FED. RD. DIVISION	STATE	PROJECT	
5	OHIO	~~IR-75-1(96)10 F-2(13)~~ * STATE	

1 / 707

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

*NOTE: All references to IR-75-1(96)10 shall be considered to be 95% State & 5% Hamilton County funded. All references to F-2(13) shall be considered to be 87.5% State & 12.5% Hamilton County funded. Federal funds will not be used on this project.

150 Yellow 1-19Q

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
HAM-75-9.93
HAM-126-13.00

GRADE SEPARATION WITH THE BALTIMORE AND OHIO RAILROAD
GRADE SEPARATION WITH THE CONSOLIDATED RAIL CORPORATION
CITY OF READING, CITY OF CINCINNATI,
HAMILTON COUNTY
VILLAGE OF ARLINGTON HEIGHTS, VILLAGE OF AMBERLEY
SPRINGFIELD TOWNSHIP, SYCAMORE TOWNSHIP

CONVENTIONAL SIGNS

Township Line
County Line
Corporation Line
Existing Limited Access Line
Existing Right of Way Line
Prop. Right of Way & Limited Access Line
Prop. Right of Way Line
Prop. Limited Access Line
Section Line
Center Line or Base Line
Property Line
Guard Rail
Fence Line
Trees & Stumps
Hedges
Existing Underground Utilities
Manholes
Existing Sewers
Proposed Sewers
Inlets
Utility
Barrier Guard Rail

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485-487

Rev. Sh. 25C, 30A, & 312B 9-16-86 SMK

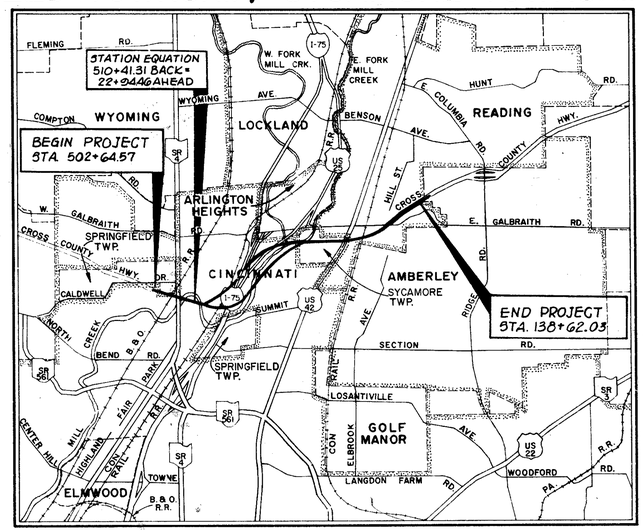
Rev. Sh 20 10-21-86 SMK

Note: For Further Listing of Sheets Used or Not Used See Sheet No. 26

LINE DATA Buildings Removal

	~~IR-75-1(96)10 & F-2(13)~~ Ft.	Ft.
Begin Project HAM-126-13.00 Sta. 502+64.57 WB		
Station Equation:		
Sta. 510+41.31 W.B. Bk. = Sta. 22+94.46 W.B. Ah.		776.74
Suspend Project HAM-126-13.00 Sta. 30+66.75 W.B.		772.29
Begin Project HAM-75-9.93 Sta. 30+66.75 W.B.		
End Project HAM-75-9.93 Sta. 80+93 W.B.	4976.25	
Resume Project HAM-126-13.00 Sta. 80+43 W.B.		
End Project HAM-126-13.00 Sta. 138+62.03 & SR 126		5819.03
Length Project HAM-126-13.00		7368.03
Length Project HAM-75-9.93	4976.25 or 0.943 mi.	or 1.395 mi.
Length of Project 12,344.31 Ft. or 2.338 mile		
Add for Work HAM-126-13.00:		
Sta. 500+20 W.B. to Sta. 502+64.57 W.B.		244.57
Sta. 138+62.03 to Sta. 147+25		862.97
Sta. 179+50 to Sta. 182+05		255.00
Drive A Sta. 1+00 to Sta. 5+66.82		466.82
Sta. 6+16.40 to Sta. 7+16.62		100.22
Drive B Sta. 1+75.37 to Sta. 6+20.67		445.30
Galbraith Rd. Sta. 5+36.00 to Sta. 26+75.00		2139.00
Knollcrest Dr. Sta. 0+89.83 to Sta. 9+75.00		885.17
Add for Work HAM-75-9.93		
I-75 Sta 343+00 to Sta. 343+75	75.00	
Station Equation:		
Sta. 368+32.81 Bk = Sta. 68+39 Ah.		
I-75 Sta. 73+50 & I-75 to Sta. 148+00 S.B.	7450.00	
I-75 Sta. 159+75 S.B. to Sta. 160+25 S.B.	50.00	
I-75 Sta. 210+15 S.B. to Sta. 210+65 S.B.	50.00	
Length of Work HAM-126-13.00		12,767.08
Length of Work HAM-75-9.93	12,601.25 or 2.387 mi.	or 2.418 mi.
Total Length of Work 25,368.33 Ft. or 4.805 Mi.		

Project:
Date of Letting _____ 19__, Contract No. _____



LOCATION MAP

SCALE OF MILES
1 0 1 2

Portion to be Improved
State Roads
Federal Roads
Interstate Highways
Other Roads

SCALES

Plan 0 50' 100'
Profile Horizontal 0 50' 100'
Profile Vertical 0 10' 20'
Cross Sections Horizontal and Vertical 0 10' 20'

UNDERGROUND UTILITIES
2 WORKING DAYS
BEFORE YOU DIG
Call 800-362-2764 (Toll Free)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS MUST BE CALLED DIRECTLY

Plan Modified By:
BALKE ENGINEERS
CINCINNATI, OHIO

For Continuation See Sheet No. 2

Supplemental Prints of Standard Construction Drawings								
BP-1	G-1-65	F-1	11-10-83	GR-5	2-5-82	MC-1	6-13-80	CB-2-24&B	5-1-79
BP-2	1-11-85	F-3	5-1-76	GR-6	2-5-82	MH-5	6-12-75	CB-3	5-1-79
BP-3	12-6-76	F-4	11-10-83	GR-6A	2-5-82	MC-4	7-26-76	CB-3A	5-1-79
BP-4	1-11-85	F-5	5-1-76	GR-1	1-11-85	MC-5	6-12-75	CB-5	11-10-83
BP-5	1-11-85	F-2	5-1-76	GR-2A	2-5-82	MC-6	1-30-84	CB6	5-1-79
BP-6	6-1-65	F-6	5-1-76	GR-3B	1-21-85	MC-7	10-15-76	CB-453A	5-1-79
BP-7	12-6-76	GR-2B	2-5-82			MH-1	12-18-84	1-2A	12-18-84
BP-8	12-6-76	GR-3	1-21-85	MC-9	1-30-84	MH-2	6-12-75	1-3A&B	4-1-80
BP-10	1-30-84	GR-4	2-5-82	MC-9A	1-11-85	MH-3	12-18-84	LA-1	6-1-79
		GR-4A	1-30-84	MC-10	5-1-76	HW-4A	4-1-80	CB-8	11-10-83
BP-12	7-7-81			MC-11	8-1-78	HW-4B	4-1-80	CB-2-312-4	5-1-79

Supplemental Specifications	
845	2-25-86
824	10-8-82
927	10-19-81
861	7-9-83
953	8-21-80
896	11-12-85
961	7-9-83
848	10-2-85
932	3-25-85

REVISED SHTS. 1, 513A, 557A, 558A, 598, 668, 676, 677, 681, 684 & 688 on 9/29/86 WTX
ADDED SHTS. 676A, 681A, 681B & 688A on 9/29/86 WTX
REVISED SHTS. 1, 547, 552, 553, 553A, 554, 554A & 564B on 12/9/86 WTX
REVISED SHTS. 547, 552, 552C, 553, 553A, 554, 554A, 564B on 2/26/87 WTX
REVISED SHT. 623 on 10-27-87 LMG
REVISED SHTS. 522, 524, 525, 526, 527, 527A, 527B, 528, 529, 530, 530A, 531, 533 and added shts. 527A-S & 528-S on 12-28-87 LMG

Approved _____
Date 3/25/87 City Manager, City of Cincinnati

Approved _____
Date 3/25/86 M.J. Maloney, County Administrator

Approved _____
Date 3/25/86 Hamilton County Engineer

By, For, on behalf of and in the name of the County of Hamilton and under the authority of its Board of County Commissioners by virtue of R.C. Section 305.30 and the resolution adopted January 7, 1963, and entered in the Journal of said Board.

Approved _____
Date 5-31-86 District Deputy Director of Transportation

6/5/86 CPD

Approved _____
Date 5-15-86 Engineer Bureau of Bridges and Structural Design

5/21/86

Approved _____
Date 7-16-86 Chief Engineer, Planning and Design

Approved _____
Date 7-19-86 Director, Department of Transportation

Robert C. Vogt
ROBERT C. VOGT FEB. 1973

PREPARED BY
VOGT, IVERS & ASSOCIATES INC.
ENGINEERS ARCHITECTS
CINCINNATI, OHIO

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED

DIVISION ADMINISTRATOR _____ DATE _____

REVISED 10-27-87 REVISED 2/25/87 REVISED 9/29/86 REVISED 12/9/86

CALC. BY	
DATE	
CHKD. BY	
DATE	

HAM 75/126 - 9.93/13.00

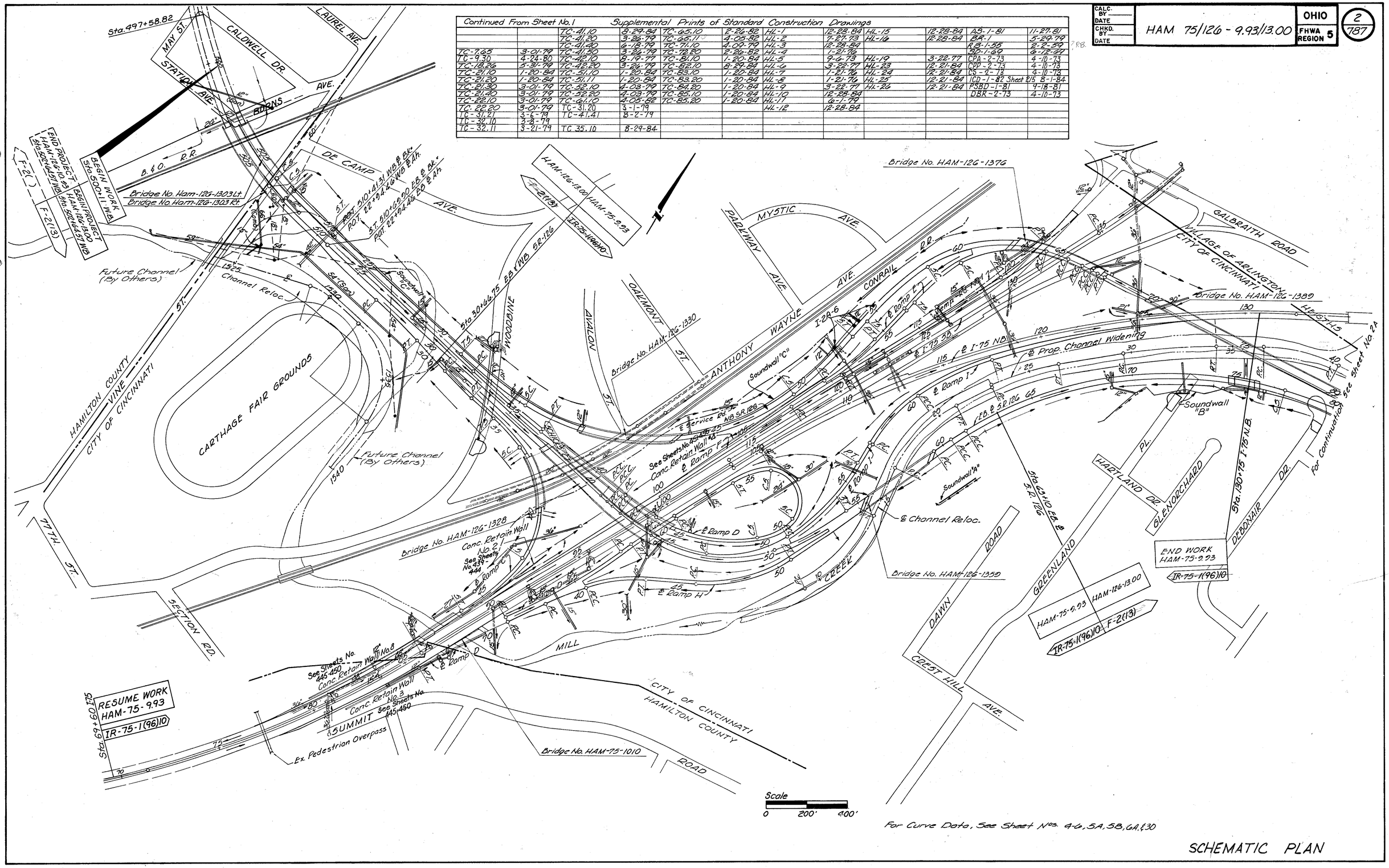
OHIO | FHWA REGION 5

2 / 787

Continued From Sheet No. 1

Supplemental Prints of Standard Construction Drawings

		TC-41.10	8-29-84	TC-65.10	2-26-82	HL-1	12-28-84	HL-15	12-28-84	AS-1-81	11-27-81
		TC-41.20	3-26-79	TC-65.11	4-05-82	HL-2	7-27-73	HL-16	12-28-84	BA-1	5-29-79
		TC-41.40	6-5-79	TC-71.10	4-20-79	HL-3	12-28-84			RB-1-55	2-25-80
TC-7.65	3-01-79	TC-41.50	3-26-79	TC-78.20	2-20-82	HL-4	1-21-76			SD-1-69	6-12-84
TC-9.30	4-24-80	TC-42.10	8-19-77	TC-81.10	1-20-84	HL-5	9-6-73	HL-19	3-22-77	CPA-2-73	4-10-73
TC-18.26	5-30-79	TC-42.20	3-26-79	TC-82.10	8-29-84	HL-6	3-22-77	HL-23	12-21-84	CPP-2-73	4-10-73
TC-21.10	1-20-84	TC-51.10	1-20-84	TC-83.10	1-20-84	HL-7	1-21-76	HL-24	12-21-84	CS-2-73	4-10-73
TC-21.20	1-20-84	TC-51.11	1-20-84	TC-83.20	1-20-84	HL-8	1-21-76	HL-25	12-21-84	ICD-1-82 Sheet 2/5	8-1-84
TC-21.30	3-01-79	TC-52.10	4-03-79	TC-84.20	1-20-84	HL-9	3-22-77	HL-26	12-21-84	PSBD-1-81	9-18-81
TC-21.40	3-01-79	TC-52.20	4-03-79	TC-85.10	1-20-84	HL-10	12-28-84			UBR-2-73	4-10-73
TC-22.10	3-01-79	TC-52.30	4-26-82	TC-85.20	1-20-84	HL-11	6-1-79				
TC-22.20	3-01-79	TC-31.20	3-1-79			HL-12	12-28-84				
TC-31.21	3-6-79	TC-41.41	8-2-79								
TC-32.10	3-8-79										
TC-32.11	3-21-79	TC 35.10	8-29-84								



For Curve Data, See Sheet Nos. 4-6, 5A, 5B, 6A, & 30

SCHEMATIC PLAN

CALC. BY		HAM 75/126 - 9.93/13.00	OHIO	2A
DATE			FHWA REGION 5	787
CHKD. BY				
DATE				

HAM-75-9.93 | HAM-126-13.00

IR-75-1(196)10 | F-2(13)

Sta. 80+43 WB & SR. 126

RESUME WORK Sta. 179+50

END WORK Sta. 182+05

Exist. S.R. 126

21a. 138+62.03 WB & Bk. ℄ S.T. 138+59.72 EB & Bk. ℄
Sta. 139+62.03 ℄ Ahd.

SUSPEND WORK Sta. 147+25

CREEK

GALBRAITH

VILLAGE OF ARLINGTON HEIGHTS
Prop. Channel Widening
CITY OF CINCINNATI

MILL

HAMILTON COUNTY

CITY OF READING

PT.

ROAD

BURKHART ST.

READING RD.

SHERMAN ST.

CLARK ST.

MERRELL LANE

AMBERLEY

CITY OF READING
VILLAGE OF AMBERLEY

KNOLL CREST

℄ Kodak Dr.

℄ McLean Dr.

℄ Temp. Rd. No. 5

℄ Honeywell Dr.

℄ Ramp P

℄ Knollcrest Drive

℄ Ramp A

℄ Ramp B

℄ Drive A

℄ Drive B

Bridge No. HAM-126-1497

Bridge No. HAM-126-1516

Bridge No. HAM-126-1436

Bridge No. HAM-126-1483

Bridge No. HAM-126-1467

Conc. Retain. Wall #5
See Shts. 457-465

Conc. Retain. Wall #6
See Sheets No. 466-472

See Sheets No. 484-488
Conc. Retaining Wall #6

Conc. Retain. Wall #7
See Sheets No. 473-477
Temporary Road No. 2
(See Sht. 310B)

Soundwall

Soundwall

WB & SR 126

EB & SR 126

Temp. Rd. No. 4

Temp. Rd. No. 3

GALBRAITH ROAD

END PROJECT STA. 138+62.03 ℄ HAM-126-13.00 | STA. 138+62.03 NB HAM.-453-A

F-2(13)

DR

CHAUCER

STILLWELL RD

CITY OF CINCINNATI
SPRINGFIELD TOWNSHIP
SYCAMORE TOWNSHIP
HAMILTON COUNTY

HAMILTON COUNTY
CITY OF READING

CONRAIL R.R.

VILLAGE OF AMBERLEY

For Continuation See Sheet No. 2

Scale
0 200 400

For Curve Data, See Sheet Nos. 4-6, 5A, 5B, 6A, & 30

SCHEMATIC PLAN

CALC. BY FY DATE 3/86
CHKD. BY REA DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

OHIO
FHWA REGION 5

2B
787

Sta. 497+58.82
MAY ST.
(18345) 23595
STATION AVE.
(6535) 23845
CALDWELL DR.
LAUREL AVE.
BURNS AVE.
B. & O. R.R.
DE CAMP AVE.
END PROJECT HAM-126-10.63 Sta 502+64.57 WB
BEGIN PROJECT HAM-126-9.90 Sta 502+64.57 WB
F-2(13)
BEGIN WORK Sta 500+11 WB
Bridge No. Ham-126-1303 Lt
Bridge No. Ham-126-1303 Rt
2025
2050
2075
2100
2125
2150
2175
2200
2225
2250
2275
2300
2325
2350
2375
2400
2425
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2500
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2550
2575
2600
2625
2650
2675
2700
2725
2750
2775
2800
2825
2850
2875
2900
2925
2950
2975
3000

CALC. BY FV DATE 3/86	HAM-75-9.93	OHIO
CHKD. BY REA DATE 3/86	HAM-126-13.00	FHWA REGION 5
	HAMILTON COUNTY	

EC 787

HAM-75-9.93 | HAM-126-13.00

IR-75-1(96)10 F-2(13)

Sta 80+43 WB & SR 126

See Sheet No 2B for Continuation

(4928) 6329 | (2111) 2710 | (871) 1119 | (2982) 3829 | CREEK

GALBRAITH

(8771) 11263 | (6660) 8553 | (5779) 7448 | CITY OF READING | (13621) 17492 | (5044) 6478 | ROAD

Prop. Channel Widening

MILL

(18594) 23876 | (18186) 2075 | (9438) 12119 | & Ramp T | (7822) 10044

WB & SR 126 | EB & SR 126 | & SR 126

(19488) 25024

Conc. Retain Wall #S45

& Ramp N

CHAUCER DR.

STILLWELL RD

(9204) 11819 | (9156) 11757 | See Detail A This Sheet | (10284) 13205

(15662) 20111 | (13258) 17024

HAMILTON COUNTY | CITY OF READING

(753) 967 | BURKHART ST. | (753) 967 | (759) 967

CLARK ST. | RD. (U.S. 42) | MERRELL LANE

(9559) 12274 | READING | (8501) 10916 | SHERMAN ST.

(10746) 13800 | (2636) 3385 | Merrell Drive | (2676) 3437 | (1468) 385

(12116) 15582 | (10027) 12876 | (1460) 1875 | (10474) 13476 | (10002) 12844

(1168) 1499 | (9735) 12500 | (4324) 5553

& Drive A2 | & Drive B2 | & Drive A | & Drive B

(259) 333 | (4317) 5544 | (9463) 12151

Bridge No. HAM-126-1483

CONRAIL R.R.

VILLAGE OF AMBERLEY

CITY OF READING

VILLAGE OF AMBERLEY

DETAIL "A"

(753) 967 | Burkhart St. | (753) 967 | (13621) 17492 | (640) 822 | (331) 425 | (13312) 17095 | (665) 854

(9559) 12274 | (10501) 10916 | (91) 117 | (2930) 3765 | (95) 122 | (3754) 4821 | (10746) 13800

Galbraith Rd.

(5044) 6478 | (422) 542 | (1173) 145 | (4735) 6081 | (1824) 2342 | (7690) 9874 | (10027) 12876

(3485) 4475 | (18916) 24289 | (12116) 15557 | (5658) 7265

(9204) 11819 | (3546) 4554 | (15562) 20111 | (13258) 17024

RESUME WORK Sta. 179+50

℄ Exist. S.R. 126

END WORK Sta. 182+05

Sta 138+62.03 WB & Br. ℄

Sta 138+62.03 ℄ Ahd.

℄ Kodak Dr.

KNOLLCREST

℄ McLean Dr.

℄ Honeywell Dr.

(13739) 17643 | (14852) 19071 | AMBERLEY

(4583) 5886 | (4568) 5866 | ℄ Ramp P

SUSPEND WORK Sta. 147+25 ℄

CITY OF READING VILLAGE OF AMBERLEY

(906) 1164 | (946) 1216 | (299) 384 | (5594) 7182

(5929) 7613 | (634) 815 | (251) 322 | (312) 401 | (5110) 6561

GALBRAITH ROAD

(607) 780 | (5405) 6940

END PROJECT STA. 138+62.03 WB HAM-126-13.00 | STA. 138+62.03 ℄ HAM.-453-A

F-2(13)

DESIGN DESIGNATION
See Sheet No. 2B

Scale
0 200 400

DESIGN DESIGNATION

CALC. BY DJS DATE 3/96	HAM-75-9.93	OHIO	3
CHKD. BY JAS DATE 3/96	HAM-126-13.00	FHWA REGION 5	78T
	HAMILTON COUNTY		

Sta. 497+58.82

MAY ST. — CALDWELL DR. — LAUREL AVE. — STATION AVE. — BURNS AVE.

END PROJECT HAM-126-10.03 Sta. 502+64.57 WB

BEGIN PROJECT HAM-126-13.00 Sta. 502+64.57 WB

F-2(13)

BEGIN WORK Sta. 500+11 WB

B. & O. R.R.

Bridge No. Ham-126-1303 Lt.
Bridge No. HAM-126-1303 Rt.

DE CAMP AVE.

HAM-126-13.00 HAM-75-9.93
F-2(13) IR-75-1(90)10

Bridge No. HAM-126-1376

MYSTIC AVE. — PARKWAY — WAYNE AVE. — ANTHONY

CONRAIL R.R.

GALBRAITH ROAD

VILLAGE OF ARLINGTON
CITY OF CINCINNATI

Bridge No. HAM-126-1389

HUGHES HS

Sta. 30+46.75 EB & WB 58-126

WOODBINE — AVALON — OAKMONT

Bridge No. HAM-126-1330

HAMILTON COUNTY
CITY OF CINCINNATI

CARTHAGE FAIR GROUNDS

Future Channel (By Others)

Channel Reloc.

77TH ST.

SECTION RD.

Bridge No. HAM-126-1328

Conc. Retain Wall No. 2

Conc. Retain Wall No. 3

Conc. Retain Wall No. 6

Ramp D — Ramp H — Ramp I — Ramp J

E Service Rd. N.B. SR. 126

E I-75 NB — E I-75 SB — E Prop. Channel Widening

Retain Wall No. 1

Sta. 73+50 Rt. 58

BEGIN WORK HAM-75-9.93
IR-75-1(96)10

SUMMIT

Ex. Pedestrian Overpass

Bridge No. HAM-75-1010

CITY OF CINCINNATI
HAMILTON COUNTY

ROAD

MILL CREEK

Sta. 63+10 EB & WB SR. 126

E Channel Reloc.

Bridge No. HAM-126-1359

DAWN — GREENLAND — CREST HILL — AVE.

EE-1

HARTLAND DR. — PL. — GLENORCHARD — DEBONAIR DR.

Sta. 128+90 I-75

END WORK HAM-75-9.93
IR-75-1(96)10

Sound Wall

For Continuation See Sheet No. 3B

Scale
0 200' 400'

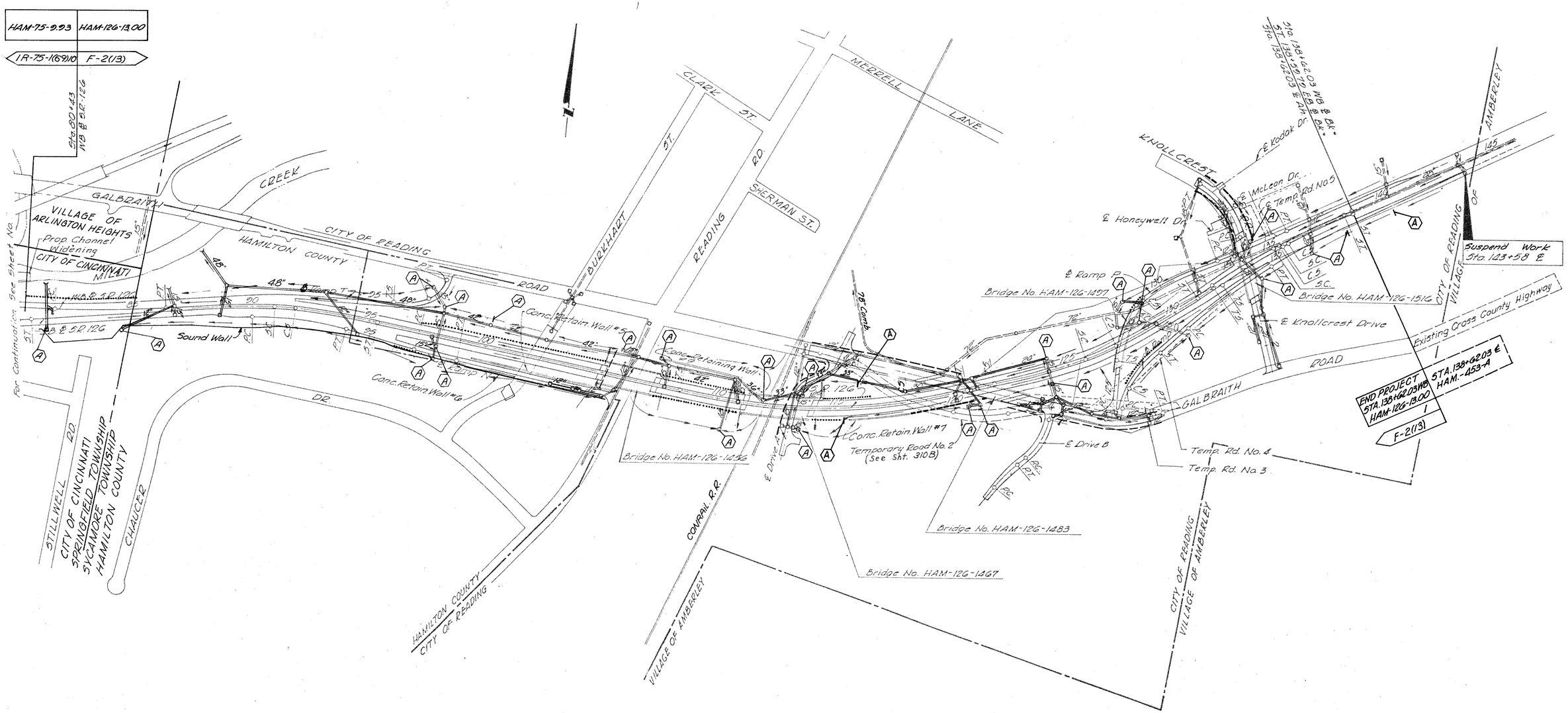
LEGEND (For Temporary Erosion Control)

- (A) Straw Bale Ditch Check
- (B) Sediment Basin
- (C) Sediment Dams
- (G) Sediment Pit
- -------- Filter Dike
- ..... Longitudinal Dike

For Curve Data, See Sheet Nos. 4-6, 5A, 5B & 30

TEMPORARY EROSION PROTECTION PLAN

CALC. BY DS DATE 3/86	HAM-75-9.93 HAM-126-13.00 HAMILTON COUNTY	OHIO	3A
CHKD. BY JAS DATE 3/86		FHWA REGION 5	787



Notes:
Legend for Temporary Erosion Control
See Sheet No. 3

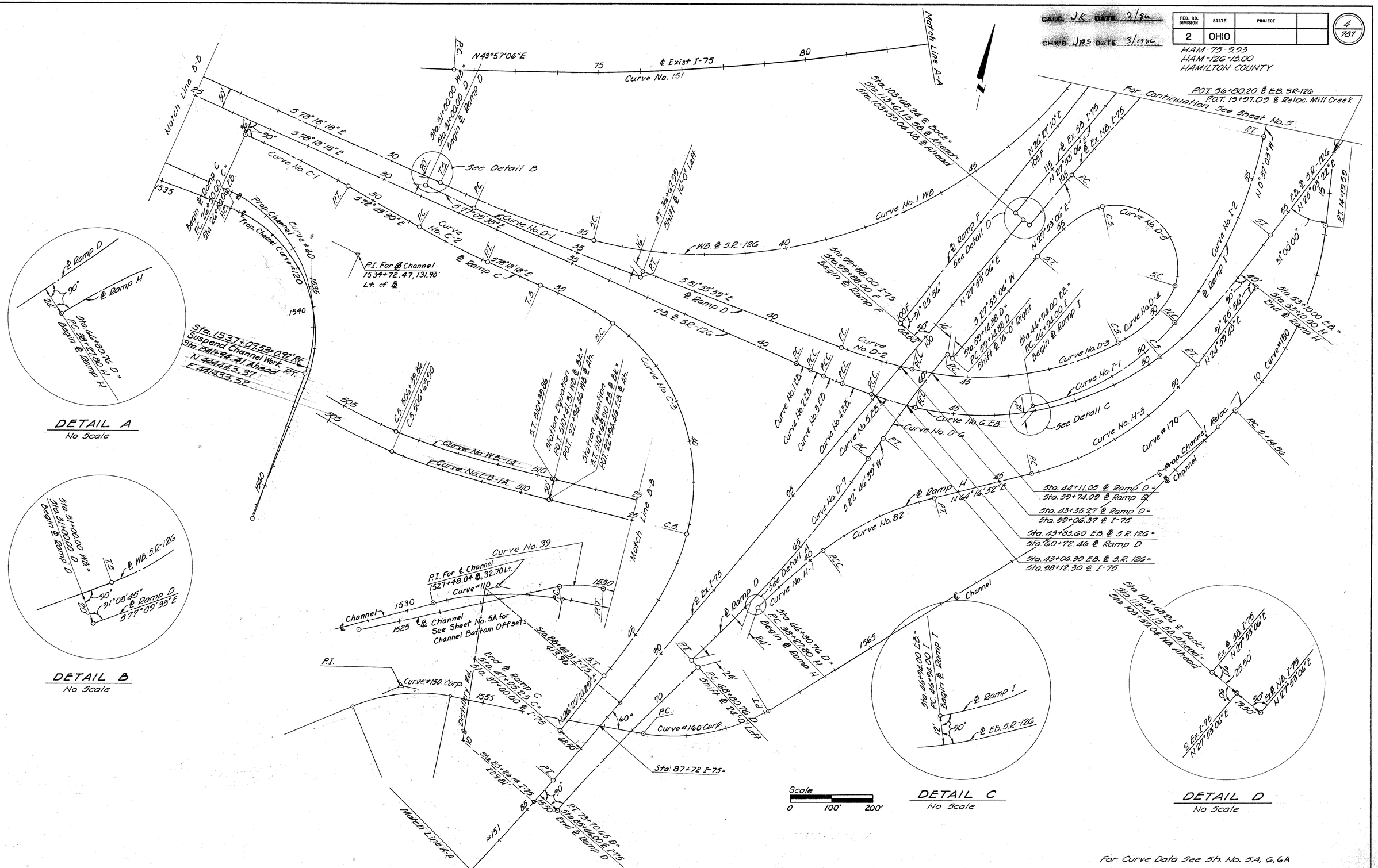
TEMPORARY EROSION PROTECTION PLAN

CALC. JK DATE 3/86
CHK'D JRS DATE 3/1986

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

4 / 187

HAM-75-2.93
HAM-126-13.00
HAMILTON COUNTY



DETAIL A
No Scale

DETAIL B
No Scale

DETAIL C
No Scale

DETAIL D
No Scale

For Curve Data See Sh. No. 5A, 6, 6A

DEVELOPED | CHECKED

GEOMETRIC LAYOUT

CALC. VK DATE 3/1986

CHK'D JRS DATE 3/1986

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

5 / 707

HAM-75-2.93
HAM-126-13.00
HAMILTON COUNTY

N

Sta. 63+88.34 WB. & S.R. 126 =
Sta. 121+94.74 ℄ Ramp F

Sta. 63+80.85 ℄ Ramp E =
Sta. 121+80.23 ℄ Ramp F

See Detail B

Sta. 65+10.42 WB. & S.R. 126 =
Sta. 132+65.76 SB. & I-75

P.O.T. 74+55.84 ℄ WB S.R-126
P.O.T. 35+17.79 ℄ Channel

Sta. 35+54.60
Sta. 3+10.17

P.C. 36+57.85

Curve # 38
Curve = 280

85° 13' 22"

N 86° 50' 36" E

WB. & S.R.-126

P.T. 34+28.49

Sta. 71+56.31 WB. & S.R. 126 =
Sta. 126+84.87 NB. & I-75

℄ Channel

P.T. 40+36.43

Curve # 43
Curve = 230

N 80° 59' 03" E

Curve No. 8 WB.

P.T.

P.C.

See Detail C

Curve No. 1 NB.
See Sheet No. 5A

℄ Ex. NB. I-75

Curve No. 2 WB.

Curve No. E-2

Curve No. F-2

Curve No. 3 WB.

Curve No. 4 WB.

Curve No. 5 WB.

Curve No. 6 WB.

Curve No. 7 WB.

Curve No. 9 EB.

℄ Prop. Channel Widening

Curve # 37
Curve = 210

P.C. 29+68.85

℄ Ex. Channel & ℄ Prop. Channel

P.T. 29+48.75

Curve # 36
Curve = 200

Sta. 75+75 E.B. =
Sta. 1+33 Channel

75° 44' 54"
Tan To Curve

E.B. & S.R.-126

Sta. 117+39.00 I-75
P.T. Curve = 280
End ℄ Ramp I

Sta. 115+74.74 WB =
P.T. Curve = 280
End ℄ Ramp E

Curve No. I-3

Curve No. I-4

℄ Ramp I

P.T. 20+97.81

P.O.T. 23+00 ℄ Bk.
P.C. 23+00 ℄ Ahead

Curve # 35

℄ Prop. Channel Relocated

Curve No. 8 EB.

Curve No. 7 EB.

P.C. 16+68.19

P.C. 57+22.31 I
Shift ℄ 16'-0" Lt.

Curve No. F-1

Curve No. E-1

See Detail A

Begin ℄ Ramp E
P.C. 51+22.97 E =
Sta. 109+70.00 F

℄ Ramp E

℄ Ramp F

℄ Ramp F

Shift ℄ 16'-0" Right

Sta. 36+30 E

N 13° 21' 19" E

N 11° 49' 46" E

N 13° 24' 19" E

N 27° 53' 06" E

N 27° 33' 06" E

N 26° 27' 10" E

N 0° 37' 09" W

N 25° 03' 22" E

Curve No. 1 WB.

C.S.

S.C.

T.S.

S.T.

P.C.C.

P.C.

P.T.

For Continuation See Sheet No. 4

For Continuation See Sheet No. 5A

DETAIL A
No Scale

Sta. 109+70.00 F =
P.C. 51+22.97 E =
Begin ℄ Ramp E

℄ Ramp E

℄ Ramp F

91° 25' 56"

90°

20'

DETAIL B
No Scale

℄ WB. S.R. 126

℄ Ramp E

Sta. 64+07.74 WB =
P.T. Curve = 280
End ℄ Ramp E

DETAIL C
No Scale

℄ WB. S.R. 126
N 80° 59' 03" E

℄ S.R. 126

℄ EB. S.R. 126
N 80° 59' 03" E

T.S. 87+44.00 ℄ S.R. 126 Ah. =
Sta. 87+44.00 WB. ℄ Bk. =
Sta. 87+24.33 EB. ℄ Bk.

Scale
0 100' 200'

For Curve Data See Sheet No. 5A, 6, 6A

DEVELOPED | CHECKED

GEOMETRIC LAYOUT

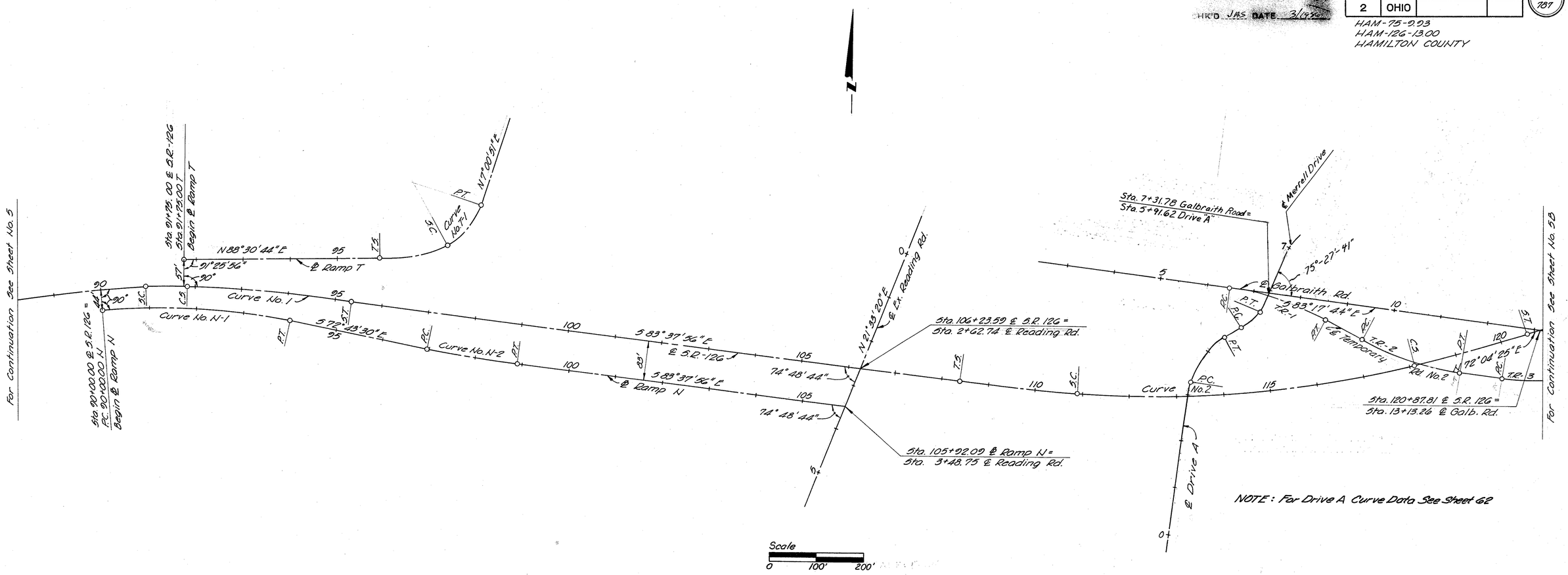
CALC. JK DATE 3/1986

CH'K'D JAS DATE 3/1986

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

5A
787

HAM-75-2.93
HAM-126-13.00
HAMILTON COUNTY



Curve No.	Δ	Dc	R	Spiral No. 1	Spiral No. 2	θ No. 1	θ No. 2	Curve Length	Tangent No. 1	Tangent No. 2	E	P.I. Sta	P.I. N	P.I. E	P.C.C., P.C. Or T.S. Sta	P.C.C., P.C. Or T.S. N	P.C.C., P.C. Or T.S. E	S.C. Sta	S.C. N	S.C. E	C.S. Sta	C.S. N	C.S. E	P.C.C, P.T. Or S.T. Sta	P.C.C, P.T. Or S.T. N	P.C.C, P.T. Or S.T. E
I.E.I.-75	16°06'00"	1°06'00"	5208.71	——	——	——	——	1460.61	735.13	735.13	51.62	78+70.00	442,951.47	441,889.46	71+34.87	442,422.23	441,379.25	——	——	——	——	——	——	85+95.48	443,601.24	442,233.28
I.N.B.T.-75	34°09'30"	1°15'00"	4583.66	——	——	——	——	2732.67	2732.67	2732.67	211.47	110+25.66	446,543.77	443,812.34	105+17.37	445,299.00	443,153.69	——	——	——	——	——	——	132+50.04	447,203.99	445,056.20
I.71	24°33'13"	27°00'00"	212.21	——	——	——	——	90.94	46.18	46.18	4.97	2+10.92	446,445.8098	443,580.7422	1+64.75	446,407.7278	443,554.6224	——	——	——	——	——	——	2+55.68	446,682.5932	443,620.3247
I.81	52°17'43"	20°30'00"	286.48	——	——	——	——	261.48	140.64	140.64	32.66	4+39.60	446,764.3156	443,777.9665	2+58.96	446,691.8799	443,657.4133	——	——	——	——	——	——	5+60.43	446,923.5937	443,784.3857
G.R.-1	32°46'00"	12°00'00"	477.465	——	——	——	——	273.06	140.37	140.37		20+00.00	446,946.80	450,15.183	18+39.63	446,963.19	450,012.42	——	——	——	——	——	——	21+32.68	447,008.47	450,277.93
TR-1	22°00'00"	10°14'35"	559.37	——	——	——	——	214.78	108.73	108.73	10.47	7+58.73	447,091.71	443,919.05	6+50.00	447,104.41	443,811.06	——	——	——	——	——	——	8+64.78	447,039.49	443,924.42
TR-2	22°00'00"	10°00'00"	572.96	——	——	——	——	220.00	111.37	111.37	10.72	10+66.05	446,942.82	443,790.95	9+54.68	446,956.31	443,903.27	——	——	——	——	——	——	11+74.68	446,920.32	443,901.56
TR-3	23°15'00"	10°00'00"	572.96	——	——	——	——	232.50	117.87	117.87	12.00	13+80.31	446,905.81	443,505.79	12+62.44	446,910.38	443,388.72	——	——	——	——	——	——	14+94.94	446,939.38	443,618.78
TR-4	23°15'00"	16°00'00"	358.10	——	——	——	——	145.31	73.67	73.67	9.50	16+71.26	446,980.59	443,787.80	15+97.59	446,968.61	443,717.18	——	——	——	——	——	——	17+42.90	446,980.99	443,960.96

CHANNEL BOTTOM LOCATION (LOOKING UPSTATION)

Base Line Station	Left Offset	Right Offset	Base Line Station	Left Offset	Right Offset	Base Line Station	Left Offset	Right Offset
1524+00	Existing	Channel	1530+00	16.0	104.	1535+50	61.2	58.8
1525+00	76.9	33.1	1530+50	18.5	101.5	1536+00	64.2	55.8
1525+50	79.1	30.9	1531+00	21.1	98.9	1536+50	66.4	53.6
1526+00	81.4	29.2	1531+50	23.6	96.4	1537+00	67.8	52.2
1526+50	82.7	31.3	1532+00	26.3	93.7	1537+50	67.1	52.9
1527+00	79.9	36.5	1532+50	31.8	88.2	1538+00	65.1	54.9
1527+50	74.7	45.9	1533+00	37.5	82.5	1538+50	63.2	56.8
1528+00	63.0	57.0	1533+50	43.0	77.0	1539+00	61.2	58.8
1528+50	48.7	71.3	1534+00	48.2	71.8	1539+50	59.3	61.7
1529+00	31.5	88.5	1534+50	53.1	66.9	1540+00	57.3	62.7
1529+50	18.9	101.1	1535+00	57.5	62.5			

For Curve Data See Sheet No. 6

DEVELOPED	CHECKED

GEOMETRIC LAYOUT

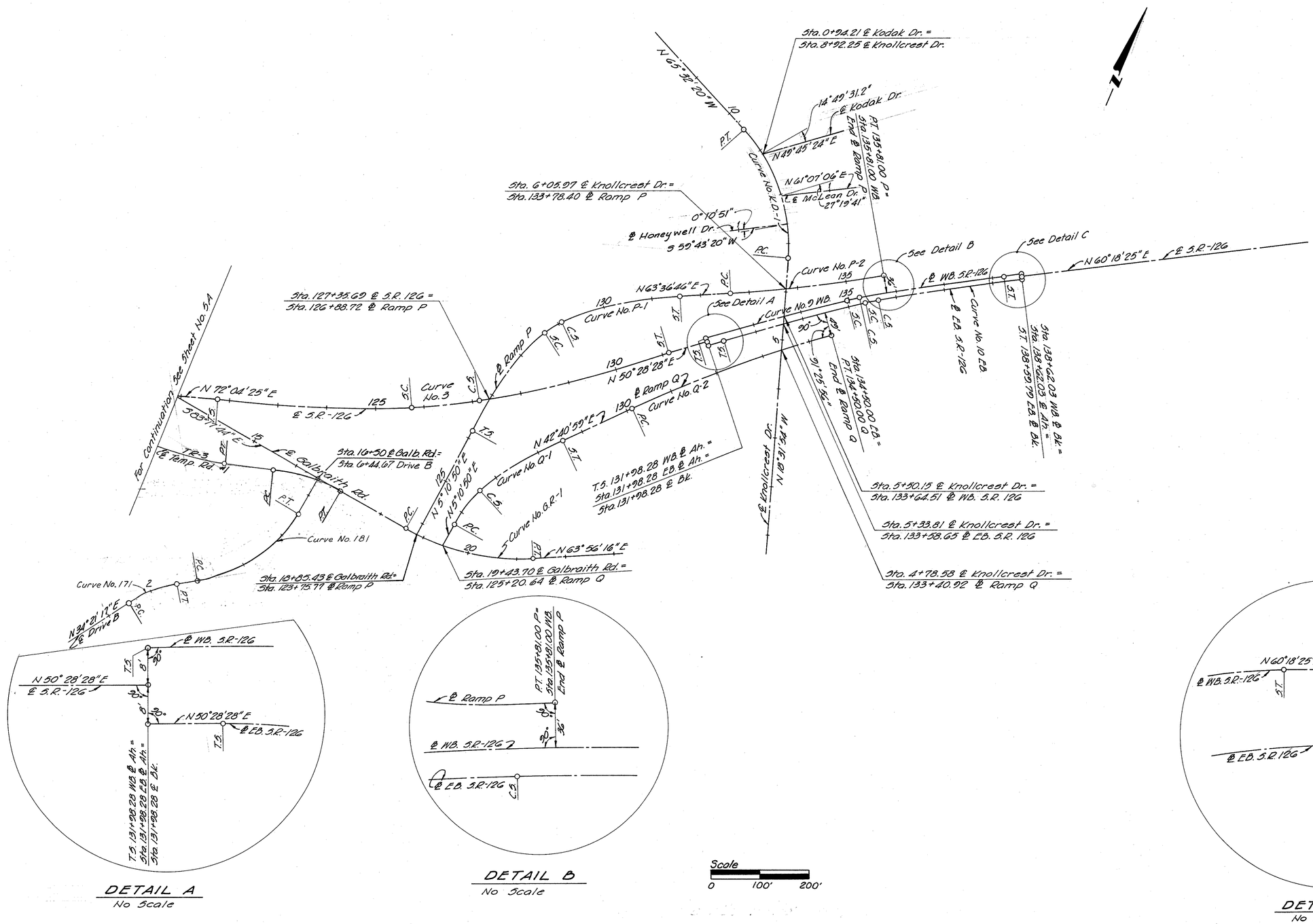
ALO J.K. DATE 3/1986

H'K'D JAS DATE 3/1986

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

58
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



DETAIL A
No Scale

DETAIL B
No Scale

DETAIL C
No Scale

For Curve Data See Sheet No. 6

DEVELOPED | CHECKED

GEOMETRIC LAYOUT

ALG. J.S. DATE 3/86

CH'D JAS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

HAM-75-9.23
HAM-126-13.00
HAMILTON COUNTY

G 787

CURVE DATA

Note: Add 1,000,000.00 To All East Coordinates

Curve No.	Δ	Dc	R	Spiral No.1	Spiral No.2	θ No.1	θ No.2	Curve Length	Tangent No.1	Tangent No.2	E	P.I. Sta.	P.I. N	P.I. E	P.C.C., P.C. Or T.S. Sta.	P.C.C., P.C. Or T.S. N	P.C.C., P.C. Or T.S. E	S.C. Sta.	S.C. N	S.C. E	C.S. Sta.	C.S. N	C.S. E	P.C.C., P.T. Or S.T. Sta.	P.C.C., P.T. Or S.T. N	P.C.C., P.T. Or S.T. E
1 EB.	0°22'30"	1°00'00"	5729.58	——	——	——	——	37.50	18.75	18.75	0.03	41+16.90	444,708.06	442,615.65	40+98.15	444,711.86	442,597.28	——	——	——	——	——	——	41+35.65	444,704.38	442,634.03
2 EB.	0°30'00"	1°30'00"	3819.72	——	——	——	——	33.33	16.67	16.67	0.04	41+52.31	444,701.11	442,650.37	41+35.65	444,704.38	442,634.03	——	——	——	——	——	——	41+68.98	444,697.98	442,666.74
3 EB.	1°10'00"	2°20'00"	2455.53	——	——	——	——	50.00	25.00	25.00	0.13	41+93.98	444,693.29	442,691.30	41+68.98	444,697.98	442,666.74	——	——	——	——	——	——	42+18.98	444,689.10	442,715.95
4 EB.	2°37'30"	3°30'00"	1637.02	——	——	——	——	75.00	37.51	37.51	0.43	42+56.49	444,682.81	442,752.92	42+18.98	444,689.10	442,715.95	——	——	——	——	——	——	42+93.98	444,678.22	442,790.15
5 EB.	6°00'00"	5°20'00"	1074.30	——	——	——	——	112.50	56.30	56.30	1.47	43+50.28	444,671.33	442,846.03	42+93.98	444,678.22	442,790.15	——	——	——	——	——	——	44+06.48	444,670.32	442,902.32
6 EB.	65°38'20"	8°00'00"	716.20	——	400.00	——	16°00'00"	624.65	475.02	660.20	143.21	48+81.50	444,661.79	443,377.26	44+06.48	444,670.32	442,902.32	——	——	——	50+31.13	444,916.00	443,455.23	54+31.13	445,259.86	443,656.86
7 EB.	1°20'00"	1°20'00"	4297.18	——	——	——	——	100.00	50.00	50.00	0.29	60+02.26	445,771.24	443,898.73	59+52.26	445,731.94	443,877.56	——	——	——	——	——	——	60+52.26	445,822.03	443,920.96
8 EB.	1°40'00"	2°00'00"	2864.79	——	——	——	——	83.33	41.67	41.67	0.30	60+93.93	445,859.36	443,939.48	60+52.26	445,822.03	443,920.96	——	——	——	——	——	——	61+35.59	445,896.13	443,959.08
9 EB.	52°55'41"	3°00'00"	1909.86	——	300.00	——	4°30'00"	1614.27	953.19	1099.21	224.65	70+88.78	446,737.31	444,407.40	61+35.59	445,896.13	443,959.08	——	——	——	77+49.86	446,854.82	445,198.15	80+49.86	446,909.56	445,493.03
10 EB.	9°49'57"	3°00'00"	1909.86	300.00	300.00	4°30'00"	4°30'00"	27.75	314.41	314.41	9.02	135+46.46	447,769.61	450,707.34	132+32.04	447,569.51	450,466.82	135+32.04	447,754.26	450,701.07	135+59.79	447,770.02	450,723.91	138+59.79	447,925.36	450,980.47
1 WB.	89°51'46"	5°00'00"	1145.92	400.00	400.00	10°00'00"	10°00'00"	1397.25	1348.77	1348.77	480.92	44+78.24	444,683.78	442,979.63	31+29.48	444,957.18	441,658.86	35+29.48	444,899.08	442,054.07	49+26.73	445,618.34	443,151.69	53+26.73	446,003.89	443,256.19
2 WB.	64°20'40"	8°00'00"	716.20	400.00	——	16°00'00"	——	604.30	645.55	460.83	135.45	60+76.02	446,738.13	443,410.01	54+31.37	446,106.30	443,277.64	58+31.37	446,487.16	443,395.27	——	——	——	64+35.67	446,848.24	443,857.49
3 WB.	6°00'00"	5°20'00"	1074.30	——	——	——	——	112.50	56.30	56.30	1.47	64+91.07	446,861.69	444,912.16	64+35.67	446,848.24	443,857.49	——	——	——	——	——	——	65+48.17	446,860.35	443,967.92
4 WB.	2°37'30"	3°30'00"	1637.02	——	——	——	——	75.00	37.51	37.51	0.43	65+85.68	446,874.46	444,005.10	65+48.17	446,869.35	443,967.92	——	——	——	——	——	——	66+23.17	446,877.85	444,042.45
5 WB.	1°10'00"	2°20'00"	2455.53	——	——	——	——	50.00	25.00	25.00	0.13	66+48.17	446,880.12	444,067.35	66+23.17	446,877.85	444,042.45	——	——	——	——	——	——	66+73.17	446,881.83	444,092.29
6 WB.	0°30'00"	1°30'00"	3819.72	——	——	——	——	33.33	16.67	16.67	0.04	66+89.84	446,883.05	444,108.91	66+73.17	446,881.83	444,092.29	——	——	——	——	——	——	67+06.51	446,884.03	444,125.55
7 WB.	0°22'30"	1°00'00"	5729.58	——	——	——	——	37.50	18.75	18.75	0.03	67+25.26	446,885.23	444,144.26	67+06.51	446,884.08	444,125.55	——	——	——	——	——	——	67+44.01	446,886.26	444,162.98
8 WB.	5°51'33"	1°15'00"	4583.66	——	——	——	——	468.73	234.57	234.57	6.00	84+03.62	446,977.65	445,820.08	81+69.05	446,964.74	445,585.86	——	——	——	——	——	——	86+37.78	447,014.21	446,051.75
9 WB.	9°49'57"	3°00'00"	1909.86	300.00	300.00	4°30'00"	4°30'00"	27.75	314.41	314.41	9.02	135+12.70	447,760.47	450,671.11	131+98.28	447,560.37	450,428.59	134+98.28	447,745.12	450,664.85	135+26.03	447,760.88	450,687.69	138+26.03	447,916.21	450,944.21
1	15°23'01"	3°30'00"	1637.02	350.00	350.00	6°07'30"	6°07'30"	89.53	396.45	396.45	18.01	91+40.45	447,085.28	446,589.46	87+44.00	447,023.15	446,157.90	90+94.00	447,065.63	446,505.14	91+83.53	447,067.70	446,594.64	95+33.53	447,041.31	446,943.46
2	24°11'39"	2°30'00"	2291.83	250.00	250.00	3°07'30"	3°07'30"	721.77	618.53	618.53	53.65	114+56.68	446,928.01	448,854.75	108+38.15	446,896.61	448,244.03	110+38.15	446,873.41	448,428.92	118+09.92	446,945.79	449,204.06	120+59.92	447,018.39	449,443.25
3	21°35'57"	4°00'00"	1432.39	400.00	400.00	8°00'00"	8°00'00"	139.08	473.99	473.99	30.56	126+49.54	447,199.87	450,004.25	121+75.55	447,053.98	449,553.27	125+75.55	447,194.55	449,927.30	127+15.53	447,261.80	450,050.09	131+15.53	447,501.53	450,369.85
C-1	5°34'48"	2°00'00"	2864.79	——	——	——	——	279.00	139.61	139.61	3.40	27+89.61	444,941.85	441,308.62	26+50.00	444,970.15	441,171.90	——	——	——	——	——	——	29+29.00	444,900.39	441,441.93
C-2	5°36'48"	3°00'00"	1909.86	——	——	——	——	186.00	93.07	93.07	2.27	32+21.33	444,813.58	441,721.07	31+28.26	444,841.22	441,632.20	——	——	——	——	——	——	33+14.26	444,794.72	441,812.21
C-3	104°45'28"	12°00'00"	477.47	200.00	400.00	12°00'00"	24°00'00"	572.98	734.65	825.62	318.95	41+85.78	444,618.06	442,665.64	34+51.13	444,766.98	441,946.24	36+51.13	444,712.98	442,138.41	42+24.11	444,255.34	442,423.56	46+24.11	443,878.88	442,297.85
WB-1A	35°14'30"	4°00'00"	1432.39	400.00	400.00	800.00	800.00	481.04	656.30	656.30	75.40	504+15.12	445,259.76	440,197.08	497+58.82	445,739.26	439,748.95	501+58.82	445,460.28	440,035.13	506+39.86	445,225.86	440,452.60	510+39.86	445,126.73	440,839.76
EB-1A	35°14'30"	4°00'00"	1432.39	400.00	400.00	800.00	800.00	481.04	656.30	656.30	75.40	504+45.16	445,210.51	440,188.37	497+88.86	445,690.00	439,740.24	501+88.86	445,411.03	440,026.41	506+69.90	445,176.60	440,443.88	510+69.90	445,077.47	440,831.04
D-1	4°24'26"	1°00'00"	5729.58	——	——	——	——	440.72	220.47	220.47	4.24	34+47.74	444,866.28	441,964.98	32+27.27	444,915.28	441,750.03	——	——	——	——	——	——	36+67.99	444,833.95	442,183.07
D-2	7°13'11"	4°00'00"	1432.39	——	——	——	——	180.50	90.37	90.37	2.85	42+73.65	444,760.95	442,784.52	41+83.28	444,774.20	442,695.13	——	——	——	——	——	——	43+63.78	444,759.03	442,872.87
D-3	41°19'24"	8°00'00"	716.20	——	——	——	——	516.54	270.08	270.08	49.23	46+33.86	444,753.31	443,144.89	43+63.78	444,759.03	442,872.87	——	——	——	48+80.32	444,927.31	443,351.45	——	——	——
* D-4	46°00'00"			200.00	——	7°54'26"	38°05'34"	——	127.18	83.32	——	50+07.50	445,009.25	443,448.72	——	——	——	50+80.32	445,092.38	443,454.37	48+80.32	444,927.31	443,351.45	——	——	——
D-5	156°00'20"	38°00'00"	150.78	——	200.00	——	38°00'00"	310.54	736.29	832.53	600.79	58+16.61	445,826.97	443,504.33	——	——	——	50+80.32	445,092.38	443,454.37	53+90.87	445,240.23	443,242.34	55+90.87	445,091.11	443,114.96
D-6	5°06'27"	2°00'00"	2864.79	——	——	——	——	255.37	127.78	127.78	2.85	60+42.65	444,699.28	442,889.53	59+14.88	444,812.21	442,949.29	——	——	——	——	——	——	61+70.25	444,581.47	442,840.06
D-7	13°00'00"	2°00'00"	2864.79	——	——	——	——	650.00	326.40	326.40	18.53	65+57.17	444,224.73	442,690.26	62+30.76	444,525.67	442,816.63	——	——	——	——	——	——	68+80.76	443,989.92	442,699.64
D-8	7°20'54"	1°30'00"	3819.72	——	——	——	——	489.88	245.28	245.28	7.87	71+26.04	443,746.90	442,375.51	68+80.76	443,945.89	442,518.91	——	——	——	——	——	——	73+70.65	443,531.20	442,258.74
E-1	12°38'24"	4°00'00"	1432.39	——	——	——	——	316.00	158.64	158.64	8.76	52+81.61	445,894.23	443,315.01	51+22.97	445,751.70	443,245.35	——	——	——	——	——	——	54+38.97	446,048.55	443,351.79
E-2		11°00'00"	520.87	300.00	——	6°30'00"	——	400.33							57+07.41	446,305.87	443,429.56	60+07.41	446,583.65	443,526.39	——	——	——	64+07.74	446,829.50	443,833.82
F-1	1°25'56"	0°30'00"	11459.16	——	——	——	——	286.42	143.22	143.22	0.89	109+08.29	445,688.05	443,233.97	107+65.07	445,559.83	443,170.17	——	——	——	——	——	——	110+51.49	445,814.64	443,300.95
F-2	16°05'46"	6°00'00"	954.93	——	——	——	——	268.27	135.02	135.02	9.50	121+07.45	446,747.99	443,794.82	119+72.43	446,628.64	443,731.67	——	——	——	——	——	——	122+40.69	446,880.16	443,822.41
H-1	8°30'13"	4°00'00"	1432.39	——	——	——	——	212.59	106.49	106.49	3.95	39+34.29	444,204.01	442,687.09	38+27.80	444,113.49	442,631.01	——	——	——	——	——	——	40+40.39	444,285.25	442,755.94
H-2	24°00'00"	8°00'00"	716.20	——	——	——	——	300.00	152.23	152.23	16.00	41+92.62	444,401.39	442,854.37	40+40.39	444,285.25	442,755.94	——	——	——	——	——	——	43+40.39	444,467.45	442,991.52
H-3	39°17'09"	8°00'00"	716.20	——	——	——	——	491.07	255.63	255.63	44.25	48+39.61	444,684.09	443,441.28	45+83.98	444,573.16	443,210.97	——	——	——	——	——	——	50+75.05	444,915.78	443,549.30
I-1	40°28'51"	10°00'00"	572.96	——	——	——	——	408.18	213.16	213.16	38.37	49+07.16	444,813.11	443,376.34	46+94.00	444,733.36	443,178.66	——	——	——	——	——	——	51+02.18	445,002.68	443,473.82
I-2	27°49'48"	5°30'00"	1041.74	——	——	——	——	506.00	258.09	258.09	31.50	53+60.24	445,232.21	443,591.84	51+02.14	445,002.68	443,473.82	——	——	——	——	——	——	56+08.14	445,490.20	443,589.06
I-3	26°09'30"	8°00'00"	716.20	——	——	——	——	326.98	166.39	166.39	19.07	58+88.70	445,771.00	443,602.04	57+22.31	445,604.62	443,603.83	——	——	——	——	——	——	60+49.29	445,921.13	443,673.78
I-4	16°10'58"	4°00'00"	1432.39	——	——	——	——	404.57	203.64	203.64	14.40	62+52.93	446,104.87	443,761.58	60+49.29	445,921.13	443,673.78	——	——	——	——	——	——	64+53.86	446,256.86	443,897.11
N-1	16°00'00"	4°00'00"	1432.39	——	——	——	——	400.00	201.31	201.31	14.08	92+01.31	447,034.83	446,616.14	90+00.00	447,014.64	446,415.84	——	——	——	——	——	——	92+00.00	446,999.03	446,814.24
N-2	3°52'35"	2°00'00"	2864.79	——	——	——	——	193.82	96.95	96.95	1.64	97+94.19	446,928.93	447,202.15	96+97.24	446,946.17	447,106.74	——	——	——	——	——	——	98+91.07	446,918.17	447,298.50
P-1	58°25'55"	20°00'00"	286.48	250.00	250.00	25°00'00"	25°00'00"	42.16	289.47	289.47	——	129+07.43	447,490.37	450,086.13	126+17.96	447,202.08	450,059.99	128+67.96	447,443.12	450,117.86	129+10.15	447,477.87	450,141.65	131+60.15	447,619.02	450,345.44
P-2	6°20'24"	2°00'00"	2864.79	——	——	——	——	317.00	158.66	158.66	——	134+22.66	447,735.69	450,580.60	132+64.00	447,665.17	450,438.47	——	——	——	——	——	——	135+81.00	447,821.47	450,714.08
Q-1	37°30'05"	20°00'00"	286.48	——	200.00	——	20°00'00"	87.51	106.77	189.30	——	126+75.74	447,115.22	450,110.35	125+68.97	447,008.89	450,100.71	——	——	——	126+56.49	447,093.50	450,121.70	128+56.49	447,254.38	450,238.60
Q-2	8°44'24"	2°00'00"	2864.79	——	——	——	——	437.00	218.92	218.92	8.35	132+31.92	447,530.37	450,493.21	130+13.00	447,369.43	450,344.79	——	——	——	——	——	——	134+50.00	447,666.88	450,664.36
T-1	71°20'53"	38°00'00"	150.78	150.00	——	28°30'00"	——	113.15	180.86	115.04	38.87	97+71.05	447,140.19	447,181.90	95+90.18	447,135.49	447,001.09	97+40.18	447,163.72	447,146.74	——	——	——	98+53.33	447,250.19	447,215.56
KD-1	41°00'26"	16°22'13"	350.00	——	——	——	——	287.15	152.21	152.21	31.66	8+21.27	447,922.18	450,471.48	6+69.06	447,777.87	450,519.86	——	——	——	——	——	——	9+56.21	447,985.21	450,332.93

* Compound Spiral Dc₁ = 8°00'00", Dc₂ = 38°00'00", Δ₁ = 7°54'26", Δ₂ = 38°05'34"

For Curve Data Continuation See Sheet No. 5A

DEVELOPED CHECKED

CURVE DATA

CALC. BY	JK
DATE	3/86
CHKD. BY	JAS
DATE	3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

OHIO
FHWA REGION 5

6-A
787

Curve No.	Δ	Dc	R	Curve Length	Tangent	E	P.I.			P.C.			P.T.		
							Sta.	N	E	Sta.	N	E	Sta.	N	E
110	25°14'59"	8°00'00"	716.197'	315.62'	160.42'	17.74	1532+24.95	444862.5600	440718.2180	1530+64.53	444817.5422	440564.2494	1533+80.15	444837.5994	440876.6790
130															
140															
150								443746.00	441829.00						
160								443777.00	442587.00						
170															
180	42°01'219"	7°11'12"	733.00'	537.61'	281.54'	52.21	1578+22.83	445045.02	443809.88	1575+41.29	444817.2911	443644.3386	1580+78.90	445325.0127	443780.4097
190	39°01'251"	9°04'59"	630.78'	429.62'	223.52'	38.43	1585+32.49	445776.11	443732.93	1583+08.97	445553.8206	443756.3268	1587+38.59	445963.5352	443854.7158
200	15°41'398"	4°30'00"	1273.24'	348.76'	175.48'	12.04	1591+57.16	446314.52	444082.78	1589+81.68	446167.3748	443987.1675	1593+30.44	446430.3156	444214.6316
210	11°29'273"	2°30'00"	2291.83'	459.64'	230.59'	11.57	1598+40.67	446767.00	444598.00	1596+10.07	446614.8380	444424.7395	1600+69.71	446881.5965	444798.1003
220	26°30'69"	7°00.00'	818.51'	378.60'	192.75'	22.39	1604+89.06	447090.00	445162.00	1602+96.31	446994.2106	444994.7393	1606+74.91	447101.0874	445354.4287
230	39°41'184"	7°00.00'	818.51'	566.98'	295.40'	51.67	1612+64.46	447135.00	445943.00	1609+69.06	447118.0080	445648.0936	1615+36.04	447386.4068	446153.0875
120	65°15'433"	18°00'00"	318.31'	362.567	203.811'	59.658	1538+186.302	444758.8423	441316.6641	1536+82.491	444790.5553	441175.3359	1540+45.058	444562.1187	441432.1109
125	23°49'151"	27°00'00"	212.207'	88.225	44.759	4.669	1540+89.817	444519.6479	441444.2879	1540+45.058	444562.1190	441432.1109	1541+33.284	444475.3280	441438.0317
39	25°40'00"	22°55'059"	250.00'	111.99	56.95	6.40	1529+46.95	444878.2644	440919.1911	1528+90.00	444864.6752	440863.8846	1530+02.00	444866.5576	440974.9265
40	86°00'00"	16°22'18.8"	350.00'	525.34	326.38	128.56	1535+16.38	444760.8213	441478.3305	1531+90.00	444827.9111	441158.9201	1537+15.35	444437.5090	441433.6851
34	39°28'33"	7°49'01"	733.00	505.02	263.00	45.75	11+77.56	445047.3540	443807.9526	9+14.56	444828.1235	443662.6713	14+19.59	445308.9394	443780.7179
35	39°1'28"	9°4'59"	630.78	429.63	223.52	38.43	18+91.71	445778.5224	443731.8275	16+68.18	445556.2020	443754.9743	20+97.81	445963.8125	443853.8298
36	15°41'38"	4°30'00"	1273.240	348.75	175.48	12.04	24+75.48	446288.5363	444050.3301	23+00.00	446141.5051	443954.5528	26+48.75	446404.1788	444182.3086
37	11°29'28"	2°30'00"	2291.83	459.65	230.60	11.57	31+99.44	446767.0997	444596.4968	29+68.85	446615.1313	444423.0609	34+28.49	446881.4708	444796.7308
38	26°30'3"	7°00.00'	818.51	378.58	192.74	22.38	38+50.59	447090.8208	445163.2483	36+57.85	446995.2254	444995.8857	40+36.43	447101.6927	445355.6814
43	40°17'59"	7°00.00'	818.51	575.71	300.34	53.36	46+25.75	447134.9347	445944.0631	43+25.41	447117.9933	445644.2008	49+01.12	447341.8022	446161.8021

CURVE DATA

TYPICAL SECTIONS

TYPE 451

DATE	BY	DATE	BY
Rev. 2/86			

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

7 / 787

HAM-75-0.03
HAM-126-13.00
HAMILTON COUNTY

ITEM LEGEND

(1)	Item 451	10" Reinforced Concrete Pavement, Modified As Per Plan (On S.R. 126) 9", 10" or 12½" Reinforced Concrete Pavement As Per Plan, (9" On Ramps & Drive A & B, 10" On S.R. 126 Accel & Decel Lanes & 12½" Adjacent To I-75.) 9" Cul-De-Sacs where shown on Plans.
(2)	Item 310	Subbase Type II, As Per Plan, 6" Thickness Except Where Otherwise Noted.
(3)	Item 304	Aggregate Base, As Per Plan, Thickness Varies.
(4)	Item 407	Tack Coat: Applied At The Rate Of 0.10 Gal. Per Sq. Yd. with Cover Aggregate
(5)	Item 301	3" Bituminous Aggregate Base, AC-20 or RT-11 or RT-12
(6)	Item 605	6" Pipe Underdrain, As Per Plan, Shallow : 30" Top Of Pipe To Subgrade. Deep : 50" Top Of Pipe To Subgrade.
(7)	Item 659	Seeding & Mulching.
(8)	Item 606	Guard Rail, Type 5
(9)	Item 606	Guard Rail, Barrier Design, Type 5
(10)	Item 622	Concrete Barrier, Standard Type A
(11)	Item 310	6" Subbase, Type II As Per Plan
(12)	Item Special	Drainage Connection, Using No. 8 Aggregate.
(13)	Item 609	Curb, Standard Type 2-A
(14)	Item 609	Combination Curb And Gutter, Standard Type 3.
(15)	Item 402	2" Asphalt Concrete, AC-20
(16)	Item 608	4" Concrete Walk.
(17)		Standard Longitudinal Joint Without Tie Bars.
(18)	Item 402	1¾" Asphalt Concrete, AC-20
(19)	Item 404	1¼" Asphalt Concrete AC-20
(20)	Item 408	Bituminous Prime Coat, Applied At The Rate of 0.40 Gal. Per Sq. Yd.
(21)	Item 304	6" Aggregate Base, As Per Plan

For Item Legend Continued See Sheet No. 11

Notes:

1.) Typical Sections For Cross Streets And S.R. 126 With Two Way Traffic Are Drawn In The Direction Of Plus Stationing. All Other Sections Are Drawn In The Direction Of Traffic.

2.) (O.H.) Preceding The Typical Section Stationing Indicates That The Section Is Drawn Opposite Hand With Respect To The Direction Of Traffic For That Particular Station Run.

3.) Sequence Of Operations For Paved Shoulder Areas: (1.) Install Pipe Underdrain On Outside Shoulder. Installation Of Shallow Underdrain In Median May Be Deferred Until 451 Is Placed, (2.) Place Subbase Out To Outside Edge Of Underdrain Or To One Foot Beyond Edge Of Pavement Where No Underdrain Is Present, (3.) Construct 451, (4.) Remove Subbase And Any Contaminated Backfill Overdrain And Replace With No. 8 Aggregate (AASHO M-43) As Shown By (12), (5.) Complete Shoulder Construction.

4.) * Following The Typical Section Stationing Indicates That The Section Is Modified For That Particular Station Run, As Indicated By Sub-Section Shown Elsewhere. Two Asterisks Thus ** Indicate That Two Or More Sub-Sections Apply In That Station Run. See Note No. 7 Below.

5.) Shoulder Slope Shall Be ½" Per Foot Min. Or Same As Superelevation.

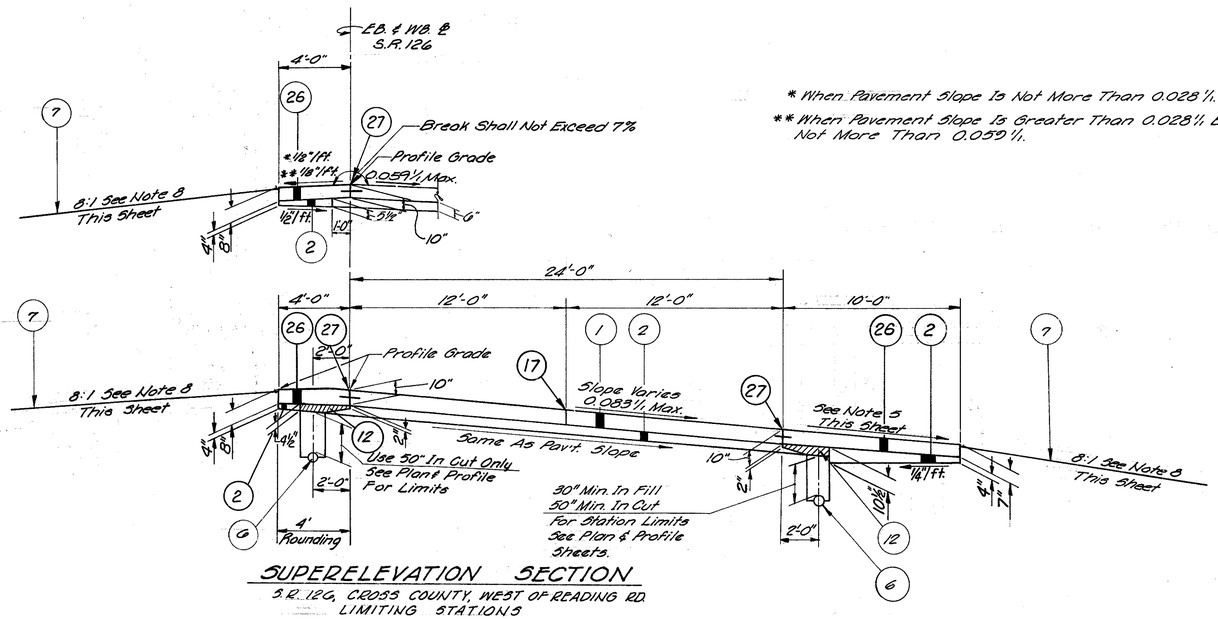
6.) For Pavement Edge Elevations See Superelevation Tables Or Pavement Details.

7.) For Slope And Width Variations From Typical Sections Shown See Pavement Details Or Plan Sheets.

8.) The Slope Rate Appearing Throughout These Typical Sections Shall Be Considered To Read, Rate (i.e. 8:1), Except As Shown On The Cross Sections.

9.) There Must be a Longitudinal Joint Without Tie Bars on one side or the Other of the Concrete Barrier Median. The Contractor has the option of Providing (at his Expense) a Joint (Tied or Untied) on the other Edge of the Concrete Barrier Median

• Includes Portion Of Super Transition To Right



* When Pavement Slope Is Not More Than 0.028½.

** When Pavement Slope Is Greater Than 0.028½ But Not More Than 0.059½.

SUPERELEVATION SECTION

S.R. 126, CROSS COUNTY, WEST OF READING RD. LIMITING STATIONS

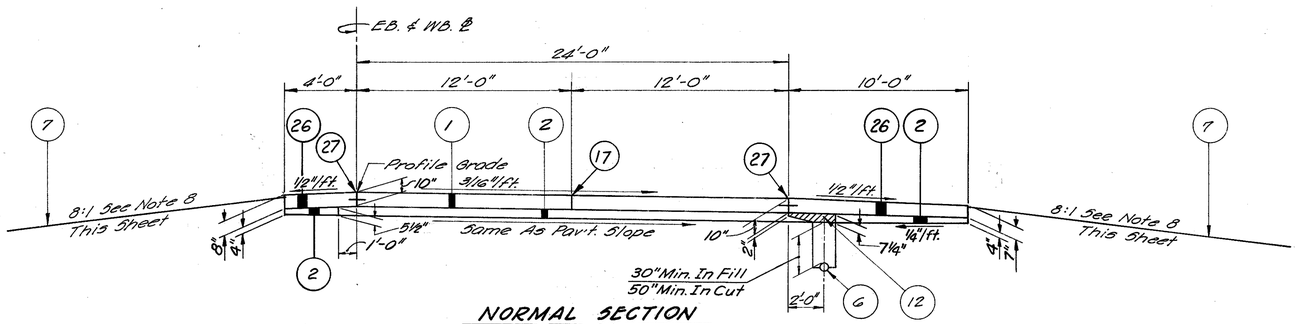
WB LANE See Note 1

Sta. 502+64.57 To Sta. 503+02.55 (Bridge No. HAM-126-1303 Lt. And Approach Slabs
Sta. 503+02.55 To Sta. 507+44.30 "
Sta. 507+44.30 To Sta. 509+75 *
(Sta. 510+41.31 Bk. = Sta. 22+94.46 Ahead Station Equation)
Sta. 31+29.48 To Sta. 38+30.01
Sta. 38+30.01 To Sta. 43+01.77 Bridge No. HAM-126-1330 And Approach Slabs
Sta. 43+01.77 To Sta. 53+79.05
Sta. 81+69.05 To Sta. 86+44.05

EB LANES

Sta. 58+86.87 To Sta. 74+95.22*
Sta. 74+95.22 to Sta. 76+09.97 Bridge No. Ham-126-1400
Sta. 76+04.97 to Sta. 80+49.86*
Sta. 87+08.70 to Sta. 87+24.33 Back

Note: For Shoulder Corrugations Detail, See Sheet No. 8



NORMAL SECTION

S.R. 126, CROSS COUNTY, WEST OF READING RD. LIMITING STATIONS

WB LANE See Note 1

Sta. 502+75. To Sta. 510+41.31 *
(Sta. 510+41.31 Bk. = Sta. 22+94.46 Ah. Station Equation)
Sta. 22+94.46 To Sta. 31+29.48 *
Sta. 67+83 To Sta. 69+88.44*
Sta. 69+88.44 To Sta. 78+46.27 Bridge No. HAM-126-1389
Sta. 78+46.27 To Sta. 81+69.05 And Approach Slabs

EB LANE

Sta. 510+43. To Sta. 510+69.90 *
(Sta. 510+69.90 Bk. = Sta. 22+94.46 Ah. Station Equation)
Sta. 22+94.46 To Sta. 40+73.15 * (Sta. 37+51.74 To Sta. 45+09.91 Bridge No. Ham-126-1328 And Approach Slabs
Sta. 54+31.13 To Sta. 54+74.13
• Sta. 54+74.13 To Sta. 58+86.87 Bridge No. HAM-126-1359
Sta. 80+49.86 To Sta. 87+08.70 And Approach Slabs

DEVELOPED	CHECKED
FIELD	
OFFICE	

TYPICAL SECTIONS

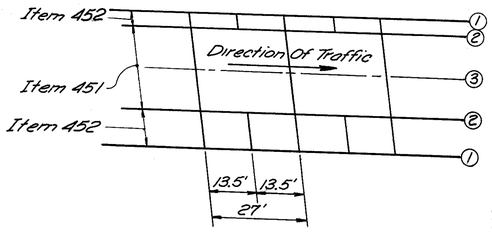
TYPICAL SECTIONS

TYPE 451

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

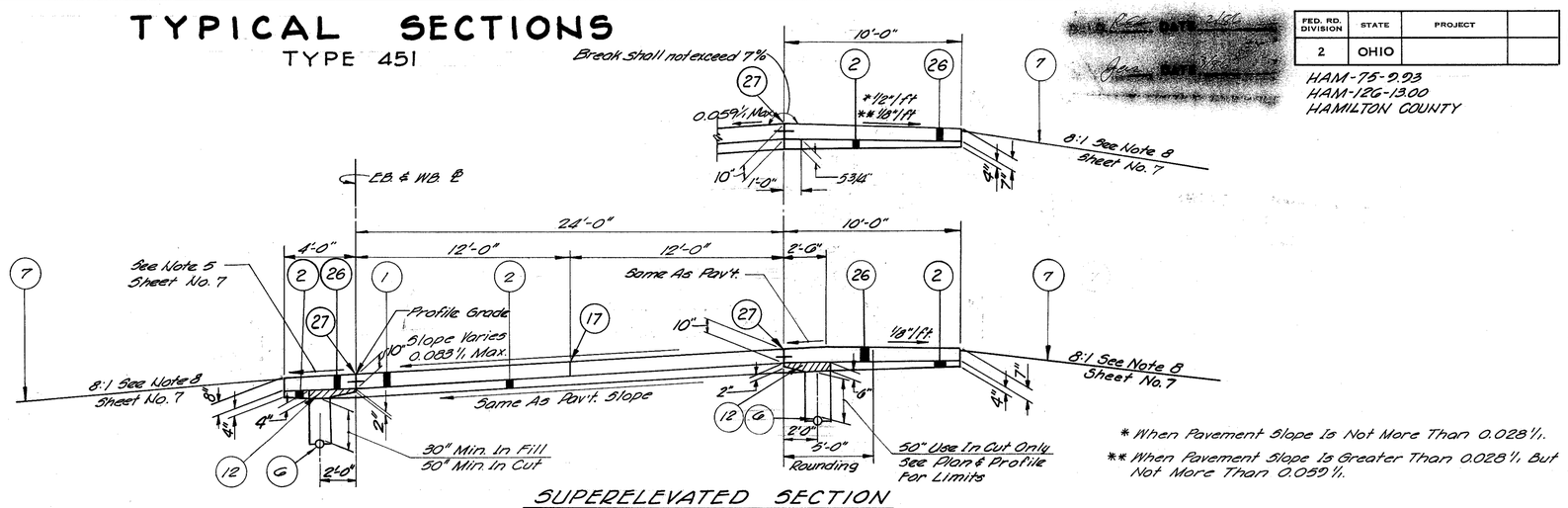
8 / 787

HAM-75-2.93
HAM-126-13.00
HAMILTON COUNTY



TYPICAL JOINT SPACING

① Edge Of Shoulder
② Edge Of Pavement
③ Centerline



* When Pavement Slope Is Not More Than 0.028'/'.

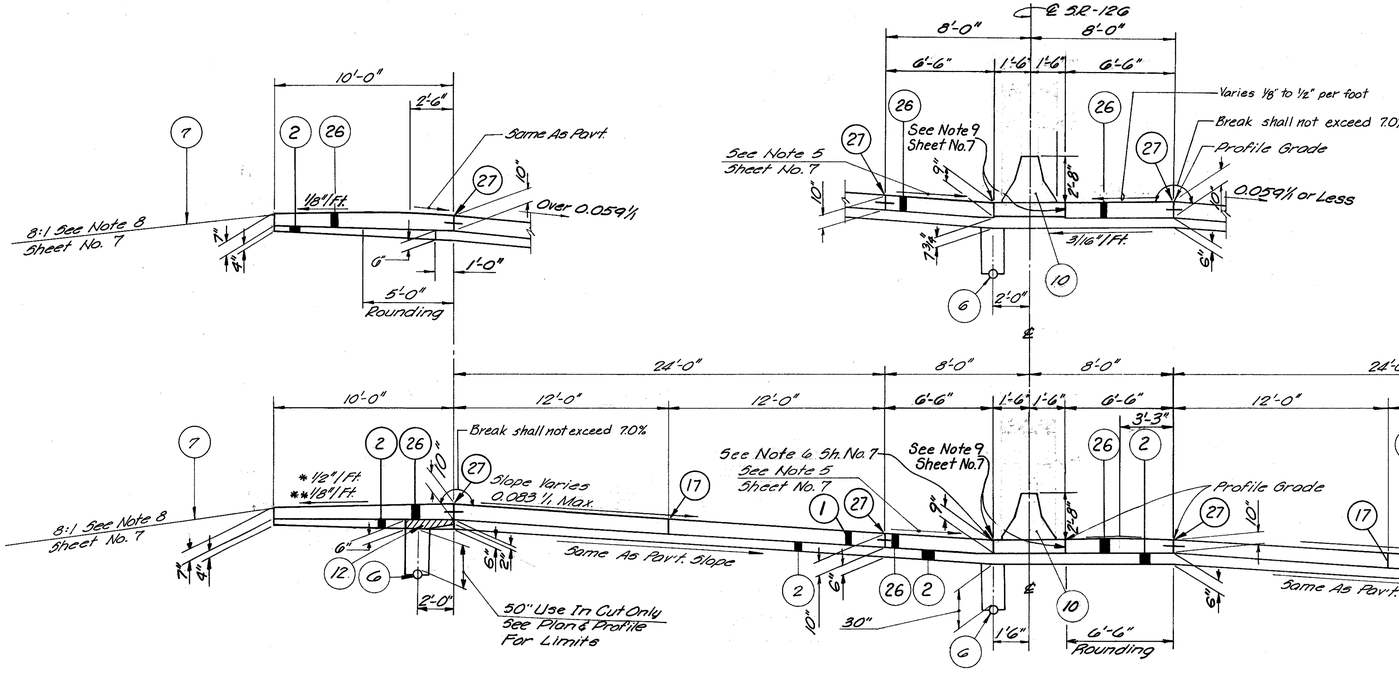
** When Pavement Slope Is Greater Than 0.028'/', But Not More Than 0.059'/'.

SUPERELEVATED SECTION

S.R. 126, CROSS COUNTY, WEST OF READING RD.
LIMITING STATIONS

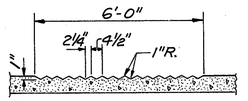
WB LANE See Note 1 Sh. No. 7
Sta. 53+70.05 To Sta. 62+92.92 *
Sta. 62+92.92 To Sta. 67+78.23 Bridge No. HAM-126-13.76
Sta. 86+44.05 To Sta. 87+44.00 And Approach Slabs

EB LANE
Sta. 502+59.45 To Sta. 503+00.57
Sta. 503+00.57 To Sta. 507+81.82 {Bridge No. Ham-126-13.03 Rt.
Sta. 507+81.82 To Sta. 510+43.00 (And Approach Slabs
(Sta. 510+60.90 BL = Sta. 22+94.46 Ah. Station Equation)
Sta. 37+51.74 To Sta. 45+09.91 {Bridge No. Ham-126-13.28
Sta. 45+09.91 To Sta. 54+31.13 (And Approach Slabs

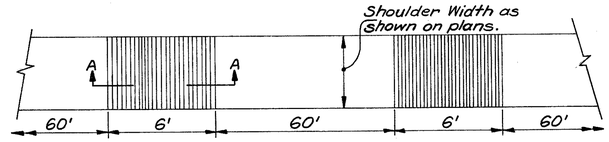


SUPERELEVATED SECTION

S.R. 126, CROSS COUNTY, WEST OF READING RD.
LIMITING STATIONS
Sta. 87+44 To Sta. 96+08.53



Note:
Cost of Shoulder Corrugation shall be Included in the price bid for Item 452 Plain Concrete Pavement.



SHOULDER CORRUGATION DETAIL

For Item Legend See Sh. 7, 11

DEVELOPED | CHECKED

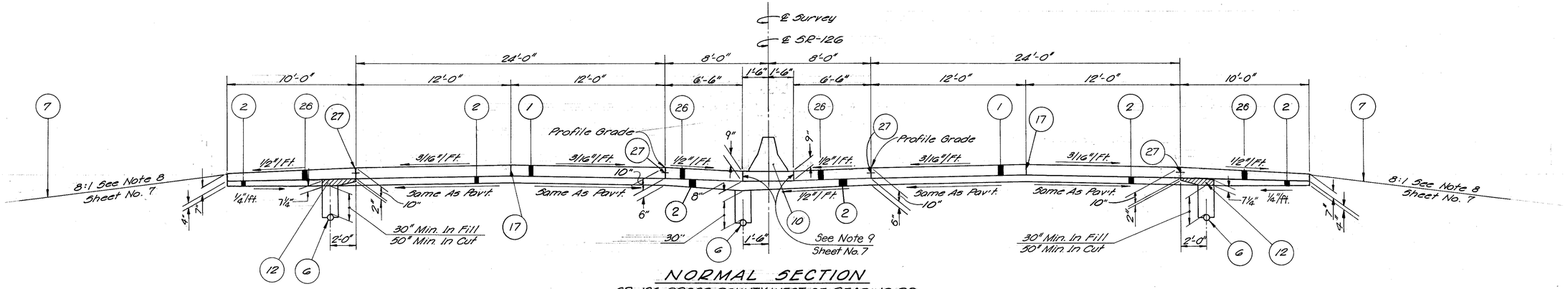
TYPICAL SECTIONS

TYPICAL SECTIONS
TYPE 451

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

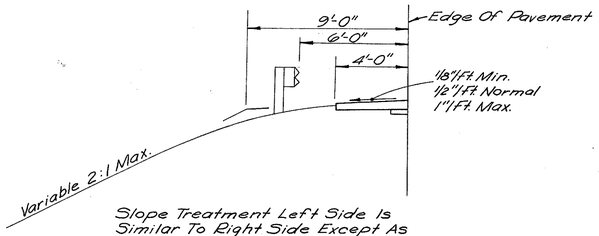
9 / 187

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



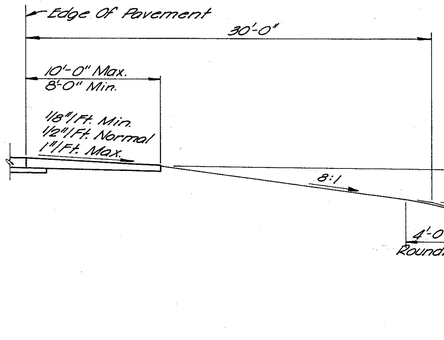
NORMAL SECTION

SR-126, CROSS COUNTY, WEST OF READING RD.
LIMITING STATIONS
Sta. 96+08.53 To Sta. 105+03.55
Sta. 105+03.55 To Sta. 107+43.03 Bridge No. HAM-126-1456 And Approach Slabs

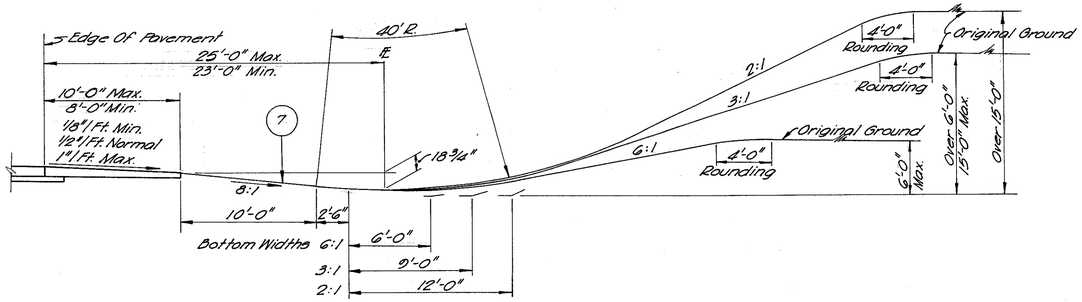


Slope Treatment Left Side Is Similar To Right Side Except As Shown Above. (See Cross-Sections and/or Site Grading Plans)

Note: Slope Treatments Are Shown In Direction Of Traffic

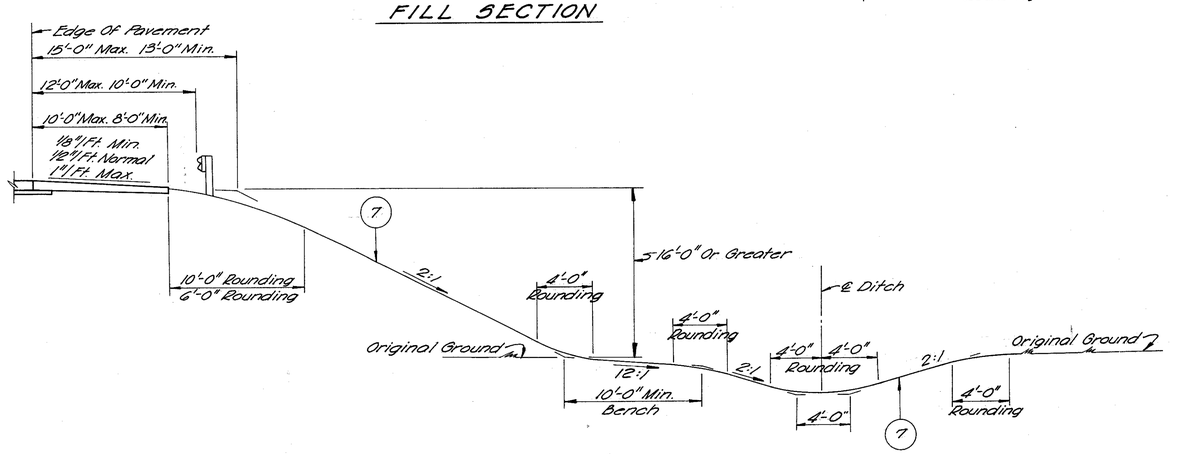


FILL SECTION

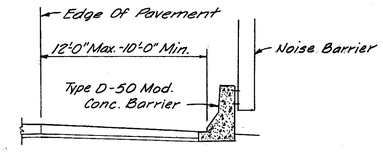


CUT SECTION

SIDE SLOPE TREATMENT SR.-126



DEEP FILL SECTION WITH GUARD RAIL



NOISE BARRIER LOCATION

For Item Legend See Sh. 7, 11
For Shoulder Corrugations, See Sheet No. 8

DEVELOPED	CHECKED

TYPICAL SECTIONS

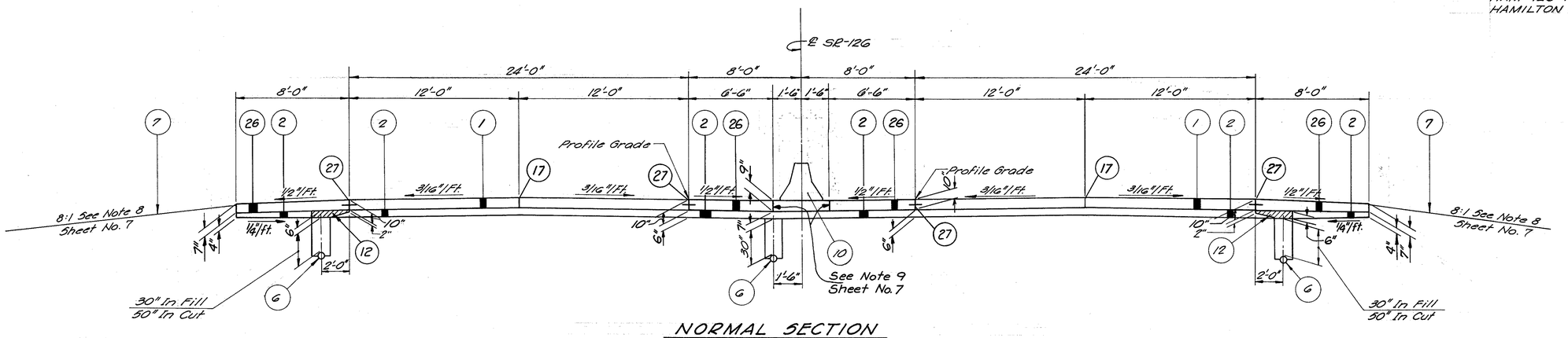
TYPICAL SECTIONS
TYPE 451

Rec. DATE 2/66
Des. DATE 3/66

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

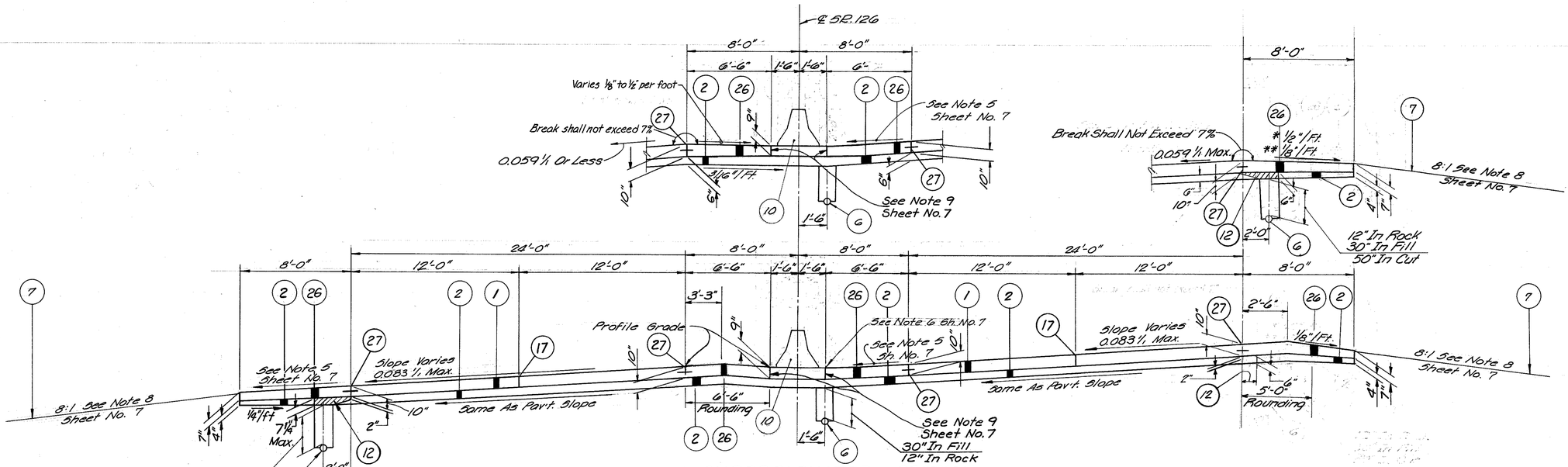
10
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



NORMAL SECTION

SR.-126, CROSS COUNTY, EAST OF READING RD.
LIMITING STATIONS
Sta. 107+43.03 TO Sta. 107+63.15



SUPERELEVATED SECTION

SR.-126, CROSS COUNTY, EAST OF READING RD.
LIMITING STATIONS

Sta. 107+63.15	To	Sta. 110+95.12	
Sta. 110+95.12	To	Sta. 114+40.01	Bridge No. HAM-126-1467
Sta. 114+40.01	To	Sta. 131+15.53	And Approach Slabs
O.H. Sta. 131+15.53	To	Sta. 131+98.28	
O.H. Sta. 131+98.28	To	Sta. 138+62.03	See Pavt. Detail For Median Width Transition

For Item Legend See Sh. 7, 11
For Shoulder Corrugations, See Sheet No. 8

DEVELOPED | CHECKED

TYPICAL SECTIONS

TYPICAL SECTIONS

TYPE 451

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

11 / 187

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

ITEM LEGEND (CONT.) See Sheet 7

(22) Item 305 8" Concrete Base, As Per Plan

(23) Item 609 Curb, Standard Type 2-B

(24) Item 404 3" Asphalt Concrete, AC 20

(25) Item 609 Curb, Standard Type 6

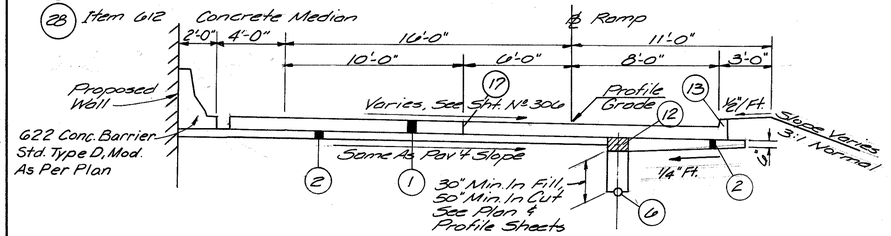
(26) Item 452 Plain Concrete Pavement, As Per Plan, Depth As Shown or Plain Concrete, Modified As Per Plan, Depth As Shown. Standard Longitudinal Joint with Tie Bars at 30" C/C

(27)

(28) Item 612 Concrete Median

(29) Item 451 12½" Reinforced Concrete Pavement, As Per Plan

(30) Item 301 6" Bituminous Aggregate Base, AC-20 or RT-11 or RT-12



NORMAL RAMP SECTION

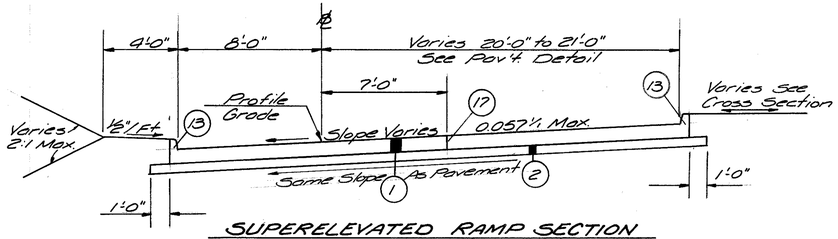
LIMITING STATIONS

Sta. 102+45 to Sta. 105+61 Ramp N

Notes:

1.) Ramp ℄ And ℄ Survey Generally Is Along Right Side Edge Pavement In Direction of Traffic See Geometric Layout Sheets 4 Thru 5B For Exceptions.

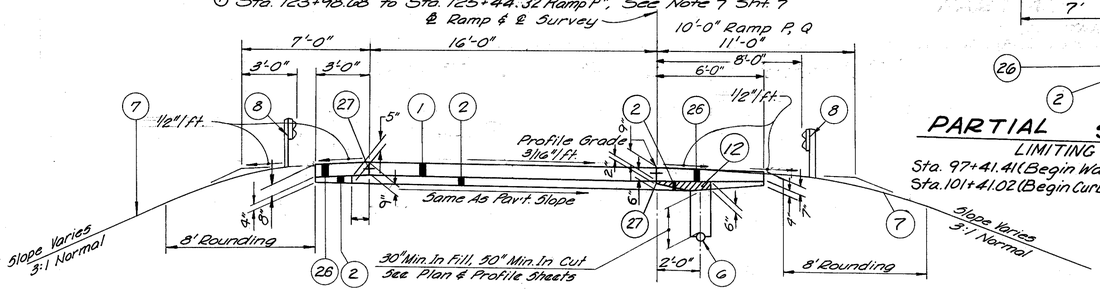
2) Transition Pav't. Width From 16' To 18' @ Sta. 48+80.32 To Sta. 50+80.32 Respectively
Pav't. Width = 18' From Sta. 50+80.32 To Sta. 53+90.87
Transition Pav't. Width From 18' To 16' @ Sta. 53+90.87 To Sta. 55+90.87 Respectively



SUPERELEVATED RAMP SECTION

LIMITING STATION

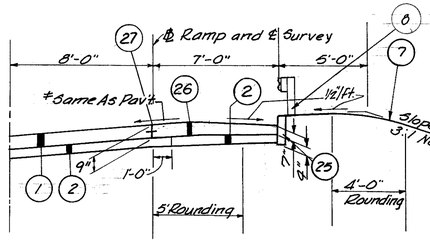
① Sta. 123+98.68 to Sta. 125+44.32 Ramp "P", See Note 7 Sht. 7



NORMAL RAMP SECTION

LIMITING STATIONS

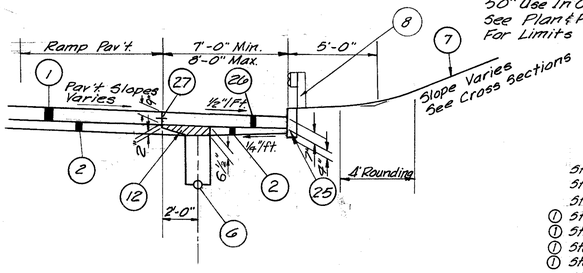
①	Sta. 31+00	To	Sta. 37+72.87	Ramp D	
①②	Sta. 37+72.87	To	Sta. 45+36.98	Ramp D	Bridge And Approach Slabs Over Anthony Wayne And Conrail R.R.
①	Sta. 55+90.87	To	Sta. 58+97.68	Ramp D	
①	Sta. 99+88.00	To	Sta. 111+22.87	Ramp F	* See Note 7 Sh. 7
	Sta. 100+11.07	To	Sta. 102+45	Ramp N	See Note 7 Sh. 7 See Partial Section C This Sheet
	Sta. 126+75	To	Sta. 131+00	Ramp Q	



PARTIAL SECTION "A"

LIMITING STATIONS

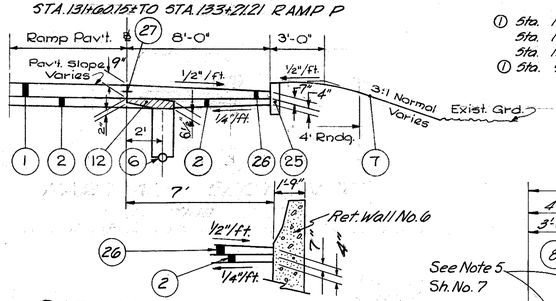
STA. 128+10± TO STA. 131+60.15 RAMP P



PARTIAL SECTION "B"

LIMITING STATIONS

STA. 131+60.15± TO STA. 133+21.21 RAMP P

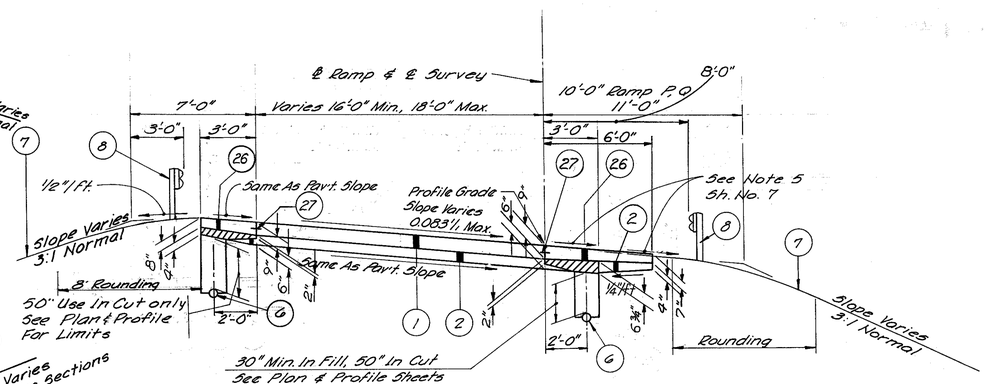


PARTIAL SECTION "C"

LIMITING STATIONS

Sta. 97+41.41 (Begin Wall #6) To Sta. 101+41.02 (Endwall #6)

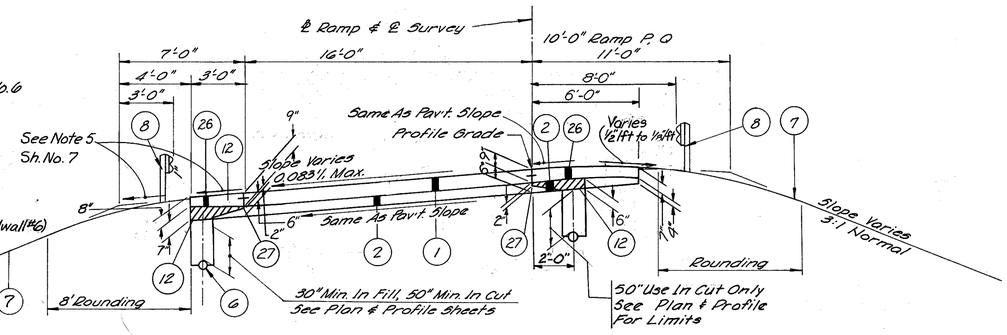
Sta. 101+41.02 (Begin Curb) To Sta. 102+45 Ramp N



SUPERELEVATED RAMP SECTION

LIMITING STATIONS

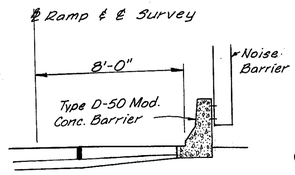
	Sta. 33+82.60	To	Sta. 36+90.73	Ramp C	
	Sta. 36+90.73	To	Sta. 39+95.44	Ramp C	Bridge And Approach Slabs Over Anthony Wayne And Conrail R.R.
	Sta. 39+95.44	To	Sta. 47+95.25	Ramp C	
①	Sta. 45+40	To	Sta. 55+90.87	Ramp D	See Note 2 This Sheet
①	Sta. 58+97.68	To	Sta. 62+00	Ramp D	See Note 1 This Sheet
①	Sta. 51+22.97	To	Sta. 55+65.43	Ramp E	
①	Sta. 117+22.87	To	Sta. 122+36.50	Ramp F	
	Sta. 40+40.39	To	Sta. 44+62.18	Ramp H	For Ramp H Back See Note 7 Sheet 7 (Pavt Details Sh. No. 293)
	Sta. 56+65.22	To	Sta. 64+53.86	Ramp I	
	Sta. 96+16.15	To	Sta. 96+60.42	Ramp N	
	Sta. 99+59.92	To	Sta. 100+11.07	Ramp N	See Partial Section C This Sheet
①	Sta. 131+60.15	To	Sta. 133+21.21	Ramp P	See Partial Section B This Sheet
	Sta. 126+50	To	Sta. 126+75	Ramp Q	See Note 7 Sh. 7
	Sta. 131+00	To	Sta. 134+50	Ramp Q	
①	Sta. 94+74.18	To	Sta. 98+80	Ramp T	See Note 7 Sh. 7



SUPERELEVATED RAMP SECTION

LIMITING STATIONS

	Sta. 30+66.29	To	Sta. 33+82.69	Ramp C	
①	Sta. 62+00	To	Sta. 64+68	Ramp D	See Note 1 This Sheet, For Ramp D Ahead See Sheet No. 293, 294
①	Sta. 55+65.43	To	Sta. 60+77.92	Ramp E	
	Sta. 44+62.18	To	Sta. 53+10.00	Ramp H	
	Sta. 51+02.14	To	Sta. 56+65.22	Ramp I	
	Sta. 96+60.42	To	Sta. 99+59.92	Ramp N	See Partial Section C This Sheet
②①	Sta. 125+44.32	To	Sta. 128+20.04	Ramp P	Bridge No. HAM-126-1497 And Approach Slabs
	Sta. 128+20.04	To	Sta. 131+60.15	Ramp P	See Partical Section A, above
	Sta. 125+40.90	To	Sta. 126+50	Ramp Q	
①	Sta. 91+75	To	Sta. 94+74.18	Ramp T	



NOISE BARRIER LOCATION

① Shown In Direction Of Traffic

② Includes Portion Of Superelevation To Right

For Item Legend See Sh. 7, 11

For Shoulder Corrugation See Sheet No. 8

DEVELOPED | CHECKED

TYPICAL SECTIONS

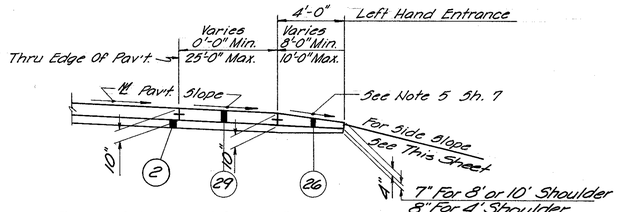
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

12 / 787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

Rec'd 2/86

Appr. 3/86



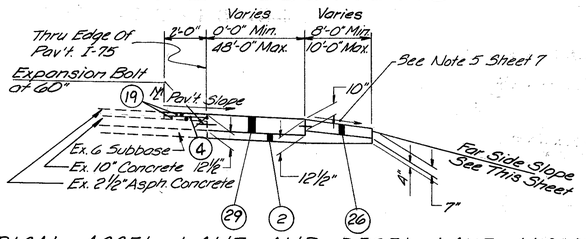
TYPICAL ACCELERATION LANE

No Scale
Limiting Stations See Note 7 Sh. 7

② Ramp D	Sta. 508+46	To	Sta. 510+41.31	WB. S.R. 126 Left Hand Entrance
(Station Equation	Sta. 510+41.31 Bk=	Sta.	22+94.46 Ah.	WB. S.R. 126)
② Ramp D	Sta. 22+94.46	To	Sta. 31+00	WB. S.R. 126 Left Hand Entrance
② Ramp E	Sta. 101+70	To	Sta. 109+70	Ramp F
Ramp H	Sta. 53+10	To	Sta. 54+00	EB. S.R. 126
Ramp H	Sta. 54+00	To	Sta. 58+30	EB. S.R. 126 Bridge No. HAM-126-1359 And Appr. Slabs
Ramp H	Sta. 58+30	To	Sta. 63+10	EB. S.R. 126

① Ramp T Sta. 81+75 WB. S.R. 126 To Sta. 91+75 ℄ S.R. 126

① Shown In Direction Of Traffic But Opposite Stations
② Shown In Direction Of Stations But Opposite Traffic



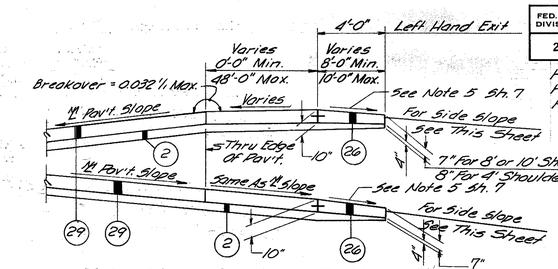
TYPICAL ACCEL. LANE AND DECEL. LANE ALONG EX. I-75 AND EX. CROSS COUNTY HIGHWAY

No Scale
Limiting Stations See Note 7 Sh. 7

① Ramp C	Sta. 77+00	To	Sta. 86+11	I-75
① Ramp C	Sta. 86+11	To	Sta. 87+00	I-75 Bridge No. HAM-75-1010 And Appr. Slabs
② Ramp F	Sta. 89+88	To	Sta. 99+88	I-75
Ramp I	Sta. 117+39	To	Sta. 127+39	N.B. I-75
Ramp B	Sta. 134+50	To	Sta. 138+58.99	EB. S.R. 126
(Station Equation	Sta. 138+58.99 ℄ EB. S.R. 126 =	Sta.	139+62.03 ℄ S.R. 126 Ah)	
Ramp Q	Sta. 139+62.03	To	Sta. 141+52.24	℄ S.R. 126
Ramp D	Sta. 78+00	To	Sta. 86+75	I-75
Ramp D	Sta. 86+75	To	Sta. 89+43	I-75 Bridge No. HAM-75-1010 And Appr. Slabs
Ramp D	Sta. 89+43	To	Sta. 90+43.50	I-75
① Ramp P	Sta. 133+24.51	W.B. S.R. 126 To	Sta. 141+24.51	℄ S.R. 126

See Partial Section B Sheet 11

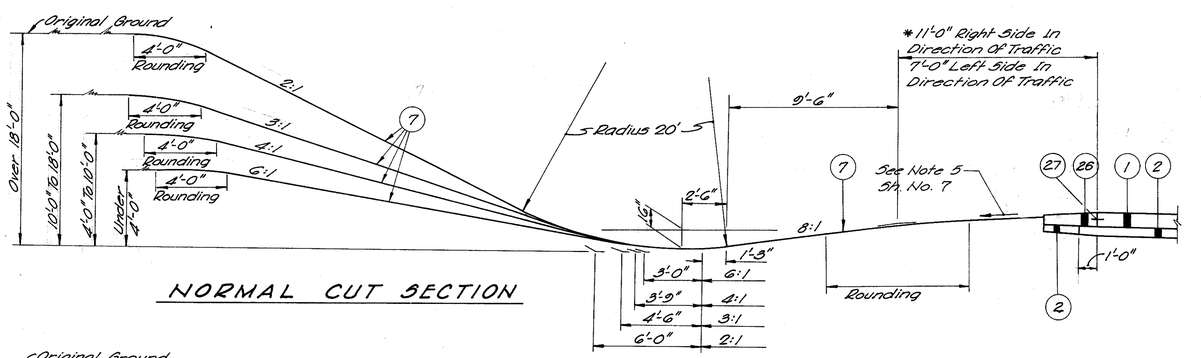
SIDE SLOPE TREATMENT RAMPS AND SPEED CHANGE LANES



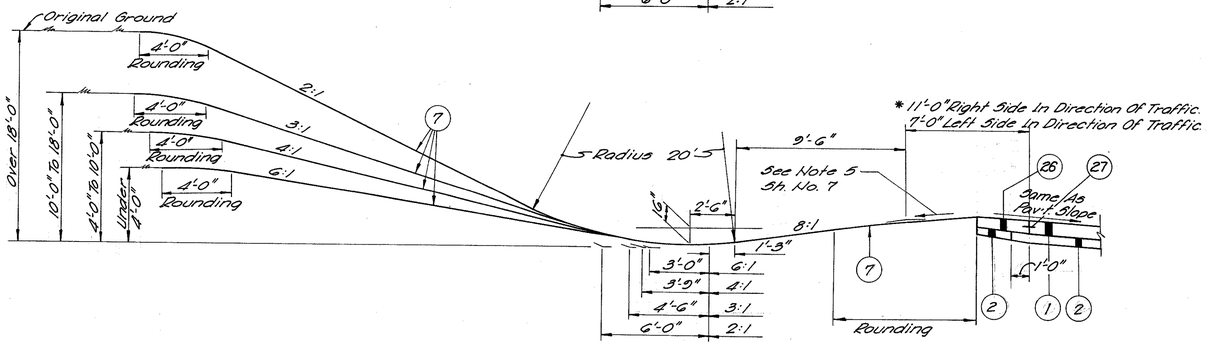
TYPICAL DECELERATION LANE

No Scale
Limiting Stations See Note 7 Sh. 7

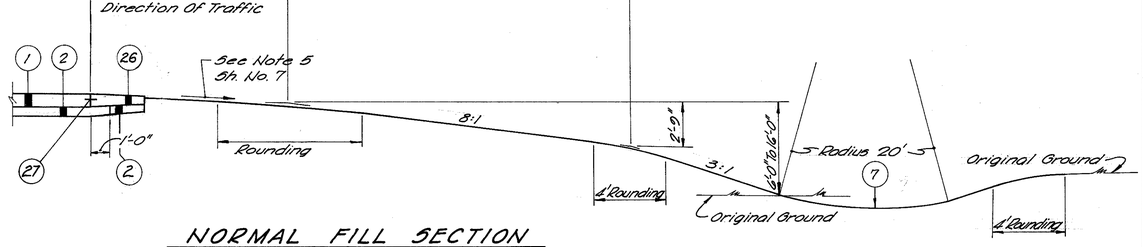
Ramp C	Sta. 510+42.19	To	Sta. 510+69.90	EB. S.R. 126
Station Equation	Sta. 510+69.90 Bk. =	Sta.	22+94.46 Ah.	EB. S.R. 126
Ramp C	Sta. 22+94.46	To	Sta. 30+66.75	EB. S.R. 126
② Ramp E	Sta. 60+66.78	To	Sta. 62+73	WB. S.R. 126 Left Hand Exit
② Ramp E	Sta. 62+73	To	Sta. 67+83	WB. S.R. 126 Bridge No. HAM-126-13.76 And
② Ramp E	Sta. 67+83	To	Sta. 68+66.78	WB. S.R. 126 Approach Slabs
OH Ramp I	Sta. 45+15	To	Sta. 51+02.14	EB. S.R. 126 Left Hand Exit
Ramp N	Sta. 88+26.53	To	Sta. 96+26.53	℄ S.R. 126



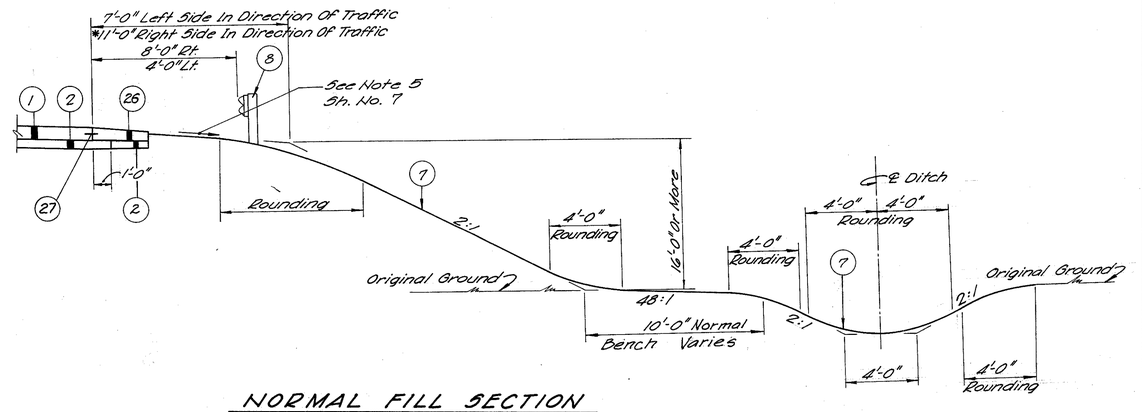
NORMAL CUT SECTION



SUPERELEVATED CUT SECTION



NORMAL FILL SECTION



NORMAL FILL SECTION WITH GUARD RAIL

* 10'-0" Right Side In Direction Of Traffic Ramps P And Q Only.

For Item Legend See Sh. 7, 11
For Shoulder Corrugation, See Sheet No. 8

DEVELOPED	CHECKED

TYPICAL SECTIONS

TYPICAL SECTIONS

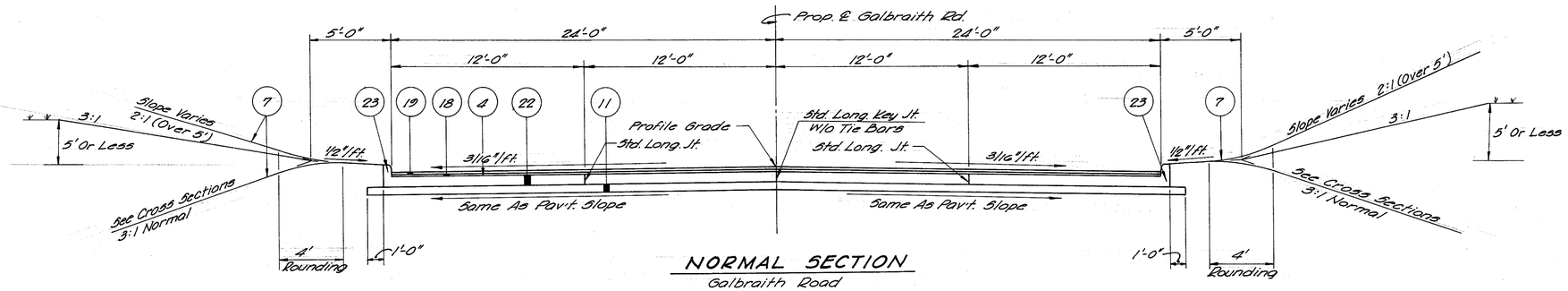
TYPE 404,

CALC. Rea DATE 2/86
CHK'D Jae DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

13
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

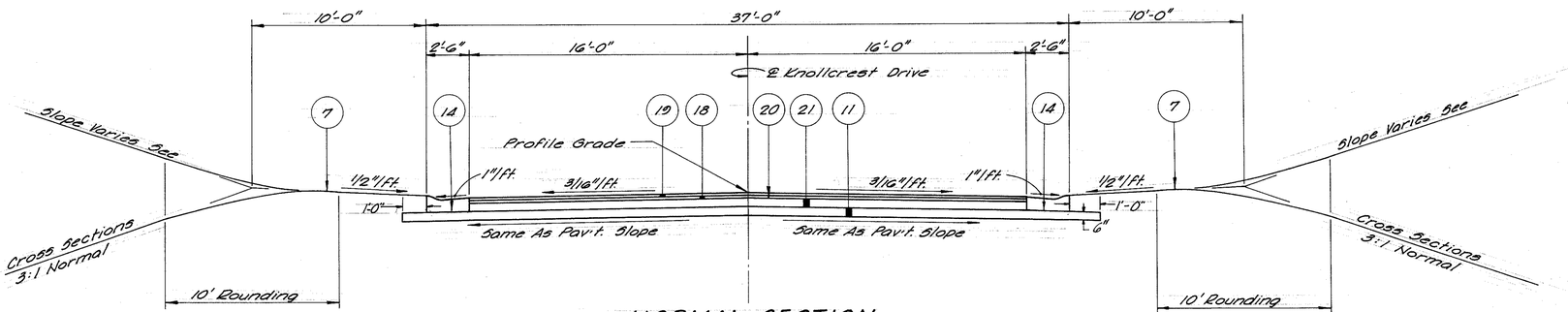


NORMAL SECTION

Galbraith Road
Limiting Stations

Sta. 7+50 To Sta. 11+00
Sta. 11+00.11 To Sta. 15+40.41 Bridge No. HAM-126-1483
Sta. 15+40.41 To Sta. 17+44.79 And Approach Slabs

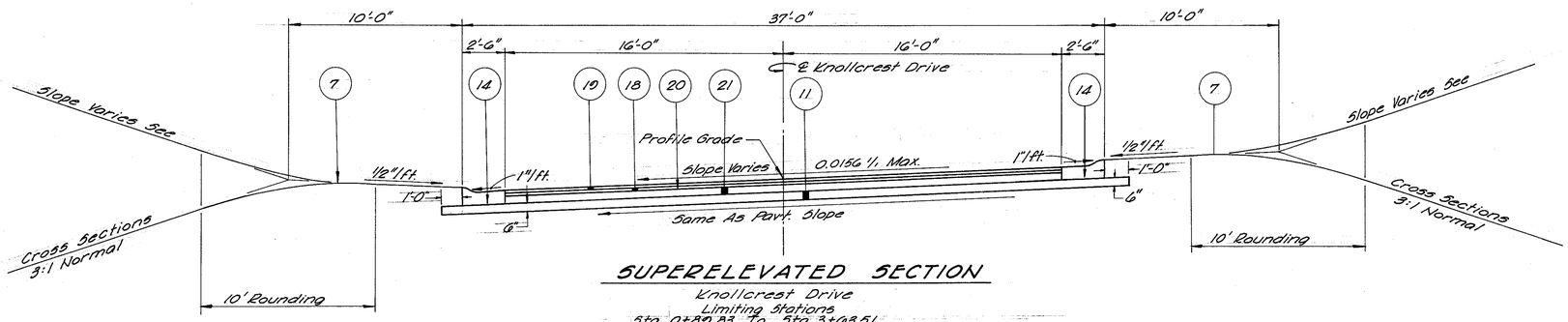
Note: For Width Transitions In Meeting Existing Galbraith Road See Pav't. Details Sh. 305, 306



NORMAL SECTION

Knollcrest Drive
Limiting Stations

• Sta. 3+63.51 To Sta. 7+03.77 Bridge No. HAM-126-1516 And Approach Slabs



SUPERELEVATED SECTION

Knollcrest Drive
Limiting Stations

Sta. 0+89.83 To Sta. 3+63.51
Sta. 7+03.77 To Sta. 9+75.00 * See Pav't. Detail Sh. 307

• Includes Portion Of Superelevation To Left

For Item Legend See Sh. 7, 11

DEVELOPED		CHECKED	

TYPICAL SECTIONS

13

TYPICAL SECTIONS

TYPE 451

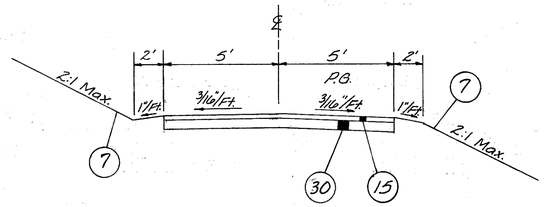
Rev. Rev. 2/83

Rev. Jan. 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

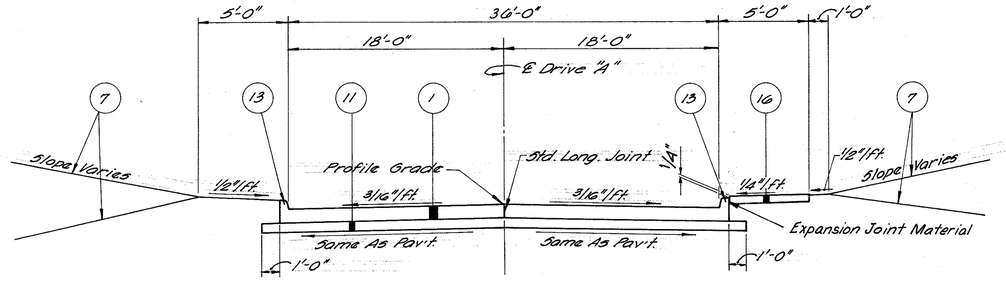
14
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



NORMAL SECTION

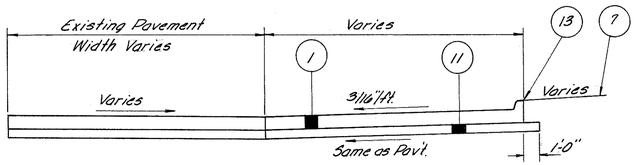
Service Rd. Over Mill Creek
Limiting Stations
Sta. 10+09.75 To Sta. 10+10.5
Sta. 11+82.25 To Sta. 11+97.25



NORMAL SECTION

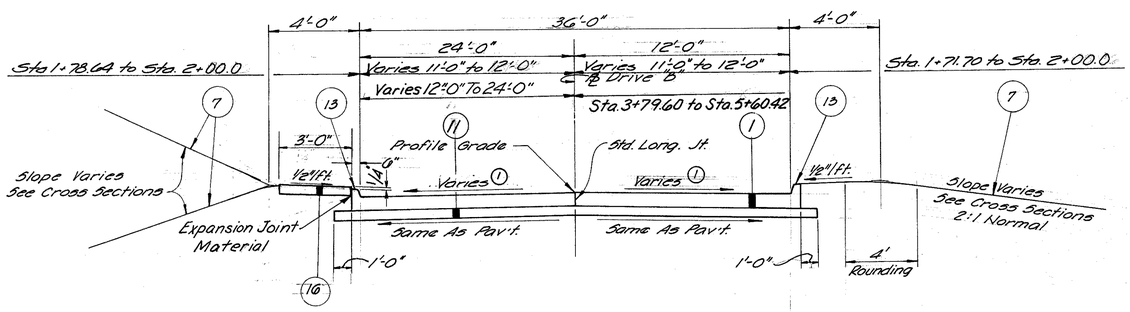
DRIVE "A"
LIMITING STATIONS

Sta. 1+00 To Sta. 5+66.82 See Pav't. Detail Sh. 306
Sta. 6+16.40 To Sta. 7+16.62



CUL-DE-SAC AND "T" TYPE TURNAROUND

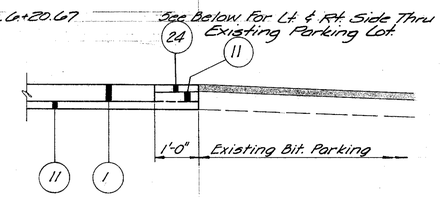
Limiting Stations
Greenland Place See Pav't Detail Sh. 309
Debonair Drive See Pav't Detail Sh. 309
Burkhart Street See Pav't. Detail Sh. 309



NORMAL SECTION

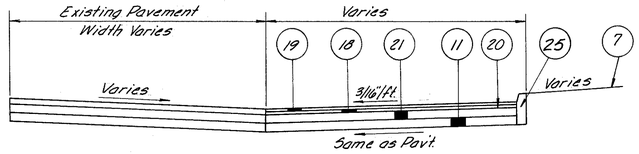
DRIVE "B"
LIMITING STATIONS

Sta. 1+71.70 To Sta. 6+20.67



Limiting Stations ①

Sta. 1+71.70 To Sta. 3+96 Rt.
Sta. 1+78.64 To Sta. 3+75 Lt.
① See Pav't. Detail Sh. 308



CUL-DE-SAC

Limiting Stations
Woodbine Ave. North Side S.R. 126 See Pav't Detail Sh. 309
Woodbine Ave. South Side S.R. 126 See Pav't. Detail Sh. 309

For Item Legend See Sh. 7, 11

DEVELOPED	CHECKED

TYPICAL SECTIONS

TYPICAL SECTIONS

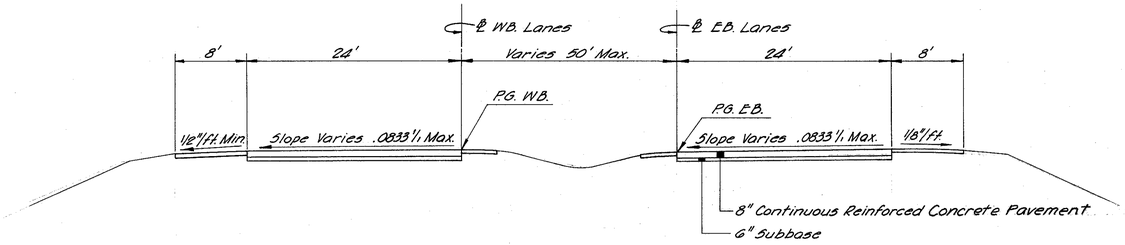
CALC. Rea DATE 2/86

CHK'D Abe DATE 3/86

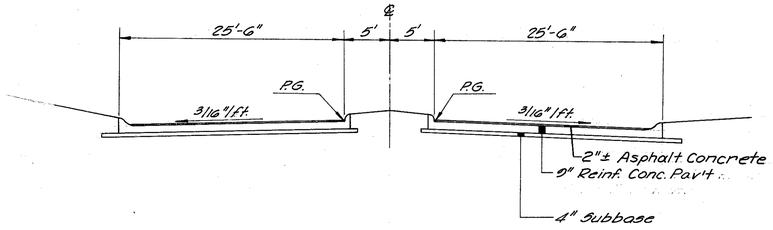
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

15
787

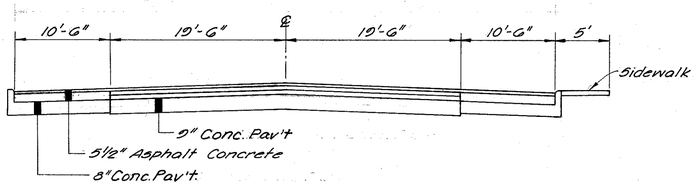
HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY



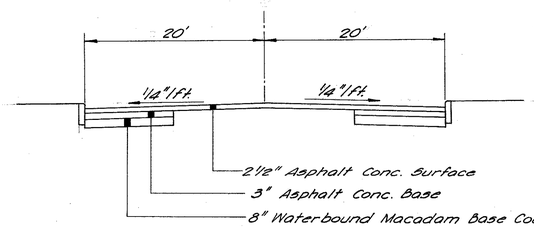
PROPOSED TYPICAL SECTION ADJOINING PROJECT WEST
S.R. 126



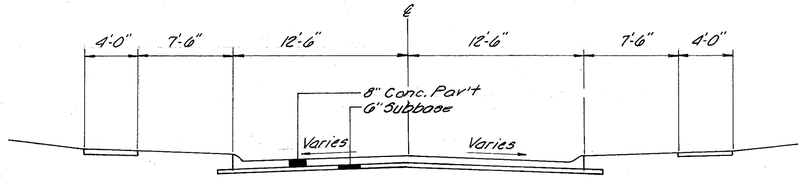
TYPICAL SECTION ADJOINING PROJECT EAST
S.R. 126 (EXIST. CROSS COUNTY)



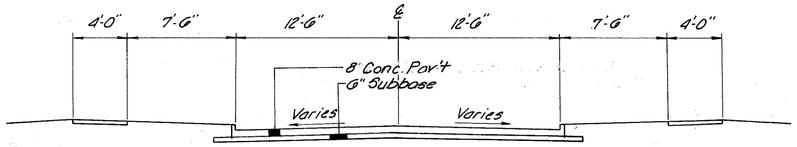
TYPICAL SECTION EXIST. READING RD.



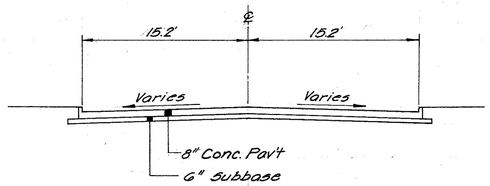
TYPICAL SECTION EXIST. GALBRAITH RD.



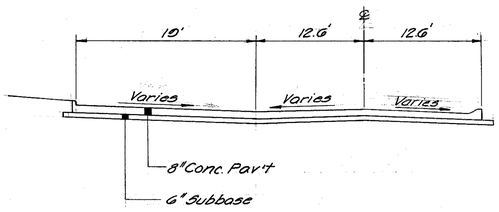
TYPICAL SECTION EXIST. DEBONAIR DRIVE



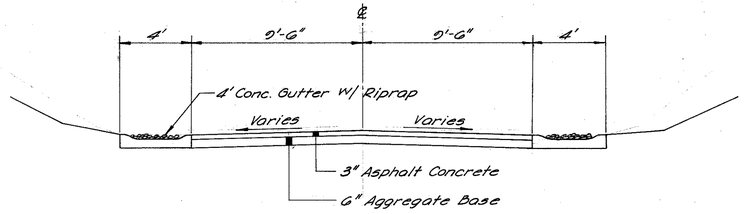
TYPICAL SECTION EXIST. GREENLAND PLACE



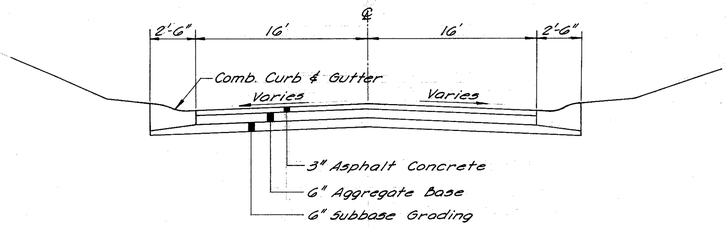
TYPICAL SECTION EXIST. BURKHART AVE.



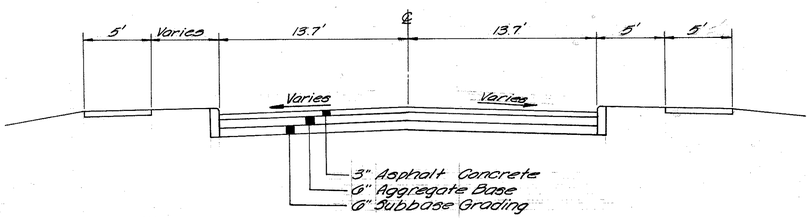
TYPICAL SECTION EXIST. BURKHART AVE.
WITH PARKING LOT



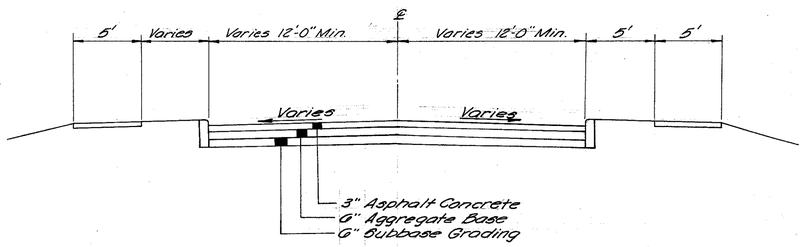
TYPICAL SECTION EXIST. KODAK DR.



TYPICAL SECTION EXIST. KNOLLCREST DR.



TYPICAL SECTION EXIST. WOODBINE AVE.
NORTH OF S.R. 126



TYPICAL SECTION EXIST. WOODBINE AVE.
SOUTH OF S.R. 126

DEVELOPED	CHECKED

TYPICAL SECTIONS

GENERAL NOTES

MAINTENANCE OF TRAFFIC

THE CONTRACTOR WILL BE PERMITTED TO CLOSE THE FOLLOWING STREETS TO TRAFFIC ON SUNDAYS FOR PERIODS NOT TO EXCEED 15 MINUTE INTERVALS DURING DAYLIGHT HOURS FOR THE PURPOSE OF ERECTING STRUCTURAL STEEL.

I-75

VINE STREET

ANTHONY WAYNE AVENUE

RAMP F TO SOUTHBOUND I-75

EXISTING RAMP FROM NORTHBOUND I-75 TO GALBRAITH ROAD

READING ROAD

DRIVE A

TEMPORARY ROAD NUMBER 4

CROSS COUNTY HIGHWAY

THE SUNDAYS SELECTED FOR CLOSING VINE STREET, RAMP F AND EXISTING RAMP FROM NORTHBOUND I-75 TO GALBRAITH ROAD SHALL BE COORDINATED WITH THE CITY OF CINCINNATI AND HAMILTON COUNTY; ANTHONY WAYNE AVENUE CLOSING WITH CITY OF CINCINNATI; READING ROAD AND TEMPORARY ROAD NUMBER 4 WITH THE CITY OF READING AND HAMILTON COUNTY; DRIVE A WITH THE CITY OF READING; CROSS COUNTY SHALL BE COORDINATED WITH THE VILLAGE OF AMBERLY, CITY OF READING AND HAMILTON COUNTY. EACH AGENCY SHALL BE GIVEN TWO WEEKS NOTICE OF THE CLOSING SO THAT TEMPORARY STOPPAGE OF TRAFFIC MAY BE SCHEDULED. DRIVE A SHALL BE COORDINATED WITH LIEBEL -FLARSHEIM.

THE FOLLOWING PROCEDURE SHALL BE USED TO MAINTAIN TRAFFIC ON I-75.

I-75 SOUTHBOUND

CONSTRUCTION OF RAMP C ACCELERATION LANE, WIDENING HAM-75-10.10 AND ASSOCIATED SHOULDER WORK WILL NECESSITATE CLOSING THE RIGHT LANE OF THE THREE I-75 SOUTHBOUND LANES. TEMPORARY PRECAST CONCRETE BARRIER SHALL BE USED AT HAM-75-1010 TO PROTECT THE MOTORIST DURING THE WIDENING OF THE EXISTING STRUCTURE. SEE SHEET 19C FOR TRAFFIC CONTROL. SOUTHBOUND I-75 PAVED SHOULDER CONSTRUCTION FROM THE EXISTING FULL WIDTH PAVED SHOULDER AT GALBRAITH ROAD BRIDGE SOUTH TO EXISTING RAMP F NOSE AND RAMP F CONSTRUCTION ADJACENT TO I-75 SHOULD FOLLOW SIMILAR PROCEDURES PLUS THE CONSTRUCTION AND USE OF TEMPORARY ROAD NUMBER 1 TO MAINTAIN EXISTING RAMP TRAFFIC FROM GALBRAITH ROAD TO SOUTHBOUND I-75.

I-75 NORTHBOUND

CONSTRUCTION OF RAMP D DECELERATION LANE AND WIDENING HAM-75-1010 SHALL FOLLOW A SIMILAR PROCEDURE TO THAT OF I-75 SOUTHBOUND. WHEN RAMP D IS COMPLETED IT SHALL BE TEMPORARLY CLOSED TO TRAFFIC AS PER SHEET 19N UNTIL THE INTERCHANGE IS OPENED TO TRAFFIC. RAMP I SHALL FOLLOW A SIMILAR PROCEDURE TO RAMP C. FOR TEMPORARY BARRICADES TO BE LEFT IN PLACE SEE SHEET 19N.

I-75 GENERAL

CONSTRUCTION OF RETAINING WALLS, EARTHWORK AND BRIDGE PIERS SHALL BE COMPLETED WITH A MINIMUM OF INTERFERENCE TO I-75 NORTHBOUND OR SOUTHBOUND TRAFFIC. THE MEDIAN LANES OF I-75 SHALL NOT BE CLOSED FOR BRIDGE PIER CONSTRUCTION AT THE SAME TIME THE OUTSIDE LANES ARE CLOSED TO TRAFFIC. A SHORT TERM CLOSURE OF THE EXISTING OUTSIDE SHOULDERS MAY BE NECESSARY. USE THE TRAFFIC CONTROL SHOWN ON SHEETS 19C AND 19F TO 19L. EITHER TEMPORARY OR PERMANENT GUARDRAIL SHALL BE USED TO PROTECT THE TRAVELING PUBLIC.

To lessen the construction generated noise impact, construction will be prohibited between the hours of 10:00 P.M. and 7:00 A.M.

I-75 TRAFFIC CONTROL DURING THE ERECTION OF BRIDGE BEAMS AND/OR OVERHEAD SIGNS AND SUPPORTS.

1. THREE LANE CLOSURES FOR THE ERECTION OF BEAMS, SIGNS OR SIGN SUPPORTS WILL BE PERMITTED ONLY DURING SUNDAY DAYLIGHT HOURS. CONTRACTOR WILL COORDINATE CLOSURE TIMES WITH THE CITY OF CINCINNATI, HAMILTON COUNTY AND THE STATE OF OHIO RESPECTIVE TRAFFIC AND POLICE DEPARTMENTS SO CLOSURES DO NOT OCCUR DURING CROWD EVENTS WHICH INCREASE I-75 TRAFFIC.

2. THE MAXIMUM DURATION OF THREE LANE CLOSURES SHALL NOT EXCEED 15 MINUTES, SETTING ONLY ONE (1) BEAM AT A TIME. TRAFFIC SHALL BE COMPLETELY CLEARED BEFORE CLOSING TO ERECT THE NEXT BEAM.

3. "PREPARE TO STOP" (OW-152-48) SIGNS SHALL BE ERECTED ON EACH ON EACH SIDE OF THE DIRECTIONAL TRAFFIC LANES 3000 FEET IN ADVANCE OF THE STRUCTURE WHERE THE ERECTION IS IN PROGRESS. SUGGESTED LOCATIONS ARE:

   A. EASTBOUND S.R. 126 AND RAMP D STRUCTURES:

      1. NORTHBOUND I-75

         500 FEET NORTH OF S.R. 4 (PADDOCK ROAD).

         AT NB "ON" RAMP FROM S.R. 4 (PADDOCK ROAD) MIDWAY BETWEEN ENTRANCE ONTO RAMP AND NOSE OF RAMP AT I-75.

      2. SOUTHBOUND I-75

         300 FEET NORTH OF GALBRAITH ROAD OVERPASS.

         25 FEET SOUTH OF SOUTH END OF ISLAND AT GALBRAITH ENTRANCE RAMP TO SB I-75.

   B. WESTBOUND S.R.126 STRUCTURE OVER NB & SB I-75:

      1. NORTHBOUND I-75

         100 FEET NORTH OF NORTH END OF I-75 BRIDGE OVER MILLCREEK NORTH OF PADDOCK ROAD.

      2. SOUTHBOUND I-75

         300 FEET SOUTH OF SOUTH END OF I-75 SB BRIDGE OVER WEST FORK OF MILL CREEK.

         25 FEET SOUTH OF SOUTH END OF ISLAND AT GALBRAITH ROAD ENTRANCE RAMP TO SOUTHBOUND I-75.

4. WATCH FOR STOPPED TRAFFIC SIGNS. THE CONTRACTOR SHALL FURNISH AND INSTALL TWO (2) "WATCH FOR STOPPED TRAFFIC" SIGNS (SPECIAL) 1800 FEET UPSTREAM FROM THE "ROAD WORK AHEAD" SIGNS ON I-75 NORTHBOUND AND SOUTHBOUND AND AT THE SAME LOCATION OF THE "ROAD WORK AHEAD" ON ALL "ON" RAMPS TO I-75. THE CONTRACTOR SHALL INSTALL ADDITIONAL "WATCH FOR STOPPED TRAFFIC" EVERY 2000 FEET UPSTREAM FROM THE "WATCH FOR STOPPED TRAFFIC" ON I-75 IF TRAFFIC BACKUPS REACH THE FIRST SET OF SIGNS. THE NEED FOR THESE SIGNS SHALL BE CONSTANTLY MONITORED BY THE CONTRACTOR.

5. POINTS OF CLOSURE SHALL BE LOCATED SO VEHICLES CAN USE EITHER NORTHBOUND OR SOUTHBOUND RAMPS TO GALBRAITH ROAD WHILE BEAM ERECTION IS IN PROGRESS ON WESTBOUND S.R. 126 BRIDGES.

6. AT LEAST ONE FLAGGER SHALL BE PROVIDED AT THE POINT OF CLOSURE. TWO LAW ENFORCEMENT OFFICERS WITH VEHICLES HAVING ROTATING FLASHING BEACONS IN OPERATION SHALL BE PROVIDED TO MAKE THE CLOSURE AS OUTLINED IN STEP 7. INFORMATION REGARDING THE FEES, ARRANGEMENTS AND PAYMENT FOR SPECIAL DUTY PATROL SERVICES MAY BE OBTAINED BY CONTACTING THE APPROPRIATE LAW ENFORCEMENT AGENCIES AS SPECIFIED IN NOTE COVERING LAW ENFORCEMENT OFFICER.

GENERAL NOTES

7. ERECTION OF BRIDGE BEAMS, SPAN- TYPE AND/OR BRIDGE MOUNTED OVERHEAD SIGNS AND SUPPORTS SHALL BE ACCOMPLISHED IN THE FOLLOWING MANNER:

   A MINIMUM OF TWO (2) LAW ENFORCEMENT PATROL VEHICLES SHALL BE USED WHERE NECESSARY TO PACE MOTORISTS TO A STOP. AFTER TRAFFIC HAS BEEN STOPPED, ONE (1) PATROL VEHICLE SHALL TRAVEL ALONG THE ROADWAY SHOULDER 50 FEET BEHIND THE BACKUP OF STOPPED VEHICLES WHEN STOPPAGES OCCUR. IN THE VICINITY OF FREEWAY ENTRANCES OR EXITS, THE CONTRACTOR SHALL PLACE FLAGGERS ON THE RAMPS TO SLOW TRAFFIC. PATROL VEHICLES SHALL HAVE HIGH-RISE FLASHING BEACONS TO PROVIDE ADEQUATE VISIBILITY TO APPROACHING TRAFFIC. WHEN THE ENGINEER DEEMS IT APPROPRIATE, THE CONTRACTOR SHALL ERECT AND MAINTAIN "ROADWORK AHEAD", "ROAD CLOSED AHEAD" AND "STOP AHEAD" SIGNS WITH FLASHING TWELVE INCH (12") TRAFFIC SIGNAL HEADS IN ACCORDANCE WITH 632.05. PATROL VEHICLES AND SIGNS SHALL BE LOCATED IN ACCORDANCE WITH SKETCH SHOWN ON SHEET NO. 19D.

8. WHEN ERECTING BEAMS OR OVERHEAD SIGN SUPPORTS IN THE VICINITY OF SR 126 WB BASELINE, THE CONTRACTOR SHALL KEEP EITHER THE RAMPS OR THE MAINLINE OF I-75 OPEN TO TRAFFIC.

VINE STREET AND ANTHONY WAYNE AVENUE

ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF TEMPORARY PAVEMENT OR THE EXISTING PAVEMENT. PROVISIONS SHALL BE MADE FOR PEDESTRAIN TRAFFIC.

FOR TEMPORARY TRAFFIC CONTROL OF STATION AVENUE, BURNS AVENUE, WOODBINE AVENUE, BURKHART STREET, GREENLAND PLACE AND DEBONAIR DRIVE, SEE SHEETS 19A & 19B.

RAMP T AND RAMP N

ONE LANE OF GALBRAITH ROAD OR READING ROAD MAY BE CLOSED TO CONSTRUCT THE INTERSECTION WITH ITS RESPECTIVE RAMP. NO LANE CLOSURE SHALL BE PERMITTED DURING THE HOURS OF 6:00 AM TO 9:00 AM OR 3:00 PM TO 6:00 PM. THIS CLOSURE SHALL BE PERMITTED ONLY TO COMPLETE THE WORK ADJACENT TO THE EXISTING PAVEMENT, NOT THE ENTIRE RAMP.

AFTER THE INTERSECTION IS COMPLETE, THE RAMP SHALL BE TEMPORARLY CLOSED TO TRAFFIC AS PER SHEET 19B & 19N.

DRIVE A (LIEBEL-FLARSHIEM & MERRELL DRIVES) AND DRIVE B.

DRIVE TRAFFIC SHALL BE MAINTAINED AT ALL TIMES BY USE OF EITHER THE EXISTING OR THE PROPOSED DRIVES. ASPHALT CONCRETE TO MAINTAIN DRIVE TRAFFIC HAS BEEN INCLUDED IN THE PLANS TO MAINTAIN TEMPORARY DRIVE TRAFFIC SHOULD THIS BECOME NECESSARY. ALSO SEE TRAFFIC SIGNAL GENERAL NOTE FOR MAINTENANCE OF THE TRAFFIC SIGNAL AT DRIVE A.

GALBRAITH ROAD

FOUR LANES OF TRAFFIC SHALL BE , MAINTAINED BY USE OF EXISTING OR PROPOSED PAVEMENT OR TEMPORARY ROAD NO. 2. THE REDUCTION TO ONE LANE IN EACH DIRECTION WILL BE PERMITTED TO CONSTRUCT SEWER OR WATER LINES. FOR TRAFFIC CONTROL, SEE SHEET 19B, 19M AND 19U. IT MAY BE NECESSARY TO HAUL EARTHWORK ACROSS EITHER GALBRAITH ROAD OR TEMPORARY ROADS NO'S. 2 OR 3, BUT THIS SHALL BE DONE ONLY UNDER THE CONTROL OF A FLAGGER AND NOT BETWEEN THE HOURS OF 6:00 AM TO 9:00 AM OR 3:00 PM TO 6:00 PM.

RAMP P

ONE LANE OF EXISTING CROSS COUNTY HIGHWAY MAY BE CLOSED DURING THE CONSTRUCTION OF THE DECELERATION LANE, STA 133+00 TO STA 141+24 BY REMOVING THE EXISTING MEDIAN AND PLACING TEMPORARY PAVEMENT IN ORDER TO MAINTAIN TWO LANES WESTBOUND AND ONE LANE EASTBOUND. FOR TRAFFIC CONTROL, SEE SHEET NOS. 19B, 310C, 310E AND 19T.

RAMP Q

THIS RAMP AND TEMPORARY ROAD NO. 4 SHALL BE USED TO MAINTAIN TRAFFIC DURING THE CONSTRUCTION OF RAMP P AND SR 126 BETWEEN STA 121+00 AND STA 141+25. THREE LANES OF EXISTING CROSS COUNTY HIGHWAY SHALL BE MAINTAINED AT ALL TIMES; TWO WESTBOUND AND ONE EASTBOUND. SEE SHEETS 19B, 19T, 310C, AND 310E FOR TRAFFIC CONTROL ON RAMP Q AND TEMPORARY ROAD NO. 4. BEFORE TRAFFIC IS ROUTED OVER RAMP Q AND TEMPORARY ROAD NO. 4 THE PROPOSED TRAFFIC SIGNAL OR A TEMPORARY TRAFFIC SIGNAL SHALL BE IN PLACE AND OPERATIONAL AT GALBRAITH ROAD AND RAMP Q. SEE TEMPORARY TRAFFIC SIGNAL GENERAL NOTE. DURING THE CONSTRUCTION OF RAMP Q ACCELERATION LANE, STA 134+50 TO STA 143+58 AND KNOLLCREST DRIVE, ONLY ONE EASTBOUND LANE NEED BE MAINTAINED.

CROSS COUNTY HIGHWAY

RECONSTRUCTION OF THE EXISTING HIGHWAY FROM STA 135+00 TO STA 138+62 SHALL REQUIRE THE SAME PROCEDURE AS RAMP Q. FOR TRAFFIC CONTROL. TEMPORARY CLASS A PAVEMENT HAS BEEN PROVIDED TO MAINTAIN TRAFFIC IN THE AREA OF THE EXISTING MEDIAN.

KNOLLCREST DRIVE

TWO WAY TRAFFIC SHALL BE MAINTAINED ON THE EXISTING ROADS UNTIL TEMPORARY ROADS NO.'S 5 AND 6 ARE CONSTRUCTED AND OPENED TO TRAFFIC. SEE SHEETS 57, 310D AND 310E. WHEN MAKING THE CONNECTION OF PROPOSED KNOLLCREST DRIVE AND THE EXISTING PAVEMENT, ONE LANE TRAFFIC WILL BE PERMITTED ON KNOLLCREST DRIVE IF UNDER THE CONTROL OF A FLAGGER. (SEE SHEET NO. 19D) AT THE INTERSECTION OF KNOLLCREST DRIVE AND GALBRAITH ROAD, TWENTY-FOUR FEET OF PAVEMENT SHALL BE MAINTAINED ON GALBRAITH ROAD AT ALL TIMES. THE REDUCTION IN PAVEMENT WIDTH SHALL BE KEPT TO A MINIMUM LENGTH OF TIME.

TEMPORARY ROAD NO. 6

TWO-WAY TRAFFIC INTO THE PARKING LOT OF PARCEL 915 SHALL BE MAINTAINED BY THE USE OF THIS TEMPORARY ROAD UNTIL THE PROPOSED DRIVE OFF KNOLLCREST DRIVE IS COMPLETE AND OPENED TO TRAFFIC.

THE LIMITS AND DURATION OF USE OF TEMPORARY ROADWAYS SHALL BE HELD TO AN ABSOLUTE MINIMUM AND, IN ALL CASES, SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

SEQUENCE OF CONSTRUCTION

CLOSE STATION AVENUE, BURNS AVENUE, WOODBINE AVENUE AND BURKHART STREET IN ORDER TO SEPARATE ALL FROM SR 126 CONSTRUCTION. REMOVE THE EXISTING TRAFFIC SIGNALS AT THE INTERSECTIONS OF GALBRAITH ROAD WITH BURKHART STREET AND READING ROAD WITH CHAUCER DRIVE AND REPLACE WITH STOP SIGNS PER PERMANENT SIGNING PLANS. COMPLETE THE CONSTRUCTION OF STATION, BURNS AND WOODBINE AVENUES AND BURKHART STREET CUL-DE-SACS USING TEMPORARY SIGNING PER SHEETS 19 A AND 19 B. INSTALL THE PERMANENT TRAFFIC CONTROL PER SIGNING AND PAVEMENT MARKINGS PLANS WHILE REMOVING TEMPORARY TRAFFIC CONTROL ON RESPECTIVE STREETS. FOLLOW A SIMILAR PROCEDURE WITH THE CUL-DE-SACS AT GREENLAND PLACE AND DEBONAIR DRIVE. NONE OF THE PRECEEDING STREETS SHOULD BE DISTURBED BY FURTHER CONSTRUCTION.

CONSTRUCT RIGHT-OF-WAY FENCE AND NOISE BARRIERS AT THE FOLLOWING LOCATIONS:

FENCE:

LEFT SIDE FROM VINE STREET TO ANTHONY WAYNE AVENUE; STA 506+50 TO STA 40+00.

RIGHT SIDE FROM WOODBINE AVENUE TO ANTHONY WAYNE AVENUE; STA 33+00 TO STA 38+00.

LEFT SIDE FROM STA 89+00 TO STA 97+00 RAMP T.

RIGHT SIDE FROM STA 98+50 TO STA 105+00.

RIGHT AND LEFT SIDES FROM READING ROAD TO THE PENN-CENTRAL RAILROAD; STA 107+00 TO STA 111+00.

NOISE BARRIERS:

STATION 58+25, 227.00' RIGHT TO STATION 60+54.98, 226.07' RIGHT.

IN ORDER TO SECURE THE WORK SITE, OTHER AREAS SHALL BE FENCED OR NOISE BARRIERS ERECTED AS SOON AS PRACTICAL, EXCEPT AS NOTED ON SHEET 16D

ALL OF THE WORK EAST OF READING ROAD SHOULD BE COMPLETED IN ONE OPERATION. THIS WILL ALLOW THE PERMANENT FACILITIES OF GALBRAITH ROAD, EXISTING CROSS COUNTY HIGHWAY, RAMP P & Q, DRIVES A & B AND KNOLLCREST DRIVE TO BE USED BY THE PUBLIC WHILE THE REST OF THE PROJECT IS BEING COMPLETED. UPGRADING OF THE SIGNALS ALONG GALBRAITH ROAD SHOULD BE DONE CONCURRENTLY TO ASSIST IN THE OPERATION OF EXISTING TRAFFIC.

GENERAL NOTES

CALC. BY Aaz DATE 3/96
CHKD. BY Rcs DATE 3/96
HAM-75/126-9.93/13.00
HAMILTON COUNTY
OHIO
FHWA REGION 5
168
787

A SEQUENCE OF CONSTRUCTION EVENTS IS:

CONSTRUCT TEMPORARY ROADS NOS. 3 & 5.

INSTALL 30-55 GALLON DRUMS TO CLOSE RIGHT EASTBOUND LANE OF CROSS COUNTY HIGHWAY FROM STA 122+00 TO STA 144+00.

RELOCATE KNOLLCREST DRIVE AND GALBRAITH ROAD TRAFFIC TO TEMPORARY ROADS NO'S. 3, 5 AND 6.

CONSTRUCT GALBRAITH ROAD FROM STA 15+50 TO STA 21+20, DRIVE B, KNOLLCREST DRIVE, ALL DRIVES OFF OF KNOLLCREST DRIVE, AND RAMP Q, TEMPORARY ROAD NO. 4 AND MEDIAN REMOVAL ON CROSS COUNTY EXCEPT WHERE THEIR CONSTRUCTION WILL INTERFERE WITH TEMPORARY ROAD NO.3 TRAFFIC.

ROUTE GALBRAITH ROAD, DRIVE B AND ALL KNOLLCREST DRIVE TRAFFIC ONTO NEW FACILITIES. CONSTRUCT TEMPORARY ROAD NO.2, THE REMAINING PORTIONS OF TEMPORARY ROAD NO.4, RAMP Q AND DRIVE "A" PAVEMENT TO TEMPORARY ROAD NO. 2 WITH TEMPORARY SIGNALS AT THE INTERSECTIONS OF TEMPORARY ROAD NO. 2 WITH DRIVE "A" AND TEMPORARY ROAD NO. 4-RAMP Q WITH GALBRAITH ROAD.

REROUTE CROSS COUNTY TRAFFIC ONTO RAMP Q-TEMPORARY ROAD NO 4, GALBRAITH ROAD TRAFFIC ONTO TEMPORARY ROAD NO. 2 AND EXISTING PLANT TRAFFIC FOR LIBEL-FLARSHIEM AND MERRELL TO DRIVE A.

INSTALL 30-55 GALLON BARRELS ALONG RAMP P DECEL LANE AND CONSTRUCT REMAINING WORK ON PROJECT LYING EAST OF READING ROAD.

THE SECTION BETWEEN WOODBINE AVENUE AND READING ROAD SHOULD BE COMPLETED NEXT AND OPENED TO TRAFFIC.

THE BALANCE OF THE PROJECT (WEST OF WOODBINE AVENUE) SHOULD BE COMPLETED LAST. THE BRIDGE OVER THE MILLCREEK ON VINE STREET WILL BE RECONSTRUCTED. DURING THE BRIDGE PROJECT, VINE STREET WILL BE CLOSED TO THROUGH TRAFFIC. SUCH A ROAD CLOSURE WILL NOT BE PERMITTED ON HAM.-75/126-9.93/13.00, BUT IF BOTH PROJECTS ARE UNDER CONSTRUCTION AT THE SAME TIME, THE CONTRACTOR MAY TAKE ADVANTAGE OF THE NEED FOR REDUCED TRAFFIC CONTROL.

THE CONTRACTOR SHALL MAINTAIN TRAFFIC AT ALL TIMES IN ACCORDANCE WITH THE REQUIREMENTS OF SPEC. 614. TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT,THE COMPLETED PAVEMENT AND TEMPORARY PAVEMENTS. THE LIMITS AND DURATION OF USE OF TEMPORARY ROADWAYS SHALL BE HELD TO AN ABSOLUTE MINIMUM,AND IN ALL CASES BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

ITEM	DESCRIPTION	UNITS	IR-75-1(96)10	F-2(13)
404	BITUMINOUS CONCRETE FOR MAINTAINING TRAFFIC	CU YD	450	500
615	TEMPORARY ROADS	LUMP	LS	LS
615	TEMPORARY PAVEMENT, CLASS A	SQ YD	200	345
622	TEMPORARY PRECAST CONCRETE BARRIER, LEFT IN PLACE	LIN FT	1000	0
622	TEMPORARY PRECAST CONCRETE BARRIER	LIN FT	750	0
615	TYPE III BARRICADES LEFT IN PLACE	LIN FT	396	0
SPL	30-55 GALLON DRUMS LEFT IN PLACE	EACH	23	0
SPL	REPLACEMENT DRUMS	EACH	100	100
SPL	REPLACEMENT PYLONS	EACH	0	20
SPL	REPLACEMENT SIGNS	SQ FT	250	250
SPL	LAW ENFORCEMENT OFFICER WITH PATROL CAR	HOURS	200	0
614	TEMPORARY LANE LINE, CLASS 1	MILES	0	0.8
614	TEMPORARY CENTERLINE, CLASS 1	MILES	0	0.5
614	TEMPORARY CHANNELIZING LINES, CLASS 1,LEFT IN PLACE	LIN FT	689	0
SPL	TEMPORARY ASPHALT DIVIDER	LIN FT	0	1625
614	TEMPORARY CHANNELIZING LINES, CLASS 1	LIN FT	0	300
614	TEMPORARY EDGE LINES, CLASS 1, LEFT IN PLACE	LIN FT	2704	0
614	TEMPORARY EDGE LINES, CLASS 1	MILES	.3	1.5
614	TEMPORARY STOP LINES, CLASS 1	LIN FT	0	214
614	TEMPORARY RAILROAD SYMBOL MARKINGS, CLASS 1	EACH	0	2
614	TEMPORARY WORD "ONLY" ON PAVEMENT, 72-INCH, CLASS 1	EACH	0	2
614	TEMPORARY TRANSVERSE LINES, CLASS 1, LEFT IN PLACE	LIN FT	445	0
614	TEMPORARY TRANSVERSE LINES, CLASS 1	LIN FT	0	725

THE CONTRACTOR SHALL ARRANGE HIS OPERATIONS SO AS TO PREVENT ANY INTERFERENCE TO THE CONTINUOUS FLOW OF TRAFFIC. ALL VEHICLES, EQUIPMENT, MEN AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO ONE SIDE OF THE PAVEMENT UNLESS OTHERWISE APPROVED BY THE ENGINEER. VEHICLES AND EQUIPMENT SHALL ALWAYS MOVE WITH, AND NOT ACROSS OR AGAINST THE FLOW OF TRAFFIC. VEHICLES AND EQUIPMENT SHALL NOT PARK OR STOP EXCEPT WITHIN DESIGNATED WORK AREAS, AND SHALL ENTER OR LEAVE WORK AREAS IN SUCH A MANNER WHICH WILL NOT BE HAZARDOUS TO,OR INTERFERE WITH THE NORMAL TRAFFIC FLOW. PERSONAL VEHICLES WILL NOT BE PERMITTED TO PARK WITHIN THE RIGHT-OF-WAY EXCEPT IN SPECIFIC AREAS DESIGNATED BY THE ENGINEER.

THE CONTRACTOR WILL BE REQUIRED TO RELOCATE, PROVIDE, ERECT, MAINTAIN (IN PROPER POSITION, CLEAN, LEGIBLE AND IN GOOD WORKING CONDITION) AND REMOVE ALL LIGHTS, SIGNS, BARRICADES, CONES AND ALL OTHER TRAFFIC DEVICES NECESSARY FOR THE MAINTENANCE OF TRAFFIC, INCLUDING REGULATORY SIGNS AND PAVEMENT MARKINGS.

ALL SIGNS SHALL BE REFLECTORIZED. ALL SIGNS SHALL BE POST-MOUNTED, UNLESS OTHERWISE SHOWN IN THE PLANS OR DIRECTED BY THE ENGINEER.

BEFORE WORK BEGINS, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER, THE NAMES AND TELEPHONE NUMBERS OF PERSONS WHO CAN BE CONTACTED 24 HOURS A DAY BY THE OHIO DEPARTMENT OF TRANSPORTATION AND ALL INTERESTED POLICE AGENCIES. THESE PERSONS SHALL BE RESPONSIBLE FOR PLACING OR REPLACING NECESSARY TRAFFIC CONTROL DEVICES TO MAINTAIN THE TRAVELLED PAVEMENT SAFELY.

PAYMENT FOR ALL OF THE ABOVE INCLUDING FURNISHING, ERECTING, MAINTAINING AND REMOVAL OF LIGHTS, SIGNS, SIGN SUPPORTS, TEMPORARY BARRICADES, TEMPORARY GUARDRAIL, TEMPORARY PRECAST BARRIERS, TEMPORARY ASPHALT DIVIDERS, DELINEATORS FOR TEMPORARY PRECAST CONCRETE BARRIERS, DRUMS, AND CONES IS INCLUDED IN THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC EXCEPT FOR THE ITEMS LISTED ABOVE, WHICH WILL BE PAID FOR SEPARATELY.

PYLONS

THE PYLONS SPECIFIED FOR USE BETWEEN THE DIRECTIONAL TRAFFIC ON CROSS COUNTY HIGHWAY WHILE TEMPORARY ROAD NO 4 IS IN USE SHALL BE 36" HIGH AND SPACED AT 30' CENTERS.

ITEM SPECIAL TEMPORARY ASPHALT DIVIDER

THIS ITEM SHALL CONSIST OF CONSTRUCTING AN ASPHALT CONCRETE DIVIDER TO THE DIMENSIONS SHOWN IN THE PLANS, PAINTING THE TOP YELLOW, AND THE REMOVAL AND DISPOSAL WHEN NO LONGER NEEDED. THE ASPHALT CONCRETE MATERIAL SHALL MEET THE GENERAL REQUIREMENTS OF SPECIFICATION 404. THE PAINT AND GLASS BEADS SHALL MEET THE REQUIREMENTS OF SPECIFICATION SEC. 621.02. THE METHOD OF MEASUREMENT WILL BE LINEAR FOOT IN PLACE WITH PAYMENT AS ITEM SPECIAL TEMPORARY ASPHALT DIVIDER

CALC. BY	DATE 2/96	HAM-75/126-9.93/13.00 HAMILTON COUNTY	OHIO	16C 787
CHKD. BY	DATE 3/96		FHWA REGION 5	

GENERAL NOTES

ITEM 622 TEMPORARY BARRIER ON BRIDGES OR LEFT IN PLACE

ON THE BRIDGES WHERE TRAFFIC IS TO BE MAINTAINED WHILE THE BRIDGE IS WIDENED AND/OR PORTIONS OF THE EXISTING STRUCTURE ARE REMOVED OR REPLACED, TEMPORARY BARRIERS SHALL BE PROVIDED. THE TEMPORARY BARRIER SHALL BE PORTABLE CONCRETE BARRIERS AND SHALL CONFORM TO THE SPECIFICATIONS AS SHOWN ON STANDARD DRAWING MC-9A WITH A POSITIVE CONNECTION TO EACH OTHER. PAYMENT FOR TEMPORARY BARRIER SHALL BE MADE UNDER UNDER "ITEM 622-TEMPORARY PRECAST CONCRETE BARRIER." AN ESTIMATED QUANTITY OF 650 LINEAR FEET IS PROVIDED IN THE GENERAL SUMMARY. PAYMENT WILL BE MADE ONCE FOR EACH BRIDGE SITE WITH THE PAYMENT INCLUDING THE COST OF FURNISHING, INSTALLING (AND ALL SHIFTING OF CONCRETE BARRIER FROM THE INITIAL SIDE TO THE OPPOSITE SIDE), MAINTAINING AND REMOVING THE BARRIER. THE TEMPORARY PRECAST CONCRETE BARRIER SHALL BE FLARED BACK ON THE APPROACH END OF THE BRIDGE. ALL OF THE ABOVE SHALL BE USED IN CONJUNCTION WITH SHEET 19C "TYPICAL CLOSURE DETAIL" WHILE MAKING MODIFICATIONS AS DEEMED NECESSARY. PLANS OF THE TEMPORARY PRECAST BARRIER CLOSURE ON BRIDGES SHALL BE SUBMITTED FOR APPROVAL TO THE ENGINEER.

NO BRIDGE RAIL OR PARAPET SHALL BE REMOVED UNTIL THE NEW REPLACEMENT MATERIAL IS ON THE SITE, READY FOR INSTALLATION. ALL NEW BRIDGE PARAPET SHALL BE INSTALLED AS SOON AS PERMISSIBLE. THE INTENT OF THIS NOTE IS TO MINIMIZE HAZARDS AS WELL AS ANY PROLONGED INCONVENIENCE TO THE TRAVELING PUBLIC. FAILURE TO COMPLY WITH THESE REQUIREMENTS SHALL BE DEEMED SUFFICIENT CAUSE TO ORDER WORK SUSPENDED ON THIS PROJECT UNTIL SUCH TIME THAT THE ENGINEER IS ASSURED OF SAID COMPLIANCE.

UNDER ITEM 614 MAINTAINING TRAFFIC, BARRIER DELINEATORS SHALL BE INSTALLED ON EVERY SECTION OF THE TEMPORARY PRECAST CONCRETE BARRIER USED FOR BRIDGES AT A HEIGHT OF 26" ABOVE THE NEAR EDGE OF PAVEMENT, BUT NOT LESS THAN 3" BELOW THE TOP OF THE TEMPORARY CONCRETE BARRIER. SAID DELINEATORS SHALL BE A "STIMSONITE" MODEL 965 OR EQUIVALENT WITH AN ADHESIVE RECOMMENDED BY THE MANUFACTURER. THE COST OF THE DELINEATORS, LABOR, INSTALLATION, EQUIPMENT AND REPLACEMENT WILL BE INCLUDED IN THE LUMP SUM BID PRICE "ITEM 614 MAINTAINING TRAFFIC".

UNDER ITEM 622 TEMPORARY PRECAST CONCRETE BARRIER LEFT IN PLACE, BARRIER DELINEATORS SHALL BE INSTALLED ON EVERY SECTION OF THE TEMPORARY PRECAST CONCRETE BARRIER AT A HEIGHT OF 26" ABOVE THE NEAR EDGE OF PAVEMENT, BUT NOT LESS THAN 3" BELOW THE TOP OF THE TEMPORARY CONCRETE BARRIER. SAID DELINEATORS SHALL BE A "STIMSONITE" MODEL 965 OR EQUIVALENT WITH AN ADHESIVE RECOMMENDED BY THE MANUFACTURER. THE COST OF THE DELINEATORS, LABOR, INSTALLATION, EQUIPMENT AND REPLACEMENT WILL BE INCLUDED IN THE UNIT PRICE BID FOR "ITEM 622 TEMPORARY PRECAST CONCRETE BARRIER LEFT IN PLACE".

MILLCREEK CHANNEL

TWO OTHER PROJECTS ON THE MILLCREEK ARE CURRENTELY UNDER DESIGN. THE OHIO DEPARTMENT OF TRANSPORTATION PLANS TO REPLACE THE TRUSS BRIDGE ON VINE STREET OVER THE MILLCREEK AND THE U.S. CORPS OF ENGINEERS PLANS TO WIDEN THE MILLCREEK CHANNEL. BOTH OF THESE PROJECTS MAY BE UNDER CONSTRUCTION AT THE SAME TIME AS HAM-75/126-9.93/13.00. IF THIS OCCURS IT WILL BE NECESSARY FOR THE CONTRACTOR TO COOPERATE AS PER 105.07.

IN ADDITION, A PORTION OF THE EROSION CONTROL HAS BEEN DESIGNED TO MEET THE EXISTING CHANNEL, NOT THE FUTURE CHANNEL. DEPENDING ON THE STAGE OF CONSTRUCTION FOR EACH PROJECT, IT MAY BE NECESSARY TO NON-PERFORM THE ROCK CHANNEL PROTECTION AT THE FOLLOWING LOCATIONS:

STATION 1524+58 TO STATION 1525+85

STATION 5+65 TO STATION 9+14.56

THE FOUR CORNERS OF THE BRIDGE HAM-75-1010

REMOVAL OF OBSTRUCTIONS

THERE ARE NUMEROUS BUILDINGS SHOWN ON THE PLANS. THESE WILL BE REMOVED UNDER A SEPARATE CONTRACT. THERE ARE MISCELLANEOUS OBSTRUCTIONS THAT MAY REMAIN AFTER THE BUILDINGS HAVE BEEN REMOVED. REMOVAL OF THESE WILL BE PERFORMED AS PER 202.01.

REMOVAL OF EXISTING SIGNS

ALL REGULATORY, WARNING, GUIDE AND ROUTE MARKING SIGNS WHICH AR SCHEDULED FOR REMOVAL ON EXISTING PUBLIC RIGHT OF WAY OR EASEMENTS SHALL BE STORED ON SITE FOR PICKUP BY STATE FORCES. THE SIGNS REMOVED FROM EXISTING PRIVATE PROPERTY SHALL BE STORED ON SITE FOR PICKUP BY THE OWNER OF THE SIGN. PAYMENT FOR VARIOUS 630 ITEMS SHALL BE MEASURED AND PAID FOR AS PROVIDED IN SECTIONS 630.14 AND 630.15 OF THE SPECIFICATIONS.

ITEM SPECIAL-REPLACEMENT DRUMS

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER, AND SHALL BE PAID FOR UNDER ITEM SPECIAL "REPLACEMENT DRUMS". PAYMENT FOR EACH NEW DRUM SHALL INCLUDE: (1)THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM AND (2)PROVIDING, MAINTAINING AND REMOVING THE REPLACEMENT DRUMS IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS OF THE ORIGINAL DRUMS.

AN ESTIMATED QUANTITY OF 100 EACH REPLACEMENT DRUMS HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

ITEM SPECIAL - REPLACEMENT SIGNS

FLAT SHEET SIGNS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS, AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONIROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN BY THE ENGINEER. PAYMENT SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED SIGNS, HARDWARE AND SUPPORTS, AND PROVIDING NECESSARY REPLACEMENT HARDWARE, SUPPORTS, ETC. REPLACEMENT SIGNS SHALL BE NEW BUT OTHER MATERIALS MAY BE USED SUBJECT TO APPROVAL BY THE ENGINEER. PAYMENT FOR THE NEW SIGNS SHALL BE MADE AT THE BID PRICE PER SQUARE FOOT FOR ITEM SPECIAL. "REPLACEMENT SIGNS" FOR WHICH AN ESTIMATED QUANTITY OF 500 SQUARE FEET HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

PLACEMENT OF ASPHALT CONCRETE

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT ONE-WAY TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR THE PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES.

ITEM 615 TEMPORARY ROADS AND PAVEMENTS

ON THIS PROJECT THE TEMPORARY CLASS A PAVEMENT SHALL BE 18 FEET WIDE AND THE ROADWAY WIDTH SHALL NOT BE LESS THAN 22 FEET OUT TO OUT OF SHOULDERS AND 22 FEET FACE TO FACE OF RAIL WHERE GUARDRAIL IS USED. THE ALIGNMENT AND PAVEMENT TYPICAL SECTION SHALL BE AS DETAILED ON THE ASSOCIATED PLAN-PROFILE SHEET.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED IN CONSTRUCTING THE TEMPORARY CLASS A PAVEMENT.

ITEM 615 TEMPORARY PAVEMENT, CLASS A	14455	SQ YD

ALTHOUGH ESTIMATES FOR TEMPORARY GUARDRAIL, TEMPORARY SIDEWALK, TEMPORARY EXCAVATION AND EMBANKMENT, HAVE BEEN SHOWN ON THE PLAN DETAILS, THESE ITEMS SHALL BE CONSIDERED INCIDENTAL TO, AND INCLUDED WITH, PAYMENT FOR ITEM 615 TEMPORARY ROADS.

TRENCH FOR WIDENING

TRENCH EXCAVATION FOR BASE WIDENING SHALL BE ONLY ON ONE SIDE OF THE PAVEMENT A TIME. THE OPEN TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS OR BARRICADES AT ALL TIMES. PLACEMENT OF PROPOSED SUBBASE AND BASE MATERIAL SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND THE THE EXCAVATION OPERATIONS. THE LENGTH OF WIDENING TRENCH WHICH IS OPEN AT ANY ONE TIME SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT TO APPROVAL OF THE ENGINEER.

LIGHTS AND SIGNS AT ADJACENT ROAD INTERSECTIONS

THE CONTRACTOR SHALL, IN ADDITION TO THE GENERAL REQUIREMENTS OF ITEM 614 ON THIS PROJECT PERFORM THE FOLLOWING:

PROVIDE, ERECT, AND MAINTAIN STANDARD 48" x 30" SIZE "ROAD CLOSED" SIGNS, SIGN SUPPORTS, AND LIGHTS AT THE LOCATIONS SPECIFIED IN THE PLANS DURING PERIODS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC:

SIGN SUPPORTS AND LIGHTS FOR "ROAD CLOSED" SIGNS SHALL BE AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR PROVIDING, ERECTING MAINTAINING, AND REMOVING LIGHTS, SIGNS, AND SIGN SUPPORTS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

GENERAL NOTES

CONTRACTOR'S MAINTENANCE RESPONSIBILITY

ON THIS PROJECT, THE CONTRACTOR'S RESPONSIBILITY FOR MAINTENANCE OF THE EXISTING PAVEMENT, PER ITEM 614, SHALL BE LIMITED TO THOSE PORTIONS OF THE EXISTING HIGHWAY LYING WITHIN THE PROPOSED WORK LIMITS. NECESSARY UPKEEP OF THE ADJOINING PAVEMENTS WHICH ARE USED FOR TRAFFIC MAINTENANCE BUT ARE OUTSIDE OF THE RIGHT-OF-WAY FOR THE PROPOSED HIGHWAY RELOCATION WILL BE PROVIDED BY OTHERS.

FIELD OFFICE

THE CONTRACTOR SHALL PROVIDE A SUITABLE FIELD OFFICE HAVING A MINIMUM OF 800 SQ.FT. OF FLOOR SPACE. PAYMENT SHALL BE MADE AT THE LUMP SUM PRICE BID FOR ITEM 619, FIELD OFFICE.

UNDERGROUND UTILITIES

THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS OF THE UTILITY AS REQUIRED BY SECTION 153.64 ORC.

UTILITY OWNERSHIP

THE FOLLOWING UTILITIES AND OWNERS ARE LOCATED WITHIN THE WORK LIMITS OF THIS PROJECT:

SANITARY SEWERS:	METROPOLITIAN SEWER DISTRICT 1600 GEST STREET CINCINNATI OHIO 45204 (513) 352-4899
WATER LINES:	CINCINNATI WATERWORKS 4747 SPRING GROVE AVENUE CINCINNATI OHIO 45232 (513) 352-3000
	SOUTHWESTERN OHIO WATER COMPANY 11137 MAIN STREET CINCINNATI OHIO 45210 (513) 554-1188
ELECTRIC:	CINCINNATI GAS AND ELECTRIC COMPANY 4TH AND MAIN STREETS CINCINNATI OHIO 45201 (513) 381-2000
TELEPHONE:	CINCINNATI BELL TELEPHONE COMPANY 225 EAST FOURTH ST. CINCINNATI OHIO 45201 ATTN:MR. C. FREDERICK (513) 397-9000
TELEPHONE:	A T & T LONG LINES CENTER #2 PLANT PROTECTION CENTER XENIA OHIO 45385 (513) 376-2901
GAS:	CINCINNATI GAS AND ELECTRIC COMPANY GAS ENGINEERING AND PLANNING DEPARTMENT; ROOM 216 4TH AND MAIN STREETS CINCINNATI OHIO 45201 ATTN: MR. R GROTE SUPERVISIOR OF ENGINEERING (513) 381-2000
CABLE TELEVISION:	WARNER AMEX 11252 CORNELL PARK DR CINCINNATI OHIO 45202 (513) 489-5000
PROTECTION:	OHIO UTILITIES PROTECTION SERVICE 100 FEDERAL PLAZA EAST LOWER LEVEL YOUNGSTOWN OHIO 44503 (800) 362-2764
	UNITED UTILITIES PROTECTION SERVICE 201 EAST FORTH STREET ROOM 274 CINCINNATI OHIO 45201 (513) 397-4664

CONTIGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK LISTED IN THE GENERAL SUMMARY FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATION AND QUANTITIES USED AT THE ENGINEER'S DISCRETION SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

TEMPORARY TRAFFIC SIGNAL SYSTEMS

THE CONTRACTOR SHALL FURNISH AND INSTALL THE TEMPORARY SIGNAL SYSTEMS AT THE INTERSECTION OF RAMP Q AT GALBRAITH AND DRIVE B AT GALBRAITH ROAD.TEMPORARY SIGNAL EQUIPMENT AND INSTALLATION DETAILS SHALL BE IN ACCORDANCE WITH ALL OF THE PROVISIONS HEREIN SPECIFIED AND DETAILED FOR PERMANENT SIGNED SYSTEMS.

AFTER STATE ROUTE 126 HAS BEEN OPENED TO TRAFFIC,THE CONTRACTOR SHALL REMOVE ALL OF THE COMPONENTS OF THE TEMPORARY TRAFFIC SIGNAL SYSTEM.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSURING THAT AN OPERATIONAL SIGNAL SYSTEM IS PROVIDED FOR THE INTERSECTION OF EAST LAKESHORE DRIVE WITH GALBRAITH ROAD UNTIL THE CONNECTION FROM DRIVE B TO GALBRAITH ROAD HAS BEEN COMPLETED.

"TEMPORARY SIGNAL SYSTEM -RAMP Q AND GALBRAITH ROAD"
SHALL INCLUDE ALL EQUIPMENT,
MATERIALS, AND INCIDENTALS REQUIRED TO PROVIDE AN OPERATIONAL SIGNAL SYSTEM
ON THE PLANS AND REMOVAL OF THE SIGNAL SYSTEM.

"TEMPORARY SIGNAL SYSTEM-DRIVE B AND GALBRAITH ROAD"
SHALL INCLUDE ALL EQUIPMENT,
MATERIALS, AND INCIDENTALS REQUIRED TO PROVIDE AN OPERATIONAL SIGNAL SYSTEM
AND REMOVAL OF THE SIGNAL SYSTEM

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY OF THE TRAFFIC SIGNAL SYSTEM COMPONENTS REQUIRED TO BE HANDLED DURING THE RELOCATION OF POLES AND MODIFICATIONS TO THE SIGNAL SYSTEM. PAYMENT INCLUDED IN ITEM 614 MAINTAINING TRAFFIC.

LAW ENFORCEMENT OFFICER

ARRANGEMENTS AND FEES FOR LAW ENFORCEMENT OFFICER WITH PATROL CAR SHALL BE MADE WITH THE ADMINSTRATIVE ASSISTANT OF DISTRICT FOUR OF THE CITY OF CINCINNATI'S POLICE DEPARTMENT AT (513) 352-3021.

FENCING ALONG NATIONAL DISTILLERS

THE CONTRACTOR SHALL NOTIFY D.J.STONEKING AT (513) 948-4045 OR MR.FERD DE JACO AT (513) 948-4055 OF NATIONAL DISTILLERS AT LEAST 30 DAYS IN ADVANCE OF ANY WORK TO BE PERFORMED AFFECTING NATIONAL DISTILLERY PROPERTY BETWEEN STA.84+00 AND STA.86+25 .THE OWNERS WILL IMMEDIATELY REMOVE THE EXISTING FENCE AND CONSTRUCT THE TEMPORARY FENCE AND GATES AS SHOWN ON SHEET NO.763A. THE CONTRACTOR SHALL THEN COMMENCE WORK IN THIS AREA AND SHALL COMPLETE ALL PROPOSED WORK DRAINAGE, DITCHES AND PROPOSED WALL NO.8 WITHIN 120 CALENDER DAYS. IN THE EVENT THE CONTRACTOR DOES NOT COMPLETE THE WORK HE WILL BE ASSESSED DAMAGES IN THE AMOUNT OF $50.00 PER DAY THEREAFTER UNTIL SUCH TIME AS THE WORK IS COMPLETED.

UPON COMPLETION OF THIS WORK, THE CONTRACTOR SHALL AGAIN NOTIFY MR. DE JACO OR MR. STONEKING WHEREUPON THEY WILL IMMEDIATELY ERECT THE PERFORMANCE FENCE IN THE LOCATION SHOWN ON SHEET NO. 763A

FINAL FENCE LOCATION *The specific location of proposed fencing between 70+00 Ramp D (Lt.) and 54+22 E.B.126 (Rt.) will be determined during construction of this project. The contractor shall give the Project Engineer two (2) weeks notice prior to commencing fence installation in the above mentioned location.*

The Millcreek Valley Conservancy District and the District Design Office will determine the specific location of the fence after being notified by the Project Engineer of the contractor's intention to install the fence in the above mentioned location.

GENERAL NOTES

SPECIAL SEEDING PREPARATION AREAS

THE REFERENCE IN THE FIRST PARAGRAPH OF 659.09 TO PREPARATION OF THE SEED BED IN FRONT OF RESIDENCES, ETC. SHALL ON THIS PROJECT BE CONSIDERED TO BE PARTICULARLY APPLICABLE TO ALL AREAS LISTED IN 659.09 IN ADDITION TO THE FOLLOWING AREAS:

STATION	TO	STATION	LEFT
106+50		111+00	x
130+00		136+00	x

STATION	TO	STATION	RIGHT
87+00		111+50	x
113+00		123+00	x

ITEM SPECIAL, DRILLED WATER WELL ABANDONED

THE EXISTING CONCRETE OR STONE SLAB WELL COVER AND PUMPING EQUIPMENT SHALL BE REMOVED AND DISPOSED OF. THE CASING SHALL BE CUT OFF AT LEAST ONE FOOT BELOW THE PROPOSED FINISHED GRADE OUTSIDE PROPOSED PAVEMENT AREAS OR AT LEAST ONE FOOT BELOW THE PROPOSED SUBGRADE ELEVATION INSIDE PROPOSED PAVEMENT AREAS. THE WELL SHALL BE FILLED FROM BOTTOM TO TOP WITH CLEAN PUDDLED CLAY OR CONCRETE.

THE UNIT PRICE BID PER EACH FOR ITEM SPECIAL, DRILLED WATER WELL ABANDONED SHALL INCLUDE PAYMENT FOR ALL LABOR, TOOLS, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM.

ITEM 203, PROOF ROLLING

AN ESTIMATED QUANTITY OF 85 HOURS FOR THIS ITEM HAS BEEN PROVIDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

ITEM 659, AGRICULTURAL LIMING, AS PER PLAN

THE LOCATION AND NEED FOR AGRICULTURAL LIMING WILL BE DETERMINED BY LABORATORY TESTS, AFTER ROUGH GRADING OPERATIONS HAVE BEEN PERFORMED. QUANTITIES OF AGRICULTURAL LIMING, AS SHOWN ON THE PLANS, ARE SUFFICIENT FOR THE ENTIRE PROJECT, BUT WILL BE NON-PERFORMED FOR THE AREAS WHERE TESTS SHOW THAT LIMING IS NOT REQUIRED.

CHANNEL EMBANKMENTS

PORTIONS OF THE EXISTING CHANNEL OUTSIDE THE ROADBED, SHALL BE FILLED AND SLOPED TO DRAIN, AS CALLED FOR ON THE PLANS. THE CONTRACTOR SHALL USE EITHER SUITABLE OR UNSUITABLE MATERIALS, TO THE EXTENT AVAILABLE, FOR CHANNEL EMBANKMENTS. AREAS WHERE CHANNEL EMBANKMENTS ARE TO BE PLACED SHALL BE CLEARED OF WEEDS AND BRUSH.THE REQUIREMENTS FOR MOISTURE, DENSITY CONTROL, BENCHING, AND SUITABLE MATERIALS SHALL BE WAIVED.

THE DEPTH OF THE LAYERS IN WHICH THE EMBANKMENTS ARE TO BE PLACED AND THEIR COMPACTION SHALL, IN LIEU OF THE REQUIREMENTS OF ITEM 203, CONFORM WITH ACCEPTABLE CONSTRUCTION PRACTICES AS DETERMINED BY THE ENGINEER.

NO PROVISIONS OF THE SPECIFICATIONS SHALL BE WAIVED FOR EMBANKMENTS WHICH SUPPORT ANY PORTION OF THE NEW ROADBED OR STRUCTURAL MEMBERS.PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 203, EMBANKMENT.

WATERING AND MOWING PERMANENT SEEDED AREAS

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER TO PROMOTE GROWTH AND TO CARE FOR THE PERMANENT SEEDED AREAS, AS PER 659.09:

659 WATER F-2(13)	223	M. GAL
659 WATER IR-75-1(96)10	657	M. GAL
659 MOWING F-2(13)	927	M. SQ FT
659 MOWING IR-75-1(96)10	2739	M. SQ FT

REMOVAL OF TREES OR STUMPS

ALL TREES AND STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE CONSTRUCTION LIMITS OF THIS PROJECT SHALL BE REMOVED UNDER THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING, EXCEPT THOSE TREES FOR WHICH PROTECTION AND PRESERVATION WORK IS INDICATED ELSEWHERE IN THESE PLANS SHALL NOT BE REMOVED. THE FOLLOWING IS AN APPROXIMATE ESTIMATE OF THE NUMBER OF TREES AND STUMPS TO BE REMOVED.

SIZES	NO. TREES	NO. STUMPS	TOTAL	REMARKS
18"	3001	40	3041	F-2(13)
18"	6809	68	6873	IR-75-1(96)10
30"	285	18	303	F-2(13)
30	304	14	313	IR-75-1(96)10
48"	36	2	38	F-2(13)
48"	7	2	5	IR-75-1(96)10
60"	4	0	4	F-2(13)
60"	4	0	4	IR-75-1(96)10

THE ABOVE ESTIMATE IS APPROXIMATE AND THE STATE OF OHIO RESERVES THE RIGHT TO ORDER THE REMOVAL OF ADDITIONAL TREES OR STUMPS OUTSIDE OF THE LIMITS OF CONSTRUCTION BUT WITHIN THE RIGHT-OF-WAY AND/OR EASEMENT LINES. PAYMENT FOR THE REMOVAL OF THESE ADDITIONAL TREES OR STUMPS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

GUARDRAIL OVER CULVERTS

WHEN SUFFICIENT POST DEPTH IS NOT AVAILABLE DUE TO A CULVERT, THE GUARDRAIL POSTS DIRECTELY OVER THE CULVERT SHALL NOT BE DRIVEN, BUT SET IN HOLES. IF THE DISTANCE BETWEEN THE GROUND LINE AND THE TOP OF THE CULVERT IS LESS THAN 3 FT. , THE POST SHALL BE ENCASED IN A MINIMUM OF 4" THICKNESS OF CLASS C CONCRETE FOR THE FULL DEPTH OF THE POST. PAYMENT FOR THE ABOVE SHALL BE INCLUDED IN THE THE UNIT PRICE FOR ITEM 606,GUARDRAIL TYPE 5.

BENCHING OF FOUNDATION SLOPES

ALTHOUGH CROSS SECTIONS ON THIS PLAN INDICATE SPECIFIC WIDTHS AND DEPTHS OF PROPOSED BENCHING OF THE EMBANKMENT FOUNDATION IN CERTAIN AREAS, NO WAIVER OF THE SPECIFICATIONS IS INTENDED, AND ALL OTHER SLOPED FOUNDATION AREAS SHALL BE BENCHED AS SET FORTH IN 203.09. NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRED BY PROVISIONS OF 203.09.

MONUMENTS

MONUMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAILS SHOWN ON STANDARD CONSTRUCTION DRAWING MC-1. FOR LOCATION SEE SHEET NO.734.

LOCATION OF GUARDRAIL

THE LOCATIONS OF GUARDRAIL RUNS, AS SHOWN IN THESE PLANS, ARE SUBJECT TO ADJUSTMENT PRIOR TO FINAL ACCEPTANCE. THE ENGINEER SHALL BE SATISFIED THAT ALL INSTALLATIONS WILL AFFORD MAXIMUM PROTECTION FOR ALL TRAFFIC.

SEEDING

QUANTITIES FOR SEEDING ARE CALCULATED FOR THE SOIL AREAS BETWEEN THE RIGHT-OF WAY FENCE LINES, BETWEEN THE RIGHT-OF-WAY LINES IN UNFENCED AREAS, AND WITHIN THE WORK LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT.

GENERAL NOTES

TEMPORARY SOIL EROSION AND SEDIMENT CONTROL

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER, FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES:

HAM 75-6.93 IR-75-1(96)10

207	TEMPORARY SEEDING AND MULCHING	60865	SQ YD
207	STRAW OR HAY BALES	922	EACH
207	TEMPORARY SLOPE DRAINS	1163	LIN FT
207	TEMPORARY BENCHES, DIKES, DAMS AND SEDIMENT BASINS	182	CU YD
207	FILTER FABRIC FENCE	11626	LIN FT
601	TYPE C ROCK CHANNEL PROTECTION (WITHOUT BEDDING)	43	CU YD
659	MOWING	722	M SQ FT
659	COMMERCIAL FERTILIZER	14	TON
659	REPAIR SEEDING AND MULCHING	16053	SQ YD
659	WATER	300	M.GAL

HAM 126-13.00 F-2(13)

207	TEMPORARY SEEDING AND MULCHING	20604	SQ YD
207	STRAW OR HAY BALES	519	EACH
207	TEMPORARY SLOPE DRAINS	479	LIN FT
207	TEMPORARY BENCHES, DIKES, DAMS AND SEDIMENT BASINS	22	CU YD
207	FILTER FABRIC FENCE	4794	LIN FT
601	TYPE C ROCK CHANNEL PROTECTION (WITHOUT BEDDING)	25	CU YD
659	MOWING	282	M SQ FT
659	COMMERCIAL FERTILIZER	5.2	TON
659	REPAIR SEEDING AND MULCHING	5151	SQ YD
659	WATER	200	M.GAL

ITEM 203, EMBANKMENT USING NO.8 AGGREGATE

THE MATERIAL FURNISHED SHALL BE DURABLE, NATURAL AGGREGATES OR AIR-COOLED BLAST FURNACE SLAG NO.8 SIZE. THE AGGREGATE SHALL BE PLACED AT THE THICKNESS AND SLOPE AS SHOWN ON THE CROSS SECTIONS.

PAYMENT FOR THIS ITEM OF WORK SHALL BE MADE AT THE UNIT PRICE BID FOR:

ITEM 203 EMBANKMENT USING NO. 8 AGGREGATE CU YD

ROUNDING OF CORNERS SHOWN ON CROSS SECTIONS

THE ROUNDED CORNERS SHOWN ON THE TYPICAL SECTIONS, APPLY TO ALL CROSS SECTIONS EVEN THOUGH OTHERWISE SHOWN ON THESE PLANS.

THE CONTRACTOR SHALL PROVIDE A QUALIFIED GEOTECHNICAL ENGINEER TO OVERSEE THE INSTRUMENTATION PROGRAM TO BE PAID UNDER ITEM SPECIAL-INSTRUMENTATION MONITORING PROGRAM. IF CHANGES IN INSTRUMENTATION PROGRAM OR RATE OF EMBANKMENT CONSTRUCTION ARE PROPOSED BY THE CONTRACTOR, JUSTIFICATION BASED ON THE INSTRUMENTATION READINGS AND GEOTECHNICAL ANALYSIS SHALL BE SUBMITTED TO THE ENGINEER FOR HIS APPROVAL.
FOR RATES OF EMBANKMENT CONSTRUCTION, SEE SHEET 18B.

ITEM 203, EMBANKMENT, USING GRANULAR MATERIAL

MATERIAL FURNISHED FOR THIS ITEM SHALL BE AS DEFINED IN 203.02 EXCEPT THAT AT LEAST 75 PER CENT BY WEIGHT OF THE GRAINS OR PARTICLES SHALL BE RETAINED ON A NO. 200 SIEVE. IN ANY AREA WHICH HAS STANDING WATER, GRANULAR MATERIAL MAY BE PLACED BY THE METHOD OF END DUMPING IF SURFACE WATER IS PRESENT AT THE TIME OF CONSTRUCTION.

END DUMPING METHODS MAY BE USED UP TO AN ELEVATION TWO FEET ABOVE WATER LEVEL. ABOVE THIS ELEVATION, EMBANKMENT CONSTRUCTION SHALL BE IN ACCORDANCE WITH 203.07 TO 203.12 INCLUSIVE. WHERE END DUMPING IS PERMITTED, NORMAL CLEARING AND GRUBBING SHALL BE PERFORMED BUT THE REQUIREMENTS OF 201.04 FOR SCALPING SHALL BE WAIVED.

EMBANKMENT INSTRUMENTATION

TO MONITOR THE CONSOLIDATION OF THE SUBSOILS AND THE SLOPE STABILITY OF THE PROPOSED EMBANKMENTS, A STABILITY AND SETTLEMENT INSTRUMENTATION PROGRAM HAS BEEN INCLUDED IN THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION, MONITORING, DOCUMENTATION, INTERPRETATION AND EVALUATION OF THE INSTRUMENTATION PROGRAM TO THE SATISFACTION OF THE ENGINEER.

READING OF PIEZOMETERS, INCLINOMETERS, AND SETTLEMENT PLATES SHALL BE MADE BI-WEEKLY OR AS OTHERWISE DIRECTED BY THE ENGINEER. IF THE PIEZOMETRIC LEVEL DOES NOT EQUAL OR EXCEED ELEVATION 530 AND THE INDICATED MOVEMENT OF SETTLEMENT PLATES AND INCLINOMETERS APPEAR TO BE NORMAL, THEN EMBANKMENT CONSTRUCTION MAY PROCEED AT THE RATE CALLED FOR IN THE NOTES. IF PIEZOMETRIC LEVELS IN ANY PIEZOMETER APPROACHES ELEVATION 530 OR READINGS OF SETTLEMENT PLATFORMS OR INCLINOMETERS INDICATE A SIGNIFICANT INCREASE IN THE RATE OF MOVEMENT, THEN EMBANKMENT CONSTRUCTION SHALL BE IMMEDIATELY STOPPED AND NOT RESUMED UNTIL DIRECTED BY THE ENGINEER.

LOCATION	INSTRUMENT TYPE	OFFSET	ESTIMATED TIP OR BOTTOM ELEVATION
507+50	PIEZOMETER (2)	CL	488, 482
507+50	SETTLEMENT PLATE	CL	GROUND SURFACE
509+00	PIEZOMETER (2)	CL	486, 480
509+00	SETTLEMENT PLATE	CL	GROUND SURFACE
509+00	INCLINOMETER	RT. TOE	460
37+00 "C"	PIEZOMETER (2)	CL	486, 480
37+00 "C"	SETTLEMENT PLATE	CL	GROUND SURFACE
37+00 "C"	INCLINOMETER	RT. TOE	460
82+00 EB	INCLINOMETER	LT. TOE	480
84+00 EB	INCLINOMETER	LT. TOE	480

THE UNIT PRICE BID FOR THE INSTRUMENTATION SHALL INCLUDE ALL EQUIPMENT, LABOR, MATERIAL AND INCIDENTALS NECESSARY TO COMPLETE THE INSTALLATION AND ITS PERFORMANCE TO THE SATISFACTION OF THE ENGINEER. ANY INSTALLATION DAMAGED THROUGHOUT THE CONSTRUCTION PERIOD SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE STATE.

THE BASIS OF PAYMENT SHALL BE:

ITEM SPECIAL	INSTUMENTATION MONITORING PROGRAM	LUMP	LUMP SUM
ITEM SPECIAL	PIEZOMETER	6	EACH
ITEM SPECIAL	SETTLEMENT PLATFORM	3	EACH
ITEM SPECIAL	INCLINOMETER	4	EACH

FOR FURTHER EARTHWORK NOTE, SEE SHEET 18B.
FOR DETAILS OF SETTLEMENT PLATFORMS, PIEZOMETERS & INCLINOMETERS, SEE SHEET 20EE.

GENERAL NOTES

ITEM 603 (JACKING PIPE) AS PER PLAN

AS A PART OF THIS CONTRACT, IT WILL BE NECESSARY TO INSTALL A CONDUIT UNDER THE EXISTING PAVEMENT OR RAILROAD TRACKS AT THE FOLLOWING STATIONS BY THE METHOD OF BORING AND JACKING.

STATION	TO	STATION		SIZE	REMARKS
46+40		46+60	VINE ST.	54"	PAVEMENT
118+70 "F"		118+64 NB I-75		36"	PAVEMENT
	118+50 NB I-75			36"	PAVEMENT
111+00 "F"		110+50 NB I-75		36"	PAVEMENT
111+91 SR 126		3+71 DRIVE "A"		24"	RAILROAD CONRAIL

NO TRENCH EXCAVATION OR EQUIPMENT SHALL BE CLOSER THAN 30 FEET TO THE EDGE OF PAVEMENT. TRENCHES SHALL BE ADEQUATELY SUPPORTED AND THE SPECIFICATION REQUIREMENT FOR CLASS B BEDDING SHALL BE DISREGARDED.

HOUSE CONNECTIONS

EXISTING ROOF DRAINS, FOOTER DRAINS OR YARD DRAINS, DISTURBED BY THE PROPOSED WORK, SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS BY CONNECTING TO A STORM SEWER, MANHOLE, CATCH BASIN OR THROUGH THE CURB.

THE LOCATION, TYPE, SIZE AND GRADE OF REQUIRED REPLACEMENTS WILL BE DETERMINED BY THE ENGINEER DURING CONSTRUCTION.

40 LF ITEM 603 4" CONDUIT TYPE E, 711.29

40 LF ITEM 603 6" CONDUIT TYPE E, 711.29

40 LF ITEM 603 8" CONDUIT TYPE E, 711.29

40 LF ITEM 603 4" CONDUIT TYPE E, 706.08

40 LF ITEM 603 6" CONDUIT TYPE E, 706.08

40 LF ITEM 603 8" CONDUIT TYPE E, 706.08

40 LF ITEM 603 4" CONDUIT TYPE F

40 LF ITEM 603 6" CONDUIT TYPE F

40 LF ITEM 603 8" CONDUIT TYPE F

40 LF ITEM 603 10" CONDUIT TYPE F

40 LF ITEM 603 12" CONDUIT TYPE F

NONE OF THE ABOVE MATERIALS SHALL BE ORDERED BY THE CONTRACTOR UNTIL AUTHORIZED BY THE ENGINEER

UNRECORDED SANITARY CONNECTIONS

ANY UNRECORDED ACTIVE CONNECTION TO A SANITARY SEWER ENCOUNTERED DURING CONSTRUCTION SHALL BE RECONNECTED TO THE EXISTING SEWER, AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 603 400 LIN. FT. 4" CONDUIT, TYPE C 706.08 WITH JOINTS AS PER 706.12

ITEM 603 200 LIN. FT. 6" CONDUIT, TYPE C 706.08 WITH JOINTS AS PER 706.12

ITEM 603 200 LIN. FT. 8" CONDUIT, TYPE C 706.08 WITH JOINTS AS PER 706.12

ITEM 603 400 LIN. FT. 4" CONDUIT, TYPE B 706.08 E.S. WITH JOINTS, AS PER 706.12.

ITEM 603 200 LIN. FT. 6" CONDUIT, TYPE B 706.08 E.S. WITH JOINTS, AS PER 706.12.

ITEM 603 200 LIN. FT. 8" CONDUIT, TYPE B 706.08 E.S. WITH JOINTS, AS PER 706.12.

ITEM 602 10 CU. YD. CONCRETE MASONRY

NONE OF THE ABOVE MATERIALS SHALL BE ORDERED BY THE CONTRACTOR UNTIL AUTHORIZED BY THE ENGINEER.

CONNECTION TO EXISTING PIPE

WHERE THE PLANS PROVIDE FOR PROPOSED CONDUIT TO BE CONNECTED TO, OR TO CROSS EITHER OVER OR UNDER AN EXISTING SEWER, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE THE EXISTING PIPE BOTH AS TO LINE AND GRADE BEFORE HE STARTS TO LAY THE PROPOSED CONDUIT.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT 603 CONDUIT ITEMS.

PIPE CONNECTIONS TO CORRUGATED STEEL STRUCTURES

CONNECTIONS OF PROPOSED LONGITUDINAL DRAINAGE TO CORRUGATED METAL STRUCTURES SHALL BE BY MEANS OF A SHOP FABRICATED OR FIELD WELDED STUB ON THE STRUCTURE.

THE STUB SHALL MEET THE REQUIREMENTS OF 707 AND HAVE A MINIMUM LENGTH OF TWO FEET AND A MINIMUM THICKNESS OF 0.064 INCHES.

LOCATION AND ELEVATION OF THE STUB ARE TO BE CONSIDERED APPROXIMATE AND MAY BE ADJUSTED BY THE ENGINEER TO AVOID CUTTING THROUGH JOINTS IN THE STRUCTURE.

THE FIELD WELDED JOINT, IF USED, SHALL BE THOUROUGHLY CLEANED AND COATED OR OTHERWISE SUITABLY REPAIRED. WELDING SHALL MEET THE REQUIREMENTS OF 513.17.

A CONCRETE COLLAR, AS PER STANDARD CONSTRUCTION DRAWING MC-4, WILL BE REQUIRED TO CONNECT THE LONGITUDINAL DRAINAGE TO THE STUB, WHEN PIPE OTHER THAN CORRUGATED METAL IS PROVIDED FOR THE LONGITUDINAL DRAINAGE.

PAYMENT FOR CUTTING INTO THE STRUCTURE AND PROVIDING THE CONNECTION DESCRIBED, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 603 OR 522.

SPRING DRAINS

REFERENCE IS MADE TO THE DETAILED DRAWING ON STANDARD CONSTRUCTION DRAWING MC-1, SHOWING THE METHOD OF DRAINING ANY SPRING THAT MAY BE SHOWN ON THE PLAN, OR ENCOUNTERED DURING CONSTRUCTION, AS DETERMINED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THIS PURPOSE:

ITEM 605 300 L.F. 6" UNCLASSIFIED PIPE UNDERDRAIN, 707.01 TYPE III OR 707.12 TYPE III, AS PER PLAN.

ITEM 605 100 L.F. AGGREGATE DRAINS FOR SPRINGS.

THE CONTRACTOR SHALL NOT ORDER MATERIAL FOR "SPRING DRAINS" UNTIL AUTHORIZED BY THE ENGINEER, AND IN THE EVENT NO SPRINGS ARE ENCOUNTERED, THE ITEM SHALL BE NON PERFORMED.

EROSION CONTROL

ITEMS 601, 660, AND 670 ARE PROVIDED IN THE PLANS FOR EROSION CONTROL. ROCK OF A STABLE NATURE WILL NOT BE REMOVED IN ORDER TO PLACE ANY OF THESE ITEMS, AND TURF OF A STABLE NATURE WILL NOT BE REMOVED IN ORDER TO PLACE 660 OR 670. THE ENGINEER SHALL CHECK AND NON-PERFORM QUANTITIES OR ADJUST LOCATIONS AND QUANTITIES FOR THESE ITEMS WHERE INDICATED BY FIELD CONDITIONS DURING CONSTRUCTION.

SANITARY FLOW INTO HIGHWAY DRAINAGE SYSTEMS

SANITARY FLOW INTO HIGHWAY DRAINAGE SYSTEMS PLAN MAKES NO PROVISION FOR CONNECTING, NOR SHALL THE ENGINEER OR CONTRACTOR CONNECT, ANY EXISTING OR NEW DRAINAGE INTO THE HIGHWAY DRAINAGE SYSTEM WHEN SUCH DRAINS CARRY FLOW FROM ANY PLUMBING FIXTURES, INCLUDING FLOOR DRAINS AND SINK DRAINS, OR DRAINS FROM LIVESTOCK LOTS OR BARNS.

EXISTING PIPE CARRYING FLOW WHICH COMES WITHIN THE CATEGORY OUTLINED ABOVE, SHALL BE PLUGGED WITH CLASS C CONCRETE IN THE RIGHT-OF-WAY LINE. PAYMENT FOR SAID PLUGGING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 203 EXCAVATION (OR THE PERTINENT 202 ITEM).

GENERAL NOTES

MANHOLES, CATCH BASINS AND INLETS REMOVED OR ABANDONED

THE CASTINGS SHALL BE CAREFULLY REMOVED AND STORED WITHIN THE RIGHT-OF-WAY FOR SALVAGE BY APPROPRIATE CITY ,VILLAGE OR COUNTY FORCES.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT 202 ITEM.

EROSION CONTROL PADS AND ANIMAL GUARDS

EROSION CONTROL PADS AND ANIMAL GUARDS SHALL BE PROVIDED AT THE OUTLET END OF ALL PIPE UNDERDRAINS AND FARM DRAINS, AS PER STANDARD CONSTRUCTION DRAWING MC-4, EXCEPT WHEN THEY OUTLET INTO A DRAINAGE STRUCTURE.

PAYMENT FOR THE EROSION CONTROL PADS AND THE ANIMAL GUARDS SHALL BE INCLUDED IN THE PRICE BID OF ITEM 603, 6" CONDUIT, TYPE F.

SEWERS,MANHOLES AND CATCH BASINS TO BE ABANDONED

ALL EXISTING SEWERS, MANHOLES AND CATCH BASINS THAT ARE TO BE ABANDONED OR REMOVED AS PART OF THIS PROJECT ARE NOTED ON THE PLANS. EXISTING CATCH BASINS ARE GENERALLY 3 OR 4 FEET DEEP. THERE WILL BE NO EXTRA PAYMENT FOR ADDITIONAL DEPTH.

EXISTING SEWERS OVER 12 INCHES IN DIAMETER HAVING A COVER OF MORE THAN THREE FEET WHICH DUE TO THEIR SIZE OR CONDITION HAVE BEEN INDICATED TO BE REMOVED, SHALL BE REMOVED OR, AT THE CONTRACTOR'S OPTION, SHALL BE FILLED HYDRAULICALLY OR BY SOME OTHER MEANS APPROVED BY THE ENGINEER WITH SAND OR OTHER GRANULAR MATERIAL APPROVED BY THE ENGINEER AND LEFT IN PLACE.

IF THE SEWER IS FILLED RATHER THAN REMOVED, THE FILL MATERIAL SHALL,AFTER SOLIDIFICATION,OCCUPY AT LEAST 90% OF THE CROSS SECTIONAL AREA OF THE SEWER FOR THE ENTIRE LENGTH INDICATED TO BE REMOVED. IN ORDER TO MEET THIS REQUIREMENT, THE CONTRACTOR WILL DIG PIT HOLES AS APPROVED BY THE ENGINEER TO IMPLEMENT THE FILLING OF THE SEWER AND/OR TO CHECK THE CROSS SECTIONAL AREA OF THE SEWER WHEN FILLED.

PAYMENT FOR SEALING EXISTING SEWERS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR ITEM 203,EXCAVATION. PAYMENT FOR REMOVAL OF EXISTING SEWERS, WHERE INDICATED ON THE PLANS OR DIRECTED BY THE ENGINEER, SHALL BE AT THE CONTRACT UNIT PRICES BID FOR ITEM 202,PIPE ABANDONED AND PLUGGED 12-INCH DIAM. AND UNDER AND 202 FILL AND PLUG FOR ALL PIPES OVER 12 INCHES IN DIAMETER. WHICH PRICE SHALL ALSO INCLUDE PLUGGING OR SEALING WHEN REQUIRED. PAYMENT FOR REMOVING ALL MANHOLES, CATCH BASINS AND INLETS THAT ARE NOT SPECIFICALLY PAID FOR UNDER ITEM 202, SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR ITEM 203,503,603 OR 604 WHICHEVER IS APPLICABLE.

FURNISH COMPLETE CASTINGS FOR MANHOLES AND/OR CATCH BASINS

ALL EXISTING STRUCTURES TO BE ADJUSTED TO GRADE HAVE BEEN FIELD CHECKED TO DETERMINE THAT THE EXISTING CASTINGS ARE SUITABLE FOR SALVAGE AND REUSE AT THE PARTICULAR STRUCTURE TO BE ADJUSTED TO GRADE. HOWEVER,EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE, AS DETERMINED BY THE ENGINEER, DURING CONSTRUCTION OF THE PROJECT. TO PROVIDE FOR THIS CONTINGENCY AN ESTIMATED QUANTITY OF:

ITEM 604	CASTINGS FOR EXISTING MANHOLE	1	EACH
ITEM 604	CASTINGS FOR EXISTING CATCH BASINS	1	EACH

THESE ITEMS HAVE BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED IN ANY QUANTITY REQUIRED AS DETERMINED BY THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CASTING OF THE REQUIRED TYPE, SIZE AND STRENGTH FOR THE PARTICULAR STRUCTURE IN QUESTION.

THE CONTRACTOR IS CAUTIONED TO USE EXTREME CARE IN THE REMOVAL, STORAGE AND PLACEMENT OF ALL EXISTING CASTINGS. ANY CASTING DAMAGED BY THE CONTRACTOR'S NEGLIGENT OPERATIONS AS DETERMINED BY THE ENGINEER, SHALL BE REPLACED WITH THE PROPER NEW CASTING BY THE CONTRACTOR, AT NO EXPENSE TO THE STATE.

ITEM 604 INTERCEPTOR CHAMBER

THE WORK UNDER THIS ITEM SHALL CONSIST OF FURNISHING AND PLACING THE INTERCEPTOR CHAMBER AND APPURTENANCES COMPLETE AT THE LOCATION AND TO THE LINE, GRADE AND DETAIL AS SHOWN ON SHEET NO.352. THE INTERCEPTOR CHAMBER SHALL BE IN STRICT CONFORMANCE WITH THE REQUIREMENTS OF THE METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI. INTERCEPTOR INLET FRAME AND GRATING SHALL BE OF THE TYPE AND WEIGHT AS SHOWN IN THE DETAILS AND SHALL COMPLY WITH THE CITY OF CINCINNATI PURCHASING SPEC NO.11-34(LATEST EDITION).

THE BRONZE BOLTS AND WASHERS AS SHOWN IN THE ADJUSTABLE PLATE DETAILS SHALL CONFORM TO FEDERAL SPECIFICATION QQB 611A OR S.A.E. 72.

THE WORK AS DESCRIBED ABOVE, SHALL BE PAID FOR CONTRACT UNIT PRICE BID FOR ITEM 604 WHICH PRICE AND PAYMENT SHALL CONSTITUTE FULL COMPENSATION FOR FURNISHING AND PLACING THE CHAMBER COMPLETE.

601 8" RIPRAP USING REINFORCED CONCRETE SLAB AS PER PLAN

THE 8" RIPRAP USING REINFORCED CONCRETE SLAB SHALL BE IN ACCORDANCE WITH DETAILS SHOWN ON SHEETS 352 A AND 352 B. THE COST OF REINFORCEMENT, BEDDING, WEEP HOLES, PLASTIC MESH, SHEET PILING, 4" PERFORATED PIPE AND OTHER ITEMS NECESSARY TO INSTALL THE 8" RIPRAP SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 601 8" RIPRAP USING REINFORCED CONCRETE SLAB AS PER PLAN

CONTRACTION AND EXPANSION JOINTS

ALTHOUGH SPECIFIC LOCATIONS OF CERTAIN EXPANSION AND CONTRACTION JOINTS HAVE BEEN DETAILED ON THIS PLAN, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. PROVISION OF EXPANSION JOINTS AT ALL MAJOR STRUCTURES AND THE MAXIMUM SPACING BETWEEN CONTRACTION JOINTS SHALL, IN ALL CASES, BE IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWINGS AND THE SPECIFICATIONS.

CONTRACTION JOINTS IN PAVEMENT & BASE WIDENING

WHERE NEW CONCRETE PAVEMENT OR BASE, IS PLACED ADJACENT TO EXISTING CONCRETE PAVEMENT OR BASE, CONTRACTION JOINTS SHALL BE PROVIDED IN THE NEW PAVEMENT OR BASE SO AS TO FORM A CONTINUOUS JOINT WITH THAT IN THE EXISTING PAVEMENT OR BASE.

THE MAXIMUM DISTANCE BETWEEN THE JOINTS IN NEW PAVEMENT OR BASE SHALL BE IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING BP-4. IF NECESSARY, ADDITIONAL JOINTS SHALL BE PROVIDED IN NEW PAVEMENT OR BASE AT APPROXIMATELY EQUAL INTERVALS BETWEEN EXISTING JOINTS THAT EXCEED THE MAXIMUM SPACING.

PART-WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY OF BUILDING PORTIONS OF THIS PROJECT UNDER TRAFFIC AND CONSTRUCTING THE FULL PAVEMENT WIDTH IN STAGES, EXTREME CARE SHALL BE TAKEN TO PREVENT THE CONSTRUCTION OF A BUTT JOINT ON CENTERLINE IN THE BASE COURSES.

LONGITUDINAL JOINTS SHALL BE LAPPED AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-5.

407 TACK COAT

THE TACK COAT AND COVER AGGREGATE OPERATION SHALL BE DETERMINED AS PER SPEC.407.05. PLAN QUANTITIES INDICATE AVERAGE APPLICATION RATES OF 0.10 GALLONS PER SQUARE YARD OF TACK COAT AND 7 POUNDS PER SQUARE YARD OF COVER AGGREGATE FOR ESTIMATING PURPOSES ONLY.

GENERAL NOTES

CALC BY AGA DATE 2/86
CHKD. BY RA DATE 3/86
HAM. 75/126-9.93/13.00
OHIO
FHWA REGION 5
188
787

EMBANKMENT CONSTRUCTION - UNDERCUTTING OF FOUNDATION SOILS

THERE IS A MAJOR DEPOSIT OF SATURATED SOFT ALLUVIAL SOIL CONTAINING ORGANIC MATERIAL BETWEEN APPROXIMATELY STATIONS 40+00 AND 47+00 RAMP H. THE DEPOSIT EXTENDS TO THE LEFT WITH DECREASING DEPTH IN THE PROPOSED EMBANKMENT AREA OF S.R. 126 EASTBOUND AND RAMP D. POORLY COMPACTED EXISTING FILL MATERIAL EXISTS BETWEEN STATIONS 508+50 TO 26+00, S.R. 126 EASTBOUND, STATIONS 67+50 AND 70+50, S.R. 126 WESTBOUND. SOME OF THIS EXISTING ORGANIC ALLUVIUM AND POORLY COMPACTED FILL MATERIAL IS TO BE REMOVED PRIOR TO BEGINNING EMBANKMENT CONSTRUCTION. THE APPROXIMATE LIMITS AND VOLUME OF THE UNDERCUT EXCAVATION ARE INDICATED ON THE CROSS-SECTIONS. THE EXTENT AND DEPTH OF THE UNDERCUT IS INDICATED FOR ESTIMATING PURPOSES ONLY. THE ACTUAL EXTENT WILL BE DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION.

THE SOIL INVESTIGATION DISCLOSED ORGANIC MATERIAL EXTENDING TO DEPTHS OF AS MUCH AS 12 FEET BELOW EXISTING GRADE BETWEEN STATION 45+00 AND STATION 46+00 RAMP H. ADEQUATE EXPLORATION SHALL BE MADE DURING CONSTRUCTION TO DISCLOSE THE CHARACTERISTICS AND LATERAL EXTENT OF THIS DEPOSIT. SUFFICIENT EXCAVATION OF THIS MATERIAL IS REQUIRED TO PROTECT AGANIST SUBSIDENCE OF THE FINISHED PAVEMENT.

AN EXPLORATORY TRENCH SHALL BE EXCAVATED ON APPROXIMATELY THE RAMP H BASE LINE BETWEEN APPROXIMATELY STATION 40+00 AND 47+00 AND AT APPROXIMATELY RIGHT ANGLES TO THE BASE LINE NEAR STATION 45+00. THE TEST TRENCHES SHALL BE OUTLETTED INTO THE MILL CREEK CHANNEL TO THE EXTENT POSSIBLE. IF GRAVITY DRAINAGE CANNOT BE OBTAINED, THEN THE TRENCHES SHALL BE TEMPORARILY DEWATERED BY PUMPING TO FACILITATE DRAINAGE OF ADJACENT AREAS. FOLLOWING COMPLETION OF THE EXPLORATORY TRENCHES AND LOWERING OF THE WATER LEVEL, FINAL UNDERCUTTING SHALL BE CARRIED OUT UNDER THE DIRECTION OF THE ENGINEER. WHEREVER THE UNDERCUT EXCAVATION APPROACHES EXISTING EMBANKMENT, THE UNDERCUT SHALL NOT EXTEND BEYOND THE PROJECTED SLOPE OF THE EXISTING EMBANKMENT. SPECIAL CARE SHALL BE EXERCISED TO PROTECT ALL EXISTING EMBANKMENT.

THE FIRST MATERIAL PLACED IN ALL UNDERCUT AREAS AND AREAS THAT ARE NOT UNDERCUT BUT WHERE THE SURFACE IS WET AND UNSTABLE SHALL BE GRANULAR MATERIAL AS DEFINED IN 203.02 EXCEPT THAT AT LEAST 75% OF THE GRAINS OR PARTICLES SHALL BE RETAINED ON THE NO. 200 SIEVE. THE THICKNESS OF THE FIRST LAYER OF GRANULAR MATERIAL MAY BE AS MUCH AS 3 FEET OR AS OTHERWISE DIRECTED BY THE ENGINEER. IF EMBANKMENT IS PLACED BELOW THE NORMAL WATER LEVEL, THEN THE GRANULAR SHALL BE BROUGHT UP TO AT LEAST 2 FEET ABOVE THE WATER LEVEL. EACH LAYER OF GRANULAR MATERIAL SHALL BE COMPACTED WITH APPROPRIATE EQUIPMENT AS APPROVED BY THE ENGINEER.

PAYMENT FOR UNDERCUT AND BACKFILL SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 203, EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION OR ITEM 203, EMBANKMENT, BASED ON MEASUREMENT OF THE UNDERCUT AREAS AS PROVIDED IN 203.15(B). THE VOLUME OF EMBANKMENT SHALL NOT INCLUDE THE GRANULAR MATERIAL WHICH WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER CUBIC YARD FOR ITEM 203, GRANULAR MATERIAL AS PER PLAN.

EXISTING LANDSLIDE STATION 80+00 TO STATION 85+00

THE LIMITS OF EXCAVATION AS SHOWN ON THE CROSS-SECTIONS ARE FOR ESTIMATING PURPOSES ONLY. THE ACTUAL WIDTH AND BOTTOM ELEVATION OF THE EXCAVATION WILL BE DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION. IT IS THE INTENT THAT THE WORK IN THIS AREA START AT EITHER END AS THE CONTRACTOR MAY ELECT. A SUFFICIENT LENGTH OF THE BENCH SHALL BE EXCAVATED TO THE DESIGN ELEVATION CONSISTENT WITH EQUIPMENT REQUIREMENTS. THE GRANULAR BLANKET SHALL BE PLACED IN THIS AREA. BACKFILLING WILL THEN COMMENCE USING SUITABLE MATERIAL EXCAVATED FROM ADJACENT AREAS. EXCAVATION SHALL PROCEED IN SECTIONS UNTIL THE ENTIRE UNSTABLE AREA HAS BEEN EXCAVATED AND BACKFILLED TO AT LEAST ELEVATION 535. CONSTRUCTION OF EMBANKMENT ABOVE ELEVATION 535 CAN BE CARRIED OUT, AS A WHOLE, AS THE CONTRACTOR ELECTS.

SPECIAL BENCHING

IN ADDITION TO THE CONTINUOUS NARROW BENCHES REQUIRED BY SECTION 203.09, SPECIAL EMBANKMENT FOUNDATION BENCHES SHALL BE EXCAVATED AT THE FOLLOWING LOCATIONS, WHERE EMBANKMENT IS TO BE BUILT ON AN EXISTING SLOPE:

STA 59+50 TO STA 60+00 EASTBOUND S.R. 126

STA 44+00 TO STA 46+00 RAMP C

THESE BENCHES, SHOWN ON THE CROSS-SECTION, ARE FOR ESTIMATING PURPOSES ONLY. THE ACTUAL ELEVATION AND WIDTH WILL BE DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION.

CONTROLLED RATE OF EMBANKMENT CONSTRUCTION

THROUGHOUT THE PROJECT, EMBANKMENTS WILL BE CONSTRUCTED OVER AREAS UNDERLAIN BY SATURATED SILTS AND CLAYS CONTAINING LAYERS THAT HAVE RELATIVELY LOW SHEAR STRENGTH. IN ORDER TO CONTROL THE BUILDUP OF EXCESS PORE PRESSURE IN THESE LAYERS, WHICH COULD LEAD TO LATERAL SPREADING AND FAILURE OF THE EMBANKMENT, THE CONTRACTOR WILL BE REQUIRED TO LIMIT THE RATE OF EMBANKMENT CONSTRUCTION TO NO MORE THAN 3 FEET PER WEEK IN THE FOLLOWING AREAS:

ALL EMBANKMENTS BETWEEN VINE STREET AND ANTHONY WAYNE AVENUE, EXCEPT AS NOTED BELOW.

EB SR 126	STATION 107+00 TO STATION 116+00
EB SR 126	RAMP D AND RAMP I EXISTING I-75 TO STATION 53+00
WB SR 126	STATION 42+00 TO STATION 51+00 STATION 60+00 TO STATION 78+00
RAMP H	STATION 40+00 TO STATION 48+00
RAMP C	STATION 39+00 TO STATION 43+00

THE RATE OF EMBANKMENT CONSTRUCTION PLACED ABOVE ELEVATION 540 BETWEEN VINE STREET AND STATION 30+00 SHALL BE LIMITED TO A MAXIMUM RATE OF 2 FEET PER WEEK.

SEE SHEET 17A FOR ADDITIONAL EMBANKMENT CONSTRUCTION NOTES.

UNDERCUTTING FOR SUBGRADE STABILIZING

BETWEEN STATION 72+00 AND STATION 74+00 EASTBOUND SR 126 THERE IS AN AREA OF EXISTING FILL MATERIAL THAT IS NOT WELL COMPACTED. THE EXACT LIMITS ARE NOT KNOWN. FOR ESTIMATING PURPOSES THE CROSS SECTIONS SHOW A 5 FOOT UNDERCUT SECTION BELOW THE PAVEMENT TO REMOVE EXISTING UNSTABLE MATERIAL. THE SPECIFIC EXTENT AND DEPTH OF UNDERCUT WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

AFTER THE UNDERCUT IS MADE, THE BOTTOM OF THE EXCAVATION THUS FORMED SHALL BE ROLLED WITH A PROOF ROLLER WITH RUTS AND DEPRESSIONS BLADED IN AS THE ROLLING PROGRESSES UNTIL NO MORE APPRECIABLE SETTLEMENT OCCURS UNDER A FULLY BALLASTED ROLLER WITH 150 PSI TIRE PRESSURE.

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT, AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVE OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES SHALL MAKE AN INSPECTION OF THE EXISTING SEWERS WITHIN THE WORK LIMITS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES SHALL BE DETERMINED BY FIELD OBSERVATIONS. RECORDS OF THE INSPECTIONS SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW CONDUITS, INLETS, CATCH BASINS AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE AFORE-MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE PERTENENT 603 CONDUIT ITEMS OF THE CONTRACT.

CONDUIT END TREATMENT

IMMEDIATELY AFTER PLACEMENT OF ANY CONDUITS, THE CONTRACTOR SHALL CONSTRUCT THE END TREATMENTS REQUIRED BY THE PLANS AT BOTH THE OUTLET AND INLET ENDS. THIS SHALL INCLUDE HEADWALLS, CONCRETE RIPRAP, ROCK CHANNEL PROTECTION, SODDING, ETC.

GENERAL NOTES

TRENCH, PAVED AREAS, BY TYPE

TRENCHING IN PAVED AREAS SHALL BE AS SHOWN ON STANDARD CONSTRUCTION DRAWING HL -11 OR AS DETAILED.

TRENCHING WILL BE MEASURED IN ACCORDANCE WITH 625.24. PAYMENT WILL BE AT THE CONTRACT UNIT PRICE PER LINEAR FOOT AND SHALL BE FULL COMPENSATION FOR LABOR, EQUIPMENT, TOOLS, MATERIAL AND INCIDENTALS NECESSARY TO PERFORM THE WORK INCLUDING BACKFILLING AND SURFACE RESTORATION.

625 LINEAR FOOT TRENCH TYPE A

625 LINEAR FOOT TRENCH TYPE B

ITEM 622 CONCRETE BARRIER, STANDARD TYPE D, MODIFIED AS PER PLAN

THE REAR FACE OF THE BARRIER SHALL ABUT THE NEAR FACE OF THE RETAINING WALL. THIS SHALL BE DONE BY CONSTRUCTING THE BARRIER'S BASE WITHOUT THE 6" PROJECTION AT THE REAR. SEE DETAIL ON SHEET 37A.

ITEM 451, REINFORCED CONCRETE PAVEMENT, MODIFIED AS PER PLAN

REINFORCED CONCRETE PAVEMENT SHALL MEET THE REQUIREMENTS OF 451 AND STANDARD DRAWING BP-4 WITH THE FOLLOWING EXCEPTIONS.

1. THE MAXIMUM SPACING BETWEEN JOINTS SHALL BE 37 FEET.

2. MESH SHALL BE RECTANGULAR AND CENTERED IN EACH PANEL SO AS TO MAINTAIN A CLEARANCE OF 3 (+- 2) INCHES FROM THE END OF THE NEAREST DOWELL.

3. ALL JOINTS SHALL BE SKEWED 4 FEET RIGHT FORWARD FOR A 24 FEET WIDTH. DOWELL BARS SHALL BE INSTALLED PARALLEL TO THE LONGITUDIONAL JOINT. TIE BARS OR HOOK BOLTS INSTALLED ACROSS THE LONGITUDIONAL JOINT SHALL BE PARALLEL TO THE TRANSVERSE JOINTS.

4 THE WIDTH OF THE CONTRACTION JOINTS SHALL BE 5/8" +-1/16" AND THE MINIMUM DEPTH SHALL BE 2-1/4". PREFORMED ELASTIC JOINT SEALER SHALL MEET THE REQUIREMENTS OF 705.11 AND SHALL HAVE A MINIMUM WIDTH 1-1/4 INCHES. DRAWINGS AND SPECIFICATIONS OF THE MATERIAL PROPOSED FOR USE SHALL BE SUBMITTED TO THE DIRECTOR FOR REVIEW AND APPROVAL.

5. DOWELL INSTALLING MACHINES WILL BE PERMITTED ON THIS PROJECT.

6. THESE EXCEPTIONS SHALL NOT APPLY TO RAMP TAPERS ADJOINING EXISTING I. R. 75 WHERE THE PAVEMENT IN THE TAPER SHALL BE JOINTED AND REINFORCED TO MATCH EXISTING I.R. 75 PAVEMENT.

7. DELETE THE CRUSHED AIR-COOLED BLAST-FURNACE SLAG FROM 703.02.

ITEM 305 CONCRETE BASE, AS PER PLAN

DELETE THE CRUSHED AIR COOLED BLAST-FURNACE SLAG FROM 703.02.

ITEM 452 PLAIN PORTLAND CEMENT CONCRETE PAVEMENT, MODIFIED AS PER PLAN

THE PREVIOUS NOTE ENTITLED "ITEM 451 REINFORCED CONCRETE PAVEMENT, MODIFIED AS PER PLAN" SHALL ALSO APPLY TO ITEM 452. CONTRACTION JOINTS IN THE PAVED SHOULDERS SHALL BE SKEWED THE SAME AS THE MAIN PAVEMENT JOINTS, EXCEPT THAT JOINTS SPACING IN THE SHOULDERS SHALL BE 13.5 FEET.

DELETE THE CRUSHED AIR COOLED BLAST-FURNACE SLAG FROM 703.02.

ITEM 451 12 1/2" REINFORCED CONCRETE PAVEMENT, MODIFIED AS PER PLAN

THE EXISTING I.R. 75 PAVEMENT IS 10" REINFORCED CONCRETE RESURFACED WITH 2 1/2" ASPHALT CONCRETE. THE PROPOSED S.R. 126 SPEED CHANGE LANES ADJACENT OR I.R. 75 SHALL BE A NOMINAL 12 1/2" THICK. THE TOTAL THICKNESS MAY BE GREATER OR LESS, BUT THE BOTTOM OF THE PROPOSED PAVEMENT SHALL BE AT THE SAME ELEVATION AS THE EXISTING CONCRETE AND THE SURFACE SHALL BE AT THE SAME ELEVATION AS THE EXISTING ASPHALT CONCRETE. EDGE THICKNESS AT THE SHOULDER SHALL BE 12 1/2".

DELETE THE CRUSHED AIR COOLED BLAST-FURNACE SLAG FROM 703.02.

PAVEMENT SHALL BE JOINTED AND REINFORCED TO MATCH I.R. 75.

WHERE THE JOINTS HAVE BEEN REPAIRED SO THAT THERE ARE NOW TWO JOINTS, CONSTRUCT ONLY ONE JOINT IN THE PROPOSED PAVEMENT. SHOULDER JOINT SPACING SHALL BE ONE HALF THE DISTANCE USED ON THE SPEED CHANGE LANE.

RAILROAD CROSSING

THE PROPOSED ASPHALT CONCRETE RESURFACING COURSES SHALL BE FEATHERED PER STANDARD CONSTRUCTION DRAWING BP-5 TO MEET THE RAILROAD GRADES, IF NECESSARY.

TYPE 5 GUARDRAIL AT 3'-1 1/2" SPACING

WHEREVER TYPE 5 GUARDRAIL IS CLOSER THAN 4'-0" FROM FACE OF GUARDRAIL TO FACE OF OBSTRUCTION, THE CONTRACTOR SHALL USE TYPE 5 GUARDRAIL WITH 3'-1 1/2" POST SPACING FROM 12.5' IN ADVANCE OF THE OBSTRUCTION TO THE END OF THE OBSTRUCTION. PRICE OF EXTRA POSTS, BLOCKS, ETC. ARE TO BE INCLUDED IN UNIT PRICE FOR ITEM 606, GUARDRAIL, TYPE 5.

ITEM 304 AGGREGATE BASE, AS PER PLAN

DELETED THE CRUSHED AIR-COOLED BLAST-FURNACE SLAG FROM 703.04.

ITEM 310 SUBBASE, TYPE II, AS PER PLAN

DELETE THE CRUSHED OR GRANULATED SLAG FROM 310.01.

ITEM 207 FILTER FABRIC FENCE

MATERIALS : FILTER FABRIC SHALL MEET THE REQUIREMENT OF ITEM 207.02.

CONSTRUCTION : THE BOTTOM OF THE FENCE SHALL BE BURIED 6" BELOW THE GROUND. THE FENCE SHALL BE HIGH ENOUGH TO RETAIN SEDIMENT-LADEN WATER AND ADEQUATELY SUPPORTED TO PREVENT COLLAPSE OR BURSTING.

MAINTENANCE : THE FILTER FABRIC FENCE SHALL, AT THE DIRECTION OF THE ENGINEER, BE MAINTAINED TO BE FUNCTIONAL. THIS SHALL INCLUDE REMOVAL OF TRAPPED SEDIMENT AND REQUIRED CLEANING, REPAIR, AND/OR REPLACEMENT OF THE FILTER FABRIC.

PAYMENT : THE COST OF ALL MATERIALS, CONSTRUCTION, MAINTENANCE, AND REMOVAL REQUIRED SHALL BE PAID FOR UNDER ITEM 207, LIN. FT., FILTER FABRIC FENCE.

CALC. BY FV DATE 3/86
CHKD. BY JAS DATE 3/86

OHIO
FHWA REGION 5

HAM. 75/126 - 9.93/13.00

19A
787

During Construction of sanitory sewer relocation - Use signing and striping for Temp Rd. See Sheet No. 19M

Begin left lane closure signing for NB I-75 1200' south of Seymour Ave. bridge over I-75

Begin right lane closure signing for SB I-75 construction from Sta. 77+00 to Sta. 140+00, SB I-75 and left lane closure signing for SB I-75 construction of SR 126 WB structure over SB I-75, 1400'± north of Wyoming Avenue structure over I-75 Southbound in City of Lockland

For construction work from Sta. 77+00 I-75 to Sta. 130+00 NB I-75, Begin right lane closure signing 800' north of I-75 structure over Towne Ave.

Item 622 - Temporary Precast Concrete Barrier

Sta. to Sta. I-75	Sta. to Sta. Structure	Side	Length HAM 75-1010
86+00	89+25	Rt	325'
86+25	89+50	Lt	325'

Note: For right and left Lane Closures on on I-75 see sheet no. 19C

Scale: 0 100 200 400

MAINTENANCE OF TRAFFIC

CALC. BY FY DATE 3/86
CHK'D. BY JWS DATE 3/26
HAM. 75/126 - 9.93/13.00
OHIO FHWA REGION 5
198 787

GALBRAITH
CREEK
MILL
CITY OF READING
HAMILTON
COUNTY
ROAD
BURKHART
RD.
CLARK ST.
MERRELL LANE
KNOLLCREST DR.
AMBERLEY
VILLAGE
CITY OF READING
VILLAGE OF AMBERLEY
CONRAIL
HAMILTON COUNTY
CITY OF READING
STILLWELL RD
CITY OF CINCINNATI
SPRINGFIELD TOWNSHIP
SYCAMORE TOWNSHIP
HAMILTON COUNTY
CHAUCER
DR.

For Continuation See Sheet No. 19A

OW-128-36 ROAD CONSTRUCTION AHEAD
OW-143-24 25 MPH
OW-122-36 RIGHT LANE CLOSED AHEAD
OW-60-36
OW-125-36 (Bridge Beam Erection) FLAGGER AHEAD
OW-6-48 40 MPH
OW-145A-36 800 FT (Bridge Beam Erection)
OW-125-48 FLAGGER AHEAD
OR-107B HIGHWAY DIVIDED 24"x18"
OW-143-24 15 MPH
OW-143-24 10 MPH
OW-125-48 FLAGGER AHEAD
OW-145A-24 800 FT (Bridge Beam Erection)
OW-120-36 ROAD CLOSED AHEAD 300 FT
OW-145A-30
OW-128-36 ROAD CONSTRUCTION AHEAD
OW-123-36 ROAD CONSTRUCTION AHEAD
OW-128-36 ROAD CONSTRUCTION AHEAD
OW-143-24 25 MPH
OW-6-48 40 MPH
OW-143-24

R-75 (48"x30") ROAD CLOSED
Type III Barricade 70' Long
R-75 (48"x30") ROAD CLOSED
Type III Barricade
R-75 (48"x30") ROAD CLOSED
Type II Barricade
R-76C (60"x30") ROAD CLOSED TO THRU TRAFFIC
W1-48-30 NO OUTLET
Type III Barricade

OC-8 (60"x24") END CONSTRUCTION
OC-8 (60"x24") END CONSTRUCTION
OC-8 (60"x24) END CONSTRUCTION
OC-39L-30 KEEP LEFT
OC-39R-30 KEEP RIGHT
OC-53-36 (48"x36") (Bridge Beam Erection)

Flashing Arrow Panel
16 Drums @ 20' Ctrs. 200' Taper
11 Barrels @ 25' Ctrs
600' Taper Drums @ 50' Ctrs
225' Taper (10 barrels @ 25' Ctr's)
Temp. Centerline - Solid Double Yellow Line
Permanent signing to be installed when Burkhart St. is closed.
F-2(13)
END PROJECT Sta. 138+68.03WB HAM-126-13.00
Existing Cross County HAM-453-A
℄ Kodak Dr.
℄ McLean Dr.
℄ Temp. Rd. No. 5
℄ Honeywell Dr.
℄ Temp. Rd. No. 6
℄ Ramp P
℄ Knollcrest Drive 500'±
℄ Ramp Q
℄ Ramp T
℄ Ramp N
℄ Drive B
℄ Drive A
±Temporary Road No. 2
±Temp. Rd. No. 4
±Temp. Rd. No. 3
℄ S.R. 126
WB ℄ S.R. 126
EB ℄ S.R. 126
HAMILTON PRESENT LANE
RIDGE RD.
Type III Barricade 60' Long
ROAD CLOSED (48"x30") R-75

± See Sheet No. 19N Typical Temporary Road Signing and Striping

Erect Sign "Road Construction Ahead-OW-128-48 on Type III Barricade in Median and Right Shoulder for Westbound Cross-County Traffic 2200' West of Ridge Rd. Structure over Cross County Hwy. (Sta. 151+50±)

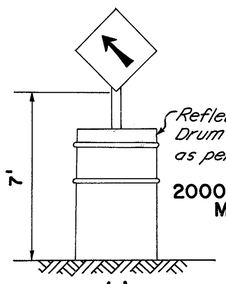
Scale: 0 100 200 400

Reading Road Structure

During erection of Bridge Beams Type II Barricade's and R-75 (48"x30") "Road Closed" Signs to be Placed at NE corner of Summit and Reading and SW corner of Galbraith and Reading.

MAINTENANCE OF TRAFFIC

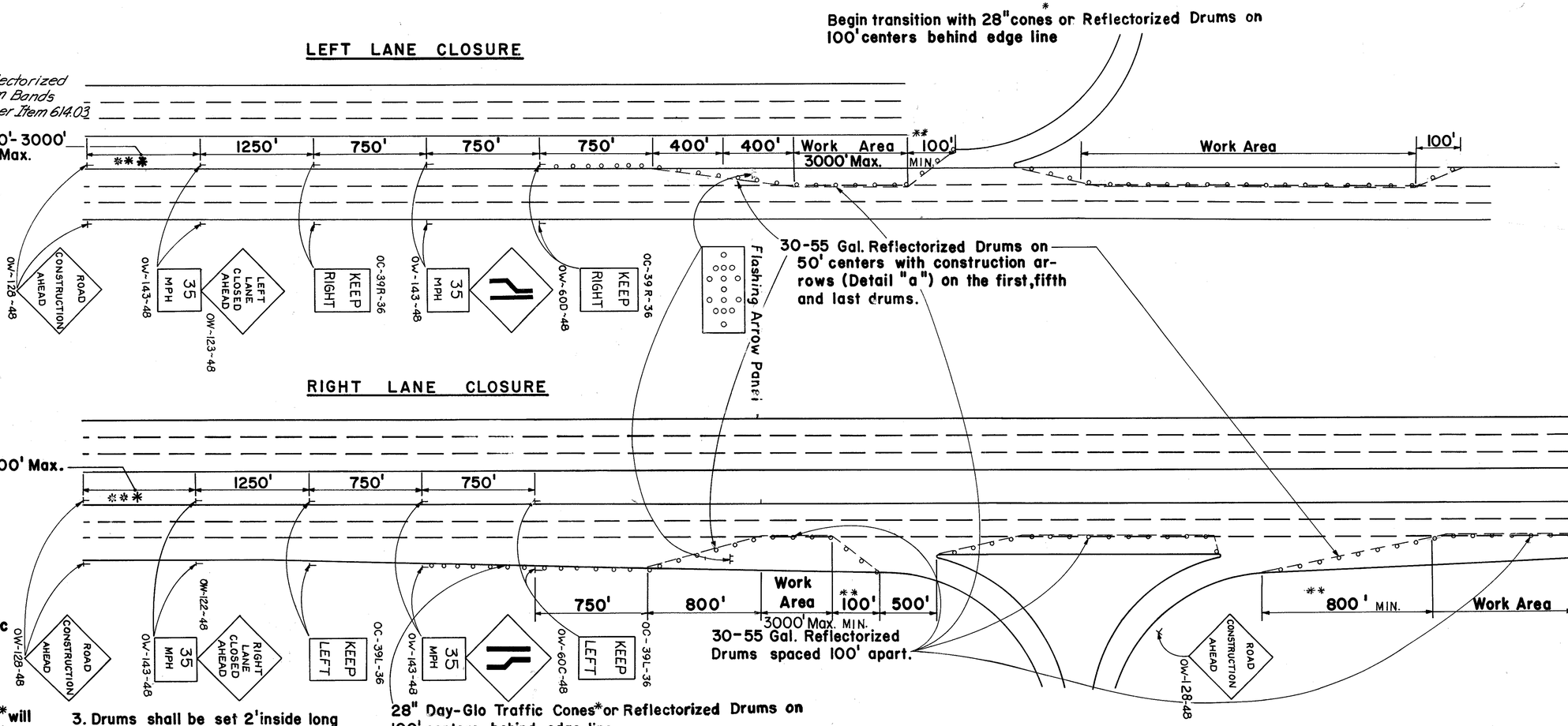
CALC. BY FY DATE 5/86		OHIO	19C 787
CHKD. BY JAS DATE 3/86	HAM.75/126 - 9.93/13.00	FHWA REGION 5	



(a)

30-55 Gal. Drum w/ ballast

LEFT LANE CLOSURE



RIGHT LANE CLOSURE

Notes:

1. Drums shall be set on 2'x 2' portions of 1/2" plywood when located on freshly-placed asphalt pavement.
2. Sign supports and traffic *cones shall be adequately weighted to prevent being blown over by traffic. Steel rings or chains of any type over the cones* will not be permitted.
3. Drums shall be set 2' inside long joints when no work is proceeding in that area.

28" Day-Glo Traffic Cones* or Reflectorized Drums on 100' centers behind edge line

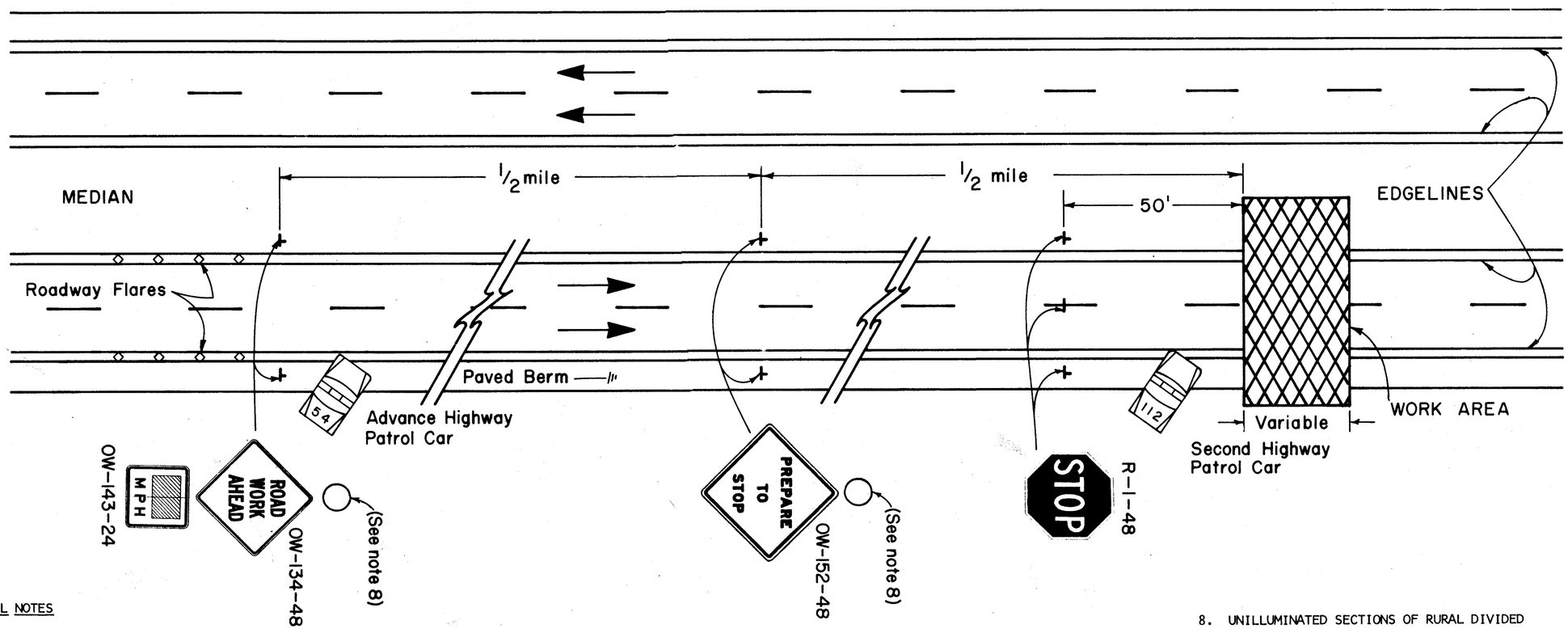
*** Distance to be adjusted so signs OW-143-48 up to Flashing Arrow Panel remains at constant distance from the work area.

* CONES MAY BE USED DURING DAYLIGHT HOURS ONLY

** DRUMS SHALL BE ADJUSTED TO PROVIDE MAXIMUM ACCELERATION AND DECELERATION LANE WHEN CONTRACTOR IS NOT WORKING IN AREA.

TYPICAL CLOSURE DETAILS

CALC. BY			
DATE	HAM.-75/126-9.93/13.00	OHIO	19-D
CHKD. BY		FHWA REGION 5	787
DATE			



GENERAL NOTES

1. THIS TYPE OF HIGHWAY CLOSURE SHALL ONLY BE USED FOR EMERGENCIES OR FOR CONSTRUCTION OPERATIONS WHEN THE DURATION OF CLOSURE WILL NOT EXCEED 15 MINUTES. AFTER THE RURAL DIVIDED HIGHWAY HAS BEEN CLOSED AND REOPENED VIA THIS PROCEDURE A MINIMUM PERIOD OF 30 MINUTES SHALL ELAPSE BEFORE ANOTHER SHORT DURATION CLOSURE, EXCEPT WITH THE APPROVAL OF THE ENGINEER.

2. AT LEAST TWO PATROLMEN AND TWO PATROL CARS SHALL BE PROVIDED ON EACH APPROACH TO THE CLOSURE. EACH PATROL CAR SHALL HAVE A ROOF MOUNTED ROTATING RED LIGHT OR A LIGHT BAR.

3. A MINIMUM OF FOUR FLARES SHALL BE BURNING CONTINUOUSLY ON EACH SIDE OF THE ROADWAY IN ADVANCE OF THE "OW-134-48" SIGN DURING THE TIME THAT TRAFFIC IS STOPPED ON THE RURAL DIVIDED HIGHWAY.

4. ROAD CLOSURES ARE NOT PERMITTED ON HOLIDAYS, WEEKENDS OR BETWEEN THE HOURS OF 6 AM TO 9 AM, 11 AM TO 1 PM AND 3 PM TO 6 PM ON MONDAY THROUGH FRIDAY, EXCEPT BY PERMISSION OF THE ENGINEER.

5. THE ADVANCE PATROL CAR AND THE "OW-134-48", "OW-143-24", AND "OW-152-48" SIGNS SHALL BE MOVED BACK AS REQUIRED BY THE QUEUING OF STOPPED VEHICLES. NEW FLARES SHALL BE PLACED WHENEVER THE ADVANCE PATROL CAR IS REQUIRED TO RELOCATE.

6. TRAFFIC CONTROL FOR THE CLOSURE SHALL BE ACCOMPLISHED IN THE FOLLOWING ORDER:

   A. ADVANCE PATROL CAR, LIGHTS AND FLASHER ON; AT LEAST FOUR FLARES BURNING ON EACH SIDE OF ROADWAY.
   B. "OW-134-48" AND "OW-143-24" SIGNS ERECTED.
   C. "OW-152-48" SIGNS ERECTED.
   D. SECOND PATROL CAR, LIGHTS AND FLASHERS ON.
   E. "R-1-48" SIGNS ERECTED BY FLAGMEN WITH FLARE OR FLAG USED TO STOP TRAFFIC. THE ORDER OF ERECTION SHALL BE TOWARD THE MEDIAN SHOULDER IN THE FOLLOWING ORDER: RIGHT SHOULDER, THEN CENTER, THEN MEDIAN SHOULDER.

7. TRAFFIC CONTROL SHALL BE REMOVED IN THE FOLLOWING ORDER:

   A. WITH TRAFFIC STOPPED ONE MAN WITH A FLARE OR FLAG SHOULD HOLD TRAFFIC AND OTHER FLAGMAN SHALL REMOVE THE "R-1-48" SIGNS TOWARD THE RIGHT SHOULDER IN THE FOLLOWING ORDER: MEDIAN, THEN CENTER, THEN SIGN ON RIGHT SHOULDER.
   B. AFTER ALL STOPPED VEHICLES HAVE STARTED MOVING, THE "OW-152-48" SIGNS SHALL BE REMOVED. THESE SIGNS MAY BE COVERED IF RE-USE IS IMMINENT.
   C. AFTER ALL CARS HAVE RESUMED APPROXIMATELY NORMAL SPEED, THE "OW-134-48" AND "OW-143-24" SIGNS SHALL BE REMOVED. THESE SIGNS MAY BE COVERED IF RE-USE IS IMMINENT.
   D. LIGHTS AND FLASHERS SHALL BE TURNED OFF ON BOTH PATROL CARS.
   E. REMOVE ALL ROADWAY FLARES IF THEY ARE STILL BURNING.

8. UNILLUMINATED SECTIONS OF RURAL DIVIDED HIGHWAYS SHOULD NOT BE CLOSED DURING HOURS OF DARKNESS EXCEPT FOR EMERGENCIES OR WITH THE APPROVAL OF THE ENGINEER. WHEN A RURAL DIVIDED HIGHWAY MUST BE CLOSED DURING HOURS OF DARKNESS, A TYPE B HIGH INTENSITY FLASHING BARRICADE WARNING LIGHT SHALL BE USED ON EACH OW-134 AND OW-152 SIGN.

9. IF AN ENTRANCE RAMP IS LOCATED BETWEEN THE OW-134 AND R-1 SIGNS, THE "OW-134-48", "OW-143-24", AND THE "OW-152-48" SIGNS SHALL ALSO BE ERECTED ON THE RAMP SHOULDER.

OHIO DEPARTMENT OF TRANSPORTATION

SHORT DURATION CLOSING OF RURAL DIVIDED HIGHWAY

DATE 5/77

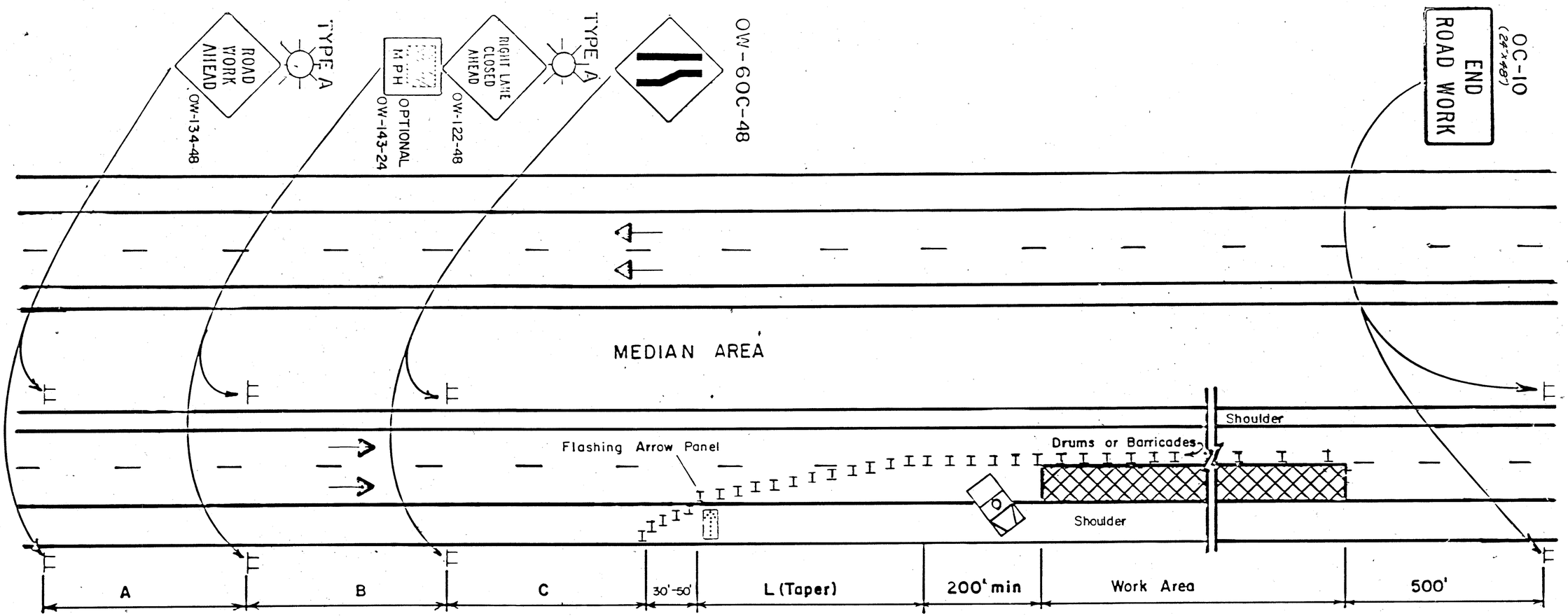
DR. BSE CK. MOW

CALC. BY — DATE —
CHKD. BY — DATE —

HAM.-75/126 -9.93/13.00

OHIO
FHWA REGION 5

19-E
787



GENERAL NOTES:

1. The taper length (L) shall be in accordance with Section 7F-17 of the OMUTCD. The location of the transition taper and location of the advance warning signs should be adjusted to provide for adequate sight distance for the existing vertical and horizontal roadway alignment. In order to determine the minimum number of channelizing devices for the transition taper see Table 7-5 OMUTCD. For a 55 MPH prevailing speed and a 12 ft. lane, not less than thirteen (13) drums or barricades shall be used to form the lane transition taper in advance of the work area. Not less than five (5) drums or barricades shall be used to form the taper on the shoulder. Drums or barricades shall be spaced approximately 50' to 60' center to center for the first 1000 feet of the work area and at a maximum of 100 to 120 feet for the balance of the work area. Cones may be substituted for barricades or drums for short term lane closures during daylight hours only.

2. The major standard level warning sign sizes may be used on divided streets or highways that are not classified as freeways or expressways.

3. When work is being performed in the lane adjacent to the median on a divided highway an OW-123-48 sign(s) shall be substituted for the OW-122-48 sign(s) and an OW-600-48 sign(s) shall be substituted for the OW-60C sign(s).

4. The work vehicle shown at the beginning of the work area shall be in place and unoccupied whenever workers are in the work area. This work vehicle shall be removed from the pavement whenever workers are not in the work area. Other protective devices may be used in lieu of the work vehicle shown when approved by the Engineer. The vehicle shall be equipped with a 360° rotating or flashing amber beacon clearly visible a minimum of a ½ mile.

5. The flashing arrow panel shall meet requirements of TC-35.10.

6. Type C steady burning barricade warning lights shall be erected on drums or barricades for night lane closures. The maximum spacing shall be identical to the channelizing device spacing requirements described in Note 1.

MINIMUM DISTANCE	A	B	C
MAJOR STANDARD	500'	500'	500'
URBAN FREEWAY & EXPRESSWAY	500' TO 1000'	500' TO 1000'	500' TO 1000'
RURAL FREEWAY & EXPRESSWAY	2600'	1600'	1000'

7. Type A flashing barricade warning lights shown on the "Road Work Ahead" and the "Right Lane Closed Ahead" signs are required whenever a night lane closure is necessary.

8. Some work area locations may require more than just static or conventional signs to enhance communication with the driver. At these locations Portable Changeable Message Signs (PCMS) units are recommended. These devices should be located approx. 2000 to 4000 feet in advance of a lane closure or other point of required action. See Section 7G-8.1, OMUTCD for further guidance on use of PCMS units.

OHIO DEPARTMENT OF TRANSPORTATION

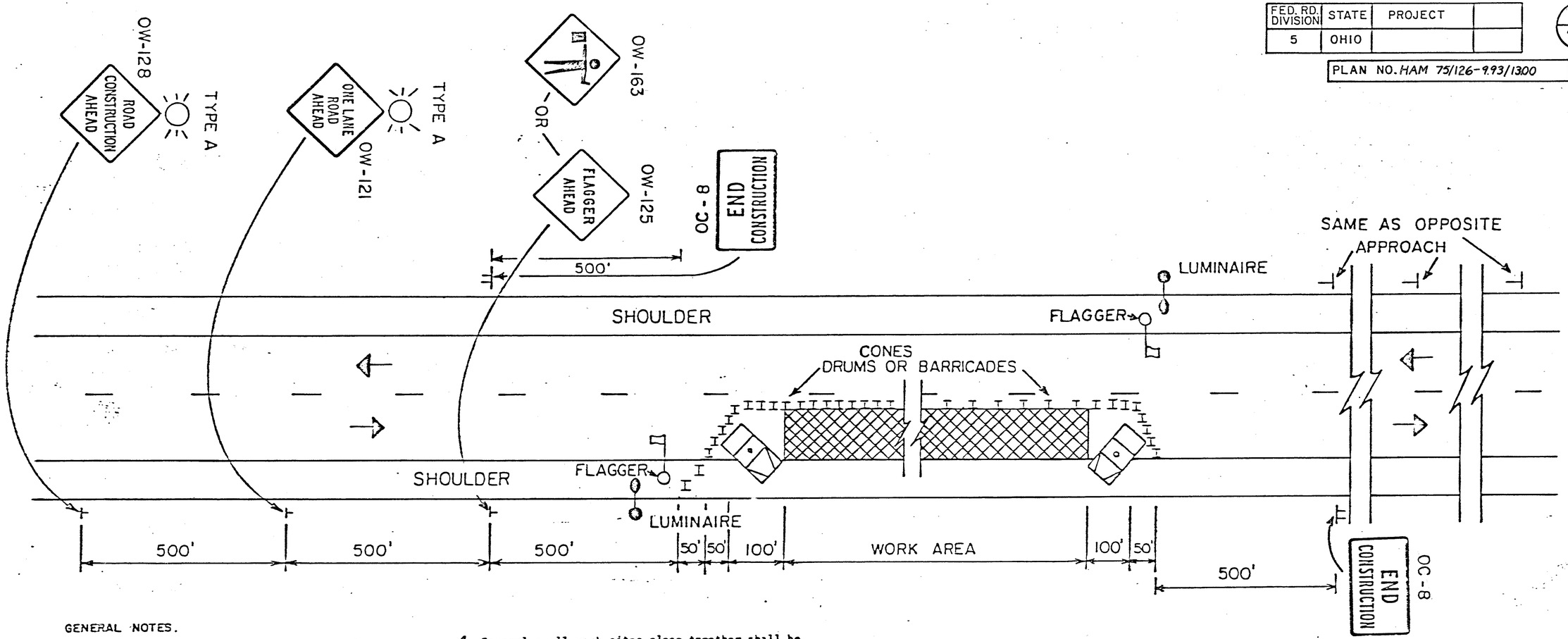
CLOSING ONE LANE OF A FOUR LANE DIVIDED HIGHWAY

DATE
12/82
4/83

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

PLAN NO. HAM 75/126-9.93/1300

19F
787



GENERAL NOTES.

1. The location of the advance warning signs should be adjusted to provide for adequate sight distance for the existing vertical and horizontal roadway alignment. The distances shown are minimums.

2. Flaggers shall be used to control traffic continuously for as long as a one lane operation is in effect. The flaggers shall communicate with each other at all times as described in the Ohio Manual of Uniform Traffic Control Devices (OMUTCD) in Section 7H: Control of Traffic Through Work Areas.

3. Cones drums or barricades shall be spaced at approximately 50' to 60' center to center for the first 1000 feet of the work area and at a maximum of 100' to 120' center to center for the balance of the work area. Cones, drums or barricades on the advance and return tapers shall be spaced at 10' center to center. Cones may be substituted for barricades or drums for short term lane closures. Cones shall be reflectorized, delineated or internally illuminated for short term night lane closures.

4. Several small work sites close together shall be combined into one work area to make a closure not more than 2000 feet long including tapers. Closures of more than 2000 feet may be approved by the Engineer. The minimum length between closures shall be 2000 feet. Only one side of the road shall be closed in any one work area.

5. The work vehicles shown at the beginning and end of the work area shall be in place and unoccupied whenever workers are in the work area. These work vehicles shall be removed from the pavement whenever workers are not in the work area. Other protective devices may be used in lieu of the work vehicles shown when approved by the Engineer. The vehicles shall be equipped with a 360° rotating or flashing amber beacon clearly visible a minimum of a ½ mile.

6. The Type A flashing barricade warning lights shown on the "Road Construction Ahead" and the "One Lane Road Ahead" signs are required whenever a night lane closure is necessary.

7. Type C steady burning barricade warning lights shall be erected on drums or barricades for night lane closures. The maximum spacing shall be identical to the channelizing device spacing requirements described in Note 3.

8. Adequate area illumination to clearly identify the flagger station at night for long term operations shall be provided by using 150 watt minimum high pressure sodium luminaires or 250 watt minimum mercury luminaires. Luminaires shall be located adjacent to one flagger station for each direction of traffic as shown above. The mounting height for temporary luminaires shall be a minimum of 27 feet above the pavement and the overhead conductor clearance shall be 20 feet above the pavement.

OHIO DEPARTMENT OF TRANSPORTATION

FLAGGERS CLOSING 1 LANE OF A 2 LANE HIGHWAY

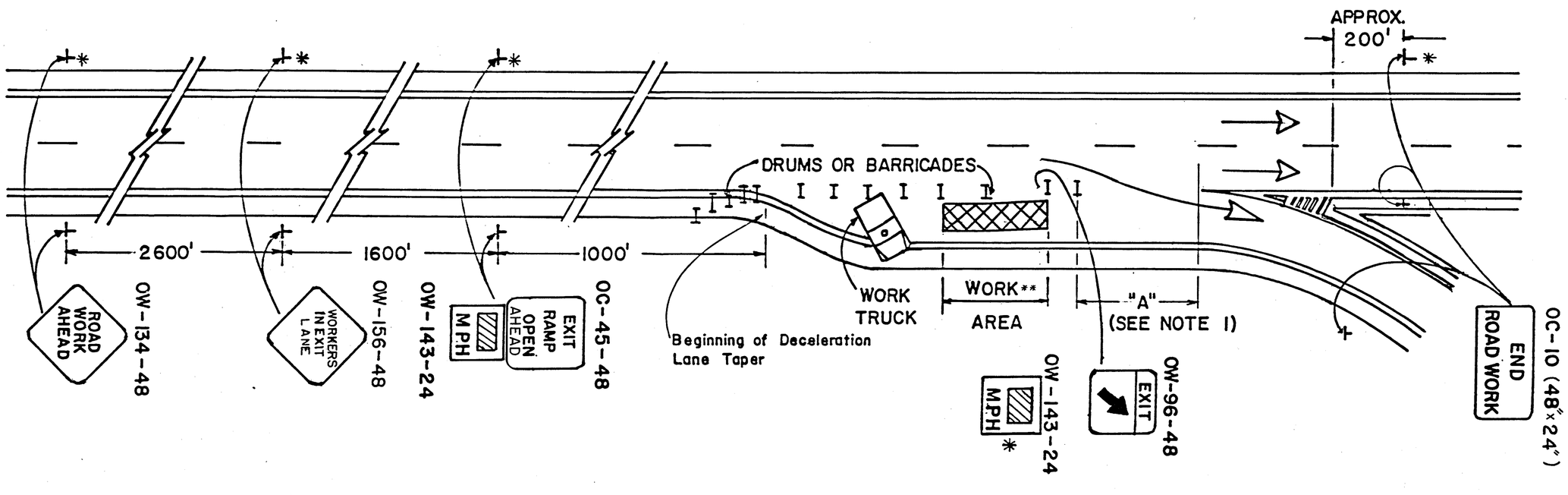
DATE 12/82

TC-1

Rev EEF 9/84

CALC. BY DATE		OHIO
CHKD. BY DATE	HAM.-75/126-9.93/13.00	FHWA REGION 5

196/787



* OPTIONAL SIGN ERECTED WITH THE APPROVAL OF THE ENGINEER.

GENERAL NOTES.

1. THIS WORK AREA TRAFFIC CONTROL APPLICATION SHALL ONLY APPLY WHEN THE DISTANCE "A" IS GREATER THAN 100'. WHEN DISTANCE "A" IS LESS THAN 100', THE RAMP SHALL BE CLOSED. WHEN THE RAMP IS CLOSED, THE TRAFFIC CONTROL SHALL INCLUDE DETOUR SIGNING FOR EXIT RAMP CLOSURES IN ACCORDANCE WITH OMUTCD.

2. DRUMS OR BARRICADES SHALL BE SPACED AT 50 FOOT CENTERS. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS FOR THE LANE CLOSURES DURING DAYLIGHT HOURS ONLY.

3. TYPE C STEADY BURNING BARRICADE WARNING LIGHTS SHALL BE ERECTED ON DRUMS OR BARRICADES FOR NIGHT LANE CLOSURES. MAXIMUM SPACING SHALL BE 50' CENTER TO CENTER IN ADVANCE OF THE WORK AREA AND 200' CENTER TO CENTER WITHIN THE LIMITS OF THE WORK AREA. TYPE A FLASHING BARRICADE WARNING LIGHTS SHALL BE USED WITH OC-134-48 AND OC-122-48 SIGNS FOR ALL NIGHT WORK LANE CLOSURES.

4. THE WORK TRUCK SHOWN AT THE BEGINNING OF THE WORK AREA SHALL BE IN PLACE AND UNOCCUPIED WHENEVER MEN ARE WORKING WITHIN THE WORK AREA. THIS TRUCK SHALL BE MOVED FROM THE PAVEMENT WHENEVER WORKMEN ARE NOT IN THE WORK AREA. OTHER PROTECTIVE DEVICES MAY BE USED IN LIEU OF THE WORK TRUCK SHOWN WHEN APPROVED BY THE ENGINEER.

5. THE SPACINGS BETWEEN CONSTRUCTION AND MAINTENANCE SIGNS SHOWN ON THIS DETAIL MAY REQUIRE ADJUSTMENTS (INCREASES OR DECREASES) TO ASSURE THAT THEY ARE POSITIONED NO CLOSER THAN 200 FEET TO EXISTING SIGNS AS DETERMINED BY THE ENGINEER.

6. ALL WORK VEHICLES SHALL BE EQUIPPED WITH A 360° ROTATING OR FLASHING AMBER BEACON CLEARLY VISIBLE A MINIMUM OF 1/4 MILE.

** DRUMS OR BARRICADES SHALL BE ADJUSTED TO PROVIDE MAXIMUM DECELERATION LANE

OHIO DEPARTMENT OF TRANSPORTATION

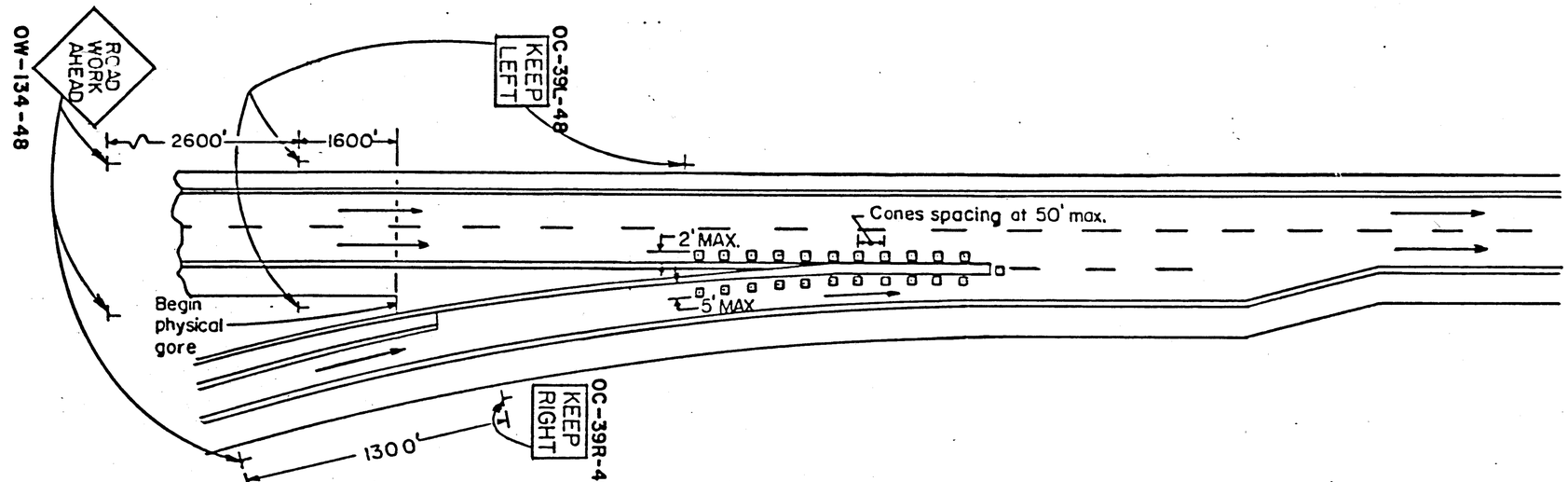
LANE CLOSURE IN DECELERATION LANE

DATE 8-3-79

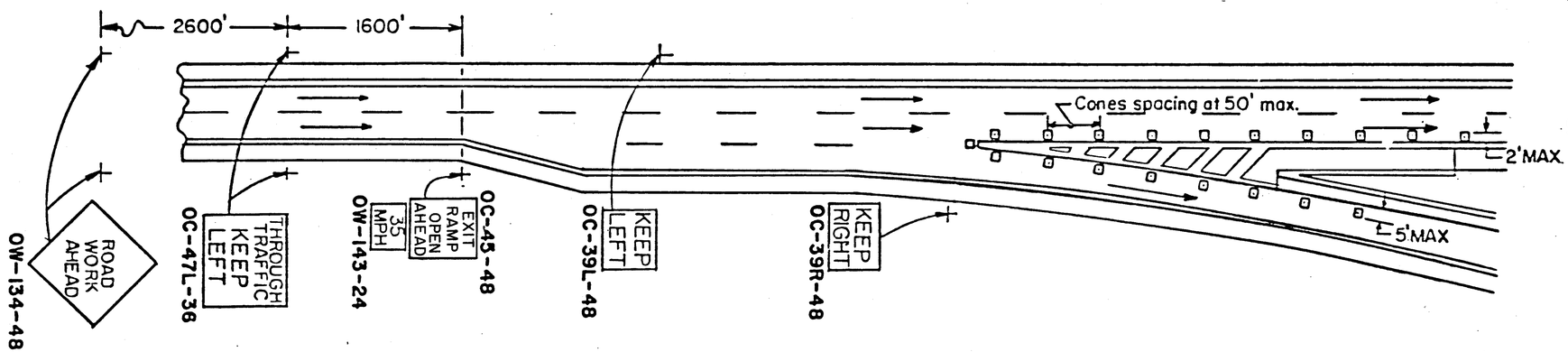
DR. | CK.

CALC. BY DATE		OHIO	19-H 787
CHKD. BY DATE	HAM:- 75/126 - 9.93/13.00	FHWA REGION 5	

ENTRANCE GORE TRAFFIC CONTROL



EXIT GORE TRAFFIC CONTROL



GENERAL NOTES

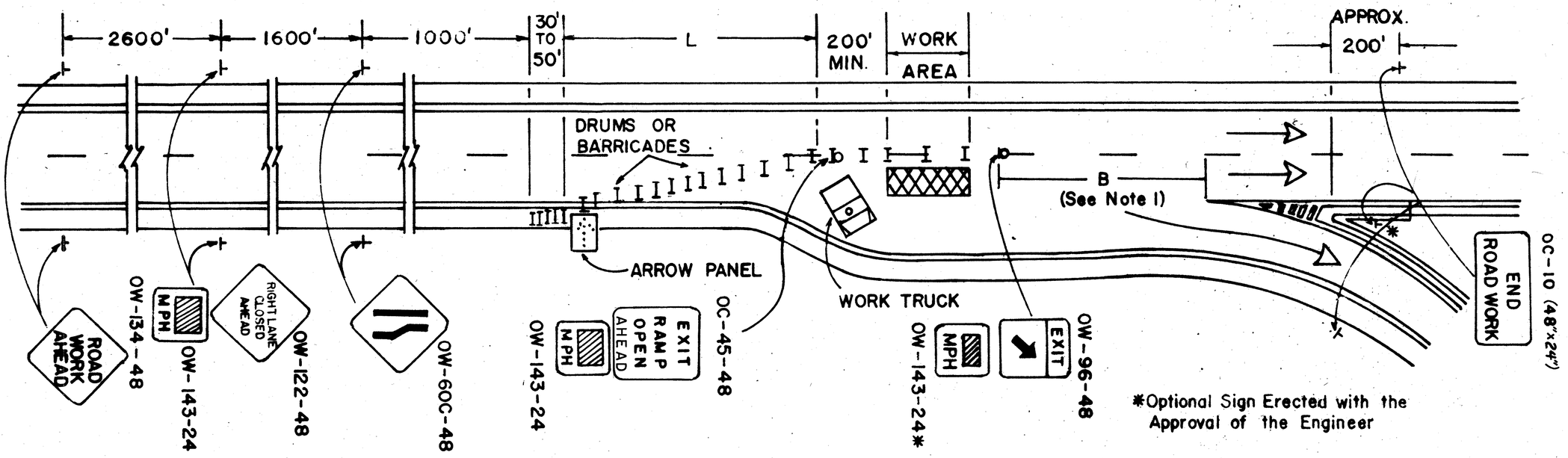
1. WHERE THE ONLY WORK IN THE GORE AREA CONSISTS OF APPLICATION OF EDGELINE MARKINGS WITH FAST DRY PAVEMENT MARKING MATERIALS, THE TRAFFIC CONTROL FOR "EDGELINE PAVEMENT MARKING OPERATIONS" SHOULD BE EMPLOYED. **SEE SHEET** ___.
2. WHERE THE WORK IN THE GORE AREA REQUIRES MORE POSITIVE TRAFFIC CONTROL OR OVERNIGHT WORK AREA PROTECTION, THE TRAFFIC CONTROL FOR "LANE CLOSURE AT THE ENTRANCE RAMP" OR "LANE CLOSURE AT EXIT GORE" SHOULD BE EMPLOYED. **SEE SHEETS** 19J 19K & 19L
3. THE SPACING BETWEEN SIGNS SHOWN ON THIS DETAIL MAY BE ADJUSTED (INCREASED OR DECREASED) WITH THE APPROVAL OF THE ENGINEER TO POSITION THEM NO CLOSER THAN 200 FEET TO EXISTING SIGNS WHICH MUST REMAIN IN USE.
4. TYPE A FLASHING BARRICADE WARNING LIGHTS SHALL BE USED WITH OC-134-48 AND OC-122-48 SIGNS FOR ALL NIGHT WORK LANE CLOSURES.
5. AT AN INTERCHANGE WHERE BOTH EXITS AND ENTRANCES ARE MARKED WITH TRAFFIC CONTROL IN PLACE AT THE SAME TIME, THE OW-134-48 SIGN ON THE ENTRANCE RAMP IS NOT REQUIRED.

OHIO DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL FOR WORK IN GORE AREAS	DATE 1/81

CALC. BY DATE F.V 3/86		OHIO
CHKD. BY DATE JAS 3/86	HAM.-75/126-9.93/13.00	F.H.W.A. REGION 5

19-7 787



GENERAL NOTES

1. THIS WORK AREA TRAFFIC CONTROL APPLICATION SHALL ONLY BE USED WHEN THE DISTANCE "B" IS 100 FEET OR GREATER. WHEN "B" IS LESS THAN 100 FEET, THE TRAFFIC CONTROL SHOWN ON THE "LANE CLOSURE AT EXIT GORE" DETAIL SHOULD BE USED, OR THE EXIT SHOULD BE CLOSED, OR THE TRAFFIC CONTROL ON THIS DRAWING MAY BE USED WITH APPROVAL OF THE ENGINEER. WHEN THE EXIT IS CLOSED, APPROPRIATE DETOUR SIGNS SHALL BE PROVIDED.

2. WHEN WORK IS BEING PERFORMED IN THE LANE ADJACENT TO THE MEDIAN ON A DIVIDED HIGHWAY, REFER TO THE TYPICAL WORK AREA TRAFFIC CONTROL SHOWN IN FIGURE C-21 OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

3. THE WORK TRUCK SHOWN AT THE BEGINNING OF THE WORK AREA SHALL BE IN PLACE AND UNOCCUPIED WHENEVER MEN ARE WORKING WITHIN THE WORK AREA. THIS TRUCK SHALL BE MOVED FROM THE PAVEMENT WHENEVER WORKMEN ARE NOT IN THE WORK AREA. OTHER PROTECTIVE DEVICES MAY BE USED IN LIEU OF THE WORK TRUCK SHOWN WHEN APPROVED BY THE ENGINEER.

4. ALL WORK VEHICLES SHALL BE EQUIPPED WITH A 360° ROTATING OR FLASHING AMBER BEACON CLEARLY VISIBLE A MINIMUM OF 1/4 MILE.

5. THIRTEEN (13) DRUMS OR BARRICADES SHALL BE USED TO FORM THE LANE TRANSITION TAPER IN ADVANCE OF THE WORK AREA. FIVE (5) CHANNELIZING DEVICES SHALL BE USED TO FORM THE TAPER ON THE SHOULDER. DRUMS OR BARRICADES SHALL BE SPACED AT 50 FOOT CENTERS. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS FOR THE LANE CLOSURES DURING DAYLIGHT HOURS ONLY.

6. TYPE C STEADY BURNING BARRICADE WARNING LIGHTS SHALL BE ERECTED ON DRUMS OR BARRICADES FOR NIGHT LANE CLOSURES. MAXIMUM SPACING SHALL BE 50' CENTER TO CENTER IN ADVANCE OF THE WORK AREA AND 200' CENTER TO CENTER WITHIN THE LIMITS OF THE WORK AREA.

6. (CONT.) TYPE A FLASHING BARRICADE WARNING LIGHTS SHALL BE USED WITH OC-134-48 AND OC-122-48 SIGNS FOR ALL NIGHT WORK LANE CLOSURES.

7. TAPER FORMULAE:

$L = S \times W$ FOR SPEEDS OF 45 OR MORE.
$L = WS^2/60$ FOR SPEEDS OF 40 OR LESS.

WHERE:

L = MINIMUM LENGTH OF TAPER.
S = NUMERICAL VALUE OF POSTED SPEED LIMIT PRIOR TO WORK OR 85 PERCENTILE SPEED.
W = WIDTH OF OFFSET.

8. THE SPACINGS BETWEEN CONSTRUCTION AND MAINTENANCE SIGNS SHOWN ON THIS DETAIL MAY REQUIRE ADJUSTMENTS (INCREASES OR DECREASES) TO ASSURE THAT THEY ARE POSITIONED NO CLOSER THAN 200 FEET TO EXISTING SIGNS AS DETERMINED BY THE ENGINEER.

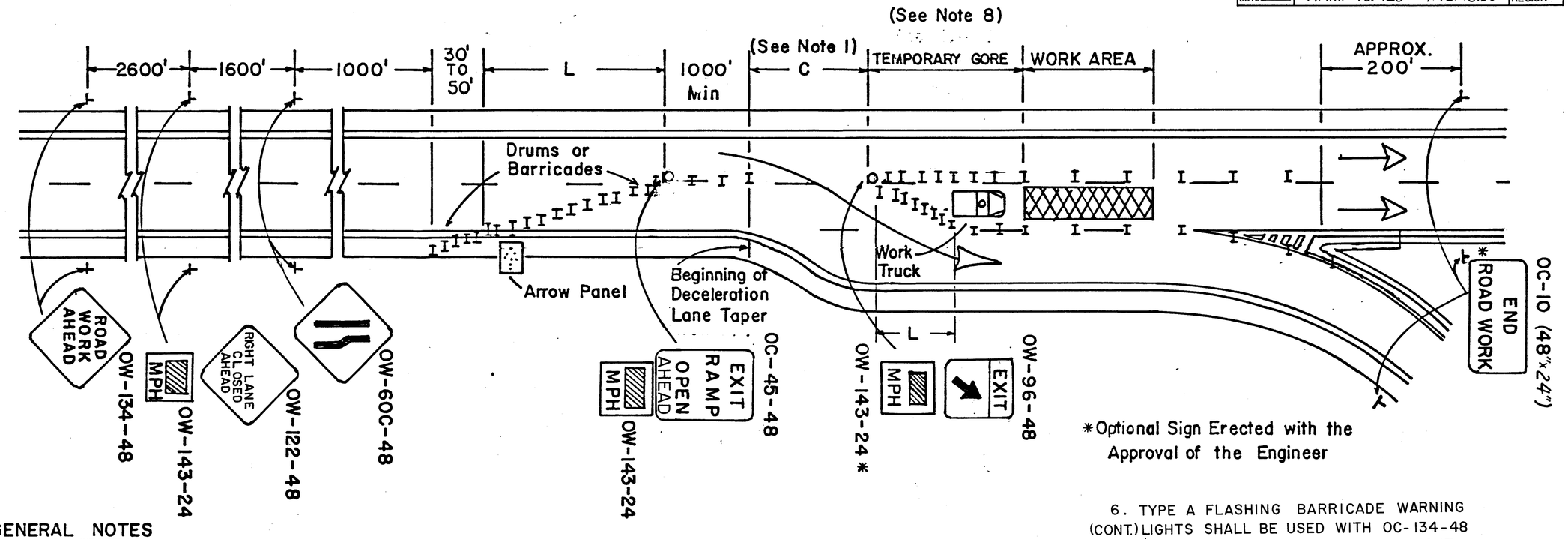
OHIO DEPARTMENT OF TRANSPORTATION

LANE CLOSURE BEFORE EXIT GORE

DATE 8-3-79

CALC. BY DATE		OHIO
CHKD. BY DATE	HAM.-75/126-9.93/13.00	FHWA REGION 5

19.J
787



*Optional Sign Erected with the Approval of the Engineer

GENERAL NOTES

1. **THIS WORK AREA TRAFFIC CONTROL APPLICATION SHALL ONLY BE USED WHEN THE DISTANCE "C" IS 100 FEET OR GREATER. WHEN "C" IS LESS THAN 100 FEET, THE TRAFFIC CONTROL SHOWN ON THE "LANE CLOSURE BEFORE EXIT GORE" DETAIL SHOULD BE USED, OR THE EXIT SHOULD BE CLOSED, OR THE TRAFFIC CONTROL ON THIS DRAWING MAY BE USED WITH APPROVAL OF THE ENGINEER. WHEN THE EXIT IS CLOSED, APPROPRIATE DETOUR SIGNS SHALL BE PROVIDED.**

2. WHEN WORK IS BEING PERFORMED IN ONLY THE LANE ADJACENT TO THE MEDIAN ON A DIVIDED HIGHWAY, REFER TO THE TYPICAL WORK AREA TRAFFIC CONTROL SHOWN IN FIGURE C-21 OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

3. THE WORK TRUCK SHOWN AT THE BEGINNING OF THE WORK AREA SHALL BE IN PLACE AND UNOCCUPIED WHENEVER MEN ARE WORKING WITHIN THE WORK AREA. THIS TRUCK SHALL BE MOVED FROM THE PAVEMENT WHENEVER WORKMEN ARE NOT IN THE WORK AREA. OTHER PROTECTIVE DEVICES MAY BE USED IN LIEU OF THE WORK TRUCK SHOWN WHEN APPROVED BY THE ENGINEER. A TRUCK MOUNTED IMPACT ATTENUATOR MAY BE EMPLOYED.

4. ALL WORK VEHICLES SHALL BE EQUIPPED WITH A 360° ROTATING OR FLASHING AMBER BEACON CLEARLY VISIBLE A MINIMUM OF 1/4 MILE

5. THIRTEEN (13) DRUMS OR BARRICADES SHALL BE USED TO FORM THE LANE TRANSITION TAPER IN ADVANCE OF THE WORK AREA. FIVE (5) CHANNELIZING DEVICES SHALL BE USED TO FORM THE TAPER ON THE SHOULDER. DRUMS OR BARRICADES SHALL BE SPACED AT 50 FOOT CENTERS. CONES MAY BE SUBSTITUTED FOR BARRICADES OR **DRUMS FOR THE LANE** CLOSURES DURING DAYLIGHT HOURS ONLY.

6. TYPE C STEADY BURNING BARRICADE WARNING LIGHTS SHALL BE ERECTED ON DRUMS OR BARRICADES FOR NIGHT LANE CLOSURES. MAXIMUM SPACING SHALL BE 50' CENTER TO CENTER IN ADVANCE OF THE WORK AREA AND 200' CENTER TO CENTER WITHIN THE LIMITS OF THE WORK AREA.

6. (CONT.) TYPE A FLASHING BARRICADE WARNING LIGHTS SHALL BE USED WITH OC-134-48 AND OC-122-48 SIGNS FOR ALL NIGHT WORK LANE CLOSURES.

7. TAPER FORMULAE:

   $L = S \times W$ FOR SPEEDS OF 45 OR MORE.
   $L = WS^2/60$ FOR SPEEDS OF 40 OR LESS.

   WHERE:

   L = MINIMUM LENGTH OF TAPER.
   S = NUMERICAL VALUE OF POSTED SPEED LIMIT PRIOR TO WORK OR 85 PERCENTILE SPEED.
   W = WIDTH OF OFFSET.

8. WHEN CREATING A TEMPORARY GORE, CHANNELIZING DEVICES SHOULD BE SPACED 25' CENTER TO CENTER SO AS TO CREATE A "SOLID GORE" **EFFECT.**

9. THE SPACINGS BETWEEN CONSTRUCTION AND MAINTENANCE SIGNS SHOWN ON THIS DETAIL MAY REQUIRE ADJUSTMENTS (INCREASES OR DECREASES) TO ASSURE THAT THEY ARE POSITIONED NO CLOSER THAN 200 FEET TO EXISTING SIGNS AS DETERMINED BY THE ENGINEER.

OHIO DEPARTMENT OF TRANSPORTATION

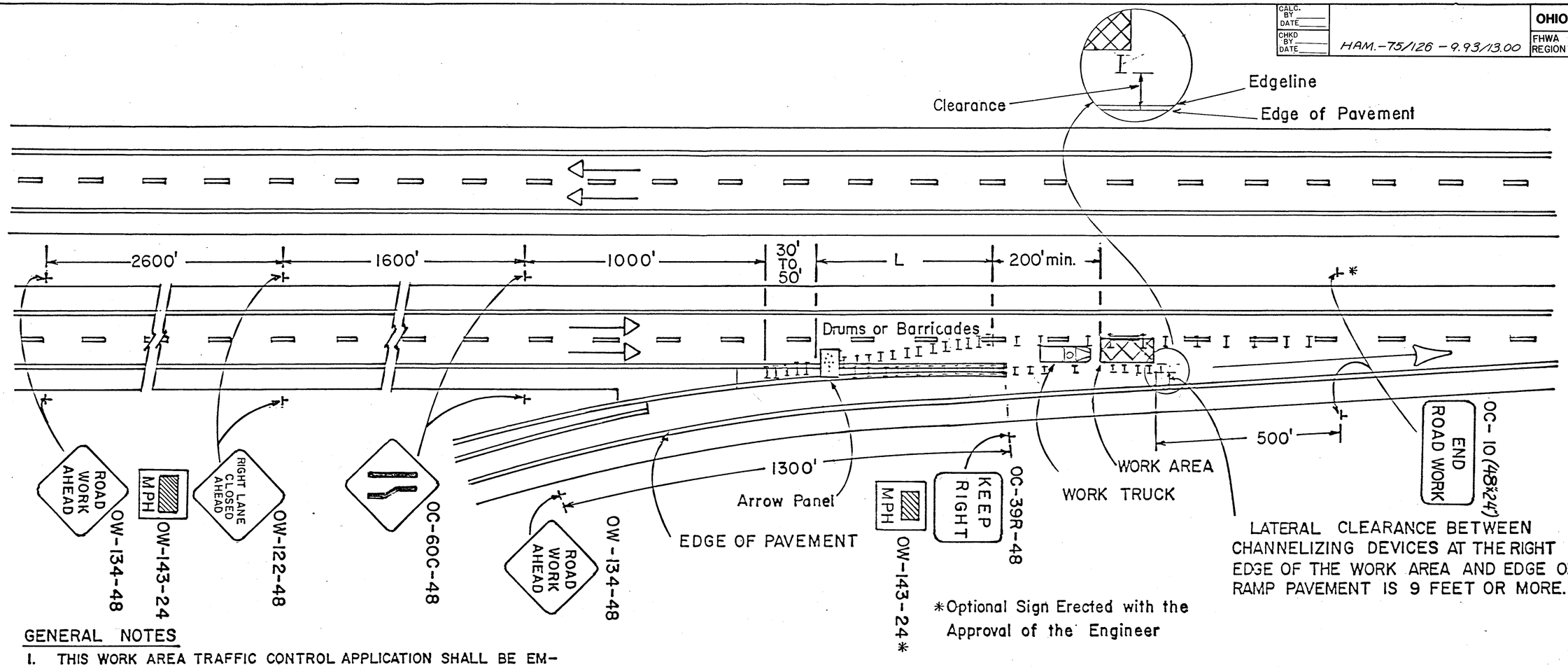
LANE CLOSURE AT EXIT GORE

DATE 8-3-79

DR. | CK.

CALC. BY DATE		OHIO
CHKD BY DATE	HAM.-75/126 - 9.93/13.00	FHWA REGION 5

19-K 787



LATERAL CLEARANCE BETWEEN CHANNELIZING DEVICES AT THE RIGHT EDGE OF THE WORK AREA AND EDGE OF RAMP PAVEMENT IS 9 FEET OR MORE.

*Optional Sign Erected with the Approval of the Engineer

GENERAL NOTES

1. THIS WORK AREA TRAFFIC CONTROL APPLICATION SHALL BE EMPLOYED WHEN THE LATERAL CLEARANCE BETWEEN THE CHANNELIZING DEVICES AT THE RIGHT EDGE OF THE WORK AREA AND THE EDGE OF THE RAMP PAVEMENT IS 9 FEET OR MORE. WHEN THE CLEARANCE IS LESS THAN 9 FEET, THE TRAFFIC CONTROL ON "LANE CLOSURE AT ENTRANCE RAMP: PLAN B" SHOULD BE USED, OR THE RAMP SHOULD BE CLOSED, OR ALLOWING RAMP TRAFFIC TO USE THE BERM SHOULD BE CONSIDERED PROVIDED THE OPERATION IS "SHORT" IN DURATION. WHEN THE RAMP IS CLOSED, APPROPRIATE DETOUR SIGNS SHALL BE PROVIDED.

2. THIRTEEN (13) DRUMS OR BARRICADES SHALL BE USED TO FORM THE LANE TRANSITION TAPER IN ADVANCE OF THE WORK AREA. FIVE (5) CHANNELIZING DEVICES SHALL BE USED TO FORM THE TAPER ON THE SHOULDER. DRUMS OR BARRICADES SHALL BE SPACED AT 50 FOOT CENTERS. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS FOR THE LANE CLOSURES DURING DAYLIGHT HOURS ONLY.

3. RAMP SIGNS SHALL BE DUAL MOUNTED ON MULTILANE RAMPS.

4. ALL WORK VEHICLES SHALL BE EQUIPPED WITH A 360° ROTATING OR FLASHING AMBER BEACON CLEARLY VISIBLE A MINIMUM OF 1/4 MILE.

5. THE WORK TRUCK SHOWN AT THE BEGINNING OF THE WORK AREA SHALL BE IN PLACE AND UNOCCUPIED WHENEVER MEN ARE WORKING WITHIN THE WORK AREA. THIS TRUCK SHALL BE MOVED FROM THE PAVEMENT WHENEVER WORKMAN ARE NOT IN THE WORK AREA. OTHER PROTECTIVE DEVICES MAY BE USED IN LIEU OF WORK TRUCK SHOWN WHEN APPROVED BY THE ENGINEER. A TRUCK MOUNTED IMPACT ATTENUATOR MAY BE EMPLOYED.

6. TYPE C STEADY BURNING BARRICADE WARNING LIGHTS SHALL BE ERECTED ON DRUMS OR BARRICADES FOR NIGHT LANE CLOSURES. MAXIMUM SPACING SHALL BE 50' CENTER TO CENTER IN ADVANCE OF THE WORK AREA AND 200' CENTER TO CENTER WITHIN THE LIMITS OF THE WORK AREA. TYPE A FLASHING BARRICADE WARNING LIGHTS SHALL BE USED WITH OC-134-48 AND OC-122-48 SIGNS FOR ALL NIGHT WORK LANE CLOSURES.

7. TAPER FORMULAE:

   $L = S \times W$ FOR SPEEDS OF 45 OR MORE.
   $L = WS^2/60$ FOR SPEEDS OF 40 OR LESS.

   WHERE:

   L = MINIMUM LENGTH OF TAPER.
   S = NUMERICAL VALUE OF POSTED SPEED LIMIT PRIOR TO WORK OR 85 PERCENTILE SPEED.
   W = WIDTH OF OFFSET.

8. THE SPACINGS BETWEEN CONSTRUCTION AND MAINTENANCE SIGNS SHOWN ON THIS DETAIL MAY REQUIRE ADJUSTMENTS (INCREASES OR DECREASES) TO ASSURE THAT THEY ARE POSITIONED NO CLOSER TNAN 200 FEET TO EXISTING SIGNS AS DETERMINED BY THE ENGINEER.

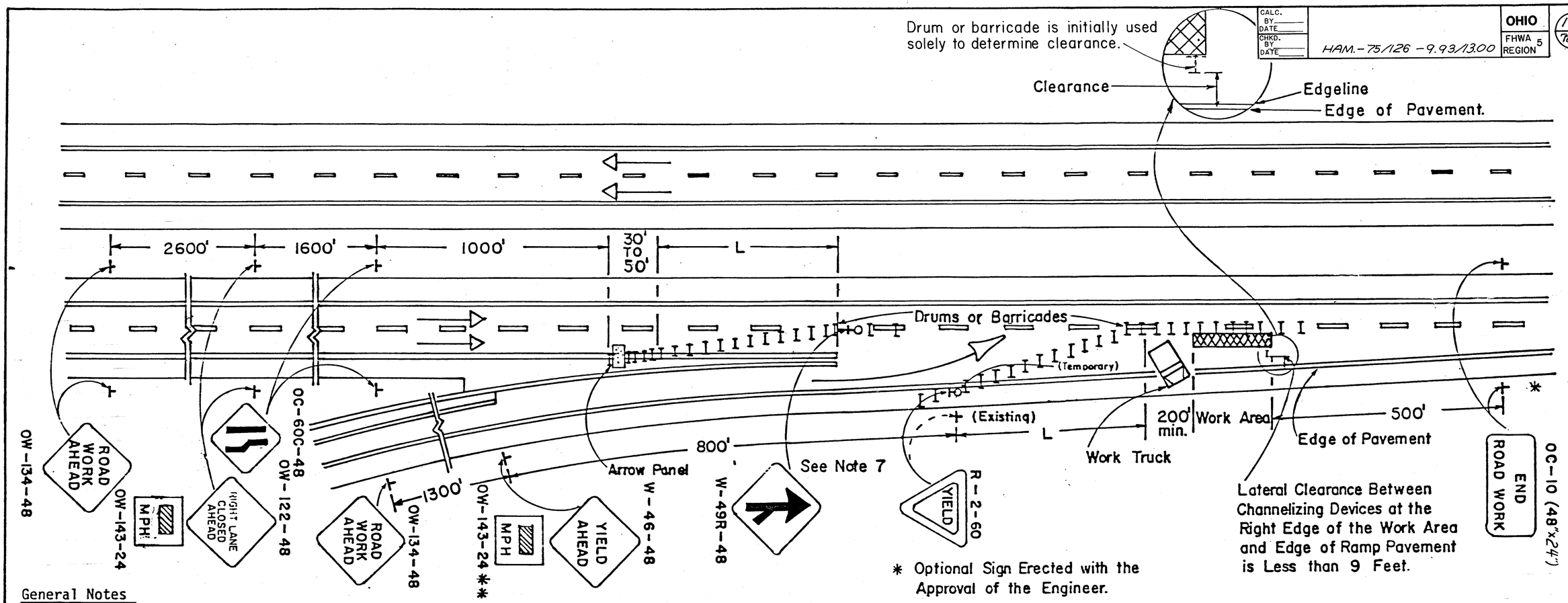
OHIO DEPARTMENT OF TRANSPORTATION

LANE CLOSURE AT ENTRANCE RAMP: PLAN A

DATE 8-3-79

CALC. BY DATE		OHIO
CHKD. BY DATE	HAM.-75/126-9.93/13.00	FHWA REGION 5

19-L 7187



* Optional Sign Erected with the Approval of the Engineer.

General Notes

1. This work area traffic control application shall be employed when the lateral clearance between channelizing devices at the right edge of the work area and the edge of the ramp pavement is less than 9 feet. When the clearance is more than 9 feet, the traffic control on "Lane Closure at Entrance Ramp: Plan A" should be used, or the ramp should be closed. When the ramp is closed, appropriate detour signs shall be provided.

2. Thirteen (13) drums or barricades shall be used to form the lane transition taper in advance of the work area. Five (5) channelizing devices shall be used to form the taper on the shoulder. Drums or barricades shall be spaced at 50 foot centers. Cones may be substituted for barricades or drums for the lane closures during daylight hours only.

3. Ramp signs shall be dual mounted on multi-lane ramps. When the ramp is not long enough to allow placement as specified above, the signs may be spaced proportionately within the space available as determined by the Engineer (a 200' minimum spacing must be maintained).

4. All work vehicles shall be equipped with a 360° rotating or flashing amber beacon clearly visible a minimum of 1/4 mile.

5. The work truck shown at the beginning of the work area shall be in place and unoccupied whenever men are working within the work area. This truck shall be moved from the pavement whenever workmen are not in the work area. Other protective devices may be used in lieu of work truck shown when approved by the Engineer.

6. Type C steady burning barricade warning lights shall be erected on drums or barricades for night lane closures. Maximum spacing shall be 50' center to center in advance of the work area and 200' center to center within the limits of the work area. Type A flashing barricade warning lights shall be used with OC-134-48 and OC-122-48 signs for all night work lane closures.

7. It may be necessary to move the location of an existing Yield condition In these cases, the permanent R-2 sign installation shall be covered and the temporary installation shall be mounted upon a drive post which shall be banded to a drum with stainless steel strapping material or other techniques subject to the approval of the Engineer.

8. Taper Formulae:

   $L = S \times W$ for Speeds of 45 or more.
   $L = WS^2/60$ for Speeds 40 or less.

   Where:

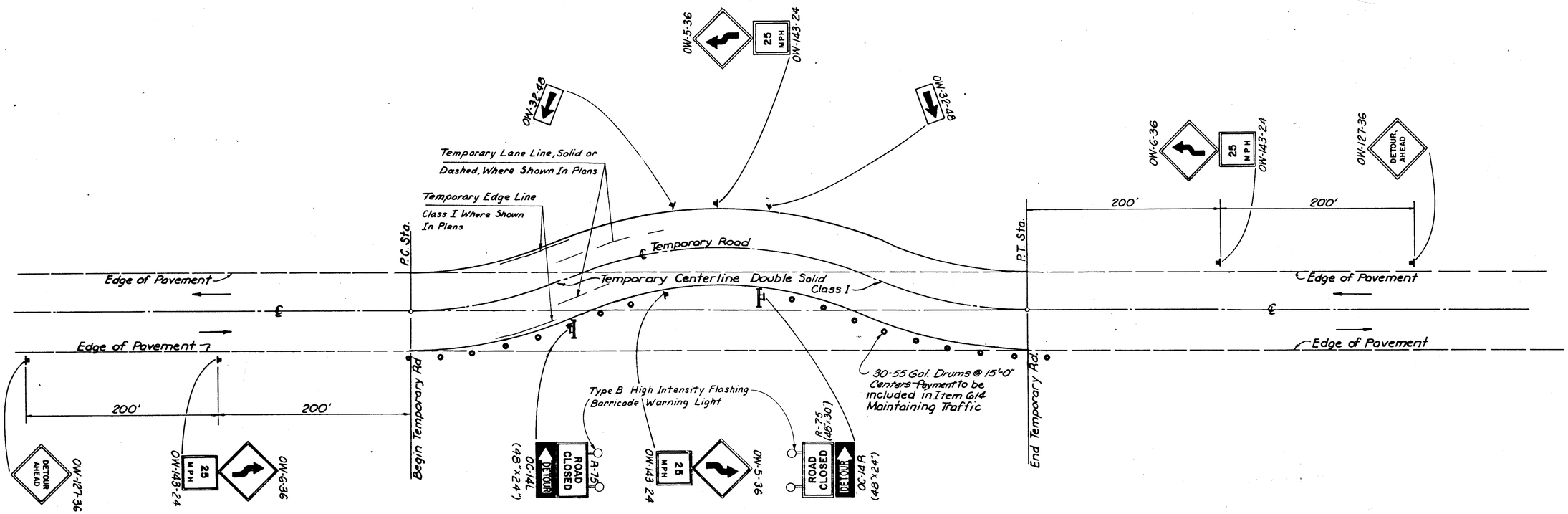
   L = Minimum length of taper.
   S = Numerical value of posted speed limit prior to work or 85 percentile speed.
   W = Width of offset.

9. THE SPACINGS BETWEEN CONSTRUCTION AND MAINTENANCE SIGNS SHOWN ON THIS DETAIL MAY REQUIRE ADJUSTMENTS (INCREASES OR DECREASES) TO ASSURE THAT THEY ARE POSITIONED NO CLOSER THAN 200 FEET TO EXISTING SIGNS AS DETERMINED BY THE ENGINEER.

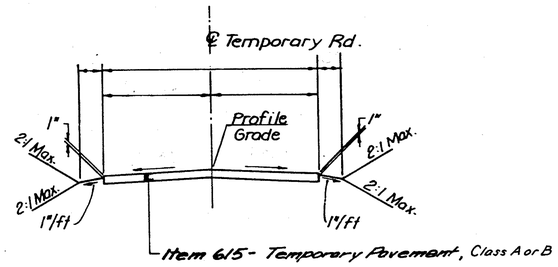
OHIO DEPARTMENT OF TRANSPORTATION

LANE CLOSURE AT ENTRANCE RAMP PLAN B	DATE 8-3-79

CALC. BY / DATE		OHIO	19-M 787
CHKD. BY / DATE	HAM.-75/126-9.93/13.00	FHWA REGION 5	



TYPICAL SIGNING AND STRIPING OF TEMPORARY ROADS



TYPICAL SECTION TEMPORARY ROADS

For Specific Dimensions and Slopes, See Sheet No's 310A, 310B, & 310C

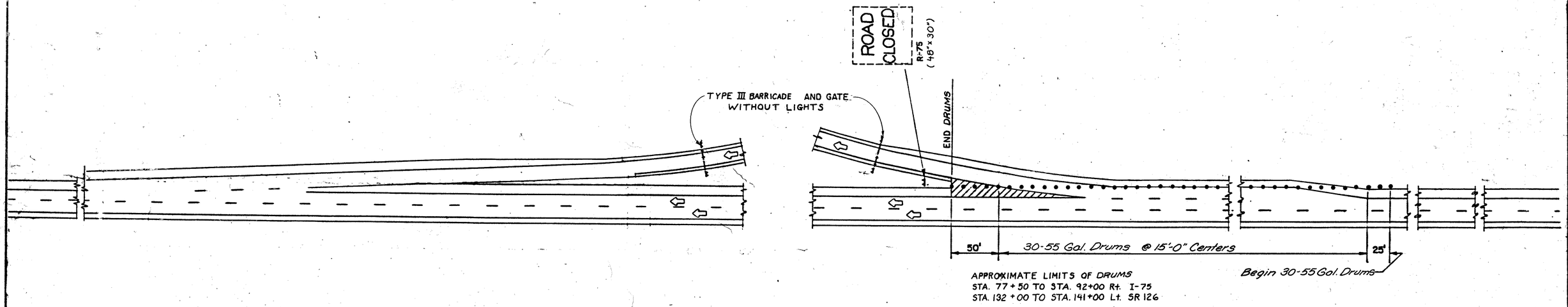
Station to Station	Unit	Class	TR-75-11(98)10 Quantity	F-2(13) Quantity
Temporary Road No. 1	Sq. Yd.	A	1001	
Temporary Road No. 2	Sq. Yd.	A		5995
Temporary Road No. 3	Sq. Yd.	A		1515
Temporary Road No. 4	Sq. Yd.	A		4978
Temporary Road No. 5	Sq. Yd.	A		816
Temporary Road No. 6	Sq. Yd.	A		150
TOTAL Item 615 Temporary Pav't.	Sq. Yd.		1001	13454

Note: Quantity carried to General Notes.

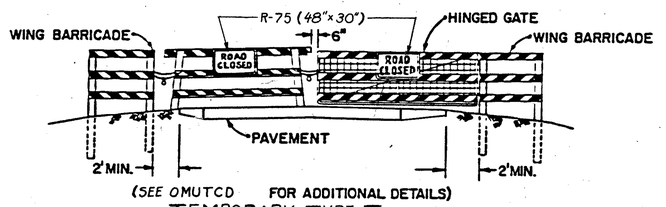
NOTE: All Temporary Pavement Markings On Permanent Pavement Which Must Be Removed Shall Be Preformed Material Meeting Requirements of 947.03, Type B or C

MAINTENANCE OF TRAFFIC

CALC. BY		HAM-75-126-9.93/13.00	OHIO	19-N
DATE			FHWA REGION 5	787
CHKD. BY				
DATE				



APPROXIMATE LIMITS OF DRUMS
STA. 77+50 TO STA. 92+00 Rt. I-75
STA. 132+00 TO STA. 141+00 Lt. SR 126



(SEE OMUTCD FOR ADDITIONAL DETAILS)

TEMPORARY TYPE III

BARRICADE AND GATE

STA. 68+00	RAMP D
STA. 53+50	RAMP E
STA. 98+65	RAMP T
STA. 105+55	RAMP N
STA. 124+25	RAMP P
STA. 132+50	RAMP P

PERMANENT TYPE III BARRICADES AND GATES

STATION	MINIMUM LENGTH
STA. 44+00 RAMP C	36'
STA. 63+00 RAMP D	80'
STA. 60+50 RAMP I	85'
STA. 50+00 E B SR126	100'
STA. 59+00 WB SR126	95'
TOTAL	396'

NOTES:

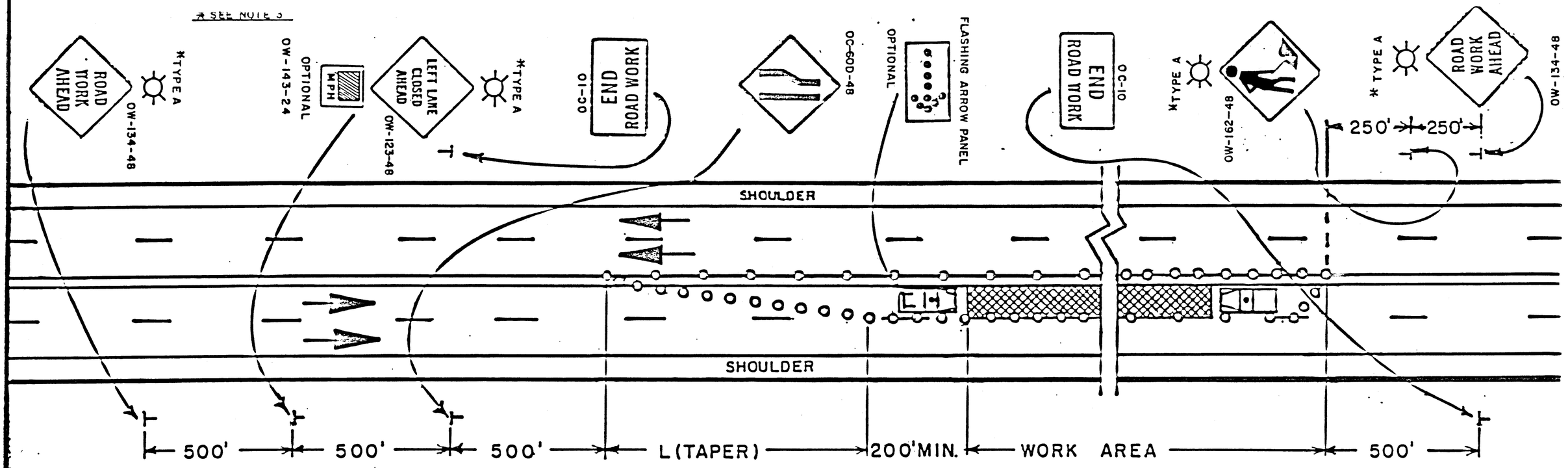
1. For Ramp Closures, The Deceleration Lane Should Be Closed With Reflectorized Drums Placed 15' Center To Center. The Existing Shoulder Width Shall Be Maintained At All Times. Temporary Concrete Barrier With End Terminals In Accordance With MC-9A May Be Used As An Alternate To The 30-55 Gal. Drums.

2. WHERE RAMP LIGHTING EXISTS, IT SHALL BE MAINTAINED IN PROPER CONDITION TO PROVIDE OPTIMUM ILLUMINATION.

3. GATES AND BARRICADES, IN ACCORDANCE WITH OMUTCD SHALL BE ERECTED ACROSS THE EXIT AND ENTRANCE RAMPS.

TEMPORARY RAMP CLOSURE DETAILS AND NOTES

CALC. BY		OHIO	19-0
DATE	HAM. 75/126-9.93/13.00	FHWA REGION 5	787
CHKD. BY			
DATE			



GENERAL NOTES

1. The taper length (L) shall be in accordance with Section 7F-17 of the OMUTCD. The location of the transition taper and location of the advance warning signs should be adjusted to provide for adequate sight distance for the existing vertical and horizontal roadway alignment. In order to determine the minimum number of channelizing devices for the transition taper see Table 7-5 OMUTCD. For a 55 MPH prevailing speed and a 12 foot lane, not less than thirteen (13) cones, drums or barricades shall be used to form the lane transition taper in advance of the work area. Cones, drums or barricades shall be spaced at approximately 50' to 60' centers for the first 1000 feet of the work area and at a maximum of 100 to 120 feet for the balance of the work area. On the return taper these devices shall be spaced at 10 foot center to center. Cones, drums or barricades shall also be placed on the left side of the work area between the closed lane and the opposing traffic. These devices shall be spaced at approximately 50' to 60' centers for 1000 feet starting at the end of the return taper and then at a maximum of 100 to 120 feet back along the remainder of the closed section. Cones may be substituted for barricades or drums for short term lane closures. Cones shall be reflectorized, delineated or internally illuminated for short term night lane closures.

2. Type C steady burning barricade warning lights shall be erected on drums or barricades for night lane closures. The maximum spacing shall be identical to the channelizing device spacing requirements described in Note 1.

3. Type A flashing barricade warning lights shown on the "Road Work Ahead", "Left Lane Closed Ahead" and "Worker Symbol" signs are required whenever a night lane closure is necessary.

4. When used, the flashing arrow panel shall meet requirements contained in Section 7G-8, OMUTCD.

5. The work vehicles shown at the beginning and end of the work area shall be in place and unocccupied whenever workers are in the work area. These work vehicles shall be removed from the pavement whenever workers are not in the work area. Other protective devices may be used in lieu of the work vehicles shown when approved by the Engineer. The vehicles shall be equipped with a 360° rotating or flashing amber beacon clearly visible a minimum of a 1/4 mile. A truck mounted impact attenuator may be employed.

6. When the work area encroaches upon the left edge of the opposite direction left lane, that lane shall be closed. Traffic control devices (signs, channelizing devices, and optional flashing arrow panel) identical in type, size and placement to primary approach traffic control shall be installed on the opposite direction approach. Work vehicles shall be repositioned accordingly.

7. Some work area locations may require more than just static or conventional signs to enhance communication with the driver. At these locations Portable Changeable Message Signs (PCMS) units are recommended. These devices should be located approximately 2,000 feet in advance of a lane closure or other point of required action. See Section 7G-8.1, OMUTCD for further guidance on use of PCMS units.

BUREAU OF TRAFFIC
OHIO DEPARTMENT OF TRANSPORTATION

CLOSING LEFT LANE OF A MULTILANE UNDIVIDED HIGHWAY	DATE 3/84
APPROVED	

7I-1C

CALC. GAA DATE 2/86
CHK'D Rea DATE 3/86

FHWA REGION	STATE	PROJECT	
5	OHIO		

(190 787)

614 WORK ZONE PAVEMENT MARKINGS

GENERAL

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND WHEN NECESSARY, REMOVE WORK ZONE RETROREFLECTIVE PAVEMENT MARKINGS ON EXISTING, RECONSTRUCTED, RESURFACED OR TEMPORARY ROADS WITHIN THE WORK LIMITS, IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS.

THE MARKINGS SHALL BE EVALUATED BY THE ENGINEER IN ACCORDANCE WITH THE THREE PERFORMANCE PARAMETERS CONTAINED IN SUPPLEMENT 1047. THE MARKINGS SHALL BE REPAIRED OR REPLACED WHEN THE NUMERICAL RATING OF A PARAMETER IS (a) SIX OR LOWER FOR DURABILITY, (b) FOUR OR LOWER FOR VISUAL EFFECTIVENESS AND (c) FOUR OR LOWER FOR NIGHT VISIBILITY. THE CONTRACTOR SHALL REPAIR OR REPLACE UNSATISFACTORY MARKINGS IMMEDIATELY AND AT NO ADDITIONAL COST TO THE STATE.

THE CONTRACTOR SHALL, IN ADVANCE OF ANY SECTION OF ROADWAY LACKING OMUTCD FULL PATTERN STANDARD DIMENSION EDGE LINE OR CENTER LINE MARKINGS, ERECT A "NO EDGE LINES" (OW-167-36) SIGN OR "UNMARKED NO PASSING ZONES" (OW-168-36) SIGN OR BOTH AS MAY BE APPROPRIATE. THESE SIGNS SHALL BE IN PLACE PRIOR TO EXPOSING THE ROADWAY TO TRAFFIC. THESE SIGNS SHALL ALSO BE ERECTED ON EACH ENTRANCE RAMP, AT INTERSECTIONS OF THROUGH ROADS TO WARN ENTERING OR TURNING TRAFFIC OF THE CONDITION AND AT LEAST ONCE EVERY TWO MILES ALONG THE ROADWAY. THESE SIGNS SHALL BE REMOVED WHEN THEY NO LONGER APPLY.

TEMPORARY PAVEMENT MARKING MATERIALS

UNLESS OTHERWISE INDICATED ON THE PLANS, TEMPORARY PAVEMENT MARKINGS MAY BE EITHER 621.02 PAINT OR 947.03 TYPE B OR C PREFORMED MATERIAL.

PAINT

PAINTED MARKINGS SHALL BE IN ACCORDANCE WITH 621 EXCEPT THAT (1) PARAGRAPH 621.14 SHALL NOT APPLY, (2) WHERE THE MARKINGS ARE NOT LIABLE TO BE TRACKED, EITHER CONVENTIONAL OR FAST DRY PAINT MAY BE USED FOR 621.02, AND (3) WHEN APPLIED TO NEW ASPHALT PAVEMENT SURFACES OR PLANED ASPHALT PAVEMENT SURFACES, THE SPECIFIED APPLICATION RATE SHALL BE AS FOLLOWS:

WIDTH OF LINE, IN.	GALLONS PER MILE OF LINE				
	4	6	8	12	24
SOLID LINE	24	36	48	72	144
DASHED LINE	6	9			
DOTTED LINE	8	12			

TYPE B AND TYPE C PREFORMED MATERIAL

PREFORMED MATERIAL SHALL COMPLY WITH 947.03 EXCEPT THAT NO PREFORMED MATERIAL CONTAINING METAL SHALL BE PLACED ON ANY SURFACE UNLESS IT WILL BE REMOVED LATER BY THE CONTRACTOR. TEMPORARY PAVEMENT MARKINGS OF 947.03 PREFORMED MATERIAL SHALL BE REMOVED PRIOR TO PLACEMENT OF 621 OR 847 SURFACE COURSE MARKINGS AT THAT LOCATION. PREFORMED MATERIAL SHALL BE APPLIED IN ACCORDANCE WITH 847 EXCEPT AS MODIFIED HEREIN.

PLACEMENT

TEMPORARY MARKINGS SHALL BE COMPLETE AND IN PLACE ON ALL PAVEMENT, INCLUDING RAMPS, PRIOR TO EXPOSING IT TO TRAFFIC. WHEN TEMPORARY MARKINGS CONFLICT WITH THE TRAFFIC PATTERN, THEY SHALL BE REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH 621.134.

LINE PLACEMENT TOLERANCE FOR FINAL SURFACES SHALL BE IN ACCORDANCE WITH 621.052. ON SURFACES OTHER THAN THE FINAL, THE TOLERANCE PERMITTED SHALL BE TWICE THAT IN 621.052.

LAYOUT AND PREMARKING SHALL BE IN ACCORDANCE WITH 621.051.

TEMPORARY MARKING CLASSES

CLASS I MARKINGS

CLASS I MARKINGS SHALL BE APPLIED TO THE FULL DIMENSIONS AS DEFINED IN 621 WITH THE FOLLOWING ADDITIONS OR EXCEPTIONS:

1) TRANSVERSE LINES SHALL BE 8-INCHES IN WIDTH.
2) STOP LINES SHALL BE 12-INCHES IN WIDTH.
3) CROSS WALK LINES SHALL BE 8-INCHES IN WIDTH.

CLASS II MARKINGS

CLASS II MARKINGS (ABBREVIATED) SHALL BE DEFINED AS FOLLOWS:

CENTER LINES SHALL CONSIST OF SINGLE, YELLOW 4-INCH WIDE BY A MINIMUM OF 48-INCH LONG DASHES SPACED AT A MAXIMUM OF 40-FOOT INTERVALS.

LANE LINES SHALL CONSIST OF WHITE 4-INCH WIDE BY A MINIMUM OF 48-INCH LONG DASHES SPACED AT A MAXIMUM OF 40-FOOT INTERVALS.

GORE MARKINGS SHALL BE TWO CONTINUOUS, WHITE 4-INCH LINES PLACED AT THE THEORETICAL GORE OF AN EXIT RAMP OR DIVERGING ROADWAYS.

THE PAINT APPLICATION RATE SHALL BE NOT LESS THAN 2.4 GALLONS PER MILE FOR LANE LINE AND CENTER LINE AND 24 GALLONS PER MILE FOR GORE MARKINGS.

CONFLICTING EXISTING MARKINGS

THE CONTRACTOR SHALL, PRIOR TO PLACING TEMPORARY MARKINGS, REMOVE ALL CONFLICTING EXISTING MARKINGS VISIBLE TO THE TRAVELING PUBLIC DURING DAYLIGHT OR NIGHTTIME HOURS IN ACCORDANCE WITH 621.134. THE COST FOR REMOVAL OF CONFLICTING MARKINGS SHALL BE INCLUDED IN 614 MAINTAINING TRAFFIC UNLESS SPECIFICALLY ITEMIZED.

THE CONTRACTOR SHALL ALSO REMOVE THE PRISMATIC RETRO-REFLECTOR WITHIN ANY RAISED PAVEMENT MARKER (RPM) WHICH IS IN CONFLICT WITH THE TEMPORARY PAVEMENT MARKINGS. WHEN THE TEMPORARY PAVEMENT MARKINGS ARE REMOVED AND THE RPM IS NO LONGER IN CONFLICT, THE CONTRACTOR SHALL THOROUGHLY CLEAN THE RECESSED REFLECTOR ATTACHMENT AREA OF THE CASTING AND INSTALL A NEW PRISMATIC RETRO-REFLECTOR OF THE SAME KIND AND COLOR. THE COST FOR THIS WORK SHALL BE INCIDENTAL TO THE VARIOUS PAY ITEMS.

INTERIM MARKINGS

WITHIN 21 CALENDAR DAYS AFTER OPENING ANY LENGTH OF PAVEMENT TO TRAFFIC, THE 621 OR 847 PAVEMENT MARKINGS CALLED FOR IN THE PLANS SHALL BE APPLIED. EQUIVALENT 614 CLASS I, PAINT MARKINGS MAY BE USED IN LIEU OF FINAL MARKINGS. IN THIS EVENT, THE CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT AND MATERIAL NECESSARY TO PLACE AND MAINTAIN 614 CLASS I PAINT MARKINGS AS PART OF THE LUMP SUM BID FOR 614 MAINTAINING TRAFFIC

FOR EACH CALENDAR DAY BEYOND 21 DAYS THAT THIS WORK SHALL REMAIN UNCOMPLETED, THE SUM OF $200 PER CALENDAR DAY WILL BE DEDUCTED FROM ANY MONEY DUE THE CONTRACTOR, NOT AS A PENALTY BUT AS LIQUIDATED DAMAGES.

METHOD OF MEASUREMENT

TEMPORARY PAVEMENT MARKINGS WILL BE MEASURED COMPLETE IN PLACE, BY CLASS AND MATERIAL, IN THE UNITS DESIGNATED. LINE QUANTITIES WILL BE THE LENGTH OF THE COMPLETED STRIPE, INCLUDING GAPS, INTERSECTIONS, AND OTHER SECTIONS OF PAVEMENT NOT NORMALLY MARKED.

TEMPORARY PAVEMENT MARKINGS WILL INCLUDE THE LAYOUT, APPLICATION AND REMOVAL OF THE MARKINGS, WHEN REQUIRED.

BASIS OF PAYMENT

PAYMENT FOR ACCEPTED QUANTITIES COMPLETE IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR PLACEMENT, MAINTENANCE AND NECESSARY REMOVAL OF THE MARKINGS.

ITEM	UNIT	DESCRIPTION
614	MILES	TEMPORARY LANE LINES, CLASS _____, ____*
614	MILES	TEMPORARY CENTER LINES, CLASS _____, ____*
614	LIN. FT.	TEMPORARY CHANNELIZING LINES, CLASS I, ____*
614	MILES	TEMPORARY EDGE LINES, CLASS I, ____*
614	LIN. FT.	TEMPORARY GORE MARKINGS, CLASS II, ____*
614	LIN. FT.	TEMPORARY STOP LINES, CLASS I, ____*
614	LIN. FT.	TEMPORARY CROSSWALK LINES, CLASS I, ____*
614	EACH	TEMPORARY LANE ARROWS, CLASS I, ____*
614	EACH	TEMPORARY RAILROAD SYMBOL MARKINGS, CLASS I, ____*
614	EACH	TEMPORARY WORD "ONLY" ON PAVEMENT, 72-INCH, CLASS I, ____*
614	LIN. FT.	TEMPORARY TRANSVERSE LINES, CLASS I, ____*
614	LIN. FT.	TEMPORARY DOTTED LINES, CLASS I, ____*

*TYPE MATERIAL (621 PAINT, 947.03 TYPE B OR 947.03 TYPE C OR LEFT BLANK TO PERMIT ANY OF THE THREE)

For Quantities See Sheet 21C

621 EDGE LINES ON NEW ASPHALT PAVEMENTS

EDGE LINES SHALL BE IN ACCORDANCE WITH 621 EXCEPT THAT (1) ON EVERY ROADWAY AND RAMP, EDGE LINES SHALL BE IN PLACE PRIOR TO EXPOSING IT TO TRAFFIC, (2) WHERE THE EDGE LINES ARE NOT LIABLE TO BE TRACKED, EITHER CONVENTIONAL OR FAST DRY PAINT MAY BE USED FOR 621.02; AND (3) WHEN APPLIED TO NEW ASPHALT PAVEMENT THE SPECIFIED APPLICATION RATE SHALL BE 24 GALLONS PER MILE.

614 WORK ZONE MARKING SIGNS

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND SUBSEQUENTLY REMOVE WORK ZONE MARKING SIGNS (OW-167 AND OW-168) WITHIN THE WORK LIMITS IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS.

THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED BUT GOOD CONDITION PROVIDED THE SIGNS MEET CURRENT DEPARTMENT SPECIFICATIONS. SIGN FACES SHALL BE REFLECTORIZED WITH TYPE G SHEETING COMPLYING WITH THE REQUIREMENTS OF 730.19. WORK ZONE MARKING SIGNS SHALL BE PROVIDED WITH SUITABLE YIELDING SUPPORTS OF SUFFICIENT STRENGTH AND STABILITY.

WORK ZONE MARKING SIGNS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGN AND NECESSARY SUPPORTS. ALL OTHER WORK ZONE SIGNS SHALL BE INCLUDED IN 614 MAINTAINING TRAFFIC UNLESS SEPARATELY ITEMIZED.

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE, IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTIALS AND EQUIPMENT FOR PLACEMENT, MAINTENANCE AND REMOVAL OF THE SIGNS.

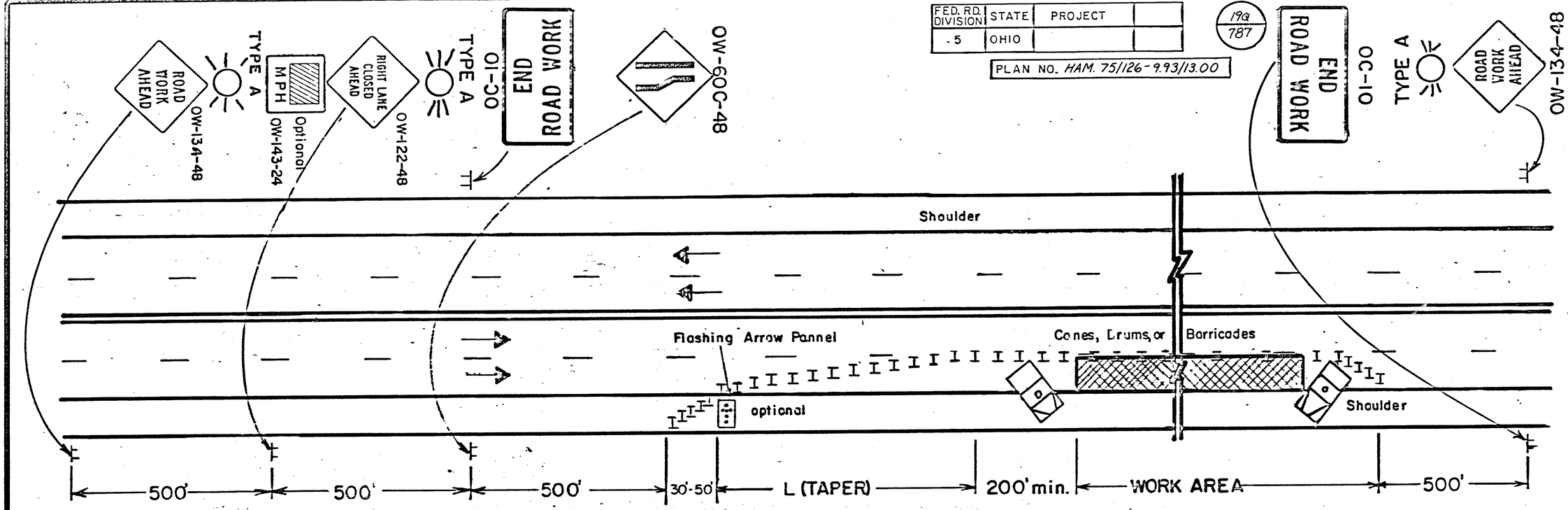
ITEM	UNIT	DESCRIPTION
614	EACH	WORK ZONE MARKING SIGNS

A QUANTITY OF ____0____ EACH WORK ZONE MARKING SIGNS (____0____ EACH "NO EDGE LINES" OW-167 AND ____0____ EACH "UNMARKED NO PASSING ZONES" OW-168) ARE CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

PLAN NO. HAM. 75/126-9.93/13.00

19Q
787



GENERAL NOTES:

1. The taper length (L) shall be in accordance with Section 7F-17 of the OMUTCD. The location of the transition taper and location of the advance warning signs should be adjusted to provide for adequate sight distance for the existing vertical and horizontal roadway alignment. In order to determine the minimum number of channelizing devices for the transition taper see Table 7-5 OMUTCD. For a 55 MPH prevailing speed and a 12 ft. lane, not less than thirteen (13) cones, drums or barricades shall be used to form the lane transition taper in advance of the work area. Not less than five (5) cones, drums or barricades shall be used to form the taper on the shoulder. Cones, drums or barricades shall be spaced approximately 50' to 60' center to center for the first 1000 feet of the work area and at a maximum of 100 to 120 feet for the balance of the work area. Cones, drums or barricades on the return taper shall be spaced at 10' center to center. Cones may be substituted for barricades or drums for short term lane closures. Cones shall be reflectorized, delineated or internally illuminated for short term night lane closures.

2. Type C steady burning barricade warning lights shall be erected on drums or barricades for night lane closures. The maximum spacing shall be identical to the channelizing device spacing requirements described in Note 1.

3. Type A flashing barricade warning lights shown on the "Road Work Ahead" and the "Right Lane Closed Ahead" signs are required whenever a night lane closure is necessary.

4. Some work area locations may require more than just static or conventional signs to enhance communication with the driver. At these locations Portable Changeable Message Signs (PCMS) units are recommended. These devices should be located approximately 2000 ft. in advance of a lane closure or other point of required action. See Section 7G-3.1, OMUTCD for further guidance on use of PCMS units.

5. The work vehicles shown at the beginning and end of the work area shall be in place and unoccupied whenever workers are in the work area. These work vehicles shall be removed from the pavement whenever workers are not in the work area. Other protective devices may be used in lieu of the work vehicles shown when approved by the Engineer. The vehicles shall be equipped with a 360° rotating or flashing amber beacon clearly visible a minimum of a ½ mile.

6. When used, the flashing arrow panel shall meet requirements contained in Section 7G-8, OMUTCD.

OHIO DEPARTMENT OF TRANSPORTATION

CLOSING RIGHT LANE OF A MULTILANE UNDIVIDED HIGHWAY

DATE 12/82

7I-15

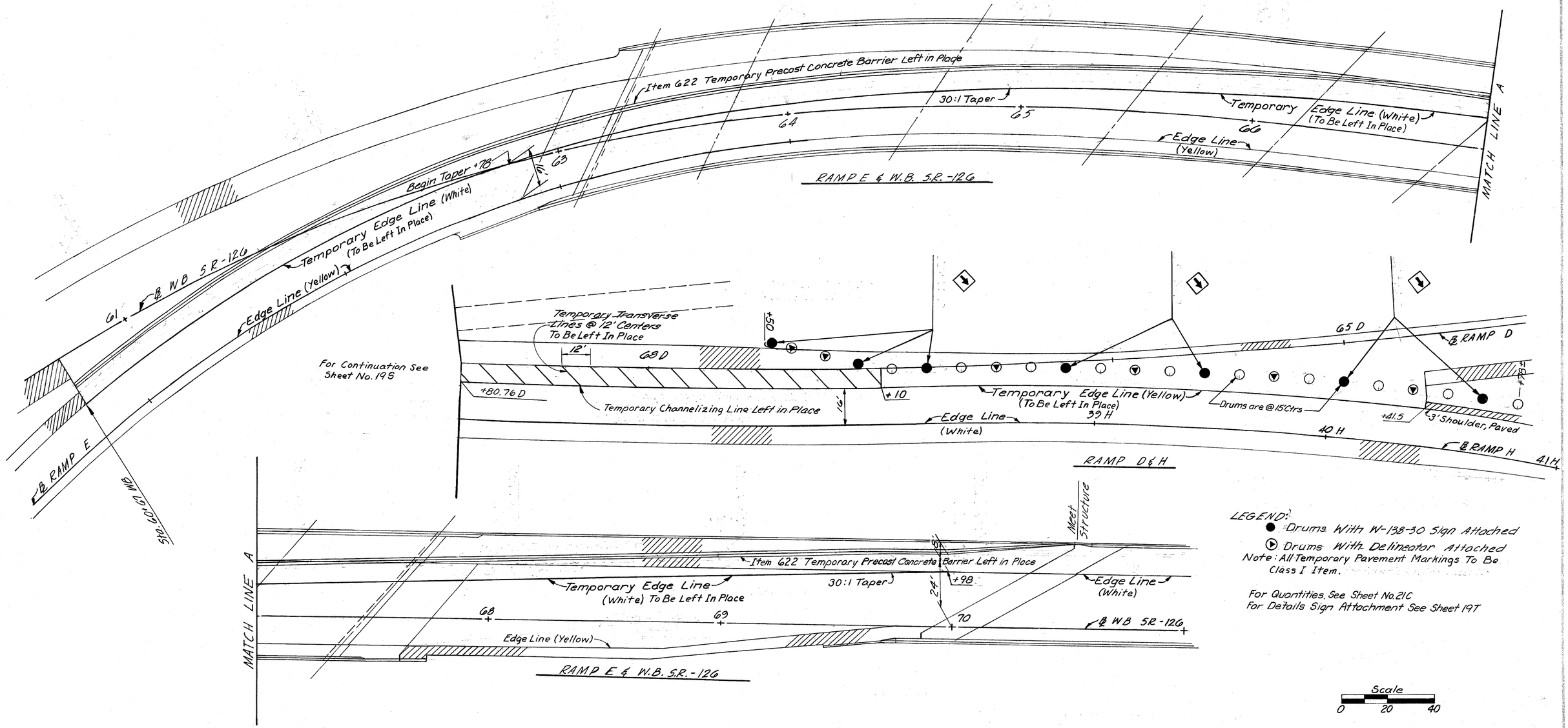
Rev. EEF 9/84

151 Yellow
19R-25F

FED. RD. SYMBOLS	STATE	PROJECT	
2	OHIO		

19A
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



LEGEND:
- ● Drums With W-138-30 Sign Attached
- ⊙ Drums With Delineator Attached

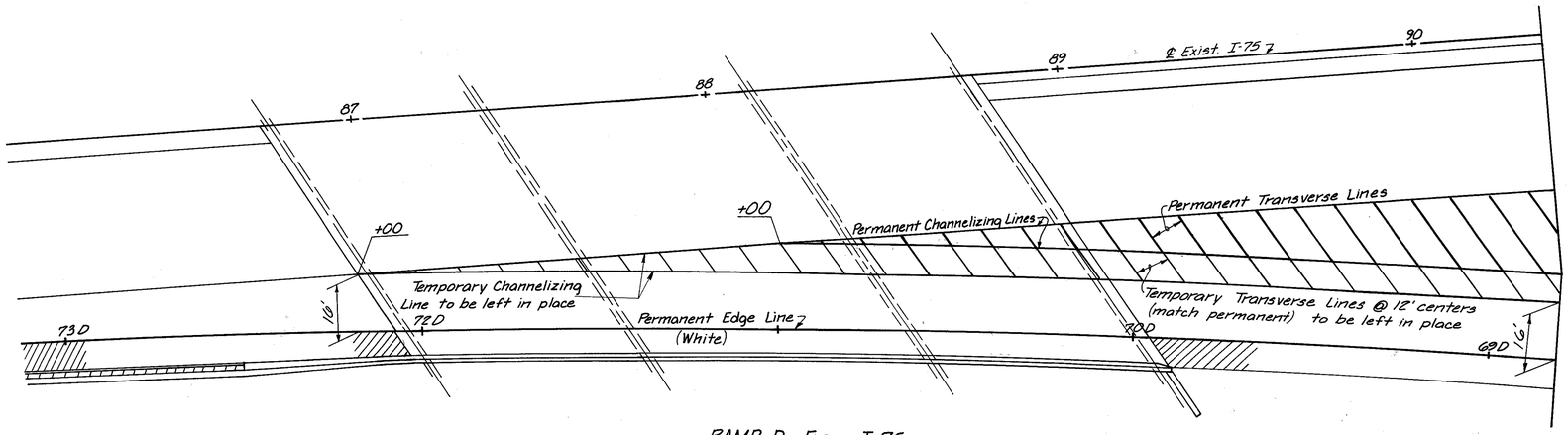
Note: All Temporary Pavement Markings To Be Class I Item.

For Quantities, See Sheet No. 21C
For Details Sign Attachment See Sheet 19T

Scale
0 20 40

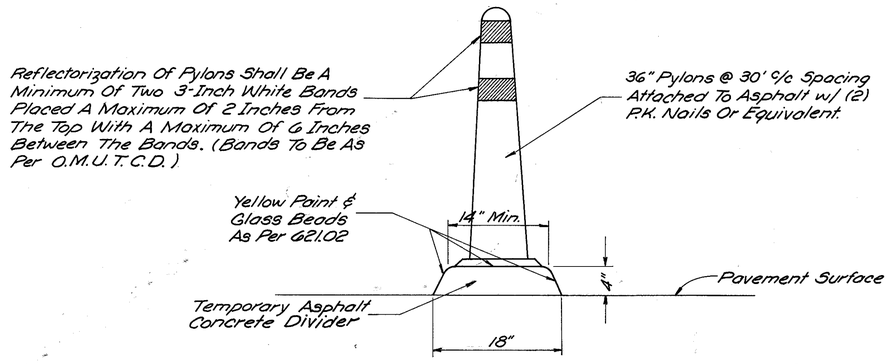
RAMP E EXIT From W.B. S.R.-126
RAMP H & D Exit From N.B. I-75

TEMPORARY TRAFFIC CONTROL



For Continuation See Sheet No. 19A

RAMP D From I-75



TEMPORARY ASPHALT DIVIDER DETAIL

NOTE:
For Quantities See Sheet No. 21C

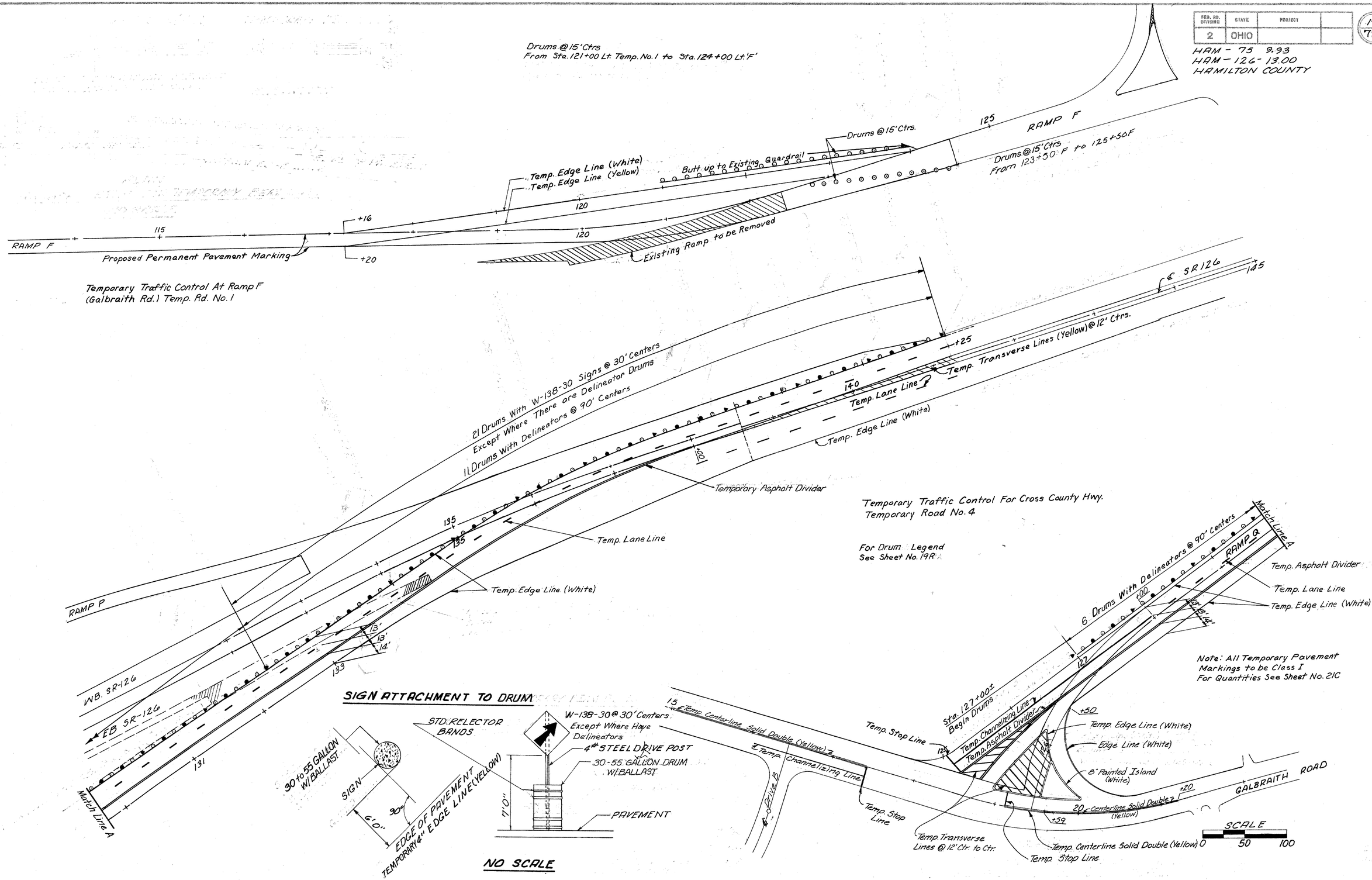
SCALE
0 20 30 40

RAMP D EXIT From NB. I-75
TEMPORARY TRAFFIC CONTROL

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

197
787

HAM - 75 9.93
HAM - 126 - 13.00
HAMILTON COUNTY

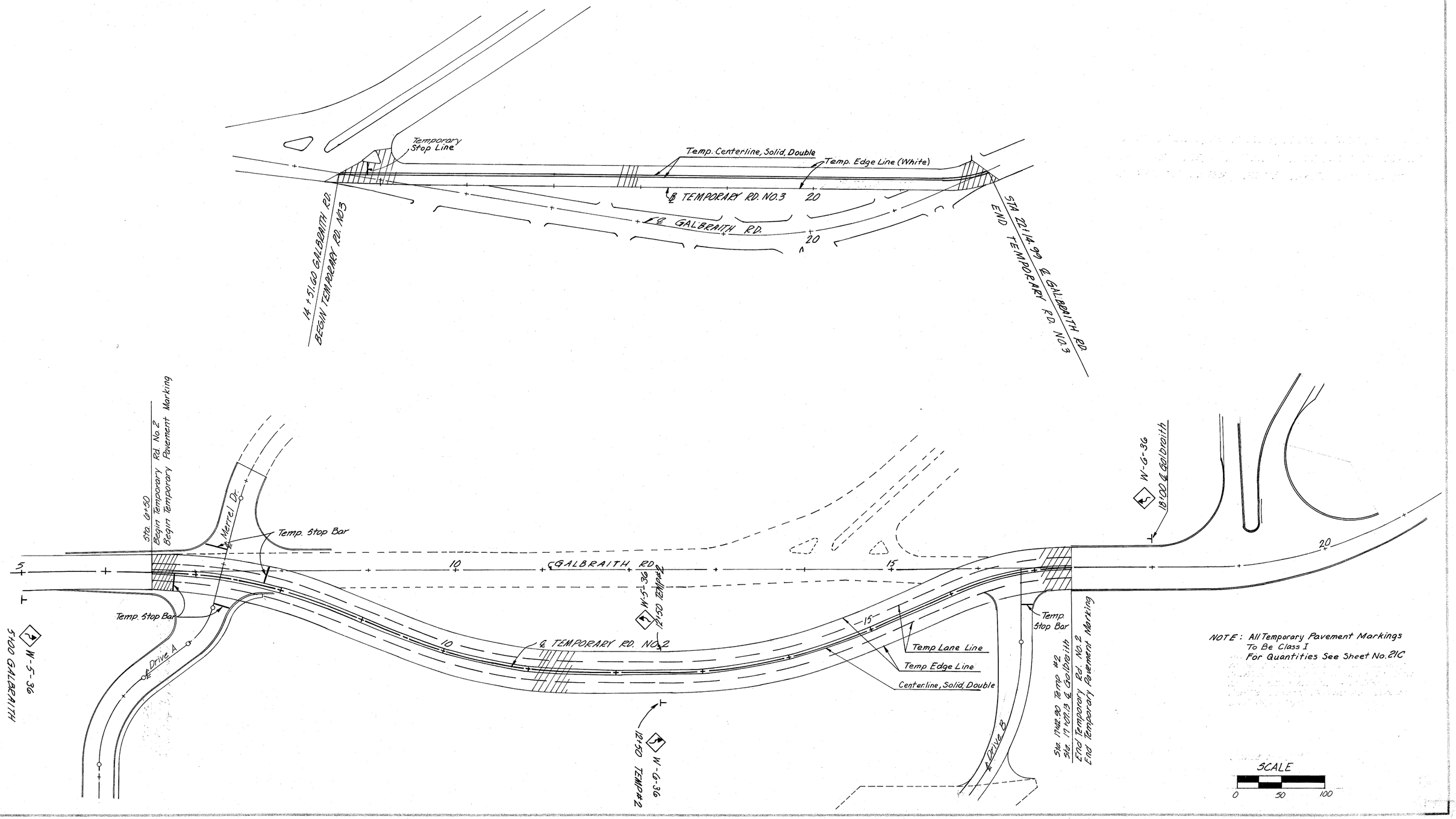


TEMPORARY TRAFFIC CONTROL

DIST. NO. DIVISION	STATE	PROJECT	
2	OHIO		

194
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



TEMPORARY TRAFFIC CONTROL

EQUA.#1 END AREA:DRAINAGE CONNECTION
10'SHOULDER LOW SIDE

((2"+6")/(2X12)x1.5')+((6"/12)x1.5')
=1.25 S.F.

EQUA.#2 END AREA:DRAINAGE CONNECTION

10'SHOULDER NORMAL ((2"+6")/(2X12)
X1.5')+[((6"+7.25")/(2X12))X1.5]
=1.33 S.F.

EQUA.#3 END AREA:DRAINAGE CONNECTION

4'SHOULDER LOW SIDE ((2"+4")/(12X2))
X1.5+(4"/12)X1.5' =.87 S.F.

EQUA.#4 END AREA:DRAINAGE CONNECTION

4'SHOULDER NORMAL ((2"+5.5")/(12X2))
x1.5'+(4"/12)x1.5' =.97 S.F.

EQUA.#5 END AREA:DRAINAGE CONNECTION

3'SHOULDER HIGH SIDE ((4"+2")/(2+12))
x1.5'+(4"/12)x1.5' =.87 S.F.

EQUA.#6 END AREA:DRAINAGE CONNECTION

6'SHOULDER LOW SIDE ((2"+6.75")/(2X12))

x1.5'+(6.75"/12)x1.5' =1.39 S.F.

EQUA.#7 END AREA:DRAINAGE CONNECTION

6'SHOULDER NORMAL ((2"+6")/(2X12))
X1.5'+(6"/12)x1.5' =1.25 S.F.

EQUA.#8 END AREA:DRAINAGE CONNECTION

3'SHOULDER LOW SIDE ((2"+4")/(2X12))
x1.5'+(4"/12)x1.5' =.87 S.F.

EQUA.#9 END AREA:DRAINAGE CONNECTION

4'SHOULDER HIGH SIDE ((2"+5")/(2+12))
x1.5'+(4.5"/12)x1.5' =.97 S.F.

EQUA.#10 END AREA:DRAINAGE CONNECTION

3'SHOULDER HIGH SIDE ((2"+5")/(2+12))
x1.5'+((5"+4")/(2X12))X1.5' =1 S.F.

EQUA.#11 END AREA:DRAINAGE CONNECTION

6'SHOULDER HIGH SIDE ((2"+6")/(2X12))
x1.5'+(6"/12)x1.5' =1.25 S.F.

EQUA.#12 END AREA:DRAINAGE CONNECTION

3'TO 6'SHOULDER TRANSITION
(1 S.F.+1.25 S.F.)/2 =1.125 S.F.

EQUA.#13 END AREA:DRAINAGE CONNECTION

8'SHOULDER LOW SIDE ((7.25"+6")/(2+12))

x1.5'+((6"+2")/(2x12))x1.5' =1.33 S.F.

WESTBOUND SR126 STA.507+19.30
APPROACH SLAB

S-P CALCULATE SURFACE AREA

(136'+16'+(1/2)X(16'X16')X(1/9)
=266 S.Y.

ITEM 404 1 1/4" ASPHALT CONCRETE

266 S.Y. X 1 1/4" X (1/(3X12))
=9.24 C.Y.

ITEM 402 1 3/4" ASPHALT CONCRETE

266 S.Y. X 1 3/4" X (1/(3X12))
=12.9 C.Y.

ITEM 407 TACK COAT

266 S.Y. X .10 GAL/S.Y =26.6 GAL

ITEM 407 COVER AGG.

266 S.Y. X 7 #/S.Y. X 1/200
=0.9 TON

ITEM 305 8" CONC. BASE, AS PER PLAN

266 S.Y. =266 S.Y.

ITEM 310 6" SUBBASE, TYPE II AS PER PLAN

266 S.Y. X 1 3/4" /(3X12)
=94 C.Y.

VINE ST. STA. 47+80

8-P ITEM 411 7" STABILIZED CRUSHED AGG.

82'X12'X(7"/12)X(1/27) =21.26 C.Y.

ITEM 452 6" PLAIN CONCRETE PVMNT AS PER PLAN
((16'X12')/2)X10'X(1/9)=11.66 S.Y.

10-P ITEM 611 15" REINFORCED CONCRETE APPROACH SLAB

984 SF x 1/9 =109.33 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

984 SF x 6"/12 x 1/27 = 18.22 C.Y.

WESTBOUND SR126 STA.507+44.30
TO STA.26+00

13-P ITEM 451 10" REINFORCED CONCRETE PAVEMENT
MODIFIED AS PER PLAN

STA.507+38.00 TO STA.508+46.85

((107.15'+102.55')/2)x24'x1/9
=279.60 S.Y.

STA.508+46.85 TO STA.509+75.00

128.15'x((24'+26.56')/2)x1/9
=359.96 S.Y.

STA.509+75.00 TO STA.510+41.31

66.31'x((26.56'+27.89')/2)x1/9
=200.59 S.Y.

STA.22+94.46 TO STA.26+00.00

305.54'x((27.89'+34')/2)x1/9
=1050.55 S.Y.

TOTAL: =1890.70 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

STA.507+38.00 TO STA.508+46.85

107.15' x 26' x(6"/12)x(1/27)
=51.6 C.Y.

STA.508+46.85 TO STA.509+75.00

128.15'x((26'+28.56')/2)X(6"/12)X
(1/27) =64.74 C.Y.

STA.509+75.00 TO STA.510+41.31

66.31'x((28.56'+29.89')/2)x(6"/12)

X(1/27) =35.89 C.Y.

STA.22+94.46 TO STA.26+00.00

305.54'x((29.89'+36')/2)x(6"/12)
X(1/27) =186.41 C.Y.

TOTAL: =338.64 C.Y.

12-P ITEM 452 10" TO 7" CONCRETE PAVEMENT
MOD. AS PER PLAN

STA.507+40.00TO STA.509+75.00

235.0' x 10' x (1/9) = 261.11 S.Y.

STA.509+75.00 TO STA.23+28.15
(TRANSITION)

100' x 10' x (1/9) =111.11 S.Y.

STA.23+28.15 TO STA.26+00

271.85' x 10' x (1/9) = 302.1 S.Y.

TOTAL: =669.50 S.Y.

12-P ITEM 310 TYPE II SUBBASE AS PER PLAN

STA.507+40.00 TO STA.509+75.00

235'x7.00'x((10.5"+4")/(2X12))
x(1/27) =36.81 C.Y.

STA.509+75.00 TO STA.23+28.15
(TRANSITION)

100'x7.00'x((7.25"+4")/(2+12))
(1/27) =12.15 C.Y.

STA.23+28.15 TO STA.26+00.00

271.85'x 7.00'x((7.25"+4")/(2+12))
x(1/27) =33.04 C.Y.

TOTAL: =82.00 C.Y.

ITEM SPL DRAINAGE CONNECTION
STA. 507+47.00 TO STA. 509+75.00

227.7 x 1.25 SF x(1/27)
=10.54 C.Y.

STA.509+75.00 TO STA.23+28.15
(TRANSITION)

100'x((1.25+1.33)/2) SF
x(1/27) = 4.78 C.Y.

STA.23+28.15 TO STA.26+00.00

271.85'x 1.33 SF x(1/27)
=13.39 C.Y.

TOTAL: =28.71 C.Y.

14-P ITEM 452 10" TO 8" CONCRETE PAVEMENT
MOD. AS PER PLAN

STA.507+44.30 TO STA.509+75.00

230.7'x 4'x(1/9) =102.53 S.Y.

STA.509+75.00 TO STA.23+28.15

100'x 4'x(1/9) = 44.44 S.Y.

STA.23+28.15 TO STA.26+00.00

271.85'x 4'x(1/9) =120.82 S.Y.

TOTAL: = 267.79 S.Y.

PAVEMENT CALCULATIONS

ITEM 310 TYPE II SUBBASE AS PER PLAN

STA.507+44.30 TO STA.509+75.00

230.7'x 3'x((4"+5")/(2x12))
x(1/27) = 10.15 C.Y.

STA.509+75.0 TO STA.23+28.15
(TRANSITION)

100'x3'x((4"+5")/(2x12))x(1/27)
= 4.40 C.Y.

23+28.15 TO STA.26+00.00

271.85'x 3'x((4"+5")/(2x12))x
(1/27) = 11.96 C.Y.

TOTAL: = 26.51 C.Y.

EASTBOUND SR126 STA.503+00.57

EASTBOUND SR126 STA.507+56.82
(APPROACH SLAB)

11-P ITEM 611 15" REINFORCED CONCRETE APPROACH SLAB

956 SF x(1/9) =106.22 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

956 SF x(6"/12)x(1/27) =17.70 C.Y.

EASTBOUND SR126 STA.507+81.82 TO STA.26+00.00

16-P ITEM 451 10" REINFORCED CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.507+81.82 TO STA.510+42.19

260.37'x 24'x(1/9) =694.32 S.Y.

STA.510+42.19Bk TO STA.23+66.75Ah

100'x((24'+36')/2x(1/9)=333.33 S.Y.

STA.23+66.75 TO STA. 26+00.00

233.25'x 36'x(1/9) =933.00 S.Y.

TOTAL: =1960.65 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

STA.507+81.82 TO STA.510+42.19

260.37'x 26'x(6"/12)x(1/27)
=125.36 C.Y.

STA.510+42.19Bk TO STA.23+66.75Ah

100'x((26'+38')/2)x(6"/12)x(1/27)
=59.26 C.Y.

STA.23+66.75 TO STA.26+00.00

233.25'x 38'x(6"/12)x(1/27)
=164.14 C.Y.

TOTAL: =348.76 C.Y.

15-P ITEM 452 10" TO 8" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.507+81.82 TO STA.510+42.19

260.37'x 4'x(1/9) =115.72 S.Y.

STA.510+42.19Bk TO STA.23+66.75Ah
(TRANSITION)

100'x 4'x(1/9) =44.44 S.Y.

STA.23+66.75 TO STA. 26+00

233.25' X 4' X (1/9) = 103.67 S.Y.

TOTAL =263.83 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

STA.507+81.82 TO STA.510+42.19

260.37'x 4'x(4"/12)x(1/27)
=12.84 C.Y.

STA.510+42.19Bk TO STA.23+66.75Ah
(TRANSITION)

100'x 4'x(4"/12)x(1/27) =4.92 C.Y.

STA.23+66.75 TO STA.26+00.00

233.25'x4'x(4"/12)x(1/27)
=11.52 C.Y.

TOTAL: =29.28 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.507+81.82 TO STA.510+42.19

260.37'x .87 SF x(1/27) =8.39 C.Y.

STA.510+42.19Bk TO STA.23+66.75Ah
(TRANSITION)

100'x((.87+.97)/2) SFx(1/27)
=3.41 C.Y.

STA.23+66.75 TO STA.26+00.00

233.25'x .97 SF x(1/27) =8.38 C.Y.

TOTAL: = 20.18 C.Y.

17-P ITEM 452 10" TO 7" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.507+87.50 TO STA. 510+42.19

254.69'x10'x(1/9) =282.99 S.Y.

STA.510+42.19Bk TO STA.23+66.75Ah
(TRANSITION)

100'x((10'+8')/2)x(1/9)=100.0 S.Y.

STA.23+66.75 TO STA.26+00.00

233.25'x 8'x(1/9) =207.33 S.Y.

TOTAL: =590.32 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

STA.507+87.50 TO STA.510+42.19

254.69'x 9'x((5.75"+7.28")/(12x2))
x(1/27) =46.09 C.Y.

STA.510+42.19Bk TO STA.23+66.75Ah
(TRANSITION)

100'x((9'+7')/2)x((7.28"+4")
/(12 x 2))x(1/27) =13.93 C.Y.

STA.23+66.75 TO STA.26+00.00

233.25'x 7'x((7.28"+4")/(12 x 2))
x(1/27) =28.42 C.Y.

TOTAL: = 88.44 C.Y.

WESTBOUND SR126 STA.26+00.00
TO STA.37+75

19-P ITEM 451 10" REINFORCED CONCRETE PAVEMENT
MOD.,AS PER PLAN

STA.26+00.00 TO STA.31+00.00

500'x((34'+44')/2)x(1/9)
=2166.67 S.Y.

ITEM 451 10" REINFORCED CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.31+00.00 TO STA.37+75

675.0'x 24'x(1/9)= 1800.00 S.Y.

STA.37+75 TO STA.38+39

64' X 24' X(1/9) = 170.67 S.Y.

TOTAL: = 4137.34 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

STA.26+00.00 TO STA.31+00.00

500'x((36'+46')/2)x(6"/12)x(1/27)
=379.63 C.Y.

STA.31+00.00 TO STA.37+75

675.00'x 26'x(6"/12)x(1/27)
=325.00 C.Y.

STA.37+75 TO STA.38+39
64'X 26'X(6"/12)X(1/27)
=30.81 C.Y.

TOTAL: = 735.44 C.Y.

18-P ITEM 452 10" TO 7" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.26+00.00 TO STA.37+75

1175.0'x 10'x(1/9) =1305.55 S.Y.

STA.37+75 TO STA.38+54
79' X 10' X(1/9) = 87.78 S.Y.

TOTAL: = 1393.33 S.Y.

PAVEMENT CALCULATIONS

78-D

STA 45+58 RAMP(D) LT

[4'X12'X(18"/12)]X(1/27) =3.0 CY

79-D

STA 57+25 RAMP (D)

[4'X10'X(18"/12)]X(1/27) =3.0 CY

83-D

STA 44+00 WB 126 LT

[4'X6'X(18"/12)X(1/27) =2.0 CY

SLOPE EROSION PROTECTION

66-D

STA 36+76 TO STA 38+00 RAMP(C) RT

(39.29'-17.61')X(400/9)X1.118
=1078 SY

72-D

STA 38+70 TO STA 39+70 WB 126 LT

(22.00'-00.71)X(400/9)X1.118
=1009 SY

62-D

STA 39+05 TO STA 40+00 RAMP (C) LT

(46.38'-30.55)X(400/9)X1.118
=787 SY

73-D

STA 42+00 TO 43+00 WB 126 RT

(47.80'-26.35')X(400/9)X1.118
=1066 SY

57-D

STA 44+05 TO STA 44+80 EB 126 RT

(21.57'-19.19')X(2500'/9)X1.118
=739 SY

67-D

STA 39+13 TO STA 40+12 RAMP(C) RT

(76.28'-62.75')X(400/9)X1.118
=672 SY

77-D

STA 44+90 TO STA 45+15 RAMP(D) LT

(24.50'-23.45')X(2500/9)X1.118
=327 SY

SHEET NO. 37A

88-D

STA 79+90 TO STA 82+25 I-75 LT

(1.5'X540'X(1/9)) =90 SY

89-D

STA 81+25 TO STA 82+00 I-75 RT

(1.5'X75'X(1/9)) =13 SY

SHEET NO. 38

118-D

STA 38+85 TO STA 40+00 RAMP(H) RT

(6'X125'X(1/9)) =83 SY

122-D

STA 69+68 TO 69+50 RAMP(D) LT

[(30'X9')+((6'+9')/2)X20']X(1/9)
X1.118 =64 SY

112-D

STA 46+45 TO RAMP(C)

[(28'X9')+((6'+9')/2)X20']X(1/9)
X1.118 =51 SY

122-D

STA 68+75 TO STA 69+68

[8'X175'X(1/9)] =175 SY

112-D

STA 40+61 TO STA 47+75 RAMP(C) RT

[(7.5'X370')+(6'X225')]X(1/9)
=515 SY

115-D

STA 94+00 TO STA 96+00

[(1.5'X220')+(6'X75')]X(1/9)=87 SY

94-D

STA 82+00 TO STA 86+53 I-75 RT

[1.5'X460'X(1/9)] =77 SY

126-D

STA 90+49 TO STA 90+90 RT I-75

[((4'+12')/2)X50'X(1/9)] =44 SY

SLOPE EROSION PROTECTION (NONE)

SHEET NO. 40

1-D

STA 52+50 TO STA 54+80 WB SR 126 LT

[230'X6'X(1/9)] =153 SY

12-D

STA 45+70 TO STA 45+95 WB SR 126 LT

[20'X6'X(1/9)] =13 SY

3-D

STA 47+00 TO STA 52+50 WB SR 126 LT

300'X6'X(1/9) =200 SY
250'X7.5'X(1/9) =208 SY
=408 SY

2-D

STA 54+00 WB SR 126 LT

[18'X3'X(1/9)] =6 SY

10-D

STA 54+00 WB SR 126 LT

[24'X3'X(1/9)] =8 SY

11-D

STA 52+50 TO STA 54+85 "E" LT

[235'X9'X(1/9)] =235 SY

16-D

STA 103+75 "F" TO STA 51+40 "E" LT

[616'X1.5'X(1/9)] =103 SY

18-D

STA 49+52 TO STA 50+32 "D" LT

(66'X9'X(1/9)) =66 SY

21-D

STA 55+00 "I" LT

[39'X3'X(1/9)] =13 SY

22-D

STA 52+65 TO STA 53+85 "D" RT.

[342'X6'X(1/9)] =228 SY

26-D

STA 50+50 TO STA 55+50 "I" LT

[492'X6'X(1/9)] =328 SY

28-D

STA 53+00 TO STA 55+18 "I" RT.

[240'X9'X(1/9)] =240 SY

29-D

STA 54+51 EB LT

[9'X3'X(1/9)] =3 SY

32-D

STA 56+00 "I" RT

[27'X3'X(1/9)] =9 SY

34-D

STA 118+95 TO SB I-75 RT.

[100'X6'X(1/9)] =67 SY

35-D

STA 55+50 TO STA 60+25 "I" LT

[500'X9'X(1/9)] =500 SY

119-D

STA 111+7 TO STA 111+67 "F" LT

[50'X((14'+22')/2)X(1/9)] =100 SY

126-D

STA 51+02 "I" & STA 51+33 "H" RT & LT

[(50'X((7'+14')/2))+(50'X((10'+18')
/2))]X(1/9) =136 SY

125-D

STA 54+70 LT SR 126

[(((9'+6")/2)X20')+(33'X9')]X(1/9)
=95 SY

124-D

STA 53+20 RT SR 126 EB

(37'X9')X(1/9) =70 SY

39-D

STA 59+30 LT SR 126 EB

[((((6'+9')/2)X20')+(30'X9')]X(1/9)
=89 SY

31-D

STA 58+30 RT SR 126 E.B.

17'X6'X(1/9) =11 SY

ITEM 310 TYPE II SUBBASE AS PER PLAN

STA.26+00.00 TO STA.30+29.48

429.48'x7.00'X((7.25"+4")/(12X2))

x(1/27) -52.19 C.Y.

STA.30+29.48 TO STA.31+29.48

100'x 7.00'x((10.5"+4")/(12 x 2))
x(1/27) -15.66 C.Y.

STA.31+29.48 TO STA.37+75

645.52'x 7.00'x((10.5"+4")/(12x2))

x(1/27) -101.11 C.Y.

STA. 37+75 TO STA 38+54
79' X 7.25' X ((10.5"+4")/(12X2))
X (1/27) -12.8 C.Y.

TOTAL: = 181.76 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.26+00.00 TO STA.30+29.48

429.48'x 1.33 SF x(1/27)
-21.15 C.Y.

STA.30+29.48 TO STA.31+29.48
(TRANSITION)

100'x((1.33+1.25)/2)SF x(1/27)
-4.77 C.Y.

STA.31+29.48 TO STA.37+75

645.52'x 1.25 SF x(1/27)
-29.89 C.Y.

STA. 37+75 TO STA 38+54

79' X 1.25 S.F. X 1/27 = 3.66 C.Y.

TOTAL: = 59.47 C.Y.

21-P ITEM 452 10" TO 8" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.26+00.00 TO STA.31+00.00

500'x 4'x(1/9) -222.22 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

STA.26+00 TO STA. 31+00

500'X3'X((5.5"+4")/(2X12))X
(1/27) -21.99 C.Y.

24-P STA.31+00.00 TO STA.34+63.00

ITEM 452 10" TO 9" CONCRETE PAVEMENT
MOD., AS PER PLAN

AREA PLANIMETERED ON 20 SCALE

3630 S.F. X 1/9 = 403.33 S.Y.

ITEM 452 10" TO 8' CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.34+63.00 TO STA.37+75

312'x 4'x(1/9) -138.67 S.Y.

STA 37+75 TO STA. 38 + 30

55' X 4' X 1/9 = 24.44 S.Y.

TOTAL: = 163.11 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

STA.31+00.00 TO STA.34+63.00

AREA PLANIMETERED ON 20 SCALE

2904 S.F. X ((5"+4")/(12 X 2))
X 1/27 = 40.33 C.Y.

STA.34+63.00 TO STA.37+75

312.0'x 3'x((5"+4")/(12x2)x(1/27))

-13.0 C.Y.

STA. 37+75 TO STA. 38+28

53' X 3' X ((5"+4")/(12 X 2))X
(1/27) -2.29 C.Y.

TOTAL: = 55.60 C.Y

22-P ITEM 452 9" TO 8" CONCRETE PAVEMENT

MOD., AS PER PLAN
STA.31+00 TO STA.31+25 (RAMP D)

25.0'x((4'+3')/2)X(1/9) -9.72 S.Y.

STA 31+25 TO STA 37+74 (RAMP D)
649' X 3' X(1/9) = 216.33 S.Y

TOTAL = 226.05 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

STA.31+00 TO STA.31+25 (RAMP D)

25'x ((3'+2')/2)X((5"+4")/(12x2))
x(1/27) -.086 C.Y.

STA 31+25 TO STA 37+74 (RAMP D)

649'X((3'+2')/2)X((5"+4")/(12X2))
X (1/27) = 22.53 C.Y.

TOTAL = 23.39 C.Y.

23-P ITEM 451 9" REINFORCED CONCRETE PAVEMENT
AS PER PLAN

STA.31+00 TO STA.37+69 (RAMP D)

669.00'x 16'x(1/9) = 1189.33 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

STA.31+00 TO STA.37+69 (RAMP D)

669.00'x 18'x(6"/12)x(1/27)
-223 C.Y.

20-P ITEM 9"TO 8" 452 CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.34+50 TO STA.37+74 (RAMP D)

324.0'x 6'x(1/9) -216.00 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

STA.34+50 TO STA.34+90 (RAMP D)

40'x 5'x((6"+4")/(12 x 2))x(1/27)
-3.09 C.Y.

STA.34+90 TO STA.37+74 (RAMP D)

284.0'x 3'x((6"+4")/(12 x 2))
x(1/27) -13.15 C.Y.

TOTAL: -16.24 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA. 34+90 TO STA. 37+74 (RAMP D)

284.00'x 1.25 SF x(1/27)=13.15 C.Y.

EASTBOUND SR126 STA.26+00.00
TO STA.37+51.74

26-P ITEM 451 10" REINFORCED CONCRETE PAVEMENT
MODIFIED AS PER PLAN

STA.26+00 TO STA.30+66.75

466.75'x(36')x(1/9) -1867 S.Y.

AREA PLANIMETERED

4,294 S.F. X 1/9 -477.11 S.Y.

STA.30+66.75 TO STA.37+25

658.25'x 24'x(1/9) -1755.33 S.Y.

STA.37+25 TO STA.37+46

21' X 24' X(1/9) -56 S.Y.

TOTAL: -4155.44 S.Y.

ITEM 310 6" TYPE II SUBBASE, AS PER PLAN

STA.26+00 TO STA.30+66.75

466.75'X 38'X (6"/12) X(1/27)

-328.45 C.Y.

AREA PLANIMETERED

4761 S.F. X(6"/12) X (1/27)
-88.17 C.Y.

STA.30+66.75 TO STA.37+25

658.25'x 26'x(6"/12)x(1/27)
-316.94 C.Y.

STA. 37+25 TO STA. 37+46

21' X 26' X (6"/12) X (1/27)
-10.11 C.Y.

TOTAL: -743.67 C.Y.

25-P ITEM 452 10" TO 8" CONCRETE PAVEMENT
MODIFIED AS PER PLAN

STA.26+00 TO STA.37+53

1153.0'x 4'x(1/9) -512.44 S.Y.

ITEM 310 TYPE II SUBBASE, AS PER PLAN

STA.26+00 TO STA.37+53

1153.0'x 3'x((5.5"+4")/(12 x 2))
x(1/27) -50.71 C.Y.

27-P ITEM 452 10" TO 7" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.26+00 TO 30+66.75

466.75'x 8'x(1/9) -414.89 S.Y.

ITEM 310 TYPE II SUBBASE, AS PER PLAN

STA.26+00 TO STA.30+66.75

466.75'x 7'x((7.25"+4")/(12 x 2))
x(1/27) -56.87 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.26+00 TO 30+66.75

466.75'x 1.33 SF x(1/27)=22.99 C.Y.

ROCK CHANNEL PROTECTION

36-D

STA 120+50 RT I-75 SB

(10'X6'X18')X(1/27) =4 CY

34-D

STA 118+70 RT I-75 SB

[4'X6'X(18"/12)]X(1/27) =2.0 CY

30-D

STA 54+49 "I" RT

(30'X9'X30')X(1/27) =25 CY

SLOPE EROSION PROTECTION

31-D

STA 57+70 TO STA 58+10 EB SR 126 RT

AREA PLANIMETERED: [630 S.F.X(1/9)] =133 SY

124-D

STA 53+80 TO STA 54+40 EB SR 126 RT

AREA PLANIMETERED: [828 S.F. X(1/9)] =174 SY

SHEET NO. 41

53-D

STA 54+80 TO STA 57+30 WB LT

[267'X6'X(1/9)] =178 SY

52-D

STA 54+85 TO STA 58+32 "E" LT

[352'X9'X(1/9)] =352 SY

114-D

STA 62+05 TO STA 65+55 "I" LT

[50'X((10'+17')/2)X(1/9)] =75 SY

115-D

STA 60+28 TO STA 60+78 "E" LT

[50'X((15'+7')/2)X(1/9) =61 SY

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50 A-D

STA 60+10 TO STA 63+80 WB LT

[433'X6'X(1/9)] =289 SY

55-D

STA 115+03 TO STA 116+53 "F" LT

[150'X7.5'X(1/9)] =125 SY

47-D

STA 117+16 TO STA 118+63 "F" LT.

[155'X7.5 'X(1/9)] =129 SY

135-D

STA 118+77 TO STA 120+27 "F" LT

[150'X10.5'X(1/9)] =236 SY

137-D

STA 62+85 TO STA 63+25 "E"

SLOPE EROSION PROTECTION

AREA PLANIMETERED: 1251 SF X(1/9)X1.118 =339 SY

42-D

STA 63+08 WB LT

[(73'X9')+((6'+9')/2)X20']X1.118 =101 SY

42-D

STA 63+11 TO STA 63+75 WB LT

SLOPE EROSION PROTECTION

AREA PLANIMETERED: 4518 S.F.X(1/9) X1.118 =561 SY

62-D

STA 66+81 TO STA 68+93 RT E.B.

[362'X6'X(1/9)] =242 SY

SHEET NO. 47

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660 SODDING

116-D

STA 67+75 RT WB

[(84'X9')+(((6'+9')/2)X20')] X(1/9)X1.118 =113 SY

58-D

STA 69+50 RT WB

[(72'X9')+(((6'+9')/2)X20')] X(1/9) =199 SY

117-D

STA 70+27 LT WB

[(80'X9')+(((6'+9')/2)X20') X(1/9)X1.118 =109 SY

73-D

STA 127+90 TO STA 128+00 LT I-75 NB

[1.5'X(20'+12+18'+14')X(1/9)] +1 S.Y. =12 SY

70-D

STA 123+50 TO STA 123+70 LT. I-75 NB

[1.5'X(24'+18'+7')X(1/9)]+1 S.Y. =10 SY

71-D

STA 123+65 TO STA 124+60 LT I-75 NB

[85'X6'X(1/9)] =57 SY

74-D

STA 68+30 TO STA 72+05 LT WB

[375'X6'X(1/9)] =250 SY

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670 SLOPE EROSION PROTECTION

116-D

STA 66+64 TO STA 67+80 RT WB

AREA PLANIMETERED: 7335 S.F.X(1/9)X1.118 =911 S.Y.

117-D

STA 70+22 TO STA 71+57 LT WB

AREA PLANIMETERED: 11736 S.F.X(1/9) X1.118 =1458 SY

118-D

STA 67+38 TO STA 67+98 LT WB

AREA PLANIMETERED: 2997 S.F.X(1/9)X1.118 =372 SY

58-D

STA 69+55 TO STA 70+27 RT WB

AREA PLANIMETERED: 3546 S.F.X(1/9)X1.118 =440 SY

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601 RIPRAP

70-D

STA 124+50 TO STA 124+65 LT I-75 NB

[(6'X18')+(6'X15')]X(1/9) =22 SY

73-D

STA 127+28 TO STA 127+65 LT I-75 NB

[(6'X25')+(6'X12')+(6'X12')] X(1/9) =33 SY

SHEET NO. 48

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660 SODDING

91-D

STA 76+35 TO STA 81+20 126 EB RT

500'X13.5'X(1/9) =750 SY

101-D

STA 81+50 TO STA 84+90 126 EB RT

50'X12'X(1/9) =67 SY

97-D

STA 81+75 LT 126 WB

[27'X3'X(1/9)] =9 SY

102-D

STA 80+48 LT 126 WB

[(30'X9')+(((6'+9')/2)X20')] X(1/9)X1.118 =53 SY

104-D

STA 78+46 RT 126 WB

[(17'X9')+(((6'+9')/2)X20')] X(1/9)X1.118 =38 SY

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85 A-D

STA 75+70 TO STA 80+75 LT EB

[505'X6'X(1/9)] =337 SY

95-D

STA 79+40 RT EB

[(28'-13.5')X1.5'X(1/9)]X2 =5 SY

98-D

STA 79+75 RT EB

[(30'-13.5')X1.5'X(1/9)]X2 =5 SY

89-D

STA 87+00 TO 84+50 RT

250'X4.5'X(1/9) =125 SY

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670 SLOPE EROSION PROTECTION

102-D

STA 78+78 TO STA 80+48 LT WB

AREA PLANIMETERED: 1701 S.F.X(1/9)X1.118 =211 SY

28-P ITEM 452 10" TO 7" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.30+66.75 TO STA.37+40

673.25'x 10'x(1/9) -748.06 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

STA.30+66.75 TO STA.37+40

673.25'x 9'x((7.25"+4")/(12 x 2)) x(1/27) -105.20 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.31+00 TO STA.37+40

640.00'x 1.33 SF x(1/27)=31.53 C.Y.

30-P ITEM 451 9" REINFORCED CONCRETE PAVEMENT
AS PER PLAN

STA.30+66.75 TO STA.36+92
(RAMP C)

625.25'x 16'x(1/9) -1111.56 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

STA.30+66.75 TO STA. 36+92
(RAMP C)

625.25'x 18'x(6"/12)x(1/27)
-208.42 C.Y.

29-P ITEM 452 9" TO 8" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.30+66.75 TO STA.36+94 (RAMP C)

627.25'x 3'x(1/9)= 209.08 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

STA.30+66.75 TO STA.33+82.69
(RAMP C)

315.94'x((6"+7")/(12 x 2))x 3' x(1/27) = 19.01 C.Y.

STA.33+82.69 TO STA.36+94

311.31'x((4"+6")/(12 x 2))x 3' x(1/27) -14.41 C.Y.

TOTAL: -33.42 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.31+00 TO STA.32+10

110'x .87 SF x(1/27) -3.54 C.Y.

31-P ITEM 452 9"TO 7" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA. 30+66.29 TO STA.31+66.29
(RAMP C)

100'x((8'+6')/2)x(1/9) -77.78 S.Y.

STA.31+66.29 TO STA.36+90.5
(RAMP C)

524.21'x 6'x (1/9) -349.47 S.Y.

TOTAL: -427.25 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

STA.30+66.29 TO STA.31+66.29
(RAMP C)

100'x((7'+5')/2)x((6"+4")/(12X2)) x (1/27) -9.26 C.Y.

STA.31+66.29 TO STA.32+00 (RAMP C)

33.71'x 5'x((6"+4")/(12X1)) x (1/27) -2.60 C.Y.

STA.32+00 TO STA. 36+90.5
(RAMP C)

490.50'x 3'x((6"+4")/(12 x 2)) x (1/27) -22.71 C.Y.

TOTAL: -34.57 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.32+00 TO STA.36+90.5
(RAMP C)

490.50'x 1.39 SF x (1/27)
= 25.26 C.Y.

CUL-DE-SAC AT WOODBINE AVE.

NORTH SIDE S.R. 126

40-P AREA PLANIMETERED 1676 S.F.

ITEM 404 1 1/4" ASPHALT CONCRETE

1676 S.F. X (1 1/4"/12) X (1/27)
-6.47 C.Y.

ITEM 402 1 3/4" ASPHALT CONCRETE

1676 S.F. X (1 3/4'/12) X (1/27)
-9.05 C.Y.

ITEM 408 BITUMINOUS PRIME COAT

1676 S.F. X (1/9) X 0.4 GAL/S.Y.
-74.49 GAL.

ITEM 304 6" AGGREGATE BASE
AS PER PLAN

1676 S.F. X (6"/12) X (1/27)
-31.04 C.Y.

ITEM 310 SUBBASE *TYPE II*
AS PER PLAN

1676 S.F. X (6"/12) X (1/27)
-31.04 C.Y.

CUL-DE-SAC AI WOODBINE AVE.

SOUTH SIDE OF S.R. 126

42-P AREA PLANIMETERED 1744 S.F.

ITEM 404 1 1/4" ASPHALT CONCRETE

1744 S.F. X (1 1/4"/12) X (1/27)
-6.72 C.Y.

ITEM 402 1 3/4 ASPHALT CONCRETE

1744 S.F. X (1 3/4"/12) X(1/27)
-9.42 C.Y.

ITEM 408 BITUMINOUS PRIME COAT

1749 S.F. X (1/9) X 0.4 GAL/S.Y.
-77.51 GAL

ITEM 304 6" AGGREGATE BASE
AS PER PLAN

1744 S.F. X (6"/12) X (1/27)
-32.30 S.Y.

ITEM 310 6" SUBBASE *TYPE II*
AS PER PLAN

1744 S.F. X (6"/12) X (1/27)
-32.30 S.Y.

DRIVEWAY (RESIDENTIAL)

ITEM 452 6"PLAIN CONCRETE PAVEMENT
AS PER PLAN

100 S.F. X (1/9) -11.11 S.Y

EASTBOUND SR126 STA.37+51.24
(APPROACH SLAB)

38-P ITEM 611 15" REINFORCED CONCRETE APPROACH SLAB

1350 SF x(1/9) -150.00 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

1350 SF x(6"/12)x(1/27)
-25 C.Y.

EASTBOUND SR126 STA.44+84.91
(APPROACH SLAB)

54-P ITEM 611 15" REINFORCED CONCRETE APPROACH SLAB

1350 SF X(1/9) =150.00 SY

ITEM 310 6" TYPE II SUBBASE, AS PER PLAN

1350 SF x(6"/12)x(1/27)
-25 C.Y.

EASTBOUND SR126 STA.45+01.50
TO STA.50+75

56-P ITEM 451 10" REINFORCED CONCRETE PAVEMENT
MOD., AS PER PLAN

573.50'x24'x(1/9) -1529.35 S.Y.

DECELERATION LANE RAMP I

8812 SF x(1/9) -979.11 S.Y.

TOTAL 2508.45 S.Y.

ITEM 310 6" TYPE II SUBBASE, AS PER PLAN

573.50'x26'x(6"/12)x(1/27)
=275.28 C.Y.

DECELERATION LANE RAMP I

8812 SF X (6"/12)X(1/27)
-163.19 C.Y.

TOTAL 438.47 C.Y.

57-P ITEM 452 10" TO 7" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA 44+90 TO 50+75

585'x10'x(1/9) -650 S.Y.

ITEM 310 TYPE II SUBBASE, AS PER PLAN

585'x7'x((6"+4")/(12x2)) x(1/27) -63.19 C.Y.

STA 45+12 TO STA 50+75

55-P ITEM 452 10" TO 8" CONCRETE PAVEMENT
MOD., AS PER PLAN

563.09'x4'x(1/9) -251.15 S.Y.

ITEM 310 TYPE II SUBBASE, AS PER PLAN

563'X4'X(5"/12)X(1/27) -34.75 C.Y.

ITEM SPL. DRAINAGE CONNECTION

563' X .87 S.F. X(1/27) -18.14 C.Y.

104-D

STA 77+62 TO STA 78+50

AREA PLANIMETERED: 621 S.F.X(1/9)X1.118 =77 SY

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601 ROCK CHANNEL PROTECTION

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85 A-D

STA 76+34 TO STA 77+04 LT EB

[20'X6'X1.5']X(1/27) =7 CY

101-D

STA 79+76 TO STA 81+45 RT EB

55'X2'X4.5'X(1/27)X1.118 =21 CY

103-D

STA 85+85 TO 86+30 WB LT

13'X6'X2.5'X(1/27) =7 CY

106-D

STA 87+64 TO STA 88+50 ML LT

7'X10'X30'X(1/27) =7 CY

SHEET NO. 51

27-D

STA 104+88 TO STA 105+15 RT SR 126

[((6'+9')/2)X16'X(1/9)]X1.118 =15 SY

36-D

STA 104+99 TO STA 105+95 LT SR 126

[((6'+9')/2)X20')+(43'X9')] X(1/9)X1.118 =67 SY

24-D

STA 98+07 TO STA 100+65 LT SR 126

[7.5'X258'X(1/9)] =215 SY

13-D

STA 95+65 TO STA 98+00 RT SR 126

[6'X235'X(1/9)] =157 SY

21-D

STA 98+00 TO STA 99+50 RT SR 126

[1.5'X150'X(1/9)X2] =50 SY

28-D

STA 99+50 TO STA 105+50 "N" LT

[1.5'X600'X(1/9)] =100 SY

10-D

STA 96+27 TO STA 98+00 RT SR 126

[6'X173'X(1/9)] =115 SY

12-D

STA 93+65 TO STA 94+15 "I" RT

[((10'+16')/2)X50'X(1/9)] =72 SY

14-D

STA 96+50 TO STA 97+96 LT SR 126

[6'X155'X(1/9)] =104 SY

40-D

STA 104+10 TO STA 105+90

[(155'+45')X6'X(1/9)] =133 SY

16-D

STA 96+07 TO STA 97+42

[150'X7.5'X(1/9)] =125 SY

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670 SLOPE EROSION PROTECTION

36-D

STA 104+99 TO STA 105+95 LT SR 126

AREA PLANIMETERED: 3501 S.F.X(1/9) X1.118 =435 SY

27-D

STA 104+88 TO STA 105+15 RT SR 126

AREA PLANIMETERED: 288 S.F.X(1/9) X1.118 =36 SY

SHEET NO. 54

44-D

STA 107+65 LT SR 126

[(42'X9')+(((6'+9')/2)X20')]X1.118 X(1/9) =66 SY

47-D

STA 107+42 RT SR 126

[(65'X9')+(((6'+9')/2)X20')]X1.118 X(1/9) =92 SY

56-D

STA 110+93 LT SR 126

[(34'X9')+(((6'+9')/2)X20')]X1.118 X(1/9) =57 SY

52-D

STA 110+64 RT SR126

[(82'X9')+(((6'+9')/2)X20')] X1.118X(1/9) =111 SY

66-D

STA 114+36 RT SR 126

[(46'X9')+(((6'+9')/2)X20')]X1.118 X(1/9) =70 SY

65-D

STA 114+77 LT SR 126

[(48'X9')+(((6'+9')/2)X20')]X1.118 X(1/9) =73 SY

50-D

STA 109+00 TO STA 110+50 RT SR 126

[150'X6'X(1/9)] =100 SY

58-D

STA 110+50 TO STA 111+57 RT SR 126

[150'X6'X(1/9)] =100 SY

55-D

STA 107+50 TO STA 111+40 LT SR 126

[390'X1.5'X(1/9)] =65 SY

57-D

STA 120+85 TO STA 121+00 RT SR 126

[15'X9'X(1/9)] =15 SY

59-D

STA 113+80 TO STA 115+30 LT SR 126

[165'X9'X(1/9)] =165 SY

67-D

STA 113+60 TO STA 117+75 RT SR 126

[465'X6'X(1/9)] =310 SY

75-D

STA 118+80 TO STA 120+35 RT SR 126

[150'X7.5'X(1/9)] =125 SY

31-D

STA 106+65 TO STA 107+18 LT SR 126

[(50'+25')X6'X(1/9)] =50 SY

SLOPE EROSION

47-D

STA 106+47 TO STA 107+45 RT SR 126

AREA PLANIMETERED: 5220X(1/9)X1.118 =649 SY

44-D

STA 106+78 TO STA 107+68 LT SR 126

AREA PLANIMETERED: 4005 S.F.X(1/9) X1.118 =498 SY

52-D

STA 110+61 TO STA 111+61 RT SR 126

AREA PLANIMETERED: 7047 S.F. X(1/9) X1.118 =875 SY

56-D

STA 111+00 TO STA 111+60 LT SR 126

AREA PLANIMETERED: 1107 S.F.X(1/9) X1.118 =138 SY

65-D

STA 114+02 STA 114+81 LT SR 126

AREA PLANIMETERED: 3384 S.F.X(1/9) X1.118 =421 SY

66-D

STA 113+50 TO STA 114+39 RT SR 126

AREA PLANIMETERED: 5499 S.F.X(1/9) X1.118 =683 SY

SHEET NO.56

188-D

STA 128+81 RT RAMP P

[(17'X9')+(((6'+9')/2)X20')] X(1/9) =34 SY

189-D

STA 128+35 TO STA 130+30 RT RAMP(P)

[185'X6'X(1/9)] =123 SY

119-D

STA 127+40 TO STA 129+65 RT SR 126

225'X6'X(1/9) =150 SY

107-D

STA 124+30 TO 127+50 LT SR 126

(265'X9')+(60'X7.5')X(1/9) =315 SY

105-D

STA 124+30 TO STA 126+75 RT SR 126

250'X10.5'X(1/9) =292 SY

99-D

STA 120+92 TO STA 122+35 LT SR 126

143'X9'X(1/9) =143 SY

N7130

STA.37+72.87 RAMP D (APPROACH SLAB)

37-P ITEM 611 15" CONCRETE APPROACH SLAB

716 SF x(1/9) =79.56 S.Y.

ITEM 310 6" TYPE II SUBBASE, AS PER PLAN

716 SF x(6"/12)x(1/27) =13.26 C.Y.

WESTBOUND SR126 STA.38+30.01
(APPROACH SLAB)

32-P ITEM 611 15" REINFORCED CONCRETE APPROACH SLAB
1054 SF x(1/9) =117.11 S.Y.

ITEM 310 6" TYPE II SUBBASE, AS PER PLAN

1054 SF x(6"/12)x(1/27) =19.52 C.Y.

WESTBOUND SR126 STA.42+76.77
(APPROACH SLAB)

33-P ITEM 611 15" REINFORCED CONCRETE APPROACH SLAB

1106 SF x(1/9) =122.89 S.Y.

ITEM 310 6" TYPE II SUBBASE, AS PER PLAN

1106 SF x(6"/12)x(1/27) =20.48 C.Y.

WESTBOUND SR126 STA.43+26
TO STA.44+85

35-P ITEM 451 10" REINFORCED CONCRETE PAVEMENT
MOD., AS PER PLAN

159'x24'x(1/9) =424.61 S.Y.

ITEM 310 6" TYPE II SUBBASE, AS PER PLAN

159.00'x26'x(6"/12)x(1/27)
=75.56 C.Y.

STA 43+64 TO STA 44+85

34-P ITEM 452 10" TO 7" CONCRETE PAVEMENT
MOD., AS PER PLAN

121' X 10'x(1/9) =134.44 S.Y.

ITEM 310 TYPE II SUBBASE, AS PER PLAN

121'x7'x((10.5"+4")/(12x2))
x1/27 =18.95 C.Y.

ITEM SPL DRAINAGE CONNECTION

198.23'x1.25 SF x(1/27) =5.60 C.Y.

STA 42+98 TO STA 44+85

36-P ITEM 452 10" TO 8" CONCRETE PAVEMENT
MOD., AS PER PLAN

187'x4'x(1/9) =83.11 S.Y.

ITEM 310 TYPE II SUBBASE, AS PER PLAN

187'x3'x((5.5"+4")/(12x2))
x(1/27) =8.27 C.Y.

STA.45+11.98 RAMP D (APPROACH SLAB)

45-P ITEM 611 15" CONCRETE APPROACH SLAB

668 SF x(1/9) =74.22 S.Y.

ITEM 310 6" TYPE II SUBBASE, AS PER PLAN

668 SF x(6"/12)x(1/27) =12.37 C.Y.

STA.45+39 TO STA.49+50 (RAMP D)

46-P ITEM 452 9" TO 7" CONCRETE PAVEMENT
MOD., AS PER PLAN

411'x6'x(1/9) =274 S.Y.

ITEM 310 6" TYPE II SUBBASE, AS PER PLAN

411'X6'X(6"/12)X(1/27) =45.67 C.Y.

ITEM SPL DRAINAGE CONNECTION

411'x 1.39 SF x(1/27) =21.16 C.Y.

STA 45+30 TO STA 48+80.32 (RAMP D)

47-P ITEM 451 9" REINFORCED CONCRETE PAVEMENT
AS PER PLAN

350.32'x16'x(1/9) =622.79 S.Y.

STA 48+80.32 TO STA 49+50

69.68' X (16'+16.70')/2 X (1/9)
=126.58 C.Y.

TOTAL =749.35 C.Y.

ITEM 310 6" TYPE II SUBBASE, AS PER PLAN

350.32'x18'x(6"/12)x(1/27)
=116.67C.Y.

69.68' X (18'+18.70')/2 X (6"/12)
X 1/27 =23.68 C.Y.

TOTAL =140.45 C.Y.

STA 45+22 TO STA 49+50

48-P ITEM 452 9" TO 8" CONCRETE PAVEMENT
MOD., AS PER PLAN

428'x3'x(1/9) =143 S.Y.

ITEM 310 TYPE II SUBBASE, AS PER PLAN

428'x((6"+4")/(12x2))X2'
x1/27 =6.60 C.Y.

STA.36+90.73 RAMP C (APPROACH SLAB)

39-P ITEM 611 15" CONCRETE APPROACH SLAB

676 SF x(1/9) =75.11 S.Y.

ITEM 310 6" TYPE II SUBBASE, AS PER PLAN

676 SF x(6"/12)x(1/27) =12.52 C.Y.

STA.39+70.44 RAMP C (APPROACH SLAB)

58-P ITEM 611 15" CONCRETE APPROACH SLAB

698 SF x(1/9) =77.56 S.Y.

ITEM 310 6" TYPE II SUBBASE, AS PER PLAN

698 SF x(6"/12)x(1/27) =12.93 C.Y.

STA.39+87.5 TO 40+50 RAMP C

59-P ITEM 452 9" TO 8" CONCRETE PAVEMENT
MOD., AS PER PLAN

62.50'x3'x(1/9) =20.83 S.Y.

ITEM 310 TYPE II SUBBASE, AS PER PLAN

62.50'x2'x((6"+4")/(2X12))
x(1/27) =1.93 C.Y.

60-P ITEM 415 9" CONCRETE PAVEMENT
AS PER PLAN

STA.39+91.5 TO STA. 40+50

58.50'x16'x(1/9) =104 S.Y.

ITEM 310 6" TYPE II SUBBASE, AS PER PLAN

58.50'x18'x(6"/12)x(1/27)
=19.50 C.Y.

STA 39+97 TO STA 40+50

61-P ITEM 452 9" TO 7" CONCRETE PAVEMENT

MOD., AS PER PLAN

53'x6'x(1/9) =35.33 S.Y.

ITEM 310 TYPE II SUBBASE, AS PER PLAN

53'x3'x((6"+6.75")/(12X2))
x1/27 =3.12 C.Y.

ITEM SPL DRAINAGE CONNECTION

53'x1.39 SF x(1/27) =2.81 C.Y.

STA.40+40.39 TO STA.50+75 RAMP H

70-P ITEM 452 8" TO 9" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.40+40.39 TO STA.44+62.18

421.79'X3'X(1/9) =140.60 S.Y.

STA.44+62.18 TO STA.50+75

612.82'x3'x(1/9) =204.27 S.Y.

TOTAL =344.87 S.Y.

ITEM 310 TYPE II SUBBASE, AS PER PLAN

STA.40+40.39 TO STA.44+62.18

421.79'x2'x((4"+6")/(12x2))
x(1/27) =13.02 C.Y.

STA.44+62.18 TO STA.50+75

612.82'x2'x((6"+7")/(2x12))
X1/27 =24.59 C.Y.

TOTAL =37.6 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.44+50 TO STA.50+75

625'x3'x((7"+2")/(12x2))
x(1/27) =26.04 C.Y.

STA 40+40.39 TO STA 50+75 "H"

71-P ITEM 451 9" REINFORCED CONCRETE PAVEMENT
AS PER PLAN

1034.61'x16'x(1/9) =1839.31 S.Y.

ITEM 310 6" TYPE II SUBBASE, AS PER PLAN

1034.61'x16'x(6"/12)x
(1/27) =306.55 C.Y.

90-D

STA 121+15 TO STA 122+64 RT SR 126

149'X1.5'X(1/9)X2 =50 SY

123-D

STA 129+50 TO STA 130+75 LT RAMP(P)

(145'X7.5'X(1/9)) =121 SY

126-D

STA 129+25 TO STA 129+75 RT RAMP(Q)

50'X9'X(1/9) =50 SY

88-D

STA 120+85 TO STA 121+15 RT. SR 126

30'X9'X(1/9) =30 SY

190-D

STA 126+75 TO STA 127+40 RT SR 126

66'X1.5'X(1/9) =11 SY

94-D

STA 123+83 TO STA 122+64 RT SR 126

124'X9'X(1/9) =124 SY

ROCK CHANNEL PROTECTION

116-D

STA 128+50 TO STA 129+50 LT RAMP(P)

7.5'X100'X(18"/12)X(1/9) =125 SY

177-D

STA 129+50 LT RAMP(P)

6'X4'X(18"/12)X(1/9) =4 SY

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670 SLOPE EROSION

188-D

STA 128+25 TO SATA 128+80 RT RAMP(P)

(39.97'-34.98')X(400/9)X1.118 =149 SY

187-D

STA 127+70 TO 128+50 LT RAMP(P)

(67.40-62.42)X(400/9)X1.118 =247 SY

185-D

STA 126+00 TO STA 125+27 LT RAMP(P)

(70.89'-64.78')X(400/9)X1.118 =309 SY

186-D

STA 126+50 TO STA 125+75 RT RAMP(P)

(41.08-40.14)X(2500/9)X1.118 =292 SY

SHEET NO. 57

142-D

STA 129+82 TO STA 133+12 RAMP(Q) RT

(115'X9'X215'X7.5')X(1/9) =294 SY

169-D

STA 136+47 E.B. TO STA 139+00 SR 126 RT

253'X12'X(1/9) =338 SY

151-D

STA 6+37 TO STA 6+80 KNOLLCREST RT.

43'X6'X(1/9) =29 SY

163-D

STA 133+82 TO STA 136+33

242'X7.5'X(1/9) =202 SY

149-D

STA 133+12 TO STA 133+70 SR 126

58'X1.5'X(1/9) =10 SY

SHEET NO. 59

138-D

STA 139+53 TO STA 139+95 C.L. SR 126

42'X9'X(1/9) =42 SY

176-D

STA 139+00 TO STA 143+58 RT SR 126

(100'X9')+(300'X9')X(58'X6')X(1/9) =472 SY

NOISE BARRIER

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660 SODDING

STA 87+00 TO STA 84+50 EB

(250'X4.5')X(1/9) =125 SY

101-D

STA 84+00 TO STA 81+50 EB

((3'X100')+(4.5'X100')+(9'X50')
X(1/9) =133 SY

58-D

STA 69+00 TO STA 70+00 EB

(3'X100')X(1/9) =33 SY

101-D

STA 82+00 TO STA 81+26 EB

(9'X83')X(1/9) =83 SY

91-D

STA 81+00 TO STA 76+00

((6'X100')+(300'X13.5')+
(7.5'X100')X(1/9) =600 SY

ROCK CHANNEL PROTECTION

101-D

STA 84+00 TO STA 84+50

(50'X3'X1.5')X(1/27) =8.3 CY

5 A-D

STA 58+14 TO STA 58+33 EB RT

30'X1.5'X6'X(1/27) = 10 CY

72-P ITEM 452 7" TO 9" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.40+40.39 TO STA.41+40.39

100'X(8' + 6')/2 X(1/9) -77.77 S.Y.

41+40.39 TO STA 44+62.18

321.79'x6'x(1/9) -214.53 S.Y.

STA.44+62.18 TO STA.50+75

612.82'x6'x(1/9) -408.55 S.Y.

TOTAL: -700.85 S.Y.

ITEM 310 TYPE II SUBBASE, AS PER PLAN

STA.40+40.39 TO STA.41+40.39

100'X[(2'X((6"+6.75")/(2X12)+(6'+4')X(1/2))X((6.75"+4")/(12X2))]X(1/27) -12.22 C.Y.

STA. 41+40.39 TO STA 45+50

409.61'x((((6.75"+4")/(12x2))X3)+(((6"+6.75")/(12 X 2))X3))X(1/27) =44.56 CY

STA.45+50 TO STA.50+75

525'x3X(((6"/12)X2)+((6"+4")/(2X12)))X(1/27) -53.47 C.Y.

TOTAL: -110.25 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.40+40.39 TO STA.45+50

509.61'x1.39 SF x(1/27) -26.25 C.Y.

68-P ITEM 451 9"REINFORCED CONCRETE PAVEMENT
AS PER PLAN

STA 55+45 TO STA 55+90.87"D"

45.87'X((16.46'+16')/2X(1/9) -82.72 S.Y.

STA.55+90.87 TO STA. 64+68 RAMP D

877.13'X16'X(1/9) -1559.34 C.Y.

TOTAL -1642.06 S.Y.

ITEM 310 6" TYPE II SUBBASE, AS PER PLAN

45.87'X((18.46'+18')/2)X(6"/12)X(1/27) -15.48 C.Y.

877.13'x18'x(6"/12)x(1/27) -292.38 C.Y.

TOTAL -307.86 C.Y.

67-P ITEM 452 8" TO 9" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA 55+45 TO STA 64+68

923'x3'x(1/9) -307.67 S.Y.

ITEM 310 TYPE II SUBBASE, AS PER PLAN

STA.55+45 TO STA.55+90.87

45.87'x3'X((4"+6")/(12X2))x(1/27) -2.12 C.Y.

STA.55+90.87 TO STA.58+97.68

306.81'x3'x((4"+5")/(12X2))x(1/27) -12.78 C.Y.

STA.58+97.68 TO STA.62+00

302.32'x3'x((4"+6")/(12X2))x(1/27) -13.99 C.Y.

STA.62+00 TO STA.65+10

268'X3'x((4"+6")/(12X2))(x1/27) -12.41 C.Y.

TOTAL -41.30 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.55+45 TO STA.64+68

923'x.87 SF x(1/27) -29.74 C.Y.

69-P ITEM 452 7" TO 9" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.55+45 TO STA.64+68

923'x6'x(1/9) -615.33 S.Y.

ITEM 310 TYPE II SUBBASE, AS PER PLAN

STA.55+45 TO STA.55+90.87

STA. 58+97.68 TO STA.62+00

348.19'x(((6"+6.75")/(2X12))X3')+(((6.75"+4")/(2X12))X3')X(1/27) -37.88 C.Y.

STA.55+90.87 TO STA.64+68

574.81'x(((6"+4")/(12x2))x3')+((6"/12)X3)x(1/27) -58.54 C.Y.

TOTAL -90.42 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.55+45 TO STA.55+90.87

STA. 58+97.68 TO STA. 61+40

288.19'x1.39SF x(1/27) -14.83 C.Y.

STA. 55+90.87 TO STA. 58+97.68"D"

306.81'X1.25 S.F.X1/27- 14.20 C.Y.

TOTAL -29.03 C.Y.

291-P ITEM 612 CONCRETE MEDIAN

STA.54+68.42 TO STA.55+45

1084 SF (PLANIMETERED)X(1/9) -120.44 S.Y.

STA.55+45 TO STA.59+14.88

369.88'x10'x(1/9) -410.98 S.Y.

STA.59+14.88 TO STA.61+53.77

3364 SF (PLANIMETERED)x(1/9) -373.78 S.Y.

TOTAL. =905.20 SY

STA. 55+45 TO STA 59+14.88

ITEM 310 6" TYPE II SUBBASE, AS PER PLAN

369.88'X10'X((1'+1.67')/2)X(1/27) -182.39 C.Y.

1084 S.F. (PLANIMETERED)X(6"/12)X(1/27) -20.07 C.Y.

STA 59+14.88 TO STA 61+53.77

3364 S.F. (PLANIMETERED)X((1'+1.67')/2)X(1/27) -166.33 C.Y.

TOTAL -368.79 C.Y.

STA.99+88 TO STA. 103+75 RAMP F

63-P ITEM 451 9" REINFORCED CONCRETE PAVEMENT
AS PER PLAN

STA.99+88 TO STA.101+70

182'x16'x(1/9) -323.56 S.Y.

STA.101.70 TO 103+75

205'x((16'+21.125')/2)x(1/9) -422.81 S.Y.

TOTAL -746.37 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

STA.99+88 TO STA.101+70

182'x18'x(6"/12)x(1/27) -60.67 C.Y.

STA.101+70 TO STA.103+75

205'x((18'+23.125')/2)x(6"/12)x(1/27) -78.06 C.Y.

TOTAL -138.73 C.Y.

62-P ITEM 452 9" TO 7" CONCRETE PAVEMENT
AS PER PLAN
STA. 99+88 TO STA. 103+75

387'x8'x(1/9) -344 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

387'x (((6"+4")/(12X2))X5)+((6"/12)X3)X(1/27) -51.36 C.Y.

ITEM SPL DRAINAGE CONNECTION

387'x1.33 SF x(1/27) -19.06 C.Y.

64-P ITEM 451 12 1/2" REINF. CONCRETE PAVEMENT
AS PER PLAN

STA. 94+10 TO STA. 99+88 I-75

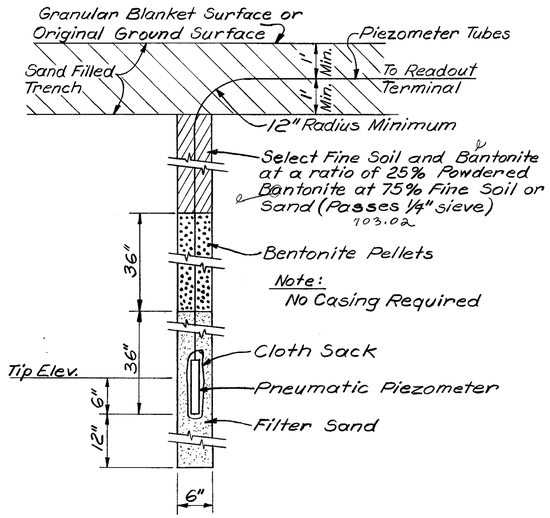
578'x((25'+10.55')/2)x(1/9) -1141.55 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

578'x((26'+11.55')/2)x(6"/12)X(1/27) -200.96 C.Y.

CALC. BY PCA DATE 2/96	HAM-75/126-9.93/13.00	OHIO
CHK'D. BY GJS DATE 3/96		FHWA REGION 5

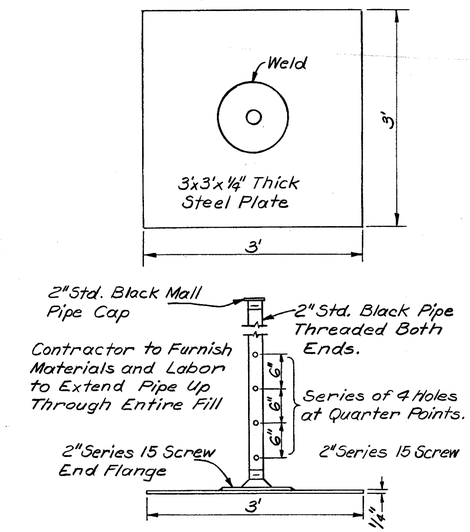
20EE 787



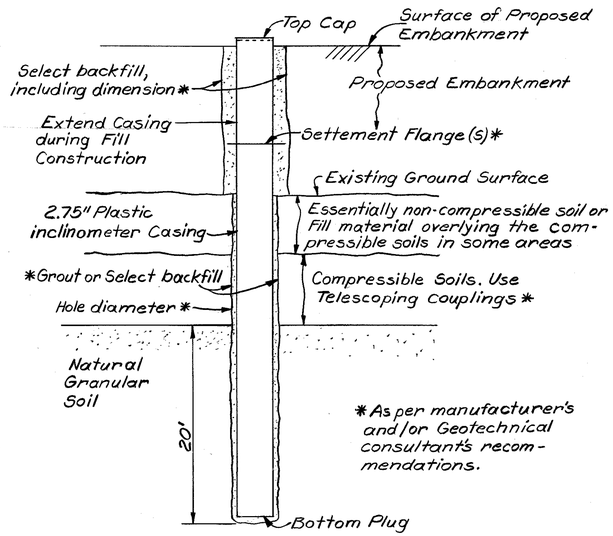
TYPICAL PIEZOMETER INSTALLATION

SINCO MODEL NO. 514178 or P-1020 TERRA TECHNOLOGY CORP. or MICROMATIC SOLINST CANADA, LTD. or APPROVED EQUAL.

SEE SHEETS 17A & 18B FOR ADDITIONAL EARTHWORK NOTES.



DETAILS OF SETTEMENT PLATFORM



TYPICAL INCLINOMETER CASING INSTALLATION

SINCO MODEL NO. 51111 or C-1 TERRA TECHNOLOGY CORP. or SOLINST CANADA, LTD. or APPROVED EQUAL.

MISCELLANEOUS DETAILS

66-P ITEM 452 9" TO 10" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA. 99+88 TO STA. 103+75 "F"

387'x((9'+18.675')/2)x(1/9)
=595.01 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

387'x((8'+17.675")/2)x(6"/12)
(1/27) =92.00 CY

44-P ITEM 452 7" TO 10" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA. 94+10 TO STA. 99+88 I-75

578'x8'x(1/9) =513.78 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA.96+00 TO STA.99+88

388'x(((6"+4")/(12x2))X4)+((6"/12)X3)X(1/27) =45.51 C.Y.

STA 94+10 TO STA 96+00

~~19~~0'X7'X((6"+~~4~~")/(12~~X2~~)X(1/27) =20.52 C.Y.

TOTAL =66.03 C.Y.

ITEM SPL DRAINAGE CONNECTION

388'X1.33 S.F.X(1/27) =19.11 C.Y.

I-75 STA.77+00 TO STA.82+00
(NORTHBOUND)

73-P ITEM 452 10" TO 7" CONC. PVMNT
MOD., AS PER PLAN

STA.77+00 TO 77+80

80'x((10'+8')/2)x(1/9) =80.00 S.Y.

STA.77+80 TO STA.80+00

220'x8'x(1/9) =195.56 S.Y.

STA.80+00 TO STA.82+00

200'x7.25'x(1/9) =161.11 S.Y.

TOTAL =436.67 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

STA.77+00 TO STA.77+80

80'x((10'+8')/2)x((6"+4")/(12x2))x(1/27) =11.11 C.Y.

STA.77+80 TO STA.80+00

220'x8'x(((6"+4")/(12x2))x(1/27) =27.16 C.Y.

STA.80+00 TO STA.82+00

200'x7.25'x(((6"+4")/(12x2))x(1/27) =22.38 C.Y.

TOTAL =60.65 C.Y.

74-P ITEM 451 12 1/2" REINFORCED CONCRETE PAVEMENT
AS PER PLAN

STA. 77+00 TO STA. 82+00

500'x(12.5'/2)x(1/9) =347.22 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

500'x(12.5'/2)x(6"/12)x(1/27)
=57.87 C.Y

75-P ITEM 451 12 1/2" REINFORCED CONCRETE PAVEMENT
AS PER PLAN

STA.78+00 TO STA.79+00

100'x(12'/2)x(1/9) =66.67 S.Y.

STA.79+00 TO STA.82+00

300'x12'x(1/9) =400.00 S.Y.

TOTAL =466.67 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

STA. 78+00 TO STA.79+00

100'x(12'/2)x(6"/12)x(1/27)
=11.11 C.Y.

STA.79+00 TO STA.82+00

300'x12'x(6"/12)x(1/27) =66.67 C.Y.

TOTAL =77.78 C.Y.

76-P ITEM 452 7"TO 10"CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.78+00 TO STA.79+00

100'x(((10'+8')/2)x(1/9)=100.00 S.Y.

STA.79+00 TO STA.82+00

300'x8'x(1/9) =266.67 S.Y.

TOTAL =366.67 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

STA.78+00 TO STA.79+00

100'X((10'+8')/2)x((6"+4")/(12x2))X(1/27) =13.89 C.Y.

STA.79+00 TO STA.82+00

300'x8'x((6"+4")/(12x2))x(1/27) =37.04 C.Y.

UNDER CONCRETE BARRIER
TYPE D MODIFIED AS PER PLAN

(6"/12)X2'X75'X(1/27)= 2.78 C.Y.

TOTAL =53.71 C.Y.

I-75 SOUTHBOUND

STA. 89+88 TO STA. 94+10

86-P ITEM 451 12 1/2" REINFORCED CONCRETE PAVEMENT
AS PER PLAN

422'x(10.55"/2)x(1/9) =247.34 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

422'X(10.55'/2)x(6"/12)x(1/27)
=41.22 C.Y.

85-P ITEM 452 7"TO 10" CONCRETE PVMNT
MOD., AS PER PLAN

STA.90+60 TO STA 94+10

350'x8'x(1/9) =311.11 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

350'x8'x(((6"+4")/(12X2))x(1/27) =43.21 C.Y.

STA.40+50 TO STA.45+91 RAMP C

83-P ITEM 452 8"TO9" CONCRETE PVMNT
MOD., AS PER PLAN

541'x3'x(1/9) =180.33 S.Y.

STA 44+36 TO STA 46+28

ITEM 452 9" TO 10" CONCRETE PVMNT
MOD., AS PER PLAN

PLANIMETERED AREA

2580 SF x(1/9) =286.67 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

STA.40+50 TO STA.45+91 "C"

541'x3'x(((6"+4")/(12x2))x(1/27) =25.05 C.Y.

PLANIMETERED AREA

2580 SF x(6"/12)X(1/27) =47.78 C.Y.

TOTAL =72.83 C.Y.

STA.40+50 "C" TO STA.46+32.5

82-P ITEM 451 9" REINFORCED CONCRETE PAVEMENT
AS PER PLAN

582.50'x16'x(1/9) =1035.56 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

582.50'x17'x(6"/12)x(1/27)
=183.38 C.Y.

I-75 NORTHBOUND

87-P ITEM 451 12 1/2" REINFORCED CONCRETE PAVEMENT
AS PER PLAN

STA. 82+00 TO STA. 85+46

346'x12'x(1/9) =461.33 S.Y.

STA. 72+32 "D" TO STA. 73+70.65

(PLANIMETERED)

1520 S.F.X(1/9) =168.89 S.Y.

TOTAL =630.22 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

346'x13'x(6"/12)x(1/27)
=83.30 C.Y.

1520 S.F.X(6"/12)X(1/27)=28.15 C.Y.

TOTAL =111.45 C.Y.

RAMP C

81-P ITEM 452 7"TO 9" CONCRETE PAVEMENT MOD., AS PER PLAN

STA. 40+50 TO STA. 45+74.11

524.11'x6'x(1/9) -349.41 S.Y.

STA.45+74.11 TO STA.46+24.11

50'X((6'+8')/2)X(1/9) -38.89 S.Y.

STA. 46+24.11 TO STA.46+39

14.89'X8'X(1/9) -13.24 S.Y.

TOTAL -401.54 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

524.11'x5'X((6.75"+4")/(12X2)) x(1/27) -43.47 C.Y.

50 ' X ((5'+7')/2)X((6.75"+4")/ (2X12))X(1/27) -4.98 C.Y.

14.89'X7'X(6"/12)X(1/27) -1.93 S.Y.

TOTAL -50.38 C.Y.

ITEM SPL DRAINAGE CONNECTION

589'x1.39 SF x(1/27) -30.32 C.Y.

STA. 46+40.97 (APPROACH SLAB)

80-P ITEM 611 15" REINFORCED CONCRETE APPROACH SLAB

(AREA PLANIMETERED)

884 SF x(1/9) -98.22 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

884 SF x(6"/12)x(1/27) -16.37 C.Y.

STA.48+60.53 (APPROACH SLAB)

79-P ITEM 611 15" REINFORCED CONCRETE APPROACH SLAB

756 SF x(1/9) -84 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

756 SF x(6"/12)x(1/27) -14.15 C.Y.

78-P ITEM 451 12 1/2" REINFORCED CONCRETE PAVEMENT AS PER PLAN

STA. 82+00 TO STA.86+14

414'x((12.5"+22.85")/2)x(1/9) -813.05 S.Y.

ITEM 310 6"TYPE II SUBBASE AS PER PLAN

414'x((13.5"+23.85")/2) x(6"/12)x(1/27) -143.18 C.Y.

77-P ITEM 452 7"TO 10" CONCRETE PAVEMENT MOD., AS PER PLAN

STA 82+00 TO STA 86+30
414'x7.25'x(1/9) -333.50 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

414'x7.25'x((6"+4")/(12x2)) x(1/27) -46.32 C.Y.

STA.72+32.89 RAMP D (APPROACH SLAB)

89-P ITEM 611 15" REINFORCED CONCRETE SLAB

568 SF X(1/9) =63.11 SY

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

568 SF x(6"/12)x(1/27) -10.52 C.Y.

I-75 NORTHBOUND

88-P ITEM 452 7"TO 10" CONCRETE PAVEMENT MOD., AS PER PLAN

STA.82+00 I-75 TO STA.72+03.71 (RAMP D)

512.94'x8'x(1/9) -455.95 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

512.94X8'X((6"+4")/(12X2))X(1/27) -63.33 C.Y.

512.94'X2'X(6"/12)X(1/27)-19.00C.Y

TOTAL -82.33 C.Y.

STA.70+00.42 RAMP D (APPROACH SLAB)

90-P ITEM 611 15" REINFORCED CONCRETE SLAB

984 SF x(1/9) -109.33 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

984 SF x(6"/12)x(1/27) -18.22 C.Y.

STA.65+10 TO STA.73+70.65 RAMP D

93-P ITEM 452 7"TO 9" CONCRETE PAVEMENT MOD., AS PER PLAN

STA. 40+40.39 "H" TO STA. 68+80 "D"

409.83'x8'x(1/9) -364.29 S.Y.

STA 68+80 "D" TO STA 69+70 "D"
ITEM 452 7" TO 10" CONCRETE PVMNT MOD., AS PER PLAN

90'X8'X(1/9) -80 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

499.83'X(((6"+4")/(12X2))X4')X +((6"/12)X3')X(1/27) -58.62 C.Y.

ITEM SPL DRAINAGE CONNECTION

499.83'x1.33 SF x1/27 -24.62 C.Y.

84-P ITEM 451 9" REINFORCED CONCRETE PAVEMENT AS PER PLAN

STA. 66+80.76 "D" TO STA. 69+95 "D"

(AREA PLANIMETERED)

4800 SF x(1/9) -534.00 S.Y.

ITEM 451 12 1/2" REINFORCED CONCRETE PAVEMENT AS PER PLAN
STA 68+80.76 TO STA 69+95 "D"

4166 S.F.X(1/9) -463.00 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

8966 SF x(6"/12)x(1/27)-166.04 C.Y.

92-P ITEM 451 9" REINFORCED CONCRETE PAVEMENT AS PER PLAN

STA 38+27.80 TO STA. 40+40.39

7046 SF (PLANIMETERED)x(1/9 -782.89 S.Y.

ITEM 301 6" TYPE II SUBBASE, AS PER PLAN

7046 SF (PLANIMETERED)x(6"/12) x(1/27) -130.48 C.Y.

91-P ITEM 452 8"TO 9" CONCRETE PAVEMENT MOD., AS PER PLAN

STA.64+68 TO STA.66+00

132'x3'x(1/9) -44.00 S.Y.

ITEM 452 7" TO 9" CONCRETE PAVEMENT MOD., AS PER PLAN

STA.66+00 TO STA.67+80.76

180.76'x((10'+3')/2)X(1/9) -130.55 S.Y.

STA.67+80.76 TO STA.68+80.76

100'x10'x(1/9) -111.11 S.Y.

TOTAL -241.66 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

STA.64+68 TO STA.66+00

132'x3'x((6"+4")/(12x2)) x(1/27) -6.11 C.Y.

STA.66+00 TO STA.67+80.76

180.76'x((10"+3")/2)x((6"+4") /(12x2))X(1/27) -18.13 C.Y.

STA.67+80.76 TO STA.68+80.76

100'x10'x((6"+4")/(2X12))x(1/27) -15.43 C.Y.

TOTAL -39.67 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.64+68 TO STA.66+08

140'x.87 SF x(1/27) -4.51 C.Y.

221-P ITEM 452 8" TO 10" CONCRETE PVMNT MOD., AS PER PLAN

FOR SIGN TRANSITION

STA 85+00 IP STA 86+10 I-75

((6'+4.75')X(1/2)X50'X4)+(4.75' X10'X2)X(1/9) -130.00 S.Y.

ITEM 310 SUBBASE, AS PER PLAN

110'X15'X(6"/12)X(1/27)-30.55 C.Y.

256-P ITEM 452 8" TO 10" CONCRETE PVMNT MOD., AS PER PLAN

FOR SIGN TRANSITION

STA 74+45 TO STA 75+55

((6'+4.75')X(1/2)X50'X4+(4.75' X10'X2)X(1/9) -130.00 S.Y.

ITEM 310 SUBBASE, AS PER PLAN

110'X15'X(6"/12)X(1/27)-30.55 C.Y.

RAMP F

106-P ITEM 452 9" TO 10" CONCRET PVMNT MOD., AS PER PLAN

STA.103+75 TO STA.107+03

328'x((18.675'+26.5')/2) x(1/9) -823.19 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

328'x((18.675'+26.5')/2)X(6"/12) x(1/27) -137.20 C.Y.

EASTBOUND 126 APPROACH SLAB

STA.54+74.13 TO STA. 54+99.13

115-P ITEM 611 15" REINFORCED CONCRETE APPROACH SLAB

1388 SF x(1/9) -154.22 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

1388 SF x(6"/12)x(1/27) -25.70 C.Y.

APPROACH SLAB

121-P ITEM 611 15" REINFORCED CONCRETE APPROACH SLAB

STA. 58+61.87 TO STA. 58+86.87

1186 SF x1/9 -131.78 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

1186 SF x(6"/12)x(1/27) -21.96 C.Y.

STA.49+50 TO STA.55+45 RAMP D

108-P ITEM 451 9" REINFORCED CONCRETE PAVEMENT
AS PER PLAN

STA. 49+50 TO STA. 50+80.32

130.32'X((16.70'+18')/2)X(1/9)
-251.33 S.Y.

STA. 50+80.32 TO STA. 53+90.87

310.55'X18'X(1/9) -621.10 S.Y.

STA. 53+90.87 TO STA. 55+45

154.13'X((18'+16.46')/2)X(1/9)
-295.07 S.Y.

TOTAL -1167.40 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

STA.49+50 TO STA.50+80.32

130.32'X((16.70'+18')/2)X(6"/12)
X(1/27) -41.87 C.Y.

STA. 50+80.32 TO STA. 53+90.87

310.55'X18'X(6"/12)X(1/27)
-103.52 C.Y.

STA.53+90.87 TO STA. 55+45

154.13'X((18'+6.46')/2)X(6"/12)
X(1/27) -34.91 C.Y.

TOTAL -180.30 C.Y.

107-P ITEM 452 8"TO 9" CONCRETE PAVEMENT MOD., AS PER PLAN]

600'x3'x(1/9) -200 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

600'x3'x((6"+4")/(12x2))
x(1/27) -27.77 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.54+50 TO STA.55+45

95'x.87 SF x1/27 = 3.06 C.Y.

109-P ITEM 452 7"TO 9" CONCRETE PAVEMENT MOD., AS PER PLAN

600'x6'x1/9 = 400 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

600'x(((6.75"+4")/(12X2))X3')
+(((6"+6.75")/(2X12))X3')X(1/27)
-65.28 C.Y.

ITEM SPL DRAINAGE CONNECTION

600'x1.39 S.F.x(1/27) -30.89 C.Y.

STA.50+75 TO STA.53+10 RAMP H

119-P ITEM 451 9" REINFORCED CONCRETE PAVEMENT
AS PER PLAN

235'x16'x(1/9) -417.78 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

235'x16'x(6"/12)x(1/27) -69.33 C.Y.

118-P ITEM 452 8"TO 9" CONCRETE PAVEMENT MOD., AS PER PLAN

STA. 50+75 TO STA. 51+36

61'x3'x(1/9) -20.33 S.Y.

ITEM 452 9" TO 10" CONCRETE PAVEMENT MOD., AS PER PLAN

STA.51+36 TO STA.53+10

(AREA PLANIMETERED)

2560 S.F.X(1/9) -284.44 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

STA. 50+75 TO STA. 51+36

61'x((6"+4")/(12X2))x(6"/12)
X(1/27) - .47 C.Y.

STA. 51+36 TO STA. 53+10

(AREA PLANIMETERED)

2560 S.F.X(6"/12)X(1/27)-47.41 C.Y.

TOTAL -47.88 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA. 50+75 TO STA. 53+00

225'x.87'x(1/27) -7.25 C.Y.

120-P ITEM 452 7"TO 9" CONCRETE PAVEMENT MOD., AS PER PLAN

STA.50+75 TO STA.52+10

135'x6'x(1/9) -90.00 S.Y.

STA.52+10 TO STA. 53+10

100'x((6'+8')/2)x(1/9) -77.78 S.Y.

TOTAL -16.78 S.Y.

ITEM 452 7" TO 10" CONCRETE PVMNT MOD., AS PER PLAN

STA. 53+10 TO STA. 53+97 E.B.

AREA PLANIMETERED

592 S.F.X(1/9) -65.78 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

135'x(((6"+4")/(2X12)+(6"/12))X3)
X(1/27) -13.75 C.Y.

100'X [((6"+4")/(2X12))X((3'+5')/2)

+(3X(6"/12))]X(1/27) -11.73 C.Y.

PLANIMETERED: 592 SF x((6"+4")
/(12x2))X(1/27) -9.14 C.Y.

TOTAL -34.61 CY

EASTBOUND SR 126

116-P ITEM 452 7" TO 10" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.50+75 TO STA.51+41

66x10'x(1/9) -73.335.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA.50+75 TO STA.51+41

66'X[(3'X(6"/12))+(7'X(6"+4")/
(2X12))]X(1/27) -10.80 C.Y.

122-P ITEM 452 8" TO 10" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.58+90 TO STA.60+25

135'x4'x(1/9) -60.00 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

135'x4'x((6"+4")/(12x2))
x(1/27) -8.33 C.Y.

123-P ITEM 451 10" REINFORCED CONCRETE PAVEMENT
MOD. AS PER PLAN

STA.58+57 TO STA.60+25

168'x24'x(1/9) -448.0 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

168'x24'x(6"/12)x(1/27) -74.67 C.Y.

124-P ITEM 452 7" TO 10" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.58+20 TO STA.60+25

205'x8'x(1/9) -182.22 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

205X[(3'X(6"/12))+(5X(10.5"+4")
/(12X2))X(1/27) -34.32 C.Y.

ITEM SPL DRAINAGE CONNECTION

205X[(1.5X(2"X6")/(12X2))+
((6"+10.5")/(12X2)X1.5)]X(1/27)
-11.63 C.Y.

STA.50+50 TO STA.60+50 RAMP I

110-P ITEM 451 9" REINFORCED CONCRETE PAVEMENT
AS PER PLAN

STA.51+02.14 TO STA.56+65.22

563.08'x16'x(1/9) -1001.03 S.Y.

STA.56+65.14 TO STA.60+50

384.86'x16'x(1/9) -684.20 S.Y.

TOTAL -1685.23 SY

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA.51+02.14 TO STA.56+65.22

563.08'x16'x(6"/12)x(1/27)
-166.84 C.Y.

STA.56+65.22 TO STA.60+50

384.86'x16'x(6"/12)x(1/27)
-114.03 C.Y.

TOTAL -280.87 C.Y.

111-P ITEM 452 8" TO 9" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.50+50 TO STA.51+02.14

52.14'X4'X(1/9) =23.17 SY

STA. 51+02.14 TO STA. 52+02.14

100'X((4'+3')/2)X(1/9) -38.89 S.Y.

STA.52+02.14 TO STA.56+65.22

463.08'x3'x(1/9) -154.36 S.Y.

STA.56+65.22 TO STA.60+50

384.86'x3'x(1/9) -128.29 S.Y.

TOTAL -344.71 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA. 50+50 TO STA. 51+02.14

52.14'X4'X((6"+4")/(12X2))X(1/27)
-3.22 C.Y.

STA. 51+02.14 TO STA. 52+02.14

100'X((4'+3")/2)X((6"+4")/(2X12))
X(1/27) -5.40 C.Y.

STA.52+02.14 TO STA.56+08.14

406'x3'x((6"+4")/(12x2))X(1/27)
-18.80 C.Y.

STA.56+08.14 TO STA.60+50

441.86'x3'x((4"+6")/12x2)
x1/27 -20.46 C.Y.

TOTAL -47.88 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA. 50+50 TO STA. 51+02.14

52.14'X.97 S.F.X(1/27) -1.76 C.Y.

STA.51+02.14 TO STA.52+02.14

100'X((.97S.F.+.87S.F.)/2)X(1/27)
-3.41 C.Y.

STA.52+02.14 TO STA.56+08.14

406'x.87 SF x(1/27) -13.08 CY

112-P ITEM 452 7" TO 9" CONCRETE
PAVEMENT
MOD., AS PER PLAN

STA.51+02.14 TO STA.56+00

497.86'x6'x(1/9) -331.90 S.Y.

STA.56+00 TO STA.60+50

450'x6'x(1/9) -300 S.Y.

TOTAL -631.90 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA.51+02.14 TO STA.56+00

497.86 x[((6"+4")/(12x2)X3)
+(3X(6"/12))]X(1/27) -50.71C.Y.

STA.56+00 TO STA.60+50

450X[(3'X(6"+6.75")/(2X12))+
(3'X(6.75"+4")/(2X12))]X(1/27)
-48.96 C.Y.

TOTAL -99.67 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.56+00 TO STA.60+50

450'X1.25 SF X1/27 -20.83 CY

113-P ITEM 452 10" TO 8" CONCRETE
PAVEMENT
MOD., AS PER PLAN

STA.51+15.16 TO STA.52+15.16

100'X10'X(1/9) -111.11 S.Y.

STA. 52+15.16 TO STA. 53+65.16

150'X((10"+4")/2)X(1/9)-116.67 S.Y.

STA. 53+65.16 TO STA.54+78

112.84'X4'X(1/9) -50.15 S.Y.

TOTAL -277.93 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

100'X[(3'X(6"+4")/(12X2))+
(7'X(4"/12))X(1/27) -13.27 C.Y.

150'X[(3'X(6"+4")/(2+12))+
((7'+1')/2)X(4"/12)]X(1/27)
-14.35 C.Y.

112.84'X[(3'X(6"+4")/(2X12))
+(1'X(4"/12))X(1/27) -6.62 C.Y.

TOTAL -35.24 C.Y.

ITEM SPECIAL DRAINAGE CONNECTION

100'X1.25 S.F. X(1/27) -4.63 C.Y.

150' X (1.25 S.F.+.87 S.F.)/2
X(1/27) -5.89 C.Y.

112.84'X.87 S.F.X(1/27) -3.64 C.Y.

TOTAL -14.16 C.Y.

114-P ITEM 451 10" REINFORCED
CONCRETE PAVEMENT
MOD., AS PER PLAN

STA. 50+75 TO STA. 51+15.16

AREA PLANIMETERED -2400 S.F.

STA. 51+15.16 TO STA. 53+10

24'X194.84" -4676.16 S.F.

STA. 53+10 TO STA.54+74

AREA PLANIMETERED -5988 S.F.

TOTAL AREA -13064.16 S.F.

ITEM 310 TYPE II SUBBASE, AS PER PLAN

13064.16 S.F.X(1/9) -1451.57 S.Y.

STA.51+22.97 TO STA.54+75 RAMP E

99-P ITEM 451 9" REINFORCED CONCRETE
PAVEMENT
AS PER PLAN

352.03'x16'x(1/9) -625.83 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

352.03'x16'x(6"/12)x(1/27)
-104.31 C.Y.

100-P ITEM 452 8" TO 9" CONCRETE
PAVEMENT
MOD., AS PER PLAN

STA.53+13 TO STA.54+75

162'x3'x(1/9) -54 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA.53+13 TO STA.53+90

77'X3'X((6"+4")/(12X2))
x(1/27) -3.56 C.Y.

STA.53+90 TO STA.54+75

85'X3'x((6"+4")/(12X2))x(1/27)
-3.94 C.Y.

TOTAL -7.50 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.53+90 TO STA.54+75

85'x1 SF x(1/27) -3.15 C.Y.

101-P ITEM 452 9" TO 7" CONCRETE
PAVEMENT
MOD., AS PER PLAN

STA. 51+22.97 TO STA. 52+22.97

100'X((8'+6")/2)X (1/9) -77.78 S.Y.

STA. 52+22.97 TO STA. 54+38.97

216.0X6'X(1/9) -144.0 S.Y.

STA. 54+38.97 TO STA. 54+75

36.03'X6'X(1/9) -24.02 S.Y.

TOTAL -245.80 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

100'X[(3'X(6"+6.75")/(2X12))+
((5'+3')/2)X((6"+4")/(2X12)))X
(1/27) -12.07 C.Y.

216.0'X[(3X(6"+6.75")/(2X12))+
(3X(6"+4")/(2X12))]X(1/27)
-22.75 C.Y.

36.03'X((3'X(6"+6.75")/(2X12))+
(3X(6"+4")/(2X12))X(1/27)
-3.79 C.Y.

TOTAL -38.61 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA 52+55 TO STA 54+39

174'X1.39 S.F. X(1/27) -9 C.Y.

STA.103+75 TO STA.113+20 RAMP F

103-P ITEM 451 9" REINFORCED CONCRETE
PAVEMENT
AS PER PLAN

STA.109+70 TO STA.113+20

350'x16'x(1/9) -622.22 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA.109+70 TO STA.113+20

350'x16'x(6"/12)x(1/27)-103.70 C.Y.

102-P ITEM 452 9" CONCRETE
PAVEMENT
MOD., AS PER PLAN

STA.109+70 TO STA.111+64

2100 SF x(1/9) -233.33 S.Y.

ITEM 452 7" TO 9" CONCRETE PVMNT
MOD., AS PER PLAN

STA.111+64 TO STA.113+20

156'x6'x(1/9) -104.00 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA.109+70 TO STA.111+64

2100 SF x(6"/12)x(1/27) -38.89 C.Y.

STA.111+64 TO STA.113+20

156'x[(3'X(6"/12))+(3'X(6"+4")/
(2X12)]X(1/27) =15.89 CY

TOTAL -54.77 C.Y.

PAVEMENT CALCULATIONS

98-P ITEM 451 9" REINFORCED CONCRETE PAVEMENT
AS PER PLAN

STA.103+75 TO STA.109+70

595'x((36"+21.125")/2)x(1/9)
=1888.30 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA.103+75 TO STA.109+70

595'x((36'+21.125')/2)x(6"/12)
x(1/27) =314.72 C.Y.

104-P ITEM 452 8" TO 9" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.107+03 TO STA.113+20

617'x3'x(1/9) =205.67 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA.107+03 TO STA.108+00

97'x3'x((6"+4")/(12x2))x(1/27)
=4.49 C.Y.

STA.108+00 TO STA.113+20

520'x3'x((6"+4")/(12X2))x(1/27)
=24.07 C.Y.

TOTAL =28.56 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.108+00 TO STA.113+20

520'x.87 SF x(1/27) =16.76 C.Y.

97-P ITEM 452 7" TO 9" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.103+75 TO STA.109+70
(RAMP F)

595'x8'x(1/9) =528.89 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA.103+75 TO STA.109+70
RAMP F

595'x8'x((6"+4")/(12x2))
x(1/27) =73.46 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.103+75 TO STA.108+00
RAMP F

425'x1.33'x(1/27) =20.94

WESTBOUND SR126 STA.45+00
TO STA.60+25

95-P ITEM 451 10" REINFORCED CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.45+00 TO STA.54+50

950'x24'x(1/9) =2533.33 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA.45+00 TO STA.54+50

950'x24'x(6"/12)x(1/27)=422.22 C.Y.

94-P ITEM 452 7" TO 10" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.45+00 TO STA.54+50

950'x10'x(1/9) =1055.56 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA.45+00 TO STA.54+50

950'x[(7'x(7.25"+4")/(12x2))+(3'X
(6"+7.25")/(12X2))]X(1/27)
=173.73 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.44+85 TO STA.54+00

915'x1.25 SF x(1/27) =42.40 C.Y.

96-P ITEM 452 8" TO 10" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.45+00 TO STA.54+50

950'x4'x(1/9) =422.22 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA.45+00 TO STA.54+50

950'x3'x((6"+4")/(12x2))
x(1/27) =69.44 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.54+00 TO STA.54+50

50'x.97 SF x(1/27) =1.80 C.Y.

292-P ITEM 612 CONCRETE MEDIAN

STA 107+03 TO STA 113+20

617'X((13'+19')/2)X(1/9)
=1096.89 S.Y.

STA 113+20 TO STA 119+81

661'X19'X(1/9) =1395.44 S.Y.

TOTAL =2492.33 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA 107+03 TO STA 113+20

ITEM 310 TYPE II SUBBASE

617'X((13'+19')/2)X(6"/12)X(1/27)
=182.81 C.Y.

STA 113+20 TO STA 119+81

661'X19'X(6"/12)X(1/27)

=232.57 C.Y.

TOTAL =415.38 C.Y.

WESTBOUND SR126
STA. 54+50 TO STA. 63+15

126-P ITEM 451 10" REINFORCED CONCRETE PAVEMENT
MOD., AS PER PLAN

STA. 54+50 TO STA. 63+03

853'X24'X(1/9) =2274.67 S.Y.

STA. 60+66.78 TO STA. 62+93

AREA PLANIMETERED (DECELERATION
LANE)

5572 S.F. X (1/9) =619.11 S.Y.

TOTAL =2893.78 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA. 54+50 TO STA. 63+03

853'X24'X(6"12)X(1/27) =379.11 C.Y.

STA. 60+66.78 TO STA. 62+93

AREA PLANIMETERED (DECELERATION

LANE)

5572 S.F.X(6"/12)X(1/27) =8.60 C.Y.

TOTAL =387.71 C.Y.

125-P ITEM 452 7" TO 10" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA. 54+50 TO STA. 63+15

865'X10'X(1/9) =961.11 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA. 54+50 TO STA. 63+15

865'X(10X(6"+4")/(12X2))X(1/27)
=133.49 C.Y.

127-P ITEM 452 8" TO 10" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA. 54+50 TO STA. 58+16.78

366.78'X4'X(1/9) =163.01 S.Y.

STA. 58+16.78 TO STA. 59+66.78

150'X((4'+10')/2)X(1/9)=116.67 S.Y.

STA. 59+66.78 TO STA. 60+66.78

100'X10'X(1/9) =111.11 S.Y.

TOTAL =390.79 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA.. 54+50 TO STA. 58+16.78

366.78'X[(3'X(6"+4")/(12X2))+
(1"X(4"/12))]X(1/27)= 21.51 C.Y.

150'X[(3'X(6"+4")/(12X2))+
((1'+7')/2X(4"/12))]X(1/27)
=14.35 C.Y.

STA. 59+66.78 TO STA. 60+66.78

100'X[(3'X(6"+4")/(12X2))+
(7'X(4"/12))X(1/27) =13.27 C.Y.

TOTAL =49.13 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA. 54+50 TO STA. 58+16.78

366.78'X.87 S.F.X(1/27) =11.82 C.Y.

STA. 58+16.78 TO STA. 59+66.78

150'X((.87 S.F.+1.25 S.F.)/2)X
(1/27) =5.89 C.Y.

STA. 59+66.78 TO STA. 60+66.78

100'X1.25 S.F X(1/27) =4.63 C.Y.

TOTAL =22.34 C.Y.

EASTBOUND SR126 STA.50+75
TO STA.60+25

RAMP 'E' STA 54+75 TO STA. 62+80

129-P ITEM 451 9" REINFORCED CONCRETE PAVEMENT
AS PER PLAN

STA. 54+75 TO STA. 60+77.92

602.92'X16X(1/9) =1071.86 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

602.92X16X(6"/12)X(1/27)
=178.64 C.Y.

130-P ITEM 452 9" TO 8" CONC. PVMT.
MOD., AS PER PLAN

STA. 54+75 TO STA. 55+65.43

90.43'X3'X(1/9) =30.14 S.Y.

STA.55+65.43 TO STA.59+02.92

337.49'X3'X(1/9) =112.50 S.Y.

STA. 59+02.92 TO STA. 60+27.92

125'X3'X(1/9) =41.67 S.Y.

STA. 60+27.92 TO STA. 60+77.92

50'X((3'+4')/2)X(1/9) =19.44 S.Y.

TOTAL =203.75 S.Y.

ITEM 452 8" TO 10" CONCRETE PVMNT
MOD., AS PER PLAN

STA. 60+77.92 TO STA. 62+80

227.08'X4'X(1/9) =100.9 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA. 54+75 TO STA. 55+65.43

90.43'X3'X((6"+4")/(12X2))X
(1/27) =4.19 C.Y.

STA. 55+65.43 TO STA. 59+27.92

362.49' X3'X((6"+7")/(12X2))X
(1/27) =21.81 C.Y.

STA. 67+27.92 TO STA. 60+77.92

50'X((3'+4')/2)X((6"+7")/(12X2))
X(1/27) =3.51 C.Y.

STA. 60+77.92 TO STA. 62+80

202.08'X[(3'X(6"/12))+(1'X(6"+4")/
(12X2))]X(1/27) =14.45 C.Y.

TOTAL =43.90 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA. 54+75 TO STA. 55+65.43

90.43'X1S.F.X(1/27) =3.35 C.Y.

STA. 55+65.43 TO STA 59+27.92

362.49'X0.87 S.F.X(1/27)=11.68 C.Y.

STA. 59+02.92 TO STA. 60+66.78

50'X0.87 SF X(1/27) =1.60 CY

STA. 60+77.92 TO STA. 62+80

202.08'X0.87 S.F.X(1/27) =6.51 C.Y.

TOTAL =23.20 C.Y.

128-P ITEM 452 9" TO 7" CONC. PVMT.
MOD., AS PER PLAN

STA. 54+75 TO STA. 55+65.43

90.43'X6'X(1/9) =60.29 C.Y.

STA. 55+65.43 TO STA. 60+77.92

512.49X6'X(1/9) =341.66 S.Y.

TOTAL =401.95 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA. 54+78 TO STA. 55+65.43

90.43'X[(3'X(6"/12))+(3'X(6"+4")/
(12X2))] X(1/27) =9.21 C.Y.

STA. 55+65.43 TO STA. 60+77.92

512.49X[(3'X(6"/12))+(3'X(6"+4")
/(12X2))]X(1/27) =52.20 C.Y.

TOTAL =61.41 C.Y.

131-P ITEM 611 15" REINFORCED CONCRETE
APPROACH SLAB

1418 SF x(1/9) =157.56 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

1418 S.F. x(6"/12)x(1/27)
=26.26 C.Y.

STA.113+20 TO STA.122+40.69
RAMP F

133-P ITEM 451 9" REINFORCED CONCRETE:

PAVEMENT
AS PER PLAN

STA. 113+20 TO STA 119+72.43

652.43'x16'x(1/9) =1159.88 S.Y.

STA.119+72.43 TO STA.122+40.69

268.26'x((16'+21.98')/2)x(1/9)
=566.03 S.Y.

TOTAL =1725.91 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA.113+20 TO STA.119+72.43

652.43'x16'x(6"/12)x(1/27)
=193.31 C.Y.

STA.119+72.43 TO STA.122+40.69

268.26'x((16'+21.98')/2)x(6"/12)
x(1/27) =94.34 C.Y.

TOTAL =287.65 C.Y.

134-P ITEM 452 8" TO 9" CONCRETE PVMT
MOD., AS PER PLAN

STA.113+20 TO STA.117+22.87

402.87'x3'x(1/9) =134.29 S.Y.

STA.117+22.87 TO STA.118+75

152.13'x3'x(1/9) =50.71 S.Y.

STA. 118+75 TO STA. 122+40.69

365.69'X3'X(1/9) =121.90 S.Y.

TOTAL =306.90 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA.113+20 TO STA.118+75

555'x[3'X((6"+4")/(12X2))]
x(1/27) =25.69 C.Y.
STA.118+75 TO STA.122+40.69

365.69'x3'x((6"+4")/(12x2))
x(1/27) =16.93 C.Y.

TOTAL =42.62 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.113+20 TO STA.118+75

555'x.87 SF x(1/27) =17.88 C.Y.

132-P ITEM 452 7" TO 9" CONCRETE PVMT
MOD., AS PER PLAN

STA.113+20 TO STA.117+22.87

402.87'x6'x(1/9) =268.58 S.Y.

STA.117+22.87 TO STA.122+40.69

517.82'x6'x(1/9) =345.21 S.Y.

TOTAL =613.79 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA.113+20 TO STA.117+22.87

555'x[(3'X(6"/12))+(3'X(6"+4")/
(12X2))]X(1/27) =56.53 C.Y.

STA. 117+22.87 TO STA. 118+75

152.13'X[(3'X(6"+6.75")/(12X2))+
(3'X(6.75"+4")/(2X12))]X(1/27)
=16.55 C.Y.

STA.118+75 TO STA.122+40.69

365.69'x[(3'X(6"+6.75")/(2X12))+
(3'X(6.75"+4")/(12X2))]X(1/27)
=39.79 C.Y.

TOTAL =112.87 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.118+75 TO STA.122+40.69

365.69'x1.39 SF x(1/27) =18.83 C.Y.

I-75 SOUTHBOUND

320-P STA. 129+73 TO STA. 132+80

CALC. SURF. AREA 307'X8' =2456 S.F.

STA.132+80 TO 137+62

CALC. SURF. AREA:120'x8'+100'
x((8'+6.7')/2)+(6.7'/2)+262'
= 2573 S.F.

TOTAL =5029 S.F.

ITEM 404 2 1/2" ASPHALT CONCRETE

5029 S.F. x(2.5"/12)x(1/27)
=38.8 C.Y.

ITEM 408 PRIME COAT
5029 S.F. X 0.4 GAL/S.Y. X(1/9)
=223 GAL

ITEM 304 6" AGG. BASE

5029 S.F. x(6"/12)x(1/27)=93.1 C.Y.

ITEM 310 3'TYPE II SUBBASE
AS PER PLAN

5029 S.F. x(3"/12)x(1/27)=46.6 C.Y.

EASTBOUND SR 126 STA 60+25 TO STA 70+15

141-P ITEM 451 10" REINFORCED CONCRETE
PAVEMENT
MOD., AS PER PLAN

990'x24'x(1/9) =2640.00 S.Y.

AREA PLANIMETERED

ACCELERATION LANE

1015 S.F.X(1/9) =112.85 S.Y.

TOTAL =2753 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

990'x26'x(6"/12)x(1/27)
=476.67 C.Y.

1,015 S.F.X(6"/12)X(1/27)=18.8 C.Y.

TOTAL =496.00 C.Y.

140-P ITEM 452 10"TO 8" CONC. PVMT.
MOD., AS PER PLAN

990'x4'x(1/9) =440.00 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

990'x[(3'x(6"+4")/(12X2))+
(1'X(4.5"+4")/(12X2))]X(1/27)
=61.11 C.Y.

142-P ITEM 452 10"TO 7" CONC. PVMT.
MOD., AS PER PLAN

705'x10'x(1/9) =783.00 S.Y.

205'X8'X(1/9) =182.00 S.Y.

80'X((8'+10')/2)X(1/9) =80.00 S.Y.

TOTAL =1045.00 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

990'x[(3'X(6"+10.5")/(12X2))+
(7'X(10.5"+4")/(12X2))]X(1/27)
=230.69 C.Y.

ITEM SPL. DRAINAGE CONNECTION

990'x0.97 SF x(1/27) =35.57 C.Y.

RAMP'I' STA 60+49.29I TO STA 123+32I-75

138-P ITEM 451 9" REINFORCED CONCRETE
PAVEMENT
AS PER PLAN

STA 60+50 TO STA 64+53.86I

403.86'x16'x(1/9) =718.00 S.Y.

ITEM 451 12 1/2" REINFORCED
CONCRETE PAVEMENT
AS PER PLAN

STA 117+39I-75 TO 123+32I-75

ACCELERATION LANE AREA

((25'+10.17')/2)x593'x(1/9)
=1158.66 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

593'X((25'+10.17')/2)x(6"/12)
x(1/27) =193.11 C.Y.

403.86'X16'X(6"/12)X(1/27)
=119.66 C.Y.

TOTAL =312.77 C.Y.

137-P ITEM 452 9"TO 8" CONC. PVMT.
MOD., AS PER PLAN

STA 60+50 TO STA 62+53

203X3'X(1/9) =68.00 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

203'X3'X((6"+4")/(12X2))
x(1/27) =9.50 C.Y.

139-P ITEM 452 9"TO 7" CONC. PVMT.
MOD., AS PER PLAN

STA 60+50 TO STA 63+53.86

303'X6'X(1/9) =202.00 S.Y.

STA. 63+53.86 +STA. 64+53.86

100'X(6'+8')/2X(1/9)= 77.78 S.Y.

TOTAL =279.78 S.Y.

ITEM 452 10" TO 7" CONCRETE
PAVEMENT
MOD., AS PER PLAN

STA. 117+39 I-75 TO STA. 123+32
I-75

593'X8'X(1/9) =527.11 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

303.00'X[(3'X(6"+6.75")/(2X12))+
(3'X(6.75"+4")/(12X2))]X(1/27)
=32.97 C.Y.

100'X[(3'X(6"+6.75")/(2X12))+
((3'+5')/2X(6.75"+4"))]X(1/27)
=12.54 C.Y.

593'X(3'X(6"+6.75")/(12X2))+
(5'X(6.75"+4")/(12X2))X(1/27)
=84.19 C.Y.

TOTAL= =129.70 C.Y.

ITEM SPL DRAINAGE CONNECTION

303.00'X1.39 S.F.X(1/27)=15.60 C.Y.

100'X(1.39 S.F.+1.33 S.F.)/2X(1/27)

=5.04 CY

593'X1.33 S.F.X(1/27) =29.21 C.Y.

TOTAL =49.93 C.Y.

STA.62+53 TO STA. 64+53.86

135-P ITEM 452 9"TO 10" CONCRETE
PAVEMENT
MOD., AS PER PLAN

2780 S.F. X(1/9) =308.89 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

2780 S.F.X(6"/12)X(1/27)=51.48 C.Y

EASTBOUND SR 126 STA 70+15 TO STA 76+00

STA 70+15 TO STA 74+73

149-P ITEM 451 10" REINFORCED CONCRETE
PAVEMENT
MOD., AS PER PLAN

STA.70+15 TO STA. 74+76.5

461.5'x24'x(1/9) =1230.67 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

461.5'x24'x(6"/12)X(1/27)
=205.11 C.Y.

148-P ITEM 452 10"TO 8" CONC.PVMT.
MOD., AS PER PLAN

STA. 70+15 TO STA. 74+72.5

457.5'x4'x(1/9) =203.33 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

457.5'X[(1'X(4.5'+4')/(12X2))+

(3'X(6"+4.5"1)/(2X12))X(1/27)

=28.24 C.Y.

150-P ITEM 452 10"TO 7" CONC. PVMT.
MOD., AS PER PLAN

STA. 70+15 TO STA. 74+79.5

464.5'x10'x(1/9) =516.11 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

464.5'x[(3'X(6"+10.5")/(12X2))
+(7'X(10.5"+4")/(2X12))]X(1/27)
=35.48 C.Y.

ITEM SPL DRAINAGE CONNECTION

459'x1.25 SF x(1/27) =21.25 C.Y.

WESTBOUND SR 126 STA 67+65 TO STA 70+40

STA. 67+82 TO STA. 70+12

145-P ITEM 451 10" REINFORCED CONCRETE
PAVEMENT
MOD., AS PER PLAN

230'x24'x(1/9) =613.33 S.Y.

STA 67+65 TO STA 69+66.78

(101.78'X12')+(100'X(12'/2))X(1/9)
=202.37 S.Y.

TOTAL =815.700 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA 67+82 TO STA 69+66.78

815.70 S.Y.X(6"/(12X3))=135.95 C.Y.

146-P ITEM 452 10" TO 8" CONC. PVMT.

MOD., AS PER PLAN

STA 67+65 TO STA 69+86

221'x4'x(1/9) =98.22 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA 67+65 TO STA 69+86

221'x4'x((6"+4")/(12X2))x(1/27)
=13.64 C.Y.

144-P ITEM 452 10"TO 7"CONC. PVMT.
MOD., AS PER PLAN

STA 68+02 TO STA 70+40

238'x10'x(1/9) =264.44 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA 68+02 TO STA 70+40

238X[(7'X(6"+7.25")/(12X2))+
(3'X(7.25"+4")/(12X2))X(1/27)
=46.46 C.Y.

RAMP 'I' STA 123+32 TO STA 127+39 I-75

262-P ITEM 451 12 1/2" REINFORCED CONC.
PAVEMENT
AS PER PLAN

407'x10.17'x.5x(1/9) =229.96 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

407'x10.17'X.5X(6"/12)X(1/9)
=114.98 C.Y.

263-P ITEM 452 12"TO 8" CONC. PVMT.
MOD., AS PER PLAN

STA. 123+32 TO STA. 126+59

327'X8'X(1/9) =290.67 S.Y.

SHOULDER TRANSITION FROM 8'TO
10' TO MEET THE EXISTING ON I-75

STA 126+58 TO STA 127+39

80'X9'X(1/9) =80.00 S.Y

TOTAL =371.00 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

327'X[(5'X(7.5"+4")/(12X2))+
(3'X(6"+7.5")/(12X2))]X(1/27)
=49.45 C.Y.

SHOULDER TRANSITION FROM 8' TO

10' TO MEET THE EXISTING ON I-75

STA 126+58 TO STA 127+39

80X[((5'+7')/2)X((6"+4")/(12X2))+
(3'X(6"+7.5")/(2X12))]X(1/27)
=13.52 C.Y.

TOTAL =62.97 C.Y.

ITEM SPL DRAINAGE CONNECTION

407'x1.33 S.F. x(1/27) =20.05 C.Y.

ADDITIONAL QUANTITY FOR TRANSITION
LENGTH

STA.125+79 TO STA.127+39

160'x(((1.25+1.33)/2)-1.25)S.F.
X(1/27) =0.24 C.Y.

TOTAL =19.08 C.Y.

143-P ITEM 611 REIN. CONC. APPROACH SLAB

STA 67+50.23 TO STA 67+75.23 AREA

PLANIMETERED

1376 S.F. x(1/9) =152.89 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

1376 S.F.X(6"/12)X(1/27)=25.48 C.Y.

147-P ITEM 611 REINF. CONC. APPROACH
SLAB

STA. 69+88.44 TO STA. 70+13.44

AREA PLANIMETERED

980 S.F. X(1/9) =108.89 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

980'X(6"/12)X(1/27) =18.15 C.Y.

GREENLAND PLACE

269-P ITEM 451 9" REINFORCED CONCRETE
PAVEMENT
AS PER PLAN

PAVEMENT

AREA PLANIMETERED

1960 S.F. X (1/9) =217.78 S.Y.

ITEM 310 6" SUBBASE, *TYPE II*
AS PER PLAN

TYPE II

AREA TO BE ADDED TO PLANIMETERED

AREA

226'X1.5' =339 S.F.

(1960 S.F.+339 S.F.)X(6"/12)X(1/27)
=42.57 C.Y.

155-P ITEM 611 REINFORCED CONCRETE
APPROACH SLAB

STA 74+73.83 TO STA 74+98.83

AREA PLANIMETERED

1098 S.F. X (1/9) =122 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

1098 S.F. X (6"/12)X(1/27) =20 C.Y.

EASTBOUND SR 126 STA 76+00 TO STA
87+24.33 AND C.L. STA 87+44 TO STA 91+50

157-P ITEM 451 10" REINFORCED CONCRETE
PAVEMENT
MOD. AS PER PLAN

STA. 76+30 TO STA. 87+24.33

1094.33'X24'X(1/9) =2918.21 S.Y.

STA. 87+44 TO STA. 91+50

406'X24'X(1/9) =1082.67 S.Y.

ADDITIONAL PAVEMENT QUANTITY FOR
RAMP "N" AND DECELERATION LANE

STA 88+26.53 TO STA 89+26.53

100'x(12'/2)x(1/9) =66.67 S.Y.

STA 89+26.53 TO STA 90+00

73.47'x12'x(1/9) =97.96 S.Y.

STA 90+00 TO STA 91+50

PLANIMETERED AREA=1880 S.F.

1880 S.F. x(1/9) =208.89 S.Y.

TOTAL =4374.40 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

1094.33'X24'x(6"/12)x(1/27)
=486.37 C.Y.

STA 87+44 TO STA 91+50

406'x24'x(6"/12)x(1/27)=180.45 C.Y.

ADDITIONAL SUBBASE QUANTITY FOR
RAMP 'N' DECELERATION LANE

STA 88+26.53 TO STA 89+26.53

((100'x12')/2)x(6"/12)x(1/27)
=11.11 C.Y.

STA 89+26.53 TO STA 90+00

73.47'x12'x(6"/12)x(1/27)
=16.32 C.Y.

STA 90+00 TO STA 91+50

PLANIMETERED AREA

1880 S.F.x(6"/12)x(1/27)=34.81 C.Y.

TOTAL =729.06 C.Y.

158-P ITEM 452 10"TO 7" CONC. PVMT.
MOD., AS PER PLAN

STA 76+36 TO 87+24.33

1088.33'x10'x(1/9) =1209.26 S.Y.

STA 87+44 TO STA 88+26.53

82.53'x10'x(1/9) =91.70 S.Y.

STA 88+26.53 TO STA 89+26.53

100'x((10'+8')/2)x(1/9)=100.00 S.Y.

STA 89+26.53 TO STA 91+50

223.47'x8'x(1/9) =198.64 S.Y.

TOTAL =1599.60 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA 76+36 TO STA 80+49.86

413.86'X[(3'X(6"/12))+
(7'X(10.5"+4")/(12X2))]X(1/27)
=87.82 C.Y.

STA 80+49.86 TO STA 87+08.70

658.84'x[(3'x(6.42"+7.25")/
(12X2))+(7'X(7.25"+4")/(2X12))]
X(1/27) =121.76 C.Y.

STA 87+08.70 TO STA 87+24.33

15.63'x[(3'x(6"/12))+(7'x(10.5"+4")
/(12X2))]X(1/27) =3.31 C.Y.

STA 87+44 TO STA 88+26.53
[SEE STATION EQUATION]

82.53'x[(3'x(6"/12))+(7'x(10.5"+4")
/(12X2))]X(1/27) =17.51 C.Y.

STA 88+26.53 TO STA 89+26.53

100'x[(3'x(6"/12))+(6'X(10.5"+4")/
(12X2))]X(1/27) =15.67 C.Y.

STA 89+26.53 TO STA 91+50

223.47'x[(3'x(6"/12))+
(6'x(10.5"+4")/(12X2))]X(1/27)
=42.42 C.Y.

TOTAL =288.49 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA. 76+36 TO STA. 87+24.33

STA. 87+44 TO STA. 88+26.53

1120.86'X1.33 S.F. X(1/27)
=55.20 C.Y.

STA.88+26.53 TO STA.89+26.53

100'X1.33 S.F X(1/27) =4.93 C.Y.

STA. 89+26.53 TO STA. 91+50

223.47'X1.33 S.F.X(1/27)=11.01 C.Y.

TOTAL =71.15 C.Y.

156-P ITEM 452 10"TO 8" CONC. PVMT. MOD., AS PER PLAN

STA 76+26 TO STA 82+59.55

633.55'x4'x(1/9) -281.58 S.Y.

ITEM 452 10"TO 9" CONCRETE PAVEMENT MOD., AS PER PLAN

STA 82+59.55 TO STA 86+18.11

358.56'x(21'+6.5')X(1/2)X(1/9) -547.80 S.Y.

STA 86+18.11 TO STA 87+24.33

100'x6.5'x(1/9) -72.22 S.Y.

STA 87+44 TO STA 91+50

406'x6.5'x(1/9) -293.22 S.Y.

TOTAL -931.35 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

STA 76+26 TO STA 80+49.86

423.86'x[(3'x(6"+5")/(2X12))+(1'x (5"+4.5")/(2X12))]x(1/27) -27.80 C.Y.

STA 80+49.86 TO 82+59.55

209.69'x(4'x(6"+4")/(12X2))x (1/27) -12.99 C.Y.

STA 82+59.55 TO STA 86+18.11

358.56'x((21'+6.6')/2)X(6"/12) -91.30 C.Y.

STA 86+18.11 TO STA 87+24.33

106.22'x6.5'X(6"/12)X(1/27) -12.79 C.Y.

STA 87+44 TO STA 91+50

406'x6.5'x(6"/12)X(1/27)-48.87 C.Y.

TOTAL -211.81 C.Y.

DEBONAIR DRIVE
"I" TURNAROUND
270-P ITEM 451 9" REINFORCED CONCRETE PAVEMENT AS PER PLAN

AREA PLANIMETERED

492 S.F.X(1/9) -54.67 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

(492 S.F. +(73'X1.5'))X(6"/12)X (1/27) -11.21 C.Y.

WESTBOUND SR 126 STA 76+45 TO STA 87+44.33

153-P ITEM 451 10" REINFORCED CONCRETE PAVEMENT MOD., AS PER PLAN

STA 78+70 TO STA 91+50

1280'x24'x(1/9) -3413.33 S.Y.

ADDITIONAL PAVEMENT QUANTITY DUE TO ACCELERATION LANE

STA 81+75 TO STA 91+50

PLANIMETERED AREA -12076 S.F.

12076 S.F. x(1/9) -1341.78 S.Y.

TOTAL -4755.00 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

STA 78+70 TO STA 91+50

1280'x24'x(6"/12)x(1/27) -568.89 C.Y.

STA 81+75 TO STA 91+50

PLANIMETERED AREA
12076 S.F. X(6"/12)X(1/27) -223.63 S.F.

TOTAL -792.52 C.Y.

154-P ITEM 452 10"TO 8" CONC. PVMT. MOD., AS PER PLAN

STA 78+42 TO STA 81+75

333'x4'x(1/9) -148.00 S.Y.

ITEM 452 10"TO 9"CONCRETE PAVEMENT MOD., AS PER PLAN

STA. 81+75 TO STA. 91+50

975'X6.5'X(1/9) -704.17 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

STA 78+42 TO STA 81+75

333'X4'XS((6"+4")/(12X2)X(1/27) -20.55 C.Y.

STA 81+75 TO STA 91+50

975'x6.5'x(6"/12)x(1/27) -117.36 C.Y.

TOTAL -137.91 C.Y.

152-P ITEM 452 10"TO 7" CONC. PVMT. MOD., AS PER PLAN

STA 79+01 TO STA 81+75

274'x10'x(1/9) -304.44 S.Y.

STA 81+75 TO STA 82+55

80'x((10'+8')/2)x(1/9) -80.00 S.Y.

STA 82+55 TO STA 91+75

920'x8'x(1/9) -817.78 S.Y.

TOTAL -1202.22 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

STA 79+01 TO STA 81+69.05

268.05'x[(3'x(6"+7.25")/(12X2) +(7'X(7.25"+4")/(12X2))]x(1/27) -49.02 C.Y.

STA 81+69.05 TO STA 81+75

5.95'x[(3'x(6"/12))+(7'x(10.5"+4")/ (12X2)X(1/27) -1.26 C.Y.

STA 81+75 TO STA 82+55

80'X[(3'X(6"/12)+((7'+5')/2)X (10.5"+4")/(12X2))]X(1/27) -15.19 C.Y.

STA 82+55 TO STA 86+44

389.05'x[(3'x(6"/12))+((5'x (10.5"+4")/(2X12))] X(1/27) -65.13 C.Y.

STA 86+44.05 TO STA 87+44

100'x[(3'x(6"/12))+(5'x(6"+4") /(12X2))]X(1/27) -13.27 C.Y.

STA 87+44 TO STA 91+75

431'x[(3'x(6"/12))+(5'x(6"+4")/ (12X2))]X(1/27) -57.20 C.Y.

TOTAL -201.07 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA 79+01 TO STA 81+69.05

268.05'x1.33 SF x(1/27) -13.20 C.Y.

STA 81+69.05 TO STA 86+44

475'x1.33 SF x(1/27) -23.40 C.Y.

STA 86+44 TO STA 87+44

100'x1.33 SF x(1/27) -4.93 C.Y.

STA 87+44 TO STA 91+50

406'x1.33 SF x(1/27) -20.00 C.Y.

TOTAL -61.53 C.Y.

151-P ITEM 611 15" REINFORCED CONCRETE APPROACH SLAB

STA 78+21.27 TO STA 78+46.27

PLANIMETERED AREA -1020 S.F.

1020 S.F. x(1/9) -113.33 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

[1020+((25'x1')x2)]SFx(6"/12) x(1/27) -19.81 C.Y.

105-P ITEM 310 6" TYPE II SUBBASE AS PER PLAN

(UNDER 622 CONCRETE BARRIER)

STA. 82+80.02 TO STA 91+50

869.98'X3'X(6"/12)X(1/27) -48.33 C.Y.

52-P ITEM 611 15" REINFORCED CONCRETE APPROACH SLAB

STA 75+99.16 TO STA 76+24.16

AREA PLANIMETERED

1098 S.F. X (1/9) -122 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

1098 S.F. X (6"/12) X (1/27) -20 C.Y.

EASTBOUND SR126 STA. 91+50 TO STA.106+75

171-P ITEM 452 7"TO 10" CONCRETE PAVEMENT MOD., AS PER PLAN

STA.96+26.53 TO STA.104+94
867.47'x10'x(1/9) -963.86 S.Y.

ITEM 310, SUBBASE TYPE II
AS PER PLAN

STA.96+26.53 TO STA.104+94

867.47'x[(7'X((7.25"+4")/(12x2))+
(3'X(6"+7.25")/(2X12))X(1/27)
-158.65 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.96+26.53 TO STA.104+94

867.47'x1.25 SF x(1/27)=40.16 C.Y.

170-P ITEM 451 10" REINFORCED CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.91+50 TO STA.96+26.53

AREA PLANIMETERED -22,470 S.F.

22470 SF x1/9 -2496.67 S.Y.

STA.96+26.53 TO STA.104+98

871.47'x24'x(1/9) -2323.92 S.Y.

TOTAL -4820.59 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA.91+50 TO STA.96+26.53

23470 SFx(6"/12)x(1/27)=433.78 C.Y.

STA.96+26.53 TO STA.104+98

871.47'x24'x(6"/12)x(1/27)
-387.32 C.Y.

TOTAL -821.95 C.Y.

162-P ITEM 452 10"TO 7" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA 91+50 TO STA. 96+16.15

466.15'X8'X(1/9) -414.36 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

466.15'X[(3'X(6"+10.5")/(2X12))
+(5'X(10.5"+4")/(2X12))]X(1/27)
-87.76 C.Y.

ITEM SPL. DRAINAGE CONNECTOR

466.15'X1.33 S.F.X(1/27)=22.96 C.Y.

167-P ITEM 452 9"TO 10" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA. 91+50 TO STA. 93+01

151'X6.5'X(1/9) -109.06 S.Y.

STA. 93+01 TO STA 93+51

50'X((6.5'+5.25')/2)X(1/9)
-32.64 S.Y.

STA 93+51 TO STA 93+61

10'X5.25'X(1/9) -5.83 S.Y.

STA 93+61 TO STA 94+11

50'X((5.25'+6.5')/2)X(1/9)
-32.64 S.Y.

STA 94+11 TO STA 105+02

1091'X6.5'X(1/9) -787.94 S.Y.

TOTAL -968.11 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA. 91+50 TO STA. 105+02

968.11 S.Y. X (6"/36) -161.35 C.Y.

WESTBOUND SR126 STA. 91+50
TO STA. 106+75

165-P ITEM 452 9" TO 10" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA 91+50 TO STA 93+01

151'X6.5'X(1/9) -109.06 S.Y.

STA 93+01 TO STA 93+51

50'X((6.5'+5.25')/2)X(1/9)
-32.64 S.Y.

STA 93+51 TO STA 93+61

10'X5.25'X(1/9) -5.83 S.Y.

STA 93+61 TO STA 94+11

50'X((5.25'+6.5')/2)X(1/9)
-32.64 S.Y.

STA 94+11 TO STA 105+05

1094'X6.5'X(1/9) -790.11 S.Y.

TOTAL -970.28 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA 91+50 TO STA 105+05

970.28 S.Y. X (6"/36) -161.71 C.Y.

166-P ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

(UNDER 622 CONCRETE BARRIER)

STA.91+50 TO STA.93+01

151'X3'X(6"/12)X(1/27) -8.39 C.Y.

STA. 93+01 TO STA. 93+51

50'X((3'+5.5')//2)X(6"/12)X(1/27)
-3.94 C.Y.

STA. 93+61 TO STA. 94+11

50'X((5.5'+3')/2)X(6"/12)X(1/27)
-3.94 C.Y.

STA. 94+11 TO STA. 105+28.04

1117.04'X3'X(6"/12)X(1/27)
-62.06 C.Y.

DEDUCT FOR I-3B INLET

20'X3'X(6"/12)X(1/27) --1.11 C.Y.

TOTAL -77.22 C.Y.

164-P ITEM 451 10" REINFORCED CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.91+50 TO STA.91+75

AREA PLANIMETERED

1209 S.F.x(1/9) -134.33 S.Y.

STA.91+75 TO STA.105+08

1333'x24'x(1/9) -3554.67 S.Y.

TOTAL -3689.0 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA.91+50 TO 91+75

AREA PLANIMETERED

1209 S.F.x(6"/12)x(1/27)
-22.39 C.Y.

STA.91+75 TO STA.105+13

1333'x24'x(6"/12)x(1/27)
-592.44 C.Y.

TOTAL -614.83 C.Y.

163-P ITEM 452 9"TO 10" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA. 91+75 TO STA. 93+62

AREA PLANIMETERED

2992 S.F.X(1/9) -332.445 S.Y.

ITEM 452 7" TO 10" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.93+62 TO STA.105+13

1151'x10'x(1/9) -1278.89 S.Y

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA. 91+75 TO STA. 93+62

AREA PLANIMETERED

2992 S.F.X(6"/12)X(1/27)=55.41 C.Y.

STA. 93+65 TO STA. 105+13

1148.55'x[7'X((6"+4")/12x2)
+(3'X(6"/12))]x(1/27) -187.79 C.Y.

TOTAL -243.2 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.92+09 TO STA.105+00

1291'x1.33 SF x(1/27) =63.59 C.Y.

STA.105+03.55 APPROACH SLAB

176-P ITEM 611 15" REINFORCED CONCRETE APPROACH SLAB

1035 S.F. x(1/9) =115 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

1035 S.F. x(6"/12)x(1/27) =19.17 C.Y.

175-P ITEM 611 15" REINFORCED CONCRETE APPROACH SLAB

1035 S.F. x(1/9) =115 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

1035 S.F. x(6"/12)x(1/27) =19.17 C.Y.

STA.98+79.54

RAMP I

STA. 91+75 TO STA. 98+79.54

161-P ITEM 452 8"TO 9" CONCRETE PAVEMENT AS PER PLAN

STA.93+65 TO STA.98+70.56

505.56'x3'x(1/9) =168.52 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

STA.93+65 TO STA.98+70.56

505.56'X3'X((6"+4")/(12X2))X(1/27)

=23.41 C.Y.

160-P ITEM 451 9" REINFORCED CONCRETE PAVEMENT AS PER PLAN

STA.91+75 TO STA.95+90.18

415.18'x16'x(1/9) =738.10 S.Y.

STA.95+90.18 TO STA.97+40.18

150'x((16'+18')/2)x(1/9) =283.33 S.Y.

STA. 97+40.18 TO STA. 98+20

79.82'X18'X(1/9) =159.64 S.Y.

STA.97+40.18 TO STA.98+79.54

1992 SF x(1/9) =221.33 S.Y.

TOTAL =1402.40 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

STA.91+75 TO STA.95+90.18

415.18'x16'X(6"/12)X(1/27) =123.02 C.Y.

STA.95+90.18 TO STA.97+40.18

150'x((16'+18')/2)x(6"/12)x(1/27) =47.22 C.Y.

STA.97+40.18 TO STA.98+20

79.82'x18'x(6"/12)x(1/27) =26.61 C.Y.

STA.98+20 TO STA.98+79.54

1992 S.F. x(6"/12)x(1/27) =36.89 C.Y.

TOTAL =233.74 C.Y.

159-P ITEM 452 7"TO9" CONCRETE PAVEMENT MOD., AS PER PLAN

STA. 91+75 TO STA. 92+75

100'X((8'+6')/2)X(1/9) =78.00 S.Y.

STA. 92+75 TO 98+20

545'X6'X(1/9) =363.00 S.Y.

TOTAL =441.00 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

STA.91+75 TO STA.92+75

100'X[(3'X(6"/12))+(7'X(6"+4")/(12X2)X(1/27) =16.00 S.Y.

STA.92+75 TO STA.94+74.18

199.18'x[(3'x(6"/12))+(3'X(6"+4")/(12X2))]X(1/27) =20.29 C.Y

STA.94+74.18 TO STA.98+20

345.82'x[(3'x(6.75"+6")/(12x2))+(3X(6.75"+4")/(12X2))]x(1/27) =37.62 C.Y.

TOTAL =74.25 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.91+75 TO STA.92+75

100'x((1.33'+1.25')/2) S.F. x(1/27) =4.78 C.Y.

STA.92+75 TO STA.94+74.18

199.18'x1.25 S.F.X(1/27) =9.22 C.Y.

STA.94+74.18 TO STA.98+20

345.82'x1.39 SF x(1/27) =17.80 C.Y.

TOTAL =31.80 C.Y.

RAMP N

STA. 96+16.15 TO STA. 105+92.09

173-P ITEM 451 9" REINFORCED CONCRETE PAVEMENT AS PER PLAN

STA.96+16.15 TO STA.102+45

628.85'x16'x(1/9) =1117.96 S.Y.

STA. 102+45 TO STA. 105+06.53

261.53'X28'X(1/9) =813.65 S.Y.

STA.105+06.53 TO STA.105+61

AREA PLANIMETERED

2320 SF x(1/9) =257.78 S.Y.

TOTAL =2189.39 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER PLAN

STA.96+16.15 TO STA.102+45

628.85'x16'x(6"/12)x(1/27) =186.33 C.Y.

STA.102+45 TO STA. 105+06.53

261.53'X28'X(6"/12)X(1/27) =135.61 C.Y.

STA.105+06.53 TO STA.105+92.09

2320 SF x(6"/12)x(1/27) =42.96 C.Y

TOTAL =364.90 C.Y.

172-P ITEM 452 8" TO 9" CONCRETE PAVEMENT MOD., AS PER PLAN

STA.96+16.15 TO STA.99+45.53

329.38'x3'x(1/9) =109.79 S.Y.

ITEM 452 9" CONCRETE PAVEMENT MOD., AS PER PLAN

STA 99+45.53 TO STA 102+45

299.47'X4'X(1/9) =133.10 S.Y.

ITEM 310 TYPE II SUBBASE AS PER PLAN

STA. 96+16.15 TO STA. 99+45.53

329.38'X3'X((6"+4")/(12X2))X(1/27)

=15.25 CY

STA 99+45.53 TO STA 102+45

299.47'X4'X(6"/12)X(1/27) =22.18 C.Y.

TOTAL =37.43 C.Y.

PAVEMENT CALCULATIONS

CALC. BY KEA DATE 2/96
CHKD. BY D.S. DATE 3/96
HAM-75/126-9.93/13.00
OHIO
FHWA REGION 5
20Q 787

315-P ITEM 310 TYPE II SUBBASE
AS PER PLAN

(UNDER 622 CONCRETE BARRIER)

STA. 99+45.53 TO STA 105+54.27

608.74'X2'X(6"/12)X(1/27)
=22.55 C.Y.

174-P ITEM 452 7" TO 9" CONCRETE
PAVEMENT
MOD., AS PER PLAN

STA 96+16.15 TO STA 97+41.41

125.26'X8'X(1/9) =111.34 S.Y.

STA 97+41.41 TO STA 101+41.02

399.61'X7'X(1/9) =310.81 S.Y.

STA 101+41.02 TO STA 102+45

103.98'X8'X(1/9) =92.43 S.Y.

TOTAL =514.38 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA 96+16.15 TO STA 96+50

33.85'X[(3'X(6"+6.75")/(2X12))+
(5'X(6.75"+4")/(12X2)]X(1/27)
=4.81 C.Y.

STA 96+50 TO STA 97+41.41

91.43'X[5'X((6"+4")/(12X2))+
(3'X(6"/12)]X(1/27) =12.13 C.Y.

STA 97+41.41 TO STA 101+41.02

399.61X[3'X((6"+6.5')/(12X2))
+4'X((6.5'+4")/(12X2)]X(1/27)
=49.03 C.Y.

STA 101+41.02 TO STA 102+45

103.98'X[3'X((6"+6.5")/(2X12)
+5'X(6.5"+4")/(12X2)X(1/27)
=14.44 C.Y.

TOTAL =80.41 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA. 96+16.15 TO STA.96+50

33.85'x((1.25'+1.29')/2)
x(1/27) =1.59 C.Y.

STA.99+40 TO STA.100+11.07

71.07'x((1.25'+1.39')/2)
x(1/27) =3.47 C.Y.

STA.100+11.07 TO STA.105+06.53

495.46'x1.25 SF x(1/27) =22.94 C.Y.

TOTAL =28.00 C.Y.

BURKHART STREET

"I"TURNAROUND

273-P ITEM 451 9" REINFORCED CONCRETE
PAVEMENT
AS PER PLAN

AREA PLANIMETERED =332 S.F.

332 S.F.X(1/9) =36.89 S.Y.

ITEM 310 6" TYPE II SUBBASE

AS PER PLAN

(332 S.F.+(59'X1.5'))X(6"/12)
X(1/27) =7.79 C.Y.

293-P ITEM 608 4" CONC. WALK

STA. 12+07 TO STA 12+90 READING RD.

83'X4.5' =374 S.F.

315-P ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

(UNDER 622 CONC. BARRIER)

508.74'X(6"/12)X(1/27) =9.4 C.Y.

APPROACH SLABS STA.107+18.63

179-P ITEM 611 15" REINFORCED CONCRETE
APPROACH SLAB

1066 SF x(1/9) =118.44 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

1066 SF x(6"/12)x(1/27) =19.74 C.Y.

186-P ITEM 611 15" REINFORCED CONCRETE
APPROACH SLAB

STA. 107+18.63

1066 SF x(1/9) =118.44 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

1066 SF x(6"/12)x(1/27) =19.74 C.Y.

APPROACH SLABS STA.110+95.12

185-P ITEM 611 15" REINFORCED CONCRETE
APPROACH SLAB

1041 SF x(1/9) =115.67 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

1041 SF x(6"/12)x(1/27) =19.28 C.Y.

189-P ITEM 611 15" REINFORCED CONCRETE
APPROACH SLAB

STA. 110+95.12 TO STA; 11+20.12

1048 SF x(1/9) =116.44 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

1048 SF x(6"/12)x(1/27) =19.41 C.Y.

APPROACH SLABS STA. 114+19.4

198-P ITEM 611 15" REINFORCED CONCRETE
APPROACH SLAB

1048 S.F. X (1/9) =116.44 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

1048 S.F.X(6"/12)X(1/27)=19.41 C.Y.

STA. 114+19.4 TO STA. 114+44.4

204-P ITEM 611 15" REINFORCED CONCRETE
APPROACH SLAB

1048 SF x(1/9) =116.44 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

1048 SF x(6"/12)x(1/27) =19.41 C.Y.

EASTBOUND SR126 STA.106+75
TO STA.121+00

184-P ITEM 452 9"TO 10" CONCRETE
PAVEMENT
MOD., AS PER PLAN

STA.107+42 TO STA.110+94

352'x6.5'x(1/9) =254.22 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA.107+42 TO STA.110+94

352'x6.5'x(6"/12)x(1/27)=42.37 C.Y.

203-P ITEM 452 9"TO 10" CONCRETE
PAVEMENT
MOD., AS PER PLAN

STA.114+37 TO STA.121+00

663'x6.5'x(1/9) =478.33 S.Y.

SUBTRACT FOR PIER TRANSITION

((1/2X1.75'X70'X2)+(124.98'X1.75'))
X(1/9) =37.91 S.Y.

TOTAL =440.92 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA.114+37 TO STA.121+00

663'x6.5'x(6"/12)x(1/27)=79.81 C.Y.

SUBTRACT FOR PIER TRANSITION

37.91 S.Y X (6"/36) =6.32 C.Y.

TOTAL =73.49 C.Y.

187-P ITEM 451 10" REINFORCED CONCRETE
PAVEMENT
MOD., AS PER PLAN

STA.107+38 TO STA.110+89

351'x24'x(1/9) =936 S.Y.

ITEM 310 6" TYPE II SUBBASE, AS PER PLAN

AS PER PLAN

STA.107+38 TO STA.110+89

351'x24'x(6"/12)x(1/27) =156 C.Y.

183-P ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

(UNDER 622 CONCRETE BARRIER)

STA 107+19 TO STA 111+19

400'X2'X(6"/12)X(1/27) =14.81 C.Y.

ADD FOR PIER TRANSITION

((1/2)X1.75'X70'X2)
+(124.98'X1.75')X(6"/12)X(1/27)X2
=12.64 C.Y.

DEDUCT FOR I-3B INLET (2)

20'X3'X(6"/12)X(1/27)X2 =2.22 C.Y.

TOTAL =25.23 C.Y.

205-P ITEM 451 10" REINFORCED CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.114+30 TO STA.121+00

670'x24'x(1/9) =1786.67 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA.114+30 TO STA.121+00

670'x24'x(6"/12)x(1/27)=297.78 C.Y.

188-P ITEM 452 7" TO 10" CONCRETE PVMT
MOD., AS PER PLAN

STA.107+34 TO STA.110+84

350'x8'x(1/9) =311.11 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA.107+34 TO STA.110+84

350'X[(3'X (6"/12))+(5'X(6"+4")/(12X2))]X(1/27) =46.45 C.Y.

206-P ITEM 452 7"TO 10" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.114+22 TO STA.121+00

678"x8'x(1/9) =602.67 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA.114+22 TO STA.121+00

678'x[(3'X(6"/12))+(5'X(6"+4")/(12x2))]X(1/27) =89.99 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.118+00 TO STA.121+00

300"x1.33 SF x(1/27) =14.78 C.Y.

WESTBOUND SR126 STA.106+75
TO STA.121+00

181-P ITEM 451 10" REINFORCED CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.107+49 TO STA.111+03

354'x24'x(1/9) =944.00 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA.107+43.63 TO STA.110+95.12

354'x24'x(6"/12)x(1/27)=157.33 C.Y.

182-P ITEM 452 9"TO 10" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.107+45 TO STA.110+98
353'x6.5'x(1/9) =254.94 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA.107+45 TO STA.110+98

353'x8'x(6"/12)x(1/27) =52.29 C.Y.

180-P ITEM 452 7" TO 10" CONCRETE PVMT
MOD., AS PER PLAN

STA.107+54 TO STA.111+08

354''x8'x(1/9) =314.67 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA.107+54 TO STA.111+08

354'x[(3'x(6"+7.25")/(12x2))+(5'X(7.25"+4")/(12X2))]X(1/27) =52.44 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.107+54 TO STA.111+08

354'x1.33 SF x(1/27) =17.44 C.Y.

202-P ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

(UNDER 622 CONCRETE BARRIER)

STA 114+15.52 TO STA 121+00

684'X2'X(6"/12)X(1/27) =25.33 C.Y.

ADD FOR PIER TRANSITION

(((1/2)X1.75'X70'X2)+(124.98'X1.75'))X(6"/12)X(1/27)X2 =12.64 C.Y.

DEDUCT FOR I-3B INLET(2)

20'X6.5'X(6"/12)X(1/27) =-2.40 C.Y.

TOTAL =35.57 C.Y.

201-P ITEM 452 9"TO 10" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.114+43 TO STA.121+00

657'x6.5'x(1/9) =474.5 S.Y.

SUBTRACT FOR PIER TRANSITION

((1/2)X1.75'X70'X2)+124.98'X1.75')X(1/9) =-37.91 S.Y.

TOTAL =436.59 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA.114+43 TO STA.121+00

657'x6.5'x(6"/12)x(1/27)=79.08 C.Y.

SUBTRACT FOR PIER TRANSITION

37.91 S.Y. X(6"/36) =-6.32 C.Y.

TOTAL =72.76 C.Y.

200-P ITEM 451 10" REINFORCED CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.114+50 TO STA.121+00

650'x24'x(1/9) =1733.33 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA.114+50 TO STA.121+00

650'x24'x(6"/12)x(1/27)=288.89 C.Y.

199-P ITEM 452 7"TO 10" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.114+58 TO STA.121+00

642'x8'x(1/9) =570.67 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA.114+58 TO STA. 121+00

642'x[(3'x(6"+7.25")/(12x2))+(5X(7.25"+4")/(12X2))]x(1/27) =95.11 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.114+58 TO STA. 121+00

642x1.33 SF x(1/27) =31.62 C.Y.

DRIVE A STA.1+00 TO STA. 5+66.82

195-P ITEM 451 9" REINFORCED CONCRETE PAVEMENT
AS PER PLAN

STA.1+00 TO STA.4+80.33

380.33SF x36'X(1/9) =1521.32 S.Y.

STA.1+24 TO STA.2+18

AREA RIGHT PLANIMETERED

1880 S.F. X (1/9) =208.89 S.Y.

STA.4+80.33 TO STA.5+66.82

AREA PLANIMETERED

4320 S.F. x(1.9) =480 S.Y.

TOTAL =2210.21 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA.1+00 TO STA.4+80.33

380.33'X39'X(6"/12)X(1/27) =274.7 C.Y.

STA.1+24 TO STA.2+18

AREA RIGHT PLANIMETERED

204 S.F.'X(6"/12)X(1/27)= 3.78 C.Y.

STA.4+80.33 TO STA.5+66.82

4619 SF x(6"/12)x(1/27) =85.54 C.Y.

TOTAL =364.02 C.Y.

197-P ITEM 608 4" CONCRETE WALK

STA.1+68 TO (GALBRAITH RD. STA. 7+78.65)

457.96'x4.5' =2061 S.F.

DRIVE "A"

STA. 6+16.40 TO STA. 7+16.62

196-P ITEM 451 9" REINFORCED CONCRETE PAVEMENT
AS PER PLAN

AREA PLANIMETERED

4736 S.F. X(1/9) =526.23 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

AREA PLANIMETERED

5110.10 S.F.X(6"/12)X(1/27) =94.63 C.Y.

265-P STA. 6+78.18 TO STA. 7+16.62

ITEM 404 1 1/4" ASPHALT CONCRETE

(1/2)X2.55'X37.97'X(1.25"/12)
X(1/27) =0.19C.Y.

ITEM 408 BIT. PRIME COAT

(1/2)X2.55'X37.97'X(1/9)X0.4 GAL/
S.Y. =2.16 GAL.

ITEM 304 6" AGG. BASE
AS PER PLAN

(1/2)X2.55'X37.97'X(6"/12)X(1/27)
=0.90 C.Y.

(GALBRAITH RD. STA. 5+43.15) TO
STA. 11+00.11

190-P ITEM 404 1 1/4" ASPHALT CONCRETE

STA. 5+38.74 TO STA. 6+50.31

111.57'X((44'+48')/2)X(1.25"/12)
X(1/27) =19.80 C.Y.

STA. 6+50.31 TO STA. 11+00.11

449.80'X48'X(1.25"/12)X(1/27)
=83.30 C.Y.

TOTAL =103.10 C.Y

ITEM 402 1 3/4" ASPHALT CONCRETE

STA. 5+43.15 TO STA. 6+50.31

111.57'X((44'+48')/2)X(1.75"/12)
X(1/27) =27.72 C.Y.

STA. 6+50.31 TO STA.11+00.11

449.80'X48'X(1.76"/12)X(1/27)
=116.61 C.Y.

TOTAL =144.33 C.Y.

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304 6" AGG. BASE
AS PER PLAN

STA. 5+43.15 TO STA. 5+80.08

36.93'X(44'+45.38')/2X(1/9)
=183.38 S.Y.

183.38 S.Y.X(6"/12X3) =30.54 C.Y.

408 BIT. PRIME COAT

183.2 S.Y. X 0.4 GAL/S.Y. =73.2 GAL

STA. 5+80.08 TO STA. 11+00.11

ITEM 407 TACK COAT

(144.33-30.34)C.Y./(1.75/12)
=780.27 S.Y.

780.27S.F.X(1/9) =86.70 S.Y.

86.707 S.Y. X0.10 GAL/S.Y.
=8.70 GAL

ITEM 407 COVER AGGREGATE

86.70 S.Y. X 7#/S.Y. X
(1TON/2000#) =.3 TON

ITEM 305 8" CONCRETE BASE
AS PER PLAN

STA. 5+80.08 TO STA. 6+50.31

70.23'X(45.38'+48')/2)X(1/9)
=364.30 S.Y.

STA. 6+50.31 TO STA. 11+00.11

449.80'X48'X(1/9) =2398.93 SY

TOTAL =2763.00 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA. 5+43.15 TO STA. 11+00.11

(2969.18 S.Y. +(855.18'X1.5')/9)X
(6"/(12X3)) =518.62 C.Y.

APPROACH SLAB STA.11+00.11

194-P ITEM 611 15" REINFORCED CONCRETE
APPROACH SLAB

1169 S.F. x(1/9) =129.89 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

1169 S.F.x(6"/12)x(1/27)=21.65 C.Y.

287-P ITEM 608 4" CONCRETE WALK

STA. 5+34 TO STA. 6+73 GALBRAITH RD

124'X4' =496 S.F.

14'X6.5' =91 S.F.

TOTAL =587 S.F.

GALBRAITH ROAD

TO STA.21+32.68

APPROACH SLAB STA.15+15.41

214-P ITEM 611 15"REINFORCED CONCRETE
SLAB

1169 SF x(1/9) =129.89 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

1169 SF x(6"/12)x(1/27) =21.65 C.Y.

216-P ITEM 404 1.25" ASPHALT CONCRETE

STA.15+40.41 TO STA.18+59.63

319.22'x48'x(1.25"/12)X(1/27)
=59.11 C.Y.

STA.18+59.63 TO STA.20+75

215.37'x((48'+30')/2)x(1.25"/12)X
(1/27) =32.41 C.Y.

SUBTRACT FOR PORTION OF TRAFFIC
ISLAND

92 S.F.X(1.25"/12)X(1/27)=-.35 C.Y.

STA. 20+75 TO STA. 21+00

25'X30'X(1.25"/12)X(1/27) =2.89C.Y.

TOTAL =94.06 C.Y.

ITEM 402-1 3/4" ASPHALT CONCRETE

(94.41 C.Y./1.25)X1.75 =132.17 C.Y.

SUBTRACT FOR PORTION OF TRAFFIC
ISLAND

92 S.F.X(1.75"/12)X(1/27)=-.50 C.Y.

TOTAL =131.67 C.Y.

ITEM 407 TACK COAT

STA.15+40.41 TO STA.18+59.63

319.22'X48'X(1/9) =1702.51 S.Y

STA.18+59.63 TO STA.20+75

215.37'X((48'+30')/2)X(1/9)
=933.27 S.Y.

SUBTRACT FOR PORTION OF TRAFFIC
ISLAND

92 S.F. X(1/9) =10.22 S.Y.

STA. 20+75 TO STA. 21+00

25'X30'X(1/9) =83.33 S.Y.

TOTAL AREA =2708.89 S.Y.

TACK COAT

2708.89 S.Y.X.1 GAL/S.Y.
=270.89 GAL

COVER AGGREGATE

2708.89 S.Y.X(7#/S.Y.)X(1TON/2000#)
=9.48 TON

ITEM 305 8" CONCRETE BASE
AS PER PLAN

(2708.89 S.Y.)

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

(2708.89 S.Y.+(765.96'X1.5')/9)
X(6"/(12X3)) =472.76 C.Y.

267-P ITEM 404 1.25" ASPHALT CONCRETE

STA.21+00 TO STA.21+20

20'x30'x(1.25"/12) =2.31 S.Y.

ITEM 407 TACK COAT

STA.21+00 TO STA.21+20

20'x30'x(1/9)x.10 GAL =6.67 GAL

ITEM 407 COVER AGGREGATE

20'X30'X(1/9)X(7#/S.Y.)X
(1TON/2000#) =.23 TON

EASTBOUND SR126 STA.121+00
TO STA.130+00

212-P ITEM 451 10" REINFORCED CONCRETE
PAVEMENT
MOD., AS PER PLAN

STA.121+00 TO STA.130+00

900'x24'x(1/9) =2400 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA.121+00 TO STA.130+00

900'x24'x(6"/12)x(1/27) =400 C.Y.

213-P ITEM 452 7"TO 10" CONCRETE
PAVEMENT
MOD., AS PER PLAN

STA.121+00 TO STA.130+00

900'x8'x(1/9) =800 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA.121+00 TO STA.130+00

900'x[(5'x("6+4")/(12x2))+
(5'X(6"/12))]X(1/27) =152.77 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.121+00 TO STA.130+00

900'x1.33 SF x(1/27) =44.33 C.Y.

211-P ITEM 452 9"TO 10" CONCRETE
PAVEMENT
MOD., AS PER PLAN

STA.121+00 TO STA.130+00

900'x6.5'x(1/9) =650 S.Y.

SUBTRACT FOR BRIDGE PIER TRANSITION

(((1/2)X1.75'X70'X2)+(35.5'X1.75'))

X(1/9)= -20.51 S.Y.

TOTAL =629.49 SY

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA.121+00 TO STA.130+00

900'x6.5'x(6"/12)x(1/27)
=108.33 C.Y.

SUBTRACT FOR BRIDGE PIER TRANSITION

20.51 S.Y.X(6"/36) =-3.42 C.Y.

TOTAL =104.91 C.Y.

210-P ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

(UNDER 622 CONCRETE BARRIER)

STA 121+00 TO STA 130+00

900'X3'X(6"/12)X(1/27) =50.00 C.Y.

ADD FOR BRIDGE PIER TRANSITION

(((1/2)X1.75'X70'X2)+(35.5'X1.75'))

X2X(6"/12)X(1/27) =6.84 C.Y.

SUBTRACT FOR I-3B INLET (3)

20'X3'X(6"/12)X3X(1/27) =-3.33 C.Y.

TOTAL =53.51 C.Y.

WESTBOUND SR126 STA.121+00
TO STA.130+00

209-P ITEM 452 9"TO 10" CONCRETE
PAVEMENT
MOD., AS PER PLAN

900'X6.5'X(1/9) =650 SY

SUBTRACT FOR BRIDGE PIER TRANSITION

(((1/2)X1.75'X70'X2)+(35.5'X1.75'))

X(1/9)= -20.51 S.Y.

TOTAL =629.49 S.Y.

ITEM 310 6" TYPE II SUBBASE AS PER
PLAN

900'x6.5'x(6"/12)x(1/27)
=108.33 C.Y.

SUBTRACT FOR BRIDGE PIER TRANSITION

20.51 S.Y. X (6"/36) =-3.42 C.Y.

TOTAL =104.91 C.Y.

208-P ITEM 451 10" REINFORCED CONCRETE
PAVEMENT
MOD., AS PER PLAN

900'x24'x(1/9) =2400 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

900'x24'x(6"/12)x(1/27) =400 C.Y.

207-P ITEM 452 7"TO 10" CONCRETE
PAVEMENT
MOD., AS PER PLAN

900'x8'x(1/9) =800 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

900'x[(5'x(7.25"+4")/(12x2)+
(3'X(6.75"+7.25")/(12X2))]
X(1/27) =133.33 CY

ITEM SPL DRAINAGE CONNECTION

900'x1.33 SF x(1/27) =44.33 C.Y.

RAMP P STA.123+99.77 TO STA.130+35

APPROACH SLAB STA.125+44.32

219-P ITEM 611 15" REINFORCED CONCRETE
APPROACH SLAB

AREA PLANIMETERED

700 SF x(1/9) =77.78 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

700 SF x(6"/12)x(1/27) =12.96 C.Y.

APPROACH SLAB STA.128+04.94

230-P ITEM 611 15" REINFORCED CONCRETE
APPROACH SLAB

AREA PLANIMETERED

654 SF x(1/9) =72.67 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

654 SF x(6"/12)x(1/27) =12.11 C.Y.

220-P ITEM 451 9" REINFORCED CONCRETE
PAVEMENT
AS PER PLAN

STA.124+76.10 TO STA.125+50

[58.90'x29'+((1'X30')+2967 S.F.)
+15'X((29'+29.66')X(1/2)]X(1/9)
=571.67 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

[571.67' S.Y.X(6"/3X12)]+[((58.90'
+15')X2')+(186'X1')] X(6"/12)
X(1/27) =101.5 C.Y.

232-P ITEM 451 9" CONCRETE PAVEMENT
AS PER PLAN

STA.128+43 TO STA.130+35

192'X16'X(1/9) =341.33 SY

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

192'x16'x(6"/12)X(1/27) =56.89 C.Y.

233-P ITEM 452 8"TO 9" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.128+59 TO STA.130+35

176'x3'x(1/9) =58.66 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

176'X(3'X(6"+7")/(12X2))X(1/27)
=10.59 C.Y.

ITEM SPL DRAINAGE CONNECTION

176'x.87 SF x(1/27) =5.67 C.Y.

231-P ITEM 452 7" TO 9" CONCRETE PVMT
MOD., AS PER PLAN

STA.128+24 TO STA.130+35

211'x7'x(1/9) =164.11 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA.128+24 TO STA.130+35

211'X(7'X(6"+4")/(2X12))X(1/27)
=22.79 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.128 TO STA.130+35

185'x1.25 SF x(1/27) =8.56 C.Y.

RAMP Q STA.125+41.5 TO STA.129+65

268-P ITEM 451 9" REINFORCED CONCRETE
PAVEMENT
AS PER PLAN

STA.125+20.64 TO STA.126+56.49

AREA PLANIMETERED

4518 SF x(1/9) =502 S.Y.

ITEM 310 6" TYPE II SUBBASE

AS PER PLAN

4518 SF x(6"/12)x(1/27) =83.67 C.Y.

261-P ITEM 612 CONCRETE MEDIAN,STD

STA. 125+39 TO STA. 125+76

AREA PLANIMETERED ON 20 SCALE
DETAIL

734 S.F.X(1/9) =81.55 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

734 S.F.X(6"/12)X(1/27) =13.59 C.Y.

225-P ITEM 451 9" REINFORCED CONCRETE
PAVEMENT
AS PER PLAN

STA.126+56.49 TO STA.129+65

308.51'x16'x(1/9) =548.46 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

308.51'x16'x(6"/12)x(1/27)
=91.41 C.Y.

224-P ITEM 452 8"TO 9" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.125+63.50 TO STA.129+65

401.5'x3'x(1/9) =133.83 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA.125+63.5 TO STA.126+50

86.5'x(3'x(7+6)/(12x2))X(1/27)
=5.21 C.Y.

STA.126+50 TO STA.126+75

25'x(3'x(4"+6")/(12x2))x(1/27)
=1.16 C.Y.

STA.126+75 TO STA.129+65

290'x(3'x(4"+6")/(12x2))x(1/27)
=13.43 C.Y.

TOTAL =19.80 C.Y.

226-P ITEM 452 7" TO 9" CONCRETE PVMT MOD., AS PER PLAN

STA.126+85 TO STA.127+00

15'X(2'+6')/2 =60 S.F.

60 S.F. x(1/9) =6.67 S.Y.

STA.127+00 TO STA.129+35

235'x6'x(1/9) =156.67 S.Y.

TOTAL =163.33 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA.126+85 TO STA.127+00

60 S.F. x((4+6)/(12x2))x(1/27)
=1.16 C.Y.

STA.127+00 TO STA.129+35

235'x(3'x(4"+6")/(12x2))+
(3'X(6"/12))x(1/27) =23.94 C.Y.

TOTAL =25.10 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA. 126+90 TO STA.129+35

245'x1.25 SF x(1/27) =11.34 C.Y.

DRIVE B

STA.1+75.37 TO STA. 6+20.67

229-P ITEM 451 9" REINFORCED CONCRETE PAVEMENT
AS PER PLAN

STA. 1+75.37 TO STA. 2+00.96

24.63'X((22'+24')/2)X(1/9)
=62.94 S.Y.

STA. 2+00 TO STA. 3+79.60
179.60'X24'X(1/9) =479.93 S.Y.

STA 3+79.60 TO STA 5+60.43

180.83'X(24'+36')/2X (1/9)
=602.77 S.Y.

STA 5+60.43 TO STA 5+95.67

35.24'X36'X(1/9) =140.96 S.Y.

STA. 5+95.67 TO STA. 6+20.67
AREA PLANIMETERED
1168 S.F.X(1/9) =129.78 S.Y.

TOTAL =1416.38 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA. 1+75.37 TO 5+95.48

[(1416.38 S.Y.X(6"/12X3))
+(462.59'X1.5'X(6"/12))]X(1/27)
=248.90 C.Y.

1'STRIP THRU PARKING LOT

STA. 1+71.70 TO STA. 3+96 RT.

STA. 1+78.64 TO STA. 3+75 LT.

420.66'X1' =420.66 S.F.

ITEM 404 3" ASPHALT CONCRETE

420.66 S.F. X(3"/12)X(1/27)
=3.90 C.Y.

ITEM 301 12" BIT. AGG. BASE

420.66 S.F. X1'X(1/27) =15.58 C.Y.

228-P AREA RT. OF DRIVE B

STA. 3+96 TO 4+23

AREA PLANIMETERED =632 S.F.

ITEM 404 1 1/4" ASPHALT CONCRETE

308 S.F. X (1.25"/12)X(1/27)
=1.19 C.Y.

ITEM 408 PRIME COAT

308 S.F.X(1/9)X(0.4 GAL/S.Y.)
=13.69 GAL

ITEM 304 5" AGGREGATE BASE
AS PER PLAN

308 S.F.X(5"/12)X(1/27) =4.75 C.Y.

223-P 608 4" CONCRETE WALK

STA. 3+75 TO STA. 6+20.67

260.53'X3' =781.59 S.F.

KNOLLCREST DRIVE
STA.0+89.83 TO STA.9+75

254-P ITEM 404 1.25" ASPHALT CONCRETE

STA.0+89.83 TO STA.1+24.90

AREA PLANIMETERED =1648 S.F.

STA.1+24.90 TO STA.3+58.5

233.6'X32' =7475.2 S.F.

TOTAL =9123.2 S.F.

ITEM 404 1.25" ASPHALT CONCRETE

9123.20 S.F.X(1.25"/12)X(1/27)
=35.20 C.Y.

ITEM 402 1.75" ASPHALT CONCRETE

9123.20 S.F.X(1.75"/12)X(1/27)
=49.28 C.Y.

ITEM 408 PRIME COAT

9123.20 S.F. X(1/9)X(0.4 GAL/S.Y.)
=405.5 GAL

ITEM 304 6" AGG. BASE
AS PER PLAN

9123.20 S.F.X(6"/12)X(1/27)
=168.95 C.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

(9123.20 S.F.+(601.5'X3.5'))X
(6"/12)X(1/27) =207.93 C.Y.

APPROACH SLAB STA.3+58.51

252-P ITEM 611 15" REINFORCED CONCRETE APPROACH SLAB

880 SF x(1/9) =97.78 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

880 SF x(6"/12)x(1/27) =16.30 C.Y.

APPROACH SLAB STA.6+78.77

251-P ITEM 611 15" REINFORCED CONCRETE APPROACH SLAB

936 SF x(1/9) =104 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

936 SF x(6"/12)x(1/27) =17.33 C.Y.

249-P ITEM 404 1.25" ASPHALT CONCRETE

STA.7+03.77 TO STA.9+75

271.23'X32' =8,679 S.F.

8679 S.F.X(1.25"/12)X(1/27)
=33.49 C.Y.

ITEM 402 1.75" ASPHALT CONCRETE

8679 S.F.X(1.75"/12)X(1/27)
=46.88 C.Y.

ITEM 408 PRIME COAT

8679 S.F.X(1/9)X(0.4 GAL/S.Y.)
=385.7 GAL.

ITEM 304 6" AGG. BASE
AS PER PLAN

8679 S.F.X(6"/12)X(1/27)
=160.73 C.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

(8679 S.F.+(191'X2.5')+
(351.46X3.5'))X(6"/12)X(1/27)
=211.59 C.Y.

KODAK DRIVE

STA.1+13.31 TO STA.1+28

279-P ITEM 404 1.25" ASPHALT CONCRETE

358 SF x(1.25"/12)X(1/27)=1.38 C.Y.

ITEM 402 1.75" ASPHALT CONCRETE

358 S.F.X(1.75"/12)X(1/27)
=1.93 C.Y.

ITEM 408 PRIME COAT

358 SF x(1/9)x.40 GAL =15.91 GAL

ITEM 304 6" AGGREGATE BASE
AS PER PLAN

358 SF x(6"/12)x(1/27) =6.63 C.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

358 S.F.X(6"/12)X(1/27) =6.63 C.Y.

MCLEAN DRIVE

STA.0+18.81 TO STA.0+74

296-P ITEM 404 1.25"ASPHALT CONCRETE

AREA PLANIMETERED =1840 S.F.

1840 SFx(1.25"/12)X(1/27)=7.10 C.Y.

ITEM 402 1.75" ASPHALT CONCRETE

1840 S.F.X(1.75"/12)X(1/27)=
9.94 C.Y.

ITEM 408 PRIME COAT

1840 SFx(1/9)x.40 GAL=81.78 GALLONS

ITEM 304 6" AGGREGATE BASE
AS PER PLAN

1840 SF x(6"/12)x(1/27)= 34.07 C.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

1840 S.F.X(6"/12)X(1/27)=34.07 C.Y.

HONEYWELL DRIVE
STA.0+18.5 TO STA.1+17

295-P ITEM 404 1.25"ASPHALT CONCRETE
AREA PLANIMETERED

3466 SF x(1.25"/12)X(1/27)
=13.37 C.Y.

ITEM 402 1.75" ASPHALT CONCRETE

3466 S.F.X(1.75"/12)X(1/27)
=18.72 C.Y.

ITEM 408 PRIME COAT

3466 SF x(1/9)x.40 GAL =154.04 GAL

ITEM 304 AGGREGATE BASE
AS PER PLAN

3466 SF x(6"/12)x(1/27) =64.19 C.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

3466 S.F.X(6"/12)X(1/27)=64.19 C.Y.

RAMP Q STA.129+65
TO STA.134+50

245-P ITEM 451 9"REINFORCED CONCRETE
PAVEMENT
AS PER PLAN

STA.129+65 TO STA.134+50

485'x16'x(1/9) -862.22 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA.129+65 TO STA.134+50

485'x16'x(6"/12)x(1/27)-143.70 C.Y.

244-P ITEM 452 8"TO 9" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.129+65 TO STA.131+50

185'x3'x(1/9) -61.67 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA.129+65 TO STA.131+50

185'x3'x((6"+4")/(12x2))
x(1/27) -8.56 C.Y.

246-P ITEM 452 7" TO 9" CONCRETE PVMT
MOD., AS PER PLAN

STA.129+65 TO STA.134+50

((385'X6')+(100'X(6'+8')/2)X(1/9)
-334.00 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

385'X3'X[(6"/12)+(6"+4")/(2X12)]
(1/27) -39.21 C.Y.

STA. 133+50 TO STA. 134+50

100'X[3'X(6"/12)+((3'+4')/2)X
(6"+4")/(2X12)]X(1/27) -10.96 C.Y.

TOTAL -50.20 C.Y.

STA.129+65 TO STA.134+50

ITEM SPL DRAINAGE CONNECTION

STA.129+65 TO STA.134+50

485'x1.25 SF x(1/27) -22.45 C.Y.

RAMP P STA.130+35 TO STA.133+21.21

235-P ITEM 451 9" REINFORCED CONCRETE
PAVEMENT
AS PER PLAN

STA.130+35 TO STA.133+21.21

286.21'x16'x(1/9) -508.82 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA.130+35 TO STA.133+21.21

286.21x16'x(6"/12)x(1/27)
-84.80 C.Y.

236-P ITEM 452 8"TO 9" CONCRETE PAVEMENT
AS PER PLAN

STA.130+35 TO STA.133+21.21

286.21'x3'x(1/9) -95.40 C.Y.

ITEM 310 TYPE II SUBBASE AS PER
PLAN

286.21x(3'X(6"+4")/(2X12))X(1/27)
-13.25 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.130+35 TO STA.131+60.15

25.15'x.87 SF x(1/27) -.81 C.Y.

STA.131+60.15 TO STA.133+21.21

261.06'x1 SF x(1/27) -9.67 C.Y.

TOTAL -10.48 C.Y.

234-P ITEM 452 7"TO 9" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA.130+35 TO STA.133+21.21

[186.21'X6'+100'X(6'+8')/2]X(1/9)
-201.92 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA.130+35 TO STA.131+60.15

125.15'X[3'X(6"/12)+3'X(6"+4")/
(12X2)]X(1/27) -12.75 C.Y.

STA 131+60.15 TO STA. 132+21.21

61.06'X[(3'X(6"+6.75")/(12X2))+3'
X(6.75"+4")/(12X2)]X(1/27)
-6.64 C.Y.

STA.132+21.21 TO STA. 133+21.21

100'X[3'X((6"+6.75")/(12X2))+
((3'+5')/2)X(6.75"+4")/(12X2)]
X(1/27) -12.54 C.Y.

TOTAL -31.93 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.130+35 TO STA.131+60.15

125.15'x1.25x(1/27) -5.79 C.Y.

STA.131+60.15 TO STA.132+21.21

61.06'x1.39x(1/27) -3.14 C.Y.

STA. 132+21.21 TO STA. 133+21.21

100'X((1.39 S.F.+1.33 S.F.)/2)X
(1/27) -5.04 C.Y.

TOTAL -13.97 C.Y.

EASTBOUND SR126 STA.130+00
STA.139+00

242-P ITEM 452 10"TO 7" CONCRETE
PAVEMENT
MOD., AS PER PLAN

STA. 130+00 TO STA. 131+50

150'X8'X(1/9) -133.33 S.Y.

ITEM 452 10" TO 9" CONCRETE
PAVEMENT
MOD., AS PER PLAN

STA. 131+50 TO STA. 134+50

AREA PLANIMETERED

4800 S.F.X(1/9) -533.33 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA. 130+00 TO STA. 134+50

666.66 S.Y.X(6"/(12X3))-111.11 C.Y.

ITEM SPL DRAINAGE CONNECTION

148'X1.33 S.F.X(1/27) -7.30 C.Y.

243-P ITEM 452 10" TO 9" CONCRETE
PAVEMENT
MOD., AS PER PLAN

STA 130+00 TO STA 131+98.28

198.28'X6.5'X(1/9) -143.20 S.Y.

STA 131+98.28 TO STA 132+75

76.72'X(6.5'+6.15')/2X(1/9)
-53.92 S.Y.

STA 132+75 TO STA 133+45

70'X(6.15'+4.09')/2 X(1/9)
-39.982 S.Y.

STA 133+45 TO STA 133+80

35'X(4.09'+3.93')/2X(1/9)
-15.59 S.Y.

STA 133+80 TO STA 134+20

40'X(3.93'+4.24')/2 X(1/9)
-18.16 S.Y.

STA 134+20 TO STA 134+45

25'X(4.24'+4.13')/2 X(1/9)
-11.63 S.Y.

STA 134+45 TO STA 134+55

10'X(4.13'+4.08')/2 XS(1/9)
-4.56 S.Y.

STA 134+55 TO STA 135+05

50'X(4.08'+5.11')/2X(1/9)
-25.53 S.Y.

STA.135+05 TO STA.137+59.79

254.79'X(5.11'+3.95')/2 X(1/9)
-128.24 S.Y.

TOTAL -440.65 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

440.65 S.Y. X(6"/36) -73.44 C.Y.

241-P ITEM 612 CONCRETE MEDIAN

STA. 137+59.79 E.B. TO
STA. 138+59.79 E.B.

STA. 137+62.03 W.B. TO
STA. 138+62.03 W.B

2X100'X((3.95'+3.50')/2)X(1/9)
-82.78 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA. 137+59.79 E.B. TO
STA. 138+59.79 E.B.

STA. 137+62.03 E.B. TO
STA. 138+62.03 W.B.

2X100'X((5.40'+5.0')/2)X(6"/12)
X(1/27) -19.26 C.Y.

247-P ITEM 451 10" REINFORCED CONCRETE
PAVEMENT
MOD., AS PER PLAN

STA. 130+00 TO STA. 138+59.79

859.79'X24'X(1/9) -2292.77 S.Y.

STA. 134+50 TO STA. 138+59.79

AREA PLANIMETERED

RAMP "Q" ACCELERATION LANE

7474 S.F. X(1/9) -830.44

TOTAL -3123.22 S.Y.

ITEM 451 10" REINFORCED CONCRETE
PAVEMENT
AS PER PLAN

STA 138+62.03 TO STA 139+00

37.97'X(14.75'+13.8')X(1/2)X(1/9)
-60.22 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA. 130+00 TO STA. 138+59.79

2292.77 S.Y. X(6"/(12X3))
-382.13 C.Y.

STA. 134+50 TO STA. 139+00

AREA PLANIMETERED

(8016 S.F.X(6"/12))X(1/27)
-148.44 C.Y.

TOTAL -530.57 C.Y.

280-P ITEM 452 7" TO 10" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA. 134+50 TO STA. 138+59.79

409.79'X8'X(1/9) =364.26 S.Y.

ITEM 452 7" TO 10" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA. 138+62.03 TO STA. 139+00

37.97' X8'X(1/9) =33.75 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA. 134+50 TO STA. 138+59.79

STA. 138+62.03 TO STA. 139+00

447.76'X(5'X(7.25"+4")/(12X2))
X(1/27) =38.66 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA. 134+50 TO STA. 138+59.79

STA. 138+62.03 TO STA. 139+00

447.76'X1.33 S.F. X(1/27)
=22.06 C.Y.

WESTBOUND SR126

STA. 130+00 TO STA. 139+00

239-P ITEM 452 10" TO 9" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA 130+00 TO STA 131+98.28

198.28'X6.5'X(1/9) =143.20 S.Y.

STA 131+98.28 TO STA 132+75

76.72'X(6.5'+6.15')/2 X(1/9)
=53.92 S.Y.

STA 132+75 TI STA 133+45

70'X(6.15'+4.09')/2 X(1/9)
=39.82 S.Y.

STA 133+45 TO STA 133+80

35'X(4.09'+3.93)/2 X(1/9)
=15.59 S.Y.

STA 133+80 TO STA 134+20

40'X(3.93'+4.24')/2 X(1/9)
=18.16 S.Y.

STA 134+20 TO STA 134+45

25'X(4.24'+4.13')/2 X(1/9)
=11.63 S.Y.

STA 134+45 TO STA 134+55

10'X(4.13'+4.08')/2 X(1/9)
=4.56 S.Y.

STA 134+55 TO STA 135+05

50'X(4.08'+5.11')/2 X(1/9)
=25.53 S.Y.

STA 135+05 TO STA 137+62.03

257.03'X(5.11'+3.95')/2 X(1/9)
=129.37 S.Y.

TOTAL =441.78 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

441.78 S.Y. X(6"/36) =73.63 C.Y.

240-P ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

(UNDER 622 CONCRETE MEDIAN)

STA 130+00 TO STA 132+75

275'X3'X(6"/12)X(1/27) =15.28 C.Y.
STA 132+75 TO STA 133+45

70'X((3'+6.5')/2)X(6"/12)X(1/27))
=6.16 C.Y.

STA 133+45 TO STA 134+20

75'X((6.5'+5.5')/2)X(6"/12)X(1/27)
=8.33 C.Y.

STA 134+20 TO STA 134+45

25'X5.5'X(6"/12)X(1/27) =2.55 C.Y.

STA 134+45 TO STA 134+55
(10' FOR SIGN)

STA 134+55 TO STA 135+05

50'X((5.5'+3')/2)X(6"/12)X(1/27)
=3.94 C.Y.

STA 135+05 TO STA 138+62.03

357.03'X3'X(6"/12)X(1/27)
=19.84 C.Y.

DEDUCT FOR I-3B INLET (1)

20'X3'X(6"/12)X(1/27) =-1.11 C.Y.

TOTAL =54.99 C.Y.

238-P ITEM 451 10" REINFORCED CONCRETE PAVEMENT
MOD., AS PER PLAN

STA. 130+00 TO STA. 138+62.03

862.03'X24'X(1/9) =2298.75 S.Y.

STA. 133+24.51 TO STA. 138+62.03

AREA PLANIMETERED

RAMP "P" DECELERATION LANE

8868 S.F. X(1/9) =985.37 S.Y.

TOTAL =3284.12 S.Y.

ITEM 451 10" REINFORCED CONCRETE PAVEMENT
AS PER PLAN

STA 138+62.03 TO STA 139+00

37.9'X12'X(1/9) =50.63 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA. 130+00 TO STA. 139+00

3334.75 S.Y. X(6"/(12X3))
=555.79 C.Y.

237-P ITEM 452 7"TO 10" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA. 130+00 TO STA. 131+74.51

174.51'X8'X(1/9) =155.12 S.Y.

STA.131+74.51 TO STA. 132+24.51

50'X(8'+10')X(1/2)X(1/9) =50 S.Y.

STA. 132+24.51 TO STA.133+24.51

100'X10'X(1/9) =111.11 S.Y.

TOTAL =316.23 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA. 130+00 TO STA. 131+74.51

174.51'X((3'X(6"+7.25")/(2X12))
+5'X(7.25"+4")/(12X2)X(1/27)
=25.85 C.Y.

STA. 131+74.51 TO STA. 131+74.51

50'X[(3'X(6"+7.25")/(12X2)+
((5'+7')/2)X(7.25"+4")/(12X2)
X(1/27)] =8.28 C.Y.

STA. 132+24.51 TO STA. 133+24.51

100'X[(3'X(6"+7.25")/(2X12))+(7'
X(7.25"+4")/(2X12))]X(1/27)
=18.29 C.Y.

TOTAL =52.42 C.Y.

ITEM SPL DRAINAGE CONNECTION

324.51'X1.33 S.FX(1/27) 15.99 C.Y.

276-P ITEM 452 7"TO 10" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA. 133+21.21 "P" TO
138+62.03

540.82'X8'X(1/9) =480.73 SY

ITEM 452 7" TO 10" CONCRETE PAVEMENT
MOD., AS PER PLAN

STA 138+62.03 TO STA 139+00

37.97'X8'X(1/9) =33.75 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

578.79'X[(3'X(6"+7.25")/(12X2)
+(5'X(7.25"+4")/(12X2))]X(1/27)
=85.75 C.Y.

ITEM SPL DRAINAGE CONNECTION

578.79'X1.33 S.F.X(1/27)=28.51 C.Y.

EASTBOUND SR126 STA.139+00
TO STA.143+58

259-P ITEM 451 10" REINFORCED CONCRETE PAVEMENT
AS PER PLAN

STA.139+00 TO STA.142+52.24

352.24'X((13.80'+5'/2)X(1/9)
=367.90 S.Y.

STA. 142+52.24 TO STA. 143+52.24

100'X((5'+0')/2)X(1/9) =27.78 S.Y.

TOTAL =395.68 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA.139+00 TO STA.142+52.24

352.24'x((13.80'+5')/2)x(6"/12)
x(1/27) =61.32 C.Y.

STA. 142+52.24 TO STA. 143+52.24

100'X((5'+0')/2)X(6"/12)X(1/27)
=4.63 C.Y.

TOTAL =65.95 C.Y.

260-P ITEM 452 7"TO 10" CONCRETE PAVEMENT

MOD., AS PER PLAN

STA.139+00 TO STA.142+52.24

352.24'x8'x(1/9) =313.10 S.Y.

STA.142+52.24 TO STA.143+52.24

100'x((8'+2.5')/2)X(1/9)=58.33 S.Y.

STA. 143+52.24 TO STA. 143+58

5.76'X2.5'X(1/9) =1.60 S.Y.

TOTAL =373.03 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA.139+00 TO STA.142+52.24

352.24'X(3'X(6"/12)+5'X(6"+4")/
(2X12)X(1/27)= 46.75 C.Y.

STA.142+52.24 TO STA.143+52.24

100'X[((3'+2.5')/2)X(6"/12)+((5'+0)
/2)X((6"+4")/(12X2))]X(1/27)
=8.95 C.Y.

STA. 143+52.24 TO STA. 143+58
5.76'X2.5'X(6"/12)X(1/27)=0.27 C.Y.

TOTAL =55.97 C.Y.

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ITEM SPL DRAINAGE CONNECTION

STA.139+00 TO STA.142+52.24

352.24'x1.25 SF x(1/27) =16.31 C.Y.

STA.142+52.24 TO STA.143+50

97.76'x1.25 SF x(1/27) =4.53 C.Y.

TOTAL = 20.84 C.Y.

WESTBOUND SR126 STA.139+00
TO STA.143+58

257-P ITEM 451 10" REINFORCED CONCRETE
PAVEMENT
AS PER PLAN

STA.139+00 TO STA.140+24.51

124.51'x12'x(1/9) =166.01 S.Y.

STA.140+24.51 TO STA.141+24.51

100'x(12'/2)x(1/9) =66.67 S.Y.

TOTAL =232.68 S.Y.

ITEM 310 6" TYPE II SUBBASE
AS PER PLAN

STA.139+00 TO STA.140+24.51

124.51'x12'x(6"/12)x(1/27)=
27.67 C.Y.

STA.140+24.51 TO STA.141+24.51

100'x(12'/2)x(6"/12)x(1/27)
=11.11 C.Y.

TOTAL =38.78 C.Y.

258-P ITEM 452 7"TO 10" CONCRETE
PAVEMENT
MOD., AS PER PLAN

STA.139+00 TO STA.140+24.51

124.51'x8'x(1/9) =110.68 S.Y.

STA.140+24.51 TO STA.141+07.84

83.28'x((8'+4')/2)x(1/9)=55.52 S.Y.

STA. 141+07.84 TO STA. 141+24.51

16.67'X((4'+0')/2)X(1/9) =3.70 S.Y.

TOTAL =169.90 S.Y.

ITEM 310 TYPE II SUBBASE
AS PER PLAN

STA.139+00 TO STA.140+24.51

124.51'x[5'x((6"+4")/(12x2))+
(3'X(6"/12))X(1/27) =16.52 C.Y

STA.140+24.51 TO STA.141+07.84

83.28'X[3'X(6"/12)+((5'+1')/2)X
(6"+4")/(2X12)]X(1/27) =8.48 C.Y.

STA. 141+07.84 TO STA. 141+24.51

16.67'X((4'+0')/2)X(6"/12)X(1/27)
=0.62 C.Y.

TOTAL =25.62 C.Y.

ITEM SPL DRAINAGE CONNECTION

STA.139+00 TO STA.141+24.51

224.51'x1.25 SF x(1/27) =10.39 C.Y.

DISTILLERY ROAD

AREAS PLANIMETERED:
490 S.F.+ 210 S.F =700 S.F.

305-P ITEM 404 2" ASPHALT CONCRETE

700 S.F. X(2"/12)X(1/27) =4.3 C.Y.

ITEM 301 6" BITUMINOUS AGG. BASE
700 SF X (6"/12)X(1/27)

=12.96 C.Y.

Legend

APP = As Per Plan
PCP = Plain Concrete Pavement
RCP = Reinforced Concrete Pavement
SJ = Skewed Joints

PAVEMENT TYPE LOCATION FOR MAINLINE AND RAMPS

Ref No	Station to Station	Type of Pavement	Location and Description
		SHEET NO. 30	
13P	507+38-26+00 WB	451-10" RCP, mod. APP	WB pavement w/SJ
12P	507+40-26+00 WB	452-7" to 10" PCP, mod. APP	WB 10' shoulder, Lt w/SJ
14P	507+44.30-26+00 WB	452-8" to 10" PCP, mod. APP	WB 4' shoulder, Rt w/SJ
16P	507+81.82-26.00 EB	451-10" RCP, mod. APP	EB Pavement, w/SJ
15P	507+81.82-26+00 EB	452-8" to 10" PCP, mod. APP	EB 4' shoulder, Lt w/SJ
17P	507+87.50-26+00 EB	452-7" to 10" PCP, mod. APP	EB 10' or 8' shoulder, Rt w/SJ
		SHEET NO. 32	
19P	26+00-31+00 WB	451-10" RCP, mod. APP	WB & "D" accel. pavement, w/SJ
19P	31+00-38+39 WB	451-10" RCP, mod. APP	WB pavement, w/SJ
18P	26+00-38+54 WB	452-7" to 10" PCP, mod. APP	WB 10' shoulder, Lt w/SJ
22P	26+00-31+00 WB	452-8" to 10" PCP, mod. APP	WB 4' shoulder, Rt w/SJ
24P	31+00-34+63 WB	452-9" to 10" PCP, mod. APP	WB Ramp "D" nose, w/SJ
24P	34+63-38+30 WB	452-8" to 10" PCP, mod. APP	WB 4' shoulder, Rt w/SJ
23P	31+00-37+69 "O"	451-9" RCP, APP	Ramp "D" pavement
20P	34+50-37+74 "D"	452-7" to 9" PCP, mod. APP	Ramp "D", 6' shoulder, Lt
22P	31+00-37+74 "D"	452-8" to 9" PCP, mod. APP	Ramp "D", 3' shoulder, Rt
26P	26+00-30+66.29 EB	451-10" RCP, mod. APP	EB & "C" Decel. Pavement, w/SJ
26P	30+66.29-37+46 EB	451-10" RCP, mod. APP	EB pavement, w/SJ
25P	26+00-37+53 EB	452-8" to 10" PCP, mod. APP	EB 4' shoulder, Lt w/SJ
27P	26+00-30+66.75 EB	452-7" to 10" PCP, mod. APP	EB 8' shoulder, Rt w/SJ
28P	30+66.75-37+40 EB	452-7" to 10" PCP, mod. APP	EB 8' shoulder, Rt w/SJ
30P	30+66.29-36+92 "C"	451-9" RCP, APP	Ramp "C" pavement
29P	30+66.29-36+94 "C"	452-8" to 9" PCP, mod. APP	Ramp "C", 3' shoulder, Lt
31P	30+66.29-36+90.5 "C"	452-7" to 9" PCP, mod. APP	Ramp "C", 6' shoulder, Rt
		SHEET NO. 33	
35P	43+26-44+85 WB	451-10" RCP, mod. APP	WB pavement, w/SJ
34P	43+64-44+85 WB	452-7" to 10" PCP, mod. APP	WB 10' shoulder, Lt w/SJ
36P	42+98-44+85 WB	452-8" to 10" PCP, mod. APP	WB 4' shoulder, Rt w/SJ
47P	45+30-49+50 "D"	451-9" PCP, APP	Ramp "D" pavement
46P	45+39-49+50 "D"	452-7" to 9" PCP, mod. APP	Ramp "D", 6' shoulder, Lt
48P	45+22-49+50 "D"	452-8" to 9" PCP, mod. APP	Ramp "D", 3' shoulder, Rt
56P	45+01.5-50+75 EB	451-10" RCP, mod. APP	EB & "I", Decel. Pavement, w/SJ
55P	45+12-50+75 EB	452-8" to 10" PCP, mod. APP	EB 4' shoulder, Lt w/SJ
57P	44+90-50+75 EB	452-7" to 10" PCP, mod. APP	EB 10' shoulder, Rt w/SJ
71P	40+40.39-50+75 "H"	451-9" RCP, APP	Ramp "H" pavement
70P	40+40.39-50+75 "H"	452-8" to 9" PCP, mod. APP	Ramp "H", 3' shoulder, Lt
72P	40+40.39-50+75 "H"	452-7" to 9" PCP, mod. APP	Ramp "H", 6' shoulder, Rt
68P	55+45-64+68 "D"	451-9" RCP, APP	Ramp "D" pavement
67P	55+45-64+68 "D"	452-8" to 9" PCP, mod. APP	Ramp "D", 3' shoulder, Rt
69P	55+45-64+68 "D"	452-7" to 9" PCP, mod. APP	Ramp "D", 6' shoulder, Lt
64P	94+10-99+88 I-75	451-12-1/2" RCP, APP	I-75 & Ramp "F" Accel. Pavement
44P	94+10-99+88 I-75	452-7" to 10" PCP, mod. APP	Ramp "F" Accel., 8' shoulder, Lt
66P	99+88-103+75 I-75	452-9" to 10" PCP, mod. APP	Ramp "F" nose
63P	99+88-103+75 I-75	451-9" RCP, APP	Ramp "F" pavement
62P	99+88-103+75 I-75	452-7" to 9" PCP, mod. APP	Ramp "F", 8' shoulder, Lt
60P	39+91.5-40+50 "C"	451-9" RCP, APP	Ramp "C" pavement
59P	39+87.5-40+50 "C"	452-8" to 9" PCP, mod. APP	Ramp "C", 3' shoulder, Lt
61P	39+97-40+50 "C"	452-7" to 9" PCP, mod. APP	Ramp "C", 6' shoulder, Rt
		SHEET NO. 37A	
74P	77+00-82+00 I-75	451-12-1/2" RCP, APP	I-75 & Ramp "C" Accel. Pavement
73P	77+00-82+00 I-75	452-7" to 10" PCP, mod. APP	I-75 & Ramp "C", 8' shoulder, Lt
75P	78+00-82+00 I-75	451-12-1/2" RCP, APP	I-75 & Ramp "D" Decel. Pavement
76P	78+00-82+00 I-75	452-7" to 10" PCP, mod. APP	I-75 & Ramp "D" Decel., 8' shldr, Rt
256P	74+45-75+55 I-75	452-8" to 10" PCP, APP	I-75 median, sign transititon
		SHEET NO. 38	
78P	82+00-86+14 I-75	451-12-1/2" RCP, APP	I-75 & Ramp "C" Accel. Pavement
77P	82+00-86+30 I-75	452-7" to 10" PCP, mod. APP	I-75 & Ramp "C" Accel., 8' Shldr, Rt
87P	82+00-85+46 I-75	451-12-1/2" RCP, APP	I-75 & Ramp "D" Decel. Pavement
87P	72+32-73+70.65 "D"	451-12-1/2" RCP, APP	Ramp "D" Decel. Pavement
88P	82+00 I-75 72+03.71 "D"	452-7" to 10" PCP, mod. APP	Ramp "D" Decel, 8' shoulder
82P	40+50-46+32.5 "C"	451-9" RCP, APP	Ramp "C" pavement
81P	40+50-45+74.11 "C"	452-7" to 9" PCP, mod. APP	Ramp "C", 6' shoulder, Rt
83P	40+50-45+91 "C"	452-8" to 9" PCP, mod. APP	Ramp "C", 3' shoulder, Lt
83P	44+36-46+28 "C"	452-9" to 10" PCP, mod. APP	Ramp "C" nose
86P	89+88-94+10 I-75	451-12-1/2" RCP, APP	I-75 & Ramp "F" Accel. Lane
85P	90+60-94+10 I-75	452-7" to 10" PCP, mod. APP	Ramp "F", Accel. Lane, 8' shoulder
84P	66+80.76-68+80.76 "D"	451-9" RCP, APP	Ramps "D" & "H" pavement
84P	68+80.76-69.95 "D"	451-12-1/2" RCP, APP	Ramp "D" Decel. pavement
93P	40+40.39"H"-68+80"D"	452-7" to 9" PCP, mod. APP	Ramps "D" & "H", 8' shoulder
93P	68+80-69+70 "D"	452-7" to 10" PCP, mod. APP	Ramp "D" Decel., 8' shoulder
91P	64+68-66+00 "D"	452-8" to 9" PCP, mod. APP	Ramp "D", 3' shoulder, Rt
91P	66+00-68+80.76	452-7" to 9" PCP, mod. APP	Ramp "D", 3' to 10' shoulder, Rt
221P	85+00-86+10 I-75	452-8" to 10" PCP, mod. APP	Median I-75 sign transition
		SHEET NO. 40	
95P	45+00-54+50 WB	451-10" RCP, mod. APP	WB pavements, w/SJ
94P	45+00-54+50 WB	452-7" to 10" PCP, mod. APP	WB 10' shoulder, Lt w/SJ
96P	45+00-54+50 WB	452-8" to 10" PCP, mod. APP	WB 4' shoulder, Rt w/SJ
98P	103+75-109+70 "F"	451-9" RCP, APP	Ramp "F" pavement
97P	103+75-109+70 "F"	452-7" to 9" PCP, mod. APP	Ramp "F", 8' shoulder, Lt
106P	103+75-107+03 "F"	452-9" to 10" PCP, mod. APP	Ramp "F" nose
99P	51+22.97-54+75 "E"	451-9" RCP, APP	Ramp "E" pavement
100P	53+13-54+75 "E"	452-8" to 9" PCP, mod. APP	Ramp "E", 3' shoulder, Rt
101P	51+22.97-52+22.97 "E"	452-7" to 9" PCP, mod. APP	Ramp "E", 6' shoulder, Lt
103P	109+70-113+20 "F"	451-9" RCP, APP	Ramp "F" pavement
102P	109+70-111+64 "F"	452-9" PCP, mod. APP	Ramp "F" nose
102P	111+64-113+20 "F"	452-7" to 9" PCP, mod. APP	Ramp "F", 6' shoulder, Lt
104P	107+03-113+20 "F"	452-8" to 9" PCP, mod. APP	Ramp "F", 3' shoulder, Rt
108P	49+50-50+80.32 "D"	451-9" PCP, APP	Ramp "D" pavement
107P	49+50-50+80.32 "D"	452-8" to 9" PCP, mod. APP	Ramp "D", 3' shoulder, Rt
109P	49+50-50+80.32 "D"	452-7" to 9" PCP, mod. APP	Ramp "D", 6' shoulder, Lt
110P	51+02.14-60+50 "I"	451-9" RCP, APP	Ramp "I" pavement
111P	50+50-60+50 "I"	452-8" to 9" PCP, mod. APP	Ramp "I", 3' shoulder, Lt
112P	51+02.14-60+50 "I"	452-7" to 9" PCP, mod. APP	Ramp "I", 6' shoulder, Rt
114P	50+75-54+74 EB	451-10" RCP, mod. APP	EB pavement, w/SJ
113P	51+15.16-54+78 EB	452-8" to 10" PCP, mod. APP	EB, 10' to 4' shoulder, Lt, w/SJ
116P	50+75-51+40 EB	452-7" to 10" PCP, mod. APP	EB, 6' shoulder, Rt, w/SJ
119P	50+75-53+10 "H"	451-9" RCP, APP	Ramp "H" pavement
118P	50+75-51+36 "H"	452-8" to 9" PCP, mod. APP	Ramp "H", 3' shoulder, Lt
118P	51+36-53+10 "H"	452-9" to 10" PCP, mod. APP	Ramp "H" nose, w/SJ
120P	50+75-53+10 "H"	452-7" to 9" PCP, mod. APP	Ramp "H", 6' shoulder, Rt
120P	53+10-53+97 EB	452-7" to 10" PCP, mod. APP	EB, 8' shoulder, Rt, w/SJ
123P	58+57-60+25 EB	451-10" RCP, mod. APP	EB pavement, w/SJ
122P	58+90-60+25 EB	452-8" to 10" PCP, mod. APP	EB 4' shoulder, Lt, w/SJ
124P	58+20-60+25 EB	452-7" to 10" PCP, mod. APP	EB 8' shoulder, Rt, w/SJ
		SHEET NO. 41	
126P	54+50-63+03 WB	451-10" RCP, mod. App	WB pavement, w/SJ
125P	54+50-63+15 WB	452-7" to 10" PCP, mod. APP	WB, 8' shoulder, Lt, w/SJ
127P	54+50-60+66.78 WB	452-8" to 10" PCP, mod. APP	WB, 4' to 10' shoulder, Rt, w/SJ
129P	54+75-60+77.92 "E"	451-9" RCP, APP	Ramp "E" pavement

N71130

PAVEMENT TYPE AND LOCATIONS

SHEET NO. 30

---

660 SODDING

13-D

STA 507+92 RT EB 126

[(79'X9')+(((6'+9')/2)X20')]X1.118
=107 SY

10-D

STA 502+68 RT EB 126

(103'X9')+((6'+9')/2)X20)X1.118
=134 SY

1-D

STA 42+64 TO 49+82 VINE

(324'X1.5')X(1/9) =54 SY

6-D

STA 509+48 TO STA 510+23 L WB 126

(70'X6')X(1/9) =47 SY

16-D

STA 23+75 TO STA 26+00 RT WB 126

(225'X7.5')X(1/9) =188 SY

ROCK CHANNEL PROTECTION

---

5 A-D

STA 510+42 TO STA 25+25 EB 126

[10.5'X267'X(18"/12)]X(1/27)
=156 CY

SLOPE EROSION PROTECTION

10-D

STA 502+83 TO 503+83 EB 126 RT

(71.02'-66.92')X(2500/9)X1.118
=1273 SY

11-D

STA 502+90 TO STA 503+75 WB 126 RT

(80.6'-78.35')X(1/9)X1.118 =699 SY

12-D

STA 506+50 TO STA 507+50 WB 126 LT

(9.69'-6.80')X(2500/9)X1.118
=898 SY

13-D

STA 506+80 TO STA 507+80

(19.93'-16.61')X(2500/9)X1.118
=1031 SY

SHEET NO. 32

19-D

STA 25+25 TO STA 31+85 SR126 LT

(10.5'X650'X(1/9)) =758 SY

20-D

STA 32+35 TO 36+37 WB 126 LT

[(9'X218')+(7.5'X141')]X(1/9)
=336 SY

---

20 A-D

STA 34+75 TO STA 35+80 WB 126 RT

[6'X105'X(1/9)] =70 SY

---

25 A-D

STA 32+50 TO STA 37+12 RAMP(C) LT

[6'X471'X(1/9)] =314 SY

23-D

STA 30+00 TO STA 34+25 RAMP(C) RT

[(7.5'X105')+(6'X335')]X(1/9)
=311 SY

28-D

STA 32+00 TO RAMP(C) RT

[45'X3'X(1/9)] =18 SY

39-D

STA 28+50 RAMP(C) RT

[3'X25'X(1/9)] =10 SY

27-D

STA 30+66 TO STA 31+06 RAMP C LT

[35'X((10'+13.5')/2)X(1/9)] =46 SY

ROCK CHANNEL PROTECTION

45-D

STA. 31+00 RAMP(C) RT

[4'X6'X(18"/12)]X(1/27) =2.0 CY

46-D

STA 34+72 W.B. 126 LT

[6'X4'X(18"/12)]X(1/27) =2.0 CY

23-D

STA 29+67 TO 30+05 RAMP(C) RT

[7.5'X60'X2']X(1/27) =33 CY

37-D

STA 28+46 WB 126 LT

(4'X6'X1.5')X(1/27) =2.0 C.Y.

SHEET NO. 33

---

660 SODDING

59-D

STA 42+35 TO 42+70

(1.5'X66')X(1/9) =11 SY

64-D

STA 39+98 TO LT. RAMP(C)

[(65'X9')+((6'+9')/2)X20']X(1/9)
X1.118 =92 SY

67-D

STA 40+15 TO RT. RAMP(C)

[(72'X9')+((6'+9')/2)X20']X(1/9)
X1.118 =100 SY

66-D

STA 36+78 RT RAMP(C)

[(75'X9')+((6'+9')/2)X20']X(1/9)
X1.118 =103 SY

74-D

STA 43+07 RT. TO W.B. 126

[(80'X9')+((6'+9")/2)X20]X(1/9)
X1.118 =109 SY

57-D

STA 45+05 RT E.B. 126

[(56'X9')+((6'+9')/2)X20]X(1/9)
X1.118 =82 SY

60-D

STA 40+00 TO STA 40+65 RT RAMP(H)

[65'X6'X(1/9)]
=43 SY

61-D

STA 94+00 TO STA 96+00 LT I-75

[(203'X6')+(1.5'X10')]X(1/9)
=137 SY

75-D

STA 96+00 TO STA 103+00 LT I-75

[700'X6'X(1/9)] =467 SY

80-D

STA 54+80 TO STA 58+20 LT RAMP(D)

[(9'X210')+(7.5'X90')]X(1/9)=285 SY

81-D

STA 47+75 TO STA 50+50 LT RAMP(I)

[270'X6'X(1/9)] =180 SY

82-D

STA 43+40 TO STA 47+15 LT RAMP(H)

[373'X7.5'X(1/9)] =311 SY

---

80 A-D

STA 42+50 TO STA 46+45 RT RAMP(H)

[375'X6'X(1/9)] =250 SY

---

75 A-D

STA 41+90 TO STA 43+40 LT RAMP(H)

[180'X7.5'X(1/9)] =150 SY

---

70 A-D

STA 60+90 TO STA 61+40 LT RAMP(D)

[65'X6'X(1/9)] =43 SY

---

85 A-D

STA 62+65 TO STA 64+15 RT RAMP(D)

[130'X6'X(1/9)] =87 SY

ROCK CHANNEL PROTECTION

71-D

STA 38+50 WB 126 LT

(4'X6'X(18"/12))X(1/27) =2.0 CY

PARTICIPATION LEGEND
② F-2(13)
① IR-75-1(96)10

CALC DS DATE 2/86
CK Rea DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

21
787

HAM-75-0.93
HAM-126-13.00
HAMILTON COUNTY

ITEM 202
PAVEMENT, CURB, SIDEWALK AND CURB AND GUTTER REMOVALS

Sheet No.	Ref. No.	FACILITY	LOCATION	Type	Removal Of Pov't.	Removal of Curbs	Removal Of Walks Conc.	Removal of Curb & Gutter
32	121R	West Bound Cross County	Sta. 32+00 - 137' Lt.				3405 S.F. ①	
33	122R	West Bound Cross County	Sta. 38+16 ℄ Rt. - 40+38 WB. Lt.	Conc.	54 ①	505 ①	20203 S.F. ②	
32	123R	West Bound Cross County	Sta. 32+67 - 115' Lt.				723 S.F. ①	
32	165R	Ramp C	Sta. 35+30 - 155' Rt.	Conc.	765 Y. ①			
32	124R	Ramp C	Sta. 34+61 - 112' Rt.	Conc.		25 L.F. ①		
32	125R	Ramp C	Sta. 35+15 - 148' Rt.				292 S.F. ①	
32	126R	West Bound Cross County	Sta. 32+17 - 123' Lt.	Conc.		60 L.F. ①		
32	127R	Ramp C	Sta. 35+50 - 133' Rt.				276 S.F. ①	
41	183R	Ramp F (Exist Ramp)	Sta. 118+40 to 122+40.69 Rt.	Conc.	605 S.Y. ①			
47	128R	East Bound Cross County	Sta. 72+80 - 82' Rt.				164 S.F.	
47	129R	East Bound Cross County	Sta. 72+30 - 85' Rt.				60 S.F.	
47	131R	East Bound Cross County	Sta. 72+38 - 92' Rt.	Conc.		125 L.F.		
47	185R	I-75 South Bound	Sta. 125+75 to 137+64 Lt.					① 1189 L.F.
48	132R	East Bound Cross County	Sta. 70+35 - 95' Rt & 79+78 - 95' Rt.	Conc.		25 L.F.		
48	133R	East Bound Cross County	Sta. 70+45 - 90' Rt.				16 S.F.	
48	134R	East Bound Cross County	Sta. 79+85 - 90' Rt.				66 S.F.	
48	135R	East Bound Cross County	Sta. 81+73 - 108' Rt.				51 S.F.	
48	136R	East Bound Cross County	Sta. 82+03 - 90' Rt.				96 S.F.	
48	139R	SR 126	Sta. 88+27 - 89' Rt.				903 S.F.	
48	140R	SR 126	Sta. 90+05 - 94' Rt.				48 S.F.	
51	166R	Ramp T	Sta. 98+70 - 20' Lt.		278 Y.			
51	141R	Ramp T	Sta. 98+73 - ℄				2383 S.F.	
51	144R	Ramp T	Sta. 98+70 - ℄	Conc.		86 L.F.		
51	143R	Ramp N	Sta. 3+25.23 to 4+23.77 Rt. Reading Rd.	Conc.		93 L.F.		
54	181R	SR 126 Lakeshore Dr.	Sta. 120+50 Rt.	Conc.	960 S.Y.			
54	182R	SR 126 Lakeshore Dr.	Sta. 120+50 Rt.	Conc.			750 S.F.	
54-56	157R	Galbraith Rd	Sta. 5+50 to 21+20 - 20' Lt.	Conc.		1120 L.F.		
54-56	159R	Galbraith Rd	Sta. 5+43 to 21+20 - 40' Wide	Asphaltand	7016 S.Y.			
54-56	158R	Galbraith Rd	Sta. 5+34 to 21+20 - 20' Rt.	Conc.		1416 L.F.		
56-57	160R	Ex. Cross County Hwy	Sta. 121+40 to 138+82.03 - Lt.	Conc.	8.868 S.Y.			
57-59	146R	SR 126	Sta. 138+62.03 to 143+58 - 25.5' Rt.	Conc.		40 L.F.		
57-59	147R	SR 126	Sta. 138+62.03 to 141+20.51 - 25.5' Lt.	Conc.		266 L.F.		
50	4R	Vine Street	Sta. 43+88 to 50+67 Lt.	Conc.	40 S.Y.	182 L.F.	1092 S.F.	
50	5R	Vine Street	Sta. 47+69 to 54+93 Rt.	Conc.	2693 Y.	161 L.F.	6955 F.	
59	77R	S.R. 126	Sta. 139+53 to 139+96 ℄		59 S.Y.	32 L.F.		
		To General Summary	Sub-Totals F-2(13)		17235	4068	33384	
		To General Summary	Sub-Totals IR-75-1(96)10	——	825 ①	590 ①	30000 ①	1189 ①
		To General Summary	Total		18060	4658	63384	1189

Participation Code is ② on this sheet for all items unless marked.

ITEM 616 DUST CONTROL

CALCULATIONS		F-2(13)	IR-75-1(96)10
Water	M-Gal.	500	500 ①
Calcium Chloride	Ton	5	5 ①
To General Summary			

ITEM 203 PROOF ROLLING

ITEM	F-2(13) QUANTITY	IR-75-1(96)10 QUANTITY
Item 451 SQ. YD.	54420	41569 ①
Item 611 SQ. YD.	2481	2002 ①
Item 301 SQ. YD.	156	78 ①
Total SY	57057	43649 ①
@ 3,000 S.Y. / Hour	19	15 ①
Stabilization of Undercut Areas by Proof Rolling YD.	17	17
Totals to General Summary	36	32

ITEM 203 SUBGRADE COMPACTION

ITEM	F-2(13) QUANTITY SQ YD	IR-75-1(96)10 QUANTITY SQ YD
Item 451	54420	41569 ①
Item 611	2481	2002 ①
Item 612	3397	165 ①
Item 301	156	78 ①
Item 408	7520	160 ①
Item 609	429	136 ①
Item 452	26731	24762 ①
Totals to General Summary	95134	68872 ①

ITEM 604 CENTERLINE REFERENCE MONUMENTS	PARTICIPATION F-2(13)	PARTICIPATION IR-75-1(96)10
For Location See Table on R/W Sh. No.	27	12 ①

ITEM 659

DESCRIPTION	UNIT	F-2(13) QUANTITY	IR-75-1(96)10 QUANTITY	TOTAL QUANTITY
Seeding & Mulching	Sq. Yds.	302590	103024 ①	405614
Sodding	Sq. Yds.	7108	8890 ①	15998
Reinforced Sodding	Sq. Yds.	830	1489 ①	2319
Slope Erosion Protection	Sp Yds.	8633	10353 ①	18986
Total Seeding, Slop Prot. Sodding	Sq. Yds.	319161	123756 ①	442917
Fertilizer To Gen. Sum.	Tons	29	11 ①	40
Liming To Gen. Sum.	Tons	144	56 ①	200
Water	M-Gal.	693	270	963

DEVELOPED		CHECKED	
E.S.	5-91	M.T.B.	10-91

ESTIMATED QUANTITIES

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

21A
787

HAM-75-0.93
HAM-126-13.00
HAMILTON COUNTY

LG. RC DATE 3/86

CHK'D DS DATE 3/86

ITEM 203
ROADWAY EXCAVATION AND EMBANKMENT

STATION TO STATION			F-2(13)		IR-75-1(96)10	
			EXCAVATION CU. YDS.	EMBANKMENT CU. YDS.	EXCAVATION CU. YDS.	EMBANKMENT CU. YDS.
EB. S.R. 126						
506+83	to	26+00	500	238168		
26+00	to	30+67	715	120414		
30+67	to	37+00			795	79962
37+00	to	50+50			0	133320
50+50	to	60+00			18245	22656
60+00	to	63+10			75385	551
63+10	to	70+00	160585	287		
70+00	to	75+00	12224	1211		
75+00	to	87+24.33	39817	32647		
508+50	to	26+00	17908	17908		
44+37	to	49+75			7217	7217
UNSUITABLE MATERIAL 59+00	to	60+50	923	923		
71+50	to	74+50	2001	2001		
79+00	to	86+00	15123	15495 *		
SR. 126						
87+44.00	to	91+50	30473	4		
91+50	to	105+92	8697	93165		
106+47	to	121+00	26834	123208		
121+00	to	130+00	105580	356		
130+00	to	131+98.28	6554	10		
E.B. S.R. 120						
131+98.28	to	138+59.70	34628	20		
			923	923		
			15123	15495		
S.R. 126						
138+62.03	to	143+58.00	8950	0		
W.B. S.R. 126						
500+45	to	503+80	380	84510		
33+50	to	37+50			342	39509
37+50	to	45+00			152	76963
45+00	to	54+50			165	109955
54+50	to	63+80			171	84075
60+64.5	to	72+00			693	87823
UNSUITABLE MATERIAL 67+00 to 71+00					5180	5180
I-75						
77+00	to	82+00			646	92
82+00	to	94+00			1555	575
94+00	to	100+00			487	6101
N.B. I-75						
104+50	to	113+00			3582	2682
113+00	to	123+00			725	762
123+00	to	127+39			256	662
127+39	to	134+00 (Channel)			160	1757
117+50	to	127+39 (Channel)			19	4012
RAMP C						
30+66.75	to	37+00	404	68537		
37+00	to	40+50	7	29299		
40+50	to	46+65	646	50268		
UNSUITABLE MATERIAL 43+50 to 46+95.38			1204	1204		
RAMP D						
45+00	to	49+50	0	66989		
49+50	to	55+50	128	74267		
55+50	to	65+00	378	23879		

ITEM 203
ROADWAY EXCAVATION AND EMBANKMENT

STATION TO STATION			F-2(13)		IR-75-1(96)10	
			EXCAVATION CU. YDS.	EMBANKMENT CU. YDS.	EXCAVATION CU. YDS.	EMBANKMENT CU. YDS.
RAMP D CON'T.						
(Unsuitable Material) 65+00	to	72+70	854	16253		
47+00	to	48+90	234	234		
RAMP E						
51+50	to	55+00	0	7418		
55+00	to	61+00	0	41134		
RAMP F						
100+00	to	104+00	287	5431		
104+00	to	113+00	217	9847		
113+00	to	122+40.69	141	13074		
RAMP H						
40+12	to	51+00	495	63,859		
51+00	to	53+50	0	4129		
(Unsuitable Material) 40+25	to	47+37	14,599	14599		
RAMP I						
51+00	to	60+50	3817	24,149		
60+50	to	64+02	2284	1510		
RAMP N						
INCLUDED IN S.R.-126 QUANTITIES						
RAMP P						
124+10	to	130+50	4967	3255		
130+50	to	135+50	712	96		
RAMP Q						
125+50	to	129+50	21822	0		
129+50	to	134+50	36960	0		
RAMP T						
93+50	to	98+85.5	1607	1219		
DRIVE A						
1+00	to	5+50	1260	2622		
DRIVE B						
1+71.7	to	6+00	4627	0		
MILL CREEK TRIBUTARY 0+00 to 2+50			5946	6248		
SUBTOTAL SUITABLE MATERIAL			523496	1,207483	103,378	651,457
SUBTOTAL UNSUITABLE MATERIAL			51992	52,364 *	12,397	12,397

Note: For Earthwork Volume Calculation on Curve See Sheet No. 29

* Includes 203 Embankment using No.8 Aggregate, See Sht. 21C.

DEVELOPED		CHECKED	
CRS	10-11	M.T.B	12-11

ESTIMATED QUANTITIES

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

21B
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

CALC. RC DATE 3/86

CHK'D DS DATE 3/86

ITEM 203
ROADWAY EXCAVATION AND EMBANKMENT

STATION TO STATION	F-2(13)		IR-75-1(96)10	
	EXCAVATION	EMBANKMENT	EXCAVATION	EMBANKMENT
	CU. YDS.	CU. YDS.	CU. YDS.	CU. YDS.
KNOLLCREST DRIVE				
0+90 to 9+75	15926	1562		
GALBRAITH ROAD				
5+36 to 12+00	1950	3677		
14+50 to 21+20	7104	383		
McLEAN DRIVE				
0+25 to 0+74	21	21		
HONEYWELL DRIVE				
0+25 to 1+17	32	197		
SERVICE ROAD				
97+50 to 104+85			37	4964
DISTILLARY ROAD				
10+14 to 11+97.25			226	0
WOODBINE AVE CUL-DE-SAC NORTHSIDE				
0+00 to 0+75			119	0
WOODBINE AVE. CUL-DE-SAC SOUTHSIDE				
0+00 to 0+75			109	0
GREENLAND PLACE CUL-DE-SAC				
0+00 to 1+14	130	32		
RELOC. MILL CREEK CHANNEL				
1524+58 to 1537+50	135,783	7041		
RELOC. MILL CREEK CHANNEL				
5+65 to 9+00			5526	3853
9+00 to 19+42.3			24139	7889
EMBANKMENT FOR CISTERNS & WELLS	0	50	0	25
SUBTOTAL SUITABLE MATERIAL THIS SHEET	160952	12963	30156	16731
SUBTOTAL UNSUITABLE MATERIAL THIS SHEET	0	0	0	0
SUBTOTAL SUITABLE MATERIAL SHEET 21A	523496	1207483	103,378	651,457
SUBTOTAL UNSUITABLE MATERIAL SHEET 21A	51,992	62,364	12,397	12,397
TOTAL TO GENERAL SUMMARY	736,440	1272810	145,931	680,585

ITEM 659
SEEDING AND MULCHING

STATION TO STATION	F-2(13)	IR-75-1(96)10
	SQ. YDS.	SQ. YDS.
S.R. 126		
Sta. 300+45 to 303+80 W.B.	10,449	
Sta. 306+83 to 26+00 E.B.	26,175	
Sta. 26+00 to 30+66.75 E.B.	11,895	
Sta. 30+66.75 to 37+00 E.B.		5327
Sta. 33+50 to 37+50 W.B.		5460
Sta. 37+00 to 50+50 E.B.		7088
Sta. 37+50 to 45+00 W.B.		9707
Sta. 45+00 to 54+50 W.B.		16841
Sta. 50+50 to 60+00 E.B.		6016
Sta. 54+50 to 63+80 W.B.		14,322
Sta. 60+00 to 63+10 E.B.		10,448
Sta. 63+10 to 70+00 E.B.	20,578	
Sta. 66+65 to 71+61 W.B.		8673
Sta. 70+00 to 75+00 E.B.	7700	
Sta. 75+00 to 87+24 E.B.	17803	
Sta. 87+44 to 91+50	5301	
Sta. 91+50 to 105+92	18932	
Sta. 106+47 to 121+00	19,418	
Sta. 121+00 to 130+00	14,034	
Sta. 130+00 to 131+98.28	656	
Sta. 131+98.28 to 138+59.79 E.B.	10,229	
Sta. 138+62.03 to 143+58	7021	
I-75		
Sta. 77+00 to 82+00		177
Sta. 82+00 to 94+00		1410
Sta. 94+00 to 99+50		3883
Sta. 104+50 to 113+00		7895
Sta. 113+00 to 123+00 N.B.		24435
Sta. 123+00 to 127+39 N.B.		1183
RAMPS		
Sta. 30+67 to 37+00 C	8985	
Sta. 37+00 to 40+50 C	4679	
Sta. 40+50 to 46+45 C	10,961	
Sta. 49+50 to 55+50 D	12,724	
Sta. 55+50 to 65+00 D	7724	
Sta. 65+00 to 72+66 D	9613	
Sta. 51+50 to 55+00 E	1132	
Sta. 55+00 to 61+08 E	6411	
Sta. 99+50 to 104+00 F	1881	
Sta. 104+00 to 113+00 F	319	
Sta. 113+00 to 122+40.69 F	4229	
Sta. 40+18 to 51+00 H	12,679	
Sta. 51+00 to 53+50 H	973	
Sta. 50+90 to 60+50 I	9069	
Sta. 60+50 to 64+65 I	1263	
Sta. 124+10 to 130+50 P	3224	
Sta. 130+50 to 135+50 P	2892	
Sta. 125+50 to 129+50 Q	5472	
Sta. 129+50 to 134+50 Q	6982	
Sta. 93+55 to 98+86 T	4217	
GALBRAITH ROAD		
Sta. 5+36 to 12+00	3298	
Sta. 14+75 to 21+20	2039	
Sta. 0+00 to 1+14 GREENLAND PLACE	46	
Sta. 0+00 to 0+81 WOODBINE AVE.-South	25	
Sta. 0+00 to 0+84 WOODBINE AVE.-North	16	
Sta. 1+00 to 5+50 Drive A	2888	
Sta. 1+25 to 6+00 Drive B	789	
Sta. 0+90 to 9+75 KNOLLCREST	4503	
Sta. 0+25 to 0+74 McLEAN DR.	41	
Sta. 0+25 to 1+17 HONEYWELL	157	
MILLCREEK CHANNEL		
Sta. 1524+58 to 1537+50	3,168	
Sta. 5+65 to 19+42.3		1559
TOTAL TO GENERAL SUMMARY	302,590	103,024

Note: Totals To General Summary Include Bench Volumes and Unsuitable Material Excavation and Embankment. For Earthwork Volume Calculation on Curve See Sheet No. 29

DEVELOPED		CHECKED	
CES	10-91	MTB	12-91

ESTIMATED QUANTITIES

CALC. BY JLR DATE 2/86
CHKD. BY Rea DATE 3/86

HAMILTON COUNTY
HAM-75/126 - 9.93/13.00

OHIO
FHWA REGION 5

21C
787

* Quantities Carried To General Notes

*614 PAVEMENT MARKINGS

SHEET NO.	STATION TO STATION	SIDE	614 Temporary Lane Line Class I Lin.Ft.	614 Temp. Edge Line Yellow Class I Lin.Ft.	614 Temp. Edge Line White Class I Lin.Ft.	614 Temp. Transverse Lines White Class I Lin.Ft.	614 Temp. Channelizing Line Class I Lin.Ft.	614 Temporary Center-line Class I Lin.Ft.	614 Temporary Stop Line Class I Lin.Ft.	614 Temporary Transverse Lines Yellow Class I Lin.Ft.	614 Temporary Railroad Symbol Class I Each	614 Temporary Word on Pavement "ONLY" 72" Class I Each	Spl. Temporary Asphalt Divider Lin.Ft.	622 Temp. Precast Conc. Barrier As Per Plan Lin.Ft.	614 Drums Each
	Temporary Pavement Markings Left in Place														
19R															
425	77+00 - 85+77 I-75	Lt.			877										
427	119+39 - 126+00 I-75 NB	Rt.			661										
427	60+67 - 69+98 S.R.126 WB	Lt.			931										
19S	87+00 I-75 - 71+00 D	Rt.					118								
19RS	87+00 I-75 - 67+00 D	Rt.				445	571								
19R	67+00 D - 40+41.5 H	Rt&Lt.		235											
19R	60+67 - 70+55 S.R.126 WB	Lt.												1000	
19R	67+50 D - 40+78 H														23
	TOTAL IR-75-(196)10			235 .5mi.	2469	445	689							1000	23
	Temporary Pavement Markings														
310A	Temporary Rd. No. 1														33
	117+16 - 124+00	Lt.			684										
	117+16 - 125+28	Rt.		820											
	Total IR-75-(196)10			820 .28mi.	684										33
310B	Temporary Rd. No.2														
	6+50 - 17+83		2266		2266			1133	100		2				
310E& 57	Temporary Rd. No.3														
	14+36 - 22+16				1560			800							
310C& E	Temporary Rd. No.4														
	125+00 - 128+00	Lt.&Rt.	1625				300								97
	125+00 - 141+25	Lt.			1625								1625		
	125+00 - 143+25	Lt.&Rt.			1875										
	128+00 - 141+25														
	125+00 - 126+50				225	475			66		2				
	139+00 - 141+25			225				45		250					
310E& 57	Temporary Rd. No.5							360	36						
310E	Temporary Rd. No.6							50	12						
	Total F-2(13)		3891 .74mi.	225 1.47mi.	7551	475	300	2388 .45mi.	214	250	2	2	1625		97

ITEM 203 EMBANKMENT
USING NO. 8 AGGREGATE

LOCATION	END AREA	VOLUME (Cu. Yd.)
Sta. 79+00 S.R.126 E.B.	0	
		56
Sta. 79+50 S.R.126 E.B.	60	
		167
Sta. 80+00 S.R.126 E.B.	120	
		208
Sta. 80+50 S.R.126 E.B.	105	
		208
Sta. 81+00 S.R.126 E.B.	120	
		222
Sta. 81+50 S.R.126 E.B.	120	
		222
Sta. 82+00 S.R.126 E.B.	120	
		236
Sta. 82+50 S.R.126 E.B.	135	
		236
Sta. 83+00 S.R.126 E.B.	120	
		222
Sta. 83+50 S.R.126 E.B.	120	
		264
Sta. 84+00 S.R.126 E.B.	165	
		314
Sta. 84+50 S.R.126 E.B.	175	
		343
Sta. 85+00 S.R.126 E.B.	195	
		347
Sta. 85+50 S.R.126 E.B.	180	
		167
Sta. 86+00 S.R.126 E.B.	0	
TOTAL	——	3378

ITEM 202
EXISTING STRUCTURES REMOVED

Sht. No.	Ref. No.	LOCATION	Description	Quantity (Each)
30	100-R	E.B. S.R. 126 Sta. 507+20 - 80' Rt.	Billboards	Lump
32	103-R	W.B. S.R. 126 Sta. 34+55 - 4' Lt.	Cistern	Lump
33	106-R	W.B. S.R. 126 Sta. 44+40 - 30' Rt.	Billboards	Lump
38	107-R	Ramp 'C' Lt. Sta. 41+66 to 41+90	Billboards	Lump
40	27-R	W.B. S.R. 126 Sta. 48+72 - 30' Lt.	Billboards	Lump
40	116-R	W.B. S.R. 126 Sta. 52+90 Rt.	Billboard	Lump
48	104-R	E.B. S.R. 126 Sta. 83+25 - 110' Rt.	Conc. Wall	Lump
48	137-R	E.B. S.R. 126 Sta. 81+10 - 83' Rt.	Stone Wall	Lump
54	109-R	S.R. 126 Sta. 106+72 - 63' Rt.	Flag Pole	Lump
54	110-R	S.R. 126 Sta. 108+17 - 102' Lt.	Flag Pole	Lump
54	114-R	S.R. 126 Sta. 117+18 - 21' Rt.	Flag Pole	Lump
54	7-R	Sta. 8+60 Galbraith Rd. - 65' Rt.	Billboard	Lump
54	11-R	Sta. 7+50 Galbraith Rd. - 80' Rt.	Billboard	Lump
56	115-R	Sta. 14+32 Galbraith Rd. - 105' Rt.	Conc. Slab	Lump
56	118-R	Sta. 17+00 & Sta. 17+70 Galb. Rd. - 30' Lt.	Conc. Walls	Lump
56	119-R	Sta. 15+10 to Sta. 15+70 Galb. Rd. - 32' Rt.	Conc. Wall	Lump
59	117-R	S.R. 126 Sta. 141+10 to 142+00	Portion of Billboard	Lump

ITEM SPECIAL - DRILLED WELLS ABANDONED

Sht. No.	Ref. No.	LOCATION	Quantity (Each)
29	31-R	S.R. 126 Sta. 500+45 W.B. - 55' Lt.	1
51	167-R	S.R. 126 Sta. 97+49 - 49' Lt.	1
		TOTAL TO GENERAL SUMMARY	2

REMOVAL OF STORAGE TANKS AND FACILITIES			ITEM 202 ABOVE GROUND		ITEM SPECIAL UNDER GROUND	
Sht. No.	Ref. No.	LOCATION	Description	Quantity (Each)	Description	Quantity (Each)
54	148-R	S.R. 126 Sta. 107+93 110' Rt.			2000 Gal. Gas Tank	1
54	153-R	S.R. 126 Sta. 109+67 2' Rt.	1250 Gal. Liquid Nitrogen Tank	1		
54	154-R	S.R. 126 Sta. 109+55 50' Rt.	1250 Gal. Oxygen Tank	1		
54	153-R	S.R. 126 Sta. 109+67 20' Rt.	1250 Gal. Argon Tank	1		
		TOTAL TO GENERAL SUMMARY		3		1

SUB-SUMMARY

GENERAL SUMMARY

CODE
① 95% State, 5% Hamilton County
② 87.5% State, 12.5% Hamilton County

CALC. BY REA DATE 2/86
CHKD. BY [illegible] DATE 3/86
HAMILTON COUNTY
HAM-75/126 – 9.93/13.00
OHIO
F.H.W.A REGION 5
22 787

ITEM	FROM SHEET NUMBER: Gen. Notes	21	21 A or B	21C	30 A or B	32 A or B	33 A or B	38 B or C	40 A or B	41 A or B	47 A or B	48 A or B	51 A or B	54 A or B	56 A or B	57 A or B	59 A or B	65	762	CODE NO.	ITEM	100% Mill Creek Conservancy District	TOTAL I-75 1(96)10 ①	TOTAL B-243 ②	GRAND TOTAL	UNIT	DESCRIPTION
																											ROADWAY
201																					201				Lump		Clearing and Grubbing
202							Lump	Lump			Lump									①	202		Lump		Lump		Structures Removed
											Lump									②				Lump			
202						Lump														①	202		Lump		Lump		Portions of Structures Removed
					Lump															②				Lump			
202							36	625			309									①	202		970		1035	Lin.Ft.	Pipe Removed, 24" and Under
													65							②				65			
202								135	264											①	202		399		739	Lin.Ft.	Pipe Removed, Over 24"
					170						170									②				340			
202		825						267												①	202		1092		18327	Sq.Yd.	Pavement Removed
		17235																		②				17235			
202		3384																		①	202		3384		7182	Sq.Ft.	Walk Removed
		3000											18	780						②				3798			
202		590						883			260									①	202		1733		5944	Lin.Ft.	Curb Removed
		4068											6	137						②				4211			
202		1189																		①	202		1189		1189	Lin.Ft.	Curb and Gutter Removed
202											172									①	202		172		172	Lin.Ft.	Gutter Removed
202								900			842.5									①	202		1742.5		1812.5	Lin.Ft.	Guardrail Removed
														70						②				70			
202								1	1	1	1									①	202		4		8	Each	Manhole Removed
					1						2		1							②				4			
202								5		3										①	202		8		14	Each	Catch Basin or Inlet Removed
											1	1	1			3				②				6			
202						3			2											①	202		5		28	Each	Manhole Abandoned
					10	1					2	4	2	3	1					②				23			
202						1														①	202		1		26	Each	Catch Basin or Inlet Abandoned
											2			5	10	6	2			②				25			
202										20										①	202		20		2880	Lin.Ft.	Abandon and Plug Pipe 12" and Under
					1140						552	549	318		301					②				2860			
202						75			482	390	558									①	202		1505		3802	Lin.Ft.	Fill and Plug Pipe over 12", As Per Plan
					1875	372								50						②				2297			
202							282	282												①	202		514		514	Lin.Ft.	Concrete Barrier Removed
202														22						②	202			22	22	S.Y.	Concrete Median Removed
202					1															②	202			1	1	Each	Flap Gate Removed for Storage
202					1															②	202			1	1	Each	Regulator Removed for Storage
202				3																②	202			3	3	Each	Remove and Dispose of Above Ground Storage Tank and Facilities
202				1																②	202			1	1	Each	Remove and Dispose of Underground Storage Tank

N27736

GENERAL SUMMARY

GENERAL SUMMARY

CALC. BY REA DATE 2/86 | CHKD. BY [illegible] DATE 3/86 | HAMILTON COUNTY HAM-75/126 – 9.93/13.00 | OHIO F.H.W.A REGION 5 | 23/787

CODE
(1) 95% State, 5% Hamilton County
(2) 87.5% State, 12.5% Hamilton County

ITEM	FROM SHEET NUMBER: Gen. Notes	21	21 A or B	21C	30 A or B	32 A or B	33 A or B	38 B or C	40 A or B	41 A or B	47 A or B	48 A or B	51 A or B	54 A or B	56 A or B	57 A or B	59 A or B	65	762	CODE NO.	ITEM	100% Mill Creek Conservancy District	TOTAL IR-75 (96)10 (1)	TOTAL E-26(83) (2)	GRAND TOTAL	UNIT	DESCRIPTION
																											ROADWAY (CONTD.)
203				3212																	203		3212		3212	Cu.Yd.	Embankment Using No.8 Aggregate
203			145,931																	(1)	203		145,931		882,371	Cu. Yd.	Excavation not Including Embankment Construction
			736,440																	(2)				736,440			
203			680,585																	(1)	203		680,585		1,953,395	Cu Yd.	Embankment
			1,272,810																	(2)				1,272,810			
203		68872																			203		68872		164006	Sq.Yd.	Subgrade Compaction
		95134																						95134			
203	22	32																		(1)	203		55		154	Hr.	Proof Rolling
	63	36			Lump															(2)				99			
503					Lump																503	Lump		Lump	Lump		Cofferdams Cribs and Sheeting
604		12																		(1)	604		12		39	Each	Reference Monument, Standard
		27																		(2)				27			
606												250								(2)	606			250	250	Lin.Ft.	Guardrail, Type 7
606						1733.25	3912.5	1875	1375	1285	2556.25	225								(1)	606		12962		25863.75	Lin.Ft.	Guardrail, Type 5
					770	829.25				1190	1.25	103.125	198.75	262.5	127.5	159.0	147.875			(2)				1290.175			
606					25															(2)	606			25	25	Lin.Ft.	Guardrail, Barrier Design, Type 5
606							3	1	3	1	6									(1)	606		14		34	Each	Anchor Assembly, Standard Type A
					1							1	2	3	5	3	5			(2)				20			
606							3	2	1	3	3									(1)	606		12		23	Each	Anchor Assembly, Standard Type T
												1	2	1	3	2	2			(2)				11			
606						4	6	7	4	4	5	3								(1)	606		33		56	Each	Bridge Terminal Assembly, Standard Type A
					2					1		1	4	8	2	5				(2)				23			
606													1							(2)	606			1	1	Each	Anchor Assembly, Barrier Design, Standard Type A
607																			2232	(1)	607		2232		16505	Lin.Ft.	Fence, Type CLT
																			14273	(2)				14273			
607																			5311	(1)	607		5311		5380	Lin.Ft.	Fence, Type 47
																			69	(2)				69			
													18							(2)	608			18	18	Sq.Ft.	Curb Ramp, Standard Type 2
608							4545													(1)	608		4545		14048	Sq.Ft.	4" Concrete Walk
					4820								473	3428	782					(2)				9503			
608													3	3						(2)	608			6	6	Each	Curb Ramp, Standard Type 2
608														4						(2)	608			4	4	Each	Curb Ramp, Standard Type 1
615	1375																			(1)	615		1375		15174	Sq.Yd.	Temporary Pavement, Class A
	13799																			(2)				13799			
615	Lump																			(1)	615		Lump		Lump		Temporary Roads
																				(2)				Lump			
616		500																		(1)	616		500		1000	M. Gal.	Water
		500																		(2)				500			
616		5																		(1)	616		5		10	Ton	Calcium Chloride
		5																		(2)				5			
Spl.				2																(2)	Spl.			2	2	Each	Drilled Well Abandoned
404	450																			(1)	404		450		950	Cu. Yd.	Bituminous Concrete For Maintaining Traffic
	500																			(2)				500			
Spl.	Lump																			(1)	Spl.		Lump		Lump	Lump	Instrumentation Monitoring
	Lump																			(2)				Lump			
Spl.	2																			(1)	Spl.		2		6	Each	Piezometer
	4																			(2)				4			
Spl.	1																			(1)	Spl.		1		3	Each	Settlement Plate
	2																			(2)				2			
Spl.	1																			(1)	Spl.		1		4	Each	Inclinometer
	3																			(2)				3			

Rev. 10-21-86 SMK

GENERAL SUMMARY

CODE
① 95% State, 5% Hamilton County
② 87.5% State, 12.5% Hamilton County

CALC. BY REA DATE 2/86 | CHKD. BY [illegible] DATE 3/86 | HAMILTON COUNTY HAM-75/126 – 9.93/13.00 | OHIO | F.H.W.A REGION 5 | 24/787

ITEM	FROM SHEET NUMBER: Gen. Notes	21	21 A or B	21C	30 A or B	32 A or B	33 A or B	38 B or C	40 A or B	41 A or B	47 A or B	48 A or B	51 A or B	54 A or B	56 A or B	57 A or B	59 A or B	65	762	CODE NO.	ITEM	100% Millcreek Conservancy District	TOTAL IR-75 1-(96)10 ①	TOTAL E-26(3) ②	GRAND TOTAL	UNIT	DESCRIPTION
																											EROSION CONTROL
207	11626																			①	207		11626		16420	Lin Ft.	Filter Fabric Fence
	4794																			②				4794			
207	922																			①	207		922		1441	Each	Straw or Hay Bales
	519																			②				519			
207	60865																			①	207		60865		81469	Sq.Yd.	Temporary Seeding and Mulching
	20604																			②				20604			
207	1163																			①	207		1163		1642	Lin.Ft.	Temporary Slope Drains
	479																			②				479			
207	182																			①	207		182		204	Cu.Yd.	Temporary Benches, Dikes, Dams and Sediment Basins
	22																			②				22			
601						7	40	14			55									①	601		116		116	Sq.Yd.	Riprap Using 6" Reinforced Concrete Slab
																				②							
601							1274		12797	4000										①	601		18071		42856	Sq.Yd.	Riprap Using 8" Reinforced Concrete Slab, As Per Plan
										10545	10750	3490								②				24785			
601											967	2335								②	601			3302	3302	Cu.Yd.	Rock Channel Protection, Type B with Fabric Filter
601					7529															①	601				7529	Cu.Yd.	Rock Channel Protection, Type C with Fabric Filter
																				②				7529			
601							3011													①	601		3011		3011	Cu.Yd.	Rock Channel Protection, Type A with Filter
																				②							
601							30	890	25											①	601		945		959	Cu.Yd.	Rock Channel Protection, Type B with Filter
												14								②				14			
601						37	10	9	18			1								①	601		75		399	Cu.Yd	Rock Channel Protection, Type C with Filter
					160	2						30		3	129					②				324			
601	43																			①	601		43		68	Cu.Yd.	Rock Channel Protection, Type C without Filter
	25																			②				25			
601								435												①	601		435		551	Lin.Ft.	Paved Gutter, Standard Type 1-2
												58				58				②				116			
601								755	616				750	390	214					①	601		1371		2725	Lin.Ft.	Paved Gutter, Standard Type 2
																				②				1354			
659	3461																			①	659		3461		4670	M.Sq.Ft.	Mowing
	1209																			②				1209			
659	957	270																		①	659		1227		2343	M.Gal.	Water
	423	693																		②				1116			
659			103,024																	①	659		103,024		405614	Sq.Yd.	Seeding and Mulching
			302,590																	②				302,590			
659	16053																			①	659		16053		21204	Sq.Yd.	Repair Seeding and Mulching
	5151																			②				5151			
659	14	11																		①	659		25		59.3	Ton	Commercial Fertilizer
	5.2	29																		②				34.3			
659		56																		①	659		56		200	Ton	Agricultural Liming, As Per Plan
		144																		②				144			
660						1100	1971	1088	2619	1445	329	338								①	660		8890		15998	Sq.Yd.	Sodding
					292	769				275		964	1071	931	1419	873	514			②				7108			
660							486	115	275	101	421	91								①	660		1489		2319	Sq.Yd.	Reinforced Sodding, Standard
					241								82	469	38					②				830			
670							5678		307	899	3181	288								①	670		10353		18986	Sq.Yd.	Slope Erosion Protection
					3901								471	3264	997					②				8633			

GENERAL SUMMARY

CODE
(1) 95% State, 5% Hamilton County
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ITEM	FROM SHEET NUMBER: Gen. Notes	21	21 AorB	21C	30 AorB	32 AorB	33 AorB	38 BorC	40 AorB	41 AorB	47 AorB	48 AorB	51 AorB	54 AorB	56 AorB	57 AorB	59 AorB	65	762	CODE NO.	ITEM	100% Millcreek Conservancy District	TOTAL IR-75 =1(96)10 (1)	TOTAL ~~L=2(43)~~ (2)	GRAND TOTAL	UNIT	DESCRIPTION
																											DRAINAGE
602	3					2.11	2.49	2.32	3.70	.76	23.64	1.40								(1)			39.42		71.04	Cu.Yd.	Concrete Masonry
	7				18.81	.27				.33	.81			4.19	.21					(2)	602			31.62			
603	400																				603		100	300	400	Lin.Ft.	4" Conduit, Type B, 706.08 E.S. W/Joints As Per 706.12
603	400																				603		100	300	400	Lin.Ft.	4" Conduit, Type C, 706.08 W/Joints As Per 706.12
603	40																				603		20	20	40	Lin.Ft.	4" Conduit, Type E, 706.08
603	40																				603		20	20	40	Lin.Ft.	4" Conduit, Type E, 711.29
603	40																				603						4" Conduit, Type F
603													35							(2)	603			35	35	Lin.Ft.	6" Conduit, Type B
603	200																				603		50	150	200	Lin.Ft.	6" Conduit, Type B, 706.08 E.S. W/Joints As Per 706.12
603	200																				603		50	150	200	Lin.Ft.	6" Conduit, Type C, 706.08 W/Joints As Per 706.12
603	40																				603		20	20	40	Lin.Ft.	6" Conduit, Type E, 706.08
603	40																				603		20	20	40	Lin.Ft.	6" Conduit, Type E, 711.29
603	20					46	168	60	179	40										(1)			513		1129	Lin.Ft.	6" Conduit, Type F
	20				40	30				20		90	136	50	120	110				(2)	603			616			
603	200																				603		50	150	200	Lin.Ft.	8" Conduit, Type B, 706.08 E.S. W/Joints As Per 706.12
603	200																				603		50	150	200	Lin.Ft.	8" Conduit, Type C, 706.08 W/Joints As Per 706.12
603	40																				603		20	20	40	Lin.Ft.	8" Conduit, Type E, 706.08
603	40																				603		20	20	40	Lin.Ft.	8" Conduit, Type E, 711.29
603	40																				603		20	20	40	Lin.Ft.	8" Conduit, Type F
603	40																				603		20	20	40	Lin.Ft.	10" Conduit, Type F
603						54	6	324		20		215								(1)	603		619		3022	Lin.Ft.	12" Conduit, Type B
										117	36		586	560	692	412				(2)				2403			
603														8						(2)	603			8	8	Lin.Ft.	12" Conduit, Type B, 706.02
603												191								(2)	603			191	191	Lin.Ft.	12" Conduit, Type B, 706.02 (2250 D-Load) or 707.13
603						16		62	259		208									(1)	603		545		881	Lin.Ft.	12" Conduit, Type C
					119						126				15	76				(2)				336			
603								14												(1)	603		14		14	Lin.Ft.	12" Conduit, Type C, 706.02 (2000 D-Load) or 707.13
603	40																				603		20	20	40	Lin.Ft.	12" Conduit, Type F
603							257	359		43	120	52								(1)	603		831		1142	Lin.Ft.	12" Conduit, Type F, 707.05
												20		107	45	139				(2)				311			
603								16												(1)	603		16		16	Lin.Ft.	12" Conduit, , Ductile Iron Class 53
603						72	282	200	276	78										(1)	603		908		2209	Lin.Ft.	15" Conduit, Type B
					59	67						254	397	242	161	109	12			(2)				1301			
603																152				(2)	603			152	152	Lin.Ft.	15" Conduit, Type B, 706.02 (2000 D-Load) or 707.13
603													50							(2)	603			50	50	Lin.Ft.	15" Conduit, Type B, 706.02 (2250 D-Load) or 707.13
603													147							(2)	603			147	147	Lin.Ft.	15" Conduit, Type B, 706.02 (2750 D-Load) or 707.13
603						150	218	116		212										(1)	603		696		886	Lin.Ft.	15" Conduit, Type C
						75								50	65					(2)				190			
603														52						(2)	603			52	52	Lin.Ft.	15" Conduit, Type C, 706.02 (2000 D-Load) or 707.13
603									93											(1)	603		93		93	Lin.Ft.	15" Conduit, Type D
603						148	118	47												(1)	603		313		768	Lin.Ft.	15" Conduit, Type F, 707.05
					118	59						127		94	57					(2)				455			
603										94				278	200	100				(2)	603			672	672	Lin.Ft.	18" Conduit, Type B
603														230						(2)	603			230	230	Lin.Ft.	18" Conduit, Type B, 707.13
603													14	43	153					(2)	603			210	210	Lin.Ft.	18" Conduit, Type C
603																190				(2)	603			190	190	Lin.Ft.	21" Conduit, Type B
603							192													(1)	603		192		192	Lin.Ft.	21" Conduit, Type B, 706.02 or 707.13

GENERAL SUMMARY

CODE
(1) 95% State, 5% Hamilton County
(2) 87.5% State, 12.5% Hamilton County

CALC. BY REA DATE 2/86 | CHKD. BY Jan DATE 3/86 | HAMILTON COUNTY HAM-75/126 – 9.93/13.00 | OHIO F.H.W.A REGION 5 | 25A 787

ITEM	FROM SHEET NUMBER: Gen. Notes	21	21 A or B	21C	30 A or B	32 A or B	33 A or B	38 B or C	40 A or B	41 A or B	47 A or B	48 A or B	51 A or B	54 A or B	56 A or B	57 A or B	59 A or B	65	762	CODE NO.	ITEM	100% Millcreek Conservancy District	TOTAL IR-75 1/96 (1)	TOTAL IR-75 1/96 (2)	GRAND TOTAL	UNIT	DESCRIPTION
																											DRAINAGE (Continued)
603									177											(1)	603		177		177	Lin. Ft.	Conduit, Type A: 24" 706.02 (1750 D-Load) or 30" 707.01 (.079), 707.04, 707.05 or 707.21
603							117													(1)	603		117		117	Lin. Ft.	Conduit, Type A: 24" 706.02 (1500 D-Load) or 30" 707.05, 707.01 (.079) or 707.04, 707.21
603					330															(2)	603			330	330	Lin. Ft.	Conduit, Type A: 24" 706.02 (2500 D-Load) or 27" 707.01 (.138) or 707.05 (.109), 707.04 (.109) 707.21 (.109)
603									145											(1)	603		145		145	Lin. Ft.	24" Conduit, Type B, 706.02 (1500 D-Load) or 707.13
603											158									(1)	603		158		158	Lin. Ft.	24" Conduit, Type B, 706.02 (2250 D-Load) or 30" 707.13
603														157						(2)	603			157	157	Lin. Ft.	24 Conduit, Type B, 706.02 (3000 D-Load) As Per Plan, Under railroad
603															345					(2)	603			345	345	Lin. Ft.	24" Conduit, Type C
603										60										(1)	603		60		60	Lin. Ft.	24" Conduit, Type C, 706.02 (1750 D-Load) or 707.13
603										378										(1)	603		378		378	Lin. Ft.	24" Conduit, Type C, 706.02 (2000 D-Load) or 707.13
603						54														(1)	603		54		54	Lin. Ft.	Conduit, Type A: 27" 706.02 or 706.08 E.S. or 33" 707.01 (.079), 707.05, 707.04, 707.21
603									85											(1)	603		85		85	Lin. Ft.	27" Conduit, Type B
603							360													(1)	603		360		360	Lin. Ft.	27" Conduit, Type B, 706.02 (2750 D-Load) or 707.13 (.079)
603								518												(1)	603		518		568	Lin. Ft.	27" Conduit, Type C
														50						(2)				50			
603											157									(2)	603			157	157	Lin. Ft.	30" Conduit, Type B
603											326									(1)	603		326		326	Lin. Ft.	30" Conduit, Type B, 706.02 (3250 D-Load) or 33" 707.13 (.079)
603							42													(1)	603		42		42	Lin. Ft.	30" Conduit, Type C, 706.02 or 706.08 E.S.
603														255						(2)	603		255		255	Lin. Ft.	30" Conduit, Type C, 706.02 or 706.08 E.S. or 707.13
603									156											(1)	603		156		156	Lin. Ft.	30" Conduit, Type C, 706.02 (1750 D-Load) or 707.13
603							54													(1)	603		54		54	Lin. Ft.	30" Conduit, Radius Type C, 706.02 or 706.08 E.S.
603														455						(2)	603			455	455	Lin. Ft.	33" Conduit, Type B
603									194											(1)	603		194		194	Lin. Ft.	Conduit, Type A: 36" 706.02 or 42" 707.01 (.079), 707.04, 707.05, 707.21
603									217											(1)	603		217		217	Lin. Ft.	36" Conduit, Type B, As Per Plan
603											264									(1)	603		264		264	Lin. Ft.	36" Conduit, Type B, 707.14 (.079)
603										476										(1)	603		476		476	Lin. Ft.	36" Conduit, Type B, 706.02 (1250 D-Load) or 707.13 As Per Plan
603											32									(1)	603		32		32	Lin. Ft.	36" Conduit, Type B, 706.02 (2250 D-Load) or 707.13
603														122						(2)	603			122	122	Lin. Ft.	36" Conduit, Type C, 706.02 (2500 D-Load) or 707.13
603									24											(1)	603		24		24	Lin. Ft.	Conduit, Type A: 42" 707.01 (.079) or 707.04, 707.05, 707.21
603														141						(2)	603			141	141	Lin. Ft.	42" Conduit, Type B, 706.02 (2250 D-Load) or 707.13
603													376	325						(2)	603			701	701	Lin. Ft.	42" Conduit, Type C, 706.02 (2250 D-Load) or 707.13
603													450							(2)	603			450	450	Lin. Ft.	42" Conduit, Type C, 706.02 (2000 D-Load) or 707.13
603					354															(2)	603			354	354	Lin. Ft.	Conduit, Type A: 48" 707.02 (0.138") 707.04 (0.109") 707.07 or 707.22 (0.109")
603													504							(2)(2)	603			504	504	Lin. Ft.	48" Conduit, Type B 706.02 (2500 D-Load) or 707.13
603								49												(1)	603		49		49	Lin. Ft.	48" Conduit, Radius Type B, 706.02 (1500 D-Load)
603								29												(1)	603		29		29	Lin. Ft.	48" Conduit, Type C, 706.02 (1500 D-Load)
603								28												(1)	603		28		28	Lin. Ft.	48" Conduit, Radius Type C, 706.02 (1500 D-Load)
603												95								(2)	603			95	95	Lin. Ft.	48" Conduit, Type C, 706.02 (2000 D-Load) or 707.13
603												458								(2)	603			458	458	Lin. Ft.	48" Conduit, Type C, 706.02 (2500 D-Load) or 707.13
603												79								(2)	603			79	79	Lin. Ft.	48" Conduit, Type F, 707.05
603								40												(1)	603		40		40	Lin. Ft.	48" Conduit, Type F, 707.05 (0.109)
603					311															(2)	603			311	311	Lin. Ft.	66" Conduit, Type B, 706.02 (1750 D-Load) with 706.11 Joints
603					53															(2)	603			53	53	Lin. Ft.	66" Conduit, Type C, 706.02 (1750 D-Load) with 706.11 Joints
604								1												(1)	604	1			1	Each	Interceptor Chamber
604	1																			(1)	604	1			1	Each	Casting For Existing Manhole
604																1				(2)	604			1	1	Each	Manhole Adjusted To Grade
604								1		2										(1)	604	3			6	Each	Manhole Reconstructed To Grade
														1		2				(2)				3			
604								2												(1)	604	2			3	Each	Manhole Type T Reconstructed To Grade Using Watertight Frame and Cover
																1				(2)				1			

Rev. 7-24-86

CALC. BY REA DATE 2/86 | CHKD. BY [illegible] DATE 3/86 | HAMILTON COUNTY HAM-75/126 – 9.93/13.00 | OHIO | F.H.W.A. REGION 5 | 258 787

GENERAL SUMMARY

CODE
① 95% State, 5% Hamilton County
② 87.5% State, 12.5% Hamilton County

ITEM	FROM SHEET NUMBER: GEN. NOTES	21	21 A&B	21 C	30 A or B	32 A or B	33 A or B	38 B or C	40 A or B	41 A or B	47 A or B	48 A or B	51 A or B	54 A or B	56 A or B	57 A or B	59 A or B	65	762	CODE NO.	ITEM	100% Millcreek Conservancy District	TOTAL IR-75 E-2(43) (96)10 ①	TOTAL IR-75 E-2(43) (96)10 ②	GRAND TOTAL	UNIT	DESCRIPTION
																											DRAINAGE (CONTD.)
604								3	4	2	2									①	604		11		12	Each	Manhole, Type A
											1									②				1			
604								1												①	604		1		1	Each	Manhole, Type A, With Drop Pipe
604														2						②	604			2	2	Each	Manhole, With Sloped Top
604					2		1						1	5	4	3				②	604			16	16	Each	Manhole, Standard No. 1
604												1	5	1	3					① ②	604			10	10	Each	Manhole, Standard No. 3
604																1				②	604			1	1	Each	Manhole, Type T, Reconstructed to Grade
604									1							1				①	604		2		2	Each	Manhole, Standard No. 3 With Flat Top
Spl.						112	197	60	195	172	20	7								①	Spl.		763		1521	Cu.Yd.	Drainage Connection, Using No. 8 Aggregate
					49	45					21	126	187	64	114	121	31			②				758			
604						2		2												①	604		4		6	Each	Single Gutter Inlet
											2									②				2			
604								3												①	604		3		3	Each	Double Gutter Inlet
604							1	1	1	1										①	604		4		4	Each	Ditch Inlet
609	1																			①	604		1		1	Each	Castings for Existing Catch Basins
Spl.					Lump															②	Spl.			Lump	Lump	Lump	Outlet Structure
Spl.					1															②	Spl.			1	1	Each	Flap Gate
604						1				1		2								①	604		1		1	Each	Catch Basin, Standard No. 2-2-B
604							1						1	8	6	2				① ②	604		4	18	22	Each	Catch Basin, Standard No. 3 With V-Grate
604											1	2	1	3	4	7	1			②	604			18	18	Each	Catch Basin, Standard No. 3-A With V-Grate
604						1		1		1		1								① ②	604		4		22	Each	Catch Basin, Standard No. 5
										2	1		3	4	5	3								18			
604							2	2	1	2										①	604		7		9	Each	Catch Basin, Standard No. 5-A
													1	1						②				2			
604														1						②	604			1	1	Each	Catch Basin, Standard No. 5-A With B-Grate
604													1	3						②	604			4	4	Each	Catch Basin, Standard No. 5 With B Grate
604							4	1		1	1	1								①	604		8		12	Each	Catch Basin, Standard No. 6
					1									1	1	1				②				4			
604						2														②	604			2	2	Each	Catch Basin, Standard No. 8
604						1			1											①	604		2		4	Each	Catch Basin, Standard No. 2-3
					1						1									②				2			
604						3			2											①	604		5		7	Each	Inlet, Standard No. I-3B, Modification A, As Per Plan
												1	1							②				2			
604							2		4	2			1②							①	604		8	1	9	Each	Inlet, Standard No. I-2A-6
604												1	1	2	2	1				②	604			7	7	Each	Inlet, Standard No. I-3B
604														3						②	604			3	3	Each	Inlet, Standard No. I-3B, Modified As Per Plan
605	100																				605		50	50	100	Lin.Ft.	Aggregate Drains For Springs
605						2398	4836	1244	4748	2757		177								①	605		16210		31418	Lin.Ft.	6" Shallow Underdrain, As Per Plan
					1278	932					62	1032	4667	2199	3138	1900				②				15208			
605									290	832	410									①	605		1532		7351	Lin.Ft.	6" Deep Underdrain, As Per Plan
										721	370	2032	561		185	1310	640			②				5819			
605										100										①	605		100		679	Lin.Ft.	6" Unclassified Underdrain, As Per Plan
											50	54	100	175		150	50			②				579			
605	300																				605		150	150	300	Lin.Ft.	6" Unclassified Pipe Underdrains, 707.01 Typ. III or 707.12 Typ. III As Per Plan

N37736

GENERAL SUMMARY

CODE
① 95% State, 5% Hamilton County
② 87.5% State, 12.5% Hamilton County

CALC. BY RCA DATE 8/86 | CHKD. BY JAC DATE 9/86 | HAMILTON COUNTY HAM-75/126-9.93/13.00 | OHIO F.H.W.A REGION 5 | CSC 787

ITEM	FROM SHEET NUMBER: Gen. Notes	21	21 A or B	21C	30 A or B	32 A or B	33 A or B	38 B or C	40 A or B	41 A or B	47 A or B	48 A or B	51 A or B	54 A or B	56 A or B	57 A or B	59 A or B	65	343	762	CODE NO	ITEM	100% Millcreek Conservancy District	TOTAL FR-75-1(96)12 ①	TOTAL (5-243) ②	GRAND TOTAL	UNIT	DESCRIPTION
																												SANITARY SEWERS
602																			66.5		②	602			66.5	66.5	Cu. Yd.	Concrete Masonry
603														150							②	603			150	150	Lin. Ft.	8" Conduit, Type C, 706.08 E.S. with 706.12 Joints
509																			2774		②	509			2774	2774	Lbs.	Reinforcing Steel
603					448	452															①&②	603		452	448	900	Lin. Ft.	12" Conduit, Type B, 706.02 (3000 D-Load) with 706.11 Joints
603												8									②	603			8	8	Lin. Ft.	12" Conduit, Type B, 706.02 with 706.11 Joints
603								43							340						②	603			383	383	Lin. Ft.	12" Conduit, Type C, 706.02 (2250 D-Load) with 706.11 Joints
603														235							②	603			235	235	Lin. Ft.	12" Conduit, Type C, 706.02 (2750 D-Load) with 706.11 Joints
603														275							②	603			275	275	Lin. Ft.	15" Conduit, Type B, 706.02 (2000 D-Load) with 706.11 Joints
603					26																②	603			26	26	Lin. Ft.	18" Conduit, Type C, 706.02 (2000 D-Load) with 706.11 Joints
603											330										②	603			330	330	Lin. Ft.	24" Conduit, Type C 706.02 (2000 D-Load) with 706.11 Joints
603											107										②	603			107	107	Lin. Ft.	27" Conduit, Type B, 706.02 (2000 D-Load) with 706.11 Joints
603											187										②	603			187	187	Lin. Ft.	27" Conduit, Type C, 706.02 (2000 D-Load) with 706.11 Joints
603						267' 50					174										②	603			174	174	Lin. Ft.	33" Conduit, Ductile Iron, Class 53 with Mechanical Joints
603									264												②	603	267		264	264	Lin. Ft.	54" Conduit, Type B, 706.02 (2000 D-Load) with 706.11 Joints
603					317'																②	603	317		50	317	Lin. Ft.	54" Conduit, Type B, 706.02 (?250 D-Load) with 706.11 Joints
603									566												①	603		566		566	Lin. Ft.	54" Conduit, Type C, 706.02 (1250 D-Load) with 706.11 Joints
603										306											①	603		306		306	Lin. Ft.	54" Conduit, Type C, 706.02 (1500 D-Load) with 706.11 Joints
603					148'																②	603	148			148	Lin. Ft.	54" Conduit, Type C, 706.02 (2250 D-Load) with 706.11 Joints, As Per Plan
603					860	115 247															① ②	603		975	247	1222	Lin. Ft.	54" Conduit, Type C, 706.02 (2000 D-Load) with 706.11 Joints
603					96																②	603			96	96	Lin. Ft.	54" Conduit, Type C, Radius 706.02 (2000 D-Load) with 706.11 Joints
603					47'																②	603	47			47	Lin. Ft.	54" Conduit, Type C, Radius 706.02 (2250 D-Load) with 706.11 Joints
604					2	2					2	1	3								① ②	604		2	8	10	Each	Manhole, Type S
604					3 1'	1				1											① ②	604	1	2	4	7	Each	Manhole, Type T
604														1	1						②	604			2	2	Each	Manhole, Type T, Reconstructed To Grade
604									1												①	604		1		1	Each	Manhole Adjusted To Grade
604									2												①	604		2		2	Each	Water Tight Type T Manhole
604											1			3							②	604			4	4	Each	Manhole, Type S with Drop
604					1																②	604			1	1	Each	Manhole, Type T with Interceptor Chamber
604															1						②	604			1	1	Each	Manhole, Type S, Reconstructed To Grade
																												PAVEMENT
301								13							26						① ②	301		13	26	39	Cu. Yd.	Bituminous Aggregate Base: AC-20; or RT-11 or RT-12
304						63					93			32	11	435					① ②	304		156	478	634	Cu. Yd.	Aggregate Base, As Per Plan
305					266									2763	2709						②	305			5738	5738	Sq. Yd.	8" Concrete Base, As Per Plan
310					1011	1802 785	2780	1616	3287	2057 562	466 331	135 2339	3202	2635	2512	2514	187				① ②	310		12143	16078	28221	Cu. Yd.	Subbase, Type II, As Per Plan

Rev. 9-16-86 SMK

GENERAL SUMMARY

CODE
(1) 95% State, 5% Hamilton County
(2) 87.5% State, 12.5% Hamilton County

CALC. BY REA DATE 2/86 | CHKD. BY JR DATE 2/86 | HAMILTON COUNTY HAM-75/126-9.93/13.00 | OHIO | F.H.W.A REGION 5 | 25D 787

ITEM	FROM SHEET NUMBER: GEN. NOTES	21	21 A & B	21 C	30 A or B	32 A or B	33 A or B	38 B or C	40 A or B	41 A or B	47 A or B	48 A or B	51 A or B	54 A or B	56 A or B	57 A or B	59 A or B	65	762	CODE NO.	ITEM	100% Millcreek Conservancy District	TOTAL IR-75 I-(96)10 (1)	TOTAL E=2(63) (2)	GRAND TOTAL	UNIT	DESCRIPTION
																											PAVEMENT (CONT.)
402						18														(1)	402		18		434	Cu. Yd.	Asphalt Concrete, AC-20
					13									144	132	127				(2)				416			
404						14		4			39									(1)	404		57		370	Cu. Yd.	Asphalt Concrete, AC-20
					9									104	111	89				(2)				313			
407					27									9	280					(2)	407			316	316	Gal.	Tack Coat
407						1								1	11					(2)	407			13	13	Ton	Cover Aggregate
408						153					223									(1)	408		376		1514	Gal.	Bituminous Prime Coat
														75	20	1043				(2)				1138			
411					21										5					(2)	411			26	26	Cu. Yd.	Stabilized Crushed Aggregate
451						2301	5080	2353	6406	3516										(1)	451		19656		31043	Sq. Yd.	9" Reinforced Concrete Pavement, As Per Plan
											218	55	3628	2736	3379	1371				(2)				11387			
451						4868	2933		4443	5674	816	461								(1)	451		19195		61488	Sq. Yd.	10" Reinforced Concrete Pavement, Modified, As Per Plan
					3852	3425					1231	8668	8510	5400	4800	6407				(2)				42293			
451																111	629			(2)	451			740	740	Sq. Yd.	10" Reinforced Concrete Pavement, As Per Plan
451							1142	2967		1159	230									(1)	451		5498		5498	Sq. Yd.	12½" Reinforced Concrete Pavement, Modified As Per Plan
452						1734	1334	1985	1535	1911	264	158								(1)	452		8928		23986	Sq. Yd.	7" To 10" Plain Concrete Pavement, Modified, As Per Plan
					1364	1011				744	516	2721	2709	1800	2288	1362	543			(2)				15058			
452						468	334	260	760	518	469	89								(1)	452		2898		4494	Sq. Yd.	8" To 10" Plain Concrete Pavement, Modified, As Per Plan
					532	207				313	203	341								(2)				1596			
452						403	595	287	1107	309										(1)	452		2701		10038	Sq. Yd.	9" To 10" Plain Concrete Pavement, Modified, As Per Plan
												1635	2270	1387	629	1416				(2)				7337			
452						427	1969	1008	2079	1296										(1)	452		6779		8059	Sq. Yd.	7" To 9" Plain Concrete Pavement, Modified, As Per Plan
													955		327	598				(2)				1880			
452						666	817	224	825	579										(1)	452		3111		3826	Sq. Yd.	8" To 9" Plain Concrete Pavement, Modified, As Per Plan
						207							279		134	95				(2)				715			
452									233											(1)	452		233		366	Sq. Yd.	9" Plain Concrete Pavement, Modified, As Per Plan
													133							(2)				133			
452						11														(1)	452		11		23	Sq. Yd.	6" Plain Concrete Pavement, As Per Plan
					12															(2)				12			
Special																		1164		(1)	Special		1164		7306.24	Sq. Ft.	Noise Barrier, 10 Feet Height and Under
																		6142.24		(2)				6142.24			
Special																		2978.28		(1)	Special		2978.28		51667.96	Sq. Ft.	Noise Barrier, Over 10 Feet To 14 Feet Height
																		2188.5.16		(2)				21885.16			
Special																		1080		(1)	Special		1080		40833	Sq. Ft.	Noise Barrier, Over 14 Feet To 20 Feet Height
																		39.753		(2)				39753			
609							108	50	28	24	32	14								(1)	609		256		3659	Lin. Ft.	Curb, Standard Type 2A
					22						177	110	566	1103	1390	35				(2)				3403			
609					161									847	802					(2)	609			1810	1810	Lin. Ft.	Curb, Standard Type 2B
609																1134				(2)	609			1134	1134	Lin. Ft.	Combination Curb and Gutter, Standard Type 3
609						288	631		34	45	854	12								(1)	609		1864		4537	Lin. Ft.	Curb, Standard Type 6
					212						30		176	407	674	865	309			(2)				2673			
609								325												(1)	609		325		965	Lin. Ft.	Curb, Standard Type 7
												640								(2)				640			
609														137						(2)	609			137	137	Lin. Ft.	Curb, Standard Type 7, Modified, As Per Plan

CALC. BY REA DATE 2/06 | CHKD. BY Jar DATE 3/06 | HAMILTON COUNTY HAM-75/126 - 9.93/13.00 | OHIO F.H.W.A REGION 5 | 25E 787

GENERAL SUMMARY

CODE
(1) 95% State, 5% Hamilton County
(2) 87.5% State, 12.5% Hamilton County

ITEM	FROM SHEET NUMBER: GEN. NOTES	21	21 A&B	21 C	30 A or B	32 A or B	33 A or B	38 B or C	40 A or B	41 A or B	47 A or B	48 A or B	51 A or B	54 A or B	56 A or B	57 A or B	59 A or B	65	762	CODE NO.	ITEM	100% Millcreek Conservancy District	TOTAL I.R.-75 (1)	TOTAL I.R.-75 (2)	GRAND TOTAL	UNIT	DESCRIPTION
																											PAVEMENT (Cont.)
611							847	815	286	158	262	113								(1)	611		2481		4483	Sq. Yd	Reinforced Concrete Approach Slab (T=15")
					215						122	122	230	830	281	202				(2)				2002			
612							905		2492						82	83				(1)	612		3397		3562	Sq. Yd	Concrete Median, Standard Type
																				(2)				165			
622												975	1348	1004	840	832				(2)	622			4999	4999	Lin. Ft.	Concrete Barrier, Standard Type A
622							282	235												(1)	622		517		517	Lin. Ft.	Concrete Barrier, Standard Type A-50
622											260									(1)	622		260		260	Lin. Ft.	Concrete Barrier, Standard Type D
622								601.4												(1)	622		601.4		1110.14	Lin. Ft.	Concrete Barrier, Standard Type D, Modified, As Per Plan
													508.74							(2)				508.74		
622								28												(1)	622		28		28	Lin. Ft.	Concrete Barrier Standard Type C
622						708.25	215.41		950		19.99									(1)	622		1893.9		3788.15	Lin. Ft.	Concrete Barrier, Standard Type D-50, Modified
					622.55	466.75						500.69	304.26							(2)				1894.25			
Spl.						97	146	140	113	60		38								(1)	Spl.		594		1033	Lin. Ft.	Pressure Relief Joint, Standard Type A
					76						38	38	80	130	77					(2)				439			
																											MAINTENANCE OF TRAFFIC
614	0.8																			(2)	614			0.8	0.8	Miles	Temporary Lane Line, Class I
614	0.5																			(2)	614			0.5	0.5	Miles	Temporary Centerline, Class I
614	300																			(2)	614			300	300	Lin. Ft.	Temporary Channelizing Lines, Class I
614	0.3																			(1)	614		0.3		1.80	Miles	Temporary Edge Lines, Class I
	1.5																			(2)				1.5			
614	214																			(2)	614			214	214	Lin. Ft.	Temporary Stop Lines, Class I
614	2																			(2)	614			2	2	Each	Temporary Railroad Symbol Marking, Class I
614	725																			(2)	614			725	725	Lin. Ft.	Temporary Transverse Lines, Class I
614	2																			(2)	614			2	2	Each	Temporary Word On Pavement, Class I "Only "72"
615	396																			(1)	615		396		396	Lin. Ft.	Type III Barricades Left in Place
Spl.	1625																			(2)	Spl.		1625		1625	Lin. Ft.	Temporary Asphalt Divider
622	1000																			(1)	622		1000		1000	Lin. Ft.	Temporary Concrete Barrier, As Per Plan, Left in Place
622	750																			(1)	622		750		750	Lin. Ft.	Temporary Precast Concrete Barrier
Spl.	100																			(1)	Spl.		100		200	Each	Replacement Drums
	100																			(2)				100			
Spl.	250																			(1)	Spl.		250		500	Sq. Ft.	Replacement Signs
	250																			(2)				250			
614	0.51																			(1)	614		0.51		0.51	Miles	Temporary Edge Line, Class I, Left In Place
614	445																			(1)	614		445		445	Lin. Ft.	Temporary Transverse Line, Class I, Left In Place
614	689																			(1)	614		689		689	Lin. Ft.	Temporary Channelizing Line, Class I, Left In Place
Spl.	23																			(1)	Spl.		23		23	Each	Drums, Left In Place
Spl.	20																			(2)	Spl.			20	20	Each	Replacement Pylons

GENERAL SUMMARY

CODE
(1) 95% State, 5% Hamilton County
(2) 87.5% State, 12.5% Hamilton County

ITEM	FROM SHEET NUMBER: GEN. NOTES	21	21 A&B	21 C	30 A or B	32 A or B	33 A or B	38 B or C	40 A or B	41 A or B	47 A or B	48 A or B	51 A or B	54 A or B	56 A or B	57 A or B	59 A or B	65	762	CODE NO.	ITEM	100% Millcreek Conservancy District	TOTAL I.R. 75 (1)	TOTAL [illegible] (2)	GRAND TOTAL	UNIT	DESCRIPTION
																											S.W.O.W. Co. Water Line Relocation - For Quantities See Sheet No. 766
																											Cincinnati Water Works Plan - For Quantities See Sheet No. 774
																											Lighting - For Quantities See Summary Sheet No. 358
																											Traffic Control - For Quantities See Summary Sheet No. 376 & 377
																											Walls Nos. 2 Thru 9: See Summary Sheet No. 438

Structures Over 20' Span

Structure No.	Summary Sheet No.
HAM-126-1303 Left & Right	Sheet No. 492 ✓✓
HAM-126-1359	Sheet No. 604 ✓
HAM-126-1376	Sheet No. 622 ✓
HAM-126-1456	Sheet No. 665 ✓
HAM-126-1467	Sheet No. 677 ✓
HAM-126-1483	Sheet No. 690 ✓
HAM-126-1516	Sheet No. 716 ✓
HAM-126-1328	Sheet No. 547 ✓
Romp D Anthony Wayne	Sheet No. 567 ✓
HAM-126-1389	Sheet No. 643 ✓
HAM-75-1010	Sheet No. 523 ✓
Romp C Anthony Wayne - ConRail R.R.	Sheet No. 537 ✓
HAM-126-1497	Sheet No. 705 ✓
HAM-126-1330	Sheet No. 586 ✓
HAM-126-1400	Sheet No. 729A ✓
Service Road Over Mill Creek	Sheet No. 730A ✓

Spl.		200																		(1)	Spl.		200		200	Hour	Law Enforcement Officer with Patrol Car
614																					614				Lump		Maintaining Traffic
619																					619				Lump		Field Office
623																					623				Lump		Construction Layout Stakes
624																					624				Lump		Mobilization

N237736

CALC JAA DATE 2/86

CHK'D Rea DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

26
707

HAM-75-2.73
HAM-126-13.00
HAMILTON COUNTY

152 Yellow
26-51B

BENCH MARKS

NUMBER	DESCRIPTION
City - No. 319	Anthony Wayne Ave. at Mystic Ave. Mark is in the N.W. Corner between the sidewalk and curb 28.1' N. of the N. curb line of Mystic Ave. and 2.1' W. of the W. curb line of Anthony Wayne Ave. B.M. Elev. 538.473
City - No. 159	Vine St. at Mill Creek. Mark is in the E. end of the S. abutment of the steel truss bridge, 12.6' E of the E. curb line of Vine St. and 2.7' S. of the N. face of the abutment. B.M. Elev. 539.419
City - No. 2100	Reading and Amity Rds. Mark is in the N.E. corner 14.2' N. of the N. curb line of Amity Rd. 3.2' E. of the E. curb line of Reading Rd. B.M. Elev. 577.140
City - No. 4094	Galbraith Rd. and Cross County Highway. Mark is in a traffic island in the southbound lanes, 5.3' S.E. of the N.W. edge of said traffic island and 9.7' S.W. of the N.E. edge of said traffic island. B.M. Elev. 604.692
City - No. 4095	Cross County Highway just N. of Knollcrest Dr. Mark is in the grass divider strip in the center of Cross County Highway 38' N. of the produced N. line of Knollcrest Dr. and 1' W. of the C.L. of Cross County Highway. B.M. Elev. 632.354
City - No. 2101	Reading Rd. at Merrell Ln. Mark is in the S.E. corner at the back of the E. sidewalk of Reading Rd. Approximately on the line of the back of the S.W. sidewalk of Jefferson Ave. produced, 45.6' of a boulevard light and in front of a 1-1/2 story stucco. B.M. Elev. 556.758
T.B.M.	Bolt at point of arrow lower ring of Fire Hyd. in front of No. 27 DeCamp Ave. T.B.M. Elev. 533.68
B.M. No. 1	R.R. spike in power and light pole No. Q17-4E opposite house No. 8068 Woodbine Ave. B.M. Elev. 533.60
B.M. No. 2	Bolt at point of arrow upper ring of Fire Hyd. at Anthony Wayne and Woodbine Ave. B.M. Elev. 532.92
City - No. 318	Anthony Wayne Ave. at the bridge over Mill Creek. Mark is in the top of the N.W. wingwall 10.0' W. of the W. curb line of Anthony Wayne Ave. and 1.0' S. of the N. edge of the coping. B.M. Elev. 535.486
B.M. No. 3	Bolt at point of arrow of Fire Hyd. N.W. corner of Anthony Wayne and Avalon St. B.M. Elev. 533.09
TBM No. B	Bolt at Point of Arrow of Fire Hydrant Corner of Parkway and Anthony Wayne BM Elev 543.45

NUMBER	DESCRIPTION
B.M. No. 5	Chiseled square cut on 2' wall on E. side of Anthony Wayne under C.L. of Galbraith Rd. B.M. Elev. 546.49
T.B.M. No. C	Spike in Light Pole on South Side of Galbraith Road at North Bound Exit. B.M. Elev. 550.21
B.M. No. 7	Bolt at point of arrow on Fire Hyd. 150' E. of I-75 N. Bound on S. side of Galbraith Rd. near Lewis Animal Hospital. B.M. Elev. 549.57
T.B.M. No. D	Chiseled Square Cut on S.W. Wingwall of Bridge over West Fork of Mill Creek. B.M. Elev. 546.44
T.B.M. No. E	Spike in Power and Telephone Pole No. R-17-19.1E on Galbraith Rd. at Hordees. B.M. Elev. 569.30
T.B.M. No. F	Spike in Power, Telephone and Light Pole #R-17-18.4E at Galbraith Rd. at Burkhart. B.M. Elev. 580.37
B.M. No. 11	S.W. Bolt on R.R. Signal Tower at Galbraith Rd. Tower is on the E. side of tracks on the N. side of Galbraith Rd. B.M. Elev. 576.31
B.M. No. 13	Bolt at point of arrow on Fire Hyd. in front of No. 8135 Burkhart Ave. B.M. Elev. 565.71
B.M. No. 14	Bolt at point of arrow on Fire Hyd. in front of No. 1914 Canterbury Gardens. B.M. Elev. 583.83
B.M. No. 15	Bolt at point of arrow of Fire Hyd. in front of No. 8110 Stillwell Ave. B.M. Elev. 577.39
B.M. No. 16	Bolt at point of arrow on Fire Hyd. in front of No. 7967 Greenland Ave. B.M. Elev. 543.50
City 4054	Anthony Wayne Ave. Opposite Hartwell Ave. Mark is 24' East of the ℄ of Anthony Wayne Ave. 33' South of the Produced ℄ of Hartwell Ave. and 64' South of Pole No. Q17-33.2E B.M. 549.115

NUMBER	DESCRIPTION
T.B.M. No. 1	N.W. abutment west side of I-75 S.B. Sta. 88+46, I-75, 45' Lt. T.B.M. Elev. 536.03
T.B.M. No. 24	Spike in abandoned pole. Sta. 39+82 Ramp D, 17' Lt. T.B.M. Elev. 543.78
T.B.M. No. 15	N.W. corner of light pole base #A4 17C. Sta. 123+73 I-75 N.B., 36' Rt. T.B.M. Elev. 545.87
T.B.M. No. 17	Fire Hydrant at end of Down Ave. Sta. 61+35 E.B. 126, 475' Rt. T.B.M. Elev. 588.97
T.B.M. No. 18	N.E. bolt on abandoned R.R. signal base. Sta. 60+00 W.B. 126, 162' Lt. T.B.M. Elev. 550.33
T.B.M. No. 19	N.E. corner of concrete light pole base. Sta. 113+85 I-75 S.B., 30' Lt. T.B.M. Elev. 540.18
T.B.M. No. 20	N.E. abutment east side of I-75 N.B. Sta. 89+03 I-75, 47' Rt. T.B.M. Elev. 535.36
T.B.M. No. 21	Spike in 24" Sycamore tree. Sta. 46+50 E.B. 126, 185' Rt. T.B.M. Elev. 520.62
T.B.M. No. 22	Spike in 48" Maple tree Sta. 60+10 E.B. 126, 210' Rt. T.B.M. Elev. 594.22
T.B.M. No. 23	Spike in 24" Maple tree Sta. 105+52 ℄ 126, 100' Rt. T.B.M. Elev. 569.64
M.F.P. No. 158	Carthage Fairgrounds near the inside edge of the race track at the N.E. turn. Sta. 28+00 E.B., 322' Rt. M.F.P. Elev. 528.29
M.F.P. No. 162	East end of Galbraith Rd. exit sign. Sta. 111+52 I-75 N.B., 41' Rt. M.F.P. Elev. 537.34
M.F.P. No. 164	Between Mill Creek and North Bound I-75 south of the West Fork of Mill Creek. Sta. 131+83 I-75 N.B., 85' Rt. M.F.P. Elev. 536.95
B.M. No. 159A	Spike in R.R. pole. Sta. 504+25 W.B. 126, 5' Lt. B.M. Elev. 536.15
B.M. No. 2166	S.E. abutment Galbraith Rd. bridge over South Bound I-75. Sta. 138+97 I-75 S.B., 100' Rt. B.M. Elev. 580.20

CROSS SECTION INDEX

LOCATION	SHEET NO.
E.B. SR.-126	(Includes WB. SR. 126 Extension) 80, 80A, BC.
E.B. SR.-126	81-118, 81A, ABCDEFGHIJR, 82A, 83A, 89A, 97A, BC.
SR.-126	119-155, 132A, 123 A,B,C,
WB. SR.-126	156-177, A,B, 159A, 174 A,B,C.
I-75	179-190, 184 A,B.
N.B. I-75	191-201
RAMP C	202-212, 206 A,B.
RAMP D	215-231, 230 A
RAMP E	233-238
RAMP F	239-250, 250A
RAMP H	251-258
RAMP I	259-266
RAMP P	267-271, 267A.
RAMP Q	272-275, 275 A,B,C.
RAMP T	276-278A
RAMP N	(Included in S.R.-126 Sections)
Knollcrest Dr.	279-281, 281 A,B.
Galbraith Rd.	282, 282 A,B,C,D,E,F
	McLean Drive 281C
	Honeywell 281D
DRIVE A	284, 284A
DRIVE B	285, 285 A,B
CUL-DE-SACS	286-287, 287A
RELOCATED MILL CR.	288-288 A,B,C,D,E,F,G.
TEMPORARY ROAD NO.1	(See Ramp F sheets.)
TEMPORARY ROAD NO.2	(Sheets 289, 289 A,B,C)
TEMPORARY ROAD NO.3	(Sheets 289, D,E,F.)
TEMPORARY ROAD NO.4	(See Ramp Q)
TEMPORARY ROAD NO.5	(Sh. 289G)
Service Road	Sh. 289H, I, J

INDEX OF ADDITIONAL SHEETS USED

2A,B,C; 3A; 5A,B; 6A; 16A,B,C,D; 17A, 18A,B; 19A,B,C,D, E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U; 20A,B,C,D,E,F,G, H,I,J,K,L,M,N,O,P,Q,R,S,T,U,W,X,Y,Z, AA,BB,CC,DD,EE, 21A,B,C; 25A,B,C,D,E,F; 28A; 29A, 30A,B; 32A,B, 27A, B 33A,B; 37A; 38A,B,C; 40A,B; 41A,B; 47A,B; 48A,B; 51A,B; 54A,B; 56A,B; 57A,B; 59A,B; 65A,B; 69A,B,C,D; 78A,B; 79A,B; D,E,F; 80A,B,C; 81A, B,C,D,E,F,G,H,I,J,K; 82A; 83A; 89A; 97A,B,C; 114A; 115A; 116A; 117A; 118A; 119A; 129A,B,C; 132A; 159A; 174A,B,C; 177A; 184A,B; 201A; 206A,B; 250A; 267A; 275A,B,C; 278A; 281A,B,C,D; 282A,B,C,D,E,F,G; 283A,B; 284A; 285A,B; 287A; 288A,B,C,D,E,F,G; 289A,B,C,D,E,F,G,H,I,J; 294A; 296A; 306A; 310A,B,C,D,E; 312A,B; 323A; 337A; 339A,B,C,D,E; 351A,B,C; 352A,B; 357A; 358A,B,C,D,E; 372A,B ; 483A,B,C,D,E,F,G,H, I,J, J(1), J(2), K,L,M,N,P,Q,R,S,T,U,V,W,X,Y; 549A,B; 550A; 522A; 523A; 527-AB; 530A; 531A; 533A; 537A; 540A,B; 542A; 567A, 572A,B; 586A; 604A; 622A; 643A,B; 665A; 677A,B; 690A,B,C; 705'A; 716A; 722A; 729A,B,C,D,E,F,G,H,I,J; 730A,B,C, D,E,F,G,H; 747A; 763A; 775A; 776A; 786A; 27A,B; 552A,B,C; 553A; 554A; 555A; 557A,B, C; 558A; 560A,B,C.

483AA; 492A; 513A; 515A; 517A; 520A; 483Z; 549A,B; 550A ; 376A ; 488 A,B,C; 400A

INDEX OF SHEES NOT USED

223, 333, 344, 354, 437, 457-465, 473-477 634, 673, 731, 732, 758, 767-773, 483-O, 484-487

DEVELOPED		CHECKED	
D.L.M.	4-71	H.T.	11-71

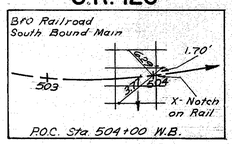
BENCH MARKS & CROSS SECTION INDEX

FED. AID SYSTEM	STATE	PROJECT	
2	OHIO		

27
787

HAM-75-2.93
HAM-126-13.00
HAMILTON COUNTY

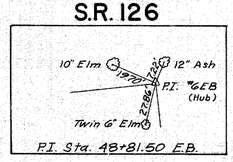
S.R. 126



P.O.C. Sta. 504+00 W.B.

S.R. 126

S.R. 126



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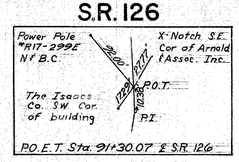
S.R. 126



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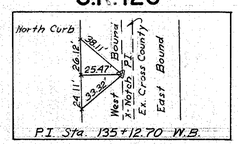
S.R. 126



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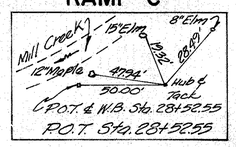
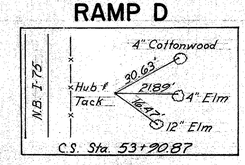
RAMP C



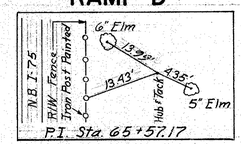
P.O.T. & W.B. Sta. 28+32.55
P.O.T. Sta. 28+32.55

RAMP D



C.S. Sta. 53+90.87

RAMP D



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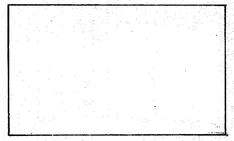
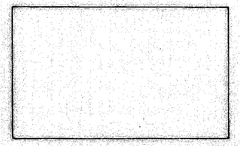
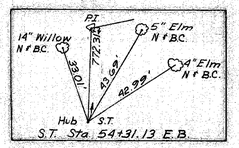
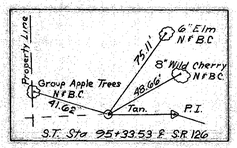


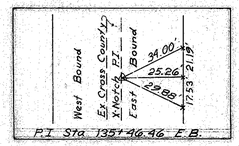




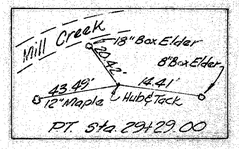
S.T. Sta. 54+31.13 E.B.



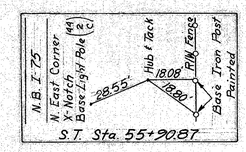
S.T. Sta 95+33.53 ℓ S.R. 126



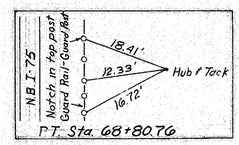
P.I. Sta. 135+46.46 E.B.



P.T. Sta. 29+29.00

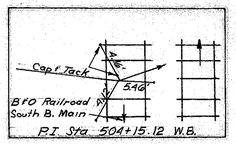


S.T. Sta. 55+90.87

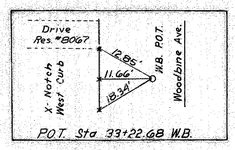


P.T. Sta. 68+80.76

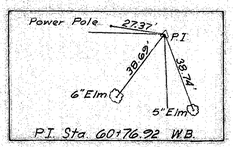
Note: Ramp "D" ℄ Shifts 24' Lt. @ Sta. 68+80.76



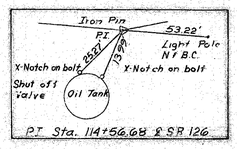
P.I. Sta. 504+15.12 W.B.



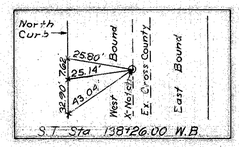
P.O.T. Sta 33+22.68 W.B.



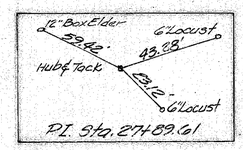
P.I. Sta. 60+76.92 W.B.



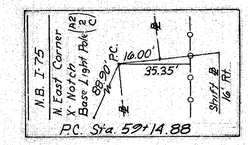
P.I. Sta. 114+56.68 ℓ S.R. 126



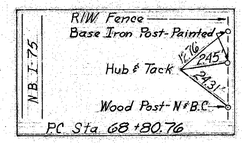
S.T. Sta. 138+26.00 W.B.



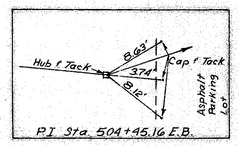
P.I. Sta. 27+89.61



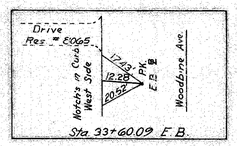
P.C. Sta. 59+14.88



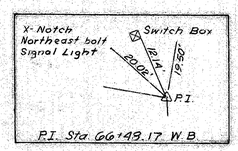
P.C. Sta. 68+80.76



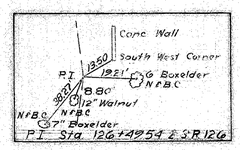
P.I. Sta. 504+45.16 E.B.



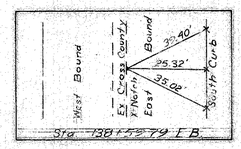
Sta. 33+60.09 E.B.



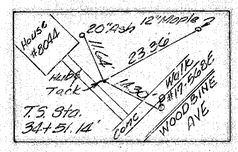
P.I. Sta. 66+49.17 W.B.



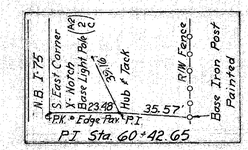
P.T. Sta. 126+49.54 ℓ S.R. 126



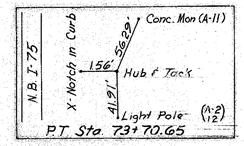
Sta. 138+75.79 E.B.



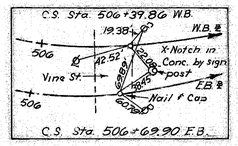
T.S. Sta. 34+51.12'



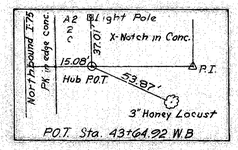
P.I. Sta. 60+42.65



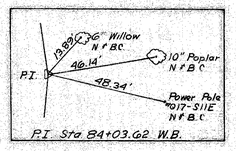
P.T. Sta. 73+70.65



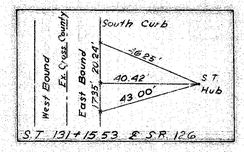
C.S. Sta. 506+69.90 E.B.



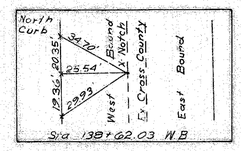
P.O.T. Sta. 43+64.92 W.B



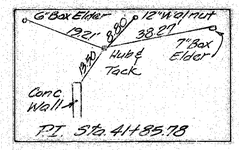
P.I. Sta 84+03.62 W.B.



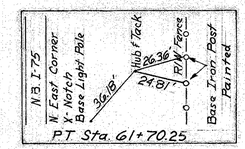
S.T. 131+15.53 ℓ S.R. 126



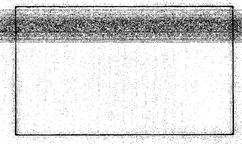
Sta 138+62.03 W.B

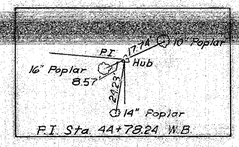


P.I. Sta. 41+85.78



P.T. Sta. 61+70.25





P.I. Sta. 44+78.24 W.B.

T.S. Sta. 87+44.00 ℓ S.R. 126

T.S. Sta. 151+38.28 W.B.

S.T. Sta. 46+24.11

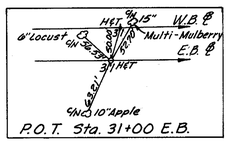
P.C. Sta 62+30.76

WITNESSES

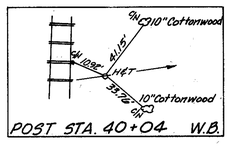
CALC. BY	HAMILTON COUNTY	OHIO
DATE	HAM-75/126 - 9.93/13.00	FHWA REGION 5
CHK'D. BY		
DATE		

27A / 787

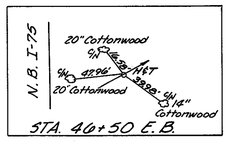
SR 126



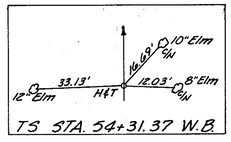
P.O.T. Sta. 31+00 E.B.



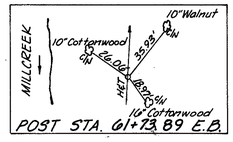
POST STA. 40+04 W.B.



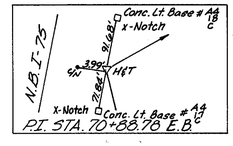
STA. 46+50 E.B.



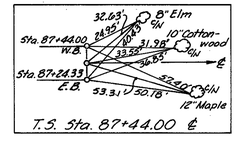
TS STA. 54+31.37 W.B.



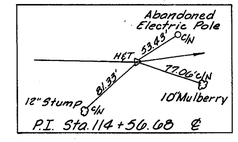
POST STA. 61+73.89 E.B.



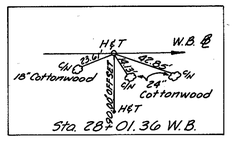
P.I. STA. 70+88.78 E.B.



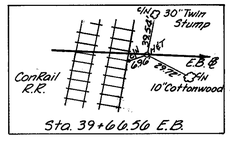
T.S. Sta. 87+44.00 ℄



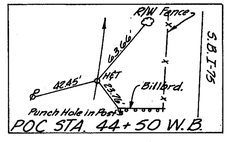
P.I. Sta. 114+56.68 ℄



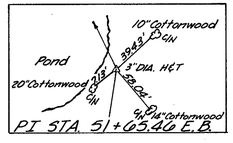
Sta. 28+01.36 W.B.



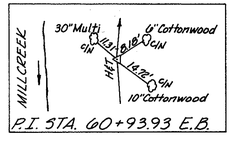
Sta. 39+66.56 E.B.



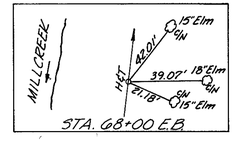
POC STA. 44+50 W.B.



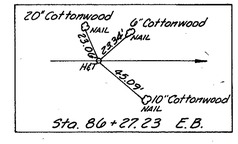
PI STA. 51+65.46 E.B.



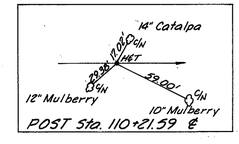
P.I. STA. 60+93.93 E.B.



STA. 68+00 E.B.

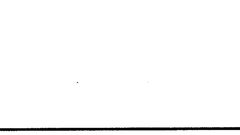


Sta. 86+27.23 E.B.

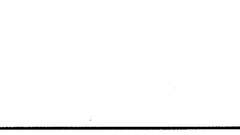


POST Sta. 110+21.59 ℄

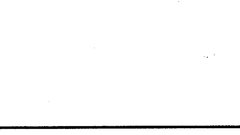
P.O.T. Sta. 26+12.41 E.B.



P.O.T. Sta. 38+57.49 E.B.

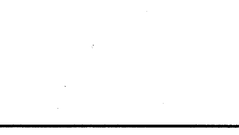


PCC STA. 44+06.48 E.B.



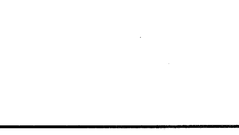
P.I. STA. 50+60.46 W.B.

P.I. STA. 60+02.26 E.B.

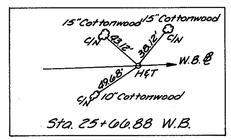


PT 67+44.01 WB

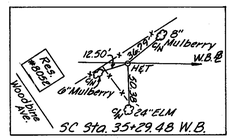
ST Sta. 80+49.86 E.B.



Sta. 106+71.68 ℄



Sta. 25+66.88 W.B.



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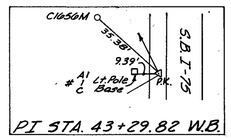

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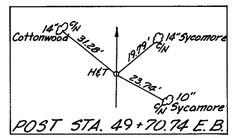
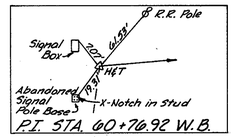
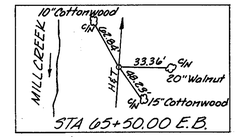


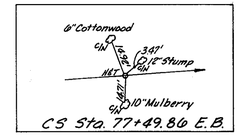
POST STA. 49+70.74 E.B.



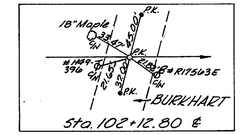
P.I. STA. 60+76.92 W.B.



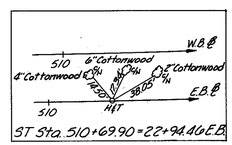
STA 65+50.00 E.B.



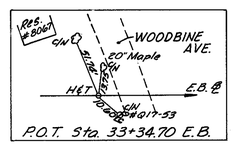
CS Sta. 77+49.86 E.B.



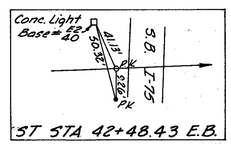
Sta. 102+12.80 ℄



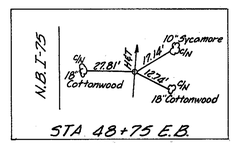
ST Sta. 510+69.90=22+94.46 E.B.



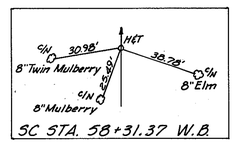
P.O.T. Sta. 33+34.70 E.B.



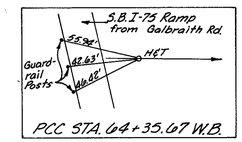
ST STA 42+48.43 E.B.



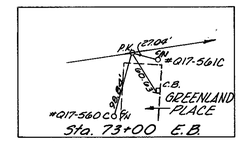
STA 48+75 E.B.



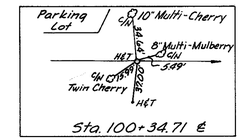
SC STA. 58+31.37 W.B.



PCC STA. 64+35.07 W.B.



Sta. 73+00 E.B.



Sta. 100+34.71 ℄

CS Sta. 506+69.90 E.B.

T.S. Sta. 31+29.48 W.B.

P.O.C. Sta. 41+35.00 W.B.

P.I. STA. 47+40.24 E.B.

POT STA. 54+78.55 E.B.

POST STA. 64+57.92 W.B.

Sta. 73+65

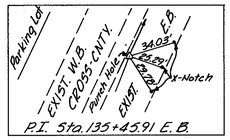
POST Sta. 93+61.50 ℄

N71130

WITNESSES

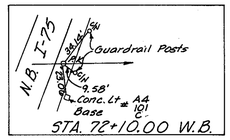
CALC. BY	HAMILTON COUNTY	OHIO	27B
DATE	HAM-75/126-9.93/13.00	FHWA REGION 5	787
CHKD. BY			
DATE			

SR 126



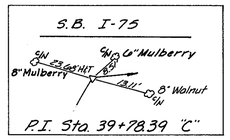
P.I. Sta. 135+45.91 E.B.

SR 126



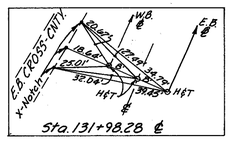
STA. 72+10.00 W.B.

RAMP C



P.I. Sta. 39+78.39 "C"
+77.85

RAMP C



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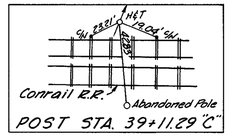
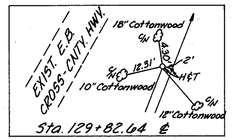
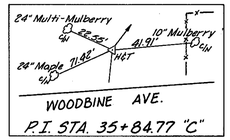


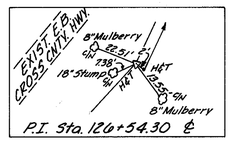
POST STA. 39+11.29 "C"



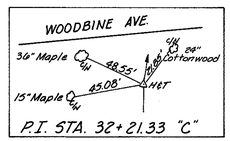
Sta. 129+82.64 ℄



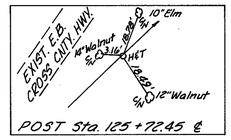
P.I. STA. 35+84.77 "C"



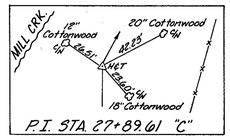
P.I. Sta. 126+54.30 ℄



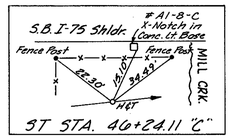
P.I. STA. 32+21.33 "C"



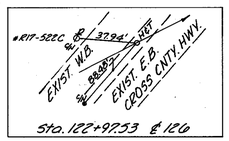
POST Sta. 125+72.45 ℄



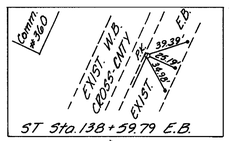
P.I. STA. 27+89.61 "C"



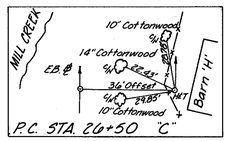
ST STA. 46+24.11 "C"



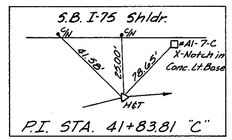
Sta. 122+97.33 ℄ 126



ST Sta. 138+59.79 E.B.



P.C. STA. 26+50 "C"



P.I. STA. 41+83.81 "C"

N71130

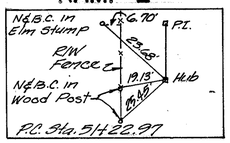
WITNESSES

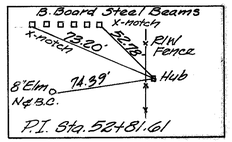
2	STATE OHIO	PROJECT	

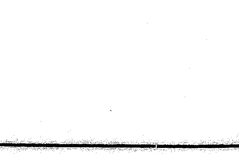
28
787

HAM-75-2.93
HAM-126-13.00
HAMILTON COUNTY

RAMP E







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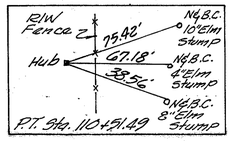
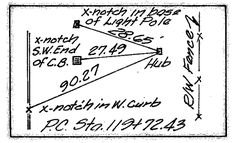
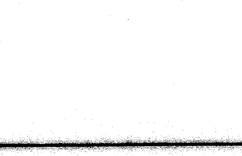
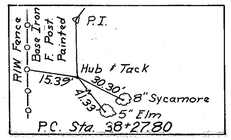
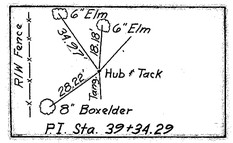


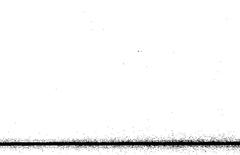




RAMP H







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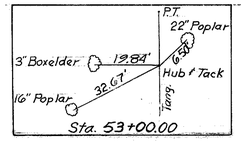

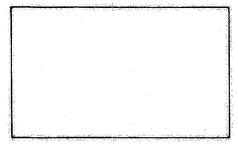

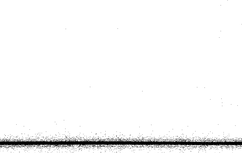

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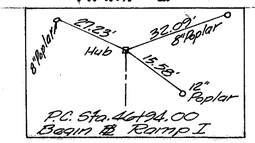

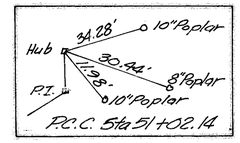

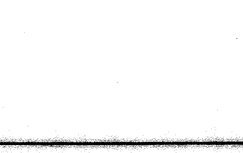

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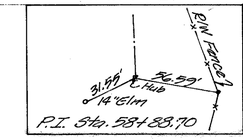

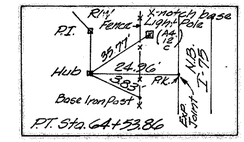

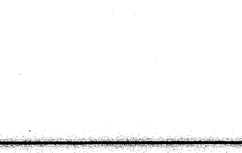

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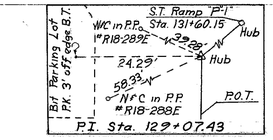
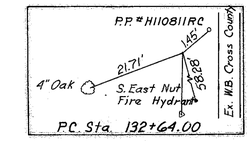
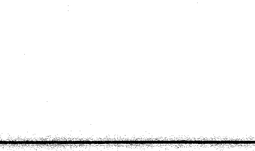
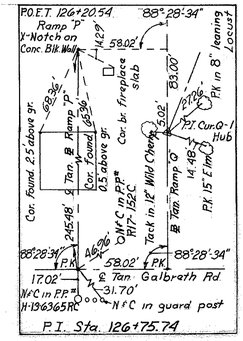


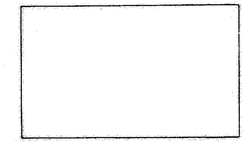




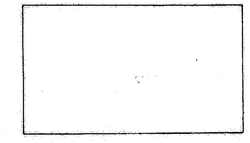
RAMP Q

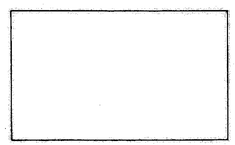


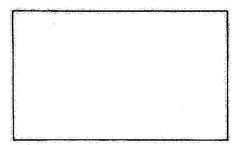
RAMP Q

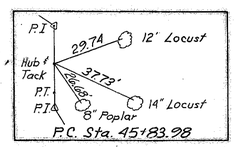


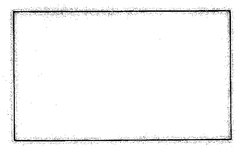


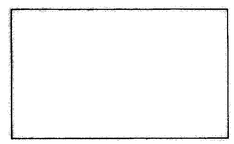


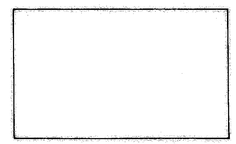


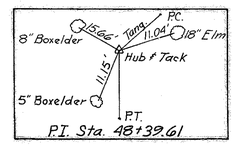


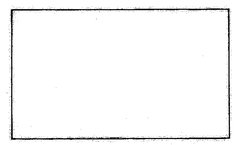


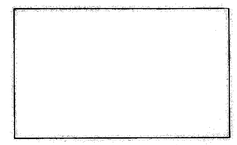


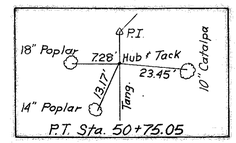












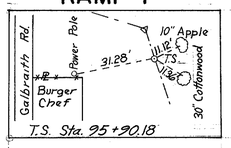
WITNESSES

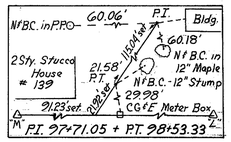
FED. AID DIVISION	STATE	PROJECT	
2	OHIO		

28A
787

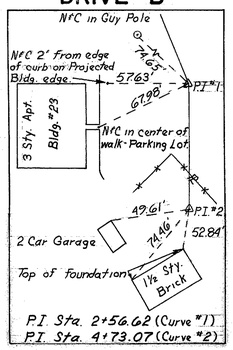
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

RAMP T

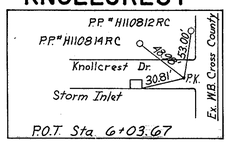


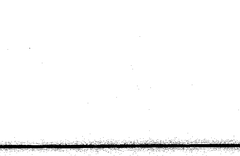


DRIVE B



KNOLLCREST





WITNESSES

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

29 / 187

HAM-75-0.03
HAM-126-13.00
HAMILTON COUNTY

DRAINAGE

PAVEMENT LEGEND

Item 451 10" Reinforced Concrete Pavement, Modified As Per Plan (On S.R.126) Or 9", 10", Or 12½" Reinforced Concrete Pav't As Per Plan (9" On Ramps & Drives A&B, 10" On S.R.126 Accel. And Decel. Lanes, 12½" Adjacent To I-75
Item 310 Subbase Type II As Per Plan, 6" Thickness Except Where Otherwise Noted.

Item 452 Plain Concrete Pavement, As Per Plan, Depth As Shown Or Plain Concrete Pavement, Modified As Per Plan, Depth As Shown.
Item 310 Subbase Type II, As Per Plan, 6" Thickness, Except Where Otherwise Noted.

Item 612 Concrete Median

Item 404 Bituminous Concrete For Maintaining Traffic (Depth Varies)

Item 404 1¼" Asphalt Concrete, AC-20
Item 402 1¾" Asphalt Concrete, AC-20
Item 408 Bituminous Prime Coat, Applied At The Rate Of 0.40 Gal. Per S.Y.
Item 304 6" Aggregate Base Course, As Per Plan
Item 310 6" Subbase Type II As Per Plan

Item 404 1¼" Asphalt Concrete, AC-20
Item 402 1¾" Asphalt Concrete, AC-20
Item 407 Tack Coat, Applied At The Rate Of 0.10 Gal. Per Sq. Yd. & Cover Aggregate
Item 305 8" Concrete Base, As Per Plan
Item 310 6" Subbase Type II, As Per Plan

Item 404 1¼" Asphalt Concrete, AC-20
Item 407 Tack Coat, Applied At The Rate Of 0.10 Gal. Per Sq. Yd. & Cover Aggregate

Item 404 1¼" Asphalt Concrete, AC-20
Item 408 Bituminous Prime Coat, Applied At The Rate Of 0.40 Gal Per S.Y.
Item 304 5" Aggregate Base Course, As Per Plan

Item 404 1¼" Asphalt Concrete, AC-20
Item 402 1¾" Asphalt Concrete, AC-20
Item 408 Bituminous Prime Coat, Applied At The Rate Of 0.40 Gal. Per S.Y.
Item 304 6" Aggregate Base Course, As Per Plan

Item 411 7" Stabilized Crushed Aggregrate.

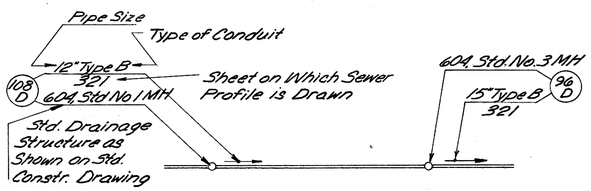
Item 615 Temporary Pavement Class A

Compacted Earth (As Per 203) Service Road

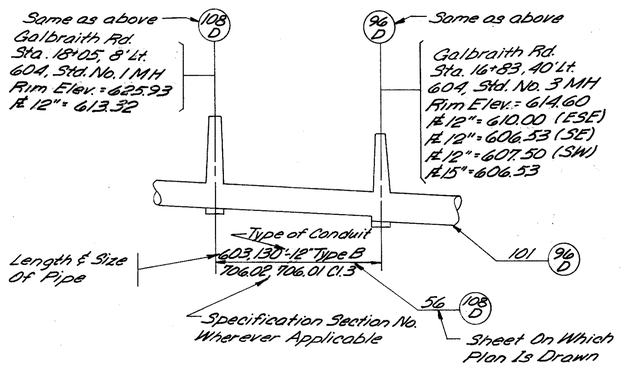
Item 404 2½ Asphalt Concrete, AC-20
Item 408 Bituminous Prime Coat, Applied at Rate Of 0.40 Gal. Per S.Y.
Item 304 6" Aggregate Base, As Per Plan
Item 310 3" Subbase, Type II As Per Plan

Item 452 6" Plain Concrete Pavement, As Per Plan

Item 404 2" Asphalt Concrete, AC-20
Item 301 6" Bituminous Aggregate Base; AC-20, or RT-11 or RT-12



LEGEND FOR PLAN SHEETS



LEGEND FOR SEWER PROFILE SHEETS

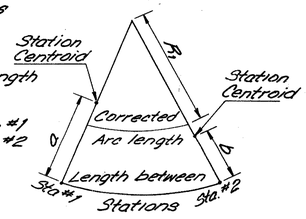
EARTHWORK VOLUME COMPUTATIONS

The Volume computations in non-tangent cross sections was obtained by the following formula:

$$V = \frac{L_1 [A_1 + A_2]}{54} \quad (cy)$$

Where: L_o = Length between Stations
R_o = Curve Radius
R_i = Adjusted Radius $= R_o \pm \frac{(a+b)}{2}$

L_1 = Corrected Arc Length $= L_o \frac{R_1}{R_o}$
A_1 = End Area Station #1
A_2 = End Area Station #2



PLAN & PROFILE INDEX

Location	Station	To Station	Plan Sh. No.	Profile Sh. No.
S.R. 126 WB.	502+64.57	26+00	30	31
	26+00	37+75	32	35
	37+75	45+00	33	35
	45+00	54+50	40	43
	54+50	65+25	41	43
	65+25	76+45	47	43
	76+45	87+24.33	48	50
S.R. 126 EB.	502+	26+00	30	31
	26+00	37+25	32	34
	37+25	50+75	33	34
	50+75	60+25	40	42
	60+25	70+15	41	42
	70+15	76+00	47	49
	76+00	87+24.33	48	49
S.R. 126 EB. & WB.	87+44	91+50	48	49
	91+50	106+75	51	52
	106+75	121+00	54	55
	121+00	130+00	56	58
	130+00	139+00	57	58
	139+00	144+52.24	59	59
I-75	72+00	82+00	37A	—
	82+00	94+00	38	—
RAMP C	26+00	37+00	32	36
	37+00	40+50	33	36
	40+50	47+95.25	38	39
RAMP D	31+00	37+40	32	37
	37+40	49+50	33	37
	49+50	55+43	40	37
	55+43	65+10	33	37, 39
	65+10	73+70.65	38	39
RAMP E	51+22.07	54+75	40	46
	54+75	64+07.74	41	46
RAMP F	99+88	103+75	33	44
	103+75	113+20	40	44
	113+20	122+36.50	41	44
RAMP H	38+27.80	40+00	38	36
	40+00	50+75	33	36
	50+75	53+10	40	36
RAMP I	46+94	50+50	33	45
	50+50	60+50	40	45
	60+50	64+53.83	41	45
RAMP N	90+00	91+50	48	52
	91+50		51	52
RAMP P	123+75.74	130+35	56	60
	130+35	135+81	57	60
RAMP Q	125+20.58	129+65	59	60
	129+65	134+50	57	60
RAMP T	91+75		51	53
GALBRAITH RD.	6+00	21+20	56, 54	64
KNOLLCREST	0+21.50	0+75	57	61
DRIVE A	0+80	5+36.63	62	62
DRIVE B	1+25	5+95.48	63	63
SERVICE ROAD OVER MILLCREEK	10+10	13+00	38	39
CUL-DE-SACS				
BURKHART ST.	101+43.50 & S.R. 126 Rt.		51	30D
WOODBINE AVE.	32+10.88 ℄ EB S.R. 126 Lt.		32	30D
	35+03.85 ℄ EB S.R. 126 Rt.			
GREENLAND PL.	72+04.03 ℄ EB S.R. 126 Rt.		47	30D
DEBONAIR DR.	79+64 ℄ EB S.R. 126 Rt.		48	30D
STABURNS ST.			29A	
TEMPORARY RDS.	No. 1 117+17.13	124+46.17	31OA	31OA
" "	No. 2 0+50	17+42.00	31OB	31OB
" "	No. 3 14+51.90	20+14.90	31OC	31OD
" "	No. 4 124+63	138+64	31OD, 31OE	31OE
" "	No. 5 0+00	1+81	31OE	31OD

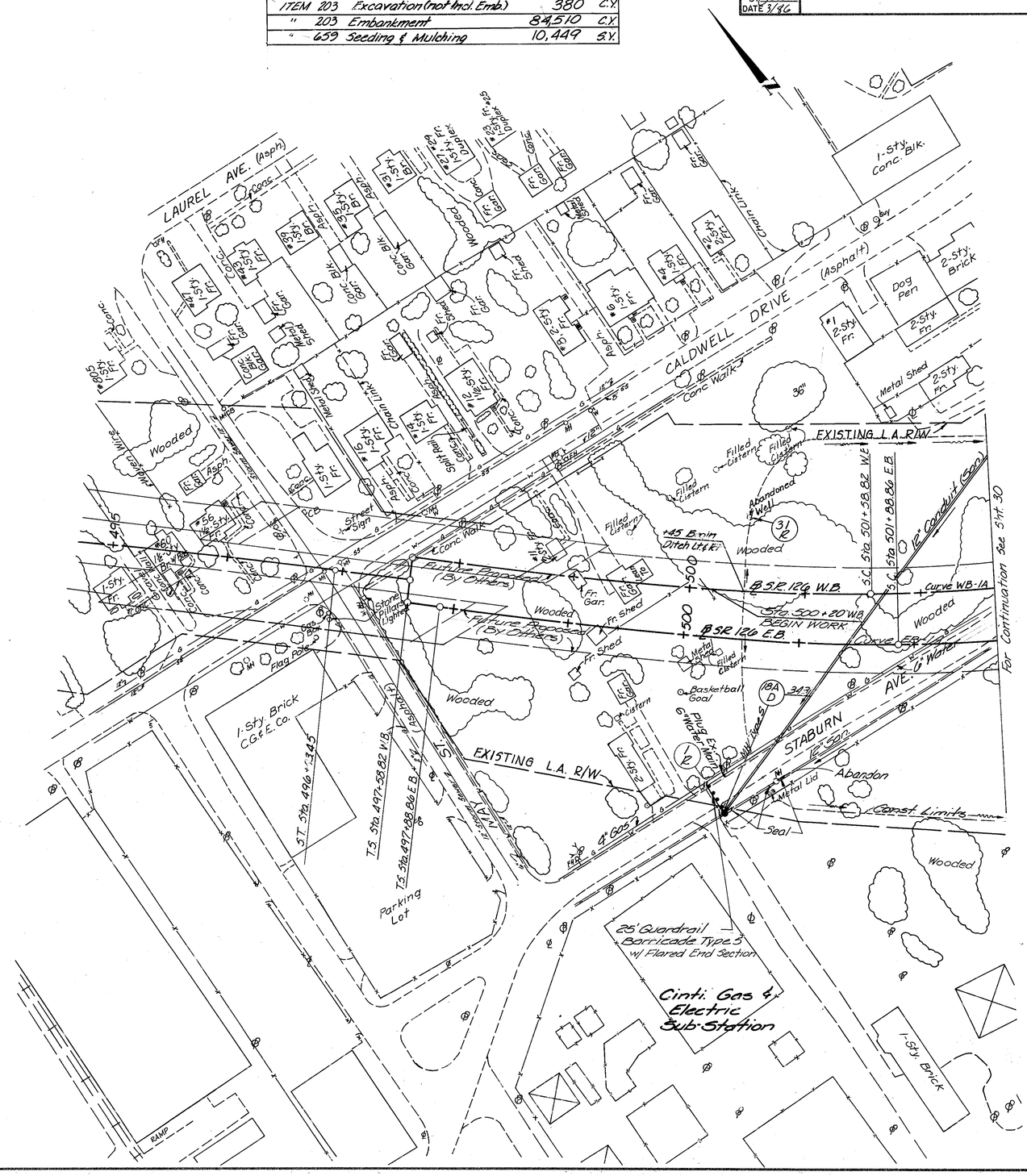
DEVELOPED	CHECKED

PAVEMENT LEGEND & PLAN & PROFILE INDEX

CALC BY REA DATE 2/86	HAMILTON COUNTY	OHIO
CHKD BY TJS DATE 3/86	HAM 75/126-9.93/13.00	FHWA REGION 5

29A
787

W.B S.R. 126 Sta. 500+45 to STA. 503+80.		
ITEM 203 Excavation (not Incl. Emb.)	380	C.Y.
" 203 Embankment	84,510	C.Y.
" 659 Seeding & Mulching	10.449	S.Y.



S.R. 126 STA 495+00.0 TO STA. 502+64.57 W.B.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

30
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

CALC. REA DATE 3/86

CHK'D DS DATE 3/86

N

DE CAMP AVE.

STATION AVE.

Wooded

Dog Pen

2-Sty. Fr.

Metal Shed

END PROJECT Sta. 502+64.57 WB

BEGIN PROJECT Sta. 502+64.57 WB

F-2 ( )

F-2 (13)

Sta. 502+64.57 WB = Sta. 506+83.00 E.B. & S.R. 126 = Sta. 500+00.00 B.P.-4

EX. L.A.

Plug Ex. 6" Water Main CITY OF CINCINNATI

Plug Pipe

Abandon Manhole

Asphalt Parking

Sound Wall

Reinforced Sodding

Existing 12" San. for Continuation See Sheet No. 32

Slope Erosion Protection

Ex. 4" Conduit

Ex. L.A.

OHIO

Type 2 A Curb

Remove Inlet

Type C Curb & Conc. Walk

See Sheet # 323 for Quantities

Sign

Sta. 47+50 Drive St. for Profile See Sh. 31:80L

Portion of Structure Removed

Asphalt

Wooded Slope Erosion Protection

Fire Alarm Box

Abandon Seal & Plug

Gas Box

Asph.

Slope Erosion Protection

Ex. L.A.

Gravel

Gravel Drive

Gravel Walk

Conc. Slab

Fr. Gar.

Shed

Conc. Limits

Sodding 6' Wide 47 S.Y.

Rock Channel Protection w/ Filter Type C 10.5'x18'x26.7'=1.56 C.Y.

Sodding 10.5' Wide 758 S.Y.

HW-4A

48" Type A 32'D

Joint, Type A Std. Dwg. BP.10

Station Equation Sta. 510+39.86 Back = Sta. 511+43.31 Ahead

Sta. 510+39.86 Back = Sta. 511+43.31 Ahead

Station Equation Sta. 510+92.00 Back = Sta. 511+22.46 Ahead

CREEK

Fill Plug

Wooded

Sound Wall

6" Shallow U.D.

Curve No. WB.-1A 510

WB. & S.R. 126

188 S.Y. Sodding 7.5' Wide

Curve No. EB.-1A

Joint, Type A Std. Dwg. BP.10

CB-6 Type B Curb

Remove MH

54" TYPE C 312

Conc. Encase Type B 312B

Abandon Pipe

Abandon MH

Tie (TMH Conc. Mod. Per Plan)

Sta. 1524+58 Begin Work

Sta. 1525+85 Begin Channel Bottom Taper & Riprap

Guard Posts

C.G.&E. Tower

Pole

Open MH

4 Guardposts

1 Sty. Conc. Blk. Barn

LA-R/W

Sta. 1527+60 End Channel Bottom Taper

Prop. Relocated Channel

Rock Channel Protection Type C w/ Fabric Filter

Asphalt

Elec. Meter

Outlet Struct. w/ Flap Valve

Sta. 1527+60 Begin Channel Bottom Taper & 4 Guardposts

Sta. 45+13.00 S.R. A = Sta. 1524+00 ℄ Mill Creek Channel

Temp. Easement

54" Type C Radius San. 312B

Channel R/W-1

Wooded

Temp. Easement

Abandon M.H.

Abandon Pipe

MILL CREEK

SPRINGFIELD TWP.

1½ Sty. Conc. Blk.

C.G.&E. Tower

Existing Ditch

BALTIMORE

18" San.

54" San.

MH

MH-T 312B

MH-7 312B

Curve C

Wooded

Temp. Easement

Abandon Pipe

Abandon M.H.

Abandon Pipe

Abandon M.H.

Abandon Pipe

Abandon M.H.

ESTIMATED QUANTITIES

DRAINAGE

CALC. DS DATE 3/86
CHK'D JAS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

30A 187

HAM-75-993
HAM-126-13.00
HAMILTON COUNTY

* Combination Sewer

PARTICIPATION CODE ① IR-75-1(96)10
PARTICIPATION CODE ② F-2(18)

REF. NO.	STATION TO STATION	SIDE	202 Abandon Pipe Seal Plug 12" & Under	202 Pipe Removed 24"& Over	202 Manhole Abandon Seal & Plug	202 Manhole Removed	202 Fill & Plug Pipe Over 12" As Per Plan	503 Coffer-dam, Cribs & Sheeting	202 Flap Gate Removed for Storage	601 Rock Channel Protection Type C W/Filter	6"x90° Bend	6"x6" Tee	Special Outlet Structure	602 Concrete Masonry	603 6" Conduit Type F 707.05	603 48" Cond. Type A 706.02 (.138") 707.04 (.168") 707.03 or 707.22 (.109")	SANITARY 603 54" COND. TYPE C 706.02 (2250 D-LOAD) W/ 706.11 JOINTS	SANITARY 603 54" RADIUS COND. TYPE C 706.02 (2000 D-LOAD) W/ 706.11 JOINTS	SANITARY 603 66" COND TYPE B 706.02 (1750 D-LOAD) W/ 706.11 JOINTS	SANITARY 603 66" COND TYPE C 706.02 (1750 D-LOAD) W/ 706.11 JOINTS	SANITARY 604 Type T Manhole w/Interceptor Chamber	SANITARY 604 Type T Manhole	605 6" SHALLOW U.D. As Per Plan	660 Sodding	660 Reinforced Sodding	670 Slope Erosion Protect.	Special Flap Gate	SEE SHEET NO.
			L.F.	L.F.	Ea.	Ea.	L.F.	LUMP	EA.	C.Y.	EA.	EA.	LUMP	C.Y.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	Ea.	Ea.	L.F.	S.Y.	S.Y.	S.Y.	Ea.	
1-D	46+62 to 49+82 Vine St Sewer	Rt		170	2			LUMP	1				LUMP	6.28						*311		*53	1	1					1	306,346
2-D	506+00 to 508+70 WB 126	Lt & Rt.	580		1																								30
3-D	507+70 to 509+00 EB 126	Rt.					245																						30
4-D	508+35 to 510+25 EB 126	Rt.			2		290																						30
5-D	508+22 to 29+45 SR126 EB	Rt				1								9.00			860	96					1						30,323,324, 312B
5A-D	510+47 to 25+25 EB 126	Lt								156																			30,32
6-D	510+50 SR 126 EB	Lt & Rt.												2.20		354									47				30
6A-D	504+00 to 509+00 EB	Rt.			2		575																	642 636					30,334
7-D	507+47 to 26+00 SR126 WB	Lt										1																	30,35
8-D	507+80 to 26+00 SR126 EB	Lt									2	1			40														30,31
9-D	510+27 EB to 28+20 RAMP C	Rt+Lt			1		765																						30,32
10-D	502+68 to 503+82 EB 126	Rt																								134	1273		30
10A-D	44+61 Vine	Lt.																					1 #						
TOTAL			580	170	8	1	1875	LUMP	1	156			LUMP	17.48	40	354		860	96	*311		*53	1	3	1278	101	134	1273	1	

REF. NO.	STATION TO STATION	SIDE	601 Rock Channel Protection Type C W/Filter	202 Manhole Abandon	202 Abandn. & Plug Pipe 12" and Under	602 Concrete Masonry	Rock Channel Protection Type C w/ Fabric Filter	603 12" Conduit Type C	603 15" Conduit Type B	603 15" Conduit Type F 707.05	603 24" Cond. Type A 706.02 (2500 D LOAD or 877 707.04 (0.138") 707.05 (.168") 707.04 (.109") 707.22 (.109")	SAN. 603 54" Type B 706.02 (2250 D-LOAD) w/ 706.11 Jts.	SAN. 603 54" Type C Radius 706.02 (2250 D-LOAD) w/ 706.11 Jts.	604 Std. No. 1 Manhole	503 Coffer dams, Cribs & Sheeting	509 Reinforcing Steel	604 Std. Type 2-3 C.B.	604 Std. Type 6 C.B.	SAN. 603 12" Cond. Type B 706.02 3000 D-Load w/706.11 Joints	SAN. 603 18" Cond. Type C 706.02 2000 D-LOAD w/706.11 Joints	SAN. 604 TYPE S Manhole	SAN. 604 TYPE T Manhole	660 Sodding	660 Reinforced Sodding	670 Slope Erosion Protect.	SAN. 603 54" Type C 706.02 (2250 D-Load) w/ 706.11 Jts. As Per Plan	SEE SHEET NO.
			C.Y.	EA.	L.F.	C.Y.	C.Y.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	Ea.	Lump	lbs.	Ea.	Ea.	L.F.	L.F.	EA.	EA.	S.Y.	S.Y.	S.Y.	L.F.	
11-D	502+44 to 503+80 WB 126	Lt	4			1.06					330																
12-D	506+46 to 507+62 WB 126	Lt																					2		699		30,794
13-D	506+82 to 507+25 EB 126	Rt																							898		30
14-D	507+78 EB SR 126	Lt						24										1						107	1031		30
15-D	507+50 WB 126	Lt				.27				118				1									1				30,353
15A-D	1524+85 to 1537+00 Reloc. Mill Creek	Lt+Rt					7529																				30,353 30,332
16-D	23+75 to 26+00 EB 126	Lt																					188				30
17-D	507+80 to 508+75 EB 126	Lt						95	59					1				1									30,353
18-D	508+35 to 508+20	Rt.			50							317#	47#		Lump#					26		1				148#	30,353
18A-D	503+15 to 500+37 WB 126	Lt & Rt		2	510	66.5						267# /50				27A			448		2						29A,30,343
TOTAL			4	2	560	1.33	7529	119	59	118	330	317#	47#	2	Lump#		1	1	448	26	2	1	191	107	2628	148#	

PARTICIPATION CODE 18 ② ON THIS SHEET UNLESS MARKED

100% Millcreek Conservancy District

Rev. 9-16-86 SMK

ESTIMATED QUANTITIES

CALC. REA DATE 3/86
CHK'D D.S DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

308
787

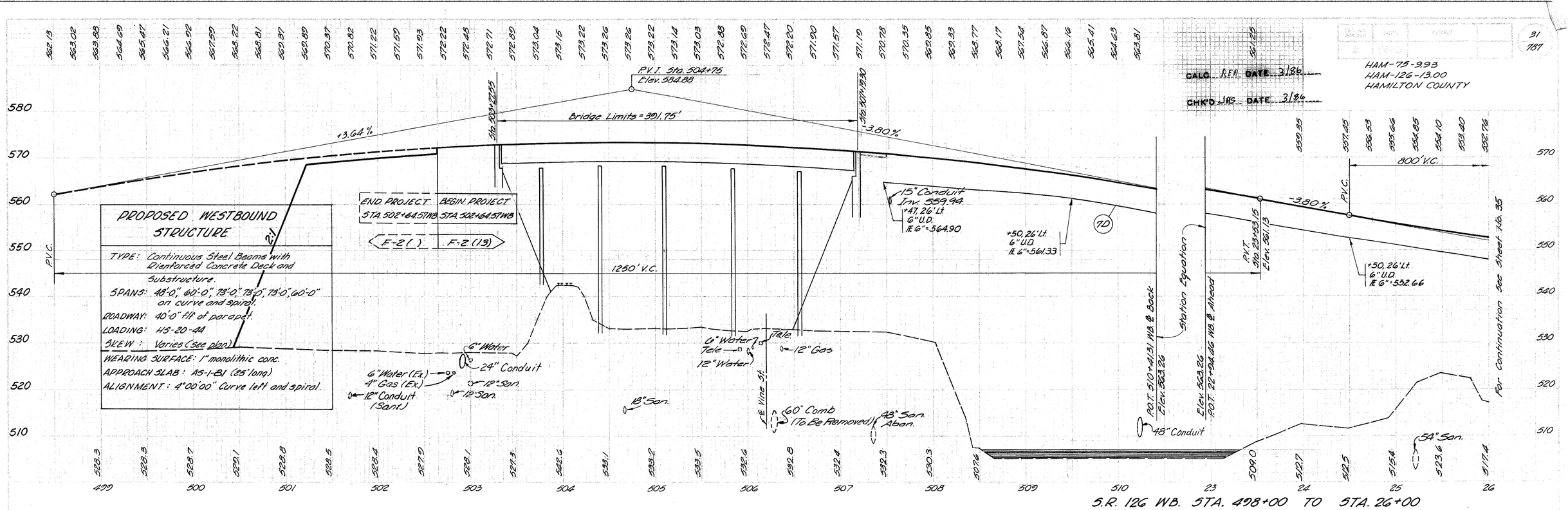
HAM.75/126-9.93/13.00
HAMILTON COUNTY

Participation Code (1) IR-75-1(96)10
Participation Code (2) F-2(13)

*For Information Only

REF. NO.	STATION TO STATION	SIDE	202 Portion of Structure Removed	202 Regulator Removed for Storage	202 Walk Removed	202 Curb Removed	202 Pav't Removed	622 Conc. Barrier Std. Type D-50 Mod.	305 8" Conc. Base	411 Stabilized Crushed Aggr.	310 Subbase Type II As Per Plan	402 Asph. Conc.	404 Asph. Conc.	407 Tack Coat	407 Cover Agg.	451 10" Reinf. Conc. Pav't Mod. As Per Plan	452 6" Conc. Pav't As Per Plan	452 7"-10" Conc. Pav't Mod. As Per Plan	452 8"-10" Conc. Pav't Mod. As Per Plan	606 Std. Type 5 G.R.	606 Flared End Section *	606 Bridge Term. Assem. Std. Type A	606 Anchor Assem. Std. Type A	606 Std. Type 5 G.R. Barrier	608 4" Conc. Walk	609 Std. Type 2B Curb	609 Std. Type 6 Curb	609 Std. Type 2A Curb	611 Reinf. Concrete Approach Slab(T-15)	Special Pressure Relief Joint Std. Type A	Special Drainage Connect	SEE SHEET NO.
			Lump	EA.	S.Y.	L.F.	S.Y.	L.F.	S.Y.	C.Y.	C.Y.	C.Y.	C.Y.	Gal.	Ton	S.Y.	S.Y.	S.Y.	S.Y.	L.F.	EA.	EA.	EA.	L.F.	S.F	L.F.	L.F.	L.F.	S.Y.	L.F.	C.Y	
	SR 126																															
	ROADWAY																															
1-R	499+22 E.B.126	Rt.																		25	2											29A
	502+64.57 26+00																															
7-R	Not Used																															
8-R	507+34 to 508+93 W.B.	Rt.																		112.5		1	1	25								30
9-R	507+71 to 26+00 E.B.	Rt.																		607.5		1										30
11-R	502+85 to 503+10 W.B	Lt.																		25	2											
101-R	507+55 E.B. 126	Rt.	Lump																													30
	VINE ST.																															
6-R	48+63	Rt.	Lump	1																												
	PAVEMENT																															
	502+64.57 - 26+00																															
6-P	507+89 W.B. 126	Lt. & Rt.																												38		30
7-P	508+22.5 E.B. 126	Lt. & Rt.																												38		30
10-P	507+19.30 W.B. 126	Lt.									18																	109				30
11-P	507+50 to 507+75 E.B.	Rt.									18																	106				30
12-P	507+00 to 26+00 W.B.	Lt.									82							670														30
13-P	507+38 to 26+00 W.B.	Lt.									339					1891																30
14-P	507+443 to 26+00 W.B.	Rt.									27								268													30
15-P	507+81.82 to 26+00 E.B.	Lt.									89								264												20	30
16-P	507+81.82 to 26+00 E.B.	Rt.									349					1961																30
17-P	507+87.50 to 26+00 E.B.	Rt.									88							590														30
310-P	507+24.30 to 26+00 W.B.	Lt.						622.55			17							104														30
	VINE ST.																															
1-P	Not Used																															30
5-P	47+84 to 50+93	Rt.							266		44	13	9	27	1										3000	161						30
8-P	47+80	Rt.																							1820		182					30
9-P	48+85 to 50+67	Lt.								21							12															
TOTAL			Lump	1				622.55	266	21	1011	13	9	27	1	3852	12	1364	532	770		2	1	25	4820	161	212	22	215	76	49	

Participation Code is (2) on this sheet



CALC. REA DATE 3/86
CHK'D JAS DATE 3/86
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
31
787
P.V.I. Sta. 504+75
Elev. 584.88
Bridge Limits = 391.75'
+3.64%
-3.80%
Sta. 503+27.55
Sta. 507+19.30
END PROJECT STA. 502+64.57WB
BEGIN PROJECT STA. 502+64.57WB
F-2(.)
F-2(13)
1250' V.C.
800' V.C.
P.V.C.
P.V.T. Sta. 23+53.15 Elev. 561.13
15" Conduit Inv. 559.94
+47, 26' Lt. 6" U.D. FE 6" = 564.90
+50, 26' Lt. 6" U.D. FE 6" = 561.33
+50, 26' Lt. 6" U.D. FE 6" = 552.66
7D
Station Equation
P.O.T. 510+41.31 WB ℄ Back
Elev. 563.26
Elev. 563.26
P.O.T. 22+94.46 WB ℄ Ahead
48" Conduit
54" Sa.
6" Water
24" Conduit
6" Water (Ex.)
4" Gas (Ex.)
12" Conduit (Sant.)
12" San.
18" San.
6" Water
Tele.
12" Water
12" Gas
℄ Vine St.
60" Comb (To Be Removed)
48" San. Aban.
For Continuation See Sheet No. 35
PROPOSED WESTBOUND STRUCTURE
TYPE: Continuous Steel Beams with Reinforced Concrete Deck and Substructure.
SPANS: 48'-0", 60'-0", 73'-0", 73'-0", 73'-0", 60'-0" on curve and spiral.
ROADWAY: 40'-0" f/f of parapet.
LOADING: HS-20-44
SKEW: Varies (see plan)
WEARING SURFACE: 1" monolithic conc.
APPROACH SLAB: AS-1-81 (25' long)
ALIGNMENT: 4°00'00" Curve left and spiral.
2:1
S.R. 126 WB. STA. 498+00 TO STA. 26+00
Bridge Limits = 431.25'
Sta. 503+25.57
Sta. 507+56.82
S.R. 126 E.B. Sta. 507+80, 26' Lt. 604 Std. No. 1 MH Rim El. = 568.88 FE 12" = 560.88 FE 18" = 560.39
S.R. 126, E.B. Sta. 508+75, 26' Lt. 604 Std. No. 2-3 C.B. FE Grate = 566.70 FE 12" = 563.20
17 D
2.44%
+80, 2' Lt. 6" U.D. FE 6" = 567.45
603-95'-12" Type "C"
30
+00, 2' Lt. 6" U.D. FE 6" = 561.41
8D
+00, 2' Lt. 6" U.D. FE 6" = 551.23
+00, 2' Lt. 6" U.D. FE 6" = 548.34
+00, 38' Rt. 6" U.D. FE 6" = 547.77
Graphical Grade
S.T. 510+69.90 EB ℄ Back
Elev. 563.36
Elev. 563.36
P.O.T. 22+94.46 EB ℄ Ahead
P.V.T. Sta. 23+53.15 Elev. 561.13
24" Conduit
4" Gas Ex.
6" Water Ex.
12" Cond. (San.)
12" San.
18" San.
12" Water
Tele.
6" Water
12" Gas
℄ Vine St.
60" Comb.
66" Conduit (Sanitary)
48" San. Aban.
48" Conduit
54" San.
For Continuation See Sheet No. 34
PROPOSED EASTBOUND STRUCTURE
TYPE: Continuous Steel Beam with Reinforced Concrete Deck and Substructure.
SPANS: 57'-0", 65'-6", 79'-0", 79'-0", 79'-0", 67'-0" on curve and Spiral.
ROADWAY: 40'-0" f/f of parapet.
LOADING: HS-20-44
SKEW: Varies (see plan)
WEARING SURFACE: 1" monolithic conc.
APPROACH SLAB: AS-1-81 (25' long)
ALIGNMENT: 4°00'00" curve left and spiral.
2:1

CALC. REA DATE 2/86

CHK'D JAS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

32
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

PIPE CURVE A
Δ = 56°-10'-00"
R = 50.00'
T = 26.66'
Arc = 49.01'

For Typical Section See Sh. 7 thru 13
For Pav't. Legend See Sh. 29
For Curve Data See Sh. 6, 6A
For E.B. S.R. 126 Profile See Sh. 34
For W.B. S.R. 126 Profile See Sh. 35
For Ramp C Profile See Sh. 36
For Ramp D Profile See Sh. 37
For Pav't. Details See Sh. 290, 292
For Superelevation Tables See Sh. 70 thru 73
For Quantities See Sh. 32B
For Drainage Quantities See Sh. 32A
For Bench Marks See Sh. 26
For ℄ or ℄ References See Sh. 27
For Woodbine Ave. Earthwork Quantities See Sh. 21B
For Channel Bottom Location See Sh. 565A
For Woodbine Ave. Cul-de-Sac Detail See Sh. 309

	DEVELOPED	CHECKED
C.E.S.	12-1-77	M.D.D. 12-2-77

Prop. Reloc. Mill Creek Sta. 1231+00 to Sta. 1537+50		
ITEM 203	Excavation (not Incl. Emb.)	135,783 C.Y.
" 203	Embankment	7041 C.Y.
" 659	Seeding & Mulching	3168 S.Y.

E.B. S.R. 126 Sta. 26+00 to Sta. 30+66.75		
ITEM 203	Excavation (not Incl. Emb.)	715 C.Y.
" 203	Embankment	12041 C.Y.
" 659	Seeding & Mulching	11,895 S.Y.

	DEVELOPED	CHECKED
C.E.S.	12-1-77	M.D.D. 12-2-77

	DEVELOPED	CHECKED
C.E.S.	12-1-77	M.D.D. 12-2-77

Ramp C Sta. 30+67 to Sta. 37+00		
ITEM 203	Excavation (not Incl. Emb.)	404 C.Y.
" 203	Embankment	68537 C.Y.
" 659	Seeding & Mulching	8985 S.Y.

W.B. S.R. 126 Sta. 33+50 to Sta. 37+50		
ITEM 203	Excavation (not Incl. Emb.)	342 C.Y.
" 203	Embankment	39509 C.Y.
" 659	Seeding & Mulching	3460 S.Y.

	DEVELOPED	CHECKED
C.E.S.	12-1-77	M.D.D. 12-2-77

	DEVELOPED	CHECKED
C.E.S.	12-1-77	M.D.D. 12-2-77

E.B. S.R. 126 Sta. 30+66.75 to Sta. 37+00		
ITEM 203	Excavation (not Incl. Emb.)	* 1023 C.Y.
" 203	Embankment	79962 C.Y.
" 659	Seeding & Mulching	* 5368 S.Y.

* Includes Woodbine Ave. Cul-de-Sac

For Quantities See Sh. 30

For Quantities See Sht. 33

RAMP C STA. 26+50 TO STA. 37+00
RAMP D STA. 31+00 TO STA. 37+40
S.R. 126 W.B. STA. 26+00 TO STA. 37+75
S.R. 126 E.B. STA. 26+00 TO STA. 37+25

1775

ESTIMATED QUANTITIES

DRAINAGE

CALC. DS DATE 3/86
CHK'D JHS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

32A
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

PARTICIPATION CODE ① IR-75-1(96)10
PARTICIPATION CODE ② F-2(13)

REF. NO.	STATION TO STATION	SIDE	6"x90° BEND	BEND 6"x30°	BEND 6"x60°	15"x25° BEND	16" CROSS	202 Abandon Manhole	602 Conc. Masonry	601 ROCK CHANNEL PROTECTION TYPE C W/FILTER	603 12" CONDUIT TYPE B	603 6" CONDUIT TYPE F 707.05	603 15" CONDUIT TYPE B	603 15" CONDUIT TYPE C	603 15" CONDUIT TYPE F 707.05	601 6" REINF. CONC. SLAB	604 STD. NO. 5 C.B.	604 STD. NO. 8 C.B.	604 Std. No. I-38 Mod. A As Per Plan	SANITARY 603 12" COND. TYPE B 706.02 3000 D-LOAD W/ 706.11 JOINTS	SANITARY 603 5¾" COND. TYPE C 706.02 2000 D-LOAD W/ 706.11 JOINTS	SANITARY 604 TYPE T MANHOLE	SANITARY 604 TYPE S MANHOLE	605 6" SHALLOW U.D. AS PER PLAN	660 SODDING	202 Fill & Plug Pipe Over 12"	SEE SHEET NO.
			EA.	EA.	EA.	EA.	EA.	EA.	C.Y.	C.Y.	L.F.	L.F.	L.F.	L.F.	L.F.	S.Y.	EA.	EA.	EA.	L.F.	L.F.	EA.	EA.	L.F.	S.Y.		
19-D	25+25 to 31+85 WB 126	Lt.																							758②		32
20-D	32+35 to 36+37 WB 126	Lt.																							336		32
20A-D	34+75 to 35+80 WB 126	Rt.																							70		32
21-D	31+00 to 31+38 EB 126	Rt.	1			1																		684			32
22-D	31+00 to 32+00 Ramp C	Lt.		1								16												90			32
23-D	29+67 to 36+50 Ramp C	Rt.								33															311		32
24-D	29+00 to 31+43 EB 126	Rt.						1													115/247②	1/1②				75	32
25-D	31+00 Ramp D to 32+50 EB 126	Lt. & Rt.												150			1										32
25A-D	32+50 to 36+71 Ramp C	Lt.														7									314		32
26-D	36+25 WB 126 to 39+68 "C"	Lt. & Rt.																		452			1				32
27-D	30+86 to 31+06 Ramp C	Lt.																							46		32
28-D	32+00 Ramp C	Rt.																							18		32
29-D	Not Used																										
30-D	33+96 Ramp C	Lt.						1																			32
31-D	Not Used																										
32-D	34+52 Ramp C	Rt.						1																			32
33-D	34+68 Ramp C	Rt.																					1				32
34-D	34+70 to 37+70 Ramp D	Lt.	1			1						10												324			32
35-D	32+00 to 36+96 Ramp C	Rt.	1			1						10												530			32
36-D	26+00 to 28+46 WB 126	Lt.			1②		1②					10②												240②			32
37-D	28+50 WB 126	Lt. & Rt.				2②			.27②	2②			67②		59②			1②							1②		32
38-D	28+46 to 38+47 WB 126	Lt.	1②		1②							10/10②												770/215②			32
39-D	26+00 EB to 28+50 Ramp C	Rt.										10②												258②	10②		32
40-D	28+50 to 29+26 WB 126	Rt.												75②				1②									32
40-AD	28+46 to 28+75 WB 126	Lt.									29								2								
TOTAL								3	.27②	33/2②	29	46/30②	67②	150/75②	59②	7	1	2②	2	452	115/247②	1/1②	2	2398/713②	1095/769②	75	

REF. NO.	STATION TO STATION	SIDE	15"x25° BEND	202 Fill & Plug Pipe Over 12"	202 Abandon Manhole	601 ROCK CHANNEL PROTECTION TYPE C W/FILTER	602 CONCRETE MASONRY	603 12" CONDUIT TYPE B	603 12" CONDUIT TYPE C	603 15" CONDUIT TYPE B	603 15" CONDUIT TYPE F 707.05	603 TYPE A CONDUIT 27" 706.02 & 30" 706.02 & 33" 707.01 (0.079) 707.05 707.04, 707.21	604 STD TYPE E-2-B C.B.	604 SINGLE GUTTER INLET	604 Std. No. I-38 Mod. A As Per Plan	604 STD. TYPE 2-3 C.B.	202 CATCH BASIN ABANDON SEAL & PLUG	605 6" SHALLOW U.D. As Per Plan	660 SODDING	SEE SHEET NO.
				L.F.	EA.	C.Y.	C.Y.	L.F.	L.F.	L.F.	L.F.	L.F.	EA.	EA.	EA.	EA.	EA.	L.F.	S.Y.	
41-D	Not Used																			
42-D	28+20 RAMP C	Rt.			1②															32
43-D	1533+08 to 1536+25 Reloc Chan	Lt.		372②																32
44-D	28+50 E.B. to 30+69 Ramp C	Rt.																219②		32
45-D	31+00 Ramp C	Rt.	2			2	.27			29	69					1			1	32
46-D	34+70 Ramp D	Rt.	2			2	.27			43	79		1		1				1	32
47-D	Not Used																			
127-D	31+85 to 32+39 WB 126	Lt.					1.36					54							2	32
128-D	0+84 Woodbine Ave.	Rt. & Lt.						25						2			1			32
129-D	0+84 Woodbine to 31+51 WB 126	Lt. & Rt.					.21		16											32
TOTAL				372②	1②	4	2.11	25	16	72	148	54	1	2	1	1	1	219②	5	

PARTICIPATION CODE IS ① ON THIS SHEET
FOR ALL ITEMS UNLESS MARKED

ESTIMATED QUANTITIES

CALC. REA DATE 3/86
CHK'D. D.S. DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

328
787

HAM-75/126-9.93/13.00
HAMILTON COUNTY

Participation Code (1) IR-75-1(96)10
Participation Code (2) F-2(13)

* For Information Only

REF. NO.	STATION TO STATION	SIDE	202 Portion of Structure Removed	304 Aggregate Base As Per Plan	310 Subbase Type II As Per Plan	402 Asphalt Concrete	404 Asphalt Concrete	408 Bitum. Prime Coat	451. 9" Reinf. Conc. Pavt. As Per Plan	451. 10" Reinf. Conc. Pavt. Mod. As Per Plan	452 6" Conc. Pavt. As Per Plan	452 7"-10" Conc. Pavt. Mod. As Per Plan	452 8"-9" Conc. Pavt. Mod. As Per Plan	452 8"-10" Conc. Pavt. Mod As Per Plan	452 9"-10" Conc. Pavt. Mod. As Per Plan	452 7"-9" Conc. Pavt. Mod. As Per Plan	606 Flared End Section *	606 Std. Type 5 G.R.	606 Bridge Term. Assem. Std. Type A	609 Std Type 6 Curb	622 Conc. Barrier Std. Type D-50 Mod.	Special Pressure Relief Jnt. Std. Type A	Special Drainage Connect.	SEE SHEET NO.
			Lump	C.Y.	C.Y.	C.Y.	C.Y.	Gal.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	Each	L.F.	Each	L.F.	L.F.	L.F.	C.Y.	
	26+00 to 37+75 W.B. 26+00 to 37+51.78 E.B. ROADWAY																							
10-R	32+50 W.B. 126	Lt.															2	25						32
12-R	27+72.5 to 28+47.5	℄																362.5 (2)						32
13-R	32+30 to 37+25 E.B.	Rt.																395						32
14-R	32+30 to 37+08 Ramp "C"	Lt.																487.5	1					32
15-R	26+00 E.B. to 37+08 "C"	Rt.																~~630.75~~ 466.75 (2)	1					32
16-R	34+80 E.B. 126	Rt.															2	25						32
67-R	29+80 W.B. 126	Lt.	Lump																					32
102-R	26+50 E.B. 126	Lt.	Lump																					32
120-R	37+00 to 37+75 E.B.	Lt.																150	2					32&33
	PAVEMENT																							
18-P	26+00 to 38+54 W.B.	Lt.			114/68 (2)								875/518 (2)										38/82 (2)	32
19-P	26+00 to 38+39 W.B.	Lt.			458/217 (2)					2580/1558 (2)														32
20-P	34+50 to 37+78 Ramp "D"	Lt.			16																		13	32
21-P	26+00 to 31+00 W.B.	Rt.			2/21 (2)								216											32
22-P	31+00 to 37+74 "D"	Rt.			23								15 807 (2)											32
23-P	31+00 to 37+69 "D"	Lt.			223				1189				226											32
24-P	31+00 to 38+20 W.B.	Lt.			56									163	403							26		32
25-P	26+00 to 37+53 E.B.	Lt.			30/21 (2)									305 201 (2)										32
26-P	26+00 to 37+46 E.B.	Rt.			416/328 (2)					2288/1867 (2)														32
27-P	26+00 to 30+66.75				57 (2)								415 (2)									45		32
28-P	30+66.75 to 37+40 E.B.	Rt.			105								748										23 (2)	32
29-P	30+66.75 to 36+94 Ramp	Lt.			33																		32	32
30-P	30+66.75 to 36+92 "C"				208				1112					209									4	32
31-P	30+66.29 to 36+90.5 "C"	Rt			35											427						26		32
311-P	26+00 to 37+75 W.B.	Lt.			20/13 (2)								118/78 (2)										25	32
40-P	Woodbine North			31	31	9	7	75													108.75/166.75 (2)			32
41-P	Woodbine North																			145				32
42-P	Woodbine South			32	32	9	7	78			11													32
43-P	Woodbine South																			143				32
TOTAL			Lump	63	1802/1785 (2)	18	14	153	2301	4868/3425 (2)	11	1741/1011 (2)	6666/6077 (2)	468/207 (2)	403	427		1733.25/829.25 (2)	4	288	108.25/166.75 (2)	97	118/45 (2)	

Participation Code Is (1) For All Items On This Sheet Unless Marked

For Continuation See Sheet No. 40

FED. RD. DIVISION	STATE	PROJECT		33 / 787
2	OHIO			

DATE REV. DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY DS DATE 3/86

For Bridge Ramp C/Anthony Wayne See Sh. 336-344
For Bridge HAM-126-13.88 See Sh. 545-564
For Bridge Ramp D/Anthony Wayne See Sh. 565-584
For Bridge HAM-126-13.90 See Sh. 585-602
For Service Rd. Earthwork Quan. See Sh. 23A
For Typical Sections See Sh. 7 thru 15
For Pavt. Legend See Sh. 29
For Curve Data See Sh. G,GA
For EB. S.R. 126 Profile See Sh. 34
For WB. S.R. 126 Profile See Sh. 35
For Ramp C Profile See Sh. 36
For Ramp D Profile See Sh. 37, 39
For Ramp F Profile See Sh. 44
For Ramp H Profile See Sh. 36
For Ramp I Profile See Sh. 45
For Drainage Quantities See Sh. 33A
For Bench Marks See Sh. 26
For ℄ or ℄ References See Sh. 27
For Quantities See Sh. 33B
For Superelevation Tables See Sh. 70 thru 73

Prop. Reloc. Mill Creek Sta. 5+65 to Sta. 9+00

Item 203	Excavation (not Incl. Emb.)	5526 C.Y.
" 203	Embankment	3853 C.Y.
" 659	Seeding & Mulching	374 S.Y.

DEVELOPED C.E.S. 12-1-71 M.D.D. 12-2-71 | CHECKED 12-2-71

E.B. S.R. 126 Sta. 37+00 to Sta. 50+50

ITEM 203	Excavation (not Incl. Emb.)	0 C.Y.
" 203	Embankment	133320 C.Y.
" 659	Seeding & Mulching	7088 S.Y.
" 203	Excavation (unsuitable)	7217 C.Y.

W.B. S.R. 126 Sta. 37+50 to Sta. 45+00

ITEM 203	Excavation (not Incl. Emb.)	152 C.Y.
" 203	Embankment	76963 C.Y.
" 659	Seeding & Mulching	9707 S.Y.

DEVELOPED C.E.S. 12-1-71 M.D.D. 12-2-71 | CHECKED 12-2-71

Ramp C Sta. 37+00 to Sta. 40+50

ITEM 203	Excavation (not Incl. Emb.)	7 C.Y.
" 203	Embankment	29299 C.Y.
" 659	Seeding & Mulching	4679 S.Y.

Ramp D Sta. 45+00 to 49+50

ITEM 203	Excavation (unsuitable)	0 C.Y.
ITEM 203	Excavation (not Incl. Emb.)	234 C.Y.
" 203	Embankment	66,989 C.Y.
" 659	Seeding & Mulching	0 S.Y.

DEVELOPED C.E.S. 12-1-71 M.D.D. 12-2-71 | CHECKED 12-2-71

Ramp D Sta. 55+50 to Sta. 65+00

ITEM 203	Excavation (not Incl. Emb.)	378 C.Y.
" 203	Embankment	23879 C.Y.
" 659	Seeding & Mulching	7724 S.Y.

Ramp H Sta. 40+12 to Sta. 51+00

ITEM 203	Excavation (unsuitable)	14,599 C.Y.
ITEM 203	Excavation (not Incl. Emb.)	495 C.Y.
" 203	Embankment	63859 C.Y.
" 659	Seeding & Mulching	12679 S.Y.

DEVELOPED C.E.S. 12-1-71 M.D.D. 12-2-71 | CHECKED 12-2-71

Ramp F Sta. 99+50 to Sta. 104+00

ITEM 203	Excavation (not Incl. Emb.)	287 C.Y.
" 203	Embankment	5431 C.Y.
" 659	Seeding & Mulching	1881 S.Y.

DEVELOPED C.E.S. 12-1-71 M.D.D. 12-2-71 | CHECKED 12-2-71

I-75 Sta. 94+00 to Sta. 99+50

ITEM 203	Excavation (Not Incl. Emb.)	487 C.Y.
" 203	Embankment	6101 C.Y.
" 659	Seeding & Mulching	3883 S.Y.

CURVE DATA- PELOC. MILL CREEK

CURVE NO. 1
P.I. Sta. 11+77.56
Δ = 39° 28' 33"
D = 7° 49' 00"
R = 733.00'
L = 505.02'
T = 263.00'

For Quantities See Sht. 32 — RAMP C STA. 37+00 TO STA. 40+50; RAMP D STA. 55+45 TO STA. 65+10; RAMP D STA. 37+40 TO STA. 49+50

For Quantities See Sht. 38 — RAMP F STA. 99+88 TO STA. 103+75; RAMP H STA. 40+00 TO STA. 50+75; RAMP I STA. 46+94 TO STA. 50+50; S.R. 126 WB. STA. 37+75 TO STA. 45+00

For Quantities See Sht. 40 — S.R. 126 EB. STA. 37+25 TO STA. 50+75

ESTIMATED QUANTITIES

DRAINAGE

CALC. DS DATE 3/86

CHK'D JAS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

33A
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

PARTICIPATION CODE ① IR-75-1(96)10
PARTICIPATION CODE ② F-2(13)

REF. NO.	STATION TO STATION	SIDE	BEND 6" x 90°	6" CROSS	202 PIPE REMOVED 24" & under	601 Rip Rap Using 8" Reinf. Conc. Slab As Per Plan	601 RIP RAP USING 6" REINF. CONC. SLAB	202 STRUCTURE REMOVED	603 6" CONDUIT TYPE F 707.05	603 15" CONDUIT TYPE B	603 15" CONDUIT TYPE C	603 15" CONDUIT TYPE F 707.05	603 30" COND. TYPE C 706.02 or 706.08 E.S.	603 30" radius CONDUIT TYPE C 706.02 or 706.08 E.S.	603 27" COND. TYPE B 706.02 (2750 D-Load) or 707.13(Con)	603 12" COND. TYPE B	604 STD. NO. 1 MANHOLE	604 DITCH INLET	604 STD. No. 5A C.B.	604 STD. No. 6 C.B.	604 STD. NO. 3 C.B. WITH V-GRATE	605 6" SHALLOW U.D. As Per Plan	660 SODDING	660 REINF. SODDING	670 SLOPE EROSION PROTECT.	SEE SHEET NO.
			EA.		L.F.	S.Y.	S.Y.	LUMP	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EA.	EA.	EA.	EA.		L.F.	S.Y.	S.Y.	S.Y.	
48-D	45+00 to 55+45 RAMP D	Rt.										20										955				33
49-D	64+00 to 66+18 RAMP D	Rt.						LUMP			218								1							33&38
50-D	55+45 to 61+40 RAMP D	Lt.	1						103													590				33
								LUMP																		
51-D	45+20 E.B. to 50+50 I	Lt.	1																			580				33
52-D	45+45 to 49+50 RAMP D	Lt.		1																		431				33
53-D	44+20 to 50+72 RAMP H	Lt.							55													667				33
54-D	40+00 to 45+50 RAMP H	Rt.																				550				33
55-D	9+14.56 to 9+50 Channel	℄				1274																				33
56-D	45+30 E.B. to 61+40 D	Lt. & Rt.								60		98				6	1			1	1					33
57-D	44+05 to 45+77 E.B. 126	Rt.																						82	739	33
58-D	98+52 I-75	Rt.			18																					33
59-D	42+35 to 42+70 RAMP H	Rt.					40																11			33
60-D	40+00 to 40+65 RAMP H	Rt.																					43			33
61-D	98+00 to 96+00 I-75	Lt.																					137			33
62-D	39+15 to 39+95 RAMP C	Lt.																							787	33
63-D	42+00 C to 96+00 I-75	Rt. & Lt.													360			1								33&38
64-D	39+98 RAMP C	Lt.																						92		33
65-D	38+53 to 38+72 RAMP C	Lt. & Rt.											42	54												33
TOTAL					18	1274	40	LUMP	158	60	218	118	42	54	360	6	1	1	1	1	1	3773	191	174	1526	

REF. NO.	STATION TO STATION	SIDE	6"x90° BEND	12"x25° BEND	6" CROSS	202 STRUCT. REMOVED	202 PIPE REMOVED 24" & UNDER	601 ROCK CHANNEL PROTECT. TYPE C w/ FILTER	601 ROCK CHANNEL PROTECT TYPE B w/FILTER	602 CONC. MASONRY	601 Rock Channel Protection Type A w/Filter	603 6" CONDUIT TYPE F 707.05	603 12" CONDUIT TYPE F (707.05)	603 15" CONDUIT TYPE B	603 21" COND. TYPE B 706.02 OR 707.13	603 24" COND. TYPE A 706.02 (1500 D-LOAD) OR 307 MORAS 1825.01 (2220# BOTTOM WEIGHT)	604 STD. No. 5A C.B.	604 STD. No. 6 C.B.	604 STD. I-2A-6 INLET	605 6" SHALLOW U.D. As Per Plan	660 SODDING	660 REINF. SODDING	670 SLOPE EROSION PROTECT.	SEE SHEET NO.
			EA.	EA.	EA.	LUMP	L.F.	C.Y.	C.Y.	C.Y.	C.Y.	L.F.	L.F.	L.F.	L.F.	L.F.	EA.	EA.	EA.	L.F.	S.Y.	S.Y.	S.Y.	
66-D	36+78 to 38+00 RAMP C	Rt.																				103	1078	32/33
67-D	39+33 to 40+20 RAMP C	Rt.																				100	672	33
68-D	40+00 to 40+50 RAMP C	Rt.			1															80				33
69-D	5+65 to 9+14.56 Reloc. Mill Crk.	Lt. & Rt.									3011													
70-D	Not Used																							
70A-D	60+90 to 61+40 RAMP D	Lt.																			43			33
71-D	38+50 W.B. 126	Lt.		2				2		0.21			91						1		1			33
72-D	38+80 to 39+67 W.B. 126	Lt.																					1009	33
73-D	42+04 to 43+04 W.B. 126	Rt.																					1066	33
74-D	43+07 W.B. 126	Rt.																				109		33
75-D	96+00 to 103+00 S.B. I-75	Lt.																			467			33
75A-D	41+90 to 43+45 RAMP H	Lt.																			150			33
76-D	96+00 I-75 to 103+73 RAMP F	Lt.	1									10								823				33,328
77-D	44+90 to 45+64 RAMP D	Lt.																					327	33
78-D	45+60 RAMP D	Lt.		1				3		0.21			84						1		1			33
79-D	57+25 RAMP D	Lt.				LUMP	18	3		0.27				82					1		1			33
80-D	55+45 to 58+00 RAMP D	Lt.																			285			33
80A-D	42+70 to 46+45 RAMP H	Rt.																			250			33
81-D	49+50 to 50+50 RAMP I	Lt.																			180			33
82-D	43+44 to 47+15 RAMP H	Lt.																			311			33
83-D	44+00 W.B. 126	Lt.		2				2		0.21			82						1		1			33
84-D	43+54 to 44+85 W.B. 126	Lt.			1															160				33
85-D	42+50 RAMP H	Rt.							30	1.2						117					2			33
85A-D	62+65 to 64+15 RAMP D	Rt.																			87			33
86-D	61+40 D to 42+52 RAMP H	Lt. & Rt.								0.39					192		1				1			33
87-D	98+52 I-75 to 61+40 RAMP D	Rt. & Lt.												140					1					33
TOTAL						LUMP	18	10	30	2.49	3011	10	257	222	192	117	1	3	2	1063	1780	312	4152	

PARTICIPATION CODE IS ① ON THIS SHEET
FOR ALL ITEMS UNLESS MARKED

ESTIMATED QUANTITIES

CALC. REA DATE 3/8/00
CHKD. DS DATE 3/8/00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

HAM- 75/126 - 9.93/13.00
HAMILTON COUNTY

338
787

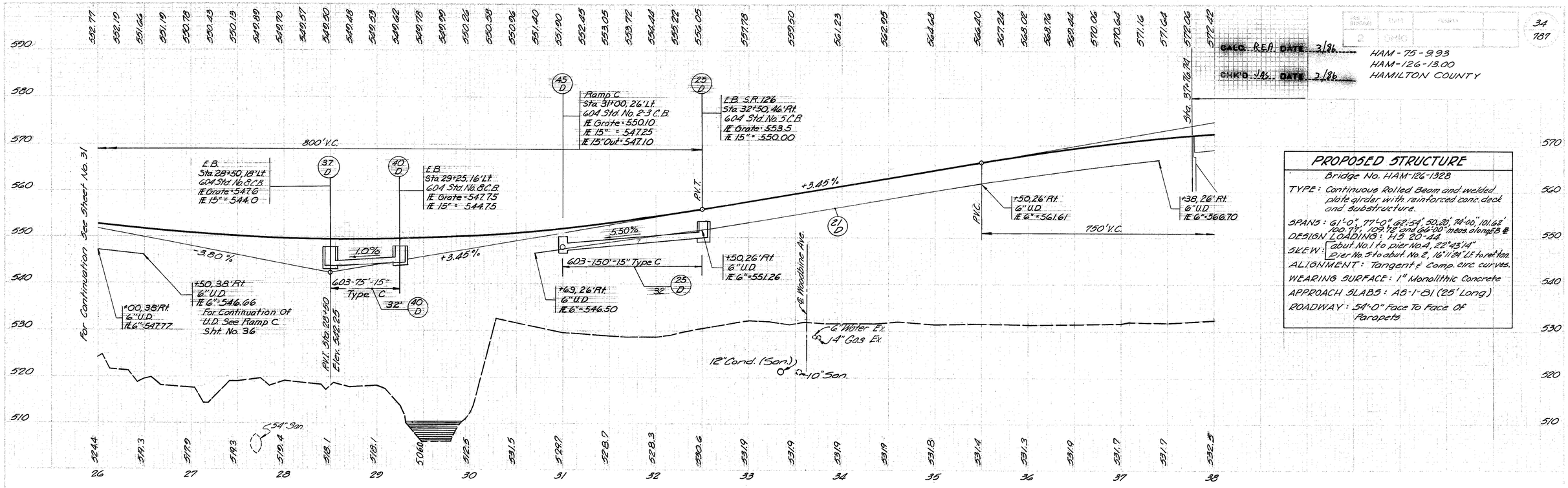
PARTICIPATION CODE IR-75-1(96)10
PARTICIPATION CODE F-2(13)

REF. NO.	STATION TO STATION	SIDE	202 Conc. Barrier Removed L.F.	310 Subbase Type II As Per Plan C.Y.	451 9" Reinf. Conc. Pav't. As Per Plan S.Y.	451 10" Reinf. Conc. Pav't. Mod. As Per Plan S.Y.	451 12½" Reinf. Conc. Pav't As Per Plan S.Y.	452 8"to10" Conc. Pav't Mod. As Per Plan S.Y.	452 7"to10" Conc. Pav't Mod. As Per Plan S.Y.	452 7"to9" Conc. Pav't Mod. As Per Plan S.Y.	452 8"to9" Conc. Pav't Mod. As Per Plan S.Y.	452 9"to10" Conc. Pav't Mod. As Per Plan S.Y.	606 Std. Type 5 G.R. L.F.	606 Bridge Terminal Assembly Std. Type A Ea.	606 Anchor Assembly Std. Type A Ea.	606 Anchor Assembly Std. Type T Ea.	608 4" Conc. Walk S.F.	609 Std. Type 6 Curb L.F.	609 Std. Type 2A Curb L.F.	611 Reinf. Conc. Approach Slab(7-15") S.Y.	612 Concrete Median, Std. Type S.Y.	622 Concrete Barrier Std. Type A-50 L.F.	622 Concrete Barrier Std. Type D-50 Mod. L.F.	Special Pressure Relief Joint Std. Type A L.F.	Drainage Connect. C.Y.	SEE SHEET NO.
	37+75 to 45+00 W.B.																									
	37+25 to 50+75 E.B.																									
	ROADWAY																									
17-R	45+36.5 to 47+00 "D"	Lt.											150	1	1											33
18-R	45+14 to 51+50 "D"	Rt.											650	1	1											33 & 40
19-R	45+08 to 52+86 "I"	Lt.											762.5	1		1										33 & 40
20-R	44+81 to 47+00 E.B.	Rt.											225	1		1										33
21-R	59+02 to 62+25 "D"	Lt.											287.5		1	1										33
22-R	69+94 "D" to 53+29.22 "H"	Rt.											1837.5	2												33, 38 & 40
23-R	97+03 to 99+85 I-75	E	282																							
	PAVEMENT Anthony Wayne																									
309-P	38+16 "C" to 40+35 W.B.	Rt.															4545	505								33
	37+75 to 45+00 W.B.																									
	37+25 to 50+75 E.B.																									
32-P	38+30.01 W.B. 126	Lt.		20																117						33
33-P	42+76.77 W.B. 126	Lt.		21																123						33
34-P	43+64 to 44+85 W.B.	Lt.		19									134												6	33
35-P	43+26 to 44+85 W.B.	Lt.		70		425																			38	33
36-P	42+98 to 44+85 W.B.	Rt.		8				83																		33
37-P	37+72.87 Ramp "D"	Lt. & Rt.		13														14	12	80						33
38-P	37+51.24 E.B. 126	Lt. & Rt.		25														14	12	150						33
39-P	36+90.73 Ramp "C"	Lt.		13														14	12	75						33
44-P	94+10 to 99+88 I-75	Lt.		66									514												19	33
45-P	45+11.98 Ramp "D"	Rt.		12														28	24	74						33
46-P	45+39 to 49+50 "D"	Lt.		46						274															21	33
47-P	45+30 to 49+50 "D"	Rt.		140	749																				26	33
48-P	45+27 to 49+50 "D"	Rt.		7							143															33
51-P	97+03 to 99+85 I-75	E																					282			33
54-P	44+84.91 E.B.	Lt. & Rt.		25														28	24	150						33
55-P	45+12 to 50+75 "I"	Lt.		35				251																	18	33
56-P	45+01.50 to 50+25 E.B.	Lt. & Rt.		439		2508																			52	33
57-P	44+90 to 50+75 E.B.	Rt.		63									650													
58-P	39+70.44 Ramp "C"	Lt. & Rt.		13														28	24	78						33
59-P	39+82.5 to 40+50 "C"	Lt.		2							21															
60-P	39+91.5 to 40+50 "C"	Lt.		20	104																				30	33
61-P	39+97 to 40+50 "C"	Rt.		3						35															3	33
62-P	99+88 to 103+75 "F"	Lt.		51						344															19	33
63-P	99+88 to 103+75 "F"	Lt. & Rt.		139	746																					33
64-P	94+10 to 99+88 I-75	Lt.		201			1142																			33
65-P	Not Used																									
66-P	99+88 to 103+75 "F"	Rt.		98								595														33
67-P	55+45 to 64+48 "D"	Rt.		41							308														30	
68-P	55+45 to 64+68 "D"	Lt. & Rt.		308	1642																					
69-P	55+45 to 64+68 "D"	Lt.		90						615															29	33
70-P	40+40.39 to 50+75 "H"	Lt.		38							345														26	33
71-P	40+40.39 to 50+75 "H"	Lt.		307	1839																					33
72-P	40+40.39 to 50+75 "H"	Rt.		110						701															26	33
291-P	54+68.42 to 61+53.77 "D"	Rt.		369																		905				33
312-P	37+75 to 38+72.25 W.B.	Lt.		3									16											97.25		33
313-P	43+81.84 to 45+00 W.B.	Lt.		3									20											118.16		33
TOTAL			282	2780	5080	2933	1142	334	1334	1969	817	595	3912.5	6	3	3	4545	631	108	847	905	282	215.41	146	197	

Participation Code Is ① For All Items On This Sheet Unless Marked

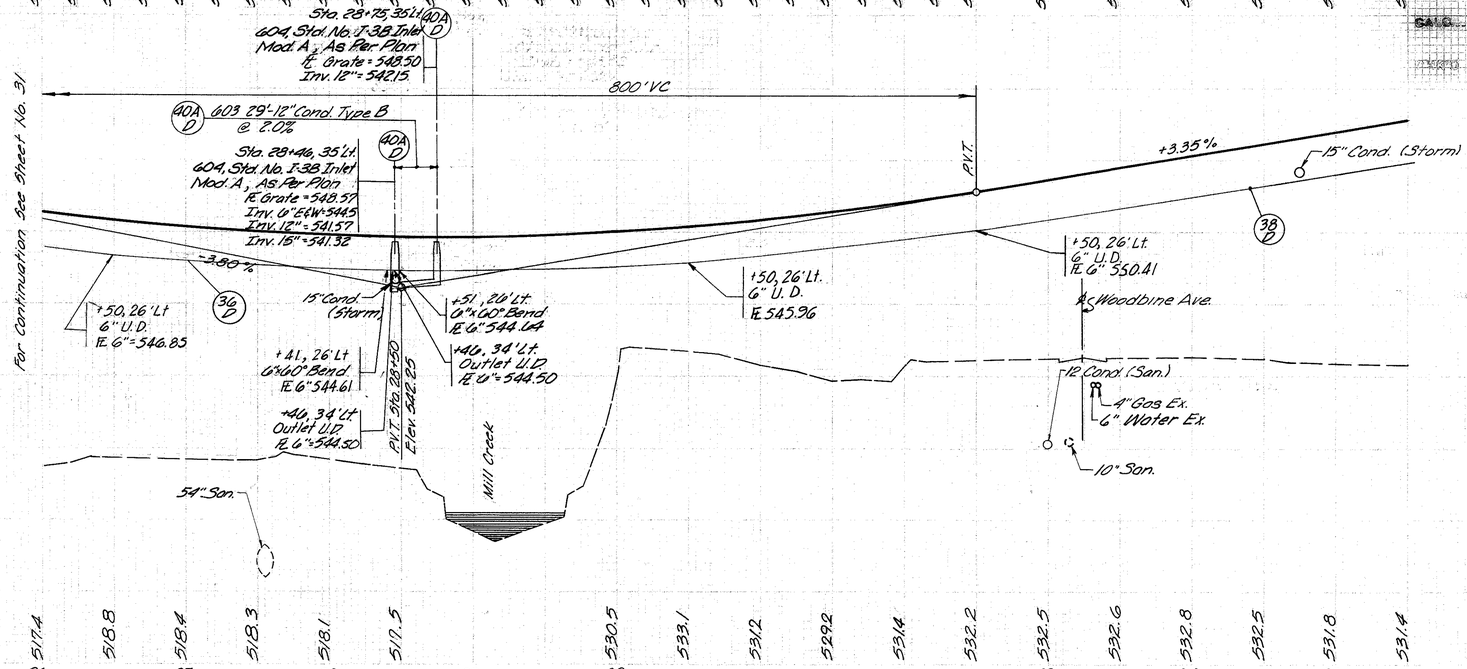
CALC. REA DATE 3/86
CHK'D JAS DATE 3/86

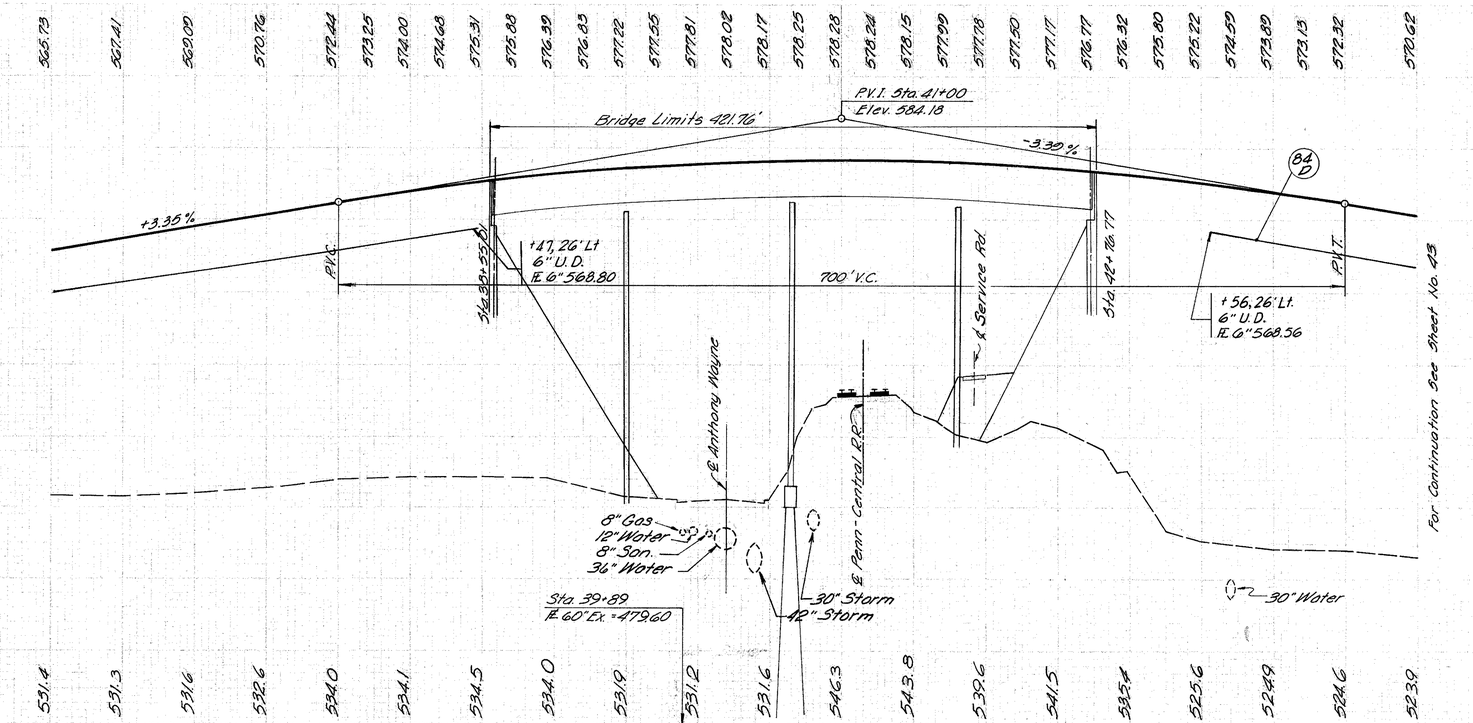
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



DES'G. REA DATE 3/86
CHK'D JAS DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY





PROPOSED STRUCTURE

Bridge No. HAM-126-1330

TYPE: Continuous Plate Girder With Reinforced Concrete Deck And Substructure.

SPANS: 92'-0", 115'-0", 115'-0" & 92'-0"

DESIGN LOADING: H5 20-44

SKEW: 51°30'01" (L.F.)

ALIGNMENT: 5°00'00" curve left.

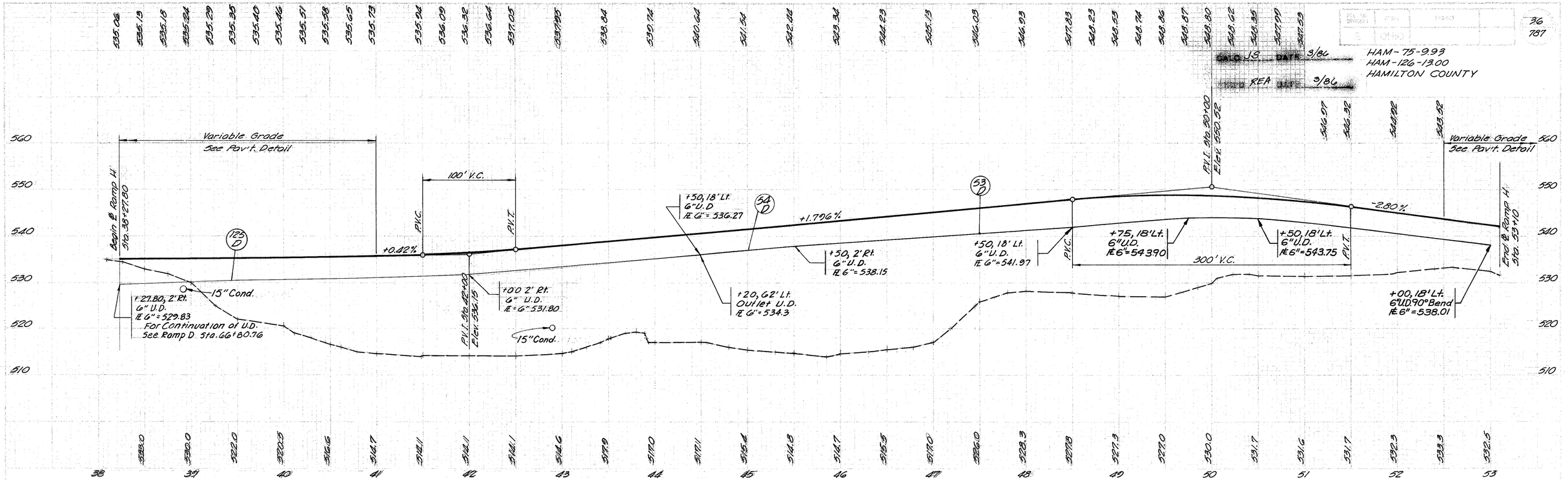
WEARING SURFACE: 1" Monolithic Concrete

APPROACH SLABS: A5-1-81 (25' Long)

ROADWAY: 42'-0" Face To Face Of Parapets

DEVELOPED | CHECKED

WB-RR-126-STA 26+00 TO STA 45+00



PROPOSED STRUCTURE

Ramp C Over Existing Anthony Wayne & Penn.-Central Railroad

TYPE: Continuous Rolled Steel Beam With Reinforced Concrete Deck And Substructure.

SPANS: 62'-6", 78'-6", 60'-6" & 48'-6"

DESIGN LOADING: HS 20-44

SKEW: 7°45'± R.F.

ALIGNMENT: 12°00' Curve Right

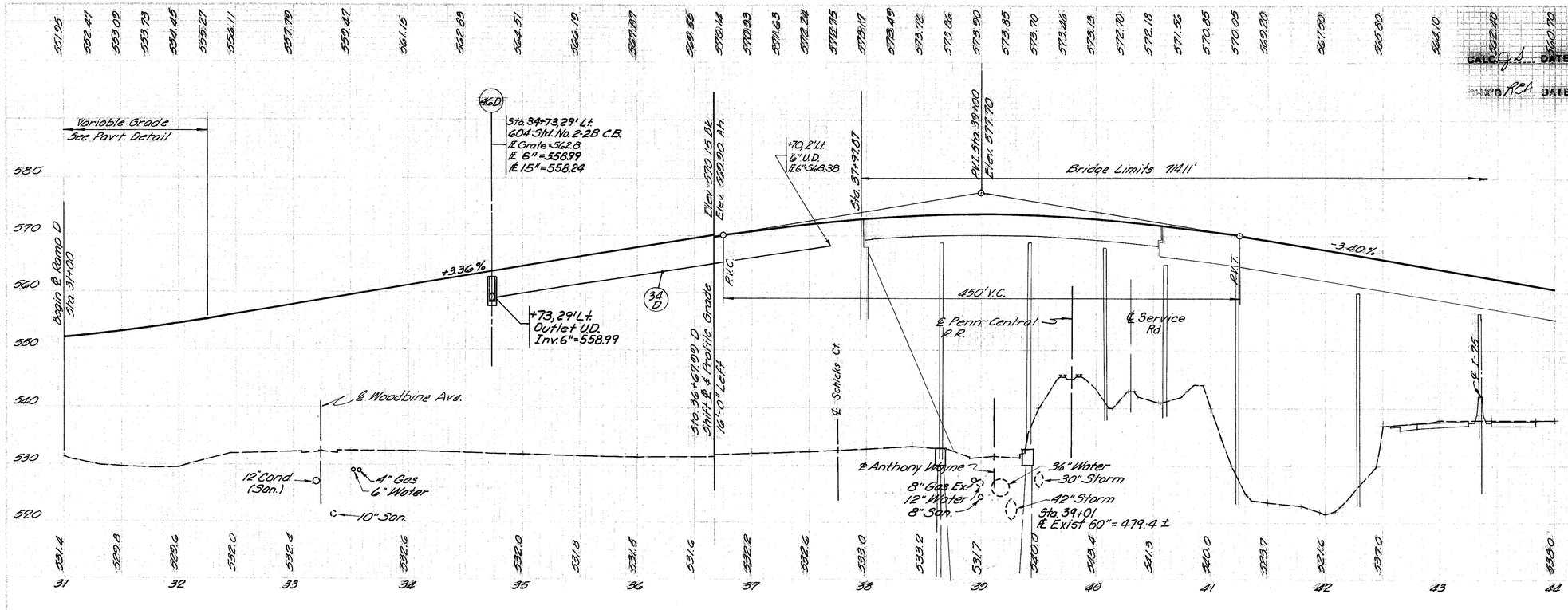
WEARING SURFACE: 1" Monolithic Concrete

APPROACH SLABS: AS-1-81 (25' Long)

ROADWAY: 27'-8" Face To Face Of Parapets

CALC. G.S. DATE 3/86
CHK'D RCA DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



PROPOSED STRUCTURE

Ramp D Over Anthony Wayne And Penn-Central Railroad. I-75

TYPE: Continuous Rolled Beam and Welded Plate girder with Reinforced Conc. deck & substructure.

SPANS: 65.50', 77.00', 66.90', 51.63', 64.00', 104.63', 105.90', 108.34' and 65.50'

DESIGN LOADING: HS 20-44

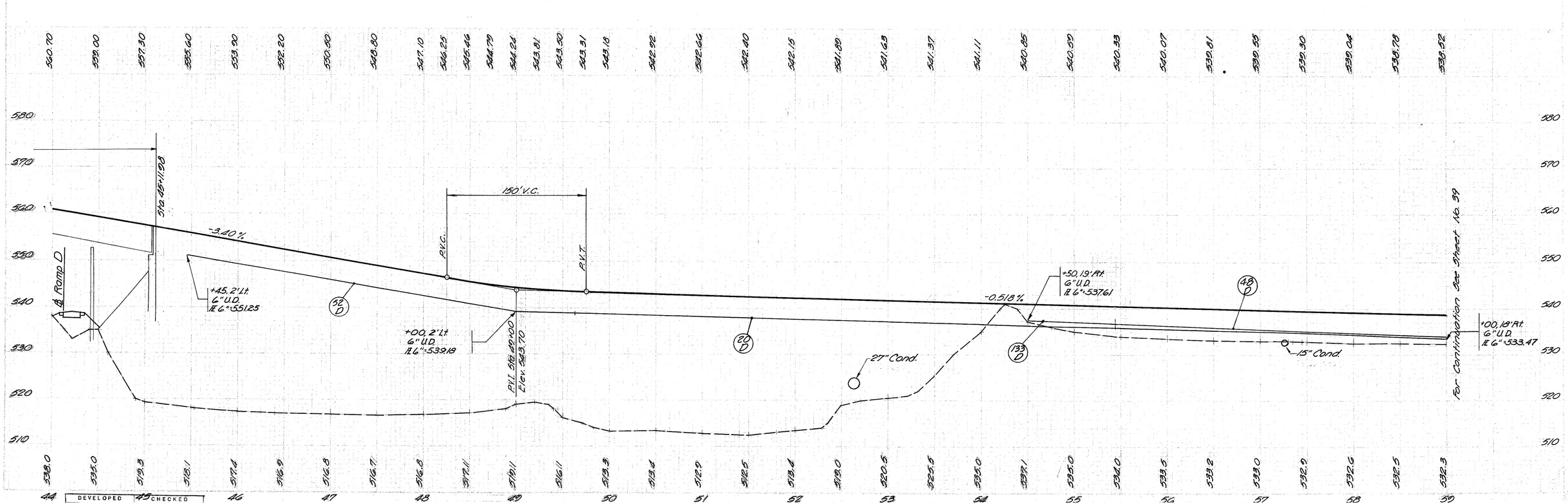
SKEW: Abut. No. 1 to Pier No. 4 = 22°32.54"
Pier No. 5 to Abut. No. 2 = 19°27.05" LF to ref. tan.

ALIGNMENT: Tangent & Comp. Circ. Curves.

WEARING SURFACE: 1" Monolithic Concrete

APPROACH SLABS: AS-1-81 (25' Long)

ROADWAY: 27'-8" Face To Face Of Parapets.



DEVELOPED | CHECKED

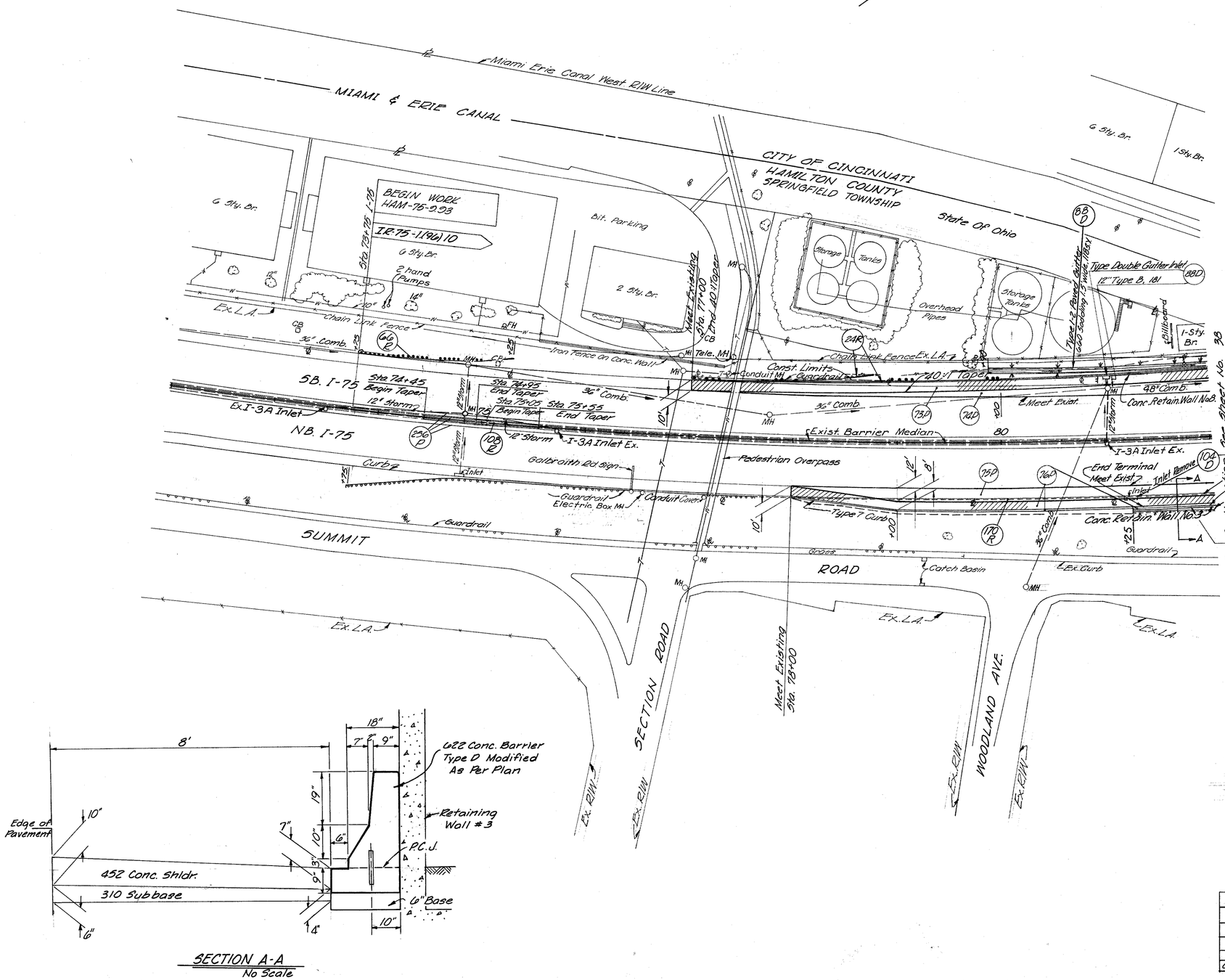
CALC. JS DATE 3/86

CHK'D REA DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

37A
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



SECTION A-A
No Scale

For Typical Sections See Sh. 7 thru 15
For Pavt. Legend See Sh. 29
For Curve Data See Sh. 5 & 5A
For Pavt. Details See Sh. 201, 204
For Quantities See Sh. 38C
For Drainage Quantities See Sh. 38B
For Bench Marks See Sh. 2G
For ℄ or ℇ References See Sh. 27
For Wall Details See Sh. 445-450 and 478-483

I-75 Sta. 77+00 to Sta. 82+00		
ITEM 203 Excavation (not Ind. Emb.)	646	C.Y.
" 203 Embankment	92	C.Y.
" 659 Seeding & Mulching	177	S.Y.

DEVELOPED		CHECKED	
C.E.S.	12-1-77	M.D.D.	12-2-77

CALC. JS DATE 3/86

CHKD REA DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

38
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

Note: For Drainage Items From Sta. 82+00 I-75 To Sta. 88+00 I-75 See Sht. No. 38-A

Sta. 13+00 End Work Sta. 88+49.31 413.96' Lt. I-75 ℄

Sta. 10+00 Begin Work Sta. 85+20.14 229.81' Lt. I-75 ℄

CITY OF CINCINNATI
HAMILTON COUNTY

Miami Erie Canal West R/W Line

Miami Erie Canal East R/W Line

Parking Area

Guard Posts

Gas Pump

Tank

Chain Link Fence

Conc. Retaining Wall No. 2

Conc. Retaining Wall No. 3

Conc. Retaining Wall No. 4

Conc. Retaining Wall No. 2

Conc. Barrier Type D Modified As Per Plan

Const. Limits

Guardrail

Exist. Curb & Gutter

Exist. Type C Relief Joint N.B. I-75 +50 (Asphalt over concrete)

Joint Type A Std. Dwg. BP-10

Exist. Curb 2

Exist. Type C Relief Joint N.B. I-75 +50 Begin Taper End Taper

Joint Type A Std. Dwg. BP-10

Sta. 85+40.00 I-75 Rt. 73+70.65 End ℄ Ramp D

Sta. 85+27.20 I-75 Rt. 38+27.80 Begin ℄ Ramp H

Sta. 85+00.00 I-75 Begin Taper 40:1

Sta. 88+00.00 I-75 End Taper 40:1

End ℄ Ramp C Sta. 47+95.25 C Sta. 88+00.00 I-75 Begin 40:1 Taper

Service Rd.

℄ Ramp C

℄ Ramp D

℄ Ramp H

℄ Existing I-75

℄ Relocated Lt. as Per Signing Plan

To Be Removed And

Type "D" Mod. As Per Plan Begin 40:1 Taper

Type 2A Curb

Sodding 75' Wide

660 Reinforced Sodding

Sodding 9' Wide 175 S.Y.

Sodding 6' Wide 775 S.Y.

Sodding 6' Wide

Sodding 6' Wide

Reconst. To Grade w/ Solid Watertight Cover Cover Elev. = 570.6 (Prop) Cover Elev. = 532.0 (Ex.)

Prop. 30" Water Line Relocated

Water Main Conc. Mon. Ex. L.A.

Wire Fence

Terminal Connector

Terminal (Connector)

45 C Ret. Wall No. 2

Begin Ret. Wall No. 2

Type 2 Paved Gutter w/ 6" Sod 15' Wide

Type 2 Paved Gutter w/ 6" Sod 15' Wide

Billboard

Conc. Retaining Wall No. 2

Curve No. C-3

Curve No. D-1

Curve No. H-1

Type F Shallow U.D.

Type C Shallow U.D.

Type C 330

Type F 328

Type F 320

Type C Fence

Type F Fence

Type C Fence

Type F Fence

Type C Fence

Type F Fence

CALC. TO DATE 3/86

CHKD REA DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

PIPE CURVE ①
R = 50.00'
Δ = 69°30'-00"
Arc = 60.65'
C = 45.60'
T = 34.69'
P.I. Sta = 85+74.57 Lt.

PIPE CURVE ②
R = 50.00'
Δ = 40°-00'-00"
Arc = 34.91'
C = 27.36'
T = 18.20'
P.I. Sta. = 83+95.11 Lt.

Parking Area
Wooded
Ex. L.A.
Const. Limits
Conc. Trough
Rock Channel Protect. Type B w/ Filter
Item 451 over Item 310
Ditch Inlet
Link Fence
Construction Limits
Ex. L.A.
48" Comb.
Exist. Paved Shoulder
Exist. Curb
Guardrail
MC-4 Conc. Collar
Remove Pipe
Remove Inlet
Remove Intercepting Pipe
Metal Posts
Conc. Water Main Mon.
Intercepter Chamber
Ex. 30" Wtr.
Ex. 12" Wtr.
Ex. 8" Wtr.
Ex. 6" Wtr.
Ex. 16" Wtr.
Ex. 8" Gas
Ex. 12" Gas
Ex. 6" Gas
Ex. 4" Gas
Ex. 24" Gas
Ex. 8" Sanit.
Ex. 12" Sanit.
Ex. 8" Sanit.
Ex. 6" Sanit.

ESTIMATED QUANTITIES

DRAINAGE

CALC. DS DATE 3/86
CHK'D JJS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

38B 787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

PARTICIPATION CODE ① IR-75-1(96)10
PARTICIPATION CODE ② F-2(13)

REF. NO.	STATION TO STATION	SIDE	12"x25° BEND	18"x12" TEE	602 Concrete Masonry	202 PIPE REMOVED 24" AND UNDER	202 PIPE REMOVED OVER 24"	202 STRUCTURE REMOVED	202 Catch Basin Removed	601 Rock Channel Protection Type B w/ Filter	601 PAVED GUTTER TYPE 1-2	601 PAVED GUTTER TYPE 2	603 18" CONDUIT TYPE B	603 12" CONDUIT TYPE C	603 12" COND. TYPE B1A DUCTILE IRON CL. 53	603 12" COND. (TYPE C 708.02 2000 D-LOAD) 707.13	603 12" CONDUIT TYPE F 707.05	603 48" RADIUS COND. TYPE B 706.02 (1500) D-LOAD	603 48" COND. TYPE C 706.02 (1500 D-LOAD)	603 48" COND. TYPE C 706.02 (1500 D-LOAD) RADIUS PIPE	603 48" CONDUIT TYPE F 707.05 (D.109)	604 STD. NO. 5-A C.B.	604 SINGLE GUTTER INLET	604 DOUBLE GUTTER INLET	604 STD. DITCH INLET	604 TYPE A MANHOLE	604 TYPE A MANHOLE W/DROP	Spl. Interceptor Chamber	SAN. 603 12" COND. TYPE C 706.02 (1250 D-LOAD) W/ 706.11 JOINTS	604 Manhole Reconst. to Grade	660 SODDING	601 Rip Rap using 6" Reinf. Conc. Slab	SEE SHEET NO.
			EA.	EA.	C.Y.	L.F.	L.F.	LUMP	EA.	C.Y.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EA.	EA.	EA.	EA.	EA.	EA.	L.F.	EA.	S.Y.	S.Y.	
88-D	79+90 to 83+50 I-75	Lt.									360				9															90		37A, 181
89-D	81+25 to 82+00 I-75	Rt.									75																			13		37A
90-D	83+50 I-75	Lt.													7																14	38A, 182
91-D	83+50 to 85+30 I-75	Lt.										180	14											1								38A, 182
92-D	83+75 to 85+52 I-75	Lt.				180			1																							38A
93-D	83+75 to 86+55 I-75	Rt.											281										1									38A, 338
94-D	83+00 to 86+55 I-75	Rt.										355																		77		38A
95-D	85+90 to 86+05 I-75	Lt.																											43	1		38A, 314
96-D	85+90 to 86+53 I-75	Lt.			1.10					11									13	28	40									2		38A, 314
97-D	86+00 to 86+02 I-75	Lt.				85																										38A
98-D	85+45 to 85+90 I-75	Lt.																49	16				1									38A, 314
99-D	Not Used																															
100-D	85+87 to 85+82 I-75	Lt.		1												7											1					38A, 338
101-D	86+02 to 85+82 I-75	Lt.											21			7								1							38A, 338
102-D	86+00 to 86+69 I-75	Lt.					80	LUMP																								38A
103-D	86+00 to 86+28 I-75	Lt.				30			1																							38A
104-D	81+25 to 83+75 I-75	Rt.							1																							37A
105-D	85+52 to 86+57 I-75	Rt.				106		LUMP	1																							38A
						200																										
106-D	86+55 I-75	Rt.											8										1									38A, 338
107-D	88+76 I-75	Rt.				8		LUMP	1																							38A
108-D	86+55 I-75 to 72+00 Ramp D	Rt. & Lt.												62								1										38A, 338
109-D	72+00 to 71+60 Ramp D	Lt.	2		.21												54									1						38A, 338
TOTAL					1.31	609	80	LUMP	5	11	435	535	324	62	16	14	54	49	29	28	40	1	2	3	1	1	1	1	43	1	182	14	

REF. NO.	STATION TO STATION	SIDE	15"x25° BEND	6" Tee	6" Cross	202 PIPE REMOVED 24" AND UNDER	202 Structure Removed	601 Paved Gutter Type 2	601 Rock Channel Protection Type C w/ Filter	602 CONCRETE MASONRY	603 6" CONDUIT TYPE F 707.05	603 12" CONDUIT TYPE F 707.05	603 15" COND. TYPE B	603 15" CONDUIT TYPE C	603 15" CONDUIT TYPE F 707.05	603 27" CONDUIT TYPE C	604 STD. NO. 6 C.B.	604 STD. NO. 5 C.B.	604 STD. NO. 5-A C.B.	604 TYPE A MANHOLE	604 MANHOLE RECONST. TO GRADE W/ NEW FR. FRAME & COVER	202 PIPE REMOVED OVER 24"	202 Manhole Removed	601 Rock Channel Protection Type B w/Filter	605 6" SHALLOW U.D AS PER PLAN	660 SODDING	660 REINFORCED SODDING	SEE SHEET NO.
			EA.	Ea.	Ea.	L.F.	Lump	L.F.	C.Y.	C.Y.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EA.	EA.	EA.	EA.	EA.	L.F.	Each	C.Y.	L.F.	S.Y.	S.Y.	
110-D	45+93 Ramp C	Rt.																			1							38
111-D	45+00 to 47+40 Ramp C	Rt.								.53						238				1						1		38, 330
112-D	40+61 to 47+75 Ramp C	Rt.																								515	51	38
113-D	40+50 to 46+32 Ramp C	Rt.		1	1						20														624			38, 39
114-D	42+00 to 45+00 Ramp C	Rt.														280				1								38, 330
115-D	91+75 to 94+00 I-75	Lt.						220																		87		38
115A-D	40+14 to 42+00 "C"	Lt.											185				1											38, 328
116-D	66+18 to 67+35 Ramp D	Rt.													116			1	1									38, 39
117-D	65+00 to 68+18 Ramp D	Rt.									20														120			38, 39
118-D	38+85 to 40+00 Ramp H	Rt.																								83		38
119-D	Not Used																											
120-D	66+18 Ramp D	Lt. & Rt.	2						7	.27				200		47										1		38, 320
120A-D	85+45 to 86+00 I-75	Lt.																				55	1					38A
121-D	68+14 Ramp D	Lt.																			1							38
122-D	69+00 to 69+90 Ramp D	Lt.																								175	64	38
123-D	70+17 to 69+63 Ramp D	Lt.							2	.21			120													1		38
124-D	86+50 to 83+50 I-75	Rt. & Lt.																						889				38A
125-D	40+00 Ramp H to 69+68 "D"	Rt. & Lt.			1						20														350			34, 38, 39
126-D	90+40 to 90+90 I-75	Rt.																								44		38
136-D	67+34 to 67+39 Ramp D	Lt.				16	Lump																					38
TOTAL						16	Lump	220	9	1.01	60	305	200	116	47	518	1	1	1	2	2	55	1	889	1294	906	115	

PARTICIPATION CODE IS ① ON THIS SHEET
FOR ALL ITEMS UNLESS MARKED

Rev. 7-24-86

ESTIMATED QUANTITIES

CALC. REA DATE 3/86
CHK'D TLS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

386
787

HAM-75/126-9.93/13.00
HAMILTON COUNTY

Participation Code (1) IR-75-1(96)10
Participation Code (2) F-2(13)

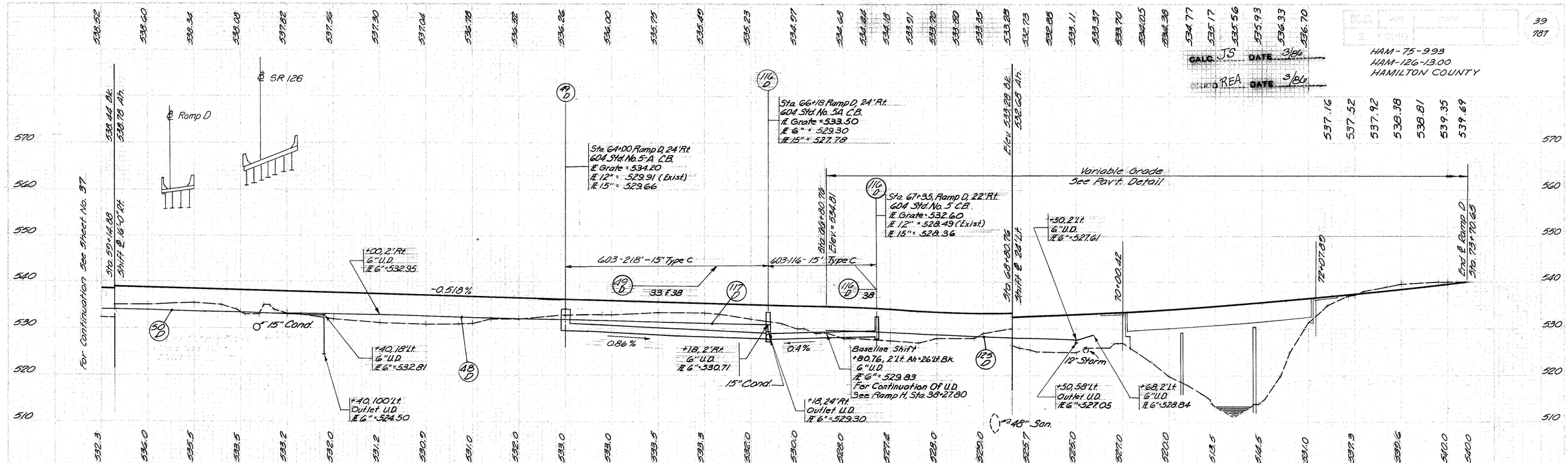
REF. NO.	STATION TO STATION	SIDE	202 G.R REMOVED	202 Conc. Barrier Removed	202 Curb Removed	202 Pavement Removed	301 Bit. Aggr. Base	310 Subbase Type II As Per Plan	404 Asphalt Conc. 2"	451 9" Reinf. Conc. Pav't. As Per Plan	451 12½" Reinf. Conc. Pav't. As Per Plan	452 7"-9" Conc. Pav't. Mod. As Per Plan	452 8"-9" Conc. Pav't. Mod. As Per Plan	452 7"-10" Conc. Pav't. Mod. As Per Plan	452 8"-10" Conc. Pav't. Mod. As Per Plan	452 9"-10" Conc. Pav't. Mod. As Per Plan	606 Std. Type 5 G.R.	606 Bridge Term. Assembly Std. Type A	606 Anchor Assembly Std. Type A	606 Anchor Assem. Std. Type T	609 Curb Std. Type 7	609 Std. Type 2A Curb	611 Reinf. Concrete Approach Slab (T=15)	622 Conc. Barrier Std. Type A-50	622 Conc. Barrier Std. Type C	Special Conc. Barrier Std. Type D Mod. As Per Plan	Special Relief Joint Std. Type A	Special Drainage Connect	SEE SHEET NO.
	ROADWAY		L.F.	L.F.	L.F.	S.Y.	C.Y.	C.Y.	C.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	L.F.	Ea.	Ea.	Ea.	L.F.	L.F.	S.Y.	L.F.	L.F.	L.F.	L.F.	C.Y.	
	72+00 ~ 82+00																												
24-R	77+00 ~ 80+00 I-75	Lt.	150														287.5	1		1									37-A
66-R	73+75 ~ 75+00 I-75	Lt.															112.5		1	1									37-A
108-R	74+45 ~ 75+55 I-75	℄		110																									37-A
170-R	78+00 ~ 86+83 I-75	Rt.			883																								37-A, 38
25-R	39+73.5 ~ 44+05 "C"	Lt.															450	2											33, 38
26-R	39+89 ~ 46+70.3 "C"	Rt.															617.5	2											33, 38
71-R	89+60 ~ 93+10 I-75	Lt.															350	2											38
95-R	88+45 ~ 89+75 I-75	Lt.	150																										38
96-R	92+56 ~ 94+26 I-75	Lt.	175																										38
97-R	85+20 ~ 86+32.5 I-75	Lt.	112.5																										38
98-R	85+45 ~ 86+95 I-75	Rt.	150																										38
99-R	89+00 ~ 90+62.5 I-75	Rt.	162.5																										38
111-R	85+00 ~ 86+10 I-75	℄		110																									38
400-R	86+65.90 ~ 86+71.90 I-75	℄		6																									
401-R	86+30 ~ 87+00 I-75	Lt. & Rt.				129																							
402-R	88+45 ~ 89+16 I-75	Lt. & Rt.				138																							
403-R	88+72.10 ~ 88+78.10 I-75	℄		6																									
	PAVEMENT																												
50-P	89+03.72 ~ 89+47 I-75	Lt.																							28	13.5			38
73-P	77+00 ~ 82+00 I-75	Lt.						61						437															37-A
74-P	77+00 ~ 82+00 I-75	Lt.						58		347																			37-A
75-P	78+00 ~ 82+00 I-75	Rt.						78		467																			37-A
76-P	78+00 ~ 82+00 I-75	Rt.						54						367							325					75			37-A
77-P	82+00 ~ 86+30 I-75	Lt.						46						334															38
78-P	82+00 ~ 86+14 I-75	Lt.						143		813																	30		38
79-P	86+05 ~ 86+70 I-75	Lt.						32															193						38
80-P	88+34 ~ 88+96 I-75	Rt. & Lt.						35														25	210						38
81-P	40+50 ~ 46+39 "C"	Rt.						50				402																30	38
82-P	40+50 ~ 46+32.5 "C"	Lt.						183		1036																	37		38
83-P	40+50 ~ 46+34 "C"	Lt.						73					180			287													38
84-P	66+80.76 ~ 69+95 "D"	Lt.						166		534	463																50		38
85-P	90+60 ~ 94+10 I-75	Lt.						43						311															38
86-P	89+88 ~ 94+10 I-75	Lt.						41			247																		38
87-P	82+00 ~ 72+98 "D"	Rt.						111			630																23		38
88-P	82+00 I-75 ~ 72+03.71 "D"	Lt.						82						456												512.9			37-A, 38
89-P	86+52 ~ 87+12 I-75	Rt.						29															175						38
90-P	88+29 ~ 89+48 I-75	Rt.						40														25	237						38
91-P	64+62 ~ 68+80.76 "D"	Rt.						90				242	44															5	33, 38
92-P	38+22.80 ~ 40+40.39 "A"	Lt.						130		783																			33, 38
93-P	40+40.39 ~ 69+70 "D"	Lt. & Rt.						59				364		80														25	33, 38
221-P	85+00 ~ 86+10 I-75	℄						31							130										110				38
256-P	74+45 ~ 75+55 I-75	℄						31							130										110				37-A
281 P	86+73.34 ~ 86+65.90 I-75	℄																							7.5				
282 P	88+70.66 ~ 88+78.10 I-75	℄																							7.5				
305 P	Service Rd. Over Mill Creek	℄					13		4																				
TOTAL			900	232	883	267	13	1616	4	2353	2967		1008	224	1985	260	287		1875	7	1	2		325	50	815		235	28	601.9	140	60	

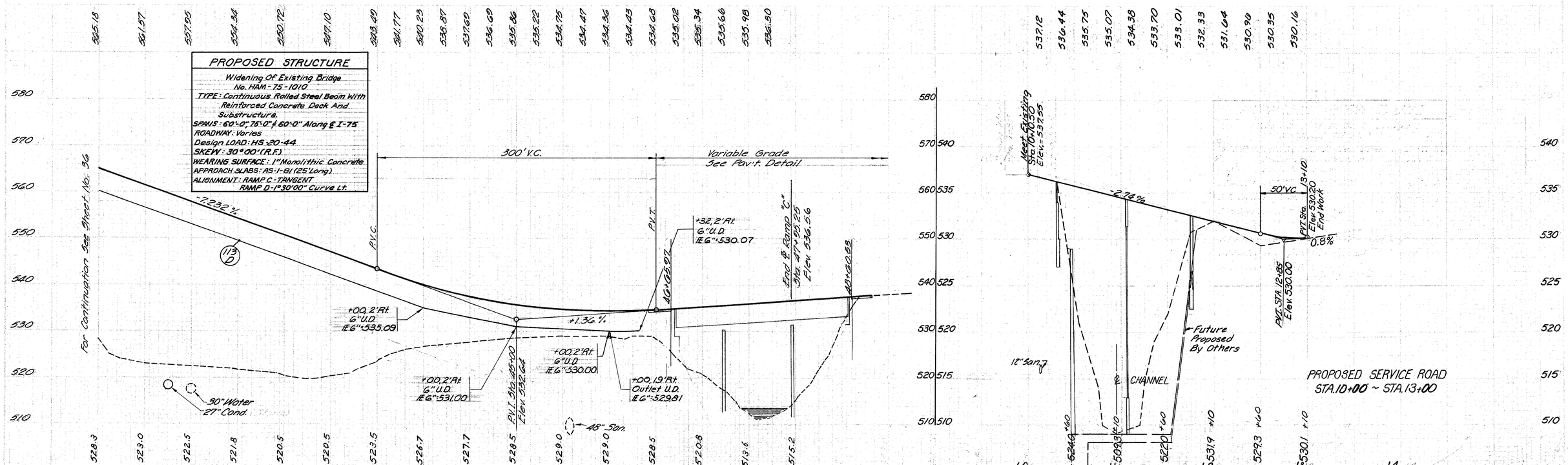
Participation Code is (1) For All Items On This Sheet Unless Marked.

CALC. JS DATE 3/86
CHKD REA DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

RAMP D STA. 59+00 TO STA. 73+70.65





RAMP C STA. 10+50 TO STA. 47+05.25

DEVELOPED | CHECKED

CALC. JS DATE 6/86

CHKD REA DATE 3/86

Prop. Reloc. Mill Creek Sta. 9+00 to Sta. 19+00		
Item 203 Excavation (not Incl. Emb.)	31,426	C.Y.
" 203 Embankment	1548	C.Y.
" 659 Seeding & Mulching	1481	S.Y.

DEVELOPED	CHECKED
C.E.S. 12-1-71	M.D.D. 12-2-71

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

40
187

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

For Typical Sections See Sh. 7 thru 13
For Pavt. Legend See Sh. 29
For Curve Data See Sh. 5A, 6, 6A
For EB. S.R. 126 Profile See Sh. 42
For WB. S.R. 126 Profile See Sh. 43
For Ramp D Profile See Sh. 37
For Ramp E Profile See Sh. 46
For Ramp F Profile See Sh. 44
For Ramp H Profile See Sh. 36
For Ramp I Profile See Sh. 45
For Bridge No. HAM-126-1359 See Sh. 603-620
For Approach Slabs Details See Std. AS-1-81
For Pavt. Details See Sh. 295, 296, 297, 298
For Superelevation Tables See Sh. 10 thru 13
For Quantities See Sh. 40A, 40B
For Bench Marks See Sh. 26
For ℄ or ℄ References See Sh. 27
For Retaining Wall Details See Sh. 451-456

For Quantities See Sheet 33

For Quantities See Sheet 41

N.B. I-75 Sta. 104+50 to Sta. 113+00		
ITEM 203 Excavation (Not Incl. Emb.)	3582	C.Y.
" 203 Embankment	2682	C.Y.
" 659 Seeding & Mulching	1895	S.Y.

DEVELOPED	CHECKED
C.E.S. 12-1-71	M.D.D. 12-2-71

E.B. S.R. 126 Sta. 50+50 to Sta. 60+00		
ITEM 203 Excavation (not Incl. Emb.)	18,245	C.Y.
" 203 Embankment	22,656	C.Y.
" 659 Seeding & Mulching	6616	S.Y.

W.B. S.R. 126 Sta. 45+00 to Sta. 54+50		
ITEM 203 Excavation (not Incl. Emb.)	165	C.Y.
" 203 Embankment	109955	C.Y.
" 659 Seeding & Mulching	16,841	S.Y.

DEVELOPED	CHECKED
C.E.S. 12-1-71	M.D.D. 12-2-71

Ramp D Sta. 49+50 to Sta. 55+50		
ITEM 203 Excavation (not Incl. Emb.)	128	C.Y.
" 203 Embankment	74,207	C.Y.
" 659 Seeding & Mulching	12,724	S.Y.

Ramp E Sta. 51+50 to Sta. 55+00		
ITEM 203 Excavation (not Incl. Emb.)	0	C.Y.
" 203 Embankment	7418	C.Y.
" 659 Seeding & Mulching	1132	S.Y.

DEVELOPED	CHECKED
C.E.S. 12-1-71	M.D.D. 12-2-71

Ramp F Sta. 104+00 to Sta. 113+00		
ITEM 203 Excavation (not Incl. Emb.)	217	C.Y.
" 203 Embankment	9847	C.Y.
" 659 Seeding & Mulching	319	S.Y.

Ramp H Sta. 51+00 to Sta. 53+50		
ITEM 203 Excavation (not Incl. Emb.)	0	C.Y.
" 203 Embankment	4129	C.Y.
" 659 Seeding & Mulching	919	S.Y.

DEVELOPED	CHECKED
C.E.S. 12-1-71	M.D.D. 12-2-71

Ramp I Sta. 50+00 to Sta. 60+50		
ITEM 202 Excavation (not Incl. Emb.)	3817	C.Y.
" 203 Embankment	24149	C.Y.
" 659 Seeding & Mulching	9069	S.Y.

RAMP D STA. 49+50 TO STA. 55+50
RAMP E STA. 51+22.97 TO STA. 54+75
RAMP F STA. 103+75 TO STA. 113+20
RAMP H STA. 50+75 TO STA. 53+10
RAMP I STA. 50+50 TO STA. 60+50
S.R. 126 WB. STA. 45+00 TO STA. 54+50
S.R. 126 EB. STA. 50+75 TO STA. 60+25

For Continuation See Sheet No. 33

ESTIMATED QUANTITIES

DRAINAGE

CALC. DS DATE 3/86
CHK'D JAS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

40A
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

PARTICIPATION CODE ① IR-75-1(96)10
PARTICIPATION CODE ② F-2(13)

REF. NO.	STATION TO STATION	SIDE	601 BENDS & BRANCHES 90° 6"	601 BENDS & BRANCHES WYE 6"	601 BENDS & BRANCHES BEND 60° 6"	601 PAVED GUTTER TYPE 2	601 Rock Chan. Prot. Type C w/ Filter	602 CONCRETE MASONRY	602 6" TEE	603 6" COND. TYPE F 707.05	603 12" COND. TYPE C	603 15" COND TYPE B	603 15" COND TYPE D	603 24" COND TYPE 3 706.02 (1500 D-LOAD or 707.13	603 24" Cond Type A 706.02 (1750 D-LOAD or 30" 707.01(.079) 707.04 707.05, 707.21	603 27" COND TYPE B	603 30" COND. TYPE C 706.02 (1750 D-LOAD or 707.13	604 TYPE A MANHOLE	604 STD. NO. 2-3 C.B.	604 STD. NO. 5-A C.B.	604 DITCH INLET	604 Std. No. I-3B Mod A, As Per Plan	605 6" SHALLOW UNDER DRAINS As Per Plan	660 SODDING	SEE SHEET NO.
						L.F.	C.Y.	C.Y.	EA.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EA.	EA.	EA.	EA.	EA.	L.F.	S.Y.	
1-D	52+50 to 54+80 WB	Lt.																						153	40
2-D	54+05 WB	Lt.					1	0.21			34											1		6	40,168
3-D	47+00 to 52+50 WB	Lt.																						408	40
4-D	52+50 "E" to 111+00 "F"	Lt. & Rt.														85			1						40,337
5-D	52+50 WB to 52+50 "E"	Lt.												145						1					40,337
5-AD	58+14 to 58+33 E.B.	Rt.					10																		40
6-D	54+00 to 54+55 WB	Rt.	1							10													75		40,43
7-D	44+85 to 54+05 WB	Lt.			1					10													910		40,43
8-D	53+90 to 54+70 "E"	Rt.	1							20													110		40,46
9-D	52+55 to 54+39 "E"	Lt.			1				1	10													197		40,46
10-D	54+00 WB	Rt.																						8	40
10-AD	52+00 WB	Lt.					1	0.21			59											1		1	40,167
11-D	52+50 to 54+85 "E"	Lt.																						235	40
12-D	45+95 to 47+00 WB	Lt.						0.54					93											13	40,43
13-D	111+00 to 113+00 "F"	Rt.										200						2							40,44
14-D	51+26 to 52+45 "E"	Lt.		1						10													135		40,46
15-D	108+00 to 113+00 "F"	Lt. & Rt.	1							45													500		40,44
16-D	103+75 "F" to 51+40 "E"	Lt.				616																		103	40
17-D	103+73 to 108+00 "F"	Lt.																					427		40,45
18-D	49+52 to 50+32 "D"	Lt.																						66	40
19-D	52+63 "D" to 55+18 "I"	Lt.						0.60									156	1						1	40,330
20-D	49+63 to 55+44 "D"	Lt.																					581		40,37
119-D	111+17 to 111+67 Ramp "F"	Rt.																						100	40
120-D	52+63 to 53+88 Ramp "D"	Rt.									166								1						40,337
121-D	51+27 Ramp I~ 52+63 "D"	Rt.						0.46							177										40,330
133-D	54+50 to 55+45 Ramp "D"	Rt.																					100		40,37
TOTAL						616	12	2.02		105	259	200	93	145	177	85	156	3	1	1	1	2	3035	1094	

REF. NO.	STATION TO STATION	SIDE	202 6"x90° BEND	202 6"x6"x6" TEE	202 6" x30° BEND	202 6" x45° BEND	202 MANHOLE REMOVED	202 MANHOLE ABANDONED	202 PIPE REMOVED OVER 24"	604 STD NO.3 MANHOLE W/FLAT TOP	Special Fill & Plug Pipe Over 12" As Per Plan	601 ROCK CHANNEL PROTECTION TYPE B W/FILTER	601 ROCK CHANNEL PROTECTION TYPE C W/FILTER	601 RIPRAP USING 8" REINF. CONC. SLAB As Per Plan	602 CONCRETE MASONRY	603 6" COND. TYPE F 707.05	603 15" COND. TYPE B	603 36" Cond Type A 706.02 (0°-24"-707.21 (.079) 707.04 707.05, 707.21	603 36" COND. TYPE B As Per Plan	603 42" Cond Type A 707.01(.079) 707.04 707.05, 707.21	604 STD. NO. I-2A-6 INLET	604 TYPE A MANHOLE	SANITARY 603 54" COND TYPE B 706.02 2000 D LOAD W/706.11 JOINTS	SANITARY 603 54" COND. TYPE C 706.02 1250 D-LOAD W/706.11 JOINTS	SANITARY 604 MANHOLE ADJUSTED TO GRADE	SANITARY 604 Watertight Type T Manhole	605 6" SHALLOW UNDER-DRAINS As Per Plan	605 6" DEEP UNDER-DRAINS As Per Plan	660 SODDING	660 REINFORCED SODDING	670 SLOPE EROSION PROTECTION	SEE SHEET NO.
			EA.				EA.	EA.	L.F.	L.F.	L.F.	C.Y.	C.Y.	S.Y.	C.Y.	L.F.	L.F.	L.F.	L.F.	L.F.	EA.	EA.	L.F.	L.F.	EA.	EA.	L.F.	L.F.	S.Y.	S.Y.	S.Y.	
21-D	55+00 Ramp I	Lt.																													40
22-D	52+65 to 53+85 Ramp D	Rt.																											13			40
23-D	55+58 Ramp I	Rt.						1			482																		228			40
24-D	55+58 to 55+85 Ramp I	Lt. & Rt.								1					0.92			194		24									1			40,330
25-D	50+58 to 56+08 Ramp I	Lt.		1												10												580				40,45
26-D	50+58 to 55+50 Ramp I	Lt.																											328			40
27-D	51+18 to 54+51 E.B.	Lt.	1													10												360				40,42
28-D	53+00 to 55+18 Ramp I	Rt.																											240			40
29-D	54+51 E.B. 126	Lt.																											3			40
30-D	54+49 Ramp I	Rt.										25																				40
31-D	58+28 E.B. 126	Rt.																												21	133	40
32-D	56+00 Ramp I	Rt.																											9			40
33-D	56+00 to 60+50 Ramp I	Rt.	1													10												492				40,45
34-D	118+95 S.B. I-75	Rt.											2																67			40
35-D	55+50 to 60+25 Ramp I	Lt.																											500			40
36-D	111+00 Ramp F to 110+50 N.B. I-75	Rt.											4		.76				217													40,337
37-D	54+50 to 60+25 Ramp I	Rt.																							566		1					40,311
38-D	59+28 E.B. 126	Lt.						1																								40
39-D	59+35 E.B.	Lt.																												89		40
40-D	57+35 to 60+28 E.B.	Rt.	1	1	2	1										10												47	290			40,42
40A-D	9+50 to 20+00 Channel	Rt. & Lt.												12797																		
122-D	NOT USED																															40
123-D	52+76 "H"~ 54+50 "I"	Rt.					1		264															264		1	1					40,326
124-D	53+13 E.B. to 54+15 E.B.	Rt.																												70	174	40
125-D	54+72 E.B. 126	Lt.																												95		40
126-D	51+02 "I" to 51+33 "H"	Rt. & Lt.																											136			40,
127-D	50+72 to 53+06 "H"	Lt.	1	1												34												234				40,36
128-D	113+00 Ramp F	Rt.															8				1											40,245
129-D	113+00 Ramp F	Rt.															8				1											40,245
130-D	110+56 to 111+00 Ramp F	Rt.															44					1										40,44
131-D	110+56 Ramp F	Rt.															8				1											40,244
132-D	110+56 Ramp F	Rt.															8				1											40,244
TOTAL							1	2	264	1	482	25	6	12797	1.68	74	76	194	217	24	4	1	264	566	1	2	1713	290	1525	275	307	

PARTICIPATION CODE IS ① ON THIS SHEET FOR ALL ITEMS UNLESS MARKED.

ESTIMATED QUANTITIES

CALC. REH DATE 3/86
CHECK DJ DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

408/787

HAM-75/126-9.93/13.00
HAMILTON COUNTY

Participation Code ① IR-75-1(96)10
Participation Code ② F-2(13)

REF. NO.	STATION TO STATION	SIDE	310 Subbase Type II As Per Plan C.Y.	451 9" Reinf. Conc. Pov't. As Per Plan S.Y.	451 10" Reinf. Conc. Pav't. Mod. As Per Plan S.Y.	452 7"to9" Conc. Pav't. Mod. As Per Plan S.Y.	452 7"to10" Conc. Pav't. Mod. As Per Plan S.Y.	452 8"to9" Conc. Pav't. Mod. As Per Plan S.Y.	452 8"to10" Conc. Pav't. Mod. As Per Plan S.Y.	452 9" Conc. Pav't. Mod. As Per Plan S.Y.	452 9"to10" Conc. Pav't. Mod. As Per Plan S.Y.	606 Std. Type 5 G.R. L.F.	606 Bridge Term. Assem. Std. Type A Each	606 Anchor Assem. Std. Type A Each	606 Anchor Assem. Std. Type T Each	609 Curb Std. Type 6 L.F.	609 Std. Type 2-A Curb L.F.	611 Reinf. Conc. Approach Slab (7"/8") S.Y.	612 Conc. Median Std. Type S.Y.	622 Concrete Barrier Std. Type D-50 Mod.	Special Relief Joint Std. Type A L.F.	Special Drainage Connect. C.Y.	SEE SHEET NO.
	ROADWAY																						
28-R	42+80 to 54+00 WB	Rt.										1100	1	1									33&40
29-R	51+22.97 to 52+75 WB	Lt.										125	1	1									40
30-R	53+33 to 54+95 "F"	Lt.										125	1	1									40
31-R	53+02.5 to 58+40 E.B.	Rt.										25	1		1								40
	PAVEMENT																						
94-P	45+00 to 54+50 W.B.	Lt.	174				1056															42	40
95-P	45+00 to 54+50 N.B.	Lt.	422		2533																		40
96-P	45+00 to 54+50 W.B.	Lt.	69						422													2	40
97-P	103+75 to 109+70 "F"	Lt.	73			329																21	40
98-P	103+75 to 109+70 "F"	Rt.	315	1868																			40
99-P	51+22.97 to 54+75 "E"	Rt.	104	626																			40
100-P	53+13 to 54+75 "E"	Rt.	8					54														3	40
101-P	51+22.97 to 54+75 "E"	Lt.	39			246																9	40
102-P	109+70 to 113+20 "F"	Lt.	55			104				233													40
103-P	109+70 to 113+20 "F"	Rt.	114	622																			40
104-P	107+03 to 113+20 "F"	Rt.	29					206														17	40
106-P	103+75 to 107+03 "F"	Rt.	137								823												40
107-P	49+50 to 55+45 "D"	Rt.	28					200														3	40
108-P	49+50 to 55+45 "D"	Rt.	180	1167																			40
109-P	49+50 to 55+45 "D"	Lt.	65			400																31	40
110-P	51+02.14 to 60+50 "I"	Rt.	281	1685																			40
111-P	50+50 to 60+50 "I"	Lt.	48					345														13	40
112-P	51+02.14 to 60+50 "I"	Rt.	100			632																21	40
113-P	51+15.16 to 54+78 E.B.	Lt.	35						278													14	40
114-P	50+75 to 54+74 E.B.	Lt. & Rt.	242		1452																		40
115-P	54+74.13 to 57+99.13 E.B.	Lt. & Rt.	26													10	16	154			65		40
116-P	50+75 to 51+41 E.B.	Rt.	11				73																40
117-P	Not Used																						
118-P	50+75 to 53+10 "H"	Lt.	48					20			284											7	40
119-P	50+75 to 53+10 "H"	Lt.	69	418																			40
120-P	50+75 "H" to 53+97 E.B.	Rt.	35			168	66																40
121-P	58+61.67 to 58+84.51 E.B.	Lt. & Rt.	22													24	12	132					40
122-P	58+90 to 60+25 E.B.	Lt.	8						60														40
123-P	58+57 to 60+25 E.B.	Rt.	75		448																48		40
124-P	58+80 to 60+25 E.B.	Rt.	34				182															12	40
292-P	107+03 to 119+81 "F"	Rt.	415																2492				40&41
314-P	45+00 to 54+50 W.B.	Lt.	20				158													950			40
TOTAL			3287	6406	4443	2079	1535	825	760	233	1107	1375	4	3	1	34	28	286	2492	950	113	195	

Participation Code is ① on This Sheet For All Items Unless Marked.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

41 / 787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

For Continuation See Sheet No. 47

For Continuation See Sheet No. 40

Plug & Abandon

ANTHONY WAYNE AVE.

CON. RAIL R.R.

C.G.&E. Tower

Ditch Inlet 24" Type C 334

Meet Existing

R.R. Signal

Metal Cabinet for Signal

Wooded

Brush

Dirt

Concr. Wall

Fence

Concr. Marker for Water Main

Joint Trench Std. Dwg. BP1.0

Type 6 Curb Wire Backed

Type 24 Curb

660 Reinforced Sodding

620 Slope Protection

660 Sodding 6' Wide

660 Sodding 10.5' Wide

660 Sodding 3' Wide

Curve No. 1 P.I. Sta. 24+75.47

Curve No. 2 P.I. Sta. 18+91.71

Curve No. 3 P.I. Sta. 24+75.47

Sta. 60+46.70 Rt.

Sta. 60+77.92 Rt.

Sta. 60+07.41 Lt.

Sta. 56+50 Shift @ 16' Lt.

Sta. 58+31.37 WB

Sta. 58+13.37 WB

Sta. 61+35.59 EB

Sta. 60+52.26 EB

Sta. 60+97.81 EB

Sta. 61+08 EB

Sta. 61+40 EB

Sta. 63+10.00 EB & End 40:1 Taper SR 126

Sta. 63+00 WB & End 40:1 Taper SR 126

Sta. 63+10.00 EB & End 40:1 Taper SR 126

Sta. 63+00 WB & End 40:1 Taper SR 126

Sta. 60+50 Shift @ 16' Lt.

Sta. 60+07.41 Lt.

Sta. 60+46.70 Rt.

Sta. 60+77.92 Rt.

ESTIMATED QUANTITIES

DRAINAGE

CALC. DS DATE 3/86
CHK'D JAS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

41-A
787

HAM-75-993
HAM-126-13.00
HAMILTON COUNTY

PARTICIPATION CODE ① IR-75-1(96)10
PARTICIPATION CODE ② F-2(13)

REF. NO.	STATION TO STATION	SIDE	202 Abandon & Plug Pipe 12" & Under L.F.	202 CATCH BASIN REMOVED EA.	202 MANHOLE REMOVED EA.	601 Riprap Using 8" Reinf. Conc. Slab As Per Plan S.Y.	602 Concrete Masonry C.Y.	603 12" Conduit Type B L.F.	603 6" COND. TYPE F 707.05 L.F.	603 12" COND. TYPE F 707.05 L.F.	603 18" COND. TYPE B L.F.	603 24" COND. TYPE C 706.02 (2000 D-LOAD) or 707.13 L.F.	603 24" COND. TYPE C 706.02 1750 D-LOAD or 707.13 L.F.	603 36" Cond. Type B 706.02 (1250 D-Load or 707.13) As Per Plan L.F.	604 Manhole Type A EA.	604 Manhole Type T (Son.) EA.	604 STD. NO. 5 C.B. EA.	604 STD. NO. 5-A EA.	604 DITCH INLET EA.	604 STD. NO. 6 C.B. EA.	604 MANHOLE RECONST. TO GRADE EA.	SAN 603 54" COND. TYPE C 706.02 1500 D-LOAD W/ 706.11 JOINTS L.F.	605 6" SHALLOW UNDER DRAINS As Per Plan L.F.	605 6" DEEP UNDER DRAINS As Per Plan L.F.	605 6" UNCLASS. UNDER DRAINS As Per Plan L.F.	660 SODDING S.Y.	660 REINFORCED SODDING S.Y.	670 Slope Erosion Protection S.Y.	6" Cross EA.	6"x90° Bend EA.	SEE SHEET NO.
41-D	122+52 to 122+82 "F"	Lt.											60					1													41,334
42-D	63+08 to 63+75 W.B.126	Lt.																										101	561			41
43-D	122+52 "F" to 62+62 WB	Lt. & Rt.						8				180			1																	41,334
44-D	62+50 to 62+62 WB 126	Rt.								43					1				1													41,334
45-D	118+75 to 122+37 "F"	Lt.							10														131	136	100					1		41,44
45-AD	70+00 to 69+00 E.B.	Rt.						117②									1②															41,337A
46-D	119+80 "F"	Rt.	20	2																												41
47-D	113+70 "F" to 62+02	Rt. & Lt.										198						1									129					41,334
48-D	118+70 "F" to 118+64 NB	Lt.												300				1														41,334
49-D	113+20 to 118+75 "F"	Rt.							20														555									41,44
50-D	54+70 to 62+70 "E"	Rt.																					853							1		41,46
50A-D	61+10 to 63+80 WB	Lt.																									289					41
51-D	58+55 to 60+67 WB	Rt.																					608									41,43
52-D	54+85 to 58+32 "E"	Lt.																									352					41
53-D	54+80 to 57+30 WB	Lt.																									178					41
54-D	118+50 N.B. I-75	Lt. & Rt.					.76							176																		41,334
55-D	115+03 to 110+53 "F"	Lt.																									125					41
56-D	120+90 & 121+80 N.B. I-75	Rt.																			2											41
57-D	60+50 "I" to 114+45 N.B.	Rt.																					610									41,45
58-D	69+00 to 70+00 E.B.	Rt.																									33②					
59-D	60+25 to 63+91 "I"	Lt.			1											1						306									41,311
60-D	119+50-123+32 N.B. I-75	Rt.							10															414								41
61-D	20+00 to 30+00 MILL CREEK	Rt. & Lt.				4000 / 10545②																								1		41
62-D	69+00 E.B.	Rt. & Lt.					.33②				94②						1②										242②					41,107
63-D	69+05 to 70+26 E.B.	Rt.							10②															136②						1	41,42
64-D	60+28 to 68+95 E.B.	Rt.							10②															282 / 5.65③						1	41,42
TOTAL			20	2	1	4000② / 10545	.76 / .33②	8 / 117②	40 / 20②	43	94②	378	60	476	2	1	2②	2	1	1	2	306	2757	832 / 72.6②	100	1073② / 275②	101	561			

REF. NO.	STATION TO STATION	SIDE	Special Fill & Plug Pipe Over 12" As Per Plan L.F.	202 Catch Basin Removed EA.	603 15" COND. TYPE B L.F.	603 15" COND. TYPE C L.F.	603 12" COND TYPE B L.F.	604 STD. NO. 5 C.B. EA.	604 STD. NO. I-2A-6 INLET EA.	STD. NO. 3 C.B W/V GRATE	660 SODDING S.Y.	670 Slope Erosion Protection S.Y.	SEE SHEET NO.
113-D	59+20 to 63+40 "I"	Rt.	390										41
114-D	62+05 to 65+55 "I"	Lt.									75		41
115-D	60+28 to 60+78 "E"	Lt.									61		41
134-D	132+45 S.B. I-75	Lt.		1			12			1			41
135-D	116+58 Ramp "F"	Rt.			62	212		1	1		236		41,247
136-D	116+58 Ramp "F"	Rt.			16				1				41,247
137-D	62+85 to 63+25 "E"	Rt.										338	41
TOTAL			390	1	78	212	12	1	2	1	372	338	

PARTICIPATION CODE IS ① ON THIS SHEET
FOR ALL ITEMS UNLESS MARKED

ESTIMATED QUANTITIES

REA DATE 3/86
DES DS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

4/B 787

HAM- 75/126 - 9.93/13.00
HAMILTON COUNTY

Participation Code ① IR-75-1(96)10
Participation Code ② F-2(13)

REF. NO.	STATION TO STATION	SIDE	310 Subbase Type II As Per Plan	451 9" Reinf Conc. Pav't As Per Plan	451 10" Reinf Conc. Pav't Mod. As Per Plan	451 12½" Reinf. Conc. Pav't. As Per Plan	452 7" to 9" Conc. Pav't Mod. As Per Plan	452 7" to 10" Conc. Pav't Mod. As Per Plan	452 8" to 9" Conc. Pav't Mod. As Per Plan	452 8" to 10" Conc. Pav't Mod. As Per Plan	452 9" to 10" Concrete Pav't. Mod. As Per Plan	606 Std. Type S G.R.	606 Bridge Term Assem. Std. Type A	606 Anchor Assem. Std. Type T	606 Anchor Assem. Std. Type A	609 Curb Std. Type 6	609 Std. Type 2-A Curb	611 Reinf. Concrete Approach Slab (7.15")	Special Relief Joint Std. Type A	Special Drainage Connect	SEE SHEET NO.
			C.Y.	S.Y.	S.Y.		S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	L.F.	Each	Each	Each	L.F.	L.F.	S.Y.	L.F.	C.Y.	
	ROADWAY																				
32-R	59+23 to 74+94 EB	Lt.										385 1190 ②	1	1 ②							40 41 & 49
33-R	60+36.5 to 62+93 "E"	Rt.										237.5	1	1							41
34-R	59+50 to 63+33 W.B.	Lt.										400	1	1							41
35-R	121+20 to 122+00 "F"	Lt.										262.5		1							41, 47
	PAVEMENT																				
125-P	54+50 to 63+15 WB	Lt.	134					961													41
126-P	54+50 to 63+03 WB	Lt & Rt.	388		8894														60		41
127-P	54+50 to 60+66.78 WB	Rt.	49							391										88	41
128-P	54+75 to 60+77.92 "E"	Lt.	61				402														41
129-P	54+75 to 60+77.92 "E"	Lt.	179	1072																	41
130-P	54+75 to 62+80 "E"	Rt.	44					101	204											23	41
131-P	62+93.2 to 63+18.2 W.B.	Rt & Lt.	26													45	24	158			41
132-P	113+20 to 122+40.69 "F"	Lt.	113				614													19	41
133-P	113+20 to 122+40.69 "F"	Rt.	288	1726																	41
134-P	113+20 to 122+40.69 "F"	Rt.	43						307											22	41
135-P	62+53 to 64+53.86 "I"	Rt.	52								309										41
137-P	60+50 to 62+53 "I"	Lt.	9						68												41
138-P	60+50 "I" to 123+32 I-75	Lt & Rt.	313	718		1159															41
139-P	60+50 "I" to 123+32 I-75	Lt & Rt.	130				280	527												50	41
140-P	60+25 to 70+15 EB	Lt.	10 45 ②							121 313 ②											41
141-P	60+25 to 70+15 EB	Rt.	43 359 ②		2753																41
142-P	60+25 to 70+15 EB	Rt.	66 164 ②					301 144 ②												36	41
316-P	54+50 to 55+75 W.B.	Lt.	3					21					1		1						
TOTAL			2051 5082 ②	3516	5674	1159	1296	1911 1144 ②	579	518 313 ②	309	1285 1190 ②	4	1 ②	3	1		45	24	158	60	172	

Participation Code is ① on This Sheet For All Items Unless Marked

CALC. JS DATE 3/86
CHK'D JEA DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

PROPOSED STRUCTURE

Bridge No. HAM-126-1359

TYPE: Continuous Welded Plate Girder With Reinforced Concrete Deck And Substructure.

SPANS: 109'-0", 136'-0" & 109'-0"

ROADWAY: Varies 50'-0"(±) To 56'-0"(±) Face To Face Of Parapets.

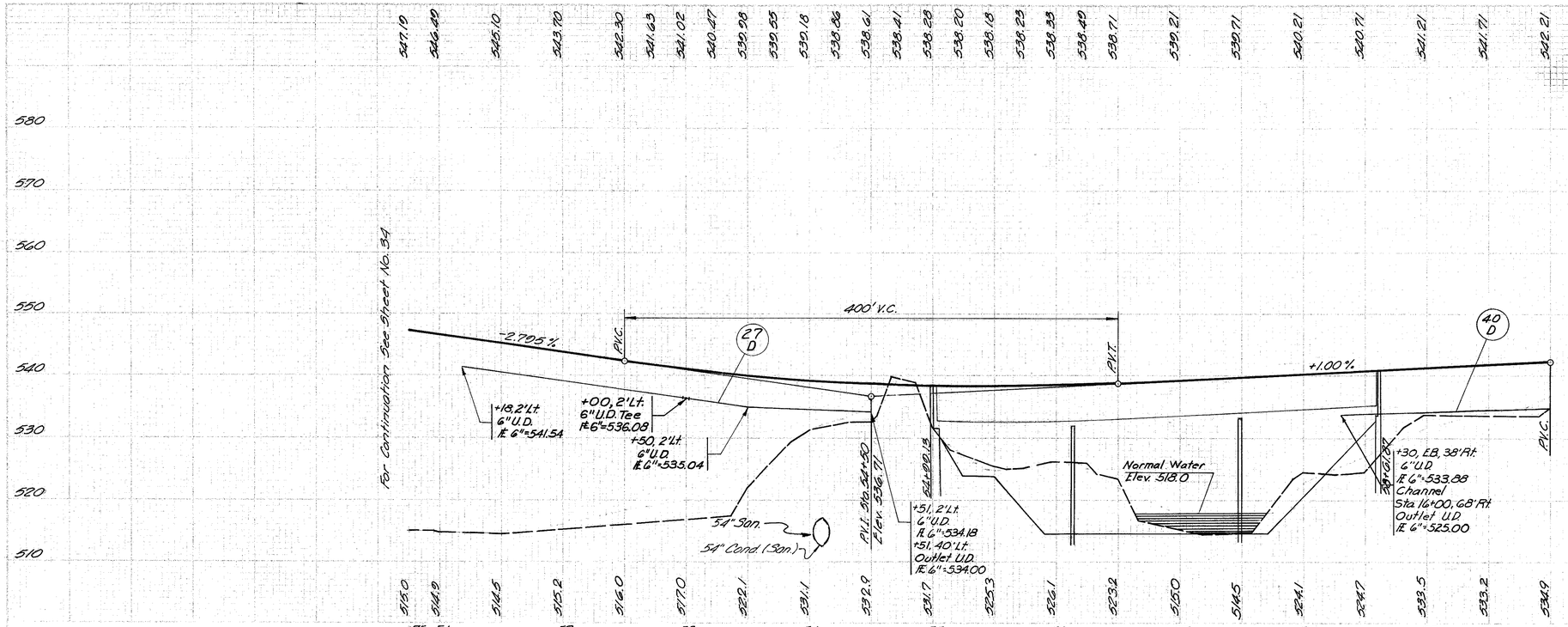
DESIGN LOAD: HS 20-44

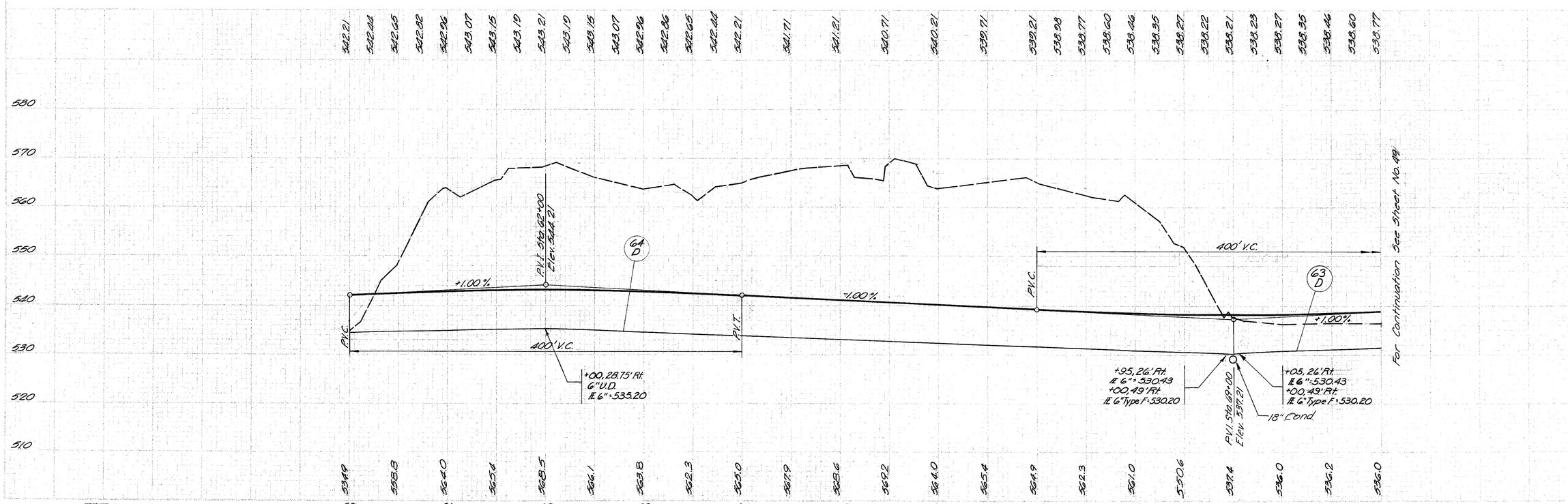
SKEW: 50°00' L.F.

WEARING SURFACE: 1" Monolithic Concrete

ALIGNMENT: Tangent

APPROACH SLABS: AS-1-81 (25' Long)



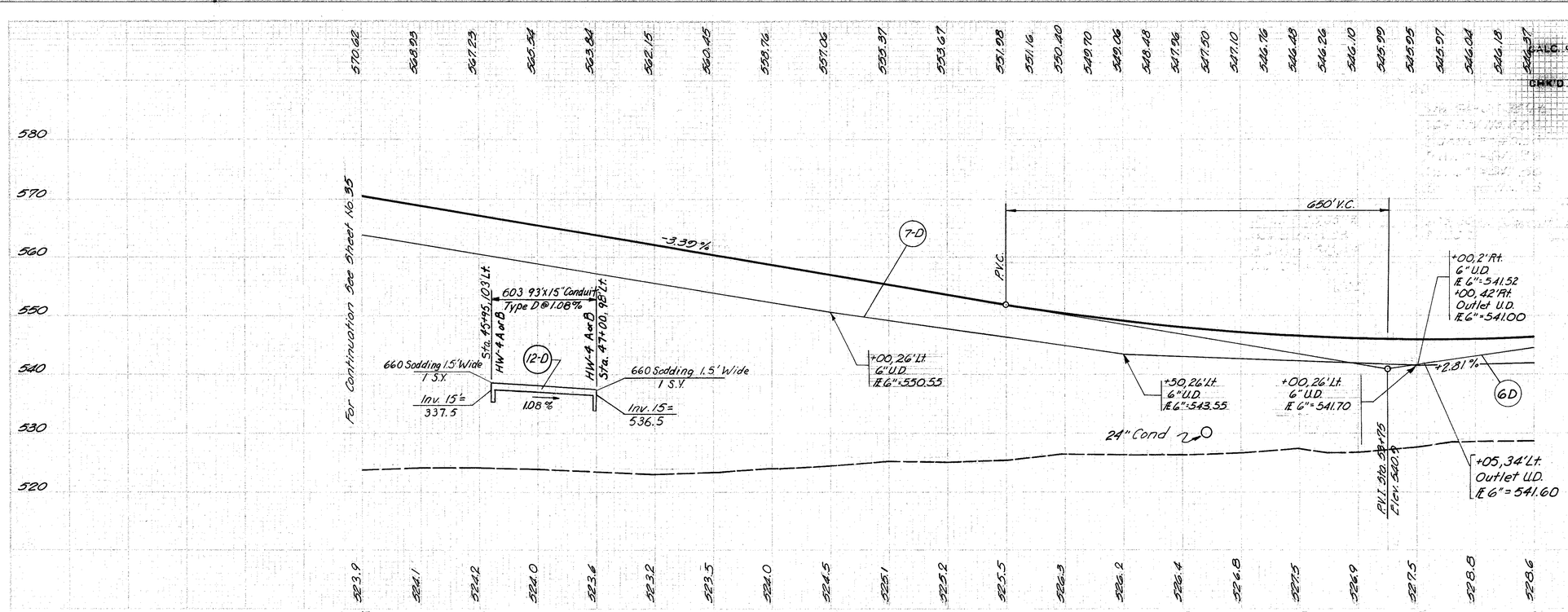


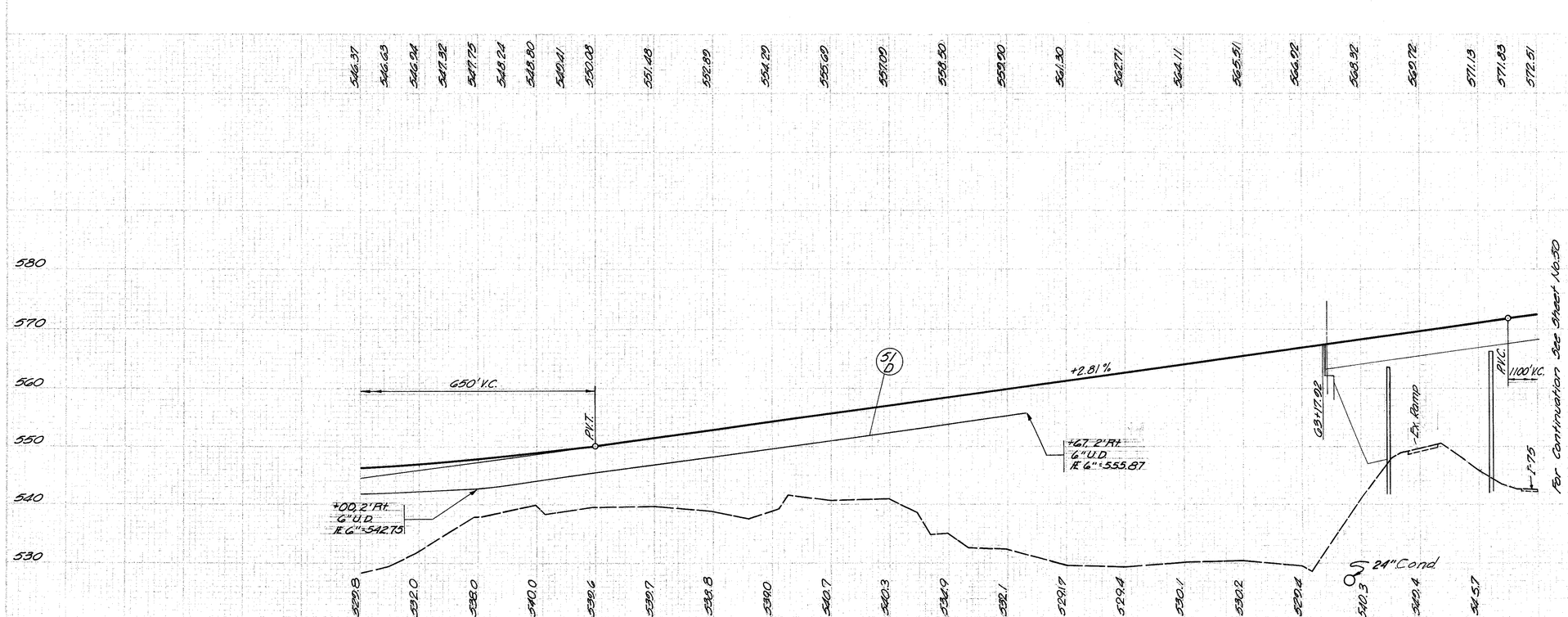
DEVELOPED CHECKED

CALC. JS DATE 3/86
CHK'D REA DATE 3/86

43
781

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY





PROPOSED STRUCTURE

Bridge No. HAM-126-1376

TYPE: Continuous Rolled Steel Beam With Reinforced Concrete Deck And Substructure.

SPANS: 52'-0", 86'-6", 86'-6", 72'-0", 72'-0" & 57'-0"

ROADWAY: Varies, 52'-0" To 57'-0" Face To Face Of Parapets

DESIGN LOADING: H5 20-44

SKEW: Varies (See Plan)

WEARING SURFACE: 1" Monolithic Concrete

APPROACH SLABS: AS-1-81 (25' Long)

ALIGNMENT: Compound Circular Curves & Tangent

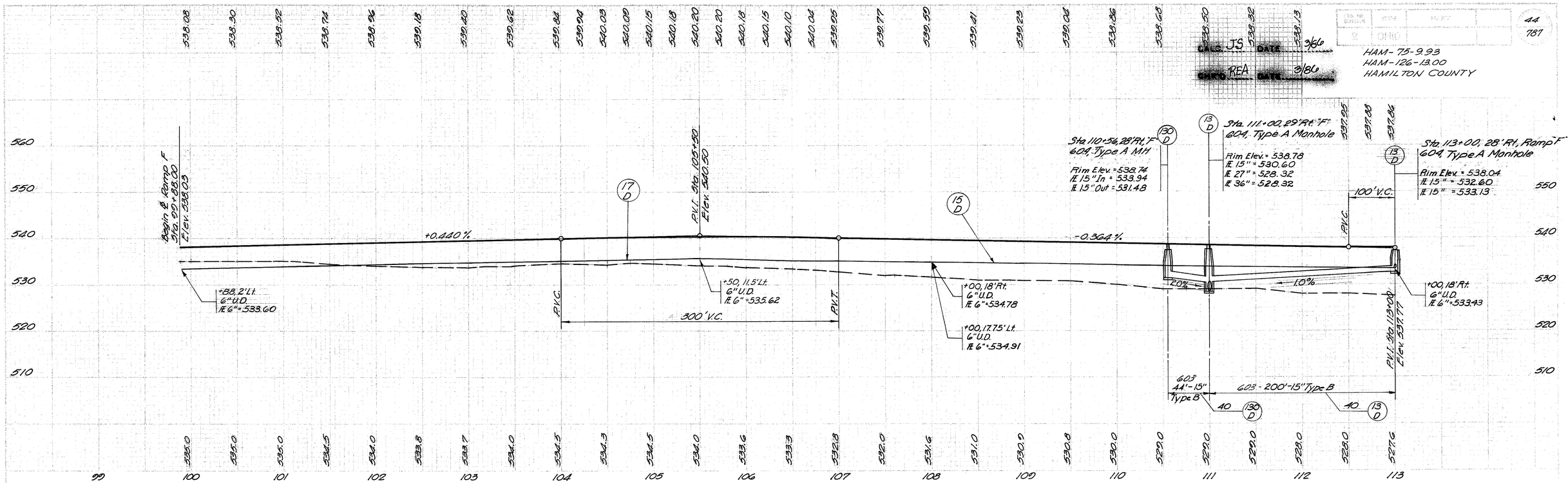
DEVISED CHECKED

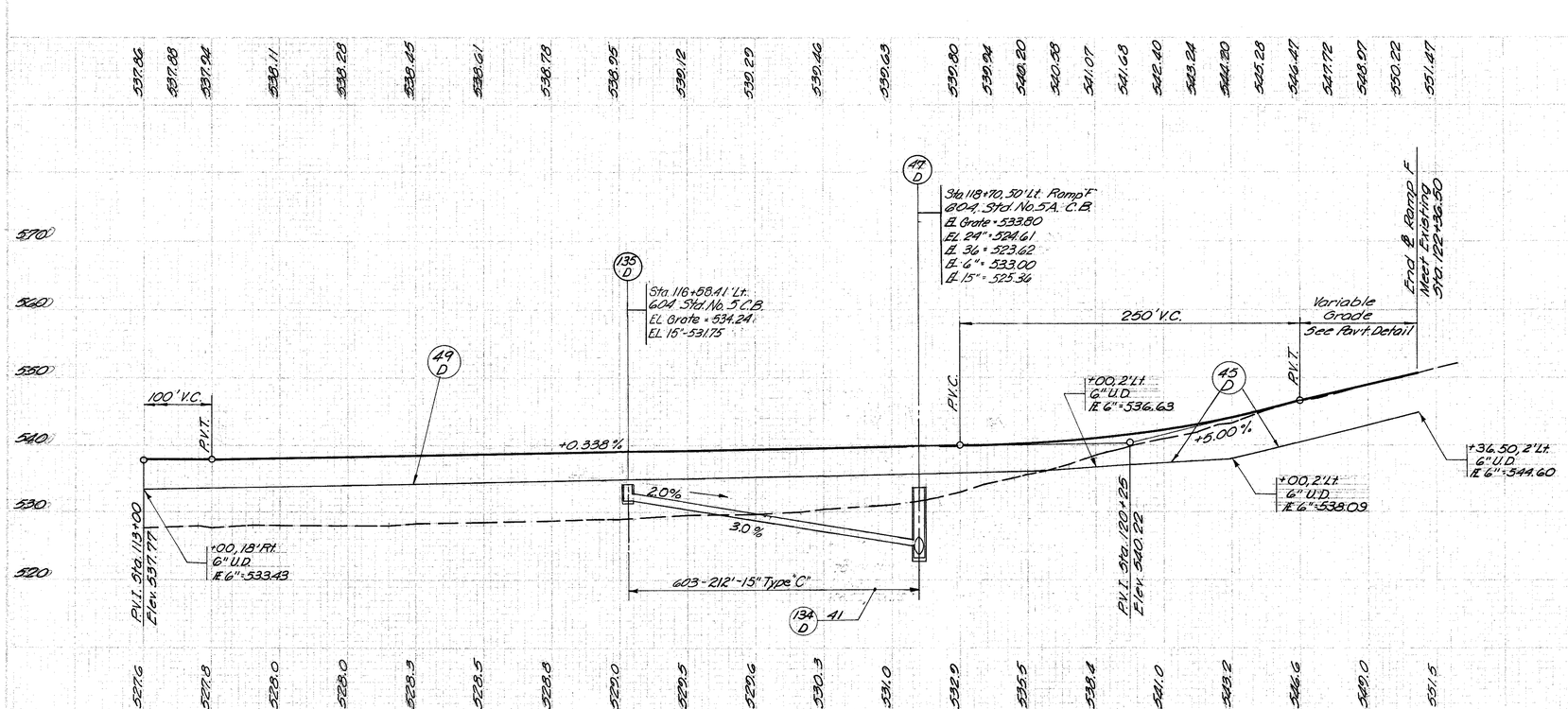
DES. | DRWN. | CHKD.

DES. & DETD. JS DATE 3/86

CHK'D REA DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



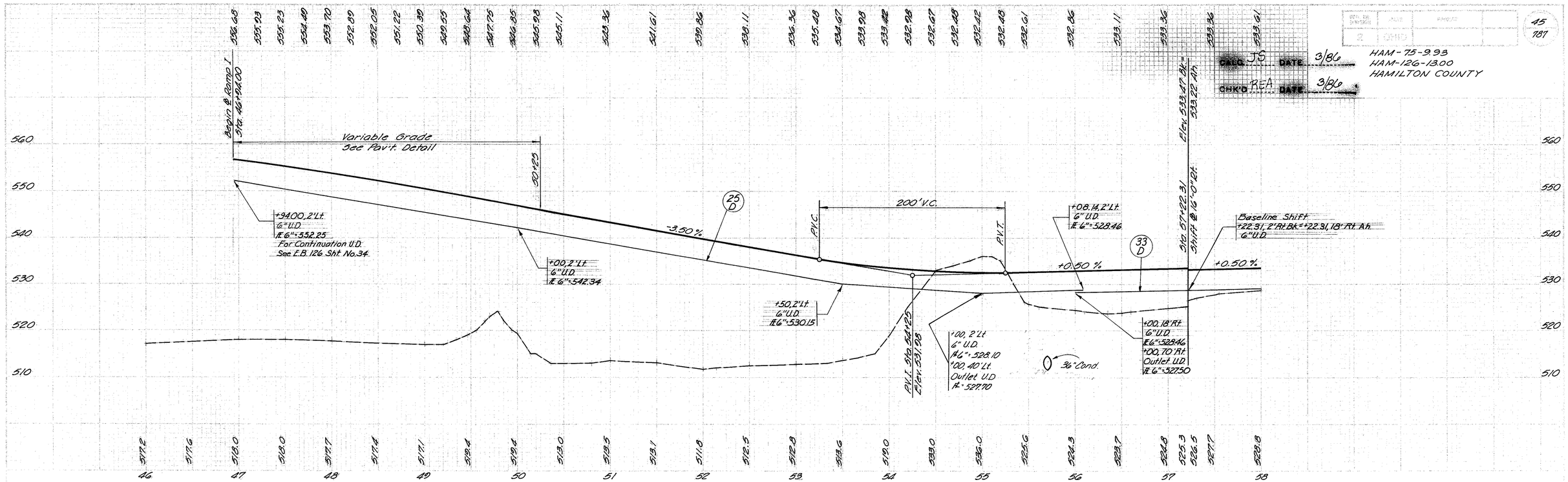


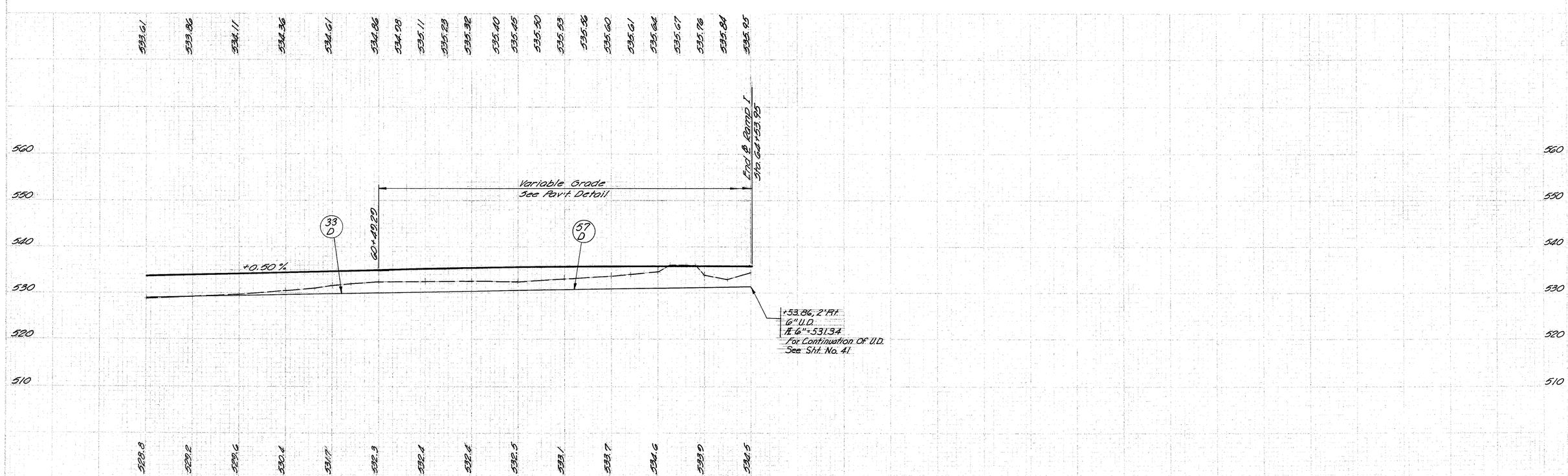
RAMP F STA 99+88.00 TO STA 122+36.50

DEVELOPED | CHECKED

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

CALC. JS DATE 3/86
CHK'D REA DATE 3/86





RAMP I STA 46+94 TO STA 64+53.86

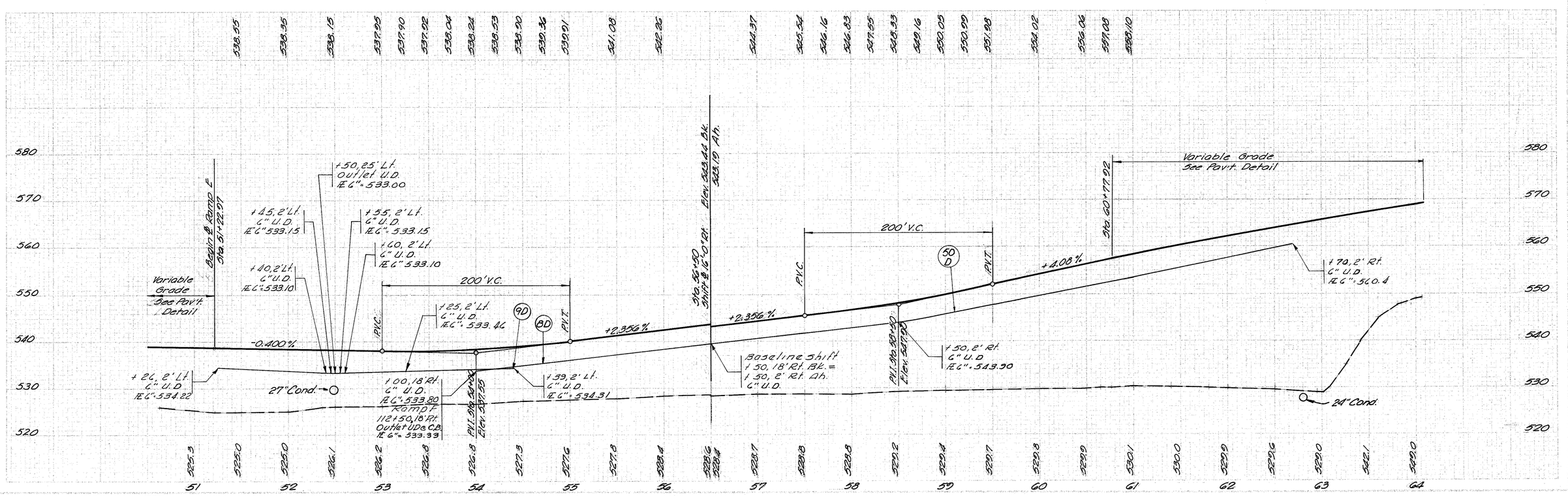
CALC. JS DATE 3/86

CHK'D. TEA DATE 3/86

FED. RD. DIVISION	STATE	PROJECT		
2	OHIO			

46
789

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



DESIGNED | CHECKED

RAMP F STA 51+22.97 TO STA 64+07.74

DIV. NO.	STATE	PROJECT	
2	OHIO		

CALC. KF
CH'KD JS DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

47
787

* Includes Greenland Pl. Cul-de-sac

E.B. S.R. 126 Sta. 70+00 to Sta. 75+00		
ITEM 203 Excavation (not Incl. Emb.)	12224	C.Y.
" 203 Embankment	1211	C.Y.
" 659 Seeding & Mulching	* 7700	S.Y.
DEVELOPED / CHECKED		
C.E.S. 12-1-77 / M.D.D. 12-2-77		

W.B. S.R. 126 Sta. 66+65 to Sta. 71+61		
ITEM 203 Excavation (not Incl. Emb.)	693	C.Y.
ITEM 203 Embankment	87823	C.Y.
ITEM 659 Seeding & Mulching	8613	S.Y.
DEVELOPED / CHECKED		
C.E.S. 12-1-77 / M.D.D. 12-2-77		

For Bench Marks See Sh. 26
For ℄ or ℄ ReFerences See Sh. 27
For Typical Sections See Sh. 7 thru 15
For Pav't. Legend See Sh. 29
For Curve Data See Sh. 5A, 6
For EB. S.R. 126 Profile See Sh. 49
For WB. S.R. 126 Profile See Sh. 50
For Bridge No. Ham-126-13.76 See Sh. 621-641
For Bridge No. Ham-126-13.89 See Sh. 642-663
For Approach Slab Details See Std. AS-1-81
For Pav't. Details See Sh. 299
For Superelevation Tables See Sh. 70 thru 78
For Quantities See Sh. 41A, 41B
For Greenland Pl. Earthwork Quan. See Sh. 25A

N.B. I-75 Sta. 123+00 to Sta. 127+30		
ITEM 203 Excavation (not Incl. Emb.)	256	C.Y.
" 203 Embankment	6662	C.Y.
" 659 Seeding & Mulching	1183	S.Y.
DEVELOPED / CHECKED		
C.E.S. 12-1-77 / M.D.D. 12-2-77		
N.B. I-75 Sta. 123+00 to 134+00		
ITEM 203 Excavation (Mill Crk. Channel)	19	C.Y.
" " Embankment (Mill Crk. Channel)	1762	C.Y.

SECTION A-A

18"
622 Conc. Barrier Std. Type D
0" Min.
Permissible Batter
Existing Integral Curb
6"
Existing
Saw or Cut In A Neat Line.
10'-6"
Remove Pavement To This Line

GALBRAITH ROAD
Traffic Control Box
Trash Can
Wooded
Sign
Open
Inlet
Meet Exist. Guardrail
Meet Exist. C.B.
Remove Exist. C.B.
Reshape Exist. C.B.
Type 6 Curb
Exist. Curb
Exist. Ditch
Exist. Ramp
Proposed Ramp
Proposed Guardrail
Conc. Wall
Bit.
Conc.
Gravel
Chain Link Fence
1 Sty. Conc. Blk. & Br. #435
Quality Office Furniture Store
1 Sty. Conc. Blk.
Loading Dock
Gate
Ex. Power Pole
Ex. Guardrail
Bit. Parking
End Work HAM-75-9.03
IR 75-(196)10
Sta. 128+30 W.B. I-75
Wooded
I-75 N.B.
I-75 S.B.
Ex. Guardrail Removal
Ex. Concrete Barrier Removal
Ex. Bridge Removal
Ex. Slope Paving Removal
Ex. Slope Wall Removal
Ex. Inlet Removal
Ex. Manhole Removal
Ex. Pipe Removal
Ex. Fence Removal
Ex. Sign Removal
Ex. Utility Pole Removal
Ex. Light Pole Removal
Ex. Tree Removal
Ex. Shrub Removal
Ex. Concrete Removal
Ex. Asphalt Removal
Ex. Pavement Removal
Ex. Curb Removal
Ex. Gutter Removal
Ex. Sidewalk Removal
Ex. Steps Removal
Ex. Retaining Wall Removal
Ex. Drainage Structure Removal
Ex. Pipe Removal
Ex. Culvert Removal
Ex. Ditch Removal
Ex. Channel Removal
Ex. Channel Lining Removal
Ex. Channel Protection Removal
Ex. Channel Lining Removal
Ex. Channel Protection Removal
Ex. Channel Lining Removal
Ex. Channel Protection

ESTIMATED QUANTITIES

DRAINAGE

CALC. DS DATE 3/86
CHK'D JAS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

47A
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

PARTICIPATION CODE ① IR-75-1(96)10
PARTICIPATION CODE ② F-2(13)

REF. NO.	STATION TO STATION	SIDE	202 ABANDON MANHOLE	202 ABANDON CATCH BASIN	202 MANHOLE REMOVED	202 PIPE REMOVED 24" & under	202 PIPE REMOVED over 24"	202 GUTTER REMOVAL	202 STRUCTURE REMOVED	601 ROCK CHANNEL PROTECTION TYPE B W/FABRIC FILTER	601 RIP RAP USING 6" REINF. CONC. SLAB	602 CONCRETE MASONRY	603 12" COND. TYPE C	603 24" COND. TYPE B 706.02 (2250 D-LOAD) or 707.13	603 30" COND. TYPE B 706.02 (2250D-LOAD) OR 707.13 (.079")	603 36" Cond. Type B 707.14 (.079")	202 Fill & Plug Pipe Over 12" As Per Plan	202 ABANDON & PLUG PIPE 12" & UNDER	604 TYPE A MANHOLE	601 RIPRAP USING 8" Reinforced Concrete Slab	SANITARY 603 24" Cond. Type C 706.02 (2000 D-Load w/ 706.11 JOINTS	SANITARY 603 33" COND. TYPE B14 Ductile Iron CL53 W/ MECHANICAL JOINT	SANITARY 603 27 COND TYPE B 706.02 (2000 D-LOAD W/ 706.11 JOINTS	SANITARY 604 TYPE S MANHOLE	605 6" CROSS	605 6" SHALLOW U.D. As Per Plan	605 6" DEEP U.D. As Per Plan	605 6" UNCLASS. U.D. As Per Plan	SAN. 604 TYPE-S MANHOLE W/DROP	660 SODDING	SEE SHEET NO.
			EA.	EA.	EA.	L.F.	L.F.	L.F.	LUMP	C.Y.	S.Y.	C.Y.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EA.	S.Y.	L.F.	L.F.		L.F.	EA.		L.F.	L.F.	L.F.	EA.	S.Y.	
66-D	133+74 I-75 S.B. to 68+45 W.B.	Rt. & Lt.											208																		47,325
67-D	133+75 I-75 S.B. to 133+40	Rt.				54			Lump																						47
68-D	68+45 to 69+50 W.B.	Lt. & Rt.														264			2												47,325
69-D	69+20 to 69+55 W.B.	Lt. & Rt.						172																							47
70-D	124+69 I-75 N.B. to 69+77 W.B.	Lt. & Rt.									22	0.6		158																10	47,327
71-D	123+65 to 124+60 N.B. I-75	Lt.																													47
72-D	123+32 to 127+39 N.B. I-75	Rt.																												57	47
73-D	69+71 W.B. to 127+95 N.B. I-75	Rt. & Lt.									33	0.68			326													410			47
74-D	68+30 to 71+55 W.B.	Lt.																												12	47,327
75-D	73+00 to 75+95 E.B.	Lt.				120											285													250	47
75A-D	35+19 to 37+25 Channel	Rt. & Lt.																		3201 ②											47
76-D	73+24 E.B. 126	Lt.	1 ②		1 ②													354 ②			330 ②			1 ②						47
77-D	72+50 to 76+00 E.B. 126	Rt.																													47,48,331
78-D	73+00 E.B. 126	Rt.	1 ②															130 ②													47
79-D	72+92 to 74+64 E.B. 126	Rt.					170 ②		Lump ②																						47
80-D	72+85 E.B. 126	Rt.		2 ②														68 ②													47
80A-D	76+39 to 76+61 E.B. I-28	Rt. & Lt.								967 ②																					47
81-D	72+95 E.B. 126	Rt.			1 ②																										47
82-D	30+00 to 35+19 Channel	Rt. & Lt.																		7549 ②											47
83-D	70+26 to 74+75 E.B. 126	Rt.																									1 ②	62 ②	370 ②	50 ②		47,49
84-D	124+96 N.B. I-75 to 70+58 E.B.	Rt. & Lt.										21.6										1.24 ②			1 ②						47,331
85-D	70+58 to 70+55 E.B. 126	Lt. & Rt.																						107 ②						1 ②	47,331
TOTAL			2 ②	2 ②	2 ②	174	170 ②	172	Lump ② / Lump	967 ②	55	2288	208	158	326	264	285	552 ②	2	10750 ②	330 ②	174 ②		107 ②	2 ②		62 ②	410 / 370 ②	50 ②	1 ②	329	

REF. NO.	STATION TO STATION	SIDE	202 REMOVE MH	202 REMOVE C.B.	202 PIPE REMOVED 24" & UNDER	602 CONCRETE MASONRY	Special Fill & Plug Pipe Over 12" As Per Plan	603 12" COND. TYPE C	603 12" COND. TYPE F 707.05	603 30" COND. TYPE B	604 STD. No.3 C.B W/V-GRATE	604 STD. No.6 C.B.	604 SINGLE GUTTER INLET	604 TYPE A MANHOLE	603 12" COND TYPE B	604 STD. NO.5 C.B.	SANITARY 603 27" COND. TYPE C 706.08 (2000 D-LOAD) w/ 706.11 JNTS.	604 STD. NO.2-3 C.B.	660 REINF. SODDING	670 SLOPE EROSION PROTECTION	603 36" Cond. Type B 706.02 (2850-D-Load) or 707.13	202 Structure Removal	SEE SHEET NO.
			EA.	EA.	L.F.	C.Y.	L.F.	L.F.	L.F.	L.F.	EA.	EA.	EA.	EA.	L.F.	EA.	L.F.		S.Y.	S.Y.	L.F.	Lump	
65-D	68+25 to 68+45 W.B. 126	Lt.							120			1											47,325
111-D	72+50 E.B. 126	Rt.						18 ②					1 ②										47,320
112-D	75+90 W.B. 126	Rt.	1		135		250																47
116-D	66+64 to 67+80 W.B. 126	Rt.																	113	911			47
117-D	70+22 to 71+57 W.B. 126	Lt.																	109	1458			47
118-D	67+38 to 67+98 W.B. 126	Lt.																		372			47
58-D	69+55 to 70+27 W.B. 126	Rt.																	199	440			47
58A-D	74+67 to 75+50 E.B.	Rt.				.21 ②		90 ②								1 ②							47,48,319
86-D	72+33 to 72+50 E.B. 126	Rt.						18 ②					1 ②										47,320
87-D	70+55 to 72+50 E.B. 126	Rt.															187 ②	1 ②					47,331
88-D	72+42 E.B. 126	Rt. & Lt.				.60 ②				157 ②				1 ②									47,109
110-D	136+90 I-75 S.B.	Lt.		1 ②							1 ②				36 ②								47
70A-D	69+77 WB to 124+69	Rt.				.76	23														32	Lump ②	
TOTAL			1	1 ②	135	.76 / .81 ②	273	126 ②	120	157 ②	1 ②	1	2 ②	1 ②	36 ②	1 ②	187 ②	1 ②	421	3181	32	Lump ②	

PARTICIPATION CODE IS ① ON THIS SHEET FOR ALL ITEMS UNLESS MARKED

ESTIMATED QUANTITIES

CALC. REA DATE 3/86
CHKD. PS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

478/787

HAM-75/12G-9.93/13.00
HAMILTON COUNTY

Participation Code ① IR-75-1(96)10
Participation Code ② F-2(18)

* For Information Only

REF. NO.	STATION TO STATION	SIDE	202 GR Removed	202 Curb Removed	304 Aggregate Base As Per Plan	310 Subbase Type II As Per Plan	404 Asphalt Concrete 2 1/2"	408 Bitum. Prime Coat	451 12 1/2" Reinf. Conc. Pav't As Per Plan	451 10" Reinf. Conc. Pav't Mod. As Per Plan	451 9" Reinf. Conc. Pav't As Per Plan	452 7" to 10" Conc. Pav't Mod. As Per Plan	452 8" to 10" Conc. Pav't Mod. As Per Plan	606 Std. Type 5 G.R.	606 Bridge Term. Assembly Std. Type T	606 Anchor Assembly Std. Type A	606 Anchor Assembly Std. Type T	606 Flared End Section *	609 Curb Std. Type 6	609 Std. Type 2-A Curb	611 Reinf. Concrete Approach Slab (T=15)	622 Conc. Barrier Std. Type D	622 Conc. Barrier Std. Type D-50 Mod.	Special Relief Joint Std. Type A	Special Drainage Connect.	SEE SHEET NO.
			L.F.	L.F.	C.Y.	C.Y.	C.Y.	Gal.	S.Y.	S.Y.	S.Y.	S.Y.	S.Y.	L.F.	Each	Each	Each	Each	L.F.	L.F.	S.Y.	L.F.	L.F.	L.F.	C.Y.	
	ROADWAY																									
36-R	131+63 to 134+00 I-75 S.B.	Lt.												200		1	1									41, 47
37-R	132+16 to 134+54 I-75 S.B.	Rt.												200		1	1									41, 47
38-R	131+60 to 134+14 I-75 S.B.	Rt.		260																						41, 47
39-R	132+22 to 134+60 I-75 S.B.	Rt.												200		1	1									41, 47
40-R	67+98 to 70+54 WB	Lt.												256.25	2											47
41-R	67+41 to 69+70 WB	Rt.												225	2											47
42-R	125+13 to 127+50 I-75 N.B.	Lt.	162.5											218.5		1										47
43-R	117+00 to 128+50 I-75 N.B.	Rt.	680											112.5		1										41, 47
45-R	73+42 to 75+045 E.B.	Rt.												137.5	1	1										47
46-R	72+00 E.B.	Rt.												125 ②				2 ②								47
																										41, 47
	PAVEMENT																									
143-P	67+50.23 to 67+75.23 WB	Lt. & Rt.				26													36	25	153					47
144-P	68+02 to 70+40 WB	Lt.				47						264														47
145-P	67+82 to 69+66.77 WB	Lt. & Rt.				136				816																47
146-P	67+65 to 69+86 WB	Rt.				14							98													47
147-P	69+88.44 to 70+13.44 WB	Lt. & Rt.				18													29	7	109					47
148-P	70+15 to 74+72.5 EB	Lt.				28 ②							205 ②													47
149-P	70+15 to 74+76.5 EB	Rt.				205 ②				1231 ②														38 ②		47
150-P	70+15 to 74+79.5 EB	Rt.				35 ②						516 ②													21 ②	47
155-P	74+74 to 74+99 EB	Lt. & Rt.				20 ②														50 ②	122 ②					47
262-P	123+32 to 127+39 I-75 N.B.	Rt.				115			230																	47
263-P	123+32 to 127+39 I-75 N.B.	Rt.				63							371												20	47
266-P	131+60 to 134+14 I-75 S.B.	Rt.																				260				41, 47
269-P	Greenland Place					43 ②					218 ②								30 ②	127 ②						47
320-P	129+73 to 137+62 I-75 S.B.	Lt.			93	47	39	223											789							41, 47
322-P	74+87.88 to 75+07.87 E.B.	Rt.																					19.99			
TOTAL			842.5	260	93	306/391 ②	39	223	230	816/1231 ②	218 ②	264/516 ②	469/203 ②	256.25/125 ②	5	6	3		854/30 ②	32/177 ②	262/182 ②	260	19.99	38 ②	20/61 ②	

Participation Code is ① on this sheet for all items unless marked.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

48
187

CALC. KEP DATE 3/86
CHK'D JS DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

For Typical Sections See Sh. 7 thru 13
For Pavt. Legend See Sh. 29
For Curve Data See Sh. 5A, 6
For E.B. S.R. 126 Profile See Sh. 49
For W.B. S.R. 126 Profile See Sh. 50
For ℄ S.R. 126 Profile See Sh. 49
For Ramp N Profile See Sh. 52
For Bridge No. HAM-126-1399 See Sh. 642-663
For Approach Slab Details See Std. AS-1-81
For Pavt. Details See Sh. 300, 309
For Superelevation Tables See Sh. 70 thru 73
For Quantities See Sh. 48A, 48B
For Bench Marks See Sh. 26
For ℄ or ℄ References See Sh. 27

I-75 N.B.
WEST FORK MILL CK.
EAST FORK MILL CREEK
GALBRAITH ROAD
Lewis Animal Hospital
C.G.&E. Tower
Meet Existing Creek Sta. 41+40.63
Channel Widening
Rock Chan. Protec. Type B 40 w/ Fabric Filter
Rock Channel Protection Type 2A w/o Fabric Filter
Rock Channel Prot. Type B 3'x10'-30" w/ Filter 7 C.Y.
Curve No. 5
Curve No. 7 E.B.
Curve No. 8 W.B.
Curve No. 1
Joint Type A Std. Dwg. BP-10
Abandon Pipe Fill & Plug
Abandon MH Seal & Plug
Remove MH
Remove CB
Remove Pipe
Remove Sewer
Remove Wall
Remove Walk
Remove Fence
Remove Sign
Remove Billboard
Remove Tree
Remove Conc. Foundation
Remove Conc. Block Wall
Remove Wood Fence
Remove Stone Wall
Remove Conc. Bit. Wall
Remove Conc. Walk
Remove Conc. Curb
Remove Bit. Curb
Remove Bit. Drive
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ESTIMATED QUANTITIES

DRAINAGE

CALC. DS DATE 3/86

CHK'D JA DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

48A (787)

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

PARTICIPATION CODE ① IR-75-1(96)10
PARTICIPATION CODE ② F-2(13)

REF. NO.	STATION TO STATION	SIDE	202							601					604		603	603 SAN.	604 SAN.	604	605				660		SEE SHEET NO.
			6"×90° Bend	6" Tee	6" Cross	ABANDONED MANHOLE	REMOVE C.B.	Abandon & Plug Pipe, 12" & Under	12"×25° Bend	PAVED GUTTER TYPE 1-2	Riprap Using 8" Reinf. Conc. Slab As Per Plan	Rock Channel Protection Type B w/ Fabric Filter	Rock Channel Protect. Type C w/ Filter	12" Cond. Type B 706.02 (2250lb load) or 707.13	STD. NO. 5 C.B.	STD. NO. 6 C.B.	12" Conduit Type B	6" COND. TYPE F 707.05	12" Cond. Type B 706.02 w/ 706.11 Joints	TYPE S MANHOLE	Std No. 3 C.B. w/ V-Grate	6" SHALLOW UNDER DRAINS As Per Plan	8" DEEP UNDER DRAINS As Per Plan	8" UNCLASS. UNDER DRAINS As Per Plan	SODDING	
			EA.	EA.	EA.	EA.	EA.	EA.	EA.	L.F.	S.Y.	C.Y.		L.F.	EA.	EA.	L.F.	CY.	L.F.	EA.	EA.	L.F.	L.F.	L.F.	S.Y.	
85A-D	76+64 to 82+75 E.B.	Lt.											7②													48
89-D	87+00 to 84+50 E.B.	Rt.																							125②	
90-D	76+40 to 80+95 E.B.	Rt.			1②													10②				473②				48,49
90A-D	78+40 to 78+25 E.B.	Rt.															5				2					48,312A
91-D	76+35 to 79+35 E.B.	Rt.																							750②	48
92-D	37+25 to 41+40.63	℄									3490②	2335②														48
93-D	79+15 E.B. 126	Lt.				1②	1②	45②																		48
94-D	79+32 E.B. 126	Lt.				1②		98②																		48
95-D	79+40 E.B.	Rt.								28②															5②	48
95-A-D	84+50 to 86+30	Rt.+Lt.							1							1	210									48,337A
96-D	79+56 & 79+66 E.B.	Rt.				1②		206②											8②	1②						48,315
97-D	79+06 & 81+75 W.B.	Lt.		1	1													10②				177 88②		54②	9②	48,50
98-D	79+75 E.B.	Rt.								30②															5②	48
99-D	81+75 WB. to 91+50 126	Lt.																20②					962②			48,50
100-D	81+00 to 91+50 E.B.	Rt.	1															30②					1070②			48,49
100A-D	81+50 E.B.	Rt.+Lt.												191	1											48,337A
110A-D	76+00 to 77+75 E.B.	Lt.				1②		200																		
TOTAL						4②	1②	549②		58②	3490②	2335②	7②	191	1	1	215	70②	8②	1②	2	177 88②	2032②	54②	332 88②	

REF. NO.	STATION TO STATION	SIDE	601		602	603							604			604	605	660		670	15"×25° Bend	42"×25° Bend	SEE SHEET NO.
			ROCK CHANNEL PROTECTION TYPE B W/ FILTER	ROCK CHANNEL PROTECTION TYPE C W/FILTER	Concrete Masonry	6" COND. TYPE F 707.05	15" COND. TYPE B	12" COND. TYPE F 707.05	15" COND. TYPE F 707.05	48" COND. TYPE C 706.02 (2000 D-LOAD) or 707.13	48" COND. TYPE C 706.02 (2500 D-LOAD) or 707.13	48" COND. TYPE F 707.05	STD. NO. 3 MANHOLE	STD. NO. 3A C.B. W/ V-Grate	STD. NO. I-3B INLET	Std. No. I-3B Mod. A, As Per Plan	6" SHALLOW UNDER DRAINS As Per Plan	SODDING	REINFORCED SODDING	Slope Erosion Protection			
			C.Y.	C.Y.	C.Y.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EA.	EA.	EA.	EA.	L.F.	S.Y.	S.Y.	S.Y.	Each	Each	
101-D	79+55 to 84+90 EB	Rt.		21②														67②					48
102-D	78+75 to 80+53 WB	Lt.																	53	211			48
103-D	85+85 WB to 86+30 EB	Lt.	7②		.27		56②		127②						1②			1②			2②		48,353
104-D	77+62 to 78+52 WB	Rt.																	38	77			48
105-D	86+30 EB to 91+50	Rt. & Lt.				20②											476②						48,50
105A-D	74+20 to 78+18 WB	Rt.		1	.21			52										1 2②					48,312A
106-D	87+64 to 88+50 ML	Lt.	7②		.92					95②		79②										2②	48,315
107-D	88+50 to 92+00 ML	Lt.									458②		1②										48,315
108-D	88+50 ML S.R. 126 88+62	Rt. & Lt.					15②							1②									48,117
109-D	86+30 EB 126	Rt.& Lt.					42②							1②									48,118
110-D	76+55 EB 126	Rt.		2②				20②								1②							
TOTAL			14②	1/23②	1.40	20②	254②	52/20②	127②	95②	458②	79②	1②	2②	1②	1②	476②	1/70②	91	288			

PARTICIPATION CODE IS ① ON THIS SHEET FOR ALL ITEMS UNLESS MARKED

ESTIMATED QUANTITIES

CALC. REA DATE 3/86
CHECD. DS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

48B 787

HAM-75/126-9.93/13.00
HAMILTON COUNTY

* For Information Only

Participation Code ① IR-75-1(96)10
Participation Code ② F-2(13)

REF. NO.	STATION TO STATION	SIDE	310 Subbase Type II As Per Plan C.Y.	451 9" Reinf. Conc. Pavt. As Per Plan S.Y.	451 10" Reinf Conc Pav't Mod As Per Plan S.Y.	452 9" to 10" Conc. Pav't Mod. As Per Plan S.Y.	452 8" to 10" Conc. Pav't Mod As Per Plan S.Y.	452 7" to 10" Conc. Pav't Mod. As Per Plan S.Y.	606 Std. Type 5 G.R. L.F.	606 Bridge Term. Assem. Std. Type A EA.	606 Anchor Assembly Std. Type A EA.	606 Anchor Assembly Std. Type T EA.	Flared End Section * Eq.	606 Std. Type 7 G.R. L.F.	609 Curb Std. Type 6 L.F.	609 Curb Std. Type 7 L.F.	609 Curb Std. Type 2-A L.F.	611 Reinf. Conc. Approach Slab (T=15") S.Y.	622 Conc. Barrier Std. Type A L.F.	622 Conc. Barrier Std. Type D-50 Mod. L.F.	Special Relief Joint Std. Type A L.F.	Special Drainage Connect. C.Y.	SEE SHEET NO.
	PAVEMENT																							
44-R	78+20 to 81+75 W.B.	Rt.							①223/9325	2①														48
47-R	80+41 to 87+26.5 W.B.	Lt.							①2/673	1①	1													48
49-R	76+01 to 77+76 E.B.	Lt.							162.5	1		1												48
51-R	Debonair Dr.								62.5				2											48
52-R	84+55 to 86+93 E.B.	Rt.											2	250										48
	Pavement																							
52-P	75+99.16 to 76+24.16 EB	Lt. & Rt.	20														25	122						48
53-P	Not Used																							
105-P	81+75 to 91+50 E.B.	Lt.	48																975					48
151-P	78+21.27 to 78+46.27	W.B. Lt. & Rt.	①20												12①		14①	113①						48
152-P	79+01 to 91+75 W.B.	Lt.	①26/775					①158/1044															①7/55	48
153-P	78+70 to 91+50 W.B.	Lt.	①73/916		①461/4294																			48
154-P	78+42 to 91+50 W.B.	Rt.	①12/126			704	①89/59																	48
156-P	76+26 to 91+50 E.B.	Lt.	212			931	282																	48
157-P	76+30 to 91+50 E.B.	Rt.	729		4374																	38		48
158-P	76+36 to 91+50 E.B.	Rt.	289					1600								640							71	48
270-P	Debonair Dr.		11	55																				48
271-P	Debonair Dr.																85							48
323-P	76+10.34 to 81+11.03 E.B.	Rt.	13					77												500.69				48
TOTAL			①135/2339	55	①461/3668	1635	①89/341	①158/2721	①225/10312.5	①3/1	1	1		250	①12/640	640	①14/110	①113/122	975	500.69		①38/38	①7/126	

Participation Code Is ② On This Sheet
For All Items Unless Otherwise Noted.

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

CALC. REA DATE 3/86
CHK'D DS DATE 3/86

538.77 538.28 539.21 539.71 540.21 540.71 541.21 541.71 542.21 542.71 543.21 543.71 544.21 544.71 545.21 545.71 545.78 546.27 546.60 546.96 547.36 547.76 548.24 548.79 549.25 549.80 550.39 551.00 552.27

570 560 550 540 530 520

PROPOSED STRUCTURE
Type: Reinforced Concrete Slab Bridge on Tapped Pile Piers & Abutments.
Spans: 33'-0", 41'-3", 33'-0"
Roadway: 44' Face to Face of Guardrail
Loading: HS-20-44 and Alternate Military Loading.
Skew: 15°00'00" Right Forward
Wearing Surface: 2½" Minimum Asphalt Concrete
Approach Slab: AS-1-81 25'-0" Long
Alignment: 3°00'00" Curve Right
Superelevation: 0.07 11/1

For Continuation See Sheet No. 42

400' V.C.
P.V.T.
83-D
+75, 26' Rt. 6" U.D. I.E. 6" = 536.76
Sta. 74+95.22
Bridge Limits 109.83
Sta. 76+05.05
+40, 26' Rt. 6" U.D. I.E. 6" = 539.64
P.V.C.
+1.00%
90-D
300' V.C.
℄ Debonair
P.V.T.
+2.53%
2" Gas Ex.
+00, 26' Rt. 6" U.D. I.E. 6" = 542.39
2" Gas Ex.
12" San.
+95, 26' Rt. 6" U.D. I.E. 6" = 547.44
12" San.
30" Storm
12" San.
+50, 26' Rt. 6" U.D. I.E. 6" = 536.51
+02, 06' Rt. 6" U.D. I.E. 6" = 539.44
12" San.
+62, 36' Rt. U.D. Outlet I.E. 6" Type F = 539.14
Rock Channel Protection Type A, 48" Thick w/o Filter
P.V.I. Sta. 79+00 Elev. 547.21
+00, 26' Rt. 6" U.D. I.E. 6" = 534.35
S 27" Cond. (San.)

536.0 536.4 536.3 542.4 542.6 541.9 541.6 539.6 538.1 536.0 539.6 534.8 522.4 535.8 536.8 537.7 541.9 541.5 542.5 529.8 534.8 544.5

71 72 73 74 75 76 77 78 79 80 81

552.27 553.53 554.80 556.06 557.33 558.59 559.86 561.12 562.39 563.65 564.92 566.18 567.44 568.21 569.48 570.74 572.01 573.27 574.54 575.80 577.07 577.69 578.23

600 590 580 570 560 550 540

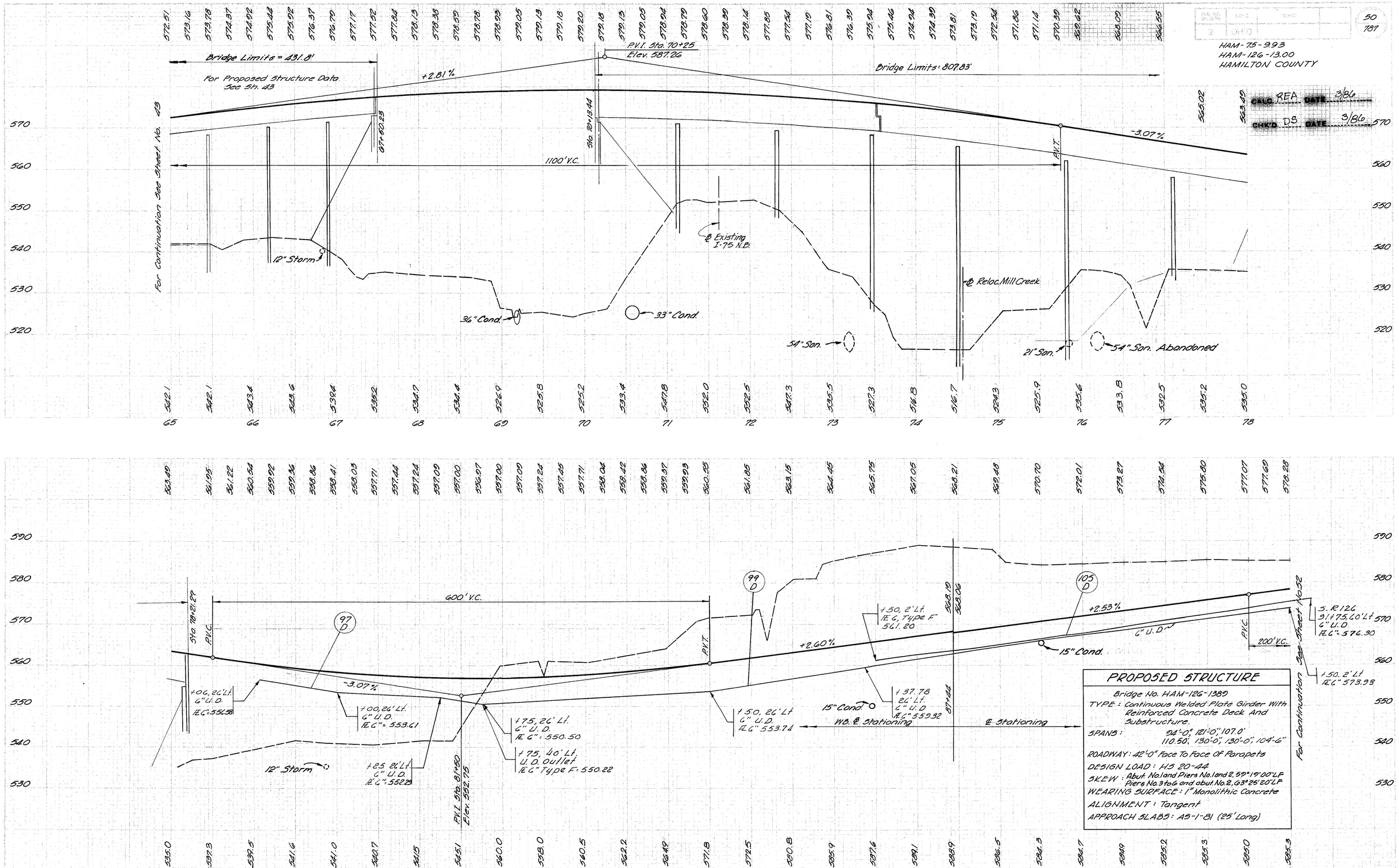
563.06 568.06
Sta. 87+24.33 ℄ Ah. 43.84' =
Sta. 87+44.00 ℄ Ah.
+44 E. 2' Lt. 6" U.D. I.E. 6" = 562.01
+2.53%
+2.53%
15" Cond
15" Cond
12" Cond (Storm)
P.V.C.
200' V.C.
+26.53, 34' Rt. 6" U.D. I.E. 6" = 562.99
+24 ℄ Bk, 26' Rt. +44 E Ah, 34' Rt. 6" U.D. I.E. 6" = 561.53
+00, 46' Rt. 6" U.D. I.E. 6" = 565.98 For Continuation Of U.D. See Ramp N, Sht. No. 52
100-D
+26.53, 46' Rt. 6" U.D. I.E. 6" = 564.75
Profile Grade Referenced To E.B. ℄
Profile Grade Referenced To ℄
12" Cond. (Storm)
+00, 26' Rt. 6" U.D. I.E. 6" = 545.82
+00, 65' Rt. Outlet U.D. I.E. 6" = 545.00

For Continuation See Sheet No. 52

545.5 546.7 546.3 545.2 548.8 548.8 547.30 542.5 545.0 544.6 545.9 547.7 548.5 546.5 544.3 544.7 539.9 535.2 535.3 535.0 535.3

81 82 83 84 85 86 87 88 89 90 91

600 590 580 570 560 550 540



HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
CALC. REA DATE 3/86
CHK'D DS DATE 3/86
Bridge Limits = 431.8'
For Proposed Structure Data See Sh. 43
+2.81%
P.V.I. Sta. 70+25
Elev. 587.26
Bridge Limits = 807.83'
-3.07%
1100' V.C.
For Continuation See Sheet No. 43
12" Storm
36" Cond.
33" Cond.
℄ Existing I-75 N.B.
℄ Reloc. Mill Creek
54" San.
21" San.
54" San. Abandoned
600' V.C.
+2.60%
+2.53%
15" Cond.
6" U.D.
200' V.C.
+06, 26' Lt. 6" U.D. FL 6" = 556.58
+00, 26' Lt. 6" U.D. FL 6" = 553.61
+25, 26' Lt. 6" U.D. FL 6" = 552.29
+75, 26' Lt. 6" U.D. FL 6" = 550.50
+75, 40' Lt. U.D. Outlet FL 6" Type F = 550.22
+50, 26' Lt 6" U.D. FL 6" 553.74
+37.78 26' Lt. 6" U.D. FL 6" 559.32
+50, 2' Lt. FL 6, Type F 561.20
+50, 2' Lt FL 6" 573.93
S.R. 126 91+75, 60' Lt 6" U.D. FL 6" = 576.30
P.V.I. Sta. 81+50 Elev. 552.75
WB. ℄ Stationing
℄ Stationing
For Continuation See Sheet No. 52
PROPOSED STRUCTURE
Bridge No. HAM-126-1389
TYPE: Continuous Welded Plate Girder With Reinforced Concrete Deck And Substructure.
SPANS: 94'-0", 121'-0", 107.0' 110.50', 130'-0", 130'-0", 104'-6"
ROADWAY: 42'-0" Face To Face Of Parapets
DESIGN LOAD: HS 20-44
SKEW: Abut. No. 1 and Piers No. 1 and 2, 59° 19' 00" LF Piers No. 3 to 6 and abut. No. 2, 63° 25' 20" LF
WEARING SURFACE: 1" Monolithic Concrete
ALIGNMENT: Tangent
APPROACH SLABS: AS-1-81 (25' Long)
S.R. 126 WB 65+25 TO STA 91+50 ℄ S.R. 126

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

51
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

GALBRAITH ROAD

READING ROAD

BURKHART

CHAUCER DRIVE

For Changes This Area See Sheet No. 54

For Continuation See Sheet No. 54

For Continuation See Sheet No. 54

S.R. 126 Sta. 91+50 to Sta. 105+92		
ITEM 203	Excavation (not Incl. Emb.)	8697 C.Y.
" 203	Embankment	93165 C.Y.
" 659	Seeding & Mulching	18.932 S.Y.
DEVELOPED	CHECKED	
C.E.S. 12-1-71	M.D.D. 12-2-71	

Ramp T Sta. 93+55 to Sta. 98+86		
ITEM 203	Excavation (not Incl. Emb.)	1607 C.Y.
" 203	Embankment	1219 C.Y.
" 659	Seeding & Mulching	4217 S.Y.
DEVELOPED	CHECKED	
C.E.S. 12-1-71	M.D.D. 12-2-71	

For Typical Sections See Sh. 7 thru 15
For Pavt Legend See Sh. 29
For Curve Data See Sh. 5A, 6
For S.R. 126 Profile See Sh. 52
For Ramp N Profile See Sh. 53
For Ramp T Profile See Sh. 53
For Bridge No. HAM-126-1456 See Sh. 664-675
For Approach Slab Details See Std. AS-1-81
For Retaining Wall Details See Sh. 457-465
For Pavt. Details See Sh. 300, 301, 306
For Superelevation Tables See Sh. 70 thru 73
For Quantities See Sh. 51A, 51B
For Bench Mark See Sh. 26
For ℄ or ℄ References See Sh. 27

For Quantities, See Sh. 48
For Quantities, See Sh. 54

RAMP N STA. 91+50 TO STA. 105+92.09
RAMP T STA. 91+75 TO STA.
S.R. 126 STA. 91+50 TO STA. 106+75

ESTIMATED QUANTITIES

DRAINGE

CALC. DS DATE 3/86

CHK'D JAS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

51A
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

PARTICIPATION CODE ① IR-75-1(96)10
PARTICIPATION CODE ② F-2(13)

REF. NO.	STATION TO STATION	SIDE	202 6" x 45° BEND	202 6" TEE BRANCH	202 ABANDON & Plug Pipe 12" and Under	601 PAVED GUTTER TYPE 2	603 6" CONDUIT TYPE F 707.05	603 15" CONDUIT TYPE B	603 15" COND. TYPE B 706.08 (2250 D-LOAD) 707.13	603 15" COND. TYPE B 706.02 (2250 D-LOAD) 707.13	603 18" CONDUIT TYPE C	603 42" COND. TYPE C 706.02 (2000 D-LOAD) 707.13	603 48" COND. TYPE B 706.02 (2500 D-LOAD) 707.13	603 12" COND. TYPE B	604 Std. No. I-3B Mod. A, As Per Plan	604 STD. NO. 3 MANHOLE	604 STD. No.6 C.B.	604 STD. No. 5 C.B.	604 STD. No. 5-A C.B.	604 STD. No. I-3B INLET	604 Std. No. 3 C.B. w/ V-Grate	SAN. 604 TYPE S MANHOLE	605 6" SHALLOW U.D. As Per Plan	605 6" DEEP U.D. As Per Plan	605 6" UNCLASS. U.D. As Per Plan	660 SODDING	SEE SHEET NO.
			L.F.		L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EA.	EA.		EA.	EA.	EA.	EA.	EA.	L.F.	L.F.	L.F.	S.Y.	
1-D	103+00 to 104+00 "N"	Rt.												195							1						
2-D	NOT USED																										51, 52
3-D	91+50 to 91+93 M.L.	Lt. & Rt.																					45				
4-D	93+00 EB to 94+50 EB	Lt. & Rt.												223	1												51, 52
5-D	NOT USED																										51, 337A
6-D	NOT USED																										
7-D	92+00 to 97+45 SR 126	Lt.					10																535				
8-D	91+50 to 96+50 RAMP N	Rt.		1			10																150	290	50		51, 52
9-D	93+96 M.L.	Lt.																									51, 52
10-D	96+27 to 98+00 M.L.	Rt.																				1					51
11-D	93+00 to 98+00 M.L.	Lt.																								115	51
12-D	93+65 to 94+15 RAMP T	Rt.											504			1											51, 316
13-D	95+65 to 98+00 M.L.	Rt.																								72	51
14-D	96+50 to 97+96 M.L.	Lt.																								157	51
15-D	91+40 to 98+00 "T"	Lt.	1	2			30																315	271	50	104	51
16-D	98+00 RAMP T to 98+00 M.L.	Lt.						112										1									51, 53
17-D	98+00 M.L.	Lt.									14							1								125	51, 319
18-D	97+50 to 97+98.5 M.L.	Rt.						75										1									51, 124
19-D	97+99.1 M.L.	Rt.							50											1							51, 319
20-D	97+99.1 to 98+00 M.L.	Rt.								147								1									51, 124
21-D	98+00 to 99+50 M.L.	Rt.				150																					51, 124
22-D	98+00 to 100+00 M.L.	Lt.										200														50	51
23-D	97+50 to 105+05 M.L.	Lt.					10									1											51, 316
24-D	98+07 to 100+65 M.L.	Lt.																					760				51, 52
25-D	101+80 N to 102+70 M.L.	Lt. & Rt.			250																					215	51
																											51
TOTAL			250		250	150	60	187	50	147	14	200	504	418	1	2		3	1	1	1	1	1805	561	100	838	

REF. NO.	STATION TO STATION	SIDE	202 6"x 90° BEND	202 6"x45° BEND	202 6" Tee	202 REMOVE CATCH BASIN	202 REMOVE MAN HOLE	202 Remove Pipe Under 24"	202 ABANDON MANHOLE	202 ABANDON & Plug Pipe 12" and Under	601 PAVED GUTTER TYPE 2	603 6" CONDUIT TYPE B	603 6" CONDUIT TYPE F 707.05	603 12" CONDUIT TYPE B	603 15" Conduit Type B	603 42" COND. TYPE C 706.02 (2250 D-LOAD) 707.13	603 42" COND. TYPE C 706.02 (2000 D-LOAD) 707.13	202 Remove Manhole	604 Std. No. 1 Manhole	604 Std. No. 3 Manhole	603 12" Cond. Type B 706.02	604 Std No. 3-A C.B. with V-Grate	604 Std. No. 5 C.B. with B-Grate	604 Std. No. I-2A-6	SAN. 604 TYPE S MANHOLE	604 6"x 90° Bend	605 6" SHALLOW U.D. As Per Plan	605 6" Cross	660 SODDING	660 REINF. SODDING	670 Slope Erosion Protect.	SEE SHEET NO.
						EA.		L.F.	EA.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EA.	EA.	EA.	L.F.	EA.	EA.	EA.	EA.		L.F.		S.Y.	S.Y.	S.Y.	
26-D	100+00 to 102+50 M.L.	Lt.															250			1											51, 317
27-D	104+88 to 105+15 M.L.	Rt.																													51
28-D	99+50 to 105+50 M.L.	Lt. & Rt.									600																		100		51
29-D	99+40 to 105+00 RAMP N	Rt.		2									20														533				51, 52
30-D	101+80 RAMP N	Rt.							1																						51
31-D	104+35 to 105+47	Rt.												112										1							51, 311
32-D	102+50 to 1+75 READING	Lt.														376				1											51, 317
33-D	102+74 M.L.	Lt.																							1						51,
34-D	93+00 to 94+75 RAMP T	Rt.	1										20														175				51, 53
35-D	92+00 to 105+03 M.L.	Lt.	1		1								36														1294				51, 52
36-D	104+99 to 105+95 M.L.	Lt.																												67	435	51
37-D	105+47 N to 3+23 READING	Rt.												48					1													51, 311
38-D	13+23 READING	Rt.												8								1										51, 311
39-D	11+75 to 13+23 READING	Rt.													150					1	8											51, 311
40-D	105+65 M.L. to 1+73 READING	Rt.													60														133			51, 319
40A-D	13+35 to 14+02 READING						1	65		60												1										51
41-D	13+38 READING	Rt.				1				8																						51
42-D	13+44 READING	Rt.							1																							51
43-D	96+29 to 104+86 M.L.	Rt.										35														1	860	1				51, 52
TOTAL						1	1	65	2	68	600	35	76	168	210	376	250		1	3	8	1	1	1	2		2862		233	82	471	

ALL ITEMS ON THIS SHEET ARE
IN PARTICIPATION CODE ② UNLESS MARKED

ESTIMATED QUANTITIES

CALC. REA DATE 3/86
CHK'D DS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

518/787

HAM-75/126-9.93/13.00
HAMILTON COUNTY

* For Information Only.

Participation Code (1) IR-75-1(96)10
Participation Code (2) F-2(13)

REF. NO.	STATION TO STATION	SIDE	310 Subbase Type II As Per Plan C.Y.	202 Walk Removed S.F.	202 Curb Removed L.F.	451 9" Reinf. Conc. Pavt. As Per Plan S.Y.	451 10" Reinf. Conc. Pavt. Mod. As Per Plan S.Y.	452 7" to 9" Conc. Pavt. Mod. As Per Plan S.Y.	452 9" Conc. Pavt. As Per Plan S.Y.	452 7" to 10" Conc. Pavt. Mod. As Per Plan S.Y.	452 9" to 10" Conc. Pavt. Mod. As Per Plan S.Y.	452 8" to 9" Conc. Pavt. Mod. As Per Plan S.Y.	606 Std. Type 5 G.R. L.F.	606 Bridge Term. Assem. Std. Type A Ea.	606 Anchor Assem. Std. Type A Ea.	606 Anchor Assem. Std. Type T Ea.	606 Anchor Assem. Barrier Design Std. Type A Ea.	606 Flared End Section * L.F.	608 Curb Ramp Std. Type 2 Ea.	608 4" Conc. Walk S.F.	608 Curb Ramp Std. Type 2 S.F.	609 Curb Std. Type G L.F.	609 Curb Std. Type E-A L.F.	611 Reinf. Conc. Approach Slab (T=15") S.Y.	622 Conc. Barrier Std. Type A L.F.	622 Conc. Barrier Std. Type D Mod. As Per Plan L.F.	Conc. Barrier Std. Type D-50 Mod. L.F.	Special Relief Joint Std. Type A L.F.	Special Drainage Connect. C.Y.	SEE SHEET NO.
	ROADWAY																													
48-R	13+93 Galb. Rd.	Lt. & Rt.		18	6														1		18									
53-R	92+20.74-94+45.74 Ramp N	RT.											300	1	1															51
54-R	96+54-99+54.5 Ramp N	LT.											275	1			1													51
55-R	96+79-105+16 E.B.126	RT.											837.5	1																51
56-R	102+47.5-105+40 W.B.126	LT.											275	1		1														51
78-R	102+40-102+77.5	LT.											37.5					2*												
78-R	91+00-94+00 Ramp T	LT.											262.5		1	1														48,51
	PAVEMENT																													
159-P	91+75-98+20 Ramp T	LT.	74					441																						51
160-P	91+75-98+79.54 Ramp T	RT.	234			1402																						32		51
161-P	98+65-98+70.56 Ramp T	RT.	23									169																		51
162-P	91+50-96+16.15 E.B.126	RT.	88							414																		23		51
163-P	91+75-105+13 ℄ 126	LT.	243							1279	332																	64		51
164-P	91+50-105+08 ℄ 126	LT.	615				3689																						40	51
165-P	91+50-105+05 ℄ 126	LT.	162								970																			51
166-P	91+50-105+28.04 ℄ 126	℄	77																							1348				51
167-P	91+50-105+02 ℄ 126	RT.	161								968																			51
168-P	98+22.38-98+79.54 ℄ 126	LT.																	1	60		15	80							51
169-P	98+70.56-98+79.54 "T"	RT.																	1	39			20							51
170-P	91+50-104+98 ℄ 126	RT.	822				4821																						40	51
171-P	96+26.53-104+94 ℄ 126	RT.	159							964																		40		51
172-P	96+16.15-102+45 Ramp N	LT.	37						133			110																		51
173-P	96+16.15-105+61 Ramp N	LT.	365			2189																								51
174-P	96+16.15-102+45 Ramp N	RT.	80					514																				28		51
175-P	105+03-105+28 ℄ 126	LT.	19																			10	25	115						51
176-P	105+03-105+28 ℄ 126	LT.	19																			10	25	115						51
177-P	105+54.69 N-138+25 Reading		Lt.																				20							51
178-P	1014+41.03 N-14+17 Reading Rd.		Lt.																			104	336							51
273-P	Burkhart St.		8			37																								51
274-P	Burkhart St.	LT. & RT.																				37	60							51
293-P	12+07-12+90 Reading Rd.	LT.																		374										51
315-P	100+45.53-105+54.27 "N"	LT.	9																								508.74			51
318-P	94+45.74-97+50 ℄	Rt.	7							58																			304.26	
TOTAL			3202	18	6	3628	8510	955	133	2709	2270	279	1987.5	4	2	2	1		3	473	18	176	566	230	1348	508.74	304.26	80	187	

Participation Code is (2) on This Sheet
For All Items Unless Marked.

52-787

CALC. DS DATE 3/86
CHKD. REA DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

153 Yellow

Begin Ramp N ℄ Sta. 90+00.00, 44.00' Rt. ℄ SR.126 = Sta. 90+00.00 ℄ Ramp N

Grade Varies. See Pavt. Detail

+2.126%

P.V.I. Sta. 99+25 Elev. 590.40

-4.036%

+1.414%

2.3%

1.0%

8-D

29-D

31-D

10

1-D

+00, 2' Rt. 6" U.D. ℄ 6" = 565.98 For Continuation Of U.D. See ℄ L.B. 126 Sht No. 49

+50, 2' Rt. 6" U.D. ℄ 6" = 576.54

+00, 2' Rt. 6" U.D. ℄ 6" = 579.37

+19, 2' Rt. 6" x 90° Bend ℄ 6" = 581.69

+50, 2' Rt. 6" U.D. ℄ 6" = 582.25

15" Cond.

350' V.C.

+40, 2' Rt. 6" U.D. ℄ 6" = 580.78

℄ Burkhart

Gas

8" Comb.

250' V.C.

Sta. 104+35.1 'N', 8' Rt. Std. No. 6 CB ℄ 6" U.D. (2 Outlets) = 5350' ℄ 12" = 564.50' ℄ Grate 569.0

Sta. 102+40, 8' Rt. 604, Std. No. 3 C.B. ℄ Grate = 573.06 ℄ 12" = 569.00

Telephone 12" Cond.

18" Cond.

End Construction Sta. 105+61.00 Elev. 570.83

4" Water

12" Gas

℄ Reading Rd. Sta. 105+92.09

+00, 2' Rt. 6" U.D. ℄ 6" = 565.64

P.V.I. Sta. 103+75 Elev. 568.20

603, 195' x 12" Type B

P.V.C.

P.V.T.

RAMP N STA. 90+00 TO STA. 105+92.09

+2.53%

P.V.I. Sta. 92+00 Elev. 579.60

3-D

35-D

7-D

43-D

23-D

+09, 34' Lt. 6" x 90° Bend ℄ 6" = 577.45

For Continuation See Ramp "T" Profile Sheet No. 53

200' V.C.

+50, 2' Lt. ℄ 6" = 573.93

6" U.D.

12" Cond. (Storm)

+29, 34' Rt. 6" x 90° Bend ℄ 6" = 582.14

+00, 34' Lt. 6" U.D. ℄ 6" = 581.62

I-3B Inlet

+50, 2' Lt. ℄ 6" Type F = 583.97

+45, 2' Lt. ℄ 6" = 583.89

15" Conduit

+1.62%

+95, 2' Lt. ℄ 6" = 587.95

+00, 2' Lt. ℄ 6" Type F = 588.08

Exist. 2" Gas

Exist. 4" Water

℄ Burkhart

+45, 2' Lt. ℄ 6" = 592.00

8" Comb.

+50, 2' Lt. ℄ 6" Type F = 592.09

+86, 34' Rt. 6" U.D. ℄ 6" = 596.05

+94, 2' Lt. 6" U.D. ℄ 6" = 596.12

+23, 34' Lt. 6" U.D. ℄ 6" = 596.23

I-3B Inlet

Exist. 6" Water

Telephone

Exist. 1" Water

12" Storm

12" Gas

12" Storm

℄ Reading Rd.

For Continuation See Sheet No. 50

For Continuation See Sheet No. 55

For Proposed Structure Data See Sh. 55

DEVELOPED

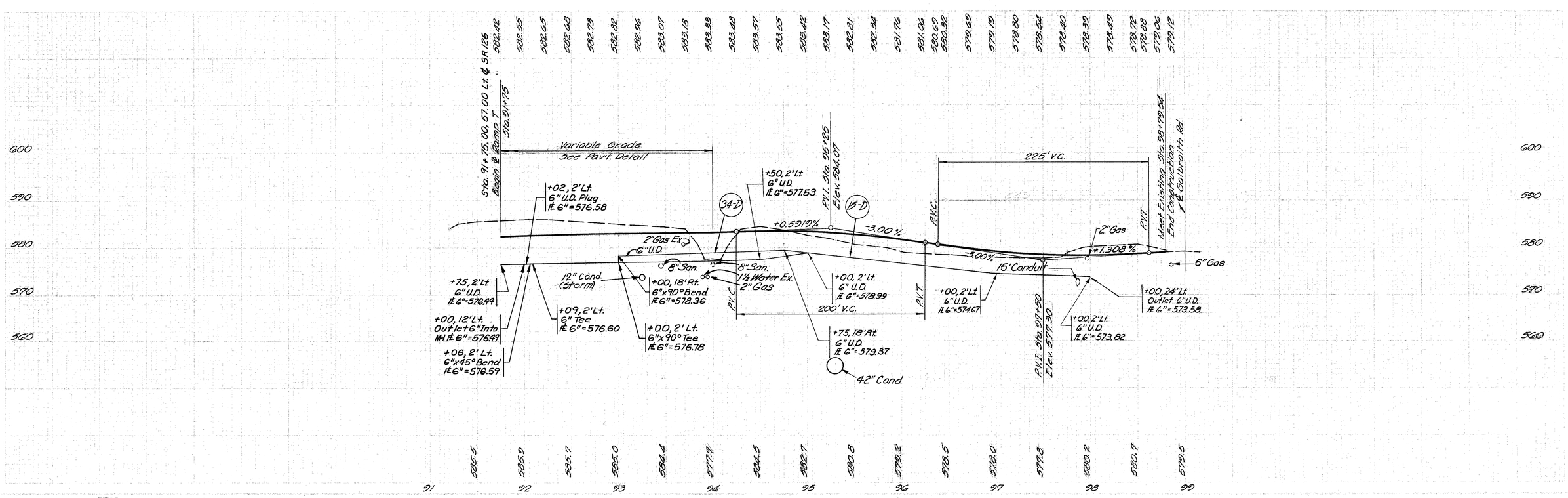
CALC. DS DATE 3/86

CHK'D JS DATE 3/86

SHEET NO.	STATE	CONTRACT	
2	OHIO		

53
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



RAMP T STA. 91+75 TO STA. 98+80

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

54 / 787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

CHKD. JS DATE 3/86
DETD. REA DATE 3/86

For Detail Sta. 119+00 to Sta. 122+25 See Sheet 55
For Temporary Rd. No. 2 See Sh. 31 & 32
For Retaining Wall Details See Sh. 484-488
For Typical Sections See Sh. 1 thru 15
For Pavt. Legend See Sh. 29
For Curve Data See Sh. 5A, 6
For S.R. 126 Profile See Sh. 55
For Drive A Profile See Sh. 62
For Bridge No. HAM-126-1467 See Sh. 676-688
For Bridge No. HAM-126-1483 See Sh. 689-703
For Approach Slab Details See Std. AS-1-81
For Pavt. Details See Sh. 306
For Superelevation Tables See Sh. 70 thru 73
For Quantities See Sh. 54A, 54B
For Drainage Quantities See Sh. 54A
For Bench Marks See Sh. 26
For R or R References See Sh. 27

Sta. 50+00 Galb. Rd.
Sta. 9+46.99 Reading Rd.
Remove Curb & Walk
Curb & Ramp Type 2
4" Conc. Walk & Type 7 Curb Mod. As Per Plan
660 Reinforced Sodding
Slope Erosion Protection
42" Type "B"
MH-3
317, 319
Sodding 6' wide
CB-5 with "B" Grate
15" Type "C"
317
10'-6" Type "F"
Type 6 Curb 10'
Sign w/ Lights Remove
660 Reinforced Sodding
Type 6 Curb 10'
1½ Sty. Brk. Fr. Restaurant
1-Sty. Blk. Hull's Car Wash
Asph.
Wooded
Chain Link
Pipe
Conc. Wall
Asph. Curb
Bit
Al Morses
Asph.
Grass
Brick
Stone Wall
Tank
Pole
Underground Gas Tank
Gravel
Conc. Retain. Wall No. 2
622 Conc. Barrier
Type 6 Curb 10'
Type 6 Curb 15'
Type 2 Paved Gutter
660 Sodding Bit.
Type 1 & Type 7 Curb Ramp & Conc. Walk As Per Plan
Curb Mod. As Per Plan
Constr. Limits
Curb & Walk
Curb Ramp Type 1
4" Conc. Walk & Type 7 Curb Mod. As Per Plan
Curb & Ramp Type 2
4" Conc. Walk & Type 7 Curb Mod. As Per Plan
660 Reinforced Sodding
Slope Erosion Protection
Sodding 6" Wide 100 S.Y.
660 Reinforced Sodding
Slope Erosion Protection
Sodding 6" Wide 100 S.Y.
Sodding 6" Wide 100 S.Y.
660 Reinforced Sodding
Slope Erosion Protection

ESTIMATED QUANTITIES

DRAINAGE

CALC. DS DATE 3/86
CH'K'D JAS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

54A
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

Participation Code (1) IR-75-1(96)10
Participation Code (2) F-2(13)

REF. NO.	STATION TO STATION	SIDE	602	601		603											604										605		660		670		SEE SHEET NO.
			Concrete Masonry	Rock Channel Protection Type C w/Filter	Paved Gutter Type 2	12" Cond. Type F 707.05		12" Conduit Type B	15" Conduit Type B	15" Cond. Type C 706.02 (2000 D Load) 707.13	15" Conduit Type F 707.05	18" Conduit Type B 707.13	36" Cond. Type C 706.02 (2500 D Load) 707.13	42" Cond. Type B 706.02 (2250 D Load) or 707.13	42" Cond. Type C 706.02 (2250 D Load) or 707.13	6" Conduit Type F	Manhole Std. No. 1	Manhole Std. No. 3	Std. No. G Catch Basin	Sloped Top Manhole	Std. No. 3A C.B. w/V-Grate	Std. No. 3 C.B. w/V-Grate	Std. No. 5 C.B.	Std. No. 5A C.B. w/B-Grate	Std. No. I-3B Inlet	Std. No. 3-C.B. w/V-Grate	6" Shallow Under-drains As Per Plan	6" Tee	6" Cross	Sodding	Reinforced Sodding		Slope Erosion Protect.	15" x 25° Bend	
			Cu. Yd.	Cu. Yd.	Lin. Ft.	Lin. Ft.		Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Each	Each	Each	Each	Each	Each	Each	Each	Each	Each	Each	Lin. Ft.	Ea.	Ea.	Sq. Yd.	Sq. Yd.		Sq. Yd.	Each	
44-D	106+78 to 107+68 ML	Lt.													325					1											66		498		54
45-D	107+63 to 110+88 ML	Lt.																																54, 317
45A-D	1+75 Reading to 107+63 ML	Lt.												141				1																54, 317
46-D	107+63 ML	Lt.							34		47														1								1	54, 130
47-D	106+47 to 107+45 ML	Rt.																													92		649		54
48-D	107+63 to 110+83 ML	Rt.														10											390	2							54, 55
49-D	107+68 to 111+12 ML	Lt.														10											465		2						54, 55
50-D	109+00 to 110+50 ML	Rt.																												100					54
50A-D	107+18 to 107+63 ML	Lt.								52													1												54, 317
51-D	110+50 to 110+88 ML	Lt. & Rt.										230												1											54, 319
52-D	110+61 to 111+61 ML	Rt.																													111		875		54
53-D	110+88 ML	Lt.							36		47									1					1									1	54, 132
54-D	110+88 to 111+91 ML	Lt.											122																						54, 317
55-D	107+50 to 111+40 ML	Lt.			390																									65					54
55A-D	114+60 to 114+65 ML		.21	3		57																				1				1					54, 133
56-D	111+20 ML	Lt.																													57		138		54
57-D	120+85 to 121+00 ML	Rt.																												15					54
58-D	110+50 to 111+57 ML	Rt.																												100					54
59-D	113+80 to 115+30 ML	Lt.																												165					54
60-D	8+00 Galbraith	Lt. & Rt.						34														1													54, 282B
60A-D	10+28 Galb to 117+80 ML	Lt. & Rt.				50																													54, 312A
61-D	8+00 Galbraith	Lt.																1																	54, 282B
62-D	8+00 to 8+35 Galbraith	Lt.						38														1													54, 282B
63-D	5+60 to 8+00 Drive A	Lt. & Rt.						70										1		1															54, 62
64-D	3+67 to 5+01 Drive A	Lt.						194																		2									54, 318
65-D	114+02 to 114+81 ML	Lt.																													73		421		54
66-D	113+50 to 114+39 ML	Rt.																													70		683		54
31-D	106+70 to 107+47 ML	Lt.																												50					
TOTAL			.21	3	390	107		336	70	52	94	230	122	141	325	20	2	1	1	2	2	1	1	1	2	3	855			496	469		3264		

REF. NO.	STATION TO STATION	SIDE	602			603							202					604	SAN. 604	Sanitary																SEE SHEET NO.
			6" Tee	6"x 90° Bend	Concrete Masonry	6" Cond. Type F 707.05	12" Conduit Type B	15" Conduit Type B	15" Conduit Type C	18" Conduit Type B	18" Conduit Type C	24" Conduit Type B 707.01 or 1500 D Load) As Per Plan	Abandoned C.B.	Abandoned M.H.	27" Conduit Type C	33" Conduit Type B	30" Cond. Type C 706.02 or 706.08	Manhole Reconstructed to Grade	Type 7 MH Recon. str. to Grade	Std. No. 1 MH	Std. No. 3A C.B. with V-Grate	Std. No. 3 C.B. with V-Grate	Std. No. 5 Catch Basin	Std. No. 5A Catch Basin	Std. No. 5 Catch Basin w/ B Grate	Std. No. I-3B Inlet Mod. as per plan	8" Cond. Type C 706.08 ES w/ 706.12 Joints	12" Cond. Type C 706.02 (2750 D Load) w/ 706.11 Joints	15" Cond. Type B 706.02 (2000 D Load) w/ 706.11 Joints	Type 3 Manhole w/ Drop	Special Fill & Plug Pipe Over 12" As Per Plan	6" Shallow U.D. As Per Plan	6" Unclassified U.D. As Per Plan	Sodding	
			Ea.	Ea.	C.Y.	L.F.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Ea.	Ea.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Each	Ea.	Ea.	Each	Each	Each	Each	Each	Each	Lin. Ft.	Lin. Ft.	Lin. Ft.	Each	Lin. Ft.	Lf.	Lin. Ft.	Sq. Yd.	
67-D	113+60 to 117+75 ML	Rt.																																310	54
68-D	9+82 Galbraith	Lt.											1																						54
69-D	118+00 to 120+72 ML	Rt.		1		10																										283			54, 55
70-D	117+03 to 118+47 ML	Rt.																									150			2					54, 313
70A-D	10+38 to 10+28 Galb.	Rt.					10														1														54, 312A
71-D	118+47 to 120+39 ML	Rt.																										235		1					54, 313
72-D	120+95 120+75 ML	Rt.											2																						54
73-D	118+47 to 9+12 Galbraith	Lt. & Rt.		.16														1										275							54, 313
74-D	10+00 Galbraith	Lt.																	1																54
75-D	118+80 to 120+35 ML	Rt.																																125	54
75A-D	11+30 to 11+40 Galbraith	Lt.					10														1														54, 312A
76-D	120+35 to 120+85 ML	Rt.							50													1													54, 332
77-D	120+65 to 120+85 ML	Rt.						59														1													54, 332
78-D	120+35 to 120+65 ML	Lt. & Rt.						59																											54, 332
79-D	120+10 to 120+35 ML	Lt.					57																			1									54, 332
80-D	120+85 to 121+10 ML	Lt.					62																			1									54, 332
80A-D	11+40 to 10+30 Galbraith	Lt. & Rt.					115														2														54, 312A
81-D	120+35 to 120+85 ML	Lt.													50							1													54, 332
82-D	117+80 to 120+35 ML	Lt.															255							1											54, 318
83-D	114+50 to 120+10 ML	Rt.	1				10																										490	100		54, 55
84-D	120+85 to 121+00 ML	Rt.		1			10																										26			54, 55
85-D	114+65 to 120+40 ML	Lt.	1	1																													545	75		54
86-D	NOT USED																																			
178-D	2+22 Drive A	Rt.						14														1													54, 284
179-D	2+10 to 2+22 Drive A	Rt.							43																1										54, 318
180-D	2+22 Drive A	Lt. & Rt.					21														1														54, 284
181-D	2+22 to 3+67 Drive A	Rt.						146												1															54, 62
182-D	3+50 to 3+67 Drive A	Rt.					53																		1										54, 318
183-D	111+91 SR 126 to 3+67 Drive A	Lt. & Rt.					68					157				137				1															54, 62
184-D	9+85 Galbraith Rd.	Rt.											2	3																					54
191-D	9+05 Gal. Rd. to 117+80 S.R. 126	Lt. & Rt.			3.78											318				1															54, 318
TOTAL					3.94	30	224	172	50	278	43	157	5	3	50	455	255	1	1	3	1	5	3	1	2	3	150	235	275	3	50	1344	175	435	

All Items on This Sheet are in Participation Code (2) Unless Marked

ESTIMATED QUANTITIES

CALC. REA DATE 3/86
CHKD. DS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

54B 787

HAM-75/126-9.93/13.00
HAMILTON COUNTY

Participation Code - ① - IR-75-1(96)10
Participation Code - ② - F-2(13)

REF. NO.	STATION TO STATION	SIDE	202 Median Removed	202 GR Removed	202 Curb Removed	202 Walk Removed	304 Aggregate Base As Per Plan	305 8" Conc. Base As Per Plan	310 Subbase Type II As Per Plan	402 Asphalt Concrete 1 3/4"	404 Asphalt Concrete 1 1/4"	407 Cover Agg.	407 Tack Coat	408 Bitum. Prime Coat	451 9" Reinf. Conc. Pvt. As Per Plan	451 10" Reinf. Conc. Pvt. As Per Plan	452 9" to 10" Conc. Pvt. Mod. As Per Plan	452 7" to 10" Conc. Pvt. Mod. As Per Plan	606 Std. Type 5 G.R.	606 Bridge Term. Assem. Std. Type A	606 Anchor Assem. Std. Type A	606 Anchor Assem. Std. Type T	608 Curb Ramp Std. Type 1	608 Curb Ramp Std. Type 2	608 4" Conc. Walk	609 Curb Std. Type 6	609 Curb Std. Type 2A	609 Curb Std. Type 2B	609 Curb Std. Type 7 Mod. As Per Plan	611 Reinf. Concrete Approach Slab (7.15%)	622 Conc. Barrier Std. Type A	Special Relief Joint Std. Type A	Special Drainage Connect.	SEE SHEET NO.
			S.Y.	L.F.	L.F.	L.F.	C.Y.	S.Y.	C.Y.	C.Y.	C.Y.	Ton	Gal.	Gal.	S.Y.	S.Y.	S.Y.	S.Y.	L.F.	L.F.	Each	Each	Each	Each	S.F.	L.F.	L.F.	L.F.	L.F.	S.Y.	L.F.	L.F.	L.F.	C.Y.	
	ROADWAY																																	
57-R	107+07 to 110+92 ℄	Rt.																	387.5	2														54
58-R	107+31 to 111+82 ℄	Lt.																	387.5	2														54
59-R	114+48 to 121+73 ℄	Lt.																	700	1	1													54, 56
60-R	114+06 to 122+93 ℄	Rt.																	875	1		1												54, 56
61-R	10+69 to 11+69 (Galb)	Lt.																	75	1	1													54
62-R	8+16 to 10+40 (Galb)	Rt.																	200	1	1													54
117-R	49+55 Galb. to 9+34 Reading	Lt. & Rt.			32	120																												54
118-R	9+10 Reading to 50+55 Galb.	Lt. & Lt.			40	264																												54
143-R	49+30 Galb. to 10+41 Reading	Rt. & Rt.			23	164																												54
155-R	10+14 Reading to 50+45 Galb.	Lt. & Rt.			42	232																												54
156-R	6+46 to 7+19 Drive "A"	Rt.	22	70																														62
	PAVEMENT																																	
136-P	49+55 Galb. to 9+34 Reading	Lt. & Rt.																						2	120			32						54
179-P	107+18.63 to 107+43.63 ℄	Lt.							20																									54
180-P	107+54 to 111+08 ℄	Lt.							52									315																54
181-P	107+49 to 110+03 ℄	Lt.							157							944																		54
182-P	107+45 to 110+93 ℄	Lt.							48								255																	54
183-P	107+19 to 111+19 ℄	℄							25																						360			54
184-P	107+42 to 110+94 ℄	Rt.							52								254																	54
185-P	110+95.12 to 110+20.12 ℄	Lt.							19																					14	10	116			54
186-P	107+18.63 to 107+43.63 ℄	Rt.							20																					10	25	118			54
187-P	107+38 to 110+50 ℄	Rt.							156							936																		54
188-P	107+34 to 110+84 ℄	Rt.							47									311																54
189-P	110+95.12 to 111+20.12 ℄	Rt.							19																					15	25	116			54
190-P	5+43.15 to 11+00.11 (Galb)	Lt. & Rt.					31	2763	519	144	103	1	9	73																		50		54
191-P	5+50.3 to 11+69 (Galb)	Lt.																												39	478				54
193-P	5+34 to 10+40 (Galb)	Rt.																												37	369				54
194-P	11+00.11 to 11+25.11 (Galb)	Lt. & Rt.							22																							130			54
195-P	1+00 to 5+66.52 Dr. "A"	Lt. & Rt.							398						2210																				54, 62
196-P	6+16.40 to 7+16.62 Dr. "A"	Lt. & Rt.							95						526																284				54, 62
197-P	1+68 to 5+66.52 Dr. "A"	Rt.																						1	206.1						420				54, 62
198-P	112+19.4 to 114+44.4 ℄	Lt.							19																					12	14	116			54
199-P	114+38 to 121+00 ℄	Lt.							95									571																32	54
200-P	114+50 to 121+00 ℄	Lt.							299							1733																	40		54
201-P	114+43 to 121+00 ℄	Lt.							73								437																		54
202-P	114+15.56 to 121+00 ℄	℄							36																							644			54
203-P	114+37 to 121+00 ℄	Lt.							73								441																		54
204-P	114+19.4 to 114+44.4 ℄	Rt.							19																							116			54
205-P	114+30 to 121+00 ℄	Rt.							208							1787																	40		54
206-P	114+22 to 121+00 ℄	Rt.							90									603																15	54
265-P	6+78.18 to 7+16.62 Drive "A"	Rt.					1				1			2																					54
278-P	9+10 Reading to 50+55 Galb.	Lt. & Lt.																						1	264			40							54
285-P	2+15 to 5+66.52 Drive "A"	Lt.																													329				54, 62
286-P	1+43	Rt.																													31				54, 62
287-P	5+34 to 6+73 Galb. Rd.	Rt.																						1	587										
288-P	115+40 to 118+ ℄	Rt.																								270									54
297-P	49+30 Galb. to 10+41 Reading	Rt. & Rt.																						1	164			23							54
301-P	10+14 Reading to 50+45 Galb.	Lt. & Rt.																						1	232			42							54
TOTAL			179	70	137	780	32	2763	2635	144	104	1	9	75	2736	5400	1387	1800	2625	8	3	1	4	3	3428	407	103	847	137	830	1004	130	64	

Participation Code is ② on this sheet for all items unless marked.

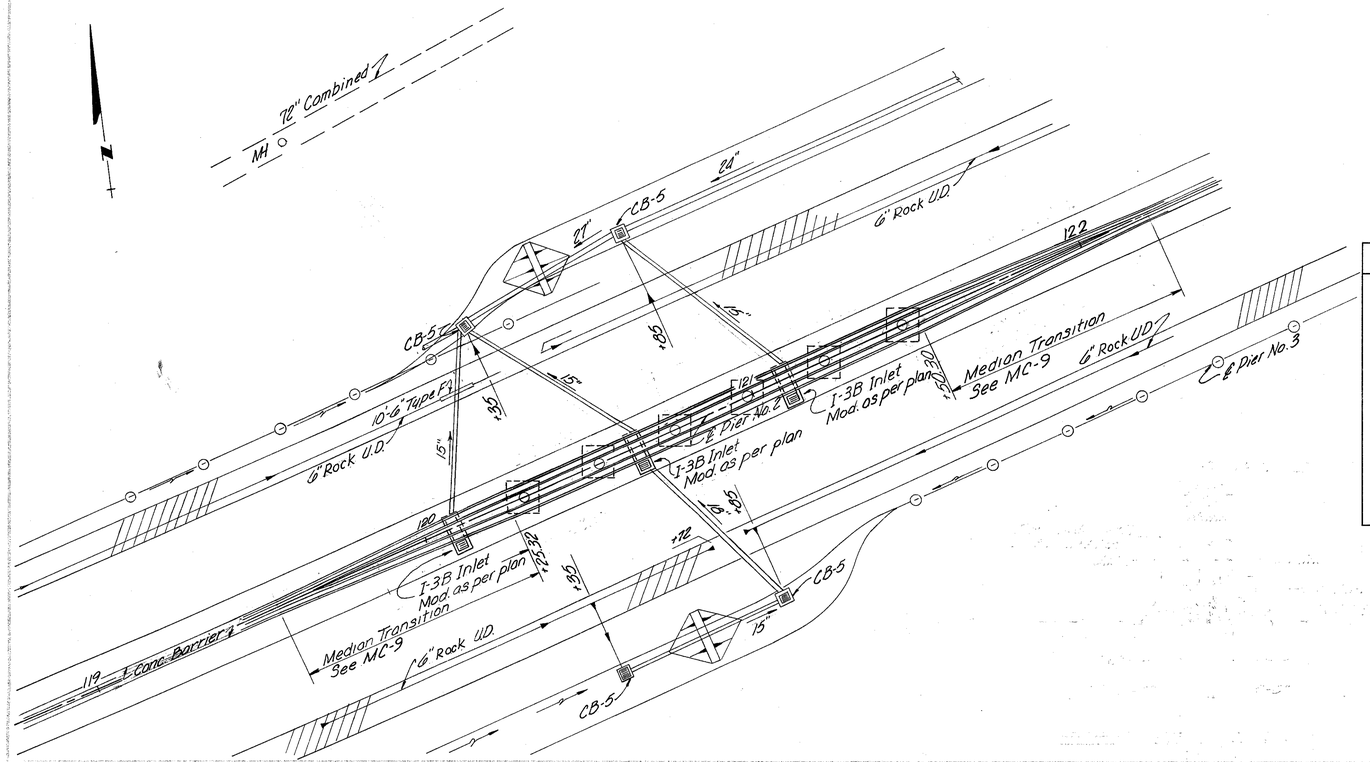
CALC. REA DATE 3/86

CHK'D. DS DATE 3/86

DESIGN SECTION	STAFF	PROJECT	
&	CHKD		

55
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



PROPOSED STRUCTURE

Bridge No. HAM-126-1456

TYPE: Continuous Rolled Steel Beam With Reinforced Concrete Deck And Substructure.

SPANS: 55'-0", 78'-0", 55'-0"

ROADWAY: 88'-0" Face To Face Of Parapets (Includes 6'-0" Raised Median)

DESIGN LOAD: HS 20-44

SKEW: 15°11'16" L.F.

WEARING SURFACE: 1" Monolithic Concrete

APPROACH SLABS: AS-1-81 (25' Long)

ALIGNMENT: Tangent

PROPOSED STRUCTURE

Bridge No. HAM-126-1467

TYPE: Continuous Rolled Steel Beam With Reinforced Concrete Deck And Substructure.

SPANS: 57'-0", 88'-0", 88'-0" 57'-0"

ROADWAY: 84'-0" Face To Face Of Parapets (Includes 6'-0" Raised Median)

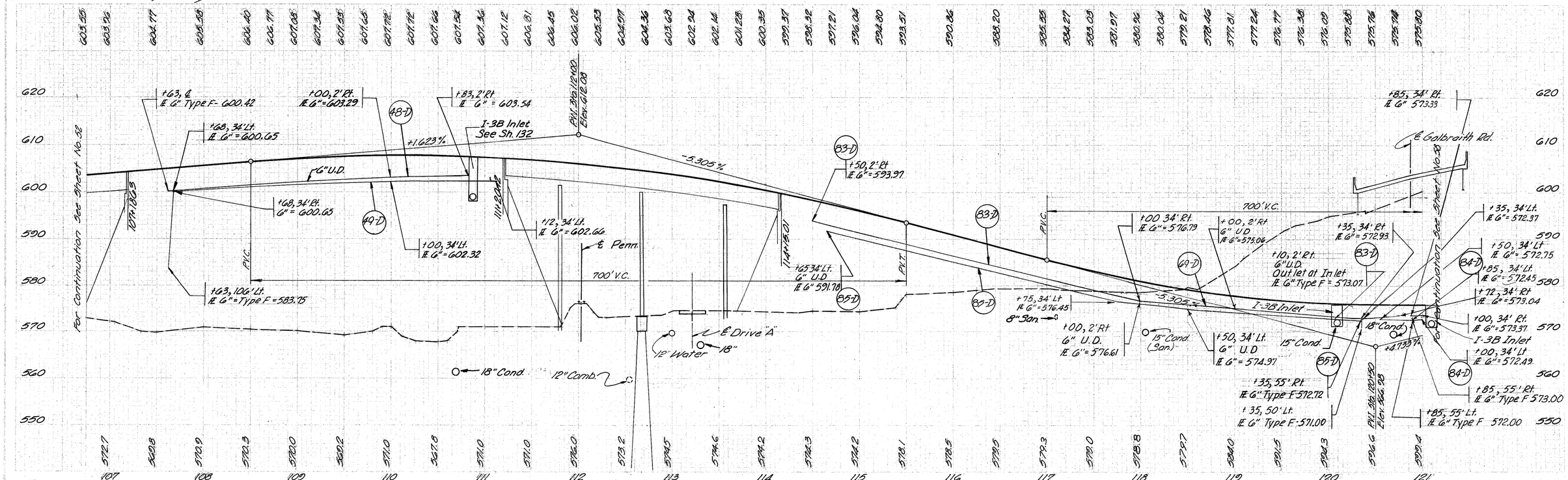
DESIGN LOAD: HS 20-44

SKEW: 22°30' L.F.

WEARING SURFACE: 1" Monolithic Concrete

APPROACH SLABS: AS-1-81 (25' Long)

ALIGNMENT: 2°30'00" Curve Left



SR-126 STA 106+75 TO STA 121+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

56
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

CALC. R.E.A. DATE 3/86

CHK'D. J.A.S. DATE 3/86

Sta. 130+51.86, 112.08' Lt. SR 126
Sta 0+20 Temp. Road #6

℄ Temp. Rd. #6

130+34.52 ℄ Temp. Rd. No. 6

Sheet 310-D

℄ SR 126

℄ Ramp Q

℄ Ramp P

℄ Galbraith Rd.

℄ Drive B

℄ Ramp A

℄ Ramp B

℄ Ramp C

℄ Ramp D

℄ Ramp E

℄ Ramp F

℄ Ramp G

℄ Ramp H

℄ Ramp J

℄ Ramp K

℄ Ramp L

℄ Ramp M

℄ Ramp N

Slope & Erosion Protect

660 Reinforced Sodding

132 SY Sodding 6' Wide

For Continuation See Sheet No. 57

6" Shallow U.D.

15" Type B 332

6" Type B

Sodding 75 Wide 50 S.Y.

Wooded

Brush

Bit. Parking

Conc. Block Standard Textile Co., Inc.

Metal Carport

Bit. Parking

Chain Link Fence

Sodding 7.5 Wide 107 S.Y.

6" Deep U.D.

Rock Chan. Protect. Type C 4 S.Y.

HVV-3

12" Type C I.C.B. - 3 W/V-Grate

Abandon C.B. & Connect Pipe Through

Reconst. Type "T" MH To Grade

Rim Elev. = 1445 (Prop.) Type 6 Curb

Joint, Type A Std. Dwg. BP.10

Rock Chan. Protect. Type D 12.5 S.Y.

CB-5

15" Type C 326

Guardrail

Slope Erosion Protect

Chain Link Fence

Transformer

Guardrail

Bit. Parking

Abandon C.B. and Connect Pipe Through

Remove Ex. Cross Culvert & Pavt. w/ Curbs and Median SC 125+75.55

See Sheet 54 & 57

Sodding 6' Wide

6" Shallow U.D.

Rock Chan. Protect. Type C 6 S.Y.

Sodding 10.5 Wide 143.5 Y.

Abandon C.B. Brick Plug Pipe Thru Wall

Abandon C.B. Brick Plug Pipe Thru Wall

Abandon C.B. and Connect Pipe Through

Abandon C.B. Brick Plug Pipe Thru Wall

Abandon C.B. Brick Plug Pipe Thru Wall

Abandon C.B. Brick Plug Pipe Thru Wall

ESTIMATED QUANTITIES

DRAINAGE

CALC. T.S. DATE 3/86

CHKD. J.A.S. DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

56A
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

PARTICIPATION CODE ① IR-75-1(96)10
PARTICIPATION CODE ② F-2(13)

REF. NO.	STATION TO STATION	SIDE	202 6" W.YE BRANCH	202 MANHOLE Abandon EA.	202 C.B. Abandon EA.	202 Abandon & Plug Pipe 12" & Under	601 PAVED GUTTER TYPE 2 L.F.	601 12" x 25° Bend Each	603 6" COND. TYPE F 707.05 L.F.	603 12" COND. TYPE B L.F.	603 12" Cond. Type F 707.05 L.F.	603 18" COND. TYPE B L.F.	603 15" COND. TYPE B L.F.	603 15" COND. TYPE F 707.05 L.F.	603 24" COND. TYPE C L.F.	604 STD. No. I-3B INLET EA.	SAN. 604 Type S Manhole Reconstr. To Grade EA.	604 STD. NO. 1 MANHOLE EA.	604 STD. NO. 3 MANHOLE EA.	604 STD. No. 3A C.B. with V-Grate EA.	604 STD. No. 3 C.B. with V-Grate EA.	604 STD. No. 5 C.B. EA.	SAN. 603 12" COND. TYPE C 706.02 (2250 D-LOAD) w/ 706.11 JOINT L.F.	604 Std. No. 6 Catch Basin Each	605 6" SHALLOW U.D. As Per Plan L.F.	15" x 25° Bend Each	660 SODDING S.Y.	SEE SHEET NO.
87A-D	120+85 to 124+25 M.L.	Lt.																								340		56,58
87-D	121+35 M.L.	Lt. & Rt.		1		54																						56
88-D	120+85 to 121+15 M.L.	Rt.																										56
89-D	121+24 M.L.	Rt.			1	35																					30	56
90-D	121+15 to 122+64 M.L.	Rt.					149																				50	56
90A-D	128+68 to 128+50 P	Lt.						1		38	25														1			56,268
91-D	120+35 to 121+06 M.L.	Lt. & Rt.			2	117																						56
92-D	121+06 to 15+35 Gal.	Lt. & Rt.			1	95																						56
93-D	15+00 to 16+00 Gal.	Rt.								104											1							56,321
94-D	16+00 Gal.	Lt. & Rt.								18																	124	56,282E
95-D	16+00 Gal.	Rt.								30												1						56,282E
95A-D	121+10 to 124+30 M.L.	Rt.							20																	315		56,58
96-D	16+83 Gal.	Lt.																	1									56
97-D	17+00 to 16+83 Gal.	Lt.									20											1						56,321
98-D	120+34 to 16+22 Gal.	Rt.															1							340				56,313
99-D	120+92 to 122+35 M.L.	Lt.																									143	56
100-D	124+30 to 16+83 Gal.	Lt.										50	27	57								1				2		56,321
100A-D	6+00 Drive B to 16+90 Gal.	Rt.								36												1						56,321
101-D	124+30 M.L.	Lt.										54				1												56,332
102-D	120+85 to 124+30 M.L.	Lt.													345							1						56,332
103-D	124+35 to 129+10 M.L.	Rt.							10																	470		56,58
104-D	121+00 to 130+00 M.L.	Rt.							20																	900		56,58
105-D	124+30 to 126+75 M.L.	Rt.																									292	56
105A-D	16+00 to 16+83 Gal	Lt.								88										1								56,321
106-D	124+35 to 130+00 M.L.	Lt.	1						20																	575		56,58
107-D	124+30 to 127+50 M.L.	Lt.																									315	56
108-D	17+00 to 19+44 Gal.	Lt.								130									1									56,321
109-D	126+67 M.L.	Lt.			1																							56
110-D	126+50 M.L.	Lt.			1																							56
110A-D	16+90 to 17+00 Gal.	Rt. & Lt.								50												1						56,321
TOTAL			1	1	6	301	149		70	494	45	104	27	57	345	1	1	1	2	1	5	2	340	1	2600		954	

REF. NO.	STATION TO STATION	SIDE	6" TEE BRANCH	6" WYE BRANCH	202 C.B. Abandon EA.	601 PAVED GUTTER TYPE 2 L.F.	601 ROCK CHANNEL PROTECT. TYPE C w/ FILTER C.Y.	602 CONC. MASONRY C.Y.	603 6" COND. TYPE F 707.05 L.F.	603 12" COND. TYPE B L.F.	603 12" COND. TYPE C L.F.	603 15" COND. TYPE B L.F.	603 15" COND. TYPE C L.F.	603 18" COND. TYPE B L.F.	603 18" COND. TYPE C L.F.	604 STD. No. I-3B INLET EA.	SAN. 604 Type T Manhole Reconstr. To Grade EA.	604 Std. No. 1 Manhole EA.	604 Std. No. 3 Manhole EA.	604 STD. No. 3A C.B. with V-Grate EA.	604 STD. No. 3 C.B. with V-Grate EA.	604 STD. No. 5 C.B. EA.	605 6" SHALLOW U.D. As Per Plan L.F.	605 6" DEEP U.D. As Per Plan L.F.	6" Cross	6" x 90° Bend	660 SODDING S.Y.	660 REINF. SODDING S.Y.	670 Slope Erosion Protect. SY.	SEE SHEET NO.
111-D	20+57 Gal.	Lt. & Rt.			2										61			1	1										56
112-D	127+42 to 127+73 M.L.	Lt.													92							1							56,326
113-D	127+42 to 128+35 M.L.	Lt.												96		1													56,314
114-D	128+35 to 129+15 M.L.	Lt.										134										1							56,314
115-D	129+15 to 129+75 "Q"	Rt.											65									1							56,326
116-D	127+73 to 128+50 "P"	Lt.					125																						56,60
117-D	128+50 "P" to 130+35 "P"	Lt.							10															185	1	1			56,58
118-D	129+15 to 130+00 M.L.	Rt.							10															75				150	56
119-D	127+40 to 129+65	Rt.																											56
120-D	129+14 M.L.	Lt.			1																								56
121-D	129+17 M.L.	Lt.															1												56
122-D	128+62 to 130+35 "P"	Rt.	1						10															178		1			56,60
123-D	129+50 to 130+75 "P"	Lt.																										121	56
124-D	129+25 "P"	Lt.			1																								56
125-D	126+90 to 129+75 "Q"	Rt.		1					20															285					56,60
126-D	129+25 to 129+75 "Q"	Rt.																										50	56
127-D	20+40 to 20+73 Gal.	Lt.								33											1								56,64
128-D	20+40 Gal.	Lt. & Rt.								27											1								56,282G
129-D	19+44 to 20+40 Gal.	Lt.								96								2											56,64
130-D	125+66 "Q" to 19+44 Gal.	Lt.								42											1								56,326
177-D	129+50 "P"	Lt.					4	.21			15											1						1	56,26B
185-D	125+50 "P"	Lt.																											56
186-D	125+70 "P"	Rt.																											56
187-D	128+05 "P"	Lt.																											56
188-D	128+55 "P"	Rt.																											56
189-D	129+03 to 130+30 "P"	Rt.																											56
190-D	126+75 to 127+40 M.L.	Rt.				65																							56
TOTAL					4	65	129	0.21	50	198	15	134	65	96	153	1	1	3	1	3	1	3	538	185	1		465	38	997	

ALL ITEMS ON THIS SHEET ARE IN PARTICIPATION CODE ②

ESTIMATED QUANTITIES

CALC. REH DATE 3/86
CHK'D DS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

56B 787

HAM-75/126-9.93/13.00
HAMILTON COUNTY

Participation Code ① IR-75-1(96)10
Participation Code ② F-2(113)

REF. NO.	STATION TO STATION	SIDE	301 Bitum. Aggregate Base C.Y.	304 Aggregate Base As Per Plan C.Y.	305 8" Conc. Base As Per Plan S.Y.	310 Subbase Type II As Per Plan C.Y.	402 Asphalt Concrete 1 3/4" C.Y.	404 Asphalt Concrete 1 1/4"	404 Asphalt Concrete 2"	407 Cover Agg. TON	407 Tack Coat GAL	408 Bitum. Prime Coat GAL	411 Stab. Crushed Agg. C.Y.	451 9" Reinf. Conc. Pavt. As Per Plan S.Y.	451 10" Reinf. Conc. Pavt. Mod. As Per Plan S.Y.	452 7" to 9" Conc. Pav't Mod. As Per Plan S.Y.	452 8" to 9" Conc. Pav't Mod. As Per Plan S.Y.	452 9" to 10" Conc. Pav't Mod. As Per Plan S.Y.	452 7" to 10" Conc. Pav't Mod. As Per Plan S.Y.	606 Std Type 5 GR L.F.	606 Bridge Term. Assem. Std. Type EACH	606 Anchor Assemb. Std. Type A EACH	606 Anchor Assemb. Std. Type T EACH	608 4" Conc. Walk S.F.	609 Curb Std. Type G L.F.	609 Curb Std. Type 2A L.F.	609 Curb Std. Type 2B L.F.	611 Reinf. Conc. Approach Slab (7=15") S.Y.	612 Concrete Median Std. Type S.Y.	622 Concrete Barrier Std. Type A L.F.	Special Drainage Connect. C.Y.	Special Relief Joint Std. Type A L.F.	SEE SHEET NO.
	ROADWAY																															
63-R	16+45 - 18+07 (Galb)	Lt.																		137.5	1	1										56
64-R	125+70 - 130+25 ℄	℄																		437.5		1	1									56,57
65-R	127+45 - 129+35 ℄	Lt.																		150		1	1									56
70-R	128+40 - 130+23 ℄	Lt.																		137.5	1	1										56
71-R	126+50 - 131+00 ℄	Lt.																		412.5		1	1									56
	PAVEMENT																															
207-P	121+00 - 130+00 ℄	Lt.				133													800												44		56
208-P	121+00 - 130+00 ℄	Lt.				400									2400																		56
209-P	121+00 - 130+00 ℄	Lt.				105													629														56
210-P	121+00 - 130+00 ℄	℄				54																											56
211-P	121+00 - 130+00 ℄	Rt.				105												629															56
212-P	121+00 - 130+00 ℄	Rt.				400									2400																		56
213-P	121+00 - 130+00 ℄	Rt.				153													800												44		56
214-P	15+15.41 - 15+40.41 (Galb)	Lt. & Rt.				22																				6		130					56
215-P	16+45 - 18+17 (Galb)	Lt.																									172						56
216-P	15+40.41 - 21+00 (Galb)	Lt. & Rt.			2709	473	132	91		10	271																					50	56
217-P	16+78 - 21+00 (Galb)	Rt.																									422						56
218-P	14+92 - 16+12 (Galb)	Lt.																									120						56
219-P	125+44.32 - 125+69.37 "P"	Lt. & Rt.				13																				16		78					56
220-P	124+76.10 - 125+50 "P"	Lt. & Rt.				102									572											334							56
222-P	4+17.5 - 6+20.67 "B"	Rt.																							43	260							63
223-P	3+55.94 - 6+20.67 "B"	Lt.																						782		203							63
224-P	125+63.50 - 129+65 "Q"	Lt.				20											134								115								56
225-P	126+56.19 - 129+65 "Q"	Lt.				91									548																		56
226-P	126+85 - 127+00 "Q"	Rt.				25										163									213	30					11		56
227-P	1+78.64 - 1+91.64 "B"	Lt.																							13								63
228-P	3+96 - 4+23 "B"	Lt. & Rt.		5				1				14																					63
229-P	1+75.37 - 6+20.67 "B"	Lt. & Rt.	15			249		4							1416																		63
230-P	128+04.94 - 128+29.94 "P"	Lt. & Rt.				12																			20	18		73					56
231-P	128+24 - 130+35 "P"	Lt.				23										164									230						9		56
232-P	128+43 - 130+35 "P"	Rt.				57									341																	27	56
233-P	128+59 - 130+35 "P"	Rt.				11													59												6		56
261-P	125+39 - 125+76 ℄	Rt.				14																				84	38		82				56
267-P	21+00 - 21+20 (Galb)	Lt. & Rt.						2		1	7														40								56
268-P	125+20.64 - 126+56.49 ℄	Lt. & Rt.				84									502											439							56
272-P	3+95 - 1+35 "B"	Rt.	11						3																								
289-P	20+75 - 21+00 (Galb)	Lt.																									50						56
298-P	18+66 (Galb)	Rt.		2				1				2	1																				56,310
299-P	19+77 (Galb)	Rt.		3				1				3	4																				56,310
300-P	20+07 (Galb)	Rt.		1				5			2	1																					56,310
TOTAL			26	11	2709	2546	132	111		11	280	20	5	3379	4800	327	134	629	2288	1275	2	5	3	782	674	1390	802	281	82	840			114	77	

Participation Code Is ② On This Sheet

1390 802

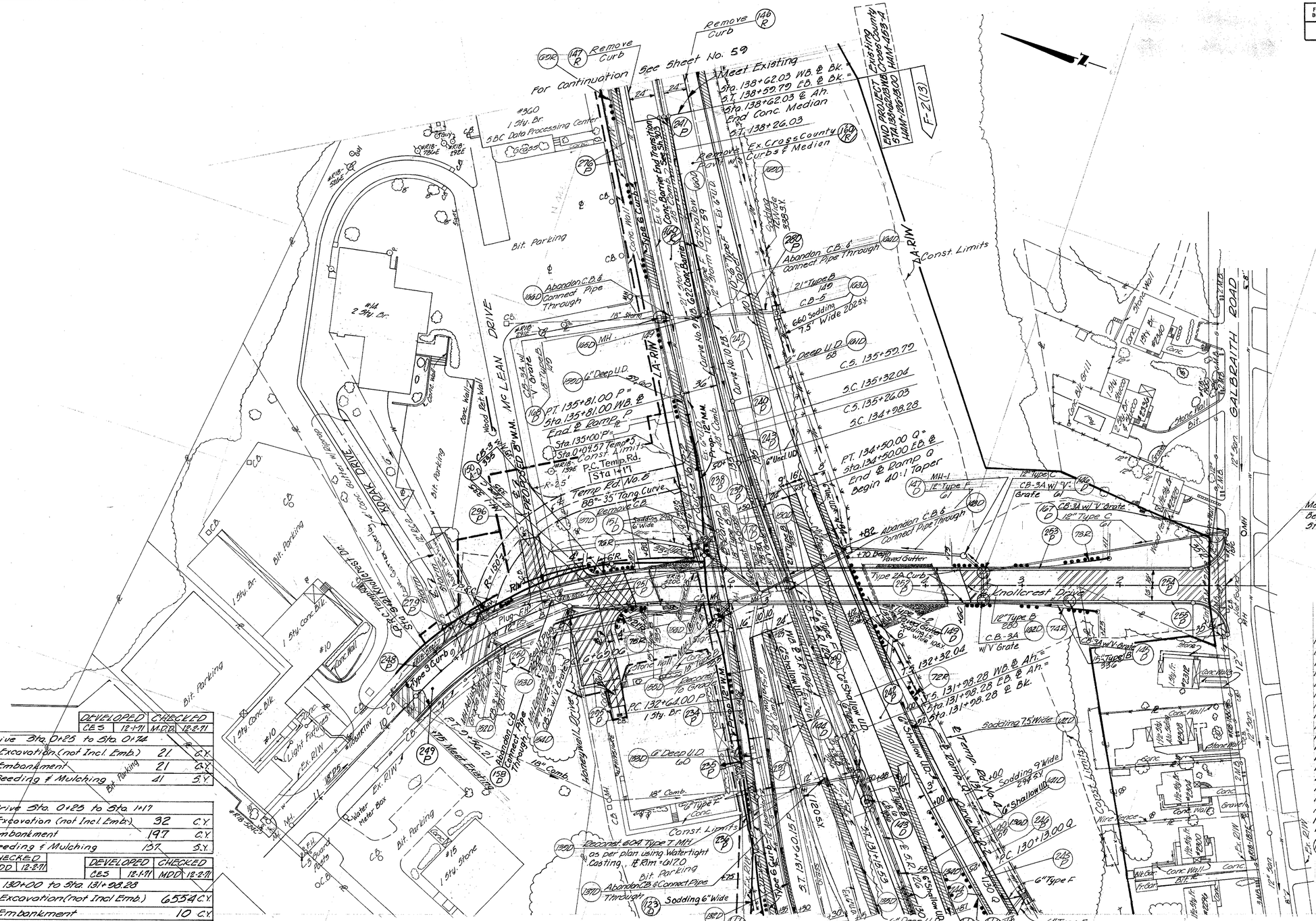
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

57
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

CALC. REQ. DATE 3/86

CHK'D. JOS. DATE 3/86



DEVELOPED	CHECKED
CES 12-1-71	MDD 12-2-71

McLean Drive Sta. 0+25 to Sta. 0+74		
Item 203 Excavation (not Incl. Emb.)	21	C.Y.
" 203 Embankment	21	C.Y.
" 659 Seeding & Mulching	41	S.Y.

Honeywell Drive Sta. 0+25 to Sta. 1+17		
Item 203 Excavation (not Incl. Emb.)	32	C.Y.
" 203 Embankment	197	C.Y.
" 659 Seeding & Mulching	157	S.Y.

DEVELOPED	CHECKED
CES 12-1-71	MDD 12-2-71

S.R. 126 Sta. 130+00 to Sta. 131+98.28		
ITEM 203 Excavation (not Incl. Emb.)	6554	C.Y.
" 203 Embankment	10	C.Y.
" 659 Seeding & Mulching	656	S.Y.

E.B. S.R. 126 Sta. 131+98.28 to Sta. 138+59.79		
ITEM 203 Excavation (not Incl. Emb.)	34628	C.Y.
" 203 Embankment	20	C.Y.
" 659 Seeding & Mulching	10,229	S.Y.

Ramp P Sta. 130+50 to Sta. 135+50		
ITEM 203 Excavation (not Incl. Emb.)	712	C.Y.
" 203 Embankment	96	C.Y.
" 659 Seeding & Mulching	2892	S.Y.

Ramp Q Sta. 129+50 to Sta. 134+50		
ITEM 203 Excavation (not Incl. Emb.)	36960	C.Y.
" 203 Embankment	0	C.Y.
" 659 Seeding & Mulching	6982	S.Y.

Knollcrest Drive Sta. 0+90 to Sta. 9+75		
ITEM 203 Excavation (not Incl. Emb.)	15926	C.Y.
" 203 Embankment	1562	C.Y.
" 659 Seeding & Mulching	4503	S.Y.

KNOLLCREST DR. STA. 0+82.83 TO STA. 9+75
RAMP P STA. 130+35 TO STA. 135+81
RAMP Q STA. 129+65 TO STA. 134+50
S.R. 126 STA. 130+00 TO STA. 139+00

ESTIMATED QUANTITIES

DRAINAGE

CALC. D.S. DATE 3/86
CHK'D J.B.S. DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

57A / 787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

PARTICIPATION CODE ① I.R-75-1(96)10
PARTICIPATION CODE ② F-2(13)

REF. NO.	STATION TO STATION	SIDE	202			601	603							604							605			660	SEE SHEET NO.
				6" WYE		ABANDON CATCH BASIN	PAVED GUTTER TYPE 1-2	6"COND. TYPE F 707.05	12"COND. TYPE B	12"COND. TYPE C	12"COND. TYPE F 707.05	15"COND TYPE B	21"COND TYPE B	STD.NO.3 C.B. WITH V-GRATE	TYPE T MANHOLE RECONST. TO GRADE	TYPE 1 MANHOLE	STD. NO. 3A C.B. WITH V-GRATE	STD. NO. 5 C.B.	STD. NO. 6 C.B.	STD. NO. I-3B INLET	MANHOLE TYPE 7 RECONST. TO GRADE USING WATER TIGHT FRAME AND COVER	6"SHALLOW UNDER DRAINS As Per Plan	6" DEEP UNDER DRAINS As Per Plan	6"UNCLASS UNDER DRAINS As Per Plan	SODDING	
						EA.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	L.F.	L.F.	L.F.	S.Y.	
132-D	130+35 to 133+20 Ramp P	Rt.																				285				57,60
133-D	130+35 to 134+20 "P"	Lt.						20															375			57,60
134-D	130+00 to 131+50 ML	Rt.																				150				57,58
135-D	130+00ML to 133+25 WB	Lt.						10														325				57,59
136-D	129+75 to 134+50 "Q"	Rt.		1				20														375		100		57,59
137-D	131+67 ML	Lt.				1																				57
138-D	Not Used																									
139-D	131+72 ML	Lt.																			1					57
140-D	Not Used																									
141-D	130+00 to 131+48 ML	Rt.																				144				57,58
142-D	129+82 to 133+12 "Q"	Rt.																							294	57
143-D	131+25 to 131+58 ML	℄										27						1								57,336
144-D	131+58 to 131+66 ML	Lt.										62							1							57,336
145-D	2+50 to 3+40 KNOLL	Lt.							90							1										57,336
146-D	3+40 to 3+60 KNOLL	Rt.								25						1										57,61
147-D	3+60 to 133+79 "Q"	Rt.									139				1											57,61
148-D	133+58 WB 126	Lt.				1																				57
149-D	133+12 to 133+70 "Q"	Rt.					58																		10	57
150-D	133+79 "Q" to 133+65 "P"	Rt.											114		1			1								57,335
150A-D	7+05 to 6+92 KNOLL	Lt.								15				1		1										57,335
TOTAL						2	58	50	90	40	139	89	114	1	1	2	2	1	1	1	1	1279	375	100	304	

REF. NO.	STATION TO STATION	SIDE	202			603							604							605			660	SEE SHEET NO.
			6"x90° BEND			6"COND TYPE F 707.05	12"COND TYPE B	12"COND TYPE C	15"COND TYPE B	15"COND TYPE B 706.02 (2000 D-LOAD) & 707.13	18"COND TYPE B	21"COND TYPE B	Std. No.3 MANHOLE WITH FLAT TOP W/96" BASE	MANHOLE RECONST. TO GRADE	MANHOLE ADJUST. TO GRADE	Std. No. 1 MANHOLE	STD. No. 3A WITH V-GRATE C.B.	STD. No. 3 WITH V-GRATE C.B.	STD. No. 5 C.B.	6"Shallow Under-Drains As Per Plan	6" Deep Under-Drains As Per Plan	6" Unclass Under-Drains As Per Plan	SODDING	
						L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.		EA.	EA.	EA.	EA.	EA.	EA.	L.F.	L.F.	L.F.	S.Y.	
151-D	133+65 to 134+25 "P"	Rt. & Lt.						30			88								1				29	57,335
152-D	8+58 KNOLL	Lt.					18								1		1							57,281A
153-D	7+90 KNOLL CREST	Lt.				1																		57
154-D	7+75 to 7+70 KNOLL	Lt.					13							1				1						57,335
155-D	7+70 KNOLL to 132+62 "P"	Lt. & Rt.							20	152				1		1								57,335
156-D	6+35 KNOLL CREST DR.	Lt. & Rt.			2																			57
157-D	134+36 Ramp "P"	Lt.			1																			57
158-D	7+85 KNOLL CREST	Rt.				1																		57
159-D	134+25 "P" to 139+00 WB	Lt.	1			20															485			57,59,60
160-D	131+58 to 138+60 EB	Lt.				30														621		50		57,60
161-D	134+50 to 139+00 EB	Rt.				10															450			57,60
162-D	3+40 KNOLL	Lt. & Rt.					36										1							57,280
163-D	136+40 to 136+54 EB	Rt. & Lt.										76							1				202	57,149
164-D	136+60 EB 126	Rt.				1																		57
165-D	136+64 EB 126	Lt.											1											57
166-D	136+64 WB 126	Lt.				1																		57
167-D	0+90 to 3+40 KNOLL	Rt.					255										1							57,61
168-D	136+64 SR 126	Lt.									12						1							57,149
169-D	136+47 EB to 139+00 ML	Rt.																					338	57
170-D	133+49 Ramp "P"	Lt.						6									1							57,270
TOTAL					3	4	60	322	36	20	152	100	76	1	2	1	1	5	1	2	621	935	50	569	

ALL ITEMS ON THIS SHEET ARE IN PARTICIPATION CODE ② UNLESS MARKED

ESTIMATED QUANTITIES

CALC. REA DATE 3/86

CHK'D DS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

578/787

HAM-75/126-9.93/13.00
HAMILTON COUNTY

Participation Code ① IR-75-1(96)10
Participation Code ② F-2(13)

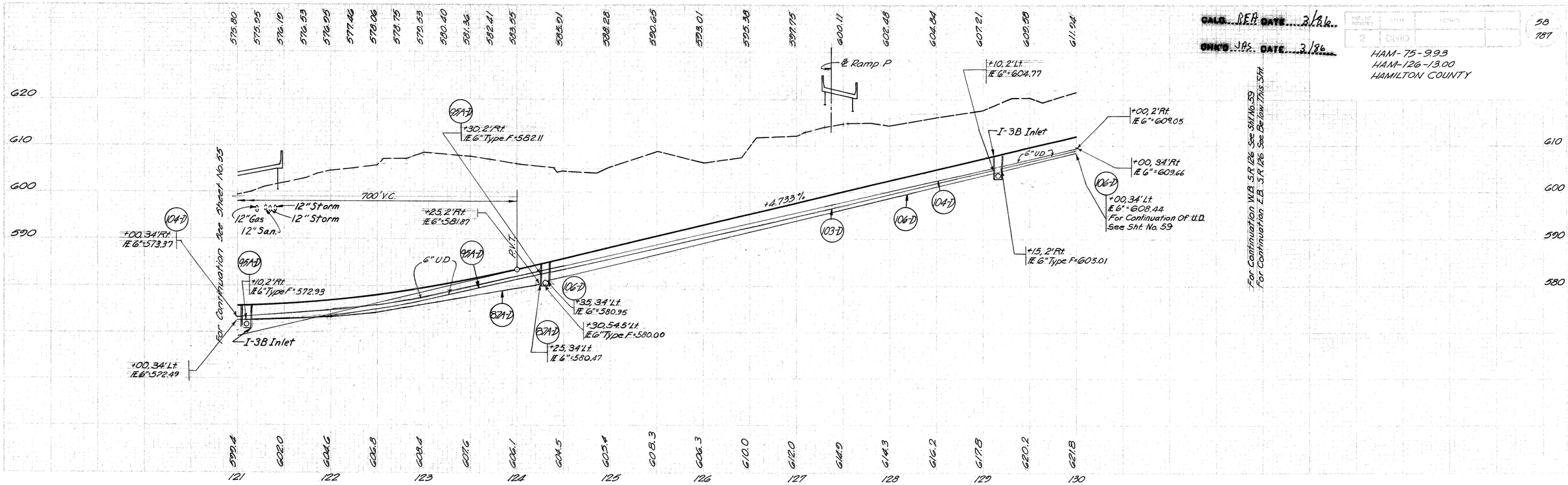
REF. NO.	STATION TO STATION	SIDE	304 Aggregate Base As Per Plan C.Y.	310 Subbase Type II As Per Plan C.Y.	402 Asphalt Concrete 1¾" C.Y.	404 Asphalt Concrete 1¼" C.Y.	407 Tack Coat Gal.	408 Bitum. Prime Coat Gal.	451 9" Reinf. Conc. Pav't. As Per Plan S.Y.	451 10" Reinf. Conc. Pav't. As Per Plan S.Y.	451 10" Reinf. Conc. Pav't. Mod. As Per Plan S.Y.	452 7"to9" Conc. Pav't. Mod. As Per Plan S.Y.	452 8"to9" Conc. Pav't. Mod. As Per Plan S.Y.	452 7"to10" Conc. Pav't. Mod. As Per Plan S.Y.	452 9"to10" Conc. Pav't. Mod. As Per Plan S.Y.	606 Bridge Term. Assem. Std. Type A Ea.	606 Anchor Assem. Std. Type A Ea.	606 Anchor Assem. Std. Type T Ea.	606 Std. Type S G.R. L.F.	609 Comb. Curb & Gutter Std. Typ. 3 L.F.	609 Curb Std. Type 2A L.F.	609 Curb Std. Type C L.F.	611 Reinf. Conc. Approach Slab(T=13) S.Y.	612 Conc. Median Std. Type S.Y.	622 Conc. Barrier Std. Type A L.F.	Special Drainage Connect C.Y.	SEE SHEET NO.
	ROADWAY																										
69-R	128+10 P - 139+00 ℄	LT.														1			1090								56,57,59
72-R	131+92 - 133+82 Ramp Q	RT.															1	1	102.5								57
73-R	2+11 - 3+73 Knollcrest	RT.														1	1		150								57
74-R	2+23 - 3+60 Knollcrest	LT.														1	1		100								57
75-R	6+86 - 7+22 Knollcrest	LT.														1			50								57
76-R	6+97 - 7+33 Knollcrest	RT.														1		1	37.5								57
	PAVEMENT																										
234-P	130+35 - 133+21.21 Ramp P	LT.		32								202										286				14	57
235-P	130+35 - 133+21.21 Ramp P	RT.		85					509																		57
236-P	130+35 - 133+21.21 Ramp P	RT.		13									95													11	57
237-P	130+00 - 133+24.51 ℄ E.B.	LT.		52										316												16	57
238-P	130+00 - 139+00 ℄ E.B.	LT.		556						51	3284																57
239-P	130+00 - 137+62.03 ℄ E.B.	LT. & RT.		74											442												57
240-P	130+00 - 138+62.03 ℄ 126	℄		55																					832		57
241-P	137+62.03 - 138+62.03 W.B.	RT. & LT.		19																				83			57
242-P	130+00 - 134+50 ℄ E.B.	RT.		111										133	533											7	57
243-P	130+00 - 137+59.79 ℄ E.B.	RT. & LT.		73											441												57
244-P	129+65 - 131+50 Ramp Q	LT.		9								62															57
245-P	129+65 - 134+50 Ramp Q	LT.		144					862																		57
246-P	129+65 - 134+50 Ramp Q	RT.		50								334														22	57
247-P	130+00 - 139+00 ℄ E.B.	RT.		531						60	3123																57
248-P	6+97 - 9+75 Knollcrest	RT.																			295						57
249-P	7+03.77 - 9+75 Knollcrest	LT. & RT.	161	212	47	33		386																			57
250-P	7+00 - 9+75 Knollcrest	LT.																			261						57
251-P	6+78.77 - 7+03.77 Knoll.	LT. & RT.		17																		20		10.4			57
252-P	3+58.51 - 3+83.51 Knoll.	LT. & RT.		16																		15		9.8			57
253-P	0+89.83 - 3+65 Knollcrest	RT.																			295						57
254-P	0+89.83 - 3+58.5 Knollcrest	LT. & RT.	169	208	49	35		405																			57
255-P	0+89.83 - 3+55 Knollcrest	LT.																			283						57
276-P	133+21.21 "P" - 39+00 ℄	LT.		86										515									579			29	57
279-P	1+13.31 - 1+28 Kodak Dr.	LT. & RT.	7	7	2	1		16																			57
280-P	134+50 - 139+00 E.B. 126	RT.		39										398												22	57
295-P	0+18.5 - 1+17 Honeywell	LT. & RT.	64	64	19	13		154																			57
296-P	0+18.81 - 0+74 McLean	LT. & RT.	34	34	10	7		82																			57
TOTAL			435	2487	127	89		1043	1371	111	6407	598	95	1362	1416	5	3	2	1590	1134	35	865	202	83	832	121	

Participation Code is ② on This Sheet For All Items Unless Marked.

CALC. REA DATE 3/86
CHK'D JAS DATE 3/86

58
787

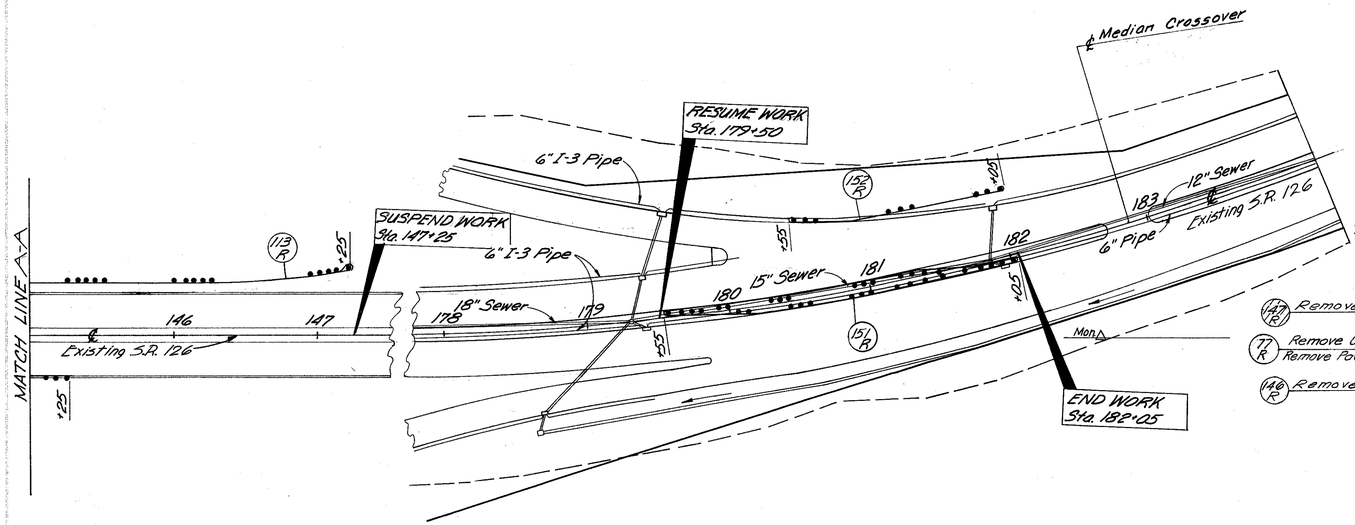
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

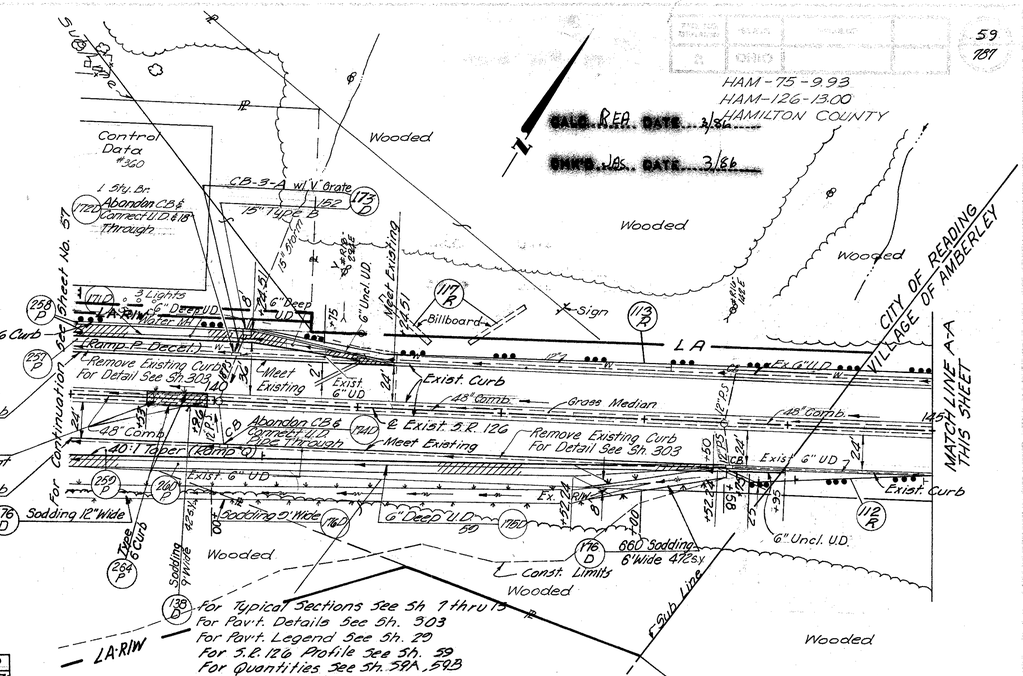


S.R. 126 - STA. 121+00 TO STA. 138+59.79 E.B. S.R. 126

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

CALC. REQ. DATE 3/86
CHK'D. JOS. DATE 3/86

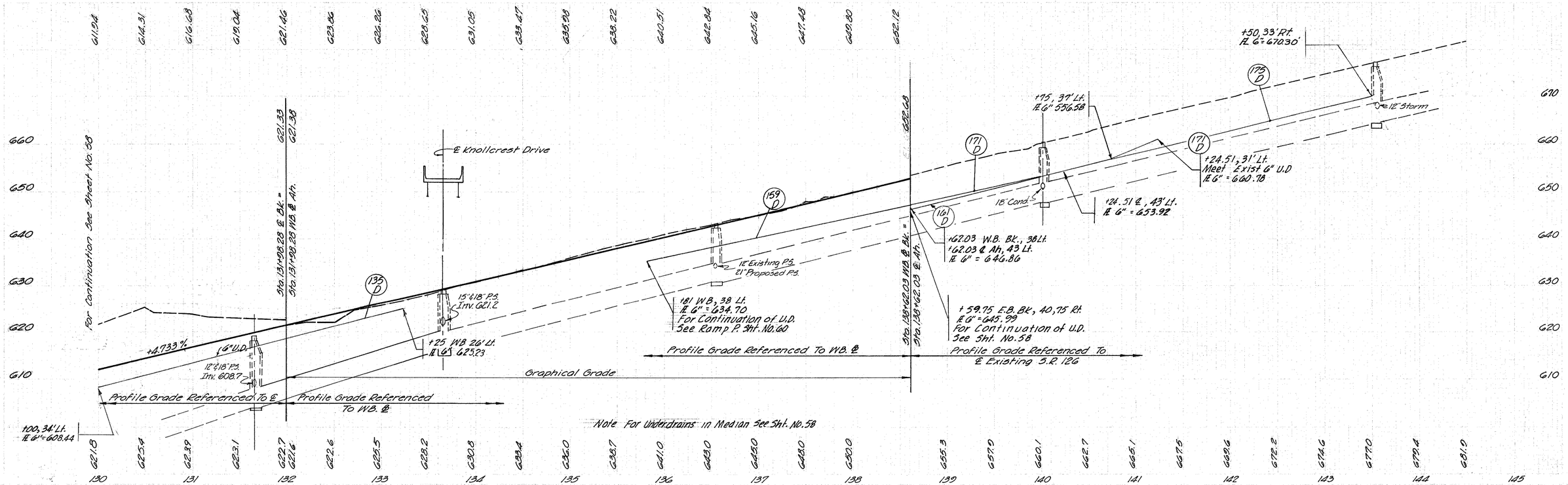




	DEVELOPED	CHECKED
	C.E.S. 12-1-71	M.D.D. 12-2-71

S.R. 126 Sta. 138+62.03 to Sta. 143+58		
ITEM 203 Excavation (Not Incl. Emb.)	8950	C.Y.
" 203 Embankment	0	C.Y.
" 659 Seeding & Mulching	7021	S.Y.

S.R. 126 STA. 139+00 TO STA. 143+58



ESTIMATED QUANTITIES

DRAINAGE

CALC. DS DATE 3/86

CHK'D JAS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

59A
787

HAM-75-993
HAM-126-1300
HAMILTON COUNTY

PARTICIPATION CODE ① IR-75-1(96)10
PARTICIPATION CODE ② F-2(13)

REF. NO.	STATION TO STATION	SIDE	202 Catch Basin Aband. Ea.	603 15" Conduit Type B L.F	604 Std. No. 3A C.B. w/ V-Grate Ea.	605 6" Deep Under Drains As Per Plan L.F	605 6" Unclass. Under Drains As Per Plan L.F	660 Sodding SY	SEE SHEET NO.
138-D	139+53 to 139+95	℄						42	59
171-D	139+00 to 141+25 ML	Lt				175	50		59
172-D	140+12 ML	Lt	1						59
173-D	140+19 SR 126	Lt		12	1				59/52
174-D	140+05 ML SR 126	Rt	1						59
175-D	139+00 to 143+52 ML	Rt				465			59
176-D	139+00 to 143+58 SR 126	Rt						472	59
TOTAL			2	12	1	640	50	514	

REF. NO.	STATION TO STATION	SIDE		SEE SHEET NO.
TOTAL				

All Items on this sheet are in Participation Code ② Unless Marked

ESTIMATED QUANTITIES

CALC. RER DATE 3/86
CHK'D DS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

598
787

HAM-75/126-9.93/13.00
HAMILTON COUNTY

Participation Code ① IR-75-1(96)10
Participation Code ② F-2(13)

REF. NO.	STATION TO STATION	SIDE	310 Subbase Type II As Per Plan Cu. Yd.	451 10" Reinf. Conc. Pav't As Per Plan Sq. Yd.	452 7" to 10" Conc. Pav't Mod. As Per Plan Sq. Yd.	606 Std. Type 5 G.R. Lin. Ft.	606 Anchor Assem. Std. Type A Each	606 Anchor Assem. Std. Type T Each	609 Curb Std. Type 6 Lin. Ft.	Special Drainage Connect. Cu. Yd.	SEE SHEET NO.
	ROADWAY										
112-R	143+75-145+25 ℄	Rt.				112.5	1	1			59
113-R	139+00-147+25 ℄	Lt.				803.75	1				59
151-R	179+55-182+05 ℄	Lt. & Rt.				450	2				59
152-R	180+55-182+05 ℄	Lt.				112.5	1	1			59
	PAVEMENT										
257-P	139+00-143+58 ℄	Lt.	39	233							59
258-P	139+00-141+24.51 ℄	Lt.	26		170				225	10	59
259-P	139+00-143+52.24 ℄	Rt.	66	396							59
260-P	139+00-143+58 ℄	Rt.	56		373					21	59
264-P	139+53-139+95 ℄	Lt. & Rt.							84		59
TOTAL			187	629	543	1478.75	5	2	309	31	

Participation Code is ② on This Sheet
For All Items Unless Marked

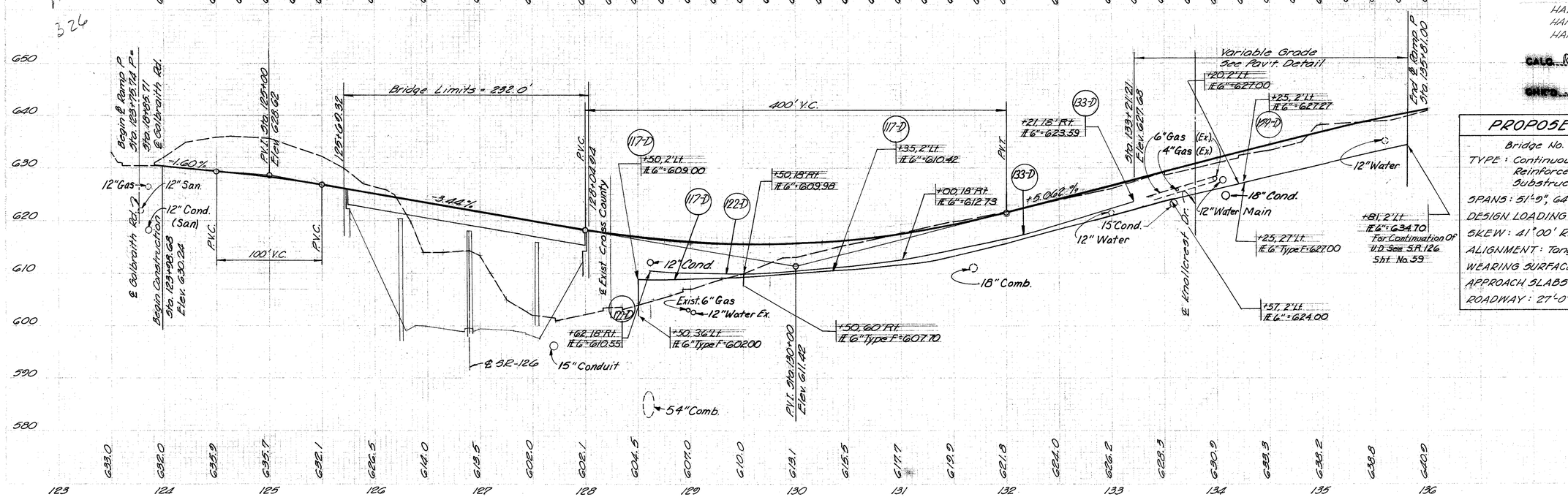
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

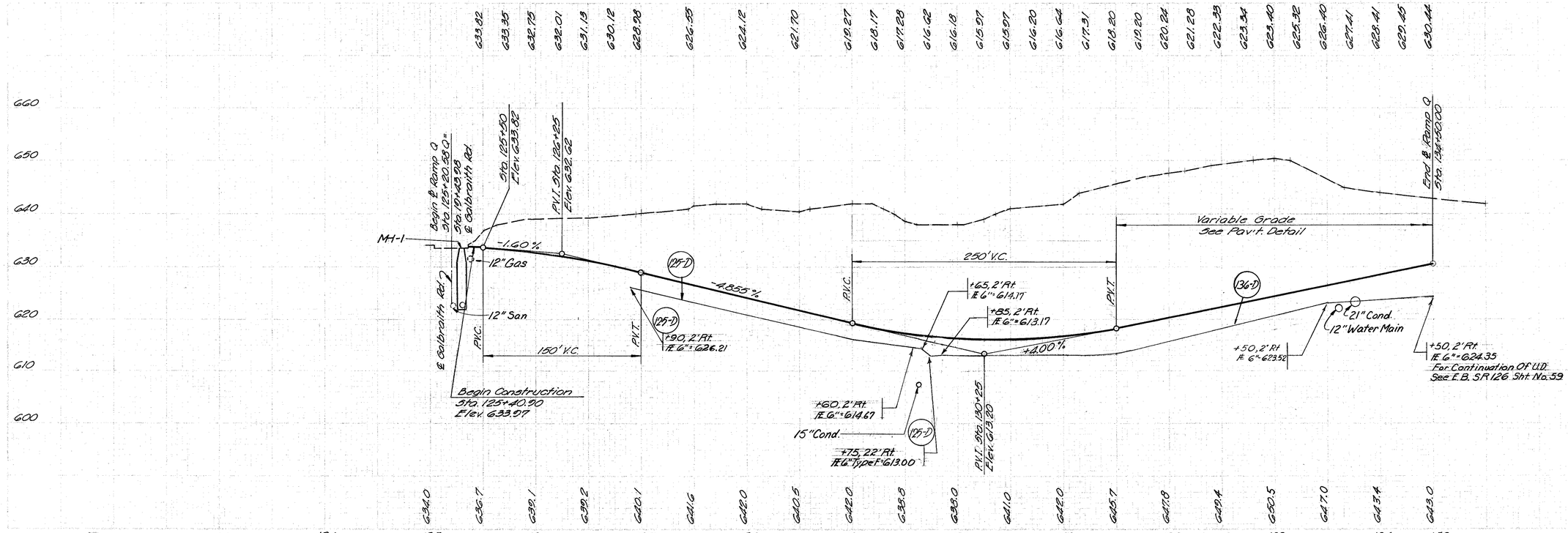
CALC. REP DATE 3/86

CHECK. MS DATE 3/86

PROPOSED STRUCTURE

Bridge No. HAM-126-1497
TYPE: Continuous Rolled Steel Beam With Reinforced Concrete Deck And Substructure.
SPANS: 51'-9", 64'-9", 64'-9" & 47'-9"
DESIGN LOADING: HS 20-44
SKEW: 41°00' R.F.
ALIGNMENT: Tangent & 250' Spiral Rt.
WEARING SURFACE: 1" Monolithic Concrete
APPROACH SLABS: AS-1-81 (25' Long)
ROADWAY: 27'-0" Face To Face Of Parapets





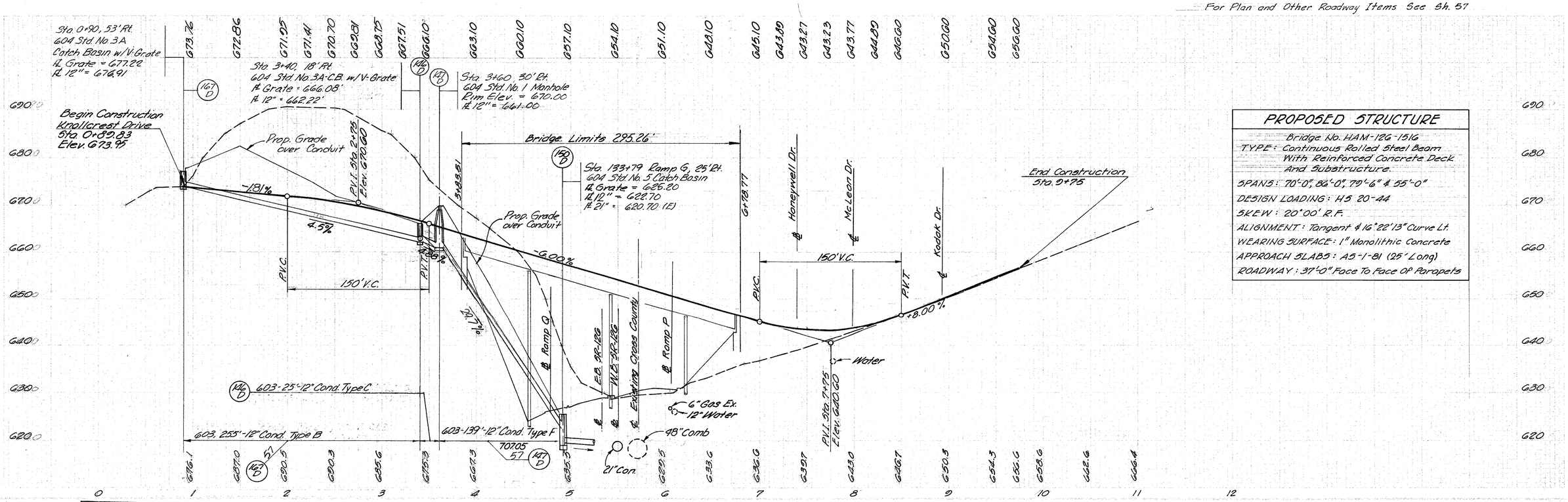
CALC. REA DATE 3/86

CHK'D JAS DATE 3/86

61
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

For Plan and Other Roadway Items See Sh. 57



PROPOSED STRUCTURE

Bridge No. HAM-126-1516

TYPE: Continuous Rolled Steel Beam With Reinforced Concrete Deck And Substructure.

SPANS: 70'-0", 86'-0", 79'-6" & 55'-0"

DESIGN LOADING: HS 20-44

SKEW: 20°00' R.F.

ALIGNMENT: Tangent & 16°22'13" Curve Lt.

WEARING SURFACE: 1" Monolithic Concrete

APPROACH SLABS: AS-1-81 (25' Long)

ROADWAY: 37'-0" Face To Face Of Parapets

DEVELOPED	CHECKED

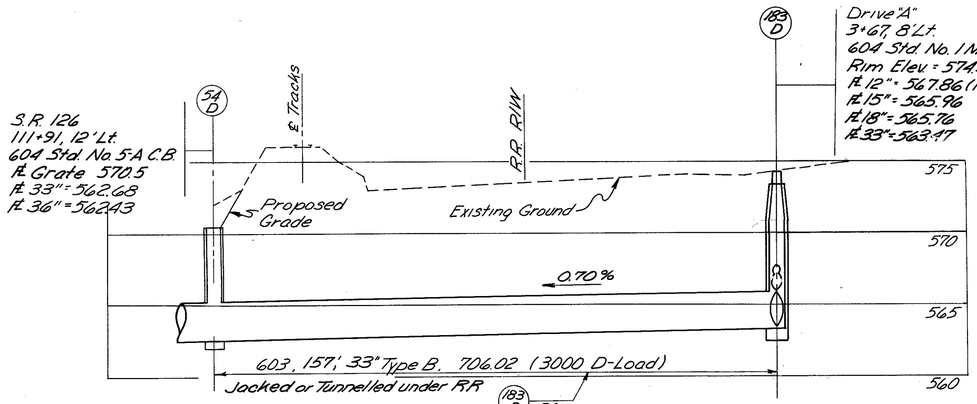
KNOLLCREST DRIVE STA. 0+00 TO STA. 9+75

CALC. BY REA DATE 3/86
CHKD. BY JAS DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

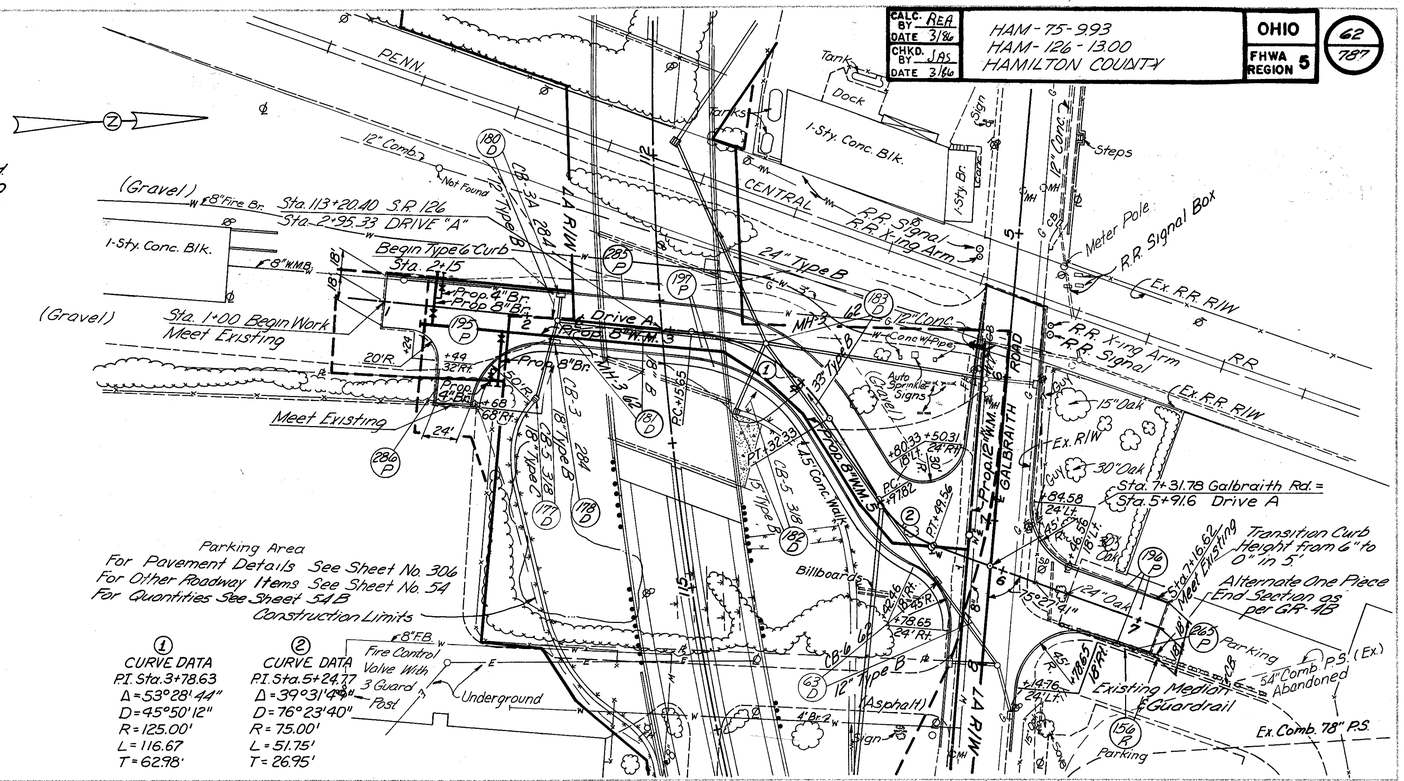
OHIO
FHWA REGION 5

62
787



PROPOSED STORM SEWER SYSTEM
Sta. 111+91 SR 126 To Sta 3+67 Drive "A"

Scale: Hort. 0 20 40
Vert. 0 5 10

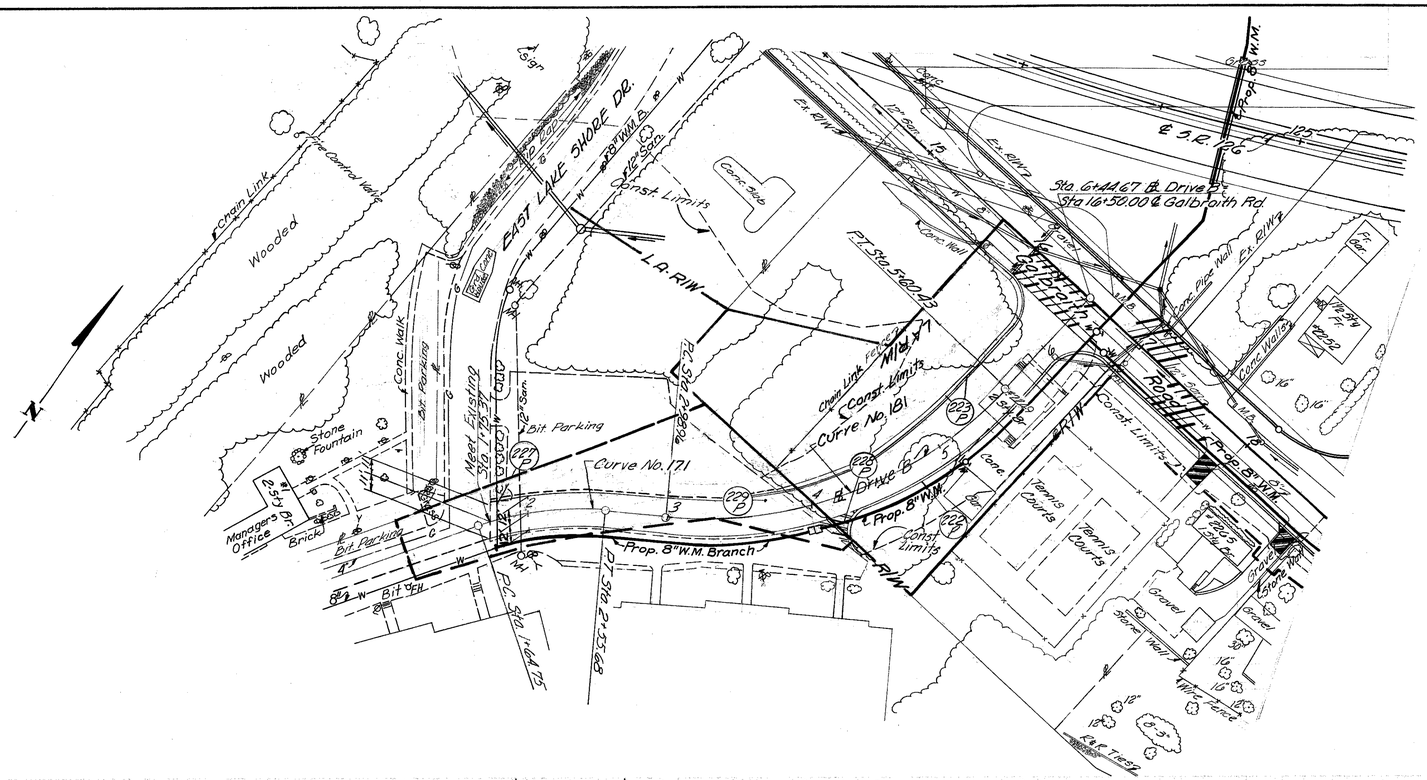


FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

63
187

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

CALC. REF. DATE 3/86
CHK'D. JAS DATE 3/86


EAST LAKE SHORE DR.
Chain Link
Wooded
Wooded
Conc. Walk
Bit. Parking
Stone Fountain
2 Sky Br.
Manager's Office
Brick
Bit. Parking
Bit. Walk
Meet Existing 36" R.C.P. Culvert
Bit. Parking
Curve No. 171
Prop. 8" W.M. Branch
P.C. Sta. 1+64.75
P.T. Sta. 2+33.68
L.A. R/W
P.T. Sta. 5+00.43
Const. Limits
Chain Link fence
Curve No. 181
Prop. 8" W.M.
Drive B
Const. Limits
Const. Limits
R/W
Ex. R/W
Ex. R/W
Sta. 6+44.67 B. Drive B
Sta 16+50.00 ℄ Galbraith Rd.
℄ S.R. 126
Prop. 8" W.M.
Conc. Wall
Conc. Curb
Conc. Curb
Conc. Curb

CALC. REA DATE 3/86

CHK'D JAS DATE 3/86

DIST. NO.	STATE	PROJECT	SHEET NO.
2	OHIO		

64
787

HAM-75-0.93
HAM-126-13.00
HAMILTON COUNTY

PROPOSED STRUCTURE

Bridge No. HAM-126-1483

TYPE : Continuous Welded Plate Girder With Reinforced Concrete Deck And Substructure.

SPANS : 72'-0", 110'-9", 109'-3" & 87'-6"

DESIGN LOADING : HS 20-44

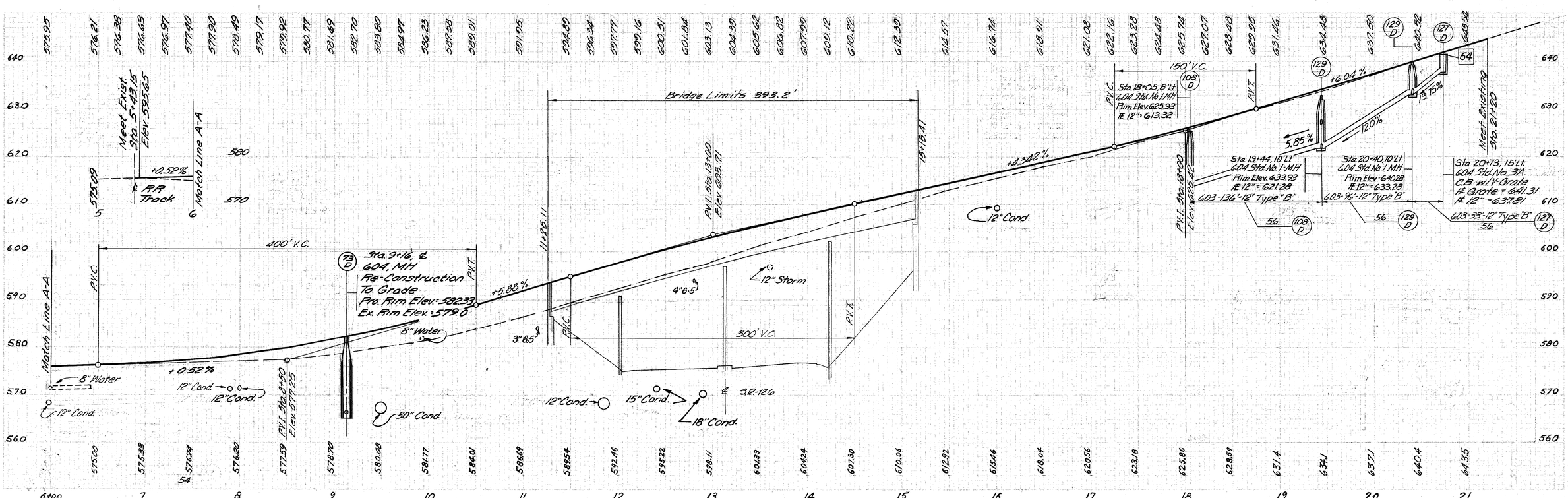
SKEW : 65°00' L.F.

ALIGNMENT : Tangent

WEARING SURFACE : 1" Monolithic Concrete

APPROACH SLABS : AS-1-81 (25' Long)

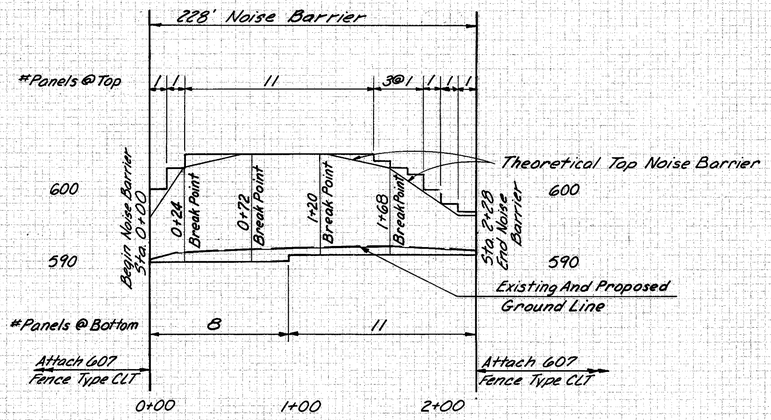
ROADWAY : 40'-6" Face To Face Of Parapets



DEVELOPED	CHECKED
AAG	JAS

CALC. BY	DATE 3/86	HAMILTON COUNTY	OHIO	65
CHKD. BY	DATE 3/86	HAM-75/126-9.93/13.00	FHWA REGION 5	787

Note: All Panels 12'-0" Wide Unless Noted



Noise Barrier "A"
Sta. 58+25 to Sta. 60+58
E.B. S.R. 126, Right Side

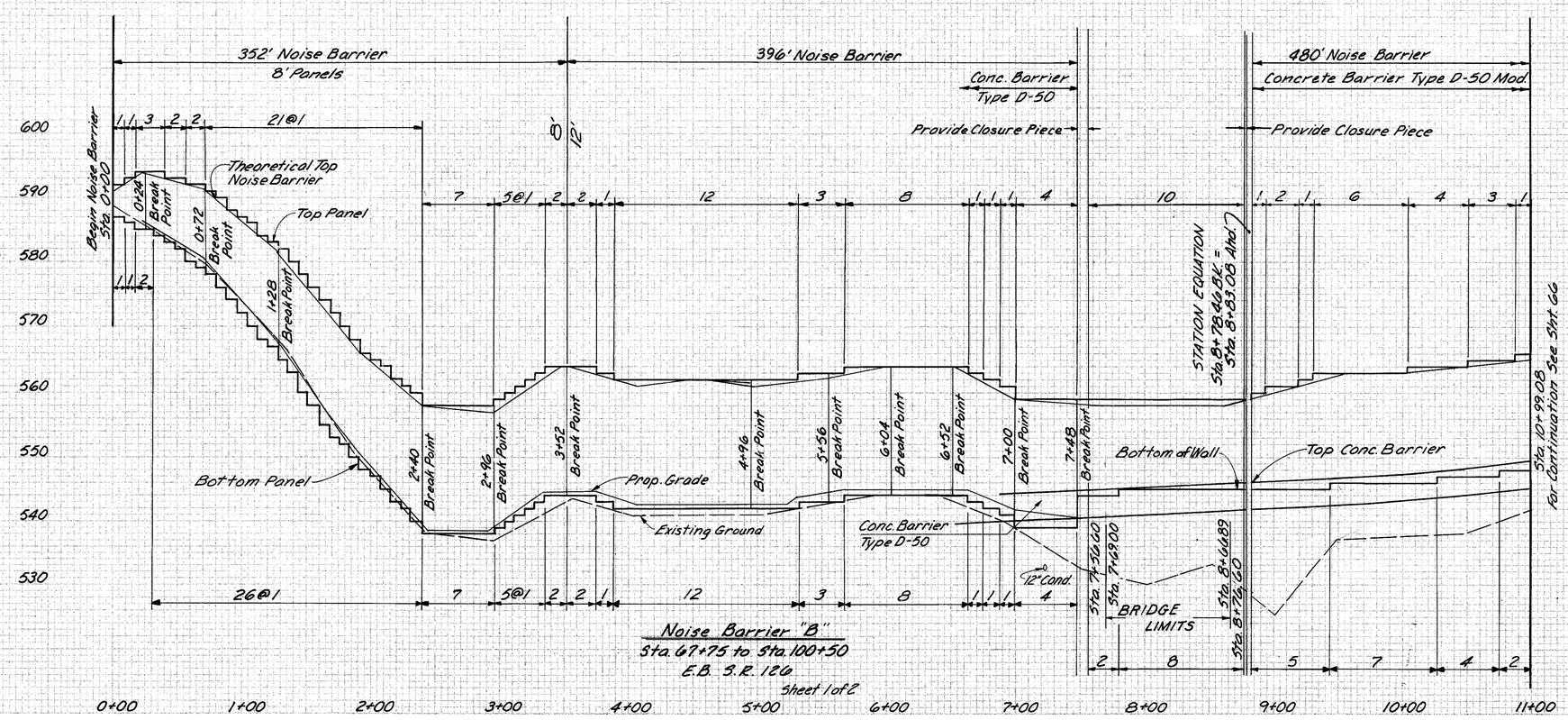
NOISE BARRIER QUANTITIES

		UNIT	CODE	WALL 'A'	WALL 'B'	WALL 'C'	Total*
Item Special	Noise Barrier 10' and Under in height.	S.F.	1	384		780	1164
			2		6022.24	120	6142.24
Item Special	Noise Barrier Over 10' to 14' in height.	S.F.	1	1428		28354.8	29782.8
			2		4170.04	17715.12	21885.16
Item Special	Noise Barrier Over 14' to 20' in height.	S.F.	1	1080			1080
			2		38673.00	1080	39753

* Quantities Carried to General Summary

FOUNDATION SCHEDULE

Location	5'-0" Depth Each	7'-0" Depth Each	9'-6" Depth Each
WALL 'A'	4	9	7
WALL 'B'	8	94	159
WALL 'C'	2	6	234
Total	14	109	400



Noise Barrier "B"
Sta. 67+75 to Sta. 100+50
E.B. S.R. 126
Sheet 1 of 2

Note:
All Panels 12' wide unless Otherwise Noted.
For Noise Barrier Location See Sheet No. 65A & B.
For Catch Basin Details Wall "B", See Sheet No. 342

Scale
Horizontal
0 25 50 100
0 5 10 20
Vertical

PLATE 3 CROSS SECTION O. P. R. & R. R. STANDARD
LEYDEN CORPORATION

CALC. BY	HAM-75-9.93	OHIO
CHKD. BY	HAM-126-13.00	FHWA REGION 5
DATE	HAMILTON COUNTY	65A 787

NOISE BARRIER LOCATION

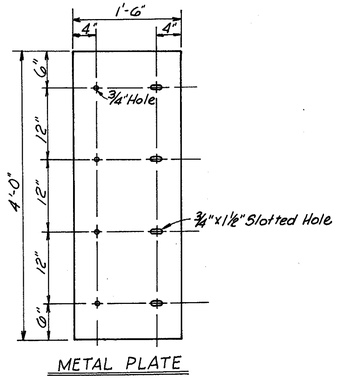
STA 58+25 TO STA 60+57

EASTBOUND SR 126

NOISE BARRIER "A"

BREAKS IN ALIGNMENT BASED ON 12'-0" PANELS EXCEPT WHERE NOTED

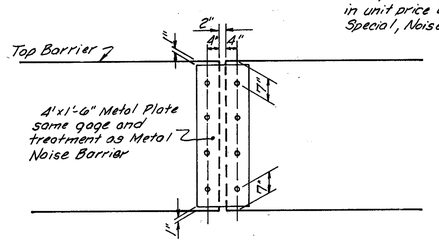
ROADWAY STATION	OFFSET (FT.)	DEFLECTION DEG	MIN	SEC	NOISE BARRIER STATION	REMARKS
58+25	227.00	--	--	--		END 607 FENCE, TYPE CLT
ATTACH 607 FENCE TO END POST OF NOISE BARRIER						
58+25	227.00	--	--	--	0+00	BEGIN NOISE BARRIER
58+48.83	229.86	-7	47	34	0+24	
58+96.22	229.06	-1	10	55	0+72	
59+44.79	227.28	-0	04	12	1+20	
59+94.99	225.23	3	58	55	1+68	
60+54.98	226.07	--	--	--	2+28	END NOISE BARRIER
ATTACH 607 FENCE TO END POST OF NOISE BARRIER						
60+54.98	226.07					BEGIN 607 FENCE,TYPE CLT



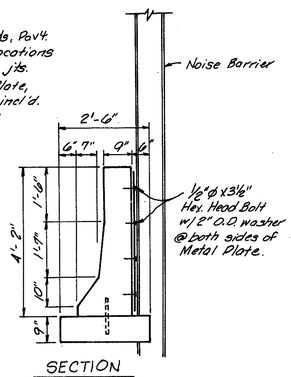
METAL PLATE

METAL PLATE for EXPANSION JOINTS w/ 622 CONCRETE BARRIER TYPE D-50 MOD.

NOTE:
Use Plate at all Bridge Ends, Pavt. Expansion Jts. and other locations which require expansion jts. Cost of installing Metal Plate, Bolts, Washers, etc. to be incl'd. in unit price bid for Item Special, Noise Barrier.



ELEVATION



SECTION

NOISE BARRIER LOCATION

STA 502+64.71 TO STA 54+50 SR 126

WESTBOUND SR 126

NOISE BARRIER "C"

BREAKS IN ALIGNMENT BASED ON 12'-0" PANELS EXCEPT WHERE NOTED

ROADWAY STATION	OFFSET (FT.)	DEFLECTION DEG MIN SEC	NOISE BARRIER STATION	REMARKS
502+64.71	-35.21	ON 4° CURVE	0+00	12'PANELS (BY OTHERS)
503+26.80	-35.21	ON 4° CURVE	0+60	
CLOSURE PANEL (BY OTHERS)				
503+30.81	-35.21	ON 4° CURVE	0+63.91	BRIDGE LIMIT
503+34.74	-35.21	ON 4° CURVE	0+67.74	BEGIN NOISE BARRIER
506+39.86	-35.21		3+65.36	C.S. OF 4° CURVE
507+11.70	-35.21	ON SPIRAL	4+35.86	BRIDGE LIMIT
507+24.30	-35.21	ON SPIRAL	4+51.74	
CLOSURE PANEL				
507+27.87	-35.21	ON SPIRAL	4+56	BEGIN TRANSITION
510+39.86	-37.46		7+60.53	END TRANSITION, S.T. OF 4° CURVE
- - -

NOISE BARRIER LOCATION

STA 67+75 TO STA 100+49.91 SR 126

EASTBOUND SR 126

NOISE BARRIER "B"

BREAKS IN ALIGNMENT BASED ON 12'-0" PANELS EXCEPT WHERE NOTED

ROADWAY STATION	OFFSET (FT.)	DEFLECTION DEG	MIN	SEC	NOISE BARRIER STATION	REMARKS
STA 0+00 to STA 3+52 BREAKS IN ALIGNMENT BASED ON 8' PANELS						
67+75	210.00	--	--	--	--	END 607 FENCE, TYPE CLT
ATTACH 607 FENCE TO END POST OF NOISE BARRIER						
67+75	210.00	--	--	--	0+00	BEGIN NOISE BARRIER
68+01.75	213.20	-29	24	14	0+24	
68+51.26	194.53	-16	41	06	0+72	
68+97.80	157.78	8	17	38	1+28	
69+96.15	93.68	12	29	09	2+40	
70+49.32	70.30	65	12	22	2+96	
70+94.92	105.57				3+52	
STA 3+52 END 8' PANELS; BEGIN 12' PANELS						
70+94.92	105.57	-45	51	37	3+52	
72+44.17	81.20	18	10	55	4+96	
73+06.67	86.70	7	35	38	5+56	
73+56.13	96.01				6+04	BEGIN 607 FENCE,TYPE CLT
ATTACH 607 FENCE TO POST OF NOISE BARRIER						
73+56.13	96.01	-19	02	50	6+04	
74+05.89	88.21	-10	08	38	6+52	
74+52.67	71.05	-22	22	07	7+00	
74+87.88	37.38	45	15	18	7+48	
BEGIN CONCRETE BARRIER, TYPE D-50 MODIFIED; MEET SHOULDER						
CLOSURE PANEL						
74+96.65	37.38	ON 3°CURVE			7+56.60	
75+09.15	37.38	ON 3°CURVE			7+69.00	BRIDGE LIMIT
76+00.15	37.38	ON 3°CURVE			8+66.89	BRIDGE LIMIT

NOISE BARRIER LOCATION

STA 67+75 TO STA 100+49.91 SR 126

EASTBOUND SR 126

NOISE BARRIER "B"

BREAKS IN ALIGNMENT BASED ON 12'-0" PANELS EXCEPT WHERE NOTED

ROADWAY STATION	OFFSET (FT.)	DEFLECTION DEG	MIN	SEC	NOISE BARRIER STATION	REMARKS
76+19.04	37.38	ON 3°CURVE			8+76.60	BEGIN TRANSITION
CLOSURE PANEL						
76+20.94	37.46	ON 3°CURVE			8+78.46	BK=8+83.08 AH END TRANS.
81+11.03	37.46	57	13	51	13+63.08	
STA 13+63.08 END 12' PANELS; BEGIN 8' PANELS						
END CONCRETE BARRIER TYPE D-50 MODIFIED; LEAVE SHOULDER						
STA 13+63.08 TO STA 14+34.08 BREAKS IN ALIGNMENT BASED ON 8' PANELS						
81+50	98.00				14+35.08	END 607 FENCE TYPE CLT
ATTACH 607 FENCE TO POST OF NOISE BARRIER						
81+50	98.00	-57	13	51	14+35.08	
STA 14+35.08 END 8' PANELS; BEGIN 12' PANELS						
84+02	98.00	-5	56	53	16+87.08	
84+49.74	93.03	-21	34	23	17+35.08	
84+92.31	70.85	28	42	39	17+83.08	
85+52	72.09	1	06	03	18+43.08	
87+20.16	78.81	- 0	08	39	20+11.08	
STATION EQUATION						
87+24.33 8.00' LT EB SR 126 = 87+44.00 SR 126						
88+00.05	89.00	1	40	10	20.71.08	
88+48.58	91.92	- 1	43	33	21+19.08	
88+97.59	92.97	2	56	32	21+67.08	

NOISE BARRIER LOCATION

STA 67+75 TO STA 100+49.91 SR 126

EASTBOUND SR 126

NOISE BARRIER "B"

BREAKS IN ALIGNMENT BASED ON 12'-0" PANELS EXCEPT WHERE NOTED

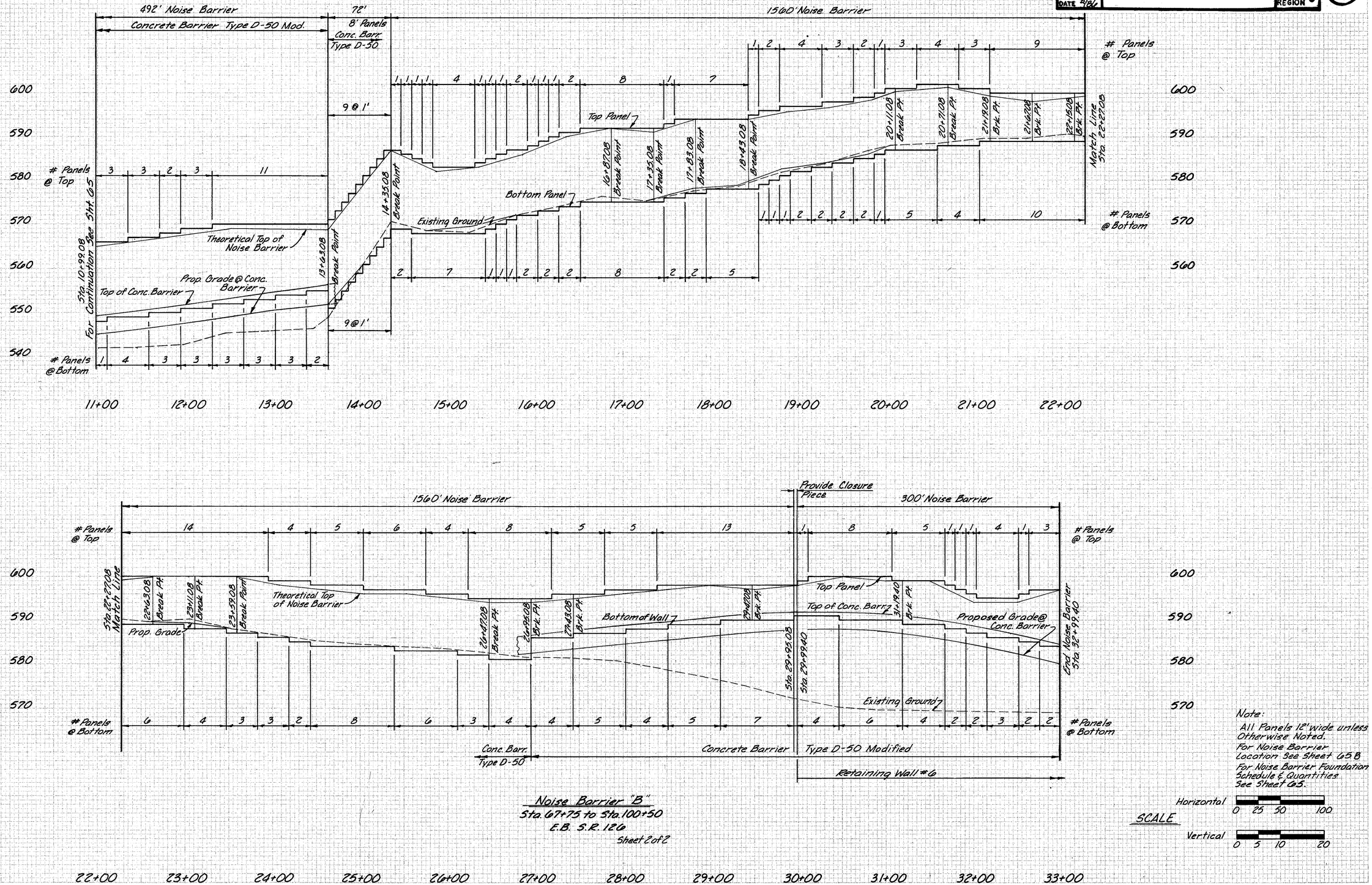
ROADWAY STATION	OFFSET (FT.)	DEFLECTION DEG	MIN	SEC	NOISE BARRIER STATION	REMARKS
89+46.95	95.84	- 4	26	11	22+15.08	
89+96.81	94.16	- 0	14	20	22+63.08	
90+46.97	91.22	1	25	09	23+11.08	
90+97.47	88.19	6	49	59	23+59.08	
93+97.39	76.26				26+47.08	BEGIN 607 FENCE TYPE CLT
ATTACH 607 FENCE TO POST OF NOISE BARRIER						
93+97.39	76.26	- 0	43	08	26+47.08	
94+45.74	70.53	8	46	12	26+95.08	
BEGIN CONCRETE BARRIER TYPE D-50 MODIFIED;MEET SHOULDER PARALLEL TO RAMP N						
94+94.11	71.78				27+43.08	
96+97.72	85.84				29+47.08	
97+45.67	88.08				29+95.08	BEGIN TRANS TO WALL 6
CLOSURE PIECE						
97+50	88.29				29+99.42	END TRANS TO WALL 6
STA 29+99.42 END CONCRETE BARRIER TYPE D-50 MODIFIED; BEGIN WALL 6						
97+51	88.33				30+00.42	1ST SUPPORT ON RET WALL
100+50.93	92.21				33+00.42	
STA 33+00.42 LAST SUPPORT ON RETAINING WALL; END NOISE BARRIER						

CALC. BY [illegible] DATE 7/86
CHKD. BY DS DATE 7/86

HAMILTON COUNTY
HAM-75/12G - 9.93/13.00

OHIO
FHWA REGION 5

66
787



Note:
All Panels 12' Wide unless Otherwise Noted.
For Noise Barrier Location See Sheet 65B
For Noise Barrier Foundation Schedule & Quantities See Sheet 65.

SCALE
Horizontal 0 25 50 100
Vertical 0 5 10 20

Noise Barrier "B"
Sta. 67+75 to Sta. 100+50
E.B. S.R. 126
Sheet 2 of 2

PLATE 3 CROSS SECTION O. F. D. 3 & 4 X STANDARD
DIVISION CORPORATION

CALC. BY DATE 12/86
CHKD. BY DATE 5/86

HAMILTON COUNTY
HAM-75/12.0-9.93/13.00

OHIO
FHWA REGION 5

67
787

12' Panels (By Others)

384' Noise Barrier

1848' Noise Barrier

Provide Closure Piece

Panels @ Top: 9, 21, 2, 2, 4, 4, 4, 4, 8, 3, 3, 2, 2, 4, 4, 1, 2, 2, 2

Panels @ Bottom: 25, 7, 4, 5, 5, 5, 3, 3, 2, 2, 2, 2, 2, 3, 3, 2, 4

Top Panel

Bottom of Wall

Top Concrete Barrier

Theoretical Top Noise Barrier

Proposed Grade @ Conc. Barrier

Bridge Limits 371.95'

Sta. 0+43.64

±63.91

Sta. 0+67.74 Begin Noise Barrier

+35.86

4+51.72

4+36.0

1848' Concrete Barrier Type D-50 Modified

Sta. 10+68

Match Line

Existing Ground

580 570 560 550 540 530 520 510

0+00 1+00 2+00 3+00 4+00 5+00 6+00 7+00 8+00 9+00 10+00 11+00

1848' Noise Barrier

Panels @ Top: 6, 6, 7, 8, 2, 12, 4, 4, 3, 3, 2, 3, 3, 3, 3, 4, 3, 3, 3, 4, 4, 2, 1

Panels @ Bottom: 3, 3, 5, 20, 8, 5, 3, 3, 4, 3, 3, 3, 3, 3, 2, 2, 3, 2, 3, 2, 1

For Continuation See Sht No. 68

Sta. 21+84

Concrete Barrier Type D-50 Modified 1848'

11+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00 20+00 21+00 22+00

NOTE: All Panels 12'-0" wide unless noted.

For Noise Barrier Location See Sht No. 65A.

For Noise Barrier Foundation Schedule & Quantities See Sht. 65.

NOISE BARRIER "C"

Sta. 502+64.71 TO Sta. 510+41.31
Sta. 22+94.46 TO Sta. 54+50
W.B. S.R. 126

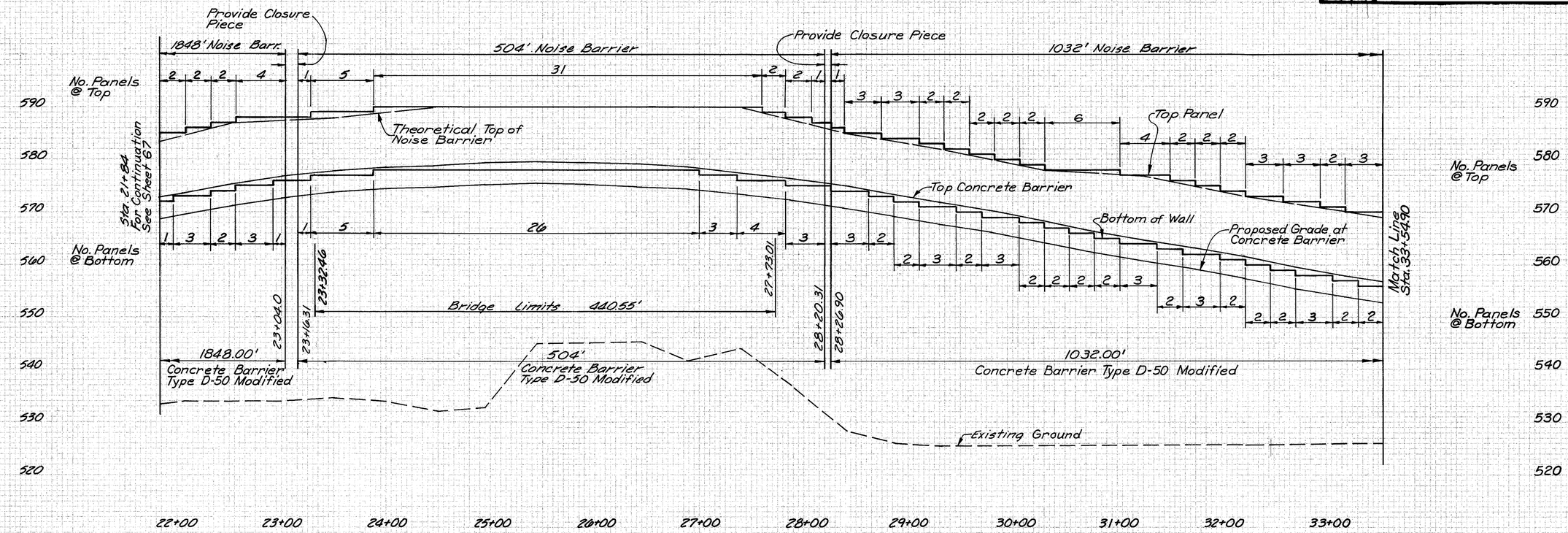
Sheet 1 of 2

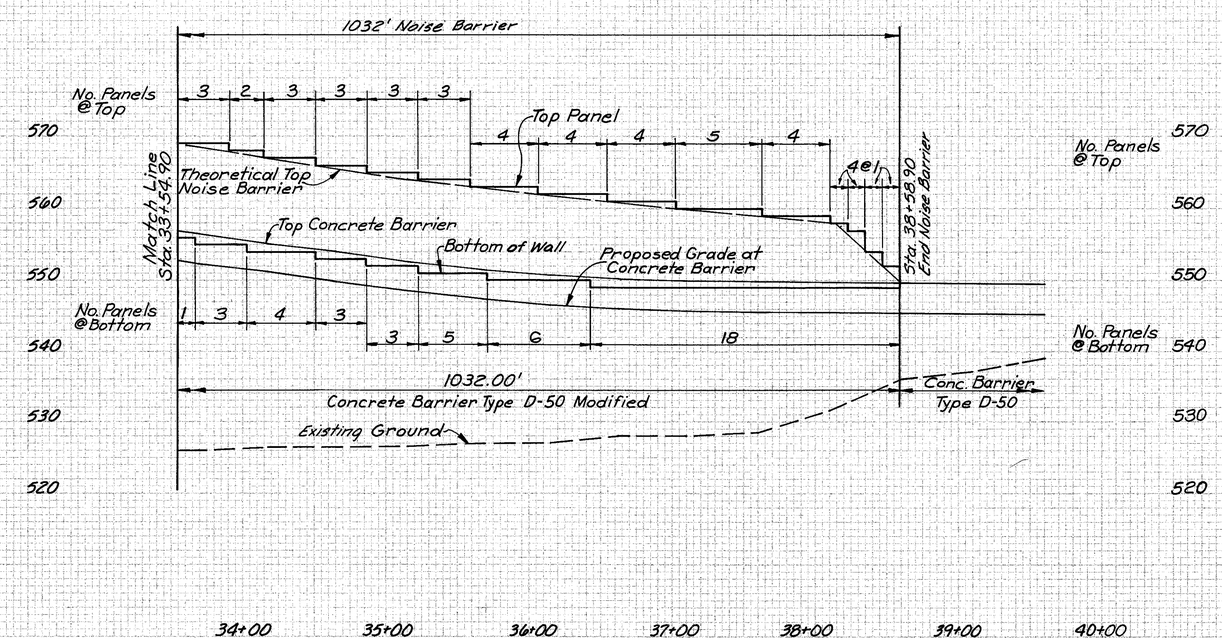
SCALE

VERT. 0 5' 10' 20'
HORIZ. 0 50' 100'

PLATE 3 CROSS SECTION O.D.P.W.R.C. STANDARDS

CALC. BY	DATE 3/86	CHKD. BY	DATE 3/86	HAMILTON COUNTY HAM-75/126-9.93/13.00	OHIO	FHWA REGION 5	68 / 787





Note:
All Panels 12'-0" Wide unless Noted.
For Noise Barrier Location See Sheet 65A.
For Noise Barrier Foundation Schedule & Quanties See Sheet 65.

NOISE BARRIER "C"

STA. 502+64.71 TO STA. 510+41.31
STA. 22+94.46 TO STA. 54+50
W.B. S.R. 126

Sheet 2 of 2

SCALE

VERT. 0 5' 10' 20'

HORIZ. 0 50' 100'

GENERAL NOTES

Noise Barrier

I. Description
II. Posts
III. Barrier Materials
IV. Construction Methods
V. Method of Measurement
VI. Basis of Payment

Item Special-Noise Barrier

I. Description

This work shall consist of furnishing and installing noise barriers including all material, labor and equipment required in accordance with these provisions and applicable standards and in conformity with the dimensions, lines and grades shown on the plans.

No mixing of barrier material types or colors at any one noise barrier will be allowed, except where a run of noise barrier includes placement on a bridge.

Noise barriers placed on bridges shall not weigh more than 225 lbs. per linear foot.

Barrier material type may be any of those covered by the approved drawings listed in the proposal unless otherwise specified.

Barrier fabrication and erection details, except for posts, shall be as per approved drawings listed in the proposal. Posts and foundations are detailed in these plans. These post and foundation details govern should any conflict arise between them and the approved drawings.

The barrier and the associated work shall conform to sections 499 and 501 of the CMS as appropriate.

II. Posts

A. Sawn Timber Posts (to be used with wooden noise barriers only)

Sawn timber posts shall be select structure grade southern pine, surfaced four sides, with a allowable stress of 1,500 PSI. The material shall be dried to 19% maximum moisture content prior to preservative treatment. Color shall be similar to the barrier material furnished.

B. Glulam Posts (to be used with wooden noise barriers only)

Glulam posts (stress symbol 20F, wet use condition) shall be southern pine with an allowable stress of 2,000 PSI for the finished laminated post. AITC Standard 117, latest revision, and VPS-PS 56-73, shall govern the material requirements and laminating procedures. The adhesive used in glulam production shall comply with "wet condition" use as set forth in VPS-PS 56-73. The appearance grade of the posts shall be Industrial per Section 2 of AITC Standard 110. Color shall be similar to the barrier material furnished.

C. Steel Posts

Steel posts shall be in accordance with Item 513 of the CMS. The posts except as otherwise specified shall conform to ASTM A588.

All post surfaces exposed to earth shall have coal tar epoxy paint applied to them. Minimum surface coverage shall be from 6" below the top of the concrete encasement to 6" above finished ground. Painting shall be done prior to erection. Steel surfaces shall be sand blasted to the near-white grade, conforming to Steel Structure Painting Council Specification SSPC-SP10. The paint shall be a coal tar epoxy paint, conforming to SSPC - Paint 16 (black). The paint shall be applied in accordance with the manufacturer's recommendations. The paint shall be applied in two coats to a dry film thickness of 16 mils at its thinnest spot.

As an alternate to the above, the contractor may supply posts as per ASTM A572 grade 50, hot dipped galvanized per ASTM A123 and omit the coal tar epoxy paint. Exposed posts shall be painted to match panel color. Parapet mounted posts shall conform to this alternate.

Painting shall conform to Item 514 of the CMS.

D. Concrete Posts, Pedestals and Spread Footings

Reinforcing steel shall be ASTM A615, A616, or A617, Grade 40 or Grade 60.

Concrete shall be in accordance with Item 511 of the CMS, Class C.

Concrete for posts shall contain an admixture to color the concrete integrally.

Color of concrete posts shall be similar to barrier material furnished.

E. Prestressed Concrete Posts

Item 515 of the CMS shall apply except as modified below. Prestressed Concrete; compressive strength - 5,000 PSI, compressive strength at transfer of prestress - 4,000 PSI, prestressing strand - ASTM A416. Ultimate strength F's = 270,000 PSI. Initial stress = 0.70 F's.

Prestressing strand shall be 1/2" diameter with an area of 0.154. An initial tensile force of 28,900 lbs. shall be applied to each strand. Exposed strand ends shall be painted with an approved epoxy. See paragraph C. above for specifications and application rates.

Concrete for posts shall contain an admixture to color the concrete integrally. Color of concrete shall be similar to barrier material furnished.

F. Reinforced Masonry Posts

Reinforcing steel shall be as per II.D. above. Concrete pea gravel for posts shall conform to ASTM C 476. Portland Cement, Type I, II or III, shall be used in the grout mix.

Posts shall be faced either with brick or concrete block. Color and texture shall be similar to barrier material furnished.

For additional masonry notes, see masonry wall plans.

G. Concrete Backfill

Concrete backfill for drilled shafts shall be in accordance with Item 511 of the CMS, Class C concrete. A plasticizer shall be added to the concrete in accordance with ASTM C494, Type A or D. Vibration of the concrete backfill is not required.
Reinforcing steel in the concrete backfill shall be as per II.D. above.

III Barrier Materials

For listing of acceptable barrier materials and designs, see note in proposal.

A. Noise barriers by Fanwall and Hoover (proprietary products) are acceptable unless otherwise stated in these plans, where the wider berm required for installation can be constructed.

1. The elevation of the top of the noise barrier shall be maintained and the plan quantities for noise barrier shall not be adjusted for a Fanwall or Hoover installation.

2. Payment for these barriers shall be based on the plan quantities for noise barrier. Earthwork quantities and payment shall be adjusted as required to provide the wider berm; however, no increase in costs shall be incurred for earthwork above plan quantities. All other costs related to constructing these barriers in addition to quantities shown in the plans shall be included in the price bid for noise barrier.

IV. Construction Methods

A. Noise barriers shall be installed in accordance with the plans. Joints and connections shall be secured in such a manner as to be structurally sound with no visible openings for sound transmission and, in the case of metal barriers, shall not be a secondary source of noise transmission due to vibration.

B. Marred, chipped, scratched, spalled or damaged areas of noise barriers shall be repaired or replaced in accordance with the manufacturer's recommendations and as directed by the Engineer at the Contractor's expense.

C. Preservative treatment of all wood materials used in the noise barrier shall be in accordance with section 712.06 of the CMS and the requirements of one of the following optional materials:

TYPE	RETENTION RATE (lbs./cu.ft.)	
	Above Ground	In Ground Contact
CCA-Type C	0.4	0.6
Penta/LPG	0.4	0.6

Penta/LPG shall be penta-chlorophenol in AWPA P9 Section 2 solvent.

Laminated components shall be in conformance with AWPA Standard C28 for Glulam. Sawn lumber shall be in conformance with AWPA Standard C2.

Additional requirements for CCA-Type C are:
1. All lumber materials shall be dried to 19 percent moisture content or less prior to treatment. The treatment shall be in accordance with the AWPA Standards.
2. The same preservative shall be used to treat bolt holes, saw cuts, etc., (if any), and for additional dressing deemed necessary by the Engineer.
3. All wood members, except posts, shall be kiln-dried to a moisture content of 15 percent or less after preservative treatment.
4. After completion of the preservative treatment, all lumber materials shall be protected from increases in moisture content until they are incorporated into the wall.
5. CCA-Type C shall meet AWPA P-5.

Payment for all the above shall be included in the unit price bid for Item Special, Noise Barrier.

D. Trench backfill for noise barrier construction shall be placed in accordance with Section 603.08 (type A or B conduit) of the CMS for trench backfill. The trench backfill shall be granular material. Aggregate drains in accordance with Item 605 of the CMS shall be placed at all low spots in the noise barrier profile.

If, in the opinion of the Engineer, the trench is so narrow that compaction may not be achieved, the trench excavation shall be backfilled with concrete to the satisfaction of the Engineer. No additional compensation will be made for the concrete.

E. All excess excavation shall be disposed of in a manner satisfactory to the Engineer.

F. After erection of the noise barrier, the disturbed area shall be left in a finished condition at the direction of the Engineer and a growth of grass established, at the Contractor's expense, in accordance with CMS Item 659.

G. Tolerances

1. Posts (measured at top)

a. Vertical alignment shall be within 0.05 inch/ft. of height.

b. Posts shall be set within ± 1/2 inch of their specified location.

2. Noise barriers

a. Vertical alignment shall be within 0.05 inch/ft. of height.

H. For noise barriers that are built on top of earth berms, the berms shall be constructed of earthwork fill material in accordance with Item 203 of the CMS.

V. Method of Measurement

Noise barriers shall be measured in square feet of barrier using a height from bottom of wall to top of wall as detailed in these plans and a length from post to post, installed, complete, and in place.

Quantities in this plan are reduced for construction adjacent to concrete parapet or barrier. Noise barrier types requiring construction to the ground are acceptable with no change in quantities.

Trench Wall type noise barriers are acceptable with no change in plan quantities.

VI. Basis of Payment

Noise barriers, complete and in place, will be paid for at the contract unit price per square foot, which shall be full compensation for all materials, labor and equipment necessary to construct the barrier and, inclusive of, all excavation, backfill with suitable material, aggregate drains, compaction, disposal of surplus or unsuitable materials, seeding, fertilizing and mulching of disturbed areas.

Item	Description	Unit
Special	Noise Barrier, 10 ft.ht. and under	Sq.ft.
Special	Noise Barrier, over 10 to 14 ft.ht.	Sq.ft.
Special	Noise Barrier, over 14 to 20 ft.ht.	Sq.ft.

ABBREVIATIONS

AITC - American Institute of Timber Construction
ASTM - American Society for Testing and Materials
AWPA - American Wood Preservers' Association
BIA - Brick Institute of America
CCA - Cromated Copper Arsenate
CMS - Construction and Materials Specifications of ODOT
ILI - Indiana Limestone Institute
LPG - Volatile Petroleum Solvent (liquid propane gas)
SSPC - Structural Steel Painting Council
VPS - Voluntary Product Standard

OHIO DEPARTMENT OF TRANSPORTATION

NOISE BARRIER DETAILS

DATE
5/3/83
2/1/84
4/16/86

SHEET 1 / 5

HAM-75-9.93
HAM-126-13.00

69A
787

NOISE BARRIER TABLE (POST AND PANEL CONSTRUCTION)

BARRIER HEIGHT (feet)	POST SPACING (Feet)	GROUP	POST SIZE	SOIL TYPE
	8 & Under			
12 and Less		I	Steel W8x13	TRANSVERSE GROUND SLOPE
			Sawn Timber 8"x10" (Nom.)	
			Glulam 5 1/8" x 12 3/8" (**) to 5 1/8" x 5 1/2" (top)	
			Reinforced Concrete 12"x16" W/6 #4	
			Prestressed Concrete 12"x14" W/4 strands	
			Masonry △ 8 3/4" x 12 3/4" W/4-#6	
Greater Than 12 Thru 16		II	Steel W8x18	
			Sawn Timber 8"x14"(Nom.)	
			Glulam 5 1/8" x 16 1/2" (**) to 5 1/8" x 5 1/2" (top)	
			Reinforced Concrete 12"x16" W/6 #6	
			Prestressed Concrete 12"x14" W/4 strands	
			Masonry △ 8 3/4" x 12 3/4" W/4-#7	
Greater Than 16 Thru 20		III	Steel W8x28	
			Sawn Timber 10"x16"(Nom.)	
			Glulam 6 3/4" x 19 1/4" (**) to 6 3/4" x 5 1/2" (top)	
			Reinforced Concrete 12"x16" W/6 #9	
			Prestressed Concrete 12"x14" W/4 strands	
			Masonry △ 8 3/4" x 16 3/4" W/4-#9	
		IV	Steel W14x38	
			Sawn Timber 12"x20"(Nom.)	
			Glulam 10 3/4" x 20 5/8" (**) to 10 3/4" x 5 1/2" (top)	
			Reinforced Concrete 12"x20" W/6 #9	
			Prestressed Concrete 12"x20" W/4 strands	
			Masonry △ 8 3/4" x 16 3/4" W/4-#11	

FOUNDATION DEPTH (Feet)

	GRANULAR SOIL								COHESIVE SOIL	PARTIAL POST EMBEDMENT	
ϕ	24-25	26-27	28-29	30-31	32-33	34-35	36-37	38-39	COHESION		
δ	15	16	17	18	19	20	21	22	1000 LBS/SF		
lbs/cu.ft.	104	108	112	116	120	124	128	132	100	OTHERS	CONC.
Level	9.0	8.5	8.0	7.5	7.0	6.0	6.0	6.0	5.0	3.5	3.0
5:1	10.5	10.0	9.0	8.5	8.0	7.5	7.0	6.5	5.0		
4:1	11.0	10.5	9.5	9.0	8.5	7.5	7.0	6.5	5.0		
3:1	12.0	11.0	10.5	9.5	9.0	8.5	7.5	7.0	5.0		
2:1	*	15.0	13.0	11.5	10.5	10.0	9.0	8.5	5.0		
Level	11.0	10.5	9.5	9.0	8.0	7.5	7.0	6.5	7.0		
5:1	13.0	12.0	11.0	10.5	9.5	9.0	8.0	7.5	7.0		
4:1	13.5	12.5	11.5	11.0	10.0	9.5	8.5	8.0	7.0		
3:1	14.5	13.5	12.5	11.5	11.0	10.0	9.5	8.5	7.0		
2:1	*	18.0	15.5	14.0	13.0	12.0	11.0	10.5	7.0		
	*										
Level	13.5	12.5	12.0	11.0	10.0	9.5	8.5	8.0	9.5		
5:1	16.0	14.5	13.5	12.5	12.0	11.0	10.0	9.5	9.5		
4:1	16.5	15.5	14.0	13.5	12.5	11.5	10.5	10.0	9.5		
3:1	18.0	16.5	15.5	14.5	13.5	12.5	11.5	10.5	9.5		
2:1	*	22.0	19.0	17.5	16.0	15.0	13.5	13.0	9.5		
	.										
Level	18.0	16.5	15.5	14.5	13.0	12.0	11.0	10.0	14.0		
5:1	21.0	19.5	18.0	16.5	15.5	14.5	13.5	12.5	14.0		
4:1	22.0	20.0	19.0	17.5	16.0	15.0	14.0	13.0	14.0		
3:1	24.0	22.0	20.5	19.0	17.5	16.5	15.0	14.0	14.0	↓	↓
2:1	*	29.5	25.5	23.0	21.0	19.5	18.0	17.0	14.0	3.5	3.0

For soil conditions outside the scope of this table, foundation depth shall be calculated.

* For backfill slope of 2:1, limiting Friction Angle is 26.56°.

△ Core dimensions only

LEGEND: ϕ = Angle of Internal Friction.
δ = Angle of Friction between drilled shaft and earth.
(**) = Top of foundation.

† = Additional rebars at post location (4-#5 rebars @ 1'-6" as per Std. Dwg. BR-1 placed symmetrically about post location and spaced alternately between curb and parapet rebars).

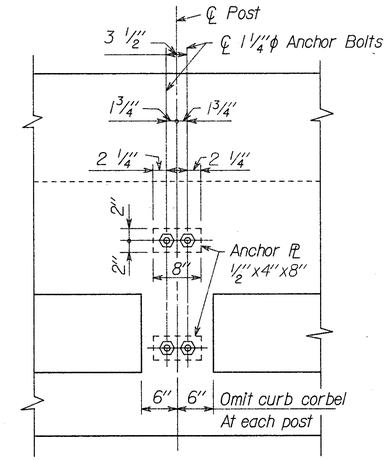
For curb and parapet rebars in concrete slab bridges, see Std. Dwg. BR-1-67.

FRICTION ANGLES BETWEEN FOUNDATION MATERIALS AND SOIL OR ROCK

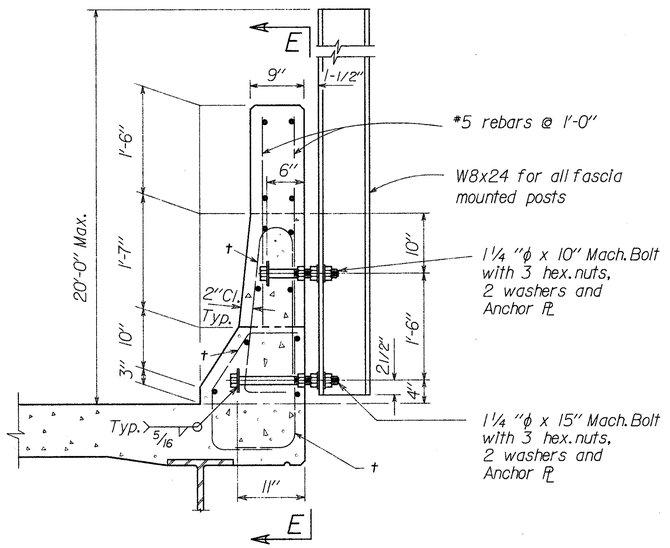
Interface Materials	Friction Angle δ Degrees
Concrete against:	
Clean gravel	22-26
Gravel-sand mixtures	22-26
Well-graded rock fill with spalls	22-26
Clean sand	17-22
Silty sand-gravel mixture	17-22
Single size hard rock fill	17-22
Silty sand	17
Gravel or sand mixed with silt or clay	17
Fine sandy silt	14
Non-plastic silt	14
Wood against soil	14-22

POST SPACING: For all bridge mounted posts, including the first post off the bridge, the maximum post spacing shall be 12'-0".

MATERIAL: All machine bolts, nuts, washers and plates shall conform to the physical properties of ASTM A325 except that the minimum elongation shall be 10%. The chemical properties are waived.



VIEW E-E



FASCIA MOUNTED POST

NOISE BARRIER TABLE (TRENCH WALL)

BARRIER HEIGHT (feet)	SOIL TYPE	EMBEDMENT DEPTH (feet) GRANULAR SOIL ϕ	24-25	26-27	28-29	30-31	32-33	34-35	36-37	38-39	COHESIVE SOIL COHESION 1000 LBS/SF
		δ	15	16	17	18	19	20	21	22	
		lbs/cu.ft.	104	108	112	116	120	124	128	132	100
11 and Less	TRANSVERSE GROUND SLOPE	Level	6.5	6.0	6.0	5.5	5.0	5.0	4.5	4.5	4.0
		5:1	7.5	7.0	7.0	6.5	6.0	6.0	5.5	5.0	4.0
		4:1	8.0	7.5	7.5	7.0	6.5	6.0	6.0	5.5	4.0
		3:1	9.0	9.5	8.0	7.5	7.0	6.5	6.0	6.0	4.0
		2:1	*	11.0	10.0	9.0	8.5	8.0	7.5	7.0	4.0
Greater than 11 thru 16		Level	8.0	7.5	7.0	6.5	6.0	6.0	5.5	5.0	5.0
		5:1	9.5	9.0	8.5	8.0	7.5	7.0	6.5	6.0	5.0
		4:1	10.0	9.5	9.0	8.5	8.0	7.5	7.0	6.5	5.0
		3:1	11.0	10.0	9.5	9.0	8.5	8.0	7.5	7.0	5.0
		2:1	*	13.5	12.0	11.0	10.0	9.5	9.0	8.5	5.0
Greater than 16 thru 20		Level	9.0	8.5	8.0	7.5	7.0	6.5	6.0	5.5	6.0
		5:1	10.5	10.0	9.5	9.0	8.5	8.0	7.5	7.0	6.0
		4:1	11.0	10.5	10.0	9.5	9.0	8.5	8.0	7.5	6.0
		3:1	12.0	11.5	10.5	10.0	9.5	9.0	8.5	8.0	6.0
		2:1	*	15.5	13.5	12.5	11.5	10.5	10.0	9.5	6.0

OHIO DEPARTMENT OF TRANSPORTATION

NOISE BARRIER DETAILS

DATE 5/3/83 2/1/84

SHEET 2/5

HAM-75-9.93
HAM-126-13.00

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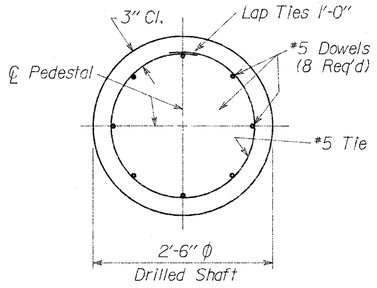
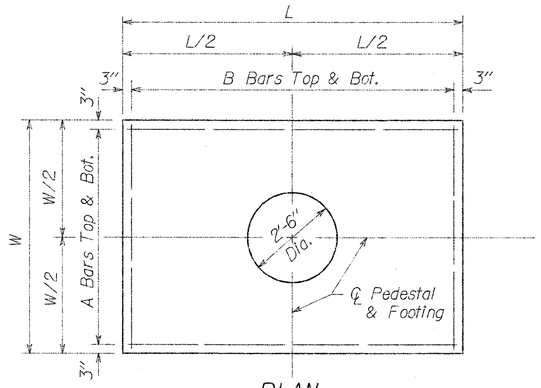
TABLE - DETAILS FOR SPREAD FOOTINGS

PANEL GROUP	LENGTH L	WIDTH W	A BARS	B BARS
I	7'-6"	3'-6"	4-#5x7'-2" Top 4-#6x7'-2" Bot.	6-#5x3'-2" Top & Bottom
II	8'-6"	5'-0"	6-#5x8'-2" Top 6-#6x8'-2" Bot.	7-#5x3'-8" Top & Bottom
III	9'-6"	6'-6"	7-#5x9'-2" Top 7-#6x9'-2" Bot.	7-#5x6'-2" Top & Bottom
IV	11'-6"	8'-0"	9-#5x11'-2" Top 9-#6x11'-2" Bot.	9-#5x7'-8" Top & Bottom

Minimum allowable bearing pressure = 1.25 tons per sq.ft.



SECTION C-C



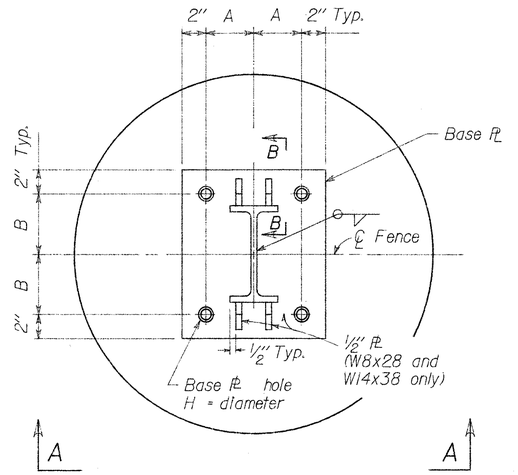
PLAN

TABLE - OPTIONAL POST MOUNTING DETAILS BOLTED CONNECTION

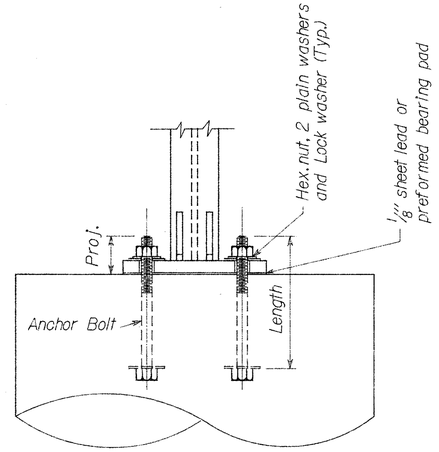
Steel Post	Base Plate	Dim. A	Dim. B	Min. Weld Size	Anchor Bolts	Proj.	Threaded Length	Base Pl. Hole Dim. H
W 8x13	12"x14"x 5/8"	4"	5"	1/4"	4 - 5/8" ϕ x 12"	2"	4"	7/8"
W 8x18	12"x14"x1"	4"	5"	1/4"	4 - 7/8" ϕ x 14"	2 1/2"	4 1/2"	1 1/4"
W 8x28	14"x14"x1 3/8"	5"	5"	5/16"	4- 1 1/4" ϕ x 17"	3 1/4"	5 1/4"	1 3/4"
W 14x38	14"x20"x1 1/2"	5"	8"	5/16"	4- 1 3/8" ϕ x 18"	3 1/2"	5 1/2"	1 7/8"

Note: All anchor bolts, nuts, plain washers and lock washers shall conform to the physical properties of ASTM A325 except that the minimum elongation shall be 10%. The chemical properties are waived.

f_t = 36,000 psi

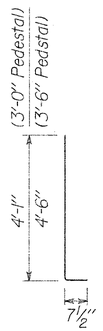


PLAN

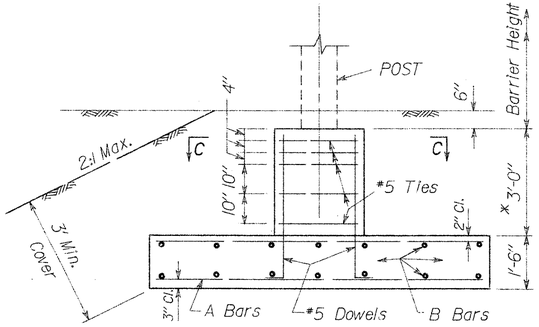


PARTIAL ELEVATION A-A

OPTIONAL POST ATTACHMENT



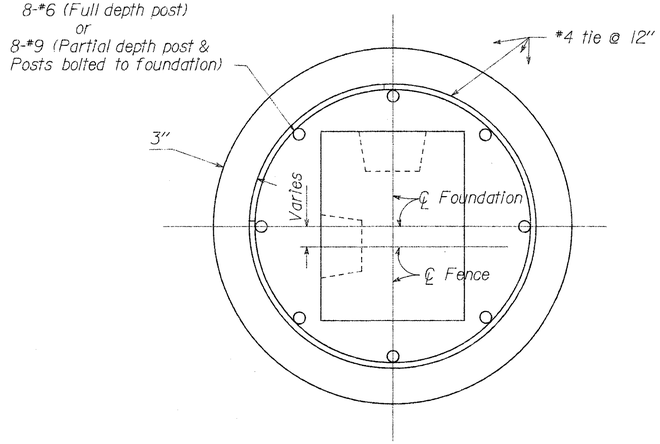
#5 DOWEL



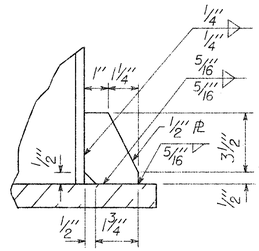
ELEVATION

OPTIONAL FOUNDATION

*3'-6" Pedestal for all embedded posts except concrete.



TYPICAL DRILLED SHAFT CROSS-SECTION



SECTION B-B

OHIO DEPARTMENT OF TRANSPORTATION

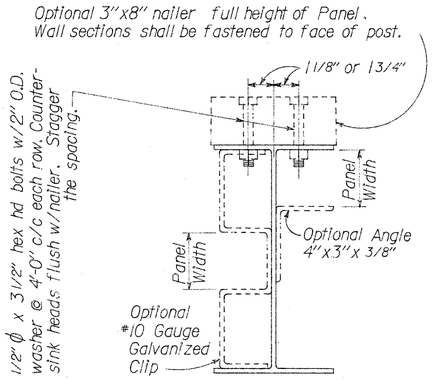
NOISE BARRIER DETAILS

DATE
5/3/83
2/1/84

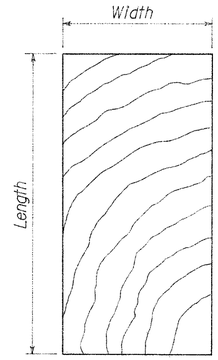
SHEET
3 / 5

HAM-75-9.93
HAM-126-13.00

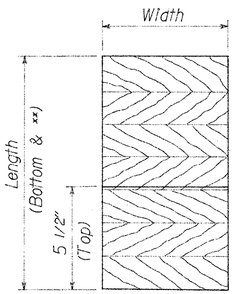
69C
787



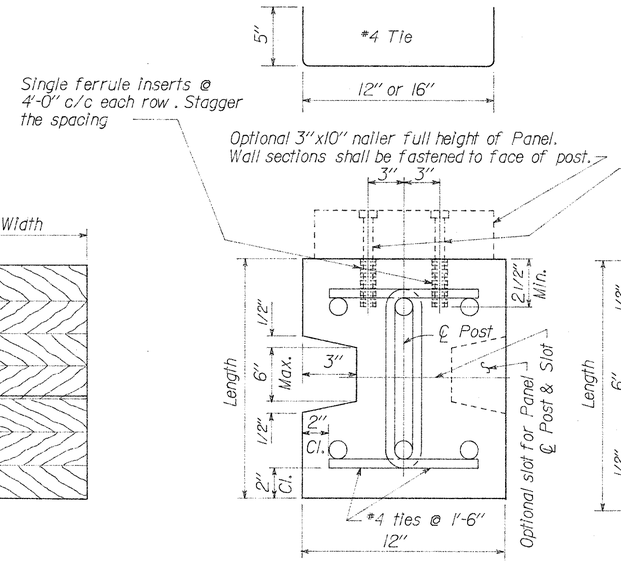
STEEL



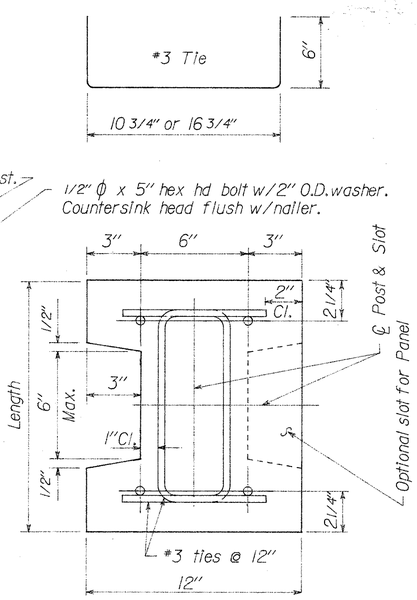
SAWN WOOD



GLULAM

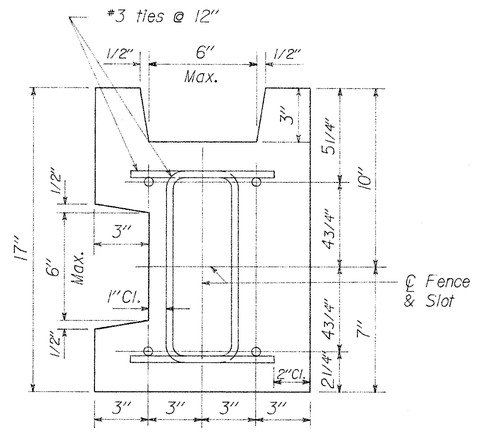


REINFORCED CONCRETE
(Precast)

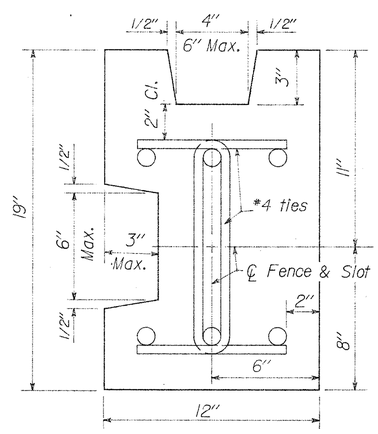


PRESTRESSED CONCRETE
(4-1/2" ϕ strands)

NOTE: For post sizes and concrete post reinforcement, see Noise Barrier Table.



PRESTRESSED CONCRETE
CORNER POST



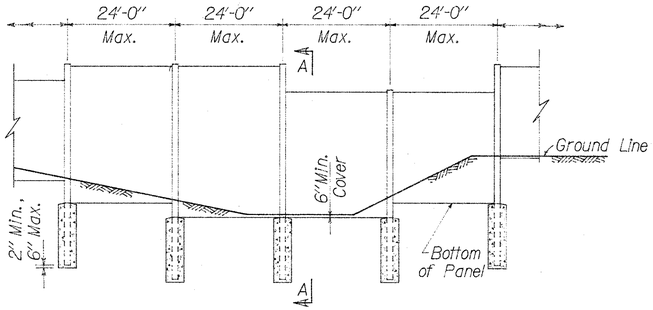
REINFORCED CONCRETE
CORNER POST

OHIO DEPARTMENT OF TRANSPORTATION

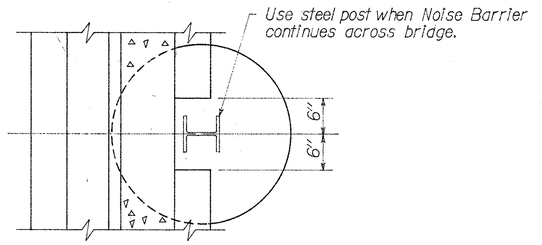
NOISE BARRIER DETAILS

DATE
5/3/83
2/1/84

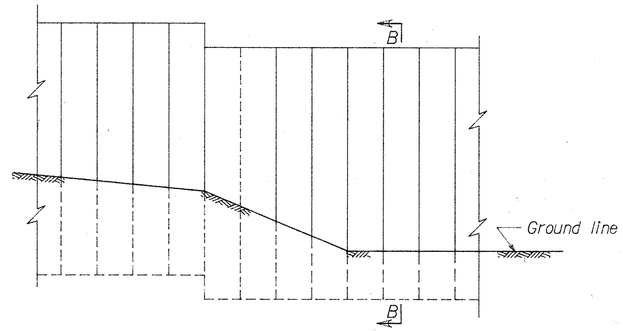
SHEET
4 / 5



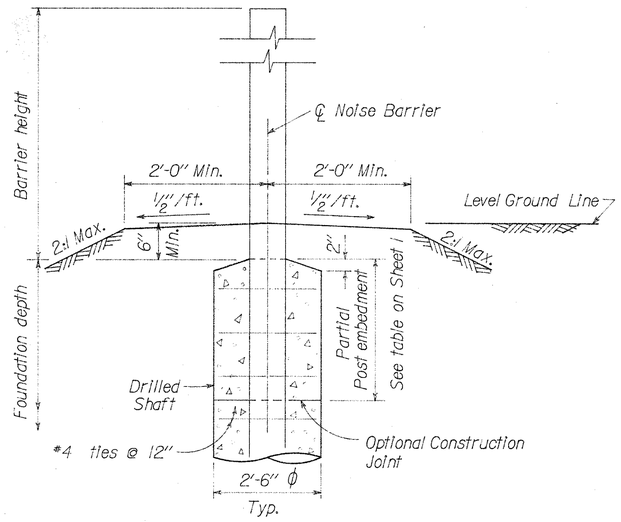
FRONT ELEVATION
(Post and Panel Noise Barrier)



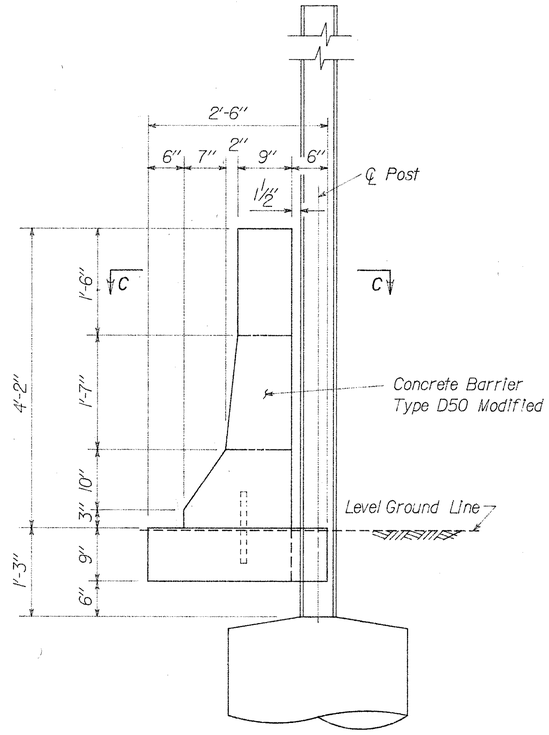
SECTION C-C



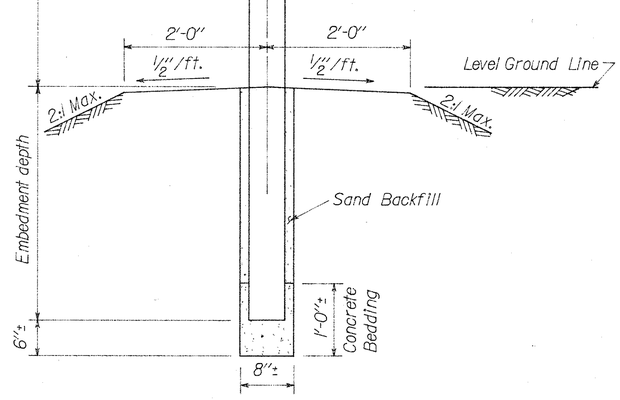
FRONT ELEVATION
(Trench Wall Noise Barrier)



SECTION A-A



TYPICAL SECTION
(Noise Barrier with Concrete Barrier)



SECTION B-B

OHIO DEPARTMENT OF TRANSPORTATION

NOISE BARRIER DETAILS

DATE 2/1/84

SHEET 5/5

CALC. RED DATE 3/86

CHK'D JAS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

70
187

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

WB-IA

Dc = 4°00'00"

STATION	24'LT OF ℄	12'LT OF ℄	℄ P.G.
502+50.00	570.05	570.99	571.93
502+64.57	570.13	571.12	572.11
502+75.00	570.24	571.23	572.22
503+00.00	570.48	571.48	572.48
503+25.00	570.71	571.71	572.71
503+50.00	570.89	571.89	572.89
503+75.00	571.04	572.04	573.04
504+00.00	571.15	572.15	573.15
504+25.00	571.22	572.22	573.22
504+50.00	571.26	572.26	573.26
504+75.00	571.26	572.26	573.26
505+00.00	571.22	572.22	573.22
505+25.00	571.14	572.14	573.14
505+50.00	571.03	572.03	573.03
505+75.00	570.85	571.88	572.88
506+00.00	570.69	571.69	572.69
506+25.00	570.51	571.49	572.47
506+50.00	570.32	571.26	572.20
506+75.00	570.14	571.02	571.90
507+00.00	569.95	570.76	571.57
507+25.00	569.69	570.44	571.19
507+50.00	569.40	570.09	570.78
507+75.00	569.08	569.71	570.34
508+00.00	568.73	569.29	569.85
508+25.00	568.33	568.83	569.33
508+50.00	567.89	568.33	568.77
508+75.00	567.41	567.79	568.17
509+00.00	566.92	567.23	567.54
509+25.00	566.37	566.62	566.87
509+50.00	565.76	565.96	566.16
509+75.00	565.03	565.22	565.41
510+00.00	P.G.-0.38	P.G.-0.19	P.G.
510+25.00	NORMAL		
EQUATION			
510+41.31 WB Bk=			
22+94.46 WB Ah.			

I-WB

Dc = 5°00'00"

STATION	24'LT OF ℄	12'LT OF ℄	℄ P.G.
Bk. See WB-1A This Sheet			
T.S. 31+29.48	551.90	552.09	552.27
31+50.00	552.30	552.53	552.76
31+75.00	552.84	553.12	553.40
32+00.00	553.44	553.77	554.10
32+25.00	554.09	554.48	554.86
32+50.00	554.80	555.23	555.67
32+75.00	555.54	556.02	556.51
33+00.00	556.28	556.81	557.34
33+25.00	557.01	557.60	558.18
33+50.00	557.75	558.39	559.02
33+75.00	558.49	559.17	559.86
34+00.00	559.22	559.96	560.70
34+25.00	559.96	560.75	561.54
34+50.00	560.70	561.54	562.38
34+75.00	561.44	562.33	563.22
35+00.00	562.17	563.11	564.05
35+25.00	562.91	563.90	564.89
S.C. 35+29.48	563.04	564.04	565.04
	P.G.-2.00	P.G.-1.00	P.G.
Full	Superelevation = .083 ft/ft		
	P.G.-2.00	P.G.-1.00	P.G.
C.S. 49+26.73	554.16	555.16	556.16
49+50.00	553.47	554.42	555.37
49+75.00	552.73	553.63	554.52
50+00.00	552.00	552.83	553.67
50+25.00	551.26	552.04	552.82
50+50.00	550.52	551.25	551.98
50+75.00	549.81	550.49	551.16
51+00.00	549.17	549.78	550.40
51+25.00	548.58	549.14	549.70
51+50.00	548.05	548.56	549.06
51+75.00	547.58	548.03	548.48
52+00.00	547.17	547.57	547.96
52+25.00	546.82	547.16	547.50
52+50.00	546.53	546.82	547.10
52+75.00	546.30	546.53	546.76
53+00.00	546.13	546.31	546.48
53+25.00	546.02	546.14	546.26
S.T. 53+26.73			
53+50.00	545.97	546.03	546.10
53+75.00	545.98	545.99	545.99
53+79.05			

2-WB Dc = 8°00' 5-WB Dc = 2°20'
3-WB Dc = 5°20' 6-WB Dc = 1°30'
4-WB Dc = 3°30' 7-WB Dc = 1°00'

STATION	24'LT OF ℄	12'LT OF ℄	℄ P.G.
53+79.05			
54+00.00	546.04	546.00	545.95
54+25.00	546.17	546.07	545.97
T.S. 54+31.37			
54+50.00	546.36	546.20	546.04
54+75.00	546.60	546.39	546.18
55+00.00	546.91	546.64	546.37
55+25.00	547.27	546.95	546.63
55+50.00	547.70	547.32	546.94
55+75.00	548.18	547.75	547.32
56+00.00	548.73	548.24	547.75
56+25.00	549.33	548.79	548.24
56+50.00	549.99	549.39	548.80
56+75.00	550.72	550.06	549.41
57+00.00	551.50	550.79	550.08
57+25.00	552.31	551.55	550.78
57+50.00	553.12	552.30	551.48
57+75.00	553.94	553.06	552.18
58+00.00	554.75	553.82	552.89
58+25.00	555.56	554.57	553.59
S.C. 58+31.37	555.77	554.77	553.77
	P.G.+2.00	P.G.+1.00	P.G.
Full	Superelevation = .083 ft/ft		
	P.G.+2.00	P.G.+1.00	P.G.
63+19.01	569.45	568.45	567.45
63+25.00	569.59	568.60	567.62
63+50.00	570.18	569.25	568.32
63+75.00	570.77	569.90	569.02
64+00.00	571.36	570.54	569.72
64+25.00	571.95	571.19	570.42
P.C.C. 64+35.67			
64+50.00	572.54	571.83	571.13
64+75.00	573.13	572.48	571.83
65+00.00	573.71	573.11	572.51
65+25.00	574.25	573.71	573.16
P.C.C. 65+48.17			
65+50.00	574.75	574.27	573.78
65+75.00	575.23	574.80	574.37
66+00.00	575.67	575.29	574.92
P.C.C. 66+23.17			
66+25.00	576.08	575.76	575.44
66+50.00	576.45	576.18	575.92
P.C.C. 66+73.17			
66+75.00	576.79	576.58	576.37
67+00.00	577.10	576.94	576.79
P.C.C. 67+06.51			
67+25.00	577.37	577.27	577.17
P.T. 67+44.01			
67+50.00	577.61	577.57	577.52
67+69.01	577.77	577.77	577.77
67+75.00	577.83	577.84	577.84
68+00.00	578.05	578.09	578.13
68+25.00	578.24	578.31	578.38
68+50.00	578.39	578.49	578.60
68+75.00	578.51	578.65	578.78
69+00.00	578.60	578.77	578.93
69+19.01	578.65	578.84	579.02
	P.G.-.375	P.G.-.1875	P.G.
	Normal		
	P.G.-.375	P.G.-.1875	P.G.
81+69.05			
Ah. See Curve No. 8-WB Sh. 71			

EB-1A

Dc = 4°00'00"

STATION	℄ P.G.	12'RT OF ℄	24'RT OF ℄
502+50.00	573.81	574.75	575.69
502+59.55	573.95	574.94	575.93
502+75.00	574.20	575.19	576.18
503+00.00	574.48	575.48	576.48
503+25.00	574.71	575.71	576.71
503+50.00	574.89	575.89	576.89
503+75.00	575.04	576.04	577.04
504+00.00	575.15	576.15	577.15
504+25.00	575.22	576.22	577.22
504+50.00	575.26	576.26	577.26
504+75.00	575.26	576.26	577.26
505+00.00	575.22	576.22	577.22
505+25.00	575.14	576.14	577.14
505+50.00	575.03	576.03	577.03
505+75.00	574.88	575.88	576.88
506+00.00	574.69	575.69	576.69
506+25.00	574.47	575.45	576.43
506+50.00	574.20	575.14	576.08
506+75.00	573.84	574.73	575.62
507+00.00	573.46	574.29	575.12
507+25.00	573.00	573.77	574.54
507+50.00	572.52	573.23	573.94
507+75.00	572.00	572.66	573.32
508+00.00	571.41	572.01	572.61
508+25.00	570.79	571.33	571.87
508+50.00	570.14	570.62	571.10
508+75.00	569.48	569.91	570.34
509+00.00	568.79	569.16	569.53
509+25.00	568.09	568.40	568.71
509+50.00	567.39	567.65	567.91
509+75.00	566.66	566.86	567.06
510+00.00	565.84	565.97	566.10
510+25.00	564.99	565.04	565.09
510+50.00	564.10	564.08	564.06
EQUATION			
510+69.90 EB Bk=	563.36	563.27	563.18
22+94.46 EB Ah.			
23+00.00	563.15	563.05	562.94
23+25.00	562.20	562.04	561.88
23+50.00	561.25	561.07	560.88
23+53.15	561.13	560.94	560.75
	P.G.	P.G.-0.19	P.G.-0.38
	Normal		

1EB Dc = 1°00' 4-EB Dc = 3°30'
2-EB Dc = 1°30' 5-EB Dc = 5°20'
3-EB Dc = 2°20' 6-EB Dc = 8°00'

STATION	℄ P.G.	12'RT OF ℄	24'RT OF ℄
Bk See EB-1A This Sheet			
39+23.15	573.48	573.29	573.10
39+50.00	573.54	573.39	573.23
39+75.00	573.54	573.42	573.30
40+00.00	573.50	573.40	573.31
40+25.00	573.40	573.34	573.27
40+50.00	573.24	573.21	573.19
40+73.15	573.06	573.06	573.06
41+00.00	572.78	572.84	572.90
41+25.00	572.47	572.59	572.70
41+50.00	572.11	572.28	572.45
41+75.00	571.70	571.93	572.15
42+00.00	571.24	571.52	571.80
42+25.00	570.72	571.05	571.39
42+50.00	570.15	570.54	570.94
42+75.00	569.53	569.98	570.43
43+00.00	568.86	569.36	569.87
43+25.00	568.16	568.72	569.28
43+50.00	567.46	568.07	568.69
43+75.00	566.76	567.43	568.10
44+00.00	566.06	566.79	567.51
44+25.00	565.36	566.14	566.93
44+50.00	564.66	565.50	566.34
44+75.00	563.96	564.86	565.75
45+00.00	563.27	564.21	565.16
45+23.15	562.62	563.62	564.62
	P.G.	P.G.+1.00	P.G.+2.00
Full	Superelevation = .083 ft/ft		
	P.G.	P.G.+1.00	P.G.+2.00
49+81.13	549.82	550.82	551.82
50+00.00	549.29	550.25	551.21
50+25.00	548.59	549.49	550.40
50+50.00	547.89	548.74	549.59
50+75.00	547.19	547.98	548.78
51+00.00	546.49	547.23	547.97
51+25.00	545.79	546.48	547.16
51+50.00	545.10	545.72	546.35
51+75.00	544.40	544.97	545.54
52+00.00	543.70	544.21	544.73
52+25.00	543.00	543.46	543.92
52+50.00	542.30	542.70	543.11
52+75.00	541.63	541.98	542.33
53+00.00	541.02	541.31	541.60
53+25.00	540.47	540.71	540.94
53+50.00	539.98	540.16	540.34
53+75.00	539.55	539.67	539.80
54+00.00	539.17	539.24	539.31
54+25.00	538.86	538.88	538.89
S.T. 54+31.13	538.79	538.79	538.79
54+50.00	538.61	538.58	538.56
54+75.00	538.41	538.36	538.30
55+00.00	538.28	538.19	538.10
55+25.00	538.20	538.08	537.97
55+50.00	538.18	538.04	537.89
55+75.00	538.23	538.05	537.87
55+81.13	538.25	538.06	537.87
	P.G.	P.G.-.19	P.G.-.38
		Normal	
	P.G.	P.G.-.19	P.G.-.38
58+36.46			
A.H. See Curve No. 7-EB This Sheet			

7-EB Dc = 1°20' 8-EB Dc = 2°00' 9-EB Dc = 3°00'

STATION	℄ P.G.	12'RT OF ℄	24'RT OF ℄
58+36.46	540.57	540.39	540.20
58+50.00	540.71	540.49	540.27
58+75.00	540.96	540.69	540.41
59+00.00	541.21	540.88	540.55
59+25.00	541.46	541.08	540.69
59+50.00	541.71	541.27	540.83
59+75.00	541.96	541.46	540.97
60+00.00	542.21	541.66	541.11
60+25.00	542.44	541.84	541.23
60+50.00	542.65	541.99	541.32
60+75.00	542.82	542.10	541.38
61+00.00	542.96	542.19	541.41
61+25.00	543.07	542.24	541.41
P.C.C. 61+35.59	543.11	542.25	541.40
	P.G.	P.G.-0.85	P.G.-1.70
Full	Superelevation .071 ft/ft		
	P.G.	P.G.-0.85	P.G.-1.70
C.S. 77+49.86	545.71	544.86	544.01
77+75.00	545.98	545.18	544.38
78+00.00	546.27	545.53	544.79
78+25.00	546.60	545.92	545.23
78+50.00	546.96	546.33	545.70
78+75.00	547.36	546.78	546.21
79+00.00	547.78	547.26	546.74
79+25.00	548.24	547.78	547.31
79+50.00	548.73	548.32	547.91
79+75.00	549.25	548.90	548.54
80+00.00	549.80	549.51	549.21
80+25.00	550.39	550.15	549.90
ST. 80+49.86	551.00	550.81	550.63
Ah. See Curve No. 10-EB Sh. 71			

DEVELOPED | CHECKED

SUPERELEVATION TABLES

CALC. R&D DATE 3/86

CHK'D JAS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

71
787

HAM.-75-9.93
HAM.-126-13.00
HAMILTON COUNTY

8-WB 126 WB

Dc= 1° 15' 00"

STATION	24' LT. ℄	12' LT. ℄	℄ P.G.
P.C. 81+69.05	556.60	556.78	556.97
81+75.00	556.57	556.77	556.97
82+00.00	556.49	556.74	557.00
82+25.00	556.47	556.78	557.09
82+46.63	556.50	556.86	557.22
	P.G.-0.72	P.G.-0.36	P.G.
Full	Superelevation = .03 1/ft		
	P.G.-0.72	P.G.-0.36	P.G.
84+82.00	560.66	561.02	561.38
85+00.00	561.21	561.53	561.85
85+25.00	561.97	562.23	562.50
85+50.00	562.73	562.94	563.15
85+75.00	563.49	563.64	563.80
86+00.00	564.25	564.35	564.45
86+25.00	565.01	565.05	565.10
P.T. 86+37.78			
86+50.00	565.77	565.76	565.75
86+75.00	566.53	566.47	566.40
87+00.00	567.29	567.17	567.05
87+25.00	568.06	567.88	567.70
87+44.00	568.63	568.41	568.19

126 EB

87+44.00 ℄ 126 AH =	87+08.70	567.67	567.48	567.29
87+44.00 WB ℄ BK. =	87+24.33	568.06	567.84	567.62
87+24.33 EB ℄ BK.				

SR 126

C-1 Dc= 2°00'00" C-2 Dc= 3°00'00" C-3 Dc= 12°00'00"

32' LT.	20' LT.	8' LT.	1.5' LT.	℄ STATION	1.5' RT.	8' RT.	20' RT.	32' RT.
568.63	568.41	568.19	567.92	87+44.00	567.97	568.06	567.84	567.62
568.81	568.58	568.34	568.07	87+50.00	568.12	568.21	567.98	567.74
569.56	569.27	568.97	568.70	87+75.00	568.75	568.84	568.55	568.26
570.30	569.95	569.61	569.34	88+00.00	569.38	569.48	569.13	568.78
571.04	570.64	570.24	569.97	88+25.00	570.02	570.11	569.71	569.31
571.79	571.33	570.87	570.60	88+50.00	570.65	570.74	570.28	569.83
572.35	571.85	571.35	571.08	88+69.00	571.13	571.22	570.72	570.22
572.54	572.03	571.52	571.24	88+75.00	571.20	571.37	570.86	570.35
573.34	572.77	572.20	571.90	89+00.00	571.96	572.01	571.44	570.87
574.14	573.51	572.89	572.54	89+25.00	572.62	572.64	572.01	571.39
574.47	573.83	573.18	572.82	89+35.60	572.91	572.91	572.28	571.61
574.92	574.24	573.56	573.19	89+50.00	573.27	573.27	572.59	571.91
575.68	574.95	574.21	573.81	89+75.00	573.90	573.90	573.17	572.43
576.45	575.66	574.87	574.44	90+00.00	574.54	574.54	573.75	572.95
577.22	576.37	575.52	575.06	90+25.00	575.17	575.17	574.32	573.48
577.98	577.08	576.18	575.69	90+50.00	575.80	575.80	574.90	574.00
578.75	577.79	576.83	576.31	90+75.00	576.43	576.43	575.48	574.52
579.33	578.33	577.33	576.79	S.C. 90+94.00	576.92	576.92	575.92	574.92
P.G.+2.417	P.G.+1.417	P.G.+.417	P.G.-.125		P.G.	P.G.	P.G.-1.00	P.G.-2.00
		.083 1/ft =	Full	Superelevation		=	.083 1/ft	
P.G.+2.417	P.G.+1.417	P.G.+.417	P.G.-.125		P.G.	P.G.	P.G.-1.00	P.G.-2.00
580.69	579.69	578.69	578.15	91+50.00	578.28	578.28	577.28	576.28
581.11	580.17	579.23	578.72	91+75.00	578.84	578.84	577.90	576.96
				C.S. 91+83.53				
581.50	580.62	579.74	579.26	92+00.00	579.37	579.37	578.49	577.61
581.86	581.04	580.22	579.78	92+25.00	579.88	579.88	579.05	578.23
582.20	581.43	580.67	580.26	92+50.00	580.35	580.35	579.59	578.82
582.50	581.80	581.09	580.71	92+75.00	580.80	580.80	580.10	579.31
582.77	582.12	581.47	581.12	92+99.00	581.20	581.20	580.56	579.91
583.01	582.43	581.84	581.53	93+25.00 *	581.59	581.63	581.04	580.45
583.24	582.72	582.19	581.90	93+50.00 *	581.96	582.03	581.51	580.98
583.35	582.85	582.35	582.08	93+61.66 *	582.13	582.22	581.72	581.22
583.53	583.06	582.59	582.32	93+75.00 *	582.34	582.44	581.97	581.50
583.79	583.38	582.97	582.70	94+00.00 *	582.75	582.84	582.44	582.03
584.08	583.73	583.38	583.11	94+25.00	583.16	583.25	582.90	582.55
584.37	584.08	583.79	583.52	94+50.00	583.56	583.66	583.36	583.07
584.66	584.43	584.19	583.92	94+75.00	583.97	584.06	583.83	583.60
584.88	584.69	584.50	584.23	94+93.93	584.28	584.37	584.18	583.99
584.93	584.77	584.58	584.31	95+00.00	584.34	584.47	584.31	584.12
585.13	585.09	584.90	584.63	95+25.00	584.64	584.87	584.83	584.65
585.20	585.20	585.01	584.74	S.T. 95+33.53	584.74	585.01	585.01	584.82

*For Median Flare For Sign Support See Pav't. Detail Sheet No. 301

SR 126 Cont.

32' LT.	20' LT.	8' LT.	1.5' LT.	℄ STATION	1.5' RT.	8' RT.	20' RT.	32' RT.
585.43	585.47	585.28	585.01	95+50.00	585.01	585.28	585.32	585.13
585.77	585.87	585.69	585.42	95+75.00	585.42	585.69	585.79	585.60
586.11	586.28	586.09	585.82	96+00.00	585.82	586.09	586.26	586.07
586.23	586.42	586.23	585.96	96+08.53	585.96	586.23	586.42	586.23
P.G.	P.G.+.188	P.G.	P.G.-.270		P.G.-.270	P.G.	P.G.+.188	P.G.
				Normal				
P.G.	P.G.+.188	P.G.	P.G.-.270		P.G.-.270	P.G.	P.G.+.188	P.G.
604.98	605.17	604.98	604.71	101+63.15	604.71	604.98	605.17	604.98
605.14	605.33	605.17	604.90	101+75.00	604.90	605.17	605.36	605.20
605.49	605.67	605.58	605.31	102+00.00	605.31	605.58	605.77	605.67
605.83	606.02	605.99	605.72	102+25.00	605.72	605.99	606.17	606.14
606.01	606.20	606.20	605.93	T.S. 102+38.15	605.93	606.20	606.39	606.39
606.14	606.33	606.39	606.12	102+50.00	606.16	606.43	606.62	606.68
606.40	606.59	606.77	606.50	102+75.00	606.62	606.89	607.08	607.26
606.41	606.60	606.79	606.52	102+76.42	606.65	606.92	607.10	607.29
606.59	606.83	607.08	606.81	103+00.00	606.94	607.21	607.46	607.70
606.72	607.02	607.33	607.06	103+25.00	607.19	607.46	607.77	608.08
606.78	607.15	607.52	607.27	103+50.00	607.38	607.65	608.12	608.39
606.79	607.22	607.65	607.43	103+75.00	607.51	607.78	608.21	608.64
606.73	607.22	607.71	607.52	104+00.00	607.57	607.84	608.33	608.83
606.72	607.22	607.72	607.54	104+09.46	607.58	607.85	608.35	608.85
606.61	607.16	607.72	607.60	104+25.00	607.60	607.90	608.45	609.00
606.43	607.04	607.61	607.61	104+50.00	607.56	607.90	608.51	609.13
606.30	606.95	607.60	607.60	104+63.72	607.52	607.87	608.52	609.17
606.19	606.86	607.54	607.54	104+75.00	607.45	607.82	608.50	609.17
606.04	606.74	607.45	607.45	S.C. 104+88.15	607.36	607.75	608.45	609.16
P.G.-1.416	P.G.-0.708	P.G.	P.G.		P.G.-.059	P.G.+.295	P.G.+1.003	P.G.+1.711
			Full	Superelevation			.059 1/ft	
P.G.-1.416	P.G.-0.708	P.G.	P.G.		P.G.-.059	P.G.+.295	P.G.+1.003	P.G.+1.711
579.16	579.87	580.58	580.58	C.S. 118+09.92	580.49	580.88	581.58	582.29
578.66	579.36	580.03	580.03	118+25.00	579.95	580.32	580.99	581.67
578.27	578.92	579.56	579.56	118+38.74	579.48	579.83	580.48	581.13
577.95	578.58	579.20	579.19	118+50.00	579.11	579.45	580.07	580.70
577.31	577.88	578.46	578.41	118+75.00	578.35	578.66	579.23	579.80
576.76	577.28	577.80	577.72	119+00.00	577.67	577.95	578.47	578.99
576.57	577.07	577.57	577.48	119+09.83	577.43	577.70	578.20	578.70
576.30	576.77	577.24	577.14	119+25.00	577.10	577.37	577.84	578.30
575.93	576.35	576.76	576.67	119+50.00	576.62	576.89	577.31	577.73
575.65	576.01	576.38	576.28	119+75.00	576.24	576.51	576.87	577.24
575.46	575.77	576.08	575.99	120+00.00	575.94	576.21	576.52	576.84
575.35	575.62	575.88	575.78	120+25.00	575.74	576.01	576.27	576.53
575.34	575.55	575.76	575.67	120+50.00	575.62	575.89	576.10	576.31
575.36	575.55	575.74	575.64	S.T. 120+59.92	575.60	575.87	576.06	576.24
575.36	575.54	575.73	575.64	120+75.00	575.59	575.86	576.05	576.24
575.42	575.61	575.80	575.70	121+00.00	575.66	575.93	576.11	576.30
575.57	575.76	575.95	575.85	121+25.00	575.81	576.08	576.27	576.45
575.81	576.00	576.19	576.10	121+50.00	576.05	576.32	576.51	576.70
576.15	576.33	576.52	576.43	121+75.00	576.38	576.65	576.84	577.03
576.15	576.34	576.53	576.44	T.S. 121+75.55	576.39	576.66	576.85	577.04
576.47	576.71	576.94	576.85	122+00.00	576.80	577.07	577.31	577.55
576.88	577.17	577.45	577.36	122+25.00	577.31	577.58	577.87	578.16
577.38	577.72	578.06	577.96	122+50.00	577.92	578.19	578.52	578.86
577.97	578.36	578.75	578.65	122+75.00	578.61	578.88	579.27	579.65
578.64	579.08	579.53	579.43	123+00.00	579.39	579.66	580.10	580.54
579.41	579.90	580.39	580.30	123+25.00	580.25	580.52	581.02	581.51
579.56	580.06	580.56	580.46	123+29.40	580.42	580.69	581.19	581.69
580.27	580.81	581.35	581.29	123+50.00	581.23	581.52	582.07	582.61
581.22	581.81	582.40	582.37	123+75.00	582.29	582.62	583.21	583.81
582.25	582.90	583.54	583.54	124+00.00	583.46	583.81	584.45	585.09
582.35	583.00	583.65	583.65	124+02.26	583.56	583.92	584.57	585.21
583.34	584.03	584.72	584.72	124+25.00	584.64	585.01	585.71	586.40
584.42	585.16	585.91	585.91	124+50.00	585.82	586.22	586.96	587.71
585.50	586.30	587.09	587.09	124+75.00	587.00	587.42	588.22	589.01
586.50	587.43	588.27	588.27	125+00.00	588.16	588.63	589.47	590.32
587.66	588.56	589.46	589.46	125+25.00	589.32	589.83	590.73	591.63
588.74	589.69	590.64	590.64	125+50.00	590.52	591.04	591.98	592.93
589.83	590.83	591.82	591.82	125+75.00	591.70	592.24	593.24	594.24
589.85	590.85	591.85	591.85	125+75.55	591.73	592.27	593.27	594.27
P.G.-2.00	P.G.-1.00	P.G.	P.G.		P.G.-.125	P.G.+.417	P.G.+1.417	P.G.+2.417
	.083 =		Full	Superelevation			= .083 1/ft	
P.G.-2.00	P.G.-1.00	P.G.	P.G.		P.G.-.125	P.G.+.417	P.G.+1.417	P.G.+2.417
596.48	597.48	598.48	598.48	127+15.53	598.35	598.89	599.89	600.89

32' LT.	20' LT.	8' LT.	1.5' LT.	℄ STATION	1.5' RT.	8' RT.	20' RT.	32' RT.
596.92	597.92	598.92	598.92	127+25.00	598.80	599.33	600.31	601.28
598.11	599.11	600.11	600.11	127+50.00	599.99	600.49	601.40	602.32
599.42	600.36	601.29	601.19	127+75.00	601.19	601.65	602.50	603.35
600.74	601.61	602.48	602.48	128+00.00	602.39	602.80	603.59	604.38
602.04	602.85	603.66	603.66	128+25.00	603.57	603.96	604.69	605.41
603.34	604.09	604.84	604.84	128+50.00	604.76	605.12	605.78	606.44
603.68	604.41	605.14	605.14	128+56.33	605.06	605.41	606.06	606.71
604.66	605.34	606.03	605.95	128+75.00	605.92	606.25	606.85	607.45
605.96	606.59	607.21	607.09	129+00.00	607.08	607.37	607.91	608.45
606.77	607.36	607.94	607.80	129+15.53	607.80	608.07	608.57	609.07
607.27	607.83	608.39	608.24	129+25.00	608.24	608.51	608.99	609.47
608.58	609.08	609.58	609.40	129+50.00	609.41	609.68	610.09	610.51
609.89	610.32	610.76	610.54	129+75.00	610.58	610.85	611.20	611.55
611.19	611.57	611.94	611.69	130+00.00	611.75	612.02	612.30	612.59
612.50	612.81	613.12	612.85	130+25.00	612.91	613.18	613.41	613.63
613.81	614.06	614.31	614.04	130+50.00	614.08	614.35	614.51	614.68
615.12	615.30	615.49	615.22	130+75.00	615.25	615.52	615.62	615.72
616.43	616.56	616.68	616.41	131+00.00	616.41	616.68	616.72	616.76
617.24	617.32	617.41	617.14	ST. 131+15.53	617.14	617.41	617.41	617.41
617.74	617.80	617.86	617.59	131+25.00	617.57	617.84	617.82	617.81
619.06	619.06	619.06	618.79	131+50.00	618.71	618.98	618.92	618.87
620.38	620.32	620.26	619.99	131+75.00	619.84	620.11	620.02	619.93
621.61	621.49	621.37	621.10	T.S. 131+98.28	620.90	621.17	621.04	620.91
				EQUATION				
				T.S. 131+98.28 W.B. AH. =				
				131+98.28 E.B. AH. =				
				131+98.28 ℄ BK.				

9-WB

Dc.= 3°00'00"

24' LT.	12' LT.	℄ P.G.	Median Edge Width Varies
621.61	621.49	621.37	621.10-6.5'
623.04	622.85	622.66	622.39-6.38'
624.36	624.11	623.86	623.59-6.27'
625.70	625.38	625.06	624.79-6.15'
626.91	626.61	626.26	626.03-5.42'
628.24	627.85	627.45	627.25-4.68'
629.51	629.08	628.65	628.48-4.06'
630.78	630.32	629.85	629.68-3.95'
631.93	631.43	630.93	630.75-4.29'
632.05	631.55	631.05	630.87-4.34'
633.34	632.80	632.26	632.07-4.23'
634.62	634.03	633.47	633.27-4.11'
635.90	635.29	634.67	634.44-4.50'
637.10	636.45	635.80	635.53-4.91'
637.18	636.58	635.98	635.71-5.08'
638.37	637.72	637.07	636.80-5.06'
638.42	637.77	637.12	636.85-5.02'
639.40	638.81	638.22	637.98-4.91'
640.42	639.90	639.37	639.16-4.80'
641.45	640.98	640.51	640.31-4.66'
642.48	642.08	641.67	641.48-4.57'
643.52	643.18	642.84	642.65-4.45'
644.56	644.28	644.00	643.82-4.35'
645.59	645.37	645.16	644.98-4.23'
646.63	646.47	646.32	646.15-4.12'
647.66	647.57	647.48	647.31-4.01'
648.70	648.67	648.64	-3.90'
649.75	649.79	649.82	-3.78'
650.81	650.91	651.00	-3.67'
651.87	652.03	652.19	-3.55'

10-EB

Dc= 3°00'00"

STATION	Median Edge Width Varies	℄ P.G.	12' RT.	24' RT.
620.90-6.5'	621.17	621.04	620.91	
622.15-6.38'	622.42	622.25	622.08	
623.32-6.27'	623.58	623.37	623.16	
624.49-6.15'	624.75	624.50	624.25	
625.68-5.42'	625.91	625.63	625.34	
626.87-4.68'	627.07	626.75	626.42	
628.08-4.06'	628.24	627.87	627.51	
629.27-3.95'	629.41	629.00	628.60	
630.43-4.34'	630.57	630.12	629.68	
631.60-4.23'	631.73	631.25	630.77	
632.79-4.11'	632.90	632.38	631.86	
633.95-4.50'	634.06	633.50	632.94	
635.13-4.91'	635.23	634.63	634.03	
636.31-5.08'	636.39	635.75	635.12	
637.49-4.99'	637.72	636.07	635.42	
638.68-4.80'	638.77	638.15	637.52	
639.78-4.68'	639.92	639.33	638.74	
640.90-4.66'	640.00	639.41	638.82	
642.10-4.57'	642.21	641.66	641.11	
643.31-4.45'	643.43	642.85	642.28	
644.52-4.35'	644.65	644.08	643.51	
645.73-4.23'	645.87	645.30	644.73	
646.94-4.12'	647.09	646.52	645.95	
648.15-4.01'	648.31	647.74	647.17	
649.37-3.90'	649.52	648.96	648.39	
650.58-3.78'	650.73	650.18	649.62	
651.80-3.67'	651.96	651.40	650.84	
653.01-3.55'	653.18	652.62	652.06	

See Pav't. Detail Sheet No. 302, 303.

** Bridge Pier Transition and Overhead Sign Support Transition

⊕ 6½ Concrete Median See Detail Sheet No. 303

DEVELOPED		CHECKED	
M.P.G.	5-30	J.S.H.	11-71

SUPERELEVATION TABLES

CALC. REA DATE 3/86

CHK'D JAS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

72
137

HAM.-75-9.93
HAM.-126-13.00
HAMILTON COUNTY

RAMP C

C-2 Dc= 3°00'00" C-3 Dc= 12°00'00"

STATION	16'L.T. OF ℄	℄ P.G.
Bk. See Pavt. Detail		Sh 290
31+93.20	555.30	555.82
	P.G.-.512	P.G.
Full Superelevation =.032'/'		
	P.G.-.512	P.G.
32+37.54	557.78	558.29
32+50.00	558.52	558.99
32+75.00	560.00	560.38
33+00.00	561.48	561.78
P.T. 33+14.26	562.32	562.57
33+25.00	562.96	563.17
33+50.00	564.45	564.57
33+75.00	565.93	565.96
34+00.00	567.42	567.36
34+25.00	568.90	568.75
34+50.00	570.39	570.15
T.S. 34+51.13	570.46	570.21
34+75.00	571.85	571.47
35+00.00	573.18	572.67
35+25.00	574.38	573.73
35+28.06	574.52	573.85
35+50.00	575.44	574.66
35+75.00	576.37	575.45
36+00.00	577.17	576.11
36+25.00	577.83	576.64
36+50.00	578.36	577.03
S.C. 36+51.13	578.38	577.05
	P.G.+1.33	P.G.
Full Superelevation =.083'/'		
	P.G.+1.33	P.G.
C.S. 42+24.11	553.93	552.60
42+50.00	551.93	550.73
42+75.00	549.99	548.92
43+00.00	548.06	547.11
43+25.00	546.13	545.30
43+50.00	544.20	543.49
43+75.00	542.35	541.77
44+00.00	540.69	540.24
44+10.71	540.03	539.63
44+25.00	539.27	538.87
44+50.00	538.09	537.69
44+75.00	537.09	536.69
45+00.00	536.27	535.87
45+25.00	535.62	535.22
45+50.00	535.16	534.76
45+75.00	534.87	534.47
45+95.25	534.77	534.37
46+00.00	534.76	534.36
46+25.00	534.83	534.43
46+50.00	535.07	534.68
46+75.00	535.42	535.02
46+95.25	535.70	535.27
47+00.00	535.76	535.34
47+25.00	536.06	535.66
47+50.00	536.39	535.98
47+75.00	536.71	536.30
47+95.25	537.00	536.56

RAMP D

D-2 Dc= 4°00'00" D-3 Dc= 8°00'00"

STATION	℄ P.G.	16'L.T. OF ℄	
31+00.00			
Bk. See Pavt. Detail		Sh. 292	
36+67.99			
	Normal		
40+99.88			
Baseline Shift.	@ P.G.	16'Rt.	
40+99.88	570.86	571.11	
41+25.00	570.05	570.43	
41+50.00	569.20	569.70	
41+75.00	568.35	568.98	
P.C. 41+83.28	568.07	568.74	
42+00.00	567.50	568.17	
42+25.00	566.65	567.32	
42+50.00	565.80	566.47	
42+75.00	564.95	565.62	
43+00.00	564.10	564.77	
43+25.00	563.25	563.92	
43+50.00	562.40	563.07	
43+63.78	561.93	562.60	
43+75.00	561.55	562.27	
44+00.00	560.70	561.55	
44+25.00	559.85	560.82	
44+50.00	559.00	560.10	
44+75.00	558.15	559.38	
44+95.78	557.44	558.77	
	P.G.	P.G.+1.33	
Full Superelevation =.083'/'			
	P.G.	P.G.+1.33	
48+80.32	544.66	545.99	
49+00.00	544.24	545.59-16.2'	Width Transition
49+25.00	543.81	545.18-16.4'	
49+50.00	543.50	544.89-16.7'	
49+75.00	543.31	544.72-16.9'	
50+00.00	543.18	544.61-17.2'	
50+25.00	543.05	544.51-17.4'	
50+50.00	542.92	544.40-17.7'	
50+75.00	542.79	544.29-17.9'	
S.C. 50+80.32	542.77	544.27-18'	
	P.G.	P.G.+1.50	
Full Superelevation =.083'/'			
	P.G.	P.G.+1.50	
C.S. 53+90.87	541.16	542.66-18'	
54+00.00	541.11	542.55-17.9'	
54+25.00	540.98	542.26-17.65	
54+50.00	540.85	541.97-17.4'	
54+75.00	540.72	541.67-17.15'	
55+00.00	540.59	541.38-16.9'	
55+13.87	540.52	541.22-16.77'	
55+25.00	540.46	541.10-16.65	Width Transition
55+50.00	540.33	540.82-16.4'	
55+75.00	540.20	540.54-16.15'	
ST. 55+90.87	540.12	540.37-16.0'	
56+00.00	540.07	540.32	
56+25.00	539.94	540.19	
56+50.00	539.81	540.06	
56+75.00	539.68	539.93	
57+00.00	539.55	539.80	
57+25.00	539.42	539.67	
57+50.00	539.30	539.55	
57+75.00	539.17	539.42	
58+00.00	539.04	539.29	
58+25.00	538.91	539.16	
58+50.00	538.78	539.03	
58+75.00	538.65	538.94	
58+97.68	538.53	538.78	
P.C. 59+14.88	538.44	538.78	
Baseline Shift.	16'Lt.	@ P.G.	

RAMP D- Cont.

D-4 Dc_1= 8°00'00" Dc_2= 38°00'00" D-5 Dc= 38°00'00"

STATION	16'L.T. OF ℄	℄ P.G.
P.C. 59+14.88		
	P.G.-.336	P.G.
Full Superelevation		=.021'/'
	P.G.-.336	P.G.
61+32.80	537.65	537.31
61+50.00	537.31	537.56
61+75.00	537.30	537.43
62+00.00	537.30	537.30
62+25.00	537.30	537.17
62+50.00	537.30	537.04
62+67.20	537.29	536.95
	P.G.+.336	P.G.
Full Superelevation		=.021'/'
	P.G.+.336	P.G.
64+67.00		
Ah. See Pavt.	Detail Sh.	293-294

RAMP F

F-1 Dc= 0°30'00" F-2 Dc= 6°00'00"

STATION	℄ P.G.	16'RT. OF ℄	
Bk. See Pavt.	Detail Sh.	295	
107+00.00	539.95	540.20	
107+25.00	539.86	540.05	
107+50.00	539.77	539.90	
P.C. 107+65.01			
107+75.00	539.68	539.74	
108+00.00	539.59	539.59	
108+25.00	539.50	539.44	
108+50.00	539.41	539.28	
108+75.00	539.32	539.13	
109+00.00	539.23	538.98	
	P.G.	P.G.-.25	
	Normal	=.016'/'	
	P.G.	P.G.-.25	
117+22.87	539.20	538.95	
117+50.00	539.30	539.11	
117+75.00	539.38	539.26	
118+00.00	539.46	539.40	
118+25.00	539.54	539.55	
118+50.00	539.63	539.70	
118+75.00	539.71	539.84	
119+00.00	539.80	539.99	
119+22.87	539.92	540.17	
119+50.00	540.20	540.58	
119+75.00	540.58	541.09	
P.C. 119+98.67	541.04	541.67	
AH. See Pavt.	Detail	Sh. 296	

RAMP E

E-1 Dc= 4°00'00" E-2 Dc=11°00'00"

STATION	℄ P.G.	16'RT. OF ℄	
P.C. 51+22.97	538.66	538.88-14'	Width Transition
51+50.00	538.55	538.89-14.5'	
51+75.00	538.45	538.90-15.0'	
52+00.00	538.35	538.92-15.5'	
52+22.97	538.26	538.95-16'	
52+50.00	538.15	538.76-14.5'	
52+75.00	538.05	538.60-15.0'	
53+00.00	537.95	538.60-15.5'	
53+22.97	537.90	538.57-16'	
53+50.00	537.92	538.59	
53+75.00	538.04	538.71	
53+97.37	538.22	538.88	
54+00.00	538.24	538.89	
54+25.00	538.53	539.06	
54+50.00	538.90	539.31	
54+75.00	539.36	539.64	
P.T. 54+80.87	539.48	539.73	
55+00.00	539.91	540.10	
55+25.00	540.50	540.62	
55+50.00	541.09	541.13	
55+75.00	541.67	541.65	
56+00.00	542.26	542.16	
56+25.00	542.85	542.68	
56+50.00	543.44	543.19	
	16 Lt.	@ P.G.	
56+50.00	543.44	543.19	
56+75.00	544.03	543.78	
57+00.00	544.62	544.37	
T.S. 57+07.41	544.79	544.54	
57+25.00	545.27	544.96	
57+50.00	545.95	545.54	
57+75.00	546.65	546.16	
58+00.00	547.42	546.83	
58+22.71	548.15	547.49	
58+50.00	549.07	548.33	
58+75.00	549.96	549.16	
59+00.00	550.91	550.05	
59+25.00	551.92	550.99	
59+50.00	552.97	551.98	
59+75.00	554.06	553.00	
59+77.92	554.18	553.12	
60+00.00	555.29	554.02	
C.S. 60+07.41	555.66	554.32	
	P.G.+1.33	P.G.	
Full Superelevation =.083'/'			
	P.G.+1.33	P.G.	
60+77.92			
Ah. See Pavt.	Detail Sh.	299	

RAMP H

H-2 Dc= 8°00'00" H-3 Dc= 8°00'00"

STATION	16'L.T. OF ℄	℄ P.G.
Bk. See Pavt. Detail		Sh. 293
41+40.39	537.05	535.90
41+50.00	537.16	535.94
41+72.99	537.41	536.07
	P.G.+1.33	P.G.
Full Superelevation		=.083'/'
	P.G.+1.33	P.G.
42+18.59	537.88	536.55
42+25.00	537.94	536.64
42+50.00	538.21	537.05
42+75.00	538.52	537.50
43+00.00	538.83	537.95
43+25.00	539.15	538.40
P.T. 43+40.39	539.34	538.67
43+50.00	539.46	538.84
43+75.00	539.77	539.29
44+00.00	540.08	539.74
44+16.00	540.28	540.03
44+25.00	540.39	540.19
44+50.00	540.71	540.64
44+75.00	541.02	541.09
45+00.00	541.33	541.54
45+08.37	541.44	541.69
45+25.00	541.65	541.99
45+50.00	541.96	542.44
45+75.00	542.27	542.89
P.C. 45+83.98	542.38	543.05
46+00.00	542.58	543.33
46+25.00	542.89	543.78
46+50.00	543.20	544.23
46+75.00	543.52	544.68
47+00.00	543.83	545.13
47+05.78	543.90	543.23
	P.G.-1.33	P.G.
Full Superelevation .083'/'		
	P.G.-1.33	P.G.
49+16.95	547.35	548.68
49+25.00	547.44	548.74
49+50.00	547.66	548.86
49+75.00	547.79	548.87
50+00.00	547.81	548.80
50+25.00	547.75	548.62
50+50.00	547.58	548.35
50+75.00	547.32	547.99
P.T. 50+75.05	547.32	547.99
AH. See Pavt.	Detail	Sh. 298

RAMP I

I-2 Dc= 5°30'00" I-3 Dc= 8°00'00"

STATION	℄ P.G.	16'RT. OF ℄
Bk. See Pavt.	Detail	Sh. 297
P.C.C. 51+02.14	543.28	544.61
51+25.00	542.48	543.70
51+50.00	541.61	542.70
51+75.00	540.73	541.70
51+83.34	540.44	541.37
	P.G.	P.G.+.928
Full Superelevation		.058'/'
	P.G.	P.G.+.928
54+72.94	532.49	533.42
55+00.00	532.42	533.21
55+24.74	532.48	533.15
55+50.00	532.61	533.15
55+75.00	532.73	533.15
56+00.00	532.86	533.15
P.T. 56+08.14	532.90	533.15
56+25.00	532.98	533.16
56+50.00	533.11	533.17
56+75.00	533.23	533.19
57+00.00	533.36	533.20
P.C. 57+22.31	533.47	533.22
	16 Lt.	@ P.G.
57+25.00	533.50	533.23
57+50.00	533.76	533.36
57+75.00	534.03	533.98
57+95.21	534.25	533.58
58+00.00	534.30	533.61
58+25.00	534.57	533.73
58+50.00	534.84	533.86
58+75.00	535.10	533.98
59+00.00	535.37	534.11
59+11.81	535.50	534.16
Full Superelevation =.083'/'		
59+32.79	535.60	534.27
59+50.00	535.59	534.36
59+75.00	535.57	534.48
60+00.00	535.55	534.61
60+25.00	535.54	534.73
P.C.C. 60+49.29	535.52	534.85
AH. See Pavt.	Detail	Sh. 300

DEVELOPED	CHECKED

SUPERELEVATION TABLES

CALC. REH DATE 3/86
CHK'D JBS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

78
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

RAMP P

P-1 Dc=20°00'00" P-2 Dc=2°00'00"

STATION	℄ P.G.	16' RT OF ℄
Bk. See Pavt.	Detail	Sh. 305
124+00.00	630.22	631.24
124+25.00	629.82	630.78
124+50.00	629.42	630.21
124+75.00	628.96	629.63
125+00.00	628.39	628.94
125+25.00	627.70	628.14
125+50.00	626.90	627.22
125+64.83	626.39	626.64
125+75.00	626.04	626.24
126+00.00	625.18	625.26
T.S. 126+17.96	624.56	624.56
126+25.00	624.32	624.28
126+50.00	623.46	623.29
126+64.78	622.95	622.70
126+75.00	622.60	622.30
127+00.00	621.74	621.30
127+25.00	620.88	620.31
127+44.01	620.23	619.56
127+50.00	620.02	619.32
127+75.00	619.16	618.33
128+00.00	618.30	617.33
128+25.00	617.51	616.40
128+50.00	616.85	615.61
S.C. 128+67.96	616.45	615.12
	P.G.	P.G.-1.33
Full Superelevation =.083'/'		
	P.G.	P.G.-1.33
CS. 129+10.15	615.80	614.47
129+25.00	615.66	614.21
129+50.00	615.53	614.41
129+75.00	615.53	614.55
130+00.00	615.67	614.82
130+25.00	615.94	615.22
130+34.10	616.07	615.40
130+50.00	616.34	615.76
130+75.00	616.88	616.43
131+00.00	617.54	617.22
131+13.33	617.96	617.71
131+25.00	618.35	618.16
131+50.00	619.28	619.22
ST. 131+60.15	619.70	619.70
131+75.00	620.35	620.38
132+00.00	621.54	621.63
132+21.21	622.62	622.75
132+25.00	622.81	622.95
132+50.00	624.08	624.26
132+75.00	625.34	625.58
132+79.74	625.58	625.83
133+00.00	626.61	626.90
133+21.21	627.68	628.02
AH. See Pavt.	Detail	Sh. 302

RAMP Q

Q-1 Dc=20°00'00" Q-2 Dc=2°00'00"

STATION	16' LT. OF ℄	℄ P.G.
Bk. See Pavt.	Detail	Sh. 305
126+50.00	631.13	631.14
CS. 126+56.49		
126+75.00	630.37	630.12
127+00.00	629.23	628.98
127+25.00	628.02	627.77
127+50.00	626.80	626.55
127+75.00	625.59	625.34
128+00.00	624.37	624.12
128+25.00	623.16	622.91
128+50.00	621.95	621.70
ST. 128+56.49		
128+75.00	620.73	620.48
130+00.00	616.43	616.18
P.C. 130+13.00		
130+25.00	616.22	615.97
130+50.00	616.22	615.97
130+75.00	616.45	616.20
131+00.00	616.89	616.64
131+25.00	617.60	617.31
131+50.00	618.54	618.20
AH. See Pavt.	Detail	Sh. 302

RAMP N

N-2 Dc=2°00'00"

STATION	16' LT. OF ℄	℄ P.G.
Bk. See Pavt.	Detail	Sh. 300
96+50.00	586.73	586.68
96+75.00	587.09	587.16
P.C. 98+97.24		
97+00.00	587.34	587.52
97+13.76	587.43	587.68
97+25.00	587.44	587.78
	P.G.-.34	P.G.
Full Superelevation =.021'/'		
	P.G.-.34	P.G.
P.T. 98+91.07	586.35	586.69
99+00.00	586.20	586.49
99+08.68	586.04	586.29
99+25.00	585.70	585.87
99+50.00	585.09	585.13
99+75.00	584.36	584.29
100+00.00	583.53	583.34
100+11.07	583.14	582.89
	P.G.+.25	P.G.
	Normal	=.016
	P.G.+.25	P.G.
102+45.00	573.45	573.70
AH. See Pavt.	Detail	Sh. 306

RAMP T

T-1 Dc=38°00'00"

STATION	℄ P.G.	16' RT. OF ℄
Bk. See Pavt.	Detail	Sh. 301
93+75.00	583.18	583.38
93+85.00	583.24	583.49
	P.G.	P.G.+.25
	Normal	
	P.G.	P.G.+.25
95+87.63	582.06	582.31
95+90.18	582.00	582.26
96+00.00	581.76	582.07-16.13'
96+25.00	581.06	581.50-16.97'
96+50.00	580.32	580.89-16.81'
96+75.00	579.69	580.38-17.16'
96+81.37	579.55	580.27-17.25'
97+00.00	579.19	580.01-17.48'
97+25.00	578.80	579.76-17.8'
97+40.18	578.63	579.67-18'
Full Superelevation .058'/'		
97+94.41	578.38	579.48-18'
98+00.00	578.39	579.39-18'
98+25.00	578.49	579.33-18'
AH. See Pavt.	Detail	Sh. 301

Width Transition

KNOLLCREST

KD-1 Dc=16°22'13"

STATION	16' LT OF ℄	℄ P.G.	16' RT OF ℄
Bk. See Pavt.	Detail	Sh. 307	
5+69.00	Normal		
5+75.00	G52.35	G52.60	G52.38
6+00.00	G50.85	G51.10	G51.01
6+25.00	G49.35	G49.60	G49.63
6+50.00	G47.85	G48.10	G48.26
P.C. 6+69.00	G46.71	G46.96	G47.21
	P.G.-.25	P.G.	P.G.+.25
	Full Superelevation=.016'/'		
	P.G.-.25	P.G.	P.G.+.25
8+33.00	G45.12	G45.37	G45.62
8+50.00	G46.32	G46.60	G46.87
8+75.00	G48.20	G48.60	G48.64
9+00.00	G50.25	G50.60	G50.52
9+25.00	G52.21	G52.60	G52.39
9+50.00	G54.18	G54.60	G54.27
P.T. 9+56.21			
9+75.00	G56.14	G56.60	G56.14

TEMPORARY RD. NO.2

	STATION	* 24' LT. OF ℄	℄ P. G.	* 24' RT. OF ℄
TR-1 D=10°16'35"	P.C. G+50	575.00	575.49	575.00-20.00'
	G+75	575.41	575.69	575.26-20.39'
	7+00	575.88	575.95	575.55-20.79'
	7+25	576.40	576.26	575.89-21.19'
	7+48.20	576.93	576.59	576.25-21.57'
	7+50	576.95	576.68	576.28-21.59'
	7+75	577.37	577.03	576.69-21.99'
	8+00	577.85	577.50	577.15-22.39'
	8+25	578.35	577.99	577.63-22.79'
	8+50	578.84	578.48	578.12-23.19'
P.T. 8+68.78	8+68.75	579.22	578.85	578.49-23.50'
TR-2 D=10°00'	8+75	579.27	578.98	578.68-23.60'
	9+00	579.47	579.47	579.47-24.00'
	9+25	579.79	579.96	580.13
	9+50	580.11	580.45	580.80
TR-3 D=10°00'	P.C. 9+54.68	580.17	580.54	580.92
	P.T. 11+74.68	P.G.-.38'	P.G.	P.G.+.38'
	Full Superelevation = .0156'/'			
	P.C. 12+62.44	P.G.-.38'	P.G.	P.G.+.38'
	P.T. 14+24.24	609.37	609.78	610.18
TR-4 D=16°20'	15+00	609.71	610.05	610.39
	15+25	611.33	611.48	611.64
	15+50	612.85	612.82	612.79
	15+75	614.27	614.06	613.85
	P.C. 15+97.99	615.46	615.09	614.71
	16+00	615.50	615.19	614.88
	16+25	616.51	616.27	615.90
	16+50	617.47	617.37	616.99
	16+75	618.42	618.44	618.07
	17+00	619.38	619.53	619.16
	17+25	620.34	620.61	620.84
	P.T. 17+42.90	621.02	621.39	621.02

* Width Transition Lt. and Rt. Side 20' to 24'

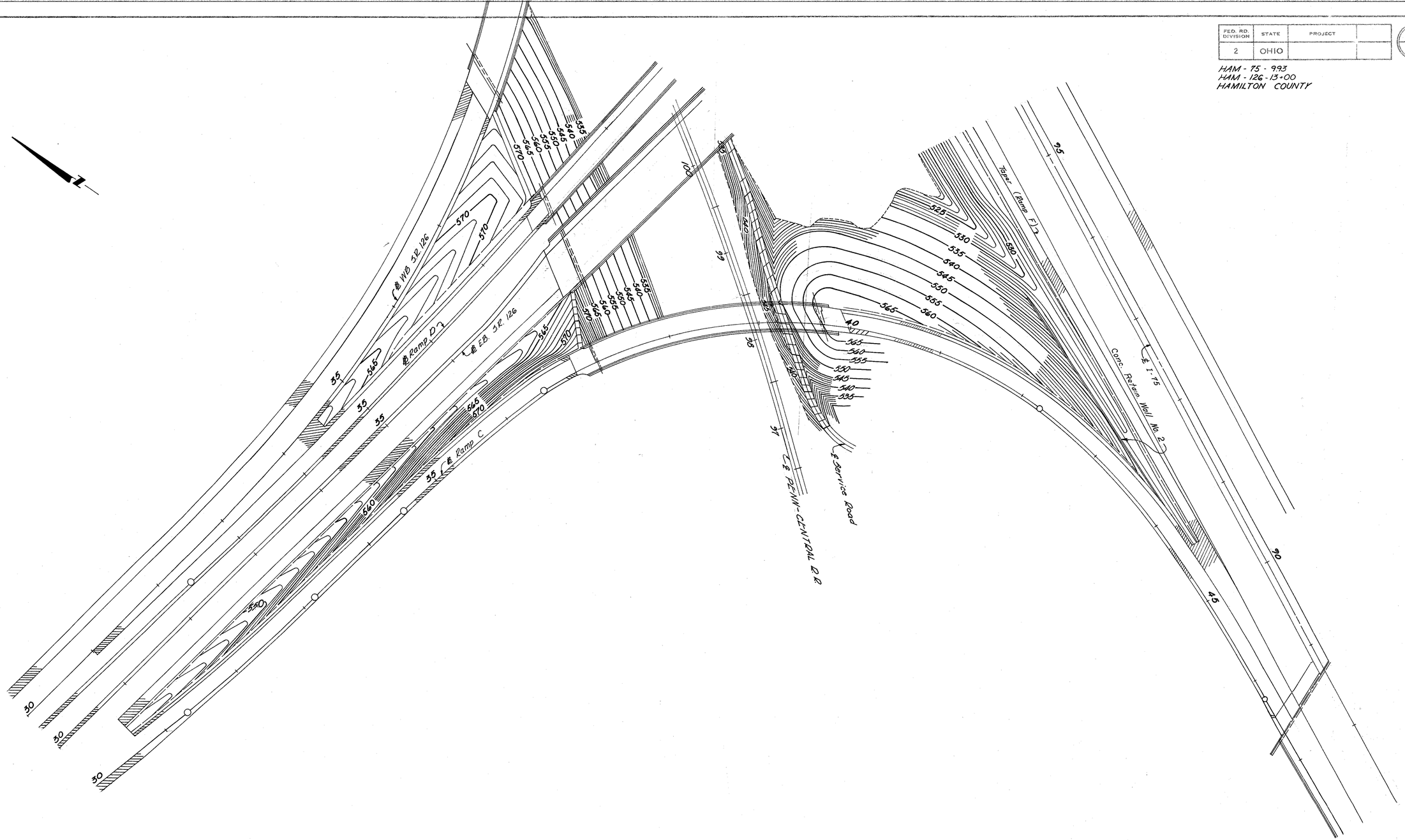
DEVELOPED CHECKED

SUPERELEVATION TABLES

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

74
787

HAM - 75 - 9.93
HAM - 126 - 13.00
HAMILTON COUNTY



RAMP C @ E.B. S.R. 126 (LEFT)
RAMP C @ EXIST. I-75 (RIGHT)
RAMP D @ W.B. S.R. 126 (TOP LEFT)

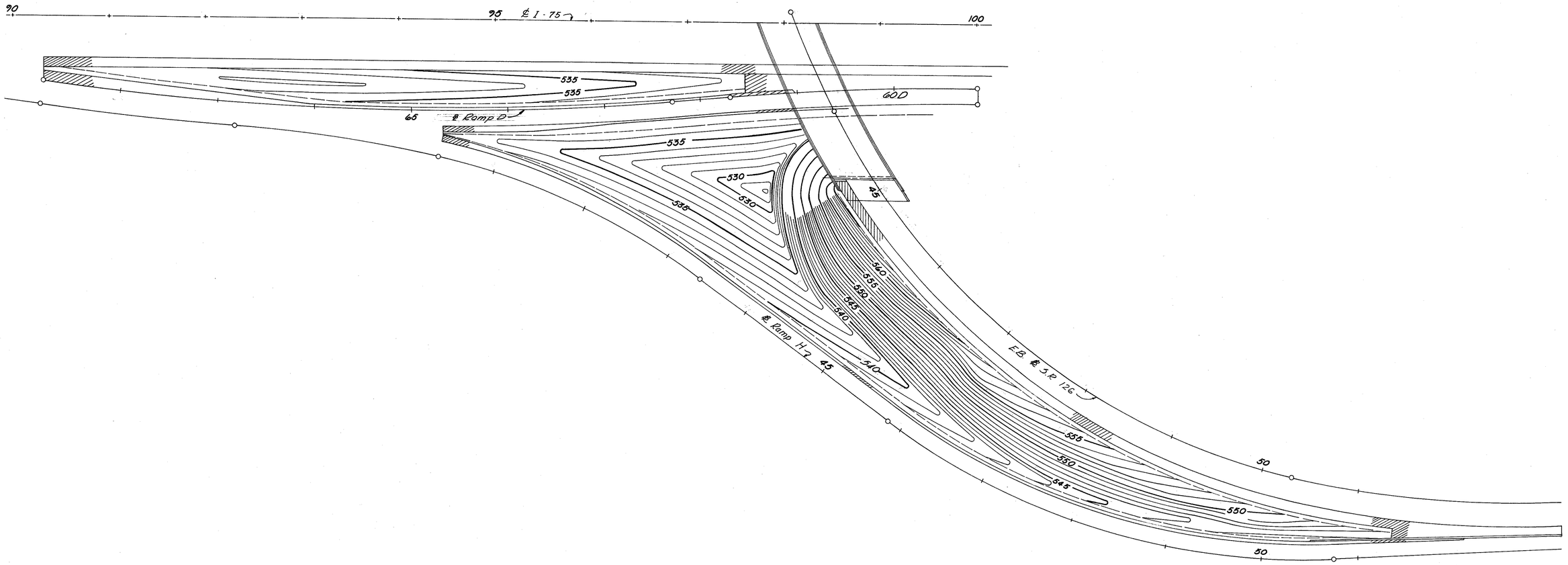
GRADING PLAN

DEVELOPED | CHECKED

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

75
787

HAM - 75 - 9.93
HAM - 126 - 13.00
HAMILTON COUNTY



RAMP D @ EXIST. I-75 & RAMP H
RAMP H @ E.B. S.R. 126

GRADING PLAN

DEVELOPED	CHECKED

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

76
787

HAM - 75 - 9.93
HAM - 126 - 13.00
HAMILTON COUNTY

℄ Service Road
Construction Limits
℄ PENN-CENTRAL R.R.
Construction Limits
W.B. ℄ S.R. 126
Conc. Retain. Wall No. 4
℄ Ramp F
℄ I-75
S.B. ℄ I-75
N.B. ℄ I-75
℄ Ramp D
℄ Ramp I
℄ Relocated
E.B. ℄ S.R. 126
523.00
For Continuation See Sheet No. 77

RAMP D @ E.B. S.R. 126 & N.B. I-75
RAMP F @ W.B. S.R. 126
RAMP I @ E.B. S.R. 126 & N.B. I-75

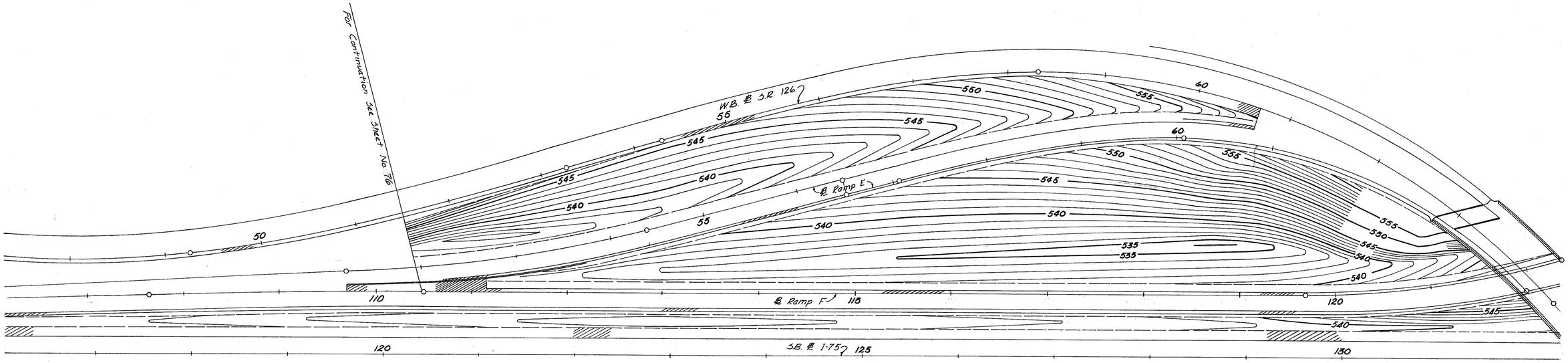
DEVELOPED | ENGINEER

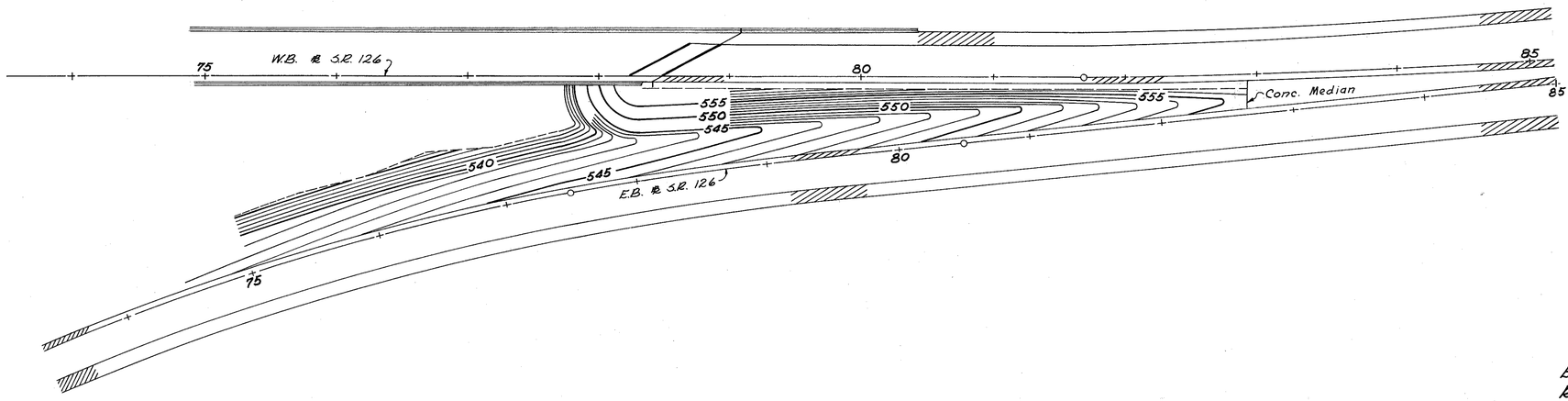
GRADING PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

77
787

HAM - 75 - 9.93
HAM - 126 - 13.00
HAMILTON COUNTY





E.B. S.R 126 @ W.B. S.R. 126
RAMP F @ S.B. I-75
RAMP E @ W.B. S.R.126

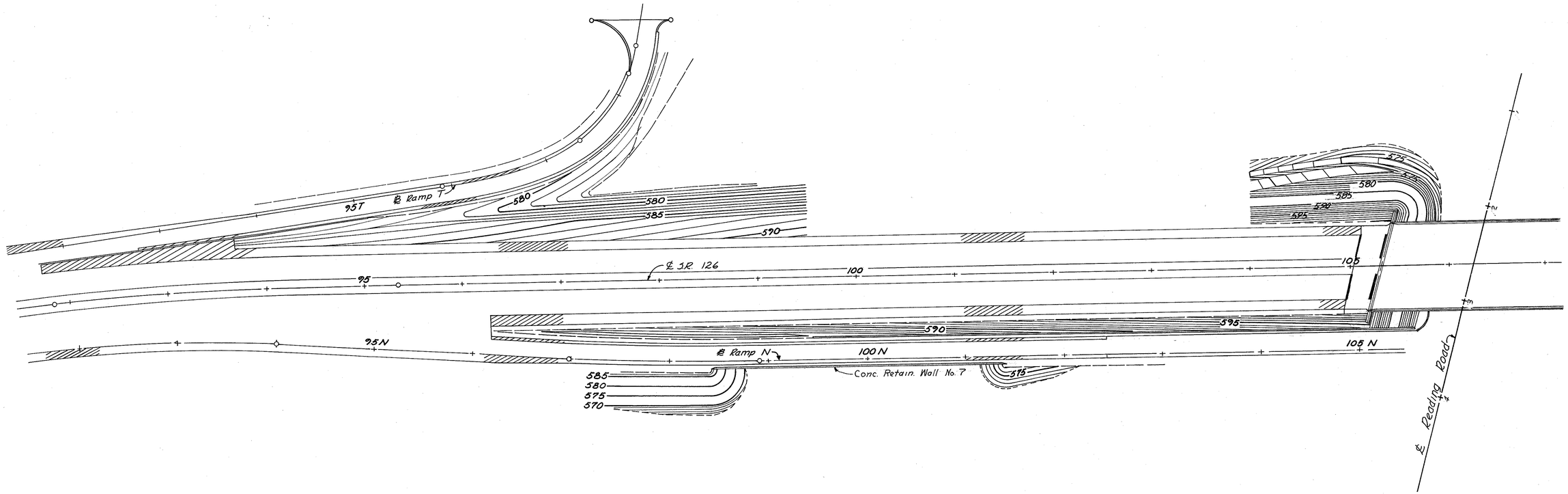
GRADING PLAN

DEVELOPED	CHECKED

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

78
787

HAM - 75 - 9.93
HAM - 126 - 13.00
HAMILTON COUNTY



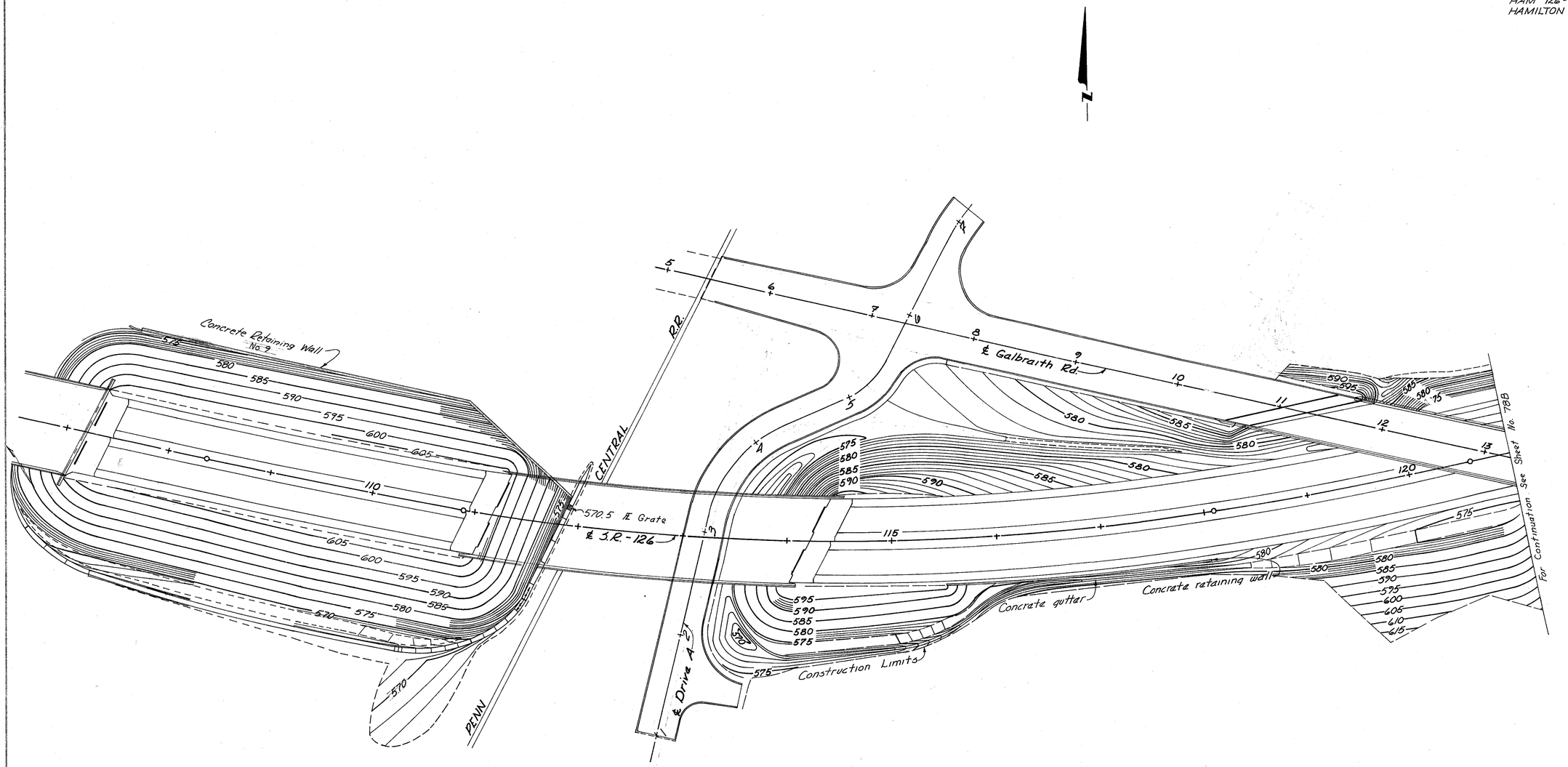
RAMP N @ S.R. 126
RAMP T @ S.R. 126
GRADING PLAN

DEVELOPED | CHECKED

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

78A
787

HAM 75 - 9.93
HAM 126 - 13.00
HAMILTON COUNTY



GALBRAITH ROAD @ S.R. 126 & DRIVE A
DRIVE A @ S.R. 126

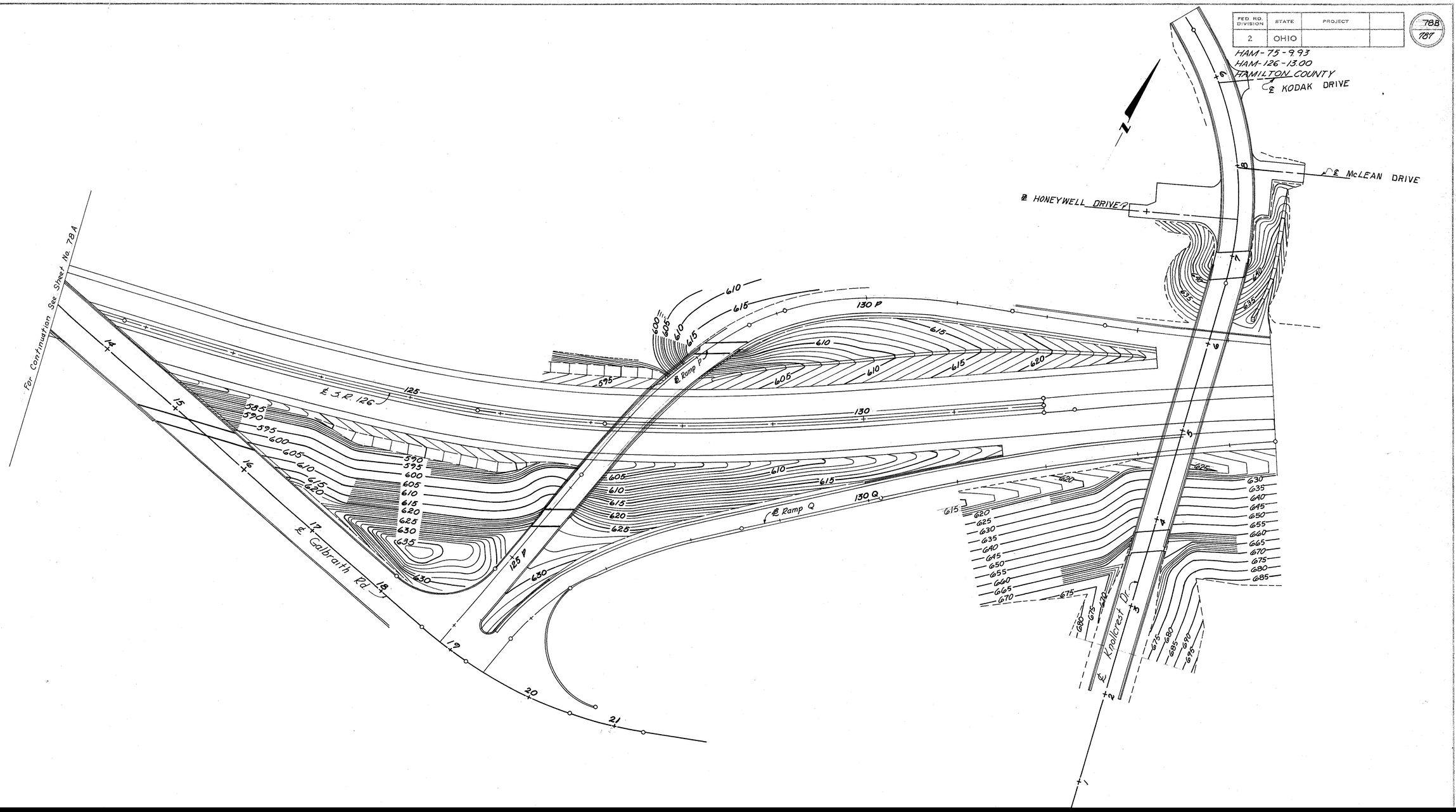
DEVELOPED	CHECKED

GRADING PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

788
787

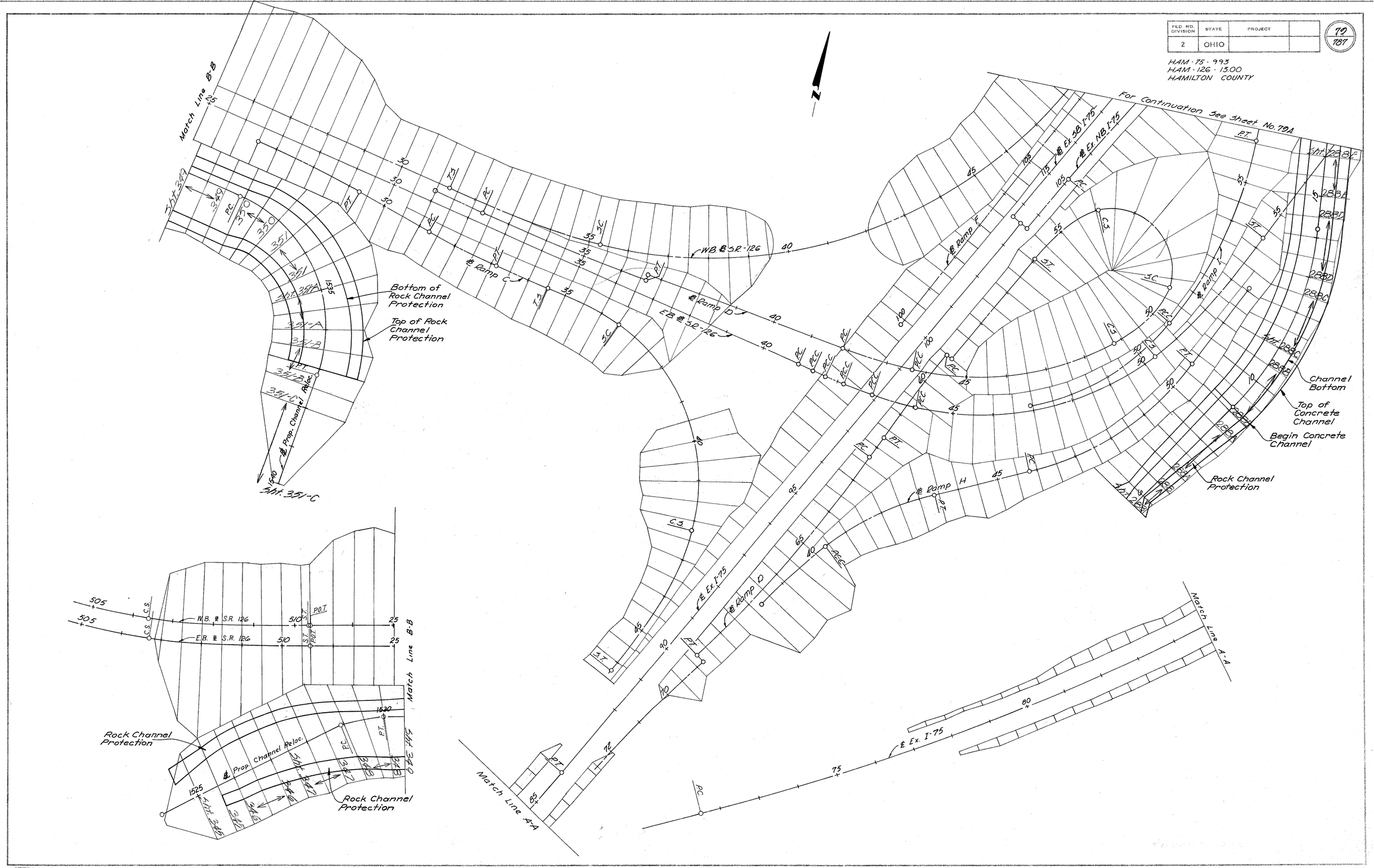
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

79
787

HAM-75-993
HAM-126-13.00
HAMILTON COUNTY



FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

70A
78T

HAM - 75 - 9.93
HAM - 126 - 13.00
HAMILTON COUNTY

N

End Conc. Channel Sta. 39+65

End R.C.P. Sta. 44+75

Begin R.C.P. Sta. 39+65

℄ EB & S.R.-126

Mill Creek Tributary

Rock Channel Protection

℄ Ex. NB I-75

℄ Ramp C

℄ Ramp F

℄ Ex. SB I-75

℄ WB & S.R.-126

℄ Existing Channel & Prop. Channel 30 Widening

℄ Ramp I

Channel Bottom

Top of 8" Reinforced Conc. Channel

For Continuation See Sheet No. 79B

For Continuation See Sheet No. 79

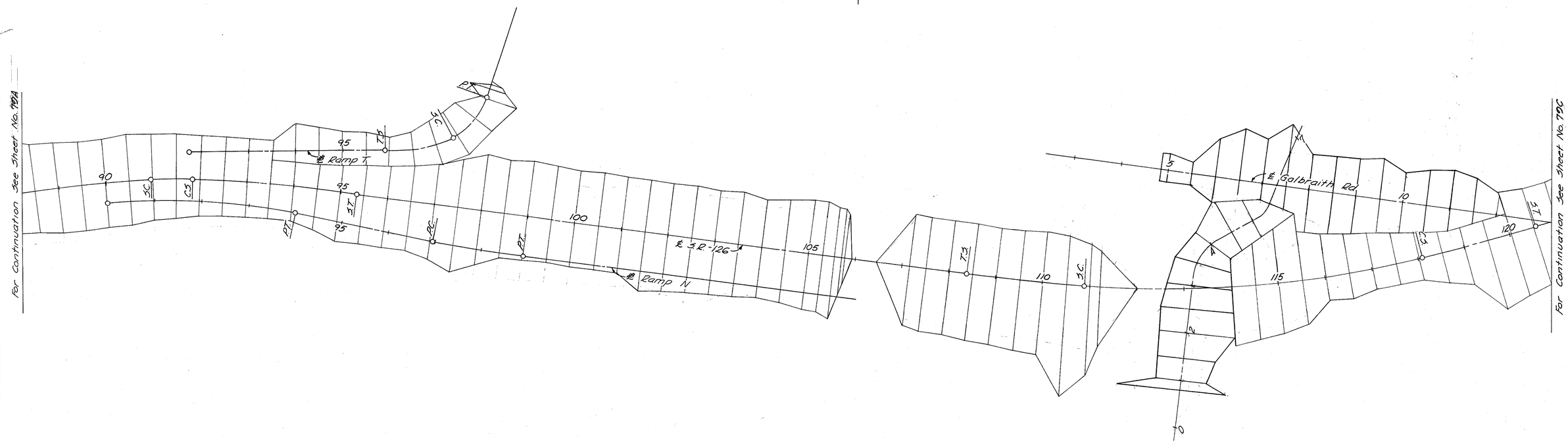
DEVELOPED | CHECKED

CROSS SECTION LAYOUT

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

79B
787

HAM - 75 - 9.93
HAM - 126 - 13.00
HAMILTON COUNTY

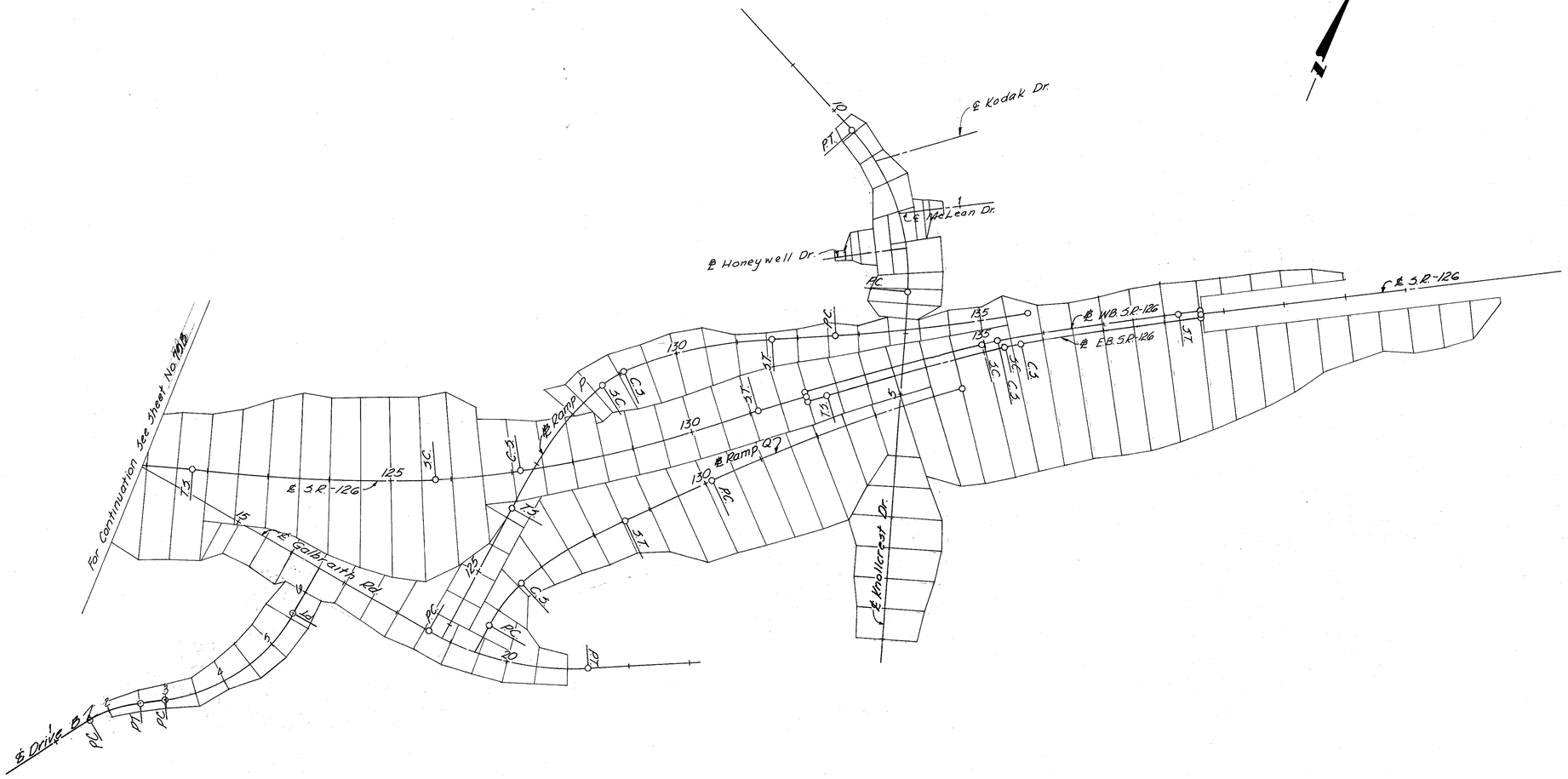


DEVELOPED	CHECKED

CROSS SECTION - LAYOUT

FED. RD. DIVISION	STATE	PROJECT		
2	OHIO			

HAM - 75 - 993
HAM - 126 - 13.00
HAMILTON COUNTY



DEVELOPED | CHECKED

CROSS SECTION LAYOUT

CALC. BY R.C. DATE 2/86
CHKD. BY J.C. DATE 3/86

OHIO
FHWA REGION 5

79D
787

HAMILTON COUNTY
HAM-126-13.00

SEEDING
End Width | Sq. Yds.

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

℄ E.B.

B.Y. OTHERS

24:1 24:1

2:1 2:1

0.5%

L.A. R/W

48:1

2:1 2:1

527.0

569.37
501+00 W.B.
528.6

Basement
203 Embankment

Match Line ℄

Match Line ℄

160 180

0.5%

2:1

48:1

2:1 2:1

526.0

L.A. R/W

END AREA | VOLUME

	cut	fill	cut	fill	
283	530				
			24	4467	
865					
			24	6687	
0	0	+45			
			+45	0	0

STA. 500+45
BEGIN WORK
BEGIN DITCH

L.A. R/W

Garage

530

500+00 W.B.
528.7

Bldg. w/ Basement

Porch

Bldg. w/ Basement

530

Bldg. w/ Basement

499+00 W.B.
528.6

STA. 499+00 W.B. ℄ – STA. 501+00 W.B. ℄

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

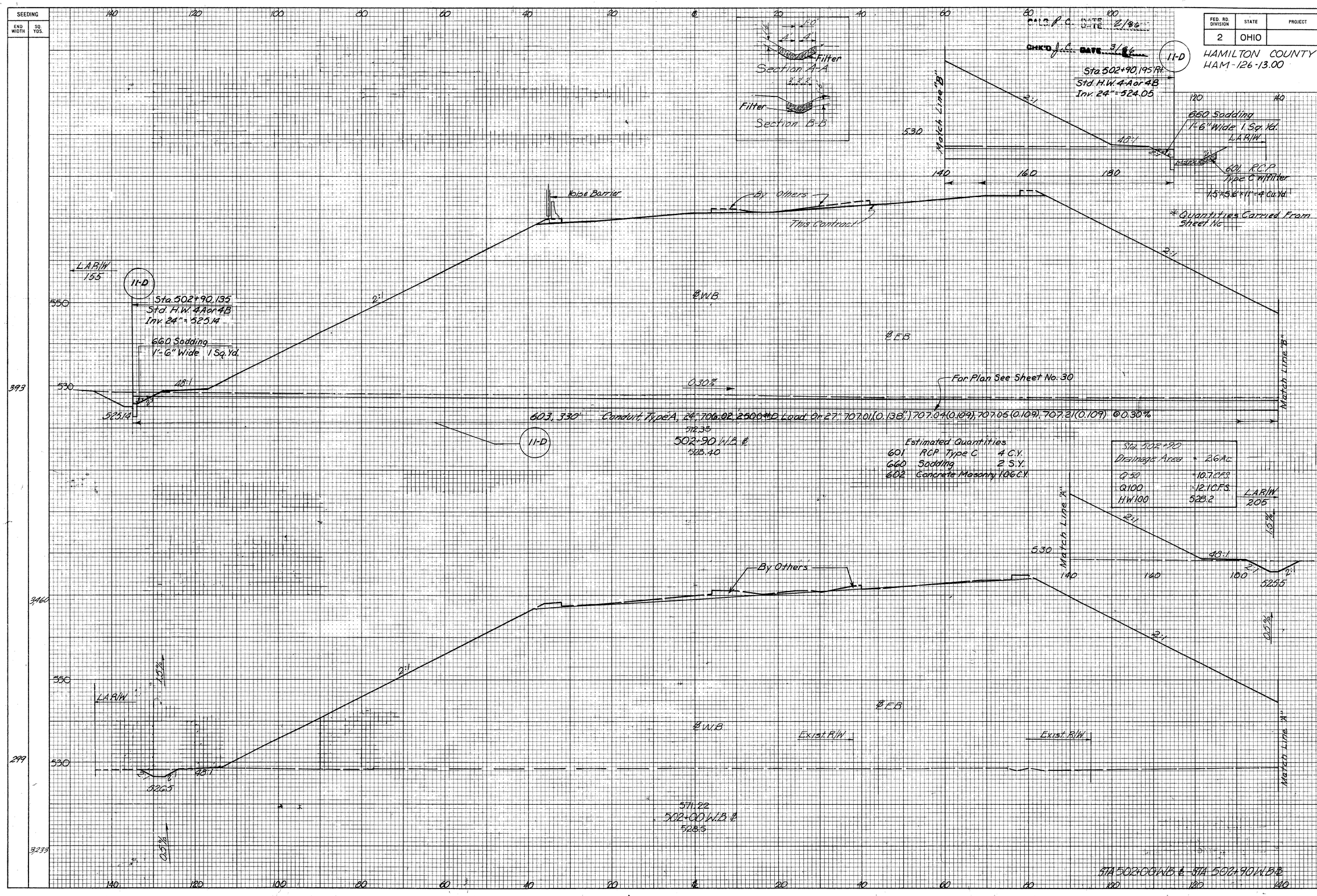
PLATE 8 CROSS SECTION O. D. T. & F. C. STANDARD
SECTION DIMENSIONS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

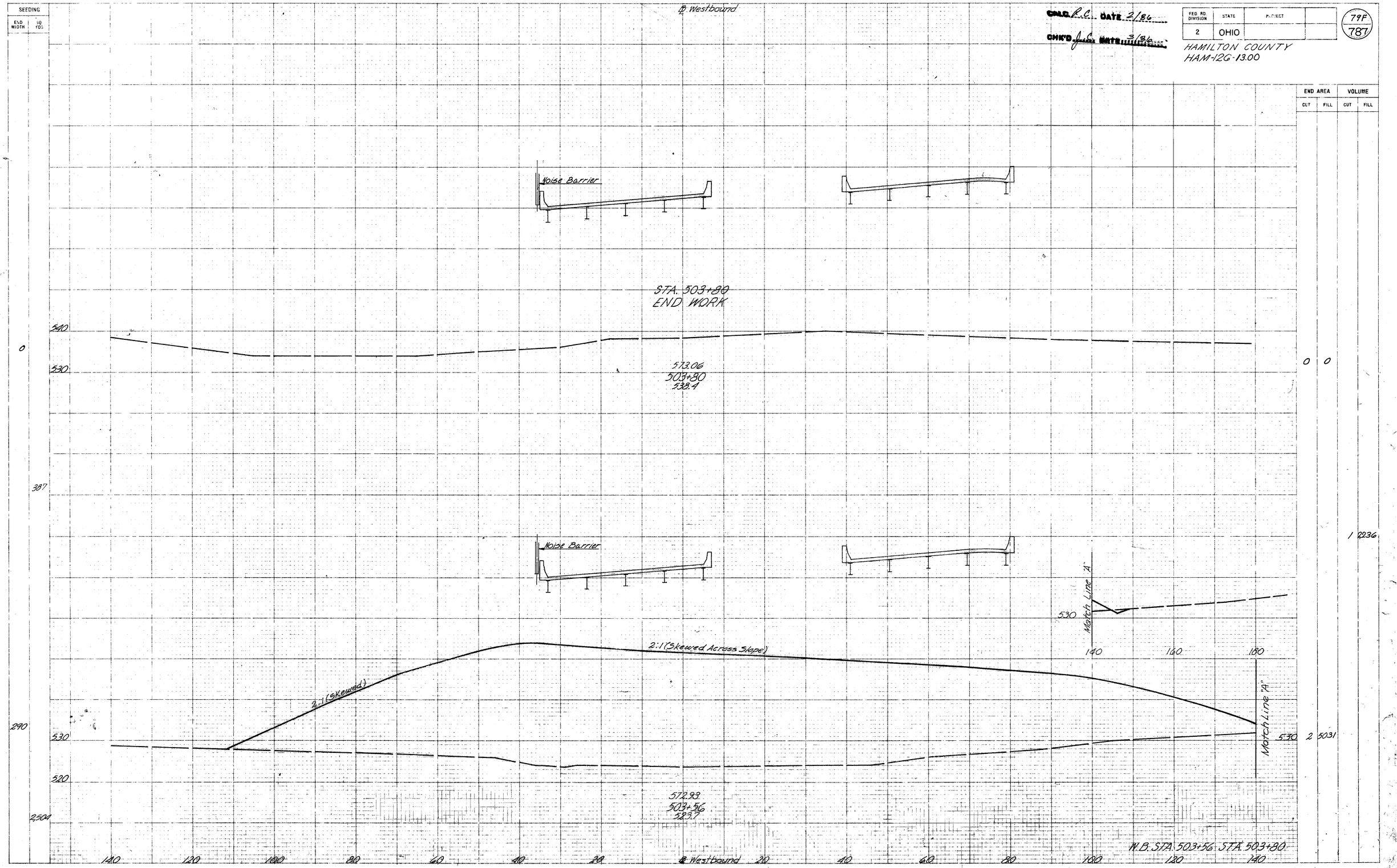
79E
787

HAMILTON COUNTY
HAM-126-13.00

CALC. R.C. DATE 2/86
CHK'D J.C. DATE 3/86



SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
				95	17,788
		76	9,523		
393				168	30107
				258	54
299				91	27,793



SEEDING
END WIDTH
SQ YDS
℄ Westbound
CALC. R.C. DATE 2/86
CHK'D J.C. DATE 3/86
FED. RD. DIVISION 2
STATE OHIO
PROJECT
79F
787
HAMILTON COUNTY
HAM-126-13.00
END AREA
CUT
FILL
VOLUME
CUT
FILL
Noise Barrier
STA. 503+80
END WORK
540
530
0
573.06
503+80
538.4
0
0
387
1
2236
Noise Barrier
Match Line "A"
530
140
160
180
2:1 (Skewed Across Slope)
2:1 (Skewed)
290
530
520
2,504
572.93
503+56
523.7
530
2
5031
Match Line "A"
W.B. STA. 503+56 STA. 503+80
140
120
100
80
60
40
20
℄ Westbound
20
40
60
80
100
120
140

CALC. R.C. DATE 2/86
CHK'D J.C. DATE 3/86

HAM - 75 - 9.93
HAM - 126 - 13.00
HAMILTON COUNTY

154 Yellow
80 - 129

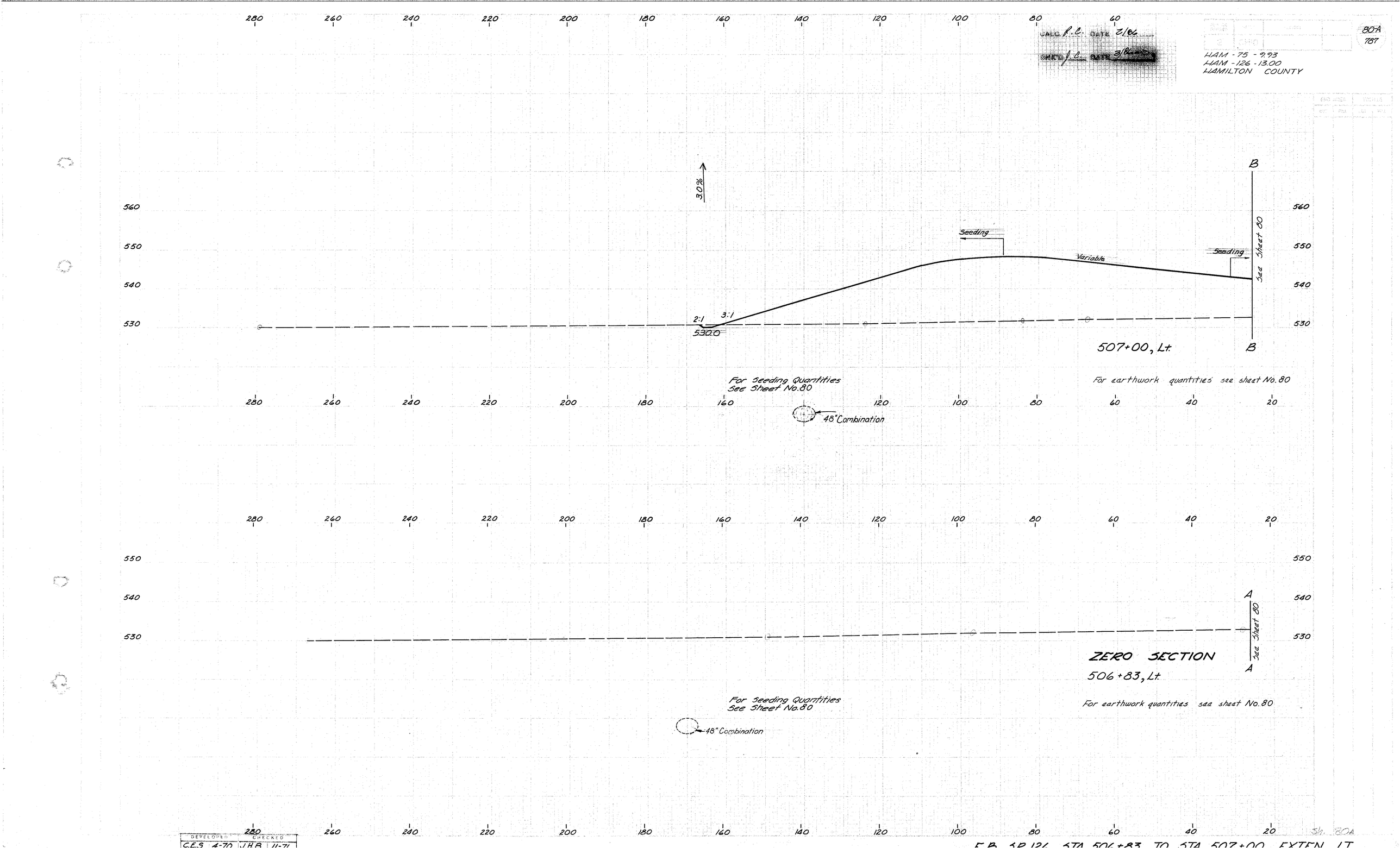
Embankment From Driveway
Sta. 47+80 Vine Street

℄ Vine St.
+.02%
-.19%
537.01± Gutter
537.19
0+30 537.75
0+35 537.45
0+40 536.65
Proposed Regraded Ground
Existing Ground Line
Meet Existing 525.9 Sta 1+12
Proposed Service Drive At Sta. 47+80 Rt., Vine Street

B — See Sheet 80-A — B
Seeding
Variable
Seeding
573.46
507+00
532.7
5-12" Gas
60" Combination
66" Conduit (Slant)

A — See Sheet 80-A — A
ZERO SECTION
573.72
506+83
533.9
5-12" Gas
Telephone
Ex. 6" Water
5-12" Water
66" Conduit (Slant)

E.B. 126 STA 506+83 TO STA 507+00



CALC. R.C. DATE 2/86
CHK'D J.C. DATE 3/86
80-A
787
HAM - 75 - 9.93
HAM - 126 - 13.00
HAMILTON COUNTY
3.0%
Seeding
Variable
Seeding
See Sheet 80
2:1
3:1
530.0
507+00, Lt.
For Seeding Quantities
See Sheet No. 80
For earthwork quantities see sheet No. 80
48" Combination
ZERO SECTION
506+83, Lt.
For Seeding Quantities
See Sheet No. 80
For earthwork quantities see sheet No. 80
48" Combination
DEVELOPED
CHECKED
C.E.S. 4-70
J.H.B. 11-71
Sh. 80A

SEEDING
ENG. WIDTH | SQ. YDS.

20 B 20 40 60 80 100 120 140 160 180 200 220

CALC. K.C. DATE 2/86
CHK. J.C. DATE 2/86

SHEET NO.	STATE	PROJECT
2	OHIO	

80-B
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

ENG. AREA | VOLUME
CUT | FILL

2258

B

570 560 550 540 530 520 510 500

B:1

569.7

See Sheet 80-C

2:1

24:1

Mill Creek

66" Conduit (Sant.)

8" Comb.

18" San.

60 2.4244

55 12176

423

571.41
508+00
528.7

A

Seeding

Seeding

2338

Variable

See Sheet 80-C

Mill Creek

60" Comb.

66" Conduit (Sant.)

56 18567

419

572.52
507+50
~~530.6~~
530.3

6 7876

20 B 20 40 60 80 100 120 140 160 180 200 220 240 260

C.E.S. 4-70 HUB 11-71

F.A. SR 126 STA 507+50 TO STA. 508+00

HAM - 75 - 9.93
HAM - 126 - 13.00
HAMILTON COUNTY

300 280 260 240 220 200 180 160 140 120 100 80 60

570
560
550
540
530
520

56%

Noise Barrier

Variable

568.7

12" Cond S

B

2:1

2:1 2:1 2:1

5222

See Sheet 80-B

508+00, Lt.

B

For Seeding Quantities
See Sheet No 80-B

For earthwork quantities
see sheet No. 80-B

148

580
570
560
550
540
530
520

12.2%

Noise Barrier

A

Variable

2:1

See Sheet 80-B

2:1 2:1

528.5

507+50, Lt.

A

For Seeding Quantities
See Sheet No. 80-B

For earthwork quantities
see sheet No. 80-B

30%

48" Comb.

300 280 260 240 220 200 180 160 140 120 100 80 60 40 20

STATE OF OHIO DEPT. OF HIGHWAYS

F.A.P. 126 STA. 507+50 TO STA. 508+00 EXTENSION LT.

CALC. R.C. DATE 2/86
CHK'D J.C. DATE 2/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

20 Ⓒ 20 40 60 80 100 120 140 160 180 200 220

7921 580

B

570

560

550

540

530

520

510

500

B

B-T

566.2

2:1

See Sheet B1-A

Mill Creek

24:1

568.79
509+00
508.4

362

A

A

B-T

567.7

2089 550

See Sheet B1-A

2:1

24:1

Mill Creek

8" San.

18" San.

570.14
508+50
505.5

390

126 22819
1559 1559

52 12426
Unsuitable Material 578 578

57 24799
535 535

10 14062
Unsuitable Material 0 0

20 Ⓒ 20 40 60 80 100 120 140 160 180 200 220

DRAWN C.E.S. 4-70 CHECKED J.H.R. 11-71

EB. SR-126 STA. 508+50 TO STA. 509+00

SEEDING

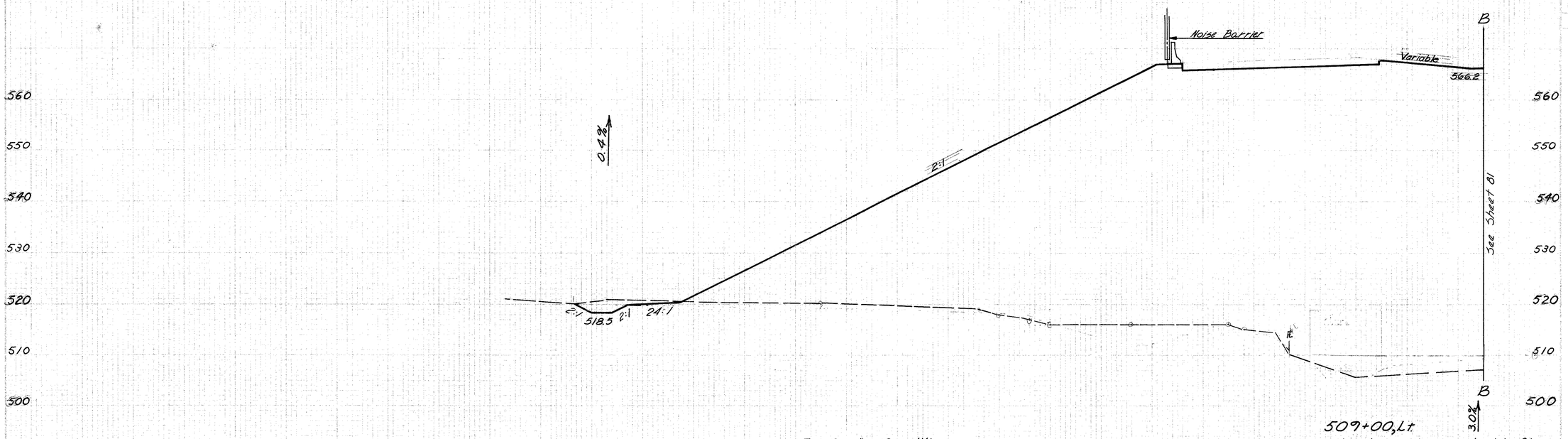
240 220 200 180 160 140 120 100 80 60

CALC. K.L. DATE 2/86

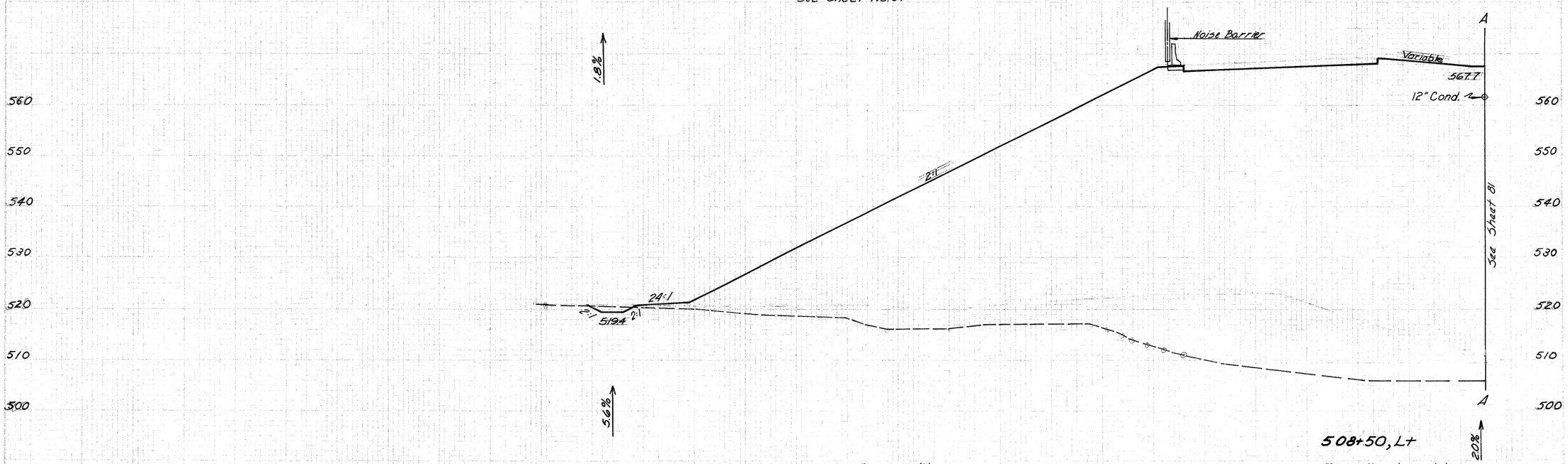
CHKD J.L. DATE 3/86

81-A
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



For Seeding Quantities See Sheet No. 81

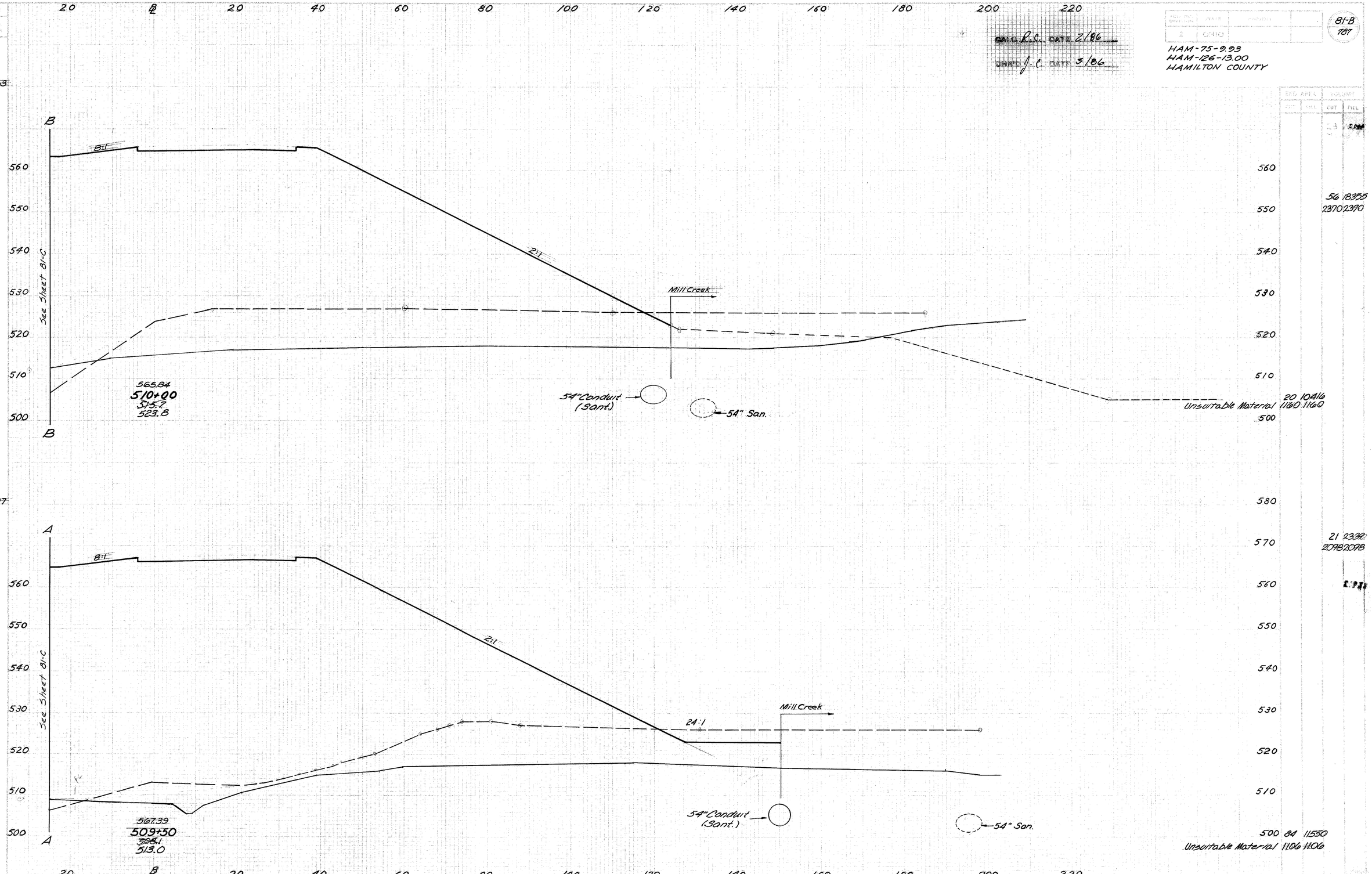


For Seeding Quantities See Sheet No. 81

240 220 200 180 160 140 120 100 80 60 40 20

DESIGNED CHECKED

E.B. S.R.-126 STA. 508+50 TO STA. 509+00 EXTENT



FB SR-126 STA 509+50 TO STA 510+00

SEEDING

END WIDTH	SIDE SLOPE

240 220 200 180 160 140 120 100 80 60 40

CALC. R.S. DATE 2.86

CHKD. J.L. DATE 2.86

STATE	PROJECT
OHIO	

81-C
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

END AREA SHEET

CUT	FILL

560
550
540
530
520
510
500

2.0%

Noise Barrier

Variable

563.3

24:1

2:1

516.5

2:1

B

See Sheet 81-B

B

510+00, Lt

For earthwork quantities see sheet No. 81-B

3.0%

A

Noise Barrier

Variable

564.8

2:1

24:1

2:1

518.3

2:1

See Sheet 81-B

A

0.4%

For Seeding Quantities See Sheet No. 81-B

0.4%

For Seeding Quantities See Sheet No. 81-B

For earthworks quantities see sheet No. 81-B

509+50, Lt

2.0%

240 220 200 180 160 140 120 100 80 60 40 20

DEVELOPED	CHECKED
CSC	JLB
DWB	11-71

WB & EB SR 126 STA 509+50 TO STA 510+00 EXTEN. Lt

SEEDING
LIN. WIDTH | SQ. YDS.

GALC. J.C. DATE 2-86
CHK'D J.C. DATE 3-86

REVISION	DATE	PROJECT
2	CHKD	

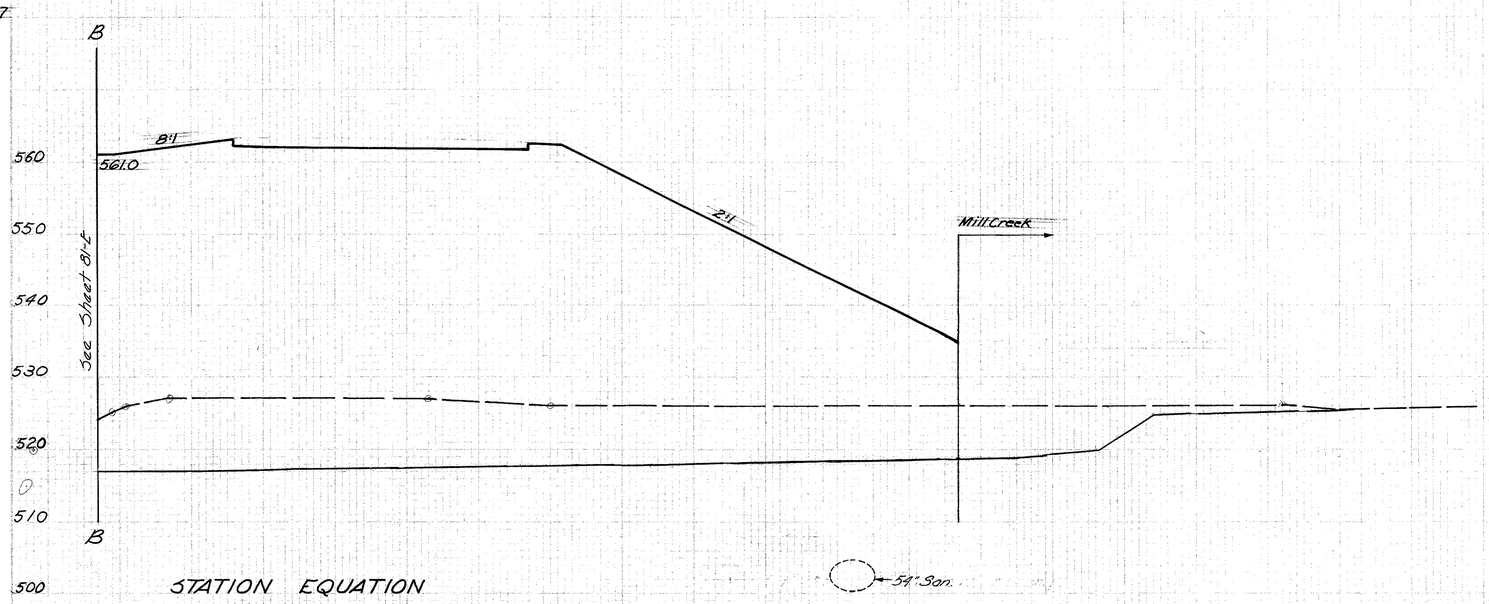
81-D
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

RAD APCA | VOLUME
SHEET | NO.

13 17929
26952695

1757

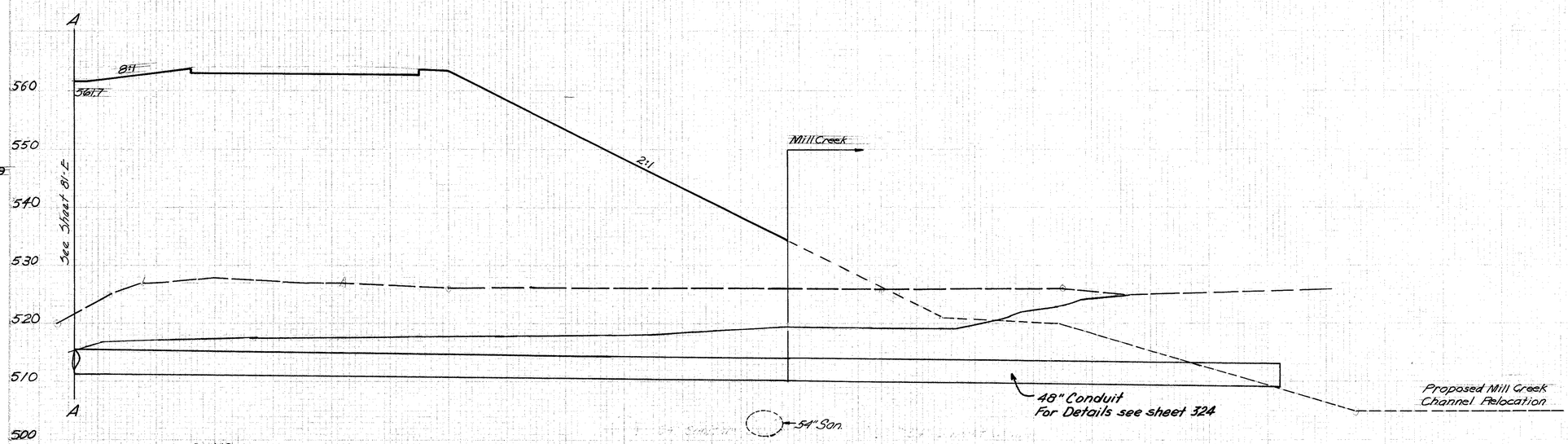


560
550
540
530
520
510
500

8 8804
Unsuitable Material 1350 1350

STATION EQUATION
563.36
510+69.90 E.B. ℄ Back =
22+94.46 E.B. ℄ Ahead =
528.49

297



560
550
540
530
520
510
500

15 6794
1013 1013

679

317

564.10
510+50
528.2

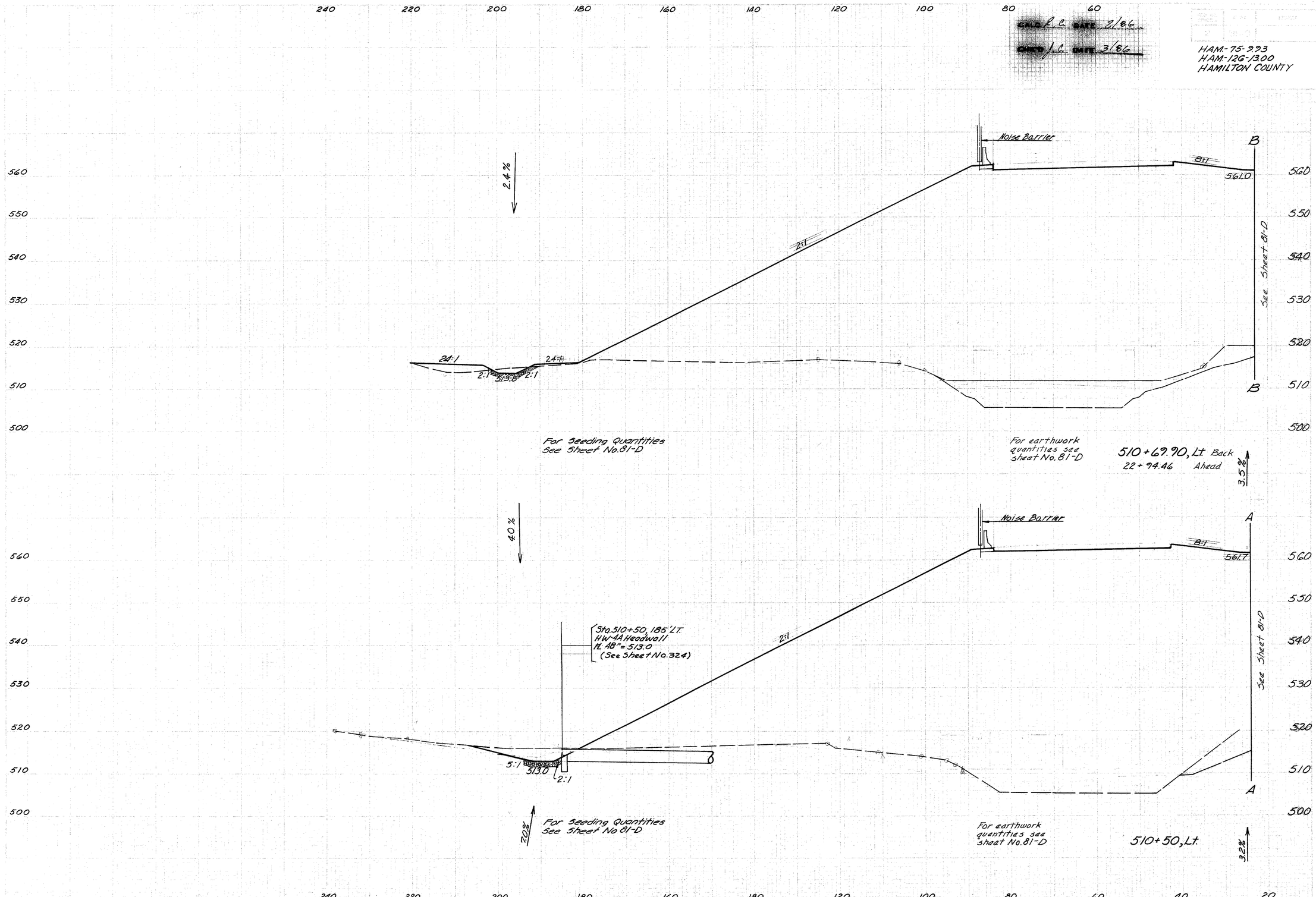
40 9407
Unsuitable Material 1475 1475

EB. SR-126 STA. 510+50 TO STA. 510+69.90

81-E

CALC. J.C. DATE 2/86
CHKD. J.C. DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



FB SR-126 STA. 510+50 TO STA. 510+69.90 EXTENSION

SEEDING

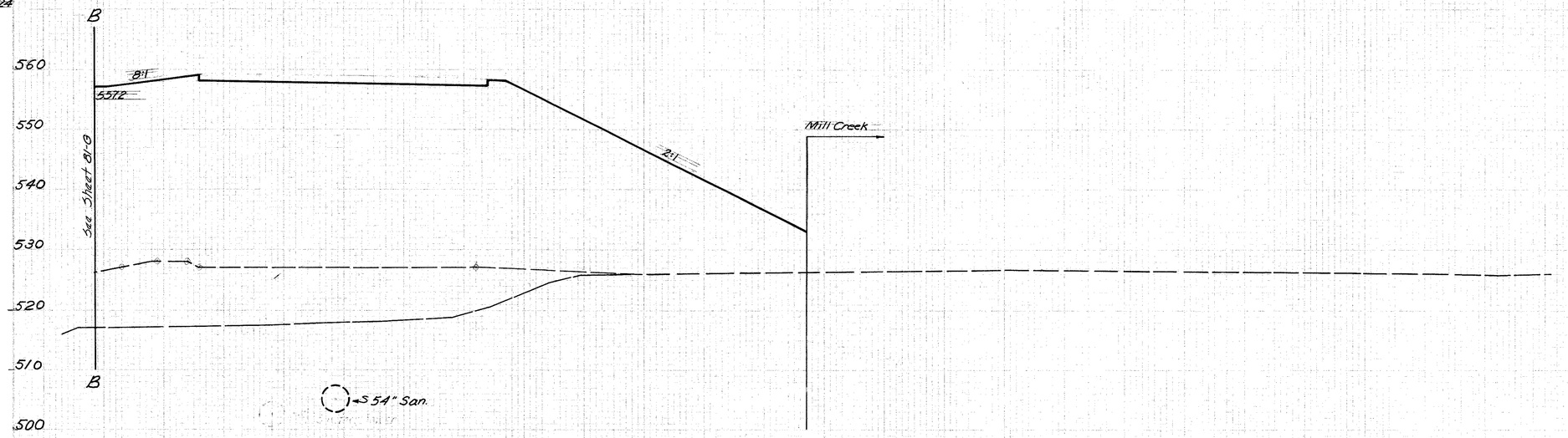
CALC. [illegible] DATE 2/86

CHK'D [illegible] DATE 3/86

81-F
TBT

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

1624



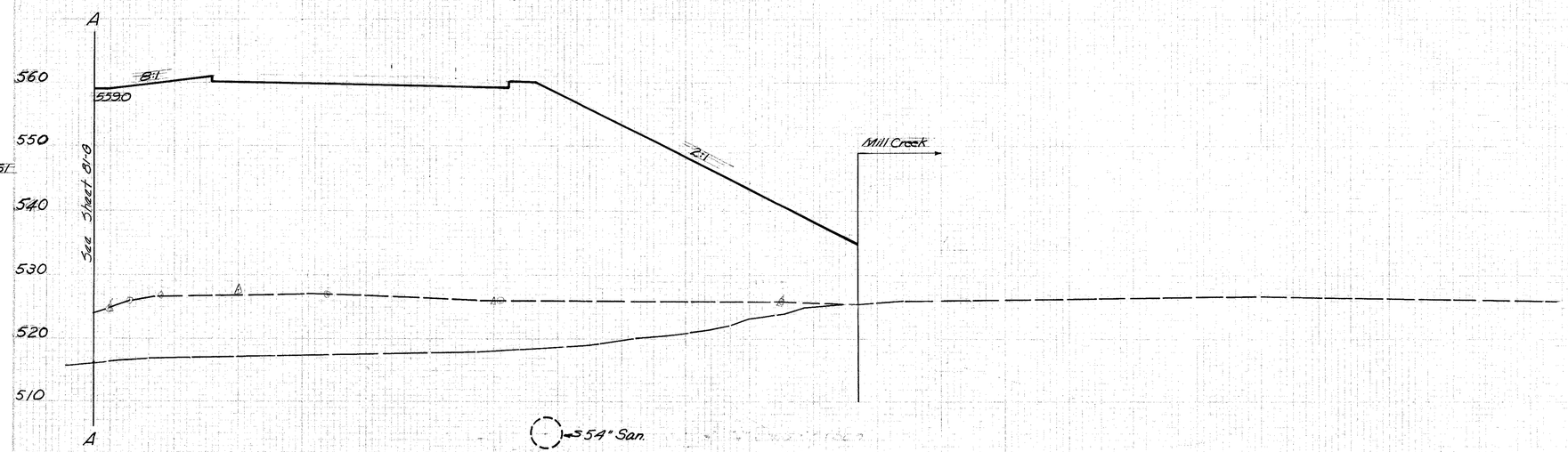
END AREA | VOLUME
CUT | FILL | CUT | FILL

560 | 0 | 16157
550 | 1624 | 16824
540
530
520
510
500

0 8550
Unsuitable Material 1003 1003

559.35
24+00
549.5
528.6

286



1561

END AREA | VOLUME
CUT | FILL | CUT | FILL

560
550
540 | 5 15906 | 21052105
530
520
510
500

5 8628
Unsuitable Material 1180 1180

561.25
23+50
549.3
527.9

273

20 | ℄ | 20 | 40 | 60 | 80 | 100 | 120 | 140 | 160 | 180 | 200 | 220 | 240

EB SR-126 STA 23+50 TO STA 24+00

SEEDING
END WIDTH | SQ YDS

CALC J.C. DATE 2/86
CHKD J.C. DATE 3/86

STATE DIVISION	STATE	PROJECT	
2	OHIO		

81-G
187

HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY

CHG SHT | VOLUME | SHT | NO

300 280 260 240 220 200 180 160 140 120 100 80 60

560 550 540 530 520 510 500

Noise Barrier

B

B:1

5572

2:1

4.5%

24:1

2:1

5187

2:1

24:1

See Sheet 81-F

B

For Seeding Quantities
See Sheet No.81-F

7.2%

For earthwork quantities
see sheet No81-F

24+00, Lt.

3.6%

Noise Barrier

A

B:1

5570

2:1

24:1

2:1

5150

2:1

24:1

See Sheet 81-F

A

2.4%

For Seeding Quantities
See Sheet No.81-F

4.0%

23+50, Lt.

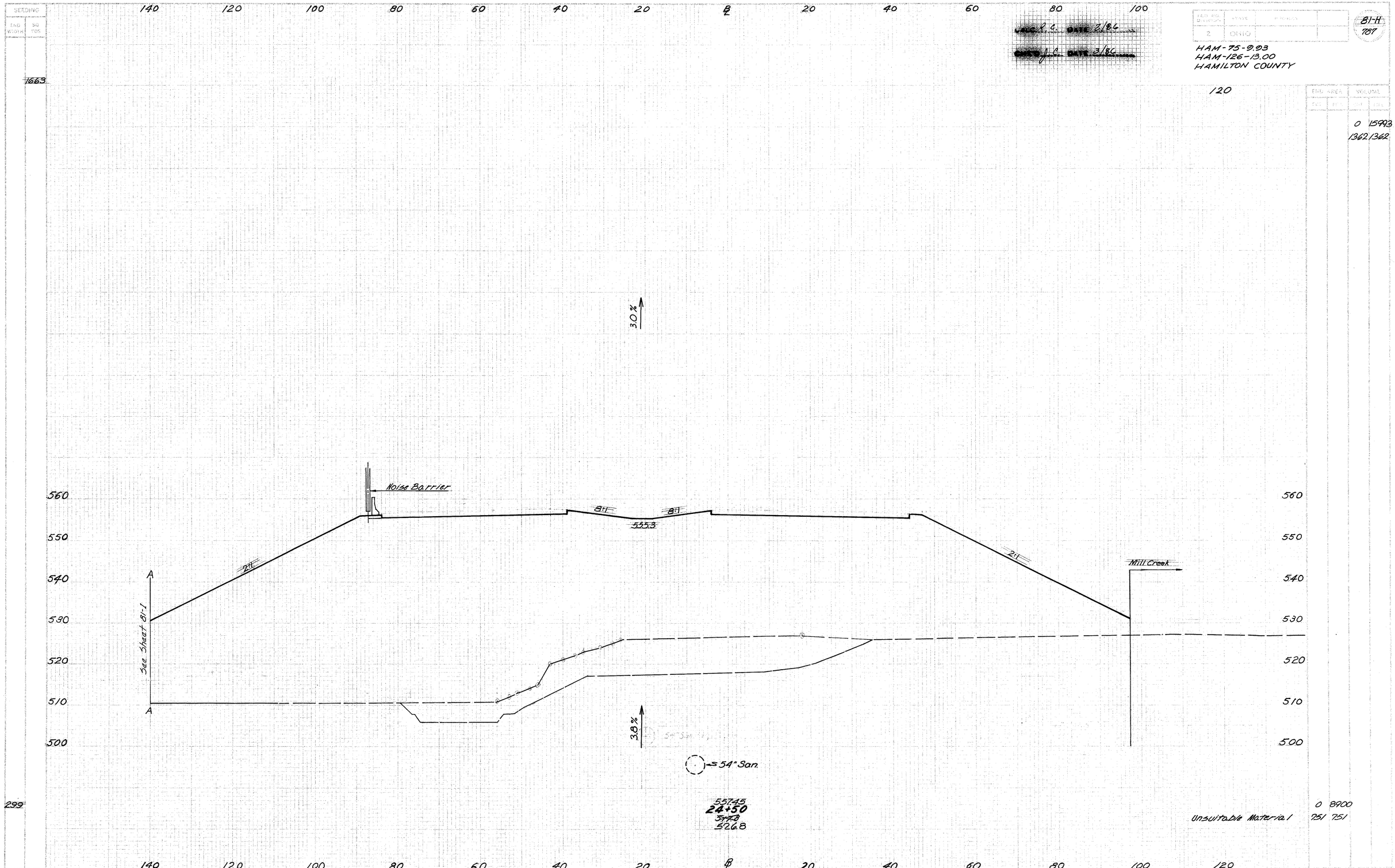
For earthwork quantities
see sheet No.81-F

300 280 260 240 220 200 180 160 140 120 100 80 60 40 20

DEVELOPED		CHECKED	

EB. SR-126 STA. 23+50 TO STA. 24+00 EXT. LT.

81



CALC. R.C. DATE 2/86
CHK'D J.C. DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

81-H
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

DEVELOPED	CHECKED

EB. SR-126 STA. 24+50

SEEDING	
END WIDTH	SQ YDS

320 300 280 260 240 220 200 180 160

CALC R.C. DATE 3.86

CHK'D J.C. DATE 3.86

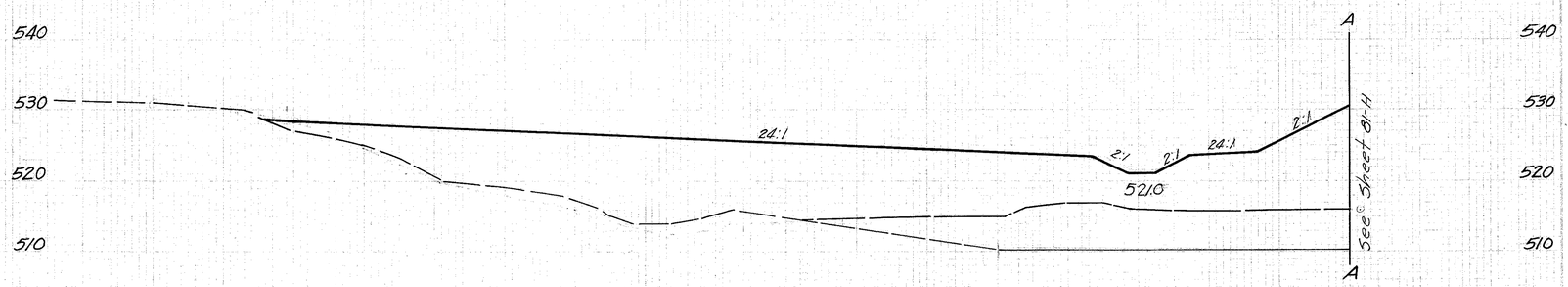
FED SC DIVISION	STATE	PROJECT	
2	OHIO		

81-I
187

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

END AREA		VOLUME	
CUT	FILL	CUT	FILL

10%



For Seeding Quantities
See Sheet No. 81-H

24+50 Lt.

For earthwork quantities
see sheet No. 81-H

4.5%

320 300 280 260 240 220 200 180 160 140

DEVELOPED	CHECKED

F.A.S.R. 126 STA. 24+50 EXTENSION Lt.

CHECKED A.C. DATE 2-86
CHECKED J.C. DATE 3-86

81-J
787

HAM-75-2.93
HAM-126-13.00
HAMILTON COUNTY

160 140 120 100 80 60 40 20 ℄ 20 40 60 80

Noise Barrier

8:1 8:1 550.8 2:1

C
2:1 2:1 24:1
See Sheet 81-K
C

2.4%

552.77
26+00
532.0
524.9

-54" San.

Mill Creek

1676 550 540 530 520 510 500 302

530 3 14517
520 0 0
510 2 8200
Unsuitable Material 0 0
500

Noise Barrier

8:1 8:1 552.0 2:1

B
2:1 2:1 24:1
See Sheet 81-K
B

3.6%

-54" San.

554.10
25+50
537.3
523.0

Mill Creek

1672 550 540 530 520 510 500 301

550
540 2 14644
940 940
530
520
510
500 0 7625
Unsuitable Material 1015 1015

Noise Barrier

8:1 8:1 553.8 2:1

A
2:1 2:1 24:1
See Sheet 81-K
A

3.0%

54" San.

555.66
25+00
529.4
526.2

Mill Creek

1668 550 540 530 520 510 500 300

550
540 0 14803
1606 1606
530
520
510
0 8372
Unsuitable Material 720 720
500

160 140 130 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 130

FR 6-2-126 STA 25+00 TO STA 26+00

SEEDING

END WIDTH	SQ YDS

320 300 280 260 240 220 200 180

Date J.C. Date 2/86

Ohio J.C. Date 2/86

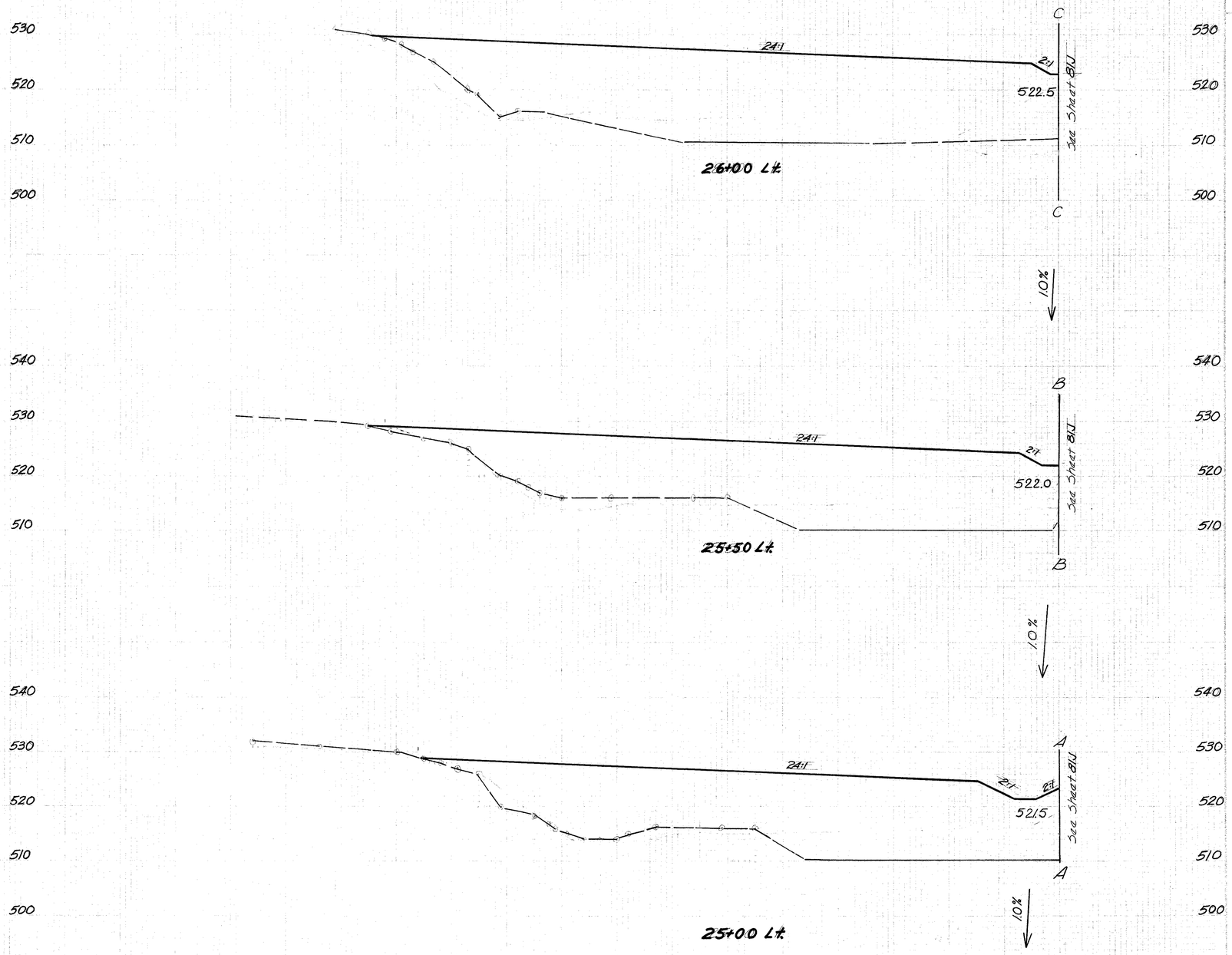
DEP. OF TRANSP. DIVISION	STATE	PROJECT	
7	OHIO		

81-K
187

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

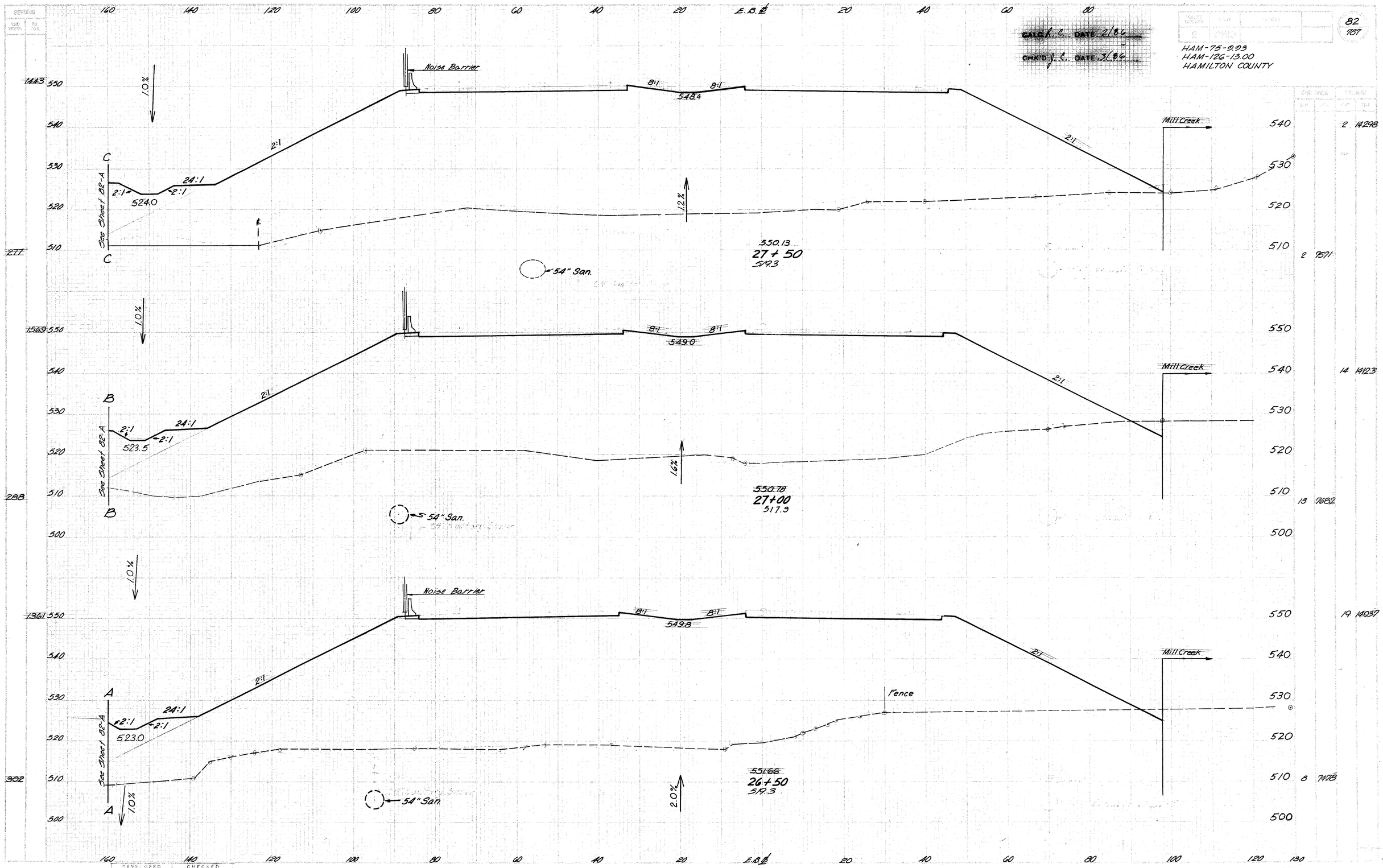
END AREA		VOLUME	
CUT	FILL	CUT	FILL

For Seeding & Earthwork Quantities
See Sheet No. 81-J



320 300 280 260 240 220 200 180 160

E.B. S.R. 126 STA 25+00 TO STA 26+00 EXTENSIONS Lt.



CALC. L.C. DATE 2/86
CHK'D J.C. DATE 3/86
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
82
787
Noise Barrier
1.0%
8:1
8:1
548.4
2:1
2:1
24:1
2:1
2:1
524.0
See Sheet 82-A
C
C
1.2%
Mill Creek
550.13
27+50
519.3
54" San.
1.0%
8:1
8:1
549.0
2:1
2:1
24:1
2:1
2:1
523.5
See Sheet 82-A
B
B
1.6%
Mill Creek
550.78
27+00
517.9
54" San.
1.0%
Noise Barrier
8:1
8:1
549.8
2:1
2:1
24:1
2:1
2:1
523.0
See Sheet 82-A
A
A
1.0%
Fence
Mill Creek
551.66
26+50
519.3
2.0%
54" San.
E.B.℄

SEEDING	
END WIDTH	SQ YDS

For Seeding & Earthwork Quantities
See Sheet No. 82

DEVELOPED | CHECKED

300 280 260 240 220 200 180

CHKD J.C. DATE 2/86

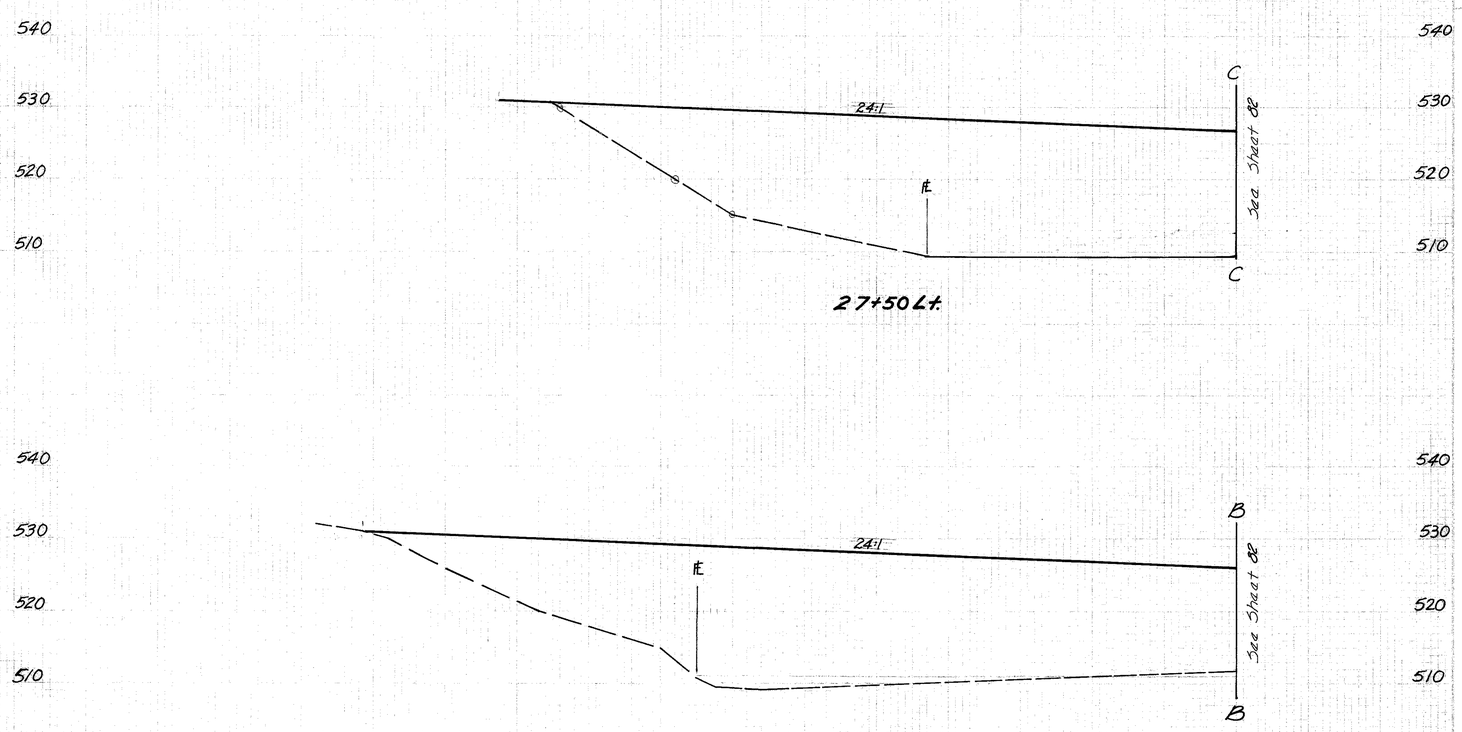
CHKD J.C. DATE 5/86

FED ROD DIVISION	STATE	PROJECT	
2	OHIO		

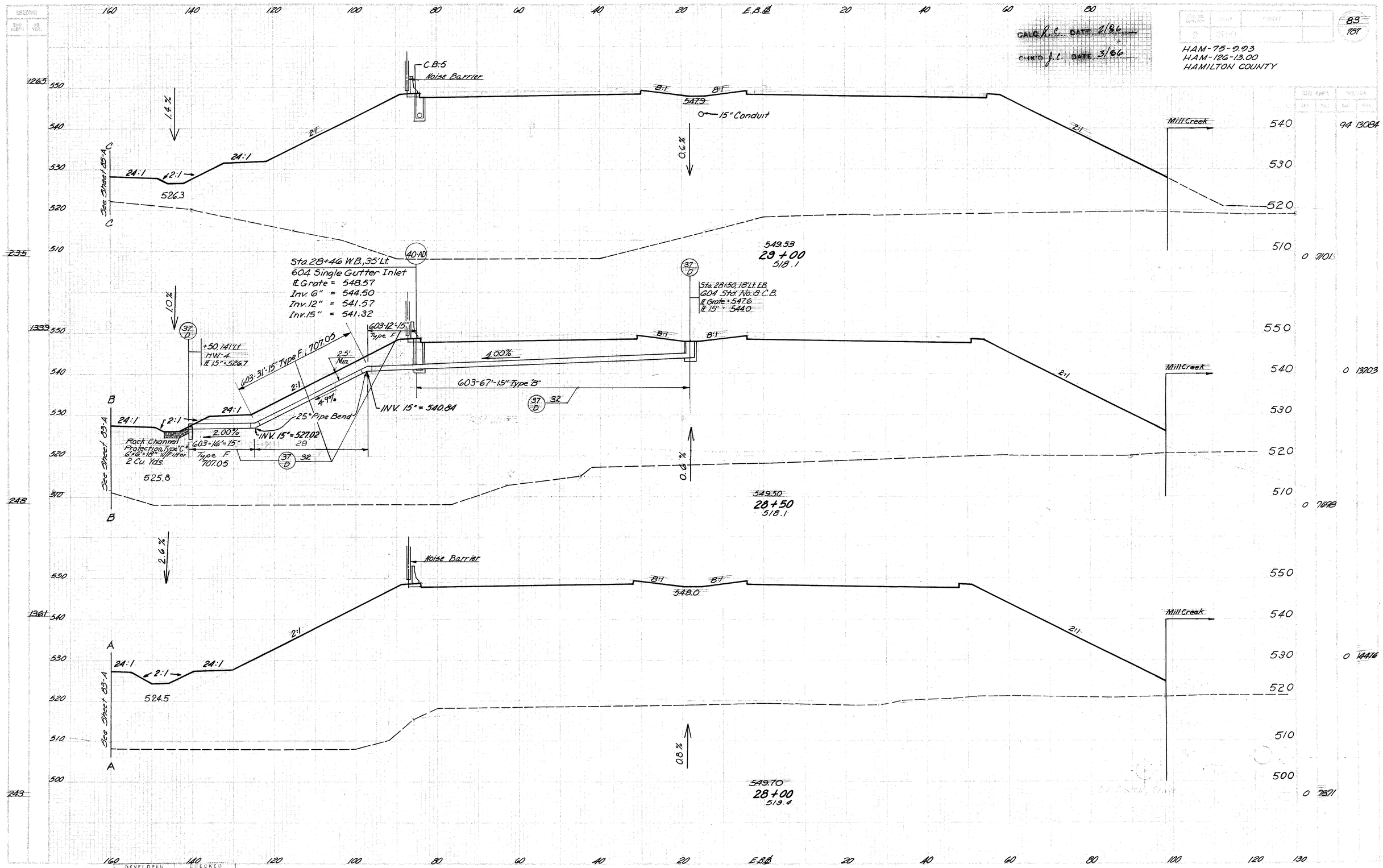
82-A
187

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

END AREA	VOLUME		
CUT	FILL	CUT	FILL



320 300 280 260 240 220 200 180 160



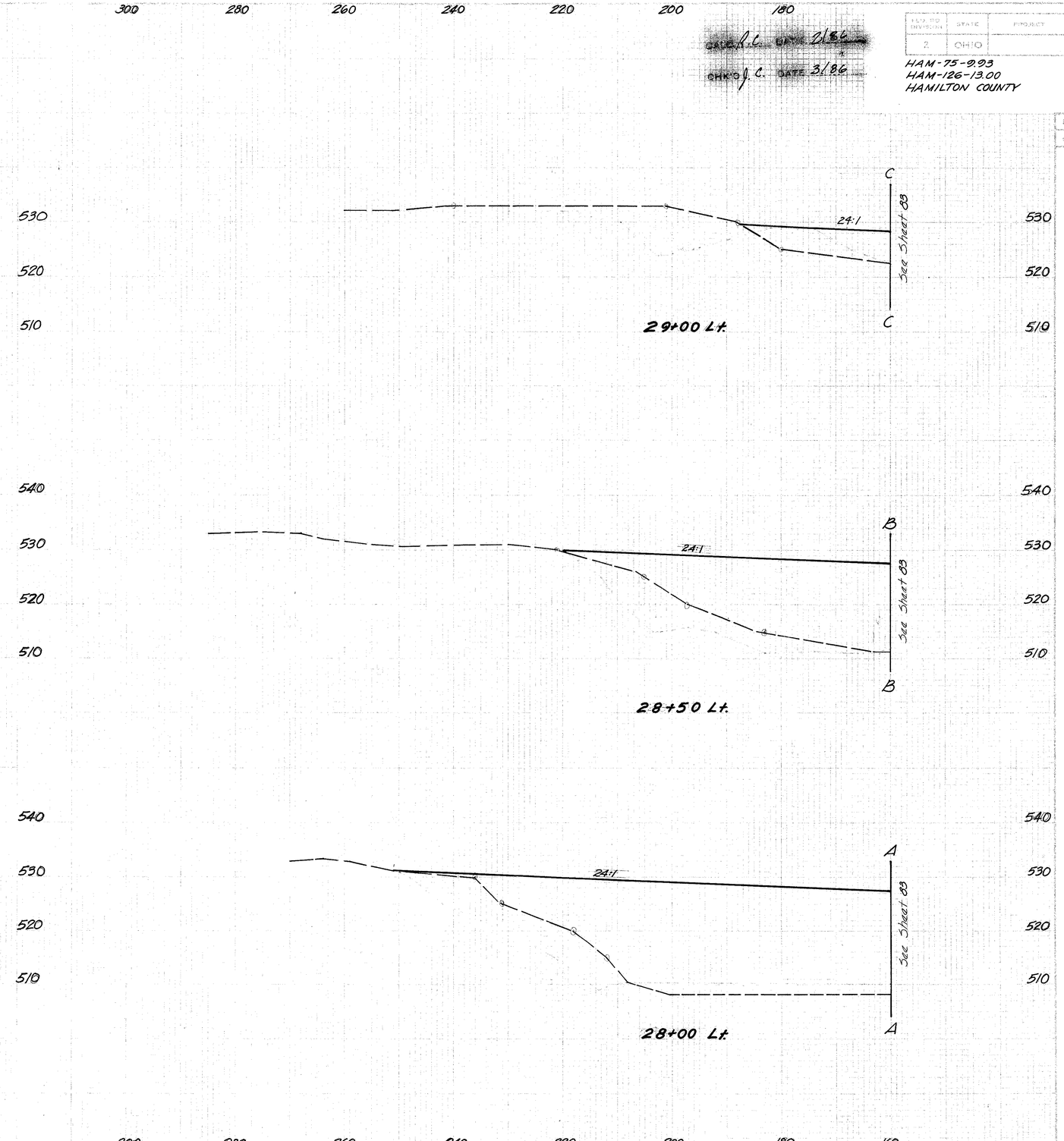
CALC. R.C. DATE 2/86
CHK'D J.L. DATE 3/86
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
83
787
C.B.-5
Noise Barrier
15" Conduit
Mill Creek
See Sheet 83-A
Sta. 28+46 W.B., 35' Lt.
604 Single Gutter Inlet
℄ Grate = 548.57
Inv. 6" = 544.50
Inv. 12" = 541.57
Inv. 15" = 541.32
Sta. 28+50, 18' Lt. E.B.
604 Std. No. 8 C.B.
℄ Grate = 547.6
℄ 15" = 544.0
603-31'-15" Type F, 707.05
603-12'-15" Type F
603-67'-15" Type "B"
INV. 15" = 540.84
INV. 15" = 527.02
25° Pipe Bend
Rock Channel Protection, Type "C" 6'x6'x18" w/Filter 2 Cu. Yds.
603-16'-15" Type F 707.05
549.53
29+00
518.1
549.50
28+50
518.1
549.70
28+00
519.4

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

83-A
787

CALC. R.C. DATE 2/86
CHK'D J.C. DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



For Seeding & Earthwork Quantities
See Sheet No. 83

SEEDING	
END WIDTH	SQ. YDS.

ENG. AREA		VOLUME	
CUT	FILL	CUT	FILL

DEVELOPED	CHECKED

F.R.C.B. 126 STA. 28+00 TO STA. 29+00 EXTENSIONS Lt.

HAM-75-2.93
HAM-126-13.00
HAMILTON COUNTY

DRAWN A.L. DATE 2/86
CHKD J.L. DATE 3/86

Sta. 30+67
E.B. S.R. 126 Back
E.B. S.R. 126 Ahead | Ramp C Ahead

B
540
530
48:1
2%
7%
B
120
140 526.3

638
550
540
530
520
510
AH 112
BK 206

0.6%
Noise Barrier
8:1
8:1
549.5
2:1
24:1
2:1
527.7
1.6%
2:1
12.2%
B
30+67 Ahead 145 2445
30+67 Back 167 3527
105 2281
* For Ramp C Earthwork Quantities See Sheet No. 202
550.96
30+50
531.5
Mill Creek
A
530
520
510
24:1
519.3
A
120
140
160
520
510

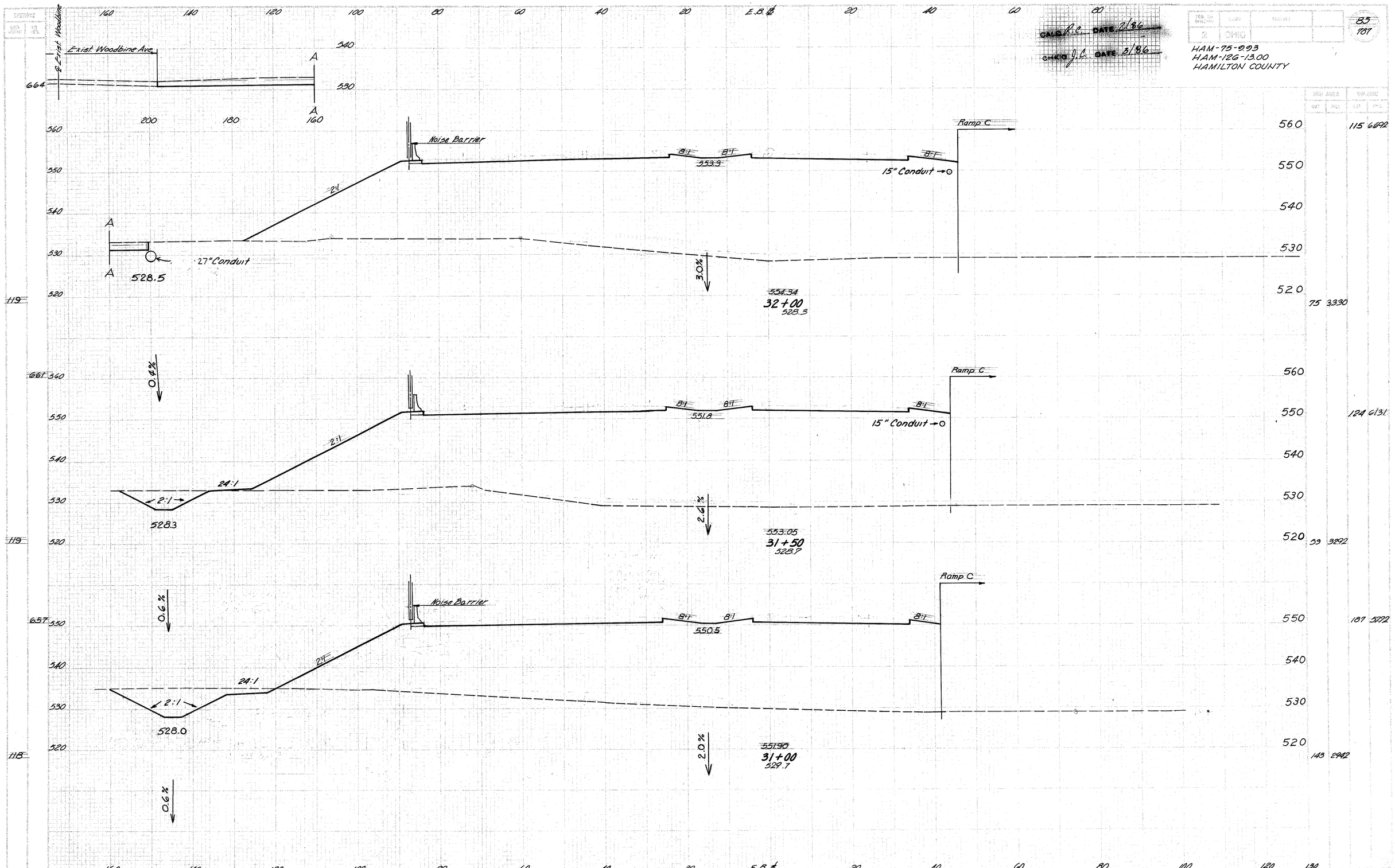
0.6%
1185
550
540
530
520
510
8:1
8:1
548.7
2:1
24:1
2:1
527.4
2:1
1.0%
267 8386
A
530
520
510
A
550.26
30+00
512.5
121 5530

0.8%
221
Noise Barrier
550
540
530
520
510
1226
8:1
8:1
548.2
2:1
24:1
2:1
527.0
0.5%
2:1
550
540
530
Mill Creek
24:1
520
510
206 1630
1.4%
221
549.78
29+50
506.0
101 7030

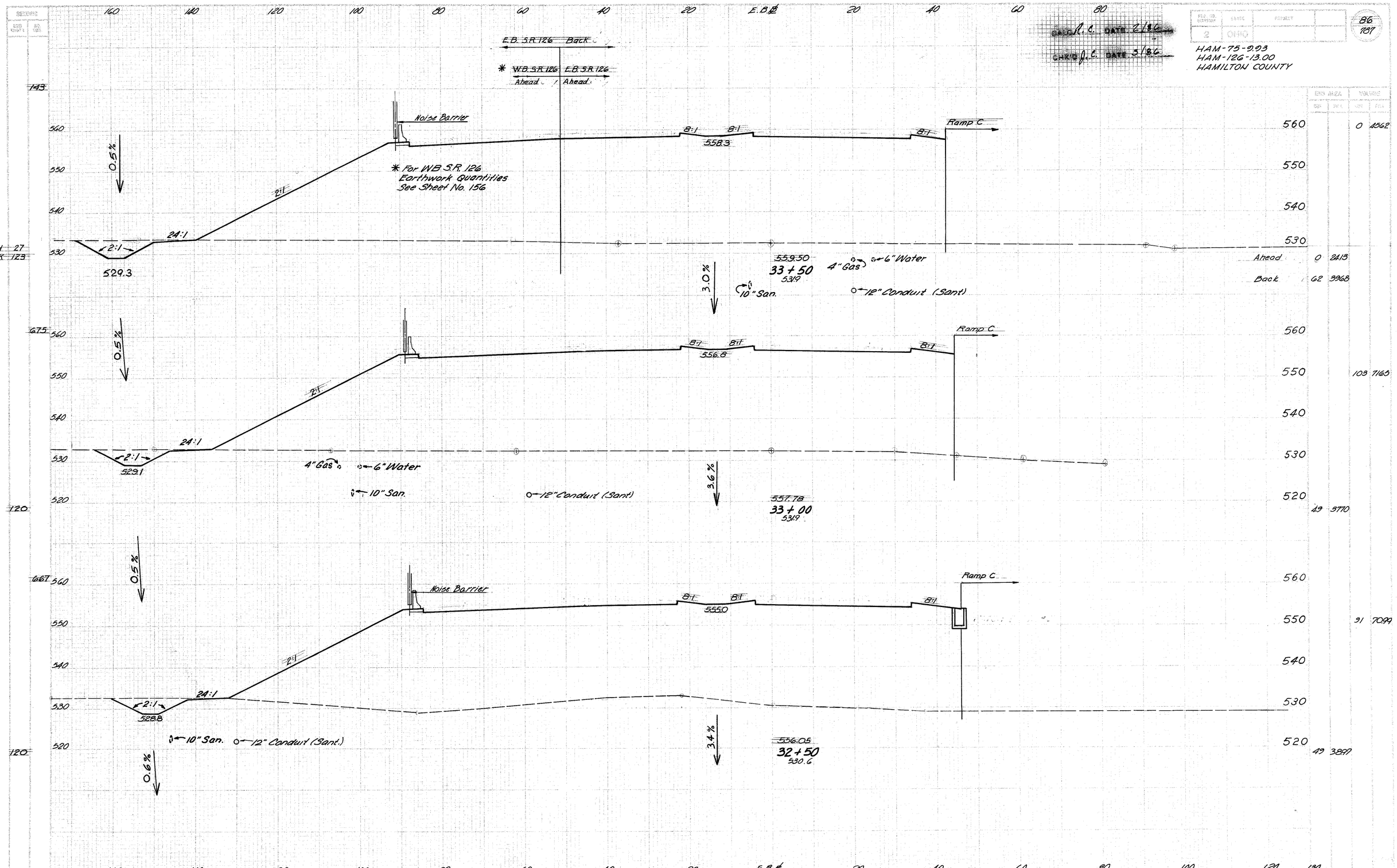
160 140 120 100 80 60 40 20 E.B. ℄ 20 40 60 80 100 120 130

DEVELOPED | CHECKED

FB SD 126 STA 29+50 TO STA 30+50



FB 5D 126 STA 31+00 TO STA 32+00



2	OHIO		

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

86
787

Ahead	0	2413	
Back	62	3968	
			0 4562
			103 7165
			49 3770
			91 7099
			49 3897

DEVELOPED | CHECKED

FB. S.R. 126 STA. 32+50 TO STA. 33+50

140 120 100 80 60 40 20 E.B.℄ 20 40 60 80 100

215

570
560
550
540
530

W.B. S.R. 126 ← 8:1 8:1 8:1 8:1 → Ramp C

5634

3.12%

564.68
35+00
531.8

0 6002

36

168 570
560
550
540
530

W.B. S.R. 126 ← 8:1 8:1 8:1 → Ramp C

561.8

3.6%

562.95
34+50
531.9

0 3049

23

133 570
560
550
540
530

W.B. S.R. 126 ← 8:1 8:1 8:1 → Ramp C

560.0

3.4%

561.23
34+00
531.9

4" Gas Ex. → ○ 6" Water Ex.

○ ← 10" Sant. ○ ← 12" Conduit (Sant.)

0 3836
0 2628
0 4761
0 2514

25

140 120 100 80 60 40 20 E.B.℄ 20 40 60 80 100 120 140

DEVELOPED | CHECKED

FR. S.R. 126 STA 34+00 TO STA 35+00

140 120 100 80 60 40 20 E.B.℄ 20 40 60 80 100

CALC J.L. DATE 2/86

CHKD J.L. DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

88
107

363

570
560
550
540
530

W.B. SR 126 — Variable — 8:1 — 8:1 — 8:1 — Ramp C

5678

2.2%

5624.4
36+50
531.9

0 8605

64

570
560
550
540
530

W.B. SR 126 — 8:1 — 8:1 — 8:1 — 8:1 — Ramp C

5667

317

3.4%

5628.02
36+00
531.3

0 4499

570
560
550
540
530

0 7806

51

570
560
550
540
530

W.B. SR 126 — 8:1 — 8:1 — 8:1 — 8:1 — Ramp C

5650

269

3.2%

5666.40
35+50
531.1

0 3931

570
560
550
540
530

0 6819

42

0 3433

140 120 100 80 60 40 20 E.B.℄ 20 40 60 80 100 120 140

DEVELOPED CHECKED

FR SR 126 STA 35+00 TO STA 36+50

| | | |

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

89-A
187

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

SEEDING	
END WIDTH	SQ. YDS.
0	
12	
7	
292	
98	

END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	0		
		0	357
0	402		
0	4856		
0	4643		

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

540 530

8"Gas 12"Water

ZERO SECTION

36"Water

38+82 BACK
531.9

560 550 540 530

W.B. S.R. 126 Seeding Limits

Variable (2:1 Normal)

Telephone Water

573.00
38+50
532.2

Telephone 8"Gas 12"Water 8"San. 36"Water Main 42"Storm

580 570 560 550 540 530

W.B. S.R. 126

Variable

Variable (2:1 Normal)

Seeding Limits

Ramp C

Telephone Water

572.42
38+00
532.5

Water Telephone

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

DEVELOPED	CHECKED
[illegible]	[illegible]

E.B. S.R. 126 STA. 38+00 TO STA. 38+82

DESIGNED | DRAWN | CHECKED | QUANTITY CHECKED

CALC'D J. C. DATE 2/86

CHK'D J. C. DATE 3/86

PDN TO DISTRICT | DATE | ORIGINAL | 2 | 3 | 4 | 5 | 6

90
187

HAM-75-0.93
HAM-126-13.00
HAMILTON COUNTY

140 120 100 80 60 40 20 E.B. ℄ 20 40 60 80 100

651

570 560 550 540 530 520 510

Ramp D

15" Conduit

Variable

Ramp H

563.27
45+00
519.1

101

510

570 560 550 540 530 520 510

465

570 560 550 540 530 520 510

Ramp D

Variable

Seeding Limits

2:1 Max

Ramp H

564.66
44+50
520.1

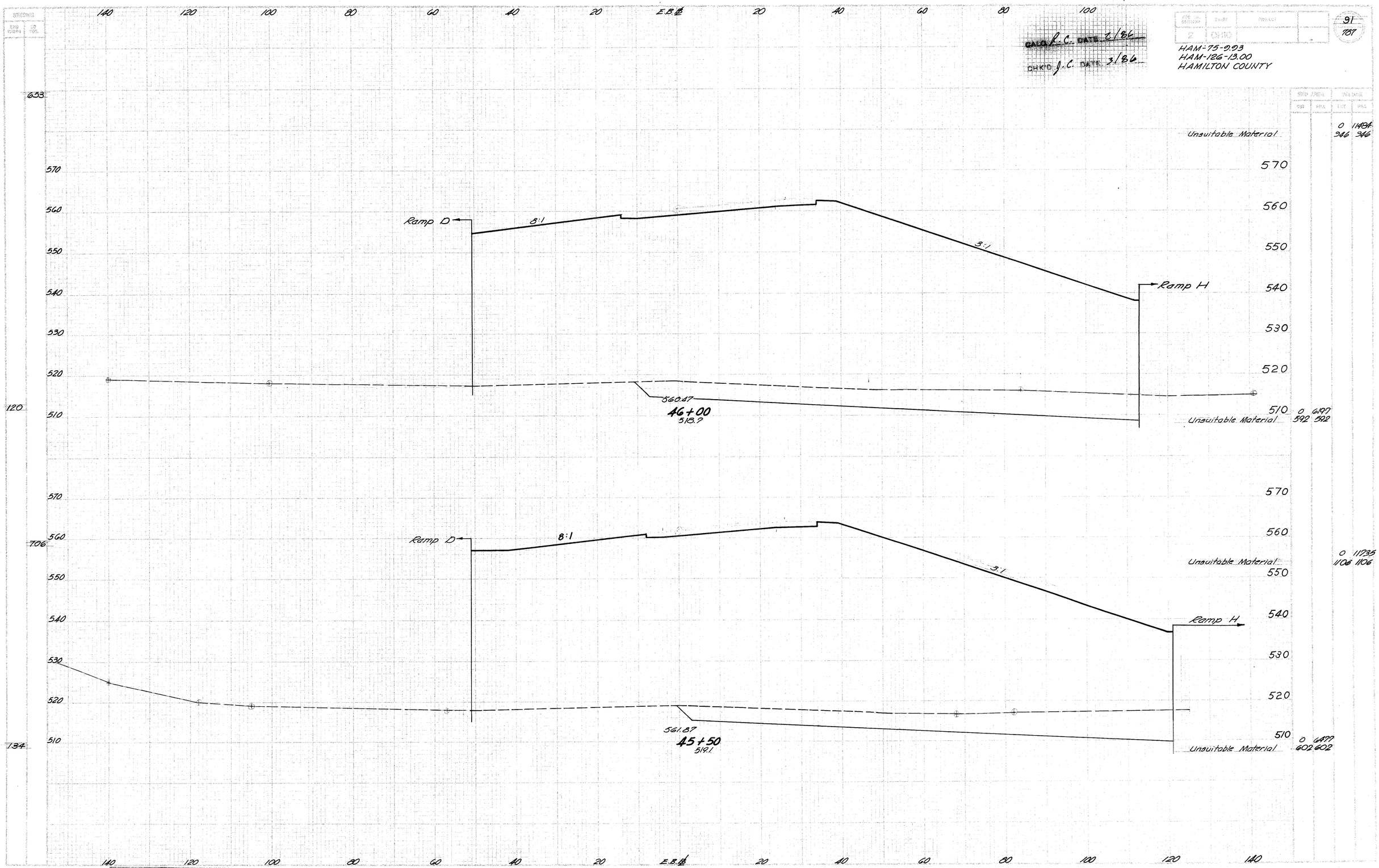
67

140 120 100 80 60 40 20 E.B. ℄ 20 40 60 80 100 120 140

	DRG NBER		QUANTITY	
	CUT	FILL	CUT	FILL
			0	10552
Unsuitable Material			826	826
			0	4919
Unsuitable Material			290	290
			0	7009
Unsuitable Material			310	310
			0	2651
Unsuitable Material			45	45
Unsuitable Material			11	11
Sta. 44+37				
Unsuitable Material			0	0

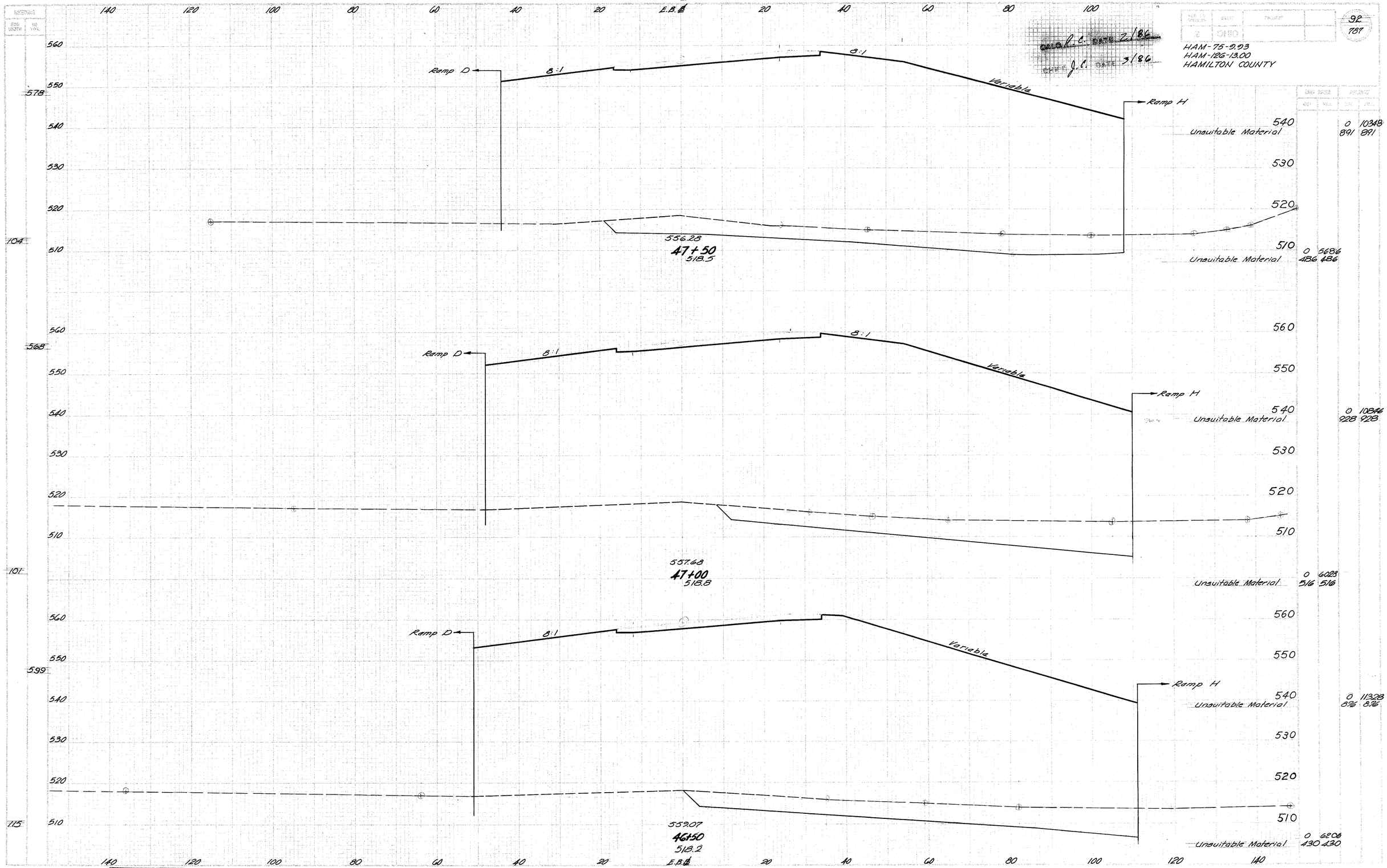
DEVELOPED | CHECKED | SWD | W.T.

EB SR 126 STA 44+50 TO STA 45+00

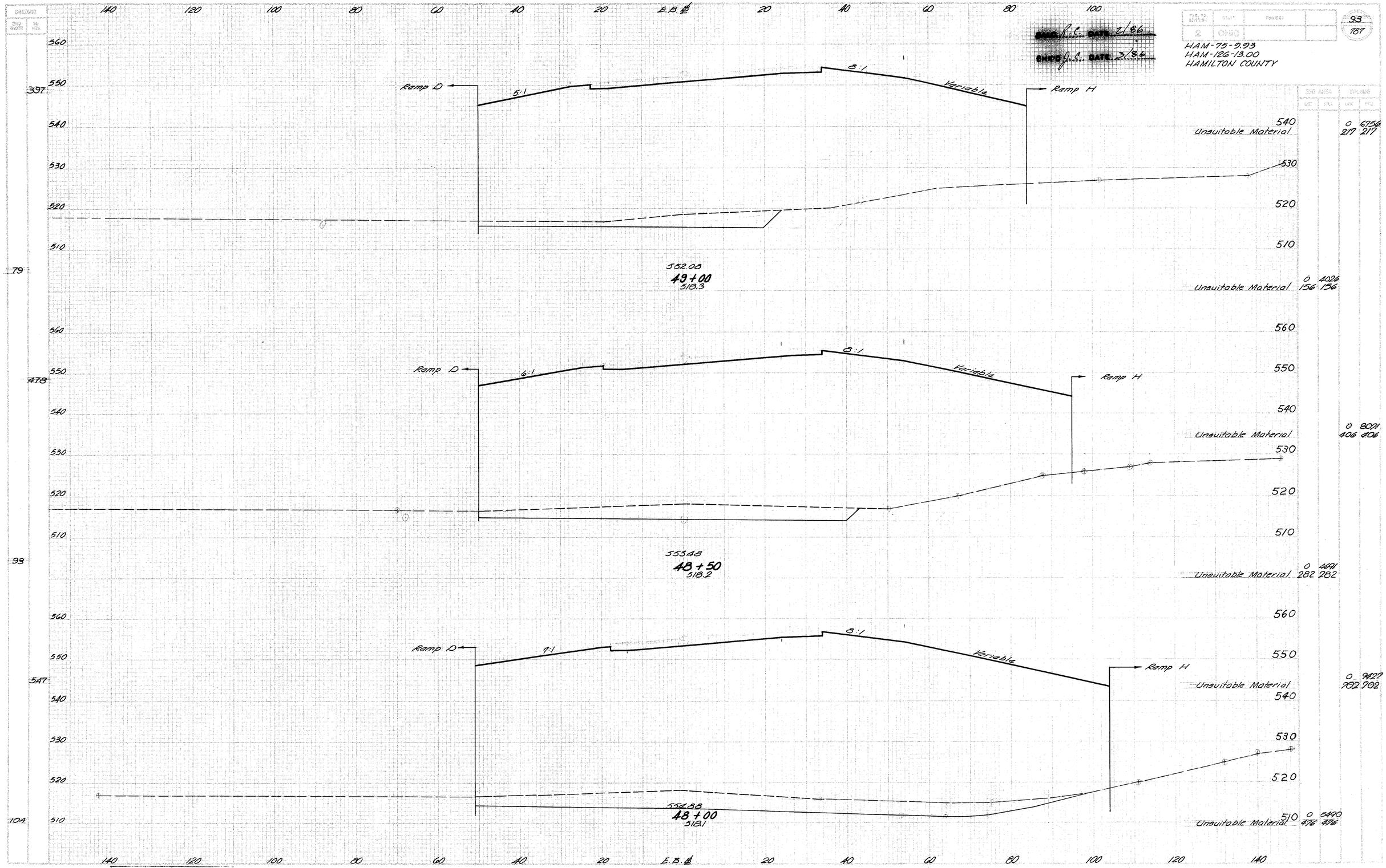


DEVELOPED CHECKED

FB SR 126 STA 45+50 TO STA 46+00



FB SD 126 STA 46+50 TO STA 47+50



FB. SD 126 STA 48+00 TO STA 49+00

SEEDING

SEED (LB/ACRE)	SOD (SQ. YDS.)
146	
32	
222	
48	
311	
64	

140 120 100 80 60 40 20 E.B.℄ 20 40 60 80 100

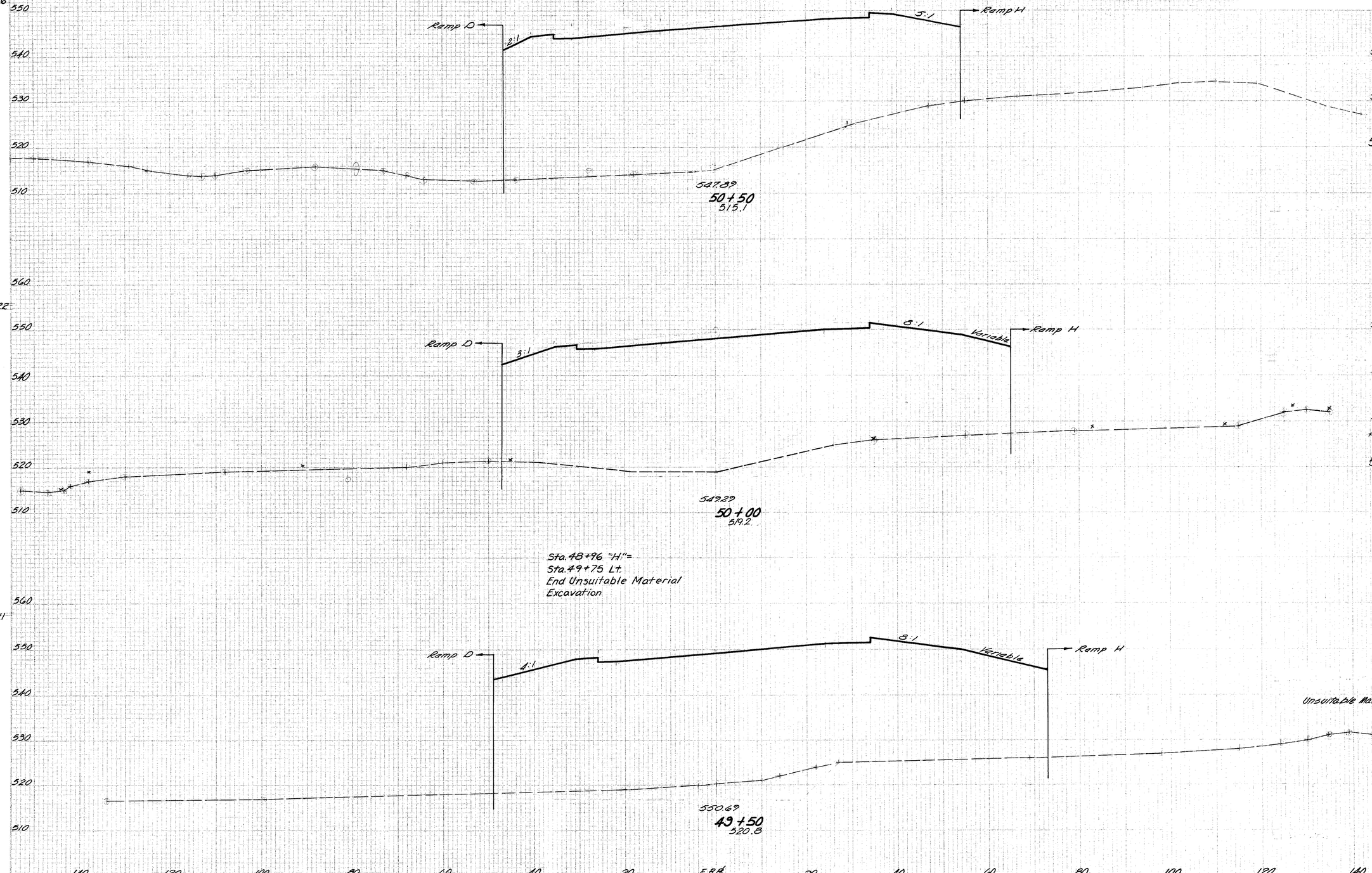
CALC. C. L. DATE 2/86

CHK'D J. L. DATE 3/86

FED. ROAD DIV. NO.	STATE	PROJECT	
5	OHIO		

94
787

HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY



	EXC. AREA CUT	EXC. AREA FILL	EXC. VOLUME CUT	EXC. VOLUME FILL
540			0	5019
530				
520				
510			0	21164
560				
550			0	5158
540				
530				
520				
510			0	2807
560				
550			0	5628
540				
Unsuitable Material	0	0		
530				
520				
510			0	3271

140 120 100 80 60 40 20 E.B.℄ 20 40 60 80 100 120 140

DEVELOPED	CHECKED

E.B. S.R. 126 STA. 48+50 TO STA. 50+50

SECTIONS

SHT. NO.	STA.
11	78
47	6
50	AH. 12 BK. 21

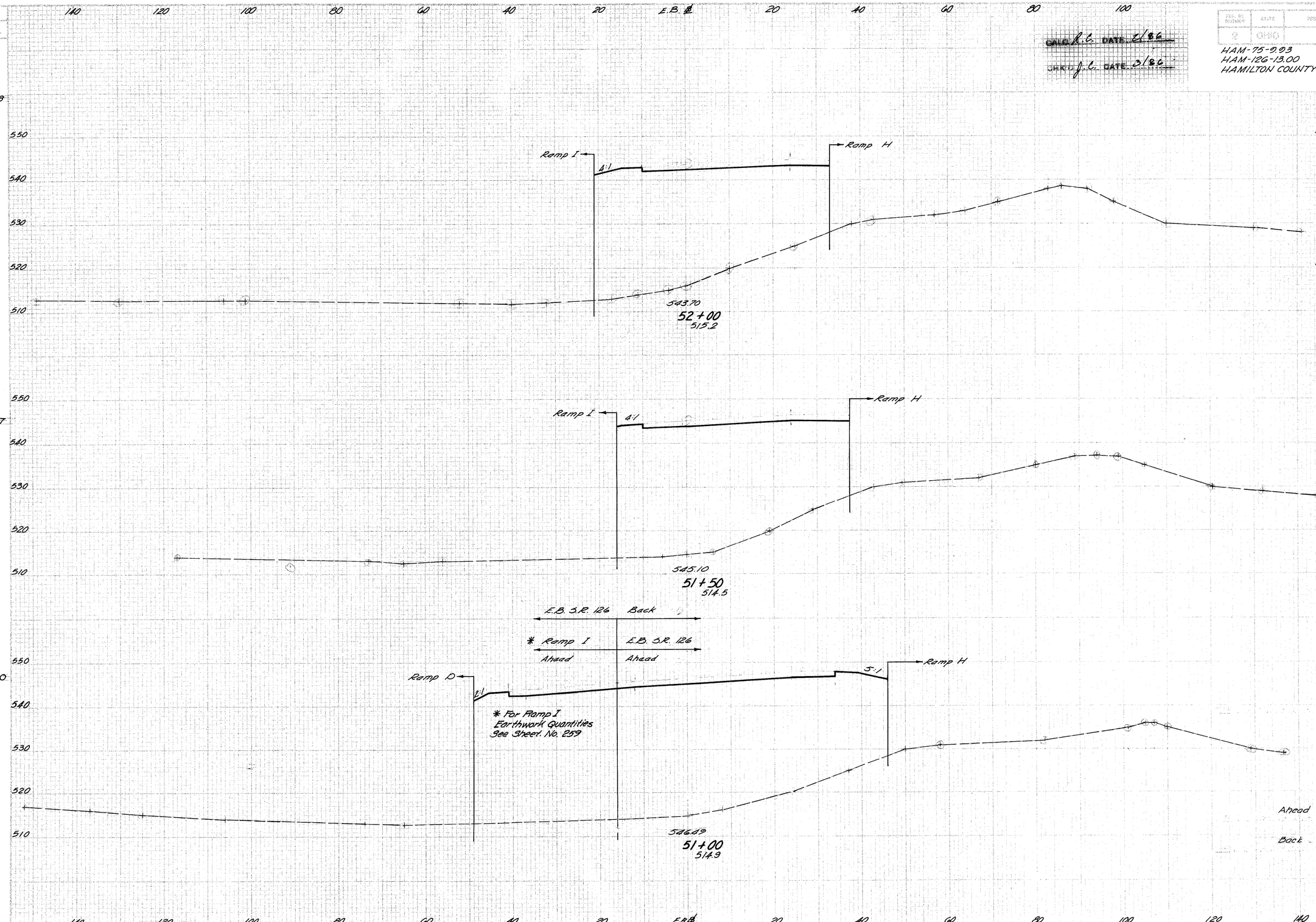
CALC. R.C. DATE 2/86

CHK'D J.C. DATE 3/86

REV. BY	ADD'N	PROJECT

95
787

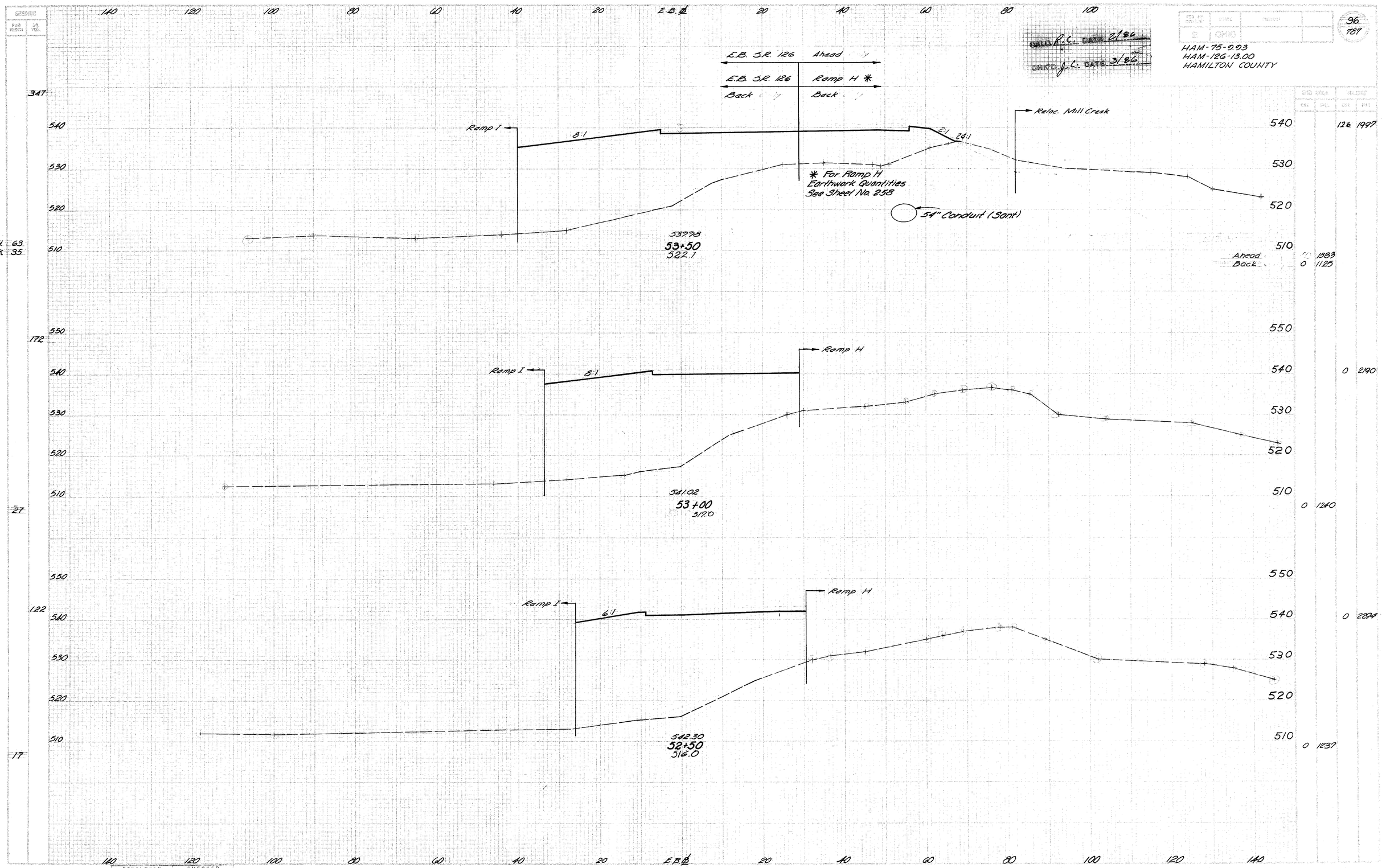
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



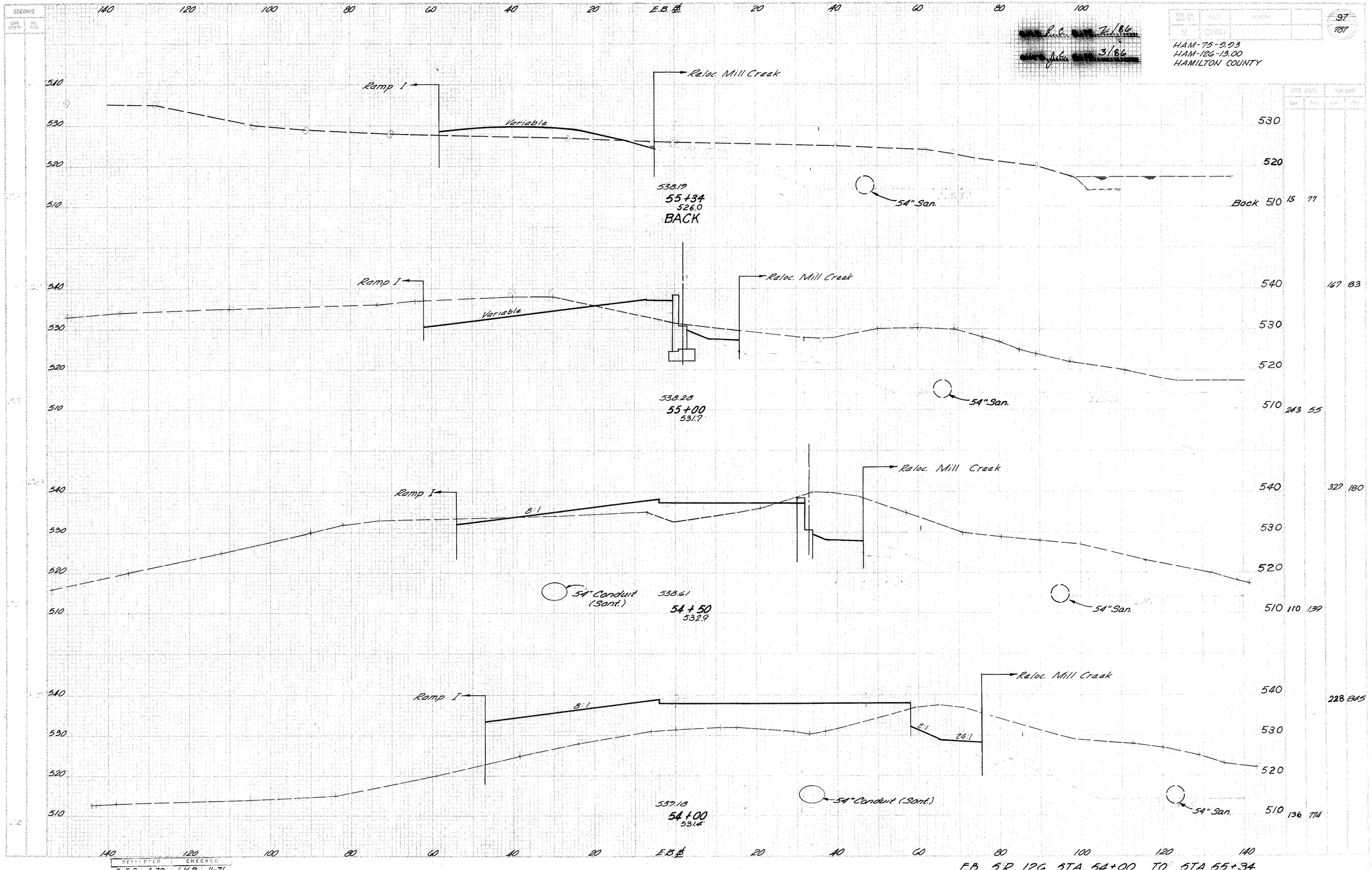
END AREA		VOLUME	
CUT	FILL	CUT	FILL
		0	2331
		0	1280
		0	2468
		0	1385
		0	2834
		Ahead 0	1676
		Back 0	2656

DEVELOPED	CHECKED
C.S.J. 1-73	H.P. 11-71

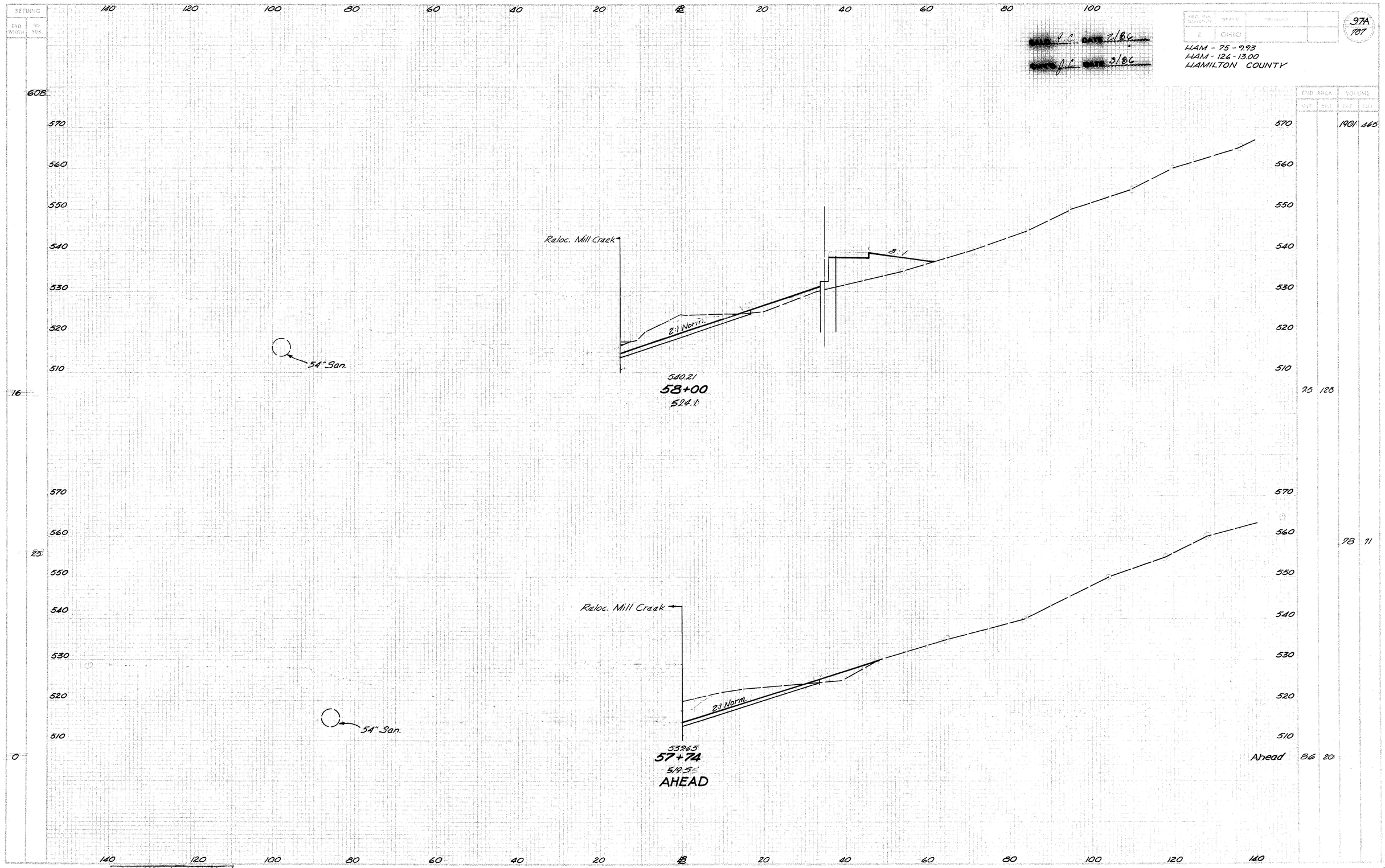
E.B. S.R. 126 STA. 51+00 TO STA. 52+00



96
787
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
CALC. R.C. DATE 2/86
CHK'D. J.C. DATE 3/86
E.B. S.R. 126 Ahead
E.B. S.R. 126 Ramp H *
Back Back
Ramp I
8:1
2:1
24:1
Reloc. Mill Creek
* For Ramp H Earthwork Quantities See Sheet No. 258
54" Conduit (Sant)
539.98
53+50
522.1
Ahead 1383
Back 0 1125
126 1997
Ramp H
541.02
53+00
517.0
0 2190
0 1240
6:1
542.30
52+50
516.0
0 2294
0 1237
AH. 63
BK. 35
347
172
27
122
17
E.B. ℄



FB 5R 126 STA 54+00 TO STA 55+34



FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

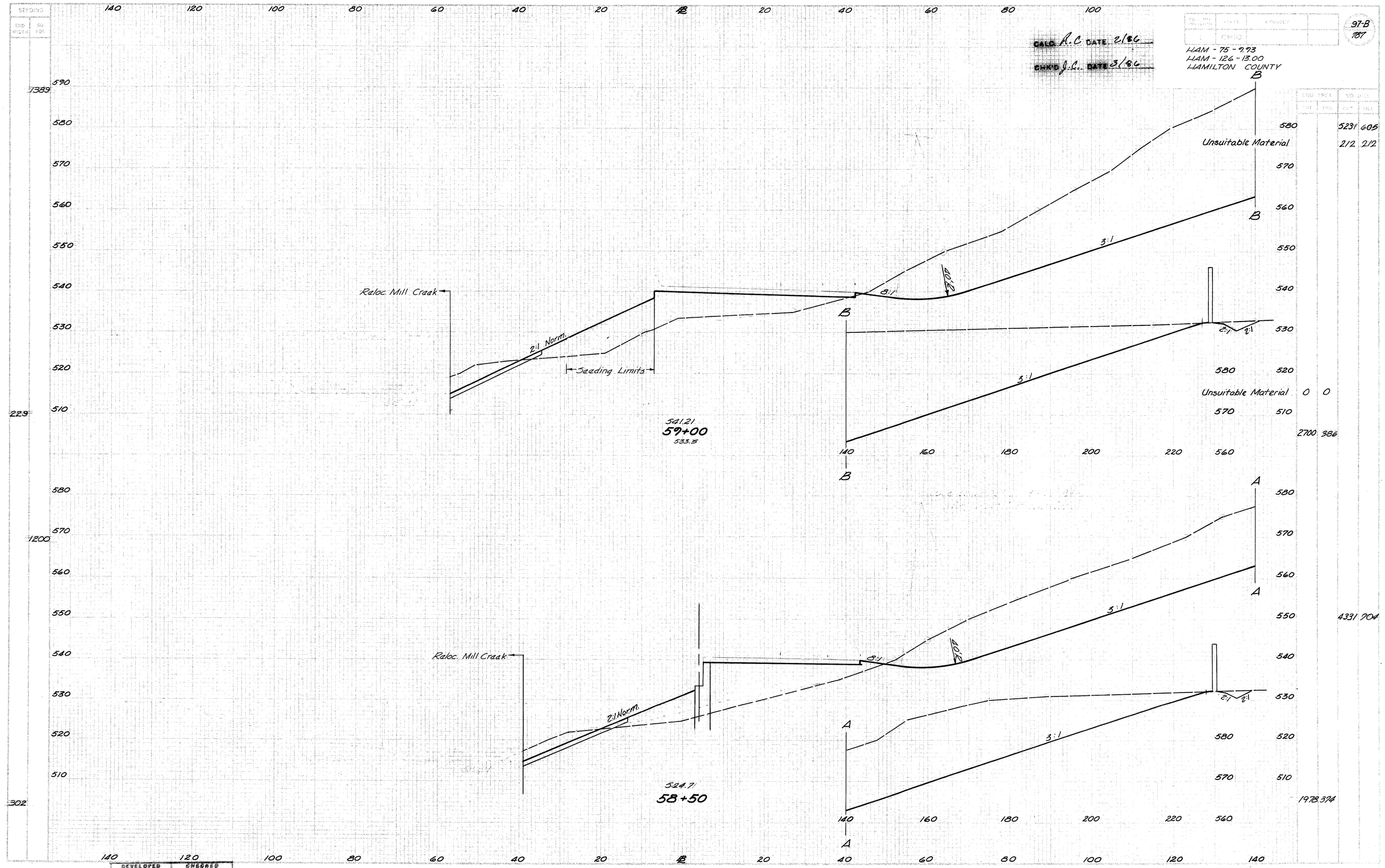
97A
787

HAM - 75 - 9.93
HAM - 126 - 13.00
HAMILTON COUNTY

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		1901	465
75	128		
		78	71
Ahead 86	20		

DEVELOPED | CHECKED

FB SR 126 STA 57+74 TO STA 58+00



DEVELOPED | CHECKED

FB SR 126 STA 58+50 TO STA 59+00

SEEDING
SKID WIDTH | SQ YDS

1482

271

CALC R.C. DATE 2/86
CHK'D J.C. DATE 3/86

DESIGN	DRAWN	ENGINEER	
	CHKD		

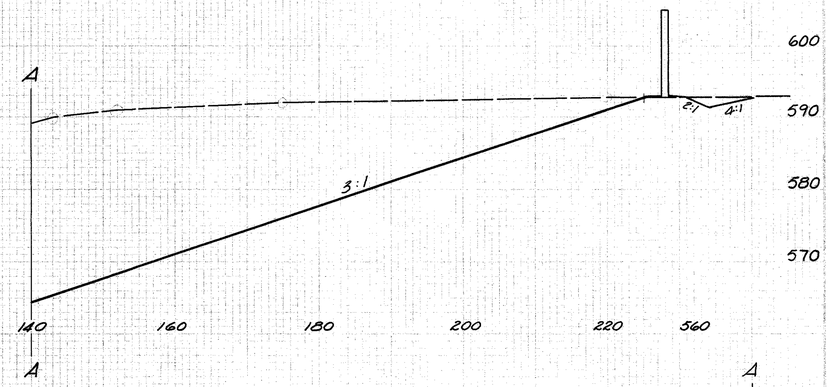
97-C
787

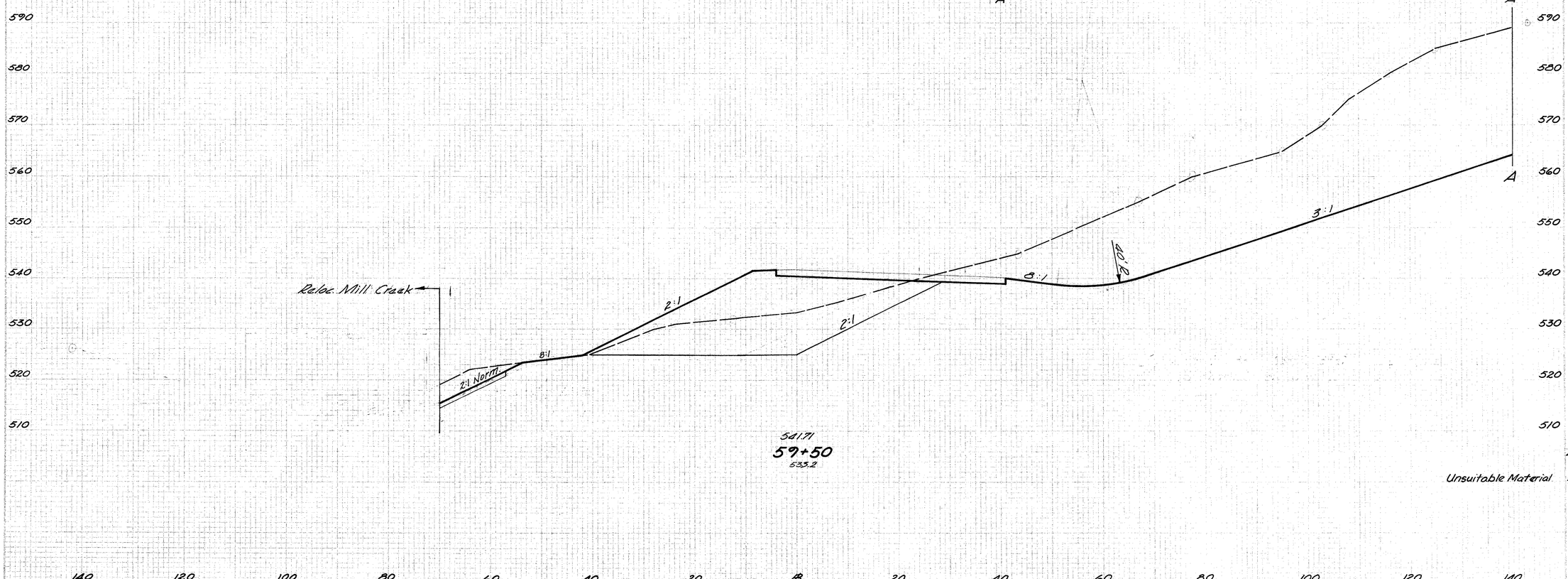
HAM - 75 - 7.93
HAM - 126 - 13.00
HAMILTON COUNTY

RIB APTS | VOLUME
SQ YDS | CUT | FILL

5860 532
461 461

Unsuitable Material





DEVELOPED | CHECKED

FR-SR126-3TA 59+50

SEEDING
SHD WIDTH 36 YDS

98
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

R.C. [redacted] 2/86
J.C. [redacted] 3/86

140 120 100 80 60 40 20 E.B.℄ 20 40 60 80 100

590 580 570 560 550 540 530 520 510 600

Ramp I

℄ Reloc. Mill Creek
Rip Rap Using 8" Reinf. Conc. Slab

2:1 Normal

515.5

8:1

Seeding Limit

542.65
60+50
548.8

B B

40'R

3:1

8:1

B

590 580 570 560

120 140 160 180 200 220

B

570 560 550 540 530 520 510

LA.R/W

Unsuitable Material 0 0

4934104

10649 112

A

590 580 570 560 550 540 530 520 510

Unsuitable Materials

249 249
7654 423

A

3:1

40'R

8:1

2:1

2:1

LA.R/W

8:1 8:1

Unsuitable Materials 269 269

Ahead 3332 363

Back 3379 351

E.B. S.R. 126 Ahead
* Reloc. Mill Cr. E.B. S.R. 126
Back Back

Reloc. Mill Creek
* For Mill Creek
Earthwork Quantities
See Sheet No. 2883

2:1 Normal

2:1

See Ramp I

515.41

Seeding Limit

542.21
60+00
534.9

140 120 100 80 60 40 20 E.B.℄ 20 40 A 60 80 100 120 140

DEVELOPED | CHECKED

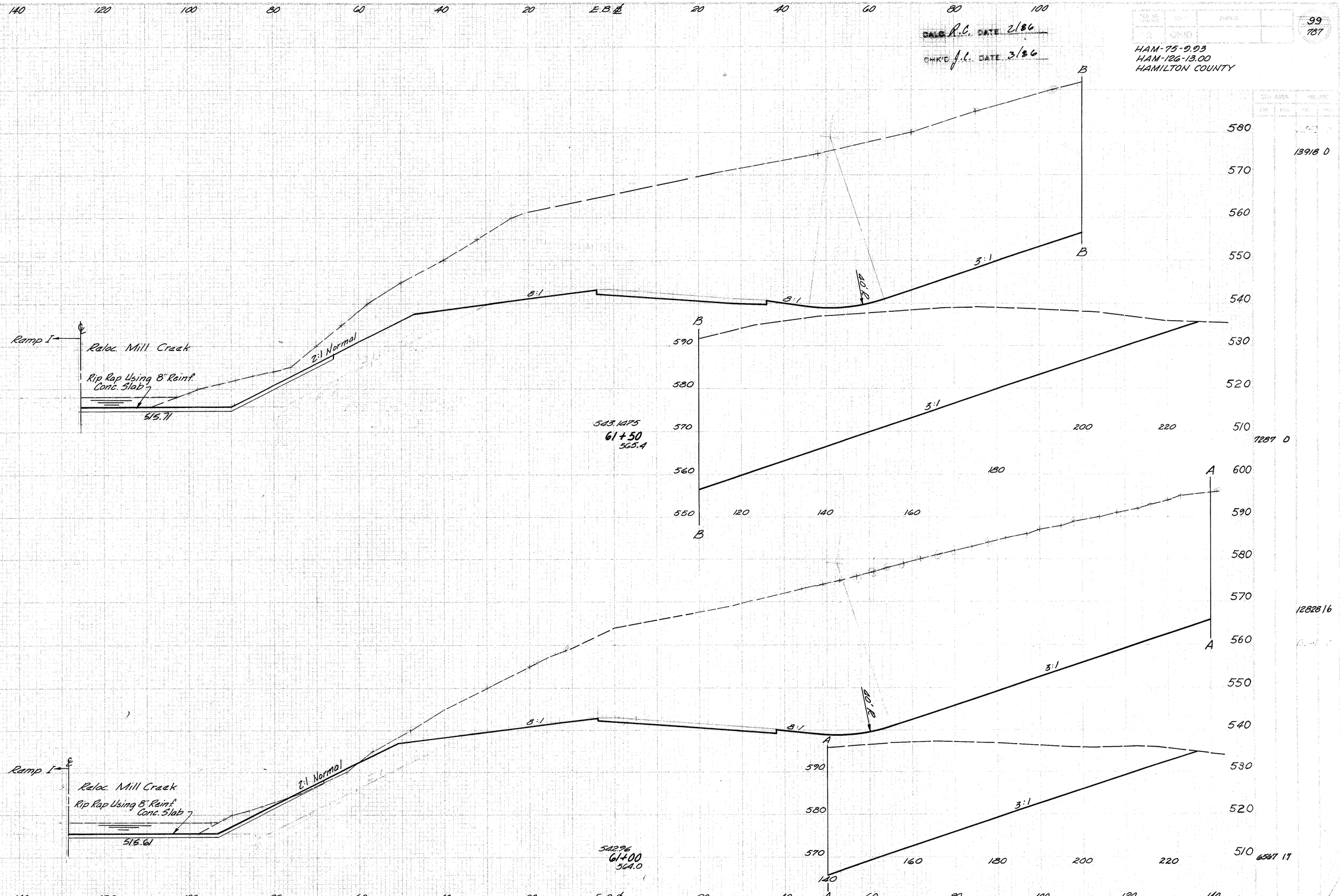
E.B. S.R. 126 STA. 60+00 TO STA. 60+50

CALC. R.C. DATE 2/86

CHK'D J.L. DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

99
187



139.18 0

12828.16

CALC. R.C. DATE 2/86

CHK. J.L. DATE 3/86

HAM-75-0.93
HAM-126-13.00
HAMILTON COUNTY

140 120 100 80 60 40 20 E.B.℄ 20 40 60 80 100

600 590 580 570 560 550 540 530 520 510

B B

3:1

120 140 160 180 200 220 240

B B

℄ Ramp I

Reloc. Mill Creek

Rip Rap Using 8" Reinf. Conc. Slab

515.92

2:1 Normal

8:1 8:1 3:1

40'℄

543.1875
62+50
566.1

A A

515.81

543.21
62+00
568.5

140 120 100 80 60 40 20 E.B.℄ 20 40 60 80 100 120 140

600 590 580 570 560 550 540 530 520 510

160 180 200 220

DEVELOPED | CHECKED

EB. S.R. 126 STA. 62+00 TO STA. 62+50

100
787

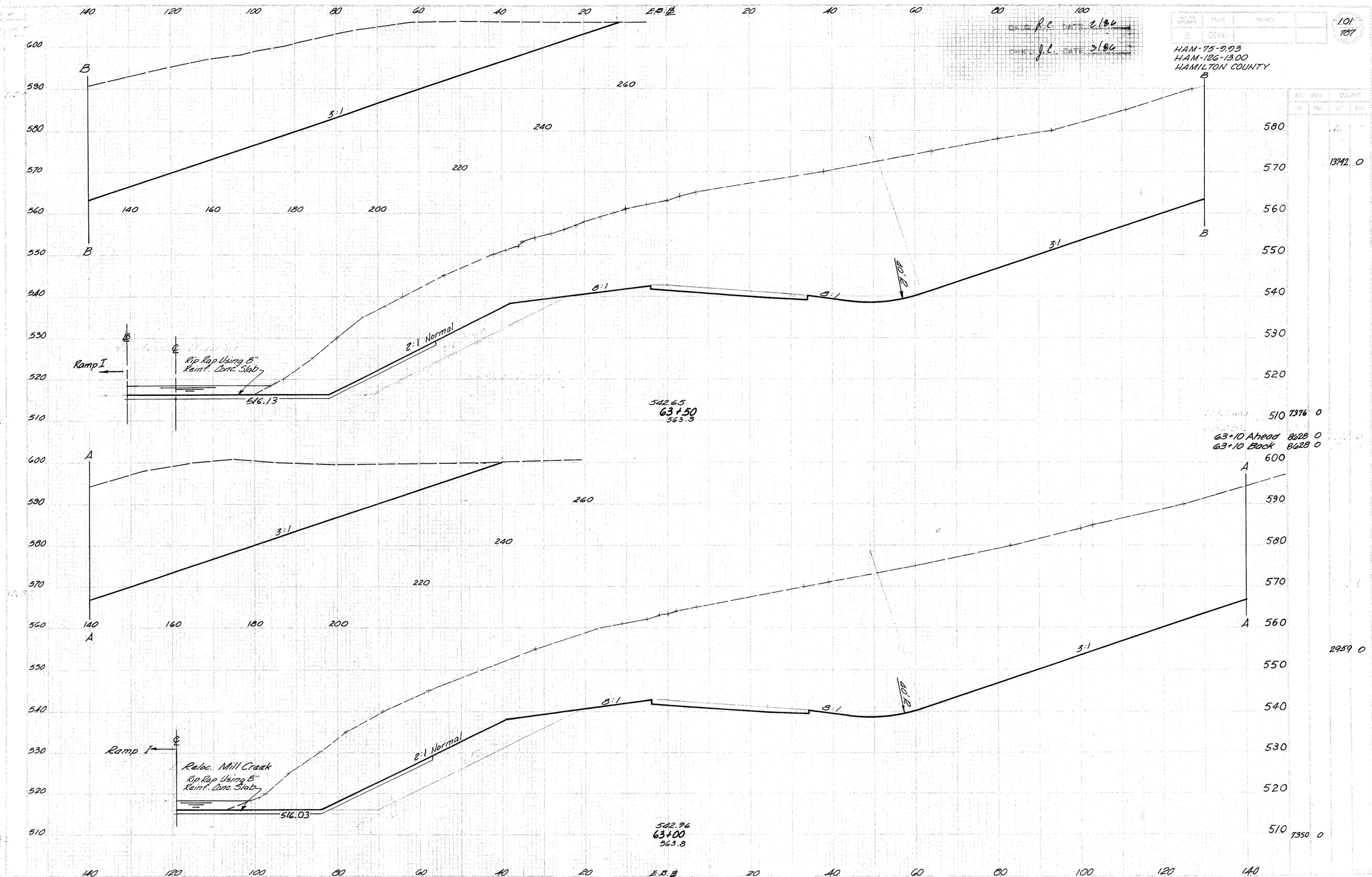
580 570 560 550 540 530 520 510

13506 0

13871 0

7237 0

7744 0



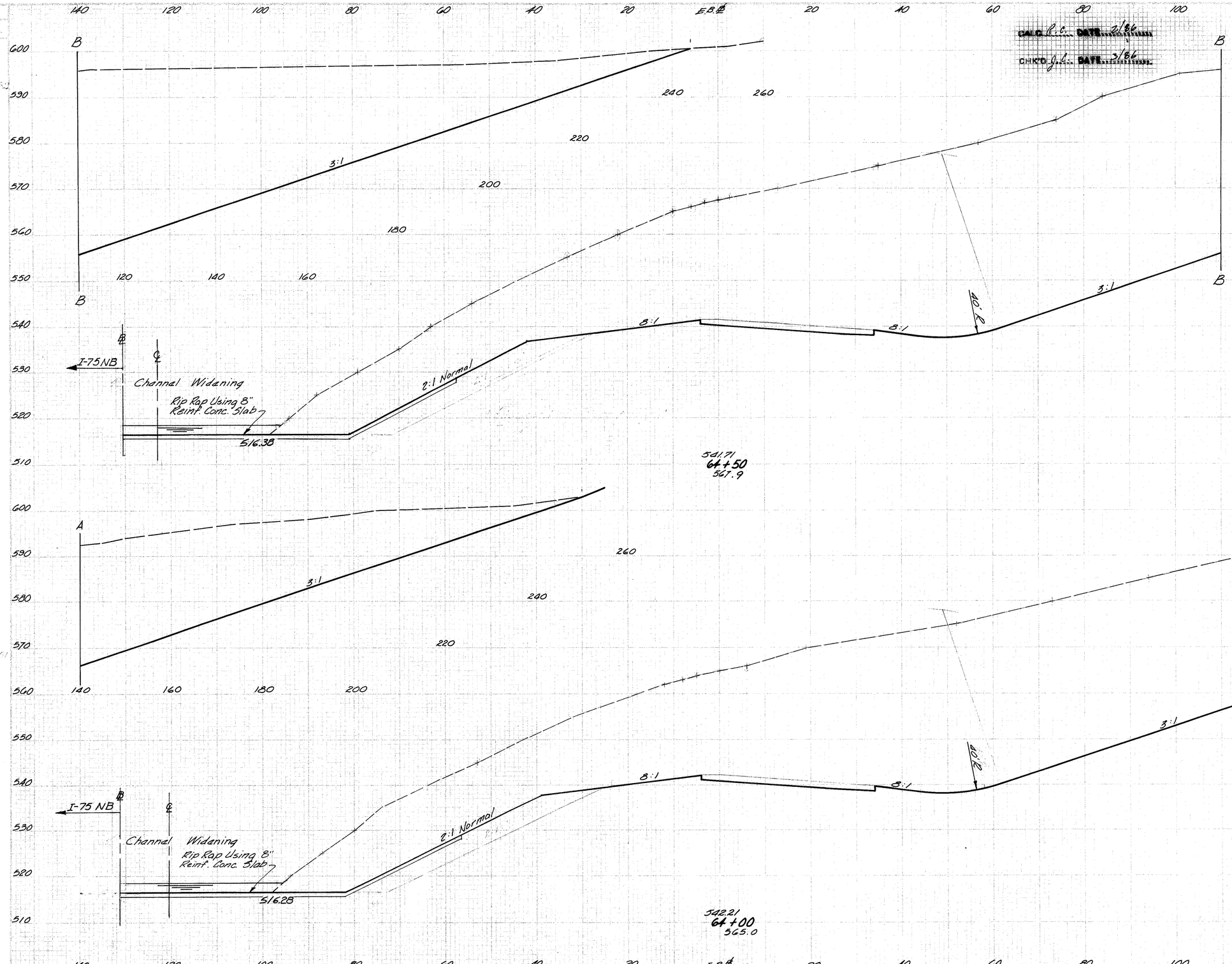
CALC. R.C. DATE 2/86
CHK'D J.C. DATE 3/86
101
787
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
E.B. ℄
B
3:1
260
240
220
140
160
180
200
Ramp I
Rip Rap Using 8" Reinf. Conc. Slab
516.13
2:1 Normal
8:1
40'R
542.65
63+50
563.3
13742 0
7376 0
63+10 Ahead 8628 0
63+10 Back 8628 0
A
Reloc. Mill Creek
516.03
542.96
63+00
563.8
2959 0
7350 0
DEVELOPED
CHECKED

CALC. V.C. DATE 2/86

CHK'D J.L. DATE 3/86

102
187

HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY



15529 0

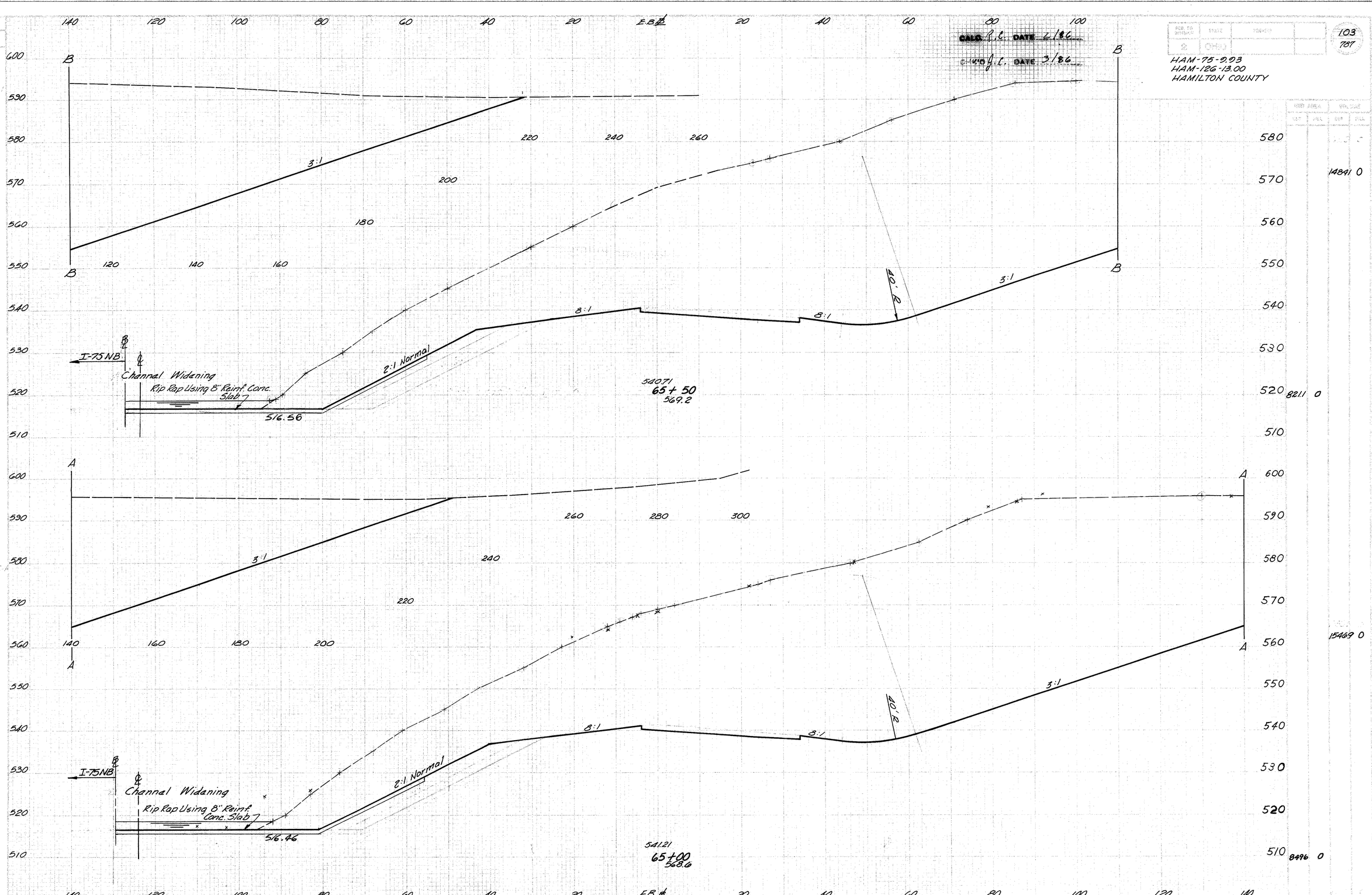
8275 0

14574 0

7965 0

DEVELOPED	CHECKED

EB SR 126 STA 64+00 TO STA 64+50



DEVELOPED	CHECKED

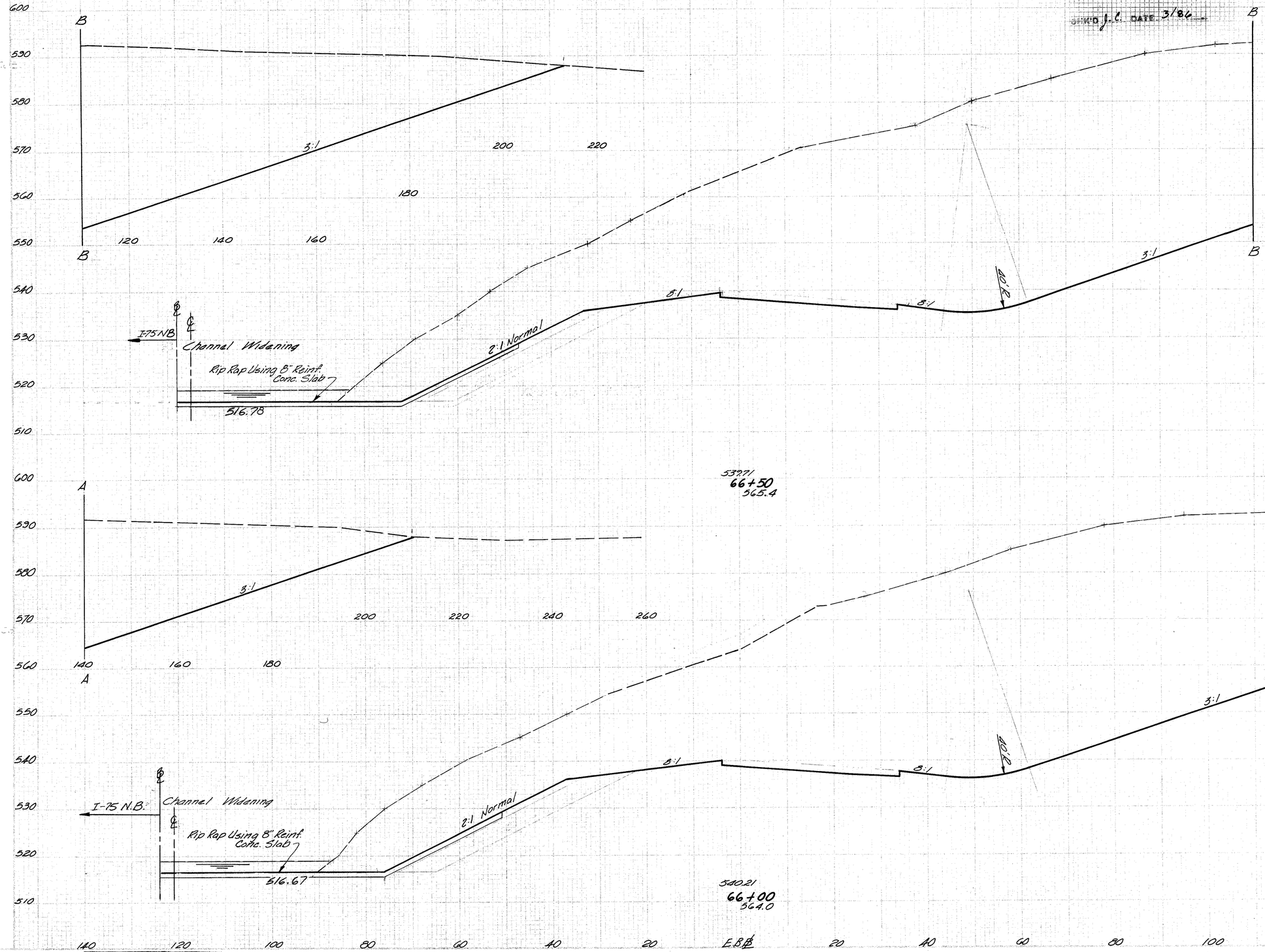
E.B. S.R. 126 STA 65+00 TO STA 65+50

CALC. T.L. DATE 2/86

CHK'D T.L. DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

104
787



DEVELOPED	CHECKED

EB. S.R. 126 STA. 66+00 TO STA. 66+50

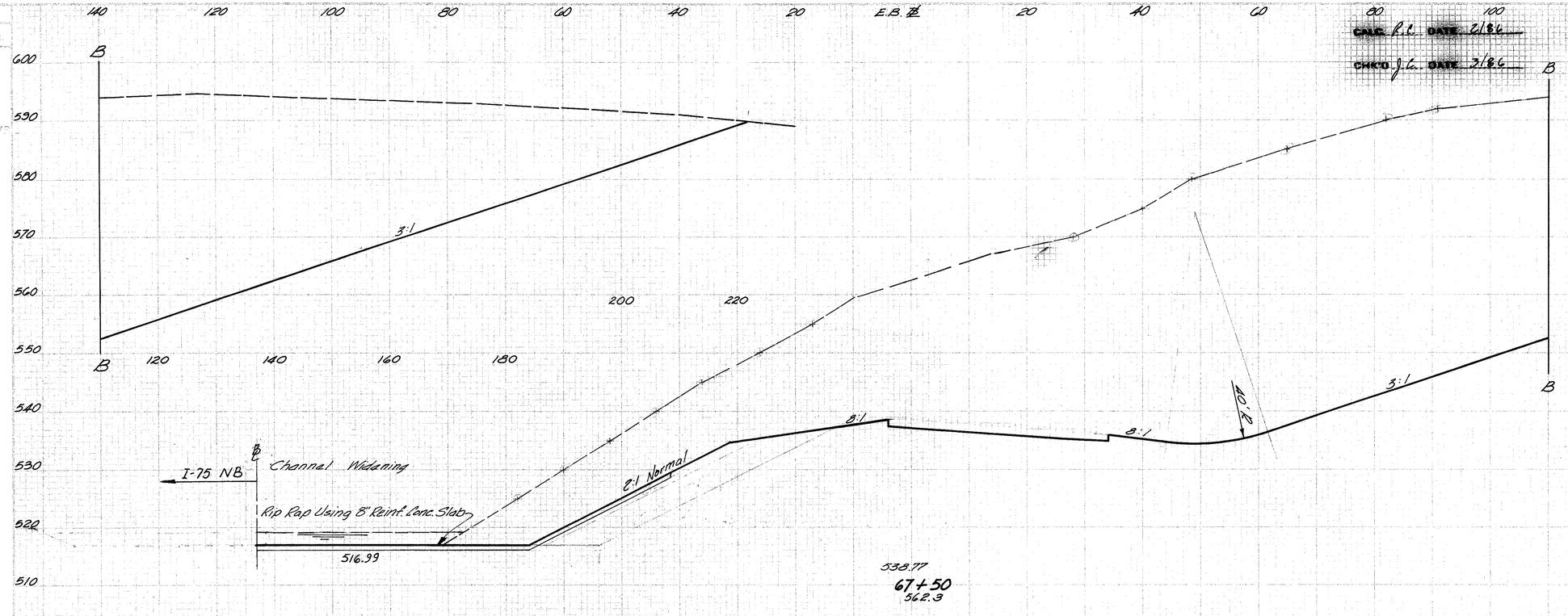
DESIGNED | DRAWN | TRACED | CHECKED

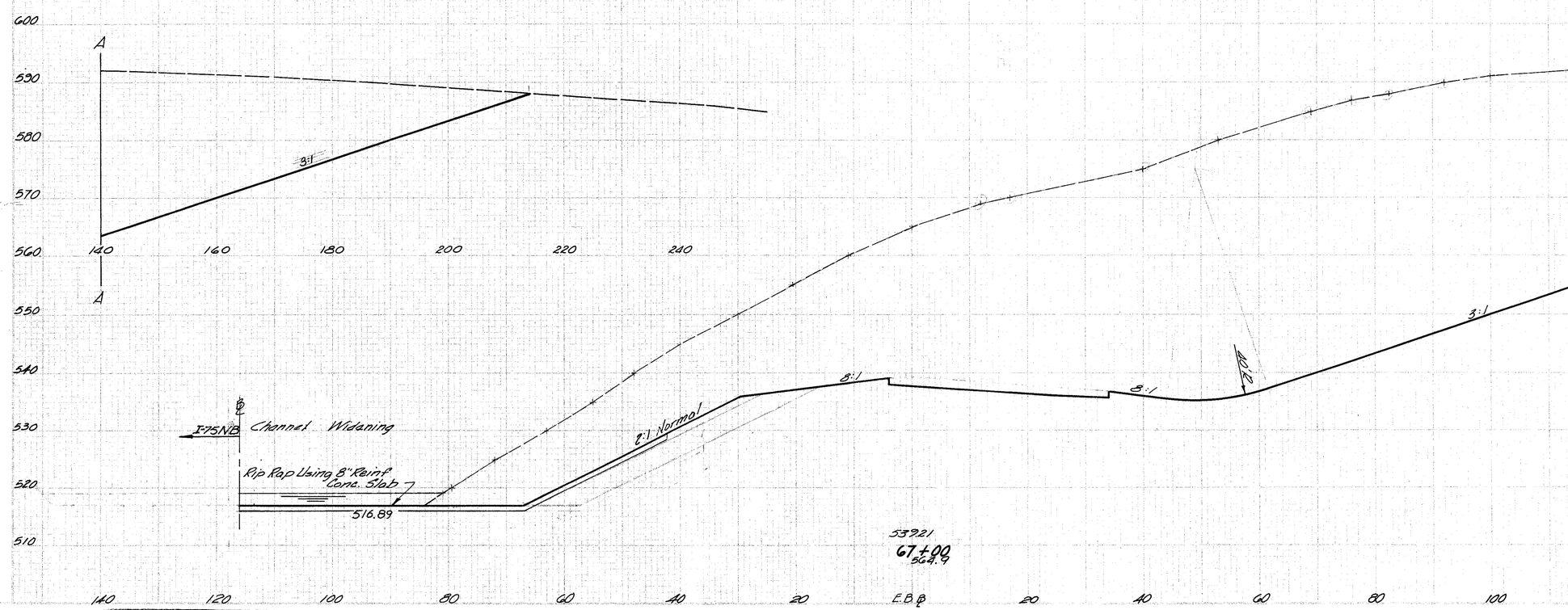
CHKD R.L. DATE 2/86

CHKD J.L. DATE 3/86

105
187

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY





140 120 100 80 60 40 20 E.B.℄ 20 40 60 80 100 120 140

DEVELOPED | CHECKED

E.B.℄ 126 STA 67+00 TO STA 67+50

13456 2

7984 0

14460 0

7633 0

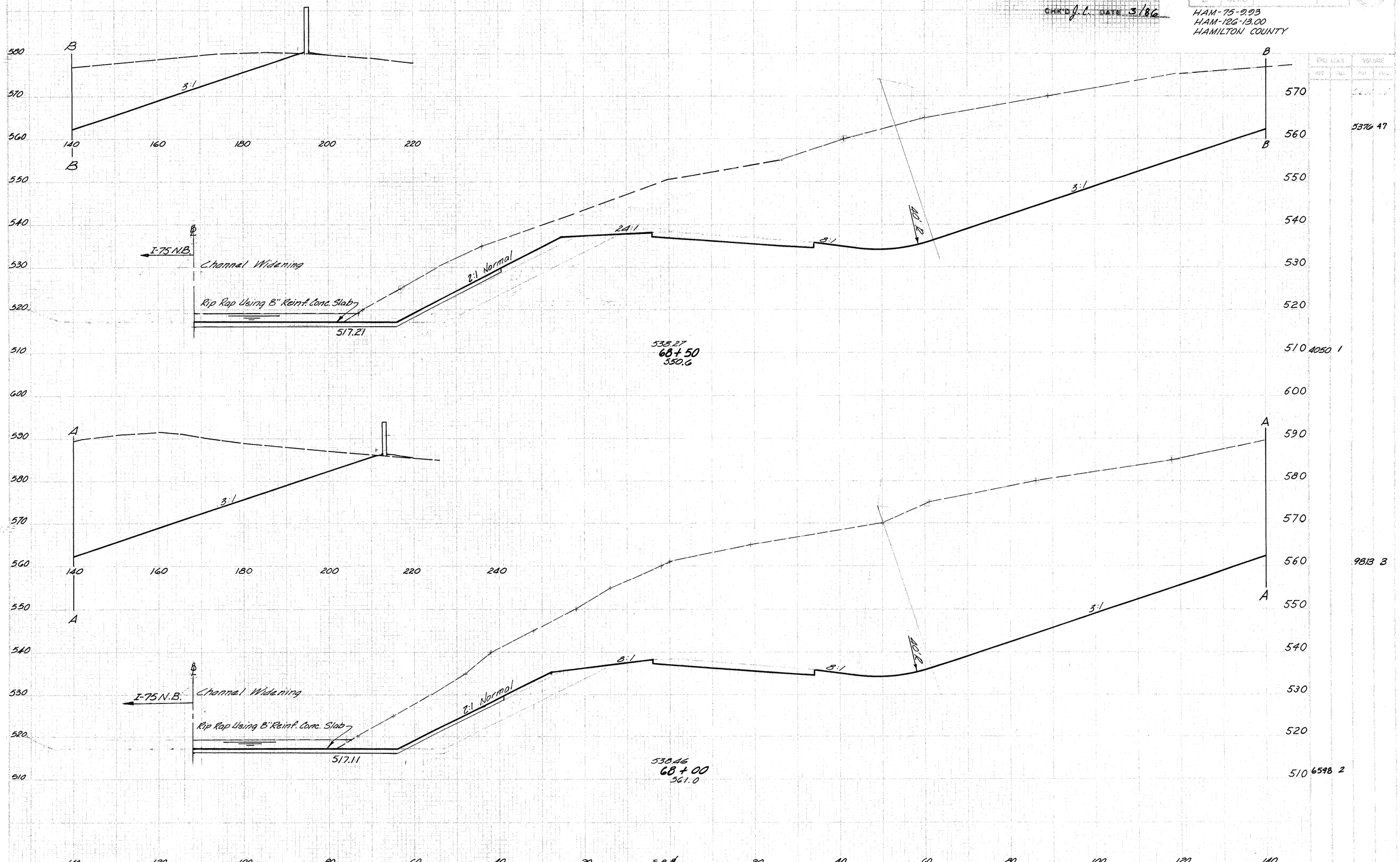
CALC. L.C. DATE 2/86

CHK'D J.L. DATE 3/86

FED. ROAD DIVISION	STATE	PROJECT	
5	OHIO		

106
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



DEVELOPED	CHECKED

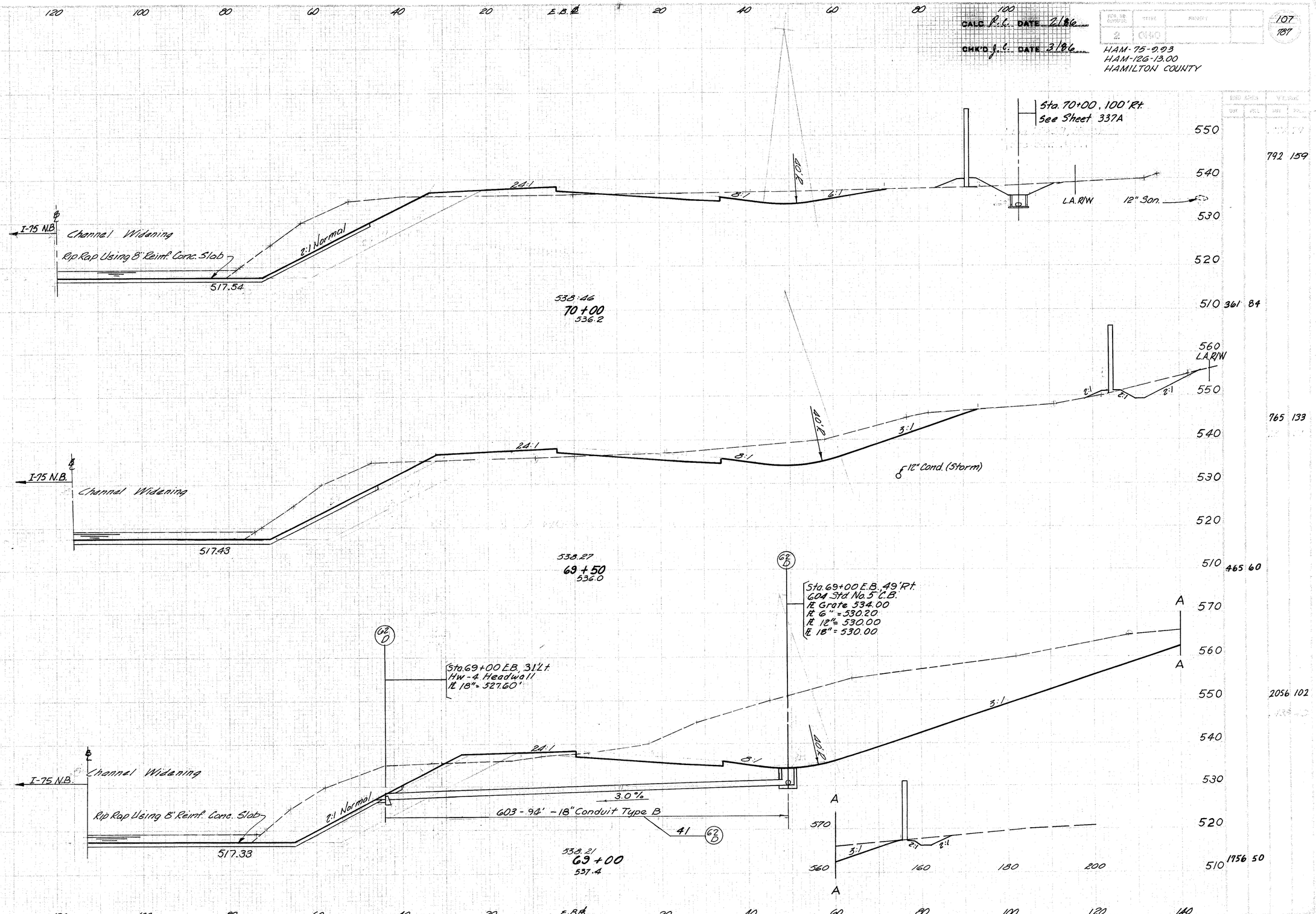
FR-5-D 126 STA 68+00 TO STA 68+50

CALC. P.C. DATE 2/86

CHK'D J.C. DATE 3/86

HAM-75-0.03
HAM-126-13.00
HAMILTON COUNTY

107
787



DESIGNED | DRAWN | CHECKED | QUANTITIES | CHKD. BY | DATE

CHKD. BY J.C. DATE 3/86

CHKD. BY J.L. DATE 3/86

NO.	BY	DATE	REVISION
2	DHD		

108
187

HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY

CROSS SECTIONS

END AREA		VOLUME	
CUT	FILL	CUT	FILL

140 120 100 80 60 40 20 E.B.℄ 20 40 60 80

560 550 540 530 520 510

℄ Channel Widening

Rip Rap Using 8" Reinf. Conc. Slab

2:1 Normal

24:1

517.86

12" San. Ex.

40:1

8:1

6:1

L.A. R/W

27" Conduit (Sant.)

539.71
71+50
536.3

540 1302 122
Unstable Materiol 0 0
530
520
510 486 127

℄ Channel Widening

2:1 Normal

24:1

517.75

12" San. Ex.

40:1

8:1

6:1

L.A. R/W

27" Conduit (Sant.)

539.21
71+00
536.4

560 550 540 530 520 510 1025 206
621 96

℄ Channel Widening

Rip Rap Using 8" Reinf. Conc. Slab

2:1 Normal

24:1

517.65

40:1

8:1

24:1

L.A. R/W

12" Sant. Ex.

538.77
70+50
536.0

560 550 540 530 520 510 1032 170
494 88

140 120 100 80 60 40 20 E.B.℄ 20 40 60 80 100 120 140

DEVELOPED | CHECKED

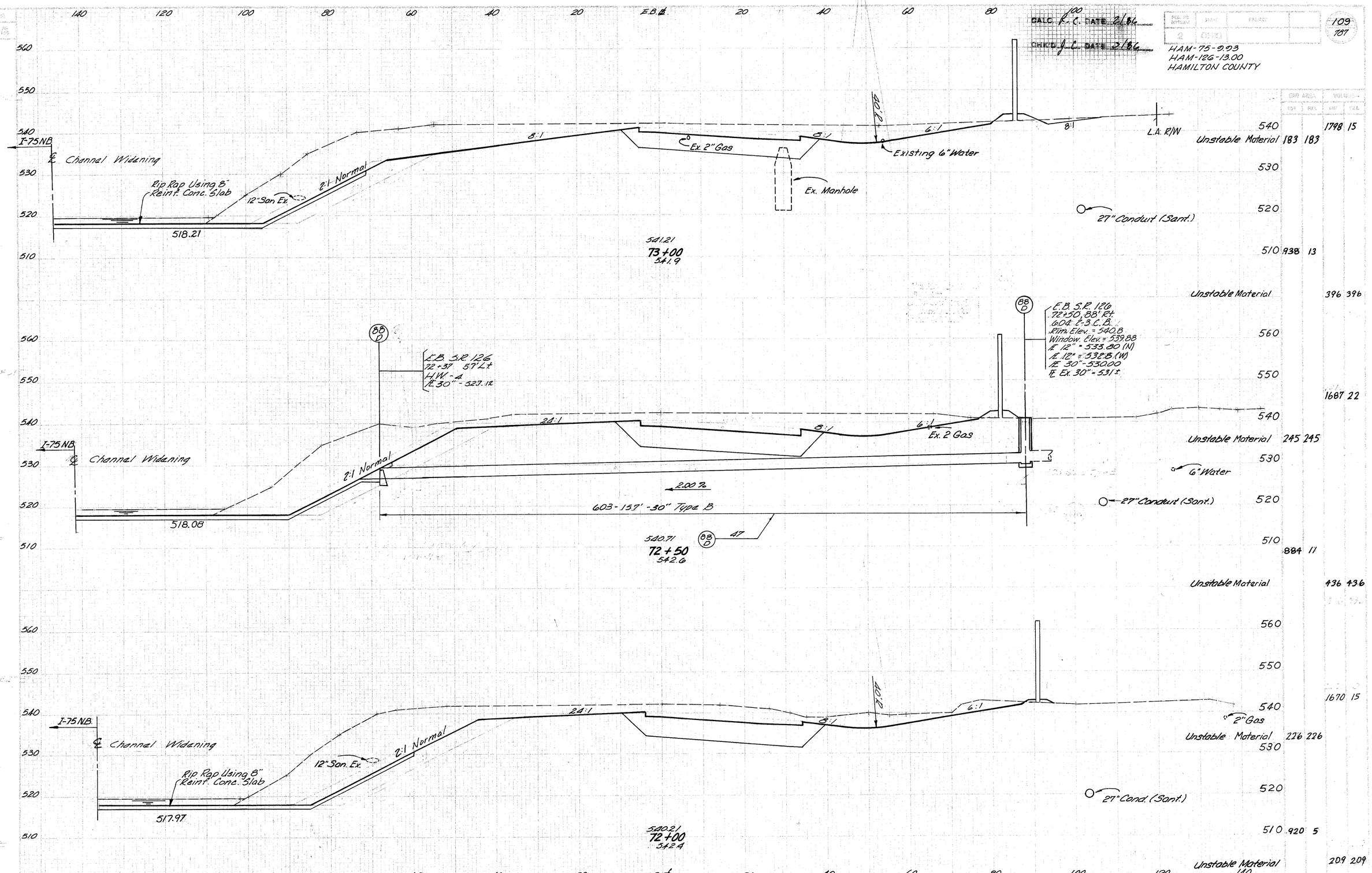
EB S.R. 126 STA 70+50 TO STA 71+50

CALC K. C. DATE 2/86

CHKD J. L. DATE 2/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

109
187



DEVELOPED | CHECKED

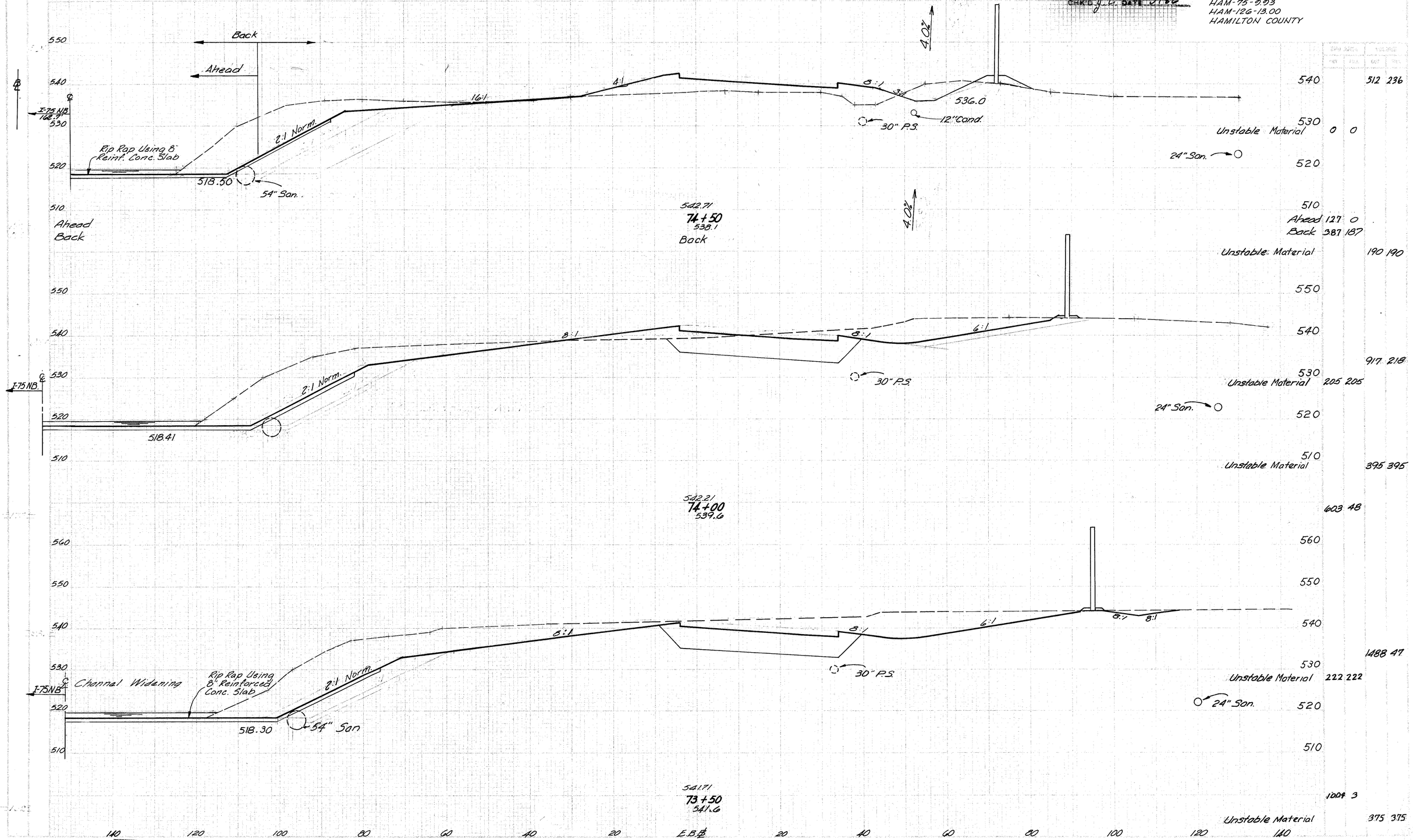
E.B. S.R. 126 STA. 72+00 TO STA. 73+00

CALC R.C DATE 2/86
CHK'D J.C. DATE 3/86

SHEET NO.	STATE	PROJECT	
2	OHIO		

110
787

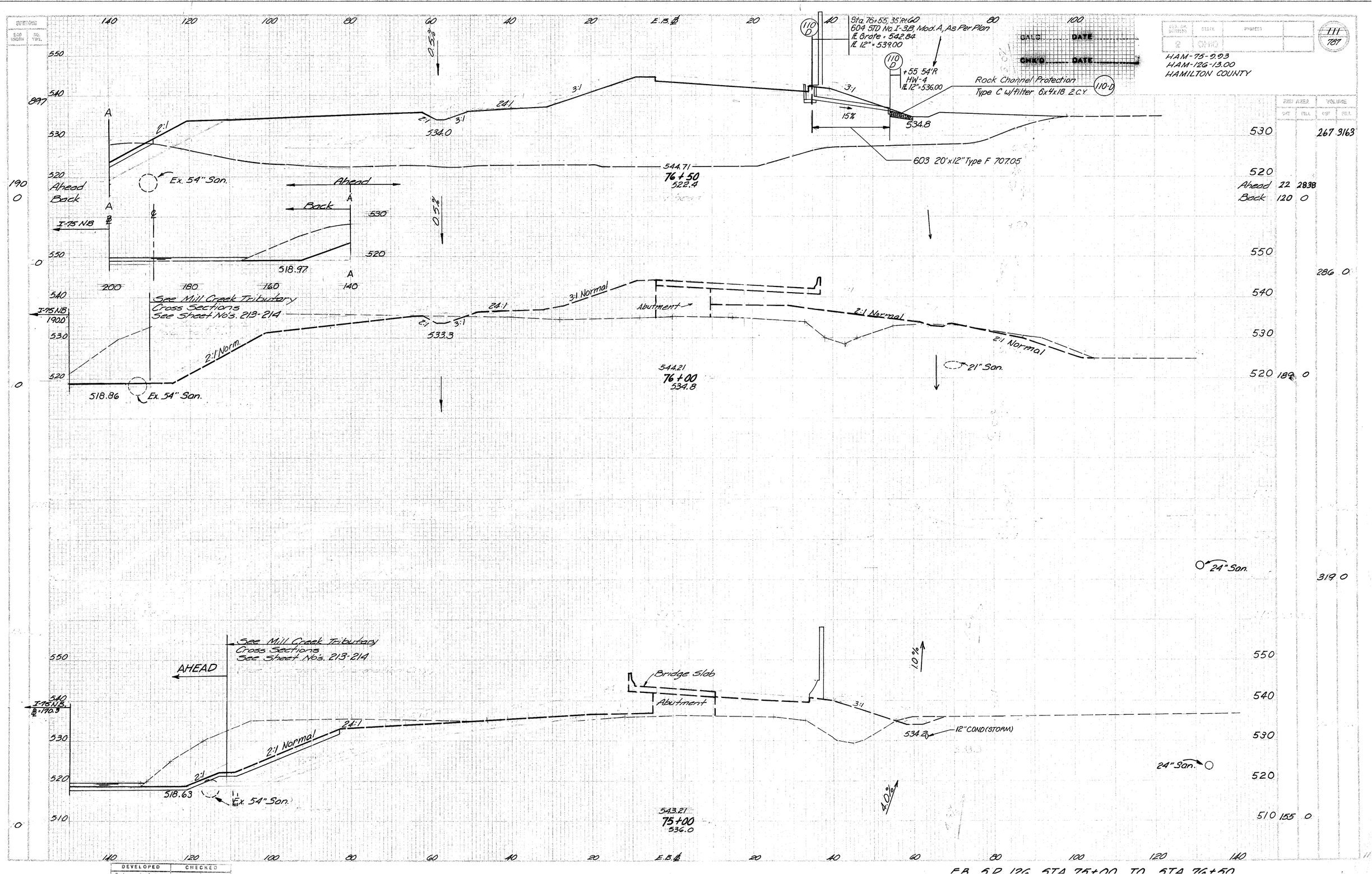
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



540		512 236
530	Unstable Material	0 0
520		
510	Ahead 127	0
	Back 387	187
	Unstable Material	190 190
550		
540		
		917 218
530	Unstable Material	205 205
520		
510	Unstable Material	395 395
		603 48
560		
550		
540		1488 47
530	Unstable Material	222 222
520		
510		
		1004 3
	Unstable Material	375 375

DEVELOPED | CHECKED

E.B. S.R. 126 STA. 73+50 TO STA. 74+50



HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

530			267 3163
520			
Ahead	22	2838	
Back	120	0	
550			
			286 0
540			
530			
520	189	0	
			319 0
550			
540			
530			
520			
510	155	0	

DEVELOPED | CHECKED

F.B. 5 P. 126 STA. 75+00 TO STA. 76+50

CALC. P.C. DATE 2/86
CHEC. J.L. DATE 3/86

HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY

112
787

140 120 100 80 60 40 20 E.B.℄ 20 40 60 80 100

550
540
530

Variable
Variable
8:1
3.6%
8:1
3:1
40'R.
546.27
78+00
537.7
536.7
550
540
530
509 2989
206 1580

C
C

ZERO SECTION
W.B. LANES ONLY
Sta. 77+58, E.B. ℄ S.R. 126

I-75 N.B.
B
Rip Rap Using 8" Reinf. Conc. Slab
2:1 Norm.
14.82%
1.8%
540
530
520
200 180 519.30 160 140
442 1910

550
540
530
I-75 N.B.
B
B
3:1
2:1
3:1
3:1
8:1
3:1
40'R.
545.71
77+50
536.8
534.5
535.8
550
540
530
271 483
0.5%
0.5%

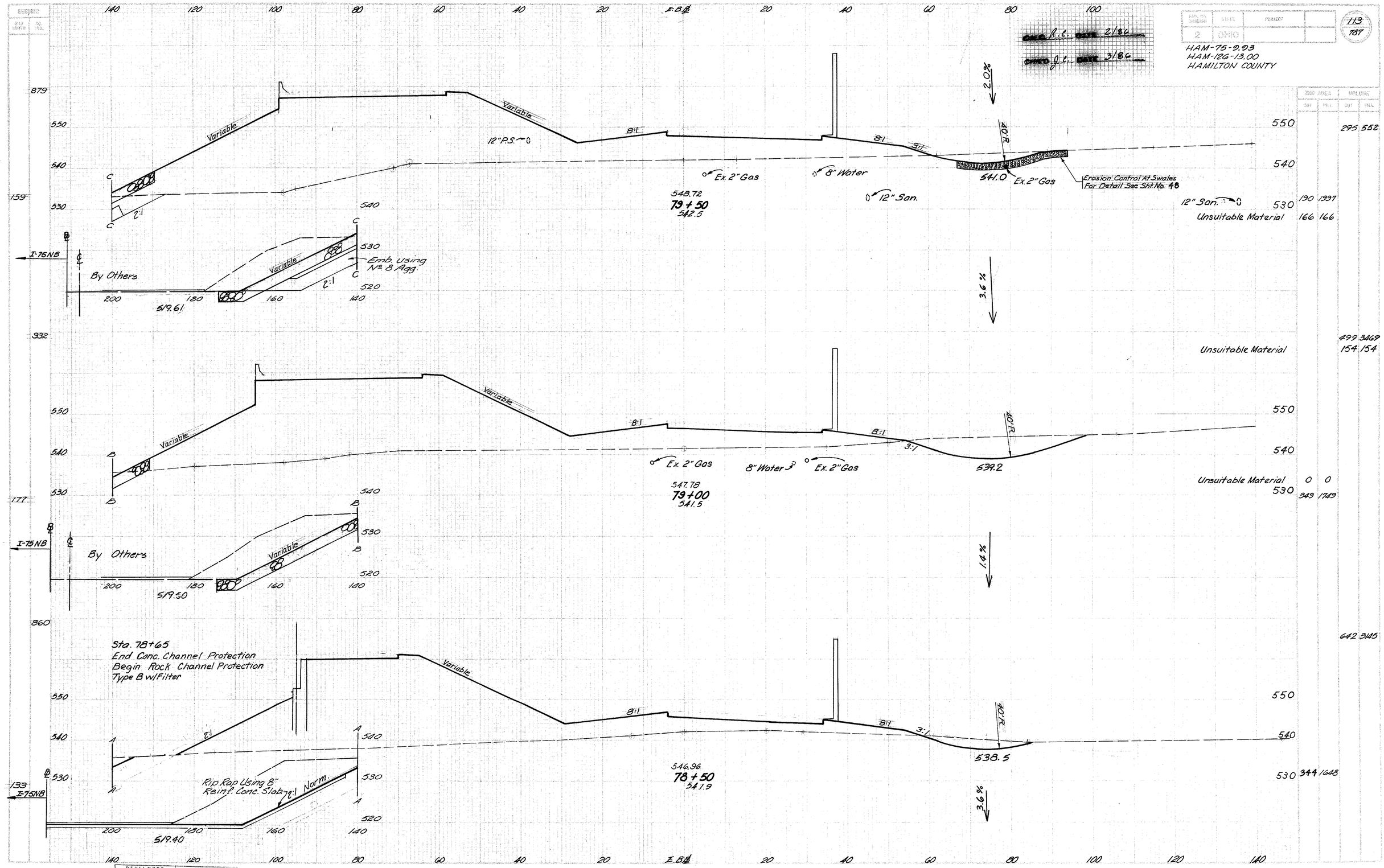
I-75 N.B.
B
B
Ex. 54" San.
200 180 519.20 160 140
540
530
520
497 982

I-75 N.B.
B
A
A
Rip Rap Using 8" Reinf. Conc. Slab
2:1 Norm.
1.6:1
Ex. 54" San.
200 180 160 519.09 140
540
530
520
3:1
8:1
3:1
40'R.
545.21
77+00
536.0
534.2
535.6
550
540
530
266 578
0.5%

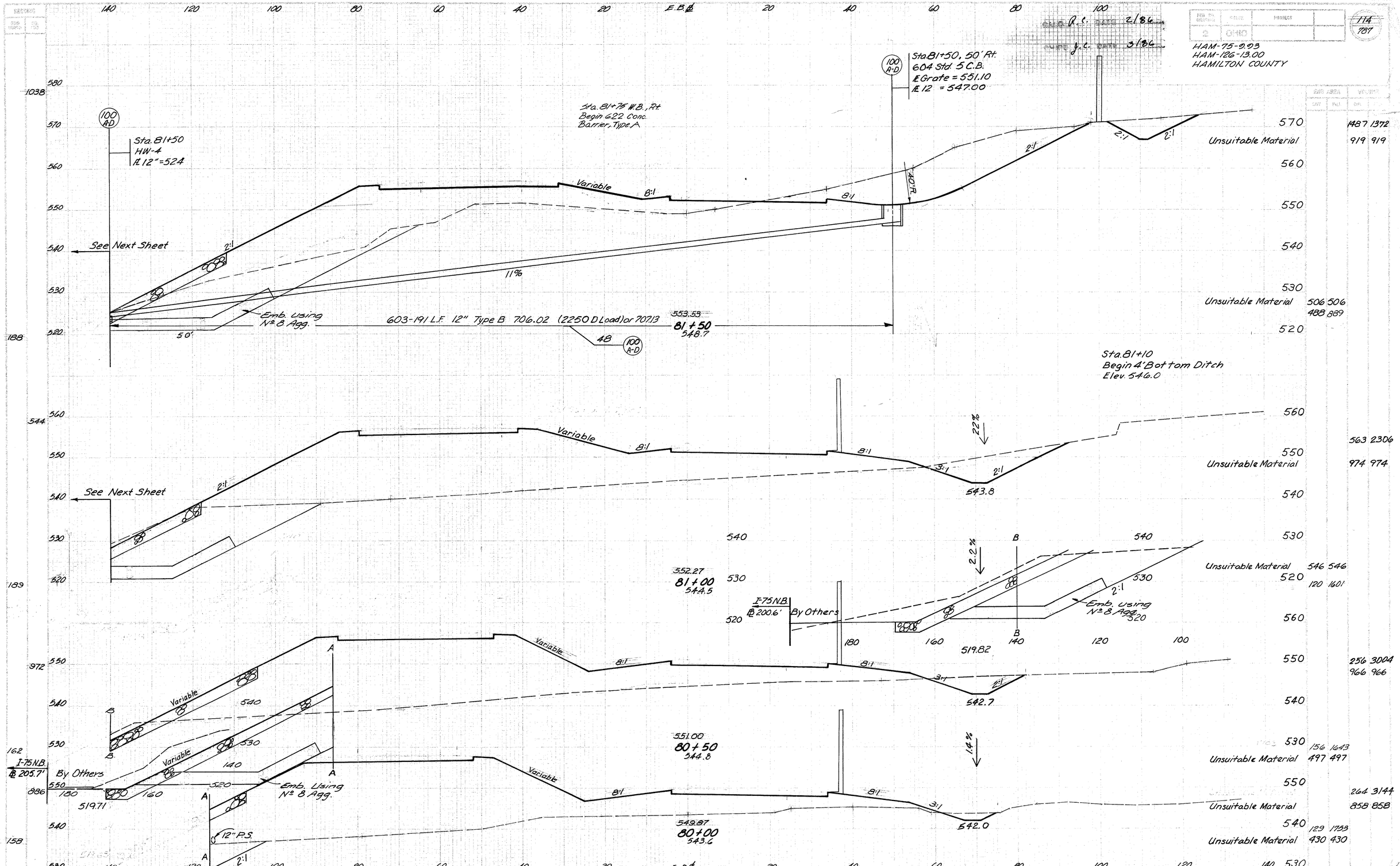
140 120 100 80 60 40 20 E.B.℄ 20 40 60 80 100 120 140

DEVELOPED | CHECKED

E.B. S.R. 126 STA. 77+00 TO STA. 78+00



113
787
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
Variable
12" P.S.
8:1
3:1
2.0%
40'R
Ex. 2" Gas
8" Water
12" San.
Erosion Control At Swales For Detail See Sht. No. 48
548.72
79+50
542.5
541.0
Unsuitable Material
190 1997
166 166
295 552
I-75NB
By Others
Emb. Using No. 8 Agg.
519.61
3.6%
Unsuitable Material
499 3469
154 154
Ex. 2" Gas
8" Water
Ex. 2" Gas
547.78
79+00
541.5
539.2
Unsuitable Material
0 0
349 1749
519.50
1.4%
Sta. 78+65
End Conc. Channel Protection
Begin Rock Channel Protection
Type B w/Filter
642 3145
Rip Rap Using 8" Reinf. Conc. Slab
2:1 Norm.
546.96
78+50
541.9
538.5
344 1648
519.40
3.6%



F.B. S.P. 126 STA. 80+00 TO STA. 81+50

SECTION

END WIDTH	SQ. YDS.

260 240 220 200 180 160

CALC R.L. DATE 2/86

CHKD J.L. DATE 3/86

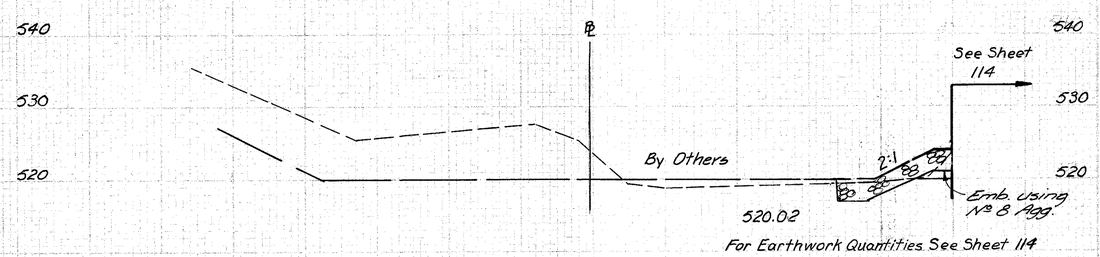
FHWA REGION	STATE	PROJECT	
5	OHIO		

HAM-75/126-9.93/13.00

114A
787

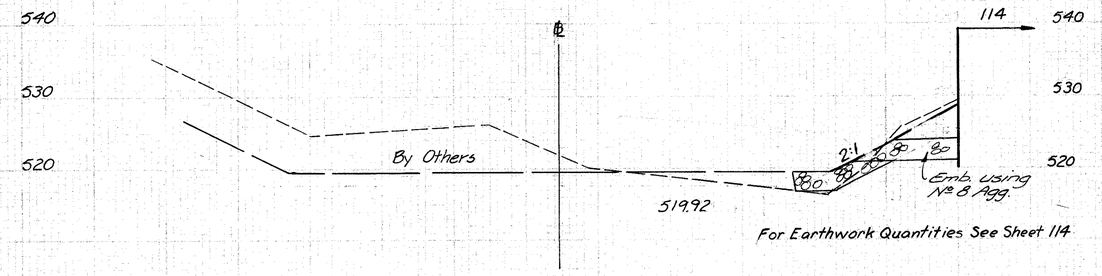
END AREA		VOLUME	
CUT	FILL	CUT	FILL

140



For Earthwork Quantities See Sheet 114

B1+50



For Earthwork Quantities See Sheet 114

81+00

240 220 200 180 160 140

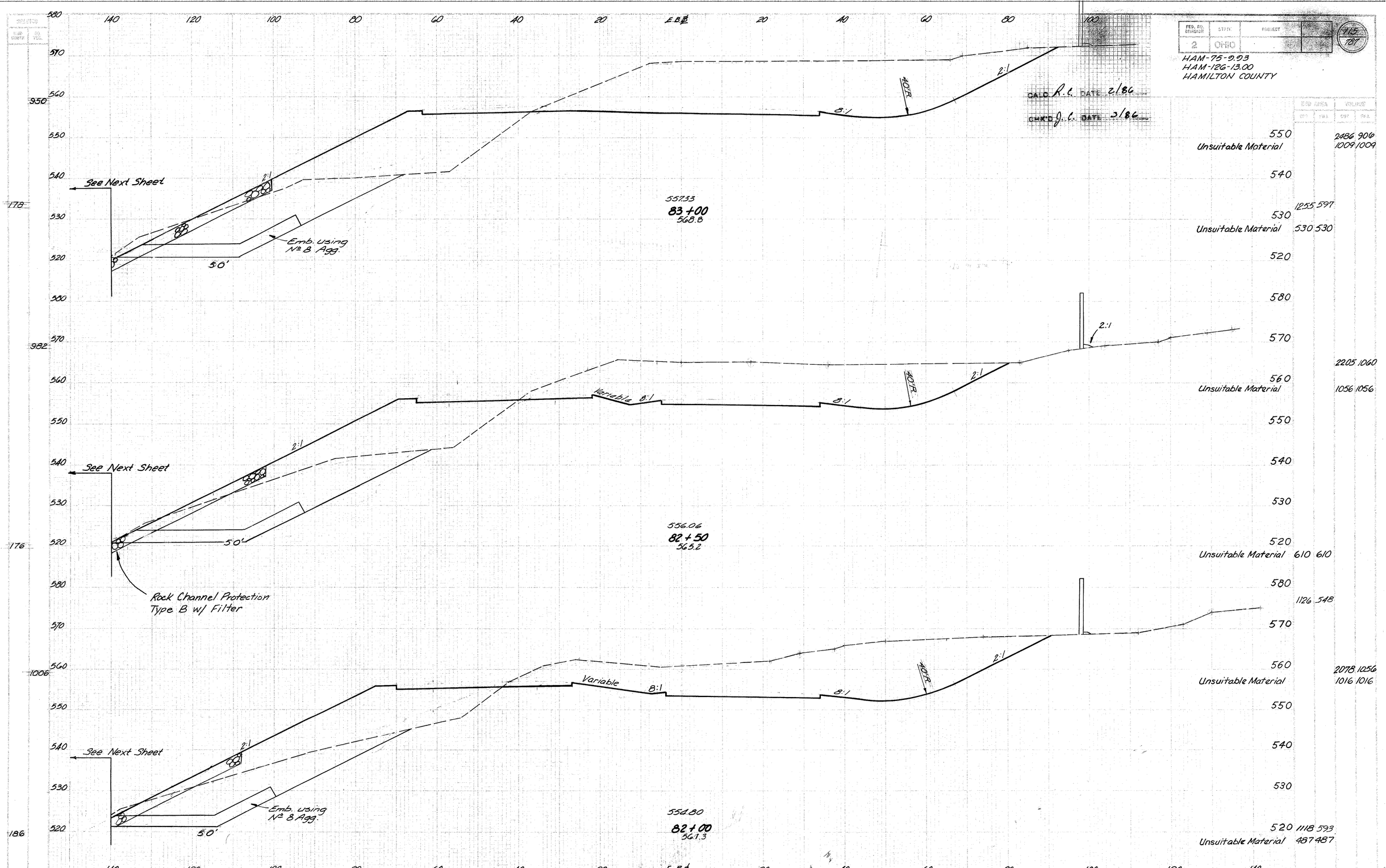
E.B. S.R. 126 STA. 81+00 TO STA. 81+50 LEFT

FED. RD. DIVISION	STATE	PROJECT		
2	OHIO			

HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY

CALC R.L. DATE 2/86
CHKD J.L. DATE 3/86

	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
550 Unsuitable Material	2486	906		
	1009	1009		
540				
530			1255	597
Unsuitable Material	530	530		
520				
580				
570				
			2205	1060
560 Unsuitable Material				
	1056	1056		
550				
540				
530				
520 Unsuitable Material	610	610		
580				
			1126	548
570				
560 Unsuitable Material			2078	1056
	1016	1016		
550				
540				
530				
520 Unsuitable Material	1118	593		
	487	487		



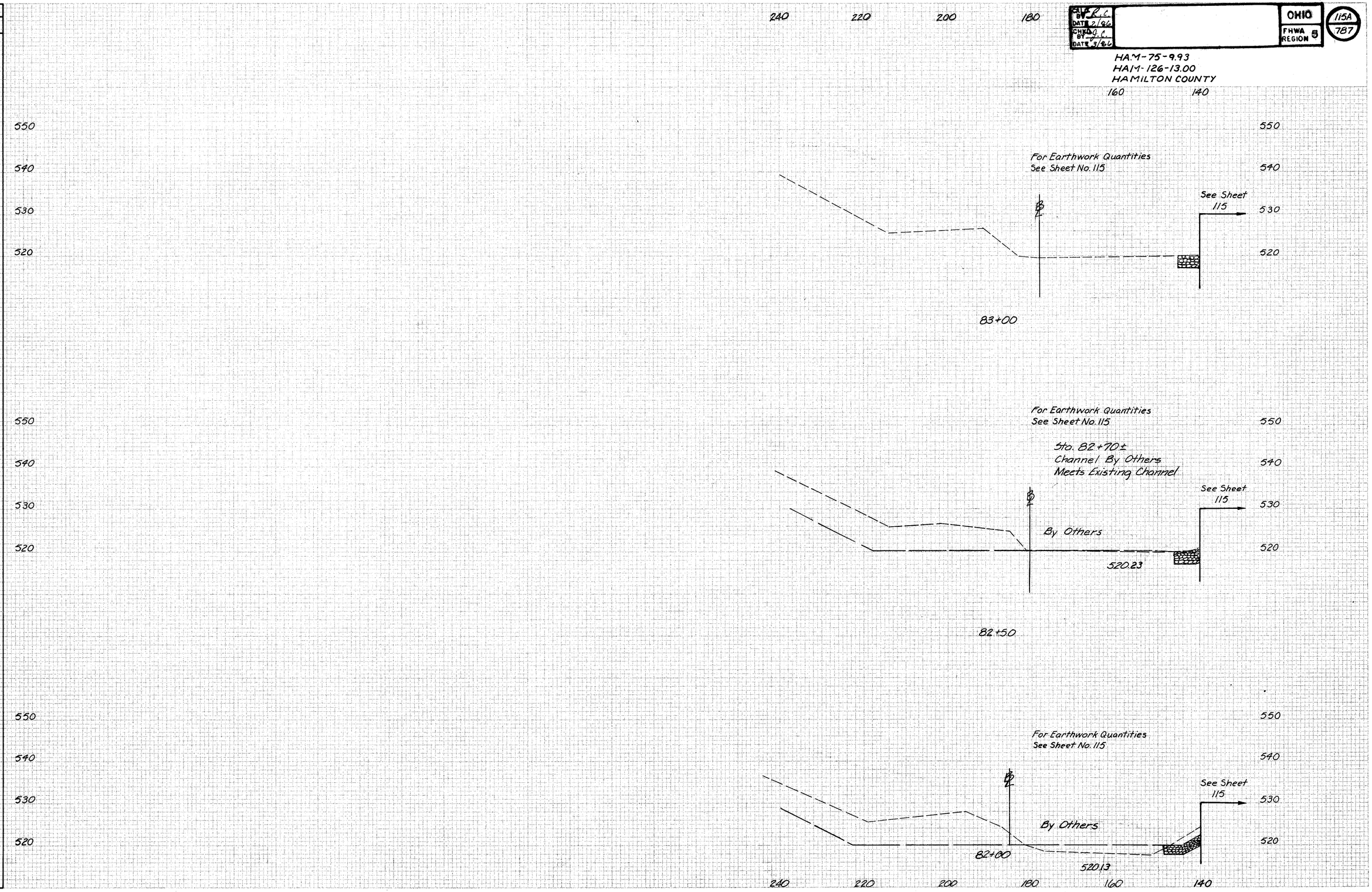
Seeding	
END WIDTH	SQ. YDS.

CALC. BY R.C. DATE 2/86
CHKD. BY J.C. DATE 3/86

OHIO
FHWA REGION 5

115A
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



E.B. S.R. 126 STA. 82+00 TO STA. 83+00 LEFT

HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY

CALC. R.C. DATE 2/86
CHKD. J.L. DATE 3/86

CB-5

714

See Next Sheet

24:1

2:1

Emb. using No. 8 Agg.

40'R

3:1

Unsuitable Material

550	2563 523
	2166 2263
540	
530	
520	1447 213
	1142 1247

561.12
84+50
572.5

749

886

See Next Sheet

24:1

2:1

580	
570	
560	
	2833 594
550	
Unsuitable Material	1752 1938
540	
530	
520	1613 428
Unsuitable Material	750 846

552.86
84+00
573.0

771

881

Sta. 83+75
End Rock Channel
Protection Type B w/ Filter

See Next Sheet

Emb. using No. 8 Agg.

580	
570	
560	
	2818 750
Unsuitable Material	1213 1302
550	
540	
530	
520	1430 382
Unsuitable Material	560 560

538.59
83+50
568.8

165

140 120 100 80 60 40 20 E.B.℄ 20 40 60 80 100 120 140

DEVELOPED | CHECKED

FA 50 126 STA 83+50 TO STA 84+50

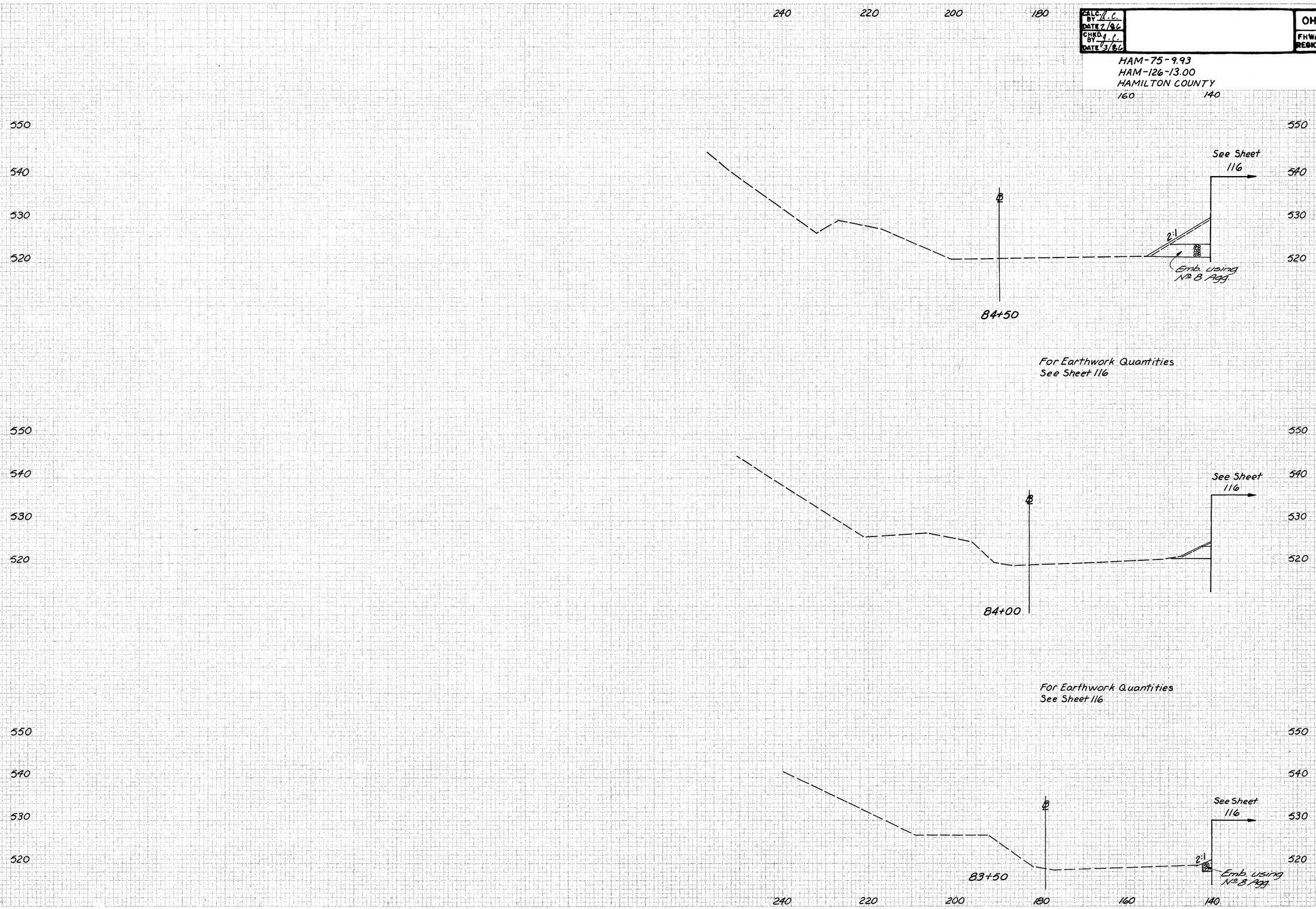
Seeding	
End Width	SQ. YDS.

CALC. BY R.C. DATE 2/86
CHKD. BY J.C. DATE 3/86

OHIO
FHWA REGION 5

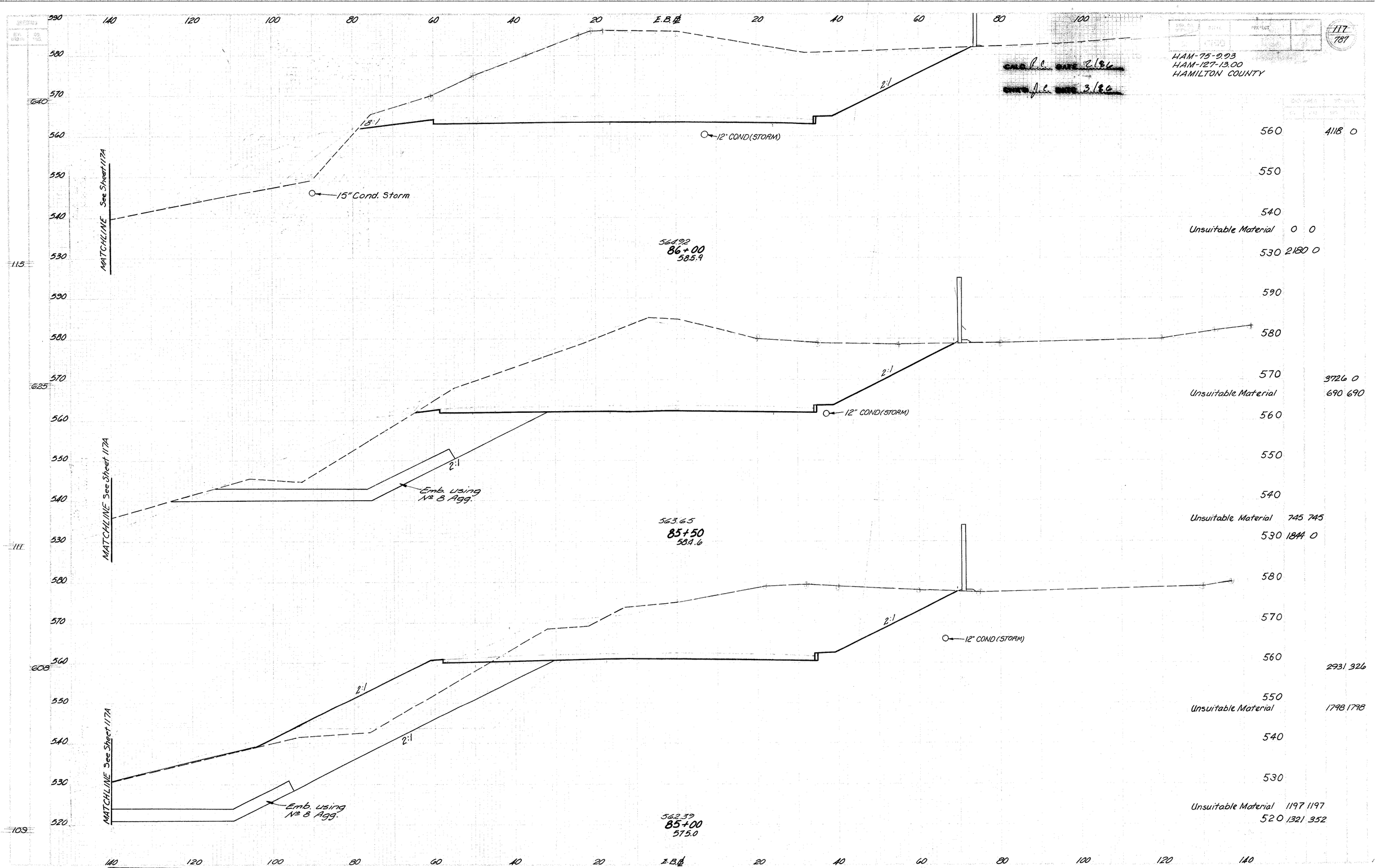
116A
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



E.B. S.R. 126 STA. 83+50 TO STA. 84+50 LEFT

HAM-75-9.93
HAM-127-13.00
HAMILTON COUNTY



DEVELOPED	CHECKED

EB. S.R. 126 STA. 85+00 TO STA. 86+00

Seeding	
END WIDTH	SQ. YDS.

CALC. BY N.C. DATE 2/86
CHKD. BY N.C. DATE 3/86

OHIO
FHWA REGION 5

117A
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

300 280 260 240 220 200 180

550
540
530
520

℄

86+00

MATCHLINE See Sheet 117

For Earthwork Quantities
See Sheet 117

550
540
530
520

℄

85+50

578.5

MATCHLINE See Sheet 117

For Earthwork Quantities
See Sheet 117

550
540
530
520

℄

85+00

579.6

Emb. using
№ 8 Agg.

MATCHLINE See Sheet 117

280 260 240 220 200 180 160 140

PLATE 3 CROSS SECTION O. P. C. R. R. & HIGHWAY
IMPROVEMENT COMMISSION

E.B. S.R. 126 STA. 85+00 TO STA. 86+00 LEFT

140 120 100 80 60 40 20 E.B.℄ 20 40 60 80 100

FED. NO. | STATE | PROJECT

CALC. R.L. DATE 2/86

CHK'D. J.L. DATE 2/86

HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY

118
787

STATION EQUATION
STA. 87+24.33 E.B. ℄ S.R. 126 BACK =
STA. 87+44.00 ℄ S.R. 126 AHEAD

601

590
580
570
560
550

MATCHLINE See Sheet 11BA

6:1

3.0'

8:1

2:1

567.44
87+00
589.5

590
580
570
560
550

2500 0

667

590
580
570
560
550
540

MATCHLINE See Sheet 11BA

Sta. 86+30 E.B. 8.5' Lt.
604 Std. No. 1-3A Inlet
℄ Slot = 565.37'
℄ 6" = 559.52'
℄ 12" = 559.30'
℄ 15" = 559.30'

103 D

Sta. 86+30 E.B. 33' Rt.
604 Std. No. 3A C.B. With V-Grate
℄ Grate = 564.7'
℄ 15" = 561.2'

109 D

6:1

3.0'

8:1

2:1

4.5%

15" Type B

604-42'-15" Type B

48

109 D

For Profile Continuation
See Sheet No. 353

565.97
86+50
587.1

590
580
570
560
550
540

4473 0

2267 0

724

716

140 120 100 80 60 40 20 E.B.℄ 20 40 60 80 100 120 140

DEVELOPED | CHECKED

FA. S.R. 126 STA. 86+50 TO STA. 87+00

SEEDING	
END WIDTH	SQ. YDS.

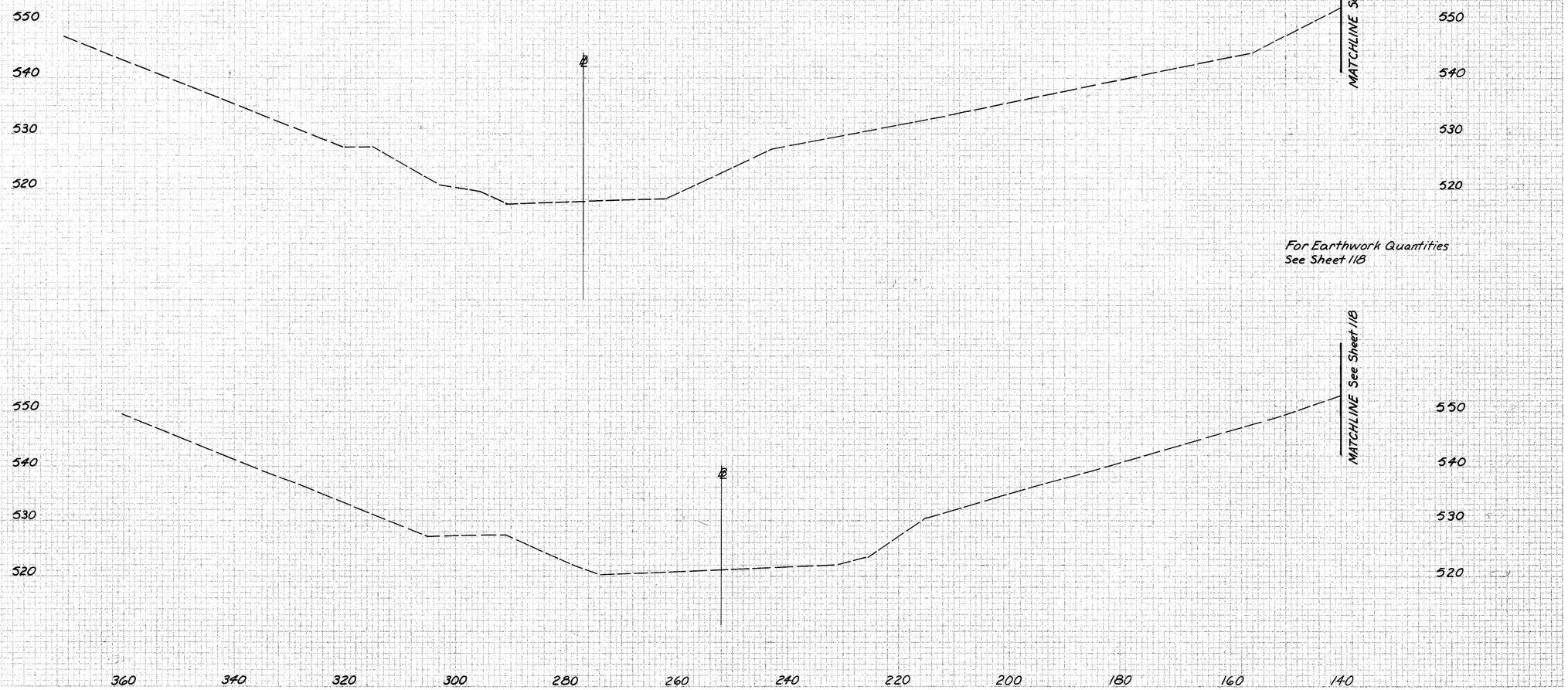
CALC. BY R.C. DATE 2/86
CHKD. BY [illegible] DATE 3/86

OHIO
FHWA REGION 5

118A
787

HAMILTON COUNTY
HAM-126-13.00

For Earthwork Quantities
See Sheet 118



For Earthwork Quantities
See Sheet 118

PLATE 2 CROSS SECTION O. P. W. & R. R. STANDARDS
DIFFERENT DISTRIBUTION

EB. S.R. 126 STA. 86+50 TO STA. 87+00 LEFT

DEVELOPED: C.R.C. DATE 2/86
CHECKED: J.C. DATE 3/86

DESIGN	STATE	SHEET		
2	OHIO			

119
787

H.AM-75-9.93
H.AM-126-13.00
HAMILTON COUNTY

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

600 590 580 570

689

126

4:1 8:1 2:1 3.00

572.01
89+00
584.1

590 4025 0
580
570
2290 0

600 590 580 570

704

126

Match line See Sheet 119A

42" Cond.

108 D

Sta. 88+62, 110 Lt.
604 Std. No. 3 MH
Rim Elev.: 577.80
℄ 15" = 561.57
℄ 42" = 550.36

4:1 8:1 2:1 4.00

6" Deep U.D.

2.6%

370.74
88+50
584.3

108 D

Sta. 88+50, 44' Rt.
604 Std. No. 3A C.B. With V-Grate
℄ Grate = 569.13'
℄ 15" = 565.63'

600 590 580 570

590 4309 0
580
570
2364 0

603-156'-15" Type B

48 108 D

590 580 570 560

717

130

Match line See Sheet 119A

4:1 8:1 2:1 4.00

569.13
88+00
586.5

590 4549 0
580
570
560 2549 0

590 580 570 560

473

122

Match line See Sheet 119A

6:1 8:1 2:1 4.00

568.06
87+44
590.2

590 5738 0
580
570
560 2984 0

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

DEVELOPED | CHECKED

S.R. 126 STA. 87+44 TO STA. 89+00

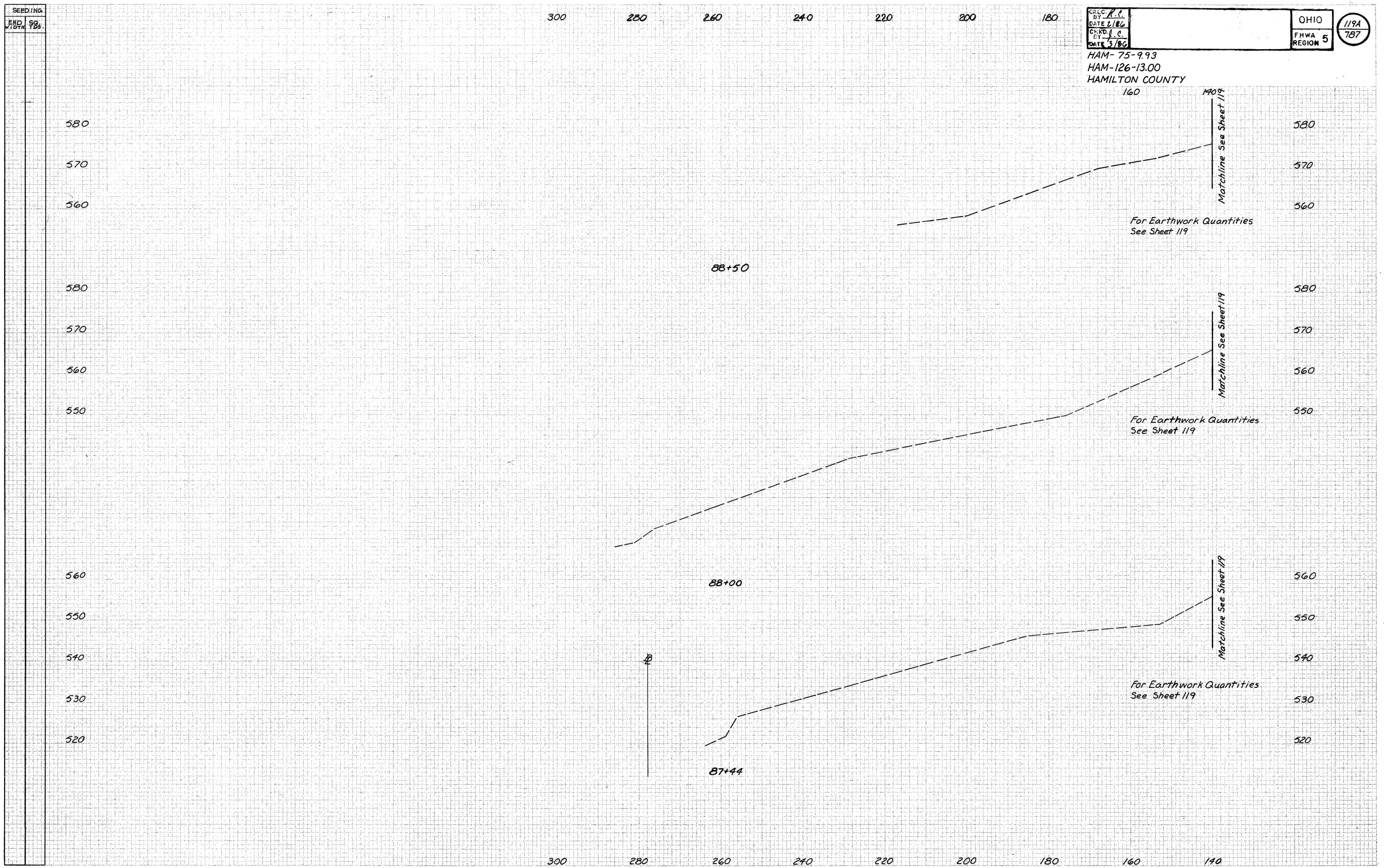


PLATE 2 CROSS SECTION O. R. R. & R. L. STANDARD

S.R. 126 STA 87+44 TO STA 88+50 (FEET

CALC'D A.L. DATE 2/86

CHK'D J.F. DATE 3/86

NO.	DATE	REVISION	BY
2	1980		

120
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

703

600
590
580
570
560

40'-2"
4:1
8:1
2:1

575.80
90+50
585.3

42" Conduit

125

600 2777 2
590
580
570
560 1611 2

689

600
590
580
570
560

40'-2"
4:1
8:1
2:1

574.54
90+00
585.2

42" Cond

123

600 3127 2
590
580
570
560 1766 0

682

600
590
580
570

40'-2"
4:1
8:1
2:1

573.27
89+50
584.9

42" Cond.

123

600
590 3540 0
580
570
2057 0

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

DEVELOPED | CHECKED

S.R. 126 STA 89+50 TO STA 90+50

DESIGNED	CHECKED
EWP 4-70	EWP 11-71
DRAWN	CHECKED
EWP 11-71	EWP 11-71

CHKD. P.C. DATE 2-86

CHKD. P.C. DATE 3-86

SER. NO. BRDG.	SHEET	PROJECT	
2	OMIT		

121
787

HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

0.8%
Sta. 92+60 Lt.
End Ditch
2.0%
8:1
581.2
2" Gas Line
Ex. 1½" Water
4:1
2:1
580.36
92+50
585.8
0.5%
42" Cond
474
87
933 0
1577 0

590 580 570 560

2.0%
8:1
581.0
2" Gas Line
Ex. 1½ Water
4:1
2:1
579.37
92+00
585.4
42" Conduit
525
703
1075 0
1859 0

590 580 570 560

2.0%
8:1
4:1
2:1
578.28
91+50
585.3
42" Cond.
574
704
1213 0
2119 0

590 580 570 560

2.0%
8:1
4:1
2:1
577.07
91+00
585.0
42" Cond
644
128
1388 0
2408 0

590 580 570 560

S.R. 126 STA. 91+00 TO STA. 92+50

CALC. A. C. DATE 2/86
CHK'D J. C. DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

122
787

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

Ramp T
2.7%
40'R.
8:1
6:1
580.4
583.66
34+50
582.3
Sta. 94+40
Begin 40R Ditch
3.2%
290
590
580
570
49
590 78 195
580
570 65 1

Ramp T
6:1
6:1
582.85
34+00
581.8
12" COND (STORM)
268
590
580
570
48
590 144 73
580
570 91 78

S.R. 126 Back
* Ramp T S.R. 126
Ahead Ahead
42" Cond.
* For Ramp T Earthwork Quantities See Sheet No. 276
Gas
Ex. 1½" Water
12" COND (STORM)
2:1
582.04
93+50
585.2
225
590
580
570
560
AH. 34
BK. 72
590 544 72
580
570
Ahead 497 0
Back 529 0
560

42" Cond.
Sta. 93+00, 95' Lt.
604 Std. No. 3 M.H.
Rim Elev. = 588.00
ℓ 42" = 552.01
Gas
1½" Water Ex.
2:1
581.22
93+00
585.3
432
590
580
570
84
560
590 1249 0
580
570 770 0
560

DEVELOPED	CHECKED

S.R. 126 STA. 93+00 TO STA. 94+50

CALC. R.C. DATE 2/86

CHK'D J.C. DATE 3/86

123
787

HAM-75-0.93
HAM-126-13.00
HAMILTON COUNTY

539
88
436
69
369
64
332
56

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

590
580
570
560

Ramp T

3:1 8:1 2:1 2:1

576.0

586.91
96+50
577.4

2.8%

590 27 2931
580
570
560 7 1351

Ramp T

3:1 8:1 3:1 3:1

578.3

586.10
96+00
578.6

0.7%

590 20 2163
580
570 15 985

Ramp T

8:1 6:1 3:1

578.7

585.28
95+50
579.7

0.7%

590 29 1431
580
570 16 561

Ramp T

6:1 4:1

579.0

584.47
95+00
581.7

2.7%

590 32 714
580
570 19 210

DESIGNED		DRAWN		CHECKED	
CES	4-70	JHB	11-71		

S.R. 126 STA. 95+00 TO STA. 96+50

DESIGNED | DETAILED | CHECKED | QUANTITIES | CHECKED | DATE | SHEET | NO. OF SHEETS | STATE | DIST. | COUNTY | FED. AID PROJ. NO.

CALC. C.C. DATE 2/86
CHKD. J.L. DATE 3/86

HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY

124
787

103 4597
82 2298
96 4265
41 3818
22 2308
22 1815

Sta. 98+00, 105.5 Lt
604 Std. No. 5 C.B.
Rt. Grate = 573.7'
Rt. 15" = 570.35'
Rt. 18" = 570.10'

Sta. 98+00, 92' Lt.
604 Std. No. 3 M.H.
Rim Elev. 576.50'
Rt. 18" = 569.82
Rt. 15" = 559.06
Rt. 33" = 554.58
Rt. 42" = 553.83

Sta. 97+99.1, 54.5' Rt.
604 Std. No. 5A C.B.
Rt. Grate = 584.75
Rt. 15" = 581.72
Rt. 15" = 562.00

Sta. 97+99.1, 105' Rt.
604 Std. No. 5 C.B.
Rt. Grate = 566.0
Rt. 15" = 562.50

0.5%
0.26%
0.69%
0.99%
1.0%
2.0%
0.8%
0.26%
7.8%
1.2%
9.8%

3:1
8:1
2:1

574.0
574.5
585.0
589.34
98+00
574.5
50
566.3
585.3
566.8
588.34
97+50
575.3
585.4
571.0
587.72
97+00
574.0

603
14"-18" Type C
51
170

603-147'-15" Type B. 706.02 (2750 D-Load) or 707.13
200
51

603-50'-15" Type B 706.02 (2250 D-Load) or 707.13
190
51

Wall #6

42" Cond.

Ramp T

DEVELOPED | CHECKED

S.R. 126 STA 97+00 TO STA 98+00

CALC'D K.C. DATE 2/86
CHK'D J.C. DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

125
787

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

760
600
590
580
570
560

0.6%

5:1
8:1
2:1
3:1
574.7
585.4
Wall #5
Begin Wall
Sta. 99+54.50 ℄ S.R. 126
Sta. 99+45, 57' Rt.
Begin 601 Type 2
Paved Gutters
591.78
99+50
571.8
1.6%
0.26%
0.5%
33" Conduit

140

590
580
570
560

817
154
904
172

3:1
8:1
2:1
574.5
586.3
590.97
99+00
571.2
574.2
585.1
590.16
98+50
572.1
Wall #6

16 2380
12 2922
47 5247
39 2745
63 5011
29 2667

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

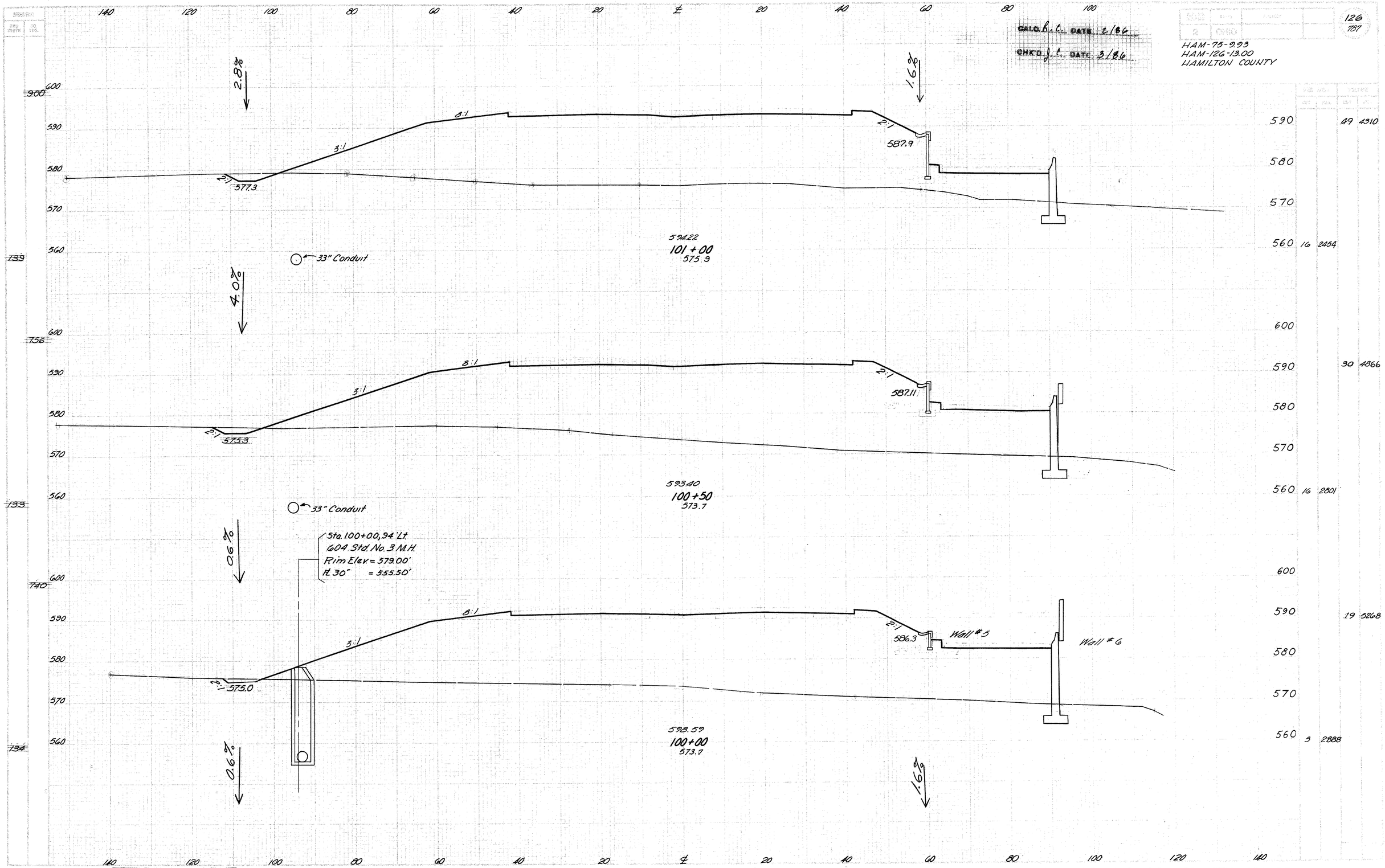
S.R. 126 STA 98+50 TO STA 99+50

CALC. R. L. DATE 2/86

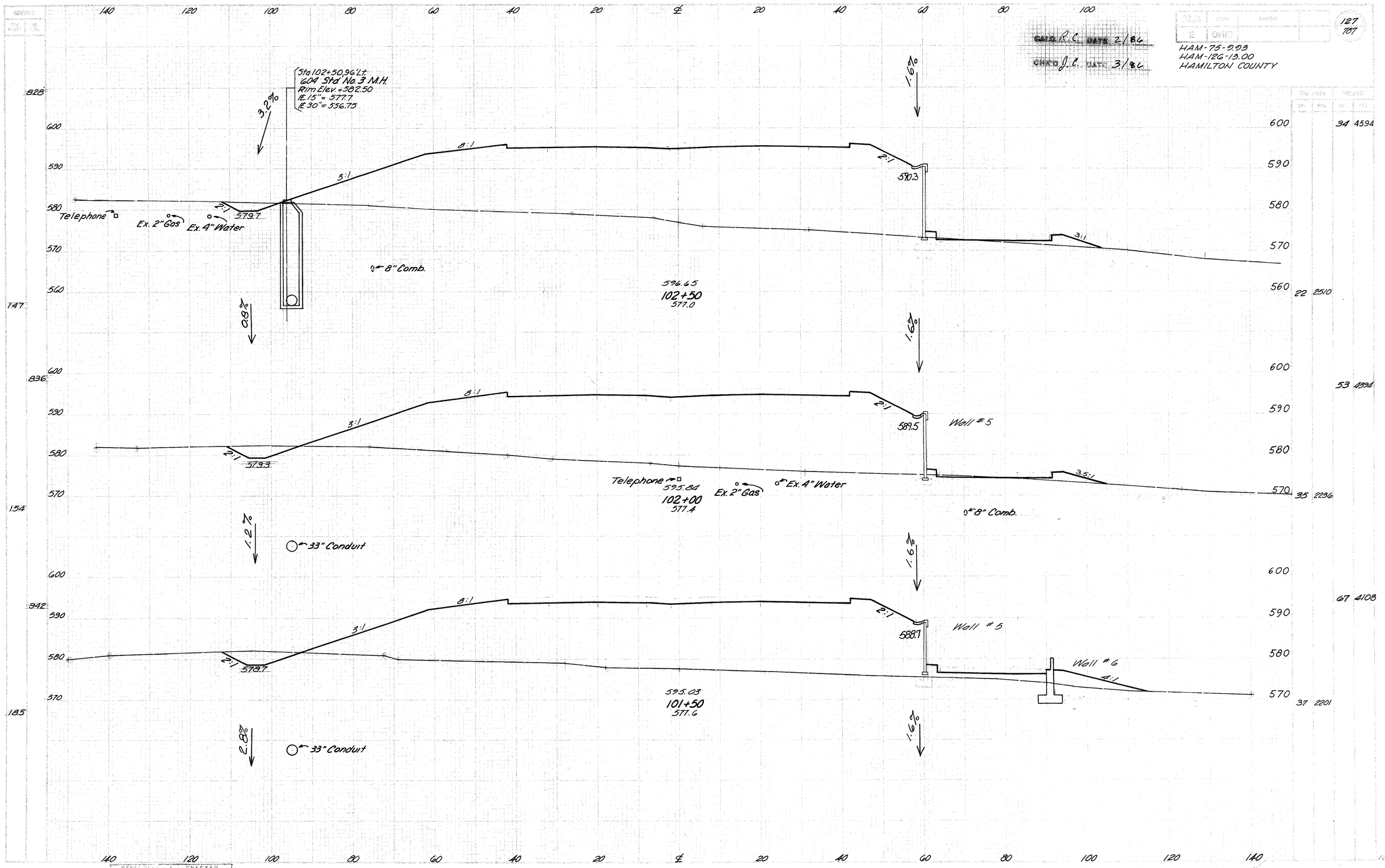
CHK'D J. L. DATE 3/86

126
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



S.R. 126 STA. 100+00 TO STA. 101+00



127
787
CALC. R.C. DATE 2/86
CHK'D J.C. DATE 3/86
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
Sta 102+50, 96' Lt.
604 Std. No. 3 M.H.
Rim Elev. = 582.50
℄ 15" = 577.7
℄ 30" = 556.75
3.2%
1.6%
8:1
3:1
2:1
579.7
590.3
Telephone
Ex. 2" Gas
Ex. 4" Water
8" Comb.
596.65
102+50
577.0
0.8%
1.6%
8:1
3:1
2:1
579.3
589.5
Wall # 5
3.5:1
Telephone
595.84
102+00
577.4
Ex. 2" Gas
Ex. 4" Water
8" Comb.
1.2%
33" Conduit
1.6%
8:1
3:1
2:1
578.7
588.7
Wall # 5
Wall # 6
4:1
595.03
101+50
577.6
2.8%
33" Conduit
1.6%
828
747
836
154
942
185
34 4594
22 2510
53 4394
35 2236
67 4108
37 2201

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

128
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

1.6%

847

600
590
580
570
560

8.0%

2:1
2:1
2:1
580.0
592.7
3:1
12" COND (STORM)
46 5234
33 3201

154

33" Conduit

597.09
104+00
571.5

3.4%

1.6%

854

600
590
580
570
560

2:1
2:1
2:1
581.7
591.9
3:1
12" COND (STORM)
34 2815

154

33" Conduit

0.4%

598.28
103+50
572.9

1.6%

846

600
590
580
570
560

2:1
2:1
2:1
581.5
591.1
INLET #5
3:1
45 4877

151

33" Conduit

3.2%

597.46
103+00
575.6

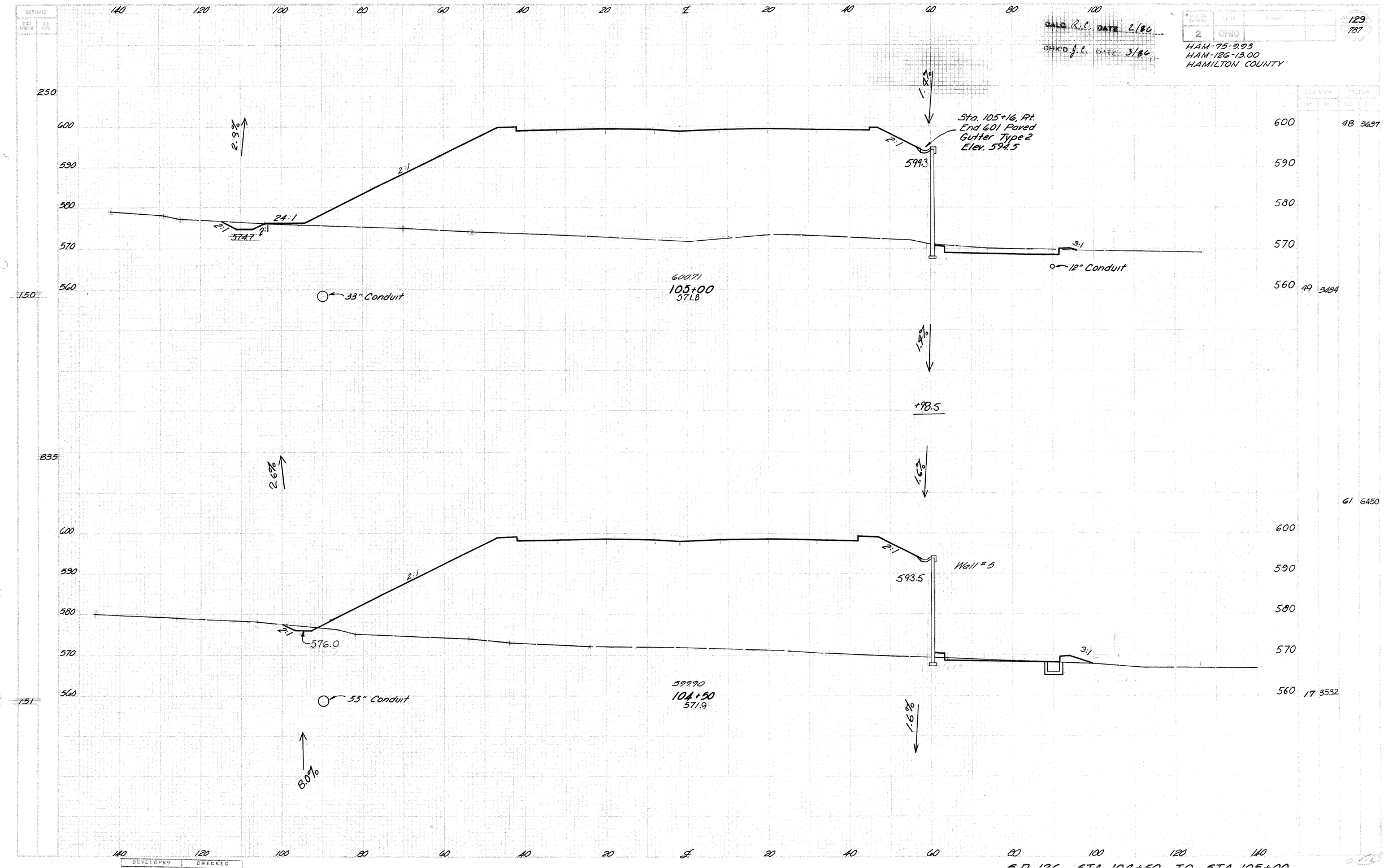
1.6%

15 2452

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

DEVELOPED	CHECKED

S.R. 126 STA. 103+00 TO STA. 104+00



CALC R.C. DATE 2/86
CHK'D J.C. DATE 3/86
2 OHIO
129
787
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
Sta. 105+16, Rt.
End 601 Paved
Gutter Type 2
Elev. 594.5
594.3
2:1
24:1
574.7
2.3%
1.4%
3:1
12" Conduit
33" Conduit
600.71
105+00
571.8
+98.5
2.6%
1.6%
Wall #5
593.5
576.0
599.90
104+50
571.9
8.0%
48 3637
49 3434
61 6450
17 3532

SEEDING	
AVG WIDTH	SQ YDS
47	57
94	64
257	144

CALC'D R.C. DATE 2/86

CHK'D J.C. DATE 2/86

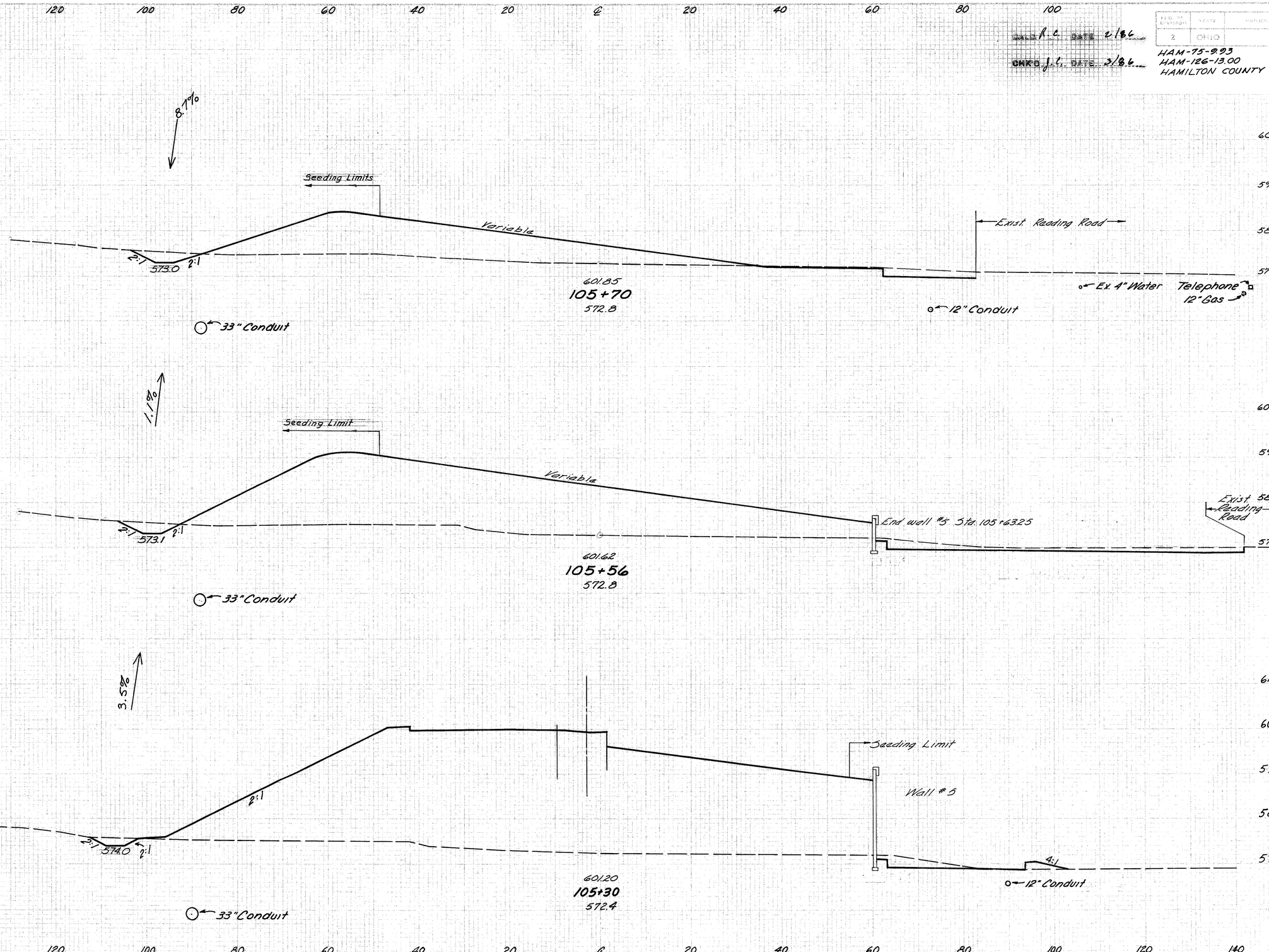
NO. OF DIVISION	STATE	PROJECT	
2	OHIO		

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

129-A
787

155 Yellow
127A - 193

AVG AREA		VOLUME	
CUT	FILL	CUT	FILL
11		127	
62		619	
47		549	
120		1498	
76		2220	
38		3112	



DEVELOPED	CHECKED

S.R. 126 STA. 105+30 TO STA. 105+70

SEEDING

END WIDTH | TO

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

CALC'D A.L. DATE 2/86

CHK'D J.L. DATE 3/86

PROJECT	STATE	SHEET	
2	OHIO		

129-B
787

HAM-75-9.93
HAM-126-13.00
HAMLTON COUNTY

END AREA | VOLUME
+ | - | + | -

590
580
570
0
37
48

33" Conduit

8.7%

ZERO SECTION
602.20
105+92
572.9

Ex. 4" Water
Telephone
12" Gas
12" Conduit
8" Cmp.

Variable
2:1
573.7

8.7%

33" Conduit

601.98
105+78
572.9

Exist. Reading Road
Existing Manhole
4" Water Ex.
12" Conduit
Telephone
12" Gas
Telephone

0 0
3 62
12 241

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

DEVELOPED | CHECKED

STA 126 105+78 TO STA 105+92

SEEDING
END AREA: CUT / FILL
MG LINE: CUT / FILL

DESIGN DIV. | STATE | PROJECT
2 | OHIO |

129-C
1987

DALD R.L. DATE 2/86
OHIO J.L. DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

645 610 600 590 580 570 560

10%
6.0%

Sta. 107+25, Lt.
Begin 601 Type 2
Paved Gutters

SR126
Sta 107+18.8, 105' Lt.
604 Std. No. 5
C.B. w/B-Grate
℄ Grate = 571.8
℄ 15" = 568.8

SDA D

Seeding Limit
Variable

2:1
24:1
2:1
2:1
24:1
2:1

33" Conduit

604.25
107+18
571.1

3%

655 610 600 590 580 570 560

33" Conduit

6" Water Ex.

12" Storm

ZERO SECTION
603.10
106+47
572.8

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

END AREA: CUT / FILL
MG LINE: CUT / FILL

7 5823
5 4458
7 5861
0 0
0

DEVELOPED | CHECKED

SR 126 STA 106+47 TO STA 107+18

DESIGNED | DRAWN | CHECKED | QUANTITIES

CALC. R. C. DATE 6/86

CHK'D J. C. DATE 5/86

FED. ROAD PROJECT	STATE	PROJECT	
S	OHIO		

130
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		24	10530
		11	5568
		16	10190
		6	5437
		11	10005
		6	5368

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

610 600 590 580 570 560

1268 225

1.18%

+70

1.68%

2:1

1:3

573.5

575.5

24:1

566.0

0.67%

33" Conduit

606.40
108+50
570.3

1228 610 600 590 580 570 560 217

10%

1.6%

573.0

574.8

566.7

1.47%

605.58
108+00
570.9

1150 610 600 590 580 570 560 137

1.68%

603
10-15"
Type F
707.05

MC-4 Collar

603-37-15" Type F 707.05

2.0%

15"-25° Bend

50.0%

603-34'-15" Type B

54

45D

46D

Sta. 107+63, 80' Lt
604 Sloped Top Manhole
Rim Elev. = 586.50'
℄ 15" N 583.00'
℄ 33" 559.42
℄ 15" NW 567.76'
℄ 6" 583.75'

Sta. 107+63 ℄
604 Std No. I-3B Inlet
℄ Inlet 604.60'
℄ 6" = 600.42'
℄ 15" = 599.32'

℄ 599.0'

Begin Wall #2
Sta 107+50

572.5

574.0

567.0

0.6%

604.77
107+50
569.8

34'

SR 126 STA 107+50 TO STA 108+50

DESIGNED	DRAWN	CHECKED	QUANTITIES	BY

FED. ROAD DIVISION	STATE	PROJECT	
2	OHIO		

131
787

CALC. J.C. DATE 2/86

CHKD J.C. DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

END AREA		VOLUMES	
CUT	FILL	CUT	FILL

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

1136 242

610 600 590 580 570 560

0.3%

2:1 2:1 577.1 574.0

33" Conduit

607.72
110+00
571.0

0.4%

590 580 570 560

2:1 24:1 2:1 2:1 565.2

96 11466 85 5934

1340 241

610 600 590 580 570 560

0.3%

+75

1.0%

2:1 2:1 574.5 576.7

10%

33" Conduit

607.53
109+50
569.2

0.6%

610 600 590 580 570 560

2:1 24:1 2:1 2:1 565.5

127 11006 52 5952

1313 232

610 600 590 580 570 560

1.1%

2:1 2:1 Top Wall #9 574.0 576.2

10%

11%

33" Cond.

607.03
109+00
570.0

0.4%

610 600 590 580 570 560

2:1 24:1 2:1 2:1 565.7

62 10885 15 5804

DEVELOPED	CHECKED

S.R. 126 STA. 109+00 TO STA. 110+00

CALC'D R.C. DATE 6/86

CHK'D J.C. DATE 3/86

FED. AID PROJECT	STATE	PROJECT		SHEET NO.	TOTAL SHEETS
2	OHIO			132	187

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

Sta. 110+88.80 Lt.
604 Sloped Manhole
Rim Elev. 587.50'
℄ 15" = 583.60
℄ 18" = 580.85
℄ 33" = 580.72
℄ 24" (E) = 561.47

Sta. 110+88. ℄
604 Std. No. F-3B Inlet
℄ Inlet = 607.28'
℄ 6" = 603.10'
℄ 15" = 602.60'

603
10'-15"
Type F
707.05

MC-4 Collar

603-37'-15" Type F 707.05

603-36'-15" Type B

15"-25° Bend

℄ 600.00'

21.7%
27.6%
+0.7
5.62%
2:1
584.1
571.0
18"
34'
27.6%
+76
30%
0.3%
90%
0.3%
14.0%
Variable
5.8%
24:1
2:1
568.0
565.0
572.5
571.8
Wall #9
5723
33" Conduit

607.36
111+00
571.0

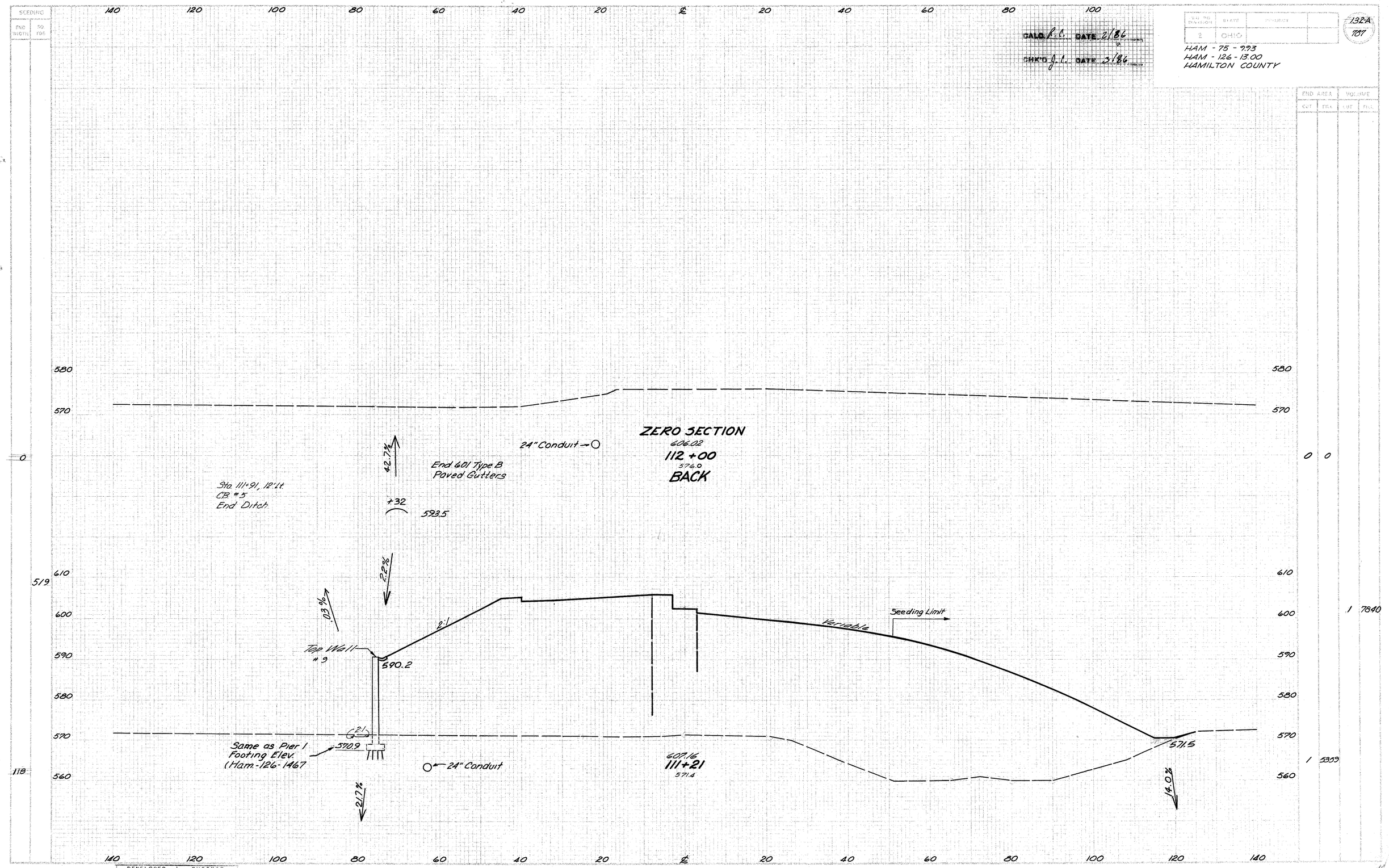
607.66
110+50
567.8

B
A

1 4787
2 6850
19 12906
19 6449
1042
167
208

DEVELOPED | CHECKED

S.R. 126 STA. 110+50 TO STA. 111+00



SEEDING
END WIDTH
SQ. YDS.
CALC. J.C. DATE 2/86
CHK'D J.C. DATE 3/86
2
OHIO
132A
787
HAM - 75 - 9.93
HAM - 126 - 13.00
HAMILTON COUNTY
END AREA
VOLUME
CUT
FILL
ZERO SECTION
606.02
112 +00
576.0
BACK
24" Conduit
End 601 Type B
Paved Gutters
Sta. 111+91, 12' Lt.
CB #5
End Ditch
42.7%
+32
593.5
22%
.03%
2:1
Top Wall
#9
590.2
Variable
Seeding Limit
Same as Pier 1
Footing Elev.
(Ham-126-1467
570.9
24" Conduit
607.16
111+21
571.4
571.5
21.7%
14.0%
DEVELOPED
CHECKED

SHEET
END AREA: CU. YDS. CUT | CU. YDS. FILL

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

CALC. R. C. DATE 2/86
CHKD J. C. DATE 3/86

FED. NO. DIVISION	STATE	PROJECT		
2	OHIO			

133
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

END AREA: CUT | FILL — VOLUME: CUT | FILL

25 4676

14 2951

19 5683

7 3187

30 4834

25 2034

940
600
590
580
570
188

10%

Drive "A"

Variable

4:1

574.1

2:1

24:1

2:1

3:1

573.0

8.3%

55A D

Sta. 114+60
HW-4A Headwall
℄ = 574.50

55A D

Sta. 114+65
604, Std. No. 3
CB w/V-Grate
℄ Grate = 596.11
℄ 12" = 593.00

596.04
115+00
574.2

11%

0.4%

993
600
590
580
570
170

Drive "A"

603. 57'-12" Type F 70705

573.4

54

55A D

Rock Channel Protection
Type C w/ Filter
5'×10'×1.5' (28 C.Y.)

55A D

596.32
114+50
574.3

824
600
590
580
570
127

10%

Drive "A"

Variable

2:1

24:1

2:1

3:1

572.3

For Drive A
Earthwork Quantities
See Sheet No. 284 & 284-A

600.35
114+00
574.2
AHEAD

6.2%

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

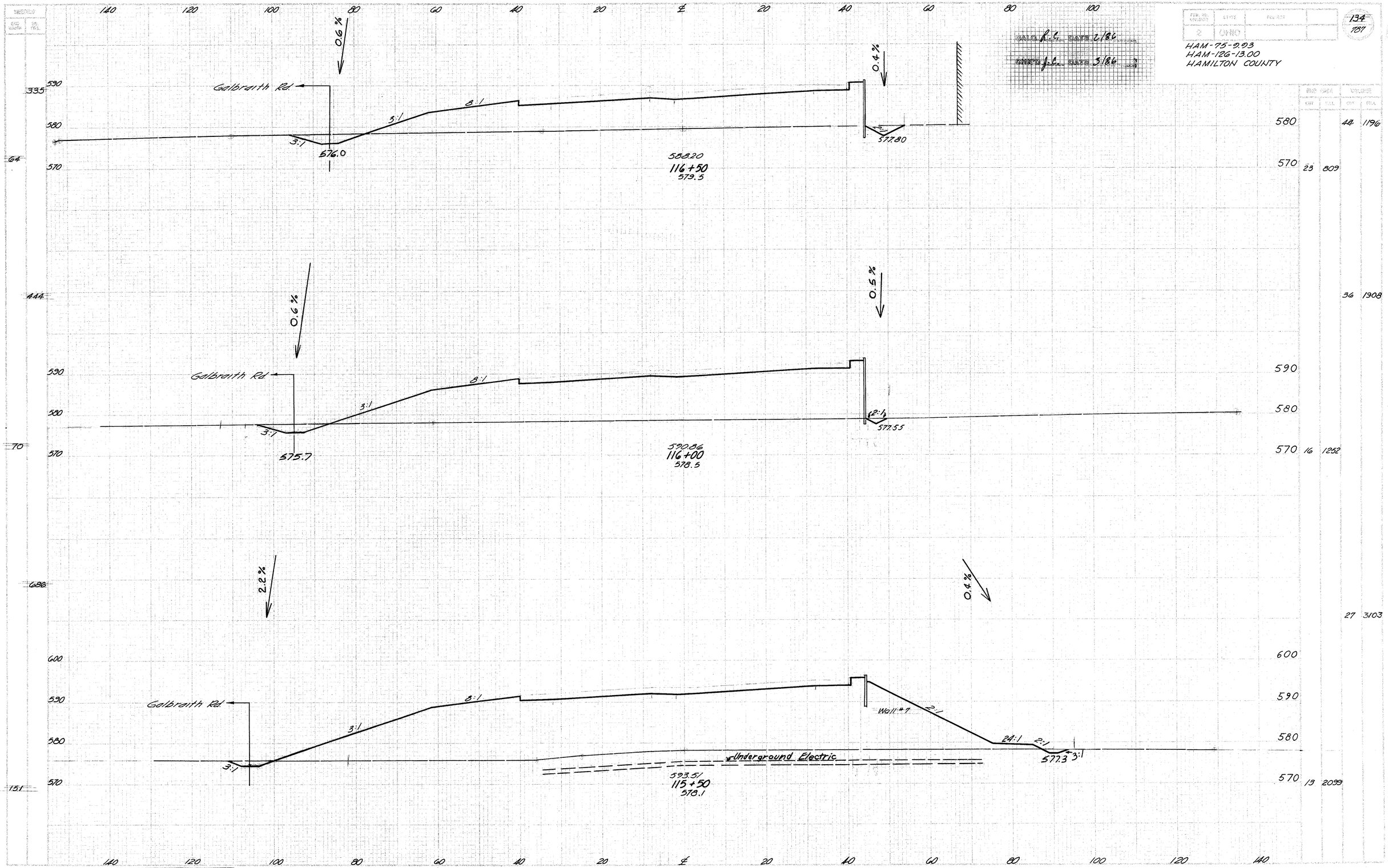
DESIGNED	DRAWN	CHECKED
C.S.D.	A.T.D.	M.C.B.

S.R. 126 STA. 114+00 TO STA. 115+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

CALC. R.C. DATE 2/86
CHK'D J.C. DATE 3/86

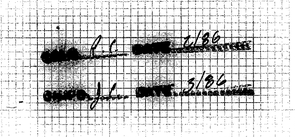


DEVELOPED | CHECKED

S.R. 126 STA. 115+50 TO STA. 116+50

SEE SHEET INDEX | PROJECT
OHIO
135
787

HAM-75-0.03
HAM-126-13.00
HAMILTON COUNTY



140 120 100 80 60 40 20 ℄ 20 40 60 80 100

331 41 239 46 270 52 303 57

590 580 570

Galbraith Rd

12" Gas
8" Water
30" Conduit
8:1
579.20
118+50
579.7
401R
Ex. 3" Gas
Ex. 6" Water
12" Conduit (San.)

0.68%

590 580 570

Galbraith Rd

12" Gas
8" Water
8:1
580.96
118+00
578.8
2:1
578.6
12" Conduit (San.)

0.24%

0.66%

590 580 570

Galbraith Rd

8" Water
3:1
576.6
583.08
117+50
579.0
579.3
12" Conduit (San.)

0.68%

590 580 570

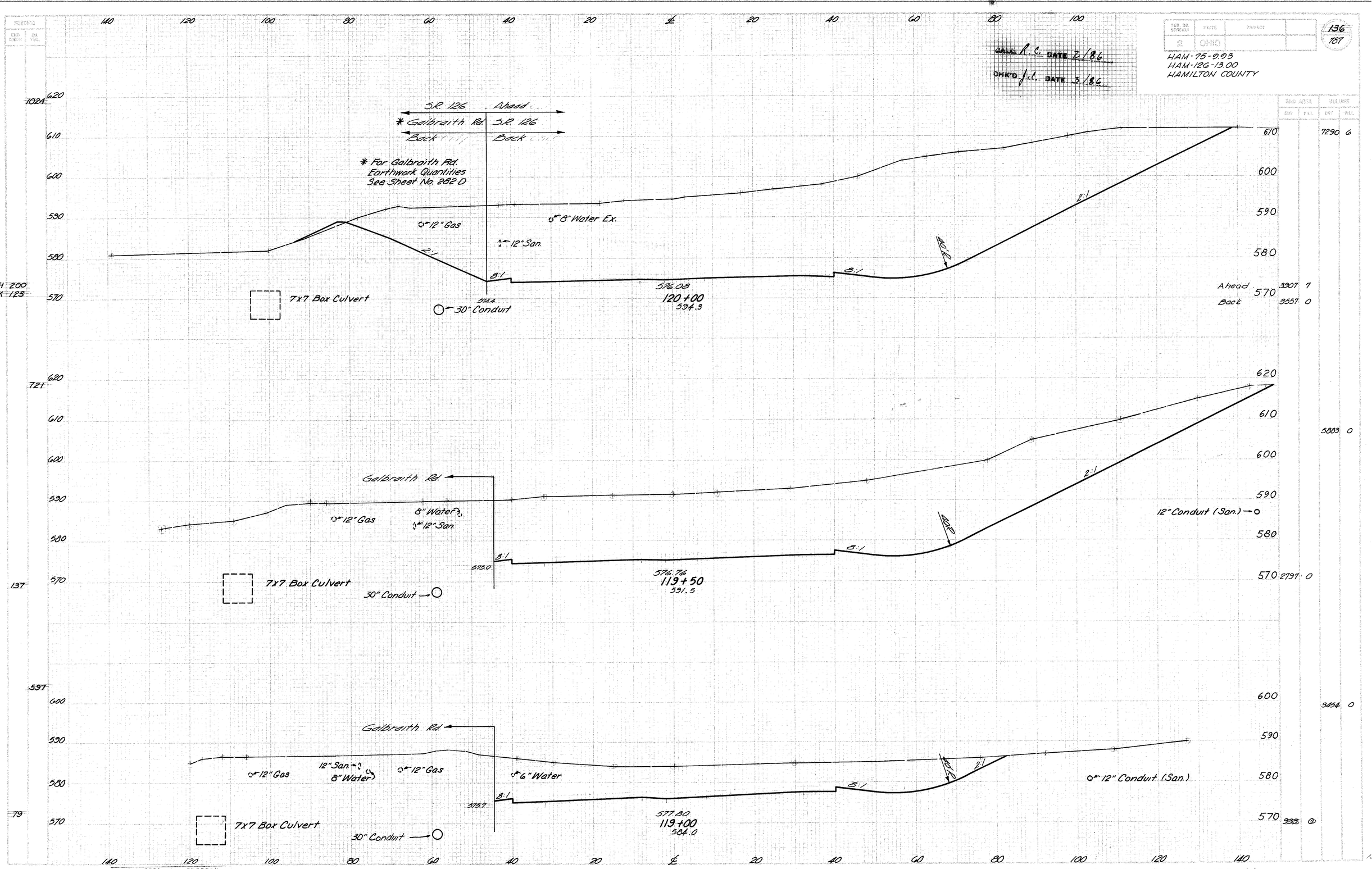
Galbraith Rd

3:1
576.3
583.55
117+00
579.3
Well #7
598.0
Manhole
See Sheet 313

	END AREA		VOLUME	
	CUT	FILL	CU	FILL
580			1086	0
570	240	0		
			243	55
590				
580				
570	22	59		
			37	278
590				
580				
570	18	241		
			40	670
590				
580				
570	25	483		

DEVELOPED	CHECKED

S.R. 126 STA. 117+00 TO STA. 118+50



S.R. 126 STA. 119+00 TO STA. 120+00

DESIGN | DRAWN | CHECKED | QUANTITY | CHECKED

SIM | SWITH | SB | DMS

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

DESIGNED R.C. DATE 2/86

DRAWN J.C. DATE 3/86

PROJECT IDENTIFICATION	STATE	PROJECT		SHEET NO.	TOTAL SHEETS
2	OHIO			137	181

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

PAY AREA VOLUME

CUT FILL CUT FILL

1144 3244 0

630 620 610 600 590 580 570

6" Gas 12" Gas 8" Water Ex. 12" San. 24" Conduit

3:1 8:1 40:12 8:1 10:R 2:1

575.80
121+00
399.4

204 4943 0

A

630 620 610

2:1

140 150 160 170

A

1035 8249 0

610 600 590 580 570

12" Gas 8" Water 12" San. 72" Comb. 27" Conduit 15" Conduit

3:1 8:1 40:12 8:1 10:R 2:1

573.4
575.57
120+50
396.6

169 3966 0

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

DEVELOPED	CHECKED
FE: 1.20	SWB 11-21

S.R. 126 STA. 120+50 TO STA. 121+00

ORIGINAL

DES	CK

DESIGNED	R.C.	DATE	2/86
DRAWN	J.C.	DATE	3/86

FED. AID PROJECT	STATE	PROJECT		SHEET NO.	TOTAL SHEETS
2	OHIO			138	187

HAM-75-0.93
HAM-126-13.00
HAMILTON COUNTY

ITEM	AREA	VOLUME
	CUT	FILL
7947	0	

S.R. 126 Back
S.R. 126 Ahead
Galbraith Rd. * Ahead

* For Galbraith Rd. Earthwork Quantities See Sheet No.

608 630 620 610 600 590 580 570

#6"Gas
12"Water
12"Storm
12"Gas
8"Water Ex.
12"San.
Variable
40.0'
8:1
24"Conduit
575.39
122+00
604.6
2:1

B 640 630 620 610 — 140 150 160 170 180 — B

Ahead 4171 0
Back 5064 0
12"Conduit

AH 104
BK 207

1153 630 620 610 600 590 580 570

12"Water
6"Gas
12"Storm
12"Gas
Ex. 8"Water
12"San.
Variable
40.0'
8:1
24"Conduit
576.19
121+50
602.0
2:1

A 640 630 620 — 140 150 160 170 180 — A

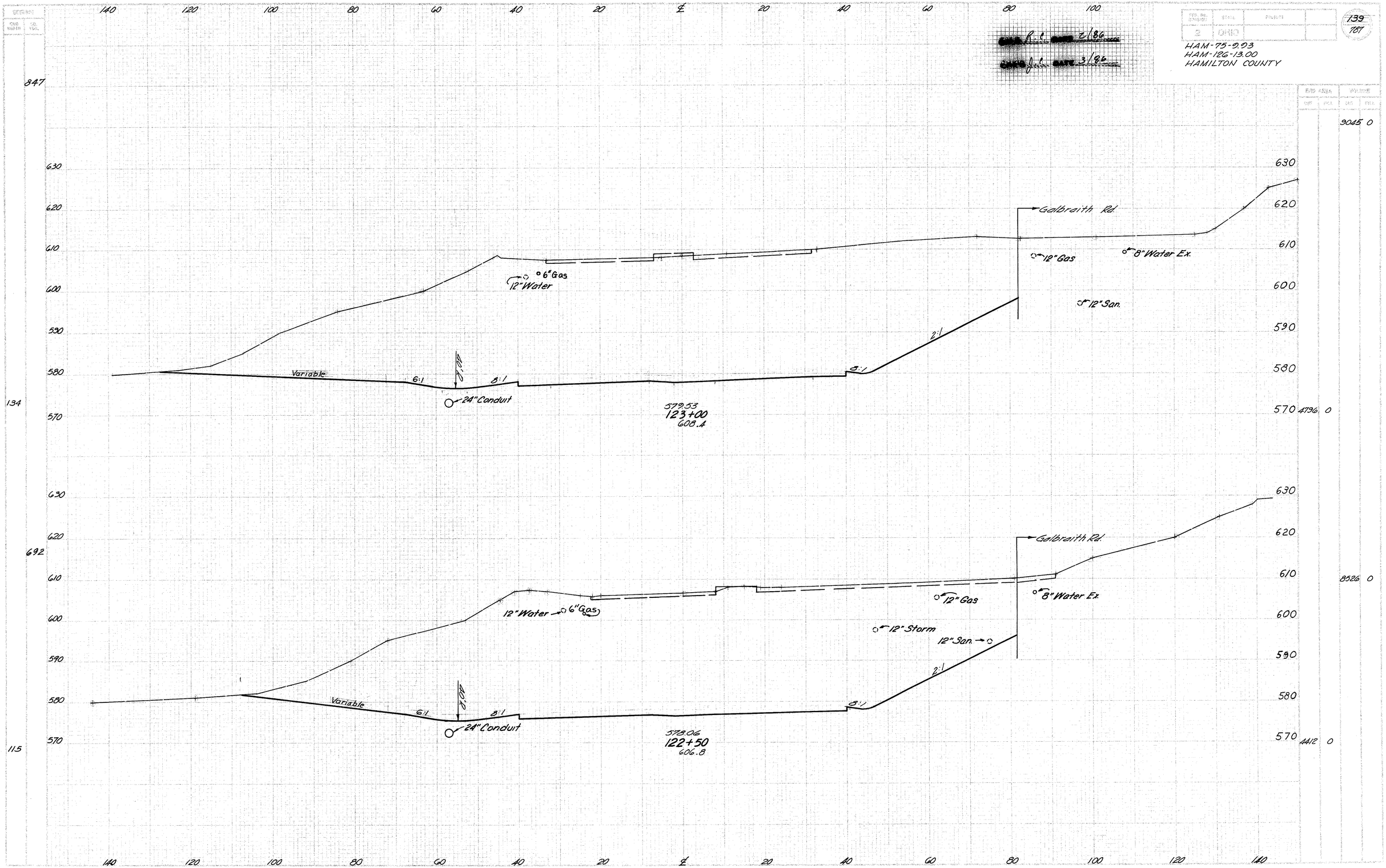
9356 0
5041 0

208

DEVELOPED	CHECKED

S.R. 126 STA 121+50 TO STA 122+00

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



DEVELOPED | CHECKED

S.R. 126 STA. 122+50 TO STA. 123+00

SHEETING	
REQ	AS
DRIVEN	DES

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

140
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

C.A.G. f. l. DATE 2/86

CHK'D f. l. DATE 3/86

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

GRID AREA VOLUME

		CUT	FILL
1468	258	10583	9
1319	217	3472	0
1078	171	9163	0
		4323	0
		4973	0

Galbraith Rd.

12" Water ○ ○ 6" Gas Ex.

Variable 6:1 8:1 2:1

12.0'

583.54
124+50
604.5

Galbraith Rd.

12" Water ○ ○ 6" Gas Ex.

Variable 6:1 8:1 2:1

10.0'

583.54
124+00
606.1

○ 24" Conduit

Galbraith Rd.

12" Water ○ ○ 6" Gas Ex.

Variable 6:1 8:1 2:1

10.0'

581.35
123+50
607.6

○ 24" Conduit

Galbraith Rd.

○ 12" Gas ○ 12" 8" Water Ex. ○ 12" ○ 8"

DEVELOPED	CHECKED

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

SR 126 STA 123+50 TO STA 124+50

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

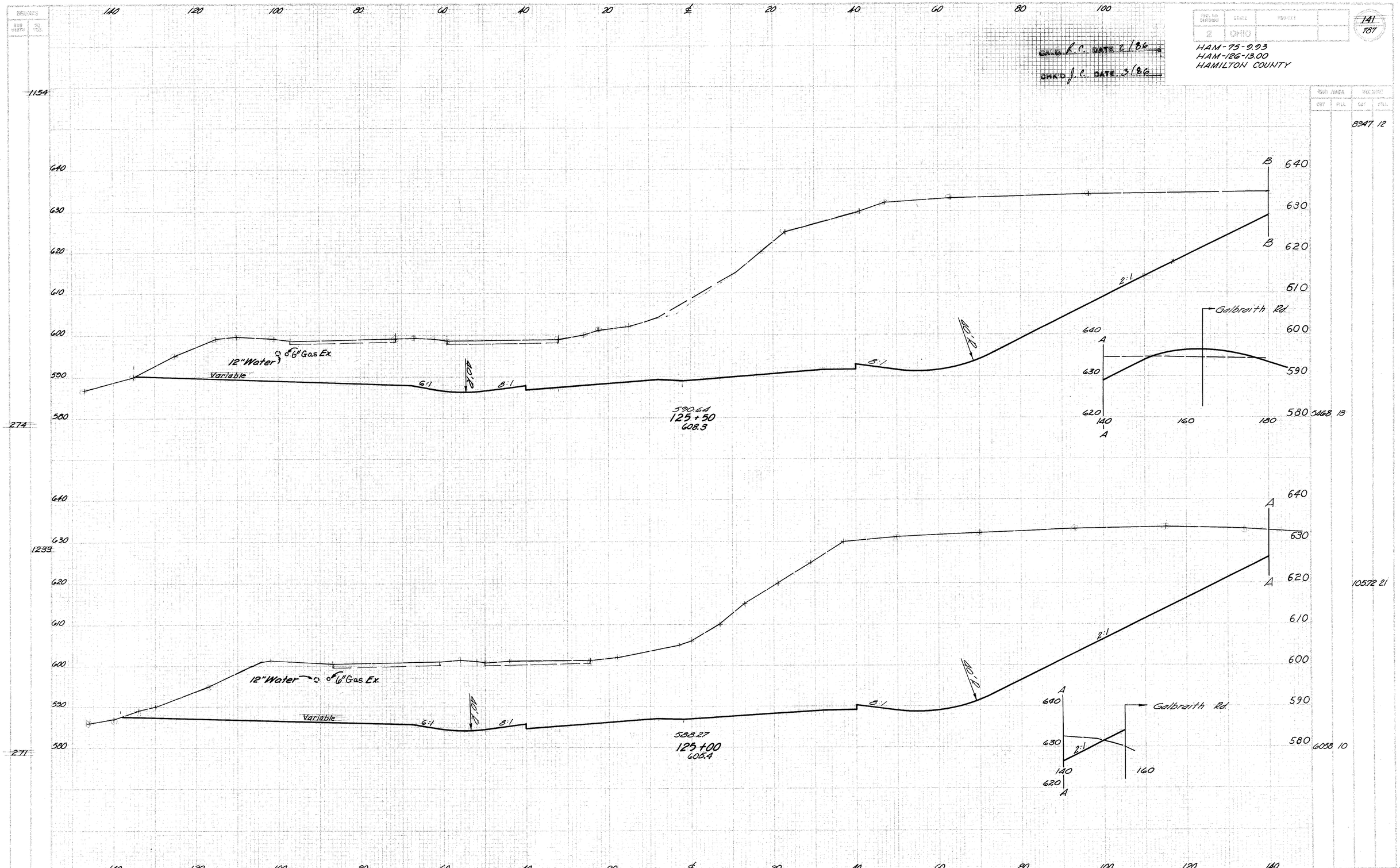
141
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

CALC. L.C. DATE 2/86
CHK'D J.C. DATE 3/86

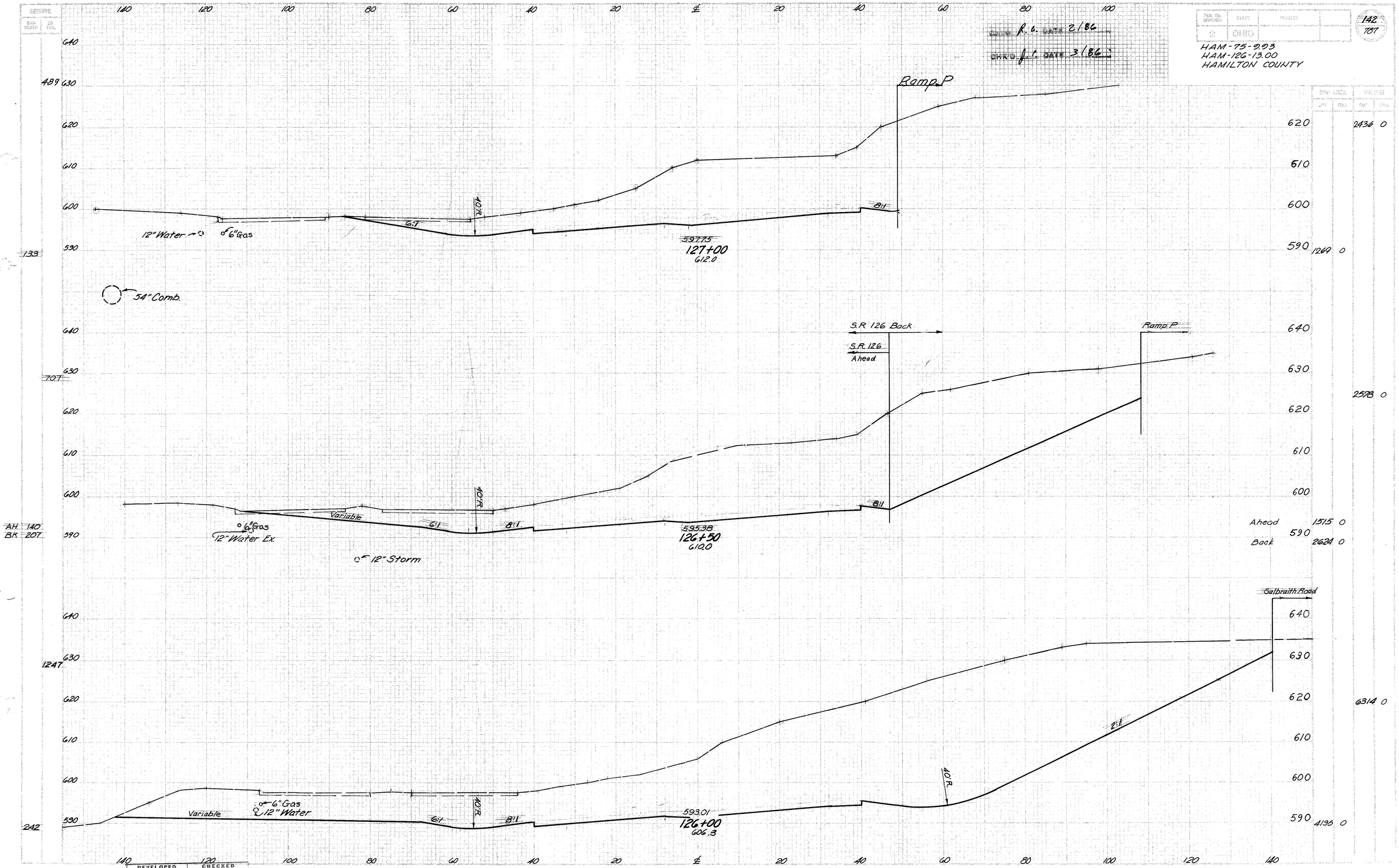
BRIDGE	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
		8947	12



DEVELOPED	CHECKED
C.E.C. 4-70	L.H.B. 11-71

S.R. 126 STA. 125+00 TO STA. 125+50



CHKD R.G. DATE 2/86
CHKD J.C. DATE 3/86
FED. RD. DIVISION 2
STATE OHIO
PROJECT
142
787
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
Ramp P
12" Water
6" Gas
40'R
6:1
8:1
597.75
127+00
612.0
54" Comb.
S.R. 126 Back
S.R. 126 Ahead
Ramp P
Variable
6" Gas
12" Water Ex.
12" Storm
595.38
126+50
610.0
Galbraith Road
2:1
6" Gas
12" Water
593.01
126+00
606.3
489
133
707
AH 140
BK 207
1247
242
2436 0
1269 0
2578 0
Ahead 1515 0
Back 2624 0
6314 0
4195 0
DEVELOPED
CHECKED

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

Cx. w.r.c. DATE 2-86
Chkd. w.r.c. DATE 3-86

AREA VOLUME CUT FILL CUT FILL

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

650 640 630 620 610 600

119

4H 19
3K 39

3.4%

S.R. 126 Back

* Ramp P Ahead | S.R. 126 Ahead

Ramp P

* For Ramp P Earthwork Quantities See Sheet No. 267-A

Ramp Q

8:1

6"Gas
12"Water

601.6

18" Conduit

60A84
128+50
616.2

54" Comb.

2090 0

Ahead 1148 0
Back 1157 46

650 640 630 620 610 600

225

4.0%

Ramp P

Ramp Q

2:1

8:1

6"Gas
12"Water

18" Conduit

42

60A47
128+00
614.3

2153 178

1168 146

650 640 630 620 610 600 590

236

4.0%

Ramp Q

6:1

8:1

6"Gas
12"Water

18" Conduit

18" Conduit

43

600.11
127+50
614.3

54" Comb.

2343 195

1362 0

DEVELOPED | CHECKED

S.R. 126 STA 127+50 TO STA 128+50

SEEDING
MIN. WIDTH | SQ. YDS.

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

DESD. R.A. DATE 2/86
CHKD. J.C. DATE 3/86

DIST. NO.	STATE	PROJECT		
8	OHIO			

144
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

EARTHWORK: CU. YDS. (UNCORR.) — CUT | FILL | OVERHAUL CUT | FILL

181

650 640 630 620 610 600

Ramp P — 4.8% — Ramp Q

6" Gas
12" Water

8:1

608.0

611.94
130+00
621.8

54" Comb.

630 620 610 600 — 1917 0 — 1073 0

33

769

650 640 630 620 610 600

Ramp P — 4.8% — Ramp Q

6" Gas
12" Water

8:1

605.7

609.57
129+50
620.2

15" Conduit

54" Comb.

650 640 630 620 610 600 — 1991 0 — 1077 0

28

146

650 640 630 620 610 600

Ramp P — 4.8% — Ramp Q

6" Gas
12" Water

8:1

603.3

18" Conduit (Storm)

607.21
129+00
617.8

54" Comb.
Elev. 582.5 ±

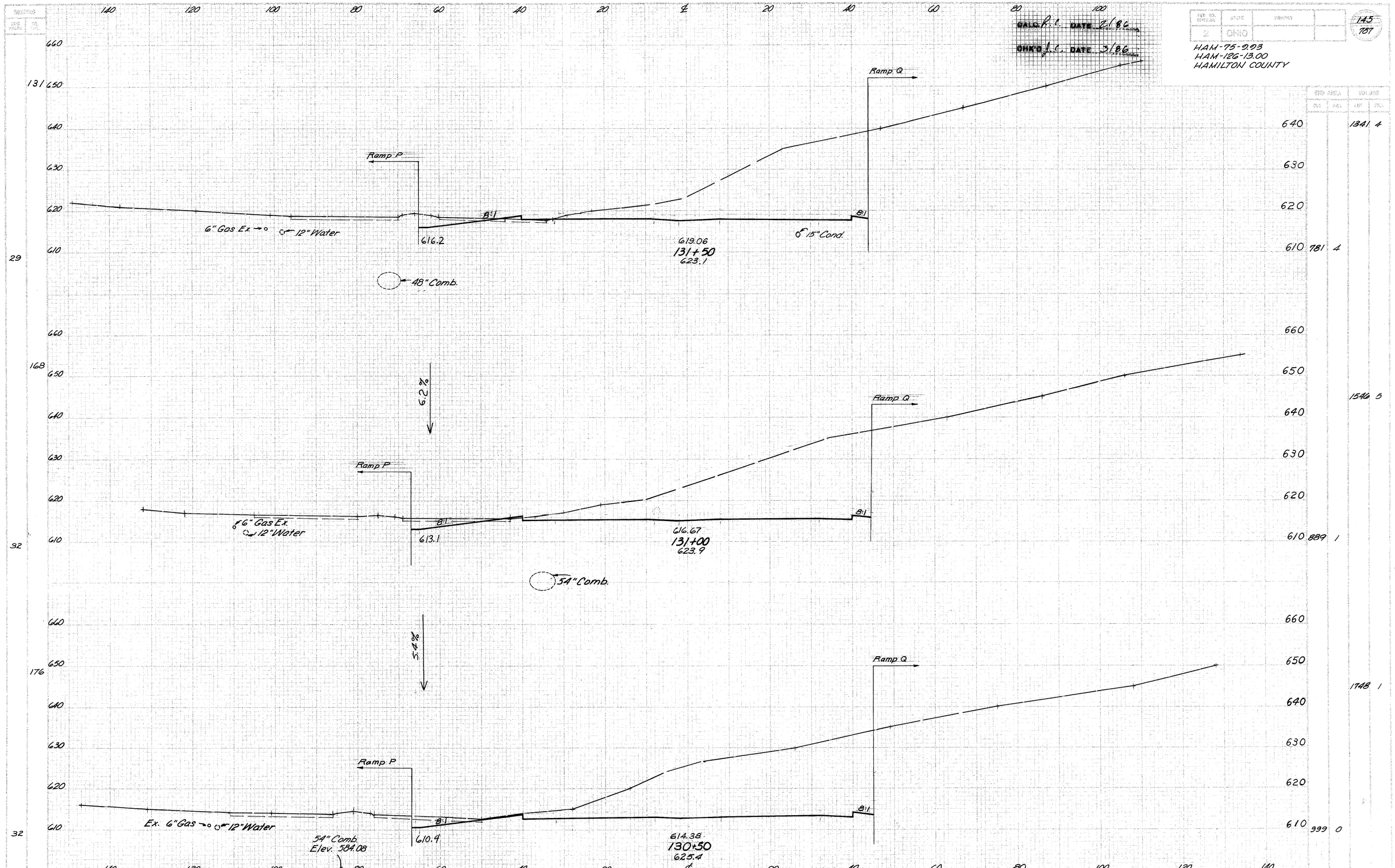
650 640 630 620 610 600 — 2024 0 — 1109 0

25

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

DEVELOPED		CHECKED	

S.R. 126 STA. 129+00 TO STA. 130+00



S.R. 126 STA 130+50 TO STA 131+50

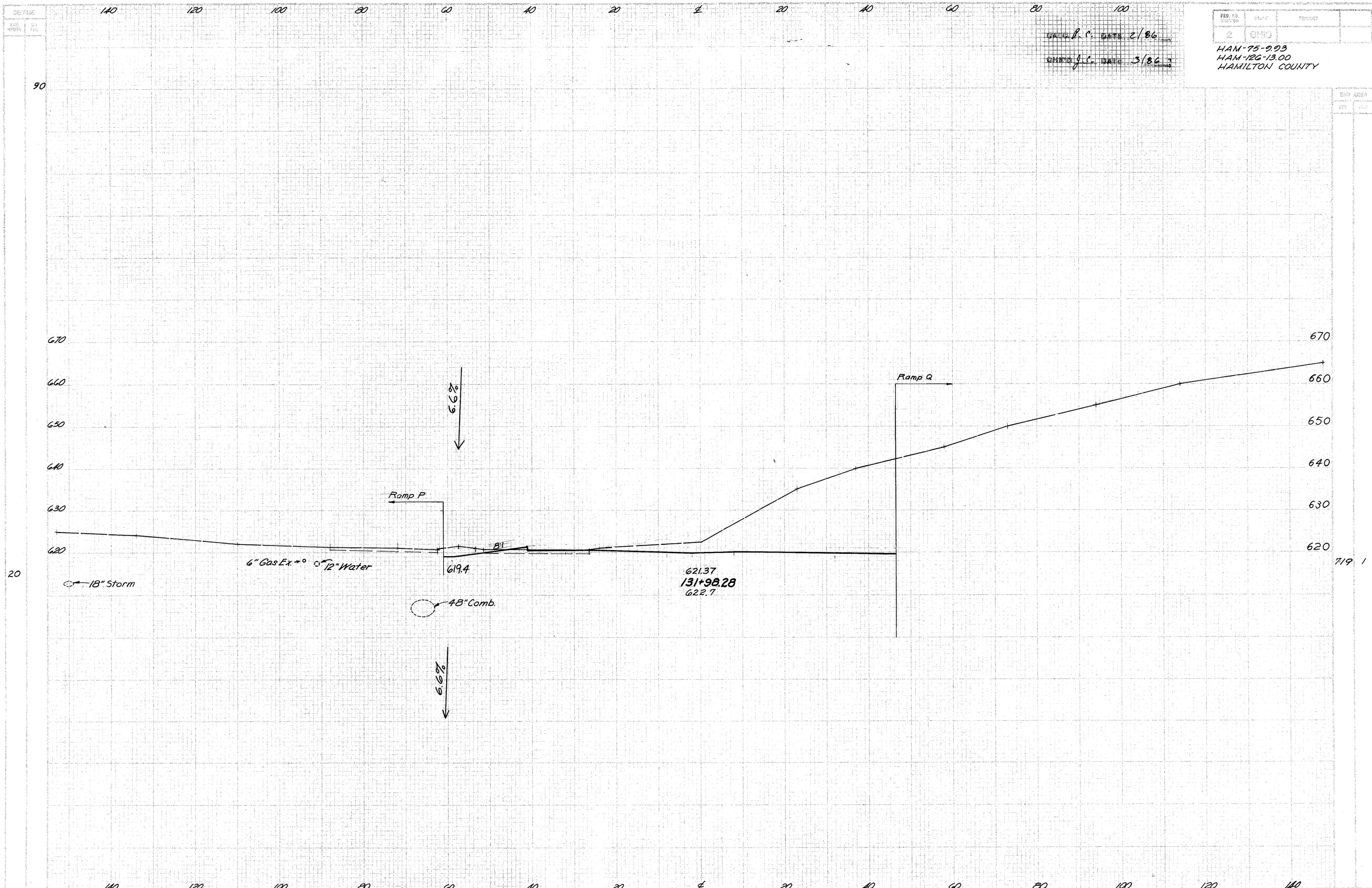
CALC. R.C. DATE 2/86
CHK'D J.C. DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

146
787

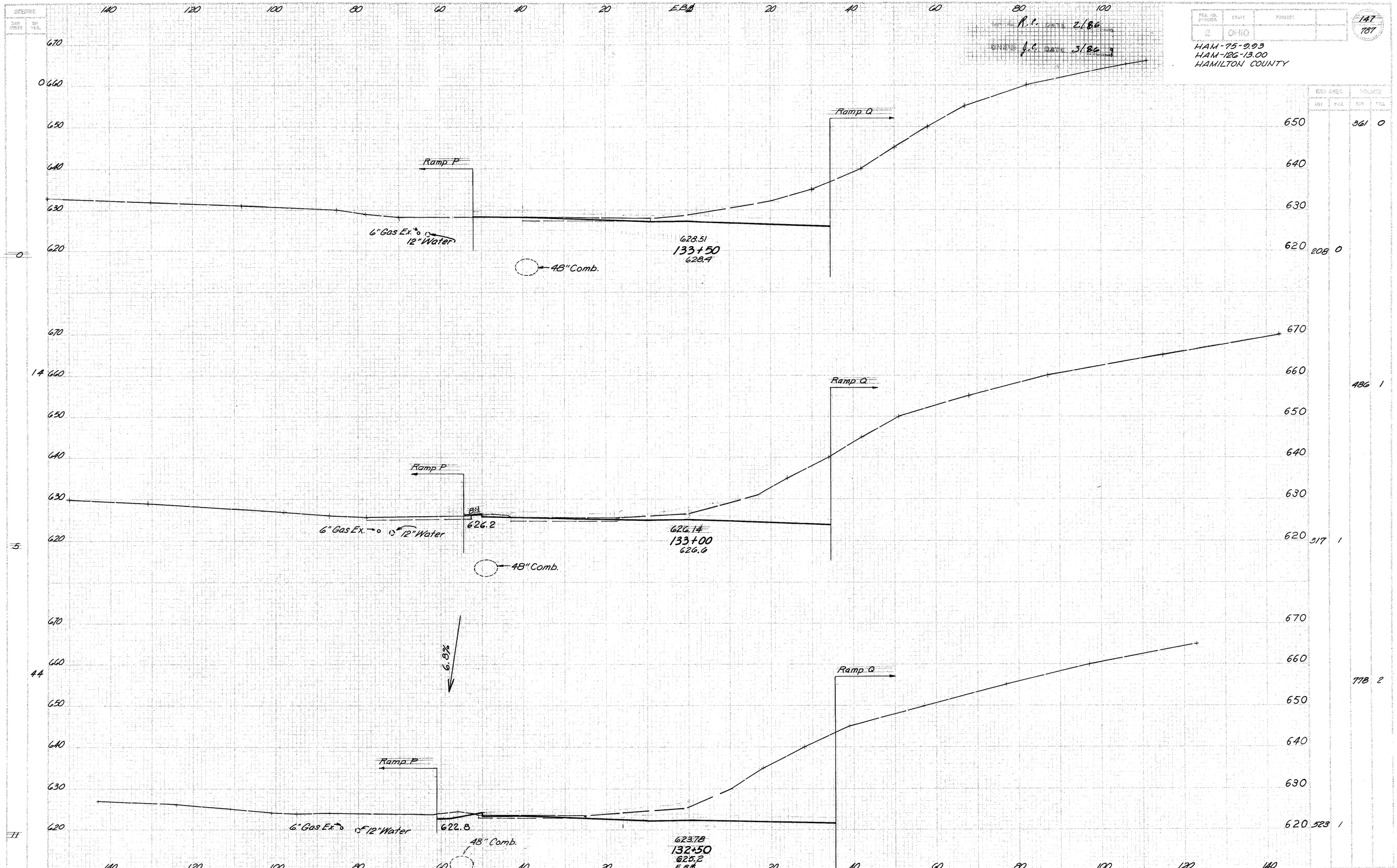
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

1190 2



DEVELOPED	CHECKED

S.R. 126 STA. 131+98.28



E.B. S.R. 126 STA. 132+50 TO STA. 133+50

DESIGNED E.E.S. 4-70 CHECKED E.W.R. 11-71

CALC. A.C. DATE 2/26/86
CHK'D J.L. DATE 2/26/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

E.B. S.R. 126 Ahead

E.B. S.R. 126 Ramp Q * Back | Back

* For Ramp Q Earthwork Quantities See Sheet No. 275-C

Ramp P
8:1
12" Water
635.61
135+00
635.7
48" Comb.
B
B
8:1
2:1
40R
690
680
670
660
650
640
630
180
200
160
120
140
A
A
Temporary Pav't Ahd (Temp. Rd. No.4)
Temporary Pav't Bk (Temp. Rd. No.4) See Sheet No. 275-C
633.24
134+50
633.3
48" Comb.
Ramp P
8:1
12" Water
Ramp Q
Ahead
Back
3126 0
156 0
5088 0
2826 0
5511 0
3133 0
182 0
AH 188
BK 0
1039
1042
187
0
6" Gas
12" Storm
18" Storm
48" Comb.
Elev. 617.7
630.88
134+00
630.4
E.B.

DEVELOPED | CHECKED

E.B. S.R. 126 STA. 134+00 TO STA. 135+00

DESIGNED | DETAILED | QUANTITIES | CHECKED

CALC. R. C. DATE 2/86

CHK'D J. C. DATE 3/86

FED. ROAD DIV. NO.	STATE	PROJECT	
5	OHIO		

149
787

HAM-75-0.93
HAM-126-13.00
HAMILTON COUNTY

Sta. 136+61, 39' Lt.
202 C.B. Abandoned
Connect Thru. Pipe
Ft. 21" (Exist.) = 636.29'
Ft. 18" = 636.54'

Sta. 136+54, 9' Lt.
604 Std. No. 3 M.H.
With 36" I.D Base &
With Flat Top
& Manhole Cover,
9' Lt.
Rim. Elev. = 642.80
Ft. 12" = 636.28' (Exist)
Ft. 21" = 632.61' (Exist)
Ft. 48" = 630.36' (Exist)

S.R. 126 E.B.
Sta. 136+64, 35' Lt
603 Std. No. 3A
C.B. with V-Grate

Ft. Grate = 643.35'
Ft. 18" = 636.79'

Sta 136+40 E.B. 67' Rt.
604 Std. No. 5 Catch Basin
Ft. Grate = 637.32'
Ft. 21" = 633.82'

12" Water

1.54 %

MC-4 Conc. Collar

603
12'-18" Type B

MC-4 Conc. Collar

642.71
136+50
642.5

1.6 %

603-76'-21" Type B

57

57

2:1

40' R.

12" Water

640.34
136+00
640.2

48" Comb.

E.B. S.R. 126 Ahead

* Ramp P Back

E.B. S.R. 126 Back

* For Ramp P
Earthwork Quantities
See Sheet No. 271

12" Water

637.98
135+50
638.2

48" Comb.

Temporary Road No. 4

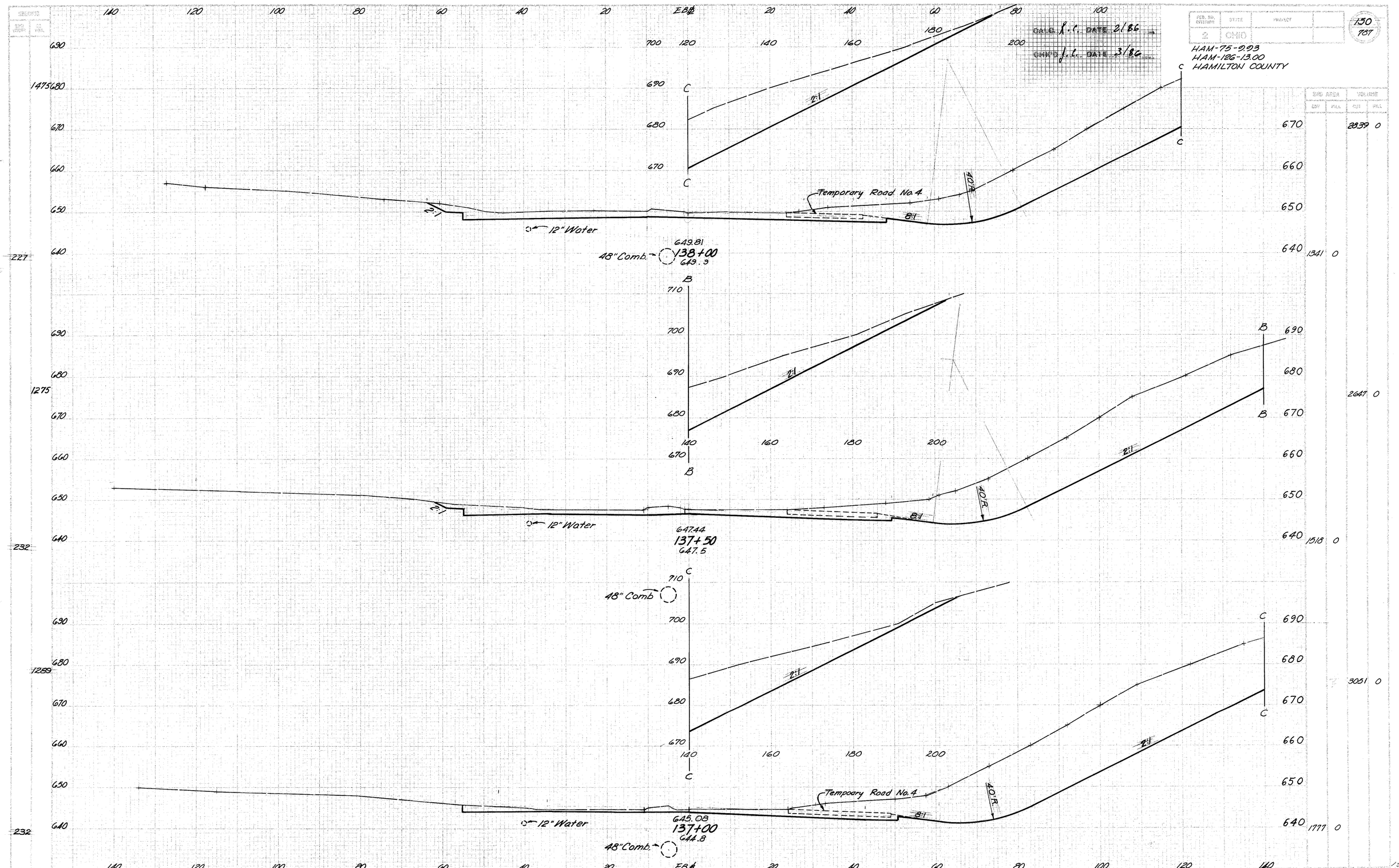
8:1

END AREA

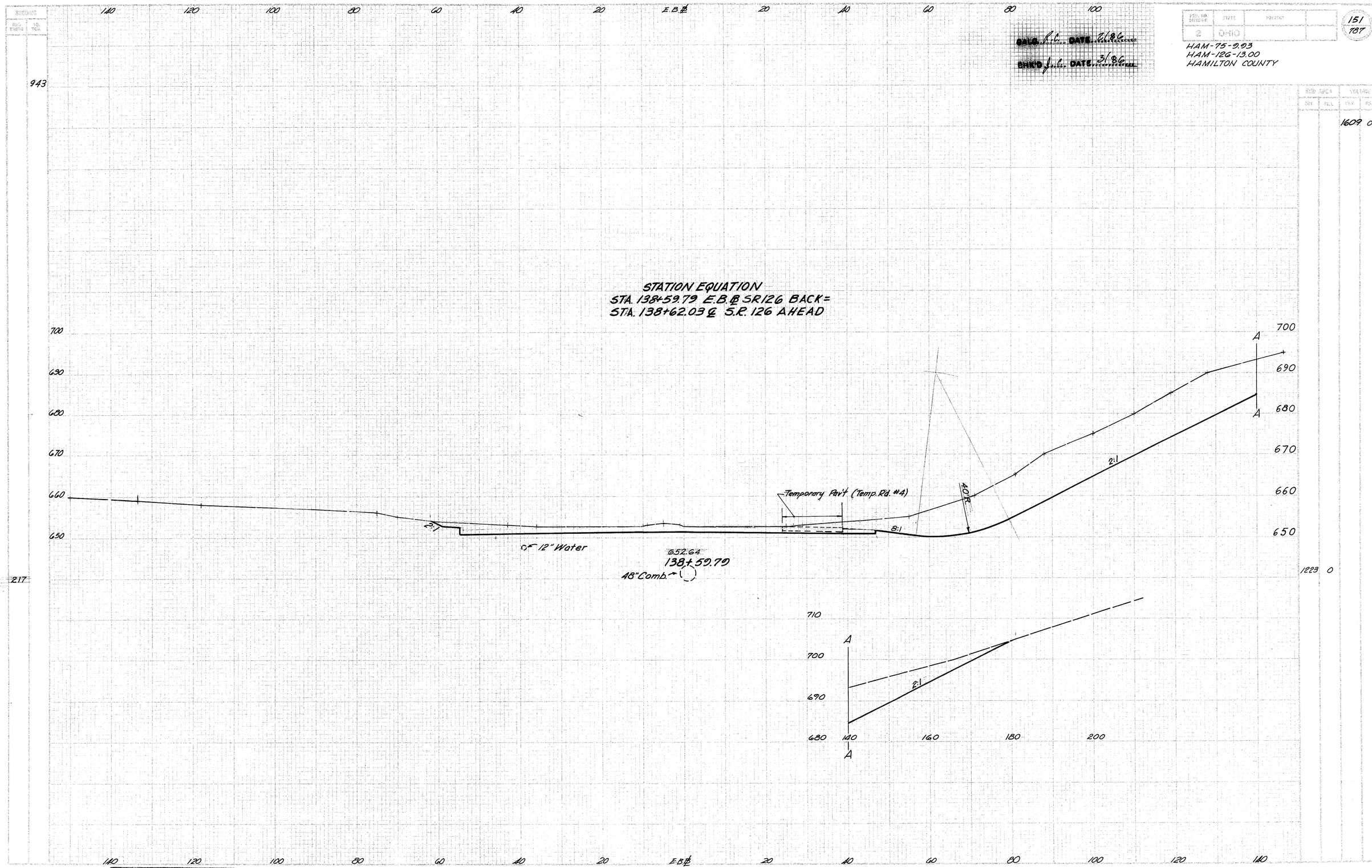
CUT	FILL
3581	0
2090	0
4172	0
2816	0
4662	15
Ahead 2619	16
Back 2615	0

AH 246
BK 187

E.B. S.R. 126 STA 135+50 TO STA 136+50



EB. S.R. 126 STA. 137+00 TO STA. 138+00



CALC. K.C. DATE 2/86
CHK'D J.C. DATE 3/86
FED. RD. DIVISION 2
STATE OHIO
PROJECT
151
787
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
943
1609 0
STATION EQUATION
STA. 138+59.79 E.B.℄ SR126 BACK=
STA. 138+62.03 ℄ S.R. 126 AHEAD
700
690
680
670
660
650
Temporary Pav't (Temp. Rd. #4)
40'R
2:1
8:1
12" Water
652.64
138+59.79
48" Comb.
BK Only 217
1223 0
710
700
690
680
140
160
180
200
E.B.℄
E.B. S.R. STA. 138+59.79
DEVELOPED
CHECKED

FED. ROAD DIVISION	STATE	PROJECT	
5	OHIO		

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787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

DESIGNED
DRAWN
CHECKED R.L. DATE 2/84
QUANTITIES CHKD L.C. DATE 3/86

Sta. 140+14, 30.5 Lt.
Exist. Std. No. 3 C.B.
℄ 15" = 653.72'
℄ 18" = 653.47'

Sta. 140+51, 139 Lt.
Exist. Std. No. 2-2-A C.B.
℄ 15" = 657.31

Sta. 140+19, 49' Lt.
604 Std. No. 3A C.B.
w/ 'V' Grate
℄ Grate = 658.43
℄ 15" = 654.38

Sta. 140+03, ℄
Exist. Std. No. 3 MH
Rim Elev. = 660.09'
℄ 48" = 647.30'
℄ 18" = 649.80'

173 D

202
Abandon C.B.
Connect Pipe Thru.

12" Water

3.48%

2:1

24:1

MC-4 Conc. Collar

603
12-15 Type B

173 D 59

140+00
660.1

8:1

10'R

C

B

A

139+50
657.9

48" Comb.

139+00
655.3

48" Comb.

	DEVELOPED	CHECKED
CONC. (CU. YDS.)	906	722
REINF. STEEL (LBS.)	171	1145
EXCAVATION (CU. YDS.)	997	1551
EMBANKMENT (CU. YDS.)	1092	1869
SEEDING (SQ. YDS.)	189	303
MULCHING (SQ. YDS.)	205	1066

	CUT	FILL
CONC. (CU. YDS.)	0	0
REINF. STEEL (LBS.)	0	0
EXCAVATION (CU. YDS.)	1145	0
EMBANKMENT (CU. YDS.)	722	0
SEEDING (SQ. YDS.)	1551	0
MULCHING (SQ. YDS.)	1869	0
	303	0
	1066	0

S.R. 126 STA. 139+00 TO STA. 140+00

SHEETS	
SHT. NO.	52
NO. SHEETS	170

FED. AID DIVISION	STATE	PROJECT	
2	OHIO		

133
187

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

CALC'D R.C. DATE 2.186

CHK'D J.C. DATE 3.186

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

444
690
680
670
660
71

2:1
10'R
8:1
2:1
12" Water
141+50
667.5
48" Comb.

ZERO SECTION
141+24.51
W.B. Lanes Only

700
690
567
680
670
660
133

24:1
12" Water
141+00
665.7
48" Comb.
8:1
2:1
10'R

700
690
801
680
670
660
156

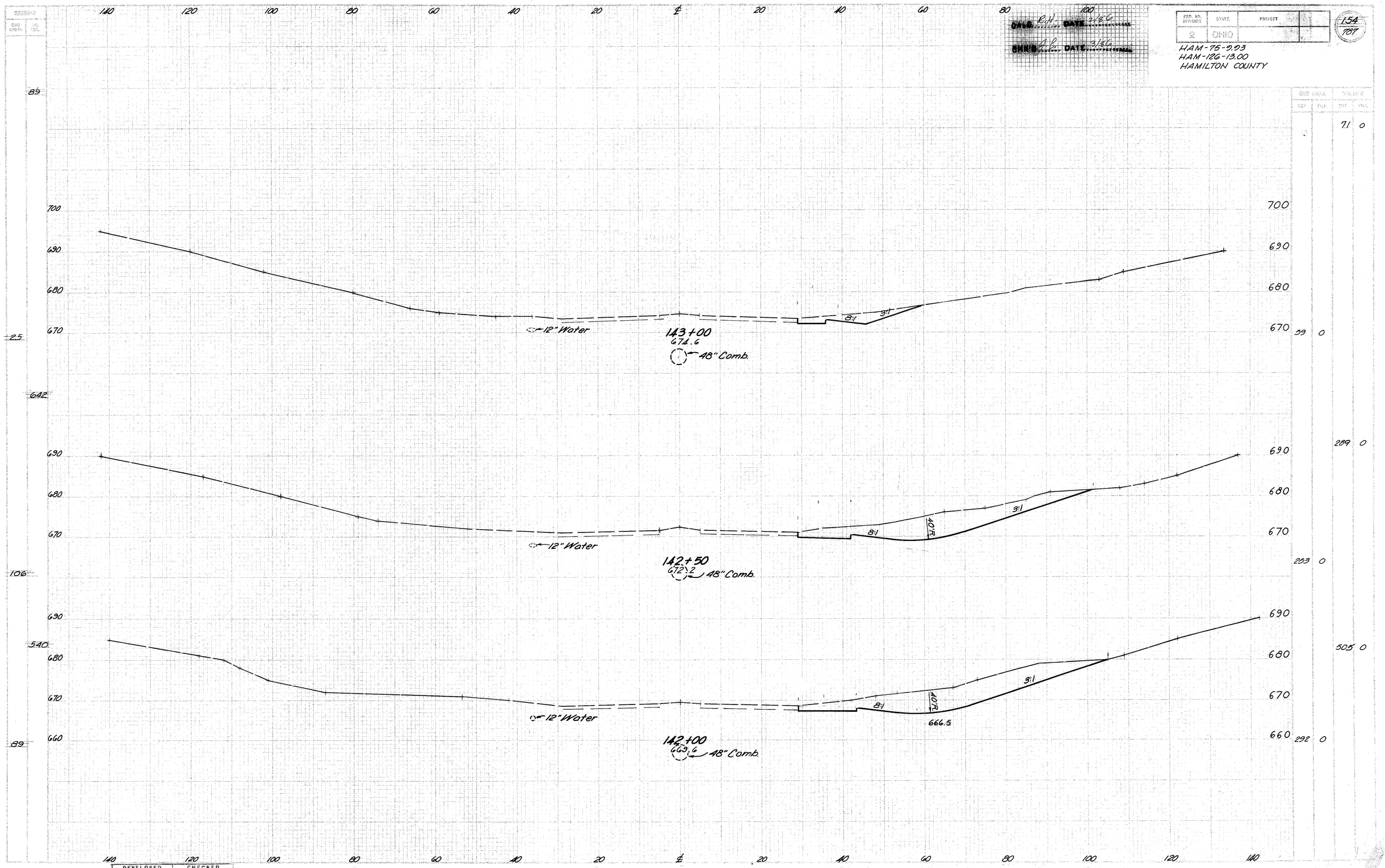
2:1
24:1
12" Water
140+50
662.7
48" Comb.
8:1
2:1
10'R

END AREA	VOLUME
CUT FILL	CUT FILL
	525 0
	275 0
	581 0
	353 0
	804 0
	515 0

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

DEVELOPED	CHECKED

S.R. 126 STA 140+50 TO STA 141+50



DEVELOPED	CHECKED

S.R. 126 STA 142+00 TO STA 143+00

DES'D R.C.	OHIO
DR'N	
CH'K D.A.L.	FHWA REGION 5
DATE 3/86	

155
787

HAM-75-2.93
HAM-126-13.00
HAMILTON COUNTY

End Area		Volume	
Cut	Fill	Cut	Fill

140 120 100 80 60 40 20 ℄ 20 40 60 80

710
700
690
680
670

12" Water

48" Comb

144+52.24
681.9

144+00
679.4

12" Water

48" Comb.

END EARTHWORK
143+58
677.0

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

7 0

PLAN & PROFILE SECTION 0.7' N.G.S. STANDARD
DIETZGEN CORPORATION

S.R. 126 STA. 143+50 TO STA. 143+58

140 120 100 80 60 40 20 W.B.℄ 20 40 60 80 100

CK'D J.C. DATE 3/4/04

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

156
787

699 570 560 550 540 530

0.8%

Noise Barrier

E.B. S.R. 126

2:1

24:1

2:1 530.0 2:1

564.05
35+00
531.8

114

Sta. 34+74, 35' Lt.
604 Std. No. I-3B, Mod. A, As Per Plan
Inv. 15" = 556.09
℄ Grate = 560.0

46-D

0.5%

610 560 550 540 530

603 4'x15' Conduit Type F 707.05

Noise Barrier

E.B. S.R. 126

Sta. 34+73.29' Lt. Ramp D
Sta. 34+70, 9' Rt.
604 Std. No. 2-2-B C.B.
℄ Grate = 562.80
Inv. 6" = 558.99
Inv. 15" = 558.24

603.56' 15" Conduit Type F 707.05

2:1

30" Min.

25° Bend

603.43' 15" Conduit Type B @ 5.0%

46D

Sta. 34+50, 108' Lt.
HW+4A
Inv. 15" = 530.5
601 Rock Channel Protection Type C With Filter
4'x6'x18'x 1/27 = 2

24:1

2:1 2:1 529.8

46D

25° Bend

562.38
34+50
532.5

106

603, 19' 15" Conduit Type F 707.05 @ 2.0%

578 560 550 540 530

0.5%

Noise Barrier

E.B. S.R. 126

2:1

2:1 2:1 24:1

529.5

560.70
34+00
532.8

102

0.5%

140 120 100 80 60 40 20 W.B.℄ 20 40 60 80 100 120 140

DEVELOPED CHECKED

WB S.R. 126 STA 34+00 TO STA. 35+00

			FILL
570		31	4464
560			
550			
540			
530		19	2275
560		40	4062
550			
540			
530		24	2112
560		75	3587
550			
540			
530		57	1762

Sta. 33+50 Ahead (From Sheet No. 86) 110 3071

Ahead 62 1355

DESIGNED	DRAWN	CHECKED	QUANTITIES
CUT FILL	CUT FILL	CUT FILL	CUT FILL

DES. DIV. DISTRICT	STATE	PROJECT		SHEET NO.	TOTAL SHEETS
8	OHIO			157	787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

C.G. f.l. DATE 2/86
CHK'D f.l. DATE 3/86

776

570
560
550
540
530

0.8%
2:1
24:1
2:1
531.2
2:1
Noise Barrier
8:1
E.B. S.R. 126

56909
36+50
531.6

136

570
560
550
540
530

0.8%
733
2:1
24:1
2:1
530.8
2:1
8:1
E.B. S.R. 126

56741
36+00
531.3

128

570
560
550
540
530

690
0.8%
2:1
24:1
2:1
530.4
Noise Barrier
8:1
E.B. S.R. 126

56573
35+50
531.4

120

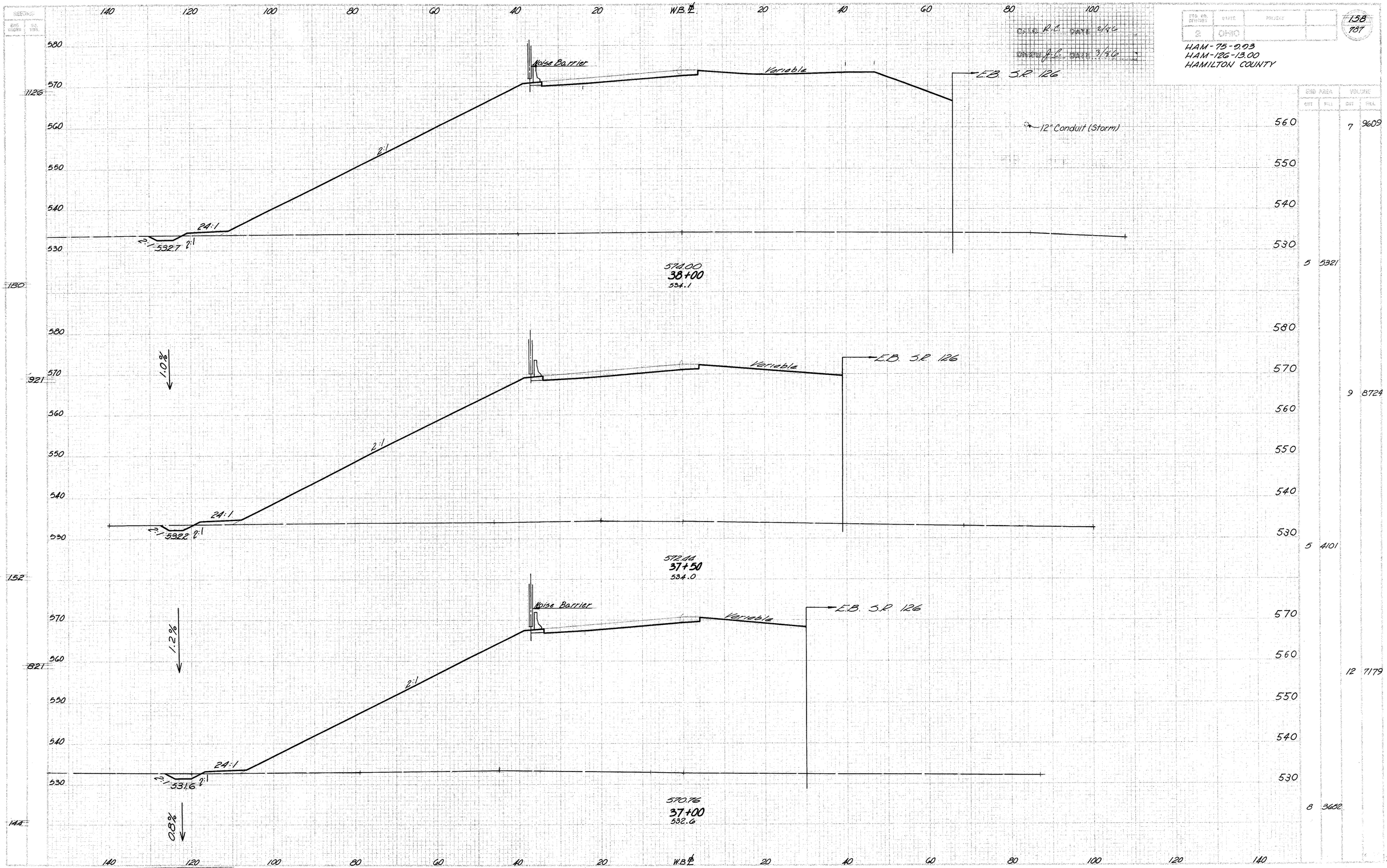
0.8%

140 120 100 80 60 40 20 W.B.℄ 20 40 60 80 100 120 140

END AREA		VOLUME	
CUT	FILL	CUT	FILL
570			19 6344
560			
550			
540			
530			12 3253
570			
560			26 5704
550			
540			
530			16 8909
570			
560			29 5049
550			
540			
530			15 2546

DEVELOPED | CHECKED

W.B. S.R. 126 STA. 35+50 TO STA. 36+50



WB S.R. 126 STA 37+00 TO STA 38+00

FED. ID DIVISION	STATE	PROJECT	
5	OHIO		

159
187

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

CALC. R.C. DATE 9/86
CHK'D. R.C. DATE 9/86

140 120 100 80 60 40 20 WBL 20 40 60 80 100 120 140

ZERO SECTION

39+66
533.0

8"Gas
8"San.
12"Water
42"Storm
30"Storm

Seeding Limit
Variable

577.22
39+50
531.9

8"Gas
12"Water
8"San.
42"Storm
30"Storm

Seeding Limit
Variable
Seeding Limit

576.39
39+00
534.0

71/D 38+50, 32' Lt.
604 Std. No.6 C.B.
℄ Grate = 572.5
℄ 12" = 569.00

12"-25° Bend
℄ 12" = 568.50
Noise Barrier
2.5 Min.
2:1
603-77'-12" Type F, 707.05
33 71/D

71/D Sta. 38+50, 115 Lt.
HW-4A
℄ 12" = 533.80'

12"-25° Bend
℄ 12" = 534.00'

71/D Rock Channel Prot.
Type C, 4'x6'x18"
W/Filter = 2c.y.

2:1
2:1
532.9
0.5%

69'

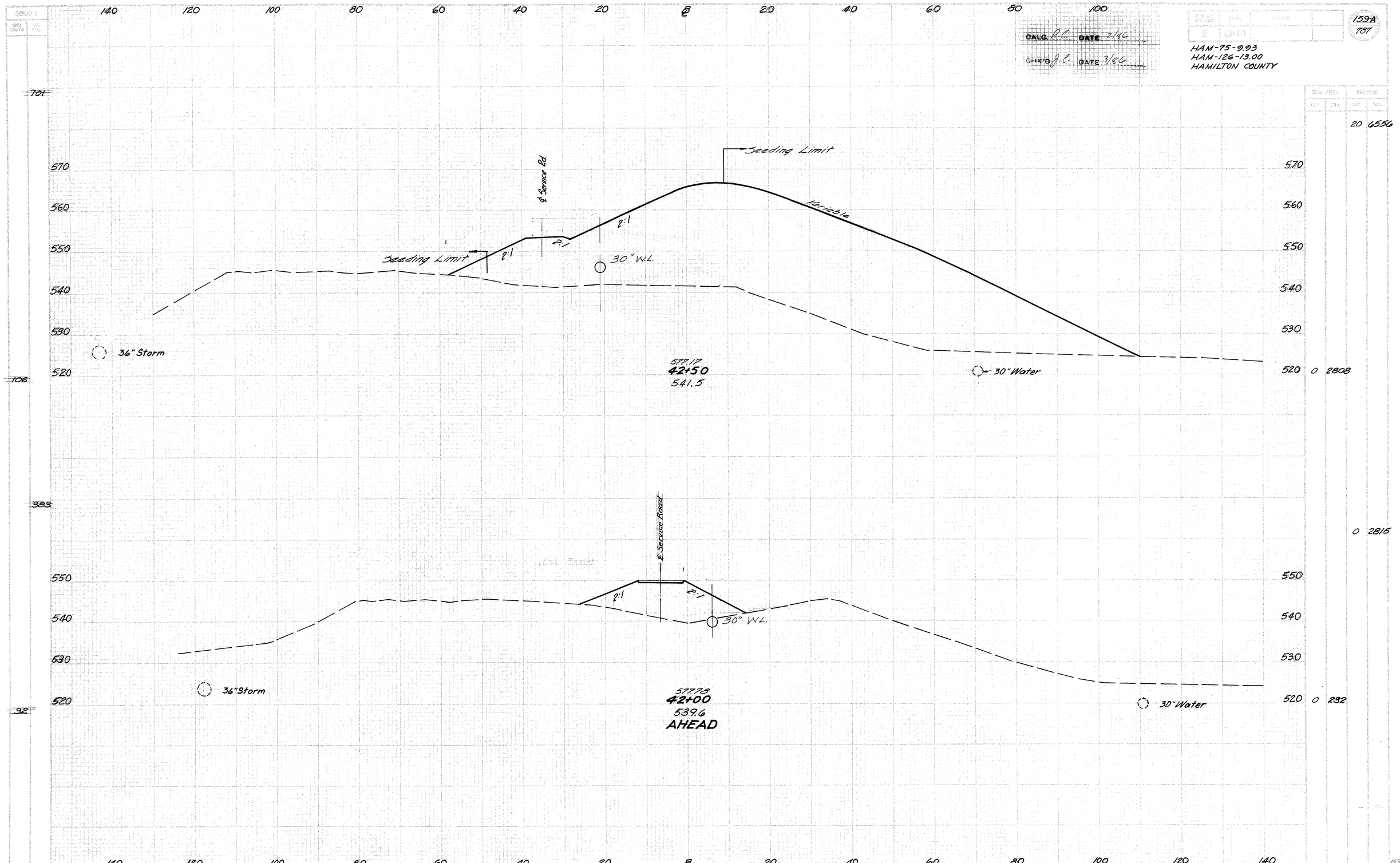
603-
7'-12" Type F 707.05
33 71/D

603-
7'-12" Type F
707.05 33 71/D

Variable
12" Conduit

575.31
38+50
534.5

| | | |



DEVELOPED	CHECKED
C.E.S. 4-70	E.W.R. 11-71

W.B. S.R. 126 STA. 42+00 TO STA. 42+50

FED. AID PROJECT	STATE	PROJECT	
2	OHIO		

160
787

CALC. K.C. DATE 2/86

CHK'D K.C. DATE 3/86

HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY

ROAD AREA		TPK LANE	
CUT	FILL	CUT	FILL

28 9921

14 5164

33 8738

22 4273

1075

192

942

147

12.2%

0.6%

Seeding Limit

30" W.L.

Variable

2:1

2:1

2:1

2:1

641.2

541.5

30" Water

575.22
43+50
525.6

576.32
43+00
535.4

Ramp F

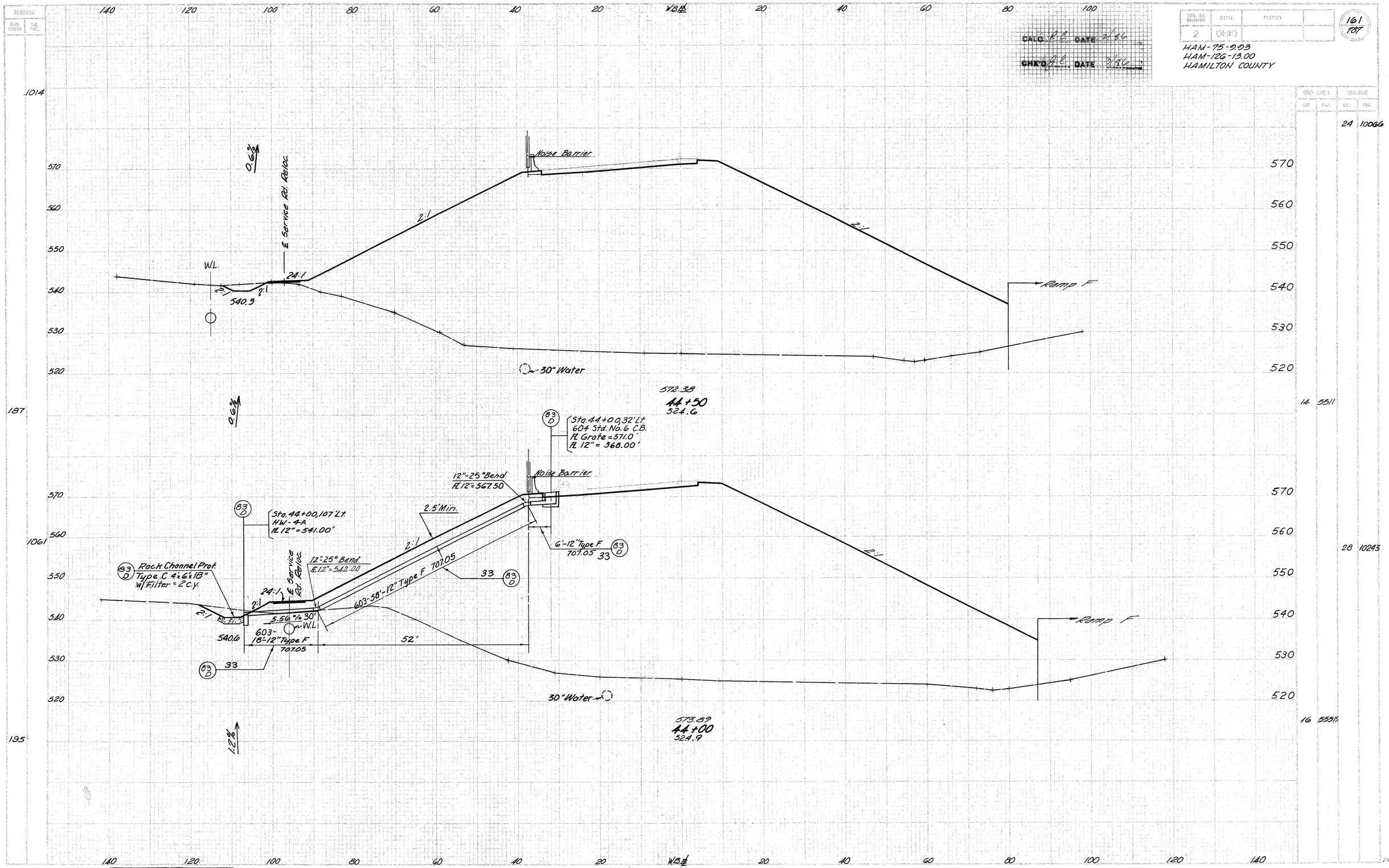
570
560
550
540
530
520

580
570
560
550
540
530
520

140 120 100 80 60 40 20 W.B.℄ 20 40 60 80 100 120 140

DEVELOPED | CHECKED

WB SD 12G STA 43+00 TO STA 43+50



		24	10066
14	5511		
28	10243		
16	5551		

WB SR 126 STA 44+00 TO STA 44+50

SECTIONS

GRID DIGITIZE	3D TOOL

140 120 100 80 60 40 20 WB℄ 20 40 60 80 100

CALC'D P.A. DATE 2/86

CHK'D J.H. DATE 2/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

END AREA		VOLUME	
CUT	FILL	CUT	FILL
		0	9018
		0	5069
		11	9656
		12	3360

935

774

308

570
560
550
540
530
520

Noise Barrier

℄ Service Rd. Reloc.

2:1

2:1

30" W.L.

24:1

2:1

2:1

539.0

Ramp F

30" Water
(To Be Abandoned)

568.93
45+50
523.9

208

976

774

570
560
550
540
530
520

Noise Barrier

2:1

2:1

30" W.L.

℄

2:1

24:1

540.0

Ramp F

30" Water
(To Be Abandoned)

570.56
45+00
523.9

208

778

140 120 100 80 60 40 20 WB℄ 20 40 60 80 100 120 140

DEVELOPED	CHECKED

WB. S.R. 126 STA. 45+00 TO STA. 45+50

DESIGN | DRAWN | CHECKED

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

163
787

CALC. R.C. DATE 2/26

CHKD. J.P. DATE 3/26

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

140 120 100 80 60 40 20 WBL 20 40 60 80 100

967

560

550

540

530

520

160

℄ Service Rd. Reloc.

Noise Barrier

2:1

Ramp F

30"WL.

Varies

24:1

15"

Ex. 50" Water
To Be Abandoned

565.54
46+50
524.0

570

560

896

550

540

530

520

163

30"W.L.

24:1

15"

2:1

2:1

537.5

Noise Barrier

2:1

Ramp F

Ex. 30" Water Main
to be abandoned

567.23
46+00
524.2

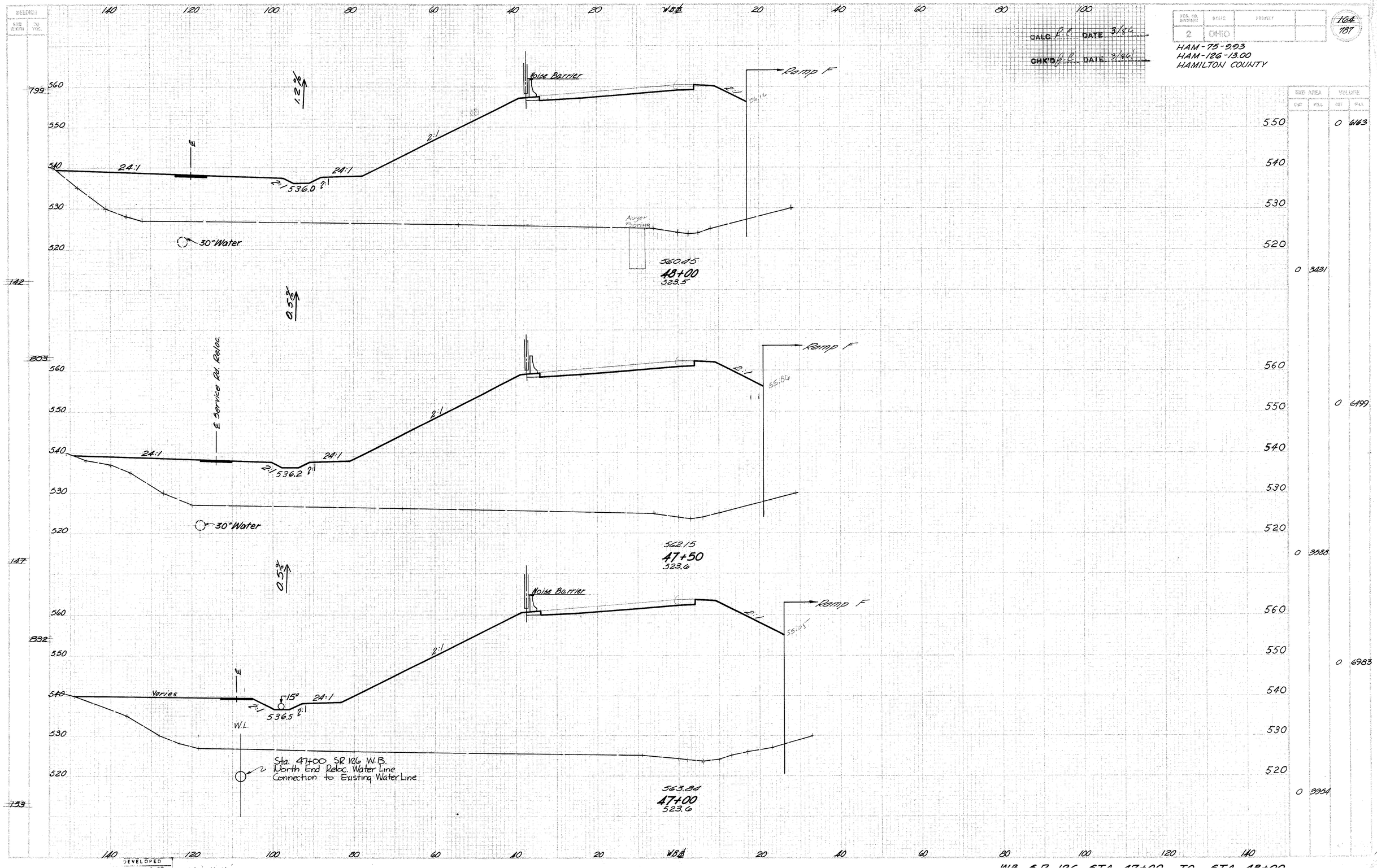
30%

CBU AREA		VM AREA	
CUT	FILL	CUT	FILL
		0	7655
		0	4913
		0	8318
		0	4670

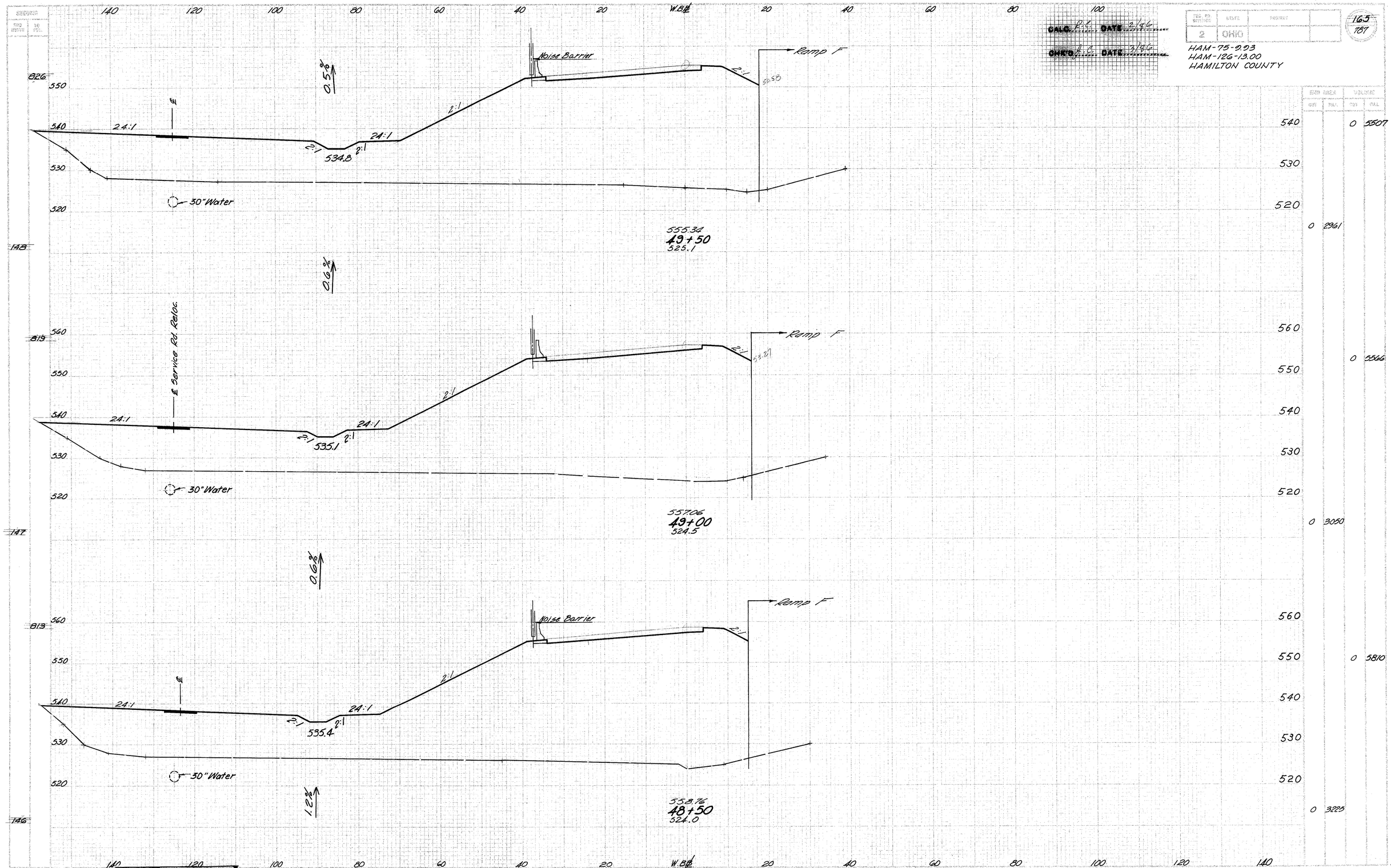
140 120 100 80 60 40 20 WBL 20 40 60 80 100 120 140

DEVELOPED | CHECKED

WB & R 126 STA 46+00 TO STA 46+50



CALC. R.C. DATE 3/86
CHK'D. J.C. DATE 3/86
FED. RD. DIVISION 2
STATE OHIO
PROJECT
164
787
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
Noise Barrier
Ramp F
24:1
2:1
536.0
30" Water
Auger Boring
560.45
48+00
523.5
1.2%
0.5%
℄ Service Rd. Reloc.
536.2
562.15
47+50
523.6
55.86
Varies
15"
536.5
W.L.
Sta. 47+00 SR 126 W.B.
North End Reloc. Water Line
Connection to Existing Water Line
563.84
47+00
523.6
END AREA
VOLUME
0 6163
0 3431
0 6499
0 3588
0 6983
0 3954



Station	Cut	Fill	Cut	Fill
540			0	5507
530				
520				
	0	2961		
560				
550			0	5566
540				
530				
520				
	0	3050		
560				
550			0	5810
540				
530				
520				
	0	3225		

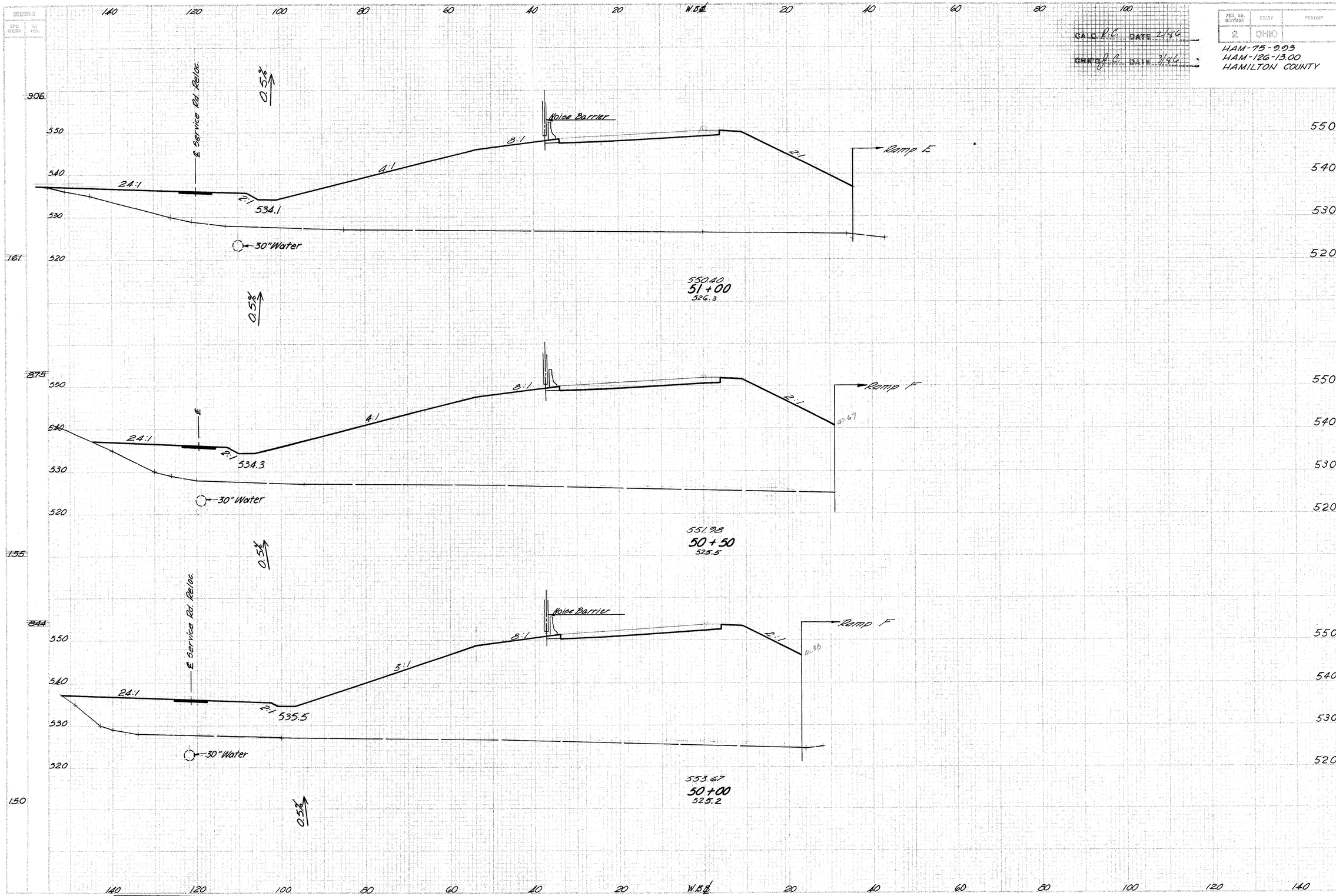
WB SR 126 STA 48+50 TO STA 49+50

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

166
787

CALC. R.C. DATE 2/86
CHK'D J.C. DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		0	4888
0	2700		
		0	5272
0	2944		
		0	5538
0	2987		

DEVELOPED | CHECKED

WB SR 126 STA 50+00 TO STA 51+00

CALC. R.C DATE 2/96
CHK'D J.C DATE 3/96

STA. NO. REVISION	DATE	REMARKS	
2	6/96		

167
787

HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY

140 120 100 80 60 40 20 W.B.℄ 20 40 60 80 100 120 140

950
550
540
530
520

548'

CB-D
337

5-D

℄

2:1 24:1 2:1

Ex. 30" Water Main to Remain Inplace

533.2

4:1 8:1

Noise Barrier

Variable

Ramp E

547.10
52+50
526.8

0.6%

603.59' x 12" Conduit Type C @ 13.07%

Sta. 52+00.93' Lt.
Std. H.W.4A or B
Inv. 12" = 534.08

Sta. 52+00 W.B., 35' Lt.
604 Std. No. I-3B, Mod. A, As Per Plan
℄ Grate = 546.67
Inv. 12" = 541.67

601 Rock Channel Protection Type C With Filter
4'x4'x1.5 x 1/27 = 1 C.Y.

4'

660 Sodding 1'6" Wide
1 S.Y.

10A-D

℄ Service Rd. Reloc.

943
550
540
530
520

24:1 2:1 533.5

4:1 8:1

13.07%

Ramp E

Variable

30" Water

547.96
52+00
526.4

0.0%

168
550
540
530
520

Noise Barrier

926

℄

24:1 2:1 533.8

4:1 8:1

Ramp E

Variable

30" Water

547.06
51+50
526.2

0.5%

165

DEVELOPED		CHECKED	
C.E.S.	4-70	E.W.R.	11-71

WB. S.R. 126 STA. 51+50 TO STA. 52+50

SUB AREA		CUM AREA	
CUT	FILL	CUT	FILL
		49	3976
		19	2226
		18	4214
		0	2390
		0	4601
		0	2579

CALC. D.L. DATE 2/86
CHK'D J.L. DATE 2/86

FED. HWY. DIVISION	STATE	PROJECT	
5	OHIO		

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

168
787

140 120 100 80 60 40 20 W.B.℄ 20 40 60 80 100 120 140

Sta. 54+05,68'Lt.
Std. H.W.-4A or B H.W.
Inv. 12" = 539.

Sta. 54+05,35'Lt.
604 Std. No. I-38 Mod. A, As Per Plan
E Grate = 545.56
Inv. 12" = 541.56
Inv. 6" = 541.56

Noise Barrier

1.0%

℄

2:1 2:1 24:1 8:1 8:1

30" Water

537.5

545.95
54+00
527.5

Ramp E

875 550 540 530 520

763 917 550 540 530 520

1.0%

CG&E Tower

℄ Service Rd. Reloc.

24:1 8:1 Variable

Ramp E

Ex. 30" Water
To Remain Inplace

2:1 2:1

537.0

546.10
53+50
526.9

168 939 550 540 530 520

2.0%

C.G.&E. Tower

Noise Barrier

8:1 Variable

Ramp E

℄

24:1

2:1 2:1

30" Water

536.0

546.48
53+00
527.5

171 520

54%

550 540 530 520

6 3153

2 1778

550 540 530 520

26 3406

26 1900

550 540 530 520

56 3673

34 2067

DEVELOPED		CHECKED	
C.E.S.	4-70	E.W.B.	11-71

WB SR 126 STA 53+00 TO STA 54+00

140 120 100 80 60 40 20 W.B.℄ 20 40 60 80 100 120 140

DESIGNED ☐ DATE 2/86
DRAWN ☐ DATE 2/86
CHECKED ☐ DATE 3/86

REGION/DIVISION	CITY	COUNTY	
2	0410		

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787

HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY

735
550
540
530
520
136

1.0%

℄

2:1 4:1 8:1 8:1

539.0 → 30" Water

Ramp E

546.95
55+50
532.0

772
550
540
530
520

1.0%

℄

30" Ex. Water Main

2:1 4:1 8:1 8:1

538.5

Ramp E

546.37
55+00
328.6

143
819
550
540
530
520

℄ Service Rd Reloc

1.0%

Noise Barrier

30" Water Ln

2:1 2:1 24:1 8:1 8:1

538.0

Ramp E

546.04
54+50
328.8

153

1.0%

EXISTING		PROPOSED	
CUT	FILL	CUT	FILL
			19 2356
		10 1311	
			18 2594
		9 1490	
			12 2886
		4 1627	

WB S.R. 126 STA 54+50 TO STA 55+50

DEVELOPED	CHECKED

FED. NO. DIVISION	STATE	PROJECT	
2	OHIO		

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787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

DESIGN R.C. DATE 2/86
DRAWN J.C. DATE 3/86
CHECK DATE

140 120 100 80 60 40 20 W.B.℄ 20 40 60 80 100

681 550 540 530 520

N.B. Track

1.6%

℄

2:1 3:1 8:1 8:1

542.0

30" Water

Ramp E

550.08
57+00
539.6

122

685 550 540 530 520

NB Track Penn Central R.R.

℄ Service Rd. Reloc.

4.0%

2:1 3:1 8:1 8:1

540.0

Ex. 30" Water Main to Remain In Place

Ramp E

543.80
56+50
540.0

125

706 550 540 530 520

1.0%

℄

2:1 4:1 8:1 8:1

539.5

30" Water

Ramp E

547.75
56+00
538.0

129

1.0%

140 120 100 80 60 40 20 W.B.℄ 20 40 60 80 100 120 140

WB SR 126 STA 56+00 TO STA 57+00

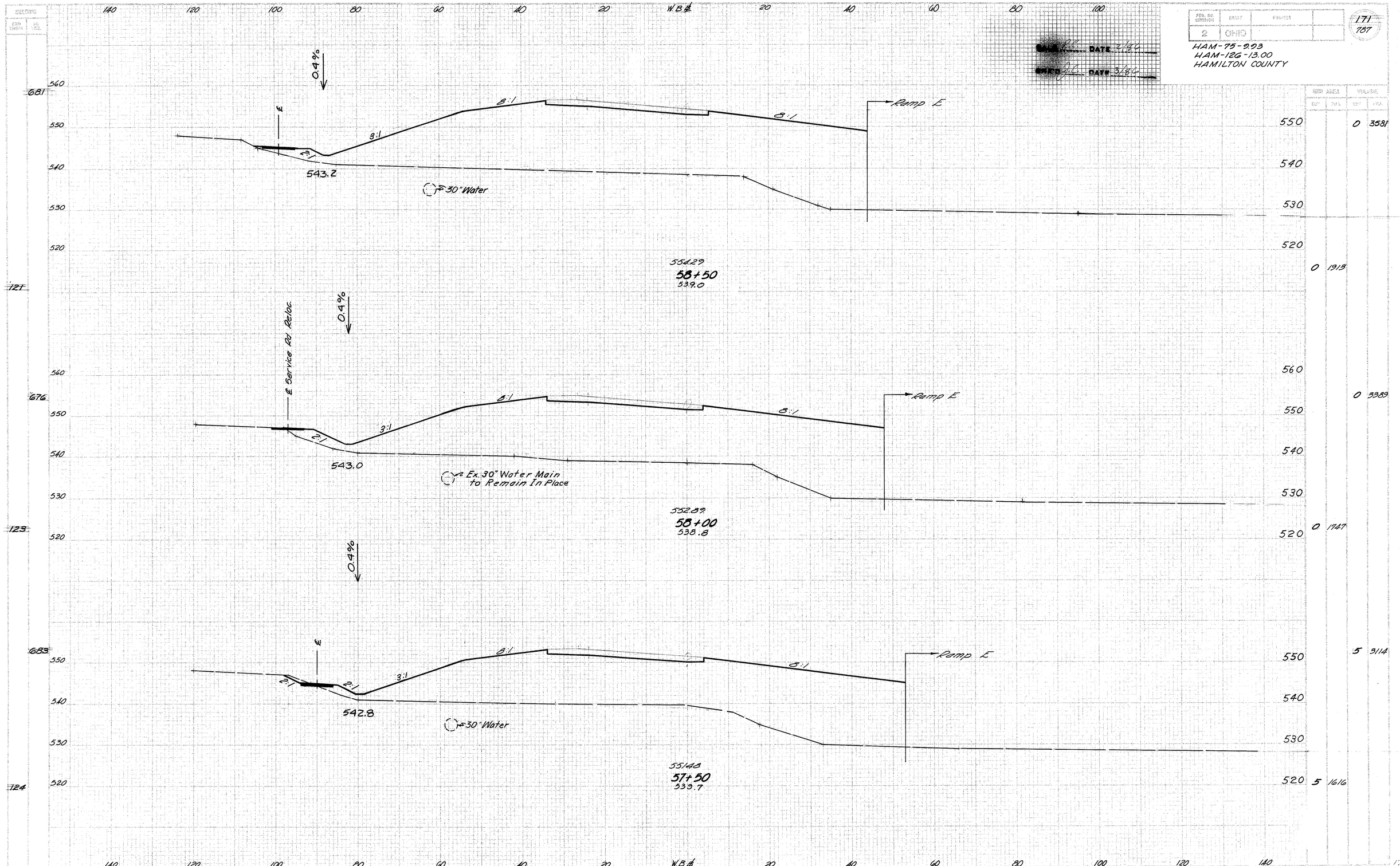
DEVELOPED	CHECKED

CUT	FILL	CUT	FILL
550		5	2844
540			
530			
520		0	1455
550		4	2520
540			
530			
520		4	1267
550		13	2315
540			
530			
520		10	1233

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

171
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



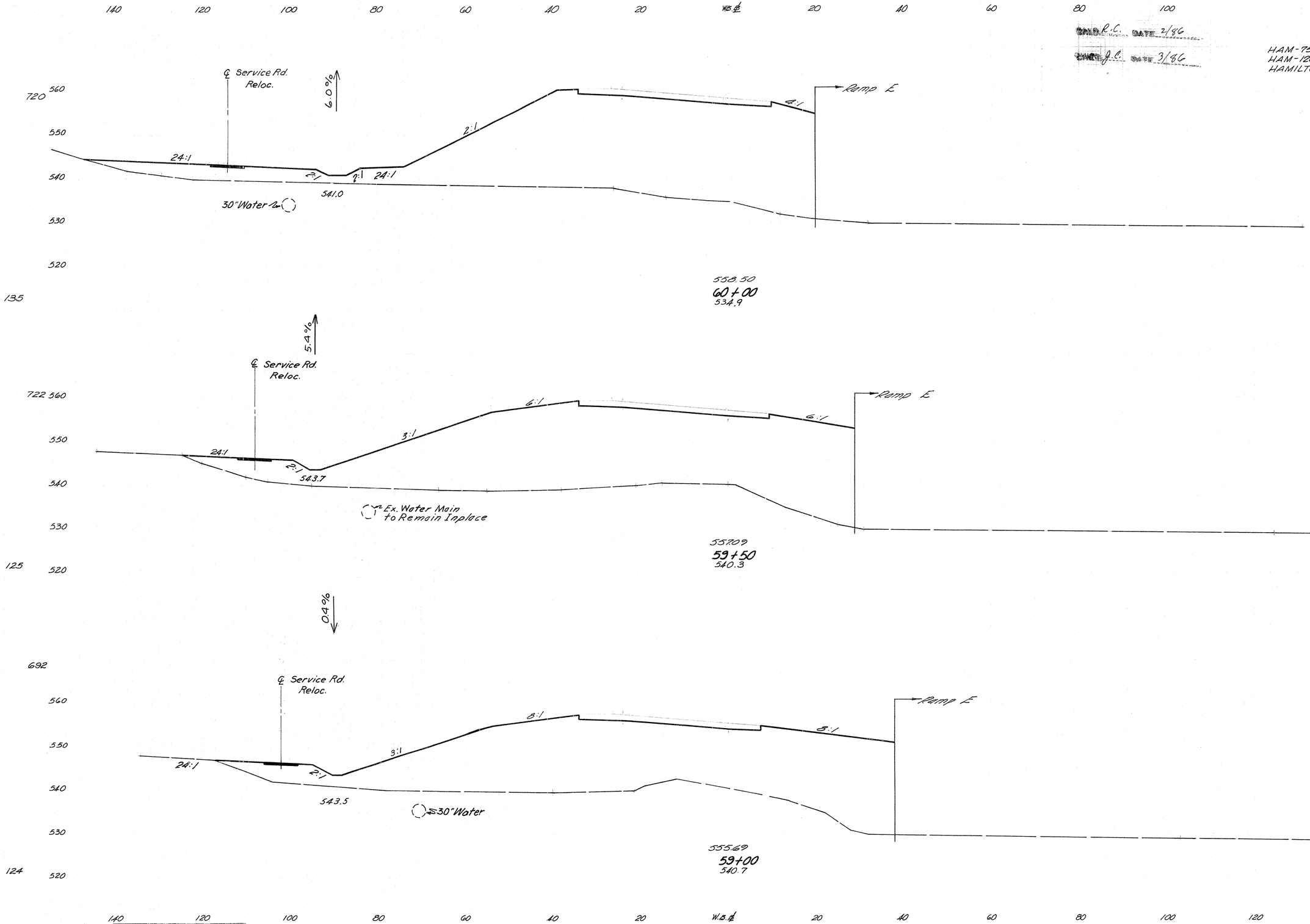
681	550	0	3581
121	520	0	1913
676	560	0	3389
123	520	0	1747
683	550	5	3114
124	520	5	1616

DEVELOPED	CHECKED

WB S.R. 126 STA 57+50 TO STA 58+50

CALC'D R.C. DATE 2/86
CHKD J.C. DATE 3/86

HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY



DEVELOPED		CHECKED	
C.E.S.	4-70	J.H.B.	11-71

WB. S.R. 126 STA. 59+00 TO STA. 60+00

FED. AID DIVISION	STATE	PROJECT	
5	OHIO		

173
787

HAM-75-0.03
HAM-126-13.00
HAMILTON COUNTY

DESIGNED — RALO DATE 2-76
DRAWN — OHCO DATE 2-76
CHECKED — DATE
QUANTITIES CHECKED — DATE

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		13	9490
		3	5070
		19	9120
		17	4780
		17	2446
		20	4111
		5	1994

1197 — 5.0 %
2:1
2:1
24:1
534.0
Variable
Ramp F
24" Conduit
562.71
61+50
529.4
WB SR 126 Ahead
WB SR 126 Ramp E*
Back
Back
* For Ramp E Earthwork Quantities See Sheet No. 238

961 — 4.0 %
2:1
24:1
2:1
2:1
536.0
30" Water
561.30
61+00
529.7
Variable
Ramp F
Ahead
Back
5.20

AH 127
BK 121

685 — 4.0 %
Ramp E
2:1
2:1
2:1
24:1
℄ Service Rd. Reloc.
30" Water
538.0
552.90
60+50
532.1

126 — 6.0 %

W.B. ℄

140 120 100 80 60 40 20 20 40 60 80 100 120 140

560 550 540 530 520

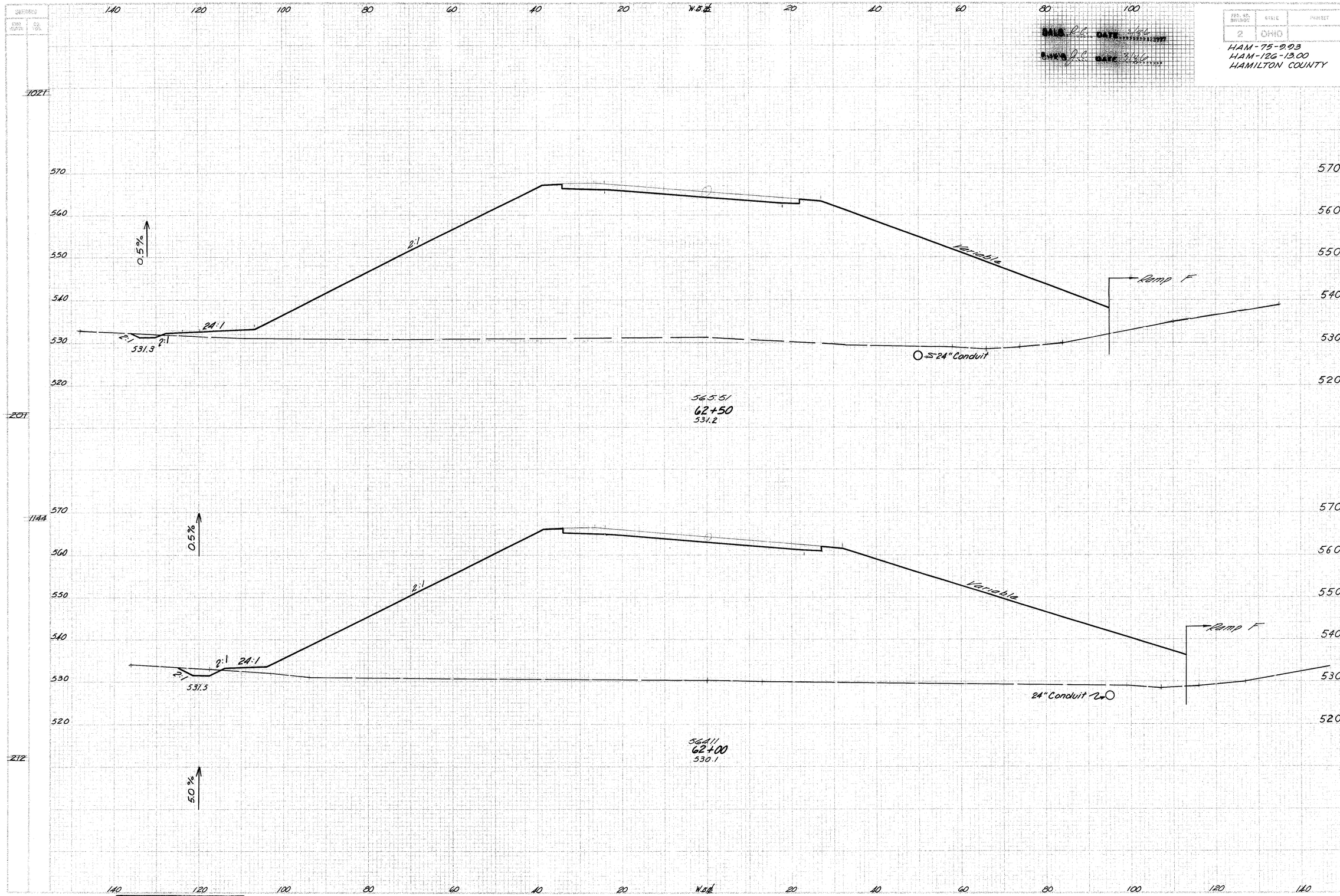
DEVELOPED | CHECKED

WB SR 126 STA 60+50 TO STA 61+50

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

174
787

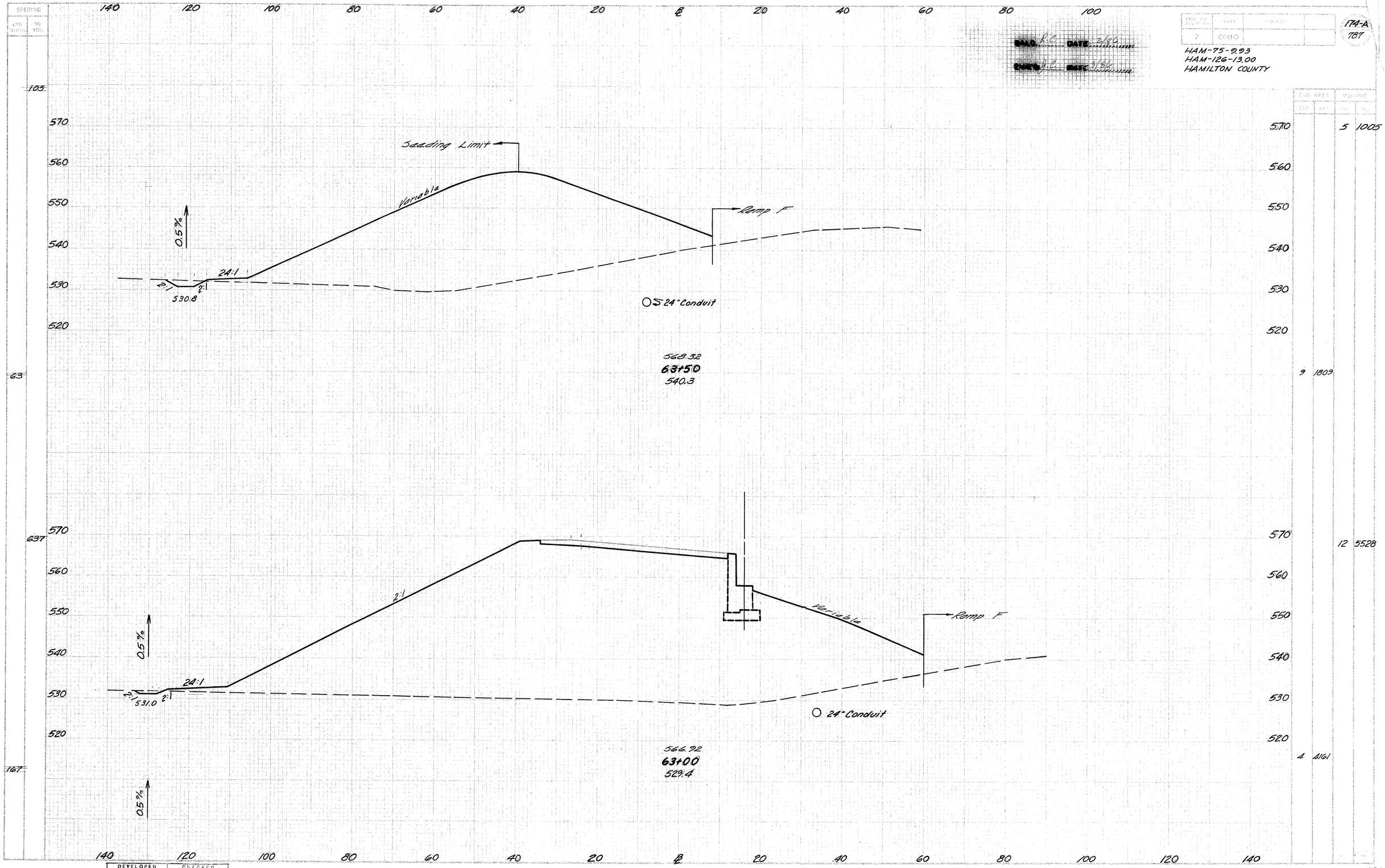
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		8	8527
5	5048		
		15	9469
11	5179		

DEVELOPED	CHECKED

WB SR 126 STA 62+00 TO STA 62+50



FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

174-A
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		5	1005
9	1809		
		12	5528
4	4161		

SEEDING	
END WIDTH	SQ YDS

SEEDING

END WIDTH | SQ YDS

974

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

RDWY DIV	STATE	PROJECT	
2	OHIO		

174-C
787

CALC. R.C. DATE 2/96

CHKD. J.C. DATE 3/96

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

END AREA		VOLUME	
CUT	FILL	CUT	FILL

6 10073

Unsuitable Material 726 726

580
570
560
550
540
530
520

40%

Seeding Limit

Variable

544.4

12" Conduit

2:1

2:1

2:1

677.52
67+50
535.2

Unsuitable Material 352 352

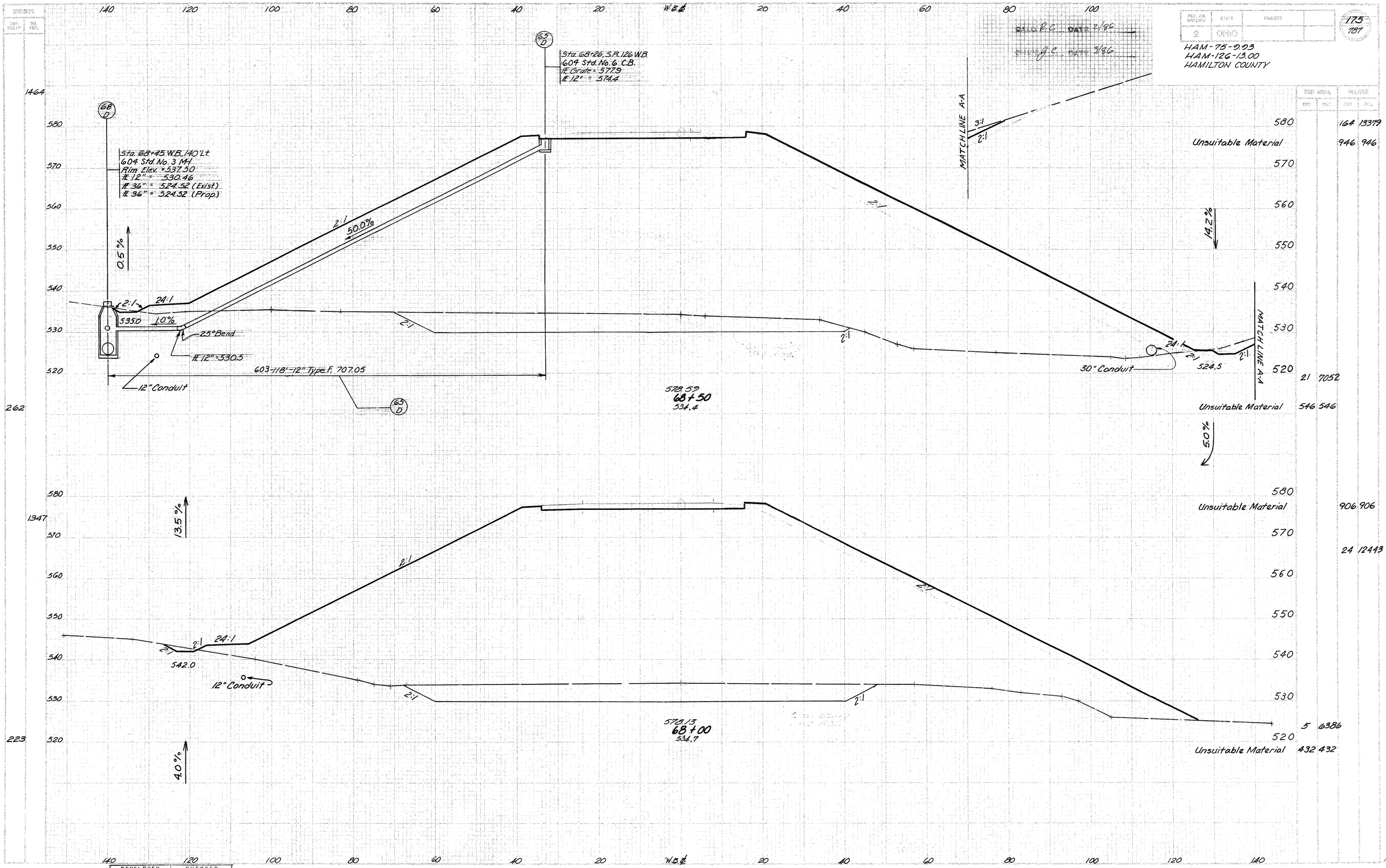
2 4493

128

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

DEVELOPED	CHECKED

WB-SR 126 STA 67+50



FED. RD. DIVISION 2
STATE OHIO
PROJECT
175
787
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
SALE R.C. DATE 2/86
SHEET J.C. DATE 3/86
Sta. 68+26, S.R. 126 W.B.
604 Std. No. 6 C.B.
℄ Grate = 577.9
℄ 12" = 574.4
Sta. 68+45 W.B. 140' Lt.
604 Std. No. 3 M-1
Rim Elev. = 537.50
℄ 12" = 530.46
℄ 36" = 524.52 (Exist.)
℄ 36" = 524.52 (Prop.)
0.5%
50.0%
14.2%
13.5%
4.0%
5.0%
2:1
24:1
10%
535.0
25° Bend
℄ 12" = 530.5
603-118'-12" Type F, 707.05
12" Conduit
30" Conduit
524.5
MATCH LINE A-A
3:1
578.59
68+50
534.4
578.13
68+00
534.7
542.0
Unsuitable Material
Unsuitable Material
Unsuitable Material
Unsuitable Material
164 13379
946 946
21 7052
546 546
906 906
24 12443
5 6386
432 432
1464
262
1347
223
W.B. ℄

CALC.	DATE
J.C.	2-86
CHKD. J.C.	DATE 3/86

FED. RD. DIST. NO.	STATE	PROJECT	
2	OHIO		

176
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

969

1372

265

229

140 120 100 80 60 40 20 W.B.℄ 20 40 60 80 100 120 140

580 570 560 550 540 530 520

1.0%

24:1 2:1 2:1 534.5

2:1 2:1

5.5%

24:1 2:1 2:1 541.5

36" Storm

24" Conduit

573.13
69+50
523.8

0.5%

24:1 2:1 2:1 534.7

2:1

36" Conduit

573.93
69+00
524.9

1.78%

A A

A A

532.0

24" Conduit

0.5%

14.2%

CUT AREA	FILL AREA	CUT VOLUME	FILL VOLUME
580		38	121.94
Unsuitable Material		766	766
570			
560			
550			
540			
530			
Unsuitable Material		549	549
520			
		28	7110
580			
570			
Unsuitable Material		949	949
560		170	13432
550			
540			
530			
Unsuitable Material		476	476
520			
		156	7397

DEVELOPED		CHECKED	

WB S.R. 126 STA 69+00 TO STA 69+50

DESIGNED | DRAWN | CHECKED | QUANTITIES | CHECKED

140 120 100 80 60 40 20 W.B.℄ 20 40 60 80 100

CALC. R.C. DATE 2/86

CHK'D A.C. DATE 9/86

REG. ED. DIVISION	STATE	PROJECT		
2	OHIO			

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787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

EXC. AREA		VOLUME	
UNIT	FILL	CUT	FILL
		24	9955
	Unsuitable Material		409 409
	Unsuitable Material		278 278
		13	6059

669

580
570
560
550
540
530
520

1.0%

2:1
24:1
2:1
2:1
534.0
2:1
2:1
Variable
30" Conduit

579.20
70+00
525.2

120

1.0%

140 120 100 80 60 40 20 W.B.℄ 20 40 60 80 100 120 140

DEVELOPED	CHECKED

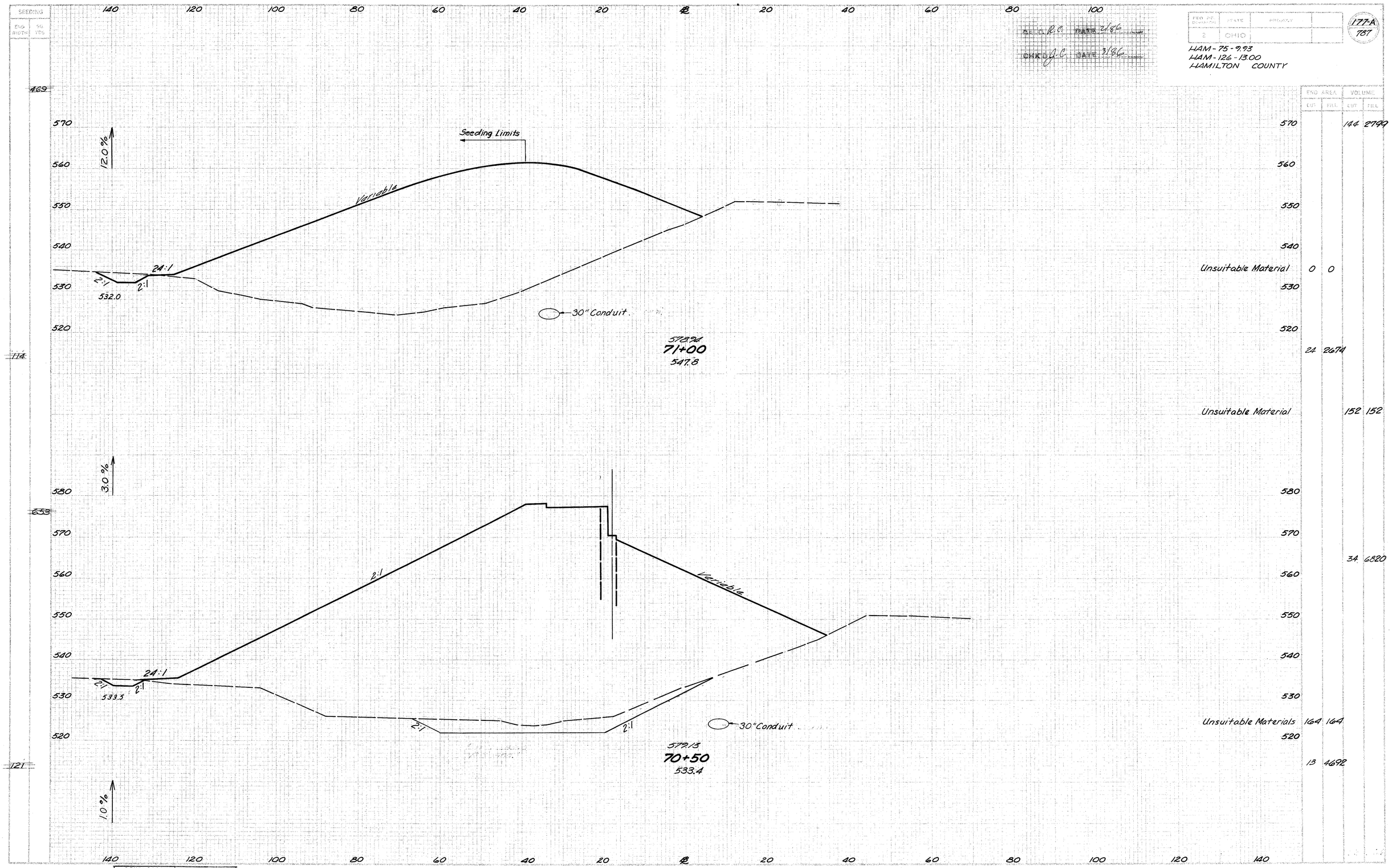
WB 6 P 126 STA 70+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

177-A
787

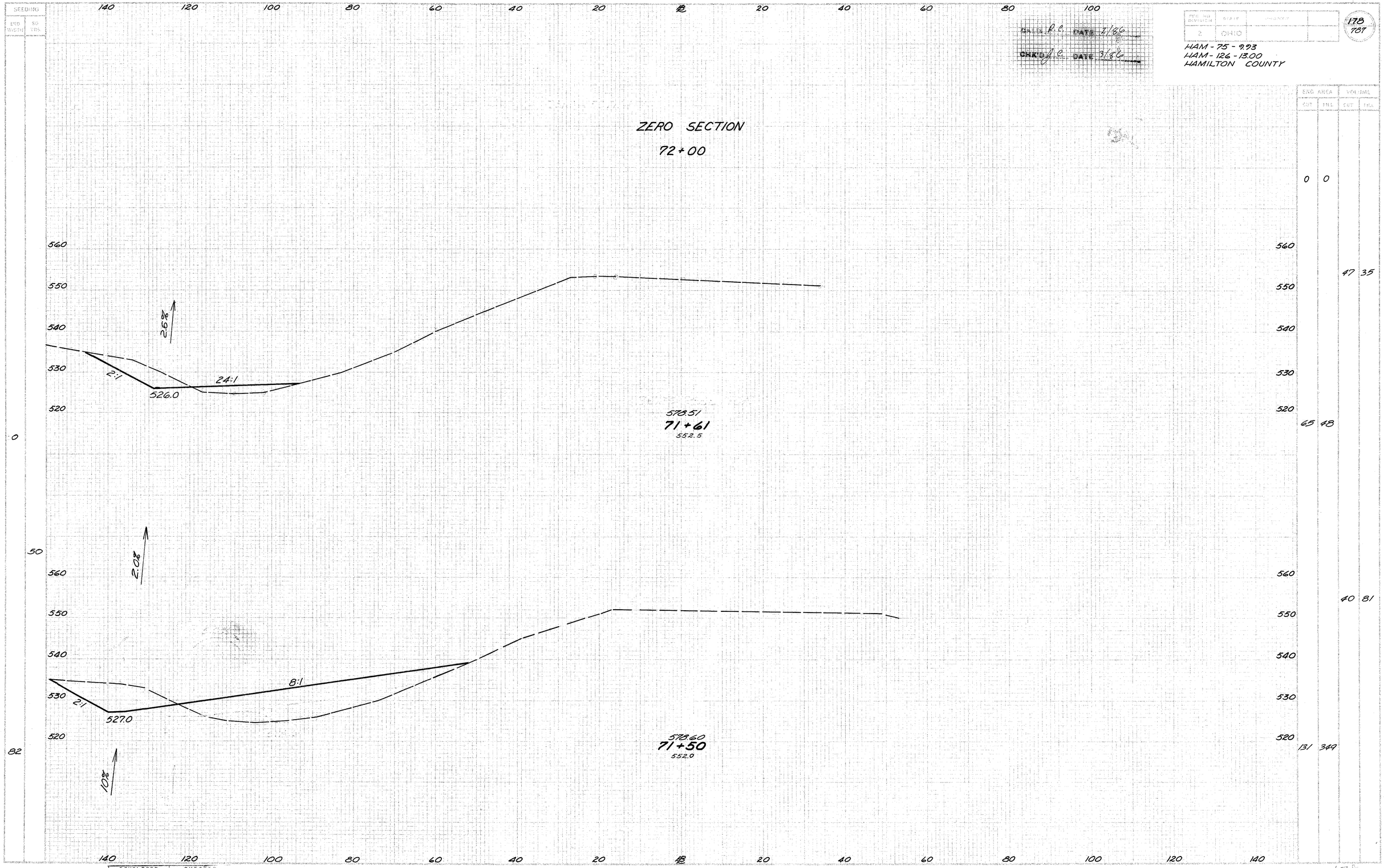
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

GEO. R.C. DATE 2/86
CHK'D J.C. DATE 3/86



DEVELOPED	CHECKED

W.B. SR 126 STA 70+50 TO STA 71+00



SEEDING
END WIDTH
SQ. YDS.
140 120 100 80 60 40 20 ℄ 20 40 60 80 100
CALC. R.C. DATE 2/86
CHK'D J.C. DATE 3/86
FED. RD. DIVISION 2
STATE OHIO
HAM - 75 - 9.93
HAM - 126 - 13.00
HAMILTON COUNTY
178
787
ZERO SECTION
72+00
560
550
540
530
520
2.6%
2:1
24:1
526.0
578.51
71+61
552.5
2.0%
8:1
2:1
527.0
578.60
71+50
552.0
10%
0
50
82
ENG. AREA
VOLUME
CUT
FILL
0 0
47 35
65 48
40 81
131 349
140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140
DEVELOPED
CHECKED
WB SR 126 STA 71+50 TO STA 71+61
178

SEEDING

END WIDTH	SQ YDS
0	
0	
0	
0	
0	

DEVELOPED	CHECKED

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

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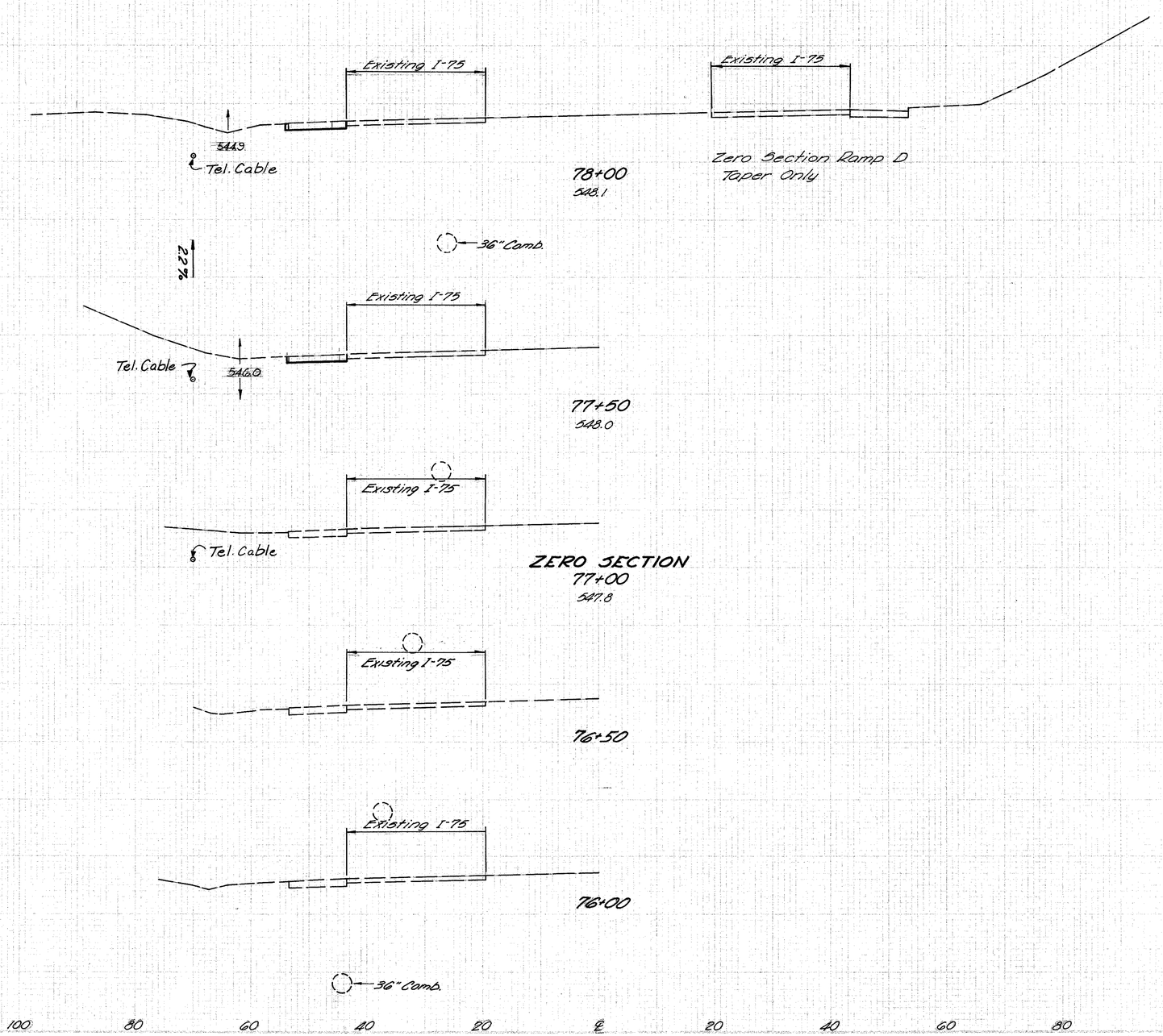
787

HAM-75-9.93
HAM-12G-13.00
HAMILTON COUNTY

CALC'D R.L. DATE 2/96
CHK'D J.C. DATE 3/96



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		43	0
12	0		
		22	0
12	0		
		11	0
0	0		

I-75 STA 77+00 TO STA 78+00

SEEDING	
END WIDTH	SQ. YDS
	25
9	
	25
0	
	0
0	
	0
0	

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

570 560 550 540

1.6%

Existing I-75 Existing I-75

Tel. Cable 543.0

80+00
546.9

Sta. 79+90 Lt.
Begin 601 Type
1-2 Paved Gutter

36" Camb.

570 560 550 540

1.6%

Existing I-75 Existing I-75

543.8 Tel. Cable

79+50
547.4

570 560 550 540

.8%

Existing I-75 Existing I-75

544.2 Tel. Cable

79+00
547.8

570 560 550 540

.2%

Existing I-75 Existing I-75

544.5 Tel. Cable

78+50
548.1

36" Camb.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
		83	17
46	6		
		82	6
43	0		
		81	0
44	0		
		72	0
34	0		

DEVELOPED	CHECKED

I-75 STA 78+50 TO STA 80+00

REVISION	DATE	BY

DES'D DC DATE 2/86
CH'K'D JC DATE 3/86

FED. NO.	STATE	PROJECT	
	OHIO		

180
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

CALC R.C. DATE 3/96

CHKD J.C. DATE 3/96

FED. ROAD DIV.	STATE	PROJECT	
5	OHIO		

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787

HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY

SLOPING END WIDTH	SLOPING SQ. FDS.
13	68
12	67
5	46
14	54
0	44

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

570 560 550 540

06%

541.5

℄ Tel. Cable

Existing I-75

Existing I-75

82+00
544.3

5-48" Comb.

12%

542.1

Tel. Cable

Existing I-75

Existing I-75

Wall #3

81+50
544.9

Sta. 81+25 Rt.
Begin Retaining Wall #3

88 D

Sta. 81+00, 59.5' Lt.
604 Double Gutter Inlet
IE Grate = 543.62
IE 12" = 540.12

48" Conduit

Sta. 81+00, 51.5' Lt.
Exist. Manhole
Rim Elev. = 544±
Exist. 36" = 522.47
Exist. 48" = 521.47
IE 12" = 537.00 (Prop.)

06%

Tel. Cable

542.4

Existing I-75

Existing I-75

10.2%

81+00
545.6

603-9'-12" Type B Ductile Iron CL-53
37.4 A

88 D

06%

Tel. Cable

542.7

Existing I-75

Existing I-75

5-36" Comb.

80+50
546.2

16%

5-36" Comb.

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		80	23
42	11		
		82	19
47	10		
		86	24
46	16		
		83	26
44	12		

DEVELOPED	CHECKED

I-75 STA. 80+50 TO STA. 82+00

SEEDING		
ENG.	SQ. YDS.	
38		
8		
50		
11		
63		
12		

END AREA		VOLUME	
CUT	FILL	CU. YD.	CU. YD.
		110	4
		48	3
		89	11
		48	9
		85	21
		44	14

REGION	STATE	PROJECT	
2	OHIO		

182
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

Sta. 83+50, 72.5' Lt.
604 Ditch Inlet
FE Grate = 539.8
FE 12" = 536.8

Sta. 83+50, 65.5' Lt.
604 A-2 Inlet Mod As Per Plan
FE Grate = 640.11
FE = 536.60

Sta. 83+50, 51.5' Lt.
Exist MH
Rim Elev. = 540.70±
FE 12" (Prop.) = 534.00
FE 48" (Exist) = 520.23±

Sta 83+50 Lt
Begin 601 Type 2
Paved Gutter

30" Water

540.1

Tel. Cable

19%

20%

Existing I-75

Existing I-75

Note: See Retaining Wall #8

83+50
541.9

Sta. 83+50 Lt.
End 601 Type 1-2
Paved Gutter

603, 14'-12" Type "B"

603, 7'-12" Type B14
Ductile Iron ASA C1.53

38A

3.5%

Existing I-75

Existing I-75

540.8

Tel. Cable

83+00
542.9

48" Comb.

0.8%

Existing I-75

Existing I-75

541.2

Wall #8

Tel. Cable

Wall #3

82+50
543.6

48" Comb.

0.6%

I-75 STA. 82+50 TO STA. 83+50

SEEDING	
END WIDTH	SQ YDS
88	
4	
13	
1	
20	
6	

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

DES. OF DIVISION	TITLE	PROJECT	
2	OHIO		

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787

CALC. R.C. DATE 2/96
CHKD. R.C. DATE 3/96

HAM-75-0.03
HAM-126-13.00
HAMILTON COUNTY

END AREA		VOLUME	
CUT	FILL	CUT	FILL
		187	0
		102	0
		172	0
		84	0
		141	1
		71	1

570 560 550 540

Drive Pavt.
541.5
30" Water
Tel. Cable
Existing I-75
85+00
540.4
Existing I-75
12" Storm
12" Conduit
48" Comb.

0.2%

570 560 550 540

541.0
30" Water
Tel. Cable
Existing I-75
84+50
540.8
Existing I-75
12" Storm
12" Conduit
48" Comb.

1.6%

570 560 550 540

540.2
Wall #8
Tel. Cable
Existing I-75
84+00
541.2
Existing I-75
12" Storm
Wall #3
12" Conduit
48" Comb.

0.2%

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

DEVELOPED	CHECKED

I-75 STA 84+00 TO STA 85+00

SEEDING
ONE WIDTH | SQ. YDS

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

CALC. R.C. DATE 2/96
CHK'D J.C. DATE 2/96

REV. TO DIVISION	NO.	CONNECT
2	DATE	

184
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

END AREA | VOLUME
CUT | FILL | CUT | FILL

0

570
560
550
540
530

Reloc Mill Creek
Existing I-75
Existing I-75
Future Channel-By Others
30" Water
12" Storm
12" Conduit

86+50
538.6
BACK

56 0

0

570
560
550
540
530

Interceptor To Be Removed
Existing I-75
Existing I-75
30" Water
12" Storm
MC Collar
12" Storm
12" Conduit
48" Storm
12"
Slope To Be Established In Field

86+00
539.3

85 0

1

570
560
550
540
530

Existing I-75
Existing I-75
Inlet To Be Removed
Wall #3
30" Water
Wall #8
12" Conduit

85+50
540.3

100 0

28

48" Storm

Sta. 85+30 Lt.
End 601 Type 2
Paved Gutter

81

570 560 550 540 530

131 0

570 560 550 540 530

171 0

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

DEVELOPED		CHECKED	
C.E.S.	4-70	S.W.B.	4-71

I-75 STA 85+50 TO STA 86+50

SEEDING	
END WIDTH	SQ YDS

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

CALC R.C. DATE 2/86

CHECK G.C. DATE 3/86

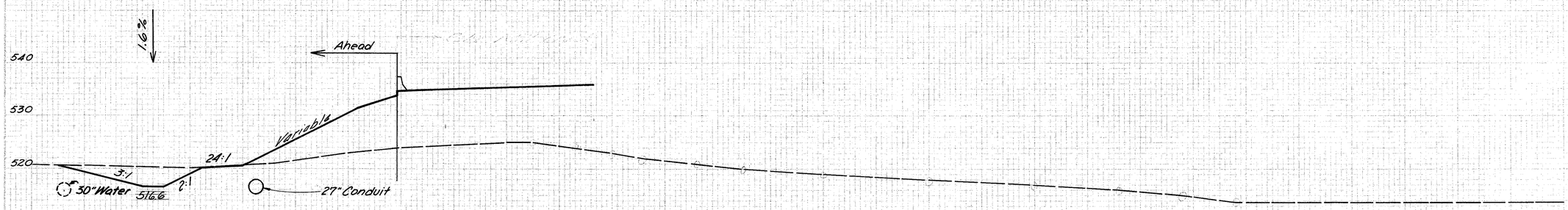
FED DIVISION	STATE	PROJECT	
5	OHIO		

184-A
787

HAM - 75 - 9.93
HAM - 126 - 13.00
HAMILTON COUNTY

END AREA		VOLUME	
CUT	FILL	CUT	FILL

202



536.20
88+24
519.0
AHEAD

52 186

60 158

69

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120

DEVELOPED	CHECKED

I-75 STA 88+24

FED. RD. DISTRICT	STATE	PROJECT
2	OHIO	

184-B
187

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

Design R.L. Date 2/86
Quantities J.C. Date 3/86

SEEDING

END WIDTH	SQ. YDS.
0	
0	
0	
0	
0	
0	

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

Existing I-75 Existing I-75

Ramp C

Wall #2

540 530 520 510

27" Conduit

48" San.

12" Conduit

89+50
535.1

Ramp C

Existing I-75 Existing I-75

540 530 520 510

27" Conduit

48" San.

89+00
535.2

I-75 Back
Ramp C I-75
Ahead Ahead

2.7%

540 530 520 510

2:1 24:1 3:1 2:1

30" Water

517.0

27" Conduit

Future Channel by Others

Ahead
Back

88+50
524.0

16%

Bk 71 Only

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

DEVELOPED CHECKED

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		20	0
		25	0
14	0		
		13	0
		23	0
14	0		
49	228		

I-75 STA. 88+50 TO STA. 89+50

184-B-1

SEEDING	
END WIDTH	SQ. YDS.
16	100
13	81
0	36
0	0
0	0
0	0

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

Ramp C — 0.4 % — Existing I-75

540 / 530 / 520

6:1 6:1 — 532.6

91+50
534.3

Ramp C — 0.4 % — Existing I-75

540 / 530 / 520

8:1 8:1 — 532.8

91+00
534.1

Ramp C — 0.4 % — Existing I-75

540 / 530 / 520

90+50
534.0

Ramp C — Existing I-75

540 / 530 / 520

90+00
534.1

48" San.

See Ramp C — Wall #2 — Existing I-75

540 / 530 / 520

89+88.00
534.1

48" San.

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

DEVELOPED		CHECKED	
C.E.S.	4-70	E.W.R.	11-71

SEQ. NO.	REVISION	SCALE	PROJECT		
2		OHIO			

185
787

R.C. 2/86
C.P.C. 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

ELEV.	AREA CUT	AREA FILL	VOLUME CUT	VOLUME FILL
520	15	6	30	19
540			28	7
530				
520	15	2		
540			31	2
530				
520	13	0		
540			31	0
530				
520	15	0		
540			7	0
530				
520	15	0		

I-75 STA. 89+88.00 TO STA. 91+50

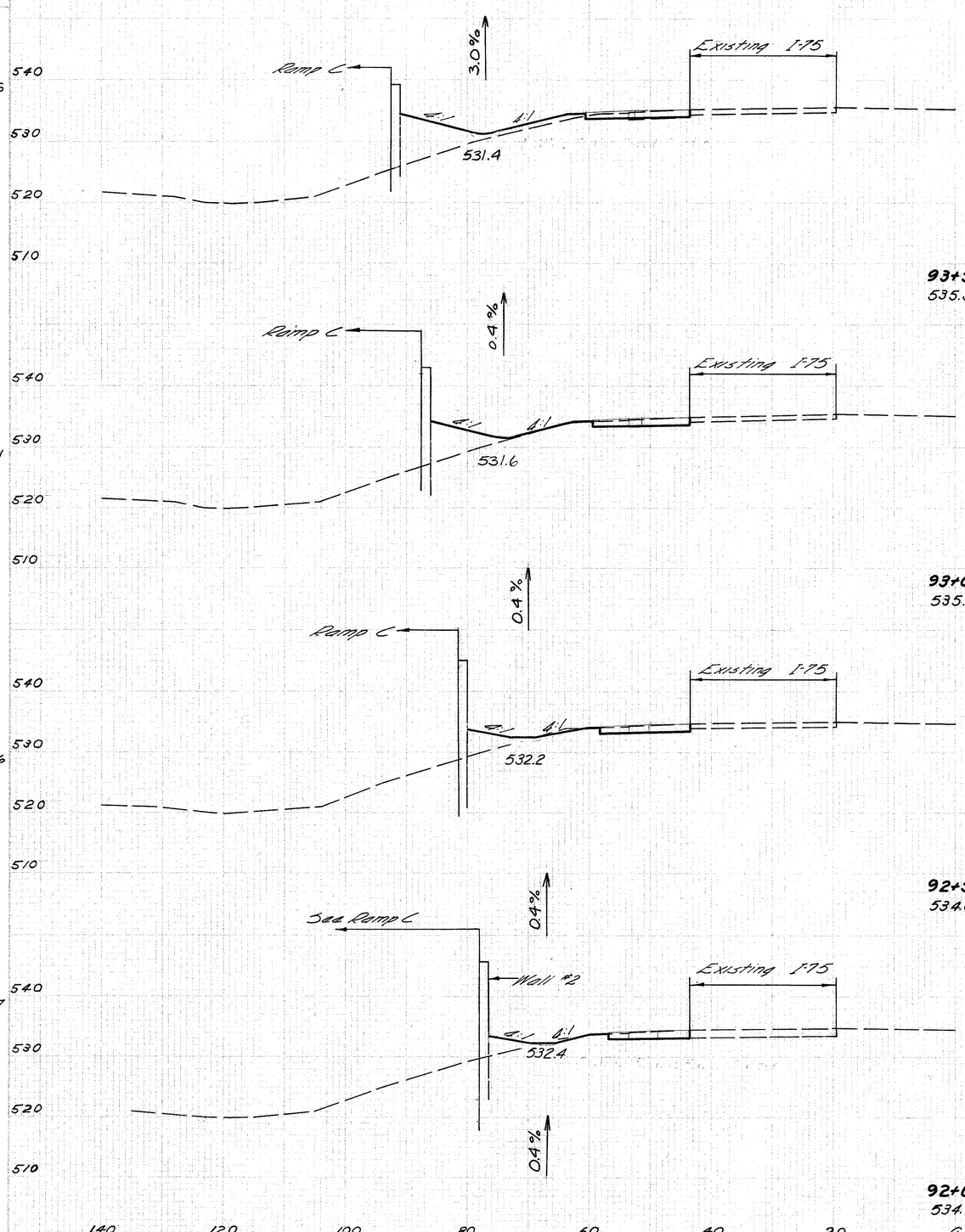
SEEDING		
END WIDTH	SQ YDS	
156	31	
161	27	
136	22	
117	20	

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

℄ R.C. 2/186
℄ J.C. 3/186

FED. RD. DIVISION	STATE	PROJECT		186 187
5	OHIO			

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



END AREA		VOLUME	
CUT	FILL	CUT	FILL
		32	101
17	75		
		32	110
18	44		
		36	59
21	20		
		35	31
17	14		

DEVELOPED	CHECKED

I-75 STA 93+00 TO STA 93+50

SEEDING

END WIDTH	SQ. YDS.
392	77
351	56
263	39
178	24

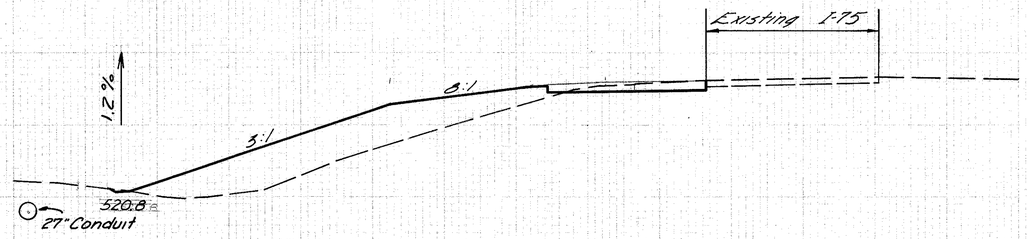
140 120 100 80 60 40 20 ℄ 20 40 60 80 100

R.C. 2/86
Const. J.C. 3/86

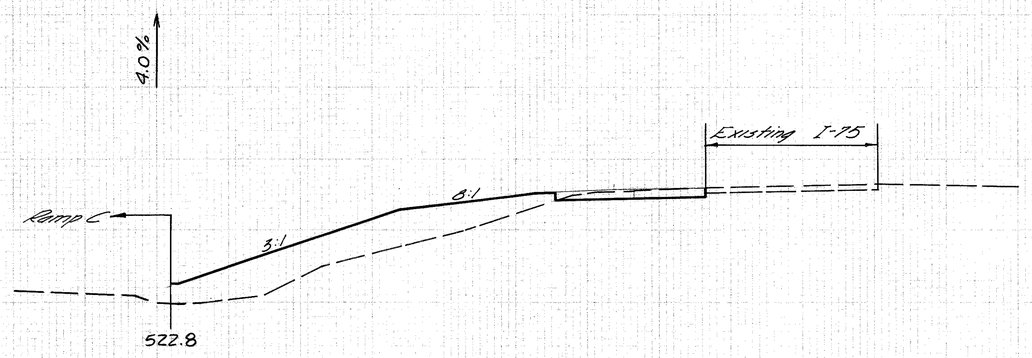
REVISIONS	DATE	BY
2	OHIO	

187
787

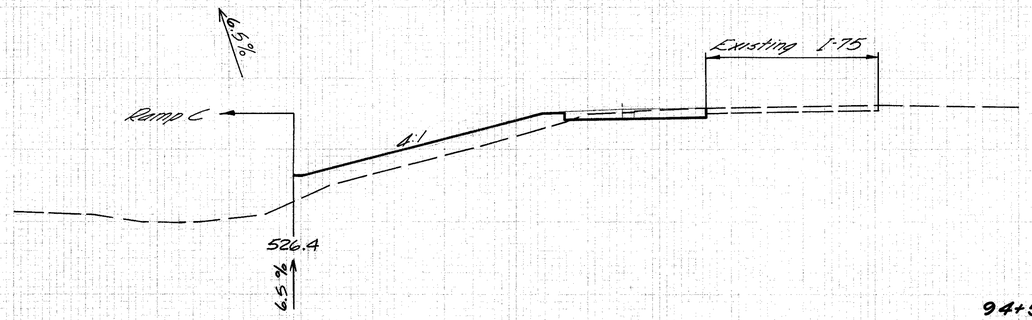
HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY



95+50
536.4



95+00
536.1



94+50
535.9

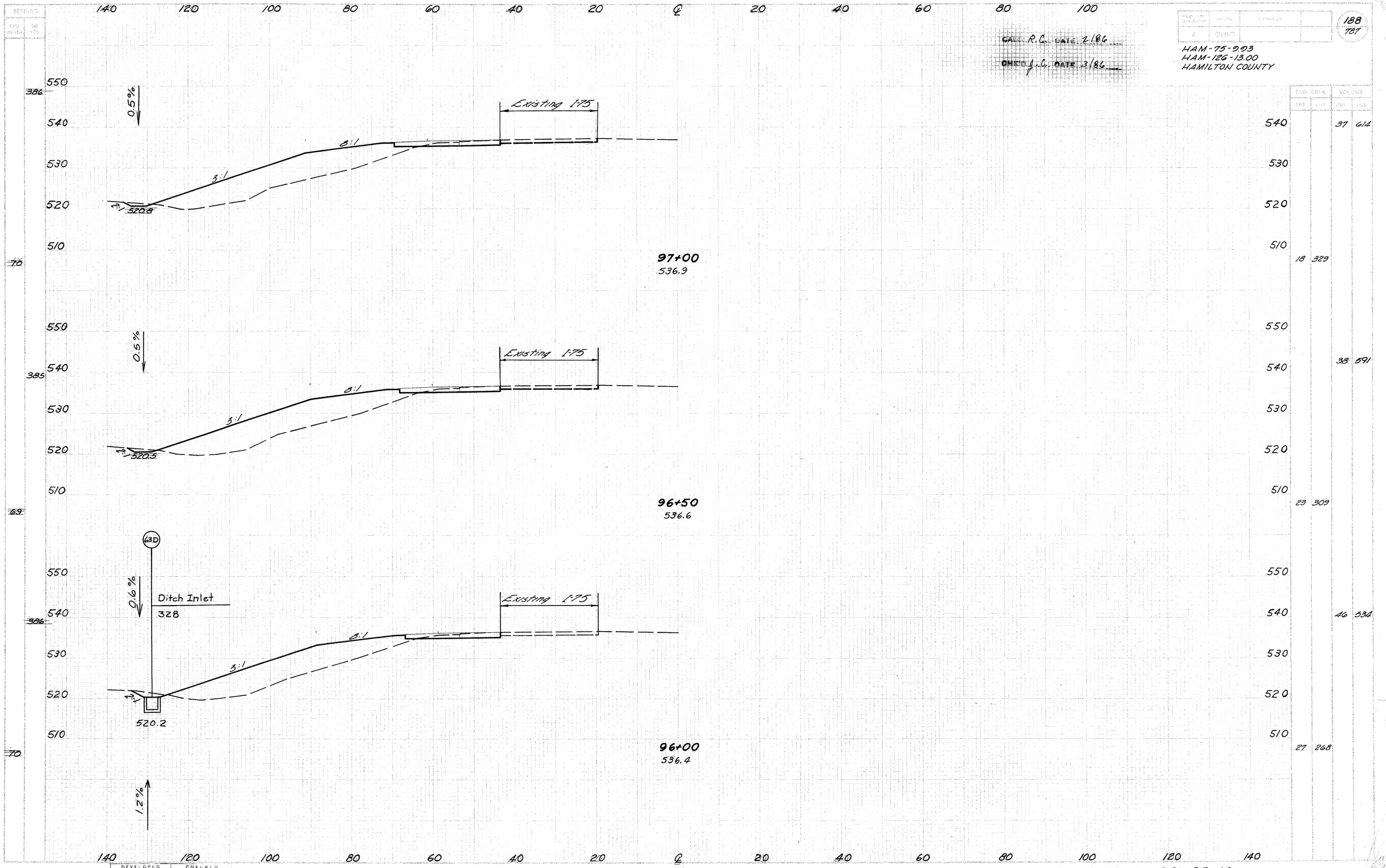
94+00
535.6

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		43	471
19	221		
		38	423
22	216		
		36	278
17	84		
		32	109
18	34		

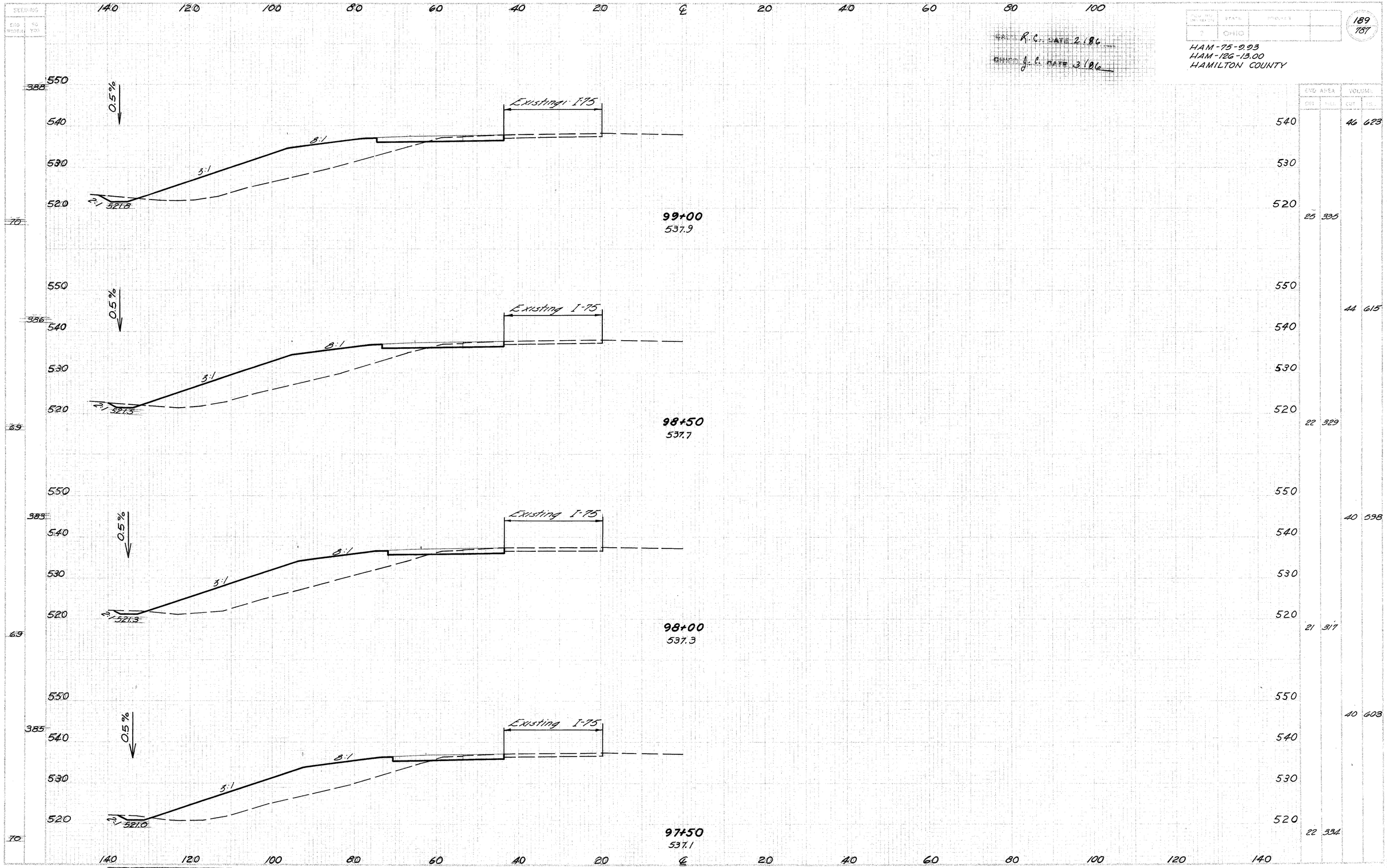
530 520 510 550 540 530 520 510 540 530 520 510 540 530 520

DEVELOPED | CHECKED

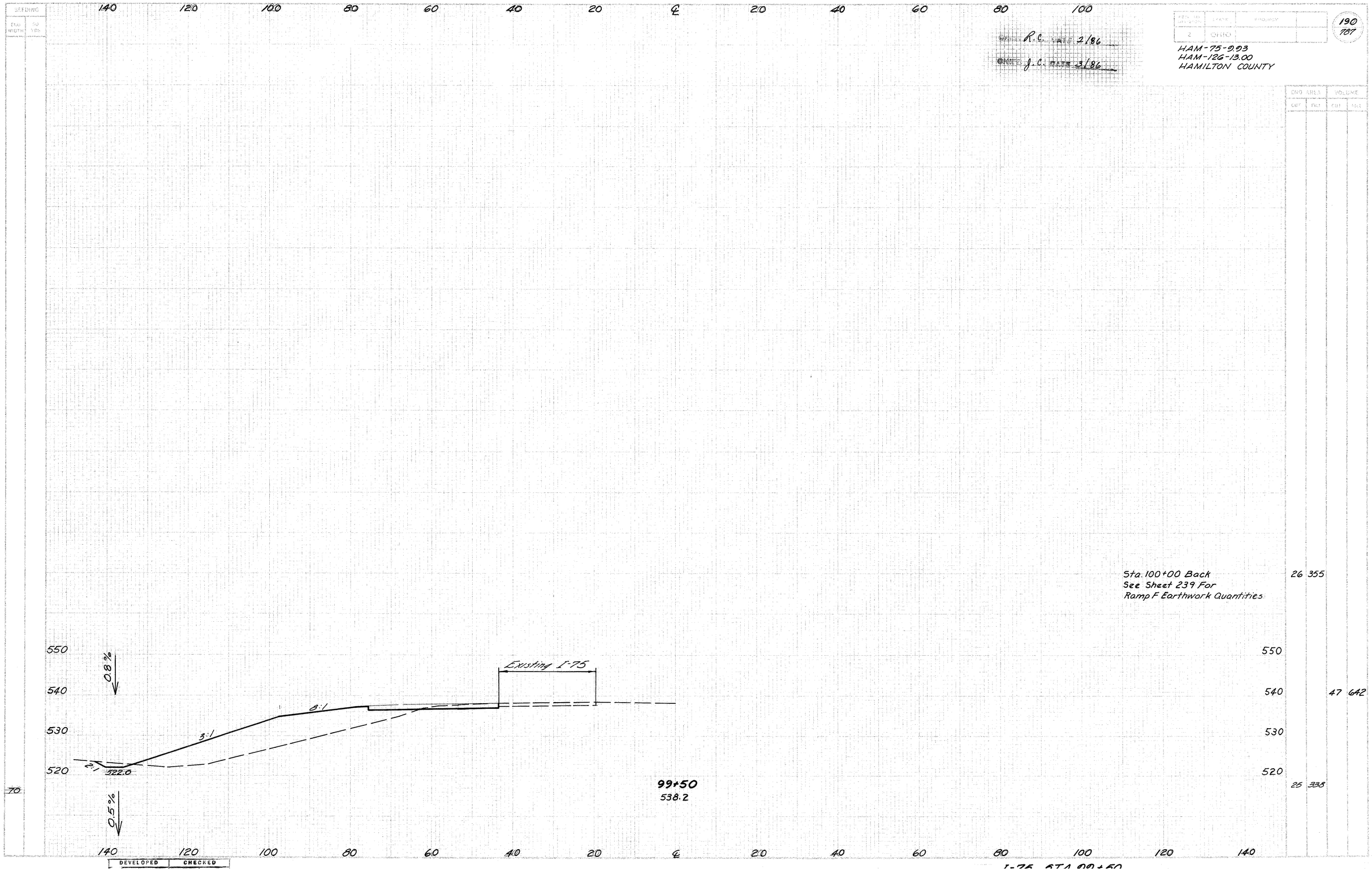
I-75 STA 94+00 TO STA 95+50



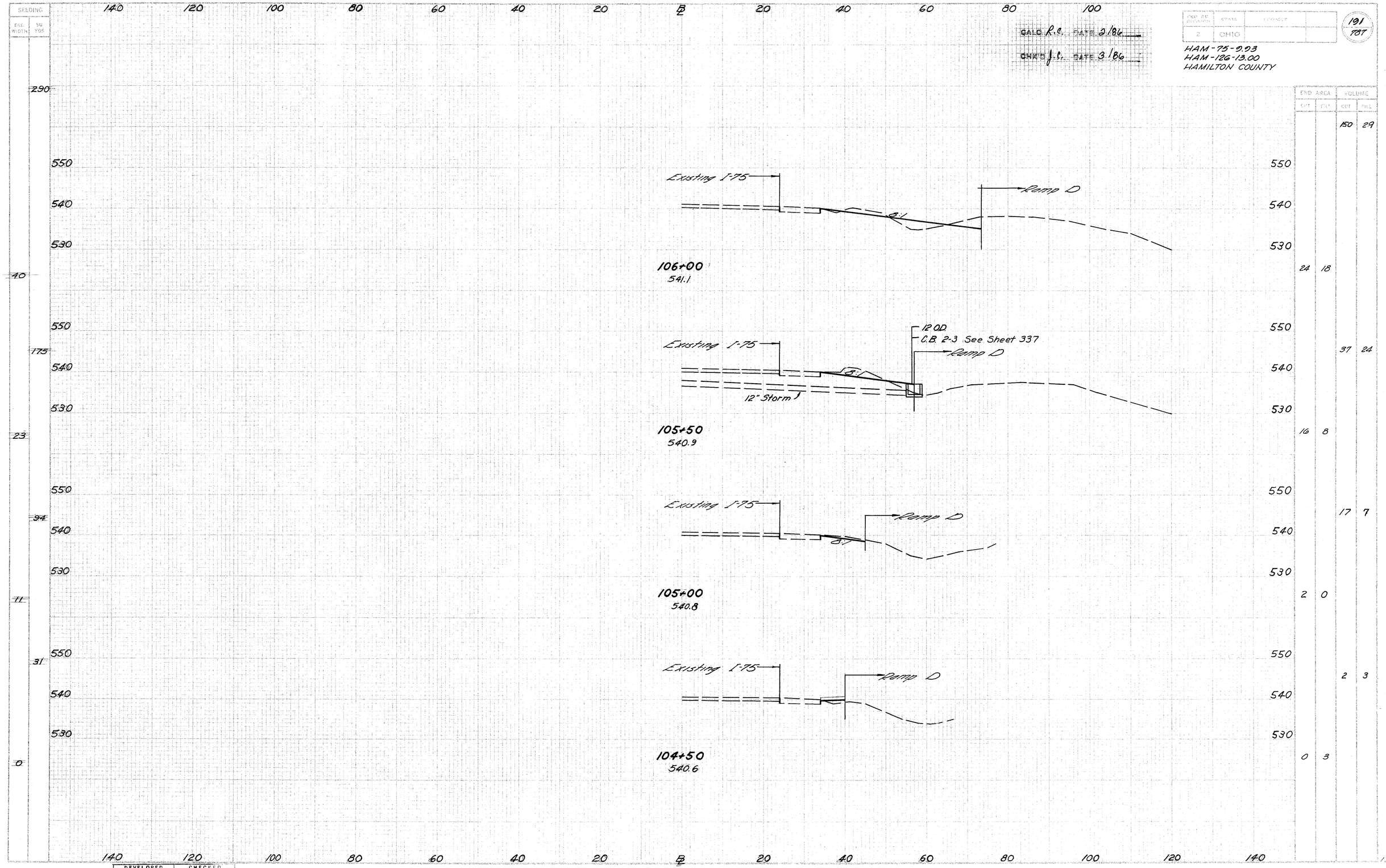
CALC. R.C. DATE 2/86
CHKD J.C. DATE 3/86
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
188
787
Existing I-75
0.5%
8:1
3:1
2:1
520.8
97+00
536.9
520.5
96+50
536.6
63D
0.6%
Ditch Inlet
328
520.2
96+00
536.4
1.2%
END AREA
VOLUME
CUT
FILL
37 614
18 329
38 591
23 309
46 534
27 268
I-75 STA 96+00 TO STA 97+00



SEEDING
END WIDTH
SQ YDS
140 120 100 80 60 40 20 ℄ 20 40 60 80 100
CALC. R.C. DATE 2/86
CHKD. J.C. DATE 3/86
STATE
OHIO
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
189
787
END AREA
VOLUME
CUT
FILL
550
540
530
520
388
70
386
69
383
385
0.5%
Existing I-75
8:1
3:1
2:1
521.8
521.3
521.0
99+00
537.9
98+50
537.7
98+00
537.3
97+50
537.1
25 335
46 623
44 615
22 329
40 598
21 317
40 603
22 334
DEVELOPED
CHECKED
I-75 STA 97+50 TO STA 99+00



SEEDING
END WIDTH
SQ YDS
140 120 100 80 60 40 20 ℄ 20 40 60 80 100
R.C. DATE 2/86
J.C. DATE 3/86
2 OHIO
190
787
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
END AREA
VOLUME
CUT FILL CUT FILL
Sta. 100+00 Back
See Sheet 239 For
Ramp F Earthwork Quantities
26 355
47 642
25 338
550
540
530
520
0.8%
0.5%
Existing I-75
8:1
3:1
2:1
522.0
99+50
538.2
70
140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140
DEVELOPED
CHECKED
I-75 STA 99+50



SEEDING
END WIDTH
SQ YDS
140 120 100 80 60 40 20 ℄ 20 40 60 80 100
GALC R.C. DATE 2/86
CHK'D J.C. DATE 3/86
FED RD DIVISION 2
STATE OHIO
PROJECT
191
787
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
290
550
540
530
40
175
23
94
11
31
0
Existing I-75
Ramp D
8:1
106+00
541.1
12 O.D.
C.B. 2-3 See Sheet 337
12" Storm
105+50
540.9
105+00
540.8
104+50
540.6
END AREA
CUT
FILL
VOLUME
CUT
FILL
150 29
24 18
37 24
16 8
17 7
2 0
2 3
0 3
DEVELOPED
CHECKED

SEEDING	
END WIDTH	SQ YDS
135	935
175	858
135	639
96	444
65	

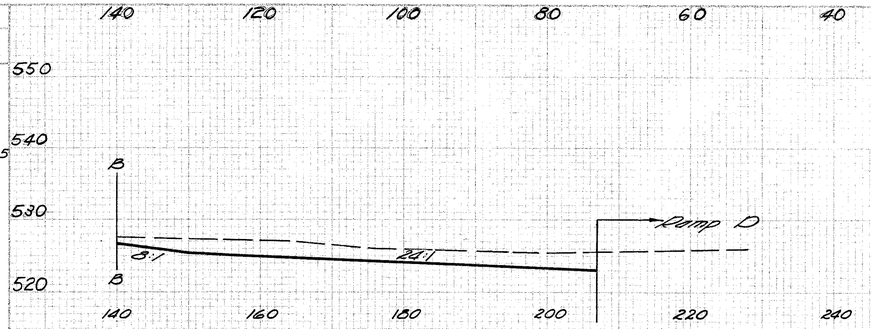
FED RD SECTION	STATE	PROJECT	
2	OHIO		

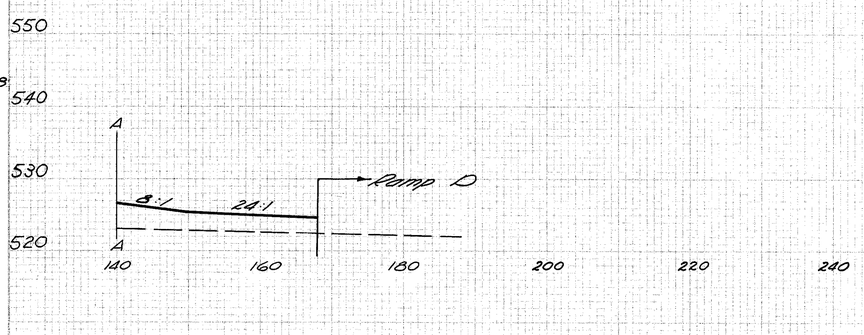
192
787

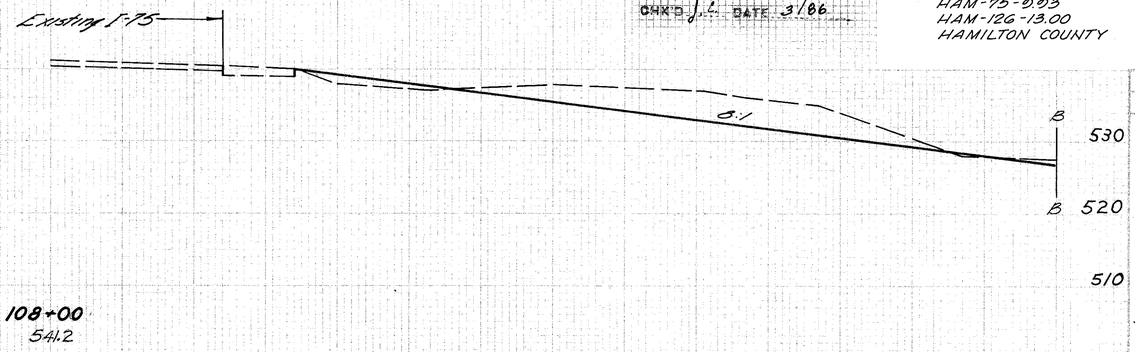
HAM-75-0.03
HAM-126-13.00
HAMILTON COUNTY

CALC. R.C. DATE 2/86

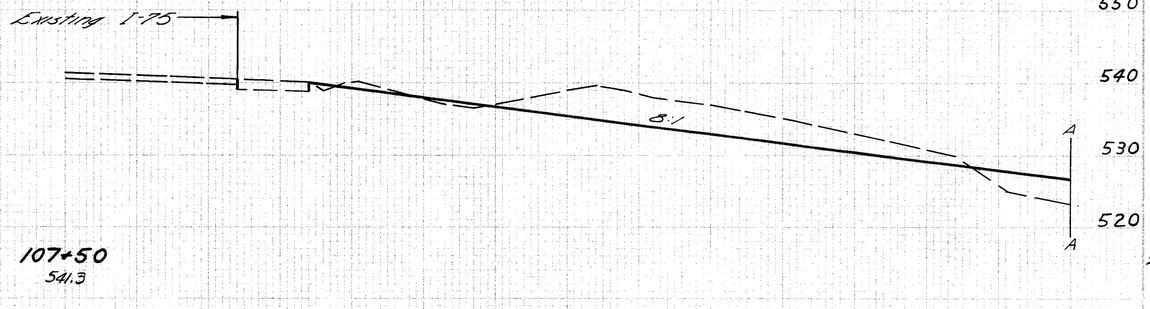
CHK'D J.L. DATE 3/86



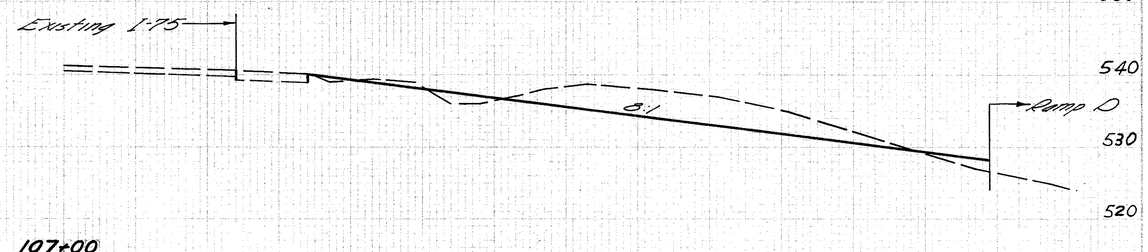




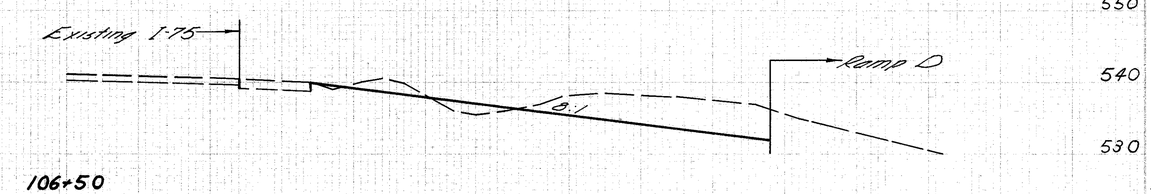
108+00
541.2



107+50
541.3



107+00
541.2



106+50
541.1

END AREA		VOLUME	
CUT	FILL	CUT	FILL
		812	18
		313	19
		498	141
		225	193
		357	144
		161	22
		277	32
		138	13

DEVELOPED		CHECKED	

NB I-75 STA 106+50 TO STA 108+00

CALC. A.L. DATE 2/86

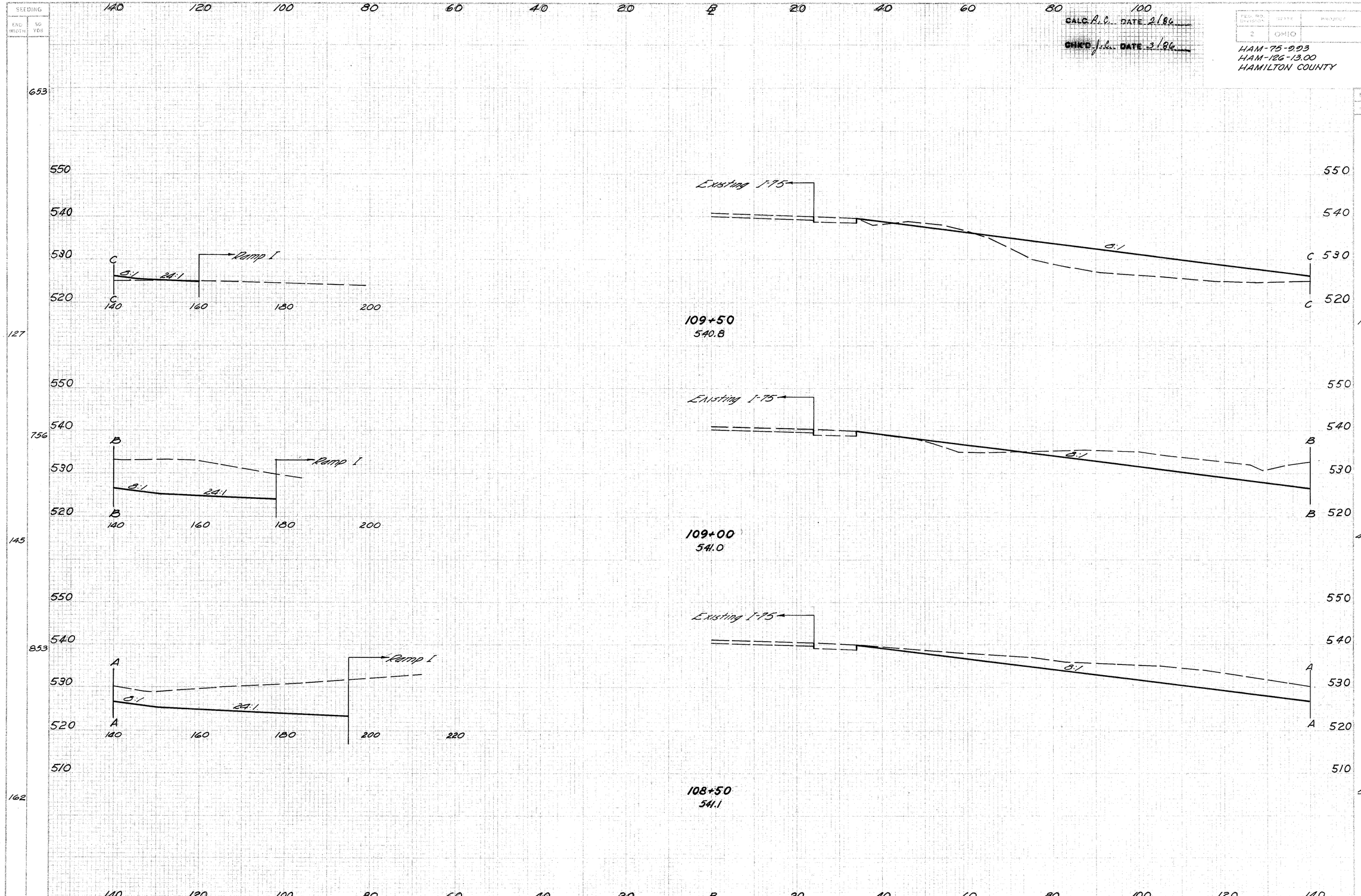
CHKD. J.L. DATE 3/86

FED. ROAD DIVISION	STATE	PROJECT	
2	OHIO		

193
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

SEEDING		END AREA		VOLUME	
END WIDTH	SQ YDS	CUT	FILL	CUT	FILL
				14	543
127	653	12	299		
145	756	11	27	471	27
162	853	9	25	958	25
		5	0	564	0



DEVELOPED	CHECKED

I/R I-75 STA 108+50 TO STA 109+50

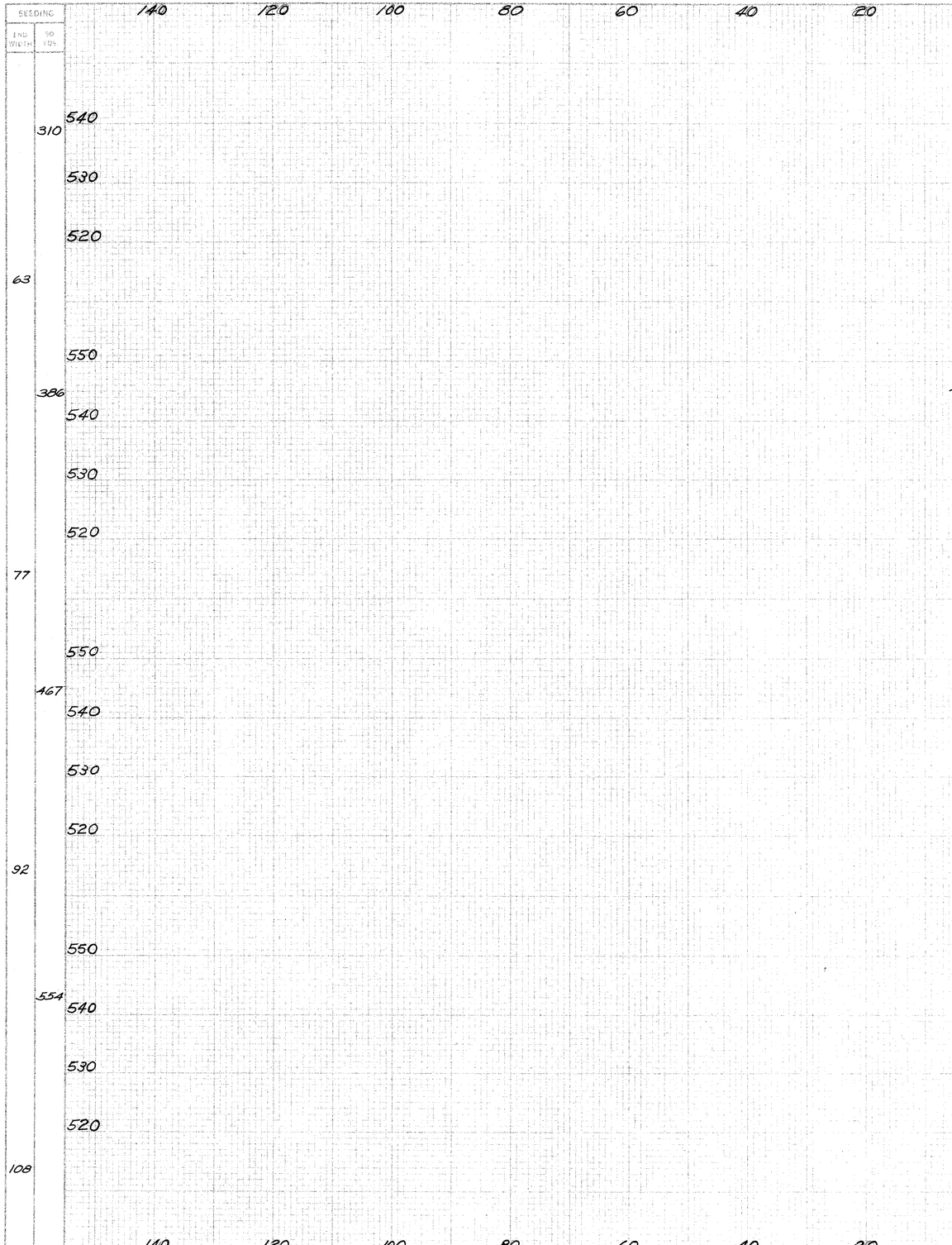
FED. ROAD DIV. NO.	STATE	PROJECT		194 787
5	OHIO			

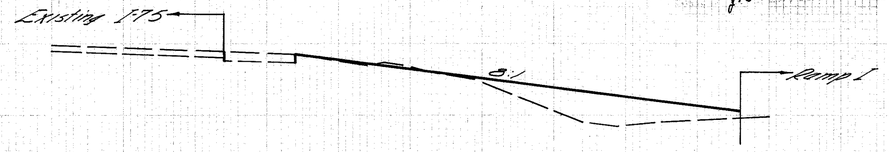
CALC R.C. DATE 2/86
J.C. DATE 3/86

HAM-75-0.93
HAM-126-13.00
HAMILTON COUNTY

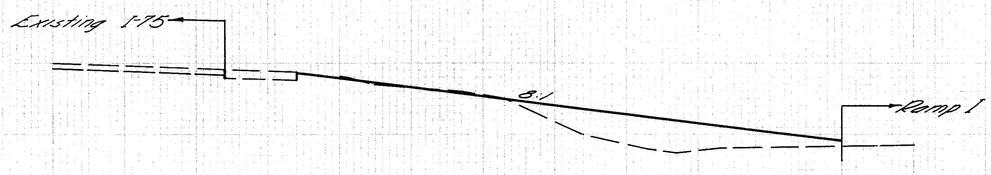
156 Yellow
194-265

SEEDING END WIDTH	SEEDING SQ YDS
63	310
77	386
92	467
108	554

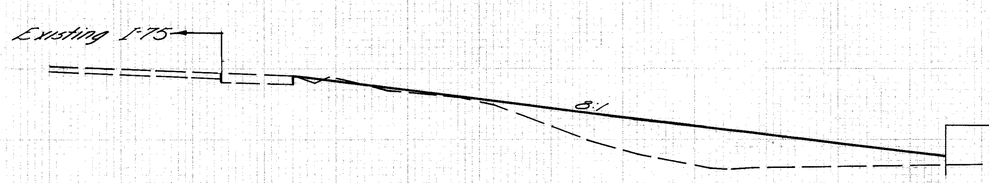




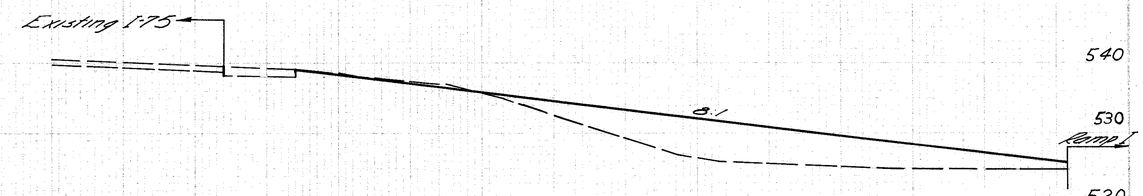
111+50
539.8



111+00
540.0



110+50
540.3



110+00
540.5

	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
530			2	168
520				
	2	108		
550				
540			3	228
530				
520				
	1	198		
550				
540			3	349
530				
520				
	2	239		
550				
540			5	487
530				
520				
	3	287		

DEVELOPED | CHECKED

NB I-75 STA 110+00 TO STA 111+50

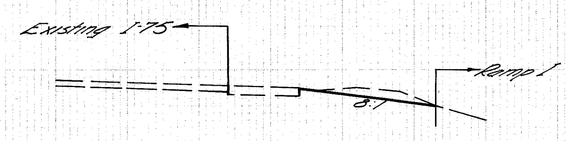
SEEDING	
END WIDTH	SQ YDS
19	92
26	125
33	164
40	203
49	247

CALC R.C. DATE 2/86
CHKD J.C. DATE 3/86

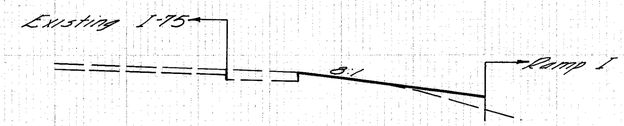
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

195 TBT

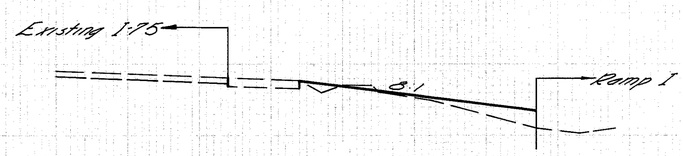
HAM-75-2.93
HAM-126-13.00
HAMILTON COUNTY



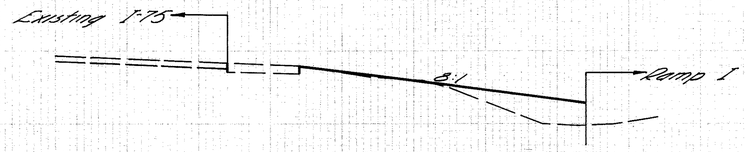
114+00
538.5



113+50
538.8



113+00
539.0



112+50
539.3



112+00
539.5

END AREA		VOLUME	
CUT	FILL	CUT	FILL
		13	10
14	0		
		13	11
0	12		
		1	37
1	28		
		1	71
0	49		
		0	113
0	73		

DEVELOPED	CHECKED

N.B. I-75 STA 112+00 TO STA. 114+00

ENG. DIV.	STATE	PROJECT	
2	OHIO		

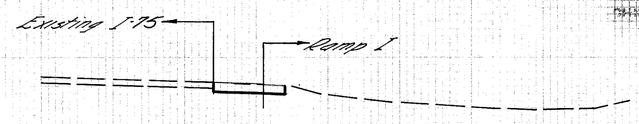
196
787

HAM-75-2.93
HAM-126-13.00
HAMILTON COUNTY

CALC. R.C. DATE 2/86

CHECK J.C. DATE 3/86

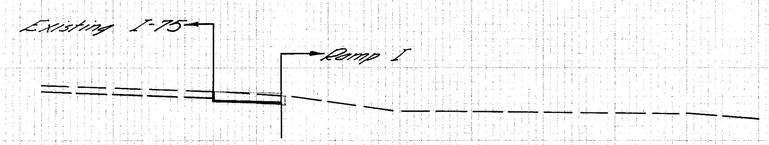
SEEDING			END AREA		VOLUME	
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
		140 120 100 80 60 40 20 **℄** 20 40 60 80 100				
	0	540				
		530				
0						
	0	540				
		530				
0						
	0	540				
		530				
AH. 0						
BK 0						
	25	540				
		530				
9						
	64	540				
		530				
14						
		140 120 100 80 60 40 20 **℄** 20 40 60 80 100 120 140				



116+50
537.3

530

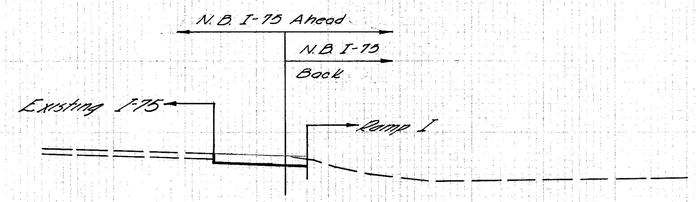
9 0 14 0



116+00
537.5

540
530

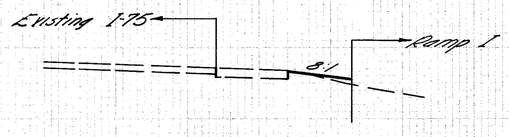
13 0 20 0



115+50
537.7

540
530

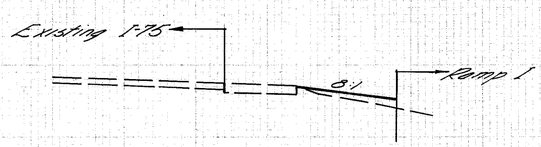
Ahead 16 0 27 0
Back 3 0



115+00
538.0

540
530

0 2 3 2



114+50
538.3

540
530

0 11 0 12

NB I-75 STA 114+50 TO STA 116+50

SEEDING	
END WIDTH	SQ. YDS.
174	32
168	29
161	29
182	37
AH	37
BK	0
	0
	0

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

CALC. R.L. DATE 2/86
CHK'D J.L. DATE 3/86

FED. ROAD DIVISION	STATE	PROJECT	
2	OHIO		

197
787

HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY

Existing I-75

Channel

6:1

119+00
538.7

2:1

Rip Rap Using 8" Reinf. Conc. Slab

Ex. 54" San.

Channel
516.54

Existing I-75

6:1

118+50
538.1

Ex. 54" San.

Existing I-75

7:1

118+00
537.7

I-75 Ahead

I-75 Back

Ex. 54" San.

Existing I-75

Channel

8:1

117+50
537.4

2:1

Ex. 54" San.

516.04

Existing I-75

Ramp I

117+00
537.2

Ex. 54" San.

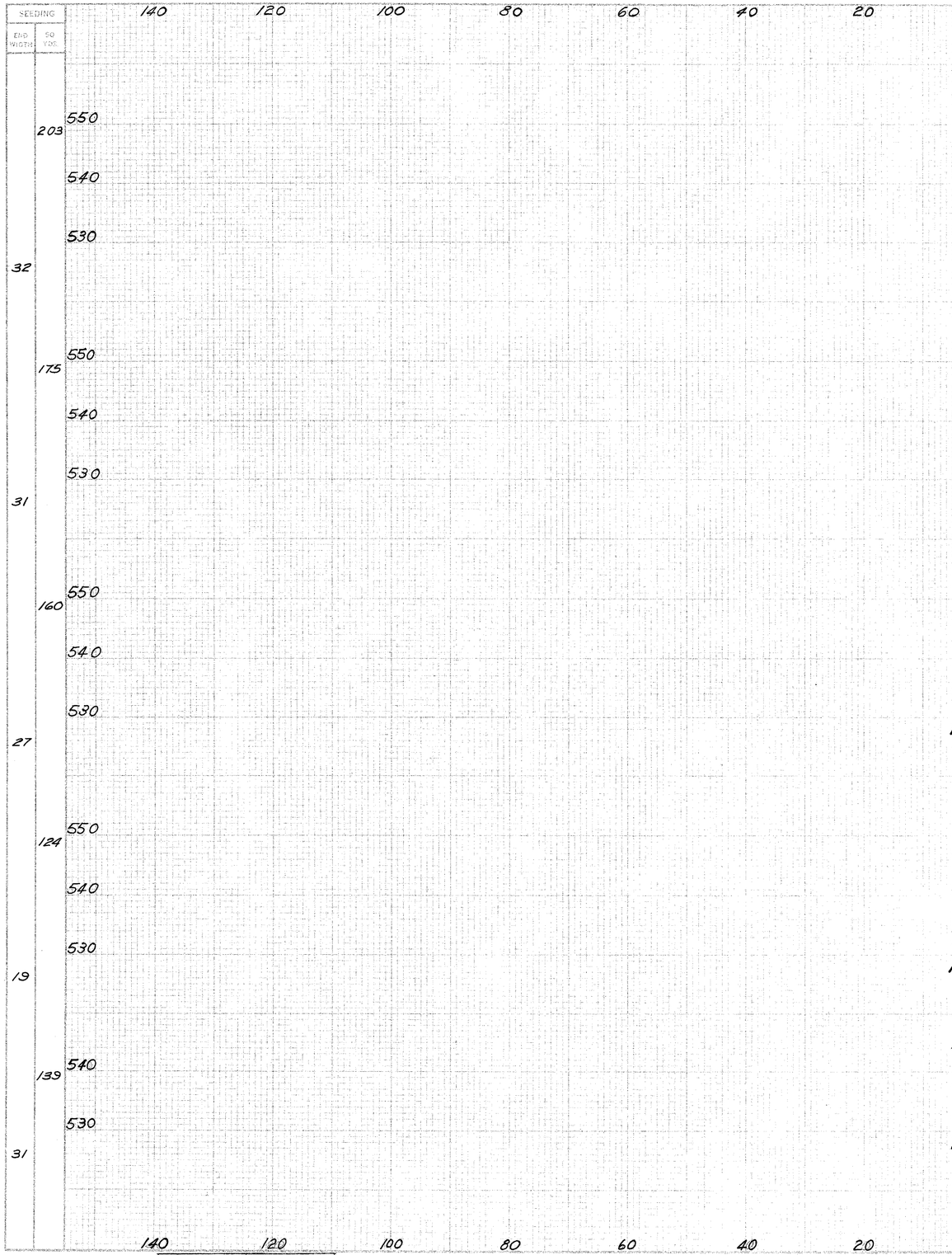
	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
530			35	61
℄ EB 126	16	40		
Channel	0	108		
			36	62
540				
530				
℄	23	27		
Channel			0	561
			38	57
540				
530				
℄	18	35		
			33	71
540				
530				
℄ EB 126				
Ahead	18	42		
Back	6	0		
Ahead Channel	0	94		
			11	0
540				
530				
	6	0		

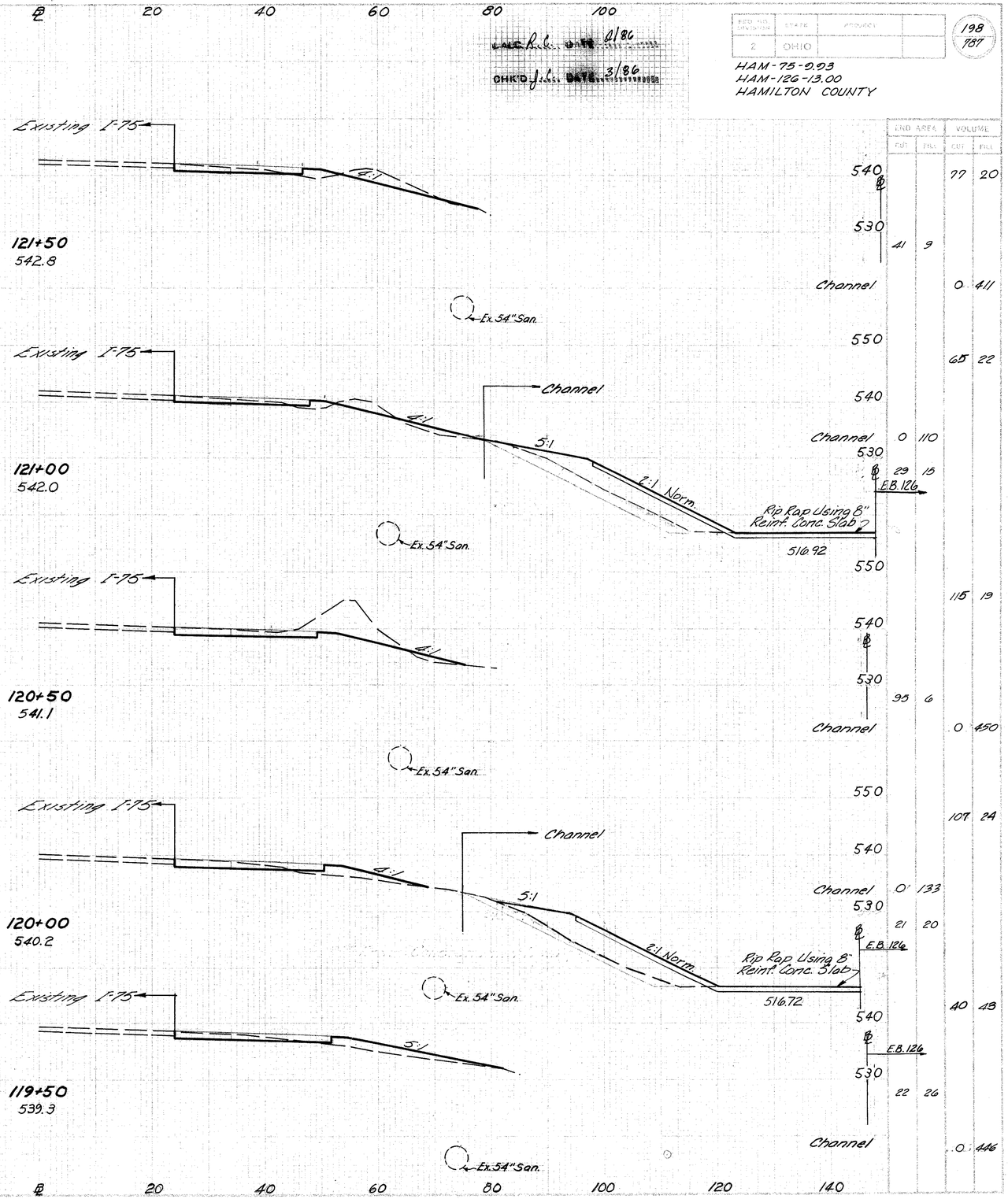
For Channel Earthwork Quantities See Sheet #266

DEVELOPED | CHECKED

N.B. I-75 STA 117+00 TO STA 119+00

SEEDING	
END WIDTH	SQ YDS
32	203
31	175
31	160
27	124
19	139
31	





DEVELOPED	CHECKED

FED. ROAD DIV. NO.	STATE	PROJECT	
2	OHIO		

198
187

HAM-75-0.03
HAM-126-13.00
HAMILTON COUNTY

CALC. R.C. DATE 4/86
CHK'D J.L. DATE 3/86

NB I-75 STA 119+50 TO STA 121+50

SEEDING	
ENG. WIDTH	SQ. YDS.
183	
34	
228	
48	
258	
46	
246	
43	
239	
41	

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

FED. ROAD DIVISION	STATE	PROJECT
2	OHIO	

199
787

HAM-75-0.93
HAM-126-13.00
HAMILTON COUNTY

R.L. DATE 2/86
J.L. DATE 3/86

124+00
547.4

Existing I-75
Channel
4:1
2:1 Norm.
Rip Rap Using 8" Reinf. Conc. Slab
54" San.
517.51
EB 126

123+50
546.6

Existing I-75
4:1
54" San.

123+00
545.6

Existing I-75
Channel
4:1
54" San.
517.32
EB 126

122+50
544.7

Existing I-75
4:1
54" San.

122+00
543.7

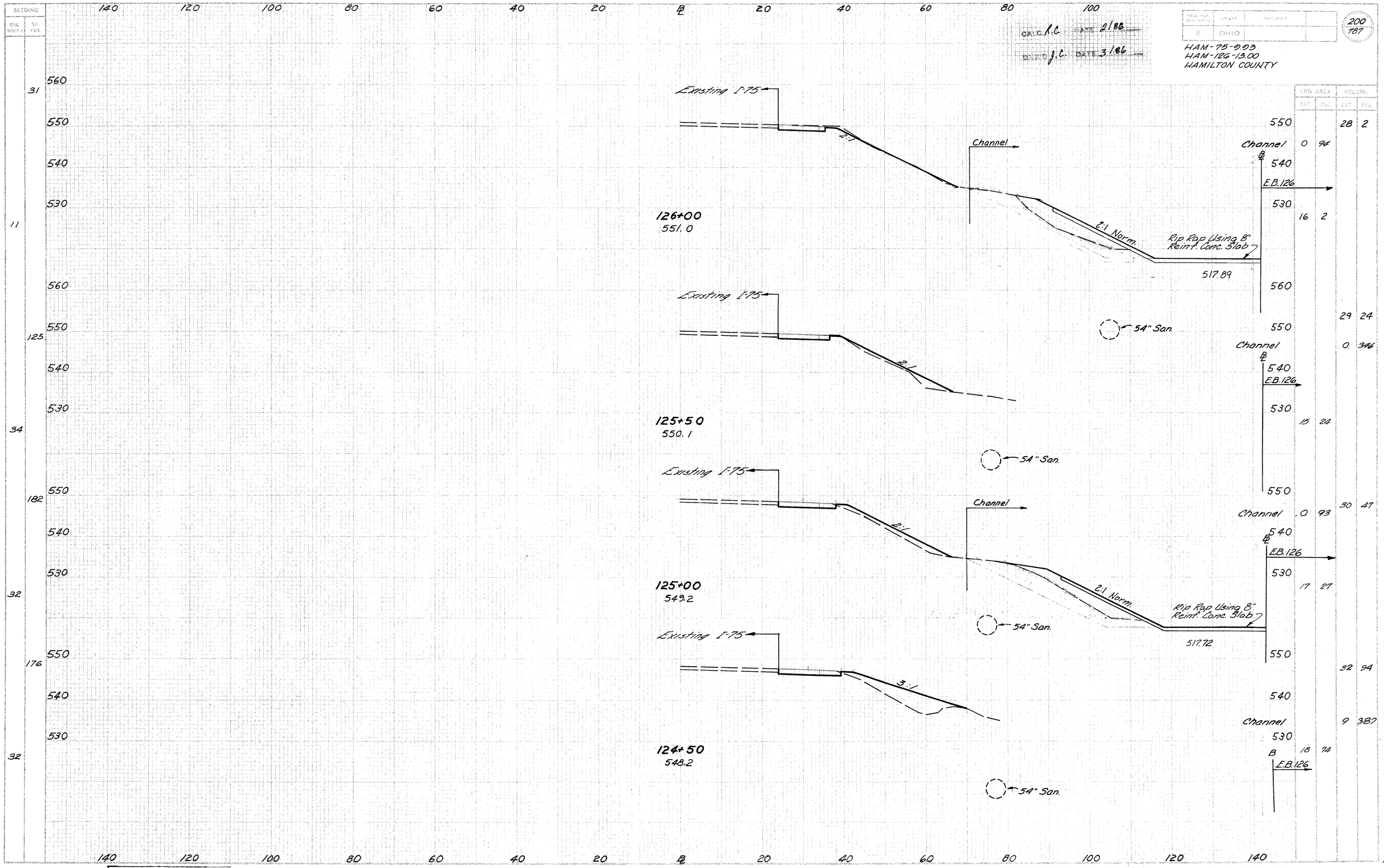
Existing I-75
Channel
4:1
Var.
2:1 Norm.
54" San.
517.11
EB 126

	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
540			42	144
Channel	3	116		
530				
℄	27	82		
EB 126				
550			42	180
540				
EB 126				
℄				
530				
	18	91		
Channel			9	388
550				
	21	191		
540				
Channel	0	94		
530				
℄	5	115		
EB 126				
550			21	202
540				
℄				
EB 126				
530				
	18	103		
Channel			0	381
550			56	109
540				
Channel	0	112		
530				
EB 126				
℄	42	13		

DEVELOPED	CHECKED
	11-12 | 11-21

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

NB I-75 STA 122+00 TO STA 124+00



DEVELOPED | CHECKED

NB I-75 STA 124+50 TO STA. 126+00

SEEDING	
EIRI WIDTH	SQ YDS
	0
	0
	0
	0
	0

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

CALC R.L. DATE 2/86

CHKD J.L. DATE 3/86

PROJECT			
DIVISION	STATE	PROJECT	
2	OHIO		

201
787

HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY

Existing I-75

NOTE: For Continuation of Mill Creek Channel See Sheet 201-A.

54" San.

ZERO SECTION
127+39.00
553.7

560 550 540 530

℄ EB126

Back 0 0

Existing I-75

Channel

Channel .0 181

560 550 540 530

℄ EB 126

12 0

2:1 Norm.

Rip Rap Using 8" Reinf. Conc. Slab

54" San.

518.09

127+00
552.8

Channel .0 509

560 550 540 530

℄ EB 126

24 0

14 0

Existing I-75

54" San.

126+50
552.0

END AREA: CUT | FILL
VOLUME: CUT | FILL

560 9 0

550

DEVELOPED	CHECKED

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

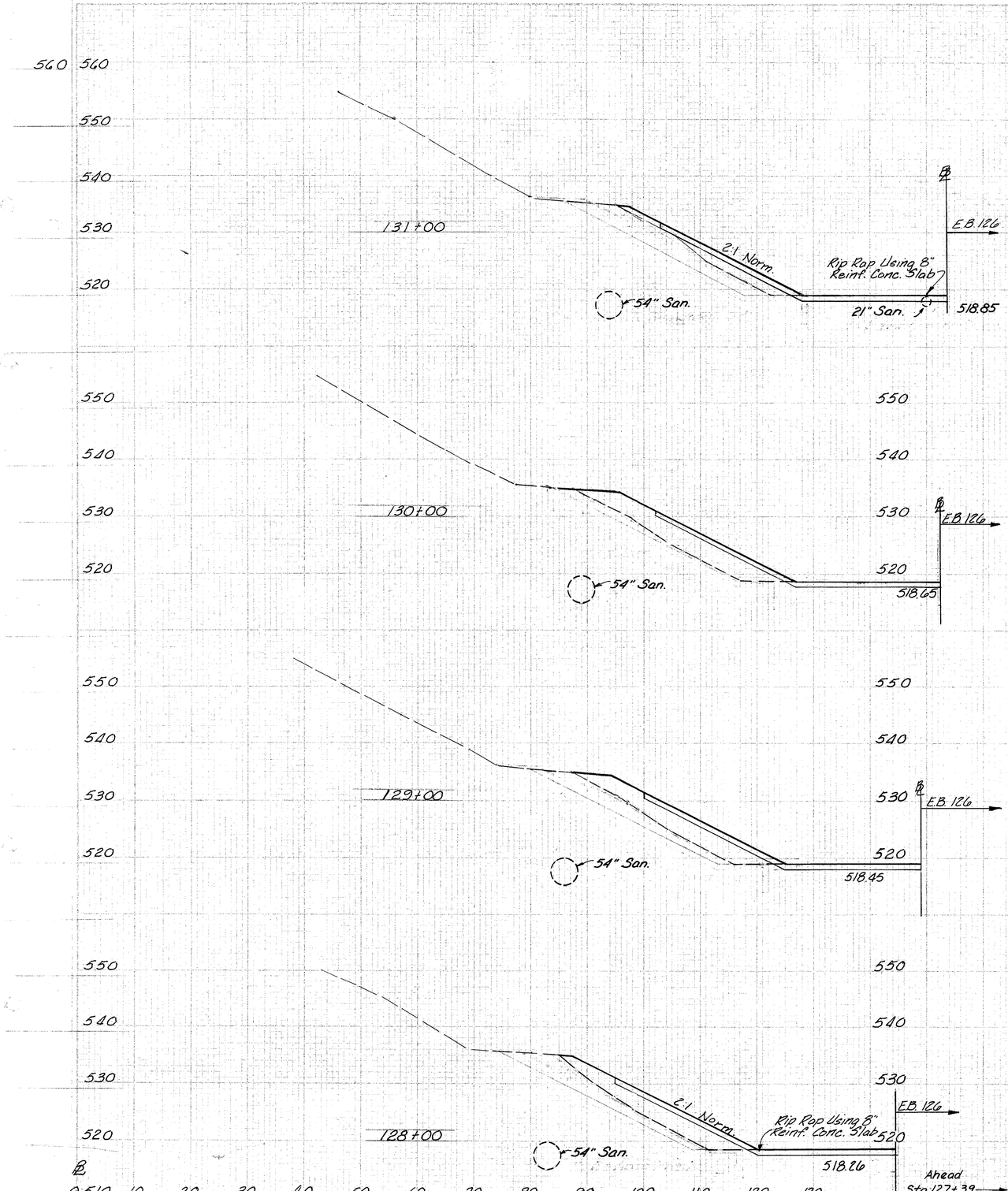
L/R I-75 STA 126+50 TO STA 127+39.00

CALC. R.C. DATE 2/86
CHKD J.C. DATE 3/86

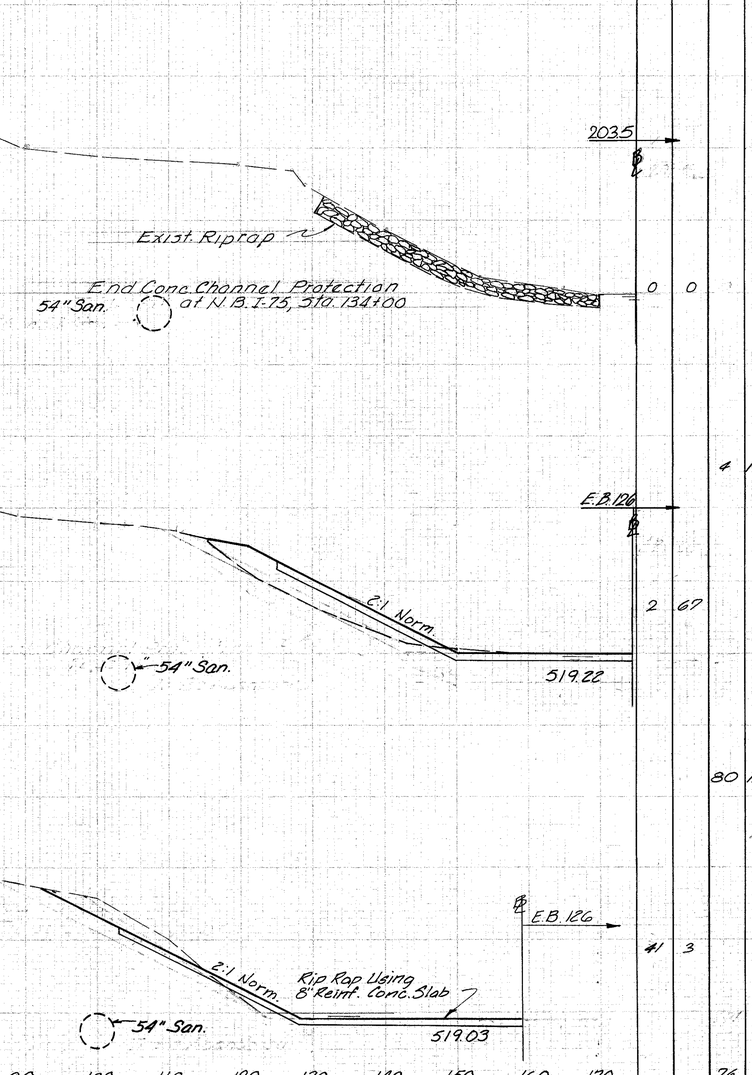
PROJECT DESIGNATION	SHEET	TOTAL SHEETS	
2	OHIO		

201-A
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



End Area Fill	End Area Fill	Vol.
		60
	550	365
	540	
	530	137
	520	
	518.65	
	550	480
	540	
	530	122
	520	
	518.45	
	550	422
	540	
	530	106
	520	
	518.86	
	Ahead Sta 127+39	0



End Area Cut	End Area Fill	Volume Cut	Volume Fill
0	0		
		4	124
2	67		
		80	130
41	3		
		76	117

DESIGN | DRAWN | CHECKED | QUANTITIES | APP'D | DATE | SHEET | 202 / 787

CHKD J.C. DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

AND BEAM | SLOPE
SPL | PVL | SPL | PVL

44 3081

29 1516

51 2605

26 1897

29 1454

22 1082

EB S.R. 126

15" Conduit

3:1

2:1

24:1

2:1

526.7

2:1

0.5%

553.50
31+50
528.7

45° D

Sta. 31+00 Ramp C, 26' Lt
604 Std. No. 2-3 CB
℄ Grate = 550.10
℄ 15" = 547.10
℄ 6" U.D. = 547.20

603
10'-15"
Type F
707.05

℄ = 546.60

Sta. 31+00 Ramp "C" 66' Rt
HW-4 Headwall
℄ 15" = 527.40

603-42'-15" Type F 707.05

EB S.R. 126

MC-4 Collar

3:1

14%

15"-25° Bend

30" Min.

2:1

℄ = 527.64

50%

0.5%

24:1 2:1

15"-25° Bend

14%

2:1

526.30

32

Rock Channel Protection Type 'C'
6'x4'x18" W/Filter
=2 CY
45° D

603-29'-45" Type B"

38'

603-17'-15" Type E"
707.05

551.60
31+00
528.8

45° D

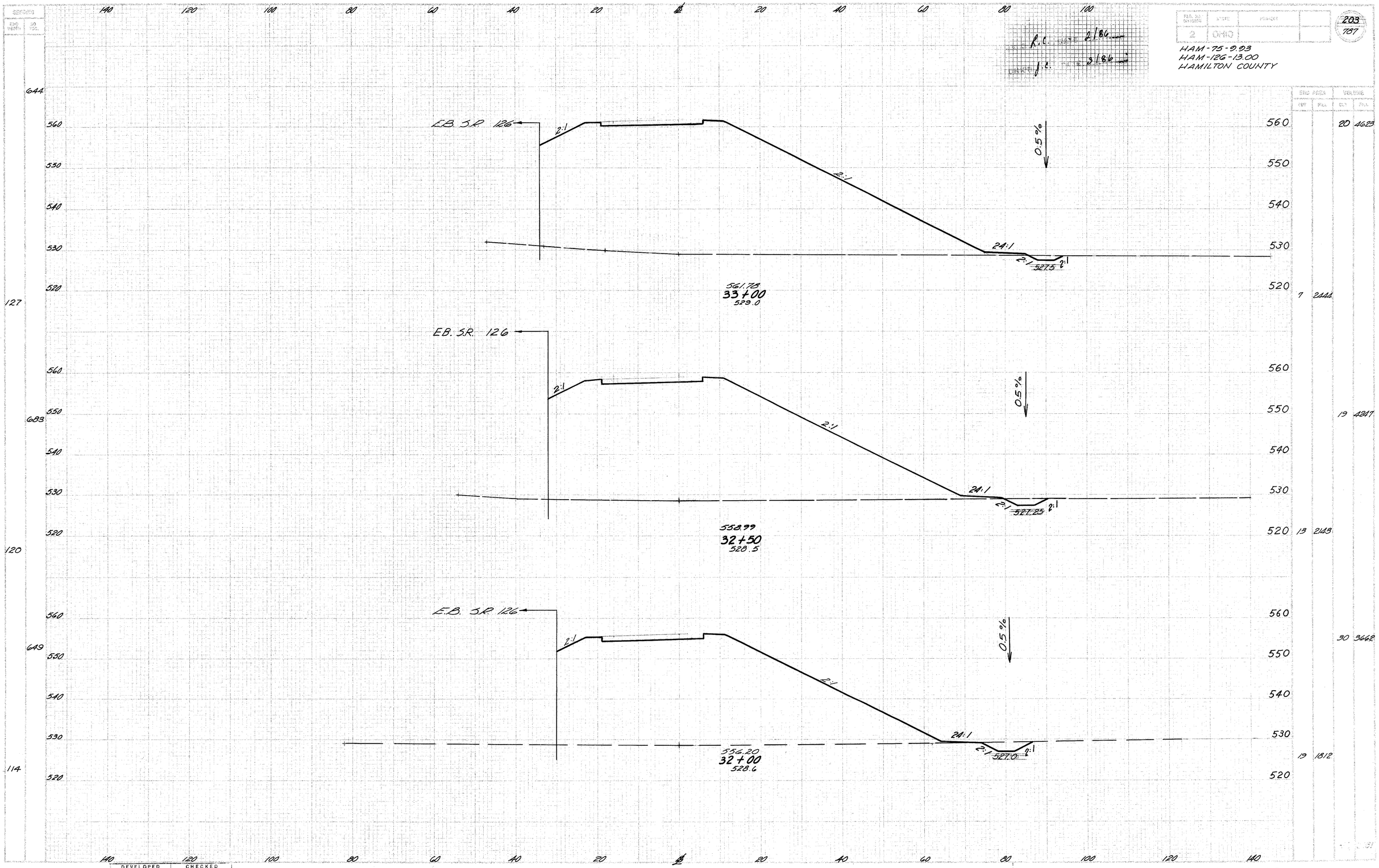
32

32

Sta. 30+67 Ahead
(From Sheet 84)

DEVELOPED | CHECKED

RAMP C STA 31+00 TO STA 31+50



203
787
2
OHIO
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
R.C. 2/86
J.C. 3/86
EB. S.R. 126
2:1
24:1
0.5%
527.5
561.78
33+00
529.0
EB. S.R. 126
2:1
24:1
0.5%
527.25
558.99
32+50
528.5
E.B. S.R. 126
2:1
24:1
0.5%
527.0
556.20
32+00
528.6
644
127
683
120
649
114
20 4623
7 2444
19 4247
13 2143
30 3662
19 1812
DEVELOPED
CHECKED

DESIGNED	DRAWN	CHECKED	QUANTITIES	CHECKED

DEVELOPED	CHECKED

REVISIONS	DATE	APPROVED	DATE
2	OHIO		

204
787

CALC. K.L. DATE 2/86

CHKD. J.L. DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

CUT AREA		VOLUME	
CUT	FILL	CUT	FILL

815
144
785
739
664
732

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

570 560 550 540 530

E.B. S.R. 126

8:1 2:1 2:1 24:1 2:1 2:1

559.8

1.0%

570.15
34+50
532.1

4" Gas 6" Water

530.0

12" Conduit (San.)

34 6380

10 3287

570 560 550 540 530

E.B. S.R. 126

8:1 2:1 2:1 24:1 2:1 2:1

559.0

2.0%

567.36
34+00
532.0

4" Gas 10" Water

529.0

33 2828

10" San. 12" Conduit (San.)

560 550 540 530

E.B. S.R. 126

8:1 2:1 2:1 24:1 2:1 2:1

557.5

1.0%

564.57
33+50
532.0

528.5

44 4979

15 2549

2.0%

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

RAMP C STA 33+50 TO STA 34+50

SECT 2

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

CALC R.C. DATE 2/86

CHK'D J.L. DATE 3/86

REVISION	MARK	DATE	
2	OHIO		

205
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

EB S.R. 126

2:1

0.5%

570
560
550
540
530

B89

156

24:1

2:1 531.3 2:1

576.11
36+00
531.8

10 4239

EB S.R. 126

8:1

559.8

2:1

0.5%

570
560
550
540
530

B67

156

24:1

2:1 531.0 2:1

572.66
35+50
532.1

12 3972

EB S.R. 126

8:1

563.2

2:1

1.0%

570
560
550
540
530

B50

150

24:1

2:1 530.5 2:1

Exist. Woodbine

572.67
35+00
532.7

27 3603

3B 7014

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

DEVELOPED	CHECKED

RAMP C STA 35+00 TO STA 36+00

205

SECTION

END AREA CUT | END AREA FILL

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

CALC R.L. DATE 2/86
CHK'D J.C. DATE 3/86

DES. & DETAIL	STATE	PROJECT		SHEET NO.
D	OHIO			206 787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

1394

580 570 560 550 540 530

E.B. S.R. 126

Variable

2:1

+15

24:1 2:1 5:1

531.79

577.42
37+00
532.0

177

END AREAS: CUT 6 7329 | FILL 7 5217

580 570 560 550 540 530

947

580 570 560 550 540 530

E.B. S.R. 126

Variable

2:1

0.5%

24:1 2:1 5:1

531.5

577.03
36+50
531.1

164

0.5%

END AREAS: CUT 10 9067 | FILL 9 4579

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

DEVELOPED	CHECKED

RAMP C STA 36+50 TO STA 37+00

SEEDING

END WIDTH	SQ YDS
0	

140 120 100 80 60 40 20 **℄** 20 40 60 80 100

CALC. R.C. DATE 2/86

CHKD. J.L. DATE 3/86

FED. AID DIVISION	STATE	PROJECT	
2	OHIO		

206A
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

END AREA		VOLUME	
CUT	FILL	CUT	FILL

560
550
540
530

ZERO SECTION
39+13

560
550
540
530

ZERO SECTION
576.52
38+03.50
532.6
Back

E.B. S.R. 126

Seeding Limit

Variable

Seeding Limit

577.28
37+50
532.5

0 0
0 2673
0 2698

140 120 100 80 60 40 20 **℄** 20 40 60 80 100 120 140

DEVELOPED | CHECKED

PAVING STA. 37+50 TO STA. 39+25

SEEDING

LAND WIDTH | 90 YDS

983

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

CALC. R.L. DATE 2/86

CHK'D J.L. DATE 3/86

LKG RD DIVISION	STATE	PROJECT
2	OHIO	

206-B
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

END AREA | VOLUME

CUT | FILL | CUT | FILL

570
560
550
540
530
520

Seeding Limit

Seeding Limit

℄ Service Road

30" Water

571.35
39+50
528.3

Ahead
Sta. 39+00

0 7285

0 3596

0 3330

0 0

127

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

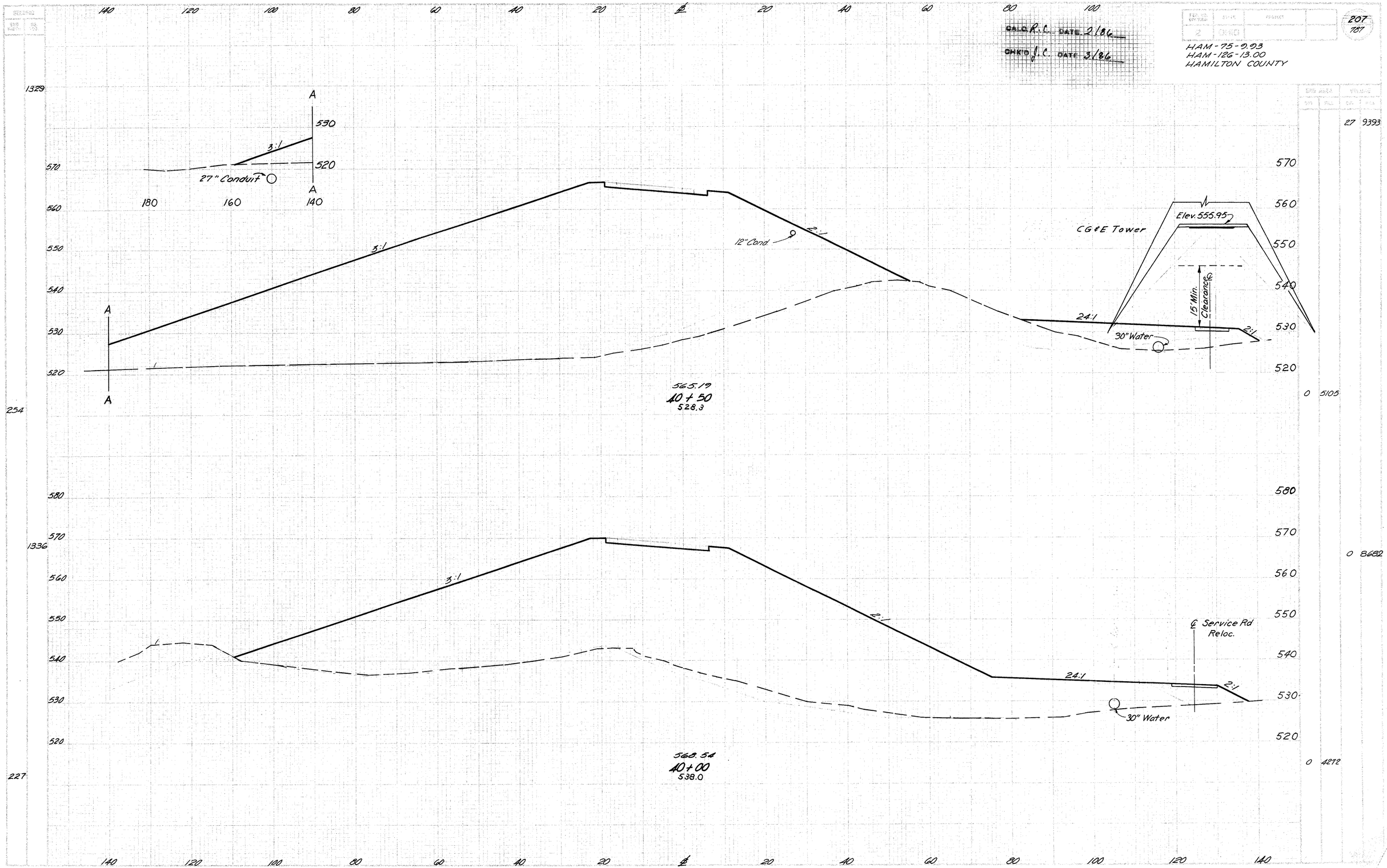
DEVELOPED	CHECKED

RAMP C STA. 39+50

CALC. R.C. DATE 2/86
CHK'D J.C. DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

207
787



27 9393
0 5105
0 8682
0 4272

DEVELOPED | CHECKED

RAMP C STA. 40+00 TO STA. 40+50

CALC. R.C. DATE 2/86

CHK'D J.C. DATE 3/86

208
787

HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY

1094

100%

+56

37.3%

570
560
550
540
530
520
510

I-75

3:1

530.0

Ex. 30 Water Main
To Be Abandoned

2:1

24:1

2:1

2:1

12" Cond.

526.6

8.0%

℄ Service Rd. Reloc.

24:1

30"
W.L.

570
560
550
540
530
520
510

219 7023

230

6.5%

5.9%

Sta. 41+40, Lt.
Begin Type 2
Paved Gutter

557.96
41+50
522.5

120%

+35

6.5%

570
560
550
540
530
520

1264

I-75

3:1

525.3

27" Conduit

30" Water

561.57
41+00
523.0

2:1

12" Cond.

24:1

2:1

2:1

532.6

24:1

℄ Service Rd. Reloc.

30"
W.L.

570
560
550
540
530
520

171 4325

185 8670

29 3039

225

6.5%

11.4%

+55

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

DEVELOPED | CHECKED

RAMP C STA 41+00 TO STA 41+50

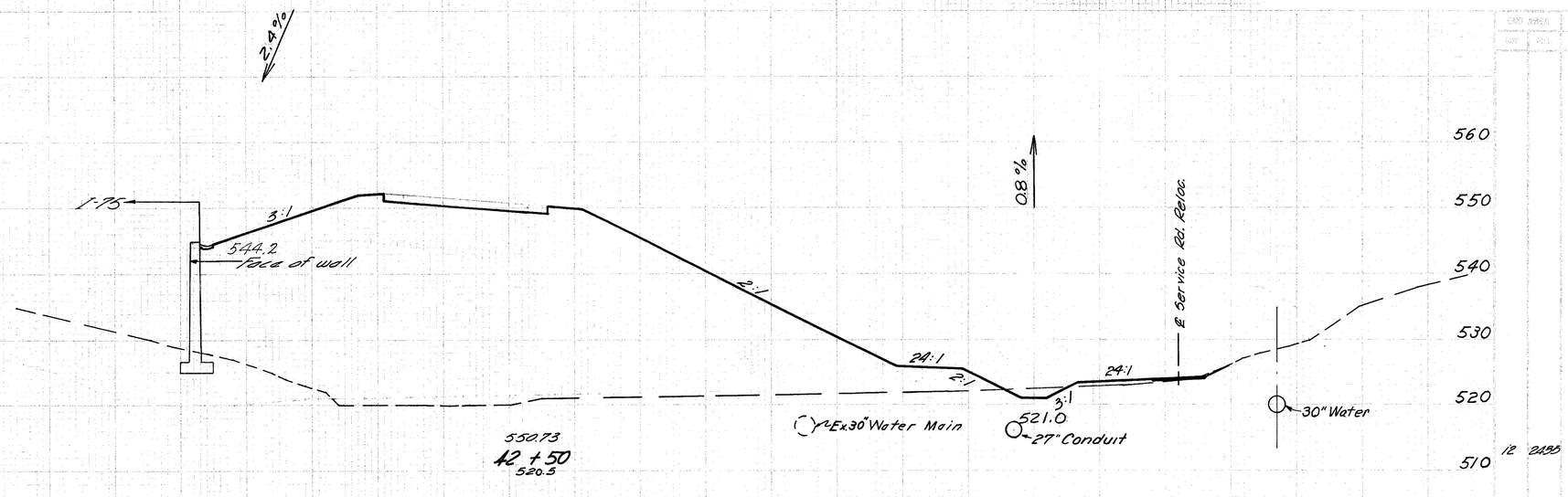
CALC'D K.L. DATE 2/86

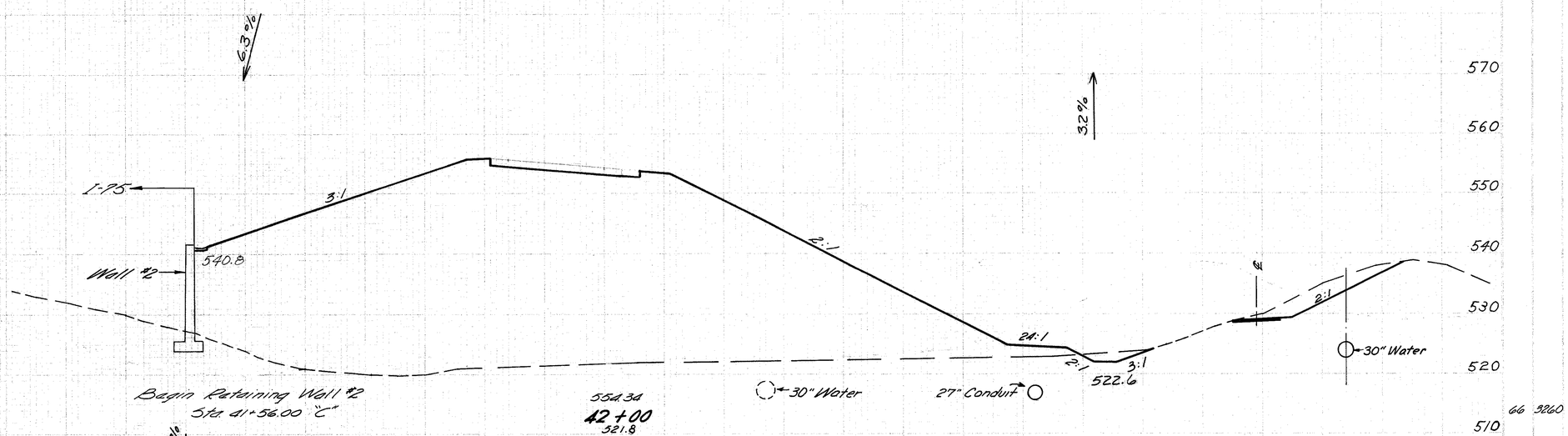
CHK'D J.L. DATE 3/86

HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY

209
787

19 3818





72 5273

66 3260

12 2455

DEVELOPED | CHECKED

RAMP C STA 42+00 TO STA 42+50

SHEETING

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

CALC'D [illegible] DATE 2/86

CHK'D [illegible] DATE 3/86

DIST.	COUNTY			
2	HAM			

210
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

543

104

622

121

560 550 540 530 520 510

I-75

3:1

2:1

24:1

2:1

2:1

0.5%

℄ Service Rd Reloc.

543.49
43+50
523.5

Ex. 30" Water Main to be abandoned

27" Conduit

30" Water

520.3

Unsuitable Material

18 1795
156 156

Unsuitable Material 0 0
5 1128

+25

End Type 2 Paved Gutter

2.6%

I-75

3:1

Face of wall

Wall #2

545.5

2:1

24:1

2:1

4:1

0.5%

547.11
43+00
520.5

30" Water

27" Conduit

30" Water

520.6

13 2607

9 1688

2.4%

0.8%

DEVELOPED | CHECKED

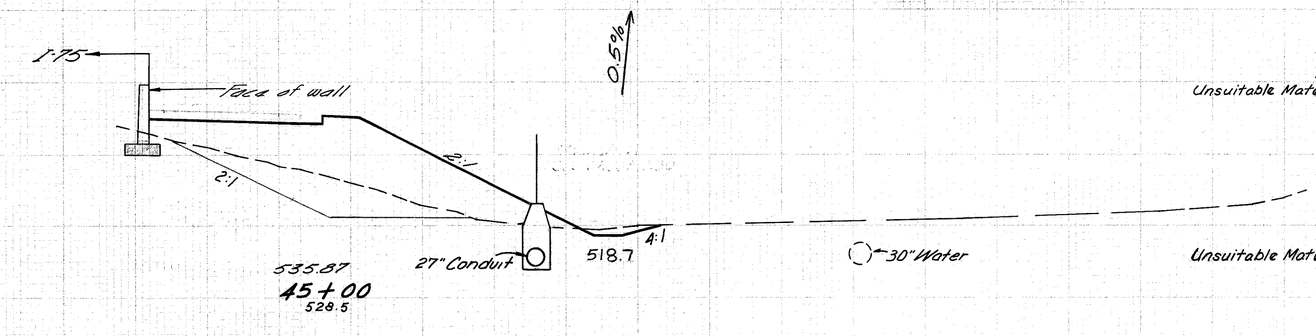
RAMP C STA. 43+00 TO STA. 43+50

CALC. R.L. DATE 2/86
CHK'D J.L. DATE 3/86

PROJECT STATUS	PART	SHEETS		211
2	GHD			787

HAM-75-0.93
HAM-126-13.00
HAMILTON COUNTY

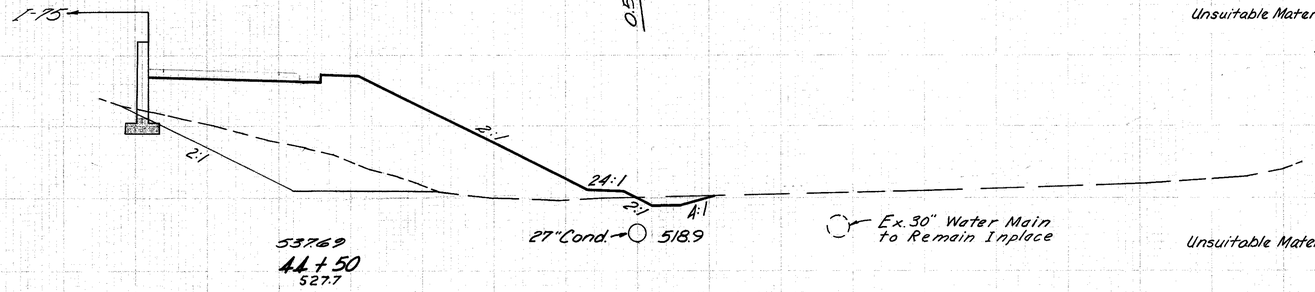
817



540		18	032
Unsuitable Material		216	216
530			
520			
Unsuitable Material		129	129
510	8	330	

73

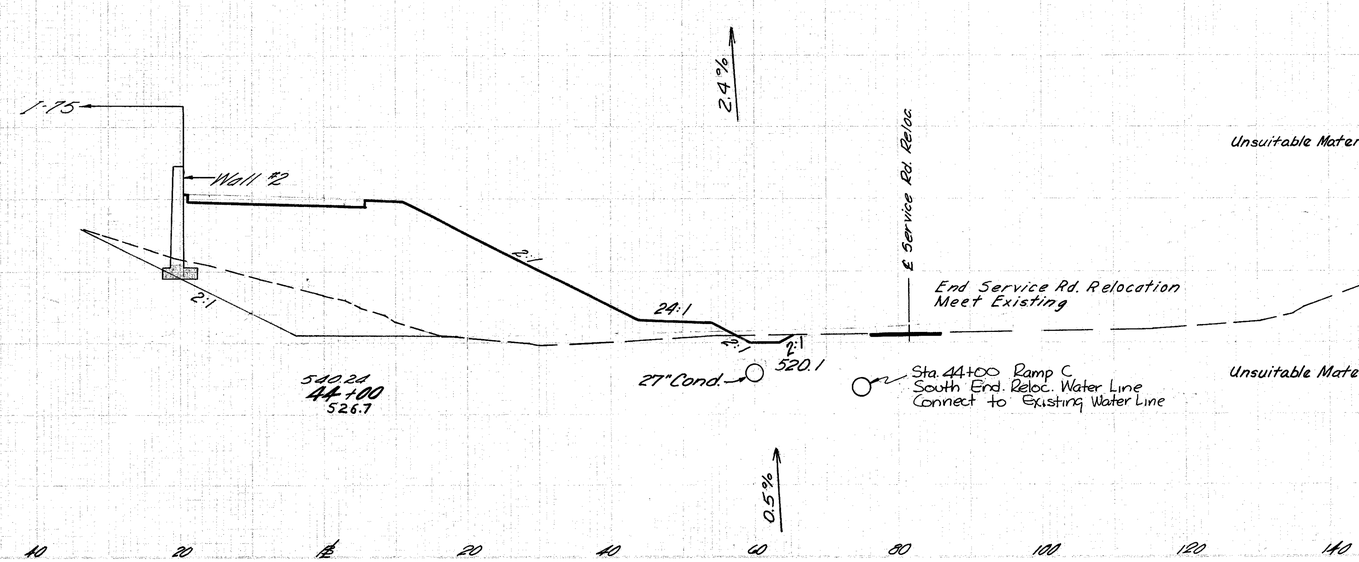
403



550			
Unsuitable Material		253	253
540		17	766
530			
520			
Unsuitable Material		144	144
510	10	497	

72

456



560			
550			
Unsuitable Material		289	289
		18	1151
540			
530			
520			
Unsuitable Material		168	168
510	9	746	

92

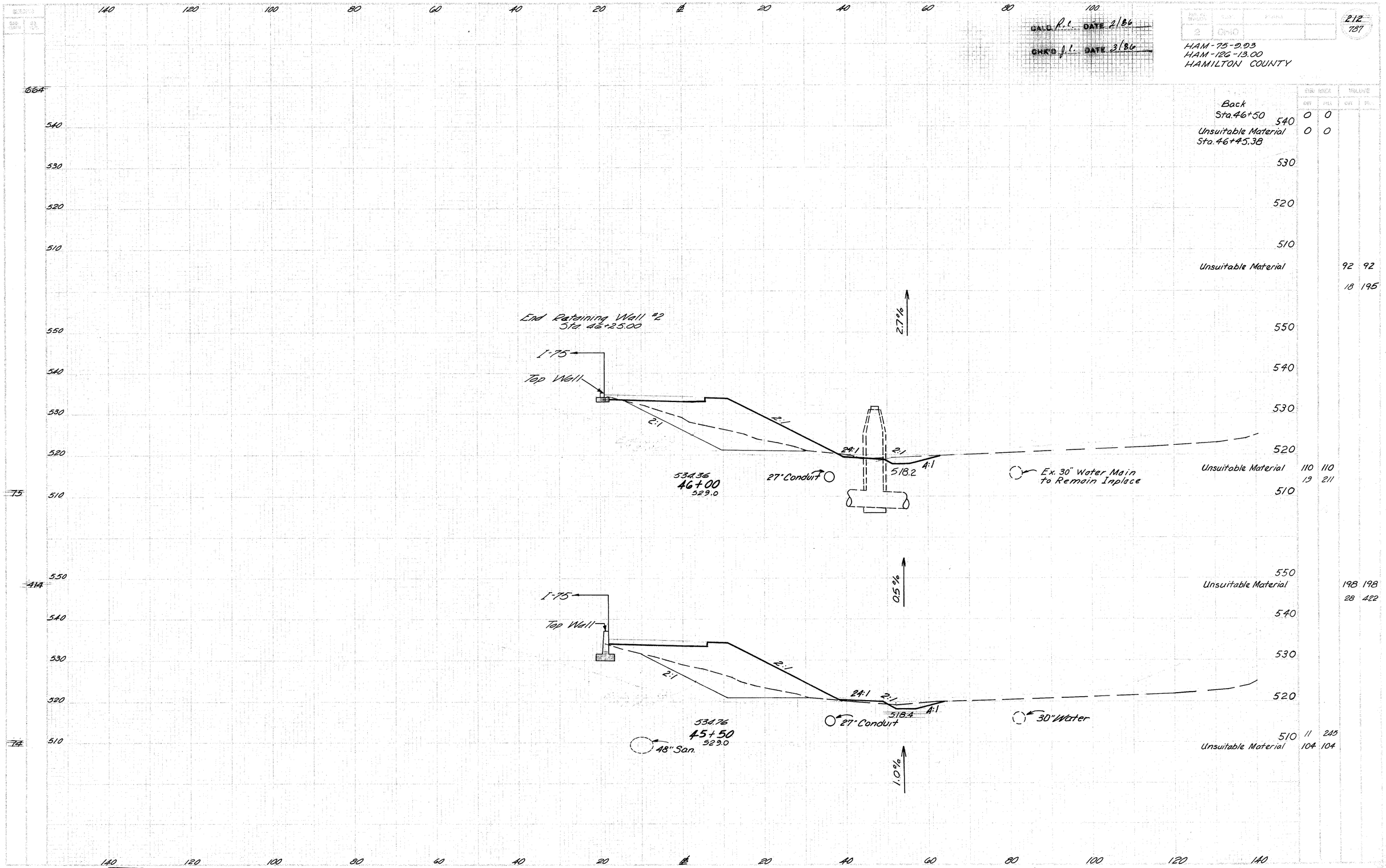
DEVELOPED | CHECKED

RAMP C STA 44+00 TO STA 45+00

CALC. R.C. DATE 2/86
CHK'D J.L. DATE 3/86

212
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

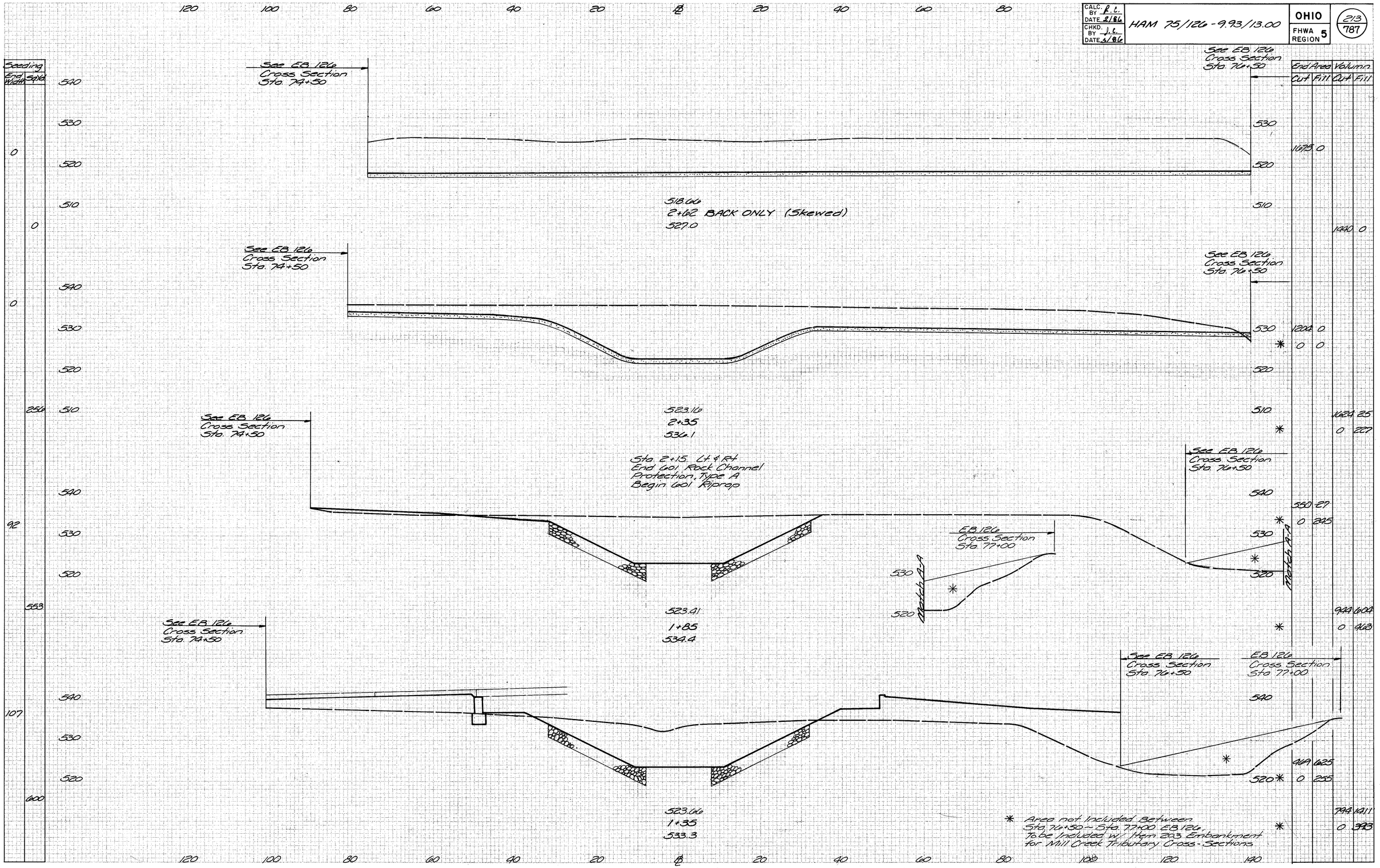


	Sta.	Elev.	Area Cut	Area Fill	Volume Cut	Volume Fill
Back Sta. 46+50		0	0			
Unsuitable Material Sta. 46+45.38		0	0			
Unsuitable Material					92	92
					18	195
Unsuitable Material					110	110
					19	211
Unsuitable Material					198	198
					28	422
					11	245
Unsuitable Material					104	104

DEVELOPED | CHECKED

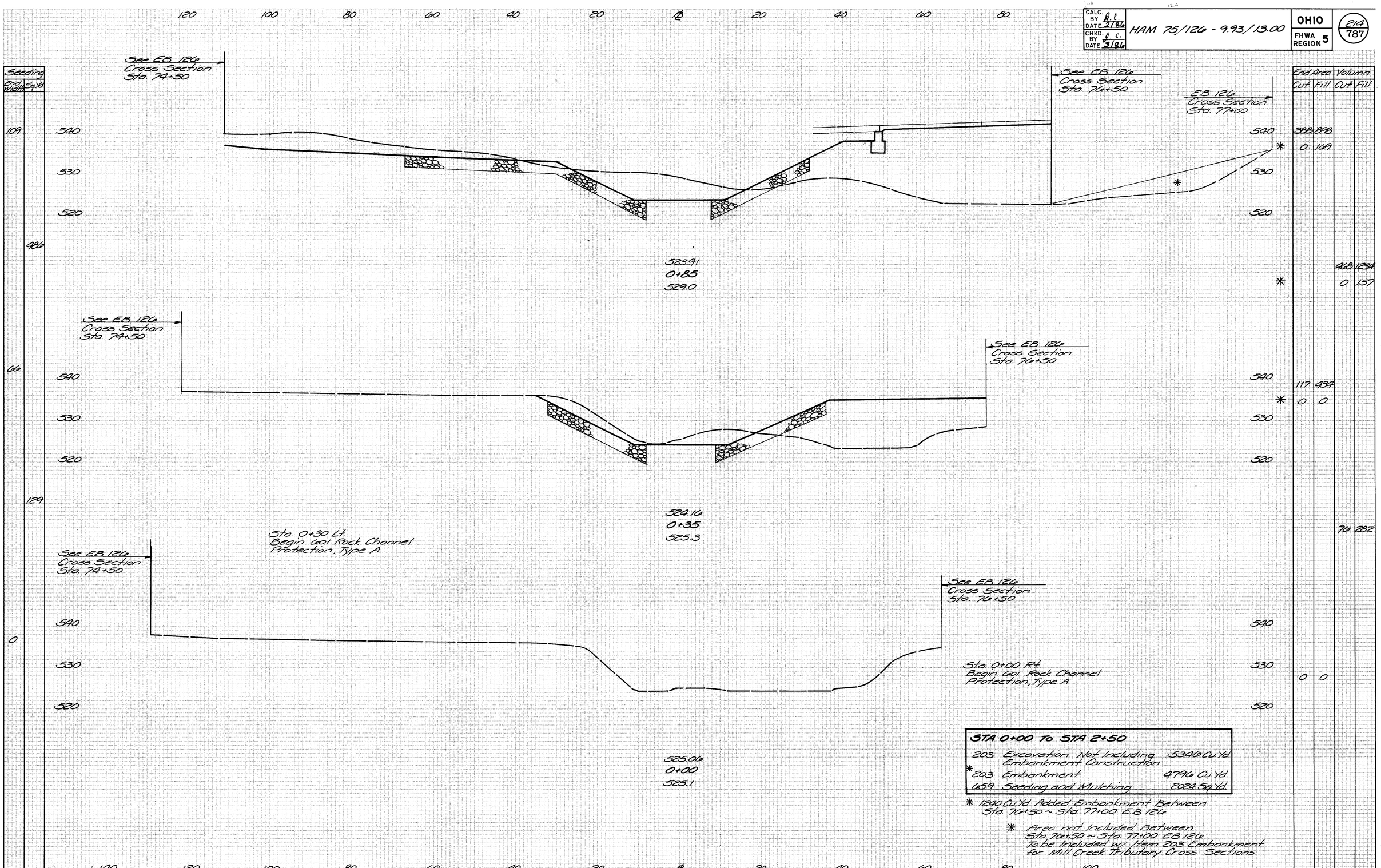
RAMP C STA 45+50 TO STA 46+00

CALC. BY R.C. DATE 2/86	HAM 75/126-9.93/13.00	OHIO	213/787
CHKD. BY J.C. DATE 3/86		FHWA REGION 5	



MILL CREEK TRIBUTARY STA. 1+35 TO STA. 2+50

CALC. BY R.C. DATE 2/86	HAM 75/126 - 9.93/13.00	OHIO	214 / 787
CHKD. BY J.C. DATE 3/86		FHWA REGION 5	



MILL CREEK TRIBUTARY STA. 0+00 TO STA. 0+85

DESIGNED | DRAWN | CHECKED | QUANTITIES | CHECKED

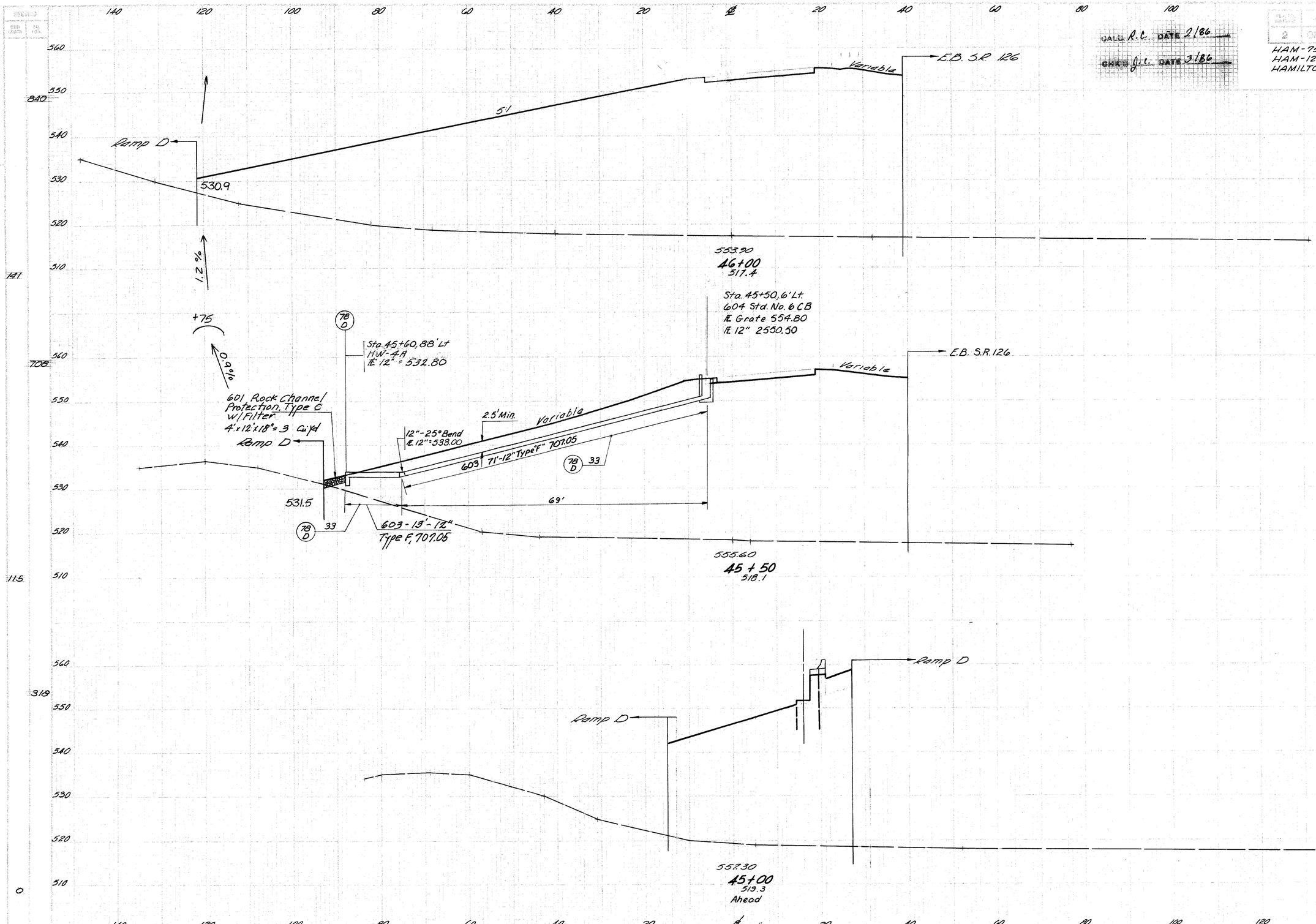
CALC. R.L. DATE 2/86

CHKD J.L. DATE 3/86

SHEET NO.	TOTAL SHEETS
2	ONLY

215
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



DEVELOPED	CHECKED

RAMP D STA. 45+00 TO STA. 46+00

DESIGNED | DRAWN | CHECKED | QUANTITIES | CHECKED | DEVELOPED | CHECKED

CALC. R.C. DATE 2/86

CHKD J.L. DATE 3/86

DISTRICT	STATE	PROJECT		SHEET NO.	TOTAL SHEETS
2	OHIO			216	789

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

140 120 100 80 60 40 20 Ⓑ 20 40 60 80 100

550 540 530 520 510

983

B

Variable

Variable

E.B. S.R. 126

B

177

Ramp D

B

530

520

560 550

B510

180 160 140

981

540 530 520 510

A

Variable

Variable

E.B. S.R. 126

550.50
47+00
516.8

A

177

Ramp D

A

530

520

560

180 160 140

A

940

550 540 530 520 510

6:1

Variable

E.B. S.R. 126

Ramp D

552.20
46+50
516.3

182

140 120 100 80 60 40 20 Ⓑ 20 40 60 80 100 120 140

528.80
47+50
516.7

530 Unsuitable Material	0	0	8243
	61	61	
520			
510			
Unsuitable Material	0	0	4572
	26	26	
560 Unsuitable Material		24	24
550			0 8743
540			
530			
520 Unsuitable Material	0	0	
510	0	4870	
560			
550			0 8789
540			
530			
520			
510			0 4622

RAMP D STA 46+50 TO STA 47+50

DESIGN
GAD VOL. NO. PGS.

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

CALC. J.L. DATE 2/86
CHKD. J.L. DATE 3/86

FED. PROJECT	STATE	PROJECT	
	OHIO		

217
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

END AREA / VOLUME

	CUT	FILL	CUT	FILL
540			0	6624
530				
520				
510	0	3518		
Unsuitable Material	0	0		
550				
540			0	6916
Unsuitable Material			50	50
530				
520				
510	0	3951		
Unsuitable Material	67	67		
550				
540			0	7768
Unsuitable Material			99	99
530				
520				
510	0	4330		
Unsuitable Material	40	40		

176 — 972

550 / 540 / 530 / 520 / 510

8:1 — E.B. S.R.126 — 3:1

C — C

544.24
49+00
519.1

Sta. 48+90
End Unsuitable Material
Excavation & Refill

Ramp D — 8:1 — C 530 / 520 / C 510

180 160 140

177 — 996

550 / 540 / 530 / 520 / 510

8:1 — E.B. S.R.126 — 4:1

B — B

545.46
48+50
517.1

Ramp D — 8:1 — B 530 / 520 / B 510

180 160 140

178 — 986

550 / 540 / 530 / 520 / 510

Variable — E.B. S.R.126 — 6:1

A — A

547.10
48+00
516.8

Ramp D — A 530 / 520 / A 510

180 160 140

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

DEVELOPED	CHECKED

RAMP D STA. 48+00 TO STA. 49+00

DESIGN	GRD	SD	DIST	COUNTY	SHEET	NO.	TOTAL SHEETS
	12	OHIO			218		787

CALC. R.L. DATE 2/86

CHKD J.L. DATE 3/86

HAM-75-0.93
HAM-126-13.00
HAMILTON COUNTY

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

968

Ramp D

C 530 520 C

8:1

550 540 530 520 510

180 160 140 510

C C

8:1

2:1

Ramp I

542.92
50+50
513.4

165

Ramp D

B 530 520 B

8:1

550 540 530 520 510

180 160 140

936

B B

8:1

2:1

E.B. S.R. 126

543.18
50+00
513.3

173

Ramp D

A 530 520 A

8:1

550 540 530 520 510

180 160 140

963

A A

8:1

2:1

E.B. S.R. 126

543.50
49+50
516.1

174

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

AREA	VOLUME
DEV	REM	CUT	FILL

550 540 530 520 510 — 0 7120

0 3569

550 540 530 520 510 — 0 6667

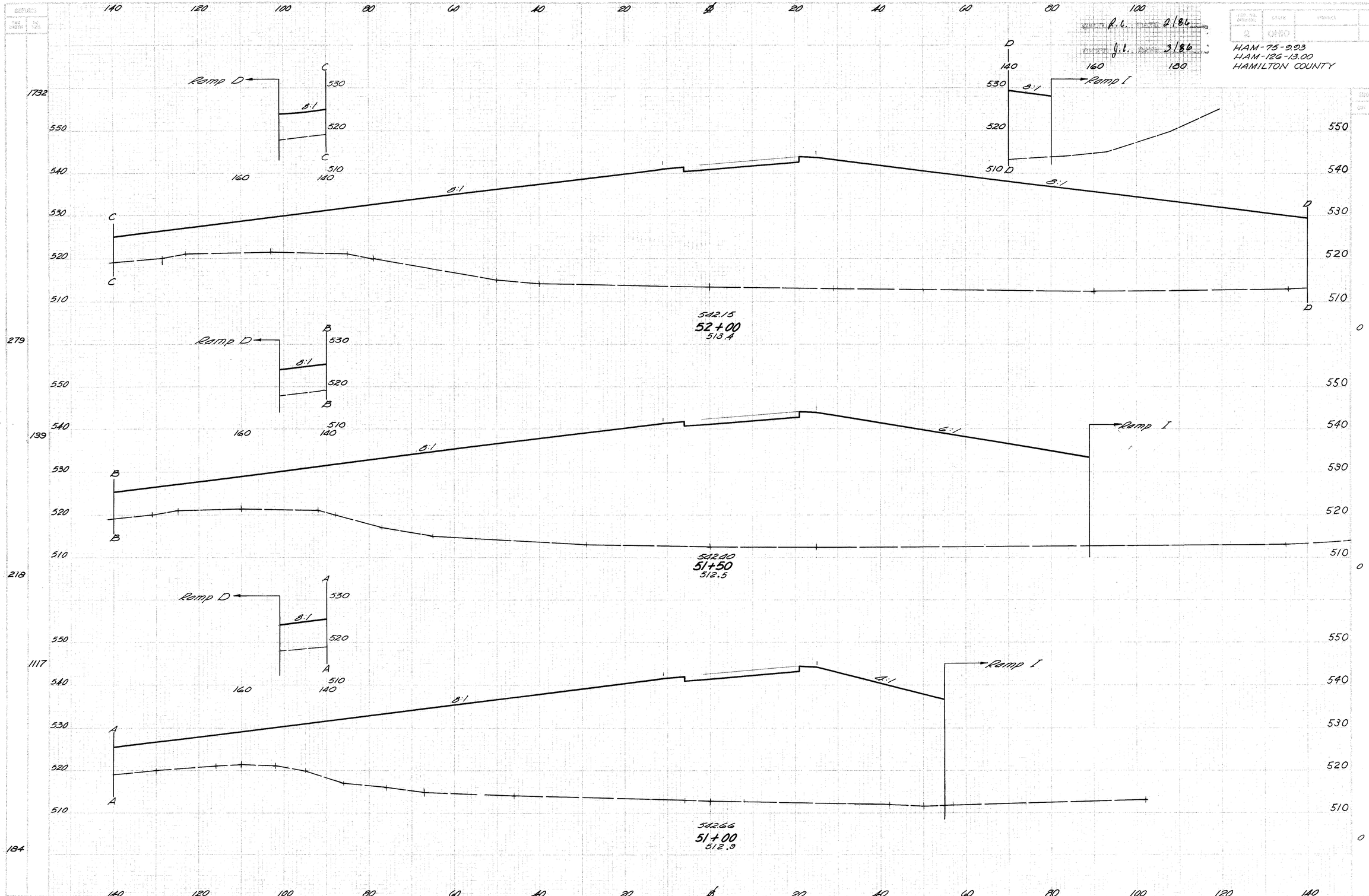
0 3631

550 540 530 520 510 — 0 6729

510 — 0 3636

DEVELOPED | CHECKED

RAMP D STA. 49+50 TO STA. 50+50



RAMP D STA. 51+00 TO STA. 52+00

DESIGNED | DRAWN | CHECKED | QUANTITIES | CHECKED

DEVELOPED | CHECKED

DATE R.C. DATE 2/86

DATE J.C. DATE 3/86

FED. ROAD DESIGN	STATE	PROJECT		220 / 787
2	OHIO			

HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY

EST. AREA: CUT | FILL — VOLUME: CUT | FILL

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

1189 223

Ramp D

C 530 520 510 C

160 140

8:1

24" Cond

12" Conduit

8:1

I-75

C C

550 540 530 520 510

541.37
53+50
525.5

48 3609

1390 278

Ramp D

B 530 520 510 B

160 140

8:1

24" Cond

12" Conduit

8:1

I-75

B B

550 540 530 520 510

541.63
53+00
520.5

48 5761

0 3918

D 530 520 530 D

8:1 24:1

Ramp 1

140 160 180 200 220

510 550

1729 345

Ramp D

A 530 520 510 A

160 140

8:1

8:1

D

A A

550 540 530 520 510

541.89
52+50
519.0

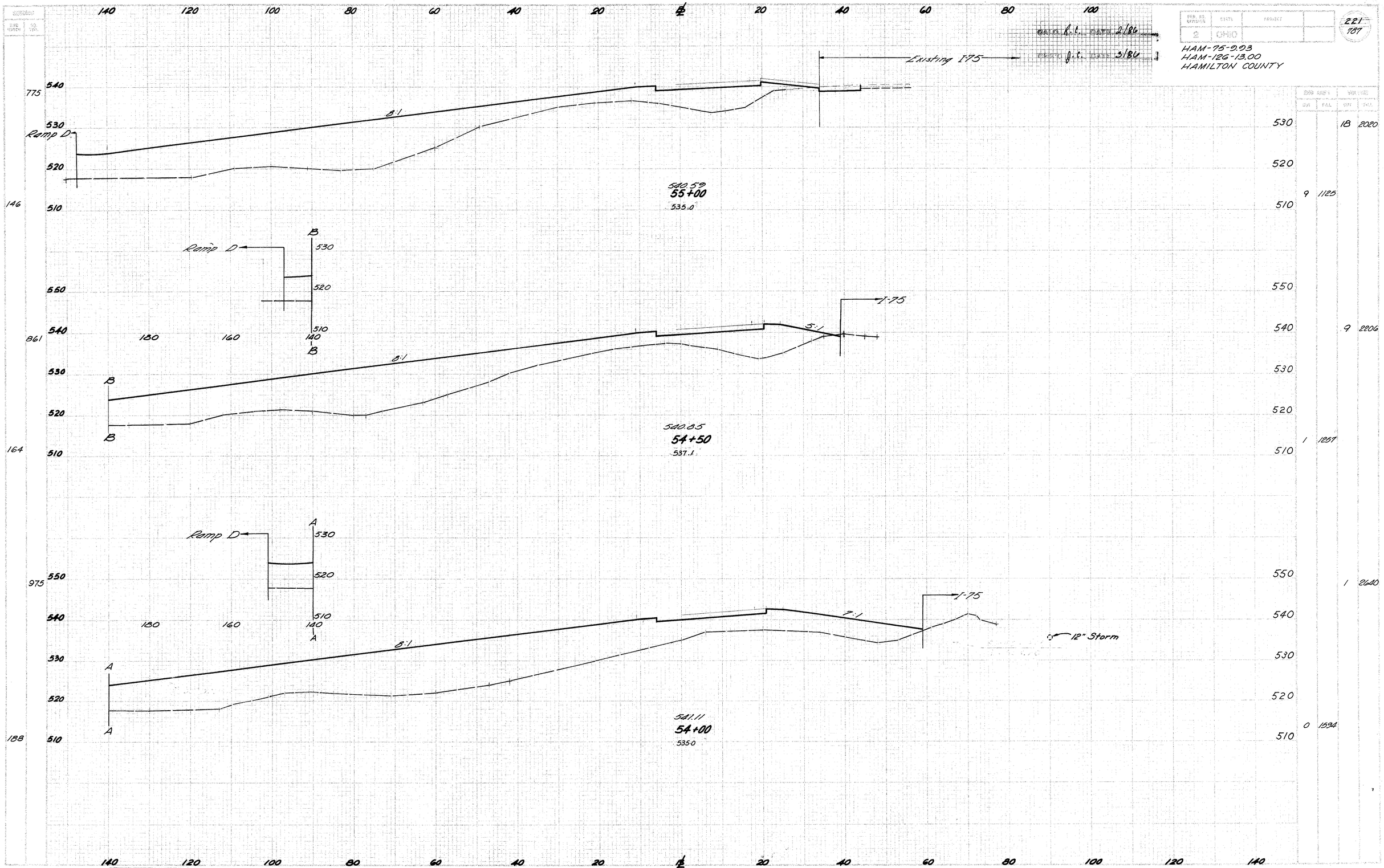
D 530 520 510 D

2 8600

2 2370

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

RAMP D STA 52+50 TO STA 53+50



FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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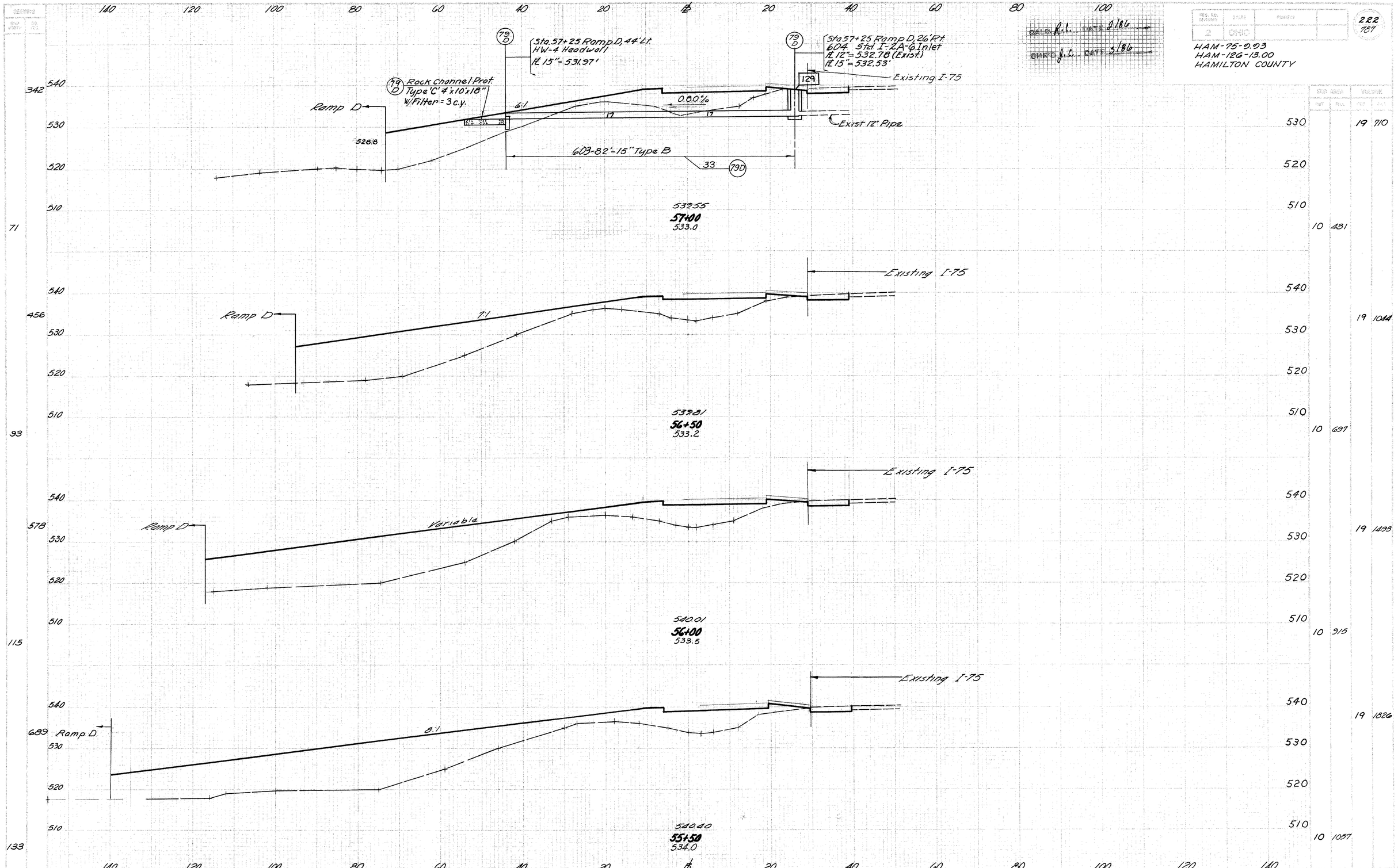
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

775	540	530		18 2020
	530	520		
146	510	510	9 1125	
861	540	540		9 2206
	530	530		
164	510	510	1 1257	
975	550	550		1 2640
	540	540		
188	510	510	0 1594	

DEVELOPED | CHECKED

RAMP D STA 54+00 TO STA 55+00



2	OHIO		

222
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

342	71	10	431
456	93	10	697
578	115	10	915
689	133	10	1057
		19	710
		19	1044
		19	1493
		19	1826

DEVELOPED	CHECKED
C.E.S. 4-70	

RAMP D STA 55+50 TO STA 57+00

Note: Sta. 59+14.88 ℄ Ramp D
Shift ℄ 16'-0" Right

CALC. A.C. DATE 2/86
CHK'D J.L. DATE 3/86

FED. ROAD DIVISION	STATE	PROJECT	
5	OHIO		

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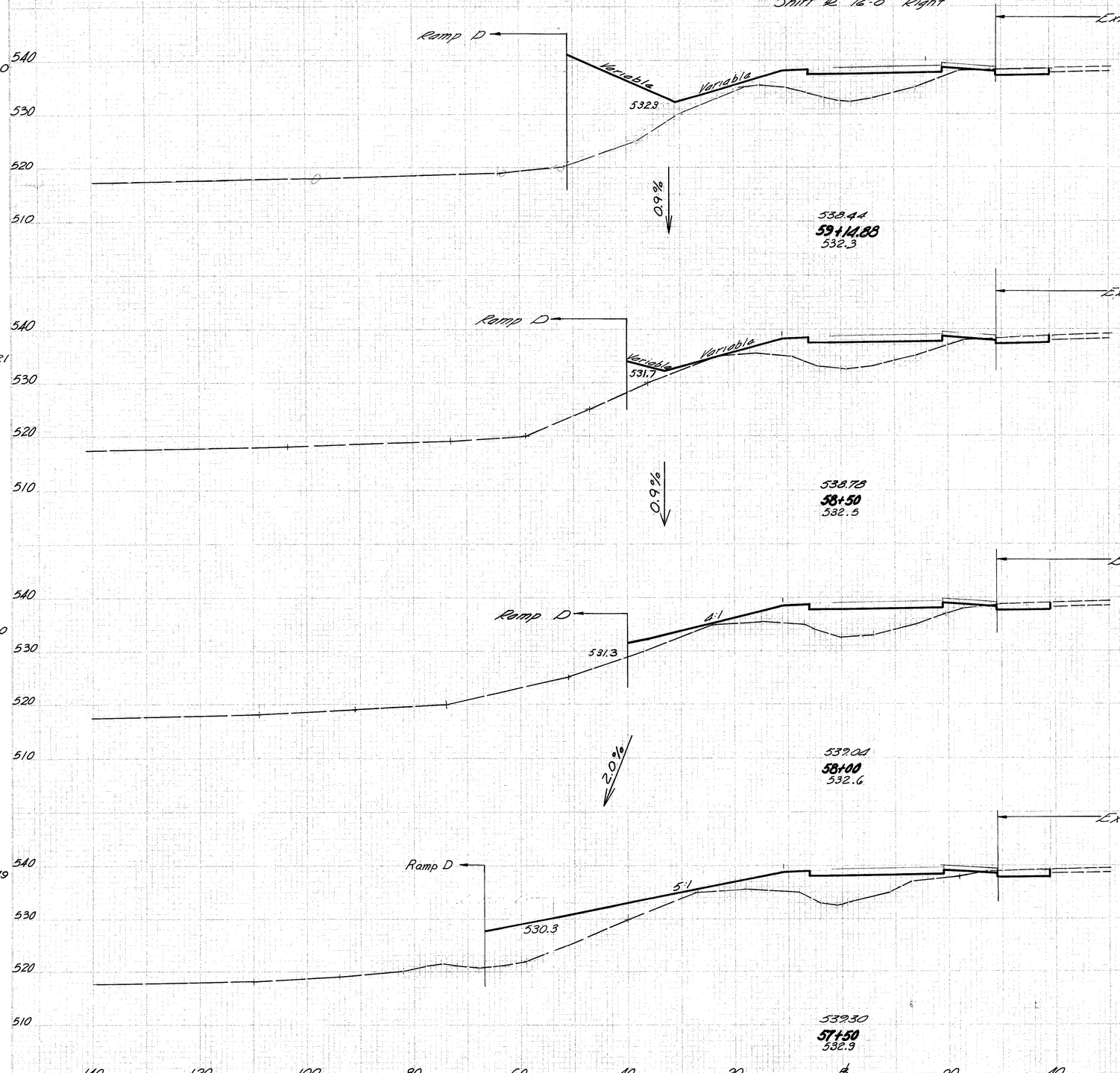
787

HAM-75-0.03
HAM-126-13.00
HAMILTON COUNTY



| | | |

REVISIONS | DATE | PROJECT
2 | OHIO
225 787

CALC K.C. DATE 2/86
CHKD J.C. DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

E.B. S.R. 126

Seeding Limit Variable

Seeding Limits

Existing I-75

533
15" Cond.

1.6%

358

540 530 520 510

E.B. S.R. 126

Back

Ahead

537.82
61+00
533.2

50

2:1

Existing I-75

Seeding Limits

533.8

206

540 530 520

AH 24
BK 24

510

E.B. S.R. 126

2:1

20%

538.08
60+50
533.5

Existing I-75

300

540 530 520

Ramp D Ahead

Ramp D Back

E.B. S.R. 126

538.31
60+00
535.5

84

510

4%

2:1

Existing I-75

532.8

540 530 520

506

AH 98
BK 82

510

8%

538.60
59+50
536.0

532.6

DEVELOPED | CHECKED

RAMP D STA 59+50 TO STA 61+00

				530	19 1773
				520	
				510	
			10 1030		
				540	
				530	19 1463
				520	
				510	
Ahead			10 550		
Back			10 2785		
				540	
				530	20 3860
				520	
				510	
			12 1384		
				540	
				530	20 3087
				520	
				510	
Ahead			10 1950		
Back			10 1913		

DESIGNED	CHECKED
DRAWN	CHECKED
TRACED	CHECKED

FED. RD. DIV. NO.	STATE	PROJECT	
5	OHIO		

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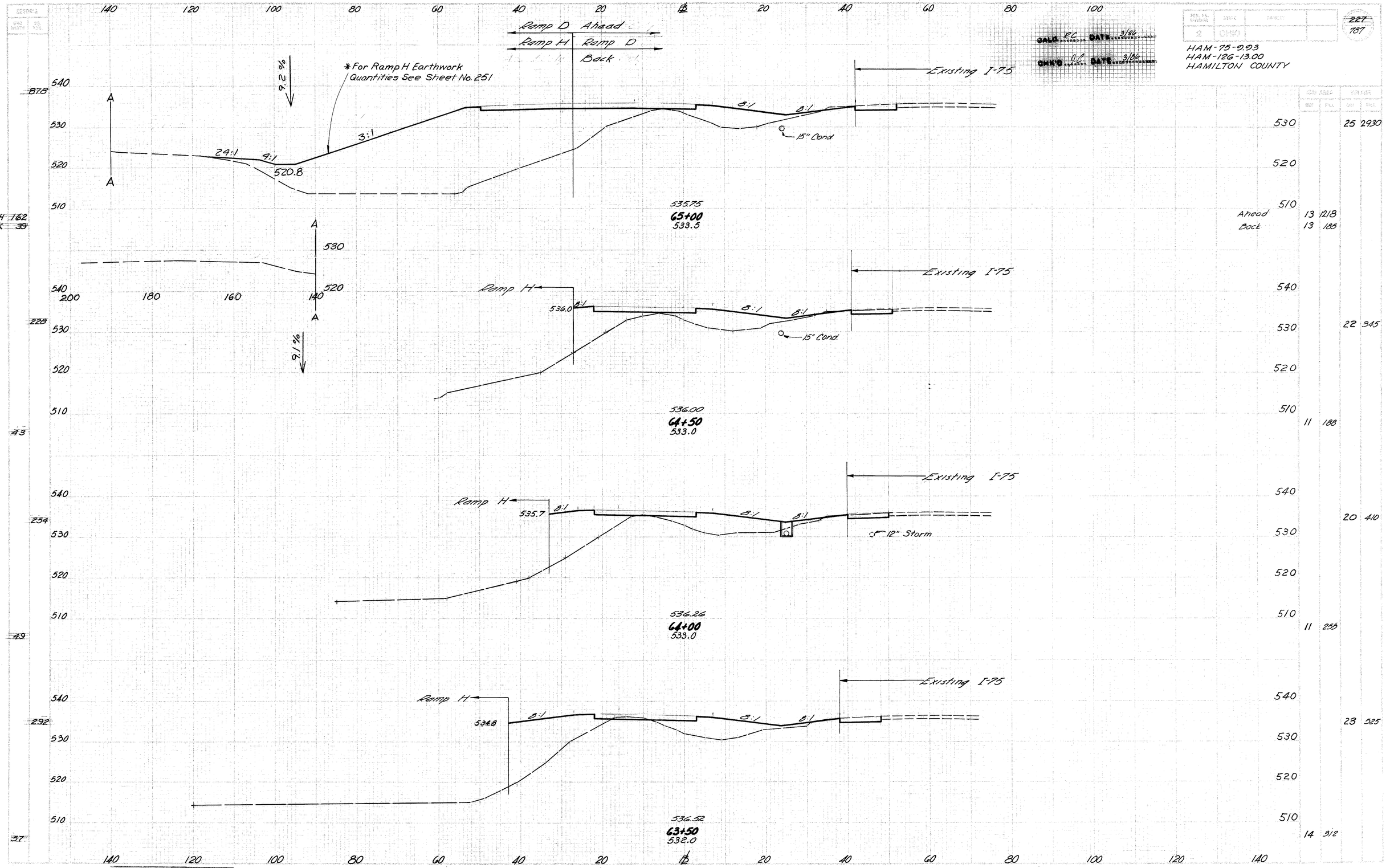
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

| | | |



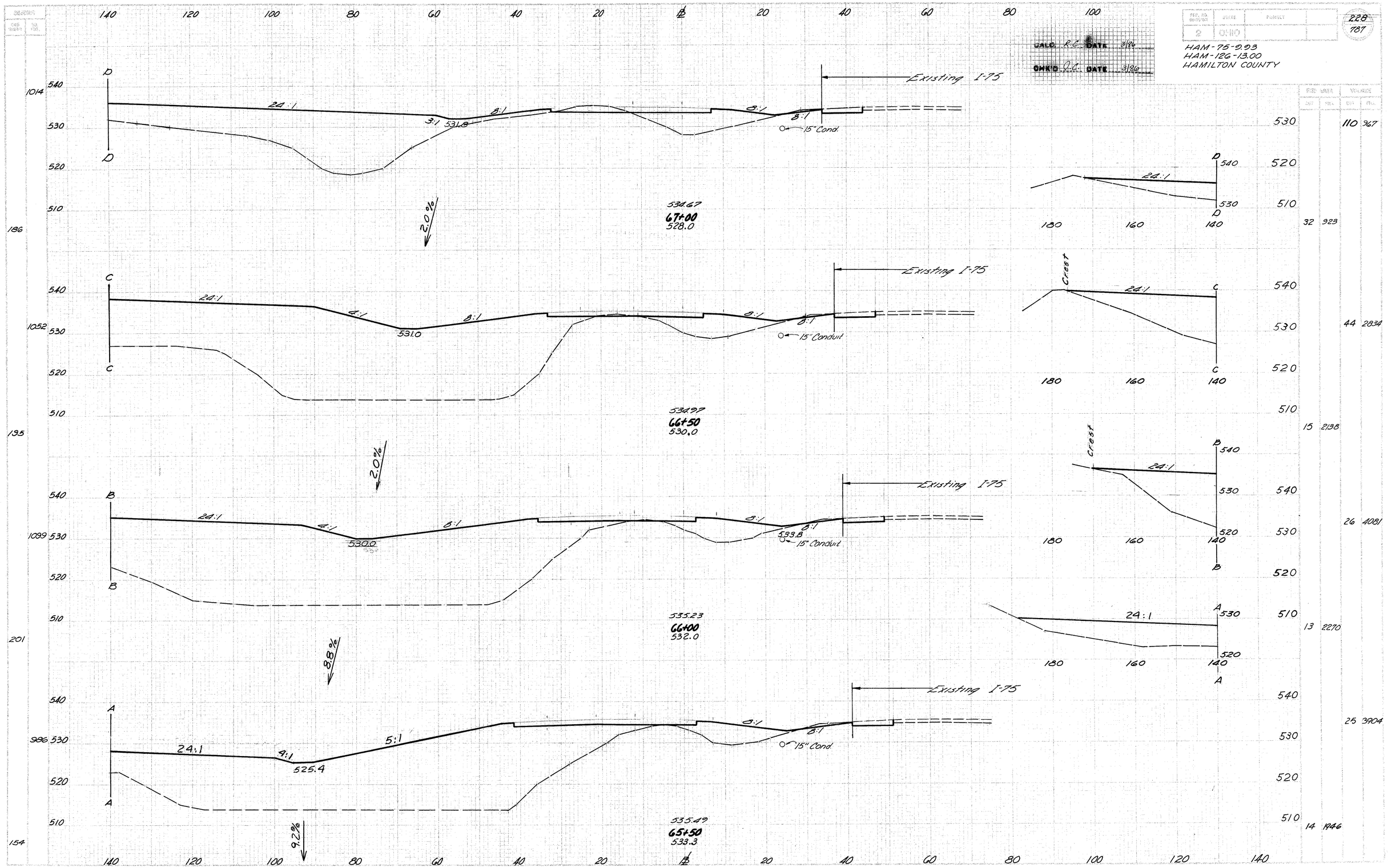
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

227
787

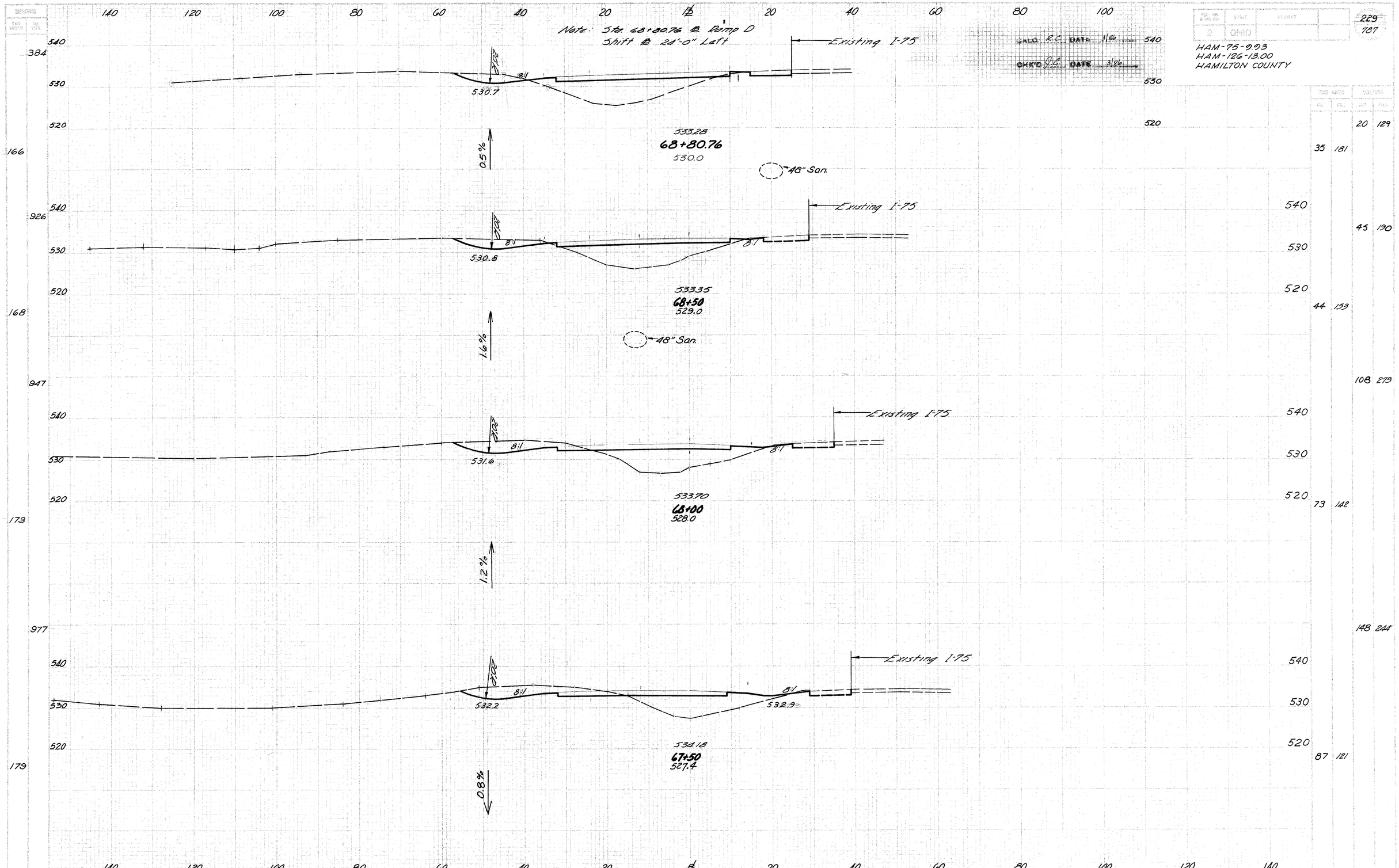
CALC. RC DATE 3/86
CHK'D. JC DATE 3/86

DEVELOPED | CHECKED

RAMP D STA 63+50 TO STA 65+00



RAMP D STA 65+50 TO STA 67+00



CALC. R.C. DATE 3/86
CHK'D J.C. DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

229
787

DEVELOPED | CHECKED

RAMP D STA 67+50 TO STA 68+80.76

DEVELOPED | CHECKED
END STATION | SHEET NO.

CALC. R.C. DATE 3/84
CHKD. J.C. DATE 3/84

DESIGN	STATE	PROJECT	
8	OHIO		

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787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

END AREA | VOLUME
CUT | FILL | CUT | FILL

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

0

540
530
520
510

Existing I-75

533.70
70+00
527.0

540 4 14
530
520
510
12 39

453

Ramp D
Sta. 70+17.14' Lt.
HW-4A Headwall
Outlet Pipe
R.12" = 513.00

Ramp D
Sta. 69+93.66' Lt.
R.12" = 514.00'
12" = 7° Deflection

Ramp D
Sta. 69+63.7' Lt.
M.C.-4 Conc. Collar
R.12" = 524.22

Existing I-75

8:1

Ex. 12" P.S.

15.25% 1.89%

Mill Creek

603'-53'-12" Type F 707.05

603'-67'-12" Type F 707.05

533.11
69+50
525.0

38 (123 D)

38 (123 D)

Proposed Lining
By Future Others

Rock Channel Prot.
Type C 4'x6'x18" = 2 Cu Yd.
W/Filter (123 D)

163

540 116 269
530
520
510
113 252

Ramp D Ahead
Ramp D Back

897

Existing I-75

8:1

530.6

540
530
520
510
193 400

532.73
69+00
525.7

AH 160
BK 160

Ahead 31 180
Back 20 180

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

RAMP D STA 69+00 TO STA 70+00

SEEDING

EXC. WIDTH	SQ. YDS.
0	
0	

CALC. RC DATE 3/86

CHK'D DE DATE 3/86

DIST. NO. DIVISION	STATE	PROJECT	
8	OHIO		

231
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

END AREA		VOLUME	
CUT	FILL	CUT	FILL
		35	9
0		10	
			0 9
Ahead Sta. 71+50 0		0	
			0 0
0		0	

Manhole - A
See Sheet 338

Relоc. Mill Creek

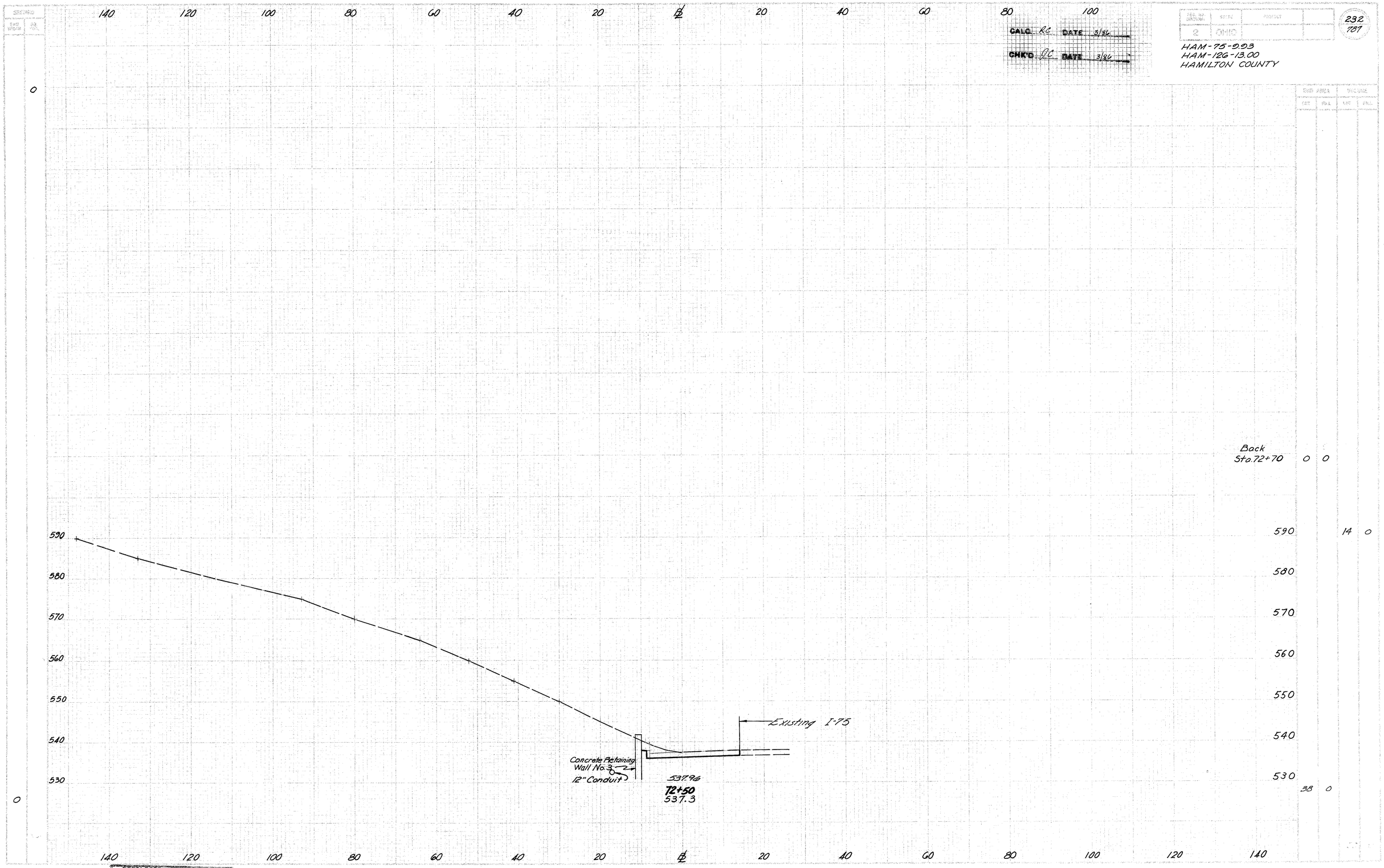
537.08
72+00
531.0
Ahead

Existing I-75

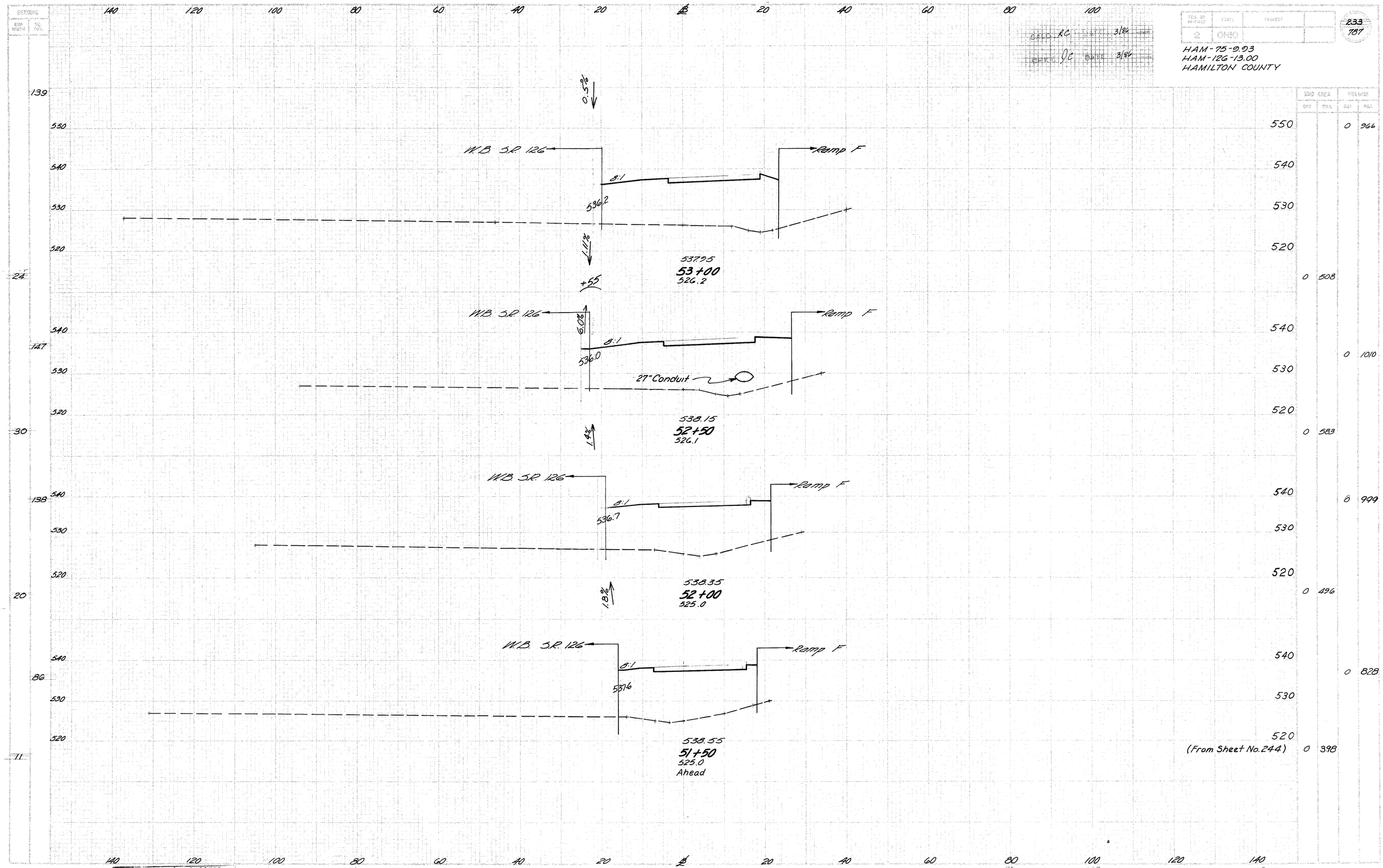
ZERO SECTION
70+19
524.6
Back

DEVELOPED | CHECKED

RAMP D STA 70+19 TO STA 72+00



RAMP D STA 72+50



	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
550			0	966
540				
530				
520				
	0	508		
540				
			0	1010
530				
520				
	0	583		
540			0	999
530				
520				
	0	496		
540			0	828
530				
520				
(From Sheet No. 244)	0	398		

DEVELOPED | CHECKED

RAMP F STA. 51+50 TO STA. 53+00

CALC. RC DATE 3/96

CHKD. JC DATE 3/96

HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY

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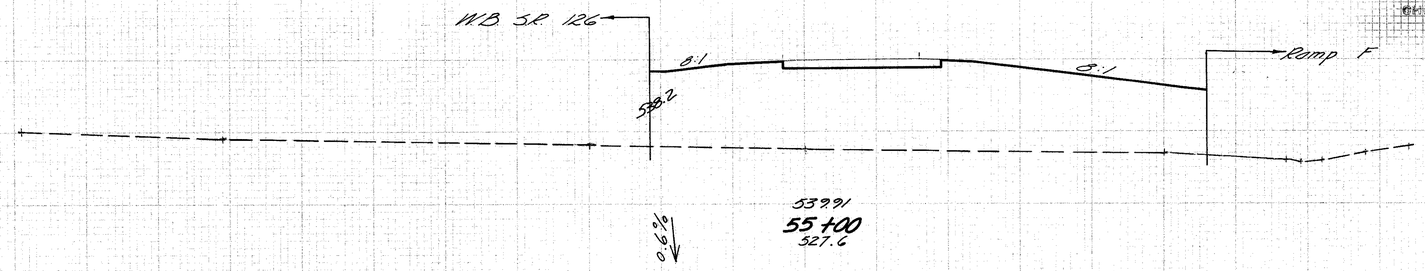
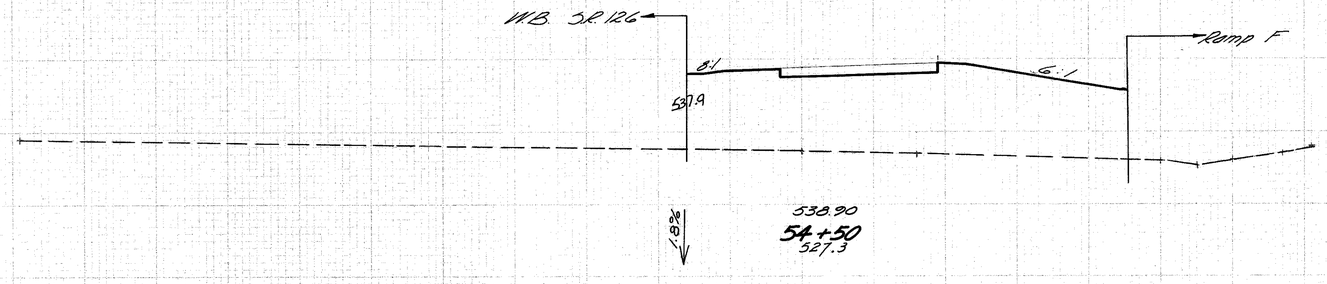
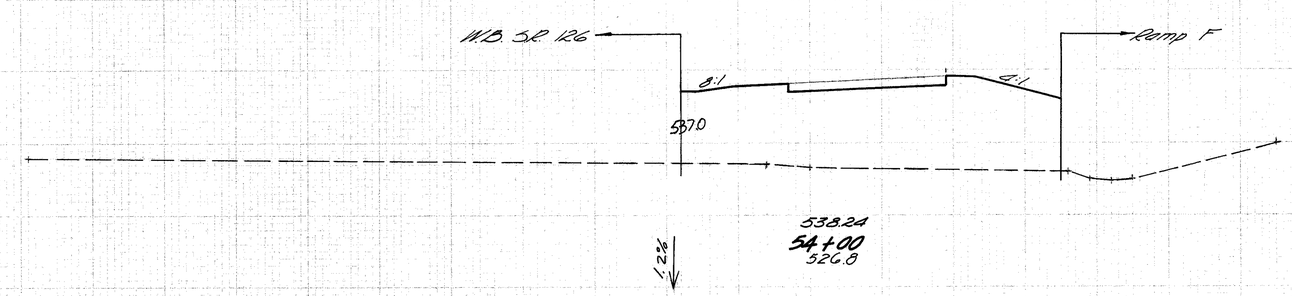
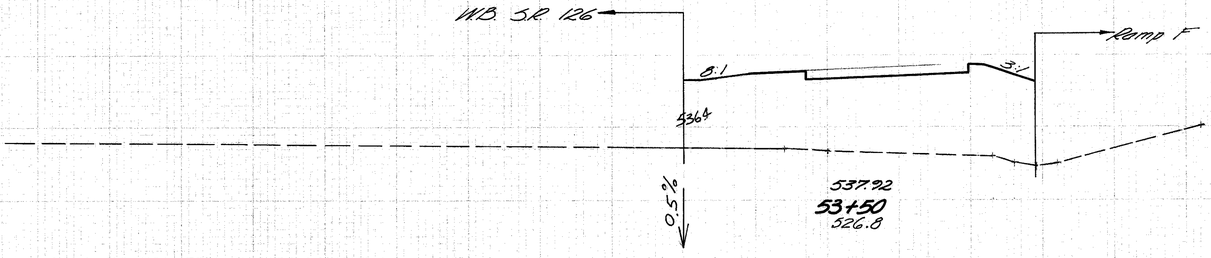
787









DEVELOPED	CHECKED

RAMP E STA. 53+50 TO STA. 55+00

FED. ROAD SECTION	STATE	PROJECT	
2	OHIO		

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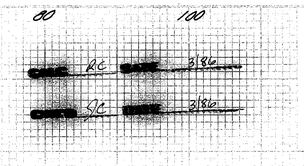
787

HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY



CROSS SECTIONS SHEET NO.	TO STA.
92	540
485	540
419	540
69	540

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		0	2910
0	1370		
		0	2381
		0	1202
		0	2081
		0	1046

Sta. 56+50 ℄ Ramp E
Shift ℄ 16'-0" Right

W.B. S.R. 126

8:1

540.9

8:1

Ramp F

543.44
56+50
528.6

2.4%

W.B. S.R. 126

8:1

539.8

8:1

Ramp F

542.26
56+00
528.4

1.6%

W.B. S.R. 126

8:1

539.0

8:1

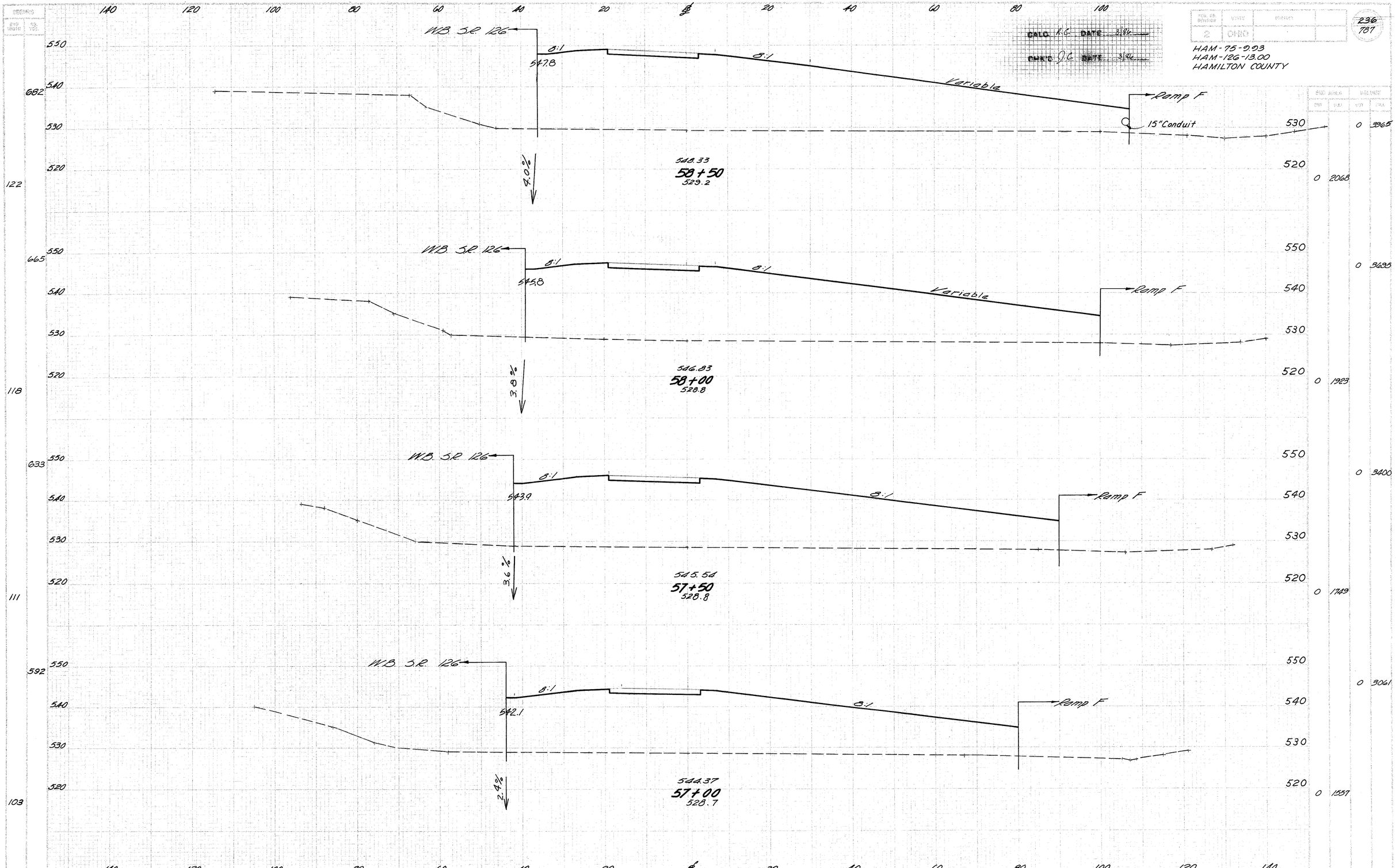
Ramp F

541.09
55+50
527.8

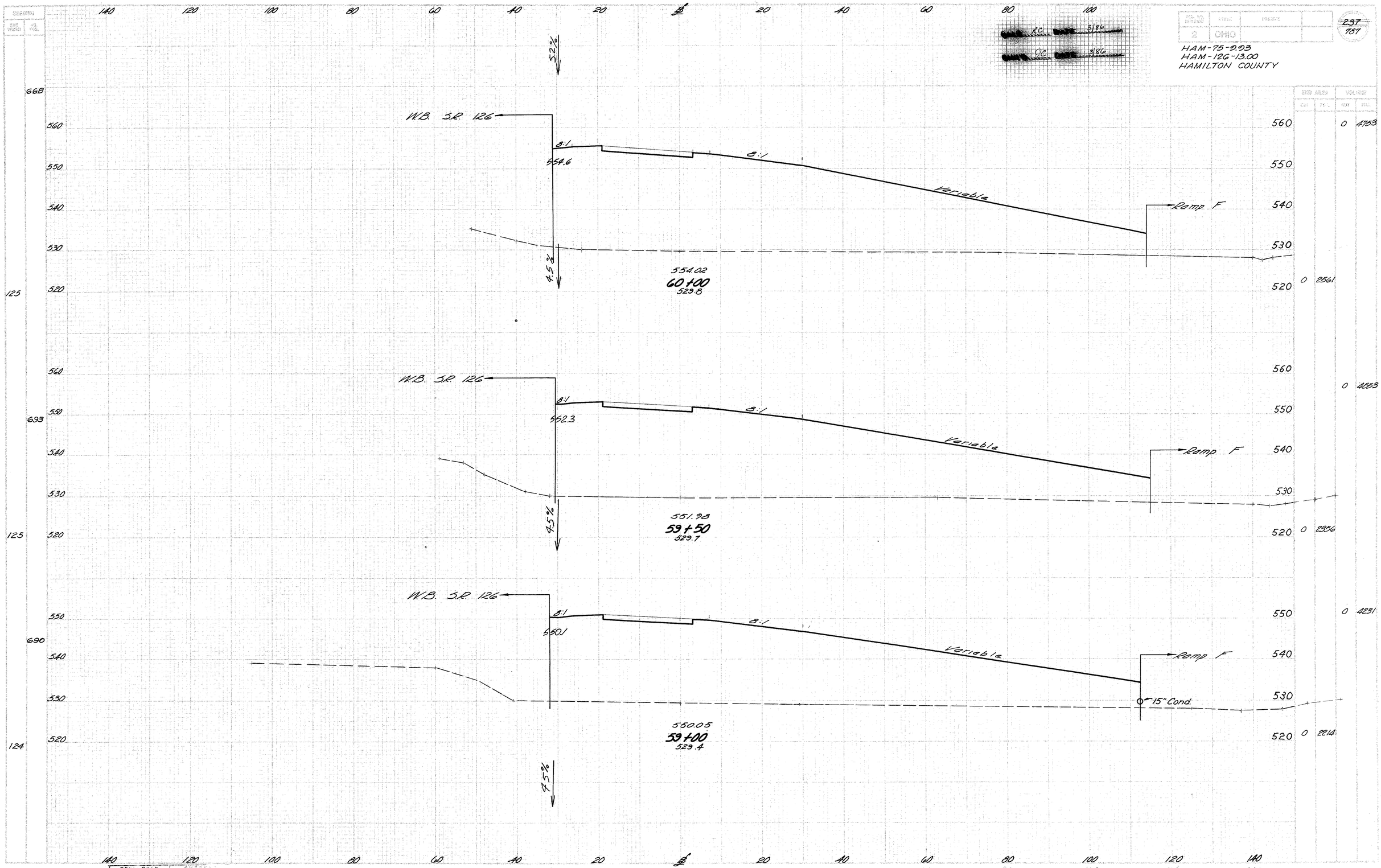
1.6%

DEVELOPED | CHECKED

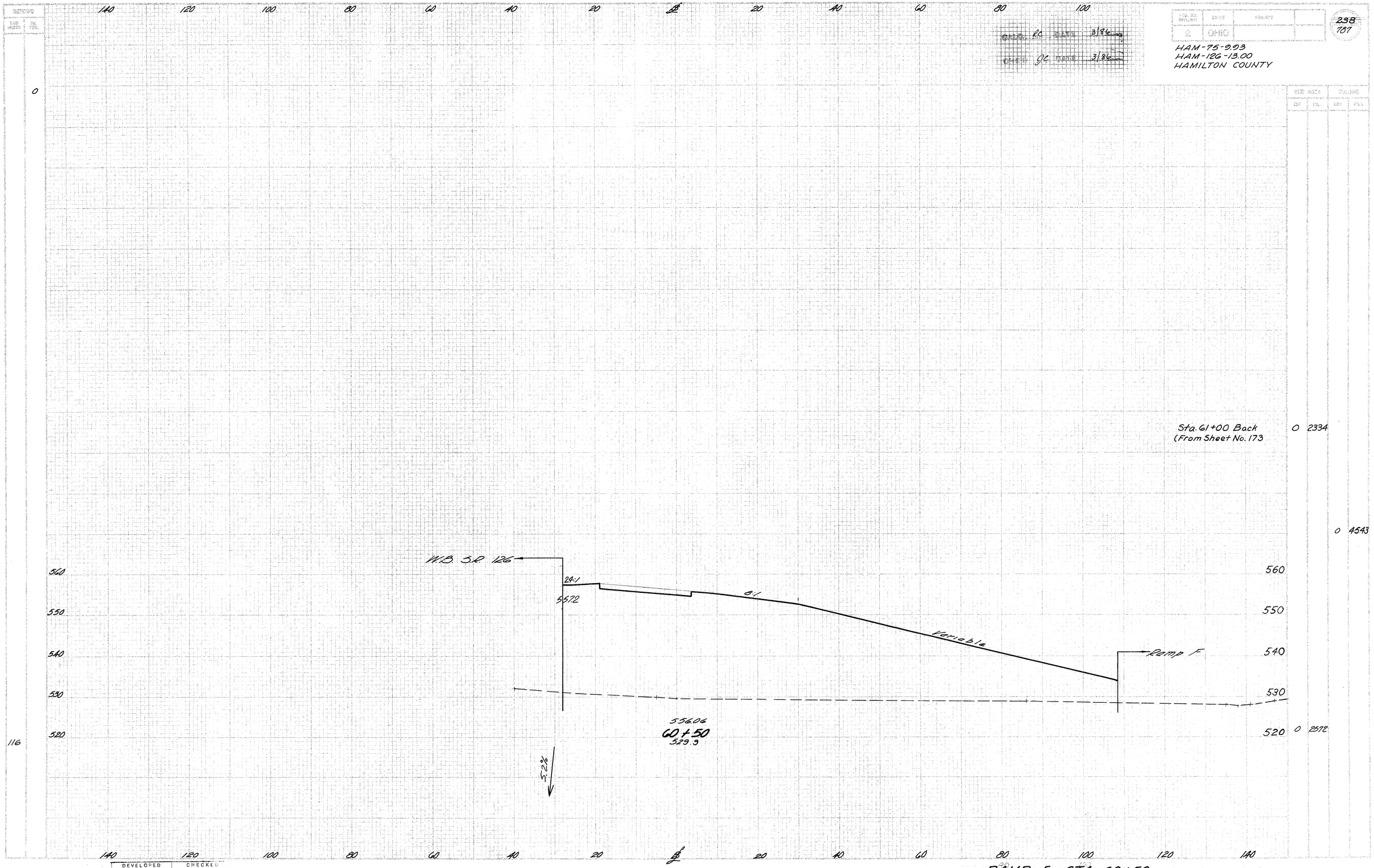
RAMP E STA 55+50 TO STA 56+50



RAMP F STA 57+00 TO STA 58+50



RAMP F STA 59+00 TO STA 60+00



CALC. RC DATE 3/86
CHECK GC DATE 3/86
FED. RD. DIVISION 2
STATE OHIO
238
787
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
Sta. 61+00 Back
(From Sheet No. 173
0 2334
0 4543
0 2572
W.B. S.R. 126
24:1
557.2
8:1
Variable
Ramp F
556.06
60+50
529.9
5.2%
560
550
540
530
520
116
140
120
100
80
60
40
20
20
40
60
80
100
120
140
DEVELOPED
CHECKED

PROJECT NUMBER	STATE	PROJECT		SHEET NO.
2	OHIO			239 / 787

CALC. RC DATE 3/86
CHK. JC DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

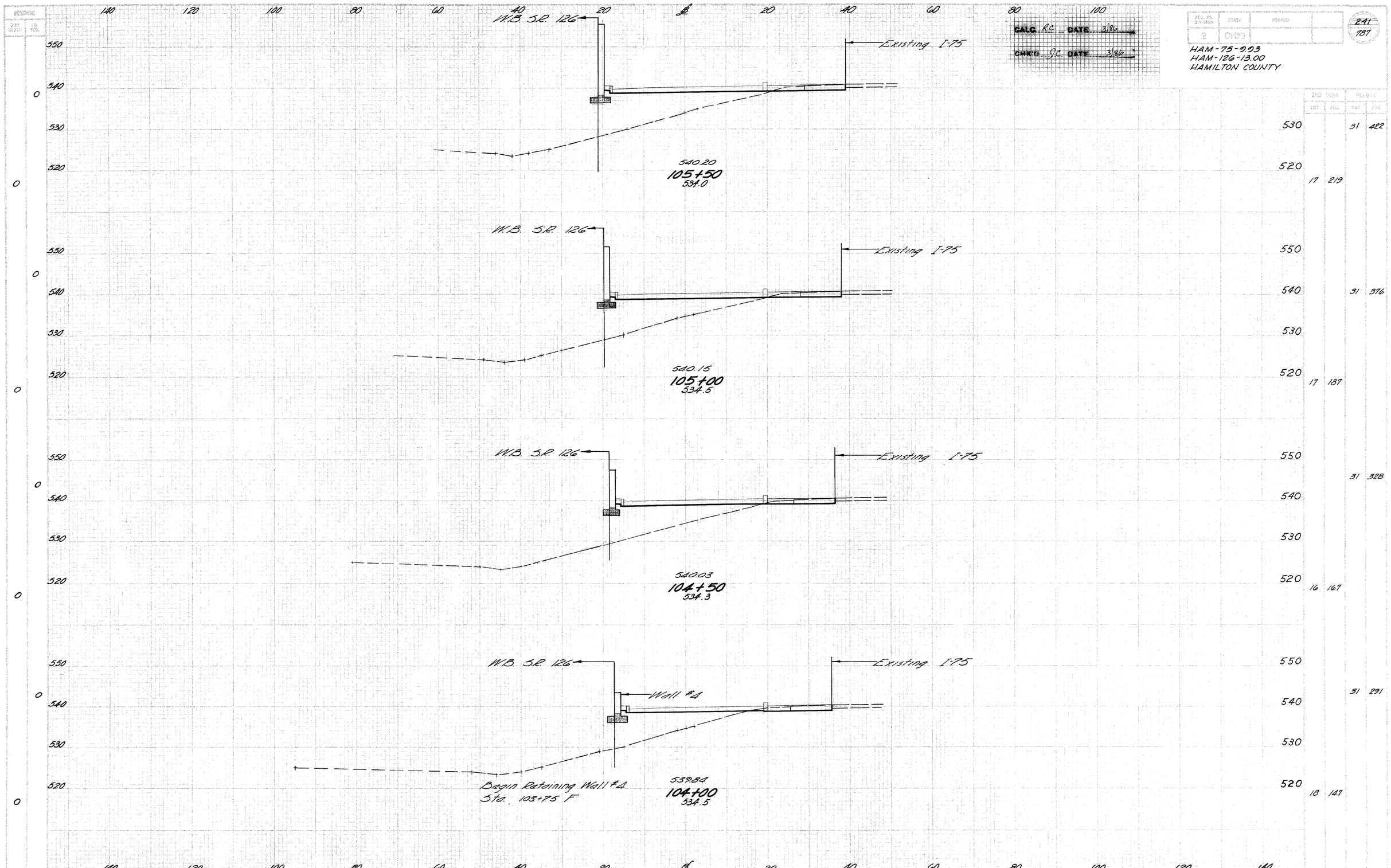
SECTION	SQ. FEET		RWY AREA	CUM AREA
CUT	FILL		CUT	CUT
				32 860
282		11.0%		
57		Existing I-75		
		W.B. S.R. 126		
		8:1		
		3:1		
		30" Water		
		5247		
		538.74		
		101+50		
		534.5		
				18 441
349		3.4%		
69		Existing I-75		
		8:1		
		3:1		
		30" Water		
		5230		
		538.52		
		101+00		
		535.0		
				23 402
386		0.8%		
70		Existing I-75		
		8:1		
		3:1		
		30" Water		
		5227		
		538.30		
		100+50		
		535.0		
				22 410
389		0.6%		
70		Existing I-75		
		8:1		
		3:1		
		30" Water		
		5224		
		538.08		
		100+00		
		535.0		
		Ahead		
				26 355
				(From Sheet No. 190) Ahead
				42 752
				44 708

DEVELOPED	CHECKED

RAMP E STA 100+00 TO STA 101+50

DESIGNED	DETAILED	QUANTITIES	CHECKED
END AREA			

PROJECT			
PROJECT			
PROJECT			
PROJECT			



530		31	422
520	17	219	
540		31	376
530			
520	17	187	
550		31	328
540			
530			
520	16	167	
550		31	291
540			
530			
520	18	147	

DEVELOPED | CHECKED | EWB 11-71

RAMP F STA 104+00 TO STA 105+50

SECTION

SHEET NO.	NO. SHEETS
2	OHIO

REVISIONS	DATE	PROJECT

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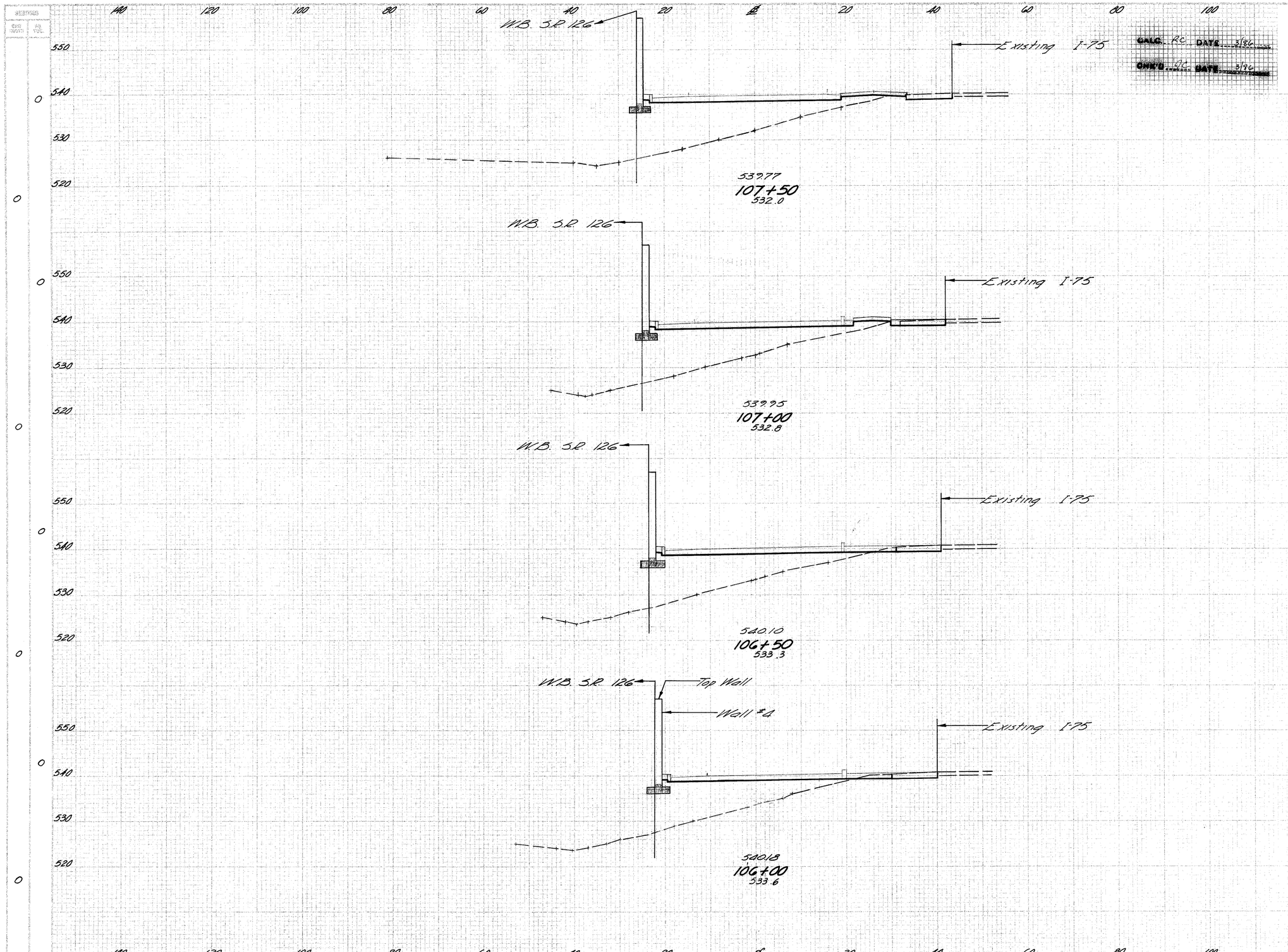
787

CALC. RC DATE 3/96

CHK'D JC DATE 3/96

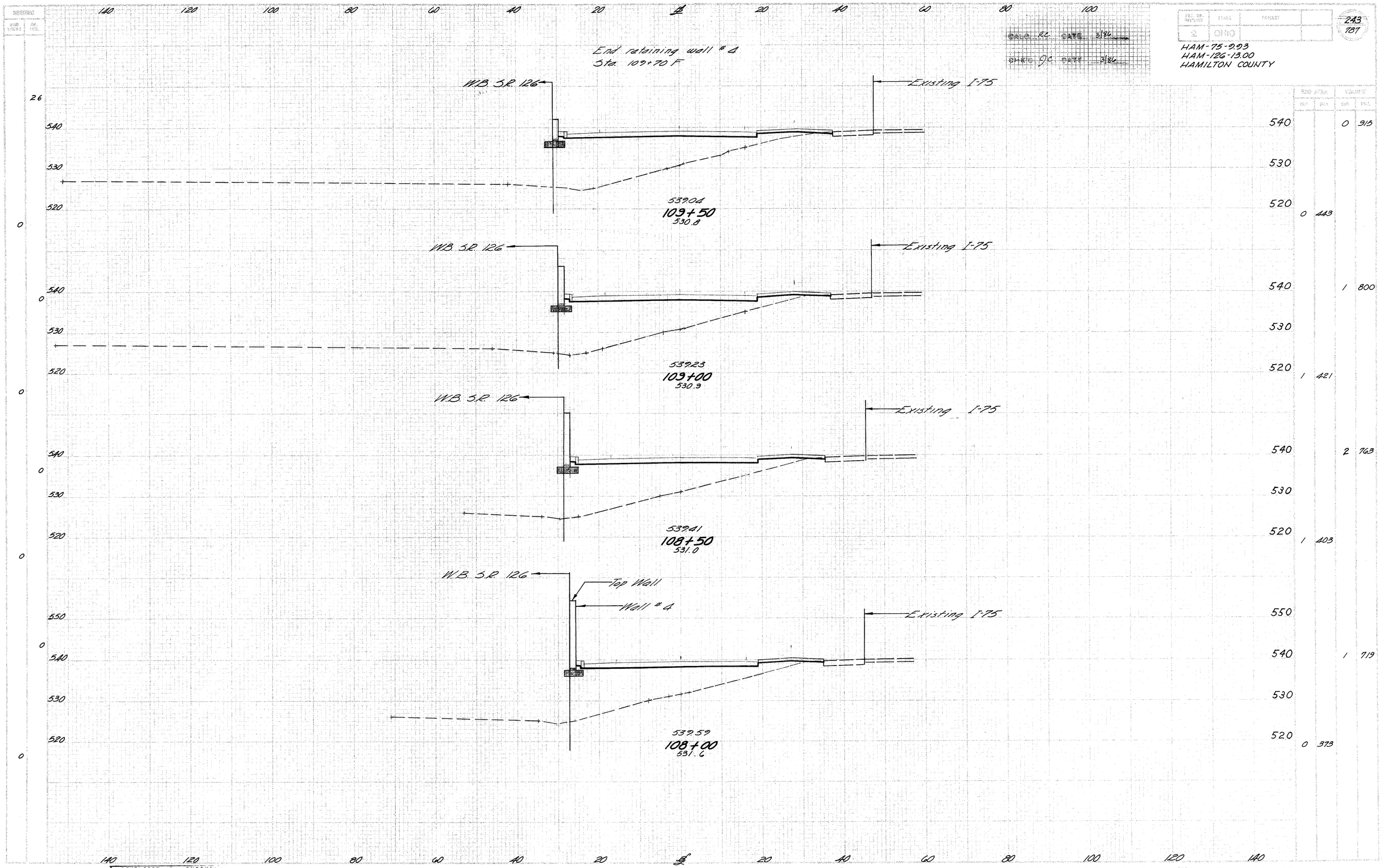
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



STA.	VOLUME
	CUT / FILL
530	10 / 662
520	11 / 342
550	26 / 608
540	
530	
520	17 / 315
550	26 / 545
540	
530	
520	11 / 274
550	26 / 473
540	
530	
520	19 / 237

DEVELOPED | CHECKED

RAMP E STA 106+00 TO STA 107+50



0	915	0	443
1	800	1	421
2	763	1	403
1	719	0	373

CALC. RC DATE 3/86
CHK'D JC DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

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787

DEVELOPED | CHECKED

RAMP F STA 108+00 TO STA 109+50

CALC. RC DATE 3/86

CHK'D JC DATE 3/86

REV. NO.	DATE	SUBJECT		
2	OHD			

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HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

BEGINS STA. 110+00 OFF SET 65 Rt

Ramp E 8:1

537.5

Existing I-75

0-15" Cond.

538.32
111+50
529.0

Existing I-75

Ramp E

538.50
111+00
529.0

130 D Sta. 110+56, 28' Rt. Ramp F
604 Type A Manhole
Rim Elev. = 538.74
E 15" In = 533.94
E 15" Out = 531.48

132 D Sta. 110+56, 19' Rt. Ramp F
604 I-2A-6 Inlet
E Grate = 538.12
E 15" = 534.12

131 D Sta. 110+56, 37' Rt. Ramp F
604 Std. No. I-2A-6 Inlet
E Grate = 538.36
E 15" = 534.36

Ramp E

Existing I-75

238 52%

603 8'-15" Type B

603 8'-15" Type B

538.68
110+50
529.0

131 D 40

132 D 40

Ramp F Back

* Ramp E Ahead

Ramp F Ahead

W.B. S.R. 126

Existing I-75

8:1

* For Ramp E Earthwork Quantities See Sheet No. 233

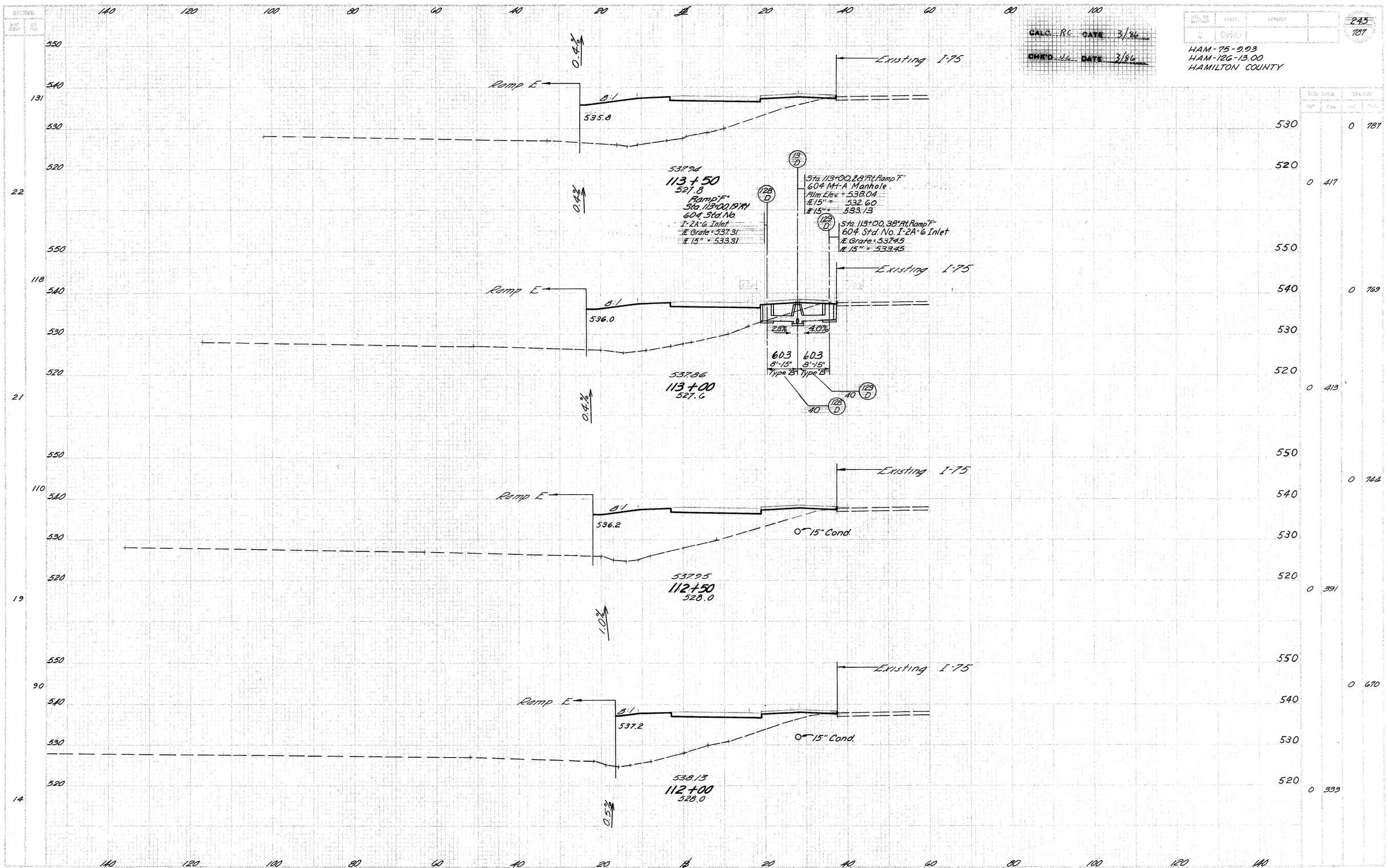
538.86
110+00
530.0

AH 0
BK 10

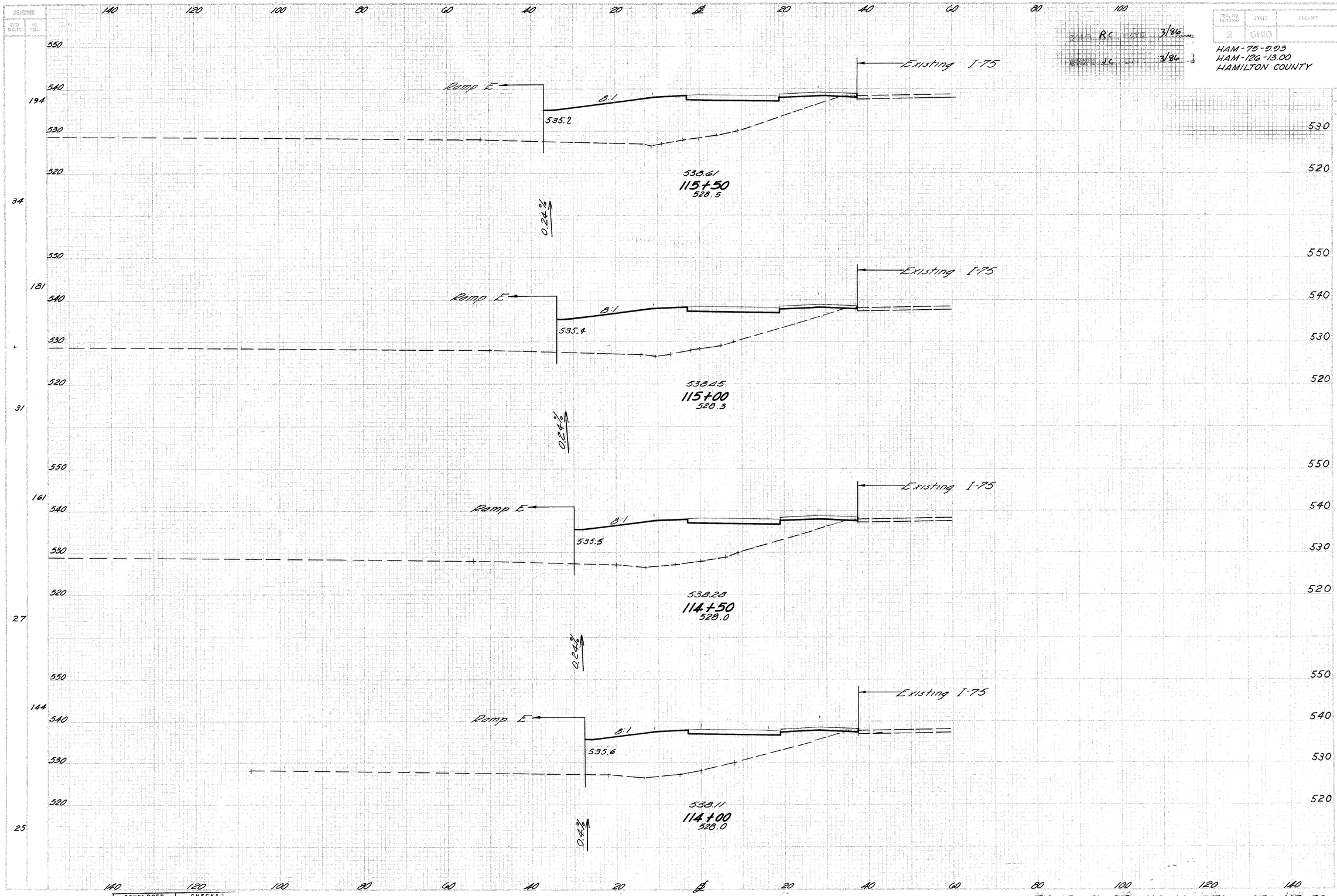
	END AREA CUT	END AREA FILL	PRISMOIDAL CUT	PRISMOIDAL FILL
			0	554
		0	265	
			0	393
			0	159
			0	297
			0	162
			0	286
Ahead			0	147
Back			0	545

DEVELOPED | CHECKED

RAMP F STA. 110+00 TO STA. 111+50



RAMP E STA 112+00 TO STA 113+50



FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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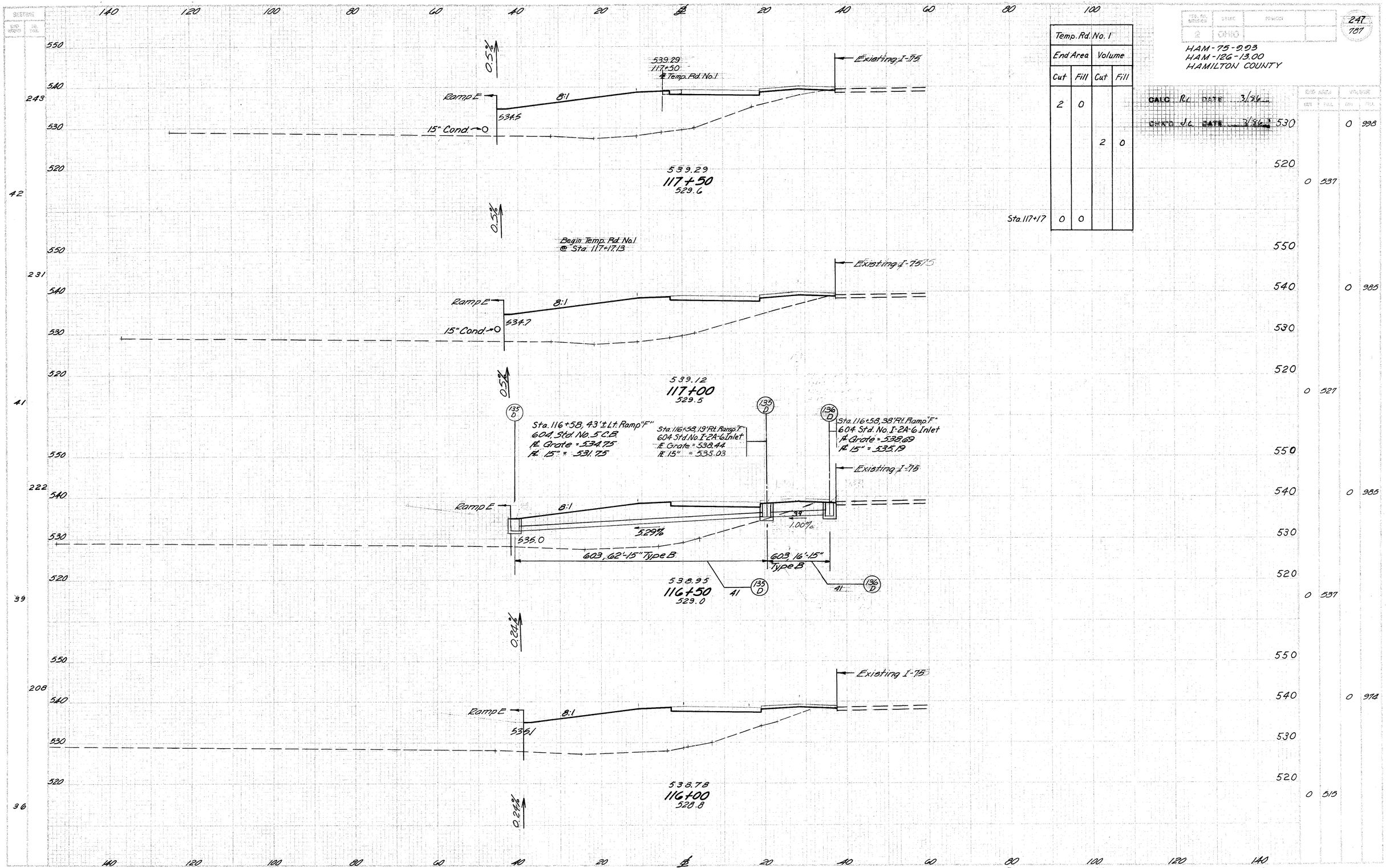
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
194			0	955
34	0	516		
181			0	936
31	0	495		
161			1	889
27	1	465		
144			1	831
25	0	433		

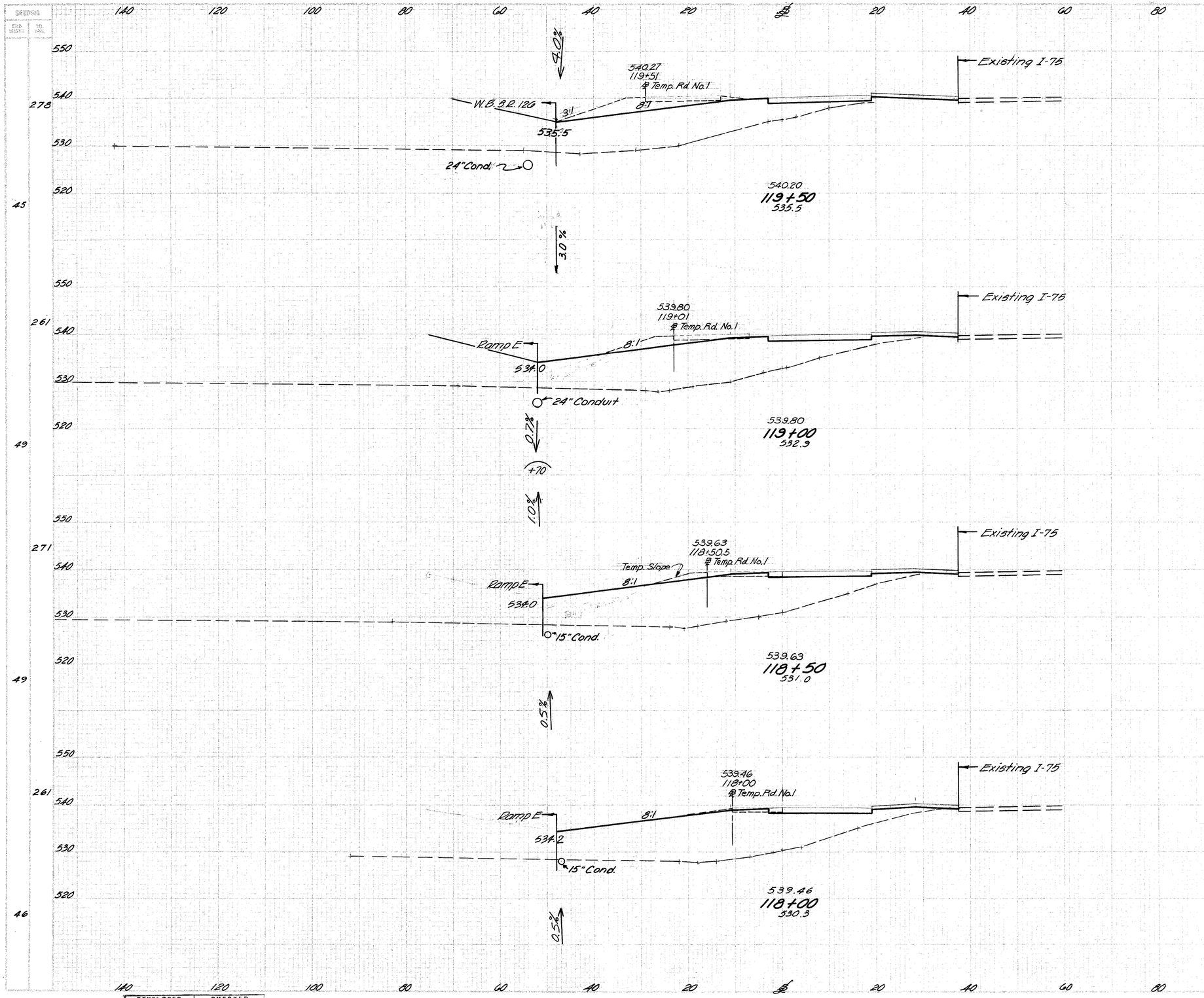
DEVELOPED | CHECKED

RAMP E STA 114+00 TO STA 115+50



DEVELOPED | CHECKED

RAMP E STA 116+00 TO STA 117+50



Temporary Rd. No. 1			
End Area		Volume	
Cut	Fill	Cut	Fill
0	64		
		0	96
0	40		
		6	46
6	10		
		11	12
5	2		
		7	2

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

248
787

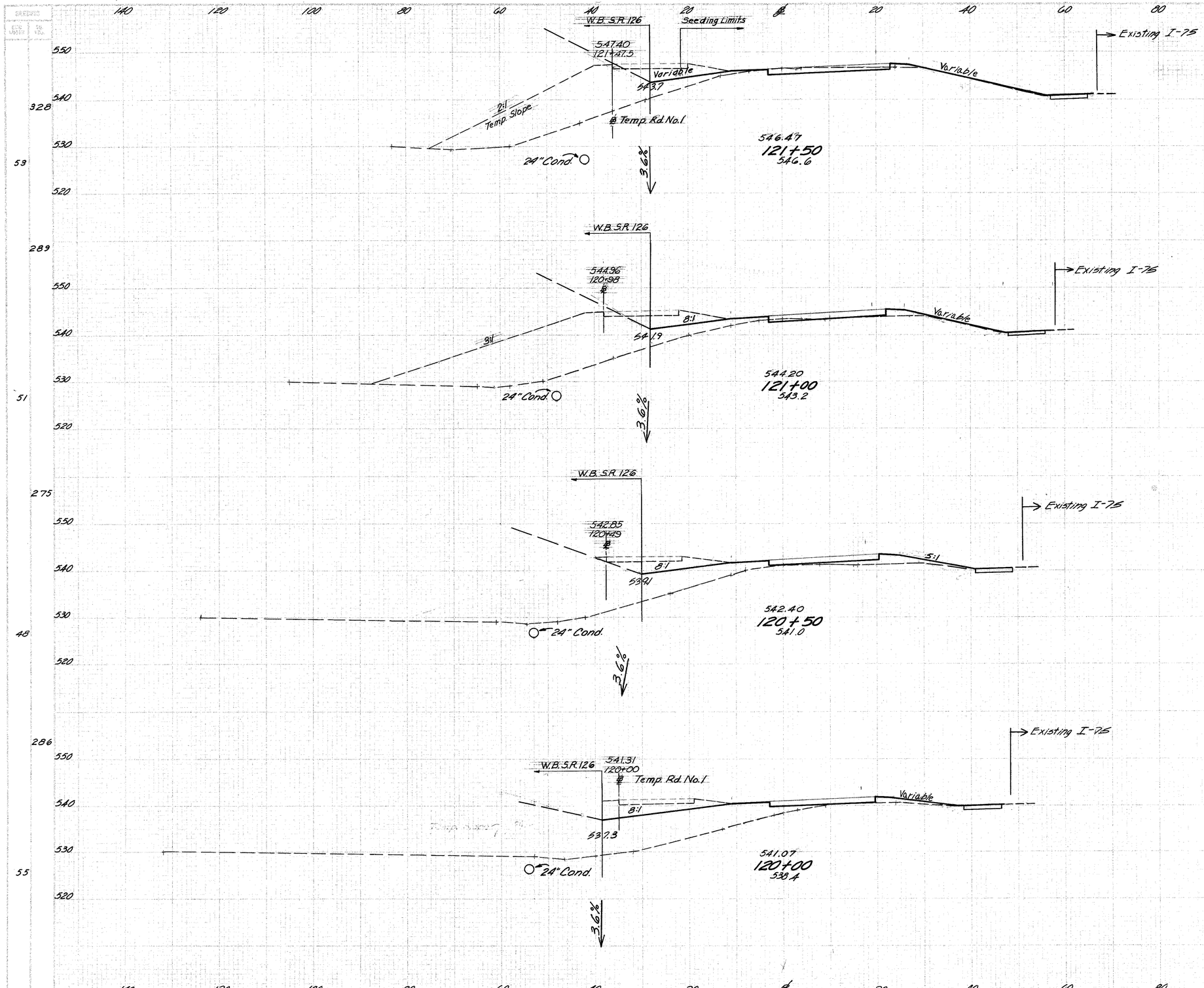
CALC. RC DATE 3/86
CHKD. LC DATE 3/86

	Cut	Fill	Cut	Fill
530			1	568
520	1	376		
550			1	808
540				
530				
520	0	497		
550			1	956
540				
530				
520	1	535		
550			1	996
540				
530				
520	0	541		

DEVELOPED | CHECKED

RAMP E STA 118+00 TO STA 119+50

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



Temporary Rd. No. 1			
End Area		Volume	
Cut	Fill	Cut	Fill
0	36		
		0	62
0	31		
		0	67
0	41		
		0	103
0	70		
		0	124

530			69	41
	26	38		
520				
			28	92
550				
540				
530	4	61		
520				
			4	169
550				
540				
530	0	121		
520				
			0	331
550				
540				
530	0	237		
520				

CALC R.C. DATE 3/86
CHK'D J.C. DATE 3/86

DEVELOPED | CHECKED

RAMP E STA 120+00 TO STA 121+50

CALC DS DATE 3/86

CHK'D RC DATE 3/86

HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY

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787

554.60
122+94
℄ Temp. Rd. No.1
Temp. Part

Existing I-75

123+00 (Existing Ramp F)
554.5

551.65
122+34
℄ Temp. Rd. No.1

Existing I-75

2:1

24" Cond.

ZERO SECTION
551.27
122+40.69
551.3

W.B. S.R. 126

549.83
121+87
℄ Temp. Rd. No.1

Variable

5+5.1

Seeding Limits

Variable

Existing I-75

2:1
Temp. Emb. Slope

549.06
122+00
549.0

24" Cond.

2.0%

Temporary Rd. No.1			
End Area		Volume	
Cut	Fill	Cut	Fill
5	145		
		6	278
0	108		
		0	120
		0	51
		0	81

RAMP F STA 122+00 TO STA 122+40.69

DEVELOPED | CHECKED

SEEDING

END WIDTH	SIDE SLOPE
0	0

CALC. DS DATE 3/86

CHK'D RC DATE 3/86

FED. ROAD DESIGN	STATE	PROJECT
2	OHIO	

250-A
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

End Temporary Road No.1
@ Sta. 125+32

123+95.17 Temp. Rd
Resurfacing

559.58
124+00 (Existing Ramp F)
559.3

Temp. Pvt.
557.11
123+45

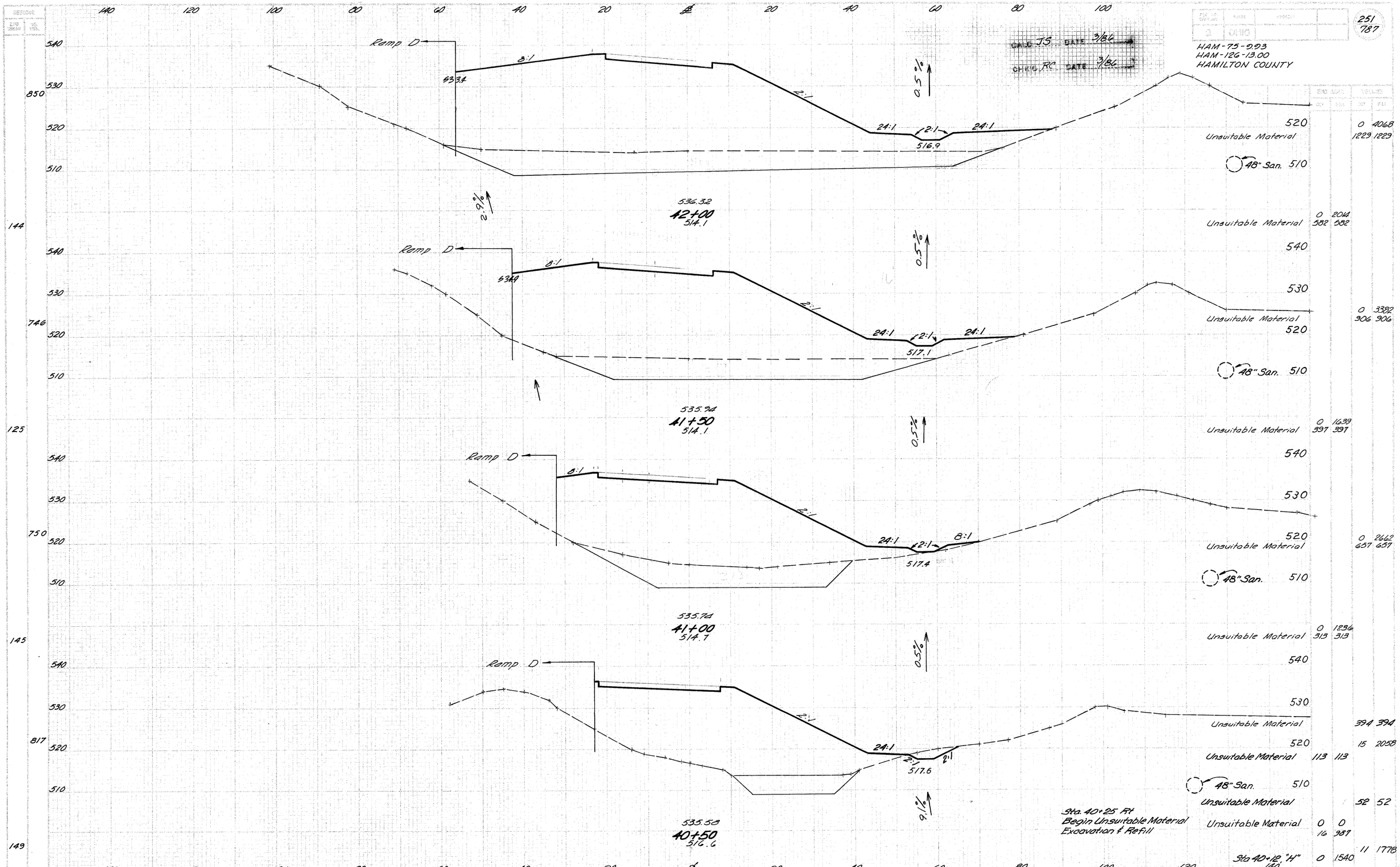
Resurfacing

123+50 (Existing Ramp F)
557.2

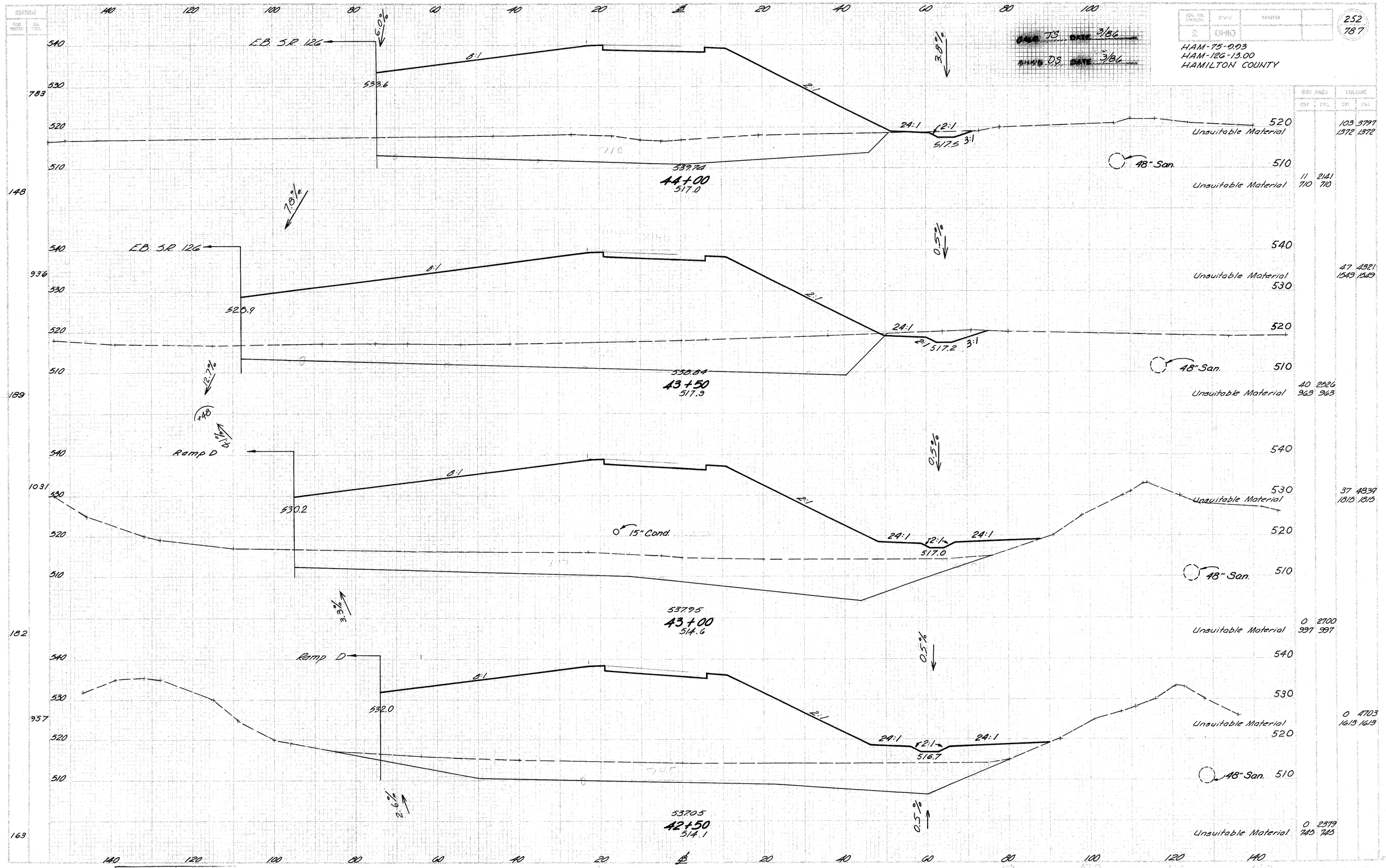
Temporary Rd. No. 1			
End Area		Volume	
Cut	Fill	Cut	Fill
0	0		
		7	0
8	0		
		12	135

DEVELOPED	CHECKED
250-A	1-78

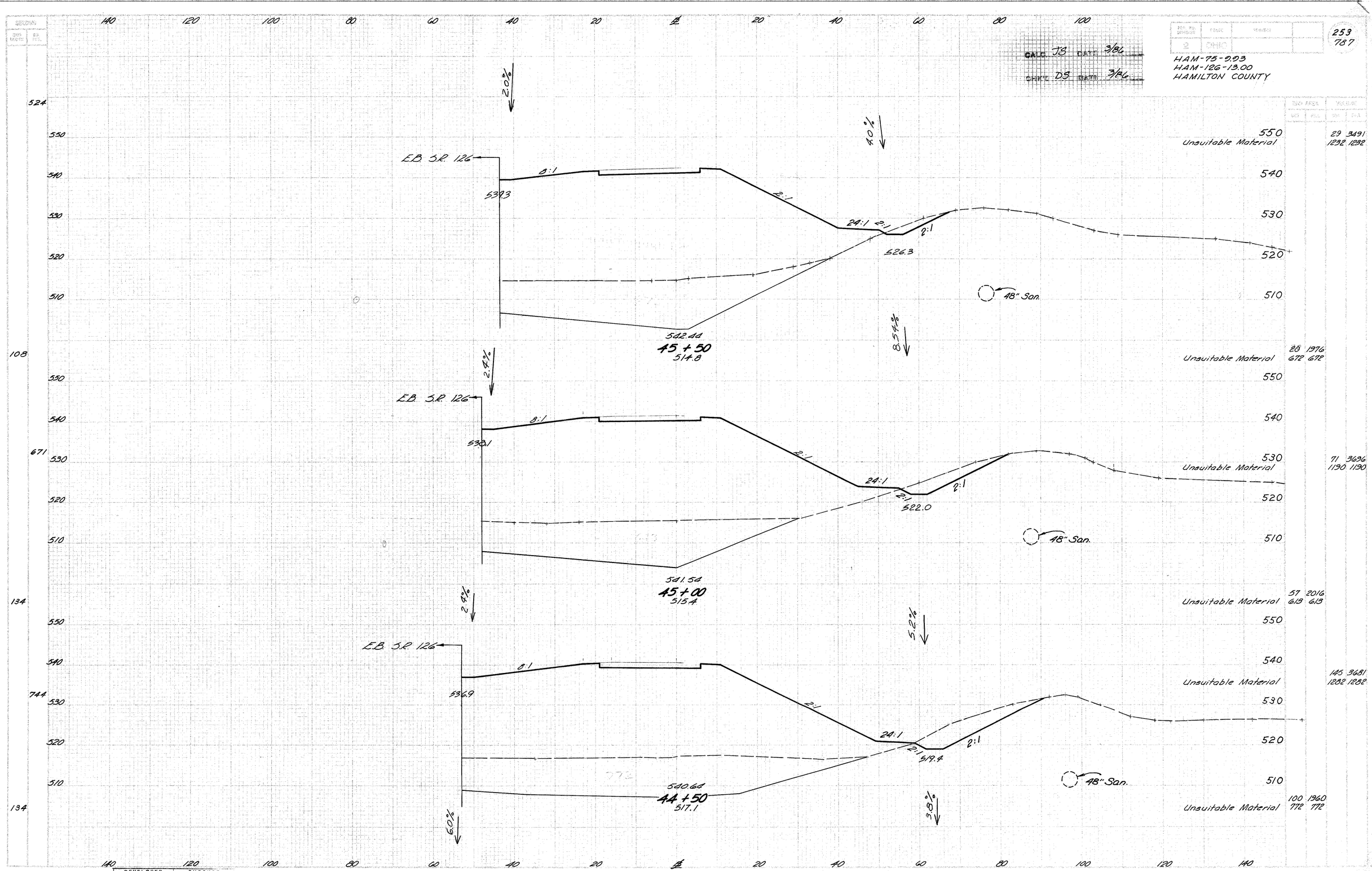
TEMP. RD NO.1, STA. 123+50 TO STA. 124+00 (RAMP F)



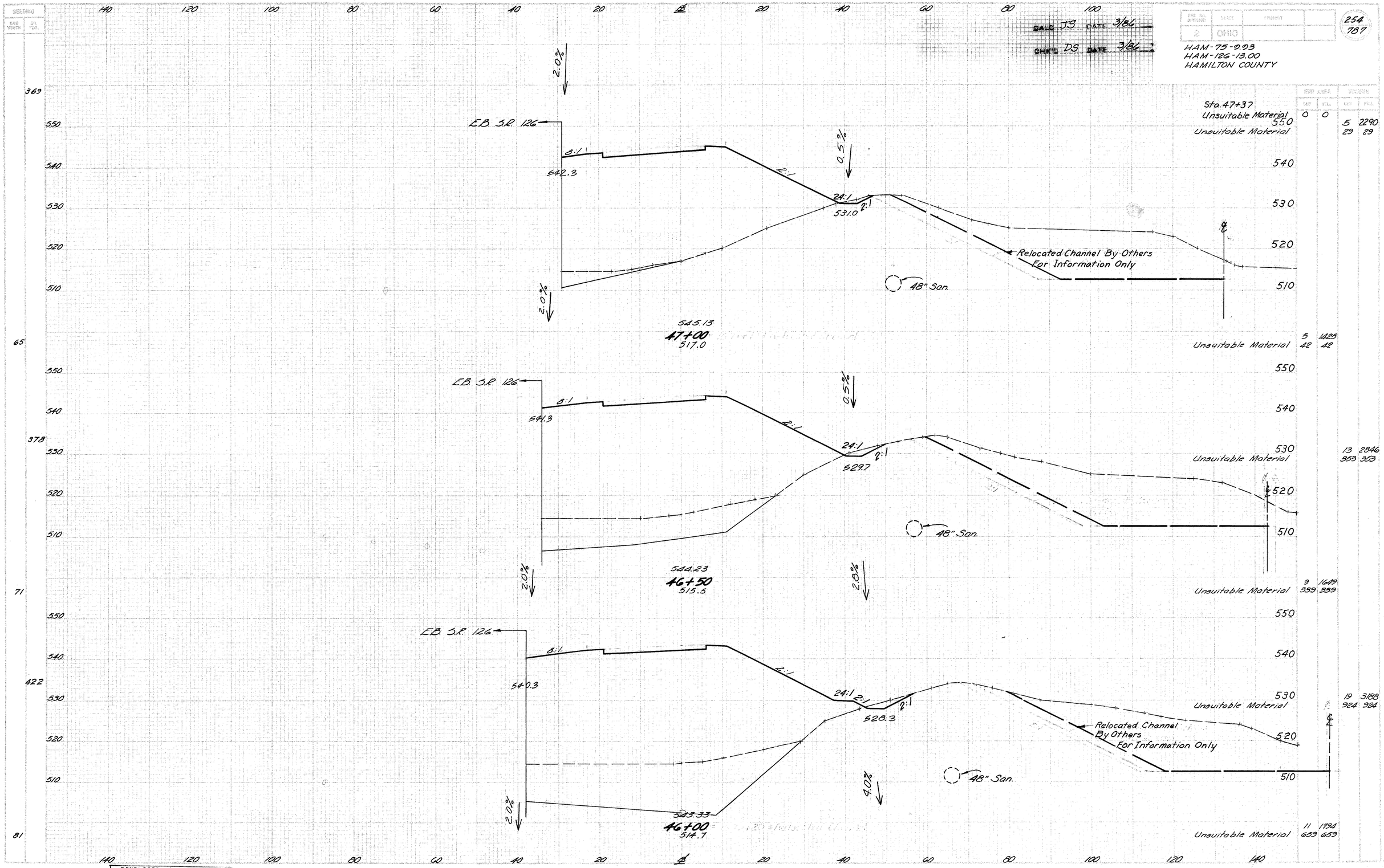
RAMP H STA 40+50 TO STA 42+00



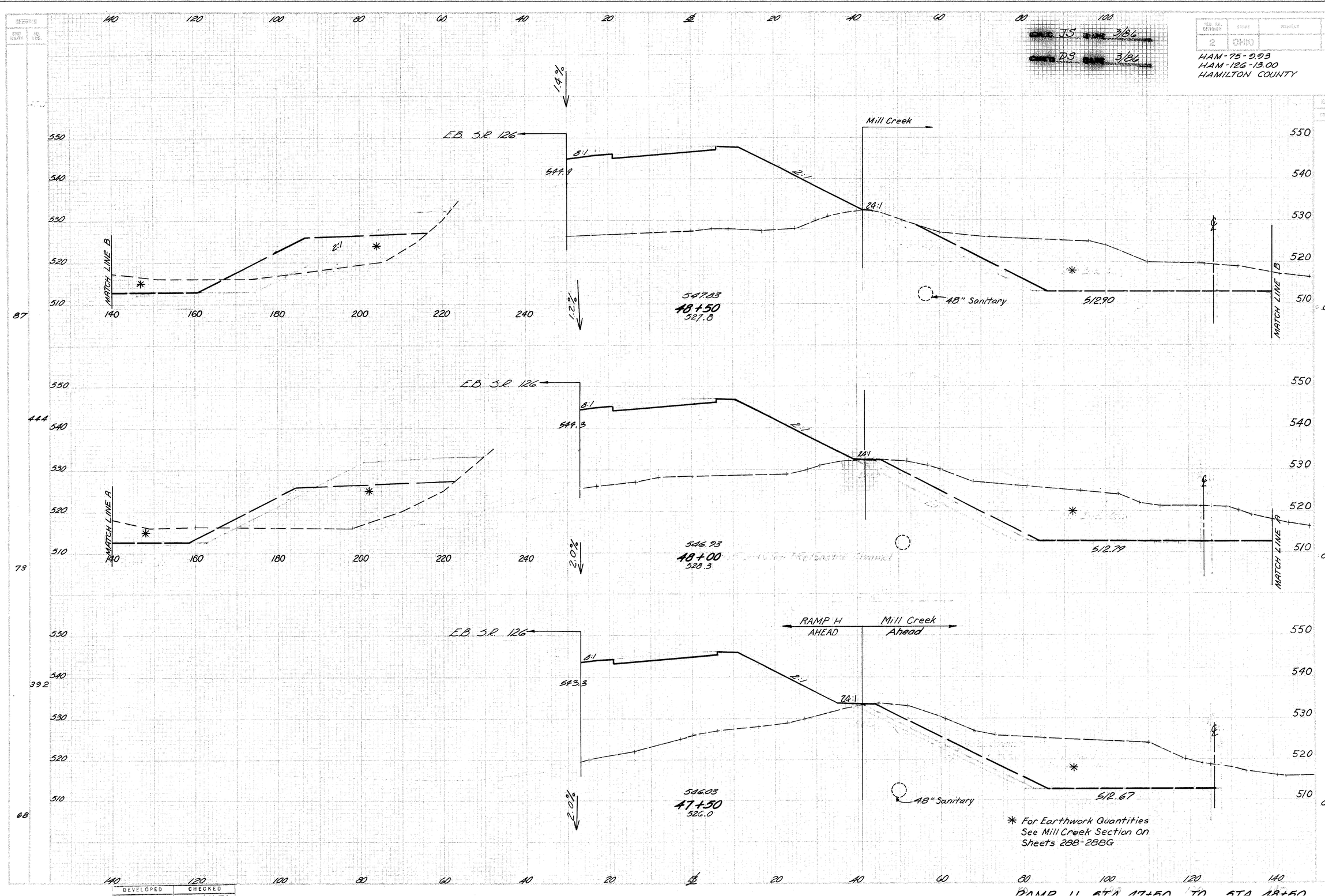
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
252
787
E.B. S.R. 126
6.0%
8:1
2:1
3.8%
533.6
24:1
2:1
517.5
3:1
539.74
44+00
517.0
48" San.
Unsuitable Material
103 3797
1372 1372
11 2141
710 710
7.8%
E.B. S.R. 126
0.5%
8:1
2:1
528.9
24:1
2:1
517.2
3:1
538.84
43+50
517.9
48" San.
Unsuitable Material
47 4321
1549 1549
40 2526
963 963
12.7%
Ramp D
0.5%
8:1
2:1
530.2
15" Cond.
24:1
2:1
24:1
517.0
48" San.
537.95
43+00
514.6
Unsuitable Material
37 4839
1815 1815
0 2700
997 997
3.3%
Ramp D
0.5%
8:1
2:1
532.0
24:1
2:1
24:1
516.7
48" San.
537.05
42+50
514.1
0.5%
Unsuitable Material
0 4703
1613 1613
0 2379
745 745
DEVELOPED
CHECKED



253
787
CALC. JS DATE 3/86
CHK'D DS DATE 3/86
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
E.B. S.R. 126
8:1
2:1
24:1
539.3
526.3
542.44
45+50
514.8
48" San.
Unsuitable Material
29 3491
1232 1232
28 1976
672 672
538.1
522.0
541.54
45+00
515.4
71 3696
1190 1190
57 2016
613 613
536.9
519.4
540.64
44+50
517.1
145 3681
1282 1282
100 1960
772 772
524
108
671
134
744
134
2.0%
4.0%
8.54%
2.4%
5.2%
6.0%
3.8%
DEVELOPED
CHECKED



CALC JS DATE 3/86
CHK'D DS DATE 3/86
254
787
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
Sta. 47+37
Unsuitable Material
Unsuitable Material
Unsuitable Material
Unsuitable Material
Unsuitable Material
Unsuitable Material
Unsuitable Material
E.B. S.R. 126
8:1
542.3
2:1
24:1
531.0
2:1
0.5%
2.0%
Relocated Channel By Others For Information Only
48" San.
545.13
47+00
517.0
541.3
529.7
544.23
46+50
515.5
2.8%
540.3
528.3
543.33
46+00
514.7
4.0%
369
65
378
71
422
81



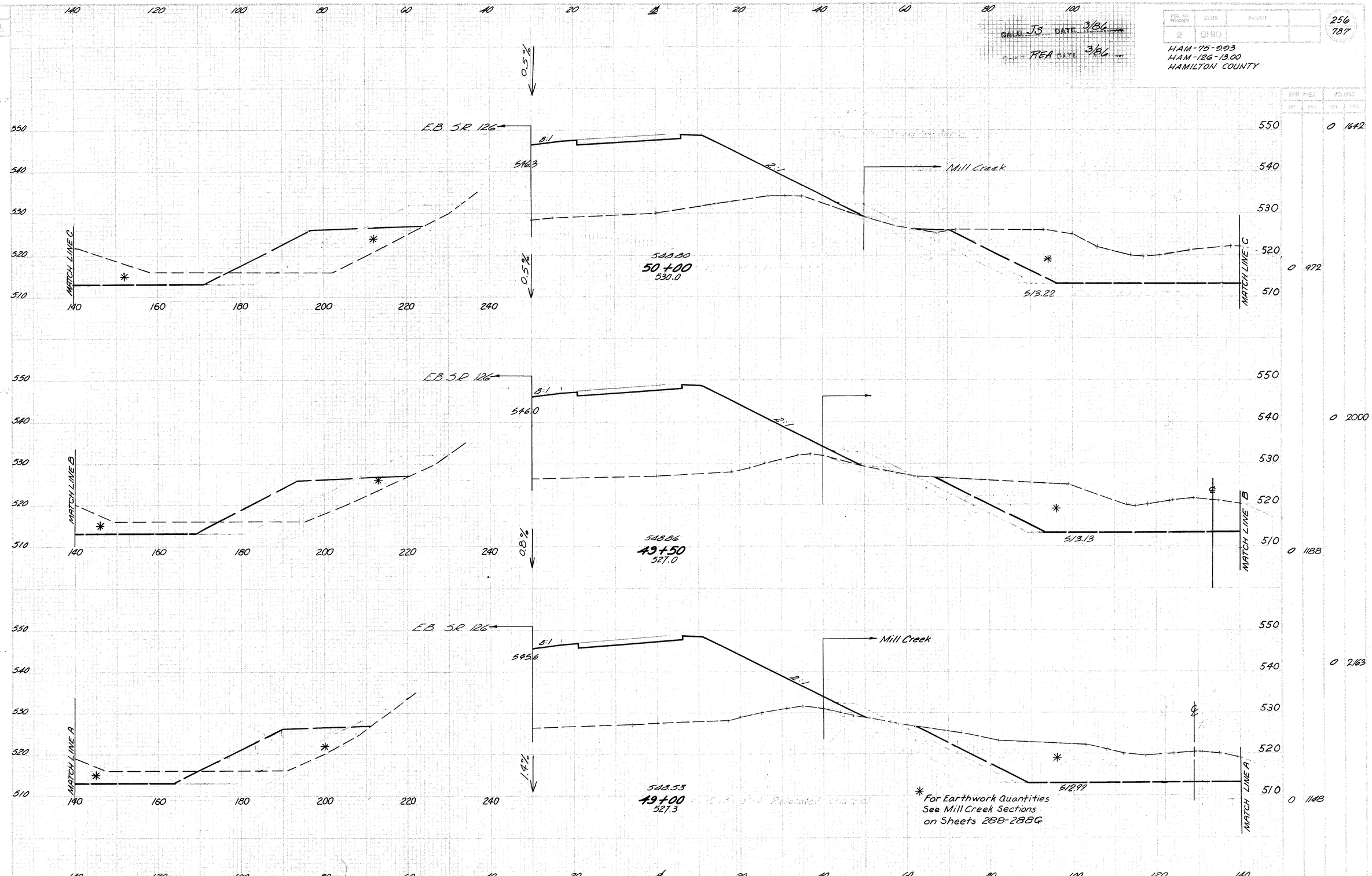
RAMP H STA 47+50 TO STA 48+50

CALC. JS DATE 3/86

REA DATE 3/86

HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY

256
787



* For Earthwork Quantities See Mill Creek Sections on Sheets 288-288G

DEVELOPED	CHECKED

RAMP H STA 49+00 TO STA 50+00

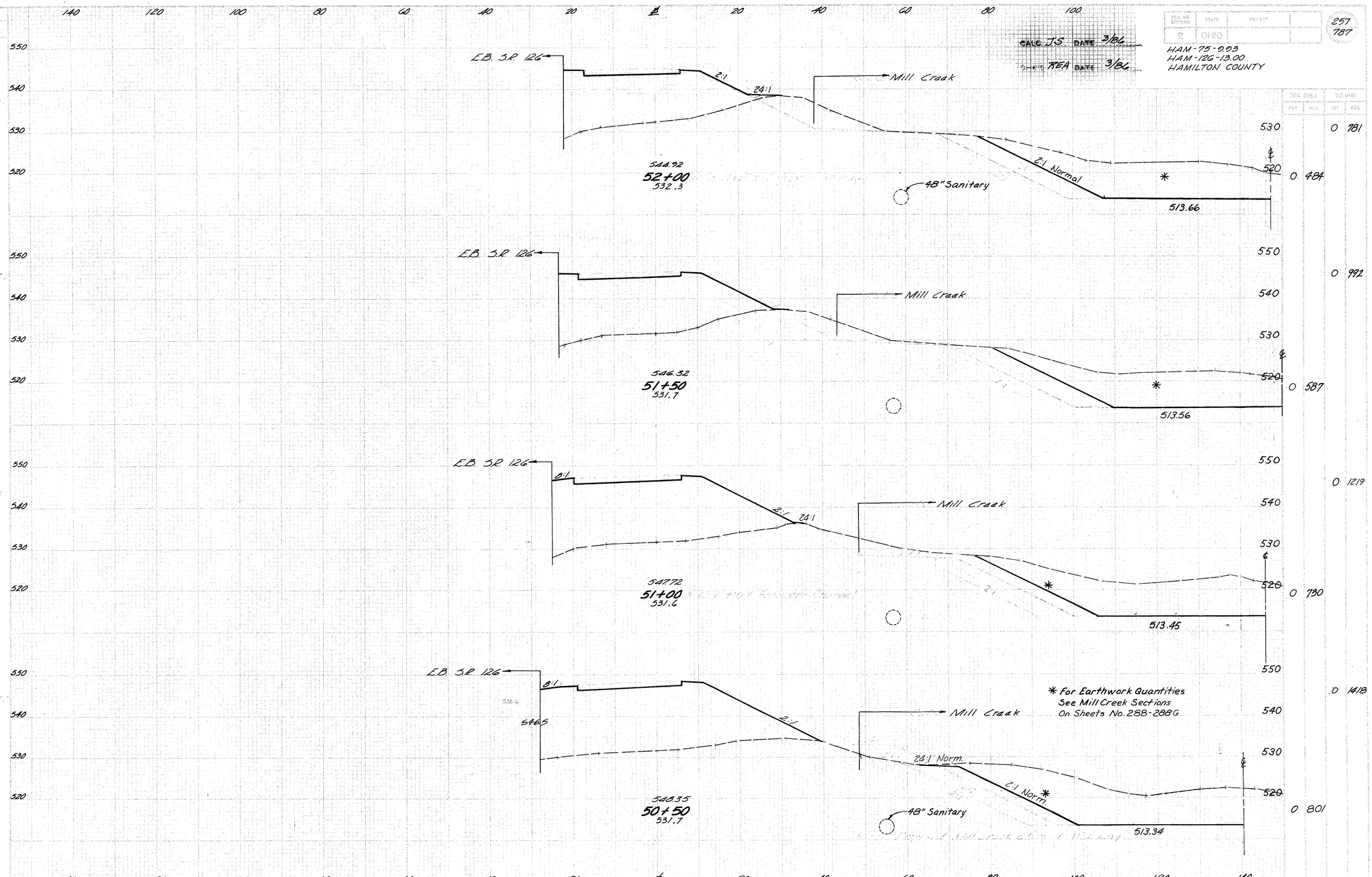
CALC JS DATE 3/86

CHK'D TEA DATE 3/86

SEQ. NO. DIVISION	STATE	PROJECT	
2	OHIO		

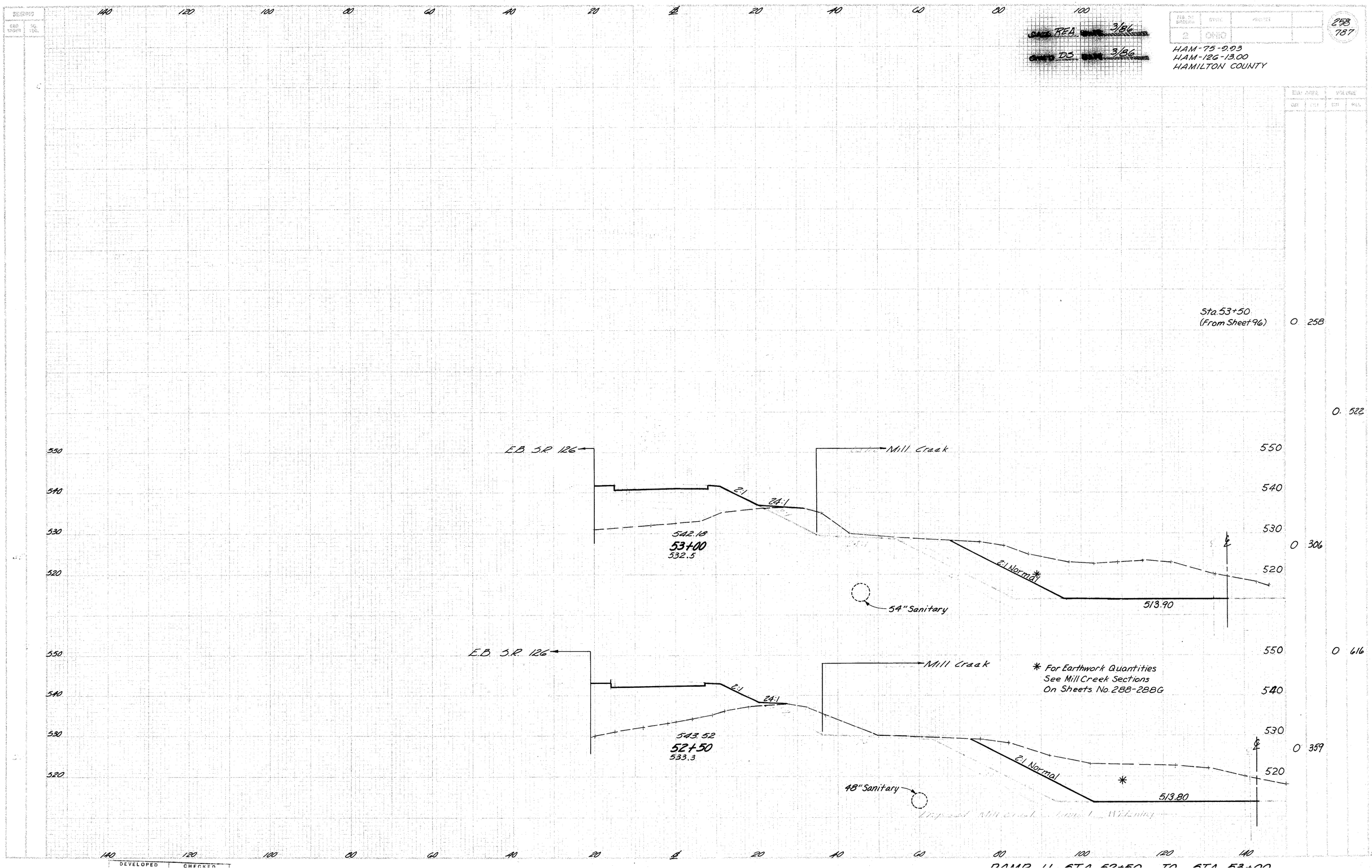
257
787

HAM-75-0.93
HAM-126-13.00
HAMILTON COUNTY



DEVELOPED | CHECKED

RAMP H STA 50+50 TO STA 52+00



REA 3/86
DS 3/86
2 OHIO
258
787
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
Sta. 53+50
(From Sheet 96)
0 258
0 522
0 306
0 616
0 359
E.B. S.R. 126
Mill Creek
2:1
24:1
542.18
53+00
532.5
2:1 Normal
54" Sanitary
513.90
543.52
52+50
533.3
48" Sanitary
513.80
* For Earthwork Quantities
See Mill Creek Sections
On Sheets No. 288-288G
550
540
530
520
140
120
100
80
60
40
20

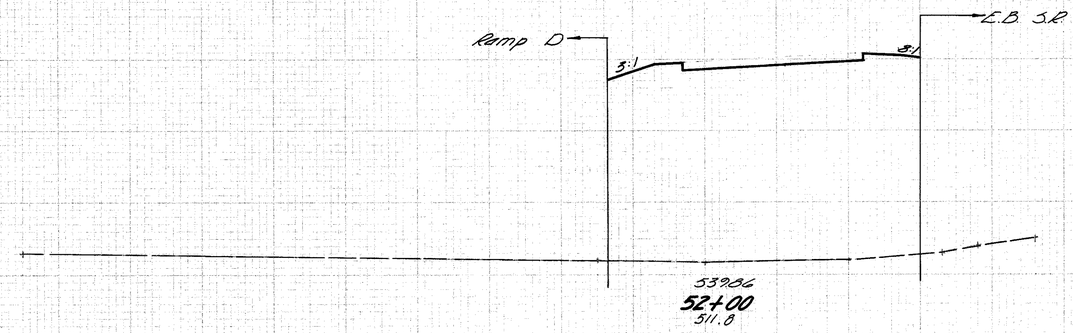
REG. NO. DIVISION	STATE	PROJECT	
2	OHIO		

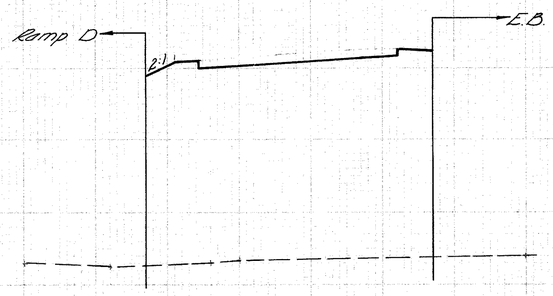
259
787

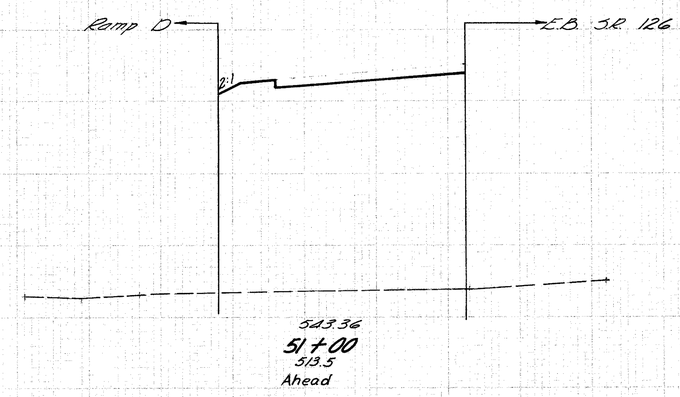
DRAWN REA DATE 3/86
CHECKED DS DATE 3/86

HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY

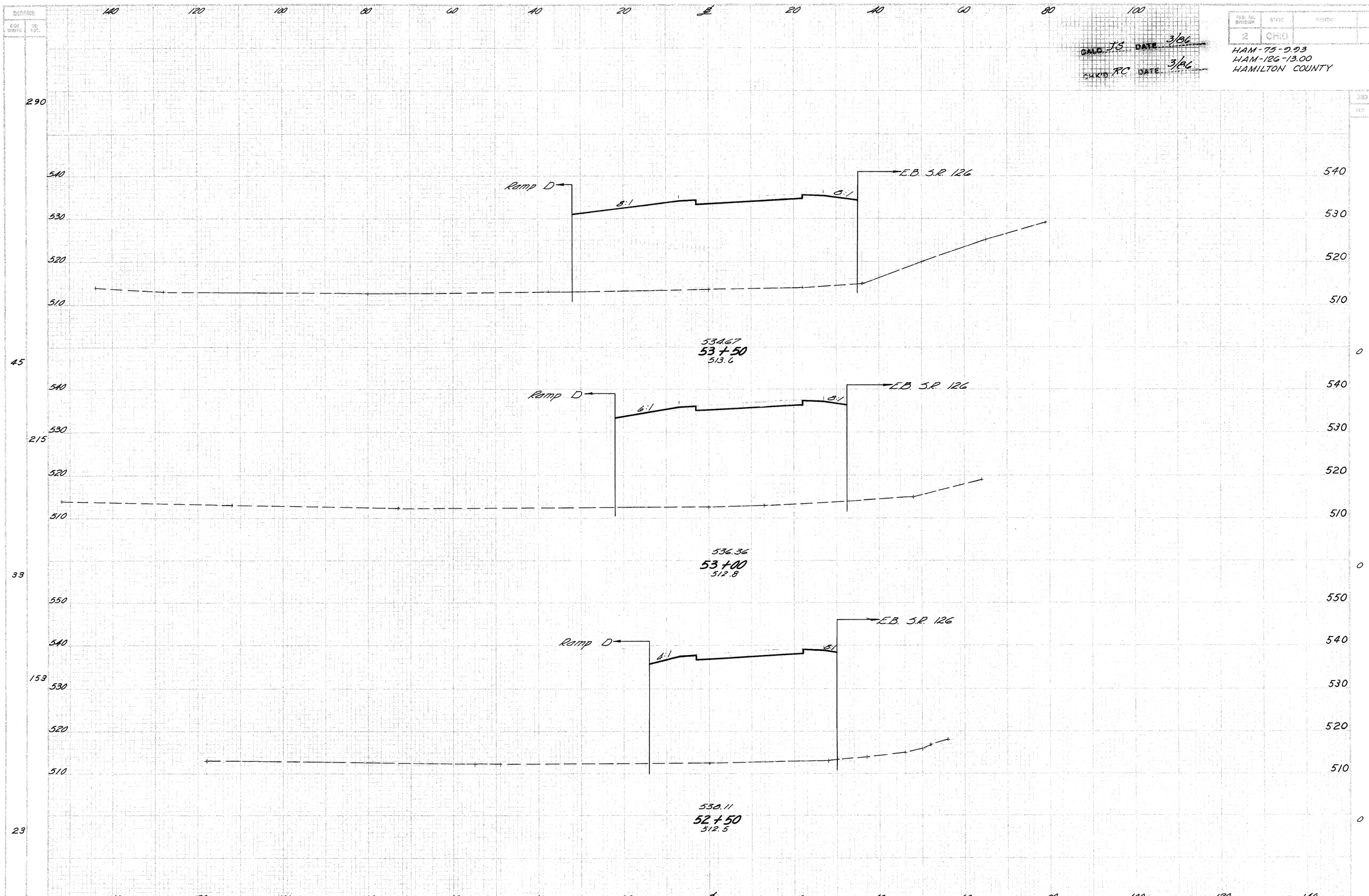
SECTIONS			
	CUT	FILL	
124			
106			
69			
22			
16			
9			







SUB AREA		VOLUME	
CUT	FILL	CUT	FILL



CALC. JS DATE 3/86
CHK'D RC DATE 3/86
FED. RD. DIVISION 2
STATE OHIO
PROJECT
260
787
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
Ramp D
8:1
8:1
E.B. S.R. 126
534.67
53+50
513.6
Ramp D
6:1
8:1
E.B. S.R. 126
536.36
53+00
512.8
Ramp D
4:1
8:1
E.B. S.R. 126
538.11
52+50
512.5
290
45
215
33
153
23
0 2159
0 1341
0 2385
0 1235
0 2162
0 1100
DEVELOPED
CHECKED

DESIGNED | DRAWN | CHECKED | QUANTITIES | CHECKED

CALC. TS DATE 3/86

CHK'D DS DATE 3/86

SEQ. NO.	STATE	PROJECT	
2	OHIO		

261
787

HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY

BRIDGE FIELD VOLUMES

CAL	SEP	PVS

840 1368

527 665

791 739

327 133

376 390

79 288

73 1184

0 991

1022 194 881 123 561 79 385 60

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

I-75

24:1 8:1

532.61
55+50
525.6

54" Sanitary

54" Conduit (Sant.)

See Sht. Nos. 288, 288-A thru 288-G for Erosion Protection

Ramp D

24:1 8:1

532.42
55+00
536.0

54" Sanitary

54" Conduit (Sant.)

Reloc. Mill Creek

32:1

* For Earthwork Quantities See Mill Creek Sections On Sheets No. 288-288G

Ramp D

8:1 8:1

532.67
54+50
533.0

E.B. S.R. 126

Ramp D

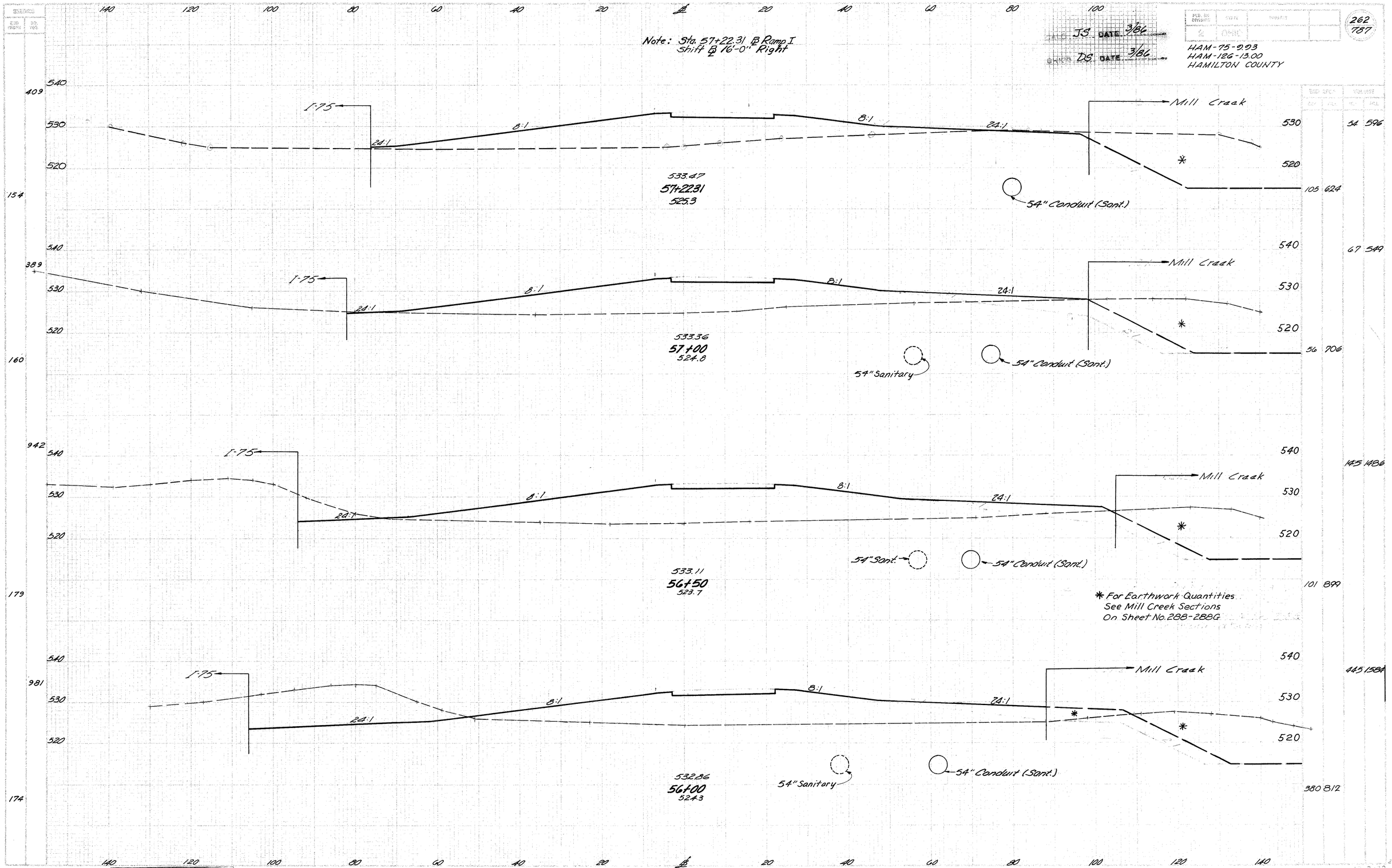
8:1 8:1

533.02
54+00
519.0

E.B. S.R. 126

DEVELOPED | CHECKED

RAMP I STA 54+00 TO STA 55+50



Note: Sta. 57+22.31 ℄ Ramp I
Shift ℄ 16'-0" Right
JS DATE 3/86
DS DATE 3/86
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
262
787
I-75
Mill Creek
8:1
24:1
533.47
57+22.31
525.3
54" Conduit (Sant.)
533.36
57+00
524.8
54" Sanitary
533.11
56+50
523.7
54" Sant.
532.86
56+00
524.3
* For Earthwork Quantities
See Mill Creek Sections
On Sheet No. 288-288G
409
154
389
160
942
179
981
174
54 596
105 624
67 549
56 706
145 1486
101 899
445 1584
380 812
DEVELOPED
CHECKED
RAMP I STA 56+00 TO STA 57+22.31

CALC. TEA DATE 3/86
CHK'D JS DATE 3/86

HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

397 | 75 | 442 | 84 | 503 | 97 | 581 | 112

540 530 520 510

I-75

8:1 8:1

533.11
59+00
529.6

Mill Creek

54" Conduit (Sanitary)

54" Sanitary

℄ 520 510

0 300 0 500

533.86
58+50
529.2

0 334 0 587

533.61
58+00
528.8

0 388 0 669

533.36
57+50
527.7

54" Conduit (Sanitary)

54" Sanitary

0 539 0 858

DEVELOPED | CHECKED

RAMP L STA 57+50 TO STA 59+00

CALC. REA DATE 3/86
CHK. JS DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

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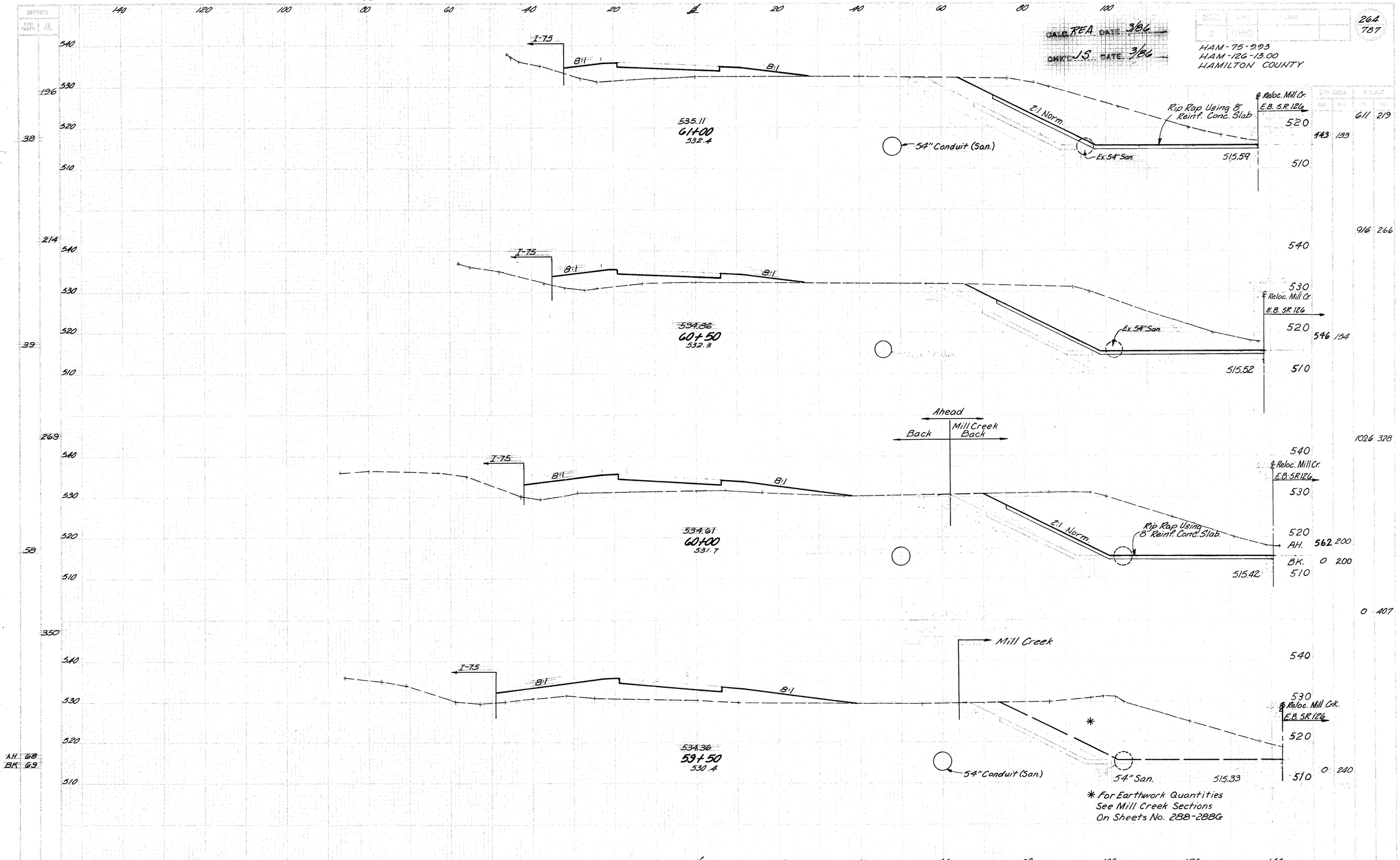
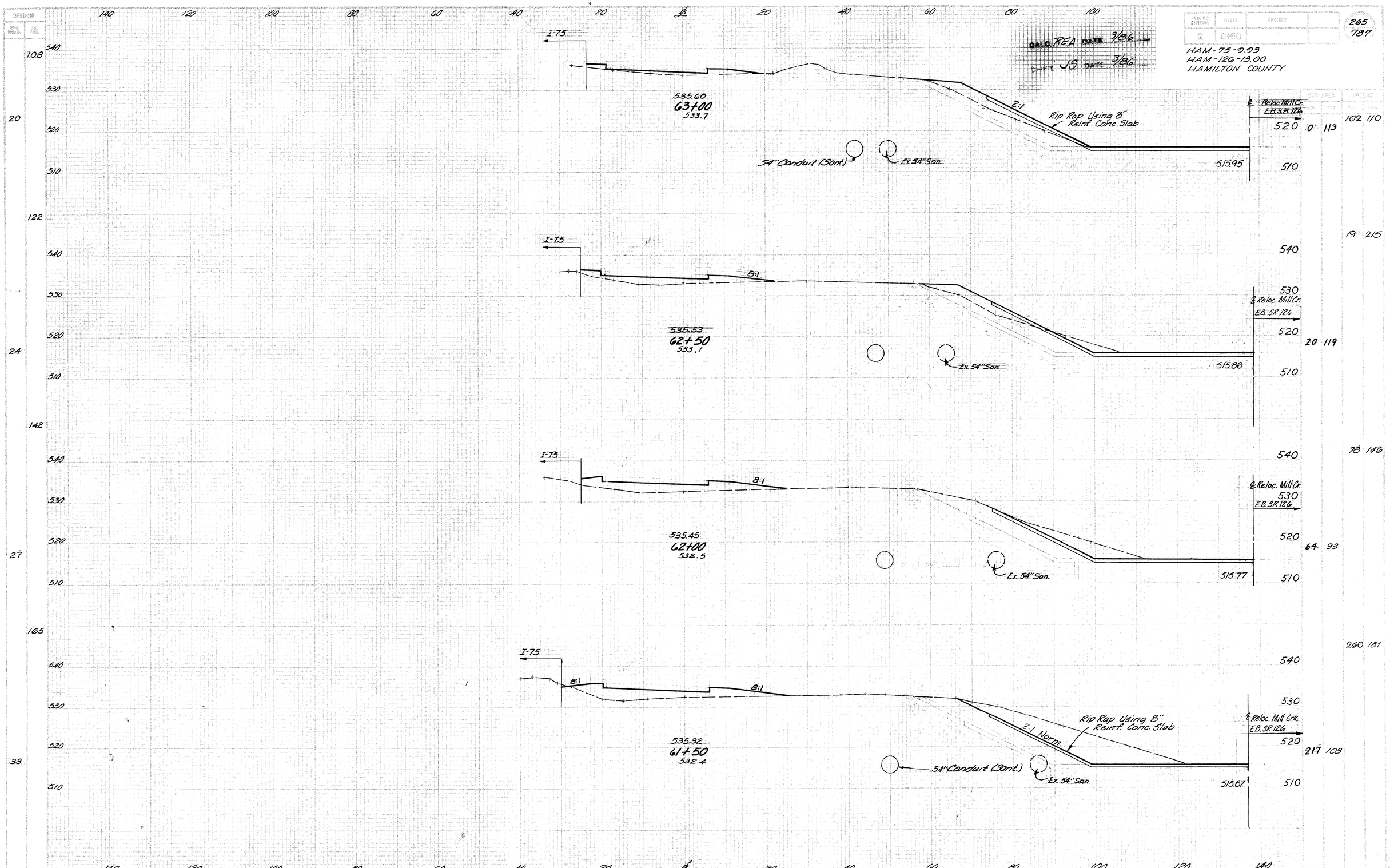
787



* For Earthwork Quantities See Mill Creek Sections On Sheets No. 288-288G



PAMP I STA 61+50 TO STA 63+00

BEGIN

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

JS 3/84
DS 3/84

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

266
787

HAM-75-0.93
HAM-126-13.00
HAMILTON COUNTY

157
Yellow
266 - 299

FILL CUT

0

37

540
530
520
510

I-75

8:1

Rip Rap Using 8" Reinf Conc. Slab

2:1 Norm.

535.85
64+62 BK
534.5

Ex. 54" San.

516.21

℄ Reloc. Mill Crk.
E.B. S.R. 126

540
530
520
Back 168 15
510

185

195 184

AH 29
BK 29

540
530
520
510

I-75

8:1

535.73
64+00
533.9

Ex. 54" San.

516.13

℄ Reloc. Mill Crk.
E.B. SR 126

540
530
520
2 145
510

133

104 140

540
530
520
510

19

I-75

8:1

535.64
63+50
534.6

Ex. 54" San.

516.06

Rip Rap Using 8" Reinf. Conc. Slab

2:1 Norm.

℄ Reloc. Mill Creek
E.B. S.R. 126

540
530
520
110 6
510

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

DEVELOPED | CHECKED

RAMP L STA 63+50 TO STA 64+50

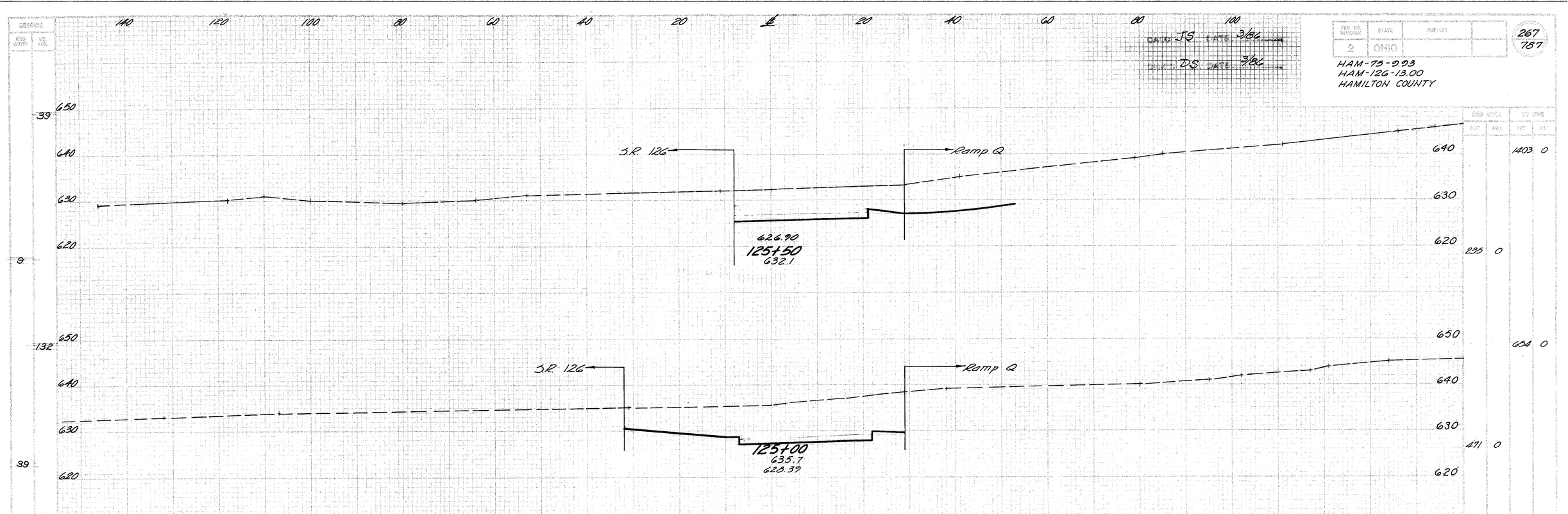
CALC JS DATE 3/84

CHECK DS DATE 3/84

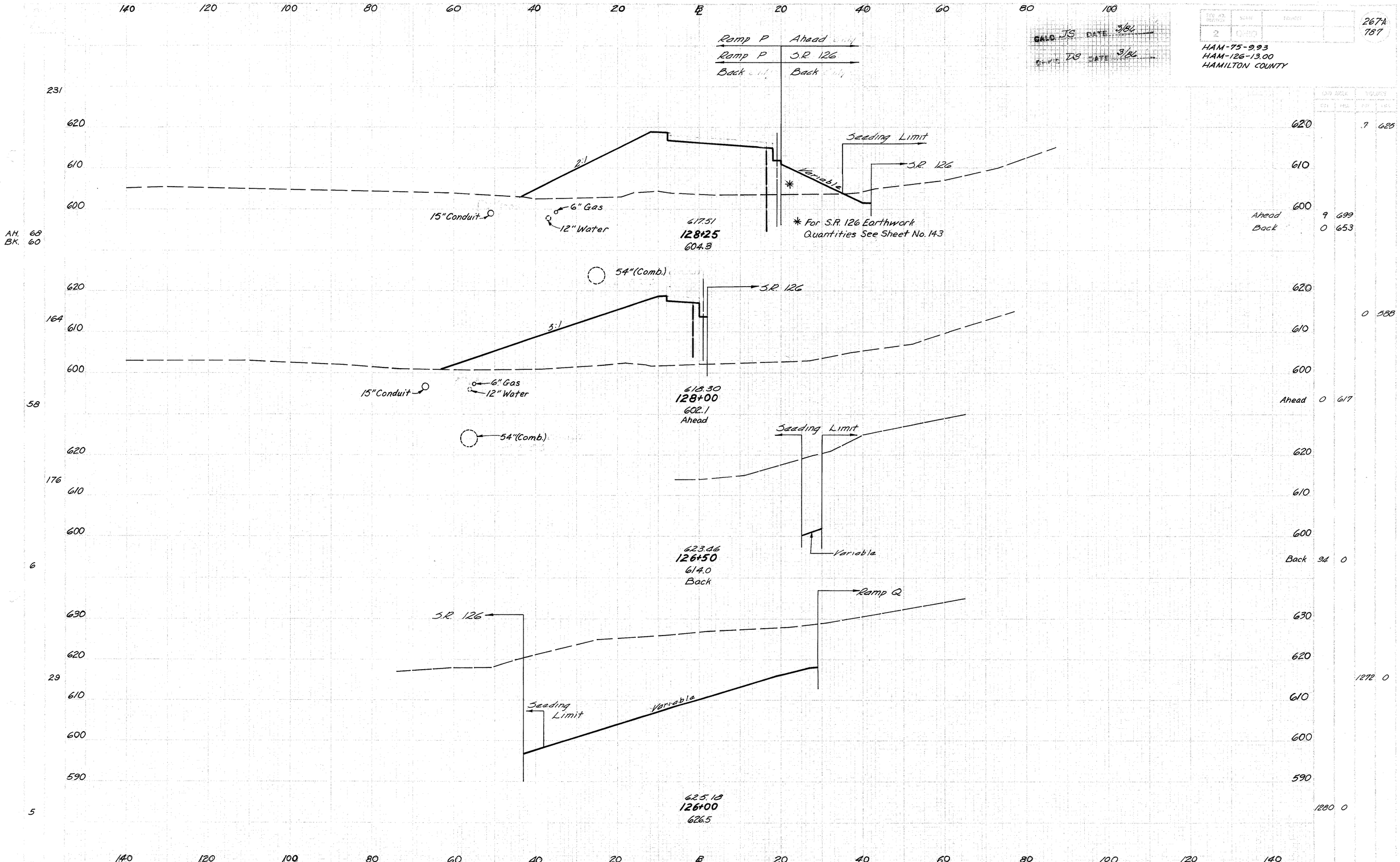
FED. ROAD DIVISION	STATE	PROJECT	
2	OHIO		

267
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



RAMP P STA 124+00 TO STA 125+50



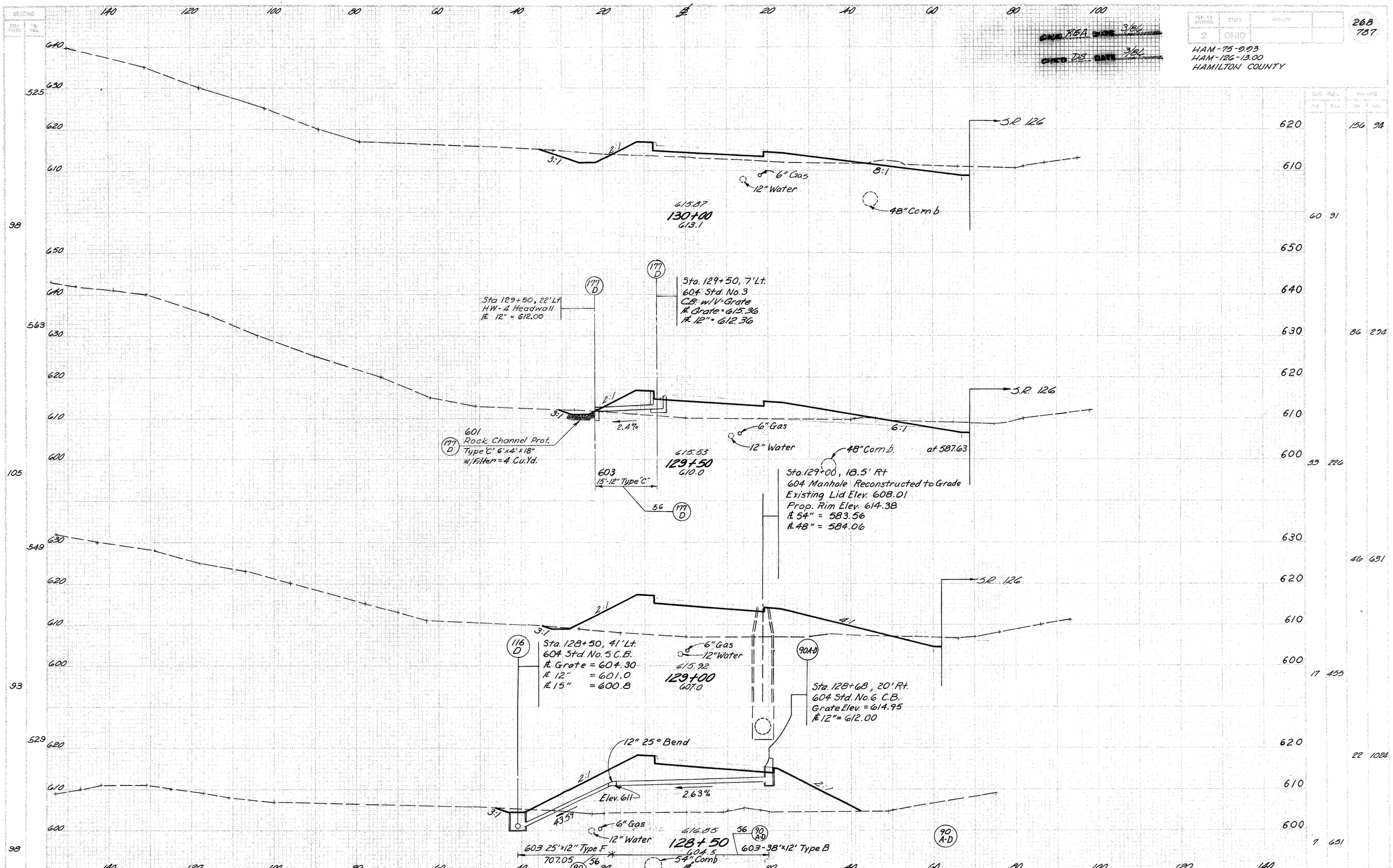
CALC. JS DATE 3/86
CHK'D DS DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

267-A
787

DEVELOPED	CHECKED
CES 4-70	EWR 11-71

RAMP P STA 126+00 TO STA 128+25



PAMP P STA 128+50 TO STA 130+00

SEEDING

SEED MIXT.	SQ. YDS.

DESIGNED ROA DATE 3/86

CHK'D JAS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT		SHEET NO.	TOTAL SHEETS
2	OHIO			269	787

HAM-75-0.03
HAM-126-13.00
HAMILTON COUNTY

140 120 100 80 60 40 20 0 20 40 60 80 100

392 71

630 620 610

2:1 3:1

621.5 6" Gas
132+00
621.8
12" Water Main (Prop.)
12" Water
S.R. 126
48" Combination

406 75

630 620 610

2:1 3:1

619.28
131+50
619.9
S.R. 126

433 81

630 620 610

2:1 3:1

617.54
131+00
617.7
S.R. 126

479 92

630 620 610

3:1 2:1 3:1

12" Water Main (Prop.)
616.34
130+50
615.5
6" Gas
12" Water
48" Combination
S.R. 126

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

END AREA VOLUMES

CUT	FILL	CUT	FILL
		85	2
630			
620			
610		60	0
630			
620			
610		135	0
630			
620			
610		86	0
630			
620			
610		85	0
630			
620			
610		109	10
		108	0
		180	9

DEVELOPED	CHECKED

RAMP B STA 130+50 TO STA 132+00

DRAWING SYMBOLS

DAN	SO
DWN	VIS.

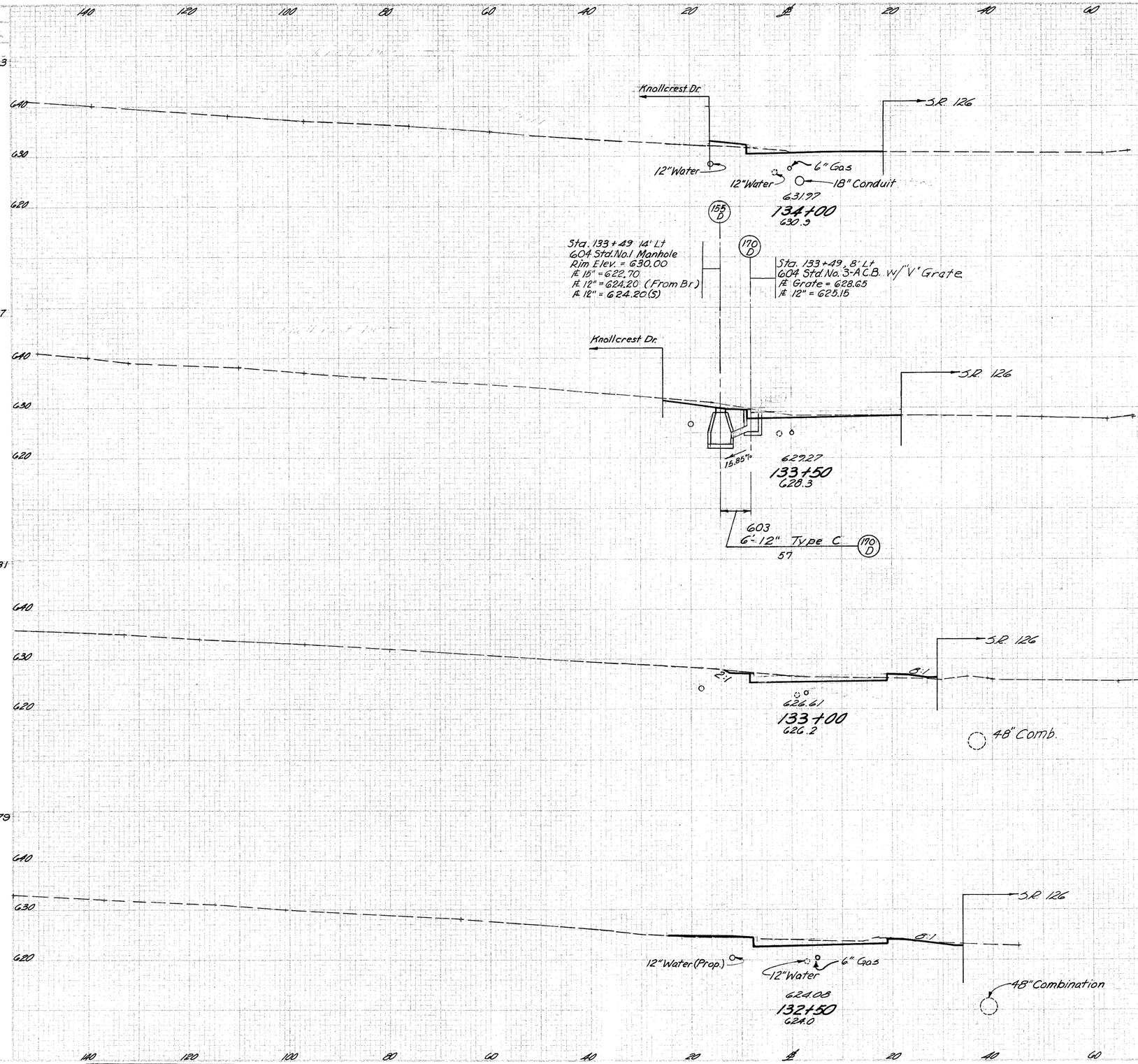
CALC. RL DATE 3/86

CHK'D JG DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

270
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



		CUT AREA		VOLUME	
		CUT	FILL	CUT	FILL
183	630			12	13
640	620	8	6		
630					
620					
7					
67				28	6
640	640				
630	630				
620	620				
17				22	0
231					
640	640			48	6
630	630				
620	620				
66		30	6		
379					
640	640			57	7
630	630				
620	620				
71				32	2

DEVELOPED	CHECKED

RAMP B STA 132+50 TO STA 134+00

DESIGNED | DRAWN | CHECKED | QUANTITIES | CHECKED

DRAWN RC DATE 3/86

CHECKED JC DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

271
787

HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY

ROAD AREA | LENGTH

	CUT	FILL	CUT	FILL
			4	16
			4	31
			0	17
			5	23
			5	8

Sta. 135+50
From Sheet No. 149

650
640
630

24:1

S.R. 126

12" Water

637.50

135+00
638.2

650
640
630

24:1

S.R. 126

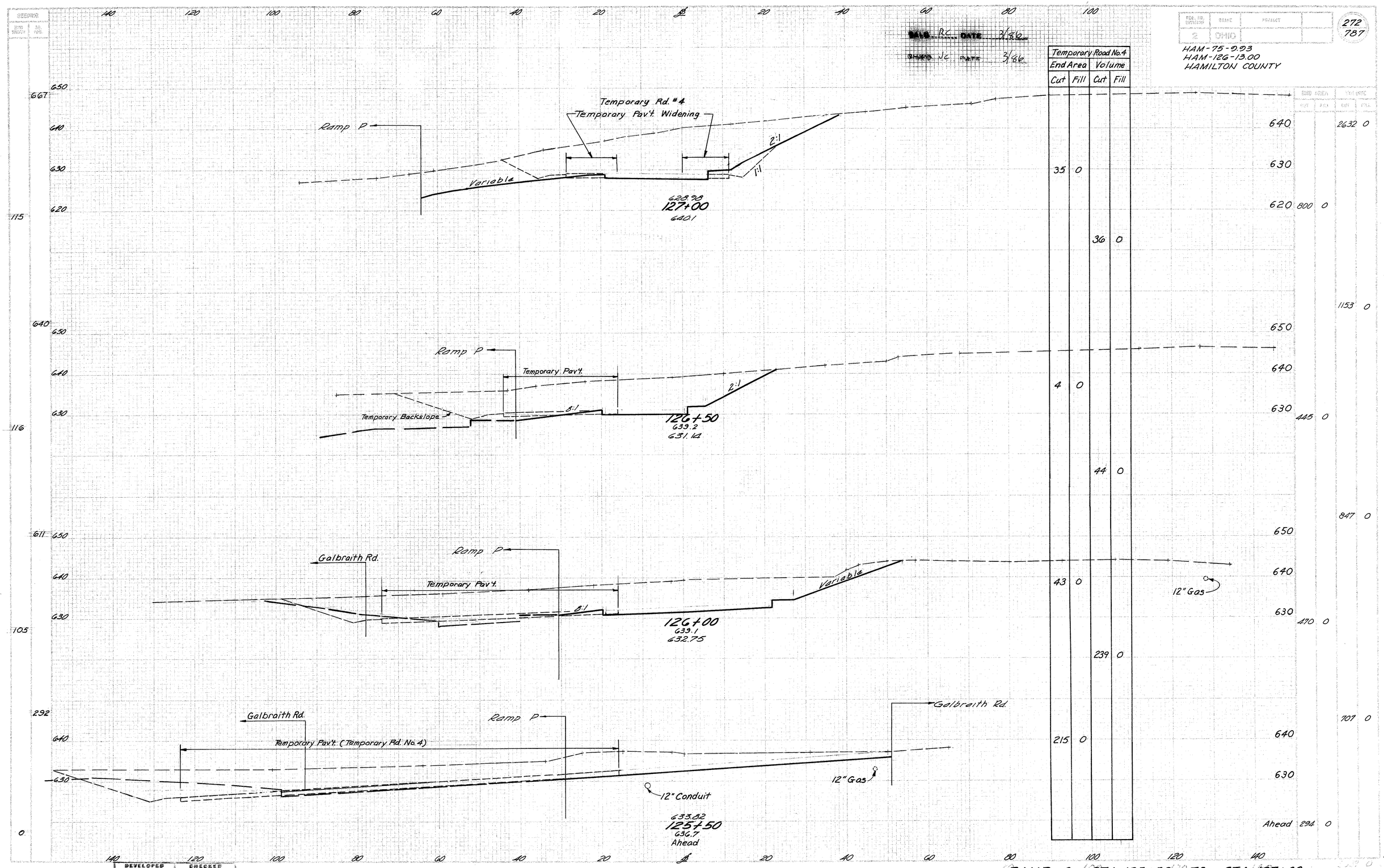
12" Water Main

12" Water

634.75

134+50
633.3

DAMP P STA 134+50 TO STA 135+50



FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

272
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

DEVELOPED	CHECKED
C.F.S. 4-70	E.W.R. 11-71

RAMP Q STA. 125+50 TO STA. 127+00

DESIGNED | DRAWN | CHECKED | QUANTITIES | DATE

DES. CONTROL | PROJECT | FEATURE | SHEET NO. | TOTAL SHEETS

273
787

HAM-75-2.93
HAM-126-13.00
HAMILTON COUNTY

CALC. PC DATE 3/86

CHK'D JC DATE 3/86

Temporary Road No.4			
End Area		Volume	
Cut	Fill	Cut	Fill
192	0		
		367	0
204	0		
		306	0
126	0		
		149	0

END AREA		VOLUME	
CUT	FILL	CUT	FILL
			3892 0
		1893	0
			3759 0
			2167 0
			3898 0
			2043 0

883 650 640 630 620 157 775 650 640 630 620 122 686 650 640 630 620 125 610

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

S.R. 126

621.70
128+50
640.5

2:1 2:1 1:1 3:1

S.R. 126

642.12
128+00
642.0

2:1 2:1 1:1 Temporary Backslope Typ. 3:1

Ramp P

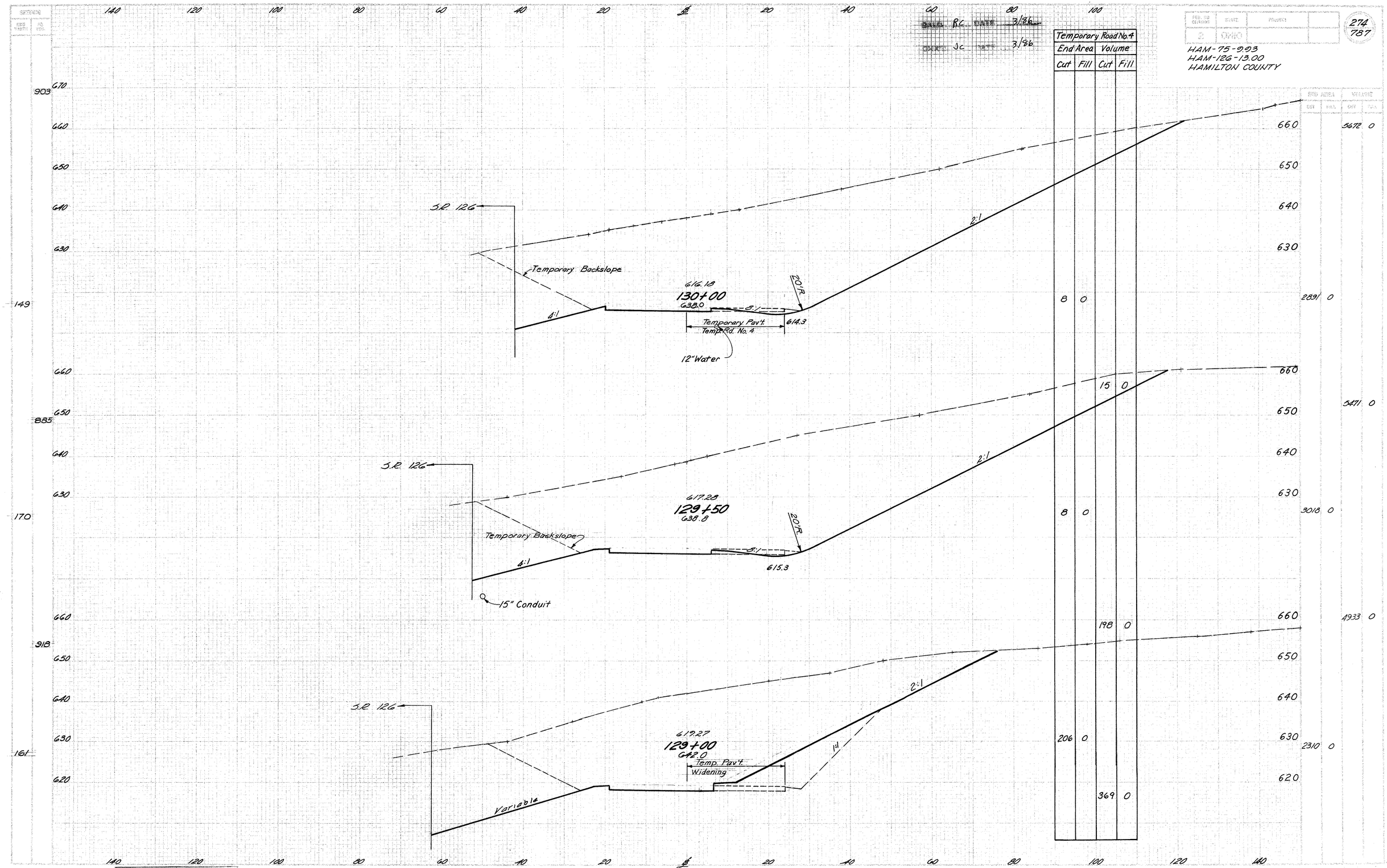
Temporary Pavt. Widening

Temporary Backslope 2:1 2:1 1:1 3:1

626.55
127+50
641.6

DEVELOPED		CHECKED	
DES.	1.70	CHD.	11.71
DRN.	1.70	CHK.	11.71

RAMP O STA 127+50 TO STA 128+50



CALC. RC DATE 3/86
CHK. JC DATE 3/86
274
787
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
Temporary Road No. 4
End Area
Volume
Cut
Fill
Cut
Fill
S.R. 126
Temporary Backslope
616.18
130+00
638.0
8:1
20'R.
4:1
Temporary Pav't.
Temp. Rd. No. 4
614.3
12" Water
2:1
617.28
129+50
638.8
615.3
15" Conduit
619.27
129+00
642.0
Temp. Pav't.
Widening
Variable
1:1
8 0
15 0
8 0
198 0
206 0
369 0
5672 0
2891 0
5471 0
3018 0
4933 0
2310 0
903
149
885
170
918
161
DEVELOPED
CHECKED

DESIGNED | DRAWN | CHECKED | QUANTITIES | CHECKED

Design PC DATE 3/26
Detail JC DATE 3/86
Check DATE

Temporary Road No.4			
End Area		Volume	
Cut	Fill	Cut	Fill
8	0		
		3540	0
8	0		
		15	0
8	0		
		15	0
8	0		
		15

DES. R.C. DATE 3/86

DRWN. R.C. DATE 3/86

CHK'D J.C. DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

275-A
787

Temporary Road No.4			
End Area		Volume	
Cut	Fill	Cut	Fill
8	0		

SEEDING

EXC.	INC.
0.20	1.05

DESIGNED	R.C.	DATE	3/86
CHECKED	J.C.	DATE	3/86

FED. AID DIVISION	STATE	PROJECT
2	OHIO	

2758
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

END SECTION

EXC.	INC.

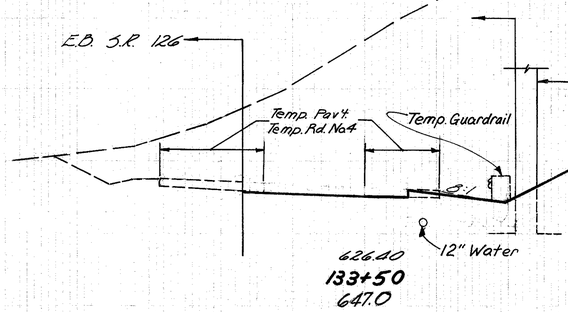
140 120 100 80 60 40 20 ℄ 20 40 60 80 100

844

680 670 660 650 640 630 620

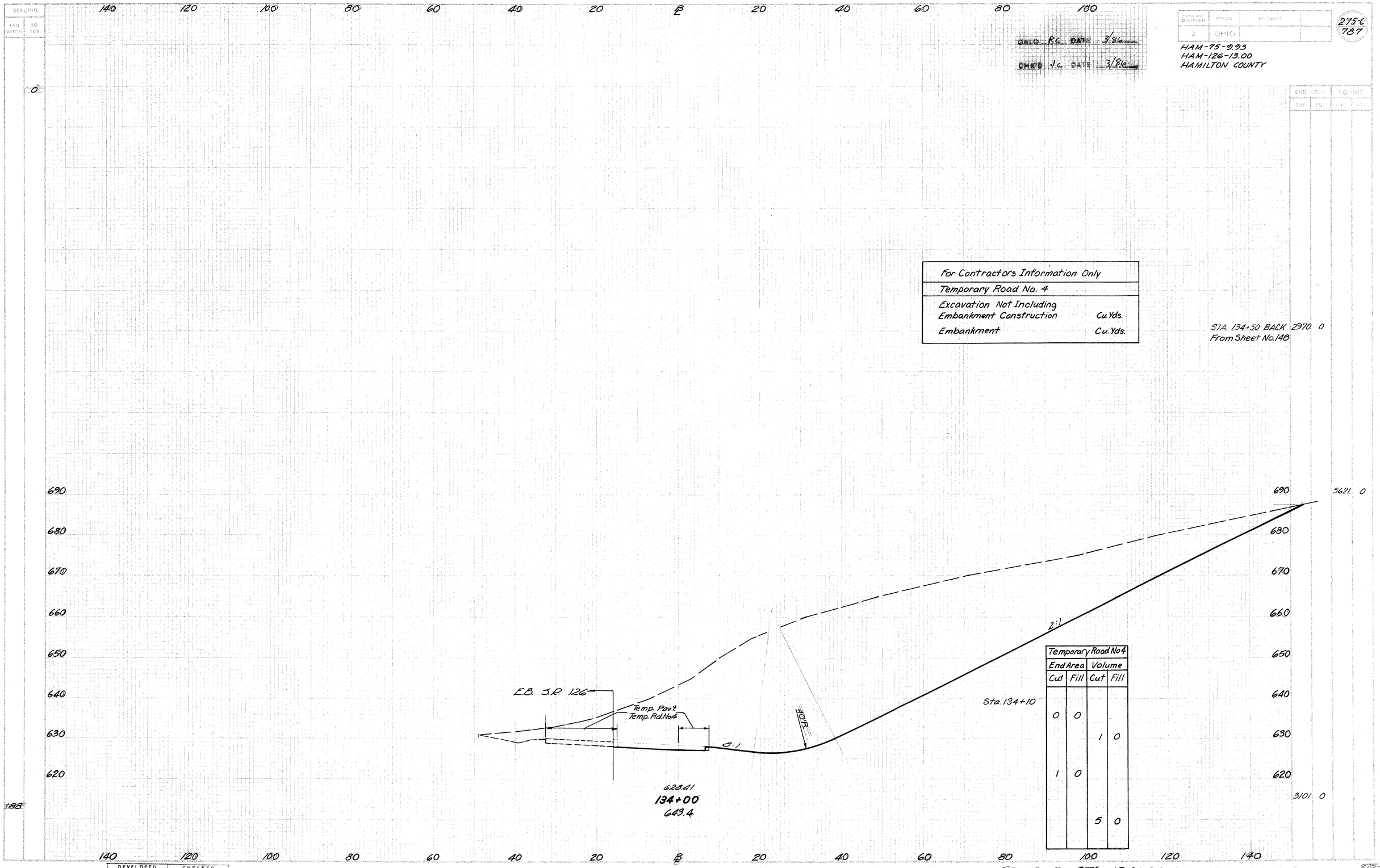
AH 116
BK 55

Ramp Q Ahead
Ramp Q Knollcrest Dr.
Back Back

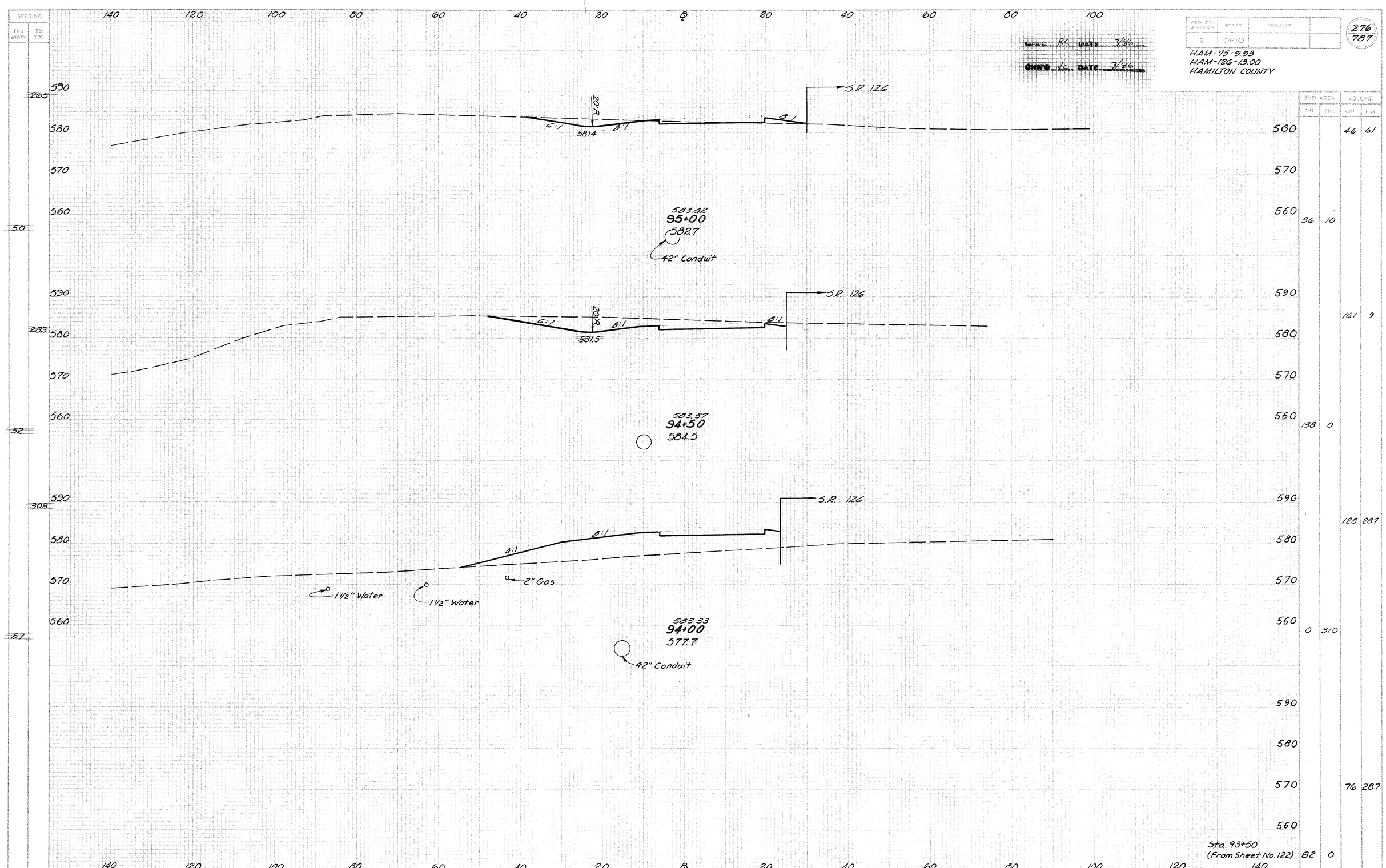


626.40
133+50
647.0

Temporary Road No. 4			
End Area		Volume	
Cut	Fill	Cut	Fill
4	0		



SEEDING
END WIDTH
SQ. YDS.
140 120 100 80 60 40 20 ℄ 20 40 60 80 100
0
CALC. RC DATE 3/86
CHK'D JC DATE 3/86
FED. RD. DIVISION 2
STATE OHIO
PROJECT
275-C
787
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
END AREA
VOLUME
CUT FILL
For Contractors Information Only
Temporary Road No. 4
Excavation Not Including Embankment Construction Cu.Yds.
Embankment Cu.Yds.
STA. 134+50 BACK 2970 0
From Sheet No.148
690 680 670 660 650 640 630 620
5621 0
3101 0
E.B. S.R. 126
Temp. Pav't
Temp. Rd. No.4
8:1
40'R
2:1
628.41
134+00
643.4
Sta. 134+10
Temporary Road No 4
End Area
Volume
Cut Fill Cut Fill
0 0
1 0
1 0
5 0
188
DEVELOPED
CHECKED



FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

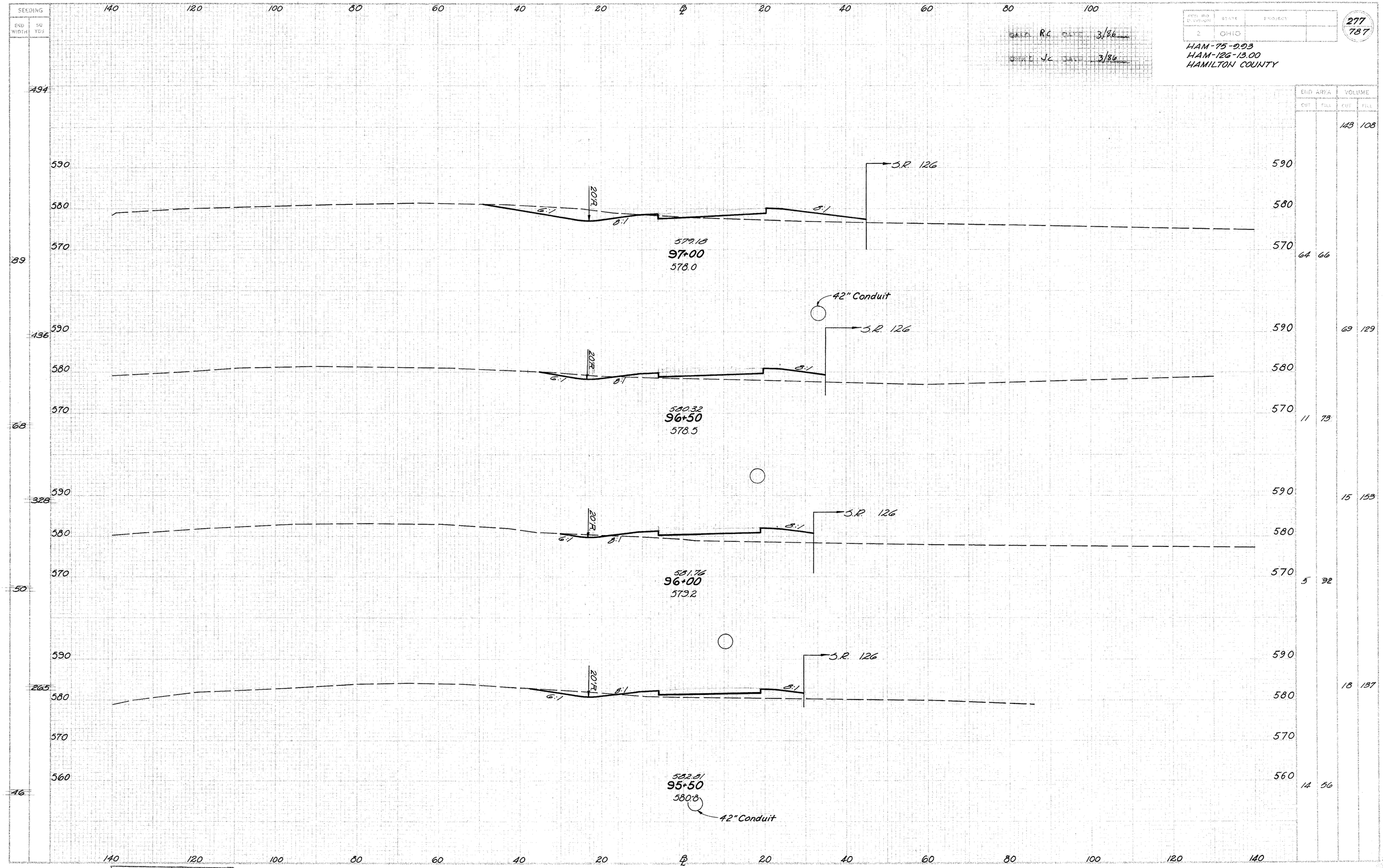
276
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		46	61
36	10		
		161	9
138	0		
		128	287
0	310		
		76	287
82	0		

DEVELOPED | CHECKED

RAMP T STA 94+00 TO STA 95+00



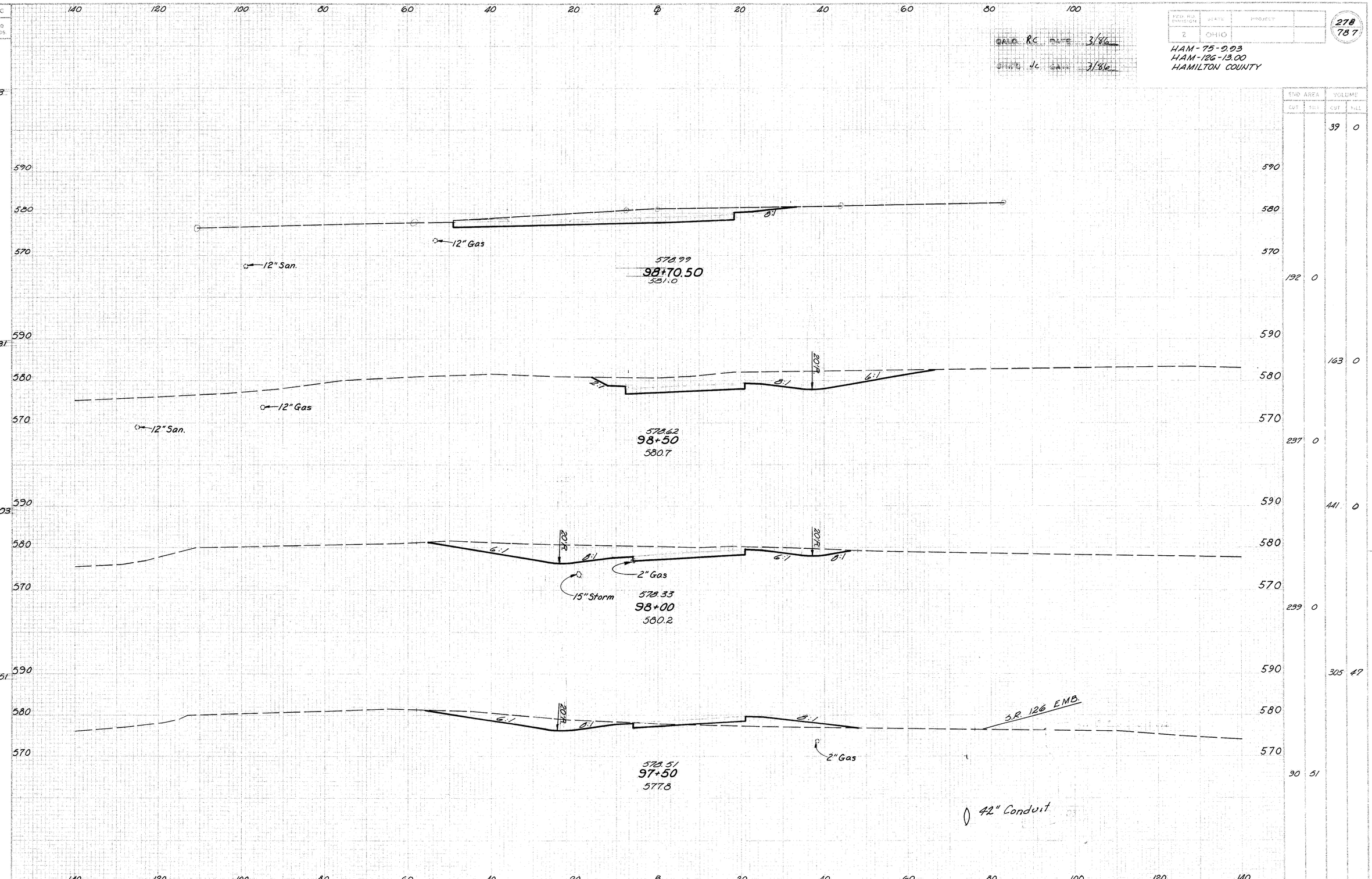
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

277
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

DEVELOPED | CHECKED

RAMP T STA 95+50 TO STA 97+00



FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

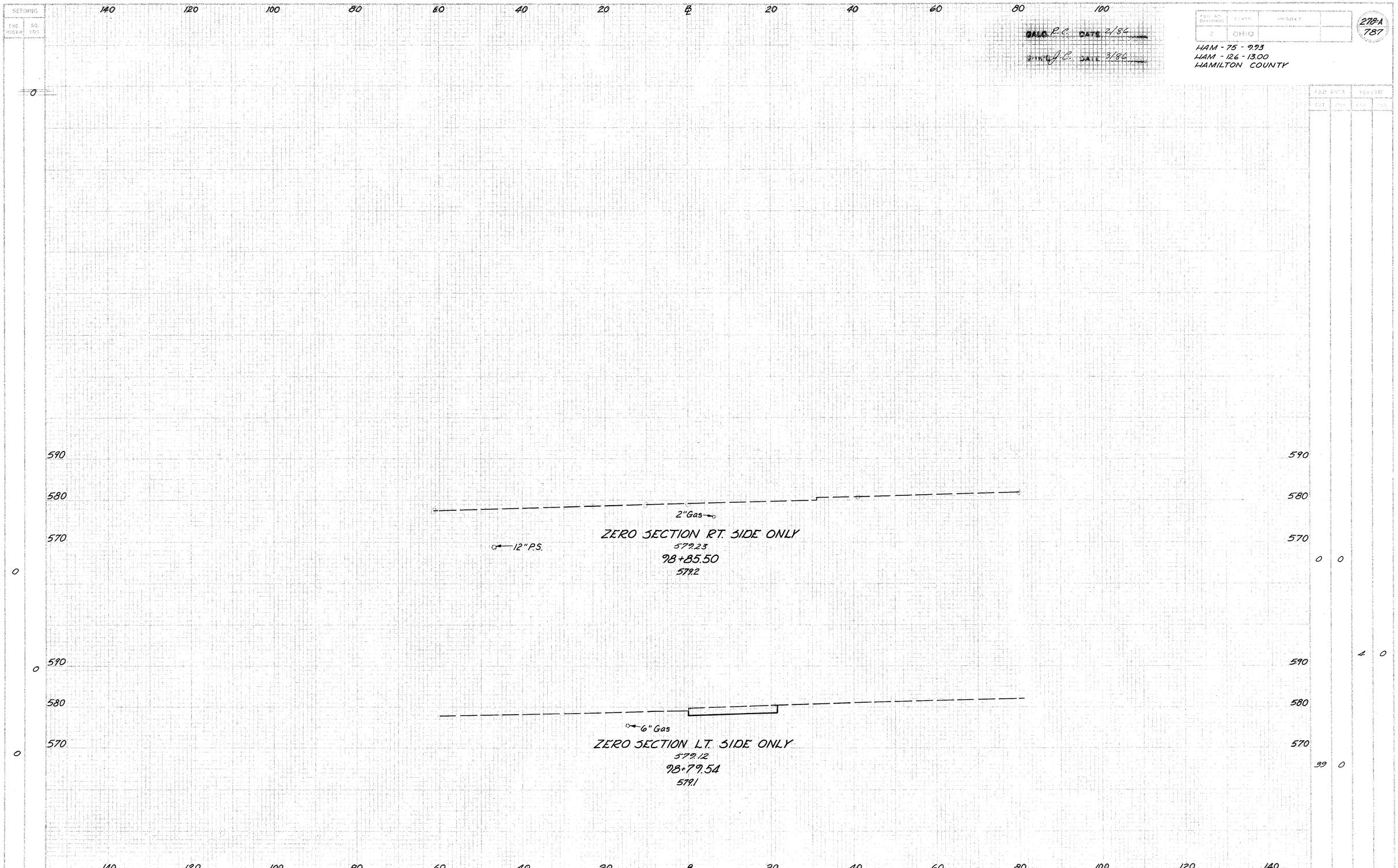
278
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

CALC. RC DATE 3/86
CHKD. JC DATE 3/86

DEVELOPED	CHECKED

RAMP T STA 97+50 TO STA 98+70.50



FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

278-A
787

HAM - 75 - 9.93
HAM - 126 - 13.00
HAMILTON COUNTY

END AREA		VOLUME	
CUT	FILL	CUT	FILL

DEVELOPED	CHECKED
C.E.S. 4-70	E.W.B. 11-71

RAMP T STA 98+79.54 TO STA 98+85.50

SEEDING	
CHD WIDTH	SQ. YDS.
611	
106	
531	
85	
325	
32	
18	
0	

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

DES. BY R.C. DATE 2/86

CHK'D BY Q.C. DATE 3/86

FED. RD. DIV. NO.	STATE	PROJECT	
2	OHIO		

279
787

HAM-75-2.93
HAM-126-13.00
HAMILTON COUNTY

671.90
2+00
690.5

2:1

2:1

12" Conduit

672.77
1+50
687.0

2:1

2:1

12" Conduit

673.64
1+00
676.1

Var.

Var.

12" Gas

12" Conduit

12" Cond.

0+90
673.8

ZERO SECTION

END AREA		VOLUME	
CUT	FILL	CUT	FILL
		3553	0
1830	0		
		2894	0
1295	0		
		1487	0
311	0		
		58	0
0	0		

690 680 670

DEVELOPED	CHECKED

R.C. 2/86
J.C. 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

700
690
680
670
660
650

361
76

Sta. 3+40, 18' Lt.
604, Std. No. 3A
CB. w/ V-Grate
Fl. Grate = 666.08'
Fl. 12" = 662.58'

162 D

Sta. 3+40, 18' Rt.
604 Std. No. 3A C.B. w/ V-Grate
Fl. Grate = 666.08'
Fl. 12" = 662.22'

146 D

Ramp Q

Variable

Variable

12" Conduit

2.0%

603-36'-12" Type B

162 D 57

666.10
3+50
675.3

690
680
670
660
650

1565 0
341 0

700
690
680
670
660

533

Ramp Q

Variable

2:1

2:1

12" Conduit

668.74
3+00
685.6

2469 0

AH 123
BK 104

710
700
690
680
670

605
114

670.68
2+50
690.3

2:1

2:1

12" Conduit

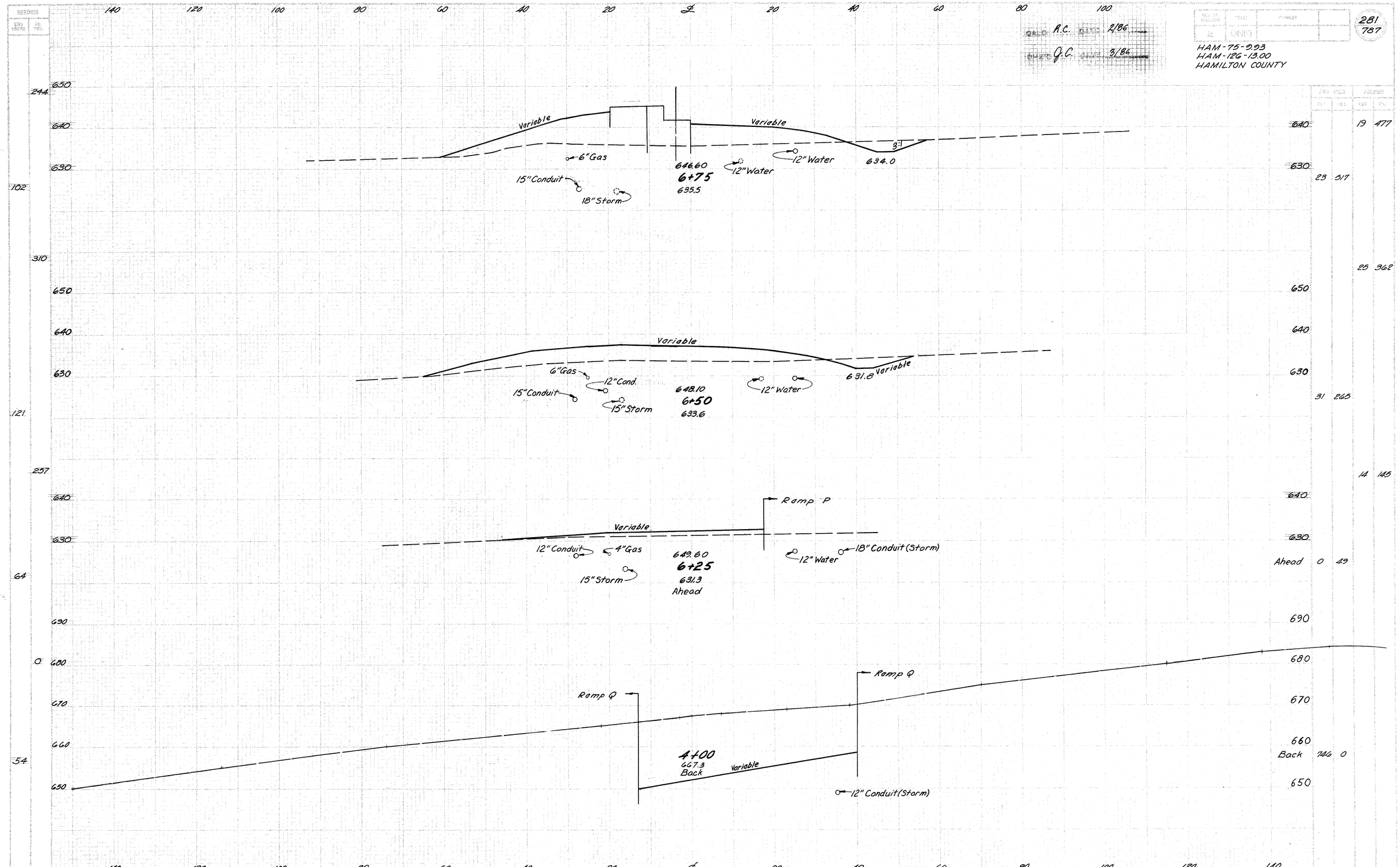
1723 0
3454 0
2007 0

710
700
690
680
670

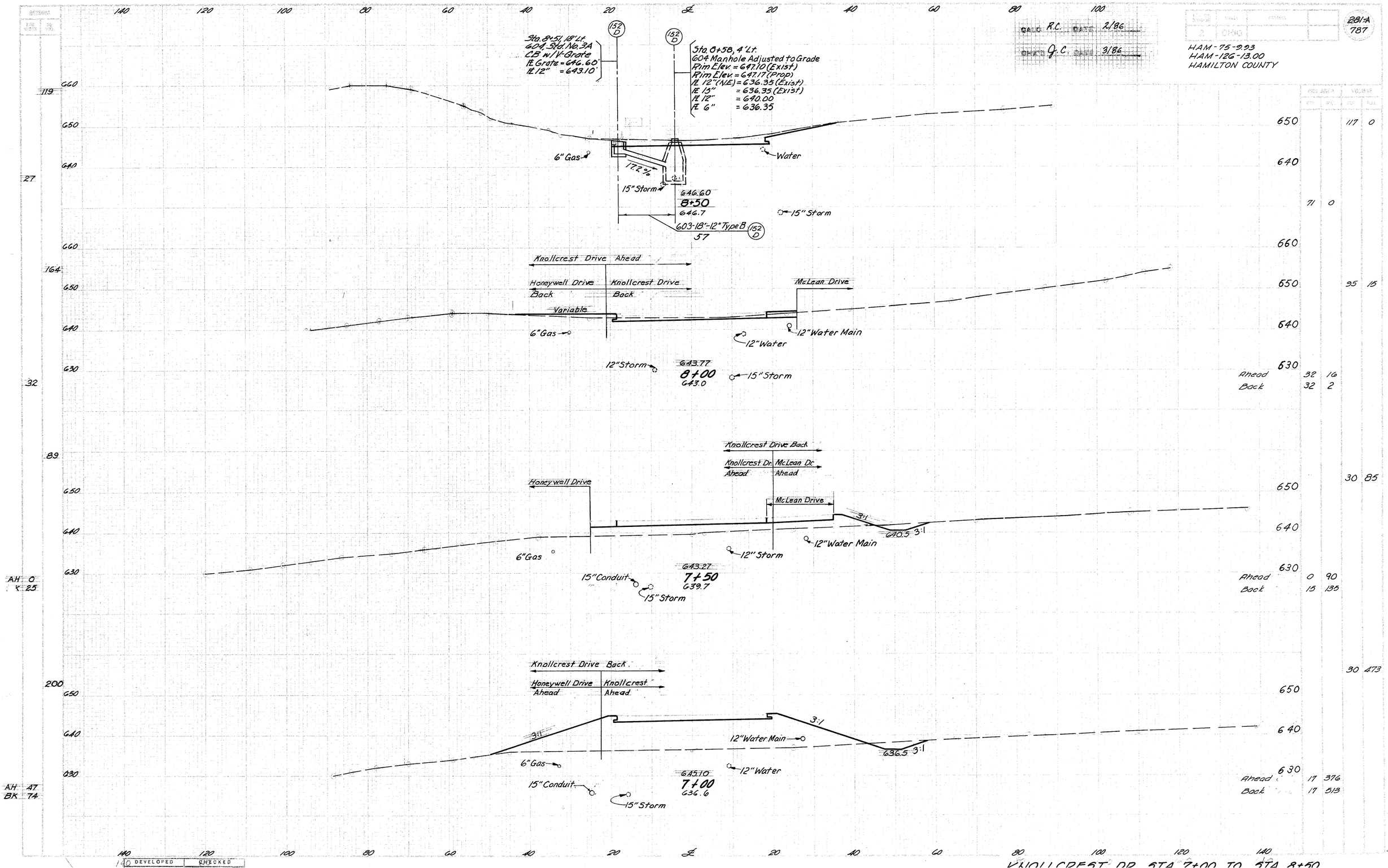
140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

120 DEVELOPED | CHECKED 1

KNOLLCREST DR. STA. 2+50 TO STA. 3+50



KNOLLCREST DR STA 4+00 TO STA 6+75



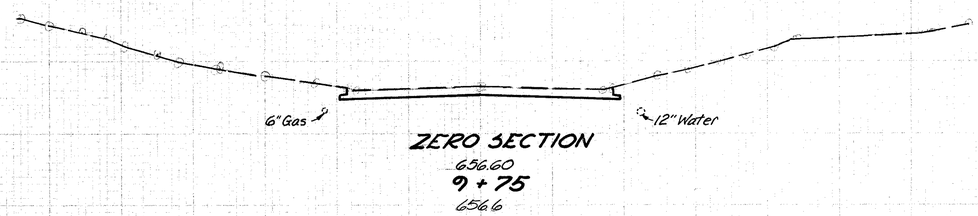
KNOLLCREST DR. STA. 7+00 TO STA. 8+50

GALC R.C. DATE 2/86

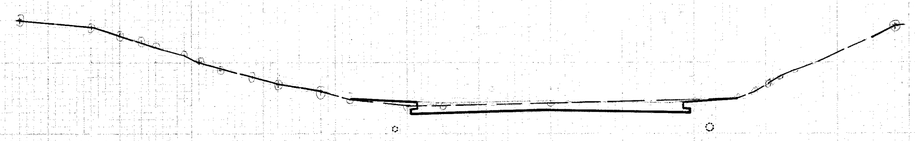
CHK'D J.C. DATE 3/86

281-B
787

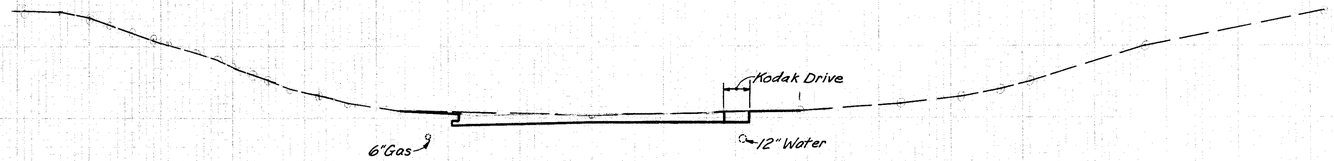
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



ZERO SECTION
656.60
9+75
656.6



654.60
9+50
654.3



650.60
9+00
650.3

KNOLLCREST DR STA 9+00 TO STA 9+75

SEEDING	
GRD WIDTH	SQ YDS
0	
17	
13	
11	
6	
13	
10	
10	

100 80 60 40 20 ℄ 20 40 60 80 100

CALC. R.C. DATE 2/86

CHKD Q.C. DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

281C 787

HAM - 75 - 9.93
HAM - 126 - 13.00
HAMILTON COUNTY

END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	0		
		8	1
17	2		
		6	5
15	26		
		7	14
Ahead	11	26	

660
650
640

ZERO SECTION
647.00
0+74
647.0

Var.
Variable

645.68
0+50
645.4

Knollcrest Dr.

645.12
0+40
644.7

Variable

644.31
0+25
643.7
Ahead

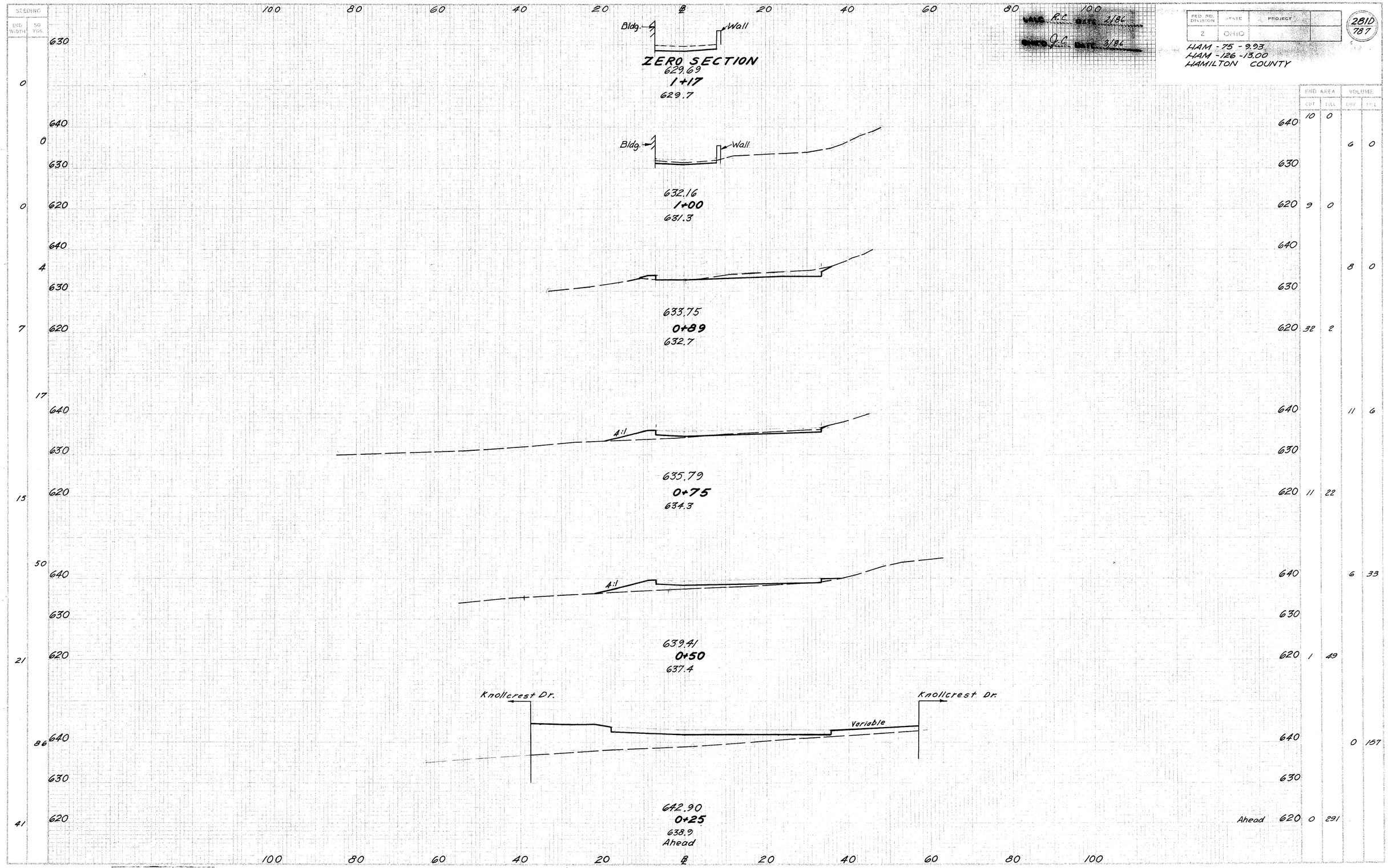
DEVELOPED | CHECKED

MCLEAN DR. STA 0+25 TO STA 0+74

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

HAM - 75 - 9.93
HAM - 126 - 13.00
HAMILTON COUNTY

281D
787

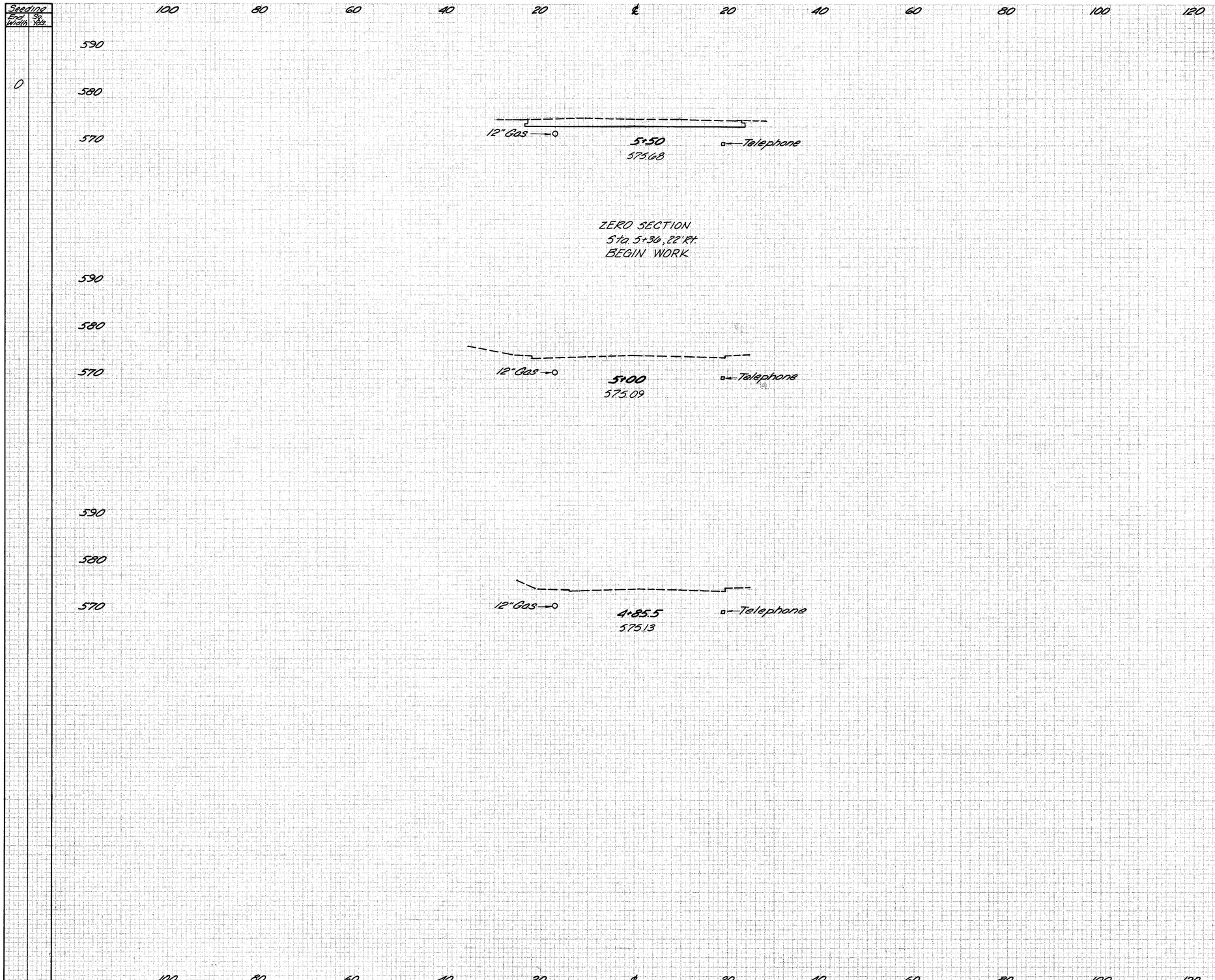


	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
	10	0		
			6	0
	9	0		
			8	0
	32	2		
			11	6
	11	22		
			6	33
	1	49		
			0	157
Ahead	0	291		

DEVELOPED | CHECKED

HONEYWELL DR STA 0+25 TO STA. 1+17

CALC. BY R.C. DATE 2/86	HAM-75-9.93 HAM-126-13.00 HAMILTON COUNTY	OHIO	282/787
CHKD. BY J.C. DATE 3/86		FHWA REGION 5	



	End Area Cut	End Area Fill	Volume Cut	Volume Fill
			109	0
570	66	0		
			17	0
Sta. 5+36	0	0		
590				
580				
570				
	0	0		
590				
580			0	0
570				
	0	0		

GALBRAITH RD. STA. 4+85.5 to STA. 5+50

PLATE 3 CROSS SECTION C. P. R. & R. E. STANDARD
OKEZGEN CORPORATION

CALC. RC DATE 2/86
CHK'D JC DATE 3/86

DIST.	COUNTY	PROJECT	
8	OHIO		

282A
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

SETTING				END AREA		VOLUME	
STA.	OFF.	ELEV.		CUT	FILL	CUT	FILL
7+50	120 L	576.20					
		590					
		580					
		570					
	40.3						
	13						
7+00	120 L	575.70					
		590					
		580					
		570					
	78						
	15						
6+50	120 L	575.33					
		590					
		580					
		570					
	22.2						
	6.5						
6+00	120 L	575.00					
		590					
		580					
		570					
	20.8						
	10						
	28						

590							
580							
570						10.4	16.0
590							
580							
570						16.8	18.0
590							
580							
570						7.7	3.0
590							
580						14.4	9.0
590							
580						7.8	7.0
590							
580						12.0	6.0
590							
580							
590						5.2	0.0

OFFSET	STA.	ELEV.
120 L	7+70	576.70
120 L	7+50	576.20
120 L	7+00	575.70
120 L	6+50	575.33
120 L	6+00	575.00
120 L	5+70	574.70
120 L	5+50	574.50

GALBRAITH RD. STA 6+00 TO STA 7+50

SEEDING
EN | SD
WD | SK

DESIGNED | CHECKED
25.0 | 1.70 | 5418 | 11.71

CALC. R.C. DATE 2/86
CHKD J.C. DATE 3/86

FED.	STATE	PROJECT
2	OHIO	

282B
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

120 100 80 60 40 20 ℄ 20 40 60 80 100 120

394 71 414 78 439 80 406 66

590 580 570

3:1 Variable S.R. 126

12" Gas
12" Sant.
30" Cond.
583.80
9+50
580.08
8" Water Ex.
Telephone Duct
15" Cond. (Sant.)
7'x7' Box

3:1 Variable S.R. 126

12" Gas
581.69
9+00
578.70
8" Water
Telephone Duct
7'x7' Box
18" San.

3:1 Variable S.R. 126

12" Gas
579.92
8+50
577.59
8" Water
Telephone Duct

54" Comb. (Abandoned)

62D — Sta. 8+35, 24' Lt.
604, Std. No. 3A
CB w/V-Grate
Ft. Grate = 577.09
Ft. 12" = 575.16

61D — Sta. 8+00, 10' Lt.
604, Std. No. 1 MH
Rim Elev. = 578.33
Ft. 12" (N & S) = 571.06
Ft. 24" = 563.45

60D — Sta. 8+00, 24' Rt.
604, Std. No. 3A
CB w/V-Grate
Ft. Grate = 578.12
Ft. 12" = 574.17

603.38 12" — 603.34 12" Type B
Type B
54 (62D) 54 (60D)
8" Water Ex.
12" Gas
10.8 %
578.49
8+00
576.88
9.15 %
Telephone Duct

| | | |

SEEDING

END AREA					
CUT	FILL	CUT	FILL	CUT	FILL

REVISED QUANTITIES	STATE	PROJECT	
2	OHIO		

2820
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

DATE RC DATE 2/96
CHECK G.C. DATE 3/96

120 100 80 60 40 20 ℄ 20 40 60 80 100 120

131
590
580
570
24

2:1
℄ 12" Gas
℄ 12" San.
8" Water
Variable
S.R. 126
7'x7' Box
594.89
11+50
589.54
30" Conduit (Storm)

144
590
580
570
AH 28
BK 8

2:1
℄ 12" Gas
7'x7' Box
591.95
11+00
586.69
Variable
S.R. 126

128
590
580
570
38

2:1
℄ 12" Gas
7'x7' Box
589.01
10+50
584.01
Variable
S.R. 126

303
590
580
570
71

2:1
℄ 12" Gas
℄ 12" San.
8" Water
℄ Telephone Duct
7'x7' Box
586.23
10+00
581.77
Variable
S.R. 126
30" Conduit (Storm)

120

	END AREA CUT	END AREA FILL
590		594 154
580		
570	291	159
		138 381
590		
580		
570	182	252
		178 367
590		
580		
570	10	360
590		13 691
580		
570	4	386

GALBRAITH RD STA 10+00 TO STA 11+50

SECTIONS

FED. ROAD DIV. NO.	STATE
2	OHIO

PROJECT	

2820
787

DESIGNED R.C. DATE 2/86

DRAWN J.C. DATE 3/86

CHECKED

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

CUT AREA		CUT VOLUME	
SQ. FT.		CU. YD.	
131	620	923	111
	610		
34	600	554	120
192	620	1305	134
	610		
35	600	855	25
138	620	1009	12
	610		
64	600	1325	0
		1027	0
		893	0
0	600		
	590		
23	580	350	7

120 100 80 60 40 20 ℄ 20 40 60 80 100 120

S.R. 126

12" Gas
8" Water
12" San
12" Conduit
614.57
15+50
612.9

Varies

CB-3

S.R. 126

8" Water
12" San.
612.39
15+00
610.1

Varies

S.R. 126

8" Water
611.31
12" San.
14+75
609.0

Varies

Sta. 14+50 Ahead
(From Sheet No. 138)

S.R. 126

Seeding Limit
12" Gas
8" Water
BACK ONLY
597.77
12+00
592.5

7x7' Box
30" Conduit

Sta. 12+00 Back
(From Sheet No. 136)

CAIRBAITH RD. STA. 12+00 TO STA. 15+50

SEEDING
ENE WIDTH | NO. YDS

120 100 80 60 40 20 ℄ 20 40 60 80 100 120

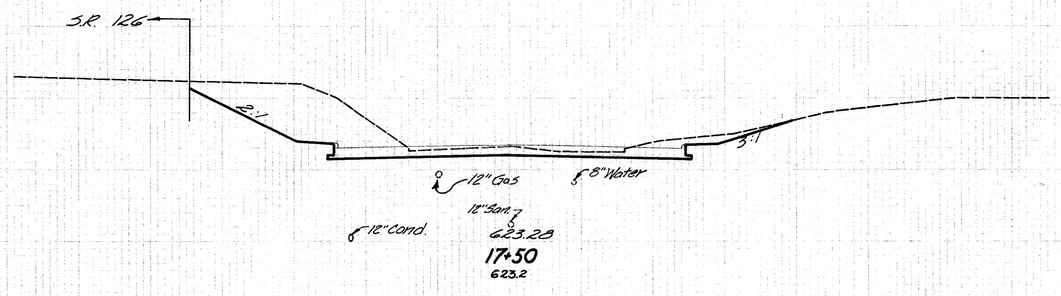
CALC R.C. DATE 2/86
CHKD G.C. DATE 3/86

REVISION DIVISION	STATE	PROJECT
2	OHIO	

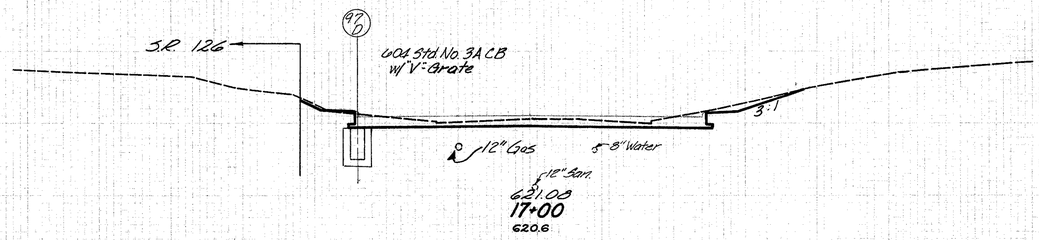
282E 787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

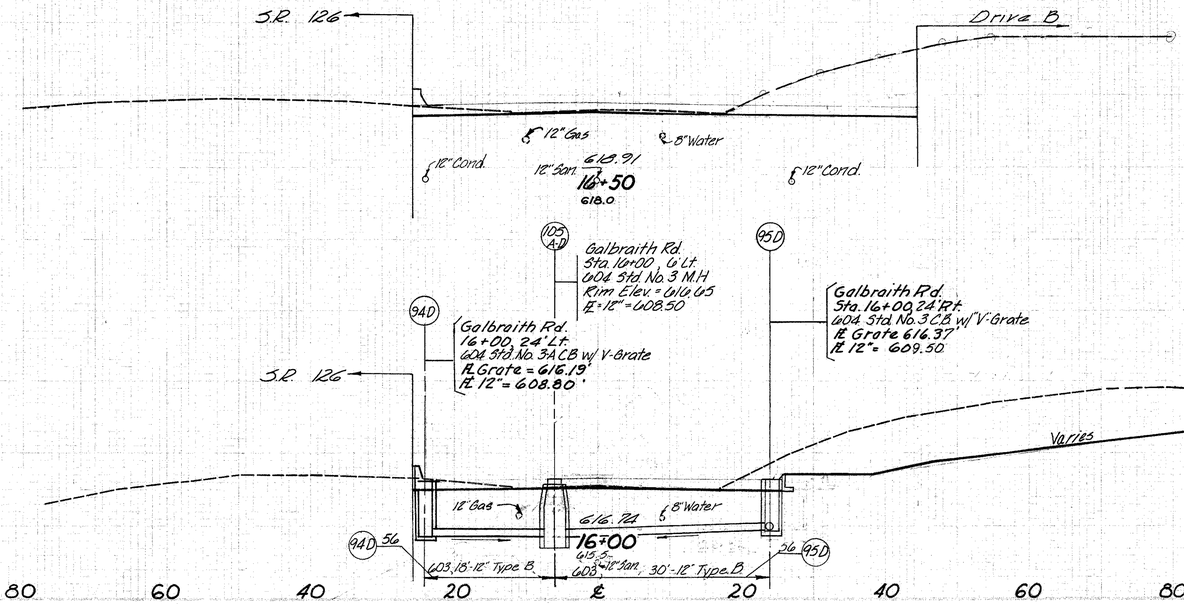
264 38



167 22



97 13



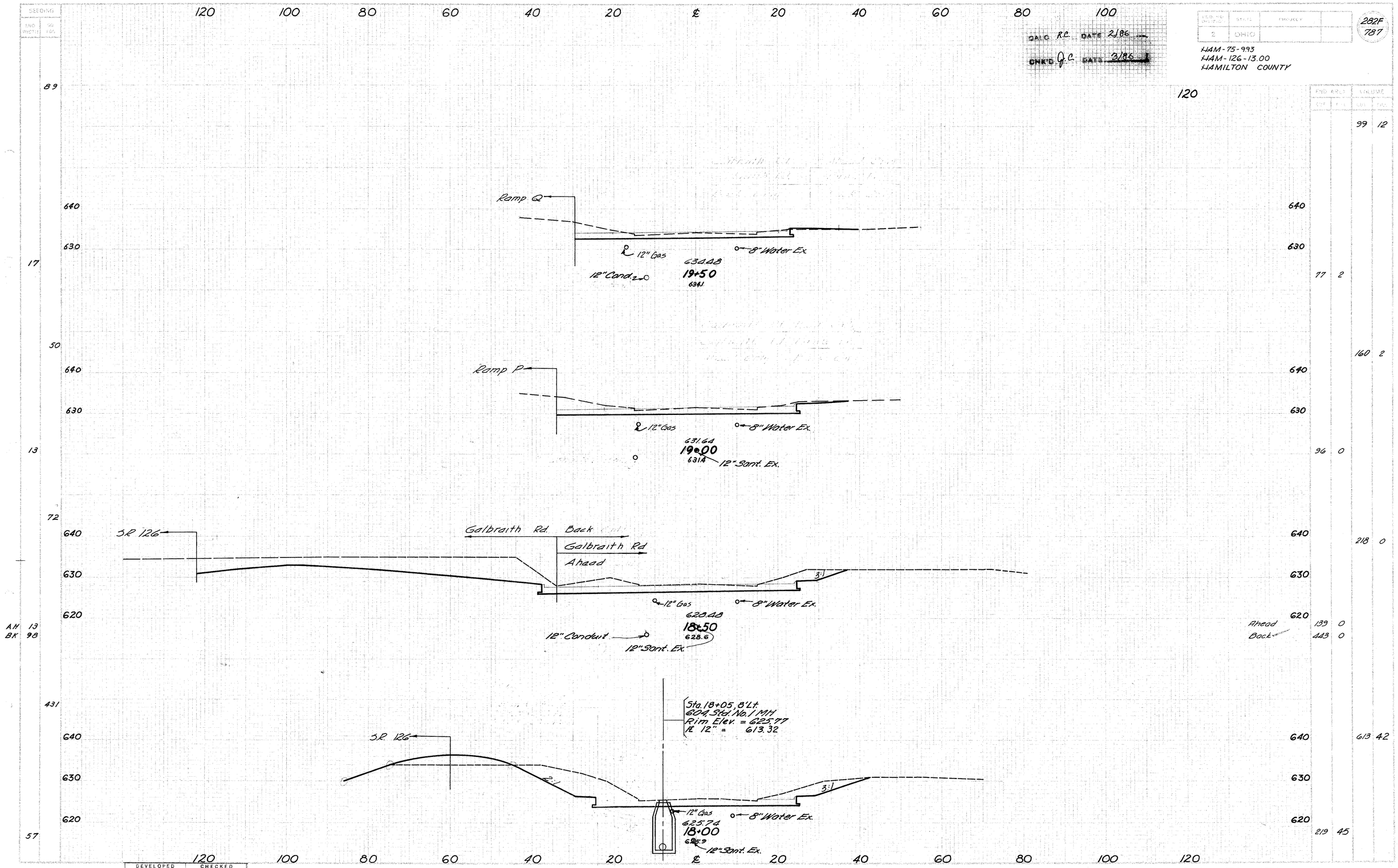
72 13

DEVELOPED	CHECKED
RES 1-20	ELW 11-21

120 100 80 60 40 20 ℄ 20 40 60 80 100 120

GALBRAITH RD. STA 16+00 TO STA 17+50

ENE AREA		VOLUME	
CUT	FILL	CUT	FILL
630		396	42
620			
610			
209	0		
		253	2
630			
620			
610			
65	2		
		214	2
630			
620			
610			
166	0		
		564	0
630			
620			
610			
443	0		



				99	12
				77	2
				160	2
				96	0
				218	0
AH	13		Ahead	139	0
BK	98		Back	443	0
				613	42
				219	45

DEVELOPED		CHECKED	
C.E.S.	4-70	F.W.R.	11-71

GALBRAITH RD. STA 18+00 TO STA 19+50

SEEDING
LIME 50 LBS
FERTILIZER 500 LBS

80 60 40 20 ℄ 20 40 60 80

CALC. RC DATE 2/86
CHK. JC DATE 3/86

REVISIONS	STATE	PROJECT	
2	OHIO		

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650
640

12" Gas
8" Water Ex.
ZERO SECTION
12" San. 644.70
21+20
644.7

0

22

650
640

12" Gas
643.50
8" Water Ex.
21+00
12" San. 643.5

21

129 D
128 D

Sta. 20+40, 10' Lt. Gal. Rd.
604 Std. No. 1 MH
Rim Elev. = 640.28'
Inv. 12" = 633.28'

Sta. 20+40, 17' Rt. Gal. Rd.
604 Std. No. 3A CB w/ V-Grate
Ht. Grate = 639.70'
Inv. 12" = 636.20'

139

650
640

6:1
6:1
12" Gas
640.52
20+50
640.8
10.82%
8" Water Ex.
12" San.
603.27'-12" Type "B"
128 D 56

29

175

Galbraith Rd Ahead
Ramp Q Galbraith Rd
Ahead Only Back Only

Ramp Q

640
630

6:1
6:1
12" Gas
8" Water Ex.
12" Cond.
12" San.
637.50
20+00
637.1

AH 34
BK 15

80 60 40 20 ℄ 20 40 60 80

DEVELOPED CHECKED
CES 4-70 EVR 11-71

GALBRAITH RD. STA 20+00 TO STA 21+20

2826

EARTHWORK VOLUME
CUT FILL

650
640

0 0

650
640

46 4

650
640

65 5

650
640

Ahead 154 11
Back 30 11

103 8

17 1

203 15

SEEDING	
End Width	SQ. YDS.

CALC. BY L.S. DATE 2/86
CHKD. BY L.S. DATE 3/86

HAMILTON COUNTY
HAM-75/126-9.93/13.00

OHIO
FHWA REGION 5

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END AREA		VOLUME	
Cut	Fill	Cut	Fill
0			
	38		
113			
	43		
33			
0			

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120

530
520
510
540
530
520
510
550
540
530
550
540
530

535.75
10+75
514.2

Future Proposed By Others

536.30
10+55
520.9

Future Proposed By Others

Sta. 10+48
Back Only

6" Non-Perf. C.S.P.

536.99
10+30
536.9

Sta. 10+14
Ahead Only

537.81
10+00
537.66

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

PLATE 2 CROSS SECTION O. D. O. T. STANDARD CONSTRUCTION DRAWING

SERVICE ROAD OVER MILL CREEK CROSS SECTIONS

SEEDING	
END WIDTH	SQ. YDS.

HAMILTON COUNTY
HAM-75/126-9.93/13.00

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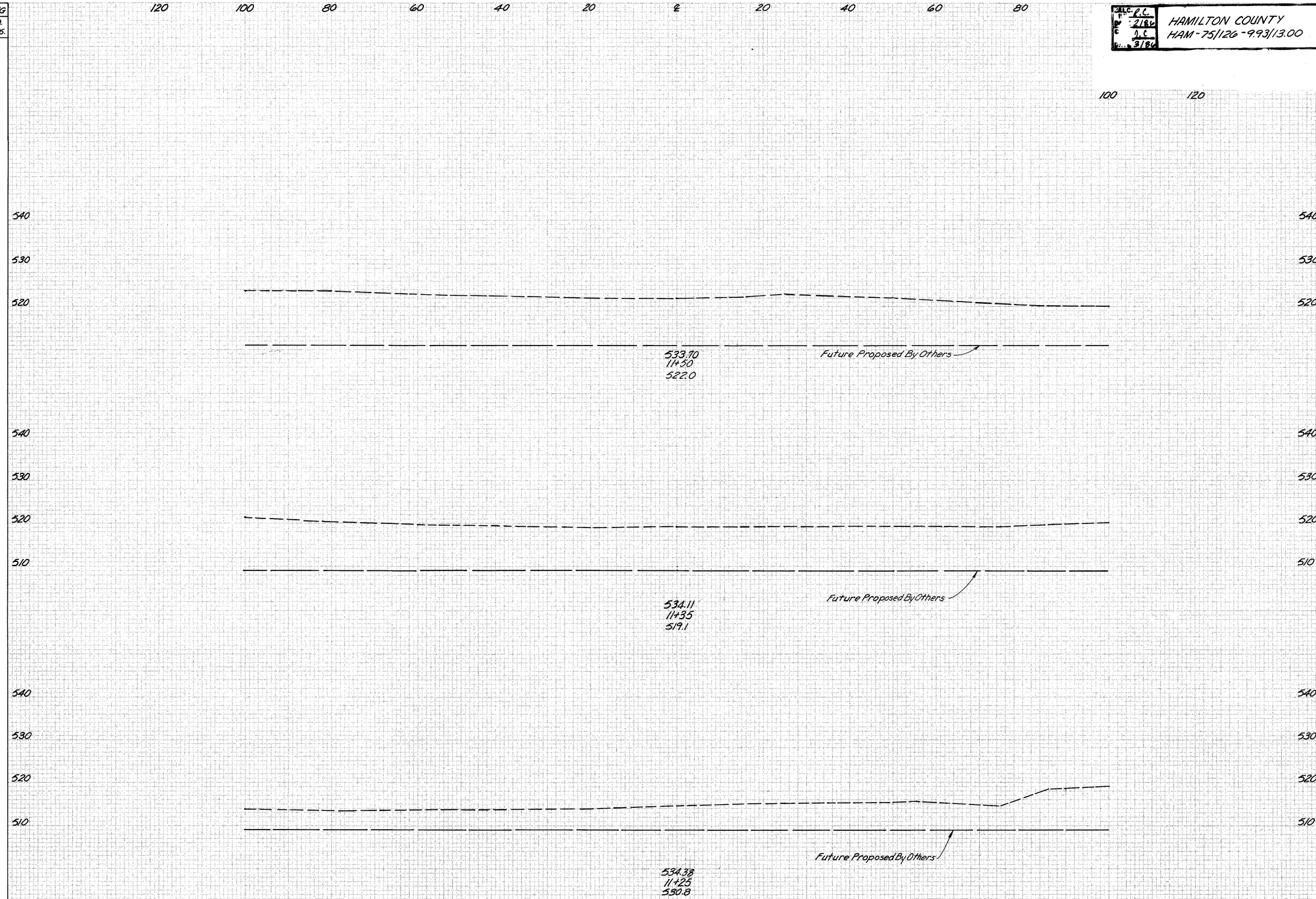
787



END AREA		VOLUME	
Cut	Fill	Cut	Fill

SERVICE ROAD OVER MILL CREEK CROSS SECTIONS

SEEDING	
End Width	SQ. YDS.

HAMILTON COUNTY
HAM-75/126-9.93/13.00

OHIO

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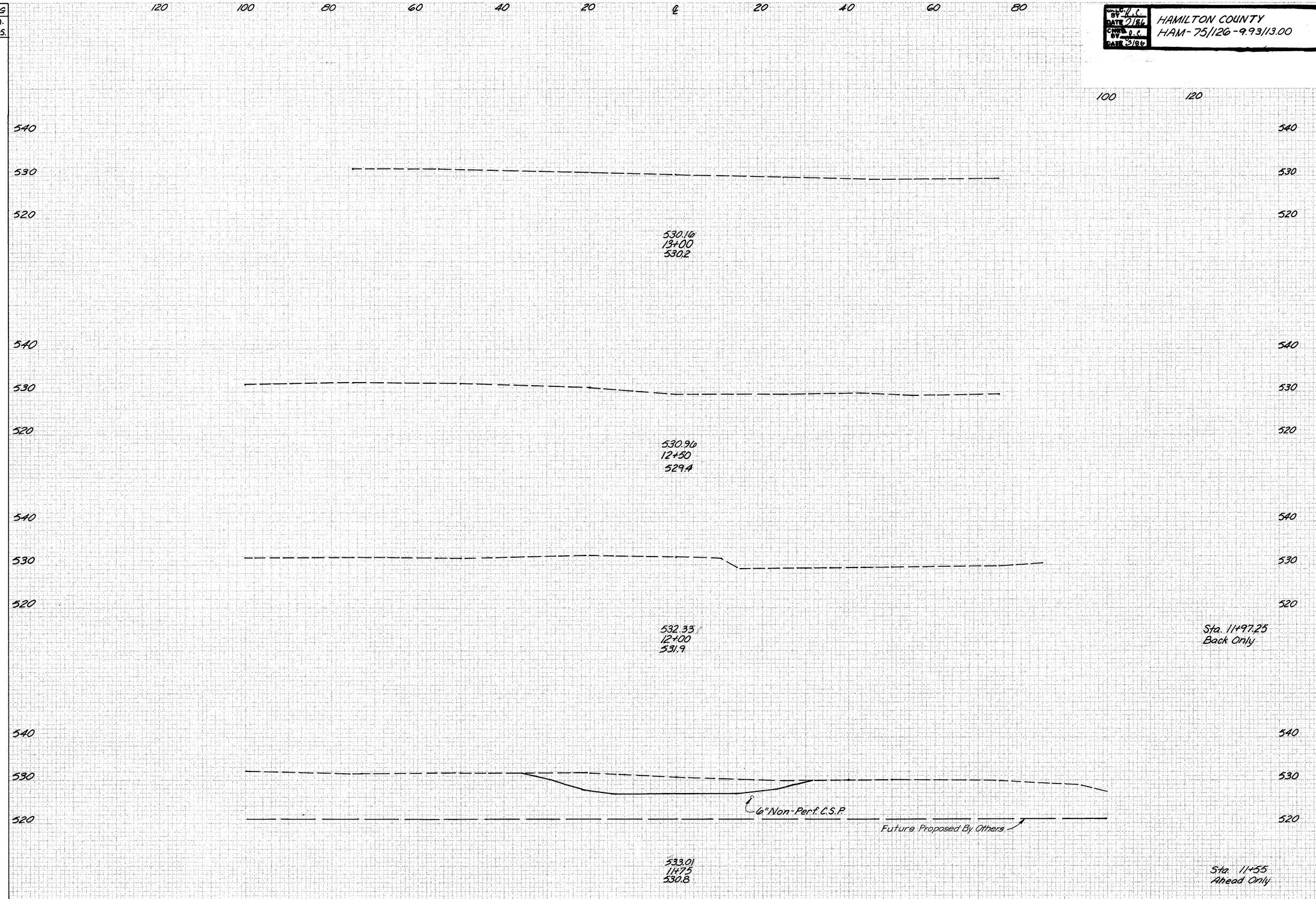

END AREA		VOLUME	
Cut	Fill	Cut	Fill
0			
		83	
202			
		75	
0			

SERVICE ROAD OVER MILL CREEK CROSS SECTIONS

DIST.	STATE	PROJECT	
8	OHIO		

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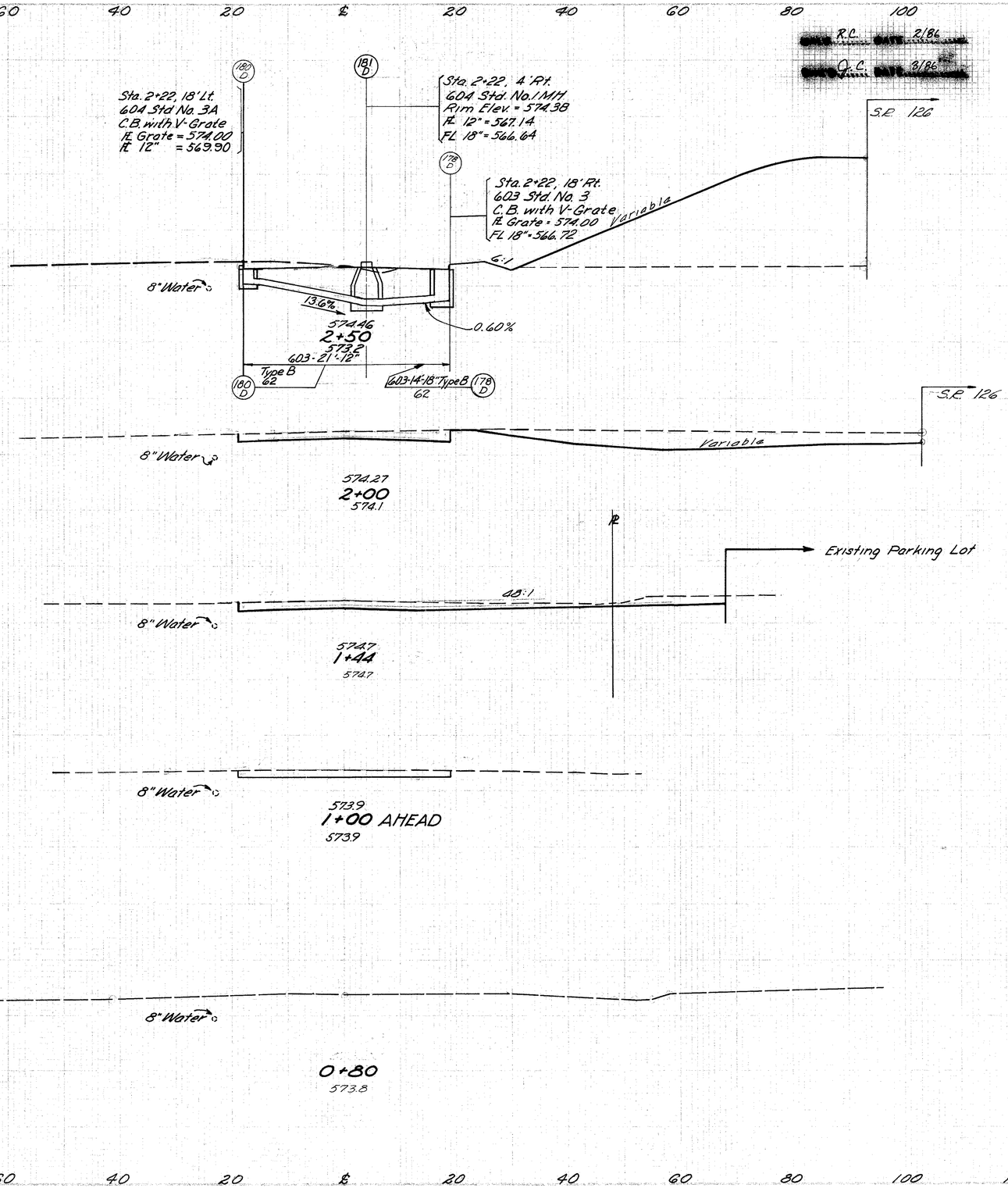
HAM-126-13.00
HAMILTON COUNTY

SEEDING

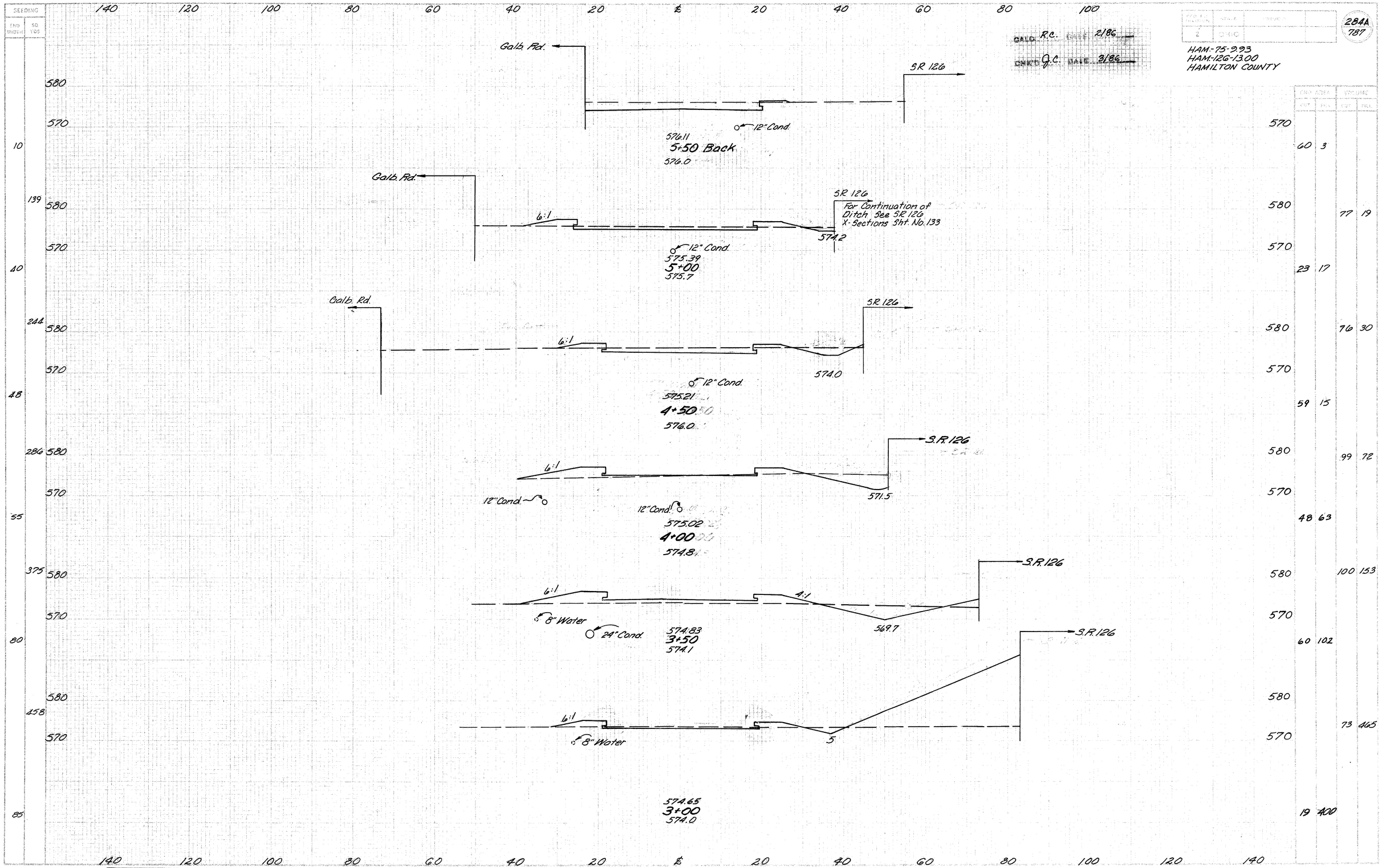
SND WIDTH	SQ. YDS
90	486
98	532
10	300
9	53
0	25



STA	CUB AREA CUT	CUB AREA FILL	VOLUME CUT	VOLUME FILL
590			27	1117
580				
570				
	10	806		
580				
			237	756
570				
	246	10		
580				
			411	11
570				
	150	1		
580			161	1
570				
Ahead	47	0		
580				
570				

DEVELOPED | CHECKED

DRIVE A STA 0+80 TO STA 3+50



GALD. R.C. DATE 2/86
CHK'D J.C. DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

284A
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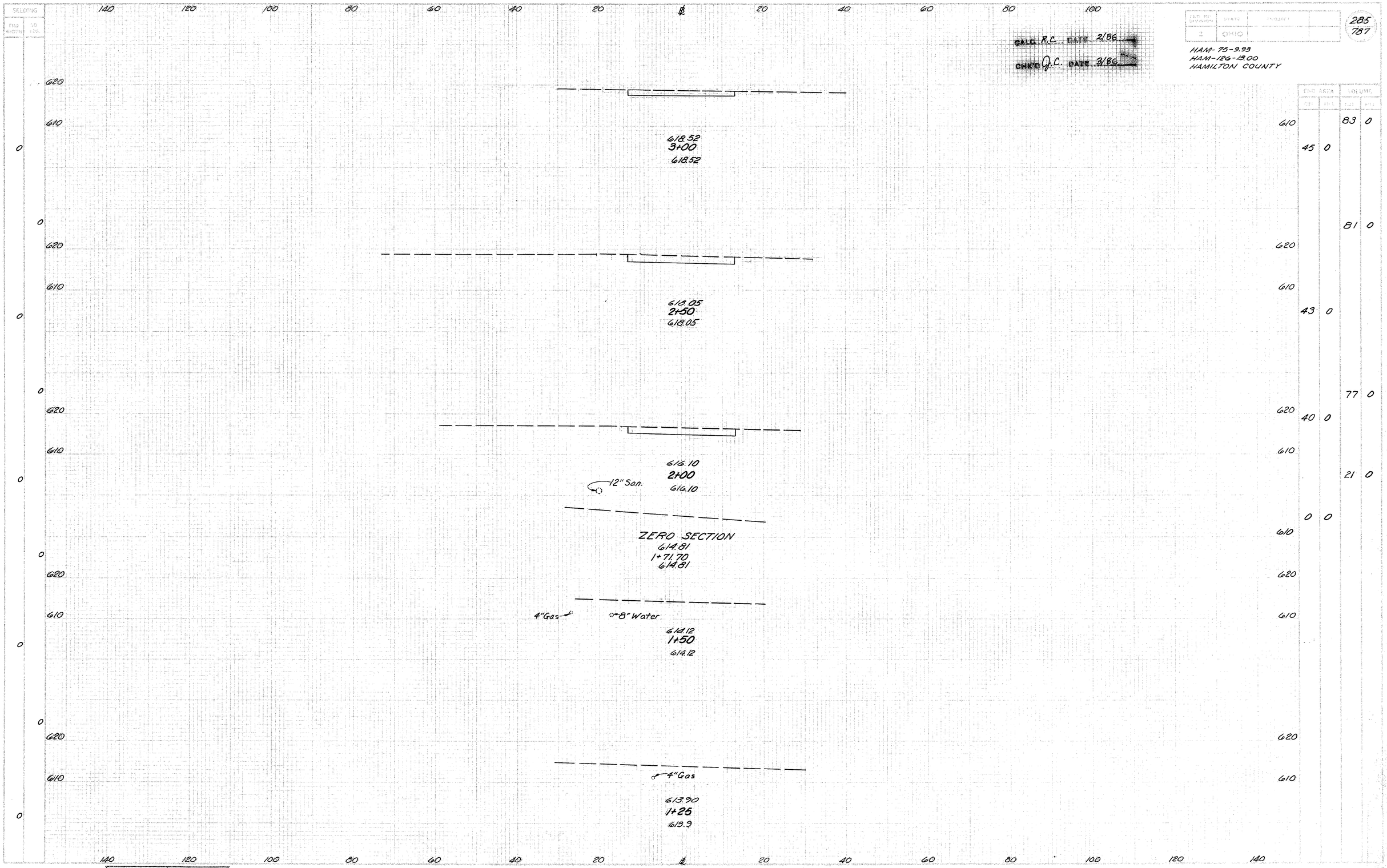
DEVELOPED | CHECKED

DRIVE A STA. 3+00 TO STA. 5+50



SEEDING
END WIDTH
SQ. YDS.
140 120 100 80 60 40 20 ℄ 20 40 60 80 100
CALC. R.C. DATE 2/86
CHK'D J.C. DATE 3/86
FED. RD. DIVISION 2
STATE OHIO
PROJECT
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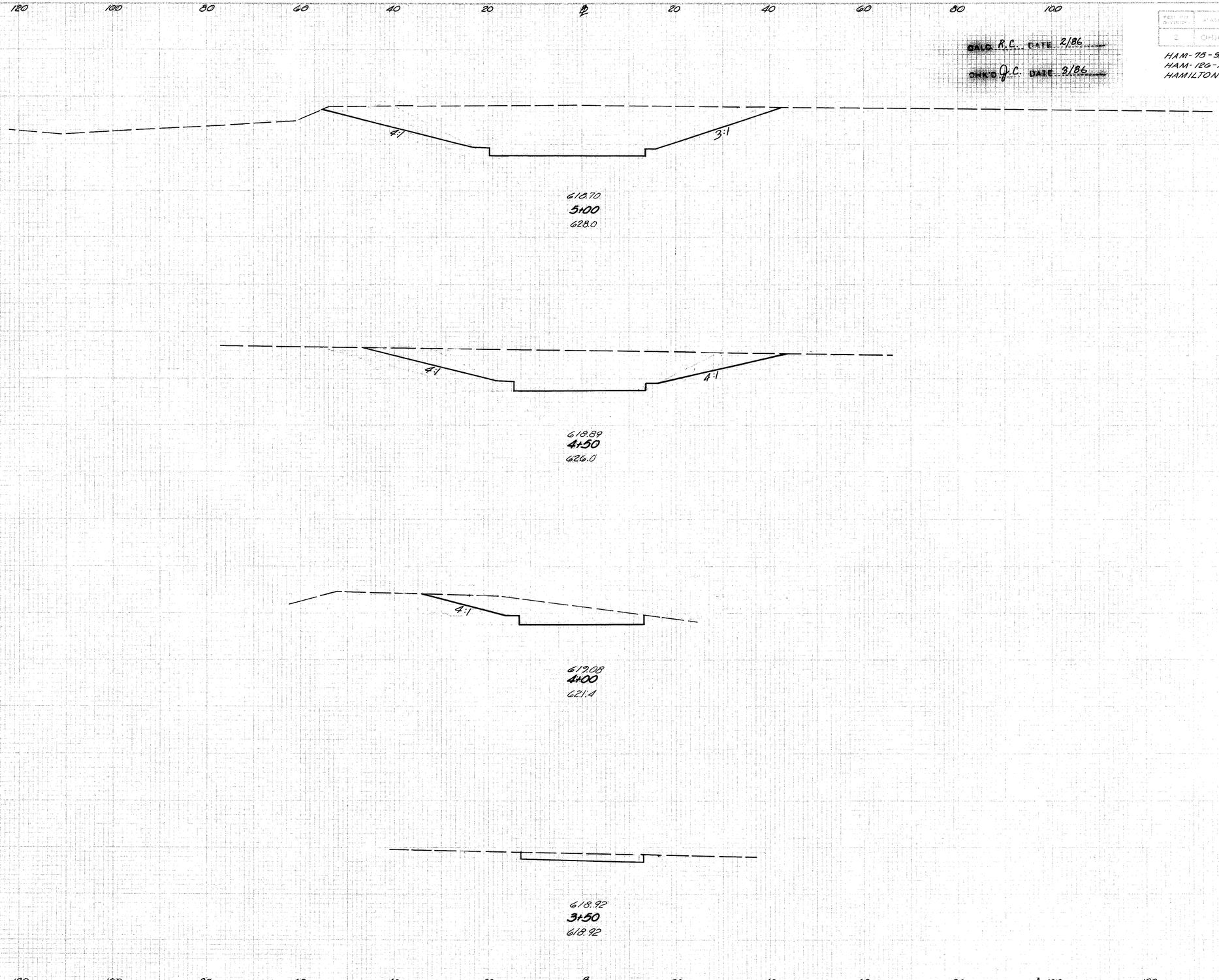
787
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
END AREA
VOLUME
620
610
0
618.52
3+00
618.52
618.05
2+50
618.05
616.10
2+00
616.10
12" San.
ZERO SECTION
614.81
1+71.70
614.81
4" Gas
8" Water
614.12
1+50
614.12
4" Gas
613.90
1+25
613.9
83 0
45 0
81 0
43 0
77 0
40 0
21 0
0 0
DEVELOPED
CHECKED
DRIVE B STA. 1+25 TO STA. 3+00

SEEDING	
SQ. WIDTH	SQ. YDS.
233	
42	
214	
35	
125	
10	
17	
10	
0	



ENG AREA	VOLUME	
CUT	FILL	CUT FILL
620		1340 0
610		
		686 0
630		1078 0
620		
610		
		478 0
630		569 0
620		
610		
		136 0
630		168 0
620		
610		
		45 0

DEVELOPED	CHECKED

CALC. R.C. DATE 2/86

CHK'D J.C. DATE 2/86

FED. PROJ. NUMBER	STATE	PROJECT	
	OHIO		

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HAMILTON COUNTY

ROUTE 4 STA 3+50 TO STA 5+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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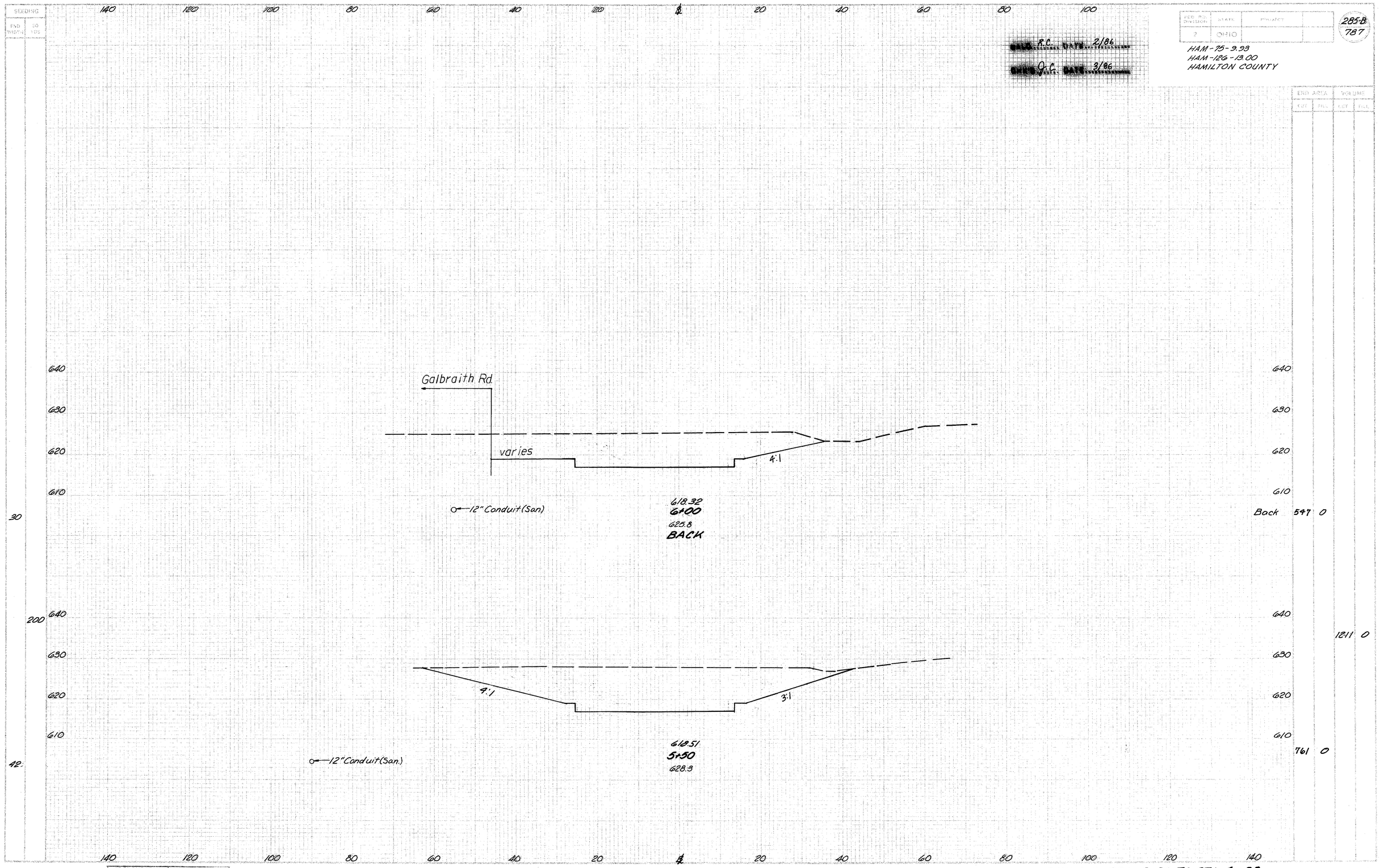
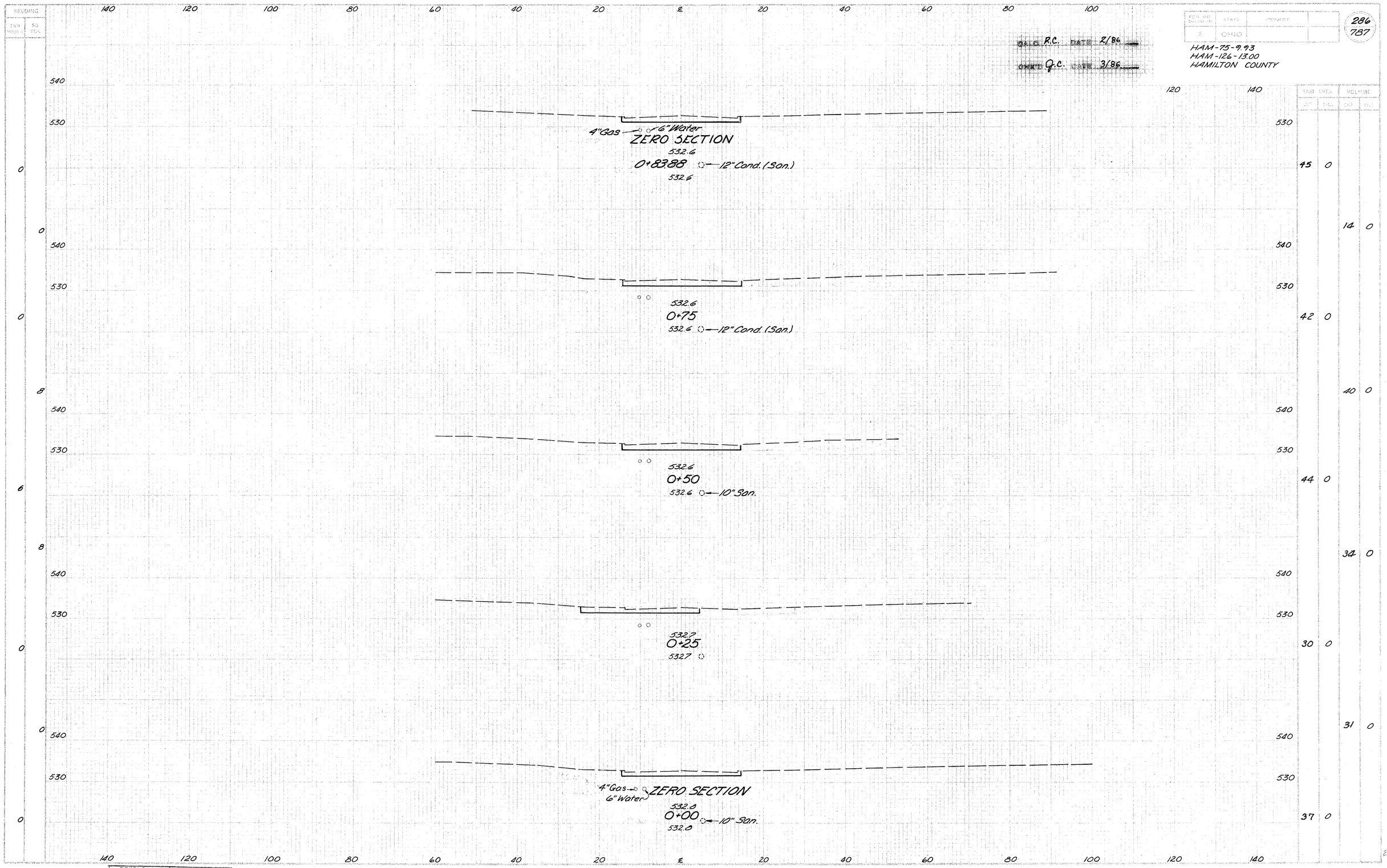
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

CALC. R.C. DATE 2/86
CHK'D J.C. DATE 3/86



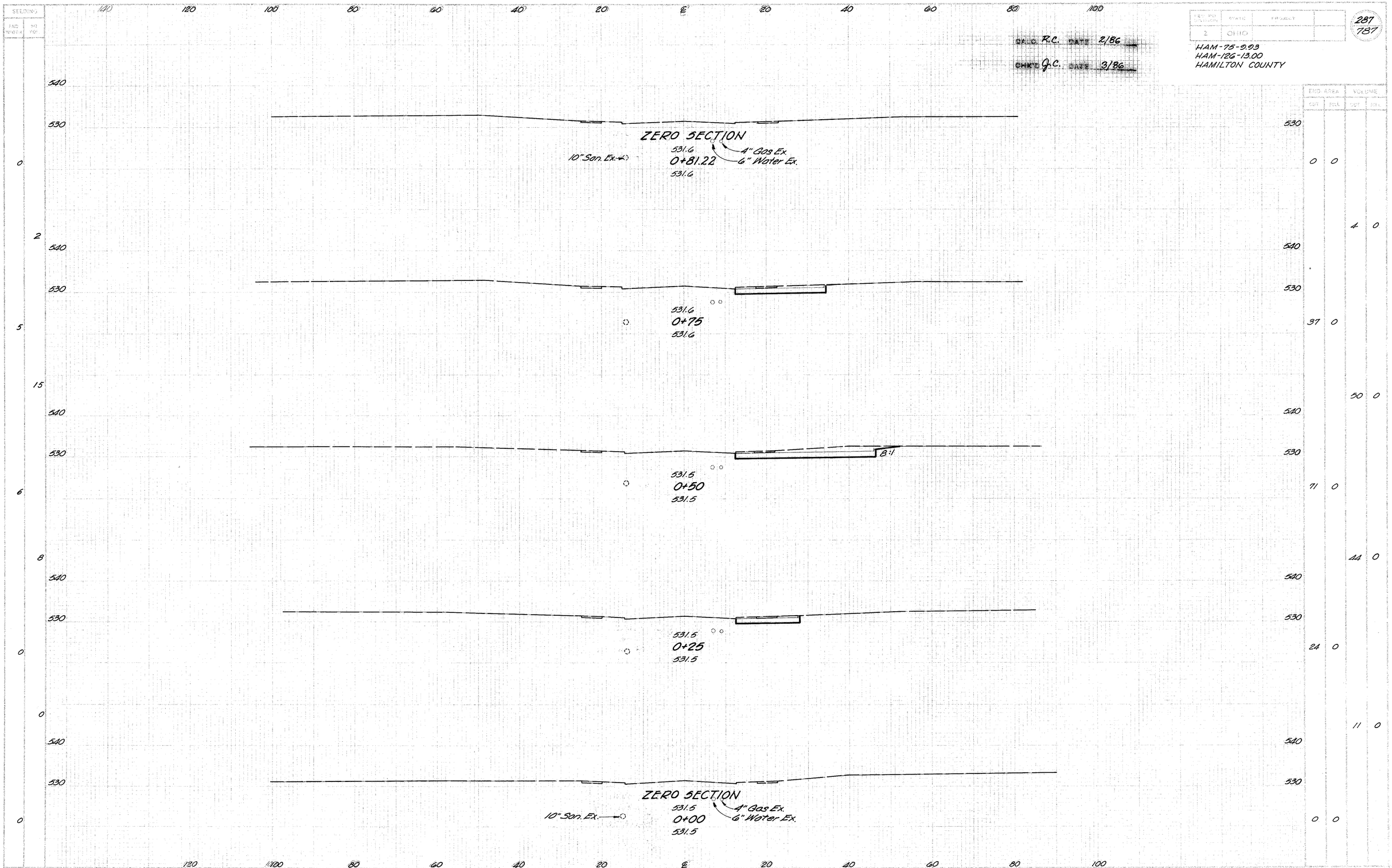
DEVELOPED | CHECKED

DRIVE B STA. 5+50 TO STA. 6+00

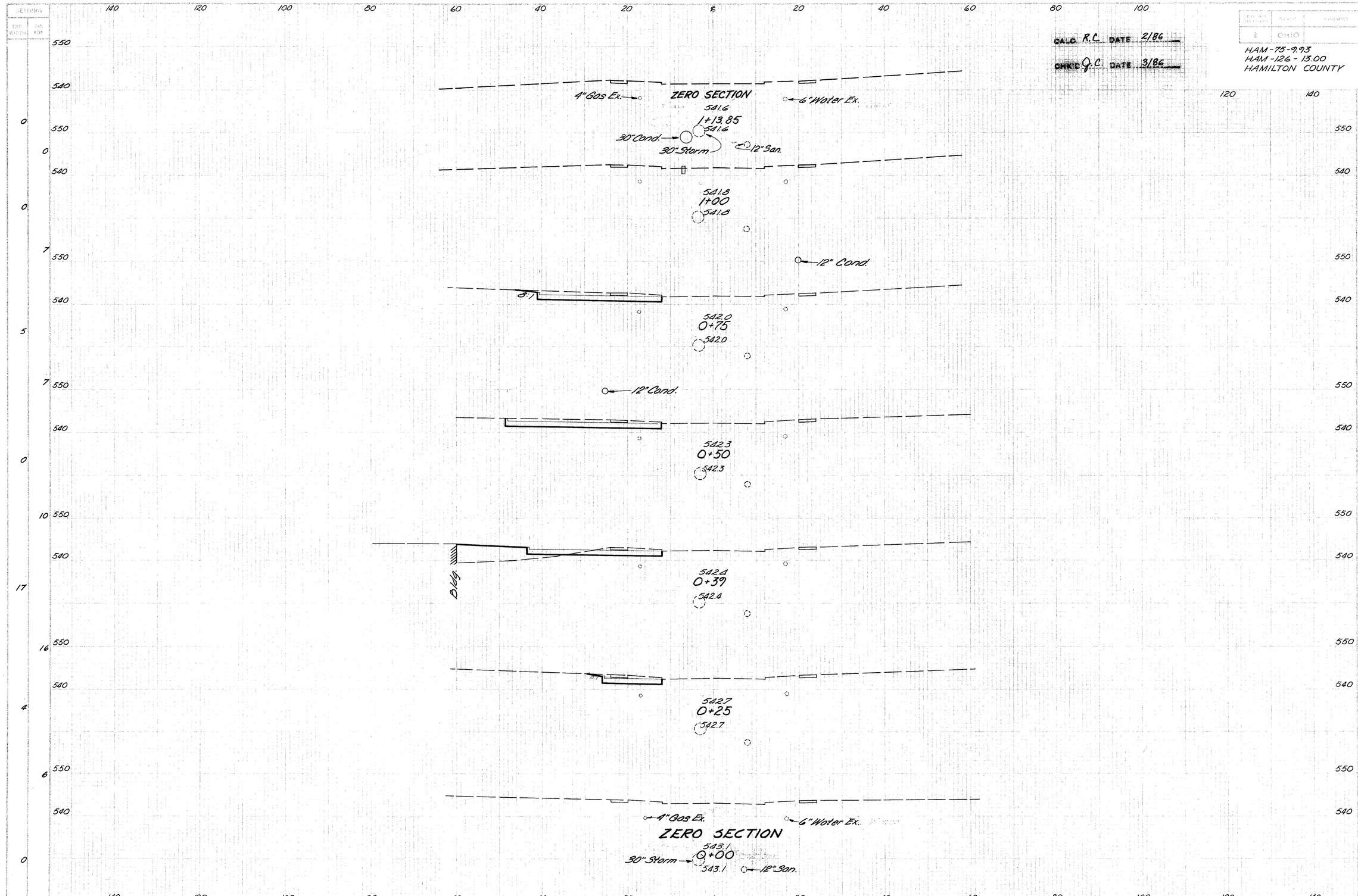


DEVELOPED | CHECKED

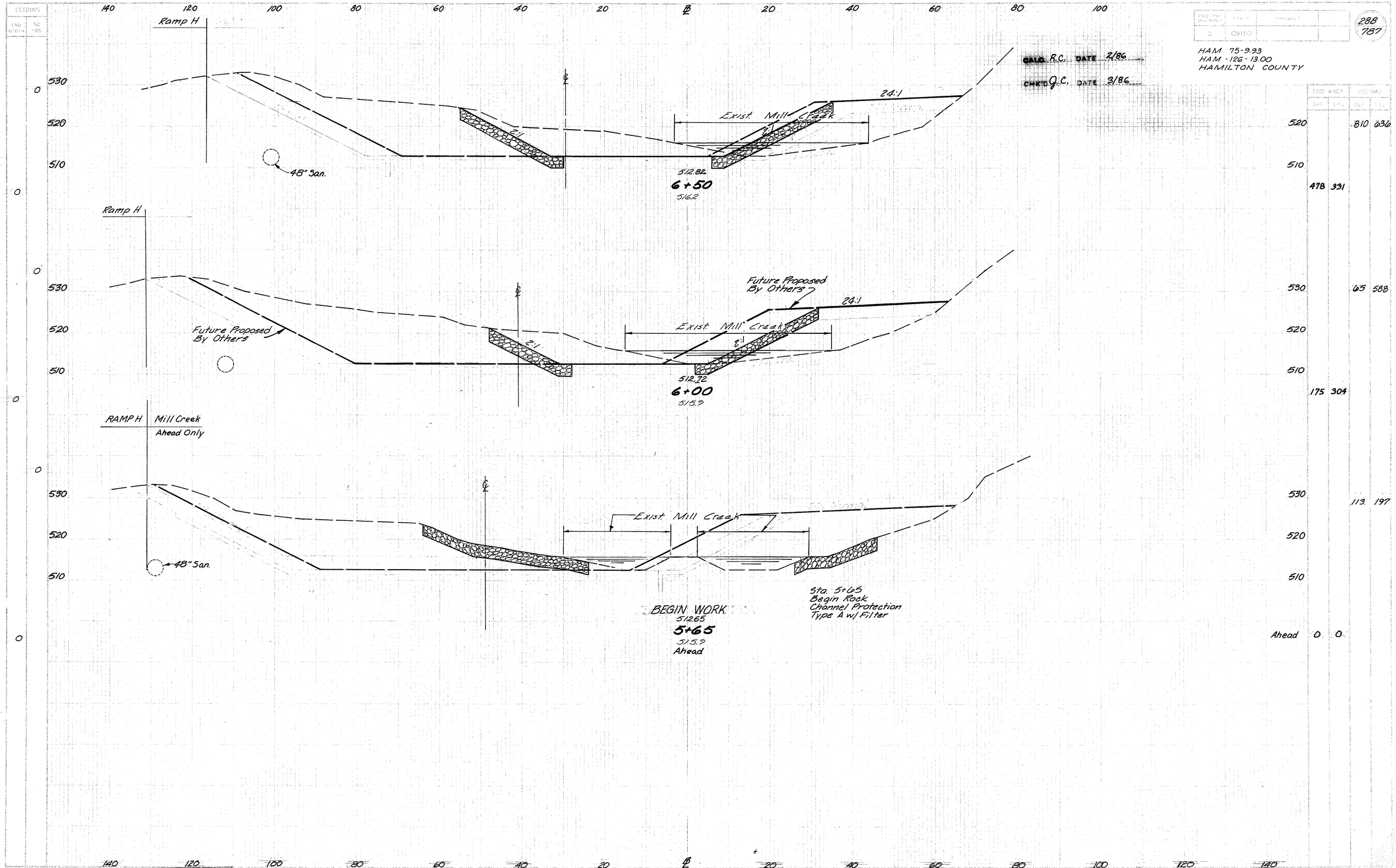
CUL DE SAC @ WOODBINE AVE. NORTH SIDE SR 126 STA 0+00 TO STA 0+83.8



CUL-DE-SAC @ WOODBINE AVE. SOUTH SIDE SR 126 STA 0+00 TO STA 0+81.22



CALC. R.C. DATE 2/86
CHK'D J.C. DATE 3/86
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
287A
787
ZERO SECTION
4" Gas Ex.
6" Water Ex.
541.6
1+13.85
541.6
30" Cond.
30" Storm
12" San.
541.8
1+00
541.8
12" Cond.
8:1
542.0
0+75
542.0
12" Cond.
542.3
0+50
542.3
Bldg.
542.4
0+39
542.4
542.7
0+25
542.7
4" Gas Ex.
6" Water Ex.
ZERO SECTION
543.1
0+00
543.1
30" Storm
12" San.
END AREA
VOLUME



CALC. R.C. DATE 2/86

CHK'D J.C. DATE 3/86

HAM 75-9.93
HAM-126-13.00
HAMILTON COUNTY

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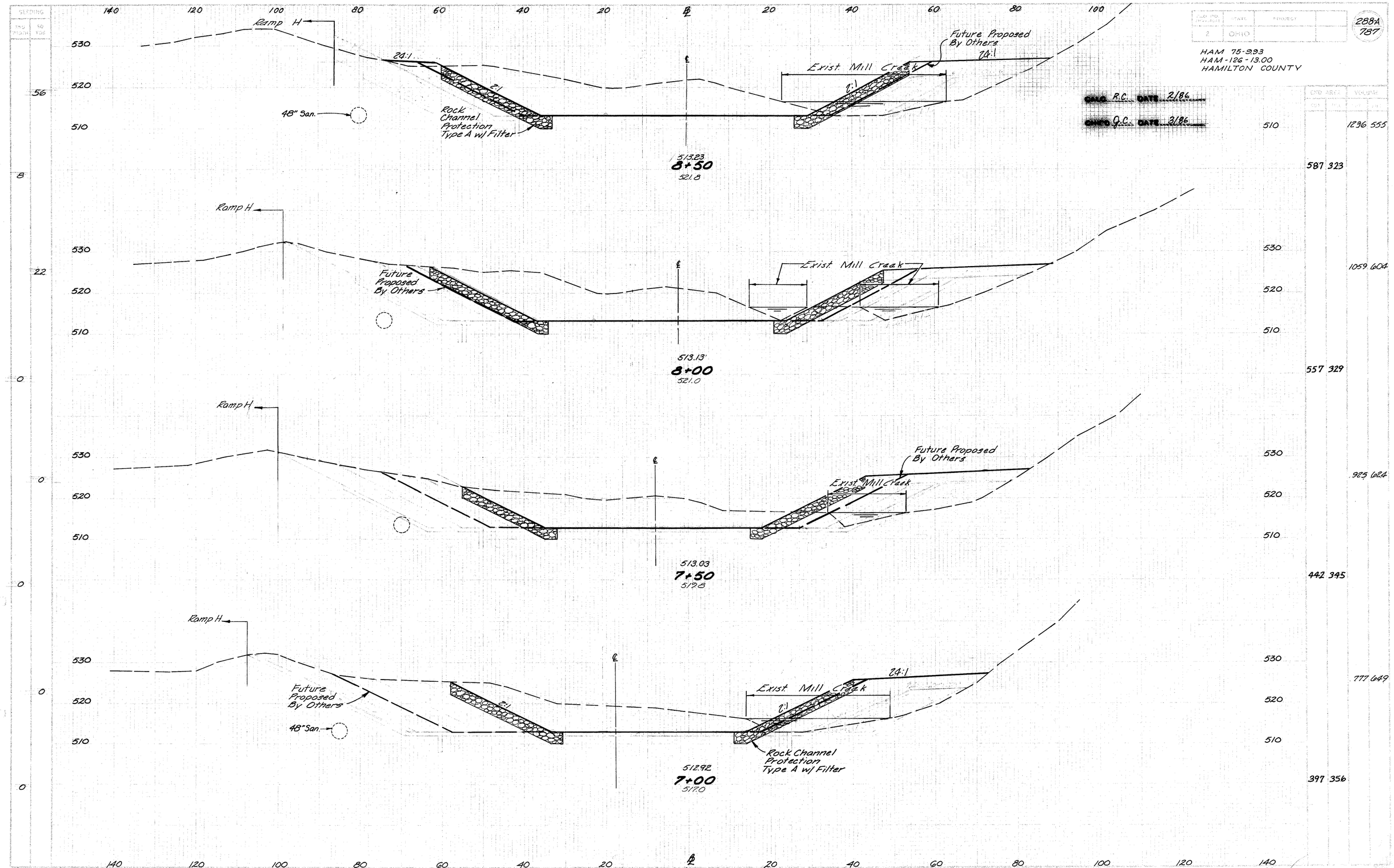
787

	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
520			.810	636
510	478	331		
530			65	588
520				
510	175	304		
530			113	197
520				
510				
Ahead	0	0		

DEVELOPED | CHECKED

BELOG MILL CREEK CHANNEL STA. 5+65 TO STA. 6+50



FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

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HAM 75-9.93
HAM-126-13.00
HAMILTON COUNTY

CALC. R.C. DATE 2/86
CHK'D G.C. DATE 3/86

CUT	FILL	VOLUME
		1236 555
587	323	
		1059 604
557	329	
		925 624
442	345	
		777 649
397	356	

DEVELOPED | CHECKED

RELOC. MILL CREEK CHANNEL STA. 7+00 TO STA. 8+50

SEEDING	
LINE WIDTH	SQ. YDS.
175	
32	
161	
26	
133	
22	
94	
12	

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

Ramp H

2:1

Rip Rap Using 8" Reinf. Conc. Slab

2:1

48" San.

Exist. Mill Creek

2:1

2:1

5+13.63
10+50
520.0

Ramp H

530
520
510

Exist. Mill Creek

2:1

5+13.53
10+00
521.2

Ramp H

530
520
510

Exist. Mill Creek

2:1

5+13.43
9+50
521.4

Sta. 9+14.56
End Rock
Channel Protection
Type A w/ Filter
Begin Rip Rap Using
8" Reinf. Conc. Slab

Ramp H

2:1

2:1

48" San.

Exist. Mill Creek

2:1

2:1

5+13.33
9+00
522.3

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

END AREA		VOLUME	
CUT	FILL	CUT	FILL
	520		1086 235
	510		
		568 144	
	530		1088 296
	520		
	510		
		607 176	
	530		1155 384
	520		
	510		
		640 239	
	530		1285 477
	520		
	510		
		748 276	

DEVELOPED	CHECKED

REVISIONS	DATE	PROJECT
2	08/10	

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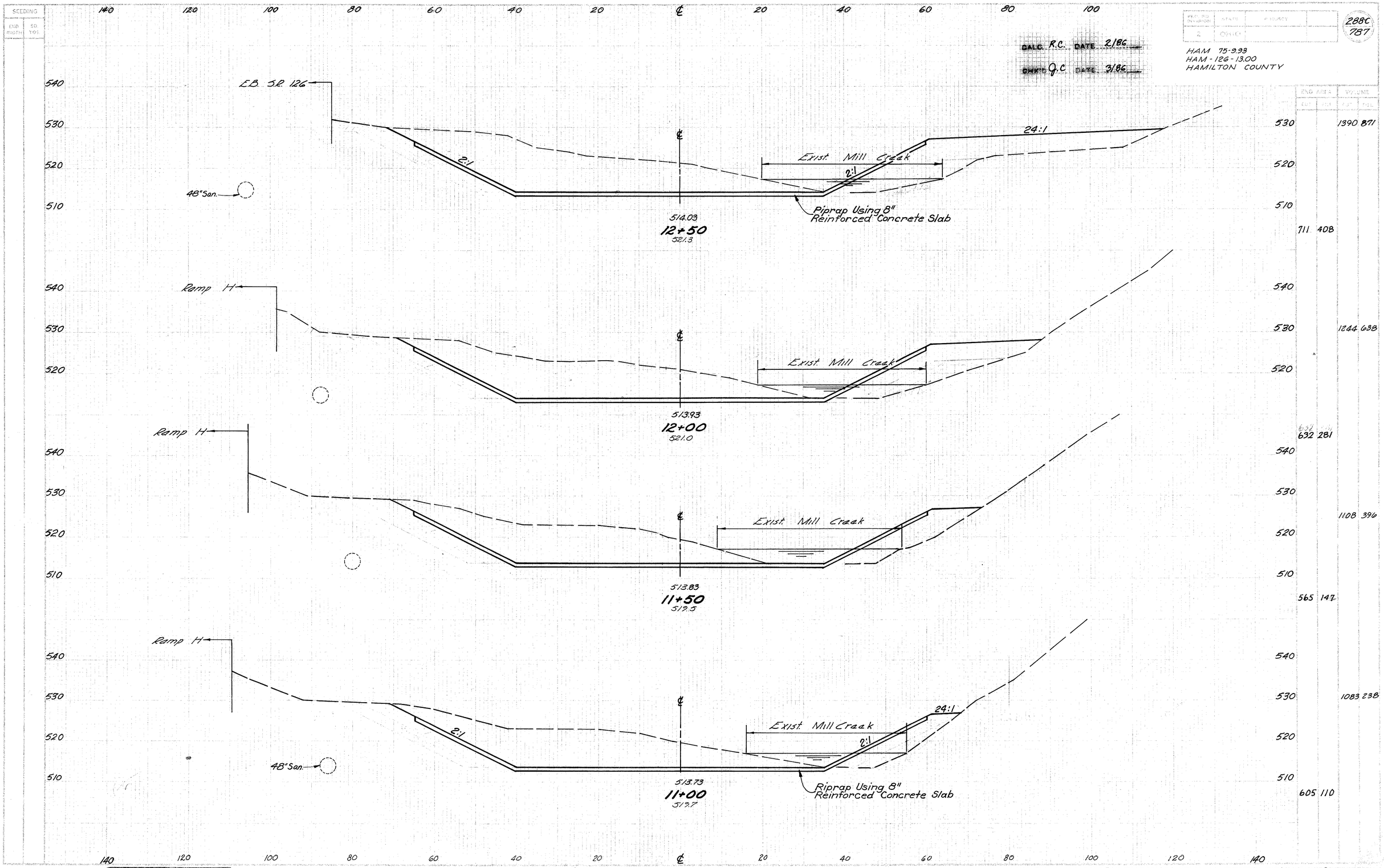
HAM 75-9.93
HAM-126-13.00
HAMILTON COUNTY

CALC. R.C. DATE 2/86
CHK'D J.C. DATE 3/86

RELOC. MILL CREEK CHANNEL STA 9+00 TO STA 10+50



RELOC. MILL CREEK CHANNEL STA 11+00 TO STA 12+50

SEEDING

END WIDTH	SQ YDS

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

R.C. 2/86
Q.C. 3/86

DESIGN	STATE	PROJECT	
A	OHIO		

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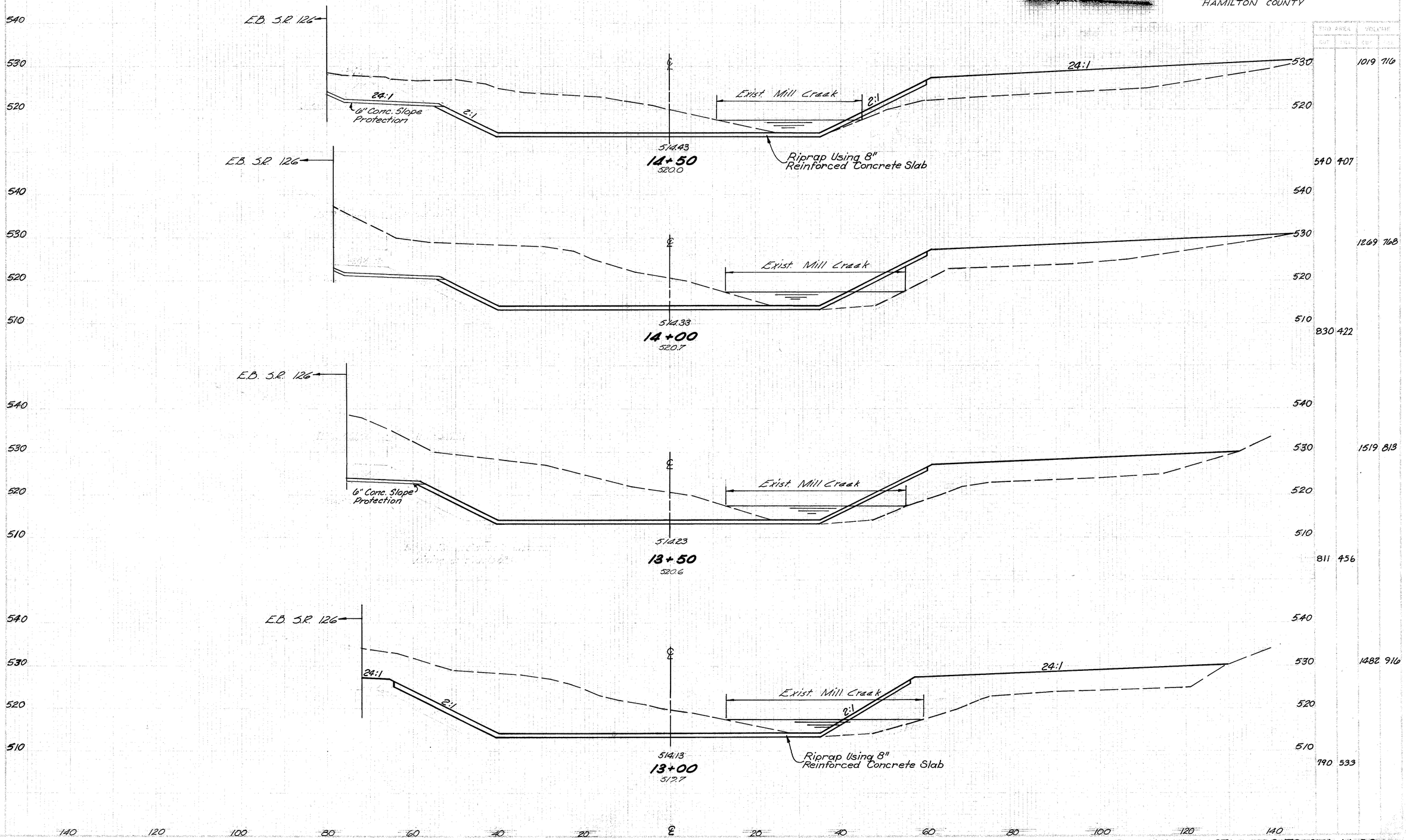
787

HAM 75-9.93
HAM-126-13.00
HAMILTON COUNTY



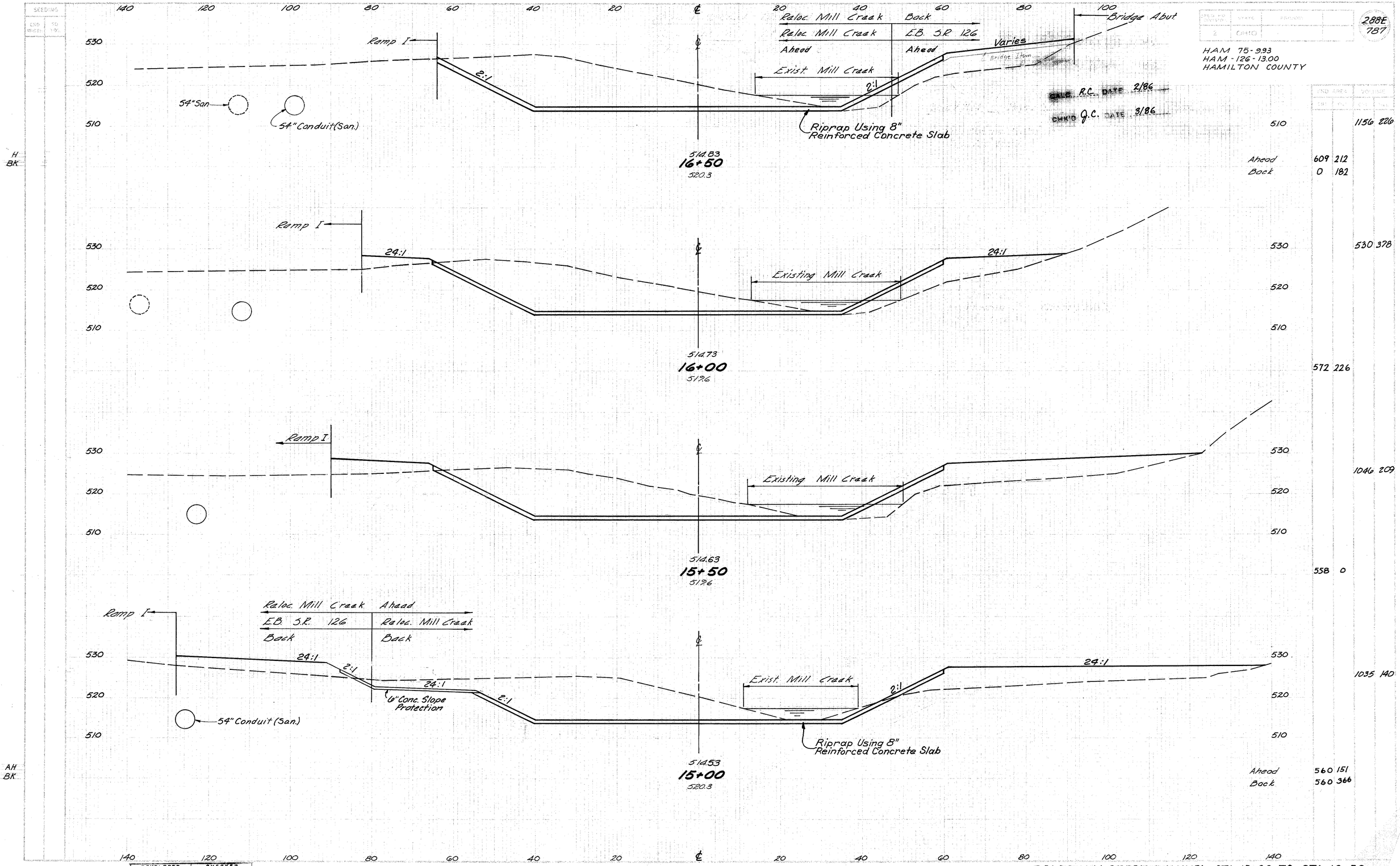
STD AREA		VOLUME	
CUT	FILL	CUT	FILL

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

DEVELOPED | CHECKED

RELOC. MILL CREEK CHANNEL STA. 13+00 TO STA. 14+50

288



HAM 75-9.93
HAM-126-13.00
HAMILTON COUNTY

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787

CALC. R.C. DATE 2/86
CHK'D J.C. DATE 3/86

	END AREA		VOLUME	
510			1156	226
Ahead	609	212		
Back	0	182		
530			530	378
572	226			
1046	209			
558	0			
1035	140			
Ahead	560	151		
Back	560	366		

H
BK

AH
BK

DEVELOPED | CHECKED

RELOC. MILL CREEK CHANNEL STA 15+00 TO STA 16+50

SEEDING

EVE	SO
YES	YES

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

OHIO

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HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

CALC. R.C. DATE 2/86
CHKD Q.C. DATE 3/86

END AREA	VOLUME
CUT FILL	CUT FILL

530
520
510

54" Conduit (San) →
2:1
54" San.
℄
Exist. Mill Creek
2:1
E.B. S.R. 126 24:1
Riprap Using 8" Reinforced Concrete Slab

5+15.23
18+50
519.3

520 1172 34

510

609 22

530
520
510

Transmission Tower
℄
Existing Mill Creek
E.B. S.R. 126
3:1
Bridge

5+15.13
18+00

530 1155 37
520
510

638 18

530
520
510

℄
Exist. Mill Creek
E.B. S.R. 126
Varies
Bridge Abut.

5+15.03
17+50
517.7

530 1174 46
520
510

630 32

530
520
510

Ramp 1
54" Conduit (San.)
2:1
℄
Exist. Mill Creek
E.B. S.R. 126 Varies
(Bridge Item)
2:1
Bridge Abut.
Riprap Using 8" Reinforced Concrete Slab

5+14.93
17+00
520.5

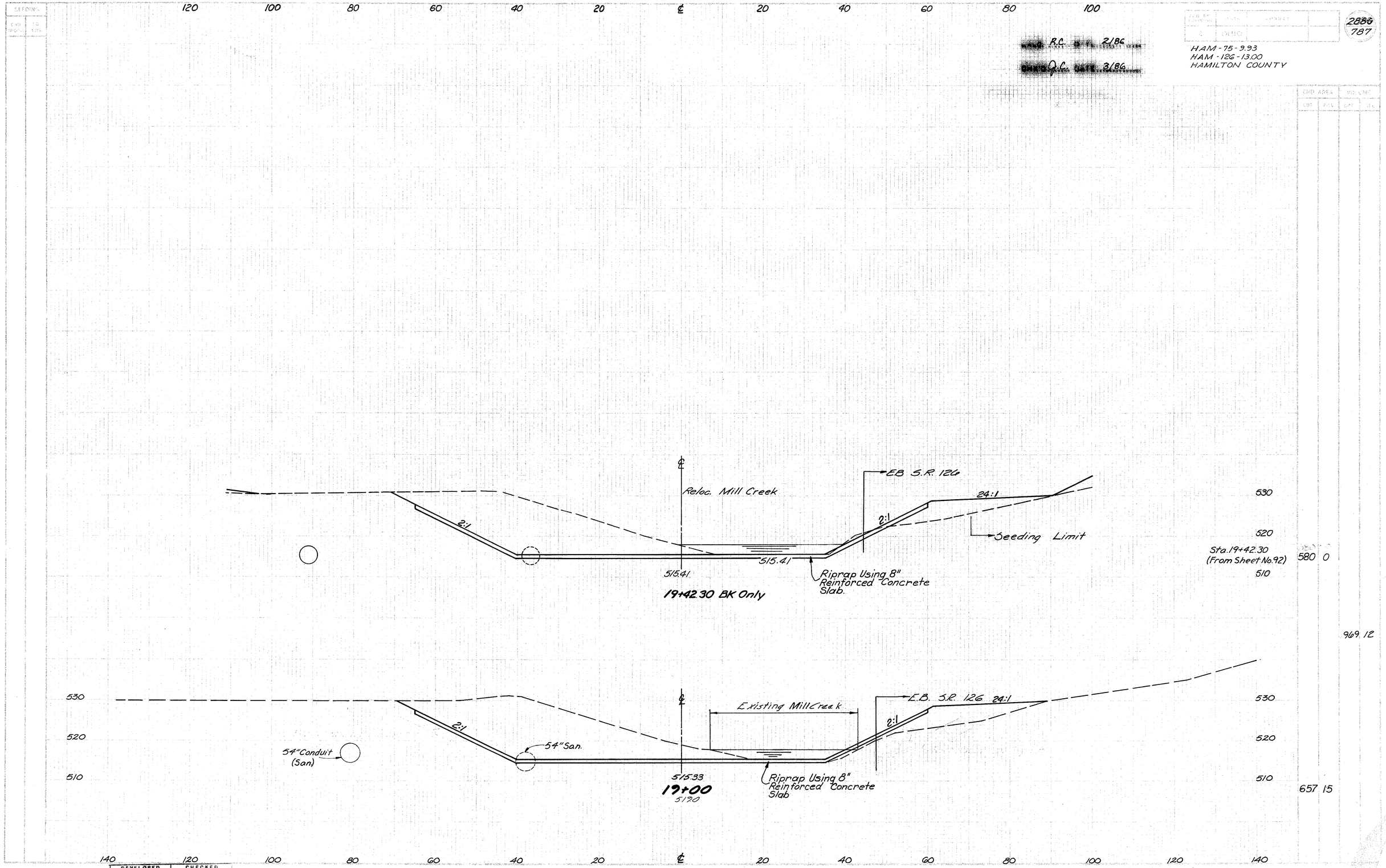
530 1175 59
520
510

639 32

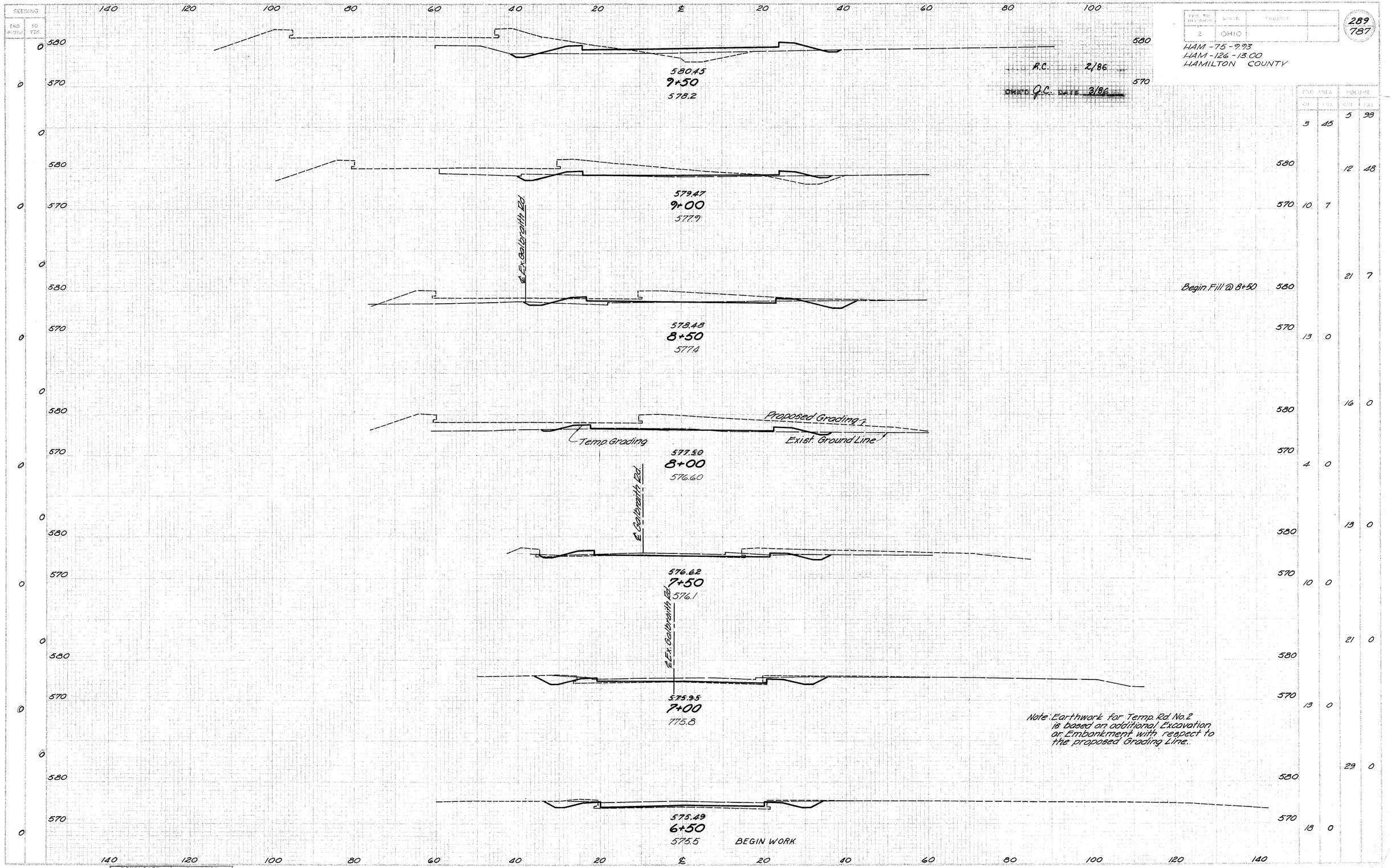
140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

DEVELOPED	CHECKED

RELOC. MILL CREEK CHANNEL STA. 17+00 TO STA. 18+50



RELOC. MILL CREEK CHANNEL STA. 19+00



FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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HAMILTON COUNTY

TEMPORARY ROAD NO. 2 STA 6+50 TO STA 9+50

DES. INIT.	STATE	PROJECT	
2	OHIO		

280A
787

HAM-75 - 9.73
HAM-126 - 13.00
HAMILTON COUNTY

DR. C. R.C. DATE 2/86
CHKD. Q.C. DATE 3/86

SEEDING END WIDTH	SEEDING SQ. YDS.	STA.	ELEV.
0		610	
		600	
		590	
		580	
0			
0		590	
		580	
0			
0		590	
0		580	
0			
0		580	
0		570	
0			
0		580	
0		570	
0			
0		580	
0		570	

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

591.95
12+50
602.0

Existing Ground Line
Temp. Grading
Proposed Grading

588.52
12+00
590.0

585.79
11+50
581.7

583.75
11+00
579.6

582.42
10+50
579.1

581.44
10+00
578.5

2:1

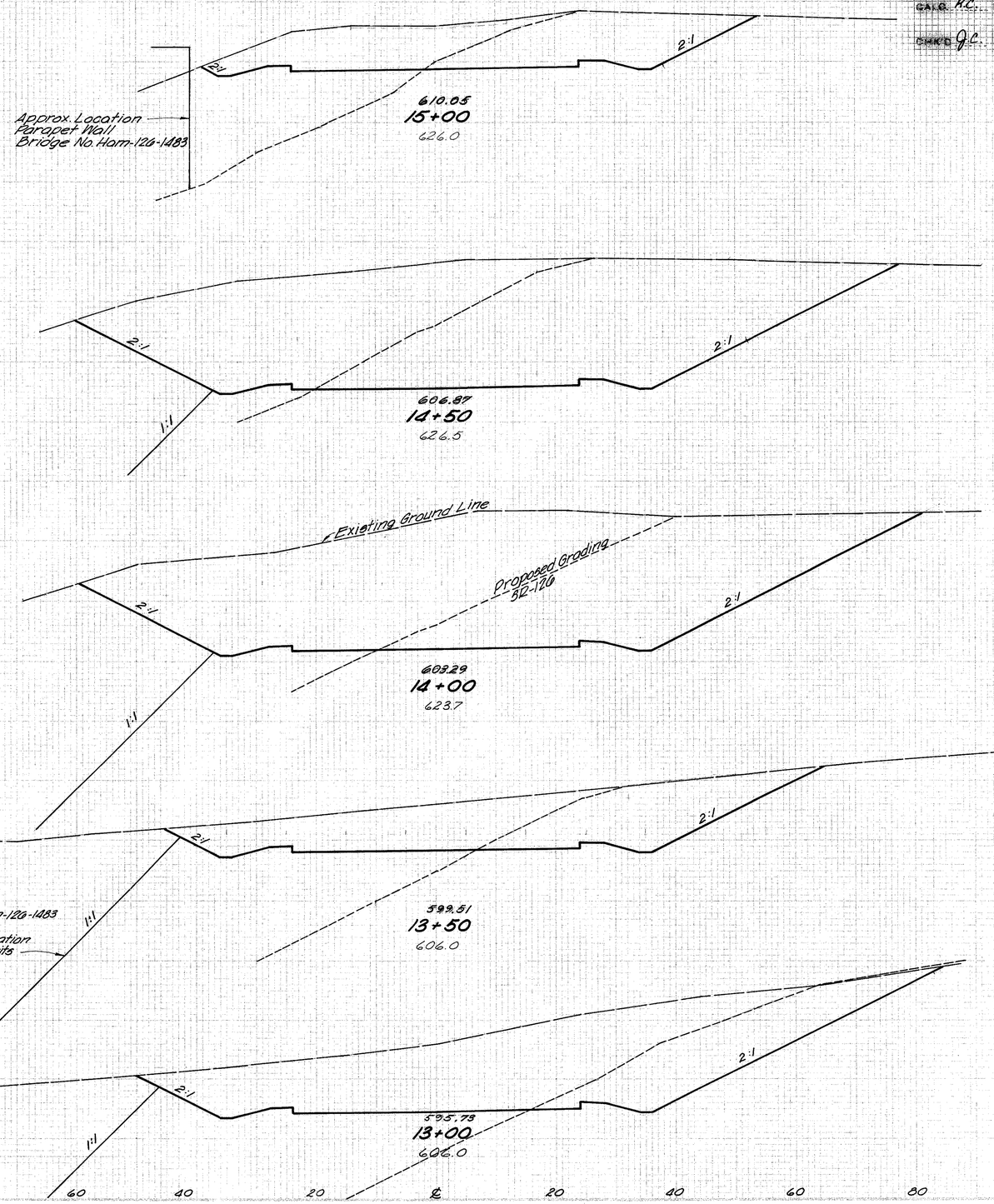
140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
600		614	0
590			
580			
200	0		
590		185	0
580			
End Cut @ 12+00	0	0	
590			
580	0	233	
	0	250	
580		422	0
570	0	215	
		298	0
580			
570	0	105	
		148	2
580			
570	2	55	

DEVELOPED	GHEGREN

TEMPORARY ROAD NO2 STA 10+00 TO STA 13+50

SEEDING		140	120	100	80	60	40	20	℄	20	40	60	80	100						
END WIDTH	SQ. YDS.																			
		620													620					
0		610													610					
0		600													600	335	0	1302	0	
		590													590					
		630													630					
0		620													620			1428	0	
		610													610					
0		600													600	1200	0			
		630													630					
0		620													620			1990	0	
		610													610					
		600													600					
0		620													620	340	0			
		610													610					
0		600													600			1200	0	
		590													590					
0		580													580	350	0			
		620													620					
0		610													610			753	0	
		600													600					
0		590													590	460	0			
		580	140	120	100	80	60	40	20	℄	20	40	60	80	100	120	140	580		



DEVELOPED	CHECKED

FED. ROAD DESIGNATION	STATE	PROJECT	
2	OHIO		

289B
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

CALC. R.C. DATE 2/86

CHK'D J.C. DATE 3/86

TEMPORARY ROAD NO.2 STA 13+00 TO STA 15+00

SEEDING

END AREA		VOLUME	
CUT	FILL	CUT	FILL

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

DEVELOPED	CHECKED

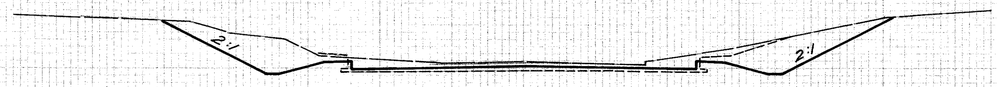
PROJECT DIVISION	NUMBER	SHEET NO.	TOTAL SHEETS
5	OHIO		

289-C
787

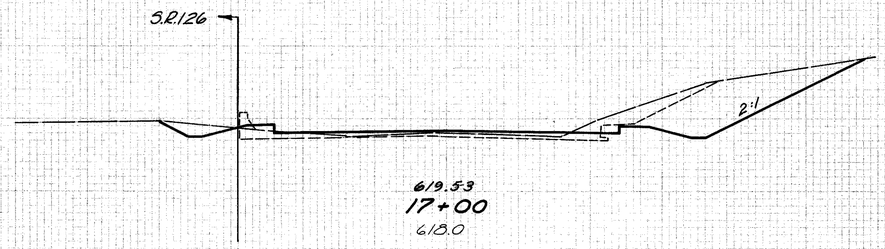
CALC'D P.I. DATE 2/86

CHK'D J.A. DATE 3/86

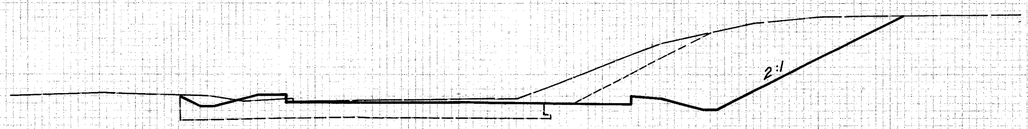
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



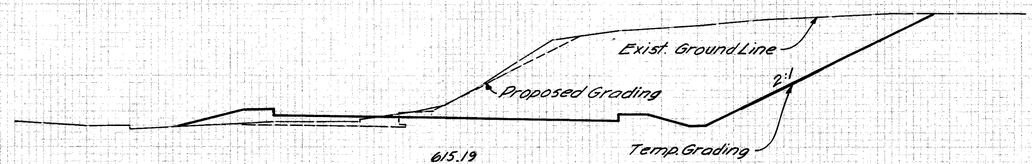
621.39
17+42.90
621.0
END WORK



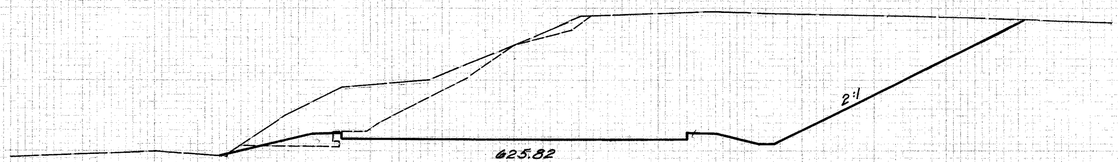
619.53
17+00
618.0



617.36
16+50
616.6



615.19
16+00
616.0



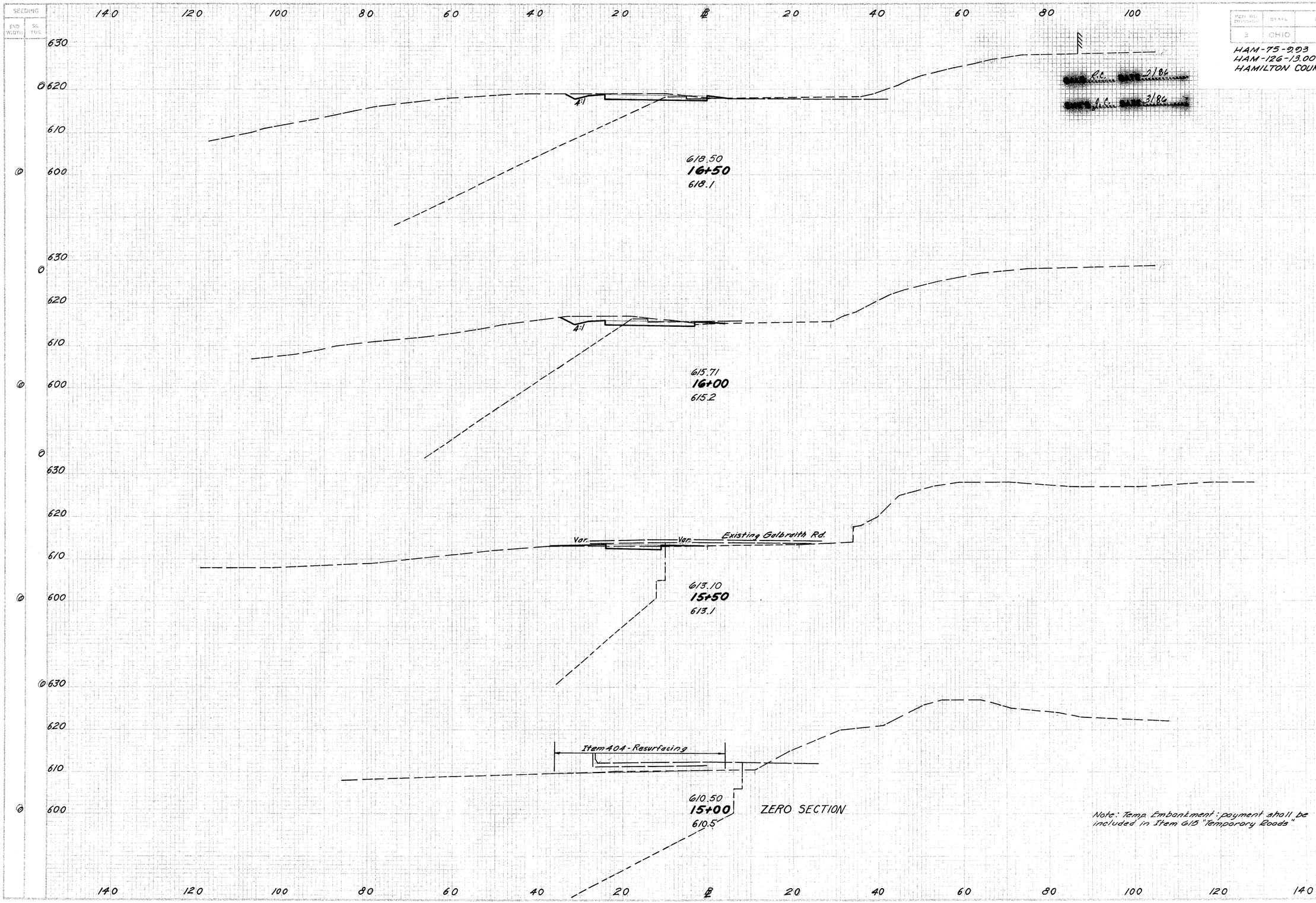
625.82
15+50
625.0

FOR CONTRACTORS INFORMATION

Temporary Road No. 2 Sta. 6+50 to Sta. 17+42.90	
Excavation Not Including Embankment Construction	10535 cu yd.
Embankment	1288 cu yd.

CUT	FILL
150	0
	270 3
140	3
367	7
855	5
777	19
580	15
1530	13
1065	0

TEMPORARY ROAD NO 2 STA 15+50 TO STA 17+42.90



FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

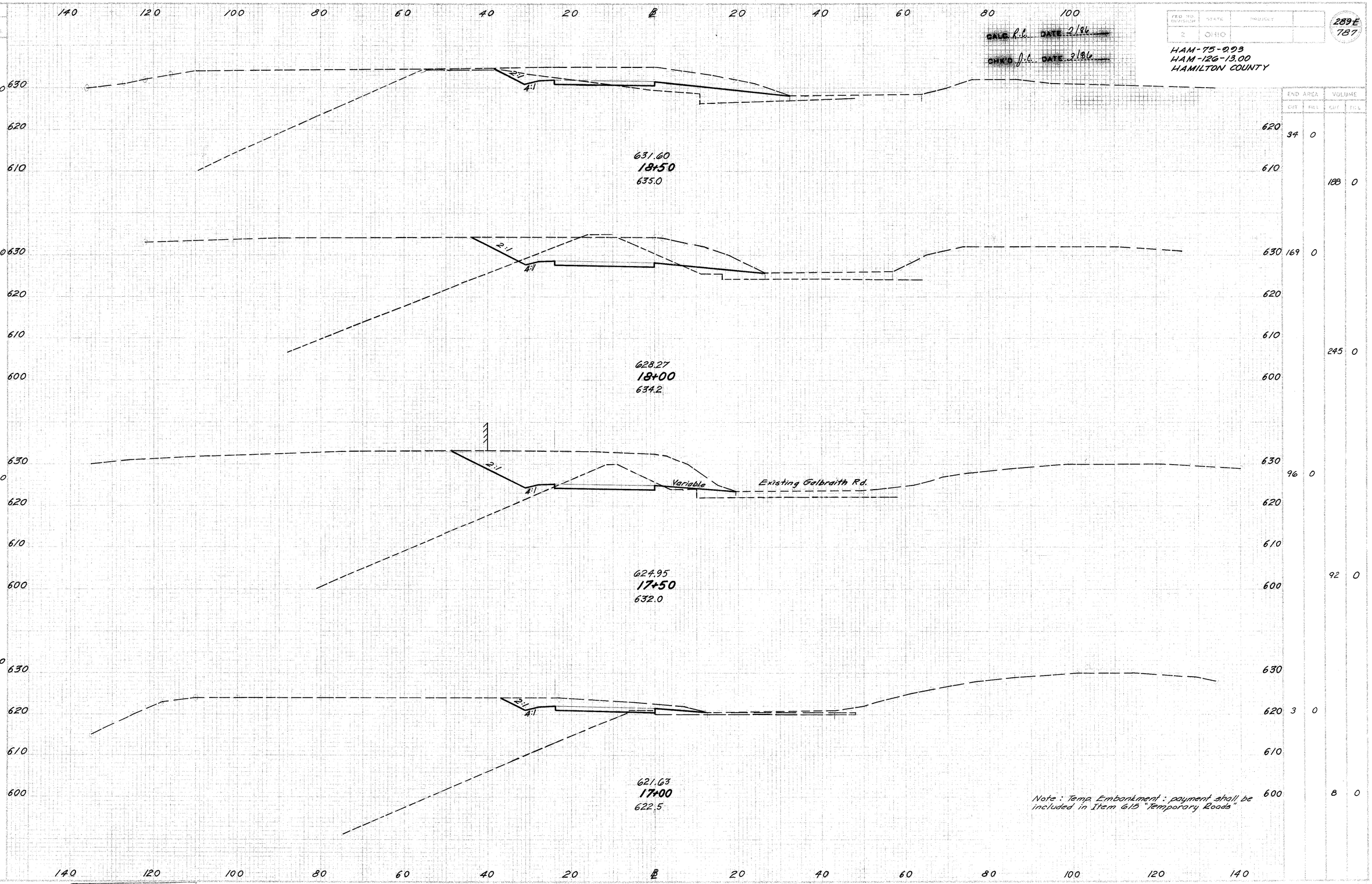
289-D
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
6	1		
		20	1
16	0		
		22	2
8	2		
		7	2
0	0		

DEVELOPED | CHECKED

SEEDING	
END WIDTH	SQ YDS.
0	
0	
0	
0	
0	



	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
620	34	0		
610			188	0
630	169	0		
620				
610			245	0
600				
630	96	0		
620				
610				
600			92	0
630				
620	3	0		
610				
600			8	0

Note : Temp. Embankment : payment shall be included in Item 615 "Temporary Roads"

DEVELOPED	CHECKED

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

CALC. R.L. DATE 2/86

CHK'D J.L. DATE 2/86

HAM-75-2.93
HAM-126-13.00
HAMILTON COUNTY

289E
787

TEMP. RD NO. 3 STA. 17+00 TO 18+50

SEEDING

SND WIDTH	SQ YDS
0	650
0	640
0	630
0	620
0	640
0	630
0	640
0	630
0	640
0	630
0	620

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

Sta. 22+00
ZERO SECTION

CHKD R.L. DATE 2/86

CHKD J.L. DATE 3/86

APPROVED	STATE	PROJECT	
2	OHIO		

289F
787

HAM-75-9.93 *
HAM-126-13.00
HAMILTON COUNTY

* FOR CONTRACTORS INFORMATION

Temporary Road No. 3
Sta. 15+00 to Sta. 22+00

Excavation Not Including Embankment Construction 709 cu.yd.

Embankment 69 cu.yd.

647.30
21+50
646.7

3:1
1:1
Temp. Embankment : payment shall be included in Item 615 "Temporary Roads"

646.80
21+00
644.0

644.85
20+50
644.1

Existing Galbraith Rd.

641.70
20+00
642.5

638.30
19+50
638.7

4:1
Variable

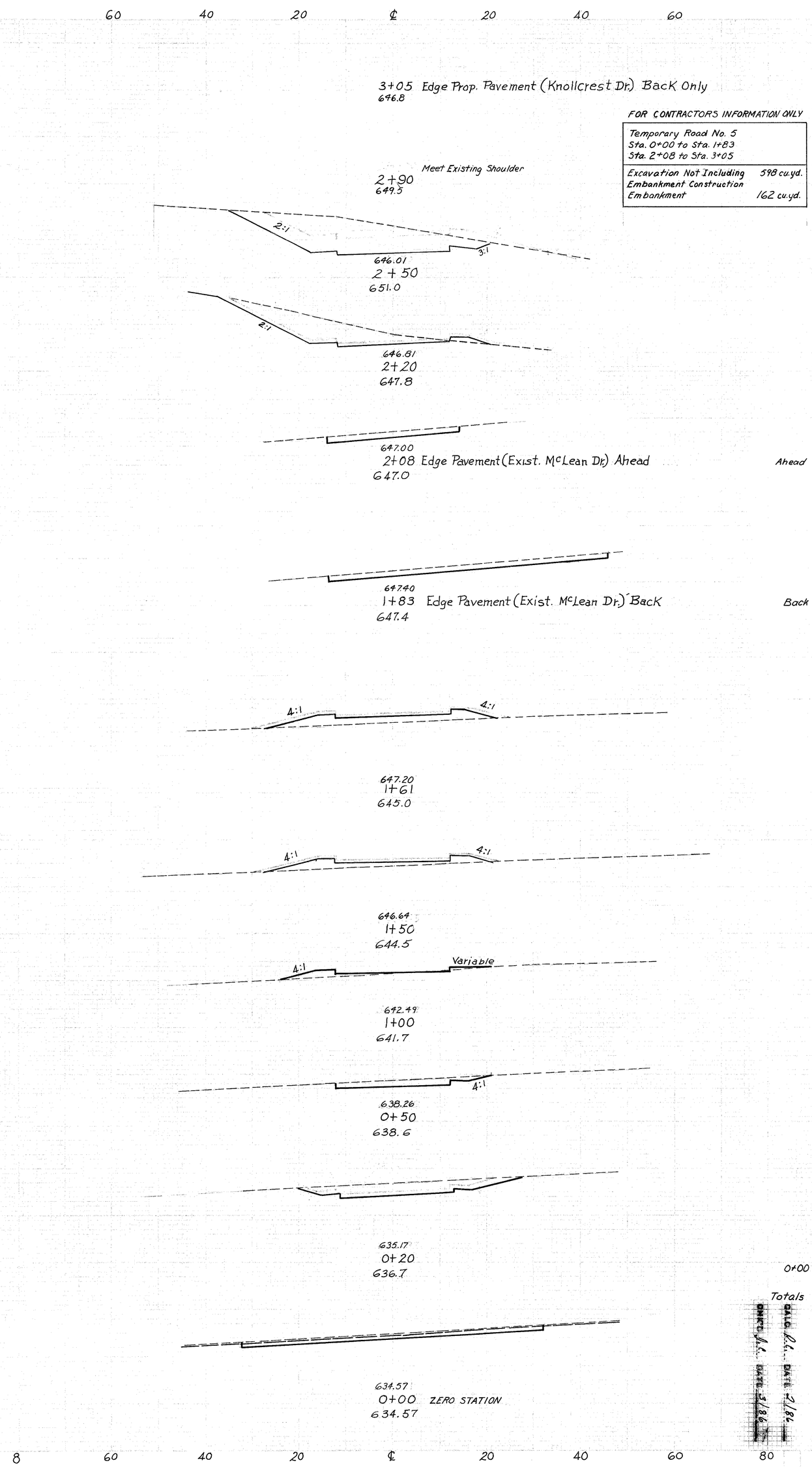
634.90
19+00
635.9

	END AREA		CU YDS	
	CUT	FILL	CUT	FILL
630	0	0		
			4	3
	4	3		
			9	30
640	6	29		
630				
620			22	29
640	18	2		
630				
620			39	2
640	24	0		
630			22	0
640				
630	0	0		
640			0	0
630	0	0		
620				
			31	0

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

DEVELOPED	CHECKED

TEMP RD NO 3 STA 19+00 TO 21+50



	End Area Cut	End Area Fill	Volume Cut	Volume Fill
	24	0		
			198	0
	170	0		
			170	5
	136	8		
			36	2
Ahead	28	0		
Back	60	0		
			24	29
	0	72		
			0	29
	0	68		
			0	80
	0	18		
			33	17
	36	0		
			76	0
	100	0		
			61	0
0+00	65	0		
Totals			598	162

CALC. R.L. DATE 2/86
CHK'D J.L. DATE 3/86

HAM-75-9.93
HAM-126-13.00

2896
787

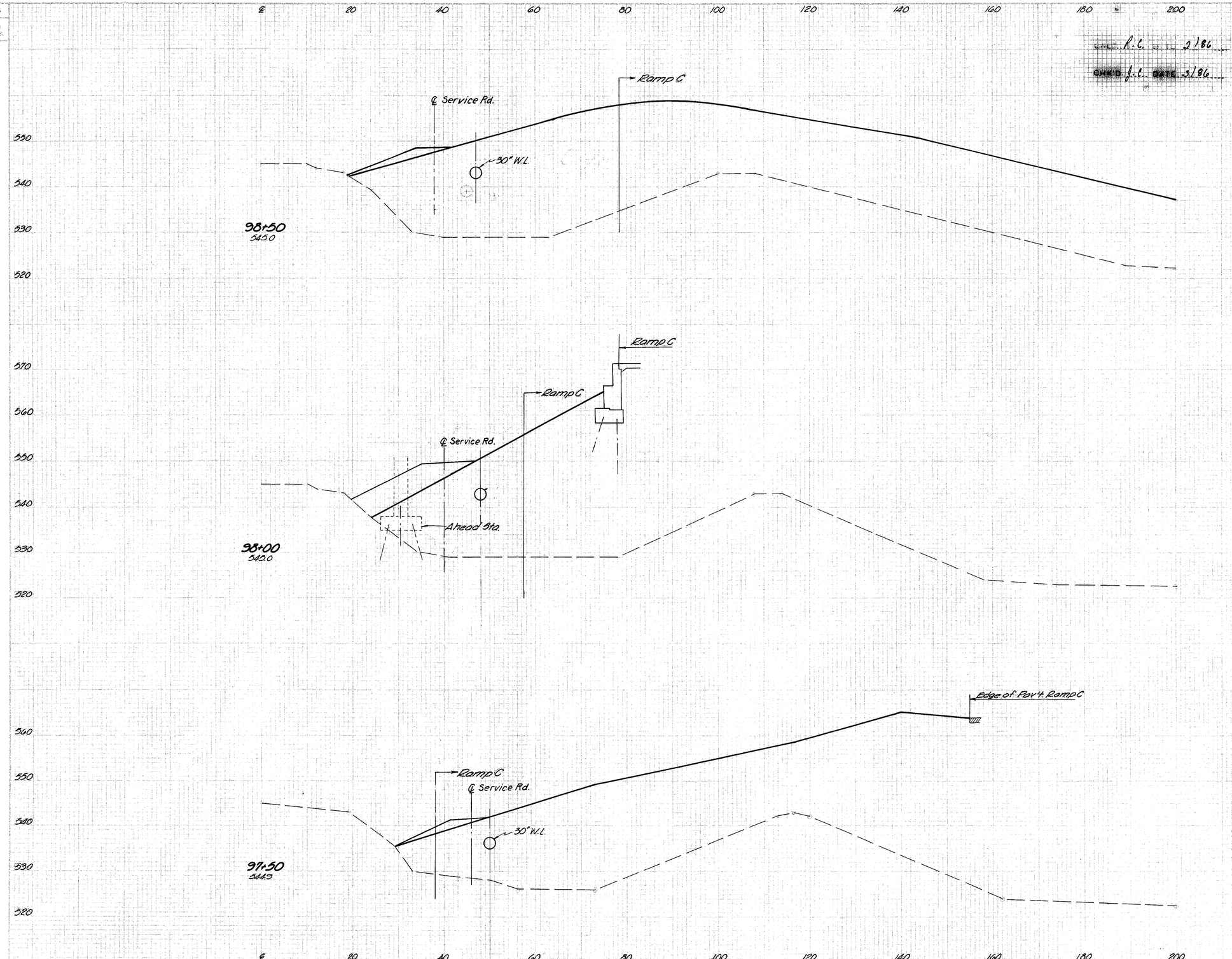
TEMP. RD. No. 5 STA. 0+00 TO STA. 3+05

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

289-H
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

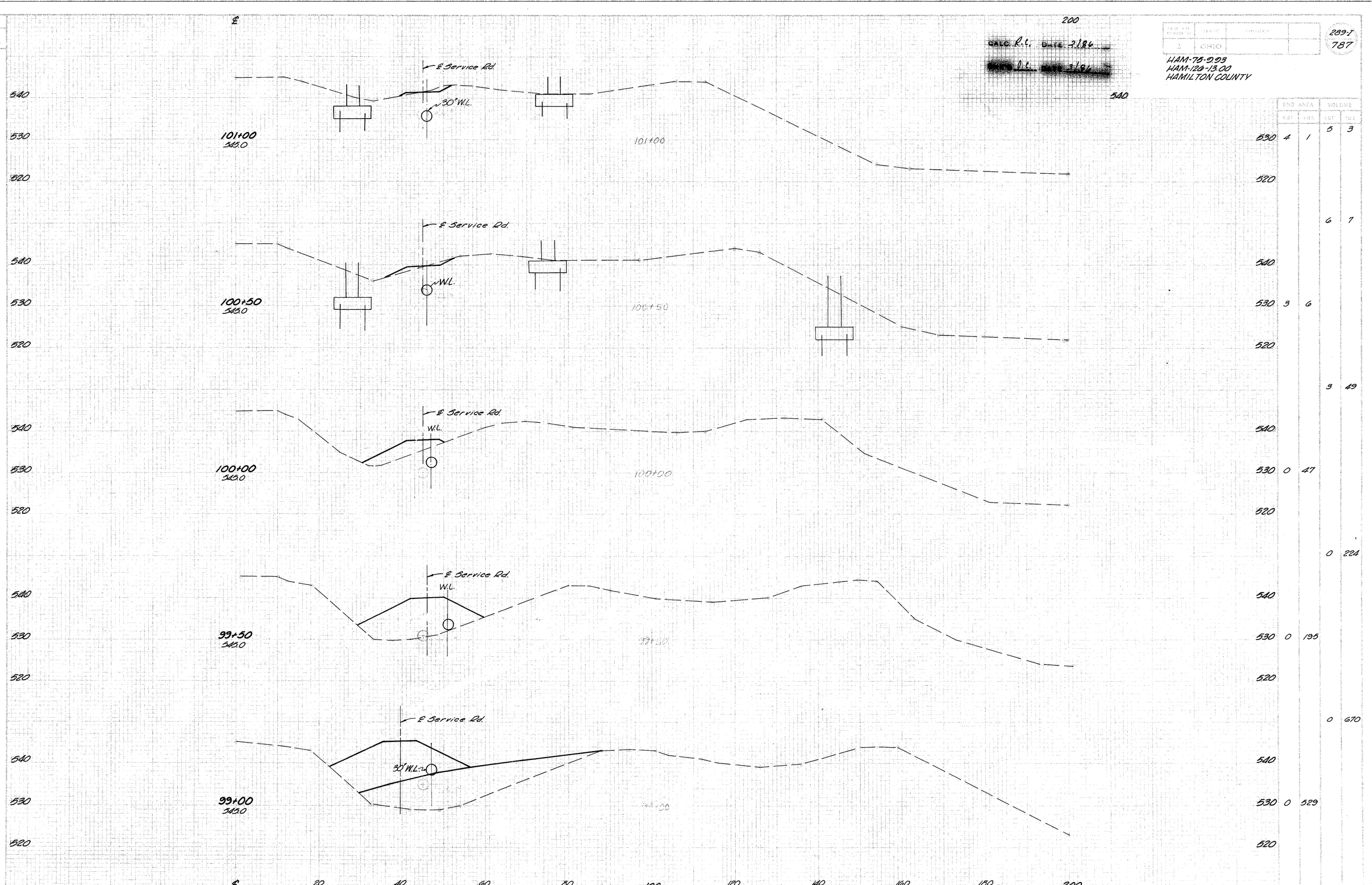
CALC. R.C. DATE 2/86
CHK'D J.C. DATE 3/86



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		0	1552
0	1147		
		0	1633
0	616		
		0	666
0	103		

SERVICE ROAD STA 97+50 TO STA 98+50

DEVELOPED | CHECKED



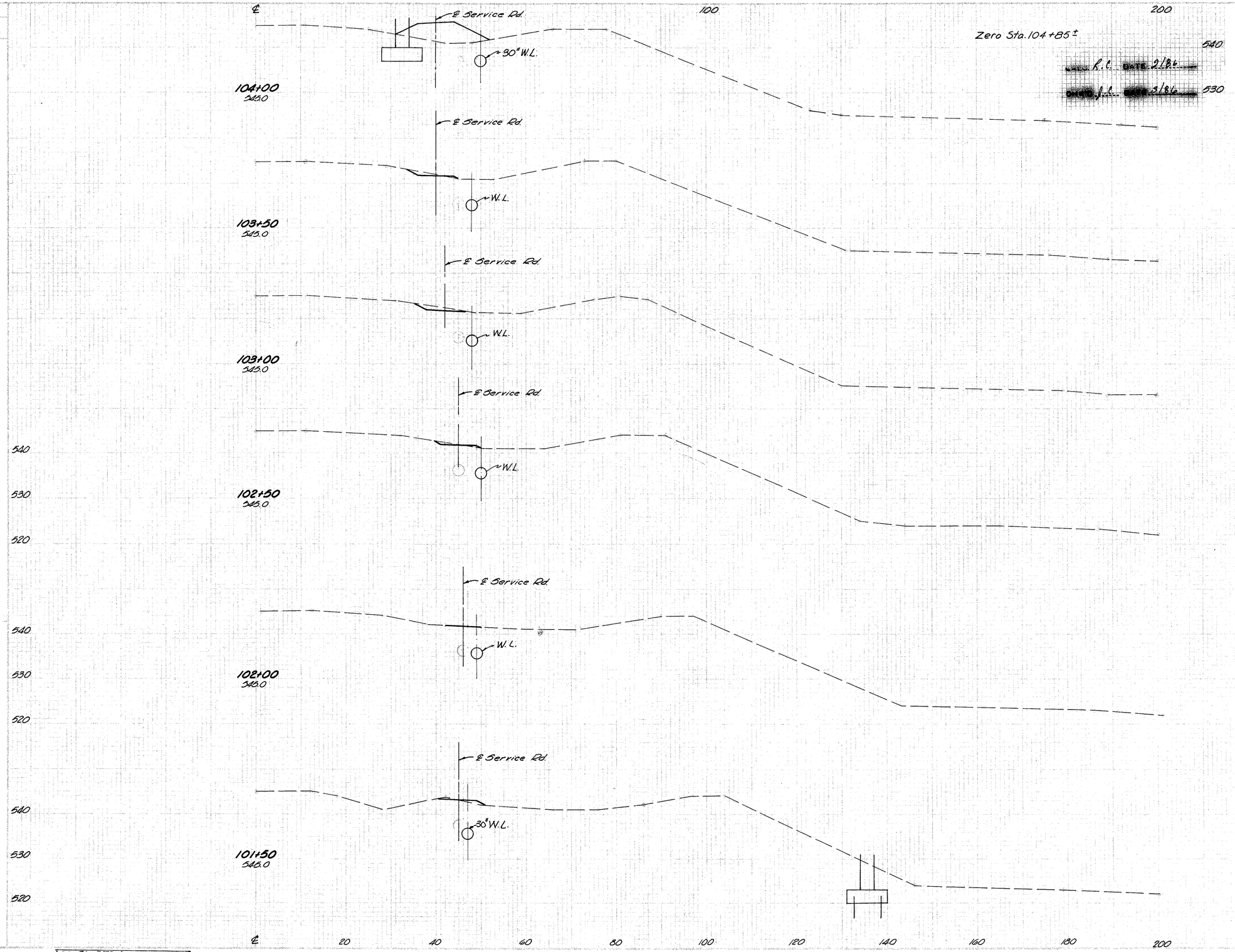
END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
4	1	5	3
		6	7
3	6		
		3	49
0	47		
		0	224
0	195		
		0	670
0	529		

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

289-I
787

DEVELOPED	CHECKED
CES 4-70	EWR 11-71

SERVICE ROAD STA 99+00 TO STA 101+00



Sta. 104+85±	0	0		
520			0	99
	0	63		
540			4	59
530	4	0		
520				
			9	0
540				
530	6	0		
520				
			8	1
540				
530	2	1		
520				
			2	1
540				
530	0	0		
520				
			1	2
540				
530	1	2		
520				

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

289-J
787

DEVELOPED | CHECKED

SERVICE ROAD STA 104+50 TO STA 104+0

CALC. R.E.P. DATE 2/86
CHK'D. J.R.S. DATE 3/86

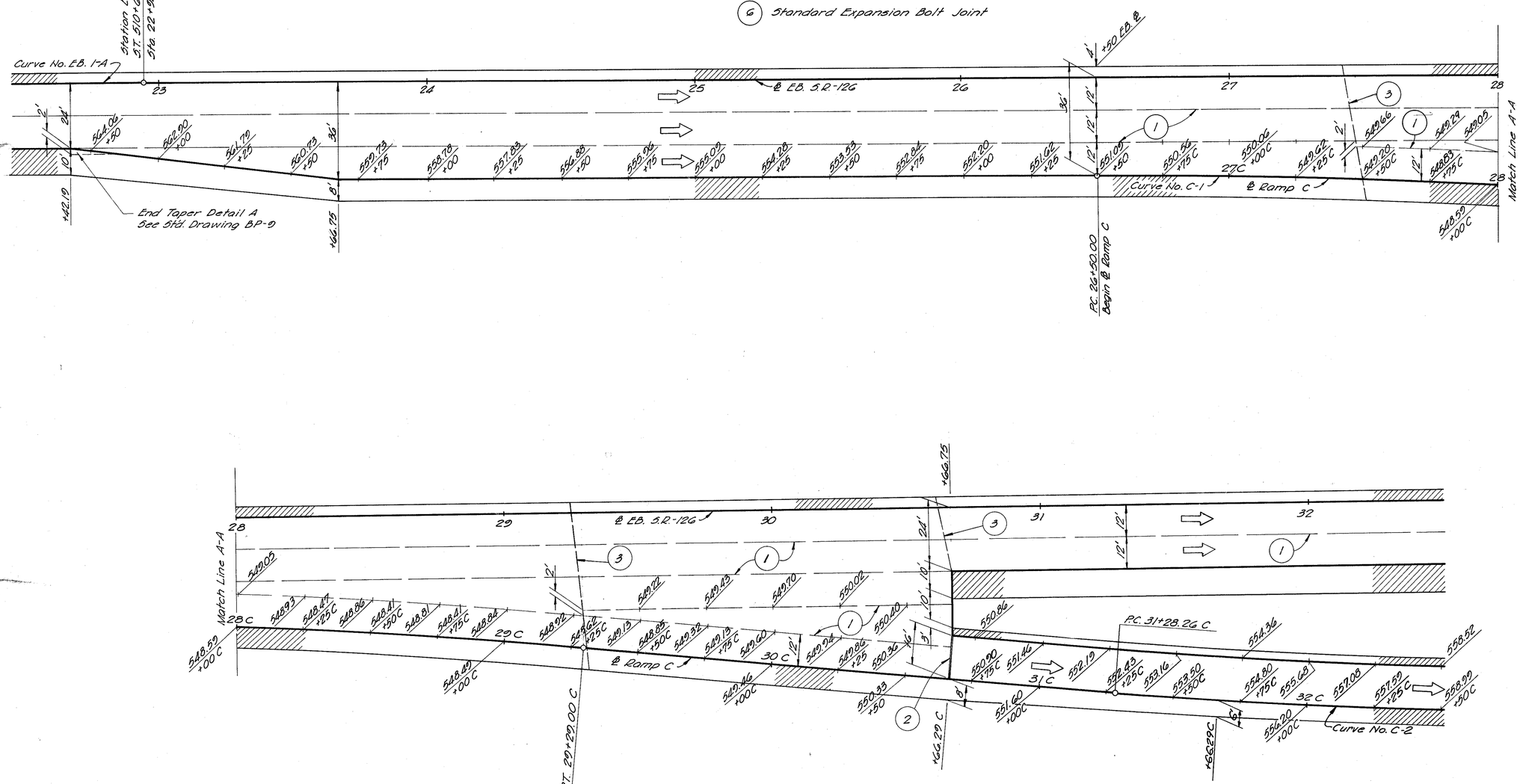
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

290
187

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

JOINT LEGEND

1. Standard Longitudinal Joint
2. Standard Expansion Joint
3. Standard Contraction Joint
4. Key Joint Without Tie Bars
5. Expansion Joint Without Dowels
6. Standard Expansion Bolt Joint



EXIT DETAIL

Ramp C From EB. S.R.-126

SCALE
0 20 30 40

For Curve Data See Sh. No. 6
For Pavement Legend See Sh. No. 29

DEVELOPED | CHECKED

PAVEMENT DETAIL

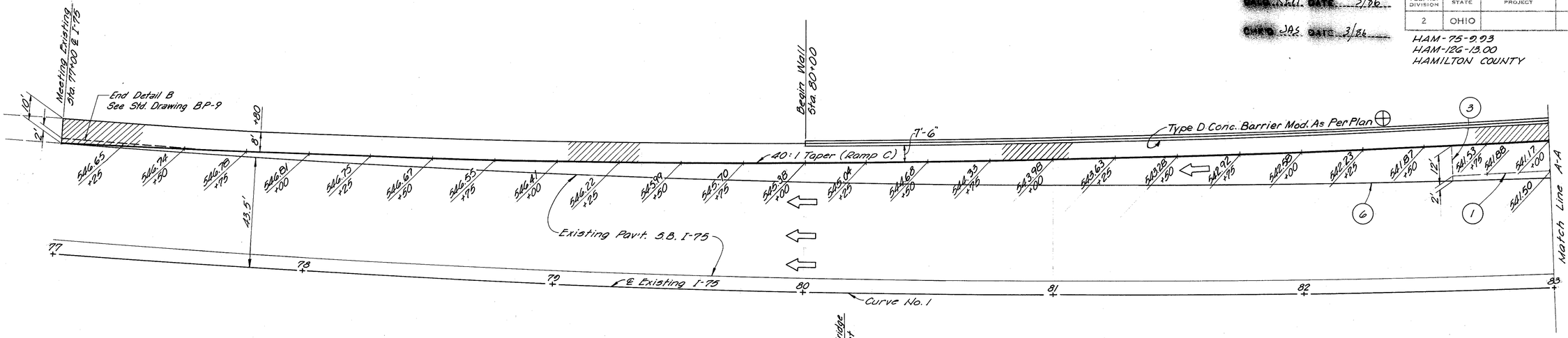
DES. R.E.H. DATE 3/86

CHKD. J.A.S. DATE 3/86

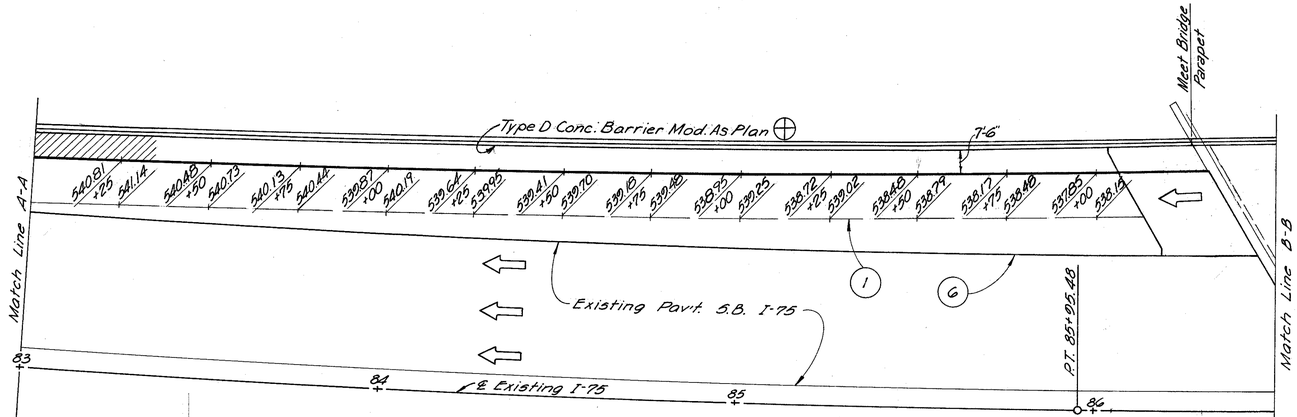
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

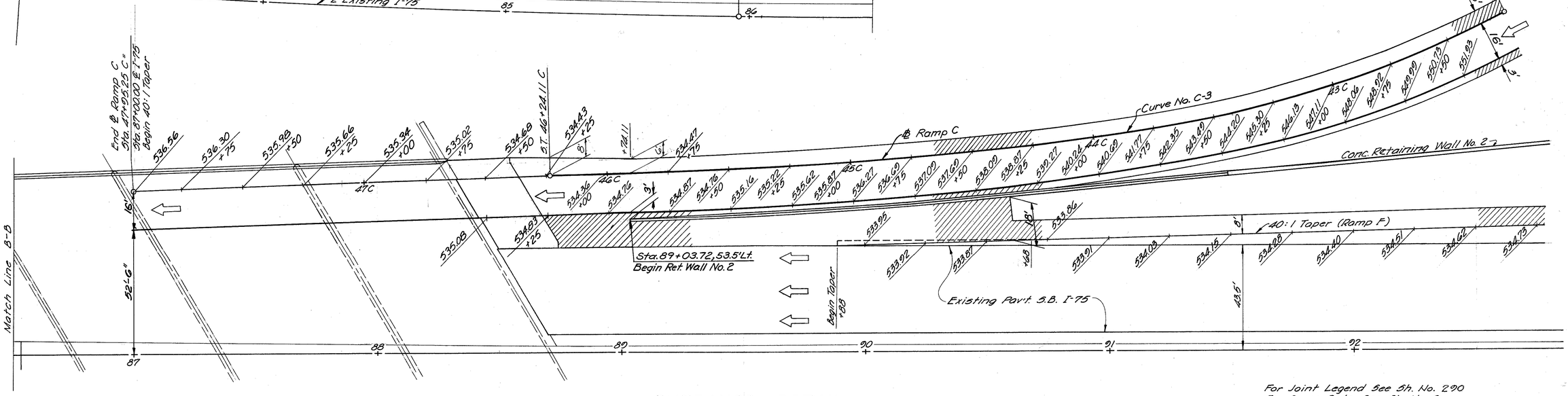
291
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



⊕ Include in Cost of Retaining Wall





ENTRANCE DETAIL

Ramp C At Existing I-75

SCALE 0 20 30 40

For Joint Legend See Sh. No. 290
For Curve Data See Sh. No. G
For Pavement Legend See Sh. No. 28
For Ramp F Taper See Sh. No. 295
For Bridge No. HAM-75-1010 See Sh. No. 522-535
For Retaining Wall Details See Sh. No. 439-444 and 478-483

DEVELOPED | CHECKED

PAVEMENT DETAIL

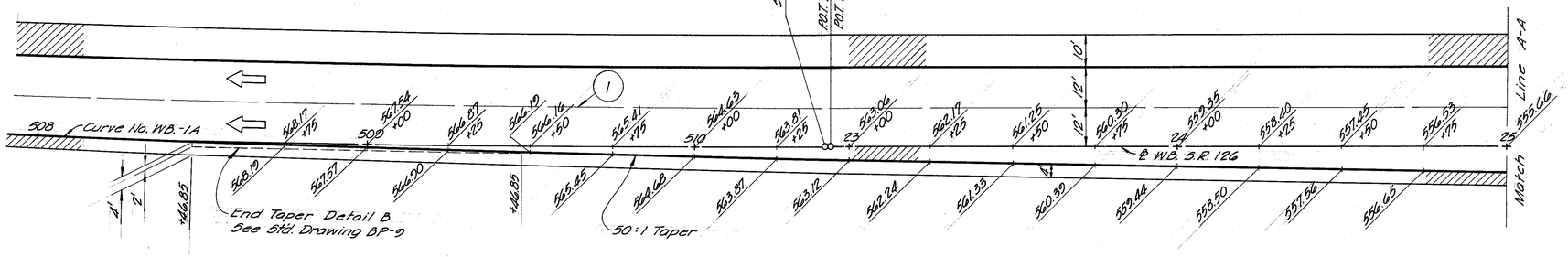
CALC. REA DATE 3/86

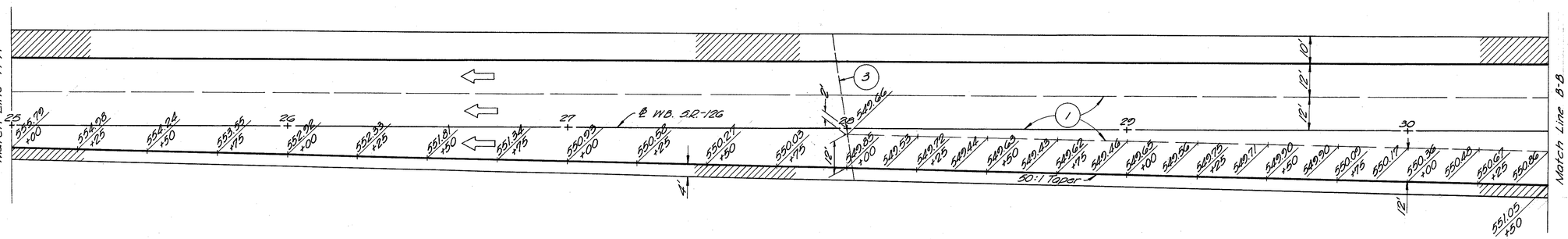
CHK'D. JDS DATE 3/86

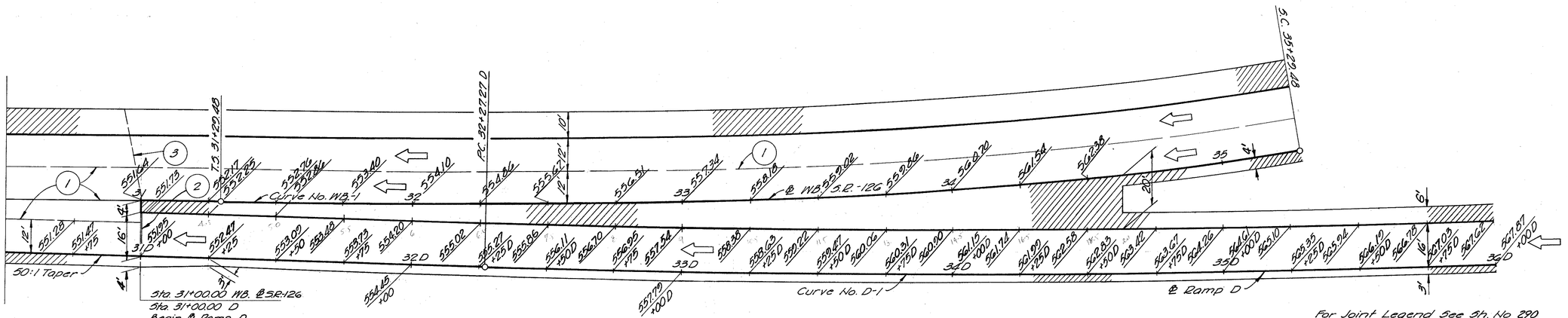
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

292
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY







ENTRANCE DETAIL

Ramp D At WB. S.R.-126

SCALE 0 20 30 40

For Joint Legend See Sh. No 290
For Curve Data See Sh. No. G
For Pavement Legend See Sh. No. 29

DEVELOPED | CHECKED

PAVEMENT DETAIL

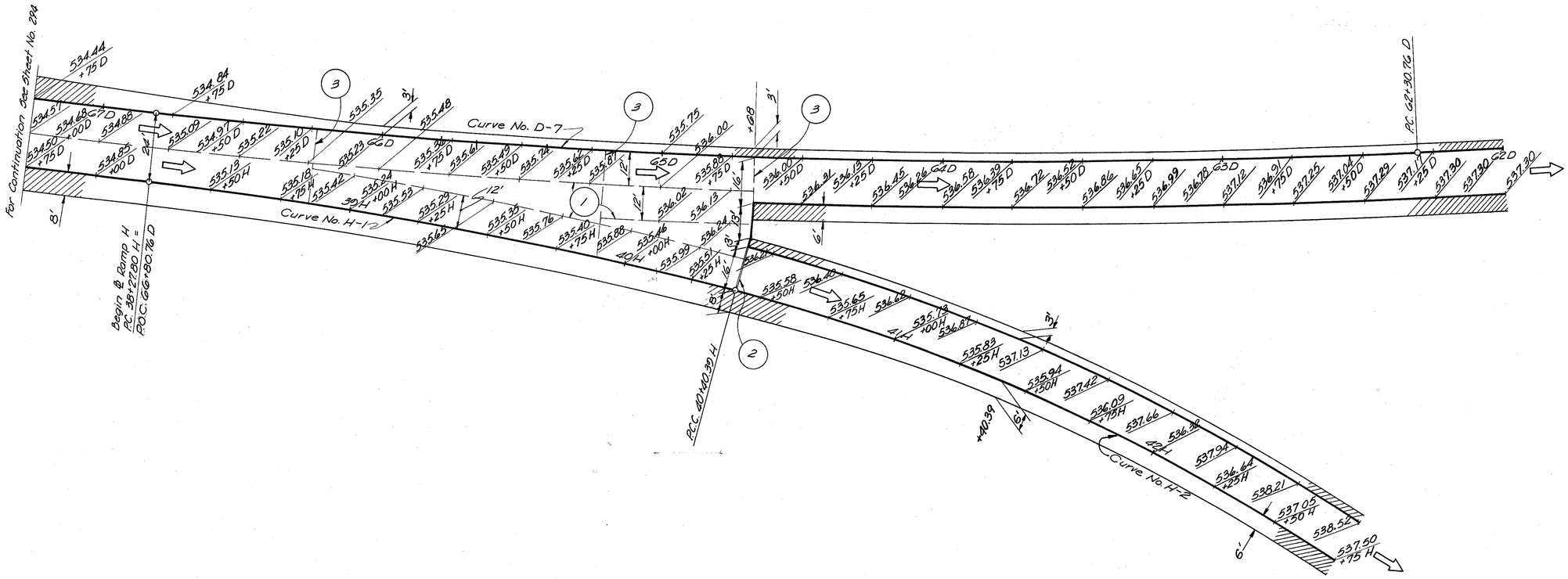
CALC. REF. DATE 3/86

CHKD. DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

293
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



EXIT DETAIL

Ramp H From Ramp D

SCALE 0 20 30 40

For Joint Legend See Sh. No. 290
For Curve Data See Sh. No. 6
For Pavement Legend See Sh. No. 29

DEVELOPED | CHECKED

PAVEMENT DETAIL

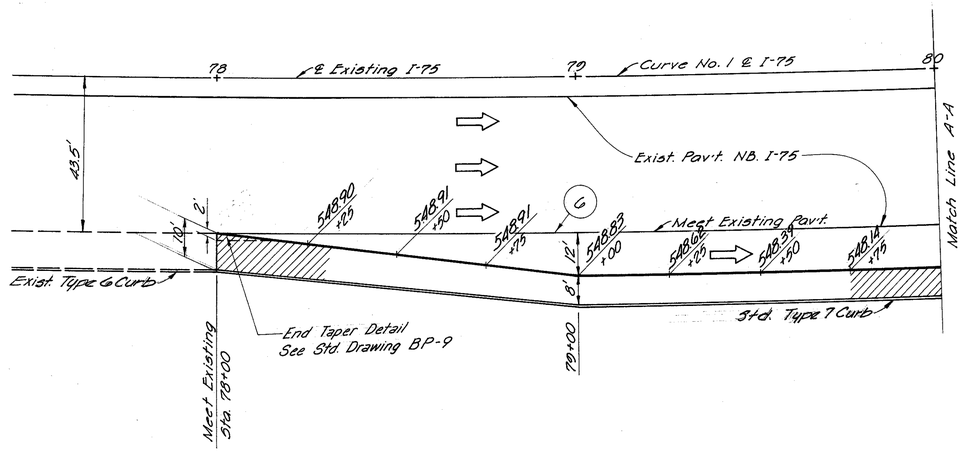
CALC. RFA DATE 3/86

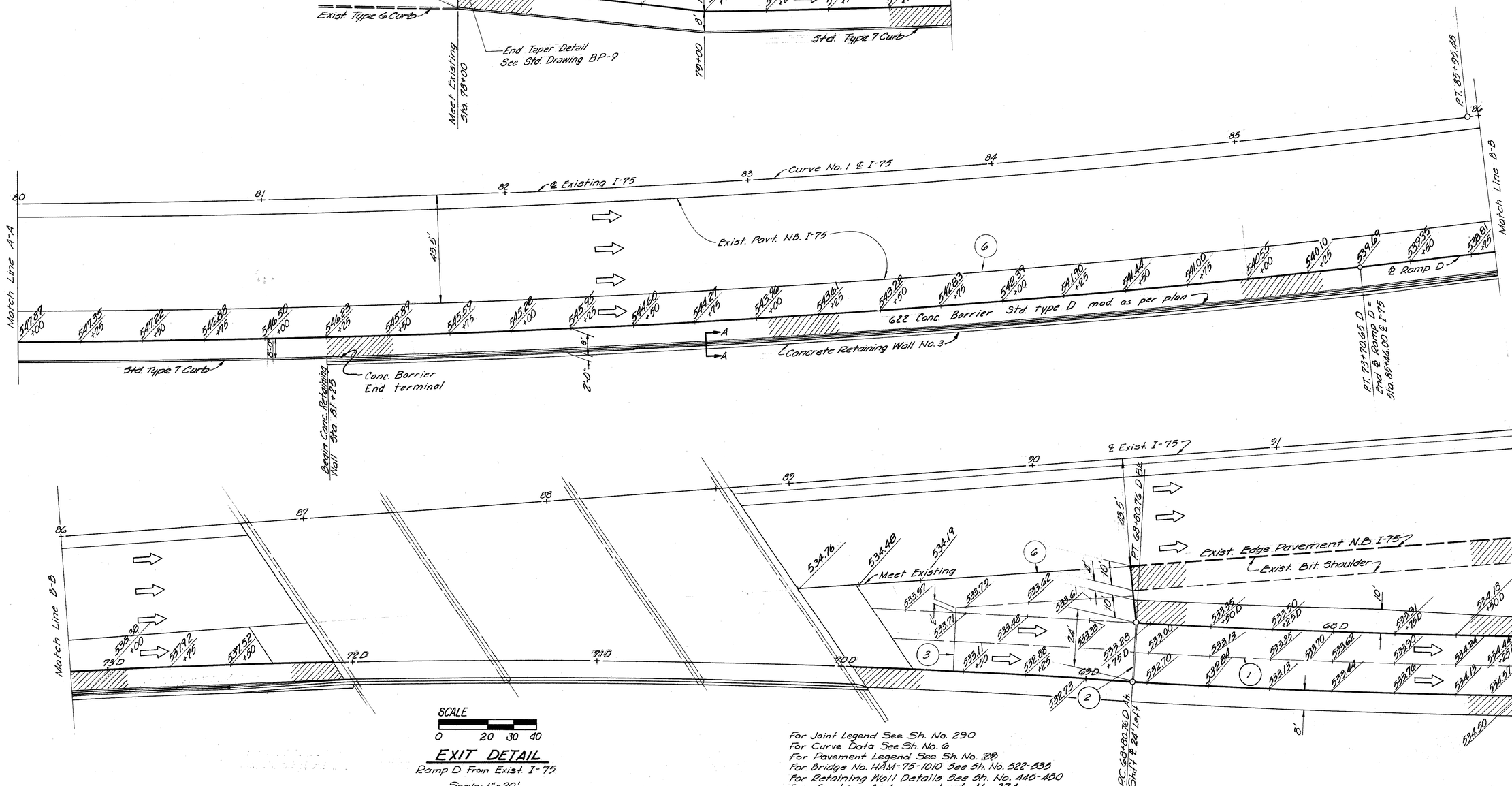
CHKD JAS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

294 / 787

HAM-75-9.99
HAM-126-13.00
HAMILTON COUNTY





SCALE
0 20 30 40

EXIT DETAIL

Ramp D From Exist. I-75

Scale: 1"=20'

For Joint Legend See Sh. No. 290
For Curve Data See Sh. No. 6
For Pavement Legend See Sh. No. 28
For Bridge No. HAM-75-1010 See Sh. No. 522-535
For Retaining Wall Details See Sh. No. 445-450
For Section A-A see sheet No. 37A.

DEVELOPED | CHECKED

PAVEMENT DETAIL

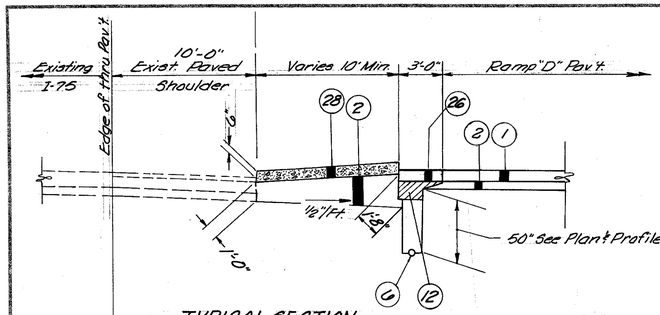
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

294 A 787

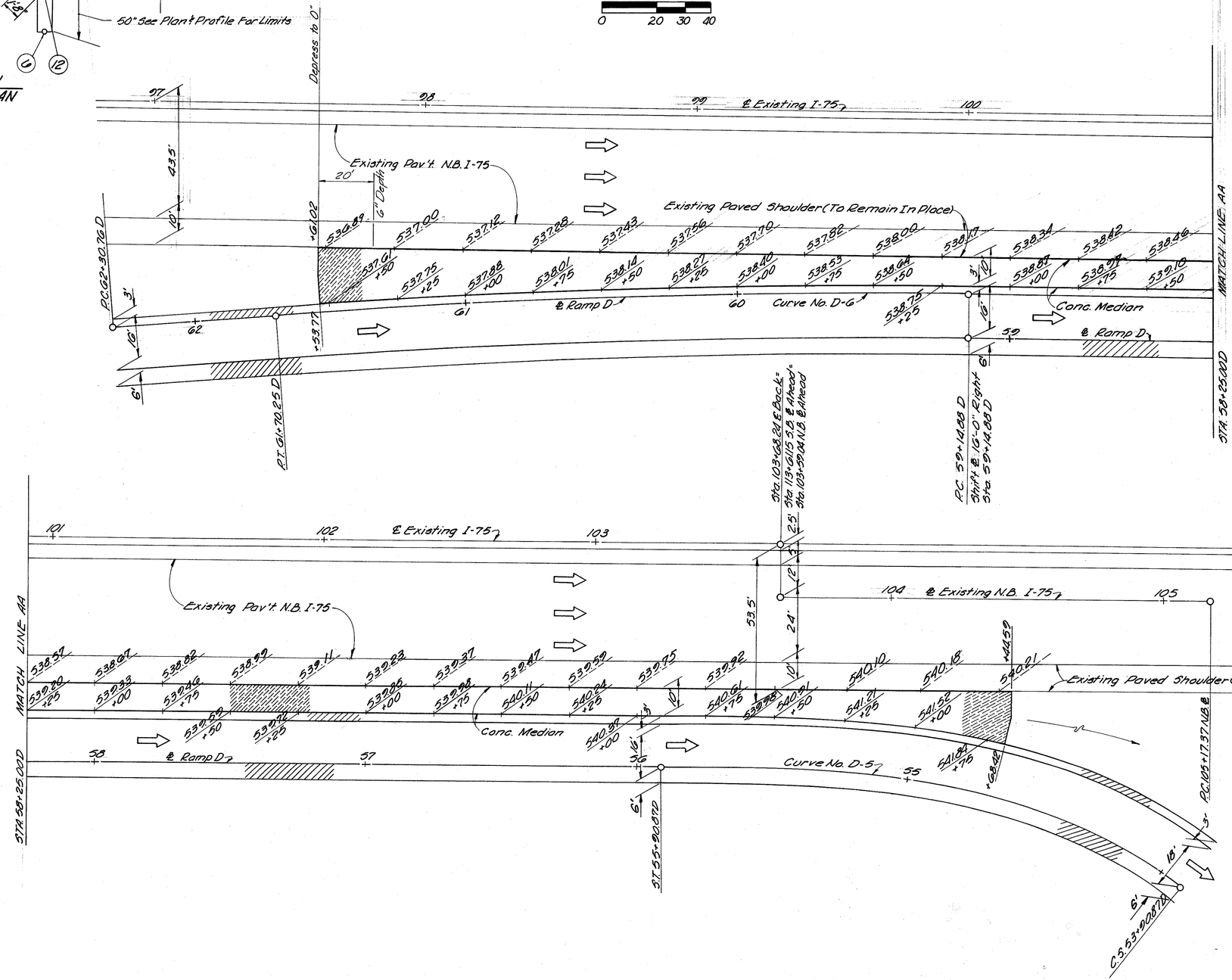
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

MEDIAN DETAIL
RAMP D AT N.B. I-75

SCALE
0 20 30 40



TYPICAL SECTION
CONCRETE MEDIAN
NO SCALE



For Pavement Legend See Sh. 20
For Item Legend See Sh. 7 & 11
For Ramp D Superelevation Tables See Sh. 72

DEVELOPED | CHECKED

PAVEMENT DETAIL

29

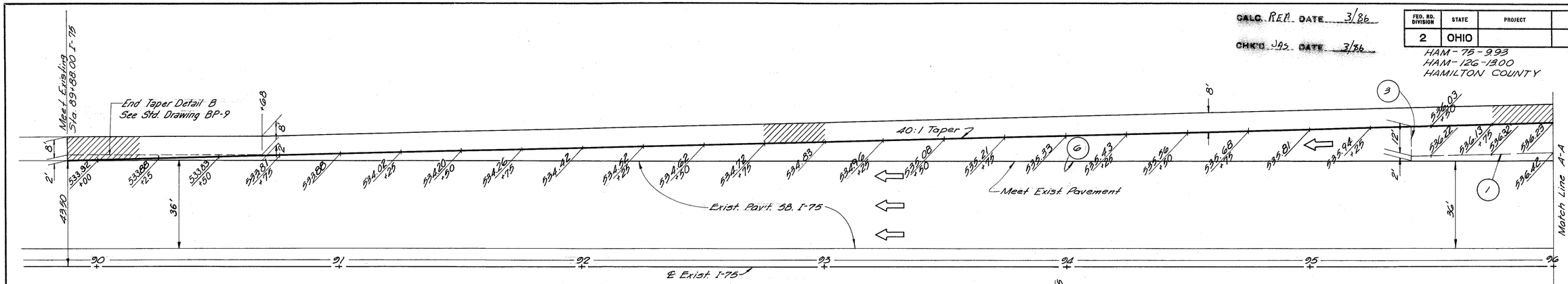
CALC. REA DATE 3/86

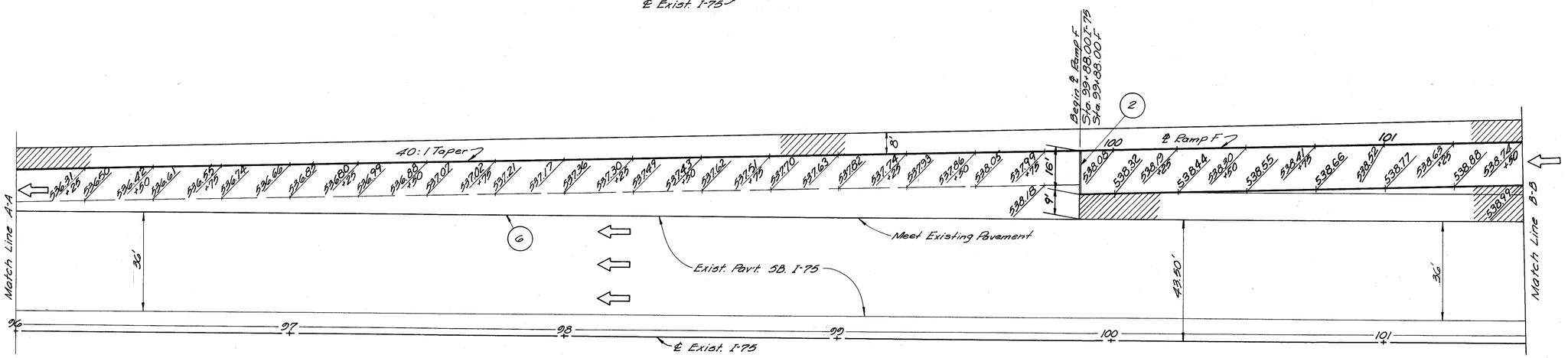
CHK'D JAS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

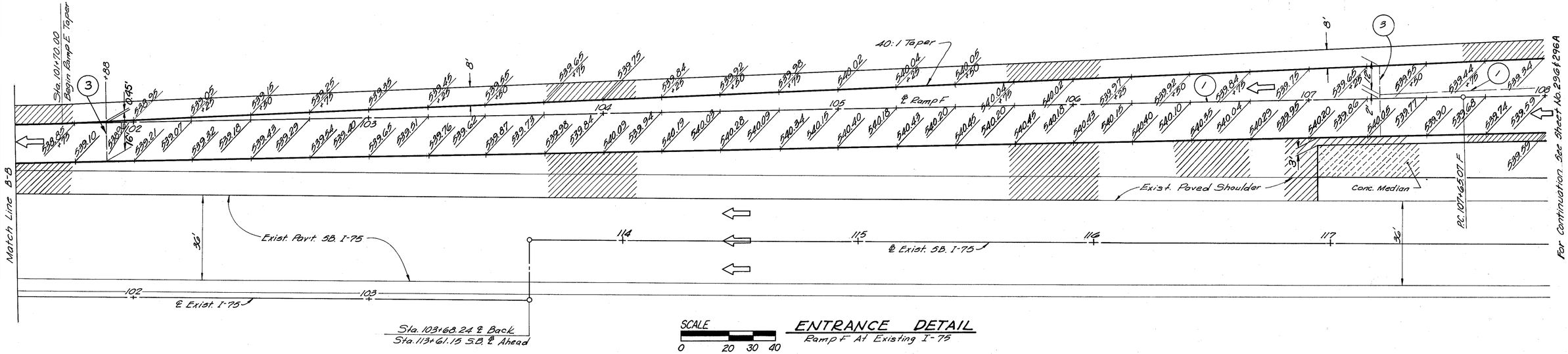
285 / 787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY





For Joint Legend See Sh. No. 290
For Curve Data See Sh. No. 6
For Pavement Legend See Sh. No. 29



SCALE 0 20 30 40

ENTRANCE DETAIL
Ramp F At Existing I-75

DEVELOPED | CHECKED

PAVEMENT DETAIL

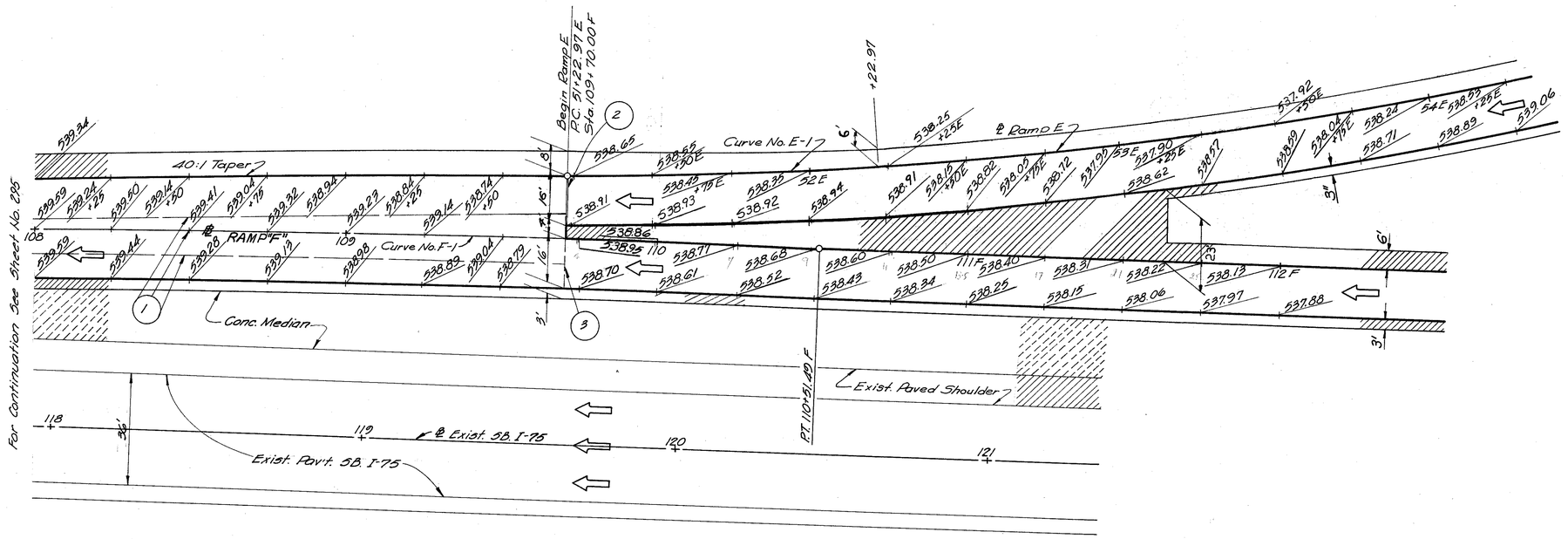
CALC. REA DATE 3/86

CHK'D JAS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

286 / 787

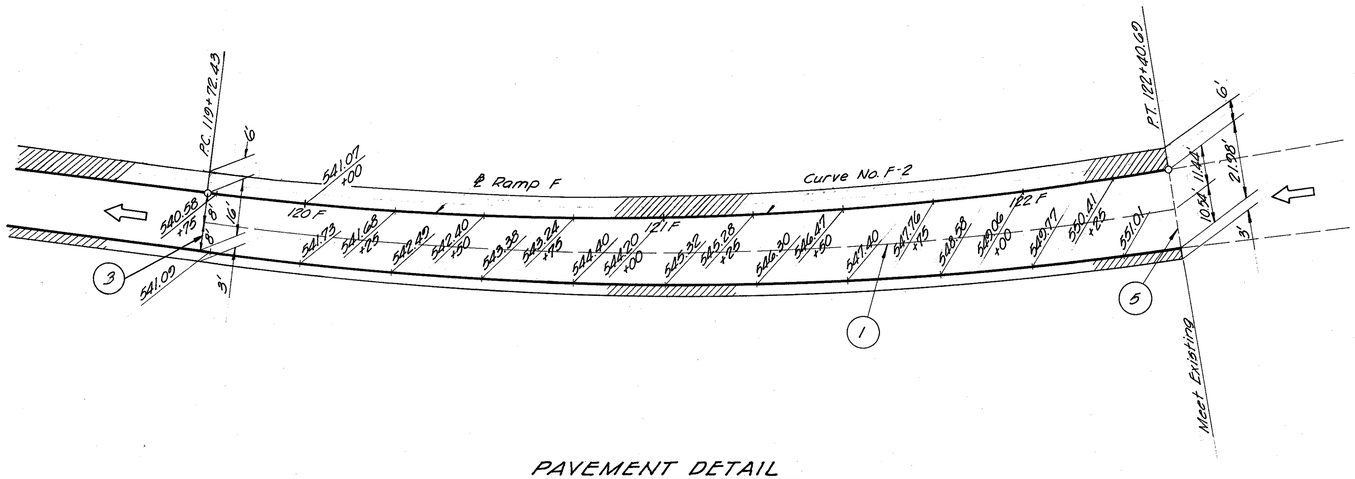
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



ENTRANCE DETAIL

Ramp E To Ramp F

Scale: 1" = 20'



PAVEMENT DETAIL

Ramp F At Existing Ramp To SB. I-75

SCALE

0 20 30 40

For Joint Legend See Sh. No. 290
For Curve Data See Sh. No. 6
For Pavement Legend See Sh. No. 29
For Concrete Median See Sh. 896A

DEVELOPED	CHECKED

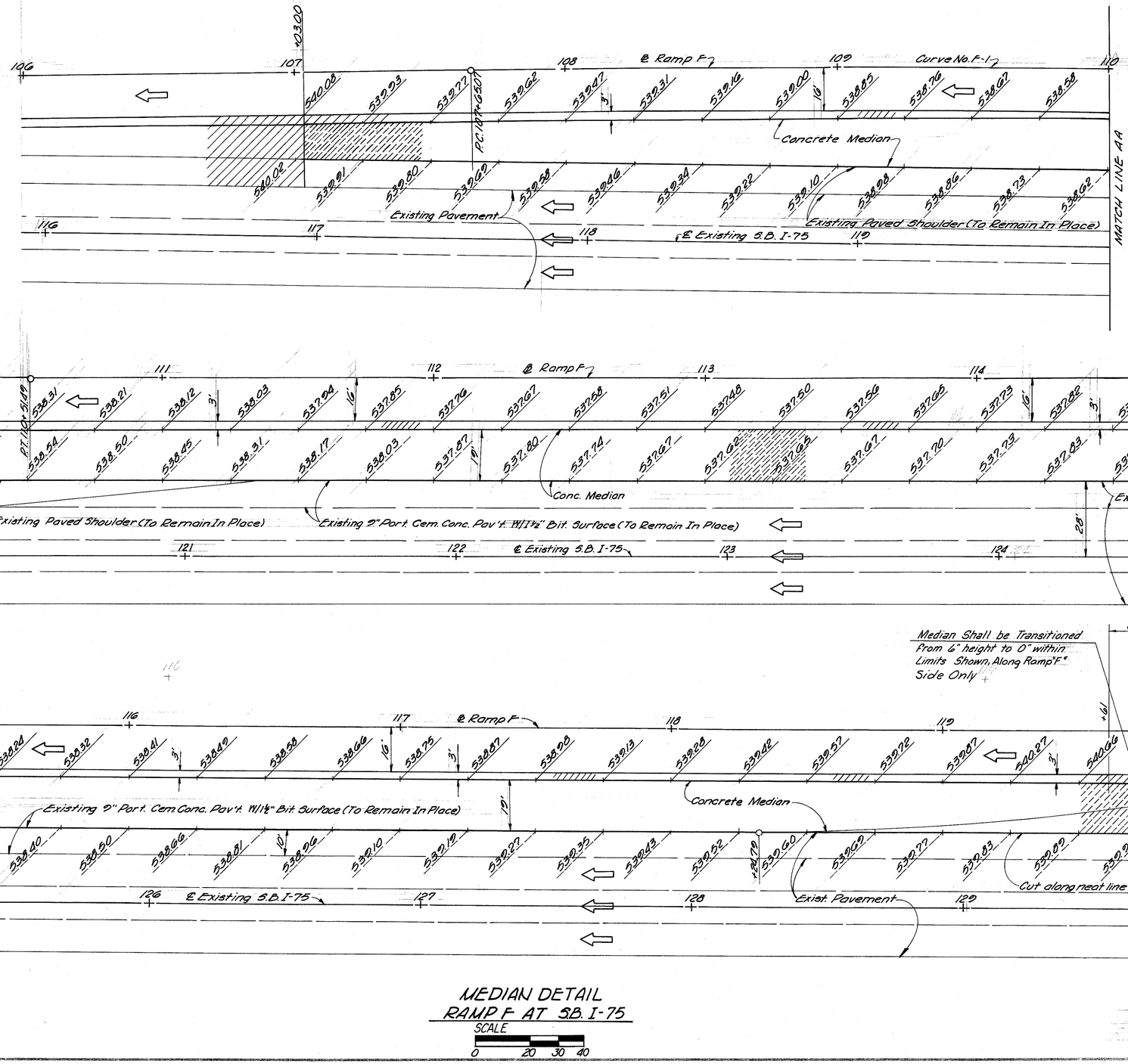
PAVEMENT DETAIL

CALC. REA DATE 3/86

CHK'D JAS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

HAM-75-2.93
HAM-126-13.00
HAMILTON COUNTY



MEDIAN DETAIL
RAMP F AT SB. I-75

SCALE
0 20 30 40

For Curve Data See Sh. G
For Pavement Legend See Sh. 290
For Ramp F Pav't Detail See Sh. 295 & 296

DEVELOPED | CHECKED

PAVEMENT DETAIL

CALC. REA DATE 3/86

CHK'D. JAS DATE 3/86

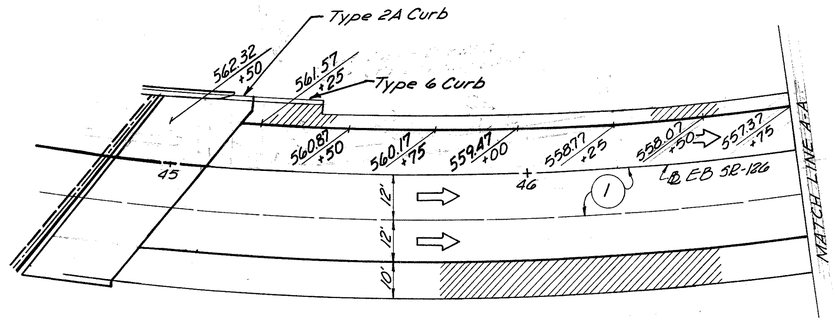
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

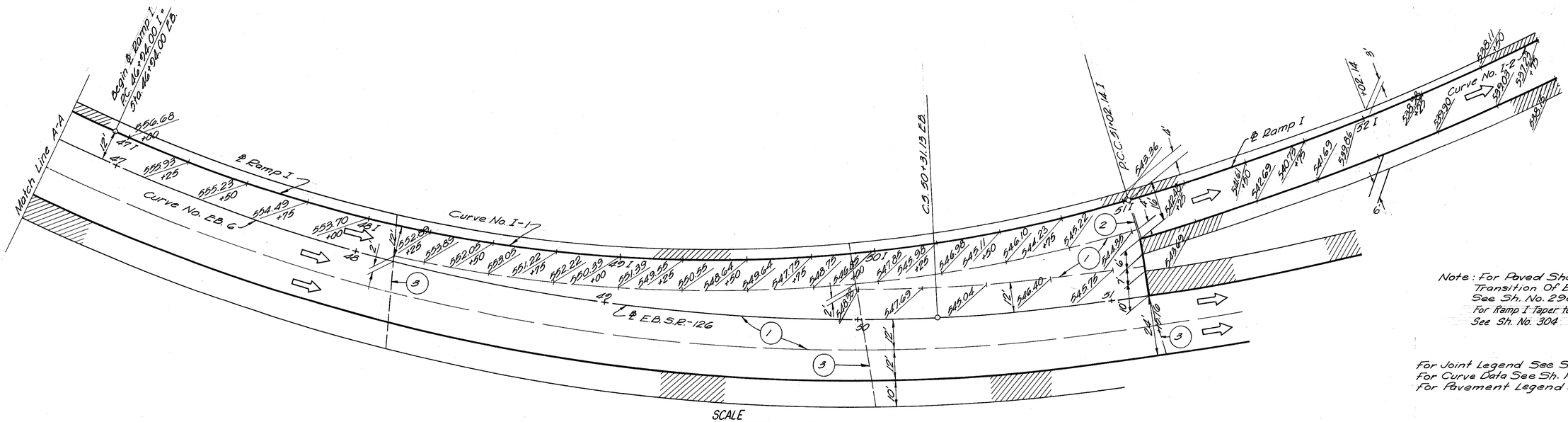
297
187

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

RAMP I
Deceleration Lane

Station	Distance Left	Edge Pave. (Elev.)
Sta. 36+50	0.00	569.44
36+75	3.00	570.11
37+00	6.00	570.73
37+25	9.00	571.30
37+50	12.00	571.83
37+75	↓	572.25
38+00		572.61
38+25		572.93
38+50		573.19
38+75		573.41
39+00		573.57
39+23.15		573.67
39+25		573.67
39+50		573.69
39+75		573.66
40+00		573.59
40+25		573.46
40+50		573.26
40+75		573.06
41+00		572.67
41+25		572.36
41+50		571.94
41+75		571.43
42+00		570.95
42+25		570.39
42+50		569.76
42+75		569.08
43+00		568.36
43+25		567.60
43+50		566.85
43+75		566.09
44+00		565.35
44+25		564.58
44+50		563.82
44+75	12.00	563.06




Begin ℄ Ramp I
PC 46+94.00 L
Sta. 46+94.00 EB
Match Line A-A
℄ Ramp I
Curve No. EB 6
Curve No. I-17
℄ E.B. S.R.-126
C.S. 30+31.13 EB
P.C.C. 31+02.14 I
Curve No. I-2
102.14'
556.68 +00
555.93 +25
555.23 +50
554.49 +75
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535.46 +50
534.53 +75
533.76
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531.93 +75
531.03 +50
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CALC JS DATE 3/86

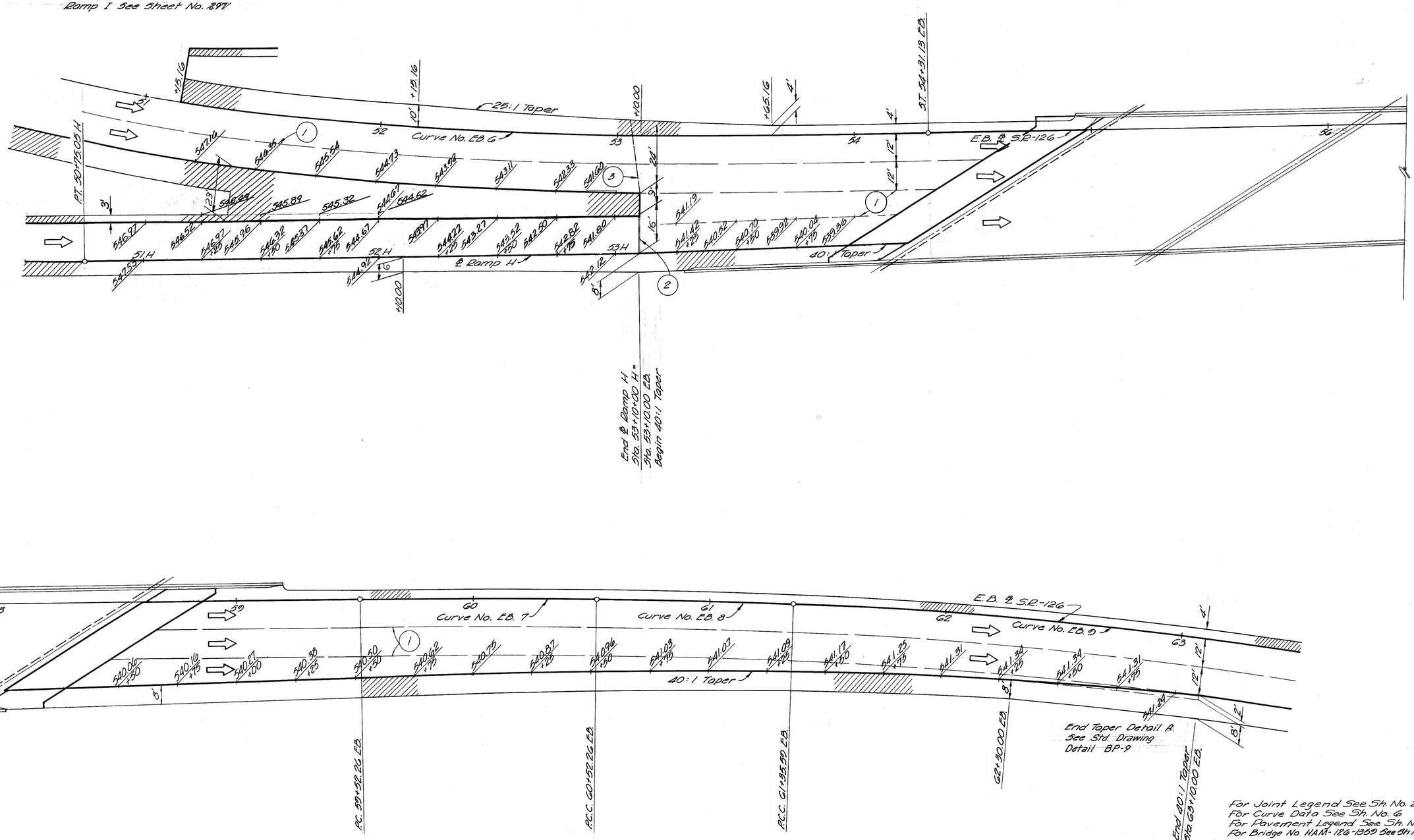
CHKD REA DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

298
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

Note: For Pavement Detail of Ramp I See Sheet No. 897



ENTRANCE DETAIL

Ramp H TO EB. 126

SCALE

0 20 30 40

For Joint Legend See Sh. No. 290
For Curve Data See Sh. No. 6
For Pavement Legend See Sh. No. 29
For Bridge No. HAM-126-1859 See Sh. No. 603-820

DEVELOPED | CHECKED

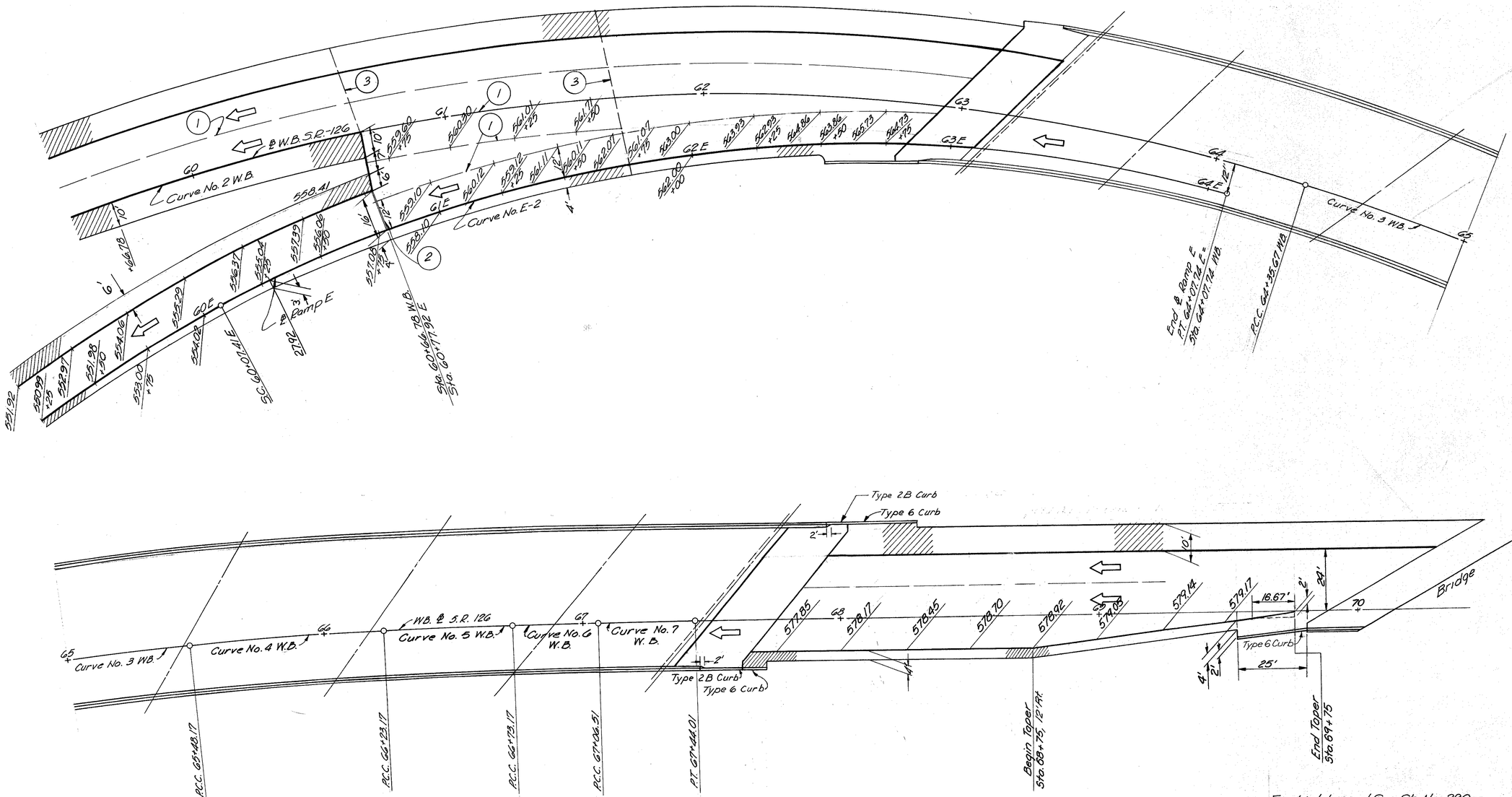
PAVEMENT DETAIL

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

299
787

JS DATE 3/86
REA DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



For Joint Legend See Sh. No. 290
For Curve Data See Sh. No. 6
For Pavement Legend See Sh. No. 29
For Bridge No. HAM-126-1376 See Sh. No. 621-641

EXIT DETAIL

Ramp E from W.B. S.R.-126

SCALE
0 20 30 40

DEVELOPED | CHECKED

PAVEMENT DETAIL

CALC. REA DATE 3/86

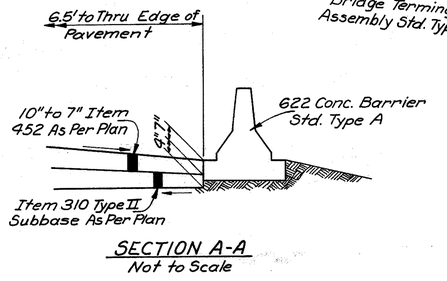
CHK'D JS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

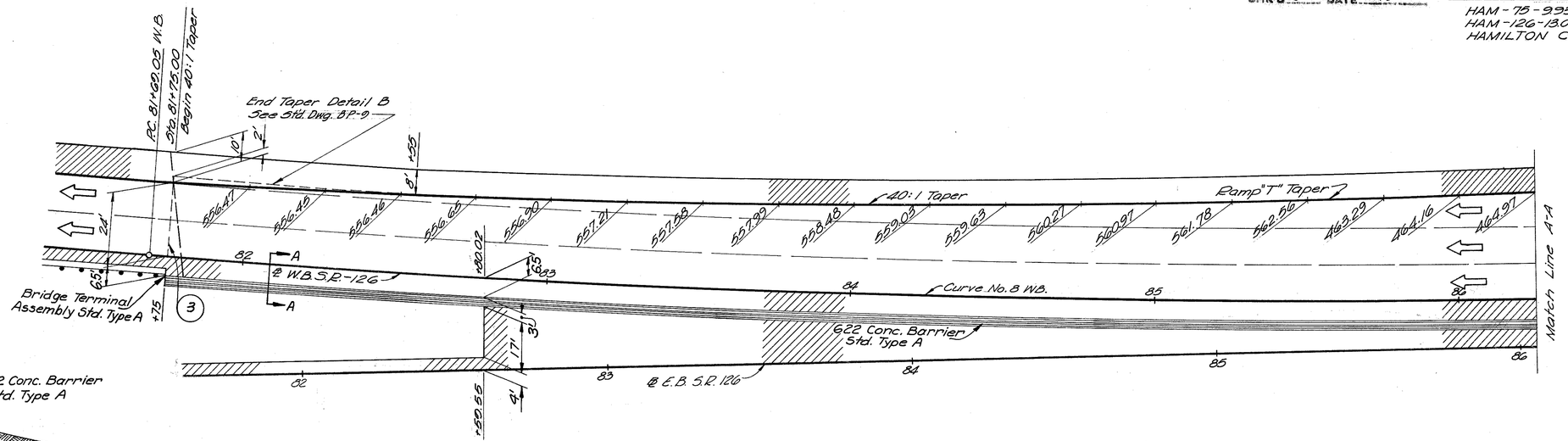
300
1187

HAM-75-9.33
HAM-126-18.00
HAMILTON COUNTY

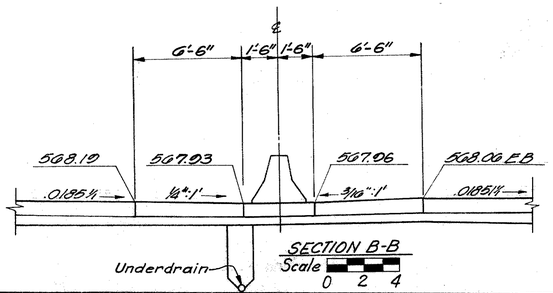
158
Yellow
300 - 353



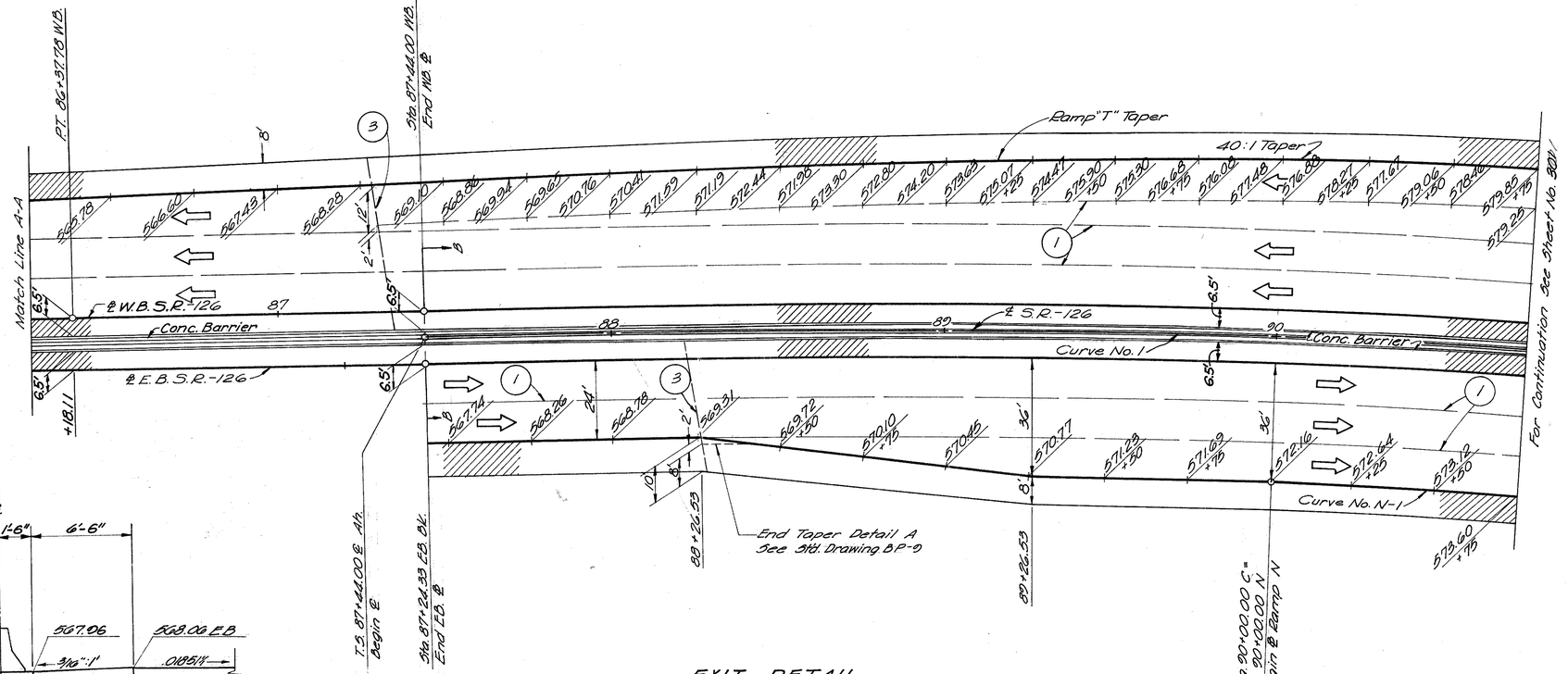
SECTION A-A
Not to Scale



ENTRANCE DETAIL
Ramp T To W.B. S.R.-126



SECTION B-B
Scale 0 2 4



EXIT DETAIL
Ramp N From S.R.-126

SCALE
0 20 30 40

For Joint Legend See Sh. No. 290
For Curve Data See Sh. No. 6
For Pavement Legend See Sh. No. 29

PAVEMENT DETAIL

300

CALC. JS DATE 3/86

CHK'D REA DATE 3/86

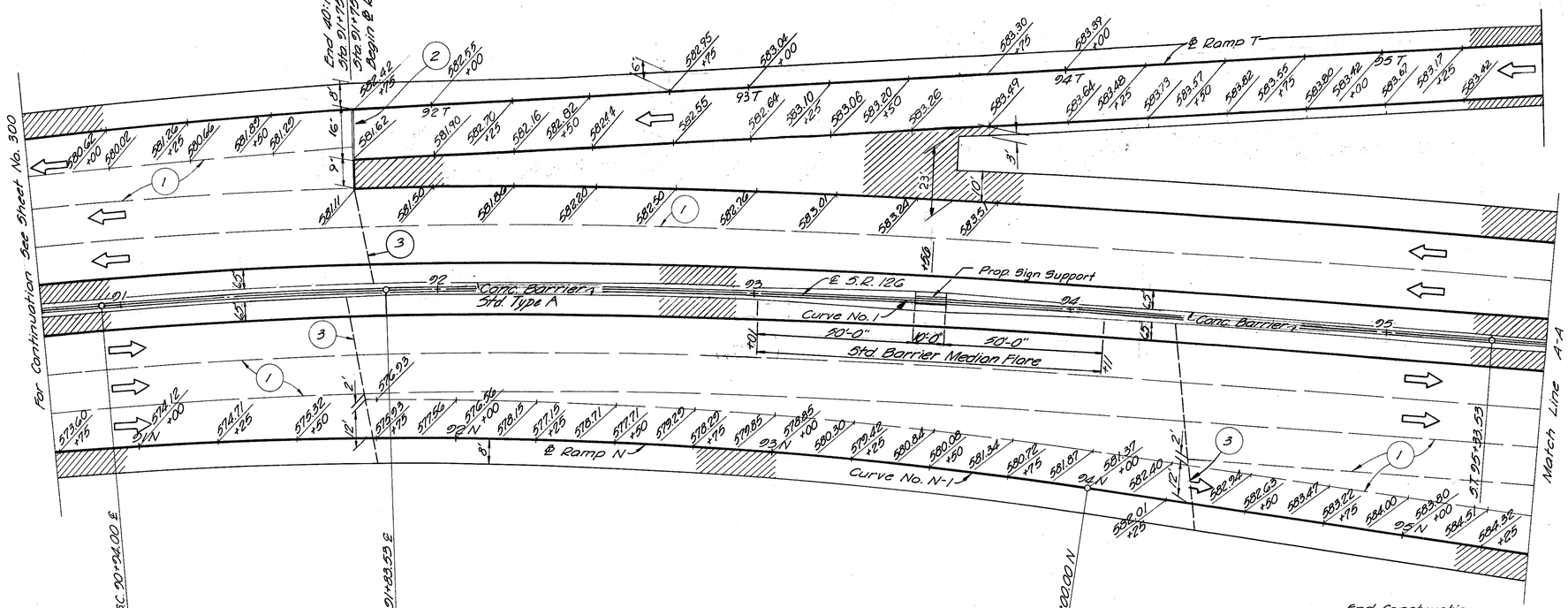
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

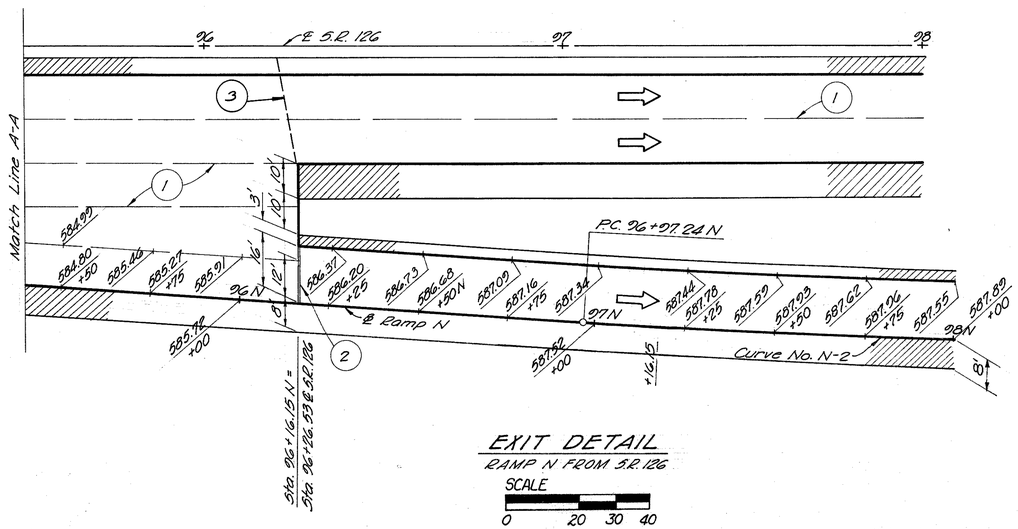
301
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

ENTRANCE DETAIL

RAMP T TO WB. S.R. 126

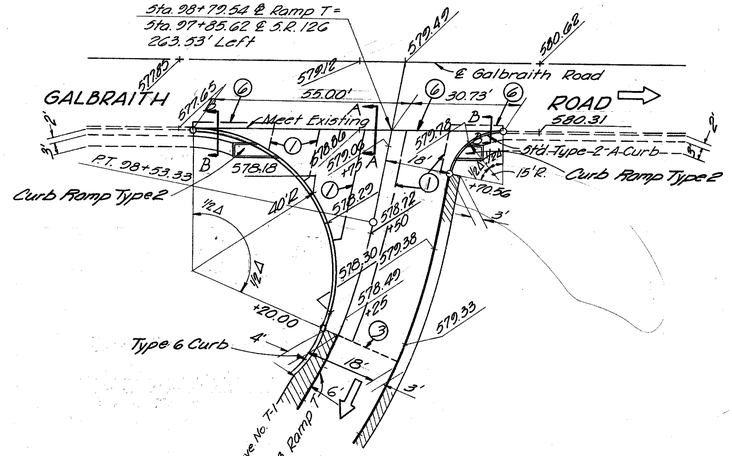




EXIT DETAIL

RAMP N FROM S.R. 126

SCALE 0 20 30 40



INTERSECTION DETAIL

RAMP T AT GALBRAITH RD.

For Joint Legend See Sh. No. 290
For Curve Data See Sh. No. 6
For Pavement Legend See Sh. No. 29
For Section B-B See Sh. No. 306-A
For Section A-A See Sh. No. 306-A

DEVELOPED | CHECKED

PAVEMENT DETAIL

CALC. JS DATE 3/86

CHK'D REA DATE 3/86

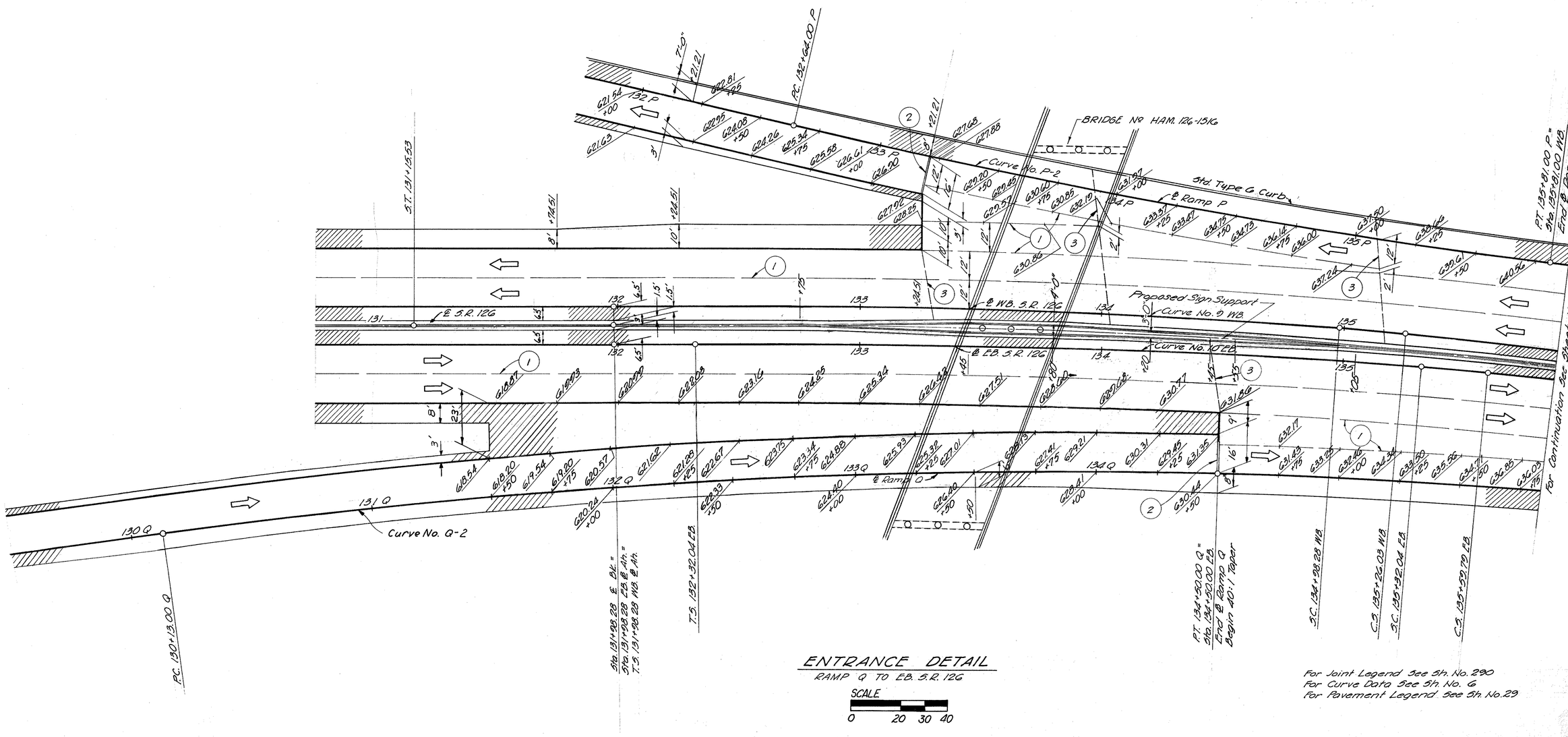
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

302
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

EXIT DETAIL

RAMP P FROM WB. S.R. 126



ENTRANCE DETAIL

RAMP Q TO EB. S.R. 126

SCALE

0 20 30 40

For Joint Legend See Sh. No. 290
For Curve Data See Sh. No. 6
For Pavement Legend See Sh. No. 29

DEVELOPED | CHECKED

PAVEMENT DETAIL

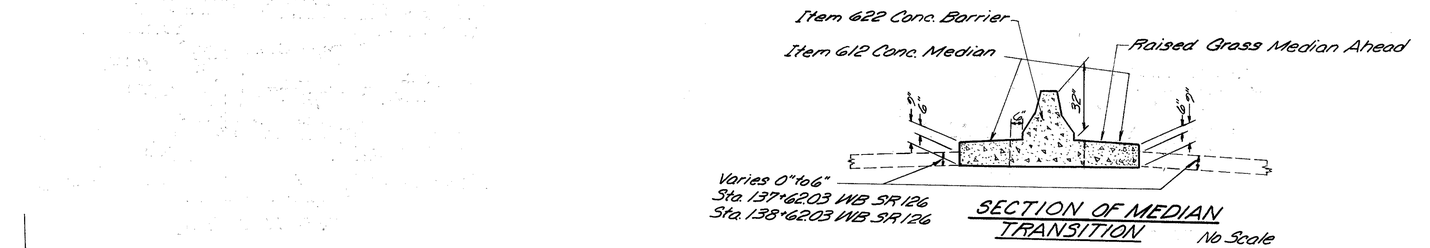
CALC. JS DATE 3/86

CHK'D REA DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

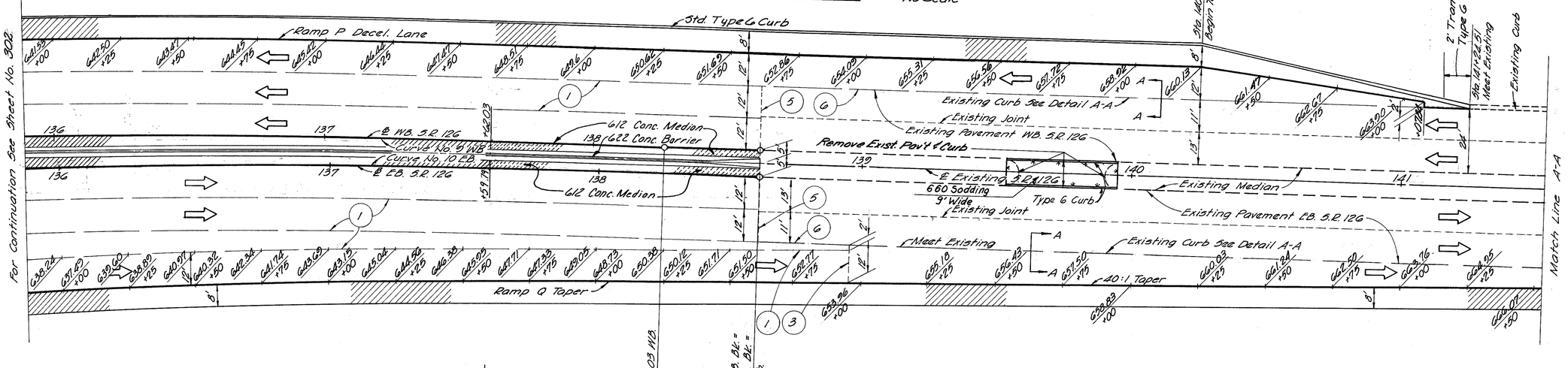
303
187

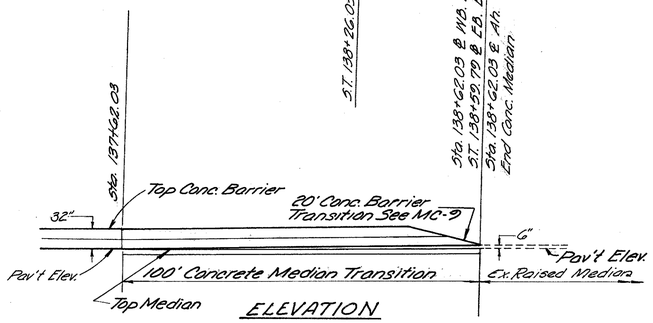
HAM-75-9.03
HAM-126-13.00
HAMILTON COUNTY



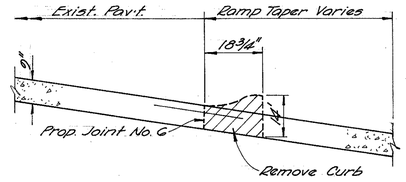
SECTION OF MEDIAN TRANSITION

No Scale





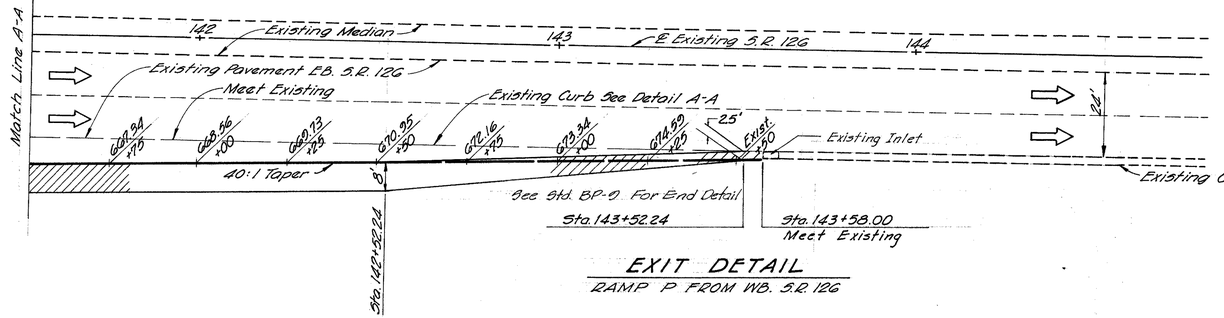
ELEVATION



See General Notes Sh. No. 16

SECTION A-A

NO SCALE



EXIT DETAIL

RAMP P FROM WB. S.R. 126

ENTRANCE DETAIL

RAMP Q TO EB. S.R. 126

SCALE

0 20 30 40

For Joint Legend See Sh. No. 290
For Curve Data See Sh. No. 6
For Pavement Legend See Sh. 29

DEVELOPED	CHECKED

PAVEMENT DETAIL

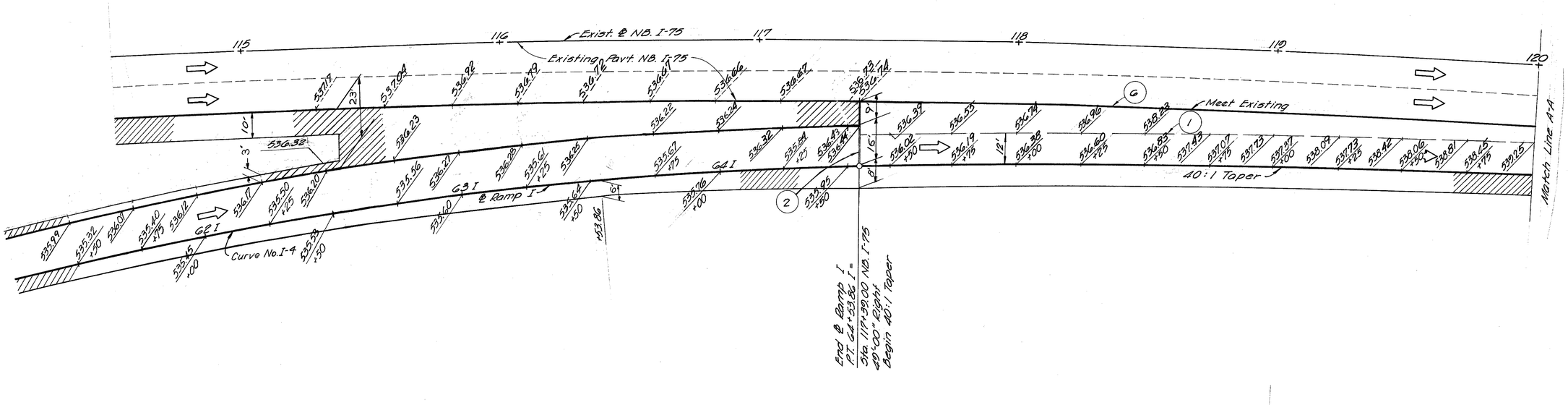
CALC. REA DATE 3/86

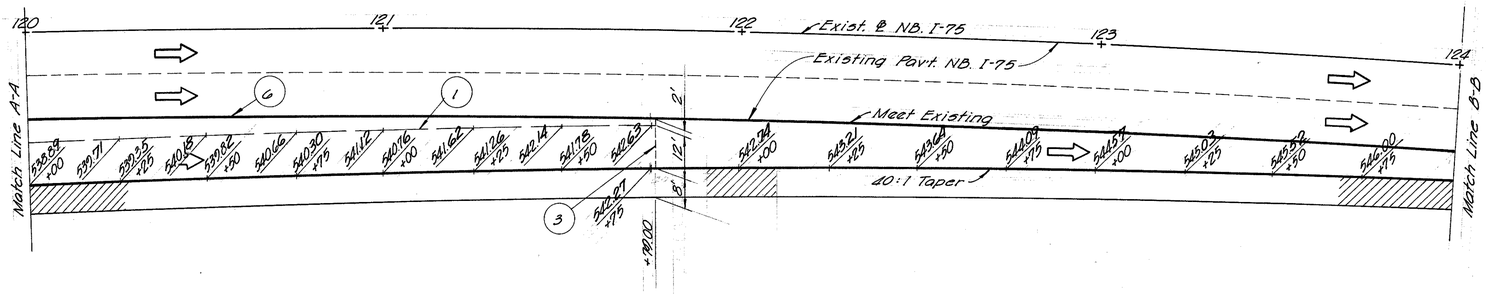
CHK'D JS DATE 3/86

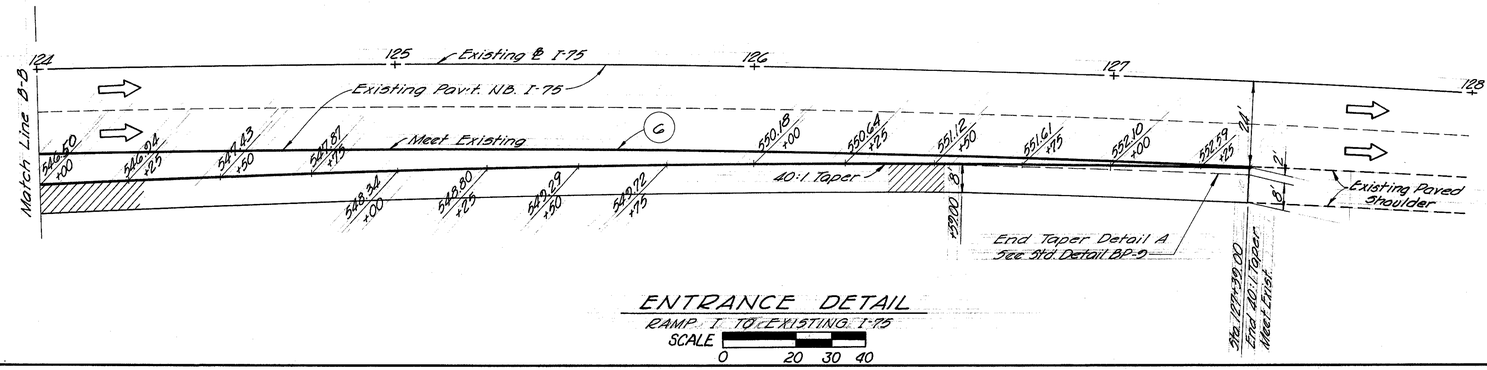
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

304
787

HAM-75-0.93
HAM-126-13.00
HAMILTON COUNTY







ENTRANCE DETAIL

RAMP I TO EXISTING I-75

SCALE 0 20 30 40

For Joint Legend See Sh. No. 200
For Curve Data See Sh. No. G
For Pavt. Legend See Sh. No. 20
For Ramp I From E.B. S.R.-126
See Sh. No. 297

DEVELOPED	CHECKED

PAVEMENT DETAIL

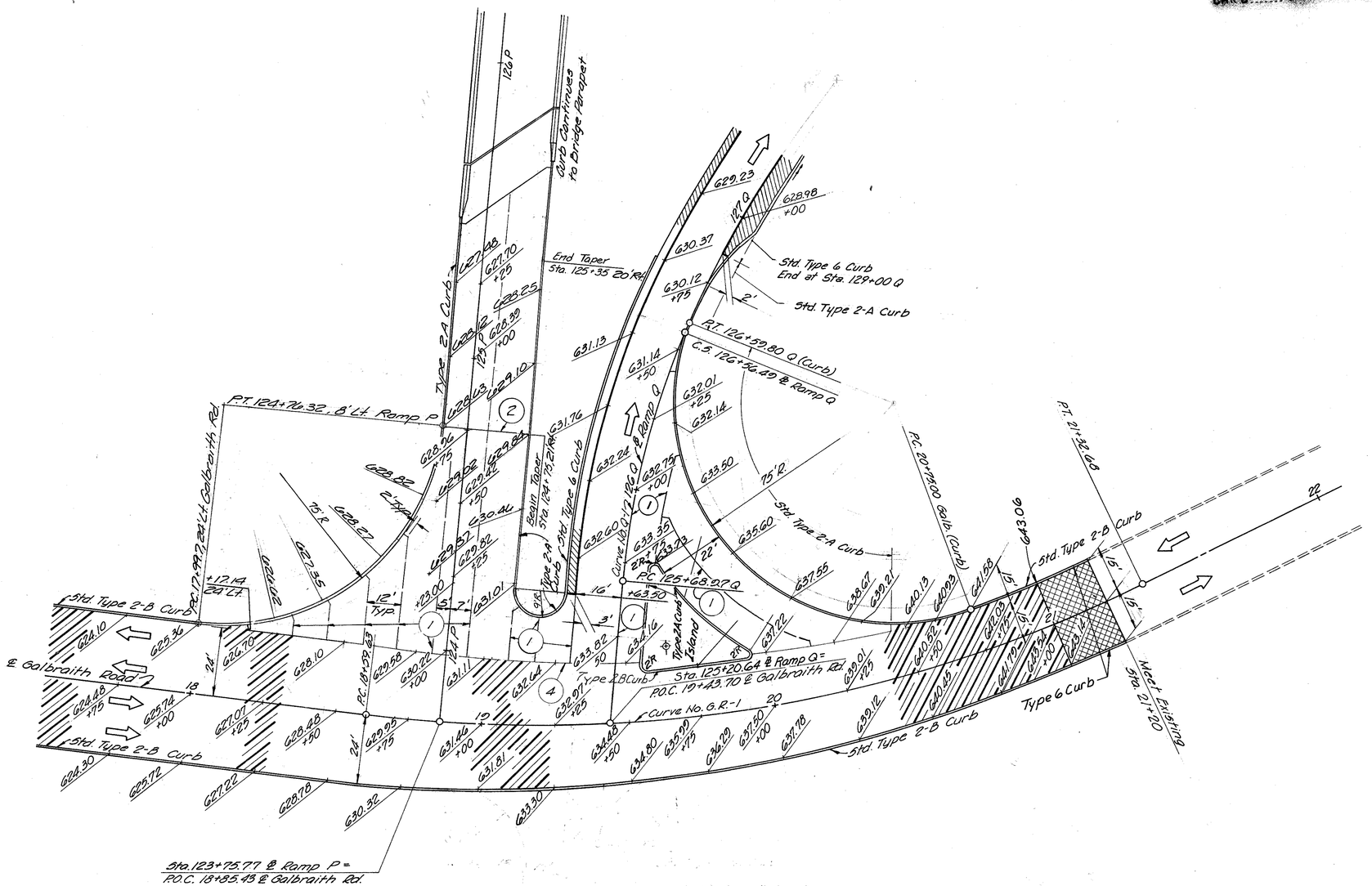
CALC. REA DATE 3/86

CH'D JS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

305
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



INTERSECTION DETAIL

Ramps P & Q At Galbraith Rd.

SCALE

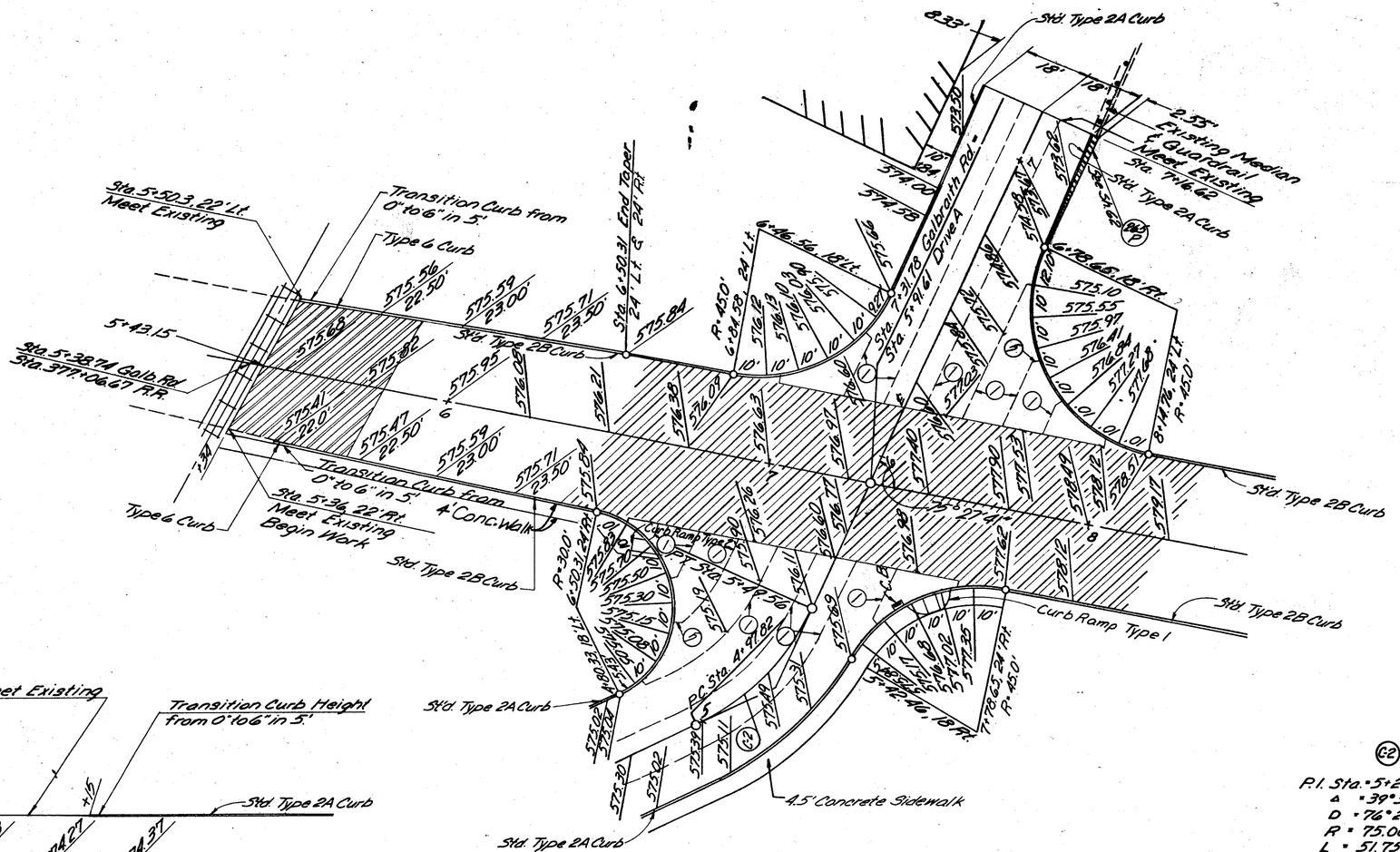
0 20 30 40

For Joint Legend See Sh. 290
For Curve Data See Sh. 5A, 6
For Pavement Legend See Sh. 28
For Drive & Pavement Details See Sh. 308

DEVELOPED	CHECKED

PAVEMENT DETAIL

CALC. BY		HAM-75-9.93 HAM-126-13.00 HAMILTON COUNTY	OHIO	306 787
DATE			FHWA REGION 5	
CHKD. BY				
DATE				



INTERSECTION DETAIL
Drive A at Galbraith Rd.

(C2)

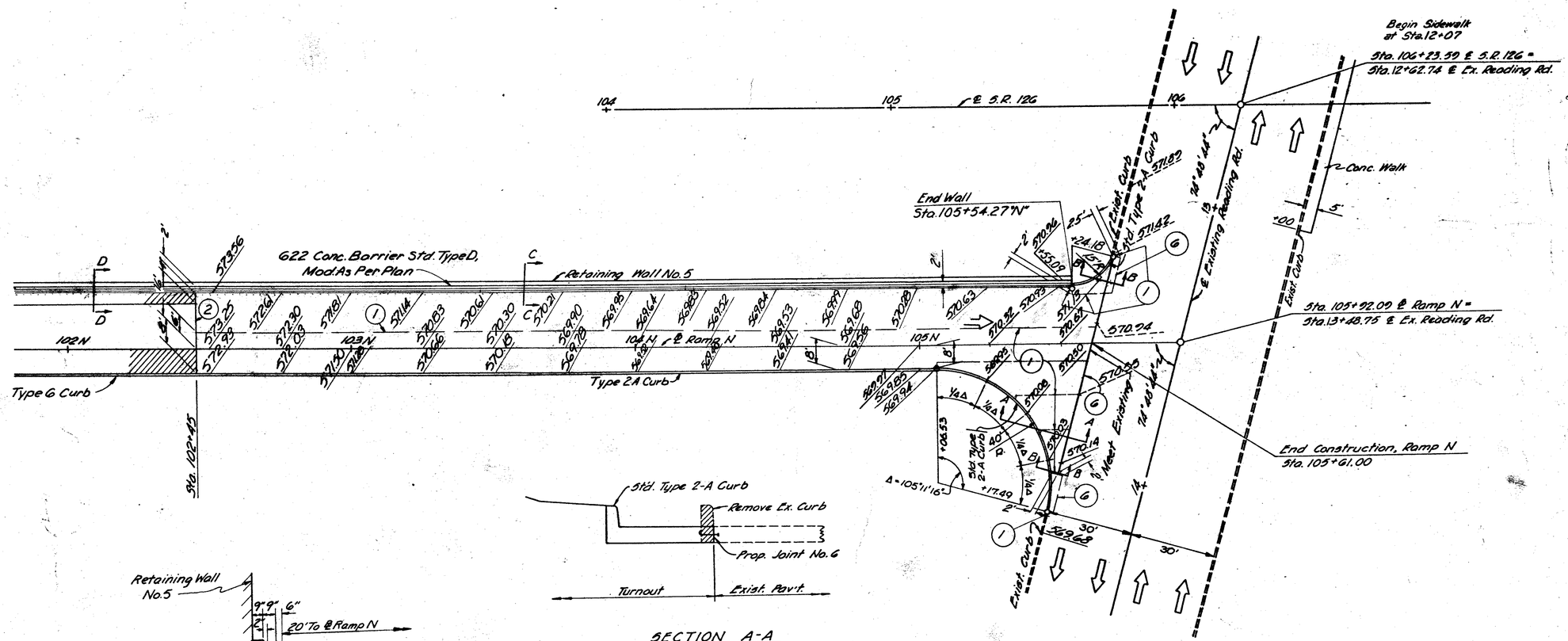
P.I. Sta. = 5+24.77
Δ = 39°31'49"
D = 76°23'40"
R = 75.00
L = 51.75
T = 26.95

For Joint Legend See Sheet 290
For Pavement Legend See Sheet 29

Scale: 0 10 20 40

PAVEMENT DETAIL

CALC. BY	HAM-75-9.93	OHIO
DATE	HAM-126-13.00	FHWA REGION 5
CHKD. BY	HAMILTON COUNTY	
DATE		



SECTION A-A
No Scale

SECTION C-C
No Scale

SECTION B-B
No Scale

SECTION D-D
No Scale

INTERSECTION DETAIL
Ramp N At Reading Road
SCALE 0 20 30 40

For Joint Legend See Sheet 290
For Pavement Legend See Sheet 29

PAVEMENT DETAIL

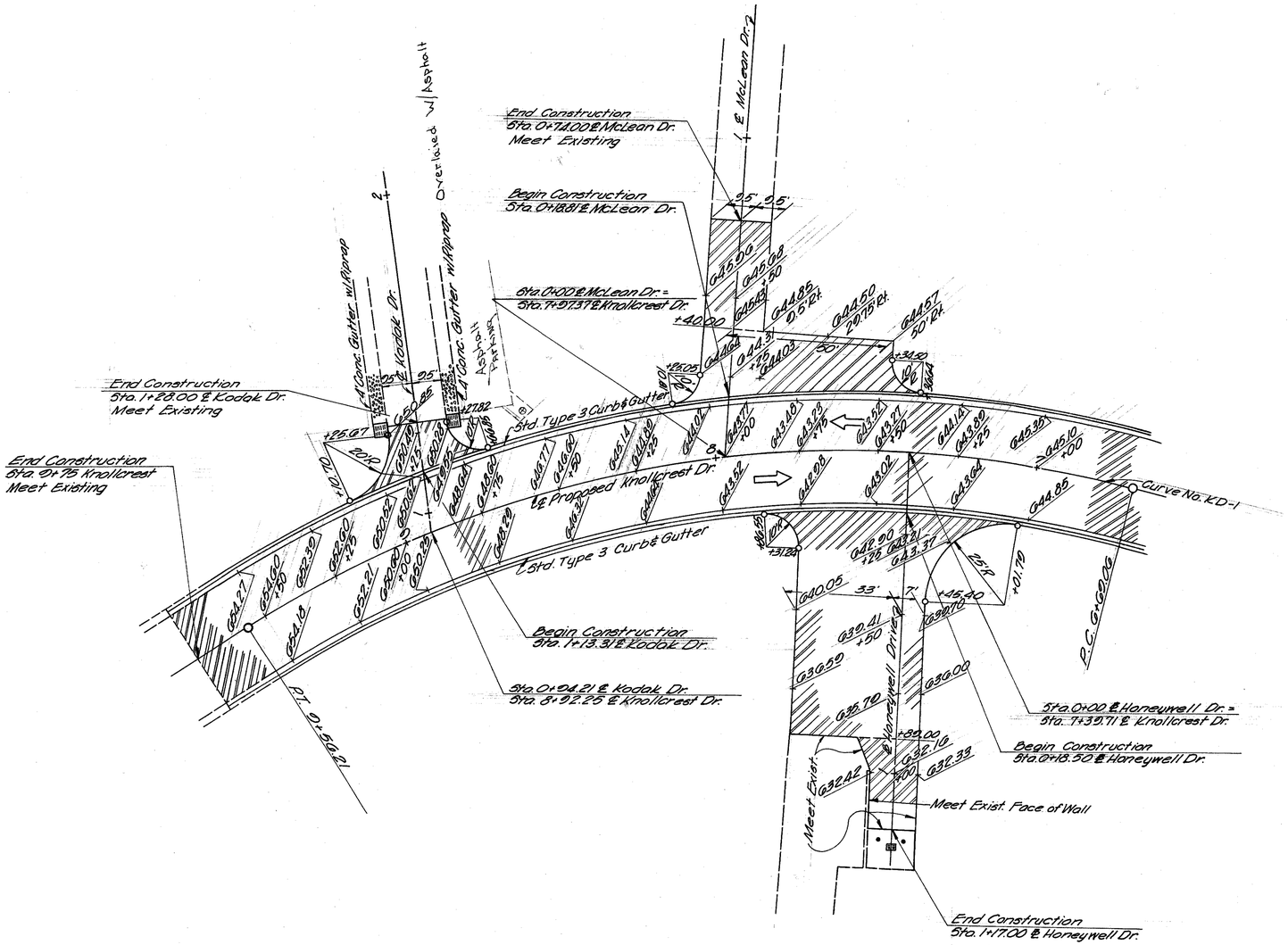
CALC. JS DATE 3/86

CHK'D REA DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

307 / 787

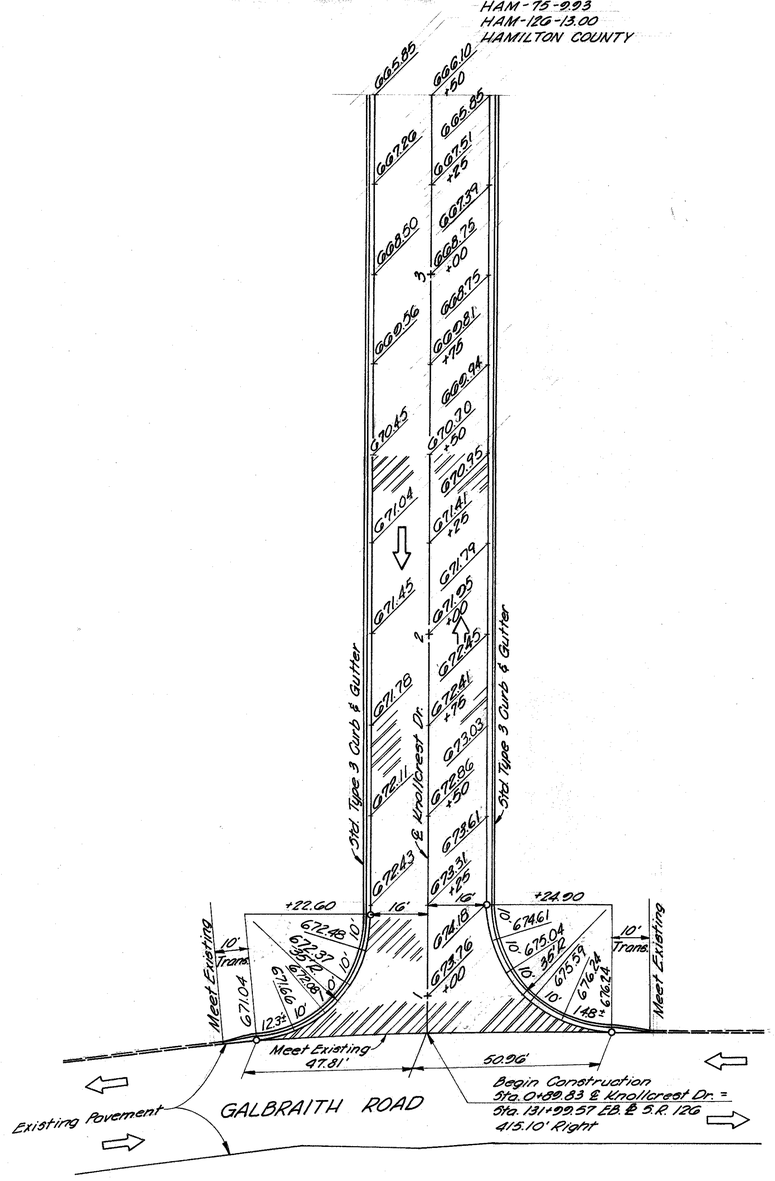
HAM-75-2.93
HAM-126-13.00
HAMILTON COUNTY



INTERSECTION DETAIL

Knollcrest Drive At Honeywell Drive
Knollcrest Drive At McLean Drive
Knollcrest Drive At Kodak Drive

SCALE
0 20 30 40



INTERSECTION DETAIL

Knollcrest Drive At Galbraith Rd

SCALE
0 20 30 40

For Curve Data See Sh. 6
For Pavement Legend See Sh. 29

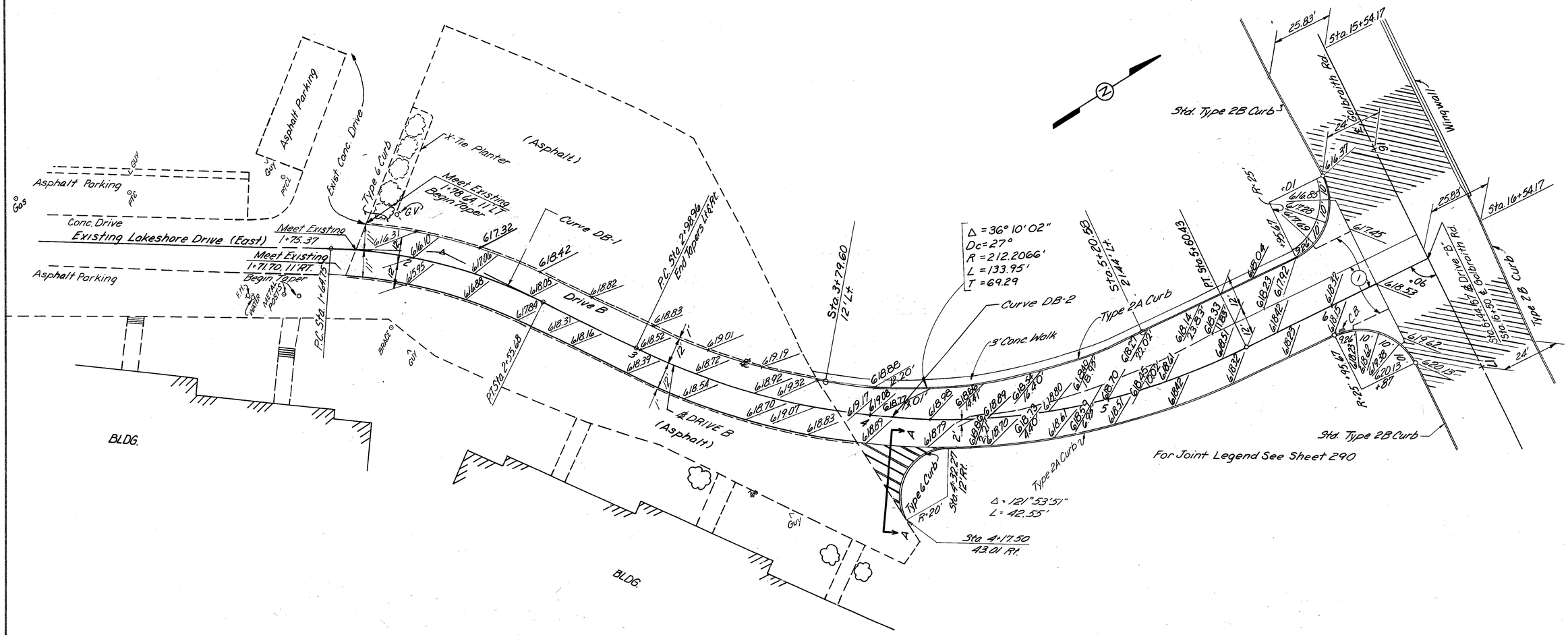
DEVELOPED | CHECKED

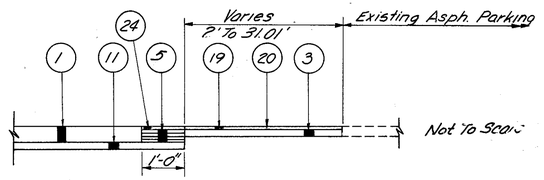
PAVEMENT DETAIL

CALC. BY JS DATE 3/86	HAM-75-9.93	OHIO	308
CHKD. BY REA DATE 3/86	HAM-126-13.00	FHWA REGION 5	787
	HAMILTON COUNTY		

PAVEMENT DETAIL
DRIVE B

Scale
0 20' 40'





SECTION A-A

For Item Legend See Sh. 7 & 11
For Joint Legend See Sh. 290
For Curve Data See Sh. 5A
For Pavement Legend See Sh. 29

PAVEMENT DETAIL

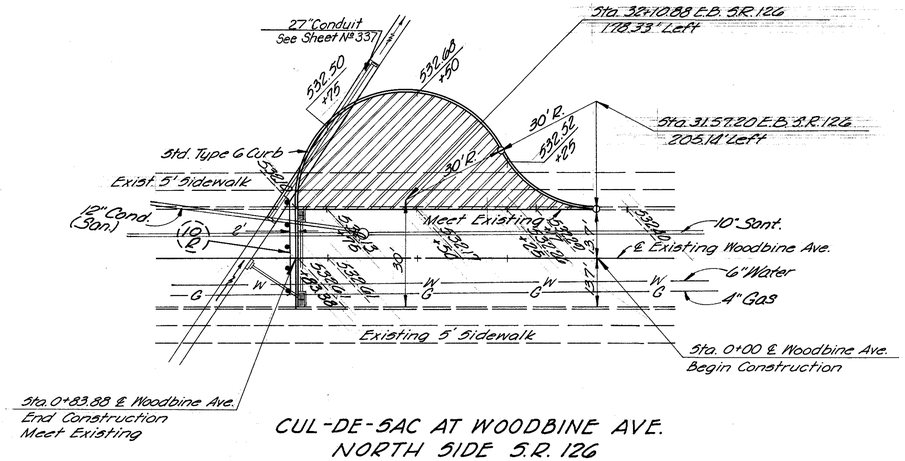
CALC. REA DATE 3/86

CHK'D JS DATE 3/86

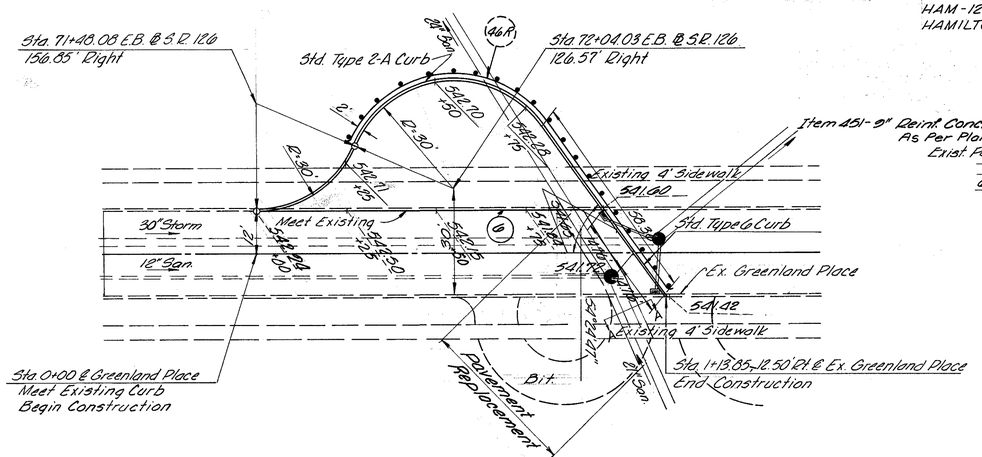
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

309
757

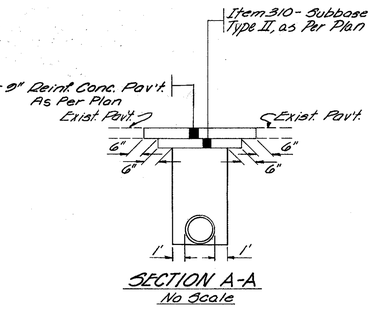
HAM-75-0.93
HAM-126-13.00
HAMILTON COUNTY



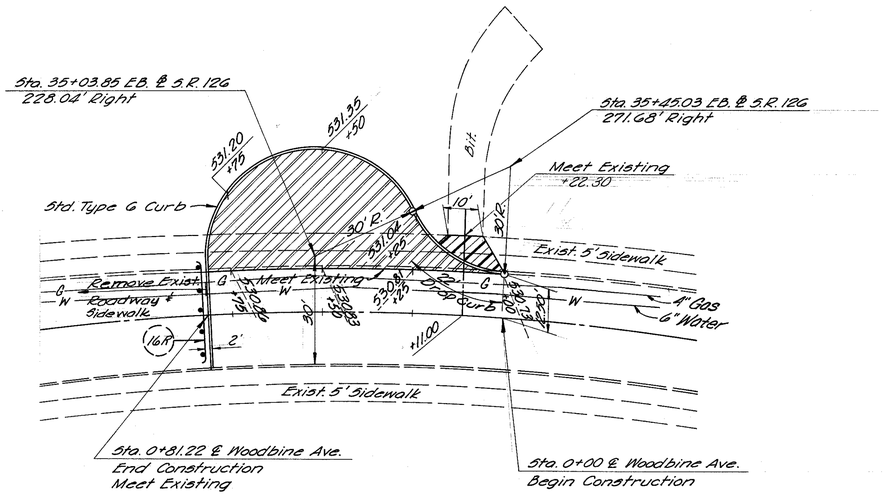
CUL-DE-SAC AT WOODBINE AVE.
NORTH SIDE S.R. 126



CUL-DE-SAC AT GREENLAND PLACE

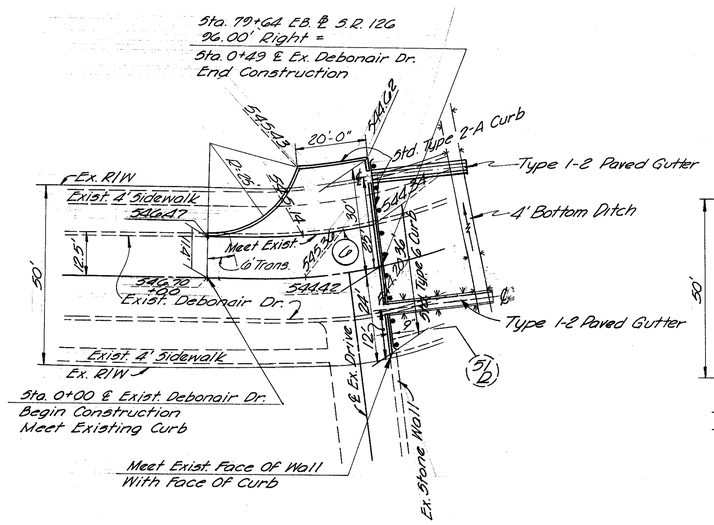


SECTION A-A
No Scale

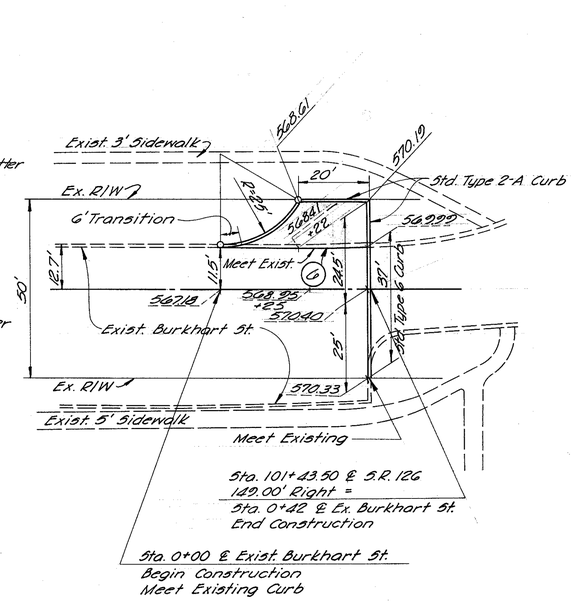


CUL-DE-SAC AT WOODBINE AVE.
SOUTH SIDE S.R. 126

Scale: 0 10 20 40



"T" TYPE TURN AROUND AT
DEBONAIR DRIVE



"T" TYPE TURN AROUND AT
BURKHART STREET

For Joint Legend See Sh. 290
For Pavement Legend See Sh. 20

DEVELOPED	CHECKED

PAVEMENT DETAIL

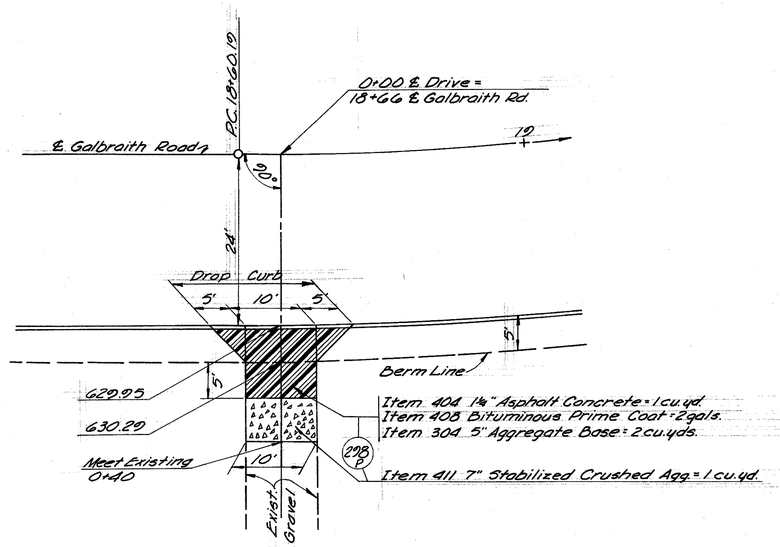
CALC. REA DATE 3/86

CHK'D JS DATE 3/86

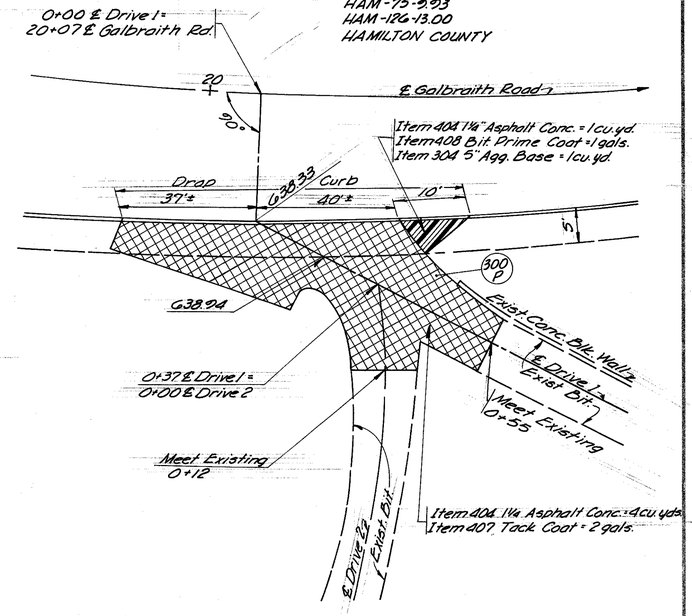
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

310

HAM-75-2.93
HAM-126-13.00
HAMILTON COUNTY

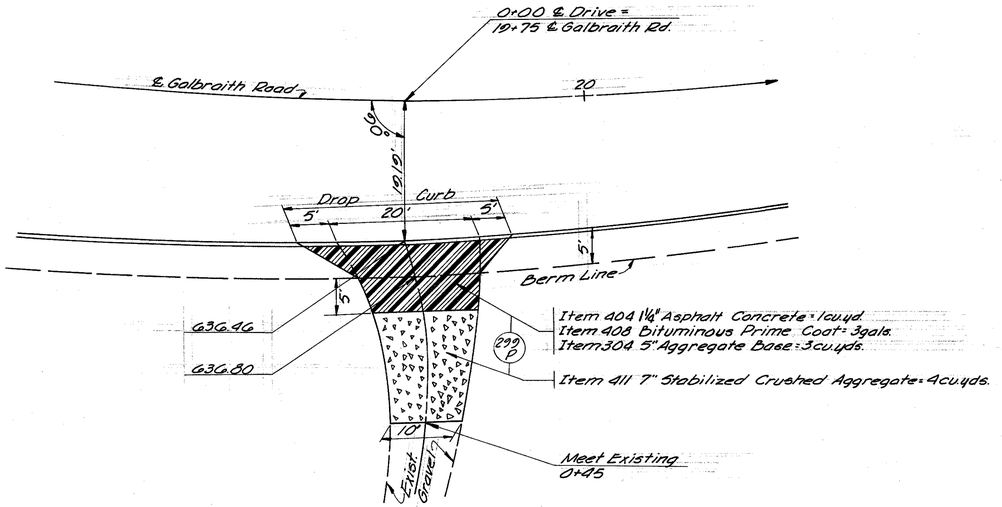


DRIVE AT STA. 18+66 RIGHT
GALBRAITH ROAD



DRIVE AT STA. 20+07 RIGHT
GALBRAITH ROAD

Note: Drop Curb to transition to proposed Standard Curb with in 18 inch distance from edge of Driveway See Std. Drawing BP-6



DRIVE AT STA. 19+75 RIGHT
GALBRAITH ROAD

Quantities Carried to Sh. 56
For Joint Legend See Sh. 290
For Pavement Legend See Sh. 29
For Location See Plan Sh. 56

DEVELOPED | CHECKED

PAVEMENT DETAIL

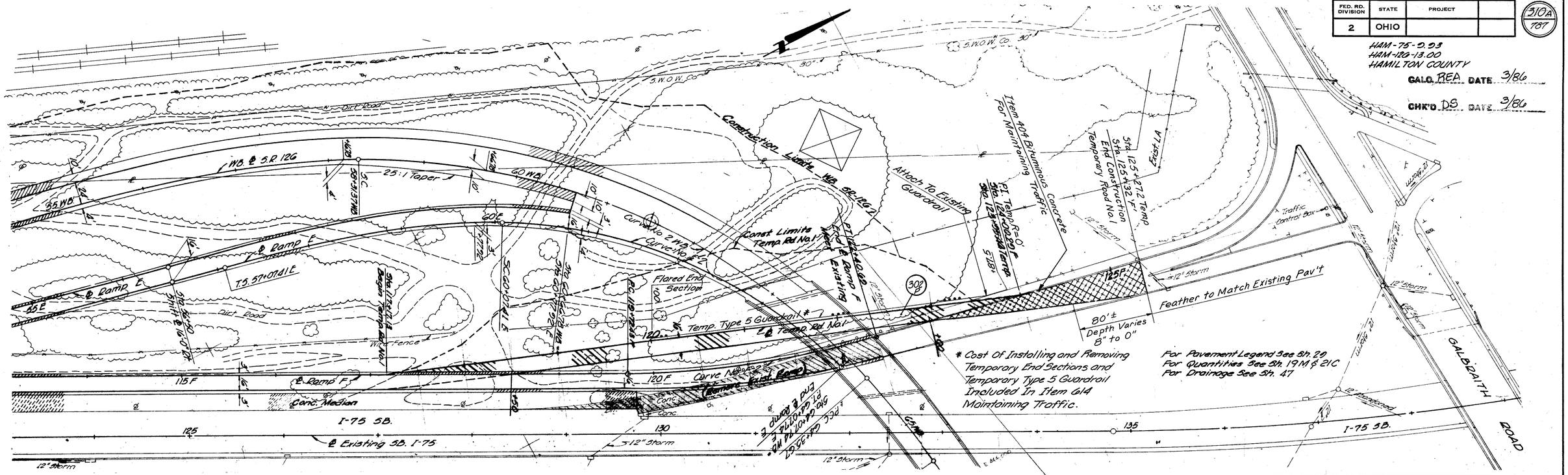
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

310A
TST

HAM-75-0.93
HAM-126-13.00
HAMILTON COUNTY

CALC. REA DATE 3/86

CHK'D DS DATE 3/86


S.W.O.W. Co.
Dirt Road
Construction Limits WB Sta. 120+?
WB & S.R. 126
55 WB
25:1 Taper
60 WB
10'
3'
SC
Sta. 117+17.13 Begin Temp. Road No. 1
Curve No. 2 WB
Const. Limits Temp. Rd No. 1
Ramp F Meet Existing
Item 614 Bituminous Concrete For Maintaining Traffic
Sta. 125+27.2 Temp. End Construction Temporary Road No. 1
Sta. 125+32 "F"
Sta. 125+27.2 Temp. End Construction
Sta. 125+32 "F"
Eject LA
Attach To Existing Guardrail
Pt. Temp. R=0' Sta. 125+32 "F"
125'
12" Storm
Traffic Control Box
Feather to Match Existing Pav't
80'± Depth Varies 8" to 0"
TS 57+01 E
& Ramp E
55 E
Sta. 116+36.90 Sta. 116+12.12
Begin Temp. Barrier
Dirt Road
Wire Fence
Flared End Section
SC 120+57.24 "F"
SC 120+57.24 "F"
EC 118+72.87
120'
Temp. Type 5 Guardrail *
℄ Temp. Rd. No. 1
115 F
℄ Ramp F
Curve No. 1 F
Cont. Median
120 F
Curve No. 2 F
Cont. Conc.
Cont. Conc.
Sta. 120+70.74 PCC
Sta. 120+70.74 PCC
Sta. 120+70.74 PCC

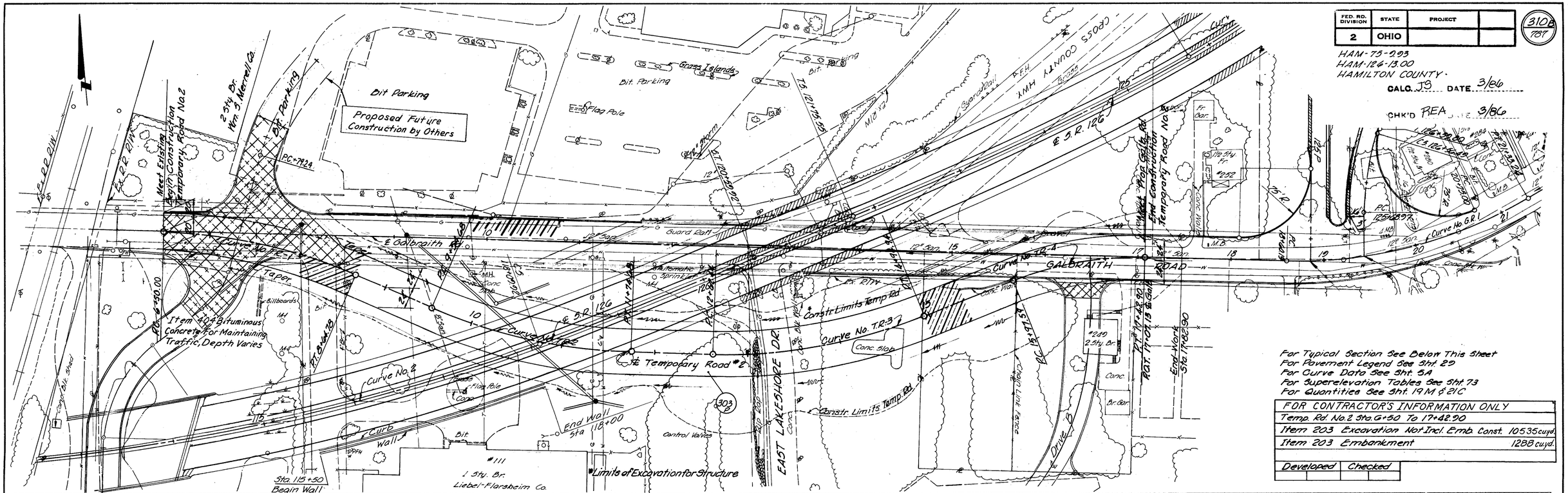
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

310B
787

HAM-75-2.93
HAM-126-13.00
HAMILTON COUNTY.

CALC. JS DATE 3/86

CHK'D REA DATE 3/86


Bit Parking
Proposed Future Construction by Others
Grass Islands
Bit. Parking
Flag Pole
Meet Existing Asph. Construction
Temporary Road No. 2
2-3½ Br. Wm. J. Merrell Co.
Ex. 22' Pvmt.
P.C. 7+92
Curve No. 1
Taper
Billboards
Item 404 Bituminous Concrete for Maintaining Traffic, Depth Varies
P.T. 9+40.78
Curve No. 2
Guard Rail
Guard Post
Galbraith Rd.
Automatic Sprinkler
Manhole
Conc. Slab
Ex. 21'Pvmt.
Ex. R.R.
Curve No. T.R.-1
Constr. Limits Temp. Rd.
Temporary Road #2
Curb
Wall
Sta. 115+50 Begin Wall
Sta. 118+00 End Wall
Control Valves
#111 1-3½ Br. Liebel-Flarsheim Co.
Limits of Excavation for Structure
EAST LAKESHORE DR.
Chain Link Fence
Drive B
Curb
Conc. Walk
Conc. Bit. Shed
Bit.
Conc.
Br. Gar.
#249 2.5½ Br.
Fr. Gar.
#252
#255
Curve No. G.R.-1
P.C. 12+48.97
Meet Prop. Galbraith Rd.
End Construction
Temporary Road No. 2
Sta. 17+42.90
P.O.T. 17+07.19 Galbraith Rd.
Curve No. G.R.-1
GALBRAITH ROAD
Curb Inlet
Conc. Mtr.
Conc. Apron
Conc. Mtr. Pit
Manhole
Low Barn
Fr. Barn
Fr. Gar.
#256
#258
#259
#260
#261
#262
#263
#264
#265
#266
#267
#268
#269
#270
#271
#272
#273
#274
#275
#276
#277
#278
#279
#280
#281
#282
#283
#284
#285
#286
#287
#288
#289
#290
#291
#292
#293
#294
#295
#296
#297

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

310c
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

CALC. JS DATE 3/86

CHK'D DS DATE 3/86



Temp. Road No. 3
For Typical Section See Sht. 310D
For Pavement Legend See Sht. 29
For Cross Sections See Sht. 289 D,E,F
For Quantities See Sht. 19M & 21C
For Profile See Sht. 310D

FOR CONTRACTORS INFORMATION ONLY		
Temp. Rd. No. 3 Sta. 14+51.60 to Sta. 22+14.99		
Item 203	Excavation not Incl. Emb	709 c.y.
" 203	Embankment	69 c.y.

DEVELOPED		CHECKED	
M.D.D.	10-71	M.T.B.	11-71

Temp. Rd. No. 4
For Profile See Sht. 310E
For Pavement Legend See Sht. 29
For Cross Sections See Sht. 272-275 (Ramp Q)
For Quantities See Sht. 65c & 310E

* Cost of Installing and Removing Temporary End Sections and Temporary Type 5 Guardrail Included In Item 614 Maintaining Traffic.

Temporary Road No. 3 Sta. 14+51.60 to 22+14.99 Galb. Rd.
Temporary Road No. 4 Sta. 124+62.86± to 129+50 Ramp Q

DEVELOPED		CHECKED	
C.E.S.	7-71	M.T.B.	11-71

310

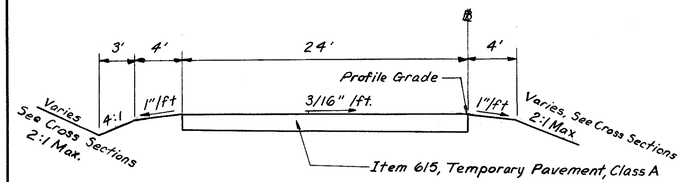
CALC. REA DATE 3/86

CHK'D JS DATE 3/86

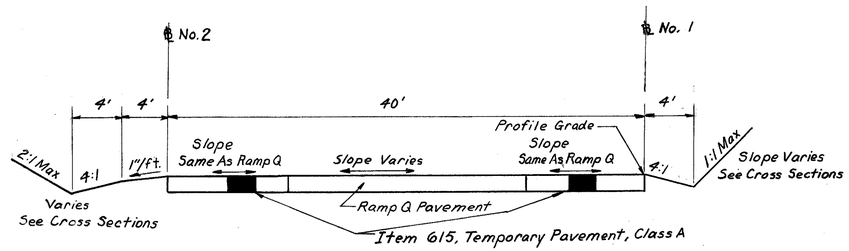
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

310D
787

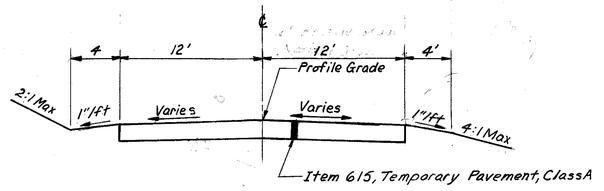
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



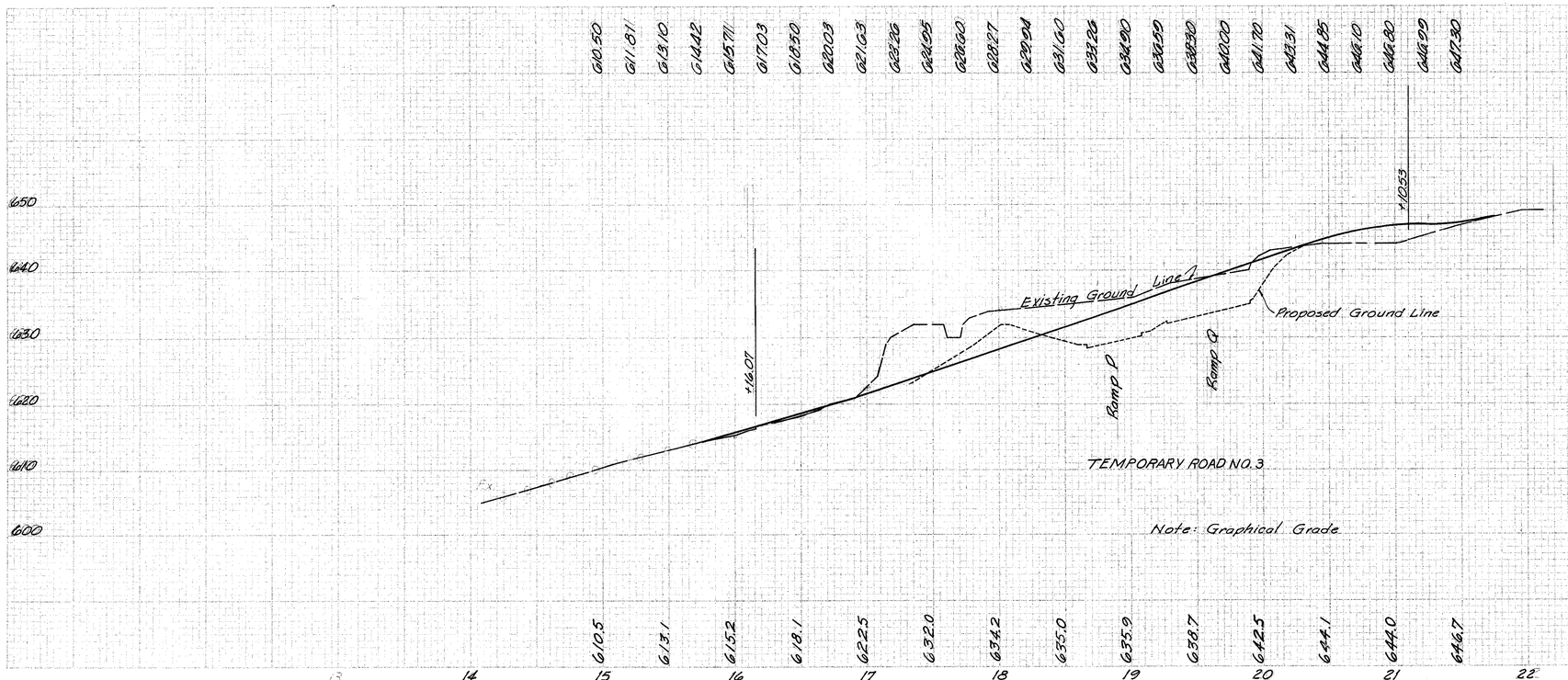
TYPICAL SECTION
TEMPORARY ROAD NO. 3

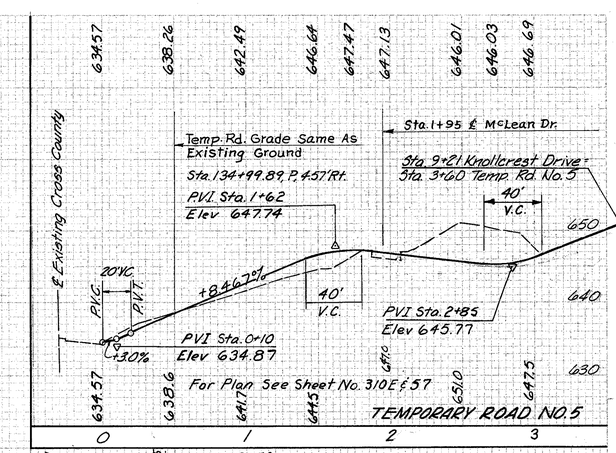


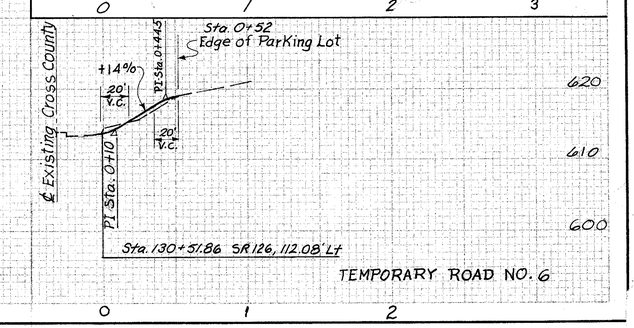
TYPICAL SECTION
TEMPORARY ROAD NO. 4



TYPICAL SECTION
TEMPORARY ROAD NO. 5
TEMPORARY ROAD NO. 6







TEMPORARY ROADS NO. 3 & 5 & 6

DEVELOPED	CHECKED
CES 4-7-71	MTD 11-71

For Continuation of Temporary Road See Sheet No. 57

For Continuation See Sheet No. 310c

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

310E
187

HAM.-75-9.93
HAM.-126-13.00
HAMILTON COUNTY

CALC. REA DATE 3/86

CHK'D JS DATE 3/86

FOR CONTRACTORS INFORMATION ONLY	
Temporary Road No. 6 Sta. 0+00 to Sta. 0+52	
Item 203 Excavation (Not Incl. Emb. Const.)	88 cuyd.
Item 203 Embankment	0 cuyd.

FOR CONTRACTORS INFORMATION ONLY	
Temp. Rd. No. 4 Sta. 129+50 to 138+64	
Item 203 Excavation (Not Incl. Emb. Const.)	1824 cu.yd.
Item 203 Embankment	0 cu.yd.

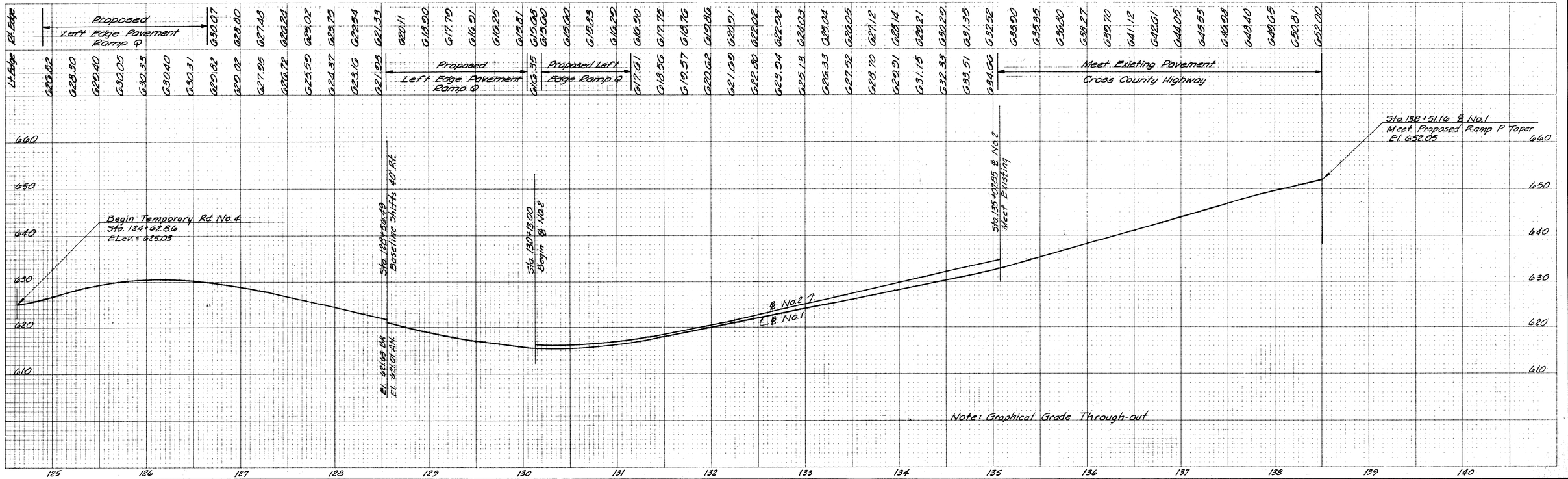
Developed		Checked	
M.D.D.	10-71	M.T.B.	11-71

Temp. Rd. No. 5 Sta. 0+00 to 9+21 Knollcrest Dr.	
Item 203 Excavation (Not Incl. Emb. Const.)	589 cuyd.
Item 203 Embankment	161 cu.yd.

Developed		Checked	
M.D.D.	10-71	M.T.B.	11-71

For Pavt. Details See Sh. 302, 303
For Pavt. Legend See Sh. 29
For Profile Temp. Rd. No. 5 See Sh. 310D
For Quantities See Sh. 19M & 21C
For Typical Section Temp. Rd. 4, 5 & 6 See Sh. 310D

TEMPORARY ROAD No. 4 Sta. 129+50 To Sta. 138+64±



TEMPORARY ROAD NO. 4 STA. 124+63± TO STA. 138+64±

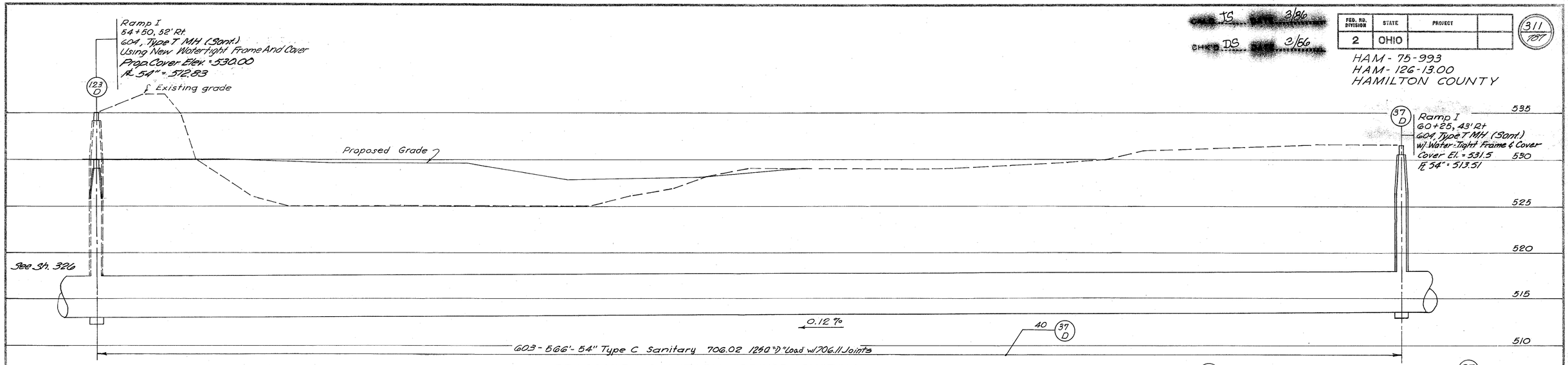
DES'D JS 3/86

CHK'D DS 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

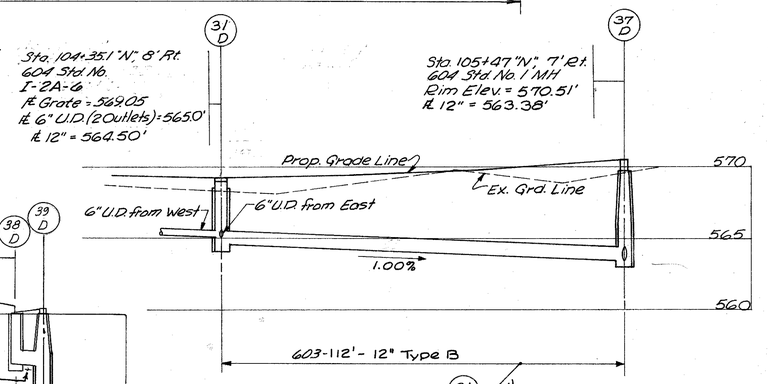
311
787

HAM-75-993
HAM-126-13.00
HAMILTON COUNTY



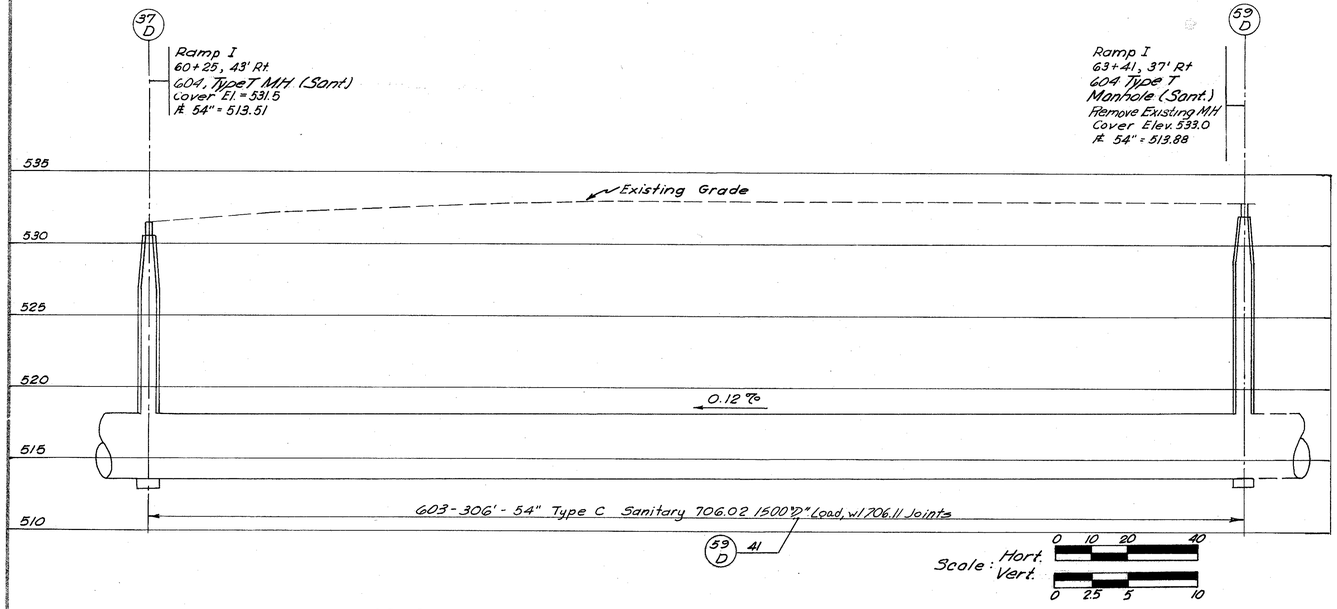
PROPOSED SANITARY SEWER SYSTEM

Sta. 54+50 to Sta. 60+25 Ramp I



PROPOSED STORM SEWER SYSTEM

Sta 105+47 Ramp "N" to Sta. 1+78 Reading Rd



PROPOSED SANITARY SEWER SYSTEM

Sta 60+25 To Sta 63+41 Ramp I

DEVELOPED	CHECKED

SEWER PROFILES

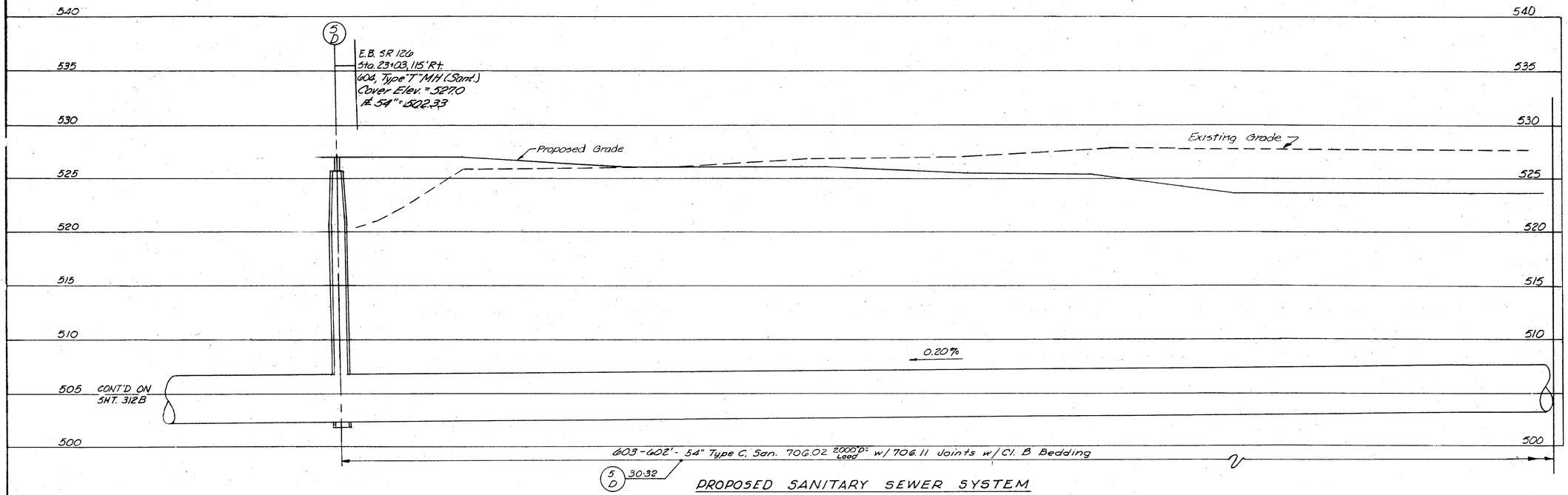
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

312
787

HAM - 75 - 993
HAM - 126 - 13.00
HAMILTON COUNTY

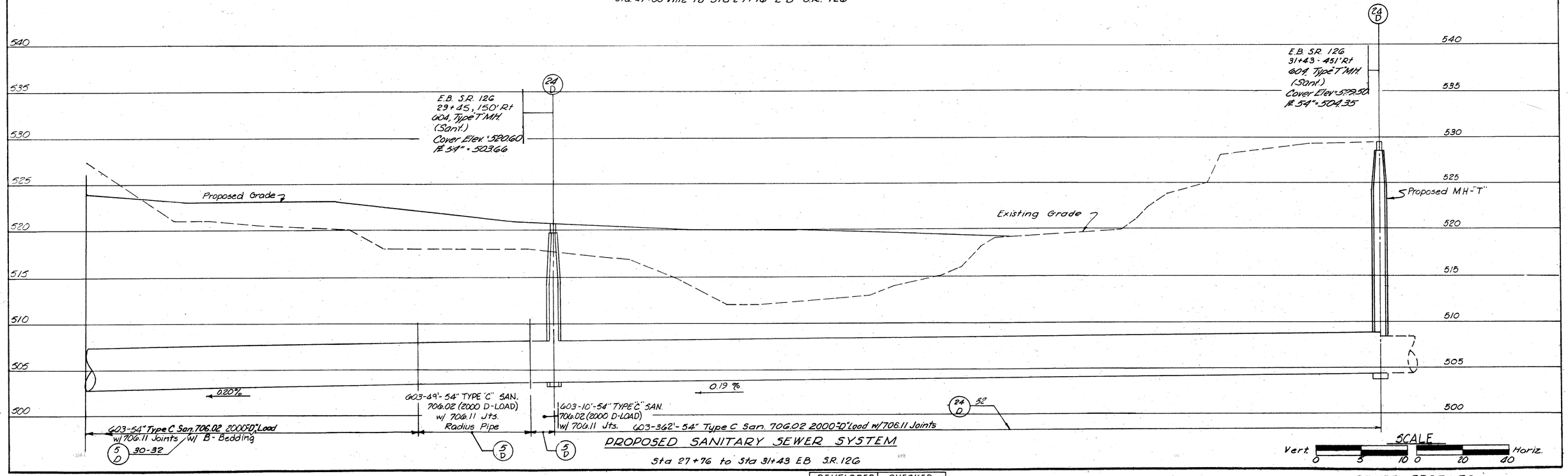
CALC'D DS DATE 3/86

CHK'D REA DATE 3/86



PROPOSED SANITARY SEWER SYSTEM

Sta. 47+08 Vine to Sta 27+76 E B S.R. 126



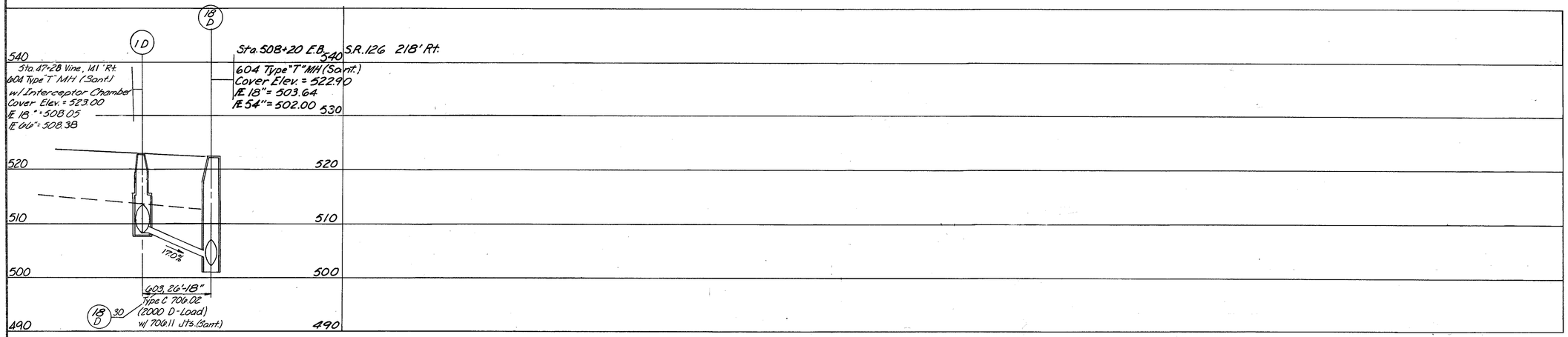
PROPOSED SANITARY SEWER SYSTEM

Sta 27+76 to Sta 31+43 EB S.R. 126

DEVELOPED		CHECKED	
DJP	3-31-71	DJP	11-9-71

SEWER PROFILES

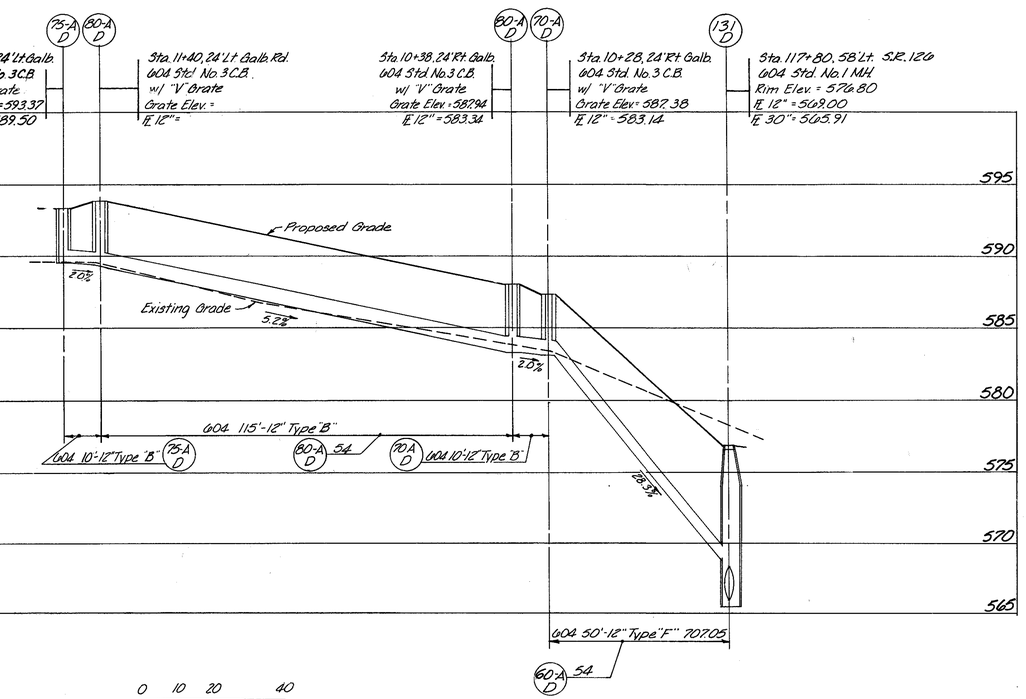
CALC. BY DS DATE 3/86	HAM-75-9.93	OHIO
CHKD. BY JS DATE 3/86	HAM-126-13.00	FHWA REGION 5
	HAMILTON COUNTY	312 A / 787



PROPOSED SANITARY SEWER

Sta. 47+08 Vine St. to Sta. 508+32 E.B. SR 126

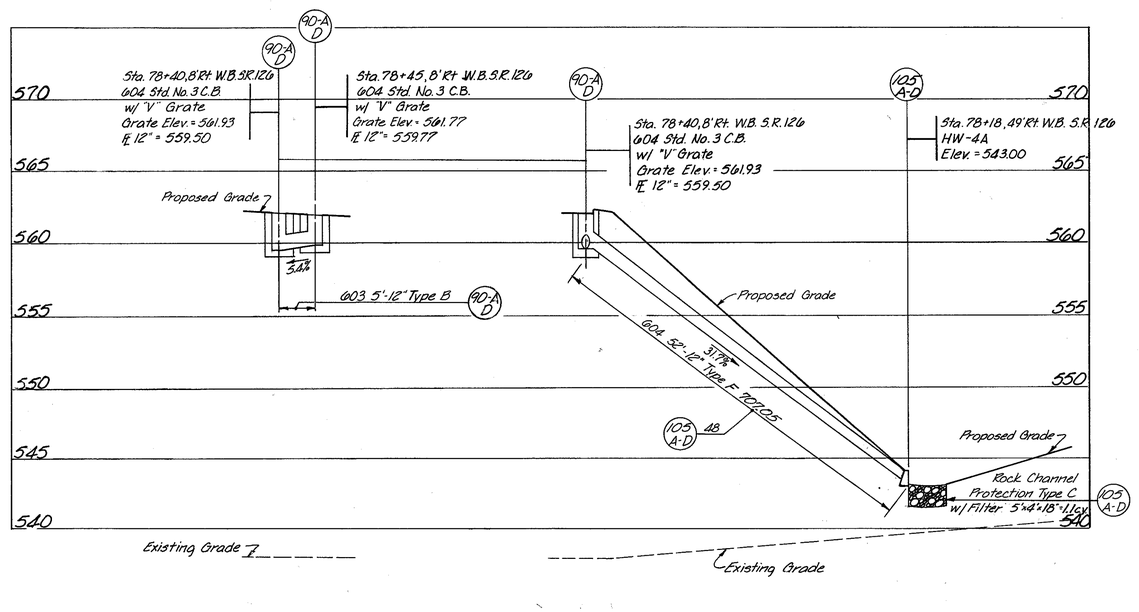
Scale: Vert. 0 10 20 — Horiz. 0 20 40



Scale: Horiz. 0 10 20 40 — Vert. 0 5 10

PROPOSED STORM SEWER

Sta. 11+40 Galbraith Rd. to Sta. 117+80 S.R. 126



PROPOSED STORM SEWER

Sta. 78+18 to Sta. 78+45 W.B. S.R. 126

SCALE Vert. 0 5 10 — Horz. 0 10 20

SEWER PROFILES

CALC. BY DS DATE 3/26
CHKD. BY JS DATE 3/27

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

OHIO
FHWA REGION 5

3128
787

℄ Vine St.
Existing
Future Proposed By Others

10 A-D

Vine St.
Sta. 44+61, 335' Lt.
604 Type "T" M.H.
Cover Elev.=529.20
℄ 54" =501.35

Exist Grade
Proposed Grade

18D

E.B. S.R. 126
Sta. 508+20, 218' Rt.
604 Type "T" M.H.
Cover Elev. = 522.90
℄ 18" =503.64
℄ 54" =502.00

℄ Exist. Mill Creek

Meet Existing Pipe

540 535 530 525 520 515 510 505 500

603, 47 L.F. 54" Type C 706.02 (2250 D Load) W/ 706.11 Jts. Radius (Sant)

603, 258 L.F. x 54" Type B (2250 D-Load) With 706.11 Joints (Sant.)

18D 30

603, 148 L.F. x 54" Type B (2250 D-Load) with 706.11 Joints (Sant.) Jacked or Tunnelled

30 18D

.12%

603, 59 L.F. x 54" Type B (2250 D-Load) with 706.11 Joints (Sant.)

30 18D

18D

E.B. S.R. 126
Sta. 508+20, 218' Rt.
604 Type "T" M.H.
Cover Elev. = 522.90
℄ 18" =503.64
℄ 54" =502.00

E.B. S.R. 126
Sta. 23+03, 115' Rt.
608 Type "T" M.H.
Cover Elev. = 527.0
℄ 54" =502.33

5D

66" Cond.

℄

48" Cond.

Polystyrene Block Encasement

O.D. = 65"

603, 146 L.F. 54" Type C 706.02 (2000 D Load) With 706.11 Joints (Sant.)

603, 47' x 54" Type C Radius 706.02 (2000 D Load)

603, 112 L.F. 54" Type C 706.02 (2000 D-Load) With 706.11 Jts. (Sant.)

* 50' - Normal project participation
9' - 100% Millcreek Conservancy District participation

SCALE

Vertical 0 5 10

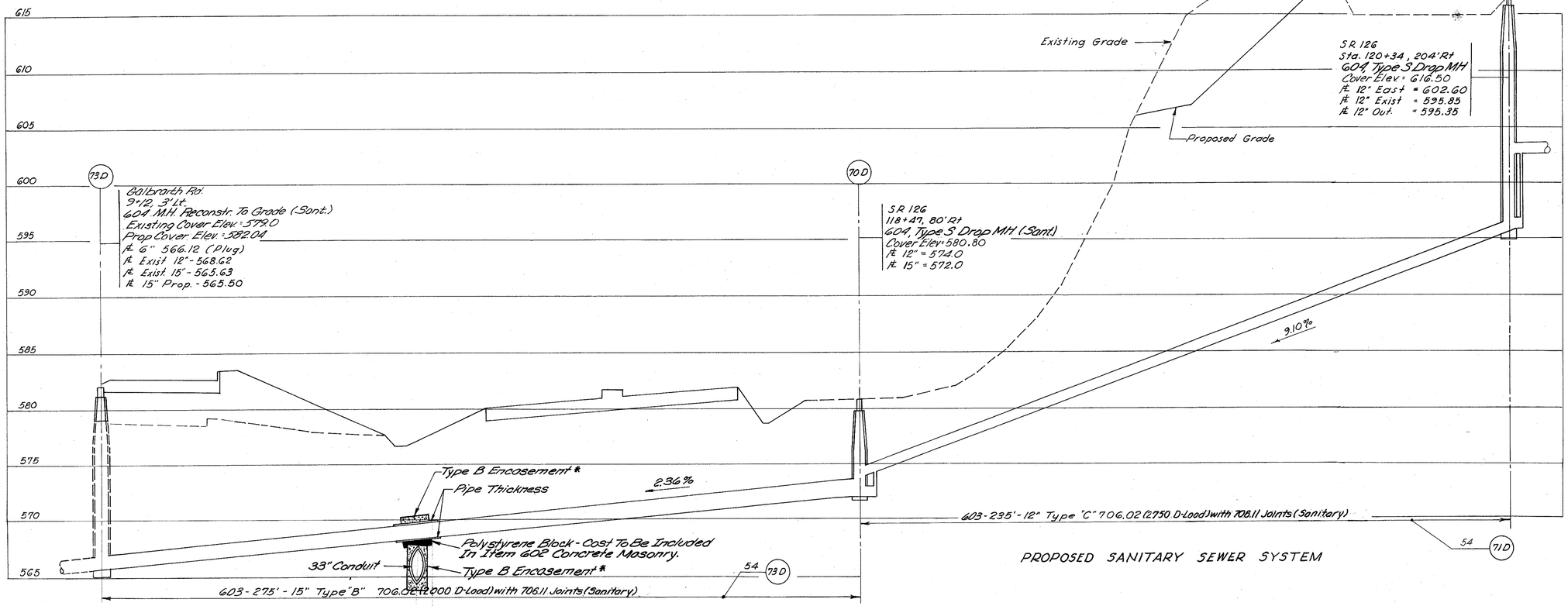
Horizontal 0 10 20

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

313 / 787

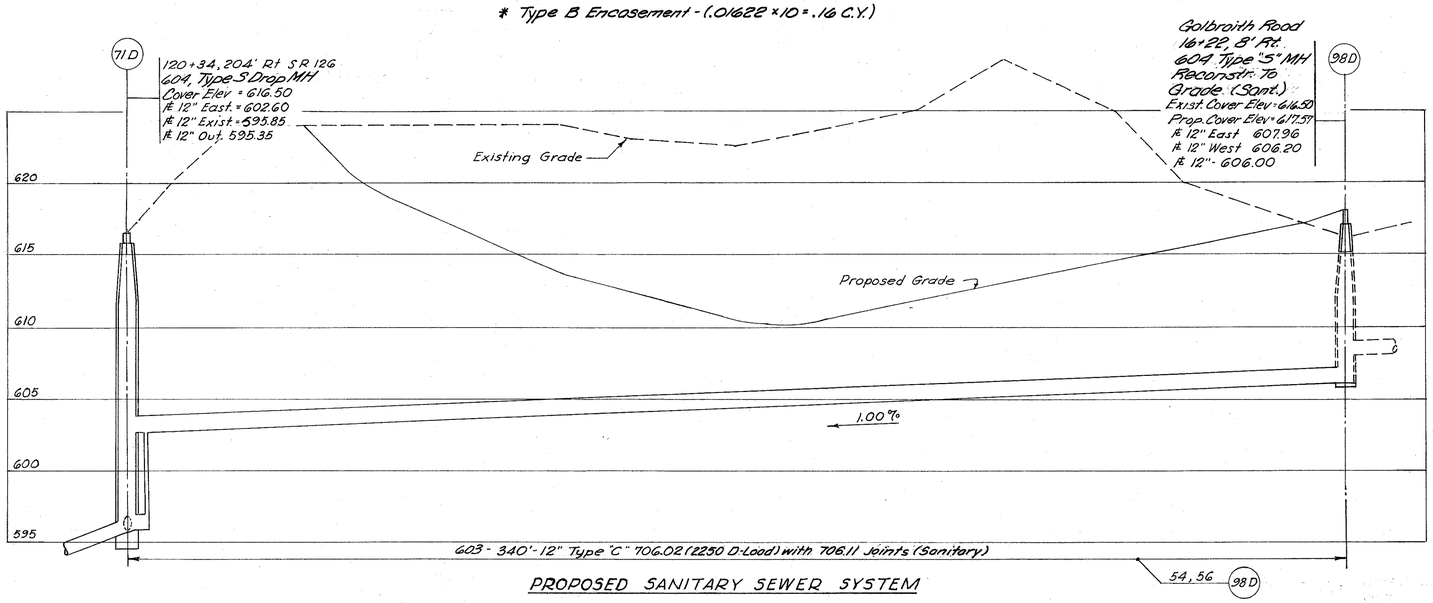
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

CALC. TS DATE 3/86
CHKD. DS DATE 3/86

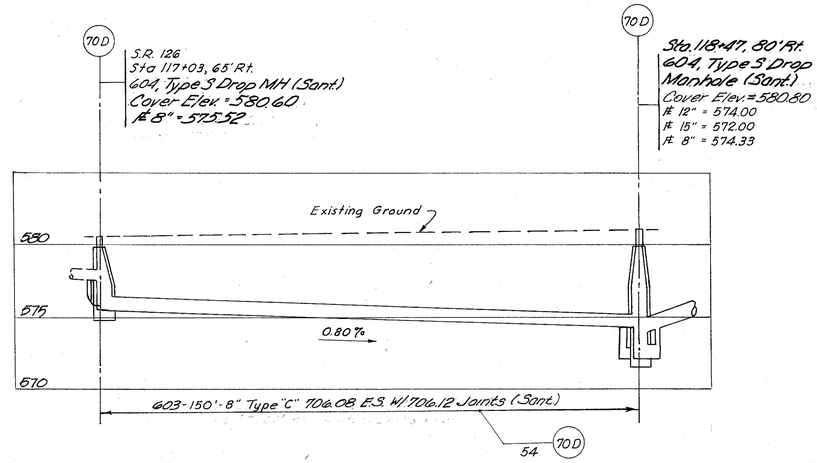


PROPOSED SANITARY SEWER SYSTEM

* Type B Encasement - (.01622 × 10 = .16 C.Y.)



PROPOSED SANITARY SEWER SYSTEM



PROPOSED SANITARY SEWER SYSTEM

Scale : Hor. 0 10 20 40
Vert. 0 5 10

DEVELOPED	CHECKED

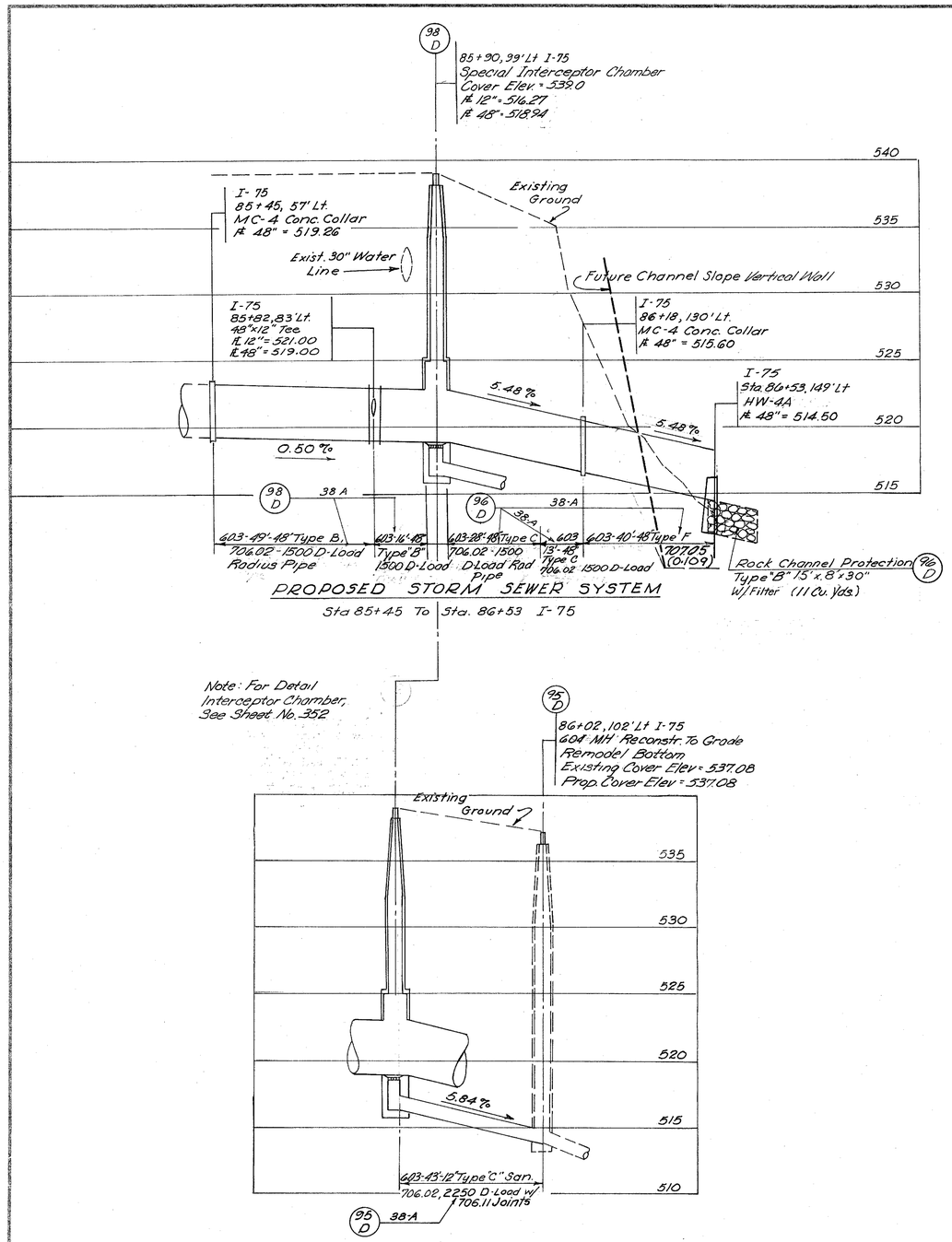
SEWER PROFILES

CALC. DS DATE 3/86
CHK'D. REA DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

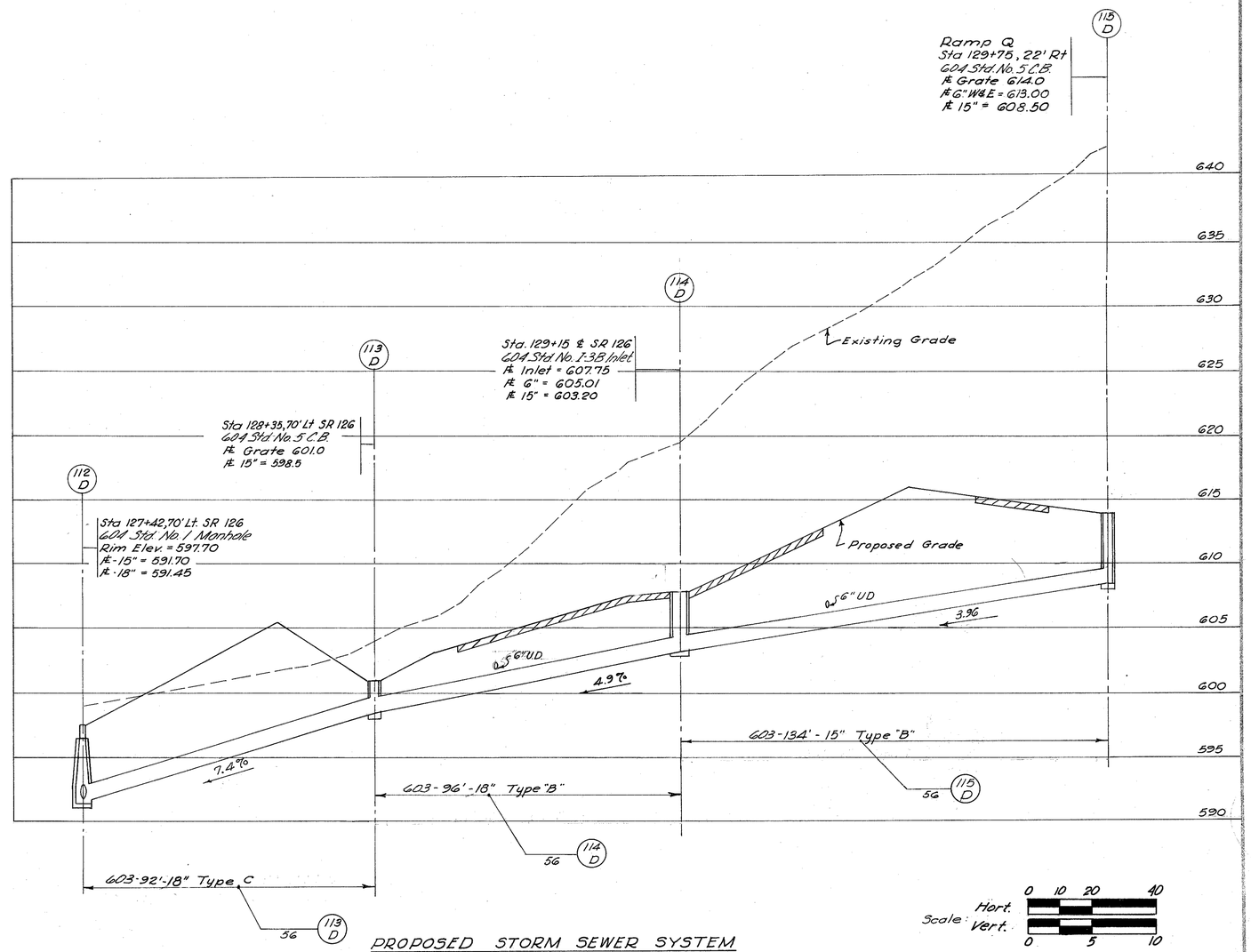
314
787

HAM-75-993
HAM-126-13.00
HAMILTON COUNTY



PROPOSED STORM SEWER SYSTEM
Sta 85+45 To Sta. 86+53 I-75

PROPOSED INTERCEPTOR SEWER
Sta 85+90 To Sta 86+02 I-75



PROPOSED STORM SEWER SYSTEM
Sta 127+42 SR 126 To Sta 129+75 Ramp Q

Rev. 7-24-86

DEVELOPED | CHECKED

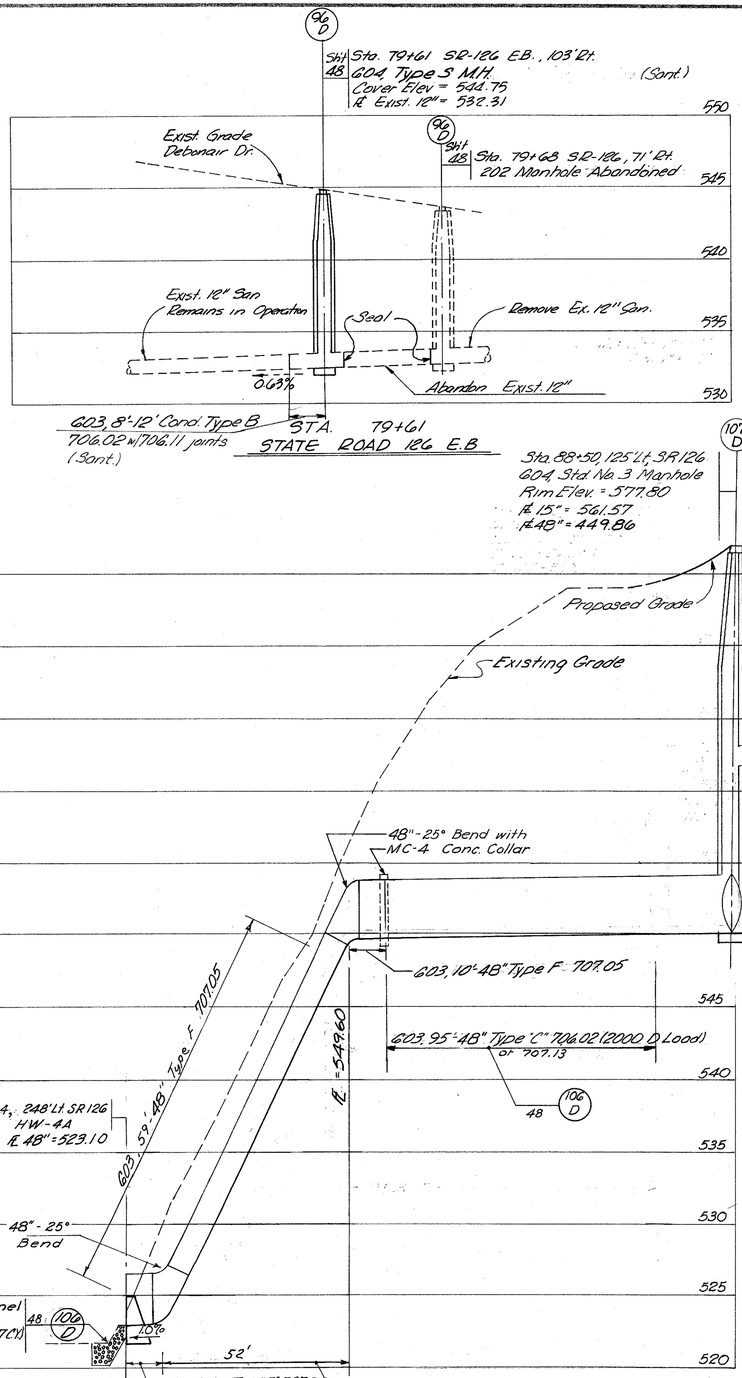
SEWER PROFILES

DES. DS 3/86
CHK'D. REA DATE 8/86

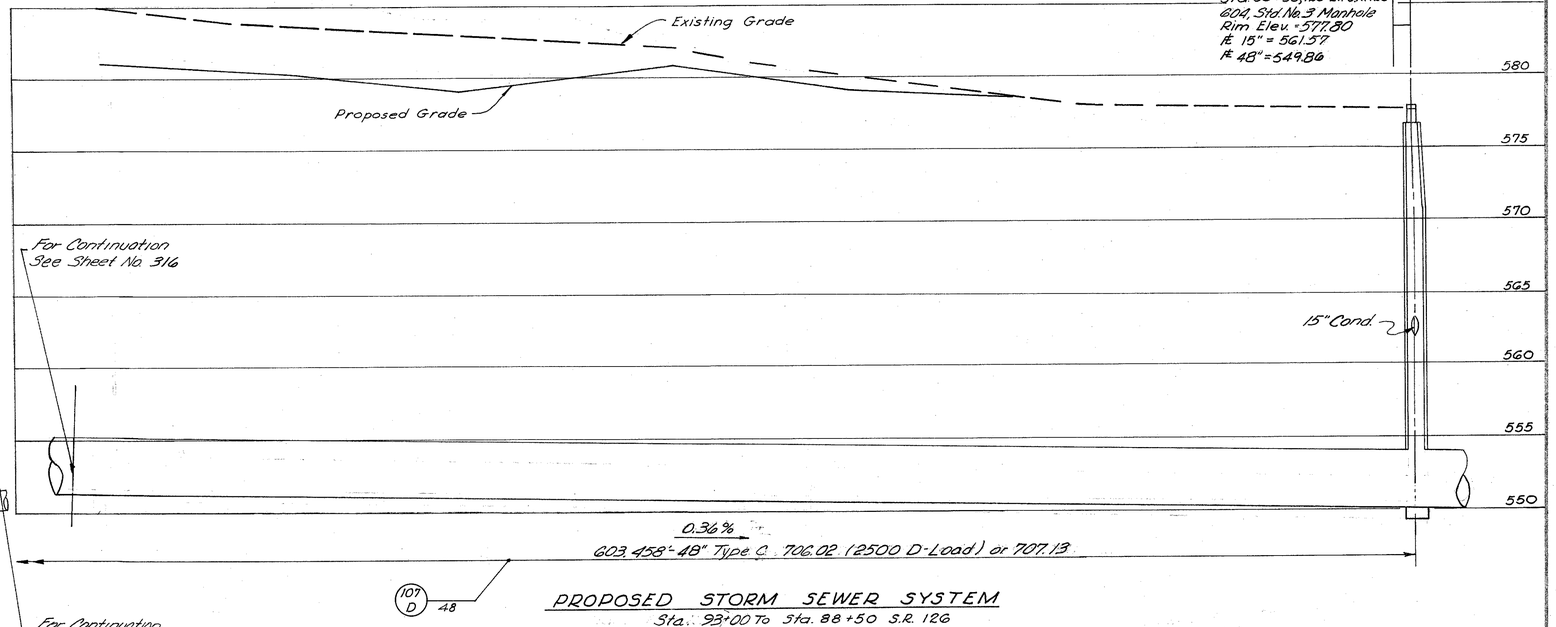
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

315 / 787

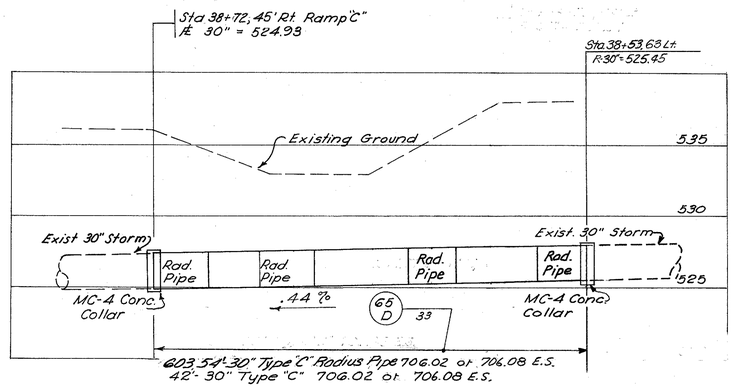
HAM-75-993
HAM-126-13.00
HAMILTON COUNTY



PROPOSED STORM SEWER SYSTEM
Sta 87+64 To Sta 88+50 S.R. 126



PROPOSED STORM SEWER SYSTEM
Sta. 93+00 To Sta. 88+50 S.R. 126



PROPOSED STORM SEWER SYSTEM
Sta. 38+72 To Sta. 38+53 Ramp C

Scale: Hor. 0 10 20 40
Vert. 0 5 10

DEVELOPED	CHECKED

SEWER PROFILES

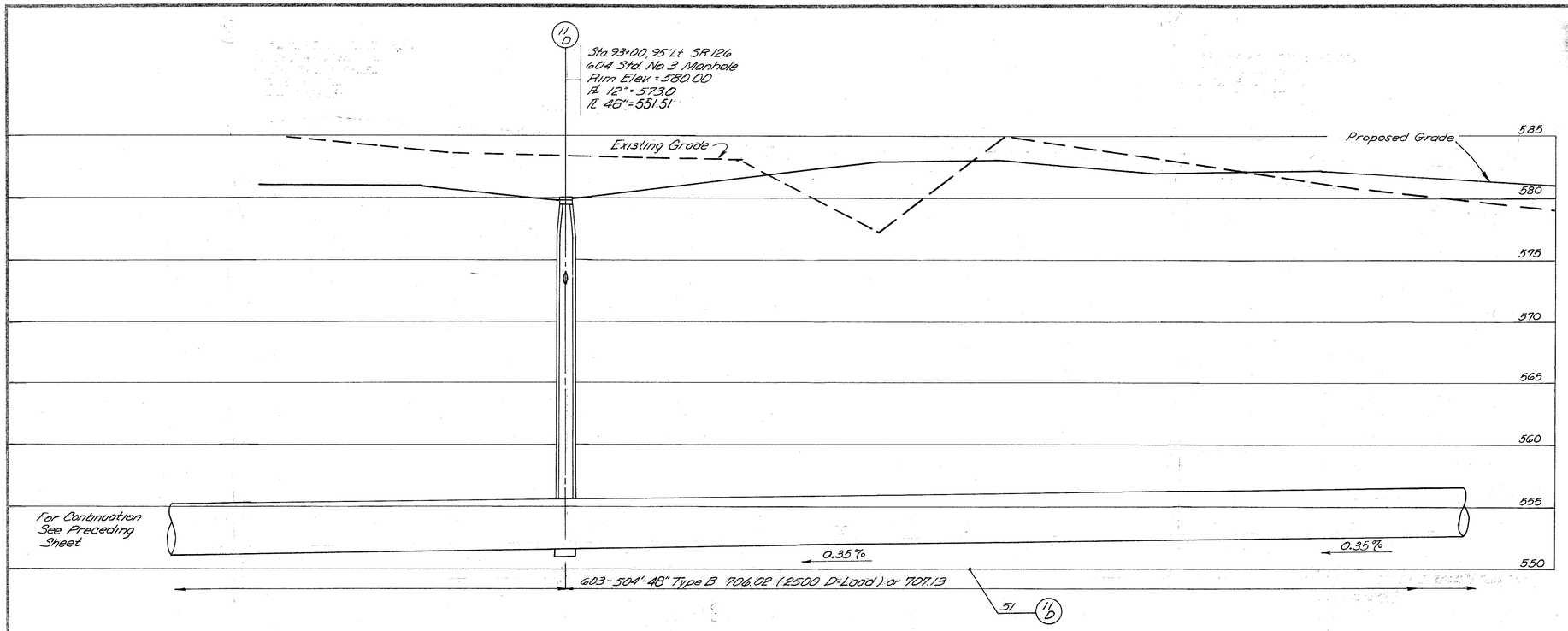
CALC. JS DATE 3/86

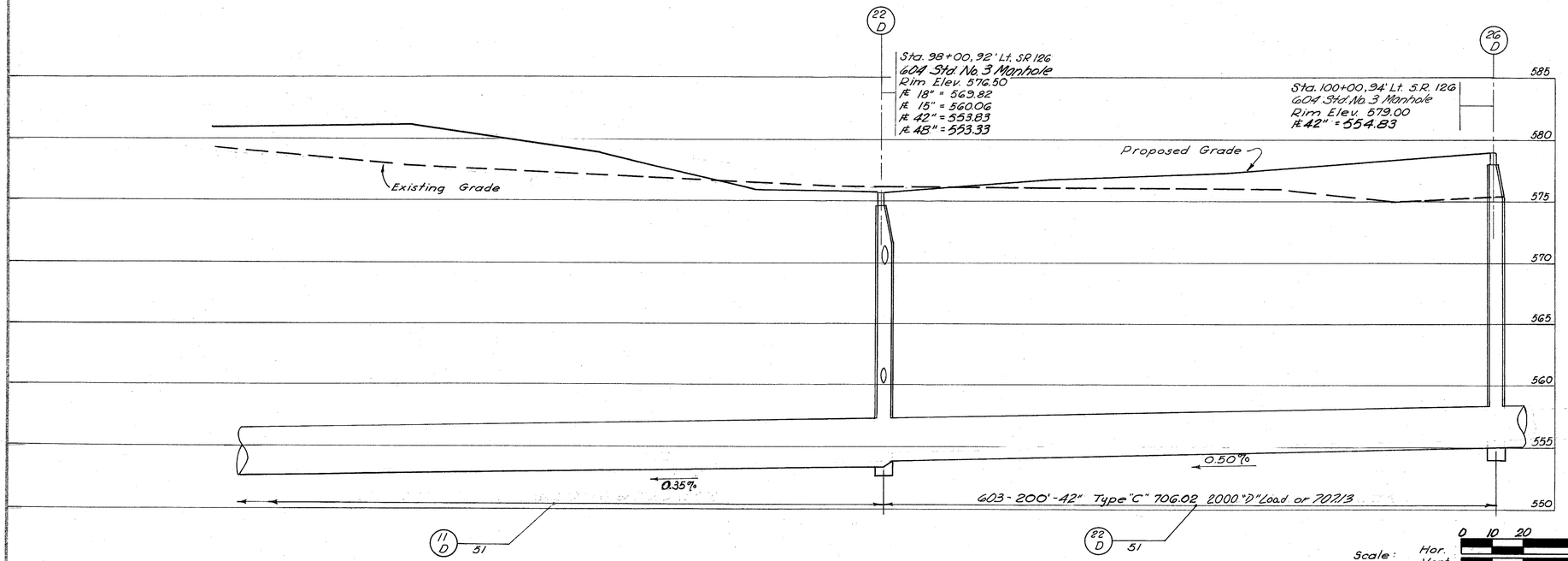
CHK'D REA DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

316 / 787

HAM-75-993
HAM-126-13.00
HAMILTON COUNTY





PROPOSED STORM SEWER SYSTEM
Sta. 92+00 Ramp "T" To Sta. 100+00 SR 126

Scale: Hor. 0 10 20 40
Vert. 0 5 10

DEVELOPED	CHECKED

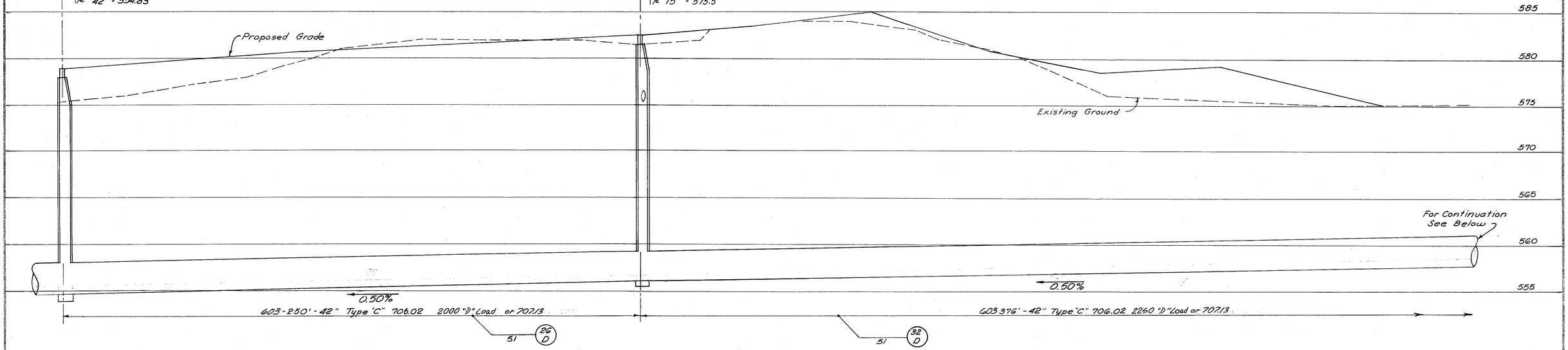
SEWER PROFILES

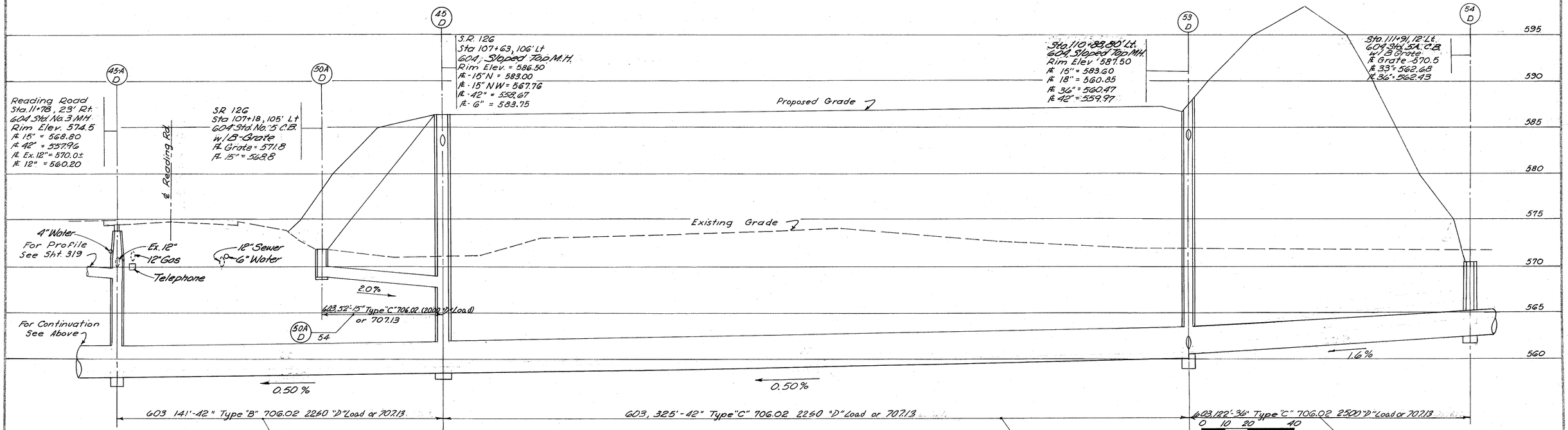
CALC. JS DATE 3/86
CHK'D DS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

317
787

HAM-75-993
HAM-126-13.00
HAMILTON COUNTY





PROPOSED STORM SEWER SYSTEM
Sta 100+00 To Sta. 111+91 SR 126

DEVELOPED		CHECKED	
HRS	1-16-71	ARS	1-18-71

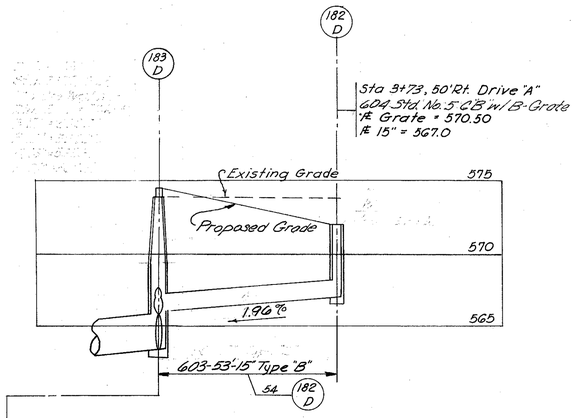
SEWER PROFILES

CALC. DS DATE 3/86
CHK'D JS DATE 3/86

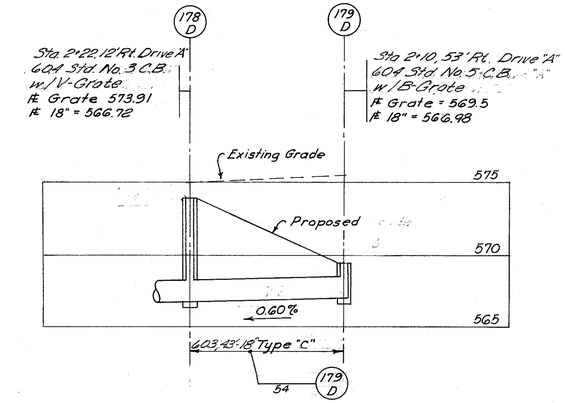
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

3/8
787

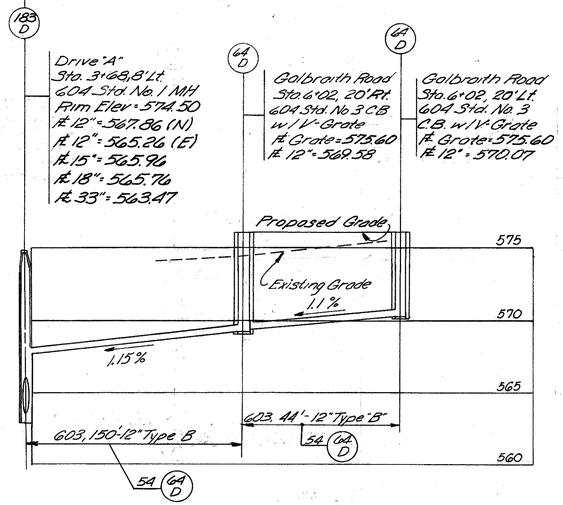
HAM-75-993
HAM-126-13.00
HAMILTON COUNTY



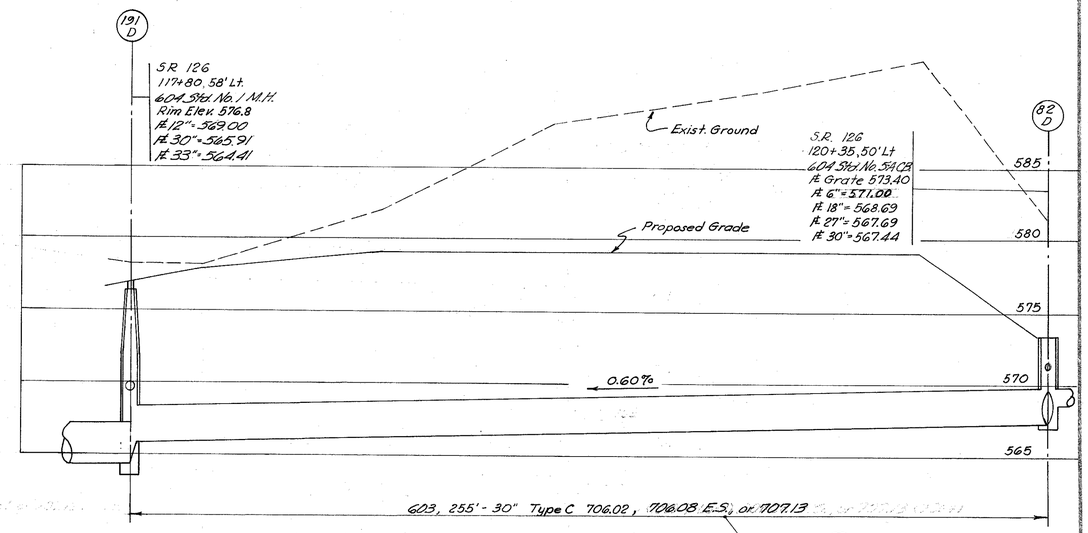
PROPOSED STORM SEWER SYSTEM
Sta. 3+56 To Sta. 3+50 DRIVE "A"



PROPOSED STORM SEWER SYSTEM
Sta. 2+22 To Sta 2+10 Drive "A"



PROPOSED STORM SEWER SYSTEM
Sta 3+73 To Sta. 6+02 Drive "A"



PROPOSED STORM SEWER SYSTEM
Sta. 9+05 Galbraith To Sta. 120+35 S.R. 126

Scale: Hort. 0 10 20 40
Vert. 0 5 10

DEVELOPED		CHECKED	

SEWER PROFILES

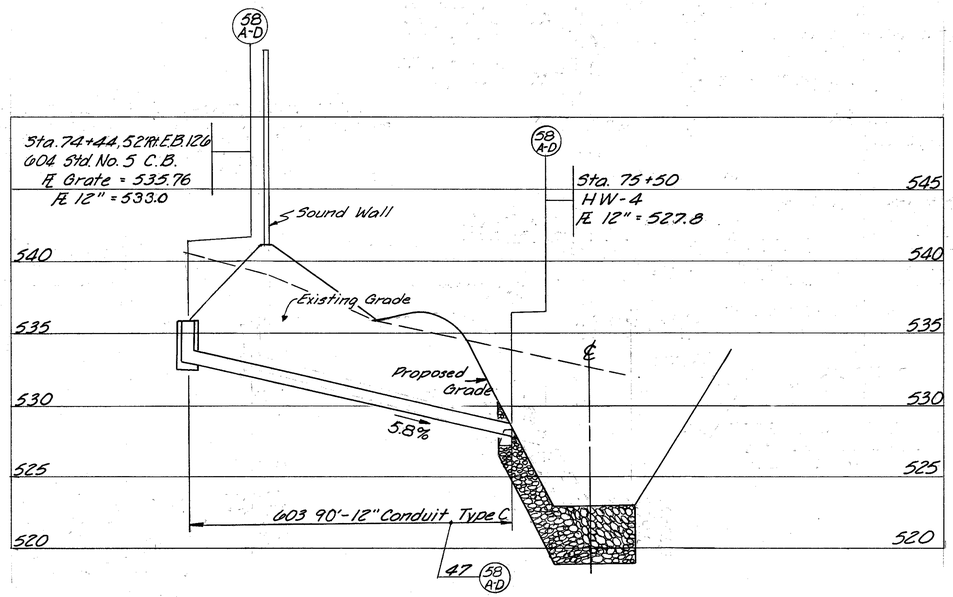
CALC. DS DATE 3/86

CHK'D REA DATE 3/86

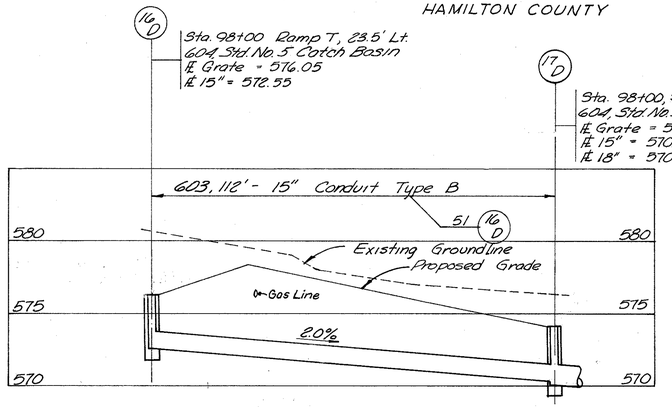
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

319
787

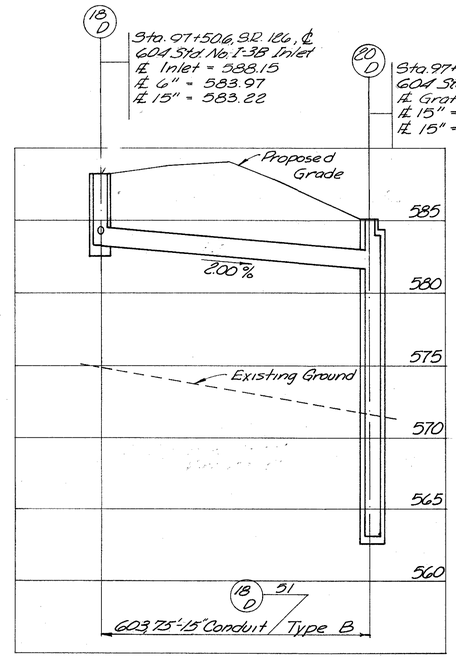
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



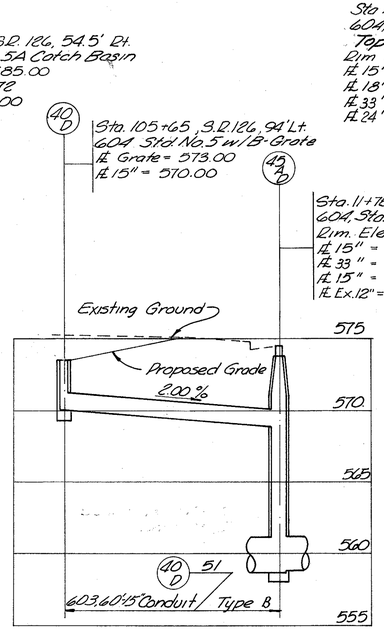
STA. 74+44 to STA. 75+50
E.B. SR 126



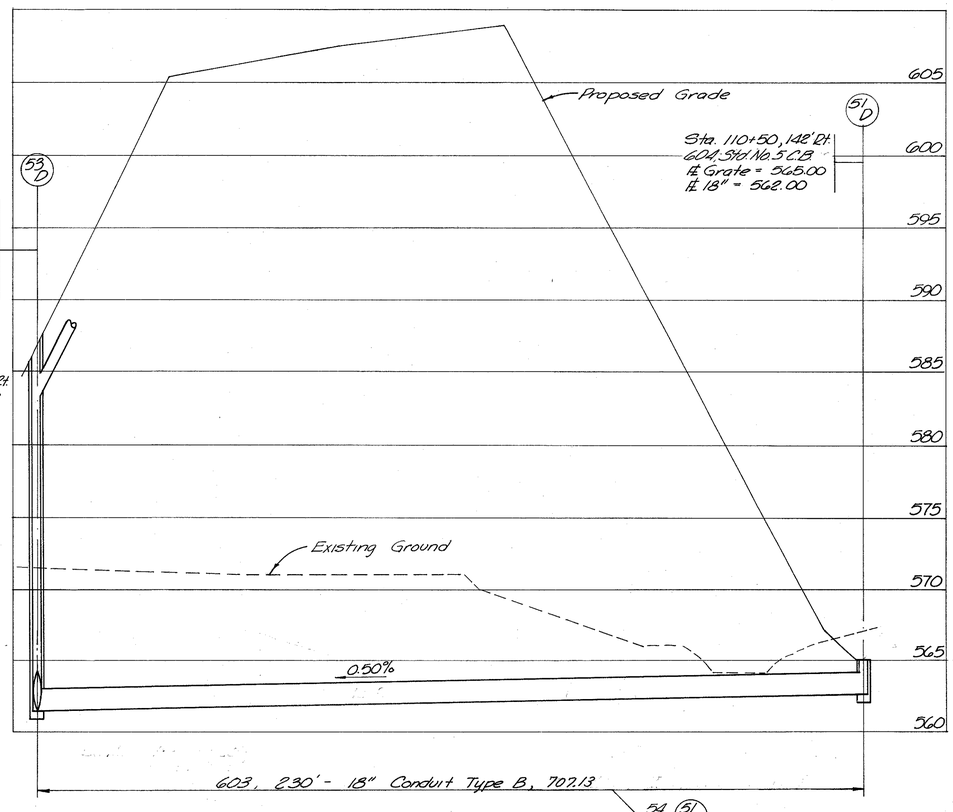
STA. 98+00 RAMP T to STA. 98+00 SR. 126



STA. 97+50 to STA. 98+00
S.R. 126



STA. 105+65 to STA. 1+73
S.R. 126 to Reading Rd.



STA. 110+50 to STA. 111+88
S.R. 126

Scale: Hor. 0 10 20 40
Vert. 0 5 10

DEVELOPED	CHECKED

SEWER PROFILES

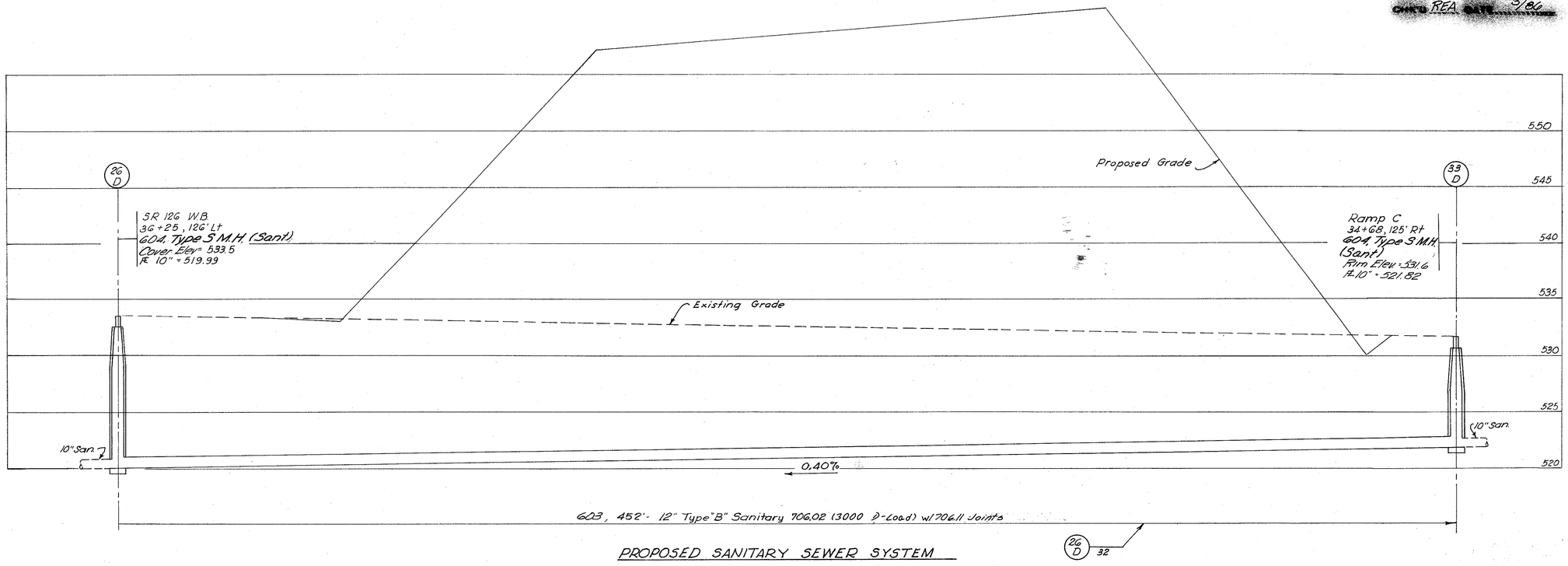
DES. DS DATE 3/86

CHK'D REA DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

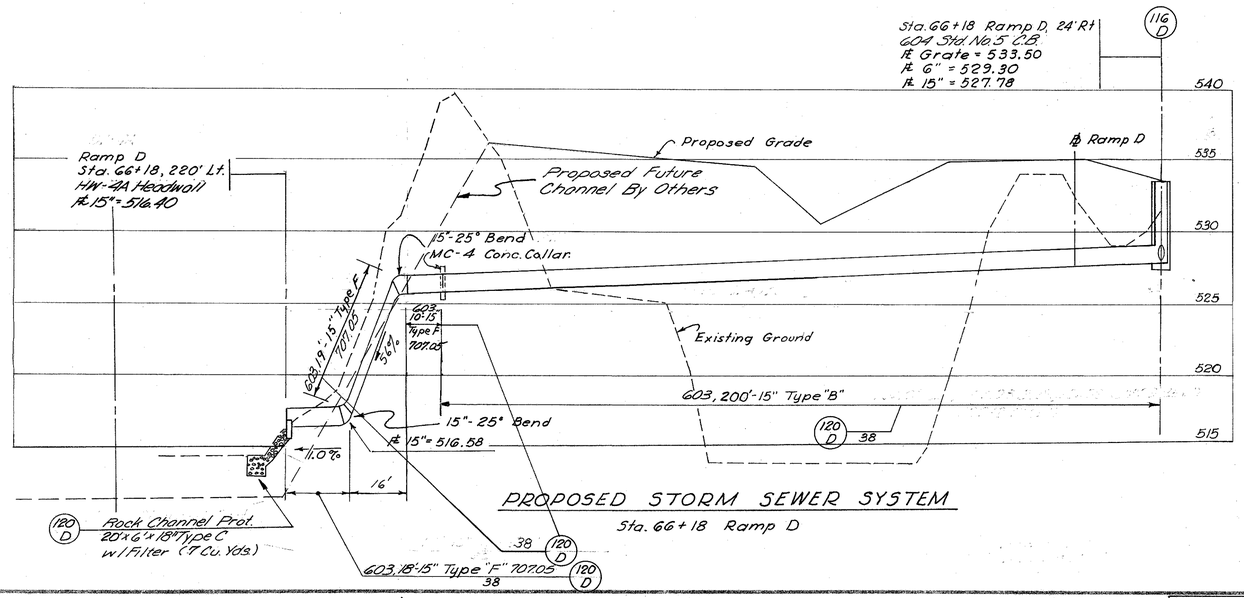
320
787

HAM-75 - 9.93
HAM-126 - 13.00
HAMILTON COUNTY



PROPOSED SANITARY SEWER SYSTEM

Sta 36+25 SR 126 to Sta 34+68 Ramp C

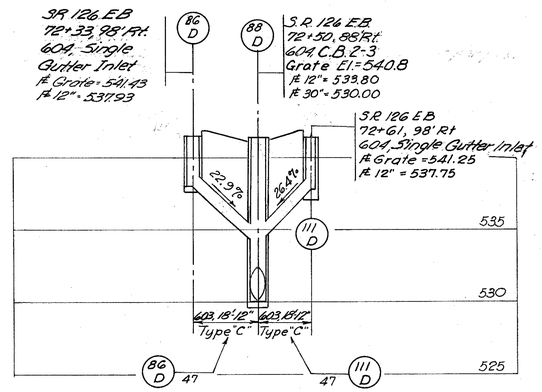


PROPOSED STORM SEWER SYSTEM

Sta. 66+18 Ramp D

Scale: Hor. 0 10 20 40

Vert. 0 5 10



PROPOSED STORM SEWER SYSTEM

Sta. 72+33 To Sta. 72+61 S.R. 126 EB

DEVELOPED | CHECKED

SEWER PROFILES

CALC. DS DATE 3/86

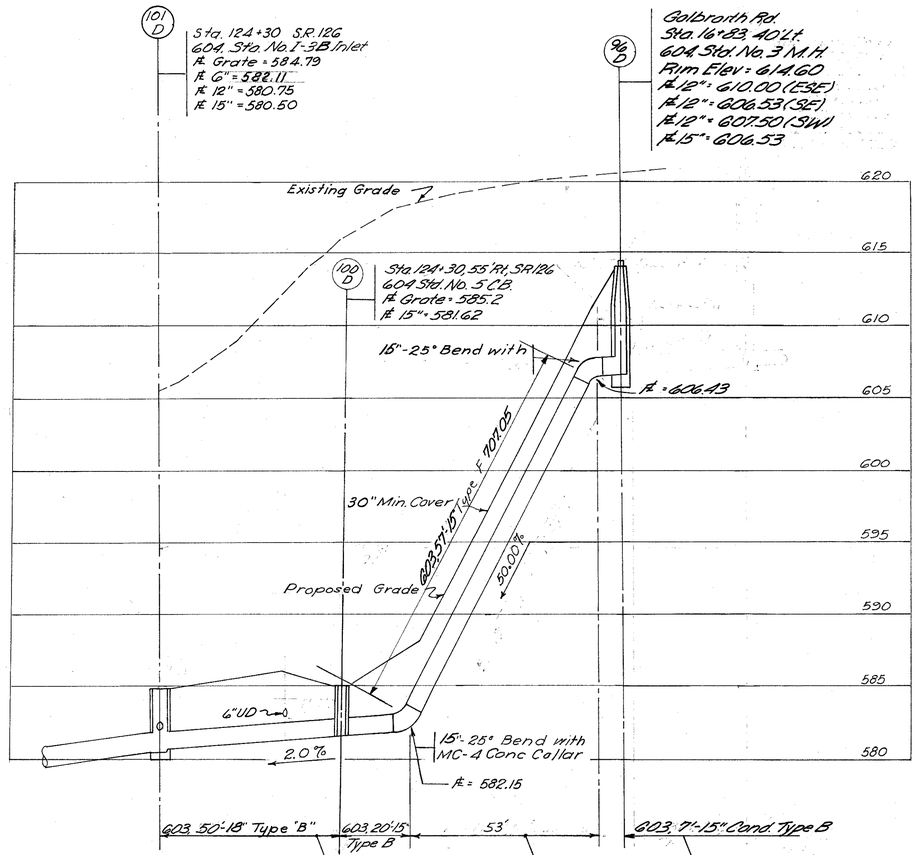
CHK'D REA DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

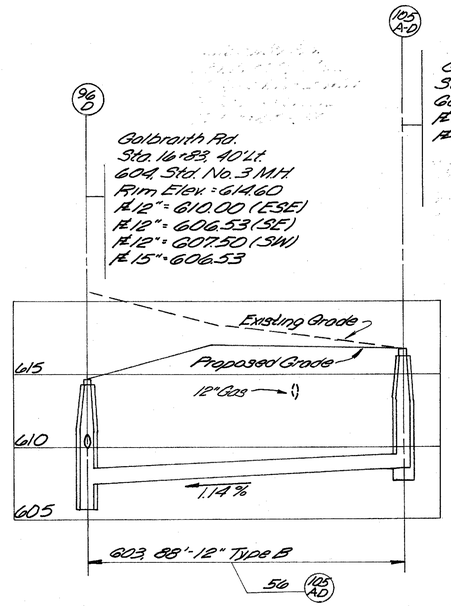
321
167

HAM-75 - 9.93
HAM-126 - 13.00
HAMILTON COUNTY

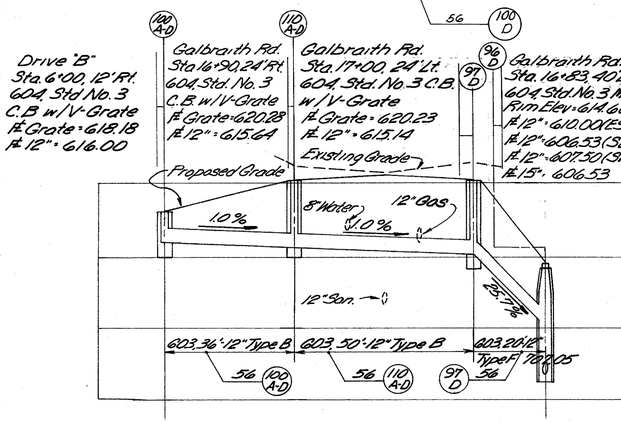
PROPOSED STORM SEWER SYSTEM
Sta. 124+30 SR 126 To Sta. 17+00 Galbraith Rd.



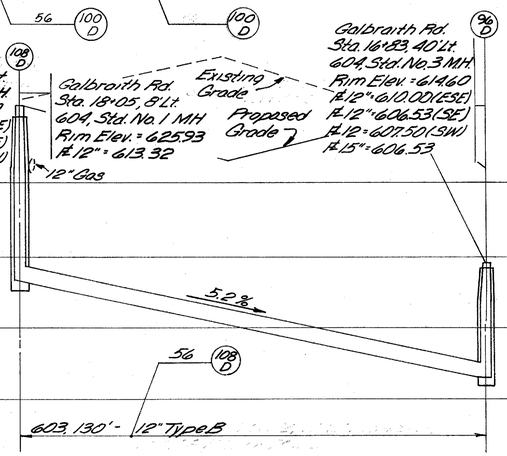
PROPOSED STORM SEWER
Sta. 16+00 To Sta. 16+83 Galbraith Rd.



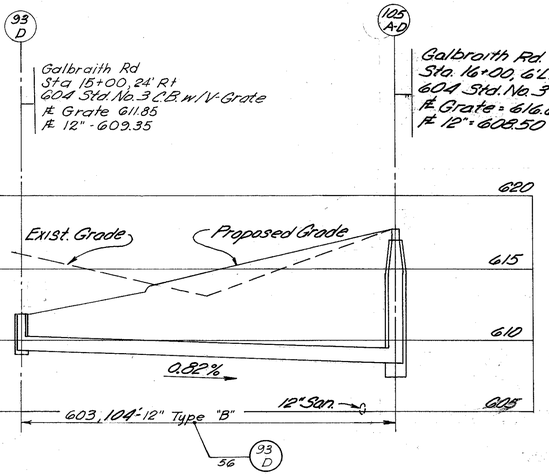
PROPOSED STORM SEWER SYSTEM
Sta. 6+00 Drive "B" To 16+83 Galbraith Rd.



PROPOSED STORM SEWER SYSTEM
Sta. 18+05 To 16+83 Galbraith Rd.



PROPOSED STORM SEWER SYSTEM
Sta. 15+00 To Sta. 16+00 Galbraith Rd



Scale: Hor. 0 10 20 40
Vert. 0 5 10

DEVELOPED | CHECKED

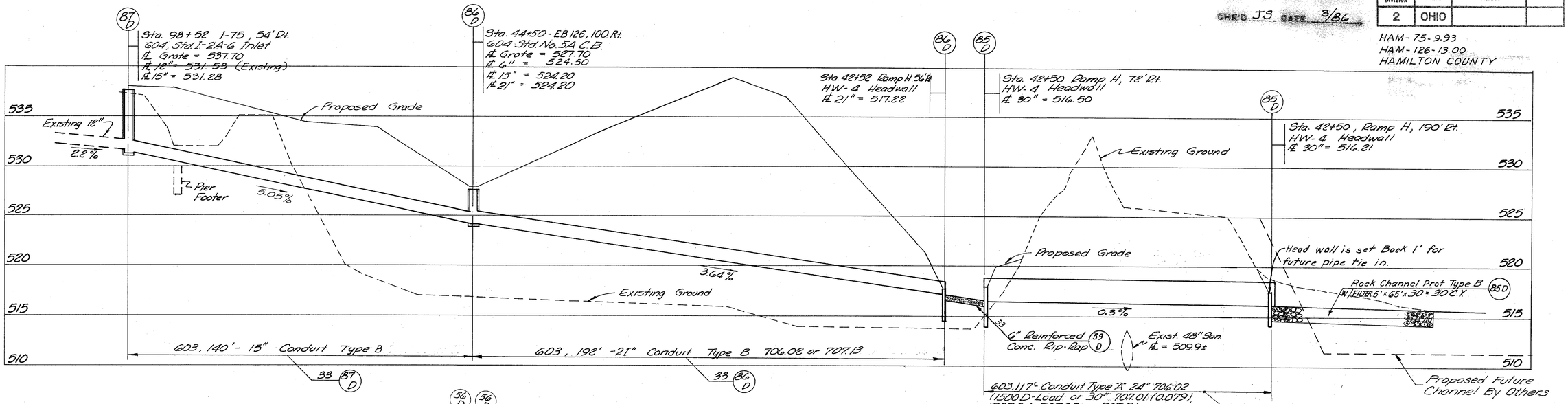
SEWER PROFILES

CALC. DS DATE 3/86
CHK'D JJ DATE 3/86

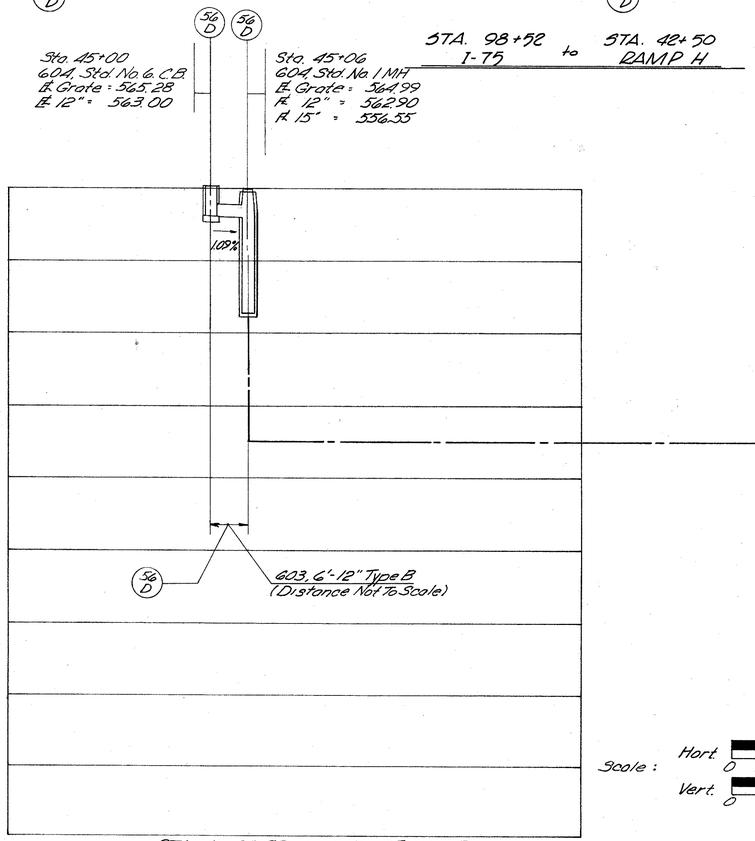
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

322 / 787

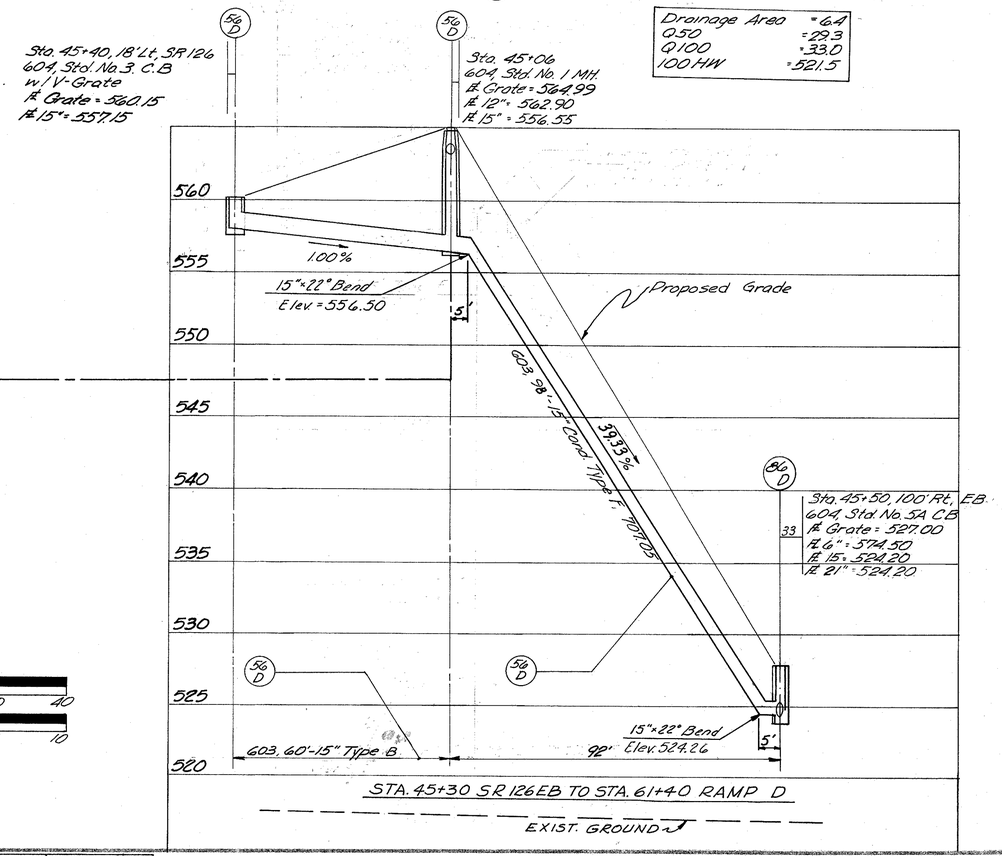
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



STA. 98+52 I-75 to STA. 42+50 RAMP H



STA. 45+00 EB to STA. 45+06 EB
SR 126



STA. 45+30 SR 126EB TO STA. 61+40 RAMP D
EXIST. GROUND

Drainage Area	= 6.4
Q 50	= 29.3
Q 100	= 33.0
100 HW	= 521.5

DEVELOPED	CHECKED

SEWER PROFILES

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

323
787

HAMILTON COUNTY
HAM-75/126-9.93/13.00

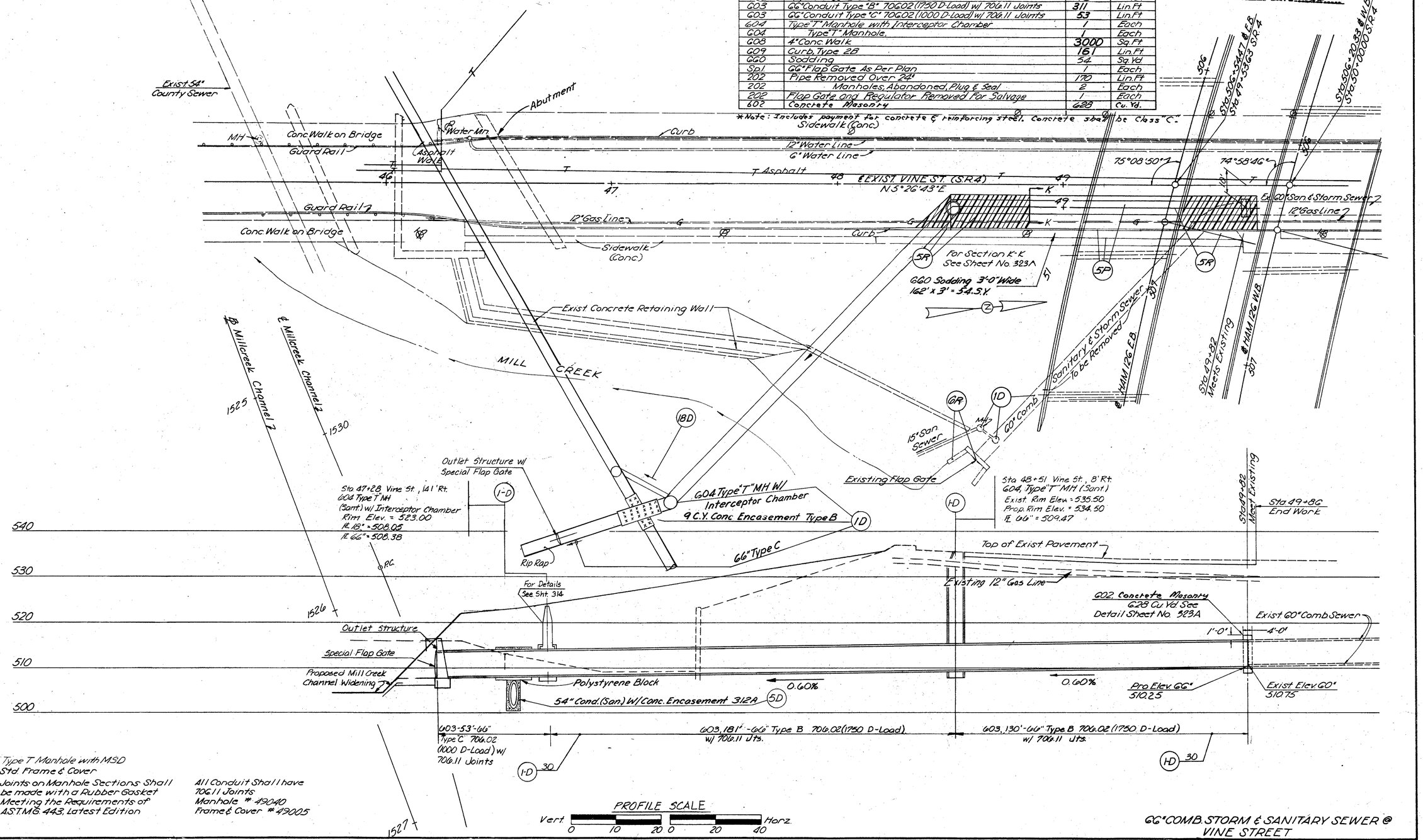
CALC. REA DATE 3/86

CHK'D DS DATE 3/86

ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
407	Cover Aggregate	1	Ton
305	8" Concrete Base, as Per Plan	266	Sq. Yd
404	Asphalt Concrete	9	Cu. Yd
407	Tack Coat	27	Gal.
503	Cofferdams, Cribs & Sheeting	LS	Lump Sum
310	6" Subbase, Type II, as Per Plan	44	Cu. Yd
* Special	Outlet Structure	LS	Lump Sum
402	Asphalt Concrete	13	Cu. Yd.
603	66" Conduit Type "B" 706.02 (1750 D-Load) w/ 706.11 Joints	311	Lin. Ft
603	66" Conduit Type "C" 706.02 (1000 D-Load) w/ 706.11 Joints	53	Lin. Ft
604	Type "T" Manhole with Interceptor Chamber	1	Each
604	Type "T" Manhole,	1	Each
608	4" Conc. Walk	3000	Sq. Ft
609	Curb, Type 2B	161	Lin. Ft
660	Sodding	54	Sq. Yd
Sp.1	66" Flap Gate As Per Plan	1	Each
202	Pipe Removed Over 24"	170	Lin. Ft
202	Manholes, Abandoned, Plug & Seal	2	Each
202	Flap Gate and Regulator Removed For Salvage	1	Each
602	Concrete Masonry	628	Cu. Yd.

*Note: Includes payment for concrete & reinforcing steel. Concrete shall be Class "C".



Note:

Type T Manhole with MSD Std. Frame & Cover

Joints on Manhole Sections Shall be made with a Rubber Gasket Meeting the Requirements of A.S.T.M.G. 443, Latest Edition

All Conduit Shall have 706.11 Joints

Manhole # 49040

Frame & Cover # 49005

66" COMB. STORM & SANITARY SEWER @ VINE STREET

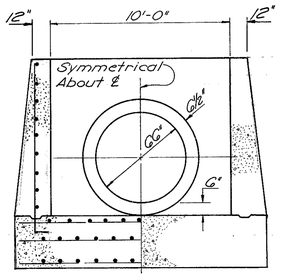
DEVELOPED	CHECKED
HRS 5-10-71	DJP 11-18-71

CALC. JJ DATE 3/86
CHK'D TEA DATE 3/86

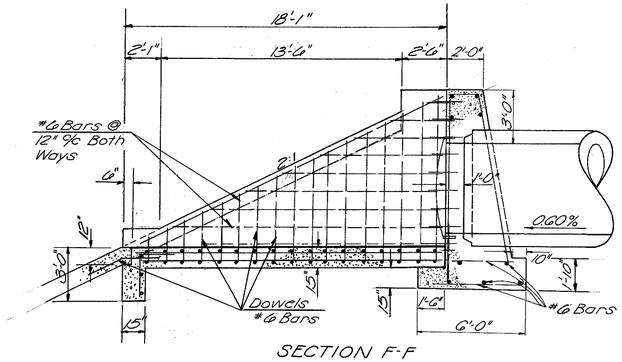
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

323-A (187)

HAMILTON COUNTY
HAM-75-9.93
HAM-126-13.00

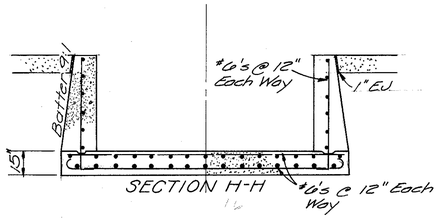


SECTION G-G

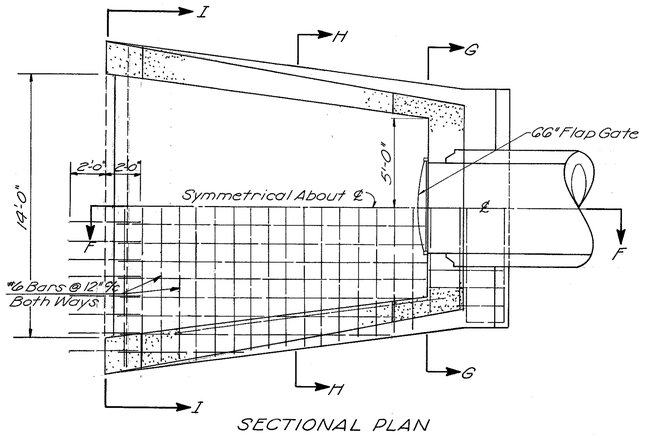


SECTION F-F

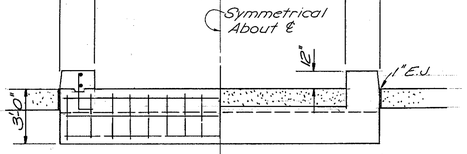
Note: All steel shall have a minimum cover of 2"



SECTION H-H

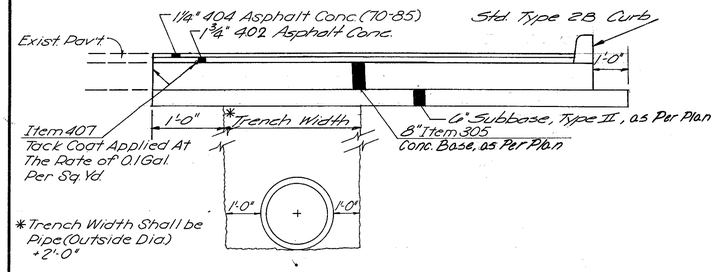


SECTIONAL PLAN

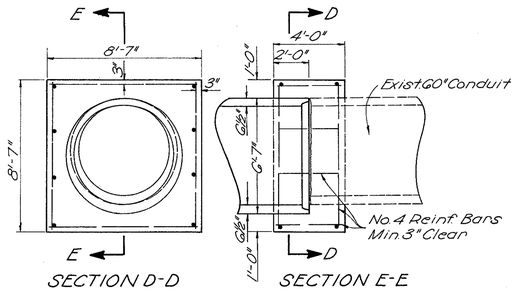


SECTION I-I

OUTLET STRUCTURE DETAIL FOR 66" CONDUIT
No Scale
Note: Payment shall be made by Item- Special - Outlet Structure

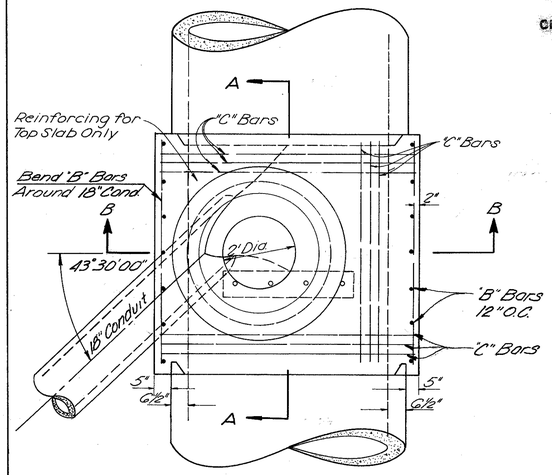


DETAIL
PAVEMENT REPLACEMENT
SECTION K-K
No Scale

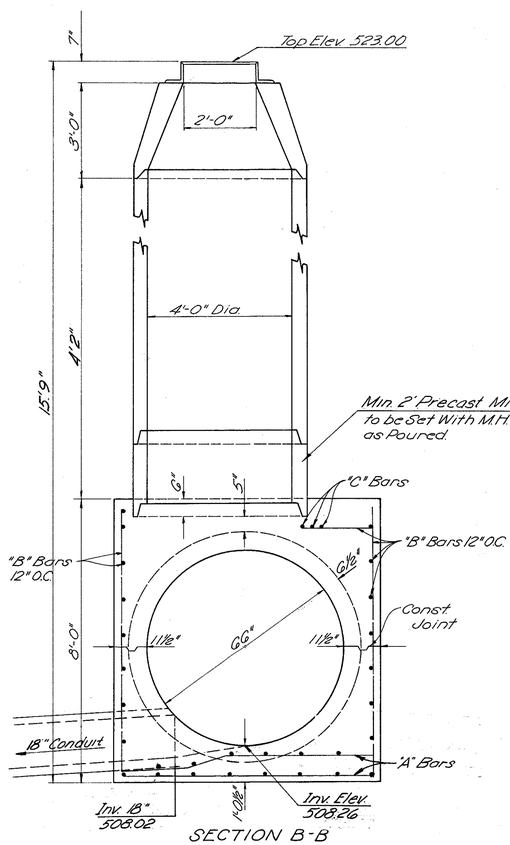


SECTION D-D SECTION E-E

CONCRETE COLLAR
No Scale

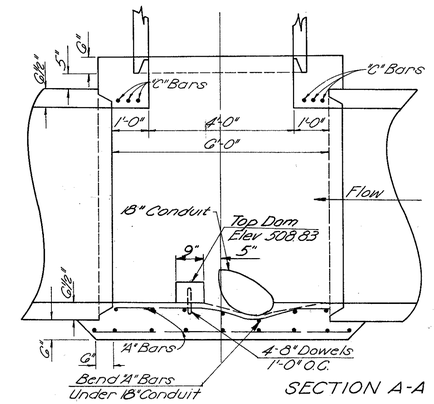


PLAN



SECTION B-B

"A", "B" and "C" bars — No. 6 bars
"A" and "B" bars — 12" O.C. as shown
"C" bars — 3" O.C. as shown



SECTION A-A

Scale: 0 1 2 4

604 TYPE "T" MANHOLE w/ INTERCEPTOR CHAMBER

DETAILS FOR 66" COMB. STORM & SAN. SEWER IN VINE STREET

HARRY BALKE ENGINEERS

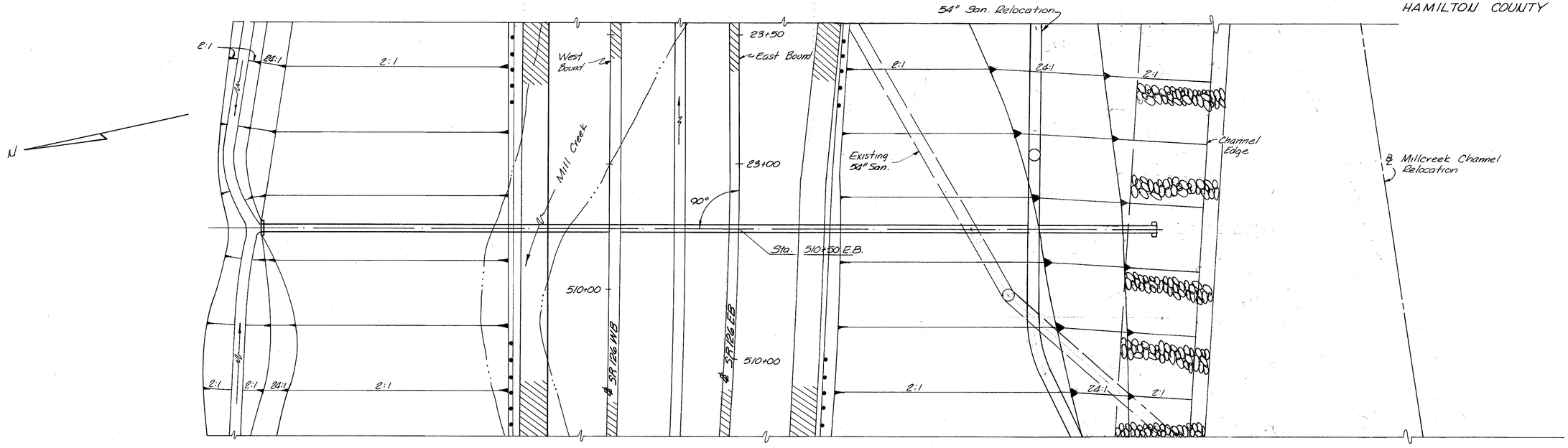
DEVELOPED	CHECKED
H.R.S. 5-28-71	D.S.P. 11-10-71

CHK'D JS DATE 3/86
CHK'D REA DATE 3/86

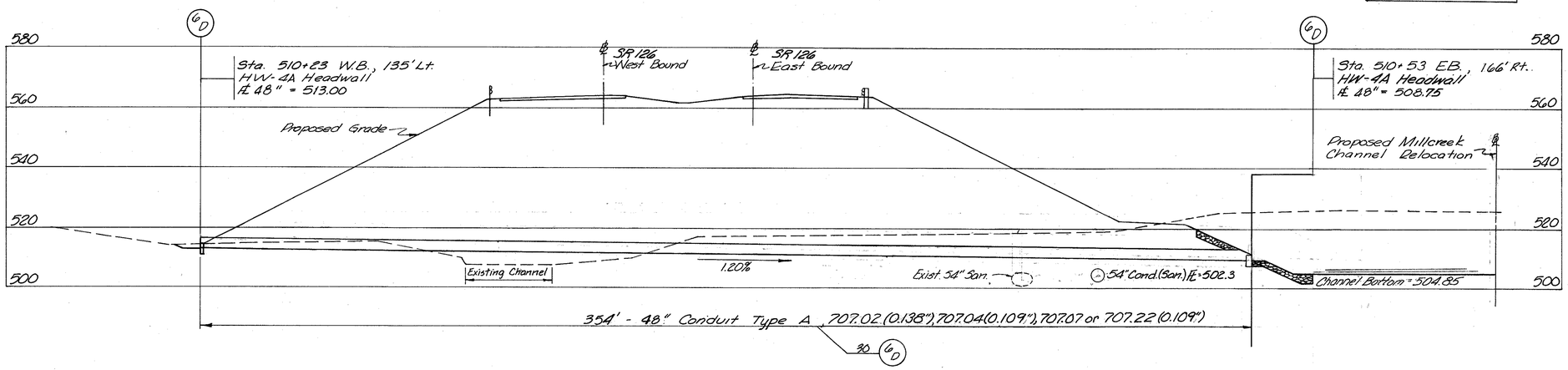
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

324
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



Drainage Area	= 25.3
Q50	= 82.2
Q100	= 93.9
100 H.W.	= 518.0



ESTIMATED QUANTITIES

602	Concrete Masonry Class "C"	220 Cu. Yd.
603	Conduit Type A: 48": 707.02 (0.138"), 707.04 (0.109"), 707.07 or 707.22 (0.109")	354 Lin. Ft.
660	Sodding	4 Sq. Yd.

Scale
10 0 20 40

DEVELOPED	CHECKED

CULVERT STA. 510+50 EASTBOUND

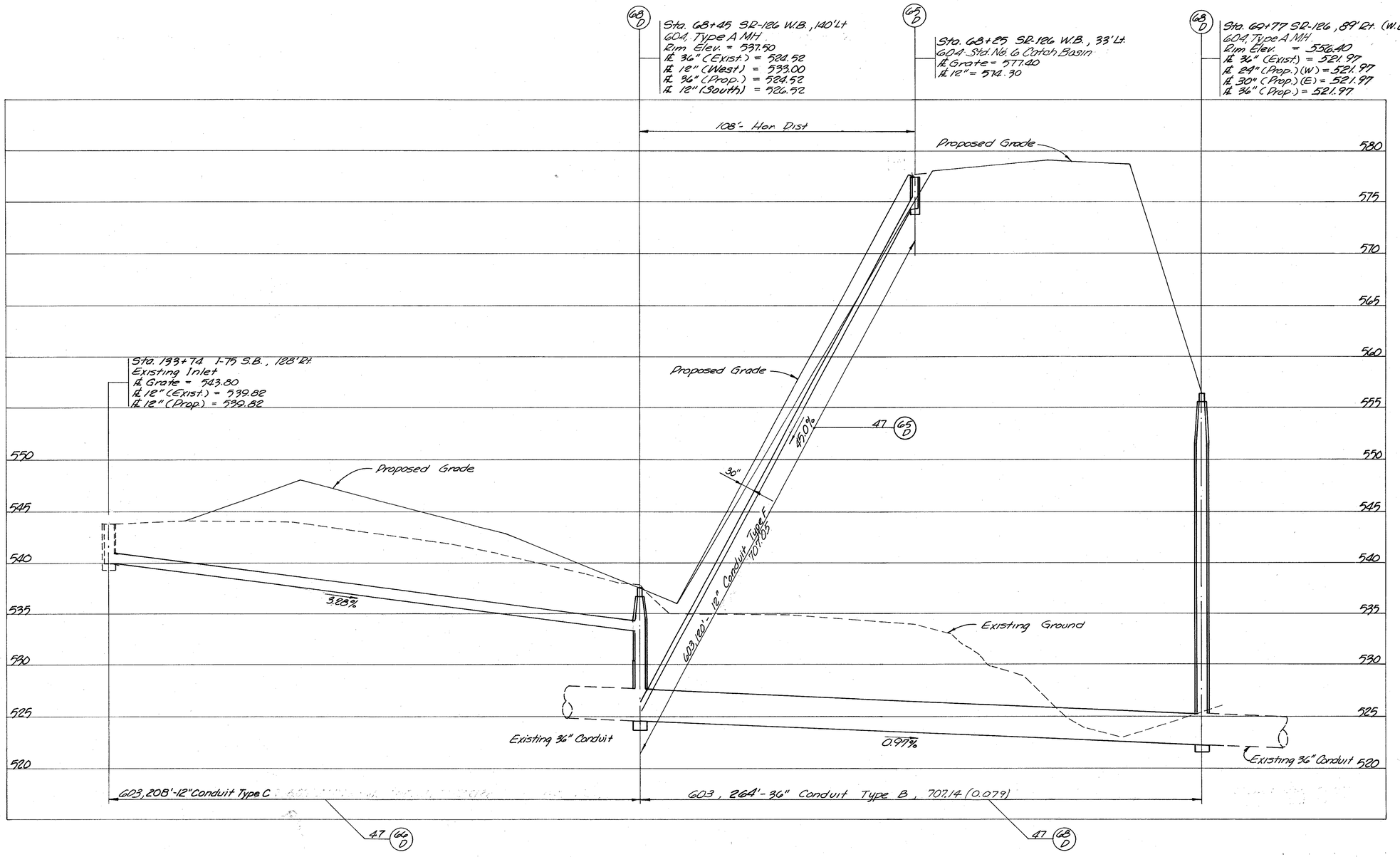
CALC. DS DATE 3/86

CHKD. REA DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

325
737

HAM- 75- 9.93
HAM-126-13.00
HAMILTON COUNTY



STA. 133+74 I-75 S. B to STA. 60+50 STATE ROAD 186 W.B.

Scale: Hor. 0 10 20 40
Vert. 0 5 10

DEVELOPED	CHECKED

SEWER PROFILES

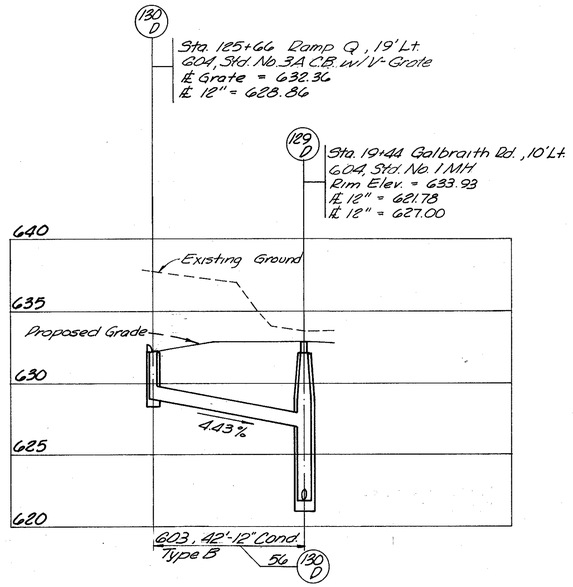
CALC. PS DATE 3/86

CHK'D JS DATE 3/86

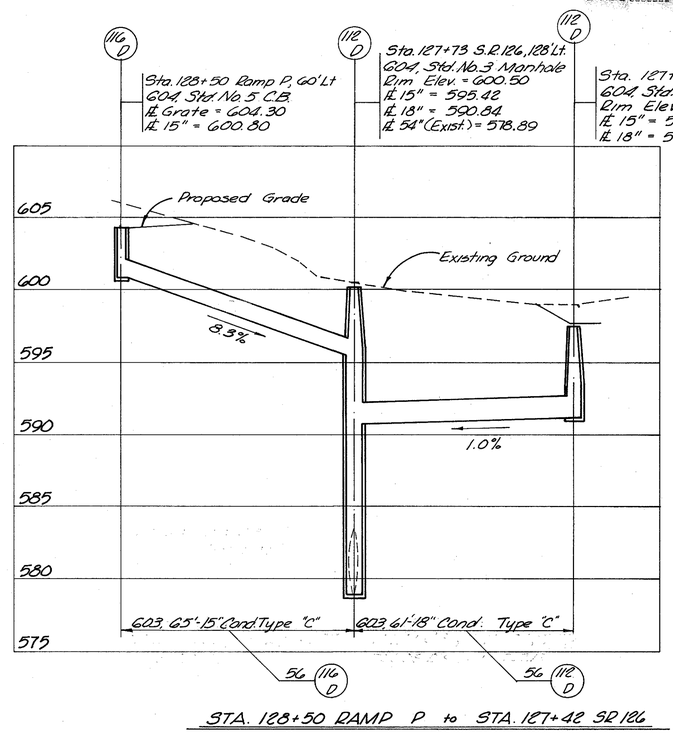
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

326 / 787

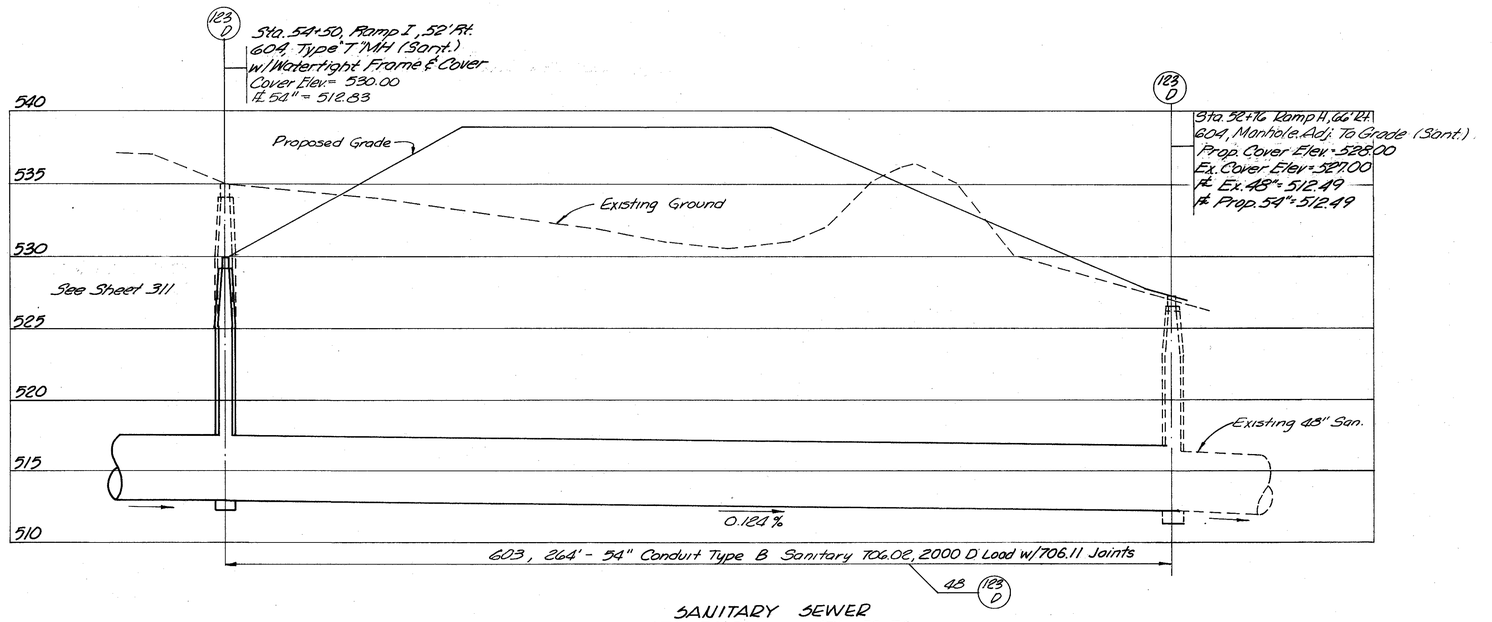
HAM- 75- 9.93
HAM-126-13.00
HAMILTON COUNTY



STA. 125+66 RAMP Q to STA. 19+44 GALBRAITH ROAD



STA. 128+50 RAMP P to STA. 127+42 SR 126



SANITARY SEWER
STA. 54+50 RAMP I to STA. 52+76 RAMP H

Scale: Hor. 0 10 20 40
Vert. 0 5 10

DEVELOPED	CHECKED

SEWER PROFILES

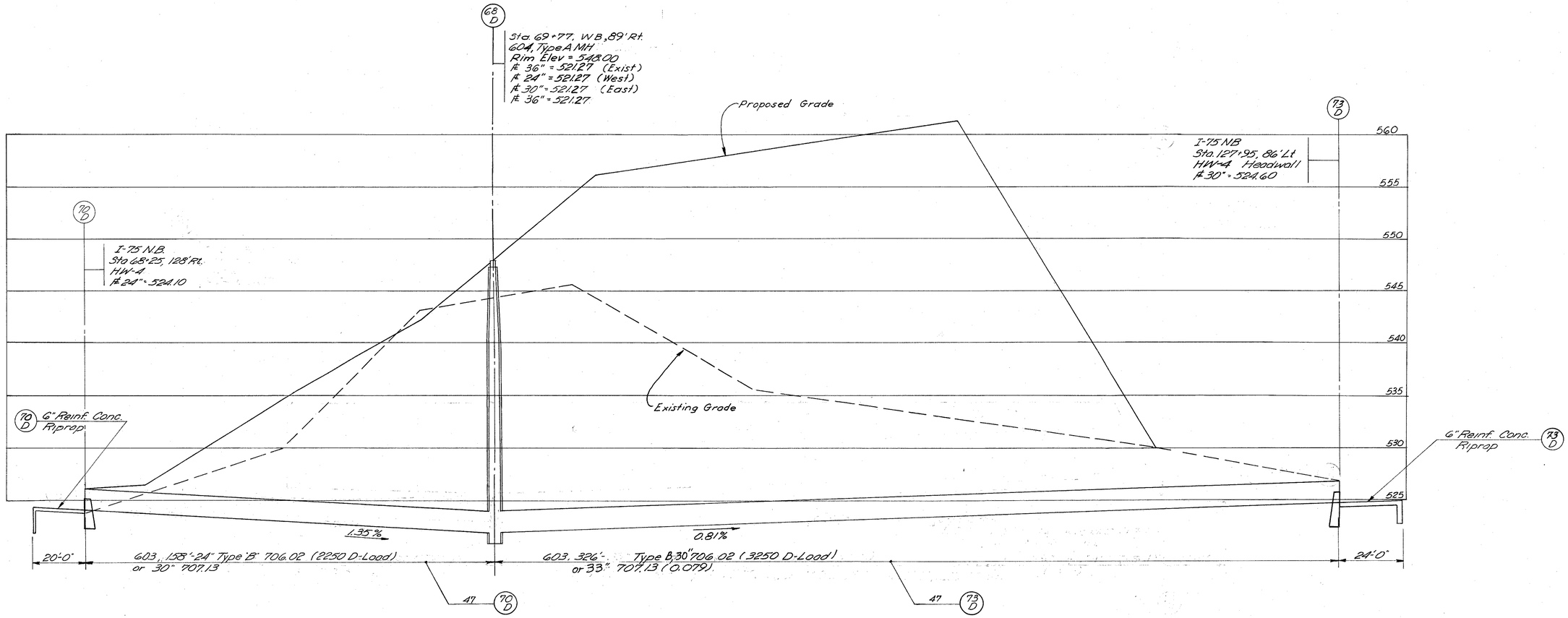
CALC. TS DATE 3/26

CHK'D DS DATE 3/26

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

327
781

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



PROPOSED STORM SEWER SYSTEM
Sta 124+69 to Sta. 127+66 I-75 N.B.

Scale: Hor. 0 10 20 40
Vert. 0 5 10

DEVELOPED	CHECKED

SEWER PROFILES

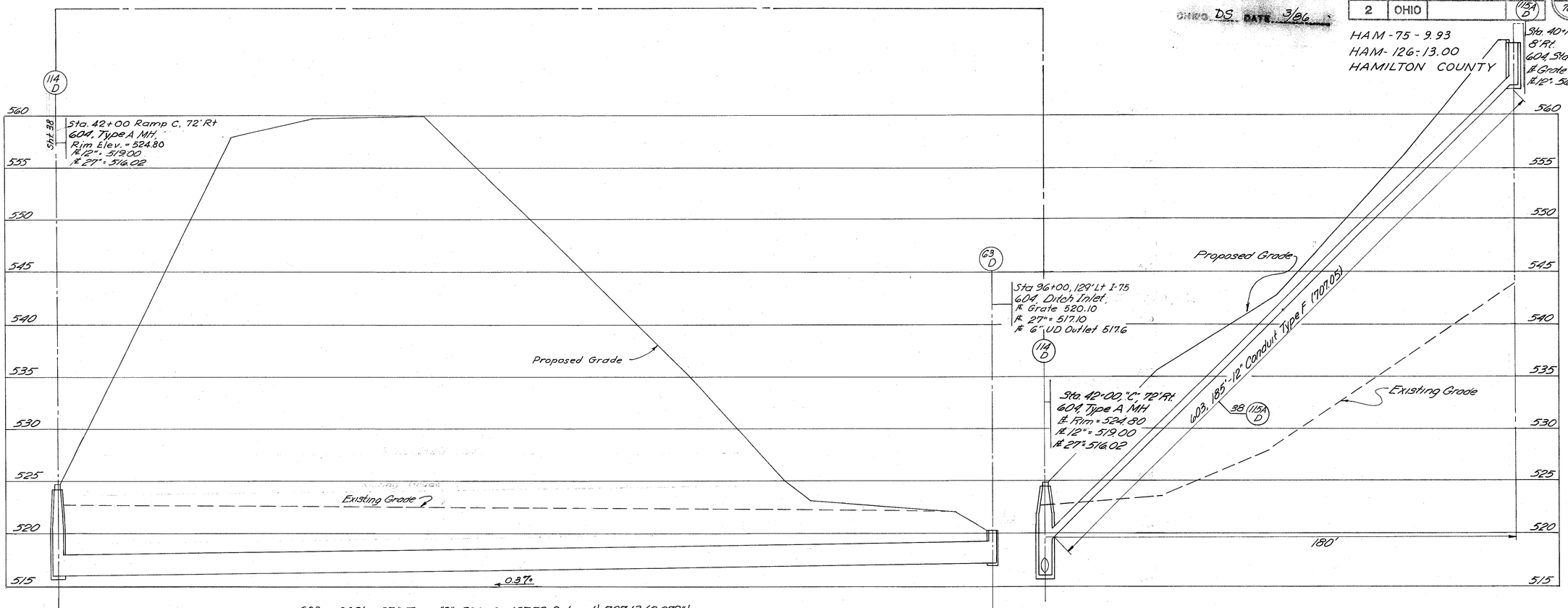
CALC. JS DATE 3/86

CHK'D DS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		115A D

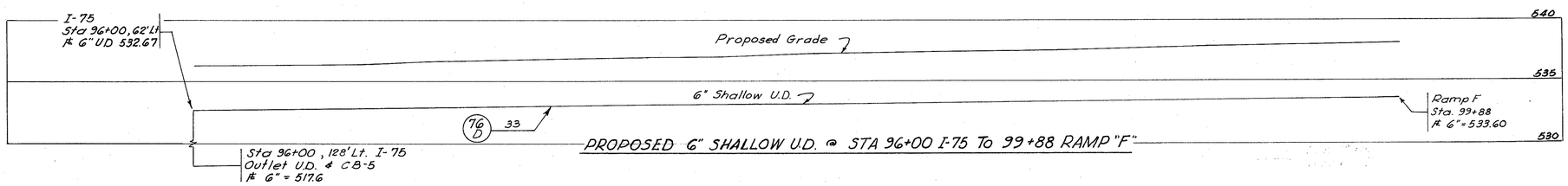
328 / 787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



PROPOSED STORM SEWER SYSTEM

Sta. 42+00 Ramp "C" To Sta. 96+00 I-75



PROPOSED 6" SHALLOW U.D. @ STA 96+00 I-75 To 99+88 RAMP "F"

Scale: Hor. 0 10 20 40
Vert. 0 5 10

DEVELOPED	CHECKED

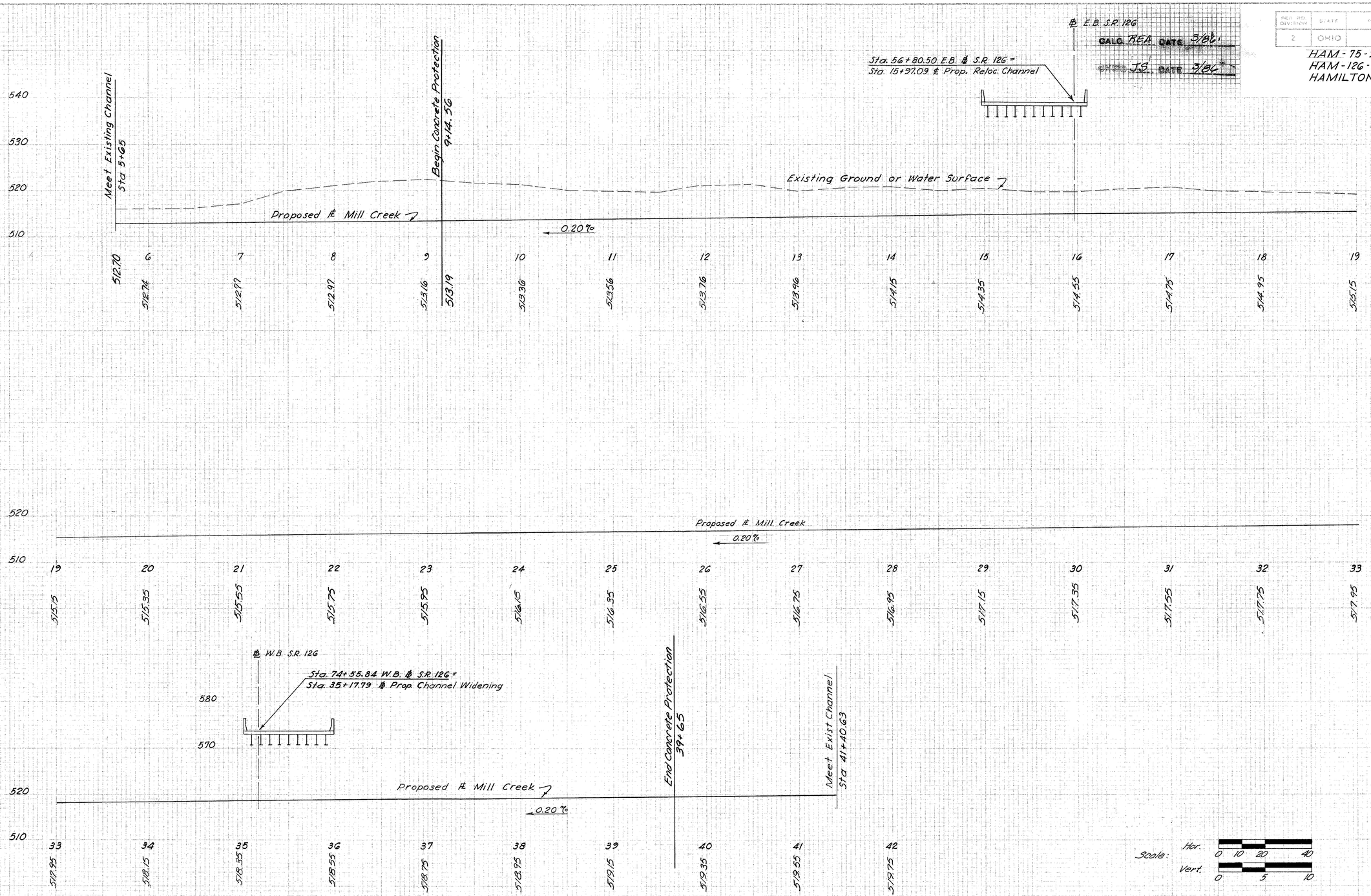
SEWER & UNDERDRAIN PROFILE

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

329
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

CALC. REA DATE 3/86
CHKD. JS DATE 3/86



DEVELOPED | CHECKED

PROFILE: PROPOSED RELOCATED MILL CREEK

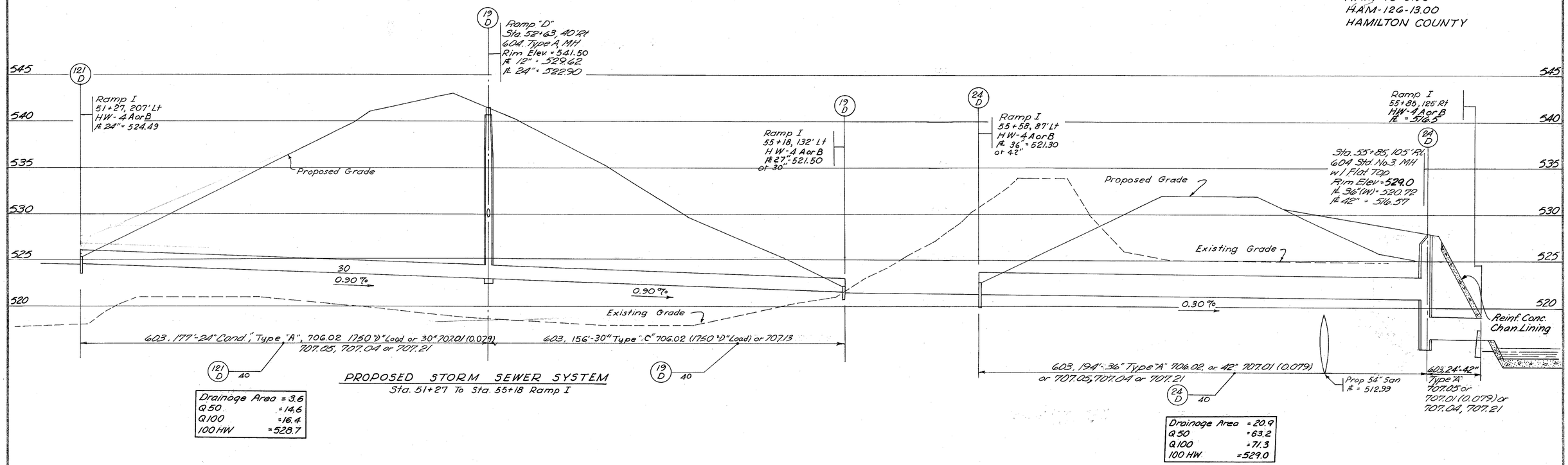
CALC. DS DATE 3/86

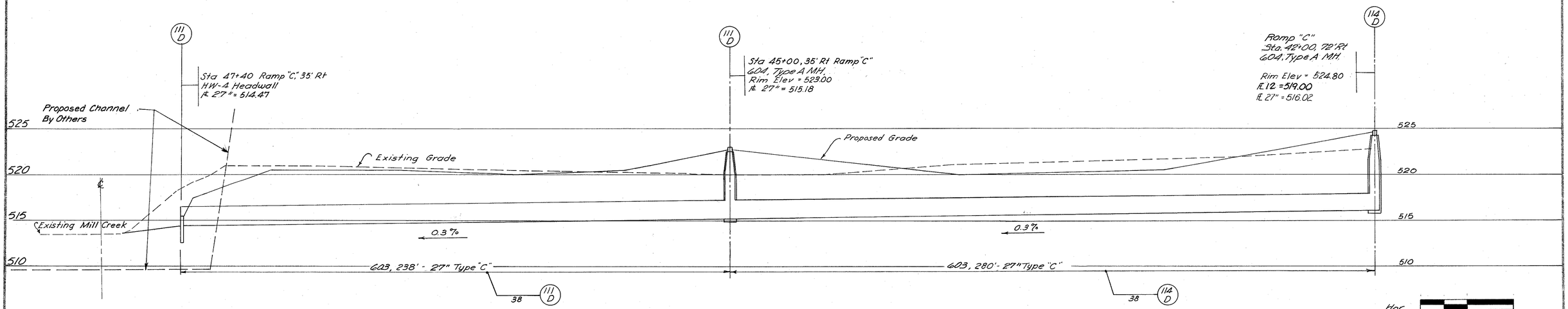
CHKD. REA DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

330
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY





PROPOSED STORM SEWER SYSTEM
Sta. 47+40 To Sta. 42+00 Ramp "C"

DEVELOPED	CHECKED

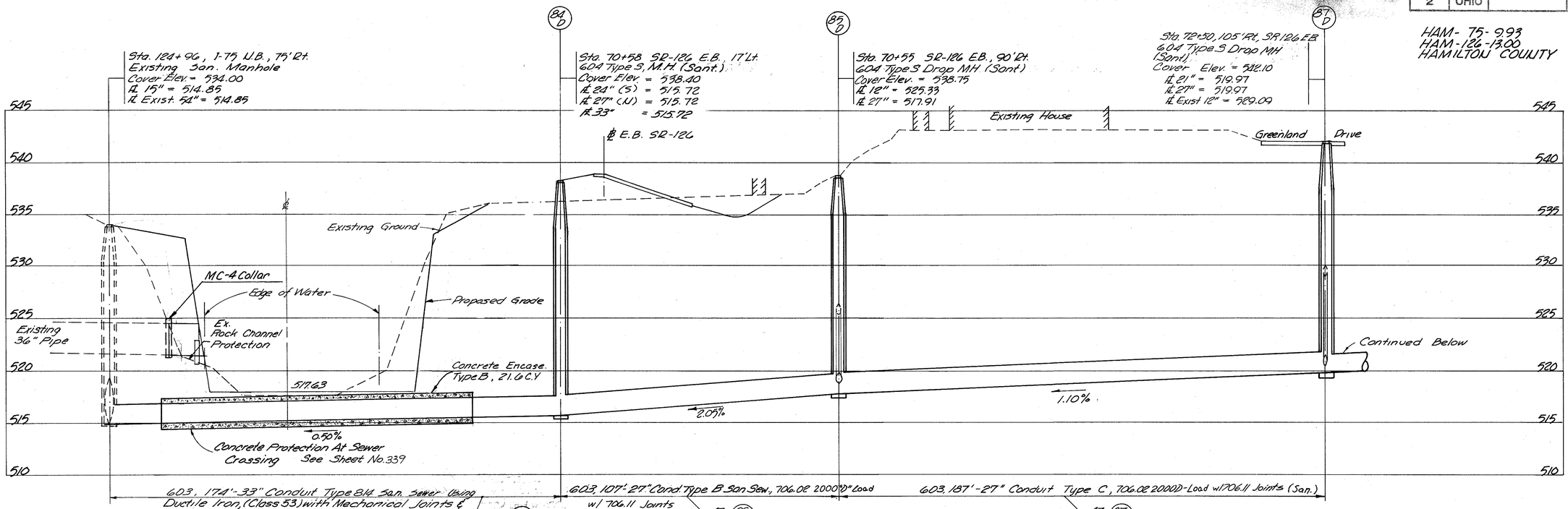
SEWER PROFILES

DRAWN DS DATE 3/86
CHK'D JS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

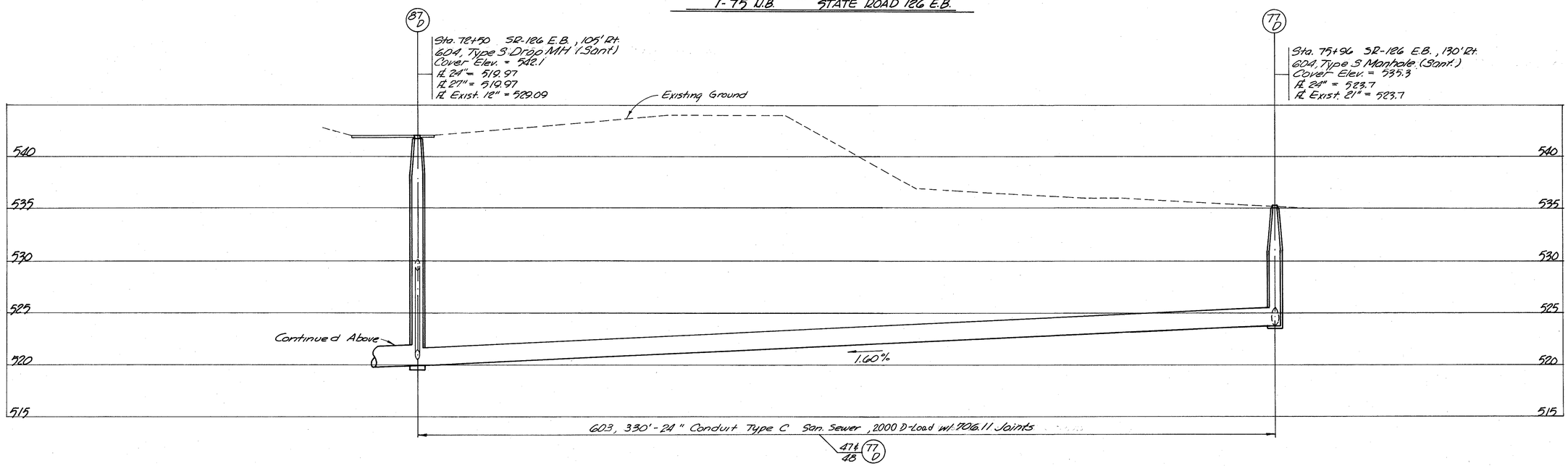
331 / 187

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



Scale: Hor. 0 10 20 40
Vert. 0 5 10

STA. 124+96 I-75 N.B. to STA. 75+96 STATE ROAD 126 E.B.



DEVELOPED	CHECKED

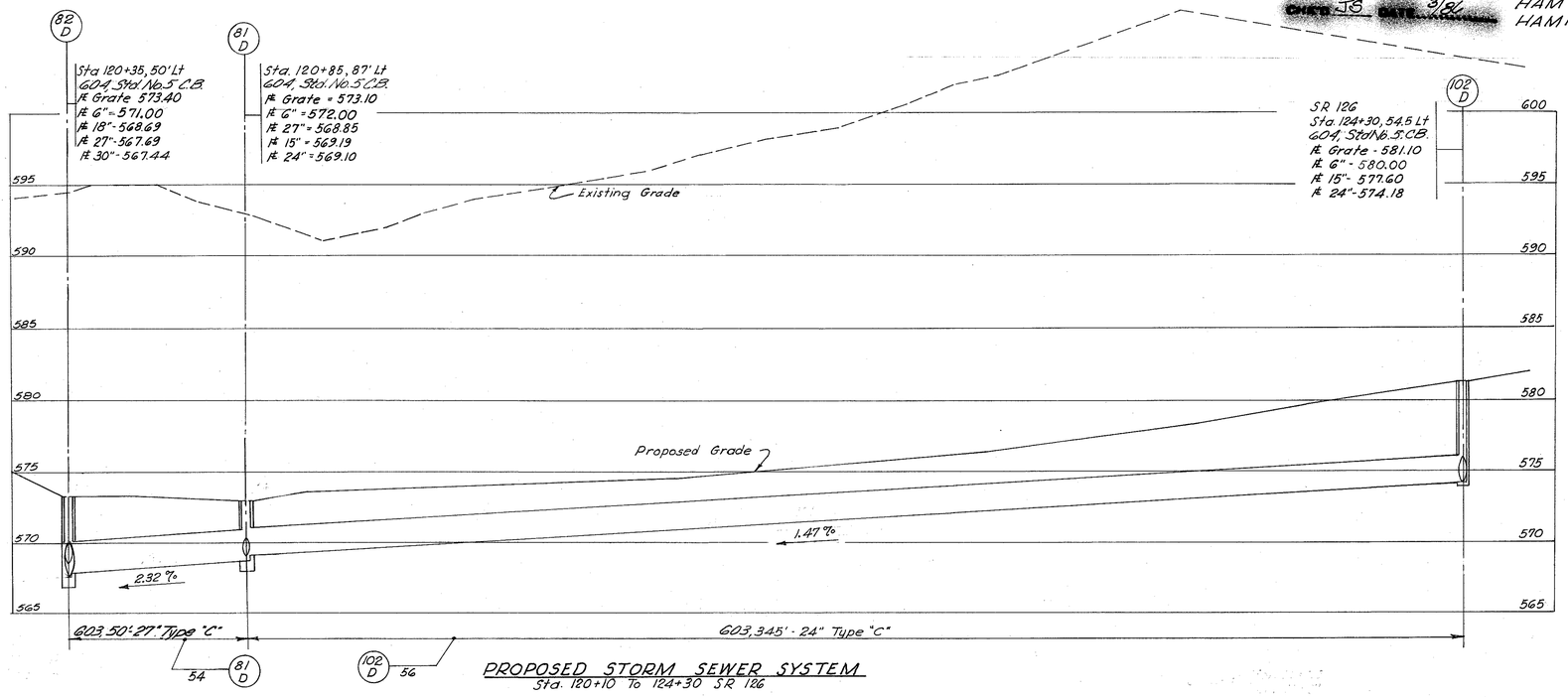
SANITARY SEWER PROFILE

DRWN REA DATE 3/86
CHKD JS DATE 3/86

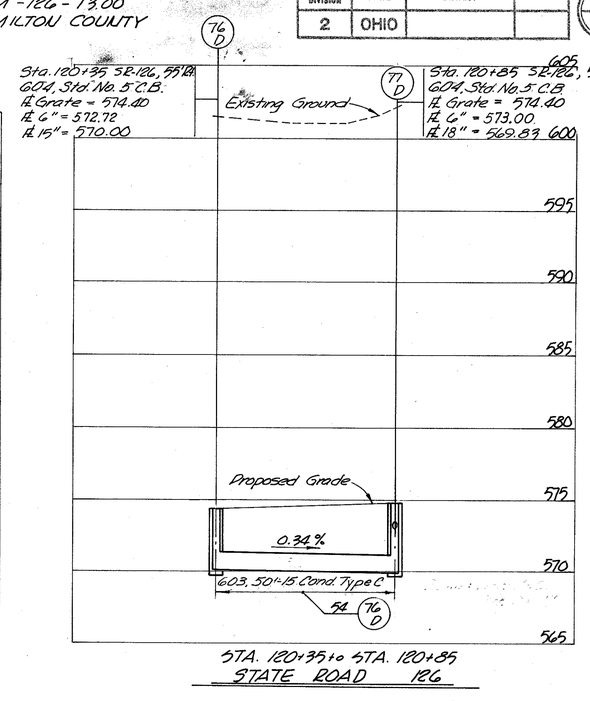
HAM - 75 - 9.93
HAM - 126 - 13.00
HAMILTON COUNTY

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

332 / 787

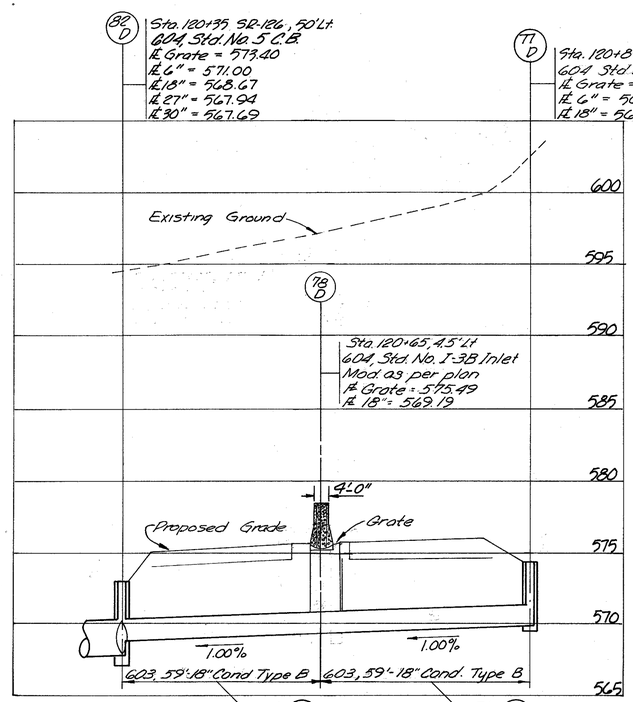


PROPOSED STORM SEWER SYSTEM
Sta. 120+10 To 124+30 SR 126

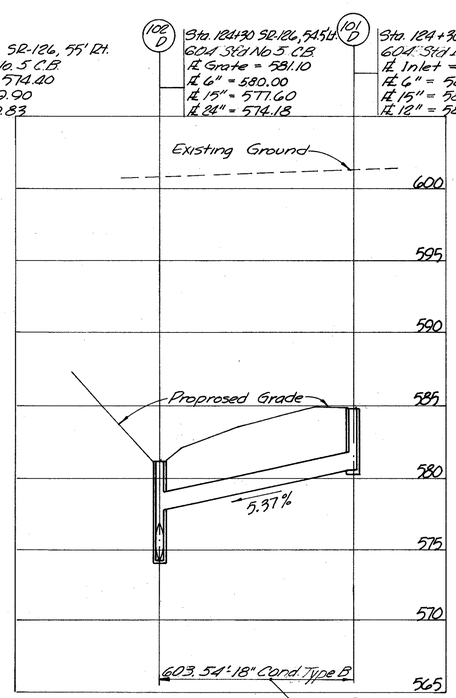


STA. 120+35 to STA. 120+85
STATE ROAD 126

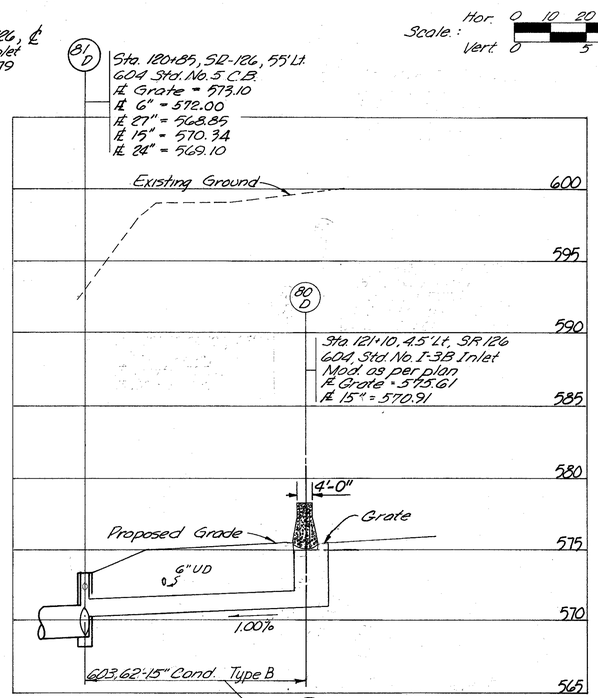
Scale: Hor. 0 10 20 40
Vert. 0 5 10



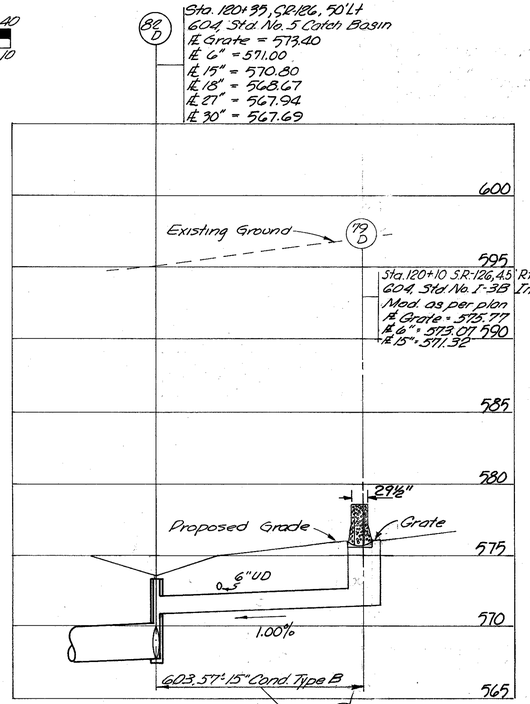
STA. 120+35 to STA. 120+85
STATE ROAD 126



STA. 121+30
STATE ROAD 126



STA. 120+85 to STA. 121+10
STATE ROAD 126



STA. 120+35 to STA. 120+10
STATE ROAD 126

DEVELOPED	CHECKED

SEWER PROFILES

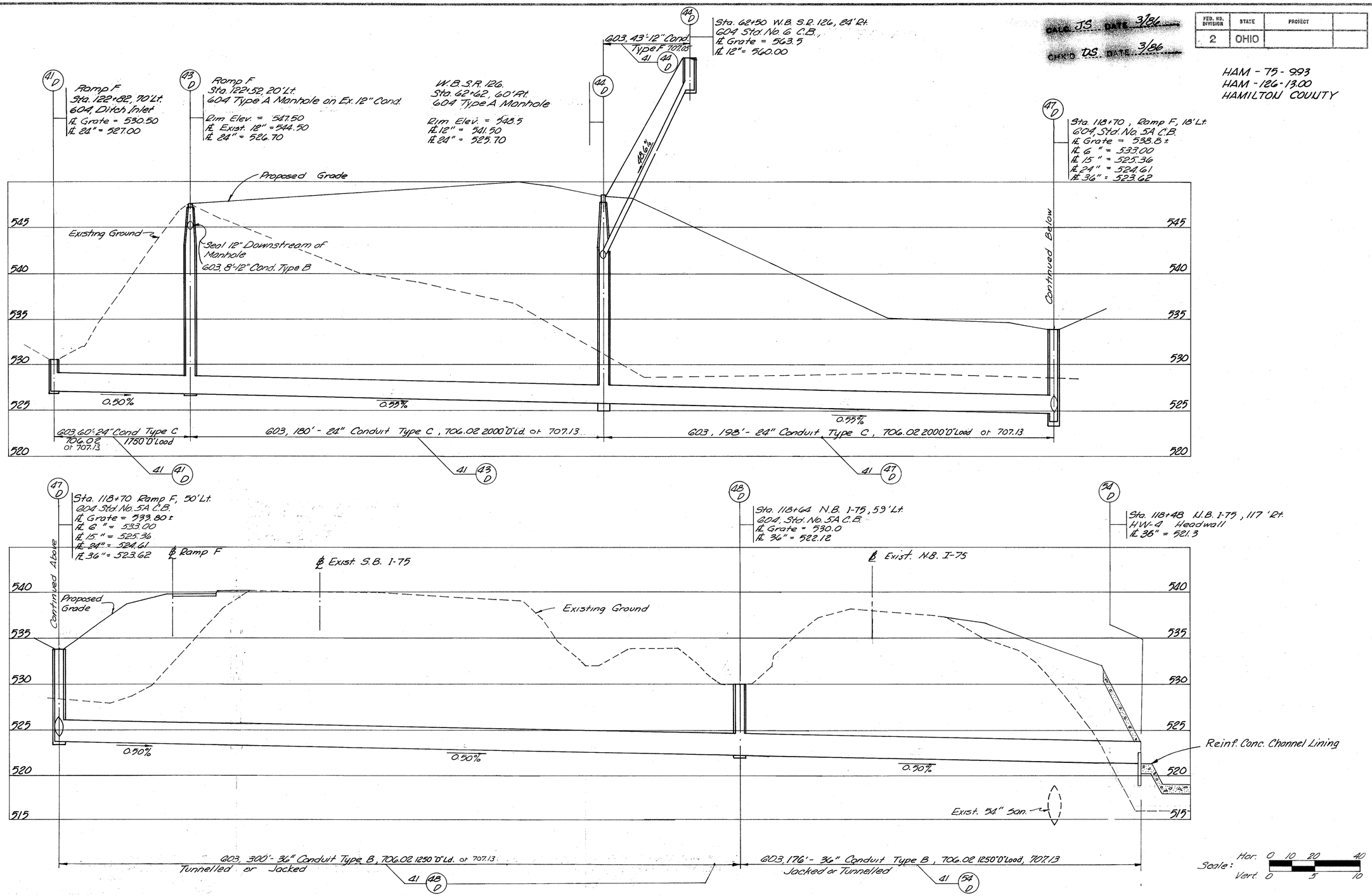
CALC. JS DATE 3/86

CHK'D DS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

334 787

HAM - 75 - 9.93
HAM - 126 - 13.00
HAMILTON COUNTY



STA. 122+82 RAMP F to STA. 118+50 N.B. I-75

DEVELOPED	CHECKED

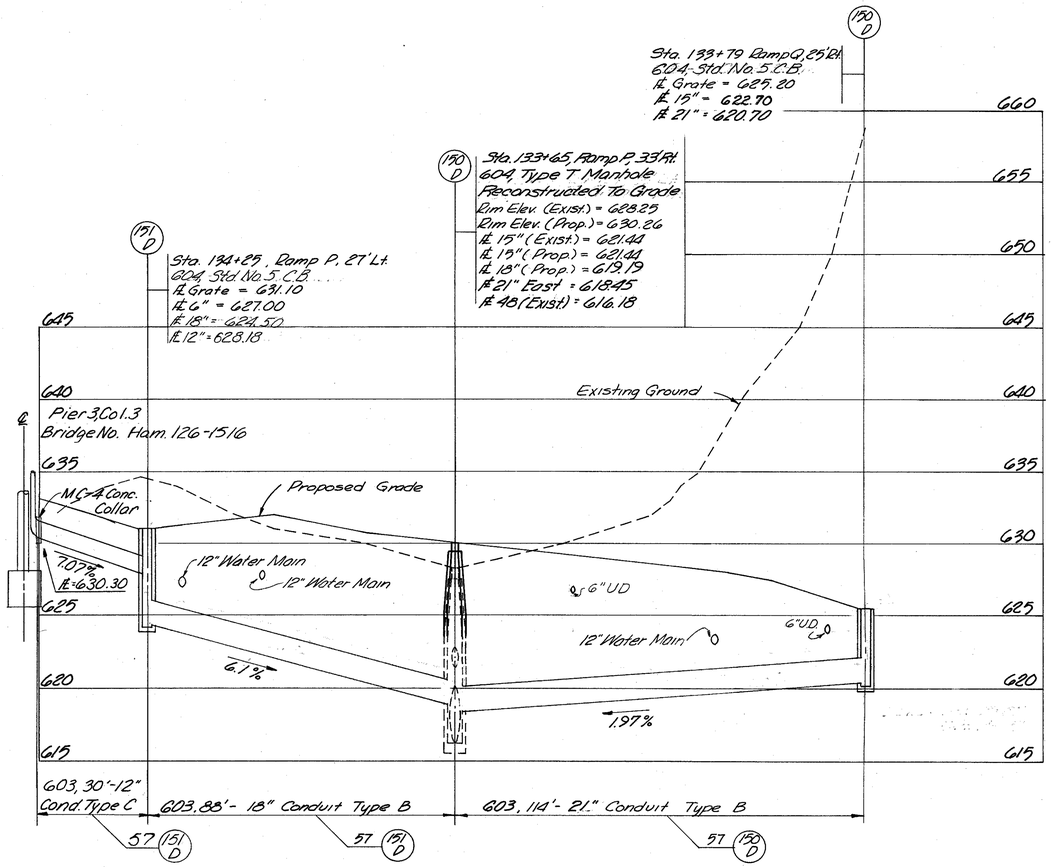
SEWER PROFILES

CALC. JS DATE 3/86
CHK'D DS DATE 3/86

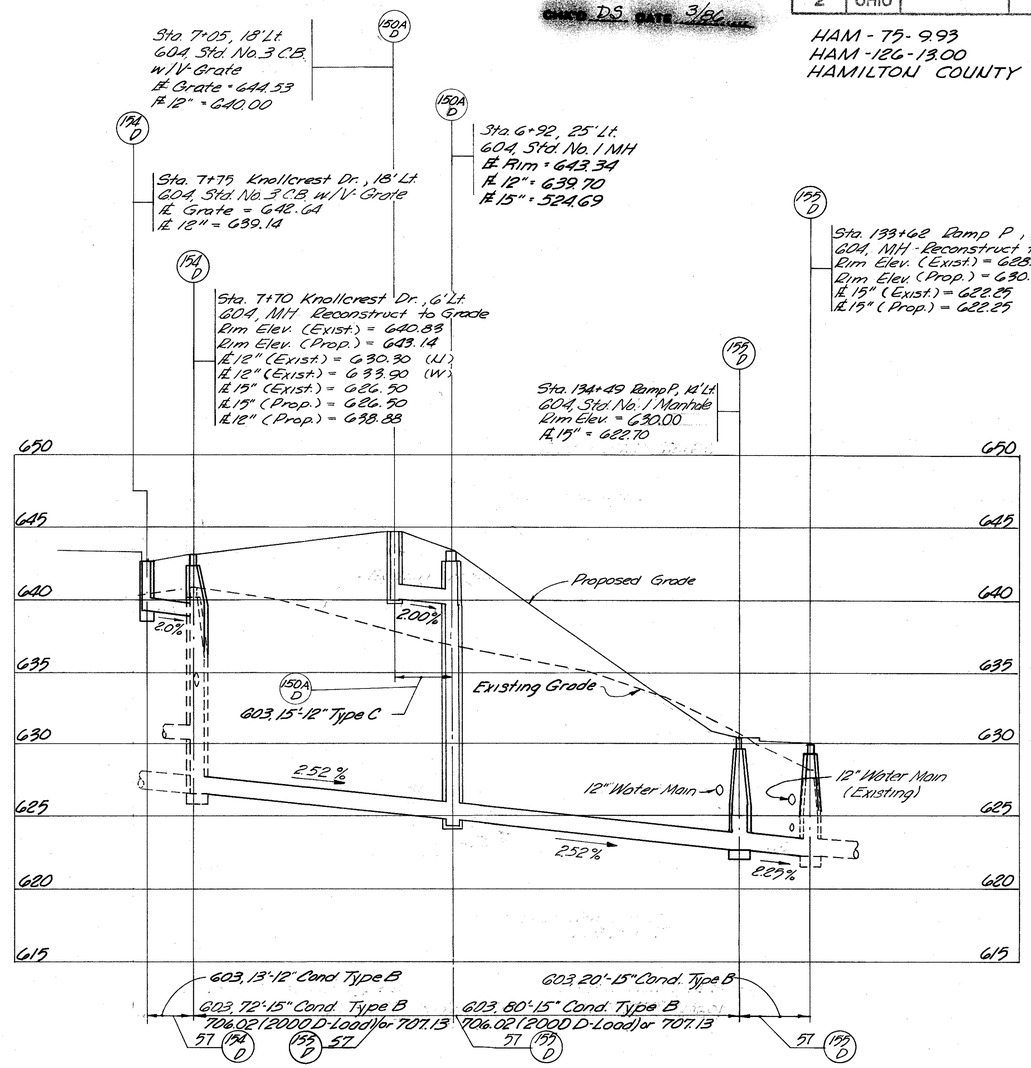
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

335
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



STA. 134+25 RAMP P to STA. 133+79 RAMP Q



STA. 7+75 KNOLLCREST DRIVE to STA. 133+62 RAMP P

Scale: Hor. 0 10 20 40
Vert. 0 5 10

DEVELOPED	CHECKED

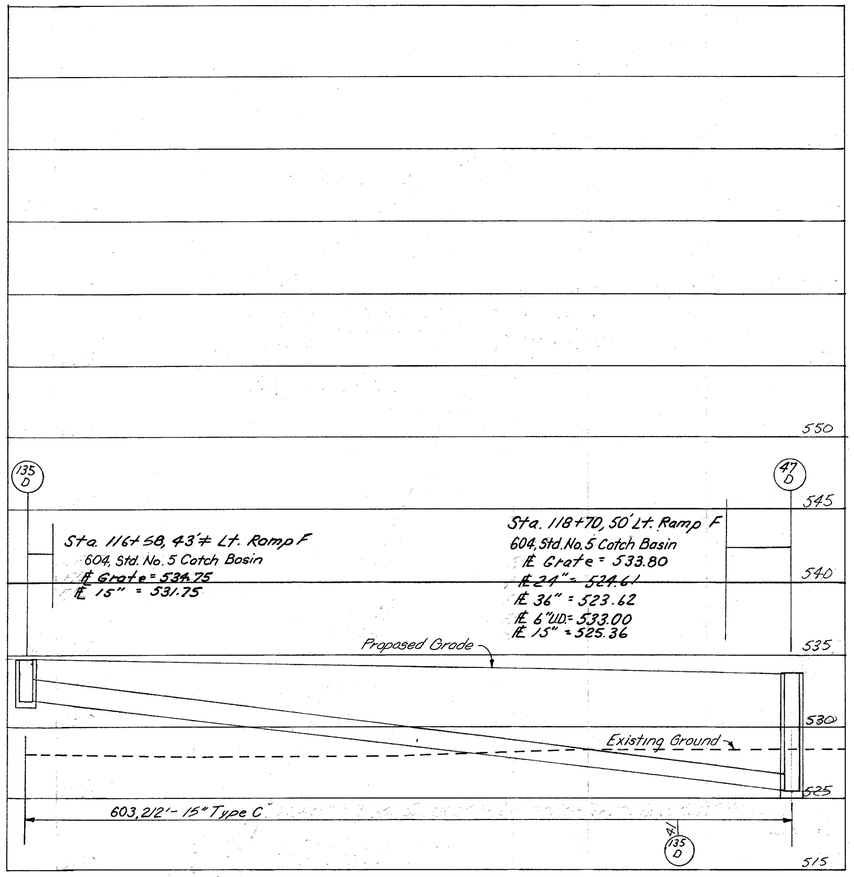
SEWER PROFILES

CALC REA DATE 3/86
CHK'D DS DATE 3/86

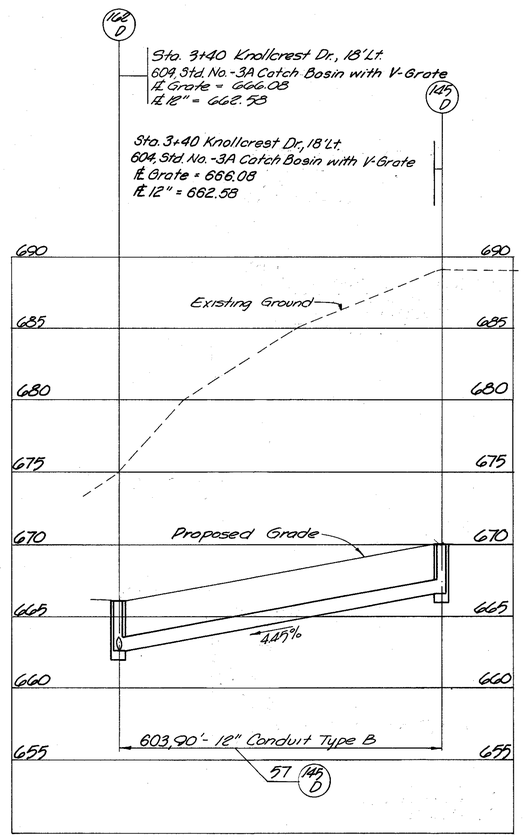
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

336
787

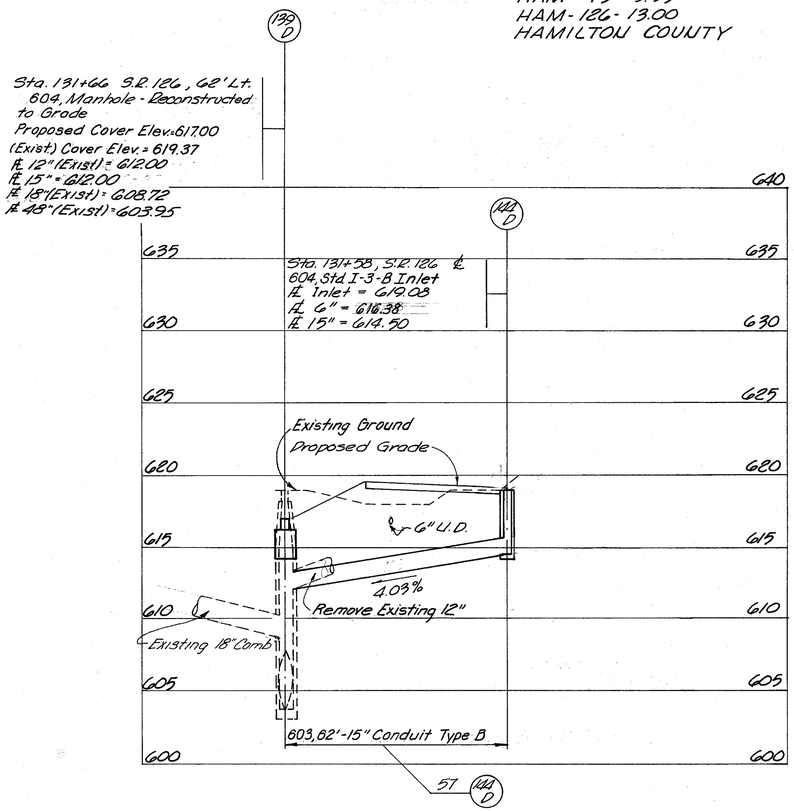
HAM- 75- 9.93
HAM-126- 13.00
HAMILTON COUNTY



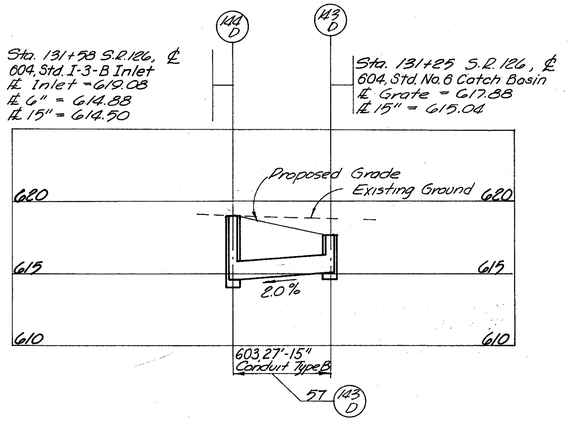
STA 116+48 to STA 118+70
RAMP F



STA. 2+50 to STA. 3+40
KNOLLCREST DRIVE



STA. 131+66 to STA. 131+52
STATE ROAD 126



STA. 131+58 to STA. 131+25
STATE ROAD 126

Scale
Horizontal
0 20' 40'

Scale
Vertical
0 5' 10'

DEVELOPED	CHECKED

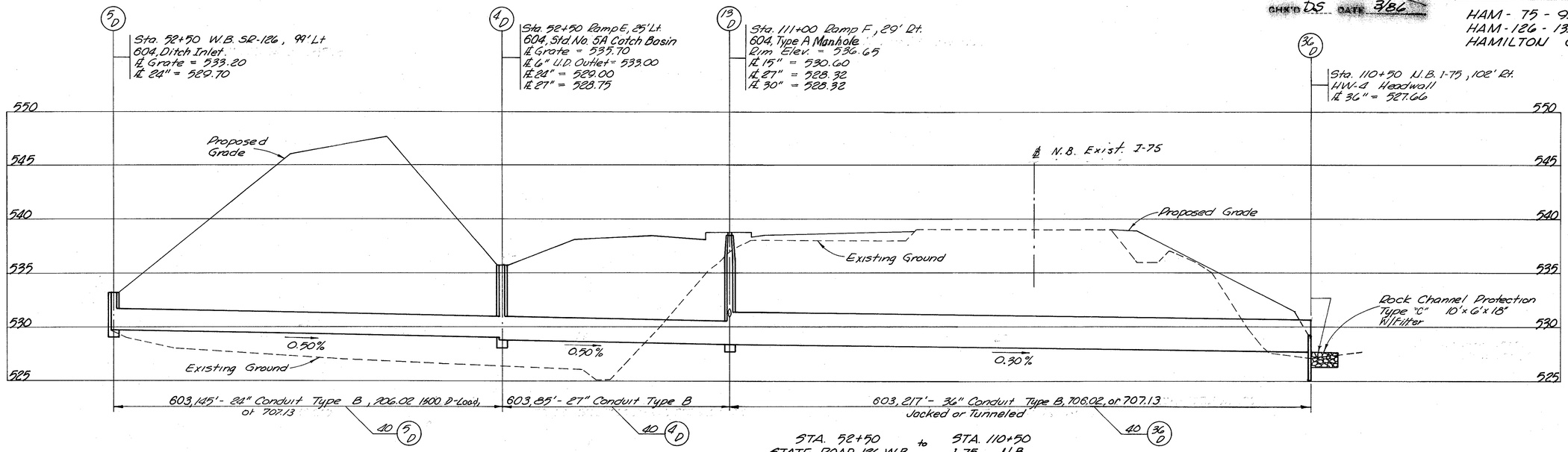
SEWER PROFILES

CALC. REA DATE 3/86
CHK'D DS DATE 3/86

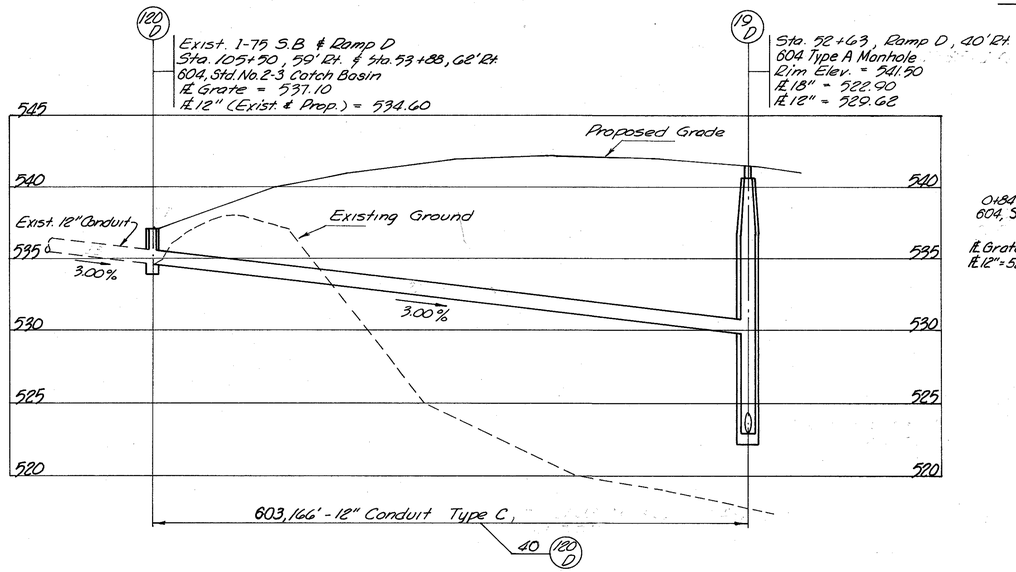
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

337
787

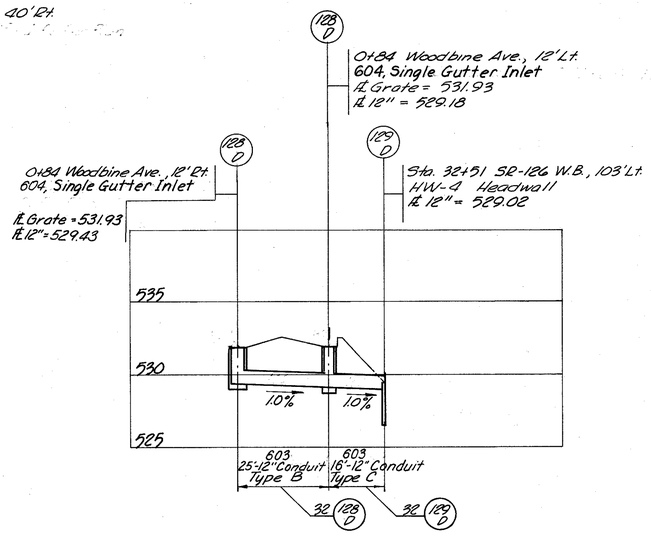
HAM - 75 - 9.93
HAM - 126 - 13.00
HAMILTON COUNTY



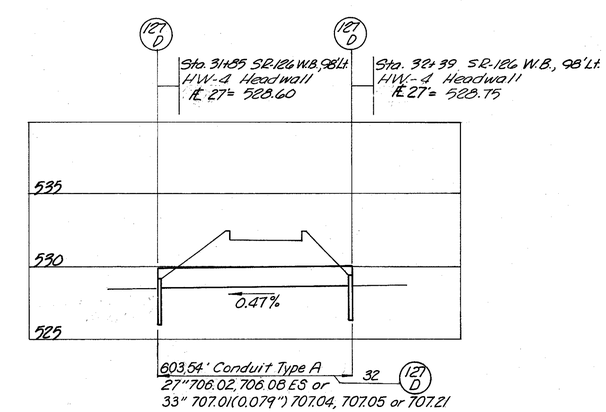
STA. 52+50 to STA. 110+50
STATE ROAD 126 W.B. I-75 N.B.



STA. 52+63 to STA. 53+88
RAMP D



STA. 0+84 to STA. 32+51
WOODBINE AVE STATE ROAD 126 W.B.



STA. 31+85 to STA. 32+39
STATE ROAD 126 W.B.

Drainage Area	= 11.7 Ac.
Φ50	= 38.0
Φ100	= 43.1
100 Hw	= 530.3

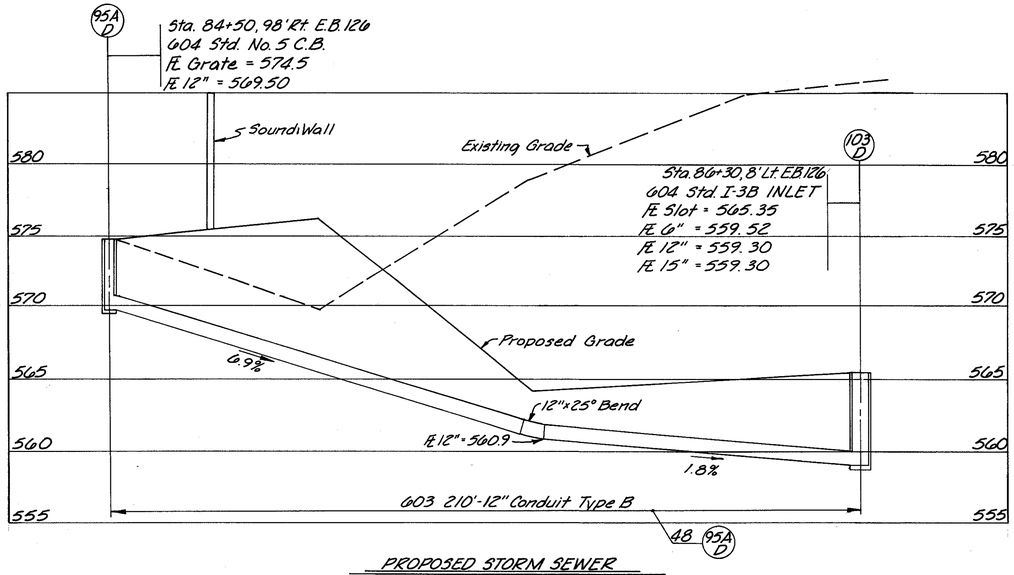
Scale
Horizontal 0 20' 40'

Scale
Vertical 0 5' 10'

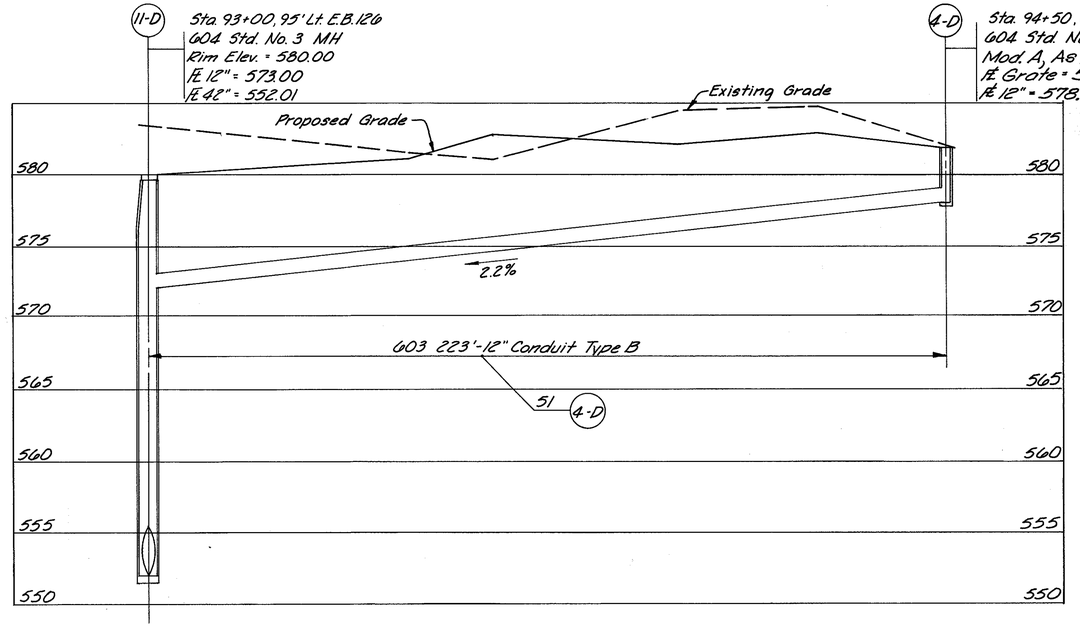
DEVELOPED	CHECKED
[illegible]	[illegible]

SEWER PROFILES

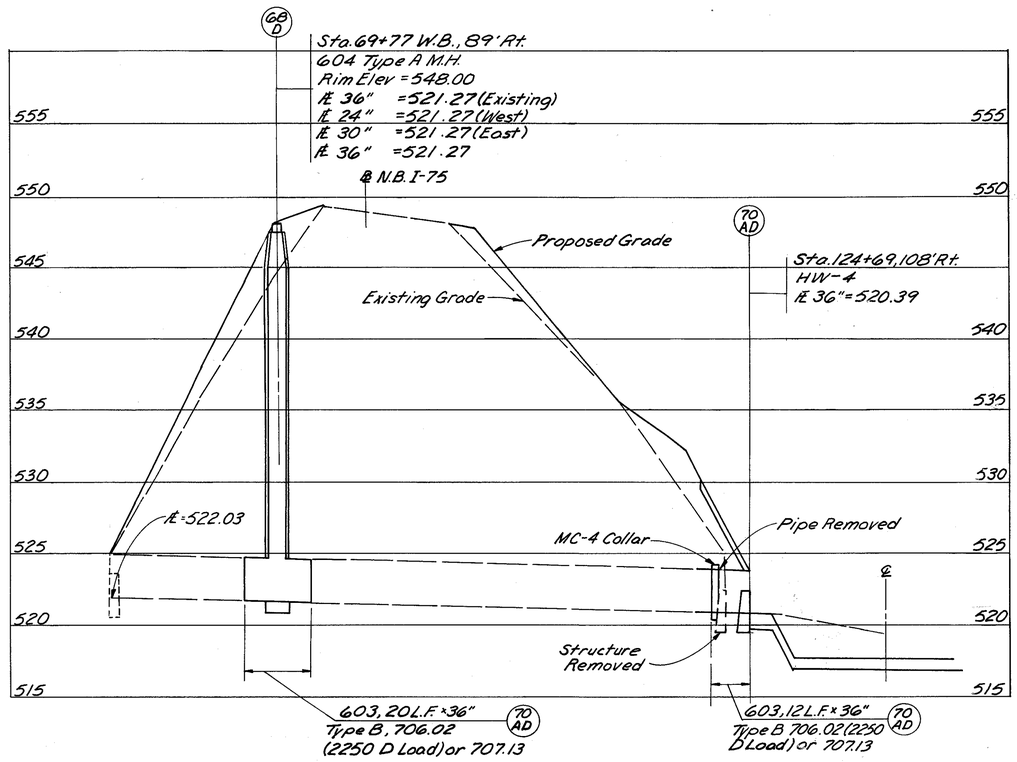
CALC. BY DS DATE 3/86	HAM-75-9.93	OHIO	337-A 787
CHKD. BY DATE 3/86	HAM-126-13.00 HAMILTON COUNTY	FHWA REGION 5	



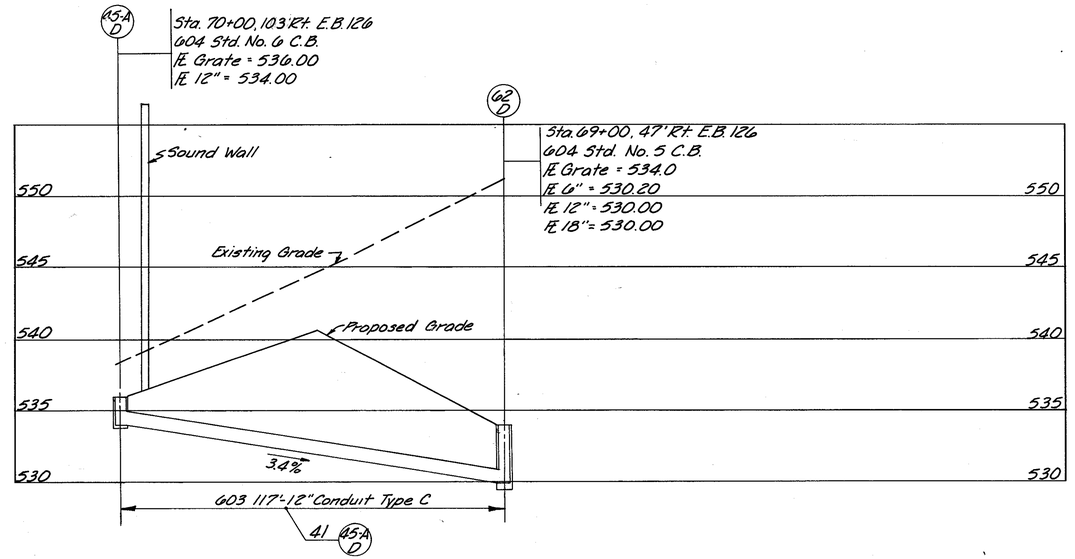
PROPOSED STORM SEWER
Sta. 84+50 – Sta. 86+30 E.B. SR 126



PROPOSED STORM SEWER
Sta. 93+00 – Sta. 94+50 E.B. SR 126



Scale: Hor. 0 10 20 40
Vert. 0 5 10



PROPOSED STORM SEWER
Sta. 69+00 – Sta. 70+00 E.B. SR 126

N-71130

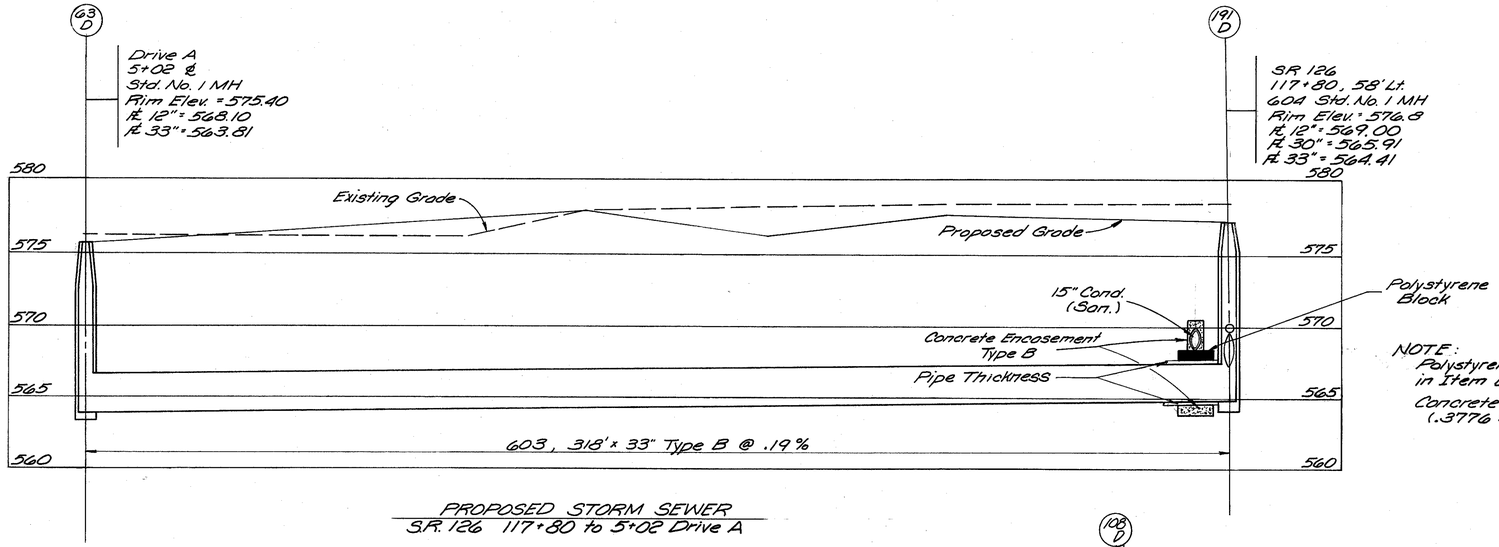
STORM SEWER PROFILES

CALC. DS DATE 3/86
CHK'D REA DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

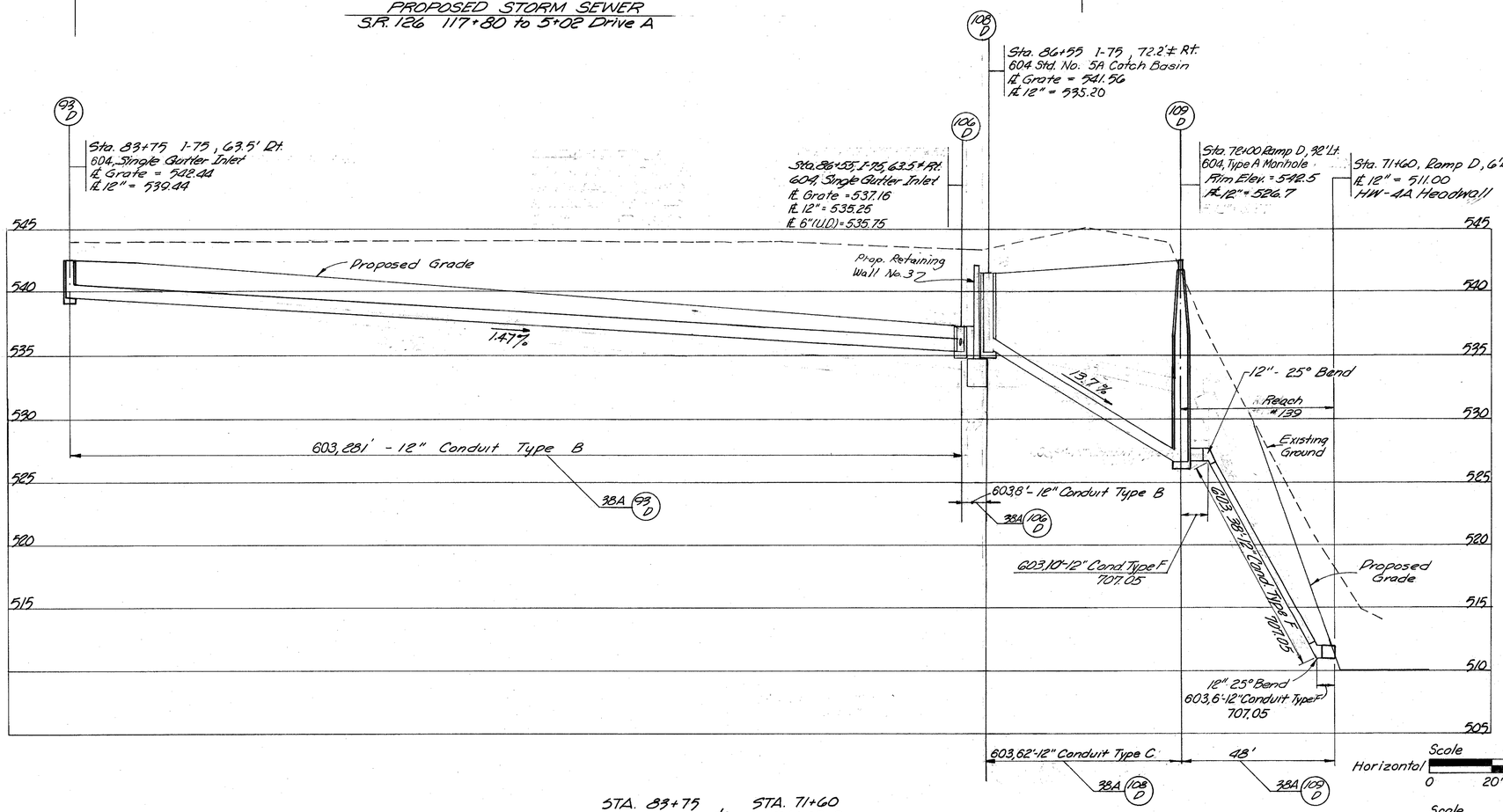
338
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

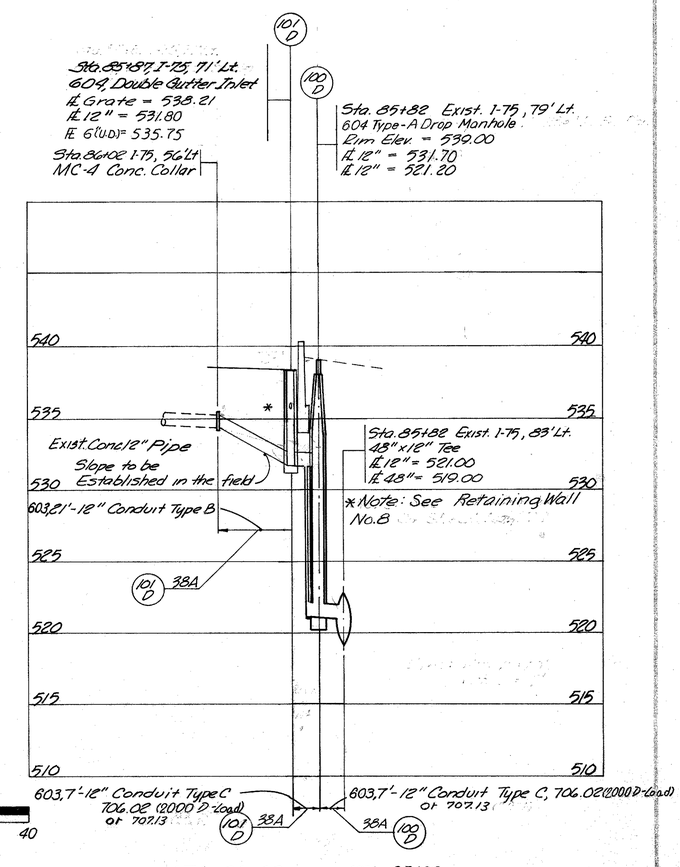


NOTE:
Polystyrene Block Cost To Be Included in Item Bid 602 Concrete Masonry.
Concrete Encasement Type B - (.3776 x 10 = 3.78 C.Y.)

PROPOSED STORM SEWER
S.R. 126 117+80 to 5+02 Drive A



STA. 83+75 I-75 to STA. 71+60 RAMP D



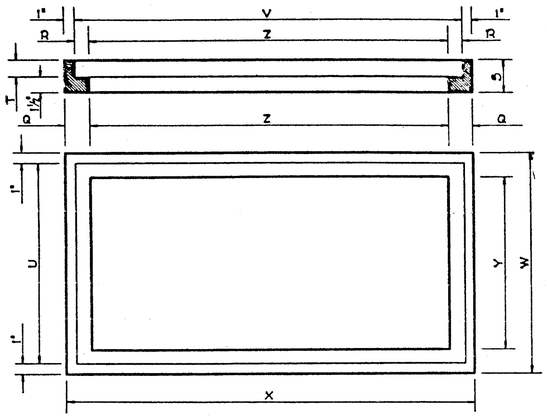
STA. 86+02 to STA. 85+82 I-75

Scale Horizontal 0 20' 40
Scale Vertical 0 5' 10'

DEVELOPED	CHECKED
D.J.D. 2-10-71	D.J.D. 11-17-71

SEWER PROFILES

CALC. BY DS DATE 3/86	HAM-75/126-9.93/13.00	OHIO	339
CHKD. BY DATE 3/86		FHWA REGION 5	787

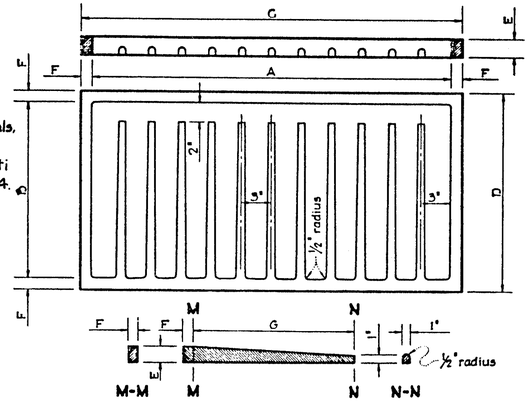


No.	Z	Y	X	W	V	U	T	S	R	Q	Computed Weight in Pounds
1	5'-0"	2'-0"	5'-5¼"	2'-5¼"	5'-3¼"	2'-3¼"	2¼"	3¾"	1⅝"	2⅝"	290 ±
2	4'-6"	1'-10½"	4'-11¼"	2'-3¾"	4'-9¼"	2'-1¾"	2¼"	3¼"	1⅝"	2⅝"	267 ±
3	4'-0"	1'-9"	4'-5"	2'-2"	4'-3"	2'-0"	2"	3½"	1½"	2½"	225 ±
4	3'-6"	1'-7½"	3'-11"	2'-0½"	3'-9"	1'-10½"	2"	3½"	1½"	2½"	202 ±
5	3'-0"	1'-6"	3'-4¾"	1'-10¾"	3'-2⅝"	1'-8⅝"	1⅜"	3¼"	1⅜"	2⅜"	165 ±
6	2'-6"	1'-4½"	2'-10⅜"	1'-9¼"	2'-8¾"	1'-7⅛"	1¾"	3¼"	1⅜"	2⅜"	144 ±
7	2'-0"	1'-3"	2'-4½"	1'-7½"	2'-2½"	1'-5⅓"	1½"	3"	1¼"	2¼"	112 ±
8	1'-6"	1'-1½"	1'-10½"	1'-6"	1'-8½"	1'-4"	1½"	3"	1¼"	2¼"	93 ±
9	1'-0"	1'-0"	1' 4½"	1'-4½"	1'-2½"	1'-2½"	1½"	3"	1¼"	2¼"	74 ±

Note:
For Measurements, Materials, Finish, and Inspection Refer To City of Cincinnati Purchasing Spec. No. 11-34. (Latest Edition)

604 INTERCEPTER INLET FRAME SANITARY

NO SCALE #49026



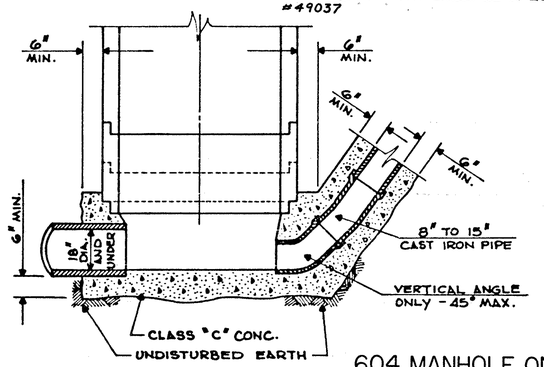
No.	A	B	C	D	E	F	G	Number of Bars	Computed Weight in Pounds
1	5'-0"	2'-0"	5'-2⅜"	2'-2¾"	2¼"	1⅜"	1'-10"	19	333 ±
2	4'-6"	1'-10½"	4'-8¾"	2'-1¼"	2¼"	1⅜"	1'-8½"	17	289 ±
3	4'-0"	1'-9"	4'-2½"	1'-11½"	2"	1¼"	1'-7"	15	203 ±
4	3'-6"	1'-7½"	3'-8½"	1'-10"	2"	1¼"	1'-5½"	13	171 ±
5	3'-0"	1'-6"	3'-2¼"	1'-8¼"	1¾"	1⅛"	1'-4"	11	113 ±
6	2'-6"	1'-4½"	2'-8¼"	1'-6¾"	1¾"	1⅛"	1'-2½"	9	91 ±
7	2'-0"	1'-3"	2'-2"	1'-5"	1½"	1"	1'-1"	7	55 ±
8	1'-6"	1'-1½"	1'-8"	1'-3½"	1½"	1"	11½"	5	41 ±
9	1'-0"	1'-0"	1'-2"	1'-2"	1½"	1"	10"	3	28 ±

Note:
For Measurements, Materials, Finish, and Inspection Refer To City of Cincinnati Purchasing Spec. No. 11-34. (Latest Edition)

604 INTERCEPTER INLET GRATING SANITARY

NO SCALE #49027

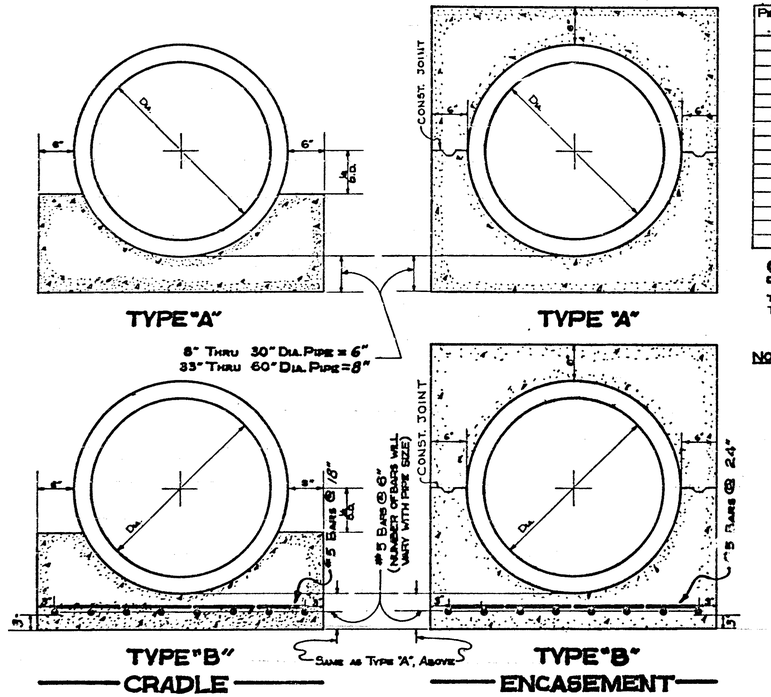
NOTE
ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH #49037



TYPE "U"

604 MANHOLE ON SANITARY CONDUITS AT BASE OF STEEP SLOPES

NO SCALE #49046



Pipe Size In.	Cradle Cu. Yds./L.F.	Encasement Cu. Yds./L.F.
8	.0398	.1079
10	.0493	.1246
12	.0619	.1500
15	.0734	.1787
18	.0852	.2085
21	.0922	.2343
24	.1103	.2719
27	.1239	.3058
30	.1381	.3410
33	.1800	.4046
36	.1972	.4443
42	.2335	.5278
48	.2727	.6167
54	.3134	.7111
60	.3570	.8108

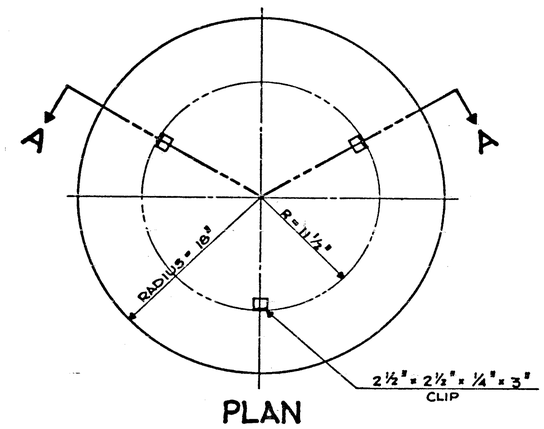
QUANTITY TABULATION

These Quantities Shall Be Used To Determine The Pay Quantity For 602.

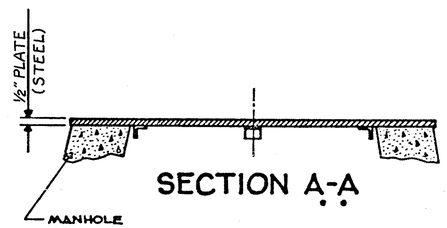
NOTE:
Concrete Shall Be CLASS "C"

603 SANITARY STANDARD CONCRETE CRADLE AND ENCASEMENT

NO SCALE #49044



PLAN

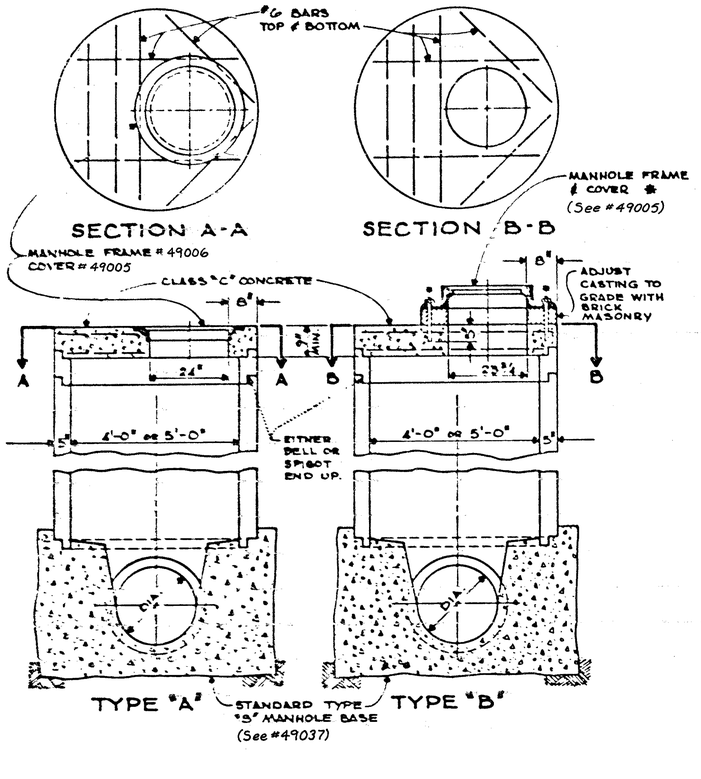


SECTION A-A

NOTE
CLIPS SHALL BE WELDED TO COVER.

604 TEMPORARY SANITARY SEWER MANHOLE COVER

NO SCALE #49045



NOTES

OUTSIDE OF RIGHT-OF WAY THE FRAMES SHALL BE SECURELY FASTENED BY 2 - ⅞" ANCHOR BOLTS. DOWEL HOLES SHALL BE IN ACCORDANCE WITH ITEM 510 OF THE SPECIFICATIONS. FRAME AND COVER SHALL BE #49050.

ALL REINFORCING STEEL SHALL HAVE A MINIMUM COVER OF 1½" BOTH FACES.

JOINTS ON MANHOLE SECTIONS SHALL BE MADE WITH A RUBBER GASKET MEETING THE REQUIREMENT OF ASTM C-443, EXCEPT THAT ONLY "O" RING AND "TYLOX CR" GASKETS ARE ACCEPTABLE.

LIFT HOLES IN MANHOLES TO BE SEALED WITH HYDRAULIC CEMENT AND EXTERIOR BITUMINOUS PAINT.

1' PRECAST MANHOLE SECTION TO BE SET WHEN MANHOLE TOP IS POURED.

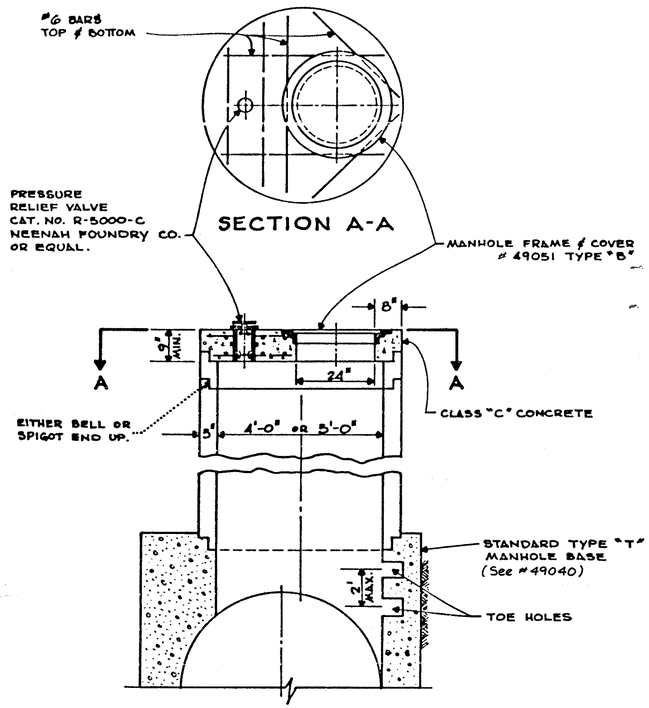
ALL OTHER CHARACTERISTICS ARE SIMILAR TO STANDARD MANHOLES.

ALL CONCRETE SHALL BE CLASS "C".

PRECAST CONCRETE BARRELS SHALL BE IN ACCORDANCE WITH ITEM 706.13 OF THE SPECIFICATIONS.

604 MODIFIED TYPE "S" MANHOLES

NO SCALE #49049



NOTES

PRECAST CONCRETE BARRELS SHALL BE IN ACCORDANCE WITH ITEM 706.13 OF THE SPECIFICATIONS.

JOINTS ON MANHOLE SECTIONS SHALL BE MADE WITH A RUBBER GASKET MEETING THE REQUIREMENT OF ASTM C-443, EXCEPT THAT ONLY "O" RING AND "TYLOX CR" GASKETS ARE ACCEPTABLE.

LIFT HOLE IN MANHOLES TO BE SEALED WITH HYDRAULIC CEMENT AND EXTERIOR BITUMINOUS PAINT.

1' PRECAST MANHOLE SECTION TO BE SET WHEN MANHOLE TOP IS POURED.

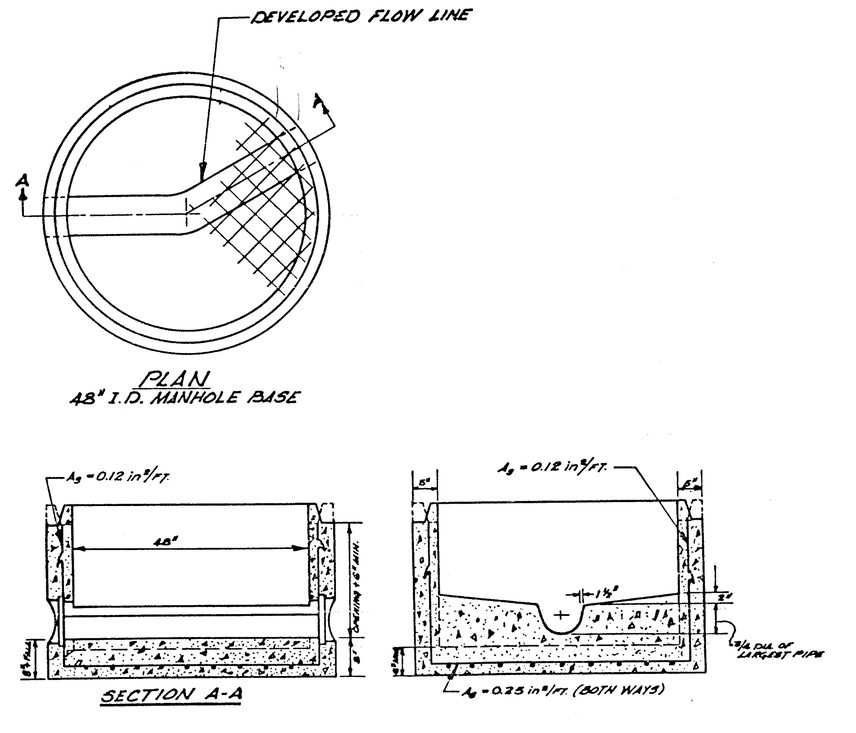
ALL OTHER CHARACTERISTICS ARE SIMILAR TO STANDARD MANHOLES.

ALL CONCRETE SHALL BE CLASS "C".

ALL REINFORCING STEEL SHALL HAVE A MINIMUM COVER OF 1½" BOTH FACES.

604 MODIFIED TYPE "T" MANHOLES

NO SCALE #49048



Manhole base may be used on 8" to 18" conduit unless otherwise noted on the plans.

Manhole base shall not be used if the grade of the influent or effluent conduit exceeds 10%.

All material shall be in accordance with Section 706.13 except as otherwise noted herein.

All concrete shall be minimum 4000 psi.

The gasket between the pre-cast manhole base and the manhole risers shall meet the requirements of ASTM C-443, except that only "O" Ring and "Tylox CR" are acceptable.

The seal between pre-cast manhole base and influent and/or effluent conduit shall be a rubber gasket, "A-LOK", "XOR-N-SEAL", "Dura-Seal" or an approved equal.

Openings for influent and effluent conduit shall be provided to meet the project requirements.

The pre-cast base shall have the floor and side wall cast as one unit; if the flow line (channel) and benches are not cast as a part of floor and side wall, they shall be cast of concrete at the place of manufacture.

Lift holes in pre-cast manhole base to be sealed with Hydraulic Cement and Exterior Bituminous Paint.

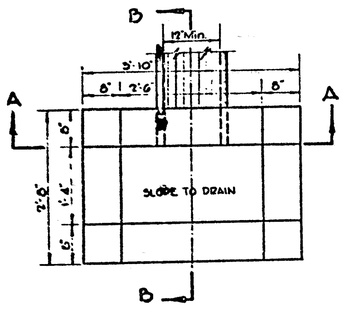
All characteristics not shown hereon shall be similar to Standard Manhole #49037.

Manhole bases shall be installed on a 6" minimum gravel base (4" clean washed).

604 PRECAST CONCRETE SANITARY MANHOLE BASE

NO SCALE #49056

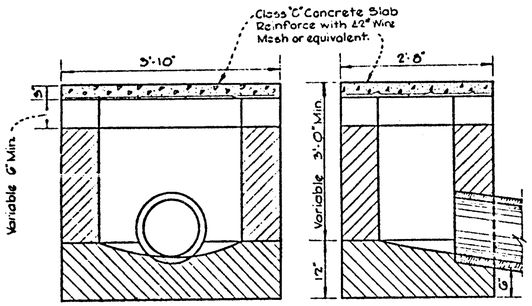
CALC. BY DS DATE 3/86	HAM-75/126-9.93-13.00	OHIO	3398
CHKD. BY DAA DATE 3/86		FHWA REGION 5	787



PLAN
TOP REMOVED

NOTE!
The inlet is shown open on four sides. Any of these openings may be closed as directed by the engineer.

Inlet shall be built of brick or concrete in accordance with 604.

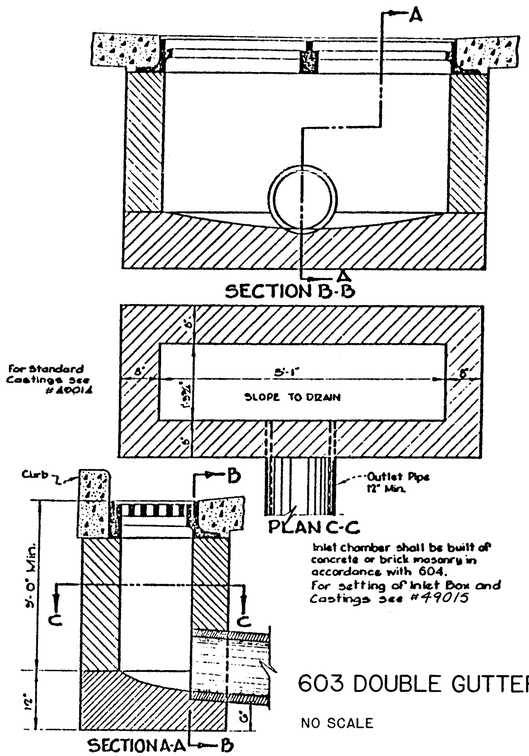


SECTION A-A

SECTION B-B

604 DITCH INLET

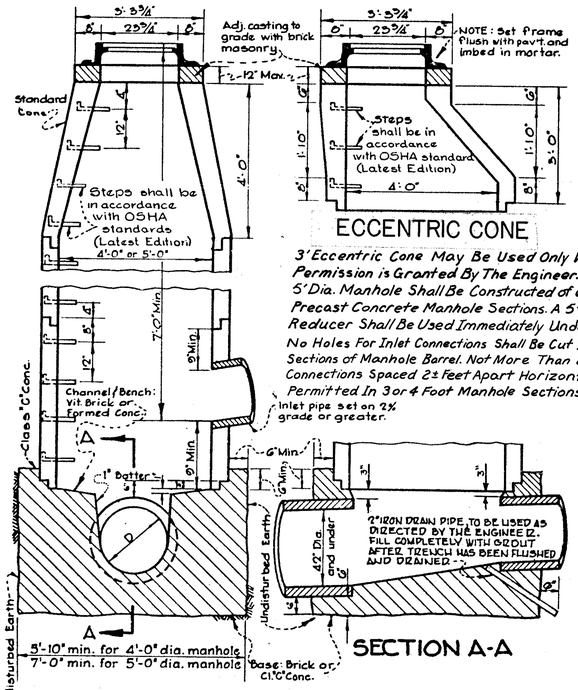
NO SCALE #49023



Inlet chamber shall be built of concrete or brick masonry in accordance with 604.
For setting of Inlet Box and Castings see #49015

603 DOUBLE GUTTER INLET

NO SCALE #49013

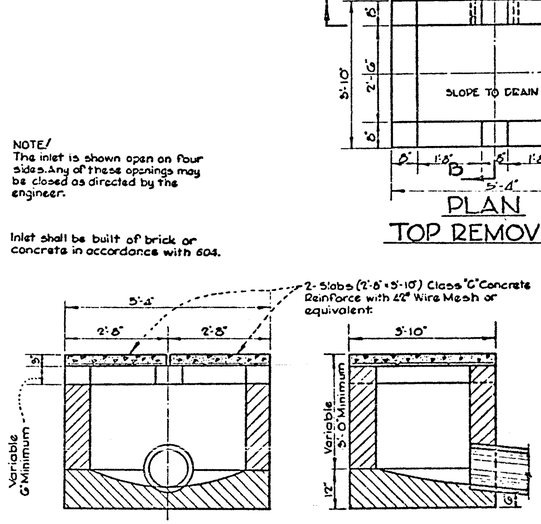


Precast Concrete Barrels, Cones, And Reducers Shall Meet Requirements Of 706.13, Precast Reinforced Concrete Manhole Riser Sections. State of Ohio Dept. of Highways Construction and Materials Specifications (Latest Edition)

TYPE "P"

604 PRECAST MANHOLE ON CONDUIT 42" & UNDER

NO SCALE #49001



PLAN
TOP REMOVED

NOTE/
The inlet is shown open on four sides. Any of these openings may be closed as directed by the engineer.

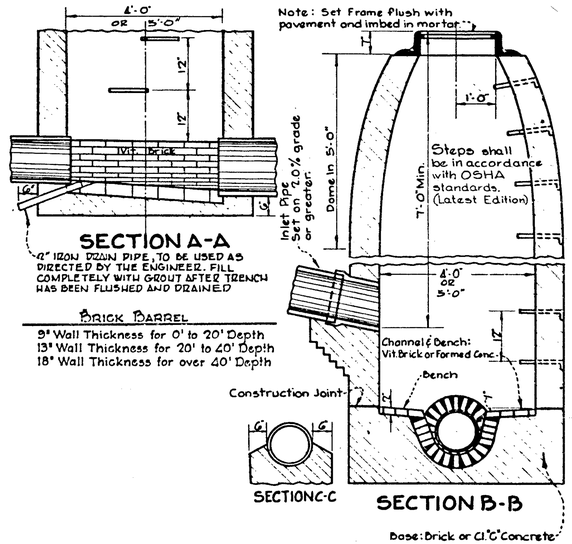
Inlet shall be built of brick or concrete in accordance with 604.

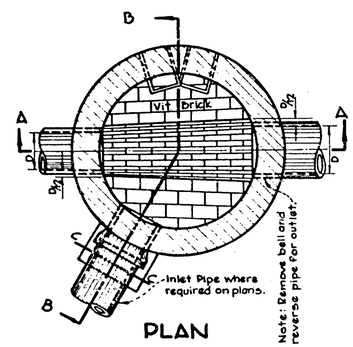
SECTION A-A

SECTION B-B

603 DOUBLE DITCH INLET

NO SCALE #49024





604 TYPE "A" BRICK MANHOLE ON CONDUITS 42" & UNDER

NO SCALE #49000

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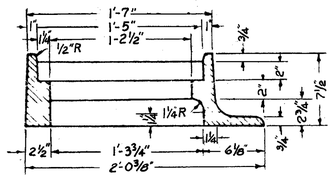
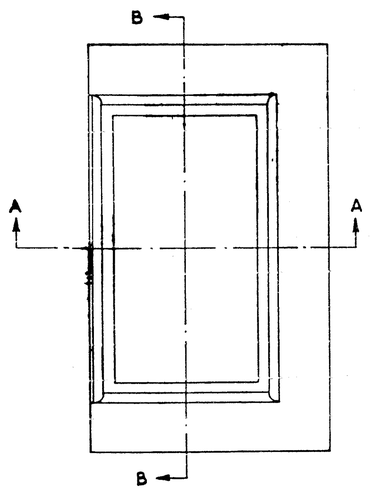
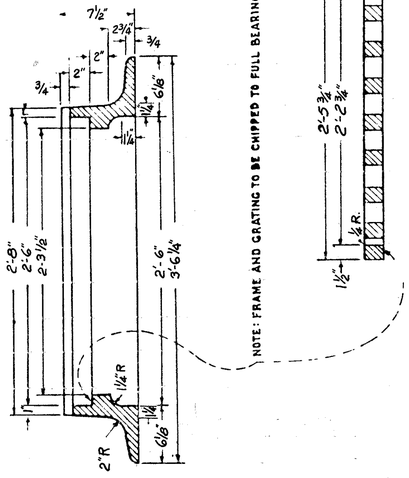
CHK'D BY DATE 3/86		FHWA REGION 5	



SECTION A-A



PLAN

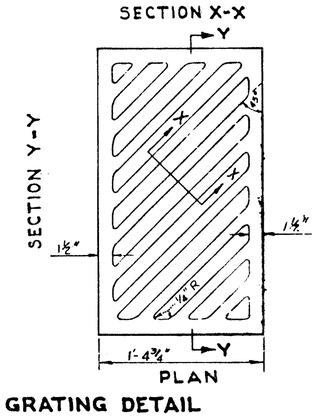


SECTION B-B

SECTION Y-Y

NOTE: FRAME AND GRATING TO BE CHIPPED TO FULL BEARING





PLAN

GRATING DETAIL

See #49015 for proper placement of grate.

For Measurement, Materials, Finish, and Inspection Refer To City of Cincinnati Purchasing Spec. No. 11-34. (Latest Edition)

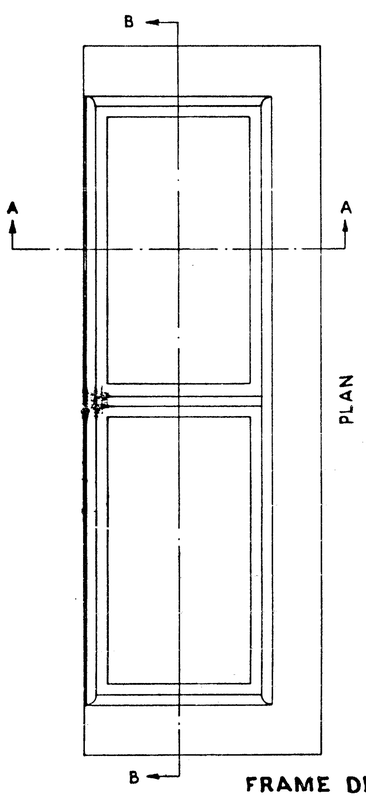
FRAME DETAIL

COMPUTED WEIGHTS

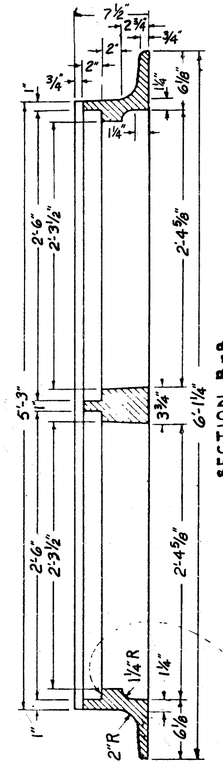
FRAME	434 lbs.
GRATING	148 lbs.
TOTAL	582 lbs.

603 CASTING FOR SINGLE GUTTER INLET

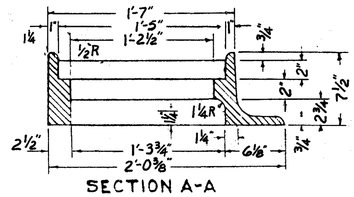
NO SCALE #49012



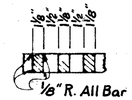
PLAN

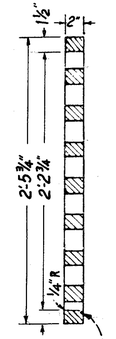


SECTION B-B



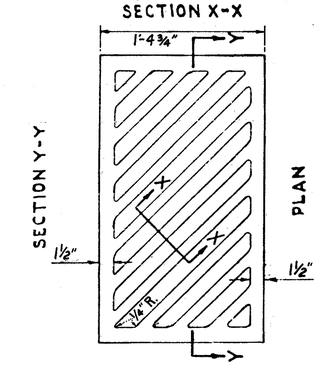
SECTION A-A





SECTION Y-Y

NOTE: FRAME AND GRATINGS TO BE CHIPPED TO FULL BEARING



PLAN

GRATING DETAIL

2 - REQUIRED

See #49015 for proper placement of grates

For Measurements, Materials, Finish, and Inspection Refer To City of Cincinnati Purchasing Spec. No. 11-34. (Latest Edition)

FRAME DETAIL

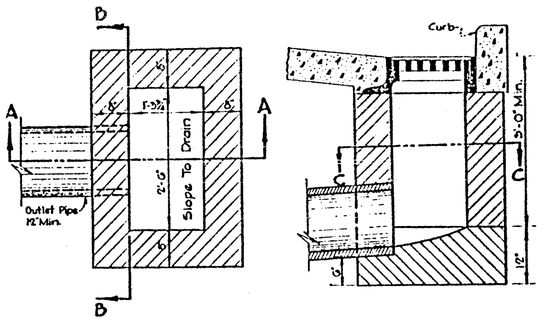
COMPUTED WEIGHTS

FRAME	736 lbs.
GRATINGS	296 lbs.
TOTAL	1020 lbs.

604 CASTINGS FOR DOUBLE GUTTER INLET

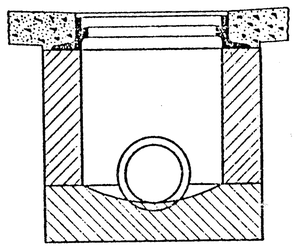
NO SCALE #49014

CALC. BY DS DATE 3/86	HAM-75/126-9.93/13.00	OHIO	3390
CHKD. BY DATE 3/86		FHWA REGION 5	787



PLAN C-C

SECTION A-A



SECTION B-B

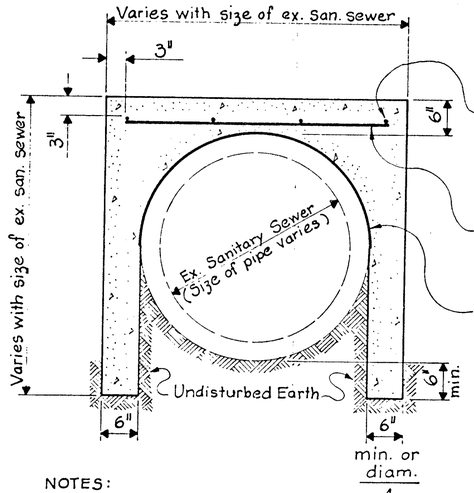
Inlet chamber shall be built of concrete or brick masonry in accordance with 604.

For setting of Inlet Box and Castings See #49015

For Std. Castings see #49012

604 SINGLE GUTTER INLET

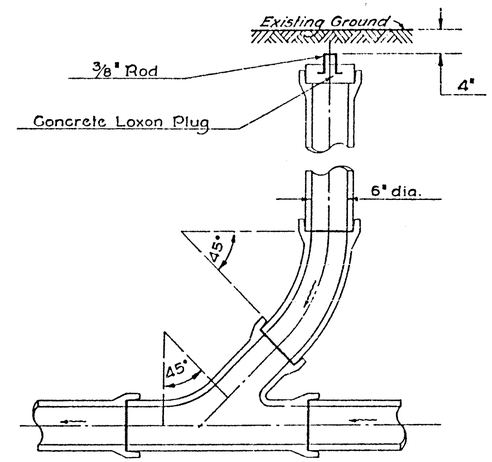
NO SCALE #49011



NOTES:
Concrete shall be Class "C".

602 TYPICAL ENCASEMENT FOR EXISTING SANITARY PIPE

NO SCALE #49057



NOTES:

All joints shall be in accordance with ASTM C-443 or ASTM C-425.

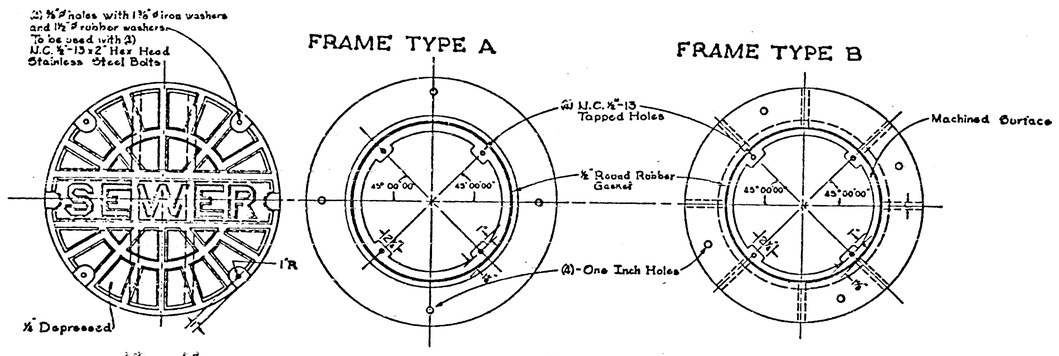
603 CLEANOUT FOR BUILDING SEWERS

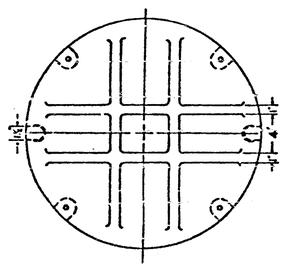
NO SCALE #49047

(2) ⅝" ø holes with 1⅜" ø iron washers and 1½" ø rubber washers. To be used with (2) U.C. ⅝"-13 x 2" Hex Head Stainless Steel Bolts

FRAME TYPE A

FRAME TYPE B





NOTE:
THIS COVER & FRAME SHALL BE USED ONLY WHERE SPECIFIED ON THE PLANS.

FRAME TYPE B 317 lbs.

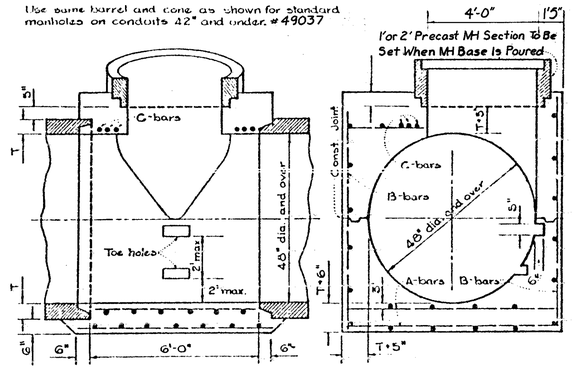
COMPUTED	WEIGHTS
FRAME	332 lbs.
COVER	155 lbs.
TOTAL	487 lbs.

FOR MEASUREMENTS, MATERIAL FINISH, AND INSPECTION REFER TO CITY OF CINCINNATI PURCHASING SPEC. No. 11-34 (LATEST EDITION)

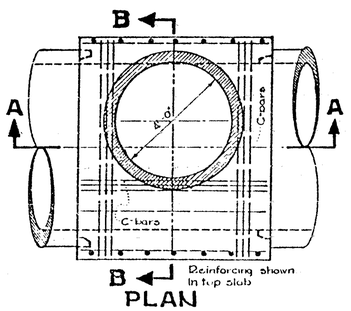
604 WATERTIGHT MANHOLE

NO SCALE #49051

Use same barrel and cone as shown for standard manholes on conduits 42" and under. #49037



SECTION A-A



PLAN

SECTION B-B

NOTES:
All Concrete Shall Be Class "C".
All Steel Shall Have 2" Cover Except Where Noted.
Longitudinal Steel-No.5 Bars @ 18" Center.
A & B Bars - 12" o.c. As Shown.
A, B & C Bars:
No.5 Bars On 48" to 60" Sr.
No.6 Bars On 66" to 78" Sr.
No.7 Bars On 84" to 108" Sr.

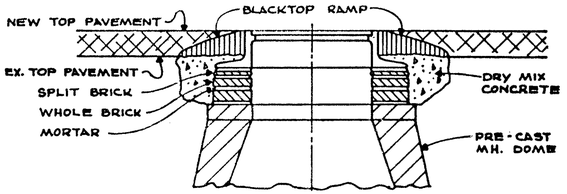
604 TYPE "T" MANHOLE ON SANITARY CONDUITS 48" & OVER

NO SCALE #49040

DRAINAGE DETAILS

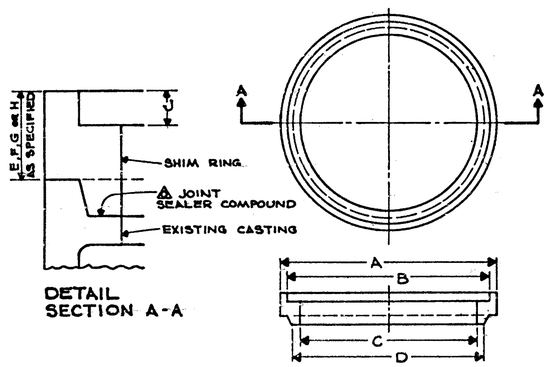
CALC BY DS DATE 3/86	HAM-75/126-9.93/13.00	OHIO
CHK'D. BY JHS DATE 3/86		FHWA REGION 5

339E / 787



INSTALLATION OF BRICK AND MORTAR

1- ALL MANHOLES ADJUSTED WITH BRICK AND MORTAR PRIOR TO MACHINE PAVING ARE PERMITTED TO BE ROUND CUT.
2- IF NEW ADJUSTMENT OF MANHOLE ELEVATES CASTING GREATER THAN 12" ABOVE DOME SECTION OF MANHOLE, THAT MANHOLE SHALL BE RECONSTRUCTED IN ACCORDANCE WITH 604.03 OF THE STATE OF OHIO CONSTRUCTION AND MATERIAL SPECIFICATIONS.
3- IF NEW ADJUSTMENT OF EXISTING MANHOLE IS LESS THAN 12" ABOVE DOME, THE CASTING SHALL BE CUT OUT TO TOP OF EXISTING MASONRY.
4- THE CASTING SHALL THEN BE RAISED WITH A COMBINATION OF WHOLE AND/OR HALF BRICKS AND MORTAR TO DESIRED HEIGHT. THESE ADJUSTMENTS SHALL BE IN ACCORDANCE WITH 604.05 OF THE STATE OF OHIO CONSTRUCTION AND MATERIALS SPECIFICATIONS.
5- DRY MIX CONCRETE SHALL BE USED FROM BOTTOM OF CUT TO EXISTING STREET PAVEMENT.
6- ADD STORAGE MIX BLACKTOP TO FORM RAMP TO LIP OF CASTING. TAMP FIRMLY. - RAMP SHALL BE REMOVED IMMEDIATELY PRIOR TO MACHINE PAVING.
7- ALL MANHOLE FRAMES AND COVERS OTHER THAN STANDARD SHALL BE REPLACED WITH STANDARD CASTINGS. (ACC. NO. 49005)



CASTING	DIMENSIONS IN INCHES								
	A	B	C	D	E	F	G	H	J
MANHOLE	26	24	21 ½	23 ¾	1 ½	2	2 ½	3	1

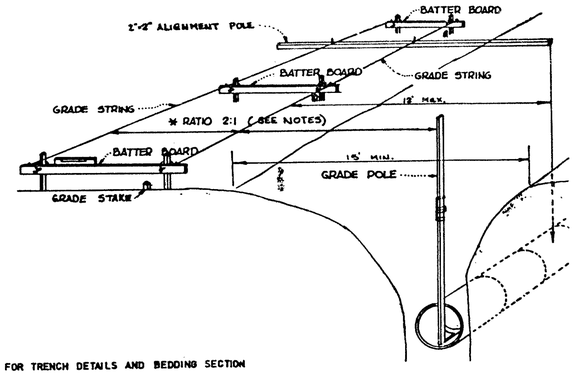
MATERIAL - ASTM DESIGNATION: A-48, CLASS 40 CAST IRON

INSTALLATION OF SHIM RING

1- CLEAN CASTING WITH WIRE BRUSH.
2- INSERT SHIM AND CHECK FIT.
3- IF SHIM DOES NOT FIT PROPERLY, CASTING SHALL BE ADJUSTED BY USING BRICK AND MORTAR.
4- REMOVE SHIM AND APPLY JOINT SEALER COMPOUND TO CASTING SEATING SURFACE.
5- INSERT SHIM ON CASTING - STACKING OF RINGS SHALL NOT BE PERMITTED.
6- USE PAVING BREAKER TO CUT OUT AROUND CASTING, 6" W. x 1½" D.
7- ADD STORAGE MIX BLACKTOP TO CUT AND FORM RAMP TO LIP OF CASTING. TAMP FIRMLY. - RAMP SHALL BE REMOVED IMMEDIATELY PRIOR TO MACHINE PAVING.
8- ALL MANHOLE FRAMES AND COVERS OTHER THAN STANDARD, SHALL BE REPLACED WITH STANDARD CASTINGS. (#49008)
⚠- IN ACCORDANCE WITH 706.10 OF THE STATE OF OHIO CONSTRUCTION AND MATERIALS SPECIFICATION.

603 SANITARY MANHOLE ADJUSTMENT PRIOR TO MACHINE PAVING

NO SCALE #49058



FOR TRENCH DETAILS AND BEDDING SECTION
SEE # 49032

Double String Method:

May be used Only when open cut trench top Exceeds 15 FEET AND when slope of pipe Exceeds 0.80%.

Laser or Batter boards (#49054) are required for slopes Less than 0.80%.

*Projection of strings shall not exceed ratio of two to one, i.e.: if distance from closest string to pipe is 10 feet, then distance between strings shall not be less than 5 feet. Maximum offset to nearest string shall be 12'.

GRADE STAKE: shall be set at the manholes and 25' intervals thereafter, except where a laser beam is used. For laser beam construction a grade stake shall be set at the manhole and 50' intervals thereafter.

BATTER BOARD: shall be a straight wood board, a minimum of 2" x 4", and shall be clamped level, with the top at the proper grade offset, to either metal or wood uprights which are driven securely into the ground. Batter boards shall be at 25' intervals with a minimum of 3 being set up at all times. Batter boards shall be set perpendicular to the center line of the pipe at each grade stake. Grade strings shall be stretched between the 3 batter boards to check line and grade. For laser beam construction a batter board shall be set every 50' to check line and grade.

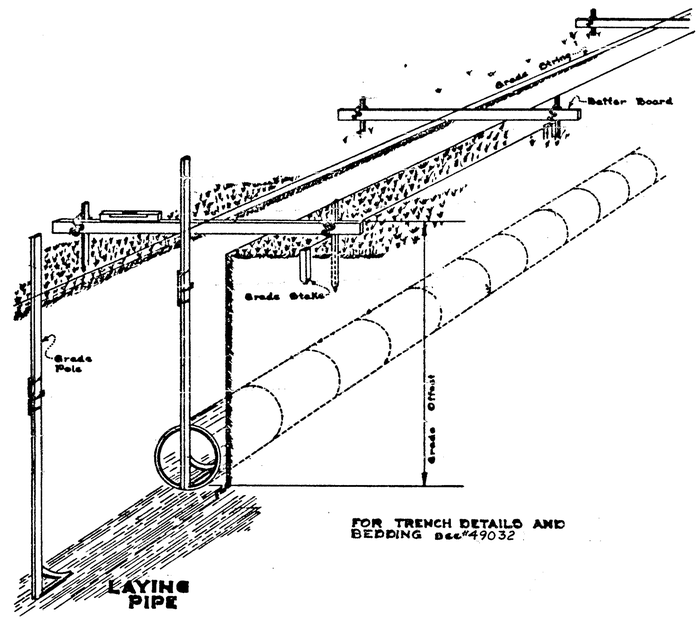
GRADE POLE: shall be a straight pole with rounded edges, approximately 2" x 2", with length depending on need. The grade pole shall be equipped with a metal bracked on the bottom with projecting length of 12"±. Nails shall be placed into the grade pole for depth of the flow line below the grade string and for the depth of trench. Spirit levels shall be used on the grade pole to determine when the grade pole is vertical.

A 2" x 2" marked pole, with plumb bob shall be used for center line measurements (alignment).

NOTE: Inspector's copy of "cut sheet" shall be on project before pipe is laid.

603 SANITARY SEWER ALTERNATE BATTER BOARD

NO SCALE #49054A



FOR TRENCH DETAILS AND BEDDING See #49032

LAYING PIPE

GRADE STAKE: shall be set at the manholes and 25' intervals thereafter, except where a laser beam is used. For laser beam construction a grade stake shall be set at the manhole and 50' intervals thereafter.

BATTER BOARD: shall be a straight wood board, a minimum of 2" x 6", and shall be clamped level, with the top at the proper grade offset, to either metal or wood uprights which are driven securely into the ground. Batter boards shall be at 25' intervals with a minimum of 3 being set up at all times. Batter boards shall be set perpendicular to the center line of the pipe at each grade stake. Batter boards shall span the trench, unless otherwise directed by the engineer. A grade string shall be stretched between the 3 batter boards, over the center line of the pipe, to check line and grade. For laser beam construction a batter board shall be set every 50' to check line and grade.

GRADE POLE: shall be a straight pole with rounded edges, approximately 2" x 2", with length depending on need. The grade pole shall be equipped with a metal bracket on the bottom with projecting length of 12"±. Nails shall be placed into the grade pole for depth of the flow line below the grade string and for the depth of trench. Spirit levels shall be used on the grade pole to determine when the grade pole is vertical.

NOTE: INSPECTOR'S COPY OF "CUT SHEET" SHALL BE ON PROJECT BEFORE PIPE IS LAID.

603 SANITARY SEWER BATTER BOARD

NO SCALE #49054

DRAINAGE DETAILS

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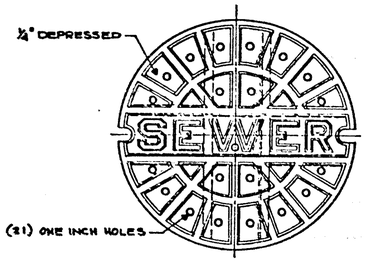
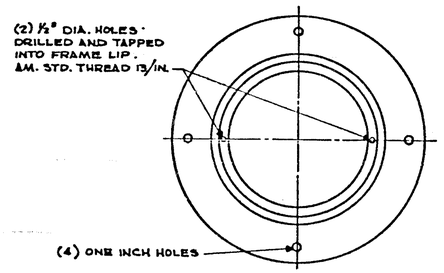
CHKD. BY JAS DATE 3/86		FHWA REGION 5

340
787

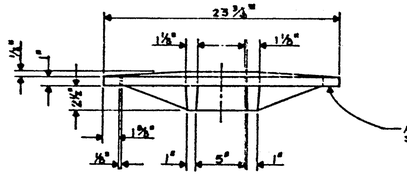


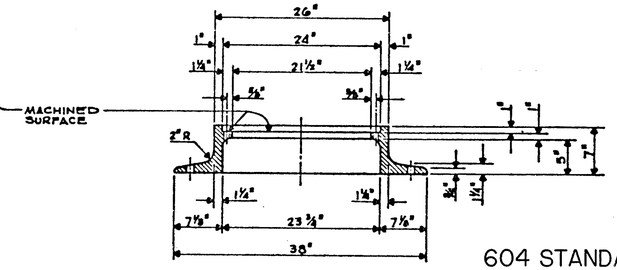


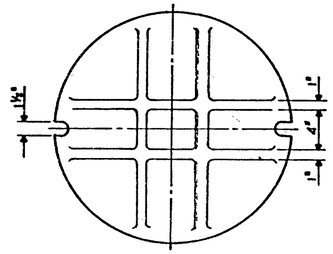
NOTE:
FOR MEASUREMENTS, MATERIAL, FINISH, AND INSPECTION REFER TO CITY OF CINCINNATI PURCHASING SPEC. NO. 11-34 (LATEST EDITION)

COMPUTED WEIGHTS

FRAME	332 LBS.
COVER	155 LBS.
TOTAL	487 LBS.

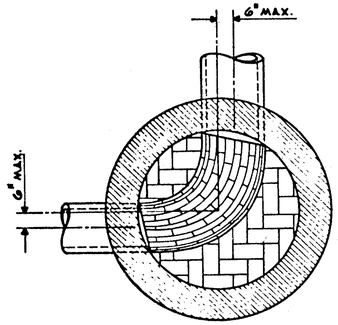


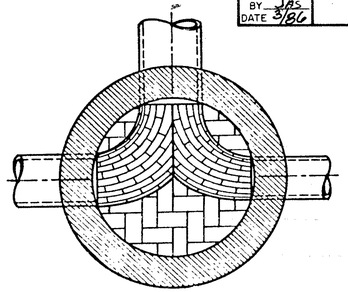


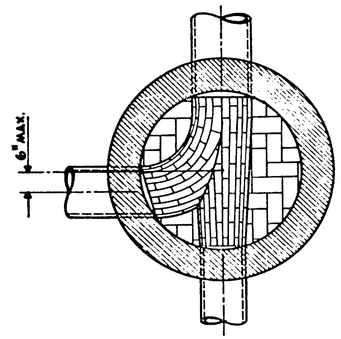


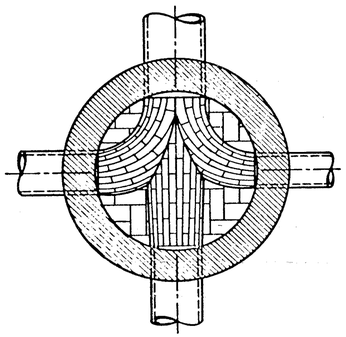
604 STANDARD CASTING FOR SANITARY MANHOLES

NO SCALE #49005



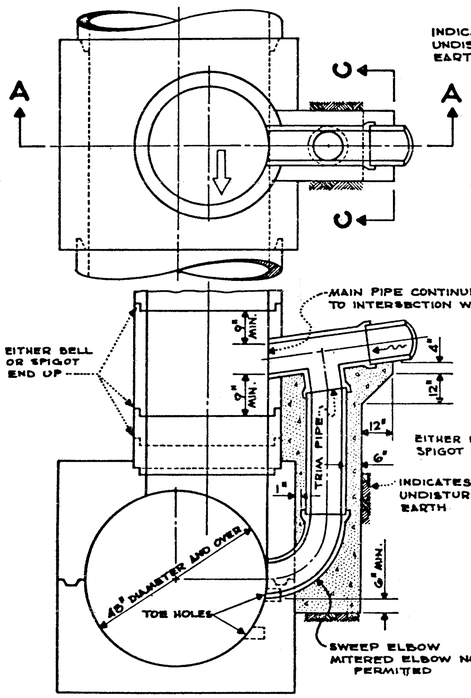




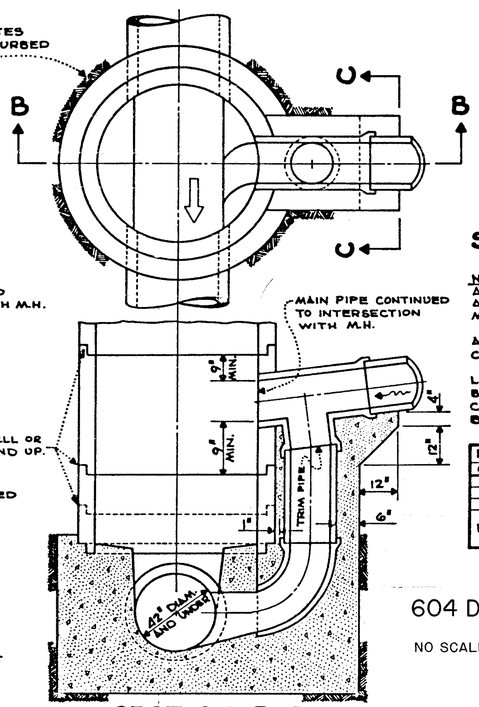


604 SANITARY SEWER MANHOLES TYPICAL INVERTS

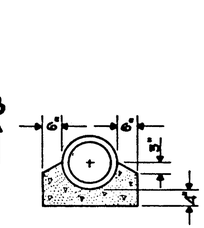
NO SCALE #49004



SECTION A-A
TYPE "D" OR "T"



SECTION B-B
TYPE "A", "P" OR "S"



SECTION C-C

NOTES:
ALL OTHER CHARACTERISTICS ARE SIMILAR TO STANDARD MANHOLES.

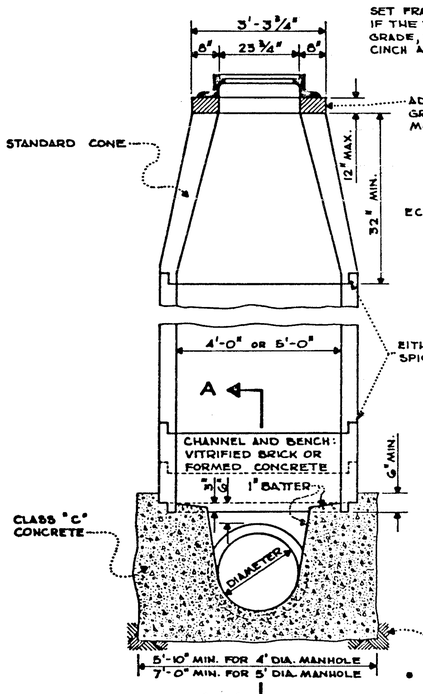
ALL CONCRETE SHALL BE CLASS "C".

LIFT HOLES IN MANHOLES TO BE SEALED WITH HYDRAULIC CEMENT AND EXTERIOR BITUMINOUS PAINT.

DROP CONNECTIONS	
CONDUIT SIZE	STACK SIZE
8"	8"
10"	10"
12"	12"
15" AND OVER.	12" UNLESS OTHERWISE NOTED ON PLANS.

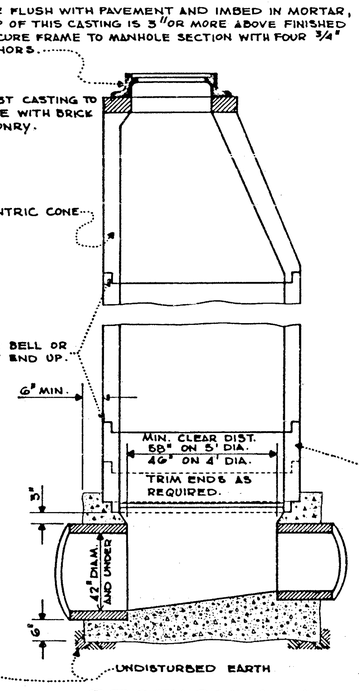
604 DROP MANHOLES

NO SCALE #49003



TYPE "S"

SET FRAME FLUSH WITH PAVEMENT AND IMBED IN MORTAR, IF THE TOP OF THIS CASTING IS 3" OR MORE ABOVE FINISHED GRADE, SECURE FRAME TO MANHOLE SECTION WITH FOUR ¾" CINCH ANCHORS.



SECTION A-A

NOTES:

5' DIAMETER MANHOLE SHALL BE CONSTRUCTED OF 60" PRECAST CONCRETE MANHOLE SECTIONS. A 5' TO 4' REDUCER SHALL BE USED IMMEDIATELY UNDER THE CONE.

3' ECCENTRIC CONE MAY BE USED ONLY WHERE PERMISSION IS GRANTED BY THE ENGINEER.

PRECAST CONCRETE BARRELS AND CONES SHALL MEET THE REQUIREMENTS OF 706.13 OF THE SPECIFICATIONS.

JOINTS ON MANHOLE SECTIONS SHALL BE MADE WITH A RUBBER GASKET MEETING THE REQUIREMENT OF ASTM C-443, EXCEPT THAT ONLY "O" RING AND "TYLOX CR" GASKETS ARE ACCEPTABLE.

LIFT HOLES IN MANHOLES TO BE SEALED WITH HYDRAULIC CEMENT AND EXTERIOR BITUMINOUS PAINT.

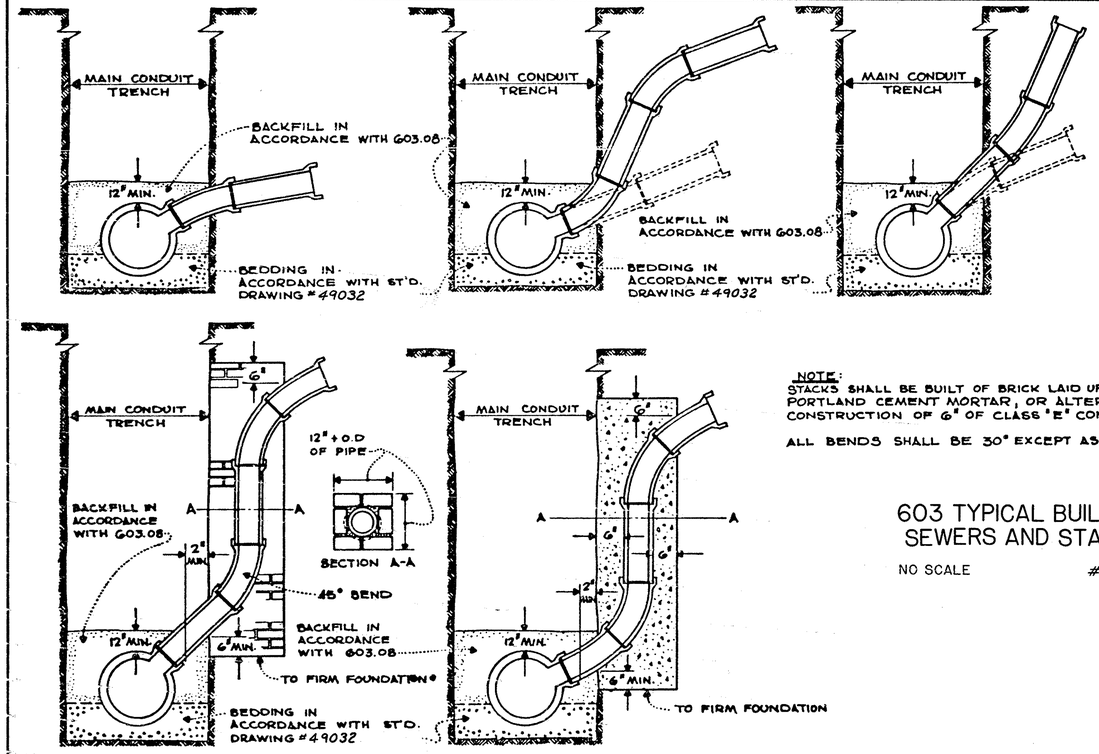
MANHOLE FRAME AND COVER CASTINGS SHALL BE IN ACCORDANCE WITH DRWG. #49005

THE STANDARD PRE-CAST MANHOLE BASE, DRWG. # 4905G, MAY BE USED AS A ALTERNATE TO THIS STANDARD WHERE APPLICABLE.

1' OR 2' PRECAST MANHOLE SECTION TO BE SET WHEN MANHOLE BASE IS POURED.

604 TYPE "S" MANHOLE ON SANITARY CONDUITS 42" & UNDER

NO SCALE #49037

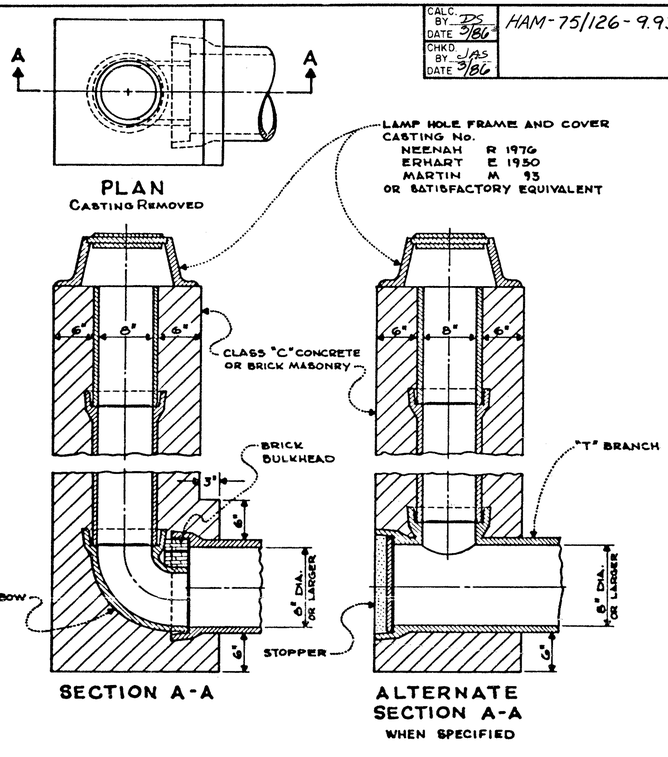


NOTE:
STACKS SHALL BE BUILT OF BRICK LAID UP IN 1:2 PORTLAND CEMENT MORTAR, OR ALTERNATIVE CONSTRUCTION OF 6" OF CLASS "E" CONCRETE.

ALL BENDS SHALL BE 30° EXCEPT AS NOTED.

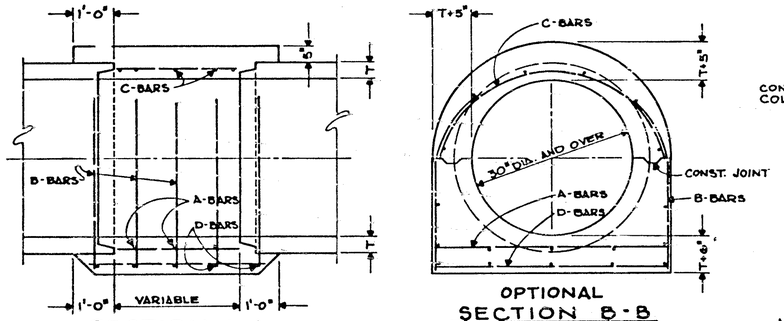
603 TYPICAL BUILDING SEWERS AND STACKS

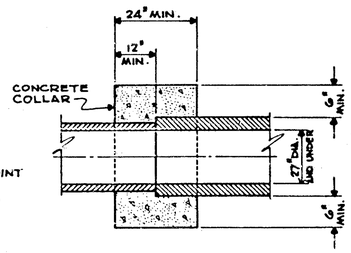
NO SCALE #49033



604 LAMP HOLE SANITARY

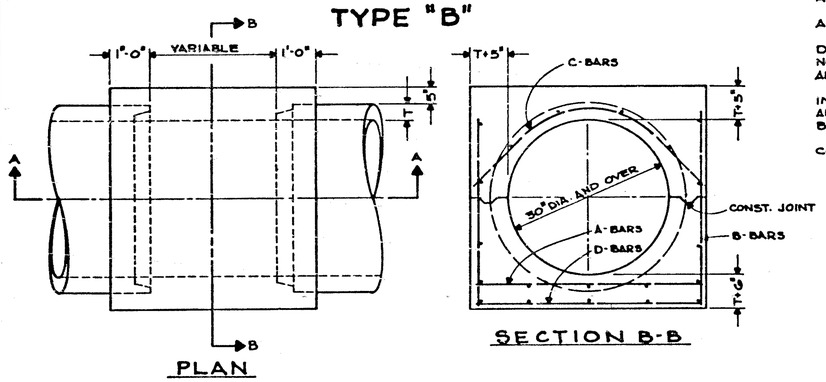
NO SCALE #49009





TYPE "A"

TYPE "B"



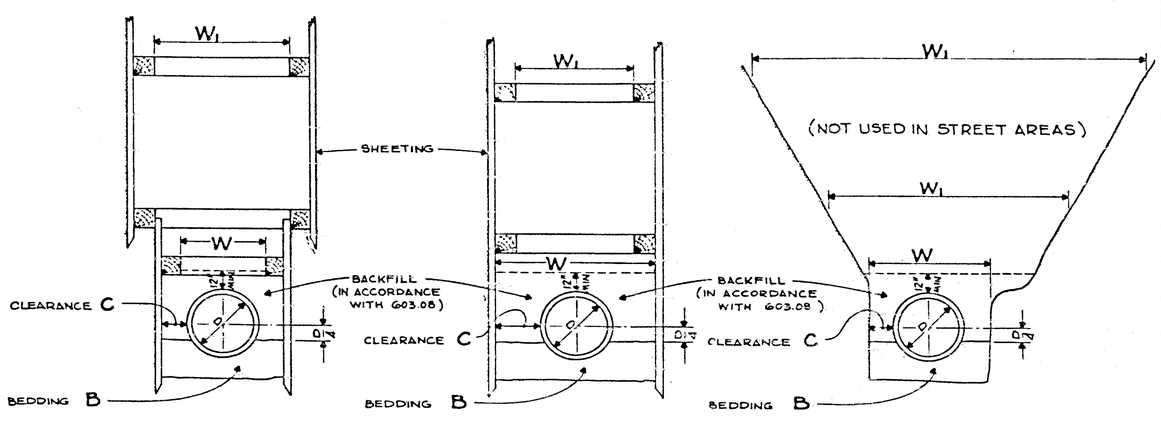
NOTE:
A-B-C AND D-BARS @ 12" O.C.
A-B-C { #5 BARS FOR 30" TO 60" SEWERS.
A-B-C { #6 BARS FOR 66" TO 78" SEWERS.
A-B-C { #7 BARS FOR 84" TO 108" SEWERS.
D-BARS #5 BARS FOR 30" TO 108" SEWERS.
NOT LESS THAN 3 TRANSVERSE BARS IN ANY GAP.
ALL LONGITUDINAL STEEL - #5 BARS @ 18" O.C.

INVERT STEEL - 3" CL.
ALL OTHER STEEL - 2" CL.
BAR LAP - 30 TIMES THE BAR DIAMETER.

CONCRETE SHALL BE CLASS "C".

604 CONCRETE COLLARS ON SANITARY SEWER CONDUIT

NO SCALE #49031



W SHALL NOT EXCEED 39 INCHES FOR 8 TO 21 INCH DIAMETER CONDUITS, OR THE GREATEST OUTSIDE DIAMETER PLUS 4 TIMES THE SHELL THICKNESS FOR CONDUITS 24 INCH DIAMETER AND OVER.

C SHALL BE NOT LESS THAN 6 INCHES AT THE POINT OF GREATEST OUTSIDE DIAMETER ON CONDUITS UP TO AND INCLUDING 60 INCH DIAMETER. SHALL BE NOT LESS THAN ONE SHELL THICKNESS AT THE POINT OF GREATEST OUTSIDE DIAMETER ON 66 INCH DIAMETER AND OVER.

W1 MAY BE EQUAL TO **W**, OR CAN BE MODIFIED AS GOVERNED BY SURFACE OR SUB-SURFACE CONDITIONS.

B CLASS OF MATERIAL AND DEPTH OF BEDDING UNDER CONDUIT
4 INCHES BANK RUN GRAVEL FOR CONDUIT 8 TO 24 INCHES IN DIAMETER.
6 INCHES No. 3 GRAVEL FOR CONDUIT 27 TO 60 INCHES IN DIAMETER.
8 INCHES No. 2 GRAVEL FOR CONDUIT LARGER THAN 60 INCHES IN DIAMETER.

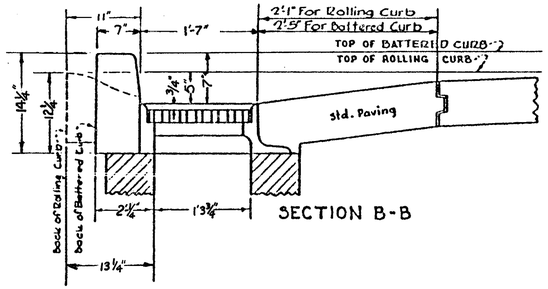
NOTE: ALL TRENCHES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS (LATEST EDITION)

NOTE:
CONCRETE FOR BEDDING OR BACKING OF CONDUITS WHERE SHOWN ON PLANS OR ORDERED BY THE ENGINEER - PAID FOR AS CONCRETE MASONRY - CLASS "C".

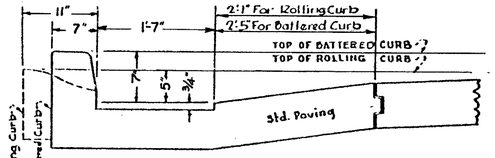
603 CONTROL DIMENSIONS FOR TYPICAL TRENCHES FOR SANITARY SEWER CONDUITS

NO SCALE #49032

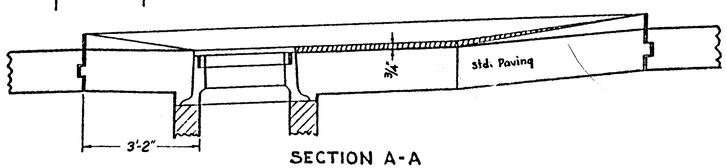
CALC. BY DS DATE 3/86
CHKD. BY JAS DATE 3/86
HAM-75/126-9.93/13.00
OHIO
FHWA REGION 5
342/787



SECTION B-B

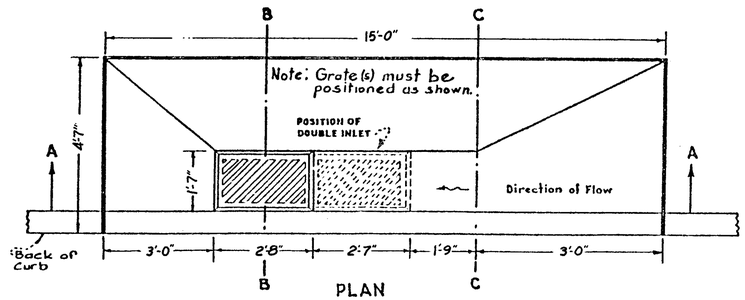


SECTION C-C



SECTION A-A

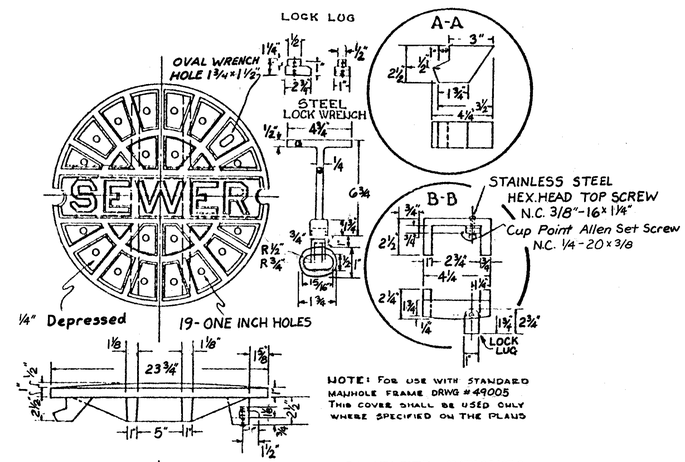
SINGLE GUTTER INLET	
FRAME AND GRATING	#49012
INLET CHAMBER	#49011
DOUBLE GUTTER INLET	
FRAME AND GRATING	#49014
INLET CHAMBER	#49013



PLAN

STANDARD PAVEMENT DETAIL FOR SINGLE OR DOUBLE GUTTER INLET

NO SCALE #49015



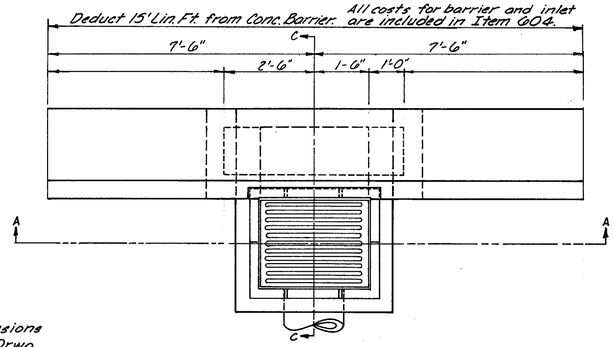
NOTE: FOR USE WITH STANDARD MANHOLE FRAME DRWG #49005 THIS COVER SHALL BE USED ONLY WHERE SPECIFIED ON THE PLANS

COMPUTED WEIGHTS	
FRAME	332 lbs.
COVER	164 lbs.
TOTAL	496 lbs.

FOR MEASUREMENTS, MATERIAL FINISH, AND INSPECTION REFER TO CITY OF CINCINNATI PURCHASING SPEC. NO. 11-34 (LATEST EDITION)

604 LOCKING LID MANHOLE

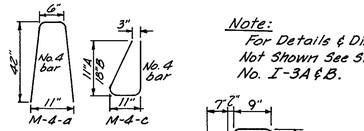
NO SCALE #49050



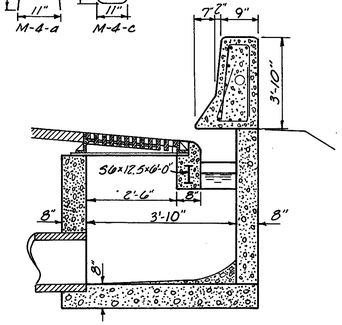
STANDARD INLET TYPE I-3B -MODIFICATION "A", AS PER PLAN

PLAN VIEW

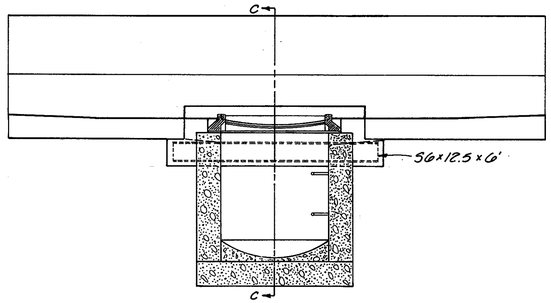
STEEL LIST							
M-4-a		M-4-b		M-4-c		SHEETS	
No.	Lin. Ft.	No.	Lin. Ft.	No.	Lin. Ft.	No.	Lin. Ft.
8	7'-6"	8	14'-8"	8	2'-7"	1	6'-0"



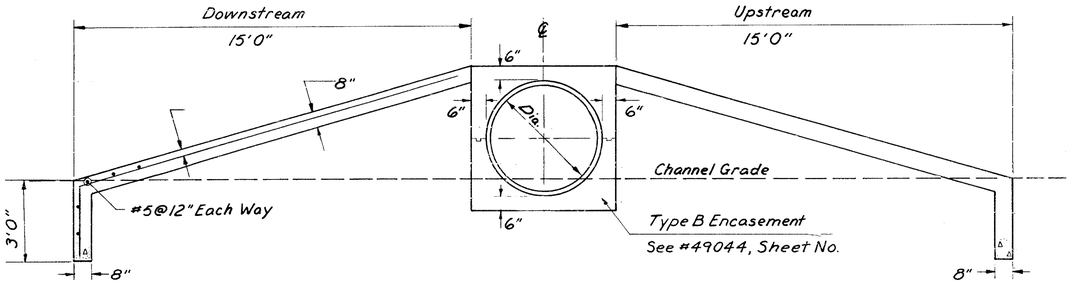
Note: For Details & Dimensions Not Shown See Std. Drwg. No. I-3A & B.



SECTION C-C



SECTION A-A

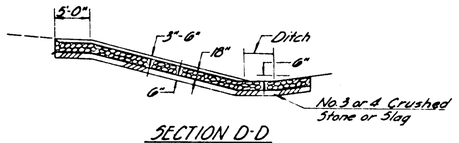


PROTECTION AT SEWER CROSSING

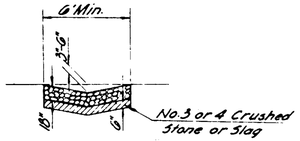
NO SCALE

DRAINAGE DETAILS

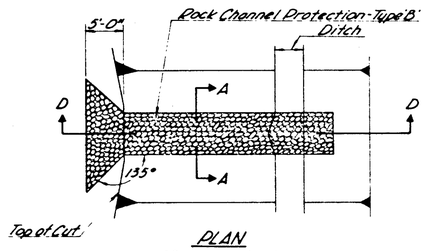
CALC. BY DS DATE 3/86	HAM-75-9.93	OHIO	343
CHKD. BY JAS DATE 3/86	HAM-126-13.00	FHWA REGION 5	787
	HAMILTON COUNTY		



SECTION D-D



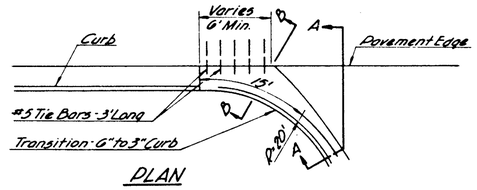
SECTION A-A



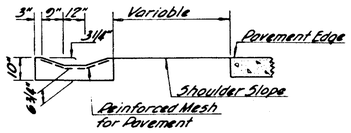
PLAN

EROSION CONTROL AT SWALES

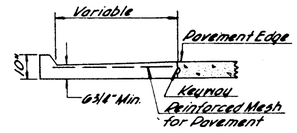
NOTE: The portion of the protection that falls within an area 30' from the pavement edge shall conform to aggregate as per Item 601.05 of the specifications. Payment shall be under Item 601 - Rock Channel Protection, as per plan.



PLAN



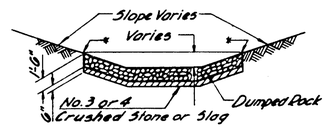
SECTION A-A



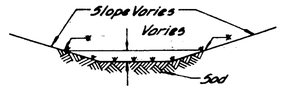
SECTION B-B

CURB TURNOUT

NOTE: Payment for Curb Turnout shall be made under Item 601. Riprap using 6" Reinforced Concrete Slab.



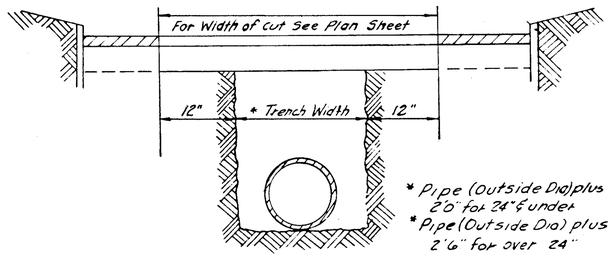
ROCK CHANNEL PROTECTION



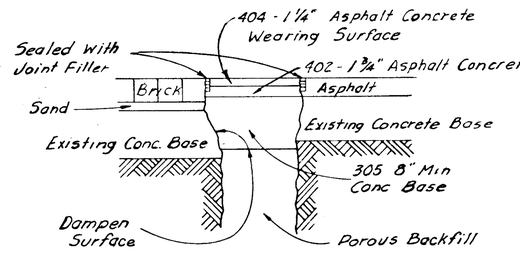
SOD

TYPICAL DITCH PROTECTION

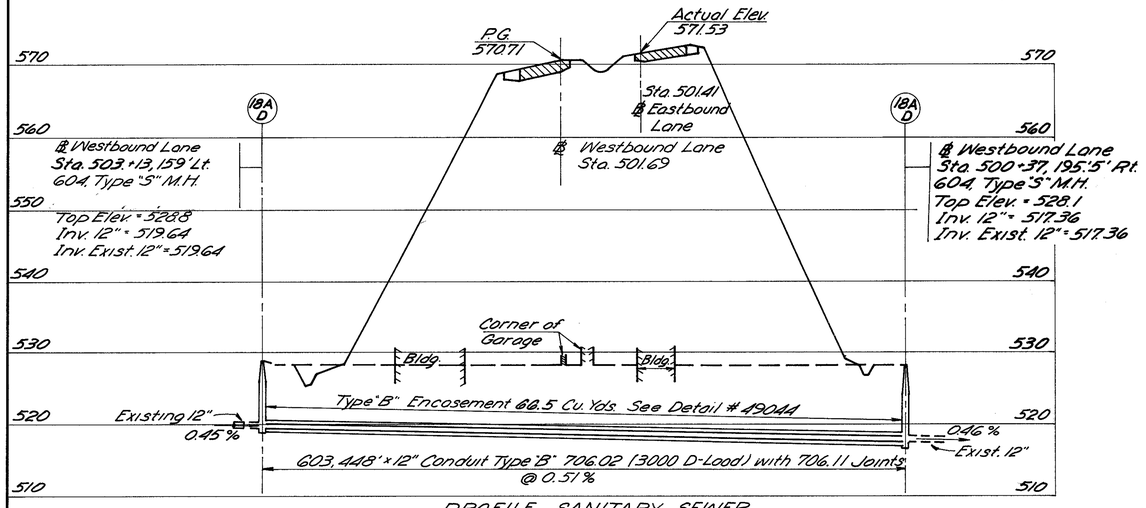
* NOTE: Ditch Protection carried to the same elevation regardless of the side slopes of the ditch.



PAVEMENT REPLACEMENT



PAVEMENT RESTORATION
CLASS 3 - ASPHALTIC CONCRETE
PAVEMENT ON CONCRETE OR BRICK BASE



PROFILE SANITARY SEWER
WESTBOUND ℄ STA. 500+37 TO STA. 503.13

NOTE: For Plan See Sheet No. 30
* City of Cincinnati Std. Type "S" Manhole With City of Cincinnati Std. Frame and Cover. #49037 and #49005
See Sheet Nos. 340
Manhole #49037 - Sheet No. 340
Frame & Cover
Type B Encasement #49044
Sheet No. 339

SCALE

VERTICAL 0 10 20

HORTIZONTAL 0 50 100

ESTIMATED QUANTITIES

ITEM	DESCRIPTION	Quantity	Units
603	12" Conduit Type "B" 706.02 3000 D-Load w/ 706.11 Joints	448	Lin. Ft.
604	Type "S" MH (Smnl)	2	Each
602	Concrete Masonary	▲66.5	Cu. Yds.
509	Reinforcing Steel	▲2774	lbs.

▲ Quantity carried to General Summary, Sheet 25C.

PROFILE SANITARY SEWER
WESTBOUND ℄ STA. 500+37 to STA. 503.13

SEEDING

END WIDTH	SQ YDS

CALC. DS DATE 3/86

CHK'D. JS DATE 3/86

DESIGN	STATE	PROJECT
2	OHIO	

345
787

HAM - 75 - 9.93
HAM - 126 - 13.00
HAMILTON COUNTY

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

364 530 520 510 500

E.B. S.R. 126

24:1

FUTURE PROPOSED BY OTHERS

2:1 NORMAL

Proposed 54" Cond. (San.)

Exist. 54" San.

℄

STA. 1525+85 ℄
BEGIN CHANNEL
BOTTOM TAPER
BEGIN RIPRAP

2:1 NORMAL

FUTURE PROPOSED BY OTHERS

ROCK CHANNEL PROTECTION TYPE C W/FILTER

504.44
1525+50
520.0

67

269 530 520 510 500

24:1

2:1 Normal

Exist. 54" San.

℄

2:1 Normal

FUTURE PROPOSED BY OTHERS

504.39
1525+00
508.2

30

STA. 1524+58
BEGIN WORK

167 530 520 510 500

℄ = 505.0±

1524+00
508.5

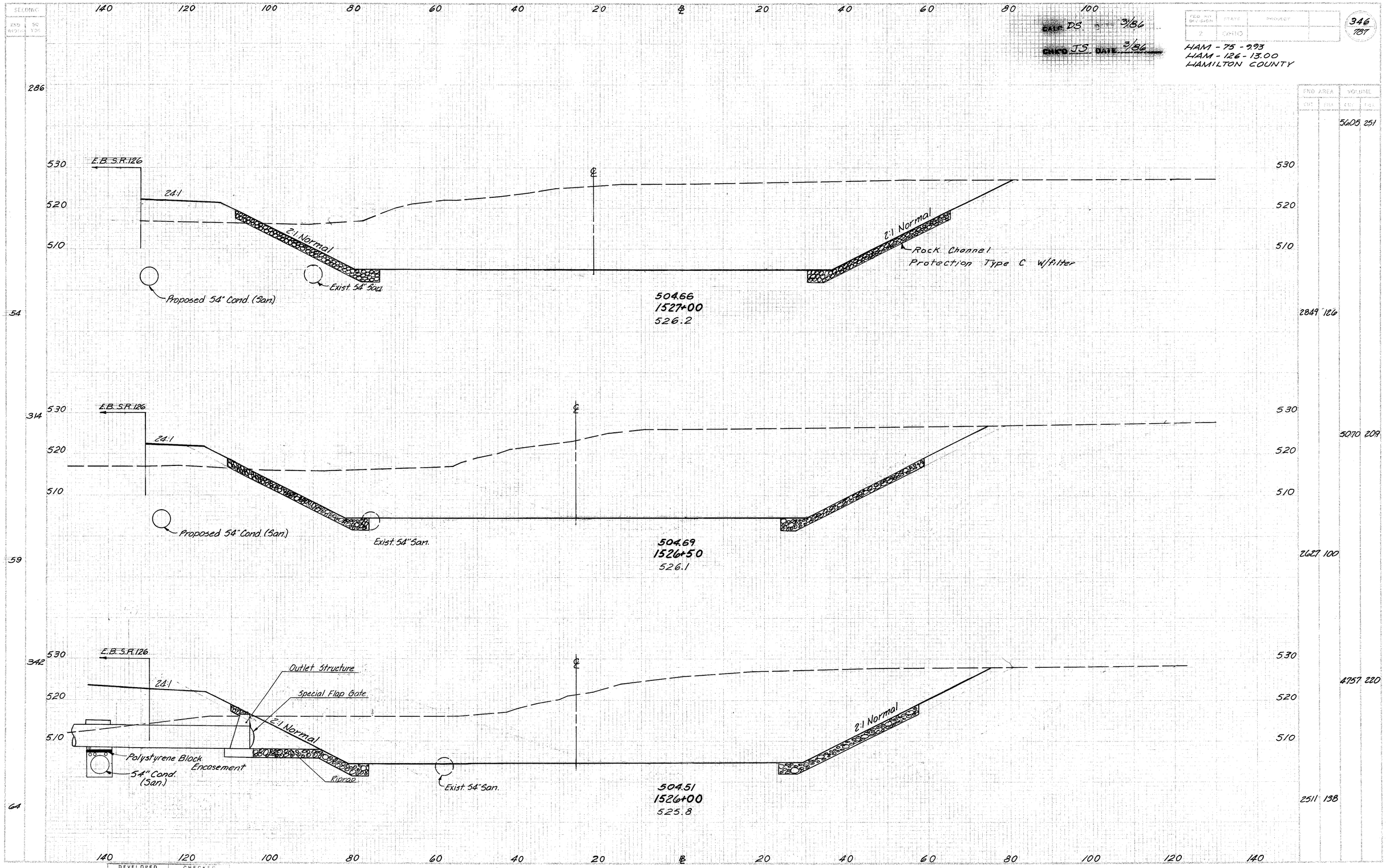
0

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

DEVELOPED	CHECKED

END AREA		VOLUME	
CUT	FILL	CUT	FILL
		3890.506	
		1690.409	
		1565.654	
.0	297		
0	231		
+38			
0	0		
		.0	.0
0	0		

RELOC. MILL CREEK CHANNEL STA 1524+00 TO STA 1525+50



DEVELOPED | CHECKED

RELOC. MILL CREEK CHANNEL STA. 1526+00 TO STA. 1527+00

SEEDING	
SIDE WIDTH	SQ. YDS.
119	
43	
244	
45	
261	
49	

CALC. JS	DATE 3/86
CHKD DS	DATE 3/86

DIST.	STATE	PROJECT	
2	OHIO		

347
187

HAM - 75 - 9.93
HAM - 126 - 13.00
HAMILTON COUNTY

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

E.B. S.R. 126

2:1

2.4:1

2:1 Normal

Proposed 54" Conduit (San)

530
520
510

504.88
1528+50
526.0

2:1 Normal

END AREA | VOLUME
CUT | FILL | CUT | FILL
6821 | 356
3691 | 266

E.B. S.R. 126

Exist. 54" San.

Proposed 54" Conduit (San)

504.82
1528+00
527.0

Rock Channel Protection Type W/ Filter

3469 | 184

STA. 1527+60
END CHANNEL
BOTTOM TAPER

E.B. S.R. 126

2.4:1

2:1 Normal

Proposed 54" Conduit (San.)

Exist. 54" San.

504.75
1527+50
527.0

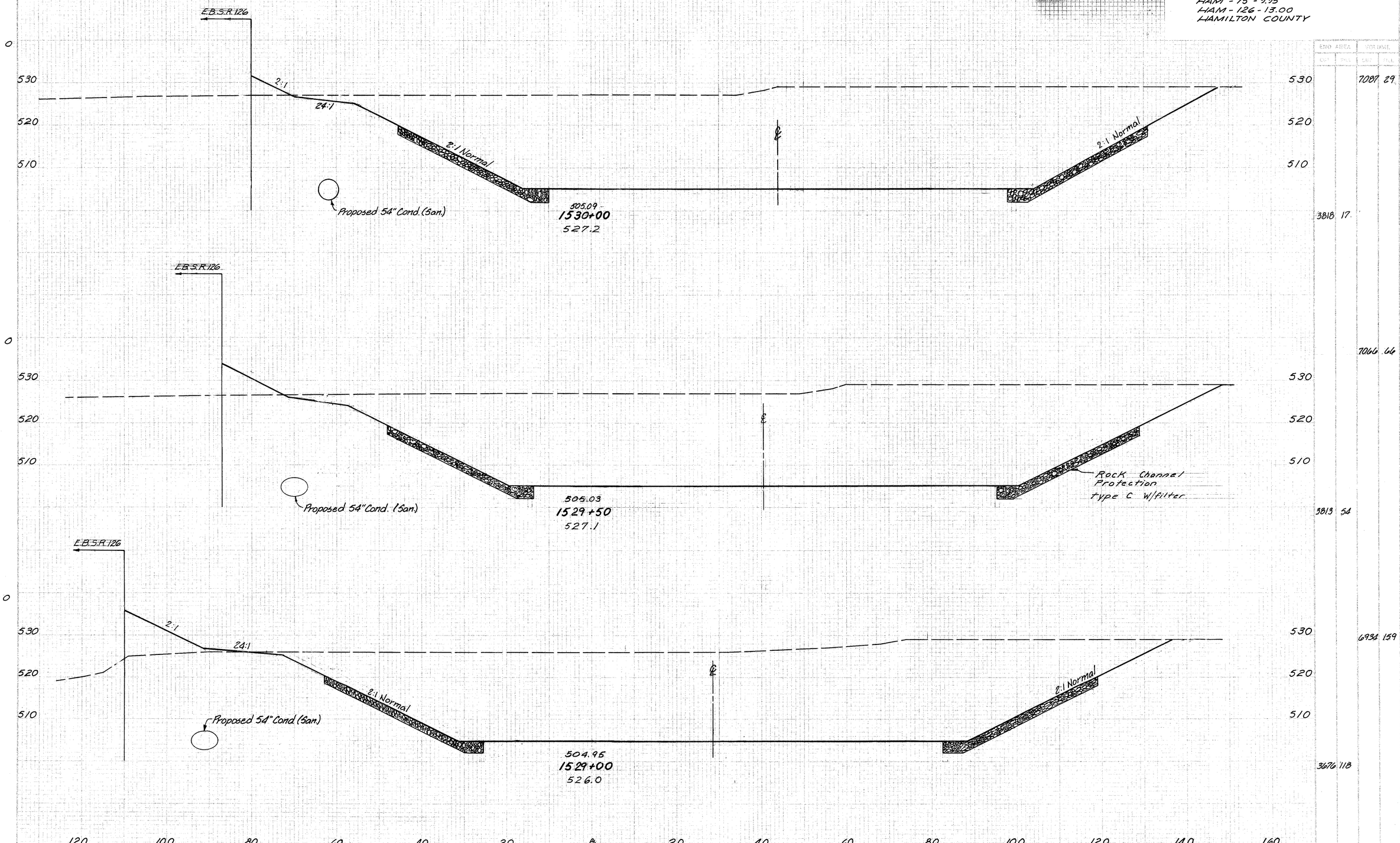
2:1 Normal

6179 | 305
3204 | 145

6630 | 417

DEVELOPED	CHECKED

RELOC. MILL CREEK CHANNEL STA 1527+50 TO STA 1528+50



BELOC MILL CREEK CHANNEL STA 1529+00 TO STA 1530+00

SEEDING

END WIDTH	SQ YDS
0	
0	
0	

120 100 80 60 40 20 ℄ 20 40 60 80 100 120

CALC. DS DATE 3/86

CHKD. TEA DATE 3/86

DES. ORG. DIVISION	STATE	PROJECT	
2	OHIO		

349
787

HAM - 75 - 9.93
HAM - 126 - 13.00
HAMILTON COUNTY

EB. SR. 126

2:1

24:1

2:1 Normal

Proposed 54" Cond. (San.)

505.30
1531+50
528.2

2:1 Normal

530
520
510

EB. SR. 126

Proposed 54" Cond. (San.)

505.23
1531+00
528.0

Rock Channel Protection Type C w/filter.

530
520
510

EB. SR. 126

2:1

24:1

2:1 Normal

Proposed 54" Cond. (San.)

505.15
1530+50
527.0

2:1 Normal

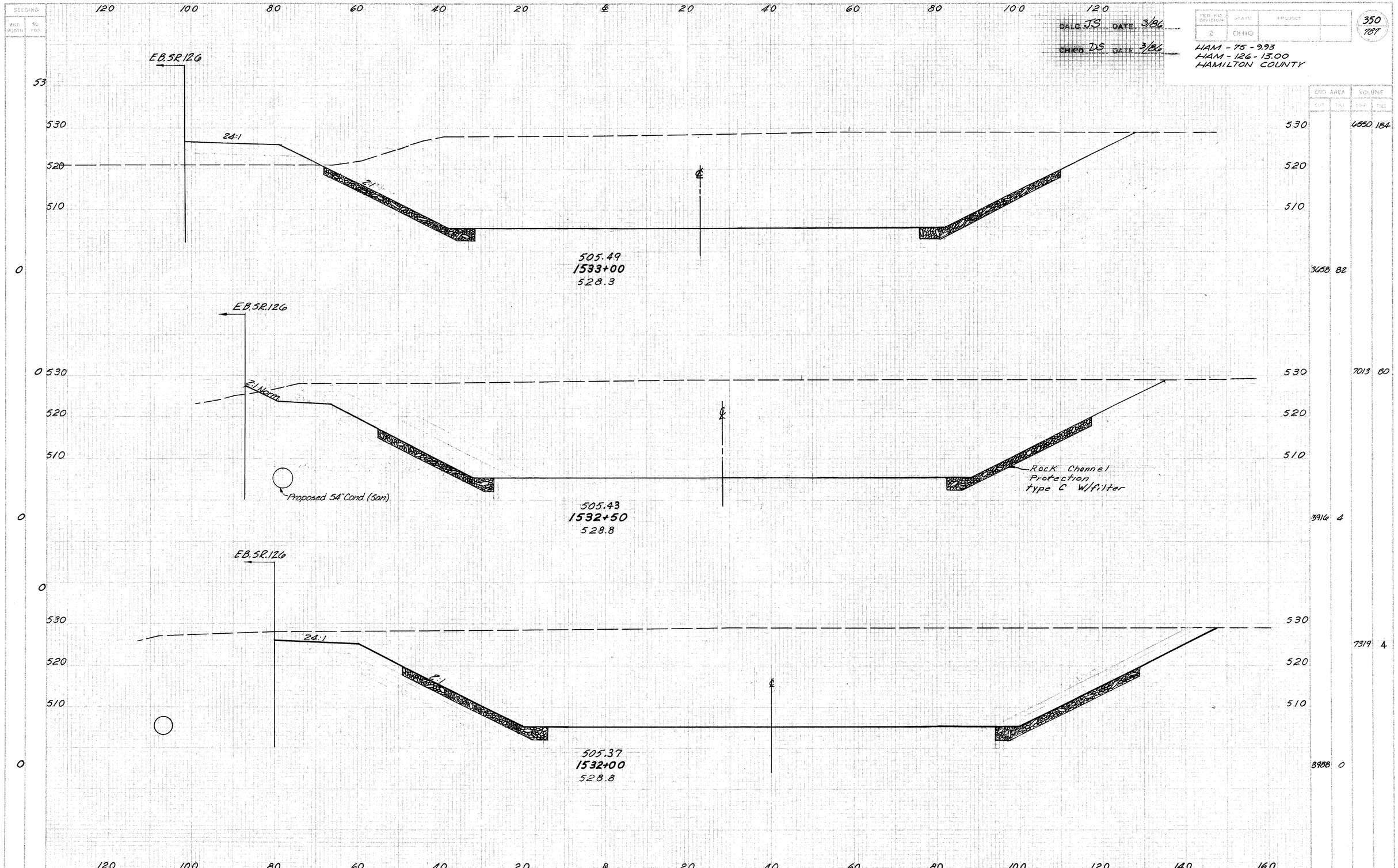
530
520
510

END AREA & VOLUME

CUT	FILL	CUT	FILL
		7295	0
		7169	0
		3891	0
		7118	13
		3836	14

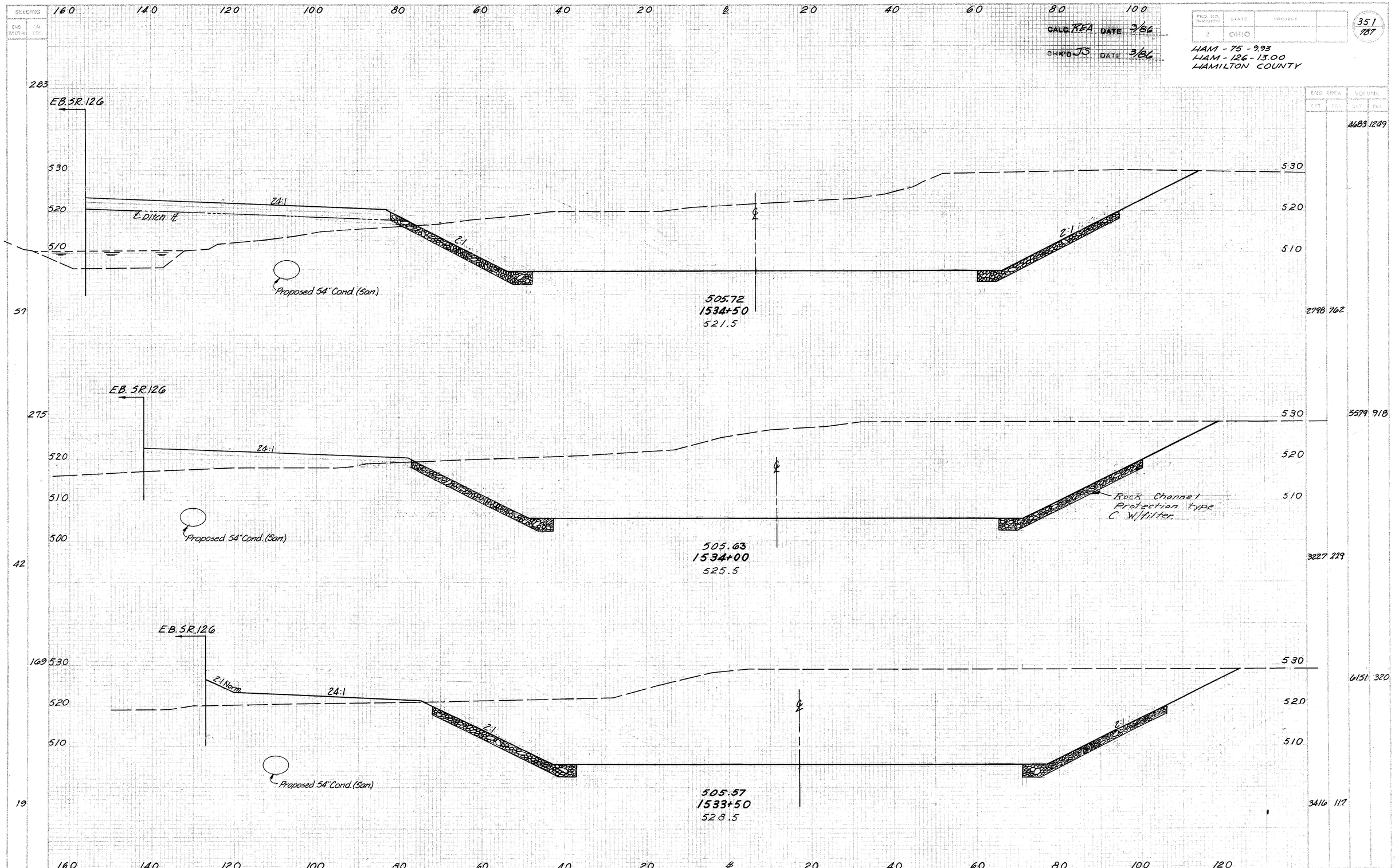
DEVELOPED	CHECKED
DES. J.TO	DWR 11-71

RELOC. MILL CREEK CHANNEL STA 1530+50 TO STA 1531+50



DEVELOPED | CHECKED

RELOC MILL CREEK CHANNEL STA 1532+00 TO STA 1533+00



DEVELOPED | CHECKED

BELOC MILL CREEK CHANNEL STA 1533+50 TO STA 1534+50

| SEEDING | | |

SEEDING

END WIDTH	SQ YDS.
0	
0	
0	

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

CALC. REA DATE 3/86

CHKD. JS DATE 3/86

PRO RD. DIVISION	STATE	PROJECT	
2	OHIO		

351B
187

HAM - 75 - 9.93
HAM - 126 - 13.00
HAMILTON COUNTY

530 520 510

FUTURE PROPOSED BY OTHERS
506.28
1537+50
508.0

530 520 510

2:1 Normal

506.13
1537+00
507.5

Sta. 1537+00
End Rock Channel
Protection type C
W/filter

530 520 510

2:1 Normal

Proposed 54" Conduit (San)

506.01
1536+50
508.0

Rock Channel
Protection type
C W/filter.

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
0	0		
530	530		
520	520		
510	510		
0	0	0	0
530	530	1926	0
520	520		
510	510		
0	0	2080	0
530	530	3684	0
520	520		
510	510		
0	0	1899	0

140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

DEVELOPED	CHECKED
956.1 to 70	FILE 11.71

RELOC. MILL CREEK CHANNEL STA 1536+50 TO STA 1537+50

SEEDING	
END WIDTH	SQ. YDS.

140 120 100 80 60 40 20 ℄ 20 40 60 80 100

CALC. REA DATE 3/86

CHK'D JS DATE 3/86

FED. HWY. DIVISION	STATE	PROJECT	
2	OHIO		

351C
787

HAM - 75 - 9.93
HAM - 126 - 13.00
HAMILTON COUNTY

END AREA		VOLUME	
CUT	FILL	CUT	FILL

530
520
510

℄

1540+00
509.0

0

0

530
520
510

℄

1538+00
507.7

0

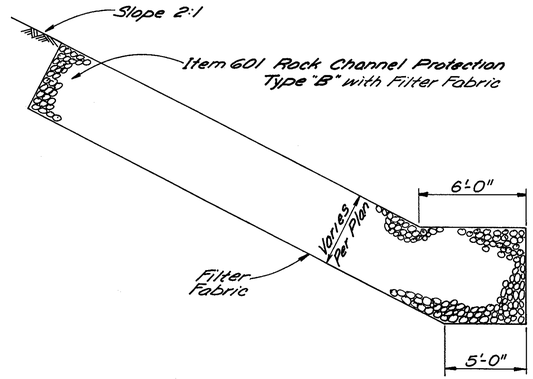
140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

DEVELOPED	CHECKED

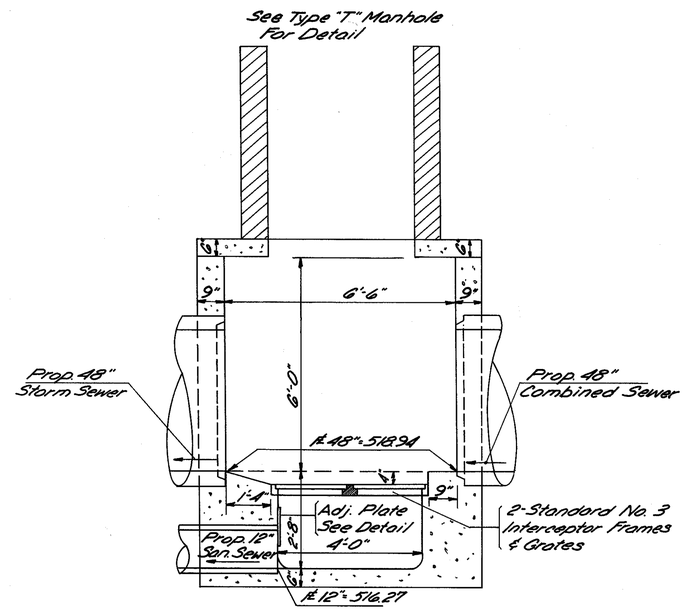
RELOC. MILL CREEK CHANNEL STA 1538+00 TO STA. 1540+00

CALC. BY JS DATE 3/86 CHKD BY RBA DATE 3/86	HAM-75-993 HAM-126-13.00 HAMILTON COUNTY	OHIO FHWA REGION 5	352 787

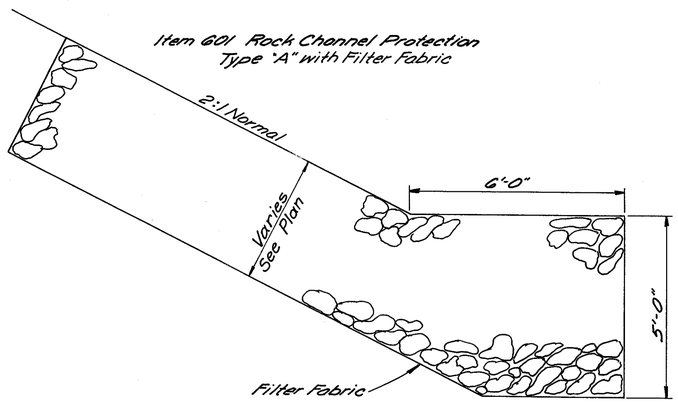
MILL CREEK CHANNEL EROSION PROTECTION



ROCK CHANNEL PROTECTION TYPE "C"
WITH FILTER FABRIC
Scale : None



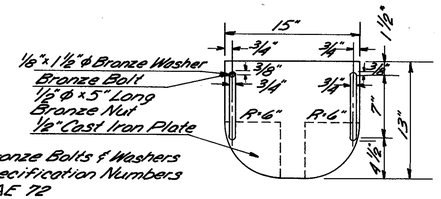
SECTION



ROCK CHANNEL PROTECTION TYPE "B"
WITH FILTER FABRIC
Scale : None

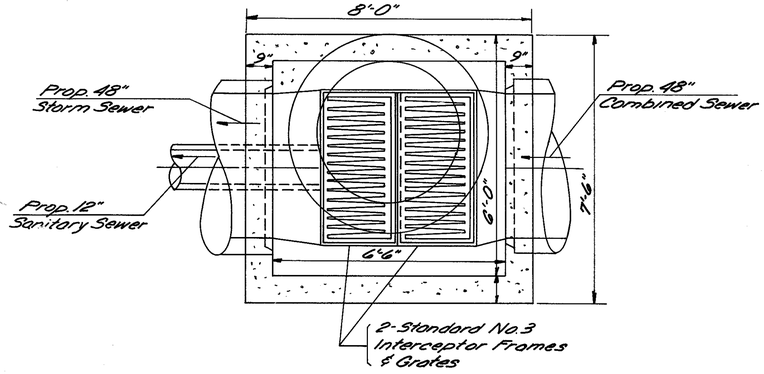
INTERCEPTOR INLET FRAME & GRATE No. 3

For Measurements, Materials, Finish & Inspection, refer to City of Cincinnati Purchasing Spec. No. 11-34 (Latest Edition)



Bronze Bolts & Washers
Specification Numbers
SAE 72
ASTM B-16
QQBG11A

ADJUSTABLE PLATE

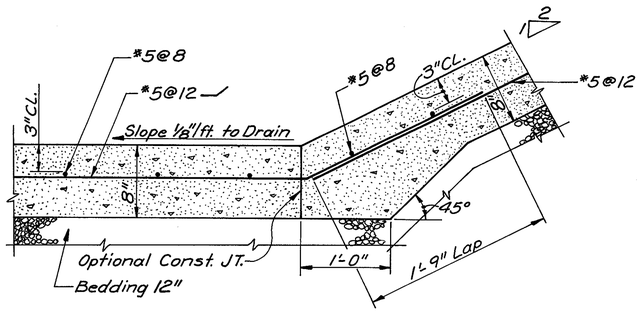


PLAN

INTERCEPTOR CHAMBER
Scale : None

CALC. BY JS DATE 3/62	HAMILTON COUNTY	OHIO	352A
CHKD. BY RLA DATE 3/62	HAM-75/12.6-9.93/13.00	FHWA REGION 5	787

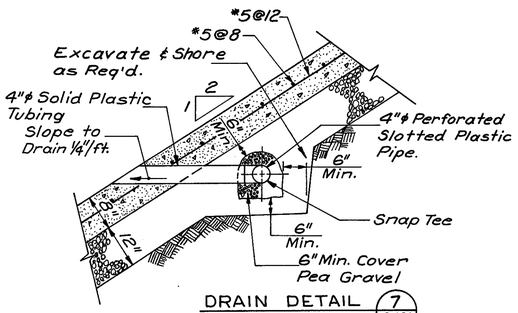
MILL CREEK CHANNEL EROSION PROTECTION



TYP. REINF. CONC. CHANNEL PAVING AT BOTTOM OF SLOPE

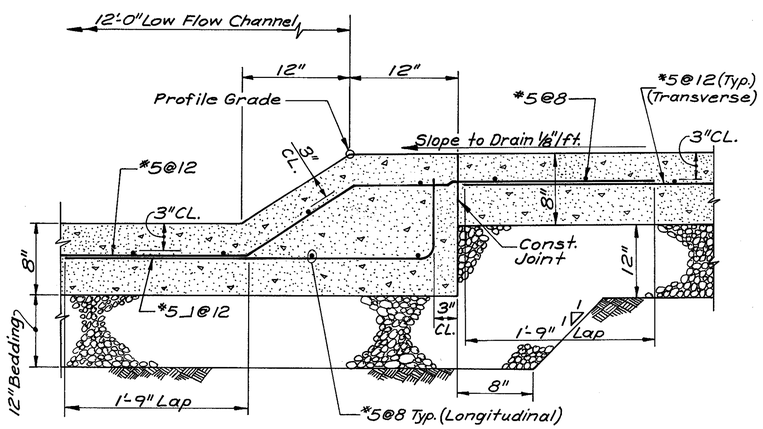
DETAIL 1 (352A)

SCALE: NONE



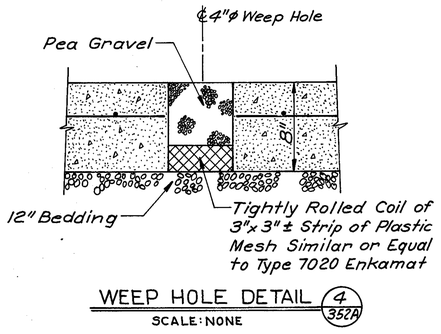
DRAIN DETAIL 7 (352A)

SCALE: NONE



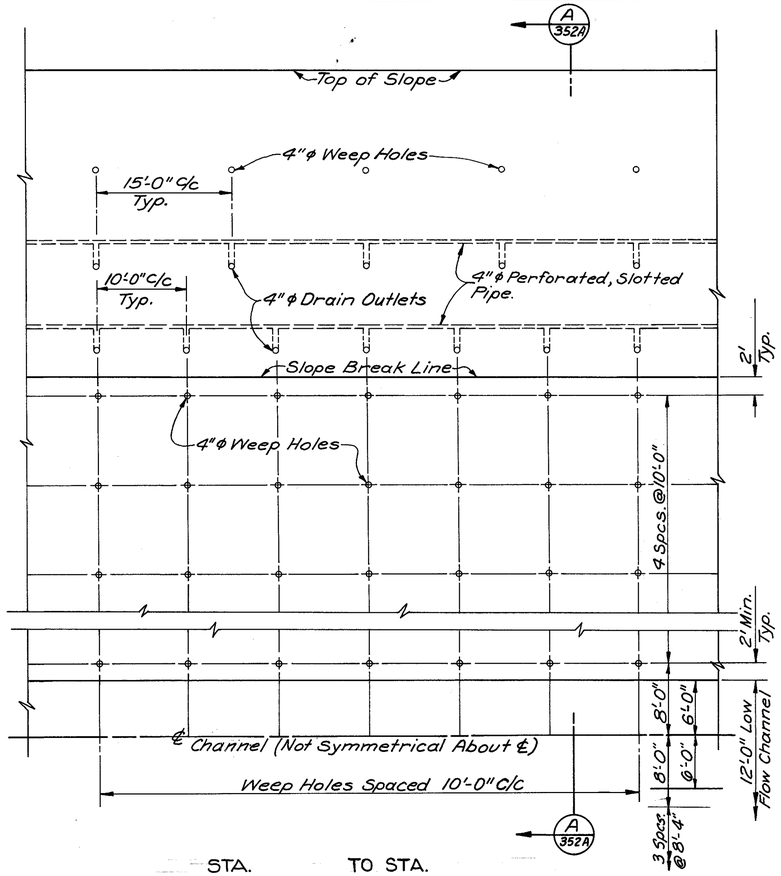
DETAIL 2 (352A)

SCALE: NONE



WEEP HOLE DETAIL 4 (352A)

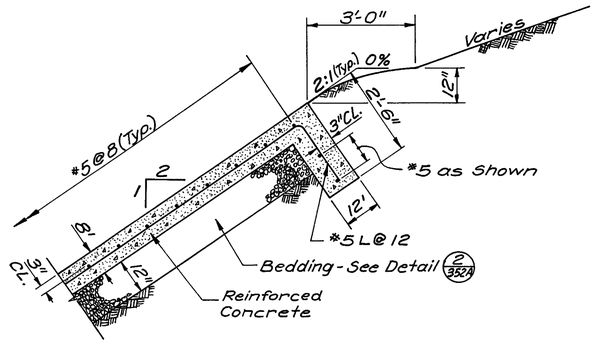
SCALE: NONE



STA. TO STA.

PLAN-TYPICAL REACH OF CONCRETE CHANNEL PAVING

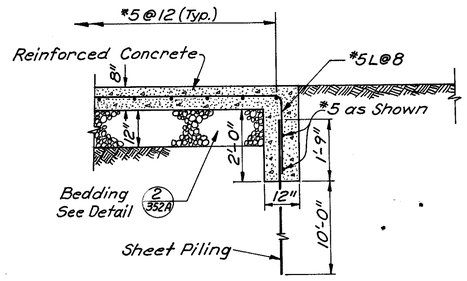
SCALE: 0 5 10 20



TYP. REINF. CONC. CHANNEL PAVING AT TOP OF SLOPE

DETAIL 3 (352A)

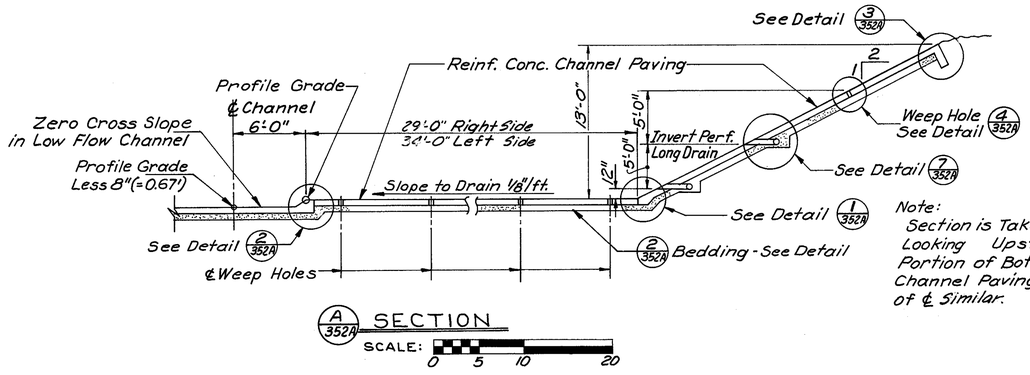
SCALE: NONE



TYP. REINF. CONC. CHANNEL PAVING DETAIL END OF PAVING

SCALE: NONE

STA. AND STA.



A (352A) SECTION

SCALE: 0 5 10 20

CONCRETE CHANNEL PAVING

N71130

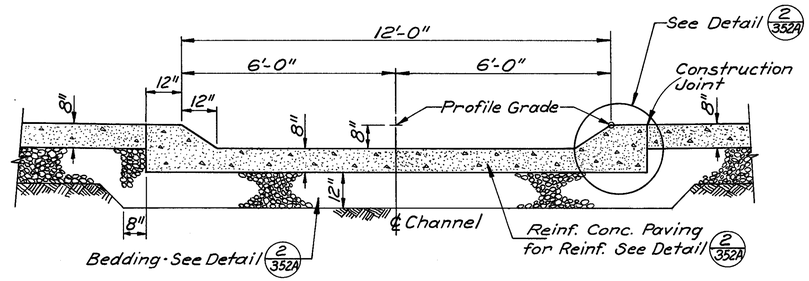
CALC. BY JS DATE 3/96
CHKD. BY AJA DATE 3/96

HAMILTON COUNTY
HAM-75/126-9.93/13.00

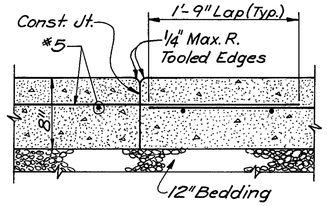
OHIO
FHWA REGION 5

352B
787

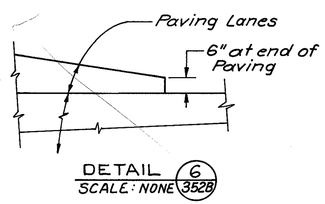
MILL CREEK CHANNEL EROSION PROTECTION



TYP. REINF. CONC. CHANNEL PAVING DETAIL
LOW FLOW CHANNEL
SCALE: NONE



CONSTRUCTION JOINT
SCALE: NONE



DETAIL 6 352B
SCALE: NONE

Note:
Construction Joints are to be placed between adjacent Paving Lanes; At the end of a days run; or any time the concreting operation has ceased for 45 minutes. Locations of construction Joints are optional with contractor, subject to approval of the Engineer. Where Longitudinal C.J.'s merge W/other C.J.'s or edges due to varying paving lane widths, Feathered edges will be eliminated by providing a 6" wide end edge, See Detail. 6 352B

N71130

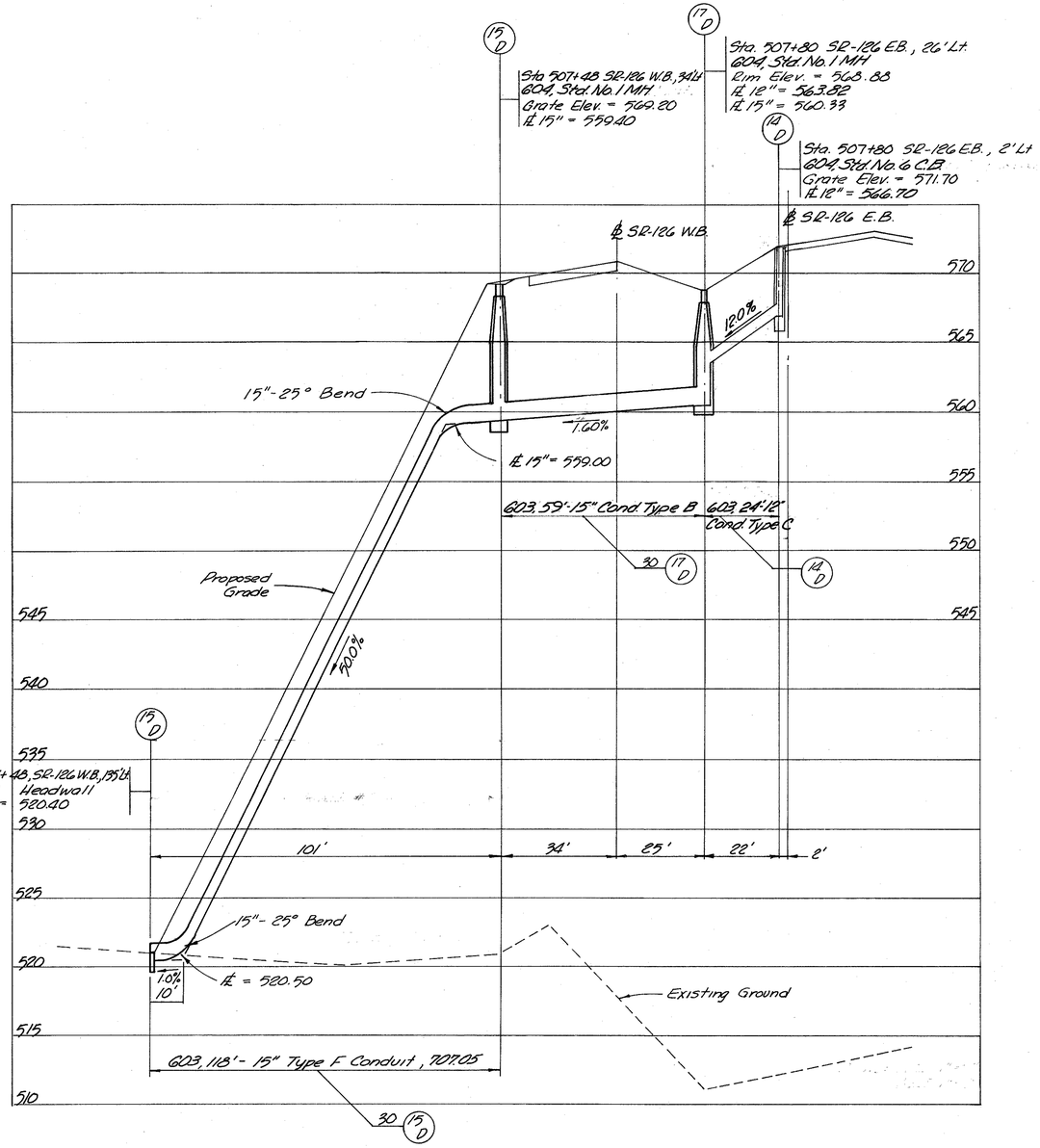
CALC. D.S. DATE 3/96

CHKD. REA DATE 3/96

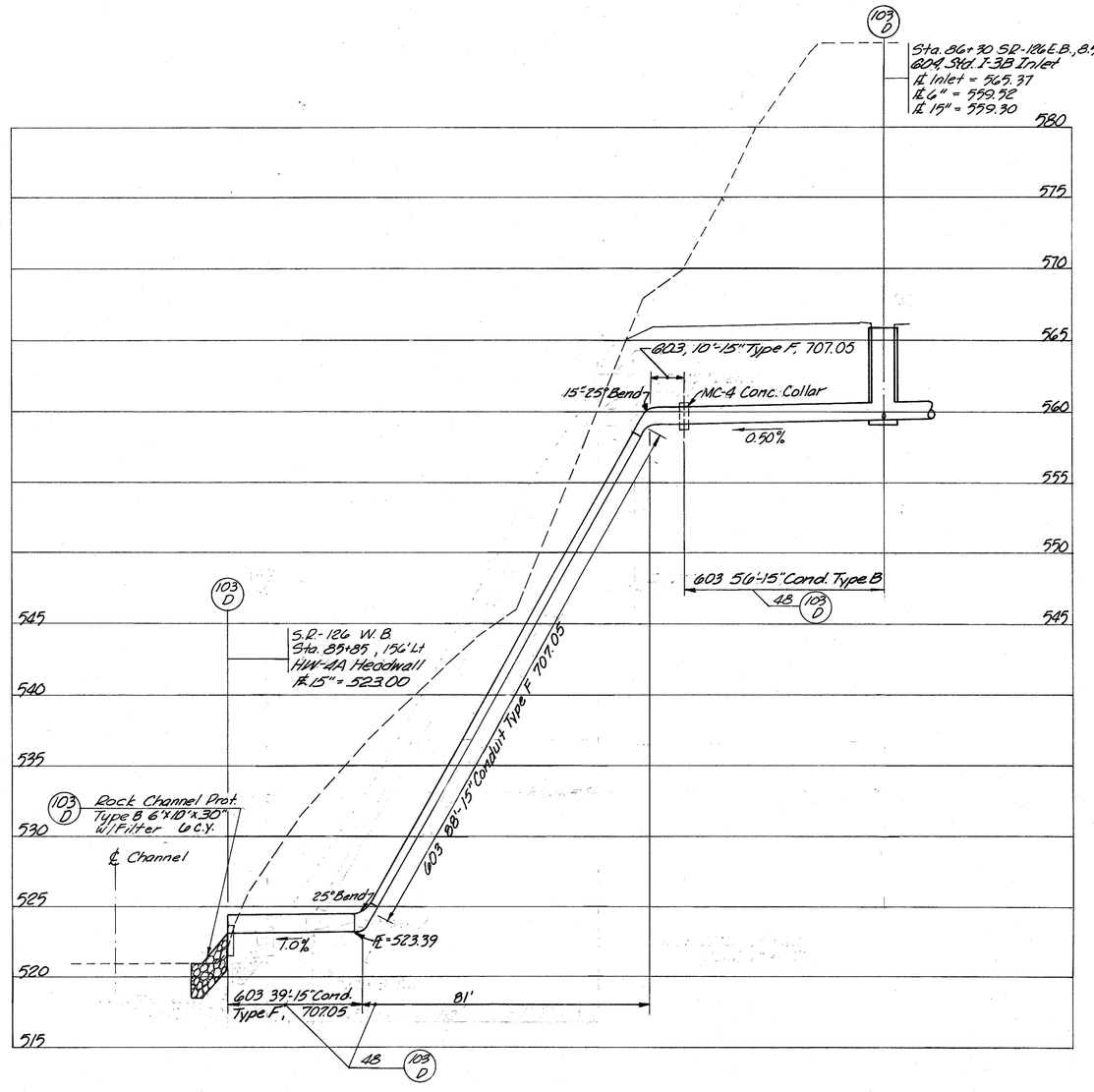
FED. NO. DIVISION	STATE	PROJECT	
2	OHIO		

353
787

HAM - 75 - 9.93
HAM - 126 - 13.00
HAMILTON COUNTY



STA. 507+48 W.B. to STA. 507+80 E.B.
STATE ROAD 126



STA. 85+85 W.B. to STA. 86+30 E.B
STATE ROAD 126

Scale: Hor. 0 10 20 40
Vert. 0 5 10

DEVELOPED	CHECKED
DRS	J.A.S.
PLAN	4-2-96

SEWER PROFILES

353

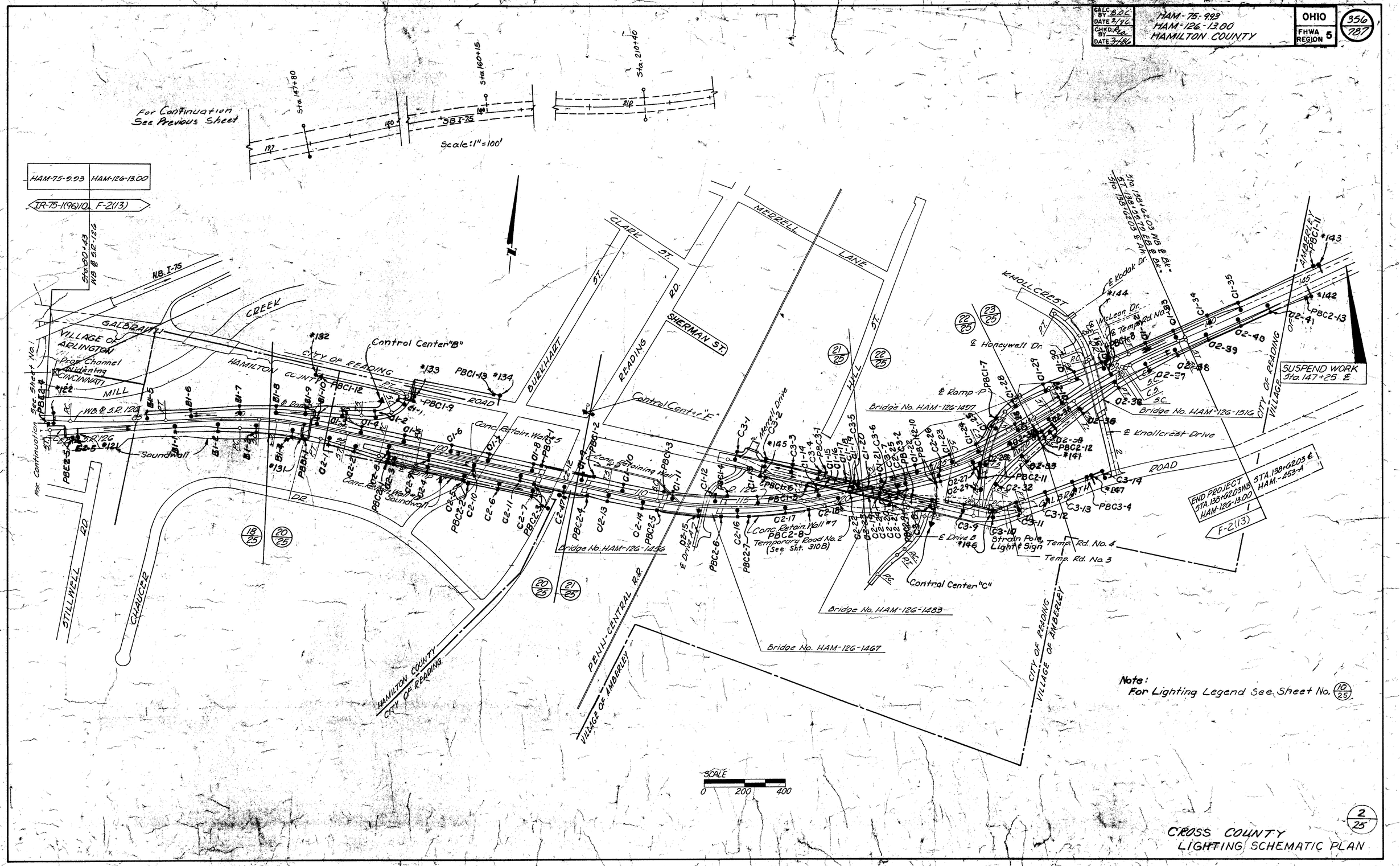
159 Yellow
355-397

CALC. BY B.D.L. DATE 2/96	HAM-75-9.93 HAM-126-13.00 HAMILTON COUNTY	OHIO FHWA REGION 5	355 787
CHKD. BY R.A. DATE 3/96			

Sta. 497+58.82
MAY ST.
CALDWELL DR.
LAUREL AVE.
STATION AVE.
BURNS AVE.
PBAI-3
PBAI-1
AI-3
AI-1
AI-2
B & O. R.R.
BEGIN WORK Sta. 500+.11 WB
END PROJECT HAM-126-10.93 Sta. 502+44.57 WB
BEGIN PROJECT HAM-126-13.00 Sta. 502+44.57 WB
F-2( )
F-2(13)
Control Center "A"
DE CAMP AVE.
Bridge No. Ham-126-1303 Lt.
Bridge No. Ham-126-1303 Rt.
PBAI-4
PBD3-1
D3-7
D3-8
D3-1
D3-2
D3-9
D3-10
D3-3
D3-4
D3-5
D3-6
D3-11
D3-12
PBD3-2
PBD3-3
PBD1&2-1
Control Center "D"
PBD1&2-2
PBD1-3
D2-13
Bridge No. HAM-126-1328
Conc. Retain. Wall No. 2
D2-12
PBD2-6
PBD1-4
D2-11
PBD2-3
D2-10
D2-9
D2-8
PBD2-4
D2-7
Conc. Retain. Wall No. 3
D2-6
D2-5
D2-4
D2-3
D2-2
D2-1
PBD2-5
PBD1-10
D1-1
D1-2
D1-3
D1-4
D1-5
Ex. Pedestrian Overpass
PBD1-9
D1-6
D1-7
D1-8
D1-9
D1-10
PBD1-8
D1-11
D1-12
PBD1-7
D1-13
D1-14
D1-15
D1-16
D1-17
D1-18
D1-19
D1-20
D1-21
PBD1-6
PBD1-5
PBD1-4
PBD1-2
D2-14
D2-15
D2-16
D2-17
I-2A-6
Conc. Retain. Wall #2
Soundwall
HAM-126-13.00 HAM-75-9.93
F-2(13)
IR-75-1(96)10
Bridge No. HAM-126-1330
Bridge No. HAM-126-1376
MYSTIC AVE.
PARKWAY AVE.
ANTHONY WAYNE AVE.
AVALON
OAKMONT
WOODBINE
CONRAIL R.R.
E. Service Rd.
E. Ramp F
E. Ramp I
E. Ramp D
E. Ramp H
E. Ramp C
E. Ramp J
E. Ramp I
E. Ramp D
E. Ramp H
E. I-75 SB
E. I-75 NB
E. Temp. Rd. No. 1
E. Prop. Channel Widening
E. Channel Reloc.
Existing
Bridge No. HAM-126-1389
Bridge No. HAM-126-1400
Bridge No. HAM-126-1359
Bridge No. HAM-75-1010
PBE1-2
PBE1&2-1
PBE2-2
PBE2-3
PBE2-4
PBE2-5
PBE2-6
PBE2-7
PBE2-8
E1-1
E1-2
E1-3
E1-4
E1-5
E1-6
E1-7
E1-8
E1-9
E2-1
E2-2
E2-3
E2-4
Soundwall "B"
Exit. PB
Sta. 30+46.75 EB & WB SR-126
Sta. 23+10 EB & SR-126
Sta. 130+75 I-75 N.B.
Sta. 129+69 I-75 S.B.
Overhead Wires
Future Channel Reloc.
Channel Reloc.
CARTHAGE FAIR GROUNDS
HAMILTON COUNTY
CITY OF CINCINNATI
VINE ST.
77TH ST.
SECTION RD.
SUMMIT
CITY OF CINCINNATI
HAMILTON COUNTY
MILL CREEK
CREST HILL AVE.
DAWN ROAD
GREENLAND
HARTLAND DR.
GLENORCHARD
DEBONAIR DR.
GALBRAITH ROAD
VILLAGE OF ARLINGTON
CITY OF CINCINNATI
END WORK HAM-75-9.93
IR-75-1(96)10
RESUME WORK HAM-75-9.93
IR-75-1(96)10
Replace Existing Pull Box W/New, Reconnect Wiring
P.B.*32
P.B.*33
(2) #2 Cable Duct
New Conduit Jacked Under Pavement W/
Replace Existing Pull Box W/New, Reconnect Wiring.
For Continuation See Next Sheet
For Continuation See Sheet No. 2
SCALE 0. 200 400

Note:
For Lighting Legend See Sheet No. 10/25

1/25
CROSS COUNTY
LIGHTING SCHEMATIC PLAN



CALC. BY B.O.C. DATE 2/96
CHKD. BY Rea DATE 3/86
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
OHIO
FHWA REGION 5
356/787
For Continuation See Previous Sheet
Scale: 1" = 100'
HAM-75-9.93 | HAM-126-13.00
IR-75-1(96)10 F-2(13)
Sta. 80+43 WB ℄ S.R. 126
N.B. I-75
GALBRAITH
VILLAGE OF ARLINGTON
Prop. Channel Widening
CINCINNATI
MILL
CREEK
HAMILTON COUNTY
CITY OF READING
ROAD
Control Center "B"
Control Center "E"
Control Center "C"
CLARK ST.
BURKHART ST.
READING RD.
SHERMAN ST.
MERRELL LANE
HILL ST.
KNOLLCREST
℄ Honeywell Dr.
℄ Ramp P
℄ Knollcrest Drive
℄ Drive B
Bridge No. HAM-126-1497
Bridge No. HAM-126-1516
Bridge No. HAM-126-1456
Bridge No. HAM-126-1483
Bridge No. HAM-126-1467
Conc. Retain. Wall #5
Conc. Retaining Wall
Conc. Retain. Wall #7
Temporary Road No. 2 (See Sht. 310B)
Strain Pole Light & Sign
Temp. Rd. No. 4
Temp. Rd. No. 3
Soundwall
STILLWELL RD.
CHAUCER DR.
PENN-CENTRAL R.R.
VILLAGE OF AMBERLEY
AMBERLEY
SUSPEND WORK Sta. 147+25 ℄
END PROJECT STA. 138+62.03 WB HAM-126-13.00
STA. 138+62.03 ℄ HAM-453-A
F-2(13)
For Continuation See Sheet No. 1
Note: For Lighting Legend See Sheet No. 10/25
SCALE 0 200 400
2/25
CROSS COUNTY LIGHTING SCHEMATIC PLAN

LIGHTING GENERAL NOTES

SPECIFICATIONS
THESE NOTES ARE SUPPLEMENTAL TO ITEMS 625 AND 713 OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS.

REFERENCE SHALL BE MADE TO STANDARD CONSTRUCTION DRAWINGS LISTED ON THE TITLE SHEET OF THESE PLANS.

GENERAL
THE POWER SUPPLYING AGENCY FOR THIS PROJECT IS:

CINCINNATI GAS & ELECTRIC COMPANY
4TH & MAIN STREETS
CINCINNATI, OHIO 45202-4003

THIS PROJECT HAS BEEN DESIGNED ON THE BASIS OF 5% VOLTAGE DROP WITH A MAXIMUM UNIFORMITY OF 4.0 TO 1 FOR CONVENTIONAL UNITS AND 3.0 TO 1 FOR TOWERS.

LUMINAIRES
STYLE "A" LUMINAIRES SHALL HAVE SINGLE RATED 480-VOLT, 100-WATT, INTEGRAL REGULATOR BALLASTS FOR USE WITH HIGH PRESSURE SODIUM LAMPS AND SHALL BE GENERAL ELECTRIC M400, CROUSE-HINDS OV-25, ITT AMERICAN 400, OR EQUAL APPROVED BY THE ENGINEER.

STYLE "B" LUMINAIRES SHALL HAVE SINGLE RATED 240-VOLT OR 480-VOLT, 100-WATT OR 200-WATT, INTEGRAL REGULATOR BALLASTS FOR USE WITH HIGH PRESSURE SODIUM LAMPS, AS SPECIFIED ON PLANS, AND SHALL BE GENERAL ELECTRIC M250R, OR CROUSE-HINDS OVM-400, ITT AMERICAN 250, OR EQUAL APPROVED BY THE ENGINEER.

STYLE "C" LUMINAIRES SHALL HAVE SINGLE RATED 240-VOLT OR 480-VOLT, 310-WATT OR 400-WATT, INTEGRAL REGULATOR BALLASTS FOR USE WITH HIGH PRESSURE SODIUM LAMPS, AS SPECIFIED ON PLANS, AND SHALL BE GENERAL ELECTRIC M-1000, CROUSE-HINES, OVM-1000, ITT AMERICAN 1000, OR EQUAL APPROVED BY THE ENGINEER.

UNDERPASS LUMINAIRES
UNDERPASS LUMINAIRES SHALL BE HOLOPHANE "UNDERPASS WALLPACK," WESTINGHOUSE, OR GENERAL ELECTRIC WL-250 UNDERPASS UNIT OR EQUAL APPROVED BY THE ENGINEER, AND SHALL BE FURNISHED WITH AN INTEGRAL FUSE HOLDER AND 10-AMPERE FUSE. THE INTEGRAL HIGH PRESSURE

SODIUM BALLAST SHALL BE OF A REGULATOR TYPE RATED FOR 480-VOLTS, 100-WATTS.

LAMPS
HIGH PRESSURE SODIUM LAMPS SHALL BE GENERAL ELECTRIC "LUCALOX," WESTINGHOUSE "CERAMALUX," SYLVANIA "LUMALUX" OR EQUAL APPROVED BY THE ENGINEER. 150-WATT HPS LAMPS SHALL BE OF THE 100-VOLT DESIGN, ANSI S545B-100. 200-WATT LAMPS SHALL BE ANSI CODE S66MN-200.

LIGHT TOWER LUMINAIRE MOUNTING ARRANGEMENT
UNLESS OTHERWISE SPECIFIED IN THE PLANS, ALL LUMINAIRES WITH ASYMMETRIC DISTRIBUTIONS SHALL BE INSTALLED SO THE "ARROW" OR "STREET SIDE" DESIGNATION ON THE OPTICAL ASSEMBLY IS POSITIONED PERPENDICULAR TO THE CENTERLINE OR BASE-LINE OF THE PAVEMENT FROM WHICH THE TOWER IS STATIONED. ANY OPTICAL ROTATION CALLED FOR WILL BE EXPRESSED AS A CLOCKWISE (CW) OR COUNTERCLOCKWISE (CCW) ANGULAR MEASUREMENT FROM THE NORMAL "ARROW" ORIENTATION.

CONDUIT ON STRUCTURE
EXPANSION FITTINGS FOR CONDUIT ON STRUCTURES SHALL BE OZ TYPE AX, CROUSE-HINDS, TYPE XJ-4, APPLETON TYPE XJ-4, OR EQUAL APPROVED BY THE ENGINEER.

EXPANSION FITTING SHALL HAVE A COPPER EXTERNAL BONDING JUMPER.

ELECTRICAL SERVICE FOR ILLUMINATED SIGNS
THE PAY ITEMS IN THE LIGHTING GENERAL SUMMARY INCLUDE THE PULL BOX OR JUNCTION BOX ADJACENT TO EACH LIGHTED SIGN AND THE ELECTRICAL SERVICE CONNECTIONS LEADING INTO THE BOX, INCLUDING SPLICE-S OR CONNECTOR KITS IN THE PULL BOX OR JUNCTION BOX. QUANTITIES FOR ELETRICAL SERVICE FROM THE CONNECTION IN THE PULL BOX OR JUNCTION BOX TO THE SIGN, ARE INCLUDED IN THE TRAFFIC CONTROL GENERAL SUMMARY.

QUANTITIES FOR ELECTRICAL SERVICE FROM THE CONNECTOR KITS TO LUMINAIRES MOUNTED ON COMBINATION-TYPE (SIGN) (OR) (SIGNAL) SUPPORTS, INCLUDING DISTRIBUTION CABLE, POLE AND BRACKET CABLE, LUMINAIRE SUPPORT ARM, LUMINAIRE, ETC., EXCLUSIVELY REQUIRED TO SERVICE THE ROADWAY LIGHTING UNIT, ARE INCLUDED IN THE LIGHTING GENERAL SUMMARY.

PADLOCKS AND KEYS
PADLOCKS FURNISHED SHALL BE EITHER BRASS OR BRONZE, EQUAL TO MASTER NO. 4BKA OR WILSON BOHANNAN 660A, AND SHALL BE KEYED IN ACCORDANCE WITH SPECIFICATION 631.08, PARAGRAPH 3. PAYMENT SHALL BE INCLUDED IN THE BID FOR THE ITEM(S) BEING LOCKED.

POLYVINYL CHLORIDE PLASTIC CONDUIT
CONDUIT FURNISHED UNDER THIS SPECIFICATION SHALL CONFORM TO NEMA STANDARDS PUBLICATION NO. TC-6 WITH THE EXCEPTION THAT CONDUIT AND CONDUIT FITTINGS COMPOSED OF ACRYLONITRILE-BUTADIENE-STYRENE (ABS) SHALL BE ACCEPTABLE.

AS AN ALTERNATE TO POLYVINYL CHLORIDE, CORRUGATED COILABLE POLYPROPYLENE CONFORMING TO NEMA STANDARDS PUBLICATIONS NO. TC-5 MAY BE USED.

ITEM SPECIAL - SERVICE TO UNDERPASS LIGHTING
THIS ITEM SHALL CONSIST OF PROVIDING COMPLETE ELECTRICAL SERVICE, EXCEPT FOR LUMINAIRES AND STRUCTURE GROUNDING, FOR AN UNDERPASS LIGHTING SYSTEM ON BRIDGE NO. HAM-126-1483 OVER S.R. 126. THE INSTALLATION WORK SHALL INCLUDE CONDUITS, CONDUIT GROUNDING, MOUNTINGS, FITTINGS, JUNCTION BOXES, CABLES, AND ALL INCIDENTALS NECESSARY TO COMPLETE, READY FOR USE, THE SERVICE AS DETAILED. THE LUMP SUM PRICE BID FOR "ITEM SPECIAL - SERVICE TO UNDERPASS LIGHTING" SHALL INCLUDE PAYMENT FOR ALL EQUIPMENT, LABOR, AND MATERIALS NECESSARY TO COMPLETE THE WORK AS SPECIFIED. COMPONENT PARTS NOT SPECIFICALLY MENTIONED BUT REQUIRED FOR SATISFACTORY OPERATION OF THIS ITEM SHALL BE FURNISHED AND CONSIDERED PAID FOR AS PART OF THE ITEM.

ITEM SPECIAL - TEMPORARY LIGHTING
THIS ITEM SHALL CONSIST OF MAINTAINING EXISTING LIGHTING OR PROVIDING LIGHTING FOR TEMPORARY ROADWAYS AS FURTHER DESCRIBED BELOW:
TEMPORARY LIGHTING SHALL PROVIDE AN AVERAGE INITAL INTENSITY OF 1.2 FOOT CANDLES WITH AN AVERAGE TO MINIMUM UNIFORMITY NOT TO EXCEED 4:1
All TEMPORARY LIGHTING SHALL MEET CURRENT FEDERAL AND STATE CRITEREA. WHEN BREAKAWAY POLES ARE USED TO MEET THESE CRITERA UNDERGROUND WIRING SHALL BE USED.

LIGHTING GENERAL NOTES

N71130

WHERE TEMPORARY LIGHTING IS TO BE INSTALLED, AND A DETAILED LAYOUT IS NOT SHOWN IN THE PLANS, THE CONTRACTOR SHALL SUBMIT FOUR (4) SETS OF THE PROPOSED DETAILED PLANS TO THE ENGINEER FOR REVIEW AND APPROVAL. THESE PLANS SHALL SHOW LOCATION OF POLES, LENGTH OF BRACKET ARMS, STYLE OF LUMINAIRES, MOUNTING HEIGHT, AND OTHER PERTINENT INFORMATION.

WOOD POLES WITH OVERHEAD WIRING MAY BE USED. ALL MATERIALS NECESSARY TO COMPLETE THE TEMPORARY LIGHTING SHALL BE FURNISHED BY THE CONTRACTOR AND THE TEMPORARY LIGHTING INSTALLATIONS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR WHEN NO LONGER NEEDED.

RECONDITIONED OR APPROVED USED MATERIALS MAY BE FURNISHED FOR TEMPORARY LIGHTING. TEMPORARY OVERHEAD CONSTRUCTION SHALL NOT BE LESS THAN GRADE "A" FOR STRENGTH REQUIREMENT AS DEFINED BY THE NATIONAL ELECTRIC SAFETY CODE. MOUNTING HEIGHT FOR TEMPORARY LUMINAIRE SHALL NOT BE LESS THAN 27 FEET AND MINIMUM OVERHEAD CONDUCTOR CLEARANCE SHALL BE 20 FEET.

THE CITY OF READING WILL PAY FOR ELECTRICAL ENERGY AND MAINTENANCE FOR UNDISTURBED LIGHTING ON EXISTING ROADWAYS AND FOR PERMANENT LIGHTING PLACED IN OPERATION. THE CONTRACTOR WILL PAY FOR ELECTRICAL ENERGY, INSTALLATION, REMOVAL, AND MAINTENANCE OF ANY TEMPORARY LIGHTING REQUIRED.

THE LUMP SUM BID PRICE FOR "ITEM SPECIAL - TEMPORARY LIGHTING" SHALL INCLUDE PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO PROVIDE THE TEMPORARY LIGHTING AS SPECIFIED.

HAZARDOUS MATERIALS
NO MATERIAL FURNISHED UNDER THIS SPECIFICATION SHALL CONTAIN POLYCHLORINATED BIPHENYLS (PCBS). TRANSFORMERS, BALLASTS AND CAPACITORS SHALL BE MARKED "NO PCBS" IN ACCORDANCE WITH FEDERAL ENVIRONMENTAL PROTECTION AGENCY REGULATION 40 CFR 761.

LIGHT POLE REMOVED FOR STORAGE, AS PER PLAN
THIS ITEM OF WORK SHALL CONSIST OF REMOVING AN EXISTING LIGHT POLE INCLUDING THE BRACKET ARM(S) AND TRANSFORMER BASE (IF USED). THE EXISTING WIRING SHALL BE REMOVED FROM THE POLE AND BRACKET ARM AND DISPOSED OF. THE POLE, BRACKET ARM(S) AND TRANSFORMER BASE SHALL BE SEPARATED AND STORED ON THE SITE FOR REMOVAL BY STATE FORCES.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE FOR EACH ITEM 202 "LIGHT POLE REMOVED FOR STORAGE, AS PER PLAN."

LUMINAIRE REMOVED FOR STORAGE, AS PER PLAN
THIS ITEM OF WORK SHALL CONSIST OF REMOVING AN EXISTING LUMINAIRE AND STORING IT ON THE PROJECT SITE FOR REMOVAL BY STATE FORCES.

PAYMENT WILL BE MADE FOR EACH ITEM 202 "LUMINAIRE REMOVED FOR STORAGE, AS PER PLAN".

LIGHT POLE FOUNDATION REMOVED, AS PER PLAN
THIS ITEM OF WORK WILL CONSIST OF REMOVING AN EXISTING LIGHT POLE FOUNDATION TO A MINIMUM OF ONE-FOOT BELOW FINISHED GRADE, BACKFILLING THE RESULTANT DEPRESSION WITH COMPACTED SOIL AND RESTORING THE DISTURBED AREA.

PAYMENT WILL BE MADE FOR EACH ITEM 202 "LIGHT POLE FOUNDATION REMOVED, AS PER PLAN."

CONVERTING EXISTING 240-VOLT WIRING TO PROPOSED 480-VOLT SYSTEM
THE EXISTING LUMINARIES ON I-75 FROM STATION 69+63 TO STATION 77+37 USE A 240-VOLT, 3-WIRED SYSTSEM. CONVERT THIS TO A 480-VOLT, 2-WIRED SYSTEM BY CONNECTING THE THIRD WIRE AS AN EXTRA GROUND. REMOVE THE LUMINAIRES, STORE FOR PICKUP BY THE STATE AND INSTALL NEW 480-VOLT LUMINAIRES.

THE COST OF THE WIRING IS TO BE INCLUDED IN THE UNIT PRICE BID FOR LUMINAIRE, STYLE "B", TYPE II, 200-WATT, HIGH PRESSURE SODIUM.

LIGHTING GENERAL NOTES

CALC. BY B.D.C. DATE 2/96
CHKD. BY R.L. DATE 3/96

HAMILTON COUNTY
HAM-75/126-9.93/13.00

OHIO
F.H.W.A. REGION 5

358
787

LIGHTING GENERAL SUMMARY

Participation Code : ① IR-75-1(96)10
② F-2(13)

ITEM	FROM SHEET NUMBER																									ITEM	Total IR-75-1(96)10 ①	Total F-2(13) ②		GRAND TOTAL	UNIT	DESCRIPTION
			①10	①11	①12	①13	②13	①14	①15	①16	②16	①17	②17	①18	②18	②19	②20	②21	②22	②23												
202			4	12				10	11	11		10														202	58			58	Each	Light Poles Removed For Storage, As Per Plan
202			14	12				10	11	11		10														202	68			68	Each	Luminaire Removed For Storage, As Per Plan
202			4	12				10	11	11		10														202	58			58	Each	Light Pole Foundation Removed, As Per Plan
625																		4		2						625		6		6	Each	Light Pole, Design AT8B41.7
625			2	1	1		1								6	4	11	7	13	17						625	5	58		63	Each	Light Pole, Design AT15B41.7
625					4		1										10		2							625	5	12		17	Each	Light Pole, Design AT18B41.7
625																			2							625		2		2	Each	Light Pole, Design AT20B41.7
625			2	4													3									625	6	3		9	Each	Light Pole, Design ST10B39
625				2	4												1	5	4							625	6	10		16	Each	Light Pole, Design ST12B41.7
625				2																						625	2			2	Each	Light Pole, Design ST10B36
625				2		2		7	7	2	1	5	1	1	1											625	26	3		29	Each	Light Tower BBBB 100
625								1		3																625	4			4	Each	Light Tower BBBBBB 100
625																		1								625		1		1	Each	Light Pole, Design ST10B40
625																	1			1						625		2		2	Each	Glare Shield
625																	1	1	1							625		3		3	Each	AT8B ARM
625			2	1	5		2								6	4	21	11	17	19						625	8	80		88	Each	Light Pole Foundation, 24" Dia. x 8 Ft. Deep
625								2	5	5	1	3														625	15	1		16	Each	Light Tower Foundation 36" Dia. x 20 Ft. Deep
625				2		2		6	2			2	1	1	1											625	15	2		17	Each	Light Tower Foundation 36" Dia. x 25 Ft. Deep
625																		12								625		12		12	Each	Luminaire, Underpass, 100 Watt High Pressure Sodium
625																4	13		6	6						625		29		29	Each	Luminaire, Style B Type II, 200 Watt High Pressure Sodium
625			14	9											6		13	18	16	13						625	23	66		89	Each	Luminaire, Style B Type III, 200 Watt High Pressure Sodium
625					9		2																			625	9	2		11	Each	Luminaire, Style C Type III, 310 Watt High Pressure Sodium
625								4	4	4	4		4													625	12	8		20	Each	Luminaire, Light Tower Assymmetric, Type I, 400 Watt High Pressure Sodium
625				8		8		24	24	4		20		4	4											625	92	4		96	Each	Luminaire, Light Tower Assymmetric, Type II or III, 400 Watt High Pressure Sodium
625								6		18																625	24			24	Each	Luminaire, Light Tower Symmetric, Type V, 400 Watt High Pressure Sodium
625			4	17	5	2	2	8	10	8	1	5	3	1	7	4	24	12	17	19						625	60	89		149	Each	Ground Rod, 713.16
625			4	4	5	2	1	4	1	1		2	2	2	1	2	8	11	5	5						625	25	35		60	Each	Pull Box, Concrete 18", 713.08
625				1				1																		625	2			2	Each	Junction Box
625			1125	1670	1775	1275	510	3725	3270	2355	845	2185	480	390	1496	555	5109	2794	3934	3173							625	17770	19796		37566	Lin.Ft.	Trench 24" Deep
625			515	1245	1103	325		340				870	135				968	1567	595							625	4398	3265		7663	Lin.Ft.	Conduit 2", 713.04
625					100	45	120	285	295	50		60			55		255		355	30						625	785	815		1600	Lin.Ft.	Conduit 3", 713.04
625								155								30	45	45	100	30						625	155	250		405	Lin.Ft.	Conduit 3", Jacked or Drilled Under pavement
625												1760														625	1760			1760	Lin.Ft.	No. 2 AWG, 5000 Volt Distribution Cable
625			1110	2650	2326	670							280				2066	3344	1290							625	6756	6980		13736	Lin.Ft.	No. 4 AWG, 5000 Volt Distribution Cable
625						670		700																		625	1370			1370	Lin.Ft.	No. 1/0 AWG, 5000 Volt Distribution Cable
625			422	903	1017		232								678	452	2974	1608	2454	2119						625	2342	10517		12859	Lin.Ft.	No. 10 AWG, Pole and Bracket Cable
625								1525	1445																	625	2970			2970	Lin.Ft.	1½" Duct Cable with Two No. 1/0 AWG 5000, Volt Cables
625												560														625	560			560	Lin.Ft.	1½" Duct Cable with Two No. 2 AWG 5000, Volt Cables
625			1165	1690	1785	1265	540	2415	1905	2515	865	2280	625	1952	30	635	5314	2914	4669	3373						625	16,972	18,965		35,937	Lin.Ft.	1½" Duct Cable with Two No. 4 AWG 5000, Volt Cables
625																																
625																																
625			10	9	12		2								12	8	30	19	22	19						625	31	112		143	Each	Connector Kit, Type II
625			14	9	6		2										22	17	22	19						625	29	82		111	Each	Connector Kit, Type III
625			8	10	10	6	2	10	4	2		8	4	4	2	4	16	22	10	10						625	62	70		132	Each	Cable Splicing Kit
625					1			1				1					1	1	1							625	3	2		5	Each	Power Service
625				1	2	1		1				1	1				1	2	1							625	6	5		11	Each	Structural Ground System
625						2		3	1			1			1											625	7	1		8	Each	Light Tower Maintenance Platform "C"
625				2		2		8	7	5	1	5	1	1	1		16									625	30	3		33	Each	Tower Lightning Protection System
625			8	32	20													24	16							625	60	40		100	Each	Light Pole Anchor Bolts on Structure
Special																		Lump								Special				Lump	Lump	Temporary Lighting
																		Lump								625		Lump		Lump	Lump	Service to Underpass Lighting
																										625				Lump	Lump	High Voltage Test

N27736

LIGHTING QUANTITIES

① IR-75-1196/10
② F-2(113)

CALC BY B.O'C DATE 2/86
CHKD BY Rea DATE 3/86

HAMILTON COUNTY
HAM-75/126 - 9.93/13.00

OHIO
F.H.W.A. REGION 5

358A 787

625

REFERENCE No.	STATION TO STATION		SIDE	LIGHT POLE, DESIGN AT15B 41.7	LIGHT POLE, DESIGN ST12B 41.7	LIGHT POLE, DESIGN ST10B 39	LIGHT POLE, DESIGN ST10B 36	LIGHT POLE DESIGN AT18B 41.7	LIGHT TOWER 8888,100	LIGHT POLE FOUNDATION 24"x8' DEEP			LIGHT TWR FOUNDATION 36"x25' DEEP	JUNCTION BOX	LUMINAIRE TYPE III 200 WATT H.P.S. STYLE B	LUMINAIRE TYPE III 310 WATT H.P.S. STYLE C			LUMINAIRE LIGHT TWR ASSYMMETRIC TYPE II OR III 400W H.P.S.		GROUND ROD	TRENCH	CONDUIT 2"	CONDUIT 3"	NO 10 AWG DISTRIBUTION CABLE	NO. 4 AWG DISTRIBUTION CABLE	10 AWG POLE AND BRACKET CABLE	1½" DUCT CABLE W/TWO NO 4 AWG	1½" DUCT CABLE W/TWO NO 2 AWG	1½" DUCT CABLE W/TWO NO 10 AWG	NO 2 AWG DISTRIBUTION CABLE	CONNECTOR KIT TYPE II	CONNECTOR KIT TYPE III	CABLE SPLICING KIT	POWER SERVICE	STRUCTURAL GROUND SYSTEM	PULL BOX 18"x18"	TOWER LIGHTNING PROTECTION SYSTEM	LIGHT POLE ANCHOR BOLT ON STRUCTURE	
				EA.	EA.	EA.	EA.	EA.	EA.	EA.			EA.	EA.	EA.	EA.			EA.		EA.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	
77	69+63 ℄ I-75		Rt												1																1								
78	71+55 ℄ I-75		Rt												1																1								
79	73+80 ℄ I-75	75+10 ℄ I-75	Rt												1						155						165				1	1						
80	75+10 ℄ I-75	75+53 ℄ I-75	Rt																		60						70						2			1		
81	75+53 ℄ I-75		Rt												1																1	1						
82	77+37 ℄ I-75	79+30 ℄ I-75	Rt												1						195						205				1	1						
83	79+30 ℄ I-75	81+15 ℄ I-75	Rt	1						1					1					1	195						113	205			1	1						
84	81+15 ℄ I-75	81+60 ℄ I-75	Rt																		20	65			150							2			1		
85	81+60 ℄ I-75	83+30 ℄ I-75	Rt			1									1					1		170			360	98					1	1				4	
86	69+66 ℄ I-75		Lt												1																1							
87	71+52 ℄ I-75		Lt												1																1							
88	73+90 ℄ I-75	76+05 ℄ I-75	Lt												1						65						75				1	1						
89	76+05 ℄ I-75	75+35 ℄ I-75	Lt																		135						145						2			1		
90	75+35 ℄ I-75														1																1	1						
91	77+00 ℄ I-75	78+85 ℄ I-75	Lt												1						175						185				1	1						
92	78+85 ℄ I-75	79+90 ℄ I-75	Lt	1						1					1					1	105					113	115				1	1						
93	79+90 ℄ I-75	80+65 ℄ I-75	Lt																		20	100			220							2			1		
94	80+65 ℄ I-75	82+45 ℄ I-75	Lt			1									1					1		180			380	98					1	1				4	
	Totals Sheet No.10			2		2				2					14					4	1125	515			1110	422	1165				10	14	8			4		8	
95	83+30 ℄ I-75	85+06 ℄ I-75	Rt			1									1					1		185			390	98					1	1				4	
96	85+06 ℄ I-75	86+85 ℄ I-75	Rt				1							1	1					1		180			380	92					1	1	2			4	
97	86+85 ℄ I-75	88+70 ℄ I-75	Rt				1								1					1		195			410	92					1	1				4	
98	88+70 ℄ I-75	69+83 D	Rt		1										1						20	55			130	107					1	1		1		4	
	Br. No. HAM-75-1010																																							
99	69+83 D	36+35 H	Rt																		120						130						2			1		
100	36+35 H	38+80 H	Rt	1						1					1					3	245					113	255				1	1						
101	38+80 H	39+70 H	Rt						1				1						4	1	100						110								1			
102	39+68 H		Rt																														2			1		
103	82+45 ℄ I-75	84+23 ℄ I-75	Lt			1									1					1		190			400	98					1	1				4	
104	84+23 ℄ I-75	86+05 ℄ I-75	Lt			1									1					2		190			400	98					1	1				4	
105	86+05 ℄ I-75	87+85 ℄ I-75	Lt			1									1					2		190			400	98					1	1				4	
106	87+85 ℄ I-75	46+60 C	Lt		1										1					1	20	60			140	107					1	1				4	
107	46+60 C	48+00 C	Lt																	1	270						280						2			1		
108	48+00 C	39+90 C	Rt						1				1						4	2	420						430									1		
109	91+05 ℄ I-75	95+25 ℄ I-75	Lt																	1	475						485						2			1		
	Totals Sheet No 11			1	2	4	2		2	1			2	1	9					8		17	1670	1245			2650	903	1690				9	9	10		1	4	2	32	
1	502+90 EB	504+90 EB	Rt																		80	120			260								2			1		4	
2	503+90 EB	506+30 EB	Rt		1											1						250			520	107					2			1		4	
	Br. No. HAM 126-1303																																							
3	506+30 EB	507+85 EB	Rt		1											1					20	175			370	107					2					4	
4	507+85 EB	507+40 WB	Rt-Lt																		140		100				160						2			1		
5	503+02 WB	504+40 WB	Lt																		20	158			336								2		1	1		
6	504+40 WB	507+40 WB	Lt		1											1						320			660	107					2					4	
7	507+40 WB		Lt																														2			1		
8	506+49 WB	507+40 WB	Lt																		95						105											
9	506+90 WB	507+40 WB	Lt		1											1					20	80			180	107					1	1				4	
10	507+40 WB	509+60 WB	Lt																		220						230						2			1		
11	509+60 WB	24+30 WB	Lt					1		1						1				1	245					119	255				1	1						
12	24+30 WB	26+80 WB	Lt					1		1						1				1	255					119	265				1	1						
13	508+45 EB	23+03 EB	Rt					1		1						1				1	245					119	255				1	1						
14	23+03 EB	25+50 EB	Rt					1		1						1				1	250					119	260				1	1						
15	25+50 EB	27+90 EB	Rt	1						1						1				1	245					119	255				1	1						
	Totals Sheet No 12			1	4			4		5					9					5	1775	1103	100		2326	1017	1785				12	6	10	1	2	5		20	

All ① Participation this sheet unless noted otherwise

5
25

LIGHTING QUANTITIES SUB-SUMMARIES

① IR-75-1(96)10
② F-2(13)

LIGHTING QUANTITIES

CALC. BY B.D.C. DATE 2/96
CHKD. BY R.E.A. DATE 3/96
HAMILTON COUNTY
HAM-75/126-9.93/13.00
OHIO
F.H.W.A. REGION 5
358B 787

625

REFERENCE No.	STATION TO STATION		SIDE	LIGHT POLE, DESIGN AT15B 41.7	LIGHT POLE, DESIGN AT18B 41.7			LIGHT TOWER 88B100	LIGHT TOWER 88B88B100	LIGHT POLE FOUNDATION 24" x 8' DEEP		LIGHTTOWER FOUNDATION 36" x 20' DEEP	LIGHTTOWER FOUNDATION 36" x 25' DEEP	NO.4 AWG Distribution Cable	No.2 AWG DISTRIBUTION CABLE	LUMINAIRE TYPE III 310 WATT H.P.S. STYLE C	LUMINAIRE TYPE I 400 WATT H.P.S. Light Tower Assym.	LUMINAIRE TYPE II-III 400 WATT H.P.S. Light Tower Assym.		LUMINAIRE TYPE II 400 WATT	GROUND ROD	TRENCH	CONDUIT 2"	CONDUIT 3"	CONDUIT 3" JACKED		10 AWG POLE AND BRACKET CABLE	1/2" DUCT CABLE W/NO No 4 AWG	1/2" DUCT CABLE W/NO No 2 AWG	1/2" DUCT CABLE W/NO No 1/0 AWG	No 4 1/0 AWG DISTRIBUTION CABLE	CONNECTOR KIT TYPE II	CONNECTOR KIT TYPE III	CABLE SPLICING KIT	POWER SERVICE	STRUCTURAL GROUND SYSTEM	PULL BOX 18"x18"	TOWER LIGHTNING PROTECTION SYSTEM	LIGHT TOWER MAINTENANCE PLATFORM C	JUNCTION BOX
				EA.	EA.			EA.	EA.	EA.		EA.	EA.		L.F.	EA.	EA.	EA.		EA.	EA.	L.F.	L.F.	L.F.	L.F.			L.F.	L.F.	L.F.	L.F.	L.F.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.
16	27+90 C	28+55 C	Rt	② 1						② 1						② 1					② 1	③ 65					③ 113	③ 75				③ 1	③ 1						
17	28+55 C	31+15 C	Rt																																				
18	31+15 C	37+15 C	Rt					1					1					4			1	6 10						620					④ 2		② 1				
	Br. No Hamilton-126-Ramp C																																						
19	36+95C	40+10C	Rt											670								40	325						670			4		1	1				
20	26+80 & 126	27+90C	Lt-Rt		② 1					② 1						② 1					② 1	② 225		② 120			② 119	② 235				② 1	② 1						
21	33+40 WB	38+45WB	Lt					1					1					4			1	565		45				575							1	1			
23	36+55 EB		Lt																																				
	Totals sheet No 13			1②	1②			2		2②			2	670		2②		8			3 3②	1275 510②	325	45 120②			232②	1265 460②			670	2 ②	2 ②	6 2②		1	3 1⑤②	2	2	
22	37+15C	36+55 EB	Rt-Lt					1					1					4			1	185		45				195							1	1			
24	38+45 WB	36+55 EB	Rt-Lt					1					1					4			1	260		45				270							1	1			
25	38+02C	36+95C	Rt-Rt																			110								240									
25A	38+02C	37+15C	Rt																			90						100											
26	39+90C	41+00 EB	Rt																			370		35						380									
27	95+25 E I-75	40+10C	Lt-Rt						1				1								6	195		35				205					4			1			
28	42+10D	95+25 E I-75	Lt-Rt					1					1				4				1	290						300							1				
29	43+25 WB	42+10D	Rt					1					1					4			1	400						410							1	1			
	Br. No Hamilton-126-1328																																						
30	41+00 EB	44+90 EB	Rt																			40	340						700			2		1	1			1
31	44+90 EB	43+50H	Rt-Lt																			110						120				2			1			
32	43+50H	39+70H	Lt-Rt					1		1								4			1	455						465								1		
33	48+25H	44+90 EB	Lt-Rt					1		1								4			1	415								420						1		
34	60+00I	48+25 H	Rt-Lt																			95								105		2						
35	56+60D	51+25 D	Lt-Lt					1					1					4			1	340						350							1			
36	48+25 H	51+20 H	Lt-Rt																			370								380						1		
	Totals Sheet No 14							7	1	2			6					4	24		6	8	3725	340	285				2415		1525	700			10	1	1	4	8	3	1
37	51+25D	60+00 I	Lt-Rt					1		1								4			1	390		30				400								1		
38	47+70 WB	43+25 WB	Lt-Rt					1					1					4			3	510		50				520								1	1	
39	53+15 WB	47+70 WB	Rt-Lt					1		1								4			2	605		50				615								1		
40	51+20H	56+00 EB	Rt-Lt					1					1					4			1	570		80						580						1		
41	56+00 EB	107+60 I-75 NB	Lt-Rt					1		1											1	365		30						375						1		
42	107+60 I-75 NB	112+10 I-75 NB	Rt					1		1								4			1	420								430						1		
43	112+10 I-75 NB	111+68 I-75 NB	Rt					1		1								4			1	50								60						1		
44	58+15 EB	60+95 EB	Rt-Lt																			360		55				370				2						
	Totals Sheet No 15							7		5			2					4	24			10	3270		295				1905		1445				4			1	7	1
45	57+90 E	120+15 F	Rt-Lt						1				1								6	2	390						400								1		
46	120+15 F	136+50 I-75 NB	Lt-Lt						1				1								6	2	700		50				710								1		
47	62+25 NB	120+15 F	Rt-Lt																			1	70						80				2						
48	115+70 I-75 NB	120+55 I-75 NB	Lt-Lt						1				1								6	1	495						505								1		
49	120+55 I-75 NB	69+80 WB	Lt-Rt					1					1					4				1	480						490								1		
50	60+95 EB	66+05 EB	Lt-Lt					1					1									1	220 305②					330 315②								1		
51	66+05 EB	71+25 EB	Lt-Lt					1 ④		① 1							② 4					④ 1	② 540					550 ②							② 1				
	Totals sheet No 16							2 1⑥	3	5 1⑥				280②	280②		4	4⑥	4		18	2 1⑤	235 205②		50				255 205②					2			1	5 1⑥		
60A	74+60 E.B.	76+40 E.B	Lt																			20②	1350					145 ②					2 ④		1②	1②			
52	136+50 I-75 SB	137+65 I-75 SB	Lt-Rt					1		1								4			1	280			60			350								1		
53	137+65 I-75 SB	137+95 G.R.	Rt-Rt					1		1								4			1	125			35			170								1		
54	134+10 I-75 SB	137+65 I-75 SB	Rt					1		1								4			1	385						395								1		
55	137+75 G.R.	68+70 NB	Rt																			420		60				430	430					1				
56	68+70 NB	69+80 WB	Rt																			120							130			4			1			
57	69+80 WB	68+70 NB	Rt					1					1					4			1	135						145								1		
	Br. No Hamilton-126-1389																																						
58	69+80 WB	78+40 WB	Rt												1760								870									2		1	1			
59	130+70 I-75 NB	69+80 WB	Rt-Rt					1					1					4			1	720			60			790				2				1	1	
60	71+25 EB	74+60 EB	Lt					② 1					② 1				② 4				② 1	③ 360						③ 370								② 1		
60B	76+40 EB	76+90 E B	Lt																			② 100						③ 110				② 2			② 1			
	Totals Sheet No 17							5 1⑥		3			2 1⑥	280②	1760 280②		4②		20			5 3⑤	218 80②	870 350②	60		155	2280 935②	560				8 4⑥	1	1 1⑥	2 2⑥	5 1⑥		1	

All ① Participation this sheet unless noted otherwise

LIGHTING QUANTITIES SUB-SUMMARIES

6/25

CALC B.OC DATE 2/96 | CHKD Rea DATE 2/96 | HAMILTON COUNTY HAM-75/126-9.93/13.00 | OHIO | F.H.W.A. REGION 5 | 358C 787

LIGHTING QUANTITIES

①IR75-1(96)10
②F-2(13)

625

REFERENCE No.	STATION TO STATION		SIDE	A LIGHT POLE, DESIGN AT15D41.7	B LIGHT POLE, DESIGN AT18D41.7	F LIGHT POLE, DESIGN ST10D3P	C LIGHT POLE, DESIGN ST12D41T	LIGHT TOWER 88B100		AT8B ARM	GLARE SHEILD		LIGHT POLE FOUNDATION 24"x8' DEEP	LIGHT TOWER FOUNDATION 36"x25' DEEP	GROUND ROD	LUMINAIRE TYPE II 200 WATT HPS STYLE B	LUMINAIRE TYPE III 200 WATT HPS STYLE B	LUMINAIRE LIGHT TOWER ASSEMBLY TYPE II or III 400 W. H.P.S.		PULL BOX 18"x18"		TRENCH	CONDUIT 2"	CONDUIT 3"	CONDUIT 5" JACKED	NO. 4 AWG DISTRIBUTION CABLE	NO. 10 AWG POLE AND BRACKET CABLE	1½" DUCT CABLE W/TWO NO. 4 AWG	1½" DUCT CABLE W/TWO NO. 2 AWG			CONNECTOR KIT TYPE II	CONNECTOR KIT TYPE III	CABLE SPLICING KIT	POWER SERVICE	STRUCTURAL GROUND SYSTEM	LIGHT TOWER MAINTENANCE PLATFORM C	TOWER LIGHTNING PROTECTION SYSTEM	ANCHOR BOLTS FOR STRUCTURE
				EA.	EA.	EA.	EA.	EA.		EA.	EA.		EA.	EA.	EA.	EA.	EA.	EA.		EA.		L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.			EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.
61	76+90 EB	78+32 WB	Lt-Rt					① 1						① 1	① 1			① 4				① 170						① 180									① 1	
62	78+40 WB	80+75 WB	Rt																	② 1		225 25 ②						225 30 ②						② 2			
63	80+75 WB	81+95 EB	Rt																	1		230		55				240						2			
64	81+95 EB	82+00 EB	Rt																	1		25						35						2			
65	82+00 EB		Rt					1						1	1			4															1	1		
66	86+80 EB	89+02 ℄ 126	Rt	1									1		1		1					220					113	230						2			
67	89+02 ℄ 126	91+00 ℄ 126	Rt	1									1		1		1					198					113	204						2			
68	91+00 ℄ 126	92+80 ℄ 126	Rt	1									1		1		1					180					113	190						2			
69	85+72 WB	87+02 ℄ 126	Lt	1									1		1		1					225					113	235						2			
70	87+82 ℄ 126	90+05 ℄ 126	Lt	1									1		1		1					223					113	233						2			
71	90+05 ℄ 126	91+75 ℄ 126	Lt	1									1		1		1					170					113	180						2			
	Totals Sheet №18			6				①1 1					6	①1 1	①1 7		6	①4 4		2 ① 1		①390 7496		55			678	①352 80 ②						12		1② 2			①1 1	
72	2+40F	2+40F	Rt-Lt																	2		10			30			50							4			
73	3+00F	2+40F	Rt	1									1		1	1						53					113	63						2			
74	4+63F	3+00F	Rt	1									1		1	1						163					113	173						2			
75	6+25F	4+63F	Rt	1									1		1	1						162					113	172						2			
76	7+85F	6+25F	Rt	1									1		1	1						167					113	177						2			
	Totals Sheet №19			4									4		4	4				2		555			30		452	635						8		4				
202	91+75 ℄ 126	93+20T	Lt	1									1		1		1					143					113	153						2			
203	93+20T	93+98 ℄ 126	Lt	1									1		1	1						130		30			113	140						2			
206	94+98T	96+00 ℄ 126	Lt	1									1		1	1						180		30			113	190						1	1		
207	94+98T	96+76T	Lt	1									1		1	1						178					113	188						1	1		
208	96+76T	98+25T	Lt																			149						159									
209	98+25T	98+45T	Lt-Rt	1									1		1	1						90		50			113	100						1	1		
210	45+91 GR		Lt																	1															2			
212	98+00T	93+20T	Lt																			530						540							1		
213	37+37 G.R	98+25T	Rt-Lt																	1		360						370						2			
216	98+45T	45+91 G.R.	Rt-Lt																	1		510			45			565						2			
218	93+98 ℄ 126		Rt	1									1		1		1										113							2			
221	96+00 ℄ 126	98+16 ℄ 126	Lt		1								1		1		1					216					119	226						1	1		
222	98+16 ℄ 126	100+36 ℄ 126	Lt		1								1		1		1					220					119	230						1	1		
223	100+36 ℄ 126	102+56 ℄ 126	Lt		1								1		1		1					220					119	230						1	1		
224	102+56 ℄ 126	104+72 ℄ 126	Lt		1								1		1		1					220					119	230						1	1		
225	104+72 ℄ 126	105+02 ℄ 126	Lt		1								1		1		1					30					119	40						1	1		
	Br. № Hamilton-126-1456																																					
226	105+02 ℄ 126	106+95 ℄ 126	Lt																	1		20	240			490									2		1	
229	93+58 ℄ 126	93+98 ℄ 126	Rt-Lt																	1		150		110				160							2			
231	94+49 ℄ 126	95+89 ℄ 126	Rt	1									1		1	1						140					113	150						1	1		
232	95+89 ℄ 126	97+34 N	Rt	1									1		1	1						136					113	146						1	1		
233	97+34 N	97+14 ℄ 126	Rt																	1		60		35				70							2			
234	97+34 N	97+60 N	Rt			1									1	1						20	20			60	103						1	1				4
235	99+40 N	97+60 N	Rt			1									1	1							180			380	103						1	1				.4
236	101+25 N	99+40 N	Rt			1									1	1							185			390	103						1	1				4
237	101+57 N	101+25 N	Rt																	1		20	20			60									2			
238	103+20 N	101+57 N	Rt	1									1		1	1						163					113	173						1	1		
239	104+88 N	103+20 N	Rt	1									1		1	1						168					113	178						1	1		
241	97+18 ℄ 126	99+48 ℄ 126	Rt		1								1		1		1					234					119	244						1	1		
243	99+48 ℄ 126	101+80 ℄ 126	Rt		1								1		1		1					232					119	242						1	1		
244	101+80 ℄ 126	104+18 ℄ 126	Rt		1								1		1		1					238					119	248						1	1		
245	104+18 ℄ 126	104+82 ℄ 126	Rt		1								1		1		1					64					119	74						1	1		
246	104+82 ℄ 126	106+38 ℄ 126	Rt																	1		20	186			392									2			
247	106+38 ℄ 126	107+35 ℄ 126	Rt				1										1					20	137			294	112						1	1				4
240	104+88	4+10 Galb.	Rt.	1									1		1	1						70					123	80						1	1				
228	92+80 ℄ 126	93+58 ℄ 126	Rt		1					1			1		1		1					78					119	88						2					
247A	13+15 Galb.	107+35 ℄ 126	Lt-Rt								1					1						100					110	100						1	1				
	Totals Sheet №20			11	10	3	1			1	1		21		24	13	13			8		5109	968	255	45	2066	2974	5314						30	22	16	1	1			16	

All ② Participation this sheet unless noted otherwise

7/25

LIGHTING QUANTITIES

① IR-75-1(96)10
② F-2(13)

CALC. B.OC. BY DATE 2/86
CHKD. REG BY DATE 3/86

HAMILTON COUNTY
HAM-75/126-9.93/13.00

OHIO
F.H.W.A. REGION 5

358D (787)

625

REFERENCE No.	STATION TO STATION		SIDE	A LIGHT POLE, DESIGN AT75B 41.7		C LIGHT POLE, DESIGN ST12B41.7	D LIGHT POLE, DESIGN AT8B 41.7	I LIGHT POLE DESIGN ST12B40		G LIGHT POLE, DESIGN AT20 B41.7	AT BB ARM		LIGHT POLE FOUNDATION 24"x8' DEEP		GROUND ROD	LUMINAIRE TYPE II 200 WATT H.P.S. STYLE B	LUMINAIRE TYPE III 200 WATT H.P.S. STYLE B			PULL BOX 18"x18"		TRENCH	CONDUIT 2"	CONDUIT 3"	CONDUIT 3" JACKED	NO. 4 AWG DISTRIBUTION CABLE	10 AWG POLE AND BRACKET CABLE	1½" DUCT CABLE W/TWO NO.4 AWG.			TEMPORARY LIGHTING as per Plan	CONNECTOR KIT TYPE II	CONNECTOR KIT TYPE III	CABLE SPLICING KIT	POWER SERVICE	STRUCTURAL GROUND SYSTEM	LIGHT POLE ANCHOR BOLTS ON STRUCTURE	LUMINAIRE UNDERPASS 100 WATT HPS	SPI. SERVICE TO UNDERPASS LIGHTING	
				EA.		EA.	EA.			EA.	EA		EA.		EA.	EA.	EA.			EA.		L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.			L.F.	LUMP	EA.	EA.	EA.	EA.	EA.	EA.	EACH	LUMP	
248	107+35 ℄ 126	108+50 ℄ 126	Rt																	1		115						125												
249	108+50 ℄ 126	110+78 ℄ 126	Rt	1									1		1		1					228					113	238						2					
250	110+78 ℄ 126	110+88 ℄ 126	Rt	1									1		1		1					10					113	20					1	1					
251	110+88 ℄ 126	112+99 ℄ 126	Rt																	1		20	231			482												
252	112+99 ℄ 126	114+25 ℄ 126	Rt			1											1					20	146			312						1	1	2				
253	114+25 ℄ 126	114+80 ℄ 126	Rt																	1		55						65						2				
254	114+80 ℄ 126	117+40 ℄ 126	Rt	1									1		1		1			1		80	205			430	113	70				1	1	2				
255	117+40 ℄ 126	119+65 ℄ 126	Rt					1							1		1			1		170	80			180		170				1	1	2			4	
256	119+65 ℄ 126	123+00 ℄ 126	Rt										1		1		1					335					113	345				1	1					
257	106+95 ℄ 126	107+60 ℄ 126	Lt			1											1					20	75			160						1	1				4	
258	107+60 ℄ 126	109+20 ℄ 126	Lt																	1		160						170						2				
259	109+20 ℄ 126	111+10 ℄ 126	Lt	1									1		1		1					190					113	200				1	1					
260	111+10 ℄ 126	111+63 ℄ 126	Lt																	1		20	73			166								2				
262	111+63 ℄ 126	113+98 ℄ 126	Lt			1											1						235			490	107					1	1			1	4	
	Br. N° Hamilton 126-1467																																							
263	113+98 ℄ 126	114+65 ℄ 126	Lt			1											1					20	87			194	107					1	1				4	
264	114+65 ℄ 126	116+20 ℄ 126	Lt																	1		155						165						2				
265	116+20 ℄ 126	118+55 ℄ 126	Lt	1									1		1		1					235					113	245				1	1					
266	118+55 ℄ 126	121+60 ℄ 126	Lt	1									1		1		1					305					113	315				1	1					
267	9+55 GR	10+40 GR	Rt																	1		85						95						2				
268	10+40 GR	12+63 GR	Rt																	1		60	170			360		70						2				
269	Underpass Lighting Bridge N°Ham.126-1483																																							
271	6+50 Temp. Rd #2	17+29 Temp. Rd #2	Lt																																Lump					
360	6+80 GR	8+29 GR	Lt				1						1		1		1					165			45		99	260					1	1					
361	8+29 GR	9+75 GR	Lt				1						1		1		1					196					99	156					1	1					
362	9+75 GR	11+20 GR	Lt				1						1		1		1					145					99	155					1	1					
363	11+20 GR	11+60 GR	Lt				1						1		1		1					40					99	50					1	1					
364	11+60 GR	12+65 GR	Lt																	1		15	120			260								2				
365	12+65 GR	14+10 GR	Lt			1											1						145			310	107					1	1				4	
273	8+93 Read Rd.	9+36.5 Read Rd.	Rt								1						1										100												
	Total Sheet N°21			7		5	4	1			1		11		12		18			11		2794	1567		45	3344	1608	2914			Lump	19	17	22	1	2	24	12	Lump	
268A	12+75 G.R.	15+15 G.R.	Rt																	1		20	230			480								2				
276	18+35 G.R.	19+65 G.R.	Lt	1									1		1		1					15		110			113	135					1	1					
277	124+65 ℄ 126	125+20 ℄ 126	Rt-Lt																	1		60		85				155						2				
279	16+90 G.R.	124+65	Rt-Lt																			220		120				590								1			
280	19+65 G.R.	21+16 G.R.	Lt								1						1					151		40	20			161					1	1					
281	15+15 G.R.	123+00 ℄ 126	Rt-Rt																			185						195										
285	123+00 ℄ 126	124+65 ℄ 126	Rt	1									1		1		1					165					113	175					1	1					
286	124+65 ℄ 126	126+55 ℄ 126	Rt	1									1		1		1					190					113	200					1	1					
287	126+55 ℄ 126	128+60 ℄ 126	Rt	1									1		1		1					205					113	215					1	1					
288	128+60 ℄ 126	130+05 ℄ 126	Rt	1									1		1		1					145					113	155					1	1					
289	121+60 ℄ 126	123+40 ℄ 126	Lt							1			1		1		1					180					123	190					1	1					
290	123+40 ℄ 126	125+20 ℄ 126	Lt	1									1		1		1					180					113	190					1	1					
291	125+20 ℄ 126	126+98 ℄ 126	Lt	1									1		1		1					178					113	188					1	1					
292	126+98 ℄ 126	129+23 ℄ 126	Lt	1									1		1		1					225					113	235					1	1					
293	129+23 ℄ 126	131+76 ℄ 126	Lt							1			1		1		1					253					123	263					1	1					
294	126+45 Q	128+40 Q	Rt	1									1		1	1						195					113	205					1	1					
295	128+40 Q	130+47 Q	Rt	1									1		1	1						207					113	217					1	1					
296	124+87 P		Lt	1									1		1	1											113						1	1					
297	125+45 P	124+87 P	Lt																	1		58						68						2				
298	125+45 P	126+55 ℄ 126	Lt-Rt																			60						70										
299	126+25 P	125+45 P	Lt			1											1					20	90			200	107					1	1			1	4	
	Br. N° Hamilton-126-1497																																							
300	127+90 P	128+40 P	Lt			1											1					20	50			120	107					1	1				4	
301	126+98 ℄ 126	129+65 P	Lt																	1		295						325						2				
302	129+65 P	131+37 P	Lt	1									1		1	1						172					113	182					1	1					
366	14+10 GR	15+55 G.R.	Lt			1											1						145			310	107						1	1				4	
367	15+55 GR	16+25 GR	Lt			1											1					20	80			180	107						1	1				4	
368	16+25 GR	16+95 GR	Lt																	1		70						80						2				
369	16+95 GR	18+35 G.R.	Lt	1									1		1		1					140					113	150					1	1					
370	22+67 GR	24+21 GR	Lt				1						1		1		1					154			40		99	164					1	1					
374	21+16 GR	22+67 GR	Lt				1						1		1		1					151			40		99	161					1	1					
	Totals Sheet N°22			13		4	2			2	1		17		17	6	16			5		3934	595	355	100	1290	2454	4669				22	22	10	1	1	16			

All ② Participation this sheet unless noted otherwise

8/25

LIGHTING QUANTITIES SUB-SUMMARIES

LIGHTING QUANTITIES

CALC. BY BJC DATE 2/86
CHK'D. BY EA DATE 3/86

HAMILTON COUNTY
HAM-75/126 - 9.93/13.00

OHIO
F.H.W.A. REGION 5

358E
787

① IR-75-1(96)10
② F-2113)

625

REFERENCE No.	STATION TO STATION		SIDE	A LIGHT POLE, DESIGN AT15B 41.7 EA.			D LIGHT POLE, DESIGN AT8B 41.7 EA.			GLARE SHIELD		LIGHT POLE FOUNDATION 24"x8' DEEP EA.		GROUND ROD EA.	LUMINAIRE TYPE II 200 WATT HPS STYLE B EA.	LUMINAIRE TYPE III 200 WATT HPS STYLE B EA.			PULL BOX 18"x18" EA.		TRENCH L.F.		CONDUIT 3" L.F.	CONDUIT 3" JACKED L.F.		10 AWG. POLE AND BRACKET CABLE L.F.	1½" DUCT CABLE W/TWO NO.4 AWG. L.F.				CONNECTOR KIT TYPE II EA.	CONNECTOR KIT TYPE III EA.	CABLE SPLICING KIT EA.					
303	131+37 P	133+25 NB	Lt	1								1		1	1						188					113	198				1	1					
304	133+25 NB	134+70 NB	Lt	1						1		1		1	1						145					113	155				1	1					
305	134+70 NB	134+65 NB	Lt	1								1		1		1					10					113	20				1	1					
306	134+65 NB	136+30 NB	Lt																1		150						160						2				
307	136+30 NB	137+93 NB	Lt	1								1		1		1					163					113	173				1	1					
308	137+93 NB	139+58 ℄ 126	Lt	1								1		1		1					165					113	175				1	1					
309	139+58 ℄ 126	141+26 ℄ 126	Lt	1								1		1		1					168					113	178				1	1					
310	141+26 ℄ 126	145+90 ℄ 126	Lt	1								1		1		1					464					113	474				1	1					
311	145+90 ℄ 126		Lt																1														2				
313	130+47 Q	132+50 Q	Rt	1								1		1	1						203					113	213				1	1					
313A	131+76 ℄ 126		Lt	1								1		1	1											113					1	1					
314	130+05 ℄ 126	130+88 ℄ 126	Rt																1		83						93						2				
315	130+88 ℄ 126	130+47 Q	Rt	1								1		1		1					41		30			113	51				1	1					
318	132+50 Q	134+20 Q	Rt	1								1		1	1						170					113	180				1	1					
319	134+20 Q	135+75 EB	Rt	1								1		1	1						155					113	165				1	1					
320	135+75 EB	137+45 EB	Rt	1								1		1		1					170					113	180				1	1					
321	137+45 EB	139+18 ℄ 126	Rt	1								1		1		1					173					113	183				1	1					
322	139+18 ℄ 126	140+76 ℄ 126	Rt	1								1		1		1					158					113	168				1	1					
323	140+76 ℄ 126		Rt	1								1		1		1										113					1	1					
324	142+56 ℄ 126	140+76 ℄ 126	Rt	1								1		1		1					160					113	190				1	1					
325	144+95 ℄ 126	142+56 ℄ 126	Rt									1		1		1			1		239						249						2				
371	24+21 GR	24+85 GR	Lt				1					1		1		1					64			15		99	71				1	1					
372	24+85 GR	25+69 GR	Lt																1		82			15			94						2				
373	25+69 GR		Lt				1					1		1		1										99					1	1					
	Totals Sheet № 23			17			2			1		19		19	6	13			5		3173		30	30		2119	3373				19	19	10				

All ② Participation this sheet unless noted otherwise

CALC. B.O.L. DATE 2/86
CHK'D R.E.A. DATE 3/86

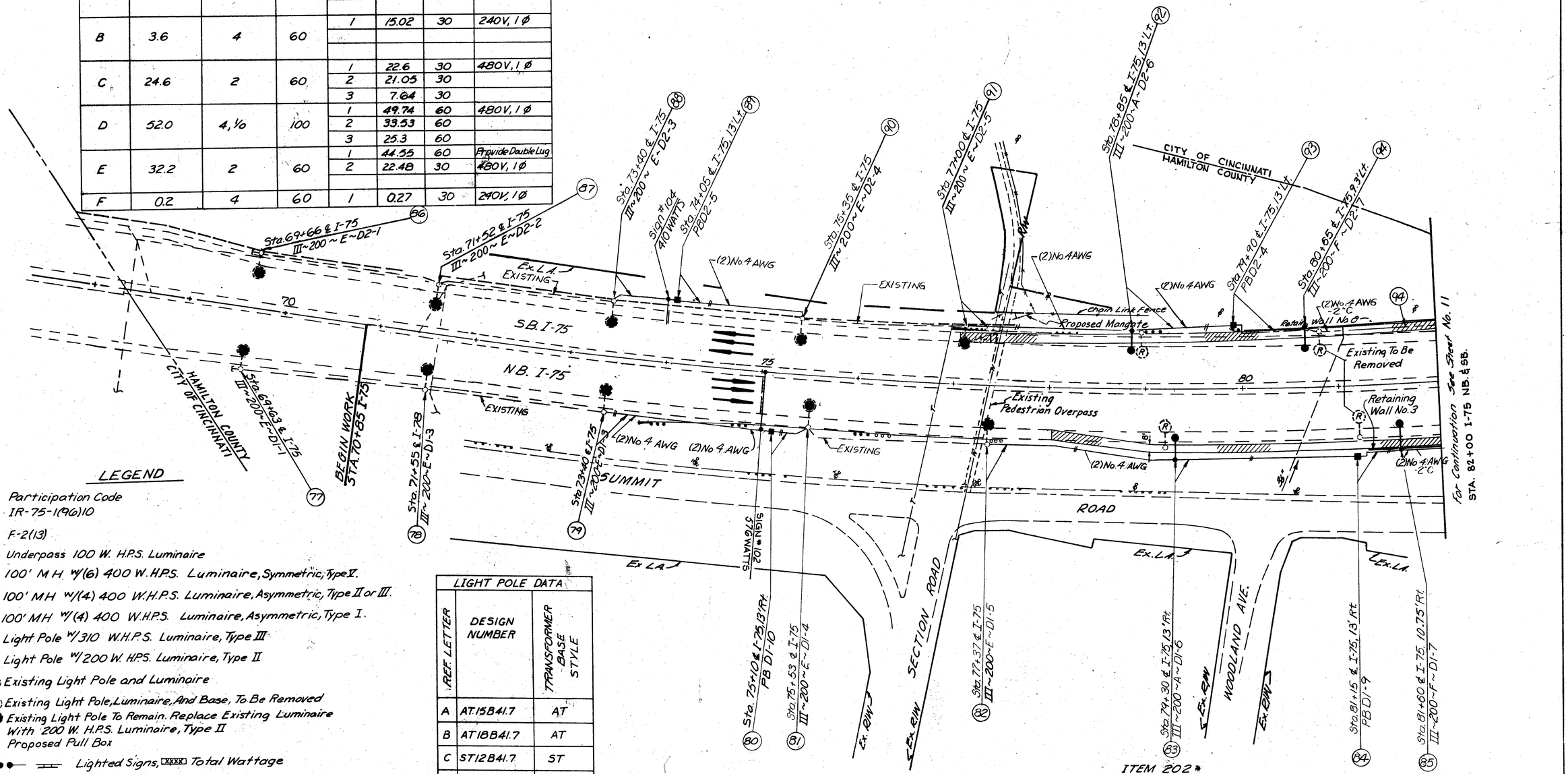
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

359
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

CONTROL CENTER DATA

Control Center	Connected Load KVA	Service Entrance Conductor Size – AWG	Enclosure Rating Amps	Circuit Number	Circuit Load Amps	Circuit Fuse Size Amps	Remarks
A	1.13	4	60	1	4.72	30	240V, 1Ø
B	3.6	4	60	1	15.02	30	240V, 1Ø
C	24.6	2	60	1	22.6	30	480V, 1Ø
				2	21.05	30	
				3	7.64	30	
D	52.0	4, ½	100	1	49.74	60	480V, 1Ø
				2	33.53	60	
				3	25.3	60	
E	32.2	2	60	1	44.55	60	Provide Double Lug
				2	22.48	30	480V, 1Ø
F	0.2	4	60	1	0.27	30	240V, 1Ø



LEGEND

Participation Code
(1) IR-75-1(96)10
(2) F-2(13)

- Underpass 100 W. H.P.S. Luminaire
- 100' M.H. W/(6) 400 W.H.P.S. Luminaire, Symmetric, Type V.
- 100' M.H. W/(4) 400 W.H.P.S. Luminaire, Asymmetric, Type II or III.
- 100' M.H. W/(4) 400 W.H.P.S. Luminaire, Asymmetric, Type I.
- Light Pole W/310 W.H.P.S. Luminaire, Type III
- Light Pole W/200 W. H.P.S. Luminaire, Type II
- Existing Light Pole and Luminaire
- (R) Existing Light Pole, Luminaire, And Base, To Be Removed
- Existing Light Pole To Remain. Replace Existing Luminaire With 200 W. H.P.S. Luminaire, Type II
- Proposed Pull Box
- Lighted Signs, XXXX Total Wattage
- ▲ Control Center
- Duct Cable
- Conduit, Size As Shown
- Pull Box - PBC1-2 = Pull Box Circuit - Pull Box No.

Sta. 305+10, 15'Rt. = Station, Offset From Controlling Pavement
III-200-A-C1-2 = I.E.S. Distrib.-Lamp Wattage-Pole Data Ref.-Circuit No.-Pole No.

XXX.XX Calculated Voltage

LIGHT POLE DATA

REF. LETTER	DESIGN NUMBER	TRANSFORMER BASE STYLE
A	AT 15 B 41.7	AT
B	AT 18 B 41.7	AT
C	ST 12 B 41.7	ST
D	AT 8 B 41.7	AT
E	Existing Pole W/ New Luminaires	AT
F	ST 10 B 39	ST
G	AT 20 B 41.7	AT
H	ST 10 B 36	ST
I	ST 12 B 40	ST

Note:
D1-1 Thru D1-5 And D2-1 Thru D2-5 Are Existing Poles To Remain. For Wiring Treatment See General Note Sheet No. 3/2

ITEM 202*
Light Poles Removed For Storage, As Per Plan (1)4
Luminaires Removed For Storage, As Per Plan (1)4
Light Pole Foundations Removed, As Per Plan (1)4
* Quantity Carried To General Summary

SCALE
0 50' 100'

10/25

LIGHTING PLAN

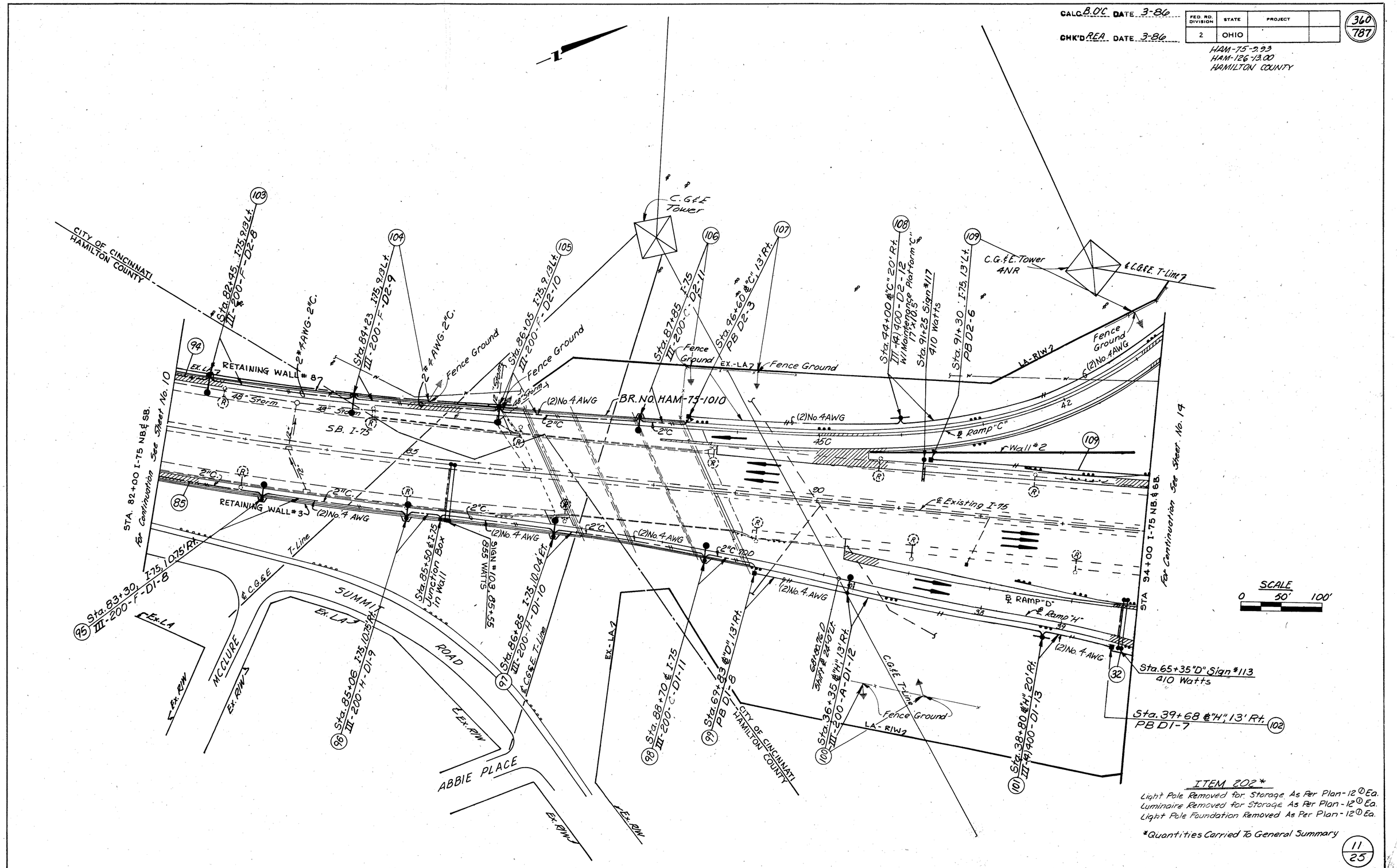
CALC. B.O'C DATE 3-86

CHK'D REA DATE 3-86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

360/787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



ITEM 202*

Light Pole Removed for Storage As Per Plan - 12 ① Ea.
Luminaire Removed for Storage As Per Plan - 12 ① Ea.
Light Pole Foundation Removed As Per Plan - 12 ① Ea.

*Quantities Carried To General Summary

11/25

LIGHTING PLAN

CALC. B.O'C. DATE 3-86

CHK'D REA DATE 3-86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

361/787

HAM-75-993
HAM-126-13.00
HAMILTON COUNTY

N

BEGIN WORK STA. 501+86 WB.

HAM-126-13.00
BEGIN PROJECT
STA. 502+65 WB.

HAM-126-10.93
END PROJECT
STA. 502+65 WB.

BRIDGE NO. HAM-126-1303 Rt.

BRIDGE HAM 126-1303 Lt.

HAMILTON COUNTY
CITY OF CINCINNATI

VINE ST.

60' Curb

B&O R.R.

EX. LA-2

EX. LA-3

LA-R/W-2

2"C CKT. D3

2"C Circuit A

3"C

(2)No.4AWG-2"C

(2)No.4AWG

(2)No.4AWG-2"C

(2)No.4AWG-2"C

(2)No.4AWG

(2)No.4AWG

Sound Wall C

505

510

25

WB @ S.R. 126

EB @ S.R. 126

54" Sam.

FE 36", 51.7

FE 54", 54.5

FE 54", 61.8

FE 54", 48.2

1 Sta. 502+90 @ 126 E.B., 17' Rt.
PBA1-1

2 Sta. 503+90 @ 126 E.B.
III~310~C~A1-3

3 Sta. 506+30 @ 126 E.B.
III~310~C~A1-2

4 Sta. 507+85 @ 126 E.B., 13' Rt.
PBA1-2

5 Sta. 503+02 @ 126 W.B., 17' Lt.
PBA1-3

6 Sta. 504+40 @ W.B. 126
III~310~C~A1-1

7 Sta. 507+40 @ 126 W.B., 17' Lt.
PBA1-4

8 Sta. 506+48 @ 126 W.B., 42' Lt.
Control Center "A"

9 Sta. 506+90 @ 126 W.B.
III~310~C~D3-7

10 Sta. 507+40 @ 126 W.B. 20' Lt.
PBD3-1

11 Sta. 509+40 @ 126 W.B., 17' Rt.
III~310~B~D3-8

12 Station Equation
P.O.T. 510+41.31 Bk.
P.O.T. 22+94.46 Ah.

S.T. 510+69.90 Bk.
P.O.T. 22+94.46 Ah.
Station Equation
Sta. 24+30 @ 126 W.B., 17' Rt.
III~310~B~D3-9

13 Sta. 508+45 @ 126 E.B., 17' Rt.
III~310~B~D3-1

14 Sta. 23+03 @ 126 E.B., 17' Rt.
III~310~B~D3-2

15 Sta. 25+50 @ 126 E.B., 13' Rt.
III~310~A~D3-3

For Continuation See Sheet No. 13
STA. 26+00 S.R. 126

SCALE
0 50' 100'

12/25

LIGHTING PLAN

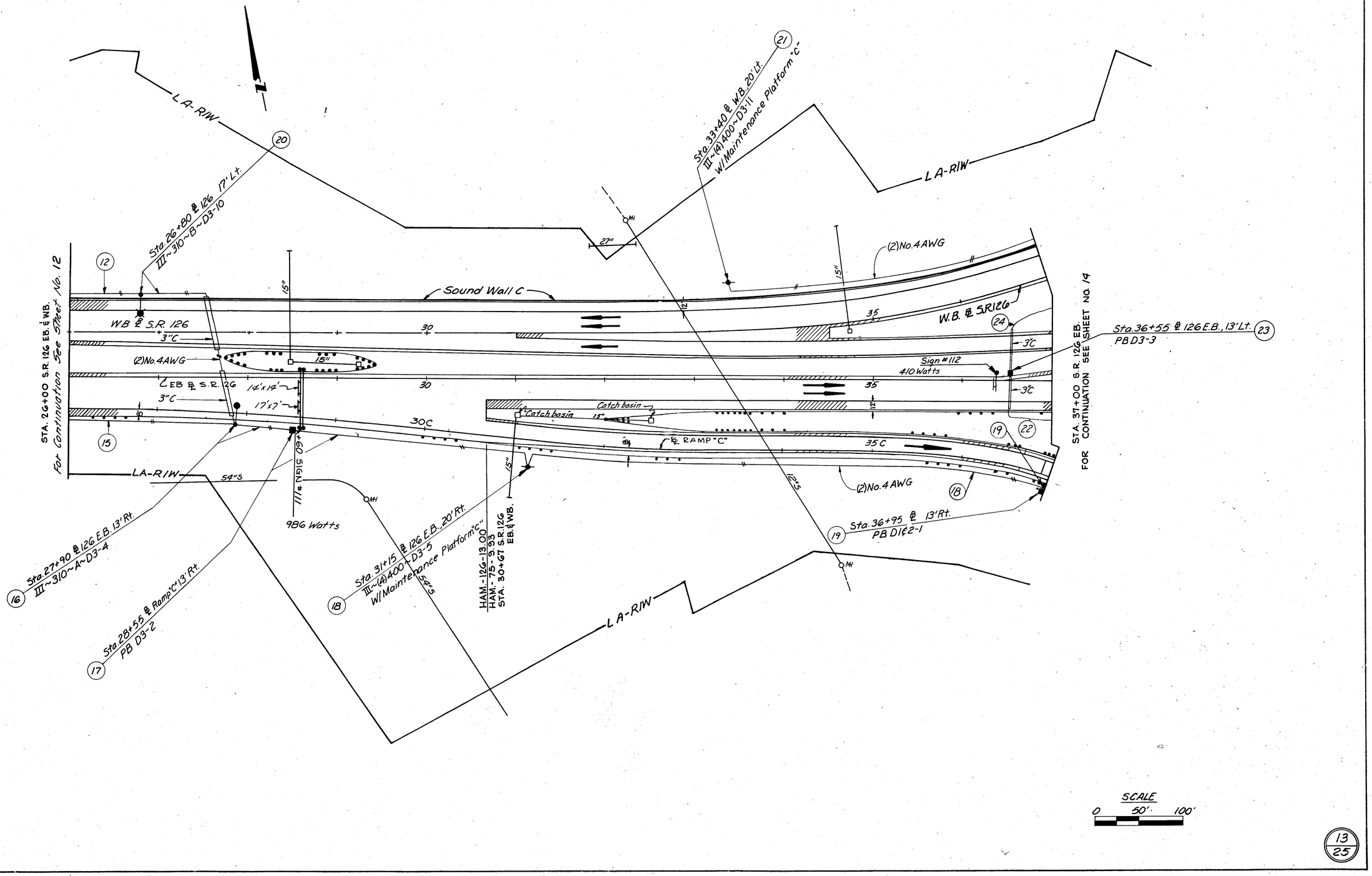
CALC. B.O'C. DATE 3-86

CHK'D REA DATE 3-86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

362
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



SCALE
0 50' 100'

13
25

LIGHTING PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

363/787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

CALC. B.O'C. DATE 3-86

CHK'D REA DATE 3-86

STA. 50+70 S.R.126 EB.

Sta. 45+00 S.R.126 W.B.

Sta. 103+68.24 ℄ I-75 Back = { Sta. 113+61.15 SBI-75 Ahead / Sta. 103+53.04 NBI-75 Ahead

For Continuation See Sheet No. 15

ANTHONY WAYNE AVE.

Fence Ground

(2) No. 4 AWG

(38) (2) No. 4 AWG

(37) (2) No. 4 AWG

(35) Sta. 56+60 ℄ D, 40' Lt.
III-(4)400-D1-17

15"+7' SIGN #114 +70
410 WATTS

(29) Sta. 43+25 ℄ WB, 40' Rt.
II-(4)400-D2-15
W/Maintenance Platform "C"

(34) Sta. 48+65 ℄ EB 13' Lt.
PB D1-5

AVALON ST.

LA-3

WB ℄ S2-126

℄ Ramp F

℄ Ramp D

I-75 SB

I-75 N.B.

103F

160F

100

60D

45D

50L

50

50H

LA-R/W-3

3"C.

(36)

(2) No 1/0 AWG

(33) Sta. 48+25 ℄ H, 40' Lt.
III-(4)400-D1-15

℄ Prop. Reloc. Channel

℄ Ramp I

(2) No 1/0 AWG

Ex. Control Center Sta. 100+50 F, 32' Lt.

C.G&E. Tower 5NR

To Be Abandoned

Sound Wall C

(24) Sta. 38+45 ℄ WB, 40' Rt.
III-(4)400-D3-12

BRIDGE No. HAM-126-1430

40

12"

(21)

3"C.

(2) No. 4 AWG

(24)

Service Rd.

LA-R/W-3

(28) Sta. 92+10 ℄ D, 40 Rt.
I-(4)400-D2-14

BRIDGE No. HAM-126-RAMP "D"

40D

℄ Ramp H

45H

(31) Sta. 44+90 ℄ EB 17' Rt.
PB D1-4

15"

(2) No. 4 AWG

(30)

Sta. 97+72 Sign #116
410 WATTS

(32) Sta. 43+50 ℄ H, 40' Lt.
III-(4)400-D1-14

21"

FOR CONTINUATION SEE SHEET NO. 13 STA. 37+00 S.R. 126 EB.

BRIDGE No. HAM-126-1328

(30) Sta. 42+00 ℄ E.B. 10' Rt.
PBD1-3

(2) No 1/0 AWG 2"C

Junction Box

(2) No. 4 AWG CKT. -D2

(2) No. 1/0 AWG -2"C CKT-D1

(22)

(27) Sta. 95+25 ℄ I-75, 70' Lt.
I-(6)400-D2-13

(2) No 4 AWG

6"

℄ Existing I-75

℄ Ramp D

(2) No. 4 AWG

30"

LA-R/W-3

(2) No. 1/0 AWG CKT D1

(26)

(2) No 4 AWG CKT D2

27"

95D

65D

40H

15"

(25) (18) (19)

BRIDGE No. HAM-126-RAMP "C"

℄ Ramp C

LA-3

(22) Sta. 37+15 ℄ C, 20' Rt.
II-(4)400W-D3-6
W/Maintenance Platform "C"

(2) No. 4 AWG CKT-D3

(4) No. 1/0 AWG To ℄ Ramp C-1

Sta. 38+02 ℄ C, 20' Rt.
Control Center "D"

(25)

(26) Sta. 40+10 ℄ C, 13' Rt.
PBD 142-2

Fence Ground

(2) No. 4 AWG CKT D2

(108)

3"C

3"C

(109)

For Continuation See Sheet No. 11, Sta. 84+00 I-75

SCALE
0 50' 100'

ITEM 202 *

Light Pole Removed For Storage As Per Plan	10 ① Ea.
Luminaire Removed For Storage As Per Plan	10 ① Ea.
Light Pole Foundation Removed As Per Plan	10 ① Ea.

*Quantities Carried To General Summary

14/25

LIGHTING PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

364
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

CALC. B.O'C. DATE 3-86

CHK'D REA DATE 3-86

STA. 123+10 ℄ I-75 SB. For Continuation See Sheet No. 16

STA. 60+00 S.R. 126 EB.

(39) Sta. 53+15 ℄ W.B. 126, 38' Rt.
III~(4)400~D2-17

(38) Sta. 47+70 ℄ 126 W.B., 20' Lt.
II~(4)400~D2-16
W/Maintenance Platform "C"

(43) Sta. 112+10 I-75 N.B., 40' Rt.
III~(4)400~D1-21

(42) Sta. 107+60 I-75 N.B., 40' Rt.
III~(4)400~D1-20

(41) Sta. 56+00 ℄ 126 E.B., 50' Lt.
I~(4)400~D1-19

(44) Sta. 58+15 ℄ 126 E.B., 13' Rt.
PB E 2-B

(40) Sta. 51+20 ℄ "H", 20' Rt.
II~(4)400~D1-16

(37) Sta. 51+25 ℄ "D", 40' Lt.
II~(4)400~D1-18

(2)No. 1/0 AWG

(2)No. 1/0 AWG
Existing Pull Box To Remain PBD1-6

(2)No. 4 AWG

3"C.

Abandon Exist. Cable

SIGN # 11 EXISTING 890 watts

17'x12' SIGN #115 Sta. 58+10 596 WATTS

End ℄ Ramp H
Sta. 53+10.00 H

BRIDGE NO. HAM-126-1359

℄ Ramp F

℄ Ramp D

℄ Ramp I

℄ Ramp J

℄ Existing I-75 SB

℄ Existing I-75 NB

℄ C.G.&E. T-Line

ANTHONY WAYNE AVE.

Sound Wall C

Sound Wall A

Conc. Retaining Wall No 42

Wall #4

12" Storm

Tower GNR

Fence

Ground

R/W

LA-RW

ITEM 202 *
Light Pole Removed For Storage As Per Plan - 11 ① Ea.
Luminaire Removed For Storage As Per Plan - 11 ① Ea.
Light Pole Foundation Removed As Per Plan - 11 ① Ea.

*Quantities Carried To General Summary

SCALE
0 50' 100'

STA. 103+68.24 ℄ I-75 Back = Sta. 113+61.15 SB. I-75 Ahead; Sta. 103+59.04 NB. I-75 Ahead

STA. 50+70 S.R. 126 EB.

For Continuation See Sheet No. 14

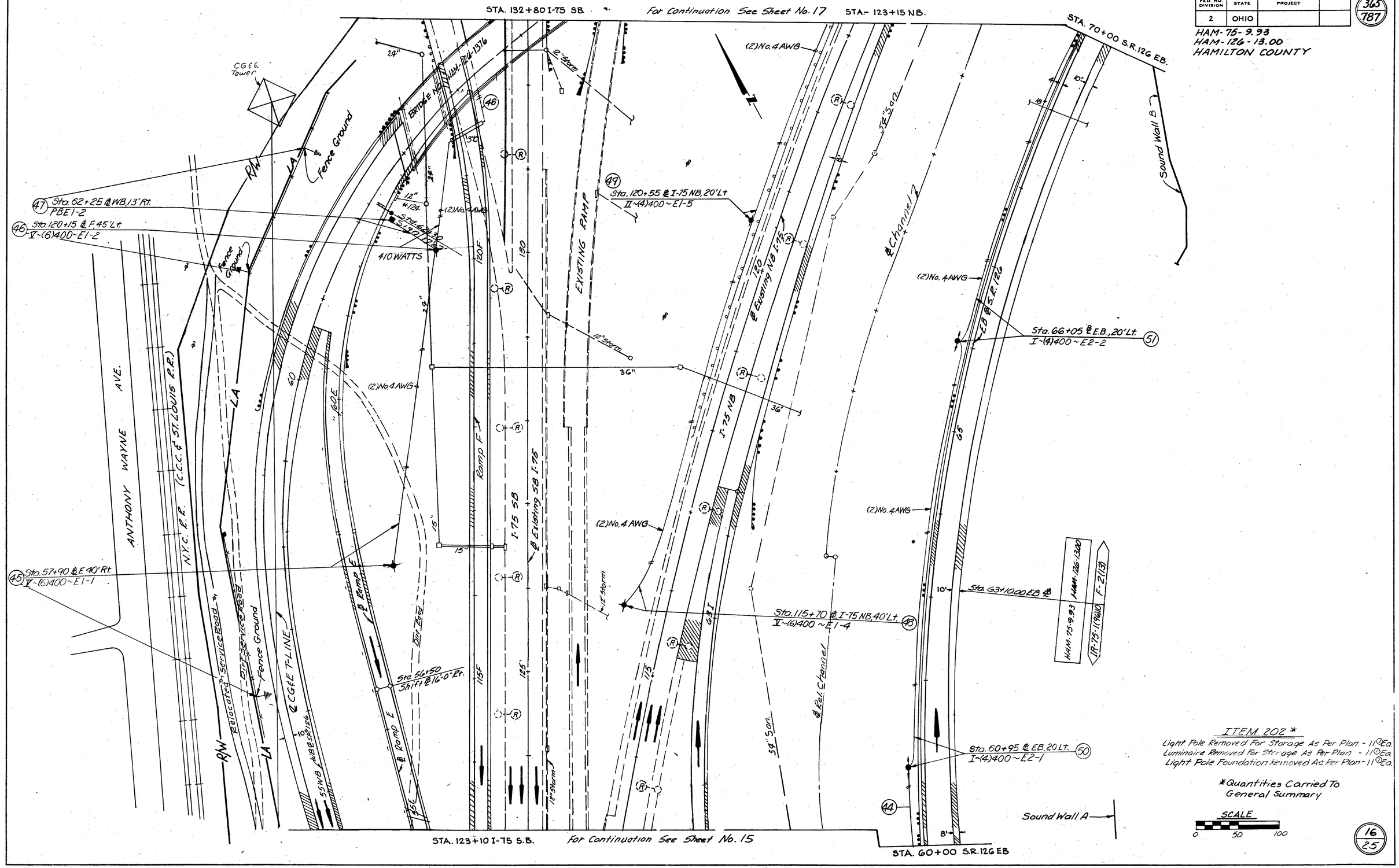
15
25

LIGHTING PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

365/787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



ITEM 202 *
Light Pole Removed For Storage As Per Plan - 11 Ea.
Luminaire Removed For Storage As Per Plan - 11 Ea.
Light Pole Foundation Removed As Per Plan - 11 Ea.

*Quantities Carried To General Summary

SCALE
0 50 100

16/25

LIGHTING PLAN

CALC. B.O.C. DATE 3-86

CHK'D REA. DATE 3-86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

366
787

HAM-75 - 9.93
HAM-126-13.00
HAMILTON COUNTY

EX. I-75 EXITING RAMP "F"

CITY OF CINCINNATI

VILLAGE OF ARLINGTON HEIGHTS

STA. 140+00 I-75 SB.

Exist. to Remain B1-17

For Continuation See Sheet No. 19

GALBRAITH ROAD

STA. 14+50 GALBRAITH RD.

For Additional Details See Sheet No. 19

EX. LA7

VILLAGE OF ARLINGTON HEIGHTS
CITY OF CINCINNATI

Sta. 13+75 ℄ GALBRAITH, 175' Rt. (55)
Control Center "E"
Provide Double Lugs For Circuit E1

Existing Pull Box
Reconnect Wiring to Sign
Ex. LA7

STA. 132+50 I-75 NB.

Sta. 130+70 ℄ I-75 NB, 40' Rt. (59)
III-(4)400-E1-9 W/ Maintenance Platform "C"

(2) No. 4 AWG

Sta. 130+00 Sign #12
Existing
13' x 6.5'
410 Watts

FOR CONTINUATION SEE SHEET NO. 18

Sta. 53+65 ℄ I-75 S.B., 125' Rt. (53)
III~(4)400~E1-8

12" Storm

12" Storm

12" Storm

I-75 S.B.

(2) No. 4 AWG
CKT E1

3" C. Jacked

36" Storm

12" Storm

(2) No. 4 AWG (52)

3" C. Jacked

(2) No. 4 AWG (54)

Sta. 136+50 ℄ I-75 S.B., 112' Lt (52)
III~(4)400~E1-3

12" Storm

EXITING RAMP "F"

46

℄ C.G.&E. T-Line

BRIDGE NO. HAM-12.6-13.16

Sta. 134+10 ℄ I-75 S.B., 40' Rt. (51)
III~(4)400~E1-7

49

STA. 132+80 I-75 SB.

For Continuation See Sheet No. 16

C.G.&E. Tower 8NR

END WORK STA. 128+50

HAM-75-9.93
I-75 NB.

℄ C.G.&E. T-Line

(2) No. 4 AWG
CKT E1
(2) No. 2 AWG
CKT E2

(2) No. 2 AWG
CKT-E2

(2) No. 4 AWG
CKT-E1

36" Storm

3" C.

14'-25' #12 3 SIGN Sta. 68+25
410 WATTS

Sta. 69+80 ℄ WB, 13' Rt. (58)
PB E2-2

Sta. 69+80 ℄ WB, 45' Rt. (57)
III-(4)400-E1-6

Sta. 68+60 ℄ WB, 13' Rt. (56)
PBE℄2-1

I-75 NB 3" C. Jacked

54" San.

75 WB.

(2) No. 4 AWG

BRIDGE NO. HAM-126-1389
℄ S.R. 126 WB.

(2) No. 2 AWG - 2" C.

Sta. 74+85 E.B. 13' Lt.
PBE2-7

33" San.

℄ Relocated Mill Creek

30" San.

12" San.

EB ℄ - L126

51

STA. 123+15 I-75 NB.

STA. 7G+00 S.R. 126 EB.

21" San.

Bridge No. Ham-126-1400 over Trib. Mill Creek.

(60)

(2) No. 4 AWG

Sound Wall B

LA-E/WJ

30" Storm

12" San.

Sound Wall

LA-E/WJ

SCALE
0 50' 100'

Sta. 71+25 ℄ E.B., 20' Lt. (60)
I-(4)400-E2-3

ITEM 202 *
Light Pole Removed For Storage As Per Plan -10 Ea.
Luminaire Removed For Storage As Per Plan -10 Ea.
Light Pole Foundation Removed As Per Plan -10 Ea.
*Quantities Carried To General Summary

STA. 70+00 S.R. 126 EB.

17
25

LIGHTING PLAN

CALC. B.O'C. DATE 3-86

CHK'D REA DATE 3-86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

BRIDGE ART-0092

Galbraith Rd.

I-75 NB Br. No. HAM-75-1056

33' Sign

135'

C.I.-22 Existing to Remain

Exist Pullbox To Remain

C.I.-23 Existing to Remain

℄ C.G.&E. T-Line

VILLAGE OF ARLINGTON HEIGHTS

CITY OF CINCINNATI

CITY OF READING

Ramp N

HAMILTON COUNTY

VILLAGE OF ARLINGTON HEIGHTS

Sta. 34+20 Galbraith

Sta. 132+50 I-75 NB

℄ C.G.&E. T-Line

C.G.&E. Tower 9NR

LAR/W

R/W

Channel MILL CREEK

40

HAM.-75-9.93
HAM.-126-13.00
STA. 80+43 WB.

14'x14', 17'x9.5'
+80 Sign #122
986 Watts

Sta. 78+32 ℄ W.B., 13' Rt. (62)
PBE2-3

Sta. 80+75 ℄ W.B., 13' Rt. (63)
PBE2-4

Sta. 85+78 WB 126, 13' Lt. (69)
III-200-A-B1-5

Sta. 87+44.00 WB ℄ BOX
End WB ℄

Sta. 87+82 ℄ 126, 13' Lt. (70)
III-200-A-B1-6

Sta. 90+05 ℄ 126, 13' Rt. (71)
III-200-A-B1-7

42"

15"

(2)No.4AWG

90

STA. 76+50 S.R. 126 WB

(58)

80

(2)No.2AWG-2"C

(61)

12"

(2)No.4AWG

℄ S.R. 126 WB

620 Conc Barrier

85

Conc. Barrier Median

℄ Ramp N

(60A)

(60B)

80

℄ S.R. 126 EB.

3"C.

21

Sound Wall B

STA. 76+00 S.R. 126 EB.

Sta. 76+90 ℄ EB, 40' Lt. (61)
III-(4)400-E2-4

Sta. 76+20
PBE2-6

EB, 13' Lt.

LAR/W

R/W

17'x12'
SIGN 82+00
576 Watts

Sta. 82+00 ℄ EB, 40' Rt. (65)
III-(4)400-E2-5
W/Maintenance Platform "C"

Sta. 81+95 ℄ EB, 17' Rt. (64)
PBE2-5

CITY OF CINCINNATI

HAMILTON COUNTY

Sound Wall B

STA. 86+08 LB 126, 15' Rt.
III-200-A-B1-1

Sta. 87+44.00 WB ℄ BOX
End EB ℄

Sta. 89+02 ℄ 126, 13' Rt.
III-200-A-B1-2

Sta. 90+00 ℄ 126, 13' Rt.
III-200-A-B1-3

(66)

(67)

(68)

(2)No.4AWG

FOR CONTINUATION SEE SHEET NO. 17

For Continuation See Sheet No. 20
STA. 91+50 S.R. 126 ℄

SCALE
0 50' 100'

18
25

LIGHTING PLAN

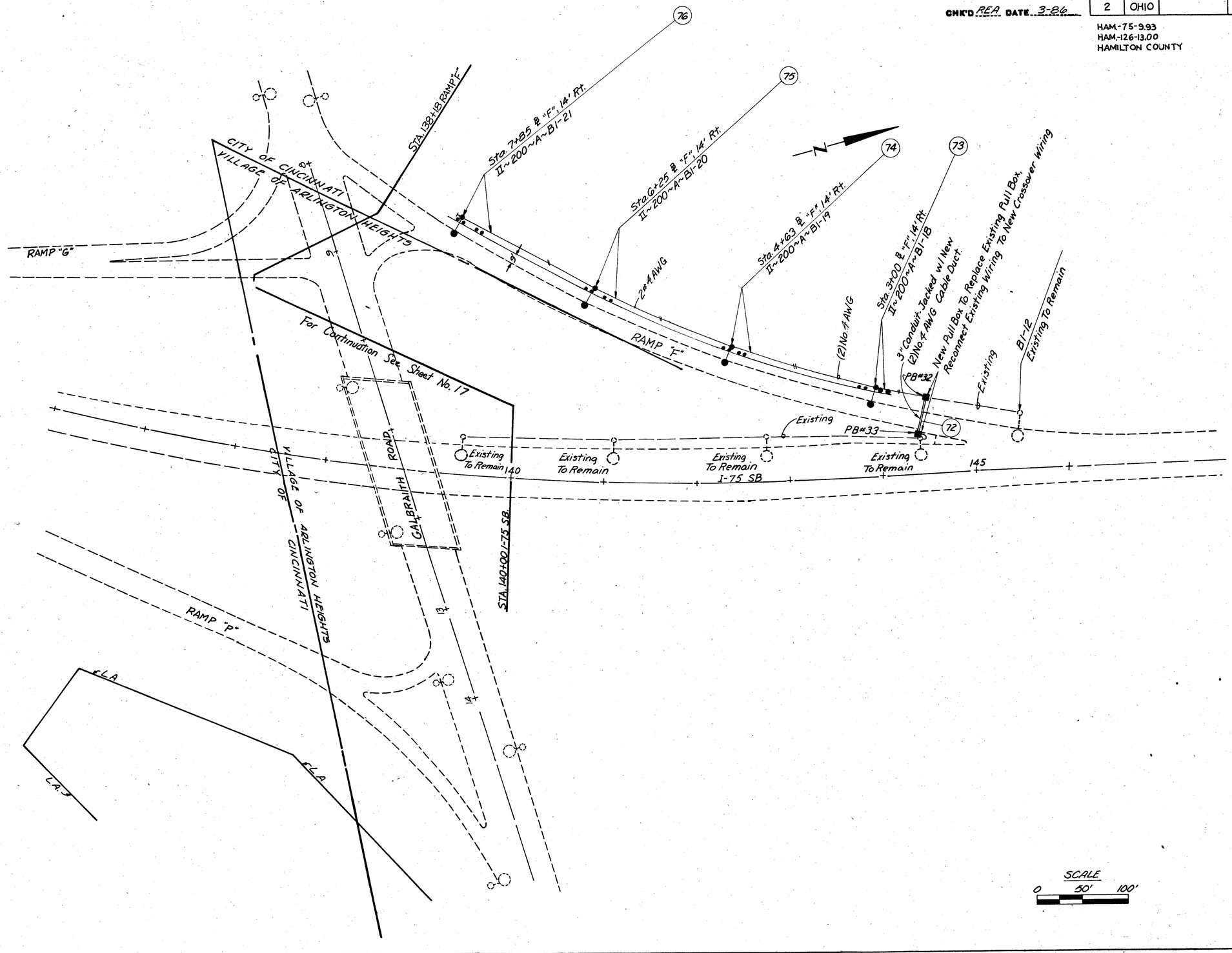
CALC. B.O'C DATE 3-86

CHK'D REA DATE 3-86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

368/787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



19/25

LIGHTING PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

369
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
CALC. B.O'C. DATE 3-86
CHK'D REA. DATE 3-86

Galbraith Road
Burkhart St.
CITY OF READING
GALBRAITH ROAD
HAMILTON COUNTY
Sta. 37+37, ℄ 6' Rt. PB C1-12
Sta. 98+25, T, 13' Lt. II-200-A-C1-1
Sta. 45+91, 7' Lt. PB C1-13
Sta. 98+45 T, 9' Rt. PB C1-9
Sta. 98+00 T, 60' Lt. Control Center "B"
STA 94+98 T, 13' Lt. II-200-A-C1-3
STA 96+76 T, 13' Lt. II-200-A-C1-2
STA 93+20 T, 13' Lt. II-200-A-B1-9
STA 93+98 ℄ 126.15' Lt. III-200-A-B1-10
STA 91+75 ℄ 126.13' Lt. III-200-A-B1-8
#132 Sign Sta. 32+33 410 Watts
#134 Sign Sta. 45+95 410 Watts
#133 Sign Sta. 97+26.5' ℄ 1103 240 Watts
LA-R/W Z
(2) No. 4 AWG CKT B1
3"C.
92" ℄ Ramp "T"
STA. 96+00 ℄ 126.17' Lt. III-200-B-C1-4
STA. 98+16 ℄ 126.17' Lt. III-200-B-C1-5
STA. 100+36 ℄ 126.17' Lt. III-200-B-C1-6
STA. 102+56 ℄ 126.17' Lt. III-200-B-C1-7
STA. 104+72 ℄ 126.17' Lt. III-200-B-C1-8
STA. 105+0 ℄ 126.17' Lt. PBC1-
(2) No. 4 AWG 2"C.
BRIDGE No. HAM-186-1656
Conc. Barrier
℄ S.R. 126
Ramp "N"
95N
100N
Sound Wall
LA-R/W 7
HAMILTON COUNTY
CITY of GREENHILLS
RETAINING WALL #6
RETAINING WALL #7
CITY OF READING
HAMILTON COUNTY
STA. 104+82 ℄ 126.15' Rt. PBC2-3
STA. 92+80 ℄ 126.17' Rt. III-200-B-B1-4
Sign #131 1060 Watts
Sta. 93+56
STA 93+28 ℄ 126.13' Rt. PB B1-1
STA. 94+43 ℄ 126.13' Rt. III-200-A-C2-1
STA. 95+89 ℄ 126.13' Rt. III-200-A-C2-2
STA. 97+14 ℄ 126.18' Rt. III-200-B-C2-8
STA. 97+34 N, 13' Rt. PB C2-1
STA. 97+60 N, 8.24' Rt. II-200-F-C2-3
STA. 99+40 N, 8.24' Rt. III-200-B-C2-9
STA. 99+49 ℄ 126.17' Rt. II-200-F-C2-4
STA. 101+25 N, 8.24' Rt. II-200-F-C2-5
STA. 101+80 ℄ 126.17' Rt. III-200-B-C2-10
Sta. 101+57 N, 12' Rt. PB C2-2
STA. 103+20 N, 13' Rt. II-200-A-C2-6
STA. 104+18 ℄ 126.17' Rt. III-200-B-C2-11
STA. 104+88 N, 13' Rt. II-200-A-C2-7
STA. 4+13 Reading, 13' Rt. II-200-A-C2-7A
STA. 10+38 ℄ 126.17' Lt. III-200-C-C2-12
STA. 13+15, 7' Lt. III-220- Provide 6' Arm On Proposed Strain Pole C2-42
HAMILTON COUNTY
CITY OF READING
ROAD
LA-R/W
For Continuation See Sheet No. 18, Sta. 91+50 ℄ S.R. 126
For Continuation See Sheet No. 21 STA. 106+75 S.R. 126 ℄

Note: For Section A-A See Sht. N2

SCALE 0 50' 100'

20/25

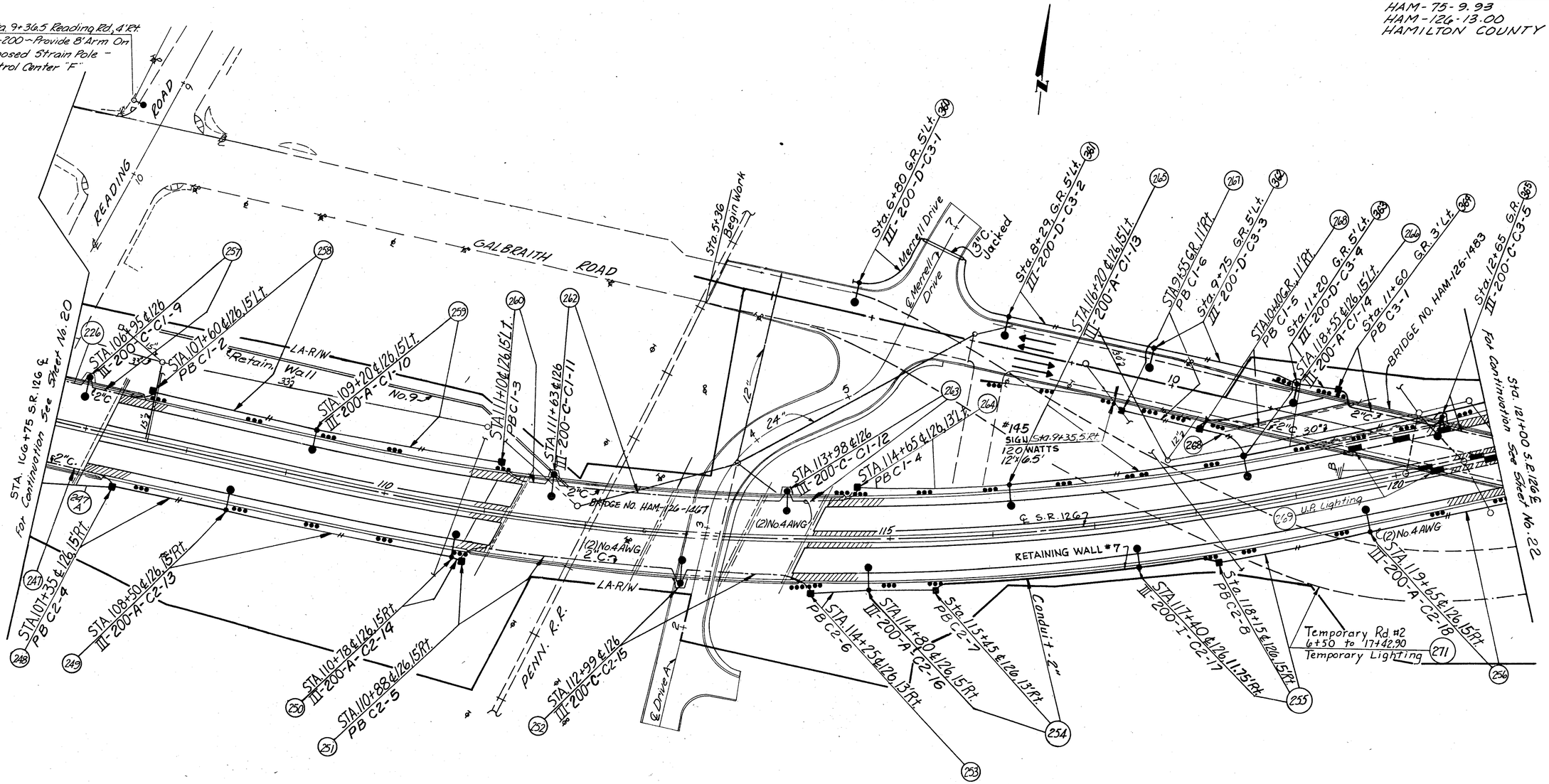
LIGHTING PLAN

CALC. B.O.C. DATE 2/86
CHK'D Rea DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

370/787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



scale: 1" = 50'

21/25

LIGHTING PLAN

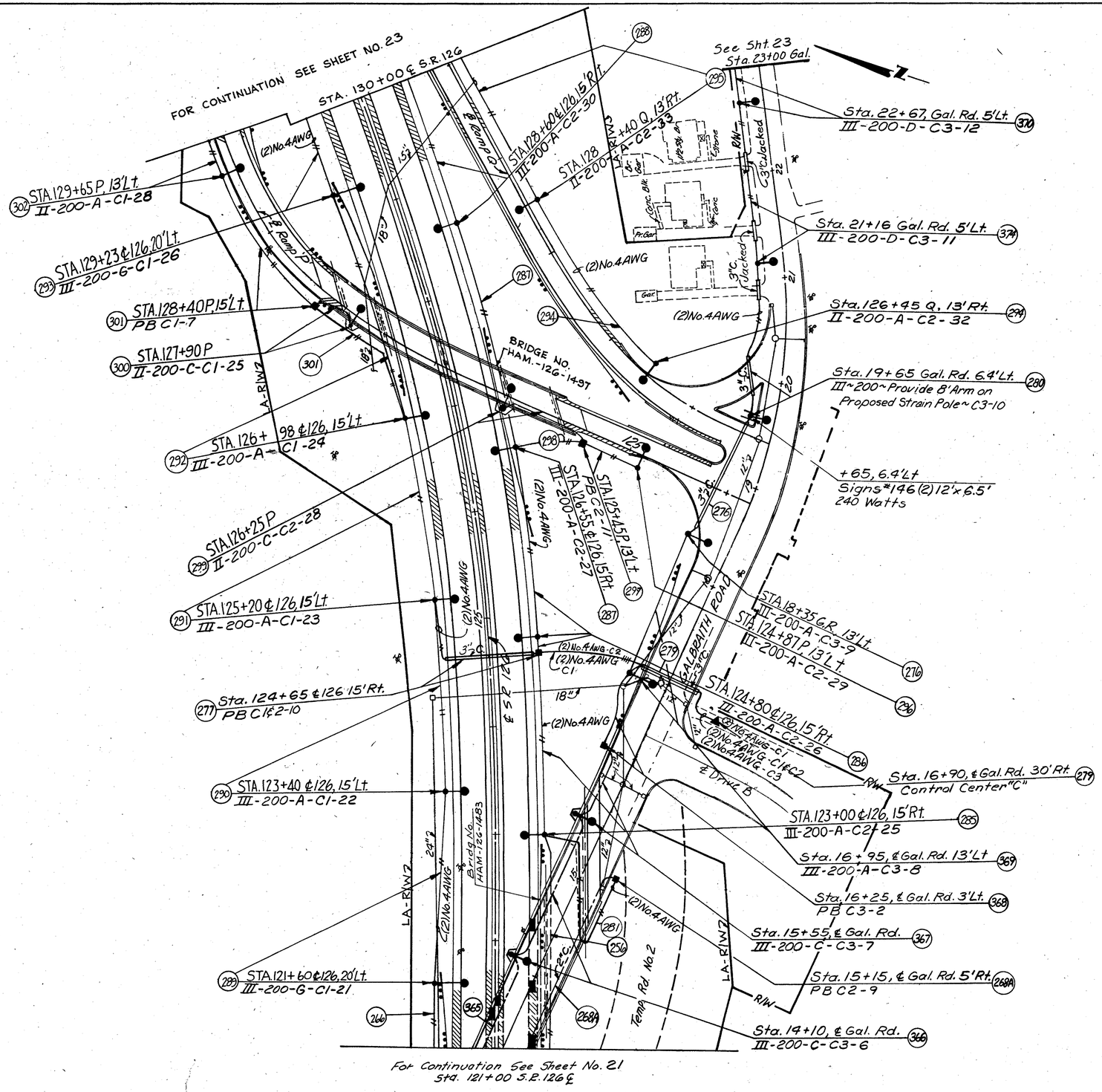
CALC. B.O.C. DATE 3-86

CHK'D REA DATE 3-86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

371
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



SCALE
0 50' 100'

22
25

LIGHTING PLAN

CALC. B.O'C. DATE 3-86

CHK'D REA DATE 3-86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

372
787

HAM - 75 - 993
HAM - 126 - 13.00
HAMILTON COUNTY

A FOR CONTINUATION SEE MATCH LINE A-A A

STA. 139+00 ℄ S.R. 126

STA. 138+62.03 WB. ℄ BK.
STA. 138+59.79 EB. ℄ BK.
STA. 138+62.03 ℄ AH.

Ex. CROSS COUNTY-Ham-453-A
END PROJECT HAM-126-13.00

308 STA. 137+93 WB 126, 13'Lt.
III-200-A-C1-33

321 STA. 137+45 EB 126, 13'Rt.
III~200~A~C2-38

LA-RIW2

S.R. 126

320 STA. 135+75 EB 126, 13'Rt.
III~200~A~C2-37

307 STA. 136+30 WB 126, 13'Lt.
III-200-A-C1-32

(2) No. 4 AWG

319

P.T. 135+81.00 P=
Sta. 135+81.00 WB. ℄
End ℄ Ramp P

306

309 STA. 134+70 WB 126, 13'Lt.
III-200-A-C1-31

#144 SIGN
1435 WATTS

STA. 134+50

Ⓐ 18'X9.5'
Ⓑ 17'X8.5'
Ⓒ 23'X9.5'

STA. 134+20 Q. 13'Rt.
II~200~A~C2-36

BRIDGE NO. HAM-126-1516

304 STA. 134+45 WB 126, 13'Lt.
PB C1-8

E 12"

KNOLLCREST DR.

End Work
Sta. 26+75

Sta. 25+69, G.R. 5'Lt. 373
III-200-D-C3-14

318 STA. 132+50 Q. 13'Rt.
II~200~A~C2-35

(2) No. 4 AWG

3"C. Jacked

305 STA. 133+25 WB 126, 13'Lt.
II-200-A-C1-30
W/Glare Shield

SIGN #197
120 Watts

303

LA-RIW2

RAMP "P"

RAMP "Q"

GALBRAITH RD.

Sta. 24+21 G.R. 5'Lt. 371
III-200-D-C3-13

3"C Jacked

313a STA. 131+76 ℄ 126, 13'Lt.
II~200~A~C1-27

18" Storm

315 STA. 130+88 ℄ 126, 15'Rt.
III~200~A~C2-31
(2) No. 4 AWG

STA. 130+47 Q. 13'Rt.
II~200~A~C2-34

STA. 24+85 G.R. 5'Lt.
PB C3-4

312

303 STA. 131+37 P. 13'Lt.
II~200~A~C1-29

302

293

314

Sta. 130+00 Sign 13'x6' #141
240 Watts

Sta. 130+05, ℄ 126, 15'Rt.
PB C2-12

370 3"C. Jacked

Sta. 23+00 Galbraith Rd.
See Sheet No. 22

FOR CONTINUATION SEE SHEET NO. 22
STA. 130+00 ℄ S.R. 126

#143 sign STA 146+00
20' X 12'
864 WATTS

311 STA. 145+90 ℄ 126, 7'Lt.
PB C1-11

VILLAGE OF AMBERLEY
CITY OF READING

Sta. 145+00
13'x6' Sign #142
240 Watts

Sta. 144+95, ℄ 126, 7'Rt. 325
PB C2-13

VILLAGE OF AMBERLEY
CITY OF READING

END WORK ROADWAY
STA. 143+58 ℄ S.R. 126

(2) No. 4 AWG

(2) No. 4 AWG

S.R. 126

STA. 142+56 ℄ 126, 13'Rt. 324
III~200~A~C2-41

LA-RIW3

LA-RIW2

310 STA. 141+26 ℄ 126, 13'Lt.
III~200~A~C1-35

STA. 140+76 ℄ 126, 13'Rt. 323
III~200~A~C2-40

LA-RIW3

15" Storm

309 STA. 139+58 ℄ 126, 13'Lt.
III~200~A~C1-34

308

A FOR CONTINUATION SEE MATCH LINE A
STA. 139+00 ℄ S.R. 126

322 STA. 139+18 ℄ 126, 13'Rt.
III-200-A-C2-39

SCALE
0 50' 100'

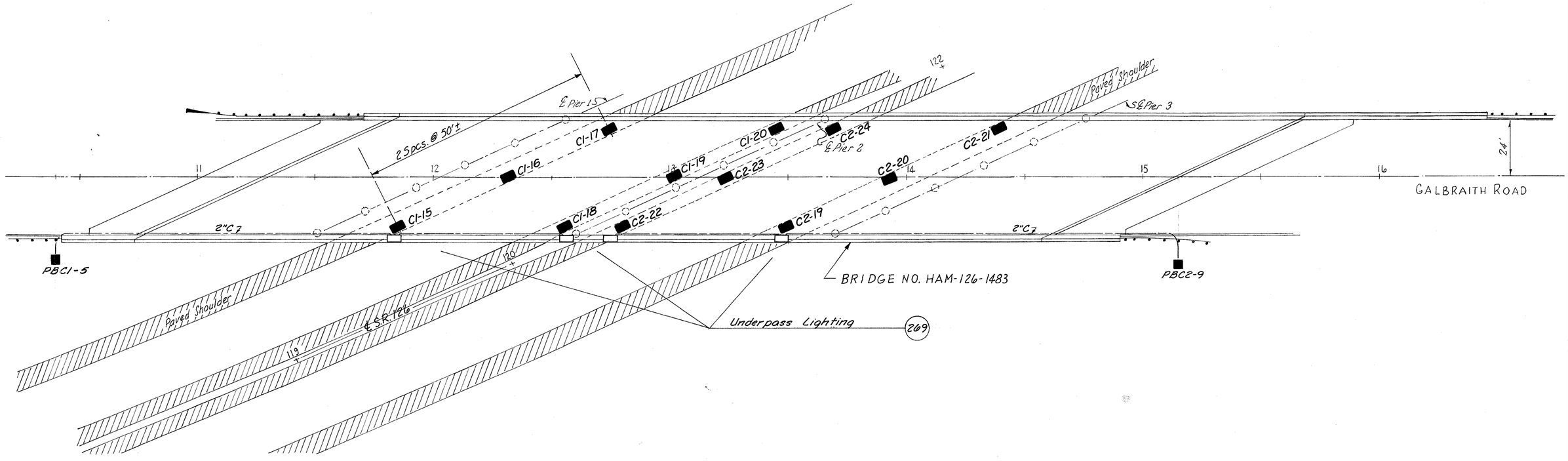
23
25

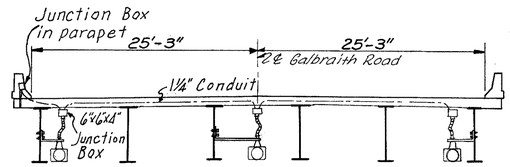
LIGHTING PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

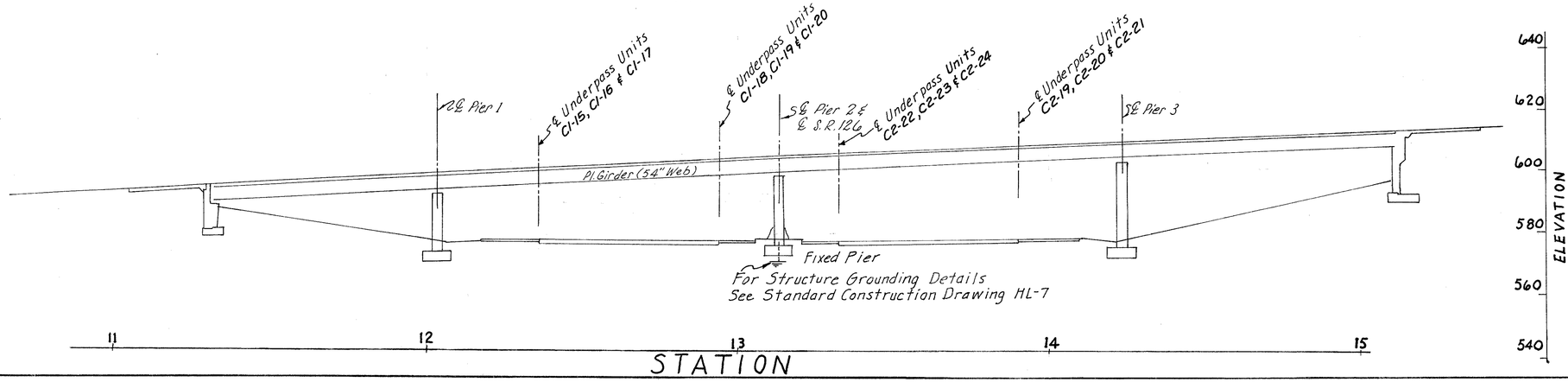
372-A
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY





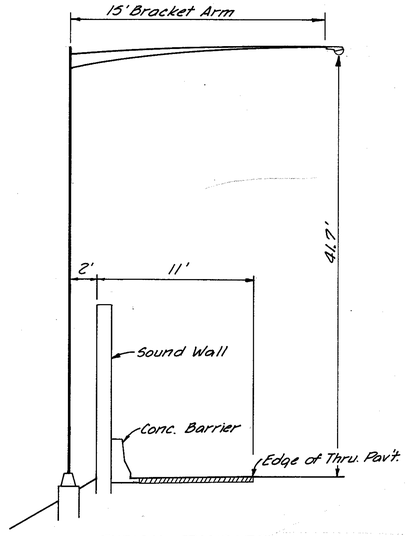
For additional details see Standard Construction Drawing HL-4 and HL-6.



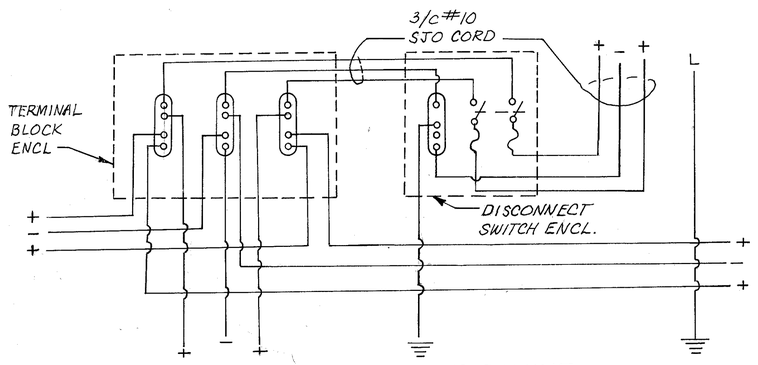
24
25

UNDERPASS LIGHTING DETAILS

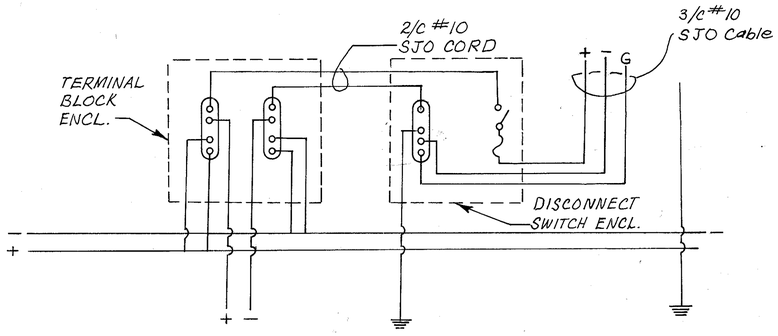
CALC. BY		HAM 75/126 - 9.93/13.00 HAMILTON COUNTY	OHIO	372B 787
DATE			FHWA REGION 5	
CHKD. BY				
DATE				



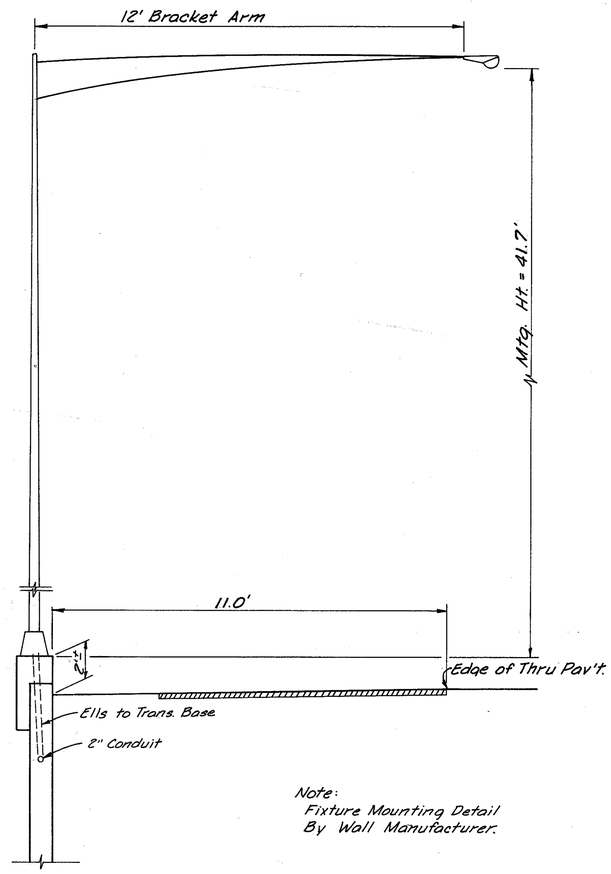
TYPICAL STANDARD
LIGHT POLE LOCATION
STA. 94+49 Rt. & STA. 95+89 Rt. & S.R. 126



LIGHT TOWER WIRING 240 VOLT

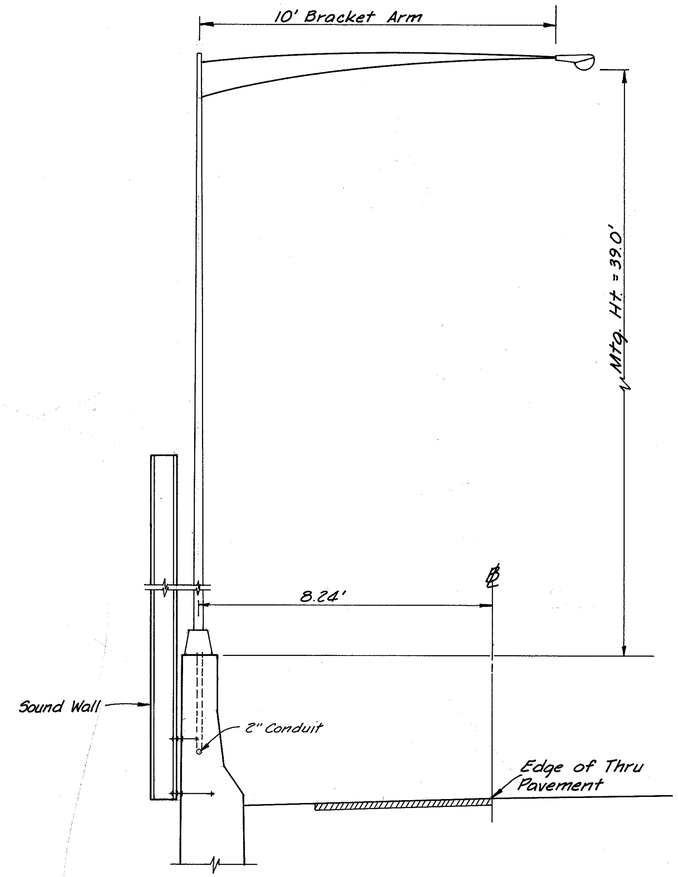


LIGHT TOWER WIRING 480 VOLT

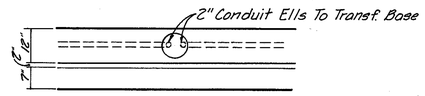


Note:
Fixture Mounting Detail
By Wall Manufacturer.

SECTION B-B RETAINING WALL #7



SECTION A-A RETAINING WALL #6



PLAN VIEW RETAINING WALL #6

25/25

N71130

LIGHTING DETAILS

GENERAL NOTES

621 PAVEMENT MARKINGS

THIS CONTRACT INCLUDES SECTIONS OF ROADWAY WHERE PLOWABLE PRISMATIC RAISED PAVEMENT MARKERS ARE INSTALLED IN THE PAVEMENT. PAVEMENT MARKING MATERIALS SHALL NOT BE APPLIED TO THE PRISMATIC REFLECTOR UNIT HOUSED IN THE CASTING OF A PLOWABLE RAISED PAVEMENT MARKER. THE CONTRACTOR SHALL INTERRUPT THE APPLICATION OF THE PAVEMENT MARKING LINES AT EACH RAISED PAVEMENT MARKER. WHERE MARKING MATERIAL WOULD OTHERWISE BE APPLIED TO THE MARKER PRISMATIC REFLECTOR. THE MAXIMUM GAP IN THE MARKED LINE AT EACH MARKER SHALL BE 18 INCHES. IF PAVEMENT MARKING MATERIAL IS APPLIED TO A PRISMATIC REFLECTOR SURFACE, THE ENGINEER SHALL SUSPEND THE WORK AND THE CONTRACTOR SHALL, AT HIS EXPENSE, EITHER REMOVE ALL MARKING MATERIAL FROM THE REFLECTOR UNIT BY CLEANING, OR HE SHALL REMOVE AND REPLACE IN KIND THE REFLECTOR UNIT, AS DETERMINED BY THE ENGINEER. WORK SHALL RESUME WHEN THE ENGINEER HAS DETERMINED THAT THE CONTRACTOR IS CAPABLE OF INTERRUPTING APPLICATION OF THE LINES AT RAISED PAVEMENT MARKERS IN CONFORMANCE WITH THESE REQUIREMENTS. LINE WIDTHS SHALL BE MAINTAINED AS PER SPECIFICATION, AND THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND AS INDICATED HEREIN.

ANNOTATED DRAWINGS DESCRIBING A DEVICE DEVELOPED BY THE DEPARTMENT TO DETECT AND INTERRUPT MARKING AT A PLOWABLE RAISED PAVEMENT MARKER ARE AVAILABLE FROM THE BUREAU OF TRAFFIC. THIS DEVICE IS COMPATIBLE WITH COMMERCIAL PAVEMENT MARKING APPLICATION EQUIPMENT EMPLOYING ELECTROPNEUMATIC VALVES TO CONTROL MATERIAL FLOW. THE CONTRACTOR IS NOT REQUIRED TO USE THIS DEVICE, HOWEVER. THIS ITEM SHALL BE INCIDENTAL TO THE APPLICATION OF THE MARKED LINES.

TRAFFIC CONTROL STANDARD CONSTRUCTION DRAWINGS

REFERENCES TO SUPPLEMENTAL SPECIFICATIONS 857, 858, 859, 957, 958 AND 959 ON THE TRAFFIC CONTROL STANDARD CONSTRUCTION DRAWINGS IN THESE PLANS SHALL BE CONSIDERED TO READ AS RESPECTIVE REFERENCES TO ITEMS 630, 631,632, 730,731 AND 732.

632 REMOVAL OF EXISTING TRAFFIC SIGNAL INSTALLATIONS

TRAFFIC SIGNAL INSTALLATION, INCLUDING SIGNAL HEADS, CABLE, MESSENGER WIRE, STRAIN POLES, CABINET, CONTROLLER, ETC., SHALL BE REMOVED IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 632.25 AND AS INDICATED ON THE PLANS. REMOVED ITEMS SHALL BE STORED ON THE PROJECT FOR SALVAGE BY THE CITY OF READING OR THE STATE OF OHIO IN ACCORDANCE WITH THE LISTING GIVEN HEREIN.

INTERSECTIONS IN CITY OF READING

BURKHART AVENUE AND GALBRAITH ROAD (CABINET AND TRAFFIC SIGNALS)

CHAUCER DRIVE AND READING ROAD (CABINET, STRAIN POLES AND TRAFFIC SIGNALS)

GALBRAITH ROAD AND READING ROAD (CABINET, STRAIN POLES AND TRAFFIC SIGNALS)

LIEBEL-FLARESHEIM / MERRELL DRIVES AND GALBRAITH ROAD (CABINET, STRAIN POLES AND TRAFFIC SIGNALS)

GALBRAITH ROAD AND CROSS-COUNTY HWY. (CABINET, STRAIN POLES AND TRAFFIC SIGNALS)

ITEMS TO BE STORED ARE:

CONTROLLERS, TRAFFIC SIGNAL HEADS, SIGNS, ANCHOR BASE STRAIN POLES, EMBEDDED STRAIN POLES SAWN FLUSH WITH EXISTING CONCRETE FOUNDATION, LOOP DETECTOR AMPLIFIERS, COORDINATORS AND ALL OTHER ITEMS INSIDE CABINETS INCLUDING CABINETS.

632 REMOVAL OF EXISTING TRAFFIC SIGNAL INSTALLATIONS (CONTINUED)

INTERSECTIONS IN WHICH SALVAGE MATERIAL IS STORED FOR STATE OF OHIO ARE:

SOUTHBOUND I-75 ON & OFF RAMPS AT GALBRAITH ROAD. (CONTROLLER AND CABINET)

NORTHBOUND I-75 OFF RAMP AT GALBRAITH ROAD. (CONTROLLER AND CABINET)

WALDMAN DRIVE AND GALBRAITH ROAD. (CONTROLLER AND CABINET)

NORTHBOUND I-75 ON RAMP AT GALBRAITH ROAD. (CONTROLLER, CABINET, STRAIN POLE NO 1 AND TRAFFIC SIGNALS)

ITEMS TO BE STORED ARE:

CONTROLLERS, CABINETS, AND TRAFFIC SIGNAL HEADS.

861 CONTROLLER, ACTUATED, PHASE, SOLID STATE DIGITAL, MICROPROCESSOR AS PER PLAN.

THE OVERLAP PROGRAMING SHALL BE BY USE OF AN INTERCHANGEABLE PLUG-IN PRINTED CIRCUIT BOARD ASSEMBLY AS DESCRIBED IN PART 14 OF IS-1 1983. IN ADDITION TO NEMA REQUIREMENTS, THE CONFLICT MONITOR SHALL ALSO HAVE EXTENDED MONITORING IN ACCORDANCE WITH 961.04 PART 3B. THE CONTROLLER HOUSING SHALL BE KEYED TO THE STATE MASTER. CONTROLLER CABINET SHALL BE PAINTED YELLOW FEDERAL STANDARD 595 COLOR 13655. PAYMENT FOR ITEM 861 CONTROLLER, ACTUATED,( ) PHASE, SOLID STATE DIGITAL, MICROPROCESSOR WILL BE AT THE CONTRACT BID PRICE PER EACH COMPLETE AND IN PLACE INCLUDING ALL CONNECTIONS TESTED AND ACCEPTED.

THE EXISTING CONTROLLER FOUNDATIONS *BEING REUSED* *SHALL BE ENLARGED AS* NECESSARY TO CORRECTLY MOUNT THE NEW CONTROLLER CABINETS. ANY ENLARGEMENT SHALL BE SECURELY ANCHORED TO THE EXISTING FOUNDATION. ANCHOR BOLTS SHALL BE INSTALLED TO SECURELY FASTEN THE NEW CABINETS. PAYMENT FOR THIS FOUNDATION ENLARGEMENT SHALL BE INCLUDED IN THE BID PRICE OF THE CONTROLLER.

ITEM 861 CONTROLLER, ACTUATED, PHASE, SOLID STATE, DIGITAL, *MICROPROCESSOR, CITY OF READING*, AS PER PLAN, ** TRANSYT 1880-ALTERNATE BID

THE CONTROLLER SHALL BE A MODEL 1880 AS MANUFACTURED BY TRANSYT CORP OF TALLAHASSEE, FL. AND SHALL INCORPORATE OR BE FURNISHED WITH ALL THE DESIGN FEATURES, AUXILIARY EQUIPMENT, ACCESSORIES, AND PREWIRED CABINET FEATURES AS REQUIRED IN THE STANDARD BID ITEM.

THE EXISTING CONTROLLER FOUNDATION AT READING ROAD SHALL BE ENLARGED AS NECESSARY TO CORRECTLY MOUNT THE NEW CONTROLLER CABINETS. ANY ENLARGEMENT SHALL BE SECURELY ANCHORED TO THE EXISTING FOUNDATION. ANCHOR BOLTS SHALL BE INSTALLED TO SECURELY FASTEN THE NEW CABINETS. PAYMENT FOR THIS FOUNDATION ENLARGEMENT SHALL BE INCLUDED IN THE BID PRICE OF THE CONTROLLER.

PAYMENT WILL BE AT THE CONTRACT UNIT PRICE FOR EACH, IN PLACE, ALL CONNECTIONS MADE AND WIRING COMPLETED, TESTED AND ACCEPTED.

GENERAL NOTES

632 VEHICULAR SIGNAL HEAD, (BY TYPE), AS PER PLAN

SECTION 732.01 OF THE SPECIFICATIONS IS MODIFIED FOR THIS PROJECT AS FOLLOWS:

A) SIGNAL HEADS AND VISORS SHALL BE CONSTRUCTED OF POLYCARBONATE PLASTIC AND MEET ITE SPECIFICATION.

B) PLASTIC LENSES SHALL BE USED.

C) PIPE, SPACERS, AND FITTINGS CONSTRUCTED OF POLYCARBONATE PLASTIC MAY BE USED IN LIEU OF GALVANIZED STEEL OR ALUMINUM.

D) PROPER EXTERIOR COLORS SHALL BE OBTAINED BY USE OF COLORED PLASTIC MATERIAL RATHER THAN PAINTING.

631 BALLAST, BY TYPE, AS PER PLAN

BALLAST FOR MERCURY VAPOR LUMINAIRES SHALL BE MOUNTED WITHIN THE LUMINAIRE HOUSING (INTEGRAL) OR MOUNTED IN A WEATHERPROOF HOUSING ATTACHED TO OR BESIDE THE LUMINAIRE (CONTIGUOUS). BALLAST HOUSINGS SHALL BE OF CORROSION RESISTANT MATERIALS.

632 LOOP DETECTOR AMPLIFIERS, BY TYPE, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF 632 AND 732.07 OR 732.08, LOOP DETECTOR AMPLIFIERS SHALL HAVE THE FOLLOWING REQUIREMENTS OR FEATURES:

THE OUTPUT DEVICE SHALL BE A RELAY, AND ALL CONTACTS SHALL BE INCLUDED IN THE WIRING HARNESS.

THE UNIT SHALL BE SELF TUNING.

THE UNIT'S ELECTRICAL CONNECTION PLUGS OR WIRING HARNESS SHALL ALLOW READY REPLACEMENT WITH A SINGLE CHANNEL AMPLIFIER AS DESCRIBED IN THE FINAL PARAGRAPH OF 732.07.

ITEM 632 LOOP DETECTOR AMPLIFIERS, DELAY AND EXTENSION TYPE AS PER PLAN.

EXTENSION AND DELAY TYPE AMPLIFIERS SHALL BE CAPABLE OF TIMING THE EXTENSION AND DELAY SIMULTANEOUSLY.

ITEM 632 REMOVAL OF SIGNAL CONTROLLERS

REMOVAL OF SIGNAL CONTROLLERS AT THE FOLLOWING FOUR INTERSECTIONS:

1. SB I-75 EXIT RAMP AND GALBRAITH ROAD
2. NB I-75 EXIT RAMP AND GALBRAITH ROAD
3. WALDMAN DRIVE AND GALBRAITH ROAD
4. NB I-75 ENTRANCE RAMP AND GALBRAITH ROAD

1 BEFORE REMOVAL OF EXISTING CONTROLLERS AND CABINETS, ALL EXISTING ELECTRICAL WIRING SHALL BE LABELED FOR CORRECT INSTALLATION IN THE NEW CABINETS.

2 THE ENGINEER SHALL APPROVE A SCHEDULE FOR REMOVAL AND INSTALLATION OF THE CONTROL EQUIPMENT.

3 THE CONTRACTOR SHALL MAKE THE NEW EQUIPMENT OPERATIONAL AND DISPLAY THE SAME TIMING AS IS PRESENTLY IN OPERATION, UNLESS PROVIDED NEW TIMING.

4 AT THE SB I-75 EXIT RAMP AND GALBRAITH ROAD, THE NEW INSTALLATION SHALL SUPPLY RESET AND DIAL TRANSFER SIGNALS TO THE CITY OF CINCINNATI VIA THE TRANSFER RELAY JUNCTION BOX LOCATED APPROXIMATELY 135 FEET WEST OF THE INTERSECTION CONTROLLER. THE NEW EQUIPMENT SHALL BE MADE OPERATIONAL WITH THE EXISTING CITY OF CINCINNATI SYSTEM.

5 THE EXISTING CONTROLLERS SHALL BE STORED ON SITE FOR PICKUP BY STATE FORCES.

ITEM 614 MAINTENANCE OF EXISTING SIGNAL INSTALLATION

THE EXISTING TRAFFIC SIGNALS SHALL BE KEPT IN OPERATION UNTIL THE NEW SIGNAL IS OPERATIONAL. IF EXISTING ITEMS ARE TO BE INCORPORATED INTO THE NEW SIGNAL, SUCH ITEMS SHALL NOT BE REMOVED AND REINSTALLED UNTIL ALL OTHER NEW WORK IS COMPLETED. AT THIS TIME, THE EXISTING SIGNAL MAY BE TURNED OFF AND THE REMAINING WORK COMPLETED. TRAFFIC SHALL BE MAINTAINED AT THE INTERSECTION THROUGH THE USE OF LAW ENFORCEMENT OFFICERS. THE INTERSECTION OF READING AND GALBRAITH SHALL REQUIRE THE USE OF TWO OFFICERS. LAW ENFORCEMENT OFFICERS SHALL BE FROM THE RESPECTIVE JURISDICTIONS AND SHALL BE HIRED AT CONTRACTORS EXPENSE. 48 HOUR NOTICE SHALL BE GIVEN TO THE RESPECTIVE JURISDICTIONS PRIOR TO THE SHUTDOWN OF SIGNAL CONTROL AT EACH INTERSECTION.

SIGNAL CONTROL OF THE INTERSECTION SHALL NOT BE INTERRUPTED DURING THE HOURS OF 7:00 AM TO 9:00 AM AND 3:00 P.M. TO 6:00 PM ON WEEKDAYS. SIGNALS SHALL BE INOPERATIVE NO LONGER THAN SIX HOURS. INTERRUPTION OF EXISTING SIGNAL COORDINATION BETWEEN OTHER SIGNALS SHALL BE MINIMAL.

TRAFFIC SIGNALS WITHIN THE CITY OF READING ARE:

XCOUNTY HIGHWAY AND GALBRAITH ROAD

GALBRAITH ROAD AND DRIVE B

GALBRAITH ROAD AND READING ROAD

READING ROAD AND RAMP N

TRAFFIC SIGNALS WITHIN THE VILLAGE OF ARLINGTON HEIGHTS ARE:

GALBRAITH ROAD AND RAMP TO NORTHBOUND I-75

GALBRAITH ROAD AND WALDMAN DRIVE

GALBRAITH ROAD AND NORTHBOUND OFF RAMP

GALBRAITH ROAD AND SOUTHBOUND ON AND OFF RAMPS

CITY OF READING'S POLICE TELEPHONE NUMBER IS (513) 733-4122 AND THE VILLAGE OF ARLINGTON HEIGHTS POLICE TELEPHONE NUMBER IS (513) 821-7547.

PAYMENT WILL BE INCLUDED IN THE LUMP SUM PRICE BID FOR 614 MAINTAINING TRAFFIC.

ITEM 861 CONTROLLER, ACTUATED, PHASE, SOLID STATE DIGITAL, *MICROPROCESSOR, CITY OF READING*

IN ADDITION TO THE REQUIREMENTS OF SUPPLEMENTAL SPECIFICATION 961, THE CONTROLLER WITH PREWIRED CABINET SHALL HAVE THE FOLLOWING FEATURES AND REQUIREMENTS:

1 THE CONFLICT MONITOR SHALL HAVE EXTENDED MONITORING IN ACCORDANCE WITH 961.04 PART 3B.

2 MANUAL CONTROL AND PUSHBUTTON SHALL BE REQUIRED IN ACCORDANCE WITH 961.04 PART 10. CABINET WIRING SHALL INCLUDE AN AUTOMATIC/MANUAL TRANSFER SWITCH ACCORDING TO 961.04 PART 11C.

3 DETECTOR SWITCHES SHALL BE PROVIDED ACCORDING TO 961.04 PART 11G.

4 THE INDICATOR LAMPS FURNISHED ON THE CONTROLLER (OTHER THAN LED'S) SHALL BE WIRED TO A CABINET DOOR SWITCH TO AUTOMATICALLY TURN OFF THE INDICATOR LAMPS WHEN THE DOOR IS CLOSED.

THE EXISTING CONTROLLER FOUNDATION AT READING ROAD SHALL BE ENLARGED AS NECESSARY TO CORRECTLY MOUNT THE NEW CONTROLLER CABINETS. ANY ENLARGEMENT SHALL BE SECURELY ANCHORED TO THE EXISTING FOUNDATION. ANCHOR BOLTS SHALL BE INSTALLED TO SECURELY FASTEN THE NEW CABINETS. PAYMENT FOR THIS FOUNDATION ENLARGEMENT SHALL BE INCLUDED IN THE BID PRICE OF THE CONTROLLER.

FHWA	STATE	PROJECT	
5	OHIO		

HAM-75/12.6-9.93/13.00

DESCRIPTION OF WORK

1. The work shall consist of furnishing and placing plowable raised pavement markers (hereafter referred to as RPMs) in accordance with the lines, symbols, and dimensions shown on the plans or as described herein on highway sections where the RPM's have never been installed to date.

2. The replacement of damaged or missing RPM's within existing marker installations in accordance with the lines, symbols and dimensions shown on the plans or as described herein. This work includes furnishing replacement RPM's.

3. The replacement of damaged or missing prismatic retro-reflectors on highway sections with existing marker installations where casting remains intact in accordance with the lines, symbols and dimensions shown on the plans or as described herein. This work includes furnishing replacement prismatic retro-reflectors.

The Contractor shall furnish all material, services, labor and equipment necessary for the required pavement preparation and pavement marker placement for each item described herein.

MATERIALS

The RPM shall consist of two components. One component is a casting; the other component is a prismatic retro-reflector. Both components of the RPM used for this project shall be Stimsonite Model 96 as manufactured by the Amerace Corporation, Niles, Illinois, or an approved functional equivalent. The RPM casting is an iron casting, snow plowable in two opposing directions, designed to be equipped with a replaceable prismatic retro-reflector. Prismatic retro-reflectors shall retro-reflect in one direction only (one way) or in two opposing directions (two-way).

The adhesive used to bond the RPM to the pavement shall be a two-component standard set epoxy available from Poly-Carb, Inc. or General Adhesives and Chemical Company or an approved functional equivalent made with the following formulation.

Component A	Parts by Weight
Epoxy Resin (Epon 828 or equal)	100.00
Titanium Dioxide	7.68
#13 Talc U	36.64

Component B	Parts by Weight
N-Aminoethyl piperazine (Jefferson or equal)	25.10
Nonyl Phenol	50.03
Talc (Fiberine C-400, Sierra or equal)	69.28
Molacco Black	0.23

The adhesive used by the Contractor to bond the prismatic retro-reflector to castings shall be MACCO, LN-602 (Liquid Nails), a waterproof synthetic rubber and resin based adhesive, manufactured by SCM Glidden-Durkee, Division of SCM Corporation, Macco Adhesives Group, Wickliffe, Ohio 44092 or an approved functional equivalent.

TESTING AND CERTIFICATION

RPMs and prismatic retro-reflectors shall be furnished and placed by the Contractor. The Contractor shall furnish to the Engineer, certified Test Data of the material's physical characteristics and Certification that the materials were manufactured and assembled in accordance with applicable State specifications. The results of all factory quality control inspection of the prismatic retro-reflector to casting bond shall be included in the physical characteristics data.

The epoxy adhesive shall be furnished by the Contractor. The Contractor shall furnish to the Engineer a Certificate of Analysis containing the Certified Formulation and Certified Test Data to be obtained in the following manner:

The Certified Formulation shall be, for each of the Component Parts, the actual percent by weight, the name of the producer and brand name of the material, and the producer's code number. A certified formulation will be required annuallu for each Component Part A and B. Certified Test Data for the properties of the Component Parts, Components A (Epoxy) and B (Hardener), and the Cured System shall be obtained in accordance with the Methods of Test of AASHTO M237-73. The respective properties of the Component Parts to be tested are noted in Sections 2.3.1 to 2.3.3 and 2.3.5 to 2.3.7. The properties of both Components A and B to be tested are noted in Section 3.1. The properties of the Cured System to be tested are listed in Table 7. Certified Test Data for the Component Parts may be obtained by the respective manufacturers. Certified Test Data for Components A and B and the Cured System may be obtained by either the Epoxy Adhesive producer or an independent test laboratory.

For sampling purposes a batch shall consist of a single charge of all Components into a mixing chamber.

A certified formulation will be required for each batch of Component Parts A and B. Certified Test Data will be required for each 1,000 gallons or fraction thereof of material. Batches of less than 1,000 gallons shall be combined in proportion to their size in order to form a composite sample representative of no more than 1,250 gallons. This composite sample shall be thoroughly mixed and shall serve to represent the material to be tested. The Contractor shall also furnish the Engineer a 1 pint sample of each Component Part from the initial batch of epoxy adhesive to be used on the project and from any subsequent batches when required by the Engineer.

PAVEMENT PREPARATION

The Contractor shall clean and prepare the pavement to which the RPM casting is to be bonded, to the satisfaction of the Engineer, such that at the time of RPM installation the pavement shall be free of dirt, dust, oil, grease, moisture, curing compound, loose or unsound layers or any other material which would interfere with proper bonding of the RPM to the pavement. Sand blasting shall be used when directed by the Engineer.

INSTALLATION AND REPLACEMENT OF RPMs

At the time of installation, or replacement the RPM casting shall be free of dirt, dust, oil, grease, rust, moisture or any foreign matter which will impair adhesion to the pavement. It shall be the Contractor's responsibility to clean each contaminated casting by sand blasting or other acceptable procedure to remove all such foreign matter prior to installation. Before beginning RPM casting installation or replacement, the Contractor shall accurately and adequately lay out, by reference points, the location of all RPMs, to assure their proper placement.

RPMs shall not be placed on pavement surfaces that show visible evidence of cracking, checking, spalling, or failure of underlying base material.

If an RPM falls within a distance equal to ten percent of typical longitudinal spacing of a bridge enddam, the marker shall be relocated onto the approach slab.

RPMs shall not be placed on active signal detector loops and detector lead-in cables.

RPMs shall not be placed directly over pavement markings except where the markings deviate visibly from their correct alignment, and then only with the approval of the Engineer.

If during the pre-installation layout operation, it is determined that a RPM would be placed at a point with one of the aforementioned conditions or at a pavement construction joint or within an intersection of a driveway or public street as the result of typical marker spacing, the affected marker shall be relocated longitudinally a sufficient distance to a point approved by the Engineer. The distance the RPM may be relocated shall not excced 10% of the typical RPM spacing. Where it would be necessary to relocate the marker a distance greater than 10% of the typical marker spacing, the affected RPM shall not be installed.

When replacing RPM's at a location within an existing pattern of RPM's a new location shall be cut into the pavement one foot away from the damaged or missing casting. The old locations of the damaged or missing castings are not suitable for new castings.

The pavement surface temperature at the time of application shall be not less than 50°F. The ambient air temperature shall be not less than 50°F. No RPMs shall be installed if the pavement surface is not dry.

The Contractor shall keep traffic off newly installed or replaced RPMs for the minimum period specified in the following table.

Ambient Air Temperature °F	Minimum Period (Minutes) Protected from Traffic
100	15
90	20
80	25
70	30
60	35
50 (no application below 50°F)	45

During periods of high ambient relative humidity, epoxy may require slightly longer drying time than indicated above.

RPMs shall be installed by inserting the two keels on the casting into parallel slots cut into the pavement. Within 7 days after the slots are cut into the pavement, the RPM castings shall be installed.

The epoxy adhesive shall be mixed by combining Component Parts A (Epoxy) and B (Hardener) in a ratio of 1:1 by volume. The epoxy adhesive requires that the mixing operation and placing of the RPMs be done rapidly. Any mixed batch that becomes so viscous that it cannot be readily extruded from under the RPM with light pressure shall not be used. The epoxy adhesive shall be maintained at 60°F to 80°F before mixing. Any heating of the epoxy adhesive shall be by the application of indirect heat. The epoxy adhesive shall not be heated above 120°F.

Before applying the epoxy adhesive, the slots shall be brushed or blown clean of loose material and shall be dry. The cleaned slots shall be filled with epoxy adhesive. Sufficient epoxy shall be placed in and between the slots to insure that all voids beneath and around the casting are filled so as to create a watertight seal around the casting. The keels of the casting shall be hand placed into the slots in such a manner as to assure that the tips of the RPM's snowplow deflecting surfaces are below the pavement surface and that the four lugs on the keels of the casting are in contact with the pavement.

The Contractor may attach the prismatic retro-reflectors to new castings, which do not include a prismatic retro-reflector already factory attached by Amerace Corporation, at any time prior to the insertion of the casting into the pavement slots. Otherwise, the prismatic retro-reflector shall not be attached to a new casting until after the epoxy adhesive in the pavement slots has properly hardened. In either operation, the following prismatic retro-reflector attachment procedure shall be used. The RPM casting shall be free of dirt, dust, oil, grease, rust, moisture or any foreign matter (including damaged reflectors or parts thereof) which will impair adhesion of the prismatic retro-reflector to the casting. Sandblasting or another procedure acceptable to the Engineer shall be utilized to free the casting of foreign matter. The recessed attachment area shall be coated with LN-602 (Liquid Nails) adhesive. The backing paper shall then be peeled from the butyl adhesive bottom of the prismatic retro-reflector and the prismatic retro-reflector shall be inserted into the recessed attachment area and pressed into place until a small amount of adhesive will squeeze out on both sides and a firm bond has been made with the casting. The Contractor shall press the prismatic retro-reflector into place by the application of a 100 pound load or by a procedure acceptable to the Engineer. Adhesive material shall not be permitted on the reflective surface of the prismatic retro-reflector. The pavement surface temperature and the ambient air temperature shall be between 40°F and 90°F at the time of application of the prismatic retro-reflector. The Contractor shall not attach the prismatic retro-reflector to the casting when rain is imminent.

REPLACEMENT OF RETRO-REFLECTORS

Damaged or missing retro-reflectors within the existing marker installations where the casting remains intact shall be replaced with the reflector type shown on the details in the plan. Damaged reflectors include those that are loose or have been broken, chipped, cracked or have otherwise lost their retro-reflective properties as determined by the Engineer.

The location of existing RPM's that require the replacement of damaged or missing retro-reflectors shall be determined by the Engineer.

Some existing castings have remnants of the old retro-reflector or contain retro-reflectors that are not serviceable due to cracking, discoloration, etc. If the casting is specified by the Plan or Engineer to have the retro-reflector replaced, the work shall include removing the old portion of the retro-reflector. The attachment procedure of prismatic retro-reflectors that are replacing damaged or missing prismatic retro-reflectors within existing marker installations shall be performed as described in "Installation and Replacement of RPMs".

CHANNELIZING LINES

RPMs which are used in channelizing line applications shall have one-way prismatic retro-reflectors facing traffic which shall be white in color to match the channelizing line color. RPMs shall be placed so that the near edge of the marker casting is no more than 1 inch from the near edge of the channelizing line. Placement of the RPMs and RPM spacing shall be as shown on the details in this plan.

LANE LINES

RPMs which are used in lane line applications shall have two-way prismatic retro-reflectors, crystal white facing traffic and red facing the opposite direction. RPMs shall be placed between and in line with the dashes of the lane line. Placement of the RPMs and RPM spacing shall be as shown on the details in this plan.

EDGE LINES

RPMs which are used in edge line applications shall have prismatic retro-reflectors which match the edge line color (white facing traffic for right edge lines; yellow facing traffic for the left edge lines). RPMs shall be placed so that the near edge of the marker casting is no more than 1 inch from the near edge of the edge line.

The number of retro-reflective faces required, the placement of RPMs and the RPM spacing shall be as shown on the details in this plan.

CENTER LINES

RPMs which are used in centerline applications shall have two-way prismatic retro-reflectors, which shall be yellow to match the centerline color. RPMs shall be placed between the lines of double line centerline and between and in line with the dashes on single line centerline. Placement of the RPMs and RPM spacing shall be as shown on the details in this plan.

METHOD OF MEASUREMENT

The number of RPMs installed or replaced will be the actual number, furnished, complete, in place, and accepted, in the units designated, including layout, premarking, surface preparation, and the furnishing and application of all required epoxy adhesive.

The number of prismatic retro-reflectors replaced will be the actual number furnished, complete, in place, and accepted in the units designated, including existing casting preparation and application of all required adhesive.

BASIS OF PAYMENT

Payment for accepted quantities in place will be made at the contract unit price for:

ITEM	UNIT	DESCRIPTION
Special	Each	Raised Pavement Marker
Special	Each	Raised Pavement Marker Replaced
Special	Each	Prismatic Retro-reflector Replaced

Payment shall be full compensation for all materials, labor, incidentals, and equipment for placement of the RPMs and Prismatic Retro-reflectors.

AUGUST 13, 1979
Revised MARCH 30, 1981
Revised MAY 26, 1981

RAISED PAVEMENT MARKER NOTES

TRAFFIC CONTROL SUMMARY

CALC. BY FGV DATE 3/86
CHKD. BY DS DATE 3/86
HAMILTON COUNTY
HAM-75/126-9.93/13.00
OHIO
F.H.W.A REGION 5
370/787

*PARTICIPATION
1. 95% State, 5% Hamilton County
2. 87.5% State, 12.5% Hamilton County

ITEM	432 *2	433 *2	434 *2	435 *2	SHEET 436 */1	SHEET 436 *2	SHEET 16D */1	SHEET 16D *2	SHEET 411 */1	SHEET 411 *2	SHEET 399 */1	SHEET 399 *2	SHEET 400 */1	SHEET 400 *2	SHEET 410 */1	SHEET 410 *2	SHEET 412 */1	SHEET 412 *2	ITEM	IR-75-1 (96) TOTAL	E-2(43) TOTAL	GRAND TOTAL	UNIT	DESCRIPTION
630						2.92							64.62	75.56					630	64.62	78.48	143.10	Cu.Yd.	Concrete for Anchor base Foundation
630											6.92	8.54							630	6.92	8.54	15.46	Cu.Yd.	Concrete for Embedded Foundation
630											60.00	200.00							630	60.00	200.00	260.00	L.F.	Ground-Mounted Supports, No. 2 Post
630											58.00	190.00							630	58.00	190.00	248.00	L.F.	Ground-Mounted Supports, No. 3 Post
630											151.50	379.50							630	151.50	379.50	531.00	L.F.	Ground-Mounted Supports, No. 4 Post
630											0	27.00							630		27.00	27.00	L.F.	4"x4"x 3/16" Square Post
630											35.50	108.00							630	35.50	108.00	143.50	L.F.	Ground-Mounted Supports, S4x7.7 Beam
630											73.50	66.50							630	73.50	66.50	140.00	L.F.	Ground-Mounted Supports, W6x9 Beam
630											80.00	124.00							630	80.00	124.00	204.00	L.F.	Ground-Mounted Supports, W10x12 Beam
630											0	29.00							630		29.00	29.0	L.F.	One Way Supports, No. 4 Post
630													5	0					630	5	0	5	Ea.	Luminaire Support Assembly Type TC-31.21
630											6	8							630	6	8	14	Ea.	Breakaway Beam Connection
630													1	0					630	1	0	1	Ea.	Overhead Sign Support, Type 12.30, Design No.5, Arm 23.0 Feet
630													2	0					630	2	0	2	Ea.	Overhead Sign Support, Type 7.65, Design No.6, Span 59.0 Feet
630													1	0					630	1	0	1	Ea.	Overhead Sign Support, Type 12.30, Design No.9, Arm 22.0 Feet
630													0	1					630	0	1	1	Ea.	Overhead Sign Support, Type 12.30, Design No.9, Arm 26.0 Feet
630													0	1					630	0	1	1	Ea.	Overhead Sign Support, Type 7.65, Design No.6, Span 52.0 Feet
630													1	0					630	1	0	1	Ea.	Overhead Sign Support, Type 12.30, Design No.6, Arm 26.0 Feet
630													0	1					630	0	1	1	Ea.	Overhead Sign Support, Type 7.65, Design No.6, Span 67.0 Feet
630													0	5					630	0	5	5	Ea.	Overhead Sign Support, Type 12.30, Design No.3, Arm 17.0 Feet
630													0	1					630	0	1	1	Ea.	Overhead Sign Support, Type 12.30, Design No.1, Arm 10.0 Feet
630													1	0					630	1	0	1	Ea.	Overhead Sign Support, Type 7.65, Design No.6, Span 66.25 Feet
630													1	1					630	1	1	2	Ea.	Overhead Sign Support, Type 7.65, Design No.8, Span 78.5 Feet
630													0	1					630	0	1	1	Ea.	Overhead Sign Support, Type 7.65, Design No.6, Span 65.0 Feet
630													0	1					630	0	1	1	Ea.	Overhead Sign Support, Type 12.30, Design No.5, Arm 15.0 Feet
630													1	0					630	1	0	1	Ea.	Overhead Sign Support, Type 12.30, Design No.5, Arm 20.0 Feet
630													0	1					630	0	1	1	Ea.	Overhead Sign Support, Type 7.65, Design No.6, Span 57.0 Feet
630													0	1					630	0	1	1	Ea.	Overhead Sign Support, Type 12.30, Design No.11, Arm 22.0 Feet
630													0	1					630	0	1	1	Ea.	Overhead Sign Support, Type 12.30, Design No.5, Arm 21.0 Feet
630													1	0					630	1	0	1	Ea.	Overhead Sign Support, Type 12.30, Design No.9, Arm 21.0 Feet
630													1	0					630	1	0	1	Ea.	Overhead Sign Support, Type 12.30, Design No.11, Arm 26.0 Feet
630													1	0					630	1	0	1	Ea.	Removal of Ground Mounted Major Sign and Reerection
630													1	0					630	1	0	1	Ea.	Overpass Structure Mounted Sign Support Type TC-18.26, Design No 3
630											0	2							630	0	2	2	Ea.	Sign Support Assembly , Bridge Mounted, Type 2
630													4	0					630	4	0	4	Ea.	Removal of Overhead Mounted Sign and Reerection
630		22.5	30			22.5					124.80	427.19							630	124.80	502.19	626.99	S.F.	Signs Flat Sheet, Type G
630											201.00	314.50	2334.0	2524.0					630	2535.00	2838.50	5373.50	S.F.	Signs Extru Sheet, Type G
630						22.5							718.50	720.00					630	718.50	742.5	1461	S.F.	Covering of Signs
630													1						630	1	0	1	Ea.	Removal of Ground Mounted Major Sign and Storage
630											4	2							630	4	2	6	Ea.	Removal of Ground Mounted Sign and Storage
630												2	5	0					630	2	5	7	Ea.	Removal of Ground Mounted Beam Support
630											5	3							630	5	3	8	Ea.	Removal of Ground Mounted Post Support
630													5	0					630	5	0	5	Ea.	Removal of Overhead Mounted Sign and Storage
630													3	0					630	3	0	3	Ea.	Removal of Overhead Sign Support and Storage, Cantilever Type
630											1	2							630	1	2	3	Ea.	Removal of Ground Mounted Sign & Reerection
620									64	33									620	64	33	97	Ea.	Delineators, Type C, Flexible Post Mounted
620									61	11									620	61	11	72	Ea.	Delineators, Type D, Flexible Post Mounted
630													9						630	9	0	9	Ea.	Sign Attachment Assembly
621															6.407	6.716			621	6.407	6.716	13.12	Mile	Edge Lines
621															4.493	3.351			621	4.493	3.351	7.84	Mile	Lane Lines
621															0	0.727			621	0	0.727	0.73	Mile	Center Lines
621															497.00	1662.00			621	497.00	1662.00	2159.00	L.F.	Channelizing Lines
621															0	483.00			621	0	483.00	483.00	L.F.	Stop Lines
621															0	340.00			621	0	340.00	340.00	L.F.	Crosswalk Lines
621															293.00	770.00			621	293.00	770.00	1063.00	L.F.	Transverse Lines
621															0	157.00			621	0	157.00	157.00	L.F.	Curb Marking
621															0	2			621	0	2	2	Ea.	Railroad Symbol Marking
621															0	6			621	0	6	6	Ea.	Lane Arrows
621															0	2			621	0	2	2	Ea.	Word on Pavement, 96 In.(ONLY)
621															0	95.00			621	0	95.00	95.00	L.F.	Dotted Lines, 4 Inch
621															4127.00	1088.00			621	4127.00	1088.00	5215.00	L.F.	Removal of Pavement Markings
625	1	5	5	5		5							11	14					625	11	35	46	Ea.	Ground Rod
630		2										8							630	0	10	10	Ea.	Sign Support Assembly, Pole Mounted
Special																	372	313	Special	372	313	685	Ea.	Raised Pavement Markers
630													144.5	72					630	144.5	72.0	216.5	S.F.	Signs Overlay

TRAFFIC CONTROL SUMMARY

N37736

GENERAL SUMMARY

CALC BY REA DATE 4/86 | CHKD. BY JAS DATE 4/86 | HAMILTON COUNTY HAM-75/126-9.93/13.00 | OHIO | F.H.W.A. REGION 5 | 376A 787

*PARTICIPATION
1. 95% State, 5% Hamilton County
2. 87.5% State, 12.5% Hamilton County

ITEM		SHEET 400A		SHEET 18		SHEET 411		SHEET 399		SHEET 400		SHEET 410		SHEET 412		ITEM	JR 75-9.93 (90) 13.00 TOTAL	EB 126-9.93 TOTAL		GRAND TOTAL	UNIT	DESCRIPTION
		*1	*2	*1	*2	*1	*2	*1	*2	*1	*2	*1	*2	*1	*2							
631										2	1					631	2	1		3	Each	Mercury Vapor Luminaire, Type TC-31.21, with 100-Watt Lamp
631										16	33					631	16	33		49	Each	Mercury Vapor Luminaire, Type TC-31.21, with 175-Watt Lamp
631										10	11					631	10	11		21	Each	Mercury Vapor Luminaire, Type TC-31.21, with 250-Watt Lamp
631										2	1					631	2	1		3	Each	Ballast, Type CMRI-100-480, As Per Plan
631										16	33					631	16	33		49	Each	Ballast, Type CMRI-175-480, As Per Plan
631										10	11					631	10	11		21	Each	Ballast, Type CMRI-250-480, As Per Plan
631										11	15					631	11	15		26	Each	Sign Service
631										16	21					631	16	21		37	Each	Signs Wired
631										11	15					631	11	15		26	Each	Disconnect Switch with Enclosure, Type X
630		1														630	1			1	Each	Removal of Overhead Sign Support and Storage, Span Type
631		1														631	1			1	Each	Signs Wired, Overpass Structure Mounted
631		1														631	1			1	Each	Switch Enclosure Mounting Bracket Assembly
631		10														631	10			10	Each	Removal of Luminaire and Storage
631		8														631	8			8	Each	Removal of Luminaire and Reerection

TRAFFIC CONTROL SUMMARY

N27736

CALC BY FGV DATE 2-86
CHKD BY [illegible] DATE [illegible]

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

OHIO
F.H.W.A REGION 5

377
787

GENERAL SUMMARY
(SIGNALS)

PARTICIPATION
(1) 95% State, 5% Hamilton County
(2) 87.5% State, 12.5% Hamilton County

ITEM	FROM SHEET NUMBER 432	433	434	435	436	ITEM	IR-75-1 (98) 10. (1) TOTAL	E-34(43) (2) TOTAL	GRAND TOTAL	UNIT	DESCRIPTION
608		8.33		8.33	8.33	608		25	25	S.F.	4" Concrete Walk
625	3	1	8	4	2	625		18	18	Ea.	Pull Box, 713.08, 18"
625	184	28		161	121	625		494	494	L.F.	Trench
625			252			625		252	252	L.F.	Trench, Type A
625	8		176	7	47	625		238	238	L.F.	Conduit, 713.07, 3" Diameter
625	170	28	76	154	74	625		508	508	L.F.	Conduit, 713.07, 2" Diameter
630					1	630		1	1	Ea.	Combination Overhead Sign Support & Strain Pole, Type TC-9.30, Design 4, Arm 12' (Mod.)
632		2	8			632		10	10	Ea.	Pedestrain Push Button
632		2	8			632		10	10	Ea.	Pedestrain Signal Head, Type D2
632	3	6		7	5	632		21	21	Ea.	Vehicular Signal Head, 3 Section, 12" Lens, One Way As Per Plan
632	1		8	2	2	632		13	13	Ea.	Vehicular Signal Head, 5 Section, 12" Lens, One Way As Per Plan
632	2	1	4		3	632		10	10	Ea.	Loop Detector Unit, As Per Plan
632	1	1	8	6		632		16	16	Ea.	Loop Detector Unit, Delay And Extension Type, As Per Plan
632	416	193	707	483	266	632		2065	2065	L.F.	Loop Detector Pavement Cutting.
632	2.39	5.92	9.56	9.56	10.09	632		37.52	37.52	C.Y.	Concrete For Anchor Base Foundations.
632		3				632		3	3	Ea.	Strain Pole, Type TC 81.10, Design No. 3, 24'-0"
		1				632		1	1	Ea.	Combination Strain Pole, Type TC 81.10, Design No. 3, 34'-6"
632				3		632		3	3	Ea.	Strain Pole, Type TC 81.10, Design No.5, 24'-0"
632					2	632		2	2	Ea.	Strain Pole, Type TC 81.10, Design No.5, 25'-0"
632			2			632		2	2	Ea.	Strain Pole, Type TC 81.10, Design No.5, 26'-0"
632				1		632		1	1	Ea.	Strain Pole, Type TC 81.10, Design No.5, 27'-0"
632	1					632		1	1	Ea.	Strain Pole, Type TC 81.10, Design No.5, 28'-0"
632					1	632		1	1	Ea.	Strain Pole, Type TC 81.10, Design No.5, 30'-0"
632			1			632		1	1	Ea.	Strain Pole, Type TC 81.10, Design No.6, 26'-0"
632			1	1		632		1	1	Ea.	Combination Strain Pole, Type TC 81.10, Design No.5, 34'-6"
632	6		1	1	1	632		9	9	Ea.	Removal Of Traffic Signal Installation
632	4	6	8	9	7	632		34	34	Ea.	Covering Of Vehicular Signal Heads
632	1	4	4	4	5	632		18	18	Ea.	Cable Support Assembly
632	99	300	340	325	329	632		1393	1393	L.F.	Messinger Wire, 7 Strand, 3/8" Diameter, w/Accessories
632	157	686	917	383	369	632		2512	2512	L.F.	Signal Cable, 5 Conductor, No. 14 AWG
632	124		1075	279	353	632		1831	1831	L.F.	Signal Cable, 7 Conductor, No. 14 AWG
632	1019	422	2068	1092	602	632		5203	5203	L.F.	Loop Detector Wire, Type E
632	452	86	1811	1099	833	632		4281	4281	L.F.	Loop Detector, Lead-In-Cable
632		44	49	47	89	632		229	229	L.F.	Power Cable, 3 Conductor, No. 8 AWG
632		1	1	1	1	632		4	4	Ea.	Power Service
861	3					861		3	3	Ea.	Coordinator, 3 Dial, Solid State, Digital, Secondary
861	1					861		1	1	Ea.	Coordinator, 3 Dial, Solid State, Digital, Master
861	2					861		2	2	Ea.	Controller, Actuated, 2 Phase, Solid State Digital, Microprocessor, As Per Plan
861	2					861		2	2	Ea.	Controller, Actuated, 3 Phase, Solid State Digital, Microprocessor, As Per Plan
861	1					861		1	1	Ea.	Weekly Programmer, 4 Circuit, Solid State Digital
630		2	4		3	630		9	9	Ea.	Sign Hanger Assembly (Span Wire), Type I
861		1				861		1	1	Ea.	Controller, Actuated, 2 Phase, Solid State Digital, Microprocessor, As Per Plan (City Of Reading)
861					1	861		1	1	Ea.	Controller, Actuated, 3 Phase, Solid State Digital, Microprocessor, As Per Plan (City Of Reading)
861				1		861		1	1	Ea.	Controller, Actuated, 5 Phase, Solid State Digital, Microprocessor, As Per Plan (City Of Reading)
861			1			861		1	1	Ea.	Controller, Actuated, 8 Phase, Solid State Digital, Microprocessor, As Per Plan (City Of Reading)
861		0.99		0.99	0.99	861		2.97	2.97	Cu. Yd.	Concrete For Cabinet Foundation
861		1	1	1	1	861		4	4	Ea.	Coordinator, Time Base, Solid State Digital
861		1				861		1	1	Ea.	Controller, Actuated, 2 Phase, Solid State Digital, Microprocessor, (Transyt 1880) Alternate Bid
861					1	861		1	1	Ea.	Controller, Actuated, 3 Phase, Solid State Digital, Microprocessor, (Transyt 1880) Alternate Bid
861				1		861		1	1	Ea.	Controller, Actuated, 5 Phase, Solid State Digital, Microprocessor, (Transyt 1880) Alternate Bid
861			1			861		1	1	Ea.	Controller, Actuated, 8 Phase, Solid State Digital, Microprocessor, (Transyt 1880) Alternate Bid

N32726

CALC. BY FGV DATE 3/86	HAM-75-9.93 HAM-126-1300 HAMILTON COUNTY	OHIO	378
CHKD. BY JAR DATE 3/86		FHWA REGION 5	787

MAY ST.

END PROJECT STA 302+64.57 WB

BEGIN PROJECT STA 300+64.57 WB

F-2( )

F-2(13)

CALDWELL DRIVE

W-48-30

X-4

NO OUTLET

(3)

(9)

Sta. 502+85 Begin Noise Barrier

500

500

BURNS AVE.

South Bound Track

North Bound Track

VINE ST.

R-10-48 (By Others)

SPEED LIMIT 55

Sta. 26+00

Station Equation P.O.T. 510+41.3 WB @ BK = P.O.T. 22+94.46 WB @ AH

Station Equation ST 510+99.0 EB @ BK = P.O.T. 22+94.46 EB @ AH

Noise Barrier

Sta 28+00

505

505

510

510

25

25

(5)

X-4

STATION AVE.

W-48-30

NO OUTLET

(4)

B&O R.R.

S.R. No 4

Level I 17'x6'

Sta. 85+55 & I-75

(10) 8'x2' EXIT 10B Goldbraith Rd. LEFT 1/2 MILE GF

Begin C Ramp C PC 26+50.00 C= Sta 26+50.00 E.B

Level I

(103) (for details see sheet 386)

(8) 8'x2' EXIT 10A 126 Cross County Highway GF Level I 21'x9.5'

Blank Temporary Overlay (45'x3.5')

(104) (for details see sheet 387)

Sta 89+00 Relocate of Sta. 24+00

Sta 91+00 By Others

See Continuation Sheet No. 379

(111)

(101)

(for details see sheet 384)

(105)

Sta 79+45 & I-75

CITY OF CINCINNATI HAMILTON COUNTY

1/2 MILE

Sta 79+50 & I-75

Pedestrian Overpass

Retaining Wall 8

Retaining Wall 3

℄ Existing I-75

70

75

80

85

73

70

90

456

℄ Ramp D

Sta 91+00 & I-75

R-10-48

R-16A-48

Sta 67+50 D'

Sta 68+80.76 D = Sta 369+27.80 H

Begin ℄ Ramp H

EXIT 10A

GF 96

(1)

RAMP

40 MPH

(2) W-98-48

Sta 87+37 ℄ I-75 10'x 3.5'

(7) Cincinnati CORP. LIMIT GN

PT Sta 85+46.00 ℄ I-75 End ℄ Ramp D

Sta 70+00 ℄ I-75

Level I 18'x6'

GE

EXIT 10B 8'x2' Arlington Hts. NEXT LEFT GE

EXIT 10A 8'x2' 126 Cross County Highway 1/4 Mile Blank Temporary Overlay

(102) (for details see sheet 385)

Level I 18'x12' (145'x3.5')

Sta. 343+25 ℄ I-75

EXIT 10B 8'x2' Goldbraith Rd LEFT 1/4 MILE 126

EXIT 9 4 66 Poddock Rd Seymour Ave.

(8) 8'x2' EXIT 10A Level I 18'x12' 126 Cross County Highway 3/4 MILE GE

Blank Temporary Overlay (145'x3.5')

(100) Sta. 348+50 ℄ I-75

Note: Remove Existing Sign and Sign Support at Sta. 353+25 Install New Sign and Sign Support as per Sign #100 on Sheet No. 384

Ground Mounted Sign Nos. 1-7 This Sheet
Ground Mounted Sign Nos. 8-10 Not Used
Overhead Sign Nos. 101-105 This Sheet
Overhead Sign Nos. 105-110 Not Used
For Ground Mounted Sign Quantities See Sheet 398-399
For Overhead Sign Quantities See Sheet 400

Scale 0 100 200

LEGEND

SIGNS

- Existing Sign
- Proposed Sign
- Existing, to be Relocated
- Existing, to be Removed

OVERHEAD SUPPORTS

	NEW	EXISTING
Contilever		
Span		

GROUND MOUNTED SUPPORTS

- Single
- Two
- Single, Back to Back
- Two, Back to Back
- One Way, Do Not Enter
- Pole Mounted

W-49R-48

Lighted Signs

SIGNING PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

379
787

HAM - 75 - 9.93
HAM - 126 - 1300
HAMILTON COUNTY

(14) W-48-30 NO OUTLET

WOODBINE AVENUE

F-2(13) IR-75-1(96)10

(13) X-4

Sta. 30+66.75 ℄ E.B. S.R. 126

W-49L-48 (By Others)

(By Others) Sta. 35+30 W.B. S.R. 126

Sta. 35+30 ℄ S.R. 126 W.B.

(By Others) Sta. 37+20 C

W-32-96

Sta. 36+50 E.B. S.R. 126 (By Others)

(75) NORTH Dayton GB (12) Level I

(16) (For Details See Sheet 390)

EXIT 108 Galbraith Rd LEFT LANE

Existing Sta 99+50 ℄ I-75 Remove & Relocate on Bridge HAM-126-1328 Detail on Sheet 390

W-49R-48 (17)

Sta. 107+25 F

Noise Barrier

Retaining Wall #4

℄ Ramp E

Sta. 121+65 S.B. I-75

W-49R-48 (15)

R-2-60 Sta. 53+60 E

VIELD (16)

W-49R-48 Sta. 112+00 F

EXIT 108 Sta. 112+50 N.B. I-75

W-49R-48 (By Others) Sta. 112+70 N.B. I-75

(115) (For Details See Sheet 390) Level I

(42) Reading Rd Galbraith Rd. EXIT 3/4 MILE GB 17'x12'

Sta. 58+10 E.B. S.R. 126

EXIT 108 Galbraith Rd. (75) NORTH Existing Sta. 111+50 N.B. I-75 GG

EXIT 12 Lockland Reading 1 Mi. GB

℄ S.R. 126 E.B.

℄ Ramp I

W-33R (By Others)

Sta. 54+60 D

Sta. 53+00 D

Sta. 52+00 D

Sta. 51+00 D

℄ N.B. I-75

℄ Ramp F

105 115 105 95

55

Noise Barrier 30 30 30 35 35 40 ℄ S.R. 126 W.B. 40 ℄ Ramp D 40 ℄ S.R. 126 E.B. 35 45 45 45 50 50 50 50 100 100 120 110

RAMP 40 MPH W-48-48 Sta. 51+12 I (By Others)

EXIT GF Sta. 52+00 I (By Others) GF-72

W-49R-48 (By Others) Sta. 50+30 E.B. S.R. 126

(14) Level I

(15) NORTH Dayton GE 15'x7'

(116) EXIT 108 Galbraith Rd. Sta. 48+70 E.B. S.R. 126 (By Others)

Sta. 98+30 ℄ I-75

W-13-36

20 MPH W-143-24

Sta. 61+43 "D" (By Others)

(113) (For Details See Sh. 389) Cross-Co Hwy WEST 126 EAST GE Level II 16'x8'

Blank Temporary Overlay (10'x5')

Sta. 65+35 D

Retaining Wall #2

95 ± ℄ I-75

Sta. 93+00

(For Details See Sh. 392) (117)

Remove & Relocate Sign Sta. 91+25 ℄ I-75

(11) NO OUTLET W-48-30

RAMP 40 MPH W-48-48

Sta. 29+90 E.B. S.R. 126 (By Others)

EXIT GF-72 (By Others) Sta. 28+80 E.B. S.R. 126

NORTH (75) 126 (11) 40 MPH 45+12

Chillicothe 17'x7' (12) SOUTH (C) GE

Ground Mounted Sign Nos. 11-17 This Sheet
Ground Mounted Sign Nos. 18-30 Not Used
Overhead Sign Nos. 111-117 This Sheet
Overhead Sign Nos. 118-120 Not Used
For Legend See Sheet 378
For Ground Mounted Sign Quantities See Sheet 398-399
For Overhead Sign Quantities See Sheet 400

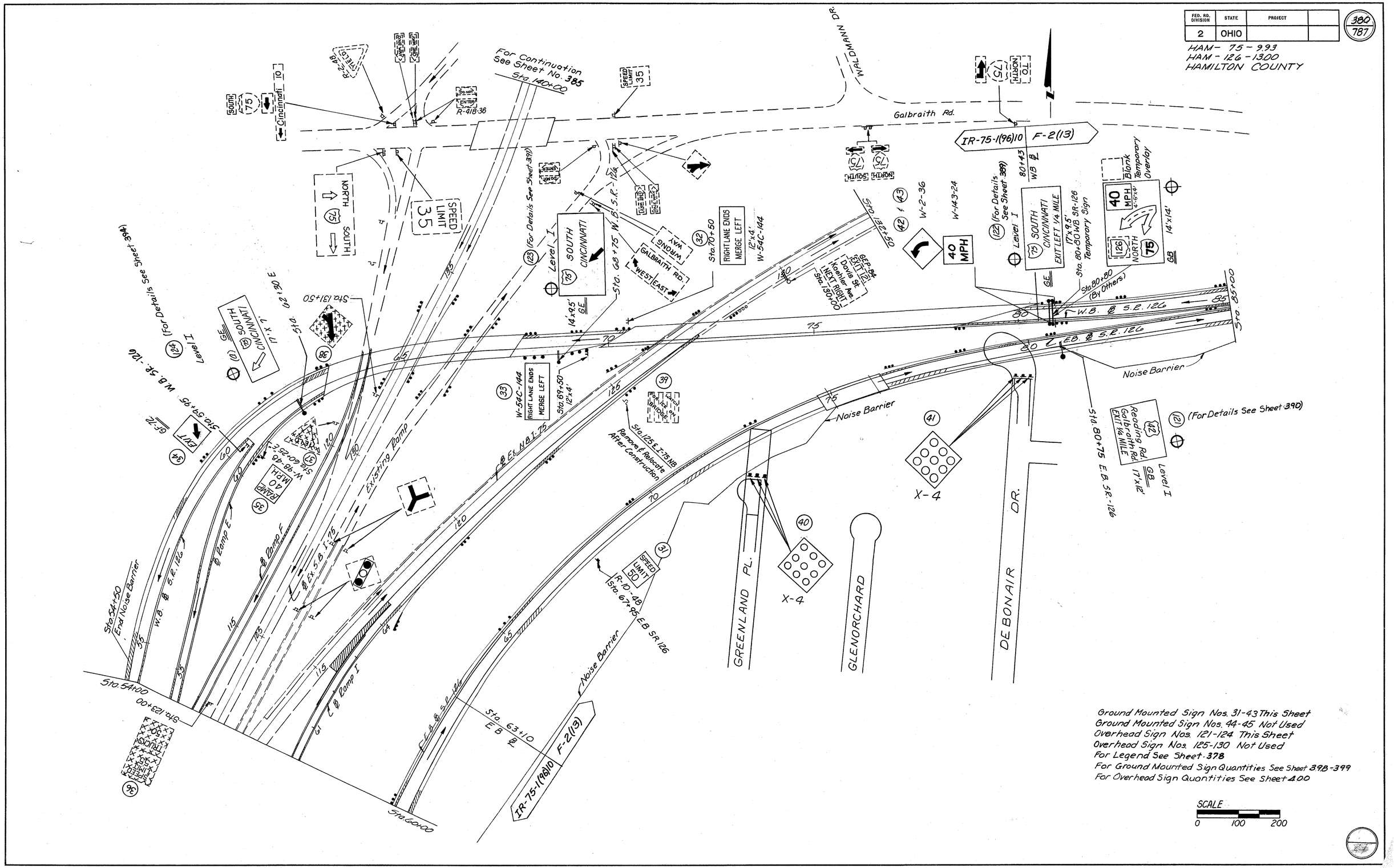
SCALE 0 100 200

SIGNING PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

380
787

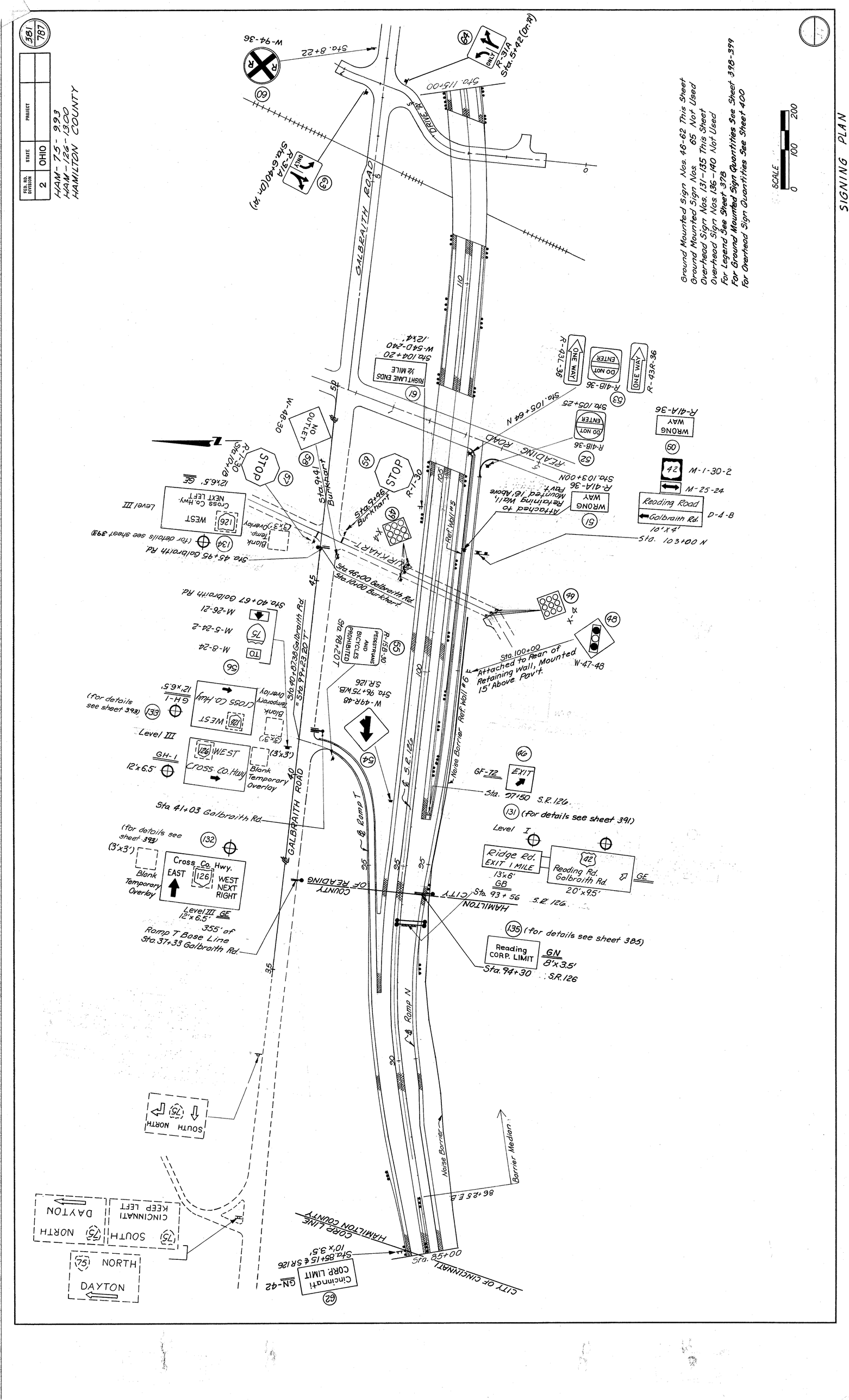
HAM- 75 - 9.93
HAM - 126 - 13.00
HAMILTON COUNTY



Ground Mounted Sign Nos. 31-43 This Sheet
Ground Mounted Sign Nos. 44-45 Not Used
Overhead Sign Nos. 121-124 This Sheet
Overhead Sign Nos. 125-130 Not Used
For Legend See Sheet 378
For Ground Mounted Sign Quantities See Sheet 398-399
For Overhead Sign Quantities See Sheet 400

SCALE
0 100 200

SIGNING PLAN


381/787
ETD. NO. DIST. 2
STATE OHIO
PROJECT
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY
SIGNING PLAN
SCALE
0 100 200
Ground Mounted Sign Nos. 46-62 This Sheet
Ground Mounted Sign Nos. 65 Not Used
Overhead Sign Nos. 131-135 This Sheet
Overhead Sign Nos 136-140 Not Used
For Legend See Sheet 378
For Ground Mounted Sign Quantities See Sheet 398-399
For Overhead Sign Quantities See Sheet 400
GALBRAITH ROAD
DRIVE M
READING ROAD
COUNTY OF READING
CITY OF CINCINNATI
HAMILTON COUNTY
CORP. LINE
Ref. Wall #5
Noise Barrier Ref. Wall #6
Noise Barrier
Barrier Median
Ramp T
Ramp N
Sta. 41+03 Galbraith Rd.
Sta. 45+95 Galbraith Rd.
Sta. 40+67 Galbraith Rd.
Sta. 46+00 Galbraith Rd.
Sta. 10+00 Burkhart
Sta. 9+41 Burkhart
Sta. 9+96 Burkhart
Sta. 100+00
Sta. 103+00 N
Sta. 105+64 N
Sta. 104+20
Sta. 88+15 ℄ SR 126
Sta. 85+00
Sta. 93+56 S.R. 126
Sta. 94+30 S.R. 126
Sta. 97+50 S.R. 126
Sta. 96+75 W.B. S.R. 126
Sta. 88+20T
Sta. 40+67.38 Galbraith Rd = Sta. PR+23.20 T
Sta. 115+00
Sta. 8+22
Sta. 6+40 (Or. Pt.)
Sta. 5+42 (Or. Pt.)
Sta. 10+10
Sta. 9+30
Sta. 37+33 Galbraith Rd.
355' of Ramp T Base Line
Level III
Level I
Level III GE
12'x6.5'
GH-1
GF-72
GB
GE
GN
8'x3.5'
20'x9.5'
13'x6'
12'x6.5'
10'x3.5'
10'x4'
12'x4'
Reading Road
Galbraith Rd.
Ridge Rd.
EXIT 1 MILE
Reading Rd.
Galbraith Rd.
Reading
CORP. LIMIT
Cincinnati
CORP. LIMIT
Cross Co. Hwy.
EAST
WEST
NEXT RIGHT
Cross Co. Hwy.
WEST
Cross Co. Hwy.
NEXT LEFT
Blank
Temporary
Overlay
(3'x3')
(for details see sheet 393)
(for details see sheet 391)
(for details see sheet 385)
Attached to Rear of Retaining Wall, Mounted 15' Above Pav't.
Refaced to Retaining Wall 1, Mounted 16' Above Pav't
STOP
R-1-30
W-48-30
NO OUTLET
R-41A-36
WRONG WAY
R-41B-36
DO NOT ENTER
R-43A-36
ONE WAY
R-43C-36
ONE WAY
R-31A
ONLY
W-94-36
M-1-30-2
M-25-24
D-4-8
M-26-21
M-5-24-2
M-8-24
W-49R-48
W-47-48
EXIT
SOUTH
NORTH
CINCINNATI
KEEP LEFT
DAYTON
NORTH
DAYTON

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

382
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

N

CORP. LINE — CITY OF READING
CORP. LINE — VILLAGE OF AMBERLEY

Sec. 32
Sec. 28

E.B. & W.B. S.R. 126

E.B. EXIST. S.R. 126

W.B. S.R. 126

E.B. C.C.

W.B. C.C.

Galbraith Road

Knollcrest Drive

Ramp P

Ramp Q

Ramp R

Sta. 11+50.00

Sta. 15+50 Galbraith

Sta. 9+60 Galb.

Sta. 9+35 Galbraith

Sta. 6+10 Drive "B"

Sta. 19+65 Galbraith

Sta. 125+00 P

Sta. 124+20 P

Sta. 126+25 P

Sta. 128+30 P

Sta. 129+50 S.R. 126

Sta. 130+00 ℄ S.R. 126

Sta. 130+62.03 ℄ Ahd. = Sta. 130+62.03 ℄ BK.

Sta. 131+98.28 W.B. ℄ AH.
Sta. 131+98.28 E.B. ℄ AH.
Sta. 131+98.28 ℄ BK.

T.S. 131+98.28

Sta. 137+60.00 W.B. S.R. 126

Sta. 143+85 ℄ S.R. 126

Sta. 145+00 ℄ S.R. 126

Sta. 147+00 W.B. & S.R. 126

Sta. 124+80 W.B. S.R. 126

Sta. 125+64 Q

Sta. 126+75 Q

Sta. 130+00 Knollcrest

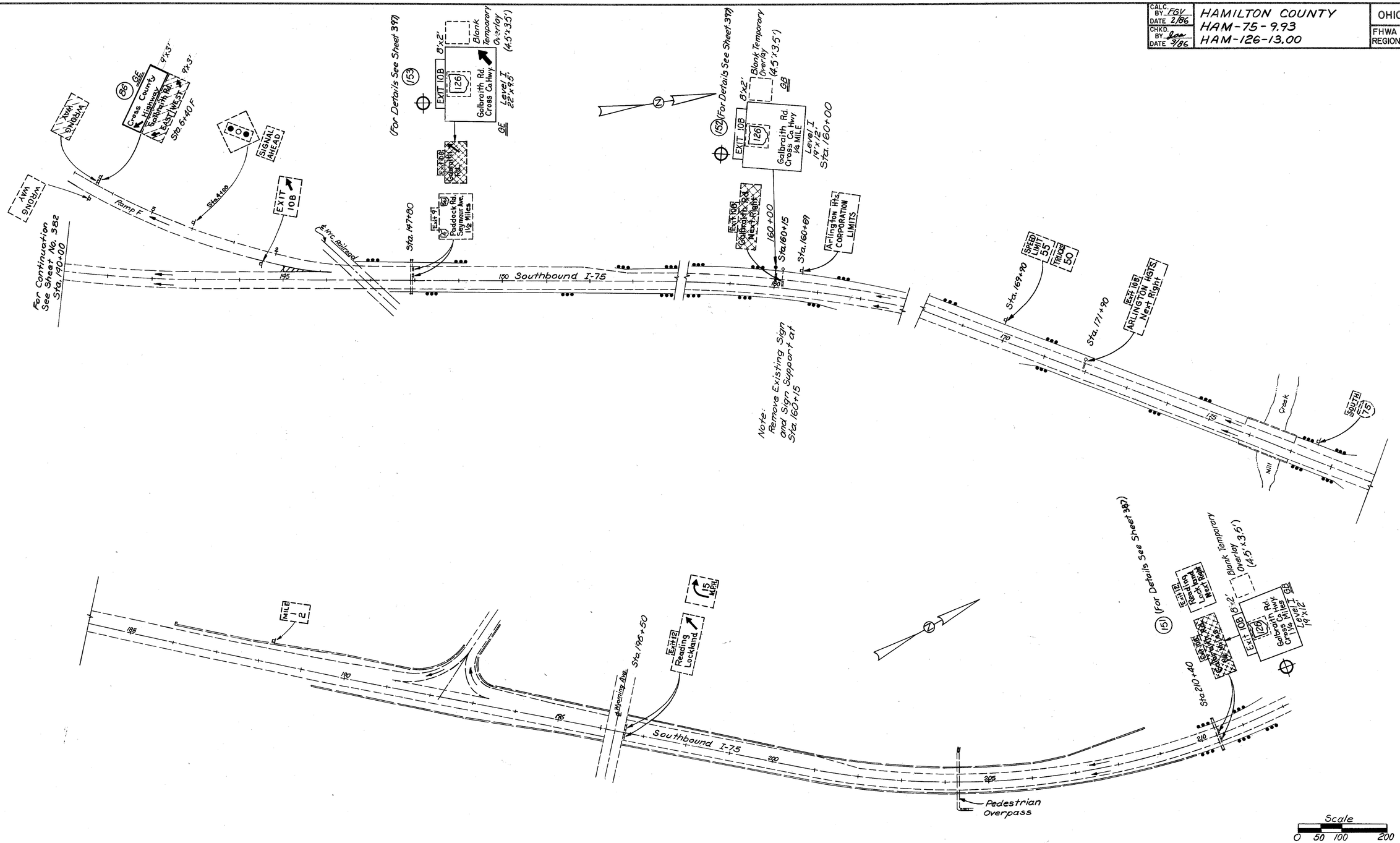
Sta. 121+00 W.B. S.R. 126

Sta. 137+60.00 W.B. S.R. 126

Sta. 144+00 W.B. S.R. 126

Sta. 145+00 W.B.

CALC. BY FGV DATE 2/86	HAMILTON COUNTY	OHIO	383
CHKD. BY Dan DATE 3/86	HAM-75-9.93 HAM-126-13.00	FHWA REGION 5	787



Ground Mounted Sign No. 86 This Sheet
Overhead Sign Nos. 151-153 This Sheet
For Legend See Sheet No. 378
For Ground Mounted Sign Quantities See Sheet. 398-399
For Overhead Sign Quantities See Sheet 400

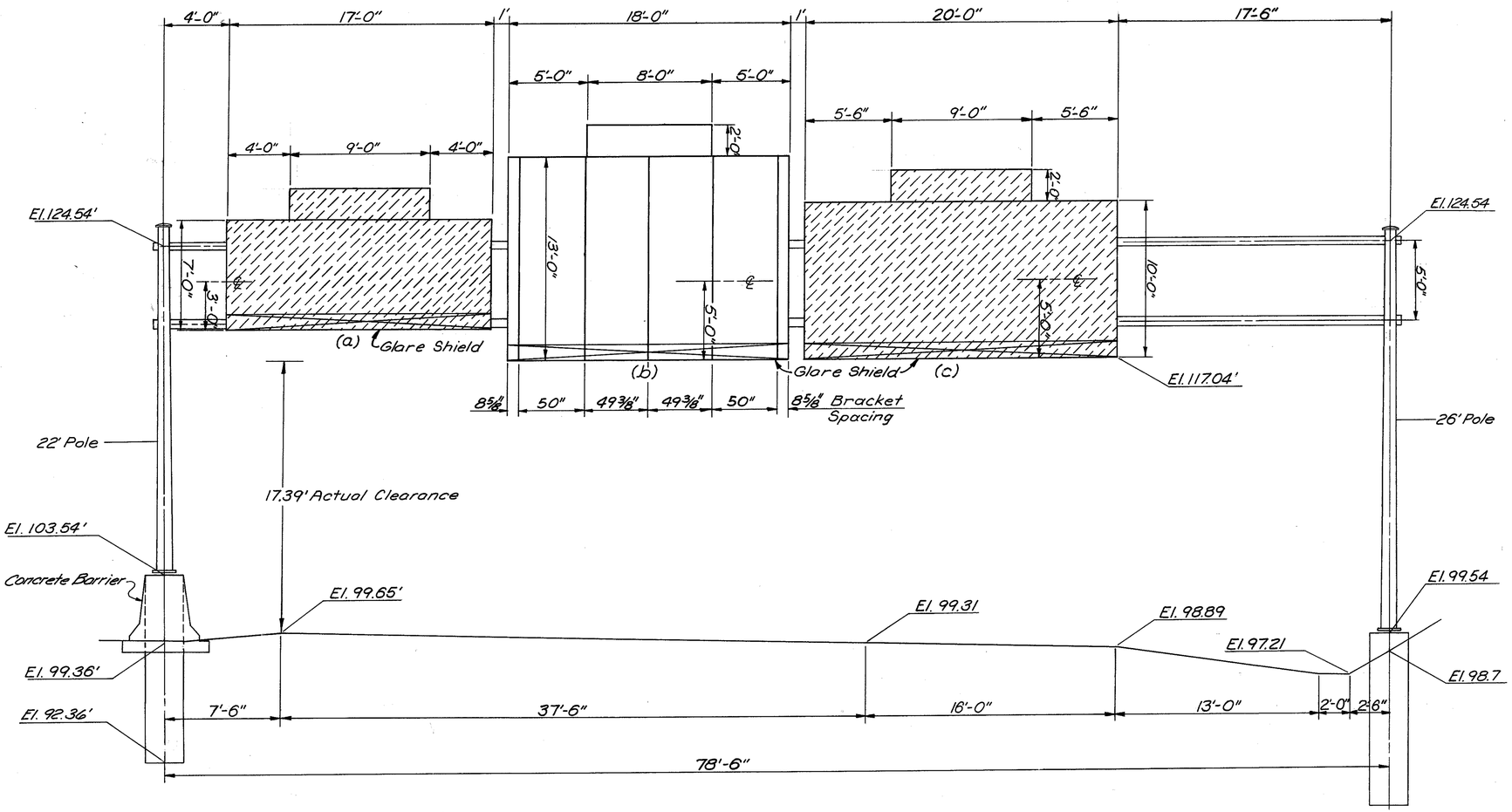
SIGNING PLAN

CALC. BY EGV DATE 2/86
CHKD. BY [illegible] DATE [illegible]

HAMILTON COUNTY
HAM-75/126-9.93/13.00

OHIO
FHWA REGION 5

384
787



(100) STA. 343+50 NORTHBOUND I-75

Sign Area
(a) 17'x 7'+9'x 2' = 137 S.F. (Relocated from Sta. 343+25)
(b) 18'x 13' + 8'x 2' = 250 S.F. (Proposed)
(c) 20'x 10'+ 9'x 2' = 218 S.F. (Relocated from Sta. 343+25)
605 S.F.

Span = 78'-6"
7.65 Design 8; 5 Ft. Box
22'-0" & 26'-0" Poles

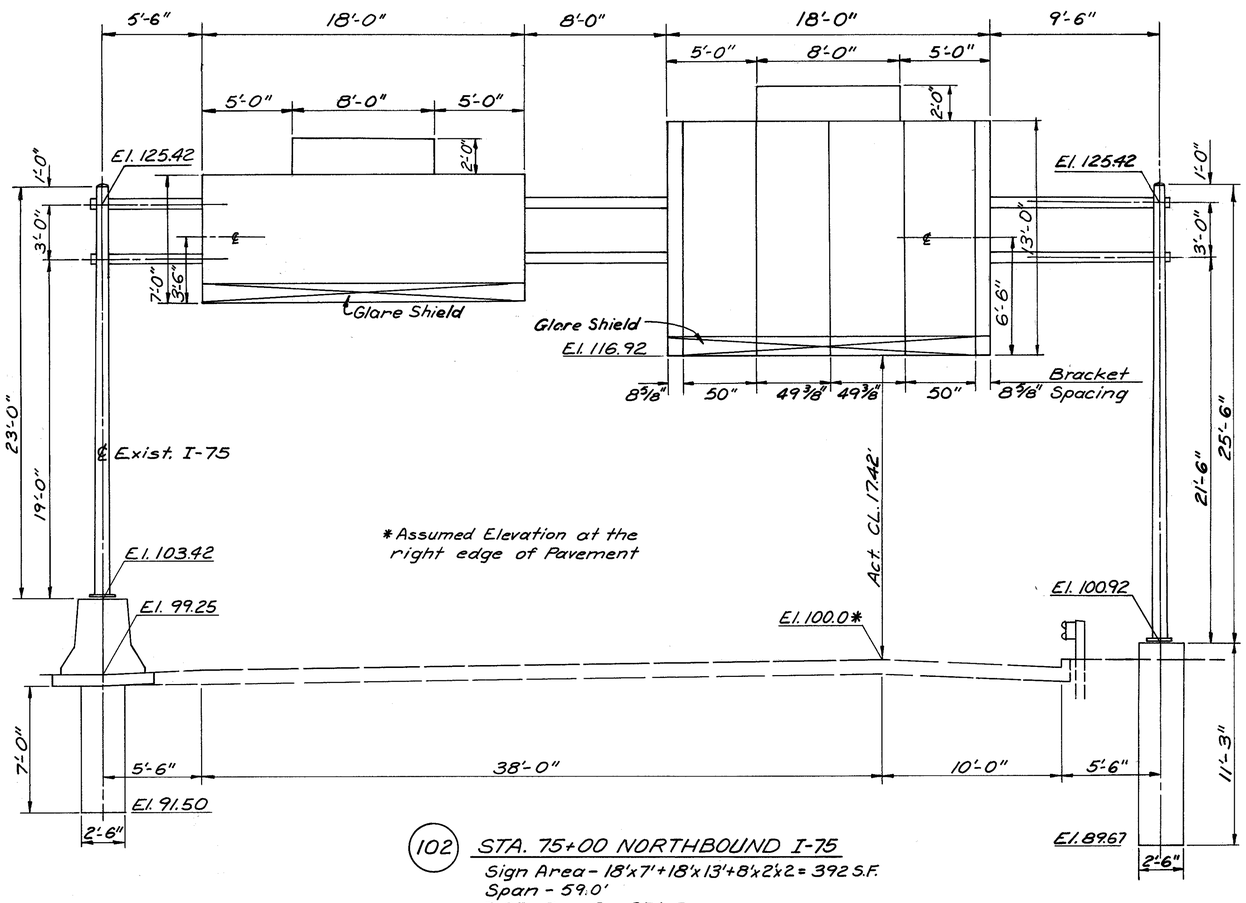
BM NE Corner of North End
Frame Post of Right Support
Existing Sign Sta. 343+25
Assumed Elev. 100.00'

Scale
0 2 4 8

OVERHEAD SIGN DETAILS

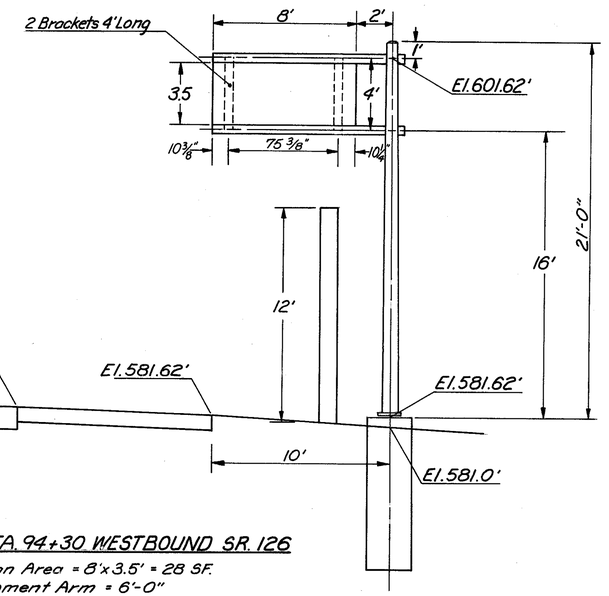
N71130

CALC. BY FGV	HAMILTON COUNTY	OHIO	385
DATE 2/86	HAM-75/126-9.93/13.00	FHWA REGION 5	787
CHKD BY			
DATE			



(102) STA. 75+00 NORTHBOUND I-75

Sign Area - 18'x7'+18'x13'+8'x2'x2 = 392 S.F.
Span - 59.0'
7.65 Des. 6.; 3Ft. Box
23'-0" & 25-6" Poles



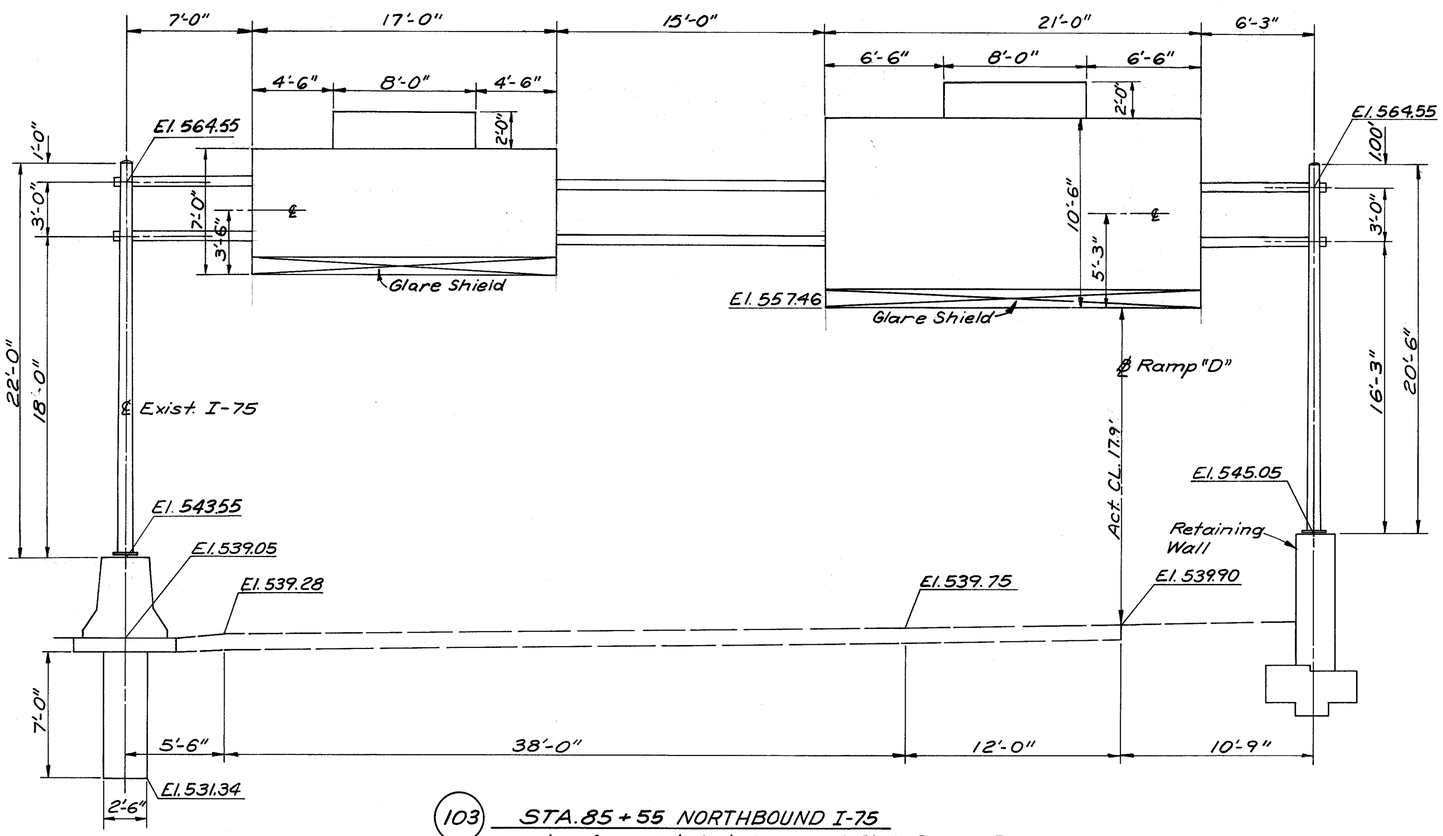
(135) STA. 94+30 WESTBOUND SR. 126

Sign Area = 8'x3.5' = 28 S.F.
Moment Arm = 6'-0"
TC 12.30 Des. 1
21'-0" Pole & 10'-0" Arm

Scale
0 2 4 8

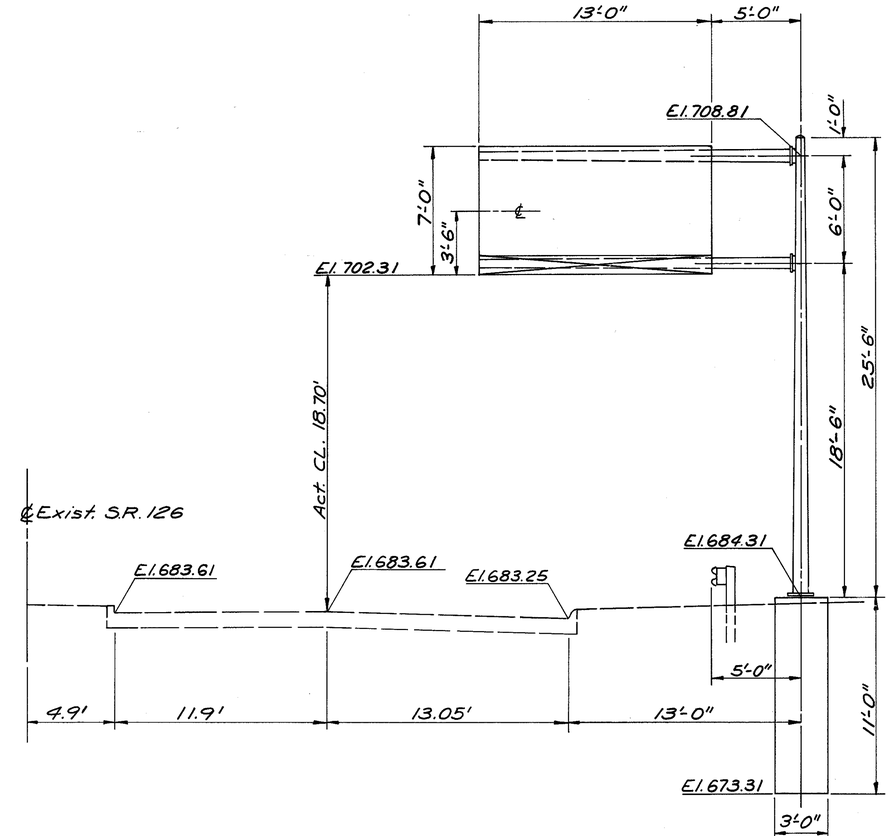
OVERHEAD SIGN DETAILS

CALC. BY FGV	HAMILTON COUNTY	OHIO	386
DATE 2/86	HAM-75/126-9.93/13.00	FHWA REGION 5	787
CHKD. BY			
DATE			



(103) STA. 85+55 NORTHBOUND I-75

Sign Area - 17'x 7'+8'x2'+21'x 10.5'+8'x2' = 371.5 S.F.
Span - 66'-3"
7.65 Des. 6; 3 Ft. Box
22'-0" & 20'-6" Poles



(142) STA. 145+00 EASTBOUND S.R. 126

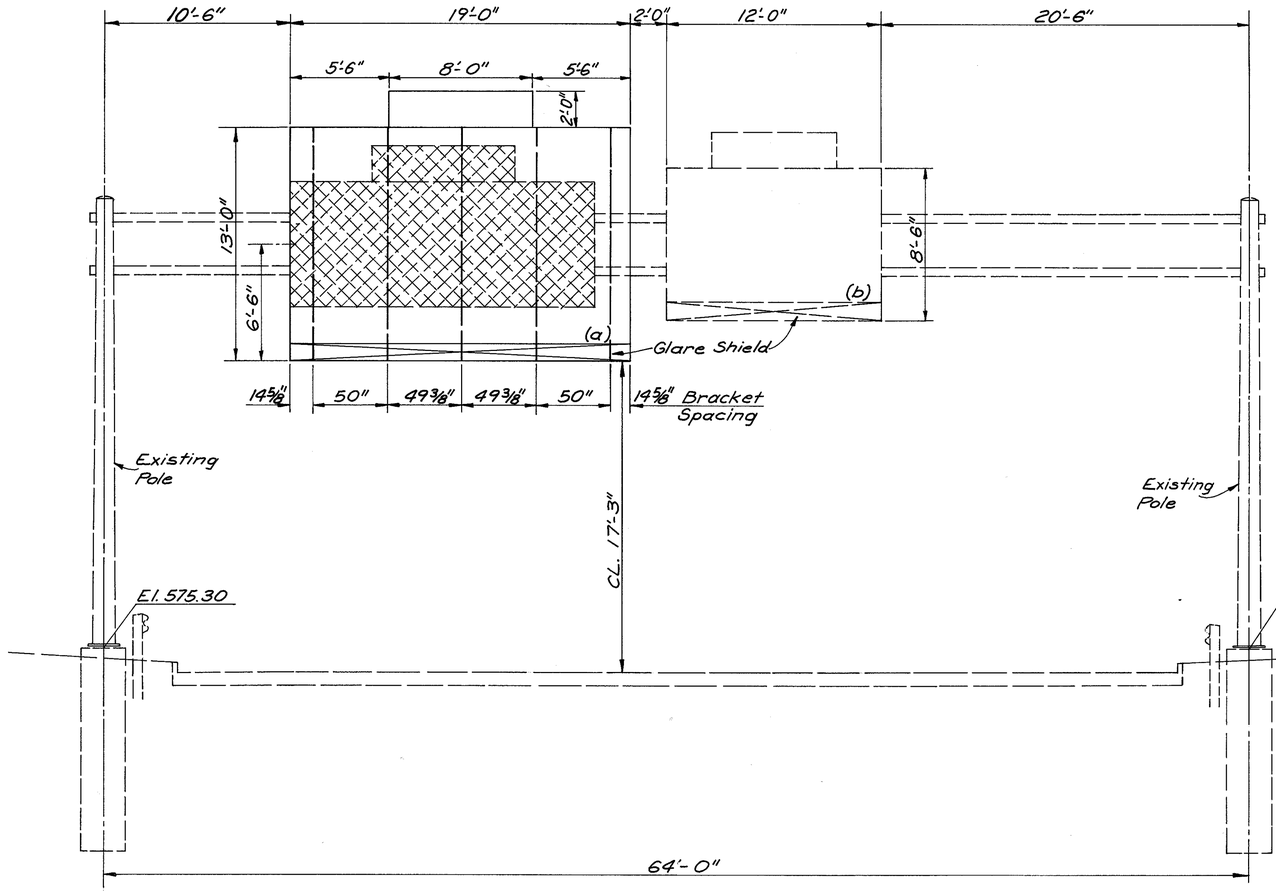
Sign Area - 13'x 7' = 91 S.F.
Moment Arm - 11'-6"
TC-12.30 Des. 5
25'-6" Pole & 18'-0" Arm

Scale
0 2 4 8

OVERHEAD SIGN DETAILS

CALC. BY EGV	HAMILTON COUNTY	OHIO
DATE 2/86	HAM-75/126-9.93/13.00	FHWA REGION 5
CHKD BY		
DATE		

387
787



151 STA. 210+40 SOUTHBOUND I-75

(EXISTING OVERHEAD SUPPORT SPAN)

Sign Area

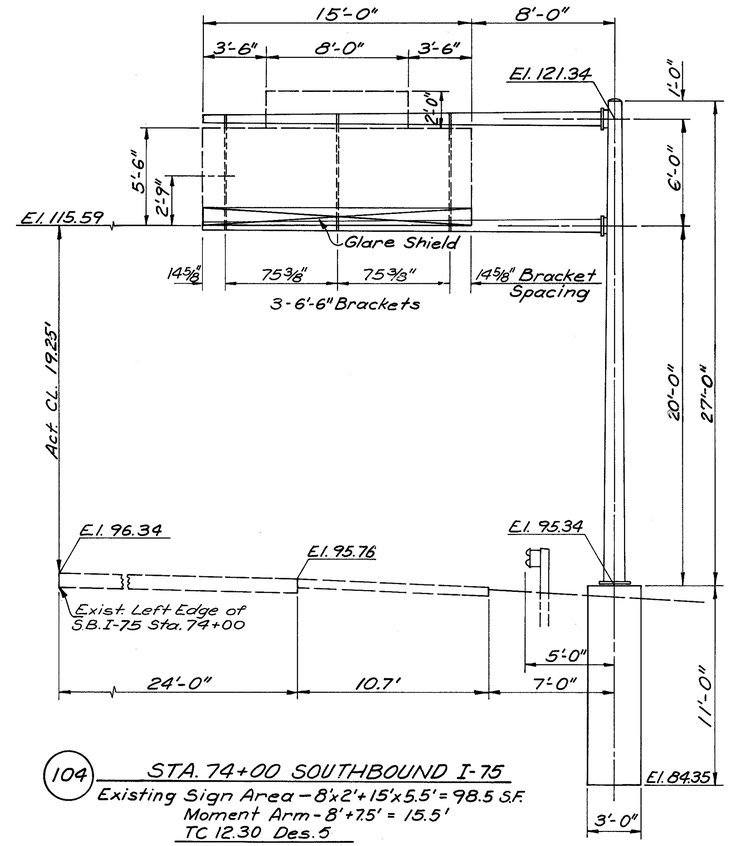
(a) 19'x13'+8'x2' = 263 S.F. (Proposed)

(b) 12'x 8.5'+ 7'x2'= 116 S.F. (Existing)

379 S.F.

7.4 Design 1, Span 64'-0" 563(64)

25'-0" & 25'-0" Poles Existing



104 STA. 74+00 SOUTHBOUND I-75

Existing Sign Area - 8'x2'+15'x5.5' = 98.5 S.F.

Moment Arm - 8'+7.5' = 15.5'

TC 12.30 Des. 5

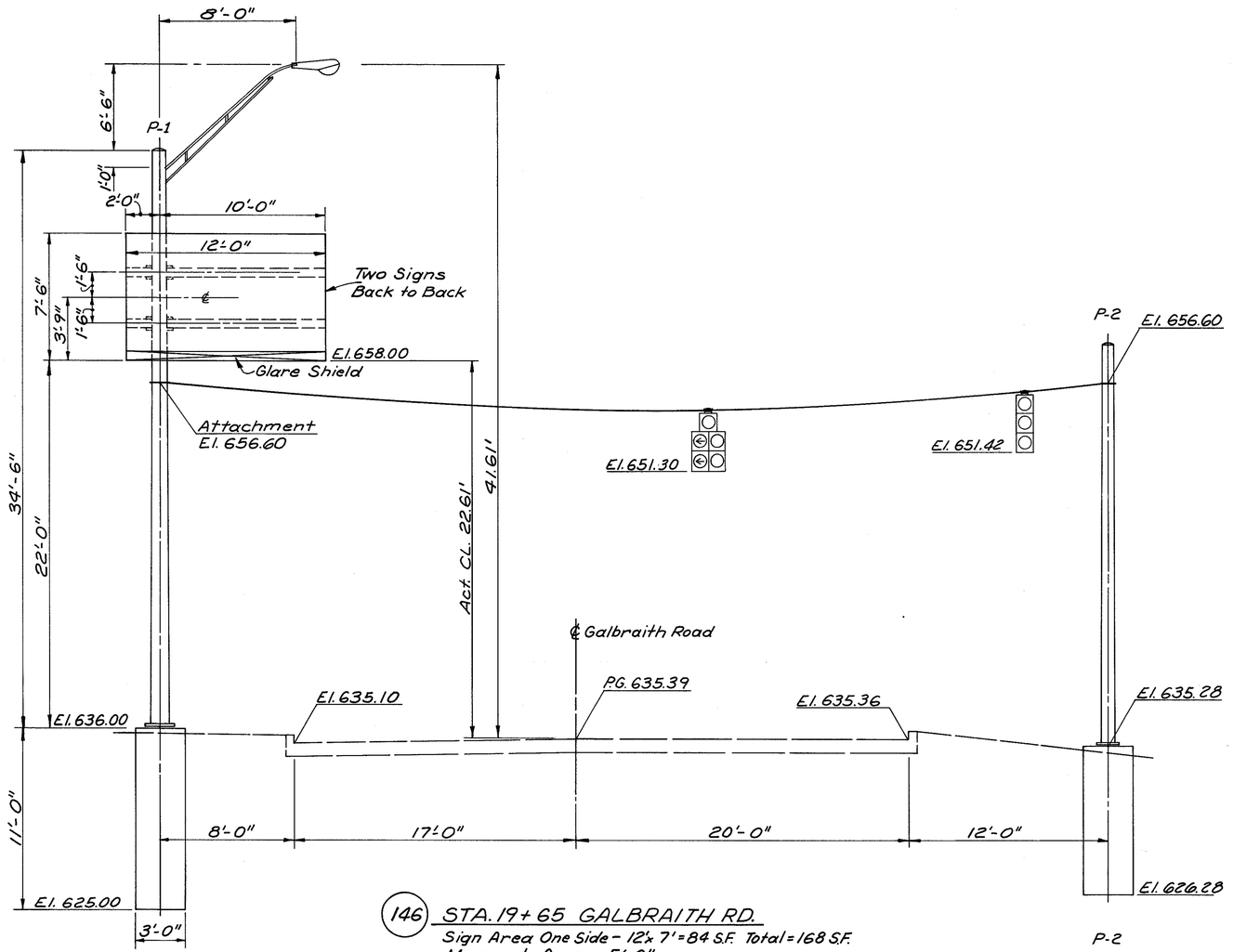
27'-0" Pole & 23'-0" Arm

Scale

0 2 4 8

OVERHEAD SIGN DETAILS

CALC. BY FGV DATE 2/86	HAMILTON COUNTY	OHIO	388
CHKD. BY [illegible] DATE [illegible]	HAM-75/126-9.93/13.00	FHWA REGION 5	787



(146) STA. 19+65 GALBRAITH RD.

Sign Area One Side - 12' x 7' = 84 S.F. Total = 168 S.F.
Moment Arm - 5'-0"
TC - 9.30, Des. 4
34'-6" Pole & 12'-0" Center Mount Arm as per plan

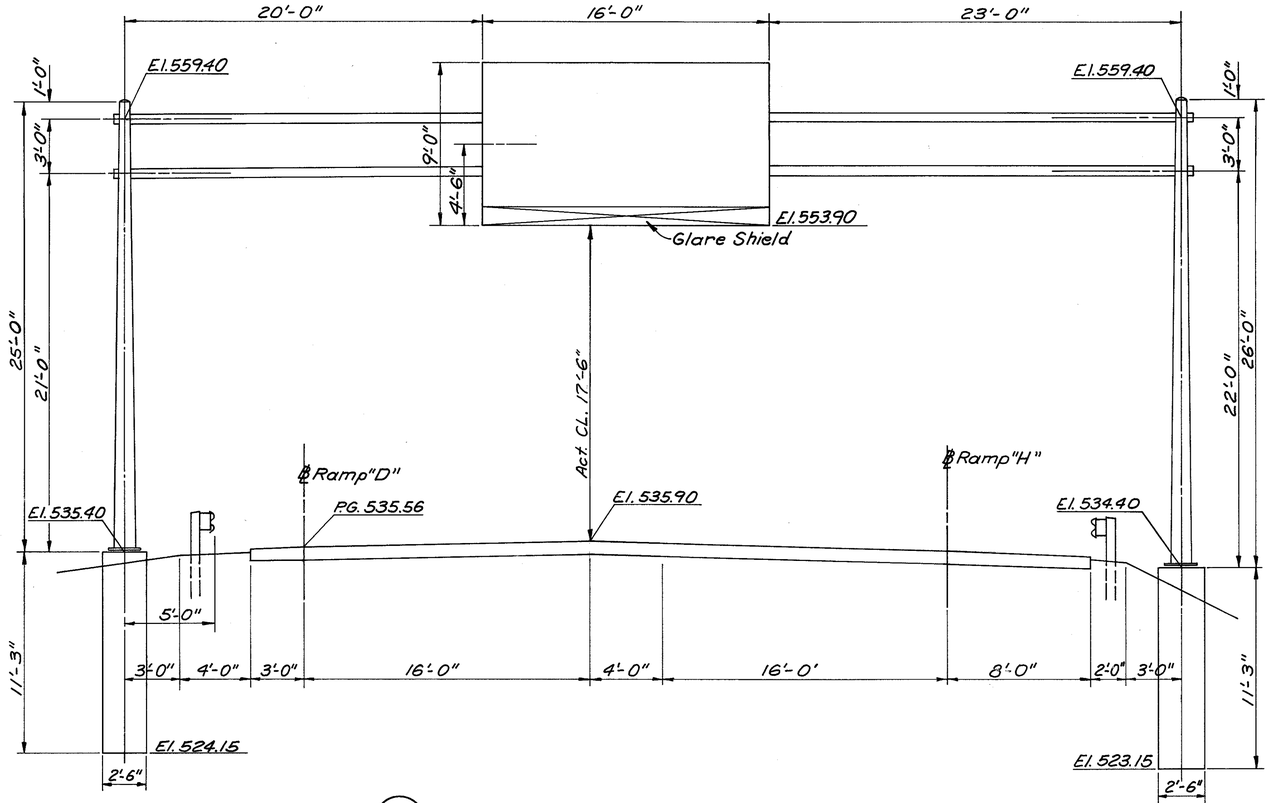
NOTE:
Sign Support Designed as a Combination Support and Quantity is Carried to Traffic Signal Sub-Summary on Sheet No. 436.

Scale
0 2 4 8

OVERHEAD SIGN DETAILS

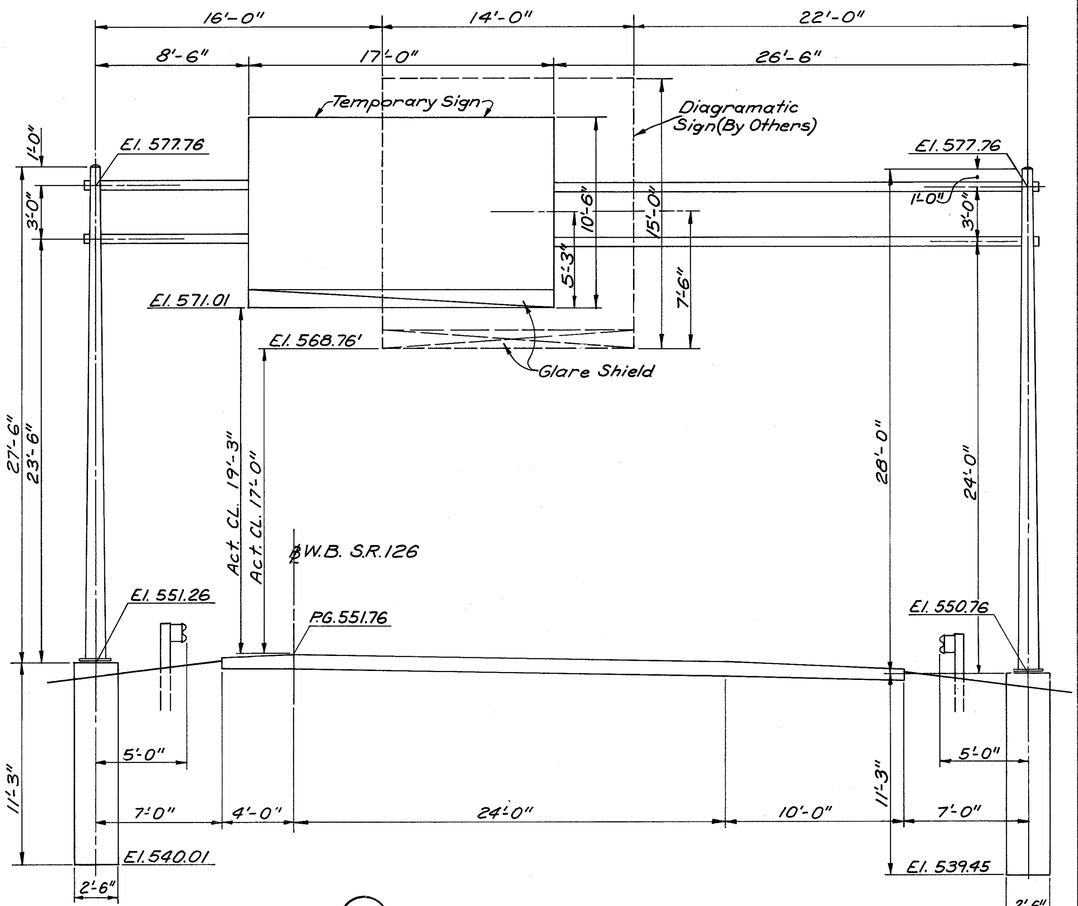
N71130

CALC. BY FGV DATE 2/86 CHKD. BY [illegible] DATE [illegible]	HAMILTON COUNTY HAM-75/126 - 9.93/13.00	OHIO FHWA REGION 5	389/787



(113) STA. 65+35 RAMP "D"

Sign Area - 16'x 9' = 144 S.F.
Span - 3'+4'+3'+16'+4'+16'+8'+2'+3' = 59 Ft.
7.65 Des. 6; 3 Ft. Box
25'-0" & 26'-0" Poles



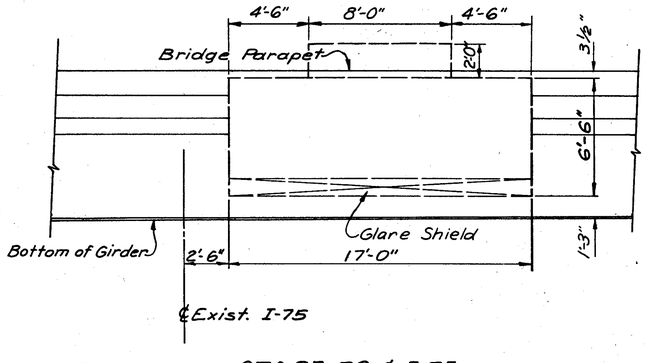
(122) STA. 80+80 WESTBOUND S.R. 126

Sign Area - 14'x 15' = 210 S.F.
Span - 7'+4'+24'+10'+7' = 52 Ft.
7.65 Des. 6; 3 Ft. Box
27'-6" & 28'-0" Poles
Temporary Sign Area - 17'x 10.5' = 178.5 S.F.

Scale
0 2 4 8

OVERHEAD SIGN DETAILS

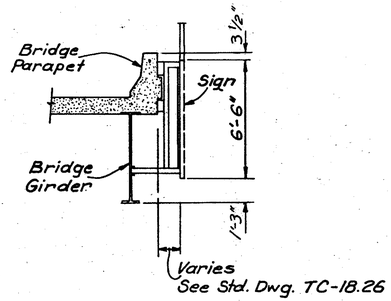
CALC. BY FGV DATE 2/86 CHKD. BY [illegible] DATE [illegible]	HAMILTON COUNTY HAM-75/126-9.93/13.00	OHIO FHWA REGION 5	390/787



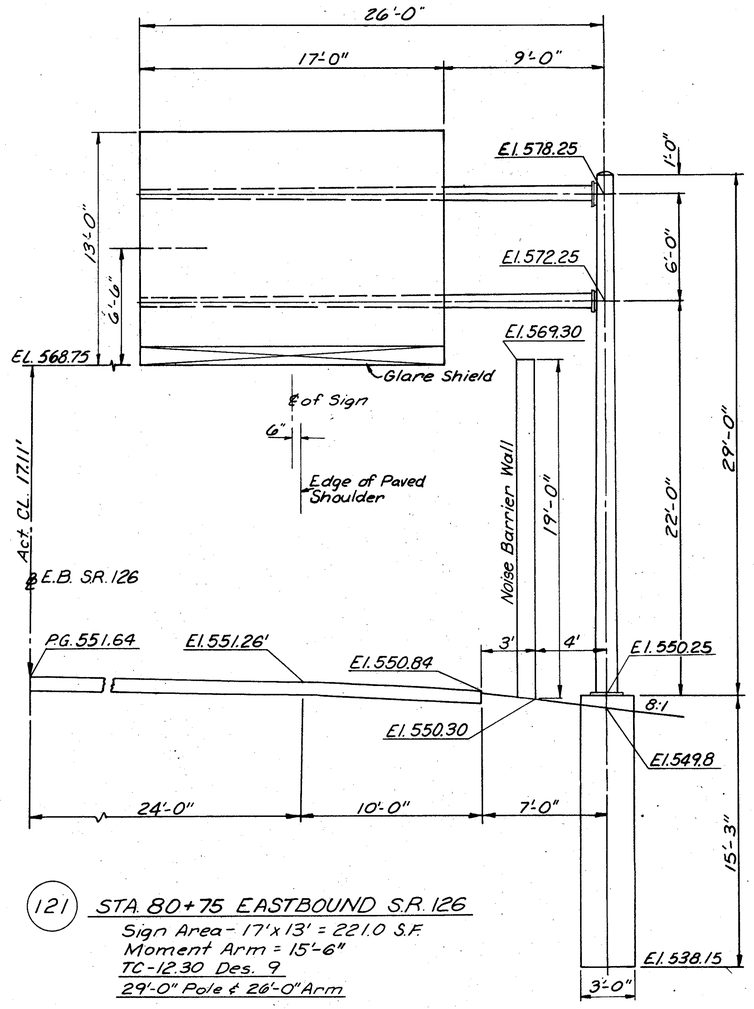
STA. 97+72 ℄ I-75

(116) SIGN MOUNTED ON BRIDGE HAM-126-1328 OVER N.B. I-75

Sign Area - 17'x6.5' = 126.5 S.F.
Overpass Structure MTD. Sign
Support Type TC-18.26 Design No. 3

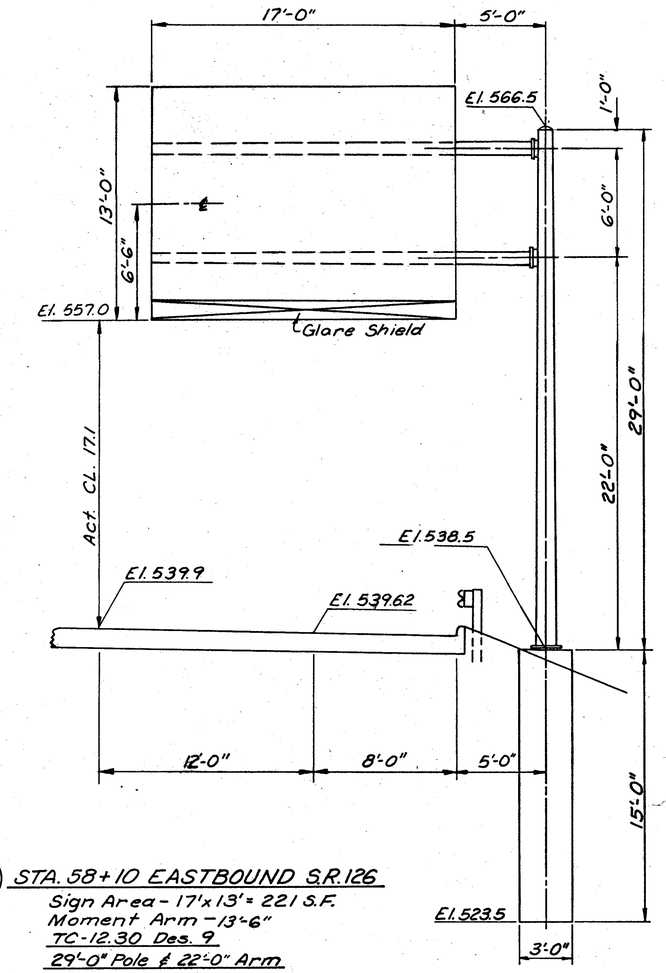


SIDE ELEVATION



(121) STA. 80+75 EASTBOUND S.R. 126

Sign Area - 17'x13' = 221.0 S.F.
Moment Arm = 15'-6"
TC-12.30 Des. 9
29'-0" Pole & 26'-0" Arm



(115) STA. 58+10 EASTBOUND S.R. 126

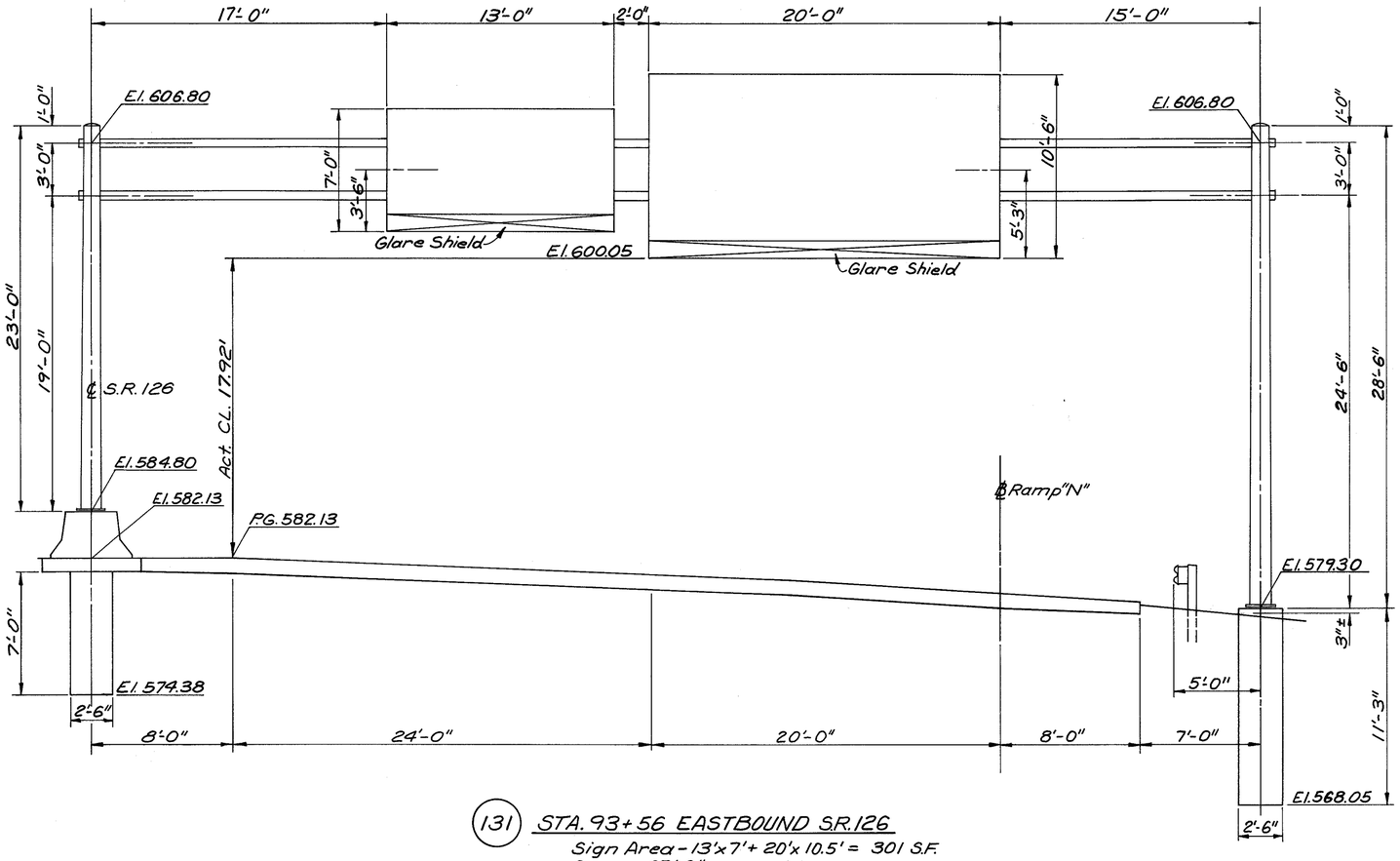
Sign Area - 17'x13' = 221 S.F.
Moment Arm - 13'-6"
TC-12.30 Des. 9
29'-0" Pole & 22'-0" Arm

Scale 0 2 4 8

Scale 0 2 4 8

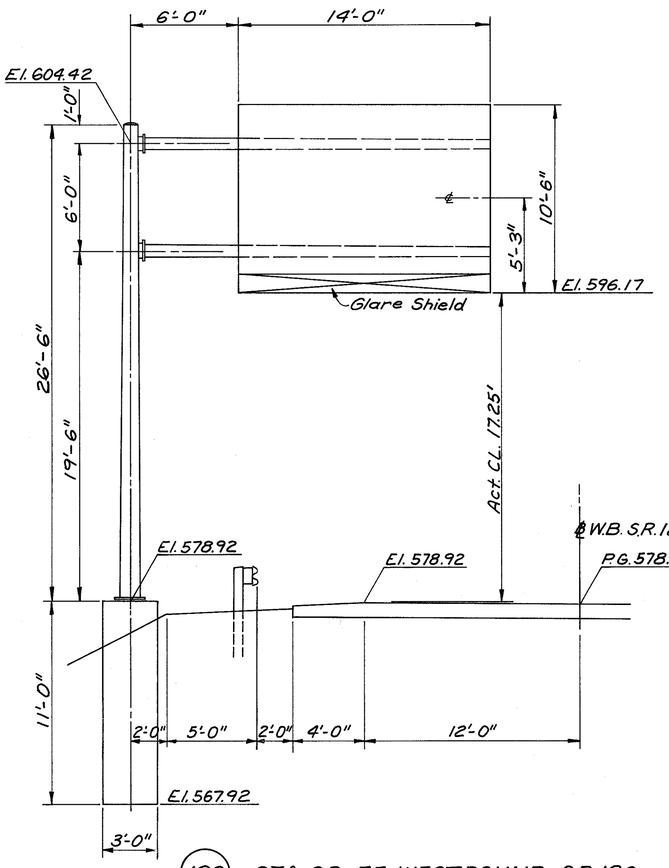
OVERHEAD SIGN DETAILS

CALC. BY EGV	HAMILTON COUNTY	OHIO	391
DATE 2/86	HAM-75/126 - 9.93/13.00	FHWA REGION 5	787
CHKD. BY			
DATE			



(131) STA. 93+56 EASTBOUND S.R. 126

Sign Area - 13'x7'+ 20'x 10.5' = 301 S.F.
Span - 67'-0"
7.65 Des. 6 ; 3 Ft. Box
23'-0" & 28'-6" Poles



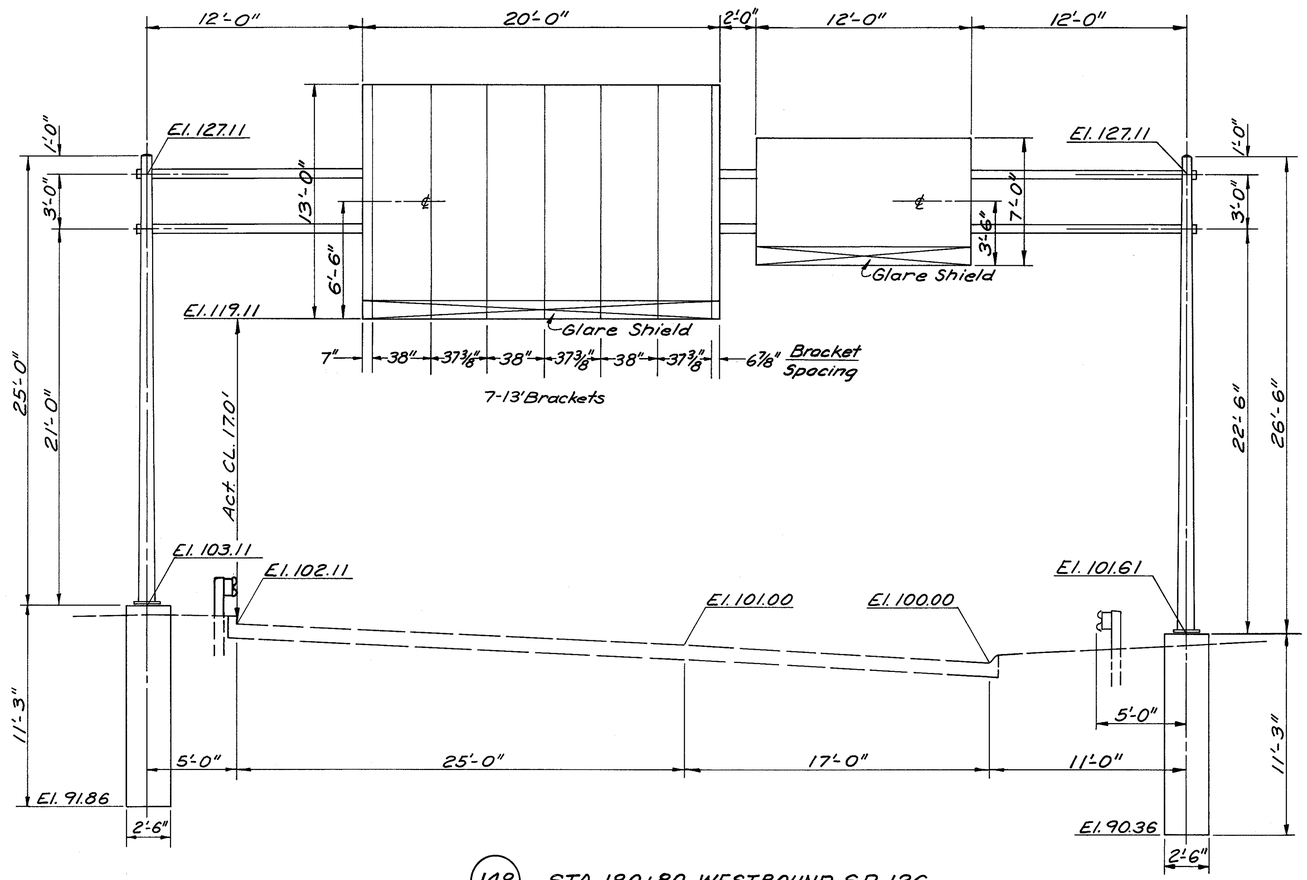
(123) STA. 68+75 WESTBOUND S.R. 126

Sign Area - 14'x 10.5' = 147 S.F.
Moment Arm - 13'-0"
TC-12.30 Des. 5
26'-6" Pole & 20'-0" Arm

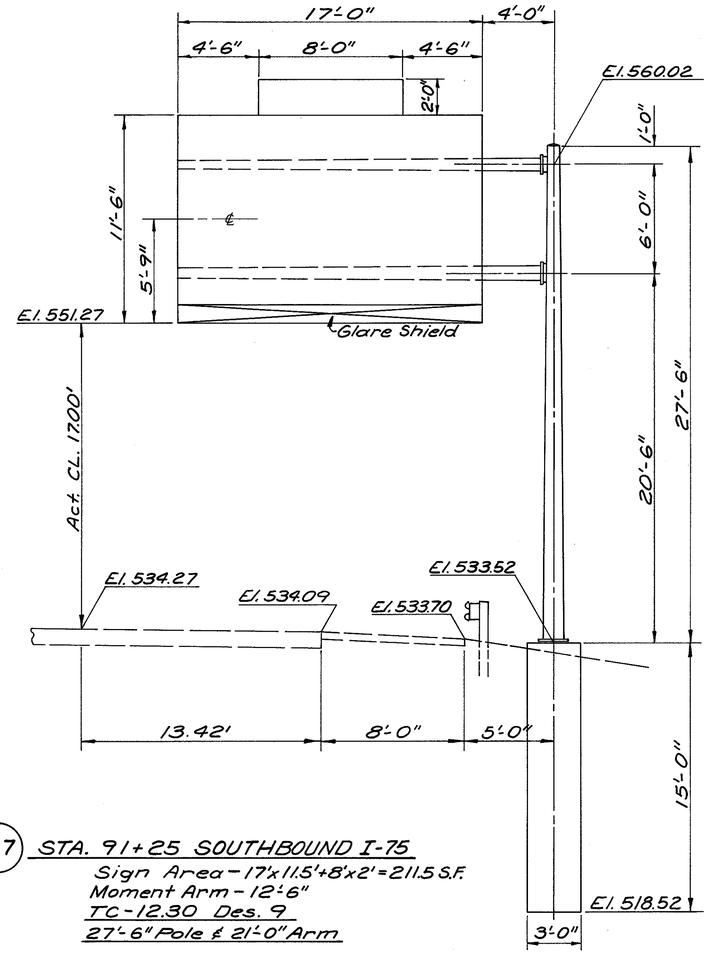
Scale
0 2 4 8

OVERHEAD SIGN DETAILS

CALC. BY FGV DATE 2/86	HAMILTON COUNTY	OHIO	392
CHKD BY DATE 4/86	HAM-75/126-9.93/13.00	FHWA REGION 5	787



(148) STA. 180+80 WESTBOUND S.R. 126
Sign Area - 20'x13'+12'x7'=344 S.F.
Span - 58'-0"
7.65 Des. 6; 3 Ft. Box
25'-0" & 26'-6" Poles

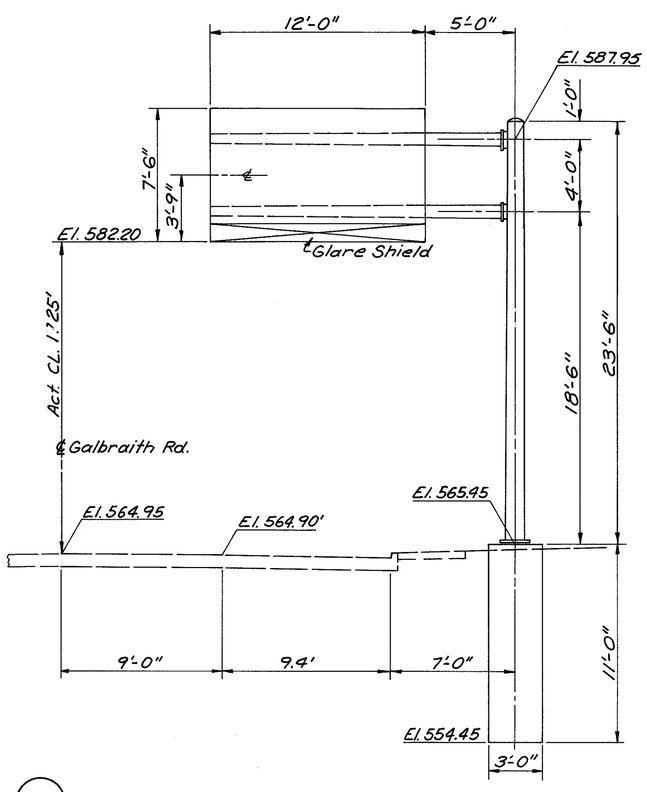


(117) STA. 91+25 SOUTHBOUND I-75
Sign Area - 17'x11.5'+8'x2'=211.5 S.F.
Moment Arm - 12'-6"
TC-12.30 Des. 9
27'-6" Pole & 21'-0" Arm

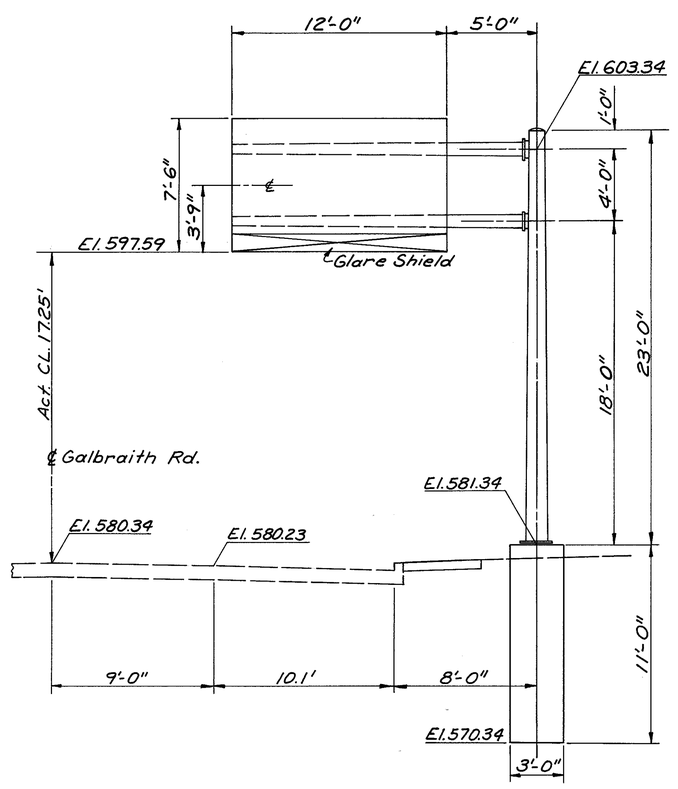
Scale
0 2 4 8

OVERHEAD SIGN DETAILS

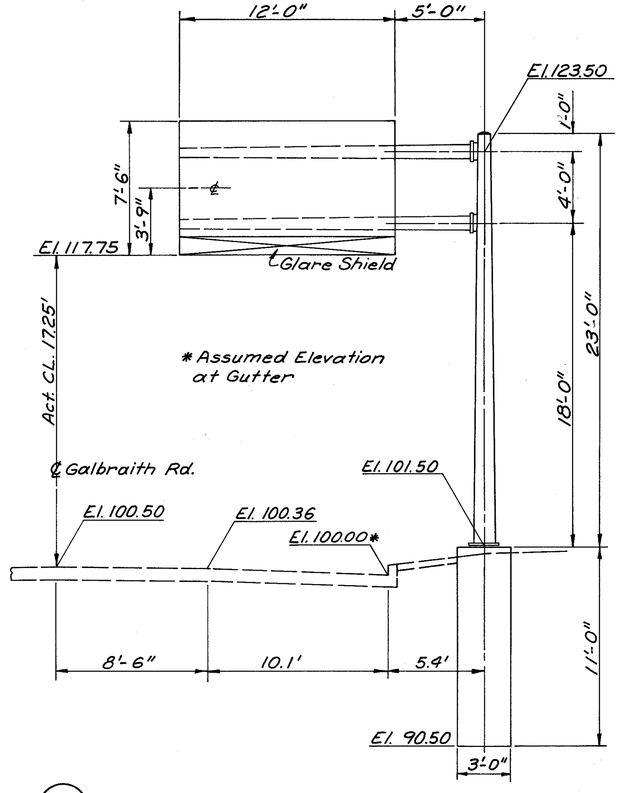
CALC. BY FGV DATE 1/16	HAMILTON COUNTY	OHIO	393
CHKD. BY DATE	HAM-75/126-9.93/13.00	FHWA REGION 5	787



(132) STA. 37+33 EASTBOUND GALBRAITH RD.
Sign Area - 12'x 7.5' = 90 S.F.
Moment Arm - 11'-0"
TC-12.30 Des. 3
23'-6" Pole & 17'-0" Arm



(133) STA. 41+03 EASTBOUND GALBRAITH RD.
Sign Area - 12'x 7.5' = 90 S.F.
Moment Arm - 11'-0"
TC-12.30 Des. 3
23'-0" Pole & 17'-0" Arm



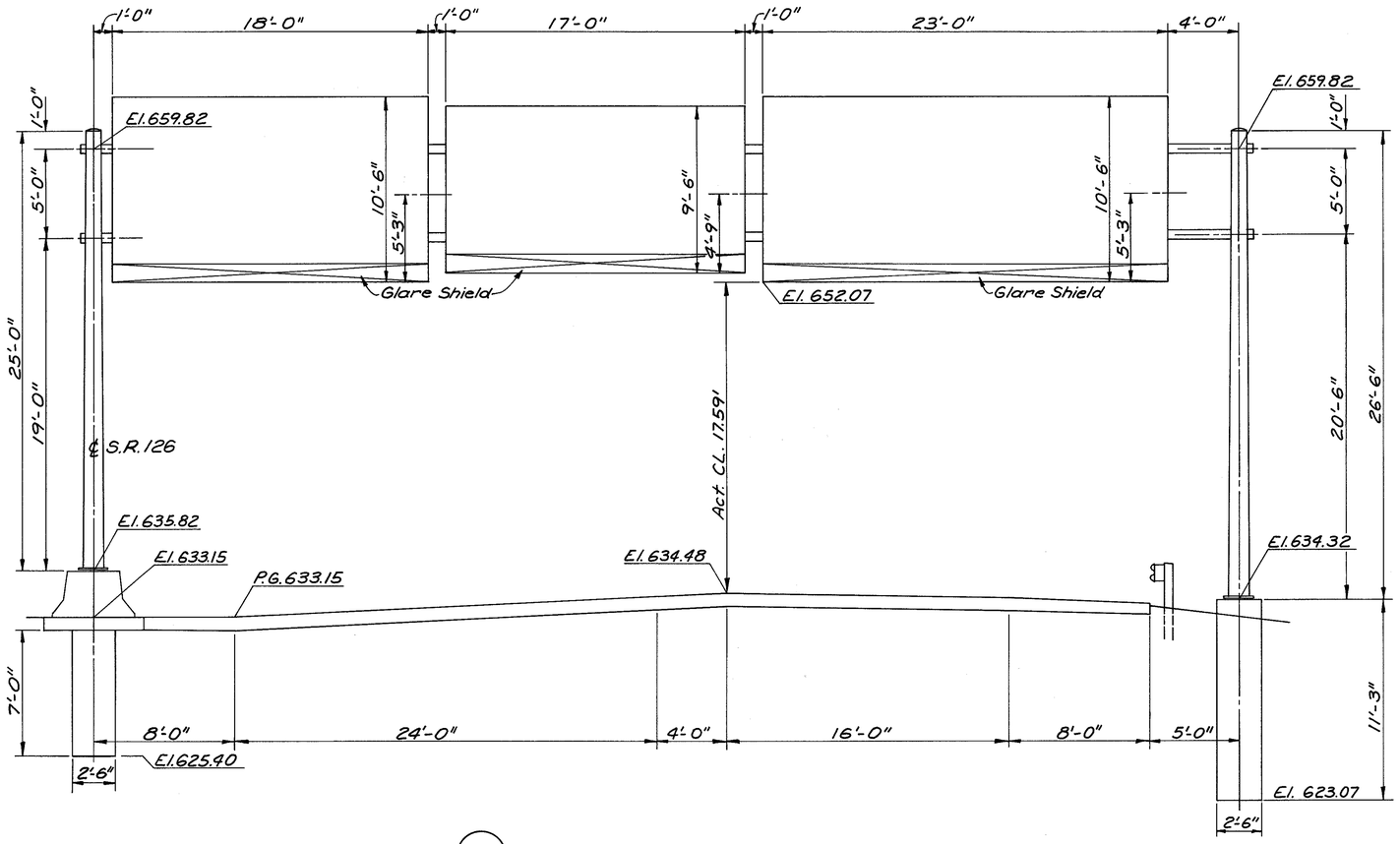
(134) STA. 45+95 WESTBOUND GALBRAITH RD.
Sign Area - 12'x 7.5'= 90 S.F.
Moment Arm - 11'-0"
TC-12.30 Des. 3
23'-0" Pole & 17'-0" Arm

Scale
0 2 4 8

OVERHEAD SIGN DETAILS

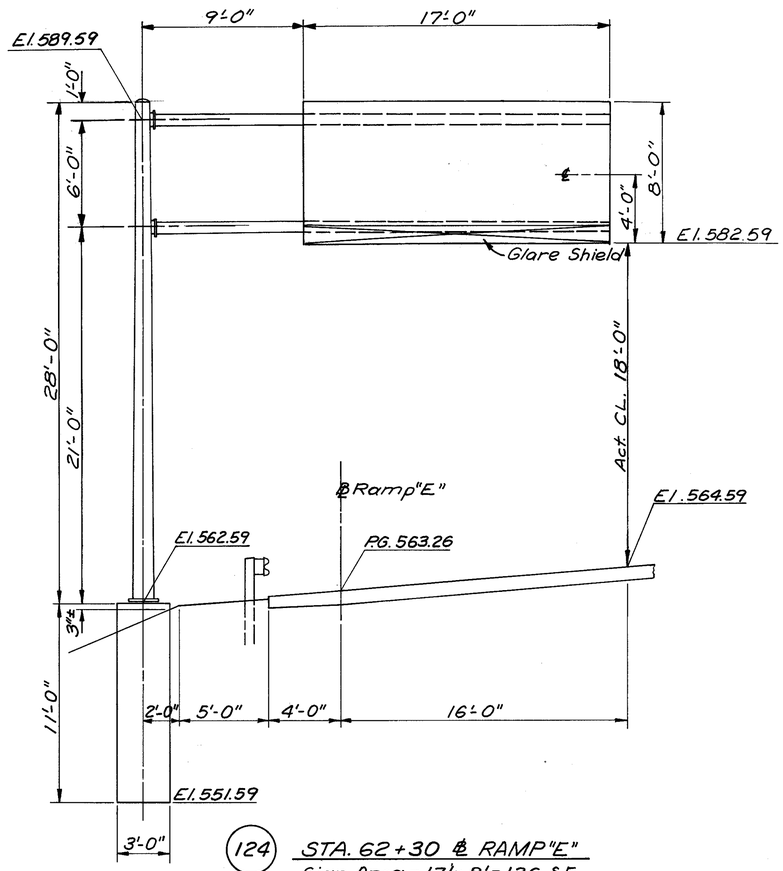
CALC. BY FGV	HAMILTON COUNTY	OHIO
DATE 2/86	HAM-75/126 - 9.93/13.00	FHWA REGION 5
CHKD. BY [illegible]		
DATE 3/86		

394
787



(144) STA. 134+50 WESTBOUND S.R. 126

Sign Area - 18'x10.5'+17'x9.5'+23'x10.5'=592 S.F.
Span - 65'-0"
7.65 Des.8; 5 Ft. Box.
25'-0" & 26'-6" Poles



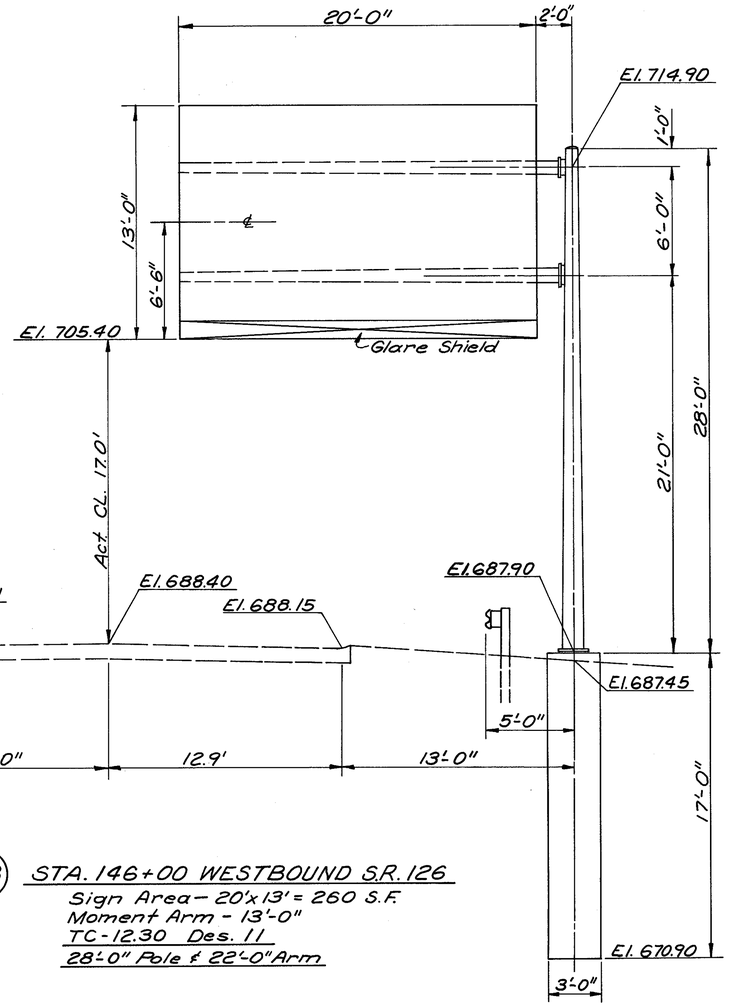
(124) STA. 62+30 ℄ RAMP "E"

Sign Area - 17'x8'=136 S.F.
Moment Arm - 17'-6"
TC-12.30 Des. 6
28'-0 Pole & 26'-0" Arm

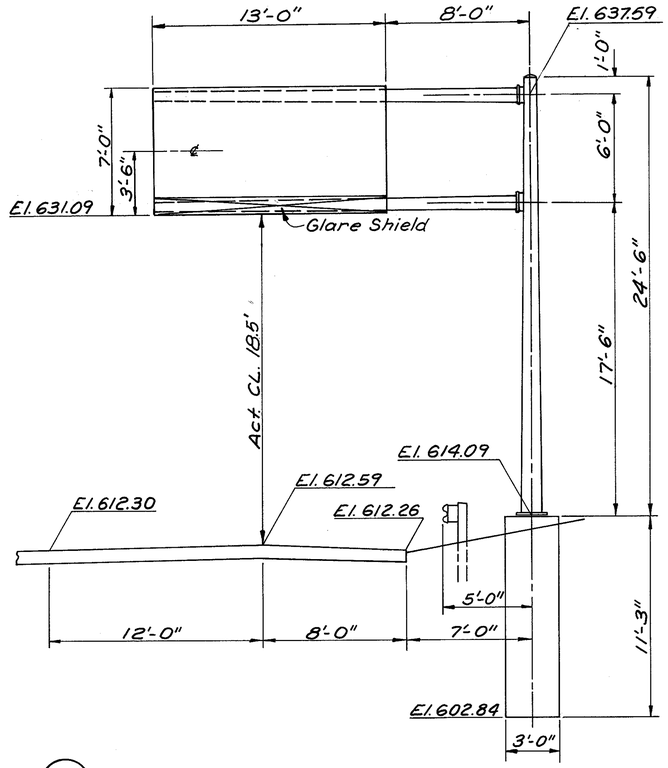
Scale
0 2 4 8

OVERHEAD SIGN DETAILS

CALC. BY FGV	HAMILTON COUNTY	OHIO	395
DATE 2/86	HAM-75/126-9.93/13.00	FHWA REGION 5	787
CHKD BY MAS			
DATE 3/86			



(143) STA. 146+00 WESTBOUND S.R. 126
Sign Area - 20'x13' = 260 S.F.
Moment Arm - 13'-0"
TC-12.30 Des. 11
28'-0" Pole & 22'-0" Arm

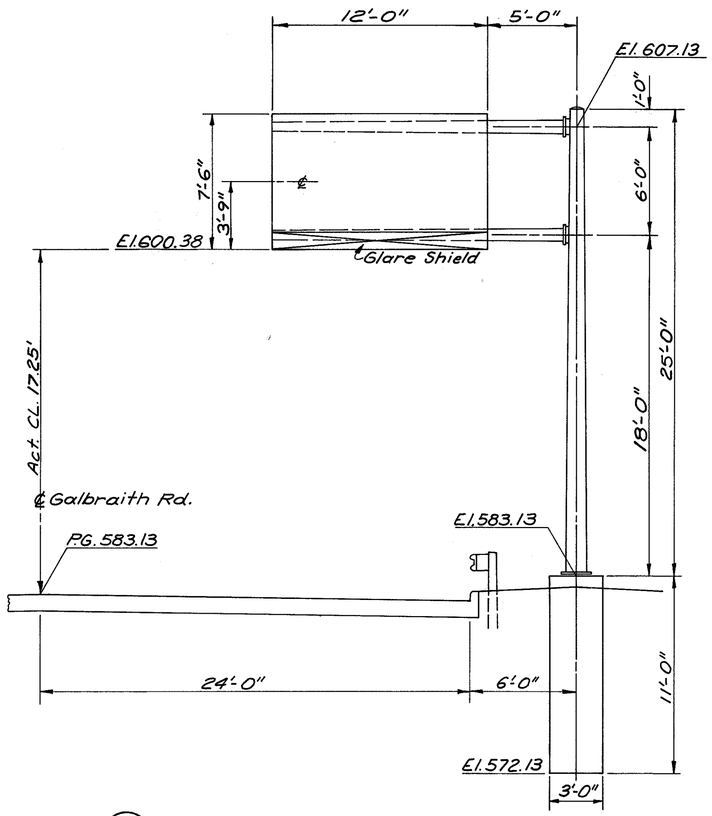


(141) STA. 130+00 EASTBOUND S.R. 126
Sign Area - 13'x7' = 91 S.F.
Moment Arm - 14'-6"
TC-12.30 Des. 5
24'-6" Pole & 21'-0" Arm

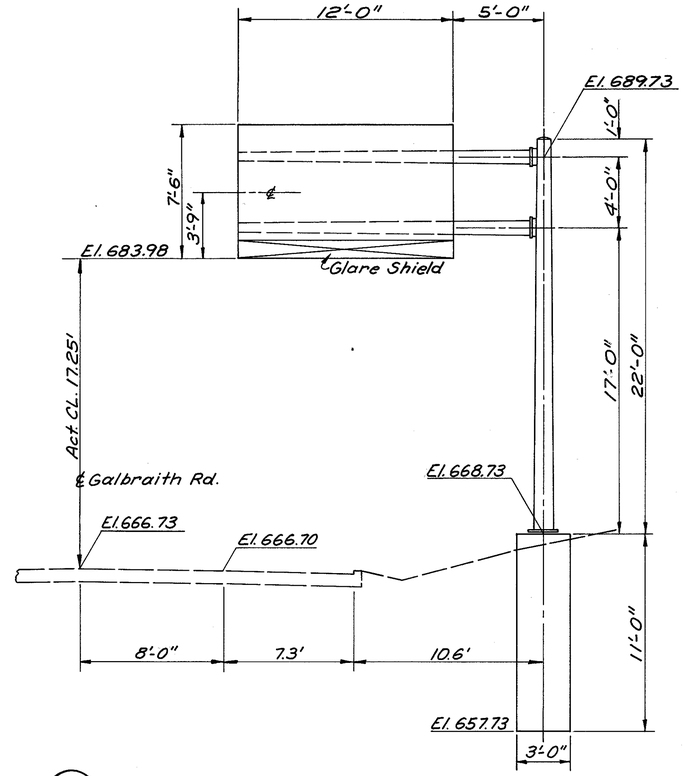
Scale
0 2 4 8

OVERHEAD SIGN DETAILS

CALC. BY EGV DATE 3/86	HAMILTON COUNTY	OHIO	396
CHKD. BY DATE	HAM-75/126-9.93/13.00	FHWA REGION 5	787



(145) STA. 9+35 EASTBOUND GALBRAITH RD.
Sign Area - 12'x7.5' = 90 S.F.
Moment Arm - 11'-0"
TC-12.30 Des. 3
25'-0" Pole & 17'-0" Arm

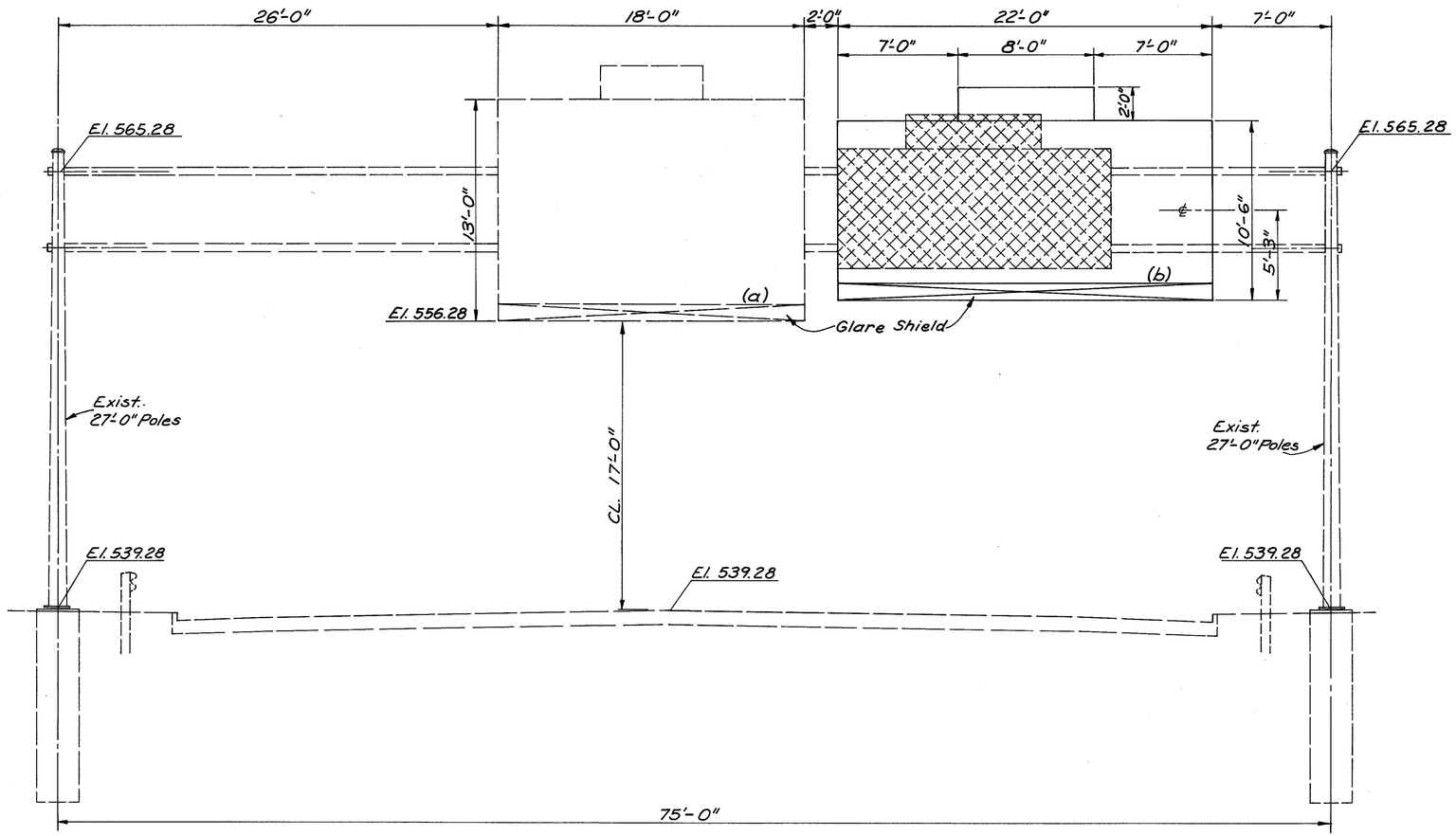


(147) 112' WEST OF KNOLLCREST DR. ON W.B. GALBRAITH RD.
Sign Area - 12'x 7.5' = 90 S.F.
Moment Arm - 11'-0"
TC-12.30 Des. 3
22'-0" Pole & 17'-0" Arm

Scale
0 2 4 8

OVERHEAD SIGN DETAILS

CALC. BY FGV	HAMILTON COUNTY	OHIO	397
DATE 2/86	HAM-75/126-9.93/13.00	FHWA REGION 5	787
CHKD. BY			
DATE 4/86			



153 STA. 147+80 SOUTHBOUND I-75

(EXISTING OVERHEAD SUPPORT SPAN)

Sign Area

(a) 18'x13'+6'x2' = 246 S.F. (Existing)

(b) 22'x10.5'+8'x2' = 247 S.F. (Proposed)

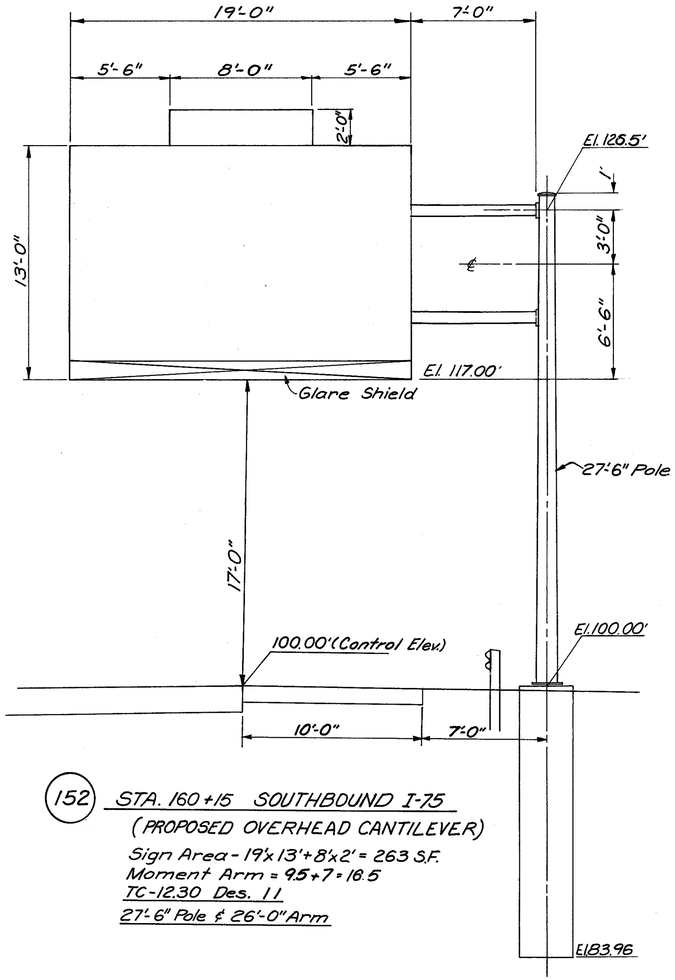
493 S.F.

Existing Span = 75'-0"

7.65 Des. 8

27'-0" & 27'-0" Poles Existing

The Existing Truss is Adequate for the Existing and Proposed Signs.



152 STA. 160+15 SOUTHBOUND I-75

(PROPOSED OVERHEAD CANTILEVER)

Sign Area - 19'x13'+8'x2' = 263 S.F.

Moment Arm = 9.5+7 = 16.5

TC-12.30 Des. 11

27'-6" Pole & 26'-0" Arm

Scale 0 2 4 8

OVERHEAD SIGN DETAILS

TRAFFIC CONTROL QUANTITIES

CALC BY FGV DATE 2/86 CHKD BY [illegible] DATE 4/86

HAMILTON COUNTY
HAM-75/126-9.93/13.00

OHIO
FHWA REGION 5

398
787

160 Yellow 398-450

* PARTICIPATION 1. PROJECT: IR-75-1(96)10, 2. PROJECT: F-2(13)

630 - GROUND MOUNTED SIGNS

REF. NO.	STATION	SIDE	CODE	SIZE	SIGNS: FLAT SHEET SQ. FT.	SIGNS: EXTRU SHEET SQ. FT.	GROUND MOUNTED SIGN SUPPORTS: NO. 2 POST LIN. FT.	NO. 3 POST LIN. FT.	NO. 4 POST LIN. FT.	4"x4"x5/16" SQUARE POST LIN. FT.		S4X7.7 LIN. FT.	W6X9 LIN. FT.	W10X12 LIN. FT.	SIGN SUPPORT ASSEMBLY POLE MOUNTED EACH	ONE WAY SUPPORTS NO-4 POST LIN. FT.	REMOVAL OF GRD. MTD. SIGN AND REERECTION EACH	CONCRETE FOR EMBEDDED FOUNDATION CU. YD.	BREAKAWAY BEAM CONNECTION EACH	SIGN SUPPORT ASSEMBLY TYPE 2 EACH	REMOVAL OF GRD. MTD. SIGN AND STORAGE EACH	REMOVAL OF GRD. MTD. MAJOR SIGN AND STORAGE EACH	REMOVAL OF GRD. MTD. BEAM SUPPORT EACH	REMOVAL OF GRD. MTD. POST SUPPORT EACH	*PARTICIPATION
	Sheet 378																								
1.	67+50 'D'	Rt.	GF-96	96"x60"		40							36.5					0.66	2						1
2.	90+95 ℄ I-75	Rt.	W-98-48	48"x60"	20.00				30																1
3.	Burns Av.		W-48-30	30"x30"	6.25			14																	2
4.	Station Av.		W-48-30	30"x30"	6.25			14																	2
5.	Station Av.		3@ X-4	18"x18"	6.75		30																		2
6.	Burns Av.		3@ X-4	18"x18"	6.75		30																		2
7.	87+37 ℄ I-75	Rt.	GN-42	120"x42"		35.00							37.0					0.66							1
8.	Not Used																								
9.	"																								
10.	Not Used																								
	Sheet 379																								
11.	Woodbine S. Corner	Rt.	W-48-30	30"x30"	6.25			13																	1
12.	Woodbine S.		3@ X-4	18"x18"	6.75		30																		1
13.	Woodbine N.		3@ X-4	18"x18"	6.75		30																		1
14.	Woodbine N. Corner	Lt.	W-48-30	30"x30"	6.25			13																	1
15.	112+00 'F'	Lt.	W-49R-48	48"x48"	16.00				34																1
16.	53+50 'E'	Lt.	R-2-60	60"x60"x60"	10.80			32																	1
17.	107+25 'F'	Rt.	W-49R-48	48"x48"	16.00				24																1
18.	Not Used																								
30.	Not Used																								
	Sheet 380																								
31.	67+95 EB SR 126	Rt.	R-10-48	48" x 60"	20.00				33																2
32.	70+50 WB SR 126	Lt.	W-54C-144	144" x 48"		48.00								40				2.20							1
33.	69+50 WB SR 126	Rt.	W-54C-144	144" x 48"		48.00								40				2.20							1
34.	59+95 WB SR 126	Rt.	GF-72	72" x 60"		30.00						35.50						0.64	2						1
35.	60+25 'E'	Rt.	W-98-48	48" x 60"	20.00				31.50																1
36.	123+00 SB I-75	Lt.	R-10-48, R-16-48	48"x60", 48"x60"														2						2	1
37.	120+56 'F'	Lt.	R-2-48	48"x48"x48"														1						1	1
38.	131+50 SR I-75	Lt.	W-49R-48	48"x48"														1						1	1
39.	125+00 NB I-75	Rt.	W-68-48	48"x48"	16.00				32								1							1	1
40.	Greenland Pl.		3@ X-4	18"x18"	6.75		30																		2
41.	Debonair Dr.		3@ X-4	18"x18"	6.75		30																		2
42.	80+80 WB SR 126	Rt.	W-2-36, W-143-24	36"x36", 24"x24"	13.00		6									4									2
43.	80+80 WB SR 126	Lt.	W-2-36, W-143-24	36"x36", 24"x24"	13.00		6									4									2
44.	Not Used																								
45.	Not Used																								
	Sheet 381																								
46.	97+50 EB SR 126	Rt.	GF-72	72" x 60"		30.00						33.00						0.54	2						2
47	Not Used																								
48.	100+00 'N'	Rt.	W-47-48	48" x 48"	16.00					21										1					2
49.	Burkhart	Lt. & Rt.	6@ X-4	18" x 18"	13.50		60																		2
50.	103+00 'N'	Rt.	D-4-B	120"x48"		40.00	8							37.0				2.20	2						2
			M-25-24, M-1-30	24"x18", 30"x30"	9.25																				2
			R-41A-36	36"x24"	6.00																				2
51.	103+00 'N'	Lt.	R-41A-36	36"x24"	6.00					3										1					2
52.	105+25 'N'	Rt.	R-41B-36	36"x36"	9.00				13.50																2
53.	105+64 'N'	Lt.	R-43R-36, R-43L-36	36"x12", 36"x12"	6.00				13.50							15.5									2
			R-41B-36	36", 36"	9.00																				
54.	96+75 WB SR 126	Lt.	W-49R-48	48"x48"	16.00				31.50																2
SUB-TOTAL: PARTICIPATION: 2					176.25	70.00	200.00	28.00	91.50	27		33.00	0.00	37.0	8	15.5		2.74	4	2					
SUB-TOTAL: PARTICIPATION: 1					124.80	201.00	60.00	58.00	151.50			35.50	73.50	80.00			1	6.26	4					5	

GROUND MOUNTED SIGN QUANTITIES

TRAFFIC CONTROL QUANTITIES

DLC. BY F.V. DATE 2/18 | CHKD. BY J.S. DATE 3/17/18 | HAMILTON COUNTY HAM-75/126 - 9.93/13.00 | OHIO | FHWA REGION 5 | 399 / 787

* PARTICIPATION 1. PROJECT: IR-75-1(96)10, 2. PROJECT: F-2(13)

630 GROUND MOUNTED SIGNS

REF. NO.	STATION	SIDE	CODE	SIZE	SIGNS: FLAT SHEET SQ. FT.	SIGNS: EXTRU SHEET SQ. FT.	GROUND MOUNTED SIGN SUPPORTS: NO. 2 POST LIN. FT.	NO. 3 POST LIN. FT.	NO. 4 POST LIN. FT.	4X4X 5/16 SQUARE POST LIN. FT.		S4 X 7.7 LIN. FT.	W6 X 9 LIN. FT.	W10 X 12 LIN. FT.	SIGN SUPPORT ASSEMBLY POLE MOUNTED EACH	ONE WAY SUPPORTS NO: 4 POST LIN. FT.	REMOVAL OF GRD. MTD. SIGN AND REERECTION EACH	CONCRETE FOR EMBEDDED FOUNDATION CU. YD.	BREAKAWAY BEAM CONNECTION EACH	SIGN SUPPORT ASSEMBLY TYPE 2 EACH	REMOVAL OF GRD. MTD. SIGN AND STORAGE EACH	REMOVAL OF GRD. MTD. MAJOR SIGN AND STORAGE EACH	REMOVAL OF GRD. MTD. BEAM SUPPORT EACH	REMOVAL OF GRD. MTD. POST SUPPORT EACH	* PARTICIPATION
	Sheet 381																								
55.	98+20 'T'	Lt.	R-15B-30	30" x 18"	3.75			12																	2
56.	40+67 Galbraith'	Lt.	M-8-24	24"X12"	2.00																				
			M-5-24-2	24" x 24"	4.00				15.00																2
	Sheet 382		M-26-21	21" x 15"	2.19																				
57.	10+18 Burkhart	Lt.	R-1-30	30"x 30"	6.25			13																	2
58.	9+41 Burkhart	Lt.	W-48-30	30" x 30"	6.25			14																	2
59.	9+46 Burkhart	Rt.	R-1-30	30"x 30"	6.25			13																	2
60.	8+22 Galbraith	Lt.	W-94-36	36" Dia.	9.00			13.5																	2
61.	104+20 WB SR 126	Lt.	W-54D-144	144"x 48"		48								42.0				2.20							2
62.	85+15 WB SR 126	Lt.	GN-42	120"x 42"		35							33.50					0.66							2
63.	6+40 Dr. 'A'	Lt.	R-31A	36"x 30"	7.50			13																	2
64.	Not Used																								
65.	Not Used																								
	Sheet 382																								
66.	9+60 Galbraith	Rt.	R-36R-30	30" x 36"	7.50			14.5																	2
67.	15+50 Galbraith	Rt.	R-32L-30	30"x 30"	6.25			12.5																	2
68.	6+10 Drive 'B'	Rt.	R-1-30	30"x 30"	6.25			16																	2
69.	125+00 'P'	Rt.	R-41A-36	36"x 24"	6.00			12.5																	2
70.	124+20 'P'	Lt.	R-41B-36	36" x 36"																					
			R-43R-48	48" x 18"	21.00				14.00							15.00									2
			R-43L-48	48" x 18"																					
71.	125+64 Q	Lt.	R-38R-36"	36" x 48"	12.00				32.00																2
72.	126+75 Q	Rt.	R-15B-30	30" x 18"	3.75			12																	2
73.	129+50 SR 126	Rt.	W-49R-48	48" x 48"	16.00				35.00																2
74.	130+60 SR 126	Rt.																				1		2	2
75.	1+00 Knollcrest	Lt.	R-1-30	30"x 30"	6.25			16																	2
76.	137+60 WB SR 126	Lt.	R-10-48	48"x 60"																		1		1	2
77.	133+00 'P'	Lt.	W-170A-48	4'x 4'	16.00				29.50																2
78.	132+85 WB SR 126	Lt.	GF-72	72" x 60"		30						33.00						0.54	2						2
79.	129+30 'P'	Lt.	W-47-48	48"x 48"	16.00				29.00																2
80.	128+25 'P'	Lt.	W-33-36	36" x 48"	12.00				34.00																
	128+60 'P'	Lt.	W-33-36	36"x 48"	12.00				34.00																2
	128+85 'P'	Lt.	W-33-36	36"x 48"	12.00				34.00																
81.	125+00 'P'	Lt.	IM-8-30 IM-37-30	30"x 15", 30"x 15"	6.25																				
			M-5-30-2 IM-24-24	30"x 30", 24"x 18"	9.25																				
			M-1-30-2, M-24-24	30"x 30", 24"x 18"	9.25																				2
			D-4-8, R-41A-36	108"x 48", 36"x 24"	6.00	36							45					0.66	2						2
82.	121+00 WB SR 126	Lt.	R-10-48	48"x 60"	20.00				32.00																2
83.	143+85 & SR 126	Rt.	GN-42	108"x 42"		31.5						21.00						0.54							2
84.	144+40 & SR 126	Lt.	GN-42	96"x 42"		28						21.00						0.54							2
85.	Not Used																								
	Sheet 383																								
86	6+40 'F'	Rt.	GF	108"x 36"		36							33				2	0.66	2				2		1
	PARTICIPATION: 2																								
SUB-TOTAL SHEET: 398					176.25	70	200	28.00	91.50	27		33.00	0.00	37.00	8	14.00	0	2.74	4	2	0		0	0	2
SUB-TOTAL SHEET: 399					250.94	244.50	0	162.00	288.00	0		75.00	66.50	87.00	0	15.00	2	5.80	4	0	2		2	3	2
TOTAL PARTICIPATION: 2					427.19	314.50	200.	190.00	379.50	27		108.00	66.50	124.00	8	29.00	2	8.54	8	2	2		2	3	2
	PARTICIPATION: 1																								
SUB-TOTAL: SHEET: 398					124.80	201.00	60	58.00	151.50	0		35.50	73.50	80.00	0		1	6.26	4		4			5	1
SUB-TOTAL: SHEET: 399					0.00	0.00	0	0.00	0.00	0		0.00	0.00	0.00	0		0	0.66	2		0			0	1
TOTAL PARTICIPATION: 1					124.80	201.00	60	58.00	151.50	0		35.50	73.50	80.00	0		1	6.92	6		4			5	1
TOTAL					551.99	515.50	260	248.00	531.00	27		143.50	140.00	204.0	8	29.00	3	15.46	14	2	6		2	8	

GROUND MOUNTED SIGN QUANTITIES

OVERHEAD SIGN QUANTITIES SUB-SUMMARY

CALC. BY FGY DATE 2/86 | CHKD BY MM DATE 6/86 | HAMILTON COUNTY HAM-75/126-9.93/13.00 | OHIO F.H.W.A. REGION 5 | 400/787

*PARTICIPATION 1; PROJECT: IR-75-1(96)10 2; F-2(13)

630/631 | 625

SHEET NO.	REF NO.	STATION	SIDE	SIGNS WIRED (EA.)	SIGN SERVICE (EA.)	SIGN EXTRUSHEET (S.F.)	BALLAST CHART-100 (EA.)	BALLAST CHART-175 (EA.)	BALLAST CHART-250 (EA.)	TYPE 12.30 DESIGN NO.5 23'-0" ARM. (EACH)	TYPE 7.65 DESIGN NO.6 59'-0" SPAN (EACH)	TYPE 12.30 DESIGN NO.9 26'-0" ARM (EA.)	TYPE 12.30 DESIGN NO.9 22'-0" ARM (EA.)	LUMINAIRE 100W (EA.)	LUMINAIRE 175W (EA.)	TYPE 7.65 DESIGN NO.6 52'-0" SPAN. (EACH)	TYPE 12.30 DESIGN NO.6 26'-0" ARM. (EACH)	TYPE 7.65 DESIGN NO.6 67'-0" SPAN (EACH)	TYPE 12.30 DESIGN NO.3 17'-0" ARM. (EACH)	TYPE 12.30 DESIGN NO.1 10'-0" ARM. (EACH)	TYPE 7.65 DESIGN NO.6 66'-3" SPAN. (EACH)	TYPE 12.30 DESIGN NO.11 26'-0" ARM (EACH)	TYPE 7.65 DESIGN NO.6 65'-0" SPAN. (EACH)	TYPE 12.30 DESIGN NO.5 15'-0" ARM. (EACH)	TYPE 12.30 DESIGN NO.5 20'-0" ARM. (EACH)	TYPE 7.65 DESIGN NO.6 57'-0" SPAN. (EACH)	TYPE 12.30 DESIGN NO.11 22'-0" ARM. (EACH)	TYPE 12.30 DESIGN NO.5 21'-0" ARM. (EACH)	TYPE 12.30 DESIGN NO.9 21'-0" ARM. (EACH)	TYPE 7.65 DESIGN NO.8 78'-6" SPAN. (EACH)	CONCRETE FOR ANCHOR BASE FOUNDATION (CU.YD.)	LUMINAIRE 250 W. (EA.)	DISCONNECT SWITCH (EA.)	COVERING OF SIGNS (S.F.)	SIGNS OVERLAY (S.F.)	REMOVAL OF OVERHEAD SIGN & REERECTION (EACH)	REMOVAL OF GRD. MTD MAJOR SIGN AND REERECTION (EACH)	REMOVAL OF GRD. MTD BEAM SUPPORT (EACH)	REMOVAL OF OVERHEAD SIGN & STORAGE (EACH)	REMOVAL OF OVERHEAD SIGN AND STORAGE CANTILEVER TYPE (EACH)	OVERPASS STRUCTURE MTD. SIGN SUPPORT TYPE TC-18.26 DESIGN NO.3 (EACH)	REMOVAL OF GRD. MTD. MAJOR SIGN FOR STORAGE (EACH)	SIGN ATTACHMENT ASSEMBLY (EACH)	LUMINAIRE SUPPORT ASSEMBLY TYPE TC-31.21 (EACH)	GROUND ROD (EACH)	REMOVAL OF LUMINAIRE AND STORAGE (EA.)	*PARTICIPATION (EA.)	REMOVAL OF LUMINAIRE AND REERECTION (EA.)
378	100	343+50 NB I-75	Rt.	3	1	241			2																					1	12.33	2	1	250	15.75									1	1	
	101	343+25 NB I-75	Rt.																																2									2	1	4
	102	75+00 NB I-75	Rt.	2	1	374		2	2		1				2															12.33	2	1	282	15.75									1	1	
	103	85+55 NB I-75	Rt.	2	1	352.5		5							5						1									9.23		1	236.5	15.75									1	1	
	104	74+00 SB I-75	Lt.	1	1	7.5	2			1				2																2.92		1				1	3							1	1	
378	105	76+50 NB I-75	Rt.																																				1					2	1	
	106	Not Used																																											
		Not Used																																											
	110	Not Used																																											
379	111	By Others																																											
	112	By Others																																											
	113	65+35 Ramp 'D'	Lt/Rt.	1	1	136		2							2															9.54		1	50.00										1	1	
	114	By Others																																											
	115	58+10 EB SR-126	Rt.	1	1	212.5			2				1																	3.97	2	1												1	1	
	116	97+72 ℄ I-75	Rt.		1																											1		1				1	1			1	1	2
	117	91+25 SB I-75	Lt.	1	1																						1			3.97		1		1					1				1	1	2
379	118	98+30 ℄ I-75	Rt.																																	2					1			1		
	119	Not Used																																											
	120	Not Used																																											
380	121	80+75 EB SR-126	Rt.	1	1	212.5			2			1																		3.97	2	1												1	2	
	122	80+80 WB SR-126	Lt.	1	1	170		2						2		1														9.54		1												1	2	
	123	68+75 WB SR-126	Rt.	1	1	140		2						2								1								2.92		1												1	1	
380	124	62+30 Ramp 'E'	Rt.	1	1	127.5		2						2			1													2.92		1												1	1	
	125	Not Used																																											
	130	Not Used																																											
381	131	93+56 SR-126	Rt.	2	1	284.5		5							5			1												12.33		1												1	2	
	132	37+33 Galbraith Rd.	Rt.	1	1	84		2							2					1										2.92		1	90	9.00									1	2	
	133	41+03 Galbraith Rd.	Rt.	2	1	168		4							4					1										2.92		1	180	18.00									1	2	
	134	45+95 Galbraith Rd.	Lt.	1	1	84		2							2					1										2.92		1	90	9.00									1	2	
	135	94+30 SR-126	Rt.	1	1	28	1							1							1									2.92		1												1	2	
	136	Not Used																																												
381	140	Not Used																																												
382	141	130+00 EB SR-126	Rt.	1	1	84.5		2							2													1		2.92		1												1	2	
	142	145+00 EB SR-126	Rt.	1	1	84.5		2							2											1				2.92		1												1	2	
	143	146+00 WB SR-126	Lt.	1	1	250			3																		1			4.49	3	1												1	2	
	144	134+50 WB SR-126	Lt.	3	1	410		4	3						4								1							12.33	3	1												1	2	
	145	8+35 Galbraith Rd.	Rt.	1	1	84		2							2					1										2.92		1	90	9.00									1	2	
	146	19+65 Galbraith Rd. *	Rt.	2	1	168		4							4																	1	180	18.00										2	
	147	112' West of Knollcrest Dr.	Lt.	1	1	84		2							2					1										2.92		1	90	9.00									1	2	
	148	180+80 WB SR-126	Lt.	2	1	328		2	3						2												1			9.54	3	1												1	2	
	149	Not Used																																												
382	150	Not Used																																												
383	151	210+40 SB I-75	Lt/Rt.	1		253.5			2																						2			15.75					1			5	2		2	1	
	152	160+15 SB I-75	Lt.	1	1	253.5			2															1						4.49	2	1		15.75					1	1			1	2	1	
383	153	147+80 SB I-75	Lt/Rt.	1		236		3							3																			15.75					1			4	3		2	1	
		SUB-TOTAL: PARTICIPATION-2		21	15	2524	1	33	11					1	33	1		1	5	1			1	1		1	1	1			75.56	11	16	720.0	72.0								14				
		SUB-TOTAL: PARTICIPATION-1		16	11	2334	2	16	10	1	2	1	1	2	16		1				1	1			1			1	1	64.62	10	11	718.5	144.5	4	1	5	5	3	1	1	9	5	11	10	8
		TOTAL		37	26	4858	3	49	21	1	2	1	1	3	49	1	1	1	5	1	1	1	1	1	1	1	1	1	1	140.18	21	26	1438.5	216.5	4	1	5	5	3	1	1	9	5	25	10	8

OVERHEAD SIGN QUANTITIES

TRAFFIC CONTROL QUANTITIES

CALCULATIONS
MADE BY _____ DATE _____
CHECKED _____ DATE _____

FHWA	STATE	PROJECT	
5	OHIO		

400A/787

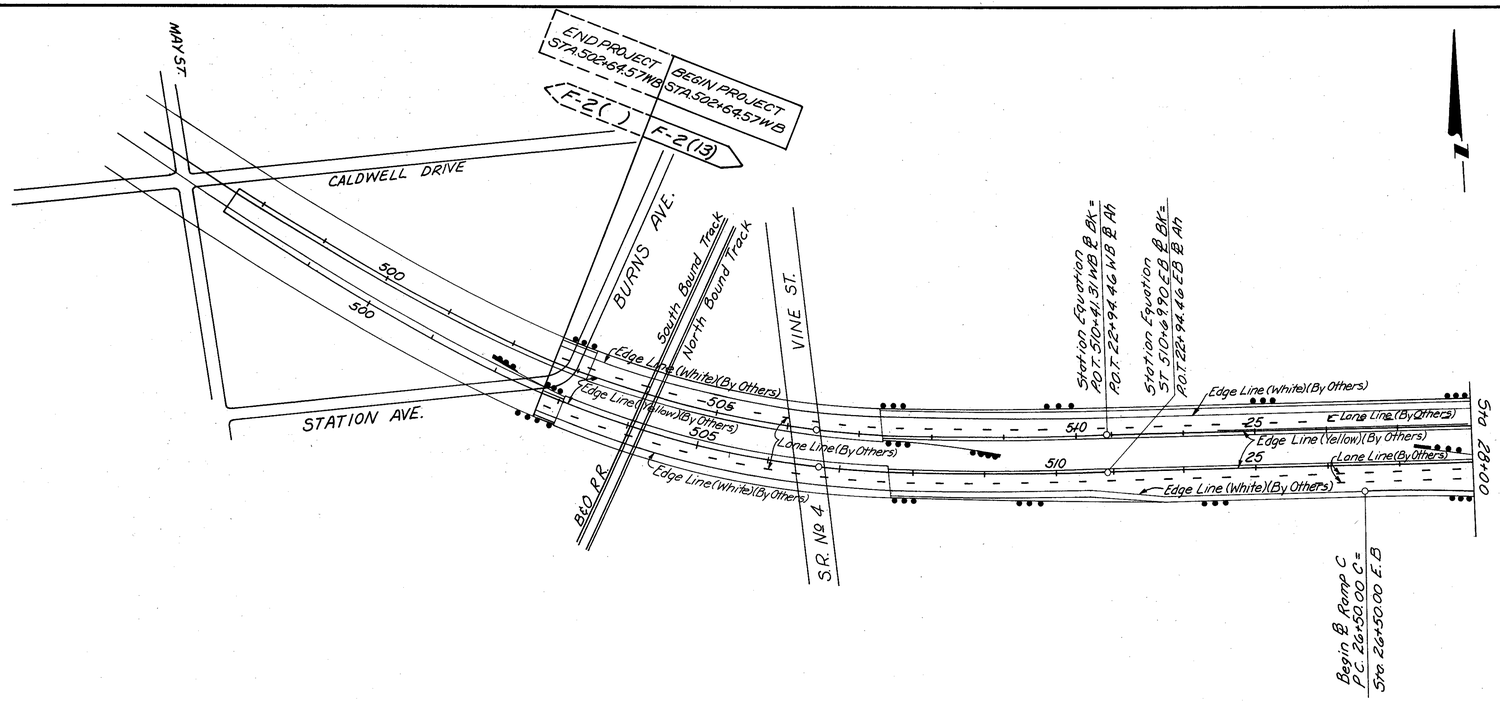
HAMILTON COUNTY
HAM-75/126-9.93/13.00

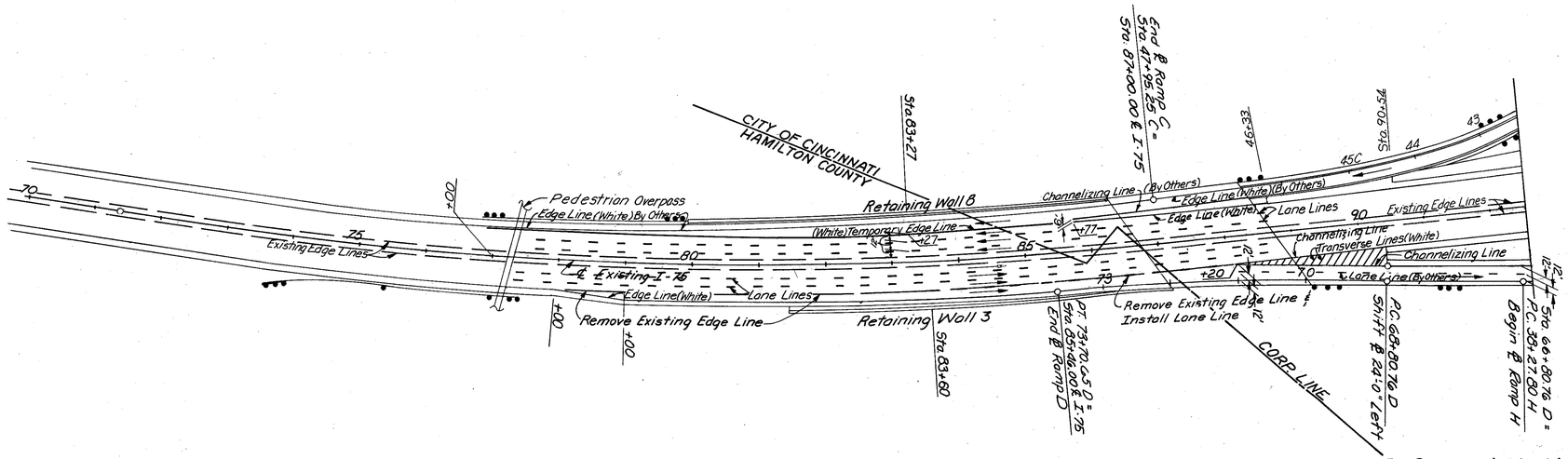
OVERHEAD SIGN SUPPORTS

REF. NO.	ROADWAY	SIDE	STATION	REMOVAL OF OVERHEAD SIGN SUPPORT AND STORAGE, SPAN TYPE EACH	SIGNS WIRED, OVERPASS STRUCTURE MOUNTED EACH	SWITCH ENCLOSURE MOUNTING BRACKET ASSEMBLY EACH
101	NB I 75	RT	343+25	1		
116	I 75	℄	97+72		1	1
			TOTALS	1	1	1

OVERHEAD SIGN SUPPORT QUANTITIES

CALC. BY EGV DATE 3/86	HAM-75-9.93	OHIO	401
CHKD. BY Dan DATE 3/86	HAM-126-13.00	FHWA REGION 5	787
	HAMILTON COUNTY		





Scale
0 100 200

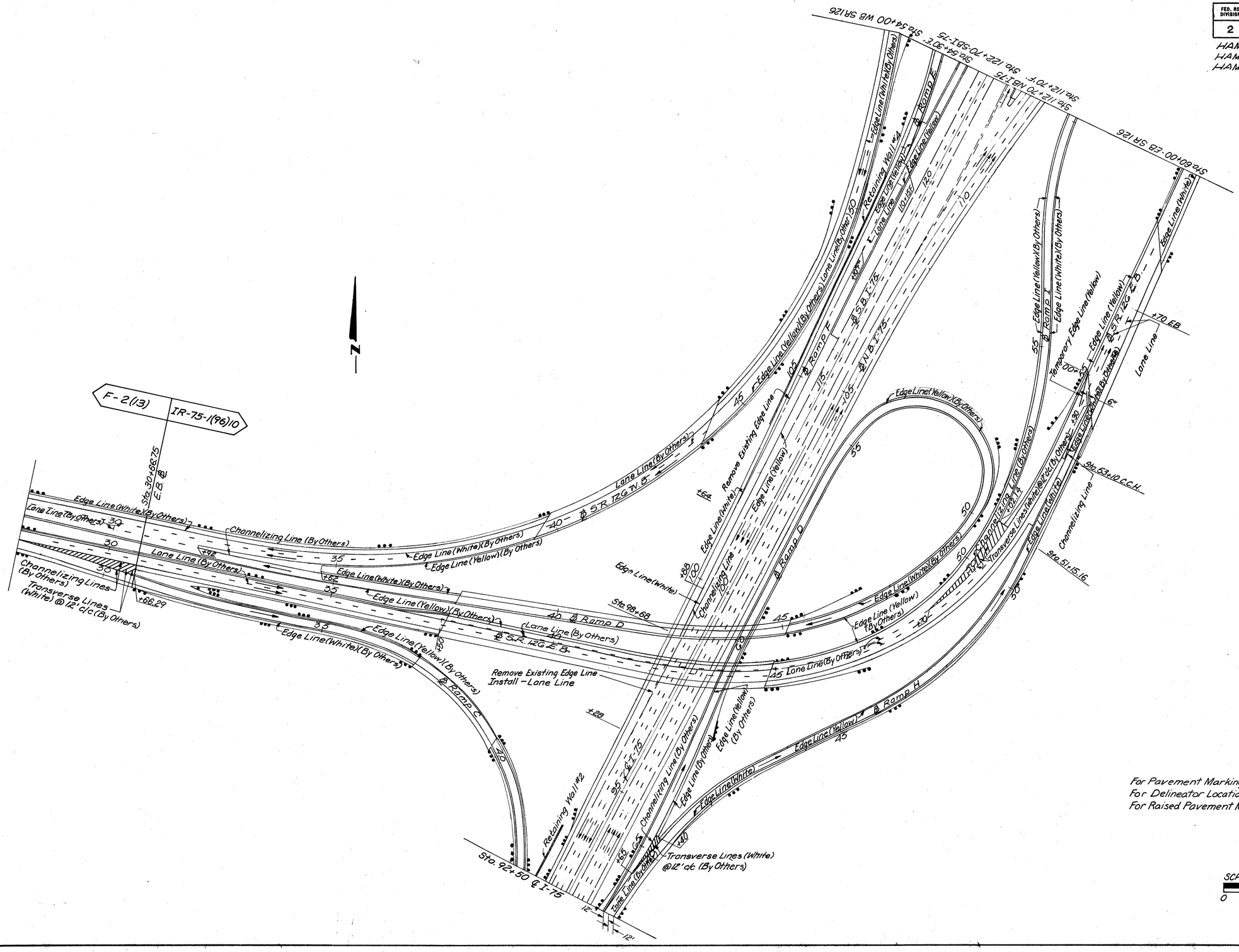
For Pavement Marking Quantities See Sheet 407-410
For Delineators Location & Quantities See Sheet 411
For Raised Pavement Markers See Sheet 412

PAVEMENT MARKING PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

402
787

HAM - 7.5 - 9.93
HAM - 126 - 13.00
HAMILTON COUNTY



For Pavement Marking Quantities See Sheet 407-410
For Delineator Location & Quantities See Sheet 411
For Raised Pavement Markers See Sheet 412

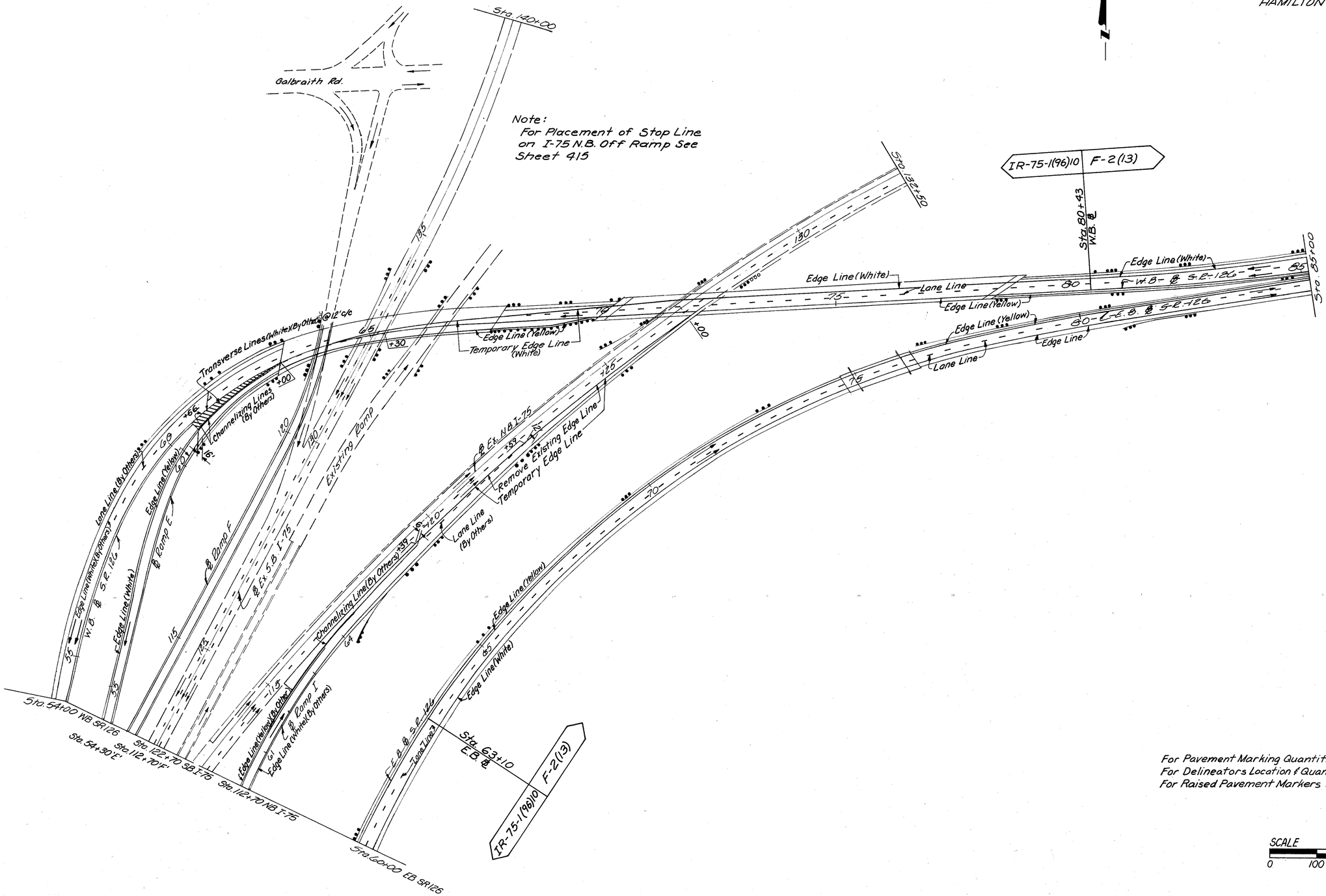
SCALE
0 100 200

PAVEMENT MARKING PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

403
787

HAM- 7.5 - 9.93
HAM - 12.6 - 13.00
HAMILTON COUNTY



For Pavement Marking Quantities See Sheet 407-410
For Delineators Location & Quantities See Sheet 411
For Raised Pavement Markers See Sheet 412

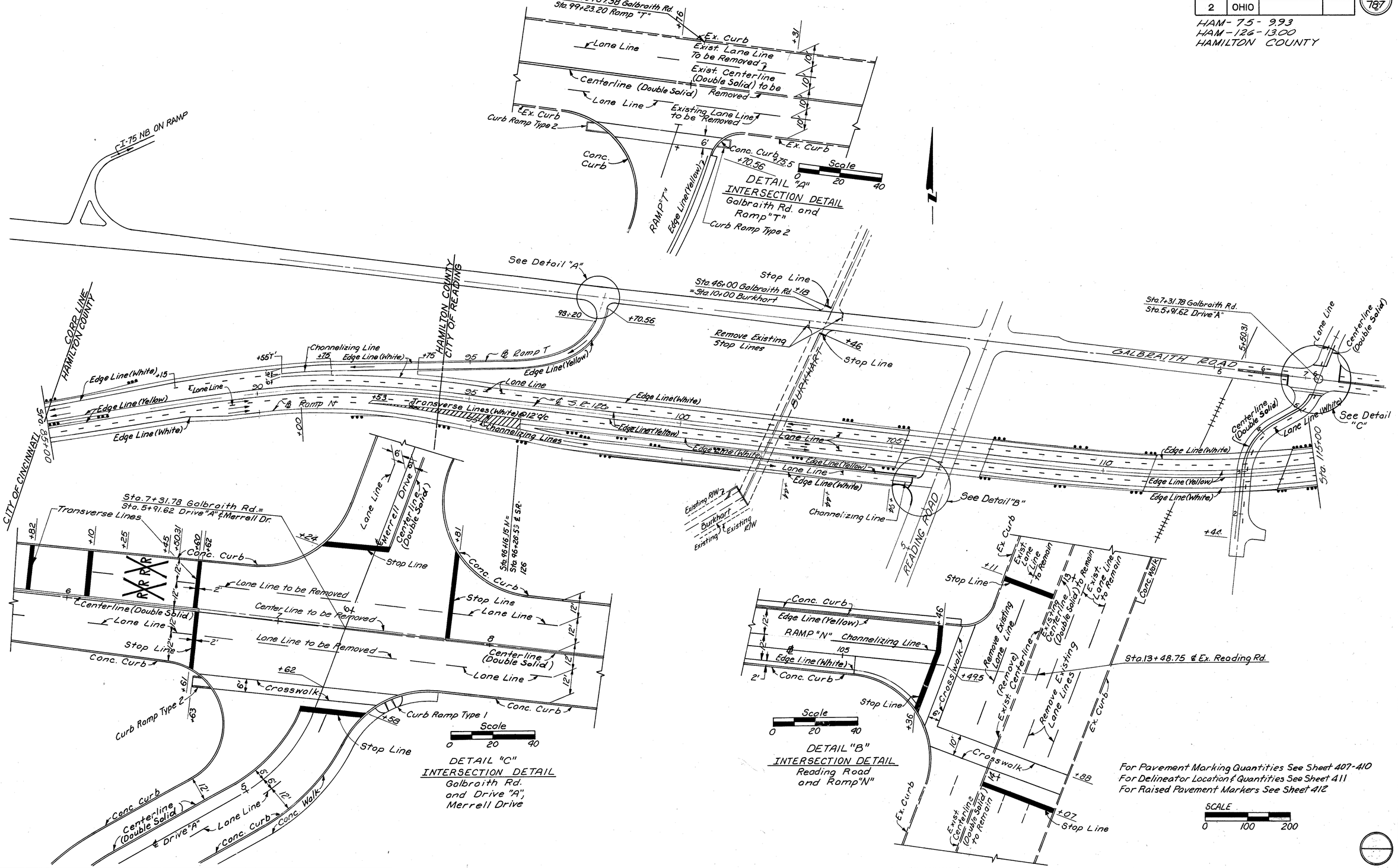
SCALE
0 100 200

PAVEMENT MARKING PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

404
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

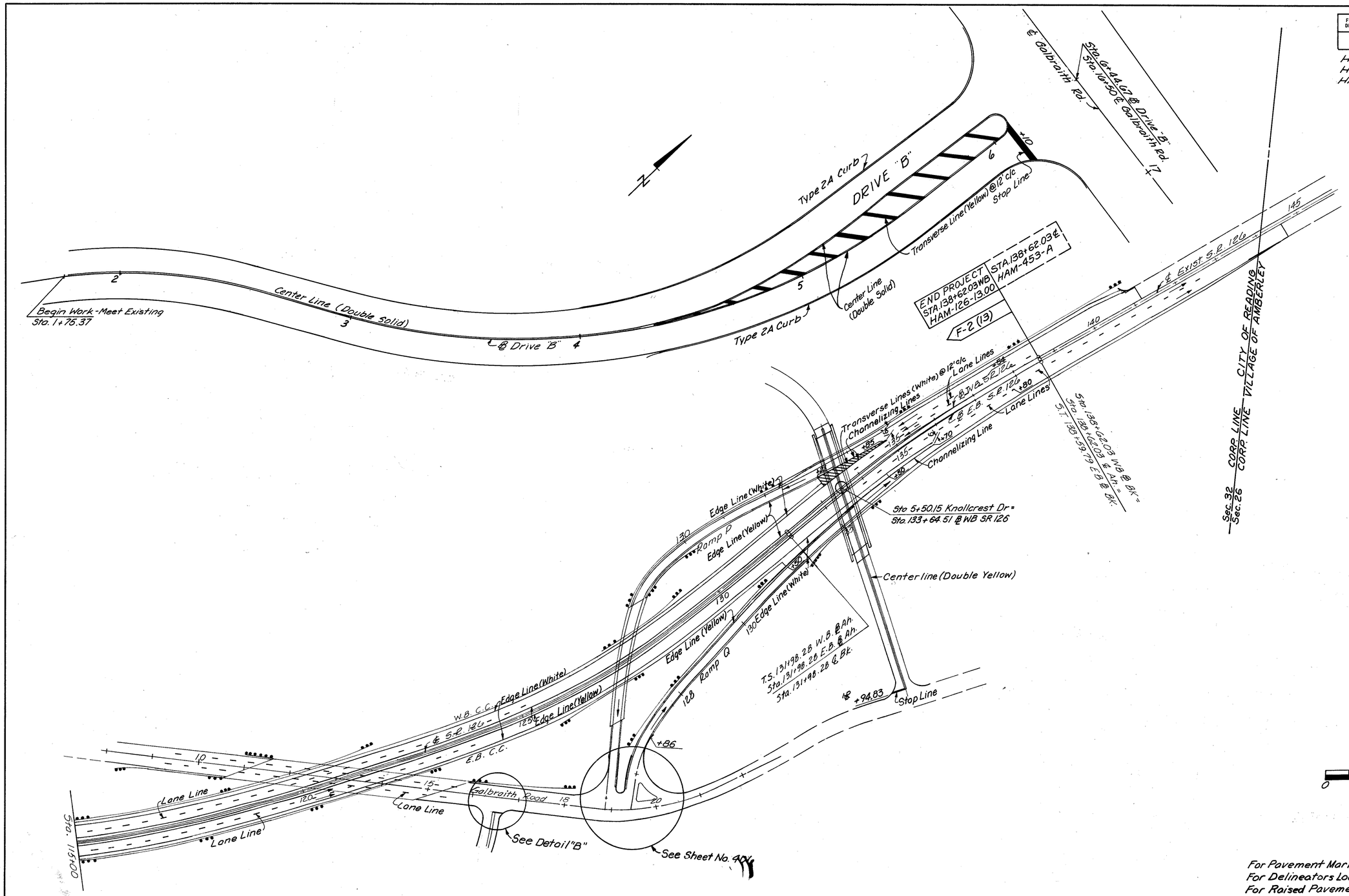


PAVEMENT MARKING PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

405
787

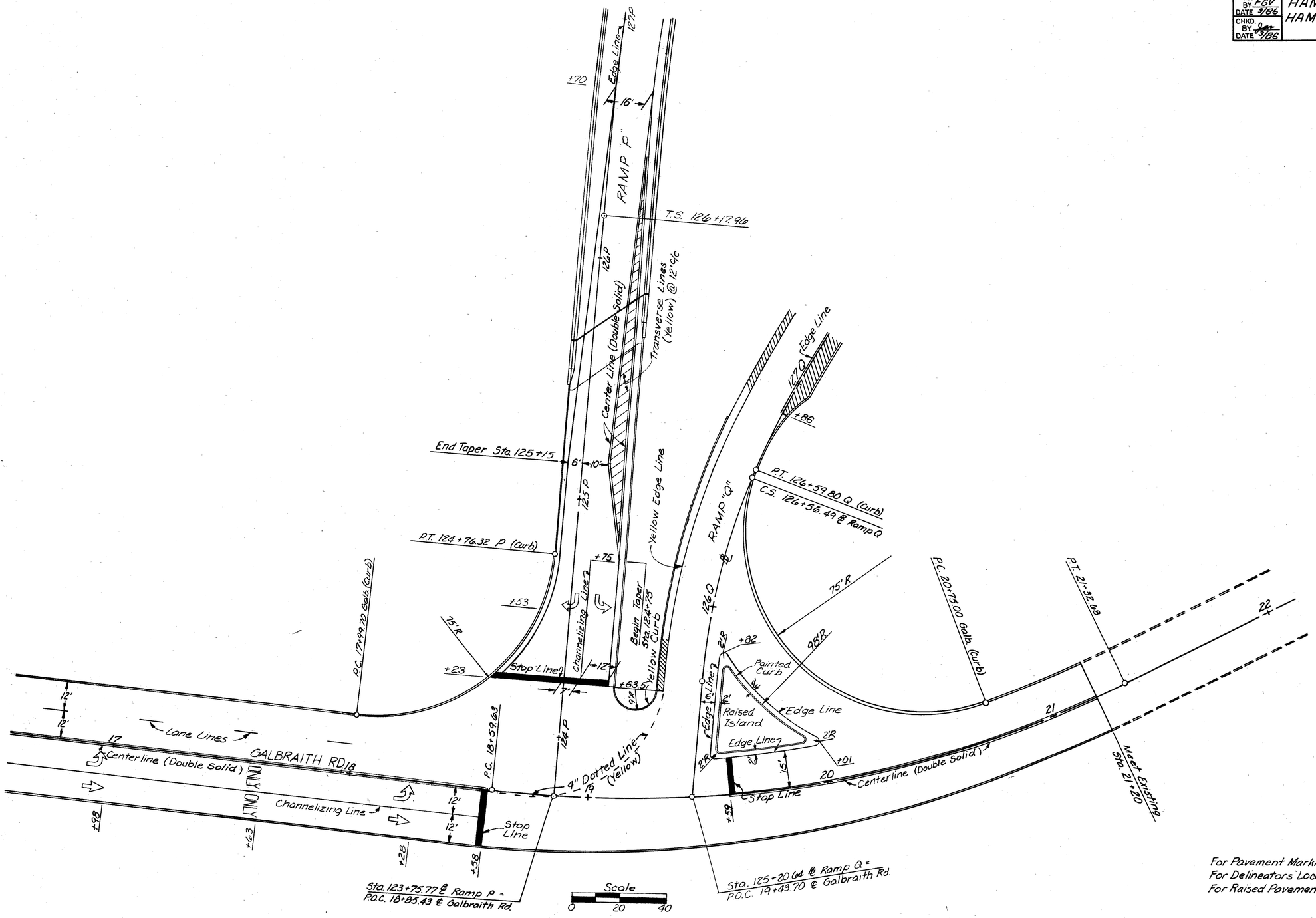
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



For Pavement Marking Quantities See Sheet 407-410
For Delineators Location & Quantities See Sheet 411
For Raised Pavement Markers See Sheet 412

PAVEMENT MARKING PLAN

CALC. BY FGV DATE 9/86	HAMILTON COUNTY	OHIO	406
CHKD. BY [illegible] DATE 9/86	HAM-75/126-9.93/13.00	F.H.W.A. REGION 5	787



For Pavement Marking Quantities See Sheet 407-410
For Delineators Location & Quantities See Sheet 411
For Raised Pavement Markers See Sheet 412

621 PAVEMENT MARKINGS

*PARTICIPATION
1. Project : IR-75-1(96)10
2. Project : F-2(13)

CALC. BY FGV DATE 2/86
CHKD. BY AS DATE 2/86

HAMILTON COUNTY
HAM-75/126 - 9.93/13.00

OHIO
F.H.W.A. REGION 5

407
787

SHEET NO.	STATION TO STATION	SIDE	EDGE LINES (White)	EDGE LINES (Yellow)	LANE LINES			CHANNELIZING LINES			TRANSVERSE LINES (White)														REMOVE EXISTING EDGE LINES											PARTICIPATION*
			L.F.	L.F.	L.F.			L.F.			L.F.														L.F.											
	I-75																																		
401	77+00 — 92+50	Lt&Rt		3100	6200																														
	77+00 — 85+46	Rt.	846																																1
	85+77 — 92+50	Lt.	673																																1
	88+20 — 90+40	Rt.						220			293																								1
	78+00 — 88+20	Rt.																							1020										1
	83+60 — 88+20	Rt.			460																														1
	77+00 — 85+77	Lt.																							877										1
	90+40 — 92+50	Rt.	210																																1
	RAMP "D" & "H"																																		
401	73+70 "D" — 38+40 "H"	Rt.	703																																1
	I-75																																		
402	92+50 — 103+68	Lt&Rt	1118	2236	4472																														
	92+50 — 99+88	Lt.	738																																1
	96+28 — 98+68	Lt.			240																														1
	98+68 — 99+88	Lt.						120																											1
	92+50 — 98+68	Lt.																							618										1
	98+68 — 103+68	Lt.	500																																1
	103+59 NB — 112+70 NB	Rt.	911																																1
	113+61 SB — 122+70 SB	Rt.		909																															1
	113+61 SB — 122+70 SB	Lt.	909																																1
	113+61 SB — 122+70 SB	Lt&Rt			1818																														1
	103+59 NB — 112+70 NB	Lt&Rt			1822																														1
	103+59 NB — 111+07 NB	Lt.		748																															1
	111+07 NB — 112+70 NB	Lt.		163																															1
	101+64 SB — 110+15 "F"	Lt.																																	1
	99+88 "F" — 112+70 "F"	Rt.		1282																					851										1
	52+05 "E" — 54+30 "E"	Rt.		225																															1
	51+68 "E" — 52+05 "E"	Rt.						37																											1
	101+64 "F" — 54+30 "E"	Lt.	1289																																1
	38+40 "H" — 60+00 EB 126	Rt.	2160																																1
	40+40 "H" — 53+10 "H"	Lt.		1270																															1
	53+10 "H" — 54+30 EB 126	Lt.						120																											1
	EB SR 126																																		
	54+30 — 56+70	Rt.			240																														
402	55+00 — 60+00	Rt.		500	500																														1
	Sub-Total Participation 1		10057	10433	15752			497			293														3366										1

TRAFFIC CONTROL SUB SUMMARY

621 PAVEMENT MARKINGS

* PARTICIPATION
1. PROJECT: IR-75-1(96)10
2. PROJECT: F-2(13)

CALC. BY FGV DATE 2/86
CHKD. BY [illegible] DATE 10/86

HAMILTON COUNTY
HAM-75/126-9.93/13.00

OHIO
F.H.W.A. REGION 5

408
787

SHEET NO.	STATION TO STATION	SIDE	EDGE LINES (White)	EDGE LINES (Yellow)	LANE LINES			CHANNELIZING LINES	STOP LINES	CROSSWALK LINES	TRANSVERSE LINES															REMOVE EXISTING EDGE LINES											* PARTICIPATION
			L.F.	L.F.	L.F.			L.F.	L.F.	L.F.	L.F.															L.F.											
	EB SR-126																																			
403	60+00 ~ 63+10	Rt.	310		310																															1
	63+10 ~ 85+00	Rt.	2190		2190																															2
	60+00 ~ 63+10	Lt.		310																																1
	63+10 ~ 85+00	Lt.		2190																																2
	Ramp 'E'																																			
	54+30 ~ 60+78	Rt.		648																																1
	54+30 ~ 60+78	Lt.	648																																	1
	WB SR-126																																			
	60+66 ~ 80+43	Rt.		1977																																1
	80+43 ~ 85+00	Rt.		457																																2
	70+55 ~ 80+43	Lt.	988		988																															1
	80+43 ~ 85+00	Lt.	457		457																															2
	88+15 ~ 90+55	Lt.			240																															2
	I-75 NB																																			
	112+70 ~ 130+00	Lt.		1730																																1
	112+70 ~ 130+00	Lt/Rt.			3460																															1
	112+70 ~ 119+39	Rt.	669																																	1
	119+39 ~ 127+00	Rt.																																		1
	127+00 ~ 130+00	Rt.	300																																	1
	Ramp 'F'																																			1
	112+70 ~ 127+50	Lt/Rt.	1650	1650																																1
	I-75 SB																																			
	122+70 ~ 135+00	Rt		1230																																1
	122+70 ~ 135+00	Lt/Rt.			2460																															1
403	122+70 ~ 135+00	Lt.	1230																																	1
	SR-126																																			
404	85+00 EB ~ 87+24 EB	Rt.		224	224																															2
	85+00 WB ~ 87+44 WB	Lt.		244	244																															2
	87+44 ~ 115+00	Lt/Rt.		5512	5512																															2
	85+00 EB ~ 105+36 'N'	Rt.	2026																																	2
	91+00 ~ 92+53	Rt.			153																															2
	92+53 ~ 96+26	Rt.						746			451																									2
	96+26 ~ 115+00	Rt.	1874																																	2
	85+00 WB ~ 98+20 'T'	Lt.	1320																																	2
	90+55 ~ 91+75 'T'	Lt.						120																												2
	90+55 ~ 115+00	Lt.	2445																																	2
	Ramp 'N'																																			
	96+16 ~ 105+46	Lt.		930																																2
	103+44 ~ 104+94	Lt.			150																															2
	104+94 ~ 105+44	Rt.						50																												2
	105+36 ~ 105+38	Lt/Rt.							42																											2
	105+49 ~ 105+55	Lt/Rt.								101																										2
	Ramp 'T'																																			
	91+75 ~ 98+70	Rt.		695																																2
404	98+73 ~ 98+76	Lt/Rt.								107																										2
	SUB-TOTAL: Participation: 2		10312	10252	9170			916	42	208	451															0										
	SUB-TOTAL: Participation: 1		5795	7545	7218			0	0	0	0															761										

TRAFFIC CONTROL SUB SUMMARY

621 PAVEMENT MARKINGS

* Participation
1. Project: IR-75-1(96)10
2. Project: F-2(13)

CALC. FGV BY DATE 2/86
CHKD. MJS BY DATE 4/10/86

HAMILTON COUNTY
HAM-75/126 - 9.93/13.00

OHIO
F.H.W.A. REGION 5

409/787

SHEET NO.	STATION TO STATION	SIDE	EDGE LINES (White)	EDGE LINES (Yellow)	LANE LINES	4" DOTTED LINES (YELLOW)	CENTER LINES (DOUBLE, SOLID)	CHANNELIZING LINES	STOP LINES	CROSSWALK LINES	TRANSVERSE LINES (White)			CURB MARKING (White)			LANE ARROWS	Word "ONLY"	RAILROAD SYMBOL MARKINGS							REMOVE EXISTING EDGE LINES	DOUBLE (YELLOW) CENTERLINE TO BE REMOVED	LANE LINES TO BE REMOVED	REMOVE EXISTING STOP LINE									*PARTICIPATION
			L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.			L.F.			E.A.	E.A.	E.A.							L.F.	L.F.	L.F.	L.F.								
	Galbraith Road																																			
404	5+50 — 6+63	Lt & Rt.			226		113												2																	2
	5+82 — 6+60	Lt.							67																											2
	6+61 — 6+63	Rt.							28																											2
	7+79 — 7+81	Lt.							41																											2
	6+62 — 7+79	Lt & Rt.																								117	234									2
	7+81 — 8+50	℄					69																													2
	7+81 — 8+50	Lt & Rt.			138																															2
	40+76 — 41+31	Rt.																								55	110									2
	45+72 — 45+74	Rt.																										20								2
	46+47 — 46+49	Lt.																										21								2
	Reading Road																																			
	13+11 —	Rt.							25																											2
	14+07 —	Lt.							36																											2
	13+11 — 14+07	Rt.																								96	96	96								2
	13+11 — 14+07	Lt.																										192								2
	13+88 — 13+98	Lt & Rt.								132																										2
	Burkhart Ave.																																			
	10+18 — 10+20	Rt.							15																											2
404	9+44 — 9+46	Rt.							17																											2
	S.R. - 126																																			
405	115+00 — 143+58	Rt.		2858	2858																															2
	115+00 — 135+70	Rt.	2070																																	2
	134+50 — 143+58	Rt.	908																																	2
	135+70 — 137+80	Rt.			210																															2
	115+00 — 143+58	Lt.		2858	2858																															2
	115+00 — 133+21	Lt.	1821																																	2
	133+21 — 134+85	Lt.						328			188																									2
	135+81 — 143+58	Lt.	777																																	2
	Galbraith Road																																			
	8+50 — 18+58	℄ & Lt.			1008		1008																													2
	8+50 — 16+08	Rt.			758																															2
	16+08 — 18+56	Rt.						248																												2
	19+59 — 21+20	℄					161																													2
	19+59 — 19+61	Lt.							15																											2
	125+82"Q" — 20+01	Rt.	147																																	2
	18+58 — 125+63"Q"	Lt.				95																														2
	16+88 — 18+28	Rt.															4	2																		2
	19+93 — 125+75"Q"	Lt.												127																						2
405	18+56 — 18+58	Rt.							25																											2
415	101+35 — 101+56	Lt.																								21		30								2
415	101+54 — 101+56	Lt.							30																											2
	Ramp "P"																																			
405/706	124+23 — 124+25	Lt & Rt.							48																											2
405/706	124+25 — 124+75	Rt.						50																												2
405/706	124+23 — 126+70	Rt.					442																													2
405	124+25 — 135+81	Lt.	1156																																	2
405	126+70 — 133+21	Rt.		651																																2
405/706	124+53 — 124+63	Rt.															2																			2
	SUB-TOTAL: Participation: 1		0	0	0	0	0	0	0	0	0			0			0	0	0							0	0	0								
	SUB-TOTAL: Participation: 2		6879	6367	8056	95	1793	626	347	132	188			127			6	2	2							96	289	632	71							

TRAFFIC CONTROL SUB SUMMARY

621 PAVEMENT MARKINGS

CALC. BY FGV DATE 2/86 | CHKD BY [illegible] DATE 4/86 | HAMILTON COUNTY HAM-75/126 - 9.93/13.00 | OHIO F.H.W.A. REGION 5 | 410/787

* PARTICIPATION 1. Project: IR-75-1(96)10 2. Project: F-2(13)

SHEET NO.	STATION TO STATION	SIDE	EDGE LINES (White) L.F.	EDGE LINES (Yellow) L.F.	LANE LINES L.F.	4" DOTTED LINE (YELLOW) Lt.	CENTER LINES (DOUBLE, SOLID) L.F.	CHANNELIZING LINES L.F.	STOP LINES L.F.	CROSSWALK LINES L.F.	TRANSVERSE LINES (White) L.F.	CURB MARKING (Yellow) L.F.	CURB MARKING (White) L.F.	LANE ARROWS EA.	WORD "ONLY" EA.	RAILROAD SYMBOL MARKINGS EA.	REMOVE EXISTING EDGE LINES L.F.	DOUBLE(Yellow) CENTERLINE TO BE REMOVED L.F.	LANE LINE TO BE REMOVED L.F.	REMOVE EXISTING STOP LINE L.F.	* PARTICIPATION
	Ramp 'Q'																				
405	125+63 ~ 134+50	Lt.		887																	2
405	134+30 ~ 135+70 EB SR126	Rt.						120													2
405	126+86 ~ 134+50	Rt.	764																		2
405/406	125+54 ~ 125+63	Rt.										30									2
	Knollcrest Drive																				
404	0+97 ~ 10+75	℄					978														2
	0+95 ~ 0+97	Lt.							16												2
	Drive 'A'																				
	1+44 ~ 5+58	℄/Lt.			414		414														2
	5+56 ~ 5+58	Rt.							30												2
	6+32 ~ 6+84	℄/Lt.			52		52														2
	6+24 ~ 6+26	Lt.							31												2
	Drive 'B'																				
	1+75 ~ 4+42	℄					267														2
	4+42 ~ 6+10	Lt/Rt					336				131										2
404	6+08 ~ 6+10	Rt							17												2
	SUB-TOTAL: Participation 1																				
	SUB-TOTAL: Participation 2		764	887	466		2047	120	94		131	30									
	Participation: 2																				
	SUB-TOTAL from Sheet 407		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	SUB-TOTAL from Sheet 408		10312	10252	9170	0	0	916	42	208	451	0	0	0	0	0	0	0	0	0	
	SUB-TOTAL from Sheet 409		6879	6367	8056	95	1793	626	347	132	188	0	127	6	2	2	96	289	632	71	
	SUB-TOTAL from Sheet 410		764	887	466	0	2047	120	94	0	131	30	0	0	0	0	0	0	0	0	
	TOTAL: Participation 2		17955	17506	17692	95	3840	1662	483	340	770	30	127	6	2	2	96	289	632	71	
	TOTAL Miles Participation 2		3.400	3.316	3.351		0.727														
	Participation: 1																				
	SUB-TOTAL from Sheet 407		10057	10433	15752			497			293						3366				
	SUB-TOTAL from Sheet 408		5795	7545	7218			0			0						761				
	SUB-TOTAL from Sheet 409		0	0	0			0			0						0				
	SUB-TOTAL from Sheet 410		0	0	0			0			0						0				
	TOTAL: Participation 1		15852	17978	22970			497			293						4127				
	TOTAL MILES Participation 1		3.002	3.405	4.493																
	TOTAL FEET		33807	35484	40662	95	3840	2159	483	340	1063	30	127	6	2	2	4223	289	632	71	
	TOTAL MILES		6.403	6.720	7.701		0.727														

TRAFFIC CONTROL SUB SUMMARY

SIDE	STATION FROM - TO	SPACING (FEET)	TYPE C	TYPE D
	RAMP "C"			
RT	510+50-32+75	200	6	
LT	32+75-34+25	150		2
LT	35+50-.....	...		1
LT	36+50-.....	...		1
LT	37+20-42+80	70		9
LT	43+65-.....	...		1
RT	43+65-.....	...	1	
RT	44+65-.....	...	1	
RT	46+25-.....	...	1	
	RAMP "D"			
LT	64+60-58+60	200	4	
LT	57+10-.....	...	1	
LT	56+10-.....	...	1	
RT	55+25-54+40	85		2
RT	53+70-.....	...		1
RT	53+20-50+70	50		6
RT	50+00-43+20	85		9
LT	43+60-33+60	200	6	
	RAMP "E"			
RT	68+70-64+70	200	3	
RT	63+85-60+45	85	5	
LT	58+45-108+92	200	5	
	RAMP "F"			
LT	125+00-123+00	200		2
RT	122+45-119+45	100		4
LT	117+95-111+95	200		4
	RAMP "H"			
LT	78+00-37+92	200	8	
RT	39+17-40+42	125	2	
LT	40+45-43+85	85		5
RT	43+85-45+85	200	2	
RT	46+70-50+10	85	5	
RT	51+10-54+10	100	4	

SIDE	STATION FROM - TO	SPACING (FEET)	TYPE C	TYPE D
	RAMP "I"			
LT	45+20-51+20	75		9
RT	51+20-57+20	150	5	
LT	57+20-60+60	85		5
	RAMP "T"			
RT	98+50-96+00	50		6
LT	96+00-92+00	200	3	
	RAMP "N"			
RT	88+20-104+20	200	9	
	RAMP "P"			
LT	141+00-133+00	200	5	
LT	132+00-126+00	100	7	
LT	124+00-.....	...	1	
	RAMP "Q"			
LT	125+68-126+68	50		3
LT	127+68-128+68	100		2
RT	128+68-132+68	200	3	
RT	134+68-.....	...	1	
TOTAL			97	72

DELINEATORS, POST MOUNTED

N71130

SIDE	STATION FROM - TO	SPACING (FEET)	TYPE	QTY
	EASTBOUND 126			
RT	502+95-28+00 E-126 E-126	80	2WY.WH/RED	17
	WESTBOUND 126			
RT	502+66-28+00 W-126 W-126	80	2WY.WH/RED	17
	EXIT RAMP "D" FROM I-75N			
RT	88+20-91+40 I-75N I-75N	40	1WY.WH	9
LT	68+97-70+97 "D" "D"	40	1WY.WH	6
LT	67+67-68+57 "D" "D"	40	1WY.YL	3
	ENTRANCE RAMP "C" TO I-75S			
LT	85+77-86+97 I-75S I-75S	40	1WY.WH	4
LT	87+37-91+77 I-75S I-75S	40	1WY.YL	12
LT	85+77-91+77 I-75S I-75S	40	1WY.WH	16
	EASTBOUND 126			
RT	28+00-42+40 E-126 E-126	80	2WY.WH/RED	19
RT	42+80-55+60 E-126 E-126	40	2WY.WH/RED	32
RT	56+00-60+00 E-126 E-126	80	2WY.WH/RED	6

SIDE	STATION FROM - TO	SPACING (FEET)	TYPE	QTY
	WESTBOUND 126			
LT	28+00-31+20 W-126 W-126	80	2WY.WH/RED	5
LT	31+60-54+00 W-126 W-126	40	2WY.WH/RED	57
	EB 126 TO EXIT RAMP "C"			
LT	28+00-30+40 "C" "C"	40	1WY.WH	14
LT	30+80-31+60 "C" "C"	40	1WY.WH 1WY.YL	3 3
	ENTRANCE RAMP "D" TO WB 126			
RT	31+92-34+32 "D" "D"	40	1WY.WH	14
RT	34+72-35+52 "D" "D"	40	1WY.WH 1WY.YL	3 3
	RAMP "D" TO EXIT RAMP "H"			
LT	64+85-65+65 "D" "D"	40	1WY.WH	9
LT	63+65-64+45 "D" "D"	40	1WY.YL	3
	ENTRANCE RAMP "H" TO EB 126			
LT	50+30-53+10 "H" "H"	40	1WY.YL	16
LT	53+50-54+30 "H" "H"	40	1WY.WH 1WY.YL	3 3
	EXIT RAMP "I" FROM EB 126			
LT	49+48-50+68 E-126 E-126	40	1WY.WH	8
RT	51+08-51+88 "I" "I"	40	1WY.WH 1WY.YL	3 3

SIDE	STATION FROM - TO	SPACING (FEET)	TYPE	QTY
	ENTRANCE RAMP "E" TO RAMP "F"			
RT	51+60-52+00 "E" "E"	40	1WY.WH	2
RT	52+40-54+00 "E" "E"	40	1WY.YL	5
LT	110+08-112+48 I-75S I-75S	40	1WY.WH	7
	ENTRANCE RAMP "F" TO I-75S			
LT	98+68-99+48 I-75S I-75S	40	1WY.WH	3
LT	99+88-107+88 I-75S I-75S	40	1WY.YL	21
LT	98+68-117+81 I-75S I-75S	40	1WY.WH	24
	EASTBOUND 126			
RT	60+80-84+80 E-126 E-126	80	2WY.WH/RED	31
	WESTBOUND 126			
LT	54+40-84+80 W-126 W-126	80	2WY.WH/RED	39
	ENTRANCE RAMP "I" TO I-75N			
RT	114+19-118+59 I-75N I-75N	40	1WY.WH	12
RT	118+59-117+79 I-75N I-75N	40	1WY.WH	3
RT	117+39-61+34 I-75N I-75N	40	1WY.YL	9

RAISED PAVEMENT MARKER QUANTITIES

H71139

SIDE	STATION FROM - TO	SPACING (FEET)	TYPE	QTY
	EXIT RAMP "E" FROM WB 126			
BL	59+80-60+60 W-126 W-126	40	1WY.YL	3
BL	61+00-63+00 W-126 W-126	40	1WY.WH	6
LT	59+84-63+04 W-126 W-126	40	1WY.WH	9
	EASTBOUND 126			
RT	85+20-114+80 E-126 E-126	80	2WY.WH/RED	38
	WESTBOUND 126			
LT	85+20-114+80 W-126 W-126	80	2WY.WH/RED	38
	ENTRANCE RAMP "T" TO WB 126			
LT	90+55-91+35 "T" "T"	40	1WY.WH	3
LT	91+75-94+55 "T" "T"	40	1WY.YL	8
LT	90+55-94+55 "T" "T"	40	1WY.WH	11
	EXIT RAMP "N" FROM EB 126			
RT	92+47-96+07 E-126 E-126	40	1WY.WH	10
RT	96+47-97+27 E-126 E-126	40	1WY.YL	3
RT	92+53-97+33 E-126 E-126	40	1WY.WH	13
	EASTBOUND 126			
RT	115+60-138+00 E-126 E-126	80	2WY.WH/RED	29

SIDE	STATION FROM - TO	SPACING (FEET)	TYPE	QTY
	WESTBOUND 126			
LT	115+60-138+00 W-126 W-126	80	2WY.WH/RED	29
	EXIT RAMP "P" FROM WB 126			
LT	133+25-134+85 W-126 W-126	40	1WY.WH	5
LT	132+05-132+85 W-126 W-126	40	1WY.YL	3
LT	132+05-134+85 W-126 W-126	40	1WY.WH	8
	ENTRANCE RAMP "Q" TO EB 126			
RT	131+70-132+50 E-126 E-126	40	1WY.YL	3
RT	132+90-135+70 E-126 E-126	40	1WY.WH	8
RT	131+70-135+70 E-126 E-126	40	1WY.WH	11

RAISED PAVEMENT MARKER QUANTITIES

M71130

CALC. BY FGV	HAMILTON COUNTY	OHIO	414
DATE 3/86	HAM-75/126-9.93/13.00	FHWA REGION 5	787
CHKD. BY			
DATE 3/86			

LEGEND FOR SIGNALS AND SUPPORTS

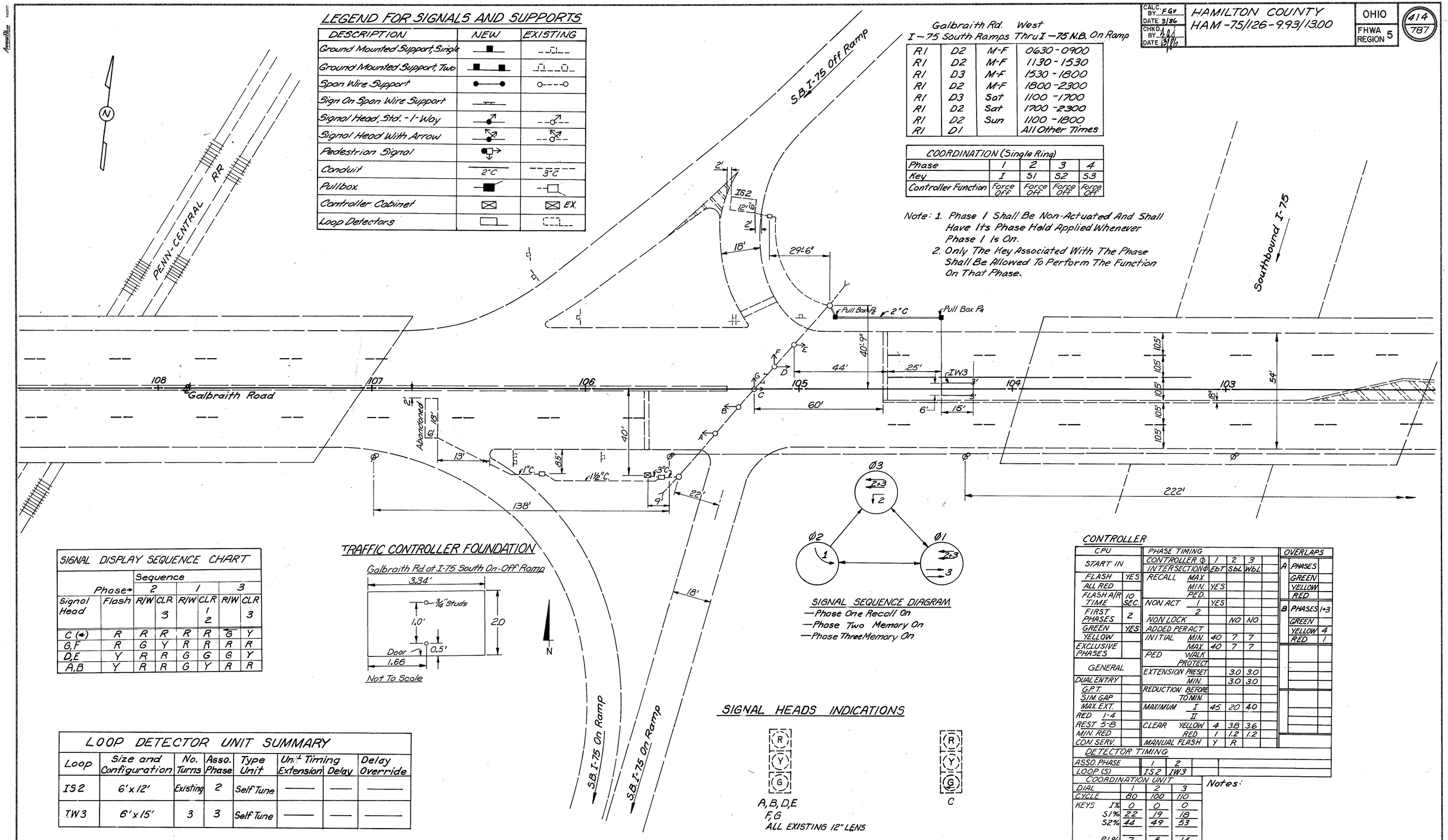
DESCRIPTION	NEW	EXISTING
Ground Mounted Support, Single	■	
Ground Mounted Support, Two	■ ■	
Span Wire Support	●——●	○——○
Sign On Span Wire Support	═	
Signal Head, Std. - 1-Way		
Signal Head With Arrow		
Pedestrian Signal		
Conduit	2"C	3"C
Pullbox	■	
Controller Cabinet	⊠	⊠ EX.
Loop Detectors	▭	▭

Galbraith Rd. West
I-75 South Ramps Thru I-75 N.B. On Ramp

R1	D2	M-F	0630 - 0900
R1	D2	M-F	1130 - 1530
R1	D3	M-F	1530 - 1800
R1	D2	M-F	1800 - 2300
R1	D3	Sat	1100 - 1700
R1	D2	Sat	1700 - 2300
R1	D2	Sun	1100 - 1800
R1	D1		All Other Times

COORDINATION (Single Ring)				
Phase	1	2	3	4
Key	1	51	52	53
Controller Function	Force Off	Force Off	Force Off	Force Off

Note: 1. Phase 1 Shall Be Non-Actuated And Shall Have Its Phase Hold Applied Whenever Phase 1 Is On.
2. Only The Key Associated With The Phase Shall Be Allowed To Perform The Function On That Phase.



SIGNAL DISPLAY SEQUENCE CHART

Phase →	Sequence 2		1		3	
Signal Head	Flash	R/W	CLR 3	R/W	CLR 1 2	R/W	CLR 3
C (→)	R	R	R	R	R	G	Y
G, F	R	G	Y	R	R	R	R
D, E	Y	R	R	G	G	G	Y
A, B	Y	R	R	G	Y	R	R

TRAFFIC CONTROLLER FOUNDATION

Galbraith Rd at I-75 South On-Off Ramp

Not To Scale

SIGNAL SEQUENCE DIAGRAM
—Phase One Recall On
—Phase Two Memory On
—Phase Three Memory On

SIGNAL HEADS INDICATIONS

CONTROLLER

CPU		PHASE TIMING				OVERLAPS	
START IN		CONTROLLER Φ	1	2	3	A	PHASES
		INTERSECTION Φ	EbT	SbL	WbL		GREEN
FLASH	YES	RECALL MAX.					YELLOW
ALL RED		MIN.	YES				RED
FLASH A/R TIME	10 SEC.	PED.				B	PHASES 1+3
FIRST PHASES	2	NON ACT 1	YES				GREEN
GREEN	YES	2					YELLOW 4
YELLOW		NON LOCK		NO	NO		RED 1
EXCLUSIVE PHASES		ADDED PER ACT					
GENERAL		INITIAL MIN.	40	7	7		
DUAL ENTRY		MAX.	40	7	7		
G.P.T.		PED WALK					
SIM. GAP		PROTECT					
MAX. EXT.		EXTENSION PRESET		3.0	3.0		
RED 1-4		MIN.		3.0	3.0		
REST 5-8		REDUCTION BEFORE TO MIN.					
MIN. RED		MAXIMUM I	45	20	40		
CON. SERV.		II					
		CLEAR YELLOW	4	3.8	3.6		
		RED	1	1.2	1.2		
		MANUAL FLASH	Y	R			

DETECTOR TIMING		
ASSO. PHASE	1	2
LOOP (S)	IS2	IW3

COORDINATION UNIT			
DIAL	1	2	3
CYCLE	80	100	110
KEYS I%	0	0	0
S1%	22	19	18
S2%	44	49	33
R1%	7	5	14

Notes:

LOOP DETECTOR UNIT SUMMARY

Loop	Size and Configuration	No. Turns	Asso. Phase	Type Unit	Unit Timing Extension	Unit Timing Delay	Delay Override
IS2	6'x12'	Existing	2	Self Tune	——	——	——
IW3	6'x15'	3	3	Self Tune	——	——	——

SCALE
0 20 40

Note: For Quantity See Sheet No. 432

TRAFFIC SIGNAL PLAN
S.B. I-75 OFF & ON RAMPS AND GALBRAITH RD.

CALC. BY FGV	DATE 3/86	HAMILTON COUNTY	OHIO	415
CHKD. BY [illegible]	DATE 3/86	HAM-75/126-9.93/13.00	FHWA REGION 5	787

CONTROLLER

CPU		PHASE TIMING		1	2	3	4	5	6	7	8
START IN		CONTROLLER ϕ		1	2	3	4	5	6	7	8
		INTERSECTION ϕ		E/W	NbL						
FLASH	Yes	RECALL	MAX.								
ALL RED	—		MIN.	Yes							
FLASH/AR TIME	10 SEC.		PED.								
		NON ACT	1	Yes							
FIRST PHASES	2		2								
GREEN	Yes	NON-LOCK			No						
YELLOW		ADDED PER ACT		—	—						
EXCLUSIVE PHASES		INITIAL	MIN.	40	8						
			MAX.	40	8						
GENERAL		PED	WALK	—	—						
			PROTECT	—	—						
DUAL ENTRY		EXTENSION	PRESET	—	3						
G.P.T.			MIN.	—	3						
SIM. GAP		REDUCTION	BEFORE	—	—						
MAX. EXT.			TO MIN.	—	—						
RED 1-4		MAXIMUM	I	60	50						
REST 5-8			II								
MIN. RED		CLEAR	YELLOW	4	4						
CON. SERV.			RED	1	1						
		MANUAL FLASH		Y	R						

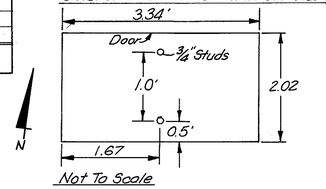
OVERLAPS		
A	PHASES	
	GREEN	
	YELLOW	
	RED	
B	PHASES	
	GREEN	
	YELLOW	
	RED	
C	PHASES	
	GREEN	
	YELLOW	
	RED	
D	PHASES	
	GREEN	
	YELLOW	
	RED	

COORDINATION UNIT			
DIAL	1	2	3
CYCLE	80	100	110
KEYS I %	0	0	0
S1 %	25	30	48
R1 %	6	6	15
TRANSFER			

RECORD OF TRAFFIC SIGNAL OPERATION

TRAFFIC CONTROLLER FOUNDATION

Galbraith Rd. at I-75 North Off Ramp



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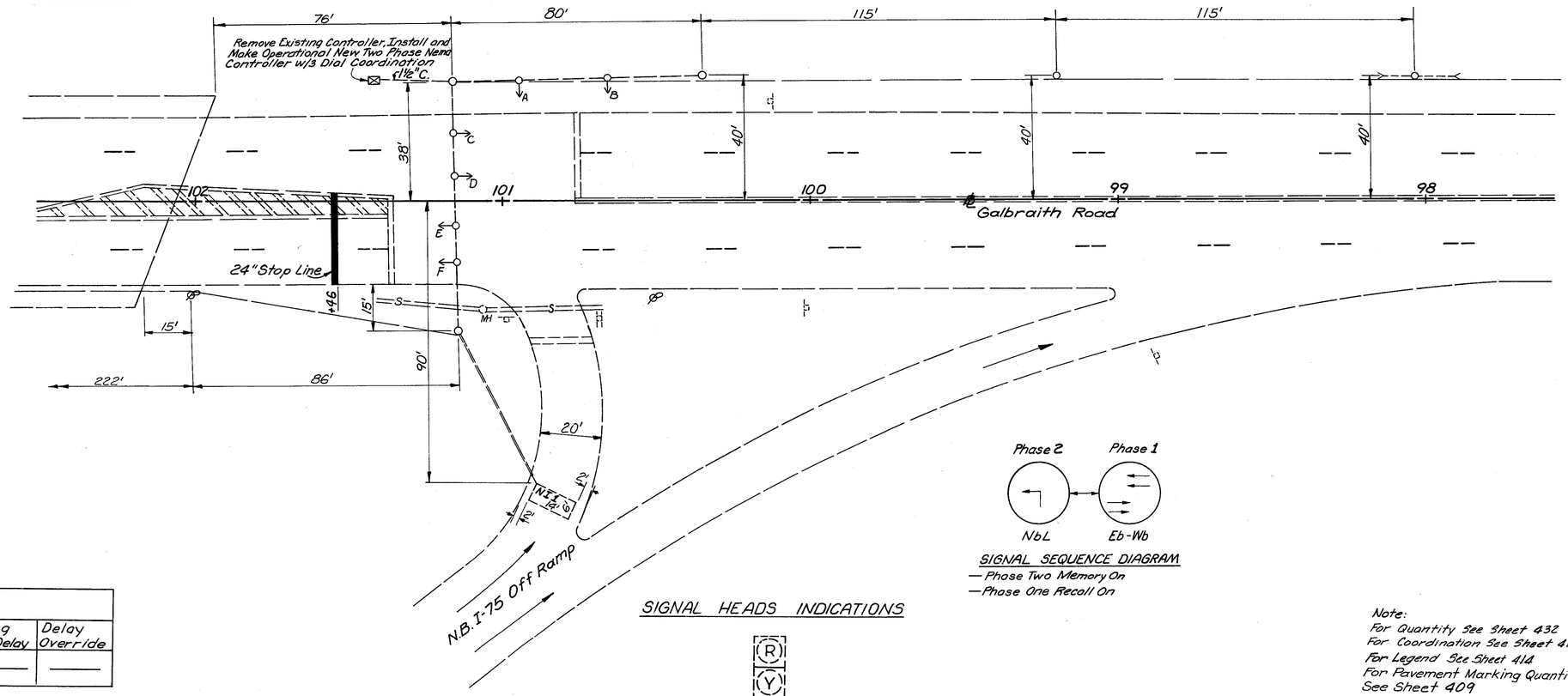


SIGNAL DISPLAY SEQUENCE CHART							
		Sequence					
Phase→		2		1		——	
Signal Head	Flash	R/W	CLR 1	R/W	CLR 2		
A,B	R	G	Y	R	R	—	—
C,D,E,F	Y	R	R	G	Y	—	—

LOOP DETECTOR UNIT SUMMARY							
Loop	Size and Configuration	No. Turns	Asso. Phase	Type Unit	Unit Timing Extension	Delay	Delay Override
NI1	6' x 14'	Existing	2	Self Tune	——	——	——

Note: Entire Intersection Is Within R/W Limits.

SIGNAL HEADS INDICATIONS

A, B, C, D
E, F
ALL EXISTING 12" LENS

SIGNAL SEQUENCE DIAGRAM
— Phase Two Memory On
— Phase One Recall On

Note:
For Quantity See Sheet 432
For Coordination See Sheet 414
For Legend See Sheet 414
For Pavement Marking Quantities See Sheet 409

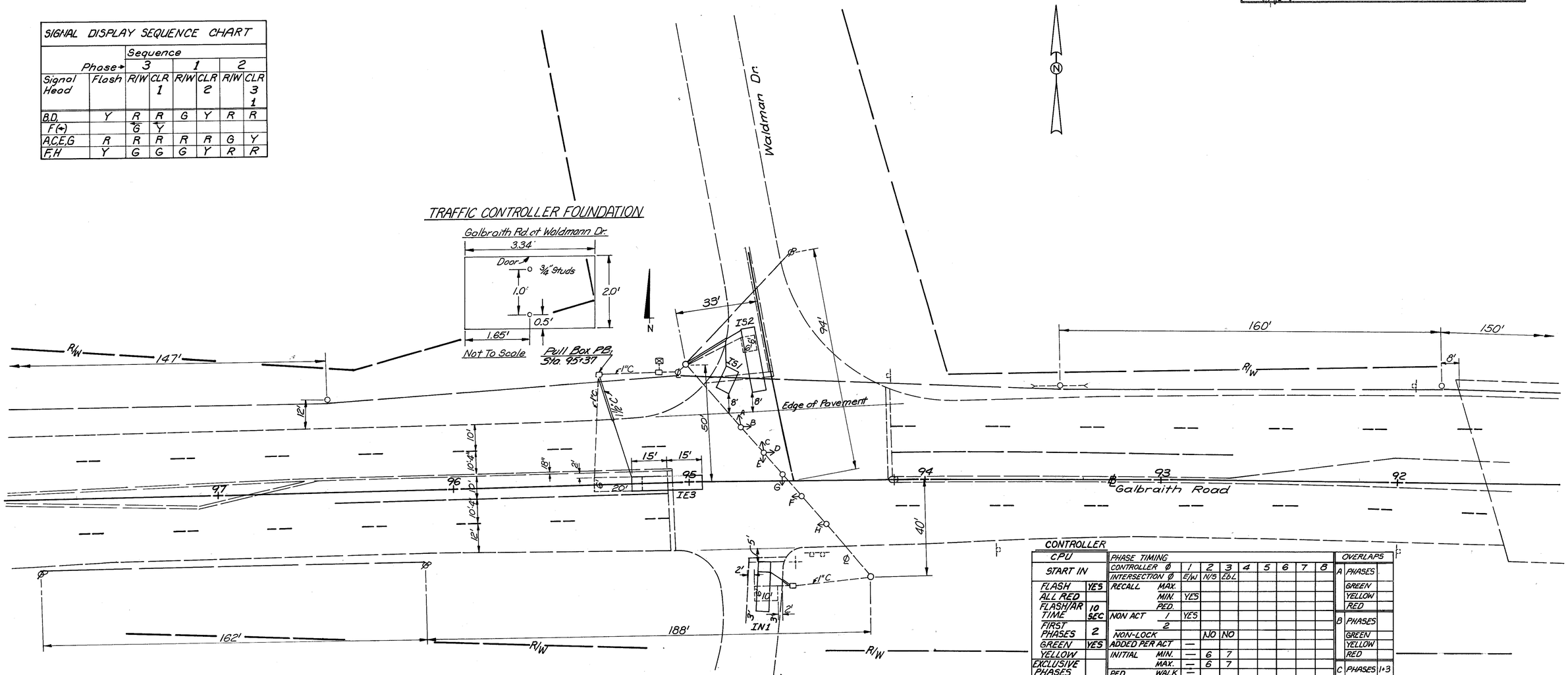
Scale
0 20 40

TRAFFIC SIGNAL PLAN
N.B. I-75 OFF RAMP AND GALBRAITH RD.

CALC. BY FGV	HAMILTON COUNTY	OHIO	410
DATE 3/86	HAM-75/126-9.93/13.00	FHWA REGION 5	787
CHKD BY [illegible]			
DATE 3/86			

SIGNAL DISPLAY SEQUENCE CHART

Phase →		Sequence 3		1		2	
Signal Head	Flash	R/W	CLR 1	R/W	CLR 2	R/W	CLR 3 1
B,D	Y	R	R	G	Y	R	R
F (←)		G	Y				
A,C,E,G	R	R	R	R	R	G	Y
F,H	Y	G	G	G	Y	R	R

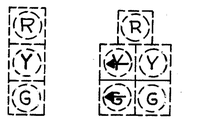


LOOP DETECTOR UNIT SUMMARY

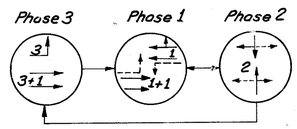
Loop	Size and Configuration	No. Turns	Asso. Phase	Type Unit	Unit Timing Extension	Unit Timing Delay	Delay Override	Associated Loop Detector Unit
IS1	6'x10'	3	2	Self Tune			8	1
IS2	6'x27'	2	2	Self Tune w/Delay	2.8		3	2 *
IE3	6'x30'	2	3	Self Tune	3.0			3 *
IN1	6'x20'	2	2	Self Tune w/Delay	2.8		3	2 *

* Existing Loop Detector Unit.

SIGNAL HEADS INDICATIONS

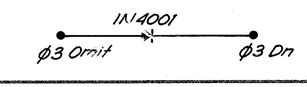


ALL EXISTING 12" LENS



SIGNAL SEQUENCE DIAGRAM

—Phase One recall
—Phases Three and Two Memory Off
—Phase Three Omit" Shall Be Connected To "Phase One On"



CONTROLLER

CPU		PHASE TIMING		1	2	3	4	5	6	7	8
START IN		CONTROLLER Ø									
		INTERSECTION Ø		E/W	N/S	Ebl					
FLASH	YES	RECALL	MAX.								
ALL RED			MIN.	YES							
FLASH/AR TIME	10 SEC		PED.								
FIRST PHASES	2	NON ACT	1	YES							
GREEN	YES		2								
YELLOW		NON-LOCK			NO	NO					
EXCLUSIVE PHASES		ADDED PER ACT		—							
		INITIAL	MIN.	—	6	7					
GENERAL			MAX.	—	6	7					
		PED	WALK	—							
			PROTECT	—							
DUAL ENTRY		EXTENSION	PRESET	—	2.8	3.0					
G.P.T.			MIN	—	2.8	3.0					
SIM.GAP		REDUCTION	BEFORE	—							
MAX.EXT.			TO MIN.	—							
RED 1-4		MAXIMUM	I	—	18	20					
REST 5-8			II								
MIN. RED		CLEAR	YELLOW	4	3.8	3.6					
CON. SERV.			RED	1	1.2	1.2					
		MANUAL FLASH		Y	R	—					

OVERLAPS		
A	PHASES	
	GREEN	
	YELLOW	
	RED	
B	PHASES	
	GREEN	
	YELLOW	
	RED	
C	PHASES	1+3
	GREEN	
	YELLOW	3.6
	RED	1.2
D	PHASES	
	GREEN	
	YELLOW	
	RED	

COORDINATION UNIT			
DIAL	1	2	3
CYCLE	80	100	110
KEYS 1%	0	0	0
51%			
S2%	39	39	36
S1%	22	21	18
R1%	18	20	94
R2%			
R3%			
TRANSFER			

NOTES

Phase Three Omit Shall Be Connected To Phase One On w/Diode.

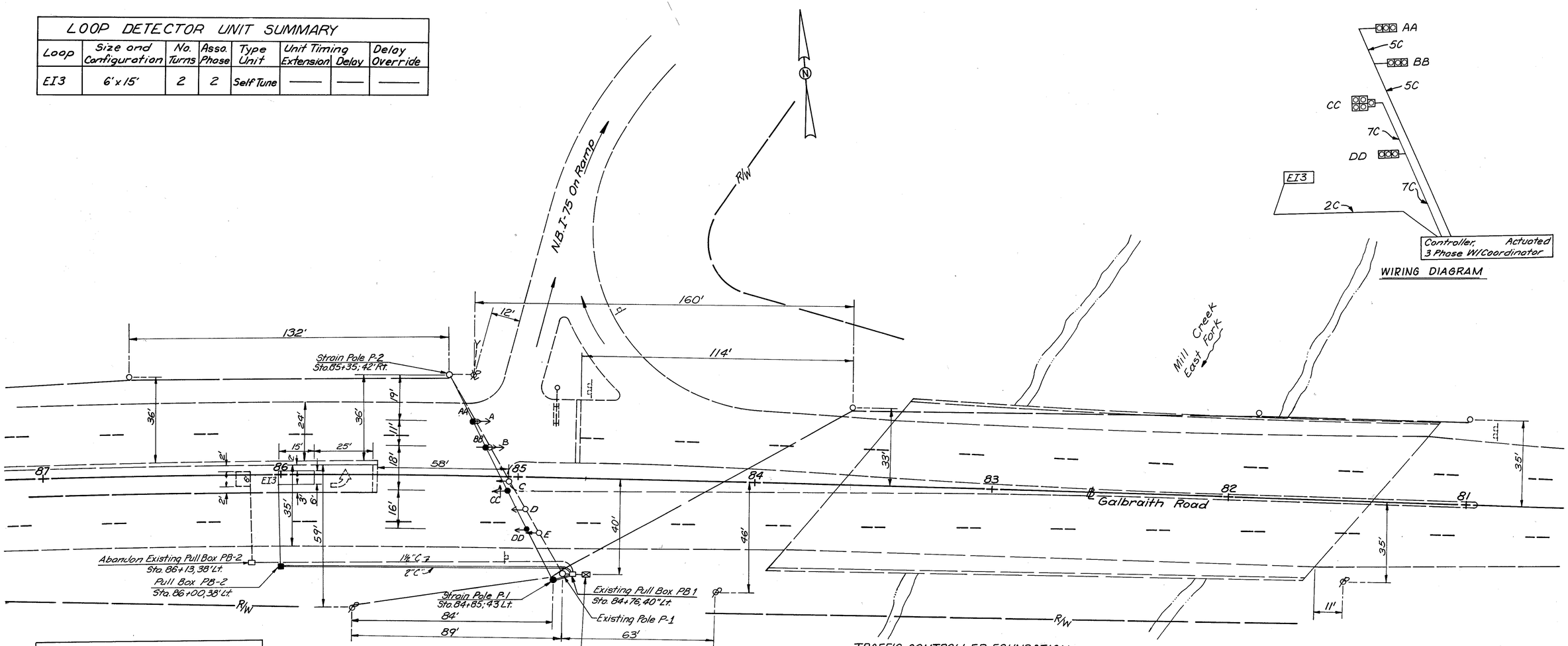
Note:
For Quantity See Sheet 432
For Coordination See Sheet 414
For Legend See Sheet 414

TRAFFIC SIGNAL PLAN
WALDMAN DR., FACTORY DR. AND GALBRAITH RD.

CALC. BY FGV	HAMILTON COUNTY	OHIO	417
DATE 3/86	HAM-75/126-9.93/13.00	FHWA REGION 5	787
CHKD BY [illegible]			
DATE 12/18/86			

LOOP DETECTOR UNIT SUMMARY

Loop	Size and Configuration	No. Turns	Asso. Phase	Type Unit	Unit Timing Extension	Unit Timing Delay	Delay Override
EI3	6'x15'	2	2	Self Tune	——	——	——



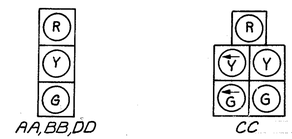
WIRING DIAGRAM

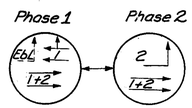
SIGNAL DISPLAY SEQUENCE CHART

Phase →		Sequence 2		Sequence 1			
Signal Head	Flash	R/W	CLR 1	R/W	CLR 2	——	——
AA,BB	Y	R	R	G	Y	—	—
CC	Y	G	G	G	G	—	—
CC (←)	——	◀G	◀G	—	—	—	—
DD	Y	G	G	G	G	—	—

NOTE: Overlap 1+2 is To be Connected To The Solid Circular Indications of Signal Head "CC" and Connected To The New Three Section Head "DD"

SIGNAL HEADS INDICATIONS

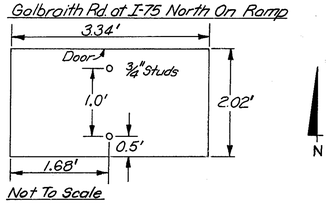




SIGNAL SEQUENCE DIAGRAM
—Phase One Recall
—Phase Two Memory Off

TRAFFIC CONTROLLER FOUNDATION

Galbraith Rd. at I-75 North On Ramp



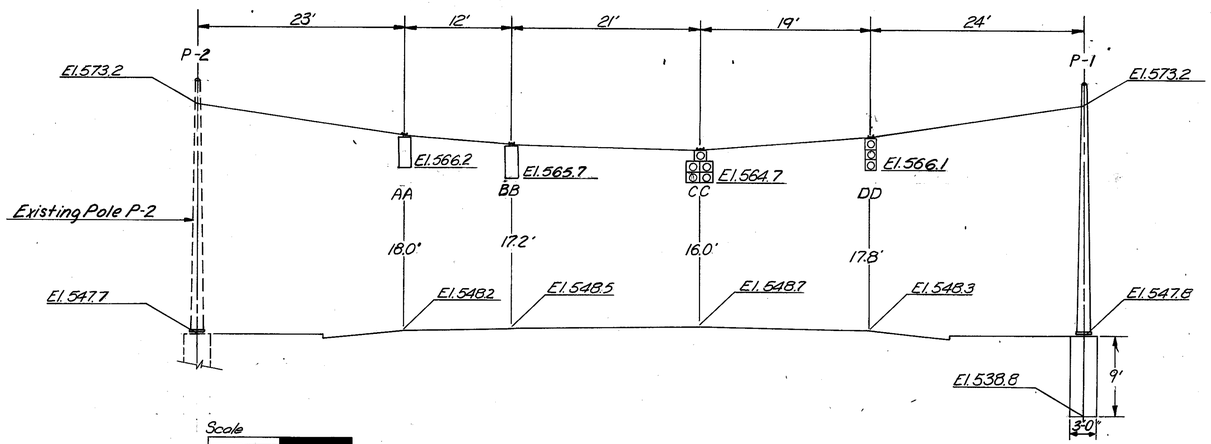
Not To Scale

Note:
For Quantity See Sheet 432
For Coordination See Sheet 414
For Legend See Sheet 414

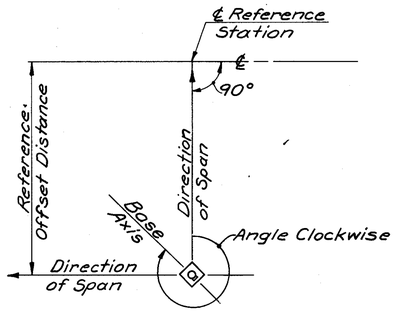
Scale
0 20 40

TRAFFIC SIGNAL PLAN
N.B. I-75 ON RAMP AND GALBRAITH RD.

CALC BY FGV	HAMILTON COUNTY	OHIO	418
DATE 3/86	HAM-75/126-9.93/13.00	FHWA REGION 5	787
CHKD BY [illegible]			
DATE 3/86			



POLE SIZE AND FOUNDATION ELEVATIONS							ORIENTATION OF ACCESSORIES									
Pole No.	Pole Design	Pole Size	Elevation Top of Foundation	Elevation Bottom of Foundation	Attachment Height	Unloaded Rake on Pole	Hand Hole	Coupling 1½"	Coupling 2"	Coupling 2"	Coupling 2½"	Base Axis	Span Wire Attach		Found. Ells 2"	Found. Ells 3"	Found. Ells 1"
P-1	5	12"x28'-0"	547.8	538.8	573.2	3.8"	150°		330°			330°	330°		74°		180°



POLE ORIENTATION
For Table See This Sheet

SIGNAL HEAD MOUNTING DATA				
Signal	Pav't Elev. Below Signal	1½" Drop Cond. Length for Signal	Actual Clearance From Pav't	Elevation Bottom of Signal
AA	548.2	—	18.0'	566.2
BB	548.5	—	17.2'	565.7
CC	548.7	—	16.0'	564.7
DD	548.3	—	17.8'	566.1

CONTROLLER

CPU		PHASE TIMING									OVERLAPS	
START IN		CONTROLLER ϕ	1	2	3	4	5	6	7	8	A	PHASES
		INTERSECTION ϕ	Wb	EBL								GREEN
FLASH	YES	RECALL MAX.										YELLOW
ALL RED		MIN.	YES									RED
FLASH/AR		PED									B	PHASES
TIME	10 Sec	NON ACT 1	YES									GREEN
FIRST		2										YELLOW
PHASES	1	NON-LOCK		YES								RED
GREEN	YES	ADDED PER ACT	—	—							C	PHASES 1+2
YELLOW		INITIAL MIN.	40	8								GREEN
EXCLUSIVE PHASES		MAX.	40	8								YELLOW 4
GENERAL		PED WALK	—	—								RED 1
		PROTECT	—	—							D	PHASES
DUAL ENTRY		EXTENSION PRESET	—	3								GREEN
G.P.T.		MIN.	—	3								YELLOW
S/M. GAP		REDUCTION BEFORE	—	—								RED
MAX. EXT.		TO MIN.	—	—								
RED 1-4		MAXIMUM I	50	50								
REST 5-8		II	—	—								
MIN. RED		CLEAR YELLOW	4	3.6								
CON. SERV.		RED	1	1.2								
		MANUAL FLASH	Y	—								

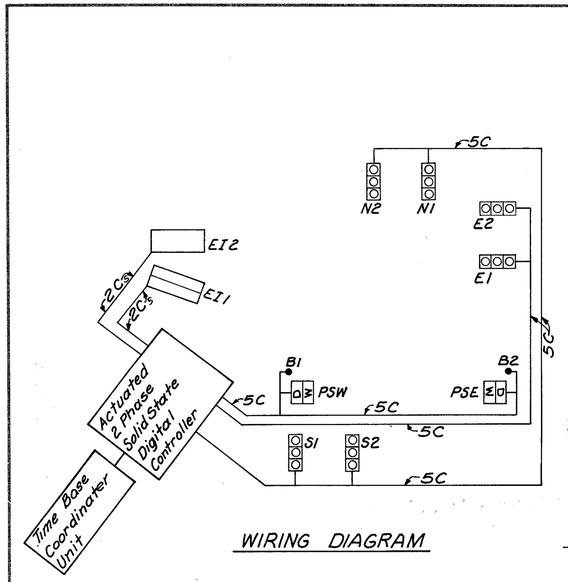
DETECTOR TIMING										
ASSO PHASE										
LOOP(S)										
EXTENSION										
DELAY										
OVER-RIDE ϕ'(S)										

COORDINATION UNIT			
DIAL	1	2	3
CYCLE	80	100	110
KEYS I%	0	0	0
S1%	32	48	30
S2%			
S3%			
R1%	2	90	77
R2%			
R3%			
TRANSFER			

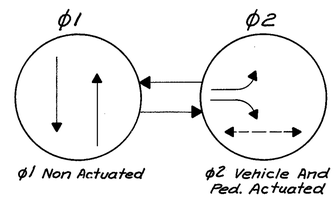
NOTES

TRAFFIC SIGNAL PLAN
NB I-75 ON RAMP AND GALBRAITH RD.

CALC. BY FGV DATE 5/86	HAMILTON COUNTY	OHIO	419
CHKD. BY DATE 5/86	HAM-75/126 - 9.93/13.00	FHWA REGION 5	787



WIRING DIAGRAM



PHASE SEQUENCE

SIGNAL DISPLAY CHART										
		SIGNAL HEAD	FLASH	1				2			
NORTH & SOUTH	VEHICLE	N1, N2 S1, S2				R	R	R	R	R
			Y		Y					
				G						
EAST & WEST	VEHICLE	E1, E2		R	R	R	R			R
									Y	
								G	G	
	PED.	PSE, PSW	DARK	DW	DW	DW	DW	FDW	DW	DW
			DARK					W		

R-26A-30 30"x36" ES2

R-27A-30 30"x36" ES1

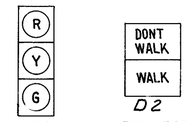
OVERHEAD SIGNS

LOOP DETECTOR UNIT SUMMARY							
Loop	Size and Configuration	No. Turns	Asso. Phase	Type Unit	Unit Timing Extension	Unit Timing Delay	Delay Override
EI1*	10'x23'	2	2	Delay & Extension	3.0	10	———
EI2	6'x32'	2	2	Standard	———	———	———

*Quadrupole

Note For Coordination See Sheet No 424

For Traffic Signal Quantity See Sheet No 433



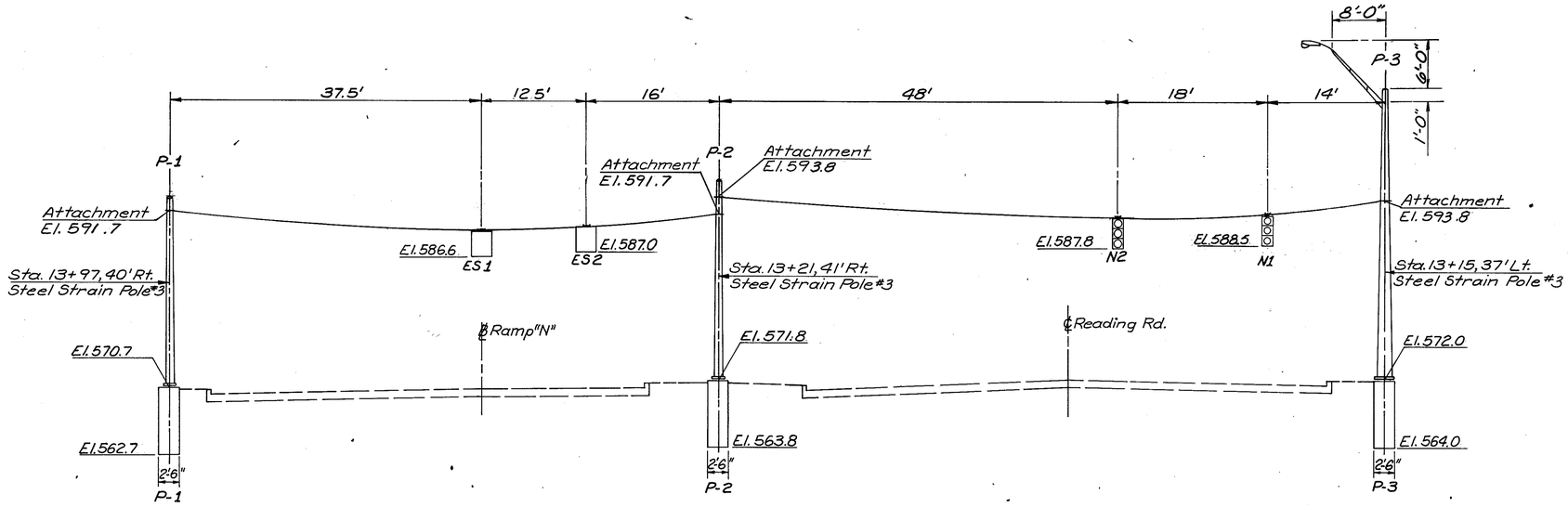
SIGNAL HEADS

Scale 0 20 40

TRAFFIC SIGNAL PLAN
S.R. 126 OFF RAMP "N" AT READING RD.

CALC BY FGV	HAMILTON COUNTY	OHIO
DATE 3/86	HAM-75/126 - 9.93/13.00	FHWA REGION 5
CHKD BY [illegible]		
DATE 3/86		

420 / 787

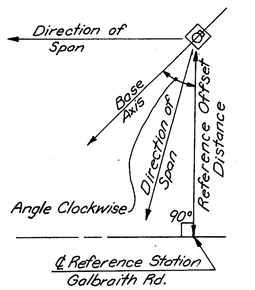


Scale 0 5 10 20

ELEVATION

POLE SIZE AND FOUNDATION ELEVATIONS							ORIENTATION OF ACCESSORIES													
Pole No.	Pole Design	Pole Size	Elevation Top of Foundation	Elevation Bottom of Foundation	Attachment Height	Unloaded Rake on Pole	Hand Hole	Coupling 1½"	Coupling 2"	Coupling 2"	Coupling 2½"	Base Axis	Span Wire Attach		Found. Ells 2"	Found. Ells 3"	Found. Ells 1"	Pedestrian Push Button	Luminaire	
P-1	3	10'x23'	570.7	562.7	591.7	3.4"	146°	358°	270°	358°		326°	270°	358°		197°	90°	0	—	
P-2*	3	10'x24'	571.8	563.8	593.8	2.6"	216°		349°	90°		36°	349°	90°	300°		160°	—	—	
P-3	3	10'x34'-6"	572.0	564.0	593.2	3.1"	131°		271°	348°		311°	271°	348°	0°		80°	—	—	0
P-4	3	10'x24'	570.1	562.1	592.0	3.4"	212°		357°	91°		32°	357°	91°	350°		45°	0	—	

* Combination Strain Pole Design Type TC-81.10 (With Light Luminaire)



POLE ORIENTATION

For Table See This Sheet

SIGNAL HEAD MOUNTING DATA				
Signal	Pav't Elev. Below Signal	1½" Drop Cond. Length for Signal	Actual Clearance From Pav't	Elevation Bottom of Signal
ES1	570.6	—	16.0	586.6
ES2	570.8	—	16.2	587.0
N2	571.8	—	16.0	587.8
N1	571.4	—	17.0	588.5

CONTROLLER

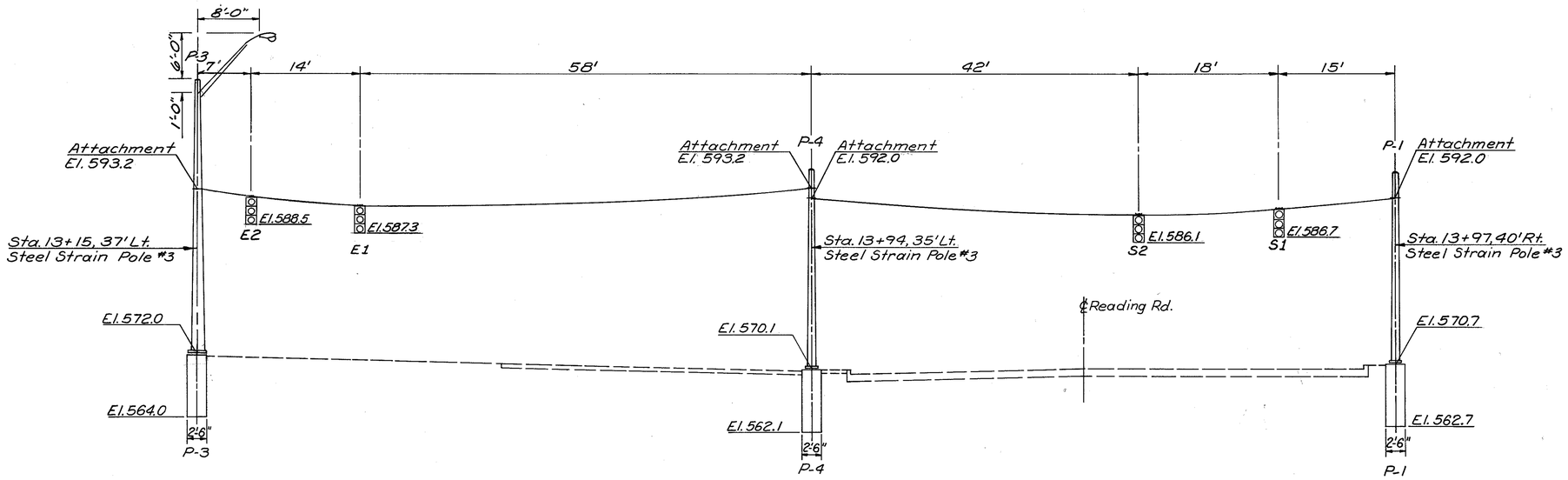
CPU		PHASE TIMING										OVERLAPS
START IN		CONTROLLER ϕ	1	2	3	4	5	6	7	8		A PHASES
		INTERSECTION ϕ	N/S	E/b								GREEN
FLASH	YES	RECALL MAX.										YELLOW
ALL RED		MIN.										RED
FLASH/AR		PED										
TIME	10sec	NON ACT 1		YES								B PHASES
FIRST		2										GREEN
PHASES	1	NON-LOCK		YES								YELLOW
GREEN	YES	ADDED PER ACT		—								RED
YELLOW		INITIAL MIN.	—	8								
EXCLUSIVE		MAX.	—	8								C PHASES
PHASES		PED WALK	—	7								GREEN
GENERAL		PROTECT	—	13								YELLOW
		EXTENSION PRESET	—	3								RED
DUAL ENTRY		MIN.	—	3								
G.P.T.		REDUCTION BEFORE	—	—								D PHASES
SIM. GAP		TO MIN.	—	—								GREEN
MAX. EXT.		MAXIMUM I	—	17								YELLOW
RED 1-4		II	—	—								RED
REST 5-8		CLEAR YELLOW	4	4								
MIN. RED		RED	1	1								
CON. SERV.		MANUAL FLASH	Y	Y								

DETECTOR TIMING											
ASSO PHASE	2	2									
LOOP (S)	ET 1	ET 2									
EXTENSION	—	—									
DELAY	10	—									
OVER-RIDE ϕ (S)	—	—									

COORDINATION UNIT				NOTES
DIAL	1	2	3	
CYCLE	80	100	110	
KEYS I %	0	0	0	
S1 %	25	20	19	
S2 %	—	—	—	
S3 %	—	—	—	
R1 %	33	38	38	
R2 %	—	—	—	
R3 %	—	—	—	
TRANSFER				

TRAFFIC SIGNAL DETAILS
S.R. 126 OFF RAMP "N" AT READING RD.

CALC. BY FGV	HAMILTON COUNTY	OHIO	421
DATE 3/86	HAM-75/126 - 9.93/13.00	FHWA REGION 5	787
CHKD. BY MM			
DATE 12/86			



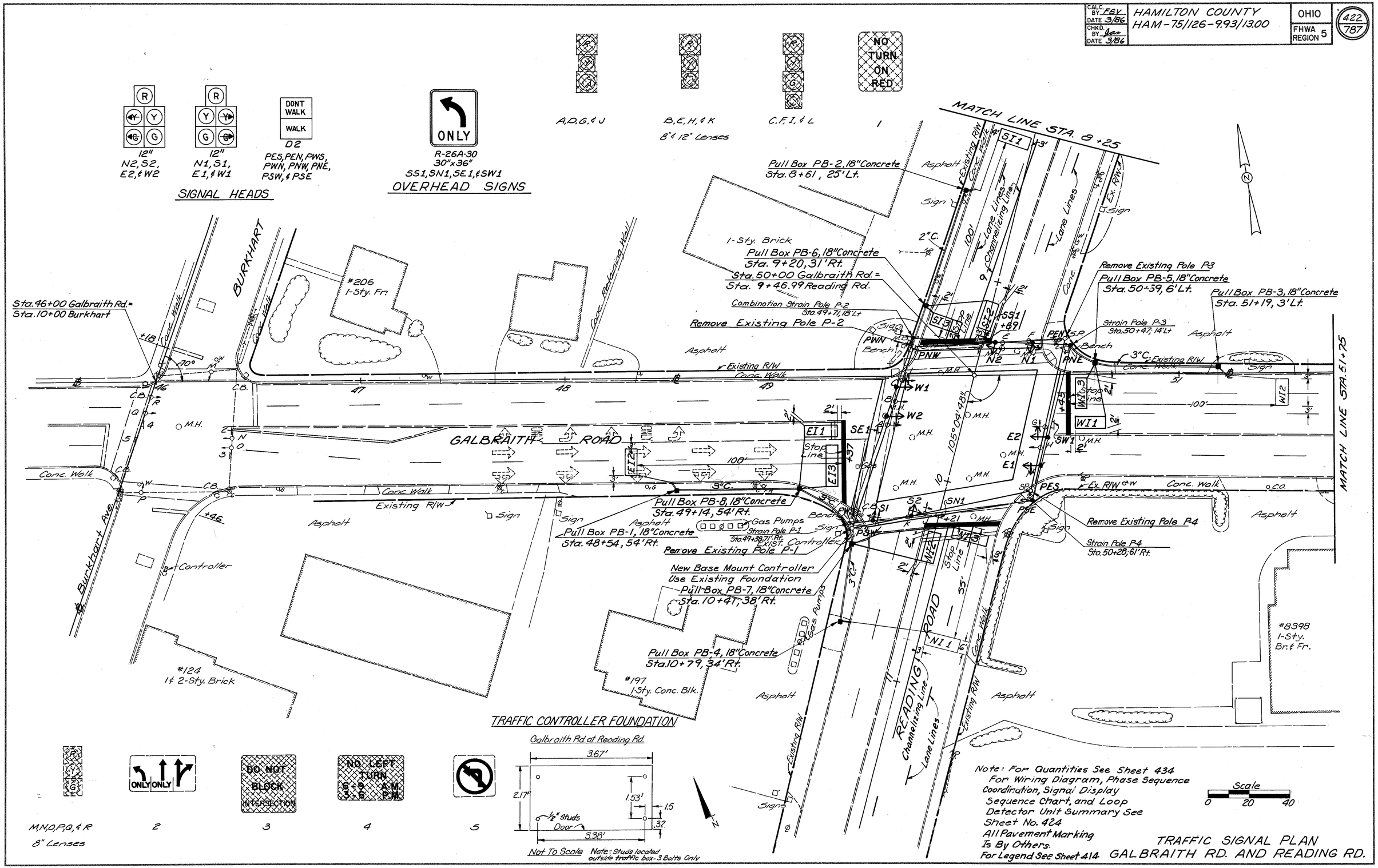
ELEVATION

Scale

0 5 10 20

SIGNAL HEAD MOUNTING DATA				
Signal	Pav't Elev. Below Signal	1½" Drop Cond. Length for Signal	Actual Clearance From Pav't	Elevation Bottom of Signal
E2	571.6	——	16.8'	588.5
E1	571.3	——	16.0'	587.3
S2	570.1	——	16.0'	586.1
S1	570.1	——	16.6'	586.7

TRAFFIC SIGNAL DETAILS
S.R. 126 OFF RAMP "N" AT READING RD.



CALC. BY FGV DATE 3/86
CHKD. BY Jan DATE 3/86
HAMILTON COUNTY
HAM-75/126-9.93/13.00
OHIO
FHWA REGION 5
422/787
SIGNAL HEADS
12" N2, S2, E2, & W2
12" N1, S1, E1, & W1
DONT WALK
WALK
D2
PES, PEN, PWS, PWN, PNW, PNE, PSW, & PSE
ONLY
R-26A-30
30"x36"
SS1, SN1, SE1, & SW1
OVERHEAD SIGNS
A, D, G, & J
B, E, H, & K
8" & 12" Lenses
C, F, I, & L
NO TURN ON RED
MATCH LINE STA. 8+25
MATCH LINE STA. 51+75
Pull Box PB-2, 18" Concrete
Sta. 8+61, 25' Lt.
Pull Box PB-6, 18" Concrete
Sta. 9+20, 31' Rt.
Sta. 50+00 Galbraith Rd. =
Sta. 9+46.99 Reading Rd.
Combination Strain Pole P-2
Sta. 49+71, 18' Lt
Remove Existing Pole P-2
Remove Existing Pole P3
Pull Box PB-5, 18" Concrete
Sta. 50+59, 6' Lt.
Pull Box PB-3, 18" Concrete
Sta. 51+19, 3' Lt.
Strain Pole P-3
Sta. 50+47, 14' Lt
Sta. 46+00 Galbraith Rd. =
Sta. 10+00 Burkhart
BURKHART
GALBRAITH ROAD
READING ROAD
Burkhart Ave.
Conc. Walk
Existing R/W
Asphalt
Sign
Controller
Lane Lines
Channelizing Line
Stop Line
Gas Pumps
Pull Box PB-8, 18" Concrete
Sta. 49+14, 54' Rt.
Pull Box PB-1, 18" Concrete
Sta. 48+54, 54' Rt.
Strain Pole P-1
Sta. 49+38, 71' Rt.
Remove Existing Pole P-1
New Base Mount Controller
Use Existing Foundation
Pull Box PB-7, 18" Concrete
Sta. 10+41, 38' Rt.
Pull Box PB-4, 18" Concrete
Sta. 10+79, 34' Rt.
Remove Existing Pole P-4
Strain Pole P-4
Sta. 50+28, 61' Rt.
#206 1-Sty. Fr.
#124 1 & 2-Sty. Brick
#197 1-Sty. Conc. Blk.
#8398 1-Sty. Br. & Fr.
1-Sty. Brick
105°04'48"
TRAFFIC CONTROLLER FOUNDATION
Galbraith Rd at Reading Rd.
3.67'
2.17'
1.53'
1.5
.32
3.38'
1/2" Studs
Door
Not To Scale
Note: Studs located outside traffic box - 3 Bolts Only
M, N, O, P, Q, & R
8" Lenses
2
3
4
5
DO NOT BLOCK INTERSECTION
NO LEFT TURN 6-9 A.M. 3-6 P.M.
Note: For Quantities See Sheet 434
For Wiring Diagram, Phase Sequence Coordination, Signal Display Sequence Chart, and Loop Detector Unit Summary See Sheet No. 424
All Pavement Marking Is By Others.
For Legend See Sheet 414
Scale
0 20 40
TRAFFIC SIGNAL PLAN
GALBRAITH RD. AND READING RD.

CALC BY FGV	HAMILTON COUNTY	OHIO	423
DATE 3/86	HAM-75/126-9.93/13.00	FHWA REGION 5	787
CHKD BY MJC			
DATE 3/86			

COORDINATION (Dual Ring)

Phase	1	2	3	4	5	6	7	8
Dial Key	S3	I	S1	S2	S3	I	S1	S2
Controller Function	Force Off Ring 1	Force Off Ring 1	Force Off Ring 1	Force Off Ring 1	Force Off Ring 2	Force Off Ring 2	Force Off Ring 2	Force Off Ring 2

Note: 1. Phase 2 and 6 Shall Have Their Respective Phase Holds Applied Whenever Those Phases are On.
2. Only The Key Associated With The Phase Shall Be Allowed To Perform The Function On That Phase.

COORDINATION (Single Ring)

Phase	1	2	3	4
Key	S3	I	S1	S2
Controller Function	Force Off	Force Off	Force Off	Force Off

Note: 1. Phase 2 Shall Be Non-Actuated and Shall Have Its Phase Hold Applied Whenever Phase 2 is On.
2. Only The Key Associated With The Phase Shall Be Allowed To Perform The Function On That Phase.

Galbraith Road East

R1	D2	AM M-F	0630-0830
R1	D3	PM M-F	1530-1830

Note: Intersection is to Operate fully Actuated and Isolated During The Hours of 8:00 PM. To 6:00 AM.

D1	All Other Times

SIGNAL DISPLAY SEQUENCE CHART

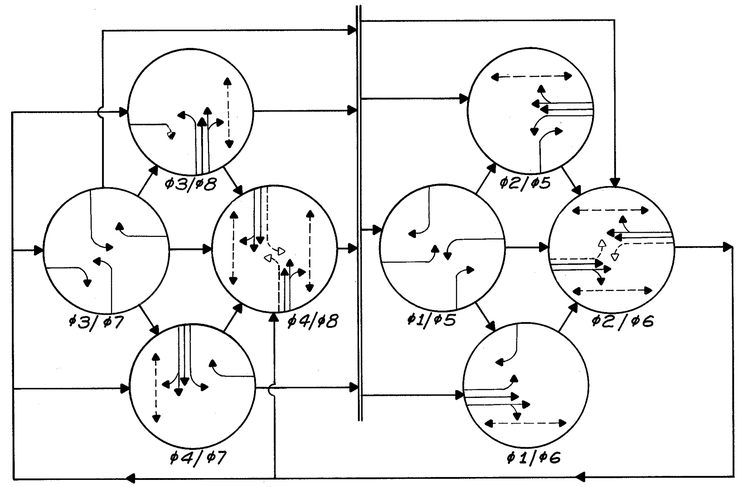
Phase→		Sequence 1		2		3		4		5		6		7		8	
		R/W	CLR TO 2	R/W	CLR TO 3 4	R/W	CLR TO 1 2 4	R/W	CLR TO 1 2	R/W	CLR TO 6	R/W	CLR TO 7 8	R/W	CLR TO 5 6 8	R/W	CLR TO 5 6
Signal Head	Flash																
N1	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y
N1(→)										G	Y						
N2	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y
N2(←)						G	Y										
S1	Y	R	R	R	R	R	R	G	Y	R	R	R	R	R	R	R	R
S1(→)		G	Y														
S2	Y	R	R	R	R	R	R	G	Y	R	R	R	R	R	R	R	R
S2(←)														G	Y		
E1	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	R
E1(→)						G	Y										
E2	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	R
E2(←)		G	Y														
W1	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R
W1(→)														G	Y		
W2	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R
W2(←)										G	Y						
PNE PES	—	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	W-FDW	DW
PWN PWS	—	DW	DW	DW	DW	DW	DW	W-FDW	DW	DW	DW	DW	DW	DW	DW	DW	DW
PSW PSE	—	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	W-FDW	DW	DW	DW	DW	DW
PNW PEN	—	DW	DW	W-FDW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW

Note:
1. Phases 1 and 5, 1 and 6, 2 and 5, 2 and 6, 3 and 7, 3 and 8, 4 and 7, 4 and 8 May Be on Together Subject to Vehicle Calls and Extensions.

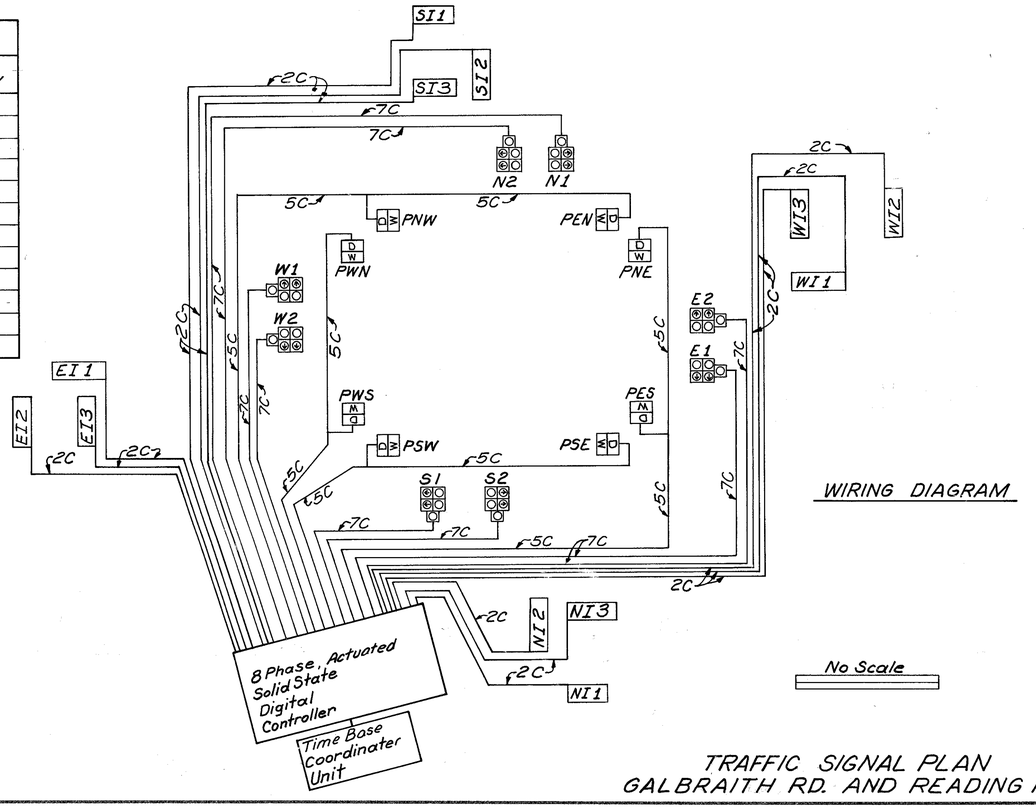
LOOP DETECTOR UNIT SUMMARY

Loop	Size and Configuration	No. Turns	Asso. Phase	Type Unit	Unit Timing Extension	Unit Timing Delay	Memory
NI1	6'x17'	3	8	Standard	2.5	—	ON
NI2	5'x15'	3	3	Delay Ext.	—	3	OFF
SI1	6'x16'	3	4	Standard	2.5	—	ON
SI2	5'x15'	3	7	Delay Ext.	—	3	OFF
EI1	5'x15'	3	1	Delay Ext.	—	3	OFF
EI2	6'x13'	3	6	Standard	2.5	—	ON
WI1	5'x15'	3	5	Standard	2.5	—	OFF
WI2	6'x13'	3	2	Delay Ext.	—	3	ON
NI3	6'x18'	3	4	Delay Ext.	—	3	OFF
SI3	6'x15'	3	3	Delay Ext.	—	3	OFF
EI3	6'x15'	3	2	Delay Ext.	—	3	OFF
WI3	6'x20'	3	1	Delay Ext.	—	3	OFF

Note:
Loops EI2 & WI2 Actuated While On Dial 1 Only.



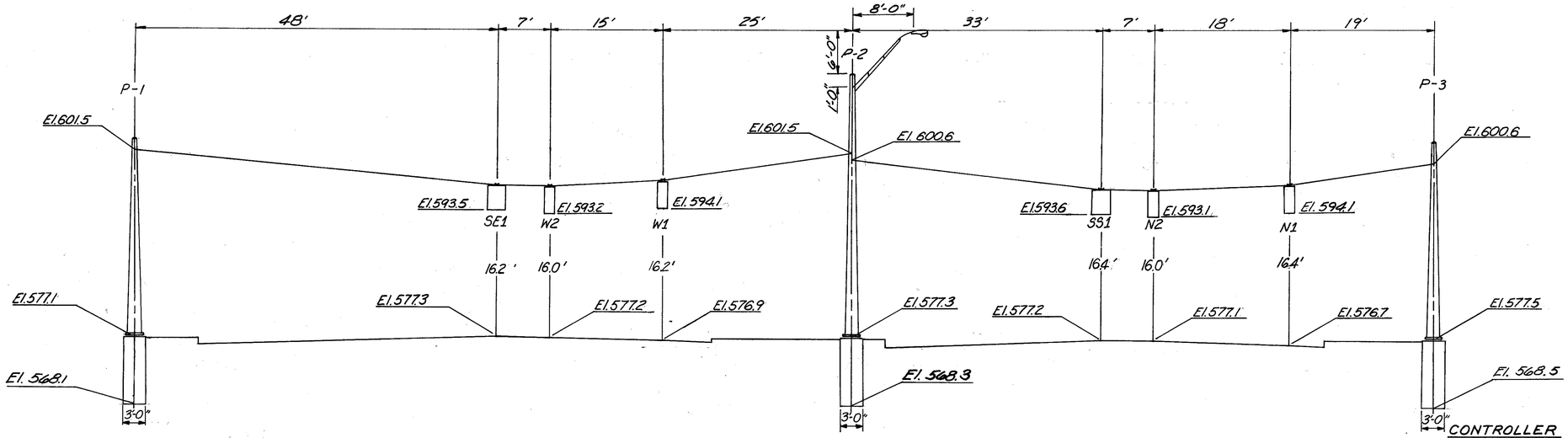
PHASE SEQUENCE



WIRING DIAGRAM

TRAFFIC SIGNAL PLAN
GALBRAITH RD. AND READING RD.

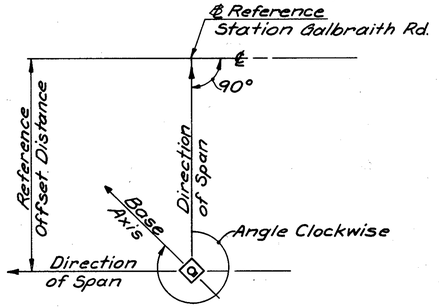
CALC. BY EGV DATE 3/86	HAMILTON COUNTY HAM-75/12.6 - 9.93/13.00	OHIO FHWA REGION 5	424 787
CHKD. BY [illegible] DATE 3/86			



POLE SIZE AND FOUNDATION ELEVATIONS / ORIENTATION OF ACCESSORIES

Pole No.	Pole Design	Pole Size	Elevation Top of Foundation	Elevation Bottom of Foundation	Attachment Height	Unloaded Rake on Pole	Hand Hole	Coupling 1½"	Coupling 2"	Coupling 2"	Coupling 2½"	Base Axis	Span Wire Attach		Found. Ells 2"	Found. Ells 3"	Found. Ells 2"	Pedestrian Push Buttons		Luminaire
P-1	6	12"x26'-0"	577.1	568.1	601.5	4.3"	230°	292°	20°	83°		50°	20°	83°	164°		90°	20°	83°	
P-2*	5	12"x34'-6"	577.3	568.3	600.6	4.8"	158°		20°	279°		338°	20°	273°	200°		270°	20°	273°	273°
P-3	5	12"x26'-0"	577.5	568.5	601.0	3.7"	233°		14°	93°		53°	14°	93°	310°		0°	14°	93°	
P-4	5	12"x26'-0"	577.5	568.5	601.3	2.6"	131°		14°	263°		311°	14°	263°	0°		270°	14°	263°	

* Combination Strain Pole Design Type TC-81.10 (With Light Luminaire)



POLE ORIENTATION
For Table See This Sheet

SIGNAL HEAD MOUNTING DATA

Signal	Pav't Elev. Below Signal	1½" Drop Cond. Length for Signal	Actual Clearance From Pav't	Elevation Bottom of Signal
SE1	577.3	—	16.2'	593.5
W2	577.2	—	16.0'	593.2
W1	576.9	—	17.2'	594.1
SS1	577.2	—	16.4'	593.6
N2	577.1	—	16.0'	593.1
N1	576.7	—	17.4'	594.1

CONTROLLER

CPU START IN		PHASE TIMING		1	2	3	4	5	6	7	8	OVERLAPS
		CONTROLLER ϕ		1	2	3	4	5	6	7	8	A PHASES
		INTERSECTION ϕ		Eb Lt.	Wb Th.	Nb Lt.	Sb Th.	Wb Lt.	Eb Th.	Sb Lt.	Nb Th.	
FLASH	YES	RECALL	MAX.									GREEN
ALL RED			MIN.									YELLOW
FLASH/AR			PED									RED
TIME	10sec	NON ACT	1									B PHASES
FIRST PHASES	2,6		2									
GREEN	YES	NON-LOCK		YES	YES	YES	YES	YES	YES	YES	YES	GREEN
YELLOW		ADDED PER ACT										YELLOW
EXCLUSIVE PHASES		INITIAL	MIN.	6	14	8	14	8	8	6	12	RED
			MAX.	6	14	8	14	8	8	6	12	C PHASES
GENERAL		PED	WALK		5.4		5.4		5.4		5.4	GREEN
			PROTECT		13.8		13.8		13.8		13.8	YELLOW
		EXTENSION	PRESET	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	RED
DUAL ENTRY	YES		MIN.	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
G.P.T.		REDUCTION	BEFORE									D PHASES
S/M. GAP			TO MIN.									GREEN
MAX. EXT.		MAXIMUM	I	17	—	20	—	25	—	20	—	YELLOW
RED 1-4			II	—	—	—	—	—	—	—	—	RED
REST 5-8		CLEAR	YELLOW	3.5	4	3.5	4	3.5	4	3.5	4	
MIN. RED			RED	1.5	1	1.5	1	1.5	1	1.5	1	
CON. SERV.		MANUAL FLASH			R		R		R		R	

DETECTOR TIMING

ASSO PHASE											
LOOP(S)											
EXTENSION	—	—	—	—	—	—	—	—			
DELAY	—	—	—	—	—	—	—	—			
OVER-RIDE ϕ'(S)											

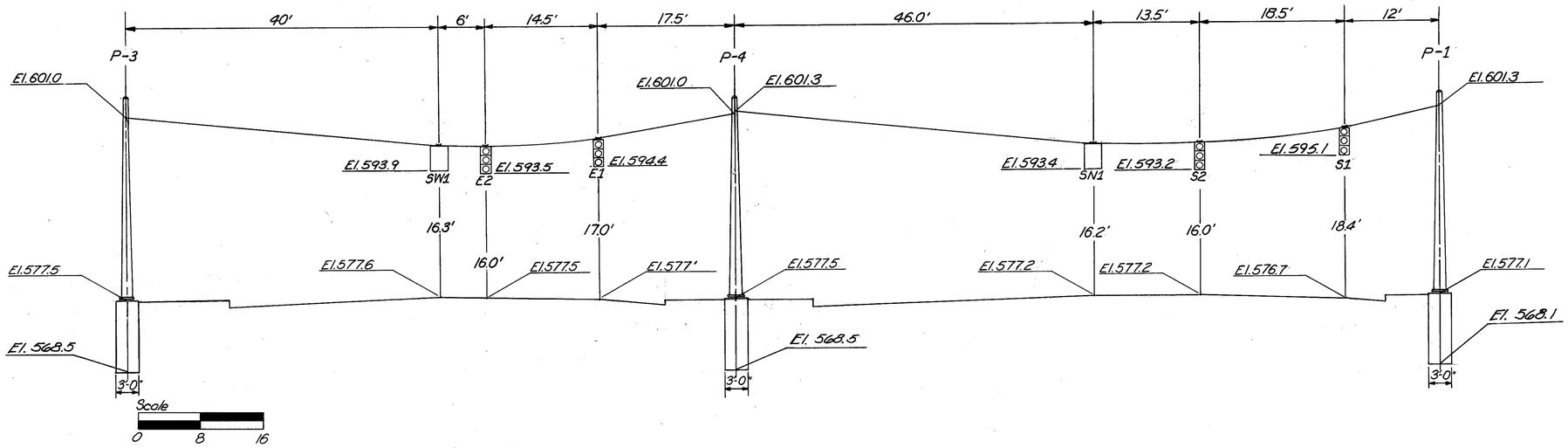
COORDINATION UNIT

DIAL	1	2	3
CYCLE	80	100	110
KEYS I %	0, 11	0, 9	0, 9
S1 %	28.40	22, 30	21, 39
S2 %	53.64	47, 56	57, 66
S3 %	81.87	78, 85	84, 87
R1 %	38	48	39
R2 %			
R3 %			
TRANSFER			

NOTES
1. Phases 2,4,6,8 shall have their respective phase hold applied whenever the phases are on.
2. Phase 2,4,6,8 shall rest in walk.
3. Intersection operates as fully actuated when on Dial 1.

TRAFFIC SIGNAL PLAN
GALBRAITH RD. AND READING RD.

CALC. BY FGV DATE 3/86 CHKD. BY [illegible] DATE 3/86	HAMILTON COUNTY HAM-75/126 - 9.93/13.00	OHIO FHWA REGION 5	425/787



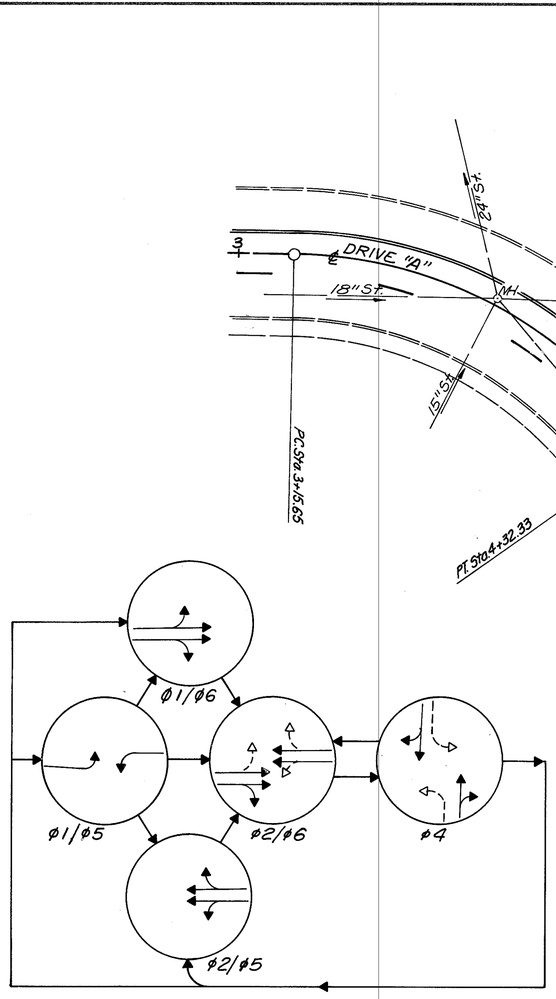
SIGNAL HEAD MOUNTING DATA				
Signal	Pav't Elev. Below Signal	1½" Drop Cond. Length for Signal	Actual Clearance From Pav't	Elevation Bottom of Signal
SW1	577.6	—	16.3'	593.9
E2	577.5	—	16.0'	593.5
E1	577	—	17.0'	594.0
SN1	577.2	—	16.2'	593.4
S2	577.2	—	16.0'	593.2
S1	576.7	—	18.4'	595.1

TRAFFIC SIGNAL PLAN
GALBRAITH RD. AND READING RD.

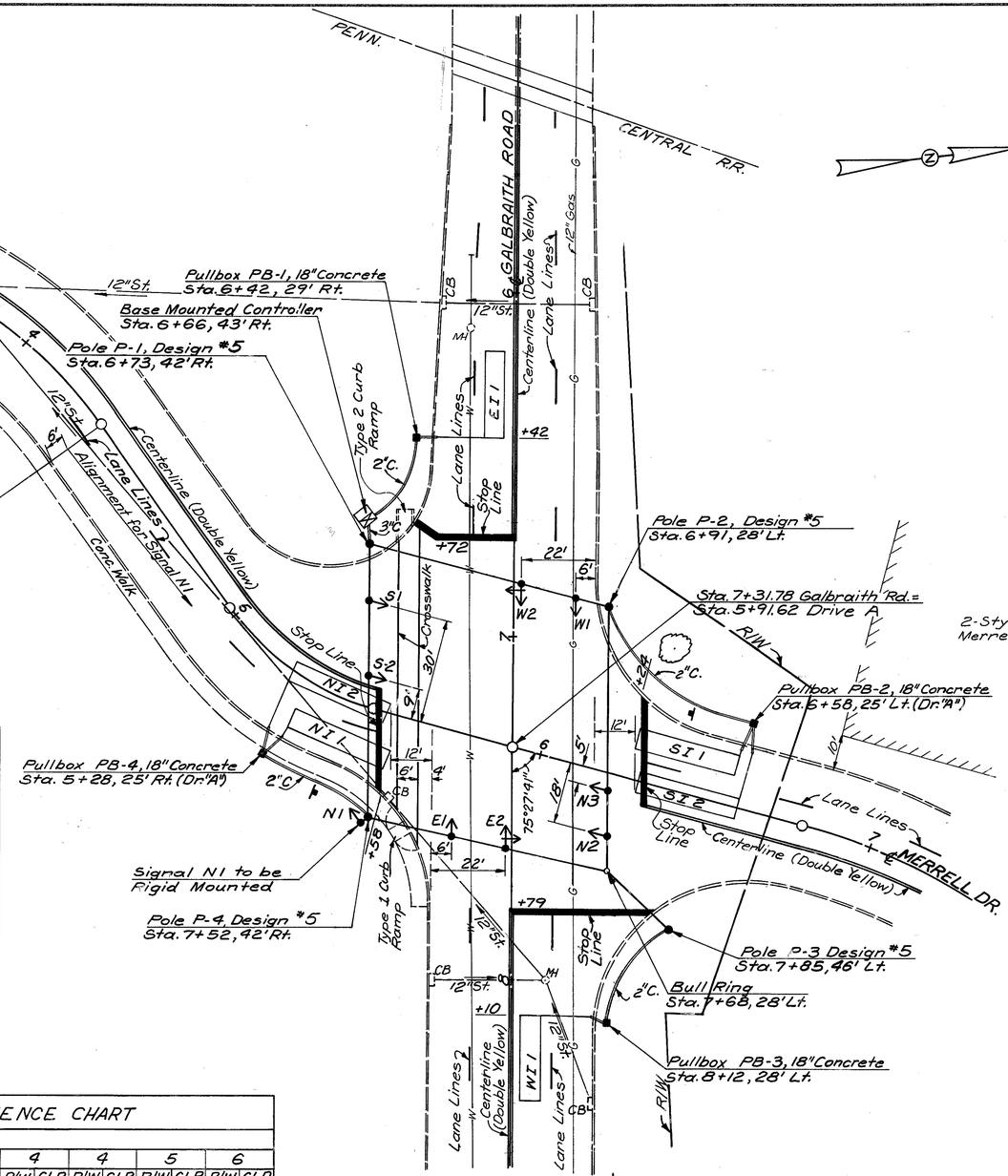
N71130

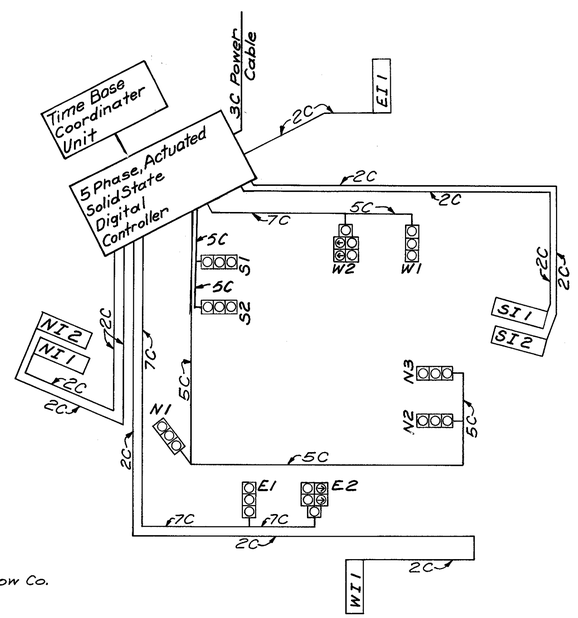
CALC. BY EGV DATE 3/86	HAMILTON COUNTY HAM-75/126-9.93/13.00	OHIO
CHKD. BY MJS DATE 3/86		FHWA REGION 5

426 787

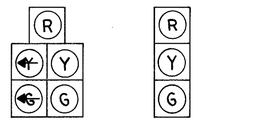


PHASE SEQUENCE





WIRING DIAGRAM



SIGNAL HEADS

SIGNAL DISPLAY SEQUENCE CHART

Phase →		Sequence 1		2		4		4		4		4		5		6	
Signal Head	Flash	R/W	CLR 2	R/W	CLR 4	R/W	CLR 1	R/W	CLR 5	R/W	CLR 2	R/W	CLR 6	R/W	CLR 6	R/W	CLR 4
N1, N2, N3	R	R	R	R	R	G	Y	G	Y	G	Y	G	Y	R	R	R	R
S1, S2	R	R	R	R	R	G	Y	G	Y	G	Y	G	Y	R	R	R	R
E1	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y
E2	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y
E2 (←)		~~G~~	~~Y~~														
W1	Y	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R
W2	Y	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R
W2 (←)														~~G~~	~~Y~~		

LOOP DETECTOR UNIT SUMMARY

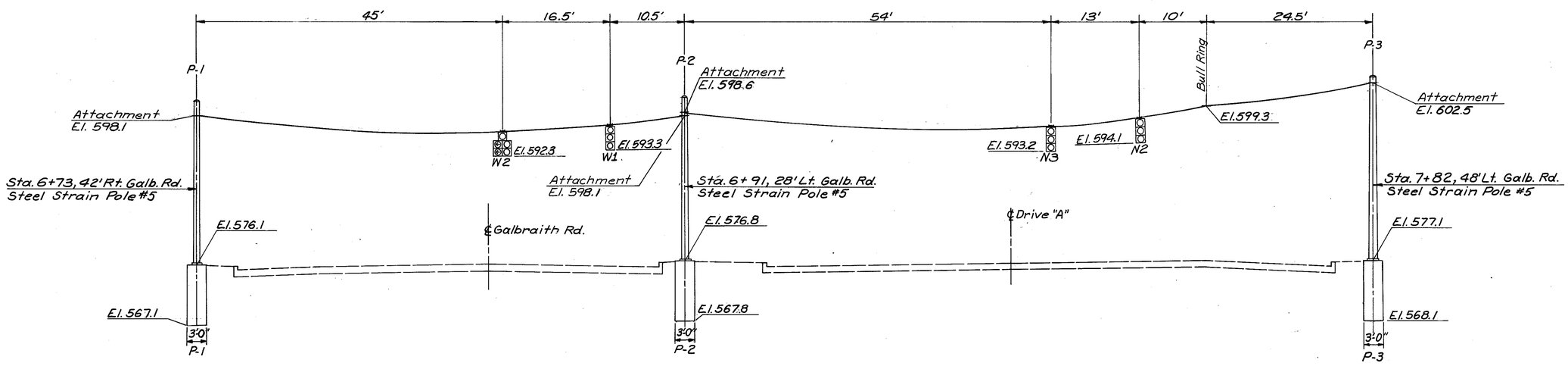
Loop	Size and Configuration	No. Turns	Asso. Phase	Type Unit	Unit Timing Extension	Unit Timing Delay	Delay Override
NI 1	6' x 30'	2	4	Delay and Extend	2.5	10	———
SI 1	6' x 30'	2					
NI 2	6' x 30'	2	4	Delay and Extend	3	2.0	4 Grn.
SI 2	6' x 30'	2					
EI 1	6' x 25'	2	1	Delay and Extend	3.0	10	1 Grn.
WI 1	6' x 25'	2	5	Delay and Extend	3.0	10	5 Grn.

Note: For Coordination See Sheet 424
For Traffic Signal Quantity See Sheet 435
For Legend See Sheet 414

Scale 0 20 40

TRAFFIC SIGNAL PLAN
GALBRAITH RD. AND DRIVE "A"

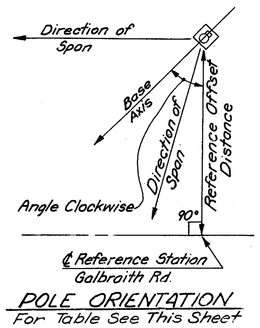
CALC BY FGV	HAMILTON COUNTY	OHIO	427
DATE 3/86	HAM-75/126 – 9.93/13.00	FHWA REGION 5	787
CHKD BY [illegible]			
DATE [illegible]			



ELEVATION

POLE SIZE AND FOUNDATION ELEVATIONS							ORIENTATION OF ACCESSORIES										
Pole No.	Pole Design	Pole Size	Elevation Top of Foundation	Elevation Bottom of Foundation	Attachment Height	Unloaded Rake On Pole	Hand Hole	Coupling 1½"	Coupling 2"	Coupling 2"	Coupling 2½"	Base Axis	Span Wire Attach		Found. Ells 2"	Found. Ells 3"	Found. Ells 2"
P-1	5	12"x24'	576.1	567.1	598.1	3.3"	228°	89.8°	15°	90°		48°	15°	90°	270°		86°
P-2	5	12"x24'	576.8	567.8	598.6	2.3"	167°		15°	270°		347°	15°	270°	246°		90°
P-3	5	12"x27'	577.1	568.1	602.5	3.4"	222°		42°			42°	42°		328°		90°
P-4	5	12"x24'	576.6	568.6	598.0	2.8"	152°		12°	270°		332	12°	270°	227°		270°

Scale
0 5 10 20



POLE ORIENTATION
For Table See This Sheet

SIGNAL HEAD MOUNTING DATA				
Signal	Pav't Elev. Below Signal	1½" Drop Cond. Length for Signal	Actual Clearance From Pav't	Elevation Bottom of Signal
W2	576.3	—	16.0'	592.3
W1	576.2	—	17.1'	593.3
N3	576.8	—	16.4'	593.2
N2	576.9	—	17.2'	594.1

CONTROLLER

CPU		PHASE TIMING										OVERLAPS
START IN		CONTROLLER ϕ	1	2	3	4	5	6	7	8		A PHASES
		INTERSECTION ϕ	Eb Lt.	Wb		N/9	Wb Lt.	Eb				GREEN
FLASH	YES	RECALL MAX.										YELLOW
ALL RED		MIN.										RED
FLASH/AR		PED										
TIME	10Sec	NON ACT 1		YES				YES				B PHASES
FIRST		2										GREEN
PHASES	2,6	NON-LOCK				YES						YELLOW
GREEN	YES	ADDED PER ACT	—	—		—	—	—				RED
YELLOW		INITIAL MIN.	6	—		8	8	—				
EXCLUSIVE		MAX.	6	—		8	8	—				C PHASES
PHASES		PED WALK	—	—		—	—	—				GREEN
GENERAL		PROTECT	—	—		—	—	—				YELLOW
		EXTENSION PRESET	2.0	—		3	2.5	—				RED
DUAL ENTRY	YES	MIN.	2.0	—		3	2.5	—				
G.P.T.		REDUCTION BEFORE	—	—		—	—	—				D PHASES
SIM. GAP		TO MIN.	—	—		—	—	—				GREEN
MAX. EXT.		MAXIMUM I	12			55	12					YELLOW
RED 1-4		II	—			—	—					RED
REST 5-8		CLEAR YELLOW	4	4		3.5	4	4				
MIN. RED		RED	1.00	1		1.5	1.00	1				
CON. SERV.		MANUAL FLASH	—	Y		R	—	Y				

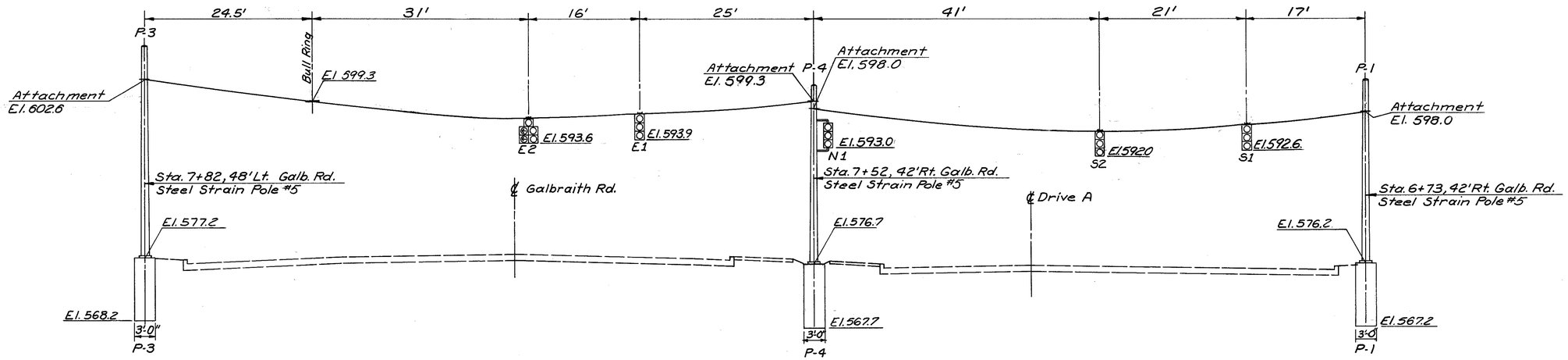
DETECTOR TIMING												
ASSO PHASE	4	4	4	4	1	5						
LOOP(S)	NI1	NI2	SI1	SI2	EI1	WI1						
EXTENSION	—	—	—	—	—	—						
DELAY	10	2	10	2	10	10						
OVER-RIDE ϕ'(S)	—	4	—	4	1	5						

COORDINATION UNIT				NOTES
DIAL	1	2	3	
CYCLE	80	100	110	
KEYS I%	0	0	0	
S1%	39	13	54	
S2%	56	31	66	
S3%	56	26	66	
R1%	98	24	97	
R2%				
R3%				
TRANSFER				

TRAFFIC SIGNAL DETAILS
GALBRAITH RD. AND DRIVE "A"

CALC. BY FGV	HAMILTON COUNTY	OHIO
DATE 3/86	HAM-75/126 - 9.93/13.00	FHWA REGION 5
CHKD. BY [illegible]		
DATE 4/86		

428
787



ELEVATION

Scale

0 5 10 20

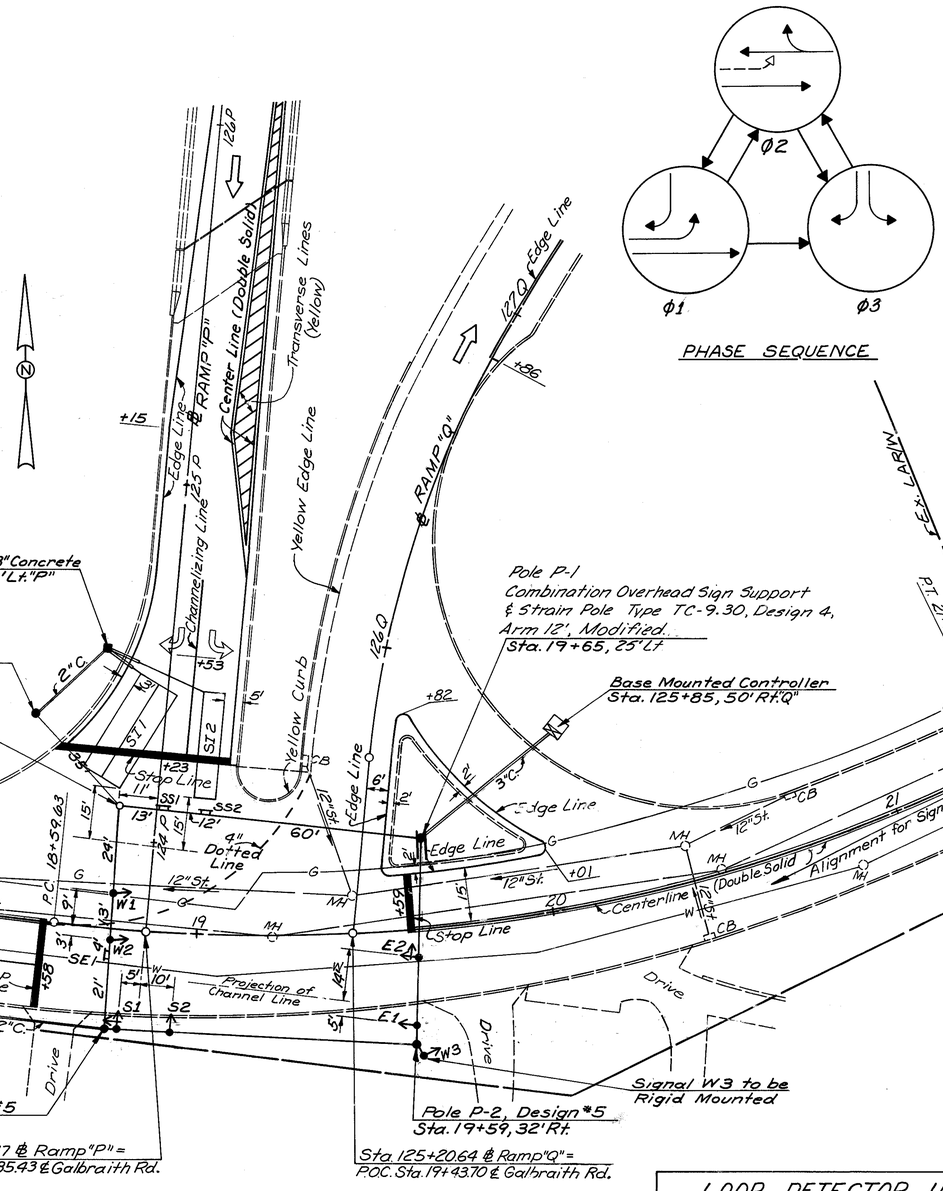
SIGNAL HEAD MOUNTING DATA				
Signal	Pav't Elev. Below Signal	1½" Drop Cond. Length for Signal	Actual Clearance From Pav't	Elevation Bottom of Signal
E2	577.6	—	16.0'	593.6
E1	577.3	—	16.6'	593.9
S2	576.0	—	16.0'	592.0
S1	575.7	—	16.9'	592.6

TRAFFIC SIGNAL DETAILS
GALBRAITH RD. AND DRIVE "A"

CALC. BY FGV DATE 3/96	HAMILTON COUNTY HAM-75/126 – 9.93/13.00	OHIO	429 787
CHKD BY [illegible] DATE 8/96		FHWA REGION 5	

SIGNAL DISPLAY SEQUENCE CHART

Phase →		Sequence 2		2		3		3		1	
Signal Head	Flash	R/W	CLR 3	R/W	CLR 1	R/W	CLR 1	R/W	CLR 2	R/W	CLR 2
S1	R	R	R	R	R	R	R	R	R	G	Y
S1(→)	—					G	G	G	Y	G	Y
S2	R	R	R	R	R	R	R	R	R	G	Y
E1	Y	G	G	G	Y	G	Y	G	G	R	R
E2	Y	G	G	G	Y	G	Y	G	G	R	R
E2(←)	—					G	Y	G	Y		
W1, W2, W3	Y	G	Y	G	Y	R	R	R	R	R	R



LOOP DETECTOR UNIT SUMMARY

Loop	Size and Configuration	No. Turns	Asso. Phase	Type Unit	Unit Timing Extension	Unit Timing Delay	Delay Override
EI1	6'x 15'	2	1	Standard	—	—	—
SI1*	12'x 30'	2	3	Standard	—	—	—
SI2	6'x 30'	2	3	Standard	—	—	—

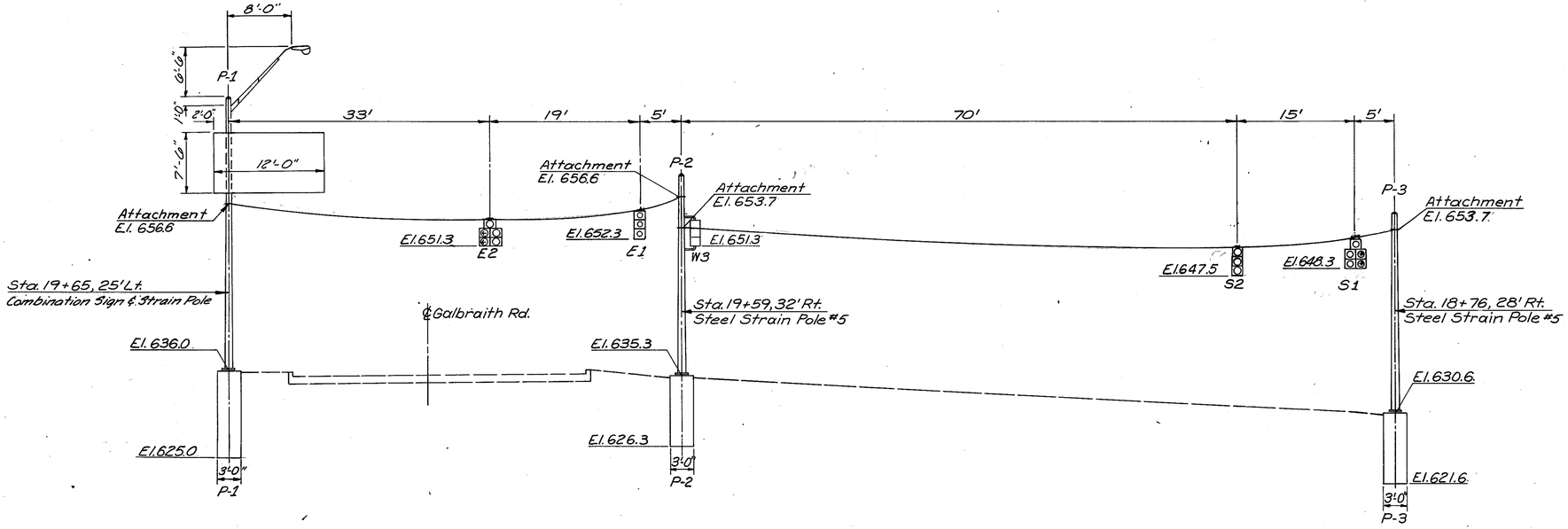
*Quadrupole

Note: For Coordination See Sheet 424
For Traffic Signal Quantity See Sheet 436

TRAFFIC SIGNAL PLAN
S.R. 126 OFF & ON RAMPS "P" & "Q" AT GALBRAITH RD.

CALC. BY FGV	HAMILTON COUNTY	OHIO
DATE 3/86	HAM-75/126 - 9.93/13.00	FHWA REGION 5
CHKD BY MAA		
DATE 3/86		

430-787

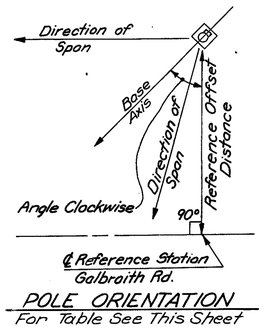


ELEVATION

POLE SIZE AND FOUNDATION ELEVATIONS							ORIENTATION OF ACCESSORIES												
Pole No.	Pole Design	Pole Size	Elevation Top of Foundation	Elevation Bottom of Foundation	Attachment Height	Unloaded Rake On Pole	Hand Hole	Coupling 1½"	Coupling 2"	Coupling 2"	Coupling 2½"	Base Axis	Span Wire Attach		Found. Ells 2"	Found. Ells 3"	Found. Ells 1"	Found. Ells 4"	Sign Arms & Luminaire
P-1	*	13"x34'-6"	636.00	625.00	656.60	2.0"	222°	6°	6°	101°	—	42°	6°	101°	233°	—	55°	235°	5°
P-2	5	12"x25'-0"	635.28	626.28	653.70	2.9"	160°	—	5°	277°	—	340°	5°	277°	35°	—	215°	—	
P-3	5	12"x25'-0"	630.65	621.65	651.50	2.9"	205°	—	1°	88°	—	25°	1°	88°	—	267°	87°	—	
P-4	5	12"x34'-6"	629.66	620.66	658.00	3.8"	132°	—	3½"	—	3½"	312°	312°	—	221°	—	41°	—	

* Combination Overhead Sign Support & Strain Pole Type TC-9.30, Design 4, Arm 12' Modified

Scale 0 5 10 20



POLE ORIENTATION
For Table See This Sheet

SIGNAL HEAD MOUNTING DATA				
Signal	Pav't Elev. Below Signal	1½" Drop Cond. Length for Signal	Actual Clearance From Pav't	Elevation Bottom of Signal
E2	635.3	——	16.0'	651.3
E1	635.3	——	17.0'	652.3
S2	631.5	——	16.0'	647.5
S1	630.7	——	17.8'	648.3

CONTROLLER

CPU		PHASE TIMING										OVERLAPS	
START IN		CONTROLLER ϕ	1	2	3	4	5	6	7	8		A	PHASES 1+2
		INTERSECTION ϕ	EB Lt	E/W	SB								GREEN
FLASH	YES	RECALL MAX.											YELLOW 4
ALL RED		MIN.											RED 1
FLASH/AR TIME	10sec	PED											
FIRST PHASES	2	NON ACT 1		YES								B	PHASES
		2											GREEN
GREEN	YES	NON-LOCK	YES		YES								YELLOW
YELLOW		ADDED PER ACT	—	—	—								RED
EXCLUSIVE PHASES		INITIAL MIN.	8	—	8							C	PHASES
		MAX.	8	—	8								GREEN
GENERAL		PED WALK	—	—	—								YELLOW
		PROTECT	—	—	—								RED
		EXTENSION PRESET	3	—	2.5								
DUAL ENTRY		MIN.	3	—	2.5							D	PHASES
G.P.T.		REDUCTION BEFORE	—	—	—								GREEN
SIM. GAP		TO MIN.	—	—	—								YELLOW
MAX. EXT.		MAXIMUM I	50	—	50								RED
RED 1-4		II	—	—	—								
REST 5-8		CLEAR YELLOW	4	4	4								
MIN. RED		RED	1	1	1								
CON. SERV.		MANUAL FLASH	R	Y	—								

DETECTOR TIMING										
ASSO. PHASE	—	—	—							
LOOP(S)	—	—	—							
EXTENSION	—	—	—							
DELAY	—	—	—							
OVER-RIDE ϕ'(S)	—	—	—							

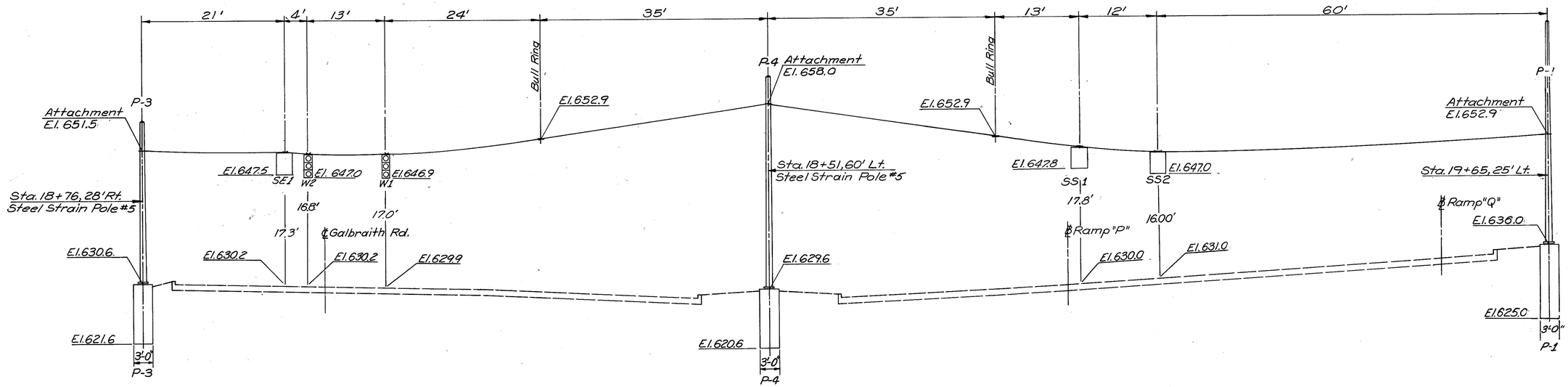
COORDINATION UNIT			
DIAL	1	2	3
CYCLE	80	100	110
KEYS I%	0	0	0
S1%	34	13	40
S2%	74	66	68
S3%			
R1%	60	85	91
R2%			
R3%			
TRANSFER			

NOTES

TRAFFIC SIGNAL DETAILS
S.R. 126 OFF & ON RAMPS "P" & "Q" AT GALBRAITH RD.

CALC. BY FGV	HAMILTON COUNTY	OHIO
DATE 3/86	HAM-75/126 - 9.93/13.00	FHWA REGION 5
CHKD. BY [illegible]		
DATE 5/86		

431
787



ELEVATION

Scale
0 5 10 20

SIGNAL HEAD MOUNTING DATA				
Signal	Pav't Elev. Below Signal	1½" Drop Cond. Length for Signal	Actual Clearance from Pav't	Elevation Bottom of Signal
SE1	630.2	——	17.3'	647.5
W2	630.2	——	16.8'	647.0
W1	629.9	——	17.0'	646.9
SS1	630.0	——	17.8'	647.8
SS2	631.0	——	16.0'	647.0

TRAFFIC SIGNAL DETAILS
S.R.126 OFF & ON RAMPS "P" & "Q" AT GALBRAITH RD.

TRAFFIC SIGNAL QUANTITIES SUB - SUMMARY

CALC. BY EGV DATE 2-14-6
CHKD. BY DATE

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

OHIO
F.H.W.A. REGION 5

432
787

SHEET NO.	STATION TO STATION	SIDE	625 Pull Box, 18" 713.08 Each	625 Trench, Type A Lin. Ft.	625 Trench L.F.	625 Conduit 3" Dia 713.07 Lin. Ft.	625 Conduit 2" Dia. 713.07 Lin. Ft.	625 Ground Rod Each.	632 Covering Of Vehicular Signal Head Each	632 Vehicular Signal Head 3 Section, 12" Lens, One Way As Per Plan Each	632 Vehicular Signal Head 5 Section, 12" Lens, One Way As Per Plan Each	632 Loop Detector Lead-In Cable Delay & Extension Unit Type As Per Plan Each	632 Loop Detector Unit As Per Plan Each	632 Loop Detector Pavement Cutting Lin. Ft.	632 Concrete For Anchor Base Foundation Cu. Yds.	632 Strain Pole Type TC 81.10 Design No. 5.28'-0" Each	632 Removal of Traffic Signal Installation Each	632 Cable Support Assembly Each	632 Messenger Wire 7 Strand 3/8" Dia w/ Accessories Lin Ft.	632 Signal Cable, 5 Conductor, No. 14 AWG Lin. Ft.	632 Signal Cable, 7 Conductor, No. 14 AWG Lin. Ft.	632 Loop Detector Wire, Type E Lin. Ft.	632 Loop Detector Lead-In Cable Lin. Ft.	632 Power Cable 3 Conductor, No. 8 AWG Lin. Ft.	861 Coordinator, 3 Dial Solid State, Digital Secondary Each	861 Controller, Actuated 2 Phase, Solid State Digital, Microprocessor As Per Plan Each	861 Controller, Actuated 3 Phase, Solid State Digital, Microprocessor As Per Plan Each	861 Coordinator, 3 Dial Solid State, Digital Master Each	861 WEEKLY PROGRAMMER 4 CIRCUIT, SOLID STATE DIGITAL Each
417	84+85 Galb. Rd. (Pole P.)	Lt.						1							239	1		1	99										
	85+20 Galb. Rd. (AA)	Rt.							1	1																			
	85+14 Galb. Rd. (BB)	Rt.							1	1																			
	84+96.5 Galb. Rd. (DD)	Lt.							1	1																			
	85+10.5 Galb. Rd. (CC)	Lt.							1		1																		
	AA-BB-Controller																			157									
	CC-DD-Controller																				124								
	EJ 3 - PB2													70								164							
	PB2 - Controller				124		124																157						
	84+71 Galb. Rd.	Lt.											1				1								1				
417	P1 - PB1	Lt.			8	8																							
416	95+15 (Waldmann Dr.)	Rt.										1					1								1		1		
	95+37 (Pull Box PB1)	Rt.	1																										
	EXIST. P.B. IN1	Lt.												59								82							
	PB 1 - IE 3 (Waldmann Dr.)	Lt & Rt.												99								244							
	Strain Pole - IS 1	Rt.												47								176	39						
416	Strain Pole - IS 2	Rt.												74								196							
415	101+42 (NB I-75 Off Ramp)	Rt.															1								1		1		
422	46+00 (Burkhart Ave.)																1												
	Chaucer Dr. at Reading Rd.																1												
414	105+71 (SB I-75 On-Off Ramp)	Lt.											1				1											1	1	1
	104+83 Galb. Rd. (PB2)		1																										
	104+33 Galb. Rd. (PB4)		1																										
	104+33 - 104+85				52		52																						
	PB4 - Controller (SB I-75 On Off Ramp)																						256						
414	IW3 to PB1 (SB I-75 On Off Ramp)													67								157							
	Total		3		184	8	176	1	4	3	1	1	2	416	239	1	6	1	99	157	124	1019	452				3	2	2	1	1

SIGNAL QUANTITIES

TRAFFIC SIGNAL QUANTITIES SUB-SUMMARY

CALC. BY: DS DATE: 2/86
CHKD BY: [illegible] DATE: 2/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

OHIO
F.H.W.A. REGION 5

433/787

SHEET NO.	STATION TO STATION	SIDE	625						632									630				632								608	861				630		
			Pull Box, 18 Inch 713.08	Trench		Conduit, 3" Dia. 713.07	Conduit, 2" Dia. 713.07		Ground Rod	Pedestrian Signal Head, Type 12	Pedestrian, Push Button	Vehicular Signal Head, 3 Section, 12" Lens, One Way As Per Plan	Combination Strain Pole, Type TC-8.10, Design No. 3, 34'-0"	Loop Detector Unit, As Per Plan	Loop Detector Unit, Delay & Extension Type As Per Plan	Loop Detector Pavement Cutting	Concrete For Anchor Base Foundations Strain Pole Type TC-8.10 Design No. 3, 24'-0"	R-12E-18 18"x18"	R-22(R)-18 18"x12"	R-26A-30 30"x36"	R-27A-30 30"x36"	Covering Of Vehicular Signal Head	Cable Support Assembly	Messenger Wire, 7 Strand, 3/8" Dia. w/ Accessories	Signal Cable 5 Conductor No. 14 AWG		Loop Detector Wire, Type 2	Loop Detector Lead-In-Cable	Power Cable 3 Conductor, No. 8 AWG	Power Service	4" Concrete Walk	Coordinator, Time Base Solid State, Digital	Controller, Actuated, 2 Phase, Solid State, Type 170 Microprocessor, Modular By-Phase As Per Plan	Controller, Actuated, 2 Phase, Solid State, Type 170 Microprocessor (Transyt 1983) Alternate Bid	Cabinet For Concrete Foundation	Sign, Flat Sheet	Sign, Type G Sheeting	Sign Hanger Assembly (Sparwing) Type I	Sign Support Assembly, Pole Mounted
			Each	Lin. Ft.		Lin. Ft.	Lin. Ft.		Each	Each	Each	Each		Each	Each	Lin. Ft.	Cu. Yds.	Each	Each	Each	Each	Each	Each	Lin. Ft.	Lin. Ft.		Lin. Ft.	Lin. Ft.		Each	Sq. Ft.	Each	Each	Each	Cu. Yds.	Sq. Ft.	Each	Each
4.19	13+97 Reading Rd. (Pole P_1)	Rt.							1	1	1						1.48	1	1	1			1							1								
	13+31 Reading Rd. (Pole P_2)	Rt.							1								1.48	1	1	1			1													3.75		1
	13+15 Reading Rd. (Pole P_3)	Lt.							1				1				1.48						1													3.75		1
	13+94 Reading Rd. (Pole P_4)	Lt.							1	1	1						1.48	1					1															
	13+21 Reading Rd. (N_2)	Lt.										1											1															
	13+18 Reading Rd. (N_1)	Lt.										1											1															
	13+22 Reading Rd. (E_2)	Lt.										1											1															
	13+37 Reading Rd. (E_1)	Lt.										1											1															
	13+95 Reading Rd. (S_2)	Rt.										1											1															
	13+96 Reading Rd. (S_1)	Rt.										1											1															
	P_1-P_2-P_3-P_4-P_1																							300													
	N_1-N_2-S_2-S_1-Controller																								311												
	E_2-E_1 Controller																								215												
	B_2-PSE-PSW-B_1-Controller																								160												
	E_{1e}-PB_1															94											214										
	E_{1i}-PB_1															99											208										
	PB_1-Controller			20			20																					86									
	P_1-Controller			8			8																						44								
	13+94 (Controller)								1					1	1															8.33	1	1	1	0.99			
	105+21 'N' (PB_1)	Rt.	1																																		
	13+47 Reading Rd.	Rt.																		1															7.5	1	
4.19	13+59 Reading Rd.	Rt.																			1															7.5	1	
	Total		1	28			28		5	2	2	6	1	1	1	193	5.92	3					6	4	300	685		422	86	44	1	8.33	1	1	1	0.99	7.5	15.0	2	2

SIGNAL QUANTITIES

TRAFFIC SIGNAL QUANTITIES SUB-SUMMARY

CALC. BY FGV DATE 3/86
CHKD. BY [illegible] DATE 3/86

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

OHIO
F.H.W.A. REGION 5

434
787

SHEET NO.	STATION TO STATION	SIDE	625						632																								861			630			
			Pull Box, 18" Inch 713.08	Trench	Trench Type A	Conduit, 3" Dia. 713.07	Conduit, 2" Dia. 713.07		Ground Rod	Pedestrian Signal Head, Type Da.	Pedestrian Push Button		Vehicular Signal Head 5 Section, 12" Lens, One Way As Per Plan	Loop Detector Unit As Per Plan	Loop Detector Unit Delay/Extension Type As Per Plan	Loop Detector Pavement Cutting	Concrete For Anchor Base Foundations	Strain Pole Type TC 81.10 Design No. 6, 28'-0"	Strain Pole Type TC 81.10 Design No. 5, 28'-0"	Combination Strain Pole Type TC 81.10 Design #334-6"		Removal Of Traffic Signal Installation	Covering Of Vehicular Signal Head	Cable Support Assembly	Messenger Wire 7 Strand, 3/8" Dia. w/ Accessories	Signal Cable 5 Conductor No. 14 AWG	Signal Cable 7 Conductor No. 14 AWG	Loop Detector Wire, Type E.	Loop Detector Lead-In Cable	Power Cable, 3 Conductor, No. 8 AWG	Power Service		Coordinator, Time Base Solid State, Digital	Controller, Actuated 8 Phase Solid State, Digital Microprocessor Modular 8 Phase, As Per Plan	Controller, Actuated 8 Phase, Solid State, Digital Microprocessor (Transyt 16) Per Plan		Sign Flat Sheet Type G Sheeting	Sign Hanger Assembly (Span Wire) Type I P-2A-4-30 30'-36"		
			Each	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.		Each	Each	Each		Each	Each	Each	Each	Cu. Yds.	Each	Each	Each		Each	Each	Each	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Each		Each	Each	Each		Sq. Ft.	Each		
422	49+38 Galb. Rd. (Pole P_1)	Rt.							1	2	2						2.39	1						1						49'	1								
	49+71 Galb. Rd. (Pole P_2)	Lt.							1	2	2						2.39			1				1															
	50+47 Galb. Rd. (Pole P_3)	Lt.							1	2	2						2.39		1					1															
	50+28 Galb. Rd. (Pole P_4)	Rt.							1	2	2						2.39		1					1															
	49+54.5 Galb. Rd. (SE_1)	Rt.																																			7.5	1	1	
	49+57 Galb. Rd. (W_2)	Rt.											1										1																
	49+62 Galb. Rd. (W_1)	Rt.											1										1																
	50+03 Galb. Rd. (SS_1)	Lt.																																			7.5	1	1	
	50+10 Galb. Rd. (N_2)	Lt.											1										1																
	50+29 Galb. Rd. (N_1)	Lt.											1										1																
	50+38 Galb. Rd. (E_1)	Rt.											1										1																
	50+35 Galb. Rd. (E_2)	Rt.											1										1																
	50+37.5 Galb. Rd. (SW_1)	Rt.																																			7.5	1	1	
	49+50 Galb. Rd. (S_1)	Rt.											1										1																
	49+69 Galb. Rd. (S_2)	Rt.											1										1																
	49+83 Galb. Rd. (SN_1)	Rt.																																			7.5	1	1	
	P_1-P_2-P_3-P_4-P_1																								340														
	PEN-PNW-Controller																									296													
	N_1-Controller																										203												
	N_2-Controller																										185												
	W_1-Controller																										118												
	We-Controller																										103												
	PB_6-Controller				17		17									79													212	560									
	SI_1-PB_2															72													196										
	SI_2-PB_6																									168												
	PWN-PWS-Controller																														150							
	PB_8-Controller				35	35										66													182										
	EI_1-PB_8															66													166										
	EI_2-PB_1																									168												
	PSE-PSW-Controller																										60												
	S_1-Controller																										79												
	S_2-Controller																									285												
	PNE-PES-Controller																										156												
	E_1-Controller																										171												
	E_2-Controller																														776							
	PB_5-Controller				16	16										68													186										
	WI_1-PB_5															67													182										
	WI_2-PB_3																														68							
	PB_7-Controller				5	5										98													252										
	NI_1-PB_9															75													200										
	NI_2-PB_7																																						
	48+54 Galb. Rd. (PB_1)	Rt.	1																																				
	9+20 Reading Rd. (PB_6)	Rt.	1																																				
	51+19 Galb. Rd. (PB_3)	Lt.	1																																				
	10+79 Reading Rd. (PB_4)	Rt.	1																																				
	49+40 Galb. Rd. (Controller)	Rt.							1					4	8								1														1	1	1	
	PB_2-PB_8				59		59																								69								
	SI_3-PB_8																													146									
	PB_1-PB_8				60	60																								70								
	EI_3-PB_8															55													162										
	PB_3-PB_5				60	60																								70								
	WI_3-PB_5															61													184										
	PB_4-PB_7																														48								
	50+59 Galb. Rd. (PB_5)	Lt.	1																																				
	8+50 Reading Rd. (PB_2)	Rt.	1																																				
	10+41 Reading Rd. (PB_7)	Rt.	1																																				
422	49+13 Galb. Rd. (PB_8)	Rt.	1																																				
	Total		8		252	176	76		5	8	8		8	4	8	707	9.56	1	2	1		1	8	4	340	917	1075	2068	1811	49	1		1	1	1		30.0	4		

SIGNAL QUANTITIES

TRAFFIC SIGNAL QUANTITIES SUB-SUMMARY

CALC. BY EGV DATE 3/KG
CHKD BY [illegible] DATE [illegible]

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

OHIO
F.H.W.A. REGION 5

435
787

SHEET NO.	STATION TO STATION	SIDE	625						632																		608		861					
			Pull Box, 18 Inch 713.08	Trench		Conduit, 3" Dia. 713.07	Conduit, 2" Dia. 713.07		Ground Rod			Vehicular Signal Head 3 Section, 12" Lens, One Way As Per Plan	Vehicular Signal Head 5 Section, 12" Lens, One Way As Per Plan		Loop Detector Unit Delay & Extension Type As Per Plan	Loop Detector Pavement Cutting	Concrete for Anchor Base Foundations	Strain Pole Type TC-5.10 Design No. 5 24'-0"	Strain Pole Type TC-8.18 Design No. 5 27'-0"			Removal Of Traffic Signal Installation	Covering Of Vehicular Signal Head	Cable Support Assembly	Messenger Wire, 7 Strand, 3/8" Dia. w/ Accessories	Signal Cable 5 Conductor No. 14 AWG	Signal Cable 7 Conductor No. 14 AWG	Loop Detector Wire Type E	Loop Detector Lead-In Cable	Power Cable, 3 Conductor, No. 8 AWG	Power Service	4" Concrete Walk		Coordinator, Time Base, Solid State, Digital	Controller, Actuated 5 Phase, Solid State Digital Microprocessor Module 8 Phase As Per Plan	Controller, Actuated 5 Phase, Solid State Digital Microprocessor Transit 2080 Alternate Bid	Concrete For Cabinet Foundation		
			Each	Lin. Ft.		Lin. Ft.	Lin. Ft.		Each			Each	Each		Each	Lin. Ft.	Cu. Yds.	Each	Each			Each	Each	Each	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Each	Sq. Ft.		Each	Each	Each	Cu. Yds.		
426	G+73 Golb. Rd. (Pole P1)	Rt.							1								2.39	1						1			47	1						
	G+91 Golb Rd. (Pole P2)	Lt.							1								2.39	1																
	7+85 Golb. Rd. (Pole P3)	Lt.							1								2.39		1					1										
	7+52 Golb. Rd. (Pole P4)(N1)	Rt.							1			1					2.39	1						1										
	G+85 Golb. Rd. (W2)	Lt.											1											1										
	G+89 Golb. Rd. (W1)	Lt.										1												1										
	7+44 Golb. Rd. N3	Lt.										1												1										
	7+58 Golb. Rd. N2	Lt.										1												1										
	7+62 Golb. Rd. E1	Rt.											1											1										
	7+58 Golb. Rd. E2	Rt.										1												1										
	7+12 Golb. Rd. S2	Rt.										1												1										
	6+90 Golb. Rd. S1	Rt.										1												1										
	P1-P2-P3-P4-P1																								325									
	N3-N2-N1-Controller																									256								
	E2-E1-Controller																										182							
	PB3-Controller			34			34																						263					
	W1-PB3																77																	
	PB4-Controller (For N1 & N12)			36			36																						375					
	N1-PB4																77																	
	N12-PB4																88																	
	PB2-Controller (For S1 & S12)			56			56																						413					
	S12-PB2																88																	
	S1-PB2																75																	
	W1-W2																									27								
	W2-Controller																										97							
	E1-PB1																78																	
	PB1-Controller			28			28																						48					
	G+66 Golb. Rd.	Rt.							1						6																8.33		1	1	1	0.99		
	G+42 Golb. Rd. (PB1)	Rt.	1																															
	G+38 Golb. Rd. (PB2)	Lt.	1																															
	8+12 Golb. Rd. (PB3)	Lt.	1																															
	5+28 Golb. Rd. (PB4)	Rt.	1																															
	P1-Controller	Rt.		7		7																												
	7+75 Golb. Rd.	Lt & Rt																					1											
426	S2-S1-Controller																									100								
	Total		4	161		7	154		5			7	2		6	483	9.56	3	1		1	9	4	325	383	279	1092	1099	47	1	8.33		1	1	1	0.99		

SIGNAL QUANTITIES

TRAFFIC SIGNAL QUANTITIES SUB-SUMMARY

CALC. BY DS DATE 3/16
CHKD. BY DATE

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

OHIO
F.H.W.A. REGION 5

436
787

SHEET NO.	STATION TO STATION	SIDE	625 Pull Box, 18 Inch 7/13.08	625 Trench	625	625 Conduit, 3" Dia. 7/13.07	625 Conduit, 2" Dia. 7/13.07	625	625 Ground Rod	608 4" Concrete Walk	608	632 Vehicular Signal Head 3 Section, 12" Lens, One Way	632 Vehicular Signal Head 5 Section, 12" Lens, One Way	632 Loop Detector Unit As Per Plan	632	632 Loop Detector Pavement Cutting	632 Concrete For Anchor Base Foundations	630 Combination Overhead Sign Support & Strain Pole Type TC-9.30 Design 4 Arms 8' (Max)	630 Concrete For Anchor Base Foundations	632 Strain Pole Type TC-81.10 Design No. 5, 30'-0"	632 Strain Pole Type TC-81.10 Design No. 5, 25'-0"	632	632 Covering Of Vehicular Signal Heads	632 Cable Support Assembly	632 Messinger Wire, 7 Strand, 3/8" Dia. w/ Accessories	632 Signal Cable, 5 Conductor, No. 14 AWG	632 Signal Cable 7 Conductor, No. 14 AWG	632 Loop Detector Wire, Type E	632 Loop Detector Lead-In-Cable	632 Power Cable, 3 Conductor, No. 8 AWG	632 Power Service	632 Removal Of Traffic Signal Installation	861 Controller, Actuated 3 Phase, Solid State, Digital, Microprocessor Model 6, Phase, Minimum Use	861 Controller, Actuated 3 Phase, Solid State, Digital, Microprocessor Model 6, Phase, Add-On Item	861 Concrete For Controller Foundation	861 Coordination, Time Base Solid State, Digital	630 Sign, Flat Sheet, Type A Sheeting	630 Covering Of Signs	630 Sign Marker Assembly (Span Wire) Type 1		
			Each	Lin.Ft.		Lin.Ft.	Lin.Ft.		Each	Each		Each	Each	Each		Lin.Ft.	Cu.Yds.	Each	Each	Each	Each		Each	Each	Lin.Ft.	Lin.Ft.	Lin.Ft.	Lin.Ft.	Lin.Ft.	Lin.Ft.	Each	Each	Each	Each	Each	Each	Each	Each	S.F.	S.F.	Each		R-26A-30 30"x36"	R-27A-30 30"x36"
429	19+65; Strain Pole-1,	Lt.							1									1	2.92					2						1													
	19+59; Strain Pole-2,	Rt.							1								2.39				1			1																			
	18+76; Strain Pole-3,	Rt.							1								2.39				1			1																			
	18+49; Strain Pole-4,	Lt.							1								2.39							1																			
	19+62 E2	Rt.											1								1																						
	19+60 E1	Rt.										1												1																			
	19+61 W3	Rt.										1												1																			
	18+94 S2	Rt.										1												1																			
	18+80 S1	Rt.											1											1																			
	18+76 W2	Rt.										1												1																	7.5	7.5	1	1	
	18+76 W1	Lt.										1												1																	7.5	7.5	1		1
	19+01	Lt.																																							7.5	7.5	1	1	
	18+88	Lt.																																							7.5	7.5	1		
	Signal E1-E2	Rt.																								29																	
	Signal E2-Controller																										117																
	Signal W3-Controller																									124																
	Signal S1-S2-Controller																										236														
	Signal W2-W1-Controller																									216																
	PB2-Controller																																525								
	PB1-Controller																																308								
	Loop S1E-PB2															97																										
	Loop S1I-PB2															121																212										
	Loop E1-PB1															48																260										
	Pole P-Controller			47		47																										130										
	125+85 Ramp "Q"	Rt.							1	8.33				3																			89									
	PB2-Pole P4			25			25																															1	1	0.99	1				
	PB1-Pole P3			49			49																																					
	124+53 Ramp "P"	Lt.	1																																									
	18+28	Rt.	1																																									
	P1-P2-P3-P4-P1																										329																
429	14+00 Galb. Rd.																																											
	Total		2	121		47	74		5	8.33		5	2	3		266	10.09	1	2.92	1	2		7	5	329	369	353	602	833	89	1	1	1	1	0.99	1	225	225	3				

SIGNAL QUANTITIES

RETAINING WALLS GENERAL SUMMARY

CALC. BY JP DATE 2-15-86	IR-75-1196)10	OHIO	438
CHKD. BY TB DATE 5-14-86	& F-2(113)	FHWA REGION 5	787

HAM-75-9.93
HAM-126-13.00

DESIGN 1 — WALL NO. 2

ITEM	TOTAL	UNIT	DESCRIPTION
203	997	C.Y.	Embankment
503	662	C.Y.	Unclassified Excavation
503	LUMP	SUM	Cofferdams, Cribs and Sheeting
509	22415	LBS.	Reinforcing Steel, Grade 60
511	282	C.Y.	Class "C" Concrete, Footings
511	329	C.Y.	Class "C" Concrete, above footings
516	102	S.F.	1" Preformed Expansion Joint Filler
518	220	C.Y.	Porous Backfill
824	4323	LBS.	Epoxy Coated Reinforcing Steel, Grade 60
516	144	L.F.	P.V.C. Waterstop

DESIGN 2 — WALL NO. 2

203	1357	C.Y.	Select Granular Embankment
203	52	C.Y.	Embankment
503	76	C.Y.	Unclassified Excavation, as per plan
503	LUMP	SUM	Cofferdams, Cribs and Sheeting
509	13447	LBS.	Reinforcing Steel Grade 60
511	8	C.Y.	Class "C" Concrete, Coping
SPL.	3893	S.F.	Retained Earth Walls
511	99	C.Y.	Class "C" Concrete, Traffic Barrier

DESIGN 3 — WALL NO. 2

203	1175	C.Y.	Select Granular Embankment
203	182	C.Y.	Embankment
503	99	C.Y.	Unclassified Excavation, as per plan
503	LUMP	SUM	Cofferdams, Cribs and Sheeting
509	3503	LBS.	Reinforcing Steel, Grade 60
511	9	C.Y.	Class "C" Concrete, Coping
SPL.	3610	S.F.	Reinforced Earth Walls
SPL.	274	LIN.FT.	Precast Traffic Barrier
511	47	C.Y.	Class "C" Concrete. Junction Slab

DESIGN 1 — WALL NO. 3

ITEM	TOTAL	UNIT	DESCRIPTION
503	804	C.Y.	Unclassified Excavation
503	LUMP	SUM	Cofferdams, Cribs and Sheeting
509	20440	LBS.	Reinforcing Steel, Grade 60
511	268	C.Y.	Class "C" Concrete, footings
511	245	C.Y.	Class "C" Concrete above footings
516	82	S.F.	1" Preformed Expansion Joint Filler
518	59	C.Y.	Porous Backfill
516	101	L.F.	P.V.C. Waterstop, as per plan
625			Highway Lighting Quantities are included in roadway plans, see highway lighting quantities

NOTE:
RETAINING WALL NO. 1 HAS BEEN DELETED.

DESIGN 1 — WALL NO. 4

ITEM	TOTAL	UNIT	DESCRIPTION
203	4752	C.Y.	Embankment
503	1514	C.Y.	Unclassified Excavation
503	LUMP	SUM	Cofferdams, Cribs and Sheeting
509	82100	LBS.	Reinforcing Steel, Grade 60
511	749	C.Y.	Class "C" Concrete, footings
511	684	C.Y.	Class "C" Concrete, above footings
516	195	S.F.	1" Preformed Expansion Joint Filler
518	607	C.Y.	Porous Backfill
516	244	L.F.	P.V.C. Waterstop

DESIGN 2 — WALL NO. 4

203	5313	C.Y.	Select Granular Embankment
203	1271	C.Y.	Embankment
503	0	C.Y.	Unclassified Excavation, as per plan
503	LUMP	SUM	Cofferdams, Cribs and Sheeting
509	2164	LBS.	Reinforcing Steel, Grade 60
511	24	C.Y.	Class "C" Concrete, Coping
SPL.	6253	S.F.	Retained Earth Walls

DESIGN 3 — WALL NO. 4

203	4828	C.Y.	Select Granular Embankment
203	1182	C.Y.	Embankment
503	0	C.Y.	Unclassified Excavation, as per plan
503	LUMP	SUM	Cofferdams, Cribs and Sheeting
509	2115	LBS.	Reinforcing Steel, Grade 60
511	26	C.Y.	Class "C" Concrete, Coping
SPL.	5800	S.F.	Reinforced Earth Walls

DESIGN 2 — WALL NO. 5

ITEM	TOTAL	UNIT	DESCRIPTION
203	6393	C.Y.	Select Granular Embankment
203	2164	C.Y.	Embankment
503	784	C.Y.	Unclassified Excavation, as per plan
503	LUMP	SUM	Cofferdams, Cribs and Sheeting
509	2212	LBS.	Reinforcing Steel, Grade 60
511	24	C.Y.	Class "C" Concrete, Coping
SPL.	10145	S.F.	Retained Earth Walls

DESIGN 3 — WALL NO. 5

203	5940	C.Y.	Select Granular Embankment
203	2163	C.Y.	Embankment
503	590	C.Y.	Unclassified Excavation, as per plan
503	LUMP	SUM	Cofferdams, Cribs and Sheeting
509	2233	LBS.	Reinforcing Steel, Grade 60
511	26	C.Y.	Class "C" Concrete, Coping
SPL.	9440	S.F.	Reinforced Earth Walls

DESIGN 1 — WALL NO. 6

ITEM	TOTAL	UNIT	DESCRIPTION
203	2518	C.Y.	Embankment
503	849	C.Y.	Unclassified Excavation
503	LUMP	SUM	Cofferdams, Cribs and Sheeting
505	LUMP	SUM	Pile Driving Equipment Mobilization
507	5550	L.F.	12" Cast-in-Place Reinforced Concrete Piles
509	69600	LBS.	Reinforcing Steel, Grade 60
511	511	C.Y.	Class "C" Concrete, footings
511	555	C.Y.	Class "C" Concrete, above footings
516	149	S.F.	1" Preformed Expansion Joint Filler
518	427	C.Y.	Porous Backfill
824	10642	LBS.	Epoxy-Coated Reinforcing Steel, Grade 60
516	206	L.F.	P.V.C. Waterstop
625			(highway lighting quantities are included roadway plans)
SPL			Noise barrier (quantities are included roadway plans)

DESIGN 2 — WALL NO. 6

ITEM	TOTAL	UNIT	DESCRIPTION
203	3134	C.Y.	Select Granular Embankment
203	201	C.Y.	Embankment
503	673	C.Y.	Unclassified Excavation as per plan
503	LUMP	SUM	Cofferdams, Cribs and Sheeting
509	20357	LBS.	Reinforcing Steel, Grade 60
511	102	C.Y.	Class "C" Concrete, Traffic Barrier
SPL.	5987	S.F.	Retained Earth Walls

DESIGN 3—WALL NO. 6

203	3354	C.Y.	Select Granular Embankment
203	184	C.Y.	Embankment
503	620	C.Y.	Unclassified Excavation, as per plan
503	LUMP	SUM	Cofferdams, Cribs and sheeting
509	23860	LBS.	Reinforcing Steel, Grade 60
511	205	C.Y.	Class "C" Concrete, Traffic Barrier
SPL	5540	S.F.	Reinforced earth walls

DESIGN 2 — WALL NO. 7

ITEM	TOTAL	UNIT	DESCRIPTION
203	1141	C.Y.	Select Granular Embankment
203	155	C.Y.	Embankment
503	292	C.Y.	Unclassified Excavation, as per plan
503	LUMP	SUM	Cofferdams, Cribs and Sheeting
509	924	LBS.	Reinforcing Steel, Grade 60
511	10	C.Y.	Class "C" Concrete, Coping
SPL.	2811	S.F.	Retained Earth Walls.

DESIGN 3 — WALL NO. 7

203	1139	C.Y.	Select Granular Embankment
203	182	C.Y.	Embankment
503	289	C.Y.	Unclassified Excavation, as per plan
503	LUMP	SUM	Cofferdams, Cribs and Sheeting
509	933	LBS.	Reinforcing Steel, Grade 60
511	11	C.Y.	Class "C" Concrete, Coping
SPL.	2620	S.F.	Reinforced Earth Walls

DESIGN 1 — WALL NO. 8

ITEM	TOTAL	UNIT	DESCRIPTION
203	0	C.Y.	Embankment
503	677	C.Y.	Unclassified Excavation
503	Lump	Sum	Cofferdams, Cribs and sheeting
509	10436	LBS.	Reinforcing steel, Grade 60
511	202	C.Y.	Class "C" concrete, footings
511	206	C.Y.	Class "C" concrete above footings
516	74	Lin Ft	PVC waterstop
516	71	Sq. ft	1" Preformed Expansion Joint filler
824	10113	Lbs.	Epoxy-Coated Reinforcing Steel, Grade 60

DESIGN 3— WALL NO. 8

ITEM	TOTAL	UNIT	DESCRIPTION
203	1333	C.Y.	Select Granular Embankment
203	0	C.Y.	Embankment
503	1600	C.Y.	Unclassified Excavation, as per plan
503	Lump	Sum	Cofferdams, Cribs, and sheeting
SPL	4840	S.F.	Reinforced earth wall

DESIGN 2 — WALL NO. 9

ITEM	TOTAL	UNIT	DESCRIPTION
203	2127	C.Y.	Select Granular Embankment
203	859	C.Y.	Embankment
503	587	C.Y.	Unclassified Excavation, as per plan
503	LUMP	SUM	Cofferdams, Cribs and Sheeting
509	1778	LBS.	Reinforcing Steel, Grade 60
511	18	C.Y.	Class "C" Concrete, Coping
SPL.	3599	S.F.	Retained Earth Walls

DESIGN 3 — WALL NO. 9

203	1579	C.Y.	Select Granular Embankment
203	1772	C.Y.	Embankment
503	252	C.Y.	Unclassified Excavation, as per plan
503	LUMP	SUM	Cofferdams, Cribs and Sheeting
509	1661	LBS.	Reinforcing Steel, Grade 60
511	20	C.Y.	Class "C" Concrete, Coping
SPL.	2850	S.F.	Reinforced Earth Walls

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

1/1

RETAINING WALLS
GENERAL SUMMARY

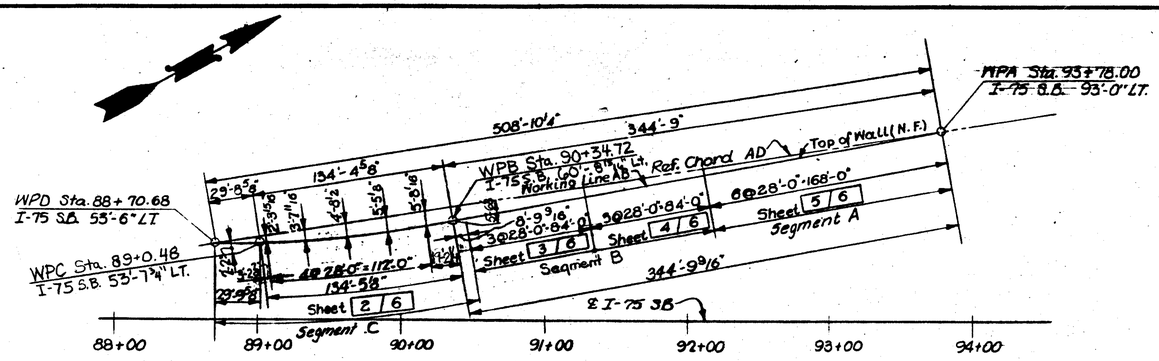
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
—	2/13/86		JAP 2-15-86	J S 2-18-86	

OHIO SUM PRINT 140503

FED. NO. DIVISION	STATE	PROJECT	
2	OHIO	IR-75-1(96)10	

103
107

HAM-75-9.93
HAM-126-13.00



LAYOUT

	ESTIMATED QUANTITIES				△REVISIONS		QUANTITIES CHECKED	
	ITEM	TOTAL	UNIT	DESCRIPTION	CALC. BY	CHECKED BY	BY	DATE
△	203	947	Cu. Yds.	Embankment	JAP 2-15-86	TMB		
△	503	Lump	Sum	Cofferdams, cribs and sheeting	JAP 2-15-86	TMB		
△	509	22415	Lbs.	Reinforcing Steel, Grade 60.	JAP 11-15-85	TMB	T.D.W.	4-22-71
△	511	282	Cu.Yds.	Class "C" Concrete in Wall Footings	JAP 11-15-85	TMB	B.W.C.	4-21-71
	511	329	Cu.Yds.	Class "C" Concrete in Walls above Footings			B.W.C.	4-21-71
△	516	144	Lin.Ft.	PVC Waterstop	JAP 2-15-86	TMB	T.D.W.	4-30-71
	516	102	Sq.Ft.	1" Preformed Expansion Joint Filler			T.D.W.	4-30-71
	618	220	Cu.Yds.	Porous Backfill			B.W.C.	4-19-71
	503	662	Cu.Yds.	Unclassified Excavation			A.S.	4-14-71
△	824	4323	Lbs.	Epoxy coated Reinforcing Steel, grade 60	JAP 11-19-85	TMB		

DESIGN SPECIFICATIONS:

This structure conforms to "Standard Specifications for Highway Bridges" adopted by the American Association of State Highway Officials, tenth edition, 1969 and Interim Specifications, 1970, developed by the AASHO Committee on Bridges and Structures, including the Ohio "Supplement" to these specifications.

DESIGN DATA:

△ CONCRETE CLASS "C" Compressive strength : 4000 PSI.

△ REINFORCING STEEL. ASTM A615, A616, A617, GRADE 60, Minimum yeild strength : 60000 PSI.

FOOTING KEYS The Key for the footing shall be placed in a carefully made trench against undisturbed earth

FOUNDATION BEARING PRESSURE Footings are designed for a maximun bearing pressure of 2.5 Tons per sq. ft.

GENERAL NOTES △

PLAN REVISIONS BY BALKE ENGINEERS

REVISIONS WERE MADE TO RETAINING WALL DRAWINGS TO INCORPORATE THE FOLLOWING:

- REVISE PARAPETS TO STANDARD SAFETY PARAPET SHAPE.
- PROVIDE EPOXY-COATED REINFORCEMENT IN CORROSION-PRONE CONCRETE AREAS.
- ADJUSTMENT OF HORIZONTAL TEMPERATURE STEEL SPACING.

REVISIONS MADE BY BALKE ENGINEERS ARE DENOTED BY (△) SYMBOL.

OTHER THAN NOTED REVISIONS, RETAINING WALLS ARE THE DESIGN AND DETAILING OF VOGT, IVERS, AND ASSOCIATES, INC.

PARAPET REVISIONS CONFORM TO OHIO DEPARTMENT OF TRANSPORTATION "STANDARD BRIDGE DRAWINGS" DRAWING NO. BR-1, DATED 5-29-79, MODIFIED VERSION.

VOGT, IVERS, & ASSOCIATES, INC. 1/6
ENGINEERS ARCHITECTS
CINCINNATI

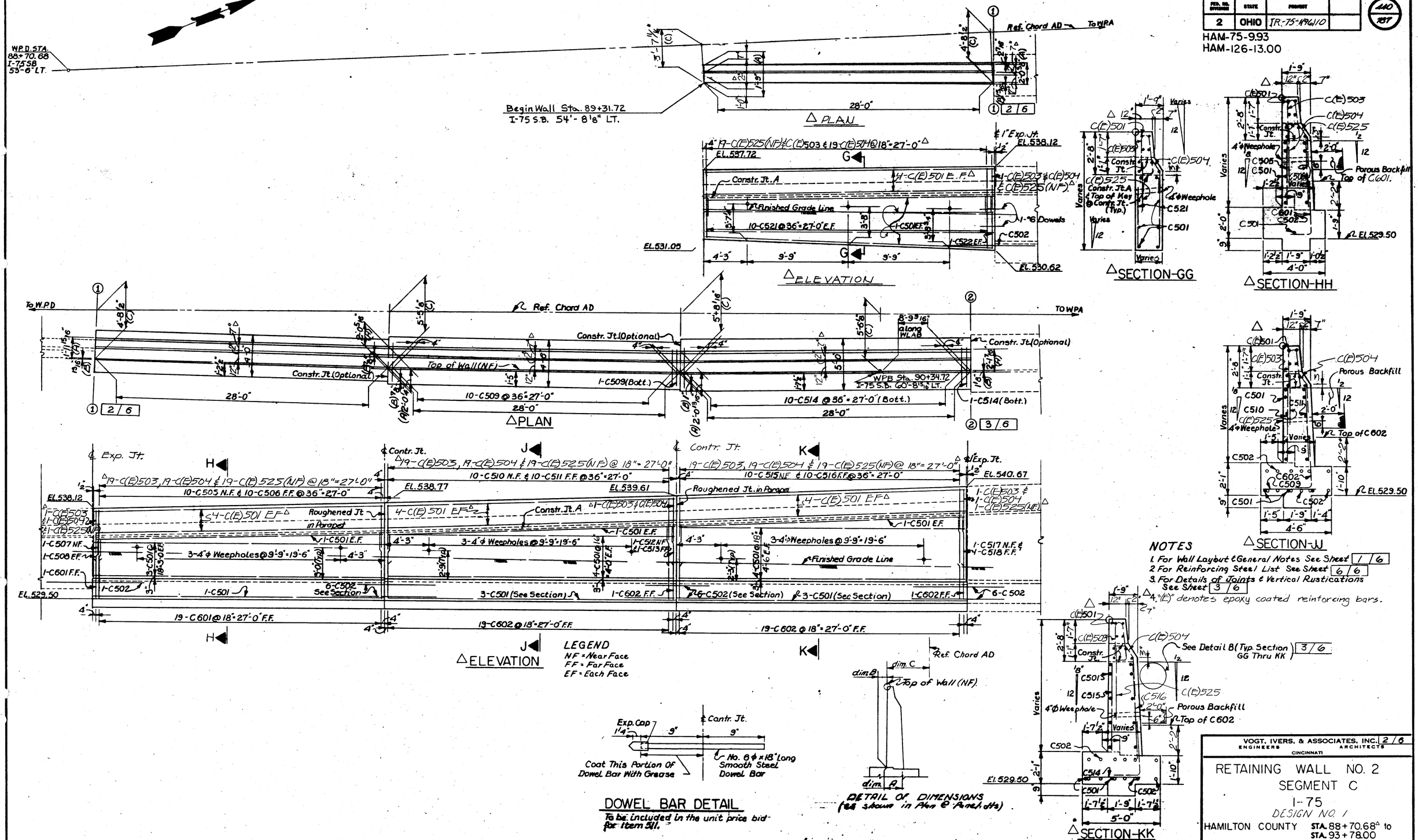
RETAINING WALL NO. 2
LAYOUT & GENERAL NOTES
I-75
DESIGN NO. 1
HAMILTON COUNTY STA. 88+70.68△ to STA. 93+78.00

DESIGNED	DRAWN	TRACED	CHECKED	REVISED DATE	REVISED
—	TDW	AS	SND	ERH 4/30/71	JAP 2-15-86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	IR-75-1496/10	

440
787

HAM-75-9.93
HAM-126-13.00



LEGEND
NF = Near Face
FF = Far Face
EF = Each Face

NOTES
1. For Wall Layout & General Notes See Sheet 1/6
2. For Reinforcing Steel List See Sheet 6/6
3. For Details of Joints & Vertical Rustications See Sheet 3/6
4. "(E)" denotes epoxy coated reinforcing bars.

VOGT, IVERS, & ASSOCIATES, INC. 2/6
ENGINEERS ARCHITECTS
CINCINNATI

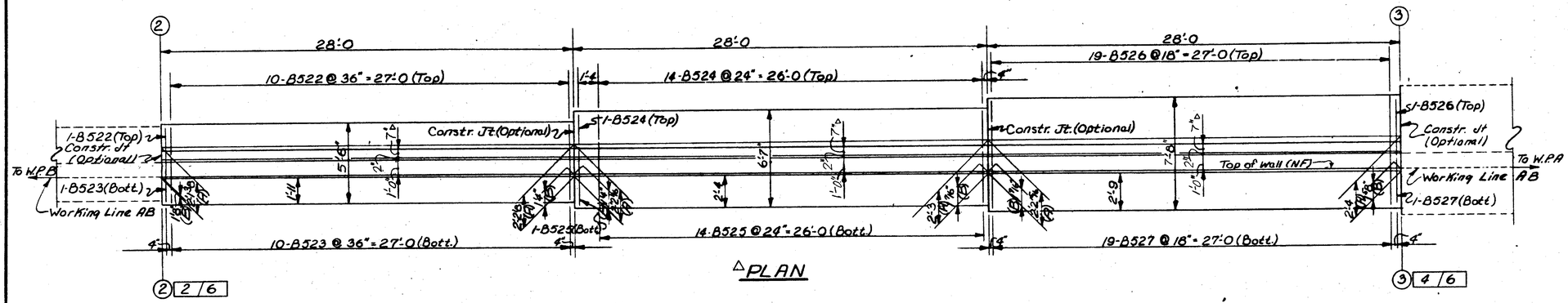
RETAINING WALL NO. 2
SEGMENT C
I-75
DESIGN NO. 1
HAMILTON COUNTY STA. 88+70.68 to STA. 93+78.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
T.D.W.	T.D.W.	A.S.	S.N.D.	ERH	6/30/71	JAP 2-15-86

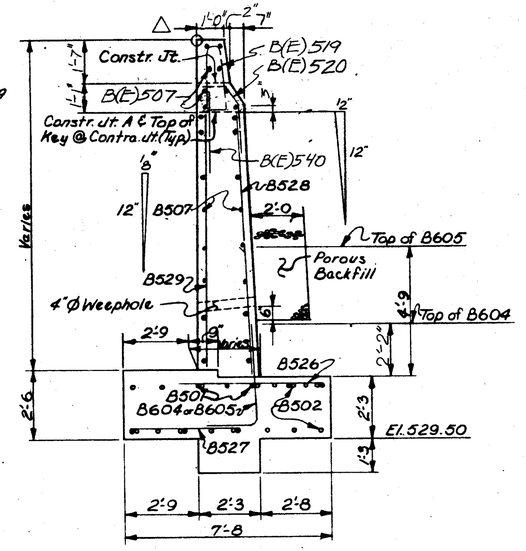
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	IR-75-1196(10	4

441
287

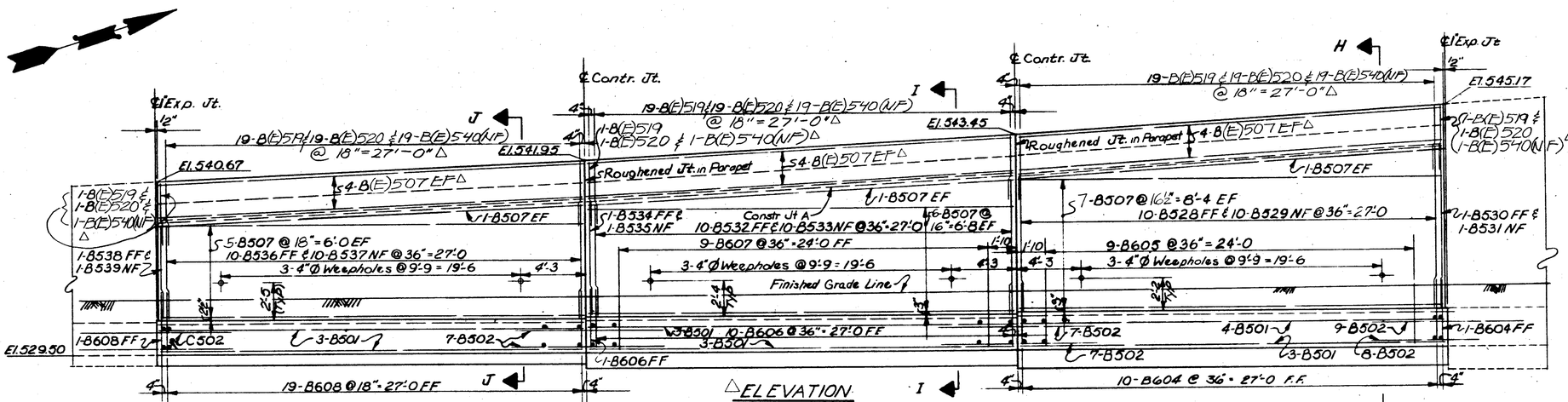
HAM-75-9.93
HAM-126-13.00



△PLAN



△SECTION H-H

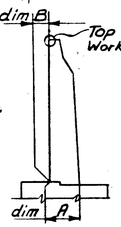


△ELEVATION

NOTES

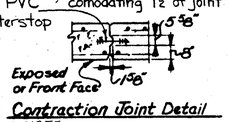
1. For Wall Layout & General Notes See Sheet 1 / 6
2. For Reinforcing Steel List See Sheet 6 / 6
3. Premolded Sealing Strip shall extend from top of footing to 1'-0 below top of Wall or to Constr Jt A for walls with parapets.
△4. "E" Denotes epoxy coated reinforcing bar.

LEGEND
EF = Each Face
NF = Near Face
FF = Far Face



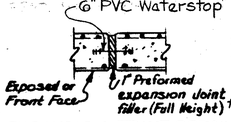
DETAIL OF DIMENSIONS (as shown in Plan & Panel Jts)

*NOTE:
A 6" PVC Waterstop shall be centered on the retaining wall expansion joints to form a continuous waterproof seal. The waterstop shall be capable of accomodating 1½" of joint movement.

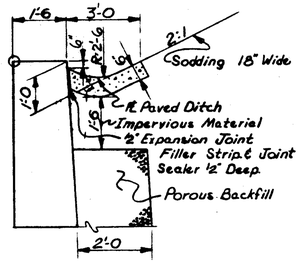


Contraction Joint Detail

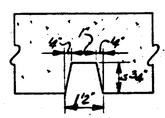
† NOTE:
Place filler on each side of PVC waterstop.



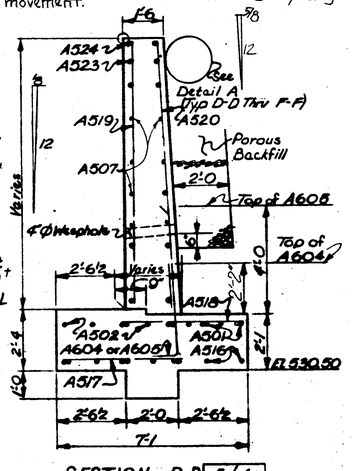
EXPANSION JOINT DETAIL



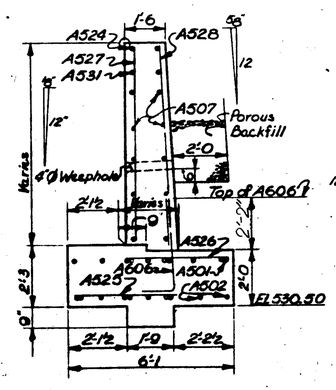
DETAIL A
TYPE 2 PAVED GUTTER



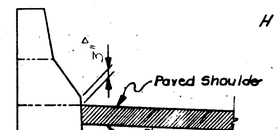
VERTICAL RUSTICATION GROOVE Spaced @ 4'-0"



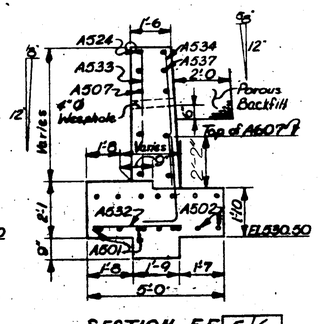
SECTION D-D 5 / 6



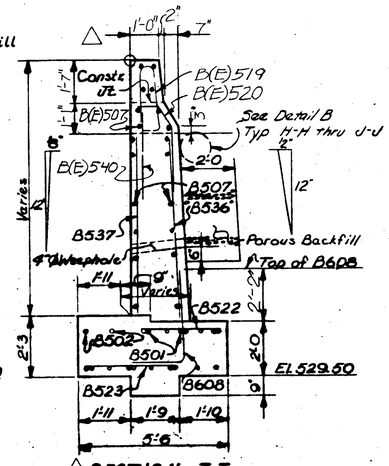
SECTION E-E 5 / 6



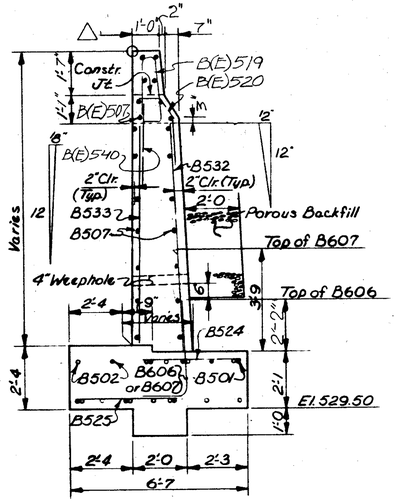
DETAIL B



SECTION F-F 5 / 6



△SECTION J-J



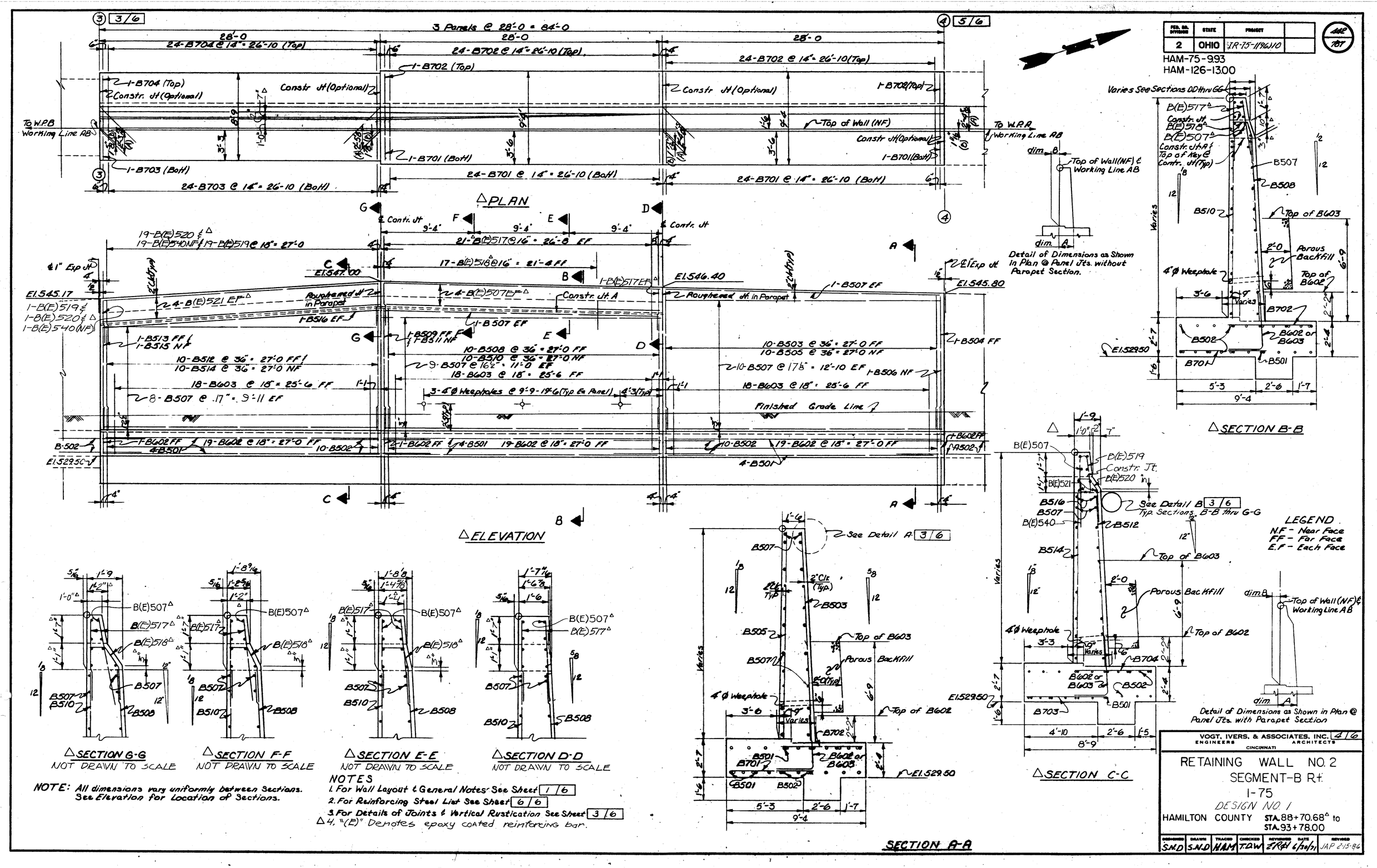
△SECTION I-I

VOGT, IVERS, & ASSOCIATES, INC. ENGINEERS ARCHITECTS
CINCINNATI

3 / 6

RETAINING WALL NO. 2
SEGMENT B Lt
I-75
DESIGN NO. 1
HAMILTON COUNTY STA. 88+70.68^ to STA. 93+78.00

DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE	REVISED
SND	BWC	BWC	TDW	ERH	6/30/71	JAP 2/15/84



NOTE: All dimensions vary uniformly between Sections. See Elevation for Location of Sections.

NOTES
1. For Wall Layout & General Notes See Sheet 1/6
2. For Reinforcing Steel List See Sheet 6/6
3. For Details of Joints & Vertical Rustication See Sheet 3/6
4. "(E)" Denotes epoxy coated reinforcing bar.

VOGT, IVERS, & ASSOCIATES, INC. 4/6
ENGINEERS ARCHITECTS
CINCINNATI

RETAINING WALL NO. 2
SEGMENT-B Rt.
I-75
DESIGN NO. 1
HAMILTON COUNTY STA. 88+70.68 to STA. 93+78.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
S.N.D	S.N.D	HAM	T.D.W	ERH	6/30/71	JAP 2-15-86

FED. ROAD DIVISION	STATE	PROJECT	
2	OHIO	IR-75-1(82)10	

HAM-75-9.93
HAM-126-13.00

3 Panels @ 28'-0 = 84'-0

24-A702 @ 14" = 26'-10 (Top) | 24-A704 @ 14" = 26'-10 (Top) | 24-A704 @ 14" = 26'-10 (Top)

1-A702 (Top) | Constr Jt (Optional) | Constr. Jt (Optional) | 1-A704 (Top) | Constr Jt (Optional) | 1-A704 (Top)

Working Line AB TO W.P.B. | 1-A701 (Bott) | Top of Wall (NF) | 1-A703 (Bott.) | Constr Jt (Optional) | 1-A703 (Bott) | W.L. AB TO WPA

24-A701 @ 14" = 26'-10 (Bott) | 24-A703 @ 14" = 26'-10 (Bott) | 24-A703 @ 14" = 26'-10 (Bott)

4 | 4 / 6 — 5 | 5 / 6

PLAN

℄ Exp Jt | A | ℄ Contr. Jt. | B | ℄ Contr. Jt. | C | ℄ Exp Jt

El. 545.80 | El. 545.20 | El. 544.60 | El. 544.00

1-A507 E.F. | 1-A507 E.F. | 1-A507 E.F.

1-A505 N.F. / 1-A506 F.F. | 10-A508 N.F. / 10-A509 F.F. @ 36" = 27'-0 | 10-A512 N.F. / 10-A513 F.F. @ 36" = 27'-0

10-A503 N.F. / 10-A504 F.F. @ 36" = 27'-0 | 1-A510 N.F. / 1-A511 F.F. | 1-A514 N.F. / 1-A515 F.F.

9-A507 @ 18" = 13'-6 E.F. | 9-A508 @ 18" = 13'-6 E.F. | 9-A507 @ 17"+11'-6 E.F.

18-A603 @ 18" = 25'-6 F.F. | 18-A603 @ 18" = 25'-6 F.F. | 18-A603 @ 18" = 25'-6 F.F.

3-4 Ø Weepholes @ 9'-9 = 19'-6 (Typ Ea. Panel)

Finished Grade Line

1-A602 F.F. | 19-A602 @ 18" = 27'-0 F.F. | 19-A602 @ 18" = 27'-0 F.F. | 19-A602 @ 18" = 27'-0 F.F. | 1-A602 F.F.

El. 529.50 | 10-A502 (See Section) | 4-A501 (See Section) | 10-A502 (See Section) | 4-A501 (See Section) | 10-A502 (See Section) | 4-A501 (See Section) | A502 A510 | El. 529.50

1-A602 F.F.

A | B | C

ELEVATION

5 | 14-A518 @ 24" = 26'-0 (Top) | 10-A526 @ 36" = 27'-0 (Top)

1-A518 (Top) | Constr Jt (Optional) | Constr. Jt. (Optional) | Top of Wall (N.F.) | 1-A526 (Top) | Constr. Jt. (Optional) | (Begin Wall)

W.L. AB To W.P.B. | 1-A517 (Bott) | 1-A525 (Bott.) | W.P.A. | 1-A532 (Bott.)

14-A517 @ 24" = 26'-0 (Bott) | 10-A525 @ 36" = 27'-0 (Bott) | 10-A532 @ 36" = 27'-0 (Bott)

3 Panels @ 28'-0 = 84'-0

5 | 5 / 6

PLAN

El. 544.00 | ℄ Exp Jt | 3 / 6 D | 1-A524 E.F. | ℄ Contr. Jt | El. 541.33 | 3 / 6 E | 1-A524 E.F. | ℄ Contr. Jt | El. 538.67 | 3 / 6 F | 10-A533 N.F. / 10-A534 F.F. @ 36" = 27'-0 | El. 536.00 | W.P.A.

1-A523 E.F. | 1-A521 N.F. / 1-A522 F.F. | 10-A519 N.F. / 10-A520 F.F. @ 36" = 27'-0 | 1-A531 E.F. | 10-A527 N.F. / 10-A528 F.F. @ 36" = 27'-0 | 1-A537 E.F. | 1-A535 N.F. & 1-A536 F.F.

3-4 Ø Weepholes @ 9'-9 = 19'-6 | 9-A605 @ 36" = 27'-0 F.F. | 3-A507 @ 18" = 3'-0 E.F. | 2-4 Ø Weepholes @ 9'-9 = 9'-9

Finished Grade Line | 1-A529 E.F. / 1-A530 N.F. | 1-A606 F.F.

1-A604 F.F. | 7-A502 | 3-A501 (See Section) | 7-A502 | 5-A501 (See Section) | 1-A607 F.F.

9-A502 | 4-A501 (See Section) | 3-A501 (See Section) | 7-A502 (See Section) | 5-A501 (See Section)

El. 529.50 | 7-A516 | El. 530.50

10-A604 @ 36" = 27'-0 F.F. | 19-A606 @ 18" = 27'-0 F.F. | 19-A607 @ 18" = 27'-0 F.F.

D | E | F

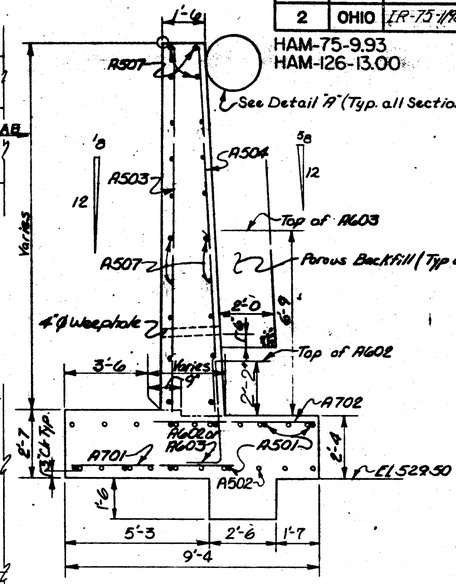
ELEVATION

NOTES

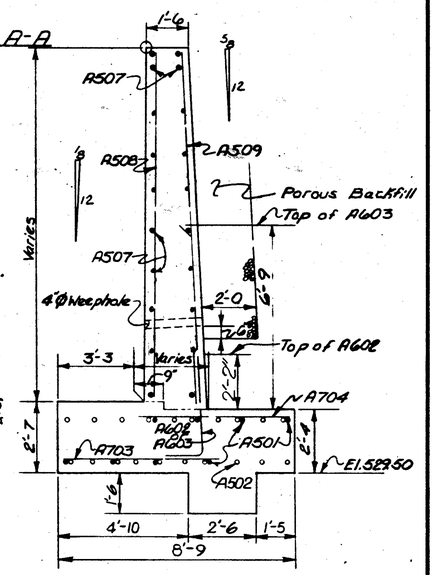
1. For Wall Layout & General Notes See Sheet 1 / 6
2. For Reinforcing Steel List See Sheet 6 / 6
3. For Details of Joints & Vertical Rustication See Sheet 3 / 6

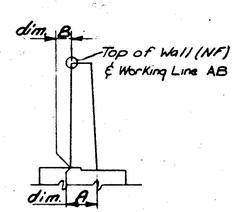
LEGEND

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face



SECTION A-A





DETAIL OF DIMENSIONS as Shown in Plan @ Panel Jts.

SECTION B-B

(Section C-C Similar)

VOGT, IVERS, & ASSOCIATES, INC. 5 / 6
ENGINEERS ARCHITECTS
CINCINNATI

RETAINING WALL NO. 2
SEGMENT A
I-75

DESIGN NO. /

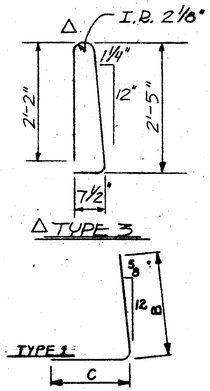
HAMILTON COUNTY STA. 88+70.68^A to STA. 93+78.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
TDW	TDW	HAM	SND	ERH	6/30/76	JAP 2/15/86

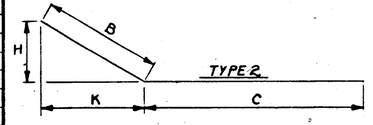
MARK	NO	LENGTH	TYPE	WEIGHT	MARK	NO	LENGTH	TYPE	WEIGHT	MARK	NO	LENGTH	TYPE	WEIGHT
		SEGMENT A [5/6]					SEGMENT B [4/6] [3/6]					SEGMENT D [2/6]		
A501	40	27'-6"	Str.	1167	B501	43	27'-6"	Str.	1233	C501	39 Δ	27'-5"	Str.	1115
A502	97	10'-0"	Str.	1012	B502	85	10'-0"	Str.	887	C502	37	10'-0"	Str.	386
A503	10	12'-11" to 13'-5 3/4" by 3/4"-1ea.	Str.	138	B503	10	13'-10" to 14'-4 3/4" by 3/4"-1ea.	Str.	147	C(E)503	80 Δ	5'-3"	3	438
A504	10	13'-2" to 13'-8 3/4" by 3/4"-1ea.	Str.	140	B504	1	13'-9"	Str.	14	C(E)504	80 Δ	3'-9"	4	313
A505	1	13'-6"	Str.	14	B505	10	13'-7" to 14'-1 3/4" by 3/4"-1ea.	Str.	145	C505	10	3'-9 3/4" to 4'-4" by 3/4"-1ea.	Str.	42
A506	1	13'-9"	Str.	14	B506	1	13'-6"	Str.	14	C506	10	4'-0 1/4" to 4'-7" by 3/4"-1ea.	Str.	45
A507	72	27'-5"	Str.	2059	B507	82 Δ	27'-5"	Str.	2344	C507	1	3'-9"	Str.	4
A508	10	12'-4" to 12'-10 3/4" by 3/4"-1ea.	Str.	132	B508	10	11'-9" to 12'-3 3/4" by 3/4"-1ea	Str.	125	C508	1	4'-0	Str.	4
A509	10	12'-7" to 13'-1 3/4" by 3/4"-1ea.	Str.	134	B509	1	12'-8"	Str.	13	C509	11	3'-3	Str.	37
A510	1	12'-4"	Str.	13	B510	10	11'-6" to 12'-1 3/4" by 3/4"-1ea.	Str.	125	C510	10	4'-4" to 5'-1" by 1"-1ea.	Str.	49
A511	1	12'-7"	Str.	13	B511	1	12'-1"	Str.	13	C511	10	4'-7" to 5'-4" by 1"-1ea.	Str.	52
A512	10	11'-9" to 12'-3 3/8" by 3/4"-1ea.	Str.	125	B512	10	10'-5" to 12'-3 1/2" by 3 1/2"-1ea.	Str.	118	C512	1	5'-2"	Str.	5
A513	10	12'-0" to 12'-6 3/4" by 3/4"-1ea.	Str.	128	B513	1	10'-5"	Str.	11	C513	1	5'-5"	Str.	6
A514	1	11'-9"	Str.	12	B514	10	10'-2" to 12'-0 1/2" by 3 1/2"-1ea.	Str.	116	C514	11	3'-6"	Str.	40
A515	1	12'-0"	Str.	13	B515	1	10'-2"	Str.	11	C515	10	5'-2" to 6'-1 1/4" by 1 1/4"-1ea.	Str.	59
A516	7	9'-7"	2	70	B516	2	27'-6"	Str.	57	C516	10	5'-5" to 6'-4 1/4" by 1 1/4"-1ea.	Str.	61
A517	15	4'-7"	Str.	72	B(E)517	44 Δ	4'-8"	Str.	195	C517	1	6'-3"	Str.	7
A518	15	4'-1"	Str.	64	B(E)518	17 Δ	3'-9" TO 3'-10" by 1/16"-12EA.	4	67	C518	1	6'-6"	Str.	7
A519	10	8'-3 1/2" to 10'-11" by 3 1/2"-1ea.	Str.	100	B(E)519	80 Δ	5'-3"	3	438					
A520	10	8'-6 1/2" to 11'-2" by 3 1/2"-1ea.	Str.	103	B(E)520	80 Δ	3'-9"	4	313					
A521	1	11'-0"	Str.	11	B(E)521	8 Δ	27'-6"	Str.	229	C521	20	5'-8" to 4'-5" by 1"-2ea	Str.	84
A522	1	11'-3"	Str.	12	B522	11	3'-0"	Str.	34	C522	2	4'-6"	Str.	9
A523	2	15'-6"	Str.	32	B523	11	3'-10"	Str.	44					
A524	6	27'-8"	Str.	172	B524	16	3'-8	Str.	57	C(E)501	32 Δ	27'-5"	Str.	915
A525	11	3'-11"	Str.	45	B525	15	4'-4"	Str.	68	C(E)525	80 Δ	3'-0"	Str.	250
A526	11	5'-8"	Str.	42	B526	20	4'-3"	Str.	89					
A527	10	5'-9 1/2" to 8'-5" by 3 1/2"-1ea.	Str.	74	B527	20	4'-10"	Str.	101					
A528	10	6'-0 1/2" to 8'-8" by 3 1/2"-1ea.	Str.	77	B528	10	8'-9 3/4" to 10'-6" by 2 1/4"-1ea.	Str.	101	C601	20	5'-7"	1	168
A529	1	6'-0"	Str.	6	B529	10	8'-6 3/4" to 10'-3" by 2 1/4"-1ea.	Str.	98	C602	40	5'-8"	1	340
A530	1	5'-9"	Str.	6	B530	1	10'-7"	Str.	11					
A531	2	14'-6"	Str.	30	B531	1	10'-4"	Str.	11					
A532	11	5'-4"	Str.	38	B532	10	7'-6" to 9'-0" by 2"-1ea.	Str.	86					
A533	10	3'-3 1/2" to 5'-11" by 3 1/2"-1ea.	Str.	48	B533	10	7'-3" to 8'-9" by 2"-1ea.	Str.	83					
A534	10	3'-6 1/2" to 6'-2" by 3 1/2"-1ea.	Str.	51	B534	1	7'-6"	Str.	8					
A535	1	9'-3"	Str.	8	B535	1	7'-5"	Str.	8					
A536	1	3'-6"	Str.	4	B536	10	6'-3 1/4" to 7'-7" by 1 3/4"-1ea.	Str.	72					
A537	2	14'-9"	Str.	51	B537	10	6'-0 1/4" to 7'-4" by 1 3/4"-1ea.	Str.	70					
					B538	1	6'-3"	Str.	7					
					B539	1	6'-0"	Str.	6					
					B(E)507	32 Δ	27'-5"	Str.	915					
A601		Not Used			B(E)510	80 Δ	3'-0"	Str.	250					
A602	60	6'-2"	1	556										
A603	54	10'-9"	1	872										
A604	11	5'-11"	1	98										
A605	9	7'-9"	1	105	B601		Not Used							
A606	20	5'-10"	1	175	B602	60	6'-2"	1	556					
A607	20	5'-8"	1	170	B603	54	10'-9"	1	872					
					B604	11	6'-1"	1	101					
					B605	9	8'-8"	1	117					
A701	25	5'8"	Str.	290	B606	11	5'-11"	1	98					
A702	25	5'-9"	Str.	294	B607	9	7'-6"	1	101					
A703	50	5'-4"	Str.	545	B608	20	5'-10"	1	175					
A704	50	5'-6"	Str.	562										
					B701	50	5'-9"	Str.	588					
					B702	50	5'-9"	Str.	588					
					B703	25	5'-6"	Str.	281					
					B704	25	5'-5"	Str.	277					

Δ TOTAL WEIGHT * 26671

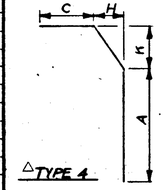
Δ* Including 4323 epoxy coated reinforcing steel, Grade 60.



MARK	B	C
A602	4'-3"	1'-11"
A603	8'-10"	1'-11"
A604	4'-0"	1'-11"
A605	5'-10"	1'-11"
A606	3'-11"	1'-11"
A607	3'-9"	1'-11"
B602	4'-3"	1'-11"
B603	8'-10"	1'-11"
B604	4'-0"	1'-11"
B605	6'-9"	1'-11"
B606	4'-0"	1'-11"
B607	5'-7"	1'-11"
B608	3'-11"	1'-11"
C601	3'-8"	1'-11"
C602	3'-9"	1'-11"



MARK	C	B	H	K
A516	6'-0"	3'-6 1/2"	2'-6"	2'-6"
A520	3'-1" to 3'-9" by 1/2"-1ea.	9" to 2'-9" by 1/2"-1ea.	9" to 1'-5" by 1/2"-1ea.	1'-0" to 2'-4" by 1'-1ea.



MARK	A	C	H	R
C(E)504	2'-5"	9"	6"	8 1/2"
B(E)518	2'-5"	9" TO 1'-0" BY 3/16"-12EA	6" TO 2 1/2" BY 7/32-1EA	8 1/2"
B(E)520	2'-5"	9"	6"	8 1/2"

Notes:
1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size number.
2. All dimensions are out to out of bar.
3. All bends shown are bent around a standard mandrel.
4. The length of bent bars is measured along the centerline.
5. For standard hook dimensions, see section 509.05 of the Specifications.

Δ6. Refer to CMS Sections 106.03, 700, 709.01 thru 709.05 and 709.08. Sufficient additional reinforcing steel shall be replaced in the structure by the additional steel spliced in accordance with 509.08.

Δ7. "(E)" denotes epoxy coated reinforcing bar.

Δ8. Reinforcing bars not revised by BALKE (Δ) shall have a minimum lap of 30 bar diameters.

FED. ROAD DIVISION	STATE	PROJECT	
2	OHIO	I-R-75-4.96(10	

444
787

HAM-75-9.93
HAM-126-13.00

VOGT, IVERS, & ASSOCIATES, INC. ENGINEERS ARCHITECTS CINCINNATI 6/6

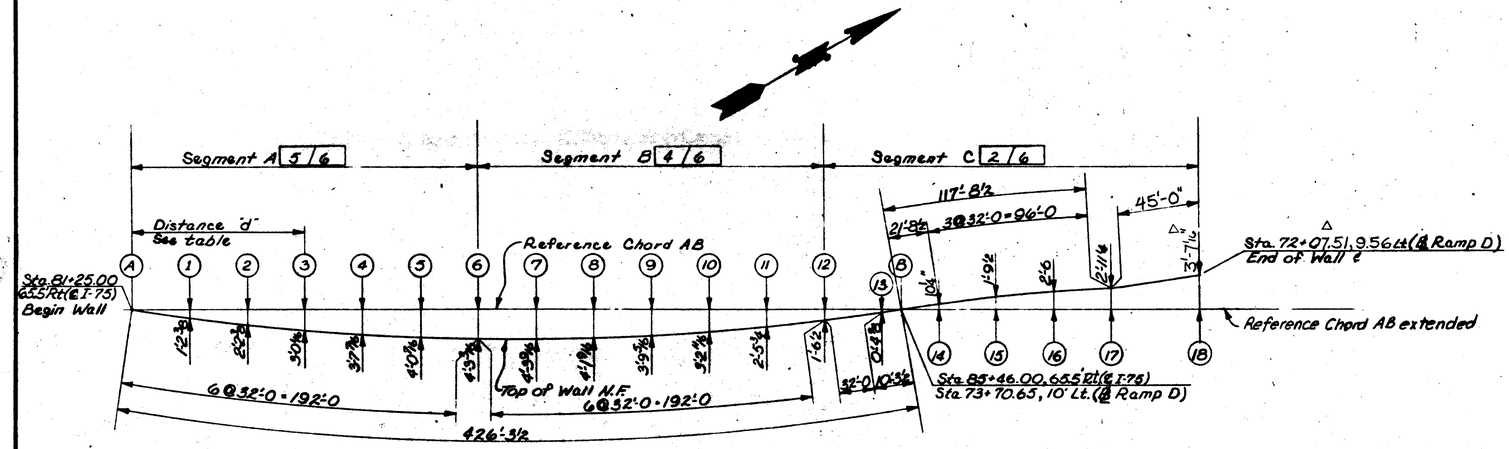
RETAINING WALL NO. 2
REINFORCING STEEL LIST
I-75
DESIGN NO. 1
HAMILTON COUNTY STA. 88+70.68Δ to STA. 93+78.78

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
—	A.S.	A.S.	T.D.W.	EAH	6/30/71	JAP 2/15/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	IR-75-1(96)10	

440
207

HAM-75-9.93
HAM-126-13.00



LAYOUT

PANEL POINT	DISTANCE "d" From W.P.A
1	31'-11¾
2	63'-11⅞
3	95'-11⅞
4	127'-11⅞
5	159'-11⅞
6	191'-11⅞
7	223'-11⅞
8	255'-11⅞
9	287'-11¾
10	319'-11¾
11	351'-11⅞
12	383'-10⅝
13	415'-10⅛
W.P.B	426'-2⅛
14	447'-10⅛
15	479'-10¼
16	511'-10⅜
17	543'-10⅛
18	588'-10⅛ △

	ESTIMATED QUANTITIES			△ REVISIONS		QUANTITIES CHECKED	
	ITEM	TOTAL	UNIT	DESCRIPTION	CALCULATED BY	CHECKED BY	BY	DATE
△	503	Lump	Sum	Cofferdams, Cribs and Sheeting	JAP 2-15-86	TMB		
△	509	20440	Lbs.	Reinforcing Steel, Grade 60	JAP 11-20-85	TMB	S.L.	6-30-71
	511	268	Cu. Yds.	Class "C" Concrete in Wall Footing			S.N.D.	6-30-71
	511	245	Cu. Yds.	Class "C" Concrete in Walls above Footing			S.N.D.	6-30-71
△	516	101	Lin Ft.	PVC Waterstop	JAP 2-15-86	TMB	T.D.W.	6-30-71
	516	82	Sq. Ft.	1" Preformed Expansion Joint Filler			T.D.W.	6-30-71
	518	54	Cu. Yds.	Porous Backfill			S.N.D.	6-30-71
	503	804	Cu. Yds.	Unclassified Excavation			S.N.D.	6-30-71
	625			Highway Lighting (quantities are included in roadway plans, see highway Lighting quantities).				

DESIGN SPECIFICATIONS:

This structure conforms to "Standard Specifications for Highway Bridges" adopted by the American Association of State Highway Officials, tenth edition, 1969 and Interim Specifications, 1970, developed by the AASHO Committee on Bridges and Structures, including the Ohio "Supplement" to these specifications.

DESIGN DATA:

△ CONCRETE CLASS "C" - Compressive Strength: 4000 P.S.I.
△ REINFORCING STEEL - ASTM A615, A616, A617, Grade 60, Minimum Yield Strength 60,000 P.S.I.

FOOTING KEYS - The key for footings shall be placed in a carefully made trench against undisturbed earth.

FOUNDATION BEARING PRESSURE - Footings are designed for a maximum bearing pressure of 8.5 Tons per. sq. ft.

GENERAL NOTES △
PLAN REVISIONS BY BALKE ENGINEERS

REVISIONS WERE MADE TO RETAINING WALL DRAWINGS TO INCORPORATE THE FOLLOWING:

- ADJUSTMENT OF HORIZONTAL TEMPERATURE STEEL SPACING.
- ADDITION OF LIGHT POLE SUPPORTS.

REVISIONS MADE BY BALKE ENGINEERS ARE DENOTED BY (△) SYMBOL.

OTHER THAN NOTED REVISIONS, RETAINING WALLS ARE THE DESIGN AND DETAILING OF VOGT, IVERS, AND ASSOCIATES, INC.

CONSTRUCTION OF THIS WALL IS TO BE BUILT ONE SECTION AT A TIME (32 FEET) IN ORDER TO MAINTAIN STABILITY OF THE EXISTING SLOPE.

VOGT, IVERS, & ASSOCIATES, INC. ENGINEERS ARCHITECTS CINCINNATI

RETAINING WALL NO. 3
LAYOUT & GENERAL NOTES
I-75 & RAMP D

DESIGN NO. 1

HAMILTON COUNTY STA. 81+25.00 I-75
STA. 72+03.00 RAMP D

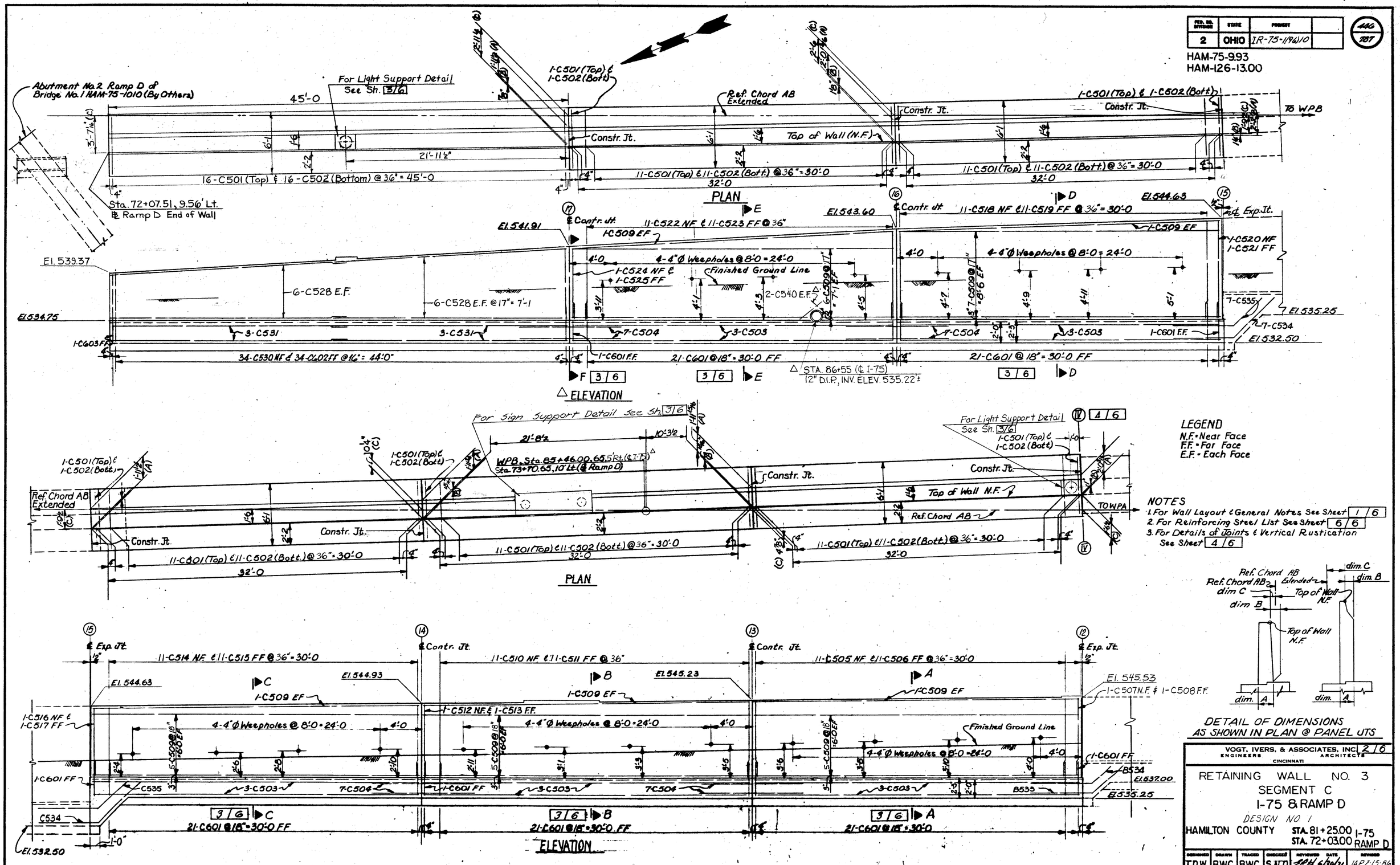
DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE	REVISED
	BWC	BWC	S.L.	JAP 6/30/71		JAP 2-15-86

1 / 6

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	IR-75-1(96)10	

446/787

HAM-75-9.93
HAM-126-13.00



LEGEND
N.F. = Near Face
F.F. = For Face
E.F. = Each Face

NOTES
1. For Wall Layout & General Notes See Sheet 1/6
2. For Reinforcing Steel List See Sheet 6/6
3. For Details of Joints & Vertical Rustication See Sheet 4/6

DETAIL OF DIMENSIONS AS SHOWN IN PLAN @ PANEL UTS

VOGT, IVERS, & ASSOCIATES, INC. 2/6
ENGINEERS ARCHITECTS
CINCINNATI

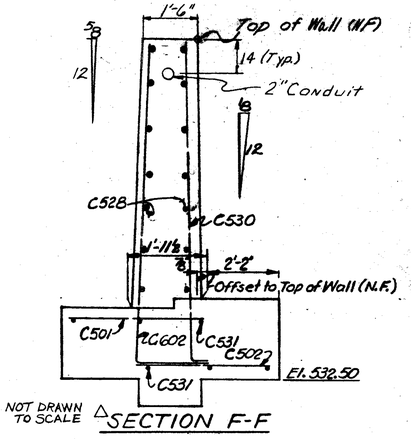
RETAINING WALL NO. 3
SEGMENT C
I-75 & RAMP D
DESIGN NO. 1
HAMILTON COUNTY STA. 81+25.00 I-75
STA. 72+03.00 RAMP D

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
T.D.W.	BWC	BWC	S.N.D.	ERH	6/30/71	JAP 2-15-86

FED. OR. DIVISION	STATE	PROJECT	
2	OHIO	I-R-75-1(69)10	

447
787

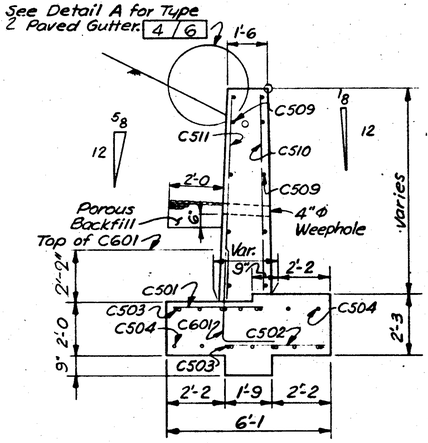
HAM-75-9.93
HAM-126-13.00



NOT DRAWN TO SCALE

SECTION F-F

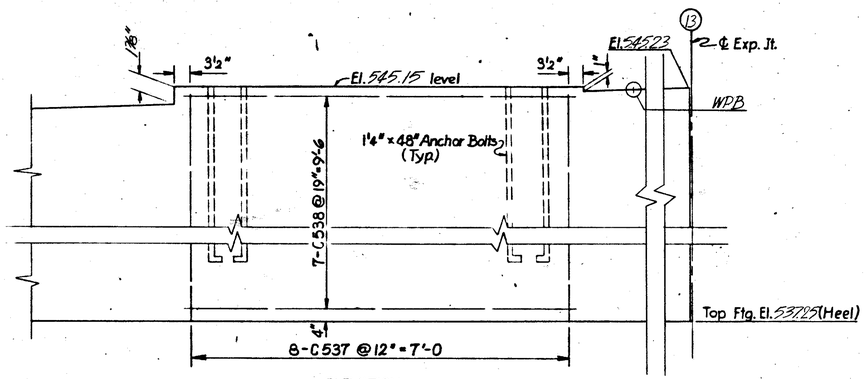
See Detail A for Type 2 Paved Gutter. 4 6



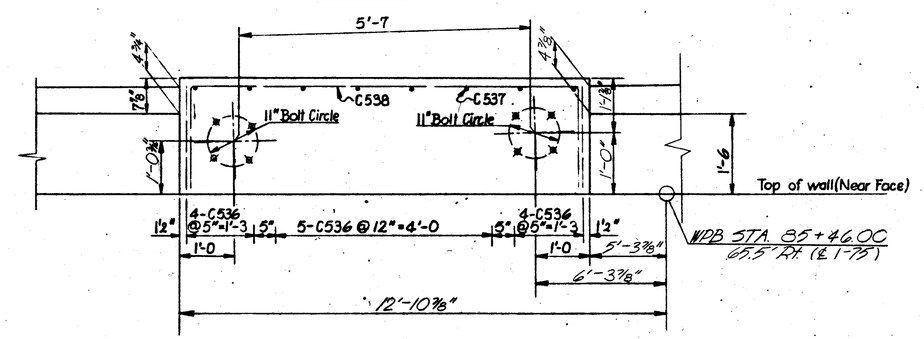
SECTION A-A (SHOWN) 2 6

SECTIONS B-B thru E-E (SIMILAR) 2 6

NOTE:
1. All dimensions vary uniformly between Sections. For location of Sections see Sheet 2 6
2. Typ. footing dimensions are shown in Section I-I

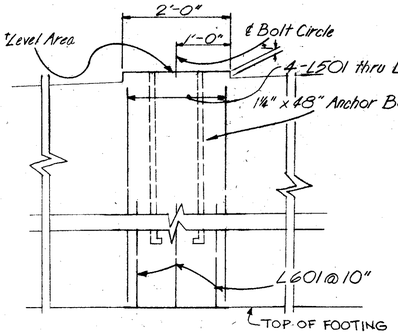


ELEVATION

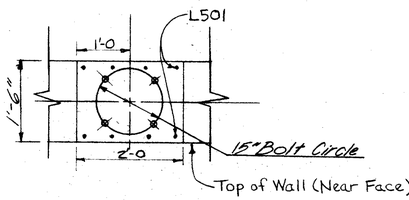


PLAN

SIGN SUPPORT DETAIL



ELEVATION



PLAN
N.T.S.

LIGHT SUPPORT STATION (I-75)	ELEV.	*BAR MARK
81+60	548.12	L501
83+30	547.12	L502
85+05.22	545.61	L503
86+85	540.76	L504

NOTE:

△ The 2" conduit raceway and 1¼" x 48" Anchor bolts items shall be furnished under highway lighting quantities. The cost of placing both of these items shall be included in the unit price for item "511 Class "C" concrete, above footings".

△ LIGHT POLE SUPPORT DETAIL
STA. 81+60 - STA. 83+30 - STA. 85+05.22
& STA. 86+85

VOGT, IVERS, & ASSOCIATES, INC. 3 6
ENGINEERS ARCHITECTS
CINCINNATI

RETAINING WALL NO. 3
SEGMENT C DETAILS
I-75 & RAMP D

DESIGN NO 1

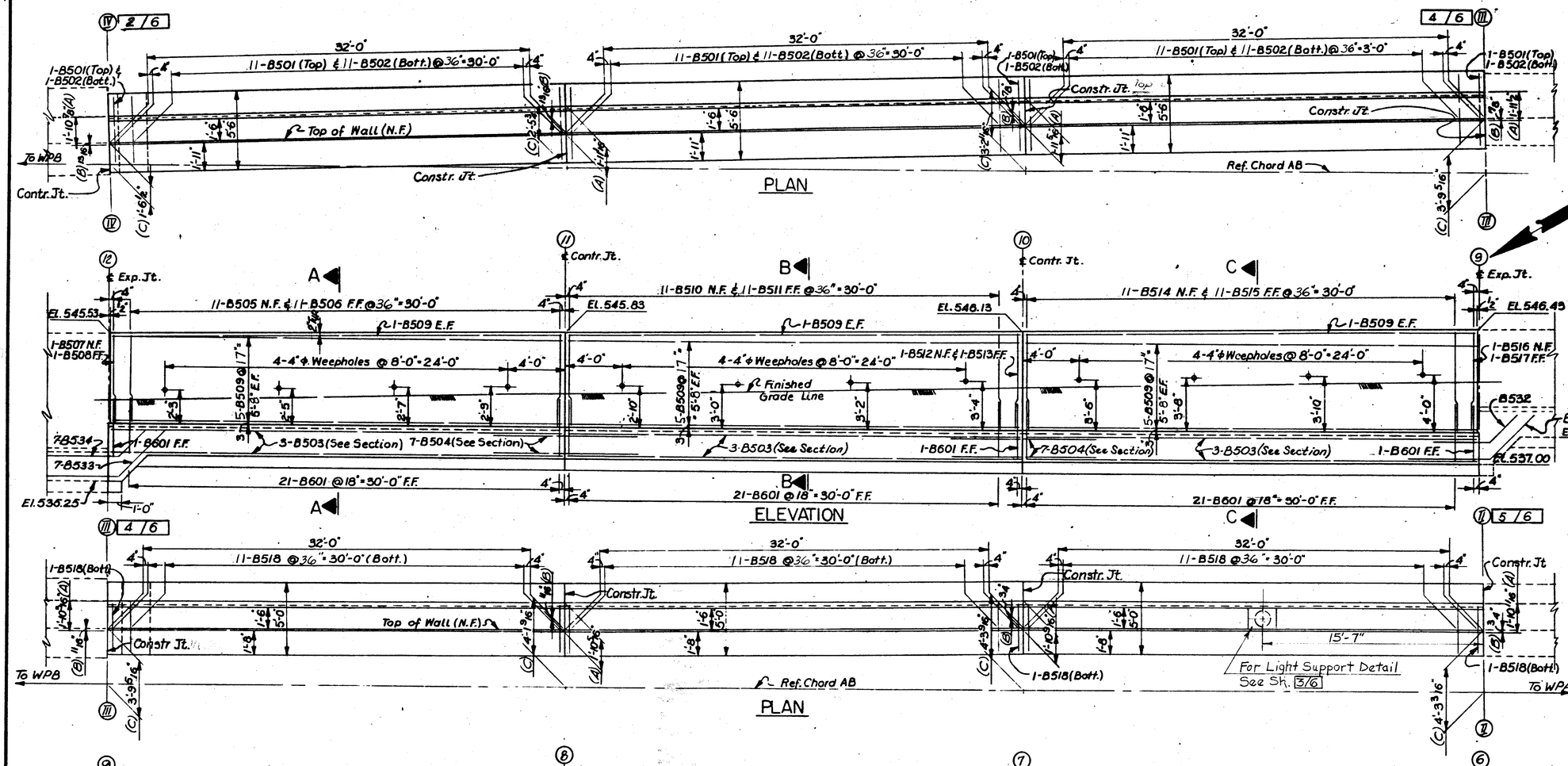
HAMILTON COUNTY STA. 81+25.00 I-75
STA. 72+03.00 RAMP D

DESIGNED	DRAWN	TRACED	CHECKED	REVISED DATE	REVISED
SND	SND	BWC	TDW	RHL 6/30/11	JAP 2-15-86

FED. ROAD DIVISION	STATE	PROJECT	
2	OHIO	I-R-75-1(42)10	

440
787

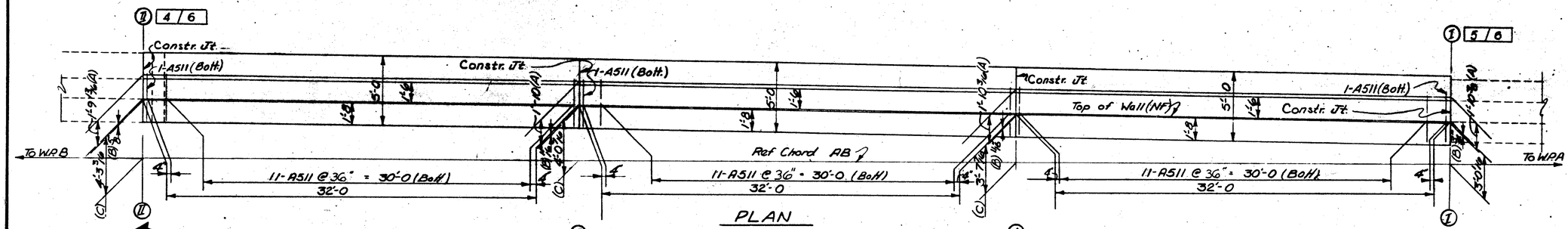
HAM-75-9.93
HAM-126-13.00

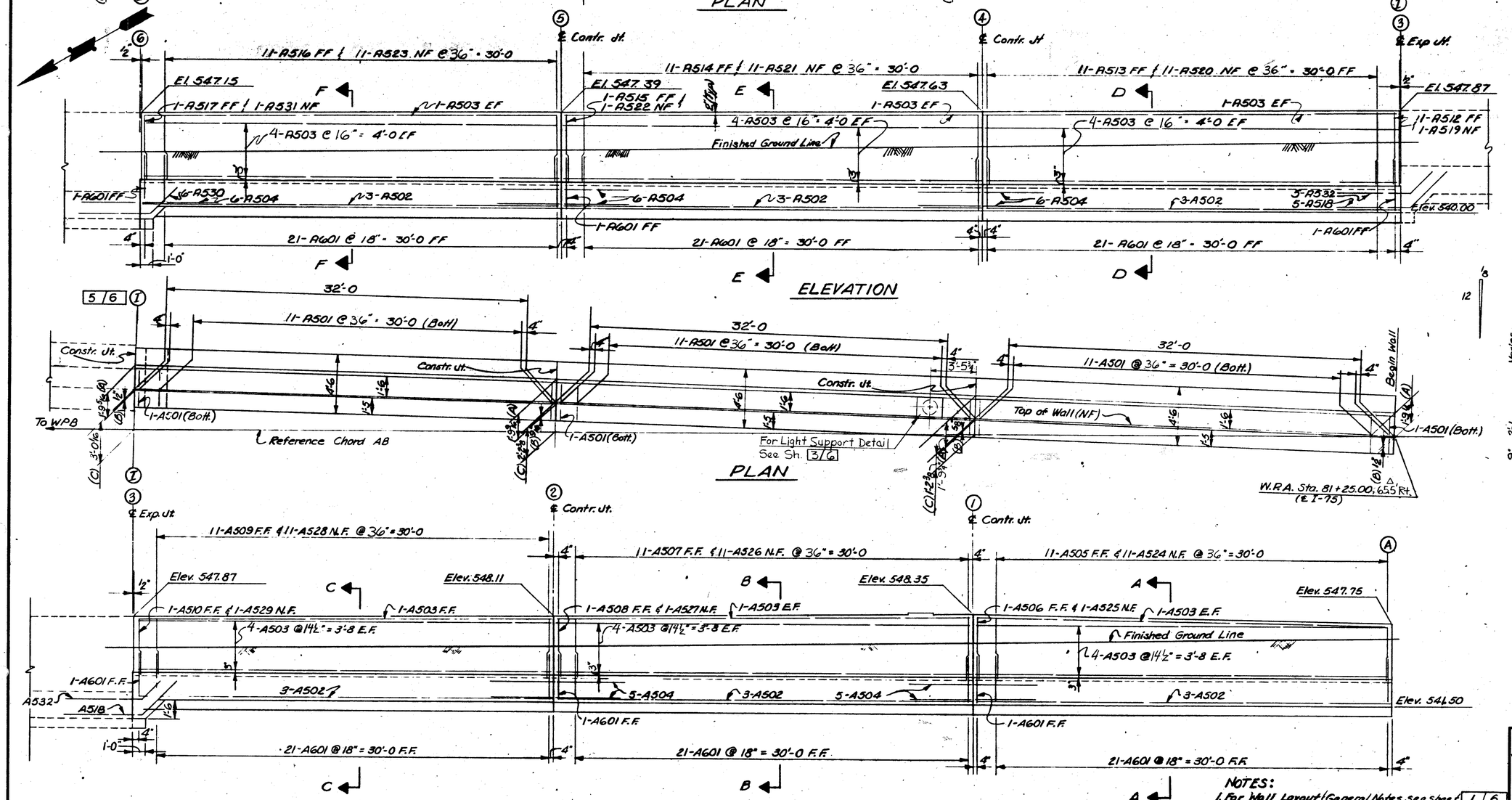

PLAN
ELEVATION
PLAN
ELEVATION
Exp. Jt.
Contr. Jt.
Constr. Jt.
Top of Wall (N.F.)
Ref. Chord AB
Finished Grade Line
For Light Support Detail See Sh. 3/6
To WPB
To WPA
Contr. Jt.
Constr. Jt.
Exp. Jt.
Contr. Jt.
Exp. Jt.
Contr. Jt.
Exp. Jt.
Cont

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	IR-75-1(69)10	

449
167

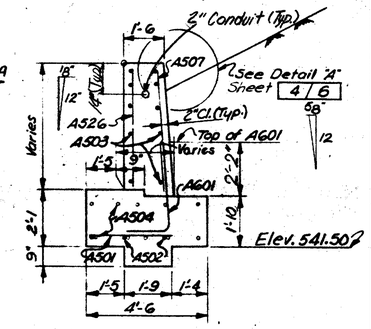
HAM-75-9.93
HAM-126-13.00



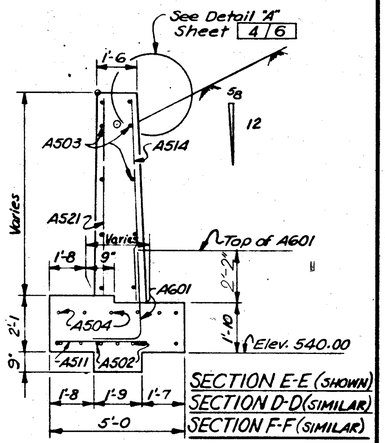


LEGEND
N.F. = Near Face
F.F. = Far Face
E.F. = Each Face

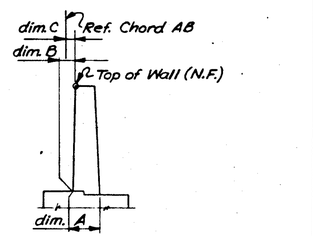
NOTES:
1. For Wall Layout/General Notes see sheet 1/6
2. For Reinforcing Steel List see sheet 6/6
3. For Details of Joints & Vertical Rustications see sheet 4/6



SECTION B-B (SHOWN)
SECTION A-A & C-C (SIMILAR)



SECTION E-E (SHOWN)
SECTION D-D (SIMILAR)
SECTION F-F (SIMILAR)



DETAIL OF DIMENSIONS AS SHOWN IN PLAN @ PANEL JTS

VOGT, IVERS, & ASSOCIATES, INC. ENGINEERS ARCHITECTS CINCINNATI — 5/6

RETAINING WALL NO. 3
SEGMENT A
I-75 & RAMP D

DESIGN NO. 1

HAMILTON COUNTY STA. 81+25.00 I-75
STA. 72+03.00 RAMP D

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
TDW	HAM	HAM	SND	ERH	6/30/71	JAP 2-15-86

FED. AID DIVISION	STATE	PROJECT		
2	OHIO	HAM-75-11.69/10		

HAM-75-9.93
HAM-126-13.00

SEGMENT A 5/6

MARK	NO	LENGTH	TYPE	WEIGHT
A501	36	3'-0	Str.	113
A502	18	31'-6	Str.	591
A503	68	31'-5	Str.	2223
A504	50	10'-0	Str.	522
A505	11	4'-10½ to 5'-1 by ¼"-1 ea.	Str.	57
A506	1	4'-10	Str.	5
A507	11	4'-7½" to 4'-10 by ¼"-1 ea.	Str.	54
A508	1	4'-7	Str.	5
A509	11	4'-4½ to 4'-7 by ¼"-1 ea.	Str.	51
A510	1	4'-4	Str.	5
A511	36	3'-3	Str.	122
A512	1	5'-10	Str.	6
A513	11	5'-7½ to 5'-10 by ¼"-1 ea.	Str.	66
A514	11	5'-4½ to 5'-7 by ¼"-1 ea.	Str.	63
A515	1	5'-4	Str.	6
A516	11	5'-2 to 5'-4½ by ¼"-1 ea.	Str.	60
A517	1	5'-2	Str.	5
A518	5	10'-0	2	52
A519	1	5'-7	Str.	6
A520	11	5'-4½ to 5'-7 by ¼"-1 ea.	Str.	63
A521	11	5'-1½ to 5'-4 by ¼"-1 ea.	Str.	60
A522	1	5'-1	Str.	5
A523	11	4'-11 to 5'-1½ by ¼"-1 ea.	Str.	58
A524	11	4'-7½ to 4'-10 by ¼"-1 ea.	Str.	54
A525	1	4'-7	Str.	5
A526	11	4'-4½ to 4'-7 by ¼"-1 ea.	Str.	51
A527	1	4'-4	Str.	5
A528	11	4'-1½ to 4'-4 by ¼"-1 ea.	Str.	49
A529	1	4'-1	Str.	4
A530	6	9'-4	2	58
A531	1	4'-11	Str.	5
A532	5	7'-2	2	37
A601	132	5'-8"	1	1123

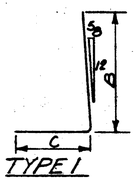
SEGMENT B 4/6

MARK	NO	LENGTH	TYPE	WEIGHT
B501	36	5'-4	Str.	125
B502	36	5'-8	Str.	138
B503	27	31'-6	Str.	887
B504	42	10'-0	Str.	438
B505	11	6'-0 to 6'-5 by ¼"-1 ea.	Str.	71
B506	11	6'-3 to 6'-8 by ¼"-1 ea.	Str.	74
B507	1	6'-1	Str.	6
B508	1	6'-4	Str.	7
B509	66	31'-5	Str.	2163
B510	11	6'-3 to 6'-8 by ½"-1 ea.	Str.	74
B511	11	6'-6 to 6'-11 by ½"-1 ea.	Str.	77
B512	1	6'-8	Str.	7
B513	1	6'-11	Str.	7
B514	11	6'-7 to 7'-0 by ½"-1 ea.	Str.	78
B515	11	6'-10 to 7'-3 by ½"-1 ea.	Str.	81
B516	1	7'-0	Str.	7
B517	1	7'-3	Str.	8
B518	36	3'-5	Str.	128
B519	6	10'-9	2	67
B520	11	5'-2 to 5'-4½ by ¼"-1 ea.	Str.	60
B521	11	5'-5 to 5'-7½ by ¼"-1 ea.	Str.	63
B522	1	5'-2	Str.	5
B523	1	5'-5	Str.	6
B524	11	5'-5 to 5'-7½ by ¼"-1 ea.	Str.	63
B525	11	5'-8 to 5'-10½ by ¼"-1 ea.	Str.	66
B526	1	5'-8	Str.	6
B527	1	5'-11	Str.	6
B528	11	5'-8 to 5'-10½ by ¼"-1 ea.	Str.	66
B529	11	5'-11 to 6'-1½ by ¼"-1 ea.	Str.	69
B530	1	5'-11	Str.	6
B531	1	6'-2	Str.	6
B532	6	8'-7	2	57
B533	7	10'-7	2	74
B534	7	8'-10	2	64
B601	66	5'-10"	1	378
B602	66	5'-8"	1	362

SEGMENT C 2/6

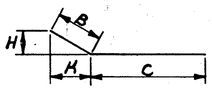
MARK	NO	LENGTH	TYPE	WEIGHT
C501	76	3'-6	Str.	277
C502	76	3'-6	Str.	277
C503	30	31'-6	Str.	986
C504	56	10'-0	Str.	584
C505	11	7'-9½ to 8'-0⅜ by 5/16"-1 ea.	Str.	91
C506	11	8'-0½ to 8'-3⅜ by 5/16"-1 ea	Str.	94
C507	1	8'-1	Str.	8
C508	1	8'-4	Str.	9
C509	66	31'-5	Str.	2163
C510	11	7'-6 to 7'-9⅜ by 5/16"-1 ea.	Str.	88
C511	11	7'-9 to 8'-0⅜ by 5/16"-1 ea.	Str.	90
C512	1	7'-6	Str.	8
C513	1	7'-9	Str.	8
C514	11	7'-2 to 7'-5⅜ by 5/16"-1 ea.	Str.	84
C515	11	7'-5 to 7'-8⅜ by 5/16"-1 ea.	Str.	87
C516	1	7'-2	Str.	7
C517	1	7'-5	Str.	8
C518	11	9'-1½ to 10'-0½ by 2"-1 ea	Str.	110
C519	11	9'-4½ to 10'-3½ by 1⅛"-1 ea	Str.	113
C520	1	10'-1	Str.	11
C521	1	10'-4	Str.	11
C522	11	7'-3 to 8'-11 by 2"-1 ea.	Str.	93
C523	11	7'-6 to 9'-2 by 2"-1 ea.	Str.	96
C524	1	7'-3	Str.	8
C525	1	7'-6	Str.	8
C528	△24	23'-3"	Str	586
C530	31	6'-10 to 9'-7" by 1" 1 ea.	6	291
C531	12	23'-10	Str.	298
C534	7	12'-1	2	88
C535	7	9'-11	2	72
C536	13	2'-9	7	37
C537	8	9'-11	Str.	83
C538	7	10'-5	7	76
C540	△4	3'-0"	Str.	13
C601	110	3'-10"	1	964
C602	34	8'-8" to 11'-0⅜ by 7/8"-1 ea	1	504
C603	1	7'-6"	1	11
L501	8	4'-6"	Str.	38
L502	8	5'-9"	Str.	48
L503	8	8'-0"	Str.	67
L504	8	5'-8"	Str.	47
L601	12	5'-9"	1	104

*TOTAL WEIGHT△ 20440



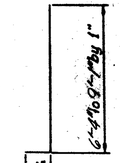
TYPE 1

MARK	B	C
A601	3'-9"	1'-11
B601	3'-11"	1'-11
B602	3'-9"	1'-11
C601	3'-11"	1'-11
C602	6'-9"to 9'-½" by 7/8"-1 ea.	1'-11
L601	3'-10"	1'-11"

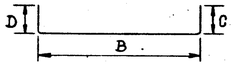


TYPE 2

MARK	H	K	B	C
A518	2'-10	2'-10	4'-0⅛	6'-0
A530	2'-4	2'-4	3'-3⅜	6'-0
A532	1'-6	1'-6	1'-1⅞	6'-0
B519	3'-4	3'-4	4'-8⅛	6'-0
B532	1'-10	1'-10	2'-7	6'-0
B533	3'-3	3'-3	4'-7	6'-0
B534	2'-0	2'-0	2'-10	6'-0
C534	4'-3	4'-3	6'-0⅛	6'-0
C535	2'-9	2'-9	3'-10⅜	6'-0



TYPE G
C530



TYPE 7

MARK	D	B	C
C536	6"	1'-9	6"
C538	1'-9	7'-2	1'-9

Notes:
1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size number.
2. All dimensions are out to out of bar.
3. All bends shown are bent around standard mandrel.
4. The length of bent bars is measured along the centerline.
5. For standard hook dimensions, see section 509.05 of the specifications.

△6. Refer to CMS Sections 106.03, 700, 709.01 thru 709.05 and 709.08. Sufficient additional reinforcing steel shall be replaced in the structure by the additional steel spliced in accordance with 509.08.

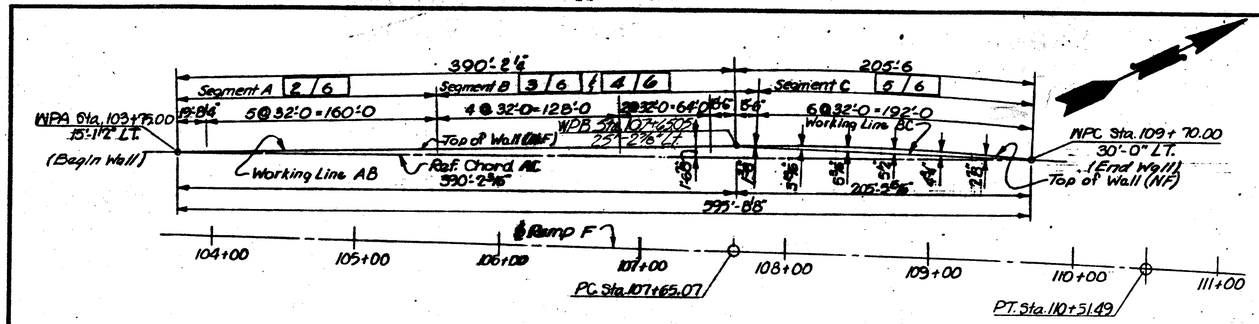
△7 Reinforcing bars not revised by BALKE (△) shall have a minimum lap of 30 bar diameters.

VOGT, IVERS, & ASSOCIATES, INC. ENGINEERS ARCHITECTS
CINCINNATI

RETAINING WALL No 3
REINFORCING STEEL LIST
S.R. 126
DESIGN NO. 1

HAMILTON COUNTY
STA. 81+25.00
STA. 72+03.00

DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE	REVISED
—	HAM	—	T.D.W.	ZRH	6/30/71	JAP 2-15-82



REFERENCE CHORD LAYOUT

	ESTIMATED QUANTITIES				Δ REVISIONS		QUANTITIES CHECKED	
	ITEM	TOTAL	UNIT	DESCRIPTION	CALCULATED BY	CHECKED BY	BY	DATE
Δ	203	4752	Cu. Yds.	Embankment	JAP 2-15-86	TMB		
Δ	503	Lump	Sum	Cofferdams, cribs and sheeting	JAP 2-15-86	TMB		
Δ	509	82100	Lbs.	Reinforcing Steel, Grade 60	JAP 11-20-85	TMB	S.N.D.	4-28-71
	511	749	Cu. Yds.	Class "C" Concrete in Wall Footings			H.A.M	3-22-71
	511	624	Cu. Yds.	Class "C" Concrete in Walls above Footings			H.A.M	3-22-71
Δ	516	244	Lin. Ft.	PVC Waterstop	JAP 2-15-86	TMB	T.D.W.	3-29-71
	516	195	Sq. Ft.	1" Preformed Expansion Joint Filler			T.D.W	3-29-71
	518	607	Cu. Yds.	Porous Backfill			T.D.W	4-8-71
	503	1514	Cu. Yds.	Unclassified Excavation			T.D.W	4-8-71

DESIGN SPECIFICATIONS:

This structure conforms to "Standard Specifications for Highway Bridges" adopted by the American Association of State Highway Officials, tenth edition, 1969 and interim Specifications, 1970, developed by the AASHO Committee on Bridges and Structures, including the Ohio "Supplement to these specifications.

DESIGN DATA:

ΔCONCRETE CLASS "C" - Compression Strength: 4000 psi

ΔREINFORCING STEEL: ASTM A615, A616, A617, Grade 60
Minimum yield strength: 60000 psi

FOOTING KEYS: The Key for footings shall be placed in a carefully made trench against undisturbed earth.

FOUNDATION BEARING PRESSURE: Footings are designed for maximum bearing pressure of 2.5 Tons per sq. ft.

GENERAL NOTES Δ
PLAN REVISIONS BY BALKE ENGINEERS

REVISIONS WERE MADE TO RETAINING WALL DRAWINGS TO INCORPORATE THE FOLLOWING:

- ADJUSTMENT OF HORIZONTAL TEMPERATURE STEEL SPACING.

REVISIONS MADE BY BALKE ENGINEERS ARE DENOTED BY (Δ) SYMBOL.

OTHER THAN NOTED REVISIONS, RETAINING WALLS ARE THE DESIGN AND DETAILING OF VOGT, IVERS AND ASSOCIATES, INC.

161
Yellow
451 - 488C

FED. AID PROJECT	STATE	PROJECT		SHEET NO.	TOTAL SHEETS
2	OHIO	IR-75-4(10)		451	707

HAM-75-9.93
HAM-126-13.00

VOGT, IVERS, & ASSOCIATES, INC. 1 16
ENGINEERS ARCHITECTS
CINCINNATI

RETAINING WALL Nº 4
LAYOUT AND GENERAL NOTES
RAMP F
DESIGN NO. 1
HAMILTON COUNTY STA. 103+75.00 to STA. 109+70.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
—	BWC	-	SND	ZKH	6/30/71	JAP 2-15-86

FED. AID. DIVISION	STATE	PROJECT	
2	OHIO	IR-75-1196(10	

452
787

HAM-75-9.93
HAM-126-13.00

PLAN

ELEVATION

SECTION C-C

SECTION B-B

SECTION D-D

SECTION E-E

SECTION A-A

DETAIL of DIMENSIONS (as shown in Plan & Panel Jts.)

LEGEND
E.F. = Each Face
N.F. = Near Face
F.F. = Far Face

NOTE
1. For Details of Section F-F, Joints & Vertical Rustication & Notes, See Sheet 3/6

VOGT, IVERS, & ASSOCIATES, INC. 2/6
ENGINEERS ARCHITECTS
CINCINNATI

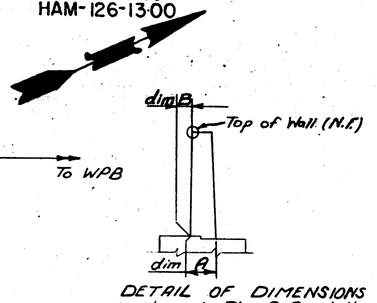
RETAINING WALL Nº 4
SEGMENT A
RAMP F
DESIGN NO. 1
HAMILTON COUNTY STA. 103+75.00 to STA. 109+70.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
SND	H.A.M.	H.A.M	TDW	ERH	6/30/71	JAP 2-15-86

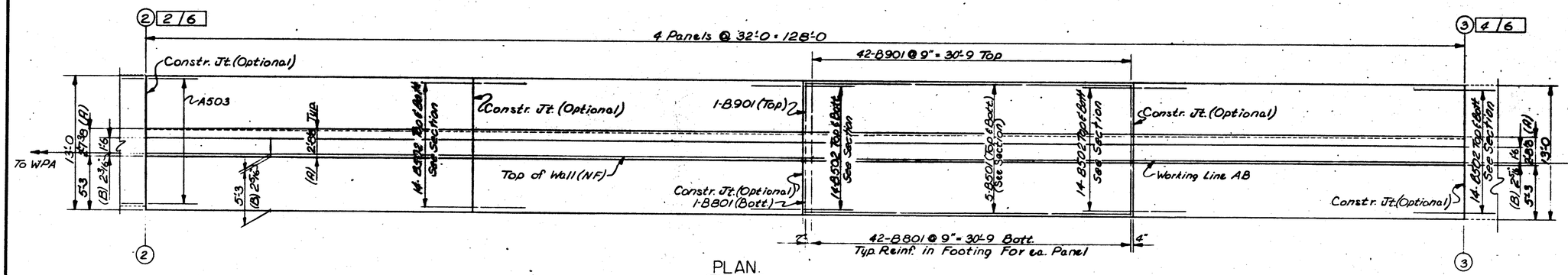
FED. ROAD DIVISION	STATE	PROJECT	
2	OHIO	IR-75-1(96)10	

459
187

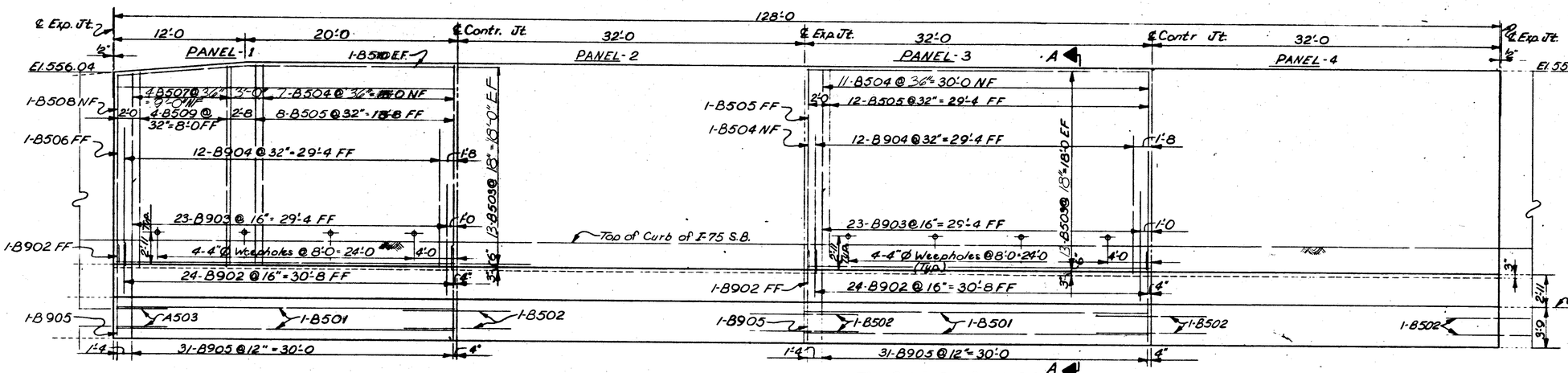
HAM-75-9.93
HAM-126-13.00



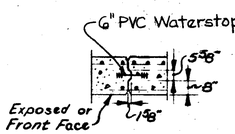
DETAIL OF DIMENSIONS as shown in Plan & Panel Jts.



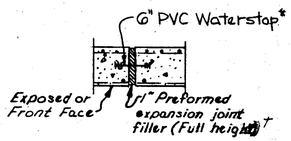
PLAN.



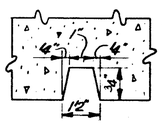
ELEVATION



CONTRACTION JOINT DETAIL

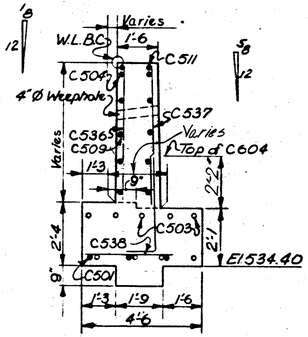


EXPANSION JOINT DETAIL

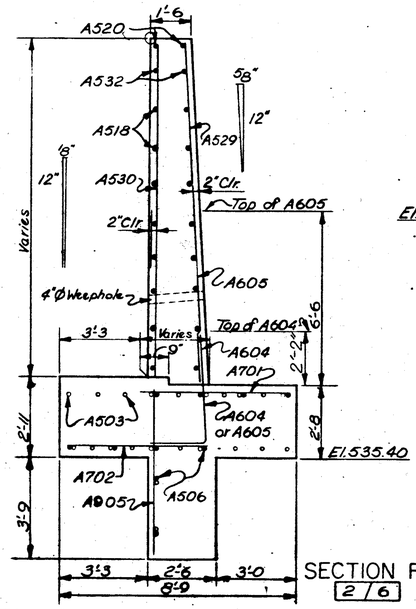


VERTICAL RUSTICATION GROOVE
SPACED 4'-0 c/c

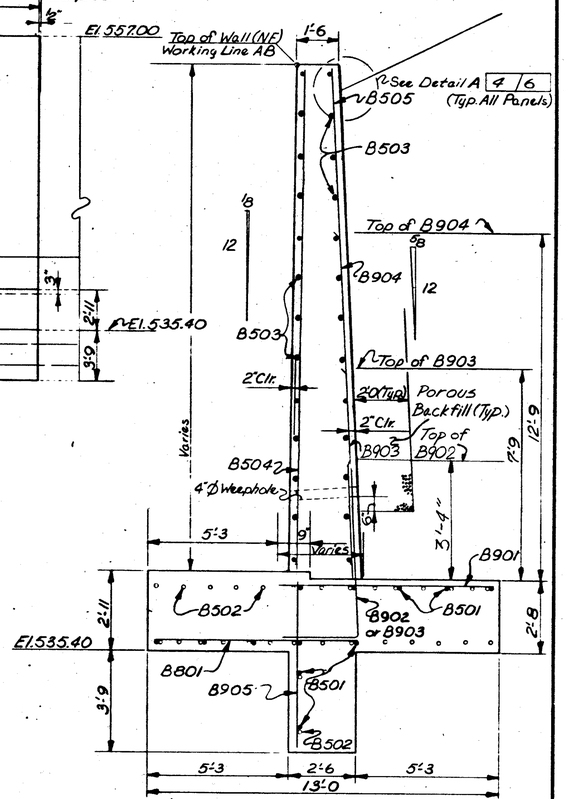
LEGEND
NF = Near Face
FF = Far Face
EF = Each Face



SECTION F-F 5/6



SECTION F-F 2/6



SECTION A-A

NOTES
1. For Layout & General Notes, See Sheet 1/6
2. For Reinforcing Steel List, See Sheet 6/6
Δ*3. A 6" PVC Waterstop shall be centered on retaining wall expansion joints to form a continuous waterproof seal. The waterstop shall be capable of accomodating 1½" of joint movement.
Δ†4. Place filler on each side of PVC waterstop.

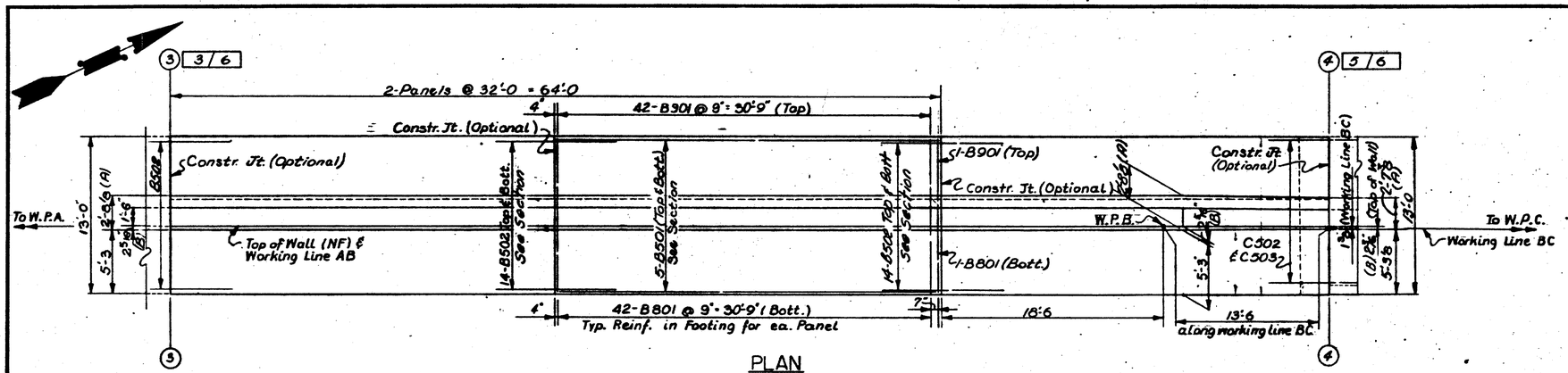
VOGT, IVERS, & ASSOCIATES, INC. 3/6
ENGINEERS ARCHITECTS
CINCINNATI

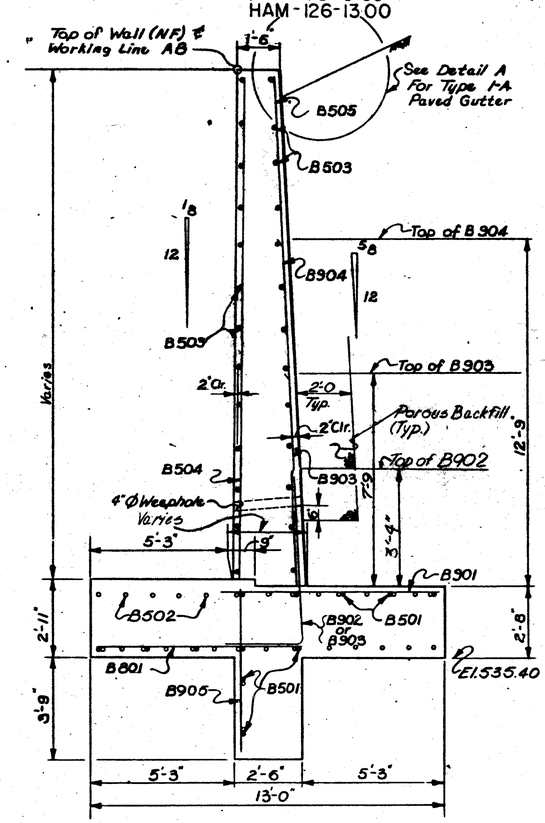
RETAINING WALL Nº 4
SEGMENT B Lt
RAMP F
DESIGN NO. 1
HAMILTON COUNTY STA. 103+75.00 to STA. 109+70.00

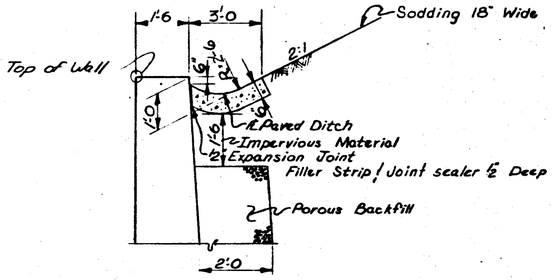
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
SND	BWC	BWC	TDW	ERH	6/30/11	IAP 21586

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	IR-75-1(96)10	

HAM-75-9.93
HAM-126-13.00



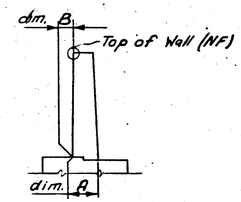




DETAIL A
TYPE 2 PAVED GUTTER

LEGEND
NF = Near Face
FF = Far Face
EF = Each Face

NOTES
1. For Wall Layout & General Notes, See Sheet 1 / 6
2. For Reinforcing Steel List, See Sheet 6 / 6
3. For Details of Joints & Vertical Rustication, See Sheet 3 / 6



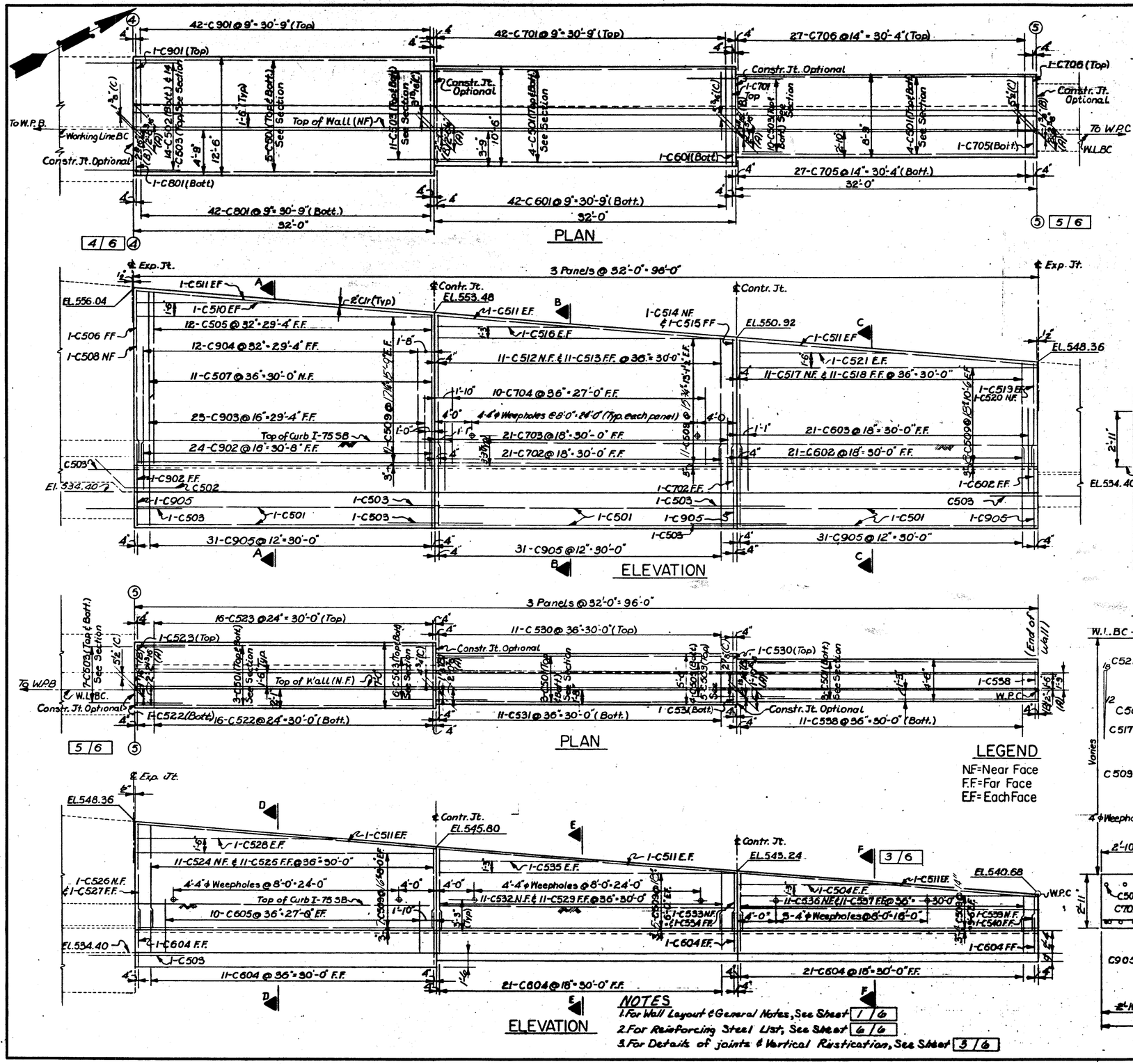
DETAIL OF DIMENSIONS
as shown in Plan & Panel dts.

VOGT, IVERS, & ASSOCIATES, INC. 4 / 6
ENGINEERS ARCHITECTS
CINCINNATI

RETAINING WALL Nº 4
SEGMENT B Rt
RAMP F
DESIGN NO. 1-
HAMILTON COUNTY STA. 103+75.00 to STA. 109+70.00

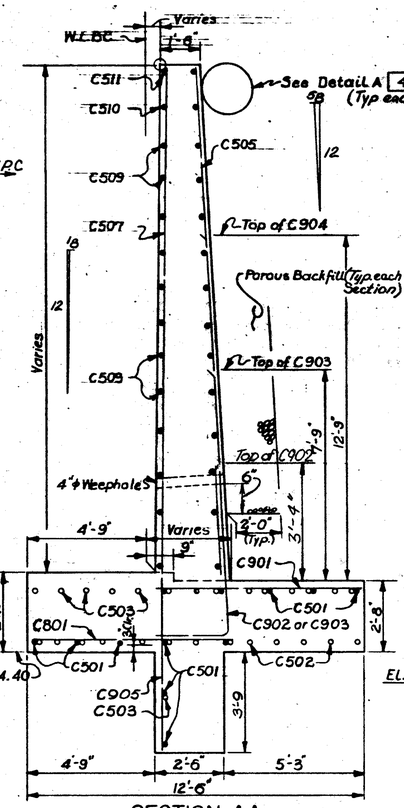
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
SND	BWC	BWC	TDW	~~ERH~~	6/30/71	JAP 2-15-86

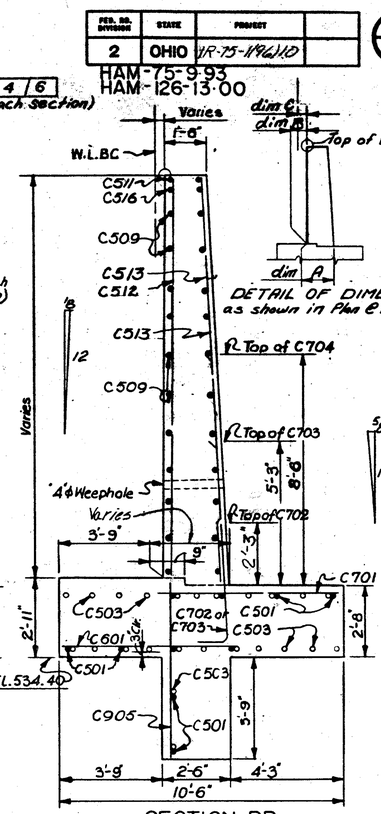
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	HAM-75-9.93 HAM-126-13.00	

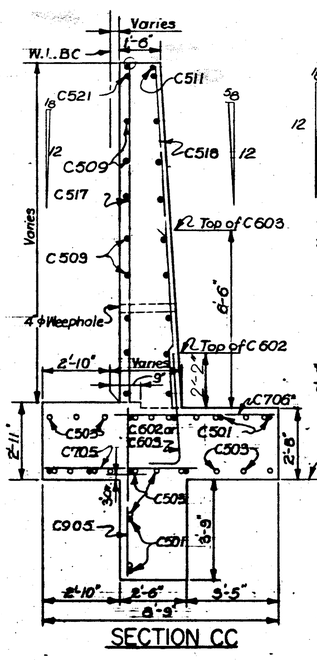


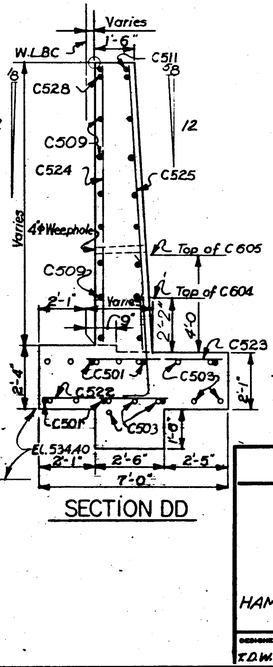
LEGEND
NF=Near Face
F.F.=Far Face
E.F.=Each Face

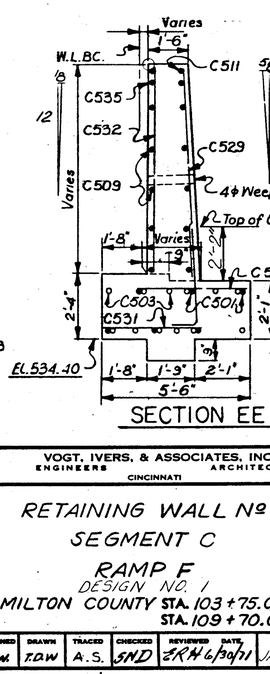
NOTES
1. For Wall Layout & General Notes, See Sheet 1 / 6
2. For Reinforcing Steel List, See Sheet 6 / 6
3. For Details of joints & Vertical Restication, See Sheet 3 / 6











VOGT, IVERS, & ASSOCIATES, INC. 5 / 6
ENGINEERS ARCHITECTS
CINCINNATI

RETAINING WALL Nº 4
SEGMENT C
RAMP F
DESIGN NO. 1
HAMILTON COUNTY STA. 103+75.00 to STA. 109+70.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
T.D.W.	T.D.W.	A.S.	S.N.D.	E.R.H.	6/30/71	JAP 2-15-86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	IR-75-1(96)10	

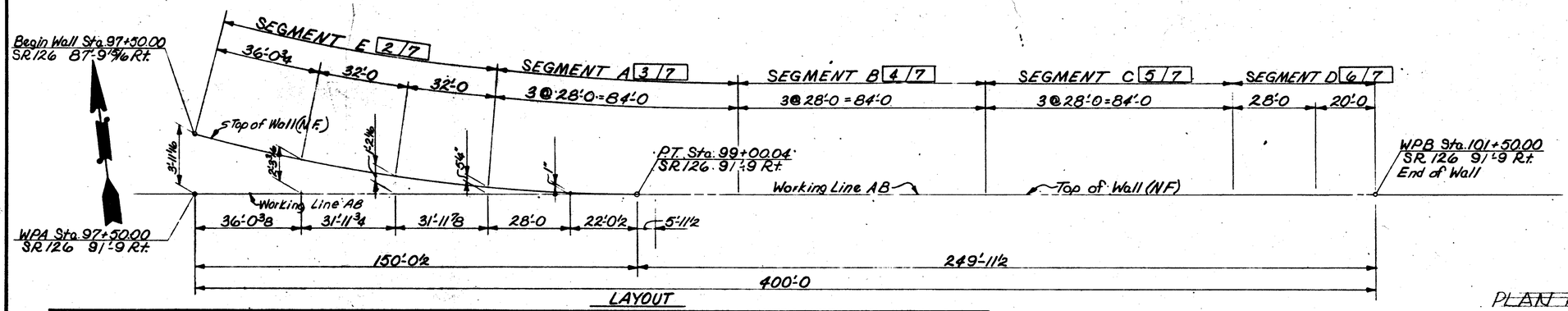
HAM-75-9.93
HAM-126-13.00

MARK	NO	LENGTH SEGMENT A 2 6	TYPE	WEIGHT
A501	8	3'-0"	Str.	25
A502	2	19'-2"	Str.	40
A503	108	10'-0"	Str.	1126
A504	12	3'-7"	Str.	45
A505	12	3'-5"	Str.	43
A506	44	31'-6"	Str.	1446
A507	17	4'-7"	Str.	81
A508	17	5'-10"	Str.	98
A509	7	4'-1" to 5'-7" by 3"-1ea.	Str.	55
A510	1	4'-0"	Str.	4
A511	7	3'-10" to 5'-4" by 3"-1ea.	Str.	33
A512	1	3'-9"	Str.	4
A513	6	19'-1"	Str.	119
A514	2	10'-8"	Str.	26
A515	2	19'-2"	Str.	40
A516	11	5'-8" to 8'-2" by 3"-1ea.	Str.	79
A517	1	5'-7"	Str.	6
A518	76	31'-5"	Str.	2490
A519	2	25'-3"	Str.	53
A520	10	31'-6"	Str.	329
A521	11	5'-5" to 7'-11" by 3"-1ea.	Str.	76
A522	1	5'-4"	Str.	6
A523	2	16'-11"	Str.	35
A524	11	7'-10" to 10'-4" by 3"-1ea.	Str.	104
A525	1	10'-5"	Str.	11
A526	11	8'-1" to 10'-7" by 3"-1ea.	Str.	107
A527	1	10'-8"	Str.	11
A528	1	10'-1"	Str.	11
A529	11	10'-2" to 12'-8" by 3"-1ea.	Str.	131
A530	11	9'-11" to 12'-5" by 3"-1ea.	Str.	128
A531	1	9'-10"	Str.	10
A532	2	14'-6"	Str.	30
A533	11	12'-9" to 15'-3" by 3"-1ea.	Str.	161
A534	1	12'-8"	Str.	13
A535	2	16'-4"	Str.	34
A536	11	12'-6" to 15'-0" by 3"-1ea.	Str.	158
A537	1	12'-5"	Str.	13
A538	2	19'-2"	Str.	40
A539	12	15'-3" to 17'-6½" by 2½"-1ea.	Str.	205
A540	1	17'-9"	Str.	19
A541	11	14'-11" to 17'-5" by 3"-1ea.	Str.	185
A542	1	17'-6"	Str.	18
A543	2	6'-8"	Str.	14
A601	48	5'-11"	1	427
A602	10	7'-9"	1	116
A603	43	6'-4"	Str.	409
A604	22	6'-6"	1	215
A605	21	10'-10"	1	342
A701	28	5'-7"	Str.	320
A702	28	5'-4"	Str.	305
A703	43	6'-5"	Str.	564
A704	22	6'-11"	1	311
A705	21	9'-11"	1	426
A706	10	8'-6"	Str.	174
A801	43	7'-6"	Str.	861
A901	43	7'-10"	Str.	1145
A902	25	8'-8"	1	737
A903	23	13'-0"	1	1017
A904	12	12'-9"	Str.	520
A905	96	6'-2"	Str.	2013

MARK	NO	LENGTH SEGMENT B 3 6 4 6	TYPE	WEIGHT
B501	84	31'-6"	Str.	2760
B502	180	10'-0"	Str.	1877
B503	178	31'-5"	Str.	3833
B504	74	18'-6"	Str.	1428
B505	81	18'-9"	Str.	1584
B506	2	17'-9"	Str.	37
B507	8	17'-7" to 18'-4" by 3"-2ea.	Str.	150
B508	2	17'-6"	Str.	37
B509	8	17'-10" to 18'-7" by 3"-2ea.	Str.	152
B510	4	31'-6"	2	131

FED. NO. DIVISION	STATE	PROJECT	
2	OHIO	F-2(113)	

HAM-75-9.93
HAM-126-13.00



ESTIMATED QUANTITIES				△ REVISIONS		QUANTITIES CHECKED	
ITEM	TOTAL	UNIT	DESCRIPTION	CALCULATED BY	CHECKED BY	BY	DATE
△ 505	1	Lump Sum	Pile driving equipment mobilization	JAP 11-18-85	TMB		
△ 507	5550	Lin. Ft.	12" Cast-in-Place Reinforced Concrete Piles	JAP 2-15-86	TMB	T.D.W.	6-29-71
△ 509	70,226	Lbs.	Reinforcing Steel, Grade 60	JAP 2-15-86	TMB	H.A.M.	6-24-71
△ 511	513	Cu. Yds.	Class "C" Concrete, footings			J.M.H.	6-21-71
△ 511	566	Cu. Yds.	Class "C" Concrete, above footings			J.M.H.	6-21-71
△ 516	206	Lin. Ft.	PVC Waterstop	JAP 2-15-86	TMB	T.D.W.	6-29-71
516	149	Sq. Ft.	1" Preformed Expansion Joint Filler			T.D.W.	6-29-71
518	427	Cu. Yds.	Porous Backfill			T.D.W.	6-29-71
503	869	Cu. Yds.	Unclassified Excavation			T.D.W.	6-29-71
△ 824	9837	Lbs.	Epoxy coated Reinforcing Steel, Grade 60	JAP 2-15-86	TMB		
△ 203	2518	Cu. Yds.	Embankment	JAP 2-15-86	TMB		
△ 503	Lump	Sum	Cofferdams, Cribs and Sheeting	JAP 2-15-86	TMB		
625			Highway Lighting (quantities included in roadway plans, see highway lighting quantities)				
Special			Noise Barrier (Quantities are included in roadway plans, see roadway quantities)				

Note: The Estimated Average Pay Length for all piles is 30'.

GENERAL NOTES △

PLAN REVISIONS BY BALKE ENGINEERS.

REVISIONS WERE MADE TO INCORPORATE THE FOLLOWING:
- REVISE PARAPETS TO STANDARD SAFETY PARAPET SHAPE.
- PROVIDE EPOXY-COATED REINFORCEMENT IN CORROSION-PRONE CONCRETE AREAS.

REVISIONS MADE BY BALKE ENGINEERS ARE DENOTED BY (△) SYMBOL.

THIS RETAINING WALL WAS STRUCTURALLY REDESIGNED BY BALKE ENGINEERS DUE TO ADDITION OF SOUND WALL BARRIER.

PARAPET REVISIONS CONFORM TO OHIO DEPARTMENT OF TRANSPORTATION STANDARD BRIDGE DRAWINGS" DRAWING NO. BR-1, DATED 5-29-79, MODIFIED VERSION.

DESIGN SPECIFICATIONS:

This structure conforms to "Standard Specifications for Highway Bridges" adopted by the American Association of State Highway Officials, tenth edition, 1969 and Interim Specifications, 1970, developed by the ASSHO Committee on Bridges and Structures, including the Ohio "Supplement" to these specifications.

DESIGN DATA:

△ **CONCRETE CLASS "C"** - Compressive strength : 4000 PSI.
△ **REINFORCING STEEL** - ASTM A615, A616, A617 Grade 60, minimum yield 60,000 PSI.
PILES - *The piles shall be 12" Cast-in-place reinforced concrete piles and driven to a minimum capacity of 35 Tons per pile.*

SOIL:

△ Any Soil exposed in wall excavation is to be inspected to verify a minimum bearing Capacity of 4,000 Lbs./Sq. ft.

VOGT, IVERS, & ASSOCIATES, INC. ENGINEERS ARCHITECTS
CINCINNATI

1 / 7

RETAINING WALL NO. 6
LAYOUT & GENERAL NOTES
SR-126
DESIGN NO. 1
HAMILTON COUNTY STA. 97+50.00
STA. 101+50.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
TDW	BWC	BWC	E.R.M.	ERM	6/29/71	JAP 2-15-86

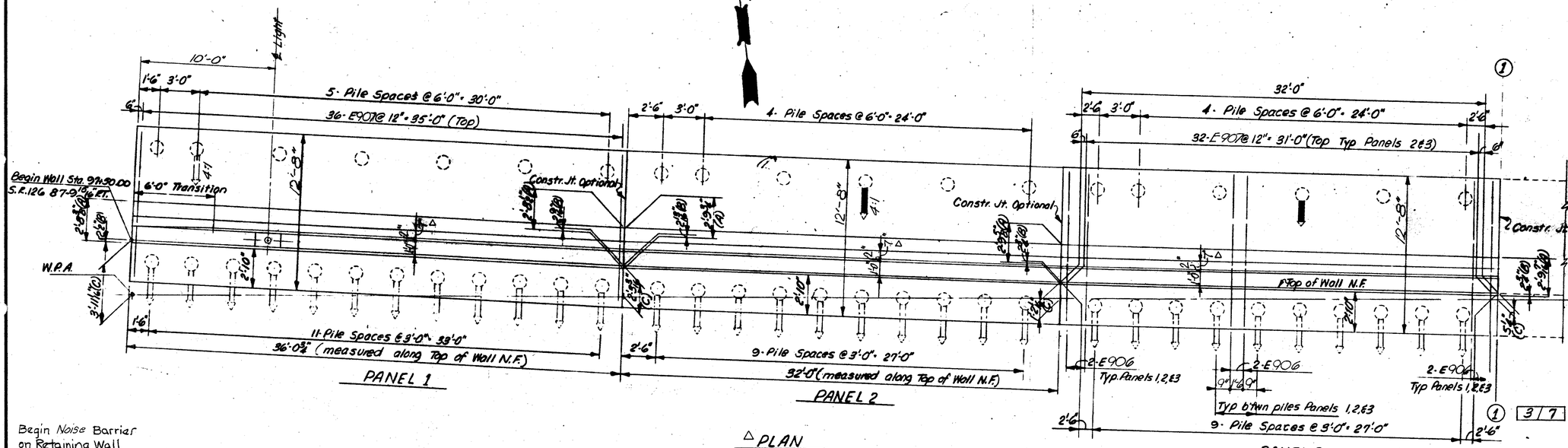
FED. AID DIVISION	STATE	PROJECT	
2	OHIO	F-2(13)	

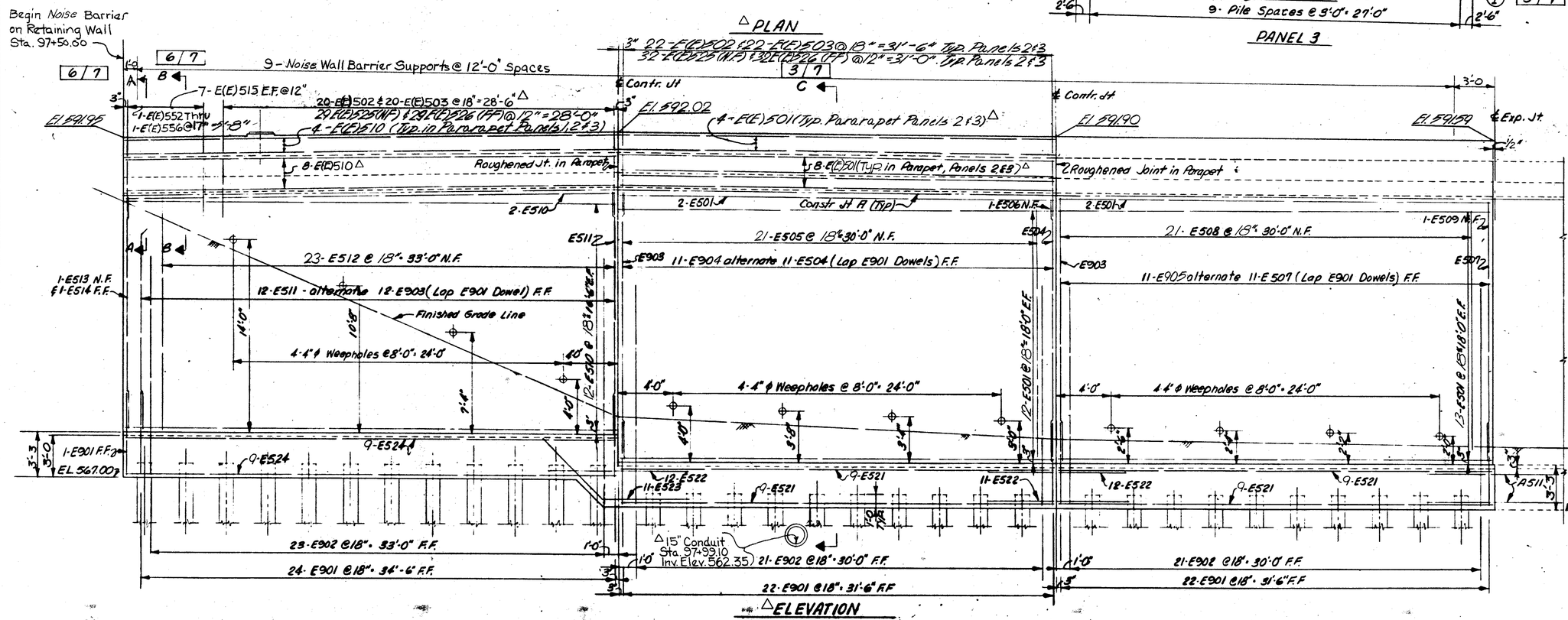
467
787

HAM-75-9.93
HAM-126-13.00

NOTES

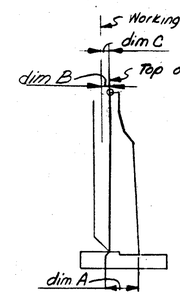
1. For Wall Layout and General Notes See Sheet 1 / 7
2. For Details of Joints and Vertical Rustication See Sheet 6 / 7
3. For Reinforcing Steel List See Sheet 7 / 7
4. △ "(E)" denotes epoxy coated reinforcing steel.
5. △ For Noise Barrier connection detail See Sh. 4 / 7.
6. △ For Light Support Details See Sh. 6 / 7.





LEGEND

N.F. - Near Face
F.F. - Far Face
E.F. - Each Face
- Vertical Pile
- Batter Pile (Batter 1:3 in direction of arrow
- Batter Pile (Batter 1:4 in direction of arrow



DETAIL OF DIMENSIONS AS SHOWN IN PLAN & PANEL JTS.

VOGT, IVERS, & ASSOCIATES, INC. 2 / 7
ENGINEERS ARCHITECTS
CINCINNATI

RETAINING WALL NO. 6
SEGMENT E
SR-126

DESIGN NO. 1

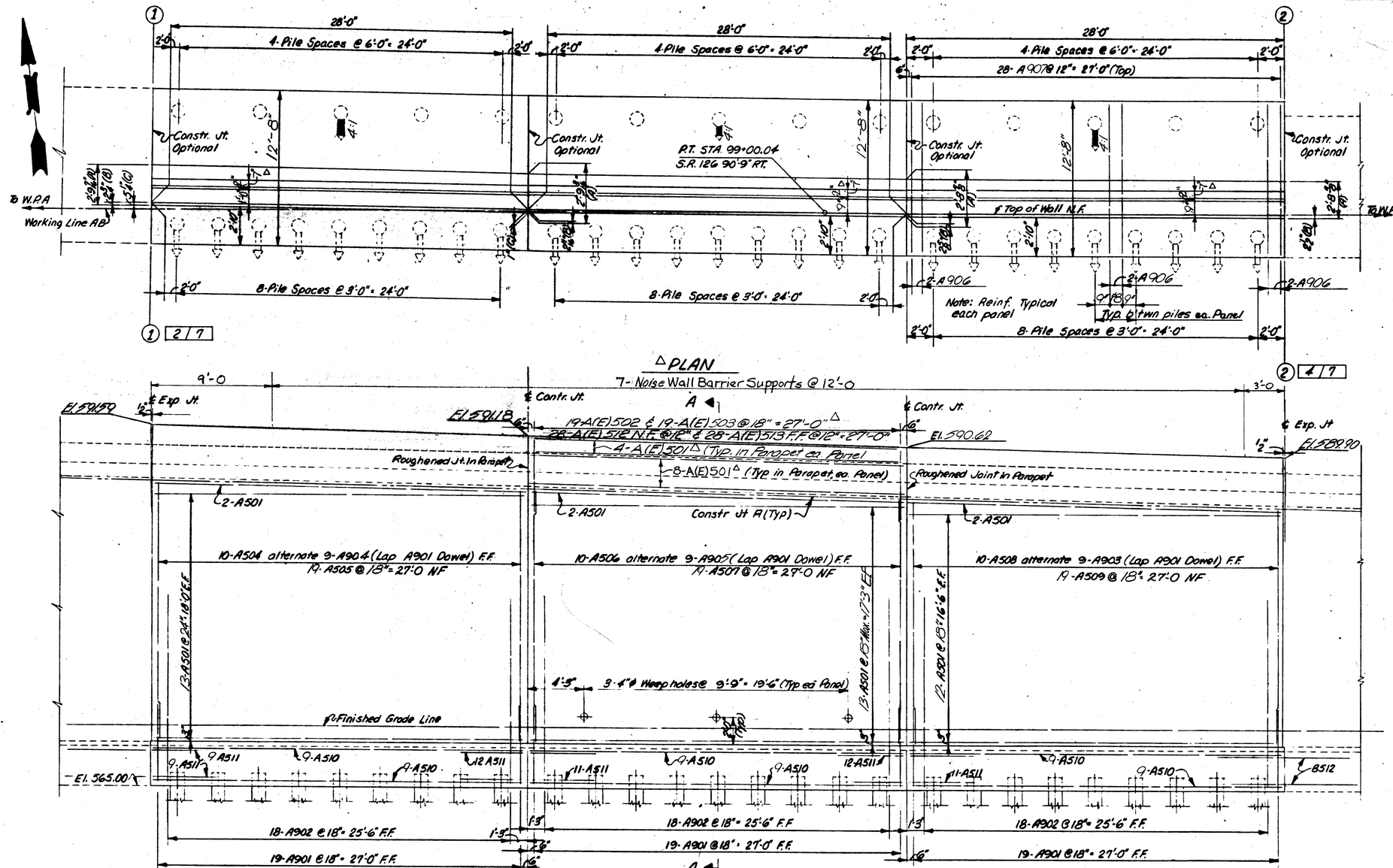
HAMILTON COUNTY STA. 97+50.00
STA. 101+50.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
T.D.W.	T.D.W.	—	S.N.D.	ZAH	6/29/84	JAP 2-15-86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-2(13)	

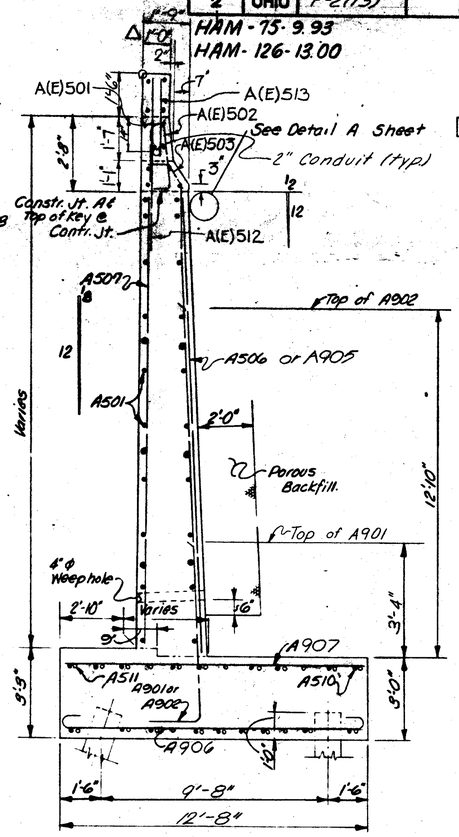
468
787

HAM-75-9.93
HAM-126-13.00



△ PLAN

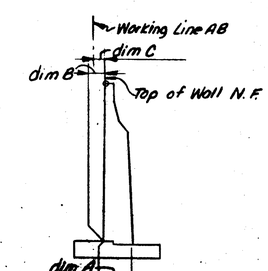
ELEVATION



△ SECTION A-A - SHOWN
SECTION C-C SIMILAR 2/7

NOTES

1. For Wall Layout and General Notes See Sheet 1/7.
2. For Details of Joints and Vertical Rustication See Sheet 6/7.
3. For Reinforcing Steel List See Sheet 7/7.
△ 4. "(E)" denotes epoxy-coated reinforcing bar.
△ 5. For Noise Barrier Support detail See Sh. 4/7.



DETAIL OF DIMENSIONS AS SHOWN IN PLAN @ PANEL JTS

LEGEND

N.F. - Near Face
F.F. - Far Face
E.F. - Each Face
- Vertical Pile
- Batter Pile (Batter 1:3 in direction of arrow)
(Batter 1:4 in direction of arrow)

VOGT, IVERS, & ASSOCIATES, INC. 3/7
ENGINEERS ARCHITECTS
CINCINNATI

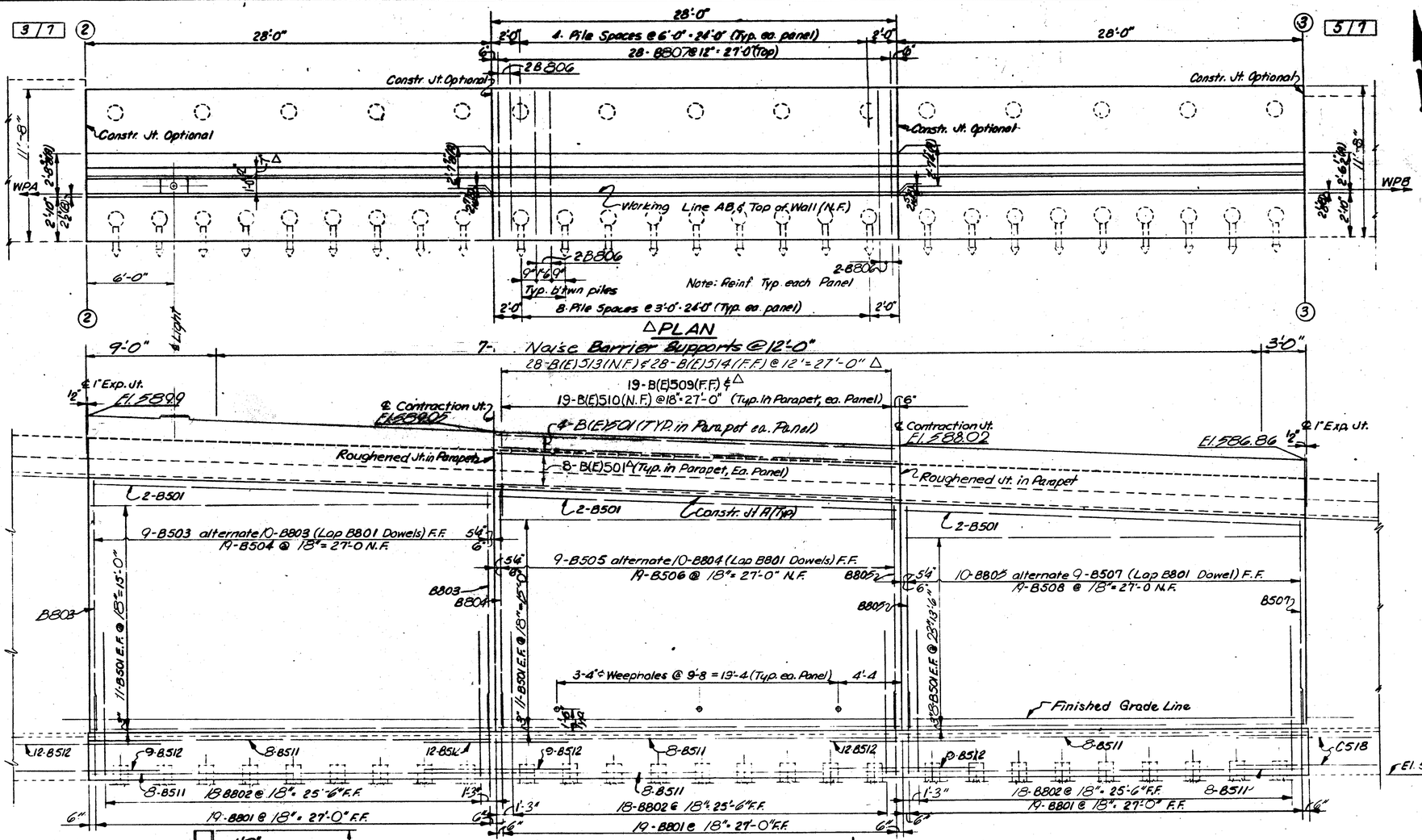
RETAINING WALL NO. 6
SEGMENT A
SR-126
DESIGN NO. 1
HAMILTON COUNTY STA. 97+50.00
STA. 101+50.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
T.D.W.	T.D.W.	—	S.N.D.	ERH	6/29/71	JAP 2-15-86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-2(13)	

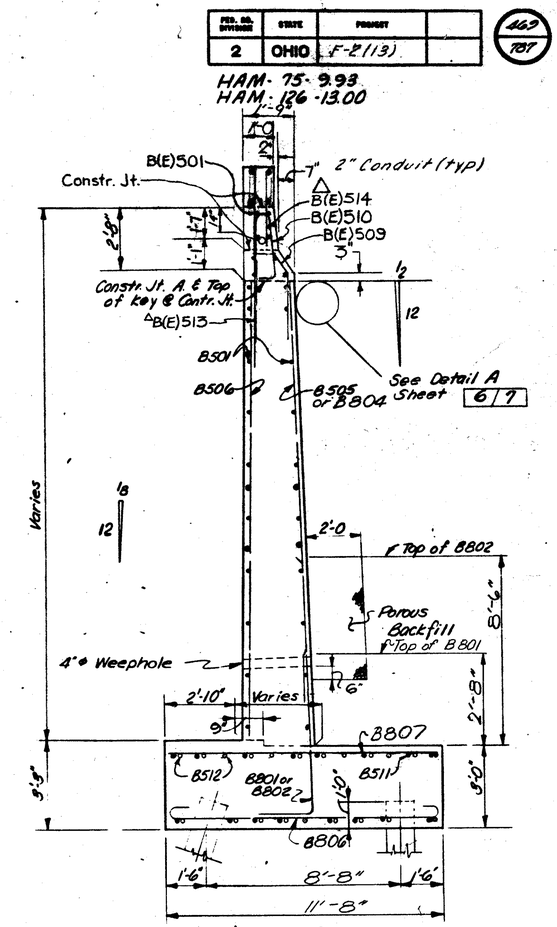
469/787

HAM-75-9.93
HAM-126-13.00

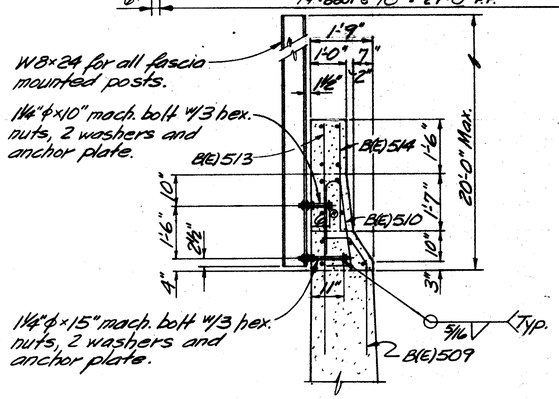


△PLAN

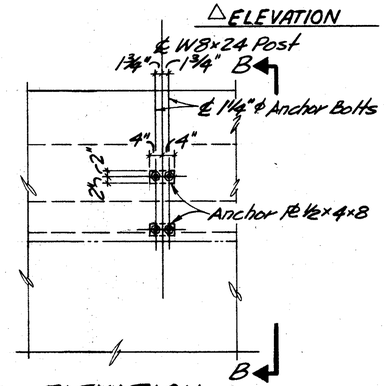
△ELEVATION



△SECTION A-A



SECTION B-B



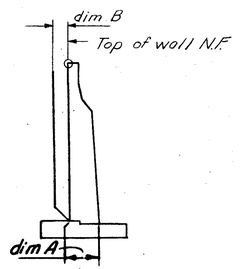
ELEVATION

NOISE BARRIER SUPPORT DETAILS*

NOTES

1. For Wall Layout and General Notes See Sheet 1/7
2. For Details of Joints and Vertical Rustication See Sheet 6/7
3. For Reinforcing Steel List See Sheet 7/7

△4. "(E)" denotes epoxy-coated reinforcing bar.
△5. For Noise Barrier Support details See Sh. 4/7
△6. For Light Support Details See Sh. 6/7



DETAIL OF DIMENSIONS AS SHOWN IN PLAN @ PANEL JTS.

LEGEND

N.F. - Near Face
F.F. - Far Face
E.F. - Each Face
- Vertical Pile
- Batter Pile (Batter 1:3 in direction of arrow)

* For Additional Details see sheets 69, thru 69d.

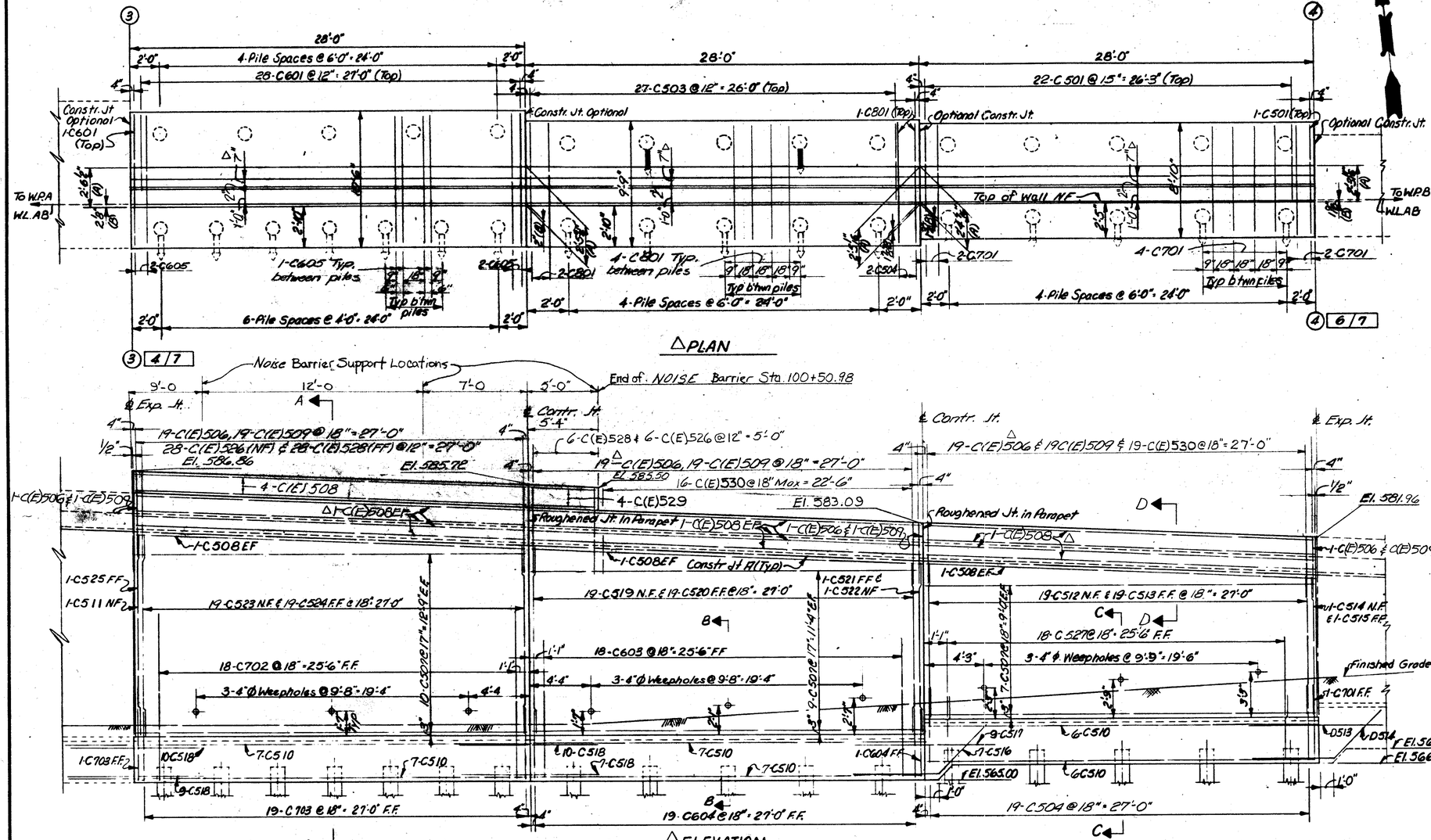
VOGT, IVERS, & ASSOCIATES, INC. ENGINEERS ARCHITECTS CINCINNATI 4/7

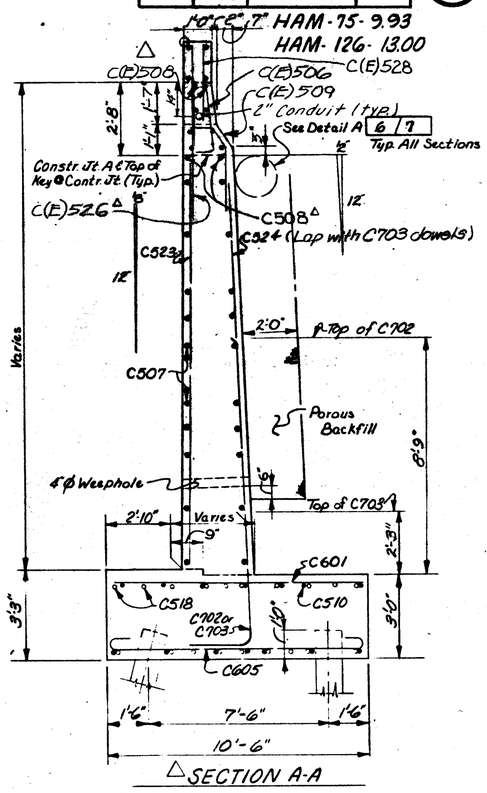
RETAINING WALL NO. 6
SEGMENT B
SR-126
DESIGN NO. 1
HAMILTON COUNTY STA. 97+50.00 STA. 101+50.00

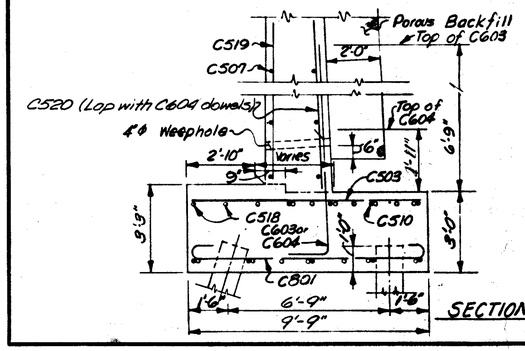
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
T.D.W.	T.D.W.	—	S.N.D.	E.R.H.	6/29/71	JAP 2-15-86

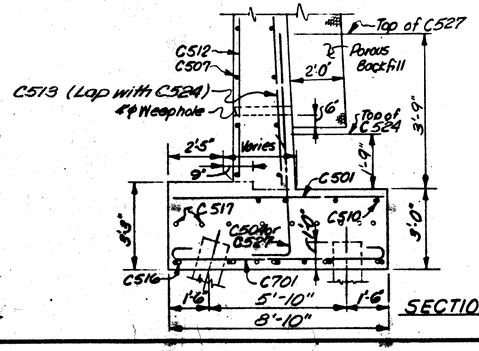
FED. ROAD DIVISION	STATE	PROJECT	
2	OHIO	F-2(13)	

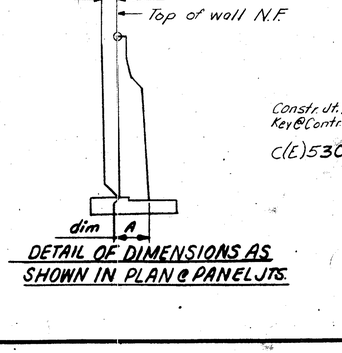
HAM-75-9.93
HAM-126-13.00



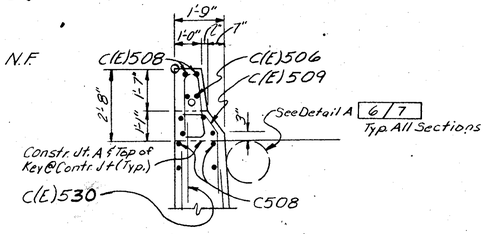








DETAIL OF DIMENSIONS AS SHOWN IN PLAN ℄ PANEL JTS.



SECTION D-D

LEGEND
N.F. - Near Face
F.F. - Far Face
E.F. - Each Face
( ) - Vertical Pile
( ) - Batter Pile (Batter 1:3 in direction of arrow)
( ) - Batter Pile (Batter 1:4 in direction of arrow)

NOTES:
1. For Wall Layout and General Notes See Sheet 1/7
2. For Details of Joints and Vertical Rustication See Sheet 6/7
3. For Reinforcing Steel List See Sheet 7/7
△4. "(E)" denotes epoxy covered reinforcing bar.
△5. For Noise Barrier Support details See Sh. 4/7.

VOGT, IVERS, & ASSOCIATES, INC. 5/7
ENGINEERS ARCHITECTS
CINCINNATI

RETAINING WALL NO. 6
SEGMENT C
SR-126

DESIGN NO. 1

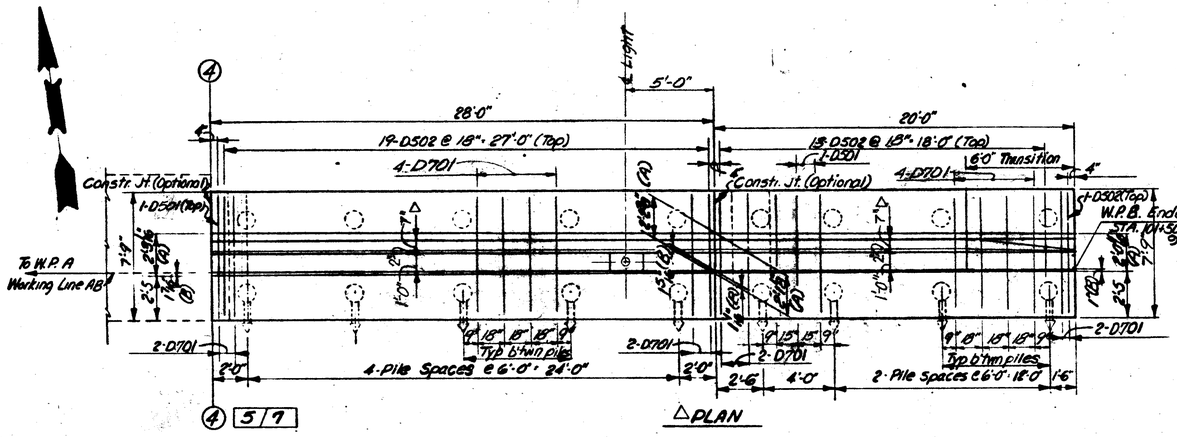
HAMILTON COUNTY STA. 97 + 50.00
STA. 101 + 50.00

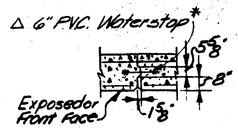
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
TDW	TDW	—	SND	ZRH	6/29/71	JAP 2/15/86

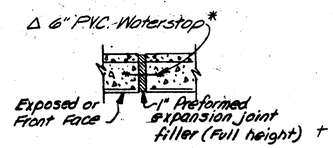
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-2(113)	

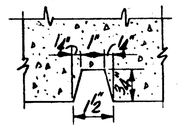
471
187

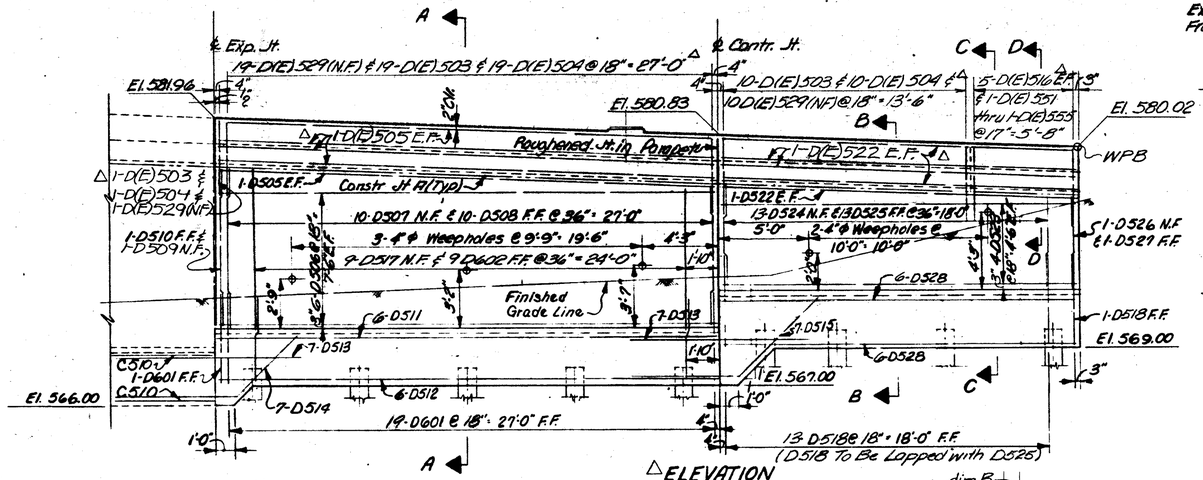
HAM-75-9.93
HAM-126-13.00

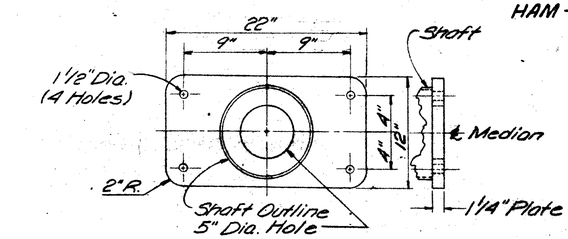




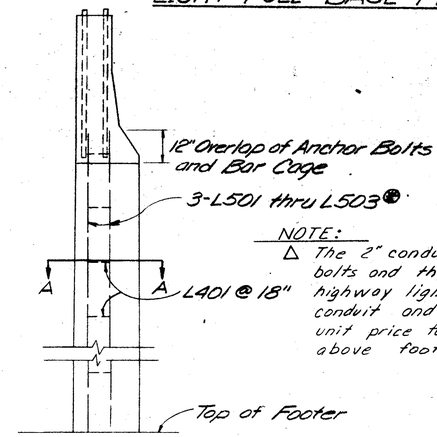


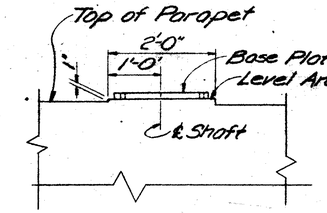






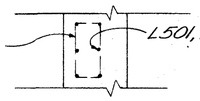
LIGHT POLE BASE PLATE





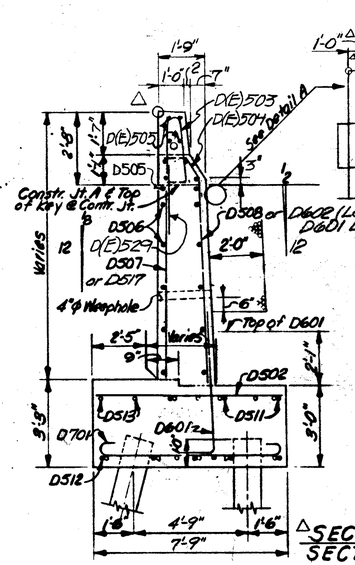
NOTE:
△ The 2" conduit raceway and the 1 1/4" x 58" anchor bolts and the base plates shall be furnished under highway lighting quantities. The cost of placing the conduit and anchor bolts shall be included in the unit price for item "511 class "C" concrete, above footings".

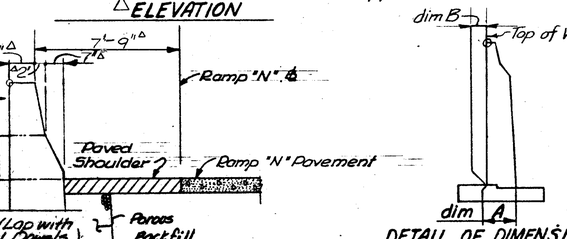
LIGHT SUPPORT		
Station (S.R. 126)	Elev.†	Bar Mark*
97+60	592.05	L501
99+40	589.72	L502
101+25	582.53	L503

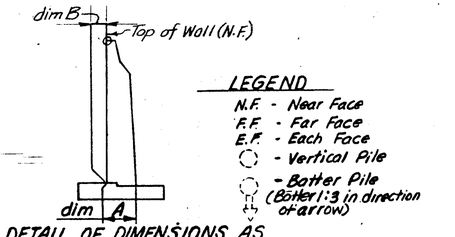


SECTION A-A

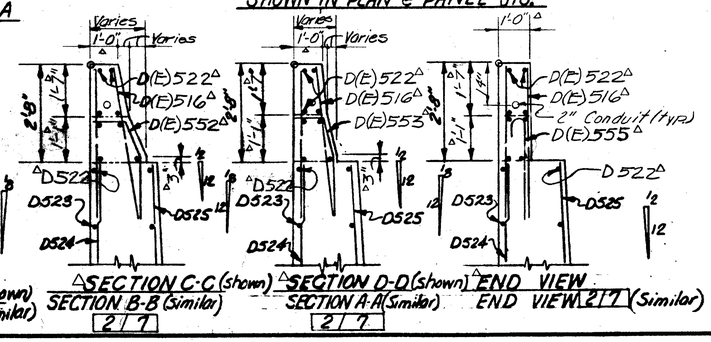
LIGHT SUPPORT DETAIL







LEGEND
N.F. - Near Face
F.F. - Far Face
E.F. - Each Face
- Vertical Pile
- Batter Pile (Batter 1:3 in direction of arrow)



NOTES:
* △ 5. A 6" P.V.C. waterstop shall be centered on the retaining wall expansion joints to form a continuous waterproof seal. The waterstop shall be capable of accommodating 1/2" of joint movement.
† △ 6. Place filler on each side of PVC waterstop.

NOTES
1. For Wall Layout and General Notes See Sheet 1/7
2. For Details of Joints and Vertical Rustication See Sheet 6/7
3. For Reinforcing Steel List See Sheet 7/7
△ 4. "(E)" denotes epoxy-coated reinforcing bar.

VOGT, IVERS, & ASSOCIATES, INC. 6/7
ENGINEERS ARCHITECTS
CINCINNATI

RETAINING WALL NO. 6
SEGMENT D
SR-126

DESIGN NO. 1
HAMILTON COUNTY STA. 97+50.00
STA. 101+50.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
T.D.W.	T.D.W.	—	S.N.D.	ERH	6/24/71	JAP 2-15-86

MARK	NO	LENGTH	TYPE	WEIGHT
		SEGMENT A 3 7		
A501	△82	27'-6	Str	2352
A(E)502	△57	5'-3"	1	312
A(E)503	△57	3'-9	2	223
A504	10	18'-10 to 19'-2 2 by 2"-1ea.	Str.	198
A505	19	18'-7 to 18'-11 2 by 1/4"-1ea.	Str.	377
A506	10	18'-3 to 18'-8 5/8 by 3/8"-1ea.	Str.	193
A507	19	18'-1 to 18'-5 5/8 by 3/8"-1ea.	Str.	362
A508	10	17'-6 to 18'-3 by 1"-1ea.	Str.	186
A509	19	17'-3 to 18'-0 by 1/2"-1 ea.	Str.	349
A510	54	27'-6	Str.	1849
A511	69	10'-0	Str.	720
A(E)501	36△	27'-6"	Str.	1033
A(E)512	84△	6'-0"	Str.	526
A(E)513	84	2'-9"	Str.	241
A904	9	18'-10"to 19'-2" by 1/2"-1ea.	Str.	581
A905	9	18'-3"to 18'-8" by 5/8"-1ea.	Str.	565
A906	60	14'-8"	3	2492
A901	57	9'-11 △	4	1922
A902	54	18'-5	4	3381
A903	9△	17'-6 to 18'-2" by 1"-1ea.	Str	346
A907	84△	12'-2"	Str.	3474
		SEGMENT B 4 7		
B501	70△	27'-6	Str	2008
B(E)504	84	2'-9"	Str.	241
B505	9△	16'-9"to 17'-3" by 1"-1ea.	Str.	160
B506	19△	16'-6"to 17'-3 by 1/2"-1ea.	Str.	334
B507	9△	15'-8"to 16'-6"by 1/4"-1ea.	Str.	151
B508	19△	14'-7 1/4"to 15'-4" by 3/4"-1ea.	Str.	315
B(E)509	57△	3'-9	2	223
B(E)510	57△	5'-3"	1	312
B511	48△	27'-6	Str.	1377
B512	63	10'-0	Str.	657
B(E)513	84△	6'-0"	Str.	526
B(E)501	36△	27'-6"	Str.	1033
B806	60	13'-0"	3	2083
B807	84	11'-2"	Str.	2504
B801	57	7'-9"△	4	1179
B802	54	13'-7"△	4	1958
B803	10△	16'-9"to 17'-6" by 1"-1ea.	Str.	457
B804	10	15'-8"to 16'-7 1/4"by 1/4"-1ea.	Str.	431
B805	10	14'-5 1/2"to 15'-7"by 1 1/2"-1ea.	Str.	401
		SEGMENT C 5 7		
C(E)528	34	2'-9"	Str.	98
C501	23△	8'-4"△	Str.	200
C502	12	8'-9	3	110
C503	28	9'-3"△	Str.	270
C504	19	6'-0"△	4	119
C(E)506	57△	5'-3"	1	312
C507	52	27'-6	Str	1491
C508	6△	27'-6	Str	172
C(E)507	57△	3'-9	2	223
C510	40△	27'-6	Str.	1147
C511	1	19'-3	Str.	15
C512	19△	9'-10 1/2 to 11'-0 by 3/4"-1ea.	Str.	207
C513	19△	10'-1 1/2 to 11'-3 by 3/4"-1ea.	Str.	212
C514	1	9'-10	Str.	10
C515	1	10'-1	Str	11
C516	7	11'-0	5	80
C517	9	10'-0	Str.	94
C518	36	10'-0	Str.	375
C519	19△	11'-1 1/2 to 13'-1 by 3/4"-1ea.	Str.	248
C520	19△	12'-2 1/2 to 13'-4 by 3/4"-1ea.	Str.	253
C521	1	11'-11	Str.	12
C522	1	12'-2	Str.	13
C523	19△	13'-1 1/2 to 14'-3 by 3/4"-1ea.	Str.	271
C524	19△	13'-8 1/2"to 14'-6"by 3/4"-1ea.	Str.	276
C525	1	14'-6	Str.	15
C(E)526	34△	6'-0"	Str.	213
C(E)508	28△	27'-6"	Str.	803
C(E)530	35	3'-0"	Str.	110

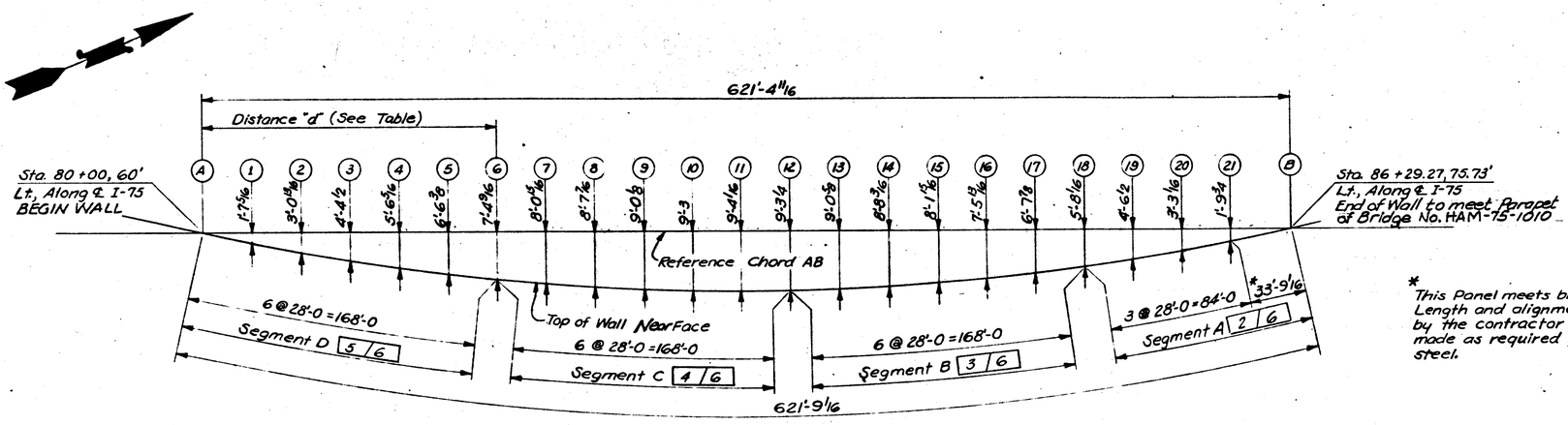
MARK	NO	LENGTH	TYPE	WEIGHT
		SEGMENT C Cont'd.		
C527	18	8'-0"△	4	180
C(E)529	4	5'-0"△	Str.	21
C601	28	10'-0"△	Str.	421
C603	18	11'-3"	4	304
C604	19	6'-5"	4	183
C605	28	11'-4"△	3	477
C701	20	10'-0"△	3	409
C702	18	13'-7"△	4	390
C703	19	7'-1"△	4	275
C801	20	11'-2"△	3	596
		SEGMENT D 6 7		
		6'-0"	Str.	187
D502	34	7'-3"△	Str.	257
D(E)503	30△	5'-3" △	1	164
D(E)504	30△	3'-9	2	117
D505	2△	27'-6	Str.	57
D506	12△	27'-6	Str.	344
D507	10	7'-8 1/2 to 8'-1 0 by 1/2"-1ea.	Str.	86
D508	10	7'-11 1/2 to 9'-1 by 1/2"-1ea.	Str.	89
D509	1	8'-10	Str.	9
D510	1	9'-1	Str.	9
D511	6	27'-6	Str.	172
D512	6	27'-6	Str.	172
D513	14	10'-0	Str.	146
D514	7	11'-0	5	80
D515	7	12'-5	5	91
D(E)516	10△	4'-3	Str.	44
D517	9△	7'-9"to 8'-9" by 1/2"-1ea.	Str.	77
D518	14△	6'-0"	4	88
D519		Not Used		
D520		Not Used		
D521		Not Used		
D522	2△	19'-6	Str.	41
D523	8	19'-6	Str.	163
D524	3△	5'-0 to 5'-9 by 3/4"-1ea.	Str.	73
D525	3△	5'-3 to 6'-0 by 3/4"-1ea.	Str.	76
D526	1	4'-11	Str.	5
D527	1	5'-2	Str.	5
D528	12△	19'-6	Str.	244
D(E)508	10△	27'-6"	Str.	288
D(E)522	10△	19'-6"	Str.	203
D601	20	6'-10"△	4	205
D602	9△	8'-0"to 9'-0" by 1 1/2"-1ea.	4	118
D701	35△	8'-11"	3	638
D(E)551	1△	3'-9"	2	4
D(E)552	1△	3'-9"	2	4
D(E)553	1△	3'-9"	2	4
D(E)554	1△	3'-9"	2	4
D(E)555	1△	4'-1"	3	4
		SEGMENT E 2 7		
E501	56△	31'-6"	Str.	1840
E(E)502	64△	5'-3"	1	350
E(E)503	64△	3'-9	2	250
E504	11	19'-6 3/4 to 19'-8" by 1/8"-1ea.	Str	225
E505	21△	19'-4"	Str.	423
E506	1	19'-4	Str.	20
E507	11	19'-5 to 19'-5 1/2 by 4"-1ea.	Str.	222
E508	21△	19'-1"	Str.	418
E509	1	19'-0	Str.	20
E510	26△	35'-6	Str.	963
E511	12	17'-7	Str.	220
E512	23△	17'-4	Str.	416
E513	1	17'-3	Str.	18
E514	1	17'-6	Str.	18
E(E)515	△14	5'-9"	Str.	84
E516		Not Used		
E517		Not Used		
E518		Not Used		
E519		Not Used		
E520		Not Used		

MARK	NO	LENGTH	TYPE	WEIGHT
		SEGMENT E Cont'd.		
E521	36△	31'-6	Str.	1183
E522	55	10'-0	Str.	365
E523	11	12'-5	5	142
E524	18△	35'-6	Str.	666
E(E)501	24△	31'-6"	Str.	789
E(E)525	93△	6'-0"	Str.	387
E(E)526	93	2'-9"	Str.	267
E(E)552	1△	3'-9"	2	4
E(E)553	1△	3'-9"	2	4
E(E)554	1△	3'-9"	2	4
E(E)556	1△	4'-1"	3	4
E901	69	8'-8"△	4	2033
E902	65	18'-5	4	4070
E903	72	17'-8"	Str.	721
E904	11	19'-7"	Str.	232
E905	11	19'-3" to 19'-5 1/2" by 1/4"-1ea.	Str.	724
E906	70	14'-8"	3	3491
E907	100	12'-2"	Str.	4137

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	IR-75-1196(10	

478
787

HAM-75-9.93
HAM-126-13.00



* This Panel meets bridge parapet (by others). Length and alignment shown must be verified by the contractor in the field and adjustments made as required prior to ordering reinforcing steel.

REFERENCE CHORD LAYOUT

	ESTIMATED QUANTITIES			△ REVISIONS		QUANTITIES CHECKED	
	ITEM	TOTAL	UNIT	DESCRIPTION	CALCULATED BY	CHECK BY	BY	DATE
△	203	0	Cu. Yds.	Embankment	JAP 2-26-86	TMB		
	503	671	Cu Yds	Unclassified Excavation			T.D.W.	6-30-71
△	509	10436	Lbs.	Reinforcing Steel, Grade 60	JAP 2-26-86	TMB	S.L.	6-30-71
	511	202	Cu. Yds.	Class "C" Concrete, footings			A.S	5-19-71
△	511	206	Cu. Yds.	Class "C" Concrete, above footings	JAP 2-26-86	TMB	A.S	5-19-71
	516	74	Lin. Ft.	PVC Water stop	JAP 3-2-86	TMB	T.D.W.	6-30-71
△	516	102	Sq. Ft.	1" Preformed Expansion Joint Filler	JAP 2-26-86	TMB	T.D.W.	6-30-71
△	503	Lump	Sum	Cofferdams, cribs and sheeting	JAP 2-26-86	TMB		
△	824	10226	Lbs.	Epoxy coated reinforcing steel, grade 60	JAP 2-26-86	TMB		
△	625			Highway Lighting (Quantities included on Roadway Plans)				

PANEL POINT	DISTANCE "d" FROM W.P.A
1	27'-11 7/16
2	55'-11
3	83'-10 3/8
4	111'-10 5/16
5	139'-10 1/8
6	167'-10
7	195'-9 7/8
8	223'-9 13/16
9	251'-9 13/16
10	279'-9 3/4
11	307'-9 3/4
12	335'-9 3/4
13	363'-9 3/4
14	391'-9 3/4
15	419'-9 11/16
16	447'-9 9/16
17	475'-9 7/16
18	503'-9 1/4
19	531'-8 13/16
20	559'-8 5/8
21	587'-8 3/16
W.P.B	621'-4 11/16

DESIGN SPECIFICATIONS

This structure conforms to "Standard Specifications for Highway Bridges" adopted by the American Association of State Highway Officials, tenth edition, 1969 and Interim Specifications, 1970, developed by the AASHO Committee on Bridges and Structures, including the Ohio "Supplement" to these specifications

DESIGN DATA

△ CONCRETE CLASS C Compressive strength: 4000 PSI.
FOOTING KEYS The Key for footings shall be placed in a carefully made trench against undisturbed earth.
FOUNDATION BEARING PRESSURE Footings are designed for a maximum bearing pressure of 2.5 Tons per sq. ft.
△ REINFORCING STEEL ASTM A615, A616 or A617, Grade 60, Minimum yeild strength: 60,000 PSI.

GENERAL NOTES △

PLAN REVISIONS BY BALKE ENGINEERS

Revisions were made to Retaining wall Drawings to incorporate the following:

- Revise Parapets to standard safty parapet shape.
- Provide epoxy-coated reinforcement in corrosion-prone concrete areas.

Revisions Made By BALKE ENGINEERS are denoted by (△) symbol.

Other than noted revisions, retaining walls are the design and detailing of VOGT, IVERS, and ASSOCIATES, INC.

Parapet revisions conform to Ohio Department of Transportation "standard Bridge Drawings" drawing No. BR-1, dated 5-29-79, Modified Version.

VOGT, IVERS, & ASSOCIATES, INC. 1/16
ENGINEERS ARCHITECTS
CINCINNATI

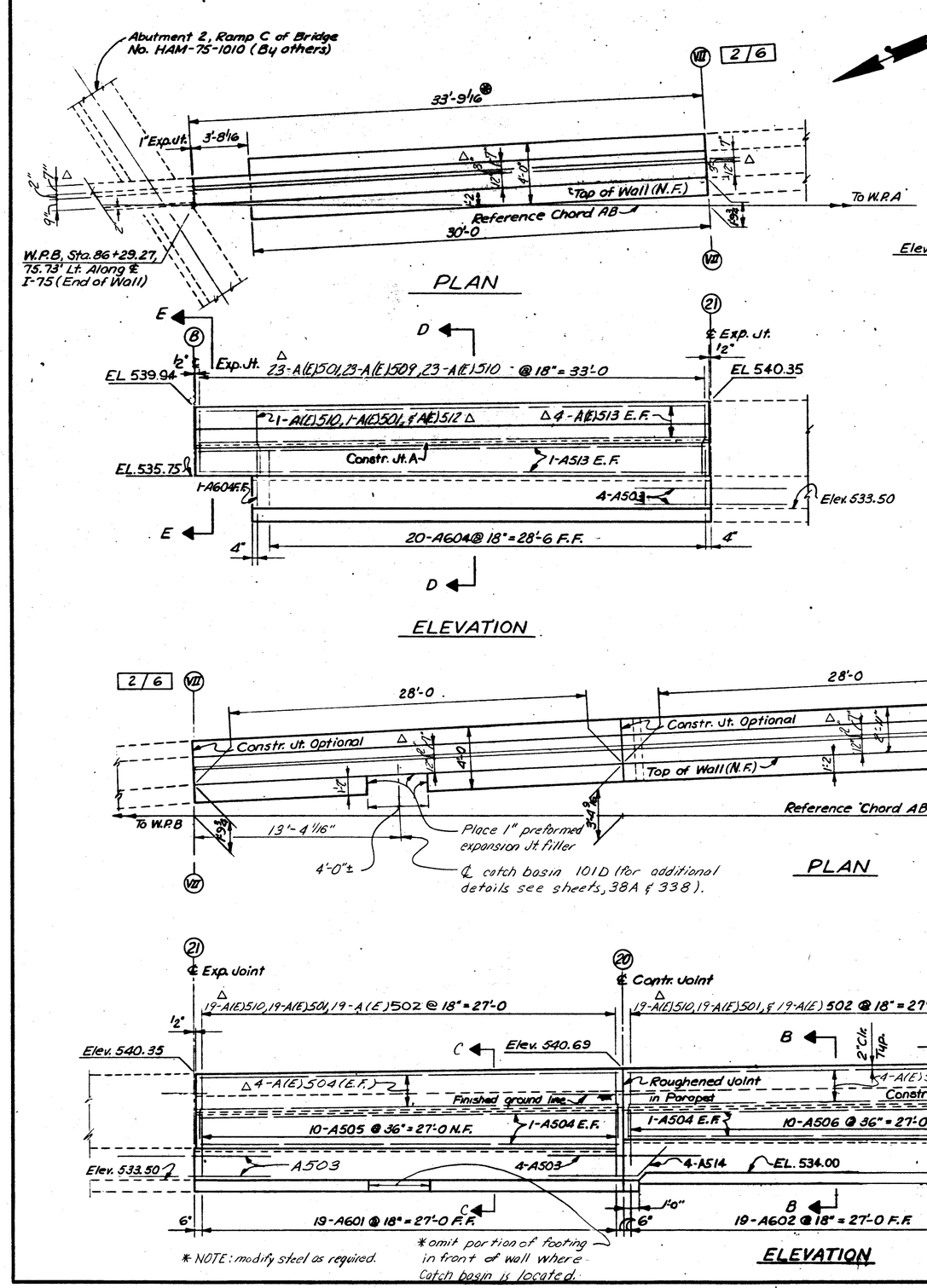
RETAINING WALL Nº 8
LAYOUT AND GENERAL NOTES
I-75
HAMILTON COUNTY STA. 80+00.00 to STA. 86+29.27

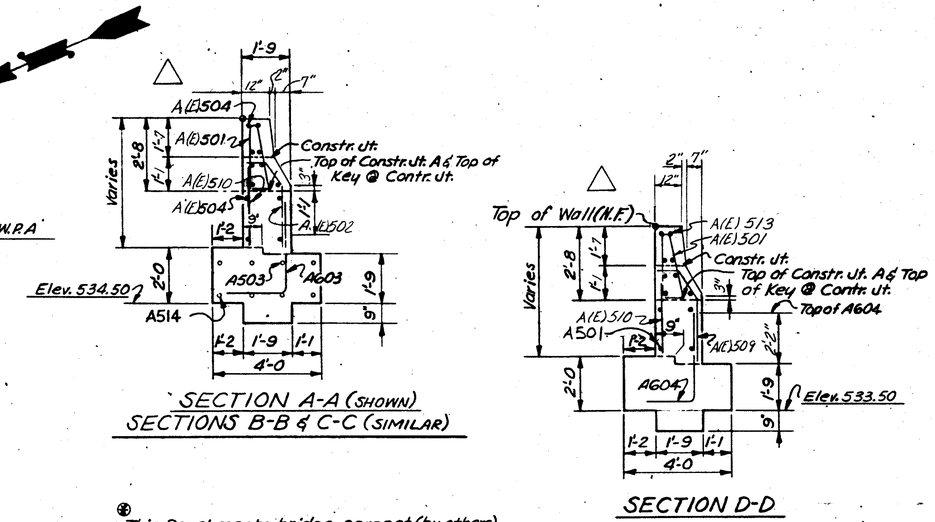
DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE	△ REVISED
—	M.D.	—	S.N.D	ZMH	6/30/71	BALKE ENG 2/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	IR-75-1(96)10	

479/787

HAM-75-9.93
HAM-126-13.00





⊛ This Panel meets bridge parapet (by others). Length and alignment shown must be verified by the Contractor in the field and adjustments made as required prior to ordering reinforcing steel.

NOTES:

1. For Wall Layout & General Notes see Sheet 1/6
2. For Reinforcing Steel List see Sheet 6/6
3. For Details of Joints and vertical Rustications see Sheet 3/6

△ 4. "(E)" denotes epoxy-coated reinforcing bar.

LEGEND

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face

VOGT, IVERS, & ASSOCIATES, INC. ENGINEERS ARCHITECTS CINCINNATI 2/6

RETAINING WALL Nº 8
SEGMENT A
I-75

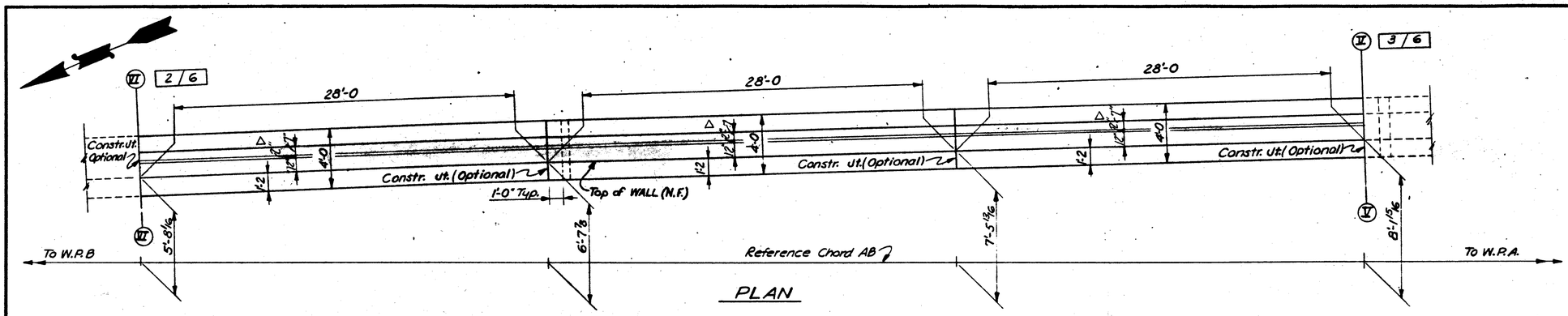
HAMILTON COUNTY STA. 80+00.00 to STA. 86+29.27

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
SND	SND	MD	T.D.W.	ERH	6/30/71	BALKE ENG 2-25-86

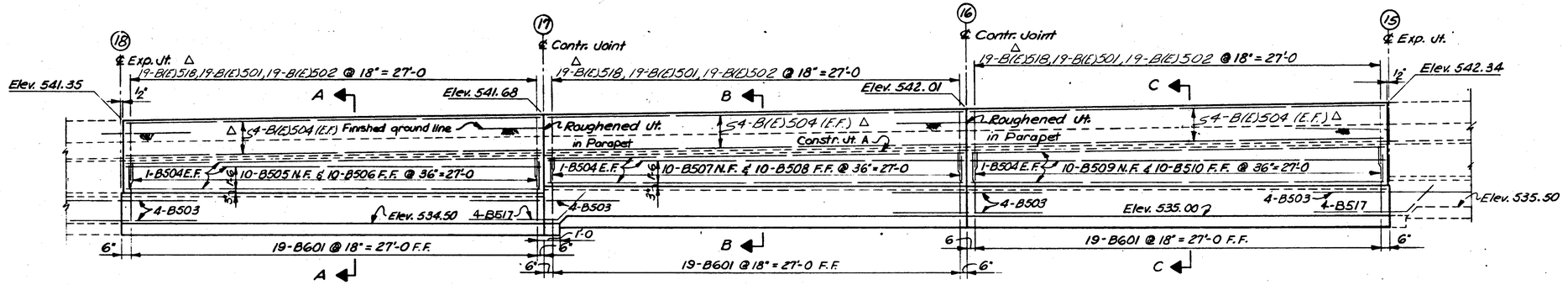
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	IR-75-1196(10	

480
187

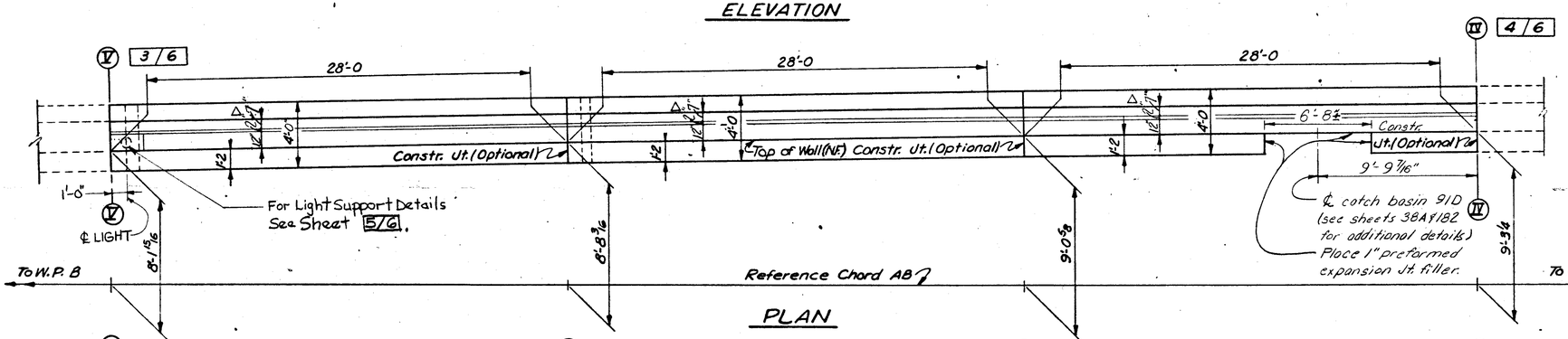
HAM-75-9.93
HAM-126-13.00



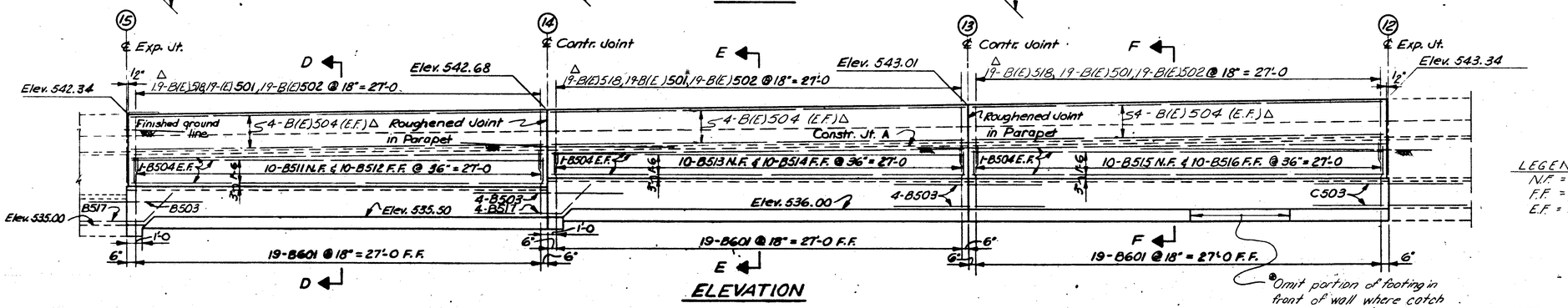
PLAN



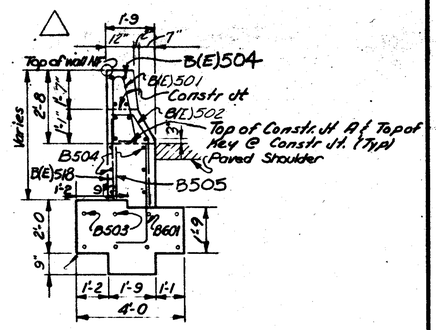
ELEVATION



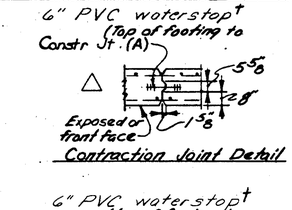
PLAN



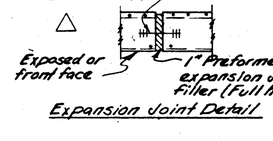
ELEVATION



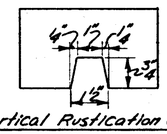
SECTION A-A (SHOWN)
SECTIONS B-B thru F-F (SIMILAR)



Contraction Joint Detail



Expansion Joint Detail



Vertical Rustication Groove

NOTES:

△ 1. "(E)" denotes epoxy coated reinforcing bar.
2. For Wall Layout & General Notes see sheet 1/6
3. For Reinforcing Steel List See Sheet 6/6
†△ 4. A 6" PVC waterstop shall be centered on the retaining wall expansion joints to form a continuous waterproof seal. The waterstop shall be capable of accomodating 1½" of joint movement.
*△ 5. 1" Preformed expansion joint filler shall be placed on each side of PVC waterstop.

LEGEND
N.F. = Near Face
F.F. = For Face
E.F. = Each Face

*NOTE: modify steel as required.

*Omit portion of footing in front of wall where catch basin is located.

VOGT, IVERS, & ASSOCIATES, INC. 3/6
ENGINEERS ARCHITECTS
CINCINNATI

RETAINING WALL Nº 8
SEGMENT B
I-75

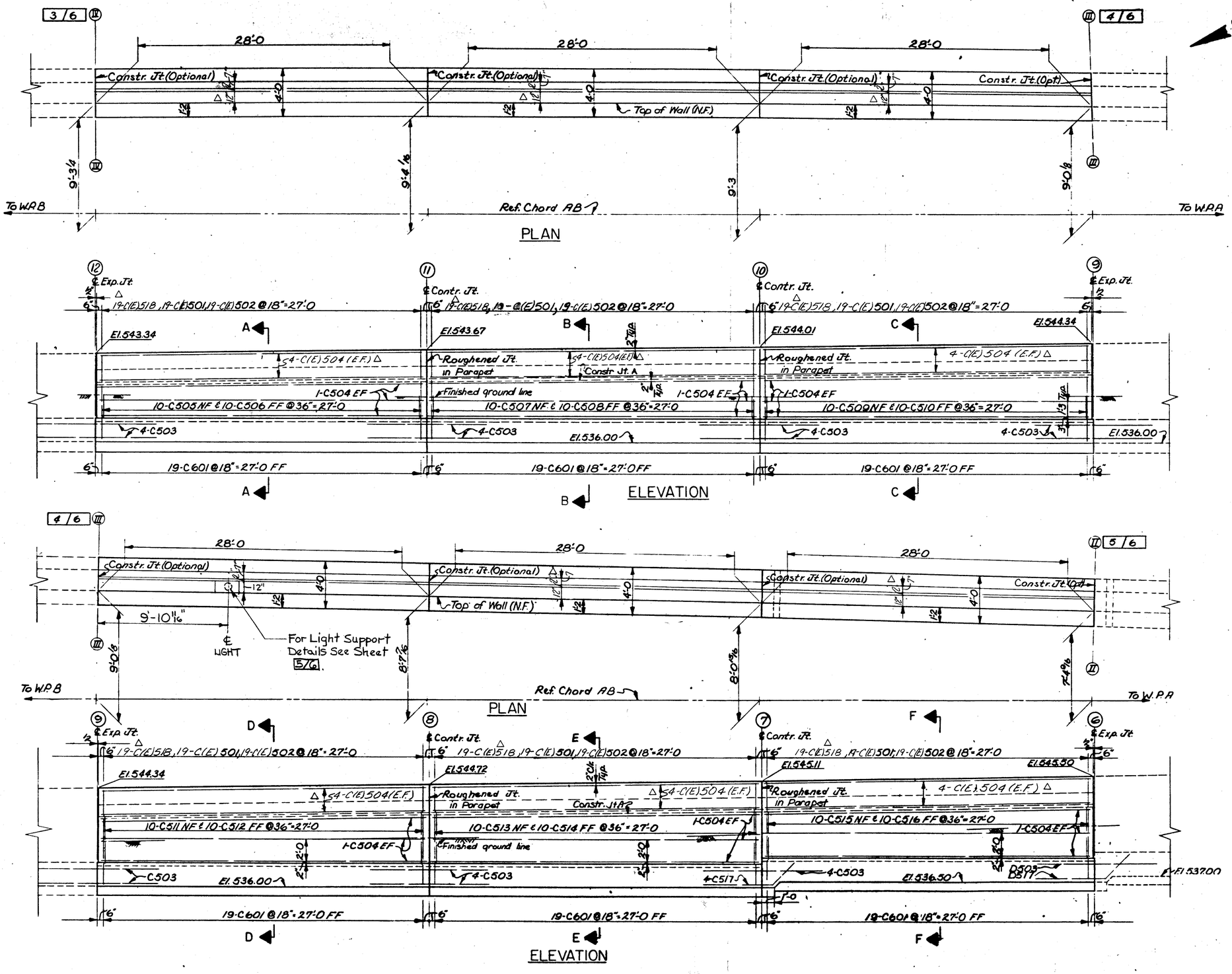
HAMILTON COUNTY STA. 80+00.00 to STA. 86+29.27

DESIGNED	DRAWN	TRACED	CHECKED	RECOMMENDED	DATE	REVISIONS
T.D.W.	T.D.W.	M.D.	S.N.D.	[illegible]	6/30/71	△ BALKE ENG 2-86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-75-1(68)	

481
787

HAM-75-9.93
HAM-126-13.00

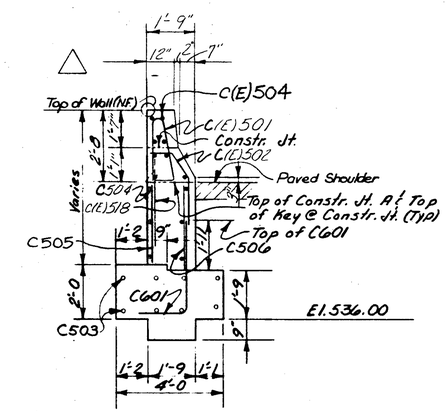


Notes.

1. For Wall Layout & General Notes see sheet 1/6
2. For Reinforcing Steel List see sheet 6/6
3. For Detail of Joints & Vertical Rustications See sheet 3/6
4. "(E)" denotes epoxy-coated reinforcing bar.

LEGEND

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face



Section AA (shown)
Section BB thru FF (similar)

VOGT, IVERS, & ASSOCIATES, INC. 4/6
ENGINEERS ARCHITECTS
CINCINNATI

RETAINING WALL No 8

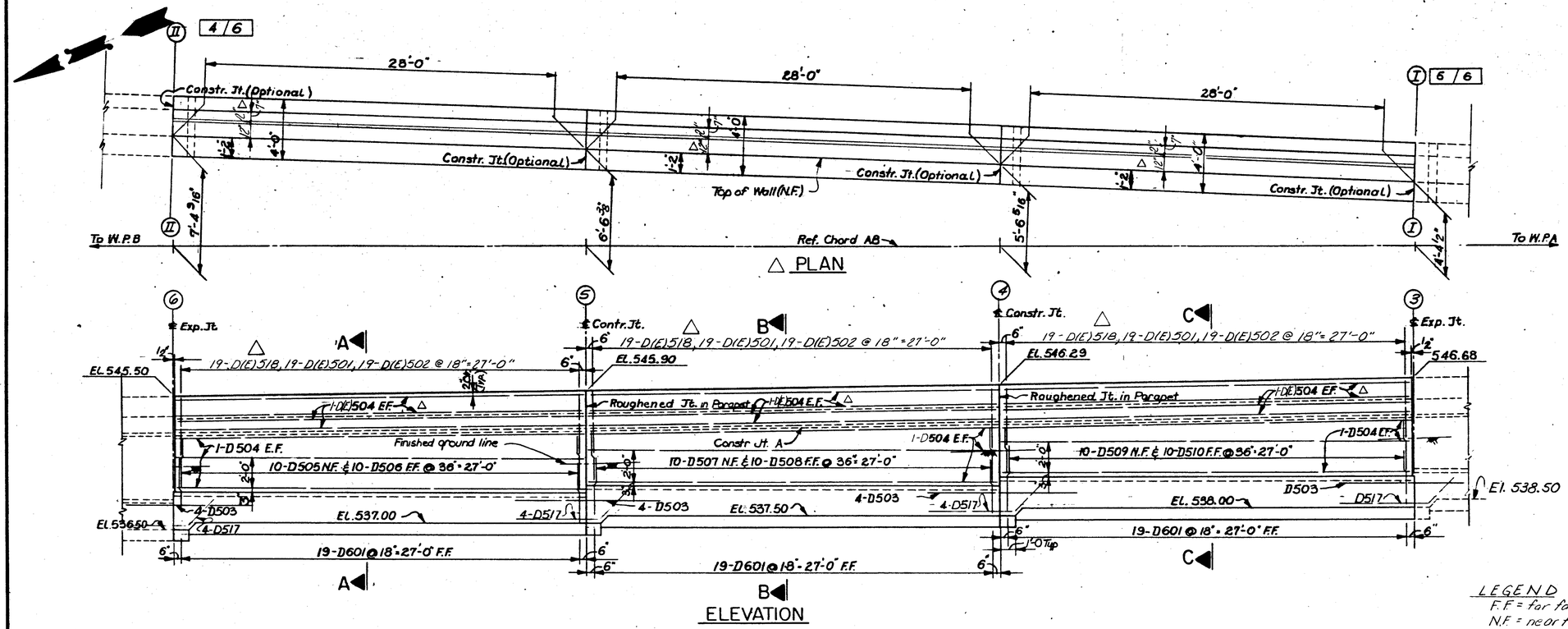
SEGMENT C
I-75

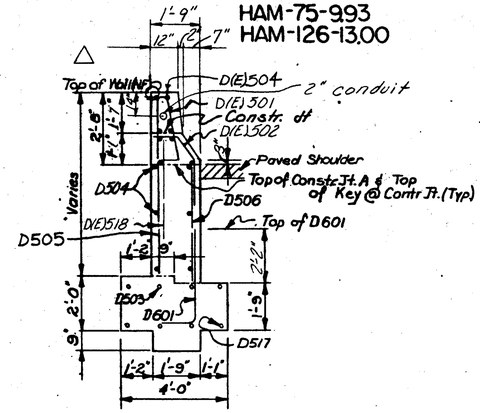
HAMILTON COUNTY STA. 80+00.00 to STA. 86+29.27

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
S.N.D	BWC	BWC	TDW	ERH	6/30/71	BALKE ENG 2/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	IR-75-1196(10	

182 / 187





NOTES:

1. For wall Layout & General Notes, see sheet 1/6
2. For Reinforcing Steel List see sheet 6/6
3. For Detail of Joints & Vertical Rustications, See sheet 3/6

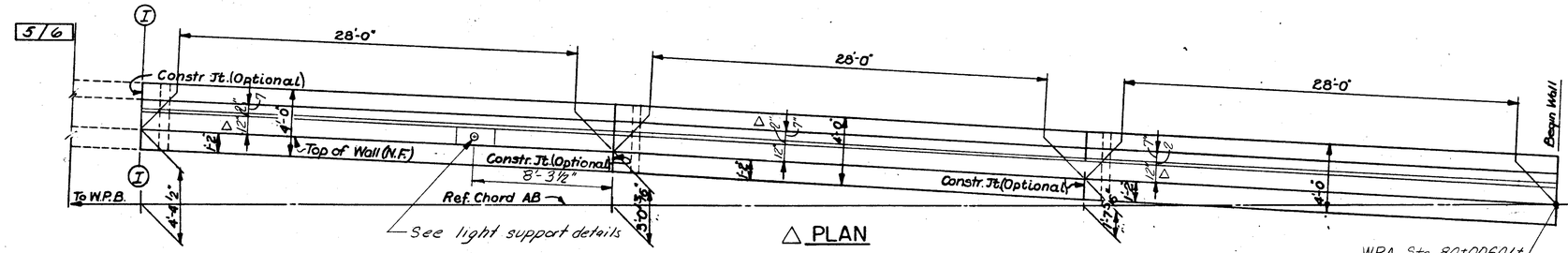
△ 4"(E)" denotes epoxy coated reinforcing bar.

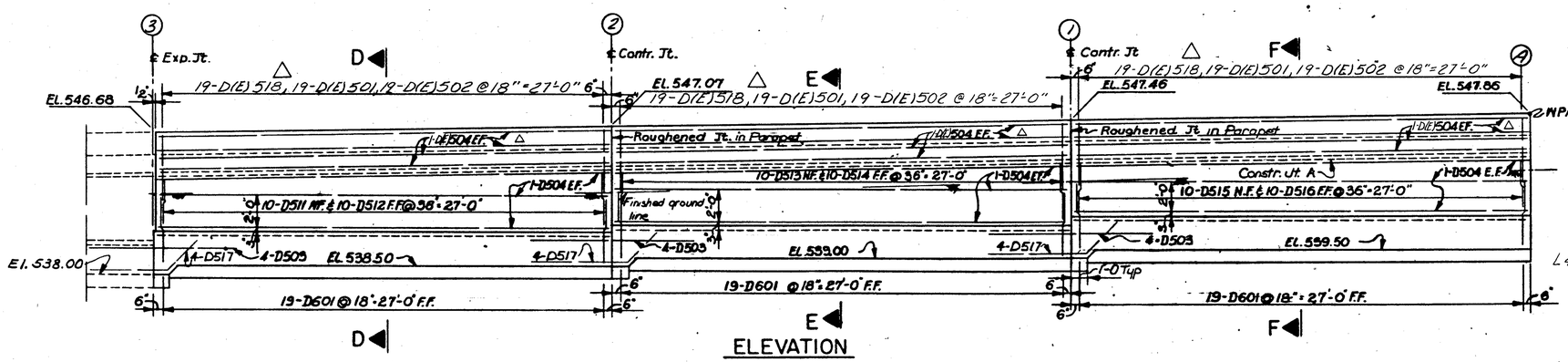
△ The 2" conduit raceway and the 1¼" × 48" anchor bolts and the base plates shall be furnished under highway lighting quantities. The cost of placing the conduit and anchor bolts shall be included in the unit price for item "511 class "C" Concrete, above footing.

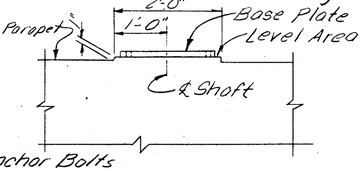
LEGEND
F.F = far face
N.F = near face
E.F = each face

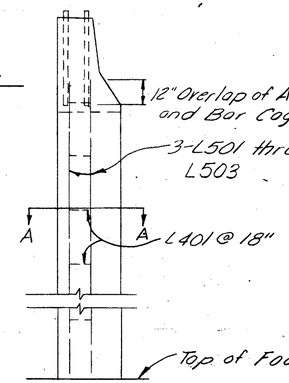
Light Support

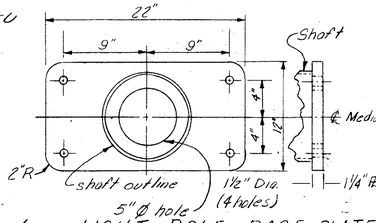
Station	Elev.	Bar mark
80+65	547.05	L(E)501
82+45	544.57	L(E)502
84+24.19	542.45	L(E)503

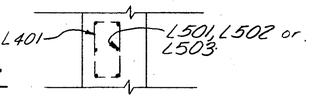












LIGHT SUPPORT DETAILS

VOGT, IVERS, & ASSOCIATES, INC. ENGINEERS ARCHITECTS CINCINNATI — 5/6

RETAINING WALL Nº 8
SEGMENT D
I-75

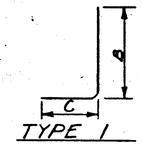
HAMILTON COUNTY STA. 80+00.00 to STA. 86+29.27

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED
T.D.W	A.S	A.S.	S.N.D	Z.R.H	6/30/11	BALKE ENG. 2/86

FED. ROAD PROJECT	STATE	PROJECT		SHEET NO.	TOTAL SHEETS
2	OHIO	IR-75-1(192)10		103	107

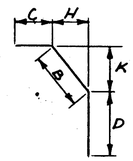
HAM-75-9.93
HAM-126-13.00

	MARK	NO	LENGTH	TYPE	WEIGHT	MARK	NO	LENGTH	TYPE	WEIGHT	MARK	NO	LENGTH	TYPE	WEIGHT
			SEGMENT A | 2 | 6					SEGMENT C | 4 | 6							
△	A(E)501	81	5'-3"	3	444	C(E)501	114	5'-3"	3	624					
△	A(E)502	57	3'-1"	2	183	C(E)502	114	3'-1	2	367					
	A503	24	10'-0	Str.	250	C503	44	10'-0	Str.	459					
△	A504	12	27'-5	Str	343	C504	36	27'-5	Str.	1029					
	A505	10	4'-8 to 4'-11 9/16 by 7/16"-1ea.	Str	50	C505	10	2'-6 6/8 to 2'-10 by 3/8"-1ea.	Str.	28					
	A506	10	4'-6 to 4'-9 7/16 by 7/16"-1ea	Str	49	C506	10	2'-9 5/8 to 3'-1 by 3/8"-1ea.	Str.	31					
	A507	10	4'-4 to 4'-7 15/16 by 7/16"-1ea	Str	47	C507	10	3'-10 3/8 to 3'-2 by 3/8"-1ea.	Str.	37					
						C508	10	4'-1 1/8 to 3'-5 by 3/8"-1ea.	Str.	39					
△	A(E)509	23	4'-1" to 4'-5 1/8" by 3/16"-1ea	2	102	C509	10	3'-2 5/8 to 3'-6 by 3/8"-1ea.	Str.	35					
△	A(E)510	81	3'-0"	Str.	853	C510	10	3'-5 3/8 to 3'-9 by 3/8"-1ea.	Str.	38					
						C511	10	3'-6 to 3'-10 1/2 by 1/2"-1ea	Str.	38					
△	A(E)512	1	4'-3	2	4	C512	10	3'-9 to 4'-1 1/2 by 1/2"-1ea	Str.	41					
△	A513	4	33'-4	Str	139	C513	10	3'-10 1/2 to 4'-3 by 1/2"-1ea.	Str.	42					
	A514	8	8'-6	4	71	C514	10	4'-1 1/2 to 4'-6 by 1/2"-1ea.	Str.	45					
△	A(E)504	24	27'-5"	Str.	686	C515	10	3'-9 to 4'-1 1/2 by 1/2"-1ea.	Str.	41					
△	A(E)513	8	33'-4"	Str.	278	C516	10	4'-0 to 4'-4 1/2 by 1/2"-1ea	Str.	44					
						C517	4	8'-6	4	35					
△						C(E)504	48	27'-5"	Str.	1373					
△						C(E)518	114	3'-0"	Str.	357					
△	A601	19	8'-4 to 8'-7 3/8 by 3/16"-1ea.	1	242	C601	114	5'-7"	1	956					
	A602	19	8'-2 to 8'-5 3/8 by 3/16"-1ea	1	237										
	A603	19	8'-0 to 8'-3 3/8 by 3/16"-1ea	1	232										
△	A604	21	5'-7"	1	176										
			SEGMENT B | 3 | 6					SEGMENT D | 5 | 6							
△	B(E)501	114	5'-3"	3	624	D(E)501	114	6'-8	3	624					
△	B(E)502	114	3'-1"	2	367	D(E)502	114	3'-7	2	367					
	B503	36	10'-0	Str	375	D503	24	10'-0	Str.	250					
△	B504	36	27'-5	Str.	1029	D504	36	27'-5	Str.	1025					
	B505	10	2'-0 to 2'-3 3/8 by 3/8"-1ea.	Str	22	D505	10	3'-8 to 4'-0 1/2 by 1/2"-1ea.	Str.	40					
	B506	10	2'-3 to 2'-6 3/8 by 3/8"-1ea.	Str.	25	D506	10	3'-11 to 4'-3 1/2 by 1/2"-1ea.	Str.	43					
	B507	10	1'-10 to 2'-1 3/8 by 3/8"-1ea.	Str.	21	D507	10	3'-6 1/2 to 3'-11 by 1/2"-1ea.	Str.	39					
	B508	10	2'-1 to 2'-4 3/8 by 3/8"-1ea.	Str.	23	D508	10	3'-9 1/2 to 4'-2 by 1/2"-1ea	Str.	42					
	B509	10	2'-2 to 2'-5 3/8 by 3/8"-1ea.	Str.	24	D509	10	3'-5 1/4 to 3'-9 3/4 by 1/2"-1ea.	Str.	38					
	B510	10	2'-5 to 2'-8 3/8 by 3/8"-1ea.	Str.	27	D510	10	3'-8 1/4 to 4'-0 3/4 by 1/2"-1ea.	Str.	40					
	B511	10	2'-0 to 2'-3 3/8 by 3/8"-1ea.	Str.	22	D511	10	3'-4 to 3'-8 1/2 by 1/2"-1ea.	Str.	37					
	B512	10	2'-3 to 2'-6 3/8 by 3/8"-1ea.	Str.	25	D512	10	3'-7 to 3'-11 1/2 by 1/2"-1ea	Str.	39					
	B513	10	1'-10 to 2'-1 3/8 by 3/8"-1ea.	Str.	21	D513	10	3'-3 to 3'-7 1/2 by 1/2"-1ea.	Str.	36					
	B514	10	2'-1 to 2'-4 3/8 by 3/8"-1ea.	Str.	23	D514	10	3'-6 to 3'-10 1/2 by 1/2"-1ea.	Str.	38					
	B515	10	2'-2 to 2'-5 3/8 by 3/8"-1ea.	Str.	24	D515	10	3'-1 1/2 to 3'-6 by 1/2"-1ea.	Str.	35					
	B516	10	2'-5 to 2'-8 3/8 by 3/8"-1ea.	Str.	27	D516	10	3'-4 1/2 to 3'-9 by 1/2"-1ea	Str.	37					
	B517	12	8'-6	4	106	D517	24	8'-6	4	213					
△	B(E)504	48	27'-5	Str.	1373	D(E)504	48	27'-5	Str.	1373					
△	B(E)518	114	3'-0	Str.	357	D(E)518	114	3'-0	Str.	357					
△	B601	114	5'-7	1	956	D601	114	5'-7	1	956					
						L(E)401	13	4'-10	5	42					
						L(E)501	6	4'-9	Str.	30					
						L(E)502	6	3'-2	Str.	20					
						L(E)503	6	3'-4	Str.	21					
													△ Total Weight *		20662



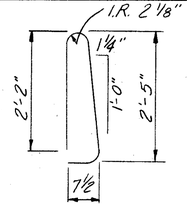
TYPE 1

	MARK	B	C	
	A601	6'-5 to 6'-8 3/8 by 3/16"-1ea.	1'-11	△
	A602	6'-3 to 6'-6 3/8 by 3/16"-1ea.	1'-11	
	A603	6'-1 to 6'-4 3/8 by 3/16"-1ea	1'-11	
△	A604	3'-8	1'-11	
△	B601	3'-8	1'-11	
△	C601	3'-8	1'-11	
△	D601	3'-8	1'-11	

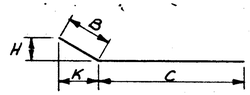


TYPE 2

	MARK	B	H	K	C	D
△	A509	10 1/2	6	8 1/2	9	2'-9 to 3'-1 8 by 3/16"-1ea
△	A512	10 1/2	6	8 1/2	9	2'-11
△	A502	10 1/2	6	8 1/2	9	1'-9
△	B502	10 1/2	6	8 1/2	9	1'-9
△	C502	10 1/2	6	8 1/2	9	1'-9
△	D502	10 1/2	6	8 1/2	9	1'-9

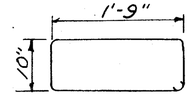


△ TYPE 3



TYPE 4

MARK	H	K	B	C
A514	1'-9	1'-9	2'-5 1/2	6'-0
B517	1'-9	1'-9	2'-5 1/2	6'-0
C517	1'-9	1'-9	2'-5 1/2	6'-0
D517	1'-9	1'-9	2'-5 1/2	6'-0



△ TYPE 5

△ 1. Refer to CMS sections 106.03, 700, 709.01 thru 709.05 and 709.08 sufficient additional reinforcing steel shall be replaced in the structure by the additional steel spliced in accordance with 509.08.
△ 2. "(E)" denotes epoxy coated reinforcing bar.
△ 3. Reinforcing bars not revised by BALKE) shall have a minimum lap of 30 bar diameters.
4. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size number.
5. All dimensions are out to out of bar.
6. All bends shown are bent around a standard mandrel except where radius "R" is indicated.
7. The length of bent bars is measured along the centerline.
8. For standard hook dimensions, see section 509.05 of the specifications.

△ * Includes 10226 lbs. epoxy coated reinforcing steel Grade 60.

VOGT, IVERS, & ASSOCIATES, INC. 6 \| 6
ENGINEERS - ARCHITECTS
CINCINNATI

RETAINING WALL No 8
REINFORCING STEEL LIST
S.R. 126

HAMILTON COUNTY
STA. 80+00.00 to
STA. 86+29.27

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
—	H.R.M	—	SD	[illegible]	6/30/87	△ BALKE ENG 6/88

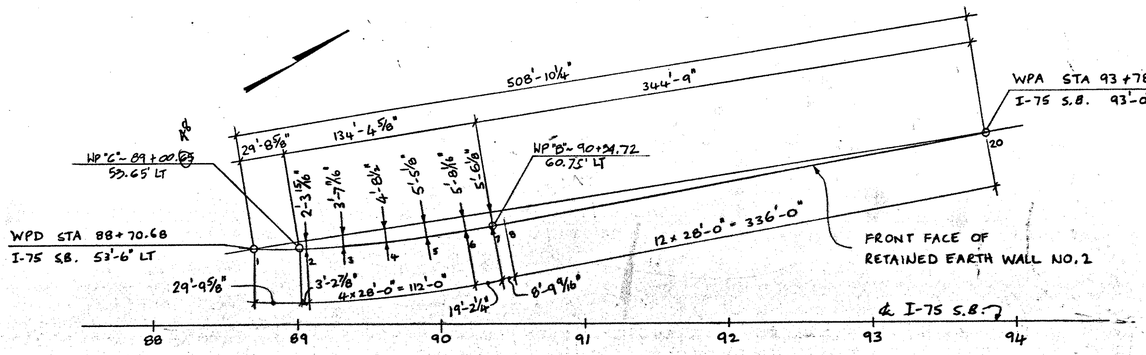
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	IR-75-1(96)10	

483A
787

HAM-75-9.93
HAM-126-13.00

ESTIMATED QUANTITIES, DESIGN 2 WALL No. 2			
ITEM	TOTAL	UNIT	DESCRIPTION
203	1357	Cu. Yds.	Select Granular Embankment
203	52	Cu. Yds.	Embankment
503	76	Cu. Yds.	Unclassified Excavation
503	Lump	Sum	Cofferdams, Cribs and Sheeting
509	13645	Lbs.	Reinforcing Steel, Grade 60
511	8	Cu. Yds.	Class C Concrete, Coping
Special	3840	Sq. Ft.	Retained Earth Walls
511	102	Cu. Yds.	Class C Concrete, Traffic Barrier

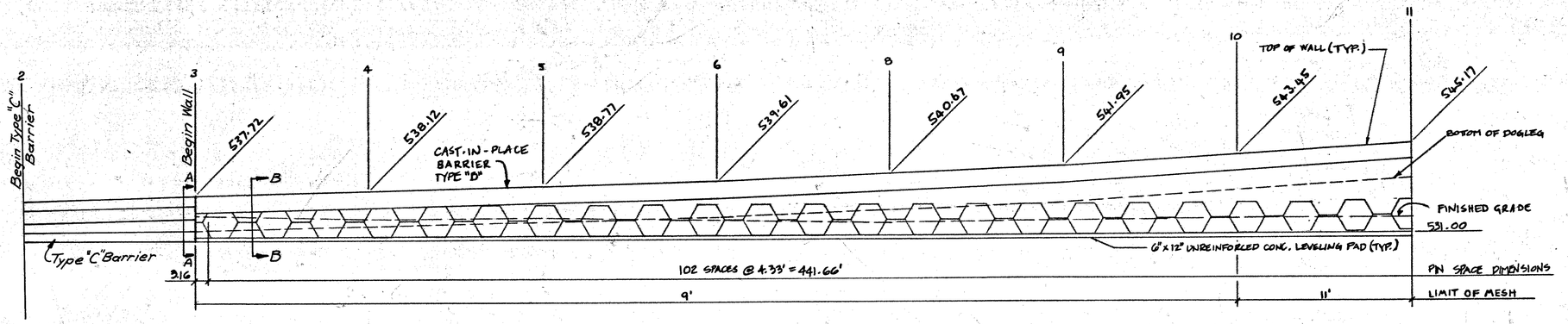
NOTES:
1. FOR TYPICAL SECTION, SEE SHT. 10 OF 11
2. FOR COPING | BARRIER DETAILS, SEE SHT. 9 OF 11



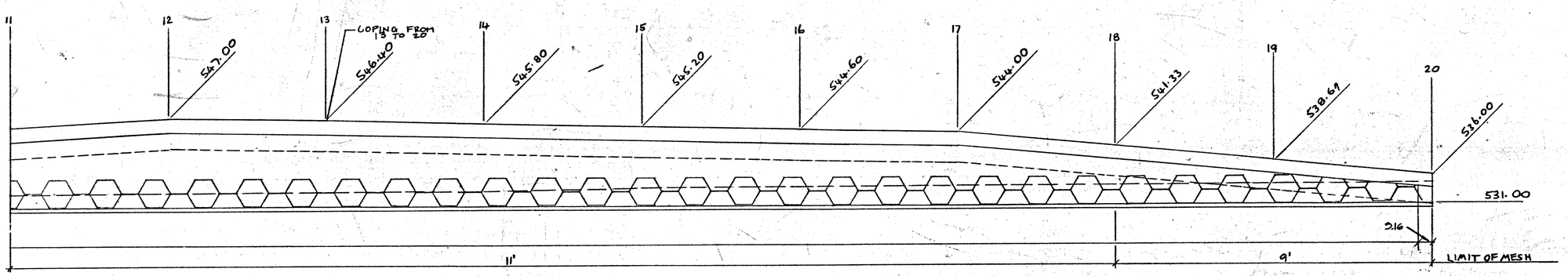
NOTE:
Section view of retaining wall excavation limits shown on roadway cross-sections, Sheet No. 184B, 185, & 186.

WALL NO. 2 PLAN

NO SCALE



Note:
For Sections, See Sheet 9 of 11



WALL NO. 2 FRONT FACE

SCALE: 1" = 10'

NO.	DATE	REVISION	BY

DES. 6-85 J.P.
DRN. 6-85 J.P.
CHK. 6-85 J.N.

PTI POST-TENSIONING INSTITUTE

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Telex: 899487
Los Gatos, CA / Campbell, CA / Seattle, WA / Atlanta, GA / Dallas, TX / Denver, CO / Honolulu, HI
Houston, TX / Minneapolis, MN / Miami, FL / Washington, D.C.

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RETAINED EARTH WALL #2

CROSS COUNTY HIGHWAY
HAMILTON COUNTY, OHIO
HAM-75/126-9.93-13.00

PRINT STATUS:

JOB NO: OH 0045

SHEET: 1 OF: 11

BRUNING 56286.5

CALC. BY JAP DATE 2-15-86
CHKD. BY TMB DATE

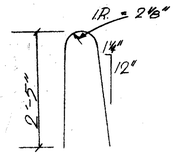
1R-75-1(196).10 & F-2(113)

OHIO FHWA REGION 5

483AA 787

HAM-75-9.93
HAM-126-13.00

BENDING DIAGRAM



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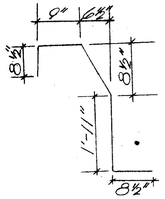

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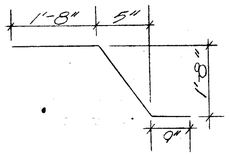
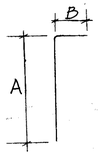
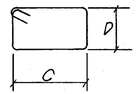


TYPE 3



TYPE 4

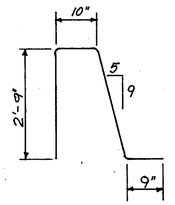


TYPE 5

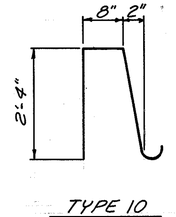
MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
A401	80	2'-3"	120	4	1'-8"	8"			
A402	80	1'-9"	94	Str.					
A403	80	8'-11"	477	Str.					
A404	4	10'-7"	28	Str.					
A515	80	29'-8½	2479	Str.					
A516	10	5'-8½	60	Str.					
A901	24	3'-0"	245	Str.					
			3503	lbs. - TOTAL WALL NO. 2					✓
B401	242	2'-3"	364	4	1'-8"	8"			
B402	242	1'-9"	283	Str.					
B403	252	8'-11"	1501	Str.					
B404	4	10'-3"	27	Str.					
			2175	lbs. - TOTAL WALL NO. 4					✓
C401	250	2'-3"	376	4	1'-8"	8"			
C402	250	1'-9"	292	Str.					
C403	260	8'-11"	1549	Str.					
C404	4	5'-10"	16	Str.					
			2233	lbs. - TOTAL WALL NO. 5					✓
D401	104	2'-3"	156	4	1'-8"	8"			
D402	104	1'-9"	122	Str.					
D403	108	8'-11"	643	Str.					
D404	4	4'-8"	12	Str.					
D550	10	7'-0"	73	Str.					
D551	10	6'-2"	64	Str.					
D552	20	9'-8"	202	Str.					
D553	10	3'-7"	37	4	1'-11½"	1'-8"			
D554	20	5'-8"	118	4	3'-8"	2'-0"			
D555	4	4'-0"	17	5			1'-0"	0'-6"	
			1499	lbs. - TOTAL WALL NO. 7					
F501	395	5'-11"	2438	10					
F502	383	7'-5"	2963	11					
F503	301	2'-9"	863	Str.					
F504	383	4'-1"	1631	12					
F505	301	6'-8"	2093	Str.					
F506	301	7'-6"	2355	Str.					
F507	104	4'-8"	506	Str.					
F508	104	5'-6"	597	Str.					
F509	313	29'-8½"	9698	Str.					
F510	21	13'-1"	287	Str.					
F511	21	5'-6"	120	7					
F512	21	7'-6"	164	6					
F513	9	8'-4"	78	8					
F514	12	5'-4"	67	9					
			23860	LBS. - TOTAL WALL NO. 6					

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
E401	184	2'-3"	277	4	1'-8"	8"			
E402	184	1'-9"	215	Str.					
E403	192	8'-11"	1144	Str.					
E404	4	9'-3"	25	Str.					
			1661	lbs. - TOTAL WALL NO. 9					

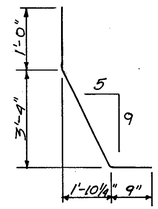
MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E



TYPE 6



TYPE 10



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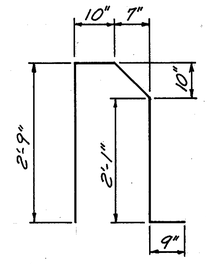
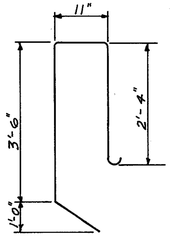


TYPE 11



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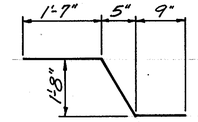
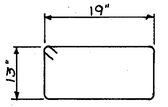


TYPE 12



TYPE 9

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

15A/15

RETAINING WALLS REINFORCED EARTH (DESIGN 3) REINFORCING STEEL LIST

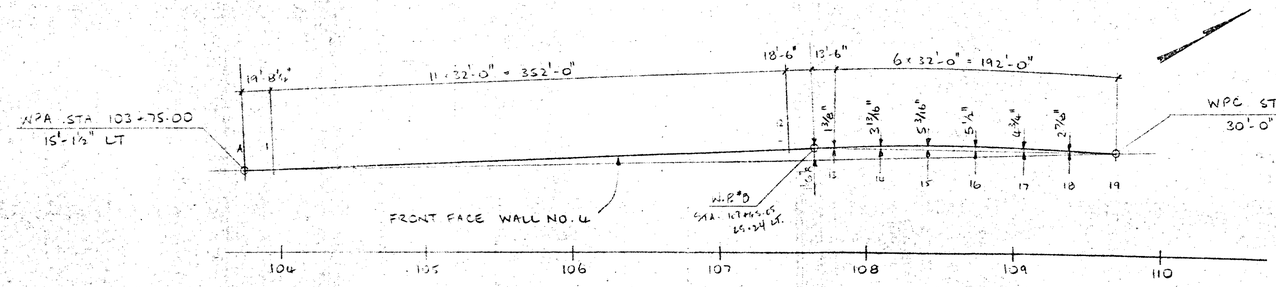
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
JAP	ALH	~	TMB 2-15-86	CRS 3/86	

OHIO BLUE PRINT 1400033

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	IR-75-1(196)10	

2838 / 787

HAM-75-9.93
HAM-126-13.00



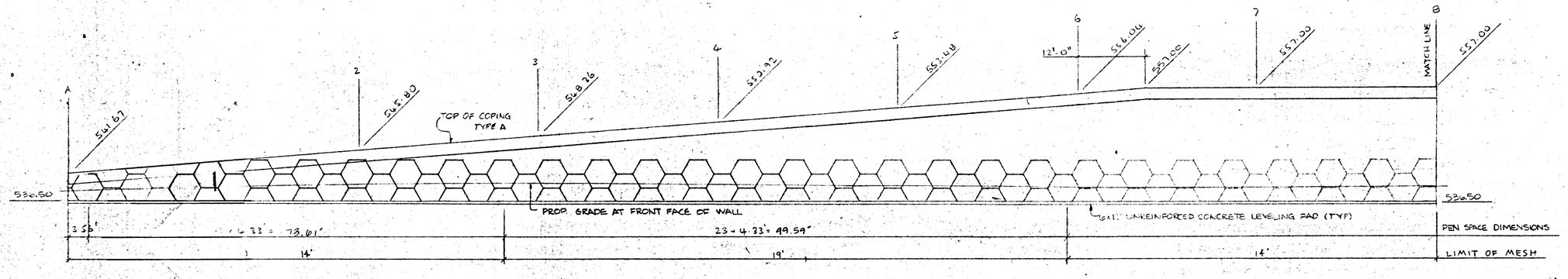
WALL NO. 4 PLAN

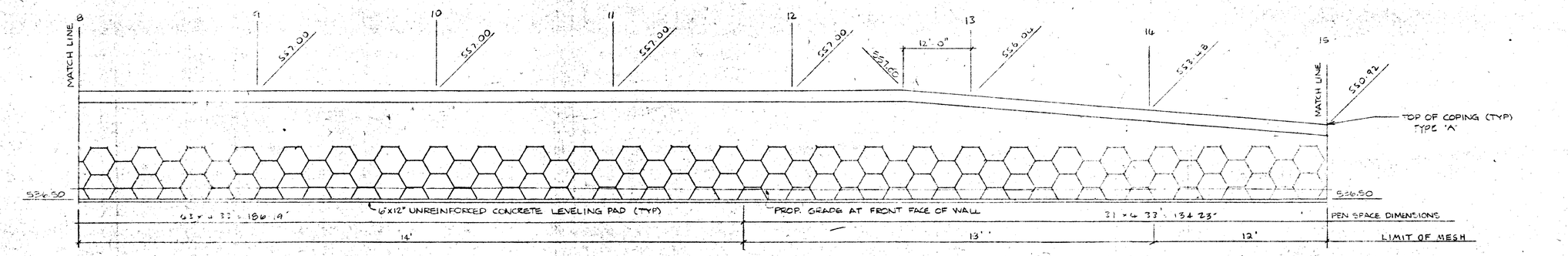
NO SCALE

ESTIMATED QUANTITIES, DESIGN 2 WALL No. 4			
ITEM	TOTAL	UNIT	DESCRIPTION
203	5313	Cu. Yds.	Select Granular Embankment
203	1271	Cu. Yds.	Embankment
503	0	Cu. Yds.	Unclassified Excavation
503	Lump	Sum	Cofferdams, Cribs and Sheeting
509	2164	Lbs.	Reinforcing Steel, Grade 60
511	24	Cu. Yds.	Class C Concrete, Coping
Special	8358	Sq. Ft.	Retained Earth Walls

NOTE:
1. FOR TYPICAL SECTION, SEE SHT 10. OF 11.
2. FOR COPING DETAILS, SEE SHT. 9. OF 11.

NOTE:
Section view of retaining wall excavation limits shown on roadway cross-sections, Sheet No. 241-243.





WALL NO. 4 FRONT FACE

SCALE: 1" = 10'

NO.	DATE	REVISION	BY
1	7-96	PER ENGINEER	KB

DES. G.B.S. J.P.
DRN. G.B.S. J.P.
CHK. G.B.S. J.N.

WIRE POSTTENSIONING INSTITUTE

VSL Corporation
Washington D.C. 8008 Marie Court Fredericksburg, VA 22553 Telephone: 703/891-8900 Telex: 899487
Los Gatos, CA / Campbell, CA / Seattle, WA / Atlanta, GA / Dallas, TX / Denver, CO / Honolulu, HI Houston, TX / Minneapolis, MN / Miami, FL / Wilmington, DE

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RETAINED EARTH WALL # 4

CROSS COUNTY HIGHWAY
HAMILTON COUNTY, OHIO
HAM. 75/126-9.93-13.00

PRINT STATUS:

JOB NO: OH 0025

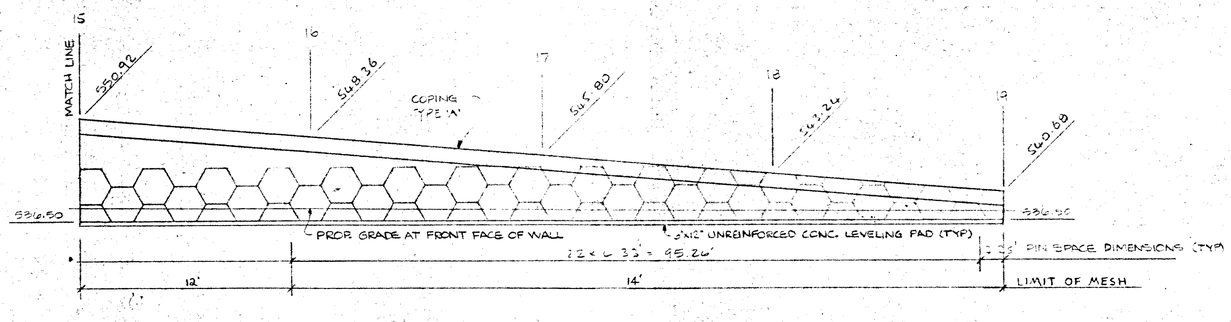
SHEET: 2 OF: 11

DRAWING 59206 S

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	IR-75-1(96)10	

483C
787

HAM-75-9.93
HAM-126-13.00



WALL NO. 4 FRONT FACE

SCALE: 1" = 10'

NOTES:
Section view of retaining wall excavation limits shown on roadway cross-sections, Sheet No. 241-243.

For Typical Sections, see Sheet 10 of 11.

For Coping Detail, see Sheet 9 of 11.

NO.	DATE	REVISION	BY
1	4-3-86	PER ENGINEER	KP

DES. 8 6 86
DRN. 8 6 86
CHK. 8 6 86

Western Post Tensioning Institute

VSL Corporation

Washington, D.C.
8608 Haven Court
Springfield, Virginia 22150
Telephone 703/451-4300
Telex 899467

Los Gatos, CA / Campbell, CA / Sunnyvale, CA / Anaheim, CA / Houston, TX / Monmouth, MN / Miami, FL / Washington, D.C.

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RETAINED EARTH WALL #4

CROSS COUNTY HIGHWAY
HAMILTON COUNTY, OHIO
HAM. 75/126-9.93-13.00

PRINT STATUS:

JOB NO: OH 0045

SHEET: 3 OF: 11

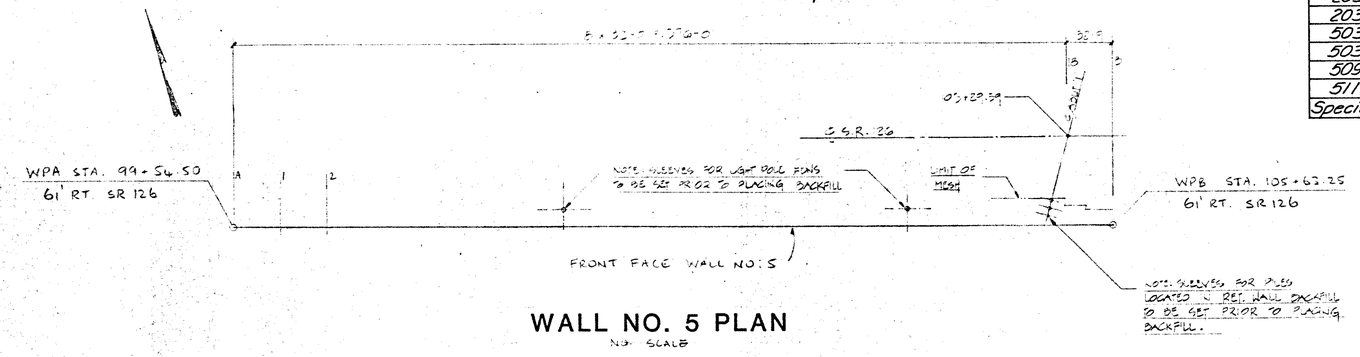
BRUNING 56286-5

ESTIMATED QUANTITIES, DESIGN 2 WALL No. 5			
ITEM	TOTAL	UNIT	DESCRIPTION
203	6393	Cu. Yds.	Select Granular Embankment
203	2164	Cu. Yds.	Embankment
503	784	Cu. Yds.	Unclassified Excavation
503	Lump	Sum	Cofferdams, Cribs and Sheeting
509	2212	Lbs.	Reinforcing Steel, Grade 60
511	24	Cu. Yds.	Class C Concrete, Coping
Special	10145	Sq. Ft.	Retained Earth Walls

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-2(13)	

483D 787

HAM-75-9.93
HAM-126-13.00



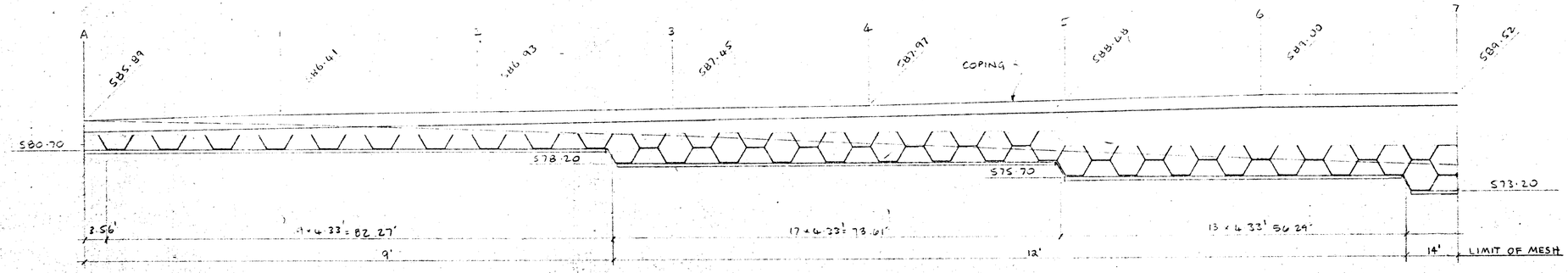
WALL NO. 5 PLAN

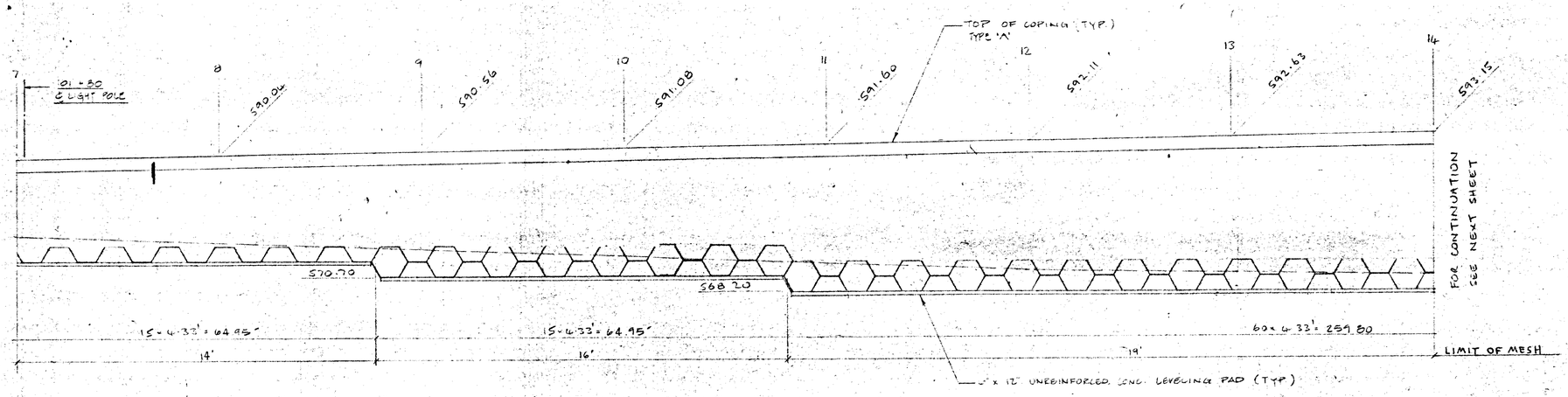
NO SCALE

NOTES:
Section view of retaining wall excavation limits shown on roadway cross-sections, Sheet No. 125-129.

For Typical Sections, see Sheet 10 of 11.

For Coping Detail, see Sheet 9 of 11.





WALL NO. 5 FRONT FACE

SCALE: 1" = 10'

NO.	DATE	REVISION	BY

DES.	DRN.	CHK.
S. PEG	S. BAY	T. ZAY

THE OHIO POSITIONING INSTITUTE

VSL Corporation

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RETAINED EARTH WALL #5

GREEN COUNTY / HAMILTON COUNTY, OHIO
HAM-75-9.93 & HAM-126-13.00

PRINT STATUS:

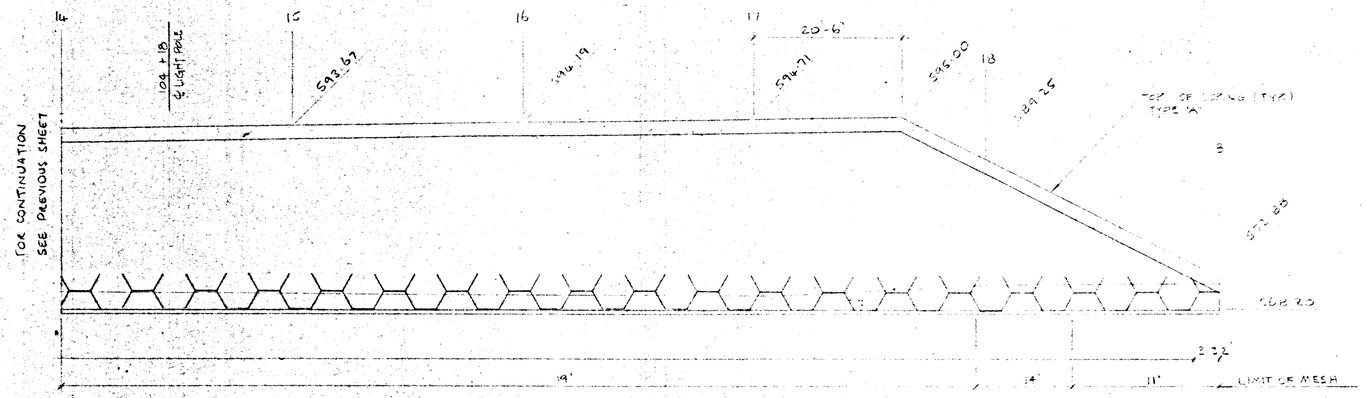
JOB NO: 04 0045

SHEET: 2 OF: 11

FED. PD. DIVISION	STATE	PROJECT	
2	OHIO	F-2(113)	

483E
787

HAM-75-9.93
HAM-126-13.00



WALL NO. 5 FRONT FACE

SCALE: 1" = 10'

NOTES:
Section views of retaining wall excavation limits shown on roadway cross-sections, Sheet No. 125-129.

For Typical Section, see Sheet 10 of 11.

NOTE:

1. Vertical pile sleeves are required for piles located within item "203 Select Granular Embankment Material." Bridge No. HAM-126-1456, Abutment 1 has piles located within this region. Sleeves for 12" ϕ cast-in-place piles must be placed at the following locations:

Pile Number	Station - Offset (℄ 126)
19	105+19.27, 38.00' Rt.
20	105+17.90, 43.07' Rt.
21	105+16.52, 48.13' Rt.
22	105+15.15, 53.20' Rt.

2. Bottom footing elevation is 590.25 for Abutment 1. For additional details see bridge plans, sheets 664-675.
3. Cost of pile sleeves placement and materials are included under special item "Retained Earth Walls" as an incidental quantity item.

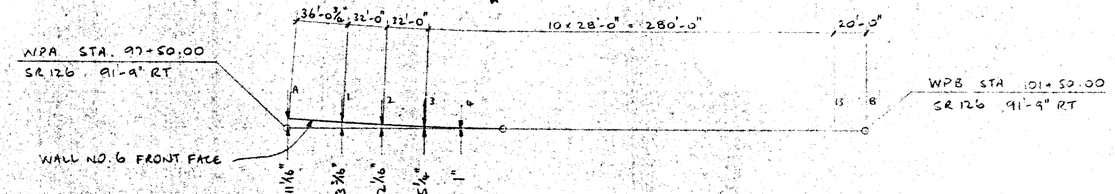
ESTIMATED QUANTITIES, DESIGN 2 WALL NO. 6			
ITEM	TOTAL	UNIT	DESCRIPTION
203	3134	Cu. Yds.	Select Granular Embankment
203	401	Cu. Yds.	Embankment
503	673	Cu. Yds.	Unclassified Excavation
503	Lump	Sum	Cofferdams, Cribs and Sheeting
509	20357	Lbs.	Reinforcing Steel, Grade 60
511	162	Cu. Yds.	Class C Concrete, Traffic Barrier
Special	5987	Sq. Ft.	Retained Earth Walls

NOTE:
Section view of retaining wall excavation limits shown on roadway cross-sections.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-2(13)	

483F
787

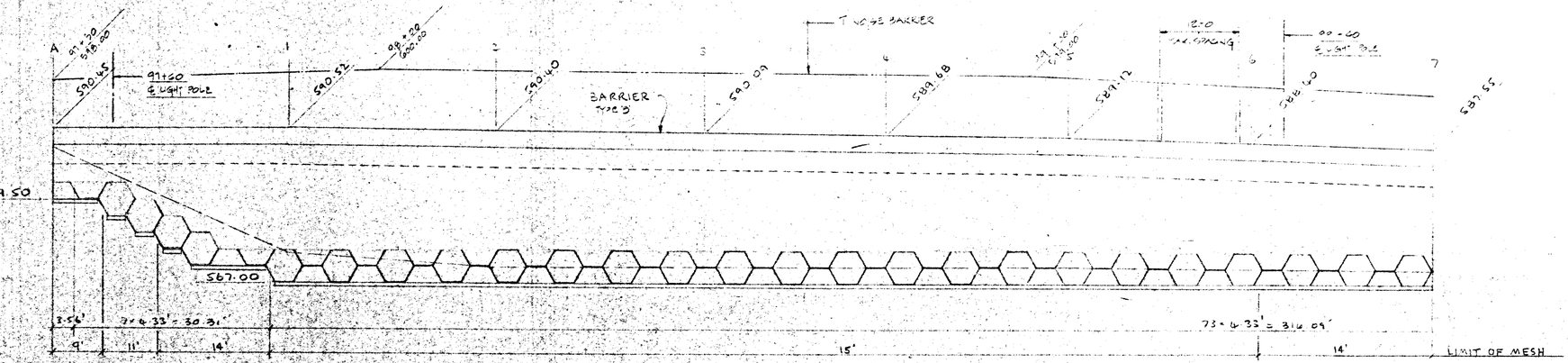
HAM-75-9.93
HAM-126-13.00

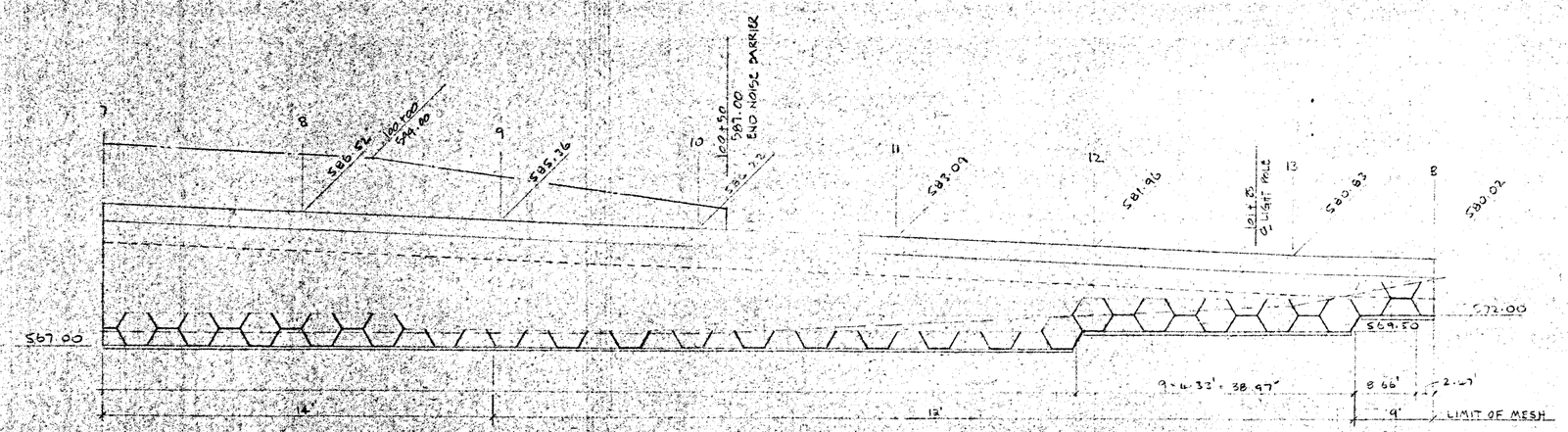


WALL NO. 6 PLAN

NO SCALE

NOTES:
1. FOR TYP. CR. DETAILS, SEE SHT. 5 OF 11.
2. FOR BARRIER DETAILS, SEE SHT. 9 OF 11.
3. FOR LIGHT POLE & NOISE BARRIER MOUNTING DETAILS, SEE SHT. 10 OF 11.





WALL NO. 6 FRONT FACE

SCALE: 1" = 10'

NO.	DATE	REVISION	BY

DES. J.P.G.
DRN. J.P.G.
CHK. J.P.G.

VSL Corporation

RETAINED EARTH WALL 6

CROSS COUNTY HIGHWAY
HAMILTON COUNTY, OHIO
HAM-75/126-9.93 - 13.00

PRINT STATUS:

JOB NO: OH 0045

SHEET: 6 OF: 11

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BRUNING 5528-S

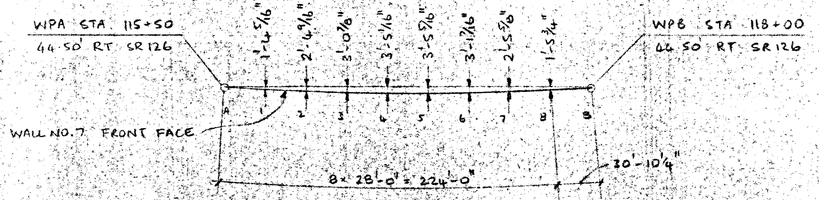
ESTIMATED QUANTITIES, DESIGN 2			WALL NO. 7
ITEM	TOTAL	UNIT	DESCRIPTION
203	1141 -	Cu. Yds.	Select Granular Embankment
203	155 -	Cu. Yds.	Embankment
503	292 *	Cu. Yds.	Unclassified Excavation
503	Lump *	Sum	Cofferdams, Cribs and Sheeting
509	924 *	Lbs	Reinforcing Steel, Grade 60
511	10 *	Cu. Yds.	Class C Concrete, Coping
Special	2811 *	Sq. Ft.	Retained Earth Walls

NOTES:

1. FOR TYPICAL SECTION, SEE SHT 10. OF 11
2. FOR COPING DETAIL, SEE SHT 9. OF 11
3. FOR LIGHT POLE MOUNTING, SEE SHT 10. OF 11
4. Section view of retaining wall excavation limits shown on roadway cross-sections Sheet No. 134-135.

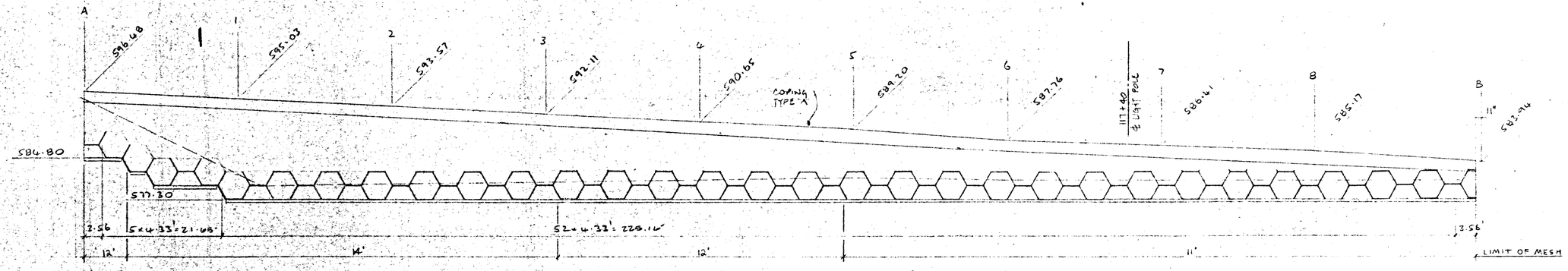
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-2(13)	

483G 787



WALL NO. 7 PLAN

NO SCALE



WALL NO. 7 FRONT FACE

SCALE: 1" = 10'

NO.	DATE	REVISION	BY

DES. J. B. DS
DRN. J. B. DS
CHK. J. B. DS

WEST VIRGINIA HIGH TECHNOLOGY CONSORTIUM FOUNDATION

VSL Corporation

Washington D.C. Metropolitan Area
Springfield, Virginia 22150
Telephone (703) 913-4800
Telex

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RETAINED EARTH WALL #7

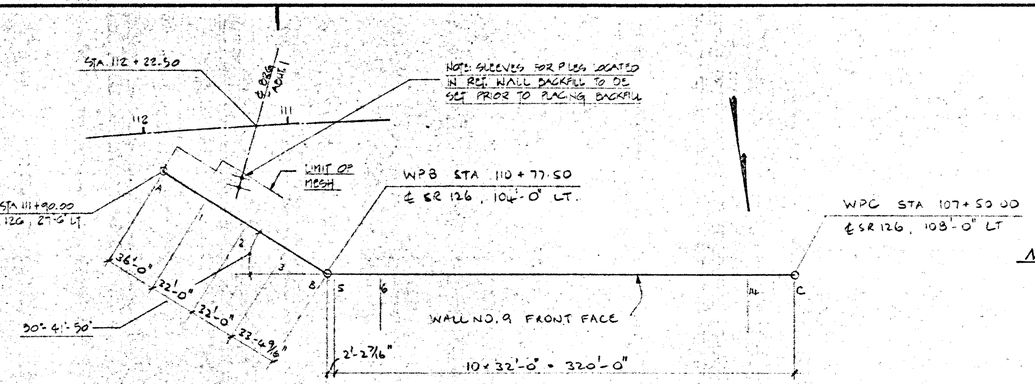
CROSS COUNTY HIGHWAY
HAMILTON COUNTY, OHIO
HAM-F(13)26.98-13.00

PRINT STATUS:

JOB NO: 6H 3045

SHEET: 1 OF: 11

56286-5



WALL NO. 9 PLAN

NO SCALE

ESTIMATED QUANTITIES, DESIGN 2 WALL NO. 9			
ITEM	TOTAL	UNIT	DESCRIPTION
203	212.7	Cu. Yds.	Select Granular Embankment
203	18.59	Cu. Yds.	Embankment
503	587	Cu. Yds.	Unclassified Excavation
503	Lump	Sum	Cofferdams, Cribs and Sheeting
509	1656	Lbs.	Reinforcing Steel, Grade 60
511	18	Cu. Yds.	Class C Concrete, Coping
Special	3599	Sq. Ft.	Retained Earth Walls

NOTE:

1. Pile sleeves are required for piles located within item "203 Select Granular Embankment Material." Bridge No. HAM-126-1467, Abutment 1 has piles located within this region. Sleeves for steel HP 10 x 42 Piles must be placed at the following locations:

Pile Number	Station - Offset (℄ S.R. 126)
8	111 + 33.60, 35.65' Lt. (Vertical)
⊛ 25	111 + 36.24, 34.74' Lt. (Tapered East 1:4)
⊛ 26	111 + 38.17, 40.17' Lt. (Tapered East 1:4)
+ 27	111 + 38.68, 40.00' Lt. (Tapered North 1:4)
+ 28	111 + 38.65, 34.25' Lt. (Tapered North 1:4)

⊛ Station - offsets located at bottom footing elevation 592.59. Piles are tapered perpendicular to bearing N21°19'50.5"E toward the east at a 1:4 ratio. For additional details see bridge plans, sheets 676-688.

2. Cost of Pile sleeves placement and materials are included under Special Item, "Retained Earth Walls" as an incidental quantity item.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-2(13)	

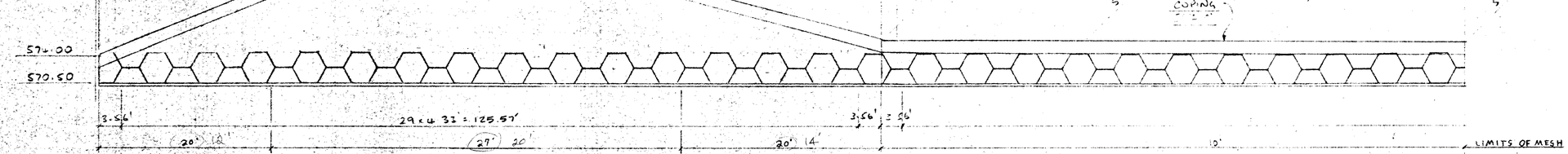
(483H 787)

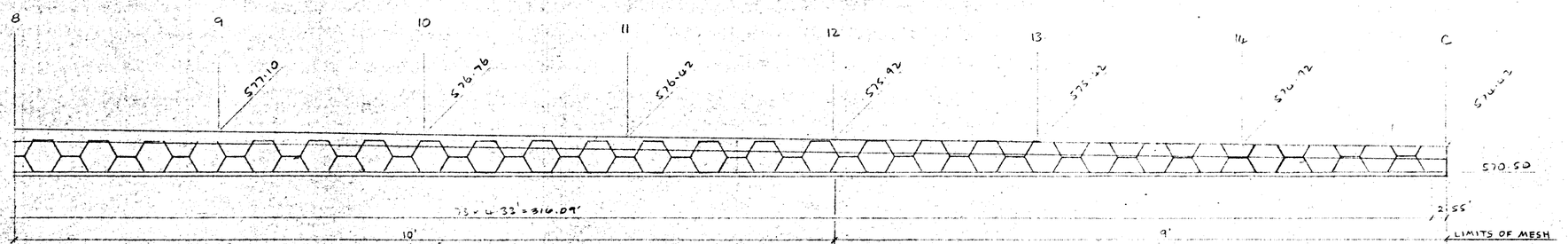
HAM-75-9.93
HAM-126-13.00

+Station - Offsets located at bottom footing elevation 592.59. Piles are tapered perpendicular to bearing S87°45'37.5"E towards the north at a 1:4 ratio. For additional plans see bridge plans Sheets No. 676-688.

NOTES:

1. SEE TYPICAL SECTION, SEE SHT. 10 OF 11.
2. SEE COPING DETAILS, SEE SHT. 9 OF 11.
3. Section view of retaining wall excavation limits shown on roadway, cross-sections, Sheet No. 130, 131, 132, 132A.





WALL NO. 9 FRONT FACE

SCALE : 1" = 10'

NO	DATE	REVISION	BY

DES.	DRN.	CHK.
K. MS	K. MS	K. MS
J. S	J. S	J. S
M. PS	M. PS	M. PS

POST-TENSIONING INSTITUTE

VSL Corporation

Washington D.C. 8008 Westpark Drive, Suite 210 Tysons Corner, VA 22182 (703) 821-1400 Telex: 899627

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RETAINED EARTH WALL

CUYAHOGA COUNTY HIGHWAY
HAMILTON COUNTY, OHIO
HAM-75|126-9.93-13.00

PRINT STATUS:

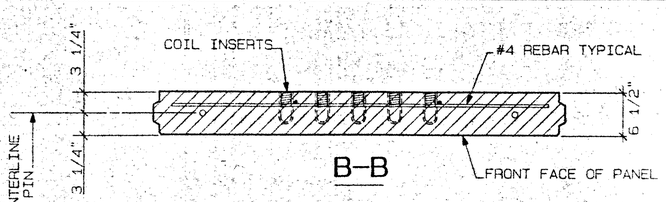
JOB NO: 04-0045

SHEET: 3 **OF:** 11

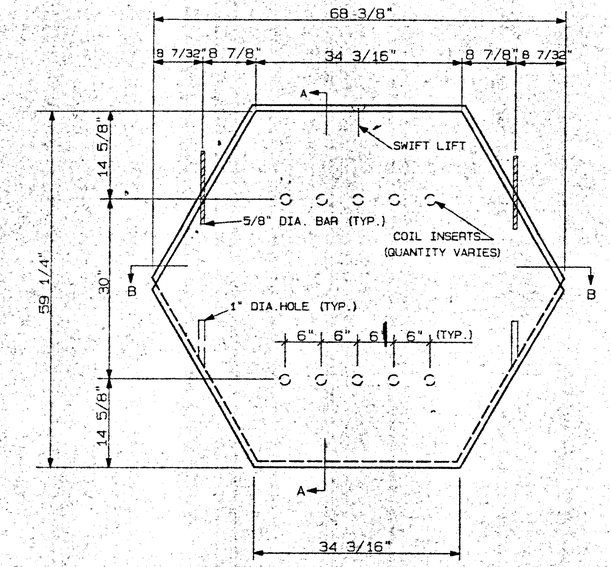
DRAWING 56285 S

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-2(13)	

4831
787

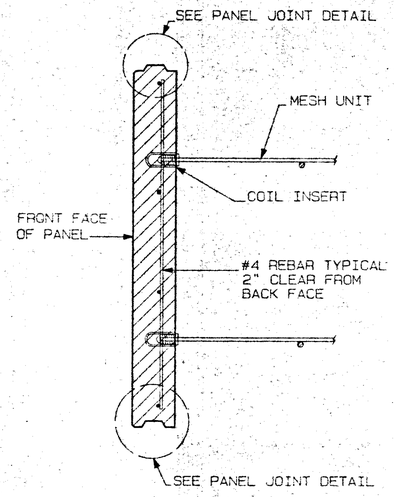


B–B

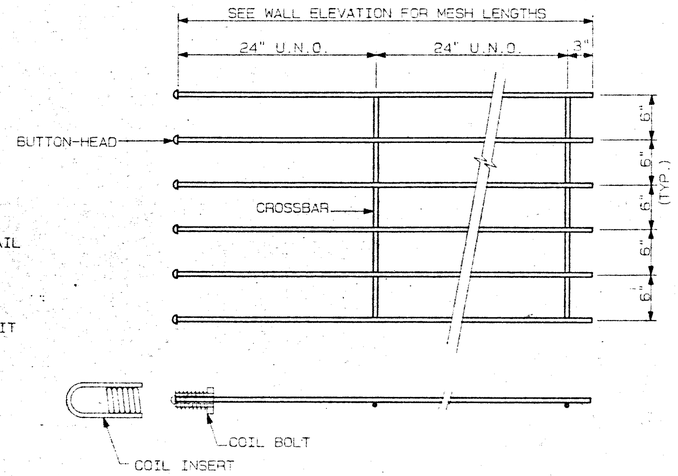


TYPE "A" PANEL

(FRONT FACE)



A–A



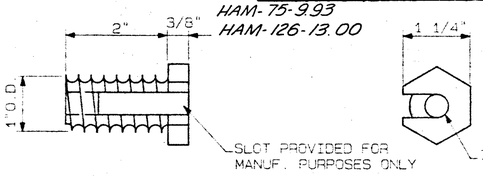
SOIL REINFORCING MESH UNIT DETAIL

(6W11 MESH)

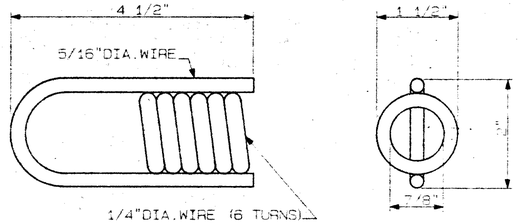
NOTES:

A. 6W11 MESH SHOWN. MESH CONFIGURATION VARIES. SEE WALL ELEVATIONS.
B. NUMBER OF COIL INSERTS VARIES ACCORDING TO MESH CONFIGURATION.
C. VERTICAL JOINTS IN PANELS TO USE 2" * 2" POLYETHYLENE FOAM.

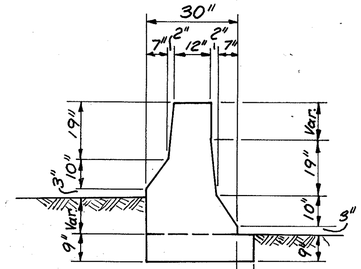
HAM-75-9.93
HAM-126-13.00



COIL BOLT DETAIL



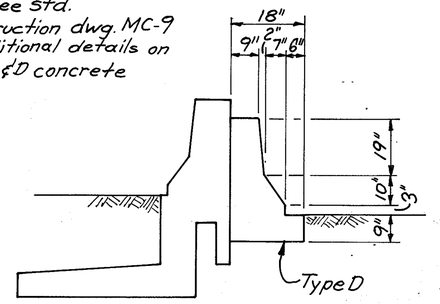
COIL INSERT DETAIL



TYPE C

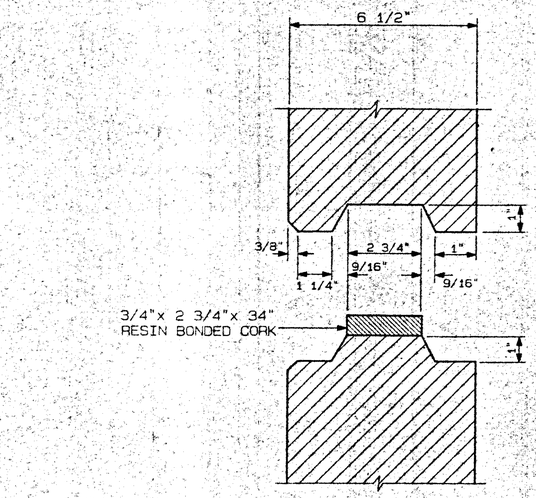
Section A-A

Note: See std. construction dwg. MC-9 for additional details on Types C & D concrete Barrier.

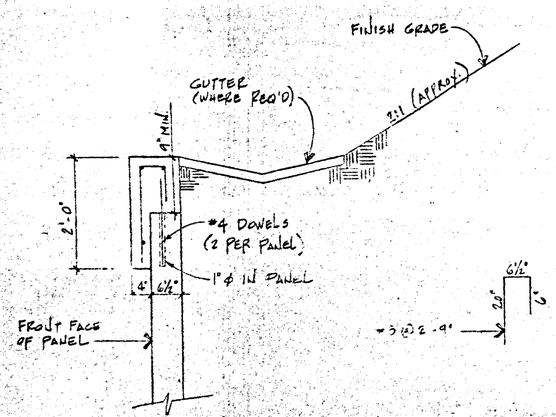


C.I.P. Traffic Barrier

TYPE "B" Section B-B @ Sta. 89+47

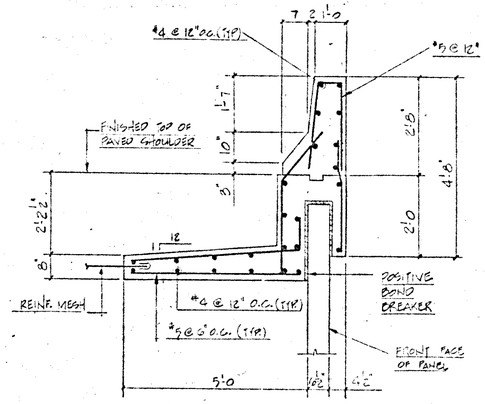


PANEL JOINT DETAIL



C.I.P. COPING

TYPE 'A'



C.I.P. TRAFFIC BARRIER

TYPE "B"

BY	REVISION	DATE	NO.

DES. JP 8-05 3 P
DRN. JP 8-05 3 P
CHK. JP 8-05 3 P

OHIO TURNPIKE INSTITUTE

VSL Corporation

Washington D.C.
Woodbridge Virginia
Springfield Virginia
Lima, Ohio

STANDARD DETAIL SHEET

STATE OF OHIO
HAMILTON COUNTY, OHIO
HAM-75/126-9.93-13.00

PRINT STATUS:

JOB NO: SH 0045

SHEET: 9 OF: 11

PRUNING 962865

CALC. BY JAP DATE 2-15-86
CHKD. BY TMB DATE

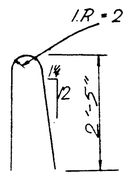
IR-75-1(96)10
& F-21(13)

OHIO
FHWA REGION 5

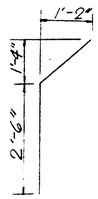
483(12)
787

HAM-75-9.93
HAM-126-13.00

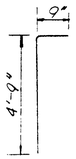
BENDING DIAGRAM



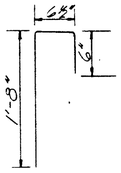
TYPE 1



TYPE 2



TYPE 3



TYPE 4

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
A401	207	27'-8"	3825	Str.					
A402	6	22'-8"	90	Str.					
A403	206	1'-9"	241	Str.					
A501	225	4'-0	939	Str.					
A502	225	5'-4	1252	1					
A503	225	4'-5	1036	2					
A504	550	5'-7	3202	3					
A505	550	4'-8	2673	Str.					
A506	46	4'-6 to 2'-6	168	Str.					
A507	72	2'-11"	219	4					
			13645	lbs. - TOTAL WALL NO. 2					
B401	54	31'-8"	1142	Str.					
B402	3	19'-4"	39	Str.					
B403	276	1'-9"	323	Str.					
B507	217	2'-11"	660	4					
			2164	lbs - TOTAL WALL NO. 4					
C401	54	31'-8"	1142	Str.					
C402	3	32'-5"	65	Str.					
C403	282	1'-9"	330	Str.					
C507	222	2'-11"	675	4					
			2212	lbs - TOTAL WALL NO. 5					
D401	24	27'-5"	444	Str.					
D402	3	30'-6"	61	Str.					
D403	116	1'-9"	136	Str.					
D507	93	2'-11"	283	4					
			924	lbs. - TOTAL WALL NO. 7					
E401	33	31'-8"	698	Str.					
E402	3	35'-8"	71	Str.					
E403	3	33'-1"	66	Str.					
E404	3	34'-11"	70	Str.					
E405	210	1'-9"	246	Str.					
E507	166	2'-11"	505	4					
			1656	lbs - TOTAL WALL NO. 9					
F401	46	31:8"	973	Str.					
F402	23	35:8"	548	Str.					
F403	230	27:8"	4250	Str.					
F404	23	19:8"	302	Str.					
F501	400	4:0"	1669	Str					
F502	400	5:4"	2224	1					
F503	400	4:5"	1844	2					
F504	800	5:7"	4659	3					
F505	800	4:8"	3888	Str.					
			20357	lbs. - TOTAL WALL NO. 6					

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

11 | 11

RETAINING WALLS
RETAINED EARTH (VSL)
(DESIGN 2)
REINFORCING STEEL LIST

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
JAP		-	TMB 2-15-86		

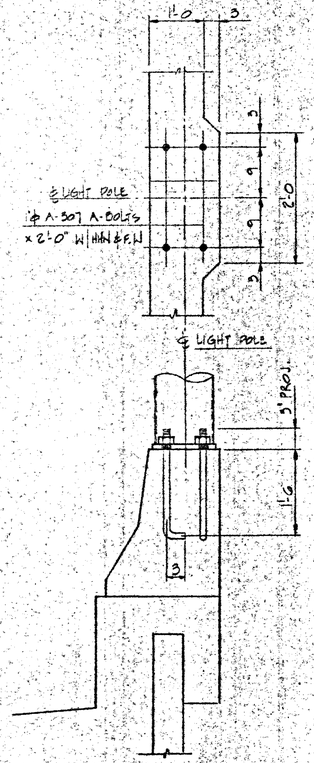
OHIO BLUE PRINT 748253

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I75-1(96)10 F-2(13)	

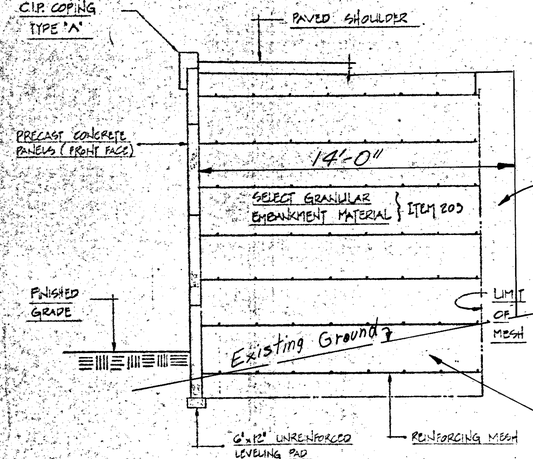
483J (1) 787

HAM-75-9.93
HAM-126-13.00

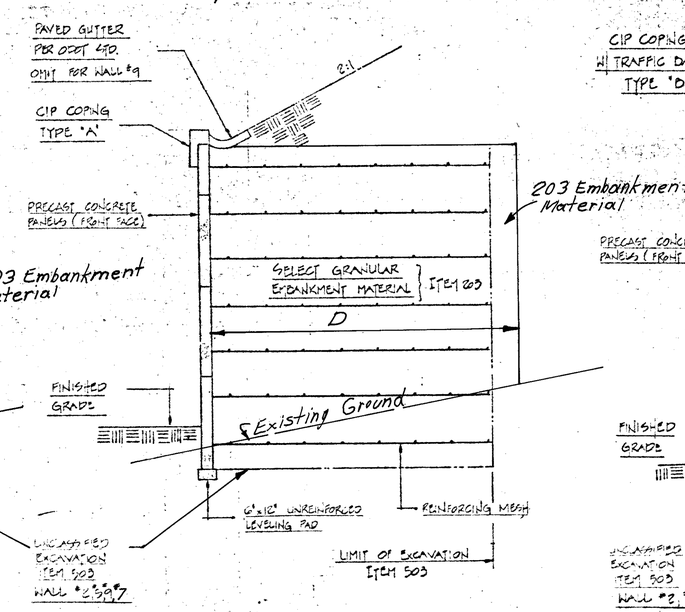
WALL	D (ft.)
2	11
4	19
5	22
9	27



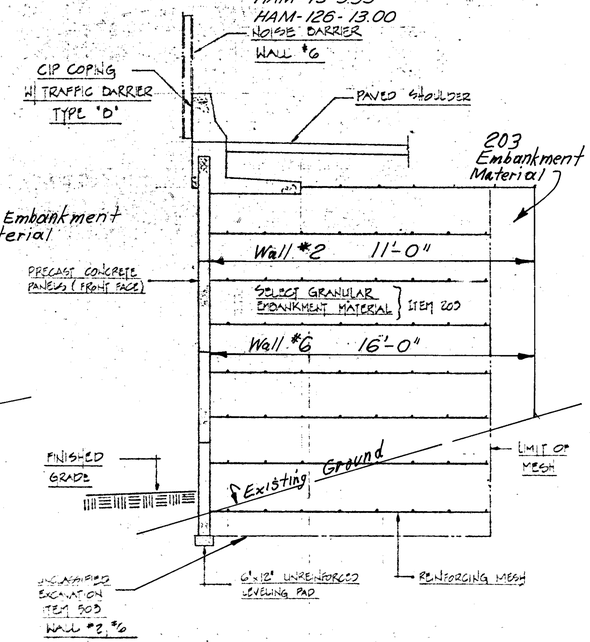
LIGHT POLE SUPPORT DETAIL



TYPICAL WALL SECTION
WALL #7

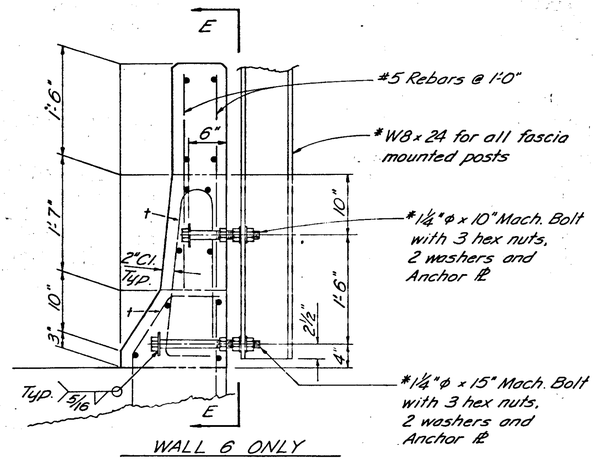


TYPICAL WALL SECTION
WALL #4, #5, #9, #2



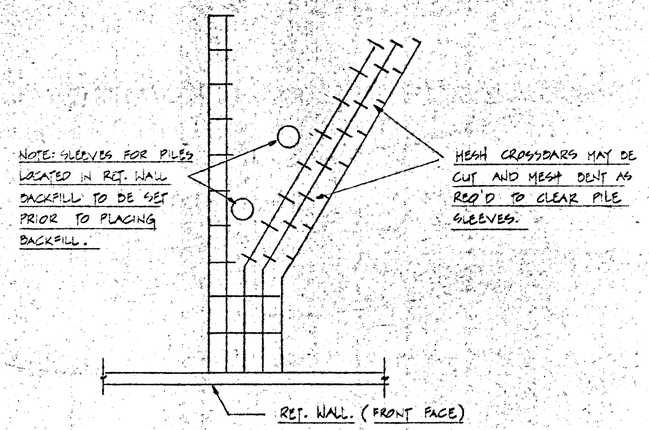
TYPICAL WALL SECTION
WALL #2, #6

t = Additional rebars at post location (4-#5 rebars @ 1'-6" as per Std. Dwg. BR-1 placed symmetrically about post location and spaced alternately between curb and parapet rebars).

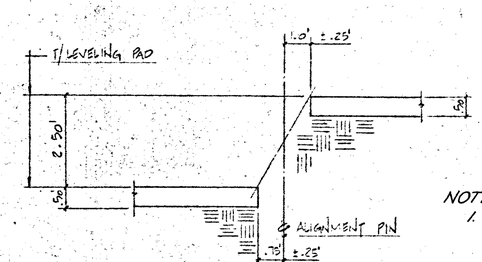


WALL 6 ONLY

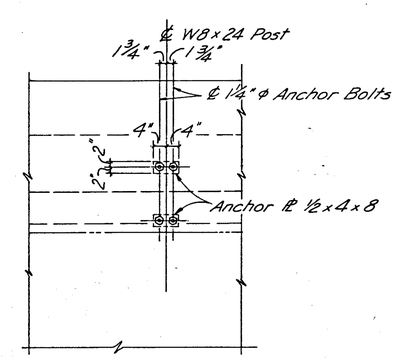
* This panel meets bridge parapet (by others). Length and alignment shown must be verified by the contractor in the field and adjustment made as required prior to ordering reinforcement steel.



PILE | MESH INTERFERENCE DETAIL



LEVELING PAD DETAIL
2.5' VERTICAL STEP



VIEW E-E

NOTES:

1. These items shall be furnished under roadway quantities. Cost of placing the 1¼" machine bolts with 3 hex nuts, 2 washers and anchor ℙ shall be included in the unit price for Item "511 Class C Concrete, Traffic Barrier."
2. For noise barrier quantities including W8x24, bolts, washers, nuts and plates see roadway quantities.
3. For additional details refer to "Noise Barrier Details", Sheets 69 thru 69D.

DES. DRN. CHK.

PRINT STATUS:

JOB NO:

SHEET: 10 OF 11

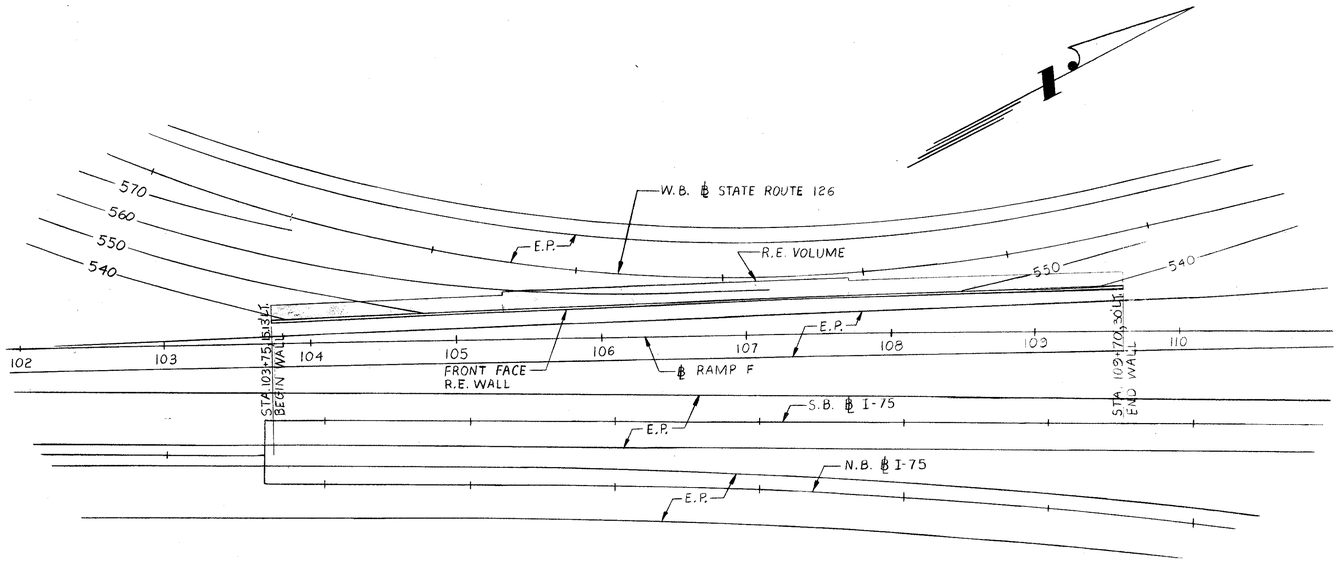
BRUNING 56286-5

IR-75-1(96)10
& F-2(13)

OHIO
FHWA REGION 5

483K
787

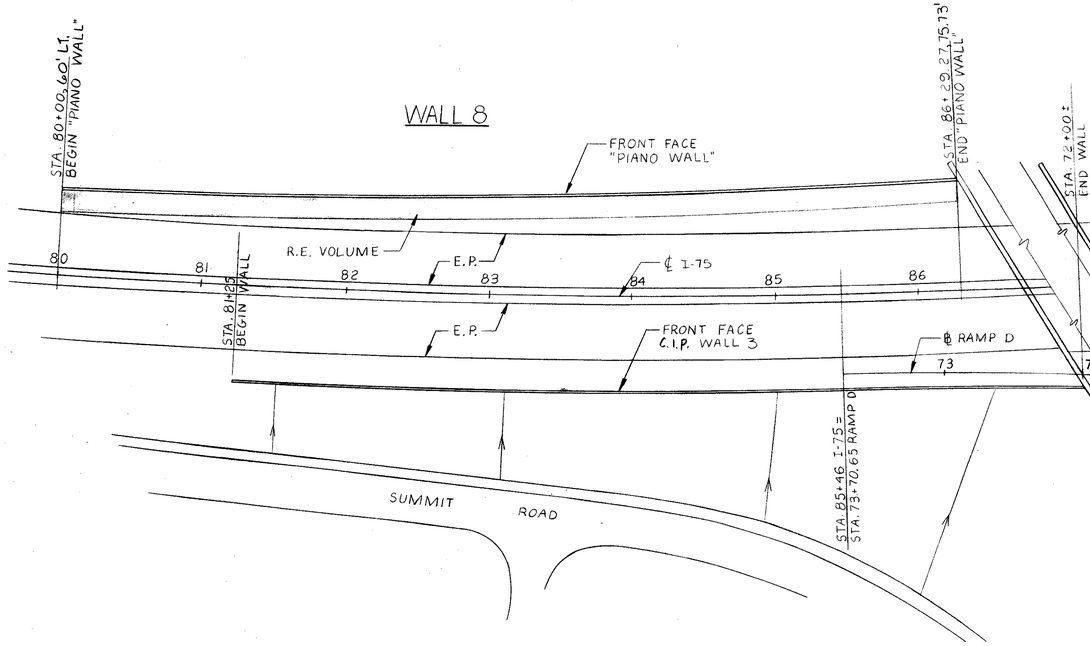
HAM-75-9.93
HAM-126-13.00

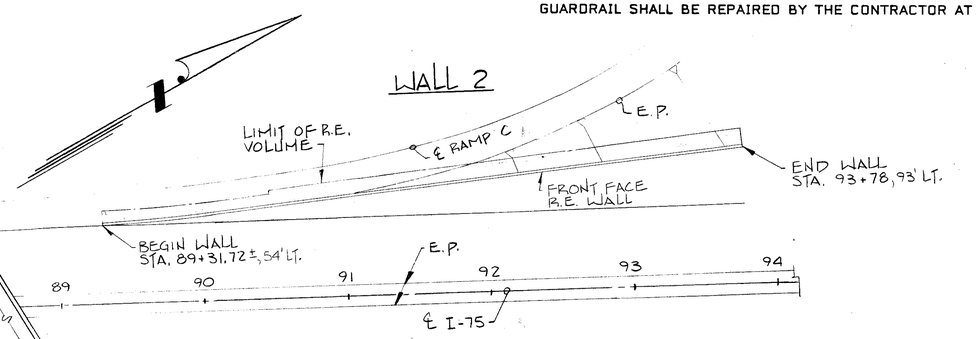


WALL 4

GENERAL NOTES:

1. DESIGN IS BASED ON THE ASSUMPTION THAT THE MATERIAL WITHIN THE REINFORCED EARTH VOLUME, METHODS OF CONSTRUCTION AND QUALITY OF PREFABRICATED MATERIALS SHALL CONFORM TO THE MANUFACTURER'S SPECIFICATIONS.
2. FOR STANDARD PANEL DETAILS SEE SHEET 17 OF 17.
3. REINFORCING STRIPS FOR REINFORCED EARTH® WALLS SHALL CONFORM TO THE PHYSICAL AND MECHANICAL PROPERTIES OF ASTM A-572, GRADE 65.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE LOCATION OF GUARDRAIL POSTS BEHIND THE REINFORCED EARTH® PANELS PRIOR TO PLACEMENT OF THE TOP LAYER OF REINFORCING STRIPS. THESE STRIPS MAY BE SKEWED AS REQUIRED TO CLEAR PROPOSED POST LOCATIONS. ANY DAMAGE DONE TO THE REINFORCING STRIPS DUE TO INSTALLATION OF GUARDRAIL SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.





PLAN WALL NO. 2, 4, AND 8 DESIGN NO. 3

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reinforced earth
The Reinforced Earth Company
Rosslyn Center, 1700 North Moore Street, Arlington, Virginia 22209
(703) 527-3434

REV NO.	DATE	DESCRIPTION

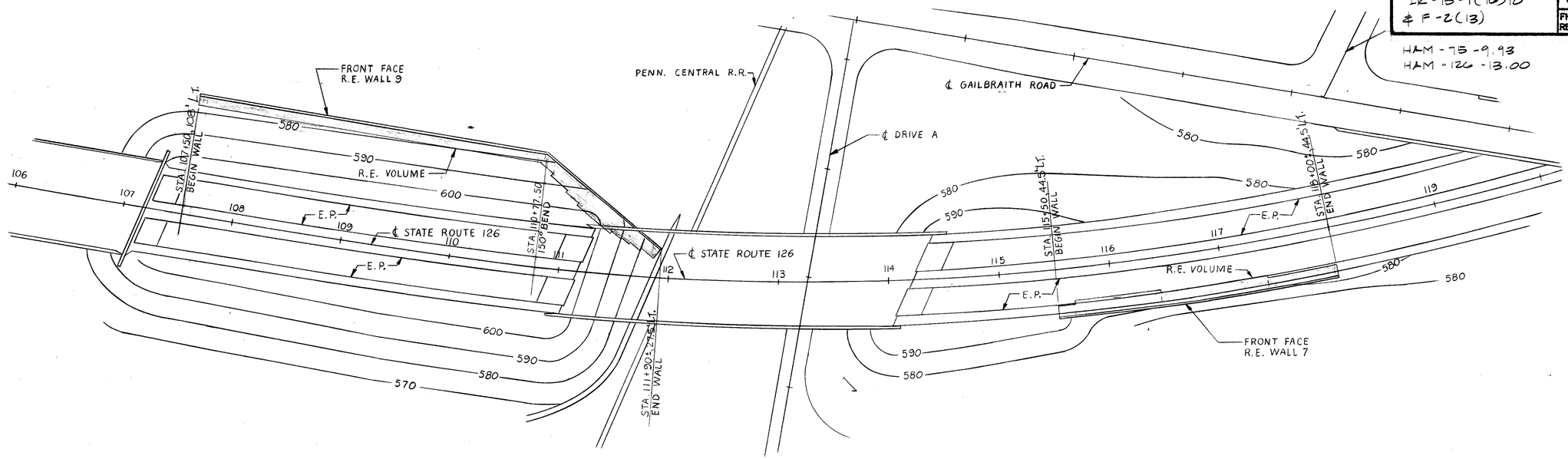
Structure	REINFORCED EARTH WALL
Location	CROSS CO. HIGHWAY
	HAMILTON CO., OHIO
Owner	
DESIGNED BY RC	DATE 3-27-86
PROJECT ENGR. AJP	
CHECKED BY	
GEN'L NOTES & PLANS	CONTRACT NO. 2039
	DRAWING NO. 1 OF 15
	SCALE 1" = 50'

IR-75-1(96)10
& F-2(13)

OHIO
FHWA REGION 5

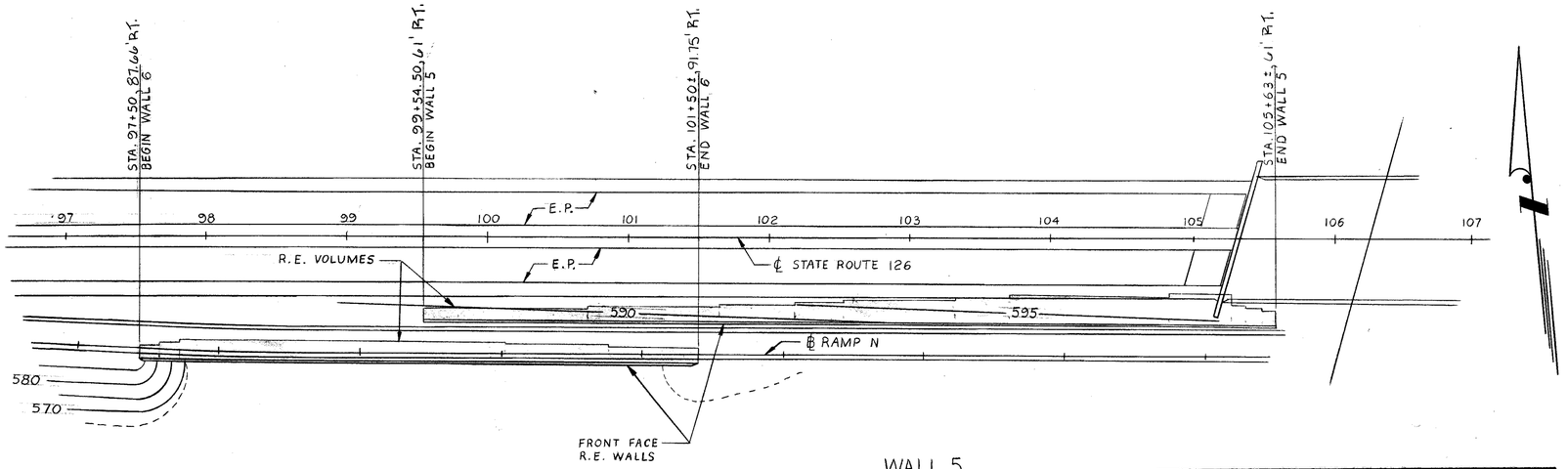
483L
787

HAM-75-9.93
HAM-126-13.00



WALL 9

WALL 7



WALL 6

WALL 5

PLAN WALL 5, 6, 7, AND 9 DESIGN NO. 3

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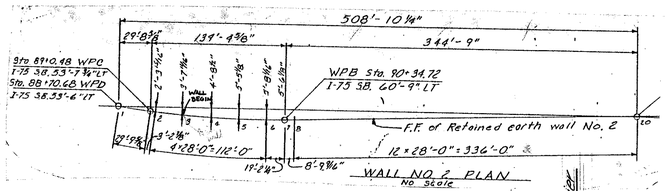
Rosslyn Center, 1700 North Moore Street, Arlington, Virginia 22209
(703) 527-3434

REV. NO.	DATE	DESCRIPTION

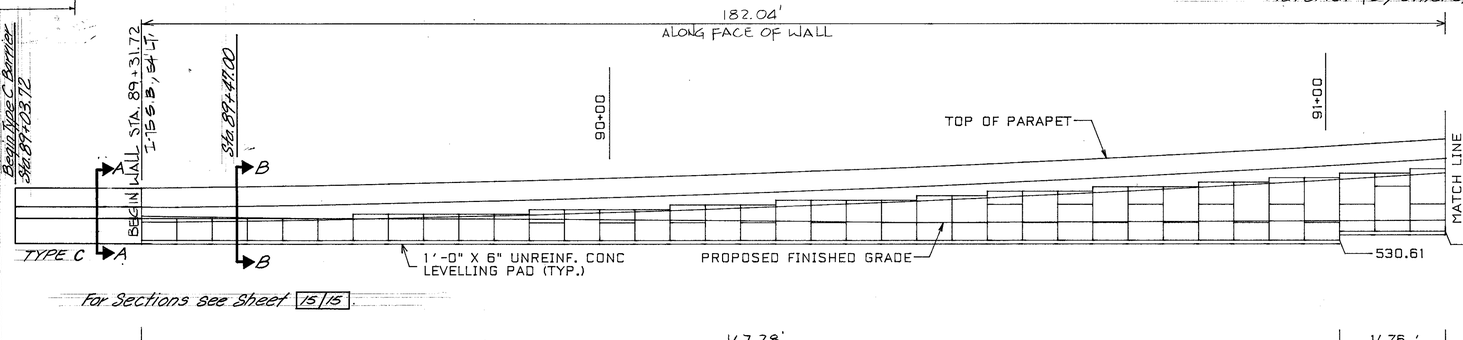
Structure	REINFORCED EARTH WALL
Location	CROSS CO. HIGHWAY
	HAMILTON CO., OHIO
Owner	
DESIGNED BY:	ZC
PROJECT ENGR:	AJP
CHECKED BY:	
DATE	3-27-86
CONTRACT NO.	2039
DRAWING NO.	2 OF 15
SCALE	1"=50'
PLANS	

IR-75-1(96)10 | OHIO | FHWA REGION 5 | 483M / 787

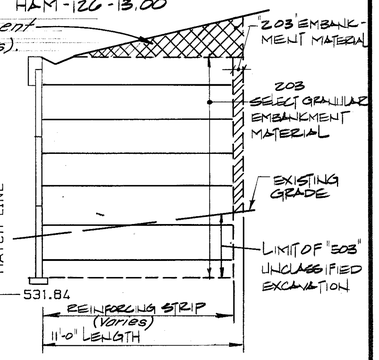
HAM-75-9.93
HAM-126-13.00



WALL 2 ESTIMATED QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
SPECIAL	REINFORCED EARTH WALL	SQ. FT.	3,400
203	SELECT GRANULAR EMBANKMENT MAT'L	C.Y.	1,175
503	COFFERDAMS, CRIBS, AND SHEETING	LUMP	SUM
503	UNCLASSIFIED EXCAVATION, AS PER PLAN	C.Y.	99
203	EMBANKMENT MATERIAL	C.Y.	182
509	REINFORCING STEEL, GRADE 60	LBS	3503
511	CLASS "C" CONCRETE, COPING	C.Y.	9
511	CLASS "C" CONCRETE JUNCTION SLAB	C.Y.	47
SPECIAL	PRECAST TRAFFIC BARRIER	L.F.	274

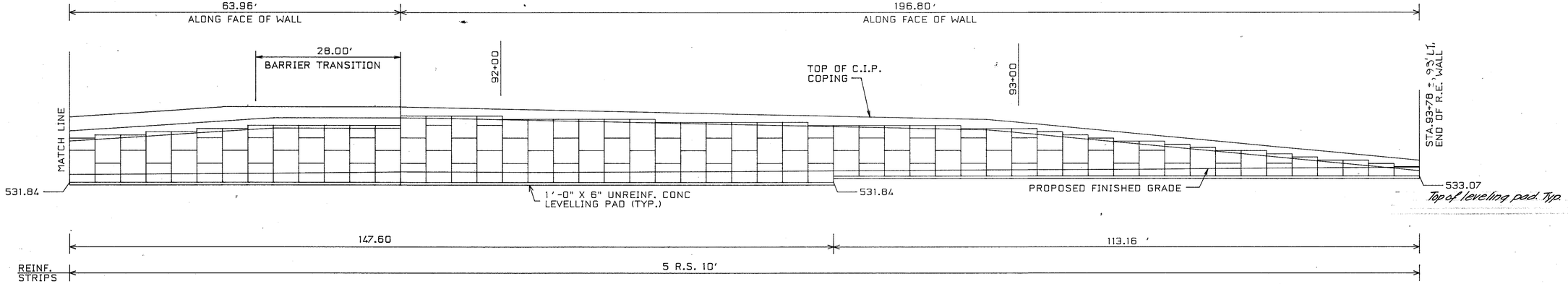


For Sections see Sheet 15/15



WALL CROSS SECTION

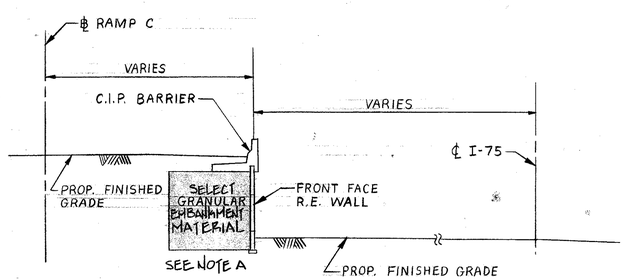
NOTE:
SECTION VIEW OF RETAINING WALL SHOWN ON ROADWAY CROSS SECTION SHEET NO 184B, 185 & 186.



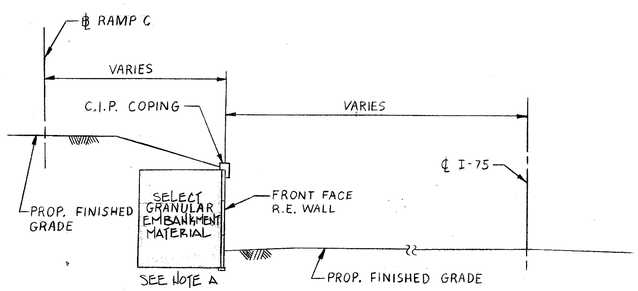
WALL NO. 2

ELEVATION - FRONT FACE

SCALE: 1"=10'



TYPICAL SECTION
STA. 89+32± TO 91+75±



TYPICAL SECTION
STA. 91+75 TO 93+78

WALL 2, DESIGN 3

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The Reinforced Earth Company
Rosslyn Center, 1700 North Moore Street, Arlington, Virginia 22209
(703) 527-3434

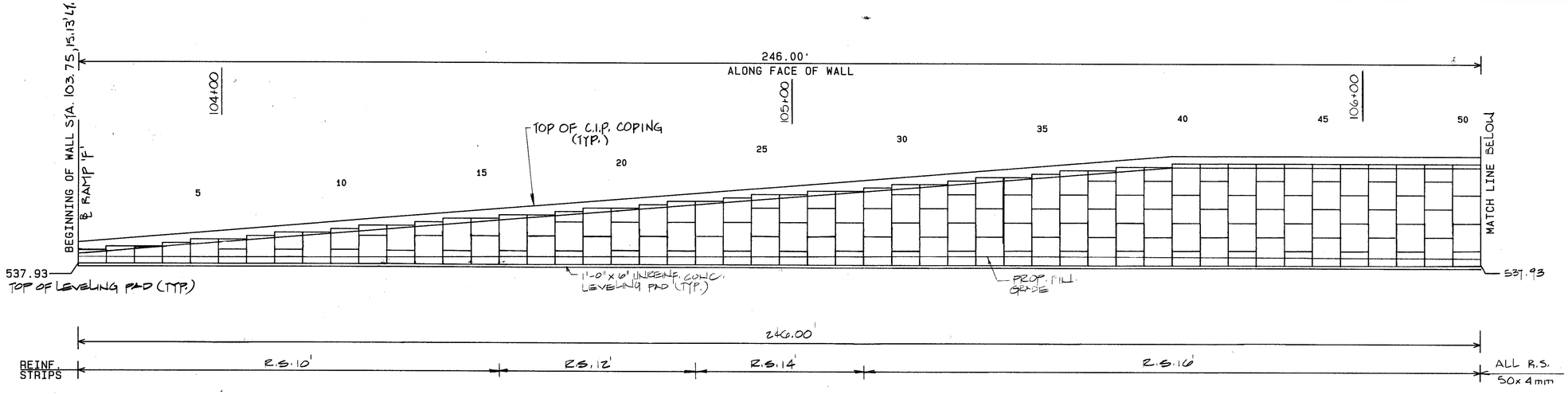
REV. NO.	DATE	DESCRIPTION

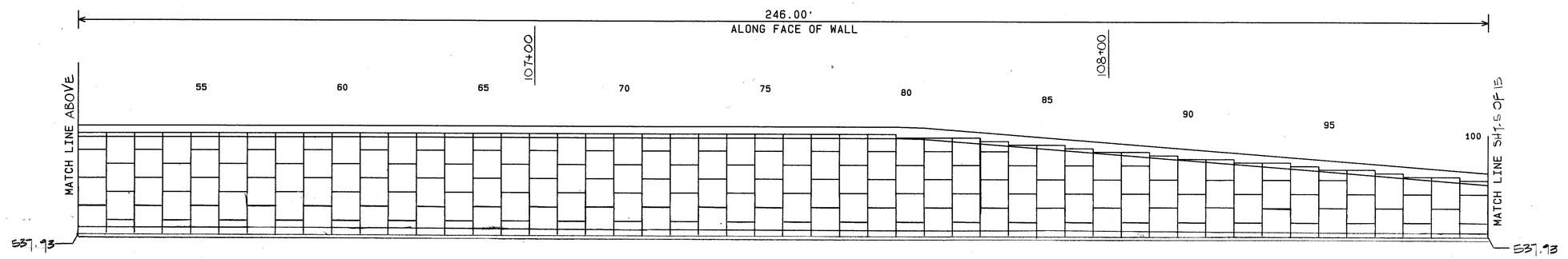
Structure	REINFORCED EARTH WALL
Location	CROSS CO. HIGHWAY
	HAMILTON CO., OHIO
Owner	
DESIGNED BY: RC	DATE
PROJECT ENGR: AJP	3-27-86
CHECKED BY:	
ELEVATION & SECTIONS	

CONTRACT NO. 2039
DRAWING NO. 3 OF 15
SCALE AS SHOWN

IR-75-1(96)10 | OHIO | FHWA REGION 5 | 483N 787

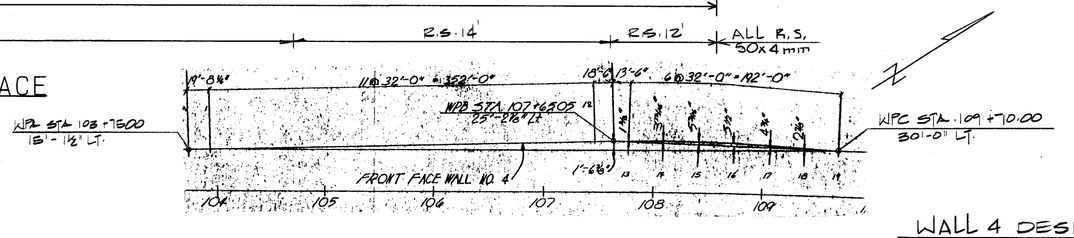
HAM-75-9.93
HAM-126-13.00





ELEVATION - FRONT FACE

SCALE : 1" = 10'



WALL 4 DESIGN 3

WALL 4 ESTIMATED QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
SPECIAL	REINFORCED EARTH WALL	SQ. FT.	7,600
203	SELECT GRANULAR EMBANKMENT MAT'L	C.Y.	4,828
503	COFFERDAMS, CRIBS, AND SHEETING	(LUMP)	SUM
503	UNCLASSIFIED EXCAVATION AS PER PLAN	C.Y.	0
203	EMBANKMENT MAT'L	C.Y.	1182
509	REINFORCING STEEL, GRADE 60	LBS	2175
511	CLASS "C" CONCRETE, COPING	C.Y.	26

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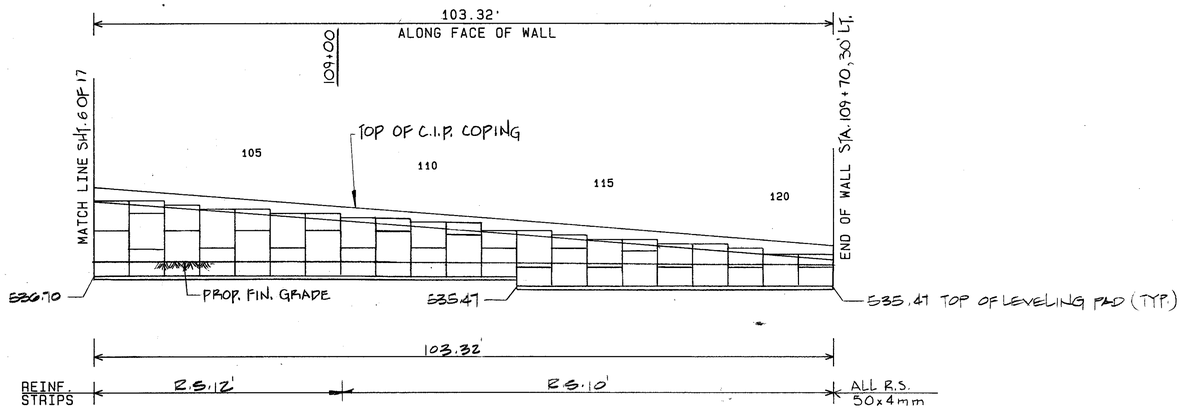
The Reinforced Earth Company
Rosslyn Center, 1700 North Moore Street, Arlington, Virginia 22209
(703) 527-3434

REV NO.	DATE	DESCRIPTION

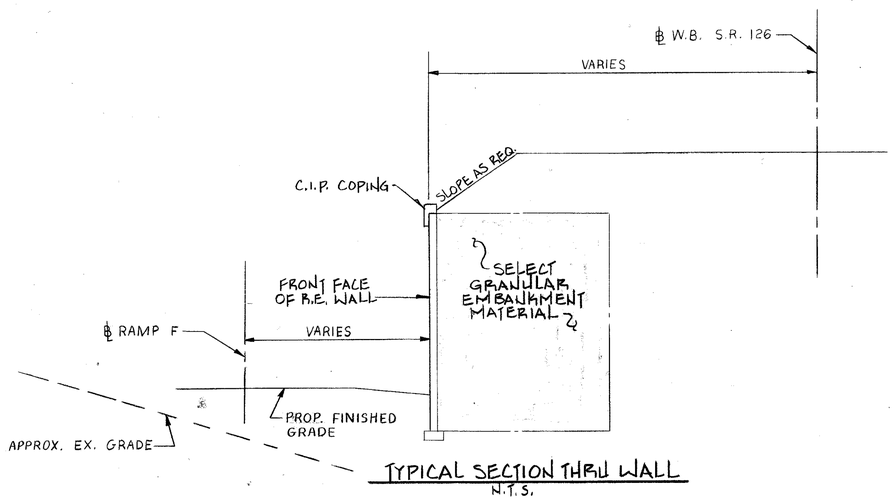
Structure	REINFORCED EARTH WALL
Location	CROSS CO. HIGHWAY
	HAMILTON CO., OHIO
Owner	
DESIGNED BY: PC	DATE: 3-27-86
PROJECT ENGR: AJP	CONTRACT NO. 2039
CHECKED BY:	DRAWING NO. 4 OF 15
ELEVATION	SCALE AS SHOWN

IR-75-1(96)10 | OHIO | FHWA REGION 5 | 483P 787

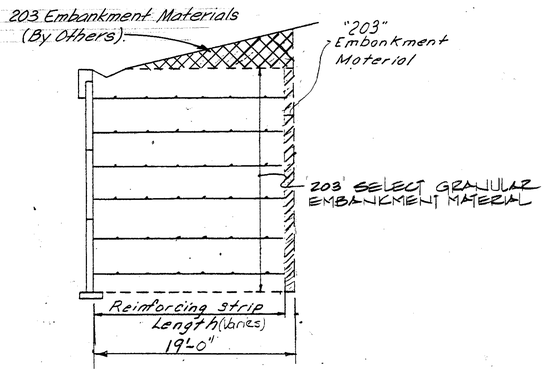
HAM-75-9.93
HAM-126-13.00



ELEVATION - FRONT FACE
SCALE : 1" = 10'



TYPICAL SECTION THRU WALL
N.T.S.



WALL CROSS SECTION

NOTE:
SECTION VIEW OF RETAINING WALL SHOWN ON ROADWAY CROSS-SECTIONS SHEET NO. 241 - 243.

WALL 4, DESIGN 3

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The Reinforced Earth Company
Rosslyn Center, 1700 North Moore Street, Arlington, Virginia 22209
(703) 527-3434

REV. NO.	DATE	DESCRIPTION

Structure	REINFORCED EARTH WALL
Location	CROSS CO. HIGHWAY
	HAMILTON CO., OHIO
Owner	
DESIGNED BY: PC	DATE: 3-27-86
PROJECT ENGR: AJP	
CHECKED BY:	
ELEVATION	SCALE: AS SHOWN
	CONTRACT NO. 2039
	DRAWING NO. 5 OF 15

F-2(13) | OHIO FHWA REGION 5 | 483Q 787

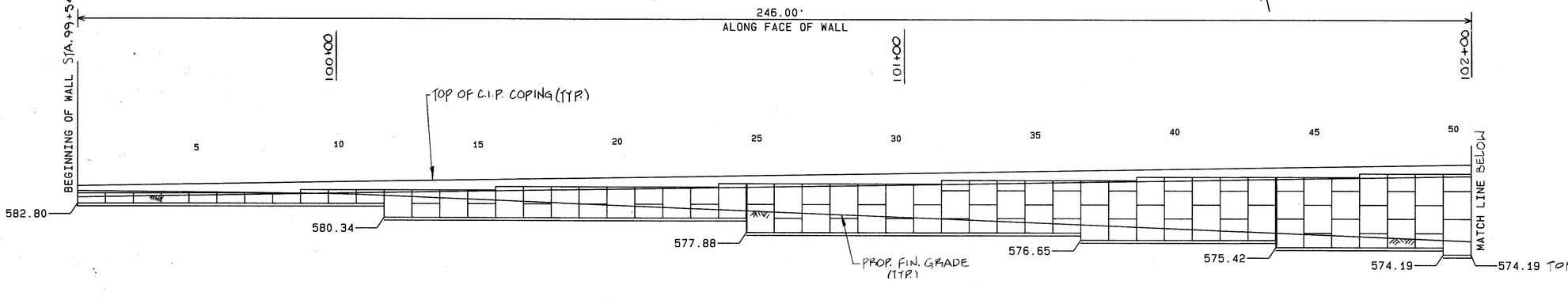
HAM-75-9.93
HAM-126-13.00

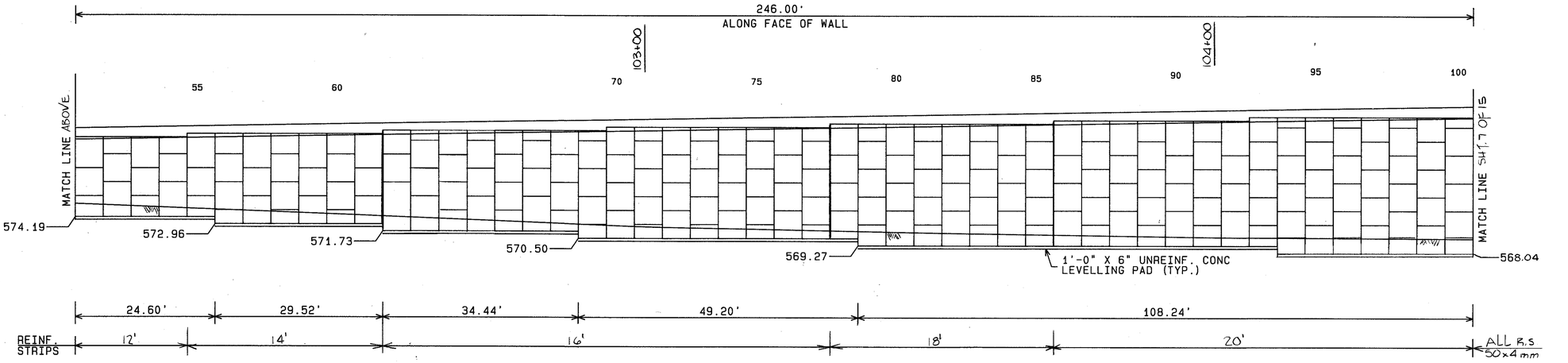
WFA STA. 99+54.50
61'RT. S.R. 126

FRONT FACE WALL NO. 5

WFB STA. 105+63.25
61'RT. S.R. 126

LAYOUT PLAN WALL NO. 5
N.T.S





ELEVATION - FRONT FACE
SCALE : 1" = 10'

NOTE!
SECTION VIEW OF RETAINING WALL SHOWN ON ROADWAY CROSS-SECTIONS SHEET NO. 125-129

WALL 5 ESTIMATED QUANTITIES

ITEM	DESCRIPTION	UNIT	QUANTITY
SPECIAL	REINFORCED EARTH WALL	SQ. FT.	9,440
203	SELECT GRANULAR EMBANKMENT MAT'L	C.Y.	5,940
503	COFFERDAMS, CRIBS, AND SHEETING	LUMS	SUM
503	UNCLASSIFIED EXCAVATION, AS PER PLAN	C.Y.	590
203	EMBANKMENT MAT'L.	C.Y.	2163
509	REINFORCING STEEL, GRADE 60	LBS	2233
511	CLASS 'C' CONCRETE, COPING	C.Y.	26

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WALL 5, DESIGN 3

reinforced earth — The Reinforced Earth Company
Rosslyn Center, 1700 North Moore Street, Arlington, Virginia 22209
(703) 527-3434

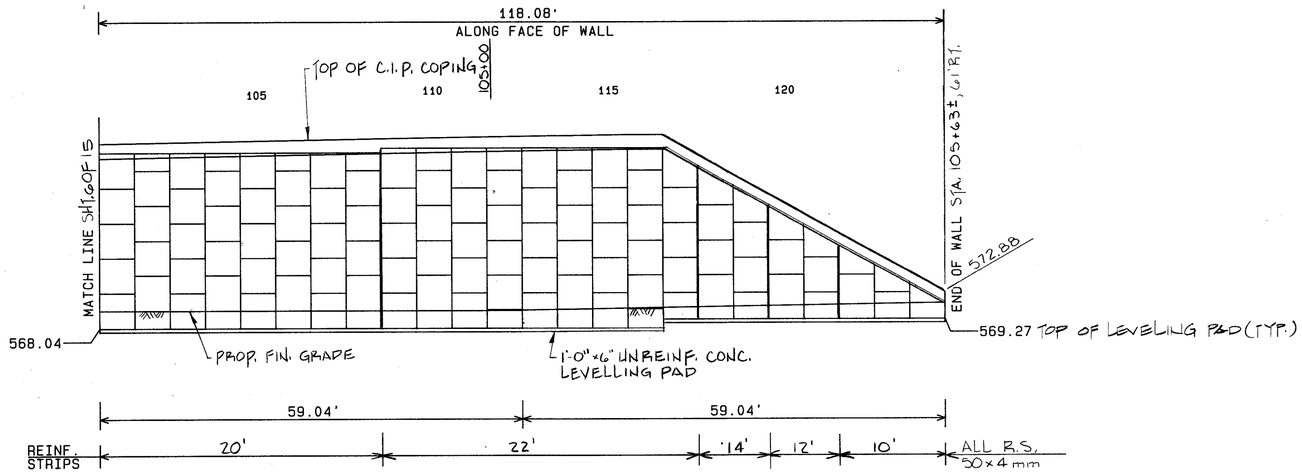
Structure	REINFORCED EARTH WALL
Location	CROSS CO. HIGHWAY
	HAMILTON CO., OHIO
Owner	
DESIGNED BY: FC	DATE: 3-27-86
PROJECT ENGR: AJP	CONTRACT NO. 2039
CHECKED BY:	DRAWING NO. 6 OF 15
ELEVATION	SCALE AS SHOWN

REV NO. | DATE | DESCRIPTION

F-2(13)	OHIO
	FHWA REGION 5

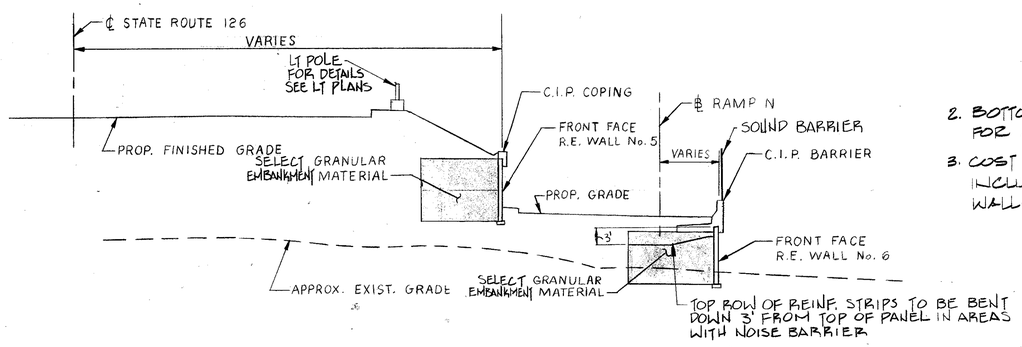
483R / 787

HAM-75-9.93
HAM-126-13.00



ELEVATION - FRONT FACE

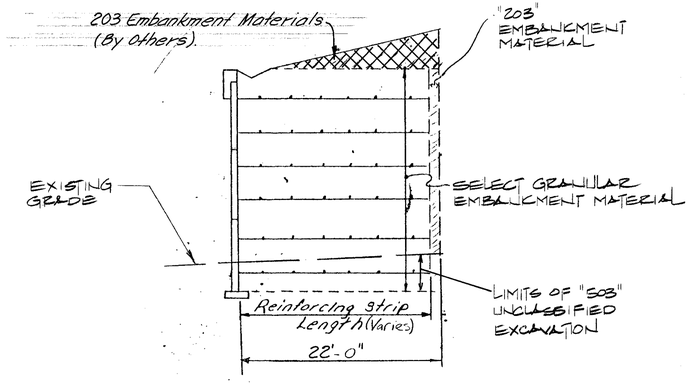
SCALE : 1" = 10'



TYPICAL SECTION-WALL 5 & 6

SCALE : 1"=10'

NOTE:
SECTION VIEW OF RETAINING WALL SHOWN ON ROADWAY CROSS-SECTIONS SHEET NO. 125-129



WALL CROSS SECTION

⚠ NOTE:

1. VERTICAL PILES SLEEVES ARE REQUIRED FOR PILES LOCATED WITHIN ITEM "203" SELECT GRANULAR EMBANKMENT MATERIAL" BRIDGE NO. HAM-126-1456, ABUTMENT 1. HAS PILES LOCATED WITHIN THIS REGION. SLEEVES, FOR 12" ϕ CAST-IN-PLACE PILES MUST BE PLACED AT THE FOLLOWING LOCATIONS:

PILE NUMBER	STATION-OFFSET (℄ 126)
19	105+19.27, 38.00 RT.
20	105+17.90, 43.07 RT
21	105+16.52, 48.13 RT
22	105+15.15, 53.20 RT

2. BOTTOM FOOTING ELEVATION IS 590.25' FOR ABUTMENT NO. 1 FOR ADDITIONAL DETAILS SEE BRIDGE PLANS SHEETS 6004-6015
3. COST OF PILE SLEEVES PLACEMENT AND MATERIALS ARE INCLUDED UNDER SPECIAL ITEM "REINFORCED EARTH WALLS" AS AN INCIDENTAL QUANTITY ITEM.

WALL 5 DESIGN 3

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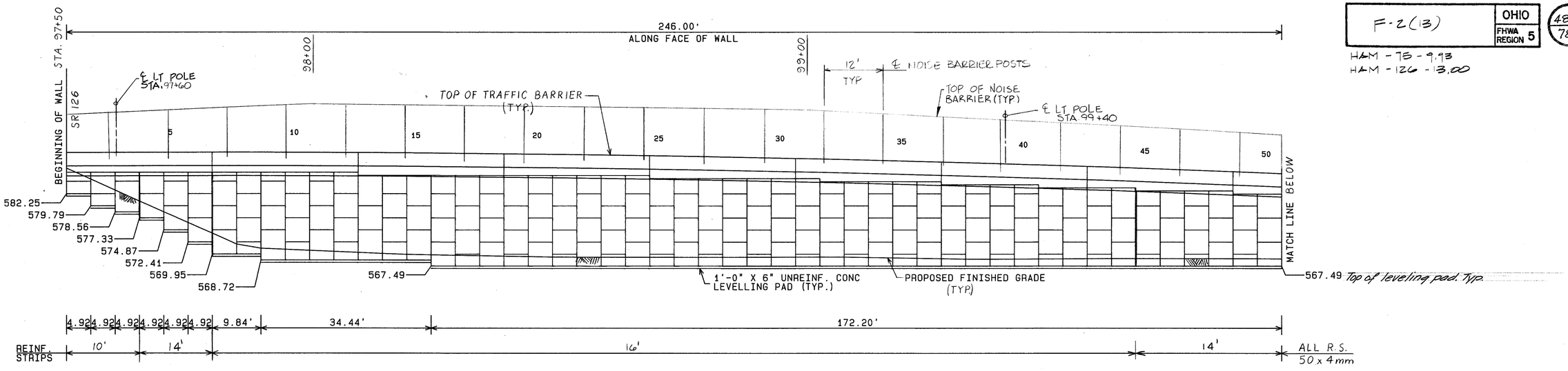
reinforced earth — The Reinforced Earth Company
Rosslyn Center, 1700 North Moore Street, Arlington, Virginia 22209
(703) 527-3434

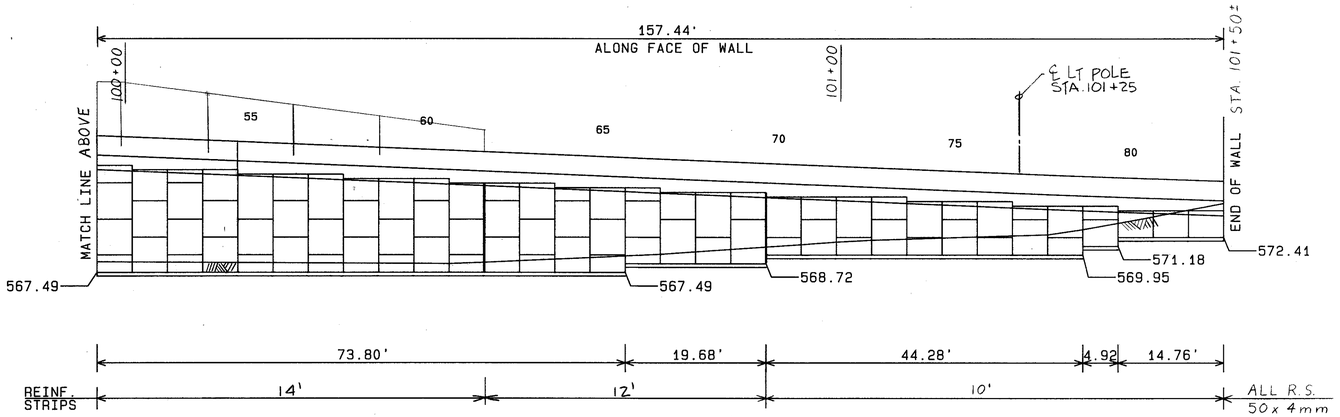
REV NO.	DATE	DESCRIPTION

Structure	REINFORCED EARTH WALL
Location	CROSS CO. HIGHWAY
	HAMILTON CO., OHIO
Owner	
DESIGNED BY: Pc	DATE: 3-27-86
PROJECT ENGR: AJP	CONTRACT NO. 2039
CHECKED BY:	DRAWING NO. 7 OF 15
ELEVATION	SCALE AS SHOWN

F-2(13) | OHIO | FHWA REGION 5 | 4835 / 787

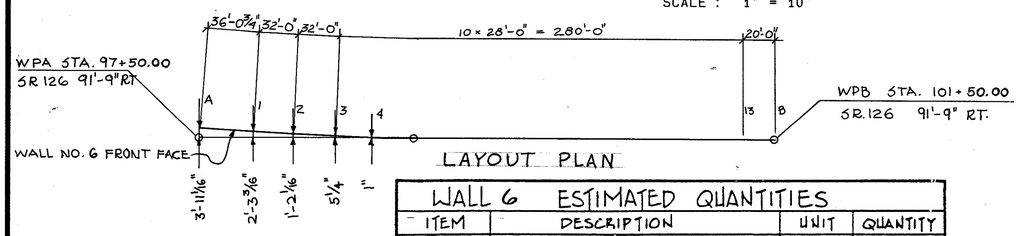
HAM - 75 - 9.93
HAM - 126 - 13.00





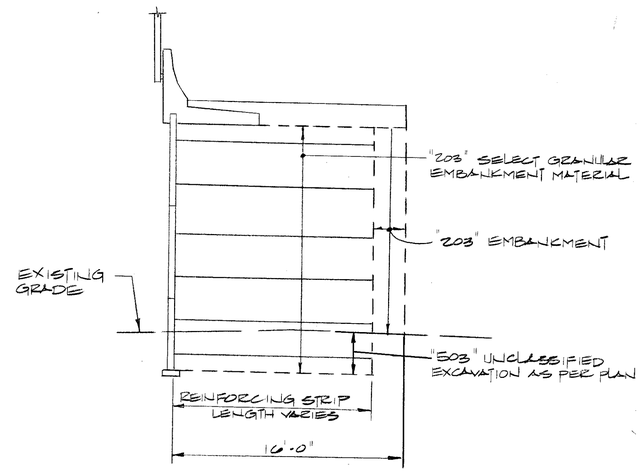
ELEVATION - FRONT FACE

SCALE : 1" = 10'



LAYOUT PLAN

NOTE:
FOR TYP. LT POLE DETAILS SEE SHT. 15 & 16 & LTG PLANS IN CONTRACT PLANS.



WALL CROSS-SECTION

WALL 6 ESTIMATED QUANTITIES

ITEM	DESCRIPTION	UNIT	QUANTITY
SPECIAL	REINFORCED EARTH WALL	SQ. FT.	5,540
203	SELECT GRANULAR EMBANKMENT MAT'L	C.Y.	3,354
503	COFFERDAMS, CRIBS, AND SHEETING	LUM	SUM
503	UNCLASSIFIED EXCAVATION AS PER PLAN	C.Y.	620
203	EMBANKMENT MATERIAL	C.Y.	184
509	REINFORCING STEEL, GRADE 60	LBS.	23860
511	CLASS "C" CONCRETE, TRAFFIC BARRIER	C.Y.	205

CONT.

625	HIGHWAY LIGHTING (QUANT. INCLUDED ON RDWY PLANS)
SPECIAL	NOISE BARRIER (QUANT. INCLUDED ON RDWY PLANS)

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WALL 6, DESIGN 3

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(703) 527-3434

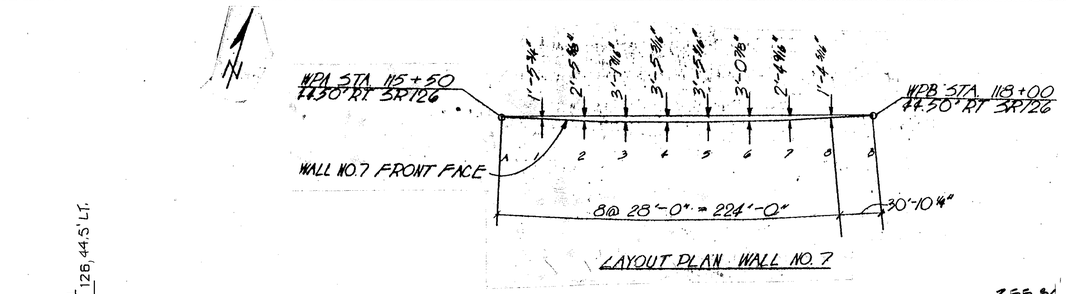
REV NO.	DATE	DESCRIPTION

Structure	REINFORCED EARTH WALL
Location	CROSS CO. HIGHWAY
	HAMILTON CO., OHIO
Owner	
DESIGNED BY: TKH	DATE
PROJECT ENGR: AJP	3-27-86
CHECKED BY:	
ELEVATION	

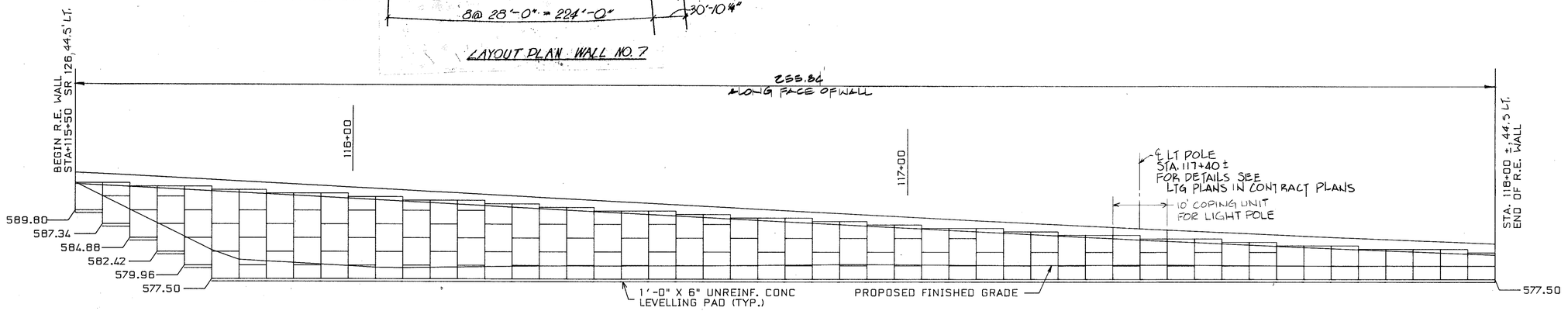
CONTRACT NO. 2039
DRAWING NO. 8 OF 15
SCALE AS SHOWN

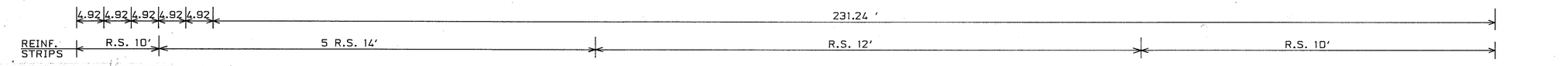
F-2(13) | OHIO | FHWA REGION 5 | 483T / 787

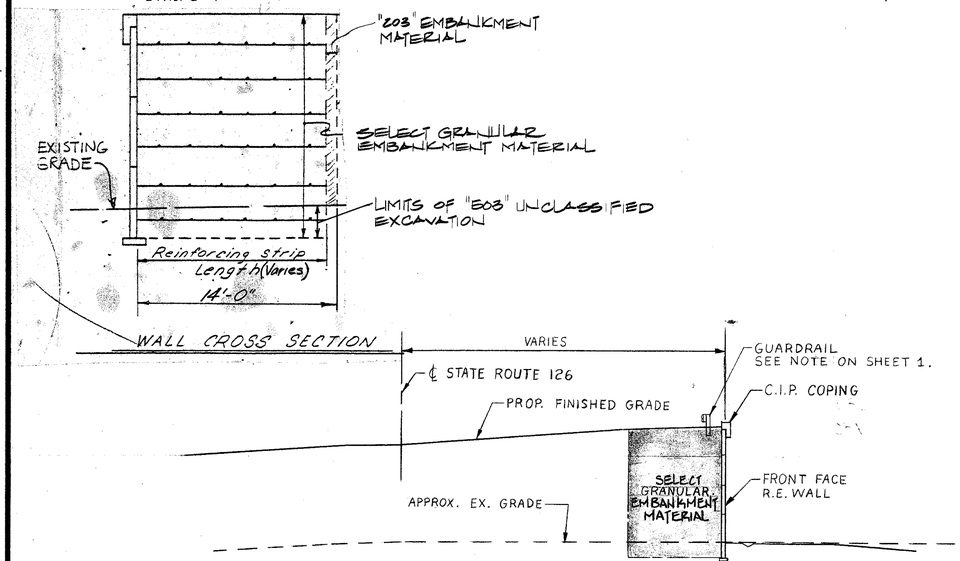
HAM -75 -9.93
HAM -126 -13.00



LAYOUT PLAN WALL NO. 7





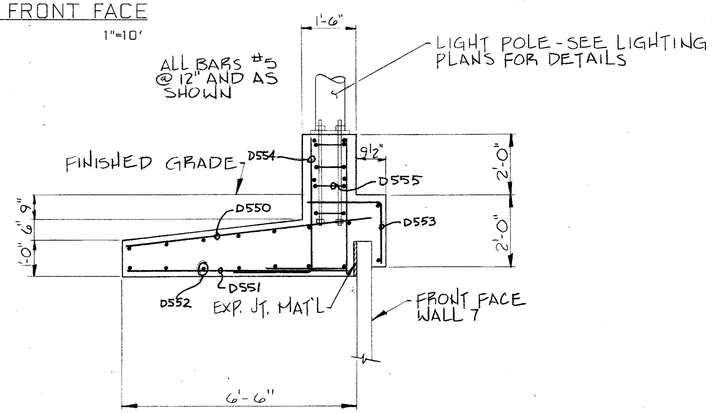


TYPICAL SECTION
SCALE: 1"=10'

WALL NO. 7

ELEVATION - FRONT FACE
SCALE: 1"=10'

NOTE:
SECTION VIEW OF RETAINING WALL SHOWN ON ROADWAY CROSS-SECTIONS SHEET NO. 134 & 135.



SECTION @ LIGHT POLE
SCALE: 1/2" = 1'-0"
(FOR DETAILS NOT SHOWN SEE SHT. 15)

WALL 7 ESTIMATED QUANTITIES

ITEM	DESCRIPTION	UNIT	QUANTITY
SPECIAL	REINFORCED EARTH WALL	SQ. FT.	2,620
203	SELECT GRANULAR EMBANKMENT MAT'L	C.Y.	1,139
503	COFFERDAMS, CRIBS, AND SHEETING	LUMP	SUM
503	UNCLASSIFIED EXCAVATION AS PER PLAN	C.Y.	289
203	EMBANKMENT MATERIAL	C.Y.	182
509	REINFORCING STEEL, GRADE 60	LBS	1444
511	CLASS 'C' CONCRETE, COPING	C.Y.	11

WALL 7 DESIGN 3

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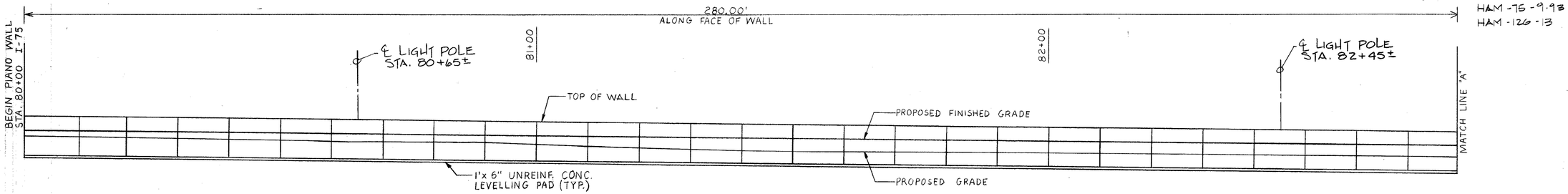
reinforced earth
The Reinforced Earth Company
Rosslyn Center, 1700 North Moore Street, Arlington, Virginia 22209
(703) 527-3434

REV NO.	DATE	DESCRIPTION

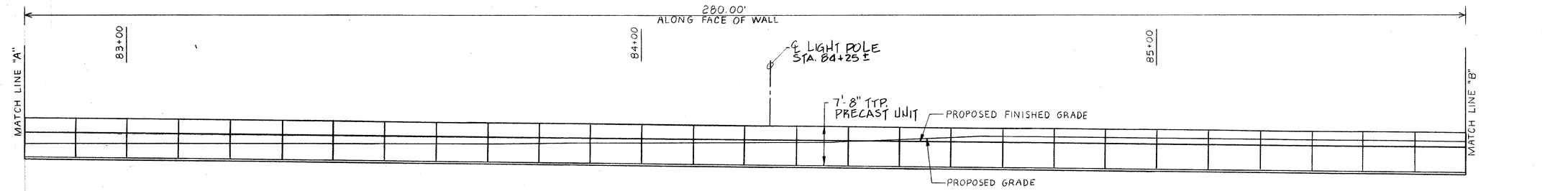
Structure	REINFORCED EARTH WALL
Location	CROSS CO. HIGHWAY
	HAMILTON CO., OHIO
Owner	
DESIGNED BY: RC	DATE 3-27-86
PROJECT ENGR: AJP	CONTRACT NO. 2039
CHECKED BY:	DRAWING NO. 9 OF 15
ELEVATION & TYP. SECTION	SCALE AS SHOWN

IR-75-1(96)10 | OHIO | FHWA REGION 5 | 483U 787



SEE DETAIL SHEET

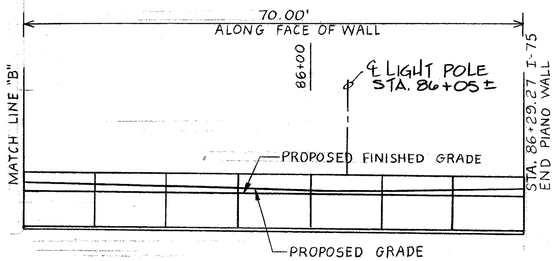
ALL R.S.
50 x 4 mm (TYP.)



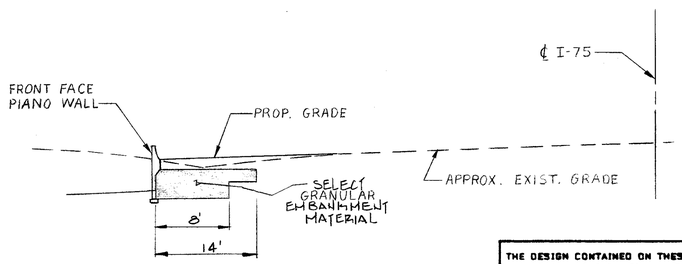
SEE DETAIL SHEET

ELEVATION - BACK FACE

SCALE: 1"=10'



SEE DETAIL SHEET



TYPICAL SECTION

SCALE: 1"=10'

⚠ NOTE
SECTION VIEW OF RETAINING WALL SHOWN ON ROADWAY CROSS-SECTIONS SHEET NO. 180-184.

WALL 8 ESTIMATED QUANTITIES

ITEM	DESCRIPTION	UNIT	QUANTITY
SPECIAL	REINFORCED EARTH WALL	SQ. FT.	4,840*
203	SELECT GRANULAR EMBANKMENT MAT'L	C.Y.	1,800
503	COFFERDAMS, CRIBS, AND SHEETING	L.S.	SUM
503	UNCLASSIFIED EXCAVATION AS PER PLAN	C.Y.	~~3,600~~

* TOP OF WALL TO TOP OF LEVELLING PAD
DESIGN 3
WALL 8

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*PATENT PENDING

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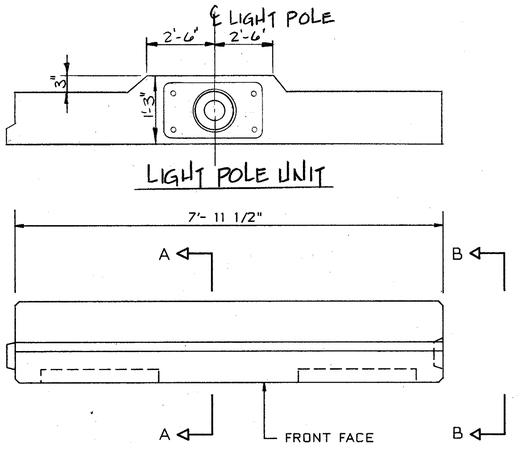
The Reinforced Earth Company
Rosslyn Center, 1700 North Moore Street, Arlington, Virginia 22209
(703) 527-3434

REV NO.	DATE	DESCRIPTION

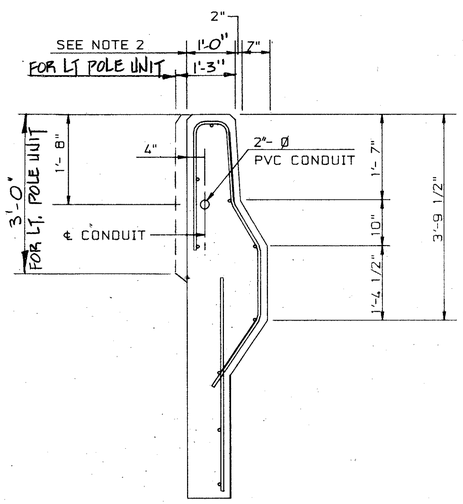
Structure	REINFORCED EARTH "PIANO WALL"*
Location	CROSS CO. HIGHWAY
	HAMILTON CO., OHIO
Owner	
DESIGNED BY: RC	DATE: 3-27-86
PROJECT ENGR: AJP	
CHECKED BY:	
ELEVATION & TYP. SECTION	CONTRACT NO. 2039
	DRAWING NO. 10 OF 12
	SCALE AS SHOWN

IR-75-1(96)10 | OHIO | FHWA REGION 5 | 483V/787



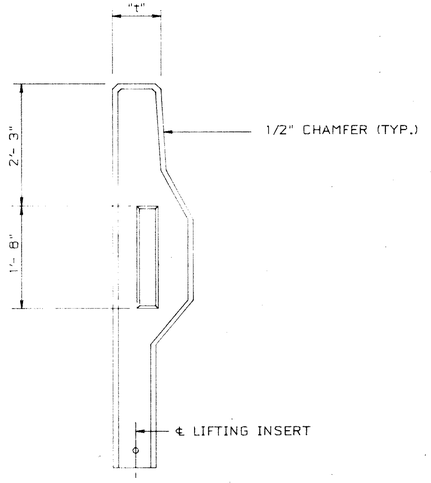
PLAN - VIEW-STD UNIT

SCALE: 3/4"=1'- 0"



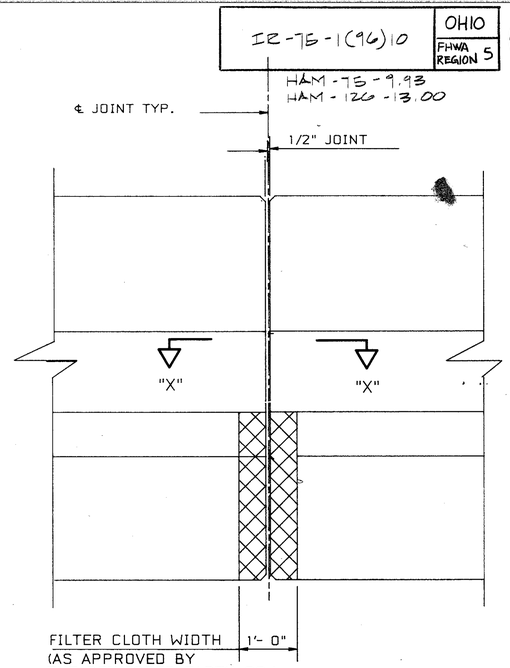
SECTION A-A
TYPICAL CONCRETE
REINFORCEMENT LAYOUT

SCALE: 3/4"=1'- 0"



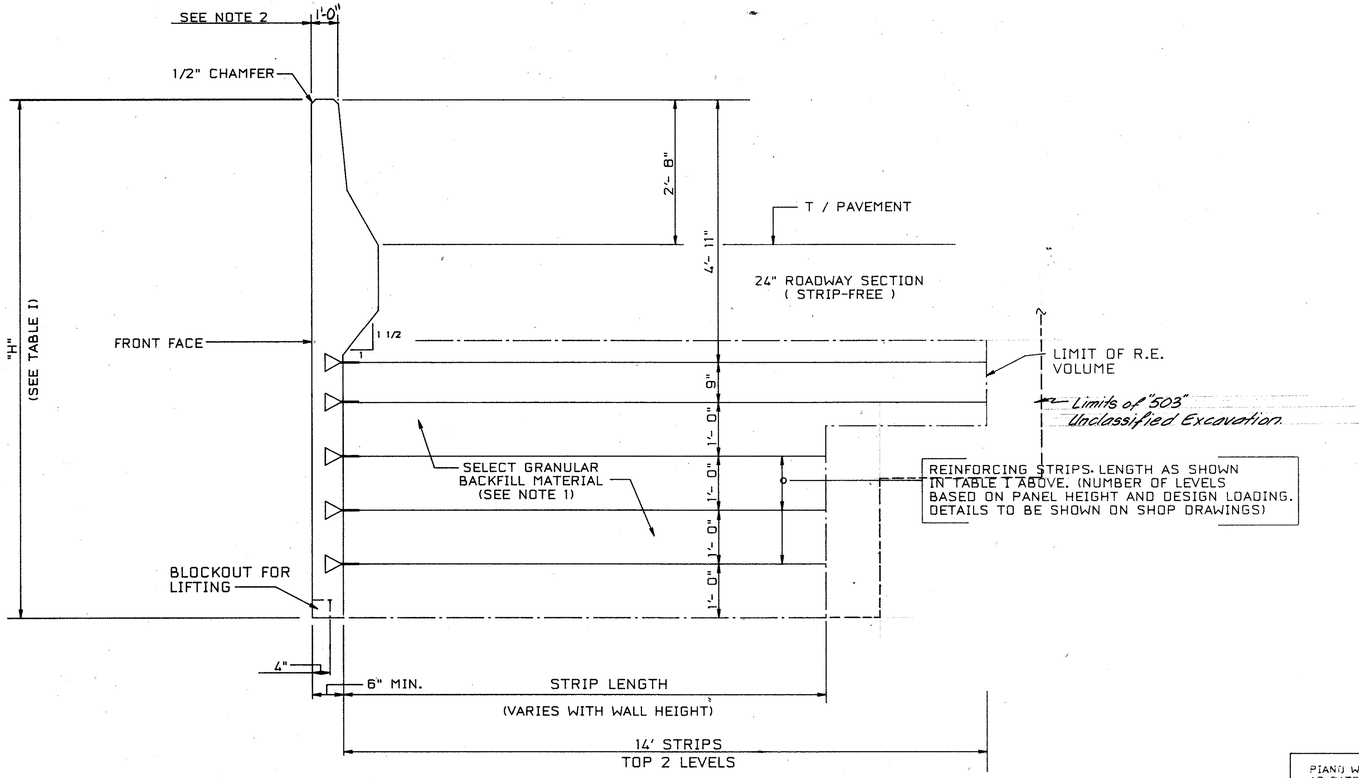
SECTION B-B
SHEAR KEY LOCATION DETAIL

SCALE: 3/4"=1'- 0"



JOINT DETAIL

SCALE: 3/4"=1' 0"



TYPICAL CROSS SECTION

TABLE I

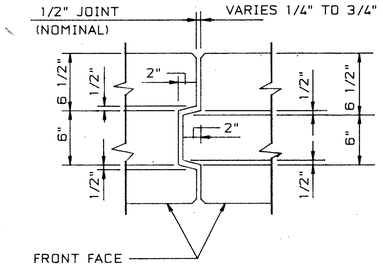
WALL HEIGHT (H)	STRIP LENGTH BELOW TOP 2 LEVELS
7' - 8"	8' - 0"
8' - 8"	10' - 0"
9' - 8"	10' - 0"
10' - 8"	10' - 0"
11' - 8"	12' - 0"
12' - 8"	12' - 0"

NOTES:

1. SELECT GRANULAR BACKFILL MATERIAL SHALL CONFORM TO THE FOLLOWING GRADATION.

SIEVE SIZE	PERCENT PASSING
6"	100%
3"	75 - 100%
NO.40	0 - 60%
NO.200	0 - 15%

2. "t" EQUALS THICKNESS AS REQUIRED BY THE STATE HIGHWAY DEPARTMENENT STANDARDS.



SECTION X-X

SCALE: 1 1/2"=1'- 0"

WALL 8, DESIGN 3

PIANO WALL & THE INFORMATION PRESENTED ON THIS DRAWING ARE CLASSIFIED AS PATENT PENDING. UNDER A FILING BY THE REINFORCED EARTH CO. THIS INFORMATION IS BEING FURNISHED FOR THE USE OF OHIO D.O.T. ONLY IN CONNECTION WITH THIS PROJECT. AND THE INFORMATION CONTAINED HEREIN IS NOT TO BE TRANSMITTED TO ANY OTHER ORGANIZATION UNLESS SPECIFICALLY AUTHORIZED IN WRITING BY THE REINFORCED EARTH COMPANY.

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Rosslyn Center 1700 North Moore Street, Arlington, Virginia 22209
(703) 527-3434

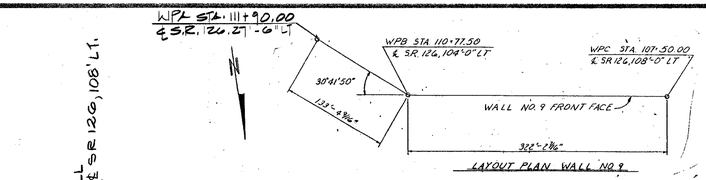
Structure	PIANO WALL
Location	CROSS CO. HIGHWAY HAMILTON CO., OHIO
Owner	
DESIGNED BY	RC
PROJECT ENGR.	AJP
CHECKED BY	
DATE	3-27-86
CONTRACT NO.	2039
DRAWING NO.	11 OF 15
SCALE	AS SHOWN

REV. | DATE | DESCRIPTION

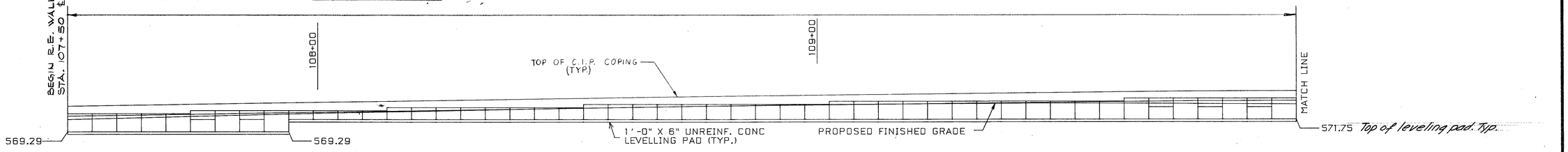
DETAILS

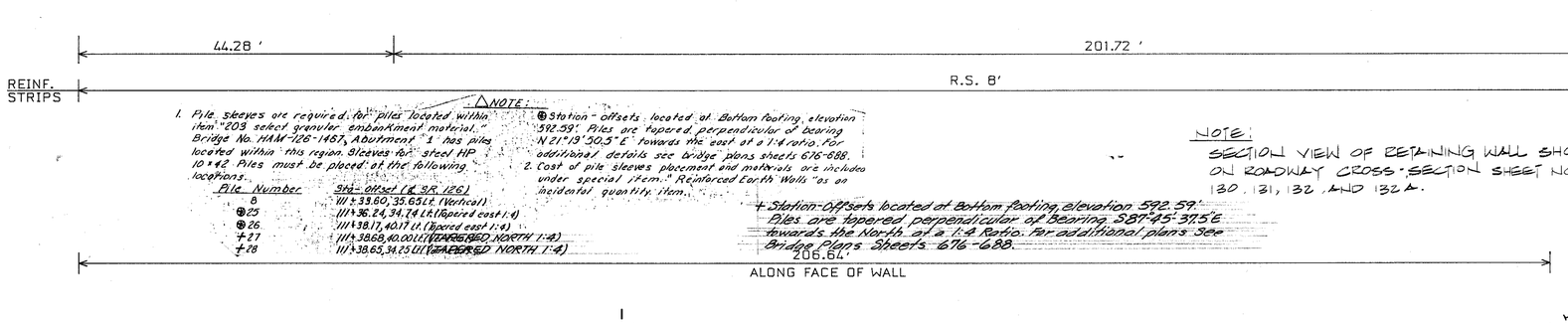
F-2(13) | OHIO | FHWA REGION 5 | 483W '87

HAM - 75 - 9.93
HAM - 126 - 13.00



LAYOUT PLAN WALL NO. 9





△NOTE:

1. Pile sleeves are required for piles located within item "203 select granular embankment material." Bridge No. HAM-126-1457, Abutment 1 has piles located within this region. Sleeves for steel HP 10×42 Piles must be placed at the following locations.

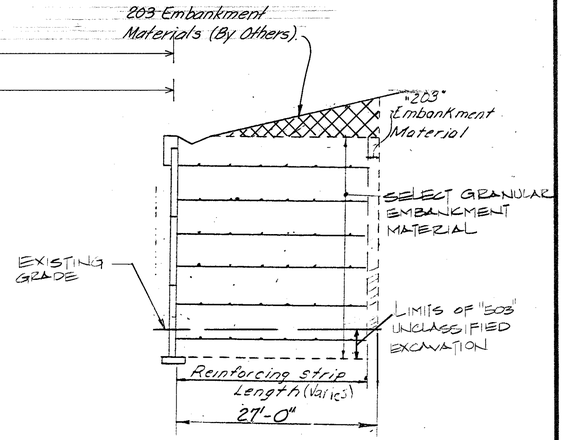
Pile Number	Sta - offset (℄ SR 126)
8	111+39.60, 35.65 Lt. (Vertical)
⊕25	111+36.24, 34.74 Lt. (Tapered cost 1:4)
⊕26	111+38.17, 40.17 Lt. (Tapered cost 1:4)
†27	111+38.68, 40.00 Lt. (TAPERED NORTH 1:4)
†28	111+38.63, 34.13 Lt. (TAPERED NORTH 1:4)

⊕ Station - offsets located at Bottom footing elevation 592.59'. Piles are tapered perpendicular of bearing N 21°19'30.5" E towards the east at a 1:4 ratio. For additional details see bridge plans sheets 676-688.

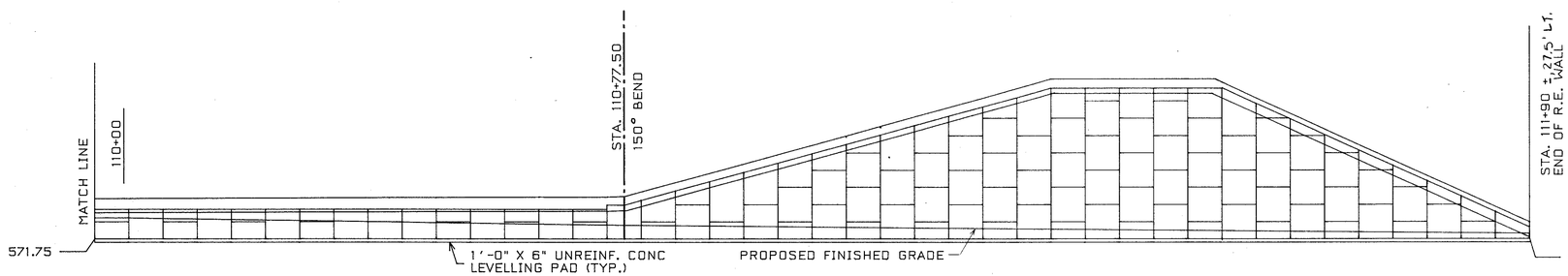
2. Cost of pile sleeves placement and materials are included under special item. "Reinforced Earth Walls" as an incidental quantity item.

† Station-Offsets located at Bottom footing, elevation 592.59'. Piles are tapered perpendicular of Bearing S 81°45'37.5" E towards the North at a 1:4 Ratio. For additional plans see Bridge Plans Sheets 676-688.

NOTE:
SECTION VIEW OF RETAINING WALL SHOWN ON ROADWAY CROSS SECTION SHEET NO. 130, 131, 132, AND 132A.

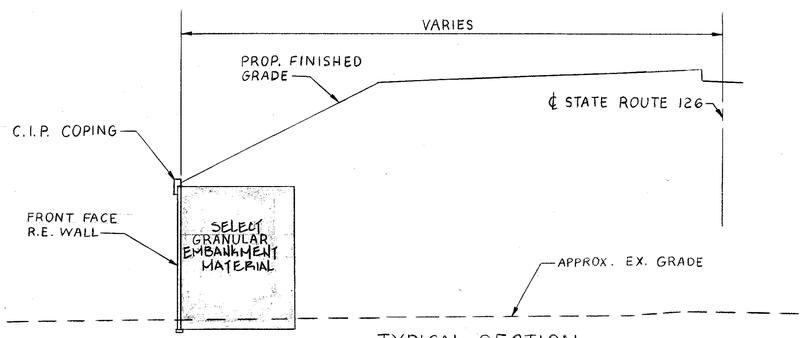


WALL CROSS SECTION



ELEVATION - BACK FACE
SCALE: 1"=10'

WALL ITEM	ESTIMATED QUANTITIES DESCRIPTION	UNIT	QUANTITY
SPECIAL	REINFORCED EARTH WALL	SQ. FT.	2,850
203	SELECT GRANULAR EMBANKMENT MAT'L	C.Y.	1,579
503	COFFERDAMS, CRIBS, AND SHEETING	LUMP	SUM
503	UNCLASSIFIED EXCAVATION AS PER PLAN	C.Y.	252
203	EMBANKMENT MATERIAL	C.Y.	1772
509	REINFORCING STEEL, GRADE 60	LBS	16661
511	CLASS "C" CONCRETE, COPING	C.Y.	20



TYPICAL SECTION
SCALE: 1"=10'

WALL 9, DESIGN 3

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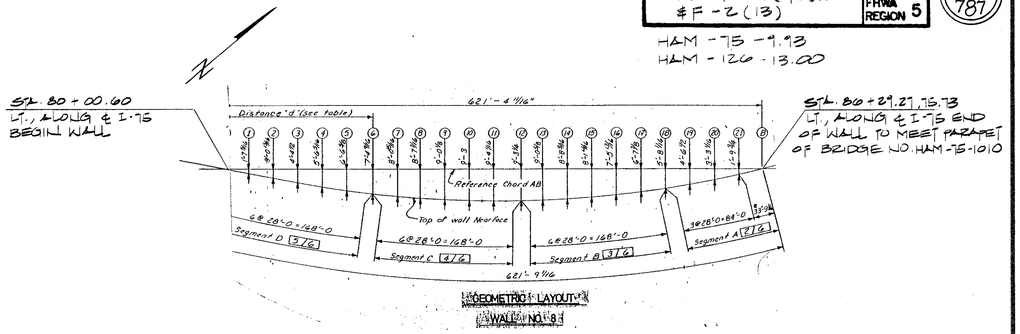
reinforced earth — The Reinforced Earth Company
Rosslyn Center, 1700 North Moore Street, Arlington, Virginia 22209
(703) 527-3434

REV NO.	DATE	DESCRIPTION

Structure	REINFORCED EARTH WALL
Location	CROSS CO. HIGHWAY
	HAMILTON CO., OHIO
Owner	
DESIGNED BY: RC	DATE: 3-27-86
PROJECT ENGR: AJP	CONTRACT NO. 2039
CHECKED BY:	DRAWING NO. 12 OF 15
ELEVATION & TYP. SECTION	SCALE AS SHOWN

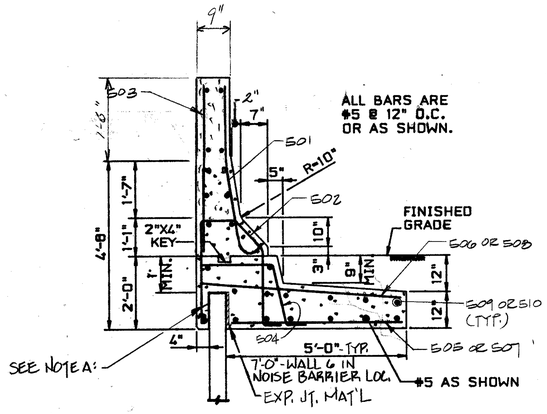
IR-75-1(96)10
&F-2(13)
OHIO
FHWA REGION 5
483X
787

HAM-75-9.93
HAM-126-13.00



* THIS PANEL MEETS BRIDGE PARAPET (BY OTHERS) LENGTH AND ALIGNMENT SHOWN MUST BE VERIFIED BY THE CONTRACTOR IN THE FIELD AND ADJUSTMENT MADE AS REQUIRED PRIOR TO ORDERING REINFORCEMENT STEEL.

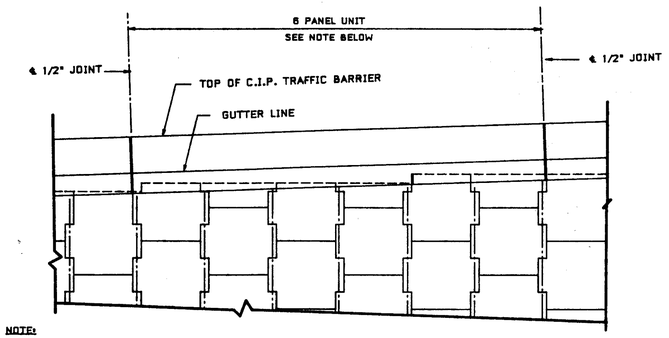
PANEL POINT	DISTANCE "d" FROM WPA
1	27'-11 7/16
2	55'-11
3	83'-10 3/8
4	111'-10 3/8
5	139'-10 1/8
6	167'-10
7	195'-9 7/8
8	223'-9 13/16
9	251'-9 13/16
10	279'-9 3/4
11	307'-9 3/4
12	335'-9 3/4
13	363'-9 3/4
14	391'-9 3/4
15	419'-9 7/16
16	447'-9 7/16
17	475'-9 7/16
18	503'-9 1/4
19	531'-8 13/16
20	559'-8 3/16
21	587'-8 3/16
WPB	621'-4 11/16



NOTE A: POSITIVE BOND BREAKER SHALL BE PROVIDED BETWEEN CAST-IN-PLACE CONC. AND PRECAST CONC. PANEL.

TRAFFIC BARRIER DETAIL

SCALE: 1/2" = 1'



NOTE:

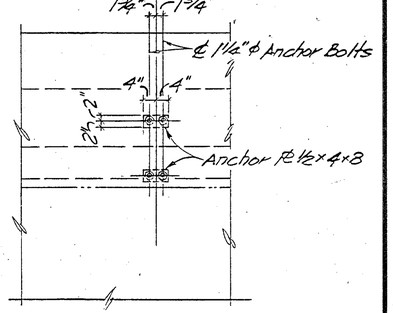
1- CAST IN PLACE CONCRETE BARRIER SHALL BE POURED IN A STAGGERED MANNER. ADJACENT SEGMENTS OF CONCRETE BARRIER MAY BE POURED NO SOONER THAN 24 HOURS AFTER FIRST POUR HAS BEEN COMPLETED. EXP. JOINT MATERIAL TO BE PLACED AT JOINTS PRIOR TO SECOND POUR. ALL LONGITUDINAL REINFORCEMENT SHALL BE STOPPED 2" CL. FROM JOINT.

2- ALL JOINTS SHALL BE LOCATED AS SHOWN ON WALL ELEVATIONS AND MUST COINCIDE WITH PANEL JOINT ON FRONT FACE WHERE BOTTOM OF LIP INTERSECTS WITH PANEL JOINT.

C.I.P. TRAFFIC BARRIER PARTIAL ELEVATION

SCALE: 3/16" = 1'

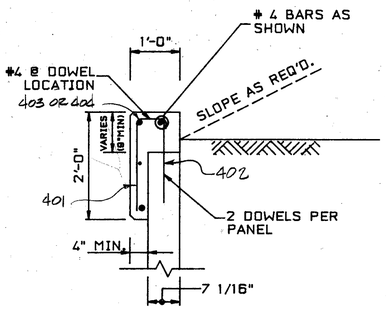
WALL G ONLY



VIEW E-E

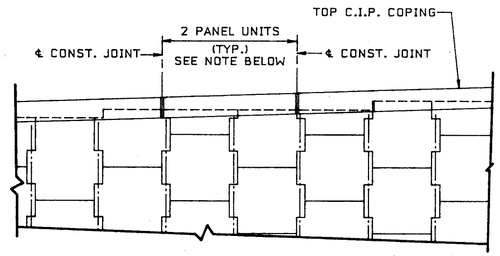
NOTES

1. THESE ITEMS SHALL BE FURNISHED UNDER ROADWAY QUANTITIES COST OF PLACING THE 1¼" MACHINE BOLTS WITH 3 HEX NUTS, 2 WASHERS AND ANCHOR PL SHALL BE INCLUDED IN THE UNIT PRICE FOR ITEM "511 CLASS 'G' CONCRETE, TRAFFIC BARRIER.
2. FOR NOISE BARRIER QUANTITIES INCLUDING W8x24, BOLTS, WASHERS, NUTS AND PLATES SEE ROADWAY QUANTITIES.
3. FOR ADDITIONAL DETAILS REFER TO "NOISE BARRIER DETAILS" SHEETS 609 THRU. 609D.



C.I.P. CONC. COPING DETAIL

SCALE: 3/4"=1'-0"



NOTE: JOINTS IN C.I.P. COPING SHALL BE AT 2 PANEL INTERVALS. JOINTS MUST COINCIDE WITH PANEL JOINTS ON FRONT FACE WHERE BOTTOM OF 4" LIP INTERSECTS WITH PANEL JOINT. REINFORCING STEEL IS NOT CONTINUOUS.

C.I.P. COPING PARTIAL ELEVATION

SCALE: 3/16"=1'

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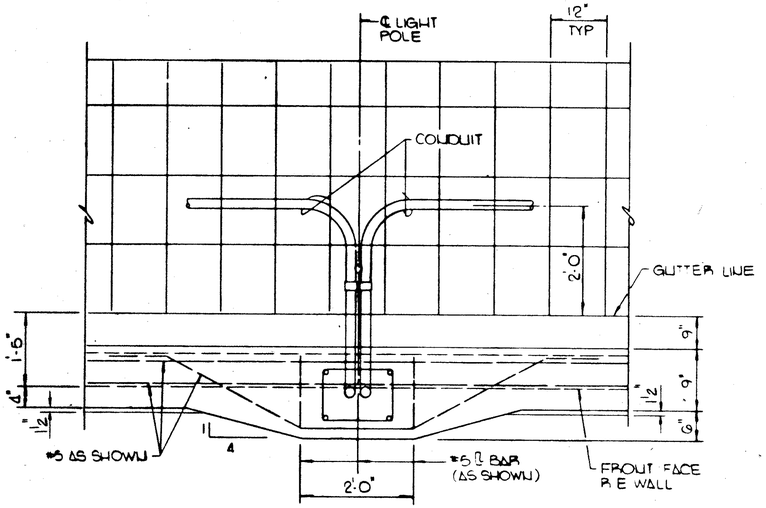
reinforced earth
The Reinforced Earth Company
Rosslyn Center, 1700 North Moore Street, Arlington, Virginia 22209
(703) 527-3434

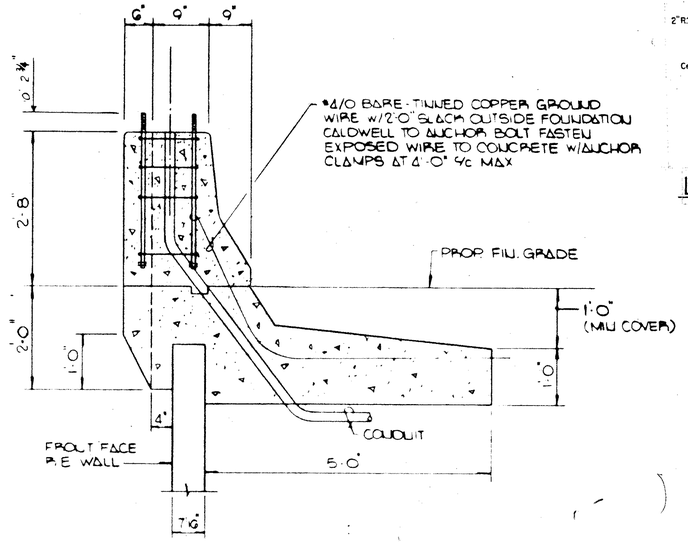
Structure	REINFORCED EARTH WALL
Location	CROSS CO. HIGHWAY
	HAMILTON CO., OHIO
Owner	
DESIGNED BY KC	DATE 3-27-86
PROJECT ENGR. AJP	CONTRACT NO. 2039
CHECKED BY	DRAWING NO. 13 OF 15
	SCALE AS SHOWN

REV. NO. | DATE | DESCRIPTION

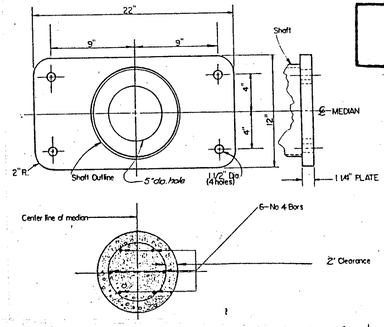
DETAILS



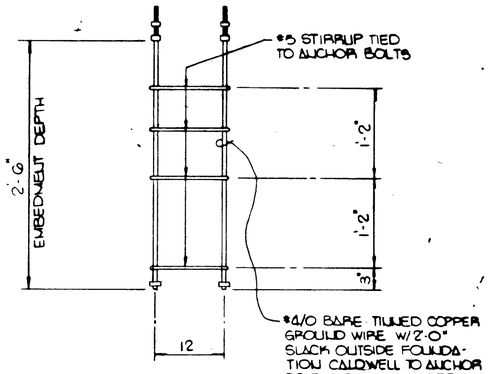
PARTIAL PLAN
SCALE: 3/4" = 1'-0"



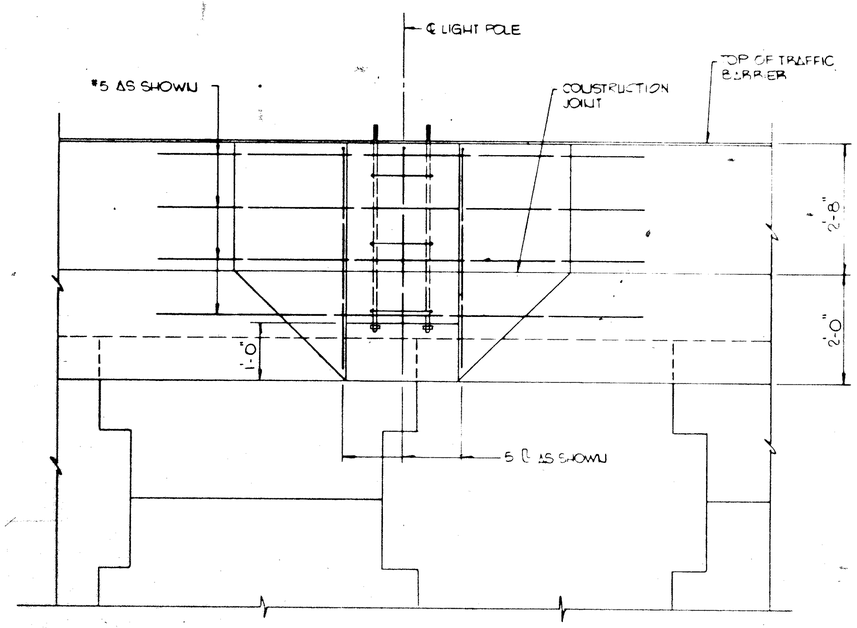
SECTION AT LIGHT POLE
SCALE: 3/4" = 1'-0"



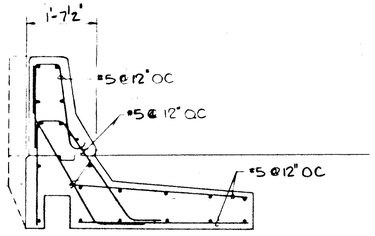
LIGHT POLE BASE PLATE DETAIL
N.T.S.



ANCHOR BOLT DETAIL
SCALE: 1" = 1'-0"

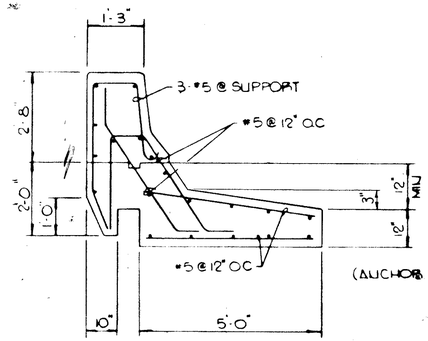


PARTIAL ELEVATION
SCALE: 3/4" = 1'-0"



ALL BARS ARE #5 SPACED AS SHOWN UNLESS OTHERWISE NOTED

SECTION BEYOND POLE
SCALE 12" = 1'-0"



(ANCHOR BOLTS AS SHOWN)

SECTION AT LIGHT POLE
SCALE 12" = 1'-0"

IR-75-1(96)10 & F-2(13) | OHIO | FHWA REGION 5 | 483Y 787

HAM-75-9.93
HAM-126-13.00

C.I.P. BARRIER W/ LIGHT POLE

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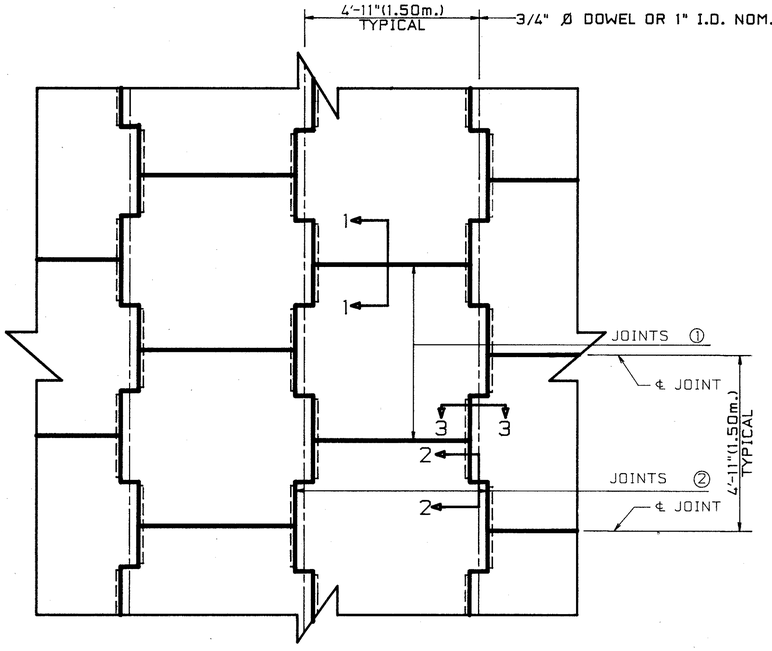
The Reinforced Earth Company
Rosslyn Center 1700 North Moore Street, Arlington, Virginia 22209
(703) 527-3434

REV NO.	DATE	DESCRIPTION

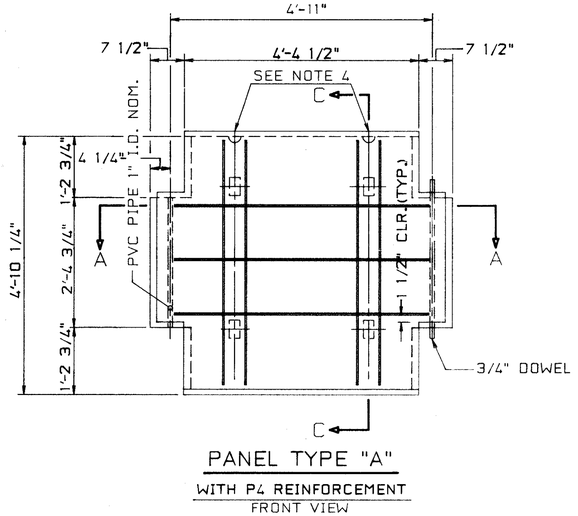
Structure	REINFORCED EARTH WALL
Location	CROSS CO. HIGHWAY
	HAMILTON CO., OHIO
Owner	
DESIGNED BY RC	DATE 3-27-86
PROJECT ENGR. AJP	CONTRACT NO. 2039
CHECKED BY	DRAWING NO. 14 OF 15
DETAILS	SCALE AS SHOWN

IR-75-1(96)10
& F-2(13)
OHIO
FHWA REGION 5
4837
787

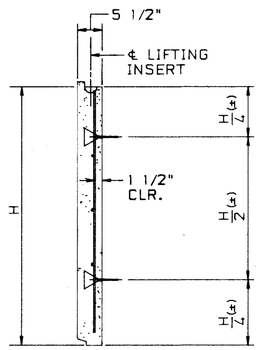
HAM-75-9.93
HAM-126-13.00



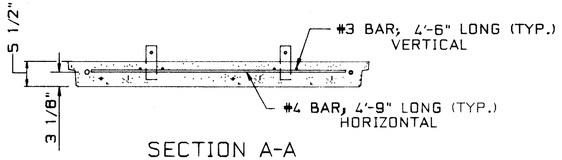
TYPICAL PANEL LAYOUT
SCALE: 1/2" = 1'-0"



PANEL TYPE "A"
WITH P4 REINFORCEMENT
FRONT VIEW



SECTION C-C
SCALE: 3/4" = 1'-0"

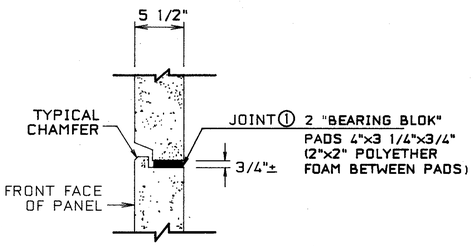


SECTION A-A
SCALE: 3/4" = 1'-0"

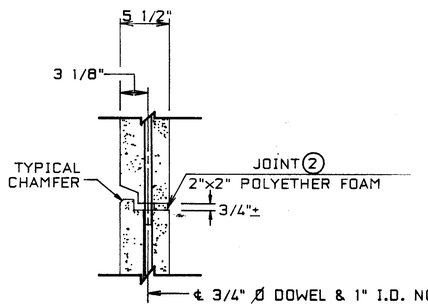
PANEL THICKNESS	REINFORCEMENT DESIGNATION	PANEL REINFORCEMENT	MAXIMUM ALLOWABLE HORIZONTAL STRESS AT FACING (KSF)
5½"	P0	2 #4 HORIZONTAL	0.54
	P4	4 #3 VERTICAL 3 #4 HORIZONTAL	1.01
	P6	8 #3 VERTICAL 4 #4 HORIZONTAL	1.33
7 1/16"	P6	6 #3 VERTICAL 3 #4 HORIZONTAL	2.14
	P8	8 #3 VERTICAL 4 #4 HORIZONTAL	2.83

NOTES:

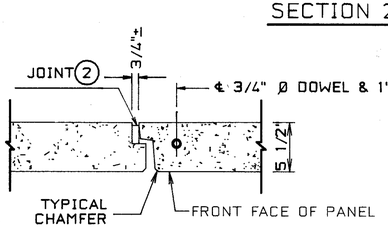
1. REINFORCING STEEL TO BE A615 GRADE 60.
2. 3/8" × 3/8" CHAMFER SHALL BE PROVIDED ON ALL EXPOSED EDGES (FRONT FACE ONLY).
3. ALL PANEL TYPES AND OTHER RELATED ELEMENTS WILL BE DETAILED ON SHOP DRAWINGS.
4. ALL PANELS SHALL HAVE TWO LIFTING INSERTS OF ONE TON CAPACITY EACH.
5. PANEL DESIGN THICKNESS IS 5½". QUANTITY OF CONCRETE WILL INCREASE TO ACCOMODATE ANY ARCHITECTURAL SURFACE FINISH THAT MAY BE SPECIFIED.
6. ACTUAL PANEL REINFORCEMENT FOR ALL PANEL TYPES IS DESIGNATED ON THE WALL ELEVATION DRAWINGS. P4 ILLUSTRATED FOR INFORMATION ONLY.
7. HORIZONTAL STRESS AT THE FACING IS CALCULATED BASED ON STANDARD REINFORCED EARTH® CALCULATION PROCEDURE.
8. PANELS SUBJECT TO HORIZONTAL STRESS AT THE FACING IN EXCESS OF 2.83 KSF WILL BE DESIGNED ON AN INDIVIDUAL PROJECT BASIS.



SECTION 1-1

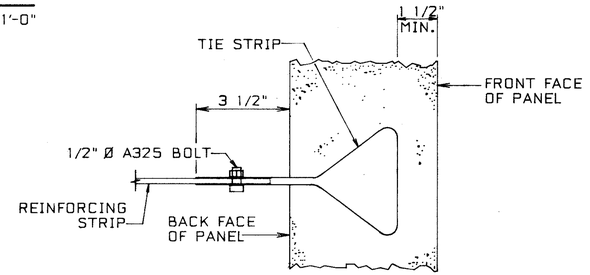


SECTION 2-2



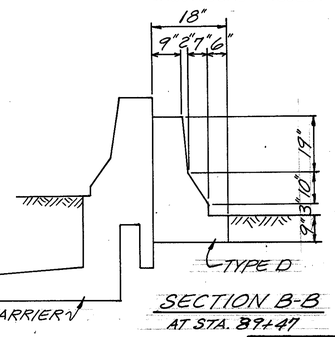
SECTION 3-3

JOINT DETAILS
SCALE: 1-1/2" = 1'-0"

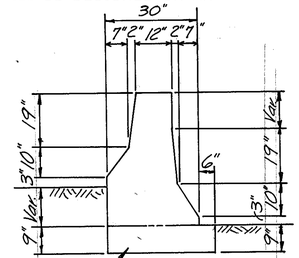


CONNECTION DETAIL
NO SCALE

Note: See Std. Construction Dwg. MC-9 for additional details on Type C & D concrete barrier.



C.I.P. TRAFFIC BARRIER TYPE "B"
SECTION B-B
AT STA. 89+47



SECTION A-A
DESIGN NO. 3

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REV. NO.	DATE	DESCRIPTION

Structure	REINFORCED EARTH WALL
Location	CROSS CO. HIGHWAY
	HAMILTON CO., OHIO
Owner	
DESIGNED BY: RC	DATE 3-27-86
PROJECT ENGR: AJP	CONTRACT NO. 2039
CHECKED BY:	DRAWING NO. 15 OF 15
STD PANEL DETAILS	SCALE AS SHOWN

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

485
787

HAMILTON COUNTY
HAM-75/126-9.93/13.00

GENERAL SUMMARY

5	6	7	8	9	10	11	12	13	14		ITEM	GRAND TOTAL	UNIT	DESCRIPTION		FEDERAL NO.	REF. NO.	
														REMOVE ALL FOLLOWING DESCRIPTIONS				
LUMP											202	LUMP	LUMP	PARCEL 711 WL,X	2 FRAME HORSE BARNS ON CONCRETE SLAB, 1 CONCRETE BLOCK & FRAME HORSE BARN ON CONCRETE SLAB, CARTHAGE FAIRGROUNDS, CITY OF CINCINNATI, HAMILTON COUNTY, OHIO.	F-1133(1)	1	
	LUMP										202	LUMP	LUMP	PARCEL 736 WL	1 1/2 STORY FRAME RESIDENCE WITH FULL BASEMENT, ATTACHED ALUMINUM CARPORT 8067 WOODBINE AVE. CITY OF CINCINNATI, HAMILTON COUNTY, OHIO	I-75-(84)	2	
	LUMP										202	LUMP	LUMP	PARCEL 741 WL	2 STORY FRAME RESIDENCE WITH FULL BASEMENT, DETACHED 1 CAR FRAME GARAGE, 8043 WOODBINE AVE. CITY OF CINCINNATI, HAMILTON COUNTY, OHIO	I-75-(84)	3	
	LUMP										202	LUMP	LUMP	PARCEL 742 WL	2 STORY ALUMINUM SIDED FRAME RESIDENCE WITH FULL BASEMENT, DETACHED 1 CAR FRAME GARAGE, 8039 WOODBINE AVE. CITY OF CINCINNATI, HAMILTON COUNTY, OHIO	I-75-(84)	4	
	LUMP										202	LUMP	LUMP	PARCEL 743 WL	2 STORY FRAME & DERMA-STONE 2 FAMILY DUPLEX WITH FULL BASEMENT, DETACHED 2 CAR FRAME GARAGE, 8035 WOODBINE AVE. CITY OF CINCINNATI, HAMILTON COUNTY, OHIO	I-75-(84)	5	
	LUMP										202	LUMP	LUMP	PARCEL 760 WL	1 1/2STORY BRICK & FRAME RESIDENCE WITH FULL BASEMENT, ATTACHED ALUMINUM CARPORT, 8066 WOODBINE AVE. CITY OF CINCINNATI, HAMILTON COUNTY, OHIO	I-75-(84)	6	
	LUMP										202	LUMP	LUMP	PARCEL 761 WL	1 1/2 STORY BRICK & FRAME RESIDENCE WITH FULL BASEMENT, INCLUDING ENCLOSED BASEMENT GARAGE, ATTACHED 1 STORY FRAME ADDITION, 8064 WOODBINE AVE. CITY OF CINCINNATI, HAMILTON COUNTY, OHIO	I-75-(84)	7	
	LUMP										202	LUMP	LUMP	PARCEL 762 WL	2 STORY ALUMINUM SIDED FRAME RESIDENCE WITH FULL BASEMENT, CISTERN, 8052 WOODBINE AVE. CITY OF CINCINNATI, HAMILTON COUNTY, OHIO	I-75-(84)	8	
	LUMP										202	LUMP	LUMP	PARCEL 763 WL	2 STORY BRICK RESIDENCE WITH FULL BASEMENT, DETACHED 2 CAR CONCRETE BLOCK & BRICK GARAGE, 8048 WOODBINE AVE. CITY OF CINCINNATI, HAMILTON COUNTY, OHIO	I-75-(84)	9	
	LUMP										202	LUMP	LUMP	PARCEL 767 WL, WD	3 STORY BRICK & FRAME 2 FAMILY DUPLEX WITH FULL BASEMENT & 1 STORY FRAME ADDITION, DETACHED 2 CAR CONCRETE BLOCK GARAGE, 8030 WOODBINE AVE. CITY OF CINCINNATI, HAMILTON COUNTY, OHIO	I-75-(84)	10	
	LUMP										202	LUMP	LUMP	PARCEL778 WL	1 1/2 STORY FRAME RESIDENCE WITH FULL BASEMENT, DETACHED 1 CAR FRAME GARAGE 285 AVALON ST. CITY OF CINCINNATI, HAMILTON COUNTY, OHIO	I-75-(84)	11	
	LUMP										202	LUMP	LUMP	PARCEL 782 WL	3 STORY ALUMINUM SIDED FRAME RESIDENCE WITH FULL BASEMENT, DETACHED 1 1/2 CAR FRAME GARAGE, 8067 ANTHONY WAYNE AVE. CITY OF CINCINNATI, HAMILTON COUNTY, OHIO	I-75-(84)	12	
		LUMP									202	LUMP	LUMP	PARCEL 809 WL, WD	1 STORY BRICK & FRAME RESIDENCE WITH FULL BASEMENT, INCLUDING 2 CAR BASEMENT GARAGE, 7955 GREENLAND PLACE, CITY OF CINCINNATI, HAMILTON COUNTY, OHIO	I-75-(84)	13	

UTILITIES

CINCINNATI GAS & ELECTRIC CO. (ELECTRIC & GAS)
FOURTH & MAIN ST.
CINCINNATI, OHIO 45201
TEL. NO. 513-381-2000

CITY OF CINCINNATI WATER DEPT.
4747 SPRING GROVE AVE.
CINCINNATI, OHIO 45232
TEL. NO. 513-352-4641

METROPOLITAN SEWER DISTRICT
1600 GEST ST.
CINCINNATI, OHIO 45204
TEL. NO. 513-352-4900

CINCINNATI BELL, INC.
225 EAST FOURTH ST.
CINCINNATI, OHIO 45201
TEL. NO. 513-397-9900

WARNER AMEX CORP.
CABLE COMM. OF CINCINNATI INC.
FIFTH & RACE TOWER
120 WEST FIFTH ST. SUITE 705
CINCINNATI, OHIO 45202
TEL. NO. 513-381-2200

CITY OF READING WATER DEPT.
1000 MARKET ST.
READING, OHIO 45215
TEL. NO. 513-733-3725

GENERAL SUMMARY

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

HAMILTON COUNTY
HAM-75/126-9.93/13.00

5	6	7	8	9	10	11	12	13	14		ITEM	GRAND TOTAL	UNIT	DESCRIPTION		FEDERAL NO.	REF. NO.
		LUMP									202	LUMP	LUMP	PARCEL 810 WL, WD	2 STORY BRICK & ALUMINUM SIDED FRAME RESIDENCE WITH FULL BASEMENT, INCLUDING 2 CAR BASEMENT GARAGE, 7961 GREENLAND PLACE, CITY OF CINCINNATI, HAMILTON COUNTY, OHIO	I-75-1(84)	14
		LUMP									202	LUMP	LUMP	PARCEL 811 WL	2 STORY BRICK & ALUMINUM SIDED FRAME RESIDENCE WITH FULL BASEMENT, INCLUDING 2 CAR BASEMENT GARAGE, 7967 GREENLAND PLACE, CITY OF CINCINNATI, HAMILTON COUNTY, OHIO	I-75-1(84)	15
		LUMP									202	LUMP	LUMP	PARCEL 813 WL	1 STORY BRICK RESIDENCE WITH DETACHED METAL SHED, 7975 GREENLAND PLACE, CITY OF CINCINNATI, HAMILTON COUNTY, OHIO	I-75-1(84)	16
			LUMP								202	LUMP	LUMP	PARCEL 828 WL, WD	1 STORY BRICK & FRAME RESIDENCE WITH FULL BASEMENT, ATTACHED 2 CAR GARAGE, 8125 DEBONAIR COURT, CITY OF CINCINNATI, HAMILTON COUNTY, OHIO	I-75-1(84)	17
			LUMP								202	LUMP	LUMP	PARCEL 829 WL	1 STORY BRICK & FRAME RESIDENCE WITH FULL BASEMENT INCLUDING 2 CAR BASEMENT GARAGE, 8131 DEBONAIR COURT, CITY OF CINCINNATI, HAMILTON COUNTY, OHIO	I-75-1(84)	18
			LUMP								202	LUMP	LUMP	PARCEL 831 WL	1 STORY BRICK & FRAME RESIDENCE WITH FULL BASEMENT INCLUDING 2 CAR BASEMENT GARAGE, 8130 DEBONAIR COURT, CITY OF CINCINNATI, HAMILTON COUNTY, OHIO	I-75-1(84)	19
			LUMP								202	LUMP	LUMP	PARCEL 832 WL	1 STORY BRICK & FRAME RESIDENCE WITH FULL BASEMENT, INCLUDING 2 CAR BASEMENT GARAGE, 8126 DEBONAIR COURT, CITY OF CINCINNATI, HAMILTON COUNTY, OHIO	I-75-1(84)	20
			LUMP								202	LUMP	LUMP	PARCEL 834 WL	1 BRICK & FRAME SPLIT-LEVEL RESIDENCE WITH FULL BASEMENT , INCLUDING 2 CAR BUILT-IN GARAGE, 8118 DEBONAIR COURT, CITY OF CINCINNATI, HAMILTON COUNTY, OHIO	F-1133(3)	21
			LUMP								202	LUMP	LUMP	PARCEL 840 WL, WD	1 STORY BRICK & FRAME RESIDENCE WITH FULL BASEMENT, INCLUDING 1 CAR BASEMENT GARAGE, 8115 STILLWELL ROAD, CITY OF CINCINNATI, HAMILTON COUNTY, OHIO	F-1133(1)	22
			LUMP								202	LUMP	LUMP	PARCEL 853 WL	1 STORY METAL COMMERCIAL BUILDING ON CONCRETE SLAB, 597 EAST GALBRAITH RD. SYCAMORE TOWNSHIP, HAMILTON COUNTY, OHIO	F-1133(1)	23
				LUMP							202	LUMP	LUMP	PARCEL 855 WL	1 STORY METAL COMMERCIAL BUILDING ON CONCRETE SLAB, 595 EAST GALBRAITH RD. SYCAMORE TOWNSHIP, HAMILTON COUNTY, OHIO	F-1133(1)	24
				LUMP							202	LUMP	LUMP	PARCEL 856 WL	1 STORY BRICK & CONCRETE BLOCK COMMERCIAL BUILDING, 593 EAST GALBRAITH RD. SYCAMORE TOWNSHIP, HAMILTON COUNTY, OHIO (SEE ASBESTOS NOTE ON PAGE 4/14)	F-1133(1)	25
				LUMP							202	LUMP	LUMP	PARCEL 858 WL	2 STORY FRAME & STUCCO RESIDENCE WITH FULL BASEMENT, DETACHED 2 CAR FRAME & CONCRETE BLOCK GARAGE, 1 STORY FRAME COTTAGE, 1679 EAST GALBRAITH RD. CITY OF READING, HAMILTON COUNTY, OHIO	F-1133(1)	26
				LUMP							202	LUMP	LUMP	PARCEL 859 WL	2 STORY BRICK RESIDENCE WITH FULL BASEMENT, ATTACHED 1 CAR BRICK GARAGE 1659 EAST GALBRAITH RD. CITY OF READING, HAMILTON COUNTY, OHIO	F-1133(1)	27
				LUMP							202	LUMP	LUMP	PARCEL 860 WL	2 STORY BRICK 4 UNIT APARTMENT BUILDING WITH FULL BASEMENT, INCLUDING 4 CAR BASEMENT GARAGE, 1709 EAST GALBRAITH RD. CITY OF READING, HAMILTON COUNTY, OHIO	F-1133(1)	28
				LUMP							202	LUMP	LUMP	PARCEL 863 WL	2 STORY BRICK & STUCCO RESIDENCE WITH FULL BASEMENT, 1 CAR BASEMENT GARAGE, GRILL, 101 BURKHART AVE. CITY OF READING, HAMILTON COUNTY, OHIO	F-1133(1)	29
				LUMP							202	LUMP	LUMP	PARCEL 865 WL	1 STORY FRAME RESIDENCE WITH FULL BASEMENT, DETACHED 2 CAR FRAME GARAGE, 103 BURKHART AVE. CITY OF READING, HAMILTON COUNTY, OHIO	F-1133(1)	30
				LUMP							202	LUMP	LUMP	PARCEL 866 WL	2 STORY BRICK & FRAME RESIDENCE WITH FULL BASEMENT, DETACHED 1 CAR FRAME GARAGE, 111 BURKHART AVE. CITY OF READING, HAMILTON COUNTY, OHIO	F-1133(1)	31
				LUMP							202	LUMP	LUMP	PARCEL 867 WL, WD	2 STORY BRICK RESIDENCE WITH FULL BASEMENT, DETACHED 2 CAR FRAME GARAGE, BRICK BARBEQUE, 115 BURKHART AVE. CITY OF READING, HAMILTON COUNTY, OHIO	F-1133(1)	32
				LUMP							202	LUMP	LUMP	PARCEL 872 WL	2 STORY BRICK & STUCCO RESIDENCE WITH FULL BASEMENT, DETACHED 2 CAR FRAME GARAGE, CISTERN, 181 READING RD. CITY OF READING, HAMILTON COUNTY, OHIO	F-1133(1)	33
					LUMP						202	LUMP	LUMP	PARCEL 876 WL	2 STORY BRICK & FRAME RESIDENCE WITH FULL BASEMENT, 1 STORY CONCRETE BLOCK INDUSTRIAL BUILDING, 2 CONCRETE PUMP ISLANDS, 2-2000 GALLON UNDERGROUND GAS STORAGE TANKS, 1 STORY BRICK INDUSTRIAL BUILDING, 1 CONCRETE BLOCK SHED WITH OVERHEAD PIPE, 8376 READING RD. CITY OF READING, HAMILTON COUNTY, OHIO	F-1133(1)	34
						LUMP					202	LUMP	LUMP	PARCEL 888 WD	2 STORY BRICK RESIDENCE WITH FULL BASEMENT, DETACHED 2 CAR BRICK GARAGE, 2249 EAST GALBRAITH RD. CITY OF READING, HAMILTON COUNTY, OHIO	F-1133(1)	35
						LUMP					202	LUMP	LUMP	PARCEL 894 WL	1 1/2 STORY FRAME RESIDENCE WITH FULL BASEMENT, DETACHED 2 CAR FRAME & CONCRETE BLOCK GARAGE, 2252 EAST GALBRAITH RD. CITY OF READING, HAMILTON COUNTY, OHIO	F-1133(1)	36
						LUMP					202	LUMP	LUMP	PARCEL 897 WL	1 STORY FRAME & ALUMINUM SIDED RESIDENCE WITH FULL BASEMENT, DETACHED 1 CAR FRAME & ALUMINUMSIDED GARAGE, 2284 EAST GALBRAITH RD. CITY OF READING, HAMILTON COUNTY, OHIO	F-1133(1)	37

GENERAL SUMMARY

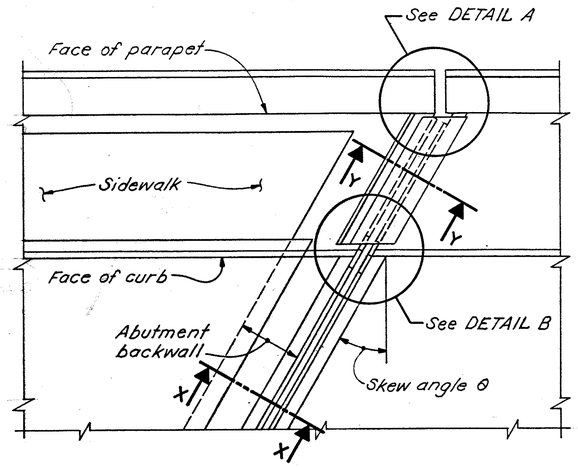
FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

487
787

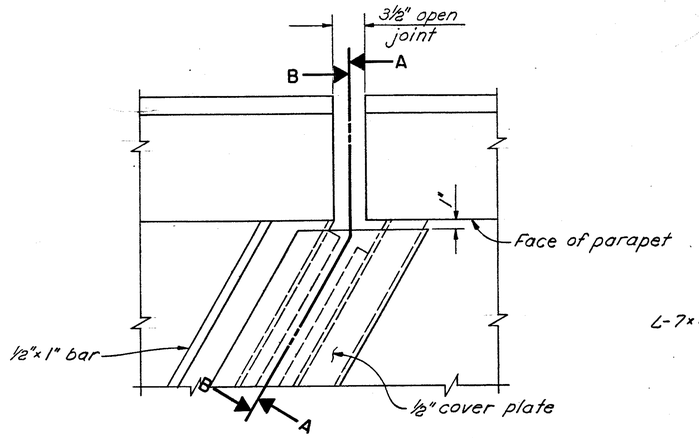
HAMILTON COUNTY
HAM-75/126-9.93/13.00

	5	6	7	8	9	10	11	12	13	14	ITEM	GRAND TOTAL	UNIT	DESCRIPTION		FEDERAL NO.	REF. NO.
									LUMP		202	LUMP	LUMP	PARCEL 510 WL	3 1/2 LEVEL CONTEMPERARY FRAME RESIDENCE WITH ATTACHED 2 CAR CARPORT, 500 GALLON UNDERGROUND FUEL OIL TANK, 635 WEST GALBRAITH RD. SPRINGFIELD TOWNSHIP, HAMILTON COUNTY, OHIO	F-1133(3)	38
								LUMP			202	LUMP	LUMP	PARCEL 576 WL	1 1/2 STORY FRAME RESIDENCE WITH FULL BASEMENT, 65 LAUREL AVE. SPRINGFIELD TOWNSHIP, HAMILTON COUNTY, OHIO	F-1133(3)	39
										LUMP	202	LUMP	LUMP	PARCEL 569 WL	1 STORY BRICK RESIDENCE WITH FULL BASEMENT, BACKWATER VALVE IN MANHOLE, 78 LAUREL AVE., SPRINGFIELD TOWNSHIP, HAMILTON COUNTY, OHIO	F-1133(3)	40
										LUMP	202	LUMP	LUMP	PARCEL 570 WL	1 1/2 STORY BRICK RESIDENCE WITH FULL BASEMENT, DETACHED 1 CAR CONCRETE BLOCK GARAGE, 74 LAUREL AVE. SPRINGFIELD TOWNSHIP, HAMILTON COUNTY, OHIO	F-1133(3)	41
								LUMP			202	LUMP	LUMP	PARCEL 575 WL	1 1/2 STORY ALUMINUM SIDED FRAME RESIDENCE WITH FULL BASEMENT, DETACHED 1 CAR ALUMINUM SIDED FRAME GARAGE, 69 LAUREL AVE. SPRINGFIELD TOWNSHIP, HAMILTON COUNTY, OHIO	F-1133(3)	42
											202	LUMP	LUMP	PARCEL 915 WL-2	TWO METAL SIGN POSTS IN CONCRETE BASES		
											202	LUMP	LUMP	PARCEL 801 WL	TWO 14'×18' LIGHTED BACK TO BACK BILLBOARDS ON SIX METAL POSTS, FOUR 12'×25' LIGHTED BACK TO BACK BILLBOARDS ON TWO METAL POSTS, TWO 14'×48' LIGHTED BACK TO BACK BILLBOARDS ON SIX METAL POSTS, ONE 14'×48' LIGHTED BILLBOARD AND TWO 12'×25' LIGHTED BILLBOARDS ON TWO METAL POSTS.		
											202	LUMP	LUMP	PARCEL 712 WL	THREE SINGLE FACE 12'×25' LIGHTED BILLBOARDS ON 12 METAL A-FRAME POSTS AND ONE SINGLE FACE 6'×12' BILLBOARD ON TWO WOODEN POSTS.		
											202	LUMP	LUMP	PARCEL 611 WL	ONE-1 STORY BRICK AND CONCRETE BLOCK OFFICE BUILDING, CONCRETE BLOCK SERVICE STATION BUILDING, ONE-8,000 GALLON UNDERGROUND TANK WITH VENT PIPE, ONE-6,000 GALLON UNDERGROUND TANK WITH VENT PIPE, AND ONE-2,000 GALLON UNDERGROUND TANK WITH VENT PIPE.		

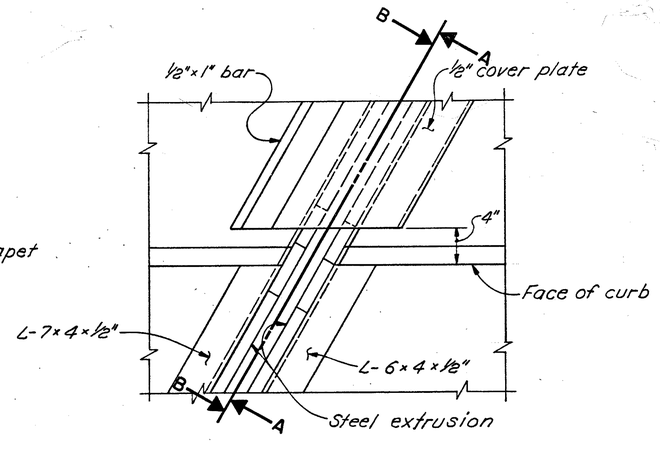
NOTE: IT HAS BEEN DETERMINED THAT ASBESTOS EXISTS IN SUFFICIENT QUANTITY IN REFERENCE #25 TO WARRANT THE IMPLEMENTATION OF THE REGULATIONS OF 42 USC 7401-7626 AND 40 CFR 61. THE CONTRACTOR SHALL REMOVE & DISPOSE OF ALL ASBESTOS AS PROVIDED THEREIN.



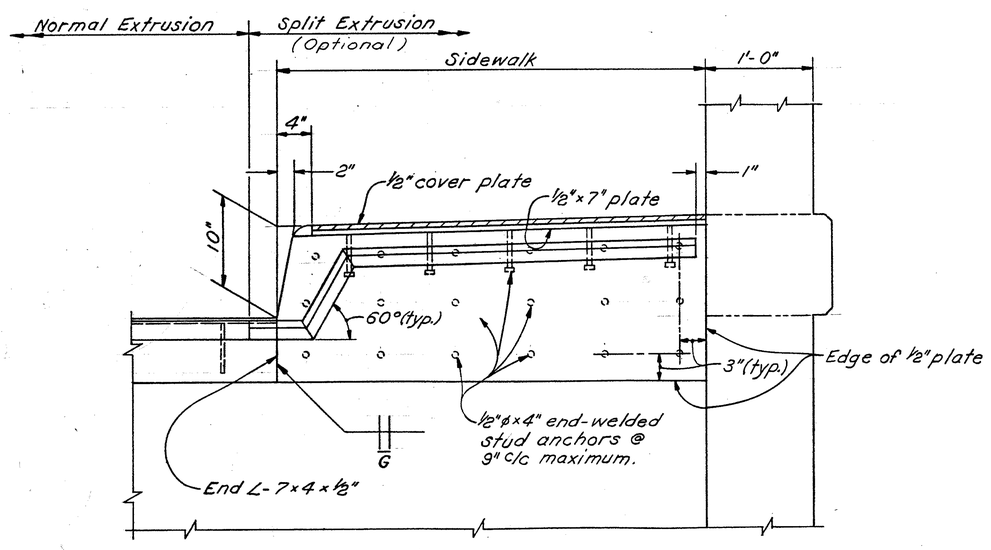
PART PLAN AT ABUTMENT
FOR BRIDGES WITH SIDEWALK PARAPET RAILING



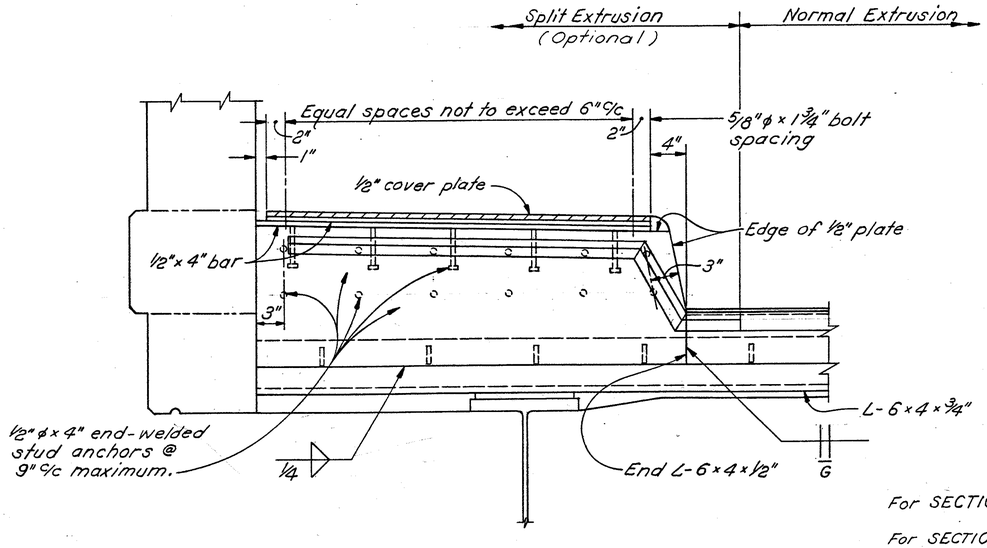
DETAIL A



DETAIL B



SECTION A-A ⚠



SECTION B-B ⚠

For SECTION X-X see sheet 2/4.

For SECTION Y-Y see sheet 3/4.

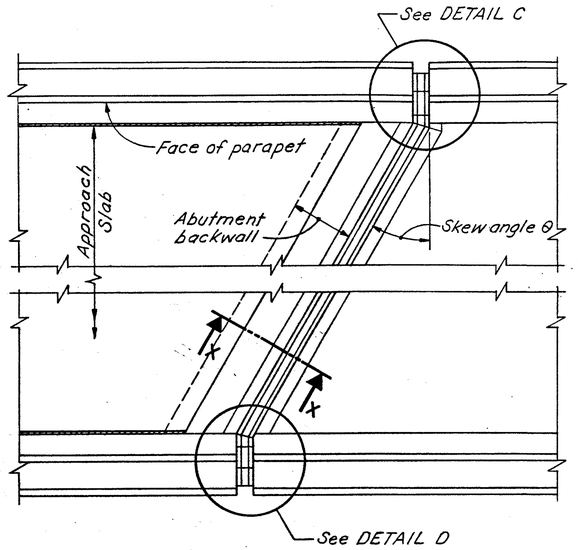
⚠ SIDEWALK AND PARAPET JOINT ARMOR ANCHORS:
In lieu of the ½"ϕ end-welded studs shown, alternate methods of anchoring the joint armor may be used, subject to approval by the Director.

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
BUREAU OF BRIDGES AND STRUCTURAL DESIGN

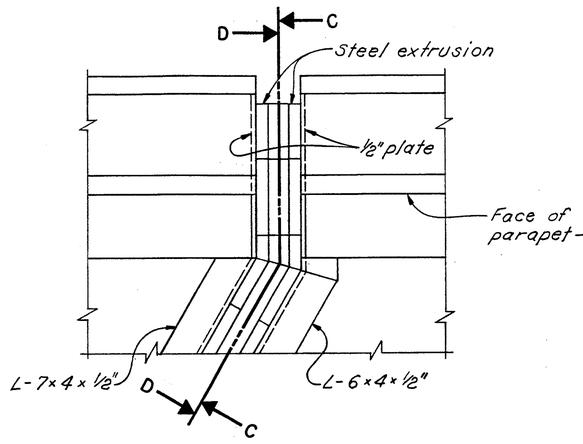
1/4

STRIP SEAL DETAILS

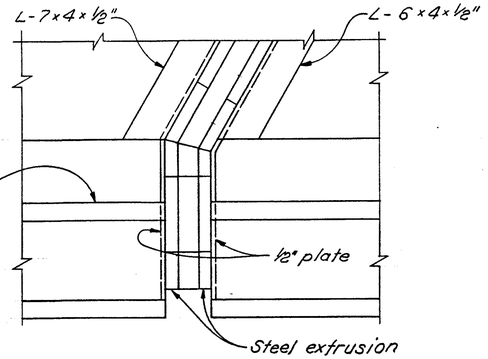
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED



PLAN AT ABUTMENT
FOR BRIDGES WITH DEFLECTOR PARAPET RAILING



DETAIL C

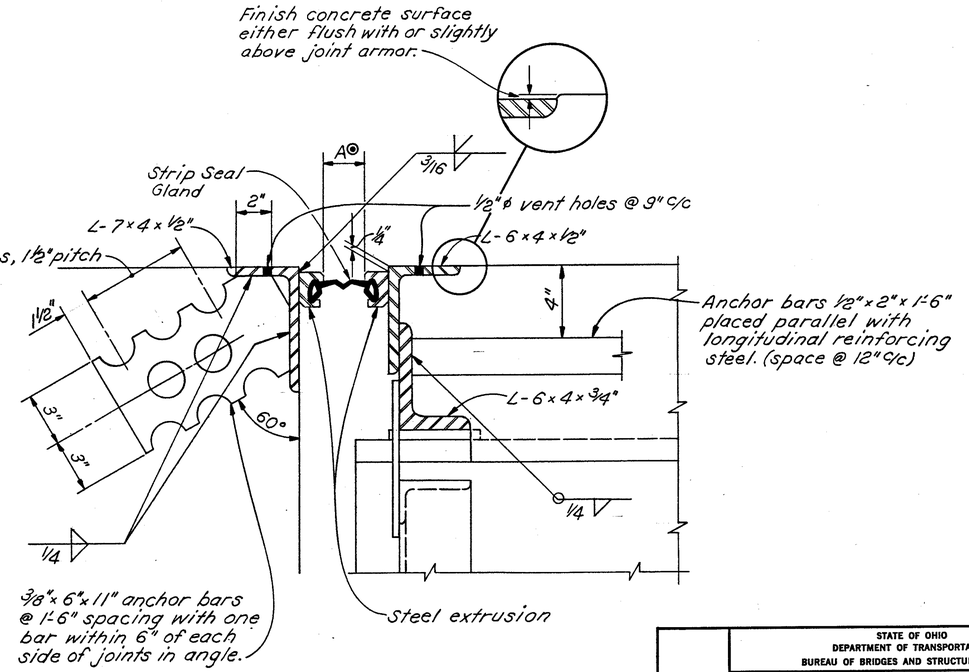


DETAIL D

SECTION C-C ⚠

SECTION D-D ⚠

⚠-See SIDEWALK AND PARAPET JOINT ARMOR ANCHORS note on sheet 1 4.



SECTION X-X

⊙-Dimension "A" shall be determined from TABLE "B", sheet 4 4.

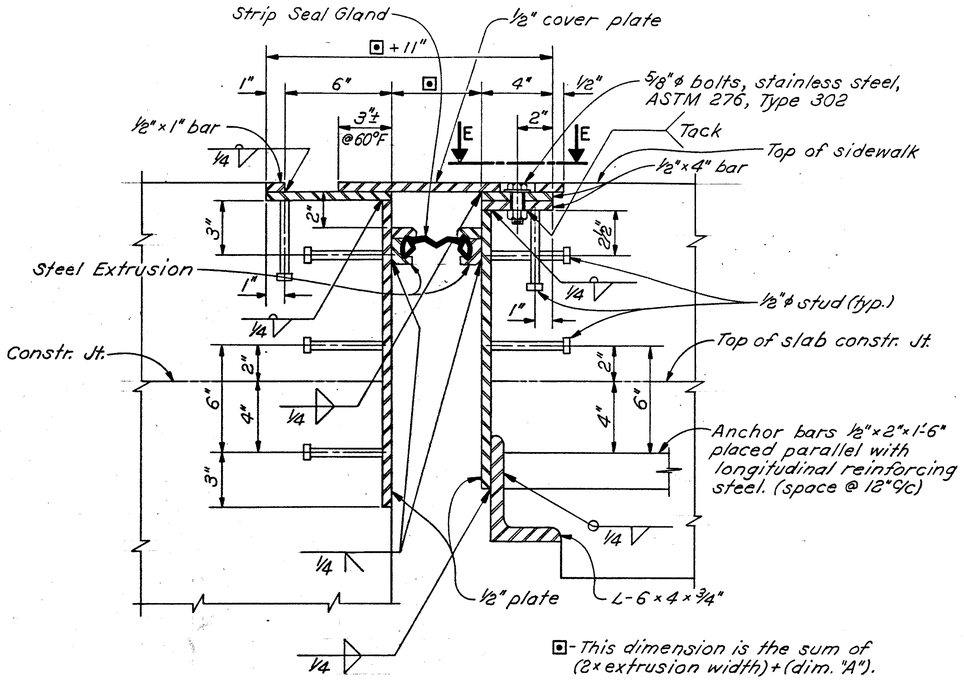
CP- Complete Penetration weld

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
BUREAU OF BRIDGES AND STRUCTURAL DESIGN

2 4

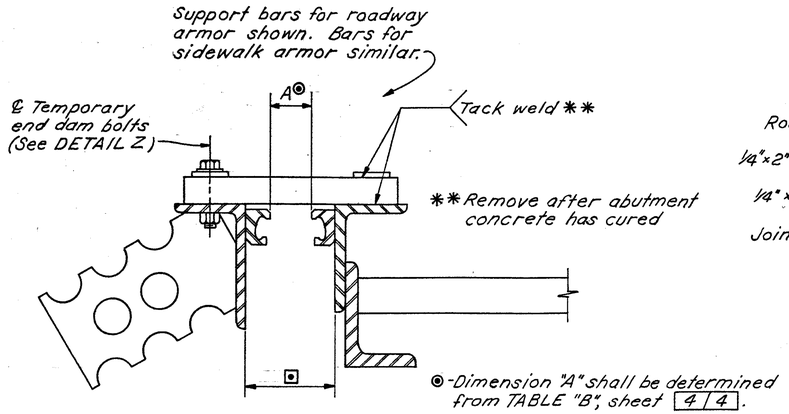
STRIP SEAL DETAILS

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED

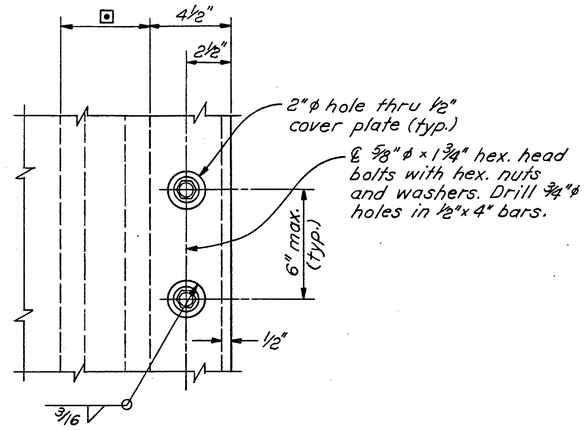


SECTION Y-Y ⚠

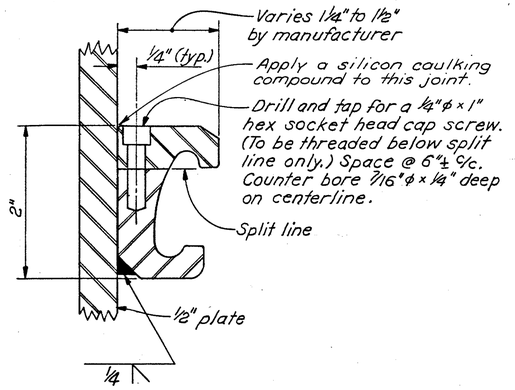
⚠-See SIDEWALK AND PARAPET JOINT ARMOR ANCHORS note on sheet 1 / 4.



JOINT ARMOR ADJUSTMENT DETAIL



VIEW E-E



SPLIT EXTRUSION DETAIL

NORMAL EXTRUSION SIMILAR

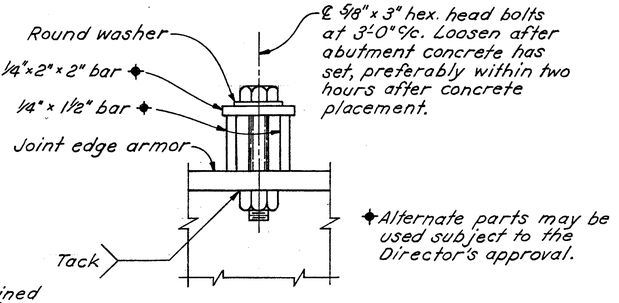
The split extrusion shown above is a normal extrusion which has been modified as indicated. When joint upturns are 45° or more split extrusions may be used.

Extrusions shall be welded at all miters (below the line where split).



STRIP SEAL GLAND TABLE		
SEAL MOVEMENT RATING	MANUFACTURER & DESIGNATION *	
	WATSON BOWMAN AND ACME CORP.	D.S. BROWN
3"	S-300	300
4"	S-400	400
5"	S-500	500

* OR AN APPROVED ALTERNATE



DETAIL Z

TEMPORARY SUPPORT BARS

For location of SECTION Y-Y see sheet 1 / 4.

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
BUREAU OF BRIDGES AND STRUCTURAL DESIGN

3 / 4

STRIP SEAL DETAILS

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED

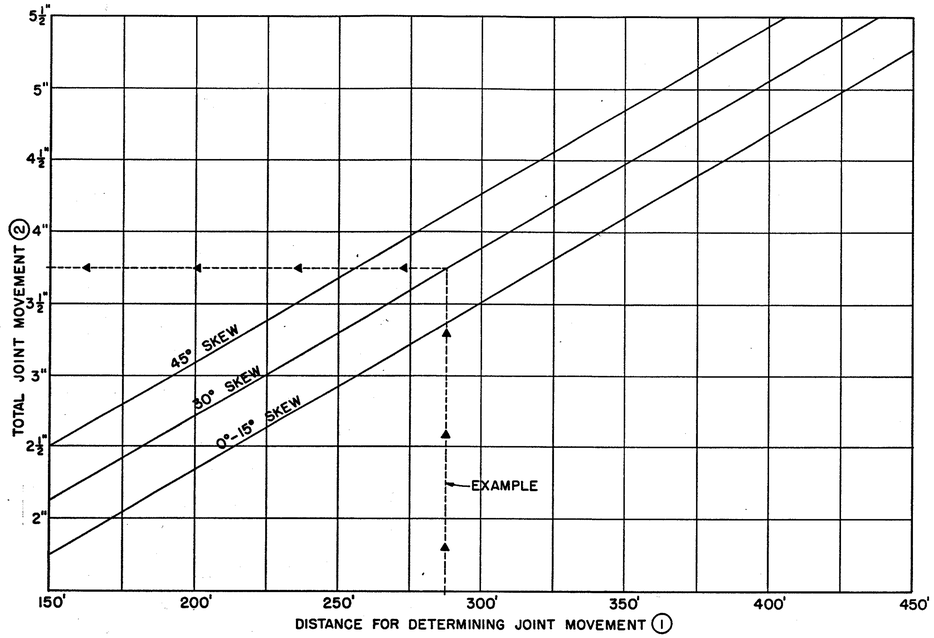


TABLE A

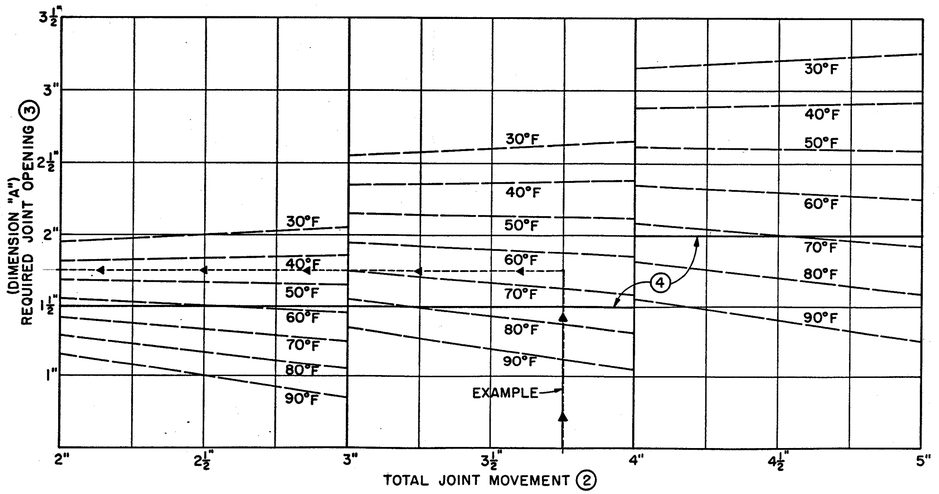


TABLE B

LEGEND

① - This distance for expansion joints having skew angles of 15° or less is the actual distance to the neutral point of superstructure along centerline of roadway. This distance for expansion joints having skew angles over 15° but not greater than 45° is arrived at by multiplying the above defined distance along centerline of roadway by the cosine of the expansion joint skew angle.

② - If this allowable movement exceeds five (5) inches this Standard Drawing shall not be used.

③ - This is the joint opening (dimension "A") required, at the time of abutment backwall concrete placement, based on the day's anticipated peak ambient temperature.

④ - Minimum joint opening (dimension "A") at time of seal gland installation shall not be less than 1½" for seals with movement ratings not exceeding 4", and shall not be less than 2" for seals with a movement rating of 5."

CONSTRUCTION PROCEDURE

1. Abutment backwall concrete shall not be placed until after superstructure concrete in the span adjacent to the abutment has been placed.
2. Place backwall concrete during stable or rising ambient temperatures and conclude placement at or immediately before the day's peak ambient temperature.
3. Not more than four hours prior to the day's peak ambient temperature, set abutment expansion joint width to dimension "A" which shall be determined from TABLE "B".
4. Loosen temporary joint armor bolts after initial set of concrete, preferably not later than two hours after conclusion of concrete placement.

STRIP SEAL NOTES

MATERIALS: Structural steel for the Strip Seal expansion-contraction joint shall conform to ASTM A588 or A36 with System A field paint on exposed steel surfaces. Field paint shall consist of one prime coat and one finish coat.

The preformed strip seal shall be extruded polychoroprene material meeting the requirements of ASTM D2628. Due to the configurations of the Strip Seal, the recovery tests are not applicable. Physical Properties shall meet the requirements specified in Table "C" this sheet.

Lubricant-adhesive used to install the preformed strip seals shall be a polyurethane and hydrocarbon solvent mixture as specified by the seal manufacturer (unless oterwise approved by the Director). It shall have suitable consistency at the temperature at which the seals are installed and shall be compatible with the seals and the steel extrusions.

PREPARATIONS FOR INSTALLATION: To avoid the subsequent contamination of prepared surfaces, all surfaces of elastomeric strip seals shall be cleaned with methyl ethyl ketone (MEK), toluene (T) or other approved solvent using clean disposable cloths.

The bonding surfaces of the steel extrusions (the interior of the anchor grooves) shall be prepared to Grade Sa 3, ASTM D2200. Preparation shall be accomplished not more than 24 hours prior to adhesive bonding.

INSTALLATION: Imediately prior to application of lubricant-adhesive, bonding surfaces shall be clean, dry and warmer than 45°F, and they shall be maintained at or above this temperature until the adhesive has cured. Lubricant-adhesive shall be applied liberally to both steel and elastomeric bonding surfaces using a stiff brush if necessary to achieve a complete and relatively uniform coating. Then the bulbed edges of the elastomeric seal shall be inserted into the anchor grooves. After installation, excess lubricant-adhesive shall be removed from the exposed seal surfaces.

MEASUREMENT for pay purposes shall be based on the linear foot of sealed joint system, measured horizontally along the joint centerlines and between the outer limits of the fabricated joint, furnished and placed, including all labor, materials and equipment necessary to complete the joint in place, which includes the joint armor, anchoring devices, temporary supports and end crossframe gusset plates. Payment shall be made per linear feet for Item 516 "Structural Expansion Joints, including Elastomeric Strip Seals."

TABLE C
(PHYSICAL PROPERTIES OF SEAL ELEMENT)

PROPERTY	REQUIREMENT	ASTM METHOD
TENSILE STRENGTH, MIN. P.S.I.	2000	D412
ELONGATION AT BREAK, MIN. PERCENT	250	D412
HARDNESS, TYPE A DUROMETER	50 MIN. 65 MAX.	D2240 (MODIFIED)
OVEN AGING, 70 HR. AT 212° F TENSILE STRENGTH, LOSS, MAX. ELONGATION, LOSS, MAX. HARDNESS, TYPE A DUROMETER (POINTS CHANGE)	 20 PERCENT 20 PERCENT 0 TO +10	D573
OZONE RESISTANCE 20 PERCENT STRAIN, 300 PPHM, IN AIR AT 104° F (WIPED WITH TOLUENE TO REMOVE SURFACE CONTAMINATION)	NO CRACKS	D1149

EXAMPLE:

GIVEN - Distance to neutral point of superstructure along centerline of roadway is 332 ft.; skew angle of expansion joint is 30°; anticipated ambient temperature at time of joint installation is 65°F.

FIND - Required strip seal gland size and joint opening (Dimension "A") at time of joint installation.

SOLUTION - (a) Enter TABLE A at 1) with 332 ft. x cosine of 30° = 287.5 ft. and find that total joint movement is 3.75 inches. This requires a strip seal gland with a movement rating of 4 inches.

(b) Enter TABLE B at 2) with a total joint movement of 3.75 inches and find required joint opening at 65°F is 1.75 inches.

NOTE: Step (b) required only at time of construction.

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
BUREAU OF BRIDGES AND STRUCTURAL DESIGN

4 / 4

STRIP SEAL DETAILS

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED

162 Yellow 489-5278S

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	-	

439 TOT

HAM-75-9.93
HAM-126-13.00

REF. P.O.C. STA. 504+00 W.B., B.C. ℄ N, 1.70', W.B. ℄, 503 B.C. ℄ N, 504, B & O. Railroad Southbound Main, X-Notch on Rail

REF. P.I. STA. 504+15.12 W.B., B.C. ℄ N, 4.16', B.C. ℄ N, 4.12', 5.46', B & O. Railroad Southbound Main, B.C. ℄ N.

REF. C.S. STA. 506+39.86 W.B., 19.36', Notch in Conc. by Sign Post, 22.08', 42.52', B.C. ℄ N.

B.M. Top Nut Arrow points to on Flange of F.H. 264' Lt. Sta. 503+00 Elev. 531.71

12" San. Sewer; 2 Sty Shingle # 20; Conc.; Asphalt; 4" Gas Line; Exist. R.R. R/W; 2:1; Exist 12" San. Sewer; 6" Water Line; 4" San. Sewer; Exist. 12" Water Line; 24" Conduit; Exist. 4" Gas Line; Exist 6" Water Line; Exist 12" San. Sewer; N 37°21'06"E.; N 37°18'32"E.; 540; 530; 503; 504; 505; 506; 507; 508; 49; 50; 51; 52; 53; 54; 55; 56; 57; 58; 59; 60; 61; 62; 63; 64; 65; 66; 67; 68; 69; 70; 71; 72; 73; 74; 75; 76; 77; 78; 79; 80; 81; 82; 83; 84; 85; 86; 87; 88;

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

490
181

HAM - 75 - 9.93
HAM - 126 - 13.00

REF. P.O.C. STA. 504+00 E.B.
E.B. ℄ 503
B & O Railroad Northbound Main
2.70'
B.C. & N.
Hub
3.75'
B.C. & N.

REF. P.I. STA. 504+45.16 E.B.
6.63'
B.C. & N.
3.74'
Hub
8.12'
B.C. & N.
Asphalt Parking Lot.

REF. C.S. STA. 506+69.90 E.B.
C.89°
38.45'
x-Notch in Conc. By Sign Post.
60.79'
Hub

B.M. Top Nut Arrow Points to on Flange of F.H. 264' Lt. Sta. 503+00 Elev. 531.71

2 Sty. Shingle #20
Conc.
℄ P. San. Sewer
Asphalt
24" Conduit
R.R. R/W
Conc.
6" Water Line
Sta. 503+25.64
Noise Barrier
℄ B & O R.R. Southbound Track
℄ B & O R.R. Northbound Track
18" San. Sewer
R.R. R/W
Asphalt
℄ S.R. 4 (Vine Street)
R/W
1 Sty. Conc. Blk. Laundry
Sign
Conc.
48" San. Sewer (Abandoned)
15" Type F
15" Type B
Asphalt
Transmission Tower
12" Type C
CB+6
2:1
Actual 18.00'
Reqd. 18.00'
82°02'44" To Local Tangent
105°00'24" To Local Tangent
P.O.C. Sta. 506+54.18 ℄ E.B.
Sta. 49+47.09 S.R. 4 (Vine St)
Sta. 506+69.90 ℄ S.R. 4
83°58'17" To Local Tangent
P.O.C. Sta. 504+04.20 ℄ E.B.
Sta. 540+14.90 ℄ R.R.
P.O.C. Sta. 504+17.91 ℄ E.B.
Sta. 540+16.61 ℄ R.R.
1 Sty. Metal Serv. Sta.
1 Sty. Conc. Blk. Gar.
104°50'32" To Local Tangent
P.O.S. Sta. 507+56.68
Begin Approach Slab
60" Conduit (To be removed)
Light Pole Pilaster (Typ.)
N. 37°21'06" E.
N. 37°18'32" E.
N. 5°28'54" E.
℄ Conc. Walk
2:1
Asphalt

ESTIMATED AVG. PAY LENGTH FOR PILES
All Piles Are 12" Cast In Place Except 14" @ Pier 1
Rear Abut - 65'
Pier 1 - 70'
Piers 2, 3 & 4 - 60'
Pier 5 - 60'
Fwd. Abut. - 65'

PLAN

℄ Eastbound
5'-10" | 24'-0" | 9'-10"
Profile Grade
1" / Ft. Max. & Varies
5'-0" Rounding
1½" / Ft.
4 Spaces @ 9'-6½" = 38'-0½"

Sta. 507 + 81.68
End Approach Slab
PROPOSED STRUCTURE

TRAIN TRAFFIC PER DAY

1 Passenger @ 40 M.P.H.
14 Freight @ 40 M.P.H.
10 Switch Runs @ 30 M.P.H.

TRAFFIC DATA

		EB
ADT	2006	23582
ADTT	2006	2594

P.O.C. Sta. 503+25.64
Bridge Limits 431.04'
Seal concrete surfaces of parapets See Proposal Note # Sht. 29 33
P.O.S. Sta. 507+56.68
Begin Approach Slab

Elevations shown are at profile grade.

El. 574.48 | El. 574.71 | El. 574.89 | El. 575.04 | El. 575.15 | El. 575.22 | El. 575.26 | El. 575.26 | El. 575.22 | El. 575.14 | El. 575.03 | El. 574.88 | El. 574.69 | El. 574.47 | El. 574.20 | El. 573.84 | El. 573.46 | El. 573.00 | El. 572.52 | El. 572.00 | El. 571.41

570 / 560 / 550 / 540 / 530 / 520

El. 568.5 ± — Exp.
El. 562.22
601.05 Crushed Aggregate Slope Protection
El. 535.83
24" Conduit
Ex. 12" San.
18.00' Actual / 18.00' Reqd.
25'-0"
Exp.
El. 529.27
Exp.
El. 529.49
Fix.
Seal conc. surfaces of Pier Columns above grade. See Proposal Note.
El. 529.09
Exp.
* south Column. Actual 10.24' Reqd. 10.00
Ex. 12" Water
Ex. 6" Gas
Ex. 12" Gas
El. 528.99
Exp.
Ex. 60" Conduit (To be removed)
Exp.
El. 566.3 ±
El. 560.01
601.06 Concrete Slope Protection To Toe of Slope

503 | +50 | 504 | +50 | 505 | +50 | 506 | +50 | 507 | +50 | 508

SECTION ALONG BASELINE OF EASTBOUND LANES

* Pier is 0°04'49" out of Parallel with Vine Street.

Note: Earthwork Limits shown are approximate. Actual slopes shall conform to plan cross-section.

PROPOSED EASTBOUND STRUCTURE

TYPE: Continuous Steel Beams with Reinforced Concrete Deck and Substructure.
SPANS: 57'-0", 65'-6", 79'-0", 79'-0", 79'-0, 67'-0" on Curve and Spiral.
ROADWAY: 39'-8" f/f of Parapet
LOADING: HS-20-44 Case (1) & Alternate Military
SKEW: VARIES
WEARING SURFACE: 1½" Latex Modified Concrete Overlay
APPROACH SLAB: AS-1-87 (25' Long)
ALIGNMENT: 4°00'00" Curve Left and Spiral.
S 'PERELEVATION: 1" / ft. Max. & Varies

HARRY BALKE ENGINEERS
990 NASSAU STREET
CINCINNATI, OHIO 45206

2 / 33
REVISED 6-86

SITE PLAN

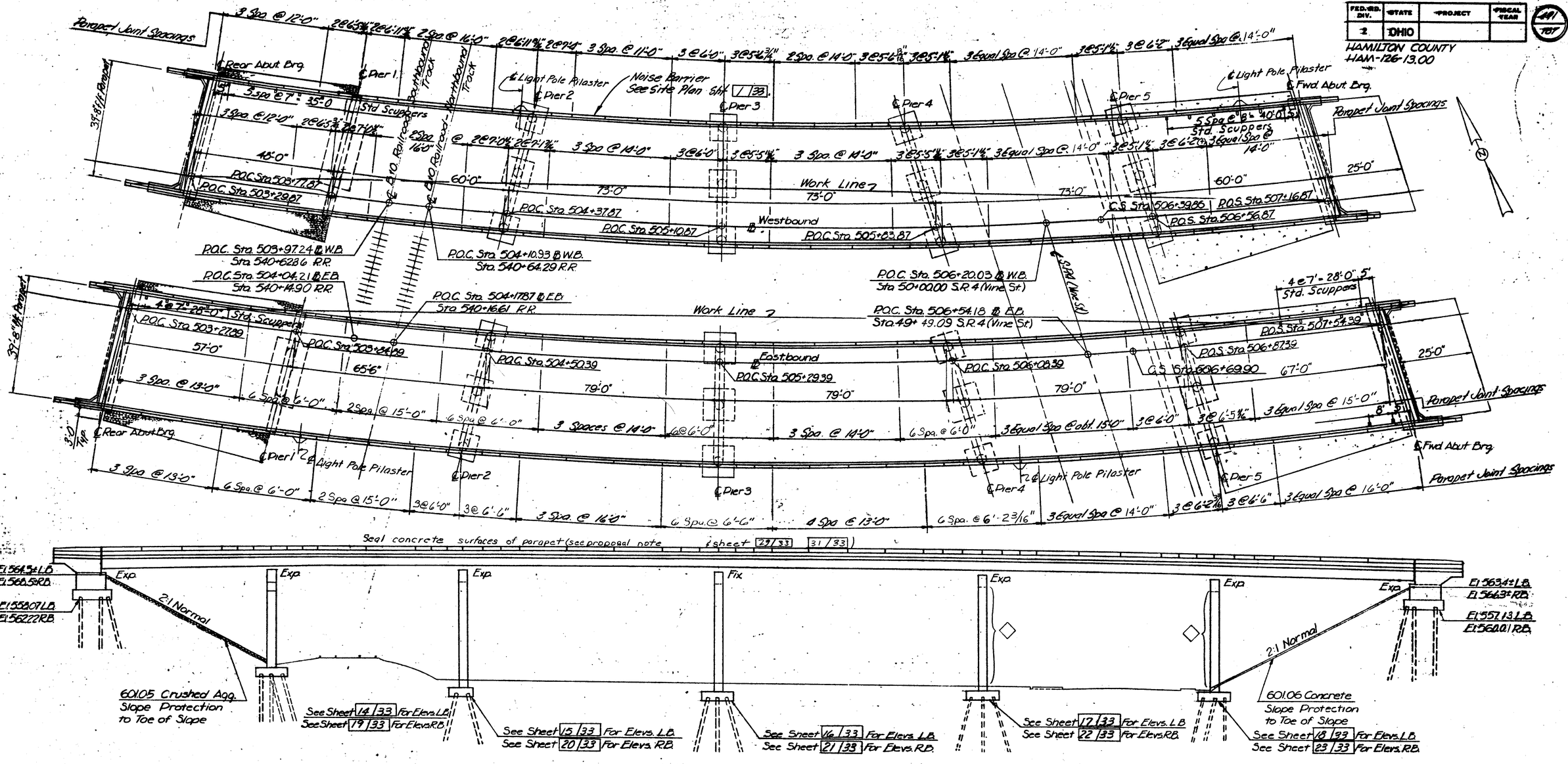
BRIDGE NO. HAM-126-1303 RT.
HAM-126 OVER BALTIMORE & OHIO R.R. AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C. STA. 503+25.64 TO P.O.S. STA. 507+56.68

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
Aerial	H.E.W.	P.R.B.	H.E.W.	R.F.	R.K.S.T.

FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

HAMILTON COUNTY
HAM-126-13.00

441
787



Elevation

◇ Seal Concrete Surfaces of Pier Columns (Piers 4 and 5) above grade. See Proposal Note.

Note.
L.B. - Left Bridge
R.B. - Right Bridge

HARRY BALKE ENGINEERS 3/33
990 NASSAU STREET
CINCINNATI, OHIO 45206

GENERAL PLAN & ELEVATION

BRIDGE NO. HAM-126-1303 LT. & RT.
HAM-126 OVER BALTIMORE & OHIO R.R.
AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C. STA. 503+27.61 TO P.O.S. STA. 507+19.17 L.B.
P.O.C. STA. 503+25.64 TO P.O.S. STA. 507+56.68 R.B.

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED-DATE	REVISED
RAB	BLZ		CAS	R.K. 3-7-11	6-86

FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

492
707

HAMILTON COUNTY
HAM-126-13.00

ITEM	TOTAL	UNIT	DESCRIPTION	LEFT BRIDGE SUPER STRUCT.	LEFT BRIDGE ABUTMENTS	LEFT BRIDGE PIER 1	LEFT BRIDGE PIER 2	LEFT BRIDGE PIER 3	LEFT BRIDGE PIER 4	LEFT BRIDGE PIER 5	LEFT BRIDGE GEN'L	RIGHT BRIDGE SUPER STRUCT.	RIGHT BRIDGE ABUTMENTS	RIGHT BRIDGE PIER 1	RIGHT BRIDGE PIER 2	RIGHT BRIDGE PIER 3	RIGHT BRIDGE PIER 4	RIGHT BRIDGE PIER 5	RIGHT BRIDGE GEN'L
503	Lump Sum	Lump Sum	Cofferdams, Cribs, and Sheeting								Lump Sum								Lump Sum
503	1186	Cu. Yds.	Unclassified Excavation		272	81	47	37	59	66			264	85	56	64	78	77	
506	Lump Sum	Lump Sum	Static Load Test as per plan			Lump					Lump Sum			Lump					Lump Sum
505	Lump Sum	Lump Sum	Pile Driving Equipment Mobilization								Lump Sum								
507	13,760	Lin. Ft.	12" Cast in Place Reinforced Concrete Piles (as per plan)		1690	—	1080	1200	1200	1200			1690	—	1200	1500	1500	1500	
507	1680	Lin. Ft.	14" Cast in Place Reinforced Concrete Piles (as per plan)			840								840					
509	259,795	Lbs.	Reinforcing Steel, Grade 60.	-	11576	16684	21890	23177	23587	23392		-	11473	18008	27238	28474	29731	24565	
511	1045	Cu. Yds.	Class S Concrete Superstructures	494								551							
511	497	Cu. Yds.	Class C Concrete Piers above Footing			66	42	42	44	44				73	47	46	47	46	
511	231	Cu. Yds.	Class C Concrete Abutments above Footing		119								112						
511	432	Cu. Yds.	Class C Concrete Footings		76	26	27	27	27	27			74	29	27	30	31	31	
511 *	1045	Cu. Yds.	Class S Concrete Superstructure using shrinkage Compensating Cement 701.08	494								551							
513	1003300	Lbs.	Structural Steel (AISC Category I) (See proposal note.)	427000								576300							
514	1003300	Lbs.	Field Painting of New Structural Steel (System A).	427000								576300							
516	168	Lin. Ft.	Structural Expansion Joints Incl. Elastomeric Strip Seals	84								84							
518	123	Cu. Yds.	Porous Backfill		64								59						
518	26	Each	Scuppers including Supports	12								14							
518	140	Lin. Ft.	6" Perforated Helical C.S.P. 707.01		70								70						
518	182	Lin. Ft.	6" Non-Perforated Helical C.S.P. 707.01		86								96						
523	12	Hrs.	Dynamic Load Test								6								6
601	1,103	Sq. Yds.	Concrete Slope Protection		566								537						
601	686	Sq. Yds.	Crushed Aggregate Slope Protection		319								368						
Special			Noise barrier (Quantities are included in roadway plans, See Roadway Quantities)																
824	331584	Lbs.	Epoxy Coated Reinforcing Steel Grade 60.	153637	3392							171497	3058						
845	3480	Sq. Yds.	Latex Modified Concrete overlay (1¼" thick, See Pro. Note)	1622								1858							
Special	2208	Sq. Yds.	Sealing of Concrete Surfaces (See Proposal Note)	872	66				91	83		848	52				103	93	

* Alternate Bid Item

Quantities Revised by BJS, 12-85
Revisions Checked by SJA, 3-86

GENERAL NOTES

REFERENCE SHALL BE MADE TO THE FOLLOWING:

STANDARD DRAWINGS: AS-1-81 DATED 11-27-81
BR-1 DATED 5-29-79
SD-1-69 DATED 6-12-69
RB-1-55 DATED 2-2-59

SUPPLEMENTAL SPECIFICATIONS:

845 DATED 2-25-86 836 DATED 11-12-85
953 DATED 8-21-80 824 DATED 10-8-82

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, 1983, INCLUDING THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:

DESIGN LOADING: HS 20-44, CASE I AND THE ALTERNATE MILITARY LOADING.

DESIGN STRESSES:

CONCRETE, CLASS S	COMPRESSIVE STRENGTH: 4500 PSI (SUPERSTRUCTURE)
CONCRETE, CLASS C	UNIT STRESS: 1333 PSI (SUBSTRUCTURE)
REINFORCING STEEL	ASTM A615, A616, A617, GRADE 60, MINIMUM YIELD STRENGTH: 60,000 PSI. (SUPERSTRUCTURE)
STRUCTURAL STEEL	ASTM A36, UNIT STRESS: 20,000 PSI
DECK PROTECTION METHOD	EPOXY COATED REINFORCING STEEL WITH 3" CONCRETE COVER OF WHICH 1-1/4" IS A LATEX MODIFIED CONCRETE OVERLAY.
BOLTS	1" DIAMETER HIGH STRENGTH STEEL BOLTS CONFORMING TO ASTM A325. UNLESS OTHERWISE NOTED.
REINFORCING STEEL	ASTM A615, A616, A617, GRADE 60 UNIT STRESS: 24,000 PSI SPIRAL REINFORCEMENT MAY BE PLAIN BARS, ASTM A82 OR A615 (SUBSTRUCTURE)

(Continued)

PILES:
The design load for the Abutments and Piers 2, 3, 4 & 5 is 40 Tons per Pile.
The design load for the Piles in Pier 1 is 70 Tons per Pile.

UTILITY LINES: All expenses involved in relocating the affected utility lines shall be borne by the owners. The contractor and owners are requested to cooperate by arranging their work in such a manner that inconvenience to either would be held to a minimum.

CONSTRUCTION CLEARANCE: of 20 feet vertically above the top of the railroad rails and 8 feet horizontally from the center of the tracks shall be maintained at all times.

SEALING OF CONCRETE SURFACES: THE FOLLOWING CONCRETE AREAS ARE TO BE SEALED PER PROPOSAL NOTE:
- SUPERSTRUCTURE PARAPETS. SEE SHEETS 29, 31, 33
- PIERS 4 & 5. SEE SHEETS 17, 18, 22, 23, 33
- WINGWALL PARAPETS. SEE SHEETS 6, 8, 10, 12, 33

ITEM 507 - 12" AND 14" DIAMETER CAST-IN-PLACE REINFORCED CONCRETE PILES, AS PER PLAN:

12-INCH PRECAST, PRESTRESSED CONCRETE PILES MAY BE SUBSTITUTED FOR 12-INCH CAST-IN-PLACE REINFORCED CONCRETE PILES SHOWN ON THESE PLANS. DRAWINGS SHOWING DETAILS OF AND SPECIFICATIONS FOR PRESTRESSED CONCRETE PILES ARE AVAILABLE FROM THE DIRECTOR (BUREAU OF BRIDGES).

IF THE PRESTRESSED PILE ATERNATE IS CHOSEN, THE METHOD OF MEASUREMENT AND BASIS OF PAYMENT SHALL BE THE SAME AS FOR CAST-IN-PLACE REINFORCED CONCRETE PILES PER ITEM 507.

PILE DRIVING CONSTRAINTS: PRIOR TO DRIVING PILES AT THE ABUTMENTS, PIER NO. 1 AND PIER NO. 5, THE SPILL-THRU SLOPE EMBANKMENT SHALL BE CONSTRUCTED UP TO THE LEVEL OF THE SUBGRADE FOR A MINIMUM DISTANCE OF 200 FEET BEHIND THE ABUTMENTS. THE EXCAVATION FOR THE FOOTINGS OF THE ABUTMENTS, PIER NO. 1 AND PIER NO. 5, AND INSTALLATION OF THE ABUTMENT PILES SHALL NOT BEGIN UNTIL AFTER THE ABOVE REQUIRED EMBANKMENT HAS BEEN CONSTRUCTED AND THE EMBANKMENT HAS EXPERIENCED A WAITING PERIOD OF 60 DAYS. THE DIRECTOR MAY SHORTEN THE WAITING PERIOD IF THE CONTRACTOR'S FIELD MEASUREMENTS INDICATE THAT 90 PERCENT CONSOLIDATION HAS BEEN ATTAINED.

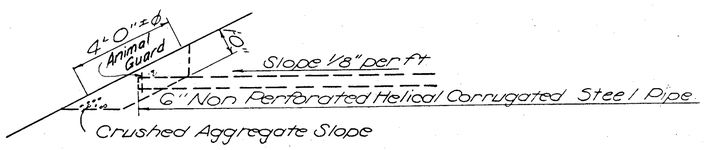
(continued at right)

ITEM 511: CLASS S CONCRETE, SUPERSTRUCTURE, USING SHRINKAGE COMPENSATING CEMENT, 701.08.

THE FOLLOWING RESTRICTIONS SHALL APPLY TO THE SUPERSTRUCTURE CONCRETE USING SHRINKAGE COMPENSATING CEMENT, 701.08.

1. CEMENT SHALL BE EXPANSIVE HYDRAULIC CEMENT, ASTM C845, TYPE K.
2. THE MAXIMUM WATER/CEMENT RATIO GIVEN FOR CLASS S CONCRETE IN 499.03 SHALL BE REVISED FROM 0.44 TO 0.50.
3. MAXIMUM SLUMP AT THE TIME AND PLACE OF CONCRETE PLACEMENT SHALL BE 6 INCHES.
4. CHEMICAL ADMIXTURES, WHEN REQUIRED BY 511.06, SHALL BE LIMITED TO 705.12 TYPE D.
5. MAXIMUM AMBIENT TEMPERATURE AT TIME OF PLACEMENT OF CONCRETE SHALL BE 80° F.
6. MEMBRANE CURING PER SS836 WILL NOT BE PERMITTED FOR ANY CONCRETE PLACED BETWEEN SEPTEMBER 1 AND MARCH 31. SUCH CONCRETE SHALL BE CURED BY METHOD (A) WATER CURING.
7. IF REQUIRED BY THE ENGINEER, THE SURFACE OF THE CONCRETE SHALL BE GIVEN A FOG SPRAY OF WATER. THIS MAY BE REQUIRED PRIOR TO EITHER WATER CURING OR MEMBRANE CURING IF WEATHER CONDITIONS DICTATE. EQUIPMENT SHALL BE ON HAND.

ITEM 506 STATIC LOAD TEST, AS PER PLAN: The Contractor shall conduct a static load test on a initially installed pile located in or near pier No. 1 footing either Left Bridge or Right Bridge prior to installation any piles of these structures. The installed shall not be more than the plan estimated pay length.



METHOD OF TERMINATING 6" C.S.P AT THE SIDE SLOPE

ITEM 507 (CONTINUED)

PILE HAMMER: THE PILE HAMMER USED TO INSTALL THE CAST-IN-PLACE REINFORCED CONCRETE PILES SHALL HAVE A STATE ENERGY RATING OF NOT LESS THAN 18,000 FOOT-POUNDS. THIS REQUIREMENT DOES NOT RELIEVE THE CONTRACTOR FROM 108.05 WHICH STATES THAT THE CONTRACTOR IS TO PROVIDE SUFFICIENT EQUIPMENT FOR PROSECUTING THE REQUIRED WORK. REFER TO "ODOT'S MANUAL OF PROCEDURES FOR STRUCTURES" TO OBTAIN THE STATE'S ENERGY RATING.

"PILE WALL THICKNESS: The responsibility of choosing and providing a satisfactory pile wall thickness for this project shall be borne by the Contractor except that the pile wall thickness shall not be less than 0.22 inches. If a pile wall thickness greater than 0.22 inches is necessary to resist the pile installation driving stress, the contractor shall make this determination and shall furnish a pile with an acceptable wall thickness. Monotube piles are not required to comply with the above specified minimum pile wall thickness. If monotube piles are used, the contractor is responsible for providing a monotube pile with a wall thickness that will conform to all applicable requirements of 507."

HARRY BALKE ENGINEERS 4 / 33
990 NASSAU STREET
CINCINNATI, OHIO 45206

ESTIMATED QUANTITIES

BRIDGE NO. HAM-126-1303 LT. & RT.
HAM-126 OVER BALTIMORE & OHIO R.R. AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C. STA. 503+27.61 TO P.O.S. STA. 507+19.17 L.B.
P.O.C. STA. 503+25.64 TO P.O.S. STA. 507+56.68 R.B.

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
P.E.T.	P.E.T.	J.D.K.	C.R.S.	R.K.	3-71	7-21-86

CALC. BY / DATE	HAM-75-9.93 HAM-126-13.00	OHIO	492A 787
CHKD. BY / DATE		FHWA REGION 5	

GENERAL NOTES
PLAN REVISIONS BY BALKE ENGINEERS

REVISIONS WERE MADE TO SUBSTRUCTURE DRAWINGS TO INCORPORATE THE FOLLOWING:

- o REVISE PARAPETS TO STANDARD SAFETY PARAPET SHAPE.
- o PROVIDE EPOXY-COATED REINFORCEMENT IN CORROSION-PRONE CONCRETE AREAS.
- o SEAL CONCRETE SURFACES OF PIER COLUMNS *AND PARAPETS*.
- o NUMBER PILES AND ADD DETAIL NOTES.
- o REVISE ABUTMENTS TO RECEIVE FULL WIDTH APPROACH SLAB PER AS-1-81.
- o REPLACE SLIDING PLATE EXPANSION JOINTS WITH STRIP SEAL JOINTS
- o LENGTHEN PIER COLUMN TO FOOTING DOWELS AS REQUIRED BY AASHTO.

AT THE REQUEST OF THE OHIO DEPARTMENT OF TRANSPORTATION, ALL SUBSTRUCTURE REINFORCEMENT IS TO BE GRADE 60.

OTHER THAN NOTED REVISIONS, SUBSTRUCTURES ARE THE DESIGN AND DETAILING OF VOGT, IVERS, AND ASSOCIATES, INC.

ANALYSIS OF THE ORIGINAL SUPERSTRUCTURE DESIGN HAS BEEN COMPARED TO THE REVISED SUPERSTRUCTURE DESIGN TO ASSURE THAT LOADINGS HAVE NOT INCREASED ON SUBSTRUCTURES PROVIDED BY VOGT, IVERS AND ASSOCIATES, INC. DESIGN OF THESE SUBSTRUCTURES REMAINS THE RESPONSIBILITY OF VOGT, IVERS, AND ASSOCIATES.

REVISED SUPERSTRUCTURE DESIGN AND DETAILING WAS PREPARED TO CONFORM WITH UPDATED DESIGN STANDARDS.

DESIGN AND DETAILING BY BALKE ENGINEERS WAS PERFORMED IN ACCORDANCE WITH THE AASHTO SPECIFICATIONS FOR HIGHWAY BRIDGES, THIRTEENTH EDITION, 1983, AASHTO INTERIM SPECIFICATIONS FOR BRIDGES 1984, AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

4A/33

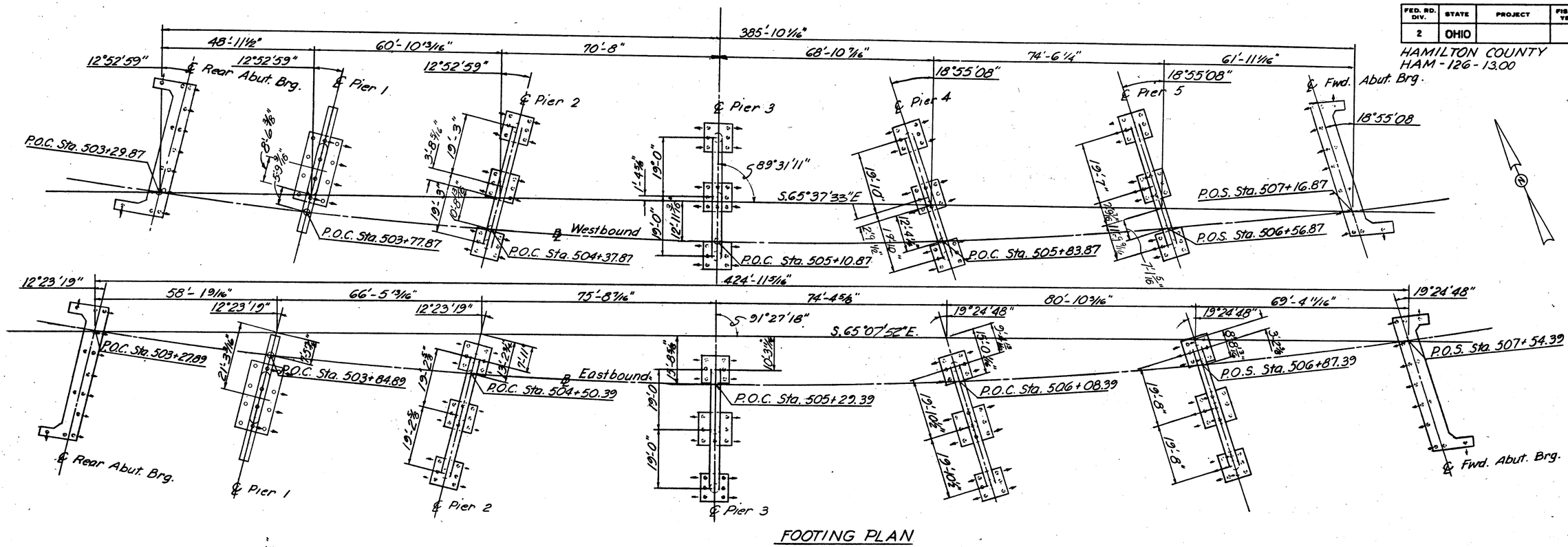
GENERAL NOTES
BRIDGE NO. HAM-126-1303 LT&RT.
HAM-126 OVER BALTIMORE & OHIO R.R.
AND S.R.-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C. STA. 503+27.61 TO P.O.S. STA. 507+19.17 L.B.
P.O.C. STA. 503+25.64 TO P.O.S. STA. 507+56.68 R.B.

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
-	ALH	-	TMB	CRS 3/86	-

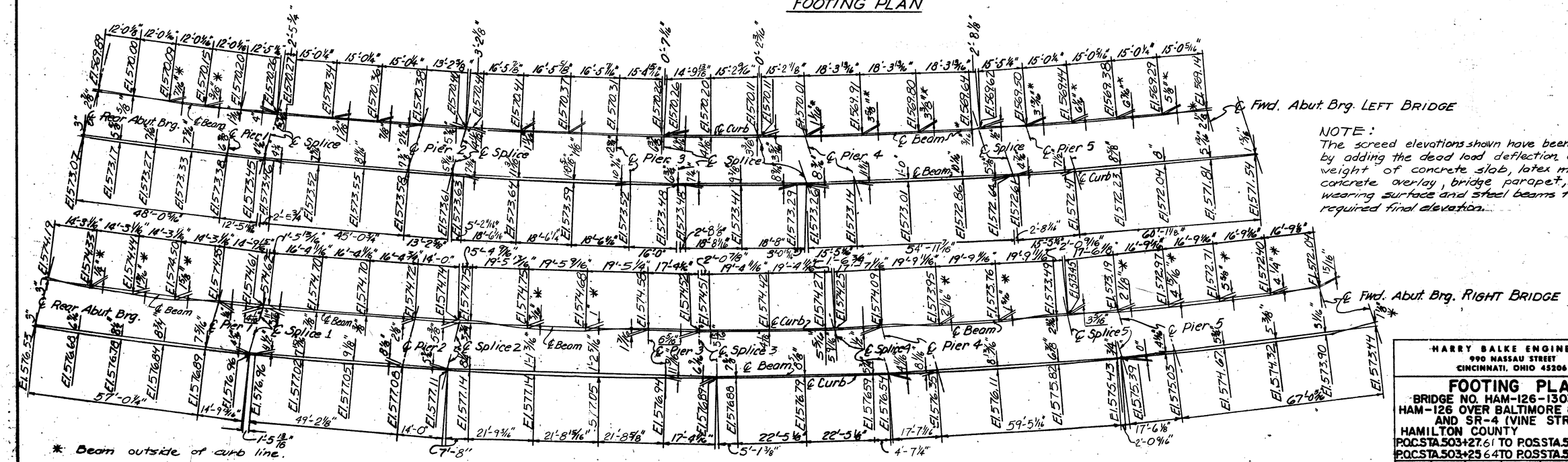
OHIO BLUE PRINT M2833

FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

HAMILTON COUNTY
HAM-126-13.00



FOOTING PLAN



NOTE:
The screed elevations shown have been obtained by adding the dead load deflection due to the weight of concrete slab, latex modified concrete overlay, bridge parapet, future wearing surface and steel beams to the required final elevation.

SCREED ELEVATIONS @ CURB (TOP OF P.C. CONCRETE)

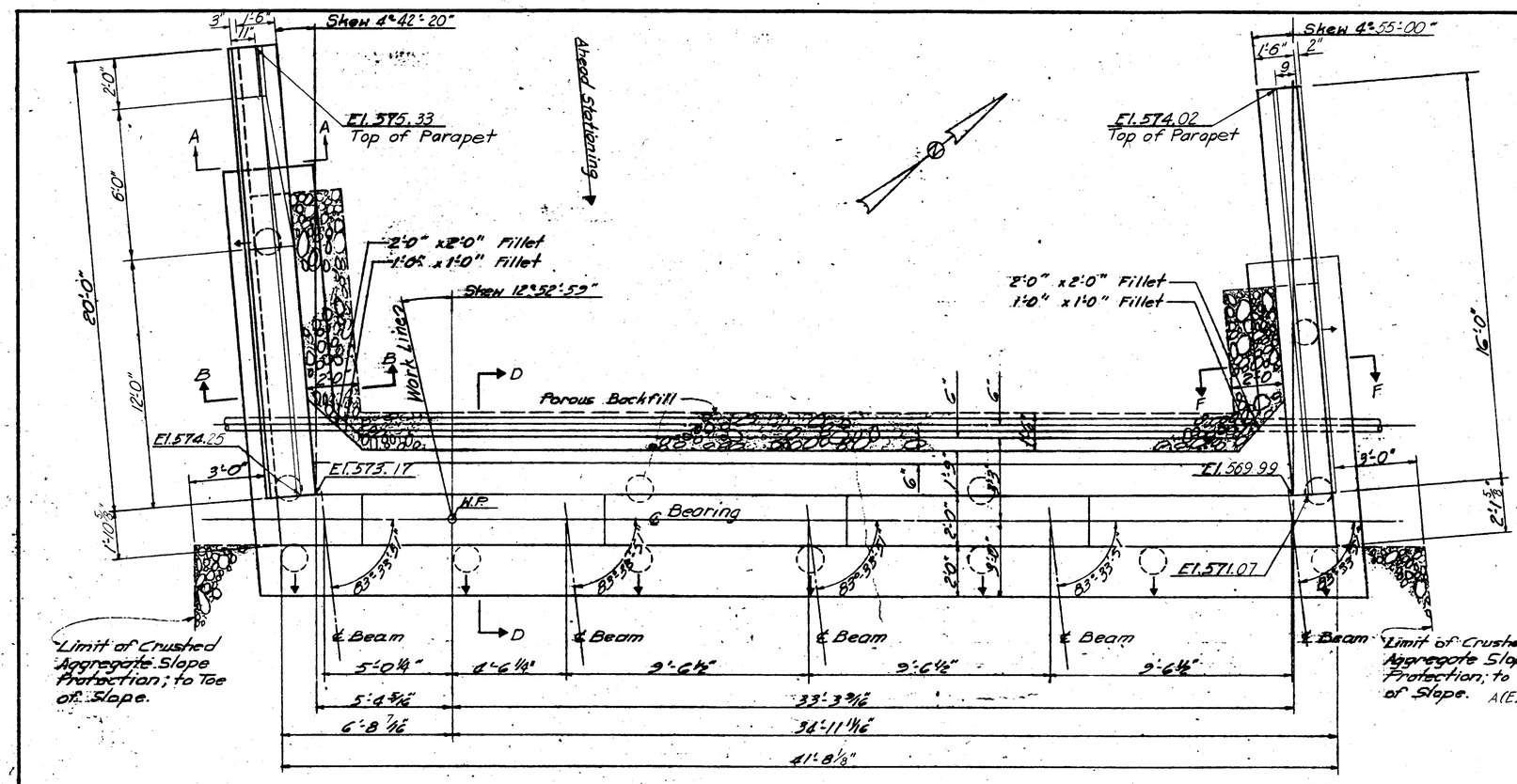
HARRY BALKE ENGINEERS 5/33
990 NASSAU STREET
CINCINNATI, OHIO 45206

FOOTING PLAN
BRIDGE NO. HAM-126-1303 LT. & RT.
HAM-126 OVER BALTIMORE & OHIO R.R. AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C. STA. 503+27.61 TO P.O.S. STA. 507+19.17 L B
P.O.C. STA. 503+25.64 TO P.O.S. STA. 507+56.68 R B

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
PRB	HEW		CRS	R.K. 3-71	6-86

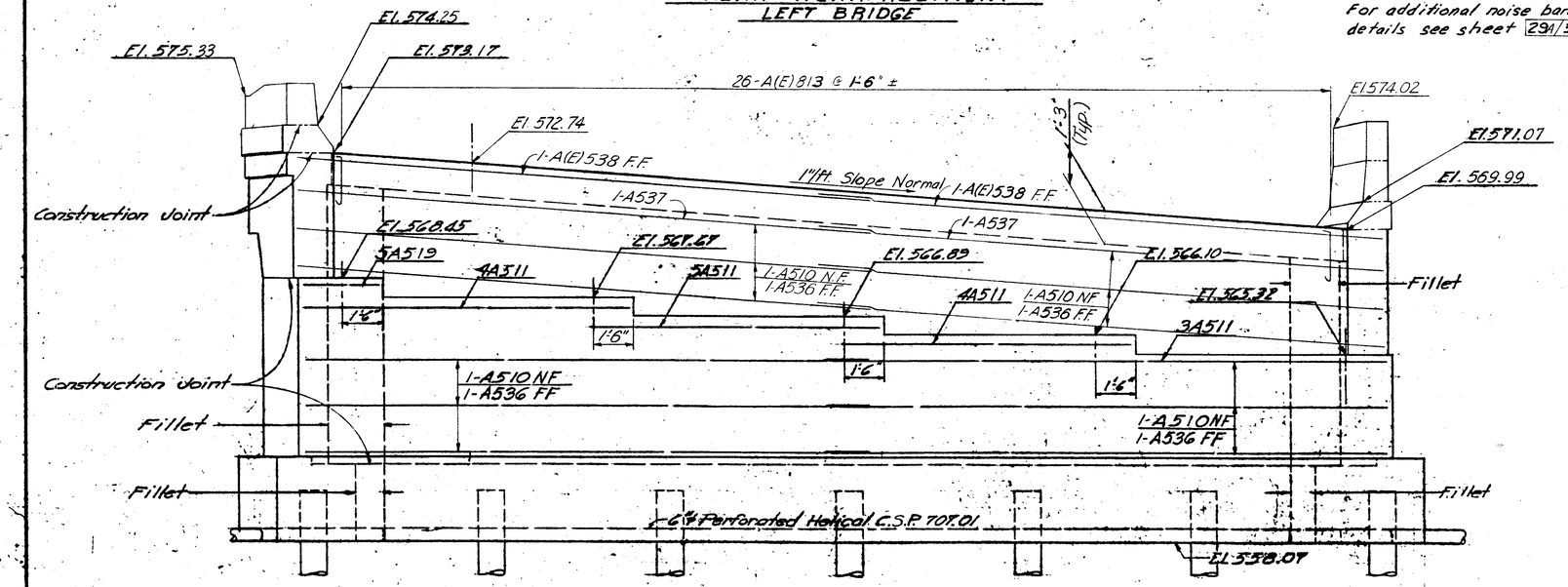
FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

HAMILTON COUNTY
HAM-126-13.00

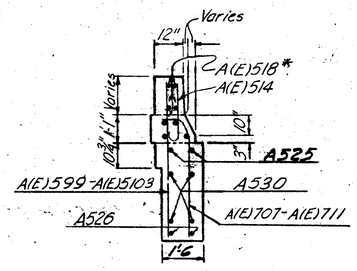


PLAN - REAR ABUTMENT
LEFT BRIDGE

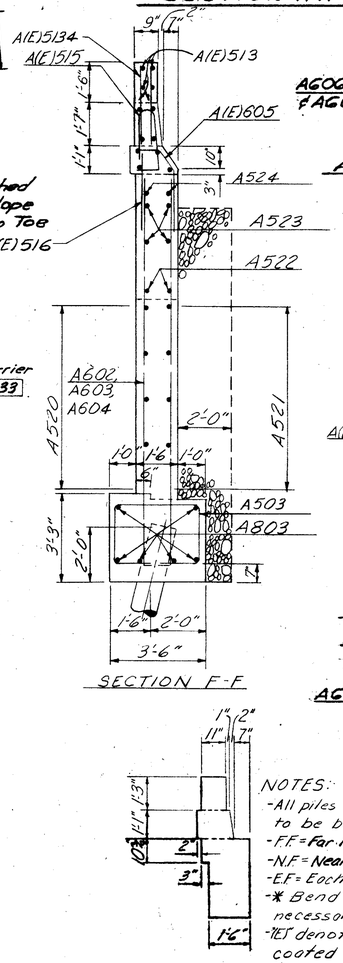
NOTE:
For additional noise barrier details see sheet 29A/33



ELEVATION

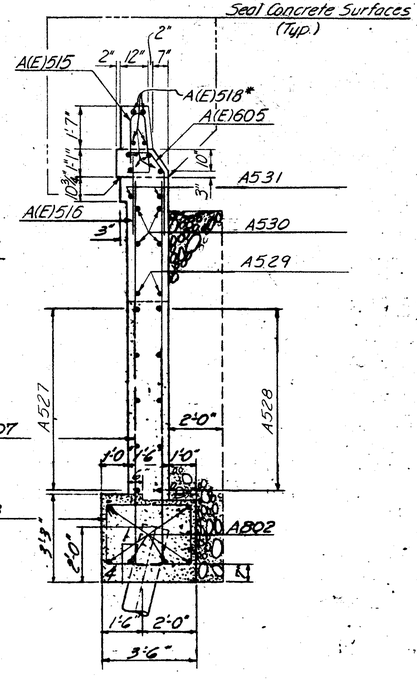


SECTION A-A

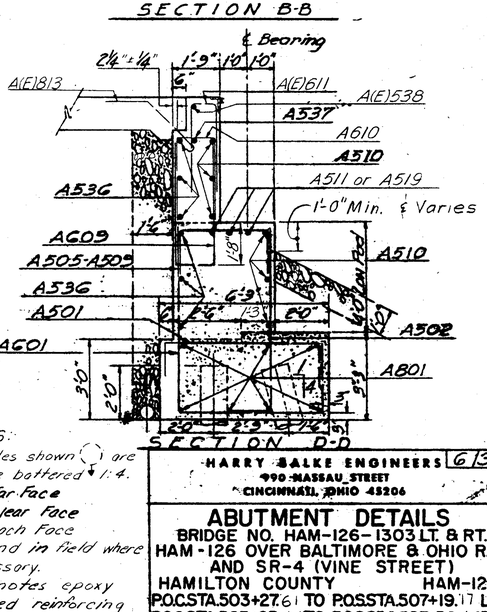


SECTION F-F

END VIEW OF PARAPET
RIGHT WINGWALL



SECTION B-B



SECTION D-D

NOTES:
- All piles shown ( ) are to be battered 1:4.
- F.F. = For Face
- N.F. = Near Face
- E.F. = Each Face
- * Bend in field where necessary.
- "E" denotes epoxy coated reinforcing bar.

HARRY SALKE ENGINEERS 6/33
990 MASSAU STREET
CINCINNATI, OHIO 45206

ABUTMENT DETAILS

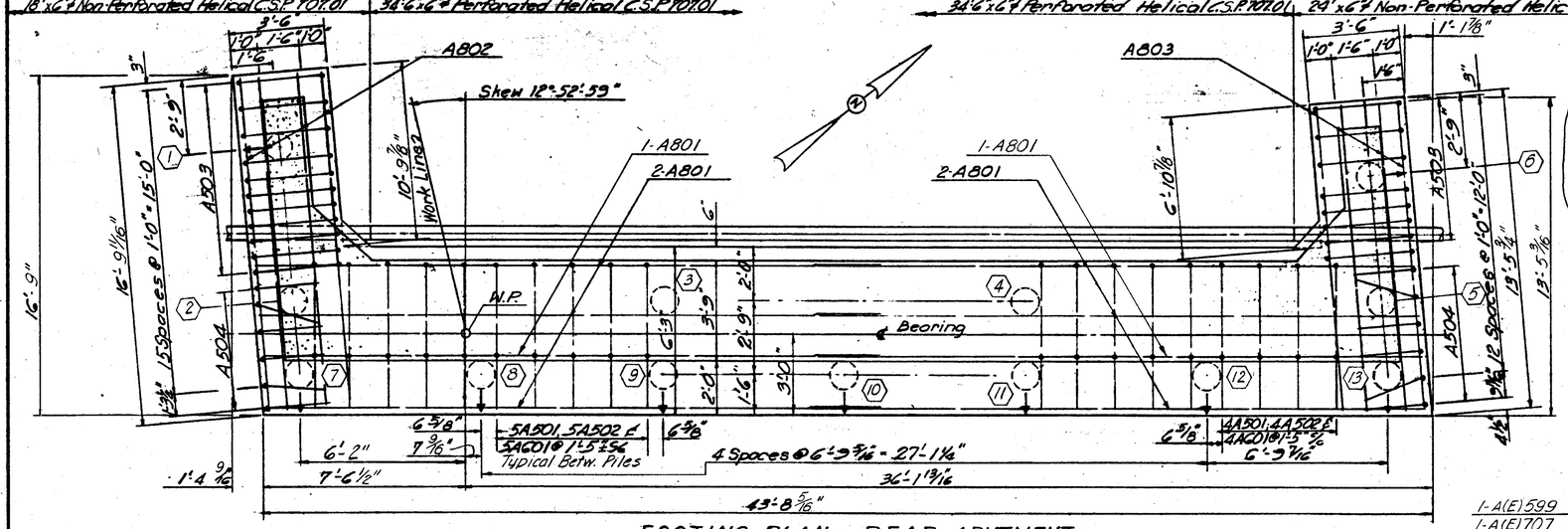
BRIDGE NO. HAM-126-1303 LT. & RT.
HAM-126 OVER BALTIMORE & OHIO R.R.
AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C. STA. 503+27.61 TO P.O.S. STA. 507+19.17 L.B.
P.O.C. STA. 503+25.64 TO P.O.S. STA. 507+56.68 R.B.

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
PRB	WP		CRS	R.K. 3-7-85	12-85

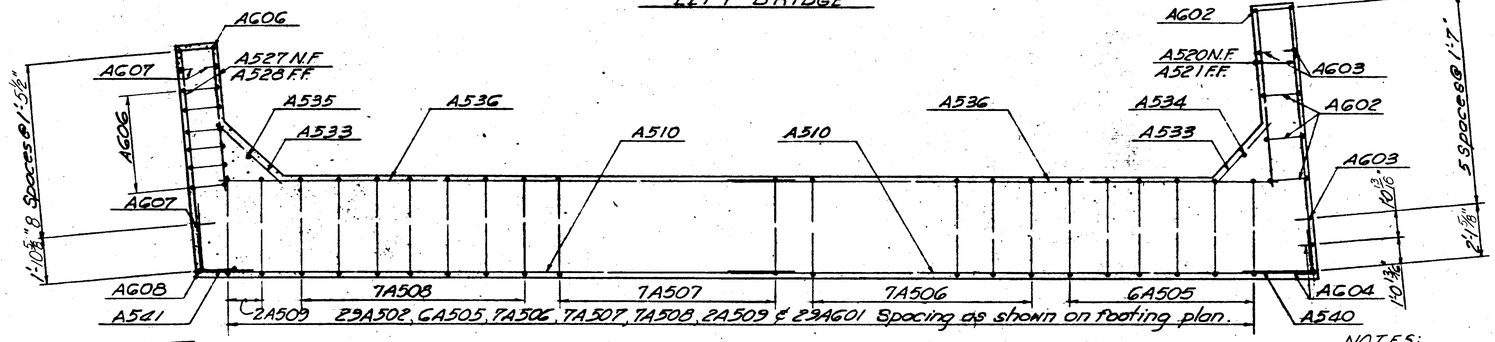
FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

495
787

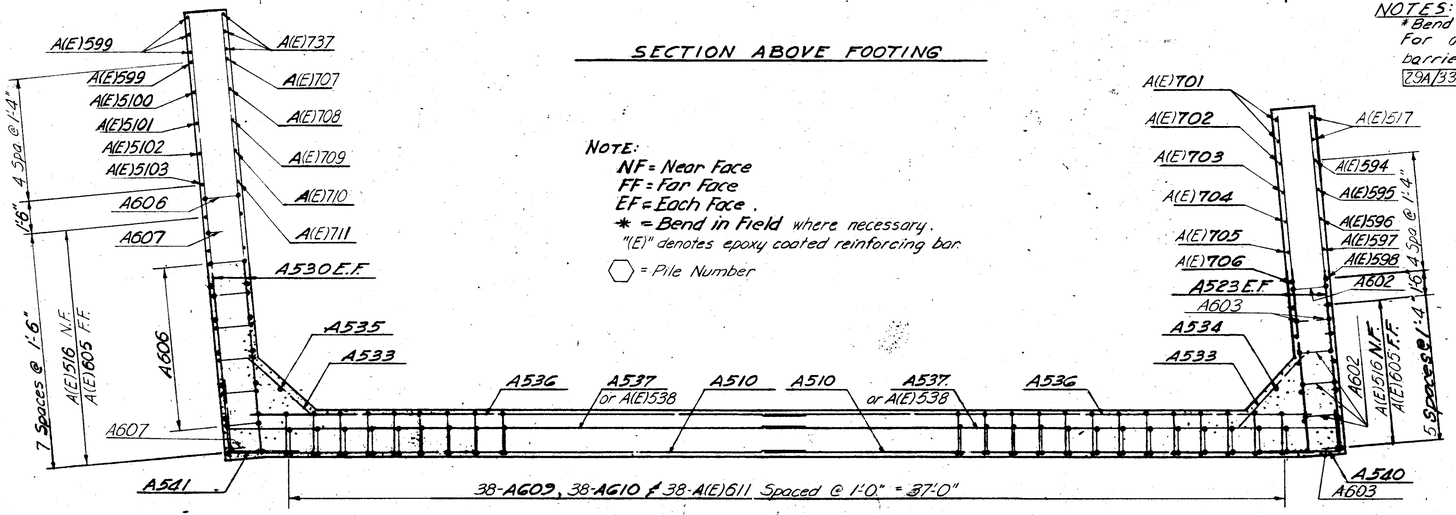
HAMILTON. COUNTY
HAM-126-13.00



FOOTING PLAN - REAR ABUTMENT
LEFT BRIDGE

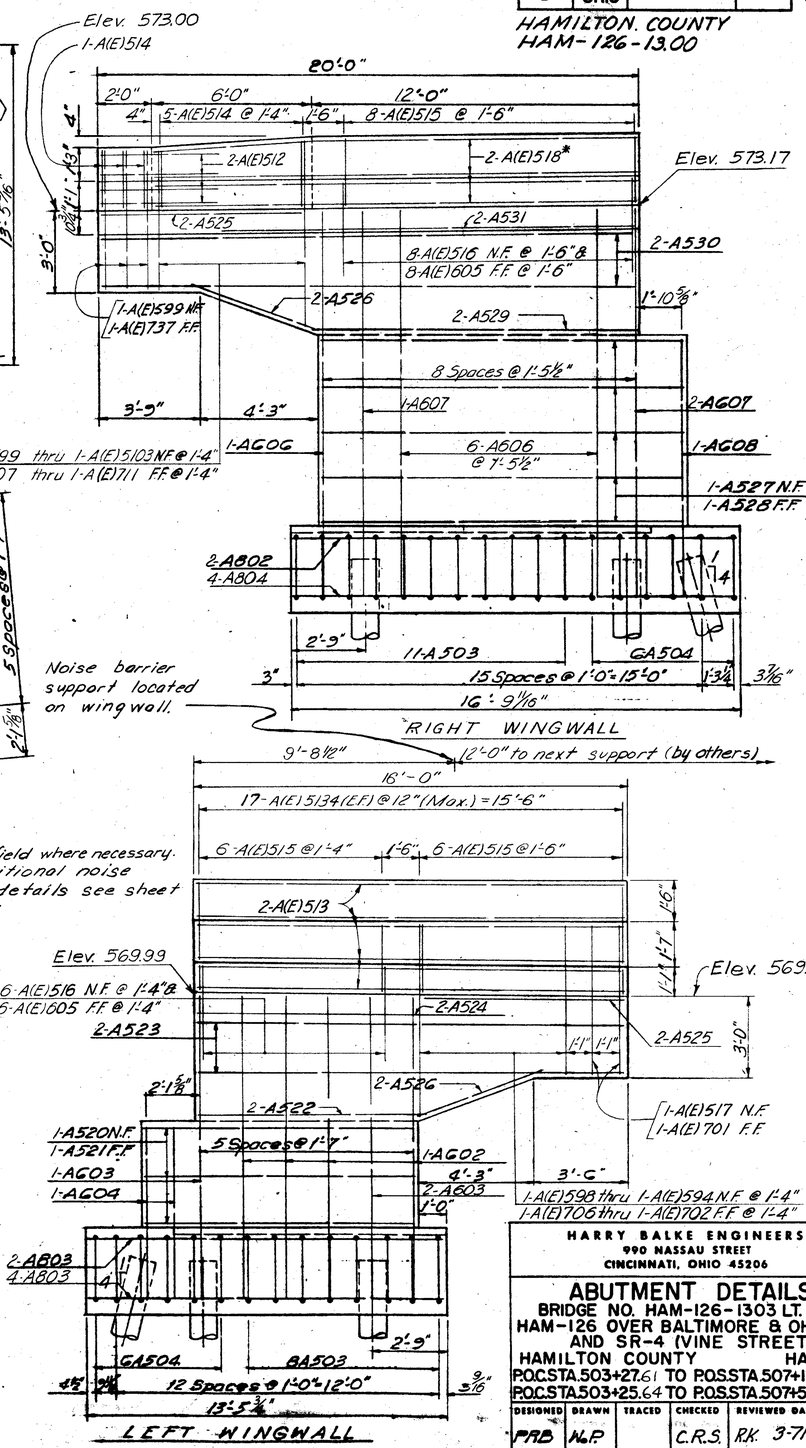


SECTION ABOVE FOOTING



NOTE:
NF = Near Face
FF = Far Face
EF = Each Face.
* = Bend in Field where necessary.
"(E)" denotes epoxy coated reinforcing bar.
⬡ = Pile Number

SECTION ABOVE BRIDGE SEAT



NOTES:
*Bend in field where necessary. For additional noise barrier details see sheet 79A/33

HARRY BALKE ENGINEERS 7/33
990 NASSAU STREET
CINCINNATI, OHIO 45206

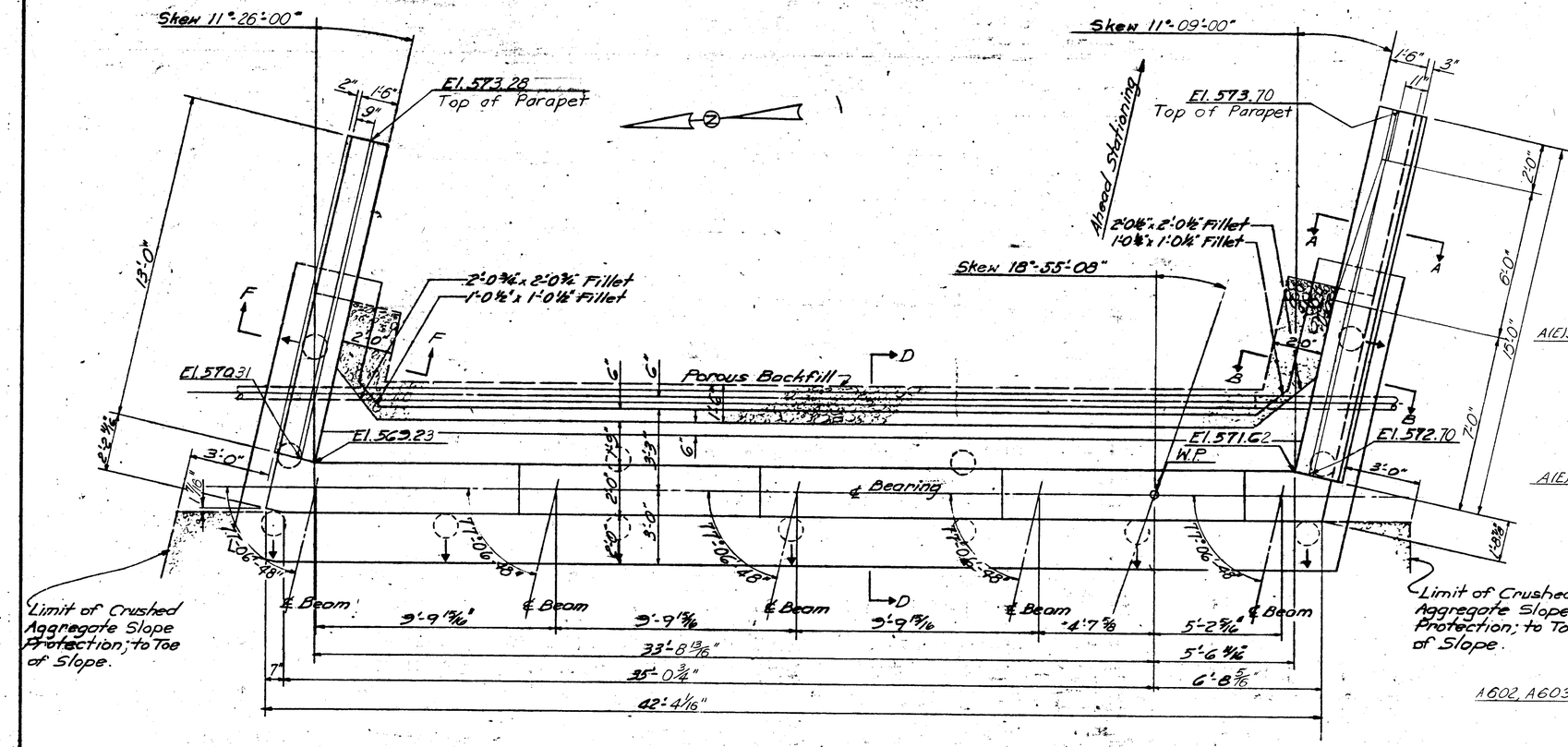
ABUTMENT DETAILS

BRIDGE NO. HAM-126-1303 LT. & RT.
HAM-126 OVER BALTIMORE & OHIO R.R. AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C. STA. 503+27.61 TO P.O.S. STA. 507+19.17 L.B
P.O.C. STA. 503+25.64 TO P.O.S. STA. 507+56.68 R.B

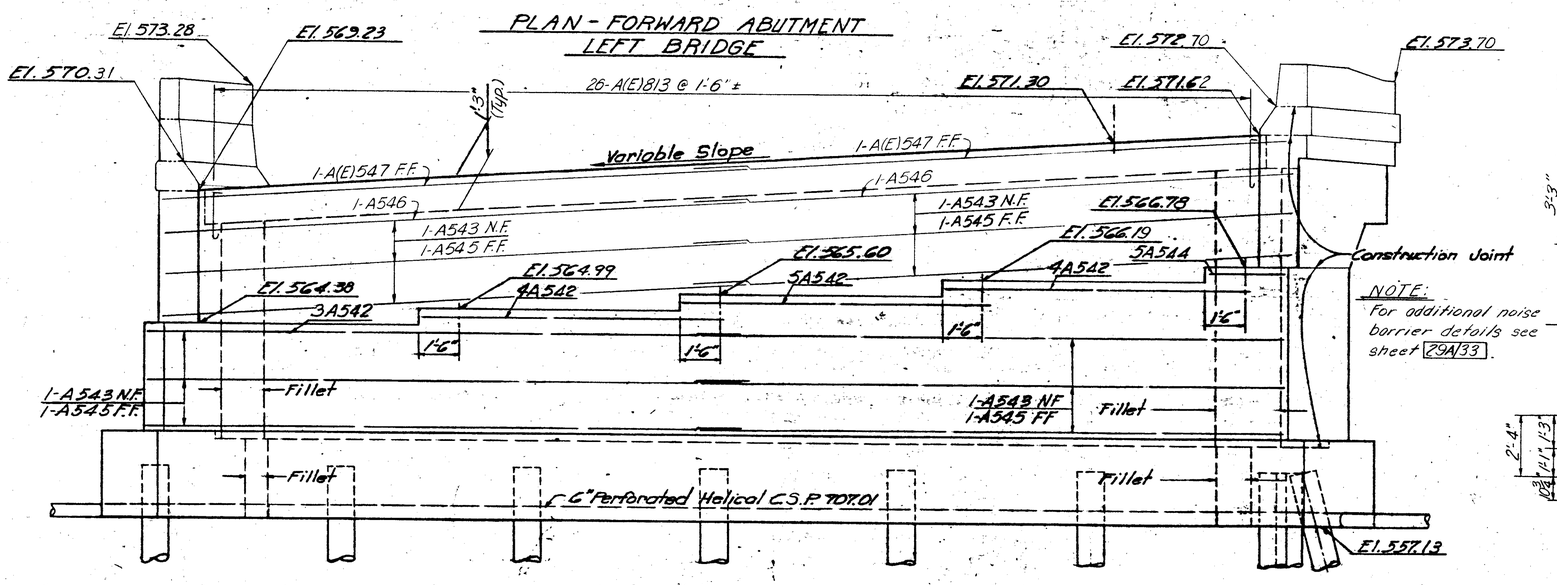
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
PRB	N.P.		C.R.S.	R.K. 3-71	12-85

FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

HAMILTON COUNTY
HAM-126-13.00

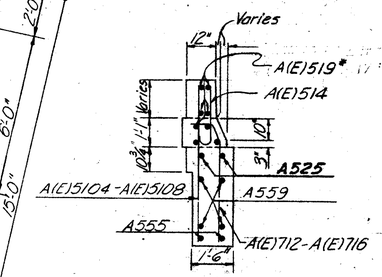


PLAN - FORWARD ABUTMENT
LEFT BRIDGE

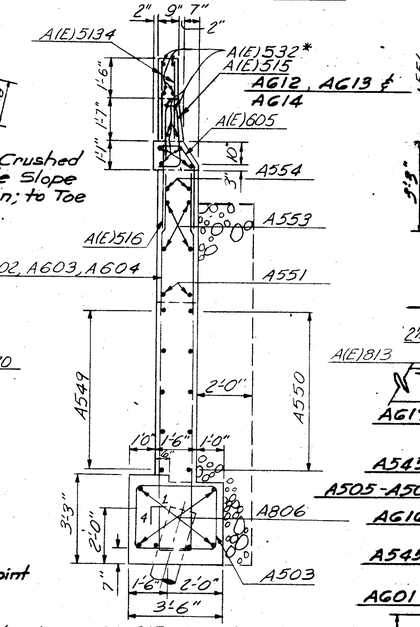


ELEVATION

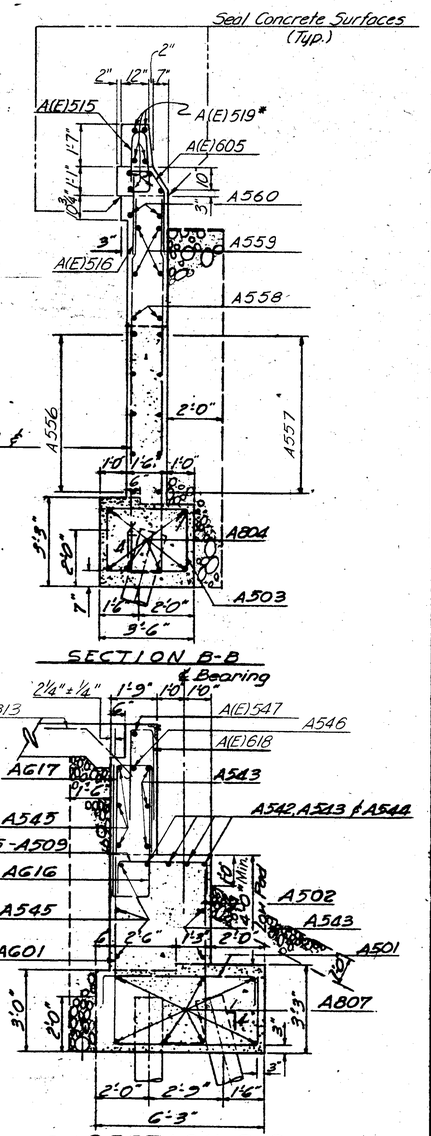
NOTE:
For additional noise barrier details see sheet 29A/33.



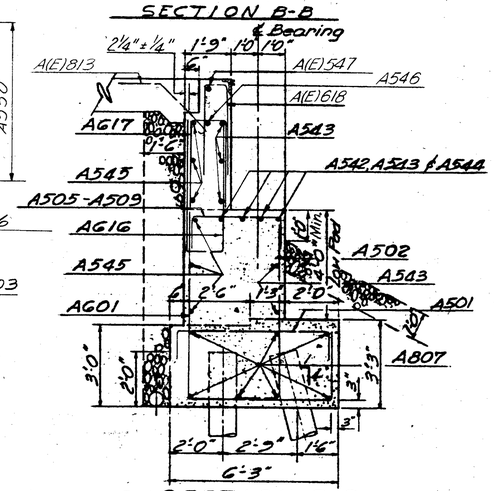
SECTION A-A



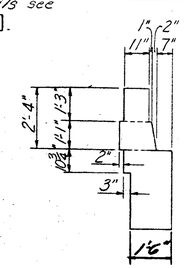
SECTION F-F



SECTION B-B



SECTION D-D



END VIEW OF PARAPET
RIGHT WINGWALL

Note:
All piles shown thus are to be battered 1:4.
F.F. = Far Face
N.F. = Near Face
E.F. = Each Face
* Bend in field.
"(E)" denotes epoxy coated reinforcing bar.

HARRY BALKE ENGINEERS 8/33
990 NASSAU STREET
CINCINNATI, OHIO 45206

ABUTMENT DETAILS

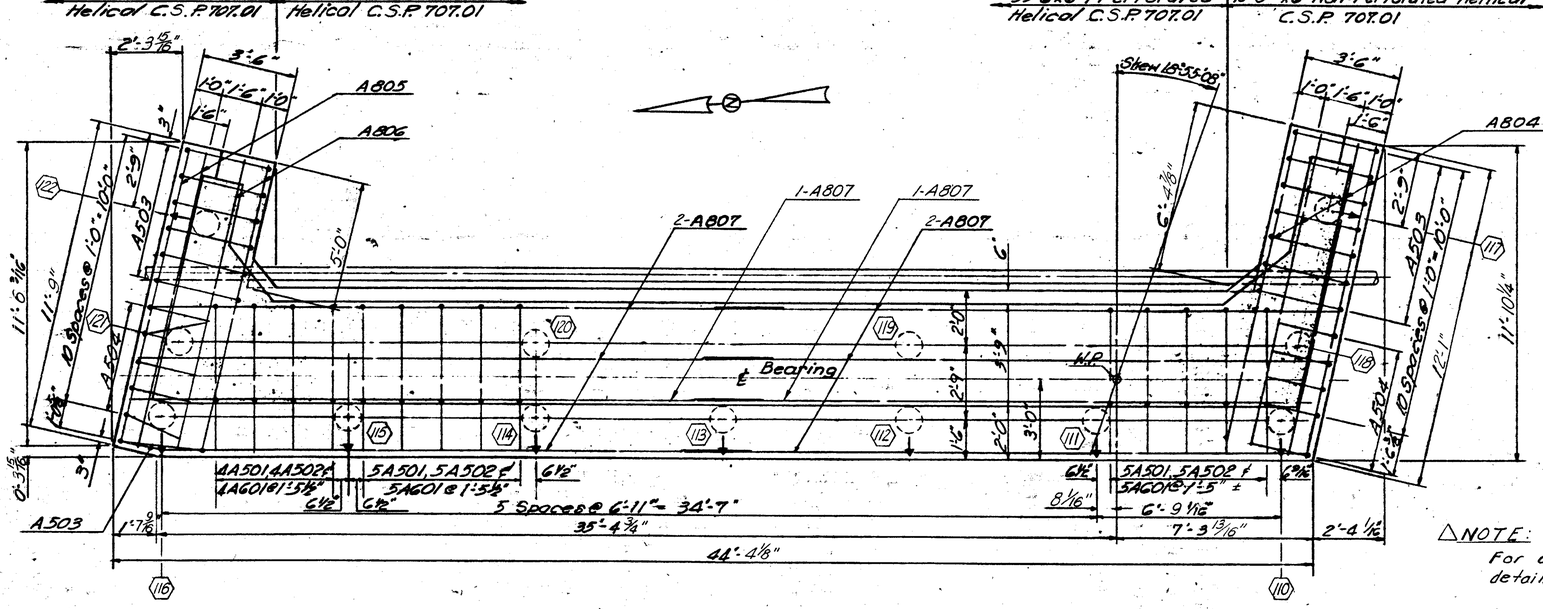
BRIDGE NO. HAM-126-1303 LT. & RT.
HAM-126 OVER BALTIMORE & OHIO R.R.
AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C. STA. 503+27.61 TO P.O.S. STA. 507+19.17 L.B.
P.O.C. STA. 503+25.64 TO P.O.S. STA. 507+56.68 R.B.

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
PRB	W.P.		CRS.	R.K. 3-71	12-85

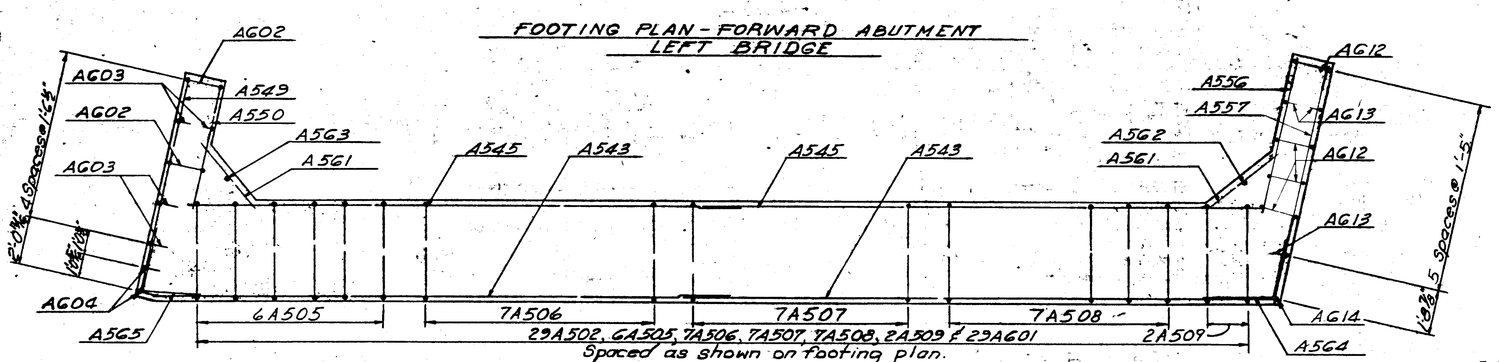
FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

491
787

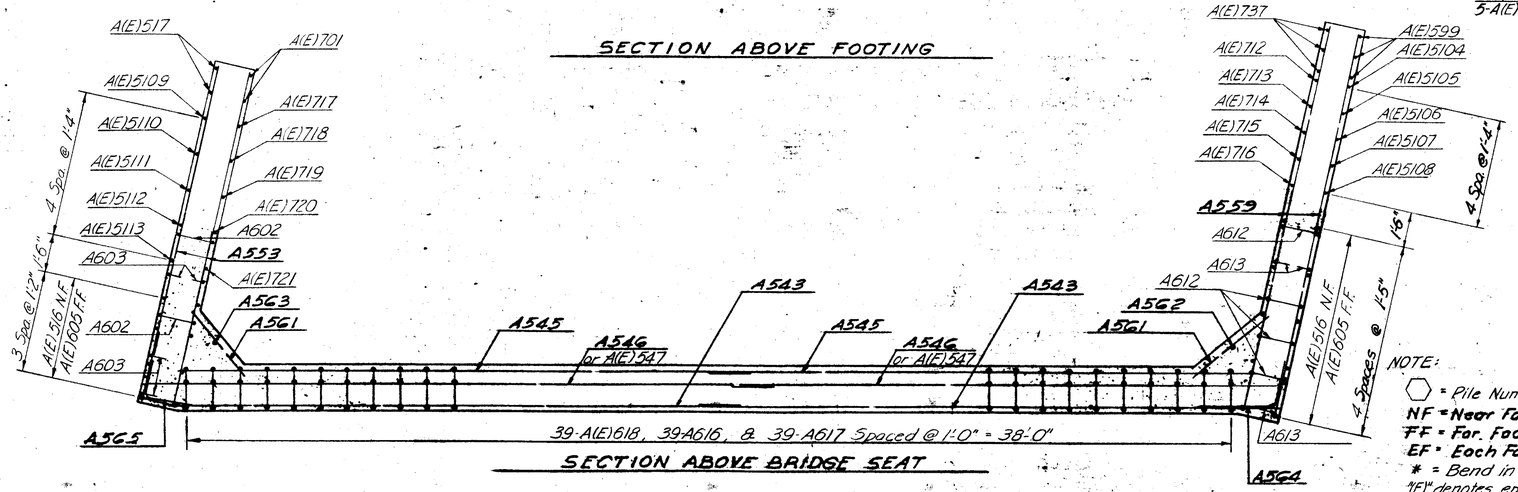
HAMILTON COUNTY
HAM-126-13.00



FOOTING PLAN - FORWARD ABUTMENT
LEFT BRIDGE



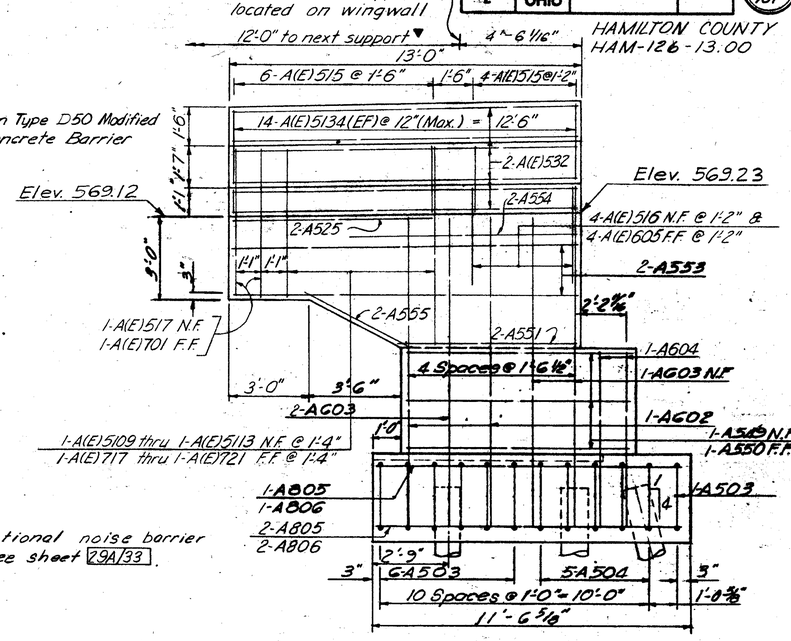
SECTION ABOVE FOOTING



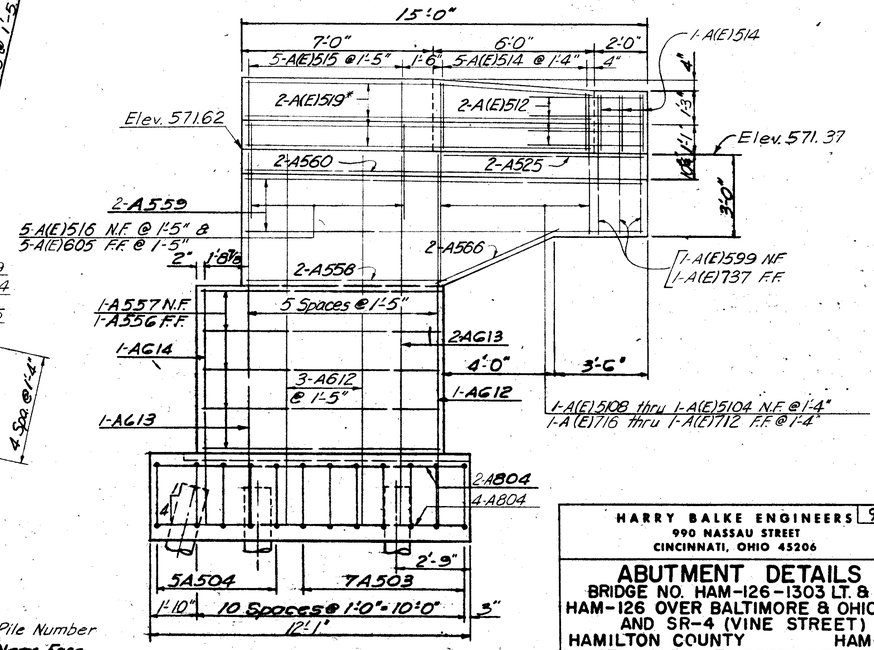
SECTION ABOVE BRIDGE SEAT

NOTE:
⬡ = Pile Number
NF = Near Face
FF = Far Face
EF = Each Face
* = Bend in field where necessary.
"(E)" denotes epoxy coated reinforcing bar.

△NOTE:
For additional noise barrier details see sheet 29A/33.



LEFT WINGWALL



RIGHT WINGWALL

HARRY BALKE ENGINEERS 9/33
990 NASSAU STREET
CINCINNATI, OHIO 45206

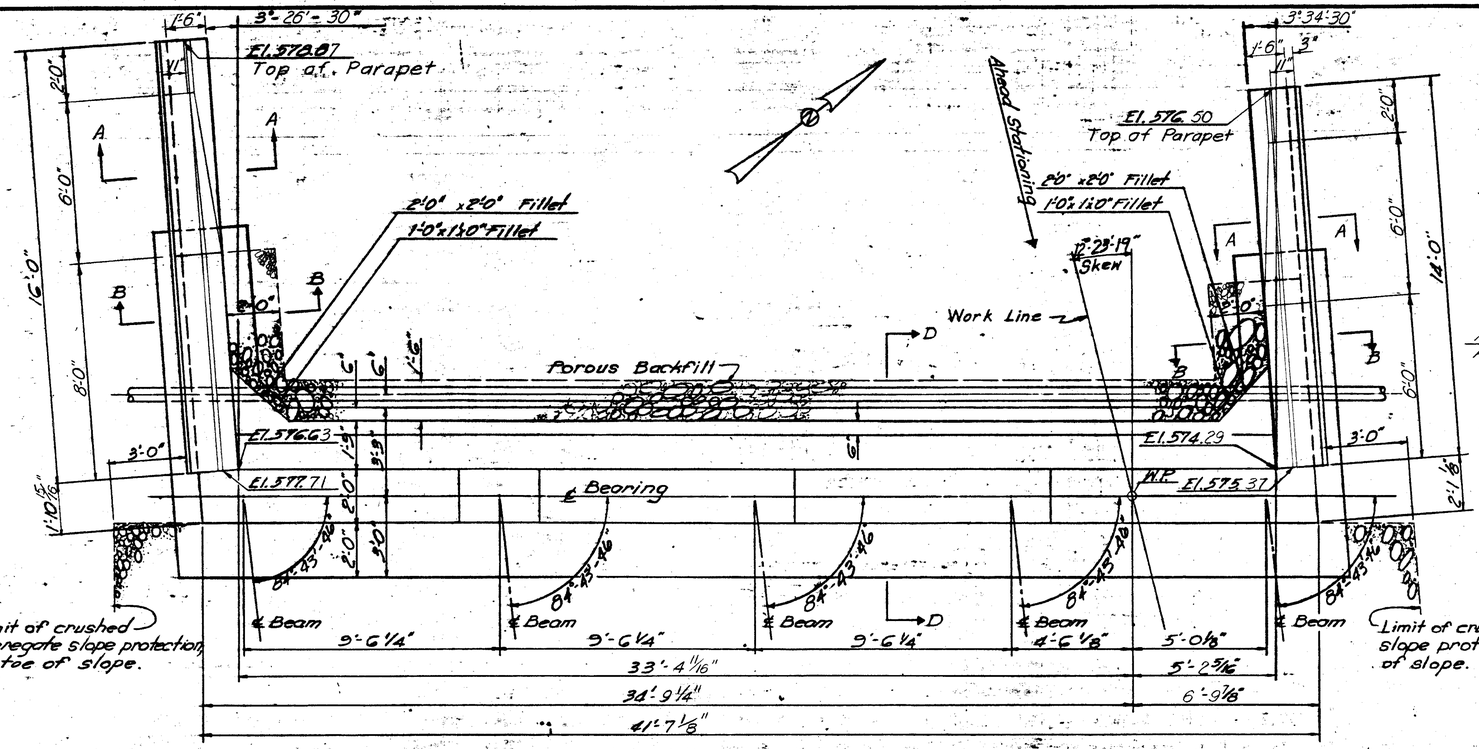
ABUTMENT DETAILS

BRIDGE NO. HAM-126-1303 LT. & RT.
HAM-126 OVER BALTIMORE & OHIO R.R.
AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C. STA. 503+27.61 TO P.O.S. STA. 507+19.17 L.B.
P.O.C. STA. 503+25.64 TO P.O.S. STA. 507+56.68 R.B.

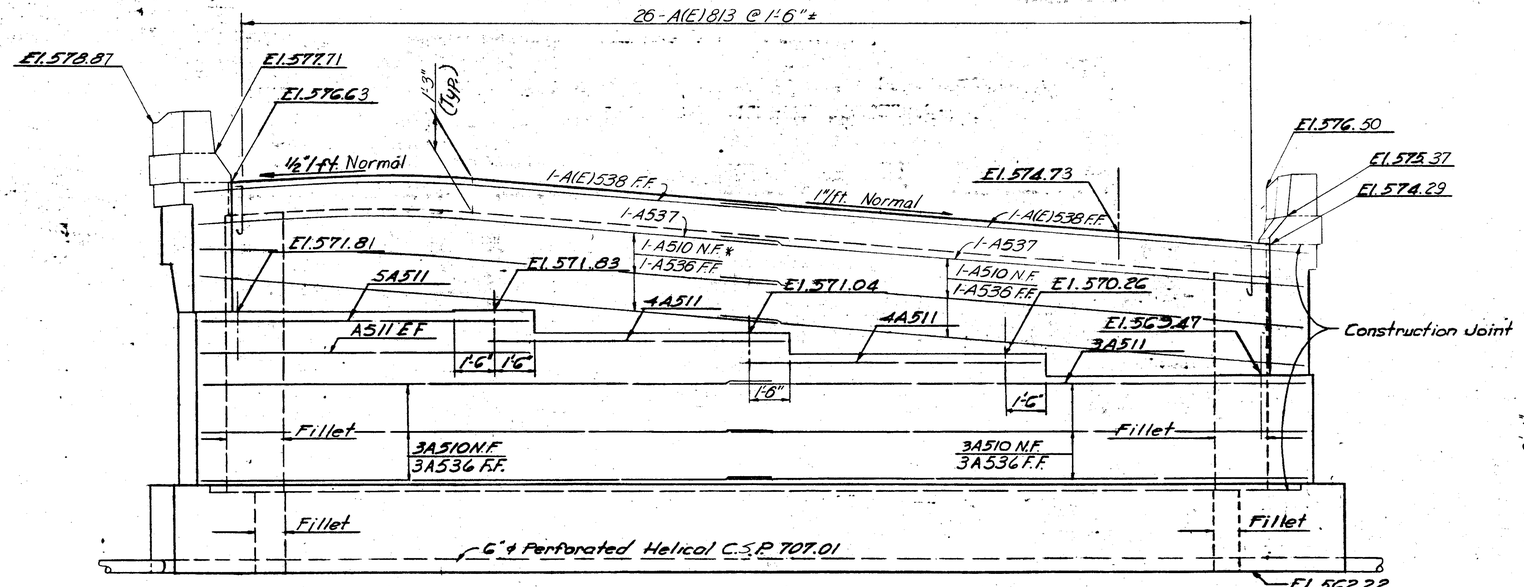
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
PRB	W.B.P.		CRS	R.K. 3-71	12-85

FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

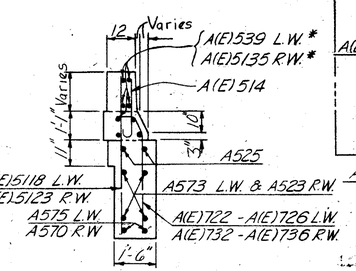
HAMILTON COUNTY
HAM-126-13.00



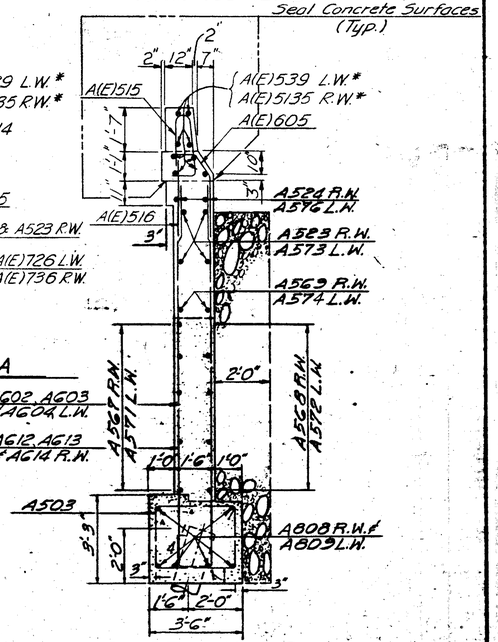
PLAN-REAR ABUTMENT
RIGHT BRIDGE



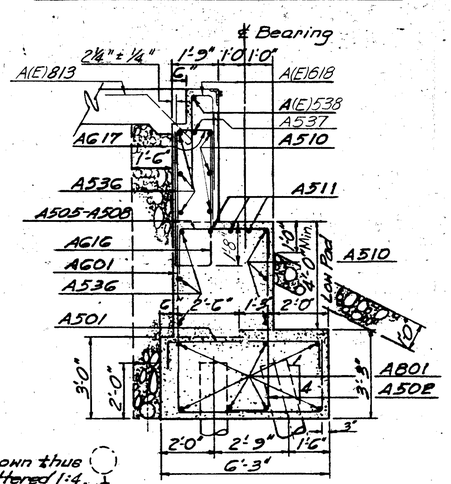
ELEVATION



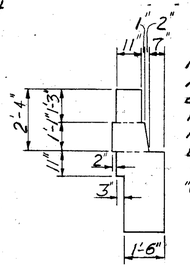
SECTION A-A



SECTION B-B



SECTION D-D



Note:
All piles shown thus ⬭ are to be battered 1:4.
F.F. = Far Face
N.F. = Near Face
E.F. = Each Face
* = Bend in field
"(E)" denotes epoxy coated reinforcing bar.

END VIEW

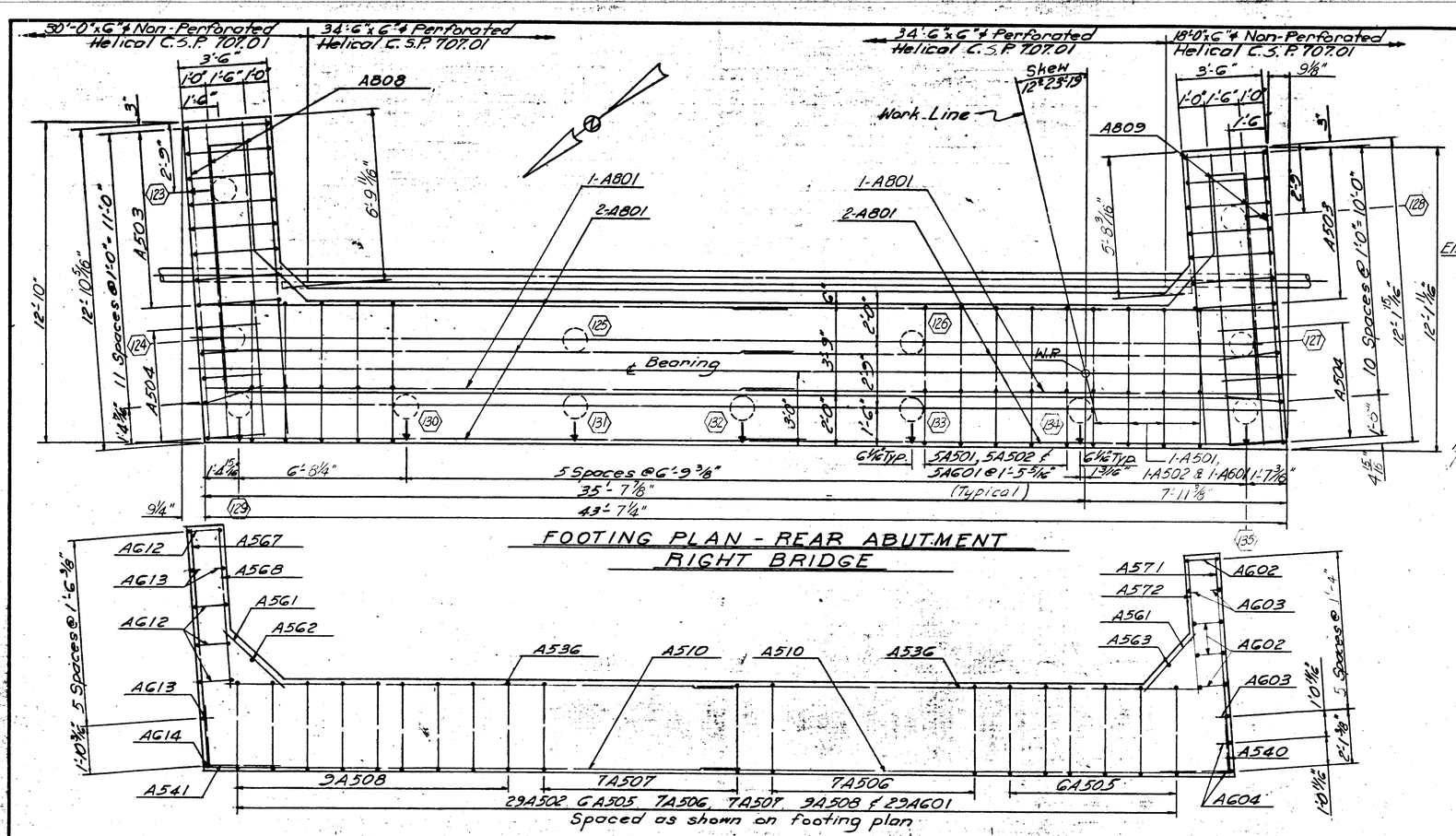
HARRY BALKE ENGINEERS 10/33
900 NASSAU STREET
CINCINNATI, OHIO 45206

ABUTMENT DETAILS

BRIDGE NO. HAM-126-1303 LT. & RT
HAM-126 OVER BALTIMORE & OHIO R.R.
AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C. STA 503+27.61 TO P.O.S. STA 507+19.17 L.B.
P.O.C. STA 503+25.64 TO P.O.S. STA 507+56.68 R.B.

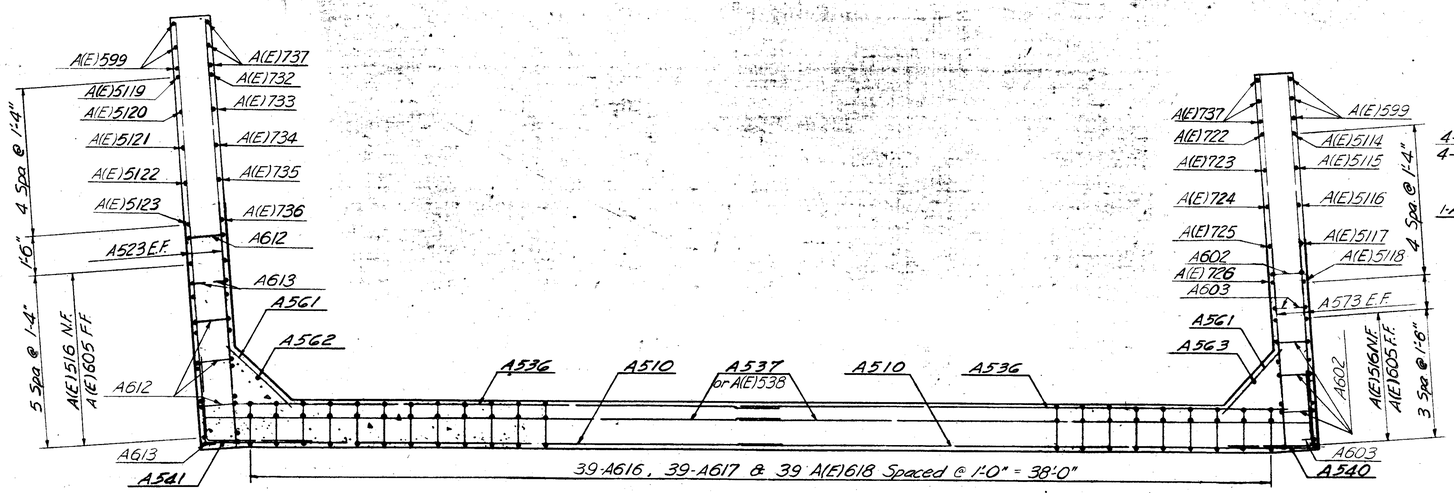
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
PRB	WDP		CRS	R.K. 3-71	

FED. RD. DIV. 2 | STATE OHIO | PROJECT | FISCAL YEAR
HAMILTON COUNTY
HAM-126-1300
122 787
FED-OHIO-126-3 (25) MAY-68

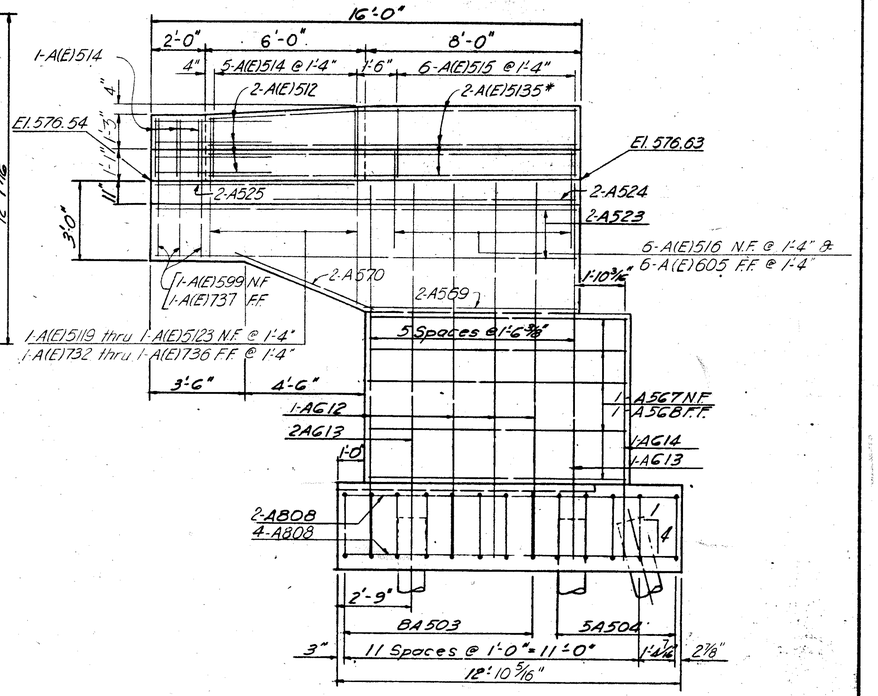


FOOTING PLAN - REAR ABUTMENT
RIGHT BRIDGE

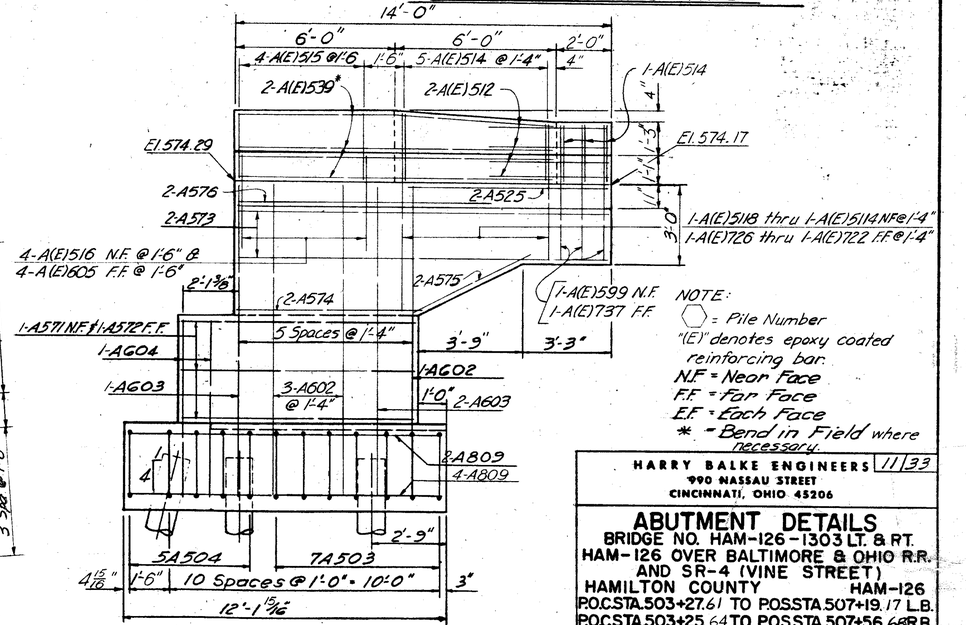
SECTION ABOVE FOOTING



SECTION ABOVE BRIDGE SEAT



RIGHT WINGWALL



LEFT WINGWALL

NOTE:
⬡ = Pile Number
"(E)" denotes epoxy coated reinforcing bar.
N.F. = Near Face
F.F. = Far Face
E.F. = Each Face
* = Bend in Field where necessary.

HARRY BALKE ENGINEERS 11/33
990 NASSAU STREET
CINCINNATI, OHIO 45206

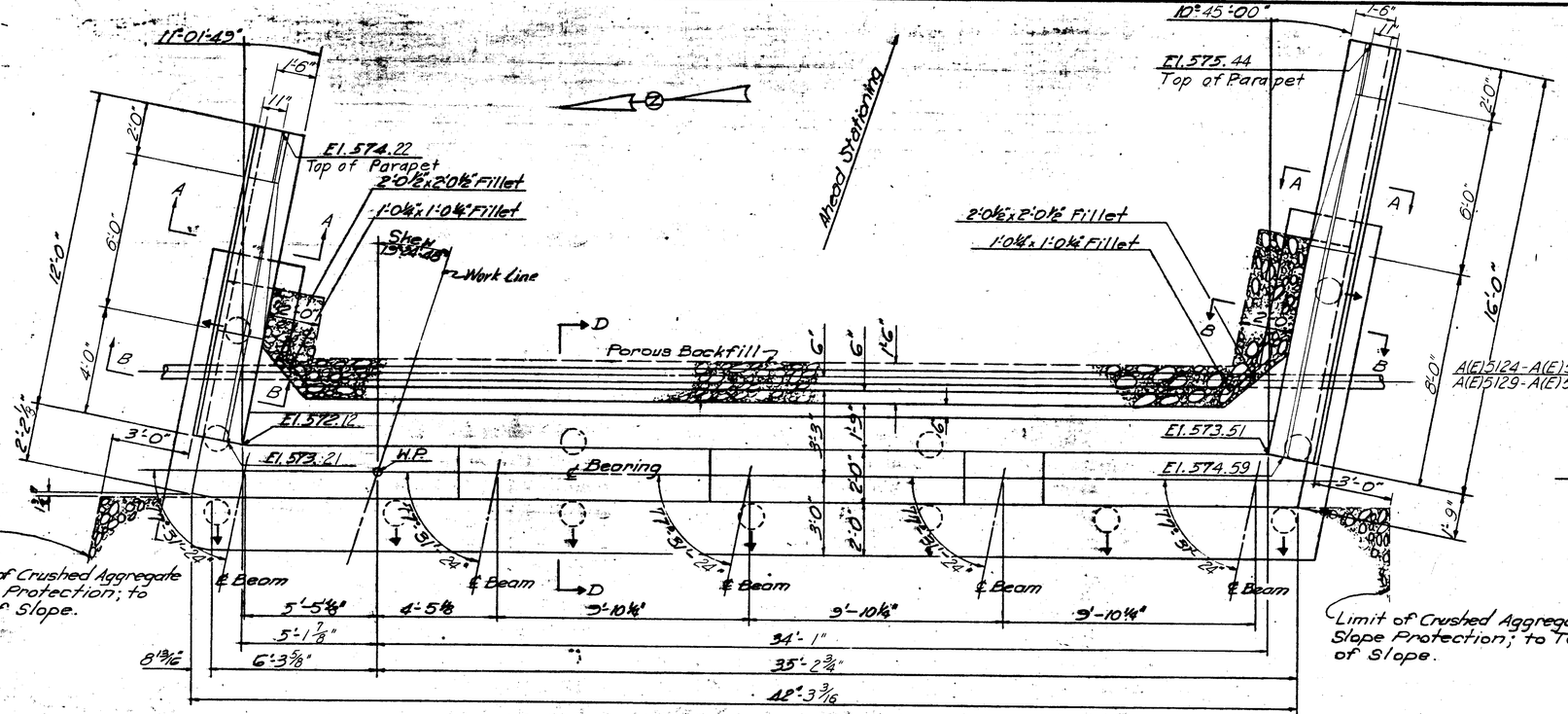
ABUTMENT DETAILS

BRIDGE NO. HAM-126-1303 LT. & RT.
HAM-126 OVER BALTIMORE & OHIO R.R.
AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C. STA. 503+27.61 TO P.O.S. STA. 507+19.17 L.B.
P.O.C. STA. 503+25.64 TO P.O.S. STA. 507+56.68 R.B.

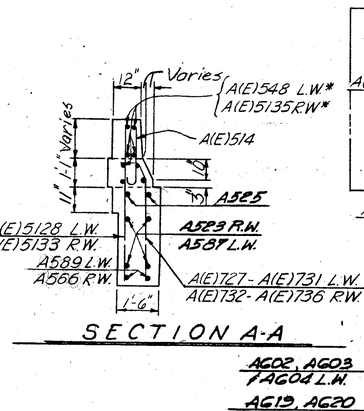
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
P.R.B.	W.A.P.		C.R.S.	R.K. 3-71	12-85

FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

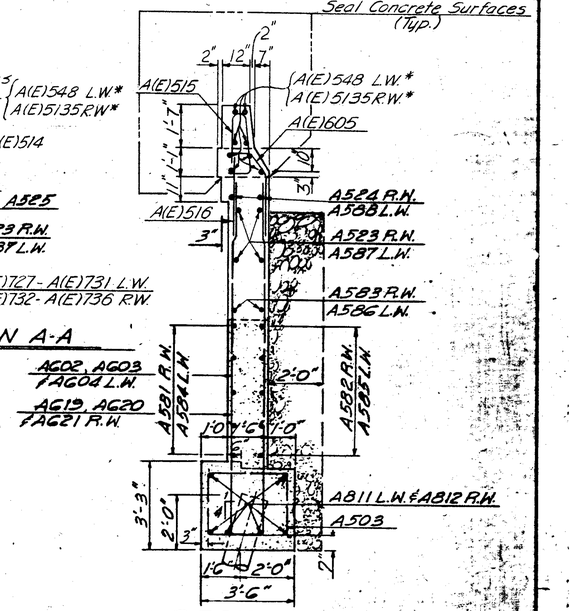
HAMILTON COUNTY
HAM-126-13.00



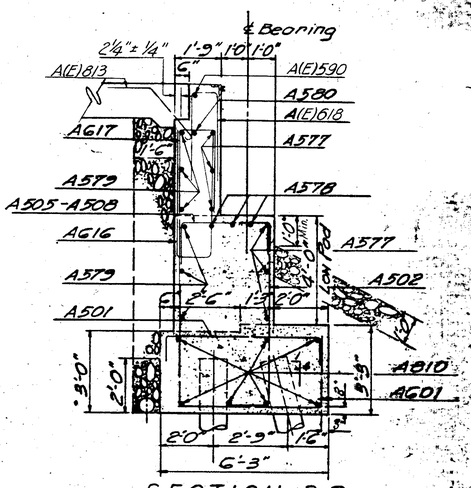
PLAN - FORWARD ABUTMENT
RIGHT BRIDGE



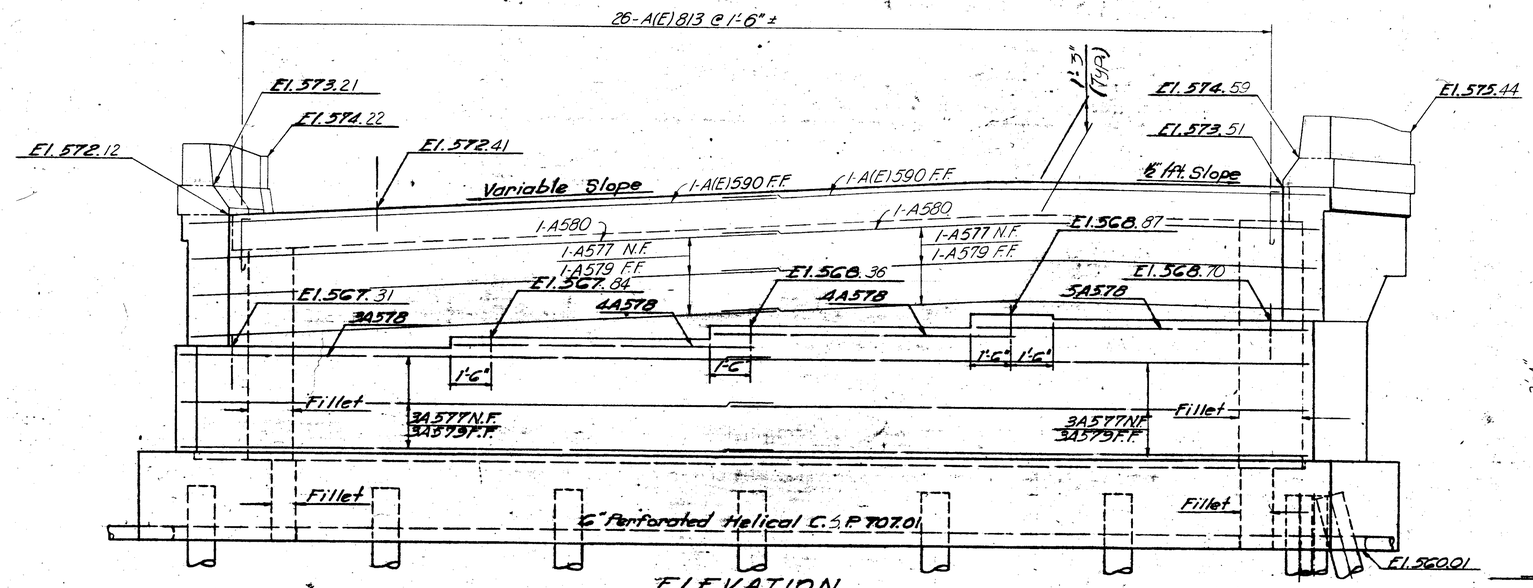
SECTION A-A



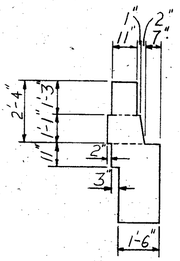
SECTION B-B



SECTION D-D



ELEVATION



END VIEW

Note:
All piles shown thus ○ are to be battered 1:4.
F.F. = For Face
N.F. = Neon Face
E.F. = Each Face
* = Bend in Field where necessary.
"(E)" denotes epoxy coated reinforcing bar.

HARRY BALKE ENGINEERS 12/33
990 NASSAU STREET
CINCINNATI, OHIO 45206

ABUTMENT DETAILS

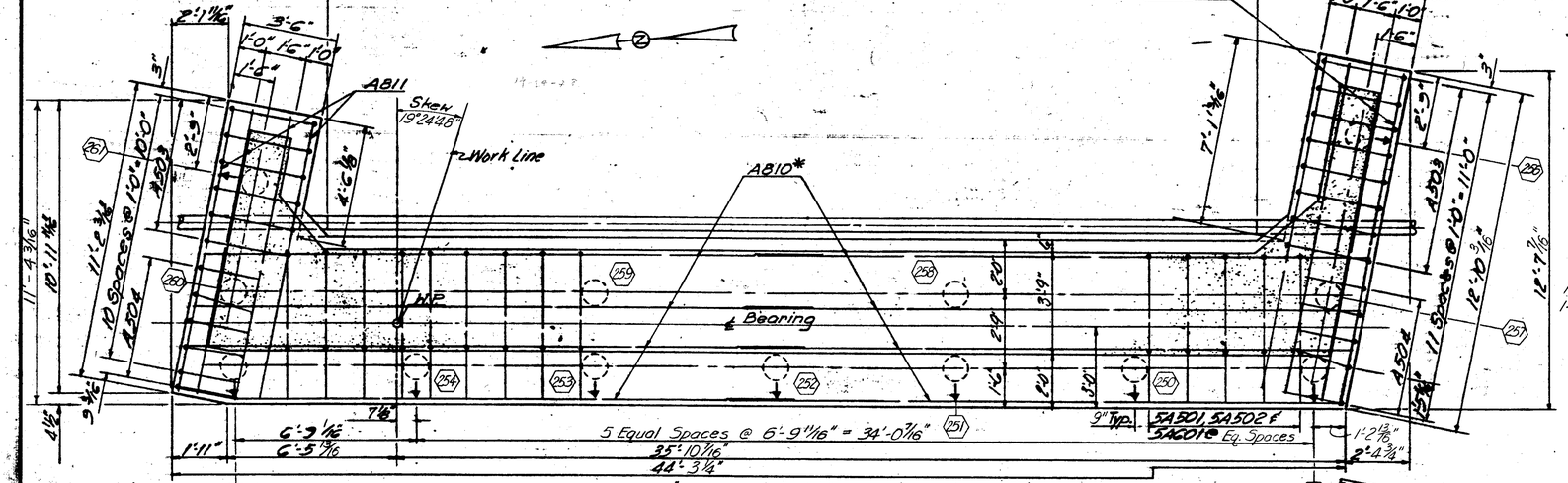
BRIDGE NO. HAM-126-1303 LT. & RT.
HAM-126 OVER BALTIMORE & OHIO R.R. AND SR-4 (VINE STREET)
HAMILTON COUNTY · HAM-126
P.O.C. STA. 503+27.61 TO P.O.S. STA. 507+19.17 L.B.
P.O.C. STA. 503+25.64 TO P.O.S. STA. 507+56.68 R.B.

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
PRB	W.o.P		C.R.S.	R.K. 3-71	12-85

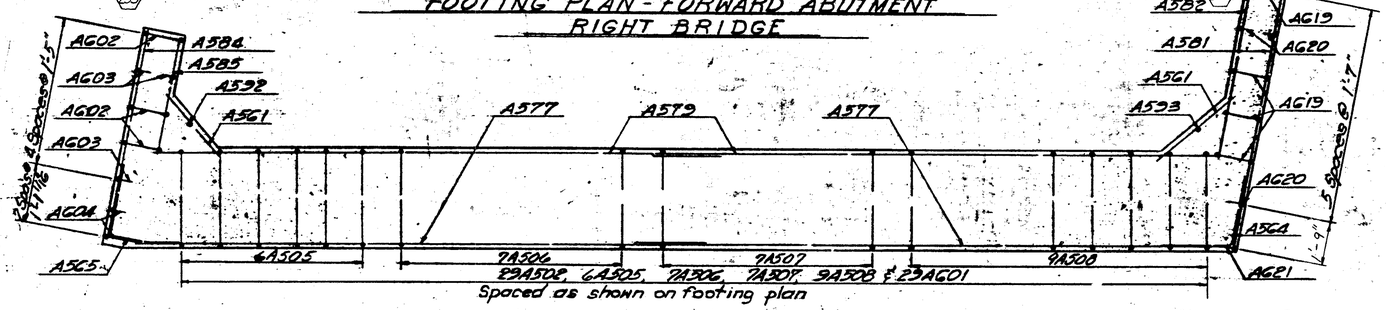
FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR	SHT. NO.	TOT. SHTS.
2	OHIO			201	787

HAMILTON COUNTY
HAM-126-13.00

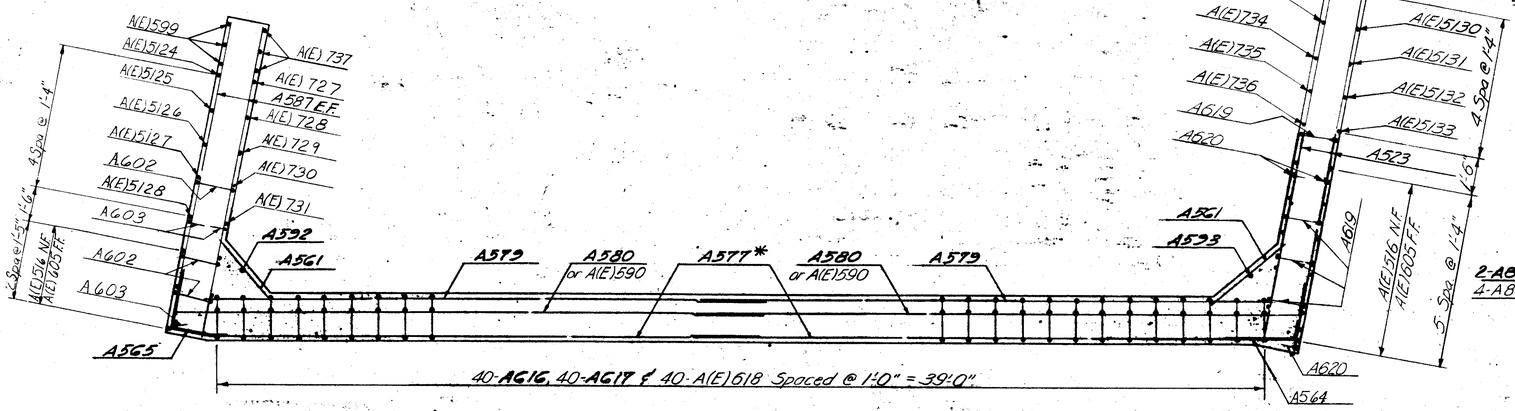
18'-0"x6" Non-Perforated Helical C.S.P. 707.01 | 35'-0"x6" Perforated Helical C.S.P. 707.01 | 35'-0"x6" Perforated Helical C.S.P. 707.01 | 30'-0"x6" Non-Perforated Helical C.S.P. 707.01



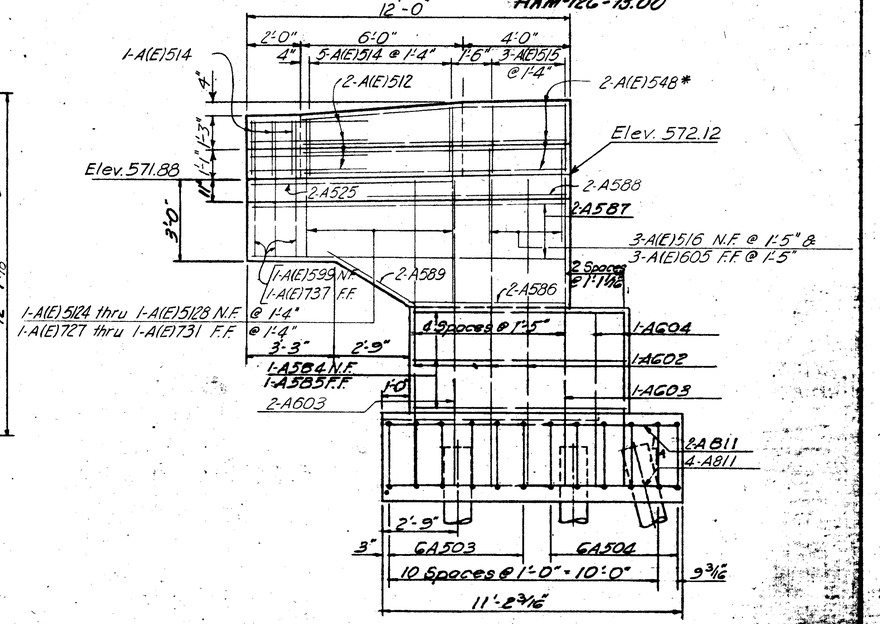
FOOTING PLAN - FORWARD ABUTMENT
RIGHT BRIDGE



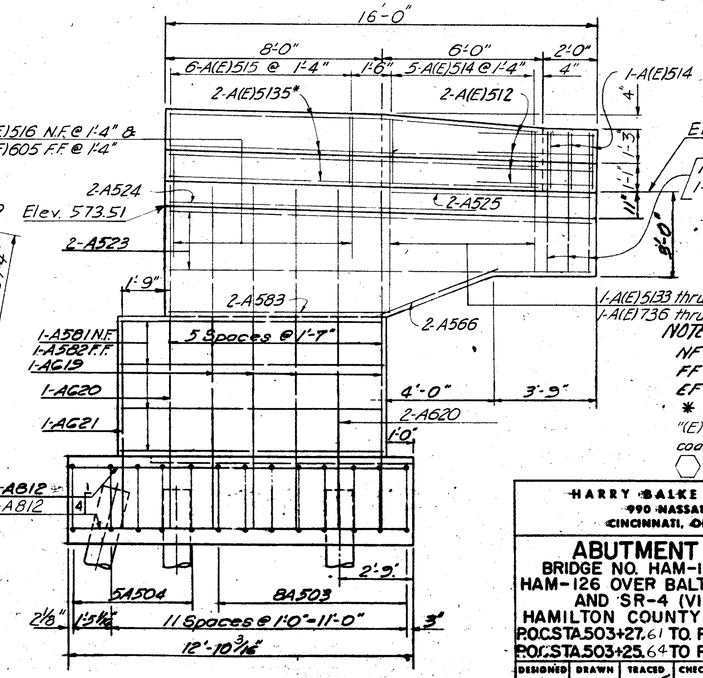
SECTION ABOVE FOOTING



SECTION ABOVE BRIDGE SEAT



LEFT WINGWALL



NOTE:
NF = Near Face
FF = Far Face.
EF = Each Face
* = Bend in Field
"(E)" denotes epoxy coated reinforcing bar.
⬡ = Pile Number

RIGHT WINGWALL

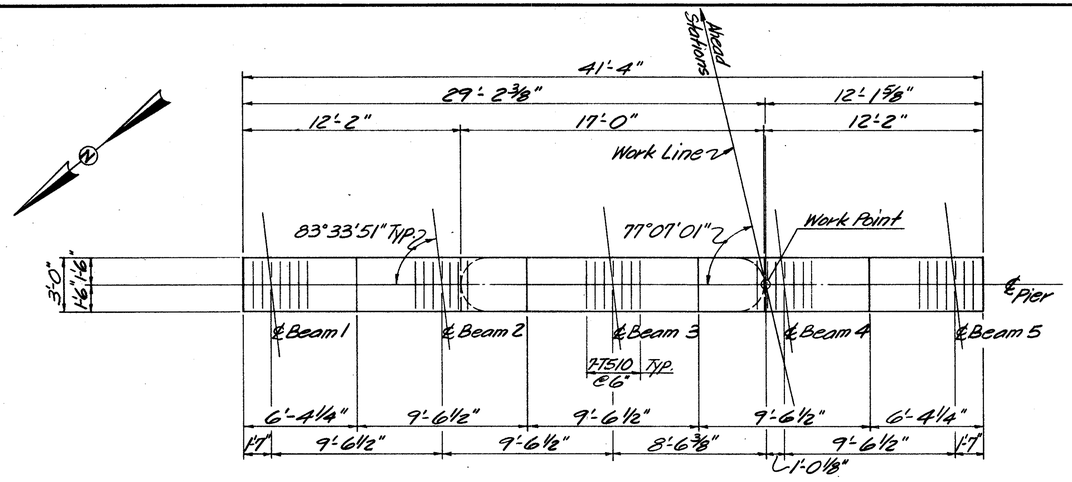
HARRY BALKE ENGINEERS 13/33
990 NASSAU STREET
CINCINNATI, OHIO 45206

ABUTMENT DETAILS

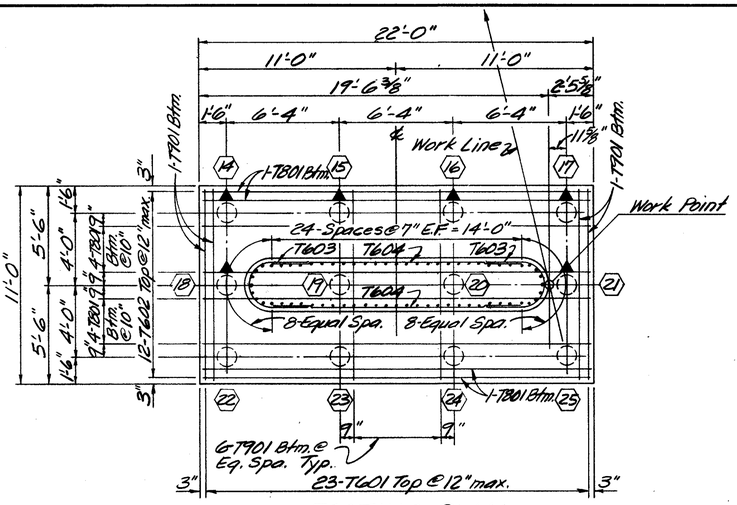
BRIDGE NO. HAM-126-1303 LT. & RT.
HAM-126 OVER BALTIMORE & OHIO R.R.
AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C. STA. 503+27.61 TO P.O.S. STA. 507+19.17 L.B.
P.O.C. STA. 503+25.64 TO P.O.S. STA. 507+56.68 R.B.

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
PRB.	W.O.P.		ORS	R.K. 3-71	12-85

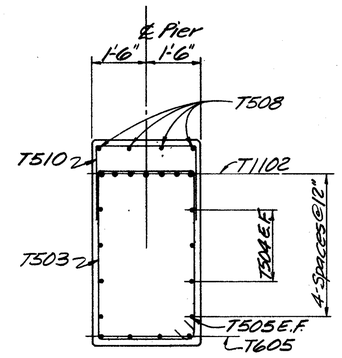
CALC. BY / DATE	HAM-75-9.93 HAM-126-13.00	OHIO FHWA REGION 5	502 787
CHKD. BY / DATE			



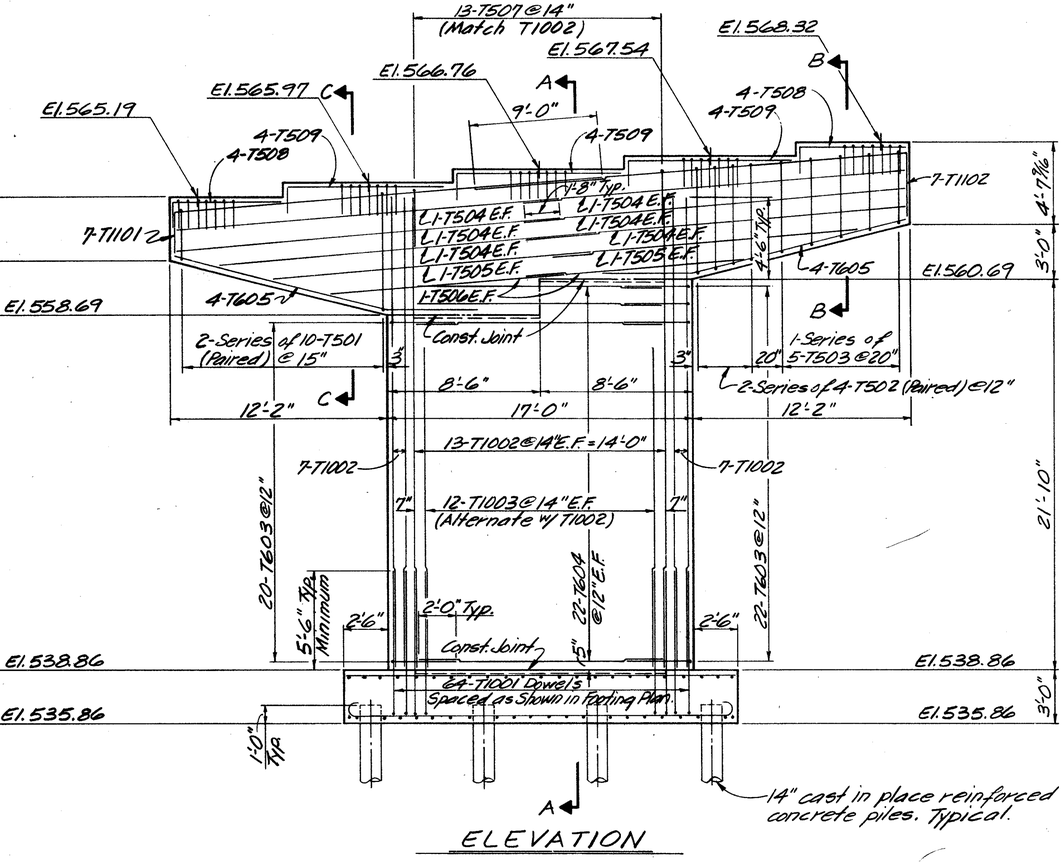
CAP PLAN



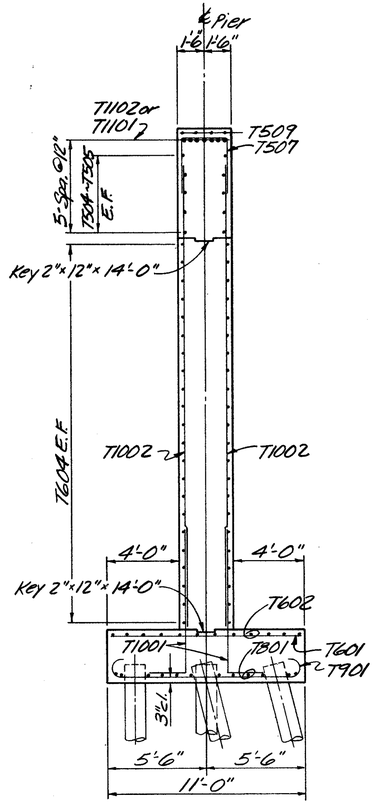
FOOTING PLAN



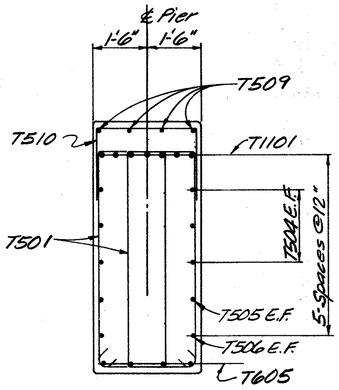
SECTION B-B



ELEVATION



SECTION A-A



SECTION C-C

NOTES:
1. ⏚ Designates Pile battered 1:4 in direction of arrow.
2. ⬡ Designates Pile Number. Pile Numbers 26-31 not used.

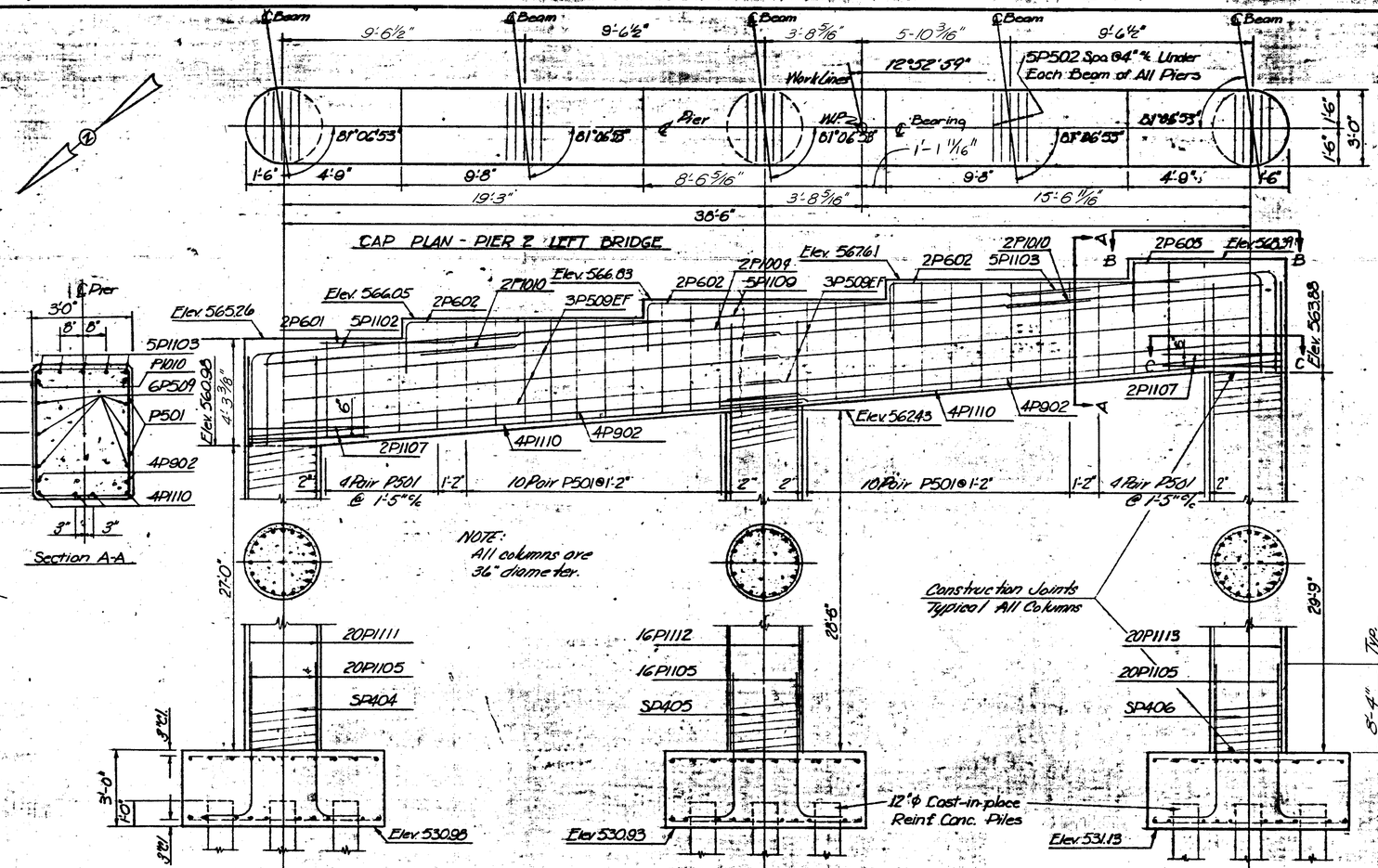
BALKE ENGINEERS 7782 READING ROAD CINCINNATI, OHIO 45237						14/33
PIER 1 LEFT BRIDGE BRIDGE NO. HAM-126-1303 L.T. HAM-126 OVER BALTIMORE & OHIO R.R. AND S.R. 4 (VINE STREET) HAMILTON COUNTY OHIO POC STA. 503+27.61 to POS STA. 507+19.19						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED	
BJS	WJH	~	SJA	CRS 6/86		

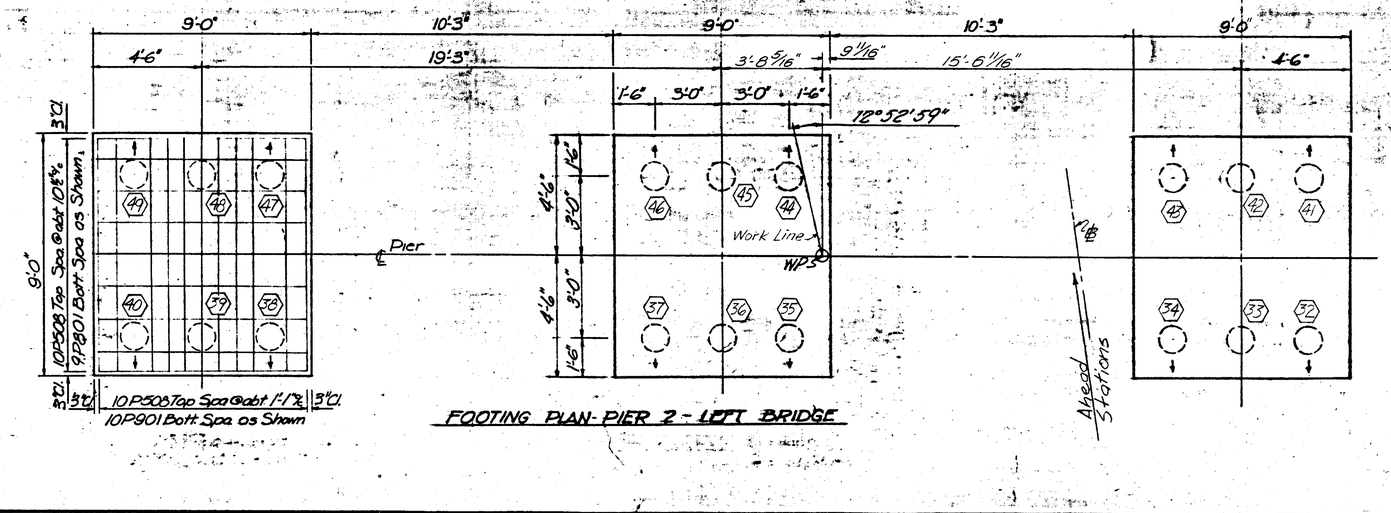
OHIO BLUE PRINT 146053

FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

503
187

HAMILTON COUNTY
HAM-126-13.00





NOTE:
For footing reinforcement see outside footing this sheet.

⬡ = Pile Number

HARRY BALKE ENGINEERS 15 33
990 NASSAU STREET
CINCINNATI, OHIO 45206

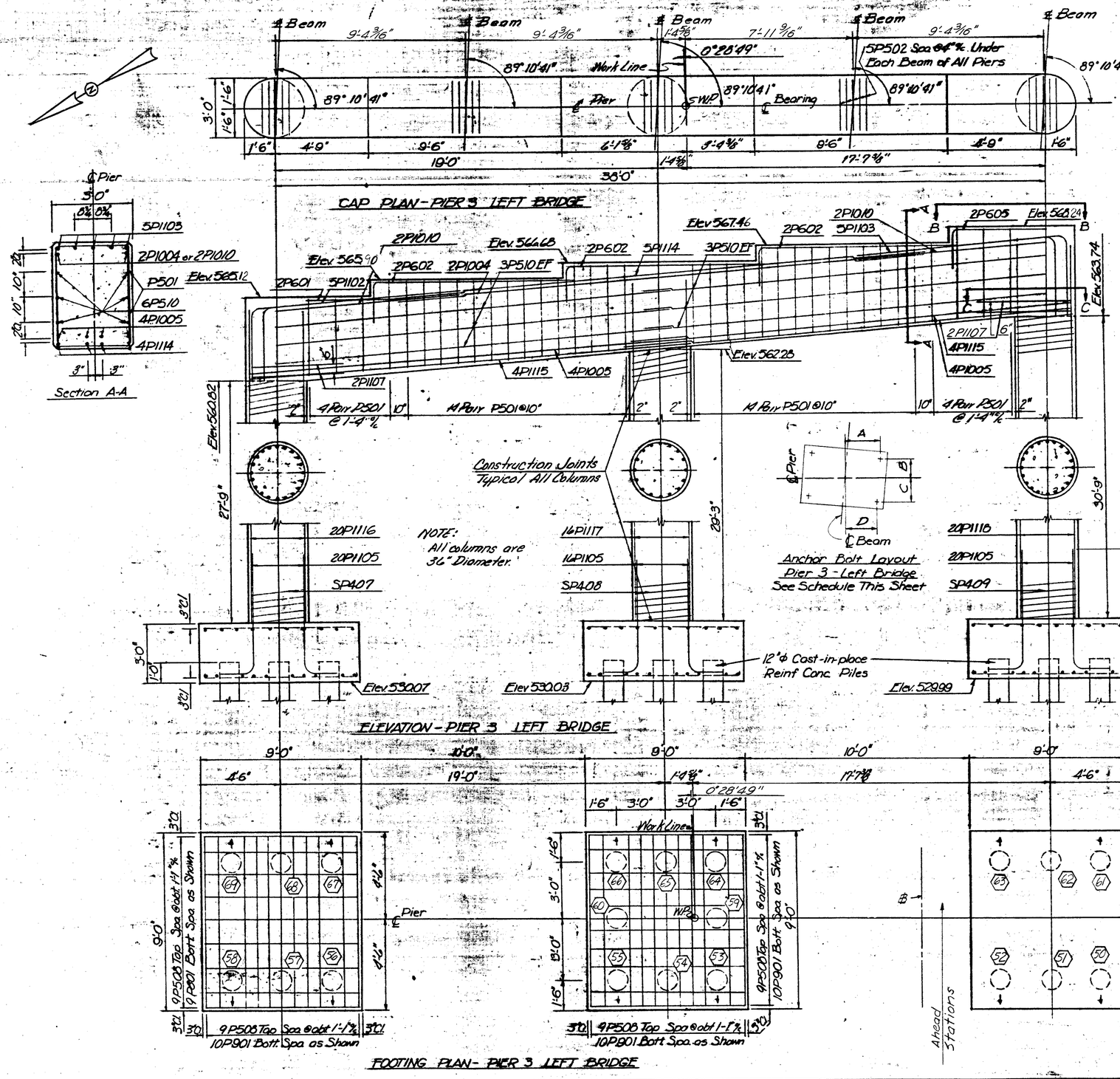
PIER DETAILS

BRIDGE NO. HAM-126-1303 LT. & RT.
HAM-126 OVER BALTIMORE & OHIO R.R.
AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C. STA. 503+27.61 TO P.O.S. STA. 507+19.17 L.B.
P.O.C. STA. 503+25.64 TO P.O.S. STA. 507+56.68 R.B.

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
PRB	BLZ		CRS	R.K. 3-71	12-85

FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR	
2	OHIO			304 787

HAMILTON COUNTY
HAM-126-18.00



Anchor Bolt Layout Dimensions				
Beam No.	A	B	C	D
1	10 9/16"	6 3/8"	6 5/16"	10 3/8"
2	10 9/16"	6 3/8"	6 5/16"	10 3/8"
3	10 9/16"	6 3/8"	6 5/16"	10 3/8"
4	10 9/16"	6 3/8"	6 5/16"	10 3/8"
5	10 9/16"	6 3/8"	6 5/16"	10 3/8"

NOTES: ⬡ = Pile Number

BRIDGE SEAT REINFORCING: Reinforcing steel in the vicinity of the bridge seat shall be accurately placed to avoid interference with the drilling of anchor bar holes.

HARRY BALKE ENGINEERS
990 NASSAU STREET
CINCINNATI, OHIO 45206

16 | 33

PIER DETAILS

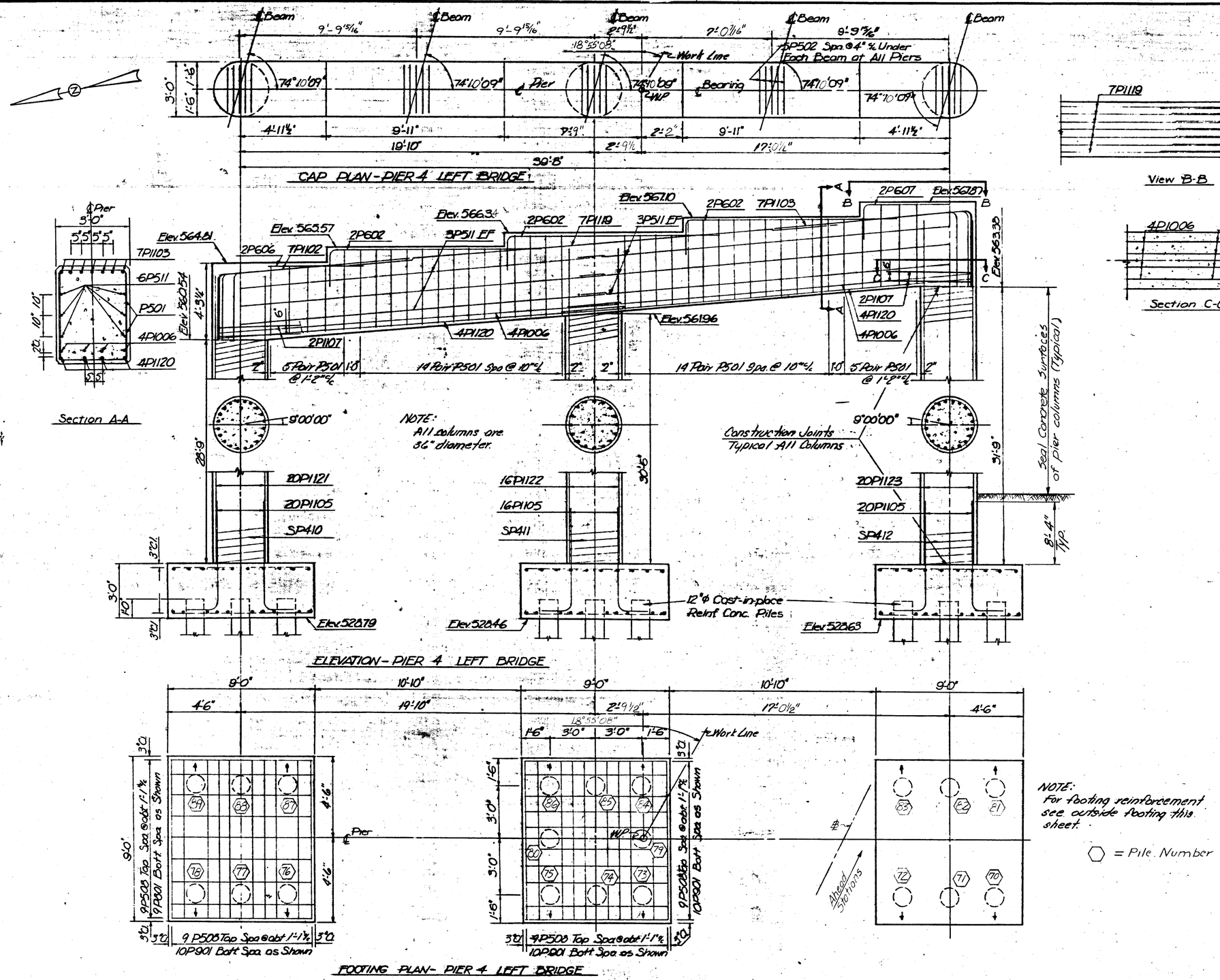
BRIDGE NO. HAM-126-1303 LT. & RT.
HAM-126 OVER BALTIMORE & OHIO R.R. AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C. STA. 503+27.61 TO P.O.S. STA. 507+19.17 L.B.
P.O.C. STA. 503+25.64 TO P.O.S. STA. 507+56.68 R.B.

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
PRB	ELZ		CRS	R.K.	3-71	12-85

FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

505/787

HAMILTON COUNTY
HAM-126-13.00



NOTE: For footing reinforcement see outside footing this sheet.

○ = Pile Number

HARRY BALKE ENGINEERS 17/33
990 NASSAU STREET
CINCINNATI, OHIO 45206

PIER DETAILS

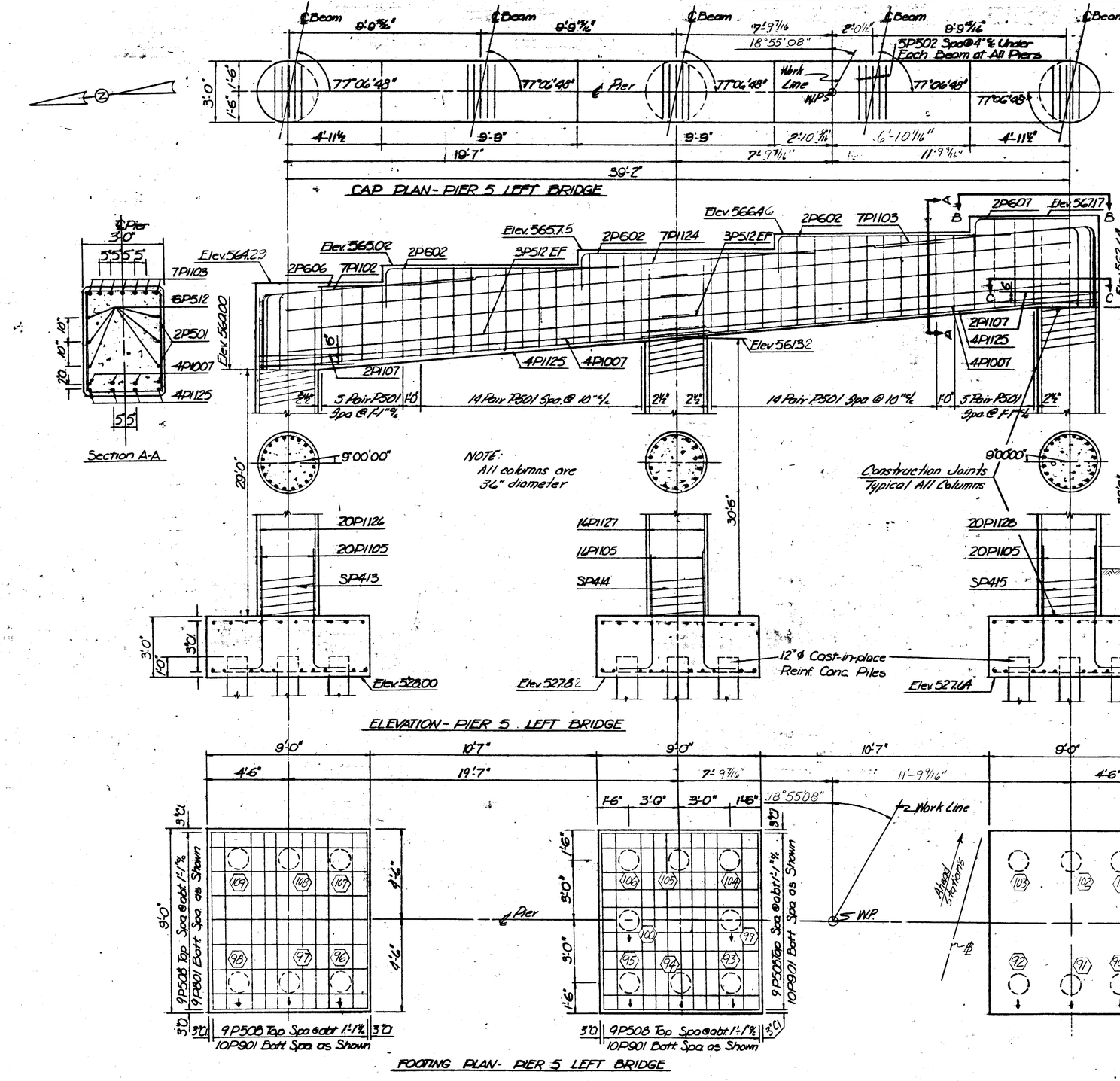
BRIDGE NO. HAM-126-1303 LT. & RT.
HAM-126 OVER BALTIMORE & OHIO R.R.
AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C.STA 503+27.61 TO P.O.S.STA 507+19.17 L.B.
P.O.C.STA 503+25.64 TO P.O.S.STA 507+56.68 R.B.

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
PRB	BLZ		CRS	RK 3-71	12-85

FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

902 787

HAMILTON COUNTY
HAM-126-13.00



NOTES: ⬡ = Pile Number

NOTE:
For footing reinforcement see outside footing this sheet.

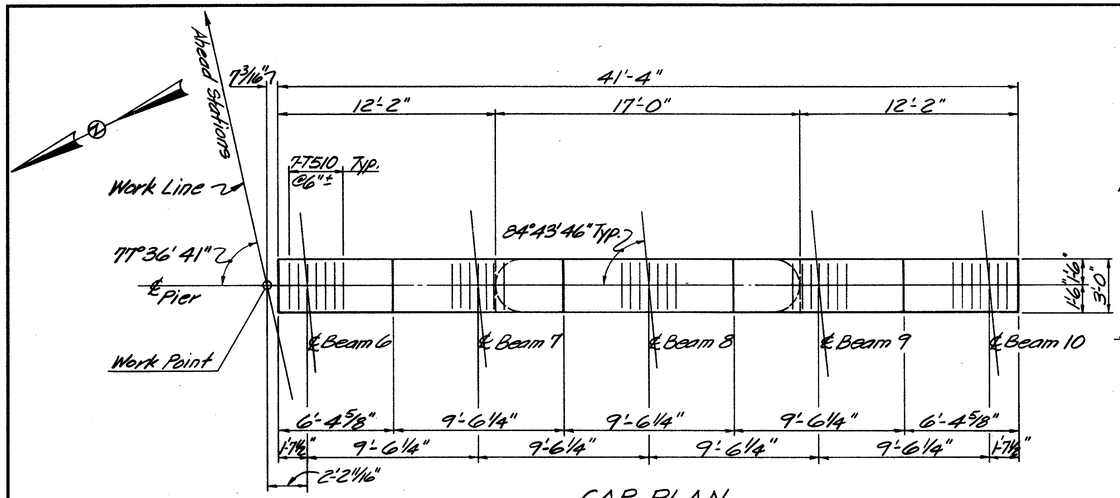
HARRY BALKE ENGINEERS 18/33
990 NASSAU STREET
CINCINNATI, OHIO 45206

PIER DETAILS

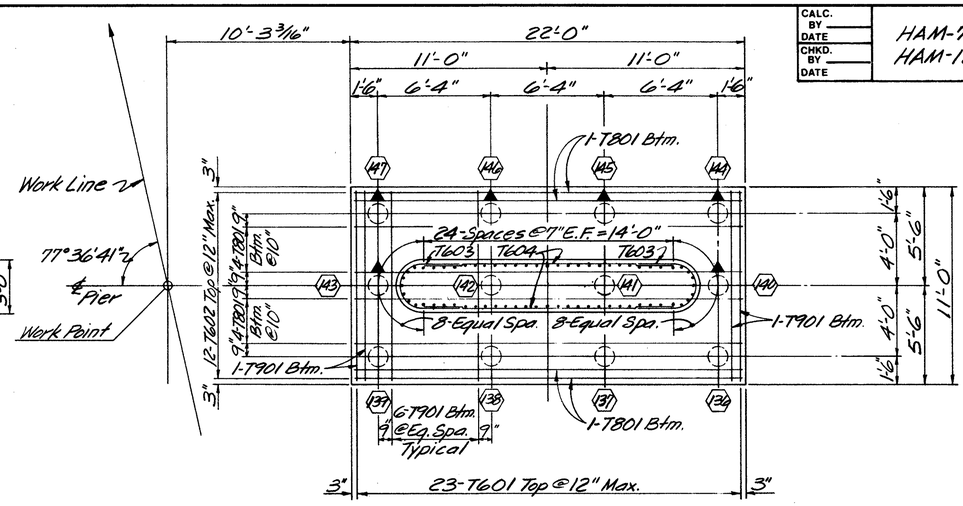
BRIDGE NO. HAM-126-1303 LT. & RT.
HAM-126 OVER BALTIMORE & OHIO R.R. AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C. STA. 503+27.61 TO P.O.S. STA. 507+19.17 L.B.
P.O.C. STA. 503+25.64 TO P.O.S. STA. 507+56.68 R.B.

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
PRB	BLZ		CRS	R.K. 3-71	12-85

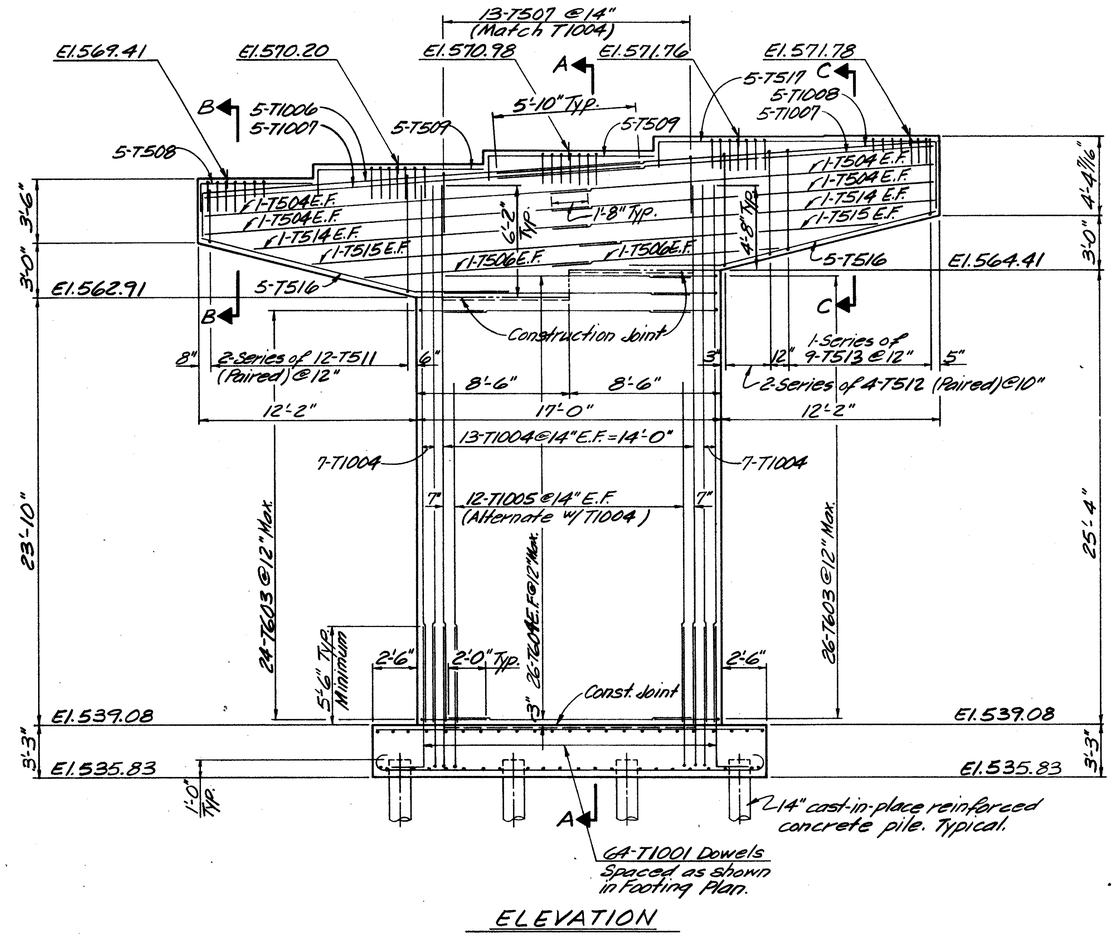
CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO FHWA REGION 5	507 787
DATE				
CHKD. BY				
DATE				



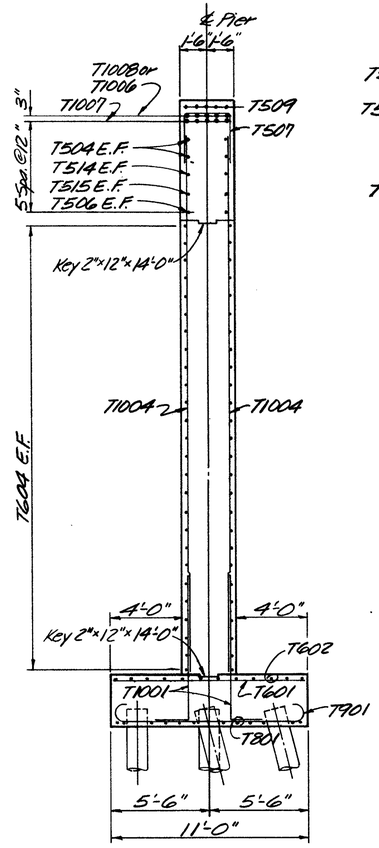
CAP PLAN



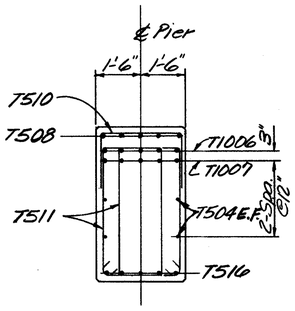
FOOTING PLAN



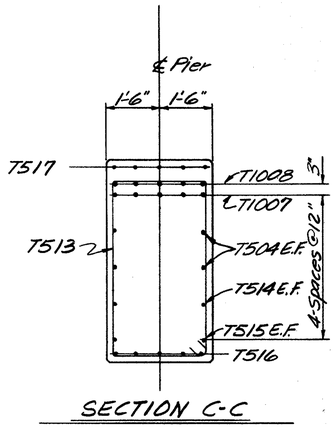
ELEVATION



SECTION A-A



SECTION B-B



SECTION C-C

NOTES:
1. Designates Pile battered 1:4 in direction of arrow.
2. Designates Pile Number. Pile Numbers 148-153 not used.

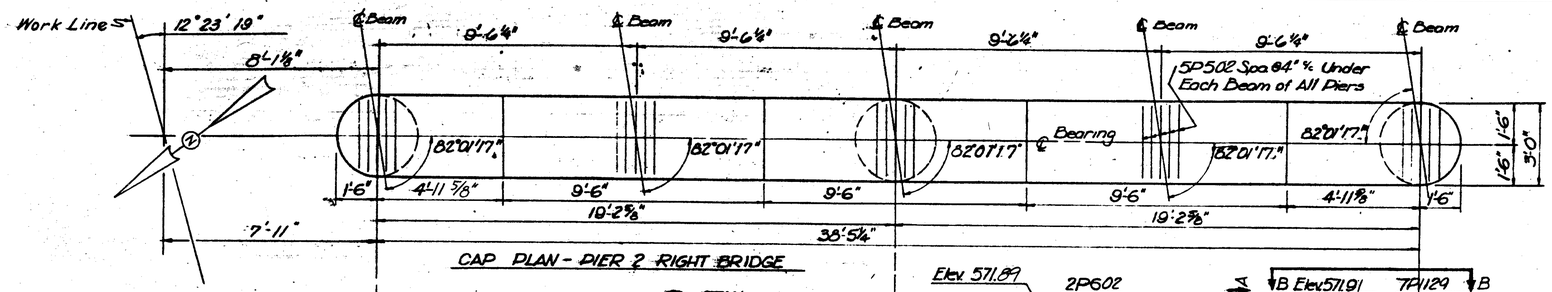
BALKE ENGINEERS 7762 READING ROAD CINCINNATI, OHIO 45237						19/33
PIER 1 RIGHT BRIDGE BRIDGE NO. HAM-126-1303 RT. HAM-126 OVER BALTIMORE & OHIO R.R. AND S.R. 4 (VINE STREET) HAMILTON COUNTY OHIO POC STA. 503+25.57 TO POS STA. 507+56.82						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED	
BJS	WJH	~	SJA	CRS 6/86		

OHIO BALK PRINT 140553

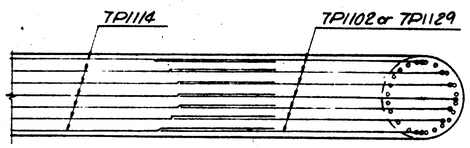
FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

300
787

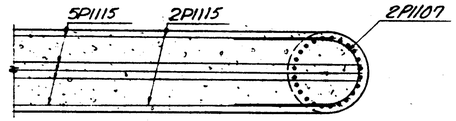
HAMILTON COUNTY
HAM-126-13.00



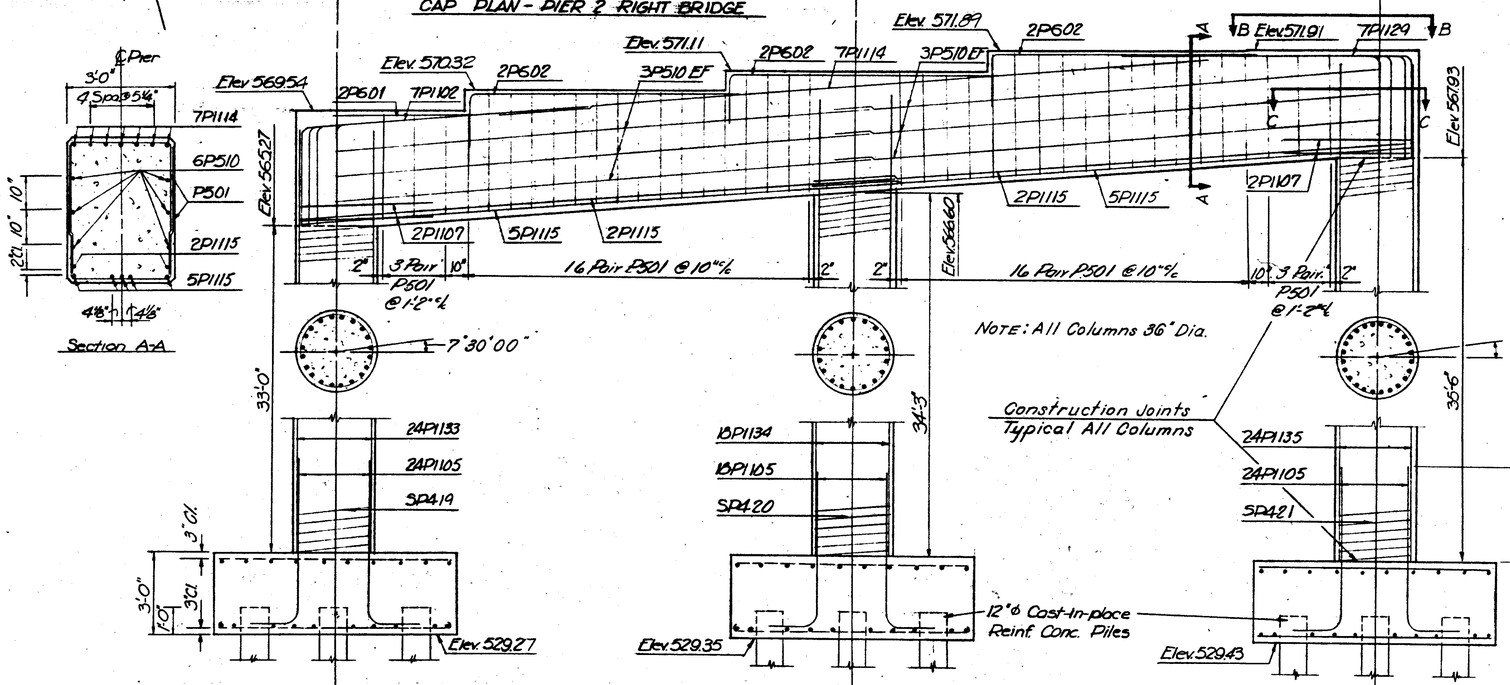
CAP PLAN - PIER 2 RIGHT BRIDGE



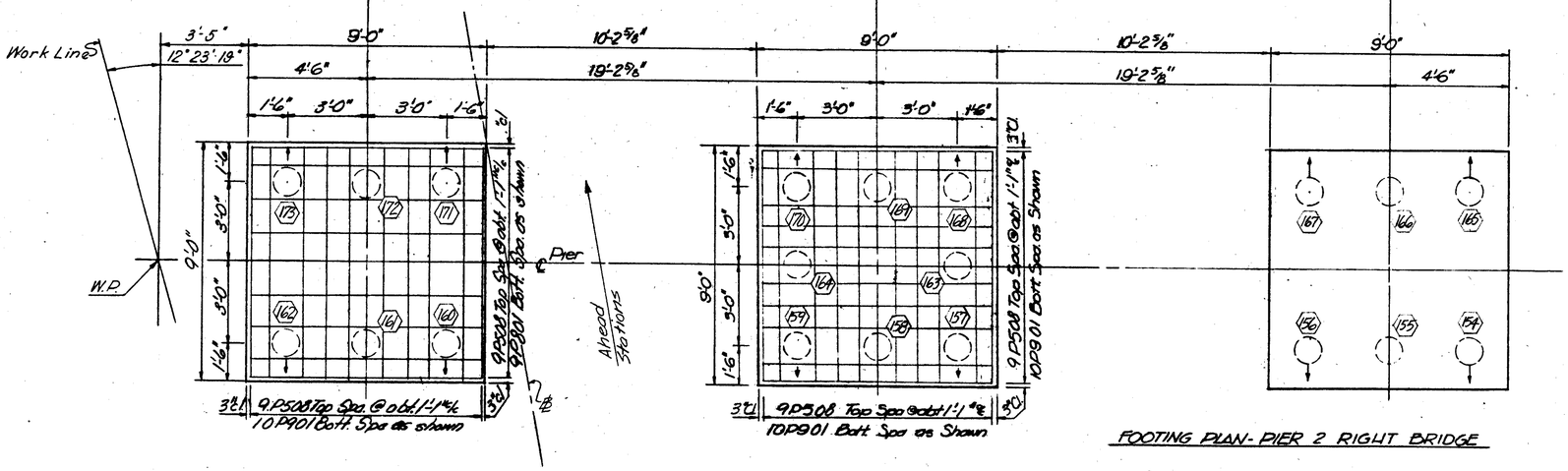
VIEW B-B



SECTION C-C



ELEVATION - PIER 2 RIGHT BRIDGE



FOOTING PLAN - PIER 2 RIGHT BRIDGE

NOTE:
For footing reinforcement some for all footings.

⬡ = Pile Number

HARRY BALKE ENGINEERS 20/33
990 NASSAU STREET
CINCINNATI, OHIO 45206

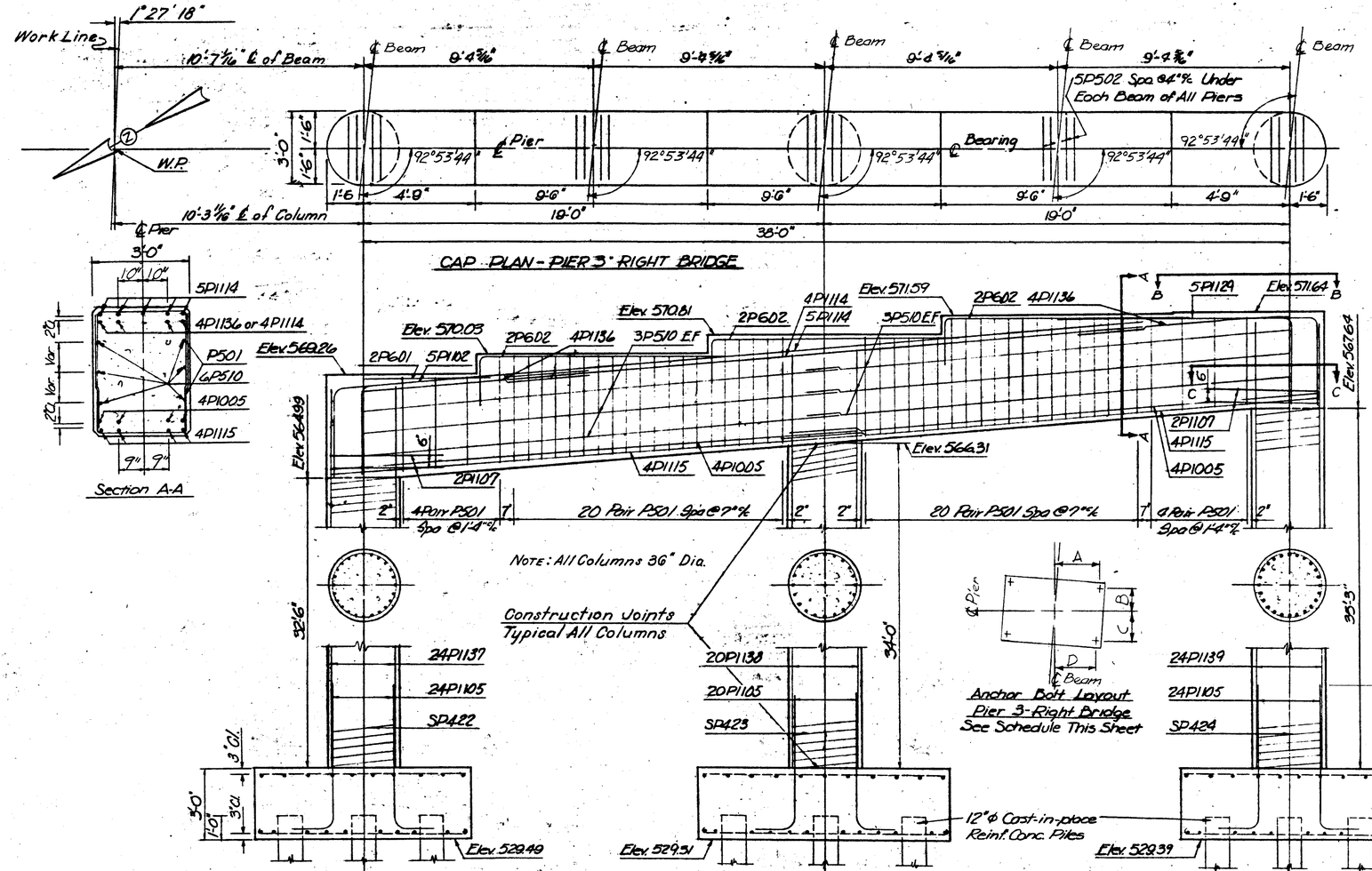
PIER DETAILS

BRIDGE NO. HAM-126-1303 LT. & RT.
HAM-126 OVER BALTIMORE & OHIO R.R. AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C. STA. 503+27.61 TO P.O.S. STA. 507+19.17 L.B.
P.O.C. STA. 503+25.64 TO P.O.S. STA. 507+56.68 R.B.

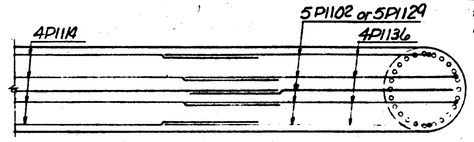
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
PRB	BLZ		CRS	R.K. 3-71	12-85

FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

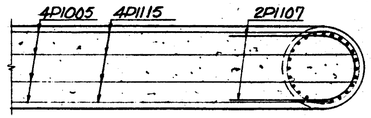
HAMILTON COUNTY
HAM-126-13.00



Section A-A



View B-B



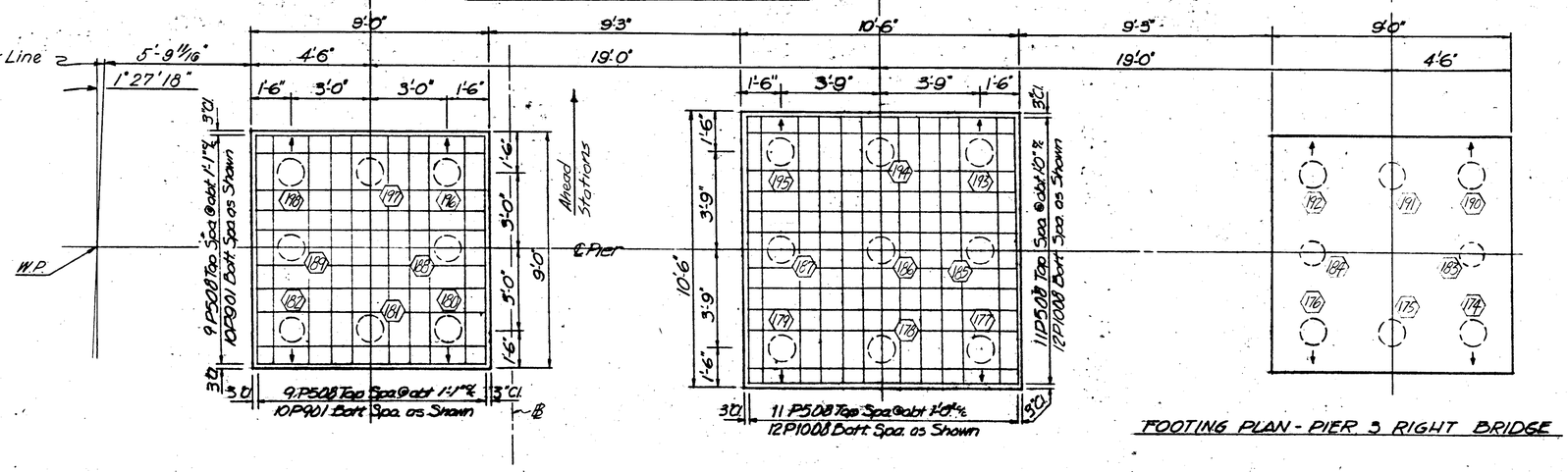
Section C-C

Anchor Bolt Layout Dimensions				
Beam No.	A	B	C	D
6	11 7/8"	6 15/16"	8 1/16"	11 1/8"
7	11 7/8"	6 15/16"	8 1/16"	11 1/8"
8	11 7/8"	6 15/16"	8 1/16"	11 1/8"
9	11 7/8"	6 15/16"	8 1/16"	11 1/8"
10	11 7/8"	6 15/16"	8 1/16"	11 1/8"

Anchor Bolt Layout
Pier 3-Right Bridge
See Schedule This Sheet

ELEVATION - PIER 3 RIGHT BRIDGE

BRIDGE SEAT REINFORCING: Reinforcing steel in the vicinity of the bridge seat shall be accurately placed to avoid interference with the drilling of anchor bar holes.



FOOTING PLAN - PIER 3 RIGHT BRIDGE

NOTE:
For footing reinforcement see outside footing this sheet.
⬡ = Pile Number

HARRY BALKE ENGINEERS
990 NASSAU STREET
CINCINNATI, OHIO 45206

21 / 33

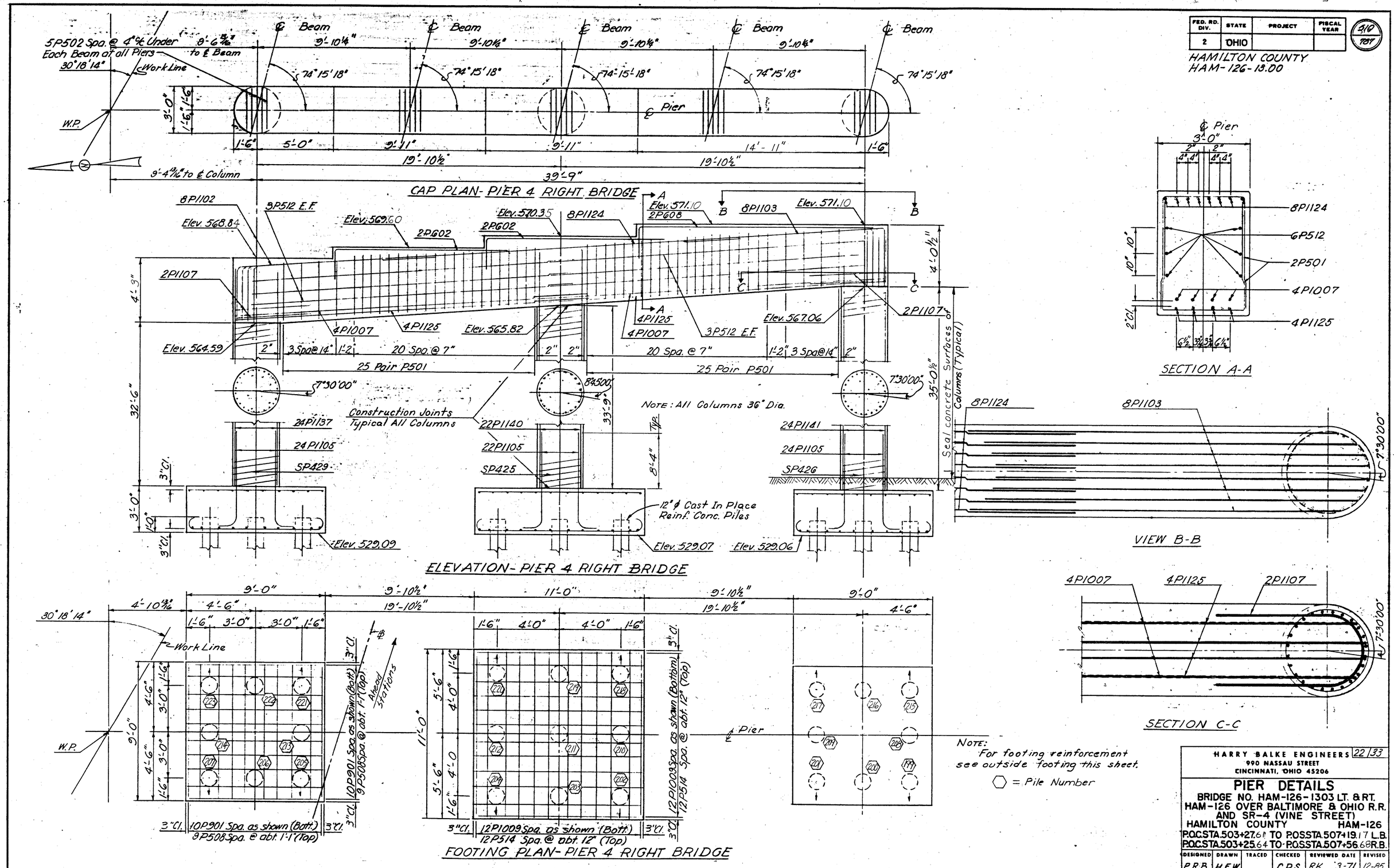
PIER DETAILS

BRIDGE NO. HAM-126-1303 LT. & RT.
HAM-126 OVER BALTIMORE & OHIO R.R.
AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C. STA. 503+27.61 TO P.O.S. STA. 507+19.17 L.B.
P.O.C. STA. 503+25.64 TO P.O.S. STA. 507+56.68 R.B.

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
ARB	BLZ		CRS	R.K. 3-71	12-85

FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

HAMILTON COUNTY
HAM-126-13.00



NOTE:
For footing reinforcement see outside footing this sheet.

⬡ = Pile Number

HARRY BALKE ENGINEERS 22/33
990 NASSAU STREET
CINCINNATI, OHIO 45206

PIER DETAILS

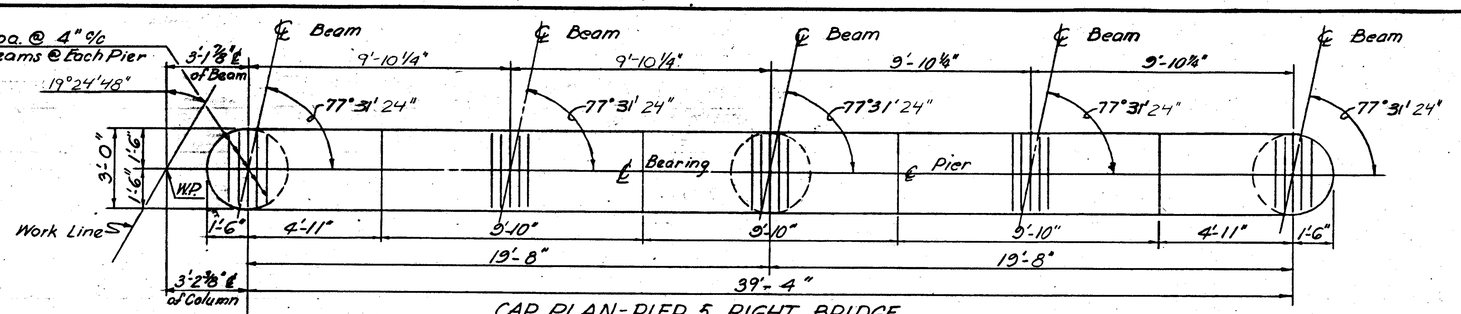
BRIDGE NO. HAM-126-1303 LT. & RT.
HAM-126 OVER BALTIMORE & OHIO R.R.
AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C. STA. 503+27.61 TO P.O.S. STA. 507+19.17 L.B.
P.O.C. STA. 503+25.64 TO P.O.S. STA. 507+56.68 R.B.

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
P.R.B.	H.E.W.		C.R.S.	R.K. 3-71	12-85

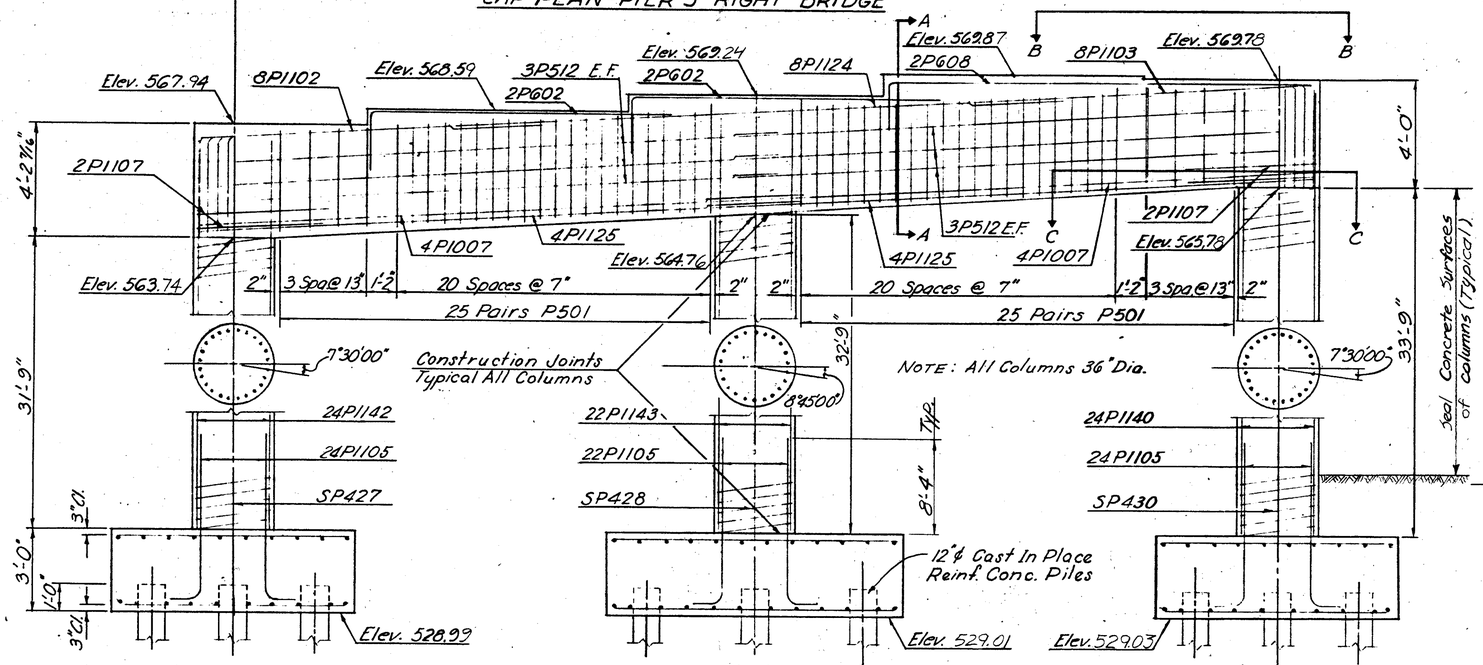
FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR	3,11 / 187
2	OHIO			

HAMILTON COUNTY
HAM-126-13.00

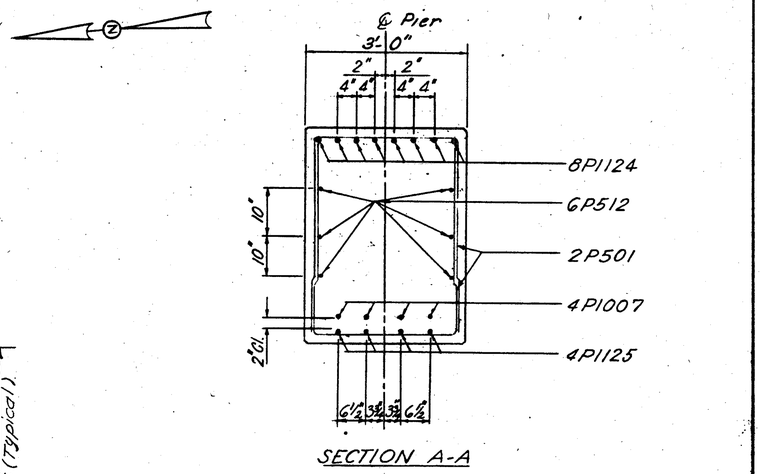
5P502 Spa. @ 4" c/c
Under all Beams @ Each Pier



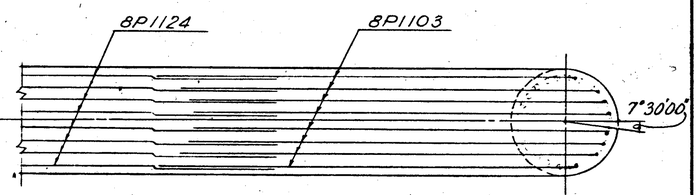
CAP PLAN-PIER 5 RIGHT BRIDGE



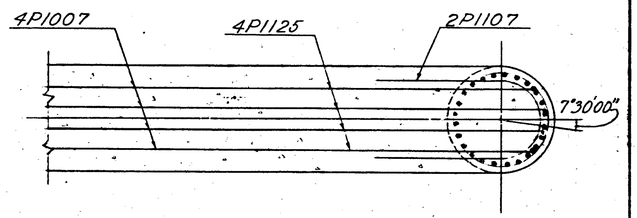
ELEVATION-PIER 5 RIGHT BRIDGE



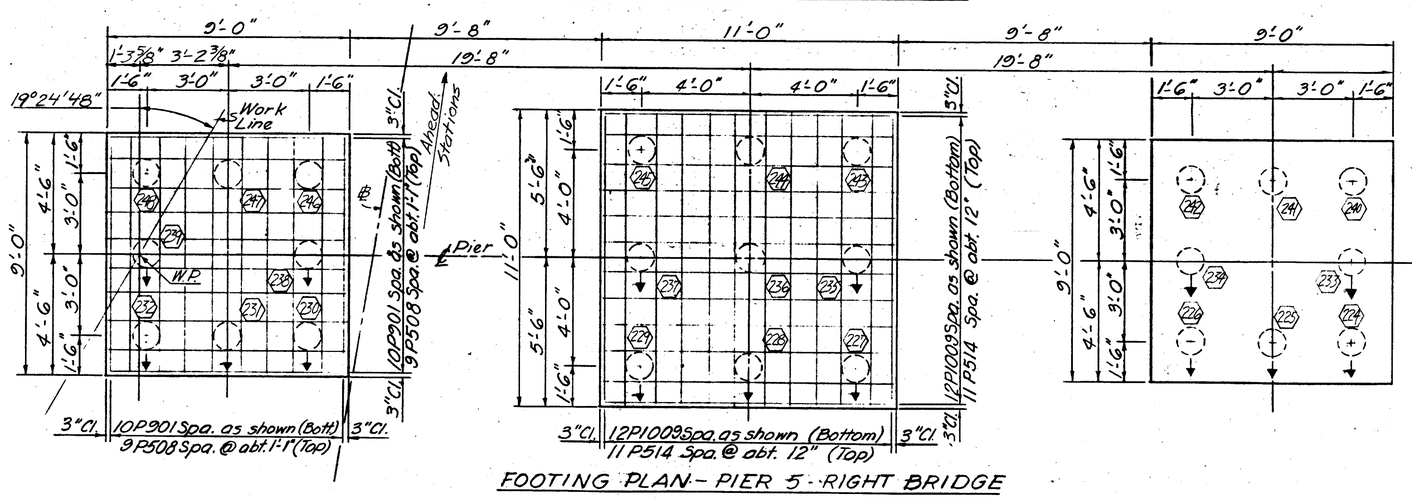
SECTION A-A



VIEW B-B



SECTION C-C



FOOTING PLAN-PIER 5-RIGHT BRIDGE

NOTE:
For footing reinforcement see outside footing this sheet

NOTE: E.F. = Each Face
⬡ = Pile Number

HARRY BALKE ENGINEERS 23/33
990 NASSAU STREET
CINCINNATI, OHIO 45206

PIER DETAILS

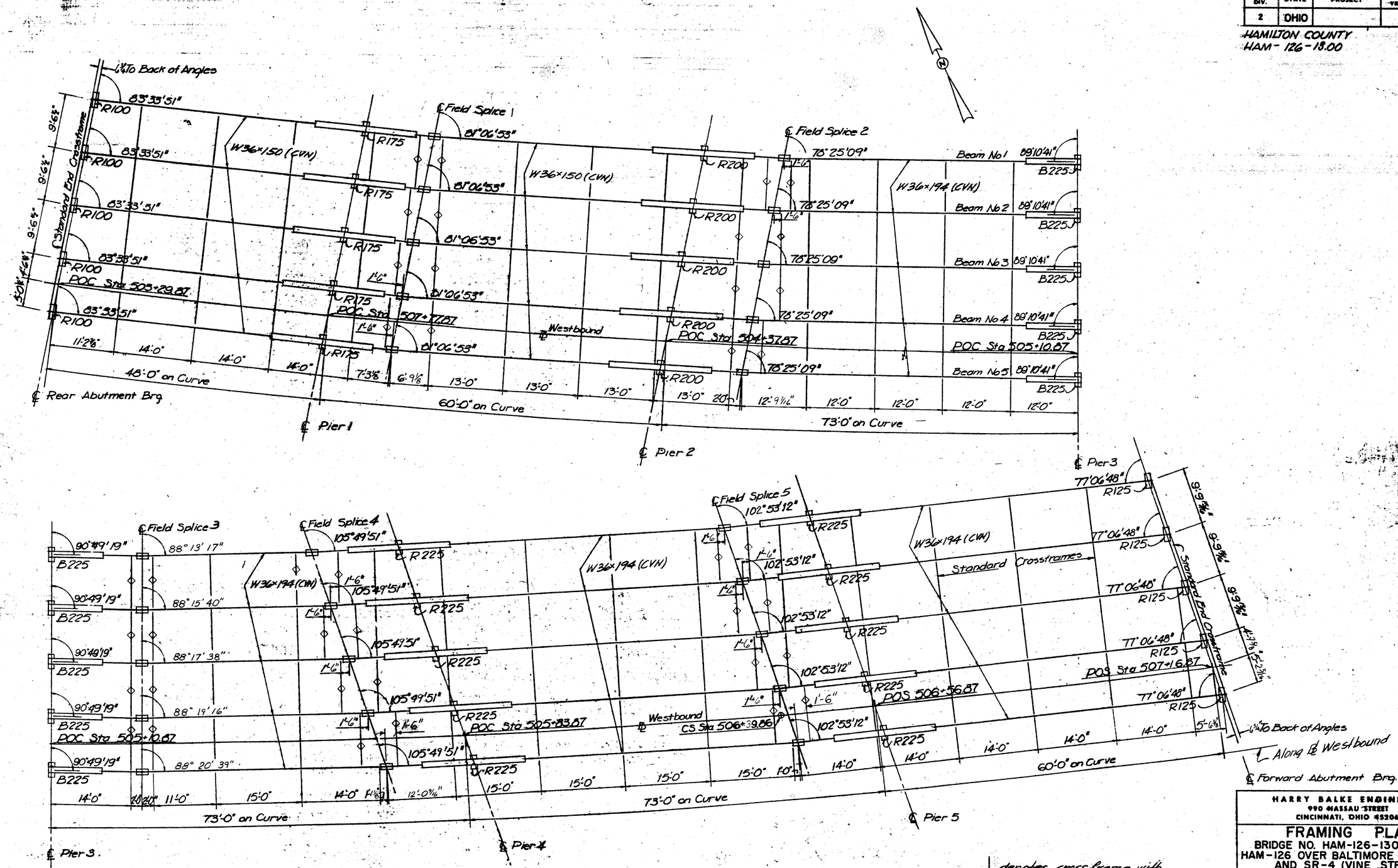
BRIDGE NO. HAM-126-1303 LT. & RT.
HAM-126 OVER BALTIMORE & OHIO R.R. AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C. STA. 503+27.61 TO P.O.S. STA. 507+19.17 L.B.
P.O.C. STA. 503+25.64 TO P.O.S. STA. 507+56.68 R.B.

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
P.R.B.	H.E.W.		C.R.S.	R.K. 3-71	12-85

FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

5/12 / 187

HAMILTON COUNTY
HAM-126-13.00



FRAMING PLAN - LEFT BRIDGE

◊ denotes crossframe with additional horizontal angle.

Note: For location of Scuppers See Sht. 3/33.

HARRY BALKE ENGINEERS 24/33
990 NASSAU STREET
CINCINNATI, OHIO 45206

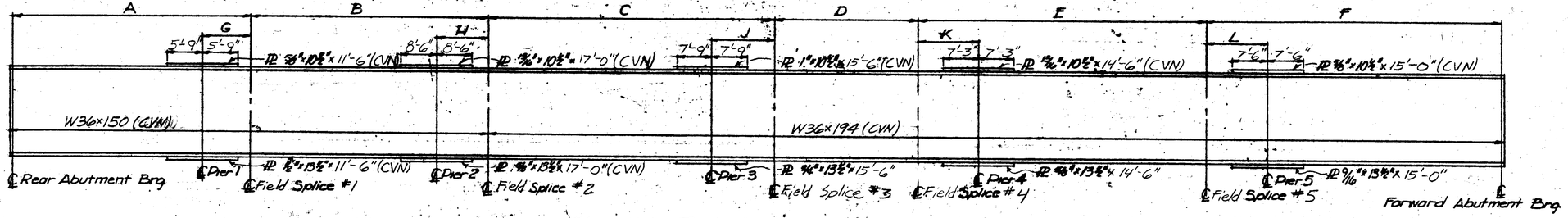
FRAMING PLAN

BRIDGE NO. HAM-126-1303 LT. & RT.
HAM-126 OVER BALTIMORE & OHIO R.R.
AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C. STA. 503+27.61 TO P.O.S. STA. 507+19.17 L.B.
P.O.C. STA. 503+25.64 TO P.O.S. STA. 507+56.68 R.B.

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
PRB	BLZ		CRS	R.K. 3-71	12-85

FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

HAMILTON COUNTY
HAM-126-13.00



Elevation - Typical - Left Bridge Beam

Beams	A	B	C	D	E	F	G	H	J	K	L
No 1	60'-6"	60'-9⅛"	65'-7 1/16"	30'-0⅞"	73'-0⅝"	75'-6⅜"	12'-5⅝"	13'-2⅛"	16'-0"	15'-5¼"	15'-3¼"
No 2	60'-6"	60'-9⅛"	70'-7⅝"	33'-3⅜"	73'-0⅛"	75'-6⅜"	12'-5⅛"	13'-2⅝"	16'-0"	15'-5¼"	15'-5⅛"
No 3	60'-6"	60'-9⅛"	72'-8 1/4"	36'-6 3/16"	73'-0⅛"	75'-6⅜"	12'-5⅛"	13'-2⅝"	16'-0"	15'-5¼"	15'-5¼"
No 4	60'-6"	60'-9⅝"	74'-8⅞"	39'-10"	73'-0⅛"	75'-6⅝"	12'-5⅛"	13'-2⅞"	16'-0"	15'-5⅛"	15'-5⅛"
No 5	60'-6"	60'-9⅝"	76'-9 7/16"	43'-1⅞"	73'-0⅛"	75'-6⅝"	12'-5 1/16"	13'-2⅞"	16'-0"	15'-5⅛"	15'-5¼"

Deflection & Camber

	Location	Span 1			Span 2				Span 3				Span 4				Span 5				Span 6		
		C②	C③	C④	C⑥	C⑦	C⑧	C⑨	C⑪	C⑫	C⑬	C⑭	C⑯	C⑰	C⑱	C⑲	C㉒	C㉓	C㉔	C㉕	C㉗	C㉘	C㉙
		¼ Pt.	½ Pt.	¾ Pt.	Sp. Pt.	¼ Pt.	½ Pt.	¾ Pt.	Sp. Pt.	¼ Pt.	½ Pt.	¾ Pt.	Sp. Pt.	¼ Pt.	½ Pt.	¾ Pt.	Sp. Pt.	¼ Pt.	½ Pt.	¾ Pt.	Sp. Pt.	¼ Pt.	½ Pt.	¾ Pt.
Beam 1	Defl. Due to Wt of Stl.	1/32	1/32	1/32	0	0	1/32	0	1/32	1/32	1/16	1/32	0	0	0	0	0	1/16	3/32	1/16	1/32	1/32	1/16	1/16
	Defl. Due to Rem. D.L.	3/16	1/4	3/32	3/32	1/8	7/32	3/32	5/32	7/32	3/8	7/32	1/32	1/32	1/16	0	0	11/32	17/32	9/32	7/32	5/32	13/32	11/32
	Camber for hor. fver. curve	0	0	0	7/16	13/32	9/32	5/32	1/2	15/32	11/32	5/32	11/16	1/16	5/16	9/16	9/16	9/32	1/4	3/32	3/16	1/16	1/32	3/32
	Total Defl. & Camber	1/32	9/32	1/8	17/32	17/32	17/32	1/4	11/16	23/32	25/32	13/32	23/32	23/32	11/16	9/16	9/16	1/8	3/8	7/16	7/16	1/8	7/16	1/2
	Location	C②	C③	C④	C⑥	C⑦	C⑧	C⑨	C⑪	C⑫	C⑬	C⑭	C⑯	C⑰	C⑱	C⑲	C⑳	C㉒	C㉓	C㉔	C㉕	C㉗	C㉘	C㉙
		¼ Pt.	½ Pt.	¾ Pt.	Sp. Pt.	¼ Pt.	½ Pt.	¾ Pt.	Sp. Pt.	¼ Pt.	½ Pt.	¾ Pt.	Sp. Pt.	¼ Pt.	½ Pt.	¾ Pt.	Sp. Pt.	¼ Pt.	½ Pt.	¾ Pt.	Sp. Pt.	¼ Pt.	½ Pt.	¾ Pt.
Beam 2	Defl. Due to Wt of Stl.	1/32	1/32	1/32	0	0	1/32	0	1/32	1/32	1/16	1/32	0	0	1/32	0	0	1/16	3/32	1/32	1/32	1/32	1/16	1/16
	Defl. Due to Rem. D.L.	7/32	1/4	1/8	1/16	3/32	3/16	3/32	3/16	1/4	13/32	1/4	1/32	1/32	1/8	1/32	1/32	5/16	1/2	1/4	7/32	3/16	13/32	11/32
	Camber for hor. fver. curve	0	0	0	7/16	13/32	9/32	5/32	1/2	15/32	5/16	5/32	21/32	21/32	5/8	9/16	9/16	5/32	1/16	7/32	5/16	1/32	1/32	3/32
	Total Defl. & Camber	1/4	9/32	5/32	1/2	1/2	1/2	1/4	23/32	3/4	25/32	7/16	11/16	11/16	25/32	19/32	19/32	7/32	17/32	1/2	9/16	3/16	1/2	1/2
	Location	C②	C③	C④	C⑥	C⑦	C⑧	C⑨	C⑪	C⑫	C⑬	C⑭	C⑯	C⑰	C⑱	C⑲	C⑳	C㉒	C㉓	C㉔	C㉕	C㉗	C㉘	C㉙
		¼ Pt.	½ Pt.	¾ Pt.	Sp. Pt.	¼ Pt.	½ Pt.	¾ Pt.	Sp. Pt.	¼ Pt.	½ Pt.	¾ Pt.	Sp. Pt.	¼ Pt.	½ Pt.	¾ Pt.	Sp. Pt.	¼ Pt.	½ Pt.	¾ Pt.	Sp. Pt.	¼ Pt.	½ Pt.	¾ Pt.
Beam 3	Defl. Due to Wt of Stl.	1/32	1/32	1/32	0	0	1/32	0	1/32	1/16	3/32	1/32	0	1/32	1/32	1/32	0	1/16	3/32	1/32	1/32	1/32	1/16	1/16
	Defl. Due to Rem. D.L.	7/32	1/4	1/8	1/16	3/32	3/16	1/16	3/16	9/32	7/16	1/4	3/32	3/32	7/32	3/32	3/32	9/32	15/32	1/4	3/16	3/16	13/32	11/32
	Camber for hor. fver. curve	0	0	0	7/16	13/32	9/32	5/32	1/2	15/32	5/16	5/32	21/32	21/32	5/8	9/16	9/16	1/32	1/8	3/8	7/16	1/32	1/16	1/8
	Total Defl. & Camber	1/4	9/32	5/32	1/2	1/2	1/2	7/32	23/32	3/4	27/32	7/16	3/4	25/32	7/8	11/16	21/32	5/16	11/16	21/32	21/32	1/4	17/32	17/32
	Location	C②	C③	C④	C⑥	C⑦	C⑧	C⑨	C⑪	C⑫	C⑬	C⑭	C⑯	C⑰	C⑱	C⑲	C⑳	C㉒	C㉓	C㉔	C㉕	C㉗	C㉘	C㉙
		¼ Pt.	½ Pt.	¾ Pt.	Sp. Pt.	¼ Pt.	½ Pt.	¾ Pt.	Sp. Pt.	¼ Pt.	½ Pt.	¾ Pt.	Sp. Pt.	¼ Pt.	½ Pt.	¾ Pt.	Sp. Pt.	¼ Pt.	½ Pt.	¾ Pt.	Sp. Pt.	¼ Pt.	½ Pt.	¾ Pt.
Beam 4	Defl. Due to Wt of Stl.	1/32	1/32	1/32	0	0	1/32	0	1/32	1/16	3/32	1/16	1/32	1/32	1/16	1/32	1/32	1/32	1/16	1/32	1/32	1/32	1/16	1/16
	Defl. Due to Rem. D.L.	7/32	1/4	1/8	1/16	3/32	5/32	1/16	7/32	5/16	1/2	9/32	1/8	5/32	5/16	5/32	1/8	1/4	7/16	7/32	3/16	3/16	7/16	3/8
	Camber for hor. fver. curve	0	0	0	7/16	13/32	9/32	1/8	1/2	15/32	5/16	5/32	21/32	21/32	5/8	9/16	9/16	1/8	5/16	7/32	9/16	1/16	3/32	3/32
	Total Defl. & Camber	1/4	9/32	5/32	1/2	1/2	5/8	3/16	3/4	27/32	29/32	1/2	15/16	27/32	1	3/4	23/32	13/32	13/16	29/32	25/32	9/32	9/32	17/32
	Location	C②	C③	C④	C⑥	C⑦	C⑧	C⑨	C⑪	C⑫	C⑬	C⑭	C⑯	C⑰	C⑱	C⑲	C⑳	C㉒	C㉓	C㉔	C㉕	C㉗	C㉘	C㉙
		¼ Pt.	½ Pt.	¾ Pt.	Sp. Pt.	¼ Pt.	½ Pt.	¾ Pt.	Sp. Pt.	¼ Pt.	½ Pt.	¾ Pt.	Sp. Pt.	¼ Pt.	½ Pt.	¾ Pt.	Sp. Pt.	¼ Pt.	½ Pt.	¾ Pt.	Sp. Pt.	¼ Pt.	½ Pt.	¾ Pt.
Beam 5	Defl. Due to Wt of Stl.	1/32	1/32	1/32	0	0	0	0	1/32	1/16	3/32	1/16	1/32	1/32	1/16	1/32	1/32	1/32	1/16	1/32	1/32	1/32	1/16	1/16
	Defl. Due to Rem. D.L.	7/32	1/4	1/8	1/16	3/32	5/32	1/32	7/32	1/32	9/16	9/32	5/32	7/32	7/16	1/4	3/16	7/32	13/32	7/32	5/32	3/16	7/16	3/8
	Camber for hor. fver. curve	0	0	0	7/16	13/32	9/32	1/8	1/2	15/32	5/16	5/32	21/32	21/32	5/8	9/16	9/16	9/32	1/2	21/32	11/16	3/32	3/32	1/16
	Total Defl. & Camber	1/4	9/32	5/32	1/2	1/2	7/16	5/32	3/4	7/8	31/32	1/2	27/32	29/32	1/16	27/32	25/32	7/32	31/32	29/32	7/8	5/16	19/32	1/2

NOTES

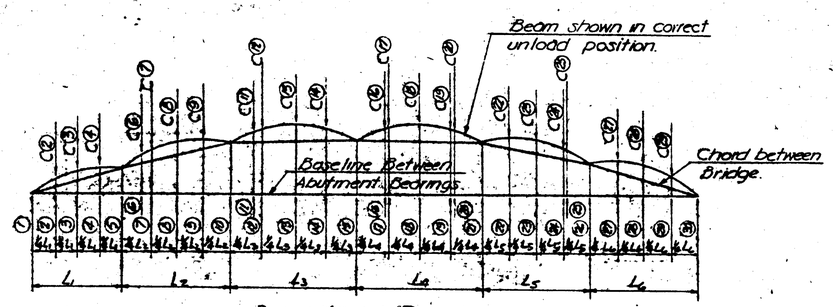
For details of End Cross-Frames See Std. Dwg. SD-1-69.

STEEL NOTCH TOUGHNESS REQUIREMENT (CHARPY V-NOTCH).
Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements as specified in 711.01 of CMS.

END BOLTED COVER PLATES:
Bolt holes in cover plate and flange must be drilled prior to welding to ensure friction type connection. Contact surfaces must be blast-cleaned and completely free of residue.

RECOMMENDED FABRICATION METHOD.
1. Drill standard holes in cover plate and flange.
2. Clean contact surfaces to be bolted.
3. Tack weld cover plate to flange.
4. Install and tighten high-strength bolts.
5. Fillet weld cover plate to flange.
Step numbers 4 and 5 can be interchanged if desired.

For cover plate details see Sheet 25A 33.
For splice details see Sheet 25A 33.



Beams Layout Diagram

Distance Between Chord and Baseline

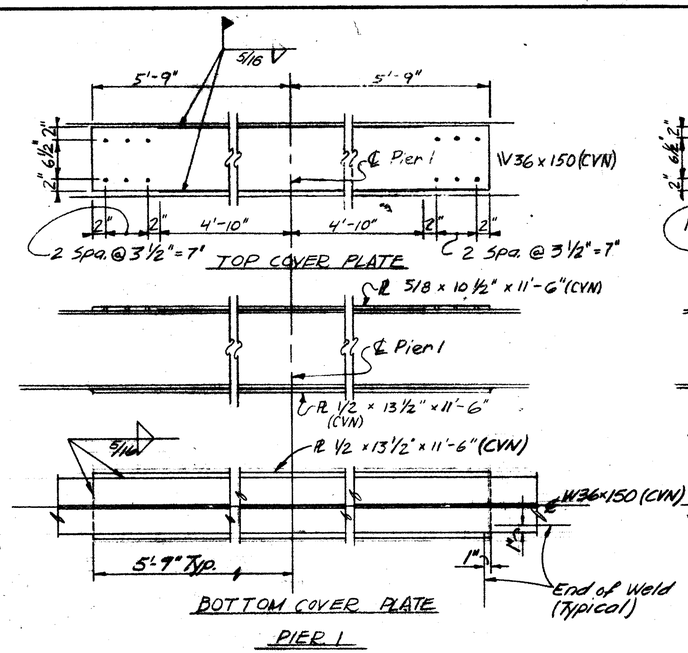
Location	R.A.	Span 1			Pier 1	Span 2				Pier 2	Span 3				Pier 3	Span 4					Pier 4	Span 5					Pier 5	Span 6			F.A.
		¼ Pt.	½ Pt.	¾ Pt.		Sp. Pt.	¼ Pt.	½ Pt.	¾ Pt.		Sp. Pt.	¼ Pt.	½ Pt.	¾ Pt.		Sp. Pt.	¼ Pt.	½ Pt.	¾ Pt.	Sp. Pt.		¼ Pt.	½ Pt.	¾ Pt.	Sp. Pt.		¼ Pt.	½ Pt.	¾ Pt.	
	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮	⑯	⑰	⑱	⑲	⑳	㉑	㉒	㉓	㉔	㉕	㉖	㉗	㉘	㉙	㉚
Beam 1	0	0.0987	0.1975	0.2960	0.3948	0.4602	0.4732	0.5520	0.6308	0.7096	0.7254	0.7891	0.7489	0.7686	0.7552	0.7367	0.7386	0.6890	0.6399	0.6400	0.5903	0.4980	0.4056	0.3132	0.2998	0.2219	0.1664	0.1109	0.0555	0
Beam 2	0	0.1035	0.2069	0.3104	0.4139	0.4845	0.4986	0.5836	0.6685	0.7539	0.7753	0.7812	0.8068	0.8362	0.8631	0.8198	0.8192	0.7747	0.7303	0.7285	0.6862	0.5941	0.5022	0.4101	0.3967	0.3191	0.2393	0.1595	0.0798	0
Beam 3	0	0.1083	0.2166	0.3250	0.4333	0.5094	0.5249	0.6160	0.7075	0.7990	0.8261	0.8347	0.8706	0.9069	0.9422	0.9061	0.9037	0.8653	0.8269	0.8236	0.7886	0.6948	0.6007	0.5067	0.4929	0.4137	0.3103	0.2068	0.1034	0
Beam 4	0	0.1132	0.2266	0.3398	0.4529	0.5345	0.5507	0.6488	0.7469	0.8449	0.8778	0.8895	0.9349	0.9790	1.0235	0.9957	0.9929	0.9609	0.9299	0.9255	0.8983	0.8006	0.7028	0.6051	0.5908	0.5085	0.3914	0.2582	0.1271	0
Beam 5	0	0.1183	0.2366	0.3549	0.4731	0.5600	0.5773	0.6820	0.7867	0.8913	0.9301	0.9454	0.9998	1.0540	1.1083	1.0861	1.0848	1.0611	1.0376	1.0338	1.0143	0.9105	0.8074	0.7039	0.6888	0.6016	0.4512	0.3007	0.1504	0

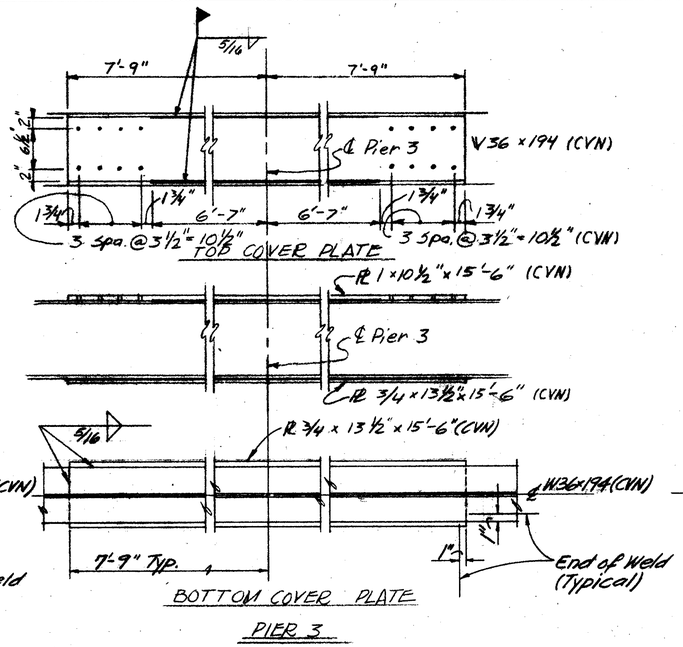
HARRY BALKE ENGINEERS 25/33
990 NASSAU STREET
CINCINNATI, OHIO 45206

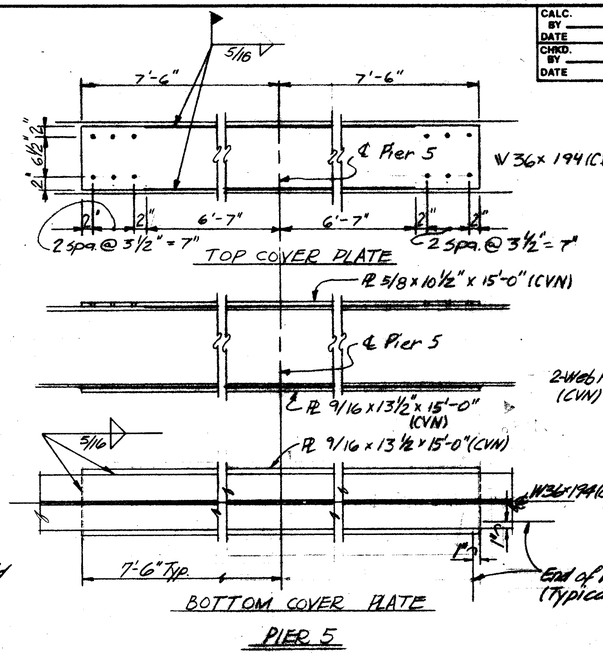
BEAM DETAILS

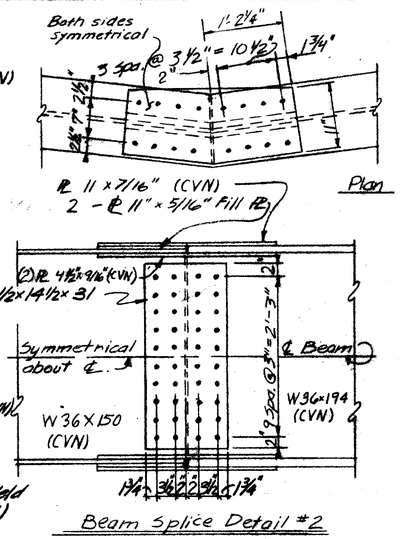
BRIDGE NO. HAM-126-1303 LT. & RT.
HAM-126 OVER BALTIMORE & OHIO R.R.
AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C. STA. 503+27.61 TO P.O. STA. 507+19.17 L.B
P.O.C. STA. 503+25.64 TO P.O. STA. 507+56.68 R.B.

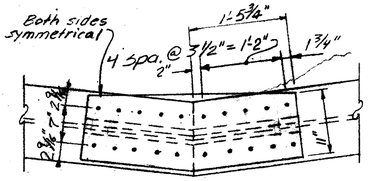
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
PRB	BLZ		C.R.S.	R.K. 3-71	12-85

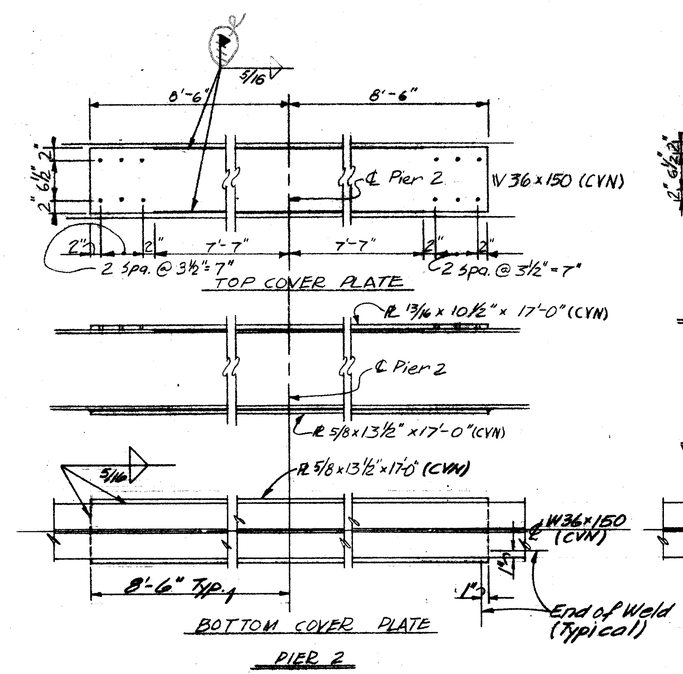


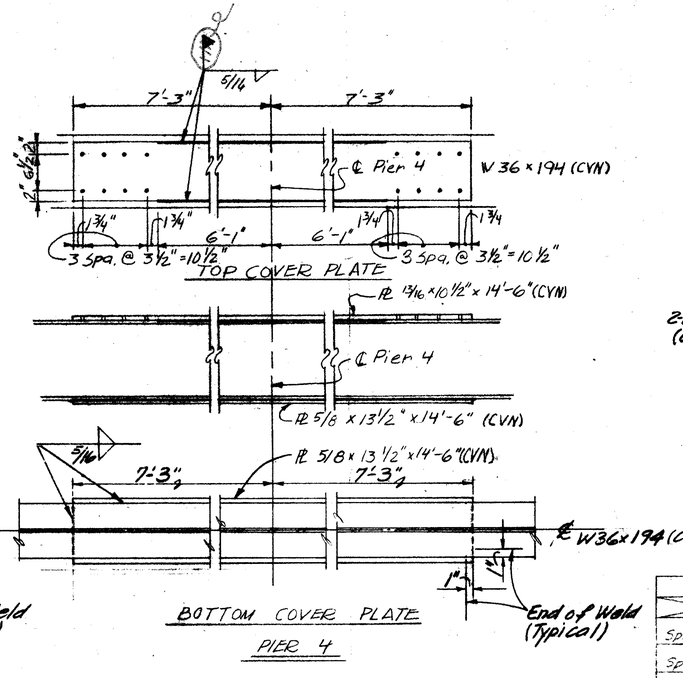


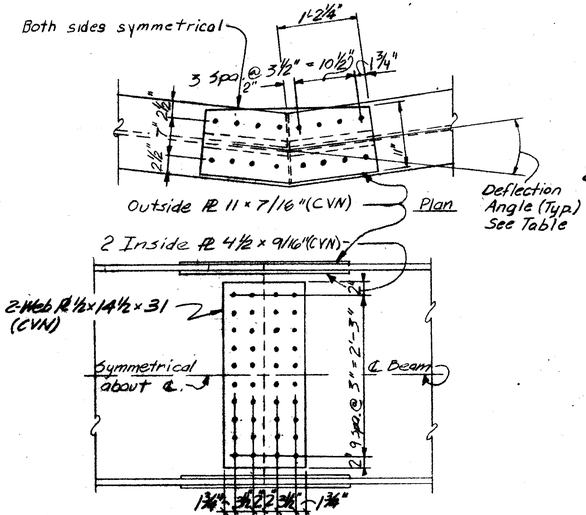


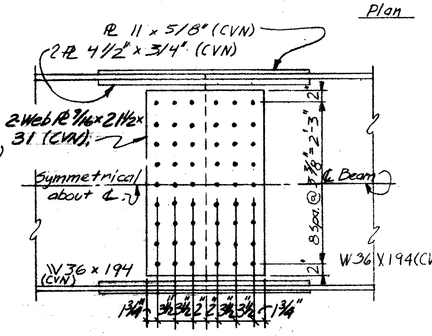












NOTES: For details not shown see SD-1-69

For Notes See Sheet 25 | 33

SPLICE DEFLECTION ANGLES

	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5
Splice 1	2° 26' 58"	2° 26' 58"	2° 26' 58"	2° 26' 58"	2° 26' 58"
Splice 2	2° 41' 44"	2° 41' 44"	2° 41' 44"	2° 41' 44"	2° 41' 44"
Splice 3	2° 36' 02"	2° 33' 39"	2° 31' 41"	2° 30' 03"	2° 28' 40"
Splice 4	1° 47' 23"	1° 49' 46"	1° 51' 44"	1° 53' 22"	1° 54' 45"
Splice 5	2° 56' 39"	2° 56' 39"	2° 56' 39"	2° 56' 39"	2° 56' 39"

CALC. BY
DATE
CHKD. BY
DATE

OHIO
FHWA REGION 5

513A
787

LEFT BRIDGE

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

25A 33

COVER PLATE & SPLICE DETAILS
BRIDGE NO. HAM-126-13C3 LT
HAM-126 OVER BALTIMORE & OHIO RR AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
STA 503+27.41 TO STA 507+19.17
STA 503+25.64 TO STA 507+56.68

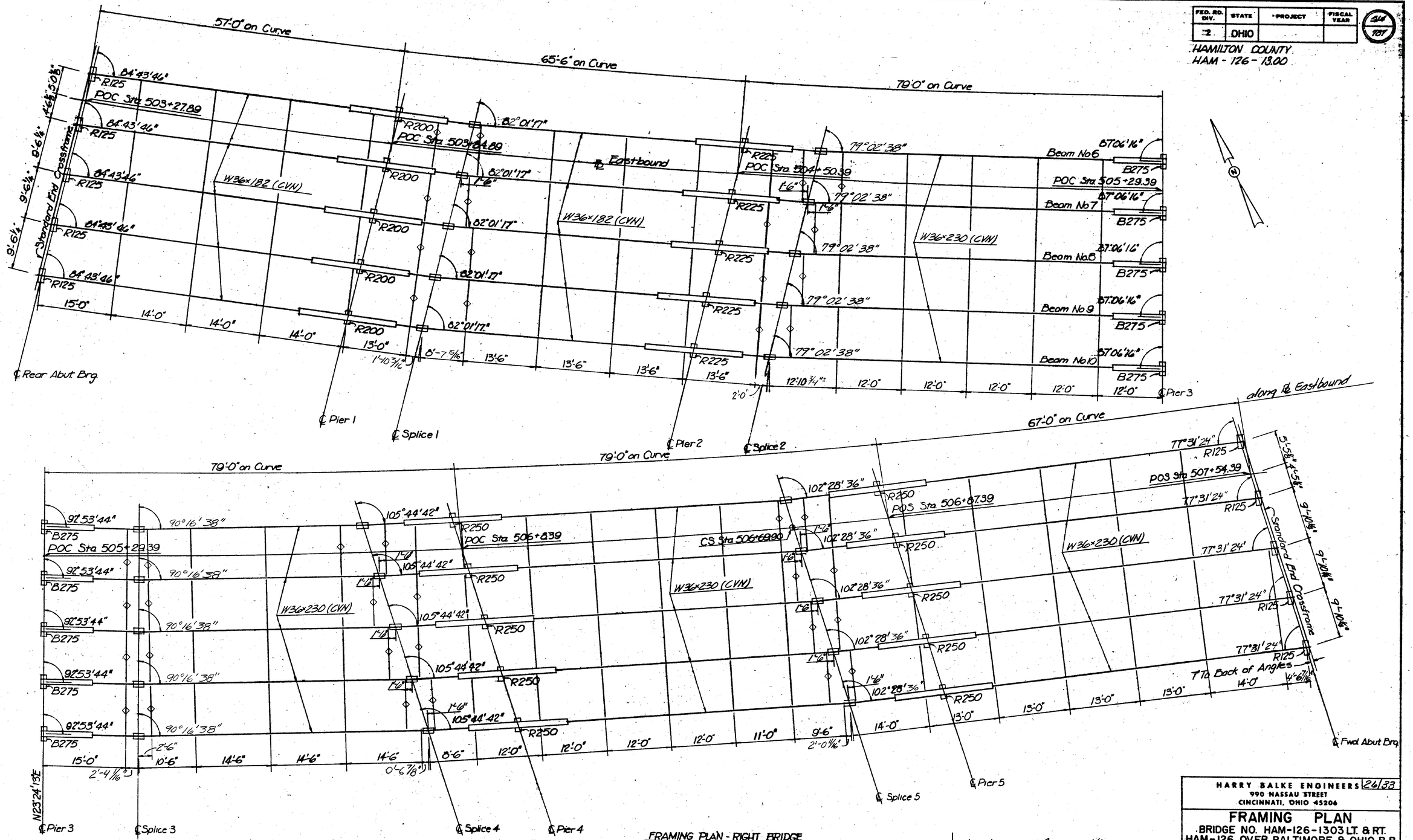
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
BJS	ADS		SJA	J.E.S.	12-85	

REVISED 9/29/86

OHIO BLUE PRINT

FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR	SHT. NO.	TOT.
2	OHIO				

HAMILTON COUNTY
HAM - 126 - 13.00



FRAMING PLAN - RIGHT BRIDGE

◇ denotes crossframe with additional horizontal angle.

Note: For Scupper location See Sht. 3/33.

HARRY BALKE ENGINEERS 26/33
990 NASSAU STREET
CINCINNATI, OHIO 45206

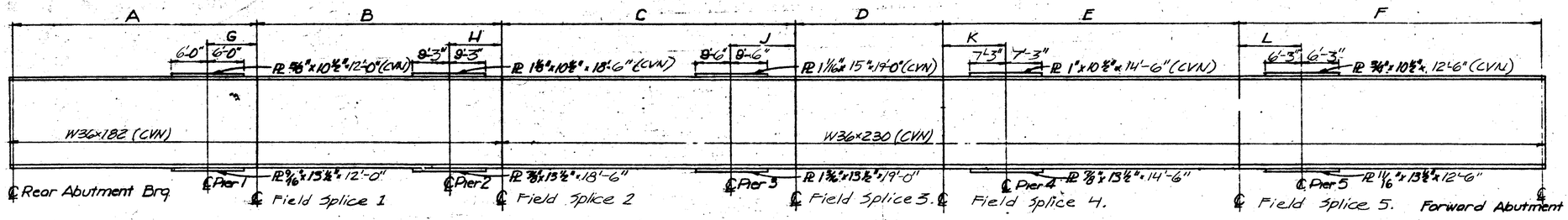
FRAMING PLAN

BRIDGE NO. HAM-126-1303 LT. & RT.
HAM-126 OVER BALTIMORE & OHIO R.R. AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C. STA. 503+27.61 TO P.O.S. STA. 507+19.17 L.B
P.O.C. STA. 503+25.64 TO P.O.S. STA. 507+56.68 R.B

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
PRB	BLZ		CRS	R.K. 3-71	12-85

FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

HAMILTON COUNTY
HAM-126 - 13.00



Elevation - Typical Right Bridge Beam

Beams	A	B	C	D	E	F	G	H	J	K	L
No 6	71'-10 3/16"	64'-7 15/16"	81'-1 1/4"	42'-5"	79'-0 11/16"	84'-6 7/16"	14'-9 15/16"	14'-0"	17'-4 1/16"	17'-7 1/16"	17'-6 1/16"
No 7	71'-10 3/16"	64'-7 15/16"	83'-4 5/8"	45'-5 1/2"	79'-0 11/16"	84'-6 1/16"	14'-9 15/16"	14'-0"	17'-4 1/16"	17'-7 1/16"	17'-6 1/16"
No 8	71'-10 3/16"	64'-7 15/16"	85'-8 1/16"	48'-5 1/8"	79'-0 11/16"	84'-6 7/16"	14'-9 15/16"	14'-0"	17'-4 1/16"	17'-7 1/16"	17'-6 1/16"
No 9	71'-10 3/16"	64'-7 15/16"	87'-11 1/16"	51'-6 7/16"	79'-0 11/16"	84'-6 7/16"	14'-9 15/16"	14'-0"	17'-4 1/16"	17'-7 1/16"	17'-6 1/16"
No 10	71'-10 3/16"	64'-7 15/16"	90'-2 13/16"	54'-6 13/16"	79'-0 11/16"	84'-6 7/16"	14'-9 15/16"	14'-0"	17'-4 1/16"	17'-7 1/16"	17'-6 1/16"

NOTES:

For details of End Crossframes See Std. Dwg. SD-1-69.

STEEL NOTCH TOUGHNESS REQUIREMENT (CHARPY V-NOTCH)
Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements as specified in 711.01 of CMS.

END BOLTED COVER PLATES
Bolt holes in cover plate and flange must be drilled prior to welding to ensure friction type connection, Contact surfaces must be blast - cleaned and completely free of residue.

RECOMMENDED FABRICATION METHOD.
1. Drill standard holes in cover plate and flange.
2. Clean contact surfaces to be bolted.
3. Tack weld cover plate to flange.
4. Install and tighten high-strength bolts.
5. Fillet weld cover plate to flange.
Step numbers 4 and 5 can be interchanged if desired.

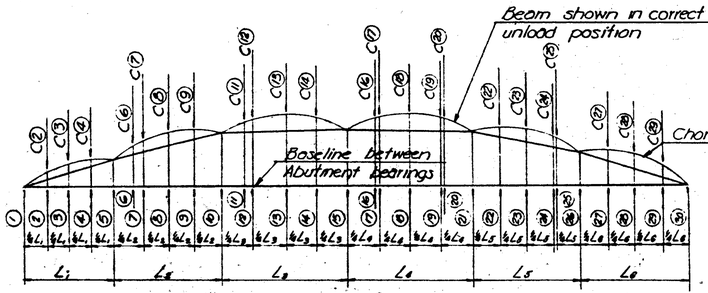
NOTES (Continued):

For cover plate details see sheet 27A/33.
For splice details see sheet 27A/33.

Deflection & Camber

	Location	Span 1			Span 2				Span 3				Span 4				Span 5				Span 6		
		C②	C③	C④	C⑥	C⑦	C⑧	C⑨	C⑪	C⑫	C⑬	C⑭	C⑯	C⑰	C⑱	C⑲	C㉒	C㉓	C㉔	C㉕	C㉗	C㉘	C㉙
		¼ Pt	½ Pt	¾ Pt	Span	¼ Pt	½ Pt	¾ Pt	Span	¼ Pt	½ Pt	¾ Pt	Span	¼ Pt	½ Pt	¾ Pt	Span	¼ Pt	½ Pt	¾ Pt	Span	¼ Pt	½ Pt	¾ Pt
Beam 6	Defl. Due to Wt of Stl.	1/16	1/16	1/32	0	0	1/32	0	1/16	1/16	3/32	1/16	1/32	1/32	1/16	1/32	1/32	1/16	3/32	1/32	1/32	1/16	1/8	3/32
	Defl. Due to Rem. D.L.	11/32	7/16	7/32	1/16	1/16	5/32	1/16	7/32	5/16	1/2	9/32	5/32	3/16	3/16	5/32	1/4	15/32	7/32	3/16	1/4	9/16	15/32
	*Camber for Vert Curve	0	0	0	9/16	17/32	3/8	5/16	9/32	9/16	3/8	3/16	25/32	25/32	25/32	3/4	3/4	7/16	31/32	15/32	1 1/2	9/32	3/16	3/32
	Total Defl. & Camber	13/32	1/2	1/4	5/8	19/32	9/16	1/4	7/8	15/16	31/32	17/32	31/32	1	1 3/32	31/32	15/16	3/4	1 3/8	1 5/32	1 9/32	9/32	7/8	21/32
Beam 7	Defl. Due to Wt of Stl.	1/16	1/16	1/32	0	0	0	0	1/16	3/32	1/8	1/16	1/32	1/32	3/32	1/16	1/32	3/32	1/32	1/32	1/16	1/8	3/32
	Defl. Due to Rem. D.L.	5/8	7/16	7/32	1/32	1/16	5/32	1/32	1/4	3/8	9/16	9/32	3/16	7/32	15/32	1/4	3/16	7/32	7/16	7/32	5/32	1/4	9/16	1/2
	*Camber for Vert Curve	0	0	0	9/16	17/32	11/32	3/16	19/32	9/16	3/8	3/16	13/16	13/16	13/16	13/16	13/16	19/32	1/4	1 9/32	2 1/32	7/32	5/32	3/32
	Total Defl. & Camber	7/16	1/2	1/4	19/32	9/32	1/2	7/32	29/32	13/32	11/16	17/32	1 1/32	1 1/16	1 9/16	1 1/8	1 1/32	1 7/32	1 5/8	1 3/32	1 17/32	27/32	1 1/16	
Beam 8	Defl. Due to Wt of Stl.	1/16	1/16	1/32	0	0	0	0	1/16	3/32	1/8	1/16	1/32	1/16	1/8	1/16	1/16	1/32	3/32	1/32	1/32	1/16	1/8	3/32
	Defl. Due to Rem. D.L.	5/8	7/16	7/32	1/32	1/16	1/8	1/32	9/32	13/32	23/32	5/16	27/32	9/32	19/32	11/32	1/4	3/16	13/32	3/16	5/32	9/32	19/32	1/2
	*Camber for Vert Curve	0	0	0	17/32	17/32	11/32	3/16	19/32	9/16	3/8	3/16	13/16	13/16	27/32	7/8	7/8	23/32	1 9/16	1 1/16	1 1/32	5/32	1/8	1/16
	Total Defl. & Camber	7/16	1/2	1/4	9/16	19/32	15/32	7/32	15/16	1 1/16	1 5/32	9/16	1 11/16	1 9/32	1 9/16	1 9/32	1 3/16	15/16	1 13/16	1 9/32	1 7/32	1/2	27/32	21/32
Beam 9	Defl. Due to Wt of Stl.	1/16	1/16	1/32	0	0	0	0	1/16	3/32	3/32	1/16	1/32	1/16	1/8	3/32	1/16	1/32	1/16	1/32	1/32	1/16	1/8	3/32
	Defl. Due to Rem. D.L.	5/8	7/16	7/32	1/32	1/32	3/32	0	9/32	15/32	23/32	11/32	1/4	11/32	23/32	7/16	5/16	5/32	3/8	3/16	5/32	9/32	19/32	1/2
	*Camber for Vert Curve	0	0	0	17/32	17/32	11/32	3/16	19/32	9/16	3/8	3/16	27/32	27/32	15/16	1	1	27/32	1 7/8	1 1/8	1 1/8	1/8	3/32	1/32
	Total Defl. & Camber	7/16	1/2	9/32	9/16	9/16	7/16	3/16	15/16	1 1/8	1 1/4	19/32	1 1/8	1 1/4	1 7/32	1 1/32	1 3/8	1 11/32	1 13/16	1 1/32	1 5/16	15/32	13/16	5/8
Beam 10	Defl. Due to Wt of Stl.	1/16	1/16	1/32	0	0	0	0	1/16	1/8	5/32	1/16	1/16	3/32	5/32	3/32	1/16	1/32	1/16	1/32	1/32	1/16	1/8	3/32
	Defl. Due to Rem. D.L.	3/8	15/32	1/4	1/32	1/32	5/32	1/32	5/16	1/2	25/32	3/8	9/32	7/16	7/8	17/32	11/32	1/8	5/16	5/32	1/8	5/16	19/32	1/2
	*Camber for Vert Curve	5/16	13/32	5/16	1/8	5/32	3/8	5/16	7/32	7/16	25/32	5/8	3/16	15/32	13/16	21/32	19/32	1/16	1/2	3/8	1/2	3/8	15/32	5/16
	Total Defl. & Camber	3/4	15/16	19/32	5/32	3/16	15/32	9/32	19/32	1 3/32	1 5/32	11/16	2/32	1	1 3/32	19/32	1	1 1/32	1 7/8	13/16	1 3/32	3/4	1 3/16	29/32

* Includes Correction for Horizontal Curve



Beams Layout Diagram

Distance Between Chord and Baseline

Location	R.A.	Span 1			Pier 1	Span 2				Pier 2	Span 3				Pier 3	Span 4					Pier 4	Span 5				Pier 5	Span 6			F.A.
		1/4 Pt.	1/2 Pt.	3/4 Pt.		1/4 Pt.	1/4 Pt.	1/2 Pt.	3/4 Pt.		Sp. Pt.	1/4 Pt.	1/2 Pt.	3/4 Pt.		Sp. Pt.	1/4 Pt.	1/2 Pt.	3/4 Pt.	Sp. Pt.		1/4 Pt.	1/2 Pt.	3/4 Pt.	Sp. Pt.		1/4 Pt.	1/2 Pt.	3/4 Pt.	
	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮	⑯	⑰	⑱	⑲	⑳	㉑	㉒	㉓	㉔	㉕	㉖	㉗	㉘	㉙	㉚
Beam 6	0	.1576	.3152	.4729	.6305	.7474	.7596	.8894	1.0192	1.1489	1.1961	1.2142	1.2799	1.3454	1.4110	1.3889	1.3862	1.3614	1.3366	1.3346	1.3121	1.1833	1.0544	.9255	.9122	.7984	.5988	.3991	.1996	0
Beam 7	0	.1648	.3297	.4946	.6593	.7845	.7970	.9355	1.0738	1.2122	1.2669	1.2901	1.3685	1.4467	1.5248	1.5117	1.5093	1.4943	1.4790	1.4772	1.4640	1.3198	1.1755	1.0314	1.0166	.8890	.6667	.4445	.2223	0
Beam 8	0	.1721	.3440	.5161	.6881	.8212	.8345	.9815	1.1286	1.2757	1.3378	1.3668	1.4584	1.5499	1.6412	1.6365	1.6355	1.6278	1.6240	1.6234	1.6183	1.4574	1.2966	1.1358	1.1192	.9770	.7328	.4885	.2443	0
Beam 9	0	.1792	.3583	.5375	.7167	.8576	.8716	1.0274	1.1831	1.3389	1.4085	1.4438	1.5492	1.6545	1.7597	1.7627	1.7635	1.7673	1.7711	1.7717	1.7748	1.5961	1.4174	1.2388	1.2203	1.0624	.7971	.5315	.2657	0
Beam 10	0	.1932	.3865	.5799	.7732	.9194	.9340	1.0955	1.2571	1.4187	1.4973	1.5402	1.6624	1.7845	1.9063	1.9058	1.9057	1.9051	1.9045	1.9044	1.9039	1.7088	1.5141	1.3192	1.2991	1.1237	.8451	.5634	.2817	0

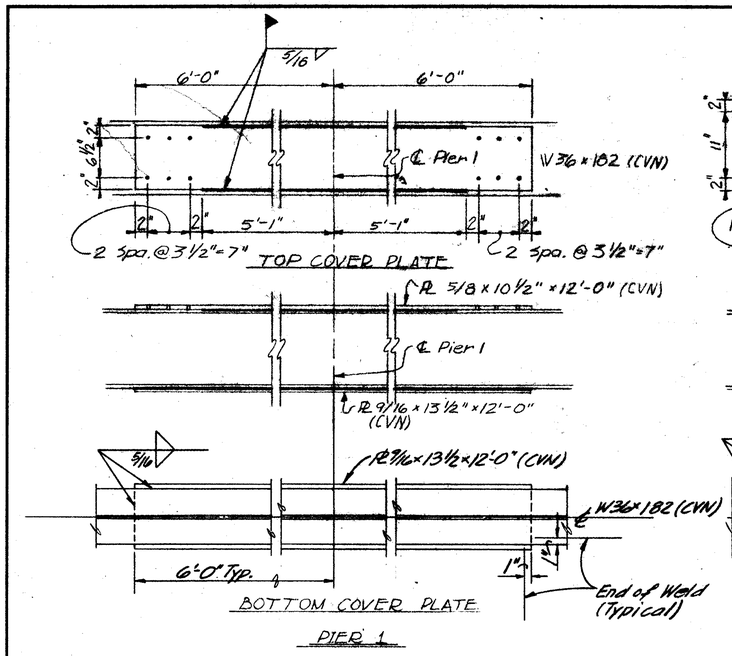
HARRY BALKE ENGINEERS 27/33
990 NASSAU STREET
CINCINNATI, OHIO 45206

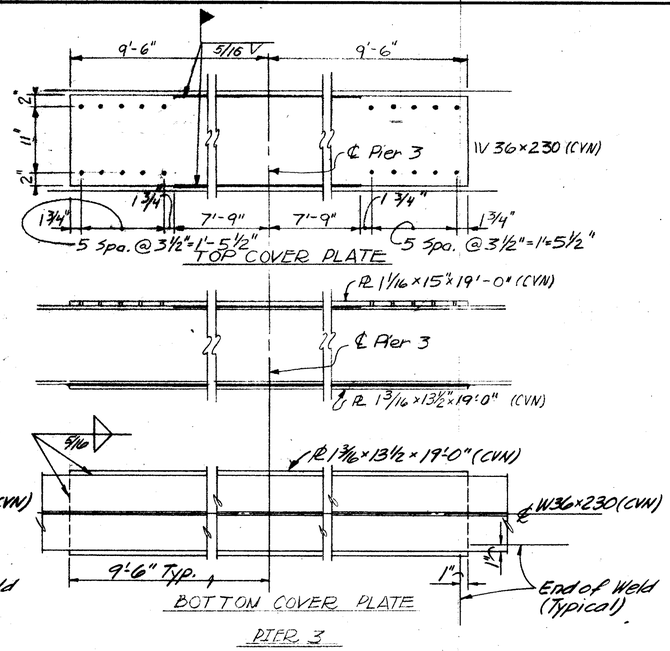
BEAM DETAILS

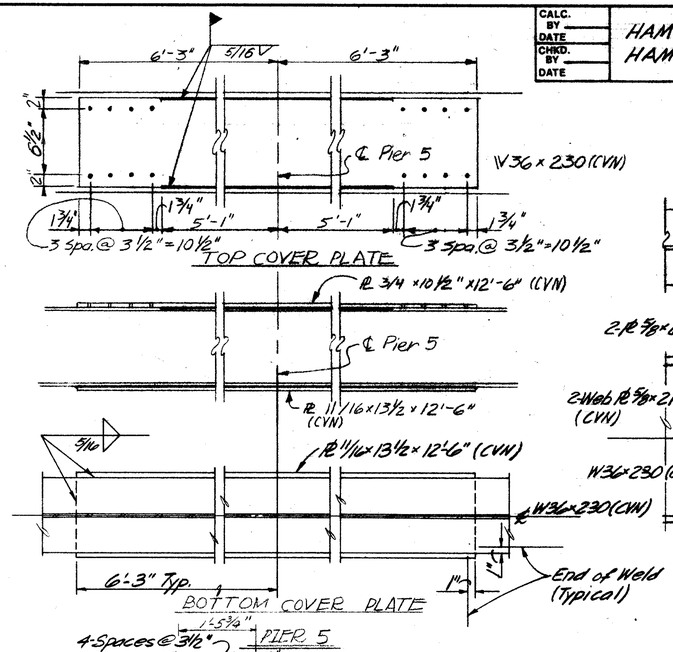
BRIDGE NO. HAM-126-1303 LT. & RT.
HAM-126 OVER BALTIMORE & OHIO R.R. AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C. STA. 503+27.61 TO P.O.S. STA. 507+19.17 L.B.
P.O.C. STA. 503+25.64 TO P.O.S. STA. 507+56.68 R.B.

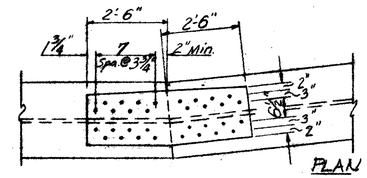
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
PRB	BLZ		CRS	R.K. 3-71	12-85

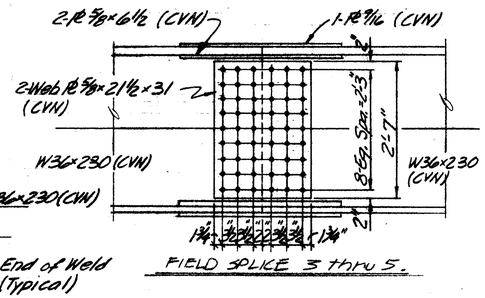
CALC. BY		HAMILTON COUNTY	OHIO	515A
DATE		HAM-126-13.00	FHWA REGION 5	787
CHKD. BY				
DATE				







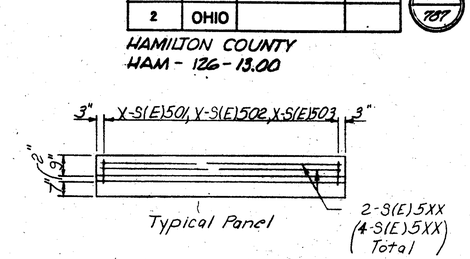



2-PL 5/8×6½ (CVN)
1-PL 9/16 (CVN)
2-Web PL 5/16×2½×31 (CVN)
W36×230 (CVN)
8 @ Spa. @ 2'-3"
2'-7"
W36×230 (CVN)
2"
1¾" 3½" 3½" 3½

FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

246 787

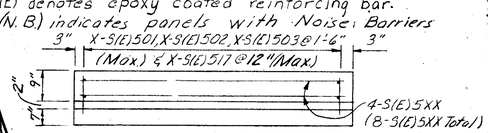
HAMILTON COUNTY
HAM - 126 - 13.00



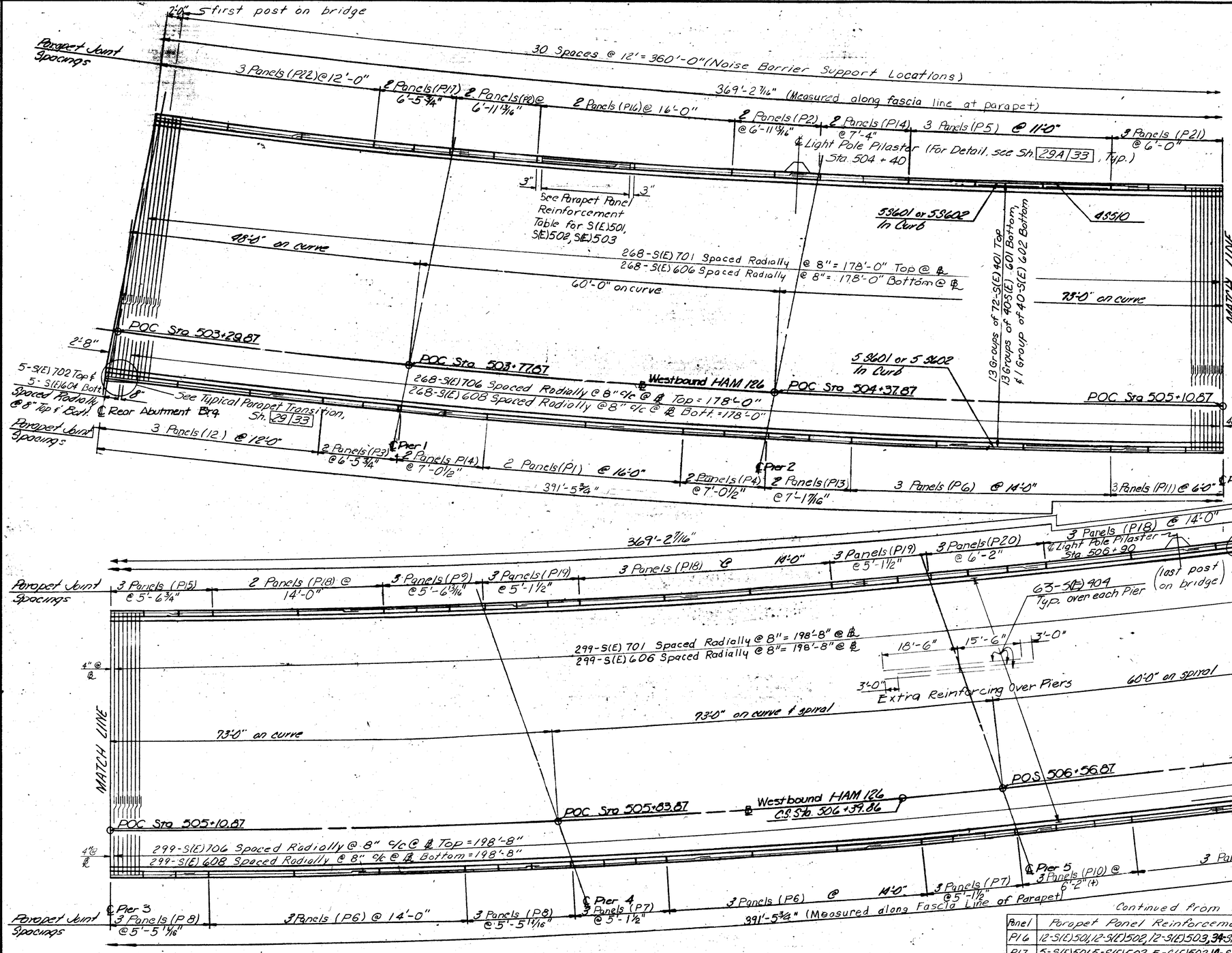
Panel	Parapet Panel Reinforcement (Per Panel)	No. of Panels
P1	12-S(E)501, 12-S(E)502, 12-S(E)503 @ 1'-6" Max., 4-S(E) 508	2
P2	6-S(E)501, 6-S(E)502, 6-S(E)503, 16-S(E)517, 8-S(E)507 (N.B.)	4
P3	5-S(E)501, 5-S(E)502, 5-S(E)503 @ 1'-6" Max., 4-S(E)506	2
P4	6-S(E)501, 6-S(E)502, 6-S(E)503 @ 1'-6" Max., 4-S(E)507	4
P5	8-S(E)501, 8-S(E)502, 8-S(E)503, 24-S(E)517, 8-S(E)510 (NB)	3
P6	10-S(E)501, 10-S(E)502, 10-S(E)503 @ 1'-6" Max. 4-S(E)511	12
P7	5-S(E)501, 5-S(E)502, 5-S(E)503 @ 1'-6" Max., 4-S(E)514	6
P8	5-S(E)501, 5-S(E)502, 5-S(E)503 @ 1'-6" Max. 4-S(E)513	6
P9	5-S(E)501, 5-S(E)502, 5-S(E)503, 12-S(E)517, 8-S(E)513 (N.B.)	3
P10	5-S(E)501, 5-S(E)502, 5-S(E)503 @ 1'-6" Max., 4-S(E)515	3
P11	5-S(E)501, 5-S(E)502, 5-S(E)503 @ 1'-6" Max. 4-S(E)512	3
P12	9-S(E)501, 9-S(E)502, 9-S(E)503 @ 1'-6" Max., 4-S(E)505	3
P13	6-S(E)501, 6-S(E)502, 6-S(E)503 @ 1'-6" Max., 4-S(E)507	2
P14	6-S(E)501, 6-S(E)502, 6-S(E)503, 16-S(E)517, 8-S(E)509 (N.B.)	2
P15	5-S(E)501, 5-S(E)502, 5-S(E)503, 14-S(E)517, 8-S(E)513 (N.B.)	3

Continued at bottom of page.

"(E)" denotes epoxy coated reinforcing bar.
(N.B.) indicates panels with Noise Barriers



(Typical Panel W/Noise Barrier)



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Panel	Parapet Panel Reinforcement (Per Panel)	No. of Panels
P16	12-S(E)501, 12-S(E)502, 12-S(E)503, 34-S(E)517, 8-S(E)508 (N.B.)	2
P17	5-S(E)501, 5-S(E)502, 5-S(E)503, 14-S(E)517, 8-S(E)506 (N.B.)	2
P18	10-S(E)501, 10-S(E)502, 10-S(E)503, 30-S(E)511, 8-S(E) 511 (N.B.)	8
P19	5-S(E)501, 5-S(E)502, 5-S(E)503, 12-S(E)517, 8-S(E) 514 (N.B.)	6
P20	5-S(E)501, 5-S(E)502, 5-S(E)503, 14-S(E)517, 8-S(E) 515 (N.B.)	3
P21	5-S(E)501, 5-S(E)502, 5-S(E)503, 14-S(E)517, 8-S(E) 512 (N.B.)	3
P22	9-S(E)501, 9-S(E)502, 9-S(E)503, 26-S(E)517, 8-S(E) 505 (N.B.)	3

SUPERSTRUCTURE PLAN - LEFT BRIDGE

NOTE:
For additional Noise Barrier details see sheet 29A/33

HARRY BALKE ENGINEERS 28/33
990 NASSAU STREET
CINCINNATI, OHIO 45206

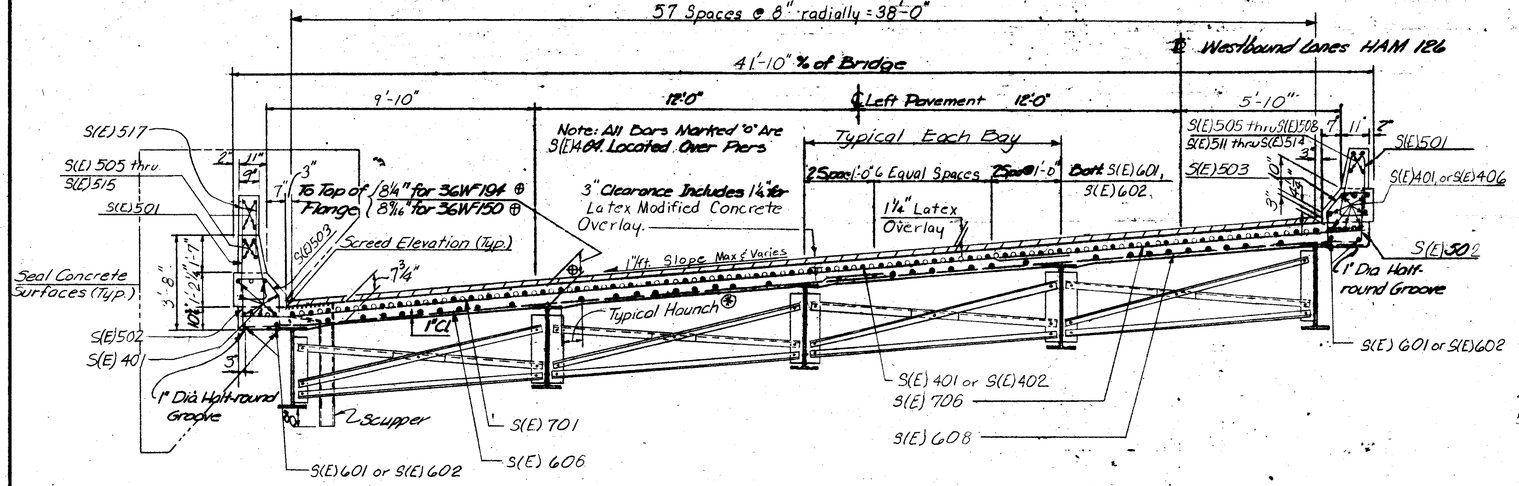
SUPERSTRUCTURE PLAN

BRIDGE NO. HAM-126-1303 LT & RT.
HAM-126 OVER BALTIMORE & OHIO R.R.
AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
POC STA 503+27.61 TO POS STA 507+19.17 L.B.
POC STA 503+25.64 TO POS STA 507+56.68 R.B.

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
P.E.T.	D.L.Z. P.E.T.		C.R.S.	R.K. 3-71	12-85

FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

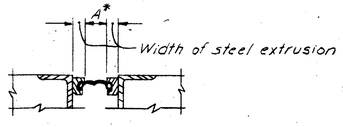
HAMILTON COUNTY
HAM-126 - 13.00



TYPICAL SECTION
LEFT BRIDGE

NOTES:

1. ⑧ A Typical Haunch of 9" Shall Be Used for Computing Quantity of Concrete, However the Haunch Width May Vary Between 6" and 12" Provided That the Slope Shall Not Be More Than 1:4 for a Haunch Less Than 9" in Width.
2. ⊕ This is a Design Dimension. The Quantity of Deck Concrete to Be Paid for Shall Be Based Upon This Dimension, Even Though Deviation From This May Be Necessary Because the Top Flange of the Beam May Not Have the Exact Camber or Conformation Required to Place it Parallel to the Finished Grade. Deduction Shall Be Made for Volume of Encased Steel Plates as Per 511.18 of the Construction and Material Specifications.
3. For Additional notes & Details of parapet, See Standard Drawing BR-1.
4. "(E)" Denotes epoxy coated reinforcing bar.
5. WELDED ATTACHMENT of supports for concrete deck finishing machine may be made to areas of the fascia stringer flanges designated "compression". Attachments shall not be made to areas designated "tension". Fillet welds to compression flanges shall be not closer than 1" from edge of flange, be not more than 2" long, and be not smaller than the minimum size required by AASHTO.



PARTIAL SECTION THROUGH
EXPANSION JOINT SHOWING DIMENSION A

For expansion Joint details not shown see Strip seal Std. dwg.

ABUTMENT 1
JOINT SETTING TABLE

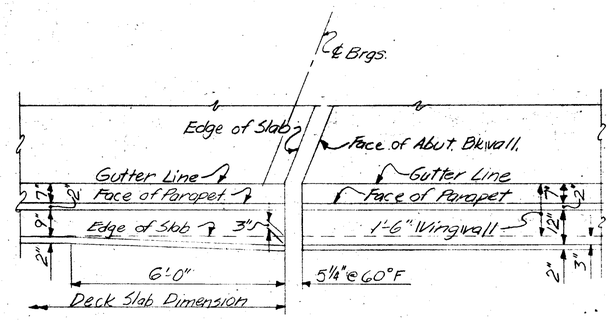
TEMP °F	0	20	40	60	80	100
A*	3 5/16"	3 1/16"	2 3/4"	2 1/2"	2 1/4"	1 15/16"

Strip seal gland to be Watson-Bowman S-400 or D.S. Brown SS-400

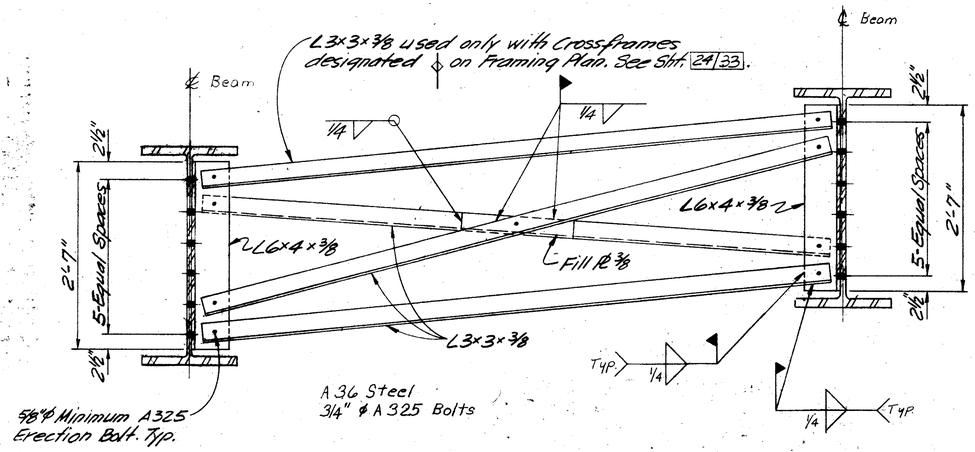
ABUTMENT 2
JOINT SETTING TABLE

TEMP °F	0	20	40	60	80	100
A*	3 3/8"	3 1/8"	2 7/16"	2 1/2"	2 3/16"	1 7/8"

Strip seal gland to be Watson-Bowman S-400 or D.S. Brown SS-400.



TYPICAL PARAPET TRANSITION
(Right Wingwalls only on Left Bridge)



TYPICAL INTERMEDIATE CROSSFRAME

ERECTION BOLTS: Hole diameter in the crossframes and girder stiffeners shall be respectively 1/16" & 1/4" larger than the diameter of the erection bolts. Unless replaced by permanent high strength bolts, erection bolts shall remain in place. Lock washers shall be furnished for other than fully torqued high strength erection bolts. Bolts shall be furnished as part of 513. In lieu of erection bolts and at the option of the contractor, alternate means of temporary bracing may be used, subject to the approval of the director (501.06).

HARRY BALKE ENGINEERS 29/33
990 NASSAU STREET
CINCINNATI, OHIO 45206

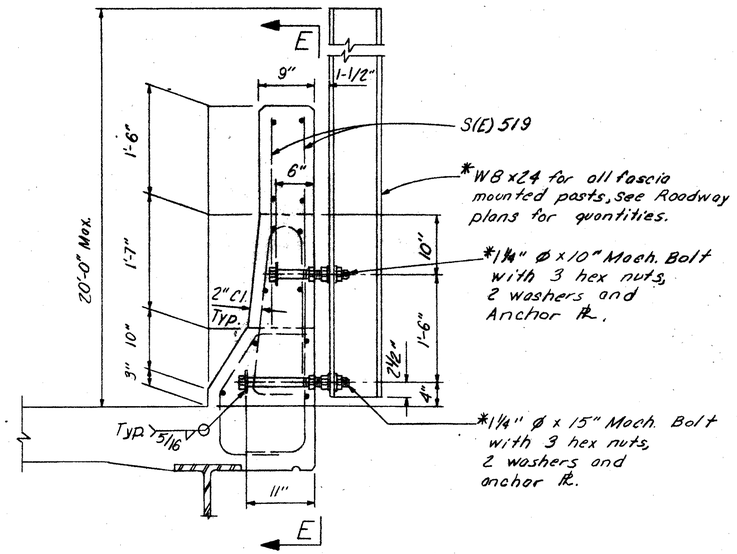
SUPERSTRUCTURE DETAIL

BRIDGE NO. HAM-126-1303 LT. & RT.
HAM-126 OVER BALTIMORE & OHIO R.R. AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C. STA. 503+27.61 TO P.O.S. STA. 507+19.17 L.B.
P.O.C. STA. 503+25.64 TO P.O.S. STA. 507+56.68 R.B.

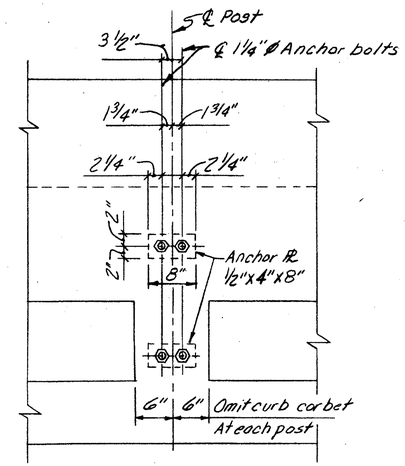
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
P.E.T.	B.L.Z.		C.P.S.	R.K. 3-71	12-85

CALC. BY		OHIO	517A
DATE		FHWA REGION 5	787
CHKD. BY			
DATE			

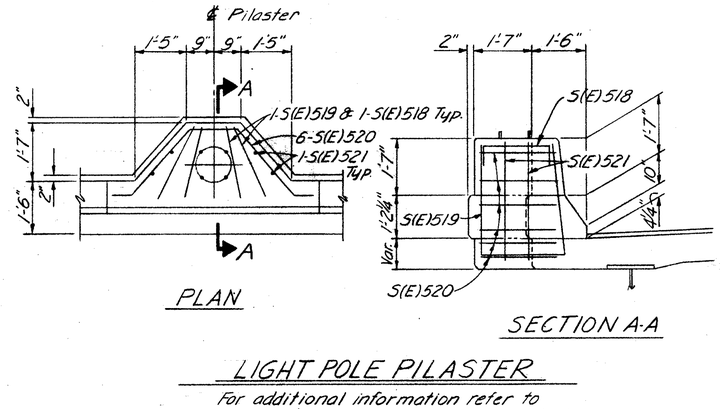
HAMILTON COUNTY
HAM-126-13.00



NOISE BARRIER SUPPORT DETAIL



VIEW E-E



LIGHT POLE PILASTER

For additional information refer to Std. Construction Dwg.s HL-3 & HL-4.

NOTES:

* These items shall be furnished under Roadway quantities. Cost of placing the 1¼" machine bolts with 3 Hex nuts, 2 washers and anchor R. shall be included in the unit price for item "511 class "S" concrete, Superstructure.

* For noise barrier quantities including W8x24, bolts, washers, nuts, and anchor Plates see Roadway Quantities.

For additional details refer to Roadway Plans

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

29A/33

NOISE BARRIER & LIGHT PILASTER
BRIDGE NO. HAM-126-1303 LT. & RT.
HAM-126 OVER BALTIMORE & OHIO R.R.
AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C. STA. 503+27.61 TO P.O.C. STA. 507+19.17 L.B.
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DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
JAP	ALH	–	TMB	CRS 3/86	–

OHIO BLUE PRINT

FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

HAMILTON COUNTY
HAM-126-13.00

3/18
TBF

℄ Rear Abut. Brg.

Parapet Joint Spacings

3 Panels (P15) @ 13'-0"

See Typical Parapet Transition, Sh. 31|33

6 Panels (P18) @ 6'-0"

424'-3 3/16"

2 Panels (P17) @ 15'-0"

℄ Pier 1

℄ Pier 2

Measured along Fascia line of Parapet

6 Panels (P18) @ 6'-0"

3 Panels (P16) @ 14'-0"

3 Panels (P18) @ 6'-0"

℄ Pier 3

2 7/16"

P.O.C. Sta. 503+27.69

57'-0" on curve

℄ Eastbound HAM-126

P.O.C. Sta. 503+84.89

65'-6" on curve

P.O.C. Sta. 504+50.39

7 3/4"

312 S(E)701 Spaced Radially @ 7 3/4" c/c @ ℄ Top

312 S(E)606 Spaced Radially @ 7 3/4" c/c @ ℄ Bott.

18'-6" 15'-6" 3'-0"

63-S(E)404 Over Pier

3'-0"

Extra Reinforcement Over Pier (Typ. for each Pier.) Top

312 S(E) 706 Spaced Radially @ 7 3/4" c/c ℄ Top

312 S(E) 608 Spaced Radially @ 7 3/4" c/c ℄ Bottom

15 Groups of 72-S(E)401 Top
15 Groups of 40-S(E) 601 Bottom & 1 Group of 40-S(E) 603 Bottom

79'-0" on curve

P.O.C. Sta. 505+29.39

7 3/4" @ ℄

MATCH LINE

3"± X-S(E)501, X-S(E)502, X-S(E)503 3"±

7 3/4"

Typical Panel

2-S(E)5xx (4-S(E)5xx Total)

Parapet Joint Spacings

See Typical Parapet Transition, Sh. 31|33

3 Panels (P15) @ 13'-0"

6 Panels (P18) @ 6'-0"

℄ Light Pole Pilaster Sta. 503+90

2 Panels (P17) @ 15'-0"

446'-7 1/16"

3 Panels (P18) @ 6'-0"

3 Panels (P20) @ 6'-6"

3 Panels (P21) @ 16'-0"

3 Panels (P20) @ 6'-6"

4 7/16"

℄ Fwd. Abut. Brg.

4 S(E) 705 Spaced Radially @ 7 3/4" c/c @ ℄ Top

4 S(E) 605 Spaced Radially @ 7 3/4" c/c @ ℄ Bottom

NOTE:
"(E)" denotes epoxy coated reinforcing bar.

℄ Pier 5

℄ Pier 3

℄ Pier 4

424'-3 3/16"

3 Panels (P17) @ 15'-0"

3 Panels (P18) @ 6'-0"

3 Panels (P19) @ 6'-5 1/16"

3 Panels (P17) @ 15'-0"

See Typical Parapet Transition, Sh. 31|33

Parapet Joint Spacings

3 Panels (P18) @ 6'-0"

2 7/16"

3 Panels (P16) @ 14'-0"

6 Panels (P18) @ 6'-0"

℄ Eastbound HAM-126

P.O.S. Sta. 506+87.39

67'-0" on spiral

P.O.S. Sta. 507+54.39

3"

10 3/4" @ ℄

49-S(E)405 @ 8" Lap With S(E)401 Top

P.O.C. Sta. 505+29.39

79'-0" on curve

P.O.C. Sta. 506+08.39

C.S. Sta. 506+69.30

79'-0" on curve & spiral

348 S(E)701 Spaced Radially @ 7 3/4" c/c @ ℄ Top

348 S(E)606 Spaced Radially @ 7 3/4" c/c @ ℄ Bottom

11-S(E) 707 Radially @ 7 3/4" c/c @ ℄ Bottom

11-S(E) 607 Radially @ 7 3/4 c/c @ ℄ Bottom

See Typical Parapet Transition, Sh. 31|33

MATCH LINE

348-S(E)706 Spaced Radially @ 7 3/4" @ ℄ Top

348-S(E)608 Spaced Radially @ 7 3/4" @ ℄ Bottom

℄ Light Pole Pilaster Sta. 506+30 (For Detail, see Sh. 29A|33, Typ.)

3 Panels (P22) @ 6'-2 3/16"

3 Panels (P20) @ 6'-6"

3 Panels (P21) @ 16'-0"

7-S(E) 403 in Parapet & Slab

4 7/16"

Parapet Joint Spacing

3 Panels (P20) @ 6'-6"

4 Panels (P15) @ 13'-0"

6 Panels (P22) @ 6'-2 3/16"

3 Panels (P16) @ 14'-0"

446'-7 11/16" Measured along fascia line of parapet.

SUPERSTRUCTURE PLAN – RIGHT BRIDGE

Panel	Parapet Panel Reinforcement (Per Panel)	no. Panels
P15	10-S(E)501, 10-S(E)502, 10-S(E)503 @ 1'-6" Max. 4-S(E)516	10
P16	10-S(E)501, 10-S(E)502, 10-S(E)503 @ 1'-6" Max 4-S(E)511	9
P17	11-S(E)501, 11-S(E)502, 11-S(E)503 @ 1'-6" Max. 4-S(E)504	10
P18	5-S(E)501, 5-S(E)502, 5-S(E)503 @ 1'-6" Max. 4-S(E)512	36
P19	5-S(E)501, 5-S(E)502, 5-S(E) 503 @ 1'-6" Max. 4-S(E)506	3
P20	5-S(E)501, 5-S(E)502, 5-S(E)503 @ 1'-6" Max. 4-S(E)506	12
P21	12-S(E)501, 12-S(E)502, 12-S(E)503 @ 1'-6" Max. 4-S(E) 508	6
P22	5-S(E)501, 5-S(E)502, 5-S(E)503 @ 1'-6" Max 4-S(E) 515	9

HARRY BALKE ENGINEERS
990 NASSAU STREET
CINCINNATI, OHIO 45206

30|33

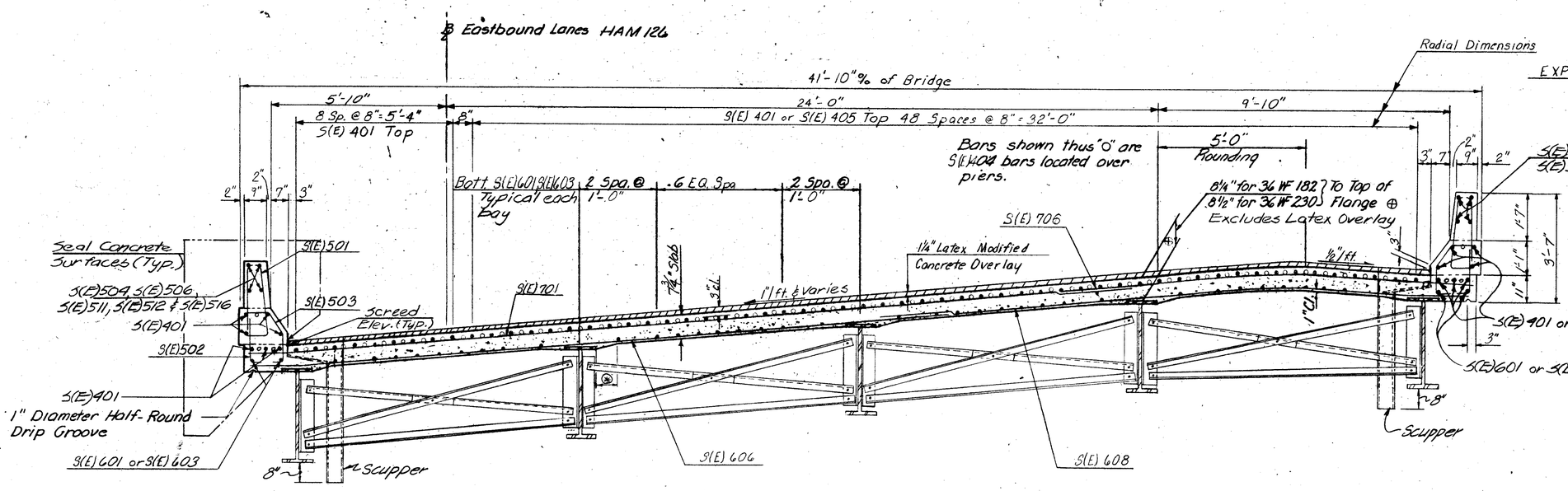
SUPERSTRUCTURE PLAN

BRIDGE NO. HAM-126-1303 LT. & RT.
HAM-126 OVER BALTIMORE & OHIO R.R. AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.S. STA. 503+27.61 TO P.O.S. STA. 507+19.17 L.B.
P.O.S. STA. 503+25.64 TO P.O.S. STA. 507+56.68 R.B.

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
R.T.	M.E.W. R.F.T.		C.R.S.	R.K. 3-71	12-85

FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

HAMILTON COUNTY
HAM-126-13.00





TYPICAL PARAPET TRANSITION

NOTE:

1. ⊕ A typical haunch of 9" shall be used for computing quantity of concrete, however, the haunch width may vary between 6" and 12" provided that the slope shall not be more than 1:4 for a haunch less than 9" in width.

2. ⊕ This is a Design dimension. The quantity of deck concrete to be paid for shall be based upon this dimension, even though deviation from this may be necessary because the top of the flange of the beam may not have the exact camber of confirmation required to place it parallel to the finished grade. Deduction shall be made for volume of encased steel plates as per 511.18 of the construction and material specifications.

3. For additional notes & details of parapet, see standard BR-1.
4. "(E)" denotes epoxy coated reinforcing bar.
5. WELDED ATTACHMENT of supports for concrete deck finishing machine may be made to areas of the fascia stringer flanges designated "compression". Attachments shall not be made to areas designated "tension". Fillet welds to compression flanges shall be not closer than 1" from edge of flange, be not more than 2" long, and be not smaller than the minimum size required by AASHTO.

TYPICAL SECTION
RIGHT BRIDGE

PARTIAL SECTION THROUGH EXPANSION JOINT SHOWING DIMENSION A

For expansion Joint Details not shown see Strip Seal Std. Dwg.

ABUTMENT 1
JOINT SETTING TABLE

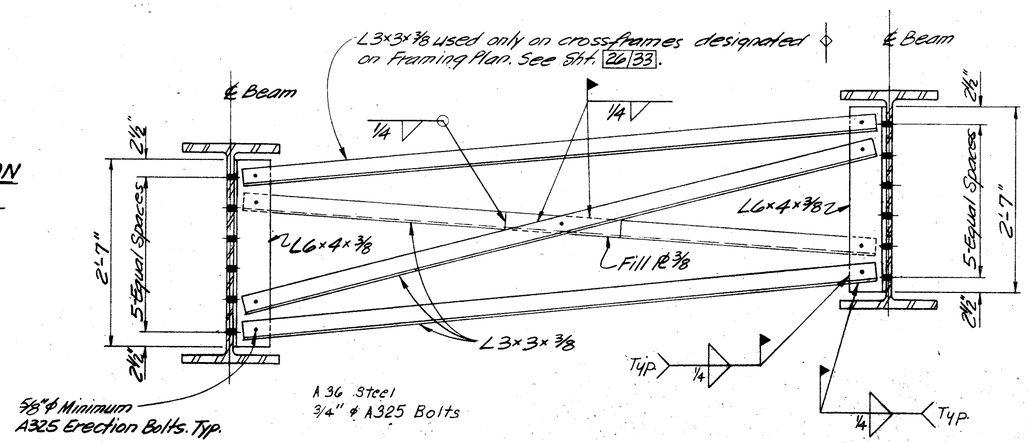
TEMP °F	0	20	40	60	80	100
A*	3 7/16"	3 1/8"	2 13/16"	2 1/2"	2 3/16"	1 7/8"

Strip Seal Gland to be Watson-Bowman S-400 or D.S. Brown 55-400.

ABUTMENT 2
JOINT SETTING TABLE

TEMP °F	0	20	40	60	80	100
A*	3 1/2"	3 3/16"	2 7/8"	2 1/2"	2 3/16"	1 15/16"

Strip Seal Gland to be Watson-Bowman S-400 or D.S. Brown 55-400.



TYPICAL INTERMEDIATE CROSSFRAME

NOTE:

ERECTION BOLTS: Hole diameter in the crossframes and girder stiffeners shall be respectively 1/16" & 1/4" larger than the diameter of the erection bolts. Unless replaced by permanent high strength bolts, erection bolts shall remain in place. Lock washers shall be furnished for other than fully torqued high strength erection bolts. Bolts shall be furnished as part of 513 in lieu of erection bolts and at the option of the contractor, alternate means of temporary bracing may be used, subject to the approval of the director (501.06).

HARRY BALKE ENGINEERS 31/33
990 NASSAU STREET
CINCINNATI, OHIO 45206

SUPERSTRUCTURE DETAIL
BRIDGE NO. HAM-126-1303 LT. & RT.
HAM-126 OVER BALTIMORE & OHIO R.R. AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C. STA. 503+27.61 TO P.O.S. STA. 507+19.17 L.B.
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DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
P.E.T.	H.E.W.		C.A.S.	R.K. 3-71	12-85

FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

HAMILTON COUNTY
HAM-126-13.00

REINFORCING STEEL LIST

ABUTMENTS

MARK	LENGTH	SHAPE	LEFT BRIDGE REAR	LEFT BRIDGE FWD	RIGHT BRIDGE REAR	RIGHT BRIDGE FWD	TOTAL NO.	WEIGHT
A501	8'-8"	Bent	29	29	29	29	116	1049
A502	7'-4"		29	29	29	29	116	886
A503	11'-2"		19	14	15	14	62	722
A504	6'-7"		12	10	10	11	43	296
A505	6'-3"		6	6	6	6	24	156
A506	7'-11"		7	7	7	7	28	232
A507	9'-5"		7	7	7	7	28	276
A508	10'-11"		7	7	9	9	32	364
A509	12'-9"		2	2	–	–	4	52
A510	21'-10"	Str.	12	–	12	–	24	547
A511	10'-11"		16	–	18	–	34	387
A(E)512	4'-4"		8	8	16	16	48	217
A(E)513	15'-8"		12	–	–	–	12	196
A(E)514	2'-8"	Bent	8	8	16	16	48	134
A(E)515	5'-3"		20	15	10	9	54	296
A(E)516	3'-0"	Str.	14	9	10	9	42	131
A(E)517	5'-4"		2	2	–	–	4	22
A(E)518	17'-8"		8	–	–	–	8	147
A(E)519	12'-8"		–	8	–	–	8	106
A520	10'-0"		3	–	–	–	3	31
A521	6'-2		3	–	–	–	3	19
A522	7'-10"		2	–	–	–	2	16
A523	15'-8"		4	–	4	4	12	196
A524	11'-5"		2	–	2	2	6	72
A525	7'-5"		4	4	4	4	16	124
A526	4'-11"		4	–	–	–	4	21
A527	19'-5"		5	–	–	–	5	70
A528	9'-10"		5	–	–	–	5	51
A529	11'-8"		2	–	–	–	2	24
A530	19'-8"		4	–	–	–	4	82
A531	15'-5"		2	–	–	–	2	32
A(E)532	12'-8"		–	12	–	–	12	159
A533	3'-0"		12	–	–	–	12	38
A534	8'-6"	Bent	1	–	–	–	1	9
A535	11'-6"		1	–	–	–	1	12
A536	20'-4"	Str.	12	–	12	–	24	508
A537	21'-11"		2	–	2	–	4	91
A(E)538	21'-11"		2	–	2	–	4	91
A(E)539	11'-8"		–	12	–	–	12	159
A540	3'-0"	Bent	6	–	6	–	12	38
A541	3'-0"		8	–	8	–	16	50
A542	11'-1"	Str.	–	16	–	–	16	185
A543	22'-3"		–	12	–	–	12	278
A544	2'-3"		–	5	–	–	5	12
A545	20'-9"		–	12	–	–	12	260
A546	22'-4"		–	2	–	–	2	47
A(E)547	22'-4"		–	2	–	–	2	47
A(E)548	9'-8"		–	–	–	8	8	81
A549	8'-4"		–	3	–	–	3	26
A550	4'-9"		–	3	–	–	3	15
A551	6'-2"		–	2	–	–	2	13
A552	Not Used							
A553	12'-8"	Str.	–	4	–	–	4	53
A554	8'-5"		–	2	–	–	2	18
A555	4'-2"		–	2	–	–	2	9
A556	5'-3"		–	5	–	–	5	27
A557	8'-10"		–	5	–	–	5	46
A558	7'-2"		–	2	–	–	2	15
A559	14'-8"		–	4	–	–	4	61
A560	10'-5"		–	2	–	–	2	22
A561	3'-0"		–	14	14	14	42	132
A562	11'-0"	Bent	–	1	1	–	2	24
A563	8'-6"		–	1	1	–	2	18
A564	3'-0"		–	8	–	7	15	47
A565	3'-0"		–	6	–	6	12	38
A566	4'-8"	Str.	–	2	–	2	4	20
A567	9'-6"		–	–	5	–	5	50
A568	5'-8"		–	–	5	–	5	30
A569	7'-8"		–	–	2	–	2	16
A570	3'-4"		–	–	2	–	2	11
A571	8'-9"		–	–	3	–	3	27
A572	4'-11"		–	–	3	–	3	15

ABUTMENTS

MARK	LENGTH	SHAPE	LEFT BRIDGE REAR	LEFT BRIDGE FWD	RIGHT BRIDGE REAR	RIGHT BRIDGE FWD	TOTAL NO.	WEIGHT
A573	13'-8"	Str.	–	–	12	–	12	171
A574	6'-8"		–	–	2	–	2	14
A575	4'-9"		–	–	2	–	2	10
A576	9'-5"		–	–	2	–	2	20
A577	22'-2		–	–	–	12	12	277
A578	11'-0"		–	–	–	20	20	229
A579	20'-8"		–	–	–	12	12	259
A580	22'-2"		–	–	–	2	2	46
A581	9'-8"		–	–	–	3	3	30
A582	5'-10"		–	–	–	3	3	18
A583	7'-11"		–	–	–	2	2	17
A584	7'-10"		–	–	–	3	3	25
A585	4'-0"		–	–	–	3	3	19
A586	5'-8"		–	–	–	2	2	12
A587	11'-8"		–	–	–	4	4	49
A588	7'-5"		–	–	–	2	2	16
A589	3'-5"		–	–	–	2	2	7
A(E)590	22'-2"		–	–	–	2	2	46
A591	Not Used							
A592	11'-4"	Bent	–	–	–	1	1	12
A593	12'-8"		–	–	–	1	1	13
A(E)594	5'-4"	Str.	1	–	–	–	1	6
A(E)595	5'-5"		1	–	–	–	1	6
A(E)596	5'-11"		1	–	–	–	1	6
A(E)597	6'-5"		1	–	–	–	1	7
A(E)598	6'-10"		1	–	–	–	1	7
A(E)599	5'-0"		4	3	6	6	19	99
A(E)5100	5'-1"		1	–	–	–	1	5
A(E)5101	5'-8"		1	–	–	–	1	6
A(E)5102	6'-3"		1	–	–	–	1	7
A(E)5103	6'-10"		1	–	–	–	1	7
A(E)5104	5'-1"		–	1	–	–	1	5
A(E)5105	5'-3"		–	1	–	–	1	5
A(E)5106	6'-6"		–	1	–	–	1	6
A(E)5107	6'-6"		–	1	–	–	1	7
A(E)5108	7'-0"		–	1	–	–	1	7
A(E)5109	5'-4"		–	1	–	–	1	6
A(E)5110	5'-8"		–	1	–	–	1	6
A(E)5111	6'-4"		–	1	–	–	1	7
A(E)5112	7'-0"		–	1	–	–	1	7
A(E)5113	7'-1"		–	1	–	–	1	7
A(E)5114	5'-0"		–	–	1	–	1	5
A(E)5115	5'-4"		–	–	1	–	1	6
A(E)5116	6'-0"		–	–	1	–	1	6
A(E)5117	6'-8"		–	–	1	–	1	7
A(E)5118	7'-1"		–	–	1	–	1	7
A(E)5119	5'-0"		–	–	1	–	1	5
A(E)5120	5'-2"		–	–	1	–	1	5
A(E)5121	5'-9"		–	–	1	–	1	6
A(E)5122	6'-4"		–	–	1	–	1	7
A(E)5123	6'-11"		–	–	1	–	1	7
A(E)5124	5'-1"		–	–	–	1	1	5
A(E)5125	5'-5"		–	–	–	1	1	6
A(E)5126	6'-3"		–	–	–	1	1	7
A(E)5127	6'-11"		–	–	–	1	1	7
A(E)5128	7'0"		–	–	–	1	1	7
A(E)5129	5'-1"		–	–	–	1	1	5
A(E)5130	5'-2"		–	–	–	1	1	5
A(E)5131	5'9"		–	–	–	1	1	6
A(E)5132	6'-4"		–	–	–	1	1	7
A(E)5133	6'-10"		–	–	–	1	1	7
A(E)5134	2'-9"		34	28	–	–	62	178
A(E)5135	13'-8"		–	–	8	8	16	228
A601	14'-5"	Bent	29	29	29	29	116	2512
A602	23'-2"		4	2	4	3	13	452
A603	12'-0"		3	4	3	3	13	234
A604	7'-2"		2	2	2	2	8	86
A(E)605	3'-9"		14	9	10	9	42	237
A606	29'-6"		7	–	–	–	7	310
A607	15'-2"		3	–	–	–	3	68
A608	20'-2"		1	–	–	–	1	30

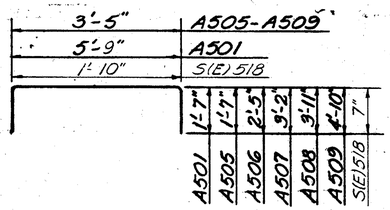
ABUTMENTS

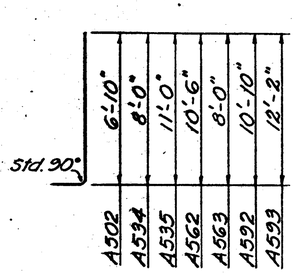
MARK	LENGTH	SHAPE	LEFT BRIDGE REAR	LEFT BRIDGE FWD	RIGHT BRIDGE REAR	RIGHT BRIDGE FWD	TOTAL NO.	WEIGHT
A609	10'-3"	Bent	38	–	–	–	38	585
A610	7'-5"		38	–	–	–	38	423
A(E)611	7'-3"		38	–	–	–	38	414
A612	28'-2"		–	4	4	–	8	338
A613	14'-6"		–	3	3	–	6	131
A614	9'-6"		–	1	1	–	2	30
A615	Not Used							
A616	10'-7"	Bent	–	39	39	40	118	1875
A617	7'-9"		–	39	39	40	118	1374
A(E)618	7'-5"		–	39	39	40	118	1315
A619	26'-2"		–	–	–	4	4	157
A620	13'-6"		–	–	–	3	3	61
A621	18'-6"		–	–	–	1	1	28
A(E)701	4'-4"	Bent	2	2	–	–	4	35
A(E)702	4'-4"		1	–	–	–	1	9
A(E)703	4'-5"		1	–	–	–	1	9
A(E)704	4'-11"		1	–	–	–	1	10
A(E)705	5'-5"		1	–	–	–	1	11
A(E)706	5'-11"		1	–	–	–	1	12
A(E)707	4'-2"		1	–	–	–	1	9
A(E)708	4'-2"		1	–	–	–	1	9
A(E)709	4'-9"		1	–	–	–	1	10
A(E)710	5'-3"		1	–	–	–	1	11
A(E)711	5'-10"		1	–	–	–	1	12
A(E)712	4'-2"		–	1	–	–	1	9
A(E)713	4'-4"		–	1	–	–	1	9
A(E)714	4'-11"		–	1	–	–	1	10
A(E)715	5'-6"		–	1	–	–	1	11
A(E)716	6'-1"		–	1	–	–	1	12
A(E)717	4'-4"		–	1	–	–	1	9
A(E)718	4'-8"		–	1	–	–	1	10
A(E)719	5'-4"		–	1	–	–	1	11
A(E)720	6'-0"		–	1	–	–	1	12
A(E)721	6'-2"		–	1	–	–	1	13
A(E)722	4'-2"		–	–	1	–	1	9
A(E)723	4'-4"		–	–	1	–	1	9
A(E)724	5'-1"		–	–	1	–	1	10
A(E)725	5'-8"		–	–	1	–	1	12
A(E)726	6'-1"		–	–	1	–	1	12
A(E)727	4'-3"		–	–	–	1	1	9
A(E)728	4'-5"		–	–	–	1	1	9
A(E)729	5'-4"		–	–	–	1	1	11
A(E)730	5'-11"		–	–	–	1	1	12
A(E)731	6'-1"		–	–	–	1	1	12
A(E)732	4'-2"		–	–	1	1	2	17
A(E)733	4'-3"		–	–	1	1	2	17
A(E)734	4'-10"		–	–	1	1	2	20
A(E)735	5'-4"		–	–	1	1	2	22
A(E)736	5'-11"		–	–	1	1	2	24
A(E)737	4'-2"		3	3	6	6	18	153
A801	23'-11"	Str.	14	–	14	–	28	1788
A802	16'-3"		6	–	–	–	6	260
A803	13'-0"		6	–	–	–	6	208
A804	11'-6"		–	6	–	–	6	184
A805	11'-3"		–	3	–	–	3	90
A806	10'-11"		–	3	–	–	3	87
A807	23'-4"		–	14	–	–	14	872
A808	12'-8"		–	–	6	–	6	198
A809	11'-8"		–	–	6	–	6	187
A810	24'-3"		–	–	–	14	14	906
A811	10'-9"		–	–	–	6	6	172
A812	12'-5"		–	–	–	6	6	199
A(E)813	4'-11"	Bent	26	26	26	26	104	1365
						TOTAL		29499

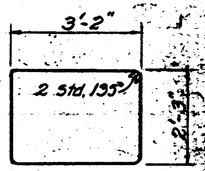
TOTAL Includes 6,450 Lbs. Epoxy Coated

BAR DIAGRAMS

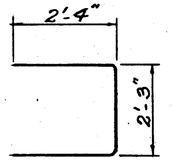
SEE ALSO SH. NO. 32A 33



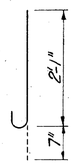




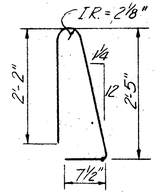
A503



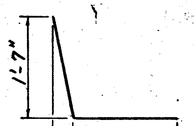
A504



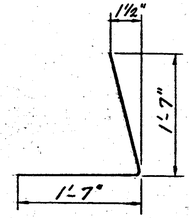
A(E)514



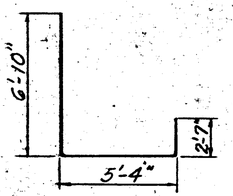
A(E)515



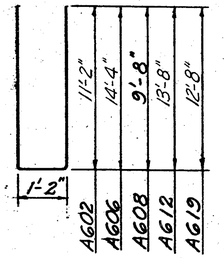
A541, A564

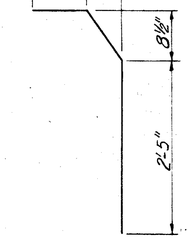


A540, A565

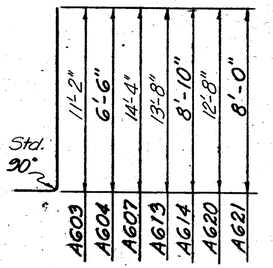


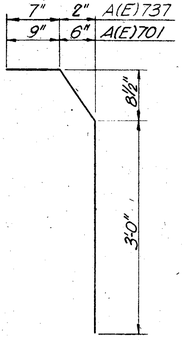
A601



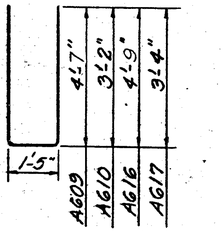


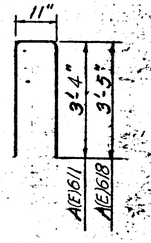
A(E)605

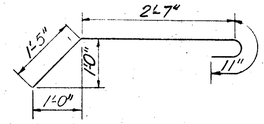




A(E)701 & A(E)737







A(E)813

Notes
"(E)" denotes epoxy coated reinforcing bar
For additional notes and bending details see Sh. 32A/33

HARRY BALKE ENGINEERS 32A/33
990 NASSAU STREET
CINCINNATI, OHIO 45206

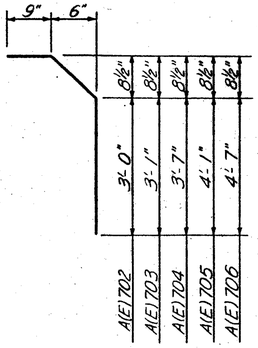
REINFORCING STEEL LIST

BRIDGE NO. HAM-126-1303 L.T.& R.T.
HAM-126 OVER BALTIMORE & OHIO R.R. AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C.STA.503+27.61 TO P.O.S.S.TA.507+19.17 L.B.
P.O.C.STA.503+25.64 TO P.O.S.STA.507+56.68 R.B.

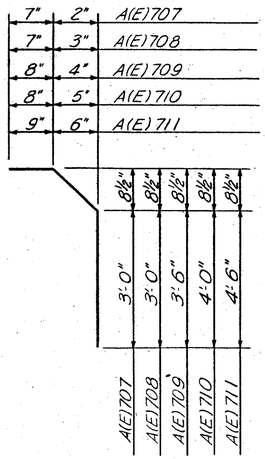
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
WOP	HEW		CAS	R.K. 3-77	12-85

CALC. BY DATE	HAMILTON COUNTY	OHIO	520A 787
CHKD. BY DATE	HAM - 126 - 1303 L/R	FHWA REGION 5	

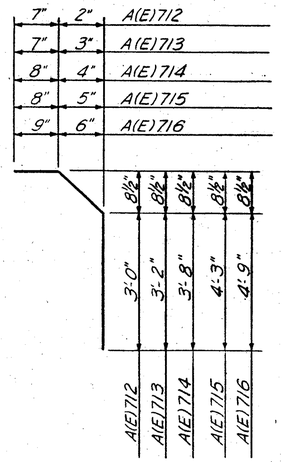
HAM-126-13.00



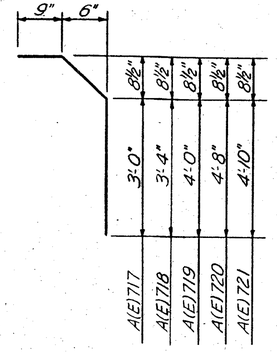
A(E)702 - A(E)706



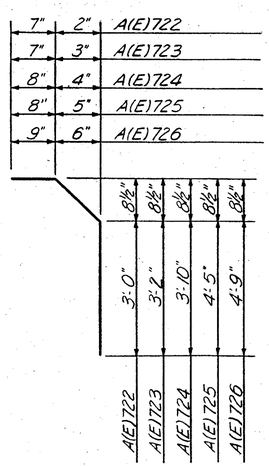
A(E)707 - A(E)711



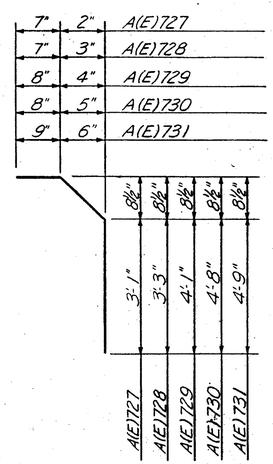
A(E)712 - A(E)716



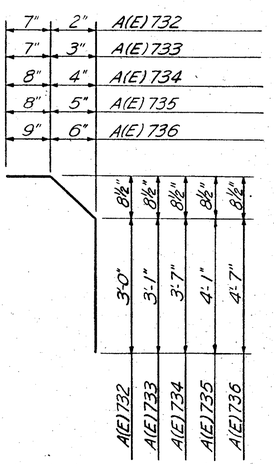
A(E)717 - A(E)721



A(E)722 - A(E)726



A(E)727 - A(E)731



A(E)732 - A(E)736

Notes:

Refer to CMS Sections 106.03, 700, 709.01 thru 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structures by the additional steel, spliced in accordance with 509.08.

"(E)" denotes epoxy coated reinforcing bar.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

32A/33

BAR BENDING DETAILS

BRIDGE NO. HAM-126-1303 LT. & RT.
HAM-126 OVER BALTIMORE & OHIO R.R.
AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C. STA. 503+27.61 TO P.O.S. STA. 507+19.17 L.B.
P.O.C. STA. 503+25.64 TO P.O.S. STA. 507+56.68 R.B.

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	ALH JAG		SJA	J.E.S. 12-85	

OHIO BLUE PRINT M46533

FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

SEI 787

HAMILTON COUNTY
HAM-126- 13.00

REINFORCING STEEL LIST

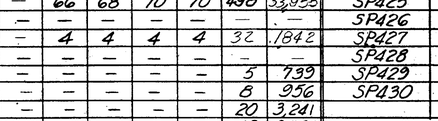
PIERS

MARK	LENGTH	SHAPE	LEFT BRIDGE Pier 1	Pier 2	Pier 3	Pier 4	Pier 5	RIGHT BRIDGE Pier 1	Pier 2	Pier 3	Pier 4	Pier 5	TOTAL NUMBER	WEIGHT
P501	9'-9"	Bent	—	56	72	76	76	—	76	96	100	100	652	6630
P502	2'-6"	Str.	—	25	25	25	25	—	25	25	25	25	200	522
P503	20'-0"	↓	—	—	—	—	—	—	—	—	—	—	—	—
P504	10'-5"		—	—	—	—	—	—	—	—	—	—	—	—
P505	25'-10"		—	—	—	—	—	—	—	—	—	—	—	—
P506	20'-0"		—	—	—	—	—	—	—	—	—	—	—	—
P507	5'-10"		—	—	—	—	—	—	—	—	—	—	—	—
P508	8'-6"		—	54	54	54	54	—	54	58	36	36	400	3546
P509	20'-0"		—	12	—	—	—	—	—	—	—	—	12	250
P510	19'-9"		—	—	12	—	—	—	12	12	—	—	36	742
P511	20'-8"		—	—	—	12	—	—	—	—	—	—	12	259
P512	20'-5"		—	—	—	—	12	—	—	—	12	12	36	767
P513	9'-8"		—	—	—	—	—	—	—	—	—	—	—	—
P514	10'-8"	↓	—	—	—	—	—	—	—	—	24	24	48	534
	Total Pier 1, Right Bridge and Pier 1, Left Bridge, See Sheet 33A/33													34692
P601	5'-3"	Str.	—	2	2	—	—	—	2	2	—	—	8	63
P602	12'-11"	Bent	—	6	6	6	6	—	6	6	4	4	44	854
P603	6'-3"	↓	—	—	—	—	—	—	—	—	—	—	—	—
P604	2'-0"	Str.	—	—	—	—	—	—	—	—	—	—	—	—
P605	6'-2"	Bent	—	2	2	—	—	—	—	—	—	—	4	37
P606	5'-6"	Str.	—	—	—	2	2	—	—	—	—	—	4	33
P607	6'-4"	Bent	—	—	—	2	2	—	—	—	—	—	4	38
P608	15'-8"	↓	—	—	—	—	—	—	—	—	2	2	4	94
P801	10'-8"	Bent	—	27	18	18	18	—	18	—	—	—	99	2820
P901	11'-0"	Bent	—	30	40	40	40	—	40	40	40	40	310	11594
P902	22'-2"	Str.	—	8	—	—	—	—	—	—	—	—	8	603
P1001	22'-3"	Str.	—	—	—	—	—	—	—	—	—	—	—	—
P1002	26'-8"	↓	—	—	—	—	—	—	—	—	—	—	—	—
P1003	9'-9"	Bent	—	—	—	—	—	—	—	—	—	—	—	—
P1004	22'-2"	Str.	—	2	2	—	—	—	—	—	—	—	4	382
P1005	22'-0"	↓	—	—	8	—	—	—	—	8	—	—	16	1515
P1006	23'-0"		—	—	—	8	—	—	—	—	—	—	8	792
P1007	22'-8"		—	—	—	—	8	—	—	—	8	8	24	2341
P1008	12'-10"	Bent	—	—	—	—	—	—	—	24	—	—	24	1325
P1009	13'-4"	↓	—	—	—	—	—	—	—	—	24	24	48	2754
P1010	11'-1"	Str.	—	4	4	—	—	—	—	—	—	—	8	382
P1101	27-8"	Str.	—	—	—	—	—	—	—	—	—	—	—	—
P1102	13'-1"	Bent	—	5	5	7	7	—	7	5	8	8	52	3615
P1103	13'-1"	↓	—	5	5	7	7	—	—	—	8	8	40	2780
P1104	25'-5"	Str.	—	—	—	—	—	—	—	—	—	—	—	—
P1105	12'-10"	Bent	—	56	56	56	56	—	66	68	70	70	498	33955
P1106	28'-8"	Str.	—	—	—	—	—	—	—	—	—	—	—	—
P1107	10'-10"	Bent	—	4	4	4	4	—	4	4	4	4	32	1842
P1108	22'-6"	Str.	—	—	—	—	—	—	—	—	—	—	—	—
P1109	27'-10"	↓	—	5	—	—	—	—	—	—	—	—	5	739
P1110	22'-6"		—	8	—	—	—	—	—	—	—	—	8	956
P1111	30'-6		—	20	—	—	—	—	—	—	—	—	20	3,241
P1112	32'-0		—	16	—	—	—	—	—	—	—	—	16	2,720
P1113	33'-3"		—	20	—	—	—	—	—	—	—	—	20	3533
P1114	28'-0"		—	—	5	—	—	—	7	9	—	—	21	3124
P1115	22'-3		—	—	8	—	—	—	14	8	—	—	30	3546
P1116	31'-3"		—	—	20	—	—	—	—	—	—	—	20	3321
P1117	32'-9"		—	—	16	—	—	—	—	—	—	—	16	2784
P1118	34'-3"		—	—	20	—	—	—	—	—	—	—	20	3639
P1119	30'-0"		—	—	—	7	—	—	—	—	—	—	7	1116
P1120	23'-6"		—	—	—	8	—	—	—	—	—	—	8	999
P1121	32'-3"		—	—	—	20	—	—	—	—	—	—	20	3427
P1122	34'-0"		—	—	—	16	—	—	—	—	—	—	16	2890
P1123	35'-3"	↓	—	—	—	20	—	—	—	—	—	—	20	3746

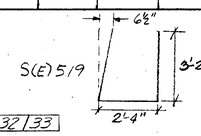
PIERS

MARK	LENGTH	SHAPE	LEFT BRIDGE Pier 1	Pier 2	Pier 3	Pier 4	Pier 5	RIGHT BRIDGE Pier 1	Pier 2	Pier 3	Pier 4	Pier 5	TOTAL NUMBER	WEIGHT
P1124	29'-4"	Str.	—	—	—	—	7	—	—	—	8	8	23	3585
P1125	22'-10"		—	—	—	—	8	—	—	—	8	8	24	2912
P1126	32'-6"		—	—	—	—	20	—	—	—	—	—	20	3453
P1127	34'-0"		—	—	—	—	16	—	—	—	—	—	16	2890
P1128	35'-6"	↓	—	—	—	—	20	—	—	—	—	—	20	3,772
P1129	13'-7"	Bent						—	7	5	—	—	12	866
P1130	29'-6"	Str.						—	—	—	—	—	—	—
P1131	30'-10"							—	—	—	—	—	—	—
P1132	32'-2"							—	—	—	—	—	—	—
P1133	36'-6"							—	24	—	—	—	24	4654
P1134	37'-3"							—	18	—	—	—	18	3610
P1135	39'-0"							—	24	—	—	—	24	4973
P1136	11'-3"							—	—	8	—	—	8	478
P1137	36'-0"							—	—	24	24	—	48	9181
P1138	37'-6"							—	—	20	—	—	20	3985
P1139	38'-9"							—	—	24	—	—	24	4941
P1140	37'-3"							—	—	—	22	—	22	4354
P1141	38'-6"							—	—	—	24	—	24	4909
P1142	35'-3"							—	—	—	—	24	24	4495
P1143	36'-3"	↓						—	—	—	—	22	22	4237
												TOTAL	222,837	

MARK	LENGTH	SHAPE	TOTAL	WEIGHT
Spirals ——— Core Diameter 32" ø/o Pitch ——— 4½ c/c Other details in accordance with C.R.S.I. Std. practice.				
SP404	26'-10"	Bent	1	497
SP405	28'-4	"	1	524
SP406	29'-7"	"	1	546
SP407	27'-7"	"	1	510
SP408	29'-1"	"	1	537
SP409	30'-7"	"	1	564
SP410	28'-7"	"	1	528
SP411	30'-4"	"	1	560
SP412	31'-7"	"	1	582
SP413	28'-10"	"	1	533
SP414	30'-4"	"	1	560
SP415	31'-10"	"	1	587
SP419	32'-10"	"	1	604
SP420	34'-1"	"	1	627
SP421	35'-4"	"	1	649
SP422	32'-4"	"	1	595
SP423	33'-10"	"	1	622
SP424	35'-1"	"	1	644
SP425	33'-7"	"	1	604
SP426	34'-10"	"	1	640
SP427	31'-7"	"	1	582
SP428	32'-7"	"	1	600
SP429	32'-4"	"	1	596
SP430	33'-7"	"	1	618
		TOTAL	13,909	



S(E) 520



S(E) 519

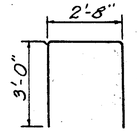
For S(E)518 see Sh 32|33

△(All Bars) SUPERSTRUCTURE

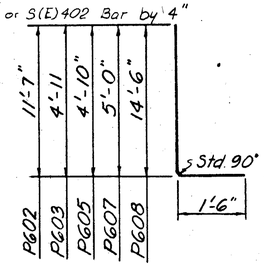
MARK	LENGTH	SHAPE	LEFT BRIDGE	RIGHT BRIDGE	NUMBER	WEIGHT
S(E)401	30'-0"	Str.	936	1080	2016	40401
S(E)402 ⊛	20'0"to21'-0"		58	—	58	446
S(E)403	19'-0"		—	7	7	89
S(E)404	34'-0"		315	315	630	14309
S(E)405 ⊛	2'0"to18'-0"		—	49	49	321
S(E)406	22'-0"	Str.	7	—	7	103
S(E)501	5'-3"	Bent	598	672	1270	6954
S(E)502	2'-6"	↓	598	672	1270	3312
S(E)503	3'-3"		598	672	1270	4305
S(E)504	14'-8"	Str	—	40	40	612
S(E)505	11'-8"		36	—	36	438
S(E)506	6'-1"		24	60	84	533
S(E)507	6'-7"		56	—	56	385
S(E)508	15'-8"		24	24	48	784
S(E)509	7'-0"		16	—	16	117
S(E)510	10'-8"		24	—	24	267
S(E)511	13'-8"		112	36	148	2110
S(E)512	5'-8"		36	144	180	1064
S(E)513	5'-1"		72	—	72	382
S(E)514	4'-9"		72	—	72	357
S(E)515	5'-10"		36	36	72	438
S(E)516	12'-8"		—	40	40	528
S(E)517	2'-9"	Str	816	—	816	2340
S(E)518	2'-10"	Bent	8	8	16	47
S(E)519	8'-5"	Bent	8	8	16	140
S(E)601	30'-0"	Str.	520	600	1120	50467
S(E)602	6'-9"to24'6"	Str.	40	—	40	1089
	Varies by 7"					
S(E)603	6'-0"to21'6"	Str	—	40	40	1006
	Varies by 6"					
S(E)604	3'4"to32'4"	Str	5	—	5	134
	Vary ea bar by 7'-3"					
S(E)605	1'-2"to30'5"	Str.	—	4	4	95
	Vary ea bar by 9'-9"		—			
S(E)606	23'-3	Str.	567	660	1227	42849
S(E)607	4'-3"to37'-7"	Str.	—	11	11	346
	Vary ea. bar by 3'-4"					
S(E)608	20'-0"	Str.	567	660	1227	36859
S(E)609	4'-11"to40'-8"	Str.	12	—	12	411
	Vary ea. bar by 3'-3"					
S(E)701	30'-0"	Str.	567	660	1227	75240
S(E)702	34'to32'4"	Str.	5	—	5	182
	Vary ea bar by 7'3"					
S(E)703	4'-11"to40'-8"	Str.	12	—	12	559
	Vary ea. bar by 3'-3"					
S(E)704	NOT USED					
S(E)705	1'-2"to30'-5"	Str.	—	4	4	129
	Vary ea bar by 9'-9"					
S(E)706	13'-8"	Str.	567	660	1227	34276
S(E)707	4'-3"to37'-7"	Str.	—	11	11	470
	Vary ea bar by 3'-4"					
S(E)520	7'-3"	Bent	12	12	24	181
S(E)521	3'-2"	Str.	8	8	16	53
			TOTAL		325,134	

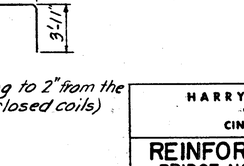
BAR DIAGRAMS

⊛ Vary each S(E) 405 or S(E)402 Bar by 4"

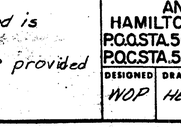


P501

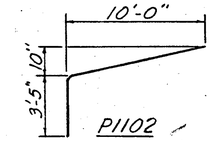




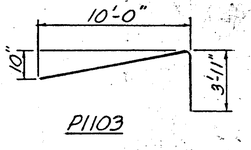




P1107



P1102



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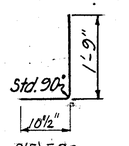

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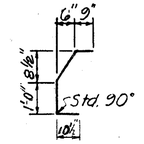

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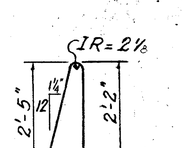

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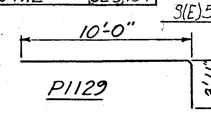


P1129

NOTES:

1. SPIRAL REINFORCING BARS: The length shown in the steel list for spiral bars is the distance from the top of the footing to 2" from the bottom of the pier cap. The number of turns is the length divided by the pitch, plus (3) turns (total number of closed coils) expressed as the nearest whole number.

   1½ closed coils shall be provided at the ends of each spiral unit.
   Four steel channels, tee or angle spacers, weight approximately 0.80 lbs. per lin. ft. of spacers shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil.
   The number of pounds of these spacers, based on 0.80 lbs. per lin. ft. will be paid for as reinforcing steel and is included in the tabulated weight of spiral reinforcement.
2. Refer to CMS sections 106.03, 700, 709.01 thru 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structures by the additional steel, spliced in accordance with 509.08.
3. Reinforcing bars not revised by Balke (△) shall have a minimum lap of 30 bar diameters.
4. "(E)" Denotes epoxy coated bar.

Add 467 to epoxy cntrl

HARRY BALKE ENGINEERS 33|33
990 NASSAU STREET
CINCINNATI, OHIO 45206

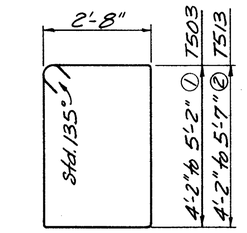
REINFORCING STEEL LIST
BRIDGE NO. HAM-126-1303 LT. & RT
HAM-126 OVER BALTIMORE & OHIO R.R. AND SR-4 (VINE STREET)
HAMILTON COUNTY HAM-126
P.O.C. STA. 503+27.61 TO P.O.S. STA. 507+19.17 L.B
P.O.C. STA. 503+25.64 TO P.O.S. STA. 507+56.68 R.B.

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
WDP	HEW		CAS	R.K. 3-71	6/86

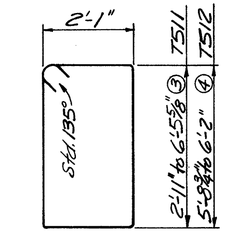
CALC. BY DATE	HAM-75-9.93 HAM-126-13.00	OHIO FHWA REGION 5	521A 787
CHKD. BY DATE			

REINFORCING STEEL LIST

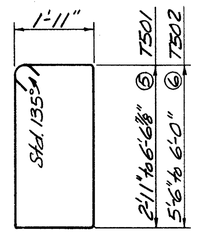
MARK	NO.	LENGTH	WEIGHT	SHAPE	LEFT BRIDGE PIER 1	RIGHT BRIDGE PIER 1
T1101	7	27'-2"	1010	B	7	—
T1102	7	28'-5"	1057	B	7	—
T1001	128	9'-9"	5370	B	64	64
T1002	40	26'-4"	4532	S	40	—
T1003	24	18'-0"	1859	S	24	—
T1004	40	30'-0"	5164	S	—	40
T1005	24	20'-0"	2065	S	—	24
T1006	5	25'-8"	552	B	—	5
T1007	10	23'-6"	1012	S	—	10
T1008	5	26'-11"	579	B	—	5
T901	44	13'-0"	1945	B	22	22
T801	24	23'-4"	1495	B	12	12
T601	46	10'-6"	725	S	23	23
T602	24	21'-6"	775	S	12	12
T603	92	8'-2"	1128	B	42	50
T604	96	14'-0"	2019	S	44	52
T605	8	17'-4"	208	B	8	—
	2	10'-3"			2	
T501	Series of 10	to ⑪ 17'-6¾"	290	B	Series of 10	—
	2	15'-5"			2	
T502	Series of 4	to ⑫ 16'-5"	133	B	Series of 4	—
	1	14'-3"			1	
T503	Series of 5	to ⑦ 16'-3"	80	B	Series of 5	—
T504	20	21'-5"	447	S	12	8
T505	4	18'-6"	77	S	4	—
T506	8	14'-0"	117	S	4	4
T507	26	9'-5"	255	B	13	13
T508	13	7'-4"	99	B	8	5
T509	22	10'-5"	239	B	12	10
T510	10	5'-5"	395	B	35	35
	2	10'-6½"				2
T511	Series of 12	to ⑨ 17'-7¾"	352	B	—	Series of 12
	2	16'-2"				2
T512	Series of 4	to ⑩ 17'-0½"	139	B	—	Series of 4
	1	14'-3"				1
T513	Series of 9	to ⑧ 17'-1"	147	B	—	Series of 9
T514	4	20'-6"	86	S	—	4
T515	4	17'-10"	74	S	—	4
T516	10	17'-4"	181	B	—	10
T517	5	16'-5"	86	B	—	5
		TOTAL	34692			



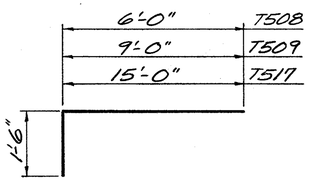
T503, T513



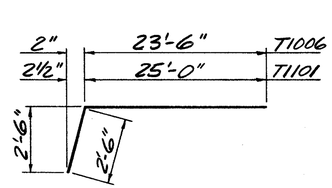
T511, T512



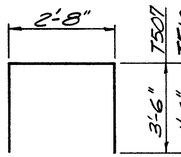
T501, T502



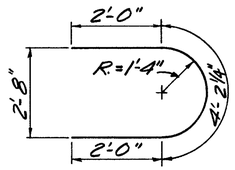
T508, T509, T517



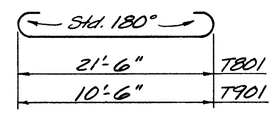
T1006, T1101



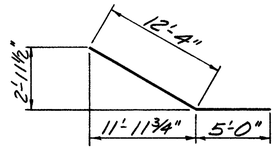
T507, T510



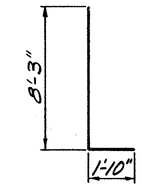
T603



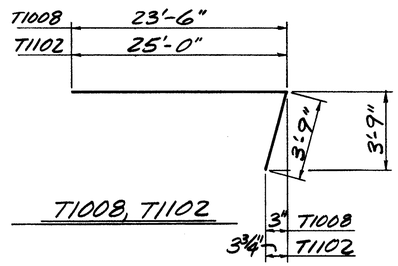
T801, T901



T516, T605



T1001



T1008, T1102

① Varies by 3" increments
② Varies by 2⅛" increments
③ Varies by 3⅛" increments
④ Varies by 1¾" increments
⑤ Varies by 4⅞" increments
⑥ Varies by 2" increments
⑦ Varies by 6" increments
⑧ Varies by 4¼" increments
⑨ Varies by 7¾" increments
⑩ Varies by 3½" increments
⑪ Varies by 9¾" increments
⑫ Varies by 4" increments

NOTES:

For Pier 2, 3, 4 & 5 Left and Right Bridges reinforcing steel, see Sheet 33/33.

REINFORCING STEEL SAMPLES:
Refer to CMS Sections 106.03, 700, 709.01 through 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structures by the additional steel, spliced in accordance with 509.08.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

33A/33

REINFORCING STEEL LIST
BRIDGE NO. HAM-126-1303 LT. & RT.
HAM-126 OVER BALTIMORE & OHIO R.R.
AND S.R. 4 (VINE STREET)
HAMILTON COUNTY OHIO
POC STA. 503+27.61 TO POS STA. 507+19.17 LINE B
POC STA. 503+25.64 TO POS STA. 507+56.68 RP6

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	WJH	~	SJA	CRS 6/82	

OHIO BLUE PRINT 1400503

FED. RD. DIVISION	STATE	PROJECT		
2	OHIO			

022
181

HAM-75-9.93
HAM-126-13.00

BEGIN APPROACH SLAB
STA 69+73.56 ℄ RAMP D
END APPROACH SLAB
STA 70+00.42 ℄ RAMP D

BEGIN APPROACH SLAB
STA. 72+07.89 ℄ RAMP D
END APPROACH SLAB
STA 72+33.65 ℄ RAMP D

P.C. STA. 68+80.76
P.T. STA. 73+70.65 ℄ RAMP D =
55.50' RT. STA. 85+46.00 ℄ I-75

℄ RAMP D
℄ RAMP C
℄ I-75

Rock Channel Protection Type B w/Filter

PROPOSED RETAINING WALL NO. 3

Remove Existing Approach Slab

Remove Exist. Approach Slab

End Approach Slab
Sta. 86+73.34 ℄ I-75

Begin Approach Slab
Sta. 86+48.34 ℄ I-75

Temporary Precast Barrier: Phase II

Remove Exist. Approach Slab

End Approach Slab
Sta. 88+75.66 ℄ I-75

Begin Approach Slab
Sta. 88+90.66 ℄ I-75

Remove Exist. Approach Slab

Temporary Precast Barrier: Phase I

Proposed Retaining Wall No. 2

40:1 TAPER

PROPOSED RETAINING WALL NO. 8

END APPROACH SLAB
△STA. 46+65.91 ℄ RAMP C

BEGIN APPROACH SLAB
STA 46+41.32 ℄ RAMP C

S.T. STA. 46+24.11

BEGIN PARAPET +70.76

STA 47+95.25 ℄ RAMP C =
68.50' LT., STA. 87+00.00 ℄ I-75

END PARAPET STA. 86+29.17

Rock Channel Protection Type B w/Filter

END APPROACH SLAB
STA 86+10.10 ℄ I-75
Offset 66.25'

BEGIN APPROACH SLAB
STA. 86+34.74 ℄ I-75
Offset 66.87'

NOTE:
EARTHWORK LIMITS SHOWN ARE APPROXIMATE ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

ABUTMENT NO. 1
PIER NO. 1
PIER NO. 2
ABUTMENT NO. 2
BENCH
PHASE I
PHASE II
Exist. Dumped Rock
Exist. Concrete Slope Protection
Existing Bridge HAM-75-1010
MILL CREEK
Skew 30°00'00"

HORIZONTAL CURVE DATA
RAMP D

P.I. STA. 71+26.04
Δ = 7°20'53.7"
Dc = 1°30'00"
R = 3819.72'
T = 245.28'
L = 489.88'

TRAFFIC DATA △

Ramp C
2006 ADT= 16,055
2006 ADTT= 1,766
Ramp D
2006 ADT= 4,337
2006 ADTT= 477

EXISTING STRUCTURE
BRIDGE NO. HAM-75-1010, PREV. DESIGNATION HA-25-93

TYPE: Continuous rolled steel beam with reinforced concrete deck and sub-structures.

SPANS: 60.00', 75.00', 60.00'

ROADWAY: 91'-0" face to face of safety curbs, includes variable width raised median.

DESIGN LOAD: S 20-46.

SKEW: 30° 00'00" R.F.

WEARING SURFACE: 3/4" monolithic concrete.

APPROACH SLABS: 15' long.

ALIGNMENT: Tangent.

SUPERELEVATION: None.

CONDITION: Excellent. Built in 1947 ±.

△PROPOSED STRUCTURE
WIDENING OF EXISTING BRIDGE NO. HAM-75-1010

TYPE: Continuous rolled steel beam with composite reinforced concrete deck and reinforced concrete substructures.

SPANS: 60.00', 75.00', 60.00' along ℄ I-75.

ROADWAY: Varies.

LOADING: HS 20-44 CASE I AND ALTERNATE MILITARY LOADING.

SKEW: 30°00'00" R.F.

WEARING SURFACE: 1 1/4" Latex Modified Concrete

APPROACH SLABS: AS-1-81 (25' long).

ALIGNMENT: Ramp D - 1°30'00" curve left.
Ramp C - Tangent.

SUPERELEVATION: 0.025' per ft. & Varies

ALL PILES ARE 12" DIA., CAST-IN-PLACE, REINFORCED CONCRETE PILES. THE ESTIMATED AVERAGE PAY-LENGTHS ARE:
ABUTMENTS - 50'
PIERS - 50'

P L A N

ELEVATIONS SHOWN ARE AT PROFILE GRADE

←RAMP D PROFILE Graphical Grades △
←RAMP C PROFILE Graphical Grades △

SEAL CONCRETE SURFACES OF PARAPETS
(SEE PROPOSAL NOTE AND SHT. NO. 11/14)

BRIDGE LIMITS = 197.32' ℄ I-75
LOW STEEL

Elev. 524.00
BENCH Elev. 528.0
Corps of Engineers-100yr. H.W. Flood Elev. 524.8
Low Water Elev. 511.2
BENCH Elev. 530.0
Elev. 526.00

△8" REINFORCED CONCRETE SLAB CHANNEL LINING (BY OTHERS)

2:1 (Normal)

CHANNEL EXCAVATION THROUGH STRUCTURE TO Elev. 509.8

Elev. 504.00
Elev. 504.00

△8" REINFORCED CONCRETE SLAB CHANNEL LINING (BY OTHERS)

PROFILE

HEADWATER FLOOD DATA
DA - 115 Sq miles
Q_{100} = 23,000 CFS
V = 12.3 FT./sec.
Depth of Flow = 13FT.

1 / 14

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

SITE PLAN

BRIDGE NO. HAM-75-1010
EXIST. I-75 AND RAMPS C & D
OVER MILL CREEK

HAMILTON COUNTY
STA. 88+70.66 to
STA. 86+73.34 I-75

SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	△ REVISED
Aerial	G.W.N.	J.R.P.	D.W.M.	D.W.S.	BALKE ENGRS. 11/86

Revised 12-28-87

12-D

CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO	522A
CHKD. BY			FHWA REGION 5	787
DATE				

SEQUENCE OF OPERATIONS

1. CAREFULLY REMOVE EXISTING DECK SLAB CONCRETE AT ABUTMENTS, ALONG LIMITS SHOWN, TO PERMIT REMOVAL OF EXISTING END DAMS AND REMOVAL OF BACKWALL. EXISTING SLAB REBARS TO REMAIN IN PLACE AND/OR BE REUSED.

2. REMOVE **EXISTING** APPROACH SLAB AND EXCAVATE SLIGHTLY BELOW BOTTOM OF BACKWALL AS SHOWN ON PLANS.

3. REMOVE BACKWALL INCLUDING REINFORCEMENT, CUTTING OFF REAR AND FRONT ROWS OF REBARS AS INDICATED.

4. REMOVE REMAINING PORTIONS OF END CROSSFRAMES AND REMOVE ALL SCALE FROM STRUCTURAL STEEL AND SLAB REINFORCING STEEL TO BE ENCASED.

5. JACK-UP EACH BEAM ENOUGH TO REMOVE BEARING DEVICE AND KEEP SUPPORTED IN THIS POSITION. SUPPORTS MUST BE A MINIMUM OF 18-INCHES FROM END OF BEAM TO CLEAR THE NEW SEATS WHICH WILL BE PLACED.

6. CUT END OF BEAMS AS SHOWN ON PLANS.

7. REMOVE EXISTING BRIDGE SEAT CONCRETE (IN LOCATIONS) WHERE THE TOP OF NEW BRIDGE SEAT IS LESS THAN 6-INCHES ABOVE ORIGNAL. REMOVE CONCRETE TO A DEPTH OF 6-INCHES BELOW TOP OF PROPOSED SEAT.

8. ROUGHEN EXISTING CONCRETE OF EXISTING BEAM SEAT AND REMOVE UNSOUND CONCRETE.

9. WELD SHIMS TO BOTTOM OF FLANGE AS INDICATED. SEE SHEET 6A OF 14.

10. FORM NEW BEAM SEAT.

11. PLACE CONCRETE UP TO THE BOTTOM OF THE WELDED PLATE AS SHOWN. PROVIDE A SMOOTH SURFACE ON THE CONCRETE.

12. AFTER FIRST CONCRETE PLACEMENT HAS SET, PLACE SHEET LEAD AND 1/2-INCH THICK PREFORMED EXPANSION JOINT FILLER ON THE SEAT AS SHOWN. IT WILL BE NECESSARY THE JACK THE BEAMS SLIGHTLY (SAY 1/4-INCH) TO BE ABLE TO SLIDE THE SHEET LEAD INTO PLACE.

13. RELEASE JACKS AND LOWER BEAMS ONTO THE SEAT.

14. BURN HOLES IN BEAM WEB FOR NEW REINFORCING STEEL.

15. FORM FRONT FACE OF CONCRETE DIAPHRAGM.

16. PLACE REMAINING REINFORCING STEEL.

17. FORM REAR FACE OF CONCRETE DIAPHRAGM.

18. PLACE REMAINING CONCRETE BEING CERTAIN THAT CONCRETE IS VIBRATED ENOUGH TO MAKE CONTACT WITH BOTTOM SURFACES OF THE BEAM FLANGES. CARE SHOULD BE EXERCISED TO SEE THAT THERE IS NO CONCRETE-TO-CONCRETE CONTACT ALONG THE PLANE OF THE NEW SEAT.

19. INSTALL **SEALANT** AND WATERPROOFING.

20. BACKFILL BEHIND BACKWALL.

21. PLACE NEW APPROACH SLABS.

MAINTENANCE OF TRAFFIC

TWO LANES OF TRAFFIC WITH A MINIMUM HORIZONTAL WIDTH OF 26'-0" SHALL BE MAINTAINED AT ALL TIMES.

ITEM 202

EXISTING STRUCTURE VERIFICATION - DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND/OR FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02, AND 513.02.

CONTRACT BID PRICES SHALL BE BASED UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PRE-BID EXAMINATION OF THE EXISTING STRUCTURE BY THE CONTRACTOR. HOWEVER, ALL PROEJCT WORK SHALL BE BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.

ALL REMOVAL OF EXISTING STRUCTURES SHALL BE DONE IN AN ORDERLY MANNER AVOIDING DANGER TO PUBLIC SAFETY, TRAFFIC ON AND UNDER THE EXISTING BRIDGE AND TO AVOID LITTERING ROADWAYS AND ENVIRONMENT.

SUGGESTED CONSTRUCTION SEQUENCE

PHASE I

1. ROUTE TRAFFIC ONTO INTERIOR SIDE OF BOTH BRIDGES. INTERIOR PART OF EXISTING BRIDGE IS TO BE KEPT IN SERVICE TO MAINTAIN TWO NORTHBOUND 13-FOOT LANES AND TWO SOUTHBOUND 13-FOOT LANES DURING PHASE I CONSTRUCTION OF RAMPS "C" AND "D". **REF. MAINTENANCE OF TRAFFIC NOTES PER ROADWAY PLANS.**

2. PROCEED WITH STEPS 1 THROUGH 3 OF "SEQUENCE OF OPERATIONS" INCLUDING THE REMOVAL OF EXISTING WINGWALLS SHOWN ON SHEETS 3 OF 14 THROUGH 6 OF 14 AND EXISTING SUPERSTRUCTURE TO SAW-CUT LINE. RETAIN ALL TRANSVERSE STEEL IN SUPERSTRUCTURE. REMOVE BULB ANGLE GUTTER, SCUPPERS, WALK, RAIL. SEE SHEETS 11 AND 12 OF 14.

3. DRIVE PILES AND CONSTRUCT FOOTING FOR NEW EXTERIOR PORTION OF ABUTMENT AS OUTLINED ON SHEET 3 THROUGH 6 OF 14.

4. POUR ABUTMENT UP TO BRIDGE SEAT LEVEL FOR NEW EXTERIOR PORTION OF ABUTMENT.

5. PROCEED WITH STEPS 4 THROUGH 14 OF "SEQUENCE OF OPERATIONS". FEED REINFORCEMENT THROUGH EXISTING TWO BEAMS.

6. INSTALL ELASTOMERIC BEARING PADS AND THE EXTERIOR FOUR COMPOSITE BEAMS FOR BOTH SIDES.

7. FEED REINFORCEMENT THROUGH EXTERIOR FOUR BEAMS.

8. PROCEED WITH STEPS 15 THROUGH 19 AND ALSO CONSTRUCT NEW PORTIONS OF SUPERSTRUCTURE.

9. PROCEED WITH STEPS 20 THROUGH 21 OF "SEQUENCE OF OPERATIONS."

PHASE II

1. REROUTE TRAFFIC ONTO COMPLETED PHASE I BRIDGE, **REF. SHEET ROADWAY PLANS.**

2. PROCEED WITH "SEQUENCE OF OPERATIONS," STEPS 1 THROUGH 21.

3. PROCEED WITH PHASE II TO COMPLETION.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

1A/14

EXIST. ABUTMENT MODIFICATIONS
BRIDGE NO. HAM-75-1010
EXIST. I-75 AND RAMPS C & D
OVER MILL CREEK
HAMILTON COUNTY
STA. 88+70.66 TO STA. 86+73.34 I-75

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	~	~	TMB	CRS 3/86	

OHIO BLUE PRINT M60053

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

323
TOT

HAM-75-9.93
HAM-126-13.00

△ REFERENCE SHALL BE MADE TO THE FOLLOWING:

STANDARD DRAWINGS:	AS-1-81	DATED 11-27-81
	BR-1	DATED 5-29-79
	SD-1-69	DATED 6-12-69
HL-4 DATED 1-21-76	MC-9	DATED 11-1-77
	MC-9A	DATED 4-1-80
SUPPLEMENTAL SPECIFICATIONS:		
	836	DATED 11-12-85
	824	DATED 10-8-82
	845	DATED 2-25-86
	953	DATED 8-21-80

DESIGN SPECIFICATIONS: THE WIDENING OF THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, 1983, INCLUDING THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

△ PORTIONS OF STRUCTURES REMOVED: The existing wingwalls, backwalls, approach slabs, medians, curbs, ball angle gutters, scuppers, rockers, portions of deck slab and any other item shall be removed as shown on detail plans.

PILES SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 35 TONS PER PILE FOR THE ABUTMENTS AND 45 TONS PER PILE FOR THE PIERS.

UTILITY LINES:
ALL EXPENSE INVOLVED IN RELOCATING THE AFFECTED UTILITY LINES SHALL BE BORNE BY THE OWNERS. THE CONTRACTOR AND OWNERS ARE REQUESTED TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WOULD BE HELD TO A MINIMUM.

ITEM 511: CLASS S CONCRETE, SUPERSTRUCTURE, USING SHRINKAGE COMPENSATING CEMENT, 701.08.

THE FOLLOWING RESTRICTIONS SHALL APPLY TO THE SUPERSTRUCTURE CONCRETE USING SHRINKAGE COMPENSATING CEMENT, 701.08.

1. CEMENT SHALL BE EXPANSIVE HYDRAULIC CEMENT, ASTM C845, TYPE K.
2. THE MAXIMUM WATER/CEMENT RATIO GIVEN FOR CLASS S CONCRETE IN 499.03 SHALL BE REVISED FROM 0.44 TO 0.50.
3. MAXIMUM SLUMP AT THE TIME AND PLACE OF CONCRETE PLACEMENT SHALL BE 6 INCHES.
4. CHEMICAL ADMIXTURES, WHEN REQUIRED BY 511.06, SHALL BE LIMITED TO 705.12 TYPE D.
5. MAXIMUM AMBIENT TEMPERATURE AT TIME OF PLACEMENT OF CONCRETE SHALL BE 80° F.
6. MEMBRANE CURING PER SS836 WILL NOT BE PERMITTED FOR ANY CONCRETE PLACED BETWEEN SEPTEMBER 1 AND MARCH 31. SUCH CONCRETE SHALL BE CURED BY METHOD (A) WATER CURING.
7. IF REQUIRED BY THE ENGINEER, THE SURFACE OF THE CONCRETE SHALL BE GIVEN A FOG SPRAY OF WATER. THIS MAY BE REQUIRED PRIOR TO EITHER WATER CURING OR MEMBRANE CURING IF WEATHER CONDITIONS DICTATE. EQUIPMENT SHALL BE ON HAND.

△ DESIGN DATA:

DESIGN LOADING: HS 20-44, CASE I

DESIGN STRESSES:

CONCRETE, CLASS S	COMPRESSIVE STRENGTH: 4500 PSI (SUPERSTRUCTURE)
CONCRETE, CLASS C	UNIT STRESS 1333 P.S.I. (SUBSTRUCTURE)
STRUCTURAL STEEL	ASTM A572-50 UNIT STRESS 27,000 PSI
DECK PROT. METHOD	ASTM A36, UNIT STRESS 20,000 PSI EPOXY COATED REINFORCING STEEL WITH 3" CONCRETE COVER OF WHICH 1-1/4" IS A LATEX MODIFIED CONCRETE OVERLAY.
BOLTS	1" DIAMETER HIGH STRENGTH STEEL BOLTS CONFORMING TO ASTM A325, Except as noted.
REINFORCING STEEL	ASTM A615, A616, A617, GRADE 60, MINIMUM YIELD STRENGTH: 60,000 P.S.I. (SUPERSTRUCTURE)
**	GRADE 60 - UNIT STRESS 24,000 P.S.I (SUBSTRUCTURE)

△ REINFORCING STEEL: Substructure Reinforcing Bars not revised by BALKE (△) shall have A minimum Lap of 30 Bar Diameters.

ESTIMATED QUANTITIES

	ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	PIERS	ABUT.	GEN.	AS BUILT	
△	202	Lump	Sum	Portions of Structures Removed				Lump		
	503	633	Cu.Yd.	Unclassified excavation		372	261			
	503	Lump	Sum	Cofferdams, cribs and sheeting				Lump		
△	505	Lump	Sum	Pile Driving Equipment Mobilization				Lump		
	507	5100	Lin.Ft.	12"cast-in-place, reinforced concrete piles		3600	1500			
△	510	472	Each	Dowel Holes			472			
△	509	37,972	Lb.	Reinforcing steel, Grade 60		24,931	13,041			
△	511	508	Cu.Yd.	Class S concrete, superstructure (Includes Class S in Abutments)	508					
	511	138	Cu.Yd.	Class C concrete, abutments			138			
	511	336	Cu.Yd.	Class C concrete, piers above footings		336				
	511	154	Cu.Yd.	Class C concrete, pier footings		154				
△	*511	508	Cu.Yd.	Class S concrete superstructure using shrinkage compensating cement 701.08	508					
△	513	4761	Each	Welded Stud shear Connectors	4761					
△	513	263,800	Lb.	Structural steel (ASTM A572-50)(AISC Category I)(See Proposal Note)	260,400		3400			
△	514	263,800	Lb.	Field painting new Structural Steel, System A	263,800					
△	516	16	Each	Laminated elastomeric bearings, 1⅛" × 10" × 18" pad with (1" × 1¾") × 11" × 19" beveled steel load plate		16	258			
△	516	166	Sq.Ft.	¼" Preformed expansion joint filler			166			
△	516	424	Lin.Ft.	PVC Waterstop, as per plan ▼			424			
△	516	166	Sq.Ft.	1" Preformed expansion joint filler			166			
△	516	111	Sq.Ft.	⅛" Sheet Lead			111			
	518	49	Cu.Yd.	Porous backfill			49			
△	516	438	Sq.Ft.	½" Preformed Expansion Joint Filler			438			
△	516	85	Sq.Ft.	3" Preformed Expansion Joint Filler			85			
△	523	6	Hour	Dynamic Load Test				6		
△	824	131,296	Lbs.	Epoxy-Coated Reinforcing Steel, Grade 60	131,296					
△	845	1,212	Sq.Yd.	Latex Modified Concrete Overlay (1¼" Thick) (See Proposal Note)	1,212					
△	514	Lump	Sum	Field Painting of Existing Steel, Surface Preparation, System A	Lump					
△	514	Lump	Sum	" " " " , Spot Prime, System A	Lump					
△	514	Lump	Sum	" " " " , Complete Coat Prime, System A	Lump					
△	514	Lump	Sum	" " " " , Complete Coat Finish, System A	Lump					
△	Special	397	Sq.Yd.	Sealing of Concrete Surfaces (See Proposal Note)	397					

Computed by: Date: Quantities Revised by: SJA 1-86
Checked by: Date: Revisions Checked by: BJS 3-86

* Alternate Bid Item

△ SEALING OF CONCRETE SURFACES: The following concrete areas are to be sealed per Proposal Note:
- Superstructure Parapets. See sheet 11/14

△** An allowance of 1,000 Lbs. extra reinforcing is included in this quantity to replace any existing reinforcing in superstructure that is too corroded to reuse. Min. Lap Lengths are as follows: #4 1'-4", #5 1'-8", #6 2'-0", #7 2'-5", #8 3'-5".

△ ASTM A572-50 Steel shall be used on all new composite beams and ASTM A36 Steel shall be used on abutment shims only. All ASTM A36 Steel shall be paid as A572-50 Steel.

△ ▼ Sawcut and grout PVC waterstop into existing concrete for the proposed 3" PEJF. Payment shall be included in Item 516, PVC waterstop.

2/14

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

GENERAL NOTES & ESTIMATED QUANTITIES
BRIDGE NO. HAM-75-1010
EXIST. I-75 AND RAMPS C&D
OVER MILL CREEK

HAMILTON COUNTY

△ STA. 88+70.66 to STA. 86+73.34 I-75

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED
J.R.P.	T.D.S.	——	D.W.S.	BJS.	5-14-71	△ BALKE ENGRS 1/86

CALC. BY	HAM-75-9.93	OHIO	523A
DATE	HAM-126-13.00	FHWA REGION 5	787
CHKD. BY			
DATE			

GENERAL NOTES
PLAN REVISIONS BY BALKE ENGINEERS

REVISIONS WERE MADE TO SUBSTRUCTURE DRAWINGS TO INCORPORATE THE FOLLOWING:

- o REVISE PARAPETS TO STANDARD SAFETY PARAPET SHAPE.
- o PROVIDE EPOXY-COATED REINFORCEMENT IN CORROSION-PRONE CONCRETE AREAS.
- o NUMBER PILES AND ADD DETAIL NOTES.
- o REVISE ABUTMENTS TO RECEIVE FULL WIDTH APPROACH SLAB PER AS-1-81.

AT THE REQUEST OF THE OHIO DEPARTMENT OF TRANSPORTATION, ALL SUBSTRUCTURE REINFORCEMENT IS TO BE GRADE 60.

REVISIONS MADE BY BALKE ENGINEERS ARE DENOTED BY (△) SYMBOL.

OTHER THAN NOTED REVISIONS, SUBSTRUCTURES ARE THE DESIGN AND DETAILING OF VOGT, IVERS, AND ASSOCIATES, INC.

ANALYSIS OF THE ORIGINAL SUPERSTRUCTURE DESIGN HAS BEEN COMPARED TO THE REVISED SUPERSTRUCTURE DESIGN TO ASSURE THAT LOADINGS HAVE NOT INCREASED ON SUBSTRUCTURES PROVIDED BY VOGT, IVERS AND ASSOCIATES, INC. DESIGN OF THESE SUBSTRUCTURES REMAINS THE RESPONSIBILITY OF VOGT, IVERS, AND ASSOCIATES.

REVISED SUPERSTRUCTURE DESIGN AND DETAILING WAS PREPARED TO CONFORM WITH UPDATED DESIGN STANDARDS.

DESIGN AND DETAILING BY BALKE ENGINEERS WAS PERFORMED IN ACCORDANCE WITH THE AASHTO SPECIFICATIONS FOR HIGHWAY BRIDGES, THIRTEENTH EDITION, 1983, AASHTO INTERIM SPECIFICATIONS FOR BRIDGES 1984, AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

2A/14

GENERAL NOTES
Bridge No. Ham-75-1010
Exist. I-75 and Ramps C&D
Over Mill Creek

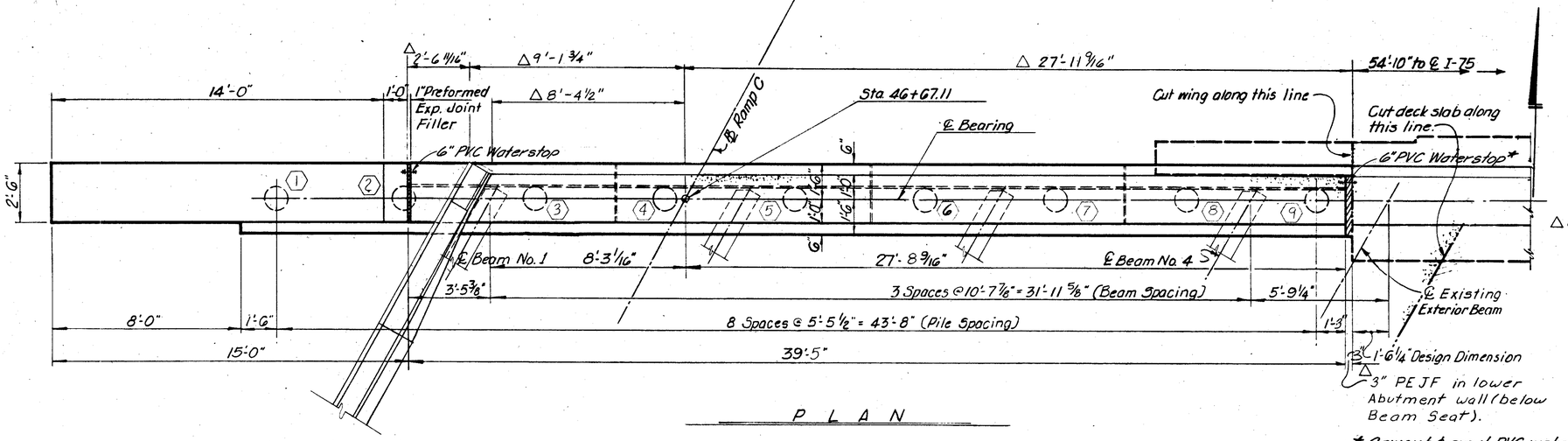
Hamilton County — Sta. 88+70.66 to Sta. 88+73.34 I-75

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
SJA	ALH	–	TMB	CRS 3/86	–

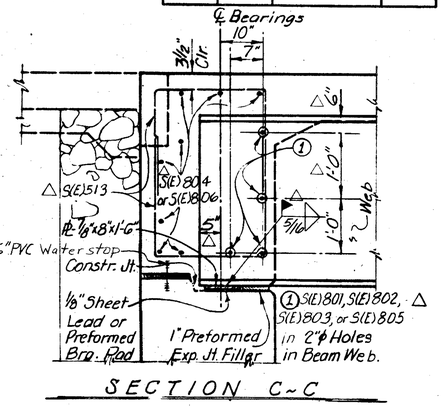
HAM-75-9.93
HAM-126-13.00

PER. RD. DIVISION	STATE	PROJECT	
2	OHIO		

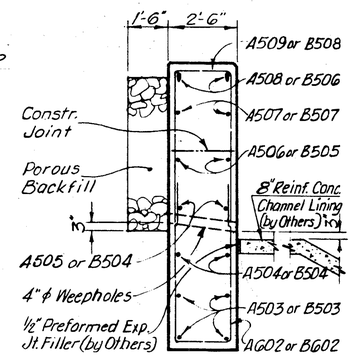
528
787



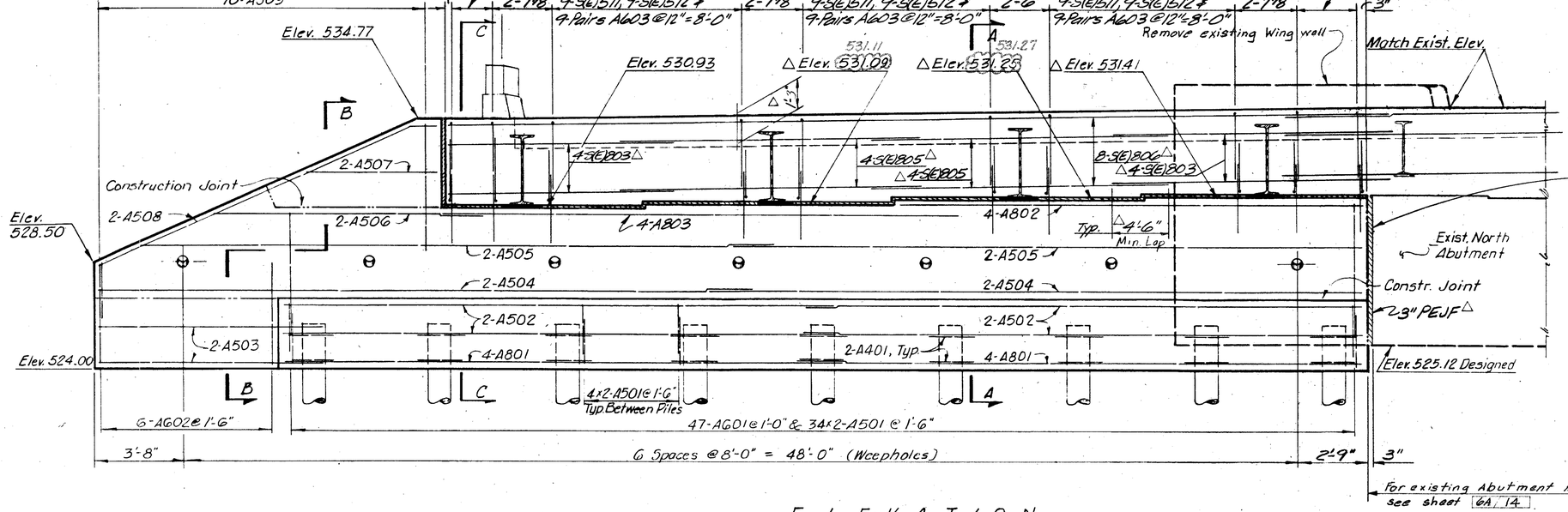
P L A N



SECTION C~C



SECTION B~B



E L E V A T I O N
at ℄ Bearings

For existing Abutment modifications see sheet 6A, 14.

NOTES:

⬡ = Pile Number

FOR SECTION A~A, see sheet 5/14.

POROUS BACKFILL shall extend upward to the plane of the subgrade & laterally to the surface of the embankment slopes.

ELEVATIONS shown are at ℄ bearings.

Δ WATERSTOP: A 6" PVC waterstop shall be centered on bridge seat construction joint and the back wall expansion joints to form a continous waterproof seal. The waterstop shall be capable of accommodating 1½" of the joint movement.

3/14

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

ABUTMENT NO. 1 - RAMP C
BRIDGE NO. HAM-75-1010
EXIST. I-75 AND RAMPS C & D
OVER MILL CREEK

HAMILTON COUNTY
Δ STA. 88+70.66 to STA. 86+73.34 I-75

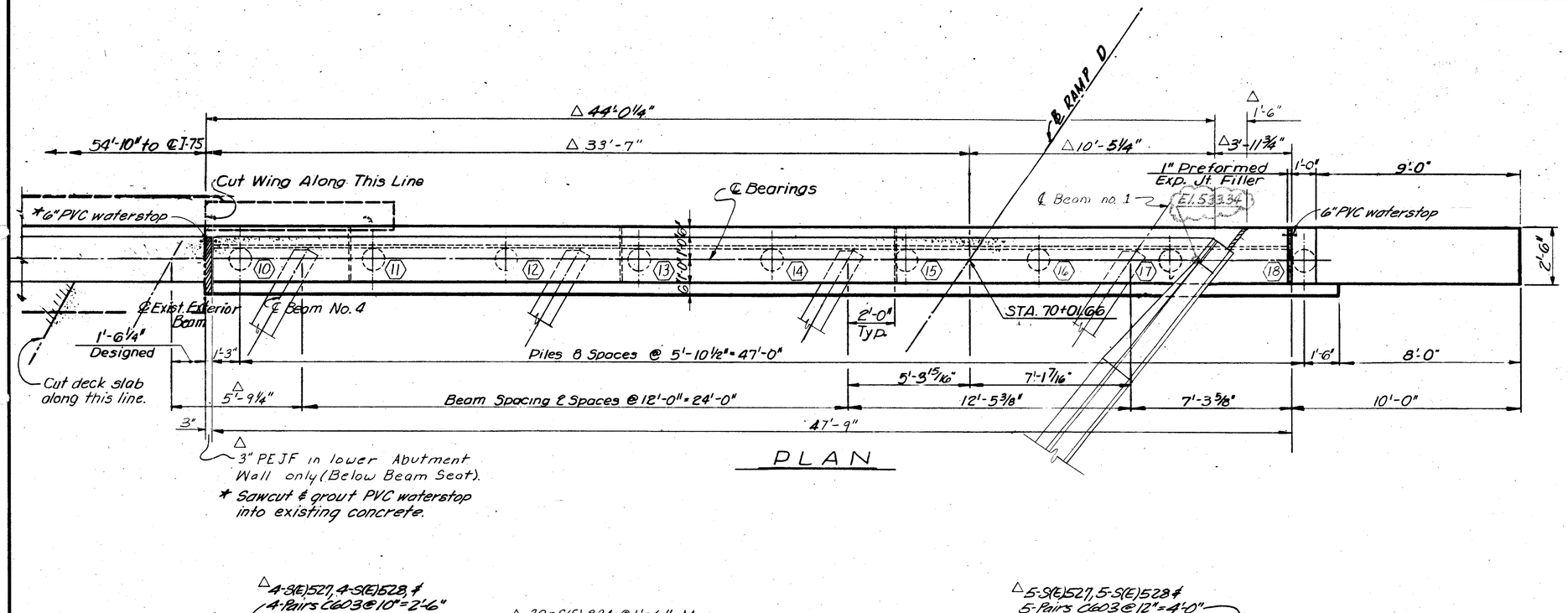
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	Δ REVISED
J.R.P.	J.R.P.	D.W.M.	D.W.S.	J.V.	5-14-71	Δ BALKE ENGRS. 1186

Revised 12-28-87

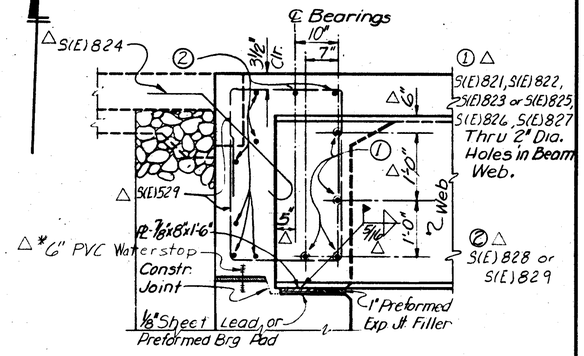
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

825
787

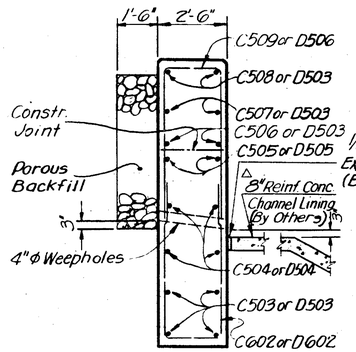
HAM-75-9.93
HAM-126-13.00



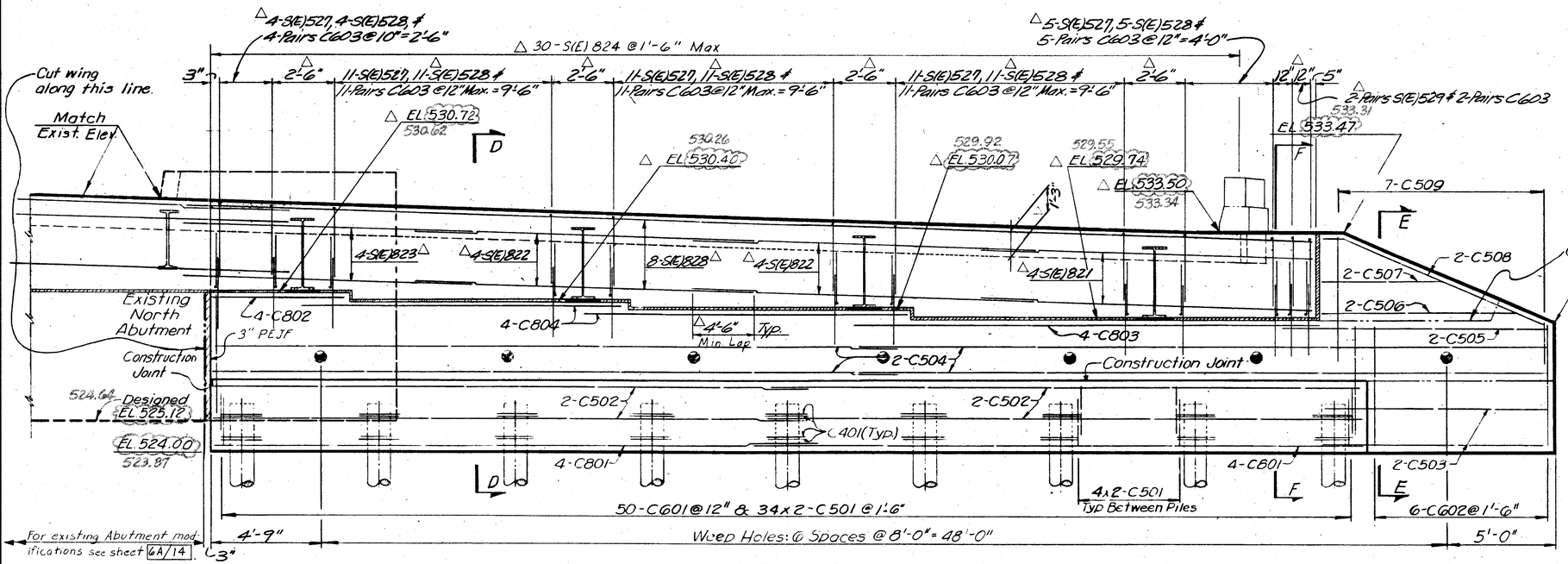
PLAN



SECTION F-F



SECTION E-E



ELEVATION
@ ℄ BEARINGS

△ * WATERSTOP: A 6" PVC waterstop shall be centered on the bridge seat construction joint and the backwall expansion joints to form a continuous waterproof seal. The waterstop shall be capable of accommodating 1½" of joint movement.

NOTES:

+ 1 OR SECTION D-D, see sheet 6/14.
+ POROUS BACKFILL shall extend upward to the plane of the subgrade & laterally to the surface of the embankment slopes.
+ Elevations shown are at ℄ Bearings.
⬡ = Pile Number

4/14

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

ABUTMENT NO. 1 - RAMP D
BRIDGE NO. HAM-75-1010
EXIST. I-75 AND RAMPS C & D
OVER MILL CREEK
HAMILTON COUNTY
△ STA. 88+70.66 to STA. 86+73.34 I-75

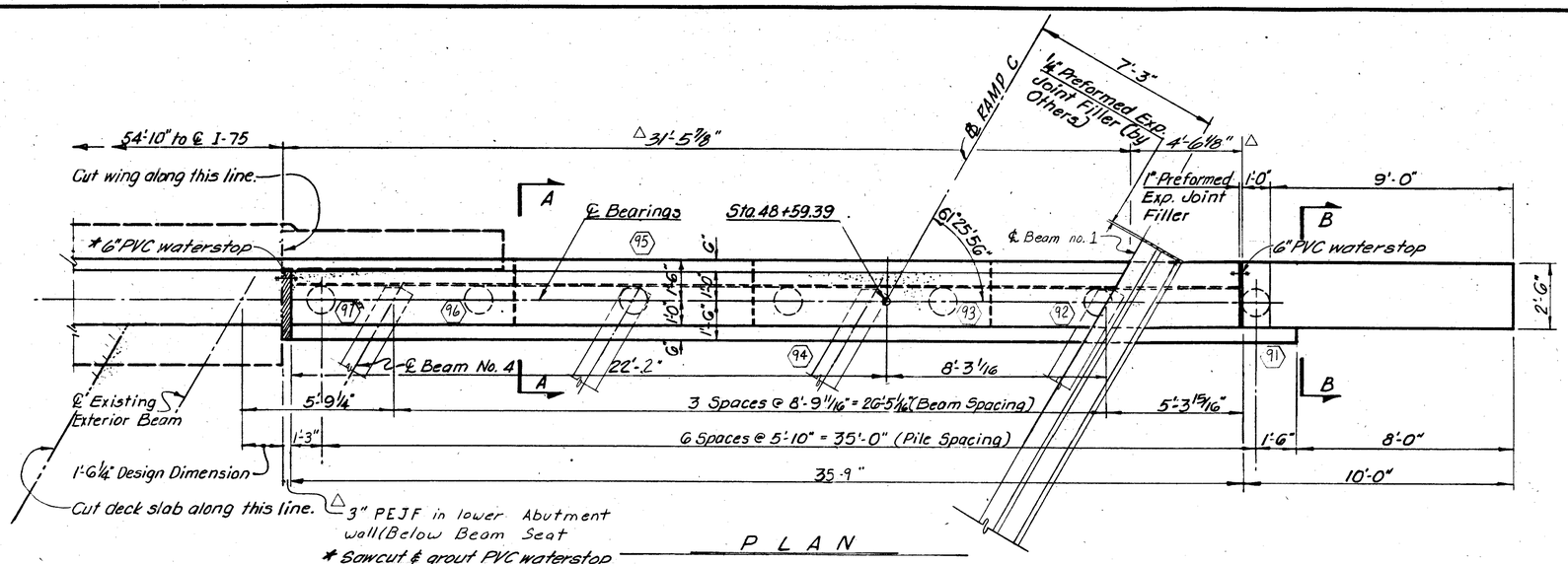
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED
J.R.P.	J.R.P.	T.D.S.	D.W.S.	[illegible]	5-14-71	△ BAKE ENGRS. 11-26

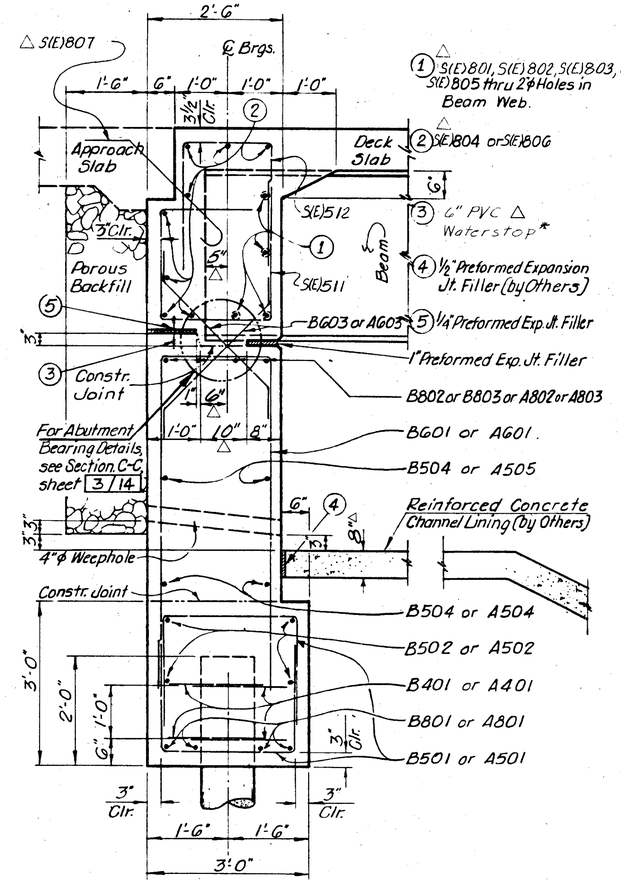
Revised 12-20-97

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

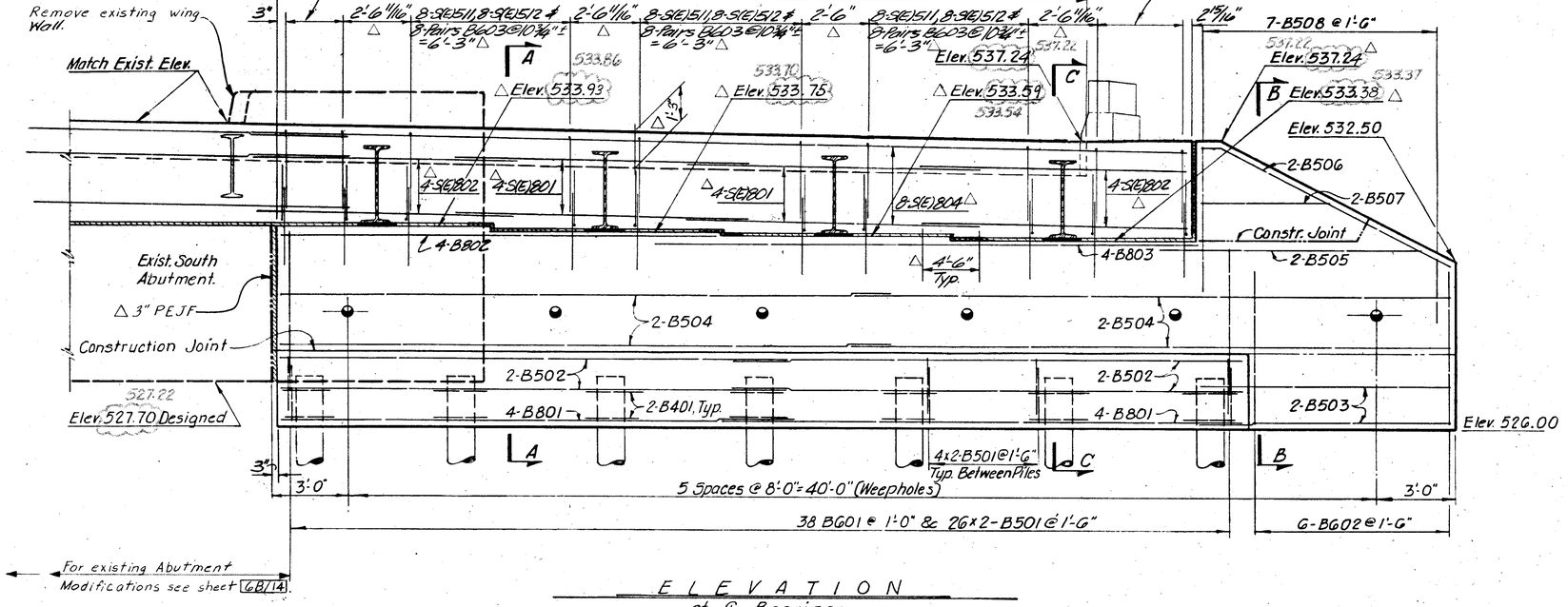
HAM-75-9.93
HAM-126-13.00

SEQ 187





SECTION A-A



ELEVATION
at ℄ Bearings

NOTES:

For SECTION B-B, C-C, and additional notes, see sheet 3/14.

△* WATERSTOP: A 6" PVC waterstop shall be centered on the bridge seat construction joint and the back wall expansion joints to form a continuous **waterproof** seal. The **waterstop shall be** capable of accommodating 1½" of joint movement.

⬡ = Pile Number

5/14

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

ABUTMENT NO. 2 - RAMP C
BRIDGE NO. HAM-75-1010
EXIST. I-75 AND RAMPS C & D
OVER MILL CREEK

HAMILTON COUNTY

△STA. 88+70.66 to STA. 86+73.34 I-75

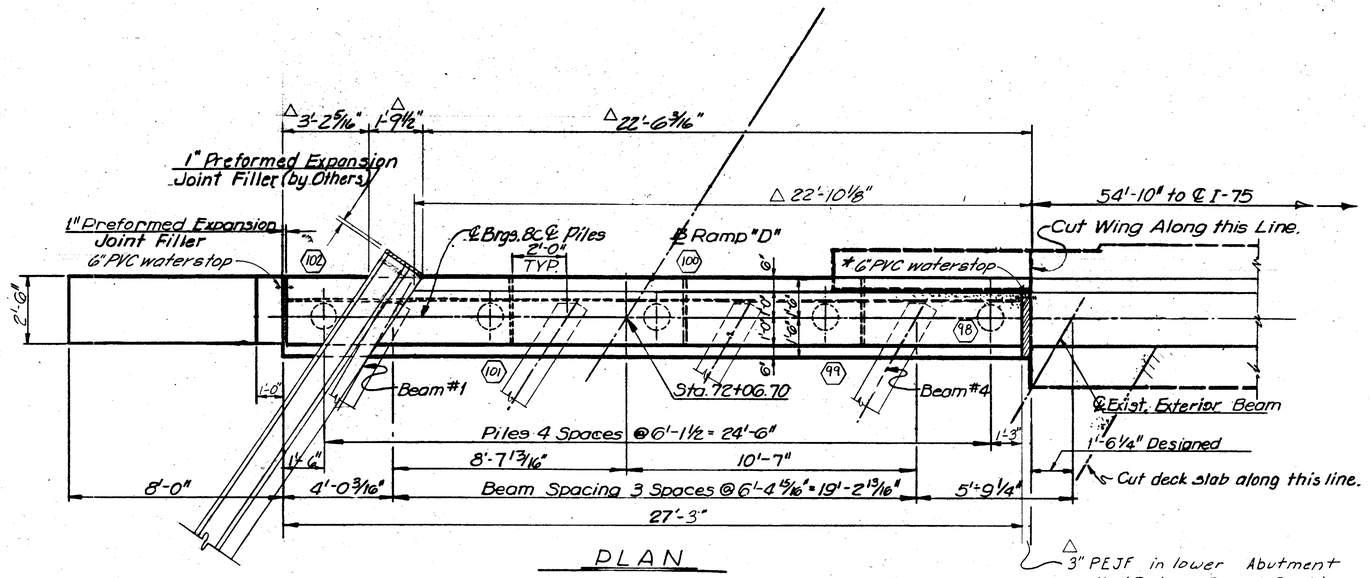
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△REVISED
J.R.P.	J.R.P.	D.W.M.	D.W.S.		5-14-71	△BAKE ENGRS. 1186

Revised 12-28-87

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

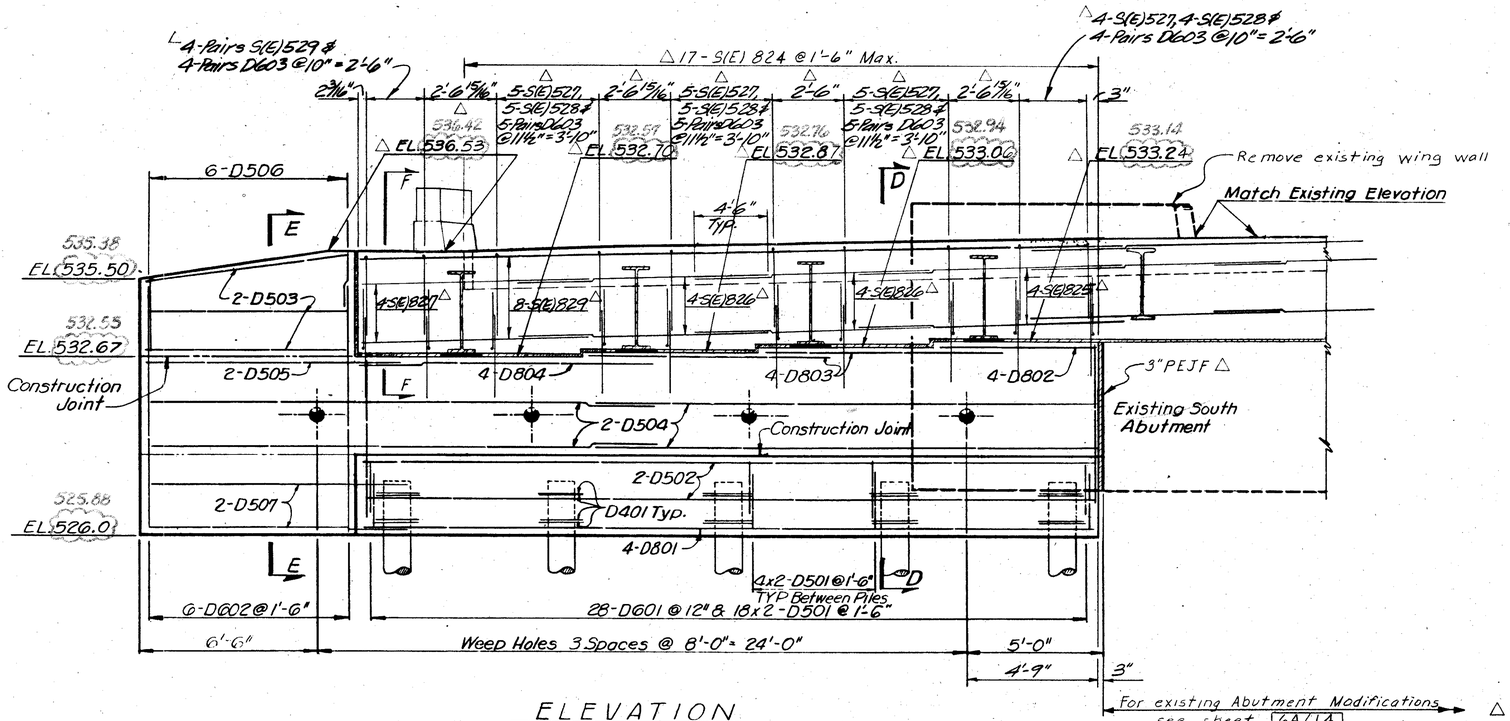
327
787

HAM-75-9.93
HAM-126-13.00



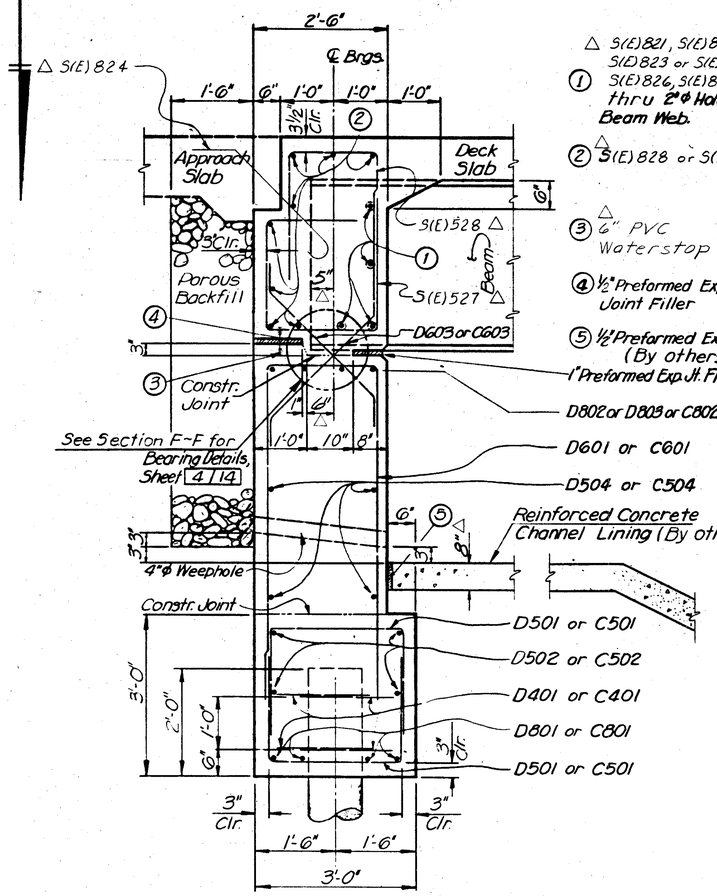
PLAN

△3" PEJF in lower Abutment wall (Below Beam Seat).
* Sawcut & grout PVC waterstop into existing concrete.



ELEVATION
℄ BEARINGS

For existing Abutment Modifications see sheet 6A/14.



△ S(E)821, S(E)822 S(E)823 or S(E)825
① S(E)826, S(E)827 thru 2 ϕ Holes in Beam Web.
② △ S(E)828 or S(E)829
③ △ 6" PVC Waterstop *
④ ½" Preformed Expansion Joint Filler
⑤ ½" Preformed Exp. Jt. Filler (By others)
1" Preformed Exp. Jt. Filler
D802 or D803 or C802 or C803

SECTION D-D

NOTES:
For SECTION B-B & F-F & additional notes, see sheet 4/14.

△* WATERSTOP: A 6" PVC waterstop shall be centered on the bridge seat construction joint and the backwall expansion joints to form a continious waterproof seal. The waterstop shall be capable of accommodating 1½" of joint movement.

⬡ = Pile number

6/14

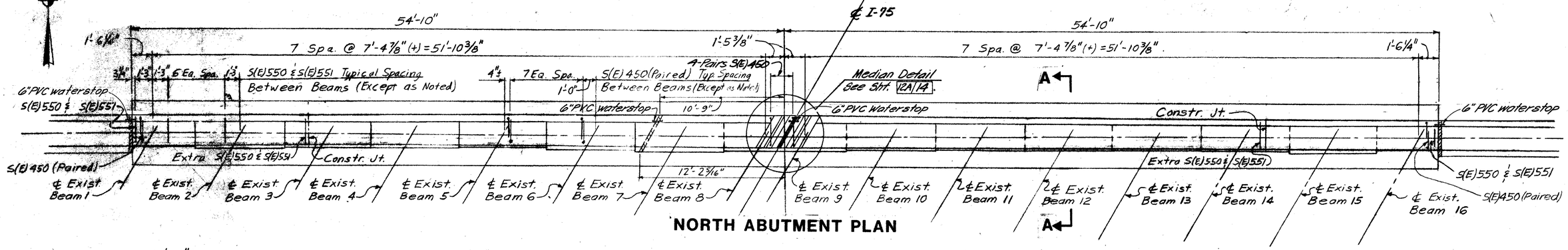
VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

ABUTMENT NO.2-RAMP D
BRIDGE NO. HAM-75-1010
EXIST. I-75 AND RAMPS C&D
OVER MILL CREEK
HAMILTON COUNTY
△STA. 88+70.66 to STA. 86+73.34 I-75

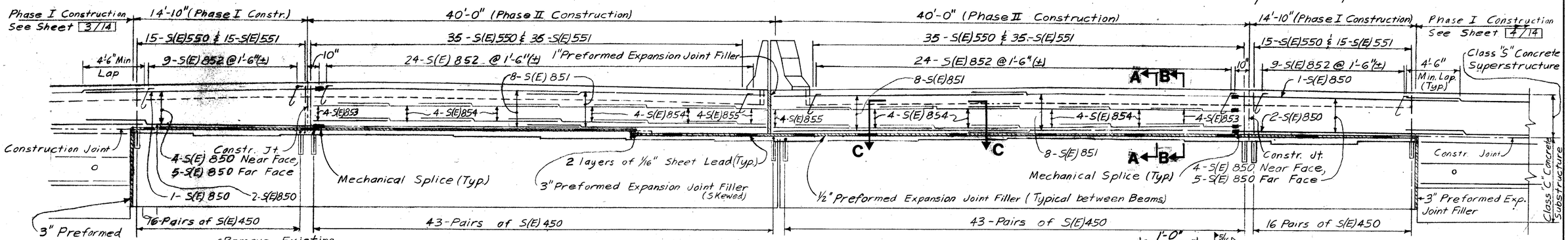
DESIGNED	DRAWN	TRACED	CHECKED	APPROVED	DATE	△REVISED
J.R.P.	J.R.P.	T.D.S.	D.W.S.		5-14-71	△BALKE ENGRS. 11-86

Revised 12-28-87

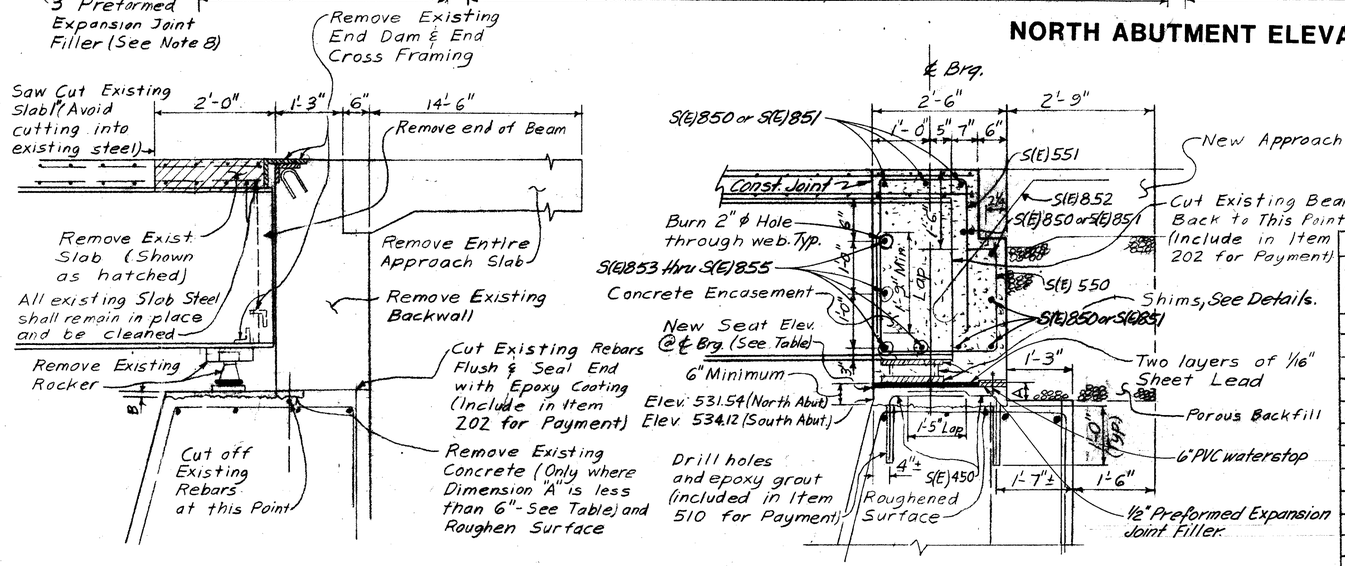
CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO	527A 787
DATE			FHWA REGION 5	
CHKD. BY				
DATE				



NORTH ABUTMENT PLAN

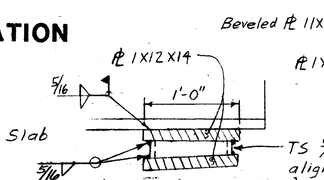


NORTH ABUTMENT ELEVATION



SECTION A-A (REMOVAL SKETCH)

SECTION A-A (PROPOSED)



SHIM (TYPE I)

SHIM (TYPE II)

NORTH ABUTMENT TABLE

Exist Beam No.	Exist Seat Elev.	Top of New Seat Elev.	Dim. "A"	Shim ⊛ Thickness Required	Shim Type	Removal Dim. "B"	Dimension "C"
1	531.54	531.86	4"	5 3/4"	Type I	2"	4 3/8"
2	531.28	531.86	7 1/8"	2 5/8"	Type II	0"	7 1/2"
3	531.36	531.86	6 1/8"	3 5/8"	Type I	0"	6 1/2"
4	531.39	531.86	5 3/4"	4"	Type I	1/4"	6 1/8"
5	531.30	531.86	6 7/8"	2 1/8	Type II	0"	7 1/4"
6	531.14	531.86	8 3/4"	1"	Type II	0"	9 1/8"
7	530.99	531.35	4 7/16"	5 5/16"	Type I	1 3/16"	4 13/16"
8	530.90	531.35	5 1/2"	4 1/4"	Type I	1/2"	5 7/8"
9	530.88	531.35	5 3/4"	4"	Type I	1/4"	6 1/8"
10	530.83	531.35	6 3/8"	3 3/8"	Type I	0"	6 3/4"
11	530.93	531.35	5 3/16"	4 3/16"	Type I	13/16"	5 9/16"
12	530.99	531.35	4 7/16"	5 5/16"	Type I	1 3/16"	4 13/16"
13	530.98	531.35	4 3/16"	5 3/16"	Type I	1 7/16"	4 15/16"
14	530.85	531.35	6 1/8"	3 5/8"	Type I	0"	6 1/2"
15	530.67	531.35	8 1/4"	1 1/2"	Type II	0"	8 5/8"
16	530.83	531.35	6 3/8	3 3/8"	Type I	0"	6 3/4"

⊛ @ ℄ Bearing

NOTES:

1. For Sections B-B & C℄C, See Sheet 6B/14
2. For South Abutment Plan & Elevation, See Sh 6B/14
3. All dimensions on this sheet are based on 1946 Plans. Contractor shall field measure & verify all dimensions & make necessary adjustments before ordering any material. Proper fit shall be the responsibility of the Contractor. See Sheet 1A/14, Item 202 Note.
4. For Recommended Sequence of Operations, See Sheet 1A/14
5. For General Notes, See Sheet 2A/14
6. For Reinforcing List, See Sheet 14/14
7. For Integral Abutment Additions, See Sheets 3/14 & 4/14
8. 3" Preformed Expansion Joint Filler shall be anchored and attached to one concrete surface.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

6A/14

EXISTING ABUTMENT MODIFICATIONS

- BRIDGE NO. HAM.-75-1010
EXIST. I-75 AND RAMPS C & D OVER MILL CREEK

HAMILTON COUNTY

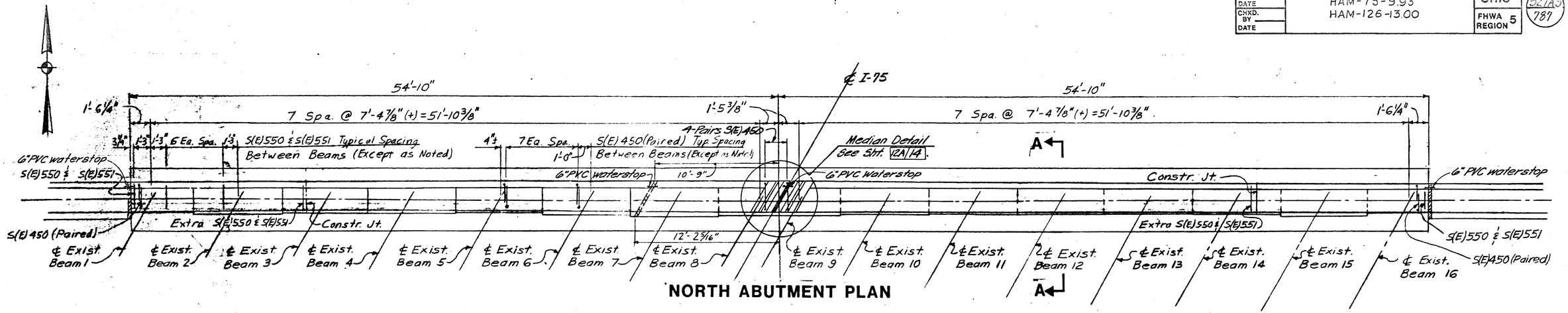
STA. 88+70.66 TO STA. 86+73.34 I-75

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	BJS	~	SJA	CRS 3/86	

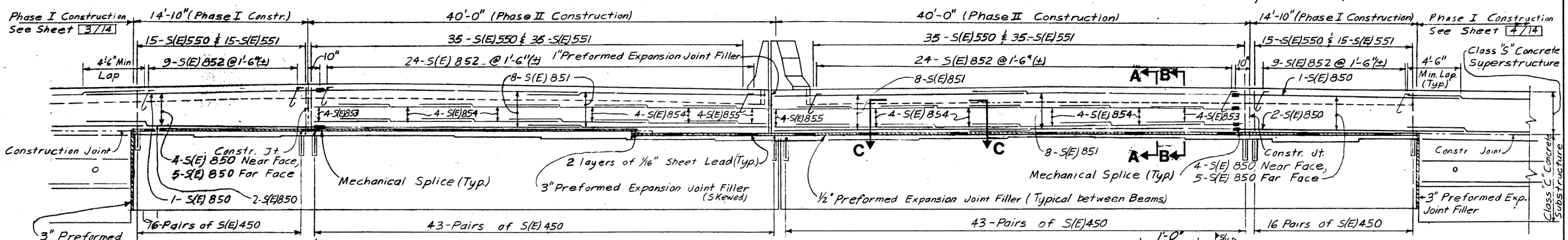
This Sheet is superseded by Sheet 527AS 12-28-87

OHIO BLUE PRINT 140033

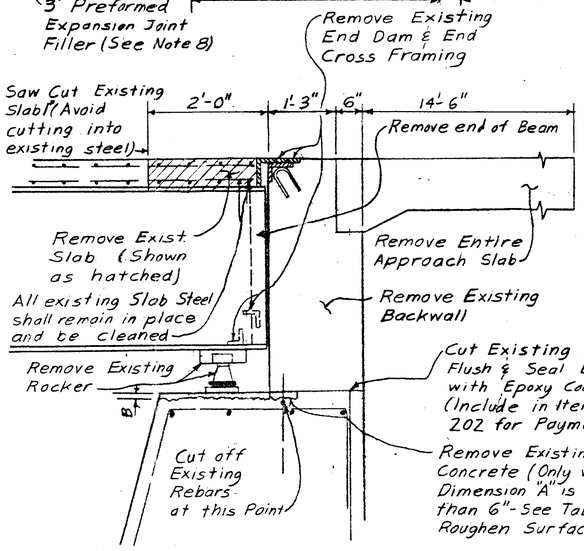
CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO	527A 787
CHKD. BY			FHWA REGION 5	
DATE				



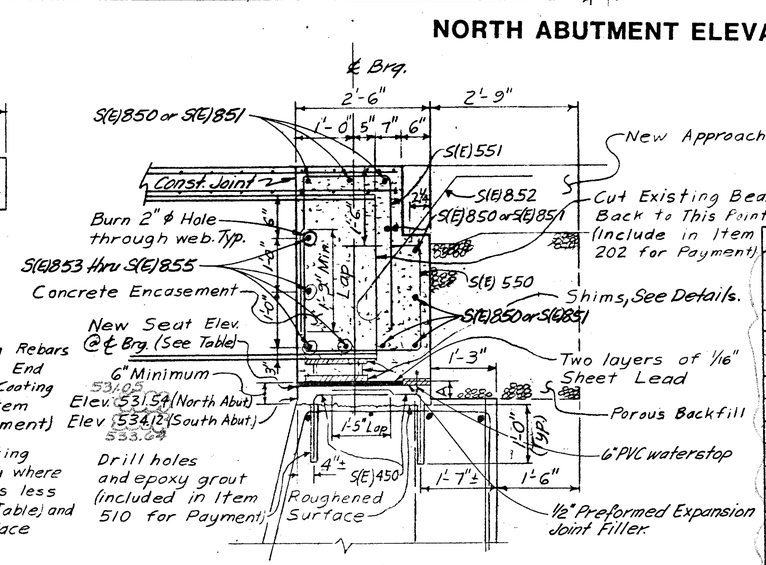
NORTH ABUTMENT PLAN



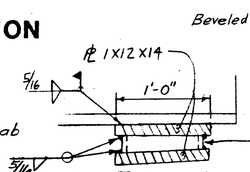
NORTH ABUTMENT ELEVATION



SECTION A-A (REMOVAL SKETCH)



SECTION A-A (PROPOSED)



SHIM (TYPE II)

SHIM (TYPE I)

NORTH ABUTMENT TABLE

Exist. Beam No.	Exist. Seat. Elev.	Top of New Seat Elev.	Dim. "A"	Shim ⊛ Thickness Required	Shim Type	Removal Dim. "B"	Dimension "C"
1	531.05	531.37	4"	5 1/4"	Type I	2"	4 3/8"
2	530.86	531.37	6 1/4"	4 11/16"	Type I	0"	6 5/8"
3	530.93	531.37	5 3/8"	5 11/16"	Type I	5/8"	5 3/4"
4	530.94	531.37	5 3/8"	5 3/8"	Type I	11/16"	5 11/16"
5	530.84	531.37	6 1/2"	4 11/16"	Type I	0"	6 7/16"
6	530.73	531.37	7 13/16"	3 3/16"	Type II	0"	8 3/16"
7	530.57	530.92	4 5/16"	6 1/8"	TypeI	1 11/16"	4 11/16"
8	530.46	530.92	5 1/16"	3 7/16"	TypeI	3/16"	6"
9	530.46	530.92	5 1/16"	4 1/16"	TypeI	3/16"	6"
10	530.39	530.92	6 1/2"	5 1/8"	TypeI	0"	6 7/8"
11	530.50	530.92	5 3/16"	6 5/16"	TypeI	13/16"	5 3/16"
12	530.54	530.92	4 11/16"	7 1/16"	TypeI	5/16"	5 11/16"
13	530.56	530.92	4 11/16"	7 3/16"	TypeI	1 9/16"	4 13/16"
14	530.45	530.92	5 3/4"	5 1/8"	TypeI	1/4"	6 1/8"
15	530.26	530.92	8 1/16"	3 13/16"	Type I	0"	8 7/16"
16	530.42	530.92	6 1/8"	3 5/8"	TypeI	0"	6 1/2"

⊛ @ ℄ Bearing

NOTES:

1. For Sections B-B & C-C, See Sheet 6B/14
2. For South Abutment Plan & Elevation, See Sh 6B/14
3. All dimensions on this sheet are based on 1946 Plans. Contractor shall field measure & verify all dimensions & make necessary adjustments before ordering any material. Proper fit shall be the responsibility of the Contractor. See Sheet 1A/14, Item 202 Note.
4. For Recommended Sequence of Operations, See Sheet 1A/14
5. For General Notes, See Sheet 2A/14
6. For Reinforcing List, See Sheet 14/14
7. For Integral Abutment Additions, See Sheets 3/14 & 4/14
8. 3" Preformed Expansion Joint Filler shall be anchored and attached to one concrete surface.

6/15/14

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

EXISTING ABUTMENT MODIFICATIONS

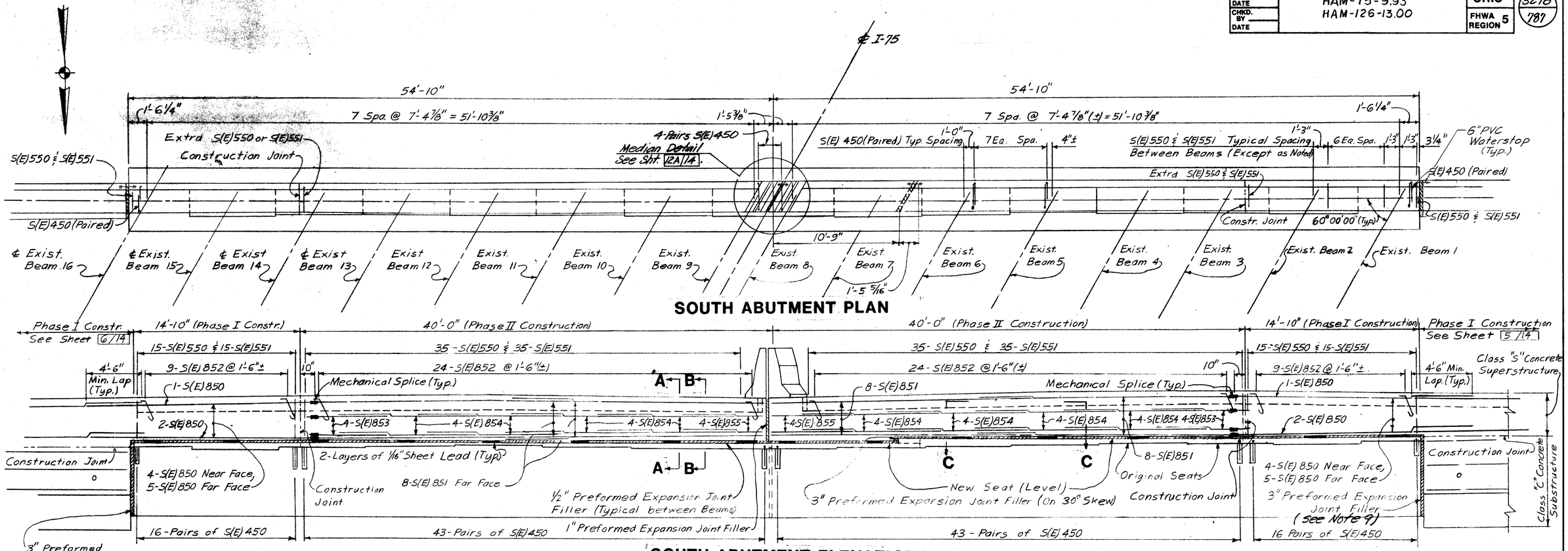
- BRIDGE NO. HAM.-75-1010
EXIST. I-75 AND RAMPS C & D
OVER MILL CREEK
HAMILTON COUNTY
STA. 88+70.66 TO STA. 86+73.34 I-75

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	BJS	~	STA	CRS 3/86	

This sheet supersedes sheet 527A 12-28-87

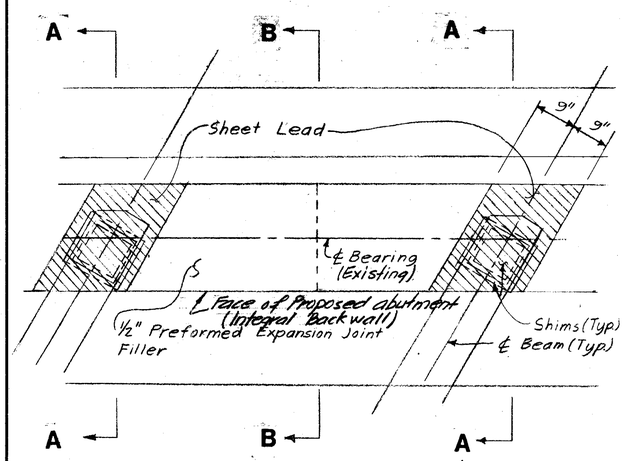
OHIO BLUE PRINT 140033

CALC. BY / DATE	HAM-75-9.93 HAM-126-13.00	OHIO	5278
CHKD. BY / DATE		FHWA REGION 5	787

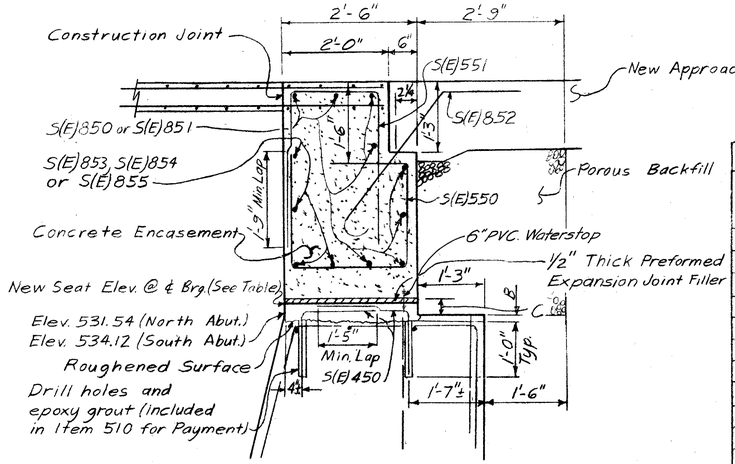


SOUTH ABUTMENT PLAN

SOUTH ABUTMENT ELEVATION



SECTION C-C



SECTION B-B (PROPOSED)

SOUTH ABUTMENT TABLE

Exist. Beam No.	Exist. Seat Elev.	Top of New Seat Elev.	Dim. "A"	Shim Thickness Required	Shim Type	Removal Dimension "B"	Dimension "C"
1	534.12	534.44	4"	5¾"	Type I	2"	4⅜"
2	533.86	534.44	7⅛"	2⅝"	Type II	0"	7½"
3	533.94	534.44	6⅛"	3⅜"	Type I	0"	6½"
4	533.97	534.44	5¾"	4"	Type I	¼"	6⅛"
5	533.88	534.44	6⅞"	2⅞"	Type II	0"	7¼"
6	533.72	534.44	8¾"	1"	Type II	0"	9⅛"
7	533.57	533.93	4 7/16"	4¼"	Type I	1 9/16"	4 13/16"
8	533.48	533.93	5½"	4¼"	Type I	½"	5⅞"
9	533.46	533.93	5¾"	4"	Type I	¼"	6⅛"
10	533.41	533.93	6⅞"	3⅜"	Type I	0"	6¾"
11	533.51	533.93	5 3/16"	4 9/16"	Type I	13/16"	5 9/16"
12	533.57	533.93	4 7/16"	5 5/16"	Type I	1 9/16"	4 13/16"
13	533.56	533.93	4 7/16"	5 3/16"	Type I	1 7/16"	4 13/16"
14	533.43	533.93	6⅛"	3⅝"	Type I	0"	6½"
15	533.25	533.93	8¼"	1½"	Type II	0"	8⅝"
16	533.41	533.93	6⅞"	3⅜"	Type I	0"	6¾"

NOTES:

1. For Section A-A, See Sheet 6A/14
2. For North Abutment Plan & Elevation, See Sheet 6A/14
3. For Shim Details, See Sheet 6A/14
4. For Recommended Sequences of Operations, See Sheet 1A/14
5. For General Notes, See Sheet 2A/14
6. All dimensions on this Sheet are based on information from 1946 Plans. Contractor shall field measure, verify all dimensions & make necessary adjustments before ordering any material. Proper fit shall be the responsibility of the Contractor. See Sheet 1A/14 Item 202 Note.
7. For Reinforcing List, see Sheet 14/14
8. For Abutment Additions, See Sheets 5/14, 6/14
9. 3" Preformed expansion joint filler shall be anchored & attached to one concrete surface.

BALKE ENGINEERS 6B/14
7762 READING ROAD
CINCINNATI, OHIO 45237

EXISTING ABUTMENT MODIFICATIONS

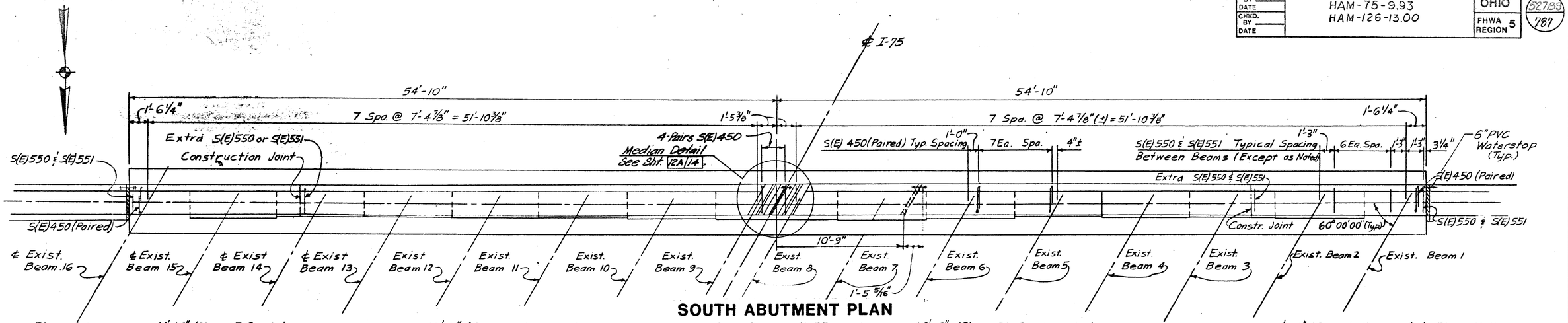
BRIDGE NO. HAM-75-1010
EXIST. I-75 AND RAMPS C & D OVER MILL CREEK

HAMILTON COUNTY — STA. 88+10.66 TO STA. 86+13.34 I-75

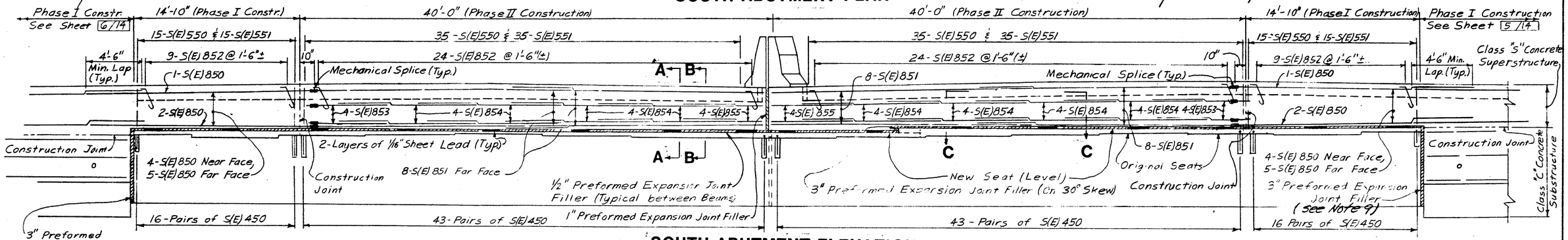
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	BJS	~	SJA	CRS 3/86	

This Sheet is Superseded by Sheet 5278S 12-28-87

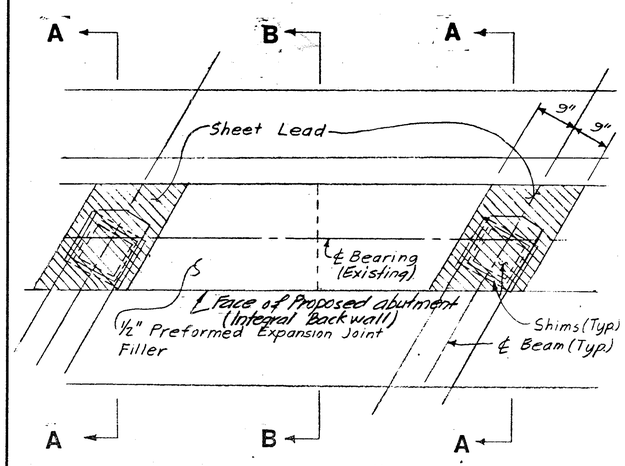
CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO	52783
DATE			FHWA REGION 5	787
CHKD. BY				
DATE				



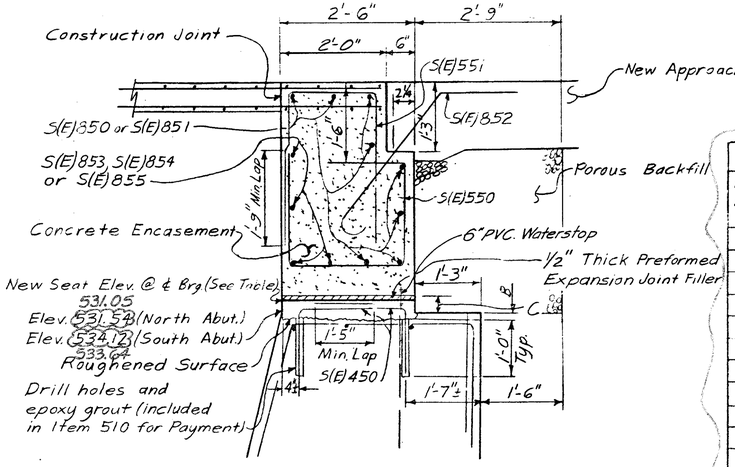
SOUTH ABUTMENT PLAN



SOUTH ABUTMENT ELEVATION



SECTION C-C



SECTION B-B (PROPOSED)

SOUTH ABUTMENT TABLE

Exist Beam No.	Exist. Seat Elev.	Top of New Seat Elev.	Dim. "A"	Shim Thickness Required	Shim Type	Removal Dimension "B"	Dimension "C"
1	533.64	533.96	4"	6 1/16"	Type I	2"	4 3/8"
2	533.36	533.96	7 5/16"	5 1/16"	Type I	0"	7 1/16"
3	533.46	533.96	6 1/8"	6 1/16"	Type I	0"	6 1/2"
4	533.48	533.96	5 1/8"	7"	Type I	1/8"	6 1/4"
5	533.37	533.96	7 1/16"	5 5/8"	Type I	0"	7 1/16"
6	533.24	533.96	8 3/4"	3 5/16"	Type I	0"	9 1/8"
7	533.04	533.43	4 7/16"	8 3/16"	Type I	1 3/16"	4 13/16"
8	532.96	533.43	5 11/16"	5 1/2"	Type I	9/16"	5 13/16"
9	532.96	533.43	5 3/4"	4 11/16"	Type I	1/4"	6 1/8"
10	532.89	533.43	6 5/8"	5 1/8"	Type I	0"	7"
11	532.99	533.43	5 7/16"	6 3/16"	Type I	3/16"	5 13/16"
12	533.03	533.43	4 15/16"	6 13/16"	Type I	1 1/16"	5 5/16"
13	533.07	533.43	4 7/16"	7 3/16"	Type I	1 9/16"	4 13/16"
14	532.93	533.43	6 1/8"	5 1/2"	Type I	0"	6 1/2"
15	532.74	533.43	8 1/16"	3 3/16"	Type II	0"	8 13/16"
16	532.93	533.43	6 1/8"	4 1/16"	Type I	0"	6 1/2"

NOTES:

1. For Section A-A, See Sheet 6A/14
2. For North Abutment Plan & Elevation, See Sheet 6A/14
3. For Shim Details, See Sheet 6A/14
4. For Recommended Sequences of Operations, See Sheet 1A/14
5. For General Notes, See Sheet 2A/14
6. All dimensions on this Sheet are based on information from 1946 Plans. Contractor shall field measure, verify all dimensions & make necessary adjustments before ordering any material. Proper fit shall be the responsibility of the Contractor. See Sheet 1A/14 Item 202 Note
7. For Reinforcing List, see Sheet 14/14
8. For Abutment Additions, See Sheets 5/14 6/14
9. 3" Preformed expansion joint filler shall be anchored & attached to one concrete surface.

BALKE ENGINEERS 6B8/14
7762 READING ROAD
CINCINNATI, OHIO 45237

EXISTING ABUTMENT MODIFICATIONS

BRIDGE NO. HAM-75-1010
EXIST. I-75 AND RAMPS C & D
OVER MILL CREEK

HAMILTON COUNTY
STA. 88+10.66 TO STA. 86+73.34 I-75

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	BJS	~	SJA	CRS 3/86	

This sheet supersedes sheet 527B3 1978

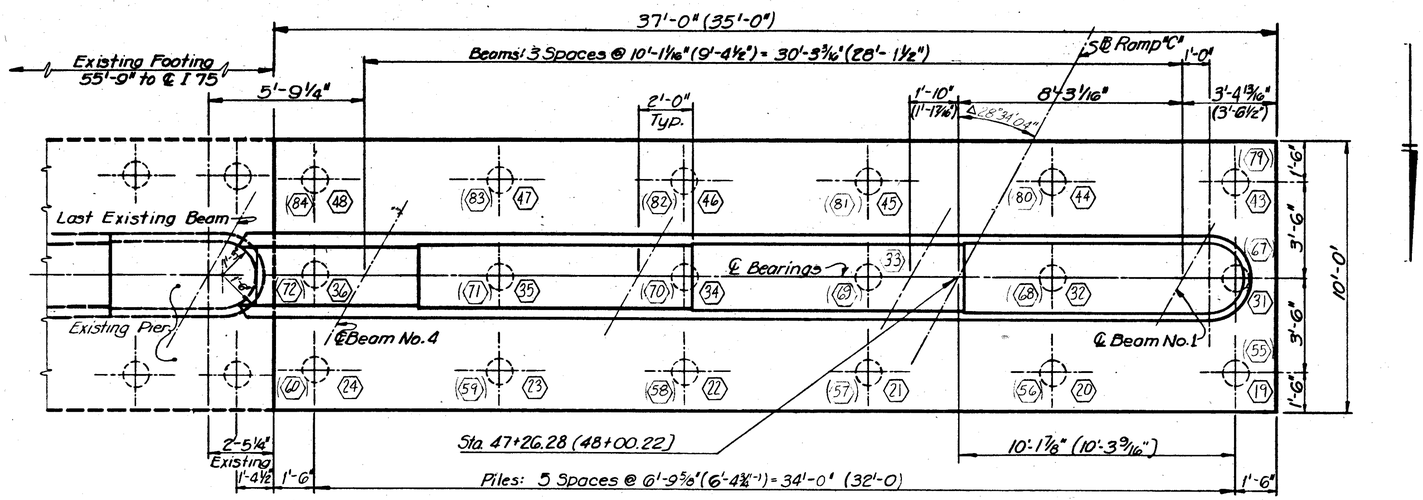
CHKD BEAT PRINT

163 Yellow 528-557C

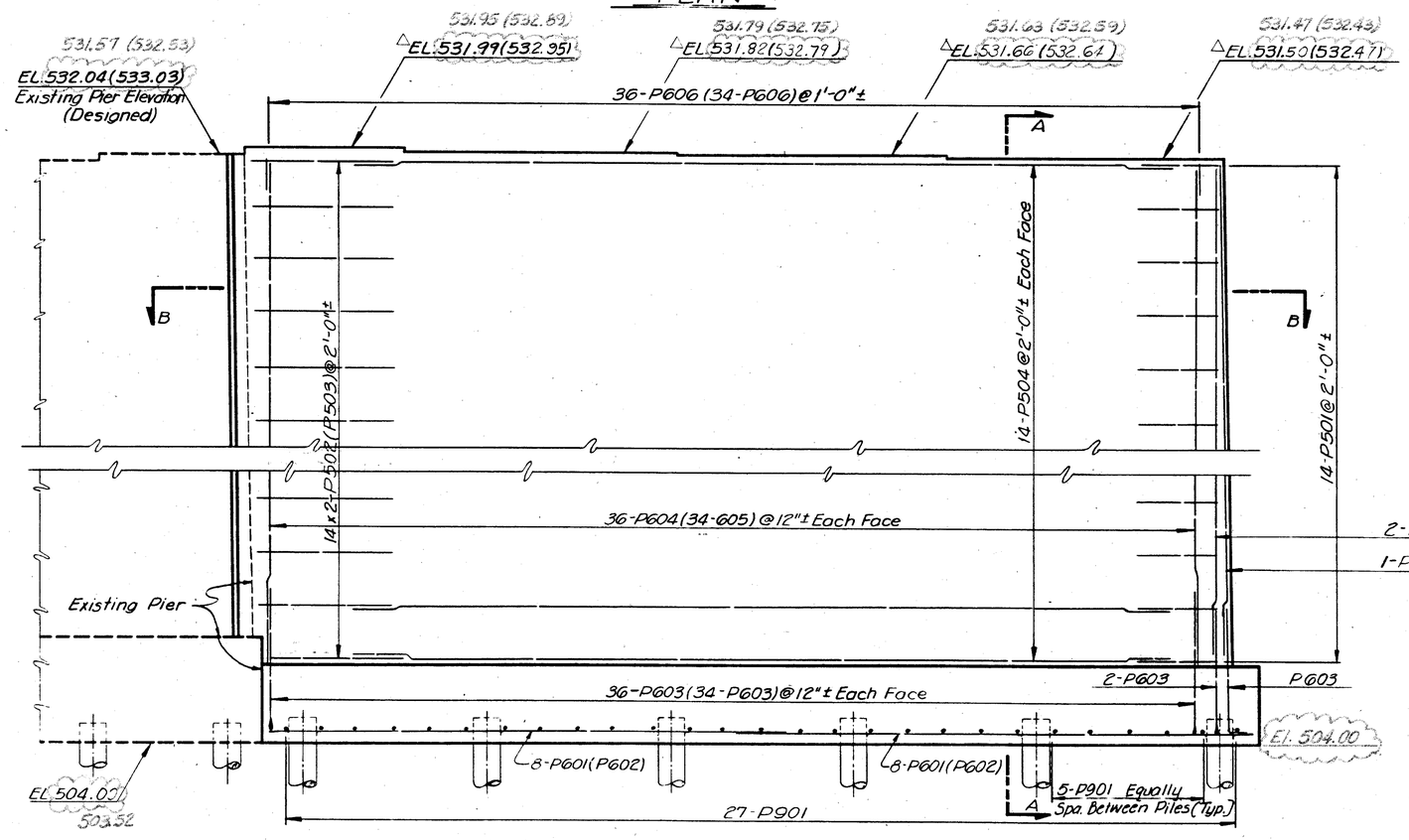
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

228 787

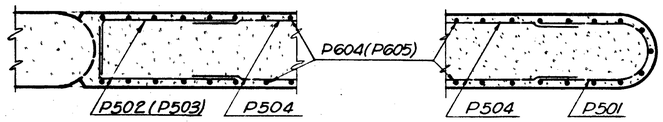
HAM-75-9.93
HAM-126-13.00



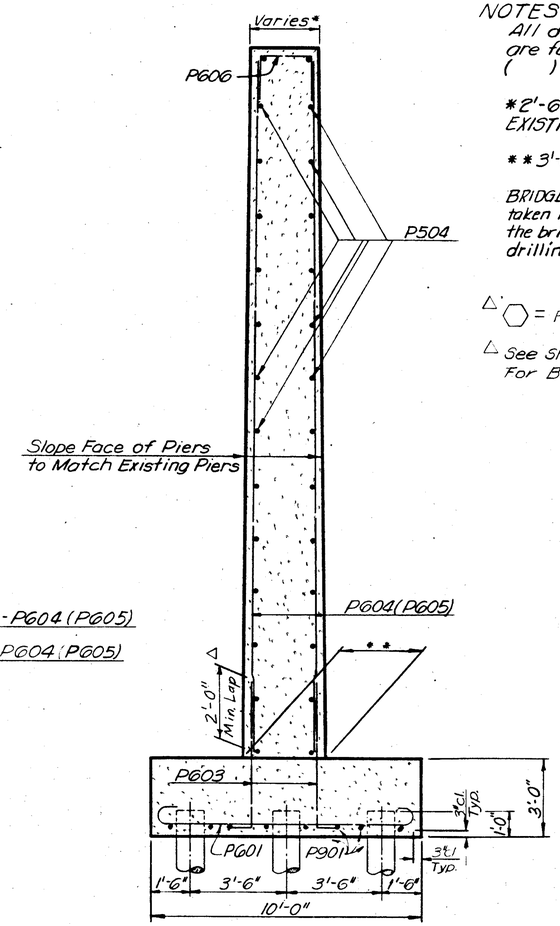
PLAN



ELEVATION



SECTION B-B



SECTION A-A

NOTES:

All dimensions, bar marks, elevs. and pile Nos. are for both piers except those shown in ( ) are for Pier No. 2 only.

*2'-6" at Elevation 532.04 (533.03) DESIGNED EXISTING PIER.

**3'-0" @ Elevation 508, Designed Existing Pier

BRIDGE SEAT REINFORCING: Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor bolt holes.

△ ⬡ = Pile Number

△ See Sheet 9A/14 For Beam Bearing Details

7 / 14

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

PIERS - RAMP C
BRIDGE NO. HAM-75-1010
EXIST. I-75 AND RAMPS C & D
OVER MILL CREEK
HAMILTON COUNTY
△ STA. 88+70.66 to STA. 86+73.34 I-75

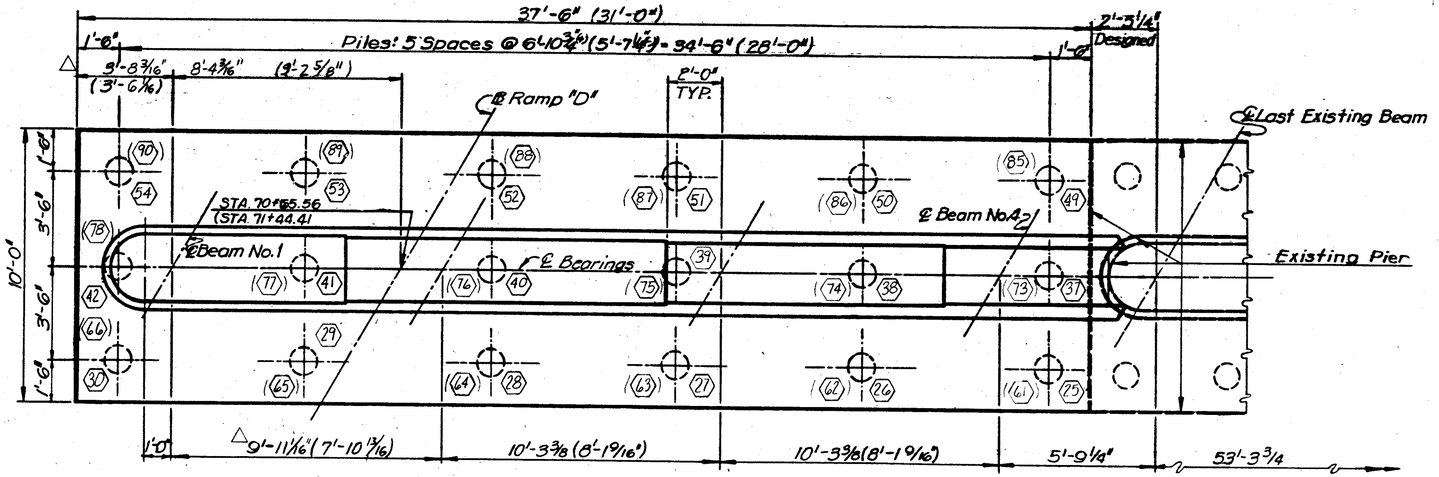
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.R.P.	J.R.P.	T.D.S.	D.W.S.	DV	5-14-71	△ BALKE ENGRS 1186

Revised 12-22-87

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

529
187

HAM-75-9.93
HAM-126-13.00



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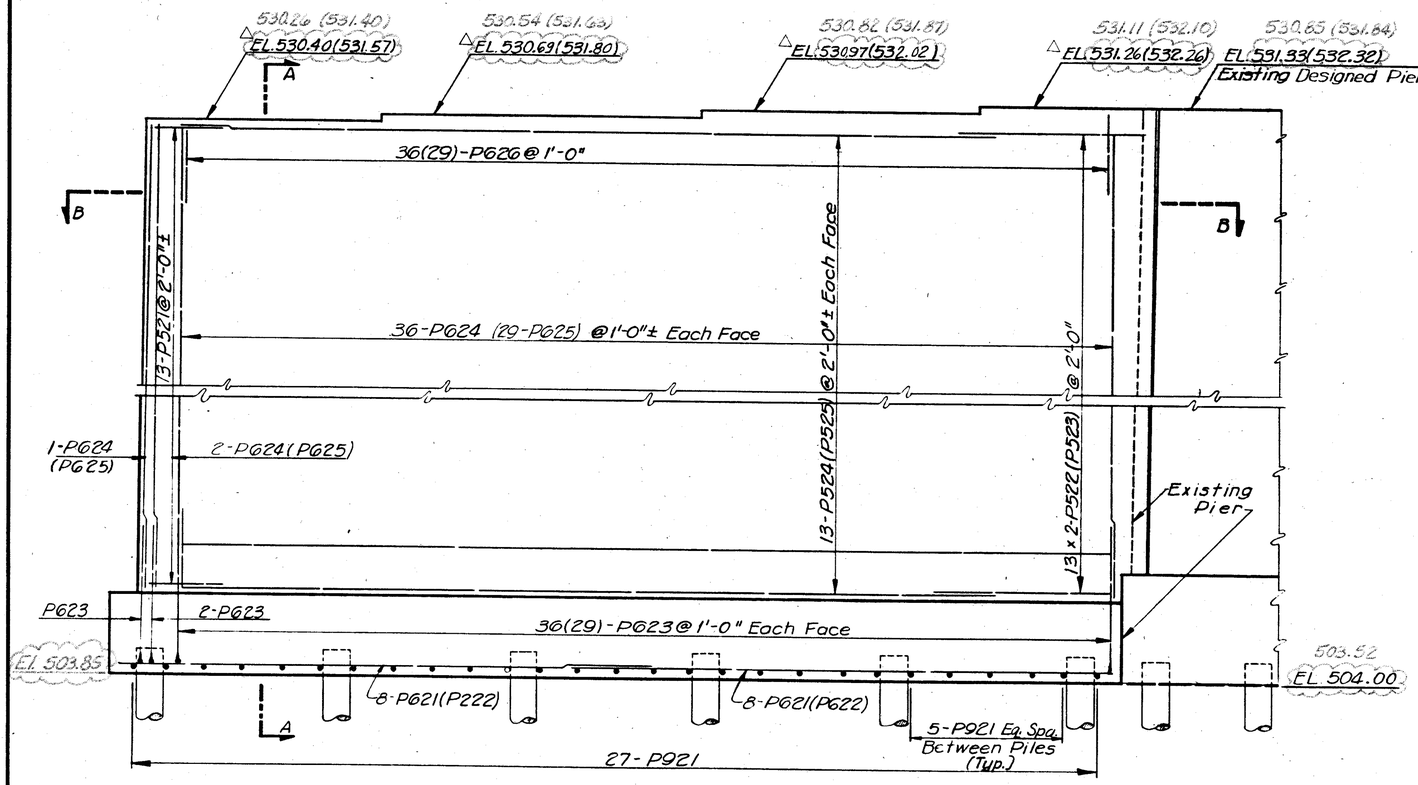
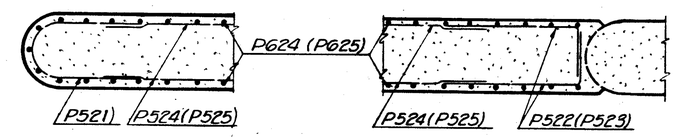
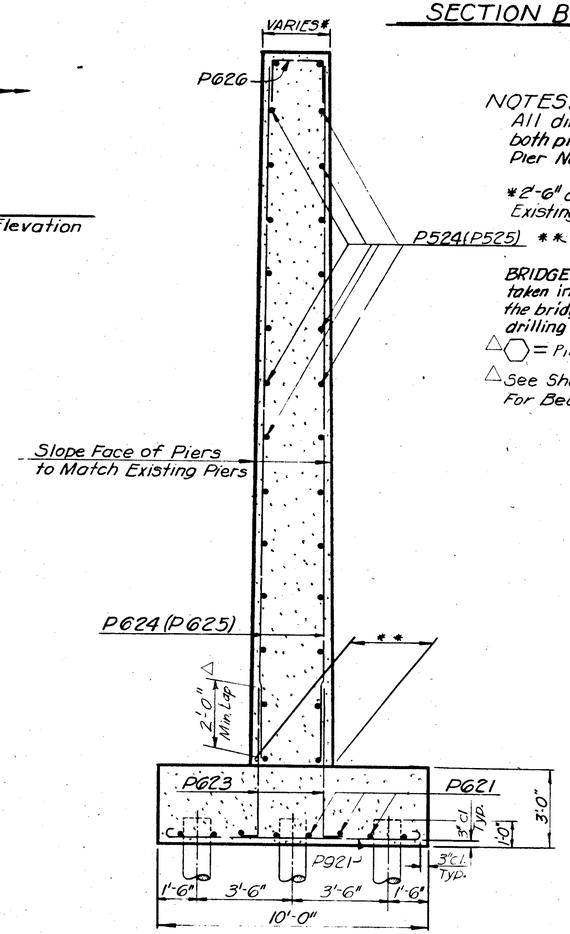


ELEVATION



SECTION B-B



SECTION A-A

NOTES:
All dimensions, bar marks, elevs. and pile nos. are for both piers except those shown in ( ) are for Pier No. 2 only.

531.57 532.53
*2'-6" at Elevation 532.04 (533.02) Designed Existing Pier.

P524 (P525) **3'-0" at Elevation 508, Designed Existing Pier.

BRIDGE SEAT REINFORCING: Special care shall be taken in placing the reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor bolt holes.

△⬡ = Pile Number

△ See Sheet 9A/14 For Beam Bearing Details

8/14

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

PIERS-RAMP D

BRIDGE NO. HAM-75-1010
EXIST. I-75 AND RAMPS C&D
OVER MILL CREEK
HAMILTON COUNTY
△ STA. 88+70.66 to STA. 86+73.34 I-75

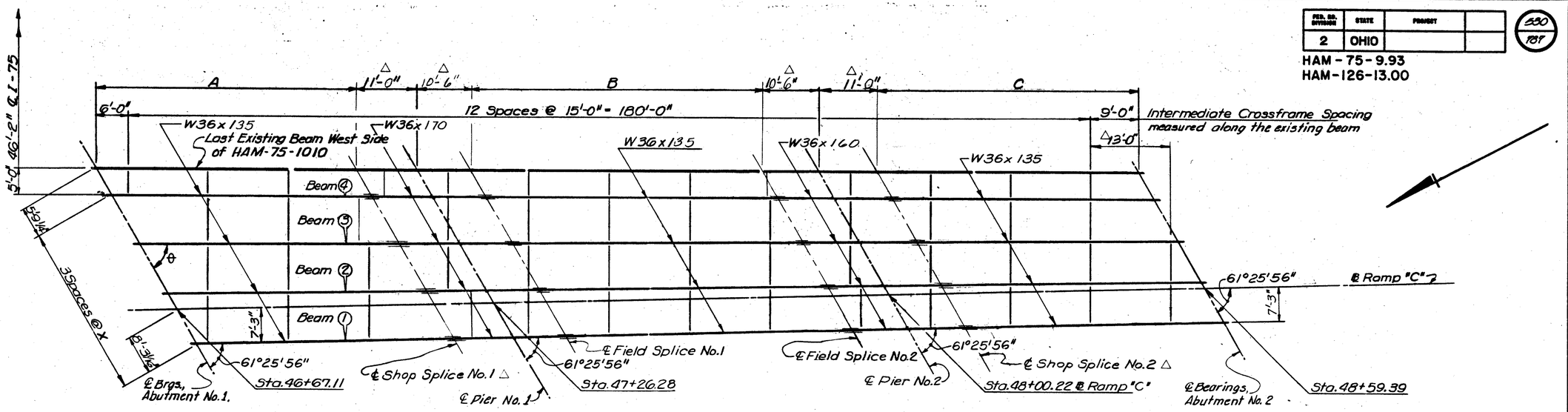
DESIGNED	DRAWN	TRACED	CHECKED	RECEIVED	DATE	△ REVISED
J.R.P.	J.R.P.	T.D.S.	D.W.S.		5-14-71	BALKE ENGRS 1/86

Revised 12-26-87

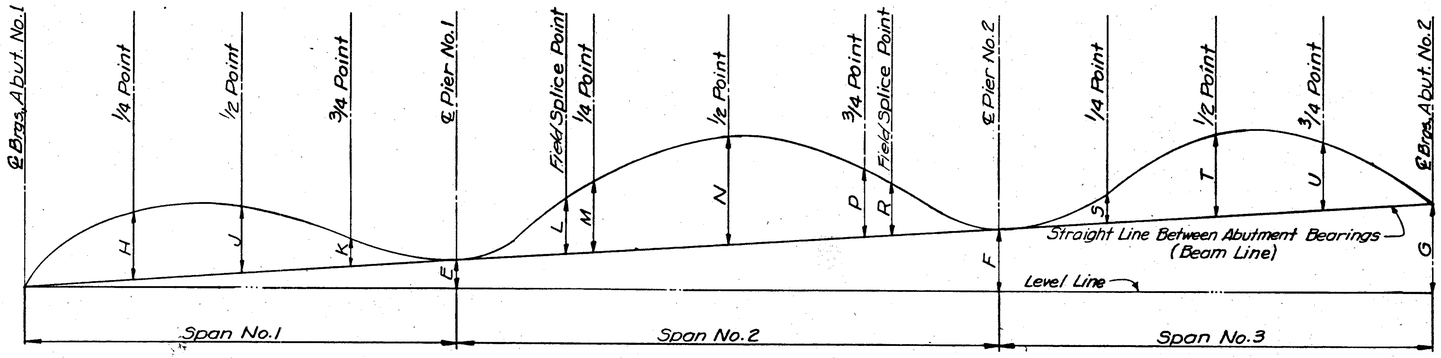
FED. AID DIVISION	STATE	PROJECT	
2	OHIO		

550
187

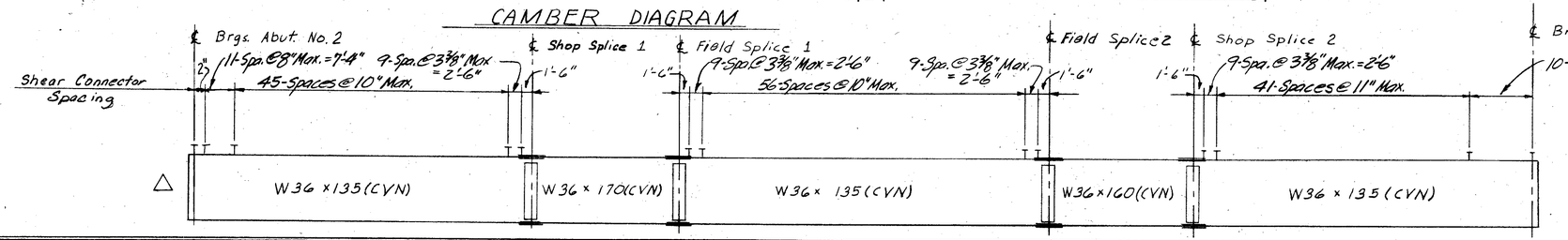
HAM-75-9.93
HAM-126-13.00

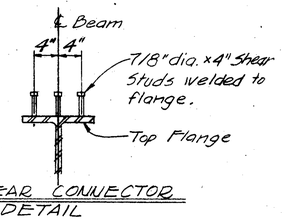


FRAMING PLAN ~ RAMP C



CAMBER DIAGRAM





△SHEAR CONNECTOR DETAIL

△DEFLECTION & CAMBER

	SPAN No.1			SPAN No.2					SPAN No.3		
	1/4 Pt.	1/2 Pt.	3/4 Pt.	Splice Pt.	1/4 Pt.	1/2 Pt.	3/4 Pt.	Splice Pt.	1/4 Pt.	1/2 Pt.	3/4 Pt.
	H	J	K	L	M	N	P	R	S	T	U
DEFLECTION DUE TO WEIGHT OF STEEL	1/16	3/32	1/32	1/32	1/16	3/32	1/16	1/32	1/32	3/32	1/16
DEFLECTION DUE TO REMAINING DEAD LOAD	13/32	15/32	3/16	1/8	9/32	17/32	5/16	1/8	3/16	13/32	3/8
REQUIRED SHOP CAMBER	15/32	9/16	7/32	5/32	11/32	5/8	3/8	5/32	7/32	1/2	7/16

No Adjustment Required For Horizontal or Vertical Curve

△DIMENSIONS & ANGLE θ

Location	A	B	C	E	F	G	θ
Beam #1	48'-2 1/16"	52'-11 1/4"	48'-2 1/16"	0'-9 1/8"	1'-8 5/8"	2'-5 3/8"	61° 25' 56"
Beam #2	48'-5 3/8"	53'-3 3/8"	48'-5 3/8"	0'-9 1/8"	1'-8 3/4"	2'-6"	60° 57' 01"
Beam #3	48'-8 11/16"	53'-7 9/16"	48'-8 11/16"	0'-9 1/8"	1'-8 5/8"	2'-6"	60° 28' 23"
Beam #4	49'-0"	53'-11 5/16"	49'-0"	0'-9 1/4"	1'-8 5/8"	2'-6 1/4"	60° 00' 00"
				0'-9 1/16"	1'-8 1/2"	2'-5 1/2"	
				0'-9"	1'-8 3/8"	2'-5 3/8"	
				0'-9"	1'-8 1/2"	2'-5 3/8"	
					1'-8 1/2"	2'-5 5/8"	

BEAM SPACING

Location	X
Abut No.1	10'-7 7/8"
Pier No.1	10'-1 1/16"
Pier No.2	9'-4 1/2"
Abut. No.2	8'-9 11/16"

△Notes:

1. Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements as specified in 711.01 of CMS.
2. Contractor may shop fabricate field splice 1 & 2 and field fabricate shop splice 1 & 2 at his option.

9/14

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

FRAMING PLAN-RAMP C
BRIDGE NO. HAM-75-1010
EXIST. I-75 AND RAMPS C&D
OVER MILL CREEK

HAMILTON COUNTY

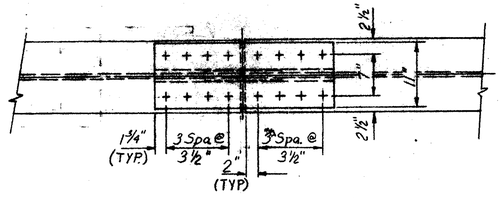
△STA. 88+70.66 to STA. 86+73.34 I-75

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED
J.R.P.	J.R.P.	T.D.S.	D.W.S.	[illegible]	5-14-71	△ HALKE ENGRS '86

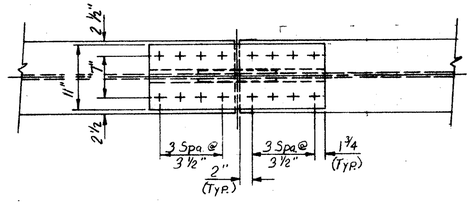
REVISED 12-28-87

CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO	530A 787
DATE			FHWA REGION 5	
CHKD. BY				
DATE				

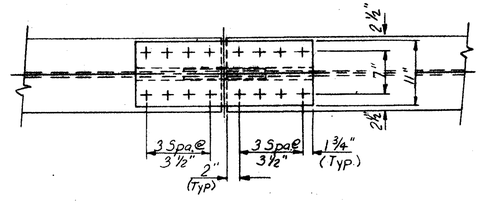
SHOP SPLICE NO. 1
75-1010-C

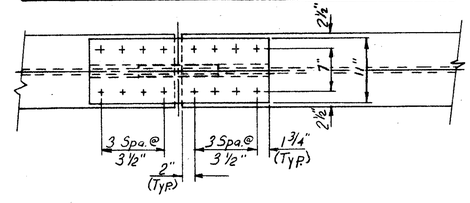


SHOP SPLICE NO. 2
75-1010-C

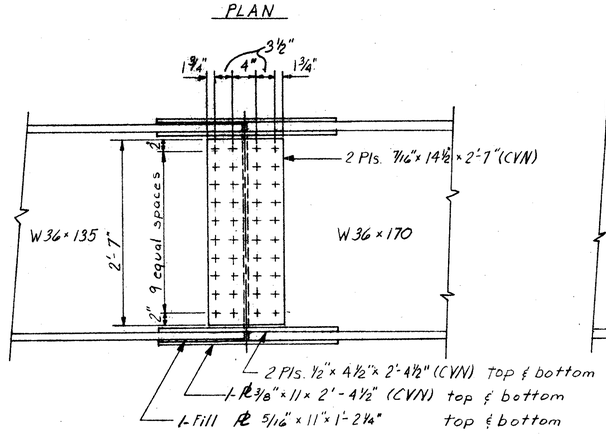


FIELD SPLICE NO. 2
75-1010-C





PLAN



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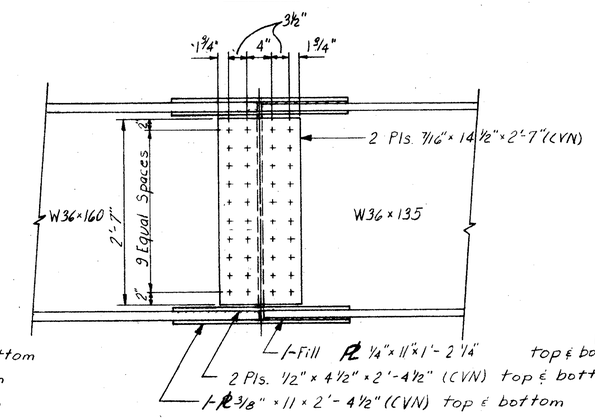

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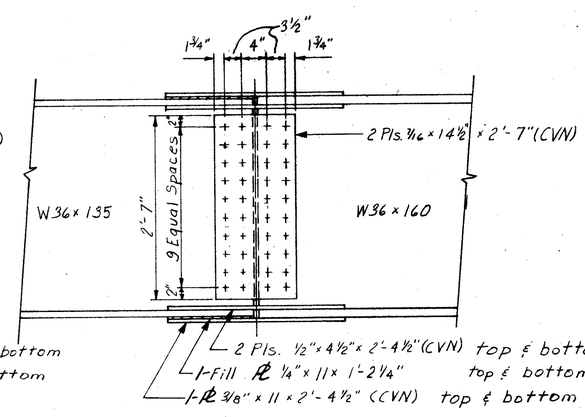

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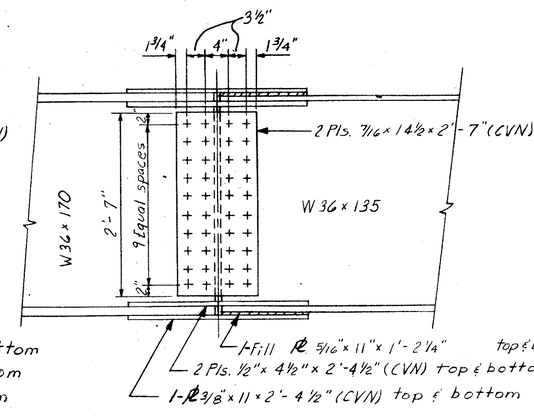
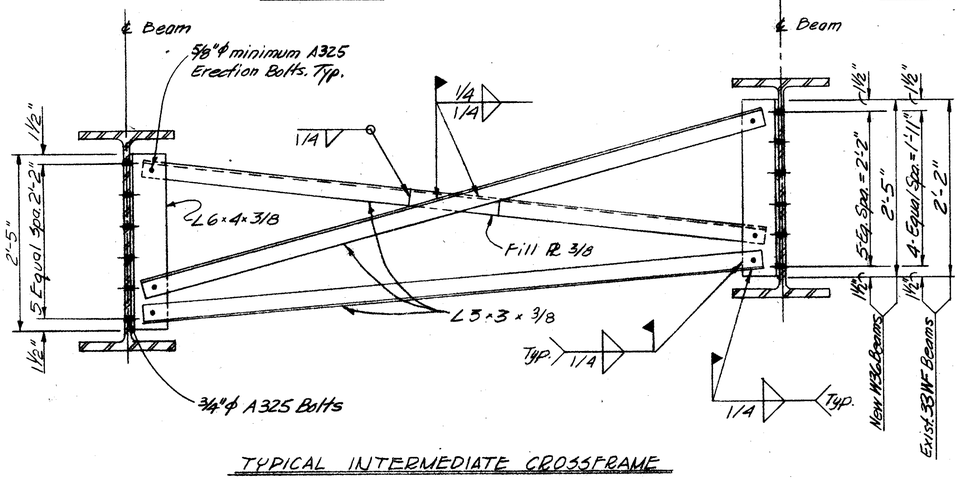
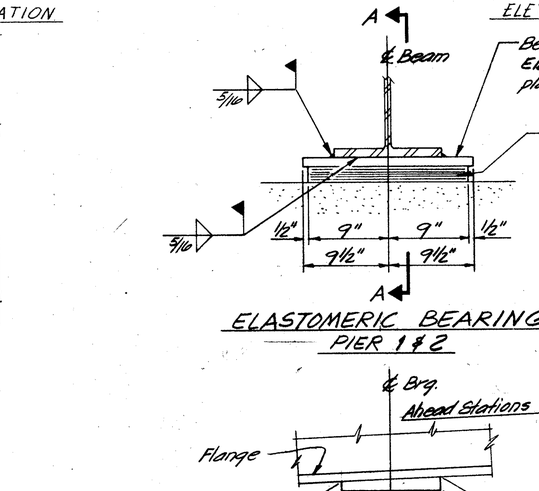


ELEVATION



ELEVATION



TYPICAL INTERMEDIATE CROSSFRAME
HAM-75-1010 C&D

Bolted stiffener connection for crossframes: Surface of existing 33WF 130 beams shall be blast cleaned before bolting L 6x4 stiffner for connecting cross-frames. The contact surface is to be a smooth clean surface, free of scale and residue. Connections with existing beams shall be field painted, including all bare areas left after removal of old crossframes. Payment to be included under item 514.

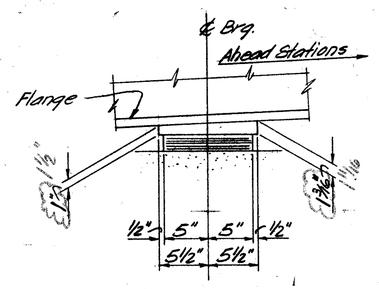
ERECTION BOLTS: Hole dia. in the crossframes and connection angles shall be respectively 1/16" and 1/4" larger than the dia. of the erection bolts. Unless replaced by permanent high strength bolts, erection bolts shall remain in place. Lock washers shall be furnished for other than fully torqued high strength erection bolts. Bolts shall be furnished as part of 513. In lieu of erection bolts and at the option of the Contractor, alternative means of temporary bracing may be used subject to the approval of the Director (501.06)

ELEVATION

Beveled load plate ASTM A588 steel. Elastomer to be vulcanized bonded to load plate during molding process.

Laminated elastomeric bearing pad 50 durometer hardness. Thickness of external elastomer = 0.1953" Thickness of internal elastomer = 0.2734" Internal steel laminate thickness = 0.0747" (14 gage) 5 steel plates A588 steel. Total = 1.8547" DL = 112ᵏ LL = 62ᵏ

ELASTOMERIC BEARINGS
PIER 1 & 2



SECTION A-A

ELEVATION

FIELD SPLICE NO. 1
75-1010-C

NOTES:
1. Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements as specified in 711.01 of CMS.
2. For additional Notes see "Elastomeric Bearings" Std. Dwg.

Bridge Seat Elevations have been adjusted upward 1/16" at piers to compensate for the Vertical deformation of the elastomeric bearings.

Welding of bearing load plate shall be monitored by pyrometric sticks or approved temperature monitoring device. The temperature adjacent to the bonded elastomer shall not exceed 300°F. Quenching of metal to accelerate cooling shall be prohibited.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

9A/14

Superstruc Details - Ramp C&D

Bridge No. Ham-75-1010
Exist. I-75 And Ramps C & D
Over Mill Creek

Hamilton County

Sta. 88+70.66 to Sta. 88+73.34 I-75

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
SJA	ALH	—	TMB	CRS 3/86	—

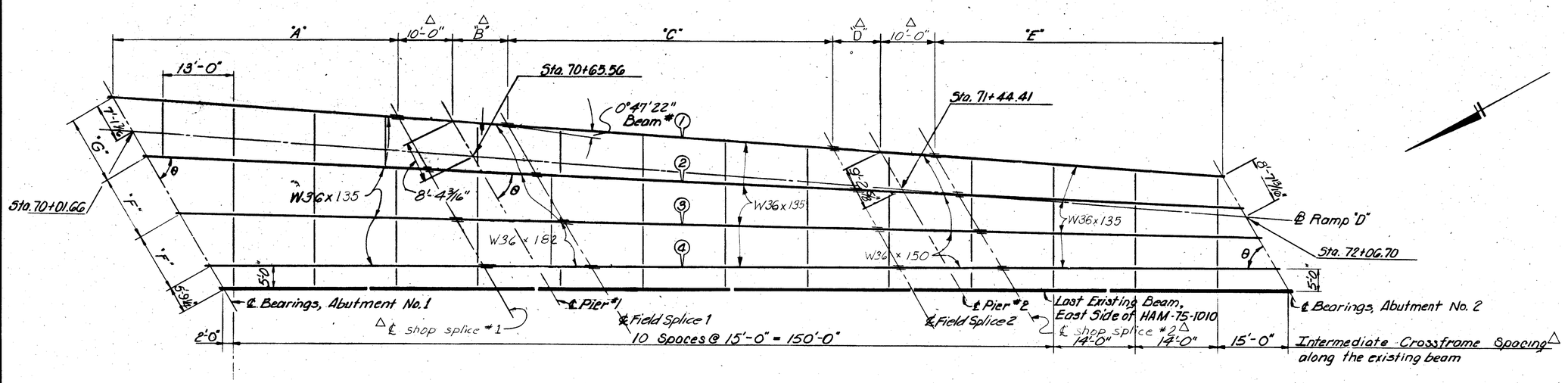
Revised 12-28-87

OHIO BLUE PRINT H46033

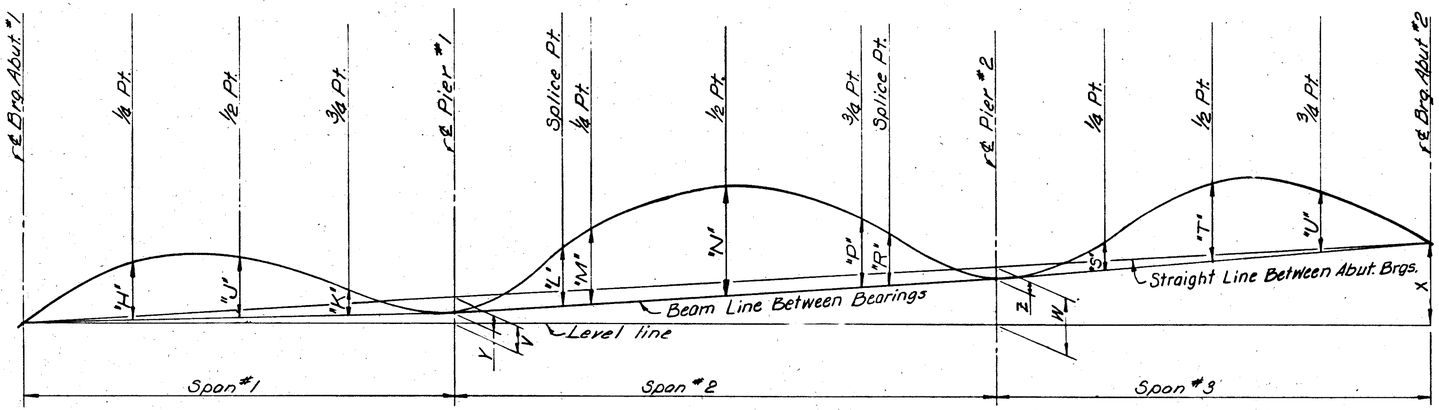
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

591
787

HAM-75-9.93
HAM-126-13.00



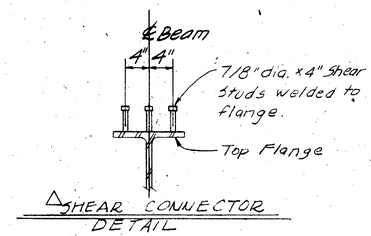
FRAMING PLAN - RAMP D



△ANGLE θ

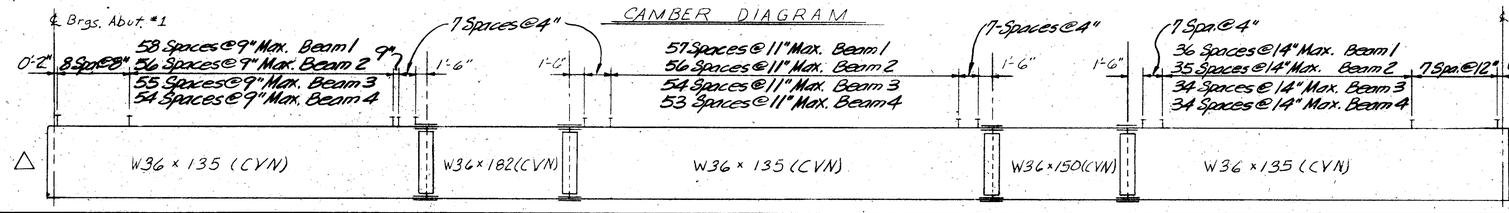
BEAM NO 1	55°18'22" * 56°05'44" **
2	57° 14'15"
3	58° 35'54"
4	60°00'00"

* θ Beam #1 at Abut #1 & Pier #1
** θ Beam #1 at pier #2 & Abut #2



△SHEAR CONNECTOR DETAIL

CAMBER DIAGRAM



	V	W	X	Y	Z
Beam #1	0'-11 5/16"	2'-0 3/16"	3'-0⅛"	-0⅛"	0 1/16
Beam #2	0'-10 3/16"	1'-11 3/16"	2'-9 15/16"	0¼"	0 3/16
Beam #3	0'-9 5/16"	1'-9 15/16"	2'-8 3/16"	0 5/16"	0 5/16
Beam #4	0'-8 5/16"	1'-8 3/16"	2'-6¼"	0 1/16"	0 3/16

△DEFLECTION & CAMBER

	Span #1			Span #2					Span #3		
	¼ Pt.	½ Pt.	¾ Pt.	Splice Pt.	¼ Pt.	½ Pt.	¾ Pt.	Splice Pt.	¼ Pt.	½ Pt.	¾ Pt.
	H	J	K	L	M	N	P	R	S	T	U
Deflection due to weight of steel	1/16	3/32	1/32	1/32	1/16	3/32	1/16	1/32	1/32	3/32	3/32
Deflection due to remaining dead load	1/2	19/32	9/32	1/16	1/4	17/32	5/16	1/8	1/8	11/32	5/16
Adjustment required for Vertical Curve	0	0	0	0	0	0	0	0	0	0	0
Required Shop Camber	9/16	11/16	5/16	3/32	5/16	5/8	3/8	5/32	5/32	7/16	13/32

△DIMENSIONS (measured along ℄ of Beams)

	F	G		A	B	C	D	E	V	W	X	Y	Z
Abut #1	12 - 0	12 - 5 9/16	Beam #1	59 - 2 5/16	10'-0"	59'-4 3/8	9'-0"	52'-7 1/4"	0'-11"	2-0 5/8	2-11 1/2"	0-0 9/16	0-0 5/16
Pier #1	10 - 3 3/8	9 - 11 11/16											
			Beam #2	51-9 1/2	10'-0"	58'-2 7/8"	9'-0"	51'-9 1/2	0-10 5/16"	1-11 1/4"	2-9 5/8"	0-0 9/16"	0-0 7/16
			Beam #3	50-10 1/2	10'-0"	57'-1 1/4"	9'-0"	50'-10 1/2	0-9 13/16"	1-10 1/8"	2-7 15/16"	0-0 9/16"	0-0 5/8
Pier #2	8 - 1 9/16	7 - 10 13/16	Beam #4	50-0	10'-0"	56'-0"	9'-0"	50'-0"	0-9 5/16"	1-8 15/16"	2-6 1/4"	0-0 9/16"	0-0 7/16
Abut #2	6 - 4 5/16	6 - 4 5/16											

△NOTES:

1. Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements as specified in 711.01 of CMS.
2. Contractor may shop fabricate field splice 1 & 2 and field fabricate shop splice 1 & 2 at his option.

10 / 14

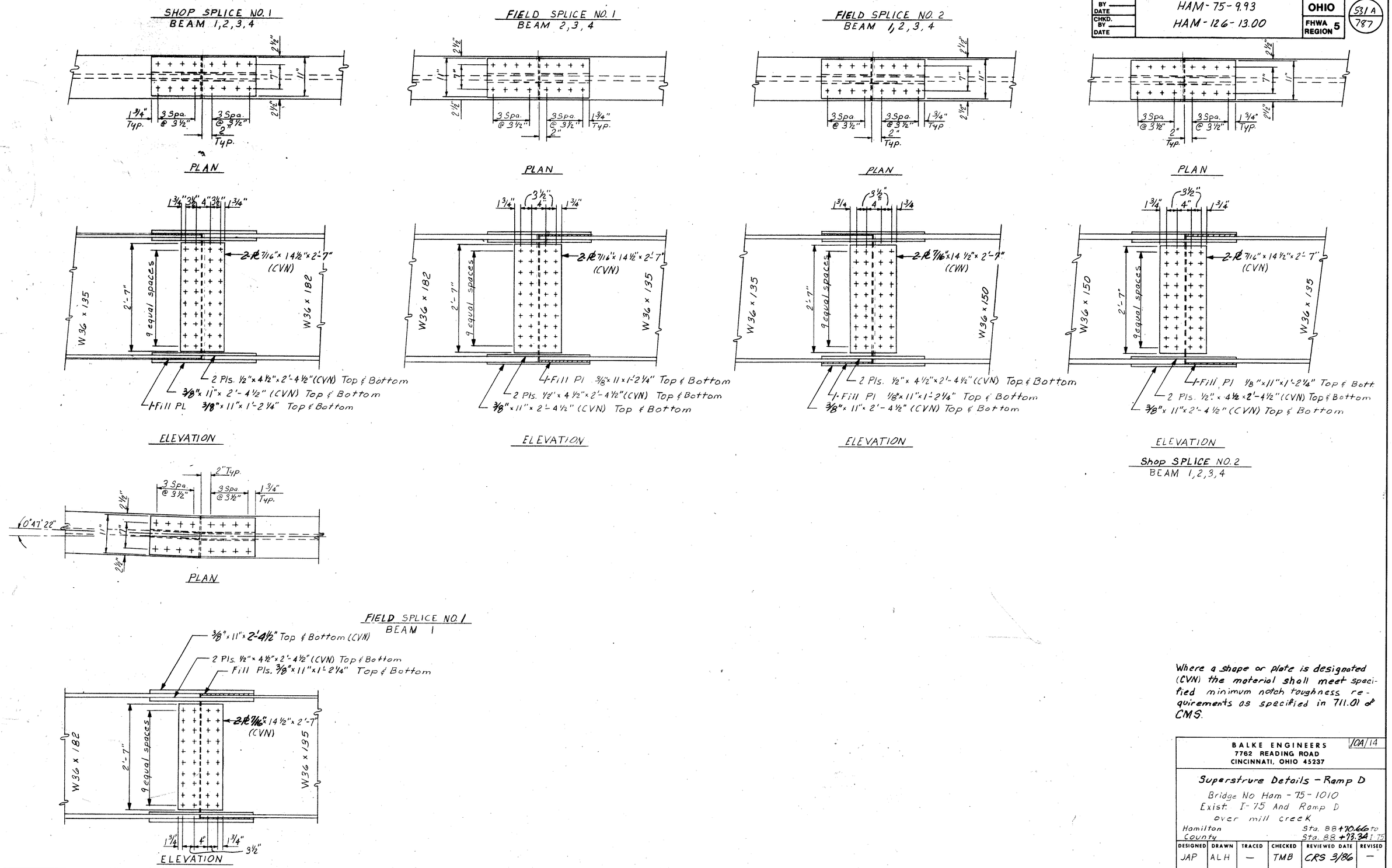
VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

FRAMING PLAN - RAMP D
BRIDGE NO. HAM-75-1010
EXIST. I-75 AND RAMPS C & D
OVER MILL CREEK
HAMILTON COUNTY
△STA. 88+70.66 to STA. 86+73.34 I-75

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△REVISED
J.R.P.	J.R.P.	C.W.G.	D.W.S.		5-14-71	△BALKE ENGRS. 1-86

Revised 11-25-87

CALC. BY	HAM-75-9.93	OHIO	531 A
DATE	HAM-126-13.00	FHWA REGION 5	787
CHKD. BY			
DATE			



Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements as specified in 711.01 of CMS.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

10A/14

Superstrure Details - Ramp D

Bridge No Ham - 75 - 1010
Exist. I-75 And Ramp D
over mill creek

Hamilton County — Sta. 88+70.66 to Sta. 88+73.34 I-75

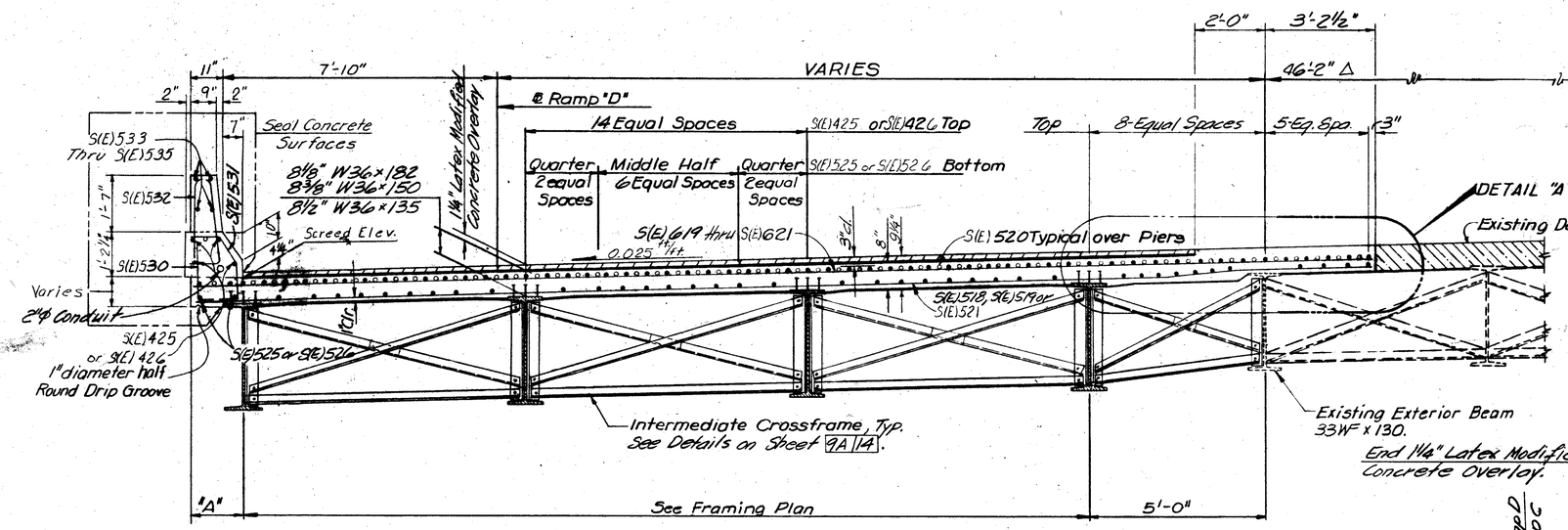
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
JAP	ALH	—	TMB	CRS 3/86	—

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

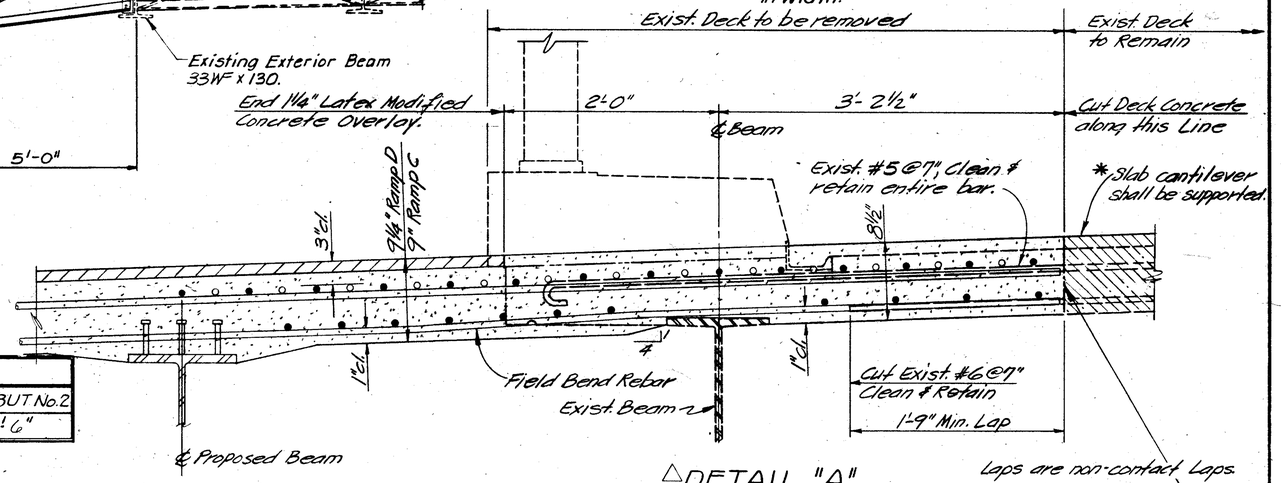
232
781

HAM-75-9.93
HAM-126-13.00

NOTES:
- DECK SLAB DEPTH: The distance shown from top of deck slab to top of steel beam is the design dimension. The quantity of deck concrete to be paid for shall be based on this dimension, even though deviation from it may be necessary because the top flange of the beam may not have the exact camber or conformation required to place it parallel to the finished grade.
- A HAUNCH WIDTH of 9" shall be used for computing quantity of concrete. However, the haunch width may vary between 6" and 12" provided that the slope shall be not more than 1:4 for a haunch less than 9" in width.



△TRANSVERSE SECTION ~ RAMP D



△DETAIL "A"

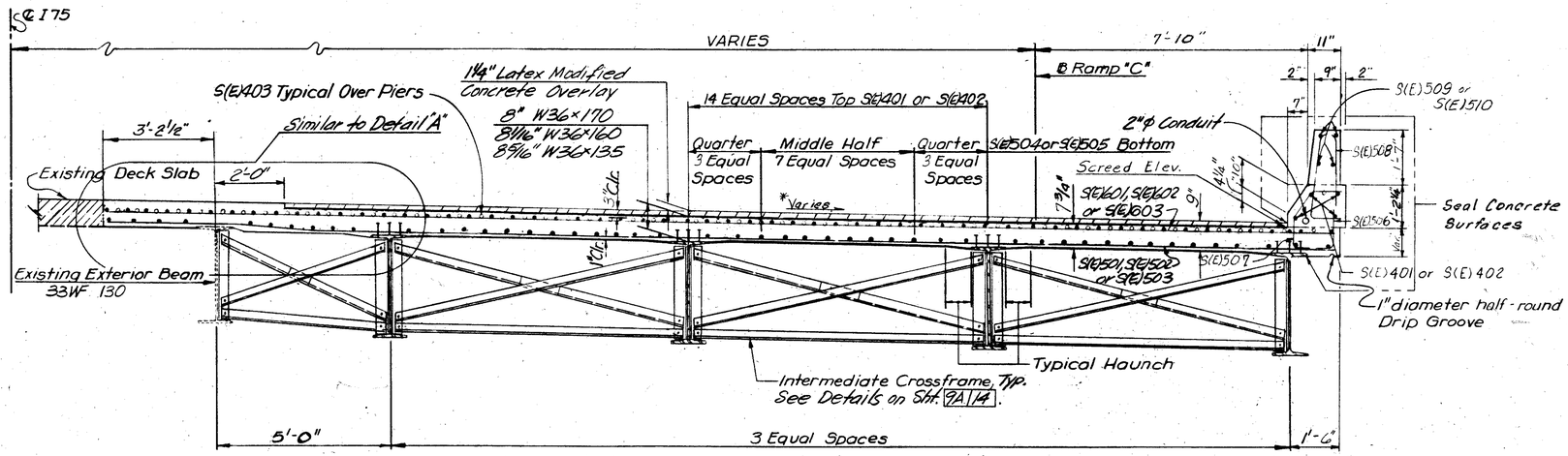
Laps are non-contact Laps.

Bonding Agent: Thermal Chem Wet Concrete Bonder Product No. 5, "Sikadur Hi-Mod" by Sika Chem. Corp., or Equal. Payment to be included in Item 511, Class S Concrete.

*Contractor shall not Load Cantilevered Portion of Slab.

△CURB OVERHANG DIMENSION "A"

ABUT. No.1	MIDSPAN	PIER No.1	SPLICE No.1	MIDSPAN	SPLICE No.2	PIER No.2	MIDSPAN	ABUT No.2
3'-0"	2'-4"	1'-11⅛"	1'-10¼"	1'-4⅝"	1'-1⅝"	1'-1¼"	1'-2⅛"	1'-6"



△TRANSVERSE SECTION ~ RAMP C

*Slope Varies from 0.0241% to 0.032% to match existing Pavement.

11 / 14

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

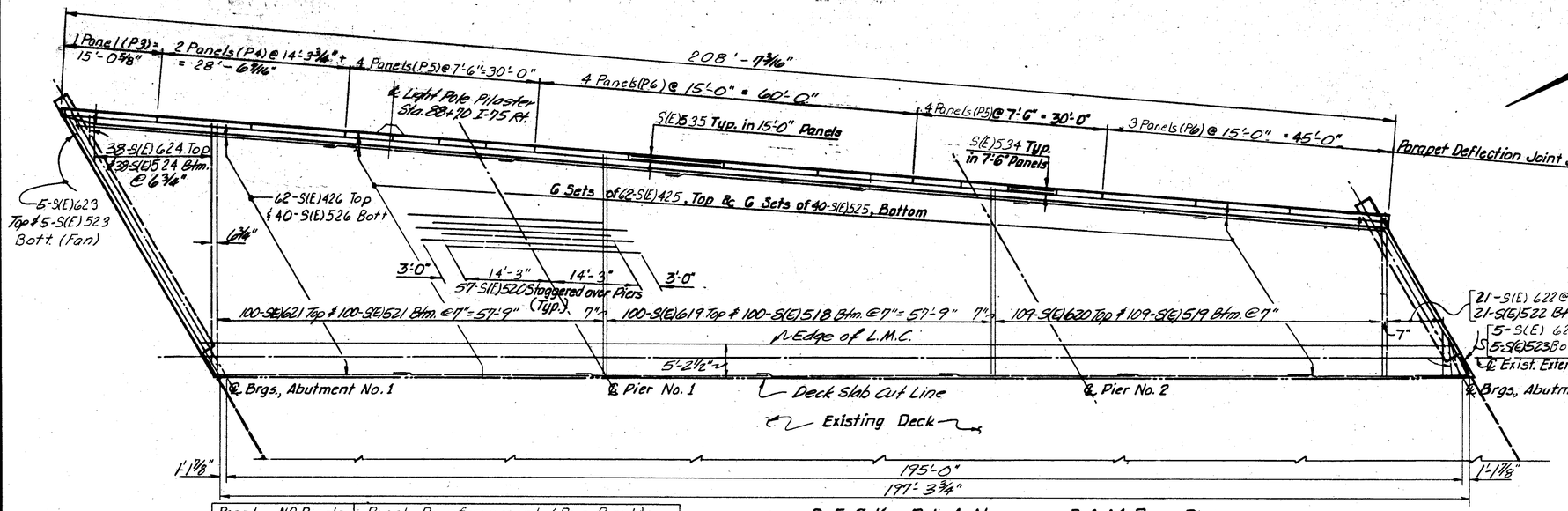
SUPERSTRUCTURE DETAILS
BRIDGE NO. HAM-75-1010
EXIST. I-75 AND RAMPS C&D
OVER MILL CREEK
HAMILTON COUNTY
△STA. 88+70.66 to STA. 86+73.34 I-75

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△REVISED
J.R.P.	J.R.P.	T.D.S.	D.W.S.	[illegible]	5-14-71	△BALKE ENGRS. 11-86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

333
707

HAM-75-9.93
HAM-126-13.00



Panel	NO. Panels	Panel Reinforcement (Per Panel)
P4	2	10-S(E)530, 10-S(E)531, 10-S(E)532, & 4-S(E)533
P5	8	5-S(E)530, 5-S(E)531, 5-S(E)532, & 4-S(E)534
P6	7	10-S(E)530, 10-S(E)531, 10-S(E)532, & 4-S(E)535
P3	1	SEE SHEET 12A/14

DECK PLAN ~ RAMP D

*SCREED ELEVATIONS

	LOCATION	EAST CURB RAMP D STA.	EAST CURB ELEV.	WEST CURB RAMP C STA.	WEST CURB ELEV.	
533.24	℄ Brgs, Abut. No. 1	69+96.36	533.35	46+71.06	534.67	
533.54	1/4 Point	70+12.38	533.61	46+85.85	534.89	534.96
533.80	1/2 Point	70+28.40	533.85	47+00.64	535.01	535.14
534.01	Span 1 3/4 Point	70+44.42	534.02	47+15.43	535.24	535.29
534.23	℄ Pier No. 1	70+60.45	534.26	47+30.22	535.43	
534.52	1/4 Point	70+80.21	534.58	47+48.71	535.68	535.70
534.87	Span 2 1/2 Point	70+99.98	534.91	47+67.20	535.94	535.96
535.15	3/4 Point	71+19.75	535.20	47+85.69	536.18	
535.39	℄ Pier No. 2	71+39.51	535.48	48+04.18	536.39	
535.65	1/4 Point	71+55.13	535.72	48+18.97	536.57	
535.91	Span 3 1/2 Point	71+70.75	535.97	48+33.76	536.79	
536.15	3/4 Point	71+86.37	536.22	48+48.55	536.98	
536.32	℄ Brgs, Abut. No. 2	72+01.98	536.43	48+63.34	537.14	

* Elev. at top of Portland Cement Concrete.

NOTES:

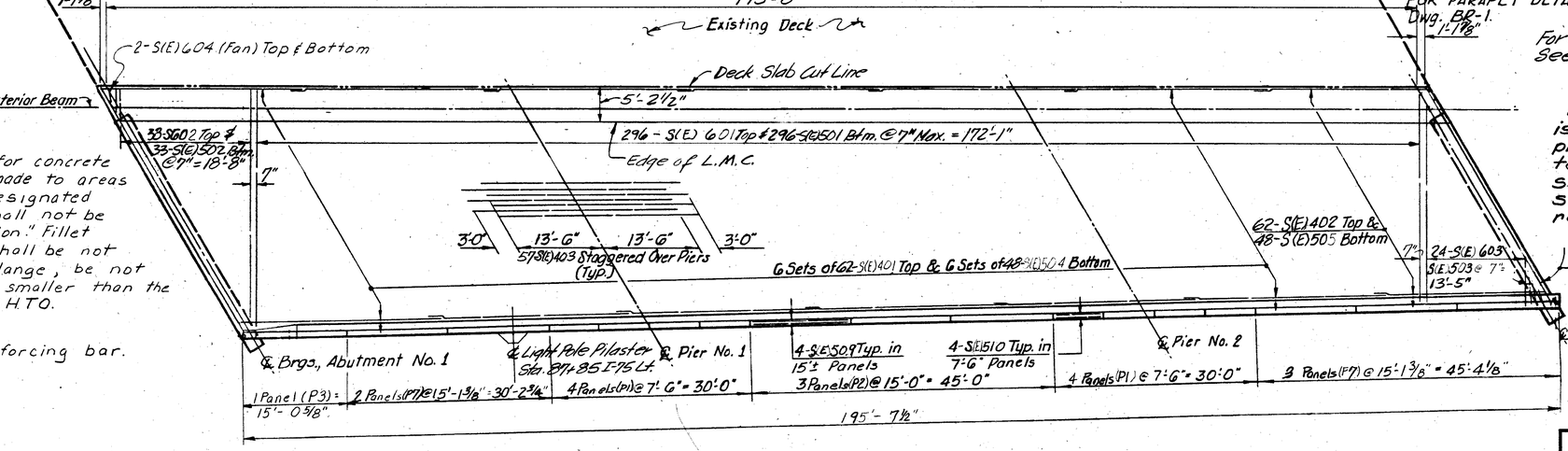
The screed elevations shown have been obtained by adding the dead load deflection due to the weight of concrete slab, latex modified concrete overlay, bridge parapet and future wearing surface to the required final elevation.

PREFORMED EXPANSION JOINT FILLER in the railing parapet deflection joints may be either 1/4" gray sponge rubber or 1/4" gray cellular polyvinyl chloride (P.V.C.) sponge.

FOR PARAPET DETAILS & notes not shown, see Std. Dwg. BR-1.

For details of Light Pole Pilasters See Sheet 12A/14.

Existing Reinforcement that is not properly located for proposed splice details or is too corroded for reuse shall be replaced with new steel. Ref. Sheet 14/14 for replacement allowance.



WELDED ATTACHMENT of supports for concrete deck finishing machine may be made to areas of the fascia stringer flanges designated "Compression." Attachments shall not be made to areas designated "Tension." Fillet welds to compression flanges shall be not closer than 1" from edge of flange, be not more than 2" long and be not smaller than the minimum size required by AASHTO.

"(E)" denotes epoxy-coated reinforcing bar.

Panel	No. Panels	Panel Reinforcement (Per Panel)
P1	8	5-S(E)506, 5-S(E)507, 5-S(E)508, 4-S(E)510
P2	3	10-S(E)506, 10-S(E)507, 10-S(E)508, 4-S(E)509
P3	1	SEE SHEET 12A/14
P7	5	11-S(E)506, 11-S(E)507, 11-S(E)508, 4-S(E)509

DECK PLAN ~ RAMP C

12/14

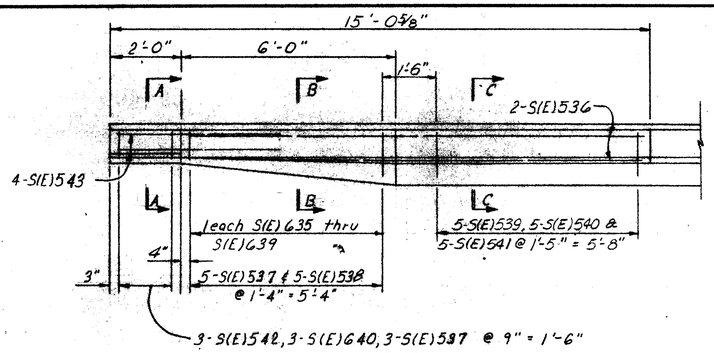
VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

DECK PLANS
BRIDGE NO. HAM-75-1010
EXIST. I-75 AND RAMPS C & D
OVER MILL CREEK
HAMILTON COUNTY
△ STA. 88+70.66 to STA. 86+73.34 I-75

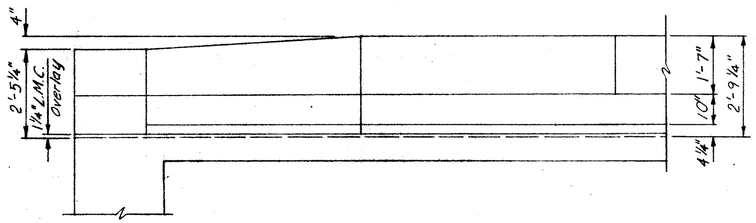
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.R.P.	J.R.P.	D.W.M.	D.W.S.	D.	5-14-71	BALKE ENGRS. INC.

Revised 12-28-87

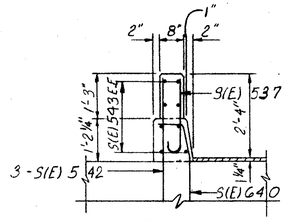
CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO	533A 787
CHKD. BY			FHWA REGION 5	
DATE				



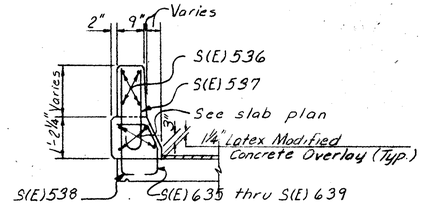
PLAN



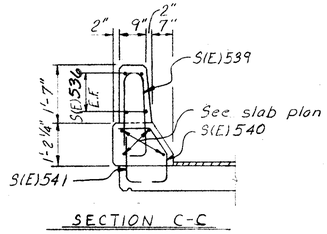
ELEVATION



SECTION A-A

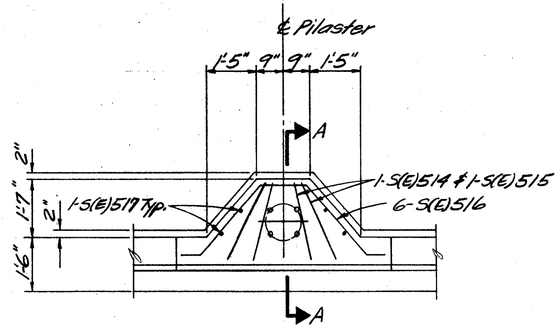


SECTION B-B

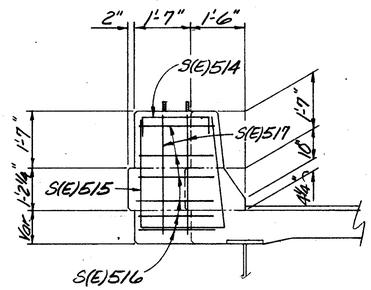


SECTION C-C

NOTES:
1. For Parapet Details and notes not shown see Std. Dwg. BR-1.
2. "(E)" denotes epoxy coated reinforcing bar.



PLAN

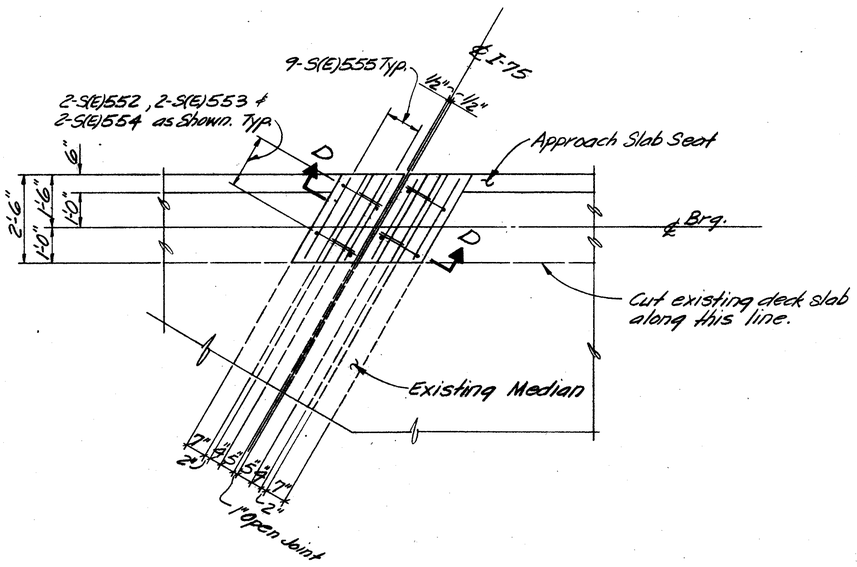


SECTION A-A

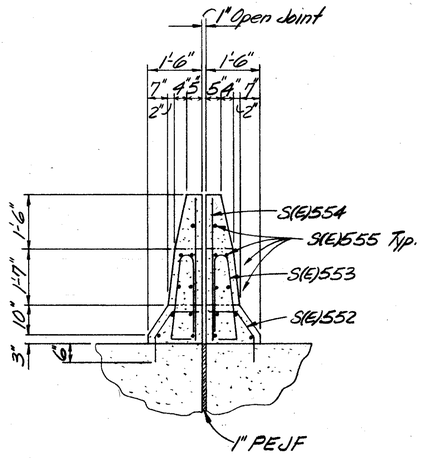
LIGHT POLE PILASTER

For additional information refer to Std. Construction Dwgs. HL-3 & HL-4.

PARAPET DETAILS (PANEL P3)



MEDIAN DETAIL
TYPICAL



SECTION D-D

BALKE ENGINEERS 7762 READING ROAD CINCINNATI, OHIO 45237						24/14
PARAPET DETAILS BRIDGE NO. HAM-75-1010 EXIST. I-75 AND RAMPS C & D OVER MILL CREEK						
HAMILTON COUNTY				STA. 88+70.66 to STA. 86+73.34 I-75		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED	
SJA	JAG ALH	–	TMB	CRS 3/86	–	

OHIO BLUE PRINT

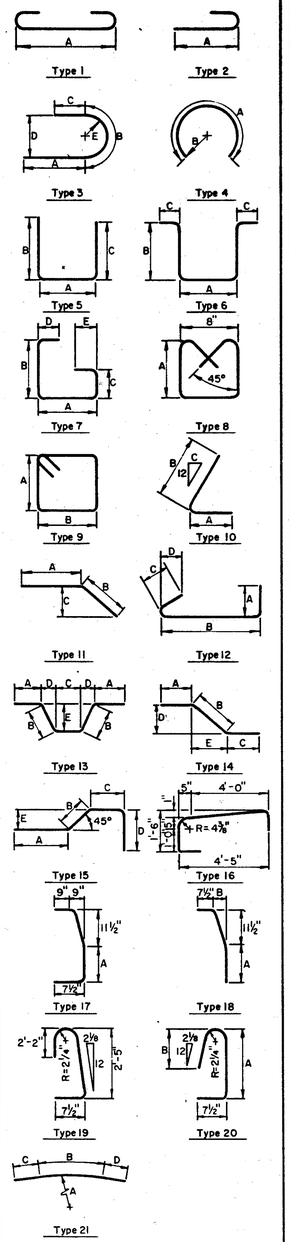
REINFORCING STEEL LIST

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

534 / 787

HAM-75-9.93
HAM-126-13.00

BENDING DIAGRAM



S IN THE COLUMN FOR "TYPE" INDICATES STRAIGHT BARS.

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
		ABUTMENT No.1 ~ RAMP "C"							
A401	36	5-5	130	5	1-9	1-11	1-11		
A501	68	6-3	443	5	2-6	2-0	2-0		
A502	8	23-10	199	5					
A503	4	10-6	44	5					
A504	4	28-0	117	5					
A505	4	27-0	113	5					
A506	2	11-6	24	5					
A507	2	5-6	11	5					
A508	2	15-6	32	11	14-6	1-0	0-7		
A509	10	5-5 to 12-11	96	5	2-2	1-9 to 5-6	1-9 to 5-6	Vary by 5".	B&C
A601	47	13-9	971	5	2-1	6-0	6-0		
A602	6	10-0	90	5	2-2	4-1	4-1		
A603	70	3-11	412	14	0-6	2-11	0-6	2-1	2-1
A801	8	24-3	518	5					
A802	4	19-10	212	5					
A803	4	22-0	235	5					
		Sub-Total	3647						
		ABUTMENT No.2 ~ RAMP "C"							
B401	28	5-5	101	5	1-9	1-11	1-11		
B501	52	6-3	339	5	2-6	2-0	2-0		
B502	8	19-6	163	5					
B503	4	10-6	44	5					
B504	8	23-9	198	5					
B505	2	10-0	21	5					
B506	2	10-6	22	11	9-6	1-0	0-7		
B507	2	5-0	10	5					
B508	7	6-11 to 12-11	72	5	2-2	2-6 to 5-6	2-6 to 5-6	Vary by 6".	B&C
B601	38	14-5	823	5	2-1	6-4	6-4		
B602	6	13-10	125	5	2-2	6-0	6-0		
B603	66	3-11	388	14	0-6	2-11	0-6	2-1	2-1
B801	8	20-0	427	5					
B802	4	17-0	182	5					
B803	4	21-0	224	5					
		Sub-Total	3139						

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
		ABUTMENT No.1 ~ RAMP "D"							
C401	36	5-5	130	5	1-9	1-11	1-11		
C501	68	6-3	443	5	2-6	2-0	2-0		
C502	8	25-6	213	5					
C503	4	10-6	44	5					
C504	8	29-8	248	5					
C505	2	11-6	24	5					
C506	2	8-6	18	5					
C507	2	5-0	10	5					
C508	2	10-0	21	11	9-0	1-0	0-7		
C509	7	5-5 to 12-5	65	5	2-2	1-9 to 5-3	1-9 to 5-3	Vary by 7".	B&C
C601	50	11-9	882	5	2-1	5-0	5-0		
C602	6	12-4	111	5	2-2	5-3	5-3		
C603	88	3-11	518	14	0-6	2-11	0-6	2-1	2-1
C801	8	26-0	555	5					
C802	4	6-0	64	5					
C803	4	20-0	214	5					
C804	8	14-0	299	5					
		Sub-Total	3859						
		ABUTMENT No.2 ~ RAMP "D"							
D401	20	5-5	72	5	1-9	1-11	1-11		
D501	36	6-3	235	5	2-6	2-0	2-0		
D502	4	27-0	113	5					
D503	6	7-6	47	5					
D504	8	18-6	154	5					
D505	2	9-6	20	5					
D506	6	6-11	43	5	2-2	2-6	2-6		
D507	4	10-6	44	5					
D601	28	13-3	557	5	2-1	5-9	5-9		
D602	6	19-10	179	5	2-2	9-0	9-0		
D603	46	3-11	271	14	0-6	2-11	0-6	2-1	2-1
D801	4	27-0	288	5					
D802	4	6-0	64	5					
D803	8	9-0	192	5					
D804	4	11-0	117	5					
		Sub-Total	2396						
Total Abutments			13041						

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
		PIERS ~ RAMP "C"							
P501	28	9-2 to 9-8	275	3	3-0	3-2 to 3-8	3-0	2-0 to 2-4	1-0 to 1-2 *
P502	28	7-0	204	5	2-2	5-0	0-0		
P503	28	5-0	146	5	2-2	3-0	0-0		
P504	56	30-0	1752	5					
P601	16	19-3	463	5					
P602	16	18-3	439	5					
P603	146	5-8	1243	5	4-10	1-0	0		
P604	75	24-3	2732	5					
P605	71	25-3	2693	5					
P606	70	7-10	824	5	2-2	3-0	3-0		
P901	54	12-0	2203	1	9-6				
		Sub-Total	12974						
									* 2 Sets of 14, Vary each set B,D, & E as shown.
		PIERS ~ RAMP "D"							
P521	26	9-2 to 9-8	225	3	1-9	3-2 to 3-8	1-9	2-0 to 2-4	1-0 to 1-2 **
P522	26	8-9	237	5	2-2	6-9	0		
P523	26	3-9	102	5	2-2	1-9	0		
P524	26	30-0	814	5					
P525	26	28-6	773	5					
P621	16	19-6	469	5					
P622	16	16-3	391	5					
P623	136	5-8	1158	5	4-10	1-0	0		
P624	75	23-0	2591	5					
P625	61	24-4	2229	5					
P626	65	7-10	765	5	2-2	3-0	3-0		
P921	54	12-0	2203	1	9-6				
		Sub-Total	11957						
Total Piers			24931						
									** 2 Sets of 13, Vary each set B,D, & E as shown.

NOTES

BAR SIZE is indicated in the bar mark. The first digit where three digits are used, and the first two digits where four are used, indicate the bar size number. For example, A700 is a No.7 size bar and A1014 is a No.10 size.

Bars not Revised by Balke (△) shall have a min. lap of 30 Bar diameters.

13 / 14

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS CINCINNATI ARCHITECTS

REINFORCING STEEL LIST

BRIDGE NO. HAM-75-1010
EXIST. I-75 AND RAMPS C & D
OVER MILL CREEK

HAMILTON COUNTY

△STA. 88+70.66 to STA. 86+73.34 I-75

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED
J.R.P.	T.D.S.	——	S.S.C.		5-14-71	△ BALKE ENGRS 1-86

REINFORCING STEEL LIST

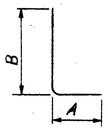
CALC. BY / DATE / CHKD. BY / DATE

HAM-75-9.93
HAM-126-13.00

OHIO — FHWA REGION 5

535 / 787

BENDING DIAGRAM



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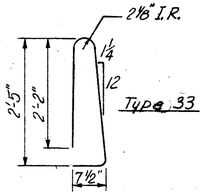

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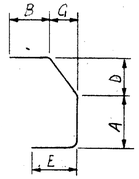

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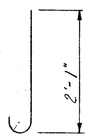

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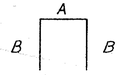

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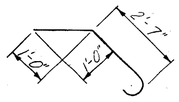

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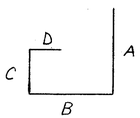


Type 37

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
		SUPERSTRUCTURE ~ RAMP "C"							
S(E)401	372	30'-0"	7455	S					
S(E)402	62	26'-0"	1077	S					
S(E)403	114	30'-0"	2285	S					
S(E)501	296	32'-8" to 37'-2"	10780	S	37 Sets of 8 bars, vary each set by ½"				
S(E)502	33	4'-10" to 36'-10"	717	S	1 ea.,	vary	by 1'-0"		
S(E)503	24	9'-10" to 32'-10"	534	S	1 ea.,	vary	by 1'-0"		
S(E)504	288	30'-0"	9012	S					
S(E)505	48	28'-6"	1427	S					
S(E)506	125	2'-5	315	31	0'-10½	1'-8"	—	—	—
S(E)507	125	3'-2"	413	32	0'-11"	9"	6"	8½"	10½"
S(E)508	125	5'-3"	684	33	—	—	—	—	—
S(E)509	32	14'-8"	490	S					
S(E)510	32	7'-2"	239	S					
S(E)511	59	7'-9"	477	37	2'-6"	2'-1"	1'-10"	1'-8"	—
S(E)512	59	6'-5"	395	35	1'-8"	2'-6"	—	—	—
S(E)513	18	6'-10"	128	35	2'-1"	2'-6	—	—	—
S(E)514	4	2'-10"	12	35	1'-10"	0'-9"			
S(E)515	4	8'-5"	36	38	2'-4"	3'-2"	3'-2"	0'-6½"	
S(E)516	6	7'-3"	45	39	1'-10"	1'-4"	1'-10"	0'-6"	
S(E)536	4	12'-8"	53	S					
S(E)537	8	2'-8"	22	34	—	—	—	—	—
S(E)538	5	3'-7"	19	31	10½"	2'-10"	—	—	—
S(E)539	5	5'-3"	27	33	—	—	—	—	—
S(E)540	5	3'-2"	17	32	11"	9"	6"	8½"	10½"
S(E)541	5	2'-4"	12	31	10½"	1'-7"	—	—	—
S(E)542	3	4'-7"	14	S					
S(E)543	8	4'-6"	38	S					
S(E)517	4	3'-2"	13	S					
S(E)601	296	32'-8" to 37'-2"	15524	S	37 Sets of 8	bars, vary each	set by 1½"		
S(E)602	33	4'-10" to 36'-10"	1033	S	1 ea.,	vary	by 1'-0"		
S(E)603	24	9'-10" to 32'-10"	769	S	1 ea.,	vary	by 1'-0"		
S(E)604	4	4'-0"	24	S					
S(E)605	12	4'-0" to 9'-0"	117	S	2 ea.,	vary	by 1'-0"		
S(E)635	1	2'-6"	4	32	11"	7"	2"	8½"	7½"
S(E)636	1	2'-9"	4	32	11"	7½"	3"	8½"	9"
S(E)637	1	2'-11"	4	32	11"	8"	4"	8½"	10½"
S(E)638	1	3'-0"	5	32	11"	8½"	5"	8½"	10½"
S(E)639	1	3'-1"	5	32	11"	9"	6"	8½"	10½"
S(E)640	3	3'-7"	16	32	2'-5"	7"	2"	8½"	—
S(E)801	8	13'-8"	292	S					
S(E)802	8	11'-6"	246	S					
S(E)803	8	12'-0"	256	S					
S(E)804	8	36'-9"	785	S					
S(E)805	8	15'-6"	331	S					
S(E)806	8	40'-2"	858	S					
S(E)807	49	4'-11"	643	36	—	—	—	—	—
		SUB-TOTAL	57652						

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
		SUPERSTRUCTURE ~ RAMP "D"							
S(E)514	4	2'-10"	12	35	1'-10"	0'-9"			
S(E)515	4	8'-5"	36	38	2'-4"	3'-2"	3'-2"	0'-6½"	
S(E)516	6	7'-3"	45	39	1'-10"	1'-4"	1'-10"	0'-6"	
S(E)517	4	3'-2"	13	S					
S(E)425	372	30'-0"	7455	S					
S(E)426	62	27'-5" to 37'-7"	1346	S	1 ea.,	vary	by 2"		
S(E)518	100	30'-0" to 34'-7⅛"	3371	S	1 ea.,	vary	by 3/16"		
S(E)519	109	26'-0" to 29'-11⅛"	3180	S	1 ea.,	vary	by 3/16"		
S(E)520	114	31'-6"	3745	S					
S(E)521	100	34'-7⅛ to 39'-9	3877	S	1 ea.,	vary	by 5/8"		
S(E)522	21	5'-3" to 25'-3	334	S	1 ea.,	vary by	1'-0"		
S(E)523	10	4'-6"	47	S					
S(E)524	38	5'-5" to 39'-4"	887	S	1 ea.,	vary by	11"		
S(E)525	240	30'-0"	7510	S					
S(E)526	40	29'-3" to 39'-0"	1424	S	1 ea.,	vary by	3"		
S(E)527	61	7'-9"	493	37	2'-6"	2'-1"	1'-10"	1'-8"	—
S(E)528	61	6'-5"	408	35	1'-8"	2'-6"	—	—	—
S(E)529	12	6'-10"	86	35	2'-1"	2'-6"	—	—	—
S(E)530	130	2'-5"	328	31	0'-10½	1'-8"	—	—	—
S(E)531	130	3'-2"	429	32	0'-11"	9"	6"	8½"	10½"
S(E)532	130	5'-3"	712	33	—	—	—	—	—
S(E)533	8	14'-0"	117	S					
S(E)534	32	7'-2"	239	S					
S(E)535	28	14'-8"	428	S					
S(E)536	4	12'-8"	53	S					
S(E)537	8	2'-8"	22	34	—	—	—	—	—
S(E)538	5	3'-7"	19	31	10½"	2'-10"	—	—	—
S(E)539	5	5'-3"	27	33	—	—	—	—	—
S(E)540	5	3'-2"	17	32	11"	9"	6"	8½"	10½"
S(E)541	5	2'-4"	12	31	10½"	1'-7"	—	—	—
S(E)542	3	4'-7"	14	S					
S(E)543	8	4'-6"	38	S					
S(E)619	100	30'-0" to 34'-7⅛"	4855	S	1 ea.,	vary by	9/16"		
S(E)620	109	26'-0" to 29'-11⅛"	4579	S	1 ea.,	vary by	7/16"		
S(E)621	100	34'-7⅛" to 39'9	5584	S	1 ea.,	vary by	5/8"		
S(E)622	21	5'-3" to 25'-3"	481	S	1 ea,	vary by	1'-0"		
S(E)623	10	4'-6"	68	S					
S(E)624	38	5'-5" to 39'-4"	1277	S	1 ea.,	vary by	11"		
S(E)635	1	2'-6"	4	32	11"	7"	2"	8½"	7½"
S(E)636	1	2'-9"	4	32	11"	7½"	3"	8½"	9"
S(E)637	1	2'-11"	4	32	11"	8"	4"	8½"	10½
S(E)638	1	3'-0"	5	32	11"	8½"	5"	8½"	10½
S(E)639	1	3'-1"	5	32	11"	9"	6"	8½"	10½
S(E)640	3	3'-7"	16	32	2'-5"	7"	2"	8½"	—
S(E)821	4	15'-9"	168	S					
S(E)822	8	17'-0"	363	S					
S(E)823	4	12'-9"	136	S					
S(E)824	47	4'-11"	617	36	—	—	—	—	—
S(E)825	4	11'-2"	119	S					
S(E)826	8	11'-0"	235	S					
S(E)827	4	8'-7"	92	S					
S(E)828	8	48'-9"	1041	S					
S(E)829	8	28'-3"	603	S					
		SUB-TOTAL	56980						

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
		EXISTING ABUTMENT MODIFICATION							
S(E)450	472	2'-10"	893	31	1'-3"	1'-8"	—	—	—
S(E)550	200	7'-8"	1599	37	2'-9"	2'-1"	1'-9"	1'-5"	—
S(E)551	200	6'-11"	1443	35	1'-8"	2'-9"	—	—	
S(E)552	8	2'-2"	18	32	7"	9"	6"	8½"	—
S(E)553	8	5'-3"	44	33	—	—	—	—	—
S(E)554	8	4'-0"	33	S	—	—	—	—	—
S(E)555	36	2'-6"	94	S	—	—	—	—	—
S(E)850	48	19'-2"	2456	S					
S(E)851	64	27'-9"	3717	S					
S(E)852	132	4'-11"	1733	36	—	—	—	—	—
S(E)853	16	7'-6"	320	S	—	—	—	—	—
S(E)854	64	11'-11"	2036	S	—	—	—	—	—
S(E)855	16	6'-6"	278	S	—	—	—	—	—
		SUBTOTAL	14664						

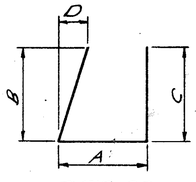
REPLACEMENT ALLOWANCE = 1000

SUPERSTRUCTURE TOTAL = 130296

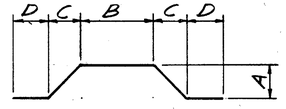
△NOTES:

Reinforcing steel samples: Refer to CMS sections 106.03, 700, 709.01, thru 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structure by the additional steel, spliced in accordance with 509.08.

"(E)" denotes epoxy coated reinforcing bar.



TYPE 38



TYPE 39

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

14 / 14

REINFORCING STEEL LIST
BRIDGE NO. HAM-75-1010
EXIST. I-75 AND RAMPS C & D
OVER MILL CREEK
HAMILTON COUNTY
STA. 88+70.66 TO STA. 86+73.34 I-75

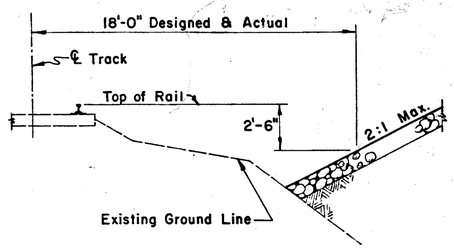
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
S.J.A.	A.L.H.	—	T.M.S.	CRS 3/86	—

OHIO BLUE PRINT M60503

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

536
187

HAM-75-9.93
HAM-126-13.00



SECTION A-A

CURVE DATA

HORIZONTAL	VERTICAL
△ P.I. STA. 39+77.80	P.V.I. STA. 37+50.00
Δ = 68° 45' 28" RT.	ELEV. 586.880
D = 12° 00' 00"	L = 600.00'
R = 477.47'	G1 = +5.580%
T = 326.67'	G2 = -7.232%
Lc = 572.98'	

△ TRAFFIC DATA
2006 ADT. = 4337
2006 ADTT. = 478

Earthwork limits shown △ are approximate. Actual slopes shall conform to plan cross sections.

PROPOSED STRUCTURE

TYPE: Continuous rolled steel beam with composite reinforced concrete deck and reinforced concrete substructures

SPANS: 62.50', 79.60', 59.40', & 48.50'.

△ LOADING: HS 20-44. Case I and the Alternate Military Loading.

SKEW: 7° 45' 00" R. F. with reference chord.

△ WEARING SURFACE: 1¼" Latex Modified Concrete Overlay.

△ APPROACH SLABS: AS-1-81 (25' long).

ROADWAY: 27'-8" face to face of parapets.

ALIGNMENT: 12° 00' 00" curve right.

SUPERELEVATION: 0.0833' per ft.

1/9

VOGT, IVERS, & ASSOCIATES
ENGINEERS CINCINNATI — ARCHITECTS CHICAGO

SITE PLAN

BRIDGE NO. HAM-126-RAMP C
RAMP C OVER
EXISTING ANTHONY WAYNE & CONRAIL
HAMILTON COUNTY STA. 37+15.73 to STA. 39+70.44

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISIONS
AERIAL	G.W.M.	V.K	D.W.M.	S.S.C.	△ BALER ENG. 6/06

GENERAL NOTES

ITEM 511: CLASS S CONCRETE, SUPERSTRUCTURE, USING SHRINKAGE COMPENSATING CEMENT, 701.08.

THE FOLLOWING RESTRICTIONS SHALL APPLY TO THE SUPERSTRUCTURE CONCRETE USING SHRINKAGE COMPENSATING CEMENT, 701.08.

1. CEMENT SHALL BE EXPANSIVE HYDRAULIC CEMENT, ASTM C845, TYPE K.
2. THE MAXIMUM WATER/CEMENT RATIO GIVEN FOR CLASS S CONCRETE IN 499.03 SHALL BE REVISED FROM 0.44 TO 0.50.
3. MAXIMUM SLUMP AT THE TIME AND PLACE OF CONCRETE PLACEMENT SHALL BE 6 INCHES.
4. CHEMICAL ADMIXTURES, WHEN REQUIRED BY 511.06, SHALL BE LIMITED TO 705.12 TYPE D.
5. MAXIMUM AMBIENT TEMPERATURE AT TIME OF PLACEMENT OF CONCRETE SHALL BE 80° F.
6. MEMBRANE CURING PER SS836 WILL NOT BE PERMITTED FOR ANY CONCRETE PLACED BETWEEN SEPTEMBER 1 AND MARCH 31. SUCH CONCRETE SHALL BE CURED BY METHOD (A) WATER CURING.
7. IF REQUIRED BY THE ENGINEER, THE SURFACE OF THE CONCRETE SHALL BE GIVEN A FOG SPRAY OF WATER. THIS MAY BE REQUIRED PRIOR TO EITHER WATER CURING OR MEMBRANE CURING IF WEATHER CONDITIONS DICTATE. EQUIPMENT SHALL BE ON HAND.

PILE DESIGN LOAD:
The Design Load for the Abutments is 35 Tons per Pile.
The Design Load for the Piles in Pier 1 is 45 Tons per Pile.
The Design Load for the Piles in Pier 2 and Pier 3 is 70 Tons per Pile.

UTILITY LINES:
ALL EXPENSE INVOLVED IN RELOCATING THE AFFECTED UTILITY LINES SHALL BE BORNE BY THE OWNERS. THE CONTRACTOR AND OWNERS ARE REQUESTED TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONCENIENCE TO EITHER WOULD BE HELD TO A MINIMUM.

CONSTRUCTION CLEARANCE OF 20'-0" VERTICALLY ABOVE THE TOP OF THE RAILROAD RAILS AND 8'-0" HORIZONTALLY FROM THE CENTER OF TRACKS SHALL BE MAINTAINED AT ALL TIMES.

ITEM 506 Static Load Test as per Plan: Prior to installation of any piles, the contractor shall conduct a static load test on one of the initially installed pier piles, or on a pile installed near a pier location. The installed length of the pile to be load tested shall not be more than the plan estimated pay length.

REFERENCE SHALL BE MADE TO THE FOLLOWING:

STANDARD DRAWINGS:

AS-1-81	DATED 11-27-81
BR-1	DATED 5-29-79
SD-1-69	DATED 6-12-69
RB-1-55	DATED 2-2-59

SUPPLEMENTAL SPECIFICATIONS:

836	DATED 11-12-85
824	DATED 10-8-82
845	DATED 2-25-86
953	DATED 8-21-80

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, 1983, INCLUDING THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:
DESIGN LOADING: HS 20-44, CASE I AND THE ALTERNATE MILITARY LOADING.

DESIGN STRESSES:

CONCRETE, CLASS S	COMPRESSIVE STRENGTH: 4500 PSI (SUPERSTRUCTURE)
CONCRETE, CLASS C	UNIT STRESS: 1333 PSI (SUBSTRUCTURE)
REINFORCING STEEL	ASTM A615, A616, A617, GRADE 60, MINIMUM YIELD STRENGTH: 60,000 PSI. (SUPERSTRUCTURE) GRADE 60 - UNIT STRESS 24,000 PSI.(SUBSTRUCTURE) SPIRAL REINFORCEMENT MAY BE PLAIN BARS, ASTM A82 OR A615.
STRUCTURAL STEEL	ASTM A36, UNIT STRESS: 20,000 PSI.
DECK PROTECTION METHOD	EPOXY COATED REINFORCING STEEL WITH 3" CONCRETE COVER OF WHICH 1-1/4" IS A LATEX MODIFIED CONCRETE OVERLAY.
BOLTS	1" DIAMETER HIGH STRENGTH STEEL BOLTS CONFORMING TO ASTM A325 UNLESS OTHERWISE NOTED.

ITEM 507 - 12" AND 14" DIAMETER CAST-IN-PLACE REINFORCED CONCRETE PILES, AS PER PLAN:

*PILE WALL THICKNESS: The responsibility of choosing and providing a satisfactory pile wall thickness for this project shall be borne by the Contractor except that the pile wall thickness shall not be less than 0.22 inches. If a pile wall thickness greater than 0.22 inches is necessary to resist the pile installation driving stress, the contractor shall make this determination and shall furnish a pile with an acceptable wall thickness. Monotube piles are not required to comply with the above specified minimum pile wall thickness. If Monotube piles are used, the Contractor is responsible for providing a monotube pile with a wall thickness that will conform to all applicable requirements of 507."

PILE DRIVING CONSTRAINTS: PRIOR TO DRIVING PILES AT THE ABUTMENTS, PIER NO. 1 AND PIER NO. 3, THE SPILL-THRU SLOPE EMBANKMENT SHALL BE CONSTRUCTED UP TO THE LEVEL OF THE SUBGRADE FOR A MINIMUM DISTANCE OF 200 FEET BEHIND THE ABUTMENTS. THE EXCAVATION FOR THE FOOTINGS OF THE ABUTMENTS, PIER NO. 1, PIER NO. 3, AND THE INSTALLATION OF THE PILES SHALL NOT BEGIN UNTIL AFTER THE ABOVE REQUIRED EMBANKMENT HAS BEEN CONSTRUCTED AND THE EMBANKMENT HAS EXPERIENCED A WAITING PERIOD OF 60 DAYS. THE DIRECTOR MAY SHORTEN THE WAITING PERIOD IF THE CONTRACTOR'S FIELD MEASUREMENTS INDICATE THAT 90 PERCENT CONSOLIDATION HAS BEEN ATTAINED.

PILE HAMMER: THE PILE HAMMER USED TO INSTALL THE CAST-IN-PLACE REINFORCED CONCRETE PILES SHALL HAVE A STATE ENERGY RATING OF NOT LESS THAN 18,000 FOOT-POUNDS. THIS REQUIREMENT DOES NOT RELIEVE THE CONTRACTOR FROM 108.05 WHICH STATES THAT THE CONTRACTOR IS TO PROVIDE SUFFICIENT EQUIPMENT FOR PROSECUTING THE REQUIRED WORK. REFER TO "ODOT'S MANUAL OF PROCEDURES FOR STRUCTURES" TO OBTAIN THE STATE'S ENERGY RATING.

HAM-75-9.93
HAM-126-13.00

FED. RD DIVISION	STATE	PROJECT	
2	OHIO		

537
787

ESTIMATED QUANTITIES

	ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	PIERS	ABUT.	GEN.	AS BUILT
	503	Lump	Sum	Cofferdams, cribs and sheeting				Lump	
△	503	459	Cu. Yd.	Unclassified excavation		245	214		
△	505	Lump	Sum	Pile Driving Equipment Mobilization				Lump	
	506	Lump	Sum	Static Load Test, As per plan		Lump			
△	507	1790	Lin. Ft.	12" cast-in-place, reinforced concrete piles (as per plan)		840	950		
△	507	2085	Lin. Ft.	14" cast-in-place, reinforced concrete piles (as per plan)		2085			
△	509	44,357	Lb.	Reinforcing steel, Grade 60.	—	35696	8661		
△	511	237	Cu. Yd.	Class S concrete, superstructure	237				
	511	78	Cu. Yd.	Class C concrete, abutments above footing			78		
△	511	135	Cu. Yd.	Class C concrete, piers above footing		135			
△	511	133	Cu. Yd.	Class C concrete, footings		75	58		
△	511*	237	Cu. Yd.	Class S concrete, superstructure using shrinkage compensating cement 701.08.	237				
△	513	2624	Each	Welded Stud Shear Connectors	2624				
△	513	202,200	Lb.	Structural steel (AISC Category I) (See Proposal Note)	202,200				
△	514	202,200	Lb.	Field painting of new structural steel, System A.	202,200				
	516	15	Sq. Ft	1/2" Preformed expansion joint filler				15	
△	516	62	Lin. Ft.	Structural Expansion Joint including elastomeric Strip Seals	62				
	518	55	Sq. Yd.	Porous backfill			55		
	518	48	Lin. Ft.	6", perforated, helical, corrugated steel pipe, 707.01			48		
	518	116	Lin. Ft.	6", non perforated, helical, corrugated steel pipe, including specials, 707.01			116		
△	523	6	Hour	Dynamic Load Test.				6	
△	601	408	Sq. Yd.	Crushed aggregate slope protection				408	
	601	393	Sq. Yd.	Concrete slope protection				393	
△	824	69,770	Lbs.	Epoxy-Coated Reinforcing Steel, Grade 60	58473		2297		
△	845	739	Sq. Yd.	Latex Modified Concrete Overlay (1 1/4" Thick) (See proposal Note).	739				
△	Special	656	Sq. Yd.	Sealing of Concrete Surfaces (See Proposal Note)	491	144	35		

Computed by SJC Date 5-9, 1971 Quantities Revised by SJA 12-16-85
Checked by LRP Date 5-10, 1971 Revisions Checked by BJS 2-13-86

△ * Alternate Bid Item.

SEALING OF CONCRETE SURFACES: THE FOLLOWING CONCRETE AREAS ARE TO BE SEALED PER PROPOSAL NOTE:
SUPERSTRUCTURE PARAPETS. SEE SHEET 6/9.
COLUMNS OR STEM OF PIER 1 & 2. SEE SHEET 5/9 & 5A/9
WINGWALL PARAPETS. SEE SHEET 4/9
SUBSTRUCTURE REINFORCING BARS NOT REVISED BY BALKE (△)
SHALL HAVE A MINIMUM LAP OF 30 BAR DIAMETERS.

2/9

VOGT, IVERS & ASSOCIATES, INC.
ENGINEERS — ARCHITECTS — PLANNERS

GENERAL NOTES & ESTIMATED QUANTITIES
BRIDGE NO HAM-126-RAMP C
RAMP C OVER
EXISTING ANTHONY WAYNE & CONRAIL
HAMILTON COUNTY
STA. 37+15.73 to STA. 39+70.44

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.K.	D.W.M	—	D.W.S		5-14-71	△ BALKE July 21, 86

CALC. BY / DATE	HAM-75-9.93 HAM-126-13.00	OHIO	537A 787
CHKD. BY / DATE		FHWA REGION 5	

GENERAL NOTES
PLAN REVISIONS BY BALKE ENGINEERS

REVISIONS WERE MADE TO SUBSTRUCTURE DRAWINGS TO INCORPORATE THE FOLLOWING:

- o REVISE PARAPETS TO STANDARD SAFETY PARAPET SHAPE.
- o PROVIDE EPOXY-COATED REINFORCEMENT IN CORROSION-PRONE CONCRETE AREAS.
- o SEAL CONCRETE SURFACES OF PIER COLUMNS *AND PARAPETS.*
- o NUMBER PILES AND ADD DETAIL NOTES.
- o REVISE ABUTMENTS TO RECEIVE FULL WIDTH APPROACH SLAB PER AS-1-81.
- o REPLACE SLIDING PLATE EXPANSION JOINTS WITH STRIP SEAL JOINTS.
- o LENGTHEN PIER COLUMN TO FOOTING DOWELS AS REQUIRED BY AASHTO.

AT THE REQUEST OF THE OHIO DEPARTMENT OF TRANSPORTATION, ALL SUBSTRUCTURE REINFORCEMENT IS TO BE GRADE 60.

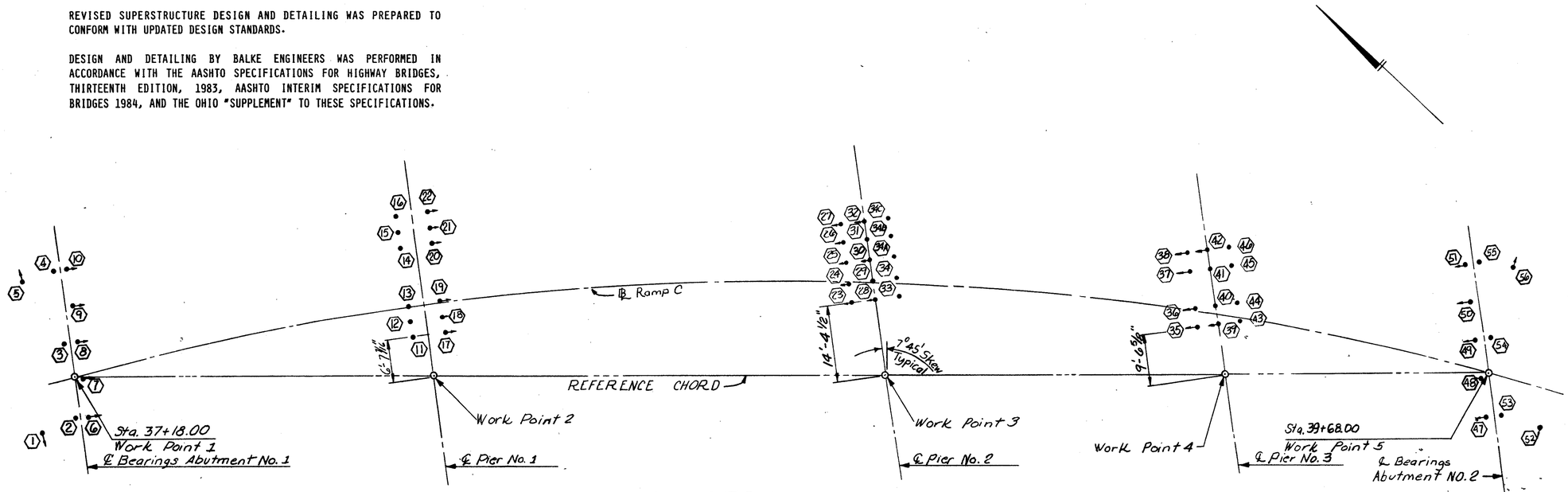
REVISIONS MADE BY BALKE ENGINEERS ARE DENOTED BY (Δ) SYMBOL.

OTHER THAN NOTED REVISIONS, SUBSTRUCTURES ARE THE DESIGN AND DETAILING OF VOGT, IVERS, AND ASSOCIATES, INC.

ANALYSIS OF THE ORIGINAL SUPERSTRUCTURE DESIGN HAS BEEN COMPARED TO THE REVISED SUPERSTRUCTURE DESIGN TO ASSURE THAT LOADINGS HAVE NOT INCREASED ON SUBSTRUCTURES PROVIDED BY VOGT, IVERS AND ASSOCIATES, INC. DESIGN OF THESE SUBSTRUCTURES REMAINS THE RESPONSIBILITY OF VOGT, IVERS, AND ASSOCIATES.

REVISED SUPERSTRUCTURE DESIGN AND DETAILING WAS PREPARED TO CONFORM WITH UPDATED DESIGN STANDARDS.

DESIGN AND DETAILING BY BALKE ENGINEERS WAS PERFORMED IN ACCORDANCE WITH THE AASHTO SPECIFICATIONS FOR HIGHWAY BRIDGES, THIRTEENTH EDITION, 1983, AASHTO INTERIM SPECIFICATIONS FOR BRIDGES 1984, AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.



PILE LAYOUT PLAN

△ NOTES

1. For exact location of Piles refer to Detail Drawings.
2. Pier 1 piles and all Abutment piles are 12" dia. cast-in-place reinforced concrete piles. Pier 2 and 3 piles are 14" dia. cast-in-place reinforced concrete piles.

LEGEND △

⟷ = Pile Battered in Direction of Arrow.

⬡ = Pile Number

BALKE ENGINEERS 7762 READING ROAD CINCINNATI, OHIO 45237	2A/9

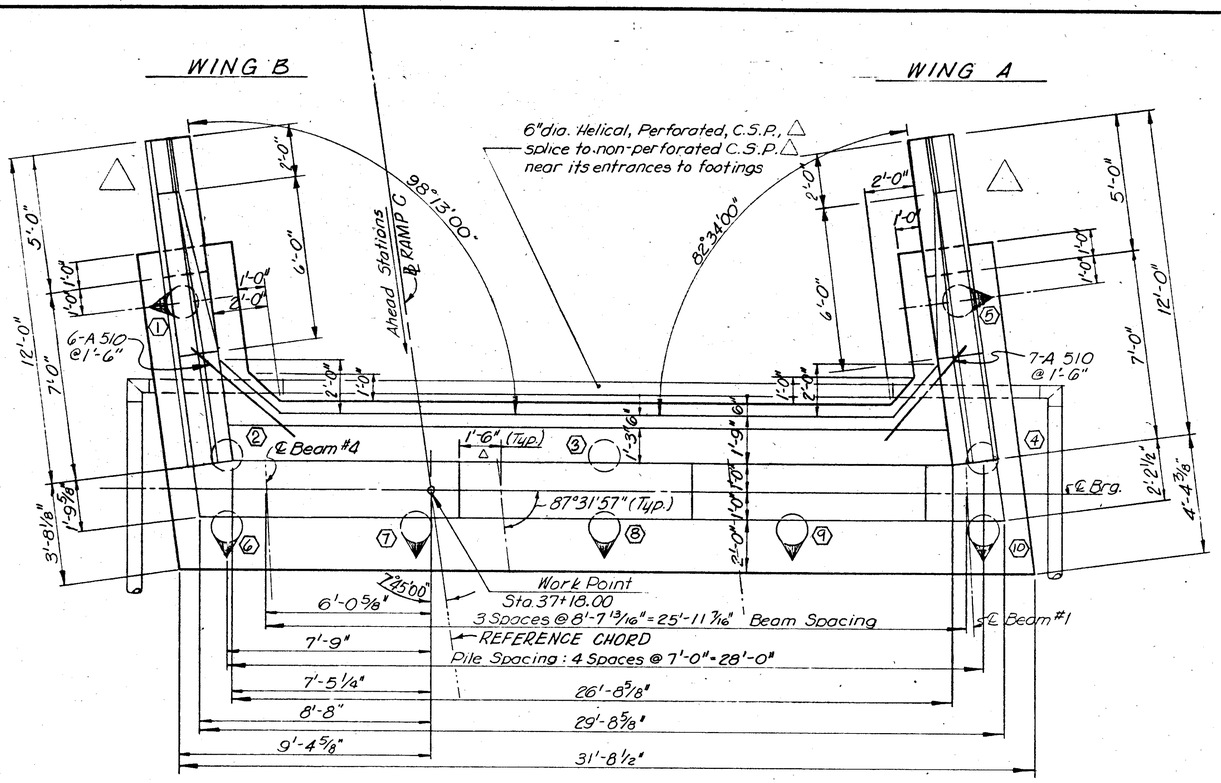
GENERAL NOTES & PILE LAYOUT PLAN
BRIDGE NO. HAM-126-RAMP C
RAMP C OVER
EXISTING ANTHONY WAYNE & CONRAIL
HAMILTON COUNTY
STA. 37+15.73
STA. 39+70.44

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
——	ALH	ADS	S.A.	CRS 3/86	BALKE △ 3/86 6/86

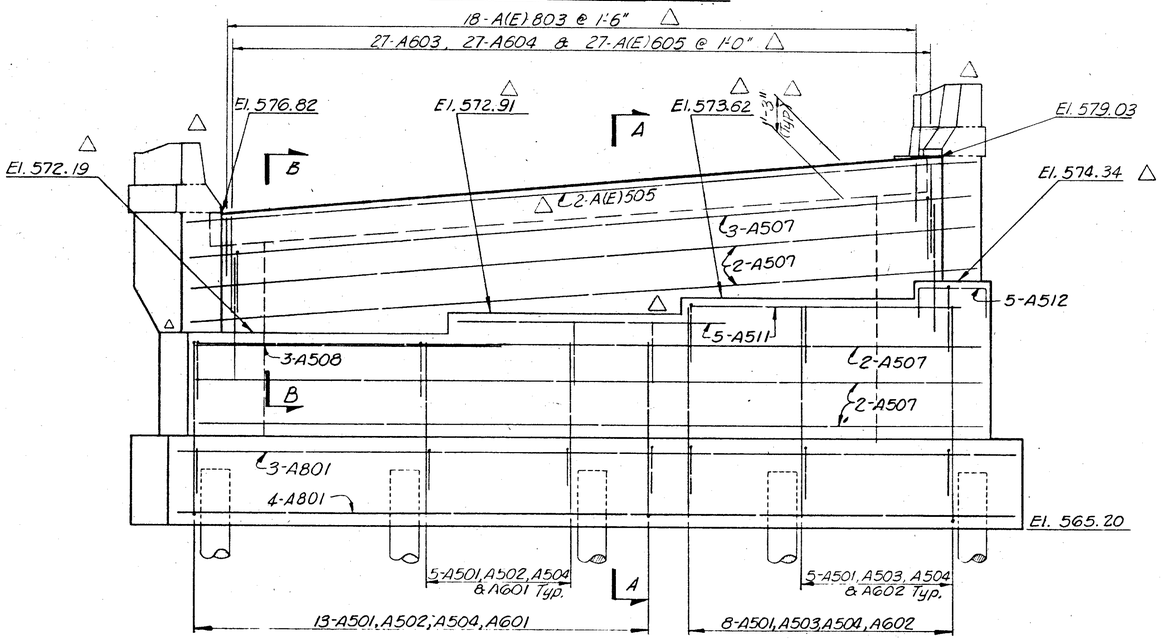
HAM-75 - 9.93
HAM-126-13.00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

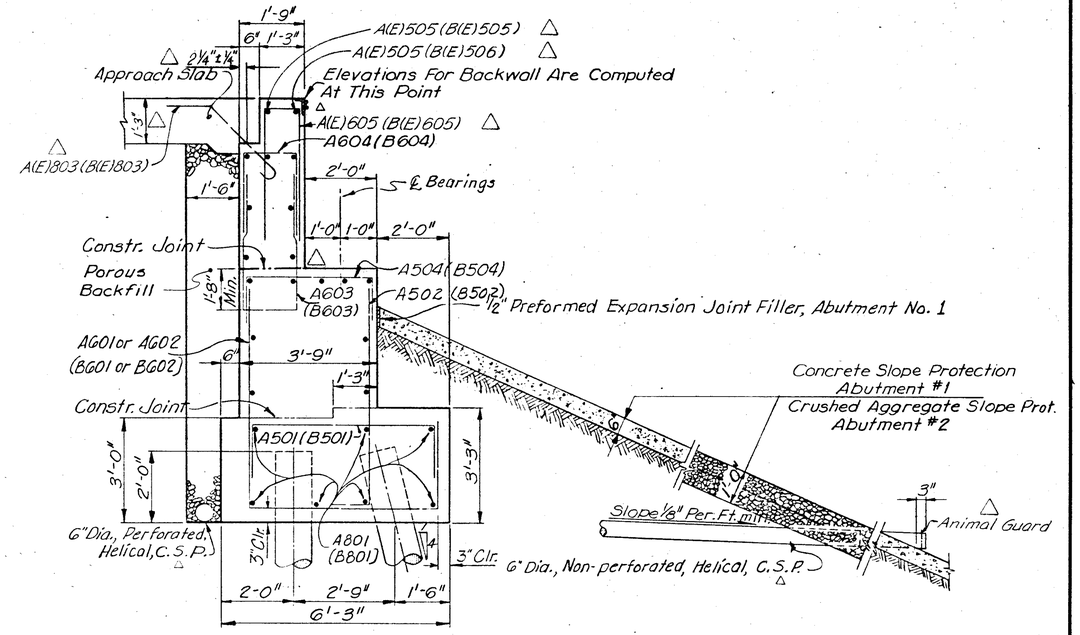
536
787



PLAN



ELEVATION



SECTION A-A

NOTES:

Bar marks with prefix "A" are for abutment no. 1 and with prefix. "B" are for abutment no. 2.

△ "(E)" denotes epoxy coated reinforcing bar.

For Wing Wall Details, See Sheet 4/9

△ ⬡ = Pile Number

POROUS BACKFILL, thickness as shown, in sections, shall extend up to the plane of the subgrade & laterally to the ends of the wingwalls.

3/9

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

ABUTMENT NO. 1
BRIDGE NO. HAM-126-RAMP C
RAMP C OVER
EXISTING ANTHONY WAYNE & CONRAIL

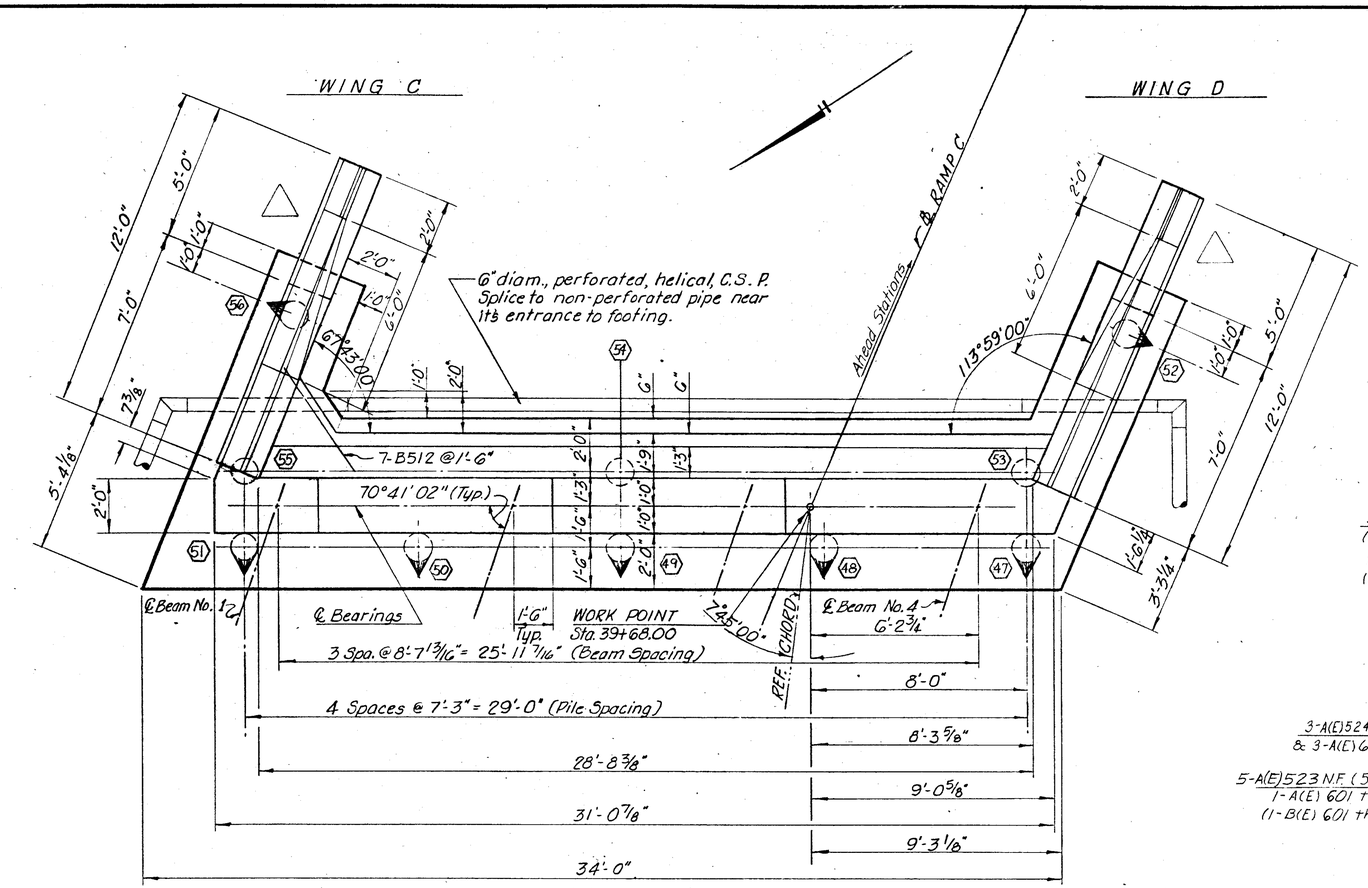
HAMILTON COUNTY
STA. 37+15.73 to STA. 39+70.44

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.W.S	D.W.S.	T.D.S.	S.S.C.		5-14-71	△ BALLE ENG. 12/85

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

339
187

HAM-75-9.93
HAM-126-13.00



NOTES

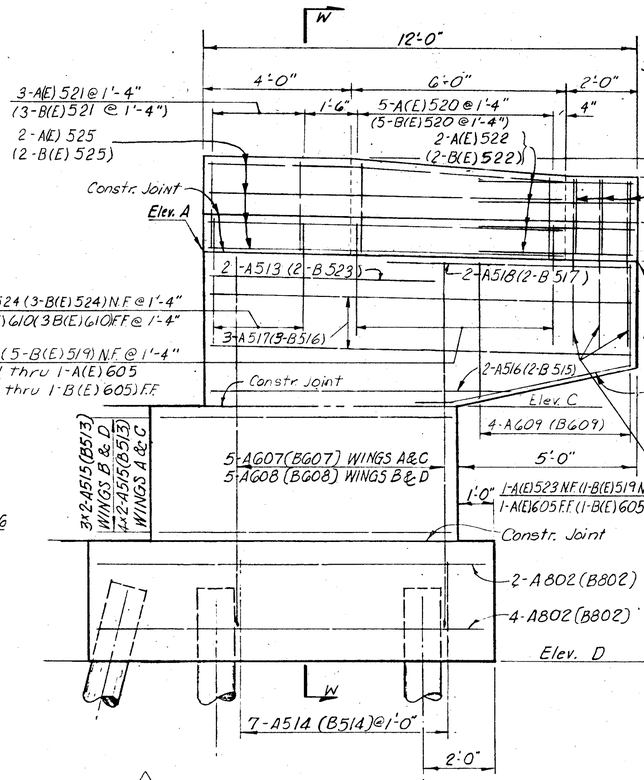
For parapet details and notes not shown, see Std. Dwg. BR-1.

"(E)" denotes epoxy coated reinforcing bar.

F.F. = Far Face ; N.F. = Near Face

⬡ = Pile number

Bar marks with prefix "A are for abutment no. 1 and with prefix "B" are for abutment no. 2.



△ TYPICAL WINGWALL ELEVATION

△ SECTION W-W

WINGWALL ELEVATIONS

LOCATION	Elev. A	Elev. B	Elev. C	Elev. D
WING A	579.03	579.03	574.34	565.20
WING B	576.82	576.82	572.19	565.20
WING C	572.36	571.74	567.60	558.00
WING D	569.56	568.87	565.07	558.00

△

4 / 9

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

ABUTMENT NO. 2
BRIDGE NO. HAM-126-RAMP C
RAMP C OVER
EXISTING ANTHONY WAYNE & CONRAIL

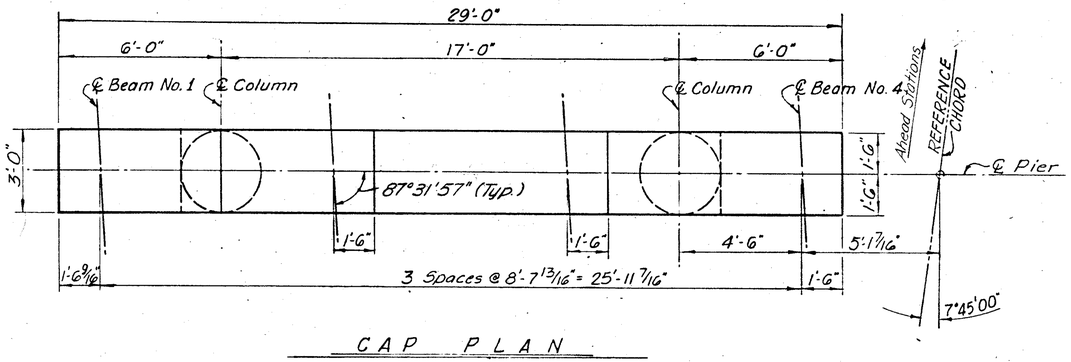
HAMILTON COUNTY
STA. 37+15.73 to STA. 39+70.44

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED
D.W.S.	D.W.S.	D.W.M.	S.S.C.		5-14-71	△ BALCE ENG. 12/85

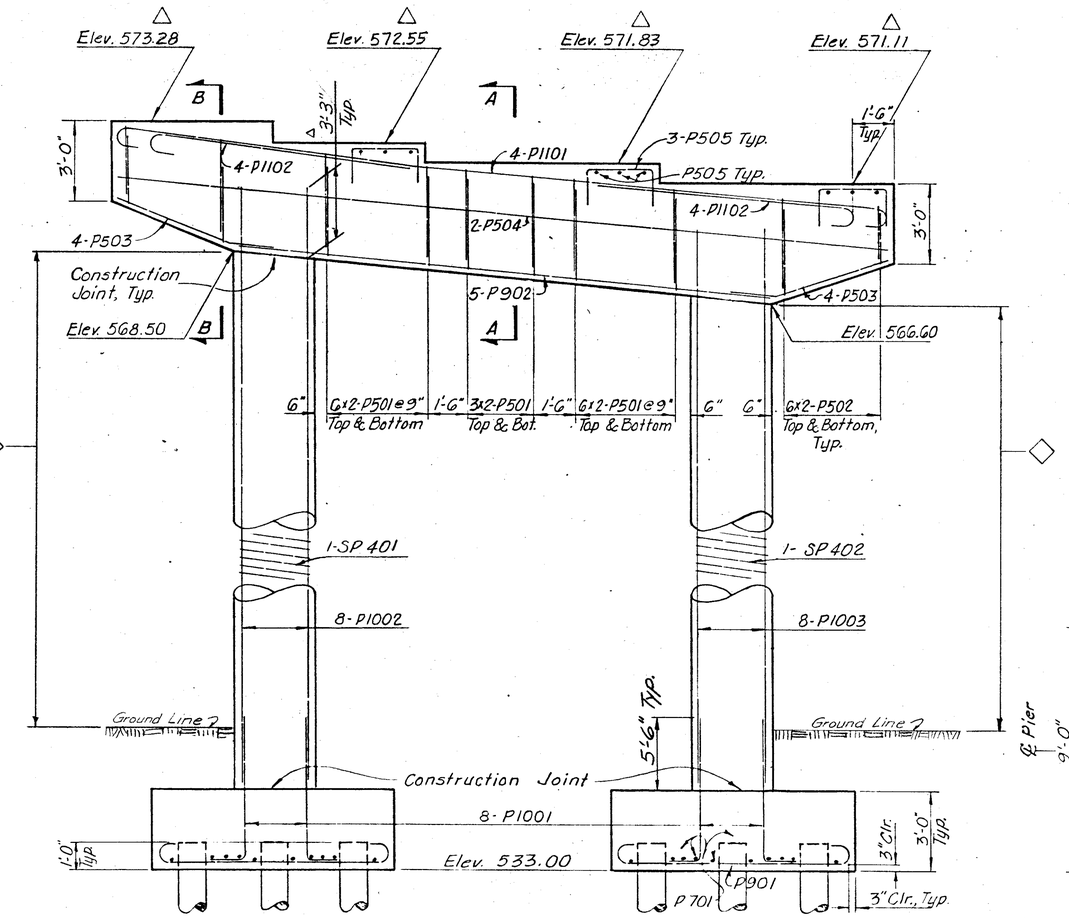
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

540
787

HAM-75-9.93
HAM-126-13.00



CAP PLAN



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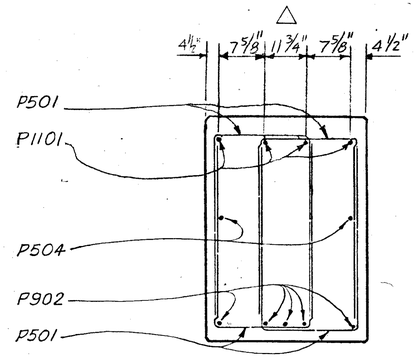
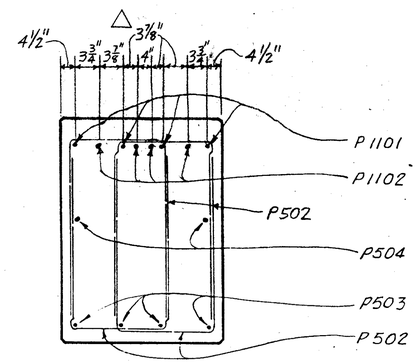
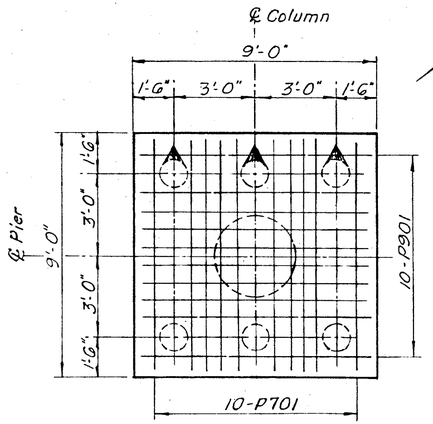


SECTION A~A



SECTION B~B



TYPICAL FOOTING PLAN

△ NOTES:

△ = Pile battered 1:4 in the direction shown.

For Pile Numbering, see Sheet 2A 9

◇ Seal concrete surfaces. (See Proposal Note)

5 9

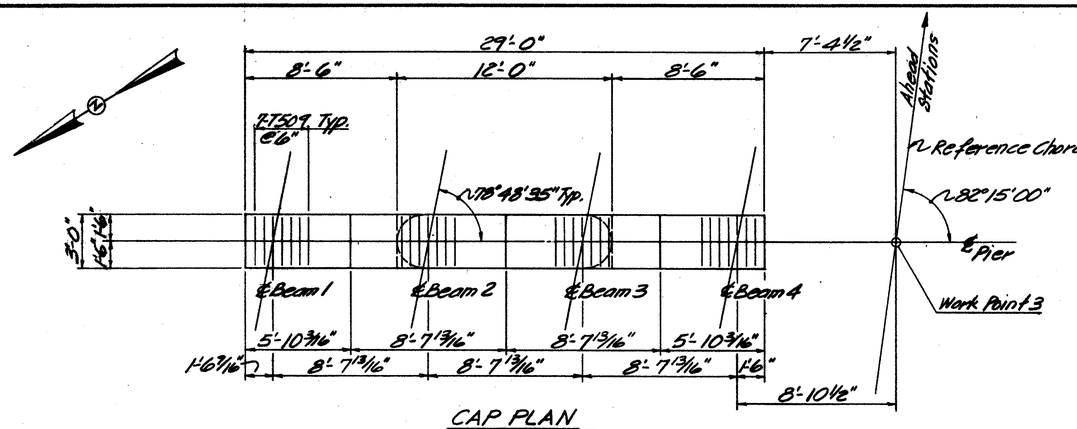
VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

PIER NO. 1
BRIDGE NO. HAM-126-RAMP C
RAMP C OVER
EXISTING ANTHONY WAYNE & CONRAIL

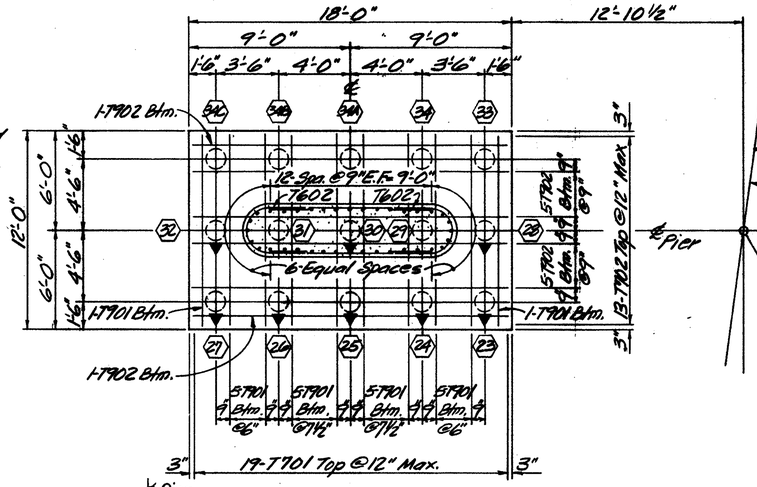
HAMILTON COUNTY
STA. 37+15.73 to
STA. 39+70.44

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.W.S.	D.W.S.	D.W.M.	S.S.C.		5-14-71	△ BALDE ENG. 12/85

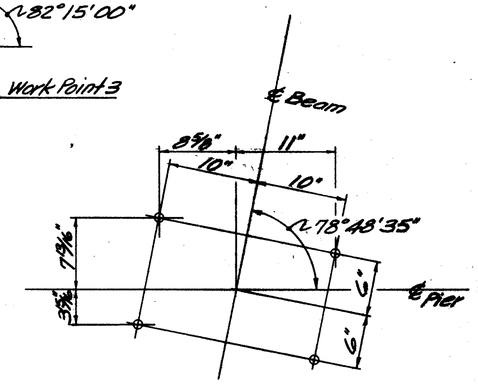
CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO FHWA REGION 5	SHEET 7 OF 7 SHEETS
DATE				
CHKD. BY				
DATE				



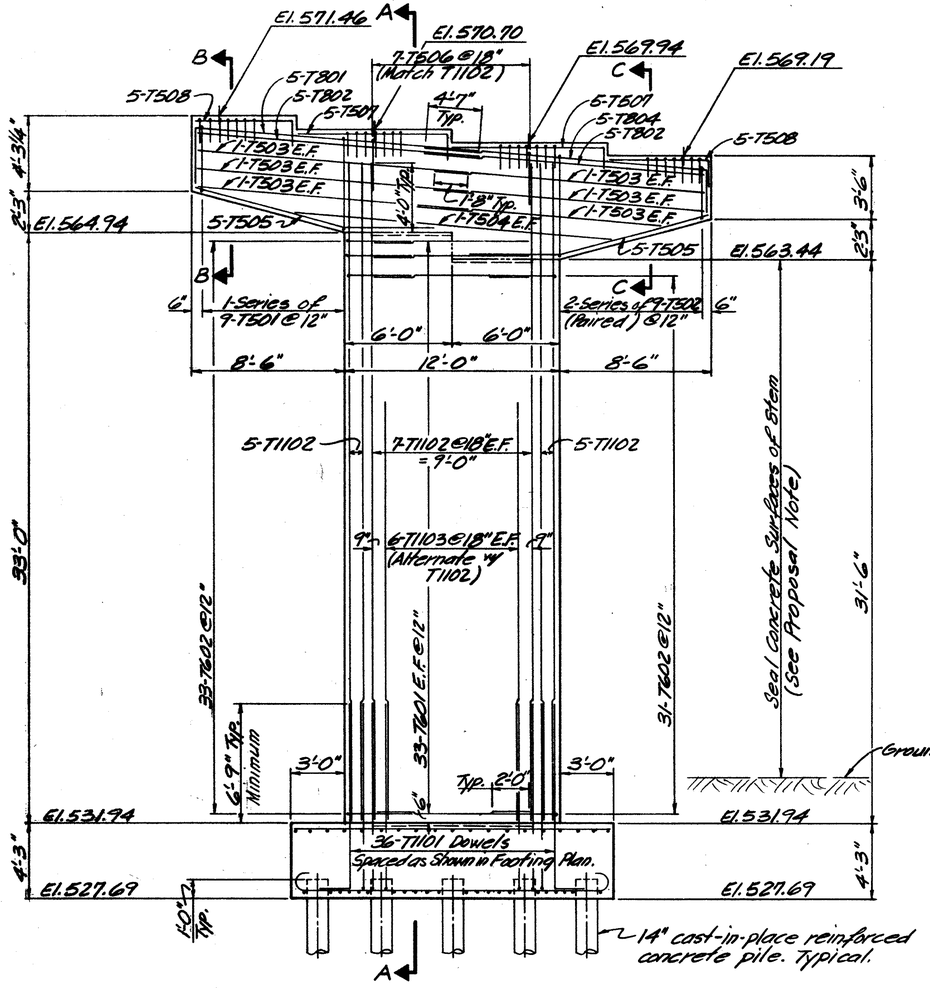
CAP PLAN



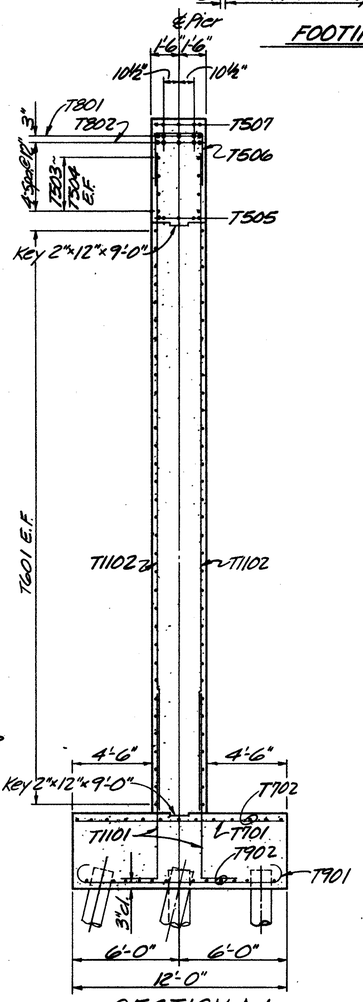
FOOTING PLAN



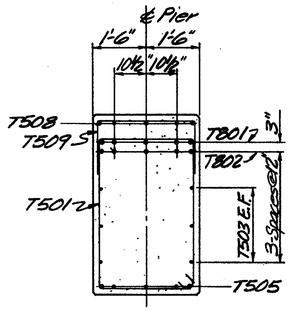
ANCHOR BOLT LAYOUT



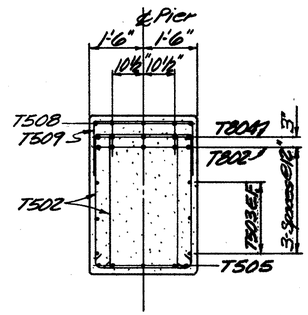
ELEVATION



SECTION A-A



SECTION B-B



SECTION C-C

NOTES:

1. BRIDGE SEAT REINFORCING: Reinforcing steel in the vicinity of the bridge seat shall be accurately placed to avoid interference with the drilling of bearing anchor holes or the pre-setting of bearing anchors.
2. BEARING ANCHORS: At the option of the contractor, bearing anchors (or formed holes), located and supported by templates, may be cast in place.
3. ⬠ Designates Pile battered 1:4 in direction of arrow.
4. ⬡ Designates Pile Number. Note Pile numbers 34A, 34B & 34C used.

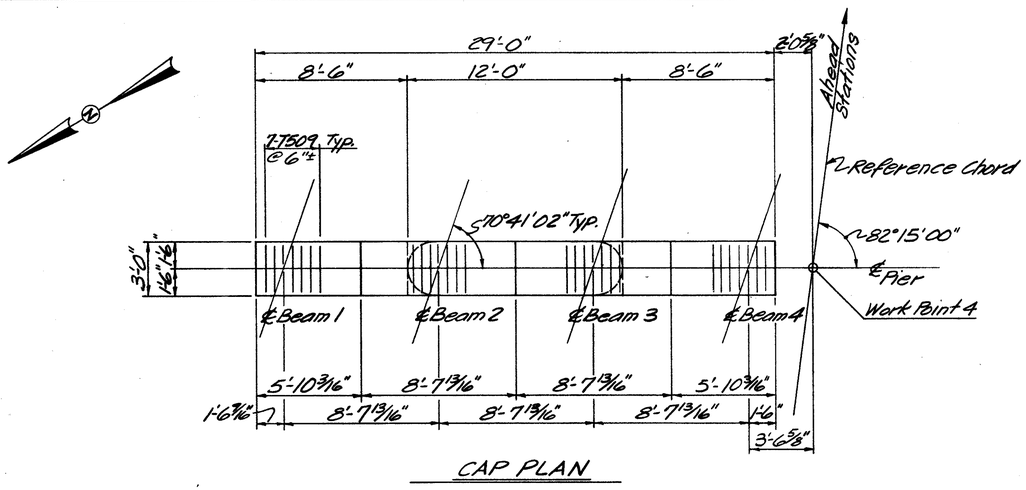
BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

SA 7

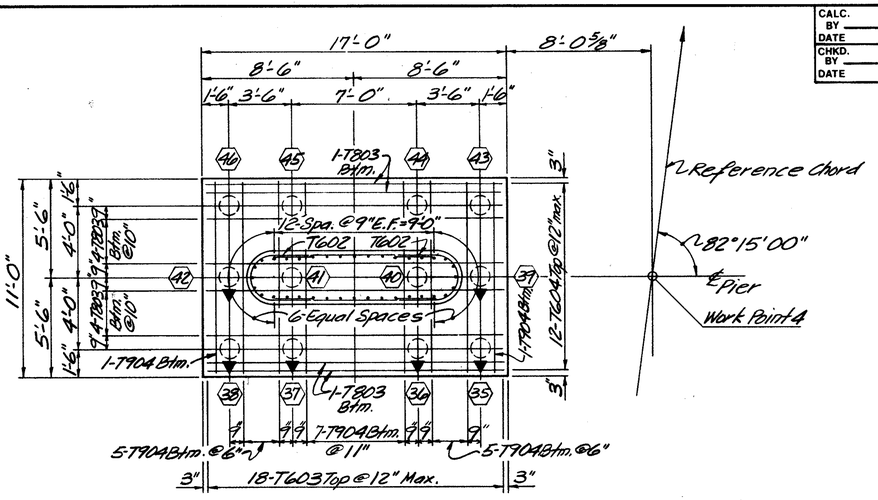
PIER 2
BRIDGE NO. HAM-126-RAMP C
RAMP C over
EXISTING ANTHONY WAYNE & CONRAIL
HAMILTON COUNTY OHIO
STA. 37+15.73 to STA. 37+70.44

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	WJH	~	SJA	CRS 6/86	

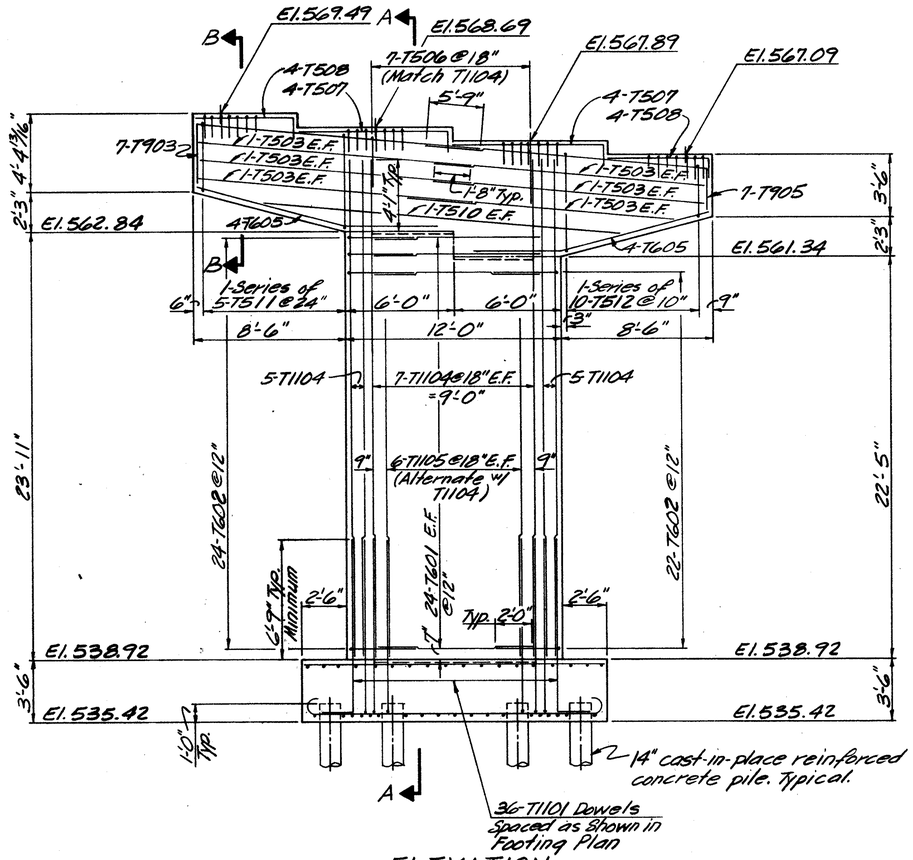
CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO	5408 787
CHKD. BY			FHWA REGION 5	
DATE				



CAP PLAN



FOOTING PLAN



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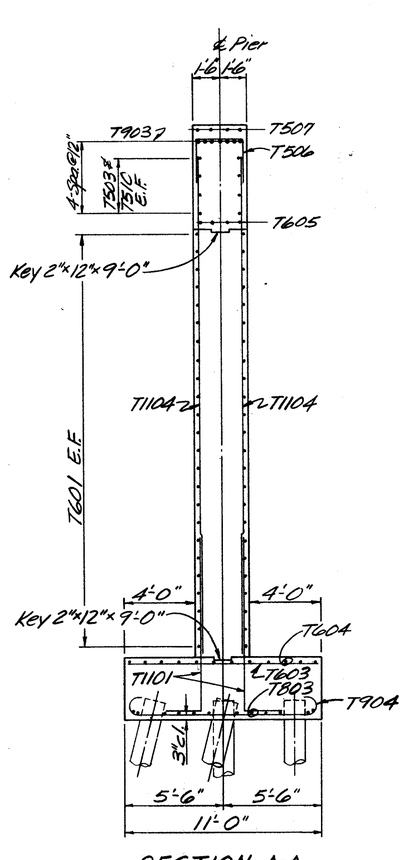
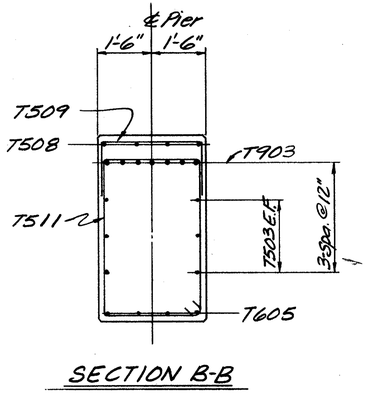


SECTION A-A



SECTION B-B

NOTES:
1. ⬠ Designates Pile battered 1:4 in direction of arrow.
2. ⬡ Designates Pile Number.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

58 9

PIER 3
BRIDGE NO. HAM-126-RAMP C
RAMP C OVER
EXISTING ANTHONY WAYNE & CONRAIL
HAMILTON COUNTY OHIO
STA. 371+15.73 TO STA. 371+70.44

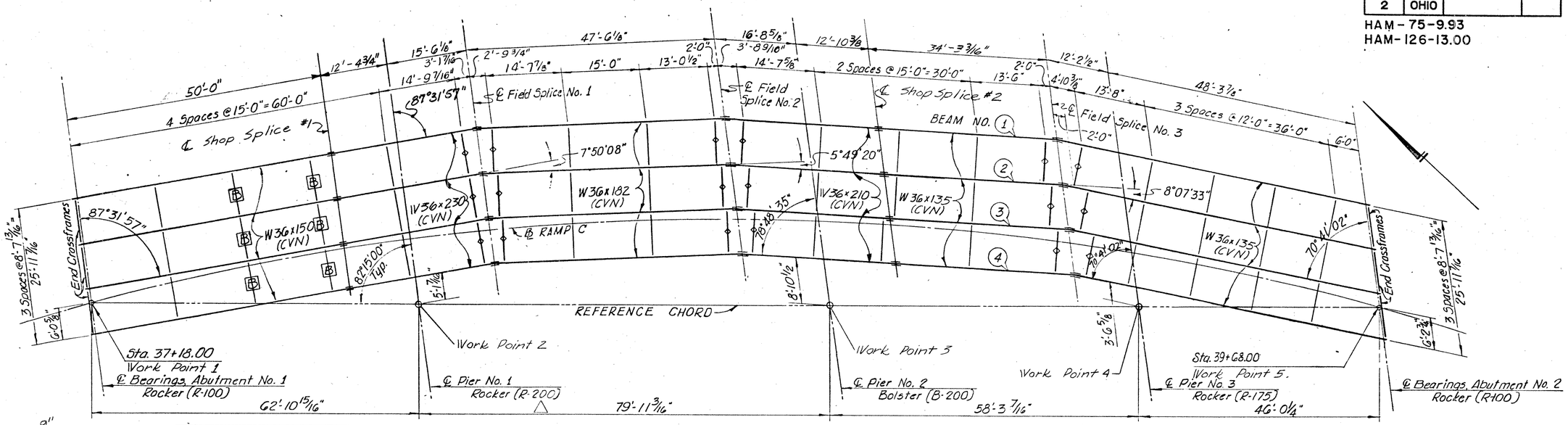
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	WJH	~	SJA	CRS 6/86	

OHIO DOT 1987 FORM 1480B

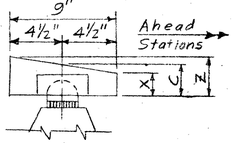
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

541
787

HAM-75-9.93
HAM-126-13.00

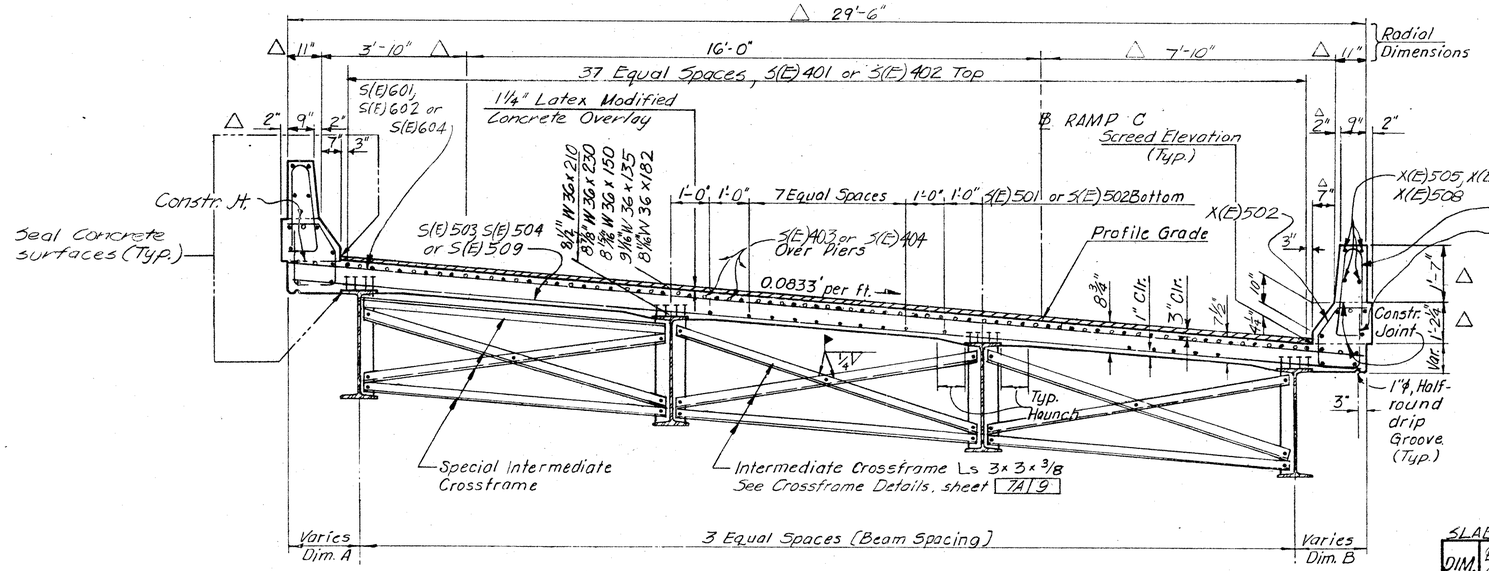


FRAMING PLAN



	C	X	Z
ABUT. 1	2½"	2½"	2½"
PIER 1	3½"	3½"	3½"
PIER 2	3½"	3⅜"	3⅜"
PIER 3	3½"	3 5/16"	3 1/16"
ABUT. 2	2½"	2¼"	2¾"

BEVELED ROCKER OR BOLSTER DETAIL



TRANSVERSE SECTION

NOTES

△ B - Denotes Bolted Crossframe Connection req'd. Alternate welded stiffener may not be used for Crossframe Connections at these locations.

DECK SLAB DEPTH: The distance shown from top of deck slab to top of steel beam is the design dimension. The quantity of deck concrete to be paid for shall be based on this dimension, even though deviation from it may be necessary because the top flange of the beam may not have the exact camber or conformation required to place it parallel to the Finished grade.

STEEL NOTCH TOUGHNESS REQUIREMENT (Charpy V-Notch): Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements as specified in 711.01 of C.M.S.

A HAUNCH WIDTH of 9" shall be used for computing quantity of concrete. However the haunch width may vary between 6" and 12" provided that the slope shall be not more than 1:4 for a haunch less than 9" in width.

—◇— Indicates SPECIAL intermediate crossframe (4-Ls).

For End Crossframe and End Dam details reference is made to standard drawing SD-1-69 sheets 1 & 2 of 4, and Strip Seal Joint, Std. Dwg.

Use of split type extrusion at joint upturns is optional.

SLAB OVERHANG DIMENSIONS

DIM.	℄ Brgs. Abut. 1	½ Point Span 1	℄ Pier 1	½ Point Span 2	℄ Pier 2	½ Point Span 3	℄ Pier 3	½ Point Span 4	℄ Brgs. Abut. 2
A	1'-0"	2'-5⅝"	1'-11⅞"	1'-9⅞"	2'-3⅜"	2'-3⅜"	2'-3⅜"	2'-11⅞"	2'-6"
B	2'-9"	1'-1½"	1'-6⅞"	1'-9⅞"	1'-7½"	1'-11⅛"	2'-4¼"	2'-0⅜"	3'-0¼"

6 | 9

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

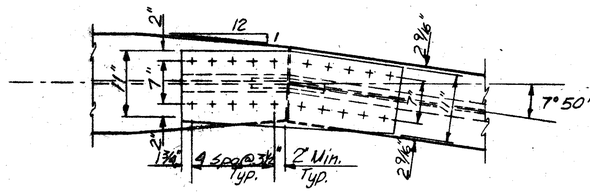
SUPERSTRUCTURE
BRIDGE NO. HAM-126-RAMP C
RAMP C OVER
EXISTING ANTHONY WAYNE & CONRAIL

HAMILTON COUNTY
STA. 37+15.73 to STA. 39+70.44

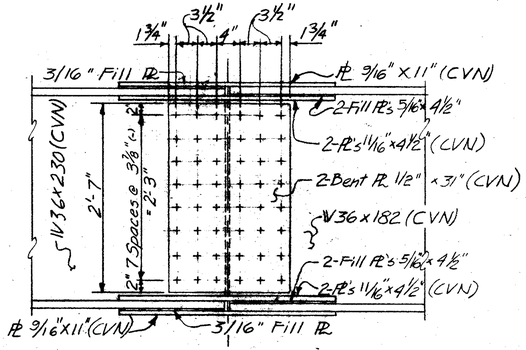
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED
V.K.	V.K.	D.W.M.	D.W.S.		5-14-71	△ E.A.L.R.E. ENG. 12/85

HAM-75-9.93
HAM-126-13.00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

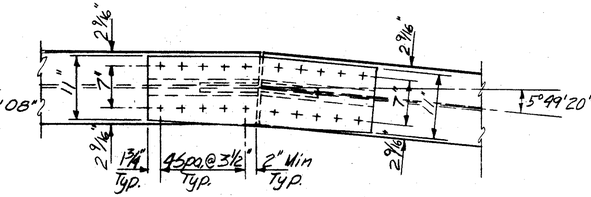


PLAN

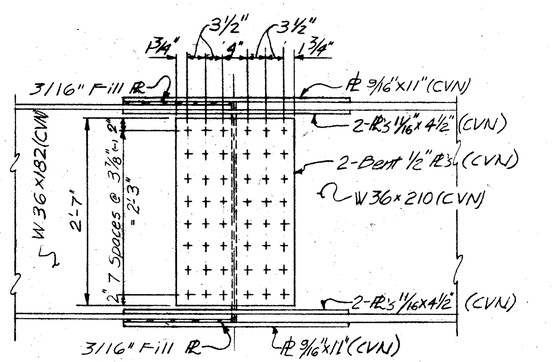


ELEVATION

△ FIELD SPLICE No. 1

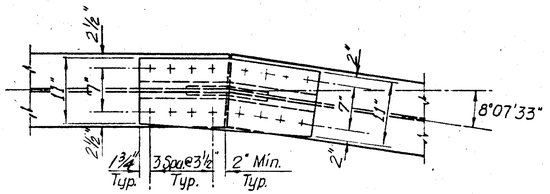


PLAN

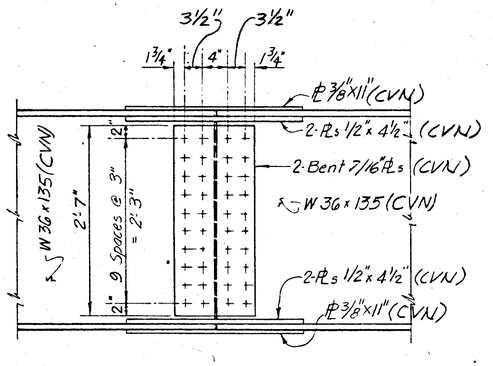


ELEVATION

△ FIELD SPLICE No. 2

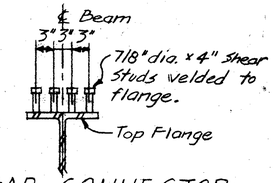


PLAN

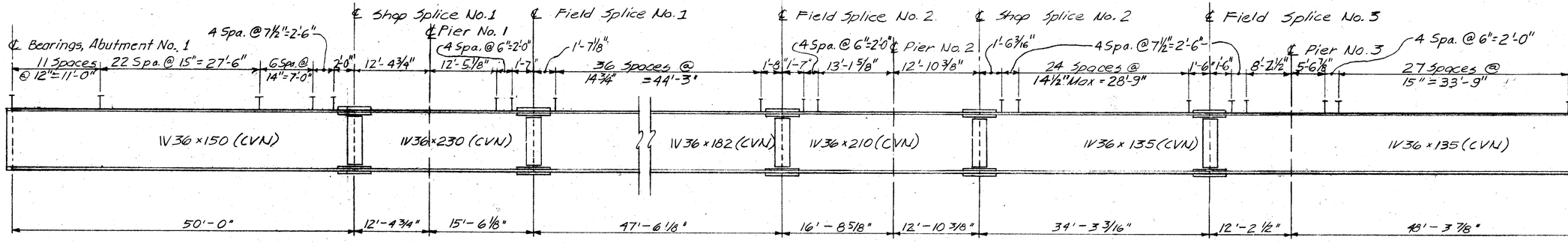


ELEVATION

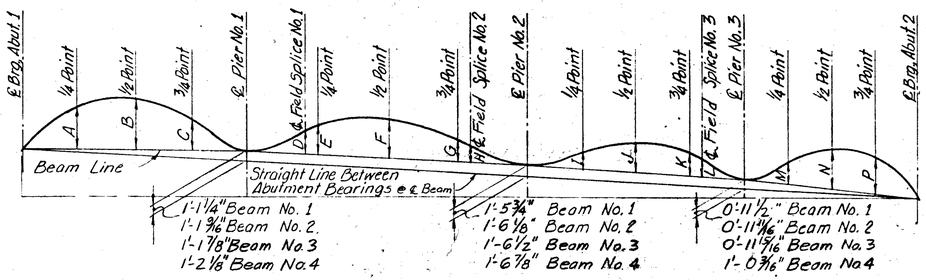
△ FIELD SPLICE No. 3



△ SHEAR CONNECTOR DETAIL



△ TYPICAL BEAM ELEVATION



△ CAMBER DIAGRAM

DEFLECTION & CAMBER

LOCATION →		¼ Point A	½ Point B	¾ Point C	℄ Spl. No. 1 D	¼ Point E	½ Point F	¾ Point G	℄ Spl. No. 2 H	¼ Point I	½ Point J	¾ Point K	℄ Spl. No. 3 L	¼ Point M	½ Point N	¾ Point P
	Deflection due to Weight of Steel		1/16	1/16	0	1/16	3/32	5/32	3/32	3/32	0	0	0	0	1/32	1/16	1/32
△	Deflection due to Remaining Dead Load		11/32	13/32	5/32	7/32	5/16	9/16	3/8	5/16	0	3/32	1/16	1/32	1/8	1/4	7/32
	Adjustment Req'd. for Vertical Curve		15/16	1 1/4	15/16	1 1/4	1 1/2	2	1 1/2	1 11/32	7/8	1 1/8	7/8	3/4	9/16	3/4	9/16
	Adjustment Required for Horiz. Curve	Beam No. 1	-1/16	-9/16	-9/16	3/16	3/16	5/16	7/16	9/16	-5/16	3/8	1/2	11/16	-1/2	-5/8	-1/2
		Beam No. 2-4	-7/16	-13/16	-11/16	1/2	3/8	5/16	-1/16	-9/16	-5/16	3/8	1/2	11/16	-1/2	-9/16	-1/2
△	REQUIRED SHOP CAMBER	Beam No. 1	1 9/32	1 5/32	17/32	1 23/32	2 3/32	3 1/32	2 13/32	2 5/16	9/16	1 19/32	1 7/16	1 15/32	7/32	7/16	5/16
△		Beam No. 2-4	29/32	29/32	13/32	2 1/32	2 9/32	3 1/32	2 13/32	2 5/16	9/16	1 19/32	1 7/16	1 15/32	7/32	7/16	5/16

STEEL NOTCH TOUGHNESS REQUIREMENT (CHARPY V-NOTCH)

Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements as specified in 711.01 of C.M.S.

HIGH STRENGTH BOLTS shall be 1" diameter A325 unless otherwise noted.

FOR DETAILS & NOTES not shown reference is made to Std. Dwg. SD-1-69, sheet 4.

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VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

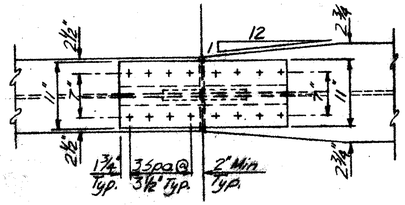
SUPERSTRUCTURE DETAILS

BRIDGE NO. HAM-126-RAMP C
RAMP C OVER
EXISTING ANTHONY WAYNE & CONRAIL

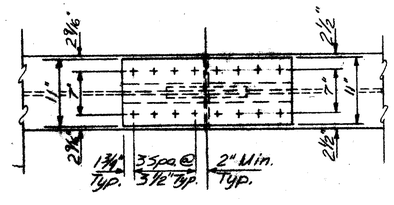
HAMILTON COUNTY
STA. 37+15.73 to STA. 39+70.44

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED
V.K.	V.K.	D.W.M.	D.W.S.	[illegible]	5-14-71	△ BALYE ENG. 12/85

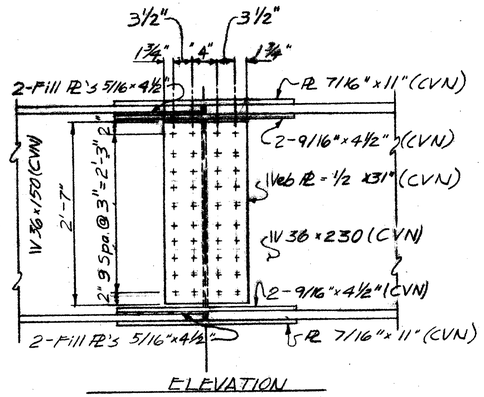
CALC. BY		HAM-75-8.93 HAM-126-13.00	OHIO FHWA REGION 5	542A 787
CHKD. BY				
DATE				



PLAN

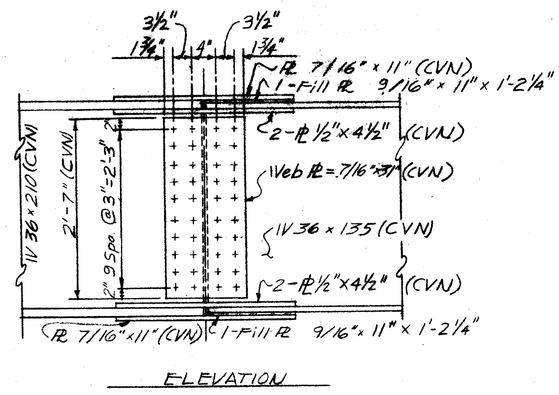


PLAN



ELEVATION

SHOP SPLICE NO. 1



ELEVATION

SHOP SPLICE NO. 2

Abutment No. 1
Joint Setting Table

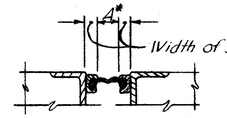
Temp °F	0°	20°	40°	60°	80°	100°
Dim. A*	3 3/16"	2 15/16"	2 3/4"	2 1/2"	2 1/4"	2 1/16"

Strip Seal Gland to be Watson-Bowman S-400 or D.S. Brown SS-400

Abutment No. 2
Joint Setting Table

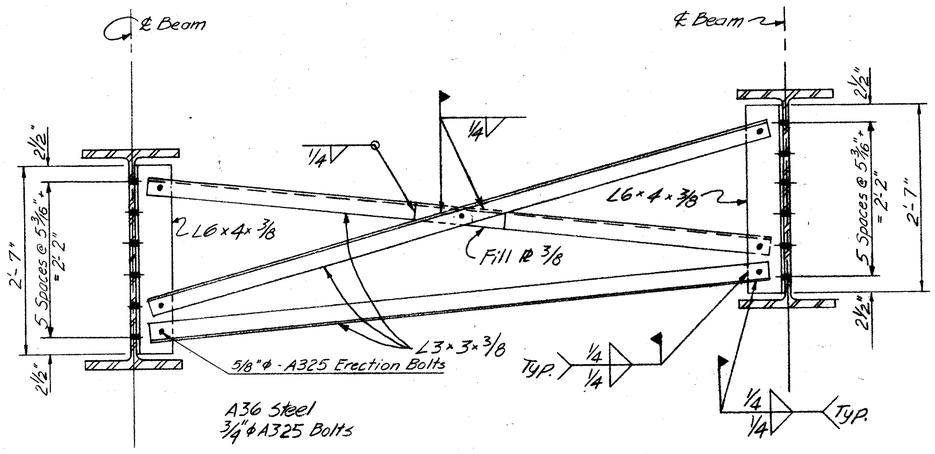
Temp °F	0°	20°	40°	60°	80°	100°
Dim. A*	2 15/16"	2 13/16"	2 5/8"	2 1/2"	2 3/8"	2 3/16"

Strip Seal Gland to be Watson-Bowman S-400 or D.S. Brown SS-400

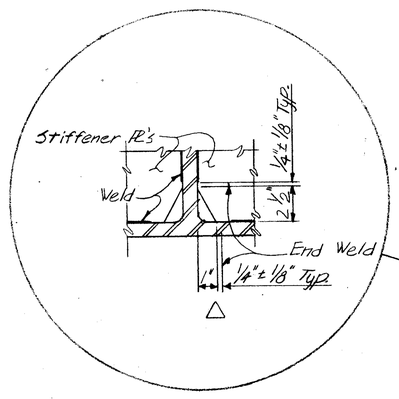


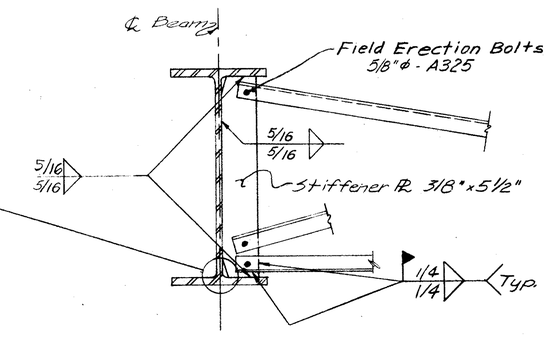
PARTIAL SECTION THROUGH EXPANSION JOINT SHOWING DIMENSION A

For expansion joint details not shown see Strip Seal Details, Sheets 488A, B, C & D.



△ BOLTED INTERMEDIATE CROSSFRAME
SEE ALTERNATE DETAIL





ALTERNATE CROSSFRAME CONNECTION DETAIL

As an alternate to the bolted crossframe connection detail the fabricator may provide the welded connection shown, but only in locations specified per framing plan, sheet 79.

ERECTION BOLTS: Hole diameter in the crossframes and connection angles shall be respectively 1/16" and 1/4" larger than the diameter of the erection bolts. Unless replaced by permanent high strength bolts, erection bolts shall remain in place. Lock washers shall be furnished for other than fully torqued high strength erection bolts. Bolts shall be furnished as part of 513 In lieu of erection bolts and at the option of the Contractor, alternative means of temporary bracing may be used subject to the approval of the Director (501.06).

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BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

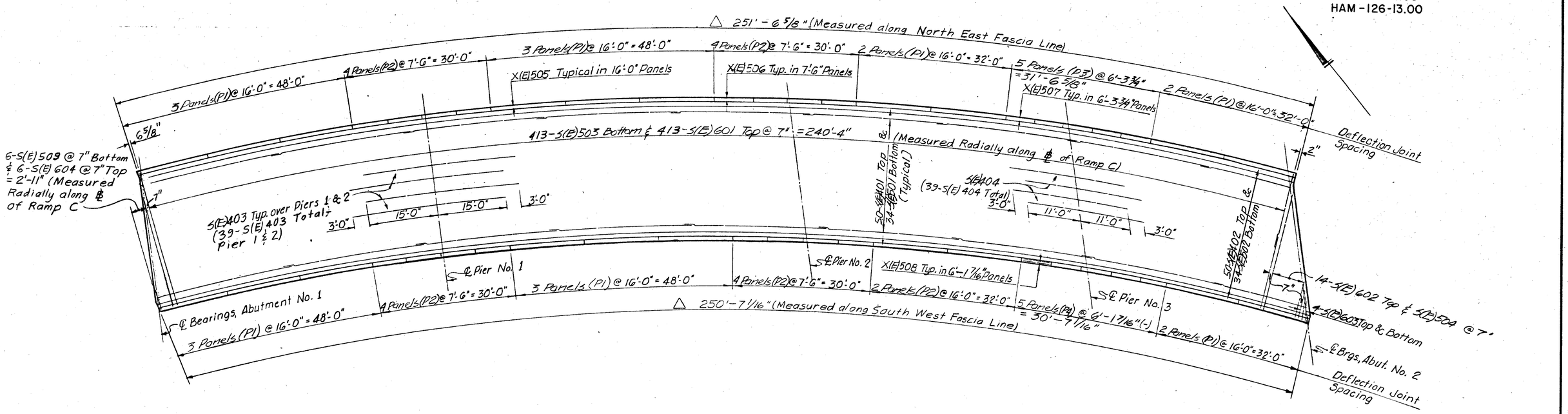
SUPERSTRUCTURE DETAILS
BRIDGE NO. HAM-126-RAMP C
RAMP C OVER
EXISTING AUTHOUP WAYNE & CONRAIL
HAMILTON COUNTY
STA. 37+15.73 to STA. 39+70.99

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
SJA	ADS	—	TMB	CRS 3/86	

OHIO BLUE PRINT 140053

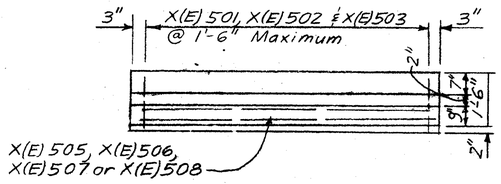
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

HAM - 75 - 9.93
HAM - 126 - 13.00



DECK PLAN

	Parapet Panel Reinforcement (Per Panel)	No. of Panels
P1	12-X(E)501, 12-X(E)502 & 12-X(E)503 & 4-S(E)505	20
P2	6-X(E)501, 6-X(E)502 & 6-X(E)503 & 4-S(E)506	16
P3	5-X(E)501, 5-X(E)502 & 5-X(E)503 & 4-S(E)507	5
P4	5-X(E)501, 5-X(E)502 & 5-X(E)503 & 4-S(E)508	5



TYPICAL PANEL DETAIL

SCREED ELEVATIONS *

	LOCATION	STATION	N. CURB	STATION	S. CURB
SPAN 1	℄ Brgs, Abut. No. 1	37+20.35	578.92	37+17.06	576.72
	1/4 Point	37+35.37	578.89	37+32.93	576.71
	1/2	37+50.39	578.80	37+48.80	576.62
	3/4	37+65.40	578.62	37+64.66	576.43
SPAN 2	℄ Pier No. 1	37+80.42	578.42	37+80.53	576.21
	1/4 Point	37+99.54	578.12	38+00.74	575.90
	1/2	38+18.67	577.76	38+20.95	575.50
	3/4	38+37.79	577.25	38+41.11	574.96
SPAN 3	℄ Pier No. 2	38+56.91	576.66	38+61.37	574.32
	1/4 Point	38+71.15	576.20	38+76.46	573.81
	1/2	38+85.40	575.70	38+91.56	573.26
	3/4	38+99.64	575.14	39+06.65	572.65
SPAN 4	℄ Pier No. 3	39+13.88	574.55	39+21.74	572.00
	1/4 Point	39+25.47	574.04	39+34.08	571.44
	1/2	39+37.07	573.51	39+46.42	570.84
	3/4	39+48.67	572.93	39+58.75	570.21
	℄ Brgs, Abut. No. 2	39+60.27	572.31	39+71.09	569.52

* Top of P.C.C.

NOTES:

PLACE TRANSVERSE REINFORCING STEEL radially measured along ℄ of bridge.

PREFORMED EXPANSION JOINT FILLER in the railing parapet deflection joints may be 1/4" gray sponge rubber or 1/4" gray cellular polyvinyl chloride (P.V.C.) sponge.

△ WELDED ATTACHMENT of supports for concrete deck finishing machine may be made to areas of the fascia stringer flanges designated "Compression." Attachments shall not be made to areas designated "Tension." Fillet welds to compression flanges shall be not closer than 1" from edge of flange, be not more than 2" long and be not smaller than the minimum size required by AASHTO.

△ "(E)" denotes epoxy coated reinforcing bar.

△ The screed elevations shown have been obtained by adding the dead load deflection due to the weight of: concrete slab, latex modified concrete overlay, bridge parapet, future wearing surface, and steel beams to the required final elevations.

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VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

DECK PLAN
BRIDGE NO. HAM - 126 - RAMP C
RAMP C OVER
EXISTING ANTHONY WAYNE & CONRAIL
HAMILTON COUNTY
STA. 37+15.73 to STA. 39+70.44

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED
V.K.	V.K.	D.W.M.	D.W.S.	[illegible]	5-14-71	△ BALUE ENG. 12/85

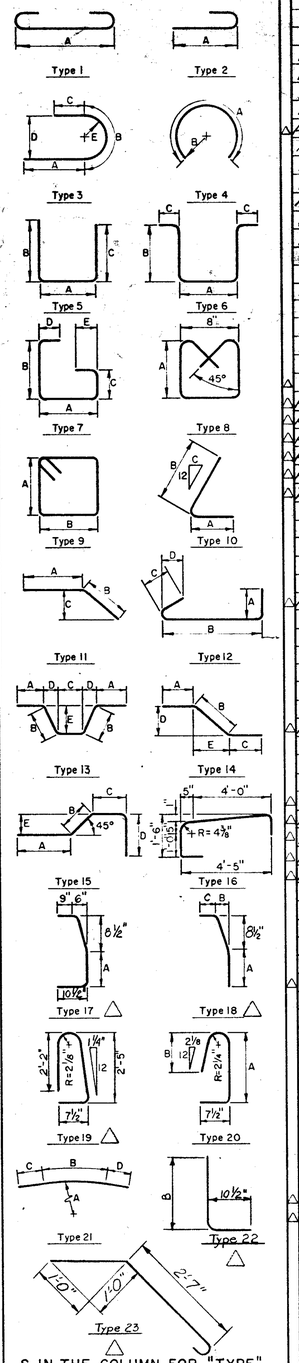
REINFORCING STEEL LIST

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

344 787

HAM- 75 - 9 93
HAM-126-13.00

BENDING DIAGRAM



S IN THE COLUMN FOR "TYPE" INDICATES STRAIGHT BARS.

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
		ABUTMENT No.1							
A501	21	8-3	181	5	5-4	1-7	1-7		
A502	13	6-11	94	5	6-5	0-7½	0		
A503	8	8-5	70	5	7-11	0-7½	0		
A504	21	7-10	172	5	3-5	2-4	2-4		
△A(E)505	2	29-6	62	5					
A506	Not Used								
A507	13	29-4	398	5					
A508	3	11-6	36	5					
A509	Not Used								
A510	13	5-0	68	5					
A511	10	10-0	104	5					
A512	5	5-0	26	5	2-0	1-7½	1-7½		
A513	4	5-8	24	5					
A514	14	10-5	152	9	2-0	3-0			
A515	14	8-6	124	5					
A516	4	9-0	38	5					
A517	12	11-8	146	5					
A518	4	7-3	30	5					
△A519	4	6-8	28	11	5-2	1-7	0-6		
△A(E)520	16	2-8	45	2	2-1				
△A(E)521	6	5-3	33	19					
△A(E)522	16	4-4	72	5					
△A(E)523	16	4-7	76	5					
△A(E)524	6	3-0	19	5					
△A(E)525	16	9-10	164	5					
AG01	13	14-0	273	5	5-4	2-7	6-5		
AG02	8	15-6	186	5	5-4	2-7	7-11		
AG03	27	10-5	422	5	1-5	4-8	4-8		
AG04	27	7-1	287	5	1-5	3-0	3-0		
△A(E)605	27	7-7	308	5	0-11	3-6	3-6		
A606	Not Used								
AG07	5	26-4	198	5	1-2	12-9	12-9		
AG08	5	21-10	164	5	1-2	10-6	10-6		
AG09	8	6-2 to 9-2	92	5	1-2	2-8 to 4-2	2-8 to 4-2	2 Sets of 4, Vary B&C by 6"	
△A(E)610	6	3-9	34	18	2-5	0-6	0-9		
△A(E)601	2	3-9	11	18	2-5	0-6	0-9		
△A(E)602	2	3-8	11	18	2-5	0-5	0-8		
△A(E)603	2	3-8	11	18	2-5	0-4	0-8		
△A(E)604	2	3-7	11	18	2-5	0-3	0-7		
△A(E)605	8	3-7	43	18	2-5	0-2	0-7		
A801	7	31-0	579	S					
A802	12	11-0	352	S					
△A(E)803	18	4-11	236	23					
Total Abut. No.1		5380							
(Includes 1136 Lbs. Epoxy Coated)									
		ABUTMENT No.2							
B501	22	8-3	189	5	5-4	1-7	1-7		
B502	13	6-11	94	5	6-5	0-7½	0		
B503	9	8-5	79	5	7-11	0-7½	0		
B504	22	7-10	180	5	3-5	2-4	2-4		
△B(E)505	1	31-10	33	5					
△B(E)506	1	30-7	32	5					
B507	13	30-8	416	5					
B508	3	11-6	36	5					
B509	10	10-0	104	5					
B510	5	6-3	33	5	3-4	1-7	1-7		
B511	Not Used								
B512	7	5-0	37	5					
B513	14	8-0	117	5					
B514	14	10-5	152	9	2-0	3-0			
B515	4	9-0	38	5					

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
B516	12	11-8	146	S					
B517	4	7-3	30	S					
B518	4	6-6	27	11	4-11½	1-7	0-3½		
△B(E)519	16	4-7	76	S					
△B(E)520	16	2-8	45	2	2-1				
△B(E)521	6	5-3	33	19					
△B(E)522	16	4-4	72	S					
B523	4	5-8	24	S					
△B(E)524	6	3-0	19	S					
△B(E)525	16	9-10	164	S					
BG01	13	14-0	273	5	5-4	2-7	6-5		
BG02	9	15-6	210	5	5-4	2-7	7-11		
BG03	29	10-5	454	5	1-5	4-8	4-8		
BG04	29	7-1	309	5	1-5	3-0	3-0		
△B(E)605	29	7-7	330	5	0-11	3-6	3-6		
BG06	Not Used								
BG07	5	26-10	202	5	1-2	13-0	13-0		
BG08	5	21-10	164	5	1-2	10-6	10-6		
BG09	8	6-2 to 8-2	86	5	1-2	2-8 to 3-8	2-8 to 3-8	2 Sets of 4 Vary B&C by 4"	
△B(E)610	6	3-9	34	18	2-5	0-6	0-9		
△B(E)601	2	3-9	11	18	2-5	0-6	0-9		
△B(E)602	2	3-8	11	18	2-5	0-5	0-8		
△B(E)603	2	3-8	11	18	2-5	0-4	0-8		
△B(E)604	2	3-7	11	18	2-5	0-3	0-7		
△B(E)605	8	3-7	43	18	2-5	0-2	0-7		
B801	14	18-0	673	S					
B802	12	10-9	344	S					
△B(E)803	18	4-11	236	23					
Total Abut No.2		5578							
(Includes 1161 Lbs. Epoxy Coated)									
Total Abuts.		10958							
(Includes 2297 Lbs. Epoxy Coated)									
		SUPERSTRUCTURE							
△S(E)401	400	30'-0"	8016	S					
△S(E)402	50	23'-0"	768	S					
△S(E)403	78	33'-0"	1719	S					
△S(E)404	39	25'-0"	651	S					
△S(E)501	272	30'-0"	8511	S					
△S(E)502	34	26'-0"	922	S					
△S(E)503	413	29'-2"	12564	S					
△S(E)504	14	7'-4½" to 26'-4"	246	S	by 17½", 1 ea.				
△S(E)505	80	15'-8"	1307	S					
△S(E)506	64	7'-2"	478	S					
△S(E)507	20	5'-11"	123	S					
△S(E)508	20	5'-9"	120	S					
△S(E)509	6	2'-8" to 26'0"	90	S	by 4'-8", 1 ea.				
△S(E)601	413	29'-2"	18093	S					
△S(E)602	14	7'-4½" to 26'-4"	354	S	by 17½", 1 ea.				
△S(E)603	8	3'-0" to 6'-0"	54	S	by 12", 2 ea.				
△S(E)604	6	2'-8" to 26'0"	129	S	by 4'-8", 1 ea.				
△X(E)501	386	2'-5"	973	22		1'-8"			
△X(E)502	386	3'-1"	1241	17	10"				
△X(E)503	386	5'-3"	2114	19					
Total Superstructure		(58,473)							

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
		PIER 1							
P501	60	8-3"	517	5	2'-0"	3-3	3-3		
P502	48	5-9 to 8-3"	350	5	2'-0"	2-0 to 3-3	2-0 to 3-3	24 Sets of 6, Vary B&C by 3"	
P503	8	6-0	50	11	4-6	1-7	0-6		
P504	2	28-8	60	5					
P505	18	5-7	105	5	2-8	1-7	1-7		
P701	20	10-2	416	1	8-6				
P901	20	11-0	748	1	8-6				
P902	5	20-0	340	5					
P1001	16	9'-10"	677	5	1-10	8-4	0		
P1002	8	35-6	1222	5					
P1003	8	33-6	1153	5					
P1101	4	31-10	677	1	28-8				
P1102	8	11-0	468	2	9-5				
Sub Total Pier 1		6,783							
Spirals		1168							
Total Pier 1		7951							
Estimated Reinforcing steel for Piers 2 and 3: 45250 Lbs.									
Pier 1		7951							
Piers 2,3		27745 ◐							
Total		35696							

MARK	NO.	LENGTH (HEIGTH)	WEIGHT
SPIRALS - Core Diam. 32" o/o - Pitch 4½" c/c - Other details in accordance with C.R.S.I. standard practice			
SP401	1	32-8	601
SP402	1	30-9	567
		Spirals	1168

△ NOTES:

Reinforcing Steel Samples: Refer to CMS Sections 106.03, 700, 709.01, thru 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structure by the additional steel, spliced in accordance with 509.08.

"(E)" denotes epoxy coated reinforcing bar.

◐ Quantity from Sheet 9A 9

9 / 9

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

REINFORCING STEEL LIST
BRIDGE NO HAM-126-RAMP C
RAMP C OVER
EXISTING ANTHONY WAYNE & CONRAIL

HAMILTON COUNTY
STA 37+1573 to STA 39+7044

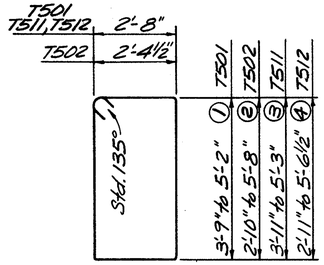
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.K.	V.K.	T.D.S.	D.W.S.		5-14-71	△ BALKE ENG. 6/86

CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO	544A
CHKD. BY			FHWA REGION 5	787
DATE				

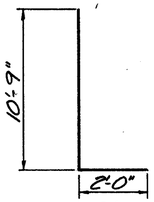
REINFORCING STEEL

MARK	NO.	LENGTH	WEIGHT	SHAPE	PIER 2	PIER 3
T1101	72	12'-5"	4750	B	36	36
T1102	24	37'-0"	4718	S	24	—
T1103	12	26'-0"	1658	S	12	—
T1104	24	28'-0"	3570	S	—	24
T1105	12	20'-0"	1275	S	—	12
T901	22	14'-0"	1047	B	22	—
T902	12	20'-0"	816	B	12	—
T903	7	20'-7"	491	B	—	7
T904	19	13'-0"	840	B	—	19
T905	7	19'-7"	468	B	—	7
T801	5	20'-0"	267	B	5	—
T802	10	16'-8"	445	S	10	—
T803	12	18'-4"	587	B	—	12
T804	5	19'-0"	254	B	5	—
T1101	19	11'-6"	447	S	19	—
T1102	13	17'-6"	465	S	13	—
T601	114	9'-0"	1541	S	66	48
T602	110	8'-3"	1363	B	64	46
T603	18	10'-6"	284	S	—	18
T604	12	16'-6"	297	S	—	12
T605	8	13'-6"	162	B	—	8
	1	13'-5"			1	
T501	Series of 9 to ② 16'-3"		139	B	Series of 9	—
	2	11'-0"			2	
T502	Series of 9 to ⑥ 16'-8"		260	B	Series of 9	—
T503	24	15'-3"	382	S	12	12
T504	2	18'-0"	38	S	2	—
T505	10	13'-6"	141	B	10	—
T506	14	9'-5"	138	B	7	7
T507	18	9'-10"	185	B	10	8
T508	18	6'-11"	130	B	10	8
T509	56	5'-5"	316	B	28	28
T510	2	20'-0"	42	S	—	2
	1	13'-9"				1
T511	Series of 5 to ⑥ 16'-5"		79	B	—	Series of 5
	1	11'-9"				1
T512	Series of 10 to ⑦ 17'-0"		150	B	—	Series of 10
		TOTAL	27745			

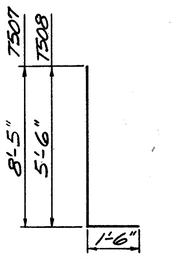
① Varies by 2⅛" increments
② Varies by 4¼" increments
③ Varies by 4" increments
④ Varies by 3½" increments
⑤ Varies by 8½" increments
⑥ Varies by 8" increments
⑦ Varies by 7" increments



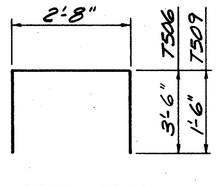
T501, T502, T511, T512



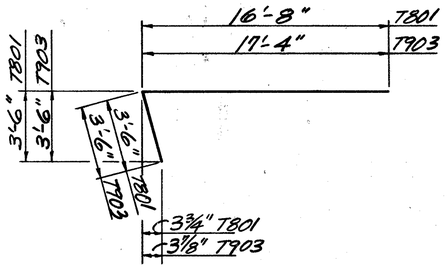
T1101



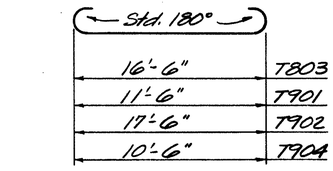
T507, T508



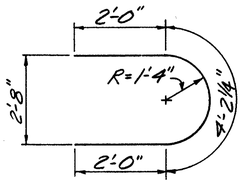
T506, T509



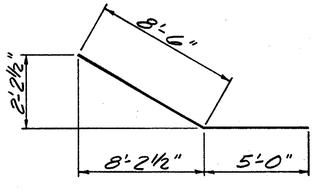
T801, T903



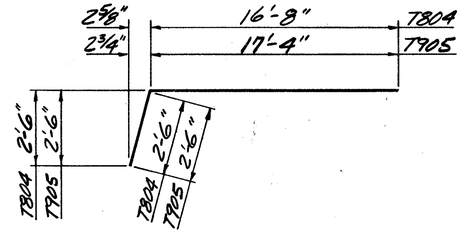
T803, T901, T902, T904



T602



T505, T605



T804, T905

For Pier 1 Reinforcing Steel See Sheet 9|9.

REINFORCING STEEL SAMPLES: Refer to CMS Sections 106.03, 700, 709.01 through 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structures by the additional steel, spliced in accordance with 509.08.

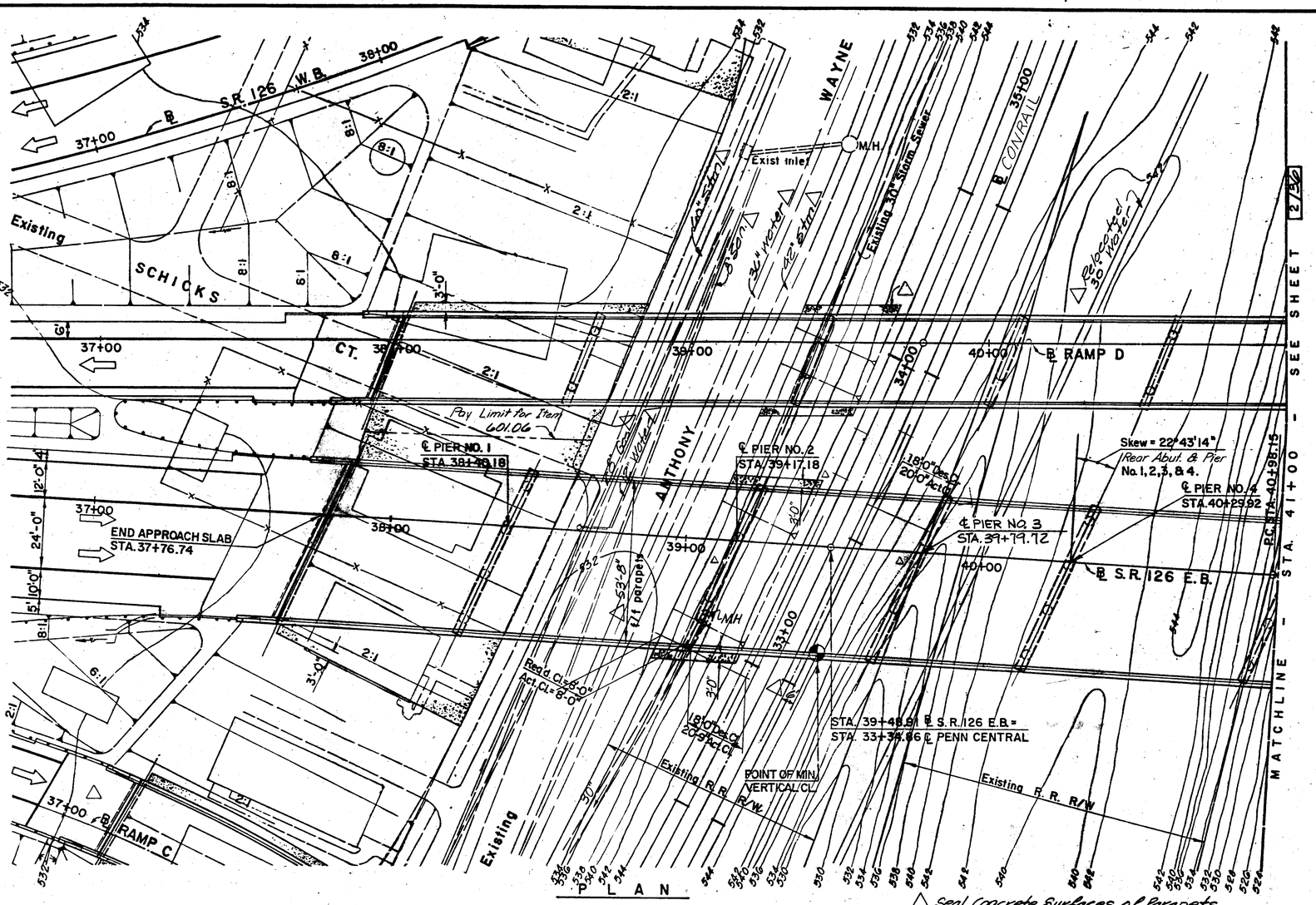
BALKE ENGINEERS 7762 READING ROAD CINCINNATI, OHIO 45237					9A|9
REINFORCING STEEL LIST BRIDGE NO. HAM-126-RAMP C RAMP C OVER EXISTING ANTHONY WAYNE & CONRAIL HAMILTON COUNTY OHIO STA. 37+15.73 TO STA. 39+70.44					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	WJH	~	SJA	CRS 6/86	

OHIO BLUE PRINT 140033

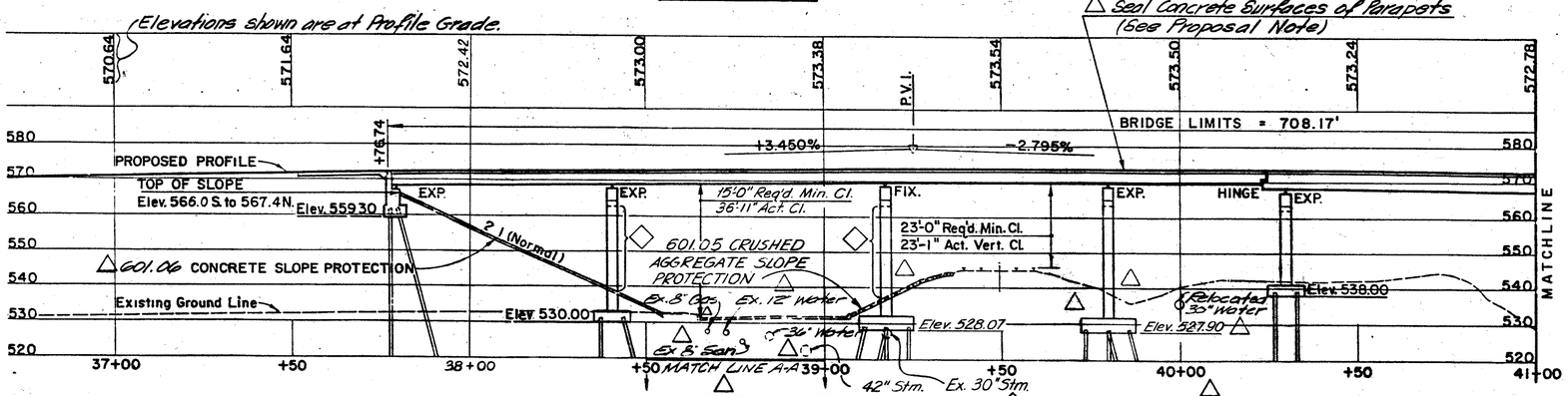
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

545/787

HAM-75- 9.93
HAM-126- 13.00

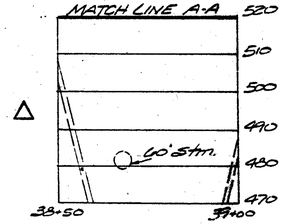


PLAN



PROFILE ALONG ℄

Seal Concrete Surfaces of Columns (Stem) of Piers 1 & 2 (See Proposal Note).



△ TRAFFIC DATA
2006 A.D.T. = 19,245
2006 A.D.T.T. = 2,117

NOTE:
△ EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

VERTICAL CURVE DATA

P.V.I. STA. 39+25.00 ℄ S.R. 126 E.B.
ELEV. 579.34
V.C. = 750.00'
G1 = +3.450%
G2 = -2.795%

△ ALL PIER PILES ARE 14" DIA. CAST-IN-PLACE, REINFORCED CONCRETE PILES. ALL ABUTMENT PILES ARE 12" DIA. CAST-IN-PLACE, REINFORCED CONCRETE PILES

THE ESTIMATED AVERAGE PAY-LENGTHS ARE:

REAR ABUTMENT	- 45'
PIERS NO. 1, 2, 3 & 7	- 85'
PIER NO. 4	- 70'
PIERS NO. 5 & 6	- 80'
PIER NO. 8	- 80'
FORWARD ABUTMENT	- 90'

PROPOSED STRUCTURE

TYPE: Continuous rolled beam and welded plate girder with reinforced concrete deck and reinforced concrete substructure.
SPANS: 61.00', 77.00', 62.54', 50.20', 74.00', 101.61', 100.77', 109.92', & 66.00' measured along ℄ E B
△ ROADWAY: 53'-8" face to face of parapets.
△ LOADING: HS 20-44 Case I and the Alternate Military Loading.
SKEW: Rear Abutm't. to Pier No 4 = 22°43'14" & Pier No. 5 to Fwd. Abutm't. = 16°11'24" L.F. to Ref. Tan.
ALIGNMENT: Tangent & compound circular curves.
△ WEARING SURFACE: 1¼" Latex Modified Concrete Overlay.
△ APPROACH SLABS: AS-1-81 (25' long).
SUPERELEVATION: Varies: 0.083 ft. per ft. max.

1/36

VOGT, IVERS, & ASSOCIATES
ENGINEERS CINCINNATI — ARCHITECTS CHICAGO

SITE PLAN

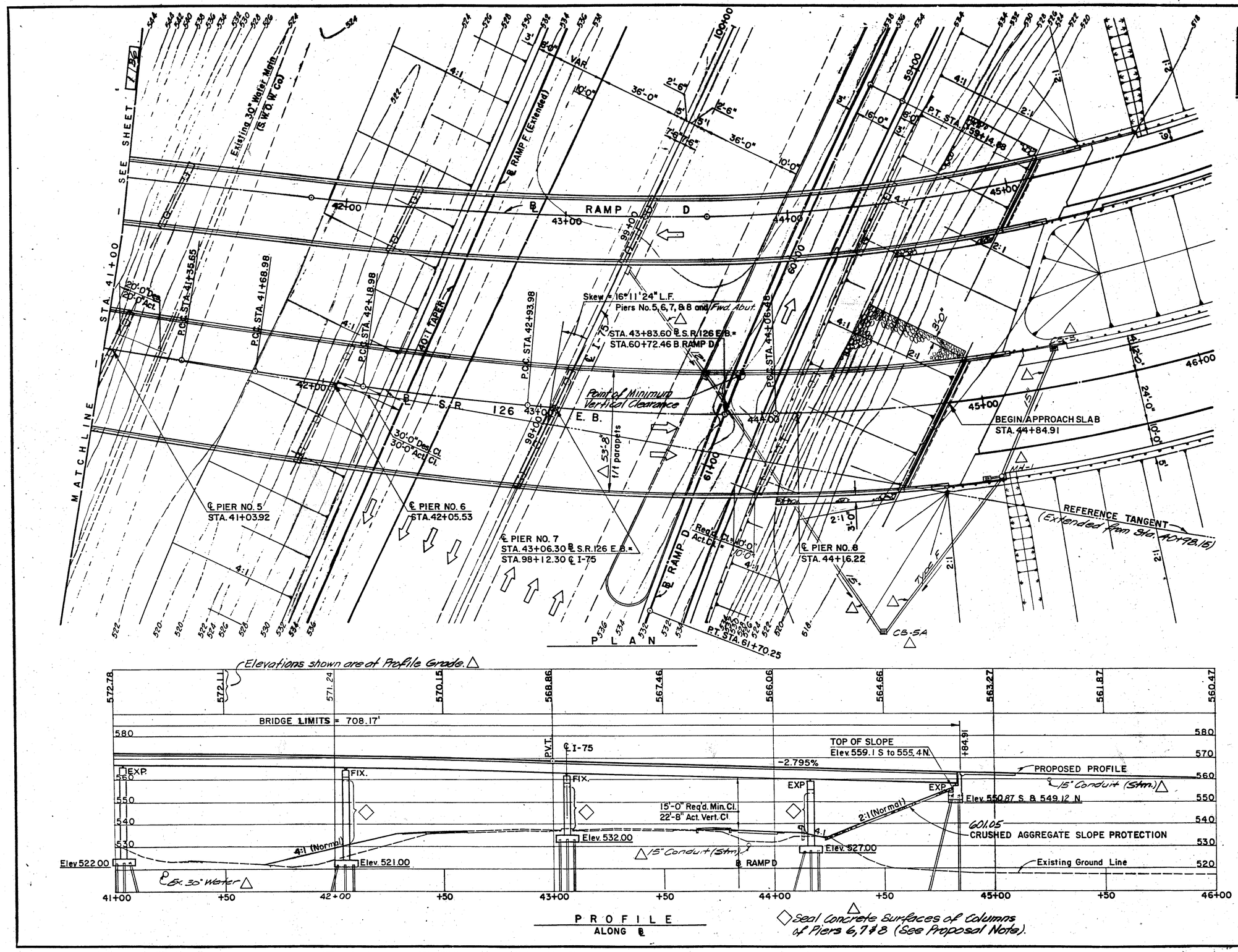
BRIDGE NO. HAM-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75, & RAMP D
HAMILTON COUNTY
STA. 37+76.74 to STA. 44+84.91

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISIONS
AERIAL	TWN EPA	V. K.	D·W·M	S. S. C.	△ BALKE ENGRS. 6/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

546
787

HAM - 75 - 9.93
HAM - 126 - 13.00



HORIZONTAL CURVE DATA

P.I. STA. 41+16.90 ℄ S.R. 126 E.B.
Δ = 0°22'30" LT.
Dc = 1°00'00"
R = 5729.58'
T = 18.75'
L = 37.50'
E = 0.03'

P.I. STA. 41+52.31 ℄ S.R. 126 E.B.
Δ = 0°30'00" LT.
Dc = 1°30'00"
R = 3819.72'
T = 16.67'
L = 33.33'
E = 0.04'

P.I. STA. 41+93.98 ℄ S.R. 126 E.B.
Δ = 1°10'00" LT.
Dc = 2°20'00"
R = 2455.53'
T = 25.00'
L = 50.00'
E = 0.13'

P.I. STA. 42+56.49 ℄ S.R. 126 E.B.
Δ = 2°37'30" LT.
Dc = 3°30'00"
R = 1637.02'
T = 37.51'
L = 75.00'
E = 0.43'

P.I. STA. 43+50.28 ℄ S.R. 126 E.B.
Δ = 6°00'00" LT.
Dc = 5°20'00"
R = 1074.30'
T = 56.30'
L = 112.50'
E = 1.47'

P.I. STA. 48+81.50 ℄ S.R. 126 E.B.
Δ = 65°58'20" LT.
Δc = 49°58'20"
Dc = 8°00'00"
R = 716.20'
Ts_1 = 475.02'
Ts_2 = 660.20'
Lc = 624.65'
Ls_1 = 0.00'
Ls_2 = 400.00'
θs = 16°00'00" LT.
Es = 143.21'

2/36

VOGT, IVERS, & ASSOCIATES
ENGINEERS CINCINNATI — ARCHITECTS CHICAGO

SITE PLAN

BRIDGE NO. HAM-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75, & RAMP D
HAMILTON COUNTY — STA. 37+76.74 to STA. 44+84.91

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISIONS
AERIAL	T.W.N.	V.K.	D·W·M	S.S.C.	BALKE JULY 21, 86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

547
787

HAM-75- 9.33
HAM-126-13.00

△GENERAL NOTES

REFERENCE SHALL BE MADE TO THE FOLLOWING:

STANDARD DRAWINGS: AS-1-81 DATED 11-27-81
BR-1 DATED 5-29-79
SD-1-69 DATED 6-12-69

SUPPLEMENTAL SPECIFICATIONS:

836 DATED 11-12-85
824 DATED 10-08-82
845 DATED 2-25-86
953 DATED 8-21-80
927 DATED 10-19-85

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, 1983, INCLUDING THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:

DESIGN LOADING: HS 20-44, CASE I AND THE ALTERNATE MILITARY LOADING.

DESIGN STRESSES:

CONCRETE, CLASS S — COMPRESSIVE STRENGTH: 4500 PSI (SUPERSTRUCTURE)

CONCRETE, CLASS C — COMPRESSIVE STRENGTH: 4000 PSI (SUBSTRUCTURE)

REINFORCING STEEL — ASTM A615, A616, A617, GRADE 60, MINIMUM YIELD STRENGTH: 60,000 PSI.

PILE DESIGN LOAD:
THE DESIGN LOAD FOR THE ABUTMENTS & PIER 4 PILES IS 50 TONS PER PILE.
THE DESIGN LOAD FOR THE PILES IN PIERS 1, 2, 3, 5, 6, 7, 8 IS 70 TONS PER PILE.

UTILITY LINES:
ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES SHALL BE BORNE BY THE OWNERS. THE CONTRACTOR AND OWNERS ARE REQUESTED TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WOULD BE HELD TO A MINIMUM.

CONSTRUCTION CLEARANCE OF 18'-0" VERTICALLY ABOVE THE TOP OF THE RAILROAD RAILS AND 8'-0" HORIZONTALLY FROM THE CENTER OF TRACKS SHALL BE MAINTAINED AT ALL TIMES.

ITEM 511: CLASS S CONCRETE, SUPERSTRUCTURE, USING SHRINKAGE COMPENSATING CEMENT, 701.08.

THE FOLLOWING RESTRICTIONS SHALL APPLY TO THE SUPERSTRUCTURE CONCRETE USING SHRINKAGE COMPENSATING CEMENT, 701.08.

1. CEMENT SHALL BE EXPANSIVE HYDRAULIC CEMENT, ASTM C845, TYPE K.
2. THE MAXIMUM WATER/CEMENT RATIO GIVEN FOR CLASS S CONCRETE IN 499.03 SHALL BE REVISED FROM 0.44 TO 0.50.
3. MAXIMUM SLUMP AT THE TIME AND PLACE OF CONCRETE PLACEMENT SHALL BE 6 INCHES.
4. CHEMICAL ADMIXTURES, WHEN REQUIRED BY 511.06, SHALL BE LIMITED TO 705.12 TYPE D.
5. MAXIMUM AMBIENT TEMPERATURE AT TIME OF PLACEMENT OF CONCRETE SHALL BE 80° F.
6. MEMBRANE CURING PER SS836 WILL NOT BE PERMITTED FOR ANY CONCRETE PLACED BETWEEN SEPTEMBER 1 AND MARCH 31. SUCH CONCRETE SHALL BE CURED BY METHOD (A) WATER CURING.
7. IF REQUIRED BY THE ENGINEER, THE SURFACE OF THE CONCRETE SHALL BE GIVEN A FOG SPRAY OF WATER. THIS MAY BE REQUIRED PRIOR TO EITHER WATER CURING OR MEMBRANE CURING IF WEATHER CONDITIONS DICTATE. EQUIPMENT SHALL BE ON HAND.

"ITEM 507- 12" AND 14" DIAMETER CAST-IN-PLACE REINFORCED CONCRETE PILES, AS PER PLAN:
The responsibility of choosing and providing a satisfactory pile wall thickness for this project shall be borne by the Contractor except that the pile wall thickness shall not be less than 0.22 inches. If a pile wall thickness greater than 0.22 inches is necessary to resist the pile installation driving stress, the Contractor shall make this determination and shall furnish a pile with an acceptable wall thickness. Monotube piles are not required to comply with the above specified minimum pile wall thickness. If monotube piles are used, the contractor is responsible for providing a monotube pile with a wall thickness that will conform to all applicable requirements of 507."

PILE HAMMER: The pile hammer used to install the cast-in-place reinforced concrete piles shall have a Stated Energy Rating of not less than 18,000 foot-pounds. This requirement does not relieve the Contractor from 108.05 which states that the contractor is to provide sufficient equipment for prosecuting the required work. Refer to "ODOT's Manual of Procedures for Structures" to obtain the "Stated Energy Rating."

ESTIMATED QUANTITIES

	ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	PIERS	ABUT.	GEN.	AS BUILT	
△	503	2034	Cu. Yd.	Unclassified excavation		1404	630			
	503	Lump	Sum	Cofferdams, cribs and sheeting				Lump		
△	505	Lump	Sum	Pile driving equipment mobilization				Lump		
△	~~506~~	~~Lump~~	~~Sum~~	~~Static Load Test~~ as per Plan		Lump				
△	523	6	Hour	Dynamic Load Test		12615		6		
12615 △	~~507~~	~~12,295~~	Lin. Ft.	14" cast-in-place, reinforced concrete piles as per Plan		12,295				
△	507	2340	Lin. Ft.	12" cast-in-place, reinforced concrete piles as per Plan.			2340			
△	824	304,612	Lbs.	Epoxy Coated Reinforcing Steel, Grade 60	301,075	~~3,556~~	3537			
200,137 225,282 △	509	~~199,720~~	Lbs.	Reinforcing steel, Grade 60		179,639	20,081			
△	511	1090	Cu. Yd.	Class S concrete, superstructure	1090	205201				
△	511	167	Cu. Yd.	Class C concrete, abutments above footing			167			
△	511	625	Cu. Yd.	Class C concrete, piers above footing		625				
△	511	535	Cu. Yd.	Class C concrete, footings		418	117			
△	513	11,388	Each	Welded Stud Shear Connectors	11,388					
△	513	1,056,000	Lbs.	Structural steel (AISC Category III)(ASTM A572-50)(see proposal note.)	1,056,000					
△	514	1,056,000	Lbs.	Field painting of new structural steel, System A	1,056,000					
△	516	30	Sq. Ft.	1/2" Preformed expansion joint filler				30		
△	516	186	Lin. Ft.	Structural Expansion Joints Including Elastomeric strip seals	60		126			
△	518	103	Lin. Ft.	6" Non-perforated helical corrugated steel pipe, incl. Specials, 707.01				103		
△	518	104	Cu. Yd.	Porous backfill			104			
△	518	113	Lin. Ft.	6", perforated, helical, corrugated steel pipe, 707.01				113		
△	516	8	Each	Laminated Elastomeric Bearings, 2.66"x8½"x12" pad with (0½"x5⅛") x 9½"x13" beveled steel load plate			8			
△	516	8	Each	" 1.86"x10"x18" pad with (1½"x5⅛")x11"x19" beveled steel load pl)		8				
△	516	8	Each	" 1.75"x10"x19" pad w/ 1½"x11"x25" steel load pl)		8				
△	516	8	Each	" 1.64"x9"x14" pad w/ 1½"x10"x15" steel load pl)		8				
△	516	8	Each	" 3.11"x11½"x18" pad w/ 1½"x12½"x19" steel load pl)		8				
△	516	8	Each	" 2.07"x12"x19" pad with (2"x2⅛")x13"x20" beveled steel load pl)		8				
△	516	8	Each	" 1.875"x11"x20" pad with (2"x2⅝")x12"x26 beveled steel load pl)		8				
△	516	8	Each	" 2.0"x11½"x23" pad with (2"x2⅜")x12½"x29 beveled steel load pl)		8				
△	516	8	Each	" 3.11"x10"x9" pad with (1½"x1½")x11"x15" beveled steel load pl)			8			
△	516	8	Each	" 2.07"x12"x19" pad with (2"x2⅛")x13"x20" beveled steel load pl)		8				
△	Special	1934	Sq.Yd.	Sealing of Concrete Surfaces (See Proposal Note)	1408	477	49			
△	845	4111	Sq.Yd.	Latex modified concrete overlay (1½" Thick) (See Proposal Note)	4111					
△*	511	1090	Cu.Yd.	Class "S" Concrete, Superstructure, using shrinkage compensating cement 701.08	1090					
△	601	780	Sq.Yd.	Crushed aggregate slope protection				780		
△	601	742	Sq.Yd.	Concrete slope protection				742		

Computed by: JRP Date: 6-7, 1971 Quantities Revised by: BJS 5-12-86
Checked by: SSA Date: 6.7., 1971 Revisions checked by: SJA 5-30-86

△* Alternate Bid Item

STRUCTURAL STEEL — ASTM A572-50, UNIT STRESS: 27,000 PSI

DECK PROTECTION METHOD — EPOXY-COATED REINFORCING STEEL WITH 3" CONCRETE COVER OF WHICH 1-1/4" IS A LATEX MODIFIED CONCRETE OVERLAY.

BOLTS — 1" DIAMETER HIGH STRENGTH STEEL BOLTS CONFORMING TO ASTM A325 UNLESS OTHERWISE NOTED.

SEALING OF CONCRETE SURFACES — THE FOLLOWING CONCRETE AREAS ARE TO BE SEALED PER PROPOSAL NOTE:

- SUPERSTRUCTURE PARAPETS (SEE SHEET 34/36 & 35/36).
- WINGWALL PARAPETS (SEE SHEETS 5/36 & 8/36).
- PIER COLUMNS & STEMS ADJACENT TO ROADWAYS (SEE SHEETS 1/36 & 2/36).

PILE DRIVING CONSTRAINTS: Prior to driving piles at the abutments, Pier 1 and Pier 8, the spill-thru slope embankment shall be constructed up to the level of the subgrade for a minimum distance of 200 feet behind the abutments. The excavation for the footings of the abutments and Pier 1 and Pier 8 and the installation of the piles shall not begin until after the above required embankment has been constructed and the embankment has experienced a waiting period of 60 days. The Director may shorten the waiting period if the contractor's field measurements indicate that 90 percent consolidation has been attained.

ITEM 518 - POROUS BACKFILL:
POROUS BACKFILL, 1'-6" OR 2'-0" THICK (SEE DETAILS), SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE AND LATERALLY TO THE ENDS OF THE WINGWALLS.

ITEM 506 STATIC LOAD TEST, AS PER PLAN: Prior to installation any piles, the contractor shall a static load test on a initially installed pile located in or near a pier footing except at a pier no.4 footing. the installed length of the pile to be looded tested shall not be more than the plan estimated pay length.

Revisions made by Balke Engineers to Vogt Ivers & Associates' Drawings are denoted by the symbol △.

3/36

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

GENERAL NOTES & ESTIMATED QUANTITIES
BRIDGE NO. HAM-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75, & RAMP D
HAMILTON COUNTY
STA. 37+76.74
STA. 44+84.91

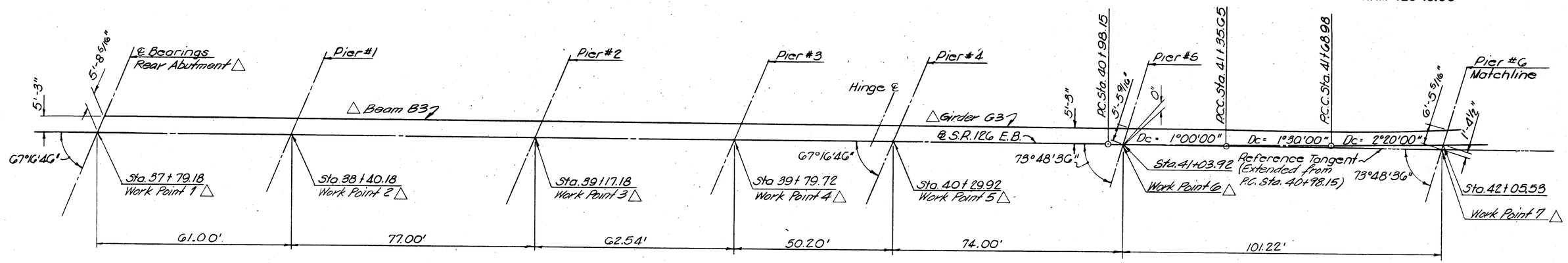
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.R.P	T.D.S.	—	S.S.C.	HJ	6-4-71	△ BALKE JULY 21, 86

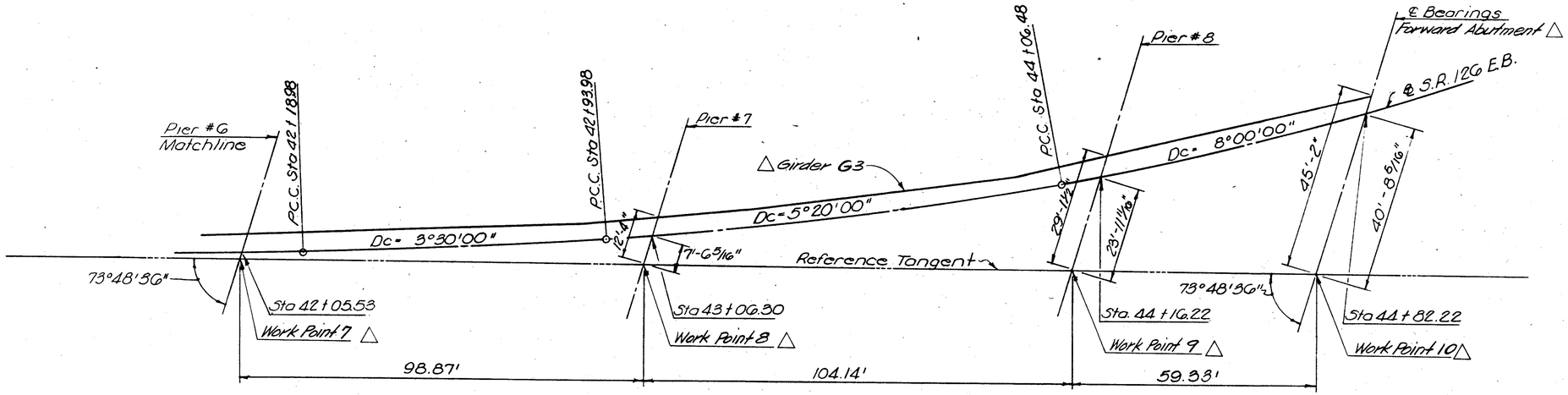
REVISED 12/9/86 REVISED 2/25/87

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

548
787

HAM-75-9.93
HAM-126-13.00





GEOMETRIC LAYOUT

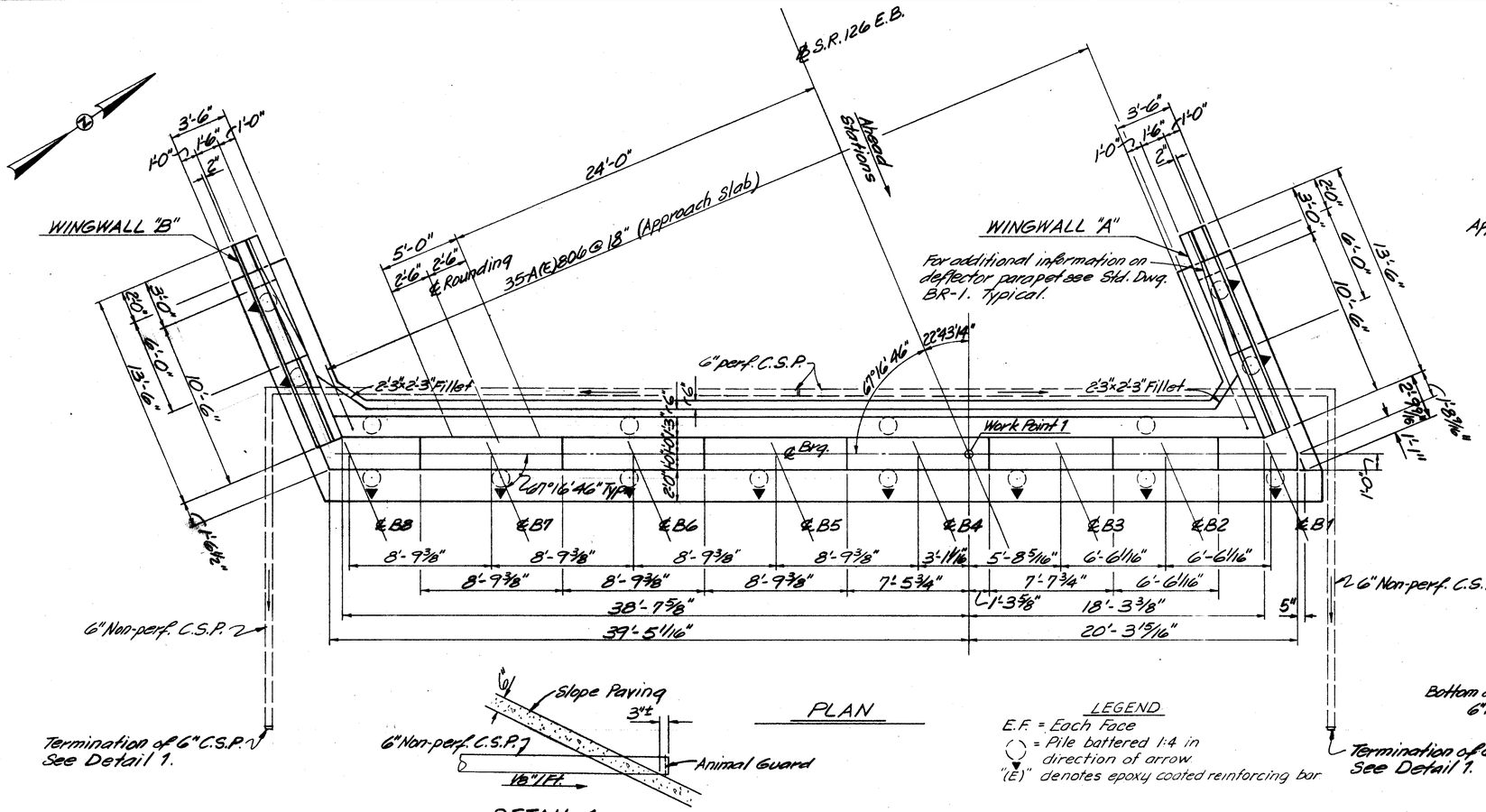
4/36

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

GEOMETRIC LAYOUT
BRIDGE NO. HAM-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75, & RAMP D
HAMILTON COUNTY
STA. 37+76.74 to
STA. 44+84.91

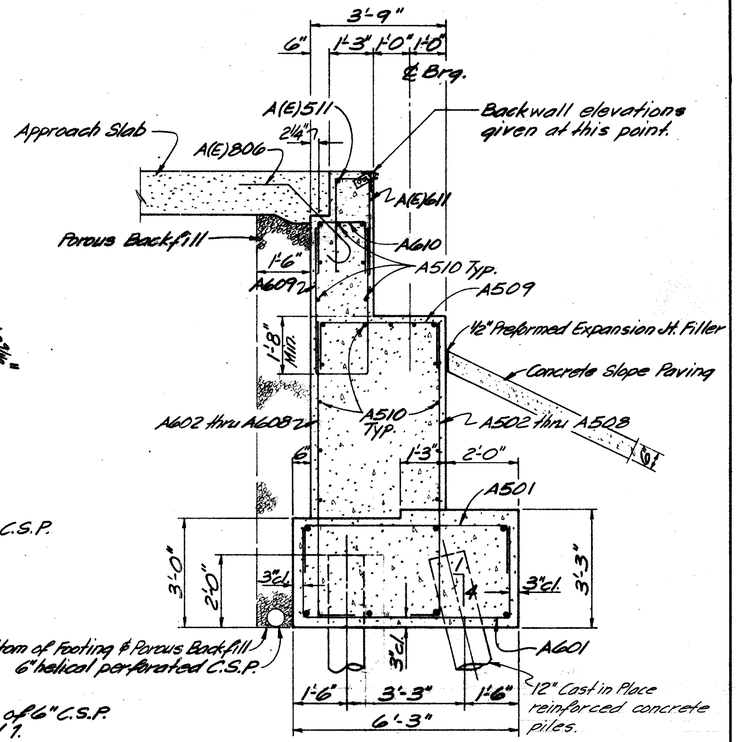
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.K.	V.K.	L.B.F.	J.R.P		6-4-71	△ BALKE ENGR. 2-86

CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO	549 787
DATE			FHWA REGION 5	
CHKD. BY				
DATE				

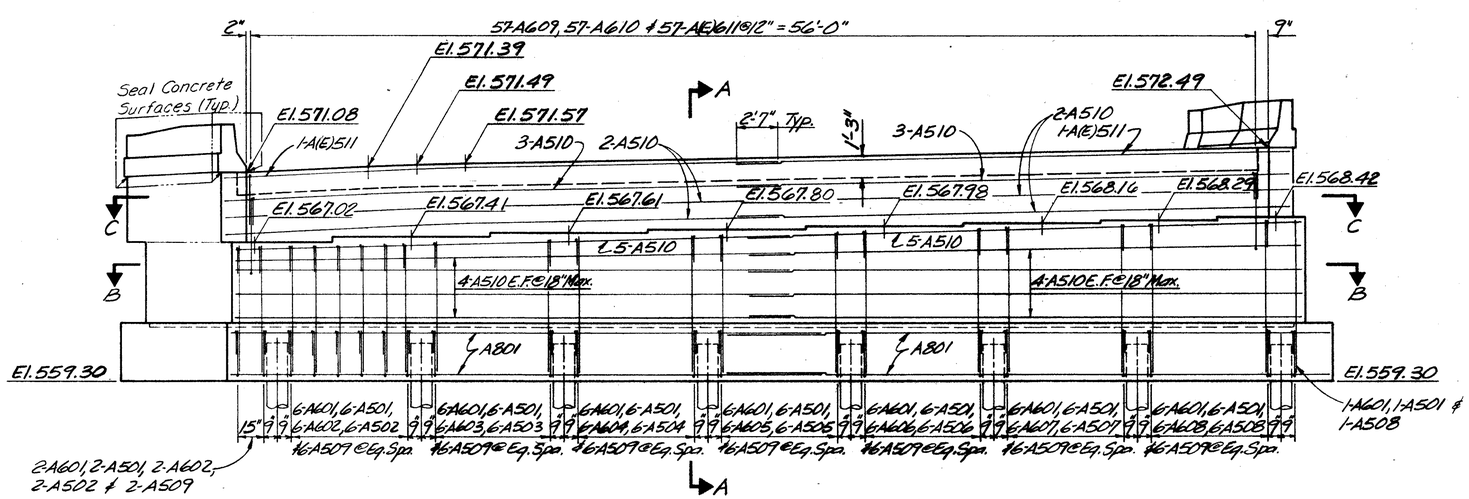


DETAIL 1

LEGEND
E.F. = Each Face
( ) = Pile battered 1:4 in direction of arrow
"(E)" denotes epoxy coated reinforcing bar



SECTION A-A



ELEVATION

Notes:
1. For Elevations and Sections of Wingwalls "A" & "B" See Sheet 7 36.
2. For Footing Plan See Sheet 6 36.
3. Bridge Seat Elevations have been adjusted upward 1/16" at Rear Abutment to compensate for the vertical deformation of the bearings.
4. Porous Backfill, as Shown shall extend up to the plane of the subgrade and laterally to the ends of the wingwalls.
5. For Sections B-B & C-C see Sheet 6 36.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

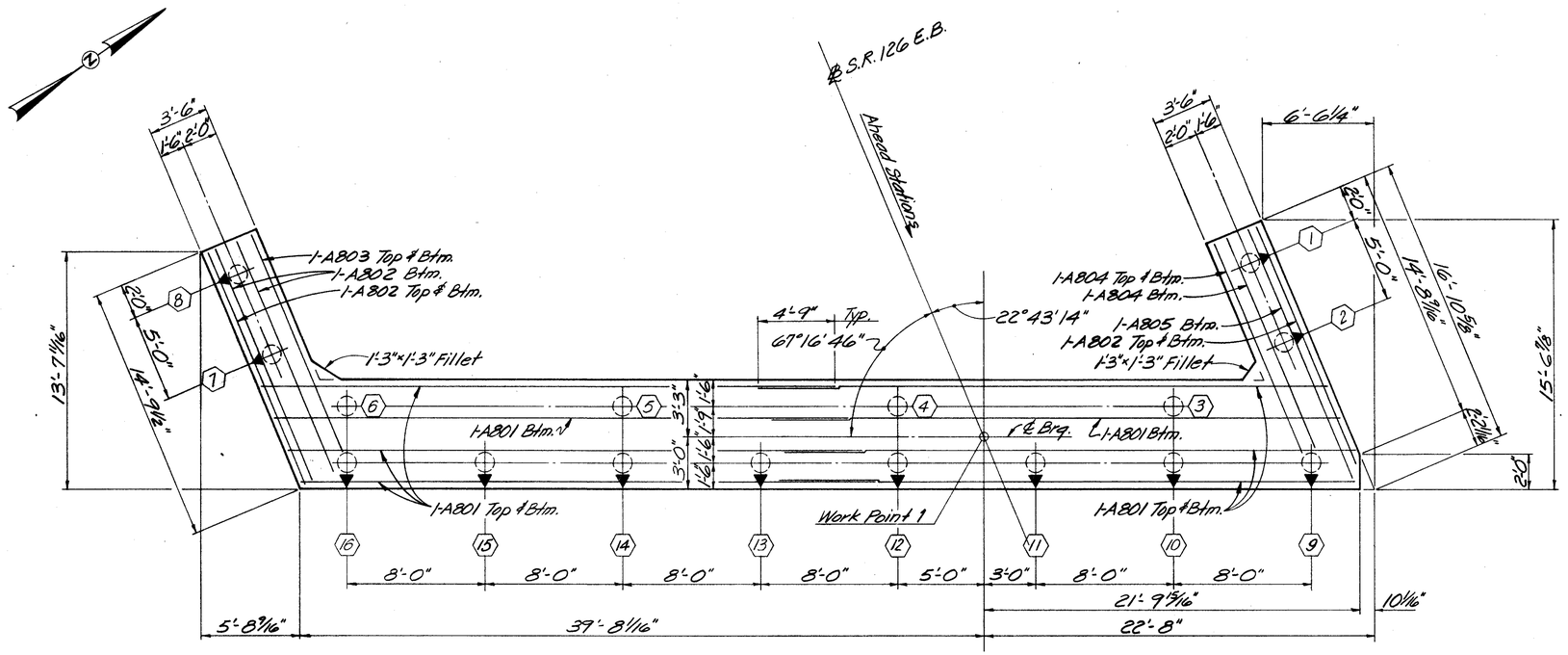
5 36

REAR ABUTMENT
BRIDGE NO. HAM-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, PENN. CENTRAL, I-75, RAMP D
HAMILTON COUNTY OHIO
STA. 37+76.14 TO STA. 44+84.91

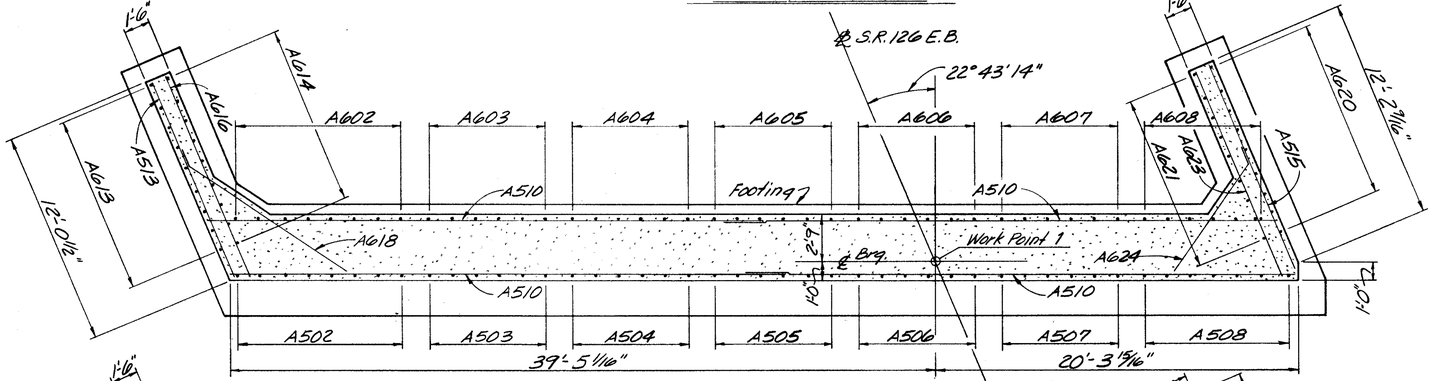
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
TMB	WLH	~	SJA	CRS 6/86	July 21 1986

OHIO BLUE PRINT

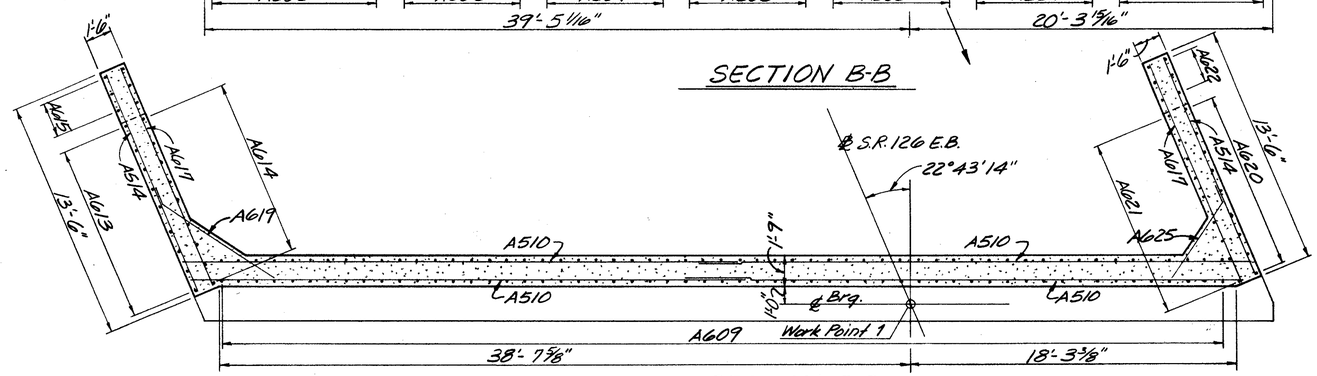
CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO	549A
CHKD. BY			FHWA REGION 5	787
DATE				



FOOTING PLAN



SECTION B-B



SECTION C-C

LEGEND

Designates Pile battered 1:4 in direction of arrow.

⬡ = Pile Number

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

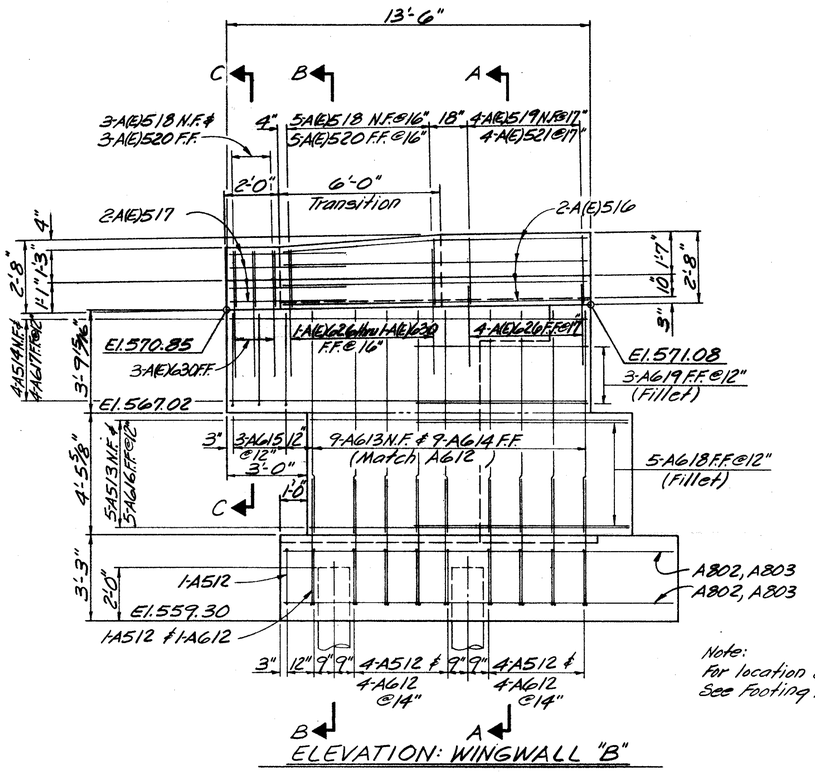
6 | 36

REAR ABUTMENT
BRIDGE NO. HAM-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75, RAMP D
HAMILTON COUNTY OHIO
STA. 37+76.74 TO STA. 44+84.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	WJH	~	TMB	CRS 6/86	

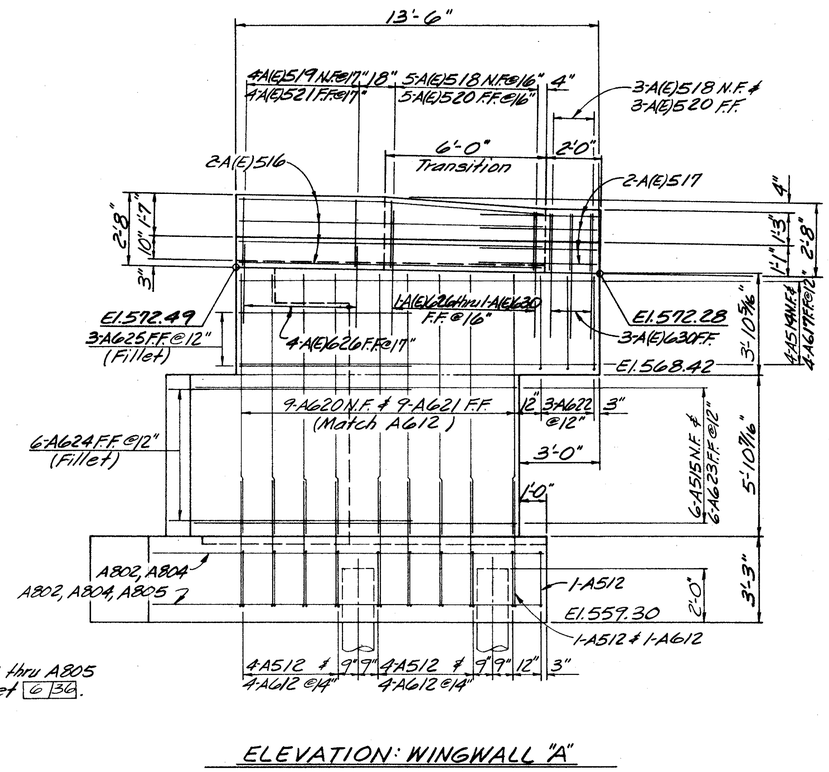
OHIO BLUE PRINT 140053

CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO	5498
DATE			FHWA REGION 5	787
CHKD. BY				
DATE				

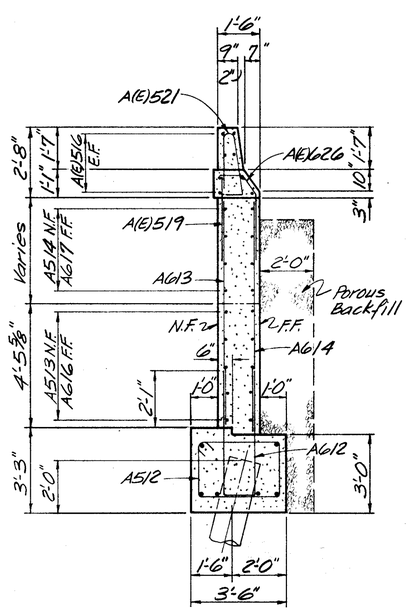


ELEVATION: WINGWALL "B"

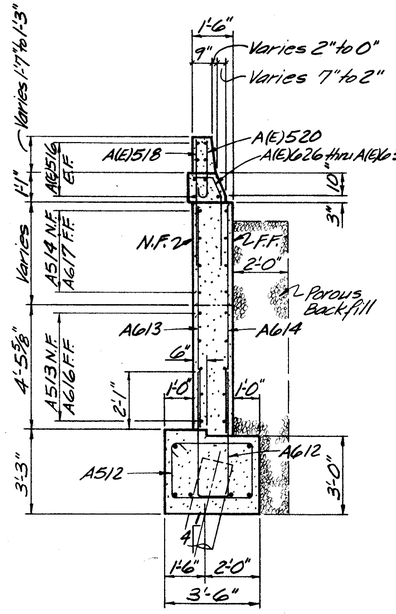
Note:
For location of bars A802 thru A805
See Footing Plan on Sheet 6 36.



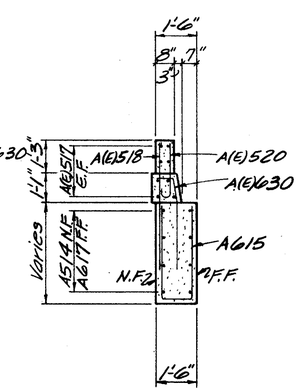
ELEVATION: WINGWALL "A"



SECTION A-A



SECTION B-B



SECTION C-C

Note:
N.F. = Near Face
F.F. = Far Face
E.F. = Each Face

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

7/36

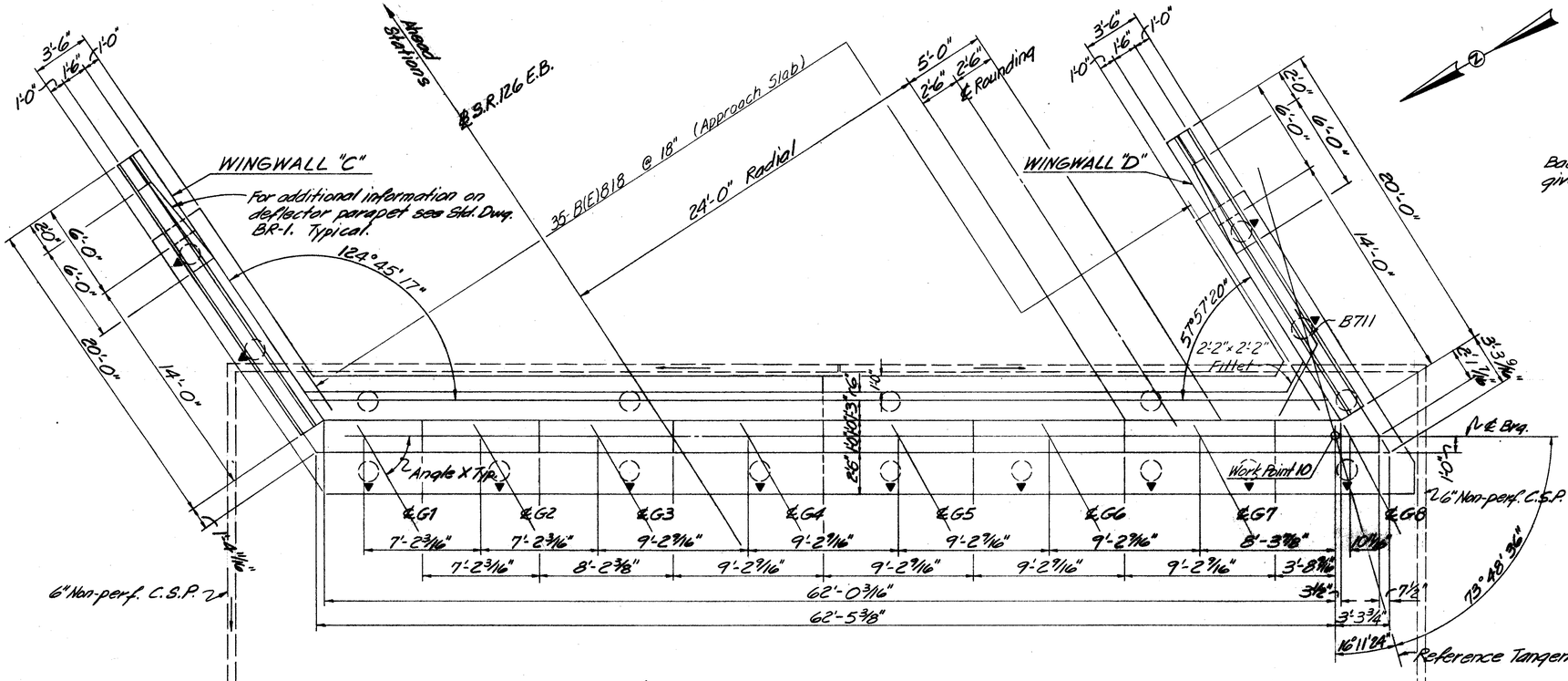
REAR ABUTMENT WINGWALLS

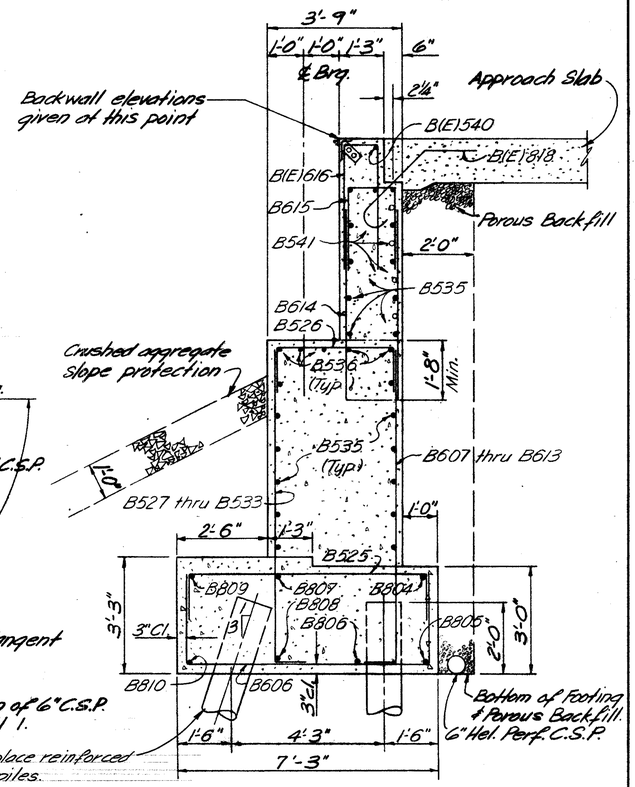
BRIDGE NO. HAM-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75, RAMP D
HAMILTON COUNTY OHIO
STA. 37+76.74 TO STA. 44+84.91

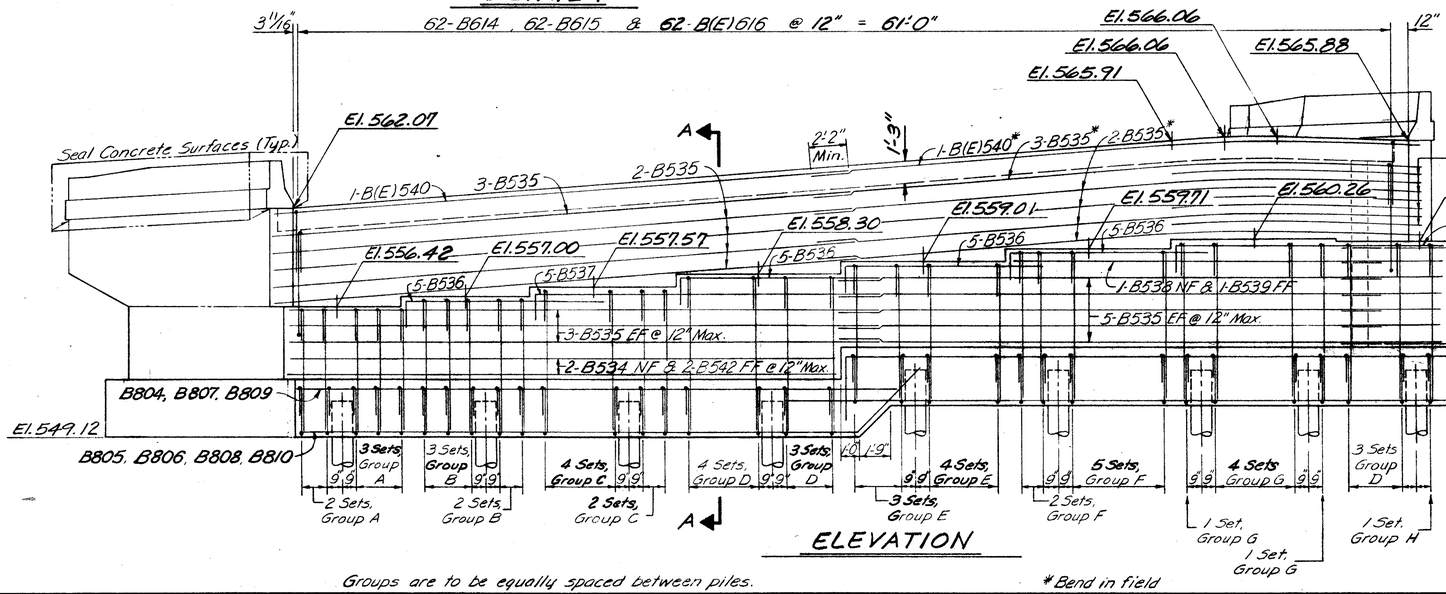
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	WJH	~	TMB	CRS 6/86	

OHIO BLUE PRINT

CALC. BY	HAM-75-9.93 HAM-126-13.00	OHIO	650 787
DATE		FHWA REGION 5	
CHKD. BY			
DATE			







Groups are to be equally spaced between piles.

*Bend in field

LEGEND

EF = Each Face
FF = For Face ; NF = Near Face
◯ = Pile battered 1:3 (1:4 in wings)
▼ in direction of arrow
"(E)" denotes epoxy coated reinforcing bar.

BAR GROUPS

A: 1-B606, 1-B525, 1-B527, 1-B607 & 1-B526
B: 1-B606, 1-B525, 1-B528, 1-B608 & 1-B526
C: 1-B606, 1-B525, 1-B529, 1-B609 & 1-B526
D: 1-B606, 1-B525, 1-B530, 1-B610 & 1-B526
E: 1-B606, 1-B525, 1-B531, 1-B611 & 1-B526
F: 1-B606, 1-B525, 1-B532, 1-B612 & 1-B526
G: 1-B606, 1-B525, 1-B533, 1-B613 & 1-B526
H: 1-B606, 1-B525 & 1-B530

Notes:
1. For Elevations and Sections of Wingwalls "C" & "D" See Sheet 10/36.
2. For Footing Plan see Sheet 9/36.
3. Bridge Seat Elevations have been adjusted upward 1/16" at the Forward Abutment to compensate for the vertical deformation of the bearings.
4. Porous Backfill, as shown shall extend up to the plane of the subgrade and laterally to the ends of the wingwalls.
5. For angle X see sheet 19/36.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

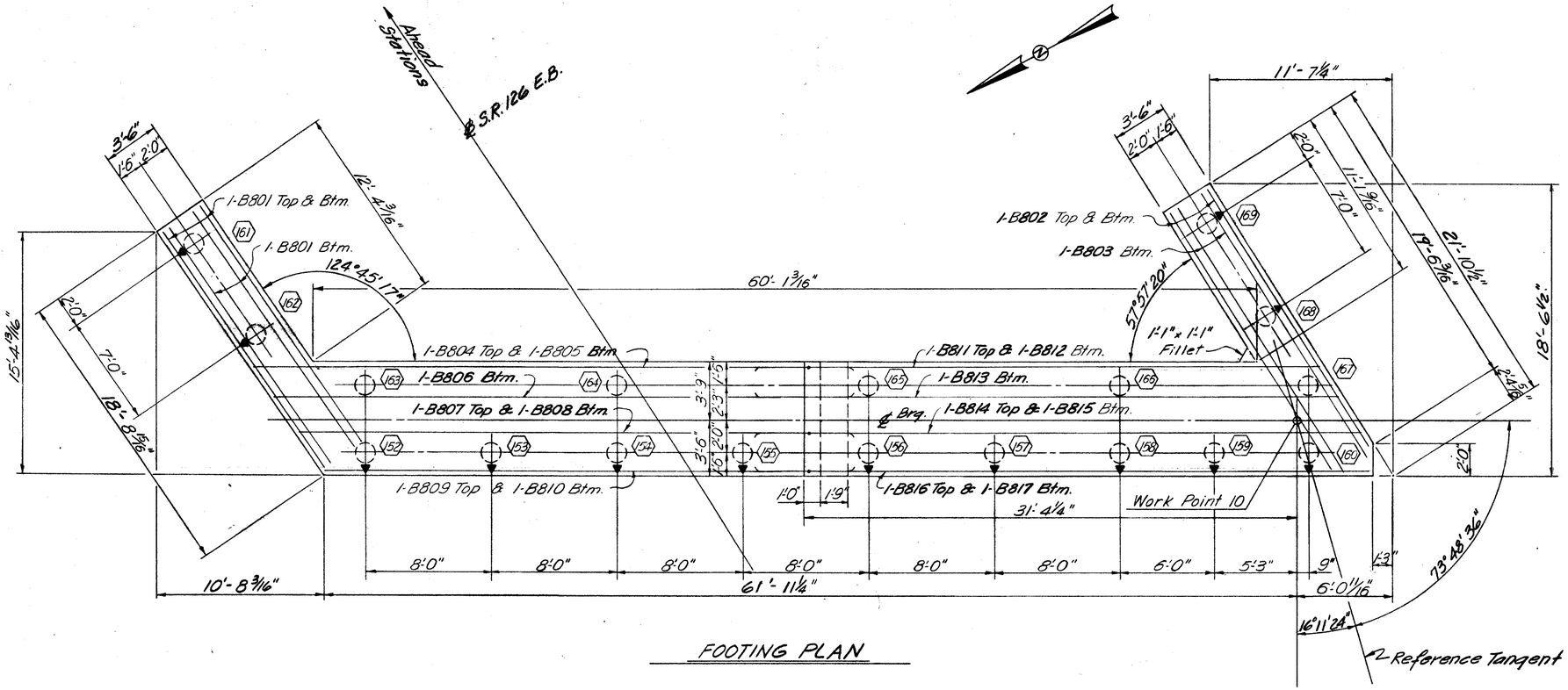
8/36

FORWARD ABUTMENT
BRIDGE NO. HAM-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75, RAMP D
HAMILTON COUNTY OHIO
STA. 37+76.74 TO STA. 44+84.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
TMB	WJH JAG	~	SJA	CRS 6/86	July 21 1986

OHIO BLUE PRINT 140333

CALC. BY / DATE	HAM-75-9.93	OHIO	550A
CHKD. BY / DATE	HAM-126-13.00	FHWA REGION 5	787



FOOTING PLAN

LEGEND

= Pile battered 1:3 (1:4 in wings) in direction of arrow.

= Pile number

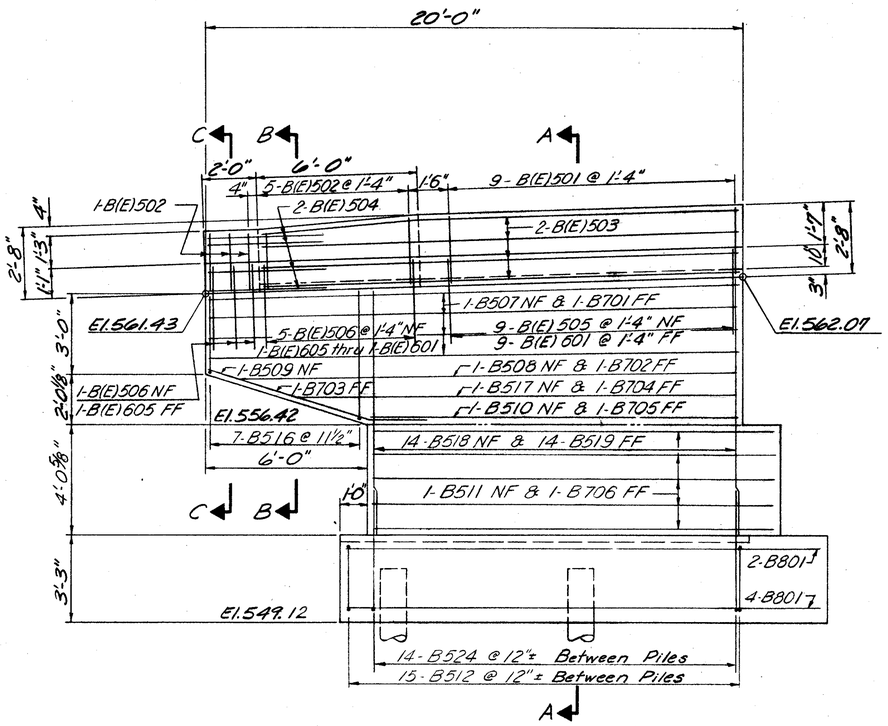
BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

9/36

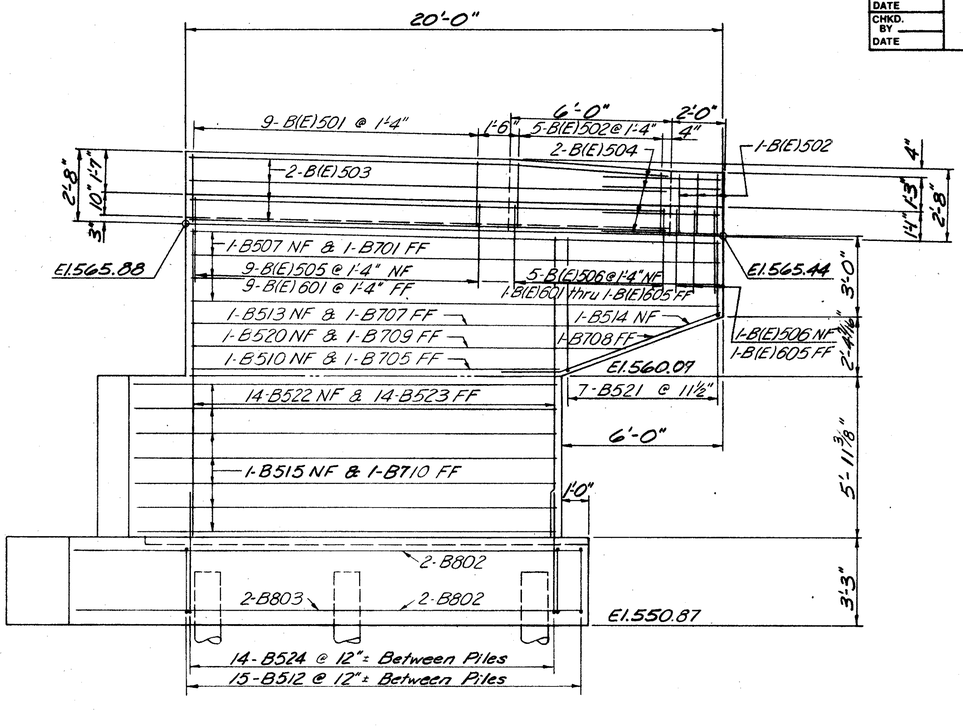
FORWARD ABUTMENT
BRIDGE NO. HAM-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75, RAMP D
HAMILTON COUNTY OHIO
STA. 37+76.74 TO STA. 44+84.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
TMB	WJH JAG	~	SJA	CRS 6/86	

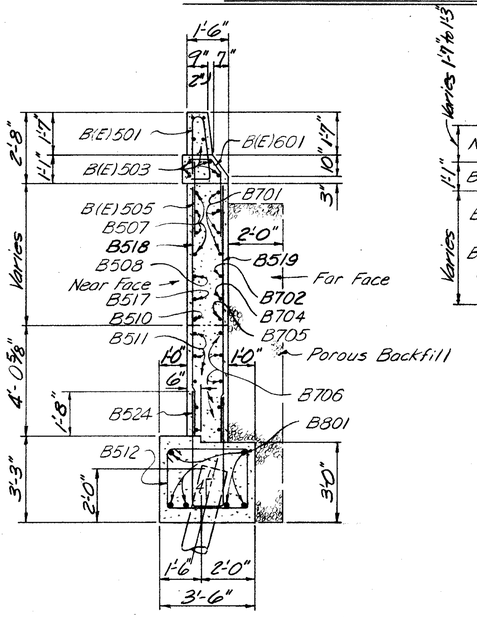
CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO	551 787
CHKD. BY			FHWA REGION 5	
DATE				



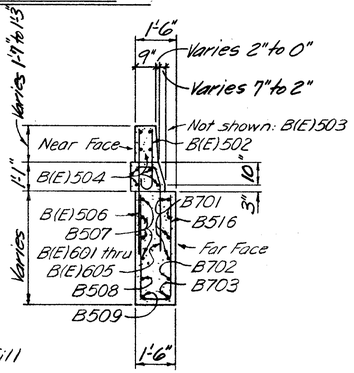
ELEVATION: WINGWALL "C"



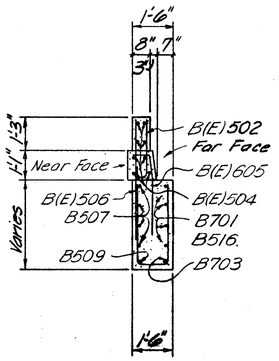
ELEVATION: WINGWALL "D"



SECTION A-A



SECTION B-B



SECTION C-C

NOTES

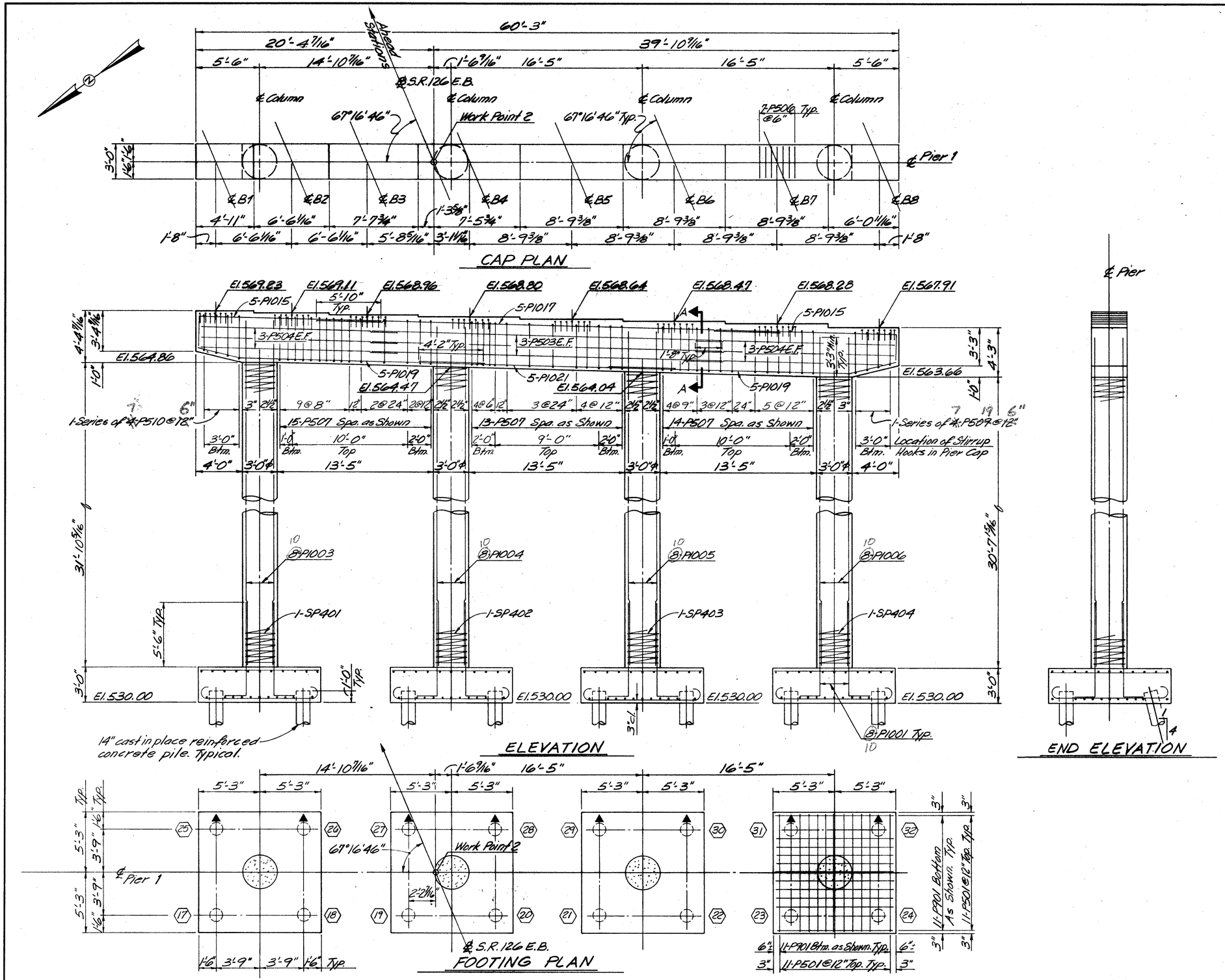
"(E)" denotes epoxy coated reinforcing bar.
NF = Near Face
FF = Far Face
EF = Each Face

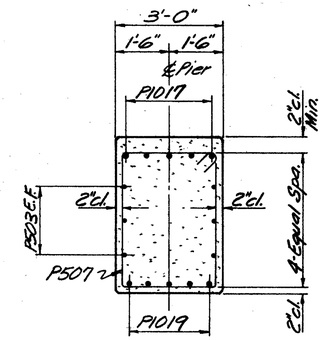
For location of bars B801 thru B803 see Footing Plan on sheet 9|36.

BALKE ENGINEERS 7762 READING ROAD CINCINNATI, OHIO 45237					10|36
FORWARD ABUTMENT WINGWALLS BRIDGE NO. HAM-126-1328 S.R. 126 E.B. OVER ANTHONY WAYNE, CONRAIL, I-75, RAMP D HAMILTON COUNTY OHIO STA. 37+76.74 TO STA. 44+84.91					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
TMB	WJH JAG	~	SJA	CRS 6/86	

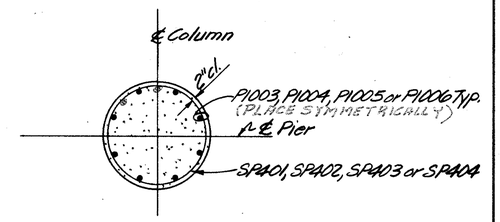
OHIO BLUE PRINT

CALC. BY	HAM-75-9.93	OHIO	552
DATE	HAM-126-13.00	FHWA REGION 5	787
CHKD. BY			
DATE			





SECTION A-A



COLUMN SECTION
TYPICAL

Notes:
1. Bridge Seat Elevations have been adjusted upward 1/16" at Pier 1 to compensate for the vertical deformation of bearings.
2. Designates Pile battered 1:4 in direction of arrow.
3. Designates Pile Number.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

11/36

PIER 1
BRIDGE NO. HAM-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75, RAMP D
HAMILTON COUNTY OHIO
STA. 37+76.74 TO STA. 44+84.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
TMB	WJH	~	BJS	CRS 6/86	

REVISED 12/9/86 REVISED 2/25/87

CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO	552A
CHKD. BY			FHWA REGION 5	787
DATE				

Ahead Sta Fwd

60'-3"

20'-4 7/16"

39'-10 9/16"

℄ S.R. 126 E.B.

2'-10 7/16"

17'-6" | 22'-4 9/16" | 17'-6"

7-P518 @6" | 7-P518 @6" | 67°16'46" 7-P518 @6" | Work Point 3 | 67°16'46" Typ. | 7-P518 @6"

3'-0" | 1'-1 1/16"

℄ Pier 2

℄B1 ℄B2 ℄B3 ℄B4 ℄B5 ℄B6 ℄B7 ℄B8

4'-11" | 6'-6 1/16" | 7'-7 3/4" | 1'-3 5/8" | 7'-5 3/4" | 8'-9 3/8" | 8'-9 3/8" | 8'-9 3/8" | 6'-0 11/16"

1'-8" | 6'-6 1/16" | 6'-6 1/16" | 5'-8 5/16" | 3'-1 1/16" | 8'-9 3/8" | 8'-9 3/8" | 8'-9 3/8" | 8'-9 3/8" | 1'-8"

CAP PLAN

℄ Beam 9 1/16"

67°16'46"

4 1/16"

℄ Pier 2

ANCHOR BOLT LAYOUT

℄ S.R. 126 E.B.

32'-0"

16'-0" | 16'-0"

6'-2 15/16" | 25'-9 1/16"

3" | 1-P902 | 1 1/16" | 2"cl.

Work Point 3

38-Spaces @ 7" E.F. = 22'-2"

P608 | 1-P609 | P608

16-P602 Top @ 12" Max. 9" | 99-P1026 @ 9" | 97-P902 @ 9" | 1-P1101 | 1-P1101

8-Equal Spaces | 8-Equal Spaces

1 1/16"

6'-0" | 7'-6" | 6'-0" | 7'-6" | 15'-0"

32-P601 Top @ 12" | 1-P902 | 6"

6" | 9" | 9" | 1'-6"

5-P1101 Btm. @ Eq. Spa. Typ.

1'-6" | 4'-10" | 4'-10" | 4'-10" | 4'-10" | 4'-10" | 4'-10" | 1'-6"

FOOTING PLAN

A ↰

20-P515 @ 14" (Match P1027)

C ↰

El. 569.76 | El. 569.65 | El. 569.51 | El. 569.37 | El. 569.23 | El. 569.09 | El. 568.92 | El. 568.57

6-P514 | 9'-0" Typ. | 6-P503 | B ↰ | 6-P1102

6-P1102

℄ 6-P1103 | ℄ 1-P603 E.F. | ℄ 1-P603 E.F. | ℄ 1-P603 E.F. | ℄ 1-P603 E.F. | ℄ 1-P603 E.F. | ℄ 1-P604 E.F. | ℄ 1-P605 E.F. | ℄ 1-P606 E.F.

℄ 6-P1103 | ℄ 1-P603 E.F. | ℄ 1-P603 E.F. | ℄ 1-P603 E.F. | ℄ 1-P603 E.F. | ℄ 1-P604 E.F. | ℄ 1-P605 E.F. | ℄ 1-P606 E.F.

8'-0" Typ.

5'-8 1/4" | 4'-4" | 4'-6"

6-P607 | C ↰ | 6-P610 | 2'-0" Typ. | 6-P610 Construction Joint | El. 559.74 | B ↰ | 6-P607

1-Series of 7-P516 @ 12" | 12" | 2-Series of 11-P517 (Paired) @ 12" | 3" | 25'-3" | 3" | 2-Series of 11-P517 (Paired) @ 12" | 12" | 1-Series of 7-P516 @ 12"

17'-6" | 17'-6"

7-P1027 | 20-P1027 @ 14" E.F. = 22'-2" | 7-P1027

7" | 19-P1026 @ 14" E.F. (Alternate with P1027) | 7"

27'-8" | 28-P608 @ 12" | 28-P609 @ 12" E.F. | 28-P608 @ 12" | 27'-8"

3'-4 1/2" | 5'-6" Typ. | 3'-4 1/2"

14"

El. 532.07

4'-0" | 1'-0" Typ. | 92-P1002 Dowels Spaced as Shown in Footing Plan | 4'-0"

El. 528.07

A ↲

14" cast in place reinforced concrete piles. Typical.

ELEVATION

℄ Pier 8 1/2" | 8 1/2" | 2" | 2"

3" | P1102 | P1103 | P503 | P515

3-Equal Spa. P603 Max. @ 16" Each Face

P610-7

Key 12" x 2" x 22'-0"

P1027 | P1027

P609 E.F.

6'-0" | 6'-0"

Key 12" x 2" x 22'-0"

P602

P1002 | P902 | P601 | P1101

7'-6" | 3" cl. | 7'-6"

15'-0"

SECTION A-A

8 1/2" | 8 1/2" | 2" cl. Min. | 2" | 2"

Anchor Bolts | P1102 | 3" | P1103

2"cl. | P603 E.F. | Equal Spaces

P516 | P517

2"cl. | 2"cl.

1'-6" | 1'-6"

P609

SECTION B-B

8 1/2" | 8 1/2" | 2" cl. Min. | 2" | 2"

Anchor Bolts

P518 | P514 | P1102 | 3"

P1103

2"cl. | P603 E.F. | Equal Spaces

P517

2"cl.

P604 E.F.

P607

SECTION C-C

NOTES:

1. Bridge Seat Elevations have been adjusted upward 1/16" at Pier 2 to compensate for the vertical deformation of the bearings.
2. Bridge Seat Reinforcing: Reinforcing steel in the vicinity of the bridge seat shall be accurately placed to avoid interference with the drilling of bearing anchor holes or the pre-setting of bearing anchors.
3. Bearing Anchors: At the option of the contractor, bearing anchors (or formed holes), located and supported by templates, may be cast in place.
4. ◇ Designates Pile battered 1:4 ▼ in direction of arrow.
5. ⬡ Designates Pile Number.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

12/36

PIER 2

BRIDGE NO. HAM-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75, RAMP D
HAMILTON COUNTY OHIO
STA. 37+76.74 TO STA. 44+84.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
TMB	ALH WJH	—	BJS	CRS 6/86	

OHIO BLUE PRINT 140053

CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO	5528
CHKD. BY			FHWA REGION 5	787
DATE				

Ahead Stations

60'-3"

20'-4 7/16" | 17'-6" | 2'-10 9/16" | 39'-10 9/16" | 22'-4 3/16" | 17'-6"

7-P518 @6" | 7-P518 @6" | 7-P518 @6" | ℄ S.R. 126 E.B. | 7-P518 @6"

67°16'46" | Work Point 4 | 67°16'46" Typ.

3'-0" | 1'-6" | ℄ Pier 3

B1 | B2 | B3 | 1'-3 5/8" | B4 | B5 | B6 | B7 | B8

4'-11" | 6'-6 1/16" | 6'-6 1/16" | 7'-7 3/4" | 7'-5 3/4" | 8'-9 3/8" | 8'-9 3/8" | 8'-9 3/8" | 6'-0 11/16"

1'-8" | 6'-6 1/16" | 6'-6 1/16" | 5'-8 5/16" | 3'-1 11/16" | 8'-9 3/8" | 8'-9 3/8" | 8'-9 3/8" | 8'-9 3/8" | 1'-8"

CAP PLAN

℄ S.R. 126 E.B.

32'-0"

16'-0" | 16'-0"

6'-2 15/16" | ℄ 25'-9 1/16"

1-P902

1'-0 1/16" Work Point 4

2 ℄

P608 | P609 | P608

38-Spaces @ 7" E.F. = 22'-2"

8-Equal Spaces | 8-Equal Spaces

1-P902

32-P601 Top @ 12"

3" | 6" | 7" | 6"

1'-6 | 5'-9 5/8" | 5'-9 5/8" | 5'-9 5/8" | 5'-9 5/8" | 5'-9 1/2" | 1'-6

6-P1101 Btm. @ Eq. Spcs. Typ.

16-P602 Top @ 12" Max

3" | 9 3/4"/P602 | 9 3/4"/P602 | 9 3/4"/P602 | 9 3/4"/P602 | 9 3/4" | 3"

@ 9" | @ 9"

1-P1101 | 4-P1101

14" | 6'-0" | 7'-6" | 15'-0"

FOOTING PLAN

A

C

B

20-P515 @ 14" (Match P1027)

El. 569.69 | El. 569.65 | El. 569.60 | El. 569.52 | El. 569.45 | El. 569.36 | El. 569.24 | El. 568.90

7'-4" Typ.

6-P514 | 6-P1028 | 6-P503 | 6-P1028

5'-3 9/16"

4'-4" | 4'-4"

6-P1029 | 1-P603E.F. | 1-P603E.F. | 1-P603E.F. | 1-P603E.F. | 1-P603E.F. | 1-P604E.F. | 1-P605E.F. | 1-P606E.F.

6-P607 | 6-P607

El. 560.07

6-P610 | 2'-0" Typ. | 6-P610

Construction Joint

C | B

1-Series of 7-P516 @ 12" | 2-Series of 11-P517 (Paired) @ 12" | 3" | 3" | 2-Series of 11-P517 (Paired) @ 12" | 1-Series of 7-P516 @ 12"

17'-6" | 25'-3" | 17'-6"

20-P1027 @ 14" E.F. = 22'-2"

7-P1027 | 7-P1027

1" | 19-P1026 @ 14" E.F. (Alternate with P1027) | 1"

28'-2"

28-P608 @ 12" | 28-P609 E.F. | 28-P608 @ 12"

3'-4 1/2" | 3'-4 1/2"

5'-6" Typ.

El. 531.90

4'-0" | 4'-0" Typ. | 92-P1002 Dowels Spaced as shown in Footing Plan | El. 527.90 | 4'-0"

14" cast in place reinforced concrete piles. Typical.

A

ELEVATION

℄ Pier

1'-6" | 1'-6"

P1028 | P1029 | P503 | P515

8-Equal Spaces @ P603E.F. Each Face

P610

Key 12" × 2" × 22'-0"

P1027 | P1027

P609E.F.

6'-0" | 6'-0"

Key 12" × 2" × 22'-0"

P602

P1002 | P1002 | P601 | P1101

3 3/4"

7'-6" | 7'-6"

15'-0"

SECTION A-A

2'cl. Min.

℄ Pier

P1028 | P1029

2'cl. | 2'cl.

P603E.F. Equal Spaces

P516 | P603E.F. | P607

1'-6" | 1'-6"

SECTION B-B

2'cl. Min.

℄ Pier

P514 | P1028

P518 | P1029

2'cl. | 2'cl.

P603E.F. Equal Spaces

P517 | P604E.F. | P607

1'-6" | 1'-6"

SECTION C-C

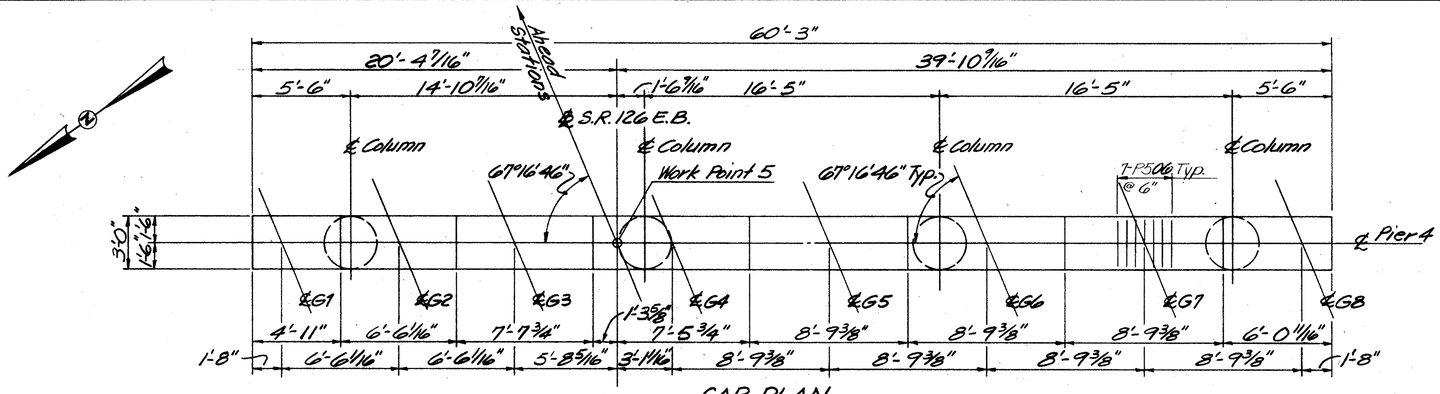
NOTES:

1. Bridge seat elevations have been adjusted upward 1/16" at Pier 3 to compensate for the vertical deformation of the bearings.
2. ▼ Designates Pile battered 1:4 in direction of arrow.
3. ⬡ Designates Pile Number.

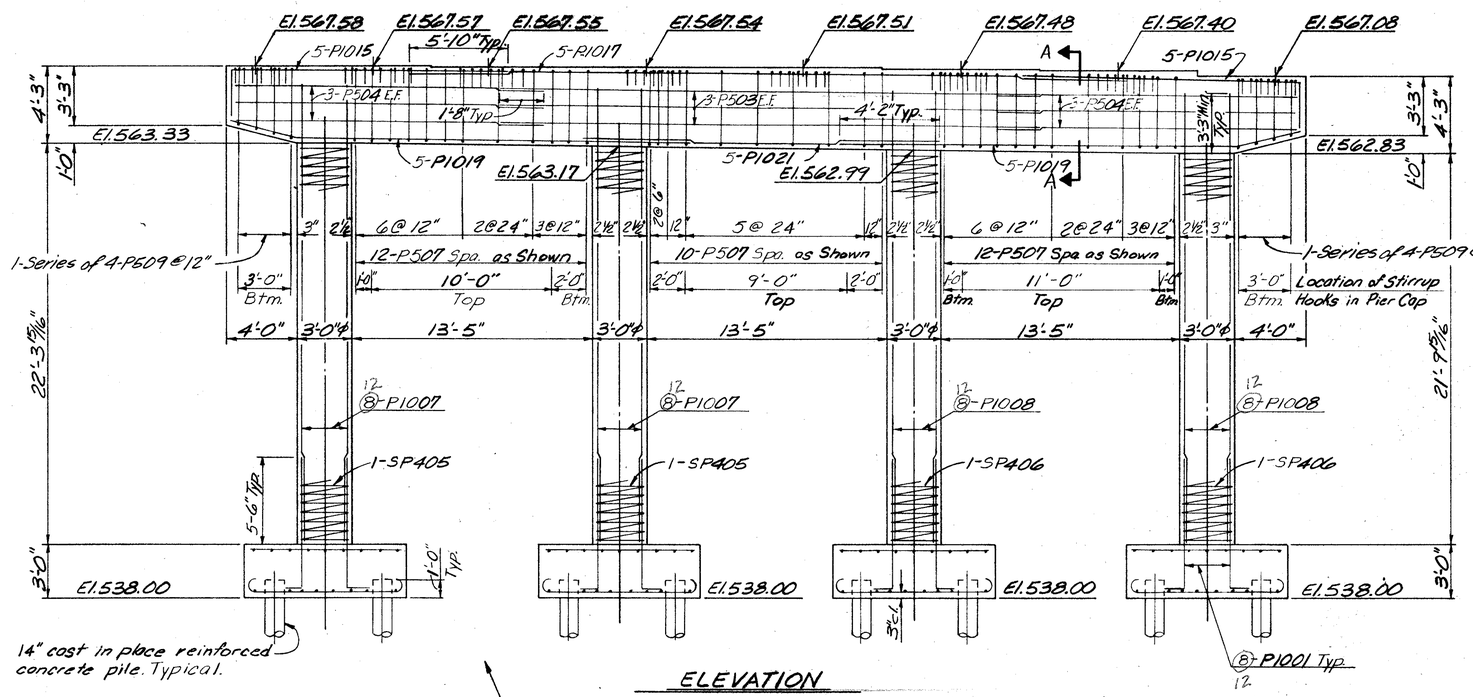
BALKE ENGINEERS 7762 READING ROAD CINCINNATI, OHIO 45237					13/36
PIER 3 BRIDGE NO. HAM-126-1328 S.R. 126 E.B. OVER ANTHONY WAYNE, CONRAIL, I-75, RAMP D HAMILTON COUNTY OHIO STA. 37+76.74 TO STA. 44+84.91					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
TMB	ALH NJH	~	BJS	CRS 6/86	

OHIO BLUE PRINT M60053

CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO	6526
DATE			FHWA REGION 5	787
CHKD. BY				
DATE				



CAP PLAN



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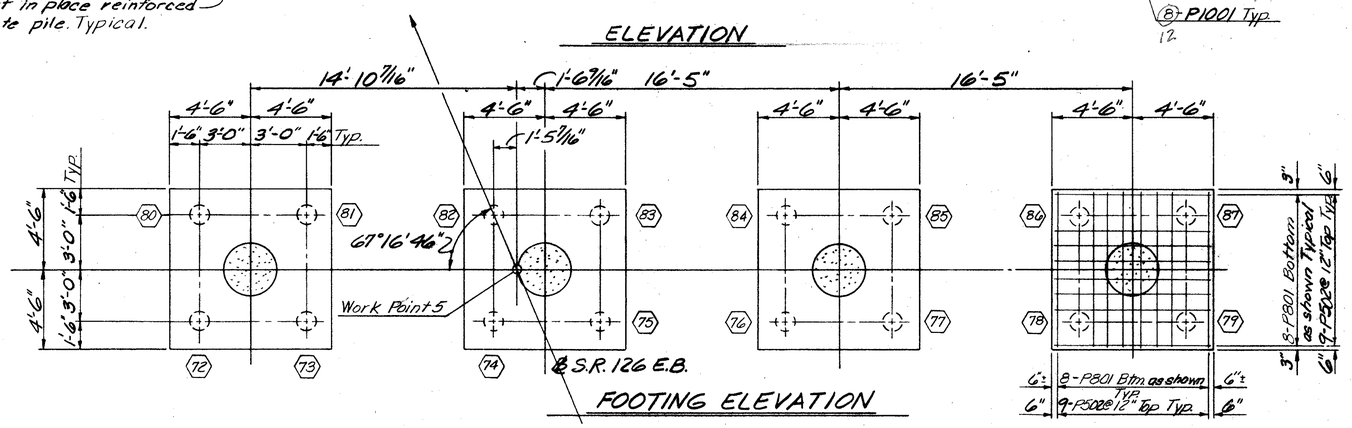
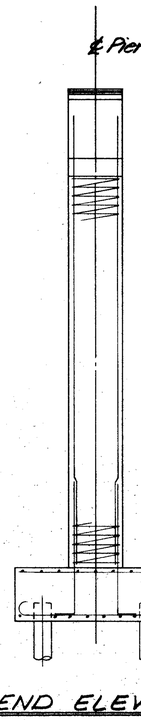


FOOTING ELEVATION



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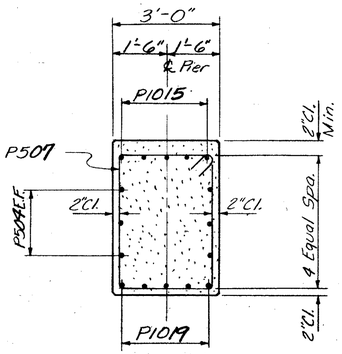
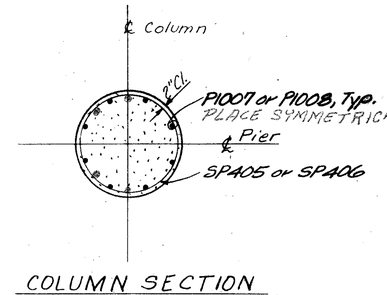


SECTION A-A



COLUMN SECTION
TYPICAL

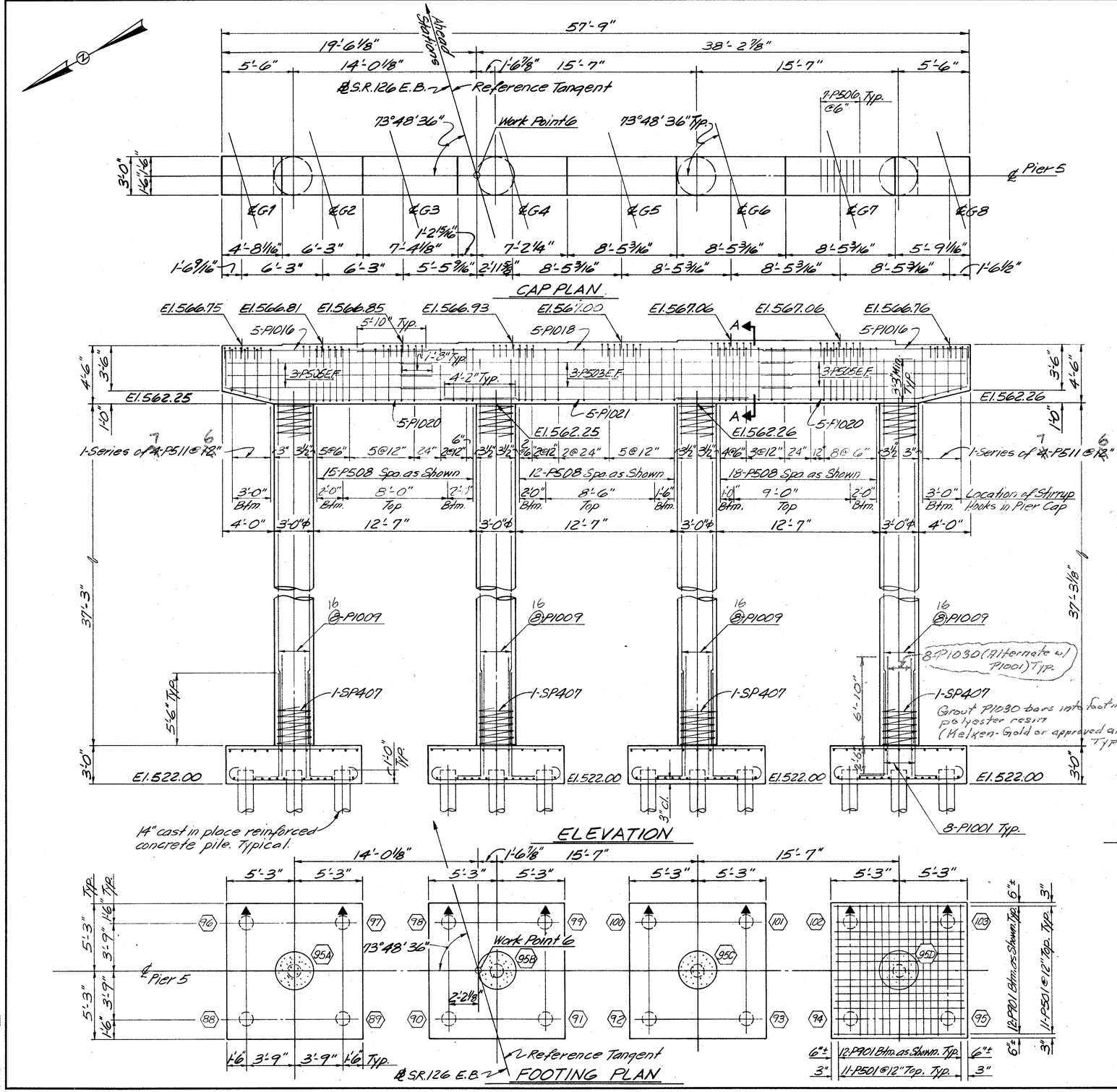
Notes:
1. Bridge Seat Elevations have been adjusted upward 1/16" at Pier 4 to compensate for the vertical deformation of the bearings.
2. ◊ Designates Pile battered 1:4 in direction of arrow.
3. ⬡ Designates Pile Number.

BALKE ENGINEERS 7762 READING ROAD CINCINNATI, OHIO 45237					14136
PIER 4 BRIDGE NO. HAM-126-1328 S.R. 126 E.B. over ANTHONY WAYNE, CONRAIL, I-75, RAMP D HAMILTON COUNTY OHIO STA. 37+76.74 to STA. 44+84.91					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
TMB	WJH ALH	~	BJS	CRS 6/86	

REVISED 2/25/87

OHIO BLUE PRINT 742033

CALC. BY / DATE	HAM-75-9.93 HAM-126-13.00	OHIO	553 787
CHKD. BY / DATE		FHWA REGION 5	



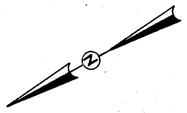
Notes:
1. Bridge Seat Elevations have been adjusted upward 1/8" at Pier 5 to compensate for the vertical deformation of the bearings.
2. ◯ Designates Pile battered 1:4 ▼ in direction of arrow.
3. ⬡ Designates Pile Number.

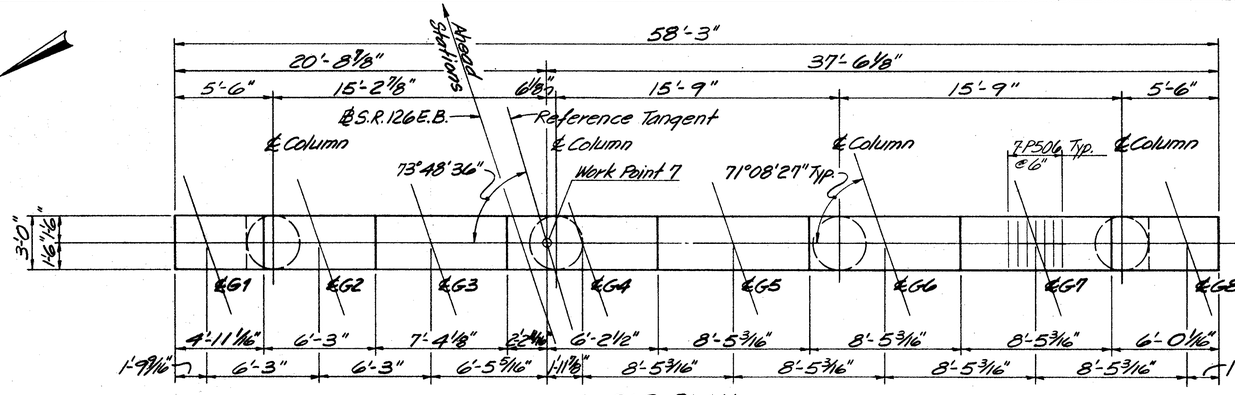
BALKE ENGINEERS 7762 READING ROAD CINCINNATI, OHIO 45237					15/36
PIER 5 BRIDGE NO. HAM-126-1328 S.R. 126 E.B. OVER ANTHONY WAYNE, CONRAIL, I-75, RAMP D HAMILTON COUNTY OHIO STA. 37+76.74 TO STA. 44+84.91					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
TMB	WJH	~	BJS	CRS 6/86	JULY 21 1986

REVISED 2/25/87 REVISED 12/9/86

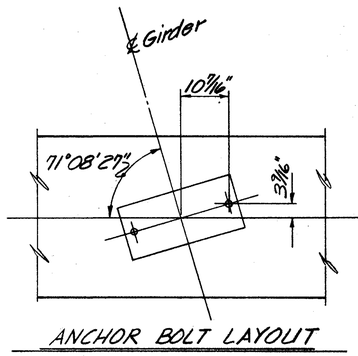
OHIO BLUE PRINT M6053

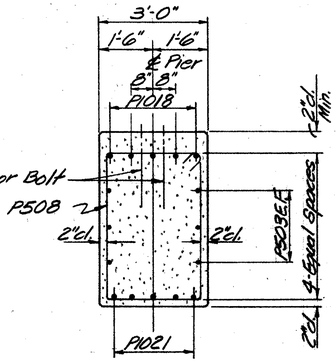
CALC. BY	HAM-75-9.93 HAM-126-13.00	OHIO	553A
CHKD. BY		FHWA REGION 5	787
DATE			



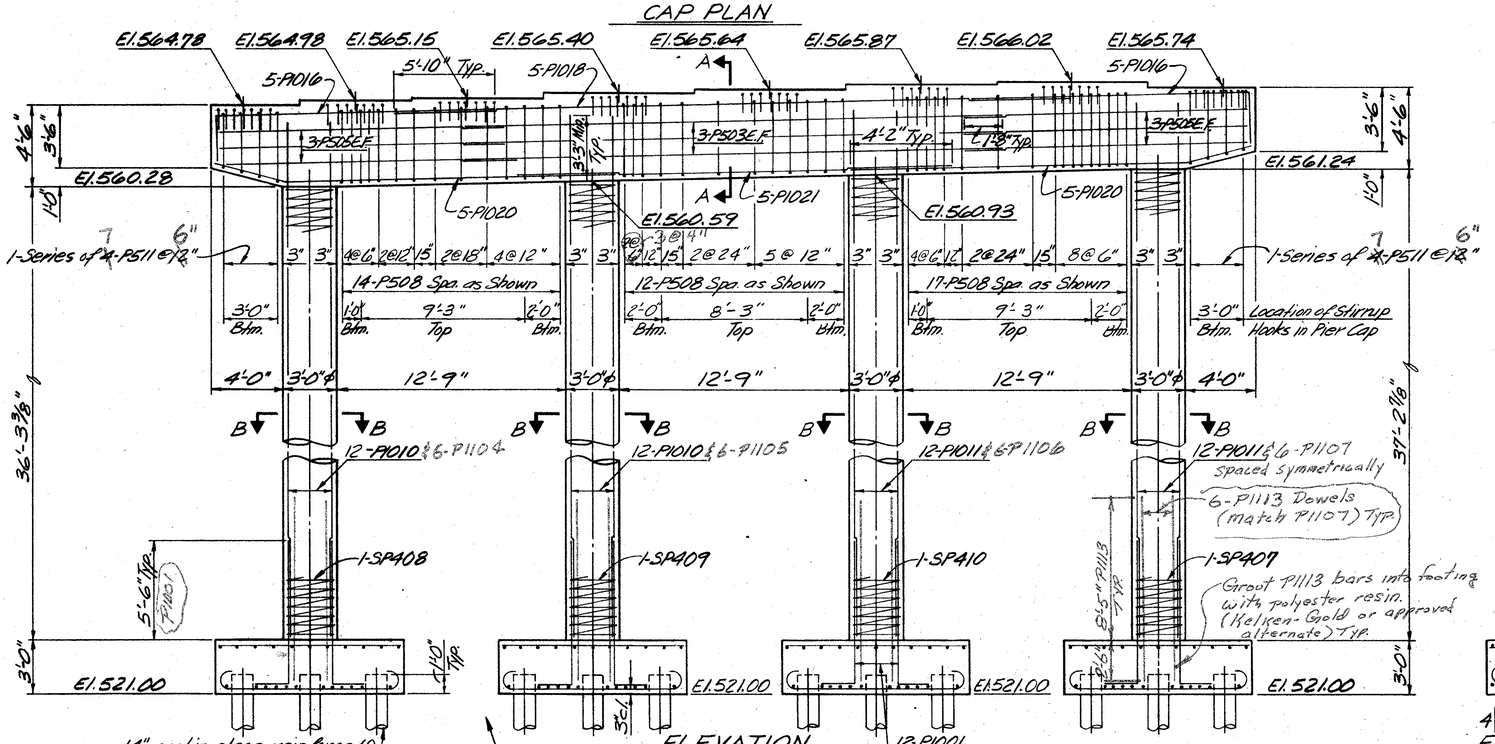


CAP PLAN

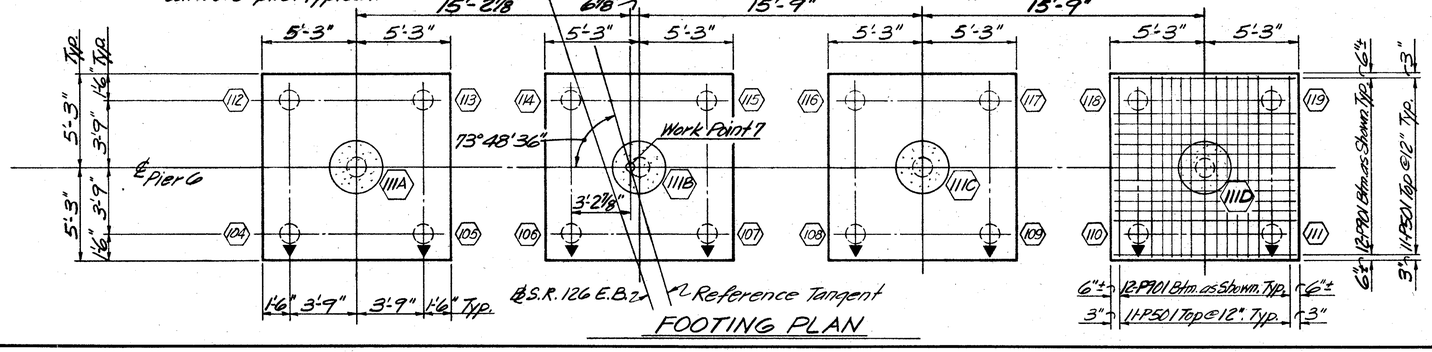




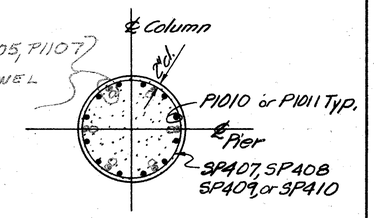
SECTION A-A



ELEVATION



FOOTING PLAN



SECTION B-B

* May be non-contact lap

Notes:
1. Bridge Seat Elevations have been adjusted upward 1/16" at Pier 6 to compensate for the vertical deformation of the bearings.
2. Bridge Seat Reinforcing: Reinforcing steel in the vicinity of the bridge seat shall be accurately placed to avoid interference with the drilling of bearing anchor holes or the pre-setting of bearing anchors.
3. Bearing Anchors: At the option of the contractor, bearing anchors (or formed holes), located and supported by templates, may be cast in place.
4. ○ Designates Pile battered 1:4 ▼ in Direction of arrow.
5. ⬡ Designates Pile Number.

BALKE ENGINEERS
7782 READING ROAD
CINCINNATI, OHIO 45237

16/36

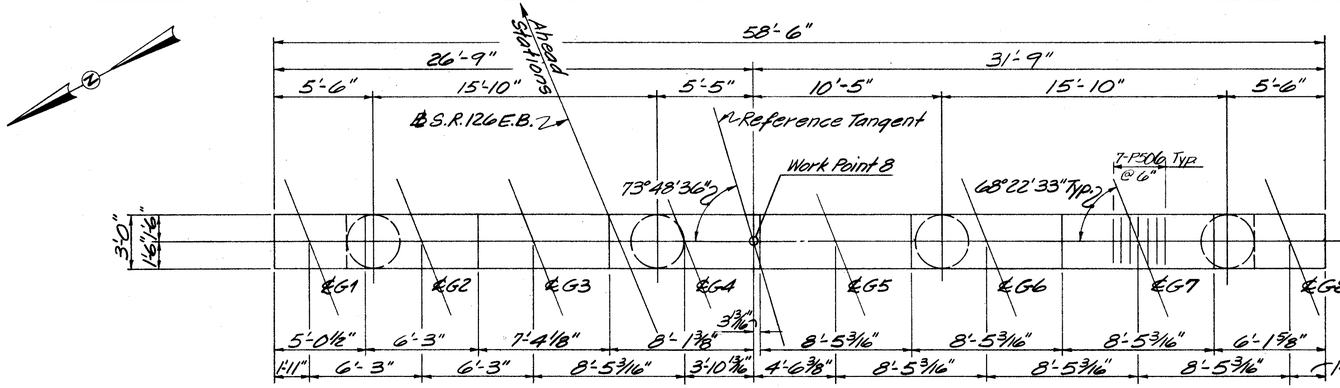
PIER 6
BRIDGE NO. HAM-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75, RAMP D
HAMILTON COUNTY OHIO
STA. 37+76.94 to STA. 44+84.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
TMB	WLH	~	BJS	CRS 6/86	JULY 21 1986

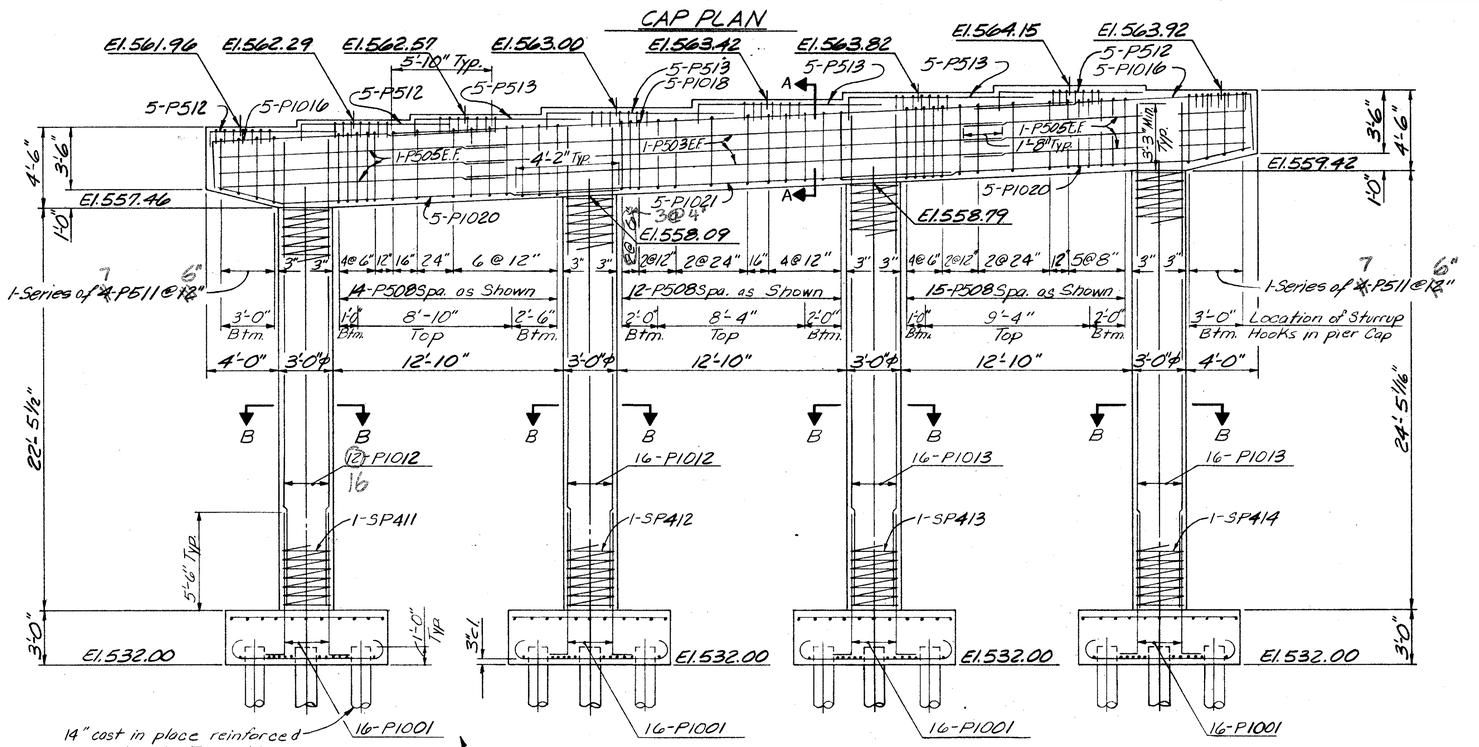
Revised 2/25/87 REVISED 12/9/86

OHIO BLUE PRINT 142033

CALC. BY / DATE	HAM-75-9.93 HAM-126-13.00	OHIO FHWA REGION 5	554 787
CHKD. BY / DATE			



CAP PLAN



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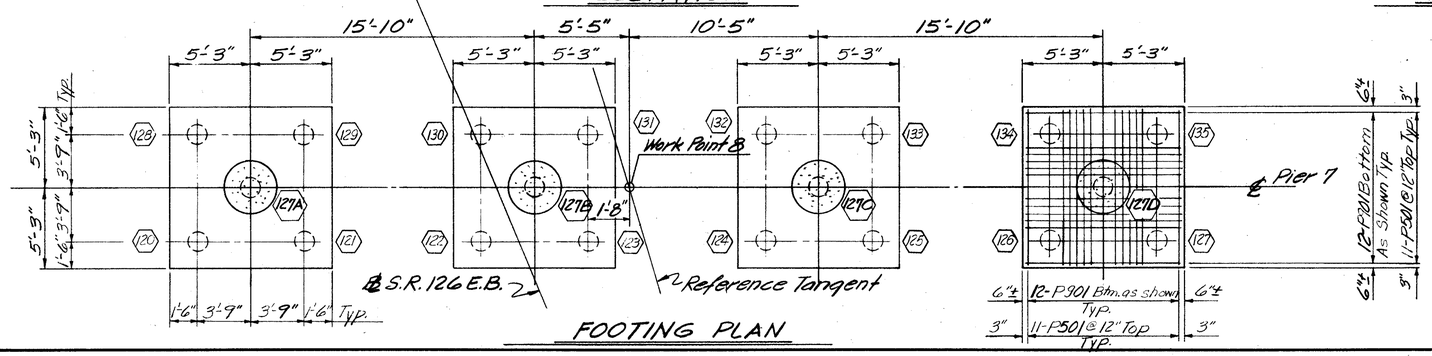
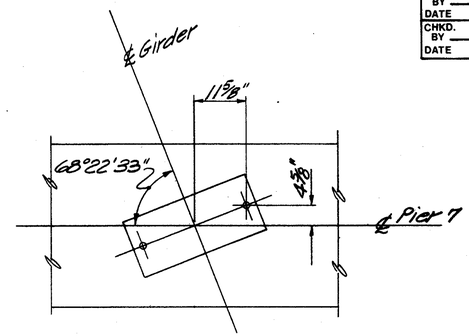
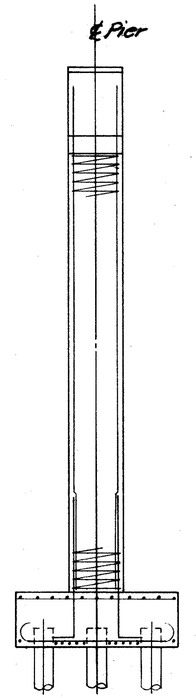


FOOTING PLAN



ANCHOR BOLT LAYOUT



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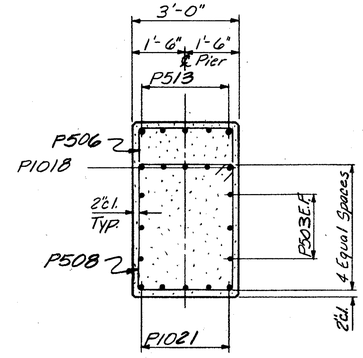
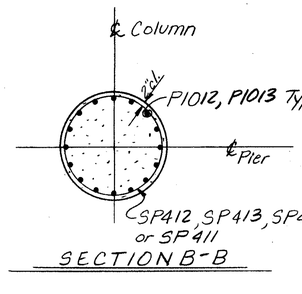


SECTION A-A



SECTION B-B

Notes:
1. Bridge Seat Elevations have been adjusted upward 1/16" at Pier 7 to compensate for the vertical deformation of the bearings.
2. Bridge Seat Reinforcing: Reinforcing steel in the vicinity of the bridge seat shall be accurately placed to avoid interference with the drilling of bearing anchor holes or the pre-setting of bearing anchors.
3. Bearing Anchors: At the option of the contractor, bearing anchors (or formed holes), located and supported by templates, may be cast in place.
4. ⬇ Designates Pile battered 1:4 in direction of arrow.
5. ⬡ Designates Pile Number.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

17/36

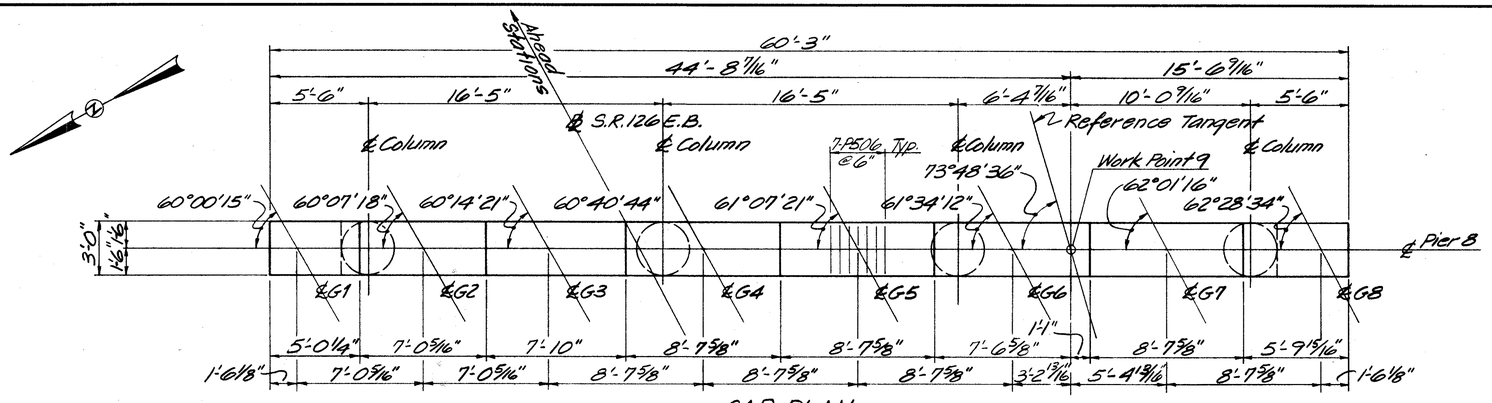
PIER 7
BRIDGE NO. HAM-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75, RAMP D
HAMILTON COUNTY OHIO
STA. 37+76.74 to STA. 44+84.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
TMB	WJH ALH	~	BJS	CRS 6/86	JULY 21 1986

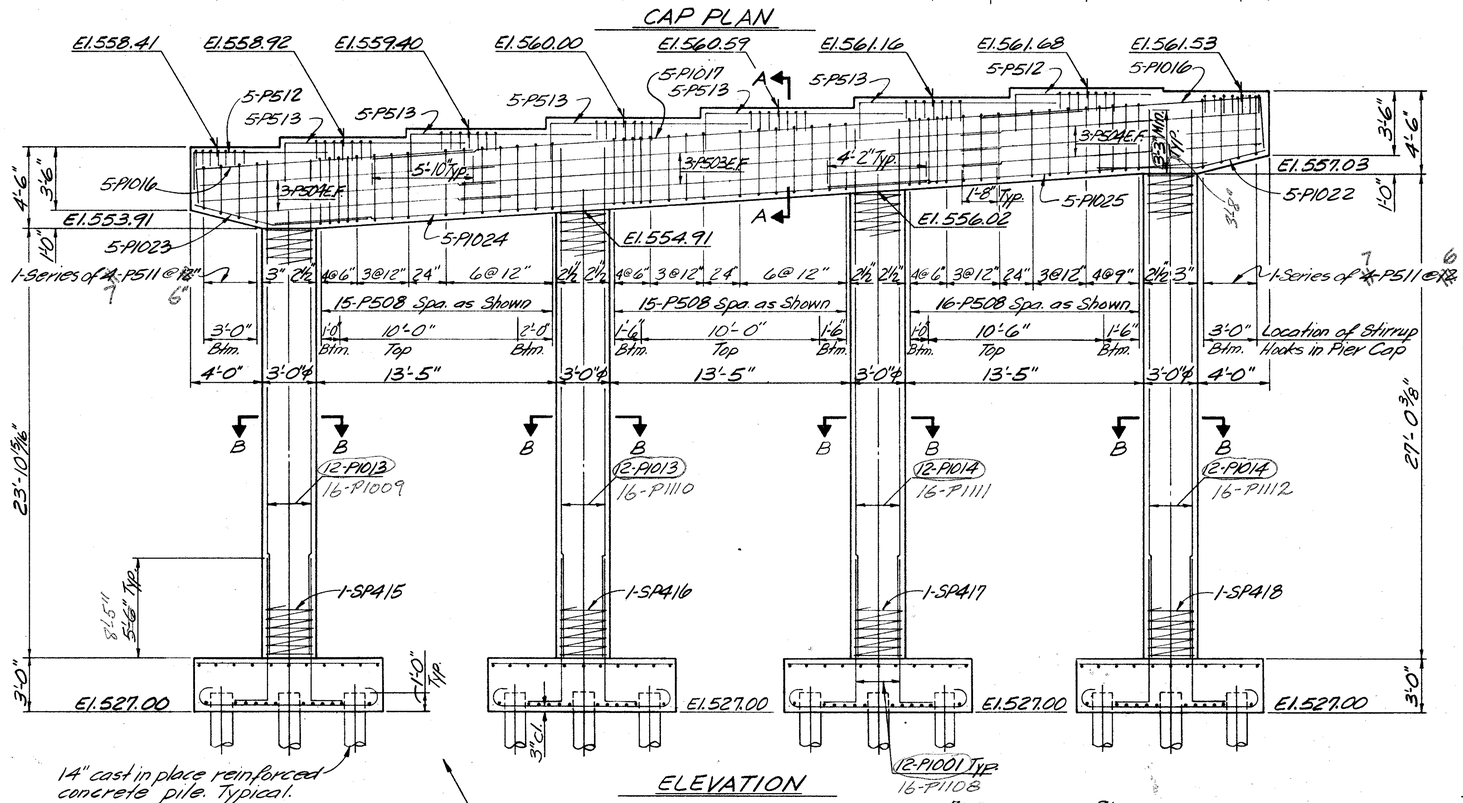
REVISED 2/25/87 REVISED 12/9/86

OHIO BLUE PRINT H40303

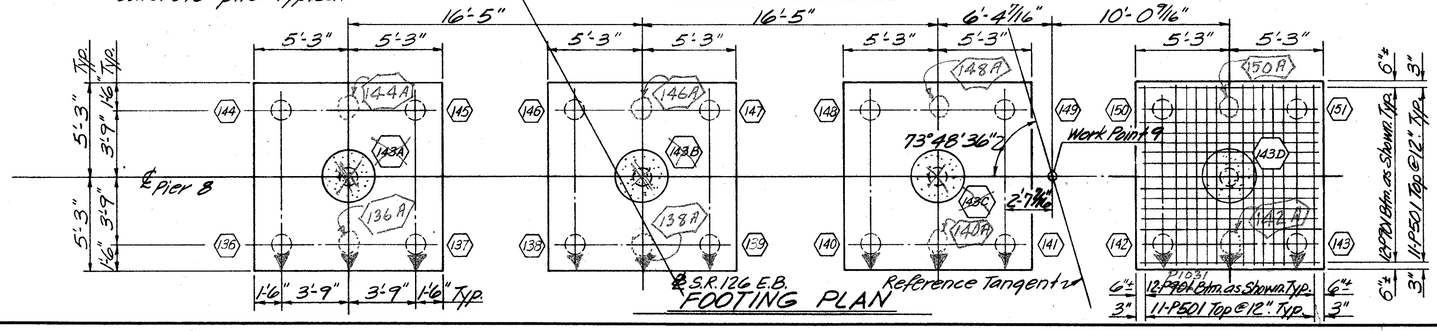
CALC. BY / DATE	HAM-75-9.93 HAM-126-13.00	OHIO FHWA REGION 5	554A 1787
CHKD. BY / DATE			



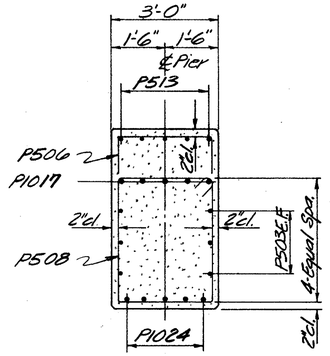
CAP PLAN



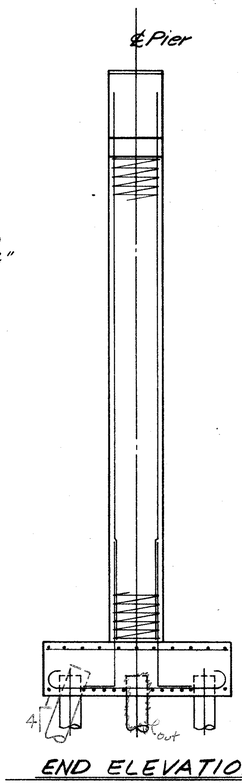
ELEVATION



FOOTING PLAN



SECTION A-A



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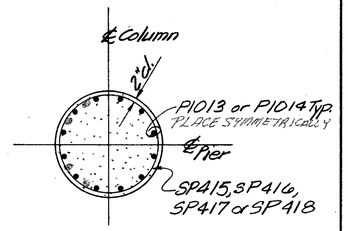


SECTION B-B

Notes:
1. Bridge Seat Elevations have been adjusted upward 1/16" at Pier 8 to compensate for the vertical deformation of the bearings.
2. ⏀ Designates Pile battered 1:4 in direction of arrow.
3. ⬡ Designates Pile Number.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

18/36

PIER 8

BRIDGE NO. HAM-126-1328
S.R. 126 E.B. over
ANTHONY WAYNE, CONRAIL, I-75, RAMP D
HAMILTON COUNTY OHIO
STA. 37+76.74 TO STA. 44+84.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
TMB	WJH	~	BJS	CRS 6/86	JULY 21 1986

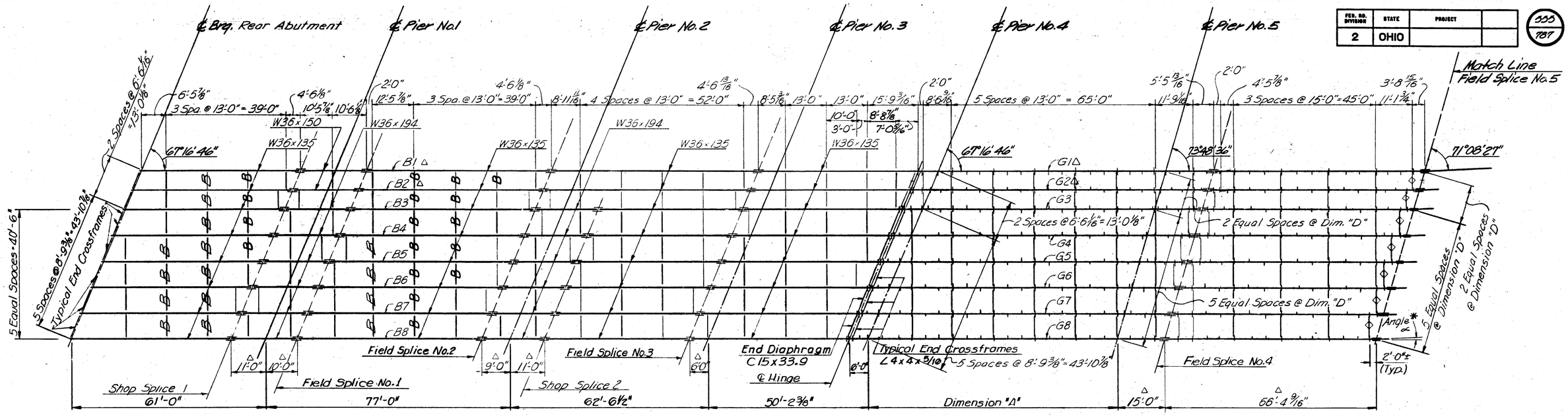
REVISED 12/9/86 REVISED 2/25/87

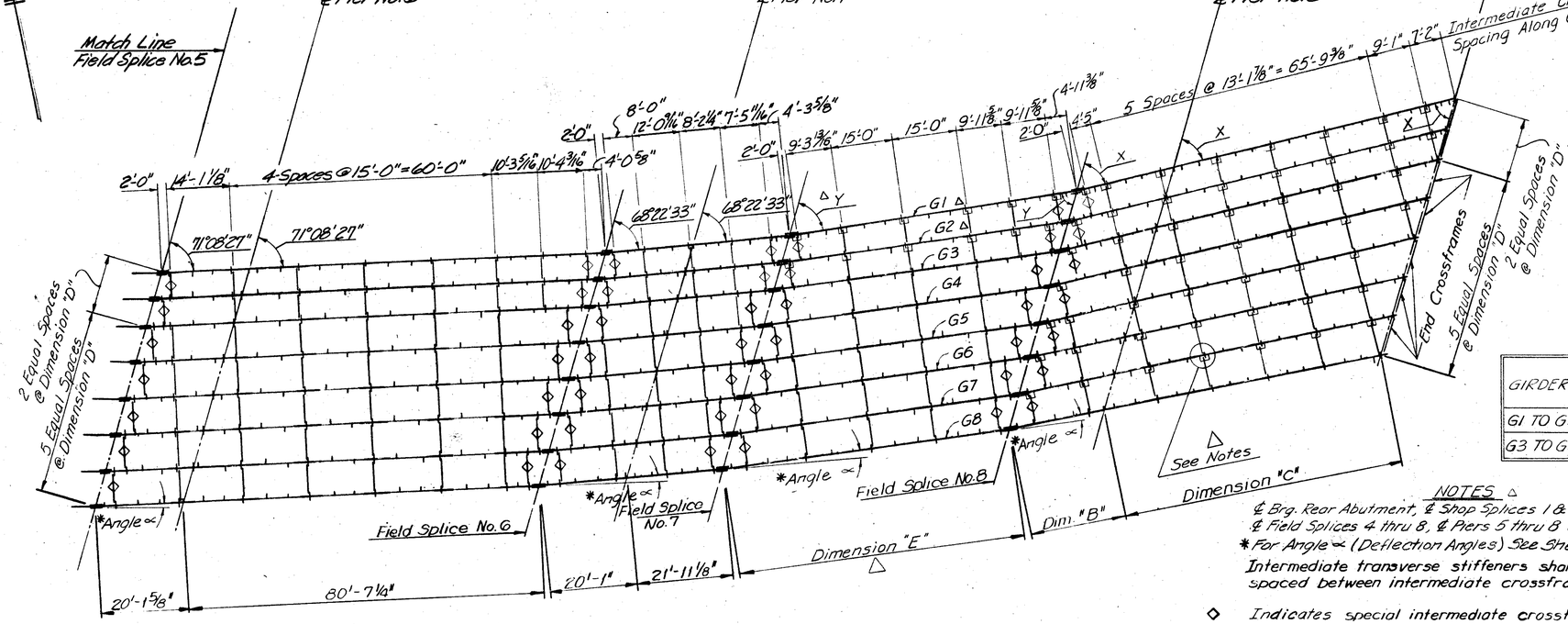
OHIO BLUE PRINT 740553

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

333 787

FRAMING





PLAN

GIRDERS	DIMENSIONS "E"	"A"	"B"	"C"	ANGLES X	Y
G1 △	66'-2 7/16"	71'-9 7/16"	22'-7 15/16"	65'-9 7/16"	60°00'15"	65°00'00"
G2 △	65'-10 3/16"	72'-6 1/16"	22'-7 5/8"	65'-8 9/16"	60°07'18"	65°34'18"
G3	65'-7 1/4"	73'-3 1/8"	22'-7 5/16"	65'-7 7/8"	60°14'21"	66°08'55"
G4	65'-7 1/2"	74'-4 3/16"	22'-6 1/8"	65'-4 3/16"	60°40'44"	66°08'55"
G5	65'-7 1/4"	75'-4 1/8"	22'-5"	65'-0 3/16"	61°07'21"	66°08'55"
G6	65'-7 1/4"	76'-5 5/16"	22'-3 9/16"	64'-9 1/2"	61°34'12"	66°08'55"
G7	65'-7 1/4"	77'-5 5/16"	22'-2 1/16"	64'-6 1/4"	62°01'16"	66°08'55"
G8	65'-7 1/2"	78'-6 5/16"	22'-1 5/8"	64'-3"	62°28'34"	66°08'55"

GIRDERS	DIMENSION "D" PIER Nos. 5, 6, & 7 and Field Splices 4, 5, 6 & 7	F. Splice 8	PIER No. 8	FWD. ABUT.
G1 TO G3	△ 6'-3"	6'-11 1/16"	7'-0 5/16"	7'-2 3/16"
G3 TO G8	8'-5 3/16"	8'-5 3/16"	8'-7 5/16"	9'-2 9/16"

NOTES △

℄ Brg. Rear Abutment, ℄ Shop Splices 1 & 2, ℄ Field Splices 1 thru 3 and ℄ Piers 1 thru 4 are parallel.
℄ Field Splices 4 thru 8, ℄ Piers 5 thru 8 and ℄ Brg. Fwd. Abutment are parallel.

* For Angle ∝ (Deflection Angles) See Sheet 25/36

Intermediate transverse stiffeners shall be equally spaced between intermediate crossframes.

◇ Indicates special intermediate crossframe, See Sheet 27/36

Indicates Bolted crossframe Connection Detail Req'd, Alternate welded stiffener may not be used for crossframe connections at these locations, See Sheet 27/36

In the regions where girders are flared, crossframes are assumed to be framed into the girder at 90° on the side of the web indicated.

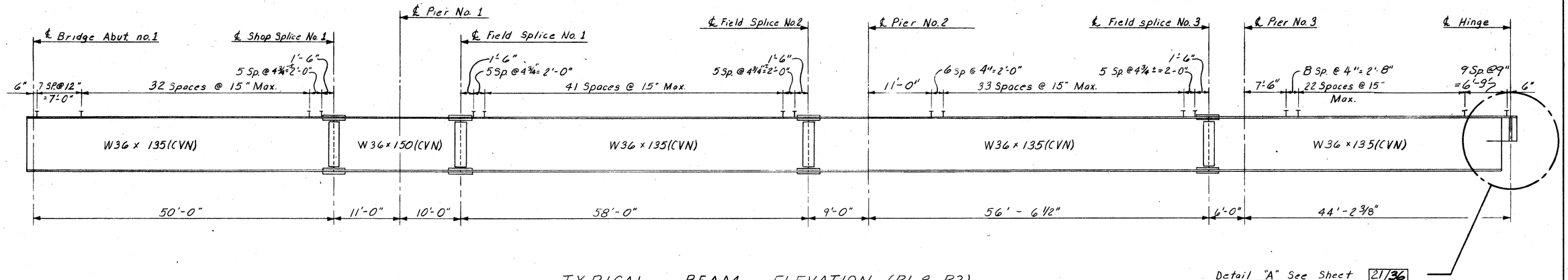
19/36

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

FRAMING PLAN
BRIDGE NO. HAM-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75, & RAMP D
HAMILTON COUNTY
STA. 37+76.74 to STA. 44+84.91

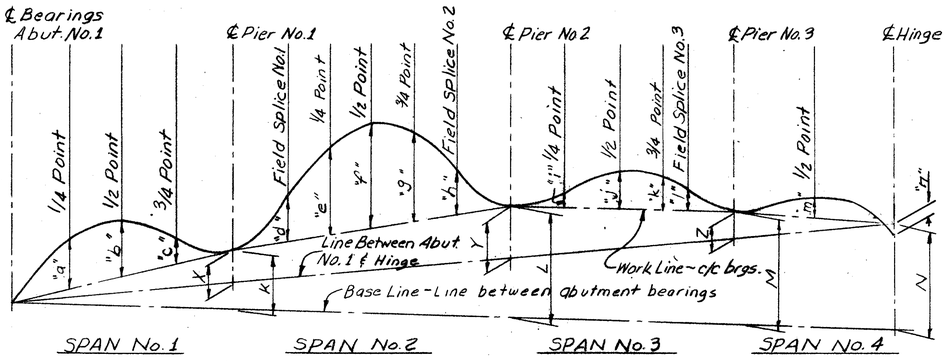
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED
V.K.	V.K.	T.D.S.	J.R.P.		6-4-71	BALKE ENGRS. 2/86

CALC. BY / DATE	HAM - 75 - 9.93 HAM - 126 - 13.00	OHIO FHWA REGION 5	555A 789
CHKD. BY / DATE			

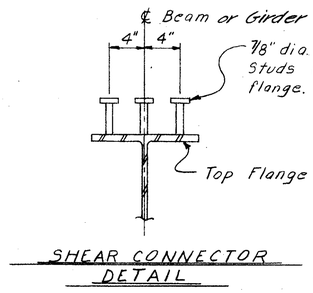


Detail "A" See Sheet 21/36.

TYPICAL BEAM ELEVATION (B1 & B2)



DEFLECTION AND CAMBER DIAGRAM



SHEAR CONNECTOR DETAIL

* Between Pier 4 & Hinge

DEFLECTION & CAMBER (B1 & B2)

LOCATION	SPAN 1			SPAN 2					SPAN 3					SPAN 4 *	HINGE
	¼ Point	½ Point	¾ Point	F.S. No.1	¼ Point	½ Point	¾ Point	F.S. No.2	¼ Point	½ Point	¾ Point	F.S. No.3		½ Point	
	"a"	"b"	"c"	"d"	"e"	"f"	"g"	"h"	"i"	"j"	"k"	"l"		"m"	"n"
DEFLECTION DUE TO WEIGHT OF STEEL	1/16	3/32	1/32	1/32	3/32	5/32	3/32	1/32	0	1/32	1/32	0		1/32	0
DEFLECTION DUE TO REMAINING DEAD LOAD	11/32	13/32	5/32	5/32	13/32	23/32	7/16	5/32	1/16	7/32	5/32	1/32		3/32	-1/16
ADJUSTMENT REQUIRED FOR VERT. AND HORIZ. CURVE	11/32	15/32	11/32	11/32	9/16	3/4	9/16	5/16	3/8	1/2	11/32	5/32		9/32	0
REQUIRED SHOP CAMBER	3/4	31/32	17/32	17/32	1 1/16	1 5/8	1 3/32	1/2	7/16	3/4	17/32	3/16		13/32	-1/16

BEAMS	DIMENSIONS						
	X	Y	Z	K	L	M	N
B1	5 3/16"	8 5/8"	4 13/16"	1'-7 11/16"	3'-3 3/16"	4'-1 3/16"	4'-6 3/16"
B2	5 13/16"	8 3/16"	4 3/4"	1'-7 1/16"	3'-1 7/8"	3'-11 7/8"	4'-4 5/8"

NOTE:
Where a plate or shape is designated (CVN) the material shall meet specified minimum notch toughness requirements as specified in 711.01 of C.M.S.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

20.36

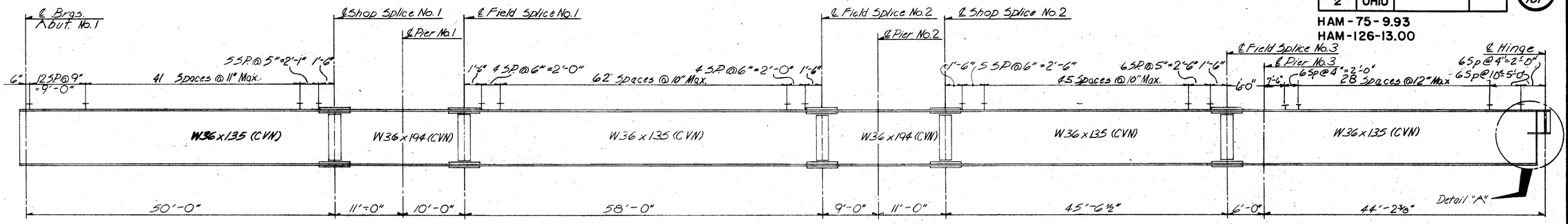
SUPERSTRUCTURE DETAILS
BRIDGE NO. HAM-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75 & RAMP D
HAMILTON COUNTY
STA 37+76.74 to STA. 44+84.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
SJA	ALH	-	TMB	CRS 2/86	-

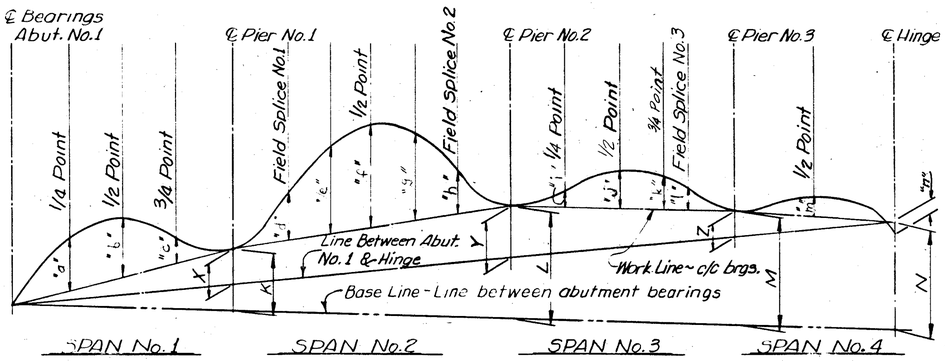
OHIO BLUE PRINT 140033

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

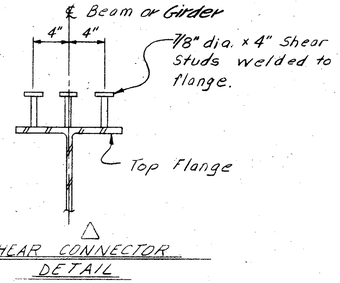
HAM-75-9.93
HAM-126-13.00



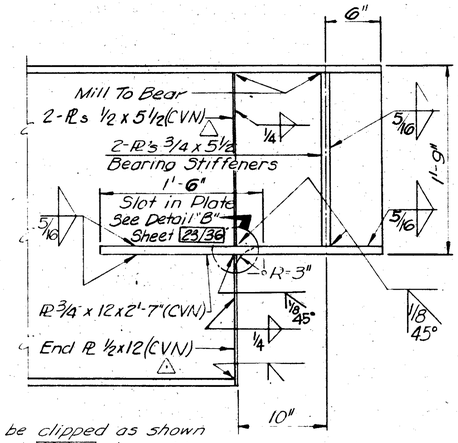
TYPICAL BEAM ELEVATION (B3 THRU B8)
△



DEFLECTION AND CAMBER DIAGRAM △



△ SHEAR CONNECTOR DETAIL



△ Stiffeners shall be clipped as shown in Detail B, sheet 22/36 to avoid intersection of welds.

DETAIL "A"

* from pier 3 to ℄ Hinge

DEFLECTION & CAMBER (B3 THRU B8) △

LOCATION	SPAN 1			SPAN 2				SPAN 3				SPAN 4 *	HINGE
	¼ Point "a"	½ Point "b"	¾ Point "c"	F.S. No.1 "d"	¼ Point "e"	½ Point "f"	¾ Point "g"	F.S. No.2 "h"	¼ Point "i"	½ Point "j"	¾ Point "k"	F.S. No.3 "l"	½ Point "m"	"n"
DEFLECTION DUE TO WEIGHT OF STEEL	1/16	3/32	1/32	1/32	1/16	1/8	1/16	1/32	0	1/32	1/32	0	0	0
DEFLECTION DUE TO REMAINING DEAD LOAD	11/32	3/8	1/8	1/8	5/16	19/32	11/32	1/8	1/16	3/16	1/8	1/32	3/32	-1/16
ADJUSTMENT REQUIRED FOR VERT. AND HORIZ. CURVE	11/32	15/32	1/32	11/32	9/16	3/4	9/16	5/16	11/32	15/32	3/8	5/32	1/4	0
REQUIRED SHOP CAMBER	3/4	15/16	1/2	1/2	15/16	1 5/32	31/32	15/32	13/32	11/16	17/32	3/16	3/8	-1/16

BEAMS	△ DIMENSIONS						
	X	Y	Z	K	L	M	N
B3	5 3/16"	7 3/16"	4 9/16"	1'-6½"	3'-0 9/16"	3'-10 11/16"	4'-3 11/16"
B4	5½"	7 3/16"	4 3/5"	1'-5 3/4"	2'-10 7/8"	3'-8 9/16"	4'-1 1/8"
B5	5¼"	6 5/8"	4 1/8"	1'-5"	2'-9 3/16"	3'-6 3/4"	3'-11 1/8"
B6	5 1/16"	6 1/8"	3 7/8"	1'-4 5/16"	2'-7 9/16"	3'-4 7/8"	3'-9 1/8"
B7	4 7/8"	5 3/4"	3 1/16"	1'-3 11/16"	2'-6 1/4"	3'-3 1/4"	3'-7 1/16"
B8	4 7/16"	5 3/4"	3 5/8"	1'-3 11/16"	2'-6 1/4"	3'-3 3/16"	3'-7 3/8"

NOTES:
HIGH STRENGTH BOLTS shall be 1"ϕ △ diameter A325 unless otherwise noted.
For Deflection and Camber Tables see Sheet 26A/36 for Beams 7 & 8.

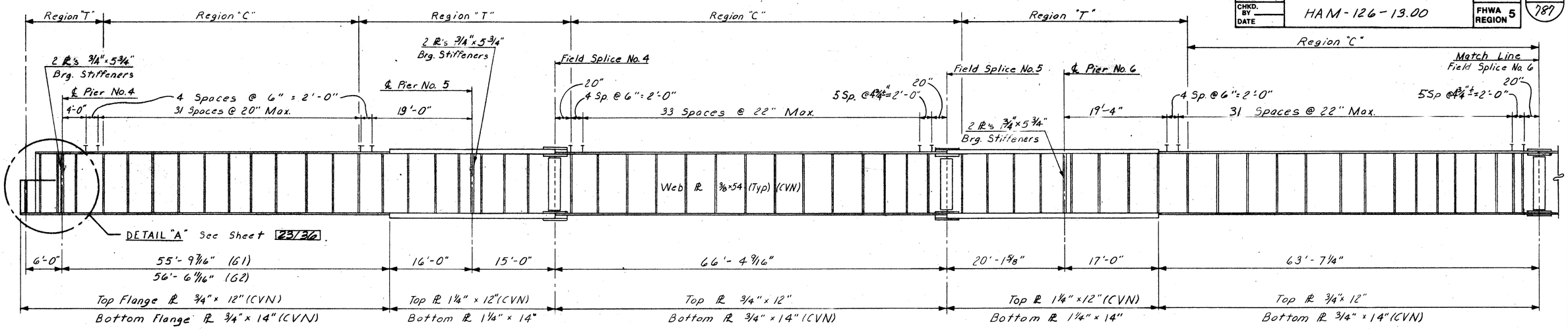
21/36

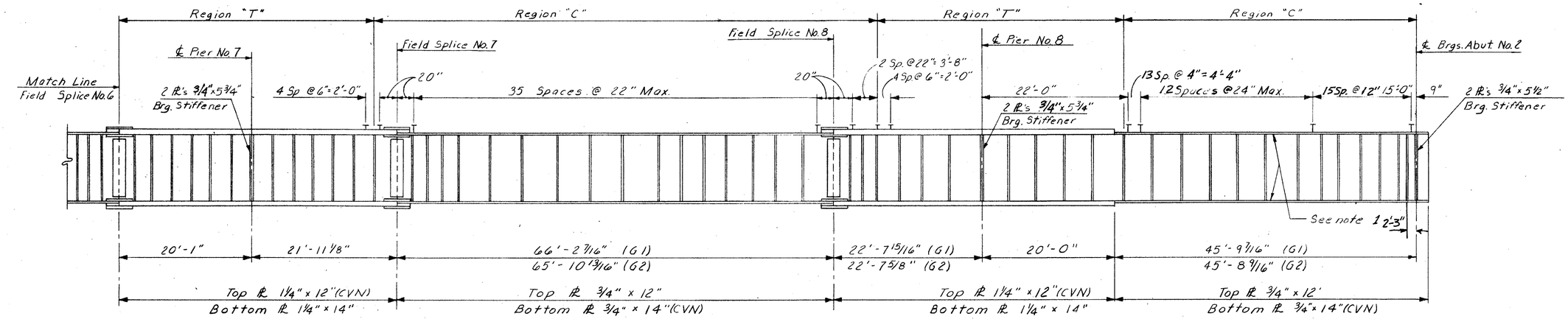
VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

SUPERSTRUCTURE DETAILS
BRIDGE NO. HAM-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75, & RAMP D
HAMILTON COUNTY
STA. 37+76.74 to STA. 44+84.91

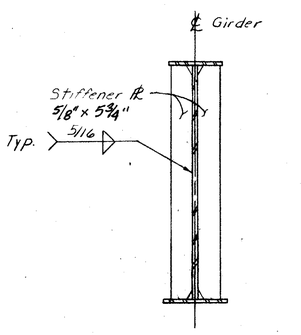
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED
V.K.	V.K.	T.D.S.	J.R.P.		6-4-71	△ BALKE ENGRS 2/86

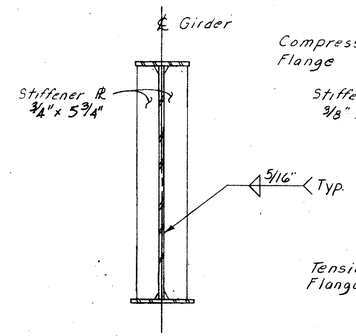
CALC. BY		HAM-75-9.93	OHIO	557
DATE		HAM-126-13.00	FHWA REGION 5	787
CHKD. BY				
DATE				

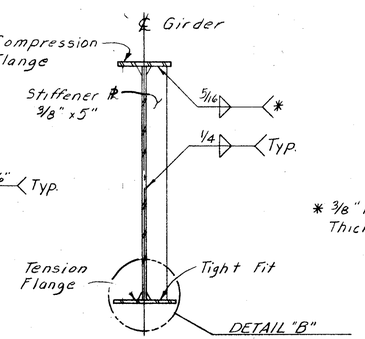




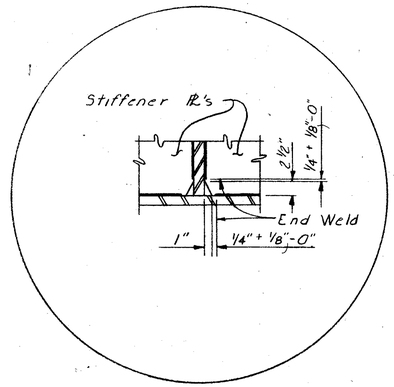
GIRDER NUMBER G1 AND G2







* 3/8" For 1 3/4" Flange Thickness.



NOTES:

1. 5/16" Continuous Fillet Welds for Flange Plates.
2. For Intermediate Stiffener Spacing See Sheet 19/36.
3. Intermediate Stiffeners are used both sides of web PL only where required for attaching Intermediate Crossframe. See Detail "B"; Weld to both tension and compression flanges where stiffener is used to attach Intermediate Crossframes.
4. Where a plate or shape is designated (CVN) the material shall meet specified minimum notch toughness requirements as specified in 711.01 of CMS.
5. Region "T" denotes top flange in tension and bottom flange in Compression.
6. Region "C" denotes top flange in Compression and bottom flange in tension.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

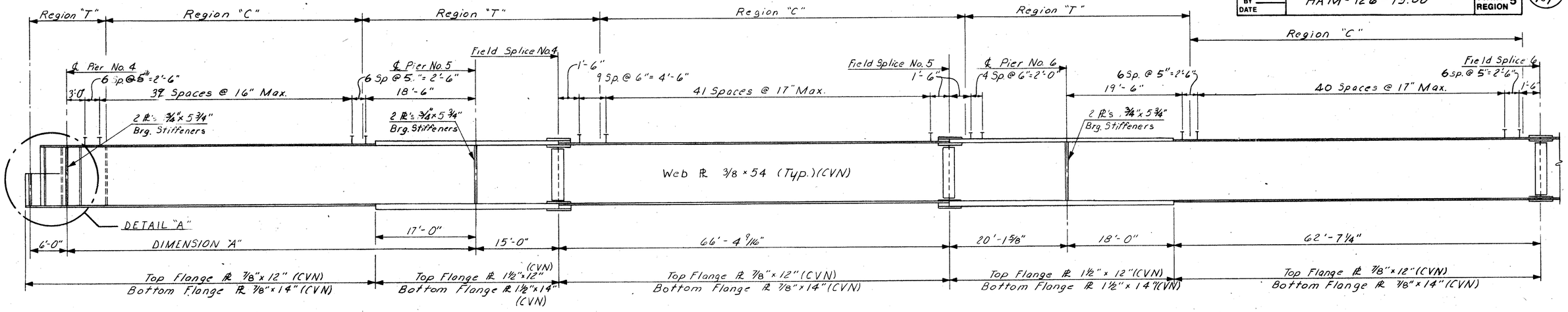
22/36

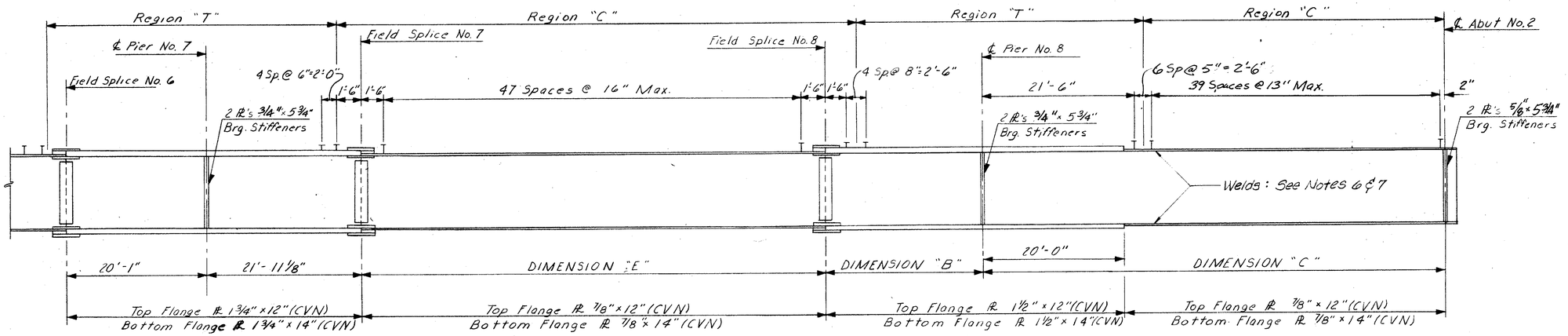
SUPERSTRUCTURE DETAILS
BRIDGE NO. HAM-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75, & RAMP D
HAMILTON COUNTY
STA. 37+76.74 to STA. 44+84.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
SJA	ALH	—	TMB	CRS 2/66	—

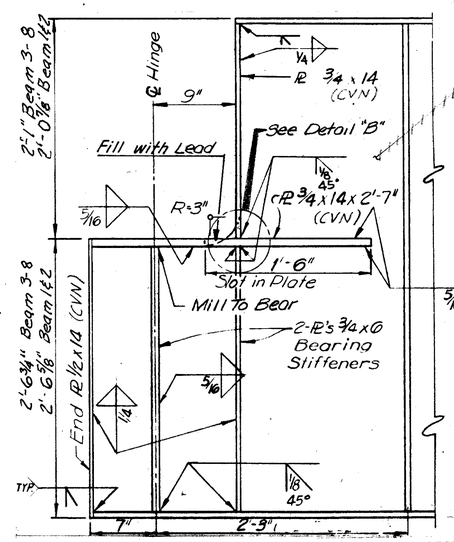
OHIO BLUE PRINT H40053

CALC. BY / DATE	HAM-75-9.93 HAM-126-13.00	OHIO FHWA REGION 5	657A 787
CHKD. BY / DATE			





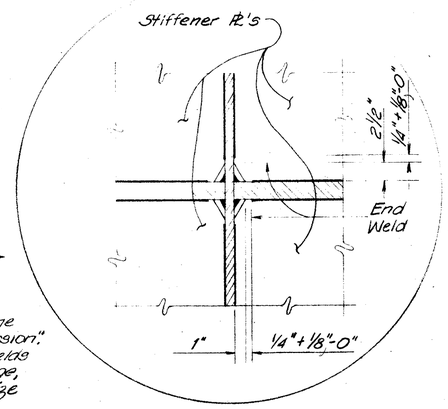
GIRDER NUMBERS G3 THRU G8



Stiffeners shall be clipped as shown in Detail "B", Sheet 22/36, to avoid intersection of welds.

DETAIL "A"

DETAIL "B"
No Scale



NOTE:
△ WELDED ATTACHMENT Of Supports For Concrete Deck Finishing Machine May Be Made To Areas Of The Fascia Stringer Flanges Designated "Compression." Attachments Shall Not Be Made To Areas Designated "Tension." Fillet Welds To Compression Flanges Shall Be Not Closer Than 1" From Edge Of Flange, Be Not More Than 2" Long And Be Not Smaller Than The Minimum Size Required By AASHTO. (Applies also to sheets 20, 21, 22, 36).

NOTES:

1. For Intermediate Stiffener Spacing See Sheet 19/36.
2. Intermediate Stiffeners are used both sides of web PL only where required for attaching Intermediate Cross-frame. Weld to both tension and compression flanges where stiffener is used to attach Intermediate Cross-frames, See Detail "B" Sheet 22/36.
3. Where a plate or shape is designated (CVN) the material shall meet specified minimum notch toughness requirements.
4. Region "T" denotes top Flange in tension and bottom Flange in Compression.
5. Region "C" denotes top Flange in Compression and bottom Flange in tension.
6. 3/8" Continuous fillet weld for flange plates of 1 3/4" thickness.
7. 5/16" Continuous fillet weld for all other flange plates.
8. For dimensions A, B, C, and E see sheet 19/36.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

23/36

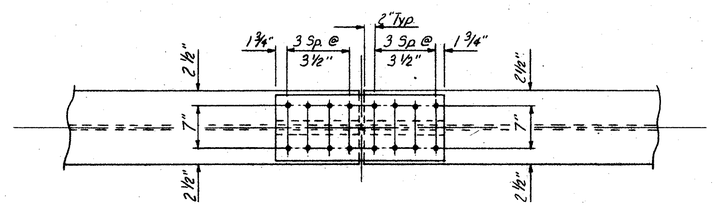
SUPERSTRUCTURE DETAILS
BRIDGE NO. HAM-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75, & RAMP D
HAMILTON COUNTY
STA. 37+76.74 to STA. 44+84.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
TMB	ALH	—	SJA	CRS 2/86	—

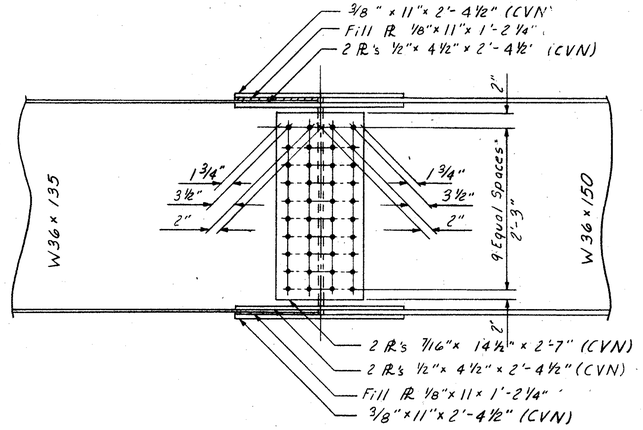
REVISED 9/29/86

OHIO BLUE PRINT 740203

CALC. BY / DATE	HAM - 75 - 9.93	OHIO	5578
CHKD. BY / DATE	HAM - 126 - 13.00	FHWA REGION 5	787



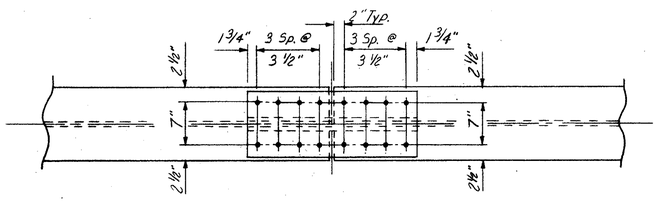
PLAN



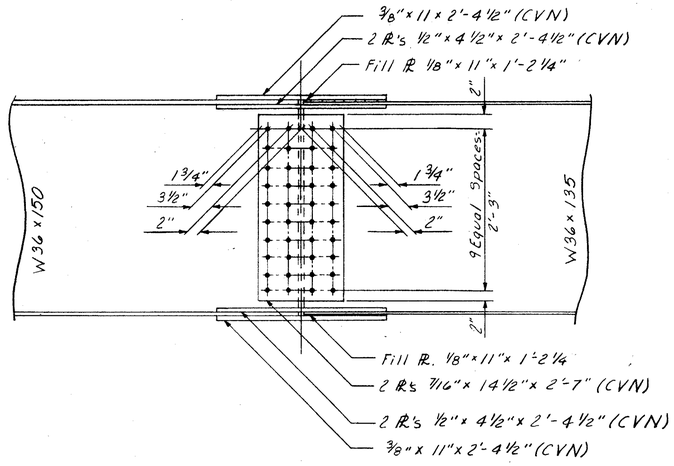
ELEVATION

SHOP SPLICE NO. 1

For B1 and B2



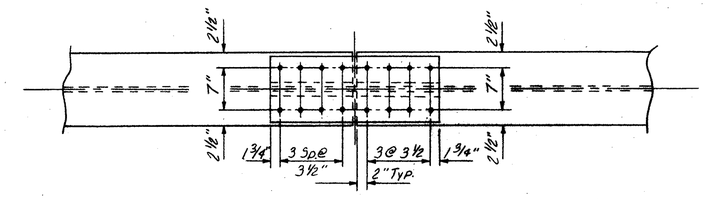
PLAN



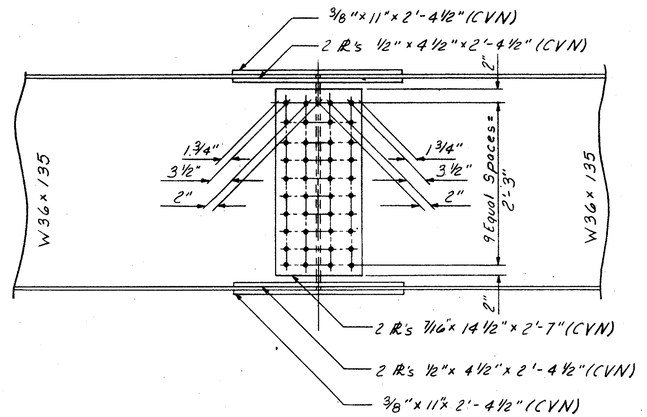
ELEVATION

FIELD SPLICE NO. 1

For B1 and B2



PLAN



ELEVATION

FIELD SPLICE NO. 2 AND 3

For B1 and B2

NOTES:

1. Where a plate or shape is designated (CVN) the material shall meet specified minimum notch toughness requirements as specified in 711.01 of CMS.
2. High strength Bolts shall be 1" diameter A325 unless otherwise noted.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

24/36

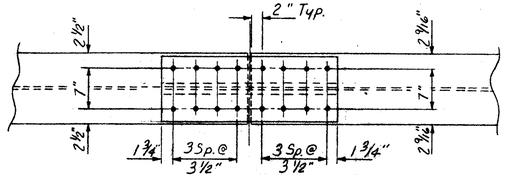
BRIDGE NO HAM - 126 - 1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75 RAMP D

HAMILTON COUNTY

STA. 37+76.74 to STA. 44+84.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
SJA	ALH	–	TMB	CRS 2/86	–

CALC. BY / DATE	HAM-75-9.93 HAM-126-13.00	OHIO	6576 787
CHKD. BY / DATE		FHWA REGION 5	



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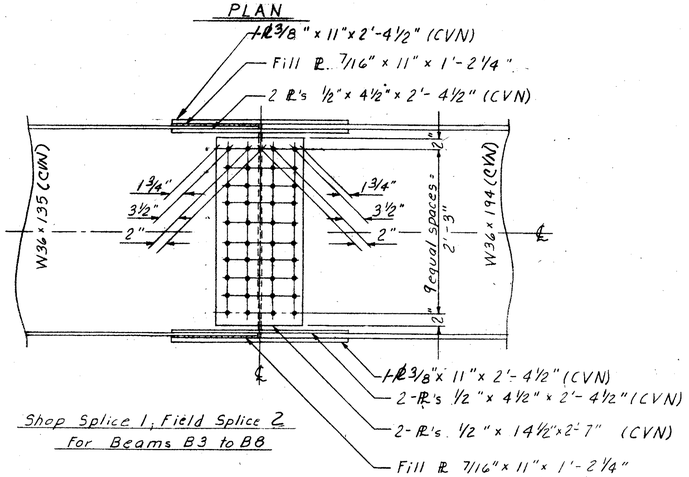
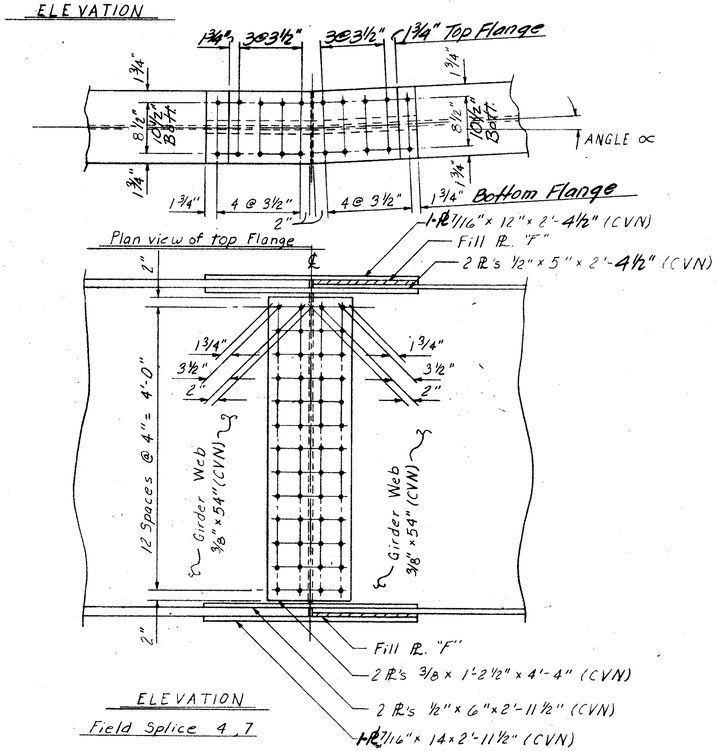
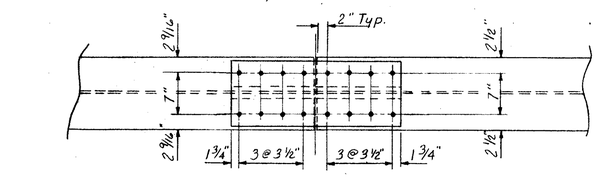


Shop Splice 1, Field Splice 2
For Beams B3 to B8

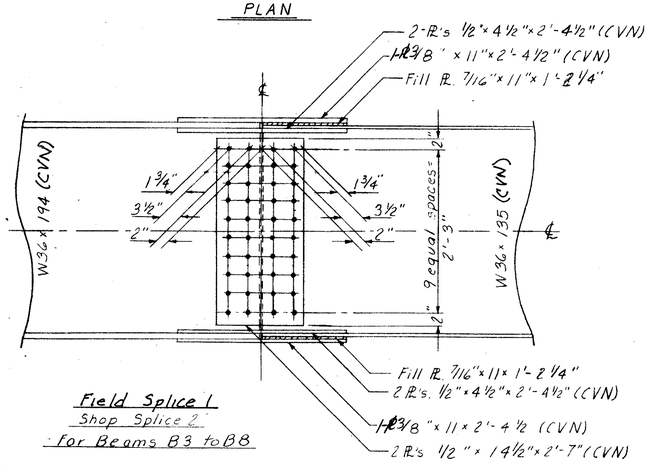
ELEVATION



ELEVATION
Field Splice 4, 7

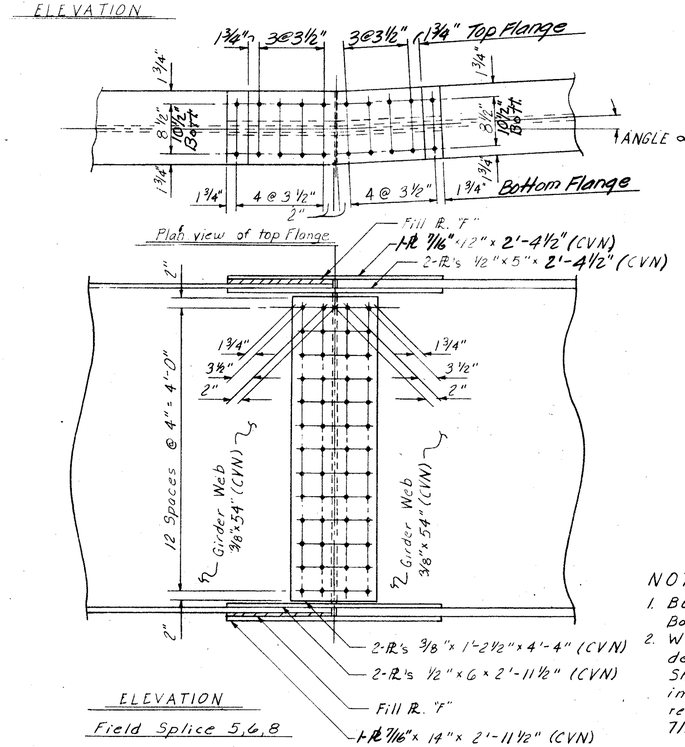


PLAN

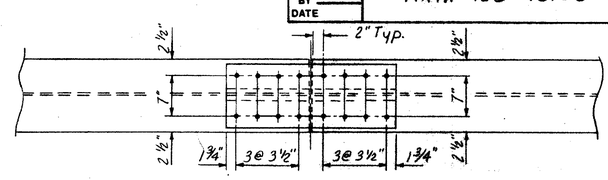


Field Splice 1
Shop Splice 2
For Beams B3 to B8

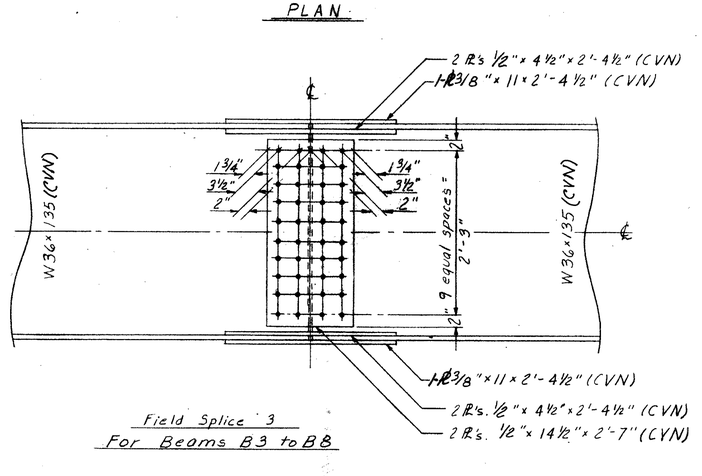
ELEVATION



ELEVATION
Field Splice 5, 6, 8



PLAN



Field Splice 3
For Beams B3 to B8

ELEVATION

Girder	Field Splice No. 4		Field Splice No. 5		Field Splice No. 6		Field Splice No. 7		Field Splice No. 8	
	"F"	∝	"F"	∝	"F"	∝	"F"	∝	"F"	∝
G1	1/2	0°	1/2	2°40'09"	1/2	2°45'54"	1/2	3°22'33"	1/2	4°59'45"
G2	1/2	0°	1/2	2°40'09"	1/2	2°45'54"	1/2	2°48'15"	1/2	5°27'00"
G3	5/8	0°	5/8	2°40'09"	7/8	2°45'54"	7/8	2°13'38"	5/8	5°54'34"
G4	5/8	0°	5/8	2°40'09"	7/8	2°45'54"	7/8	2°13'38"	5/8	5°28'11"
G5	5/8	0°	5/8	2°40'09"	7/8	2°45'54"	7/8	2°13'38"	5/8	5°01'34"
G6	5/8	0°	5/8	2°40'09"	7/8	2°45'54"	7/8	2°13'38"	5/8	4°34'43"
G7	5/8	0°	5/8	2°40'09"	7/8	2°45'54"	7/8	2°13'38"	5/8	4°07'39"
G8	5/8	0°	5/8	2°40'09"	7/8	2°45'54"	7/8	2°13'38"	5/8	3°40'21"

NOTES
1. Bolts are 1" dia. high Strength Bolts.
2. Where a plate or shape is designated (CVN) the material shall meet specified minimum notch toughness requirements as specified in 711.01 of CMS.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

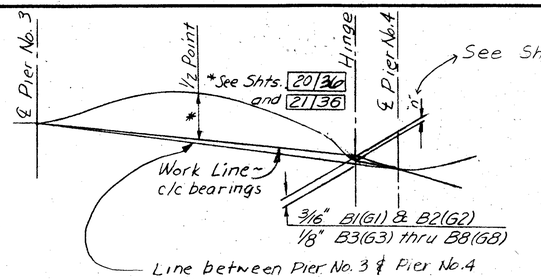
25/36

BOLTED BEAM SPLICE DETAILS

BRIDGE NO. HAM-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75 & RAMP D
HAMILTON COUNTY
STA. 37+76.74 to STA. 44+84.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
TMB	ALH	-	SJA	CRS 2/86	—

OHIO BLUE PRINT



DEFLECTION & CAMBER DETAIL

△

164
Yellow
558-594

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

338
787

HAM-75-9.93
HAM-126-13.00

DIMENSIONS

GIRDER No.	P	Q	R	S	T	U	V	W	X	Y	Z
G1	4'-6 3/16"	4'-6 1/16"	4'-9 5/16"	4'-3 7/16"	2'-11 7/16"	1'-0 3/8"	1 7/16"	1'-0 5/16"	1'-6 9/16"	1'-2 1/2"	4 9/16"
G2	4'-4 5/8"	4'-5 1/8"	4'-7 13/16"	4'-2 1/4"	2'-10 3/8"	1'-0 1/4"	1 3/16"	1'-0 3/16"	1'-6 3/8"	1'-2 5/16"	4 1/16"

DIMENSIONS △

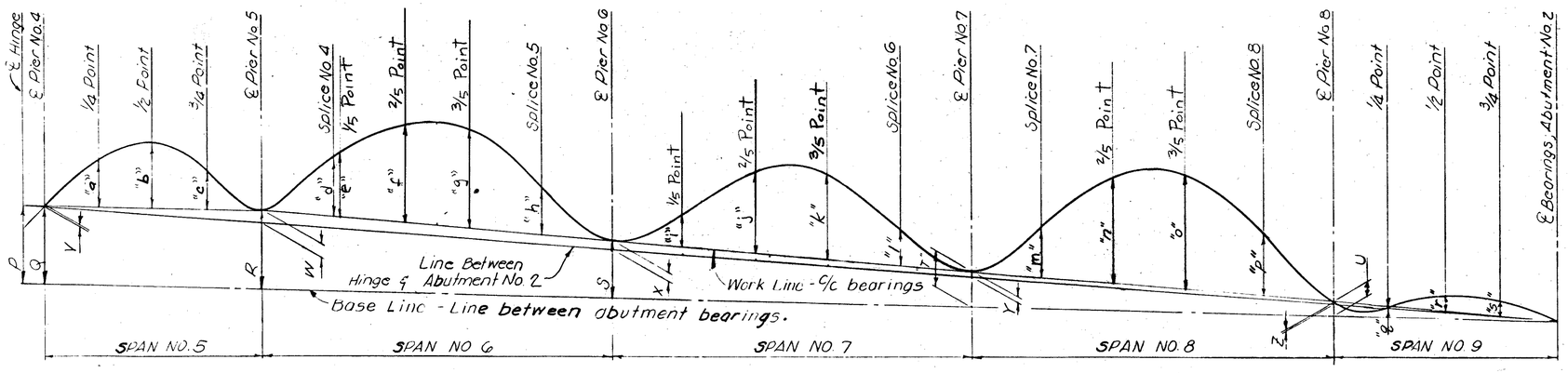
GIRDER NO.	P	Q	R	S	T	U	V	W	X	Y	Z
G3	4'-3 1/16"	4'-3 9/16"	4'-6 7/16"	4'-1 1/16"	2'-9 13/16"	1'-0 3/16"	1 1/8"	1'-0 1/16"	1'-6 3/16"	1'-2 3/16"	4 13/16"
G4	4'-1 1/8"	4'-1 9/16"	4'-4 7/16"	3'-11 1/16"	2'-9"	0'-11 11/16"	1 1/8"	11 5/16"	1'-6 1/8"	1'-2 3/16"	4 1/16"
G5	3'-11 1/8"	3'-11 5/16"	4'-2 9/16"	3'-10 5/16"	2'-8 3/16"	0'-11 1/4"	1 1/16"	11 3/16"	1'-6"	1'-2 3/16"	4 9/16"
G6	3'-9 1/8"	3'-9 9/16"	4'-0 5/8"	3'-8 5/16"	2'-7 3/8"	0'-10 3/4"	1"	11 5/8"	1'-5 7/8"	1'-2 1/4"	4 7/16"
G7	3'-7 1/16"	3'-7 1/8"	3'-11 1/16"	3'-7 3/4"	2'-6 15/16"	0'-11 3/16"	1"	11 7/16"	1'-5 13/16"	1'-2 1/2"	5 1/16"
G8	3'-7 3/8"	3'-7 7/16"	3'-10 15/16"	3'-7 11/16"	2'-7 1/8"	0'-11 7/8"	1"	11 1/2"	1'-5 13/16"	1'-2 3/4"	5 13/16"

DEFLECTION & CAMBER (G1 & G2)

LOCATION	SPAN No.5			SPAN No. 6					SPAN No. 7				SPAN No. 8				SPAN No. 9		
	1/4 Point "a"	1/2 Point "b"	3/4 Point "c"	Splice No.4 "d"	1/5 Point "e"	2/5 Point "f"	3/5 Point "g"	Splice No.5 "h"	1/5 Point "i"	2/5 Point "j"	3/5 Point "k"	Splice No.6 "l"	Splice No.7 "m"	2/5 Point "n"	3/5 Point "o"	Splice No.8 "p"	1/4 Point "q"	1/2 Point "r"	3/4 Point "s"
Deflection due to weight of steel	1/32	1/32	0	1/16	3/32	5/32	5/32	1/16	1/32	1/16	1/16	0	1/8	1/4	1/4	1/8	-1/32	0	0
Deflection due to remaining dead load.	5/32	5/32	1/32	1/4	11/32	23/32	11/16	5/16	1/8	3/8	11/32	1/16	17/32	1 3/32	1 3/32	19/32	-1/16	1/32	1/16
Adjustment req'd for vert. and horiz. Curve	17/32	27/32	19/32	5/8	13/16	1 7/32	1 3/32	15/16	1/16	1	1 3/32	7/8	1/4	1/8	9/32	3/4	-1/2	-23/32	-9/16
Total required shop Camber.	23/32	1 1/32	5/8	15/16	1/4	2 3/32	2 1/8	1 5/16	2 1/32	1 1/16	1 1/2	15/16	29/32	1 15/32	1 9/16	1 15/32	-19/32	-1 1/16	-1/2

△ DEFLECTION & CAMBER (G3 thru G8)

LOCATION	SPAN NO. 5			SPAN NO. 6					SPAN NO. 7				SPAN NO. 8				SPAN NO. 9		
	1/4 Point "a"	1/2 Point "b"	3/4 Point "c"	Splice No. 4 "d"	1/5 Point "e"	2/5 Point "f"	3/5 Point "g"	Splice No. 5 "h"	1/5 Point "i"	2/5 Point "j"	3/5 Point "k"	Splice No. 6 "l"	Splice No. 7 "m"	2/5 Point "n"	3/5 Point "o"	Splice No. 8 "p"	1/4 Pt. "q"	1/2 Pt. "r"	3/4 Pt. "s"
Deflection due to weight of steel	1/32	1/32	0	1/16	1/16	5/32	5/32	1/16	0	1/16	1/32	0	3/32	7/32	7/32	1/8	0	0	0
Deflection due to remaining dead load	5/32	3/16	1/32	3/16	9/32	19/32	9/16	9/32	3/32	1/4	1/4	1/32	13/32	7/8	29/32	15/32	-1/16	0	1/16
Adjustment req'd. for vert. and horiz. Curve	1/2	21/32	1/2	5/8	13/16	1 7/32	1 1/4	29/32	1/16	1/16	1/8	29/32	1/8	0	3/16	21/32	-15/32	-21/32	-1/2
TOTAL req'd. shop camber	11/16	7/8	17/32	7/8	1 5/32	1 31/32	1 31/32	1 1/4	25/32	1 3/8	1 13/32	15/16	5/8	1 3/32	1 5/16	1 1/4	-17/32	-21/32	-7/16



DEFLECTION & CAMBER DIAGRAM

△

NOTES

△
HIGH STRENGTH BOLTS shall be 1" dia. A325, unless otherwise shown.

For Girders 7 & 8, See Sheet 26A/36.

26/36

VOGT, IVERS. & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

SUPERSTRUCTURE DETAILS
BRIDGE NO. HAM-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75, & RAMP D
HAMILTON COUNTY
STA. 37+76.74 to STA. 44+84.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED BALKE ENGRS. 2/86
V.K.	V.K.	L.B.F.	J.R.P.	[illegible]	6-4-71	

CALC. BY / DATE	HAM-75-9.99 HAM-126-13.00	OHIO	558A 787
CHKD. BY / DATE		FHWA REGION 5	

DEFLECTION AND CAMBER (BEAM 7)

LOCATION	SPAN NO.1			SPAN NO. 2					SPAN NO.3				NO. 4	HINGE
	1/4 Point	1/2 Point	3/4 Point	F.S. No. 1	1/4 Point	1/2 Point	3/4 Point	F.S. No. 2	1/4 Point	1/2 Point	3/4 Point	F.S. No. 3	1/2 Point	
	"a"	"b"	"c"	"d"	"e"	"f"	"g"	"h"	"i"	"j"	"k"	"l"	"m"	"n"
DEFLECTION DUE TO weight of steel	1/16	3/32	1/32	1/32	1/16	1/8	1/16	1/32	0	1/32	1/32	0	1/32	0
Deflection due to remaining dead load	11/32	3/8	1/8	1/8	5/16	19/32	11/32	1/8	1/16	3/16	1/8	1/32	3/32	-1/16
Adjustment req'd for vert and horiz. curve	11/32	15/32	11/32	11/32	9/16	3/4	9/16	5/16	-1/32	5/32	3/16	1/8	1/4	0
TOTAL req'd shop camber	3/4	15/16	1/2	1/2	15/16	1 31/32	31/32	15/32	1/32	3/8	11/32	5/32	3/8	-1/16

DEFLECTION AND CAMBER (BEAM 8)

LOCATION	SPAN NO.1			SPAN NO. 2					SPAN NO.3				NO. 4	HINGE
	1/4 Point	1/2 Point	3/4 Point	F.S. No. 1	1/4 Point	1/2 Point	3/4 Point	F.S. No. 2	1/4 Point	1/2 Point	3/4 Point	F.S. No. 3	1/2 Point	
	"a"	"b"	"c"	"d"	"e"	"f"	"g"	"h"	"i"	"j"	"k"	"l"	"m"	"n"
Deflection due to weight of steel	1/16	3/32	1/32	1/32	1/16	1/8	1/16	1/32	0	1/32	1/32	0	1/32	0
Deflection due to remaining dead load	11/32	3/8	1/8	1/8	5/16	19/32	11/32	1/8	1/16	3/16	1/8	1/32	3/32	-1/16
Adjustment req'd for vert. and horiz. curve	11/32	15/32	11/32	11/32	9/16	3/4	9/16	5/16	0	1/8	5/32	3/32	9/32	0
TOTAL req'd shop camber	3/4	15/16	1/2	1/2	15/16	1 15/32	31/32	15/32	1/16	11/32	5/16	1/8	13/32	-1/16

DEFLECTION AND CAMBER (GIRDER 7)

LOCATION	SPAN NO.5			SPAN NO. 6					SPAN NO. 7				SPAN NO. 8				SPAN NO.9		
	1/4 Point	1/2 Point	3/4 Point	F.S. No. 4	1/5 Point	2/5 Point	3/5 Point	F.S. No. 5	1/5 Point	2/5 Point	3/5 Point	F.S. No. 6	F.S. No. 7	2/5 Point	3/5 Point	F.S. No. 8	1/4 Point	1/2 Point	3/4 Point
	"a"	"b"	"c"	"d"	"e"	"f"	"g"	"h"	"i"	"j"	"k"	"l"	"m"	"n"	"o"	"p"	"q"	"r"	"s"
Deflection due to weight of steel	1/32	1/32	0	1/16	1/16	5/32	5/32	1/16	0	1/16	1/32	0	3/32	7/32	7/32	1/8	0	0	0
Deflection due to remaining dead load	5/32	3/16	1/32	3/16	9/32	19/32	9/16	9/32	3/32	1/4	1/4	1/32	13/32	7/8	29/32	15/32	-1/16	0	1/16
Adjustment req'd. for vert and horiz. curve	1/2	19/32	1/4	5/8	13/16	1 3/16	1 1/8	21/32	13/16	1 7/32	1 1/4	3/4	1/32	1/32	1/32	1/16	-1/16	-1/16	0
TOTAL req'd. Shop camber	11/16	13/16	9/32	7/8	1 5/32	1 15/16	1 27/32	1	29/32	1 17/32	1 17/32	25/32	17/32	1 1/8	1 5/32	21/32	-1/8	-1/16	1/16

DEFIECTION AND CAMBER (GIRDER 8)

LOCATION	SPAN NO.5			SPAN NO. 6					SPAN NO 7				SPAN NO. 8				SPAN NO.9		
	1/4 Point	1/2 Point	3/4 Point	F.S. No. 4	1/5 Point	2/5 Point	3/5 Point	F.S. No. 5	1/5 Point	2/5 Point	3/5 Point	F.S. No. 6	F.S. No. 7	2/5 Point	3/5 Point	F.S. No. 8	1/4 Point	1/2 Point	3/4 Point
	"a"	"b"	"c"	"d"	"e"	"f"	"g"	"h"	"i"	"j"	"K"	"l"	"m"	"n"	"o"	"p"	"q"	"r"	"s"
Deflection due to weight of steel	1/32	1/32	0	1/16	1/16	5/32	5/32	1/16	0	1/16	1/32	0	3/32	7/32	7/32	1/8	0	0	0
Deflection due to remaining dead load	5/32	3/16	1/32	3/16	9/32	19/32	3/16	9/32	3/32	1/4	1/4	1/32	13/32	7/8	29/32	15/32	-1/16	0	1/16
Adjustment req'd. for vert and horiz. curve	1/2	21/32	3/16	5/8	13/16	1 5/32	1 1/16	17/32	27/32	1 9/32	1 1/4	21/32	1/32	1/8	1/16	-7/32	9/32	3/8	9/32
TOTAL req'd. shop camber	11/16	7/8	7/32	7/8	1 5/32	1 23/32	1 25/32	7/8	15/16	1 19/32	1 17/32	11/16	17/32	1 7/32	1 3/16	3/8	7/32	3/8	11/32

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

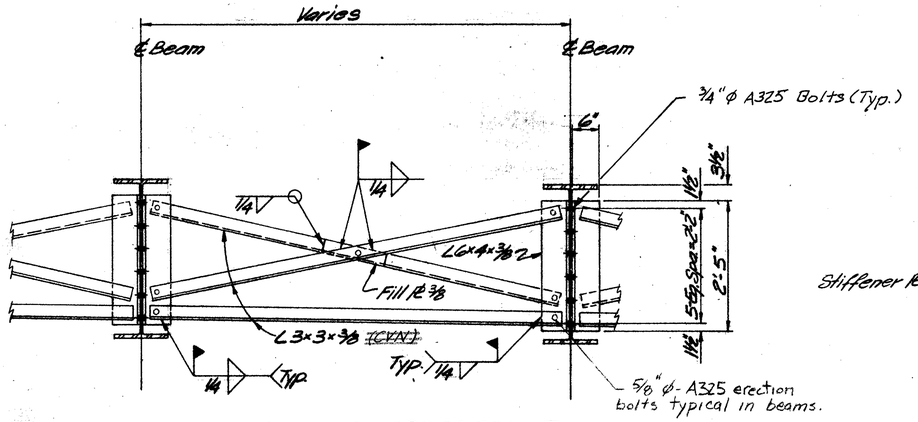
26A/36

SUPERSTRUCTURE DETAILS
BRIDGE NO. HAM-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75, & RAMPD
HAMILTON COUNTY
STA. 37+76.74 to STA. 44+84.91

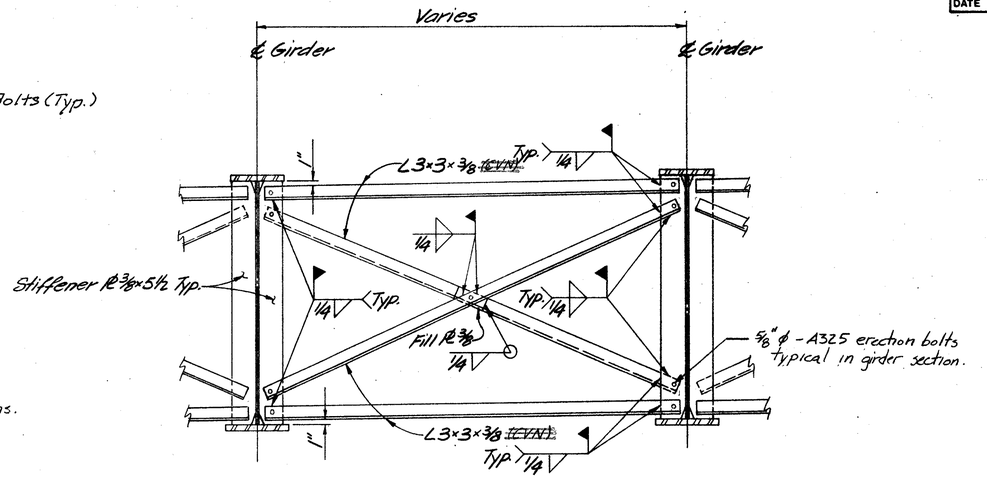
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
TMB	ALH	-	BJS	CRS 6/86	-

OHIO BLUE PRINT N48053

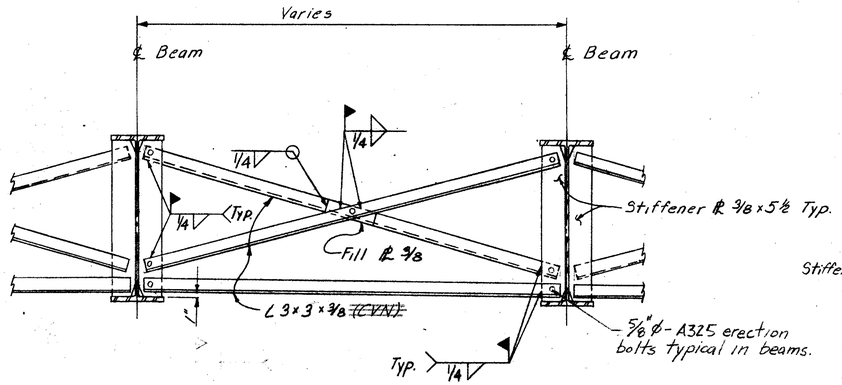
CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO	558A 787
CHKD. BY			FHWA REGION 5	
DATE				



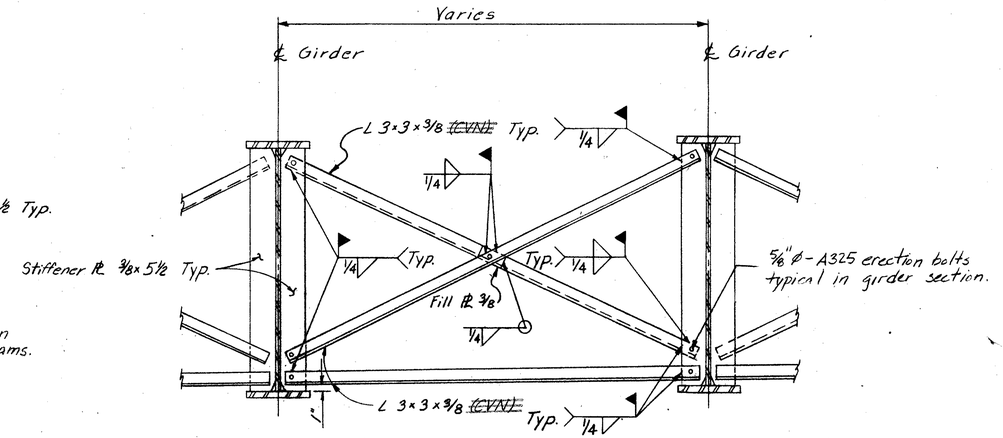
TYPICAL BOLTED CROSSFRAME
(PART 1)



SPECIAL INTERMEDIATE CROSSFRAME
(PART 2)



TYPICAL WELDED CROSSFRAME
(PART 1)



TYPICAL WELDED CROSSFRAME
(PART 2)

As an alternate to the Welded crossframe connection detail the fabricator may provide the Bolted detail shown.

ERECTION BOLTS: Hole diameter in the crossfromes and girder stiffeners shall be respectively 1/16" and 1/4" larger than the diameter of the erection bolts. Unless replaced by permanent high strength bolts, erection bolts shall remain in place. Lock washers shall be furnished for other than fully torqued high strength erection bolts. Bolts shall be furnished as part of 513.

In lieu of erection bolts and at the option of the Contractor, alternative means of temporary bracing may be used subject to the approval of the Director (501.06).

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

27/36

SUPERSTRUCTURE DETAILS

BRIDGE NO. HAM-126-1328
S.R.126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75, RAMP D
HAMILTON COUNTY OHIO
STA. 37+76.74 TO STA. 44+84.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
TMB	WJH ALH	~	SJA	CRS 2/86	

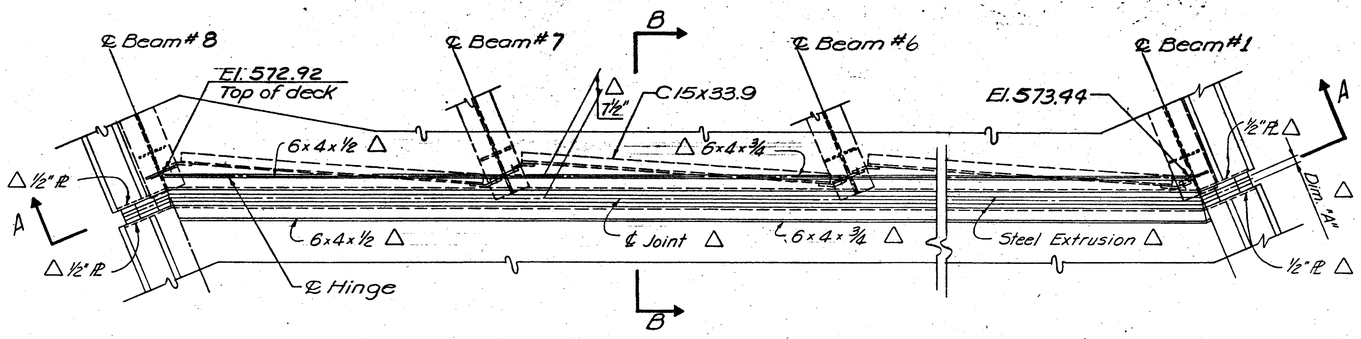
REVISED 9/29/86

OHIO BLUE PRINT
N6053

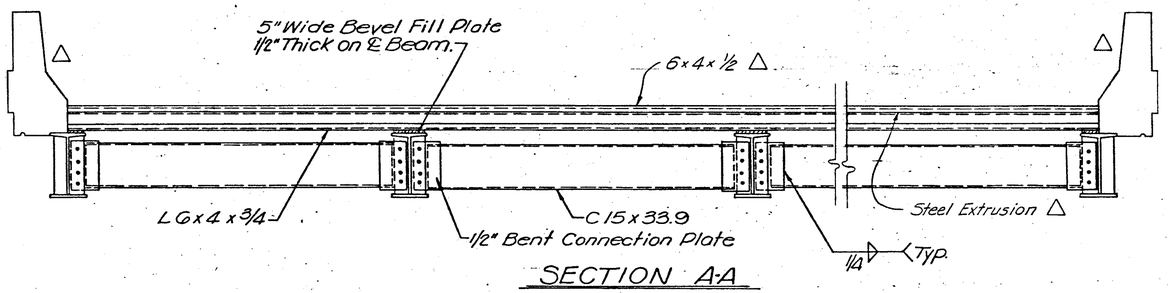
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

557
707

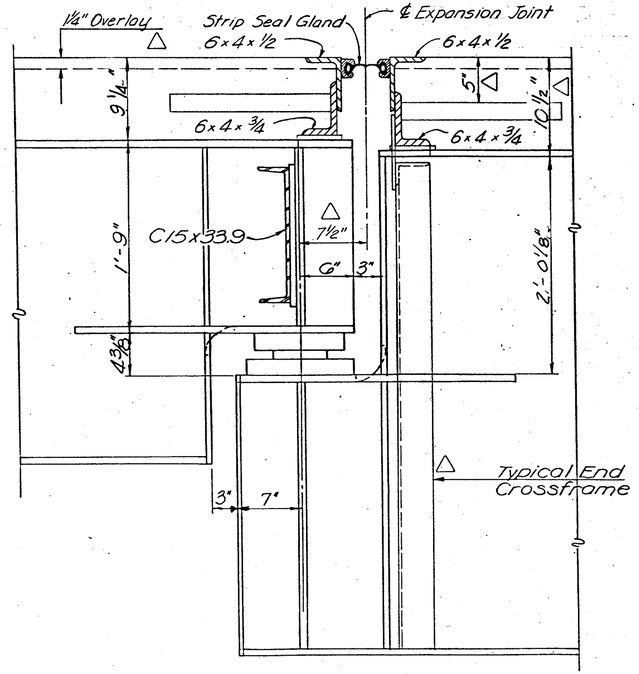
HAM - 75 - 9.93
HAM - 126 - 13.00



PLAN OF DECK JOINT



SECTION A-A



SECTION B-B

Notes:
Connect channel in field with A325 3/4" ϕ high strength bolts

△ For Expansion Joint details not shown see Strip Seal Details, Sheets 488A, B, C & D.

ABUTMENT 1
△ JOINT SETTING TABLE

TEMP °F	0	20	40	60	80	100
A*	3 1/16"	2 7/8"	2 11/16"	2 1/2"	2 5/16"	2 1/8"

Strip Seal Gland to be Watson-Bowman S-400 or D.S. Brown SS-400.

ABUTMENT 2
△ JOINT SETTING TABLE

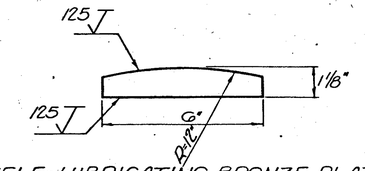
TEMP °F	0	20	40	60	80	100
A*	3 1/2"	3 3/16"	2 5/8"	2 1/2"	2 3/16"	1 13/16"

Strip Seal Gland to be Watson-Bowman S-400 or D.S. Brown SS-400.

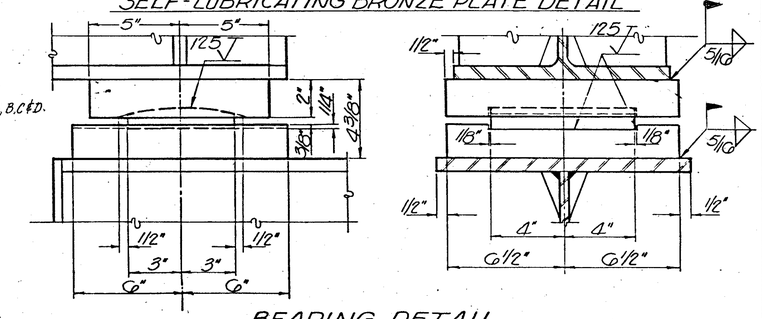
HINGE
△ JOINT SETTING TABLE

TEMP °F	0	20	40	60	80	100
A*	3 7/16"	3"	2 1/2"	2"	1 1/2"	1"

Strip Seal Gland to be Watson-Bowman S-500 or D.S. Brown SS-500.

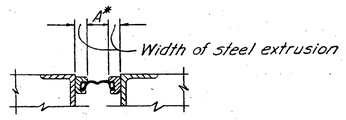


SELF-LUBRICATING BRONZE PLATE DETAIL



BEARING DETAIL
AT HINGE

NOTES:
For details and notes of end dams and end crossframes see standard drawing no. SD-1-69.



PARTIAL SECTION THROUGH EXPANSION JOINT SHOWING DIMENSION A
△

28/36

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

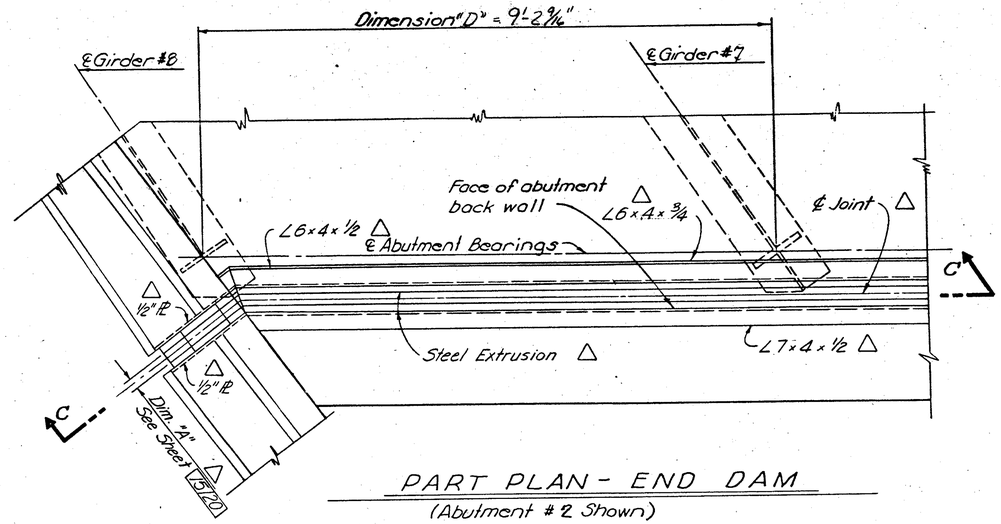
SUPERSTRUCTURE DETAILS
BRIDGE NO. HAM-126-1328
S.R. 126 EB. OVER
ANTHONY WAYNE, CONRAIL, I-75, & RAMP D
HAMILTON COUNTY
STA. 37+97.87
STA. 45+11.98

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.K.	V.K.	R.E.K.	J.R.P.		6-4-71	△ BLIKE ENGRS. 11/85

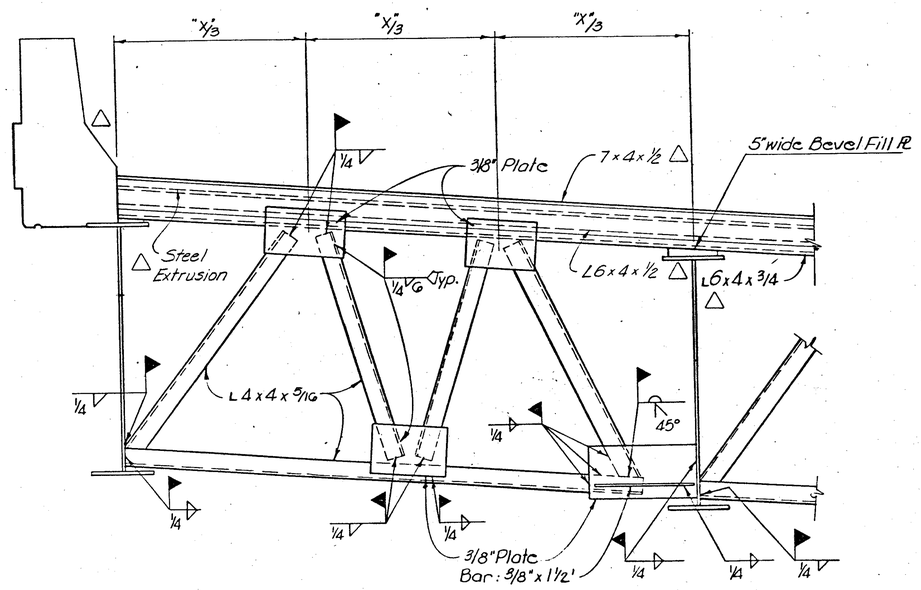
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

560
787

HAM-75-9.93
HAM-126-13.00



PART PLAN - END DAM
(Abutment #2 Shown)



SECTION C-C
Typical end crossframe at abutment #2

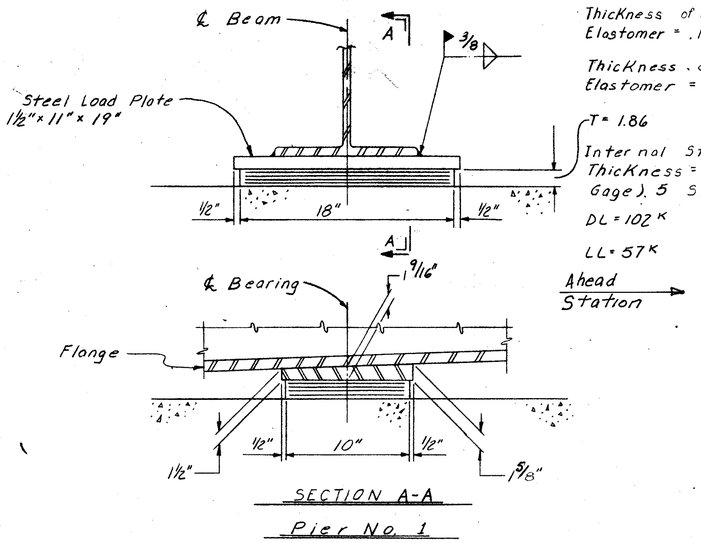
29/36

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

SUPERSTRUCTURE DETAILS
BRIDGE NO. HAM-126-1328
SR 126 EB. OVER
ANTHONY WAYNE, CONRAIL ,I-75, & RAMP D
HAMILTON COUNTY
STA. 37+97.87
STA. 45+11.98

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.K.	V.K.	L.B.F.	D.W.S.		6-4-71	△ BALKE ENGRS 2/86

CALC. BY / DATE	HAM-75-9.93 HAM-126-13.00	OHIO	560A 787
CHKD. BY / DATE		FHWA REGION 5	



SECTION A-A

Pier No. 1

Thickness of external Elastomer = .1953"

Thickness of internal Elastomer = .2734" (x 4)

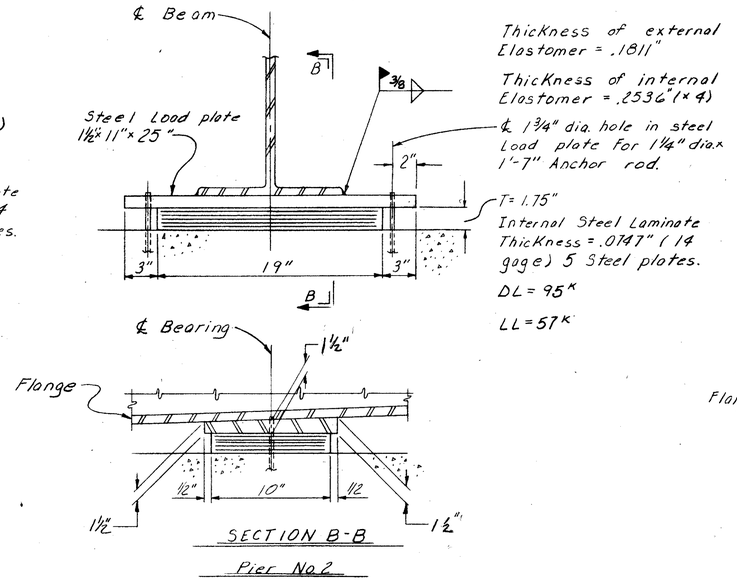
T = 1.86

Internal Steel Laminate Thickness = .0747" (14 Gage). 5 Steel plates.

DL = 102 K

LL = 57 K

Ahead Station →



SECTION B-B

Pier No. 2

Thickness of external Elastomer = .1811"

Thickness of internal Elastomer = .2536" (x 4)

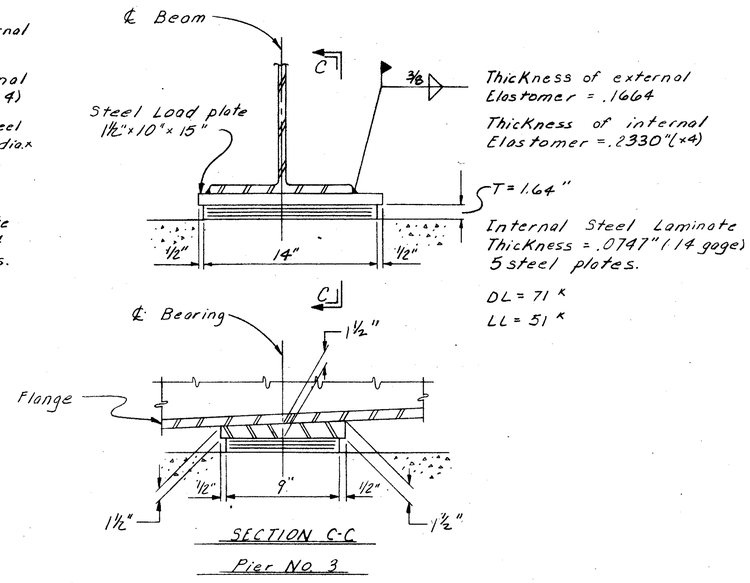
℄ 1¾" dia. hole in steel Load plate for 1¼" dia. x 1'-7" Anchor rod.

T = 1.75"

Internal Steel Laminate Thickness = .0747" (14 gage) 5 Steel plates.

DL = 95 K

LL = 57 K



SECTION C-C

Pier No. 3

Thickness of external Elastomer = .1664

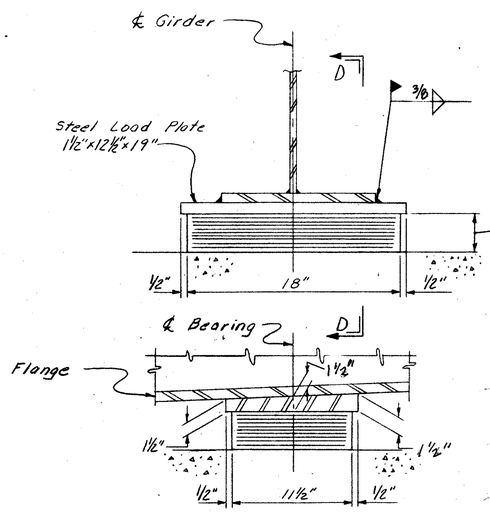
Thickness of internal Elastomer = .2330" (x 4)

T = 1.64"

Internal Steel Laminate Thickness = .0747" (14 gage) 5 steel plates.

DL = 71 K

LL = 51 K



SECTION D-D

Pier No. 4

Thickness of external Elastomer = .2131"

Thickness of Internal Elastomer = .2984" (x 7)

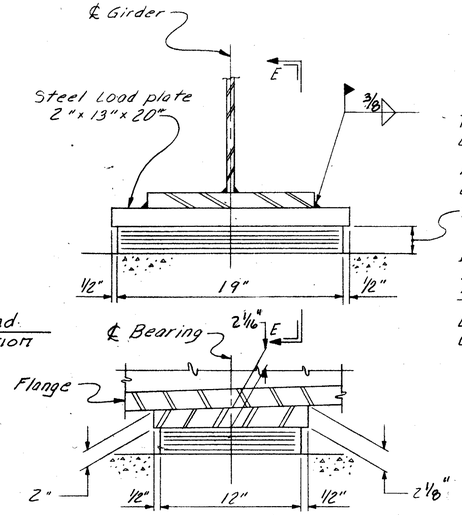
T = 3.11

Internal Steel Laminate Thickness = .0747" (14 gage) 8 Steel plates.

DL = 66 K

LL = 52 K

← Ahead Station



SECTION E-E

Pier No. 5

Thickness of external Elastomer = .2234"

Thickness of internal Elastomer = .3128" (x 4)

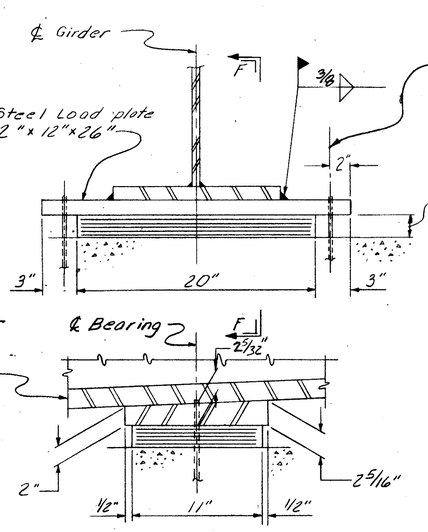
T = 2.07"

Internal steel Laminate Thickness = .0747" (14 gage) 5 Steel plates.

DL = 128 K

LL = 70 K

← Ahead Station



SECTION F-F

Pier No. 6

℄ 1¾" dia. hole in steel Load plate for 1⅛" dia x 1'-7" Anchor rod.

Thickness of external Elastomer = .1967"

Thickness of internal Elastomer = .2766" (x 4)

T = 1.875"

Internal steel Laminate Thickness = .0747" (14 gage) 5 steel plates.

DL = 133 K

LL = 73 K

NOTES:

1. All Elastomers shall be 50 Durometer Neoprene
2. All Load plates and internal steel Laminates shall conform to CMS 711.23.
3. For additional notes see sheet 31/36.

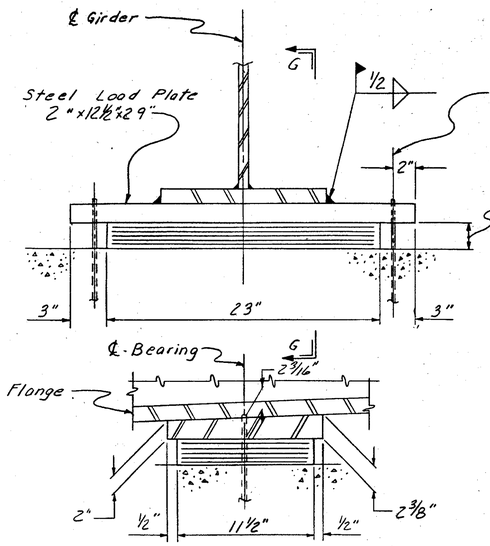
BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

30/36

ELASTOMERIC BEARINGS
Bridge No. Ham-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75 & RAMP D
HAMILTON COUNTY
STA. 37+76.74 to STA. 44+84.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
TMB	ALH	-	SJA	CRS 2/86	-

OHIO BLUE PRINT 140053



℄ 1¾" dia. hole in steel load plate for 1¼" dia x 1'-7" Anchor rod.

Thickness of external Elastomer = .2140"

Thickness of internal Elastomer = .2996" (x 4)

T = 2.0"

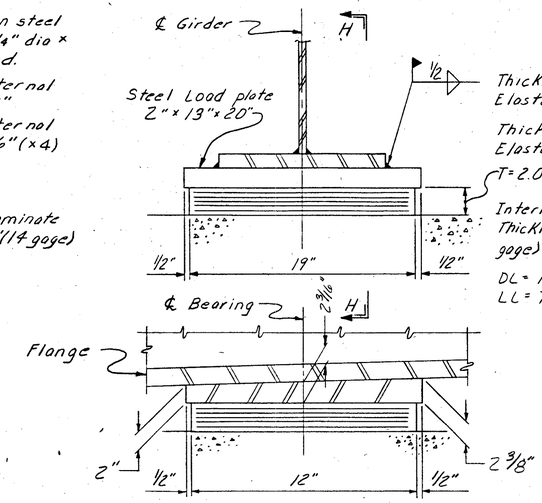
Internal steel Laminate Thickness = .0747" (14 gage) 5 steel plates.

DL = 144 K

LL = 75 K

SECTION G-G

Pier No. 7



Thickness of external Elastomer = .2234"

Thickness of internal Elastomer = .3128" (x 4)

T = 2.07"

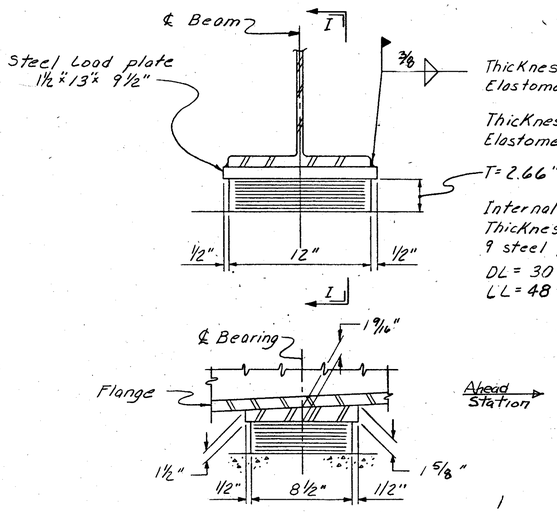
Internal steel Laminate Thickness = .0747" (14 gage) 5 steel plates.

DL = 130 K

LL = 70 K

SECTION H-H

Pier No. 8



Thickness of external Elastomer = .1511"

Thickness of internal Elastomer = .2115" (x 8)

T = 2.66"

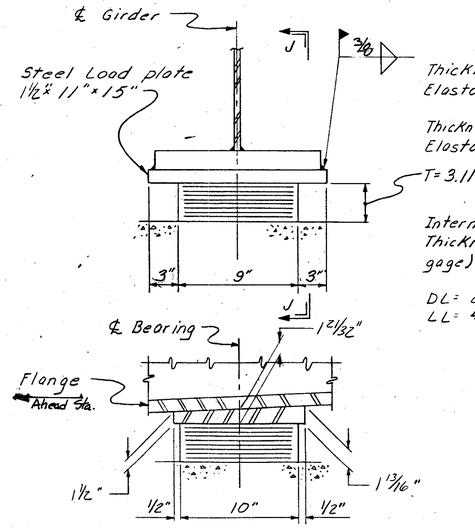
Internal steel Laminate Thickness = .0747" (14 gage) 9 steel plates.

DL = 30 K

LL = 48 K

SECTION I-I

ABUTMENT No. 1



Thickness of external Elastomer = .2131"

Thickness of internal Elastomer = .2984" (x 7)

T = 3.11"

Internal Steel Laminate Thickness = .0747" (14 gage) 8 Steel plates.

DL = 25 K

LL = 49 K

SECTION J-J

ABUTMENT No. 2

NOTES:

1. All elastomers shall be 50 Durometers Neoprene.
2. All Load plates and internal steel Laminates shall conform to CMS 711.23.
3. For additional notes see sheet 32/36.

CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO	5608 797
CHKD. BY			FHWA REGION 5	
DATE				

DESIGN SPECIFICATIONS. THIS DESIGN DATA CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1983 INCLUDING THE 1984 AND 1985 INTERIM SPECIFICATIONS AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN LOADING. MAXIMUM REACTION = TOTAL DEAD LOAD PLUS LIVE LOAD WITHOUT IMPACT. (SERVICE LOAD REACTIONS).

BASIS OF DESIGN. (SEE DESIGN TABLE)

1. AVERAGE COMPRESSIVE STRESS $< \frac{G_c S}{\beta} < \sigma_c$ IN P.S.I.
2. COMPRESSIVE DEFLECTION
   $\Delta_c = (0.04 \times n \times t_i + 0.035 \times 2 \times t_e) \times (1 + \text{CREEP})$
3. ROTATION $\alpha = \frac{2\Delta_c}{L}$ IN RADIANS
4. SHEAR FORCE $F_s = G_H \times \frac{WL}{T_e} \times \Delta_s$ IN POUNDS
5. SLIPPAGE
   MINIMUM DEAD LOAD STRESS = 2.50 X G_H IN P.S.I.
   BASED ON COEFFICIENT OF FRICTION = 0.20
6. STABILITY $\frac{L}{3} > T$.

ROTATION. EXPANSION AND FIXED BEARINGS ARE DESIGNED FOR A MAXIMUM ROTATION OF 0.01 RADIANS (1% SLOPE). PROVIDE A BEVELED LOAD PLATE IF BEAM ROTATION DUE TO AN UPPER NON-LEVEL LOADING SURFACE PLUS BEAM (GIRDER) ROTATION DUE TO DEFLECTION UNDER LIVE LOAD EXCEEDS 0.01 RADIANS. IN GENERAL, FOR MAXIMUM PERFORMANCE OF THE BEARINGS, PROVIDE BEVELED LOAD PLATES TO MAKE PROVISION FOR LEVEL LOADING SURFACES IF THE GRADE AT THE BEARING EXCEEDS ½ % .

TOLERANCES :

INDIVIDUAL ELASTOMER LAYER THICKNESS	± 20% OF DESIGN VALUE (NOT TO EXCEED ± ⅛")
PLAN DIMENSIONS	-0, + ¼"
DESIGN THICKNESS ≤ 1¼"	-0, + ⅛"
DESIGN THICKNESS > 1¼"	-0, + ¼"

LOAD PLATE. THE STEEL LOAD PLATE SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS. STEEL LOAD PLATES SHALL BE 1½ INCH THICK MIN. FOR BEARINGS RATED UP TO AND INCLUDING 200 KIPS AND SHALL BE 2 INCHES THICK MIN. FOR BEARINGS RATED OVER 200 KIPS.

WELDING OF THE LOAD PLATE TO THE SUPERSTRUCTURE SHALL BE CONTROLLED SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE SHALL NOT EXCEED 300°F AS DETERMINED BY THE USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.

BEARING ANCHOR RODS. AT THE OPTION OF THE CONTRACTOR, THE BEARING ANCHOR RODS (OR FORMED HOLES), LOCATED AND SUPPORTED BY TEMPLATES, MAY BE CAST-IN-PLACE.

BRIDGE SEAT REINFORCING. PROJECT PLANS SHALL INCLUDE PLAN VIEWS OF THE SEAT AREAS FOR FIXED BEARINGS SHOWING THE ANCHOR RODS AND THE MAIN REINFORCING BARS IN THE TOP OF THE BRIDGE SEAT. ADEQUATE DIMENSIONS SHALL BE SHOWN TO ENSURE THAT THERE WILL BE NO INTERFERENCE BETWEEN THE ANCHOR RODS AND THE REINFORCING STEEL, AND THAT THE SEAT AREA WILL ACCOMODATE THE BEARING. BEARING SEATS SHALL BE LEVEL.

BEARING REPOSITIONING. IF PLACEMENT OF THE DECK CONCRETE IS DONE AT AN AMBIENT TEMPERATURE HIGHER THAN 80°F OR LOWER THAN 40° F. THE BEAMS OR GIRDERS SHALL BE RAISED WHEN THE AMBIENT TEMPERATURE IS 60°F ± 10°F TO ALLOW THE BEARINGS TO RETURN TO THEIR UNDEFORMED SHAPE.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

31/36

ELASTOMERIC BEARINGS

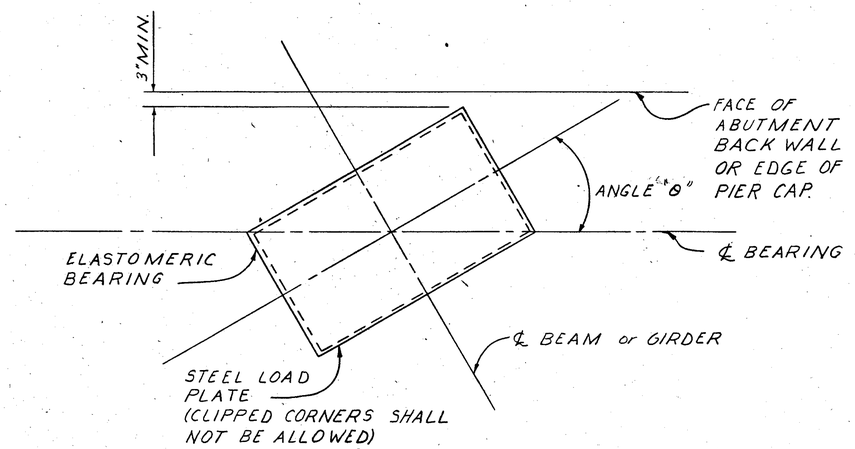
BRIDGE NO. HAM-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75 & RAMP D
HAMILTON COUNTY
STA. 97+76.74 to STA. 44+84.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
TMB	ALH	—	SJA	CRS 2/86	—

OHIO BLUE PRINT 740533

CALC. BY / DATE	HAM-75-9.93	OHIO	560C
CHKD. BY / DATE	HAM-126-13.00	FHWA REGION 5	787

BEAM OR GIRDER	LOCATION AND ANGLE "θ"									
	REAR ABUT.	Pier 1	Pier 2	Pier 3	Pier 4	Pier 5	Pier 6	Pier 7	Pier 8	FWD. ABUT.
1	22°43'14"	22°43'14"	22°43'14"	22°43'14"	22°43'14"	16°11'24"	18°51'33"	21°37'27"	29°59'45"	29°59'45"
2									29°52'42"	29°52'42"
3									29°45'39"	29°45'39"
4									29°19'16"	29°19'16"
5									28°52'39"	28°52'39"
6									28°25'48"	28°25'48"
7	↓	↓	↓	↓	↓	↓	↓	↓	27°58'44"	27°58'44"
8	22°43'14"	22°43'14"	22°43'14"	22°43'14"	22°43'14"	16°11'24"	18°51'33"	21°37'27"	27°31'26"	27°31'26"



STEEL LOAD PLATE ORIENTATION

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

32/36

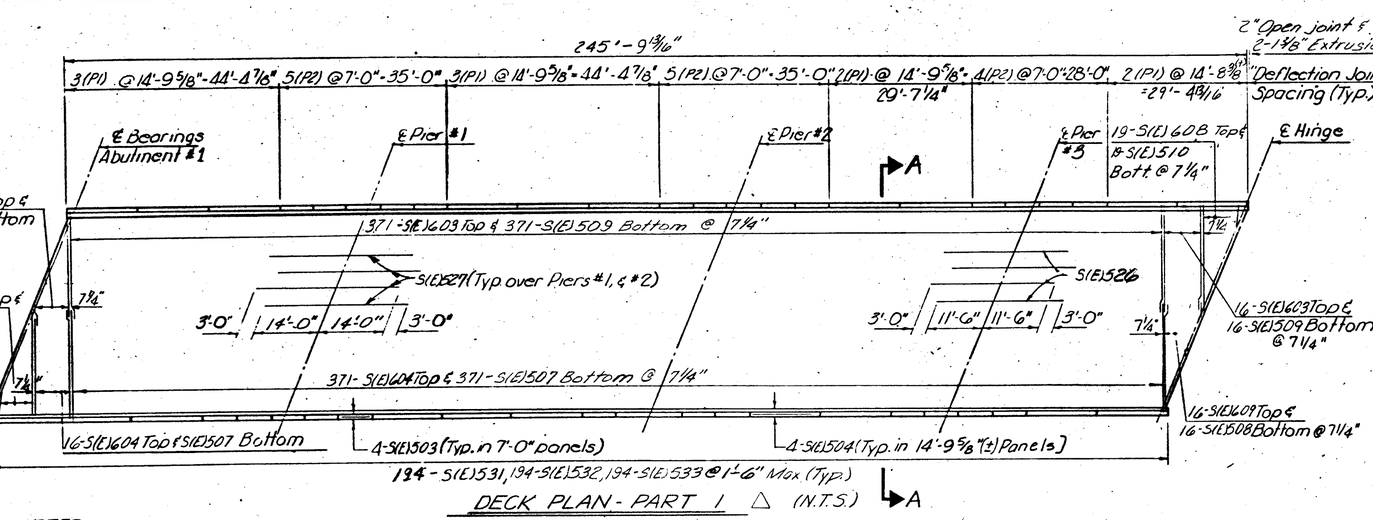
ELASTOMERIC BEARINGS
BRIDGE NO. HAM-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL ; I-75, RAMP D
HAMILTON COUNTY OHIO
STA. 37+76.74 TO STA. 44+84.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
TMB	ALH	—	SJA	CRS 2/86	—

FED. RD. DIVISION	STATE	PROJECT		
2	OHIO			

561
787

HAM-75-9.93
HAM-126-13.00



DECK PLAN - PART 1 △ (N.T.S.)

NOTES:
WELDED ATTACHMENT of supports for concrete deck finishing machine may be made to areas of the fascia stringer flanges designated "Compression". Attachments shall not be made to areas designated "Tension". Fillet welds to compression flanges shall be not closer than 1" from edge of flange, be not more than 2" long, and be not smaller than the minimum size required by AASHTO.

PLACE Transverse reinforcing steel at 7 1/4" ℄/c.

LONGITUDINAL REINFORCING STEEL: 8 Sets of 69-S(E)401 & 69-S(E)402 in top of slab (1'-5" min. lap)
8 Sets of 66-S(E)501 & 66-S(E)502 in bottom of slab (1'-9" min lap)
& 8 Sets of 8-S(E)501 & 8-S(E)502 in parapets (1'-9" min. lap)

"(E)" Denotes epoxy coated reinforcing bar.

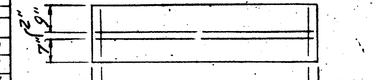
PREFORMED EXPANSION JOINT FILLER in the railing parapet deflection joints may be either 1/4" gray sponge rubber or 1/4" gray polyvinyl chloride (PVC) sponge.

The screed elevations shown have been obtained by adding the dead load deflection due to the weight of: Concrete slab, latex modified concrete overlay, bridge parapet, future wearing surface, steel beams and girders to the required final Elevations.

SCREED ELEVATIONS *

	NORTH		SOUTH		℄ ROUNDING	
	STA.	ELEV.	STA.	ELEV.	STA.	ELEV.
Rear Abut	37+86.40	572.40	37+64.42	571.00	37+68.08	571.41
	38+00.00	572.63	37+75.00	571.19	37+75.00	571.33
	38+25.00	572.94	38+00.00	571.57	38+00.00	571.92
					38+25.00	572.31
Pier No. 1	38+47.40	573.15	38+25.42	571.86	38+29.08	572.25
	38+50.00	573.18	38+50.00	572.16	38+50.00	572.50
	38+75.00	573.45	38+75.00	572.38	38+75.00	572.72
	39+00.00	573.60	39+00.00	572.49	39+00.00	572.84
Pier No. 2	39+24.40	573.65	39+02.92	572.51	39+06.08	572.87
	39+50.00	573.67	39+25.00	572.62	39+25.00	572.95
	39+75.00	573.63	39+50.00	572.74	39+50.00	573.08
Pier No. 3	39+86.95	573.58	39+69.96	572.79	39+68.62	573.14
	40+00.00	573.53	39+75.00	572.82	39+75.00	573.16
	40+25.00	573.39	40+00.00	572.82	40+00.00	573.17
Pier No. 4	40+31.15	573.29	40+15.16	572.81	40+18.82	573.14
	40+50.00	573.19	40+25.00	572.79	40+25.00	573.13
	40+75.00	572.94	40+50.00	572.75	40+50.00	573.07
	41+00.00	572.60	40+75.00	572.59	40+75.00	572.92
Pier No. 5	41+08.96	572.46	40+93.69	572.49	40+96.23	572.81
	41+25.00	572.23	41+00.00	572.45	41+00.00	572.80
	41+50.00	571.84	41+25.00	572.31	41+25.00	572.64
	41+75.00	571.34	41+50.00	572.08	41+50.00	572.42
	42+00.00	570.74	41+75.00	571.76	41+75.00	572.09
Pier No. 6	42+11.15	570.48	41+94.30	571.47	41+97.06	571.76
	42+25.00	570.14	42+00.00	571.39	42+00.00	571.72
	42+50.00	569.51	42+25.00	571.02	42+25.00	571.34
	42+75.00	568.80	42+50.00	570.58	42+50.00	570.91
	43+00.00	568.03	42+75.00	570.06	42+75.00	570.39
Pier No. 7	43+13.23	567.62	42+92.88	569.67	42+96.13	569.91
	43+25.00	567.28	43+00.00	569.52	43+00.00	569.82
	43+50.00	566.57	43+25.00	569.00	43+25.00	569.29
	43+75.00	565.82	43+50.00	568.45	43+50.00	568.76
	44+00.00	564.98	43+75.00	567.83	43+75.00	568.13
Pier No. 8	44+25.51	564.12	43+98.62	567.23	44+00.00	567.50
	44+50.00	563.36	44+00.00	567.20	44+02.86	567.44
	44+75.00	562.58	44+25.00	566.64	44+25.00	569.93
			44+50.00	566.04	44+50.00	566.35
Forward Abut	44+93.73	562.00	44+60.68	565.81	44+65.80	565.98

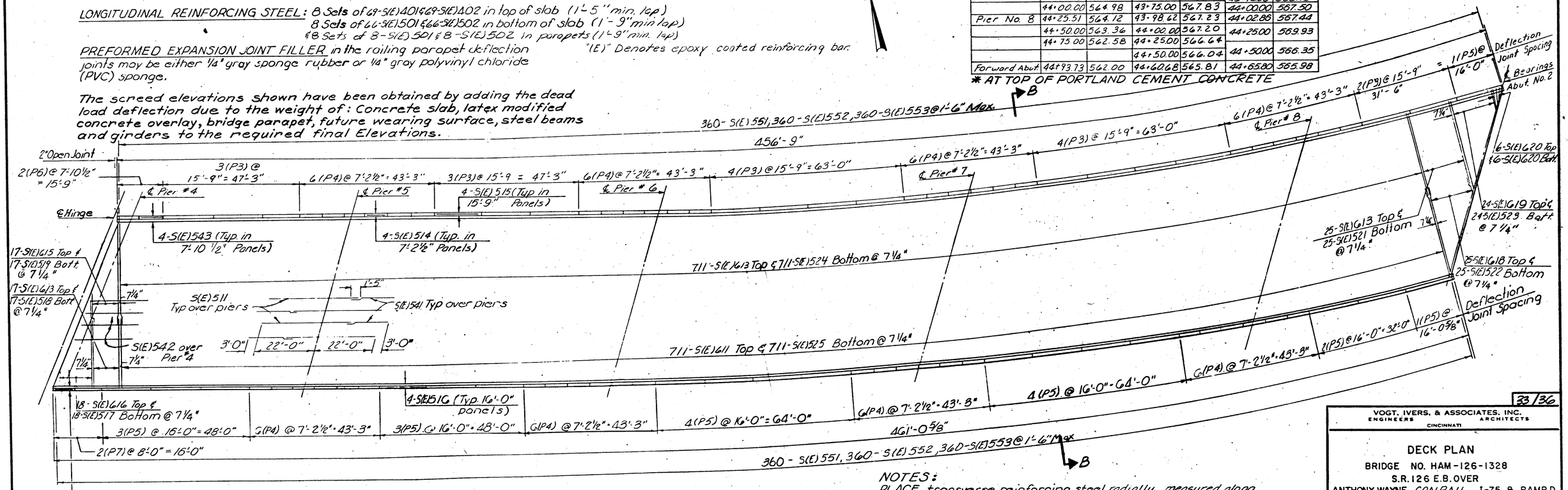
* AT TOP OF PORTLAND CEMENT CONCRETE



Typical Panel Detail

Parapet Panel Reinforcement (Per Panel)	No. of Panels
11-S(E)531, 11-S(E)532, 11-S(E)533, 4-S(E)504	20
6-S(E)531, 6-S(E)532, 6-S(E)533, 4-S(E)503	28
12-S(E)551, 12-S(E)552, 12-S(E)553, 4-S(E)515	16
6-S(E)551, 6-S(E)552, 6-S(E)553, 4-S(E)514	48
12-S(E)551, 12-S(E)552, 12-S(E)553, 4-S(E)516	18
6-S(E)551, 6-S(E)552, 6-S(E)553, 4-S(E)543	2
6-S(E)551, 6-S(E)552, 6-S(E)553, 4-S(E)544	2

○ = Panel Mark



DECK PLAN - PART 2 △

NOTES:
PLACE transverse reinforcing steel radially, measured along ℄ SR. 126 E.B. of bridge.

LONGITUDINAL REINFORCING STEEL: 15 sets of 8-S(E)511 & 1 set of 8-S(E)512 in parapet. 15 Sets of 69-S(E)411 & 1 set of 69-S(E)414 in top of slab. 15 Sets of 66-S(E)511 & 66-S(E)512 in bottom of slab.

For Sections A-A & B-B See Sht's 34/36 35/36.

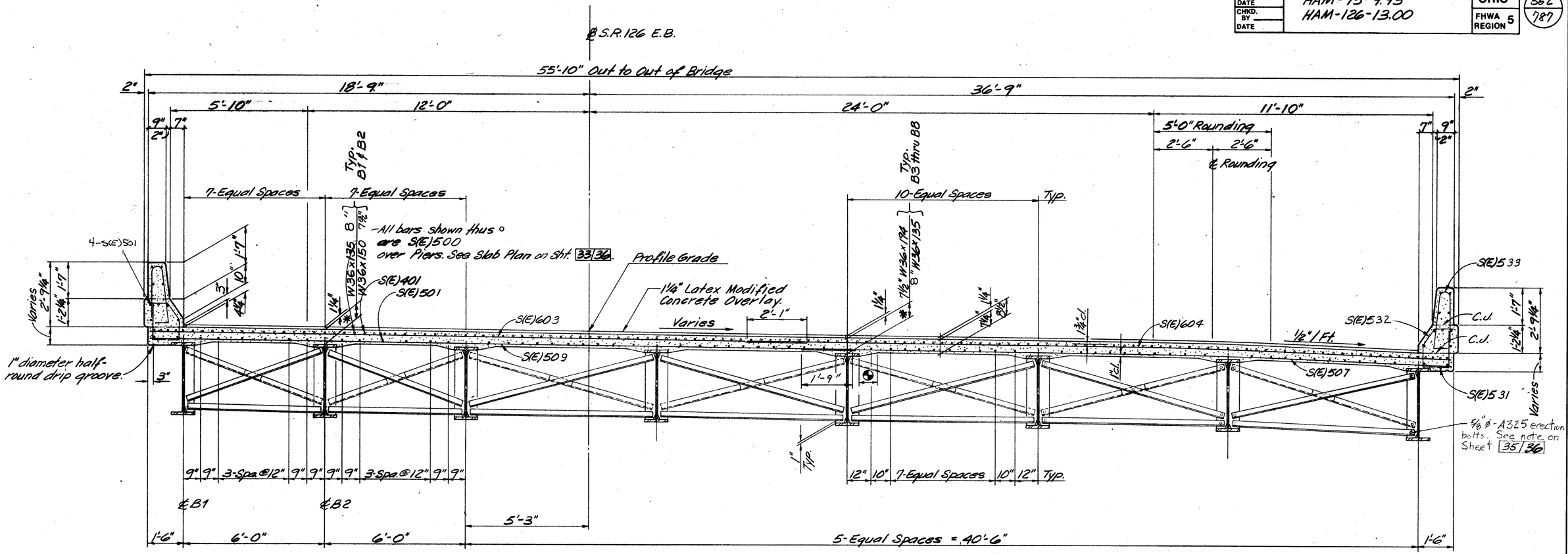
33/36

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

DECK PLAN
BRIDGE NO. HAM-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75, & RAMP D
HAMILTON COUNTY
STA. 37+76.74 to STA. 44+84.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.K.	V.K.	L.B.F.	J.R.P.		6-4-71	2/86

CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO	562
DATE			FHWA REGION 5	787
CHKD. BY				
DATE				



SECTION A-A

NOTES:

1. ✱ DECK SLAB DEPTH:
   The distance shown from top of Portland Cement Concrete slab to top of steel beam is the design dimension. The quantity of deck concrete to be paid for shall be based on this dimension, even though deviation from it may be necessary because the top flange of the beam may not have the exact camber or conformation required to place it parallel to the finished grade.
2. ◐ A HAUNCH WIDTH of 9" shall be used for computing quantity of concrete. However, the haunch width may vary between 6" and 12" (provided that the slope shall be not more than 1:4 for a haunch less than 9" width.)
3. For Crossframe details see Sheet 29/36.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

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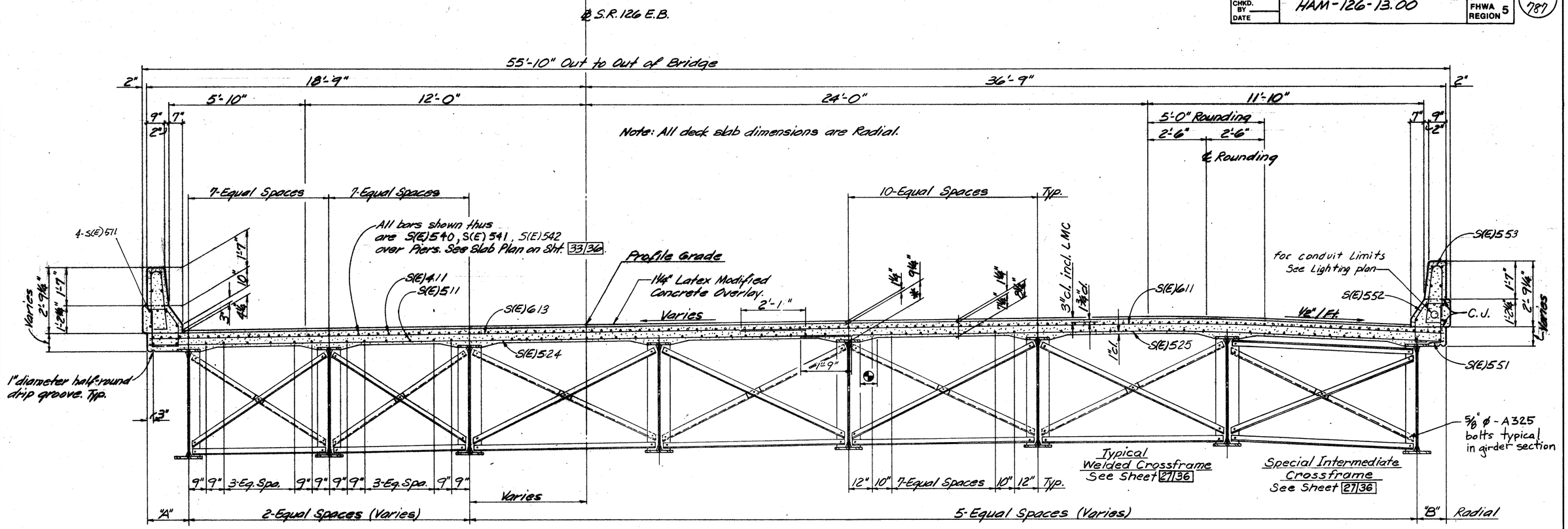
SUPERSTRUCTURE DETAILS
BRIDGE NO. HAM-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75, RAMP D
HAMILTON COUNTY OHIO
STA. 31+76.74 TO STA. 44+84.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
TMB	WJH	~	SJA	CRS 2/86	

OHIO BLUE PRINT 140503

CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO	563
DATE			FHWA REGION 5	787
CHKD. BY				
DATE				



SECTION B-B

SLAB OVERHANG DIMENSIONS	"A"	"B"
Pier 5	1'-6 11/16"	1'-6"
Splice 4	1'-6 11/16"	1'-5 15/16"
Midpoint	1'-10 1/16"	1'-3 11/16"
Splice 5	2'-4 1/16"	0'-11"
Pier 6	2'-0 11/16"	1'-5"
Midpoint	2'-0 9/16"	1'-11"
Splice 6	2'-9 1/16"	1'-6 3/16"
Pier 7	2'-7 15/16"	1'-10 1/8"
Splice 7	2'-11 3/4"	2'-0"
Midpoint	2'-4 3/8"	2'-7 9/16"
Splice 8	2'-9 11/16"	2'-3"
Pier 8	1'-9 3/8"	2'-10 11/16"
Midpoint	1'-7 11/16"	2'-10 11/16"
℄ Brg. Fwd. Abut.	3'-0 11/16"	1'-6"

NOTES:

1. ✱ This is the design dimension. The quantity of deck Portland Cement concrete to be paid for shall be based upon this dimension, even though deviation from it may be necessary because the top flange of the girder may not have the exact camber or conformation required to place it parallel to the finished grade. Deduction shall be made for volume of encased steel plates as per 511.18.
2. ◔ A HAUNCH WIDTH of 9" shall be used for computing quantity of concrete. However, the haunch width may vary between 6" and 12" (provided that the slope shall be not more than 1:4 for a haunch less than 9" width.)
3. ERECTION BOLTS: Hole diameters in the crossframes and girders stiffeners shall be respectively 1/16" and 1/4" larger than the diameter of the erection bolts. Unless replaced by permanent high strength bolts, erection bolts shall remain in place. Lock washers shall be furnished for others than fully torqued high strength erection bolts. Bolts shall be furnished as part of 513.
   In lieu of erection bolts and at the option of the Contractor, alternative means of temporary bracing may be used subject to the approval of the Director (501.06).
4. For crossframe details see sheet 27/36

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

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SUPERSTRUCTURE DETAILS
BRIDGE NO. HAM-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75, RAMP D
HAMILTON COUNTY OHIO
STA. 37+76.74 TO STA. 44+84.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
TMB	WGH	~	SJA	ERS 2/86	

OHIO BLUE PRINT 140033

SUPERSTRUCTURE STEEL LIST

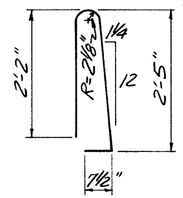
PART 1

MARK	NO.	LENGTH	WEIGHT	SHP.
S(E)603	387	27'-3"	15840	S
S(E)604	387	30'-0"	17438	S
	1	2'-9¼"		
S(E)605	Series of	to ①	326	S
	16	24'-4"		
	1	3'-7¼"		
S(E)606	Series of	to ①	462	S
	19	27'-2"		
	1	3'-4½"		
S(E)608	Series of	to ①	466	S
	19	29'-3"		
	1	5'-7½"		
S(E)609	Series of	to ①	394	S
	16	27'-2"		
S(E)501	592	30'-0"	18524	S
S(E)502	74	19'-6"	1505	S
S(E)503	112	6'-8"	779	S
S(E)504	80	14'-5"	1203	S
	1	3'-2½"		
S(E)505	Series of	to ①	320	S
	19	29'-1"		
	1	5'-5¼"		
S(E)506	Series of	to ①	271	S
	16	27'-0"		
S(E)507	387	27'-0"	10898	S
	1	2'-6¼"		
S(E)508	Series of	to ①	222	S
	16	24'-1"		
S(E)509	387	30'-0"	12109	S
	1	3'-4½"		
S(E)510	Series of	to ①	323	S
	19	29'-3"		
S(E)526	70	26'-0"	1898	S
S(E)527	140	31'-0"	4527	S
S(E)531	388	2'-5"	978	B
S(E)532	388	3'-2"	1281	B
S(E)533	388	5'-3"	2125	B
S(E)401	552	30'-0"	11062	S
S(E)402	69	17'-0"	784	S
	TOTAL	PART 1	103,735	

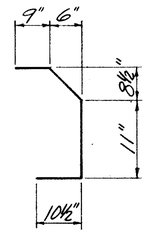
PART 2

MARK	NO.	LENGTH	WEIGHT	SHP.
S(E)611	711	30'-0"	32038	S
S(E)613	753	27'-3"	30820	S
	1	4'-2"		
S(E)615	Series of	to ①	399	S
	19	27'-2"		
	1	3'-3"		
S(E)616	Series of	to ①	418	S
	18	27'-8¼"		
	1	4'-5"		
S(E)618	Series of	to ②	598	S
	25	27'-5"		
	1	6'-5"		
S(E)619	Series of	to ②	629	
	24	28'-5½"		S
	2	3'-6"		
S(E)620	Series of	to ③	86	S
	6	6'-0"		
S(E)511	1390	30'-0"	43493	S
S(E)512	74	37'-0"	2856	S
S(E)514	192	6'-10"	1368	S
S(E)515	64	15'-5"	1029	S
S(E)516	72	15'-8"	1177	S
		3'-3"		
S(E)517	18	to ①		
		27'-8¼"	290	S
S(E)518	17	27'-9"	492	S
		3'-4"		
S(E)519	17	to ①	263	S
		26'-4"		
S(E)521	25	27'-1"	706	S
		4'-3"		
S(E)522	25	to ②	411	S
		27'-3"		
		6'-5"		
S(E)523	24	to ②	436	S
		28'-5½"		
S(E)524	711	30'-0"	22247	S
S(E)525	711	27'-0"	20022	S
S(E)541	280	18'-9"	5476	S
S(E)542	70	22'-0"	1606	S
S(E)543	8	7'-6"	63	S
S(E)544	8	7'-8"	64	S
S(E)551	720	2'-5"	1815	B
S(E)552	720	3'-2"	2378	B
S(E)553	720	5'-3"	3943	B
S(E)411	1035	30'-0"	20742	S
S(E)414	69	32'-0"	1475	S
	TOTAL	PART 2	197,340	

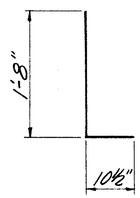
TOTAL SUPERSTRUCTURE 301,075



S(E)533, S(E)553



S(E)532, S(E)552



S(E)531, S(E)551

① Varies by 1'-5¼" increments
② Varies by 11½" increments
③ Varies by 6" increments

Notes:
REINFORCING STEEL SAMPLES:
Refer to CMS Sections 106.03, 700, 709.1 through 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structures by the additional steel, spliced in accordance with 509.08.

(E) denotes epoxy-coated rebars.

CALC. BY — DATE —
CHKD. BY — DATE —

HAM-75-9.93
HAM-126-13.00

OHIO
FHWA REGION 5

564
787

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

36/36

REINFORCING STEEL LIST
BRIDGE NO. HAM-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75, RAMP D
HAMILTON COUNTY OHIO
STA. 37+76.74 TO STA. 44+84.71

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
TMB	WJH	~	BJS	CRS 6/86	

OHIO BLUE PRINT

REINFORCING STEEL LIST

REAR ABUTMENT

MARK	NO.	LENGTH	WEIGHT	SHP.
A801	14	33'-5"	1249	S
A802	6	14'-5"	231	S
A803	2	13'-6"	72	S
A804	3	13'-0"	104	S
A805	1	15'-6"	41	S
A601	45	10'-5"	704	B
A602	8	8'-1"	97	B
A603	6	8'-6"	77	B
A604	6	8'-8"	78	B
A605	6	8'-11"	80	B
A606	6	9'-1"	82	B
A607	6	9'-3"	83	B
A608	6	9'-4"	84	B
A609	57	8'-11"	763	B
A610	57	6'-5"	549	B
A612	18	10'-4"	279	B
A613	9	8'-2"	110	S
A614	9	8'-5"	114	S
A615	3	7'-10"	35	B
A616	5	11'-8"	88	S
A617	8	13'-2"	158	S
A618	5	11'-6"	86	B
A619	3	8'-6"	38	B
A620	9	9'-8"	131	S
A621	9	9'-11"	134	S
A622	3	8'-0"	36	B
A623	6	12'-0"	108	S
A624	6	8'-3"	74	B
A625	3	6'-0"	27	B
A501	45	8'-6"	399	B
A502	8	8'-0"	67	B
A503	6	8'-5"	53	B
A504	6	8'-7"	54	B
A505	6	8'-10"	55	B
A506	6	9'-0"	56	B
A507	6	9'-2"	57	B
A508	7	9'-3"	68	B
A509	44	6'-8"	306	B
A510	40	31'-2"	1300	S
A512	20	11'-1"	231	B
A513	5	11'-8"	61	S
A514	8	13'-2"	110	S
A515	6	12'-0"	75	S
EPOXY COATED BARS				
A(E)806	35	4'-11"	459	B
A(E)611	57	7'-3"	621	B
A(E)626	10	3'-9"	56	B
A(E)627	2	3'-8"	11	B
A(E)628	2	3'-8"	11	B
A(E)629	2	3'-7"	11	B
A(E)630	8	3'-7"	43	B
A(E)511	2	31'-2"	65	S
A(E)516	16	11'-2"	186	S
A(E)517	16	4'-4"	72	S
A(E)518	16	4'-7"	76	S
A(E)519	8	3'-0"	25	S
A(E)520	16	2'-8"	45	B
A(E)521	8	5'-3"	44	B

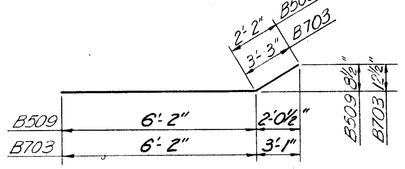
FORWARD ABUTMENT

MARK	NO.	LENGTH	WEIGHT	SHP.
B801	6	18'-3"	292	S
B802	4	19'-3"	206	S
B803	2	19'-10"	106	S
B804	1	38'-3"	102	S
B805	1	41'-0"	109	B
B806	1	39'-8"	106	B
B807	1	35'-4"	94	S
B808	1	38'-1"	102	B
B809	1	33'-8"	90	S
B810	1	36'-5"	97	B
B811	1	35'-10"	96	B
B812	1	35'-11"	96	S
B813	1	37'-2"	99	S
B814	1	38'-5"	103	B
B815	1	38'-7"	103	S
B816	1	38'-11"	104	B
B817	1	39'-1"	104	S
B701	8	19'-8"	322	S
B702	1	18'-9"	38	S
B703	1	9'-5"	19	B
B704	1	16'-4"	33	S
B705	2	13'-8"	56	S
B706	5	15'-0"	153	S
B707	1	18'-3"	37	S
B708	1	9'-7"	20	B
B709	1	16'-0"	33	S
B710	7	15'-9"	225	S
B711	7	7'-10"	112	B
B606	47	11'-5"	806	B
B607	5	7'-9"	58	B
B608	5	8'-4"	63	B
B609	6	8'-10"	80	B
B610	10	9'-7"	144	B
B611	7	8'-7"	90	B
B612	7	9'-3"	97	B
B613	6	9'-10"	89	B
B614	62	14'-1"	1311	B
B615	62	6'-5"	598	B
B507	8	19'-8"	164	S
B508	1	18'-9"	20	S
B509	1	8'-4"	9	B
B510	2	13'-8"	29	S
B511	5	15'-0"	78	S
B512	30	10'-5"	326	B
B513	1	18'-3"	19	S
B514	1	8'-6"	9	B
B515	7	15'-9"	115	S
	1 ①	6'-3"		
B516	Series	to	61	B
	of 7	10'-7"		
B517	1	16'-4"	17	S
	1 ①	9'-1"		
B518	Series	to	136	S
	of 14	9'-6"		
	1 ①	9'-4"		
B519	Series	to	139	S
	of 14	9'-9"		
B520	1	16'-0"	17	S
	1 ①	6'-3"		
B521	Series	to	63	B
	of 7	11'-1"		
	1 ①	11'-3"		
B522	Series	to	167	S
	of 14	11'-7"		
	1 ①	11'-6"		
B523	Series	to	170	S
	of 14	11'-10"		
B524	28	9'-7"	280	B
B525	47	9'-6"	466	B
B526	46	6'-8"	320	B
B527	5	7'-7"	40	B
B528	5	8'-2"	43	B
B529	6	8'-9"	55	B

EPOXY COATED BARS

MARK	NO.	LENGTH	WEIGHT	SHP.
B(E)818	35	4'-11"	459	S
B(E)601	20	3'-9"	113	B
B(E)602	2	3'-8"	11	B
B(E)603	2	3'-8"	11	B
B(E)604	2	3'-7"	11	B
B(E)605	8	3'-7"	43	B
B(E)616	62	4'-10"	450	B
B(E)501	18	5'-3"	99	B
B(E)502	16	2'-8"	45	B
B(E)503	16	17'-8"	295	S
B(E)504	16	4'-4"	72	S
B(E)505	18	3'-0"	56	S
B(E)506	16	4'-7"	76	S
B(E)540	2	34'-0"	71	S

① Vary uniformly.



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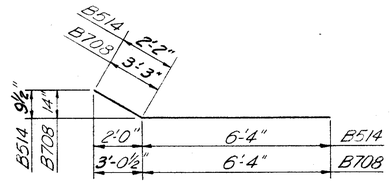

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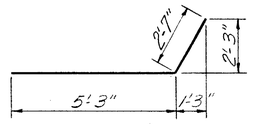
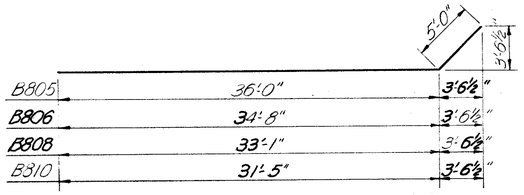
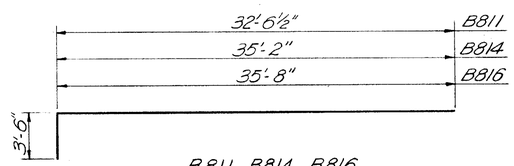


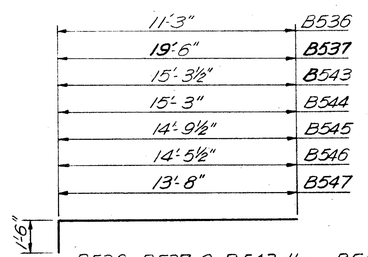
B711



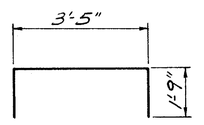
B805, B806, B808, B810



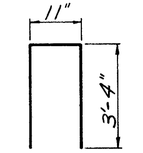
B811, B814, B816



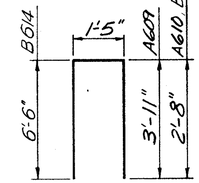
B536, B537 & B543 thru B547



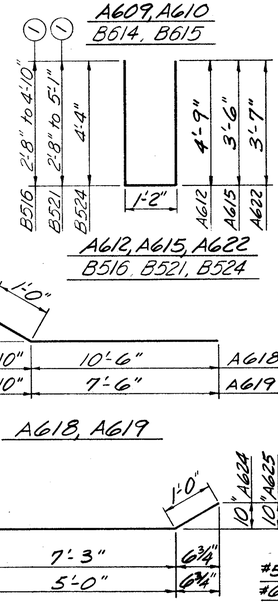
A509
B526



A(E)611
B(E)616



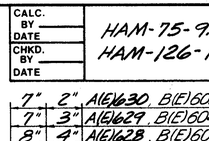
A609, A610
B614, B615



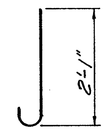
A612, A615, A622
B516, B521, B524

A618, A619

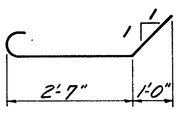
A624, A625



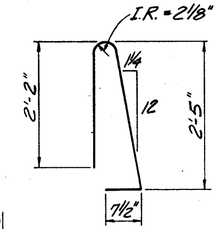
A(E)626 thru A(E)630
B(E)601 thru B(E)605



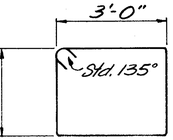
A(E)520
B(E)502



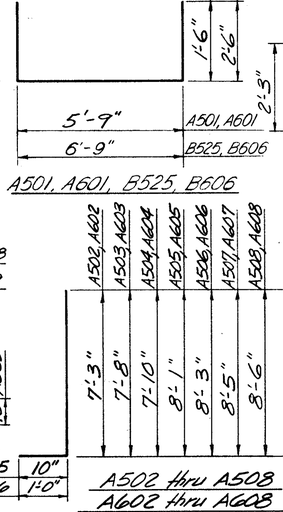
A(E)806
B(E)818



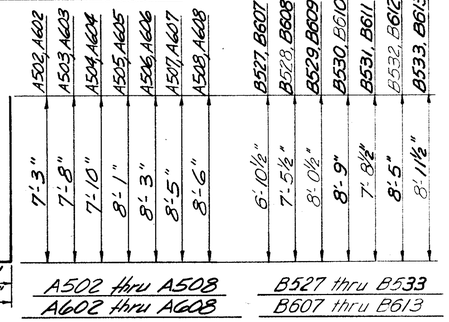
A(E)521
B(E)501



A512, B512



A501, A601, B525, B606



A502 thru A508
A602 thru A608

B527 thru B533
B607 thru B613

REINFORCING STEEL SAMPLES:
Refer to CMS Sections 106.03, 700, 709.01 through 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structures by the additional steel, spliced in accordance with 509.08.

NOTE:
"(E)" denotes epoxy coated reinforcing bar.

CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO	564A
DATE			FHWA REGION 5	787
CHKD. BY				
DATE				

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

36A/36

REINFORCING STEEL
BRIDGE NO. HAM-126-1328
S.R. 126 E.B. over
ANTHONY WAYNE, CONRAIL, I-75, RAMP D
HAMILTON COUNTY OHIO
STA. 37+76.74 TO STA. 44+84.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	WJH JAG	~	TMB	CRS 6/86	

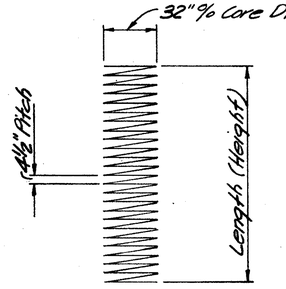
OHIO BLUE PRINT M60653

REINFORCING STEEL LIST

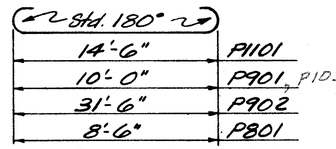
MARK	NO.	LENGTH	WEIGHT	SHP.	PIER 1	PIER 2	PIER 3	PIER 4	PIER 5	PIER 6	PIER 7	PIER 8
P1101	64	17'-8"	6007	B	—	32	32	—	—	—	—	—
P1102	12	38'-4"	2444	B	—	12	—	—	—	—	—	—
P1103	12	34'-6"	2200	S	—	12	—	—	—	—	—	—
	308		9303									
P1001	256	9'-6"	10465	B	32	—	—	32	32	48	64	48
P1002	184	10'-6"	8313	B	—	92	92	—	—	—	—	—
P1003	8	35'-4"	1216	S	8	—	—	—	—	—	—	—
P1004	8	35'-0"	1205	S	8	—	—	—	—	—	—	—
P1005	8	34'-7"	1190	S	8	—	—	—	—	—	—	—
P1006	8	34'-2"	1176	S	8	—	—	—	—	—	—	—
P1007	16	25'-8"	1967	S	—	—	—	16	—	—	—	—
P1008	16	25'-4"	1944	S	—	—	—	16	—	—	—	—
P1009	32	40'-9"	5611	S	—	—	—	—	32	—	—	—
P1010	24	39'-9"	4105	S	—	—	—	—	—	24	—	—
P1011	24	40'-5"	4174	S	—	—	—	—	—	24	—	—
P1012	32	26'-3"	3615	S	—	—	—	—	—	—	32	—
P1013	56	28'-2"	6782	S	—	—	—	—	—	—	32	24
P1014	24	30'-4"	3132	S	—	—	—	—	—	—	—	24
P1015	20	19'-0"	1635	B	10	—	—	10	—	—	—	—
P1016	40	19'-3"	3313	B	—	—	—	—	10	10	10	10
P1017	15	38'-9"	2501	S	5	—	—	5	—	—	—	5
P1018	15	37'-6"	2420	S	—	—	—	—	5	5	5	—
P1019	20	23'-8"	2037	B	10	—	—	10	—	—	—	—
P1020	30	23'-0"	2969	B	—	—	—	—	10	10	10	—
P1021	25	21'-0"	2259	S	5	—	—	5	5	5	5	—
P1022	5	8'-6"	183	B	—	—	—	—	—	—	—	5
P1023	5	8'-6"	183	B	—	—	—	—	—	—	—	5
P1024	5	36'-0"	775	S	—	—	—	—	—	—	—	5
P1025	5	20'-0"	430	S	—	—	—	—	—	—	—	5
P1026	76	22'-2"	7249	S	—	38	38	—	—	—	—	—
P1027	108	36'-0"	16730	S	—	54	54	—	—	—	—	—
P1028	12	37'-6"	1936	B	—	—	12	—	—	—	—	—
P1029	12	33'-8"	1738	S	—	—	12	—	—	—	—	—
	424		19020									48
P901	472	12'-6"	20060	B	88	—	—	—	96	96	96	96
P902	32	34'-0"	3699	B	—	16	16	—	—	—	—	—
P801	64	10'-4"	1766	B	—	—	—	64	—	—	—	—
P601	64	14'-6"	1394	S	—	32	32	—	—	—	—	—
P602	32	31'-6"	1514	S	—	16	16	—	—	—	—	—
P603	32	31'-2"	1498	S	—	16	16	—	—	—	—	—
P604	8	26'-0"	312	S	—	4	4	—	—	—	—	—
P605	8	22'-0"	264	S	—	4	4	—	—	—	—	—
P606	8	18'-6"	222	S	—	4	4	—	—	—	—	—
P607	24	20'-10"	751	B	—	12	12	—	—	—	—	—
P608	112	9'-4"	1570	B	—	56	56	—	—	—	—	—
P609	112	22'-3"	3743	S	—	56	56	—	—	—	—	—
P610	24	13'-9"	496	S	—	12	12	—	—	—	—	—
P501	440	10'-0"	4589	S	88	—	—	—	88	88	88	88
P502	72	8'-6"	638	S	—	—	—	72	—	—	—	—
P503	48	30'-0"	1502	S	6	6	6	6	6	6	6	6
P504	36	17'-0"	638	S	12	—	—	12	—	—	—	12
P505	36	16'-0"	601	S	—	—	—	—	12	12	12	—
P506	336	4'-5"	1548	B	56	—	—	56	56	56	56	56
P507	76	13'-9"	1090	B	42	—	—	34	—	—	—	—
P508	175	14'-3"	2601	B	—	—	—	—	45	43	41	46
	23	12'-1"			1			2				
P509	Series of 4	to ③ 13'-7"	1076	B	Series of 4	—	—	Series of 4	—	—	—	—
	1	12'-3"			1							
P510	Series of 7	to ①③ 13'-9"	1554	B	Series of 4	—	—	—	—	—	—	—
	8	12'-7"	761						2	2	2	2
P511	Series of 7	to ①③ 14'-1"	445	B	—	—	—	—	Series of 7	Series of 7	Series of 7	Series of 7
P512	28	9'-5"	239	B	—	—	—	—	—	—	15	10
P513	45	12'-5"	583	B	—	—	—	—	—	—	20	25
P514	12	18'-6"	232	S	—	6	6	—	—	—	—	—
P515	40	9'-5"	393	B	—	20	20	—	—	—	—	—
	4	14'-5"				2	2					
P516	Series of 7	to ③ 17'-5"	465	B	—	Series of 7	Series of 7	—	—	—	—	—
	8	15'-9"				4	4					
P517	Series of 11	to ③ 20'-9"	1675	B	—	Series of 11	Series of 11	—	—	—	—	—
P518	56	6'-5"	375	B	—	28	28	—	—	—	—	—

MARK	NO.	LENGTH (HEIGHT)	WEIGHT	SHP.	PIER 1	PIER 2	PIER 3	PIER 4	PIER 5	PIER 6	PIER 7	PIER 8
SP401	1	31'-10"	586	B	1	—	—	—	—	—	—	—
SP402	1	31'-5"	579	B	1	—	—	—	—	—	—	—
SP403	1	31'-0"	571	B	1	—	—	—	—	—	—	—
SP404	1	30'-8"	565	B	1	—	—	—	—	—	—	—
SP405	2	22'-3"	830	B	—	—	—	2	—	—	—	—
SP406	2	21'-11"	818	B	—	—	—	2	—	—	—	—
SP407	5	37'-3"	3417	B	—	—	—	—	4	1	—	—
SP408	1	36'-3"	665	B	—	—	—	—	—	1	—	—
SP409	1	36'-7"	671	B	—	—	—	—	—	1	—	—
SP410	1	36'-11"	679	B	—	—	—	—	—	1	—	—
SP411	1	22'-5"	418	B	—	—	—	—	—	—	1	—
SP412	1	23'-1"	430	B	—	—	—	—	—	—	1	—
SP413	1	23'-9"	442	B	—	—	—	—	—	—	1	—
SP414	1	24'-5"	454	B	—	—	—	—	—	—	1	—
SP415	1	23'-11"	445	B	—	—	—	—	—	—	—	1
SP416	1	24'-11"	463	B	—	—	—	—	—	—	—	1
SP417	1	26'-0"	482	B	—	—	—	—	—	—	—	1
SP418	1	27'-0"	500	B	—	—	—	—	—	—	—	1
P519	1 SERIES OF 7	12'-1" to 13'-7"	94	B	1 SERIES OF 7	—	—	—	—	—	—	—
P1001	56	9'-6"	2289	B	8	—	—	16	32	—	—	—
P1003	2	35'-4"	304	S	2	—	—	—	—	—	—	—
P1004	2	35'-0"	301	S	2	—	—	—	—	—	—	—
P1005	2	34'-7"	298	S	2	—	—	—	—	—	—	—
P1006	2	34'-2"	294	S	2	—	—	—	—	—	—	—
P1007	8	25'-8"	884	S	—	—	—	8	—	—	—	—
P1008	8	25'-4"	872	S	—	—	—	8	—	—	—	—
P1009	32	40'-9"	5611	S	—	—	—	—	32	—	—	—
P1030	32	9'-4"	1285	S	—	—	—	—	32	—	—	—
P1031	48	12'-10"	2651	B	—	—	—	—	—	—	—	48
P1104	6	40'-0"	1275	S	—	—	—	—	—	6	—	—
P1105	6	40'-4"	1286	S	—	—	—	—	—	6	—	—
P1106	6	40'-8"	1296	S	—	—	—	—	—	6	—	—
P1107	6	40'-11"	1304	S	—	—	—	—	—	6	—	—
P1108	64	12'-8"	4307	B	—	—	—	—	—	—	—	64
P1109	16	27'-7"	2345	S	—	—	—	—	—	—	—	16
P1110	16	28'-8"	2437	S	—	—	—	—	—	—	—	16
P1111	16	29'-9"	2529	S	—	—	—	—	—	—	—	16
P1112	16	30'-9"	2614	S	—	—	—	—	—	—	—	16
P1113	24	10'-11"	1392	S	—	—	—	—	—	24	—	—

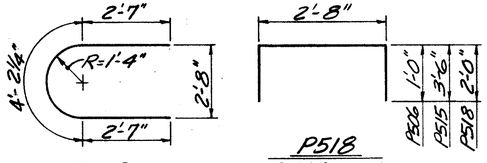
① Varies by 3" increments.
② Varies by 1½" increments.
③ Varies by 6" increments.



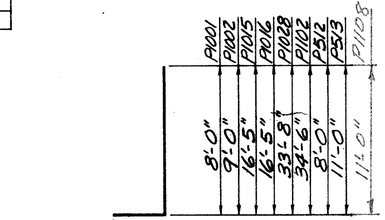
SP401 thru SP418



P1101, P901, P902, P801, P1031

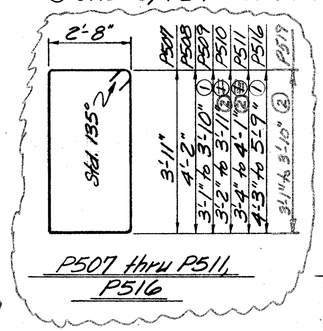


P608 P518 P506, P515

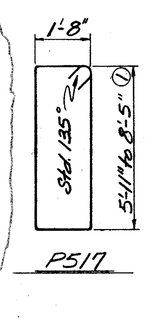


P1001, P1002	1'-10"
P1015	2'-11"
P1016	2'-9"
P1028	4'-2"
P1102	4'-2"
P512, P513	1'-6"
P1108	2'-0"

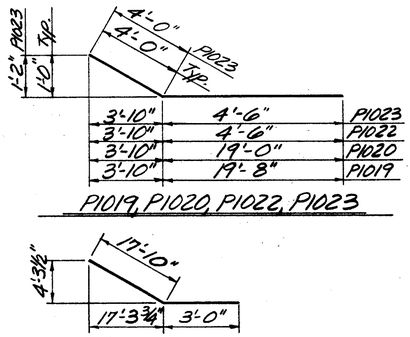
P1001, P1002, P1015, P1016, P1028, P1102, P512, P513



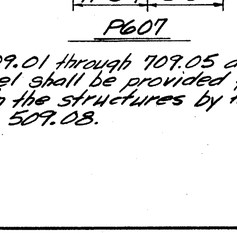
P507 thru P511, P516



P517



P1019, P1020, P1022, P1023



P607

REINFORCING STEEL SAMPLES:
Refer to CMS Sections 106.03, 700, 709.01 through 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structures by the additional steel, spliced in accordance with 509.08.

NOTE:
"(E)" denotes epoxy coated reinforcing bar.

CALC. BY — DATE —
CHKD. BY — DATE —

HAM-75-9.93
HAM-126-13.00

OHIO
FHWA REGION 5

SLAB 787

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

368 36

REINFORCING STEEL
BRIDGE NO. HAM-126-1328
S.R. 126 E.B. OVER
ANTHONY WAYNE, CONRAIL, I-75, RAMP D
HAMILTON COUNTY OHIO
STA. 37+76.74 TO STA. 44+84.91

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
TMB	WLH	~	BJS	CRS 6/86	JULY 21 1986

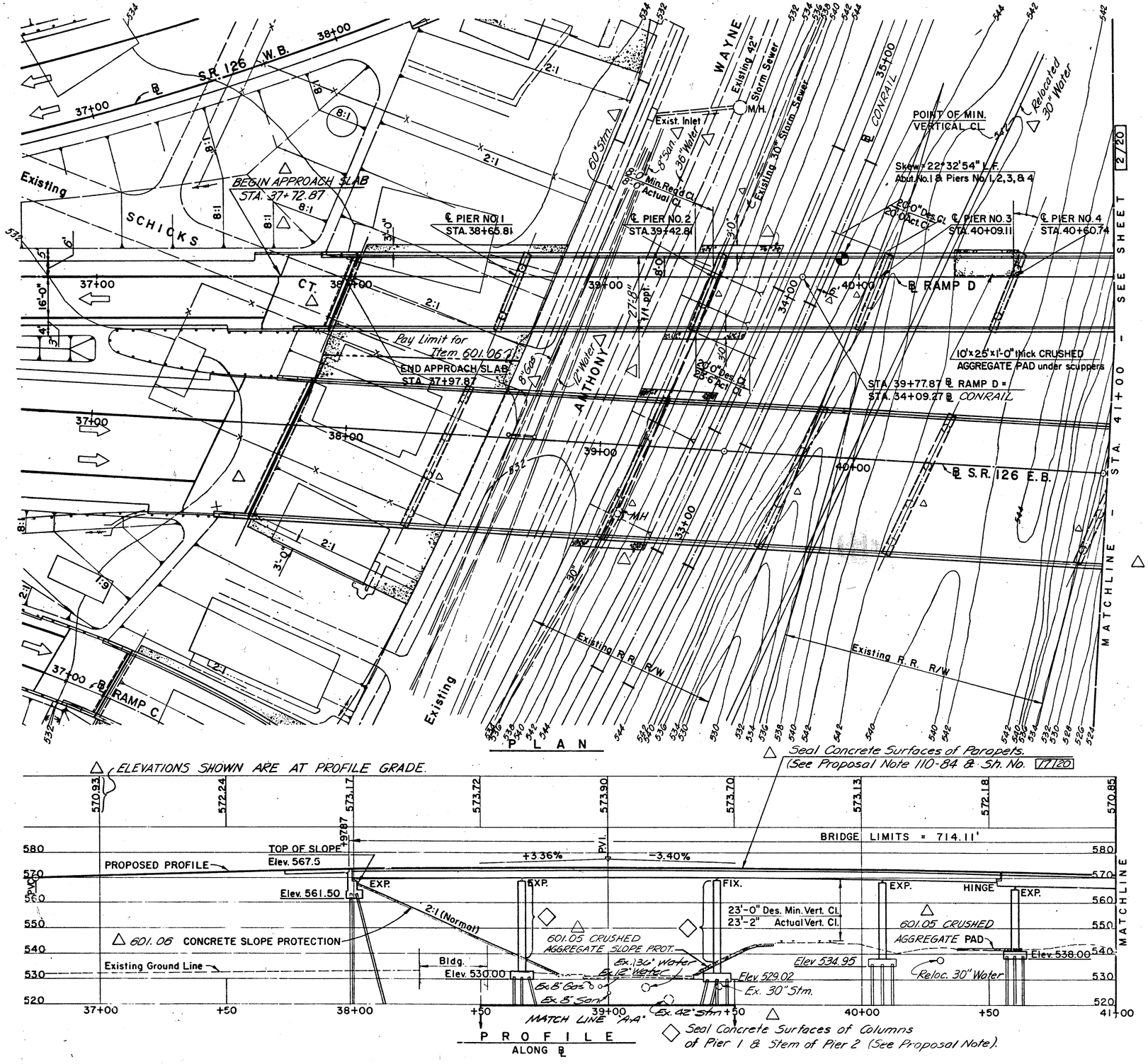
REVISED 12/9/86 REVISED 2/25/87

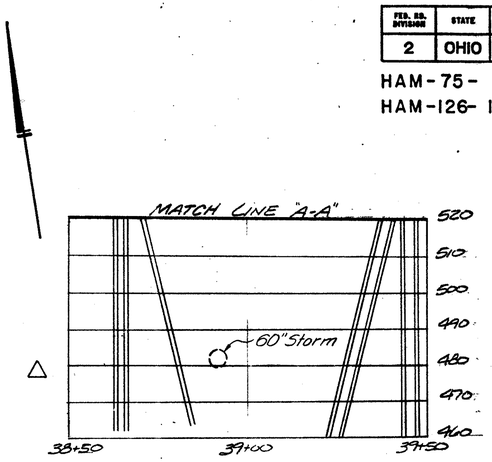
OHIO BLUE PRINT 760033

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

363
181

HAM-75- 9.93
HAM-126- 13.00





△ TRAFFIC DATA
2006 A.D.T. = 6795
2006 A.D.T.T. = 747

NOTE:
△ EARTHWORK LIMITS SHOWN ARE *APPROXIMATE*, ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

VERTICAL CURVE DATA

P.V.I. STA. 39+00.00 ℄ RAMP D
ELEV. 577.70
V. C. = 450'
G1 = +3.36%
G2 = −3.40%

PIER 1, 4, 5, 6, 7, AND 8 PILES AND ALL ABUTMENT PILES ARE 12" DIA. CAST-IN-PLACE REINFORCED CONCRETE PILES. PIER 2 AND 3 PILES ARE 14" DIA. CAST-IN-PLACE REINFORCED CONCRETE PILES.

THE ESTIMATED AVERAGE PAY-LENGTHS ARE:

ABUTMENT NO. 1	- 45'
PIERS NO. 1 & 7	- 70'
PIER NO. 2	- *85'*
PIER NO. 3	- *90'*
PIER NO. 4	- 75'
PIERS NO. 5 & 6	- 60'
PIER NO. 8	- 65'
ABUTMENT NO. 2	- 70'

△ Seal Concrete Surfaces of Parapets. (See Proposal Note 110-84 & Sh. No. 1/20)

PROPOSED STRUCTURE

TYPE: Continuous rolled beam and welded plate girder with reinforced concrete deck and substructures.

SPANS: 65.50', 77.00', 66.30', 51.63', 64.00', 104.63', 105.90', 108.34', & 65.50'.

△ ROADWAY: *27'-8"* face to face of parapets.

△ LOADING: HS 20-44. *Case I and the Alternate Military Loading*

SKEW: Abutment No. 1 to Pier No. 4 = 22°32'54" & Pier No. 5 to Abutment No. 2 = 19°27'05" L.F. to Ref. Tan.

ALIGNMENT: Tangent & compound circular curves.

△ WEARING SURFACE: *1/4" Latex Modified Concrete Overlay*

△ APPROACH SLABS: AS-1-81 (25' long).

SUPERELEVATION: Varies: 0.083 ft. per ft. max.

1/20

VOGT, IVERS, & ASSOCIATES
ENGINEERS CINCINNATI — ARCHITECTS CHICAGO

SITE PLAN

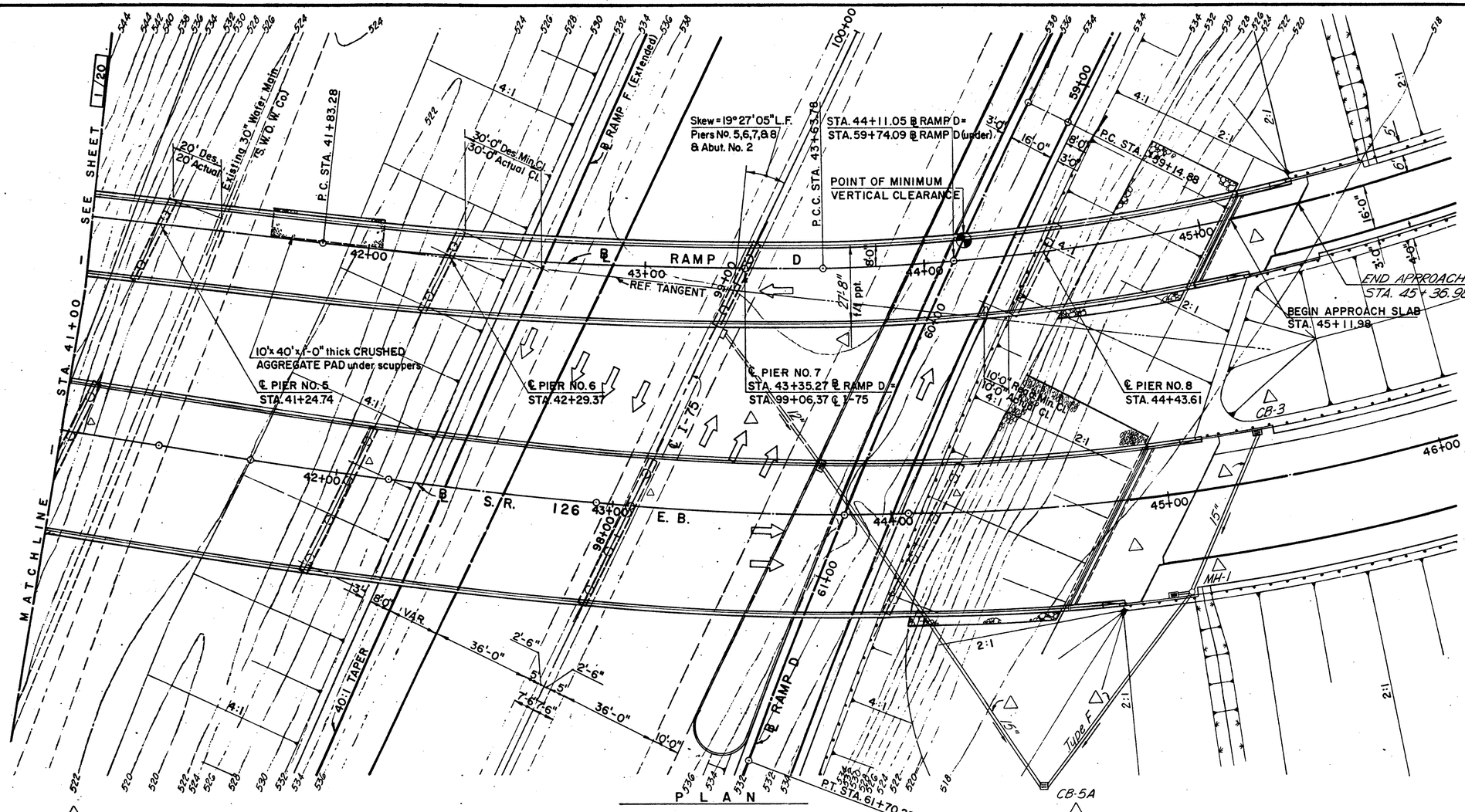
BRIDGE NO. HAM-126-RAMP D
RAMP D OVER
ANTHONY WAYNE, *CONRAIL*, I-75, & RAMP D
HAMILTON COUNTY
STA. 37+97.87 to STA. 45+11.98

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISIONS
AERIAL	TWN EPA	V. K.	D-W-M	S. S. C.	△ BALKE ENGG. CO.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

366
787

HAM - 75 - 9.93
HAM - 126 - 13.00

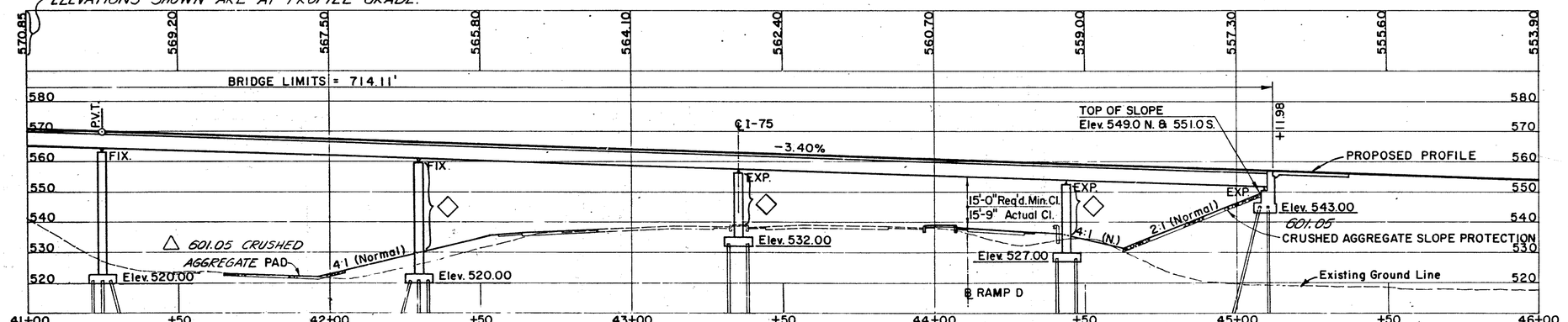


HORIZONTAL CURVE DATA

P.I. STA. 42+73.65 ℄ RAMP D
Δ = 7° 13' 11" LT.
Dc = 4° 00' 00"
R = 1432.39'
T = 90.37'
L = 180.50'
E = 2.85'

P.I. STA. 46+33.86 ℄ RAMP D
Δ = 41° 19' 24" LT.
Dc = 8° 00' 00"
R = 716.20'
T = 270.08'
L = 516.54'
E = 49.23'

△ ELEVATIONS SHOWN ARE AT PROFILE GRADE.



P R O F I L E
ALONG ℄

◇ Seal Concrete Surfaces of Columns of Piers 6, 7, & 8 (See Proposal Note).

2 / 20

VOGT, IVERS, & ASSOCIATES
ENGINEERS CINCINNATI — ARCHITECTS CHICAGO

SITE PLAN

BRIDGE NO. HAM-126-RAMP D
RAMP D OVER
ANTHONY WAYNE, CONRAIL, I-75, & RAMP D
HAMILTON COUNTY — STA. 37+97.87 to STA. 45+11.98

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISIONS
AERIAL	T.W.N.	V.K.	D·W·M	S.S.C.	△ BALKE ENGRS. 6/85

GENERAL NOTES △

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

HAM-75-9.33
HAM-126-13.00

567
787

ITEM 506 STATIC LOAD TEST AS PER PLAN: Prior to installation of any pile the Contractor shall perform static load tests on one of the initially installed pier piles located in or near a pier No. 2 or Pier No. 3 footing ② one of the initially installed pier piles located in or near a Pier No. 1 or Pier No. 4 or Pier No. 5 or Pier No. 6 or Pier No. 7 or Pier No. 8 footing. The installed length of the pile to be load tested shall not be more than the Plan estimated pay length.

REFERENCE SHALL BE MADE TO THE FOLLOWING:

STANDARD DRAWINGS:

AS-1-81	DATED	11-27-81
BR-1	DATED	5-29-79
SD-1-69	DATED	6-12-69
RB-1-55	DATED	2-2-59

SUPPLEMENTAL SPECIFICATIONS:

836	DATED	11-12-85
824	DATED	10-8-82
845	DATED	2-25-86
953	DATED	8-21-80
927	DATED	10-19-81

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, 1983, INCLUDING THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:

DESIGN LOADING: HS 20-44, CASE I. AND THE ALTERNATE MILITARY LOADING.

DESIGN STRESSES:

CONCRETE, CLASS S	COMPRESSIVE STRENGTH 4500 PSI (SUPERSTRUCTURE)
CONCRETE, CLASS C	UNIT STRESS: 1333 PSI (SUBSTRUCTURE)
REINFORCING STEEL	ASTM A615, A616, A617, GRADE 60, MINIMUM YIELD STRENGTH: 60,000 PSI. (SUPERSTRUCTURE) GRADE 60, UNIT STRESS 24,000 P.S.I. SPIRAL REINFORCEMENT MAY BE PLAIN BARS, ASTM A82 OR A615 (SUBSTRUCTURE)
STRUCTURAL STEEL	ASTM A36, UNIT STRESS: 20,000 PSI.
DECK PROTECTION METHOD	EPOXY COATED REINFORCING STEEL WITH 3" CONCRETE COVER OF WHICH 1-1/4" IS A LATEX MODIFIED CONCRETE OVERLAY.
BOLTS	1" DIAMETER HIGH STRENGTH STEEL BOLTS CONFORMING TO ASTM A325 UNLESS NOTED OTHERWISE.

ITEM 511: CLASS S CONCRETE, SUPERSTRUCTURE, USING SHRINKAGE COMPENSATING CEMENT, 701.08.

THE FOLLOWING RESTRICTIONS SHALL APPLY TO THE SUPERSTRUCTURE CONCRETE USING SHRINKAGE COMPENSATING CEMENT, 701.08.

1. CEMENT SHALL BE EXPANSIVE HYDRAULIC CEMENT, ASTM C845, TYPE K.
2. THE MAXIMUM WATER/CEMENT RATIO GIVEN FOR CLASS S CONCRETE IN 499.03 SHALL BE REVISED FROM 0.44 TO 0.50.
3. MAXIMUM SLUMP AT THE TIME AND PLACE OF CONCRETE PLACEMENT SHALL BE 6 INCHES.
4. CHEMICAL ADMIXTURES, WHEN REQUIRED BY 511.06, SHALL BE LIMITED TO 705.12 TYPE D.
5. MAXIMUM AMBIENT TEMPERATURE AT TIME OF PLACEMENT OF CONCRETE SHALL BE 80° F.
6. MEMBRANE CURING PER SS836 WILL NOT BE PERMITTED FOR ANY CONCRETE PLACED BETWEEN SEPTEMBER 1 AND MARCH 31. SUCH CONCRETE SHALL BE CURED BY METHOD (A) WATER CURING.
7. IF REQUIRED BY THE ENGINEER, THE SURFACE OF THE CONCRETE SHALL BE GIVEN A FOG SPRAY OF WATER. THIS MAY BE REQUIRED PRIOR TO EITHER WATER CURING OR MEMBRANE CURING IF WEATHER CONDITIONS DICTATE. EQUIPMENT SHALL BE ON HAND.

PILE DESIGN LOADS:
The design load for the Abutment piles is 35 tons per pile. The design load for the piles in piers 1, 4, 5, 6, 7, 8 is 45 tons per pile. The design load for the piles in piers 2 and 3 is 70 tons per pile.

UTILITY LINES:
ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES SHALL BE BORNE BY THE OWNERS. THE CONTRACTOR AND OWNERS ARE REQUESTED TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WOULD BE HELD TO A MINIMUM.

CONSTRUCTION CLEARANCE OF 20'-0" VERTICALLY ABOVE THE TOP OF THE RAILROAD RAILS AND 8'-0" HORIZONTALLY FROM THE CENTER OF TRACKS SHALL BE MAINTAINED AT ALL TIMES.

ITEM 507 - 12" AND 14" DIAMETER CAST-IN-PLACE REINFORCED CONCRETE PILES, AS PER PLAN:

"PILE WALL THICKNESS: The responsibility of choosing and providing a satisfactory pile wall thickness for this project shall be borne by the Contractor except that the pile wall thickness shall not be less than 0.22 inches. If a pile wall thickness greater than 0.22 inches is necessary to resist the pile installation driving stress, the Contractor shall make this determination and shall furnish a pile with an acceptable wall thickness. Monotube piles are not required to comply with the above specified minimum pile wall thickness. If monotube piles are used, the contractor is responsible for providing a monotube pile with a wall thickness that will conform to all applicable requirements of 507."

PILE DRIVING CONSTRAINTS: PRIOR TO DRIVING PILES AT THE ABUTMENTS, PIER NO. 1 AND PIER NO. 8, THE SPILL-THRU SLOPE EMBANKMENT SHALL BE CONSTRUCTED UP TO THE LEVEL OF THE SUBGRADE FOR A MINIMUM DISTANCE OF 200 FEET BEHIND THE ABUTMENTS. THE EXCAVATION FOR THE FOOTINGS OF THE ABUTMENTS, PIER NO. 1, PIER NO. 8, AND THE INSTALLATION OF THE PILES SHALL NOT BEGIN UNTIL AFTER THE ABOVE REQUIRED EMBANKMENT HAS BEEN CONSTRUCTED AND THE EMBANKMENT HAS EXPERIENCED A WAITING PERIOD OF 60 DAYS. THE DIRECTOR MAY SHORTEN THE WAITING PERIOD IF THE CONTRACTOR'S FIELD MEASUREMENTS INDICATE THAT 90 PERCENT CONSOLIDATION HAS BEEN ATTAINED.

PILE HAMMER: THE PILE HAMMER USED TO INSTALL THE CAST-IN-PLACE REINFORCED CONCRETE PILES SHALL HAVE A STATE ENERGY RATING OF NOT LESS THAN 18,000 FOOT-POUNDS. THIS REQUIREMENT DOES NOT RELIEVE THE CONTRACTOR FROM 108.05 WHICH STATES THAT THE CONTRACTOR IS TO PROVIDE SUFFICIENT EQUIPMENT FOR PROSECUTING THE REQUIRED WORK. REFER TO "ODOT MANUAL OF PROCEDURES FOR STRUCTURES" TO OBTAIN THE STATE'S ENERGY RATING.

ESTIMATED QUANTITIES

	ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	PIERS	ABUT.	GEN.	AS BUILT	
△	503	761	Cu. Yd.	Unclassified excavation		498	263			
	503	Lump	Sum	Cofferdams, cribs and sheeting				Lump		
△	505	Lump	Sum	Pile driving equipment mobilization				Lump		
△	523	6	Hour	Dynamic Load Test				6		
△	506	Lump	Sum	Static Load Test as per Plan		Lump				
△	507	6450	Lin. Ft.	12" cast-in-place, reinforced concrete piles (as per plan)		5230	1220			
△	507	1830	Lin. Ft.	14" cast-in-place, reinforced concrete piles (as per plan)		1830				
△	509	87,710	Lb.	Reinforcing steel, Grade 60		74,553	10,157			
△	511	761	Cu. Yd.	Class S concrete, superstructure	761					
	511	102	Cu. Yd.	Class C concrete, abutments above footing			102			
△	511	284	Cu. Yd.	Class C concrete, piers above footing		284				
△	511	216	Cu. Yd.	Class C concrete, footings		151	65			
△	513	676,369	Lb.	Structural steel (AISC Category III) (See Proposal Note)	676,369					
△	514	676,369	Lb.	Field painting of new structural steel, System A	676,369					
	516	16	Sq. Ft.	½" Preformed expansion joint filler			16			
△	516	95	Lin. Ft.	Structural Expansion Joints Including Elastomeric Strip Seals	32		63			
	518	63	Cu. Yd.	Porous backfill			63			
△	518	55	Lin. Ft.	6", perforated, helical, corrugated steel pipe, 707.01			55			
△	518	95	Lin. Ft.	6", non-perforated, helical, corrugated steel pipe, including specials, 707.01			95			
△	518	8	Each	Scuppers, including supports	8					
△	601	400	Sq. Yd.	Crushed aggregate slope protection				400		
	601	72	Sq. Yd.	Crushed aggregate pads, 1'-0" thick, under scuppers				72		
△	601	437	Sq. Yd.	Concrete slope protection				437		
△	824	182,906	Lb	Epoxy coated Reinforcing Steel, Grade 60	180,171		2735			
△	SPECIAL	1619	Sq. Yd.	Sealing of concrete surfaces (See proposal note)	1480	139				
△	845	2089	Sq. Yd.	Latex modified concrete overlay (1½" thick) (See proposal note).	2089					
△	*511	761	Cu. Yd.	Class "S" Concrete, superstructure using shrinkage compensating cement 101.08	761					

Computed by: J.R.P. Date: 5.27, 1971 △ Quantities Revised By SJA 11-7-85
Checked by: J.S.S.C. Date: 5.27, 1971 △ REVISIONS Checked By TMB 11-20-85

△ *Alternate Bid Item

Reinforcing Steel:
Substructure Reinforcing Bars Not Revised By Bulke (△) Shall Have a Minimum Lap of 30 Bar Diameters.

3/20

VOGT, IVERS & ASSOCIATES, INC.
ENGINEERS CINCINNATI ARCHITECTS

GENERAL NOTES & ESTIMATED QUANTITIES
BRIDGE NO. HAM-126-RAMP D
RAMP D OVER
ANTHONY WAYNE, PENN CENTRAL, I-75, & RAMP D

HAMILTON COUNTY
STA. 37+97.87
STA. 45+11.99

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED
J-R-P	D-W-M	—	S-S-C	S.S.C.	6-4-71	JULY 21, 86

CALC. BY DATE	HAM-75-9.93	OHIO	567A 787
CHKD. BY DATE	HAM-126-RAMP D	FHWA REGION 5	

GENERAL NOTES
PLAN REVISIONS BY BALKE ENGINEERS

REVISIONS WERE MADE TO SUBSTRUCTURE DRAWINGS TO INCORPORATE THE FOLLOWING:

- o REVISE PARAPETS TO STANDARD SAFETY PARAPET SHAPE.
- o PROVIDE EPOXY-COATED REINFORCEMENT IN CORROSION-PRONE CONCRETE AREAS.
- o SEAL CONCRETE SURFACES OF PIER COLUMNS.
- o NUMBER PILES AND ADD DETAIL NOTES.
- o REVISE ABUTMENTS TO RECEIVE FULL WIDTH APPROACH SLAB PER AS-1-81.
- o REPLACE SLIDING PLATE EXPANSION JOINTS WITH COMPRESSION OR STRIP SEAL JOINTS AS REQUIRED.
- o LENGTHEN PIER COLUMN TO FOOTING DOWELS AS REQUIRED BY AASHTO.

AT THE REQUEST OF THE OHIO DEPARTMENT OF TRANSPORTATION, ALL SUBSTRUCTURE REINFORCEMENT IS TO BE GRADE 60.

REVISIONS MADE BY BALKE ENGINEERS ARE DENOTED BY (Δ) SYMBOL.

OTHER THAN NOTED REVISIONS, SUBSTRUCTURES ARE THE DESIGN AND DETAILING OF VOGT, IVERS, AND ASSOCIATES, INC.

ANALYSIS OF THE ORIGINAL SUPERSTRUCTURE DESIGN HAS BEEN COMPARED TO THE REVISED SUPERSTRUCTURE DESIGN TO ASSURE THAT LOADINGS HAVE NOT INCREASED ON SUBSTRUCTURES PROVIDED BY VOGT, IVERS AND ASSOCIATES, INC. DESIGN OF THESE SUBSTRUCTURES REMAINS THE RESPONSIBILITY OF VOGT, IVERS, AND ASSOCIATES.

REVISED SUPERSTRUCTURE DESIGN AND DETAILING WAS PREPARED TO CONFORM WITH UPDATED DESIGN STANDARDS.

DESIGN AND DETAILING BY BALKE ENGINEERS WAS PERFORMED IN ACCORDANCE WITH THE AASHTO SPECIFICATIONS FOR HIGHWAY BRIDGES, THIRTEENTH EDITION, 1983, AASHTO INTERIM SPECIFICATIONS FOR BRIDGES 1984, AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

3A/20

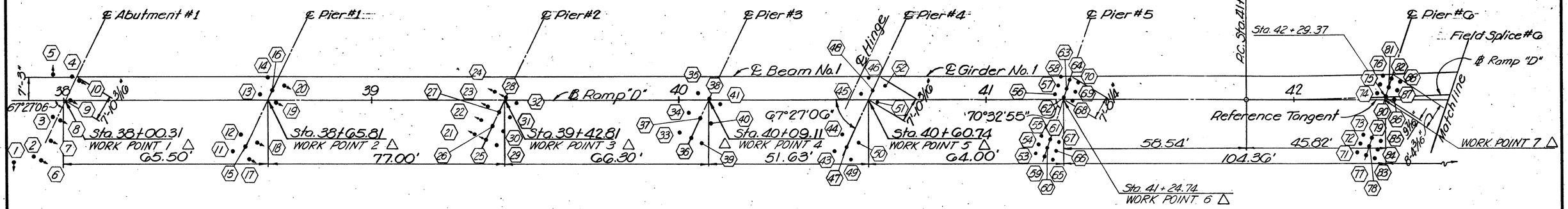
GENERAL NOTES
BRIDGE NO. HAM-126-RAMP D
RAMP D OVER
ANTHONY WAYNE, PENN CENTRAL, I-75 & RAMP D
HAMILTON COUNTY
STA. 37+57.97 to
STA. 45+11.98

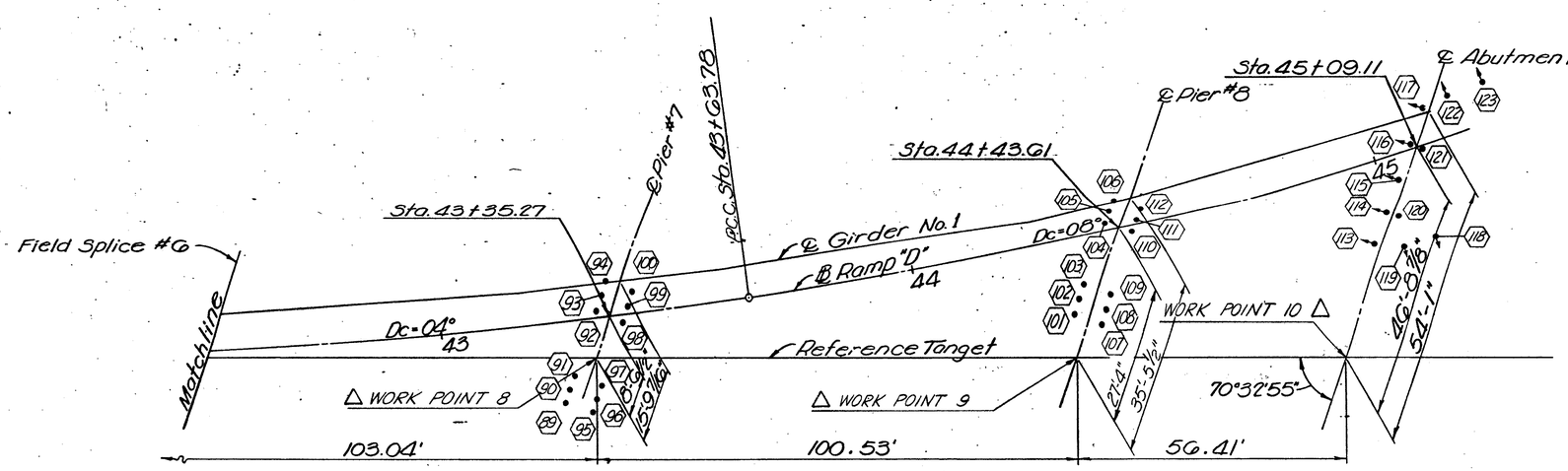
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
SJA	~	~	TMB	CRS 3/86	

OHIO BLUE PRINT 760303

FED. RD. DIVISION	STATE	PROJECT		368 / 787
2	OHIO			

HAM-75-9.93
HAM-126-13.00





△ PILE LAYOUT PLAN & GEOMETRIC LAYOUT

NOTES △

1. For exact location of Piles refer to Detail Drawings.
2. Pier 1, 4, 5, 6, 7, and 8 piles and all Abutment piles are 12" dia. cast-in-place reinforced concrete piles. Pier 2 and 3 piles are 14" dia. cast-in-place reinforced concrete piles.

LEGEND △

= Pile Battered in Direction of Arrow.
⬡ = Pile Number
Pile Number Deleted : ⬡ 42

4 / 20

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

△ PILE LAYOUT PLAN &
GEOMETRIC LAYOUT

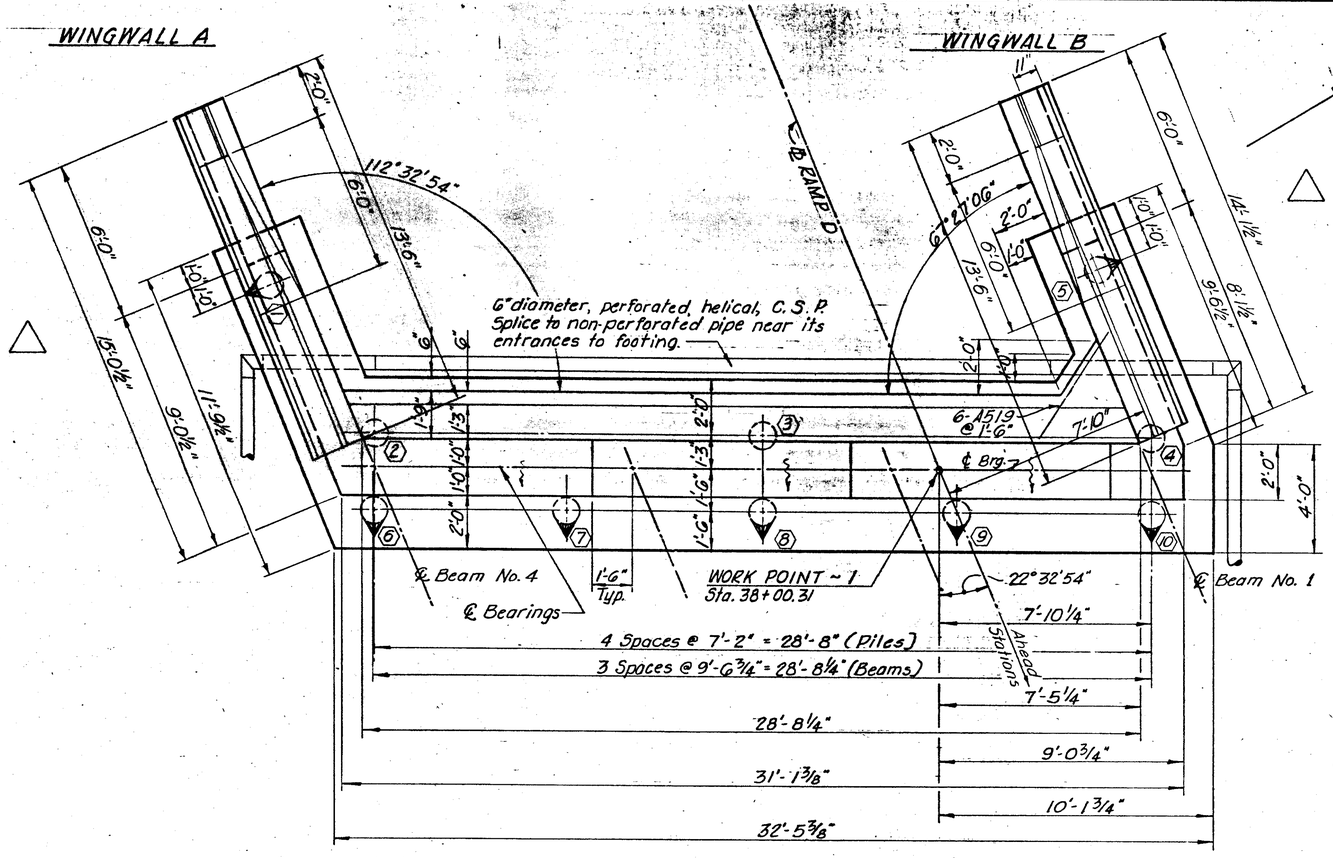
BRIDGE NO. HAM-126-RAMP D
RAMP D OVER
ANTHONY WAYNE, CONRAIL ,I-75, & RAMP D
HAMILTON COUNTY
STA. 37+97.87
STA. 45+11.98

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.K.	V.K.	R.E.K.	J.R.P.	J.R.P.	6-4-71	△ BALKE ENGR. 6/25

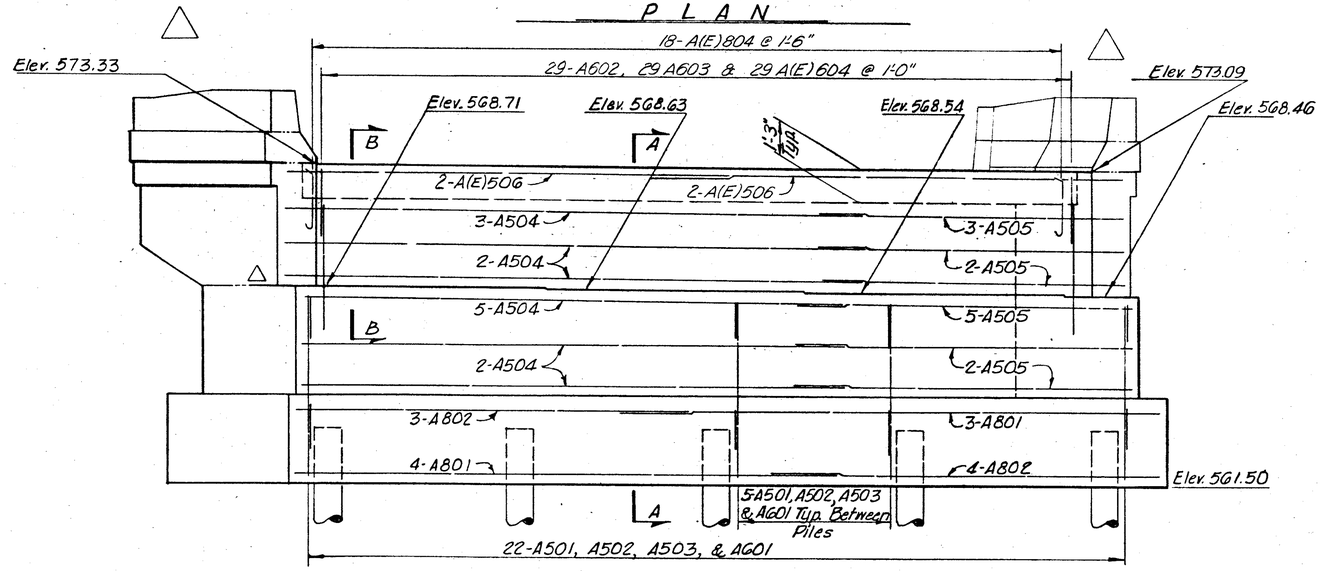
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

563
TOT

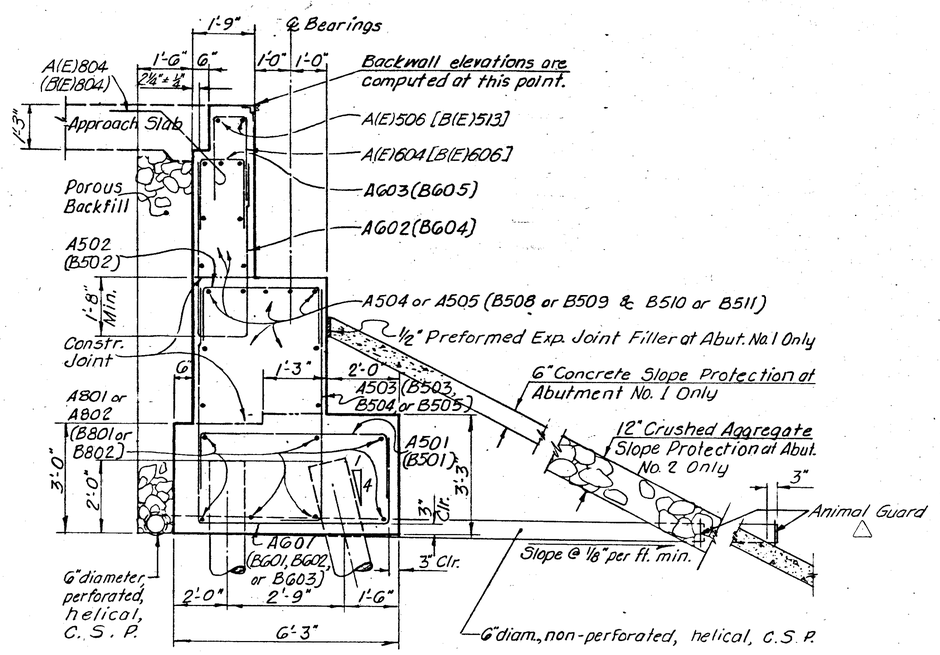
HAM-75-9.93
HAM-126-13.00



PLAN



ELEVATION



SECTION A~A

NOTES:

POROUS BACKFILL, thickness as shown in sections, shall extend up to the plane of the subgrade & laterally to the ends of the wingwalls.

Indicates pile battered 1:4 in the direction of arrow.

For SECTION B~B, and additional details, see sheet 6 / 20.

△ "(E)" denotes epoxy coated reinforcing bar.

△ ⬡ = Pile Number

△ N.F. = Near Face

5 / 20

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

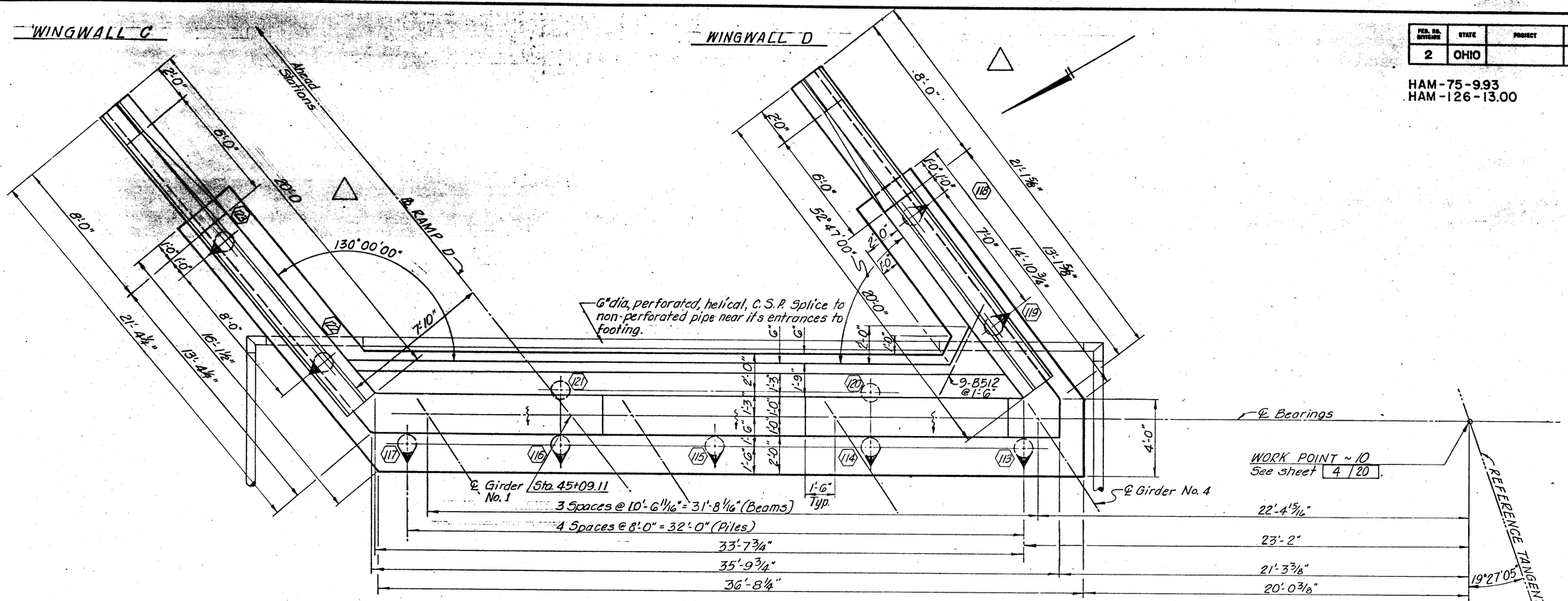
ABUTMENT NO. 1
BRIDGE NO. HAM-126-RAMP D
RAMP D OVER
ANTHONY WAYNE, PENN CENTRAL, I-75, & RAMP D
HAMILTON COUNTY
STA. 37+97.87
STA. 45+11.98

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
S.S.C.	S.S.C.	D.W.M.	D.W.S.		6-4-71	△ PAUL E ENGRS. 11/85

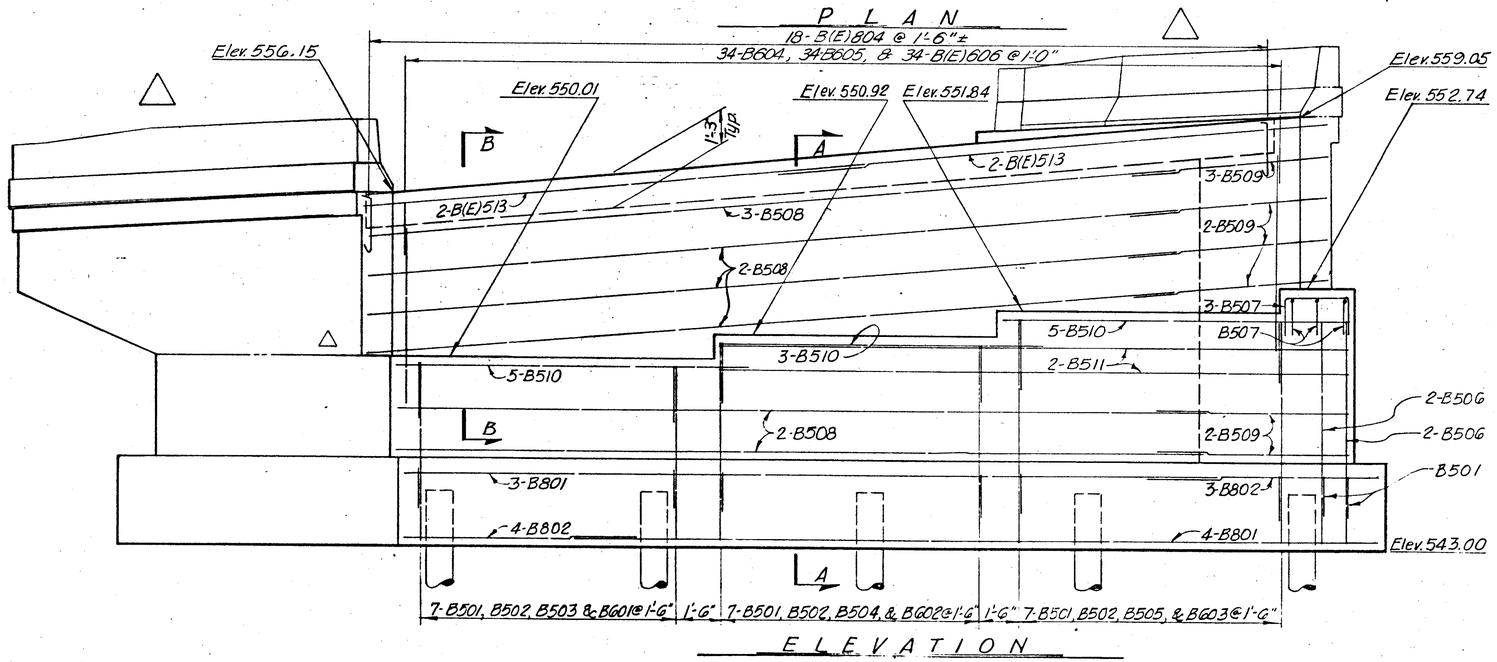
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

570
787

HAM-75-9.93
HAM-126-13.00



PLAN



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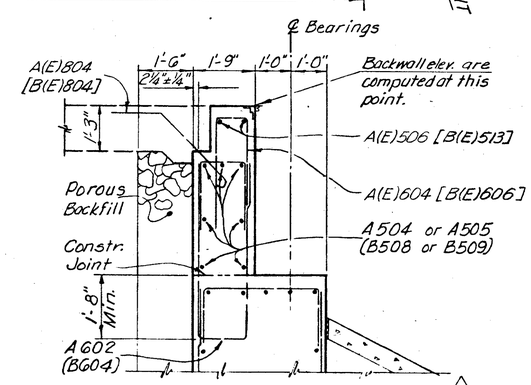


SECTION B~B

NOTES

For Section A-A, see Sh. 5/20

△ N.F. = Near Face

△ "(E)" denotes epoxy coated reinforcing bar.

△ ⬡ = Pile Number

△ ⬡ Indicates pile battered 1:4 in direction of arrow.

6/20

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

ABUTMENT NO. 2

BRIDGE NO. HAM-126-RAMP D
RAMP D OVER
ANTHONY WAYNE, PENN CENTRAL, I-75, & RAMP D

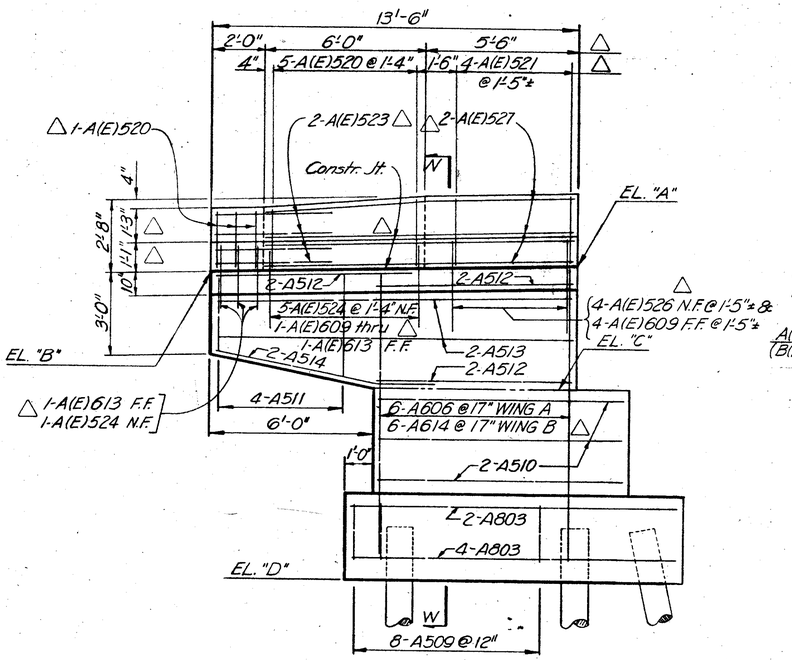
HAMILTON COUNTY
STA. 37+97.87
STA. 45+11.98

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
S.S.C.	S.S.C.	D.W.M.	D.W.S.		6-4-71	BALKE ENGRS. 11/85

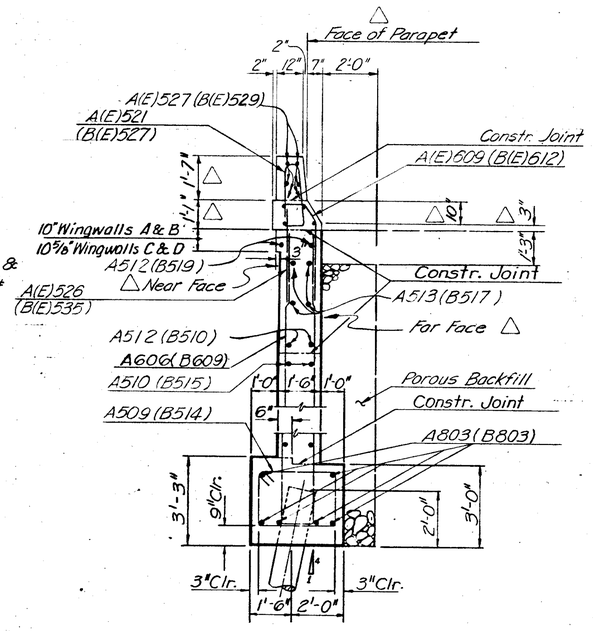
FED. RD. DIVISION	STATE	PROJECT		
2	OHIO			

371
787

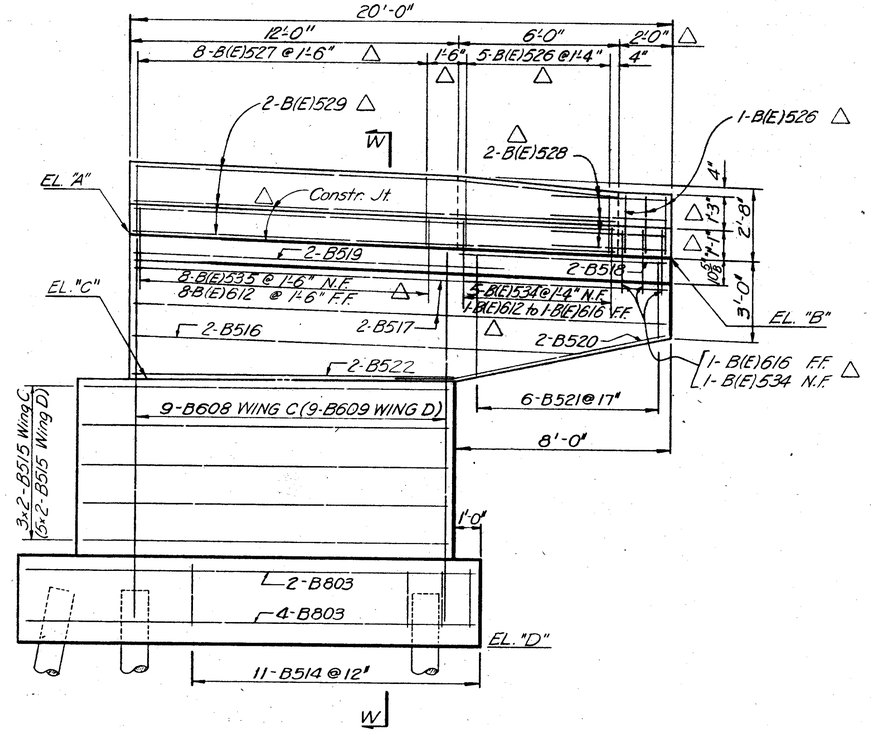
HAM-75-9.93
HAM-126-13.00



ELEVATION ~ WINGWALL ~ "A" & "B"



SECTION ~ W-W



ELEVATION ~ WINGWALL ~ "C" & "D"

△ NOTES

N.F. = Near Face
F.F. = Far Face
"(E)" denotes epoxy coated reinforcing bar.

ELEVATIONS

LOCATION	EL. "A"	EL. "B"	EL. "C"	EL. "D"
WINGWALL "A"	573.33	573.10	568.70 △	561.50
WINGWALL "B"	573.09	572.88	568.46 △	561.50
WINGWALL "C"	556.15	555.47	550.01 △	543.00
WINGWALL "D"	559.05	558.37	552.74 △	543.00

7 / 20

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

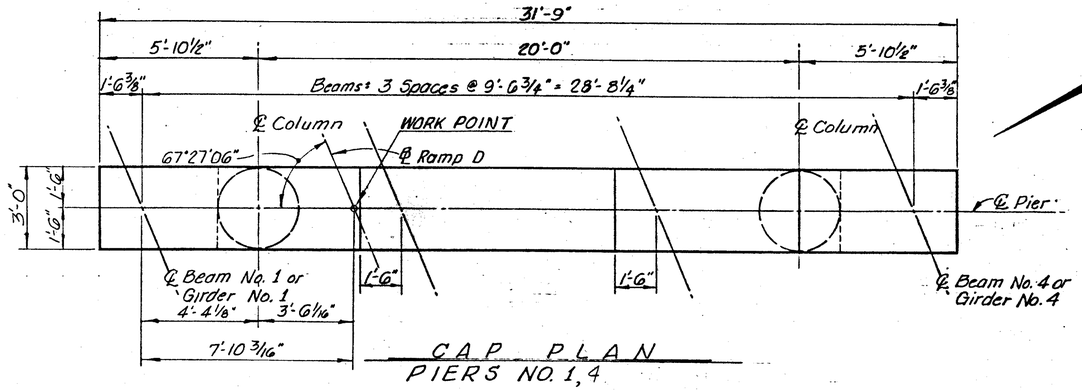
WINGWALL DETAILS
BRIDGE NO. HAM-126-RAMP D
RAMP D OVER
ANTHONY WAYNE, PENN CENTRAL, I-75, & RAMP D
HAMILTON COUNTY
STA. 37+97.87
STA. 45+11.98

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED
S.S.C.	S.S.C.	T.D.S.	J.R.P.	[illegible]	6-4-71	△ BALKE ENGRS. 11/85

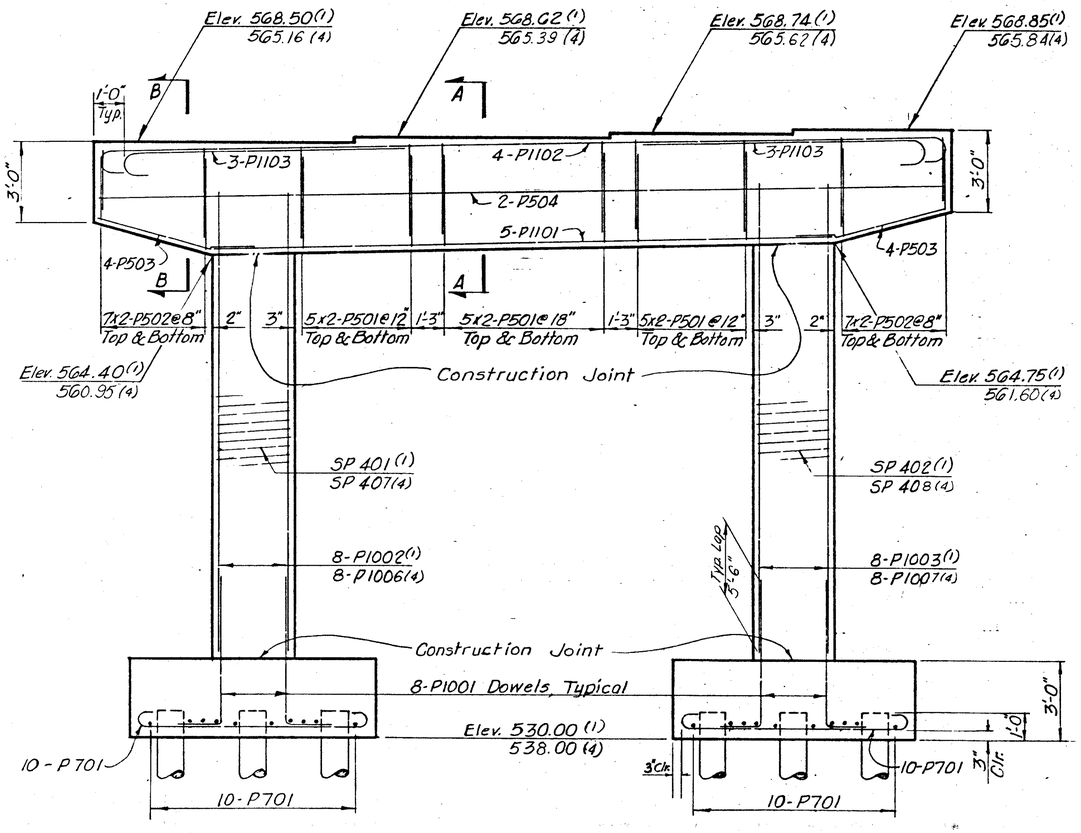
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

372
787

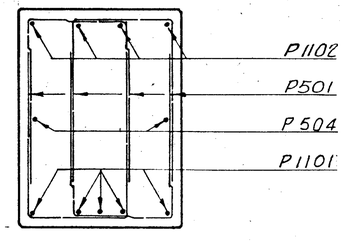
HAM-75-9.93
HAM-126-13.00



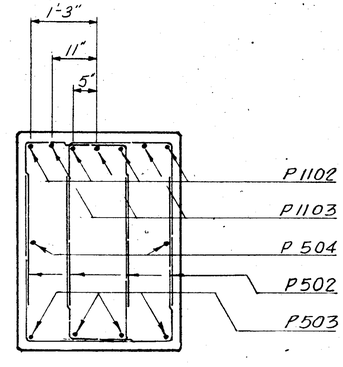
CAP PLAN
PIERS NO. 1, 4



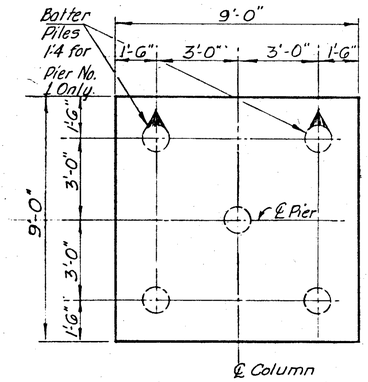
ELEVATION



SECTION A-A



SECTION B-B



PIERS NO. 1, 4

FOOTING PLAN

NOTES:

△ For Pile Numbering see sheet 4/20.

For location of the WORK POINT see "Geometric Layout", sheet 4/20.

(1), (4) indicates the pier number.

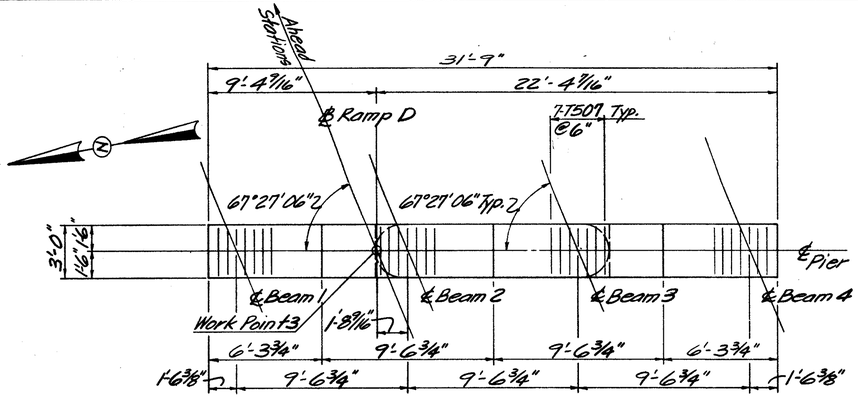
8/20

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

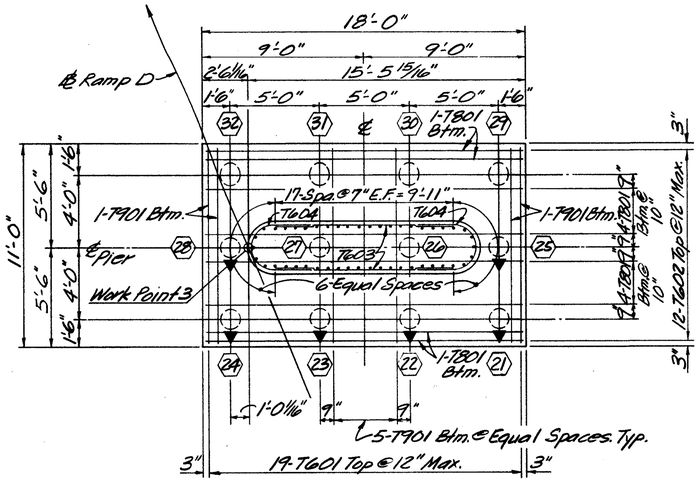
PIERS NO 1, 4
BRIDGE NO. HAM-126-RAMP D
RAMP D OVER
ANTHONY WAYNE, PENN CENTRAL, I-75, & RAMP D
HAMILTON COUNTY
STA. 37+97.87
STA. 45+11.98

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
S.S.C.	S.S.C.	D.W.M.	D.W.S.	[illegible]	6-4-71	△ BALKE ENGRS 11/85

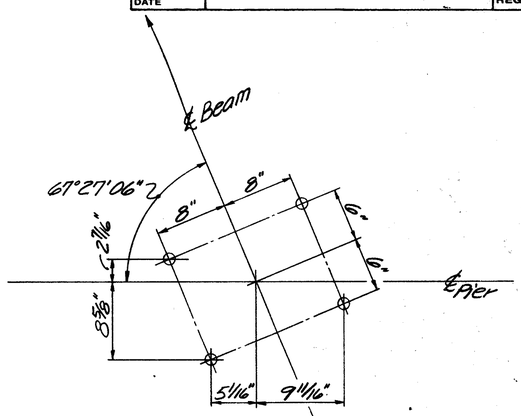
CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO	572A 787
CHKD. BY			FHWA REGION 5	
DATE				



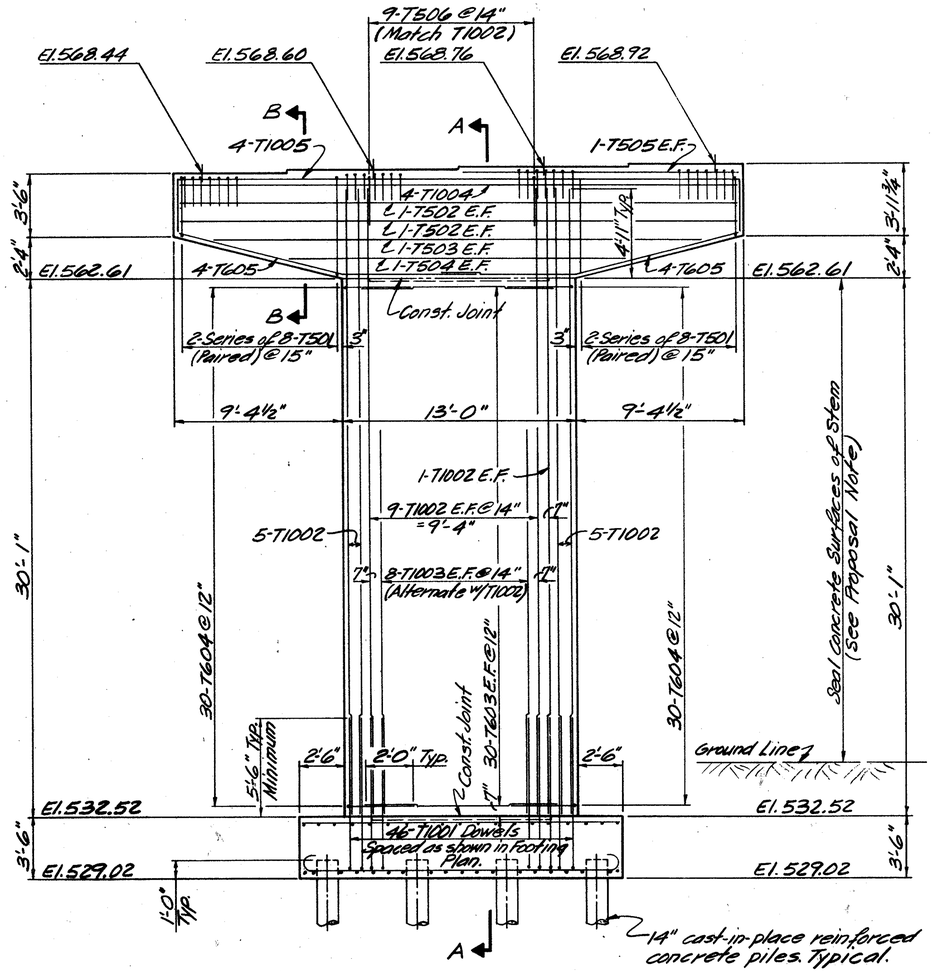
CAP PLAN



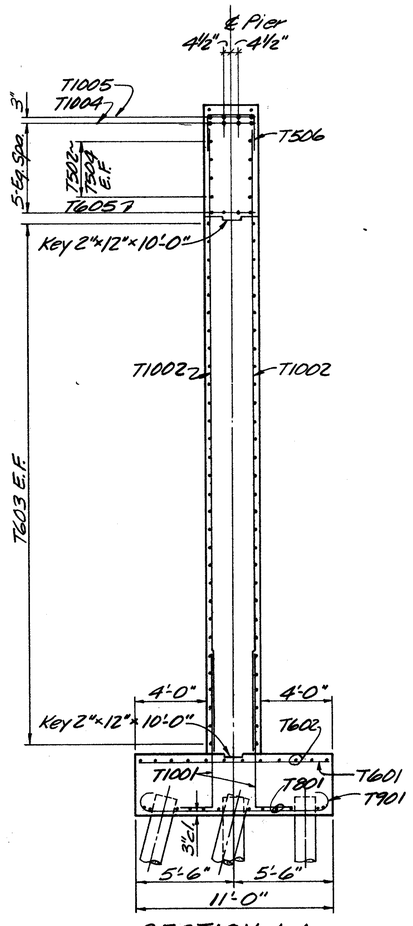
FOOTING PLAN



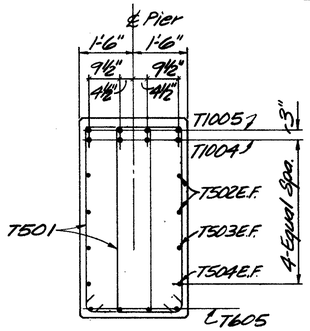
ANCHOR BOLT LAYOUT



ELEVATION



SECTION A-A



SECTION B-B

NOTES:

1. BRIDGE SEAT REINFORCING: Reinforcing steel in the vicinity of the bridge seat shall be accurately placed to avoid interference with the drilling of bearing anchor holes or the pre-setting of bearing anchors.
2. BEARING ANCHORS: At the option of the contractor, bearing anchors (or formed holes), located and supported by templates, may be cast in place.
3. ⬡ Designates Pile battered 1:4 in direction of arrow.
4. ⬡ Designates Pile Number.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

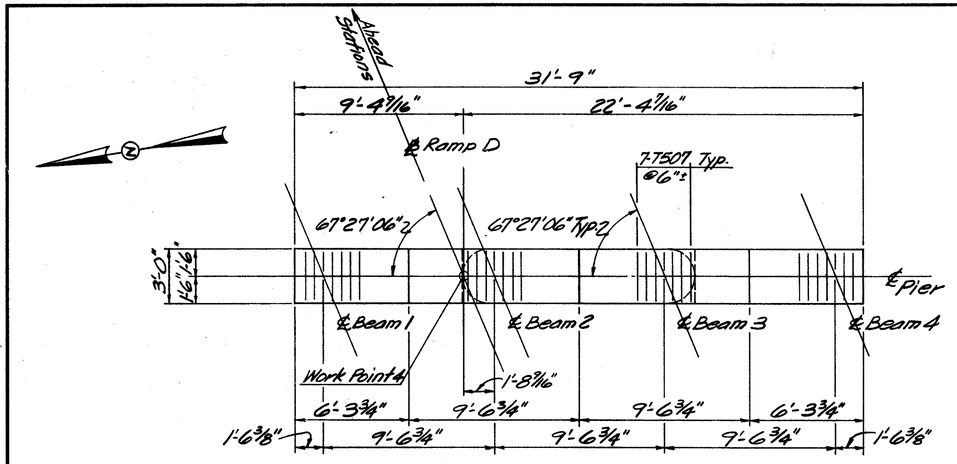
8A/20

PIER 2
BRIDGE NO. HAM-126-RAMP D
RAMP D over
ANTHONY WAYNE, CONRAIL, I-75, RAMP D
HAMILTON COUNTY OHIO
STA. 37+97.87 TO STA. 45+11.98

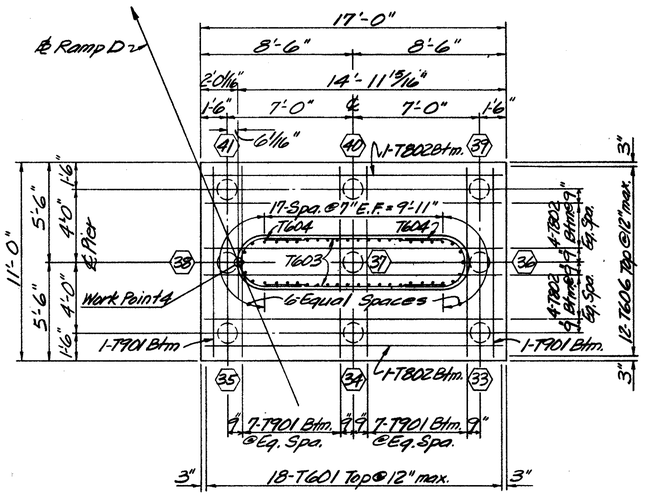
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	WJH	~	SJA	CRS 6/86	

OHIO BLUE PRINT

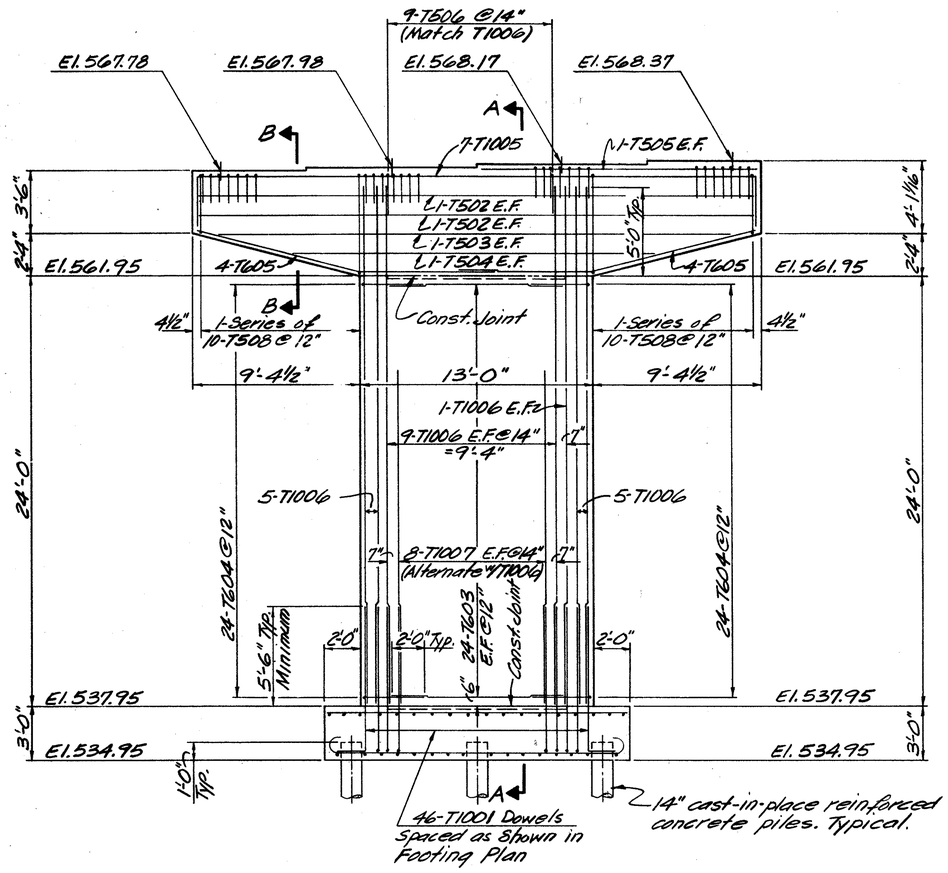
CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO	5728 787
CHKD. BY			FHWA REGION 5	
DATE				



CAP PLAN



FOOTING PLAN



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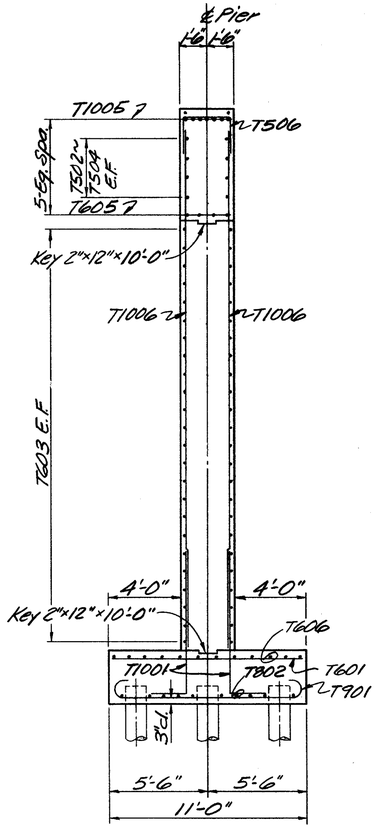
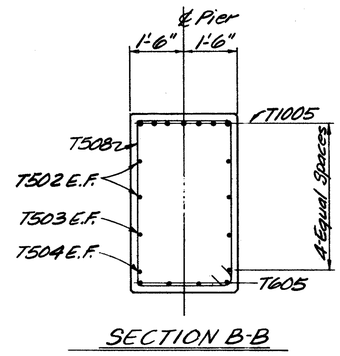


SECTION A-A



SECTION B-B

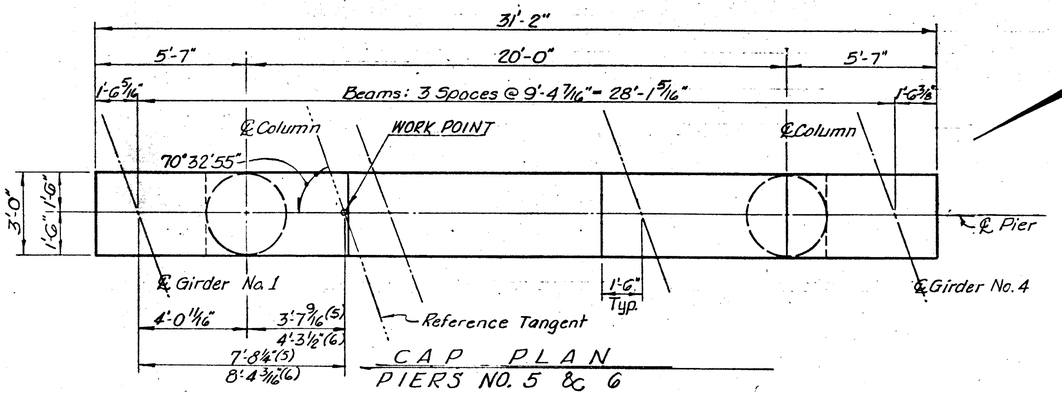
NOTES:
1. ⬡ Designates Pile Number

BALKE ENGINEERS 7762 READING ROAD CINCINNATI, OHIO 45237						88/20
PIER 3 BRIDGE NO. HAM-126-RAMP D RAMP D OVER ANTHONY WAYNE, CONRAIL, I-75, RAMP D HAMILTON COUNTY OHIO STA. 37+97.89 TO STA. 45+11.98						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED	
BJS	WJH	~	SJA	CRS 6/86		

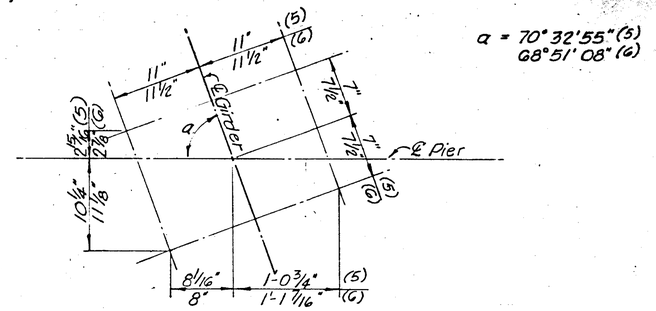
OHIO BLUE PRINT 140033

FED. RD. DIVISION	STATE	PROJECT		
2	OHIO			

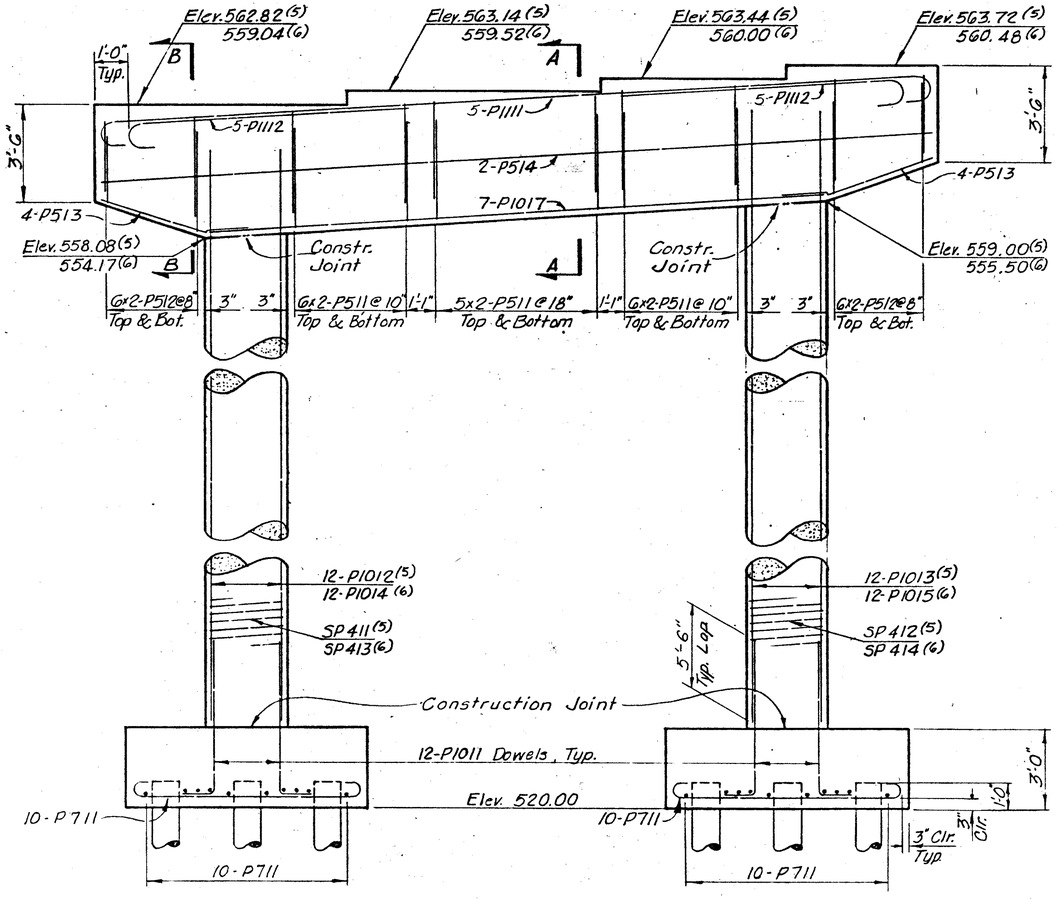
HAM-75-9.93
HAM-126-13.00



CAP PLAN
PIERS NO. 5 & 6



ANCHOR BOLT LAYOUT



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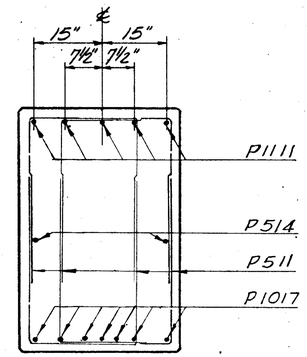
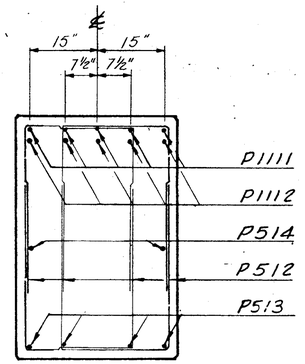
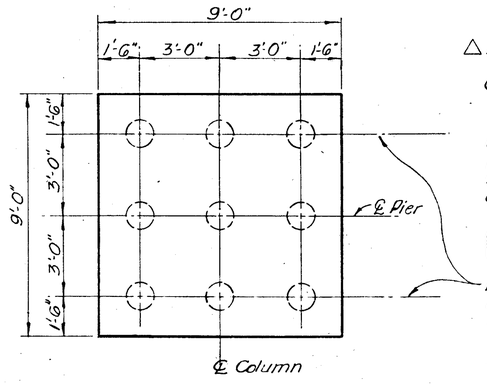


SECTION A-A



SECTION B-B



FOOTING PLAN

NOTES:

△ For Pile Numbering, see sheet 4/20.

(5) and (6) indicate the pier number.

BRIDGE SEAT REINFORCING: Special care shall be taken in placing the reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of the anchor bolt holes.

For location of the WORK POINT, see "Geometric Layout", sheet 4/20.

Batter piles 1:4 to oppose the embankment slopes as shown on site plan profile.

9/20

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

PIERS NO. 5 & 6

BRIDGE NO. HAM-126-RAMP D
RAMP D OVER
ANTHONY WAYNE, PENN CENTRAL, I-75, & RAMP D

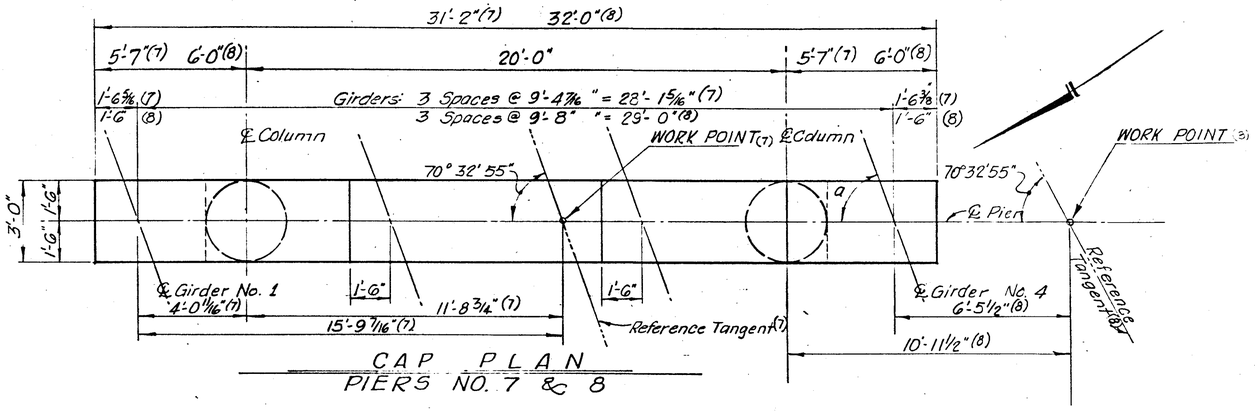
HAMILTON COUNTY
STA. 37+97.87
STA. 45+11.98

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
S.S.C.	S.S.C.	D.W.M.	D.W.S.		6-4-71	△ BALKE ENGRS. 11/85

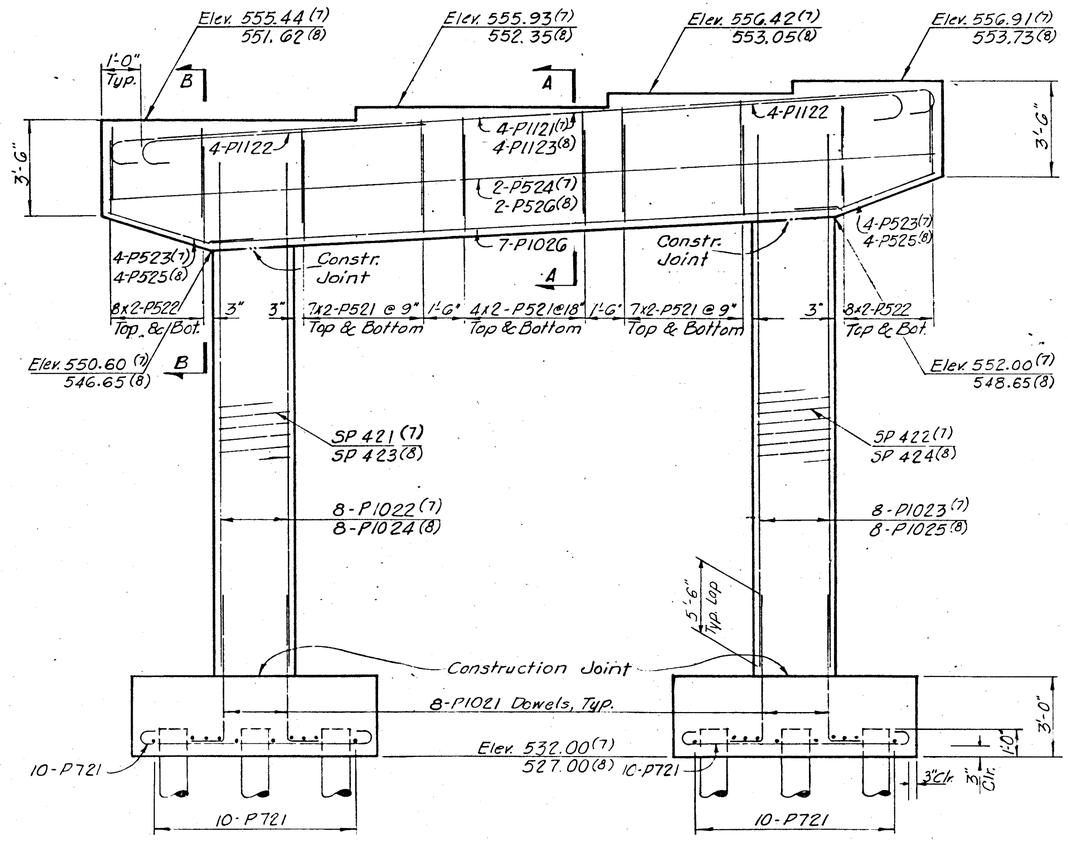
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

574
787

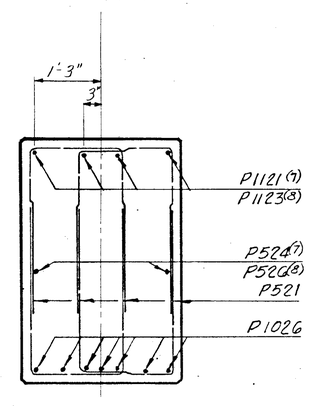
HAM-75-9.93
HAM-126-13.00



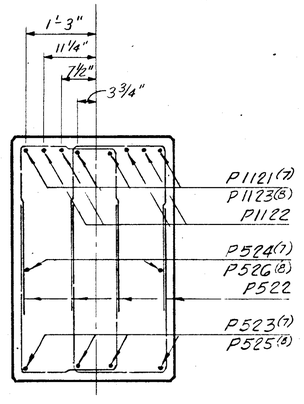
CAP PLAN
PIERS NO. 7 & 8



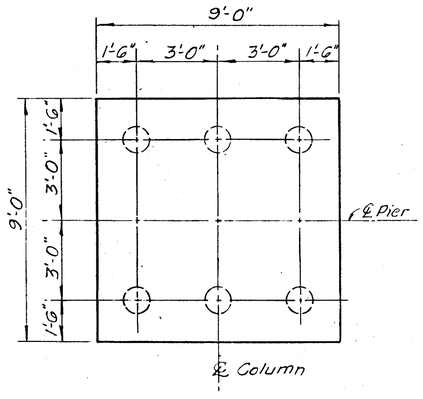
ELEVATION



SECTION A~A



SECTION B~B



FOOTING PLAN

NOTES:

△ For Pile Numbering, see sheet 4/20.

(7) and (8) indicate the pier number.

For locations of the WORK POINTS, see "Geometric Layout", sheet 4/20.

For angle "a", see "framing plan", sheet 11/20.

10/20

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

PIERS NO.7 & 8

BRIDGE NO. HAM-126-RAMP D
RAMP D OVER
ANTHONY WAYNE, PENN CENTRAL, I-75, & RAMP D

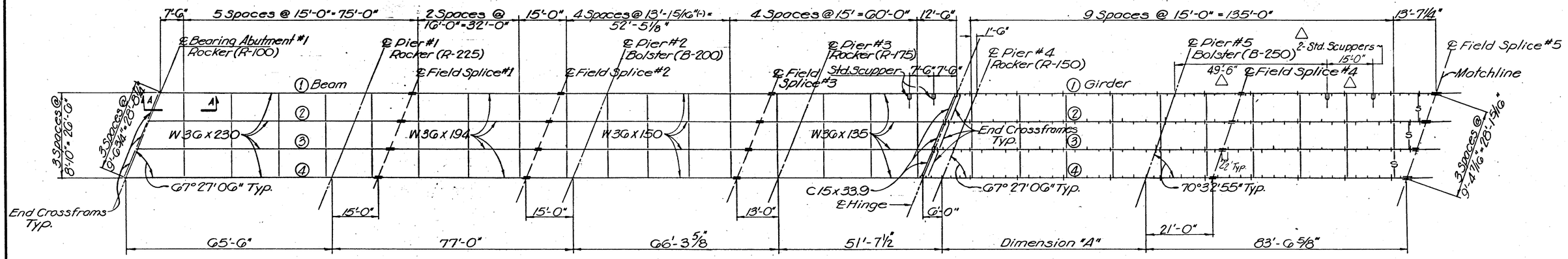
HAMILTON COUNTY
STA. 37+97.87
STA. 45+11.98

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
S.S.C.	D.W.M.	D.W.M.	D.W.S.		6-4-71	△ BALKE ENGRS 11/85

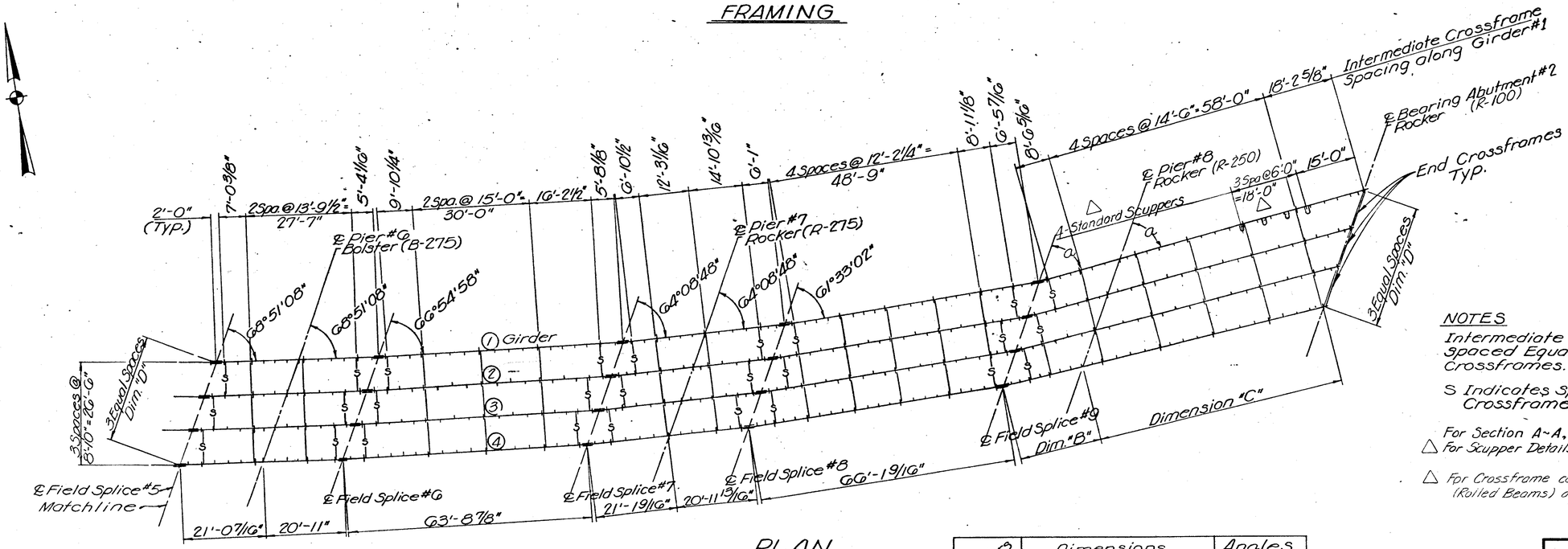
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

373 / 787

HAM-75-9.93
HAM-126-13.00



FRAMING



PLAN

	Pier #6	Pier #7	Pier #8	Abutment #2
Dim. "D"	9'-4 7/16"	9'-4 7/16"	9'-8"	10'-6 11/16"

Girders	Dimensions			Angles
	A	B	C	a
1	63'-6 5/8"	21'-8 5/8"	65'-0 5/16"	54° 52' 45"
2	64'-1 3/16"	21'-6 5/8"	64'-6 3/16"	55° 31' 41"
3	64'-7 3/4"	21'-4 9/16"	64'-0 7/16"	56° 11' 15"
4	65'-2 5/16"	21'-2 5/8"	63'-6 1/4"	56° 51' 26"

NOTES

Intermediate Transverse Stiffeners shall be spaced Equally between Intermediate Crossframes.

S Indicates Special Intermediate Crossframe. See Sheet 17/20.

△ For Section A-A, See sheet 16/20.

△ For Scupper Details, See Std. Dwg. SD-1-69.

△ For Crossframe connection details, see sheet 16/20 (Rolled Beams) and sheet 13/20 (Plate Girder).

11 / 20

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

FRAMING PLAN

BRIDGE NO. HAM-126-RAMP D
RAMP D OVER
ANTHONY WAYNE, PENNCENTRAL, I-75, & RAMP D
HAMILTON COUNTY
STA. 37+97.87
STA. 45+11.98

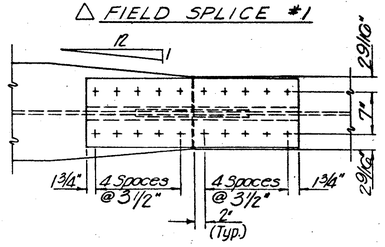
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.K.	V.K.	R.E.K.	J.R.P.		6-4-71	△ BALKE ENGRS. 11/85

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

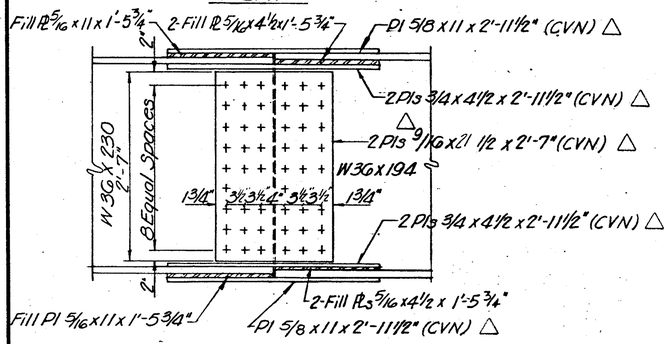
376
787

HAM-75-9.93
HAM-126-13.00

△ FIELD SPLICE #1

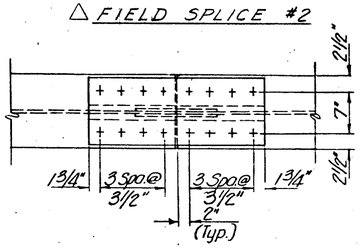


PLAN

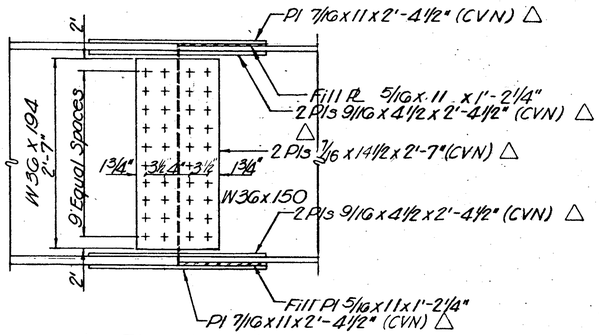


ELEVATION

△ FIELD SPLICE #2

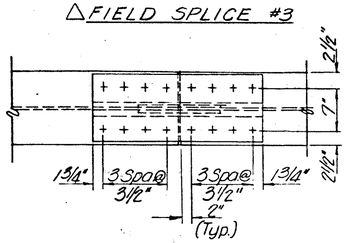


PLAN

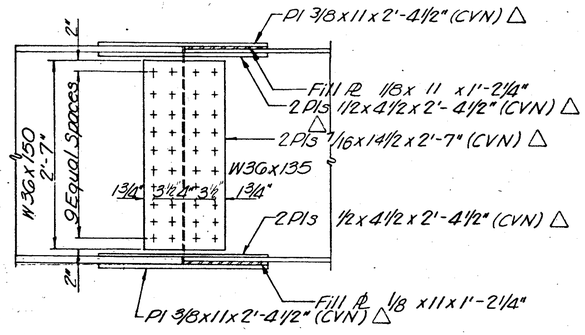


ELEVATION

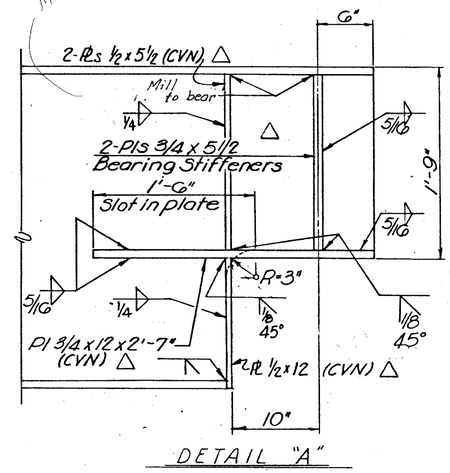
△ FIELD SPLICE #3



PLAN



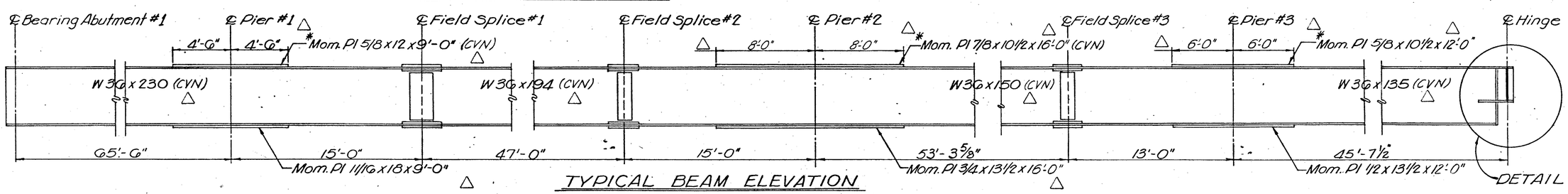
ELEVATION



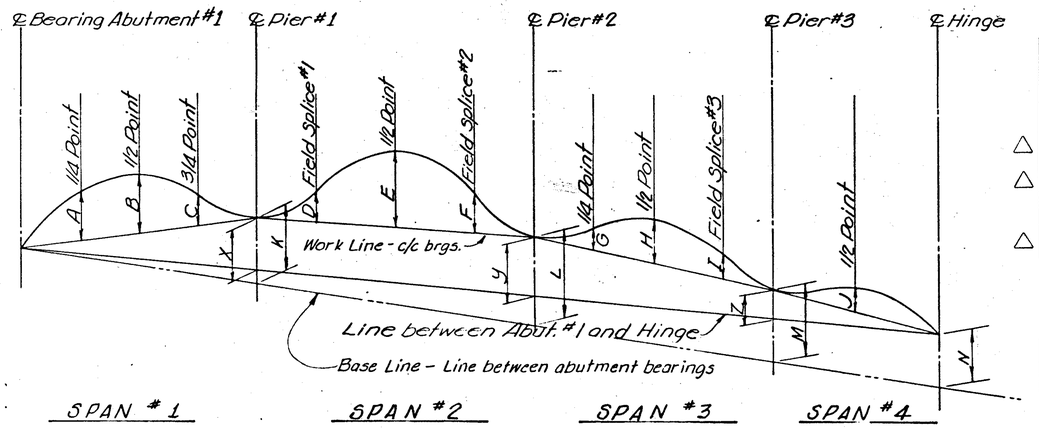
DETAIL "A"

Stiffeners shall be clipped as shown in detail 'B', sheet 13/20 to avoid intersection of welds.

BEAM FIELD SPLICES



TYPICAL BEAM ELEVATION



DEFLECTION & CAMBER DIAGRAM

DEFLECTION and CAMBER

	1/4 Point A	1/2 Point B	3/4 Point C	F.S. #1 D	1/2 Point E	F.S. #2 F	1/4 Point G	1/2 Point H	F.S. #3 I	1/2 Point J
△ Deflection due to weight of Steel.	3/32	3/32	1/16	1/32	3/32	1/32	1/32	1/32	1/32	1/32
△ Deflection due to remaining dead load	3/8	7/16	3/16	3/16	17/32	7/32	5/32	11/32	5/32	5/32
Adjustment required for Vertical Curve	3/4	15/16	3/4	7/8	1 5/16	7/8	3/4	15/16	5/8	1/2
△ Required Shop Camber	1 7/32	15/32	1	1 3/32	1 15/16	1 1/8	15/16	15/16	13/16	11/16

DIMENSIONS

X	0'-11 1/8"
Y	1'-2 3/8"
Z	0'-8 9/16"

DIMENSIONS

BEAM NO.	K	L	M	N
1	2'-2"	3'-10 5/8"	4'-7 13/16"	4'-9 9/16"
2	2'-1 1/2"	3'-9 9/16"	4'-6 5/16"	4'-7 1/16"
3	2'-1"	3'-8 1/2"	4'-4 3/4"	4'-5 13/16"
4	2'-0 1/2"	3'-7 1/2"	4'-3 1/4"	4'-3 15/16"

△ * For Moment PL Details see Sheet 13A/20

△ Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements as specified in 711.01 of CMS.

12 / 20

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS CINCINNATI ARCHITECTS

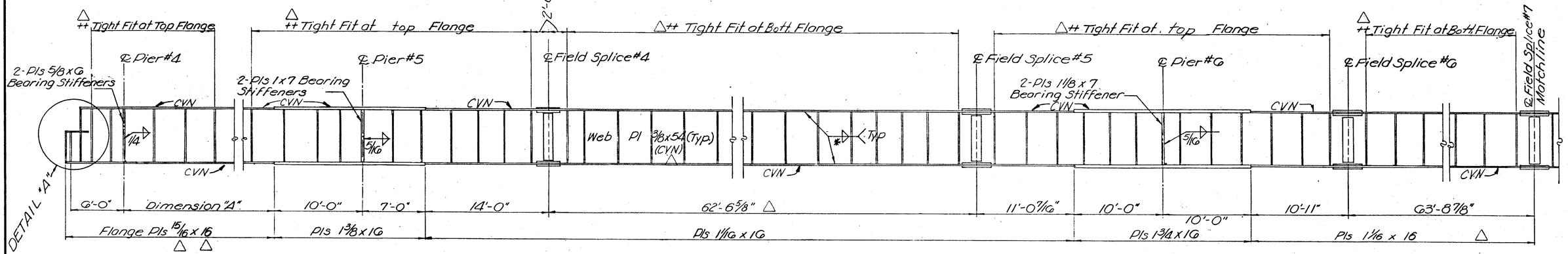
SUPERSTRUCTURE DETAILS
BRIDGE NO. HAM-126-RAMP D
RAMP D OVER
ANTHONY WAYNE, PENN CENTRAL, I-75, & RAMP D
HAMILTON COUNTY
STA. 37+97.87
STA. 45+11.98

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED
V.K.	V.K.	R.E.K.	J.R.P.	[illegible]	6-4-71	△ ZALK E ENGRS. 11/85

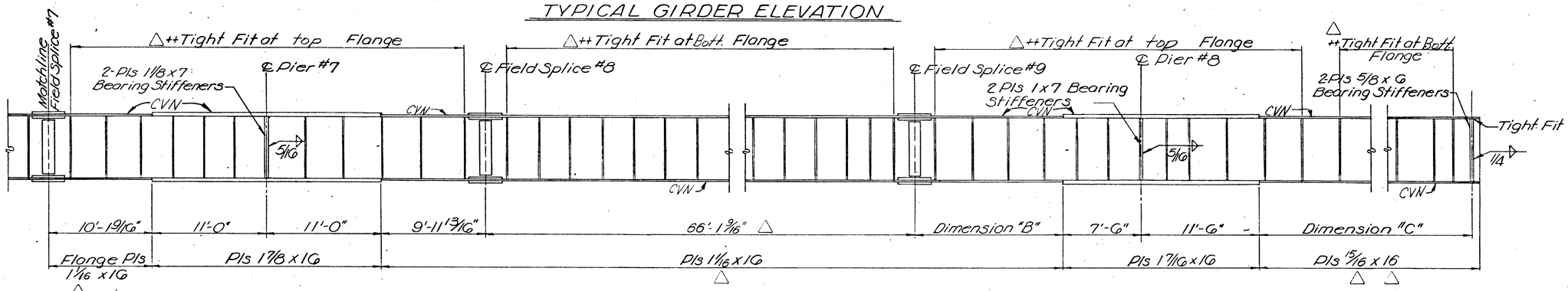
HAM-75-9.93
HAM-126-13.00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

577
787



TYPICAL GIRDER ELEVATION



NOTE:

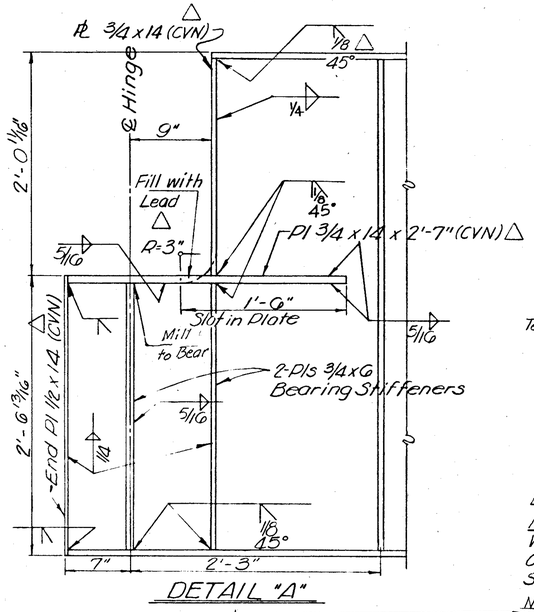
△ *5/16 Continuous Fillet Welds for Flange Plates of 15/16, 1 1/16, 1 3/8, & 1 7/16" Thickness
*3/8 Continuous Fillet Welds for Flange Plates of 1 3/4, & 1 7/8" Thickness

For Intermediate Stiffener Spacing See Sheet 11/20.

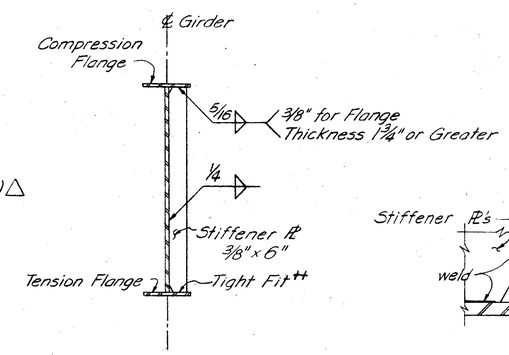
△ Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements as specified in 711.01 of CMS.

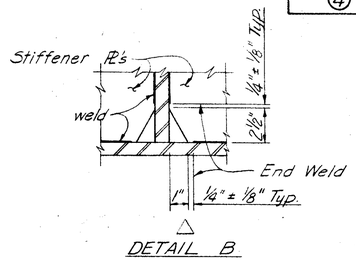
△++ Weld to both tension and compression flanges when stiffener is used to attach intermediate crossframe.

GIRDERS	DIMENSION		
	"A"	"B"	"C"
①	53'-6 5/8"	14'-2 9/8"	53'-6 5/16"
②	54'-1 3/16"	14'-0 5/8"	53'-0 3/16"
③	54'-7 3/4"	13'-10 9/16"	52'-6 3/16"
④	55'-2 5/16"	13'-8 5/8"	52'-0 1/4"



DETAIL "A"



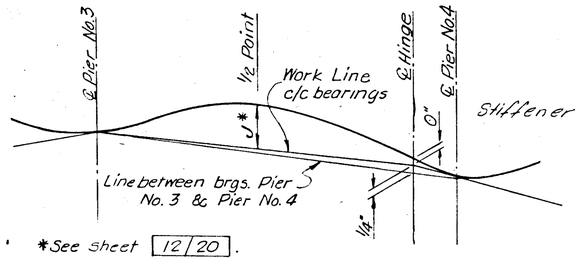


DETAIL B

△ INTERMEDIATE STIFFENER

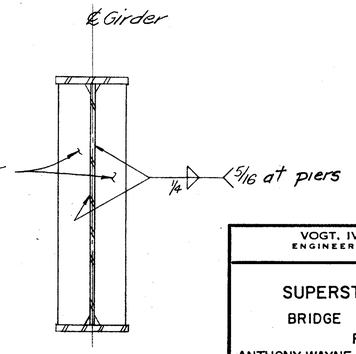
Note: Intermediate Stiffeners are used each side of Web Pl only where required for attaching Intermediate Crossframe. See Detail B this sheet and Transverse Section, Sheet 17/20.

Note: Stiffeners shall be clipped as shown in detail "B", sheet 13/20 to avoid intersection of welds.



*See sheet 12/20.

DEFLECTION & CAMBER DETAIL



△ BEARING STIFFENER

13/20

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

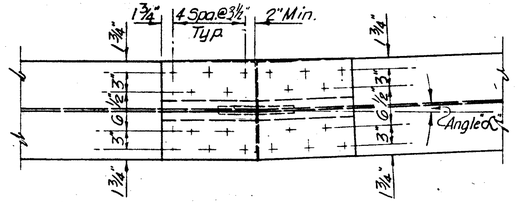
SUPERSTRUCTURE DETAILS
BRIDGE NO. HAM-126-RAMP D
RAMP D OVER
ANTHONY WAYNE, PENN CENTRAL, I-75, & RAMP D
HAMILTON COUNTY
STA. 37+97.87
STA. 45+11.98

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED
V.K.	V.K.	R.E.K.	J.R.P.		6-4-71	HALKE ENGRS. 11/85

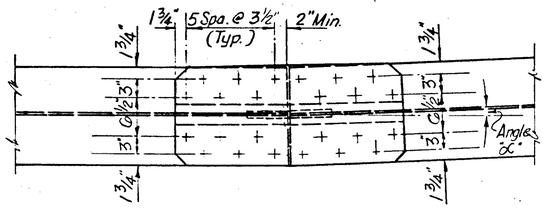
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

578
787

HAM-75-9.93
HAM-126-13.00

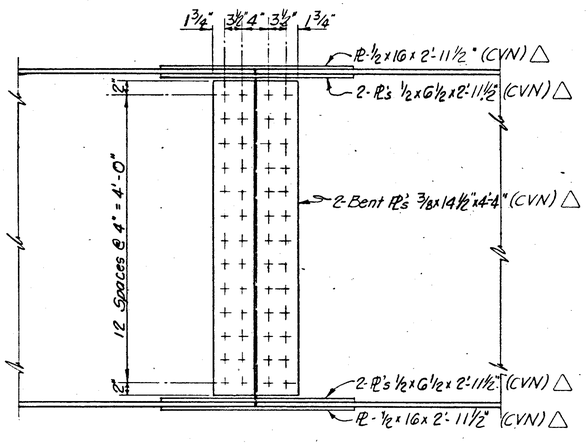


PLAN



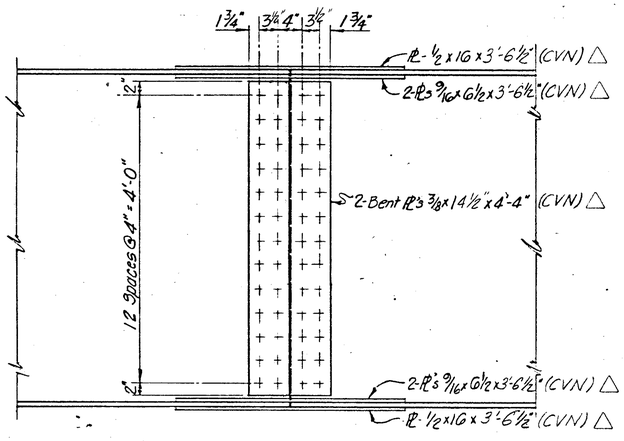
PLAN

ANGLE "α"						
GIRDER NO.	FIELD SPLICE NO.					
	4	5	6	7	8	9
1	0	1°21'47"	1°56'10"	2°46'10"	2°35'46"	6°40'17"
2	0	1°21'47"	1°56'10"	2°46'10"	2°35'46"	6°01'21"
3	0	1°21'47"	1°56'10"	2°46'10"	2°35'46"	5°21'47"
4	0	1°21'47"	1°56'10"	2°46'10"	2°35'46"	4°41'36"



ELEVATION

TYPICAL DETAILS
FOR FIELD SPLICES NO.4 & NO.9

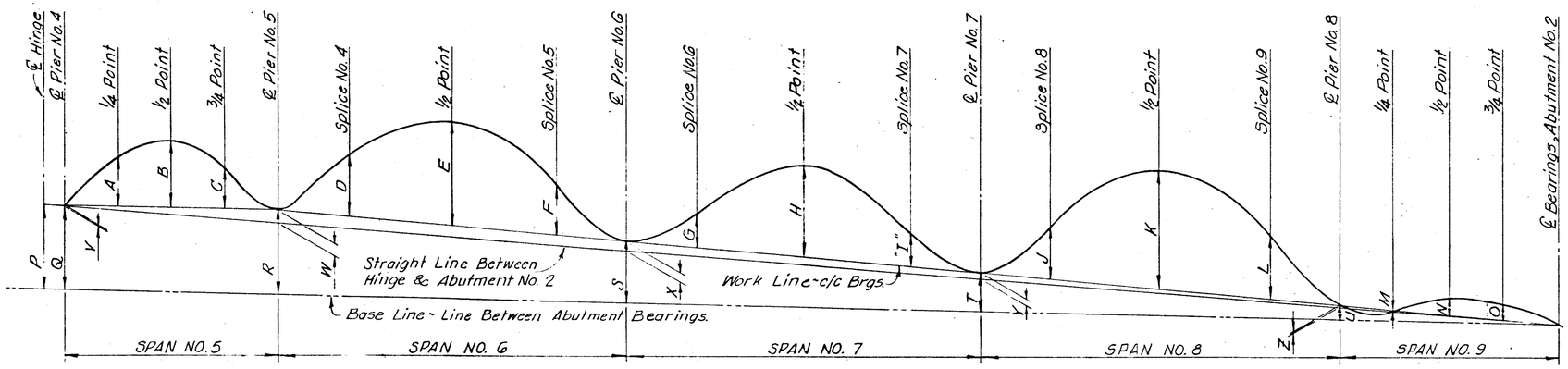


ELEVATION

TYPICAL DETAILS
FOR FIELD SPLICES NO.5, NO.6, NO.7, & NO.8

DIMENSIONS											
GIRDER NO.	P	Q	R	S	T	U	V	W	X	Y	Z
1	4'-9 9/16"	4'-9½"	4'-4 1/4"	3'-1 3/4"	2'-0 1/16"	0'-8 1/2"	1/16"	3½"	2¼"	2 5/8"	1/8"
2	4'-7 11/16"	4'-7 5/8"	4'-2 11/16"	3'-0 5/8"	1'-10 3/16"	0'-7 3/8"	5/8"	3 3/16"	2 3/8"	1 5/16"	-9/16"
3	4'-5 13/16"	4'-5 11/16"	4'-0 7/8"	2'-11½"	1'-7 3/4"	0'-5 7/8"	9/16"	3 7/16"	2½"	-¾"	-1¾"
4	4'-3 15/16"	4'-3¾"	3'-10 1/8"	2'-10 7/16"	1'-5 5/16"	0'-4 1/8"	½"	3⅛"	2 5/8"	-2 3/8"	-3⅛"

DEFLECTION & CAMBER															
LOCATION	SPAN NO. 5			SPAN NO. 6			SPAN NO. 7			SPAN NO. 8			SPAN NO. 9		
	¼ Point	½ Point	¾ Point	Splice No. 4	½ Point	Splice No. 5	Splice No. 6	½ Point	Splice No. 7	Splice No. 8	½ Point	Splice No. 9	¼ Point	½ Point	¾ Point
	A	B	C	D	E	F	G	H	"I"	J	K	L	M	N	"O"
Deflection due to weight of steel	0	0	0	3/32	3/16	1/16	1/32	3/32	1/32	1/16	3/16	3/16	0	0	0
△ Deflection due to remaining dead load	1/32	1/32	-1/32	15/32	29/32	3/8	1/8	15/32	1/8	13/32	1 1/32	½	-1/16	1/32	1/16
△ Adjustment req'd. for vertical/hore. curve	11/16	15/16	11/16	0	-1/32	1/16	1/16	-1/16	5/32	1/16	-3/16	1/2	-13/32	-5/8	-17/32
△ TOTAL req'd. shop camber	23/32	31/32	21/32	9/16	1 1/16	½	7/32	½	5/16	17/32	1 1/32	13/16	-17/32	-19/32	-15/32



DEFLECTION & CAMBER DIAGRAM

NOTES:

HIGH STRENGTH BOLTS shall be 1" dia., unless otherwise shown.

FOR SPLICE details & notes not shown, see Standard Drawing SD-1-69, sheet 4 of 4.

△ Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements as specified in 711.01 of CMS.

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VOGT, IVERS, & ASSOCIATES, INC.
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CINCINNATI

SUPERSTRUCTURE DETAILS
BRIDGE NO. HAM-126-RAMP D
RAMP D OVER
ANTHONY WAYNE, PENN CENTRAL, I-75, & RAMP D
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STA. 37+97.87
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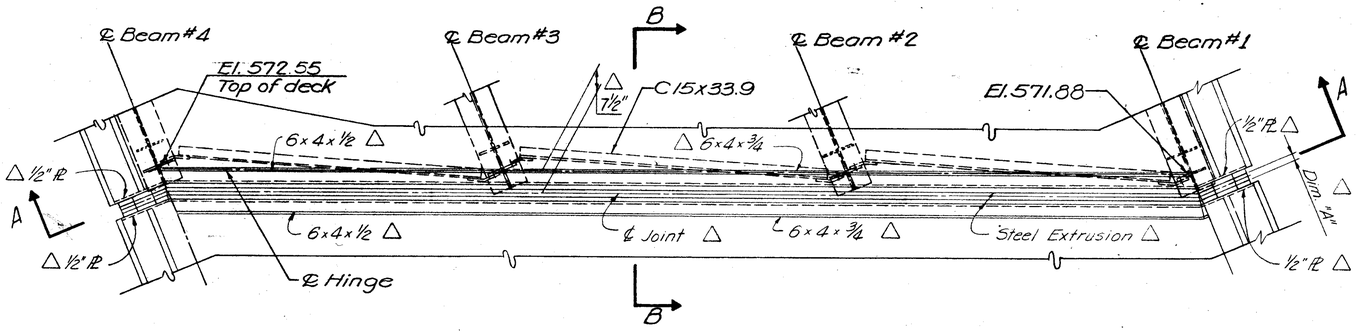
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.K.	V.K.	D.W.M.	J.R.P.	R.A.	6-4-71	△ BALKE ENGRS. 11/85

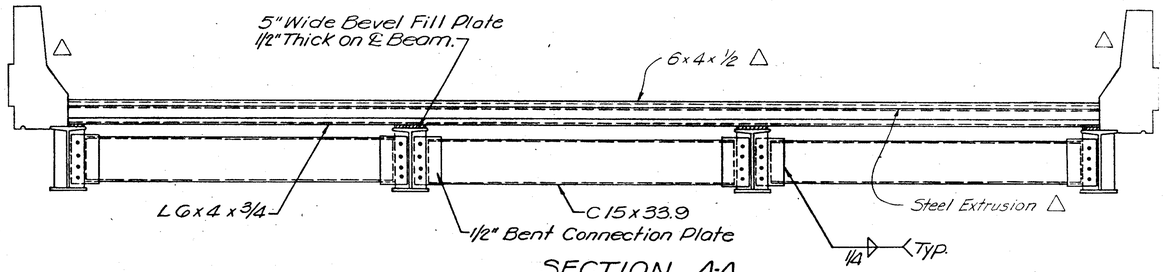
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

379 / 787

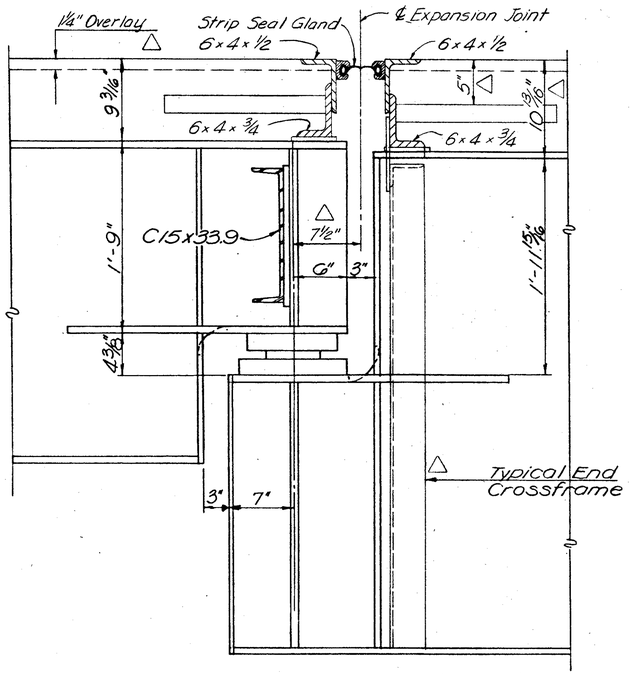
HAM-75-9.93
HAM-126-13.00



PLAN OF DECK JOINT



SECTION A-A



SECTION B-B

Notes:
Connect channel in field with ¾"ϕ high strength bolts

△ For Expansion Joint details not shown see Strip Seal Details, Sheets 488 A, B, C & D.

ABUTMENT 1
△ JOINT SETTING TABLE

TEMP °F	0	20	40	60	80	100
A*	3⅛"	2 15/16"	2 11/16"	2½"	2 5/16"	2 1/16"

Strip Seal Gland to be Watson-Bowman S-400 or D.S. Brown SS-400.

ABUTMENT 2
△ JOINT SETTING TABLE

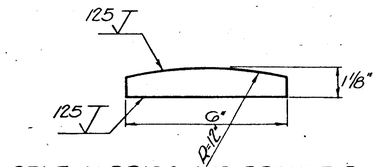
TEMP °F	0	20	40	60	80	100
A*	3 13/16"	3 3/8"	2 15/16"	2½"	2 1/16"	1 7/8"

Strip Seal Gland to be Watson-Bowman S-400 or D.S. Brown SS-400.

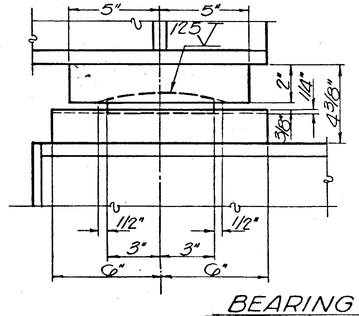
HINGE
△ JOINT SETTING TABLE

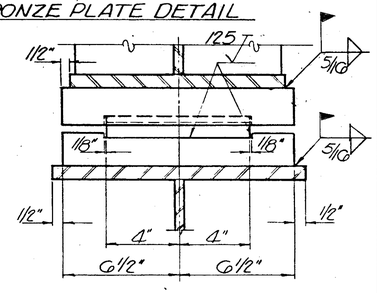
TEMP °F	0	20	40	60	80	100
A*	3"	2 11/16"	2 5/16"	2"	1 11/16"	1 5/16"

Strip Seal Gland to be Watson-Bowman S-500 or D.S. Brown SS-500.

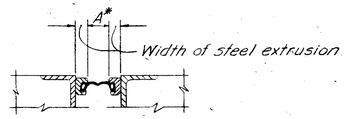


SELF-LUBRICATING BRONZE PLATE DETAIL





BEARING DETAIL



PARTIAL SECTION THROUGH EXPANSION JOINT SHOWING DIMENSION A

△

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VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

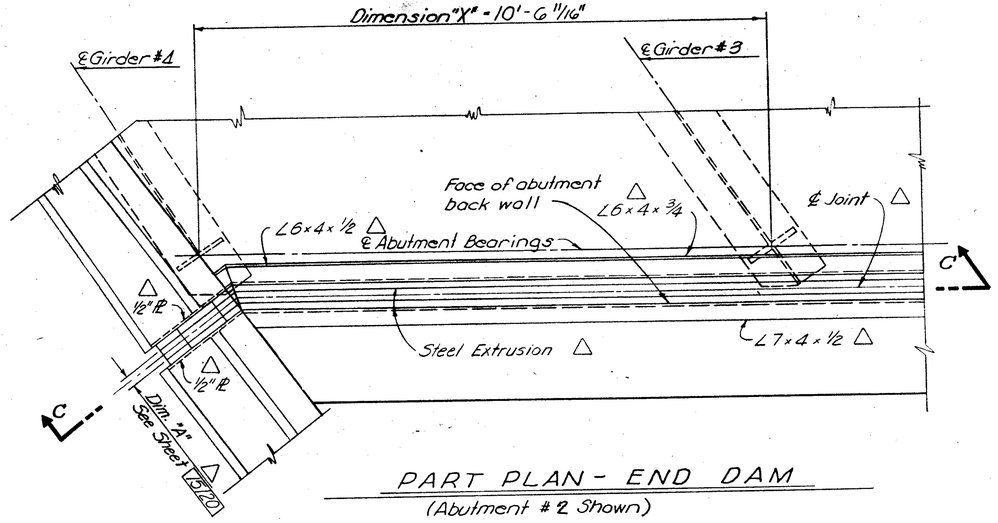
SUPERSTRUCTURE DETAILS
BRIDGE NO. HAM-126-RAMP D
RAMP D OVER
ANTHONY WAYNE, PENN CENTRAL, I-75, & RAMP D
HAMILTON COUNTY
STA. 37+97.87
STA. 45+11.98

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.K.	V.K.	R.E.K.	J.R.P.		6-4-71	△ BALKE ENGRS. 11/85

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

580
18.87

HAM-75-9.93
HAM-126-13.00



PART PLAN - END DAM

(Abutment # 2 Shown)

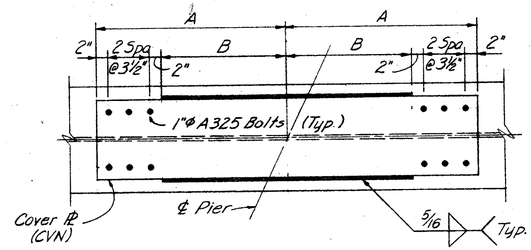
△ COVER (MOMENT) PLATES					
AT PIER	Dimension			Cover Pl Size	
	A	B	C	At Top Flange	At Bottom Flange
1	4'-6"	3'-7"	4'-6"	5/8" x 12" x 9'-0"	1 1/16" x 18" x 9'-0"
2	8'-0"	7'-1"	8'-0"	7/8" x 10 1/2 x 16'-0"	3/4" x 13 1/2" x 16'-0"
3	6'-0"	5'-1"	6'-0"	5/8" x 10 1/2 x 12'-0"	1/2" x 13 1/2" x 12'-0"

△ END BOLTED COVER PLATES:
BOLT HOLES IN COVER PLATE AND FLANGE MUST BE DRILLED PRIOR TO WELDING TO ENSURE FRICTION TYPE CONNECTION. CONTACT SURFACES MUST BE BLAST-CLEANED AND COMPLETELY FREE OF RESIDUE.

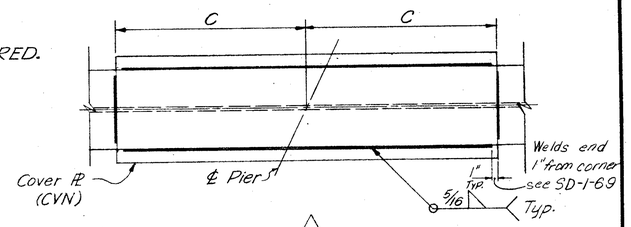
RECOMMENDED FABRICATION METHOD

1) DRILL STANDARD HOLES IN COVER PLATE AND FLANGE.
2) CLEAN CONTACT SURFACES TO BE BOLTED.
3) TACK WELD COVER PLATE TO FLANGE.
4) INSTALL AND TIGHTEN HIGH-STRENGTH BOLTS.
5) FILLET WELD COVER PLATE TO FLANGE.

STEP NUMBERS 4 AND 5 CAN BE INTERCHANGED IF DESIRED.



△ TOP FLANGE



△ BOTTOM FLANGE

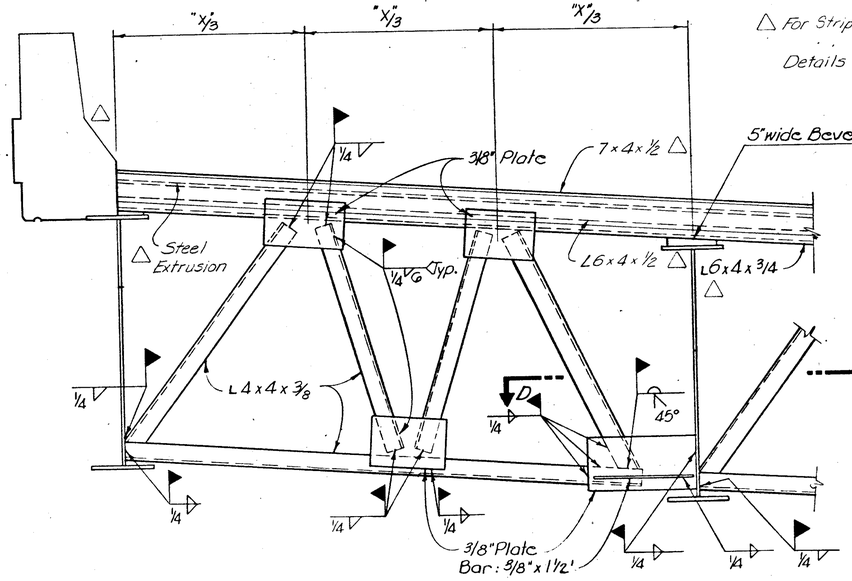
NOTES:

△ For details and notes of end dams, and end crossframes not shown, see Std. Drawing No SD-1-69.

△ STEEL NOTCH TOUGHNESS REQUIREMENT (CHARPY V-NOTCH)
Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements as specified in 711.01 of CMS.

△ For Strip seal Joint details and notes not shown, see Std. Drawing

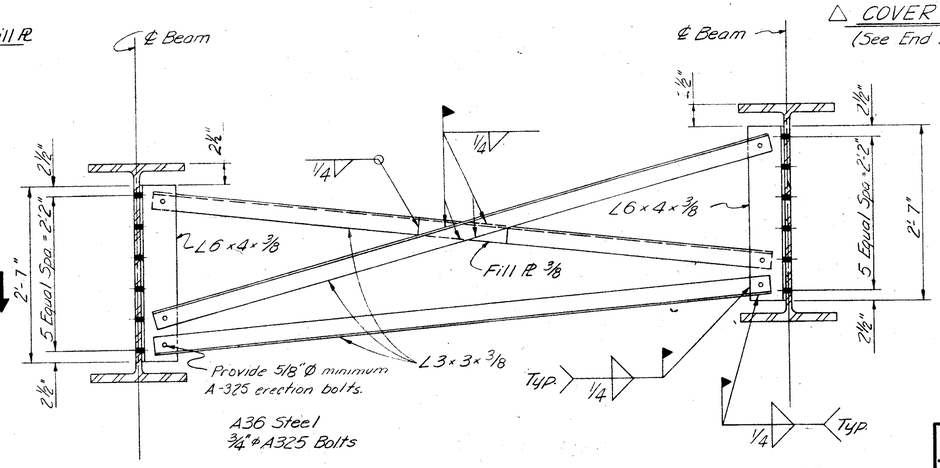
Details of end dam and crossframe at Abutment #1 are similar.



SECTION C-C

Typical end crossframe at abutment #2

△ COVER (MOMENT) PLATES
(See End Bolted Cover Plate Note)



△ TYPICAL INTERMEDIATE CROSSFRAME
(PART 1)

ERECTION BOLTS: Hole diameter in the crossframes and angle stiffeners shall be respectively 1/16" and 1/4" larger than the diameter of the erection bolts. Unless replaced by permanent high strength bolts, erection bolts shall remain in place. Lock washers shall be furnished for other than fully torqued high strength erection bolts. Bolts shall be furnished as part of 513. In lieu of erection bolts and at the option of the Contractor, alternative means of temporary bracing may be used subject to the approval of the Director (501.06).

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VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

SUPERSTRUCTURE DETAILS
BRIDGE NO. HAM-126-RAMP D
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DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED
V.K.	V.K.	L.B.F.	D.W.S.		6-4-71	△ SALKE ENGRS. 11185

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

581
187

HAM-75-9.93
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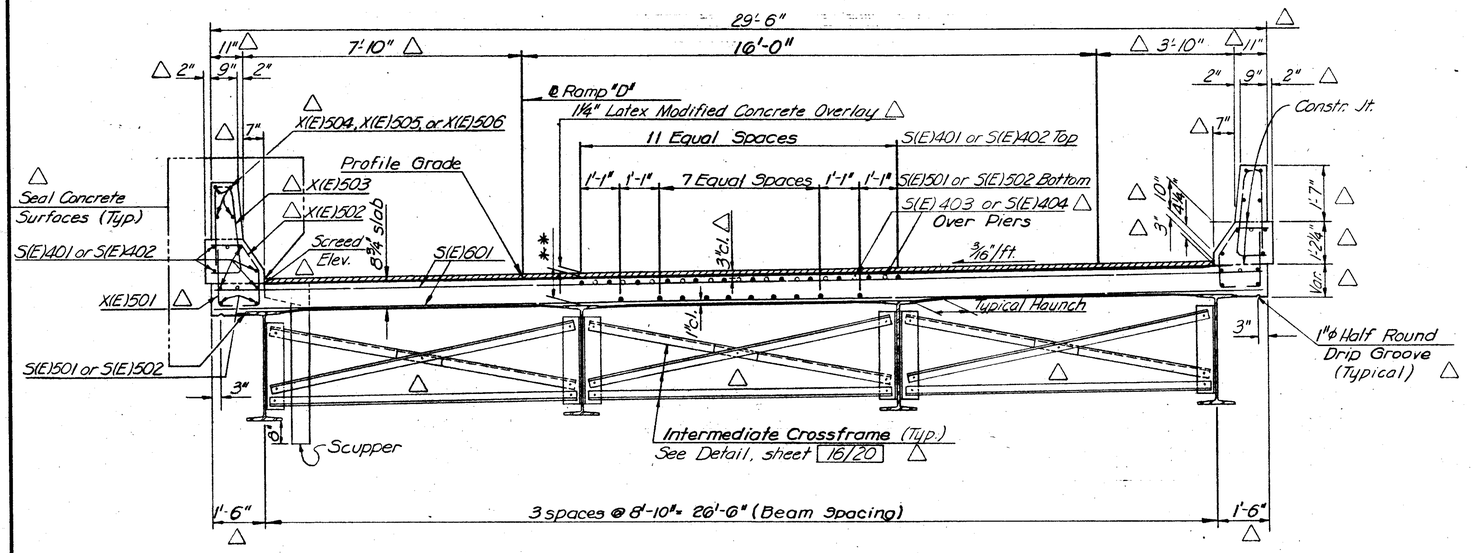
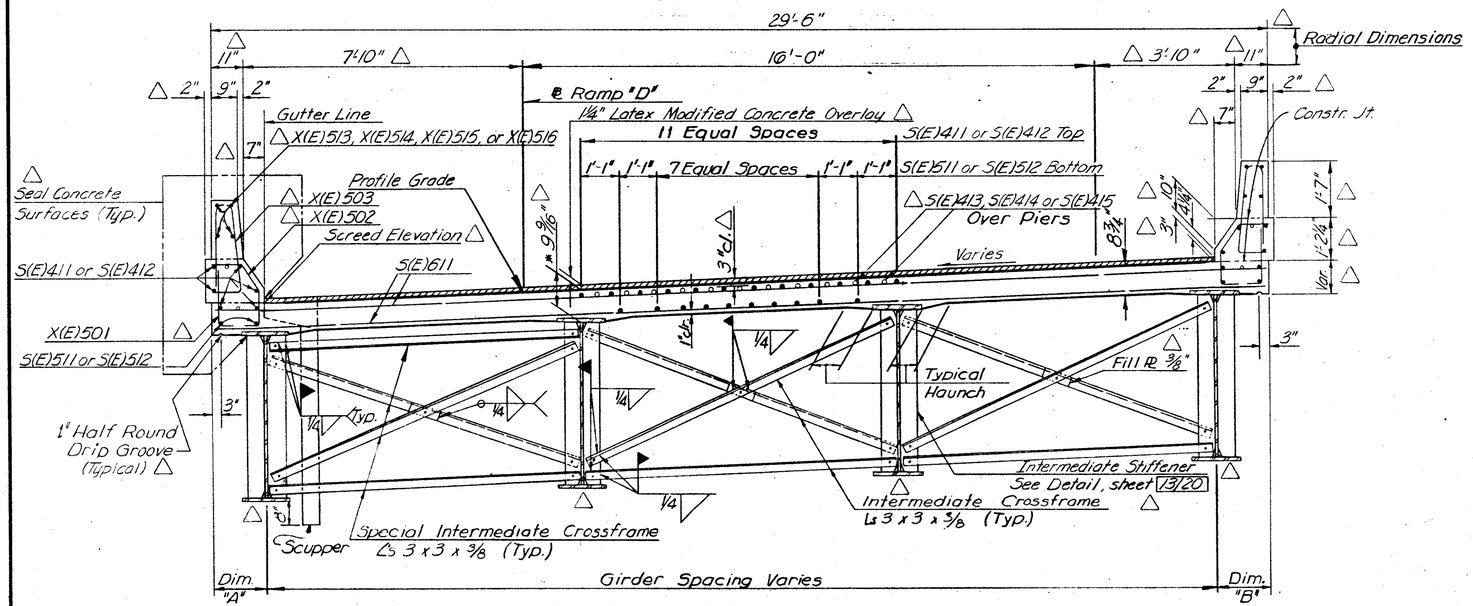


TRANSVERSE SECTION ~ PART 1



TRANSVERSE SECTION ~ PART 2

** DECK SLAB DEPTH: The distance shown from top of deck slab to top of steel beam is the design dimension. The quantity of deck concrete to be paid for shall be based on this dimension, even though deviation from it may be necessary because the top flange of the beam may not have the exact camber or conformation required to place it parallel to the finished grade.

A HAUNCH WIDTH of 9" shall be used for computing quantity of concrete. However, the haunch width may vary between 6" and 12" provided that the slope shall be not more than 1:4 for a haunch less than 9" in width.

△ For additional notes and details of Parapet, See Standard Drawing BR-1.

△ "(E)" denotes epoxy coated reinforcing bar.

*This is the design dimension. The quantity of deck concrete to be paid for shall be based upon this dimension, even though deviation from it may be necessary because the top flange of the girder may not have the exact camber or conformation required to place it parallel to the finished grade. Deduction shall be made for volume of encased steel plates as per 511.18.

** SLAB THICKNESS
- W36 x 230 = 7 13/16" △
- W36 x 194 = 7 1/2" △
- W36 x 150 = 7 13/16" △
- W36 x 135 = 7 15/16" △

△ DIMENSIONS	"A"	"B"
To Splice #4	1'-6"	1'-6"
Mid Point	1'-6"	1'-6"
Splice #5	1'-9 3/16"	1'-4 5/8"
Pier #6	1'-8 1/2"	1'-7 1/16"
Splice #6	1'-11 1/16"	1'-5 15/16"
Mid Point	1'-10 1/8"	1'-10 1/8"
Splice #7	2'-5 3/8"	1'-5 15/16"
Pier #7	2'-2 7/8"	1'-10 3/4"
Splice #8	2'-3 11/16"	1'-10 3/4"
Mid Point	2'-10 1/4"	2'-1 1/4"
Splice #9	2'-11 1/4"	2'-5 15/16"
Pier #8	1'-11 1/2"	3'-1 15/16"
Mid Point	1'-8 7/8"	3'-0 1/8"
℄ Brg. Abut #2	3'-0"	1'-5 15/16"

Mid Point is ½ the distance between adjacent points, not at Mid Span.

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VOGT, IVERS, & ASSOCIATES, INC.
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TRANSVERSE SECTIONS
BRIDGE NO. HAM-126-RAMP D
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FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

382 / 787

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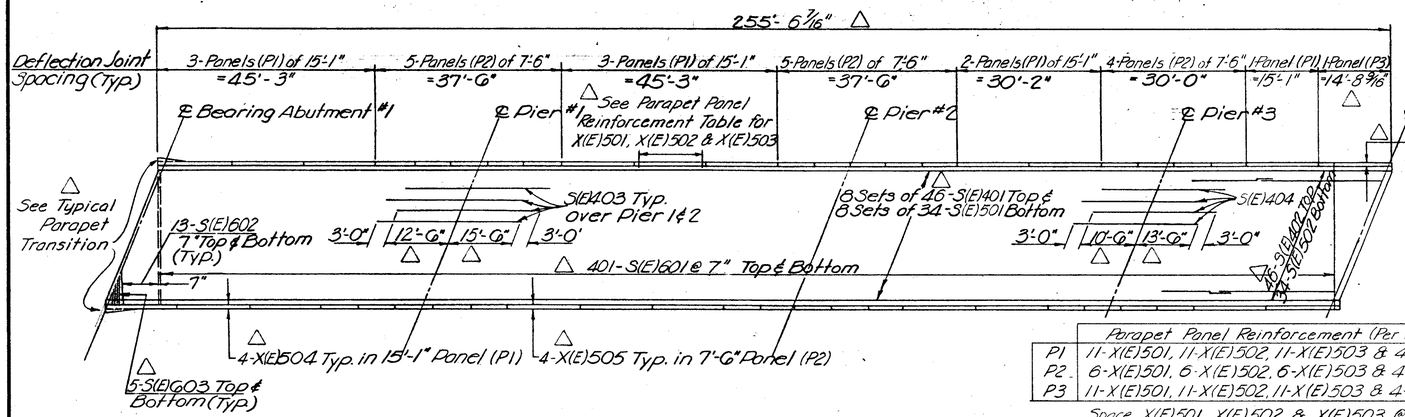


	Parapet Panel Reinforcement (Per Panel) △	No. of Panels △
P1	11-X(E)501, 11-X(E)502, 11-X(E)503 & 4-X(E)504	18
P2	6-X(E)501, 6-X(E)502, 6-X(E)503 & 4-X(E)505	28
P3	11-X(E)501, 11-X(E)502, 11-X(E)503 & 4-X(E)506	2

Space X(E)501, X(E)502 & X(E)503 @ 1'-6" Max.

DECK PLAN PART-1

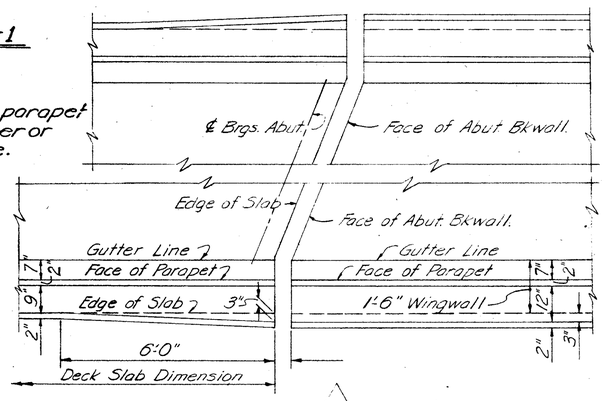
NOTES:

△ 1. PREFORMED EXPANSION JOINT FILLER in the railing parapet deflection joints may be either 1/4" gray sponge rubber or 1/4" gray cellular polyvinyl chloride (PVC) sponge.

△ 2. WELDED ATTACHMENT of supports for concrete deck finishing machine may be made to areas of the fascia stringer flanges designated "Compression". Attachments shall not be made to areas designated "Tension". Fillet welds to compression flanges shall be not closer than 1" from edge of flange, be not more than 2" long, and be not smaller than the minimum size required by AASHTO.

△ 3. "(E)" denotes epoxy-coated reinforcing bar.

△ 4. The screed elevations shown have been obtained by adding the dead load deflection due to the weight of concrete slab, latex modified concrete overlay, bridge parapet, future wearing surface, and steel beams to the required final elevation.

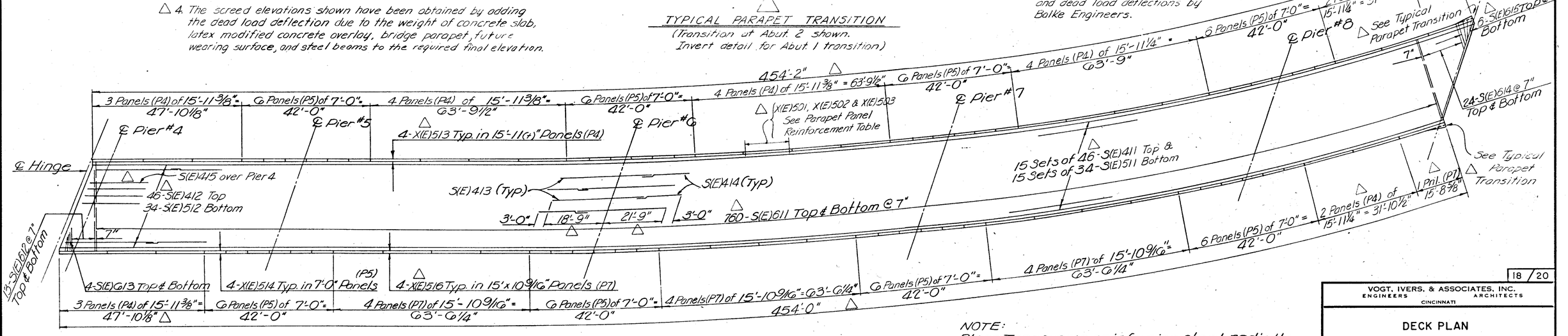


TYPICAL PARAPET TRANSITION
(Transition at Abut. 2 shown. Invert detail for Abut. 1 transition)

△ SCREED ELEVATIONS *

	LEFT GUTTER STA.	LEFT GUTTER ELEV.	RIGHT GUTTER STA.	RIGHT GUTTER ELEV.
℄ Brg. Abut #1	38+03.32	573.00	37+98.32	573.25
1/4 Point	38+19.70	573.28	38+08.70	573.55
1/2 Pt.	38+36.07	573.46	38+25.07	573.76
3/4 Pt.	38+52.45	573.55	38+41.45	573.88
℄ Pier #1	38+68.82	573.62	38+57.82	574.07
1/4 Pt.	38+85.07	573.72	38+77.07	574.11
1/2 Pt.	39+07.32	573.76	38+96.32	574.18
3/4 Pt.	39+26.57	573.68	39+15.57	574.13
℄ Pier #2	39+45.82	573.52	39+34.82	574.00
1/4 Pt.	39+62.40	573.40	39+51.40	573.91
1/2 Pt.	39+78.98	573.26	39+67.98	573.80
3/4 Pt.	39+95.55	573.01	39+84.55	573.57
℄ Pier #3	40+12.12	572.72	40+01.12	573.31
1/4 Pt.	40+23.54	572.52	40+12.54	573.15
1/2 Pt.	40+34.94	572.31	40+23.94	572.94
3/4 Pt.	40+46.35	572.06	40+35.35	572.71
Hinge	40+57.75	571.78	40+46.75	572.45
℄ Pier #4	40+63.75	571.64	40+52.75	572.32
1/4 Pt.	40+79.64	571.23	40+69.05	571.92
1/2 Pt.	40+95.53	570.78	40+85.35	571.48
3/4 Pt.	41+11.41	570.26	41+01.64	571.01
℄ Pier #5	41+27.30	569.70	41+17.94	570.60
1/4 Pt.	41+53.46	568.85	41+44.08	569.96
1/2 Pt.	41+79.63	567.94	41+70.22	569.27
3/4 Pt.	42+05.91	566.98	41+96.18	568.40
℄ Pier #6	42+32.21	566.00	42+21.97	567.46
1/4 Pt.	42+58.88	565.14	42+48.03	566.61
1/2 Pt.	42+85.48	564.28	42+74.09	565.77
3/4 Pt.	43+12.12	563.32	43+00.15	564.84
℄ Pier #7	43+38.75	562.38	43+26.21	563.91
1/4 Pt.	43+66.06	561.54	43+52.75	563.10
1/2 Pt.	43+93.50	560.63	43+79.08	562.37
3/4 Pt.	44+20.93	559.57	44+05.20	561.58
℄ Pier #8	44+48.38	558.46	44+31.47	560.74
1/4 Pt.	44+65.02	557.85	44+47.21	560.30
1/2 Pt.	44+81.65	557.26	44+62.95	559.87
3/4 Pt.	44+98.28	556.66	44+78.68	559.43
℄ Brg. Abut #2	45+14.91	556.09	44+94.42	558.99

* Table is based on Pavement Elevations provided by Vogt Ivers. Adjustments for Latex overlay and dead load deflections by Balke Engineers.



	Parapet Panel Reinforcement (Per Panel) △	No. of Panels △
P4	12-X(E)501, 12-X(E)502, 12-X(E)503 & 4-X(E)513	22
P5	6-X(E)501, 6-X(E)502, 6-X(E)503 & 4-X(E)514	48
P6	11-X(E)501, 11-X(E)502, 11-X(E)503 & 4-X(E)515	1
P7	12-X(E)501, 12-X(E)502, 12-X(E)503 & 4-X(E)516	13

Space X(E)501, X(E)502 & X(E)503 @ 1'-6" Max.

DECK PLAN PART-2

NOTE:
Place transverse reinforcing steel radially, measured along ℄ bridge.
△ Length of Panel P4 varies from 15'-11 1/4" to 15'-11 3/8" as shown.

18 / 20

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

DECK PLAN
BRIDGE NO. HAM-126-RAMP D
RAMP D OVER
ANTHONY WAYNE, PENN CENTRAL, I-75, & RAMP D
HAMILTON COUNTY
STA. 37+97.87
STA. 45+11.98

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED
V.K.	V.K.	R.E.K.	J.R.P.		6-4-71	BALKE ENGRS. 11185

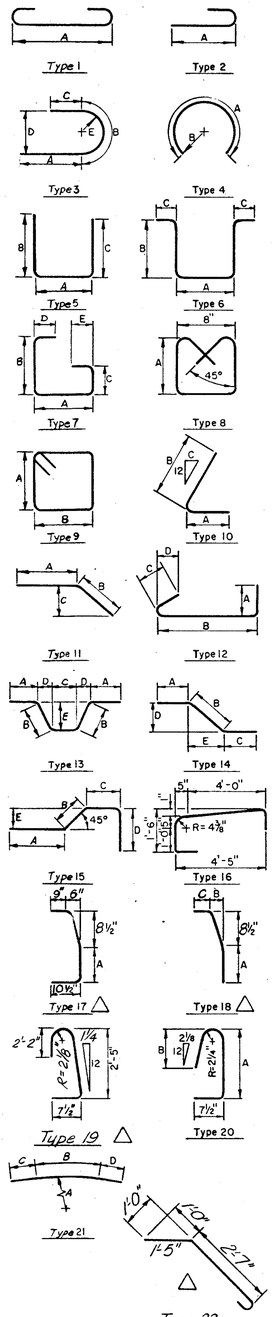
REINFORCING STEEL LIST

FED. RD. DIVISION	STATE	PROJECT		
2	OHIO			

383
787

HAM - 75 - 9.93
HAM - 126 - 13.00

BENDING DIAGRAM



S IN THE COLUMN FOR "TYPE" INDICATES STRAIGHT BARS.

PIER # 1

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
P501	60	7-7	475	5	1-10	3-0	3-0		
P502	56	6-11	404	5	1-10	2-8	2-8		
P503	8	5-10	49	11	4-3	1-7	0-5		
P504	2	31-5	66	5					
P701	40	10-2	831	1	8-6				
△P1001	16	9'-9"	671	5	8'-3"	1'-8½"	0		
P1002	8	34-7	1190	5					
P1003	8	34-11	1202	5					
P1101	5	23-0	611	5					
P1102	4	34-7	735	1	31-5				
P1103	6	12-0	383	2	10-5				
		SUB-TOTAL	6428						
		SPIRALS	1170						
		TOTAL PIER#1	7787						

PIER # 2

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
P501	60	7-7	475	5	1-10	3-0	3-0		
P502	56	6-11	404	5	1-10	2-8	2-8		
P503	8	5-10	49	11	4-3	1-7	0-5		
P504	2	31-5	66	5					
P701	40	10-2	831	1	8-6				
△P1001	16	9'-9"	671	5	8'-3"	1'-8½"	0		
P1002	8	34-7	1190	5					
P1003	8	34-11	1202	5					
P1101	5	23-0	611	5					
P1102	4	34-7	735	1	31-5				
P1103	6	12-0	383	2	10-5				
		SUB-TOTAL	6428						
		SPIRALS	1169						
		TOTAL PIER#2	7786						

PIER # 3

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
P501	60	7-7	475	5	1-10	3-0	3-0		
P502	56	6-11	404	5	1-10	2-8	2-8		
P503	8	5-10	49	11	4-3	1-7	0-5		
P504	2	31-5	66	5					
P701	40	10-2	831	1	8-6				
△P1001	16	9'-9"	671	5	8'-3"	1'-8½"	0		
P1004	8	28-10	995	5					
P1005	8	29-4	1010	5					
P1101	5	23-0	611	5					
P1102	4	34-7	735	1	31-5				
P1103	6	12-0	383	2	10-5				

Reinforcing Steel For Piers 2 & 3
See Sheet 19A 20.

PIER # 4

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
P501	60	7-7	475	5	1-10	3-0	3-0		
P502	56	6-11	404	5	1-10	2-8	2-8		
P503	8	5-10	49	11	4-3	1-7	0-5		
P504	2	31-5	66	5					
P701	40	10-2	831	1	8-6				
△P1001	16	9'-9"	671	5	8'-3"	1'-8½"	0		
P1006	8	23-1	795	5					
P1007	8	23-9	818	5					
P1101	5	23-0	611	5					
P1102	4	34-7	735	1	31-5				
P1103	6	12-0	383	2	10-5				
		SUB-TOTAL	5649						
		SPIRALS	764						
		TOTAL PIER#4	6412						

PIER # 5

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
P511	68	8-5	597	5	2-2	3-3	3-3		
P512	48	7-11	396	5	2-2	3-0	3-0		
P513	8	5-9	48	11	4-2	1-7	0-5		
P514	2	30-10	64	5					
P711	40	10-2	831	1	8-6				
△P1011	24	9'-9"	1007	5	8'-3"	1'-8½"			
P1012	12	38-4	1979	5					
P1013	12	39-0	2014	5					
P1017	7	23-0	693	5					
P1111	5	34-0	903	1	30-10				
P1112	10	12-0	638	2	10-5				
		SUB-TOTAL	9170						
		SPIRALS	1309						
		TOTAL PIER#5	10479						

PIER # 6

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
P511	68	8-5	597	5	2-2	3-3	3-3		
P512	48	7-11	396	5	2-2	3-0	3-0		
P513	8	5-9	48	11	4-2	1-7	0-5		
P514	2	30-10	64	5					
P711	40	10-2	831	1	8-6				
△P1011	24	9'-9"	1007	5	8'-3"	1'-8½"	0		
P1014	12	34-5	1777	5					
P1015	12	35-6	1833	5					
P1017	7	23-0	693	5					
P1111	5	34-0	903	1	30-10				
P1112	10	12-0	638	2	10-5				
		SUB-TOTAL	8787						
		SPIRALS	1177						
		TOTAL PIER#6	9964						

PIER # 7

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
P521	72	8-0	601	5	1-9	3-3	3-3		
P522	64	7-6	501	5	1-9	3-0	3-0		
P523	8	5-9	48	11	4-2	1-7	0-5		
P524	2	30-10	64	5					
P721	40	10-2	831	1	8-6				
△P1021	16	9'-9"	671	5	8'-3"	1'-8½"	0		
P1022	8	18-9	645	5					
P1023	8	20-2	694	5					
P1026	7	23-0	693	5					
P1121	4	34-0	723	1	30-10				
P1122	8	12-0	510	2	10-5				
		SUB-TOTAL	5792						
		SPIRALS	623						
		TOTAL PIER#7	6604						

PIER # 8

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
P521	72	8-0	601	5	1-9	3-3	3-3		
P522	64	7-6	501	5	1-9	3-0	3-0		
P525	8	6-3	52	11	4-8	1-7	0-5		
P526	2	31-8	66	5					
P721	40	10-2	831	1	8-6				
△P1021	16	9'-9"	671	5	8'-3"	1'-8½"	0		
P1024	8	19-10	683	5					
P1025	8	21-10	752	5					
P1026	7	23-0	693	5					
P1122	8	12-0	510	2	10-5				
P1123	4	34-10	740	1	31-8				
		SUB-TOTAL	5911						
		SPIRALS	672						
		TOTAL PIER#8	6772						

△ NOTES

Refer to CMS Sections 106.03, 700, 709.01 thru 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structures by the additional steel, spliced in accordance with 509.08.

Reinforcing bars not revised by BALKE (△) shall have a minimum lap of 30 bar diameters.

MARK	NO.	LENGTH (HEIGTH)	WEIGHT
SPIRALS - Core Diam. 32" c/c - Pitch 4½" o/o - Other details in accordance with C.R.S.I. standard practice			
SPA01	1	31-7	582
SPA02	1	31-11	588
TOTAL PIER#1			1170
SPA07	1	20-1	376
SPA08	1	20-9	388
TOTAL PIER#4			764
SPA11	1	35-3	648
SPA12	1	36'-0	661
TOTAL PIER#5			1309
SPA13	1	31-5	579
SPA14	1	32-6	598
TOTAL PIER#6			1177
SPA21	1	15-9	299
SPA22	1	17-2	324
TOTAL PIER#7			623
SPA23	1	16-10	318
SPA24	1	18-10	354
TOTAL PIER#8			672

19 / 20

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

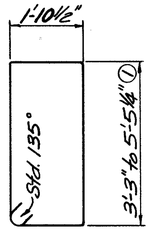
REINFORCING STEEL LIST
BRIDGE NO. HAM-126-RAMP D
RAMP D OVER
ANTHONY WAYNE, PENN CENTRAL, I-75, & RAMP D
HAMILTON COUNTY
STA. 37+97.87
STA. 45+11.98

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
S.S.C.	S.S.C.	L.B.F	J.R.P.		6-4-71	△ BALKE ENGRS 6/86

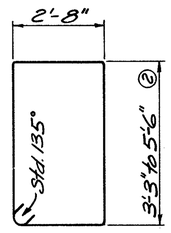
CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO	583A 787
CHKD. BY			FHWA REGION 5	
DATE				

REINFORCING STEEL LIST

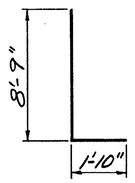
MARK	NO.	LENGTH	WEIGHT	SHAPE	PIER 2	PIER 3
T1001	92	10'-3"	4058	B	46	46
T1002	30	35'-0"	4518	S	30	—
T1003	16	21'-4"	1469	S	16	—
T1004	4	31'-3"	538	S	4	—
T1005	11	36'-7"	1732	B	4	7
T1006	30	29'-0"	3744	S	—	30
T1007	16	19'-0"	1308	S	—	16
T901	35	13'-0"	1547	B	19	16
T801	12	19'-4"	619	B	12	—
T802	10	18'-4"	489	B	—	10
T601	37	10'-6"	584	S	19	18
T602	12	17'-6"	315	S	12	—
T603	108	10'-0"	1622	S	60	48
T604	108	8'-2"	1325	B	60	48
T605	16	17'-0"	409	B	8	8
T606	12	16'-6"	297	S	—	12
	4	10'-9½"			4	
T501	Series of 8	to ③ 16'-2"	433	B	Series of 8	—
T502	8	31'-3"	261	S	4	4
T503	4	30'-0"	125	S	2	2
T504	4	21'-6"	90	S	2	2
T505	4	15'-0"	63	S	2	2
T506	18	9'-5"	177	B	9	9
T507	56	5'-5"	316	B	28	28
	2	12'-5"				2
T508	Series of 10	to ④ 16'-11"	306	B	—	Series of 10
		TOTAL	26345			



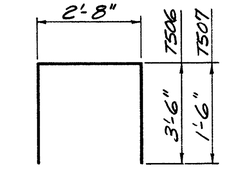
T501



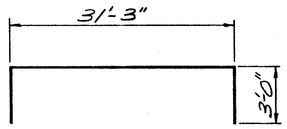
T508



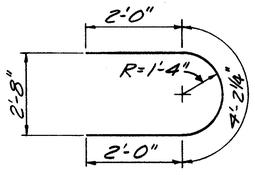
T1001



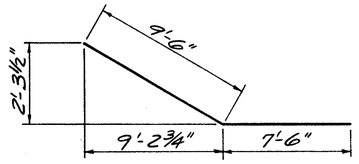
T506, T507



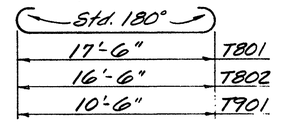
T1005



T604



T605



T801, T802, T901

① Varies by 3¾" increments
② Varies by 3" increments
③ Varies by 7½" increments
④ Varies by 6" increments

Reinforcing Steel for Piers 1, 4, 5, 6, 7 & 8
See Sheet 19A20.

REINFORCING STEEL SAMPLES: Refer to CMS Sections 106.03, 700, 709.01 through 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structures by the additional steel, spliced in accordance with 509.08.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

19A20

REINFORCING STEEL LIST
BRIDGE NO. HAM-126-RAMP D
RAMP D over
ANTHONY WAYNE, CONRAIL, I-75 & RAMP D
HAMILTON COUNTY OHIO
STA. 37+97.87 TO STA. 45+11.98

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	WJH	~	SJA	CRS 6/86	

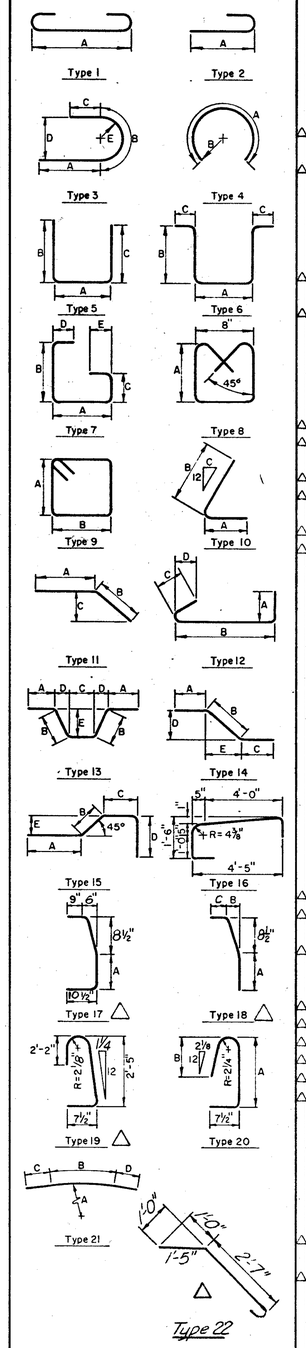
REINFORCING STEEL LIST

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

334
787

HAM-75-9.93
HAM-126-13.00

BENDING DIAGRAM



S IN THE COLUMN FOR "TYPE" INDICATES STRAIGHT BARS.

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
		ABUTMENT #1							
A501	22	8-3	189	5	5-4	1-7	1-7		
A502	22	6-4	145	5	3-5	1-7	1-7		
A503	22	6-11	159	5	6-5	0-7½	0		
△A504	16	20-10	348	5					
A505	16	13-0	217	5					
△A(E)506	4	17-5	73	5					
A509	16	10-6	175	9	3-0	2-0			
A510	12	8-0	100	5					
A511	8	6-3 to 7-9	58	5	1-2	2-8 to 3-5	2-8 to 3-5	2 sets of 4, vary B & C each by 3"	
△A512	12	7-4	92	5					
A513	8	13-2	110	5					
△A514	4	8-1	34	11	6-0	2-2	0-6		
A519	6	5-0	32	5					
△A(E)520	16	2-8	45	2	2-1				
△A(E)521	8	5-3	44	19					
△A(E)523	16	4-4	72	5					
△A(E)524	16	4-7	76	5					
△A(E)526	8	3-0	25	5					
△A(E)527	16	11-4	189	5					
A601	22	14-0	463	5	5-4	6-5	2-7		
A602	29	10-5	454	5	1-5	4-8	4-8		
△A603	29	5-1	221	5	1-5	2-0	2-0		
△A(E)604	29	7-7	330	5	0-11	3-6	3-6		
△A606	6	22-8	204	5	1-2	10-11	10-11		
△A(E)609	10	3-9	56	18	2-5	0-6	0-9		
△A(E)610	2	3-8	11	18	2-5	0-5	0-8		
△A(E)611	2	3-8	11	18	2-5	0-4	0-8		
△A(E)612	2	3-7	11	18	2-5	0-3	0-7		
△A(E)613	8	3-7	43	18	2-5	0-2	0-7		
△A614	6	22-2	200	5	1-2	10-8	10-8		
A801	7	20-0	374	5					
A802	7	16-0	299	5					
A803	12	10-0	320	5					
△A(E)804	18	4-11	236	22					
△TOTAL	ABUTMENT #1	5416	(Includes	1222	Lbs. Epoxy Coated)				

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
		ABUTMENT #2							
B501	23	8-8	198	5	5-4	1-7	1-7		
B502	21	6-4	139	5	3-5	1-7	1-7		
B503	7	6-11	51	5	6-5	0-7½	0		
B504	7	7-10	57	5	7-4	0-7½	0		
B505	7	8-9	64	5	8-3	0-7½	0		
B506	4	9-8	40	5	9-2	0-7½	0		
B507	6	5-8	33	5	2-4	1-7	1-7		
B508	18	30-0	407	5					
B509	13	8-8	118	5					
B510	13	12-0	163	5					
B511	4	23-0	96	5					
△B512	9	5-3	49	5					
△B(E)513	4	20-2	84	5					
B514	22	10-6	241	9	3-0	2-0			
B515	16	13-0	217	5					
B516	4	16-0	67	5					
B517	8	19-8	164	5					
B518	4	7-3	30	5					
B519	4	13-8	57	5					
△B520	4	10-4	43	11	8-3	2-2	0-8		
B521	12	6-3 to 10-5	104	5	1-2	2-8 to 4-8	2-8 to 4-9	2 sets of 6, vary B & C "by 5"	
△B522	4	11-10	49	5					
△B(E)526	16	2-8	45	2	2-1				
△B(E)527	16	5-3	88	19					
△B(E)528	16	4-4	72	5					
△B(E)529	16	17-10	298	5					
△B(E)534	16	4-7	76	5					
△B(E)535	16	3-0	50	5					
B601	7	14-0	147	5	5-4	6-5	2-7		
B602	7	14-11	157	5	5-4	7-4	2-7		
B603	7	15-10	166	5	5-4	8-3	2-7		
B604	34	15-1	710	5	1-5	7-0	7-0		
△B605	34	7-1	362	5	1-5	3-0	3-0		
△B(E)606	34	7-7	387	5	0-11	3-6	3-6		
△B608	9	25-2	340	5	1-2	12-2	12-2		
△B609	9	31-2	421	5	1-2	15-2	15-2		
△B(E)612	18	3-9	101	18	2-5	0-6	0-9		
△B(E)613	2	3-8	11	18	2-5	0-5	0-8		
△B(E)614	2	3-8	11	18	2-5	0-4	0-8		
△B(E)615	2	3-7	11	18	2-5	0-3	0-7		
△B(E)616	8	3-7	43	18	2-5	0-2	0-7		
B801	7	30-0	561	5					
B802	7	10-0	187	5					
B803	12	14-6	465	5					
△B(E)804	18	4-11	236	22					
△TOTAL	ABUTMENT #2	7476	(Includes	1513	Lbs. Epoxy Coated)				
△TOTAL	ABUTMENTS	12892	(Includes	2735	Lbs. Epoxy Coated)				

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
		SUPERSTRUCTURE							
		PART 1							
△S(E)401	368	30-0	7375	5					
△S(E)402	46	26-2	804	5					
△S(E)403	74	31-0	1532	5					
△S(E)404	37	27-0	667	5					
△S(E)501	272	30-0	8511	5					
△S(E)502	34	28-10	1023	5					
△X(E)501	388	2-5	978	5	0-10½	1-8	0-0		
△X(E)502	388	3-3	1315	17	0-11½				
△X(E)503	388	5-3	2125	19					
△X(E)504	72	14-9	1108	5					
△X(E)505	112	7-2	837	5					
△X(E)506	8	14-4	120	5					
△S(E)601	802	29-2	35,135	5					
△S(E)602	52	9-7 to 26-7	1412	5	4 Sets of 13. Vary by 1-5				
△S(E)603	20	3-0 to 7-0	150	5	4 Sets of 5. Vary by 1-0				
		PART 2							
△S(E)411	690	30-0	13,828	5					
△S(E)412	46	24-2	743	5					
△S(E)413	148	30-0	2,966	5					
△S(E)414	148	14-10	1466	5					
△S(E)415	37	19-0	470	5					
△S(E)511	510	30-0	15,958	5					
△S(E)512	34	29-2	1034	5					
△X(E)501	719	2-5	1812	5	0-10½	1-8	0-0		
△X(E)502	719	3-3	2437	17	0-11½				
△X(E)503	719	5-3	3937	19					
△X(E)513	88	15-7	1430	5					
△X(E)514	192	6-8	1335	5					
△X(E)515	4	14-7	61	5					
△X(E)516	52	15-6	841	5					
△S(E)611	1520	29-2	66,589	5					
△S(E)612	26	9-4 to 26-4	696	5	2 Sets of 13. Vary by 1-5				
△S(E)613	8	7-10 to 3-10	70	5	2 Sets of 4. Vary by 1-0				
△S(E)614	48	9-3 to 27-0	1307	5	2 Sets of 24. Vary by 0-9¼				
△S(E)615	12	2-6 to 8-6	99	5	2 Sets of 6. Vary by 1-0				
△TOTAL	SUPERSTR.	180171							

△ NOTES

Refer to CMS Sections 106.03, 700, 709.01 thru 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structures by the additional steel, spliced in accordance with 509.08.

"(E)" denotes epoxy coated reinforcing bar.

Substructure bars not revised by Bolke (△) shall have a min. lap of 30 bar diameters.

20/20

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

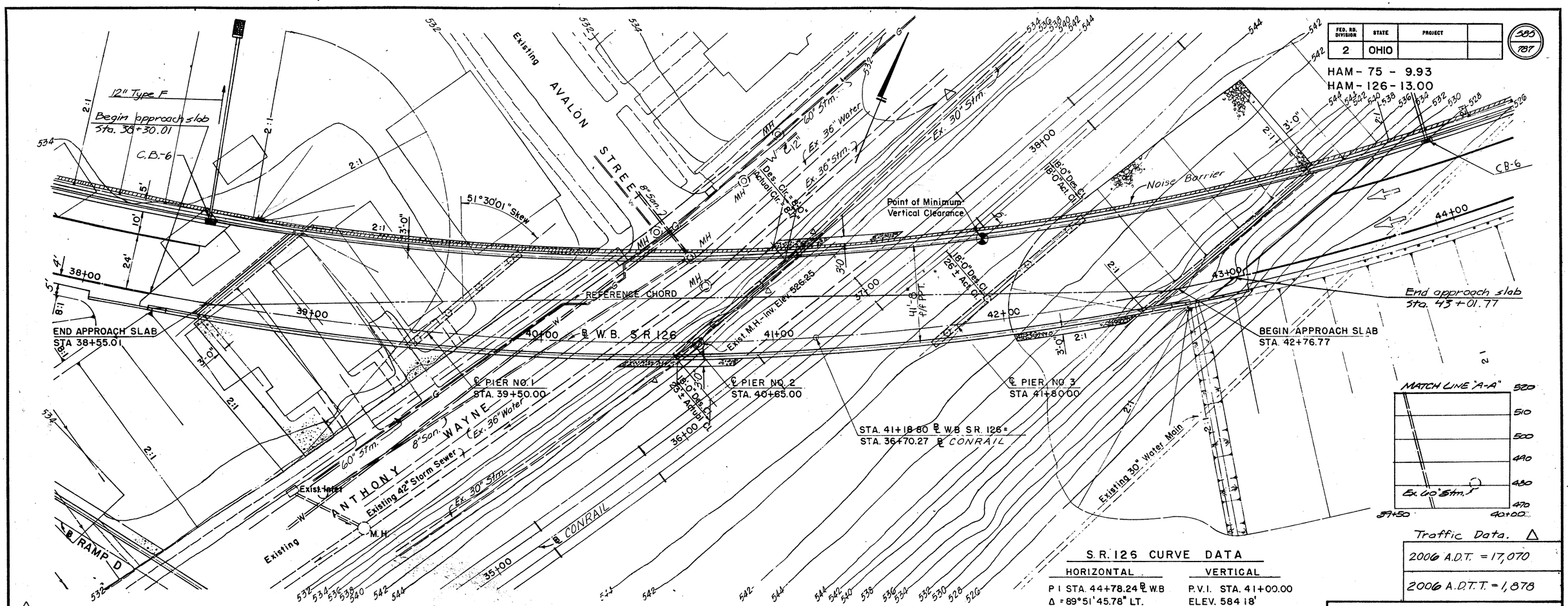
REINFORCING STEEL LIST
BRIDGE NO. HAM-126-RAMP D
RAMP D OVER
ANTHONY WAYNE, PENN CENTRAL, I-75, & RAMP D
HAMILTON COUNTY
STA. 37+97.87
STA. 45+11.98

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
S.S.C.	S.S.C.	L.B.F.	J.R.P	[illegible]	6-4-71	△ BOLKE ENGRS. 11/85

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

585
787

HAM - 75 - 9.93
HAM - 126 - 13.00



Traffic Data. △

2006 A.D.T. = 17,070

2006 A.D.T.T. = 1,878

S.R. 126 CURVE DATA

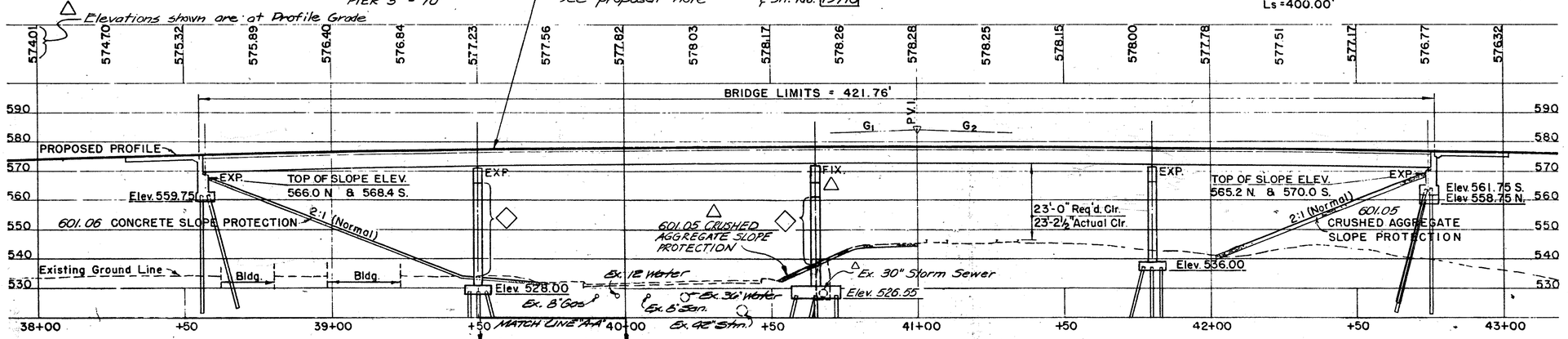
HORIZONTAL	VERTICAL
P I STA. 44+78.24 ℄ W.B	P.V.I. STA. 41+00.00
Δ = 89°51'45.78" LT.	ELEV. 584.18'
D = 5°00'00"	L = 700.00'
R = 1145.92'	G1 = +3.35%
T = 1348.77'	G2 = −3.39%
Lc = 1397.25'	
Ls = 400.00'	

△ ALL PIER 2 PILES ARE 14" DIAMETER, CAST-IN-PLACE, REINFORCED CONCRETE PILES.
ALL OTHER PILES ARE 12" DIAMETER, CAST-IN-PLACE, REINFORCED CONCRETE PILES. THE ESTIMATED AVERAGE PAY-LENGTHS ARE: ABUTMENT NO. 1 - 40' PIER 1 - 65'
ABUTMENT NO. 2 - 40' PIER 2 - 75'
PIER 3 - 70'

PLAN

EARTHWORK LIMITS SHOWN ARE APPROXIMATE △
ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

△ Seal concrete surfaces of parapets
See proposal note & Sh. No. 15/18



PROFILE
ALONG ℄ W.B.

△ ◇ Seal concrete surfaces of columns (stem) of piers 1 & 2 (See proposal note)

PROPOSED STRUCTURE

TYPE: Continuous plate girder with reinforced concrete deck & substructures.

SPANS: 92.00', 115.00', 115.00', & 92.00'.

ROADWAY: 41'-8" face to face of parapets.

△ LOADING: HS-20-44 Case I & Alternate Military Loading.

SKEW: 51°30'01" L.F. with reference chord.

△ WEARING SURFACE: 1¼" Latex modified concrete overlay.

APPROACH SLABS: AS-1-81 (25' long).

ALIGNMENT: 5°00'00" curve left.

SUPERELEVATION: 0.0833 ft per ft

1/18

VOGT, IVERS, & ASSOCIATES
ENGINEERS CINCINNATI ARCHITECTS CHICAGO

SITE PLAN.

BRIDGE NO. HAM-126-1330
WEST BOUND S.R. 126 OVER
EXIST. ANTHONY WAYNE & CONRAIL
HAMILTON COUNTY STA. 38+55.01 to STA. 42+76.77

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISIONS
AERIAL	G.W.M.	V.K.	D.W.M.	J.R.P.	[illegible]

FED. NO. DIVISION	STATE	PROJECT	
2	OHIO		

HAM - 75 - 9.93
HAM - 126 - 13.00

(286 TOT)

ITEM 506 Static Load Test As Per Plan: Prior to installation of any piles of the proposed structure, the contractor shall conduct a static load test on an initially installed pile located in or near a Pier No. 2 footing. The installed length of the pile to be load tested shall not be more than the plan estimated pay length.

REFERENCE SHALL BE MADE TO THE FOLLOWING:

STANDARD DRAWINGS:

AS-1-81	DATED 11-27-81
BR-1	DATED 5-29-79
SD-1-69	DATED 6-12-69
~~RB-1-55~~	~~DATED 2-2-59~~

SUPPLEMENTAL SPECIFICATIONS:

836	DATED 11-12-85
824	DATED 10-8-82
845	DATED 2-25-86
953	DATED 8-21-80

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, 1983, INCLUDING THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:

DESIGN LOADING: HS 20-44, CASE I AND THE ALTERNATE MILITARY LOADING.

DESIGN STRESSES:

CONCRETE, CLASS S — COMPRESSIVE STRENGTH: 4500 PSI (SUPERSTRUCTURE)

CONCRETE, CLASS C — UNIT STRESS: 1333 PSI (SUBSTRUCTURE)

REINFORCING STEEL — ASTM A615, A616, A617, GRADE 60, MINIMUM YIELD STRENGTH: 60,000 PSI. (SUPERSTRUCTURE)

STRUCTURAL STEEL — ASTM A36, UNIT STRESS: 20,000 PSI

DECK PROTECTION METHOD — EPOXY COATED REINFORCING STEEL WITH 3" CONCRETE COVER OF WHICH 1-1/4" IS A LATEX MODIFIED CONCRETE OVERLAY.

BOLTS — 7/8" DIAMETER HIGH STRENGTH STEEL BOLTS CONFORMING TO ASTM A325 UNLESS OTHERWISE NOTED.

CONTRACTOR MUST WAIT 30 DAYS AFTER PLACING FILL BEFORE CONSTRUCTING ABUTMENTS.

The design load for the Abutments Piles is 35 Tons/Pile.
The design load for the Piles in Piers 1 & 3 is 45 Tons/Pile.
The design load for the Piles in Pier 2 is 70 Tons/Pile.

Utility Lines:
All expense involved in relocating the affected utility lines shall be borne by the owners. The contractor and owners are requested to cooperate by arranging their work in such a manner that inconvenience to either would be held to a minimum.

Construction clearance of 20 feet vertically above the top of the railroad rails and 8 feet horizontally from the center of tracks shall be maintained at all times.

REINFORCING STEEL — ASTM A615, A616, A617, GRADE 60
UNIT STRESS: 24,000 PSI
SPIRAL REINFORCEMENT MAY BE PLAIN BARS A82 OR A615
(SUBSTRUCTURE)
Substructure Reinforcing Bars not revised by Balke (Δ) shall have a minimum lap of 30 Bar Diameters.

ITEM 511: CLASS S CONCRETE, SUPERSTRUCTURE, USING SHRINKAGE COMPENSATING CEMENT, 701.08.

THE FOLLOWING RESTRICTIONS SHALL APPLY TO THE SUPERSTRUCTURE CONCRETE USING SHRINKAGE COMPENSATING CEMENT, 701.08.

1. CEMENT SHALL BE EXPANSIVE HYDRAULIC CEMENT, ASTM C845, TYPE K.
2. THE MAXIMUM WATER/CEMENT RATIO GIVEN FOR CLASS S CONCRETE IN 499.03 SHALL BE REVISED FROM 0.44 TO 0.50.
3. MAXIMUM SLUMP AT THE TIME AND PLACE OF CONCRETE PLACEMENT SHALL BE 6 INCHES.
4. CHEMICAL ADMIXTURES, WHEN REQUIRED BY 511.06, SHALL BE LIMITED TO 705.12 TYPE D.
5. MAXIMUM AMBIENT TEMPERATURE AT TIME OF PLACEMENT OF CONCRETE SHALL BE 80° F.
6. MEMBRANE CURING PER SS836 WILL NOT BE PERMITTED FOR ANY CONCRETE PLACED BETWEEN SEPTEMBER 1 AND MARCH 31. SUCH CONCRETE SHALL BE CURED BY METHOD (A) WATER CURING.
7. IF REQUIRED BY THE ENGINEER, THE SURFACE OF THE CONCRETE SHALL BE GIVEN A FOG SPRAY OF WATER. THIS MAY BE REQUIRED PRIOR TO EITHER WATER CURING OR MEMBRANE CURING IF WEATHER CONDITIONS DICTATE. EQUIPMENT SHALL BE ON HAND.

ESTIMATED QUANTITIES

	ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	PIERS	ABUT.	GEN.	AS BUILT	
	503	Lump	Sum	Cofferdams, cribs and sheeting				Lump		
Δ	503	1133	Cu. Yd.	Unclassified excavation		557	576			
Δ	505	Lump	Sum	Pile driving equipment mobilization.				Lump		
Δ	506	Lump	Sum	Static load test, as per plan		Lump				
Δ	507	6900	Lin. Ft.	12" cast-in-place, reinforced concrete piles, as per Plan.		4860	2040			
Δ	507	2250	Lin. Ft.	14" cast-in-place, reinforced concrete piles, as per Plan.		2250				
Δ	509	99,886	Lb.	Reinforcing steel, grade 60		79,655	20231			
Δ	511	555	Cu. Yd.	Class S concrete, superstructure	555					
Δ	511	226	Cu. Yd.	Class C concrete, abutments above footing			226			
Δ	511	292	Cu. Yd.	Class C concrete, piers above footing		292				
Δ	511	308	Cu. Yd.	Class C concrete, footings		166	142			
Δ	*511	555	Cu. Yd.	Class S concrete, superstruture using shrinkage compensating cement 701.08	555					
Δ	516	11	Lin. Ft.	PVC Waterstop			11			
Δ	513	651,600	Lb.	Structural steel (AISC Category III) (See Proposal Note)	651,600					
Δ	514	651,600	Lb.	Field painting of new structural steel, System A	651,600					
	516	29	Sq. Ft.	1/2" Preformed expansion joint filler			29			
	516	20	Sq. Ft.	1" Preformed expansion joint filler			20			
Δ	516	153	Lin. Ft.	Structural expansion joints, including Elastomeric Strip Seals.	153					
	518	138	Cu. Yd.	Porous backfill			138			
Δ	518	152	Lin. Ft.	6", perforated, helical, corrugated steel pipe, 707.01			152			
Δ	518	123	Lin. Ft.	6", non-perforated, helical, corrugated steel pipe, including specials, 707.01			123			
Δ	525	6	Hour	Dynamic load test				6		
Δ	601	1295	Sq. Yd.	Crushed aggregate slope protection			1295			
	601	1025	Sq. Yd.	Concrete slope protection			1025			
Δ	824	165,818	Lb.	Epoxy coated reinforcing steel, Grade 60.	160,953		4865			
Δ	845	1922	Sq. Yd.	Latex modified concrete overlay (1 1/4" Thick) (See Proposal Note)	1922					
Δ	Special	1343	Sq. Yd.	Sealing of concrete surfaces (See proposal note)	973	276	94			
	Special			Noise Borrier (quantities are included in roadway plans, see Roadway quantities).						

Computed by: J.R.P. Date: .12, 1971
Checked by: S.S.C. Date: 5.12, 1971

REVISED BY: BJS 11-4-85
CHECKED BY: SJA 11-25-85

Δ * Alternate Bid Item.

ITEM 507 - 12" AND 14" DIAMETER CAST-IN-PLACE REINFORCED CONCRETE PILES, AS PER PLAN:

"PILE WALL THICKNESS:
The responsibility of choosing and providing a satisfactory pile wall thickness for this project shall be borne by the Contractor except that the pile wall thickness shall not be less than 0.22 inches. If a pile wall thickness greater than 0.22 inches is necessary to resist the pile installation driving stress, the contractor shall make this determination and shall furnish a pile with an acceptable wall thickness. Monotube piles are not required to comply with the above specified minimum pile wall thickness. If monotube piles are used, the contractor is responsible for providing a monotube pile with a wall thickness that will conform to all applicable requirements of 507."

PILE DRIVING CONSTRAINTS: PRIOR TO DRIVING PILES AT THE ABUTMENTS, PIER NO. 1 AND PIER NO. 3, THE SPILL-THRU SLOPE EMBANKMENT SHALL BE CONSTRUCTED UP TO THE LEVEL OF THE SUBGRADE FOR A MINIMUM DISTANCE OF 200 FEET BEHIND THE ABUTMENTS. THE EXCAVATION FOR THE FOOTINGS OF THE ABUTMENTS, PIER NO. 1, PIER NO. 3 AND THE INSTALLATION OF THE PILES SHALL NOT BEGIN UNTIL AFTER THE ABOVE REQUIRED EMBANKMENT HAS BEEN CONSTRUCTED AND THE EMBANKMENT HAS EXPERIENCED A WAITING PERIOD OF 60 DAYS. THE DIRECTOR MAY SHORTEN THE WAITING PERIOD IF THE CONTRACTOR'S FIELD MEASUREMENTS INDICATE THAT 90 PERCENT CONSOLIDATION HAS BEEN ATTAINED.

PILE HAMMER: THE PILE HAMMER USED TO INSTALL THE CAST-IN-PLACE REINFORCED CONCRETE PILES SHALL HAVE A STATE ENERGY RATING OF NOT LESS THAN 18,000 FOOT-POUNDS. THIS REQUIREMENT DOES NOT RELIEVE THE CONTRACTOR FROM 108.05 WHICH STATES THAT THE CONTRACTOR IS TO PROVIDE SUFFICIENT EQUIPMENT FOR PROSECUTING THE REQUIRED WORK. REFER TO "ODOT MANUAL OF PROCEDURES FOR STRUCTURES" TO OBTAIN THE STATE'S ENERGY RATING.

2/18

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

GENERAL NOTES & ESTIMATED QUANTITIES

BRIDGE NO. HAM-126-1330
WEST BOUND S.R. 126 OVER
EXIST. ANTHONY WAYNE & CONRAIL
HAMILTON COUNTY STA. 38+55.01 to STA. 42+76.77

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	Δ REVISED DATE
J.R.P.	D.W.M	—	S.S.C.	[illegible]	5.14.71	Δ DATE July 21, 86

CALC. BY		OHIO	5864
DATE		FHWA REGION 5	787
CHKD. BY			
DATE			

HAM-75-9.93
HAM-126-13.00

GENERAL NOTES
PLAN REVISIONS BY BALKE ENGINEERS

REVISIONS WERE MADE TO SUBSTRUCTURE DRAWINGS TO INCORPORATE THE FOLLOWING:

- o REVISE PARAPETS TO STANDARD SAFETY PARAPET SHAPE.
- o PROVIDE EPOXY-COATED REINFORCEMENT IN CORROSION-PRONE CONCRETE AREAS.
- o SEAL CONCRETE SURFACES OF PIER COLUMNS.
- o NUMBER PILES AND ADD DETAIL NOTES.
- o REVISE ABUTMENTS TO RECEIVE FULL WIDTH APPROACH SLAB PER AS-1-81.
- o REPLACE SLIDING PLATE EXPANSION JOINTS WITH COMPRESSION OR STRIP SEAL JOINTS AS REQUIRED.
- o LENGTHEN PIER COLUMN TO FOOTING DOWELS AS REQUIRED BY AASHTO.

AT THE REQUEST OF THE OHIO DEPARTMENT OF TRANSPORTATION, ALL SUBSTRUCTURE REINFORCEMENT IS TO BE GRADE 60.

REVISIONS MADE BY BALKE ENGINEERS ARE DENOTED BY (△) SYMBOL.

OTHER THAN NOTED REVISIONS, SUBSTRUCTURES ARE THE DESIGN AND DETAILING OF VOGT, IVERS, AND ASSOCIATES, INC.

ANALYSIS OF THE ORIGINAL SUPERSTRUCTURE DESIGN HAS BEEN COMPARED TO THE REVISED SUPERSTRUCTURE DESIGN TO ASSURE THAT LOADINGS HAVE NOT INCREASED ON SUBSTRUCTURES PROVIDED BY VOGT, IVERS AND ASSOCIATES, INC. DESIGN OF THESE SUBSTRUCTURES REMAINS THE RESPONSIBILITY OF VOGT, IVERS, AND ASSOCIATES.

REVISED SUPERSTRUCTURE DESIGN AND DETAILING WAS PREPARED TO CONFORM WITH UPDATED DESIGN STANDARDS.

DESIGN AND DETAILING BY BALKE ENGINEERS WAS PERFORMED IN ACCORDANCE WITH THE AASHTO SPECIFICATIONS FOR HIGHWAY BRIDGES, THIRTEENTH EDITION, 1983, AASHTO INTERIM SPECIFICATIONS FOR BRIDGES 1984, AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

OHIO BLUE PRINT 140053

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

2A/18

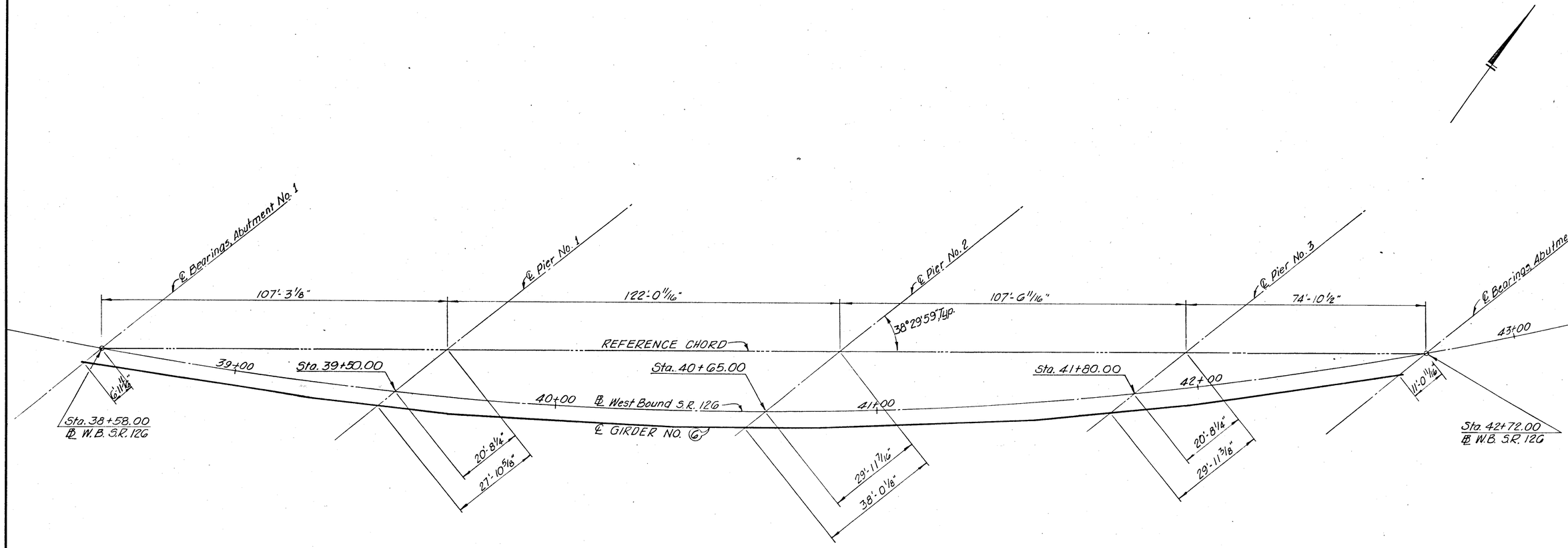
GENERAL NOTES
BRIDGE NO. HAM-126-1330
WEST BOUND S.R. 126 OVER
EXIST. ANTHONY WAYNE & CONRAIL
HAMILTON COUNTY STA. 38+55.01 to STA. 72+76.77

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
SJA	AJS	~	TMB	CRS 3/86	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

387
187

HAM - 75 - 9.93
HAM - 126 - 13.00



GEOMETRIC LAYOUT

3 / 18

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

GEOMETRIC LAYOUT

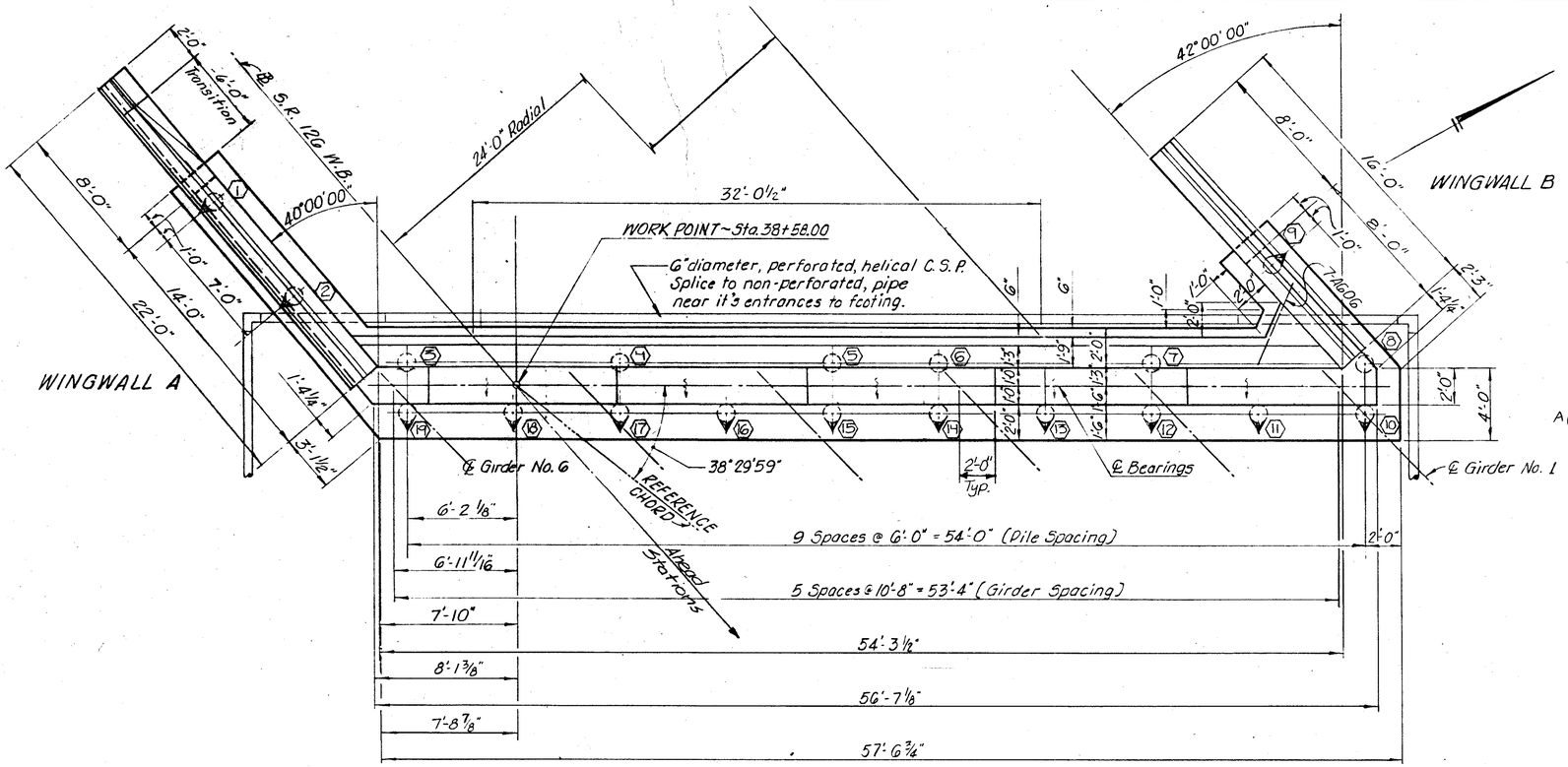
BRIDGE NO. HAM-126-1330
WEST BOUND S.R. 126 OVER
EXIST. ANTHONY WAYNE & CONRAIL.
HAMILTON COUNTY STA. 38+55.01 to STA. 42+76.77

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V. K.	D.W.M	D.W.M	J.R.P.	[illegible] V.	5-14-71	

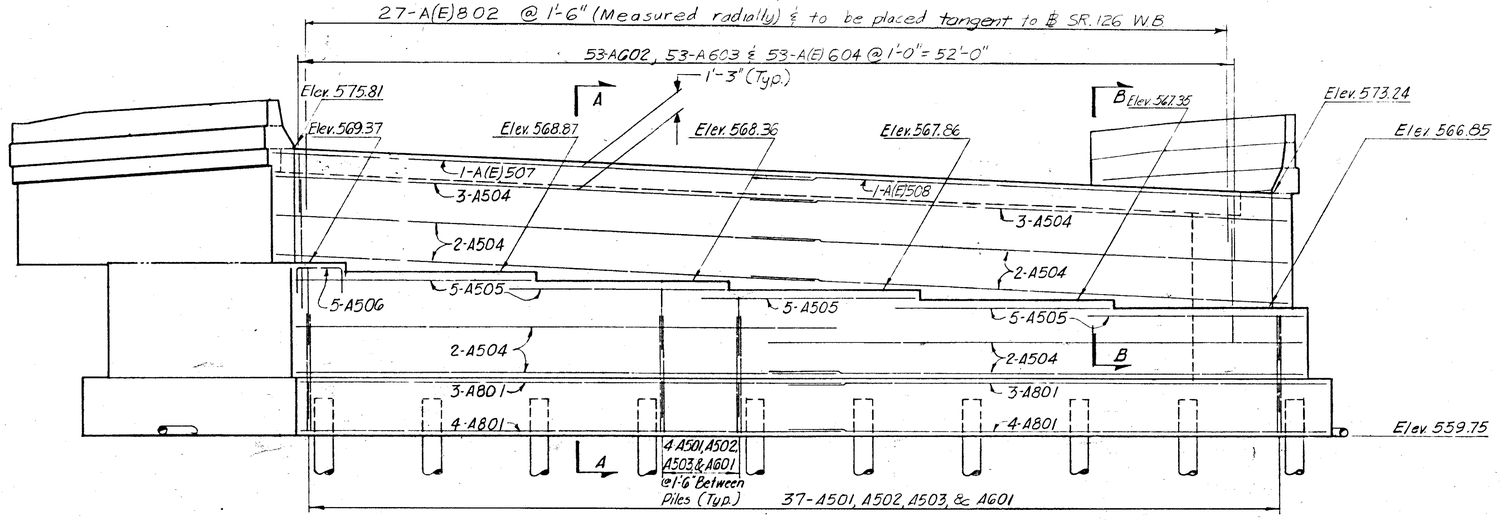
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

588
787

HAM - 75 - 9.93
HAM - 126 - 13.00

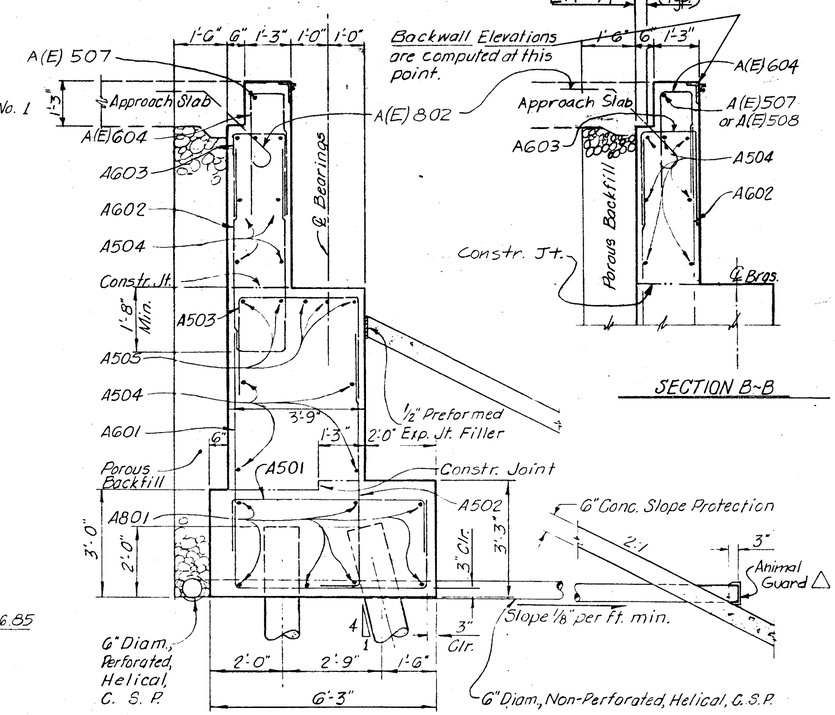


PLAN



ELEVATION

DETAIL C



SECTION B-B

SECTION A-A

NOTES:

For wing wall A & B details, & additional notes, see sheet 7/18.

△ "E" denotes epoxy coated reinforcing bar.

△ ⬡ = Pile Number

4/18

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

ABUTMENT NO. 1

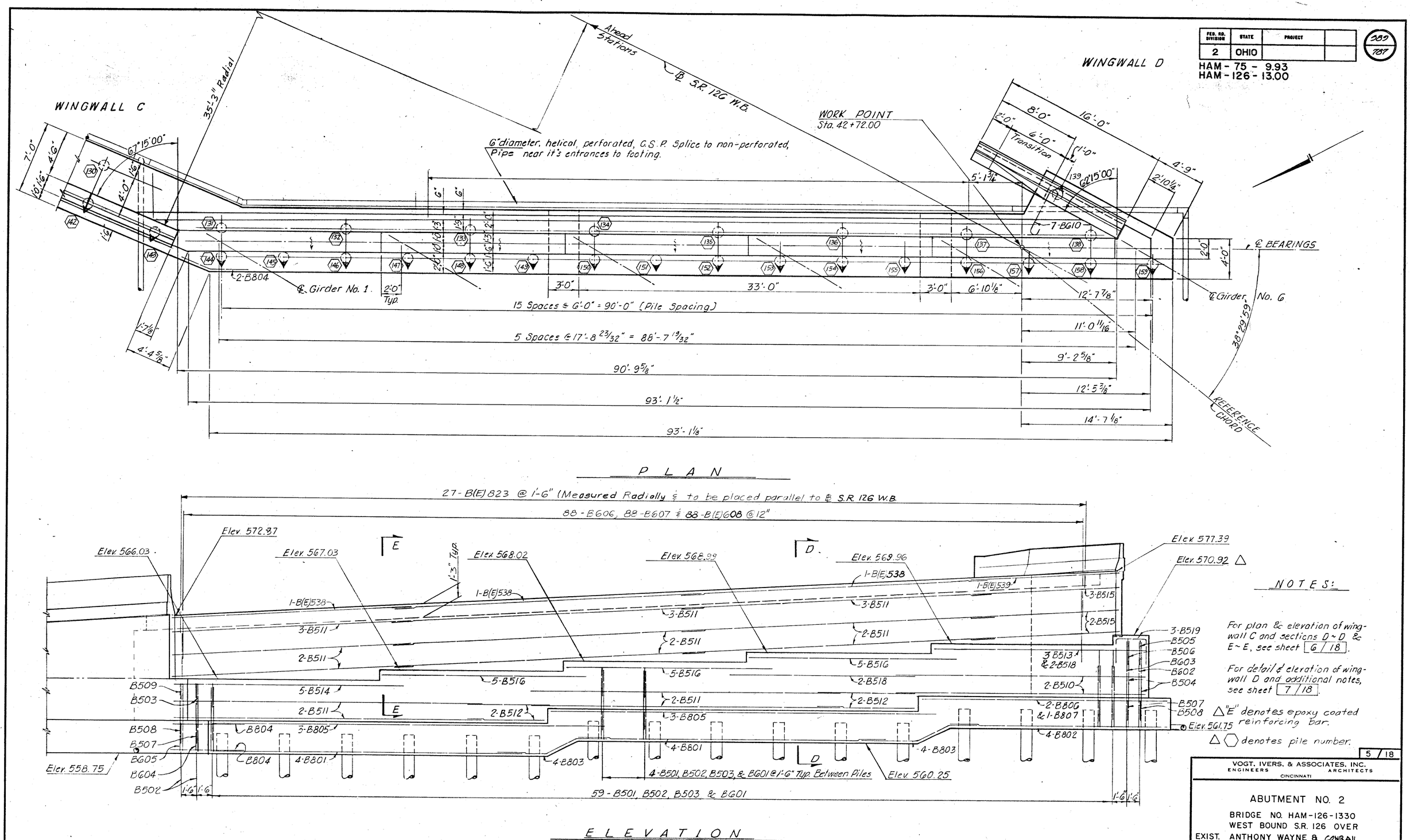
BRIDGE NO. HAM-126-1330
WEST BOUND S.R. 126 OVER
EXIST. ANTHONY WAYNE & CONRAIL
HAMILTON COUNTY STA. 38+55.01 to STA. 42+76.77

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.R.P.	J.R.P.	D.W.M.	S.S.C.	[illegible]	5-14-71	△ BALKE ENG. 11/85

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

HAM - 75 - 9.93
HAM - 126 - 13.00

589
787



NOTES:

For plan & elevation of wing-wall C and sections D~D & E~E, see sheet 6/18.

For detail & elevation of wing-wall D and additional notes, see sheet 7/18.

△ "E" denotes epoxy coated reinforcing bar.

△ ⬡ denotes pile number.

5/18

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

ABUTMENT NO. 2

BRIDGE NO. HAM-126-1330
WEST BOUND S.R. 126 OVER
EXIST. ANTHONY WAYNE & CONRAIL
HAMILTON COUNTY STA. 38+55.01 to STA. 42+76.77

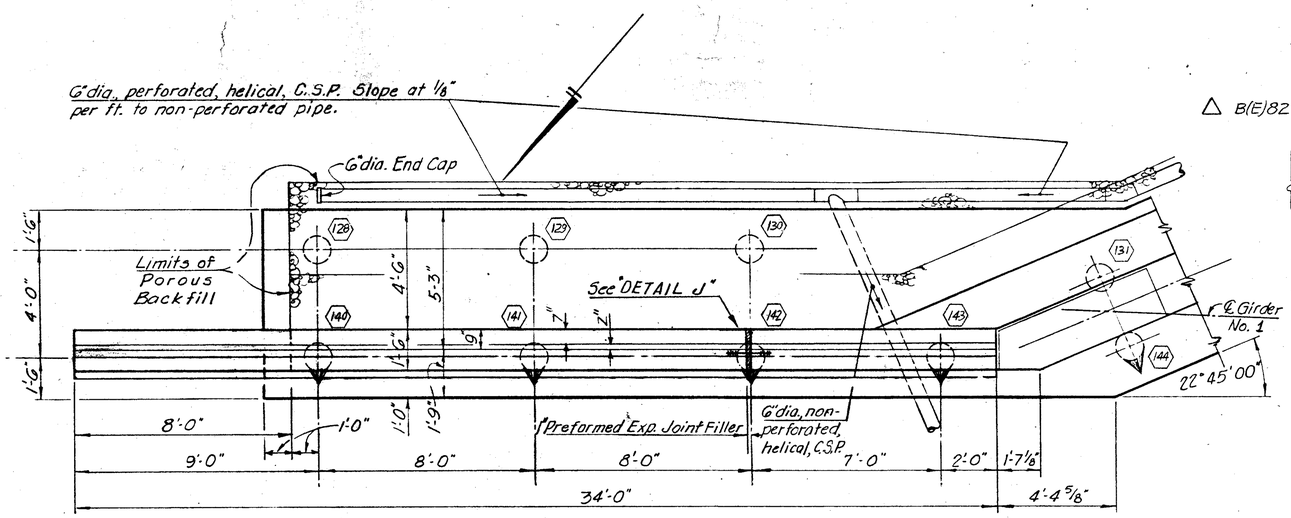
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.R.P.	J.R.P.	D.W.M.	S.S.C.	[illegible]	5-14-71	△ BALKE ENG. 11/85

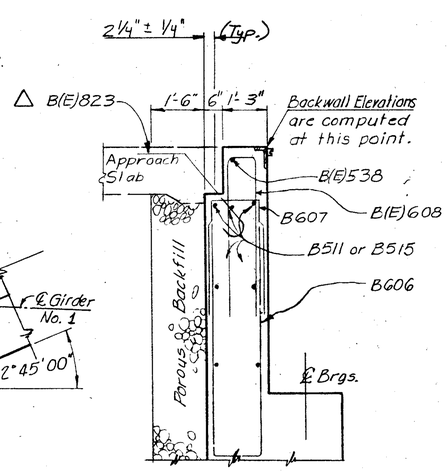
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

HAM - 75 - 9.93
HAM - 126 - 13.00

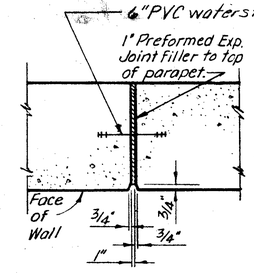
520
787

NOTE:
△ A 6" PVC waterstop shall be centered on the wingwall expansion joint to form a continious water-proof seal. The waterstop shall be capable of accomodating 1½" of joint movement. See detail on Std Drwg ICD-1-82, Sheet 2/6.
△ Place preformed expansion joint filler on each side of the PVC waterstop.

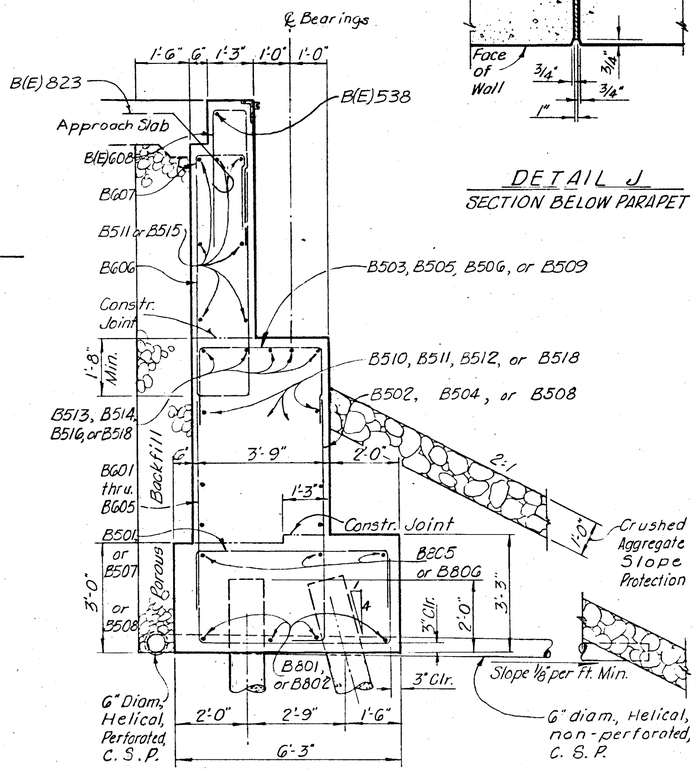




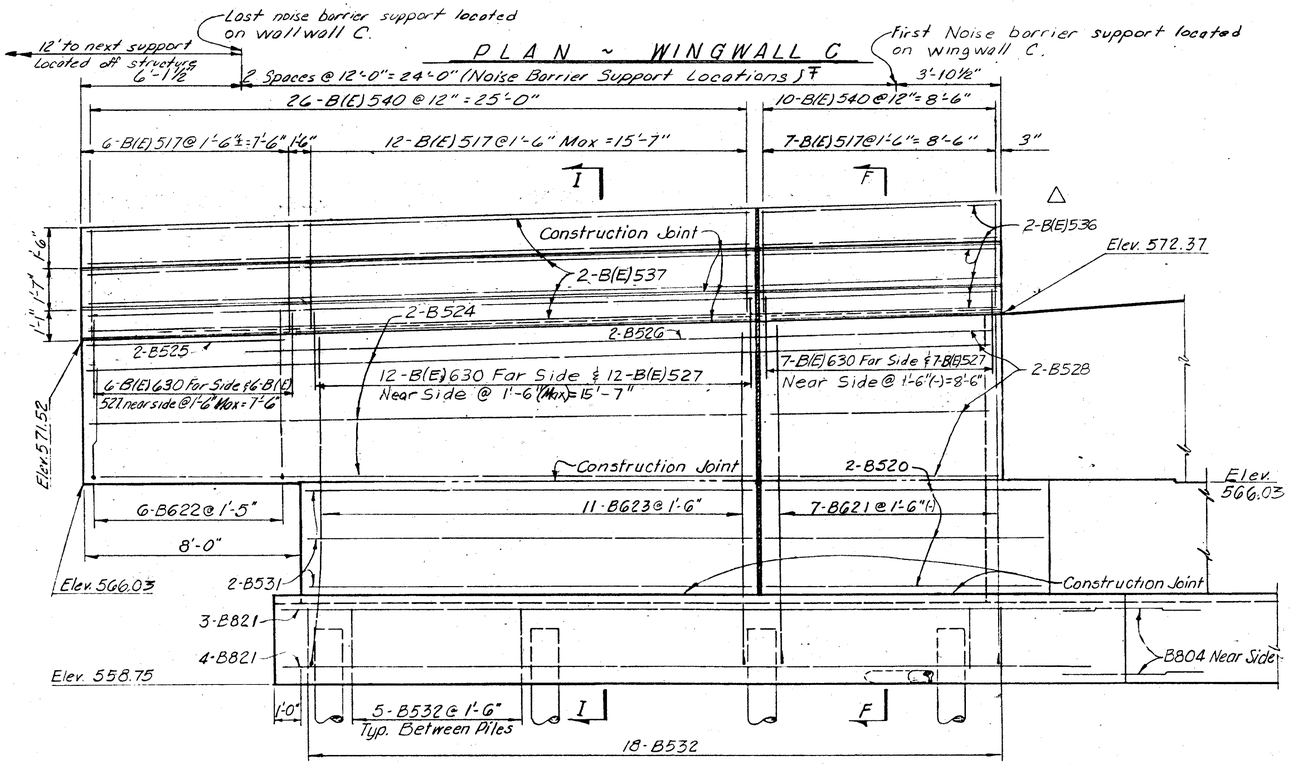
SECTION E ~ E



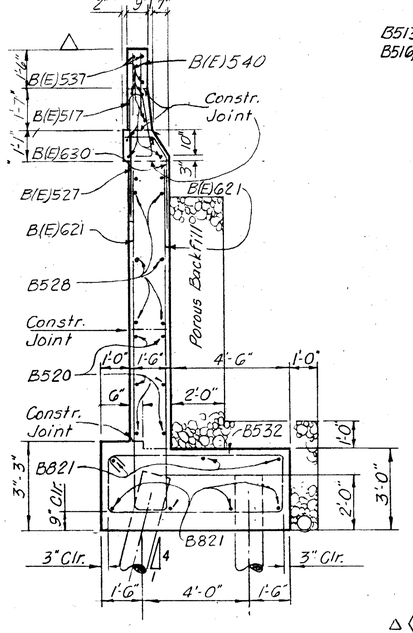
DETAIL J
SECTION BELOW PARAPET



SECTION D~D



ELEVATION ~ WINGWALL C



SECTION F~F
SECTION I~I SIMILAR

NOTE:
△ ⬡ = Pile Number
For location of sections D~D & E~E, see sheet 5/18.
△ "E" denotes epoxy-coated reinforcing bar.
△ For parapet details see standard DWG. BR-1.

F△ For noise barrier support details see sheet 13/18.

6/18

VOGT, IVERS. & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

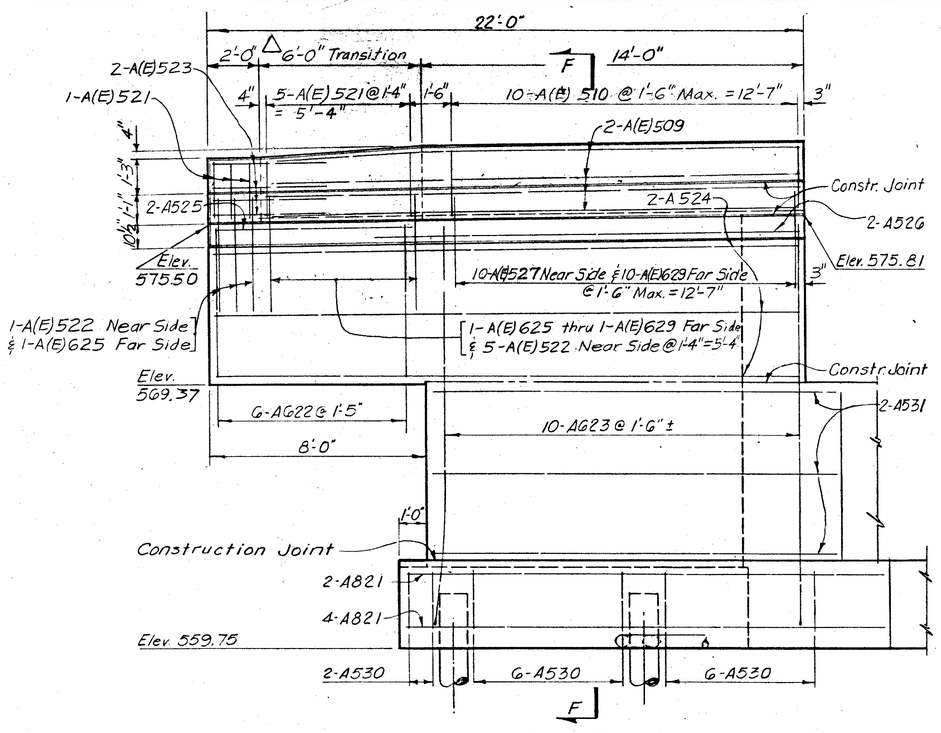
ABUTMENT NO. 2 DETAILS
BRIDGE NO. HAM-126-1330
WEST BOUND S.R. 126 OVER
EXIST. ANTHONY WAYNE & CONRAIL
HAMILTON COUNTY STA. 38+55.01
STA. 42+76.77

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED
J.R.P.	J.R.P.	D.W.M.	S.S.C.	[illegible]	5-14-71	PALME ENG. 11/85

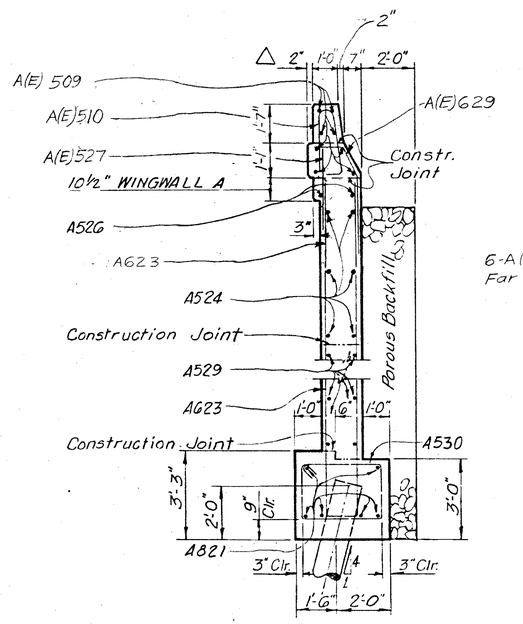
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

391
787

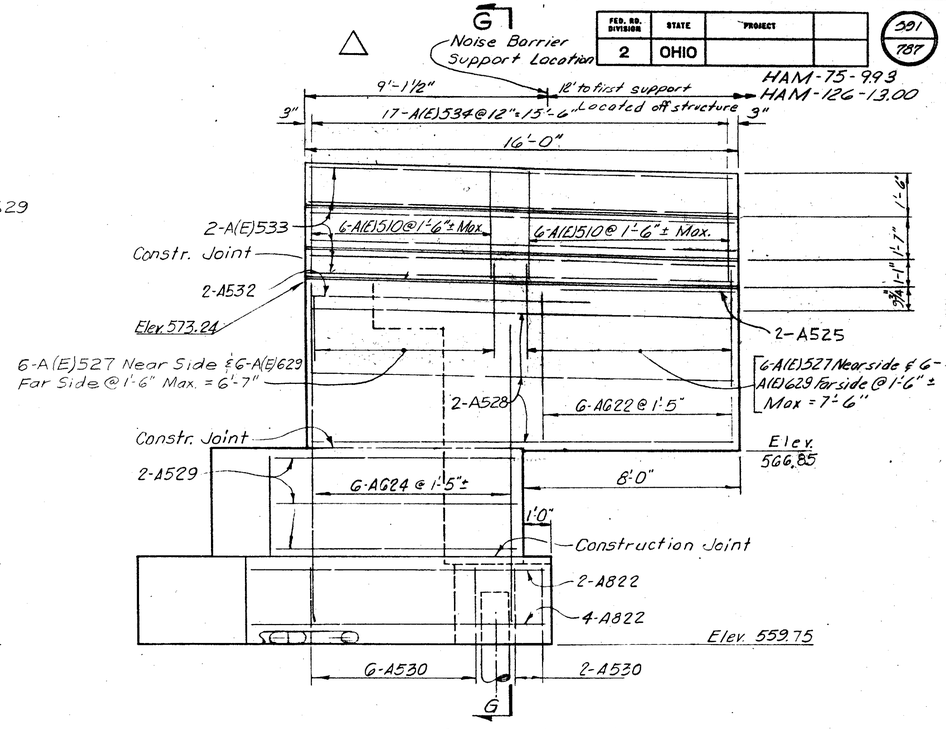
HAM-75-9.93
HAM-126-13.00



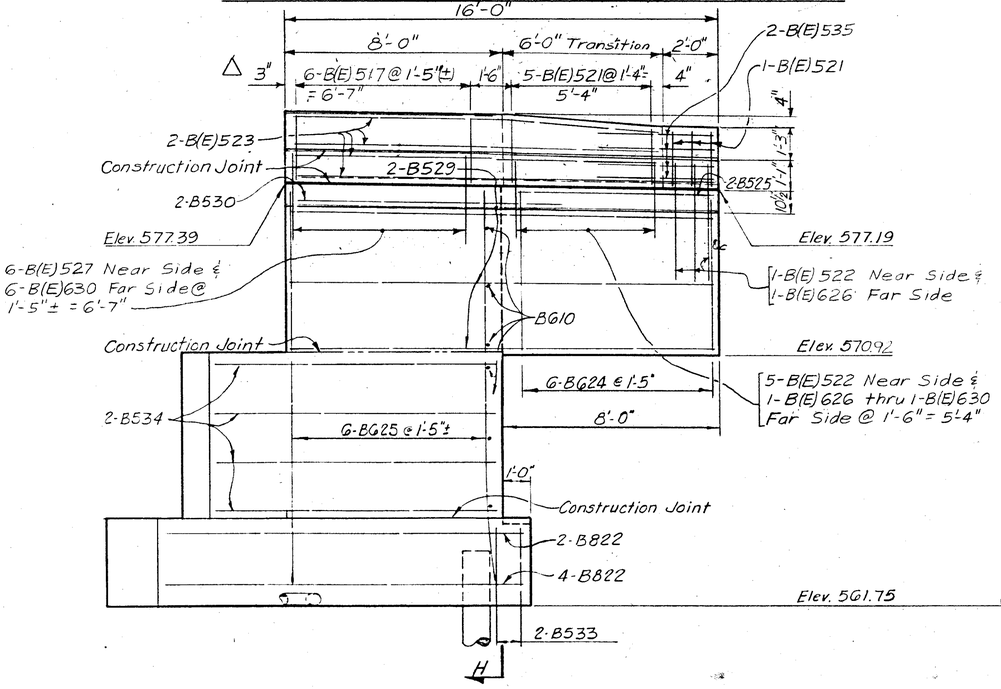
ELEVATION ~ WINGWALL A



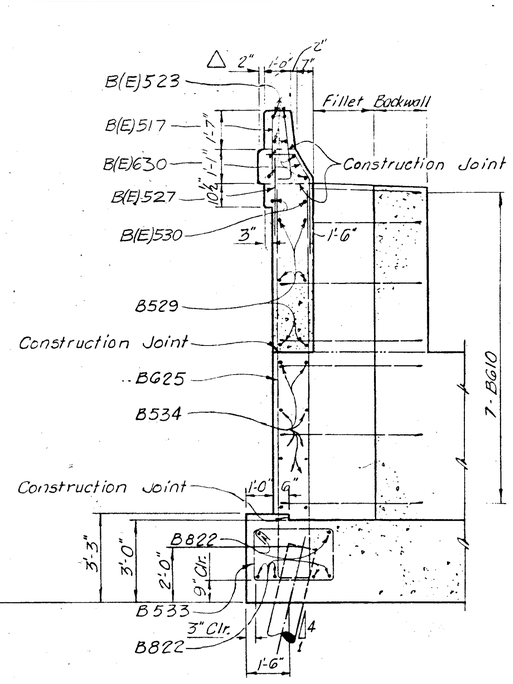
SECTION F~F



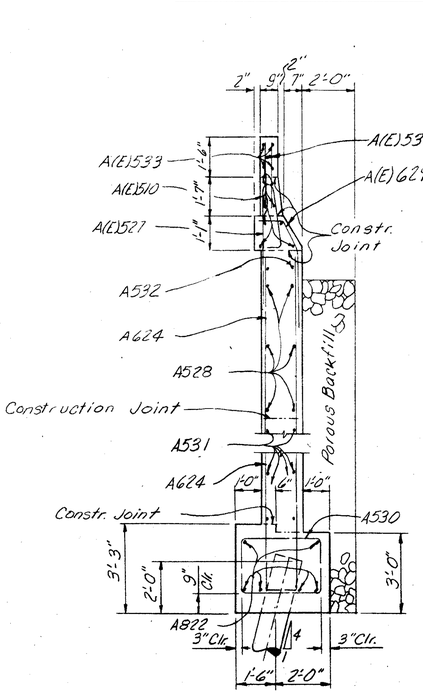
ELEVATION ~ WINGWALL B



ELEVATION ~ WINGWALL D



SECTION H~H



SECTION G~G

NOTES:

△1. For noise barrier support details see sheet 13/18.
2. For plan of wingwalls A & B, see 4/18.
3. For plan of wingwall D see sheet 5/18.
4. Porous backfill, thickness shown, shall extend up to the plane of the subgrade and laterally to ends of the wingwalls.
5. For parapet railing details and notes not shown, see std. Dwg. BR-1.
6. ∨ indicates pile battered 1:4 in the direction of the arrow.
7. "E" denotes epoxy coated reinforcing bar.
8. For additional parapet details, see Std. Dwg. BR-1.

7/18

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

WINGWALL DETAILS

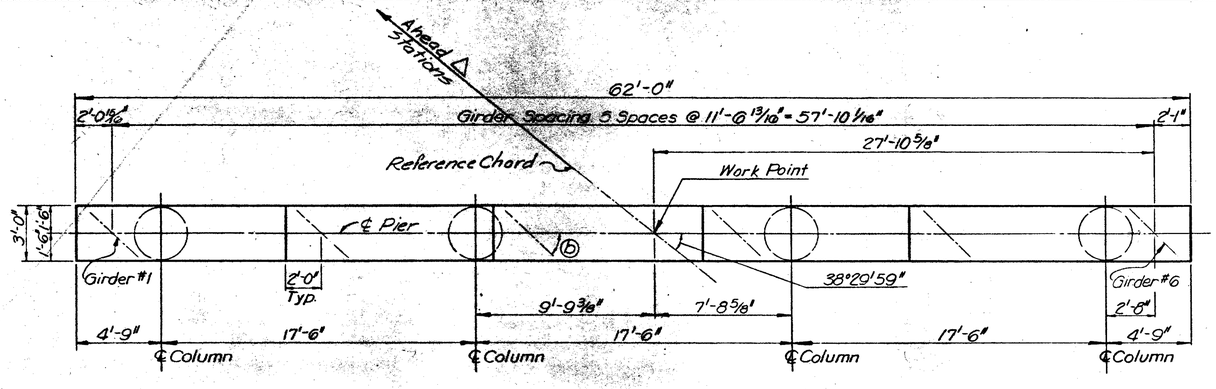
BRIDGE NO. HAM-126-1330
WEST BOUND S.R. 126 OVER
EXIST. ANTHONY WAYNE & CONRAIL
HAMILTON COUNTY STA. 38+55.01 to STA. 42+76.77

DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE	△ REVISED
J.R.P.	J.R.P.	D.W.M.	S.S.C.		5-14-71	BALKE ENG 11/85

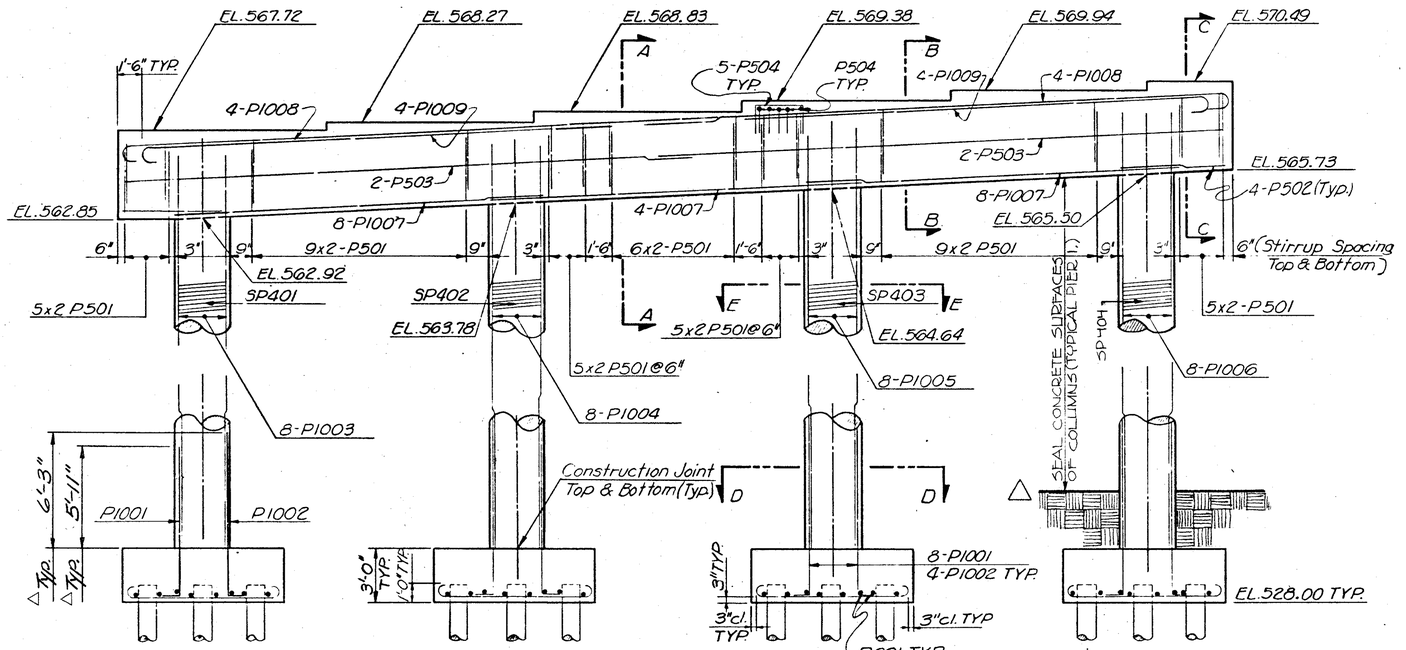
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

392
187

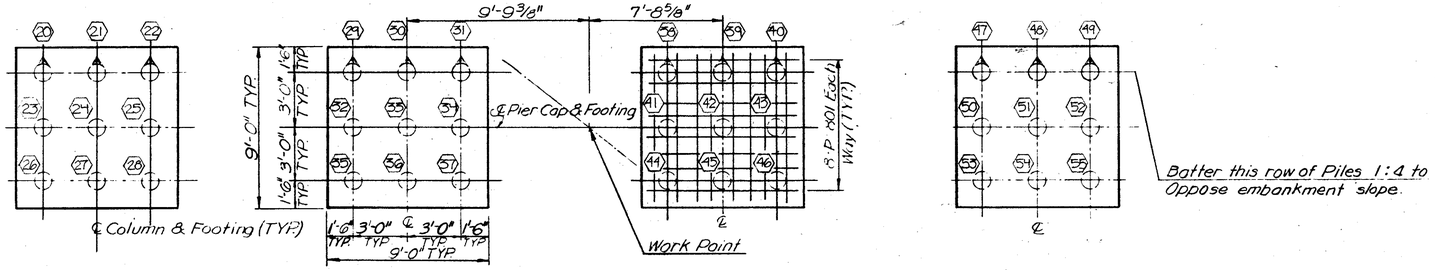
HAM - 75 - 9.93
HAM - 126 - 13.00



CAP PLAN

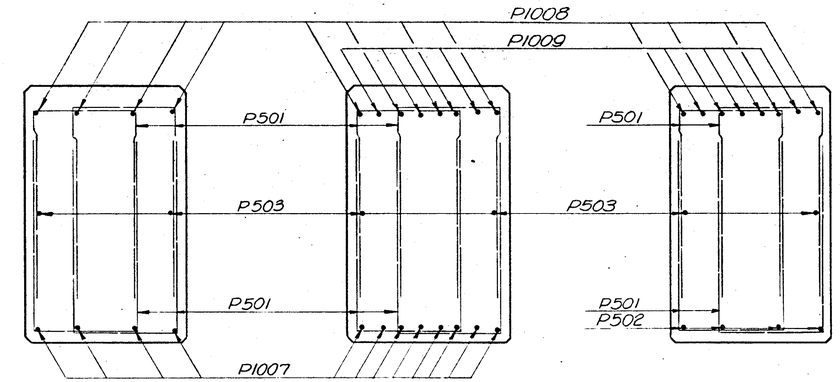


ELEVATION

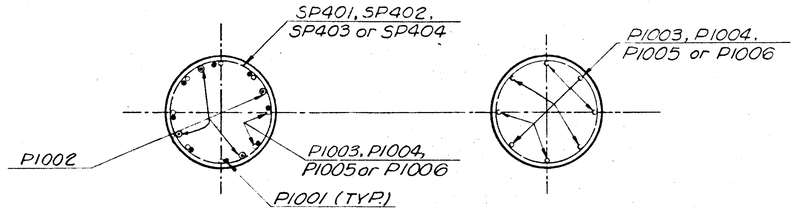


FOOTING PLAN

ANGLE "b"	
Girder #1	42°23'29"
Girder #2	42°48'15"
Girder #3	43°13'21"
Girder #4	43° 38'51"
Girder #5	44° 04'45"
Girder #6	44° 31'04"



SECTION A-A SECTION B-B SECTION C-C



SECTION D-D SECTION E-E

NOTES:
⬡ = Pile Number

8/18

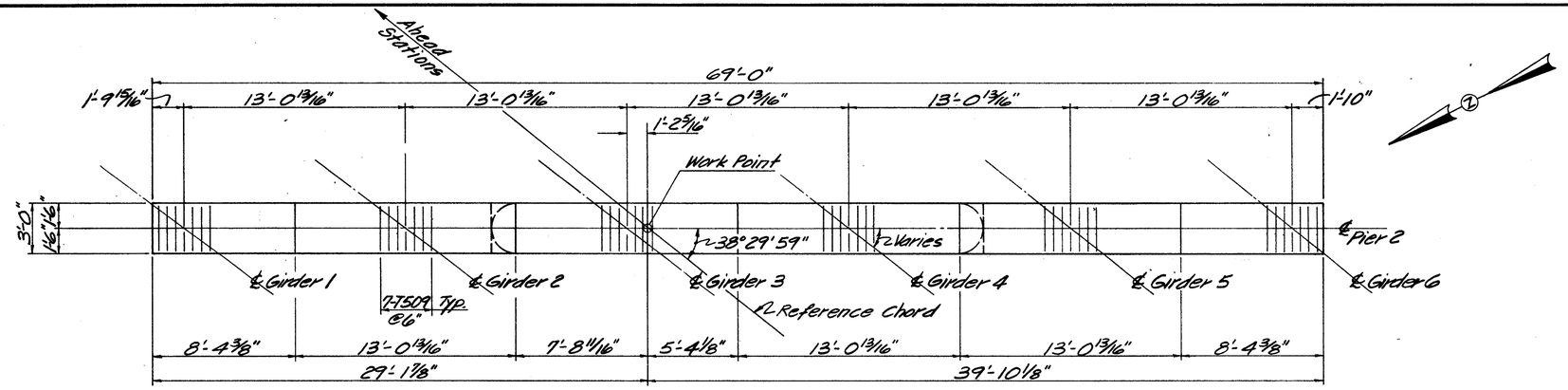
VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

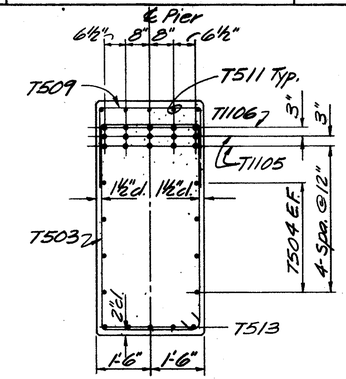
PIER NO. 1

BRIDGE NO. HAM-126-1330
WEST BOUND S.R. 126 OVER
EXIST. ANTHONY WAYNE & CONRAIL
HAMILTON COUNTY STA. 38+55.01 to STA. 42+76.77

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED BALCKE ENG. 11/85
J.R.P.	J.R.P.	T.D.S.	S.S.C.		5-14-71	

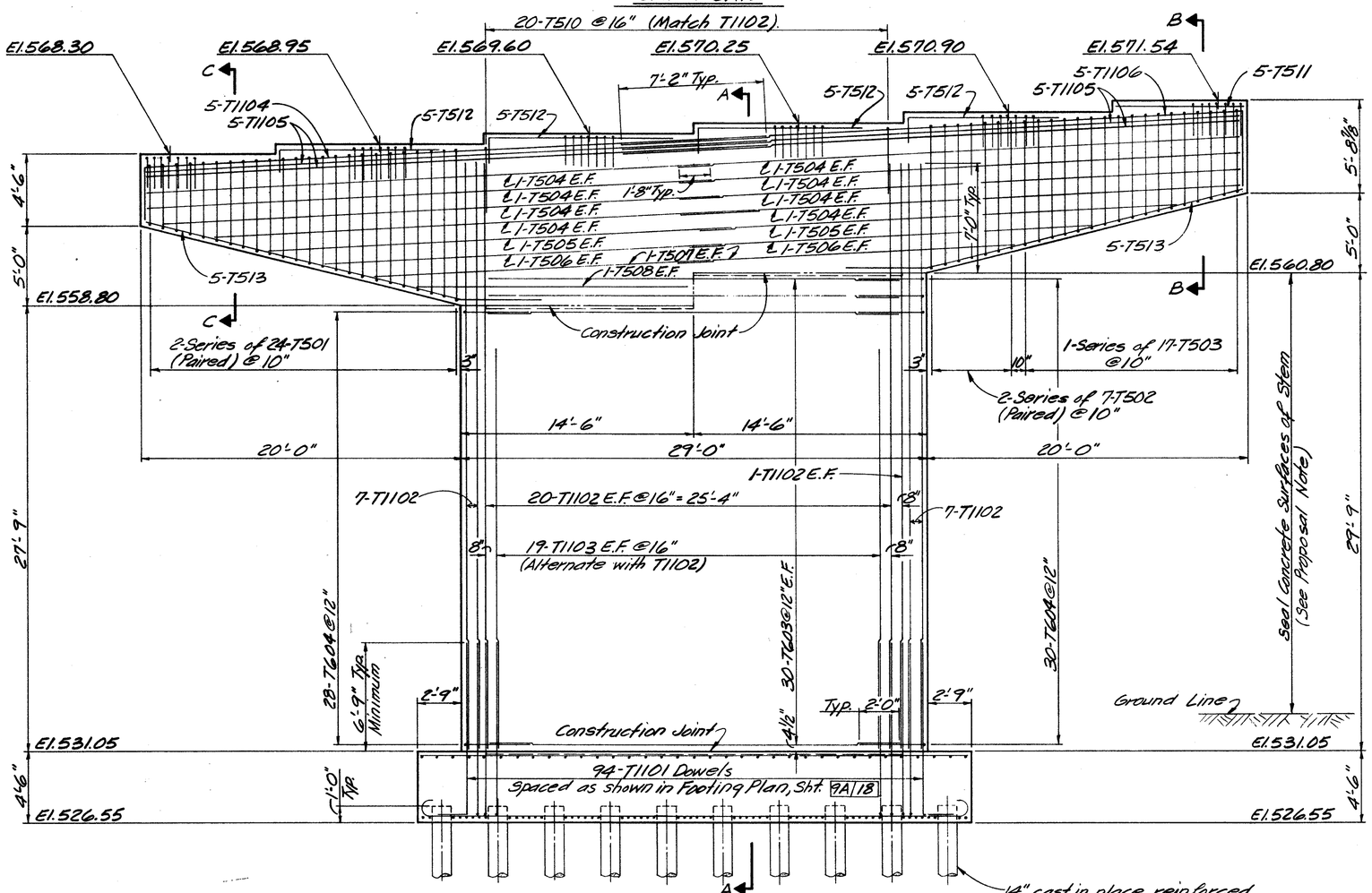
CALC. BY / DATE	HAM-75-9.93 HAM-126-13.00	OHIO FHWA REGION 5	593 787
CHKD. BY / DATE			





SECTION B-B

CAP PLAN



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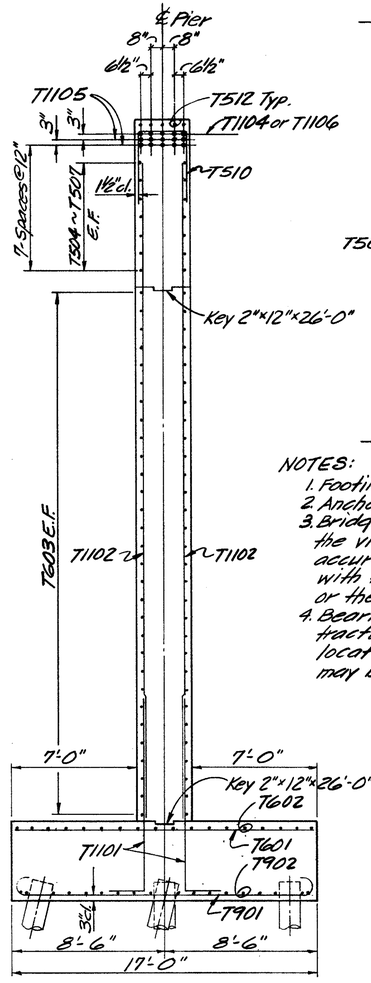
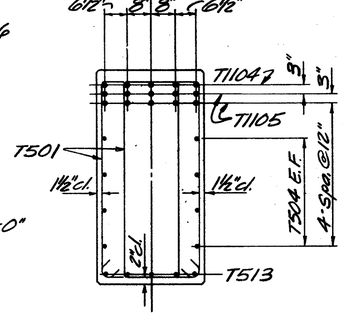


SECTION A-A



SECTION C-C

NOTES:
1. Footing Plan, see Sheet 9A|18.
2. Anchor Bolt Layout, see Sheet 9A|18.
3. Bridge Seat Reinforcing: Reinforcing steel in the vicinity of the bridge seat shall be accurately placed to avoid interference with the drilling of bearing anchor holes or the pre-setting of bearing anchors.
4. Bearing Anchors: At the option of the contractor, bearing anchors (or formed holes), located and supported by templates, may be cast in place.

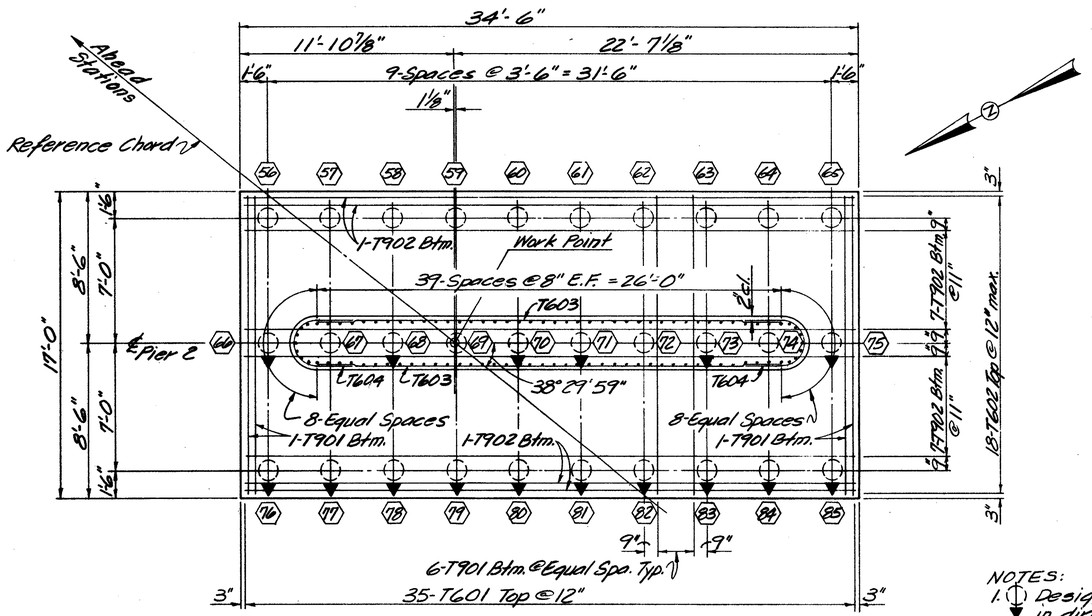
BALKE ENGINEERS 7762 READING ROAD CINCINNATI, OHIO 45237	9|18

PIER 2
BRIDGE NO. HAM-126-1330
WESTBOUND S.R. 126 OVER
EXISTING ANTHONY WAYNE & CONRAIL
HAMILTON COUNTY OHIO
STA. 38+55.01 TO STA. 42+76.97

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	WJH	~	SJA	CRS 6/86	

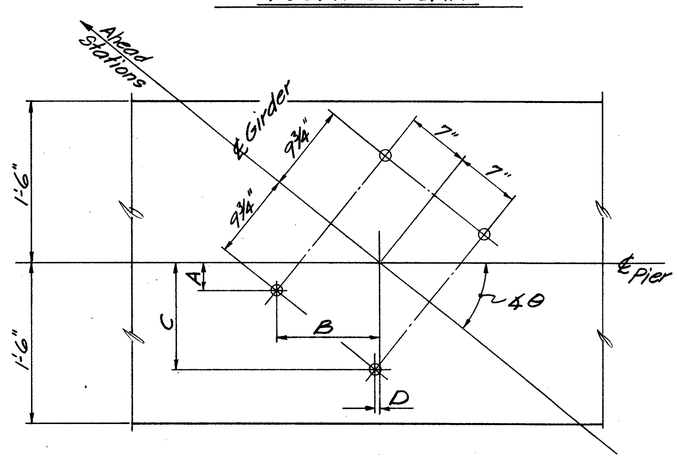
OHIO ELK PRINT 140033

CALC. BY / DATE	HAM-75-9.93	OHIO	593A
CHKD. BY / DATE	HAM-126-13.00	FHWA REGION 5	787



FOOTING PLAN

NOTES:
1. Designates Pile battered 1:4 in direction of arrow
2. Designates Pile Number.
3. All Piles are 14" cast in place reinforced concrete Piles.



GIRDER	∠θ	A	B	C	D
1	36°12'11"	3 3/4"	11 7/16"	1'-0"	0 1/8"
2	36°42'10"	3 5/8"	11 7/16"	1'-0"	0 3/16"
3	37°12'55"	3 1/2"	11 1/2"	1'-0"	0 5/16"
4	37°44'24"	3 7/16"	11 1/2"	1'-0"	0 9/16"
5	38°16'39"	3 5/16"	11 9/16"	1'-0"	0 9/16"
6	38°49'41"	3 3/16"	11 9/16"	1'-0"	0 11/16"

ANCHOR BOLT LAYOUT

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

9A/18

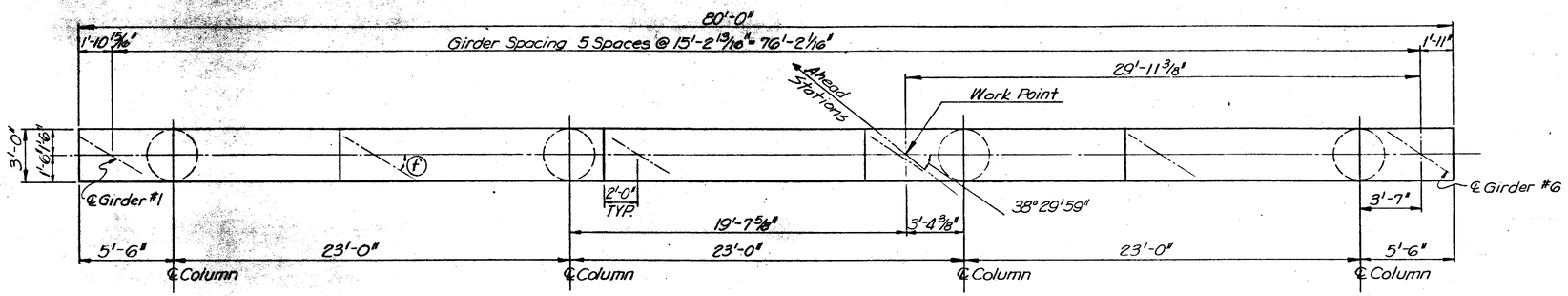
PIER 2

BRIDGE NO. HAM-126-1330
WESTBOUND S.R. 126 OVER
EXISTING ANTHONY WAYNE & CONRAIL
HAMILTON COUNTY OHIO
STA. 38+55.01 TO STA. 42+76.77

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
BJS	WJH	~	SJA	CRS	6/86	

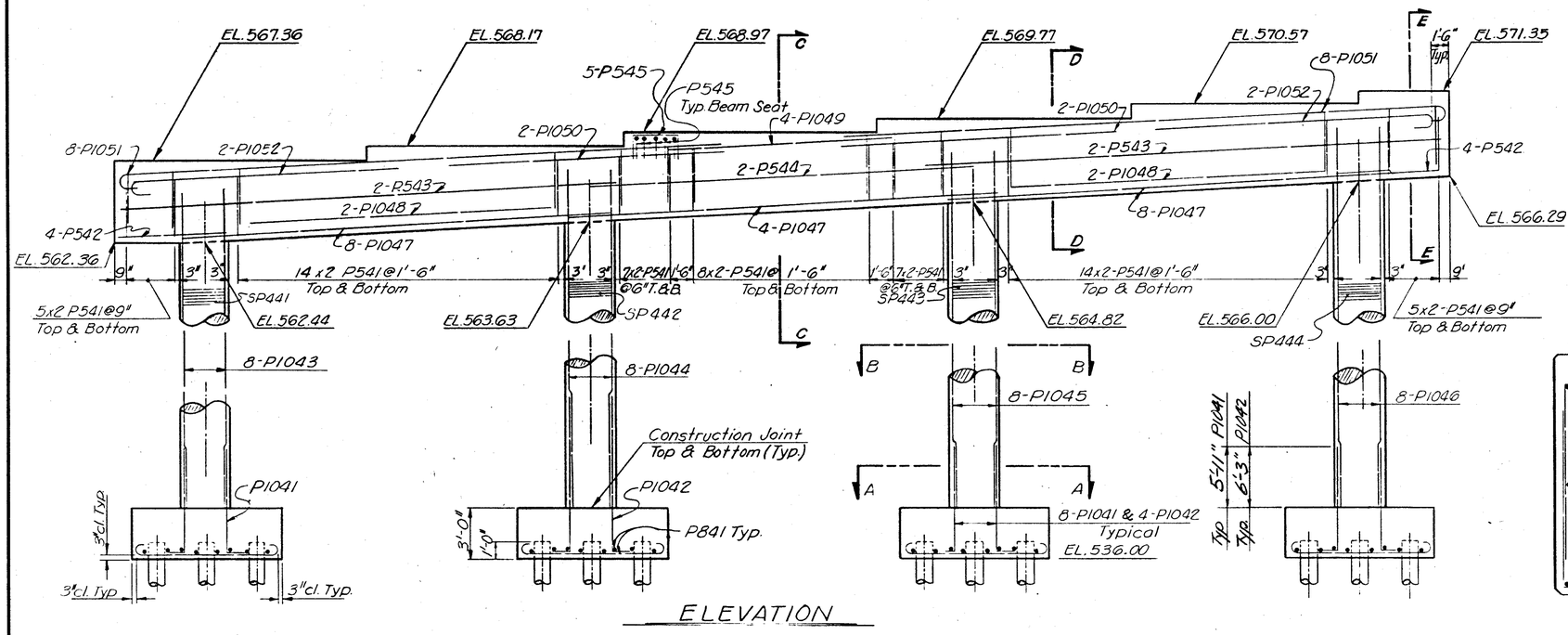
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

HAM - 75 - 9.93
HAM - 126 - 13.00

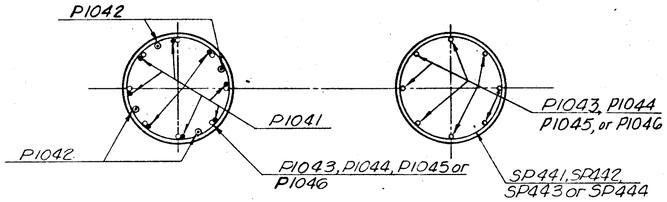


CAP PLAN

ANGLE "f"	
Girder #1	29°51'59"
Girder #2	30°28'33"
Girder #3	31°06'30"
Girder #4	31°45'54"
Girder #5	32°26'48"
Girder #6	33°09'18"

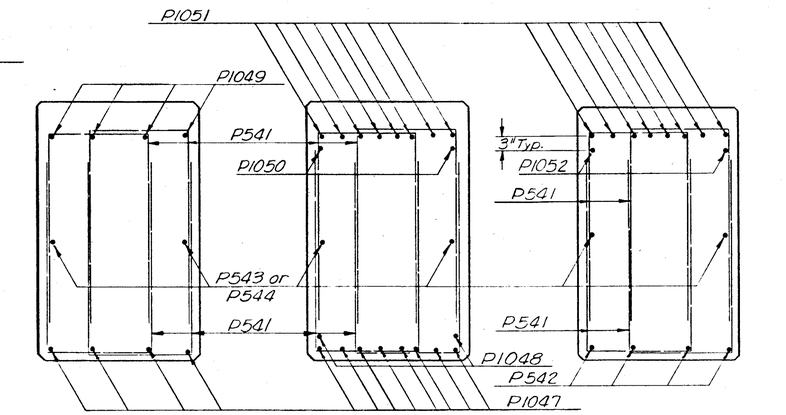


ELEVATION



SECTION A-A

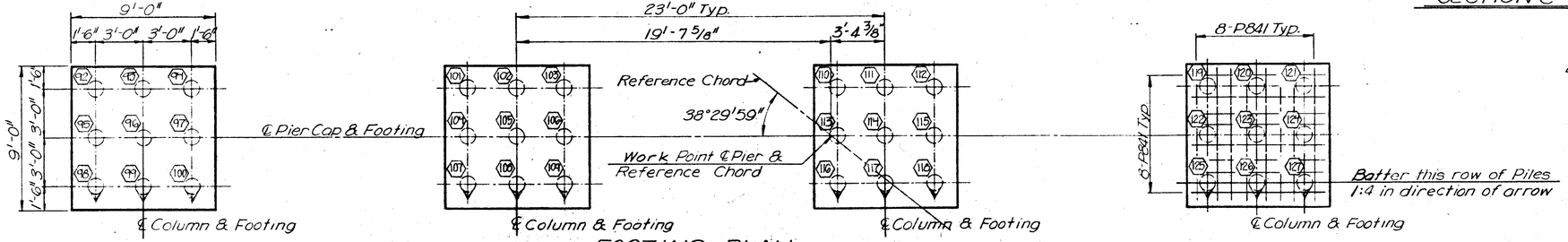
SECTION B-B



SECTION C-C

SECTION D-D

SECTION E-E



FOOTING PLAN

NOTES
△ ⬡ = Pile Number

10 / 18

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

PIER NO. 3

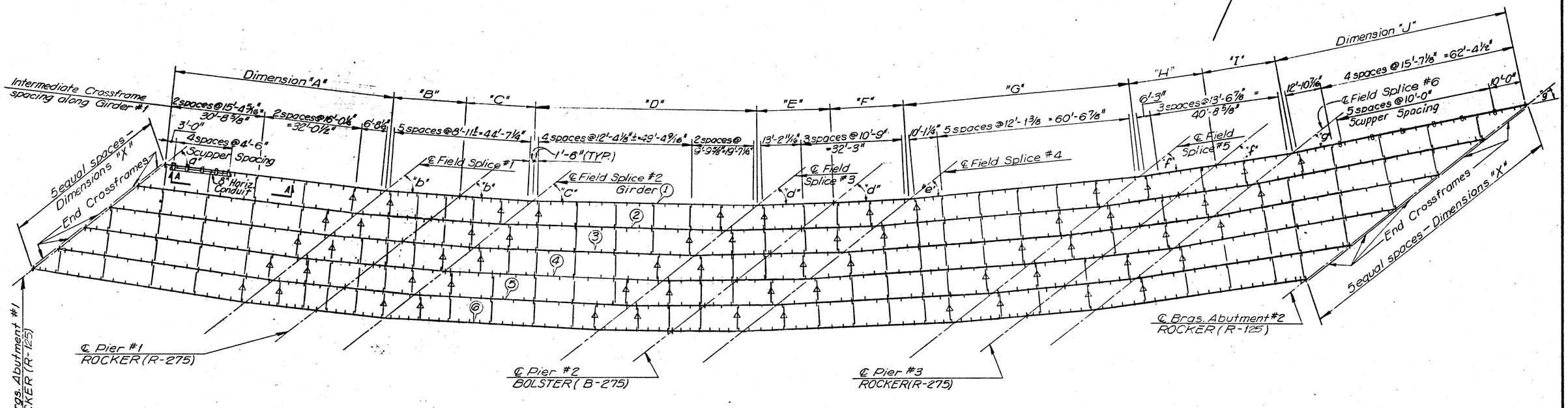
BRIDGE NO. HAM-126-1330
WEST BOUND S.R. 126 OVER
EXIST. ANTHONY WAYNE & CONRAIL
HAMILTON COUNTY STA. 38+55.01 to STA. 42+76.77

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.R.P.	J.R.P.	T.D.S.	S.S.C.	[signature]	5-14-71	△ BALKE ENG. 11/85

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

HAM - 75 - 9.93
HAM - 126 - 13.00

165 Yellow 595-68



FRAMING PLAN

GIRDERS	DIMENSIONS										ANGLES						
	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"I"	"J"	a	b	c	d	e	f	g
1	70'-11 3/8"	24'-0 9/16"	23'-6 1/16"	71'-11 3/16"	24'-6 1/2"	23'-11 3/16"	73'-8 1/8"	25'-4 1/2"	24'-7 1/8"	76'-8 15/16"	45°26'52"	42°23'29"	39°18'31"	36°12'11"	33°03'15"	29°51'59"	26°36'00"
2	70'-5 15/16"	23'-10 5/16"	23'-4 1/2"	71'-3 1/2"	24'-3 1/16"	23'-7 13/16"	72'-7 1/4"	24'-11"	24'-1 3/4"	74'-11 13/16"	45°49'20"	42°48'15"	39°45'47"	36°42'10"	33°36'26"	30°28'33"	27°16'35"
3	70'-0 9/16"	23'-8 1/16"	23'-2 5/16"	70'-7 5/16"	23'-11 5/8"	23'-4 1/2"	71'-6 7/16"	24'-5 7/16"	23'-8 7/16"	73'-2 13/16"	46°12'04"	43°13'21"	40°13'35"	37°12'55"	34°10'35"	31°06'30"	27°59'07"
4	69'-7 3/16"	23'-5 7/8"	23'-0 1/8"	69'-11 3/16"	23'-3 1/4"	23'-1 1/8"	70'-5 3/4"	24'-0"	23'-3 3/16"	71'-5 7/8"	46°35'06"	43°38'51"	40°41'56"	37°44'24"	34°45'45"	31°45'54"	28°43'43"
5	69'-1 7/8"	23'-3 1/16"	22'-10"	69'-3 1/16"	23'-4 7/16"	22'-9 15/16"	69'-5 1/8"	23'-6 1/16"	22'-9 7/8"	69'-9 3/16"	46°58'26"	44°04'45"	41°10'50"	38°16'59"	35°22'00"	32°26'48"	29°30'32"
6	68'-8 5/8"	23'-1 1/2"	22'-7 5/16"	68'-7 1/16"	23'-1 7/16"	22'-6 9/16"	68'-4 5/8"	23'-1 1/4"	22'-4 3/4"	68'-0 5/8"	47°22'04"	44°31'04"	41°40'18"	38°49'41"	35°59'21"	33°09'18"	30°19'44"

	DIMENSION "X"	DEFLECTION ANGLE AT FIELD SPLICE					
		GIRDER #1	#2	#3	#4	#5	GIRDER #6
℄ Brg. Abut. #1	10'-8"						
Field Splice #1	11'-3 3/4"	3°03'23"	3°01'05"	2°58'43"	2°56'15"	2°53'41"	2°51'00"
Pier #1	11'-6 13/16"						
Field Splice #2	11'-9 15/16"	3°04'58"	3°02'28"	2°59'46"	2°56'55"	2°53'55"	2°50'46"
Field Splice #3	12'-8 1/2"	3°06'20"	3°03'37"	3°00'40"	2°57'32"	2°54'11"	2°50'31"
Pier #2	13'-0 13/16"						
Field Splice #4	13'-5"	3°08'56"	3°05'44"	3°02'20"	2°58'39"	2°54'39"	2°50'20"
Field Splice #5	14'-8 13/32"	3°11'16"	3°07'53"	3°04'05"	2°59'51"	2°55'12"	2°50'05"
Pier #3	15'-2 13/16"						
Field Splice #6	15'-9"	3°15'59"	3°11'58"	3°07'29"	3°02'11"	2°56'16"	2°49'34"
℄ Brgs. Abut. #2	17'-8 29/32"						

NOTES:

△ indicates special intermediate Crossframes. See Sheet 15/18.

Intermediate transverse stiffeners shall be spaced equally between intermediate Crossframes.
For scupper details see sheet 14/18.

△ For Section A-A, see sheet 13/18.
For notes & details of Rocker and Bolster, see standard drawing RB-1-55.

△ WELDED ATTACHMENT of supports for concrete deck finishing machine may be made to areas of the fascia stringer flanges designated "Compression". Attachments shall not be made to areas designated "Tension." Fillet welds to compression flanges shall not be closer than 1" from edge of flange, be not more than 2" long, and be not smaller than the minimum size required by AASHTO.

11/18

VOGT, IVERS, & ASSOCIATES
ENGINEERS ARCHITECTS
CINCINNATI

FRAMING PLAN

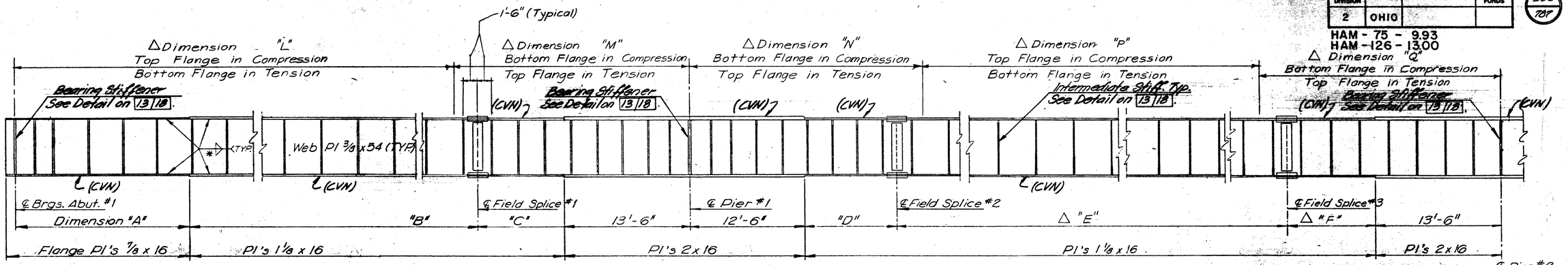
BRIDGE NO. HAM-126-1330
WEST BOUND S.R. 126 OVER
EXIST ANTHONY WAYNE & CONRAIL
HAMILTON COUNTY STA. 38+55.01 to STA. 42+76.77

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.K.	V.K.	T.D.S.	J.R.P.		5-14-71	△ BALKE ENG. 11/85

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

396
787

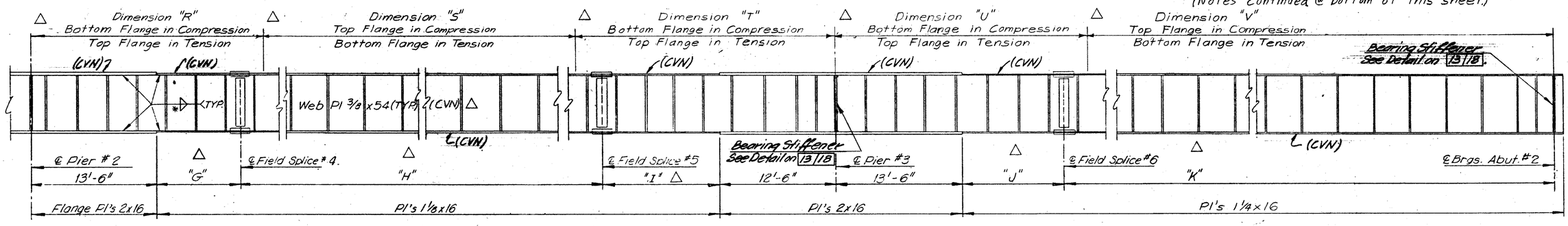
HAM - 75 - 9.93
HAM - 126 - 13.00

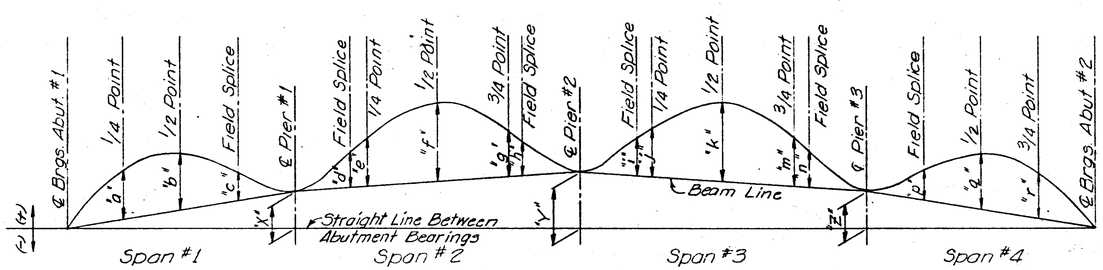


TYPICAL GIRDER ELEVATION
(GIRDER #1 SHOWN)

△ NOTES:
1. * 5/16 continuous fillet welds for flange plates of 7/8", 1", 1 1/4" thickness
2. * 3/8 continuous fillet welds for flange plates of 2" thickness
3. For intermediate stiffener spacing see "Framing Plan", sheet 11/18.

(Notes continued @ bottom of this sheet.)





CAMBER DIAGRAM △

		1/4 Point "a"	1/2 Point "b"	Field Splice "c"	Field Splice "d"	1/4 Point "e"	1/2 Point "f"	3/4 Point "g"	Field Splice "h"	Field Splice "i"	1/4 Point "j"	1/2 Point "k"	3/4 Point "m"	Field Splice "n"	Field Splice "p"	1/2 Point "q"	3/4 Point "r"
DEFLECTION DUE TO WEIGHT OF STEEL		+1/8	+5/32	+1/16	+1/16	+3/32	+3/16	+3/32	+1/16	+1/16	+3/32	+3/16	+3/32	+1/16	+3/32	+7/32	+3/16
DEFLECTION DUE TO REMAINING DEAD LOAD	GIRDERS 1&2	+11/16	+25/32	+11/32	+5/16	+15/32	+7/8	+7/16	+5/16	+11/32	+17/32	+31/32	+1/2	+11/32	+13/32	+15/16	+13/16
	GIRDERS 3&4	+21/32	+3/4	+5/16	+9/32	+13/32	+13/16	+13/32	+9/32	+5/16	+15/32	+7/8	+7/16	+5/16	+5/16	+3/4	+21/32
	GIRDERS 5&6	+5/8	+23/32	+5/16	+1/4	+3/8	+3/4	+3/8	+9/32	+9/32	+13/32	+25/32	+13/32	+9/32	+1/4	+5/8	+17/32
ADJUSTMENT REQUIRED FOR VERTICAL AND HORIZ. CURVE	GIRDERS 1&2	+1/2	+3/32	+1 1/8	+1 9/16	+1 5/8	+1 3/4	+1 25/32	+1 9/16	+1 5/8	+1 11/16	+1 25/32	+1 3/4	+1 3/32	+1 9/32	+1	+1 3/16
	GIRDERS 3&4	+17/32	+29/32	+1 1/8	+1 1/2	+1 9/16	+1 5/8	+1 19/32	+1 1/2	+1 1/2	+1 9/16	+1 11/16	+1 19/32	+1 1/2	+1 9/32	+1 5/16	+1 9/16
	GIRDERS 5&6	+17/32	+27/32	+1 1/8	+1 13/32	+1 1/2	+1 19/32	+1 1/2	+1 13/32	+1 13/32	+1 1/2	+1 19/32	+1 1/2	+1 7/16	+1 11/16	+1 7/8	+1 1/2
REQUIRED SHOP CAMBER	GIRDERS 1&2	+1 1/4	+1 29/32	+1 17/32	+1 15/16	+2 3/16	+2 13/16	+2 3/16	+1 15/16	+2 1/32	+2 5/16	+2 15/16	+2 11/32	+2 1/16	+1 25/32	+2 5/32	+1 31/32
	GIRDERS 3&4	+1 5/16	+1 13/16	+1 1/2	+1 27/32	+2 1/16	+2 5/8	+2 3/32	+1 29/32	+1 7/8	+2 1/8	+2 3/4	+2 1/8	+1 7/8	+1 5/8	+1 23/32	+1 13/32
	GIRDERS 5&6	+1 9/32	+1 23/32	+1 1/2	+1 23/32	+1 3/4	+2 19/32	+1 31/32	+1 3/4	+1 3/4	+2	+2 1/16	+2	+1 25/32	+1 13/32	+1 23/32	+1 9/32

GIRDERS	△ DIMENSIONS														
	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"I"	"J"	"K"	"L"	"M"	"N"	"P"	"Q"
No. 1	19'-11 3/8"	51'-0"	10'-6 9/16"	11'-0 1/16"	71'-11 3/16"	11'-0 1/2"	10'-5 3/16"	73'-8 1/8"	12'-10 1/2"	11'-1 1/8"	76'-8 5/16"	68'-5 1/2"	26'-6"	27'-6"	64'-1"	28'-6"
No. 2	19'-9 15/16"	50'-8"	10'-4 5/16"	10'-10 1/2"	71'-3 1/2"	10'-9 1/16"	10'-1 3/16"	72'-7 1/4"	12'-5"	10'-7 3/4"	74'-11 3/16"	67'-10 1/4"	26'-6"	27'-6"	63'-5 1/16"	28'-0"
No. 3	19'-8 3/16"	50'-4"	10'-2 1/16"	10'-8 5/16"	70'-7 5/16"	10'-5 7/8"	9'-10 1/2"	71'-6 7/16"	11'-11 7/16"	10'-2 7/16"	73'-2 13/16"	67'-2 7/8"	26'-6"	27'-6"	62'-9 1/4"	27'-6"
No. 4	19'-7 7/16"	50'-0"	9'-11 7/8"	10'-6 1/8"	69'-11 3/16"	10'-2 1/4"	9'-7 1/8"	70'-5 3/4"	11'-6"	9'-9 3/16"	71'-5 7/8"	67'-1 1/16"	26'-0"	27'-0"	62'-1 3/16"	27'-6"
No. 5	19'-5 7/8"	49'-8"	9'-9 1/16"	10'-4"	69'-3 1/16"	9'-10 3/16"	9'-3 3/16"	69'-5 1/8"	11'-0 1/16"	9'-3 5/16"	69'-9 3/16"	66'-11 9/16"	25'-6"	27'-0"	61'-5 1/8"	27'-0"
No. 6	19'-4 5/8"	49'-4"	9'-7 1/2"	10'-1 13/16"	68'-7 1/16"	9'-7 7/16"	9'-0 9/16"	68'-4 5/8"	10'-7 1/4"	8'-10 3/4"	68'-0 5/8"	66'-4 1/8"	25'-6"	27'-0"	60'-10 5/16"	26'-6"

GIRDERS	△ DIMENSIONS						
	"R"	"S"	"T"	"U"	"V"	"X"	"Y"	"Z"
No. 1	28'-0"	65'-5 13/16"	29'-6"	27'-6"	73'-10 1/16"	1'-7 13/16"	2'-5 7/8"	1'-8 3/4"
No. 2	27'-6"	64'-8 1/16"	29'-0"	27'-0"	72'-1 9/16"	1'-7 3/16"	2'-4 5/16"	1'-7 1/8"
No. 3	27'-6"	63'-10 3/16"	28'-0"	26'-6"	70'-5 1/4"	1'-6 1/2"	2'-3 3/16"	1'-7"
No. 4	27'-0"	63'-0 7/8"	27'-6"	26'-0"	68'-9 1/16"	1'-5 7/8"	2'-2 1/8"	1'-6 1/8"
No. 5	27'-0"	61'-9 7/8"	27'-0"	26'-0"	66'-7 1/8"	1'-5 7/16"	2'-1"	1'-5 1/4"
No. 6	26'-6"	61'-0 1/16"	26'-6"	25'-6"	64'-11 3/8"	1'-4 3/16"	1'-11 15/16"	1'-4 3/8"

△ NOTES (CONTINUED)
4. Where a shape or plate is designated (CVN), the material shall meet specified minimum notch toughness requirements as specified in 711.01 of CMS.

12/18

VOGT, IVERS, & ASSOCIATES
ENGINEERS CINCINNATI — ARCHITECTS CHICAGO

SUPERSTRUCTURE DETAILS

BRIDGE NO. HAM-126-1330
WEST BOUND S.R. 126 OVER
EXIST. ANTHONY WAYNE & CONRAIL
HAMILTON COUNTY STA. 38+55.01 to STA. 42+76.77

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED
V.K.	V.K.	T.D.S.	J.R.P.		5-14-71	△ BALKE ENG. 11/85

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

519
787

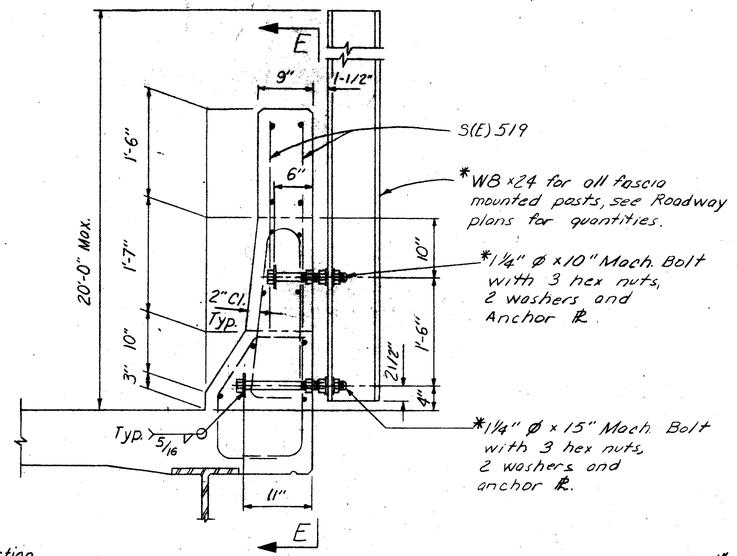
HAM - 75 - 9.93
HAM - 126 - 13.00

NOTES:

*△ These items shall be furnished under Roadway quantities. Cost of placing the 1¼" machine Bolts with 3 Hex. nuts, 2 washers and anchor Pl. shall be included in the unit price for item "511 class "S" concrete, superstructure.

*△ For noise barrier quantities including W8x24, bolts, washers, nuts, and anchor plates see roadway quantities.

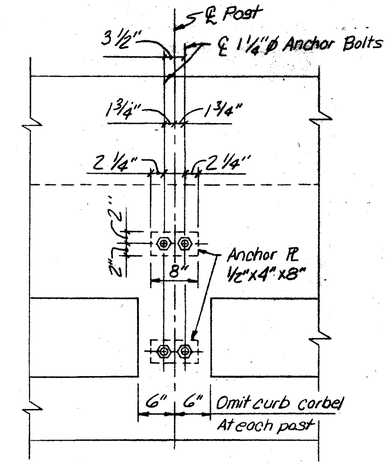
△ For additional details refer to "noise barrier details" sheets 69 thru 69.D.



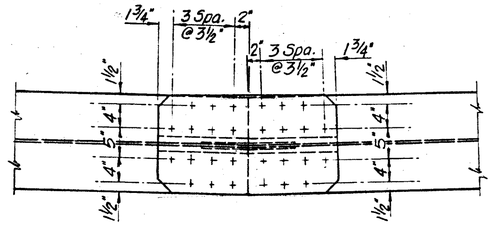
NOISE BARRIER SUPPORT DETAIL

For deflection angles of field splices, see sheet 11/18.

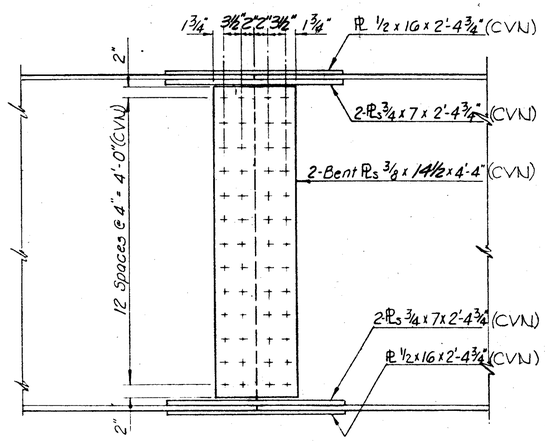
HIGH STRENGTH (A325) BOLTS shall be ⅞" diameter, unless otherwise noted.



VIEW E-E

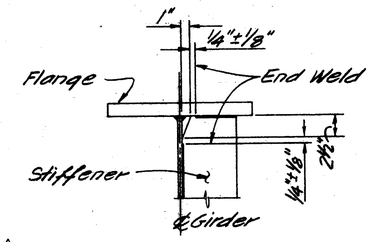


PLAN

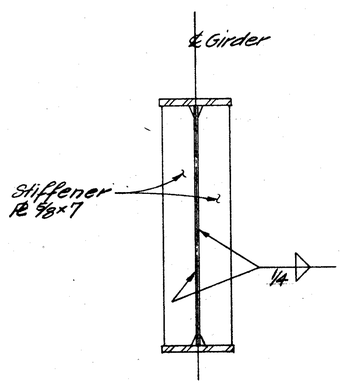


ELEVATION

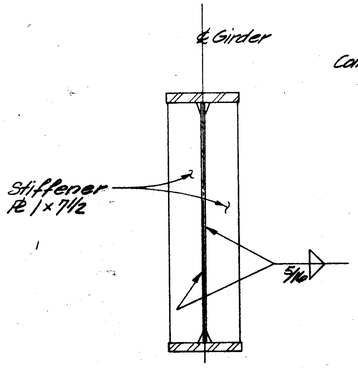
FIELD SPLICE DETAILS



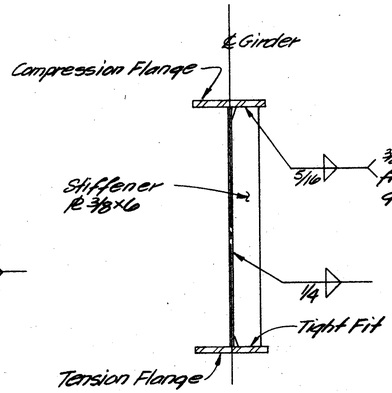
△WELDING PROCEDURE INTERMEDIATE STIFFENERS



△BEARING STIFFENER ABUTMENTS



△BEARING STIFFENER PIERS



△INTERMEDIATE STIFFENER

NOTES:

△1. STEEL NOTCH TOUGHNESS REQUIREMENT (CHARPY V-NOTCH.) Where a shape or plate is designated (CVN), the material shall meet specified minimum notch toughness requirements as specified in 711.01 of C.M.S.

△2. Intermediate Stiffeners are used on both sides of Web Pl only where required for attaching crossframes. Weld to both tension and compression flanges where stiffener is used to attach crossframe. See Welding Procedure detail on this sheet.

△3. Stiffeners: Refer to C.M.S. Section 513.08.

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VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

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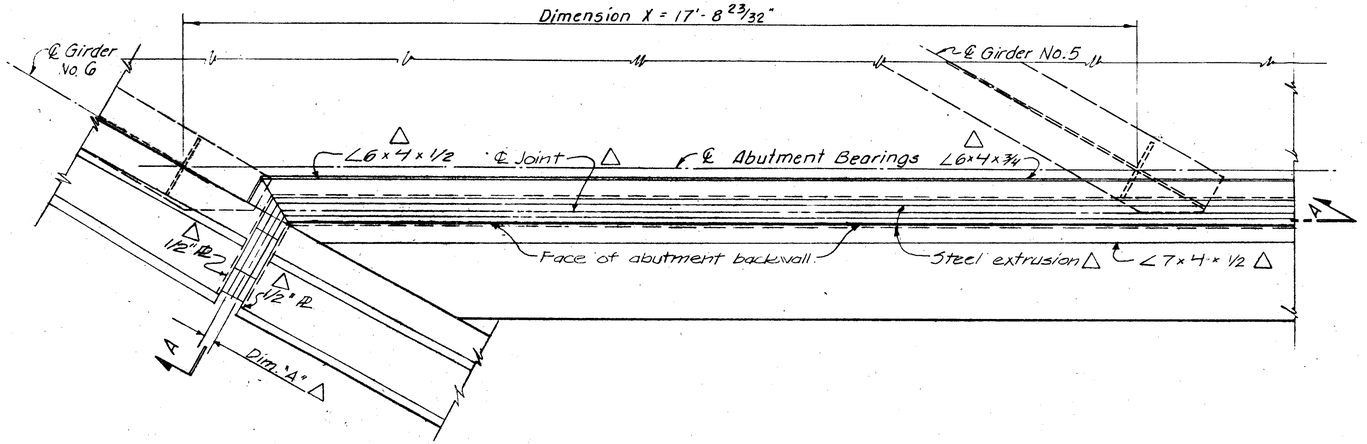
V.K.	D.W.M.	D.W.M.	J.R.P.		5-14-71	△ BALKE ENG. 11/85

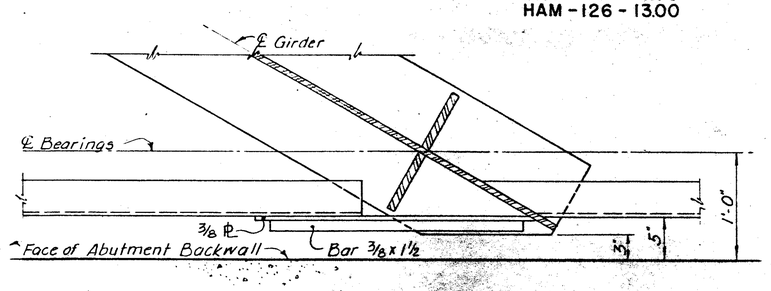
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

HAM - 75 - 9.93
HAM - 126 - 13.00

398
787



PART PLAN ~ END DAM
ABUTMENT NO. 2 SHOWN



SECTION B~B

For Expansion Joint details not shown see Strip Seal Details, Sheets 488 A, B, C & D.

ABUTMENT 1
△ JOINT SETTING TABLE

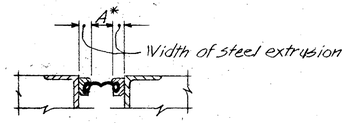
TEMP °F	0	20	40	60	80	100
A*	3 1/4"	3"	2 3/4"	2 1/2"	2 1/4"	2"

Strip Seal Gland to be Watson-Bowman S-~~500~~ 400 or D.S. Brown 55-~~800~~ 400

ABUTMENT 2
△ JOINT SETTING TABLE

TEMP °F	0	20	40	60	80	100
A*	2 15/16"	2 3/4"	2 5/8"	2 1/2"	2 3/8"	2 1/4"

Strip Seal Gland to be Watson-Bowman S-~~500~~ 400 or D.S. Brown 55-~~800~~ 400

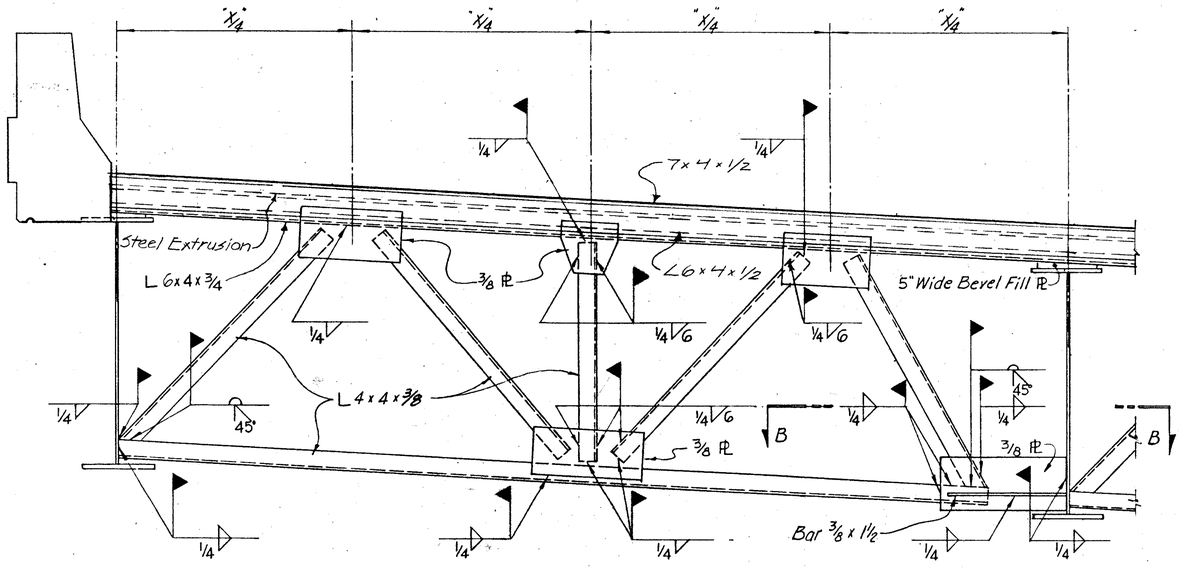


△ PARTIAL SECTION THROUGH EXPANSION JOINT SHOWING DIMENSION A

NOTES:

Details of end dam & end crossframes for abutment no. 1 are similar, except dimension "X" to be divided into 3 equal parts.

For details & notes not shown, see Std. Drawing SD-1-69, sheets 1, 2, & 3. In Section A-A on sheet number 1, the anchor bar dimension has to be 3 3/8" clear from the top of slab instead of 3".



SECTION A~A
TYPICAL END CROSSFRAME AT ABUTMENT NO. 2

14 / 18

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

SUPERSTRUCTURE DETAILS

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V.K.	D.W.M.	D.W.M.	J.R.P.	[illegible]	5-14-71	

REVISED 9/29/86

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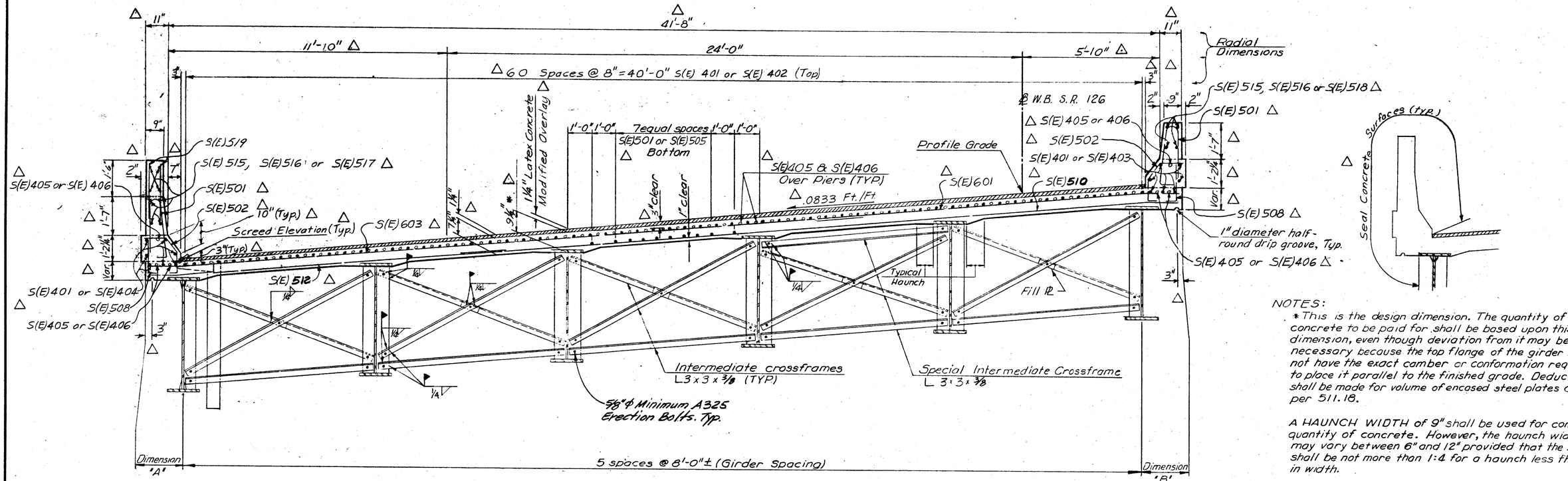

TRANSVERSE SECTION

NOTES:

*This is the design dimension. The quantity of deck concrete to be paid for shall be based upon this dimension, even though deviation from it may be necessary because the top flange of the girder may not have the exact camber or conformation required to place it parallel to the finished grade. Deduction shall be made for volume of encased steel plates as per 511.18.

A HAUNCH WIDTH of 9" shall be used for computing quantity of concrete. However, the haunch width may vary between 6" and 12" provided that the slope shall be not more than 1:4 for a haunch less than 9" in width.

△ For additional notes and details at Parapet, See Standard Drawing BR-1.

△ "(E)" denotes epoxy coated reinforcing bar.

△ WELDED ATTACHMENT of supports for concrete deck finishing machine may be made to areas of the fascia stringer flanges designated "Compression." Attachments shall not be made to areas designated "Tension." Fillet welds to compression flanges shall not be closer than 1" from edge of flange, be not more than 2" long, and be not smaller than the minimum size required by AASHTO.

△ For Noise barrier support details see sheet 13/18.

ERECTION BOLTS: Hole diameter in the Crossframes and girder stiffeners shall be respectively 1/16" & 1/4" larger than the diameter of the erection bolts. Unless replaced by permanent high strength bolts, erection bolts shall remain in place. Lock washers shall be furnished for other than fully torqued high strength erection bolts. Bolts shall be furnished as part of 513. In lieu of erection bolts and at the option of the contractor, alternate means of temporary bracing may be used, subject to the approval of the director (501.06).

△	DIMENSIONS	BRG. ℄ ABUT. #1	MID POINT ℄ ABUT #1 & SPLICE #1	SPLICE #1	PIER #1	SPLICE #2	MID POINT SPLICE #2 & SPLICE #3	SPLICE #3	PIER #2	SPLICE #4	MID POINT SPLICE #4 & SPLICE #5	SPLICE #5	PIER #3	SPLICE #6	MID POINT SPLICE #6 & ℄ ABUT #2	BRG. ℄ ABUT #2
△	"A" LEFT CURB	2'-3 1/8"	1'-8 5/16"	2'-3 1/16"	2'-0 1/16"	2'-3 1/8"	1'-8 1/8"	2'-3 1/8"	1'-11 5/16"	2'-3 1/8"	1'-7 3/4"	2'-3 1/8"	1'-11 3/4"	2'-3 1/8"	1'-7 1/8"	2'-3 1/16"
△	"B" RIGHT CURB	1'-5 7/8"	2'-0 1/16"	1'-5 7/8"	1'-8 5/8"	1'-5 7/8"	2'-0"	1'-5 7/8"	1'-8 5/8"	1'-5 7/8"	2'-0"	1'-5 7/8"	1'-8 7/16"	1'-5 7/8"	1'-11 5/16"	1'-5 7/8"

15/18

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

TRANSVERSE SECTION

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HAM - 75 - 9.93
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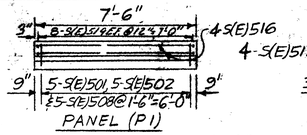
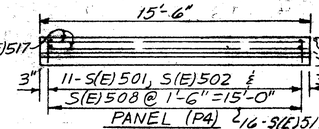
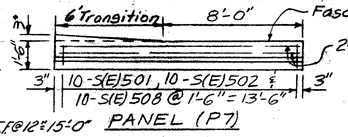
600
787



PANEL (P1)



PANEL (P4) & 16-S(E)519 E.F.@12" = 15'-0"



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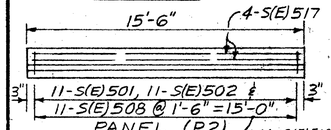
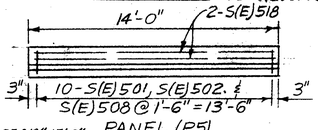
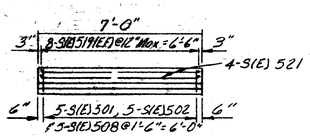


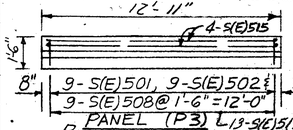
PANEL (P2) & 16-S(E)519 E.F.@12" = 15'-0"



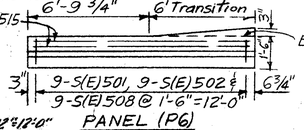
PANEL (P5)



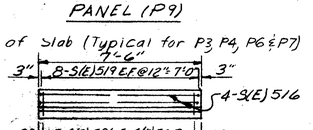
PANEL (P9)



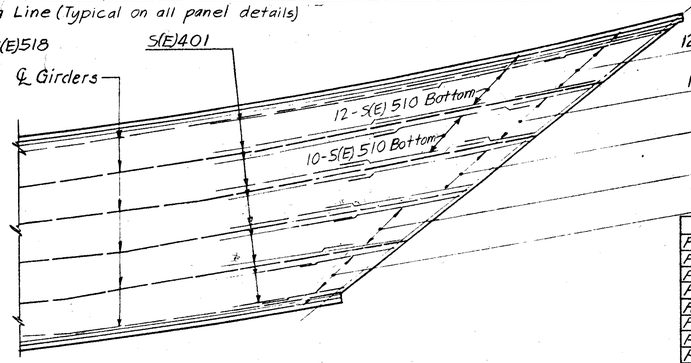
PANEL (P3) & 13-S(E)519 E.F.@12" = 12'-0"



PANEL (P6)

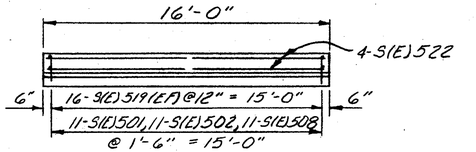


PANEL (P8)

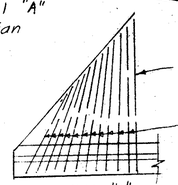


PART DECK PLAN (BOTTOM)

PANEL	# PANELS
Panel (P1)	17
Panel (P2)	17
Panel (P3)	1
Panel (P4)	1
Panel (P5)	18
Panel (P6)	1
Panel (P7)	1
Panel (P8)	18
Panel (P9)	1
Panel (P10)	1



PANEL (P10)



DETAIL "A"
S (E) 406

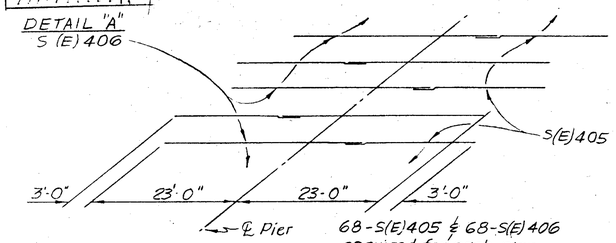
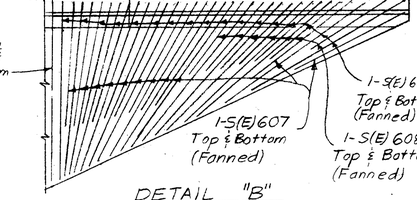


DIAGRAM SHOWING STAGGER OF S(E)405 & S(E)406 OVER PIERS



DETAIL "B"

DECK PLAN

△SCREED ELEVATIONS					
	LOCATION	STATION	N. CURB	STATION	S. CURB
SPAN 1	℄ Brgs., Abut. No. 1	38+90.18	573.16	38+53.44	575.74
	1/4 point	39+14.63	573.68	38+76.24	576.30
	1/2 point	39+39.08	574.09	38+99.04	576.77
	3/4 point	39+63.53	574.40	39+21.84	577.15
	℄ Pier No. 1	39+87.98	574.66	39+44.64	577.49
SPAN 2	0.2 x L_2	40+12.77	574.92	39+67.40	577.82
	0.4 x L_2	40+37.56	575.13	39+90.16	578.11
	0.6 x L_2	40+62.36	575.24	40+12.92	578.32
	0.8 x L_2	40+87.15	575.26	40+35.68	578.45
	℄ Pier No. 2	41+11.94	575.23	40+58.44	578.54
SPAN 3	0.2 x L_3	41+37.34	575.20	40+81.13	578.63
	0.4 x L_3	41+62.73	575.10	41+03.82	578.67
	0.6 x L_3	41+88.13	574.91	41+26.52	578.63
	0.8 x L_3	42+13.52	574.63	41+49.21	578.52
	℄ Pier No. 3	42+38.92	574.28	41+71.90	578.35
SPAN 4	1/4 point	42+65.26	573.93	41+94.50	578.18
	1/2 point	42+91.60	573.51	42+17.10	577.98
	3/4 point	43+17.93	572.98	42+39.69	577.69
	℄ Brgs. Abut. No. 2	43+44.27	572.32	42+62.29	577.32

NOTES:

PREFORMED EXPANSION JOINT FILLER in the railing parapet deflection joints may be either 1/4" gray sponge rubber or 1/4" gray cellular polyvinyl chloride (P.V.C.) sponge.

△ The screed elevations have been obtained by adding the dead load deflection due to the weight of concrete slab, latex modified concrete overlay, bridge parapet, **future wearing surface and steel beams to the required final elevations.**

△ "E" denotes epoxy coated reinforcing bar.

△ E.F. = Each Face.

△ For Noise Barrier support details see sheet 13/18.

16/18

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

DECK PLAN
BRIDGE NO. HAM-126-1330
WEST BOUND S.R. 126 OVER
EXISTING ANTHONY WAYNE & CONRAIL

HAMILTON COUNTY STA. 38+55.01 to STA. 42+76.77

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED BALVE ENG. 11/85
V.K.	D.W.M.	D.W.M.	J.R.P.		5-14-71	

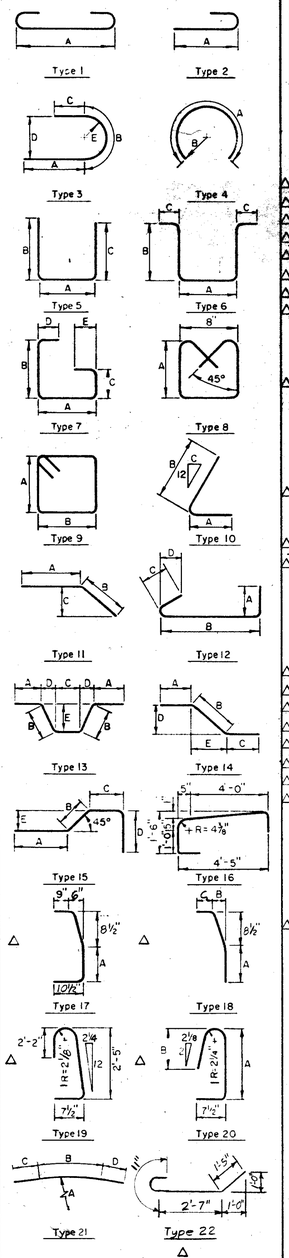
REINFORCING STEEL LIST

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

601 / 787

HAM - 75 - 9.93
HAM - 126 - 13.00

BENDING DIAGRAM



S IN THE COLUMN FOR "TYPE" INDICATES STRAIGHT BARS.

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
		ABUTMENT NO.1							
A501	37	8'-3"	318	5	5-4	1-7	1-7		
A502	37	7'-0"	270	5	0-7½	6-6	0		
A503	37	10'-2"	392	5	3-5	3-6	3-6		
A504	22	30'-0"	688	S					
A505	25	12'-6"	326	S					
A506	5	5'-9"	30	5	2-9	1-7½	1-7½		
△ A(E)507	1	30'-0"	31	S					
△ A(E)508	1	30'-5"	32	S					
△ A(E)509	8	19'-8"	164	S					
△ A(E)510	22	5'-3"	120	19					
△ A(E)524	17	2'-9"	49	S					
△ A(E)521	8	2'-8"	22	2	2'-1"				
△ A(E)522	8	4'-7"	38	S					
△ A(E)523	8	4'-4"	36	S					
A524	6	21-8	168	S					
A525	4	7-3	30	S					
A526	2	16-0	33	S					
△ A(E)527	22	3'-0"	69	S					
A528	6	15-8	98	S					
A529	6	9-0	56	S					
A530	22	10-5	239	9	3-0	2-0			
A531	6	15-0	94	S					
A532	2	10-0	21	S					
△ A(E)533	12	15'-8"	196	S					
A601	37	14-0	778	5	5-4	6-6	2-6		
A602	53	14-1	1121	5	1-5	6-6	6-6		
△ A603	53	6'-7"	524	5	1'-5"	2'-9"	2'-9"		
△ A(E)604	53	7'-7"	604	5	0'-11"	3'-6"	3'-6"		
A606	7	5-0	53	S					
△ A622	12	12'-6"	225	5	1'-2"	5'-10"	5'-10"		
△ A623	10	30'-6"	458	5	1'-2"	14'-10"	14'-10"		
△ A624	6	25'-4"	228	5	1'-2"	12'-3"	12'-3"		
△ A(E)625	4	3'-7"	22	18	2'-5"	0'-2"	0'-7"		
△ A(E)626	1	3'-7"	6	18	2'-5"	0'-3"	0'-7"		
△ A(E)627	1	3'-8"	6	18	2'-5"	0'-4"	0'-8"		
△ A(E)628	1	3'-8"	6	18	2'-5"	0'-5"	0'-8"		
△ A(E)629	23	3'-9"	130	18	2'-5"	0'-6"	0'-9"		
A801	14	30-0	1121	S					
△ A(E)802	27	4'-11"	354	22					
A821	6	17-6	280	S					
A822	6	11-0	176	S					
Total Abut. No.1		epoxy	1885						
		regular	7727						
		ABUTMENT NO.2							
B501	59	8-3	508	5	5-4	1-7	1-7		
B502	61	7-3	461	5	0-7½	6-9	0		
B503	60	9-8	605	5	3-5	3-3	3-3		
B504	2	9-2	19	5	0-7½	8-8	0		
B505	1	4-7	5	5	1-8	1-7	1-7		
B506	1	5-4	6	5	2-5	1-7	1-7		
B507	2	7-7	16	5	4-8	1-7	1-7		
B508	2	6-11	14	5	4-0	1-7	1-7		
B509	1	4-4	5	5	1-5	1-7	1-7		
B510	4	24-0	100	S					
B511	29	30-0	907	S					

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
B512	8	10-0	83	S					
B513	3	20-9	65	S					
B514	5	22-0	115	S					
B515	7	14-0	102	S					
B516	15	20-0	313	S					
△ B(E)517	31	5'-3"	169	19					
B518	4	18-0	75	S					
B519	3	5-11	19	5	3-0	1-7	1-7		
B520	6	10-3	64	S					
△ B(E)521	8	2'-8"	22	2	2'-1"				
△ B(E)522	8	4'-7"	38	S					
△ B(E)523	8	13'-8"	114	S					
B524	6	24-7	154	S					
B525	4	7-3	30	S					
B526	2	19-0	40	S					
△ B(E)527	31	3'-0"	97	S					
B528	8	8-8	72	S					
B529	6	15-8	98	S					
B530	2	10-0	21	S					
B531	6	16-7	104	S					
B532	18	17-5	327	9	6-6	2-0			
B533	2	10-5	22	9	3-0	2-0			
B534	8	10-6	88	S					
△ B(E)535	8	4'-4"	36	S					
△ B(E)536	12	8'-8"	108	S					
△ B(E)537	12	26'-8"	334	S					
B601	59	14-3	1263	5	5-4	6-9	2-6		
B602	1	14-6	22	5	3-8	8-8	2-6		
B603	1	15-3	23	5	4-5	8-8	2-6		
B604	1	13-7	20	5	4-8	6-9	2-6		
B605	1	12-11	19	5	4-0	6-9	2-6		
B606	88	14-1	1861	5	1-5	6-6	6-6		
△ B607	88	7-7	1002	5	1-5	3-3	3-3		
△ B(E)608	88	9-7	1267	5	0-11	4-6	4-6		
△ B(E)540	36	2'-9"	103	S					
B610	7	5-4	56	1	4-0				
△ B(E)538	3	30'-0"	94	S					
△ B(E)539	1	17'-0"	18	S					
B621	7	25'-6"	268	5	1'-2"	12'-4"	12'-4"		
△ B622	6	11'-4"	102	5	1-2	5'-3"	5'-3"		
△ B623	11	24'-10"	410	5	1-2	12'-0"	12'-0"		
△ B624	6	12'-10"	116	5	1-2	6'-0"	6'-0"		
B625	6	29-10	269	5	1-2	14-6	14-6		
△ B(E)626	4	3-7	22	18	2'-5"	0'-2"	0'-7"		
△ B(E)627	1	3'-7"	6	18	2'-5"	0'-3"	0'-7"		
△ B(E)628	1	3'-8"	6	18	2'-5"	0'-4"	0'-8"		
△ B(E)629	1	3'-8"	6	18	2'-5"	0'-5"	0'-8"		
△ B(E)630	33	3'-9"	186	18	2'-5"	0'-6"	0'-9"		
B801	8	30-0	641	S					
B802	4	21-6	230	S					
B803	8	11-4	242	14	5-6	3-4	2-6	3-0	1-6
B804	2	7-0	37	11	3-6	3-6	1-4½	3-3	
B805	6	34-0	545	S					
B806	2	24-0	128	S					
B807	1	19-0	51	S					
B821	7	30-0	561	S					
B822	6	12-6	200	S					
△ B(E)823	27	4'-11"	354	22					
Total Abut. No.2		epoxy	2980						
		regular	12504						
Total Abuts.		epoxy	4865						
		regular	20231						

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
		SUPERSTRUCTURE							
△ S(E)401	1050	30'-0"	21042	Str.					
△ S(E)402	61	13'-6" to 41'-0"	1110	Str.	Vary	each	bar	by	5½"
△ S(E)403	7	13'-0"	61	Str.					
△ S(E)404	7	41'-0"	192	Str.					
△ S(E)405	204	20'-0"	2725	Str.					
△ S(E)406	204	30'-4"	4134	Str.					
△ S(E)521	8	6'-8"	56	Str.					
△ S(E)522	8	13'-8"	131	Str.					
△ S(E)501	597	5'-3"	3269	19					
△ S(E)502	597	3'-3"	2024	17	1'-0"				
△ S(E)503	12	24'-0"	300	Str.					
△ S(E)504	10	30'-0"	313	Str.					
△ S(E)505	10	36'-0"	375	Str.					
△ S(E)506	10	13'-0"	136	Str.					
△ S(E)507	12	19'-0"	238	Str.					
△ S(E)508	597	2'-6"	1557	5	10½"	1'-9"	0'-0"		
△ S(E)509	41	8'-7" to 33'-7"	902	Str.	Vary	each	bar	by	7½"
△ S(E)510	1482	30'-0"	46372	Str.					
△ S(E)511	13	6'-1" to 13'-1"	130	Str.	Vary	each	bar	by	7"
△ S(E)512	666	14'-11"	10362	Str.					
△ S(E)513	25	5'-11" to 12'-11"	246	Str.	Vary	each	bar	by	3½"
△ S(E)514	85	9'-10½" to 33'-6"	1923	Str.	Vary	each	bar	by	3⅜"
△ S(E)515	12	12'-5"	155	Str.					
△ S(E)516	208	7'-2"	1555	Str.					
△ S(E)517	144	15'-2"	2278	Str.					
△ S(E)518	76	13'-8"	1083	Str.					
△ S(D)519	106	2'-9"	304	Str.					
△ S(L)520	775	6'-7"	5321	2	6'-0"				
△ S(E)601	666	15'-3"	15255	Str.					
△ S(E)602	22	4'-11" to 8'-3"	218	Str.	Vary	each	bar by	4" (2 Sets)	
△ S(E)603	704	30'-0"	31722	Str.					
△ S(E)604	34	9'-10"	502	Str.					
△ S(E)605	13	6'-5" to 13'-5"	194	Str.	Vary	each	bar	by	7"
△ S(E)606	41	8'-7" to 33'-7"	1298	Str.	Vary	each	bar	by	7½"
△ S(E)607	22	7'-0"	231	Str.					
△ S(E)608	14	5'-0"	105	Str.					
△ S(E)609	25	6'-3" to 13'-3"	366	Str.	Vary	each	bar	by	3½"
△ S(E)610	85	9'-10½" to 33'-6"	2769	Str.	Vary	each	bar	by	3⅜"
Total	Superstructure	160,953							

NOTES

△ Refer to CMS Sections 106.03, 709, 709.01 thru 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the superstructure by the additional steel, spliced in accordance with 509.08

△ "E" denotes epoxy coated reinforcing bar.

△ Substructure reinforcing bars not revised by BALVE (△) shall have a minimum lap of 30 bar diameters.

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VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS — ARCHITECTS
CINCINNATI

REINFORCING STEEL LIST

BRIDGE NO HAM-126-1330
WEST BOUND S.R. 126 OVER
EXIST. ANTHONY WAYNE & CONRAIL
HAMILTON COUNTY STA. 38+55.01 TO STA. 42+76.77

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED
J.R.P	T.D.S	—	S.S.C	O.K.	5-14-71	BALVE ENG. 11/85

REINFORCING STEEL LIST

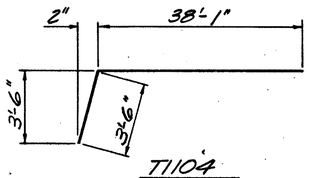
FED RD DIVISION	STATE	PROJECT	
2	OHIO		

602 / 187

HAM - 75 - 9.93
HAM - 126 - 13.00

MARK	NO.	LENGTH	WEIGHT	SHP.	A	B	C	D	E
			PIERS 1&3						
P501	176	8-8	1591	B					
P502	8	5-3	44	Str.					
P503	4	31-9	132	Str.					
P504	60	5-8	355	B					
△P521	96	8-8	868	B					
P541	240	8-8	2169	B					
P542	8	7-0	58	Str.					
P543	4	30-0	125	Str.					
P544	2	23-0	48	Str.					
P545	60	5-8	355	B					
P801	64	10-8	1823	B					
P841	64	10-8	1,823	B					
△P1001	32	10-1	1388	B					
△P1002	16	10-5	717	B					
P1003	8	35-3	1,213	Str.					
P1004	8	36-0	1,239	Str.					
P1005	8	37-0	1,274	Str.					
P1006	8	37-9	1,300	Str.					
P1007	20	20-6	1,764	Str.					
P1008	8	33-11	1,168	B					
P1009	8	27-5	944	B					
△P1041	32	10-1	1388	B					
△P1042	16	10-5	717	B					
P1043	8	26-9	921	Str.					
P1044	8	27-11	961	Str.					
P1045	8	29-1	1001	Str.					
P1046	8	30-3	1041	Str.					
P1047	20	26-0	2,238	Str.					
P1048	4	20-0	344	Str.					
P1049	4	14-0	241	Str.					
P1050	4	16-0	275	Str.					
P1051	16	37-5	2576	B					
P1052	4	17-5	300	B					
		Total Piers 1&3	32,401						

MARK	NO.	LENGTH	WEIGHT	SHP.	A	B	C	D	E
			△PIER 2						
T1101	94	12'-8"	6326	B					
T1102	56	36'-9"	10934	S					
T1103	38	25'-0"	5047	S					
T1104	5	41'-3"	1096	B					
T1105	20	38'-0"	4038	S					
T1106	5	42'-9"	1136	B					
T901	58	19'-0"	3747	B					
T902	18	36'-6"	2234	B					
T601	35	16'-6"	867	S					
T602	18	34'-0"	919	S					
T603	60	26'-0"	2343	S					
T604	58	8'-2"	711	B					
T501	2	12'-9"	926	B	Varies by 6" increments				
	Sets of 24	to 24'-3"							
T502	2	21'-1"	302	B	Varies by 4" increments				
	Sets of 7	to 23'-1"							
	1	16'-5"							
T503	Sets of 17	to 21'-9"	338	B	Varies by 4" increments				
T504	16	35'-6"	592	S					
T505	4	30'-0"	125	S					
T506	4	26'-0"	108	S					
T507	4	22'-0"	92	S					
T508	2	17'-0"	35	S					
T509	42	5'-5"	237	B					
T510	20	10'-5"	217	B					
T511	5	8'-0"	42	S					
T512	20	10'-4"	215	B					
T513	10	25'-6"	266	B					
TOTAL	PIER 2		42913						
TOTAL	PIER 1&3		32401						
TOTAL	SPIRALS		4341						
	TOTAL:		79655						



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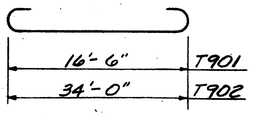
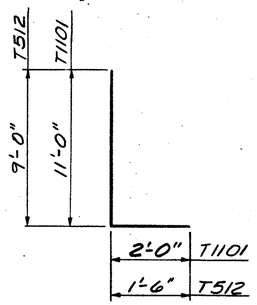


T901, T902



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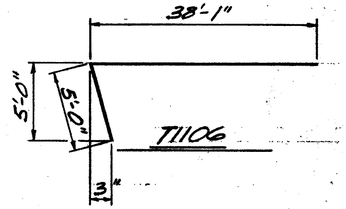

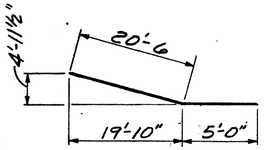

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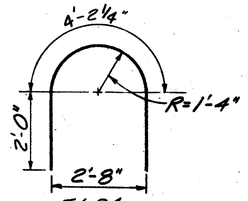

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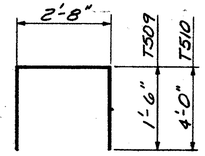
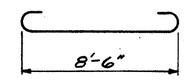
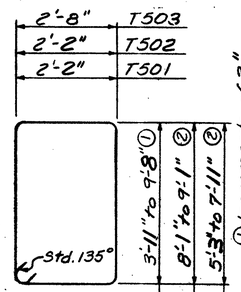


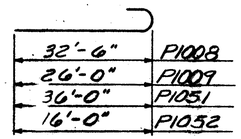
T509, T510



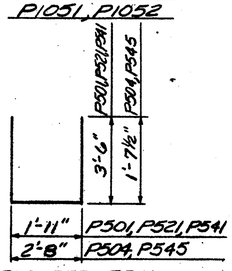
P801, P841



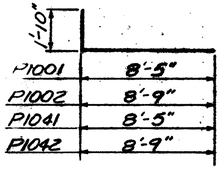
T501, T502, T503



P1008, P1009
P1051, P1052



P501, P521, P541
P504, P545



P1001, P1002
P1041, P1042

MARK	NO.	LENGTH (HEIGTH)	WEIGHT
SPIRALS - Core Diam. 32" c/c - Pitch 4½" o/o. - Other details in accordance with C.M.S.I. standard practice			
SP401	1	32 - 1	591
SP402	1	32 - 11	606
SP403	1	33 - 10	622
SP404	1	34 - 8	637
SP441	1	23 - 7	439
SP442	1	24 - 10	461
SP443	1	26 - 0	482
SP444	1	27 - 2	503
		Total Spirals	4341

NOTES

△ Refer to CMS Sections 106.03, 700, 709.01 thru 709.05 And 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the superstructure by the additional steel, spliced in accordance with 509.08.

△ Substructure reinforcing bars not required by BALKE (△) shall have a minimum lap of 30 bar diameters.

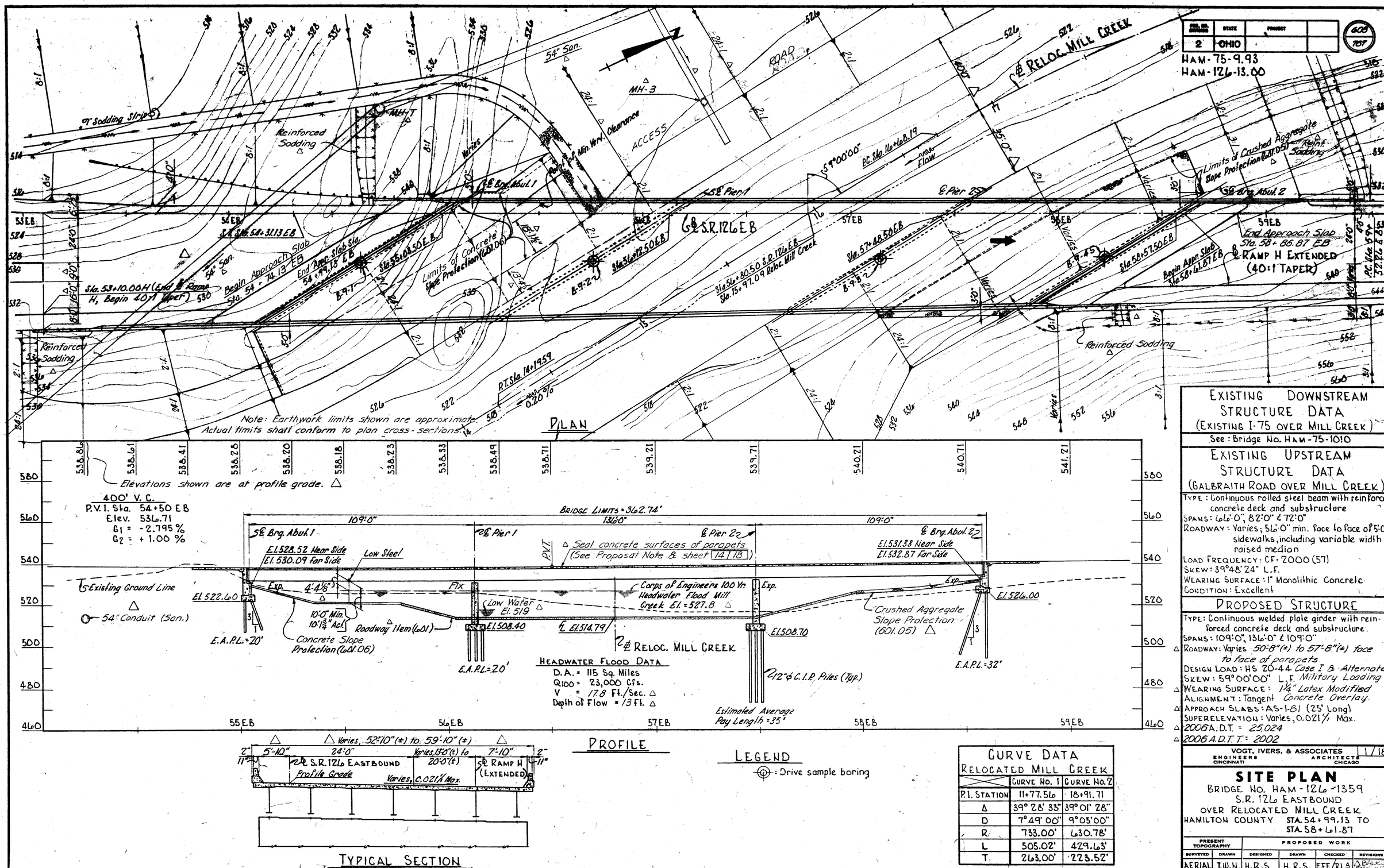
18 / 18

VOGT, IVERS, & ASSOCIATES, INC.

REINFORCING STEEL LIST

BRIDGE NO HAM-126-1330
WEST BOUND S.R. 126 OVER
EXIST. ANTHONY WAYNE & CONRAIL
HAMILTON COUNTY — STA. 38+55.01 to STA. 42+76.77

JRP	TDS	—	S.S.C.	5-14-71	△ BALKE ENG. INC.



CURVE DATA RELOCATED MILL CREEK		
	CURVE No. 1	CURVE No. 2
P.I. STATION	11+77.56	18+91.71
Δ	39° 28' 33"	39° 01' 28"
D	7° 49' 00"	9° 05' 00"
R	733.00'	630.78'
L	505.02'	429.63'
T	263.00'	223.52'

EXISTING DOWNSTREAM STRUCTURE DATA
(EXISTING I-75 OVER MILL CREEK)

See: Bridge No. HAM-75-1010

EXISTING UPSTREAM STRUCTURE DATA
(GALBRAITH ROAD OVER MILL CREEK)

TYPE: Continuous rolled steel beam with reinforced concrete deck and substructure
SPANS: 66'-0", 82'-0" & 72'-0"
ROADWAY: Varies; 56'-0" min. face to face of 5'-0" sidewalks, including variable width raised median
LOAD FREQUENCY: CF = 2000 (57)
SKEW: 39°48'24" L.F.
WEARING SURFACE: 1" Monolithic Concrete
CONDITION: Excellent

PROPOSED STRUCTURE

TYPE: Continuous welded plate girder with reinforced concrete deck and substructure.
SPANS: 109'-0", 136'-0" & 109'-0"
ROADWAY: Varies 50'-8" (±) to 57'-8" (±) face to face of parapets
DESIGN LOAD: HS 20-44 Case I & Alternate Military Loading
SKEW: 59°00'00" L.F.
WEARING SURFACE: 1¼" Latex Modified Concrete Overlay
ALIGNMENT: Tangent
APPROACH SLABS: AS-1-81 (25' Long)
SUPERELEVATION: Varies, 0.021'/' Max.
2006 A.D.T. = 25,024
2006 A.D.T.T. = 2002

VOGT, IVERS, & ASSOCIATES
ENGINEERS CINCINNATI — ARCHITECTS CHICAGO
1/18

SITE PLAN
BRIDGE No. HAM-126-1359
S.R. 126 EASTBOUND
OVER RELOCATED MILL CREEK
HAMILTON COUNTY STA. 54+99.13 TO STA. 58+61.87

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISIONS
AERIAL	T.W.N.	H.R.S.	H.R.S.	E.F.F./R.L.S.	Δ BALKE ENG. 11/85

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

604 TOT

HAM-75-9.93
HAM-126-13.00

ESTIMATED QUANTITIES

	ITEM	TOTAL	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPER-STRUCTURE	GENERAL	CHECKED BY	DATE
	503	Lump	Lump Sum	Cofferdams, Cribs and Sheeting				Lump.		
	503	1772	Cu. Yds.	Unclassifed Excavation	1170	602			C.T.S/K.C.P.	8-10-71
△	505	Lump	Lump Sum	Pile Driving Equipment Mobilization.				Lump		
	507	5221	Lin. Ft.	12"ϕ Cast-in-place Reinforced Concrete Piles	2756	2465			C.T.S/K.C.P	8-10-71
△	509	85,692	Lbs.	Reinforcing Steel, Grade 60	37,550	48,142				
△	511	601	Cu. Yds.	Class S Concrete, Superstructure			601			
	511	437	Cu. Yds.	Class C Concrete, Pier Stems		437.			K.C.P	8-5-71
△	511	355	Cu. Yds.	Class C Concrete, Abutments Above Footings	355					
	511	499	Cu. Yds.	Class C Concrete, Footings	264	235			C.T.S/K.C.P	8-10-71
△	516	89	Lin. Ft.	PVC waterstop as per plan	89				C.T.S	8-10-71
△	513	760,000	Lbs.	Structural Steel (AISC CATEGORY III) (See proposal note)			760,000			
△	514	760,000	Lbs.	Field Painting of New Structural Steel, System A.			760,000			
	516	46	Sq. Ft.	1" Preformed Expansion Joint Filler	46				C.T.S	8-10-71
	518	248	Cu. Yds.	Porous Backfill	248				C.T.S	8-10-71
	518	193	Lin. Ft.	6" Perforated Helical Corrugated Steel Pipe, 707.01	193				C.T.S	8-10-71
	518	148	Lin. Ft.	6" Non-Perforated Helical Corrugated Steel Pipe, Incl. Spec. 707.01	148				C.T.S	8-10-71
△	518	10	Each	Scuppers Including Supports			10		K.C.P	
△	601	725	Sq. Yds.	Concrete Slope Protection				725		
△	601	472	Sq. Yds.	Crushed Aggregate Slope Protection				472		
△	516	218	LIN. FT.	Structural Expansion Joints Including Elastomeric Strip Seals				218		
△	523	3	HRS.	Dynamic Load Test				3		
△	845	2195	Sq. Yds.	Latex Modified Concrete Overlay (1¼" Thick) (See Proposal Note)			2195			
△	824	173,863	LBS.	Epoxy Coated Reinforcing Steel Grade 60.	6860		167003			
△	* 511	601	Cu. Yds.	Class S Concrete, Superstructure Using Shrinkage Compensating Cem., 701.08			601			
△	Special	917	Sq. Yds.	Sealing of Concrete Surfaces (See Proposal Note)	131		786			

* Alternate Bid Item

Quantities Revised by BJS 10-24-85
Revisions Checked by JAP 12-2-85

ITEM 511: CLASS S CONCRETE, SUPERSTRUCTURE, USING SHRINKAGE COMPENSATING CEMENT, 701.08.

THE FOLLOWING RESTRICTIONS SHALL APPLY TO THE SUPERSTRUCTURE CONCRETE USING SHRINKAGE COMPENSATING CEMENT, 701.08.

1. CEMENT SHALL BE EXPANSIVE HYDRAULIC CEMENT, ASTM C845, TYPE K.
2. THE MAXIMUM WATER/CEMENT RATIO GIVEN FOR CLASS S CONCRETE IN 499.03 SHALL BE REVISED FROM 0.44 TO 0.50.
3. MAXIMUM SLUMP AT THE TIME AND PLACE OF CONCRETE PLACEMENT SHALL BE 6 INCHES.
4. CHEMICAL ADMIXTURES, WHEN REQUIRED BY 511.06, SHALL BE LIMITED TO 705.12 TYPE D.
5. MAXIMUM AMBIENT TEMPERATURE AT TIME OF PLACEMENT OF CONCRETE SHALL BE 80° F.
6. MEMBRANE CURING PER SS836 WILL NOT BE PERMITTED FOR ANY CONCRETE PLACED BETWEEN SEPTEMBER 1 AND MARCH 31. SUCH CONCRETE SHALL BE CURED BY METHOD (A) WATER CURING.
7. IF REQUIRED BY THE ENGINEER, THE SURFACE OF THE CONCRETE SHALL BE GIVEN A FOG SPRAY OF WATER. THIS MAY BE REQUIRED PRIOR TO EITHER WATER CURING OR MEMBRANE CURING IF WEATHER CONDITIONS DICTATE. EQUIPMENT SHALL BE ON HAND.

GENERAL NOTES △

REFERENCE SHALL BE MADE TO THE FOLLOWING:

STANDARD DRAWINGS:

AS-1-81	DATED 11-27-81
BR-1	DATED 5-29-79
SD-1-69	DATED 6-12-69
RB-1-55	REVISED 2-2-59

SUPPLEMENTAL SPECIFICATIONS:

836	DATED 11-12-85
824	DATED 10-8-82
845	DATED 2-25-86
953	DATED 8-21-80

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, 1983, INCLUDING THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:

DESIGN LOADING: HS 20-44, CASE I.

DESIGN STRESSES:

CONCRETE, CLASS S	COMPRESSIVE STRENGTH: 4500 PSI (SUPERSTRUCTURE)
CONCRETE, CLASS C	UNIT STRESS: 1333 PSI (SUBSTRUCTURE)
REINFORCING STEEL	ASTM A615, A616, A617, GRADE 60, MINIMUM YIELD STRENGTH: 60,000 PSI. (SUPERSTRUCTURE)
	GRADE 60, UNIT STRESS 24000 PSI SPIRAL REINFORCEMENT MAY BE PLAIN BARS, ASTM A82 OR A615 (SUBSTRUCTURE)
STRUCTURAL STEEL	ASTM A36, UNIT STRESS: 20,000 PSI
DECK PROTECTION METHOD	EPOXY COATED REINFORCING STEEL WITH 3" CONCRETE COVER OF WHICH 1-1/4" IS A LATEX MODIFIED CONCRETE OVERLAY.
BOLTS	7/8" DIAMETER HIGH STRENGTH STEEL BOLTS CONFORMING TO ASTM A325 UNLESS NOTED OTHERWISE.

EMBANKMENT CONSTRUCTION: The embankments shall be constructed to the level of the subgrade for a minimum distance of 200 feet back of the abutments. Excavation shall then be made for the abutments.

PILE DESIGN LOADS: The design load for the abutment piles is 35 tons per pile and the design load for the pier piles is 45 tons per pile.

UTILITY LINES: All expense involved in relocating (installing) the affected utility lines shall be borne by the Owner(s). The Contractor and Owner(s) are requested to cooperate by arranging their work in such a manner that inconvenience to either would be held to a minimum.

SEALING OF CONCRETE SURFACES: THE FOLLOWING CONCRETE AREAS ARE TO BE SEALED PER PROPOSAL NOTE:

- SUPERSTRUCTURE PARAPETS. SEE SHEET 14/18.
- WING WALL PARAPETS. SEE SHEET 5/18.

SUBSTRUCTURE REINFORCING BARS NOT REVISED BY BALKE
(△) SHALL HAVE A MINIMUM LAP OF 30 BAR DIAMETERS.

VOGT, IVERS, & ASSOCIATES
ENGINEERS CINCINNATI — ARCHITECTS CHICAGO

2/18

ESTIMATED QUANTITIES & GENERAL NOTES
BRIDGE NO. HAM-126-1359
S.R. 126 EASTBOUND OVER RELOCATED MILL CREEK
HAMILTON COUNTY STA. 54+99.13 to STA. 58+61.87

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED
—	E.F.F.	—	GWS EWV			△ BALKE ENG. 11/85

CALC. BY	HAM - 75 - 9.93	OHIO	604A
DATE	HAM - 126 - 13.00	FHWA REGION 5	787
CHKD. BY			
DATE			

GENERAL NOTES
PLAN REVISIONS BY BALKE ENGINEERS

REVISIONS WERE MADE TO SUBSTRUCTURE DRAWINGS TO INCORPORATE THE FOLLOWING:

- o REVISE PARAPETS TO STANDARD SAFETY PARAPET SHAPE.
- o PROVIDE EPOXY-COATED REINFORCEMENT IN CORROSION-PRONE CONCRETE AREAS.
- o SEAL CONCRETE SURFACES.
- o NUMBER PILES AND ADD DETAIL NOTES.
- o REVISE ABUTMENTS TO RECEIVE FULL WIDTH APPROACH SLAB PER AS-1-81.
- o REPLACE SLIDING PLATE EXPANSION JOINTS WITH STRIP SEAL JOINTS
- o LENGTHEN PIER COLUMN TO FOOTING DOWELS AS REQUIRED BY AASHTO.

AT THE REQUEST OF THE OHIO DEPARTMENT OF TRANSPORTATION, ALL SUBSTRUCTURE REINFORCEMENT IS TO BE GRADE 60.

REVISIONS MADE BY BALKE ENGINEERS ARE DENOTED BY (△) SYMBOL.

OTHER THAN NOTED REVISIONS, SUBSTRUCTURES ARE THE DESIGN AND DETAILING OF VOGT, IVERS, AND ASSOCIATES, INC.

ANALYSIS OF THE ORIGINAL SUPERSTRUCTURE DESIGN HAS BEEN COMPARED TO THE REVISED SUPERSTRUCTURE DESIGN TO ASSURE THAT LOADINGS HAVE NOT INCREASED ON SUBSTRUCTURES PROVIDED BY VOGT, IVERS AND ASSOCIATES, INC. DESIGN OF THESE SUBSTRUCTURES REMAINS THE RESPONSIBILITY OF VOGT, IVERS, AND ASSOCIATES.

REVISED SUPERSTRUCTURE DESIGN AND DETAILING WAS PREPARED TO CONFORM WITH UPDATED DESIGN STANDARDS.

DESIGN AND DETAILING BY BALKE ENGINEERS WAS PERFORMED IN ACCORDANCE WITH THE AASHTO SPECIFICATIONS FOR HIGHWAY BRIDGES, THIRTEENTH EDITION, 1983, AASHTO INTERIM SPECIFICATIONS FOR BRIDGES 1984, AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

2A/18

GENERAL NOTES
BRIDGE NO. HAM-126-1359
S.R. 126 EASTBOUND OVER
RELOCATED MILL CREEK

HAMILTON COUNTY STA. 54+99.13 to STA. 58+61.87

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
SJA	JAG	—	TMB	CRS 3/86	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

603
787

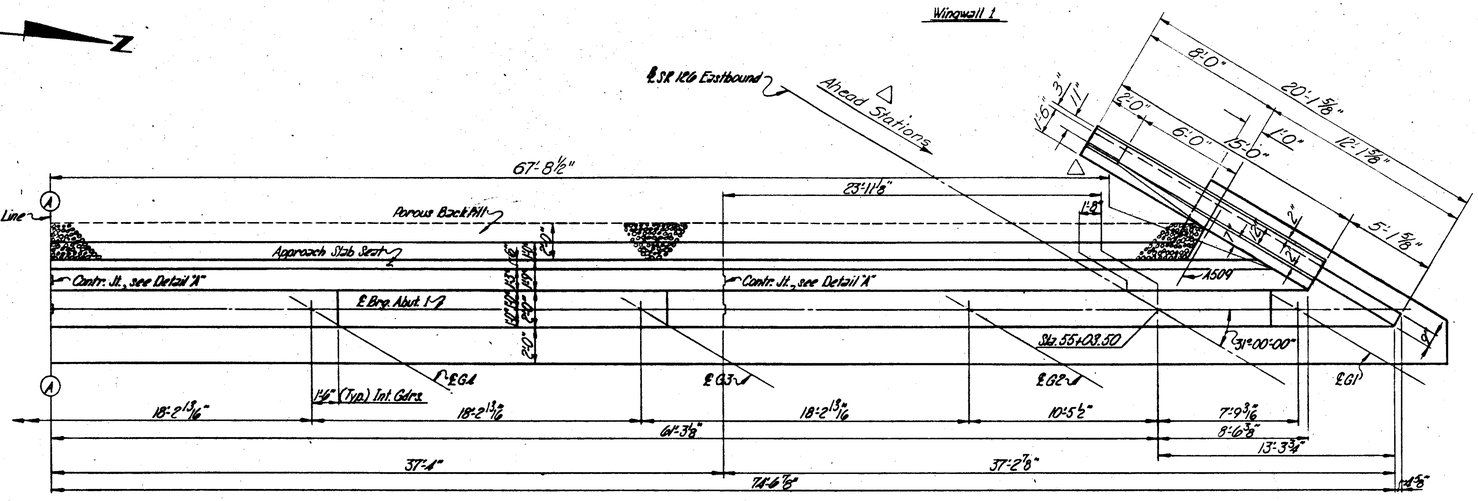
HAM-75-9.93
HAM-126-13.00

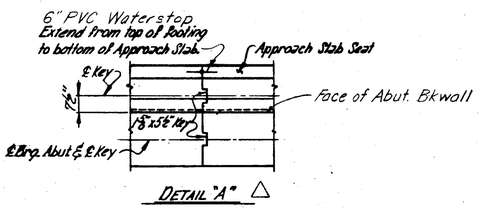
NOTES

1. For General Notes, see sh. △ 2 21 18
2. For Wingwall Details, see sh. 4,5 18
3. For Reinforcing Steel List, see sh. 16 18
4. For Termination of 6" CS.P. see Detail "C" sh. 5 18
5. Porous backfill, 2'-0" thick shall extend up to the plane of the subgrade and laterally to the ends of the wingwalls. Porous backfill, 2'-0" thick and limits as shown in wingwall plan, shall extend up to the bottom of the paved shoulder, Abut. 1 only. For Abut. 2, see Note 1, sh. 6 18

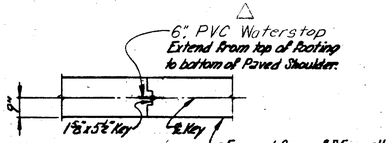


DETAIL "B"

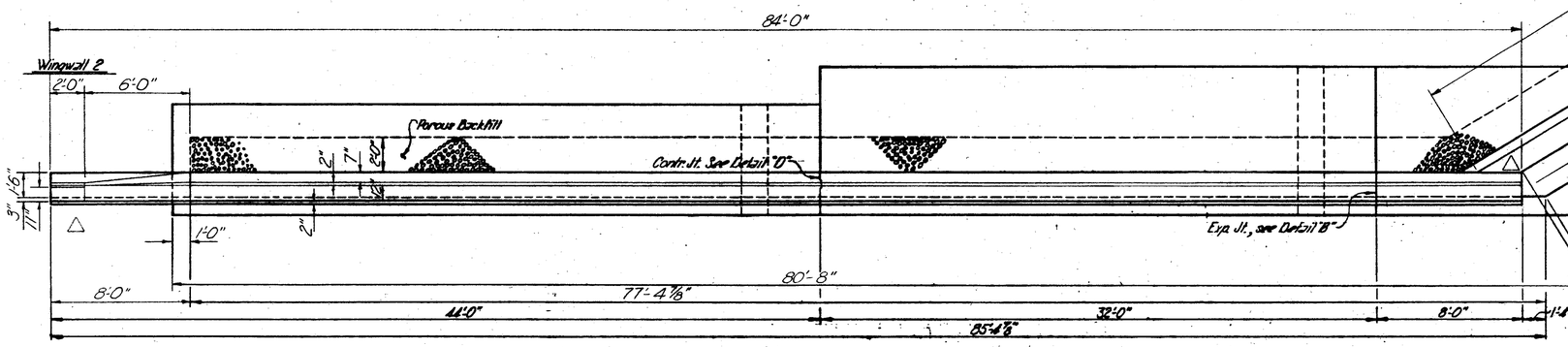




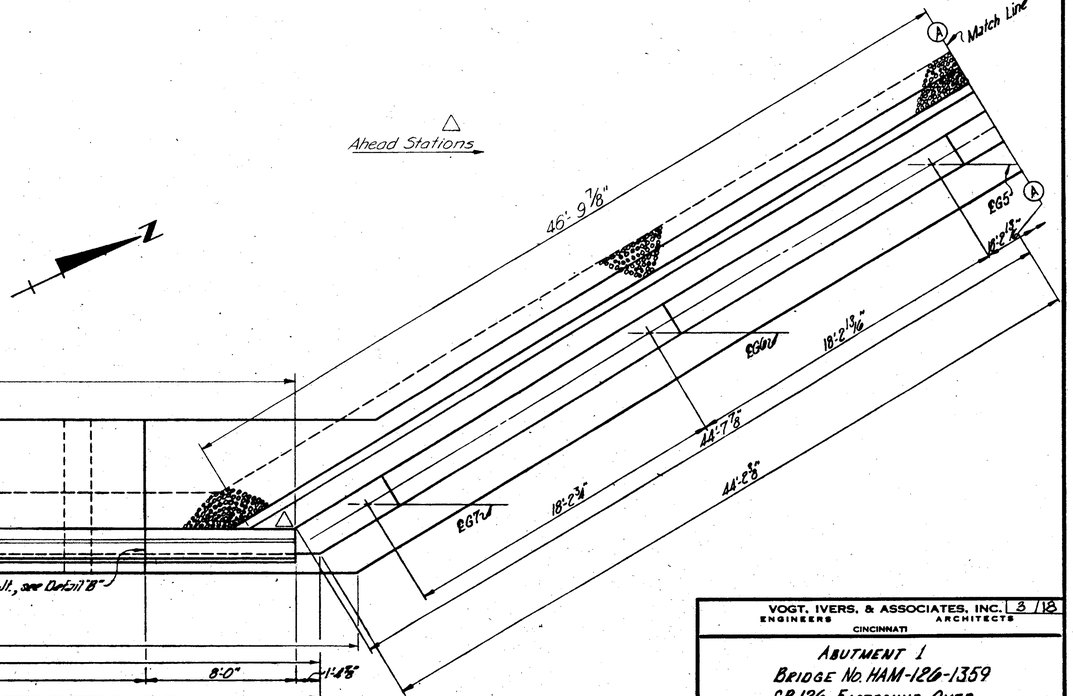
DETAIL "A" △



DETAIL "D" △



PLAN



VOGT, IVERS, & ASSOCIATES, INC. 3 18
ENGINEERS ARCHITECTS
CINCINNATI

ABUTMENT 1
BRIDGE NO. HAM-126-1359
S.R. 126 EASTBOUND OVER
RELOCATED MILL CREEK

HAMILTON COUNTY STA. 54+99.13 to STA. 58+61.87

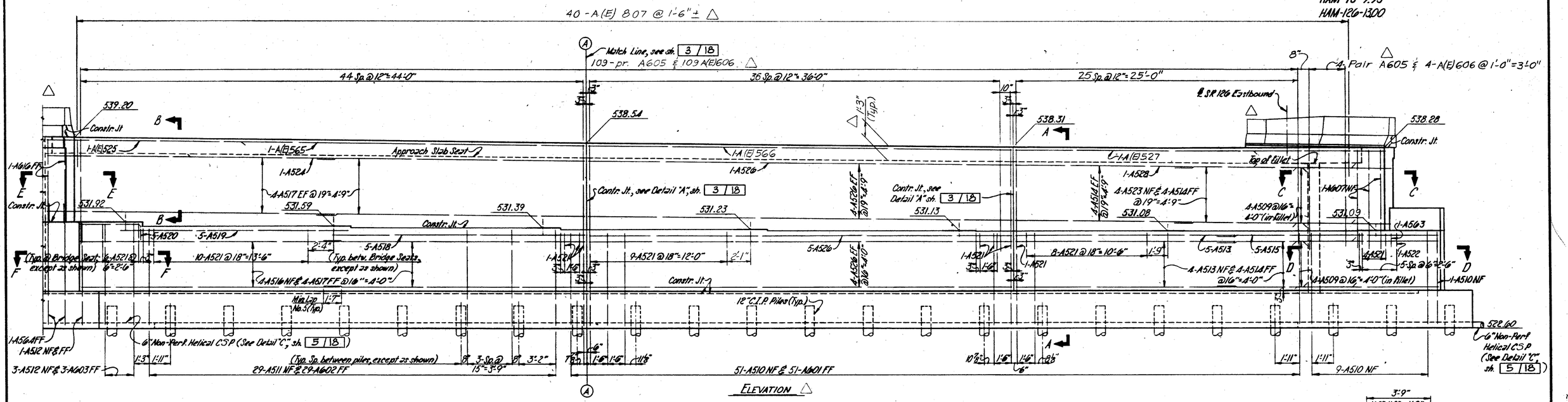
DESIGNED	DRAWN	TRACED	CHECKED	REVISIONS	DATE	△ REVISED
EDA	ABT	—	E.F.F.			△ DALDE ENG. 11/85

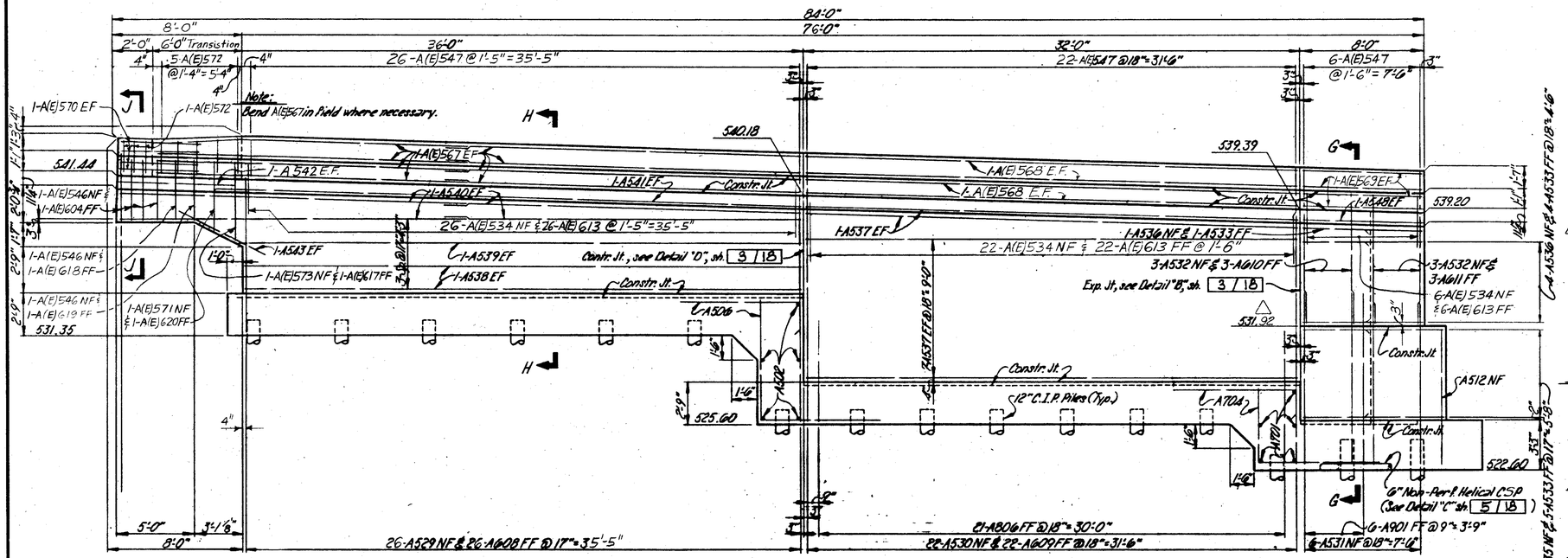
FED. RD. DESIGNATION	STATE	PROJECT	
2	OHIO		

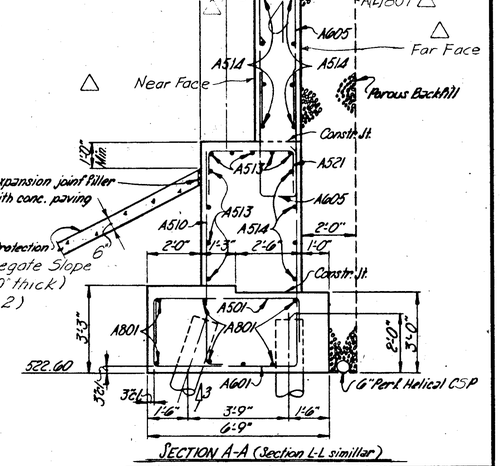
606
187

HAM-75-9.93
HAM-126-1300

40 - A(E) 807 @ 1'-6" ± △







LEGEND
NF - Near Face
FF - Far Face
EF - Each Face

Notes: △
1. For additional sections, see sh. 5 / 18
2. "E" denotes epoxy coated reinforcing bar.
3. ADDITIONAL NOTES: See Sheet 3 / 18

VOGT, IVERS, & ASSOCIATES, INC. 4 / 18
ENGINEERS ARCHITECTS
CINCINNATI

ABUTMENT 1
BRIDGE NO. HAM-126-1359
SR 126 EASTBOUND OVER
RELOCATED MILL CREEK

HAMILTON COUNTY STA. 54+99.13 to STA. 58+61.87

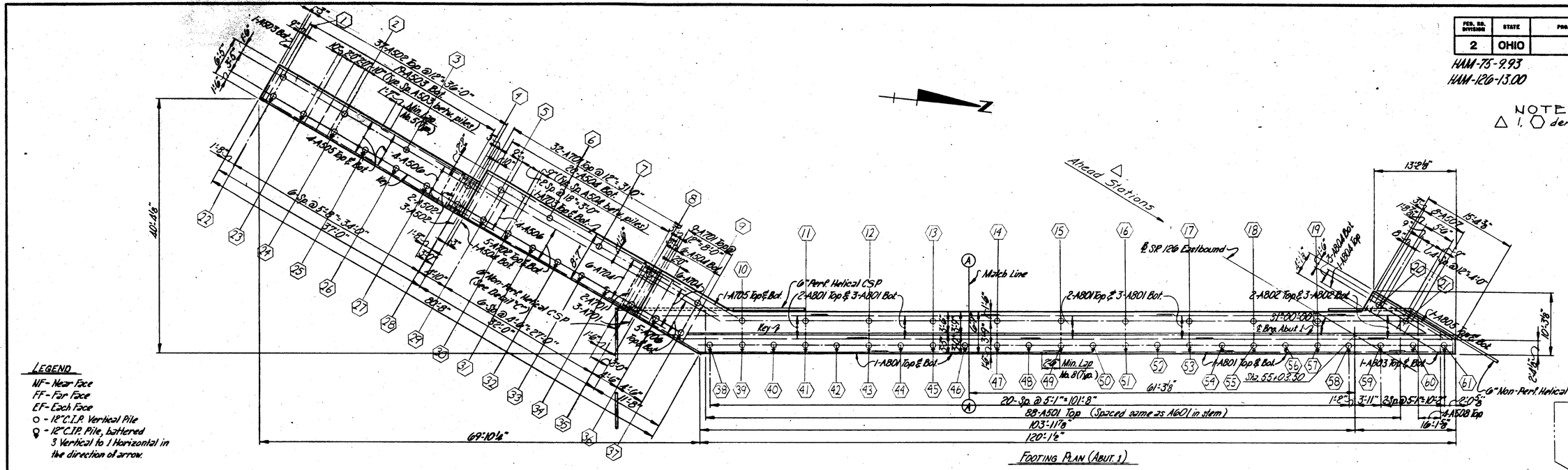
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED
EPA	187	—	E.F.F.			△ SALLE ENG. 11/85

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

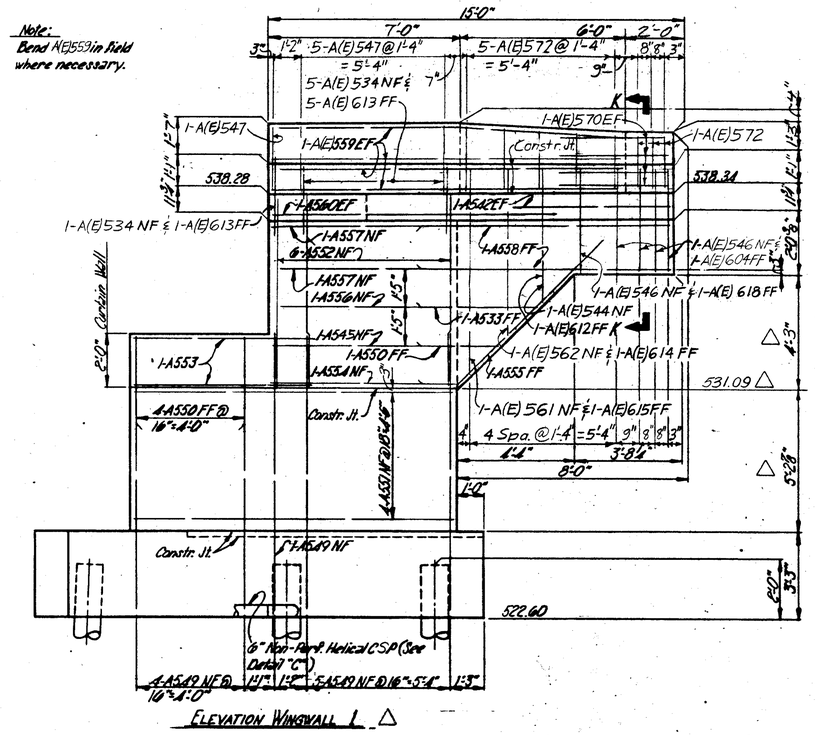
GOT 787

HAM-75-9.93
HAM-126-13.00

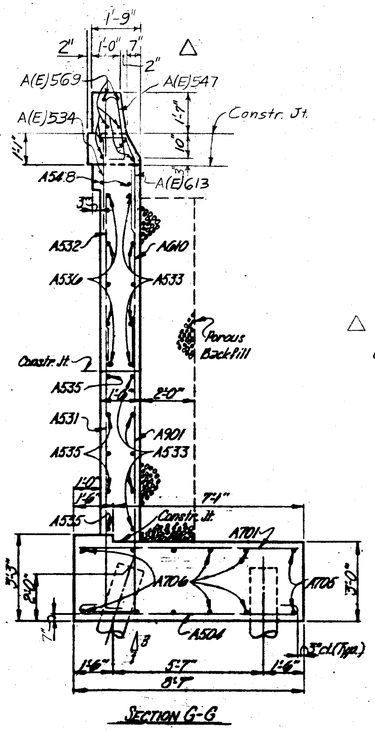
NOTE:
△ 1. ⬡ denotes pile number.



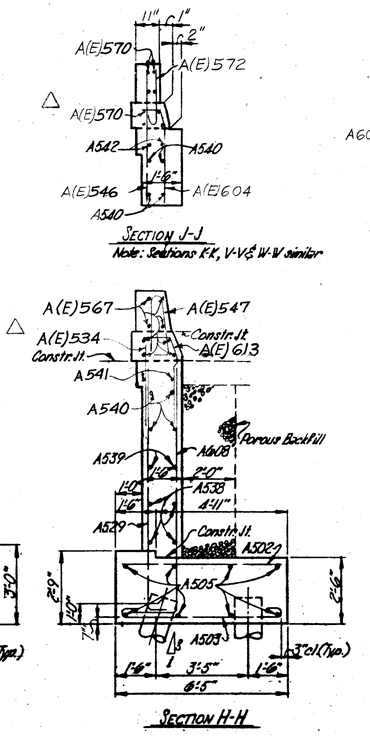
LEGEND
NF - Near Face
FF - Far Face
EF - Each Face
○ - 18" C.I.P. Vertical Pile
♀ - 18" C.I.P. Pile, battered 3 Vertical to 1 Horizontal in the direction of arrow.



ELEVATION WINGWALL 1 △

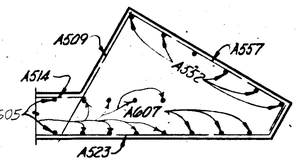


SECTION G-G

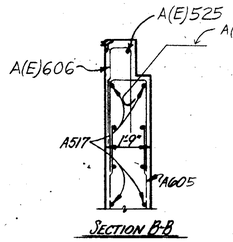


SECTION H-H

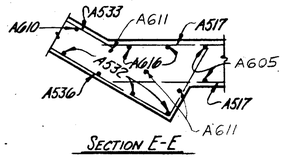
SECTION J-J
Note: Sections K-K, V-V & W-W similar



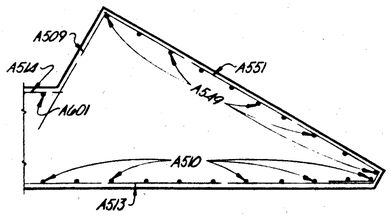
SECTION C-C



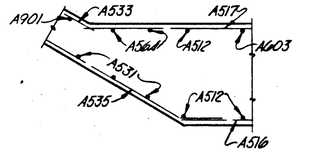
SECTION B-B



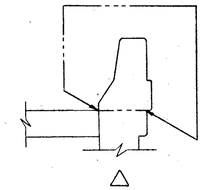
SECTION E-E



SECTION D-D

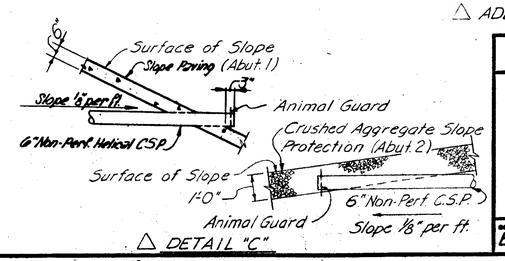


SECTION F-F



△ Seal Concrete Surfaces of Wingwall Parapets Between the Limits Indicated (Typ.)

Notes
△ "(E)" denotes epoxy coated reinforcing bar.
△ ADDITIONAL NOTES: See Sheet 3/18.



△ DETAIL "C"

VOGT, IVERS, & ASSOCIATES, INC. 5/18
ENGINEERS ARCHITECTS
CINCINNATI

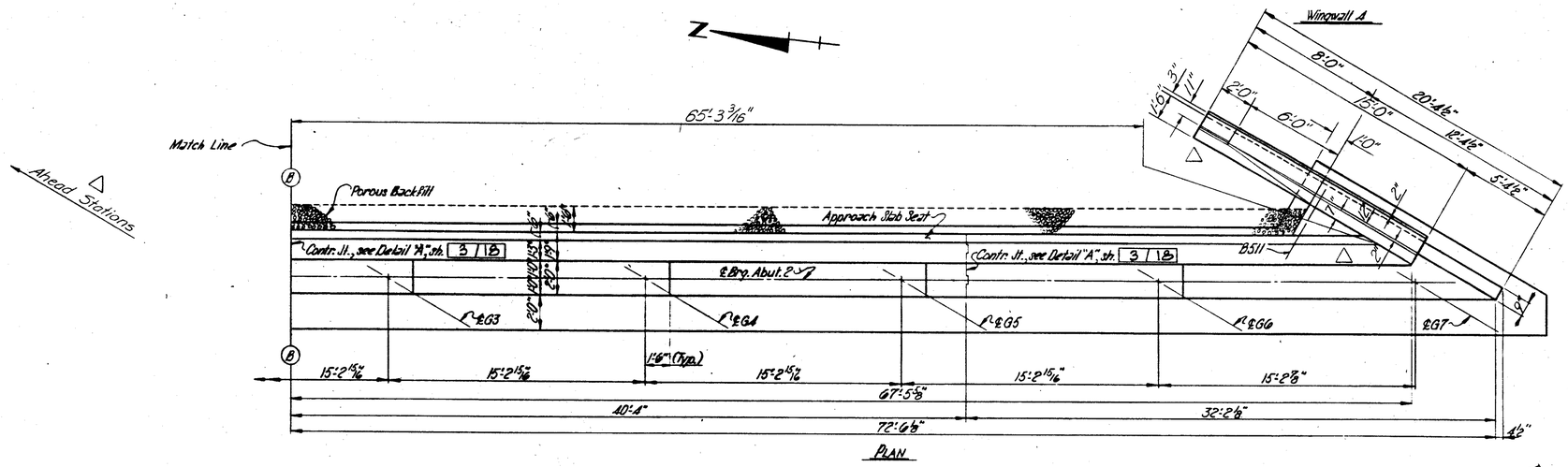
ABUTMENT DETAILS
BRIDGE NO. HAM-126-1359
S.R. 126 EASTBOUND OVER
RELOCATED MILL CREEK
HAMILTON COUNTY STA. 54+99.13 to STA. 58+61.87

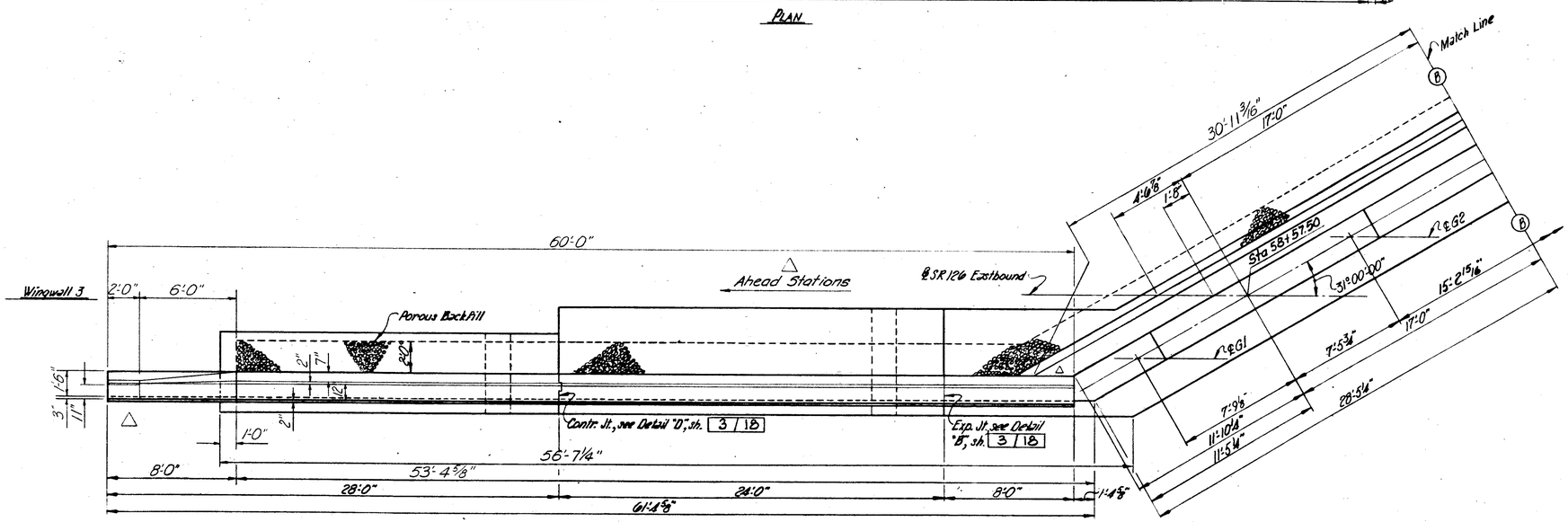
DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE	△ REVISED VALUE ENG. 11/85
EPA	ABT	—	E.F.F.			

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

608
787

HAM-75-9.93
HAM-126-13.00





Notes:

1. Porous backfill, 1'-6" thick shall extend up to the plane of the subgrade and laterally to the ends of the wingwalls. Porous backfill, 2'-0" thick and limits as shown in wingwall plan, shall extend up to the bottom of the paved shoulder.
2. ADDITIONAL NOTES: See Sheet 3 | 18

VOGT, IVERS, & ASSOCIATES, INC. 6 | 18
ENGINEERS ARCHITECTS
CINCINNATI

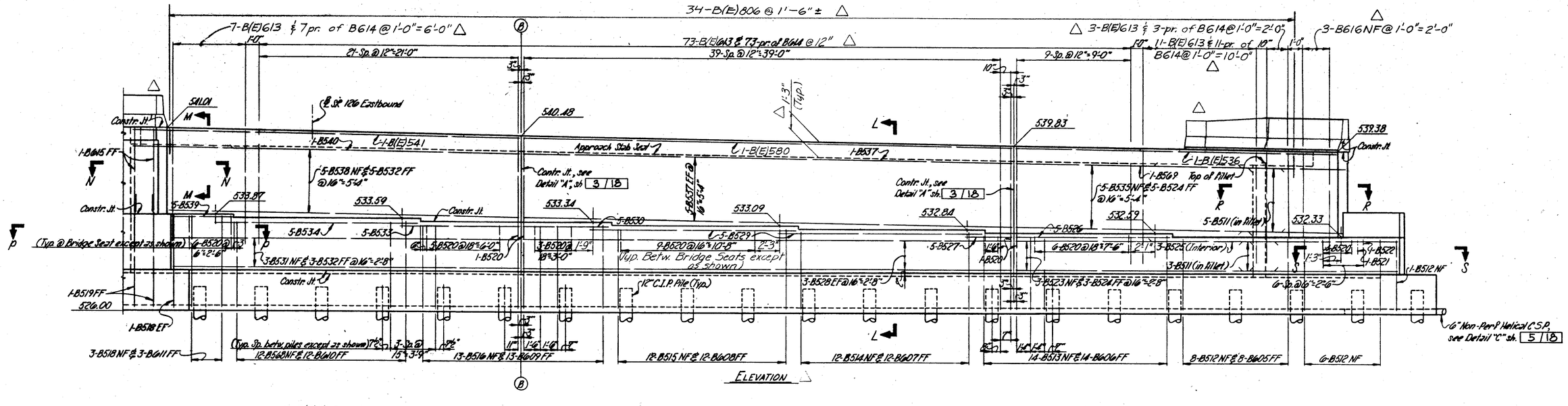
ABUTMENT 2
BRIDGE NO. HAM-126-1359
SR 126 EASTBOUND OVER
RELOCATED MILL CREEK
HAMILTON COUNTY STA. 54+99.13 to STA. 58+61.87

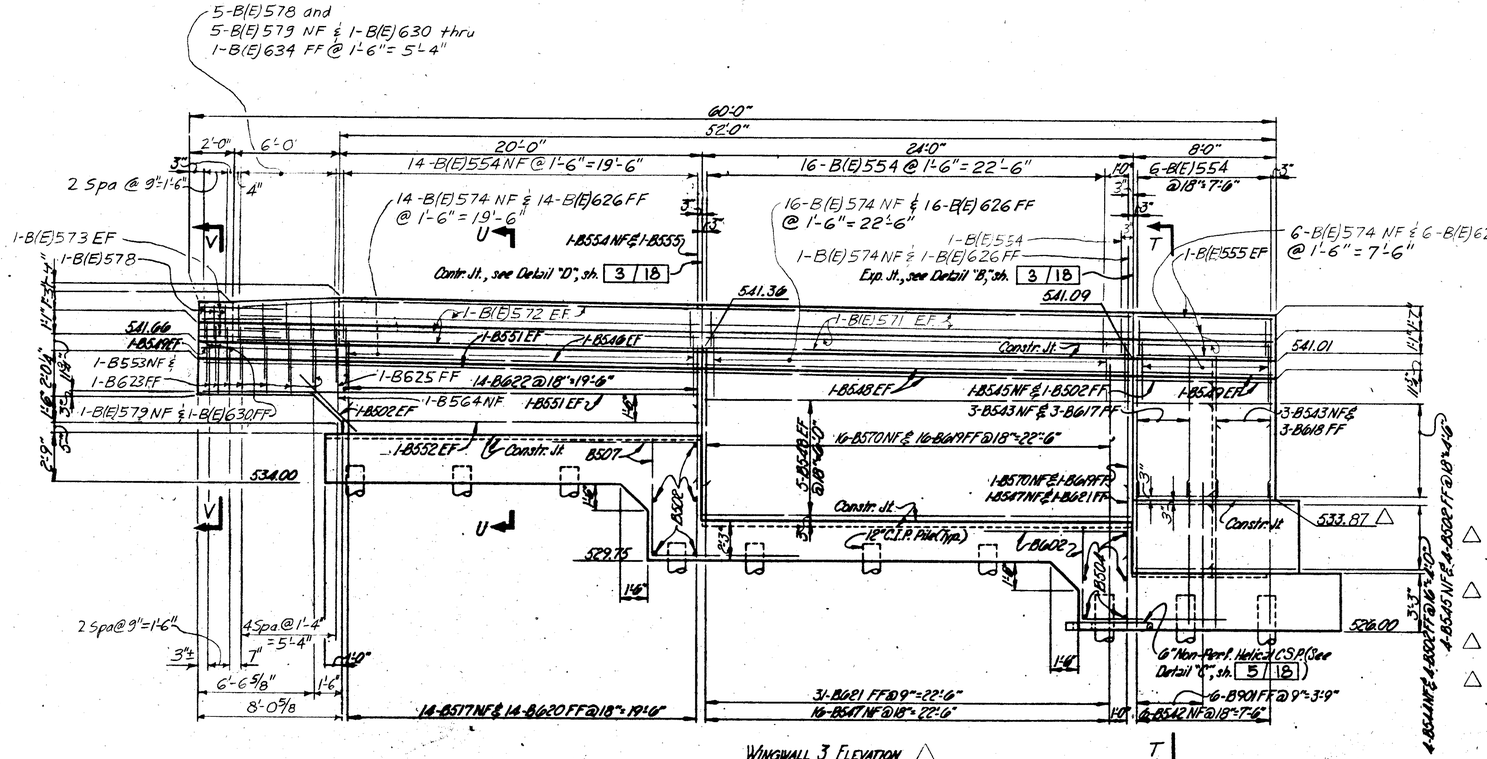
DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE	REVISED
EPA	ABT	—	E.F.F.			BALKE ENG. 11/25

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

609
787

HAM-75-9.93
HAM-126-13.00





LEGEND
NF - Near Face
FF - Far Face
EF - Each Face

NOTES

△ For Termination of 6" C.S.P. see Detail "C", Sheet 5 | 18.

△ Bend B(E)572 in field where necessary.

△ "(E)" Denotes epoxy coated reinforcing bar.

△ ADDITIONAL NOTES: See Sheet 6 | 18.

VOGT, IVERS, & ASSOCIATES, INC. 7 | 18
ENGINEERS ARCHITECTS
CINCINNATI

ABUTMENT 2
BRIDGE NO. HAM-126-1359
SR. 126 EASTBOUND OVER
RELOCATED MILL CREEK

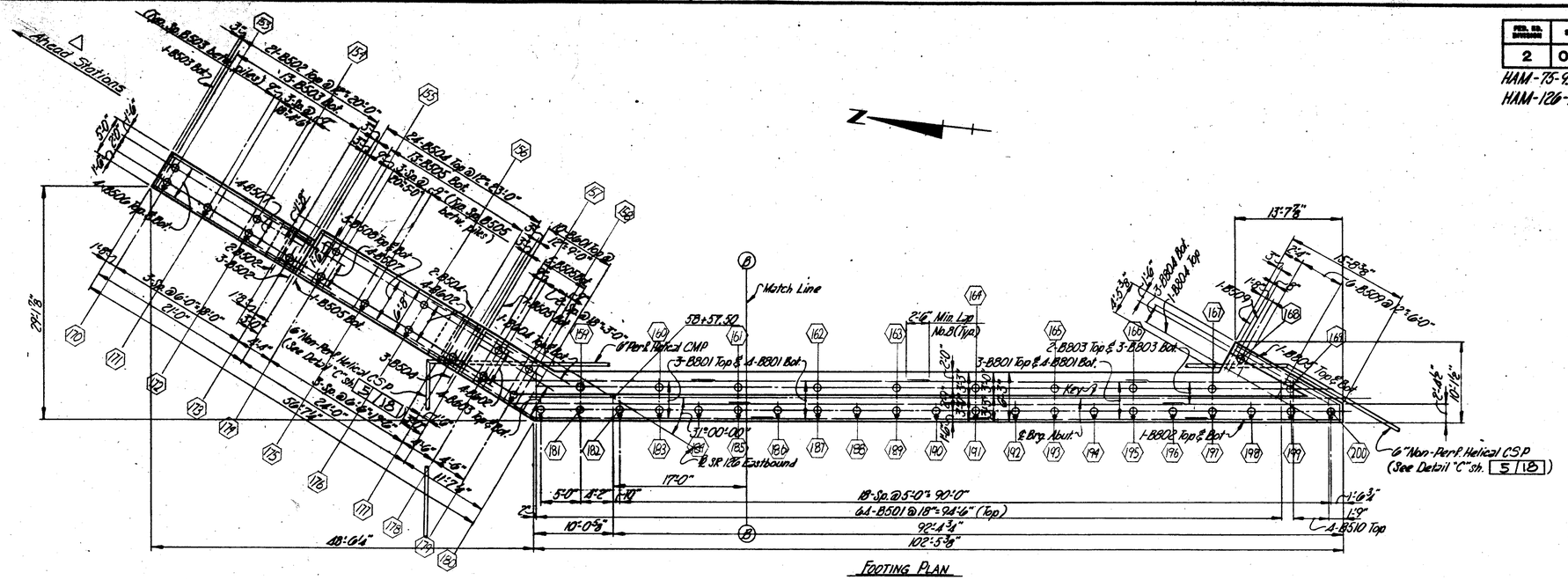
HAMILTON COUNTY STA. 54+99.13 to STA. 58+61.87

DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE	△ REVISED
EJA	ABT	—	E.F.F.			BALVE ENG. 11/85

FED. ROAD DESIGNATION	STATE	PROJECT	
2	OHIO		

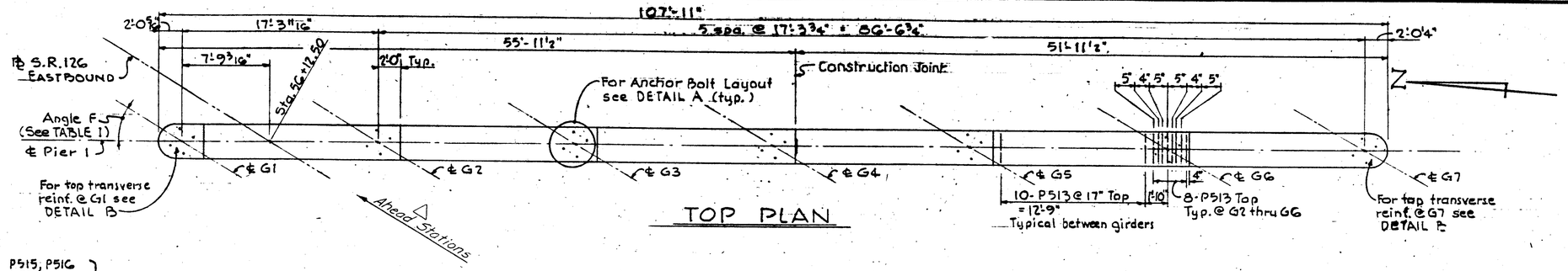
610
187

HAM-75-9.93
HAM-126-13.00

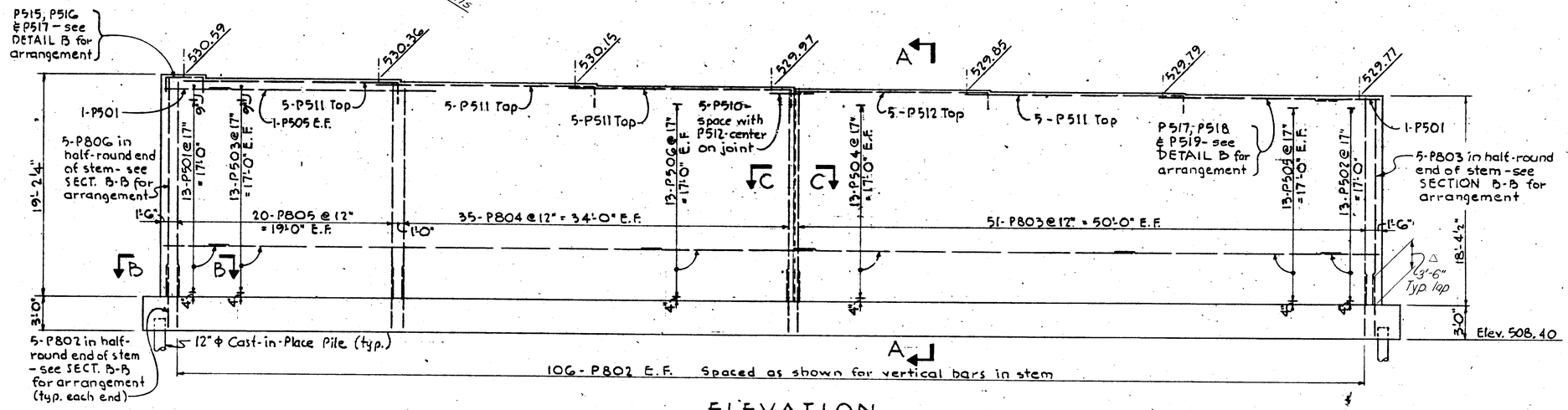

Ahead Stations
Elev. to B503 bottom (pickup) Ea. 3 lb. @ 5'-7"
3'-0"
21-B502 Top @ 1'-0" = 20'-0"
13-B501 Bot.
24-B504 Top @ 12" = 23'-0"
13-B505 Bot.
3 lb. @ 2'-0" (Top, See B504 bent. plan)
4-B505A
4-B502
2-B502
3-B502
4-B504 Top
4-B504 Bot.
2-B504
4-B502
2-B504
4-B505 Bot.
3-B504
4-B503 Top & Bot.
4-B503
6" Non-Perf. Helical CSP (See Detail "C" sh. 5 18)
3 lb. @ 6'-0" = 18'-0"
3 lb. @ 2'-0" = 24'-0"
38'-7½"
11'-7½"
48'-6¼"
29'-1⅜"
Match Line
5B+57.50
6" Perf. Helical CMP
3-B801 Top & 4-B801 Bot.
2'-6" Min. Lap No. 8 (Typ.)
2-B803 Top & 3-B803 Bot.
3-B801 Top & 4-B801 Key
1-B804 Top & Bot.
1-B804 Bot.
1-B804 Top
1-B509
6-B509 @ 1'-6"
13'-7⅞"
15'-5⅜"
2'-5⅜"
1'-1½"
10'-1½"
2'-6"
2'-5"
3'-0"
1'-6"
1'-0"
1'-3"
1'-6"
1'-6"
1'-6

FED. AID PROJECT	STATE	PROJECT	
2	OHIO		

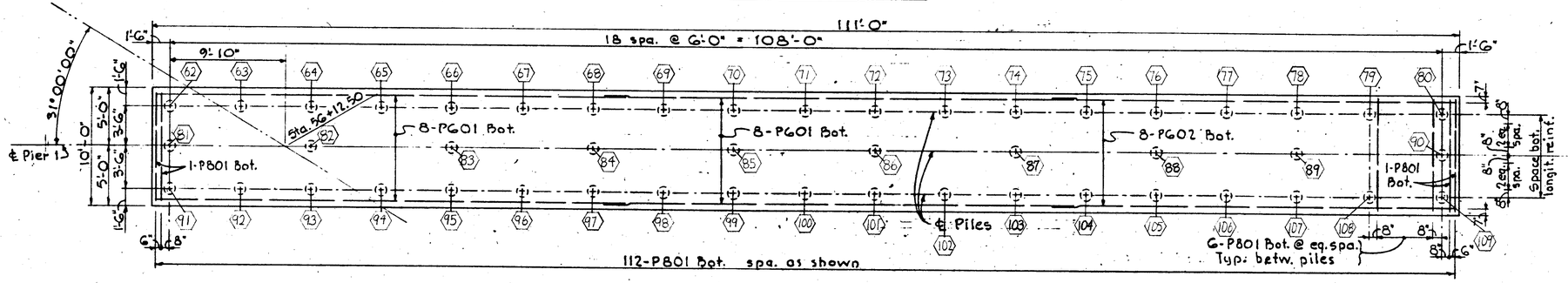
HAM-75-9.93
HAM-126-13.00



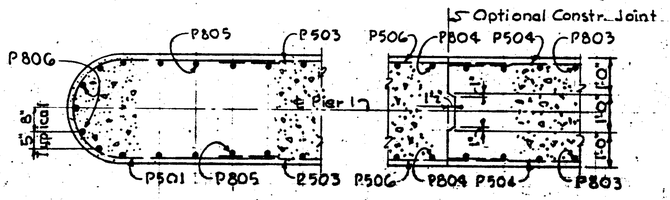
TOP PLAN



ELEVATION

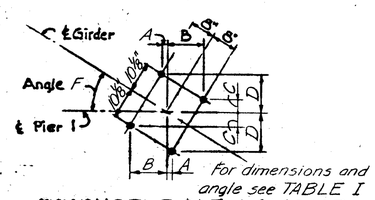


FOOTING PLAN



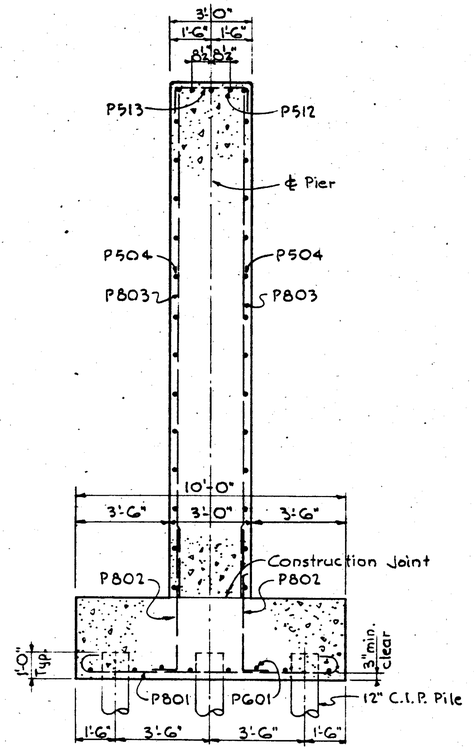
SECTION B-B

SECTION C-C



For dimensions and angle see TABLE I

ANCHOR BOLT LAYOUT DETAIL A



SECTION A-A

As shown for Pier 1
Similar for Pier 2

LEGEND

E.F. = Each Face
= Vertical Pile
△ ⬡ = Pile Number

NOTES

For NOTES see Sh. 10/18
For DETAIL B see Sh. 10/18

TABLE I

	Dim. A	Dim. B	Dim. C	Dim. D	Angle F
G1	1 5/8"	12 1/16"	4 9/16"	12 13/16"	31°00'00"
G2	1 11/16"	12 1/16"	4 5/8"	12 13/16"	30°45'10"
G3	1 3/4"	12 1/16"	4 11/16"	12 13/16"	30°30'32"
G4	1 7/16"	12"	4 11/16"	12 3/4"	30°16'07"
G5	1 7/8"	12"	4 3/4"	12 3/4"	30°01'54"
G6	1 15/16"	12"	4 13/16"	12 3/4"	29°47'53"
G7	1 15/16"	11 15/16"	4 7/8"	12 3/4"	29°34'04"

VOGT, IVERS, & ASSOCIATES, INC. 9/18
ENGINEERS ARCHITECTS
CINCINNATI

PIER 1

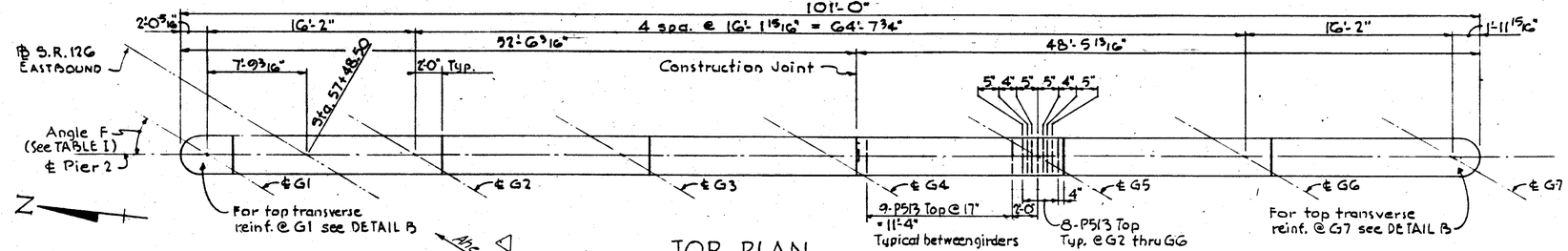
BRIDGE NO. HAM-126-1359
S.R. 126 EASTBOUND
OVER RELOCATED MILL CREEK
HAMILTON COUNTY STA. 54+99.13 TO STA. 58+61.87

DESIGNED	DRAWN	TRACED	CHECKED	REVISIONS	DATE	APPROVED
BCS	TEC	X	E.F.F.			△ BALKE ENG. 11-85

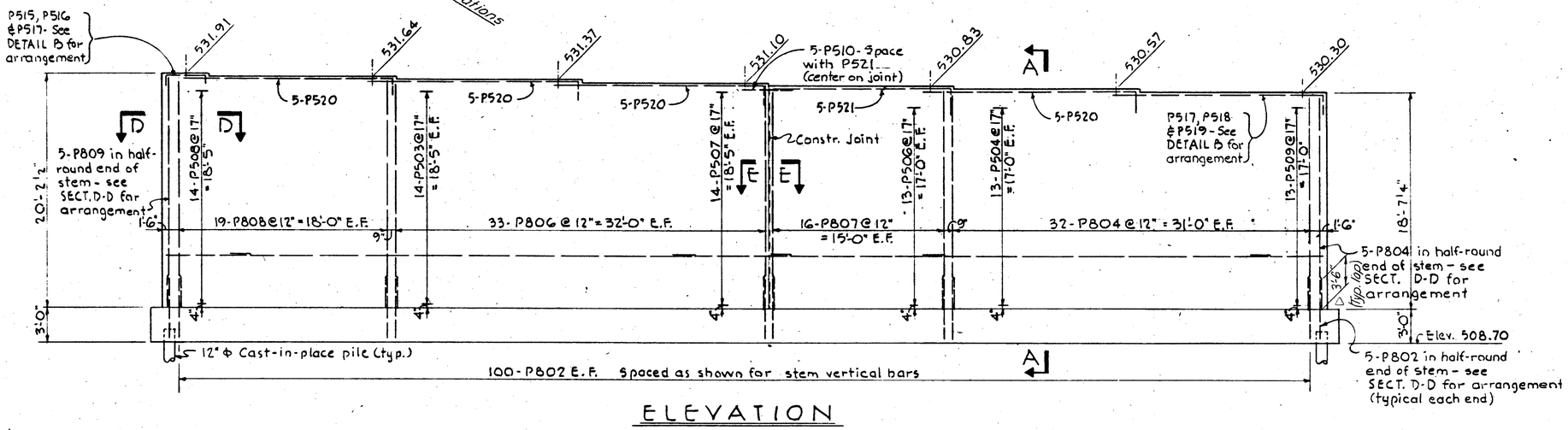
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

HAM-75-9.93
HAM-126-13.00

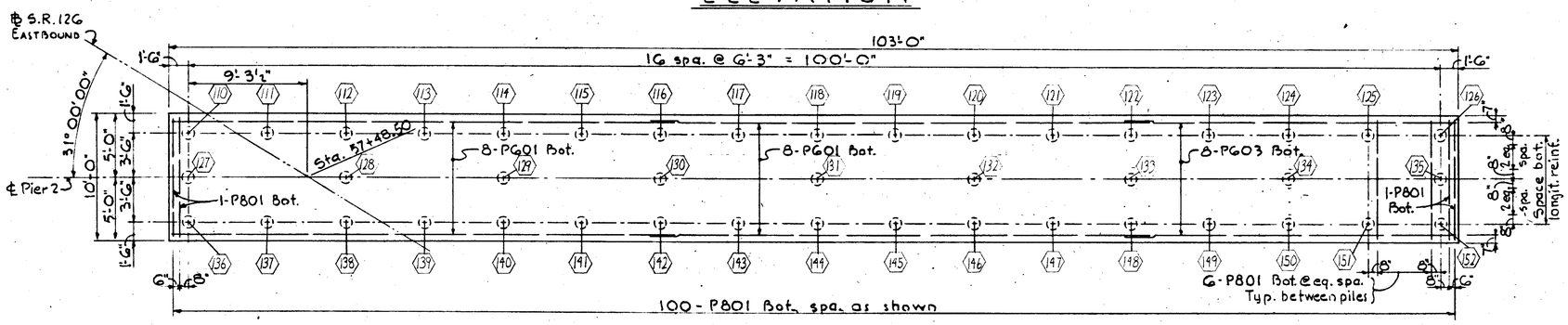
612
787



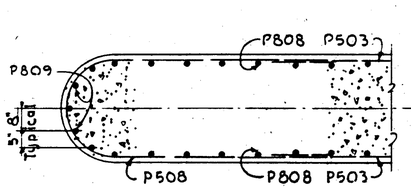
TOP PLAN



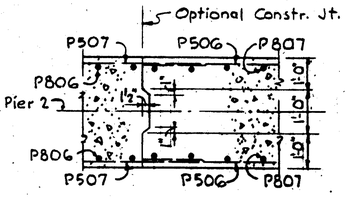
ELEVATION



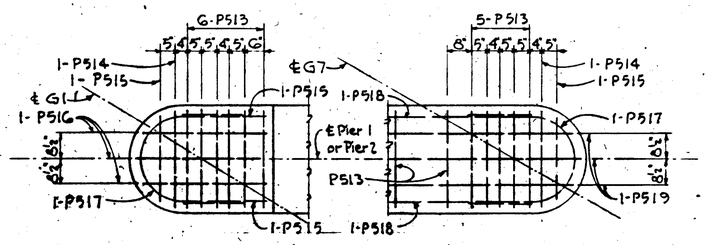
FOOTING PLAN



SECTION D-D



SECTION E-E



TOP BARS @ G1 & G7 DETAIL B

NOTES

1. For GENERAL NOTES see Sh. 2/18
2. For SECTION A-A see Sh. 9/18
3. For LEGEND see Sh. 9/18
4. For TABLE I see Sh. 9/18
5. For REINFORCING STEEL LIST see Sh. 16/18
6. Minimum clearance between any reinforcing steel and surfaces of footing shall be 3".
7. Place dowels in footing to insure correct spacing of steel in stem.

△ 8. BRIDGE SEAT REINFORCING: Reinforcing steel in the vicinity of the bridge seat shall be accurately placed to avoid interference with the drilling of anchor bar holes.

△ 9. ⬡ = Pile Number

VOGT, IVERS, & ASSOCIATES, INC. 10/18
ENGINEERS ARCHITECTS
CINCINNATI

PIER 2

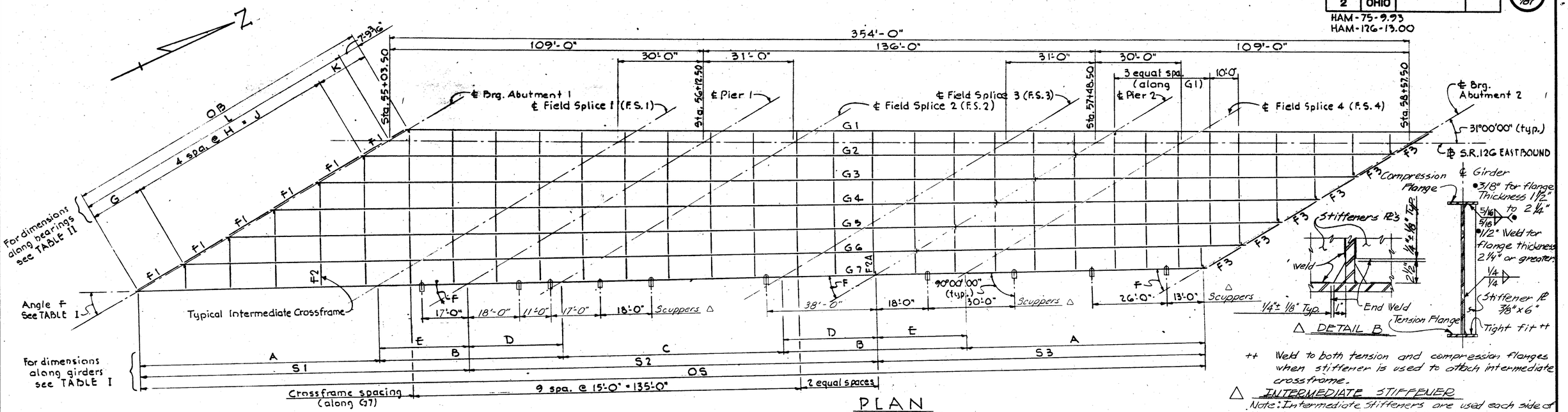
BRIDGE NO. HAM-126-1359
S.R. 126 EASTBOUND
OVER RELOCATED MILL CREEK
HAMILTON COUNTY STA. 54+99.13 TO STA. 58+61.87

DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE	△ REVISED
BCS	TEC	X	E.F.F.			BALDE ENG. 11/85

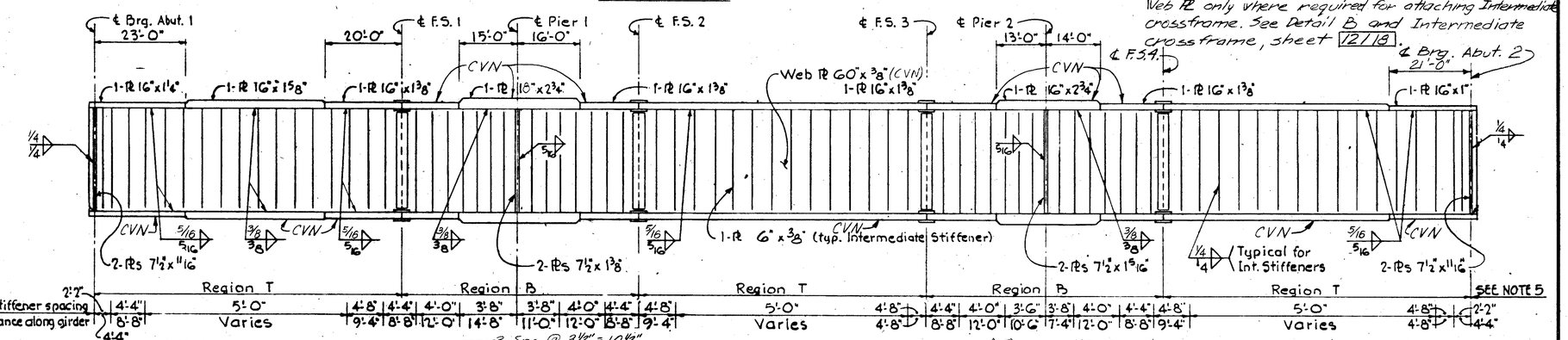
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

HAM-75-9.93
HAM-126-13.00

6/13
787



PLAN



△ Region T = Top flange in compression & bottom flange in tension
△ Region B = Bottom flange in compression & top flange in tension

ELEVATION

NOTE Bottom Flange same as Top Flange (Except for CVN designation)

△ DETAIL B

++ Weld to both tension and compression flanges when stiffener is used to attach intermediate crossframe.

△ INTERMEDIATE STIFFENER

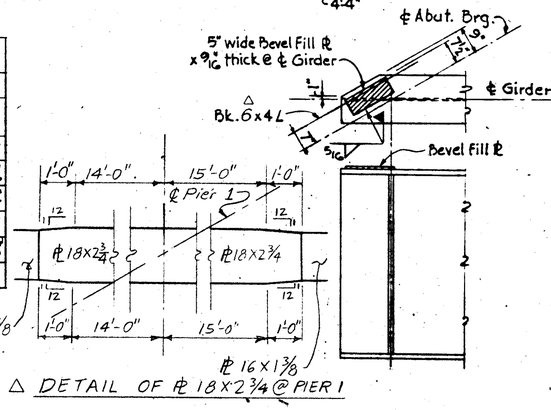
Note: Intermediate Stiffeners are used each side of Web PL only where required for attaching Intermediate crossframe. See Detail B and Intermediate crossframe, sheet 12/18.

TABLE I

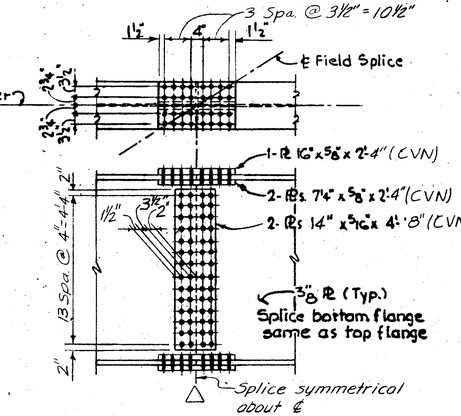
Dimension	GIRDERS						
	G1	G2	G3	G4	G5	G6	G7
S1	109'-0"	109'-9½"	110'-7"	111'-4¼"	112'-2 11/16"	112'-11 5/8"	113'-9 3/16"
S2	136'-0"	136'-11 13/16"	137'-11 11/16"	138'-11 9/16"	139'-11½"	140'-11 7/16"	141'-11 3/8"
S3	SAME AS S1						
OS	354'-0"	356'-6 13/16"	359'-1 11/16"	361'-8 9/16"	364'-3 5/8"	366'-10 11/16"	369'-5 3/4"
A	79'-0"	79'-6 7/8"	80'-1 3/4"	80'-8 5/8"	81'-3 9/16"	81'-10½"	82'-5 7/16"
B	61'-0"	61'-5 9/16"	61'-10 5/8"	62'-4"	62'-9 5/16"	63'-2 11/16"	63'-8"
C	74'-0"	74'-6 7/16"	75'-0 5/16"	75'-7 5/16"	76'-1 7/8"	76'-8 5/16"	77'-2 7/8"
D	31'-0"	31'-2 11/16"	31'-5 3/8"	31'-8 1/8"	31'-10 13/16"	32'-1 9/16"	32'-4 1/4"
E	30'-0"	30'-2 5/8"	30'-5 1/4"	30'-7 7/8"	30'-10½"	31'-1 1/8"	31'-3 3/4"
∠ F	31°00'00"	30°45'10"	30°30'32"	30°16'07"	30°01'54"	29°47'53"	29°34'04"

TABLE II

Dimension	LOCATION			
	℄ Brg. Abut. 1	℄ Pier 1	℄ Pier 2	℄ Brg. Abut. 2
G	18'-2¾"	17'-3¾"	16'-2"	15'-2 7/8"
H	18'-2 13/16"	17'-3¾"	16'-1 15/16"	15'-2 15/16"
J	72'-11¼"	69'-3"	64'-7¾"	60'-11¾"
K	18'-2 11/16"	17'-3 11/16"	16'-2"	15'-2 7/8"
L	101'-7½"	96'-1'-4"	89'-2 9/16"	83'-8 5/16"
OB	109'-4 11/16"	103'-10 7/16"	96'-11¾"	91'-5½"



△ DETAIL OF PL 18X2¾ @ PIER 1



△ 1 For details of End and Intermediate Crossframes, see Sh. 12/18.
△ 2 Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements as specified in 711.01 of CMS.
△ 3 For details of Scuppers, see sheet 13/18.
4 For ELEVATION LAYOUT, and for DEFLECTION & CAMBER, see Sh. 12/18.
△ 5 Intermediate Stiffeners shall be attached to interior sides of exterior girders & on alternating sides for interior girders.
△ 6. HIGH STRENGTH BOLTS shall be ⅞ diameter A325 unless otherwise noted.
△ 7. For End Dam details, see Strip Seal Joint, Std. Dwg. Use of split type extrusions at joint upturns is optional.
△ 8 For Joint Setting Tables, see Sheet 13/18.

NOTES

VOGT, IVERS, & ASSOCIATES, INC. ENGINEERS ARCHITECTS CINCINNATI 11/18

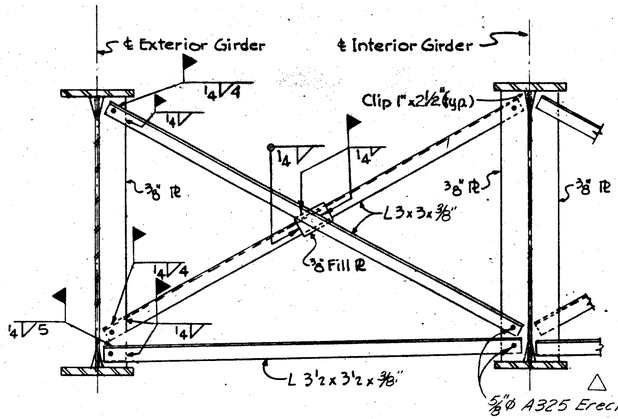
FRAMING PLAN

BRIDGE NO. HAM-126-1359
S.R. 126 EASTBOUND
OVER RELOCATED MILL CREEK
HAMILTON COUNTY STA. 54+99.13 TO STA. 58+61.87

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.R.G.	T.E.C.	X	E.F.F.			△ BALKE ENG. 11/85

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

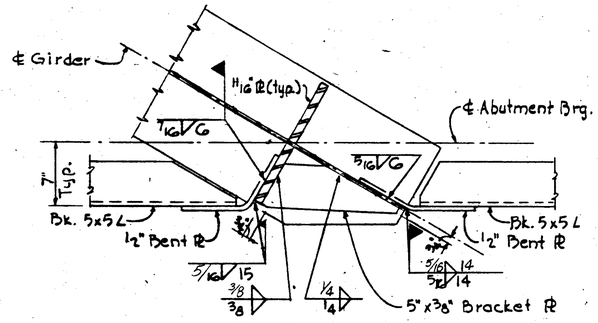
HAM - 75 - 9.93
HAM - 126 - 13.00



ELEVATION
INTERMEDIATE CROSSFRAMES
F2 As Shown

△NOTE:
Erection Bolts: Hole diameter in the crossframes and girder stiffeners shall be respectively 1/16" & 1/4" larger than the diameter of the erection bolts. Unless replaced by permanent high strength bolts, erection bolts shall remain in place. Lock washers shall be furnished for other than fully torqued high strength erection bolts. Bolts shall be furnished as part of 513.

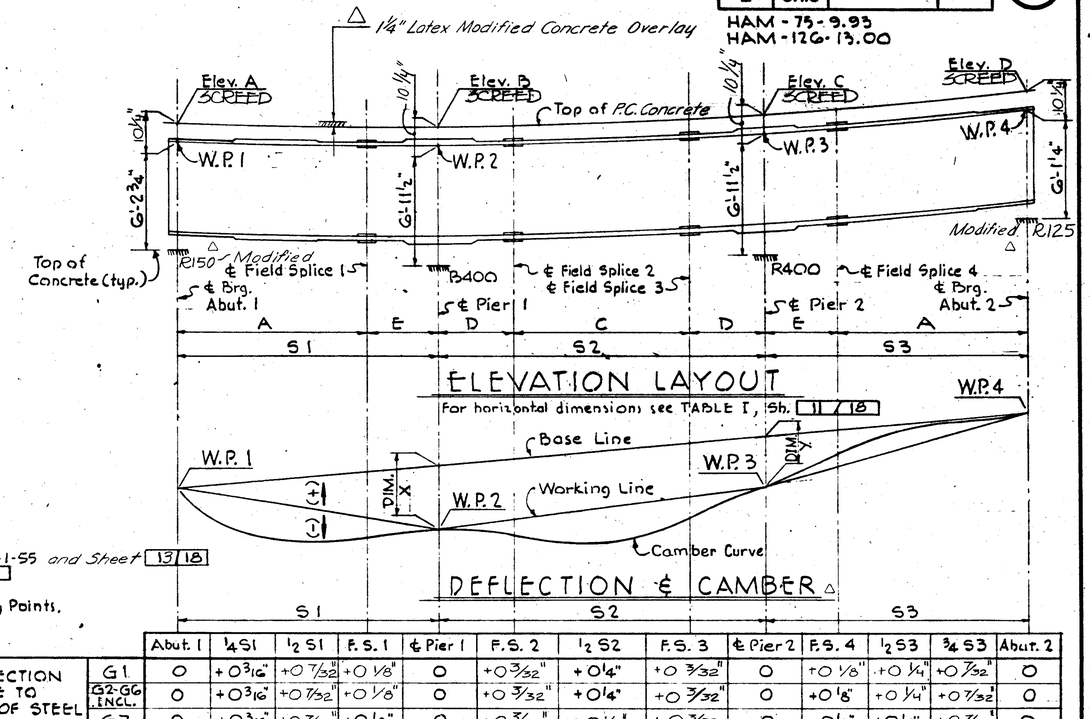
In lieu of erection bolts and at the option of the Contractor, alternative means of temporary bracing may be used subject to the approval of the Director (501.06).



DETAIL A
BOTTOM STRUT CONNECTIONS
END CROSSFRAMES

Notes for Elevation Layout

△1 For details of bearings R125 & R150, see Std. Dwg. RB-1-55 and Sheet 13/18
2 For details of bearings R400 & B400, see Sh. 13/18
3 Working Points (W.P.) are at top of web.
4 Working Lines are straight lines joining the indicated Working Points.
5 The Base Line is a straight line joining W.P. 1 & W.P. 4.
6 Tabulated values in DEFLECTION & CAMBER TABLE are measured from the Working Lines.

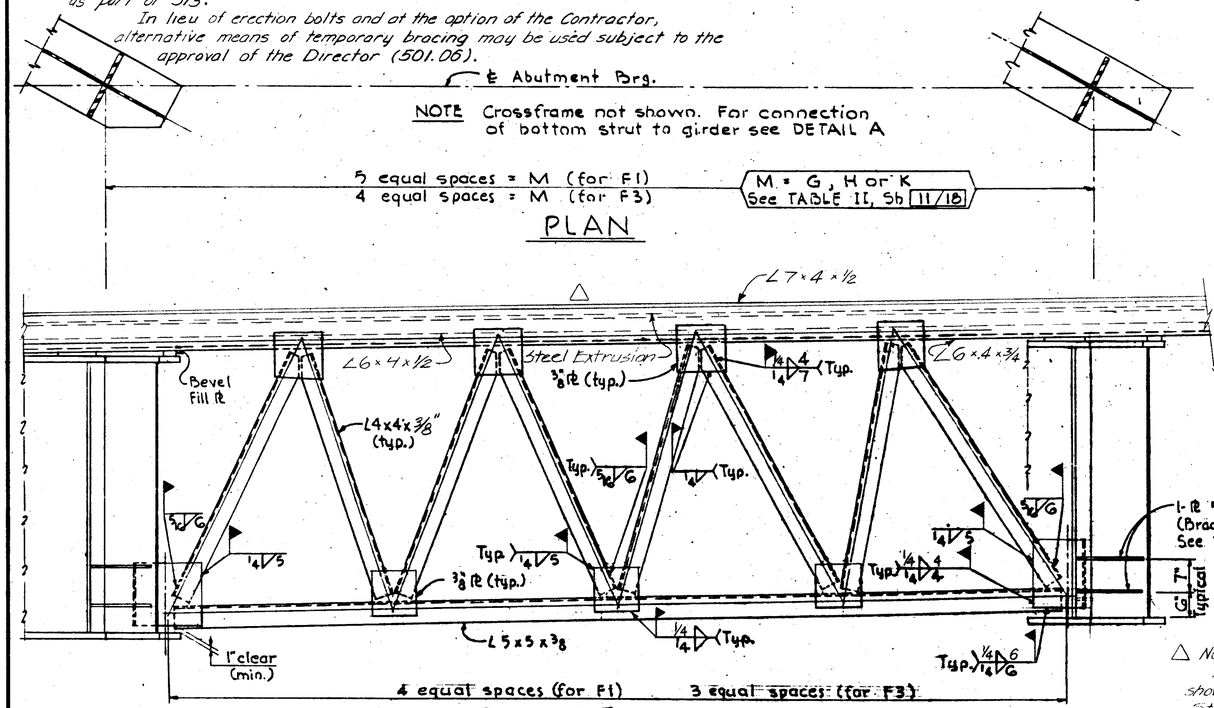


ELEVATION LAYOUT

For horizontal dimensions see TABLE I, Sh. 11/18

DEFLECTION & CAMBER △

		Abut. 1	¼ S1	½ S1	F.S. 1	℄ Pier 1	F.S. 2	½ S2	F.S. 3	℄ Pier 2	F.S. 4	½ S3	¾ S3	Abut. 2
DEFLECTION DUE TO WEIGHT OF STEEL	G1	0	+0 3/16"	+0 7/32"	+0 1/8"	0	+0 3/32"	+0 1/4"	+0 3/32"	0	+0 1/8"	+0 1/4"	+0 7/32"	0
	G2-G6 INCL.	0	+0 3/16"	+0 7/32"	+0 1/8"	0	+0 3/32"	+0 1/4"	+0 3/32"	0	+0 1/8"	+0 1/4"	+0 7/32"	0
	G7	0	+0 3/16"	+0 7/32"	+0 1/8"	0	+0 3/32"	+0 1/4"	+0 3/32"	0	+0 1/8"	+0 1/4"	+0 7/32"	0
DEFLECTION DUE TO REMAINING DEAD LOAD	G1	0	+0 23/32"	+1 1/32"	+0 1/2"	0	+0 7/16"	+1 3/32"	+0 1/2"	0	+0 15/32"	+1"	+0 29/32"	0
	G2,3	0	+0 23/32"	+1 1/32"	+0 1/2"	0	+0 7/16"	+1 3/32"	+0 1/2"	0	+0 15/32"	+1"	+0 23/32"	0
	G4	0	+0 23/32"	+1 1/32"	+0 1/2"	0	+0 7/16"	+1 3/32"	+0 1/2"	0	+0 15/32"	+1"	+0 23/32"	0
	G5,6	0	+0 23/32"	+1 1/32"	+0 1/2"	0	+0 7/16"	+1 3/32"	+0 1/2"	0	+0 15/32"	+1"	+0 23/32"	0
	G7	0	+0 23/32"	+1 1/32"	+0 1/2"	0	+0 7/16"	+1 3/32"	+0 1/2"	0	+0 15/32"	+1"	+0 23/32"	0
CORRECTION FOR VERTICAL CURVATURE	G1	0	-1 1/4"	-1 5/8"	-1 1/4"	0	-0 7/16"	-0 1/4"	-0 1/8"	0	-0 1/16"	-0 1/8"	-0 3/16"	0
	G2	0	-1 5/16"	-1 13/16"	-1 1/2"	0	-0 13/16"	-0 9/16"	-0 1/4"	0	-0 1/16"	-0 1/16"	-0 1/8"	0
	G3	0	-1 3/8"	-1 7/8"	-1 1/2"	0	-1 1/8"	-1 1/16"	-0 1/2"	0	0	0	0	0
	G4	0	-1 3/8"	-1 13/16"	-1 7/16"	0	-1 9/16"	-1 11/16"	-0 3/4"	0	0	0	0	0
	G5	0	-1 3/8"	-1 7/8"	-1 1/2"	0	-2 5/16"	-2 1/2"	-1 1/4"	0	0	0	0	0
	G6	0	-1 7/16"	-1 7/8"	-1 1/2"	0	-3 1/16"	-3 3/8"	-1 7/8"	0	0	0	0	0
	G7	0	-2"	-2 5/16"	-1 3/4"	0	-3 1/4"	-4 5/16"	-2 1/2"	0	0	0	0	0
TOTAL CAMBER REQUIRED	G1	0	-0 5/32"	-0 3/8"	-0 5/8"	0	-0 3/32"	+1 3/32"	+0 15/32"	0	+0 17/32"	+1 1/8"	+0 15/16"	0
	G2	0	-0 7/32"	-0 9/16"	-0 7/8"	0	-0 9/32"	+0 23/32"	+0 11/32"	0	+0 17/32"	+1 3/16"	+1"	0
	G3	0	-0 9/32"	-0 5/8"	-0 7/8"	0	-0 13/32"	+0 9/32"	+0 3/32"	0	+0 13/32"	+1 1/4"	+1 1/8"	0
	G4	0	-0 9/32"	-0 9/16"	-0 13/16"	0	-1 1/32"	-0 11/32"	-0 5/32"	0	+0 13/32"	+1 1/4"	+1 1/8"	0
	G5	0	-0 9/32"	-0 5/8"	-0 7/8"	0	-1 25/32"	-1 5/32"	-0 21/32"	0	+0 13/32"	+1 1/4"	+1 1/8"	0
	G6	0	-0 11/32"	-0 5/8"	-0 7/8"	0	-2 17/32"	-2 1/32"	-1 9/32"	0	+0 13/32"	+1 1/4"	+1 1/8"	0
	G7	0	-0 23/32"	-1 1/16"	-1 1/8"	0	-2 23/32"	-2 31/32"	-1 29/32"	0	+0 13/32"	+1 1/4"	+1 1/8"	0



ELEVATION
END CROSSFRAMES F1 (AS SHOWN) AND F3 (SIMILAR AND AS NOTED)

△ NOTE
For End Dam details not shown, see Strip Seal Joint, Std. Dwg.

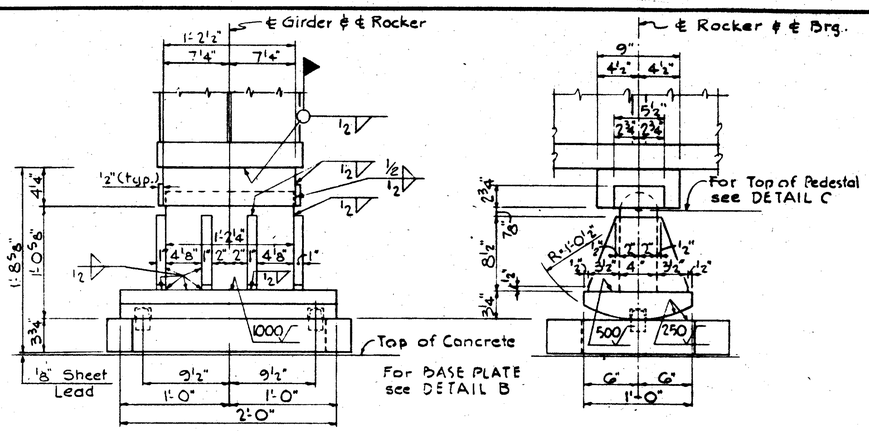
TABLE OF SCREED ELE. & DIM. △

GIRDER	ELEV. A	ELEV. B	ELEV. C	ELEV. D	DIM. X	DIM. Y
G1	538.169	538.405	539.720	540.831	7"	3½"
G2	538.161	538.171	539.451	540.545	8 11/16"	4 5/16"
G3	538.209	538.958	539.183	540.302	10 3/4"	5 11/16"
G4	538.310	537.781	538.914	540.050	1'-0 13/16"	7 3/16"
G5	538.466	537.671	538.645	539.797	1'-2 9/16"	8 7/8"
G6	538.673	537.609	538.377	539.543	1'-4 1/8"	10 13/16"
G7	539.001	537.589	538.108	539.290	1'-6 1/8"	1'-1 1/8"

VOGT, IVERS, & ASSOCIATES, INC. 12/18
ENGINEERS ARCHITECTS
CINCINNATI

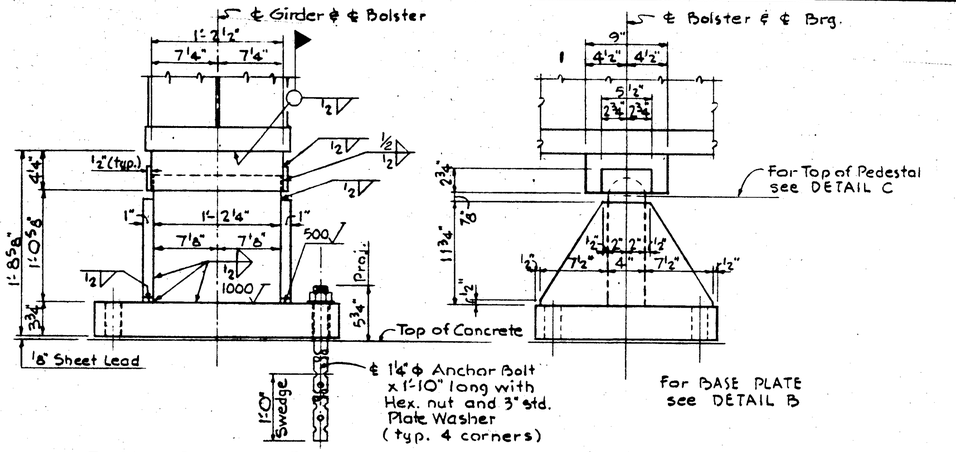
FRAMING DETAILS
BRIDGE NO. HAM-126-1359
S.R. 126 EASTBOUND
OVER RELOCATED MILL CREEK
HAMILTON COUNTY STA. 54+99.13 TO STA. 58+61.87

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED
J.R.G.	T.E.C.	~	E.F.F.			△ BALLUE ENG. 11/85



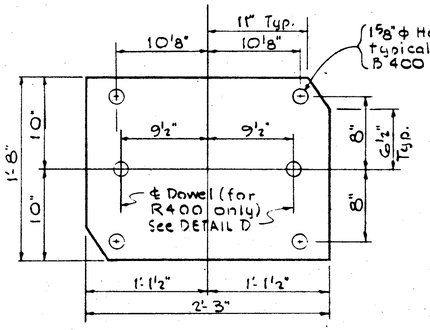
END ELEVATION — SIDE VIEW

ROCKER R400



END ELEVATION — SIDE VIEW

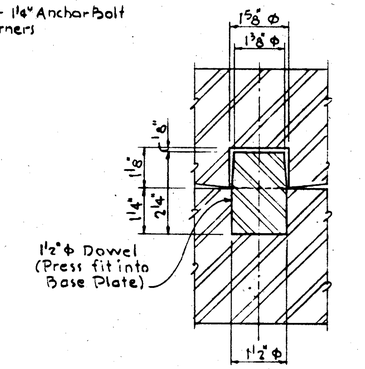
BOLSTER B400



BASE PLATE FOR R400

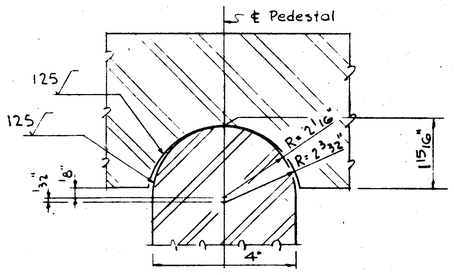
BASE PLATE FOR B400

DETAIL B



DOWEL

DETAIL D



TOP OF PEDESTAL

DETAIL C

ABUTMENT 1

△ JOINT SETTING TABLE

TEMP °F	0	20	40	60	80	100
A*	2¼"	2 3/16"	2 1/16"	2"	1 15/16"	1 13/16"

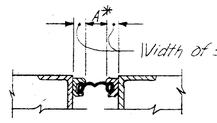
Strip Seal Gland to be Watson-Bowman S-500 or D.S. Brown 55-500

ABUTMENT 2

△ JOINT SETTING TABLE

TEMP °F	0	20	40	60	80	100
A*	3 1/16"	2⅞"	2 11/16"	2½"	2 5/16"	2⅛"

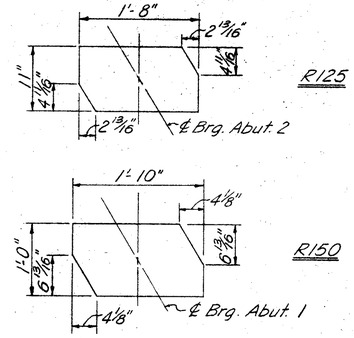
Strip Seal Gland to be Watson-Bowman S-800 or D.S. Brown 55-800



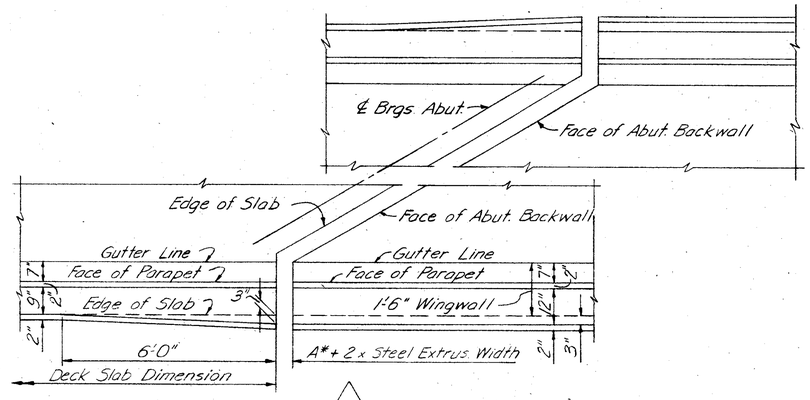
PARTIAL SECTION THROUGH EXPANSION JOINT SHOWING DIMENSION A.

For Expansion Joint details not shown see Strip Seal Details, Sheets 488 A, B, C & D.

△

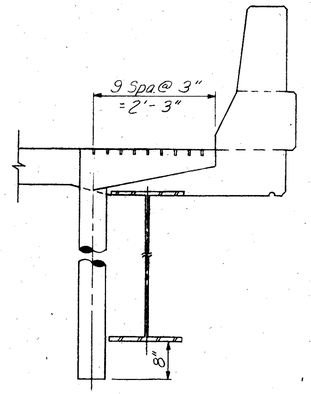


△ MASONRY BEARING BASE PLATE DETAILS



△ TYPICAL PARAPET TRANSITION

(Transition at Abutment 2 shown. Invert detail for Abut. 1 transition.)



SCUPPER DETAIL △

NOTES

△ For additional information on scupper detail, see Std. Dwg. SD-1-69

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

6/15
187

HAM-75-9.93
HAM-126-13.00

VOGT, IVERS, & ASSOCIATES, INC. 13/18
ENGINEERS ARCHITECTS
CINCINNATI

ROCKER R400 & BOLSTER B400

BRIDGE NO. HAM-126-1359
S.R. 126 EASTBOUND
OVER RELOCATED MILL CREEK
HAMILTON COUNTY STA. 54+99.13 TO STA. 58+61.87

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED
	TEC	X	E.F.F.			△ BALKE ENG. 11/85

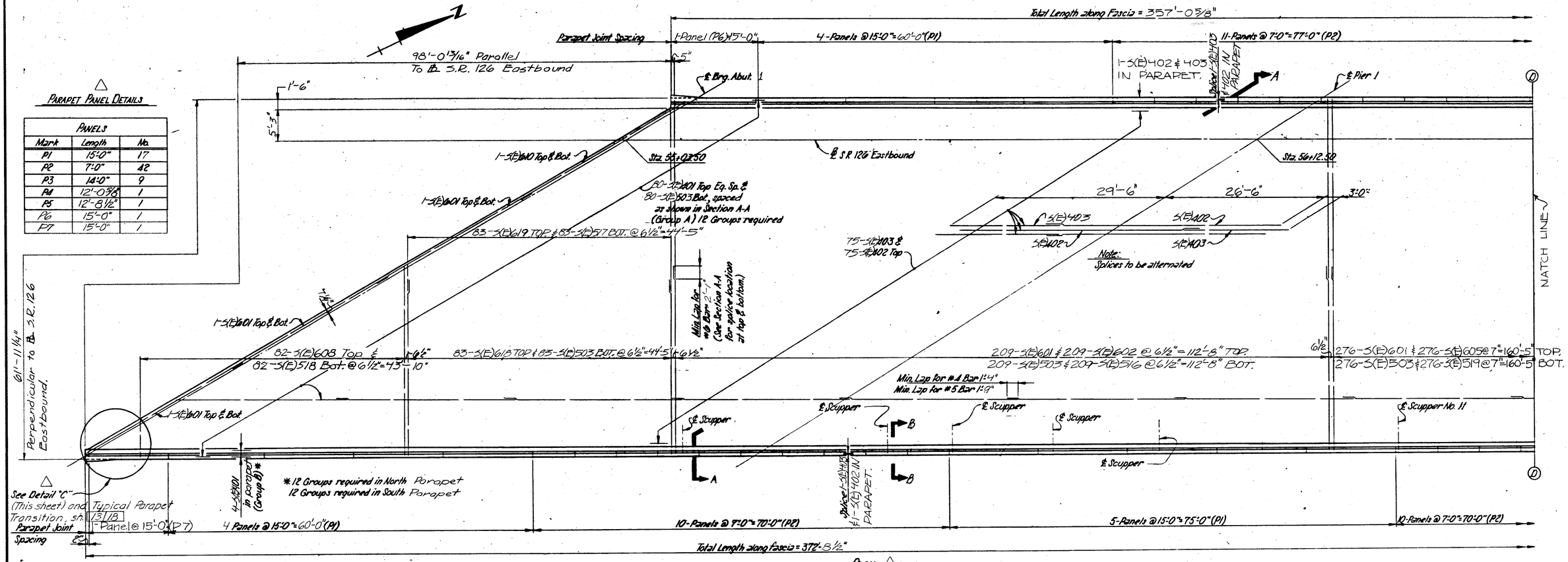
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

6/6
787

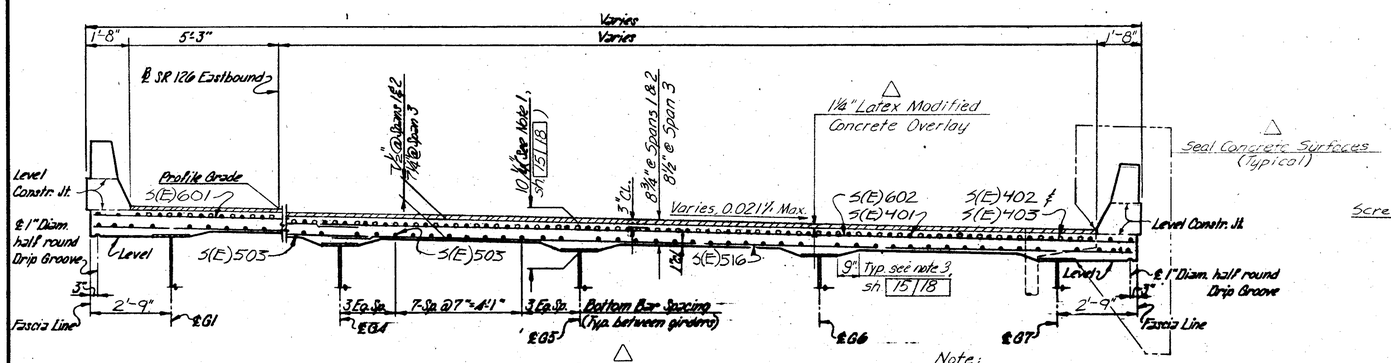
HAM-75-9.93
HAM-126-13.00

△ Parapet Panel Details

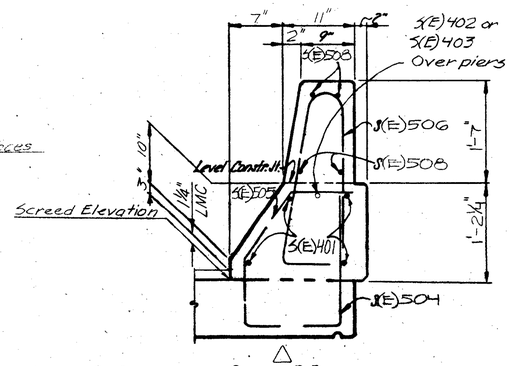
Panels		
Mark	Length	No.
P1	15'-0"	17
P2	7'-0"	42
P3	14'-0"	9
P4	12'-0 5/8"	1
P5	12'-8 1/2"	1
P6	15'-0"	1
P7	15'-0"	1



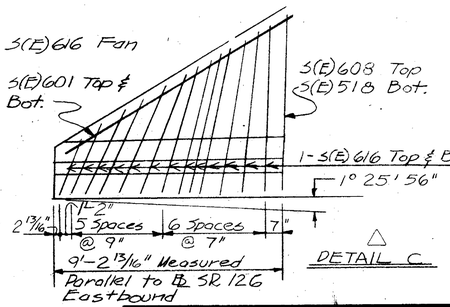
PLAN △



SECTION A-A △



SECTION B-B △



DETAIL C △

Note:
△ WELDED ATTACHMENT of supports for concrete deck finishing machine may be made to areas of the fascia stringer flanges designated "Compression". Attachments shall not be made to areas designated "Tension". Fillet welds to compression flanges shall be not closer than 1" from edge of flange, be not more than 2" long, and be not smaller than the minimum size required by AASHTO.

NOTES

△ "(E)" denotes epoxy coated reinforcing bar.

△ For Scupper Detail, see Sheet 13/18

△ ADDITIONAL NOTES: See Sheet 15/18

VOGT, IVERS, & ASSOCIATES, INC. 14/18
ENGINEERS ARCHITECTS
CINCINNATI

ROADWAY SLAB
BRIDGE NO. HAM-126-1359
S.R. 126 EASTBOUND OVER
RELOCATED MILL CREEK

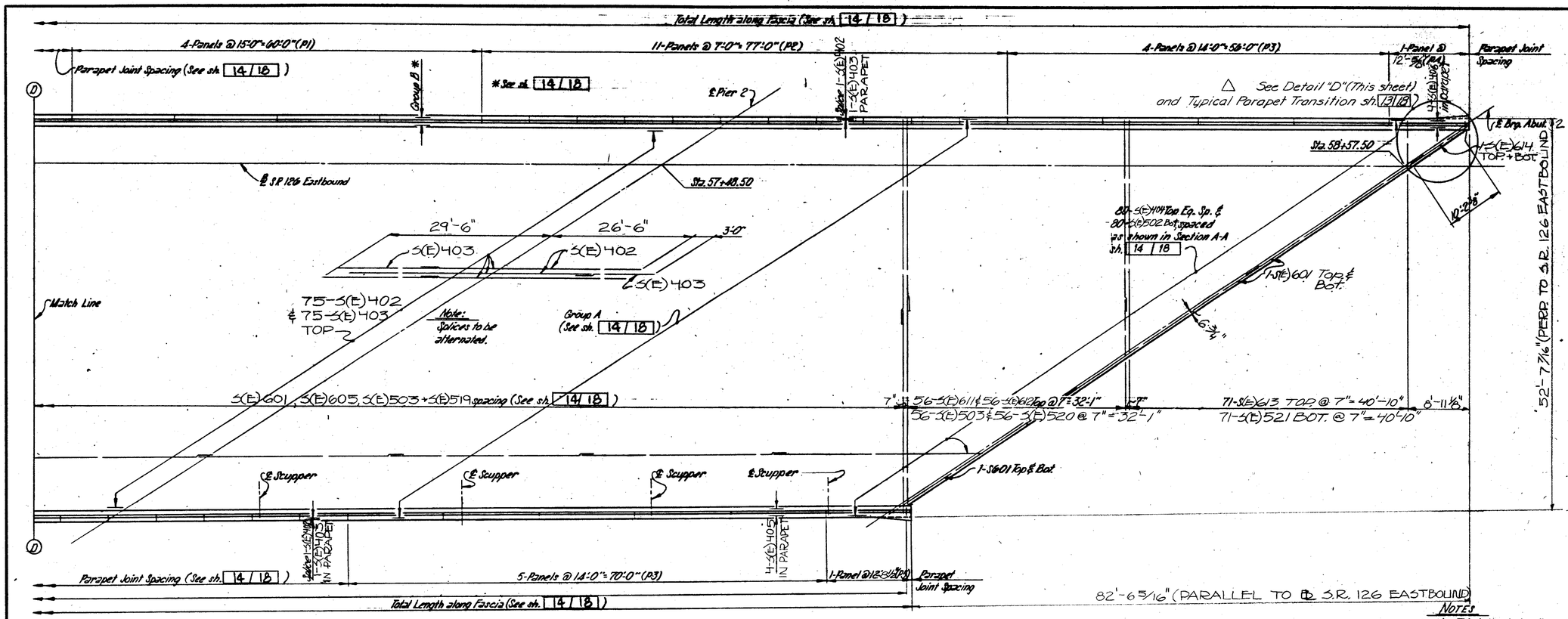
HAMILTON COUNTY STA. 54+99.13 to STA. 58+61.87

DESIGNED	DRAWN	TRACED	CHECKED	REVISIONS	DATE	APPROVED
JRG	ABT	—	E.F.F.			△ BALWE ENG. 11/7/95

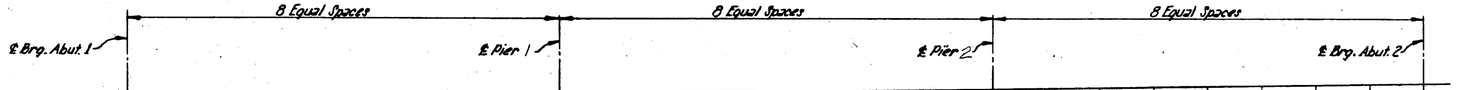
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

617 FBT

HAM-75-9.93
HAM-126-13.00



PLAN △

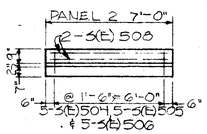


△ SCREED ELEVATIONS (SEE NOTE 11) (At top of P.C.C.)

Point	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮	⑯	⑰	⑱	⑲	⑳	㉑	㉒	㉓	㉔	㉕
North Curb Line	538.17	538.19	538.21	538.23	538.26	538.29	538.31	538.37	538.44	538.60	538.78	538.98	539.17	539.32	539.47	539.61	539.76	539.92	540.07	540.23	540.39	540.52	540.65	540.77	540.88
South Curb Line	539.06	538.80	538.59	538.38	538.20	538.01	537.83	537.70	537.59	537.51	537.46	537.43	537.53	537.63	537.75	537.90	538.06	538.22	538.39	538.56	538.73	538.88	539.02	539.13	539.24

FINISHED PAVEMENT ELEVATIONS (On Top Of Latex Overlay)

Station	54+00	54+25	54+50	54+75	55+00	55+25	55+50	55+75	56+00	56+25	56+50	56+75	57+00	57+25	57+50	57+75	58+00	58+25	58+58	58+75
North Curb Line	539.15	538.86	538.62	538.44	538.32	538.25	538.25	538.31	538.41	538.57	538.79	539.04	539.29	539.54	539.79	540.04	540.29	540.54	540.81	541.08
℄ SR 126 Eastbound	539.18	538.86	538.61	538.41	538.28	538.20	538.19	538.23	538.33	538.49	538.71	538.96	539.21	539.46	539.71	539.96	540.21	540.46	540.71	540.96
South Curb Line	539.50	538.93	538.51	538.19	537.92	537.72	537.57	537.49	537.56	537.74	537.97	538.23	538.49	538.75	539.00	539.26	539.52	539.78	539.94	540.02



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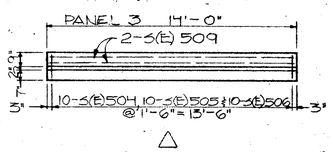

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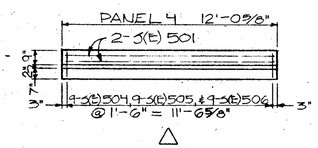

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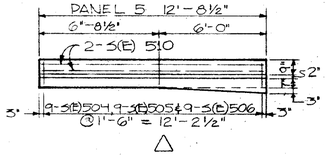

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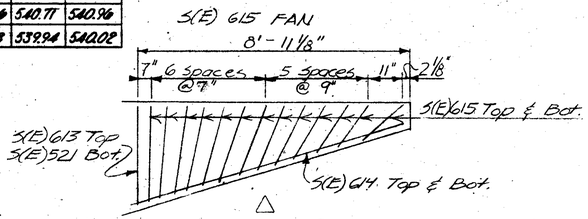
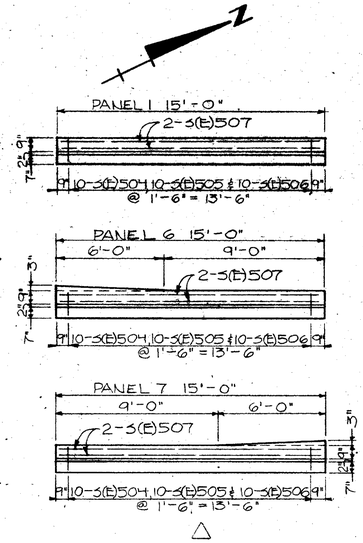


△ DETAIL D



△

NOTES

△ 1. This is the design dimension. The quantity of deck concrete to be paid for shall be based upon this dimension, even though deviation from it may be necessary because the top flange of the girder may not have the exact camber or conformation required to place it parallel to the finished grade. Deduction shall be made for volume of encased steel plates as per 511.18.

△ 2. Transverse reinforcing shall be perpendicular to ℄ S.R. 126 E.B.

3. A HAUNCH WIDTH of 9" shall be used for computing quantity of concrete. However, the haunch width may vary between 6" and 12" provided that the slope shall be not more than 1:4 for a haunch less than 9" in width.)

4. For Reinforcing Steel List see Sheet 16 / 18

△ 5. For Parapet Details and notes not shown, see Std. Dwg. BR-1.

△ 6. For Scupper Detail, see sheet 13 / 18

△ 7. "(E)" denotes epoxy coated reinforcing bar.

8. Preformed expansion joint filler in the railing parapet deflection joints may be either ½" gray sponge rubber or ¼" gray cellular polyvinyl chloride (PVC) sponge.

△ 9. Fascia Offsets are set at 2'-9" throughout.

△ 10. For Scupper Location see Sheet 11 / 18

△ 11. The screed elevations shown have been obtained by adding the dead load deflection due to the weight of: concrete slab, latex modified concrete overlay, bridge parapet, future wearing surface, and steel beams to the required final elevations.

VOGT, IVERS, & ASSOCIATES, INC. 15 / 18
ENGINEERS ARCHITECTS
CINCINNATI

ROADWAY SLAB
BRIDGE NO. HAM-126-1359
S.R. 126 EASTBOUND OVER
RELOCATED MILL CREEK

HAMILTON COUNTY STA. 54+99.13 to STA. 58+61.87

DESIGNED	DRAWN	TRACED	CHECKED	REVISIONS	DATE	REVISED
JRG	ABT	—	E.F.F.			△ BALKE ENG. 11/85

FED. RD. DIVISION	STATE	PROJECT		SHEET NO.	TOTAL SHEETS
2	OHIO			618	787

HAM-75-9.93
HAM-126-13.00

NOTES

△

1. SEE SHEET 17.18/18 FOR BENDING DETAILS.
2. "(E)" DENOTES EPOXY COATED REINFORCING BAR.
3. REFER TO CMS SECTIONS 106.03, 700, 709.01 THROUGH 709.05 AND 709.08. SUFFICIENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR SAMPLING. RANDOM SAMPLES SHALL BE REPLACED IN THE STRUCTURES BY THE ADDITIONAL STEEL, SPLICED IN ACCORDANCE WITH 509.08.
4. SUBSTRUCTURE BARS NOT REVISED BY BALKE (△) SHALL HAVE A MINIMUM LAP OF 30 BAR DIAMETERS.

ABUTMENTS

MARK	NO.	LENGTH	TYPE	WEIGHT
A501	88	8'-6"	Bt.	780
A502	12	5'-11"	Str.	259
A503	20	7'-1"	Bt.	148
A504	27	9'-3"	Bt.	260
A505	16	19'-1"	Str.	318
A506	8	15'-2"	Bt.	127
A507	8	10'-9"	Bt.	90
A508	A	5'-5" to 8'-8" by 1'-1"	Bt.	29
A509	8	5'-0"	Str.	42
A510	61	8'-5"	Bt.	535
A511	29	8'-9"	Bt.	265
A512	5	9'-5"	Bt.	49
A513	13	19'-3"	Str.	261
A514	20	14'-8"	Str.	306
A515	5	15'-5" to 19'-3" by 1'-6"	Str.	90
A516	8	22'-8"	Str.	189
A517	24	24'-3"	Str.	607
A518	5	22'-1"	Str.	115
A519	5	19'-8"	Str.	103
A520	5	5'-11"	Bt.	31
A521	104	6'-4"	Bt.	687
A522	1	5'-10"	Bt.	6
A523	4	20'-1"	Bt.	85
A524	1	34'-6"	Str.	36
A(E)525	1	△ 21'-4"	Str.	22
A526	22	37'-0"	Str.	849
A(E)527	1	△ 32'-9"	Str.	34
A528	1	20'-9"	Str.	22
A529	26	△ 9'-1½" to 10'-2" by ½"	Bt.	262
A530	22	△ 14'-0½ to 14'-11" by ½"	Bt.	332
A531	6	△ 11'-3"	Bt.	70
A532	6	△ 7'-3"	Str.	45
A533	11	4'-7"	Str.	53
A(E)534	60	△ 3'-0"	Str.	188
A535	5	10'-7"	Bt.	55
A536	5	10'-5"	Bt.	54
A537	18	31'-8"	Str.	595
A538	4	35'-8"	Str.	149
A539	2	36'-5"	Str.	76
A540	8	△ 23'-1"	Str.	193
A541	2	37'-10"	Str.	79
A542	4	7'-5"	Str.	31
A543	2	6'-8"	Str.	14
A(E)544	1	△ 6'-6"	Str.	7
A545	1	△ 8'-4"	Str.	9
A(E)546	11	△ 5'-0"	Str.	57
A(E)547	60	△ 5'-3"	Bt.	329
A548	2	7'-8"	Str.	16
A549	10	10'-4"	Bt.	108
A550	5	3'-6"	Str.	18
A551	4	13'-6"	Bt.	56
A552	6	△ 7'-1"	Str.	44
A553	2	13'-2"	Bt.	27
A554	1	14'-6"	Bt.	16
A555	1	9'-9"	Bt.	9
A556	1	10'-11"	Bt.	11
A557	2	15'-9"	Bt.	33
A558	2	9'-5"	Str.	20
A(E)559	8	△ 12'-8"	Str.	106
A560	2	10'-5"	Str.	22
A(E)561	1	△ 9'-3"	Str.	10
A(E)562	1	△ 7'-1"	Str.	8
A563	1	6'-2"	Bt.	6
A564	2	11'-2"	Bt.	23
A(E)565	1	△ 30'-0"	Str.	31
A(E)566	1	△ 37'-0"	Str.	38
A(E)567	16	△ 22'-1"	Str.	369
A(E)568	8	△ 31'-8"	Str.	264
A(E)569	8	△ 7'-8"	Str.	64
A(E)570	16	△ 4'-4"	Str.	72
A(E)571	1	△ 5'-11"	Str.	6
A(E)572	16	△ 2'-8"	Bt.	45
A(E)573	1	△ 6'-8"	Str.	7
A601	51	15'-6"	Bt.	1187
A602	29	15'-10"	Bt.	690
A603	3	16'-6"	Bt.	74
N(E)604	8	△ 4'-2"	Bt.	50
A605	226	△ 12'-3"	Bt.	4158
A(E)606	113	7'-1"	Bt.	1202
A607	3	9'-0"	Str.	41

MARK	NO.	LENGTH	TYPE	WEIGHT
A608	26	△ 10'-1½" to 11'-2" by ½"	Bt.	416
A609	22	△ 15'-0½" to 15'-11" by ½"	Bt.	511
A610	3	△ 7'-4"	Str.	33
A611	3	△ 7'-3"	Str.	33
A(E)612	1	△ 5'-7"	Bt.	8
A(E)613	60	△ 3'-9"	Bt.	338
A(E)614	1	△ 6'-11"	Bt.	10
A(E)615	1	△ 8'-4"	Bt.	13
A616	2	7'-1"	Str.	21
A(E)617	1	△ 5'-6"	Bt.	8
A(E)618	2	△ 4'-2"	Bt.	13
A(E)619	1	△ 4'-2"	Bt.	6
A(E)620	1	△ 4'-9"	Bt.	7
A701	46	8'-1"	Str.	760
A702	10	34'-6"	Str.	705
A703	2	31'-6"	Str.	129
A704	12	12'-2"	Bt.	298
A705	2	16'-9"	Str.	68
A706	10	14'-5"	Str.	295
A801	28	30'-0"	Str.	2248
A802	5	18'-9"	Str.	184
A803	2	9'-11"	Str.	53
A804	4	13'-6"	Str.	144
A805	2	16'-8"	Bt.	89
A806	21	8'-7"	Bt.	481
A(E)807	40	△ 4'-11"	Bt.	525
A901	6	14'-0"	Bt.	286
B501	64	8'-6"	Bt.	567
B502	38	4'-6"	Str.	178
B503	14	5'-8"	Bt.	83
B504	29	6'-2"	Str.	187
B505	20	7'-4"	Bt.	153
B506	8	20'-6"	Str.	171
B507	8	13'-8"	Bt.	114
B508	10	23'-6"	Str.	245
B509	8	10'-9"	Bt.	90
B510	1	2'-9" to 5'-6" by 1"	Str.	17
B511	8	5'-0"	Str.	40
B512	15	6'-4"	Bt.	99
B513	14	6'-7"	Bt.	96
B514	12	6'-10"	Bt.	86
B515	12	7'-1"	Bt.	89
B516	13	7'-4"	Bt.	99
B517	14	△ 7'-9"	Bt.	113
B518	15	△ 8'-7"	Bt.	134
B519	2	9'-8"	Bt.	20
B520	95	6'-4"	Bt.	628
B521	1	6'-9"	Bt.	6
B522	1	5'-11"	Bt.	6
B523	3	31'-10"	Str.	100
B524	8	19'-10"	Str.	165
B525	3	17'-8" to 20'-8" by 18"	Str.	60
B526	5	12'-4"	Str.	68
B527	5	4'-0"	Str.	21
B528	6	40'-0"	Str.	250
B529	10	16'-8"	Str.	174
B530	5	6'-10"	Str.	36
B531	3	28'-5"	Str.	88
B532	8	31'-3"	Str.	267
B533	7	9'-5"	Str.	69
B534	5	16'-8"	Str.	87
B535	5	28'-7"	Bt.	147
B(E)536	1	△ 26'-6"	Str.	28
B537	11	10'-0"	Str.	459
B538	5	28'-8"	Str.	149
B539	5	4'-11" to 8'-0" by 9¢"	Str.	34
B540	1	23'-0"	Str.	24
B(E)541	1	△ 33'-0"	Str.	34
B542	6	△ 10'-9"	Bt.	67
B543	6	△ 7'-1"	Str.	44
B544	A	10'-7"	Bt.	44
B545	5	10'-4"	Bt.	54
B546	2	27'-10"	Str.	46
B547	17	6'-6"	Bt.	115
B548	14	23'-8"	Str.	346
B549	6	7'-8"	Str.	48
B550	1	3'-0"	Str.	3
B551	4	27'-8"	Str.	115

MARK	NO.	LENGTH	TYPE	WEIGHT
B552	2	19'-8"	Str.	41
B553	12	△ 2'-8"	Str.	33
B(E)554	43	△ 5'-3"	Bt.	235
B(E)555	8	△ 7'-8"	Str.	64
B556	3	12'-0"	Str.	38
B557	4	3'-5"	Str.	14
B558	2	13'-6"	Bt.	28
B559	1	14'-7"	Bt.	15
B560	1	8'-1"	Str.	8
B561	1	10'-8"	Bt.	11
B562	1	9'-0"	Bt.	9
B563	2	15'-9"	Bt.	33
B564	1	△ 3'-10"	Str.	4
B565	2	6'-0"	Str.	13
B566	2	10'-3"	Str.	21
B(E)567	8	△ 12'-8"	Str.	106
B568	12	7'-7"	Bt.	95
B569	1	10'-9"	Str.	11
B570	17	7'-11"	Str.	140
B(E)571	8	△ 23'-8"	Str.	197
B(E)572	8	△ 25'-8"	Str.	214
B(E)573	16	△ 4'-4"	Str.	72
B(E)574	43	△ 3'-0"	Str.	135
B575	1	△ 3'-11"	Str.	4
B576	1	△ 5'-3"	Str.	6
B577	1	△ 6'-7"	Str.	8
B(E)578	16	△ 2'-8"	Bt.	45
B(E)579	16	△ 4'-7"	Str.	76
B(E)580	1	△ 40'-0"	Str.	42
B581	6	△ 6'-11"	Str.	43
B601	10	6'-2"	Str.	93
B602	8	12'-4"	Bt.	148
B603	8	11'-7"	Str.	139
B604	2	13'-0"	Str.	39
B605	8	13'-5"	Bt.	161
B606	14	13'-8"	Bt.	287
B607	12	13'-11"	Bt.	251
B608	12	14'-2"	Bt.	255
B609	13	14'-5"	Bt.	281
B610	12	14'-8"	Bt.	264
B611	3	15'-0"	Bt.	68
B612		Not used		
B(E)613	94	7'-1"	Bt.	1000
B614	188	△ 12'-3"	Bt.	3459
B615	2	7'-0"	Str.	21
B616	3	8'-11"	Str.	40
B617	3	△ 7'-1"	Str.	32
B618	3	△ 7'-0"	Str.	31
B619	17	△ 8'-9"	Str.	223
B620	14	△ 6'-9"	Bt.	142
B621	32	△ 6'-6"	Bt.	312
B622	14	△ 4'-6"	Str.	95
B623	12	△ 2'-8"	Str.	48
B624	6	△ 6'-11"	Str.	62
B625	1	△ 3'-10"	Str.	6
B(E)626	43	△ 3'-9"	Bt.	242
B627	1	△ 3'-11"	Str.	6
B628	1	△ 5'-3"	Str.	8
B629	1	△ 6'-7"	Str.	10
B(E)630	8	△ 3'-7"	Bt.	43
B(E)631	2	△ 3'-7"	Bt.	11
B(E)632	2	△ 3'-8"	Bt.	11
B(E)633	2	△ 3'-8"	Bt.	11
B(E)634	2	△ 3'-9"	Bt.	11
B801	21	30'-0"	Str.	1682
B802	2	19'-6"	Str.	104
B803	5	23'-8"	Str.	316
B804	4	13'-0"	Str.	139
B805	2	16'-11"	Bt.	90
B(E)806	34	△ 4'-11"	Bt.	446
B901	6	12'-7"	Bt.	257
TOTAL ABUTMENTS				44410
(Includes 6860 Lbs. Epoxy Coated)				

PIER 1

MARK	NO.	LENGTH	TYPE	WEIGHT
P501	15	12'-7"	Bt.	197
P502	13	11'-5"	Bt.	155
P503	26	40'-0"	Str.	1085
P504	26	30'-0"	Str.	814
P505	28	20'-0"	Str.	584
P506	26	15'-0"	Str.	407
P510	5	3'-6"	Bt.	18
P511	20	19'-6"	Bt.	407
P512	5	17'-6"	Bt.	91
P513	111	5'-5"	Bt.	627
P514	2	5'-4"	Bt.	11
P515	4	5'-1"	Bt.	21
P516	3	6'-2"	Bt.	19
P517	2	6'-10"	Bt.	14
P518	2	18'-0"	Bt.	38
P519	3	20'-4"	Bt.	64
P601	16	40'-0"	Str.	961
P602	8	34'-4"	Str.	413
P801	112	11'-8"	Bt.	3489
P802	222	△ 7'-4"	Bt.	4347
P803	107	18'-2"	Str.	5190
P804	70	18'-4"	Str.	3426
P805	40	18'-9"	Str.	2003
P806	5	19'-2"	Str.	256

PIER 2

MARK	NO.	LENGTH	TYPE	WEIGHT
P503	28	40'-0"	Str.	1168
P504	28	30'-0"	Str.	814
P506	26	15'-0"	Str.	407
P507	28	10'-0"	Str.	292
P508	14	15'-11"	Bt.	232
P509	18	14'-5"	Bt.	185
P510	5	3'-6"	Bt.	18
P513	105	5'-5"	Bt.	593
P514	2	5'-4"	Bt.	11
P515	4	5'-1"	Bt.	21
P516	3	6'-2"	Bt.	19
P517	2	6'-10"	Bt.	14
P518	2	18'-0"	Str.	38
P519	3	20'-4"	Bt.	64
P520	20	18'-6"	Bt.	386
P521	5	16'-6"	Bt.	86
P601	16	40'-0"	Str.	961
P603	8	26'-4"	Str.	316
P801	100	11'-8"	Bt.	3115
P802	210	△ 7'-4"	Bt.	4112
P804	69	18'-4"	Str.	3378
P806	66	19'-2"	Str.	3378
P807	32	18'-11"	Str.	1616
P808	38	19'-9"	Str.	2001
P809	5	20'-0"	Str.	267
TOTAL PIERS				48142

SUPERSTRUCTURE

MARK	NO.	LENGTH	TYPE	WEIGHT
S(E)401	1056	30'-0"	STR	21162
S(E)402	154	37'-6"	STR	3858 △
S(E)403	154	20'-0"	STR	2057
S(E)404	80	13'-4⅜" to 29'-0" by 2⅜	STR	1136 △
S(E)405	4	13'-0"	STR	35 △
S(E)406	4	29'-0"	STR	77 △
S(E)501	4	11'-8"	STR	49
S(E)502	80	18'-4⅜" to 34'-0" by 2⅜	STR	2185 △
S(E)503	1584	30'-0"	STR	49563 △
S(E)504	508	2'-6"	BT.	1325 △
S(E)505	508	3'-3"	BT.	1722 △
S(E)506	508	5'-3"	BT.	2782 △
S(E)507	76	14'-8"	STR	1163
S(E)508	168	6'-8"	STR	1168
S(E)509	36	13'-8"	STR	513
S(E)510	4	12'-2"	STR	51 △
S(E)511		NOT USED		
S(E)512		NOT USED		
S(E)513		NOT USED		
S(E)514		NOT USED		
S(E)515		NOT USED		
S(E)516	209	30'-11"	STR	6739 △
S(E)517	83	3'-6" to 29'-1½" by 3¾	STR	1412 △
S(E)518	82	6'-1" to 31'-4¾" by 3¾	STR	1603 △
S(E)519	276	28'-1"	STR	8084 △
S(E)520	56	2'-1" to 22'-4¾" by 4¼	STR	739 △
S(E)521	71	6'-0" to 30'-9½" by 4¼	STR	1362 △
S(E)601	497	30'-0"	STR	22395
S(E)602	209	31'-3"	STR	9810 △
S(E)603		NOT USED		
S(E)604		NOT USED		
S(E)605	276	28'-5"	STR	11780 △
S(E)606		NOT USED		
S(E)607		NOT USED		
S(E)608	82	6'-1" to 31'-4¾" by 3¾	STR	2308 △
S(E)609		NOT USED		
S(E)610	2	34'-0"	STR	102 △
S(E)611	56	23'-0"	STR	1935
S(E)612	56	10'-0" to 29'-5¾" by 4¼	STR	1660 △
S(E)613	71	6'-0" to 30'-9½" by 4¼	STR	1962 △
S(E)614	2	16'-0"	STR	48 △
S(E)615	26	(4'-8" to 5'-10" by 1") 2 eq.	STR	205 △
S(E)616	26	(4'-7" to 5'-9" by 1") 2 eq.	STR	202 △
S(E)617		NOT USED		
S(E)618	83	26'-2"	STR	3262
S(E)619	65	7'-8" to 33'-3½" by 3¾	STR	2553 △
TOTAL SUPERSTRUCTURE				167003
(Includes 167003 Lbs. Epoxy Coated)				

VOGT, IVERS & ASSOCIATES
ENGINEERS CINCINNATI — ARCHITECTS CHICAGO

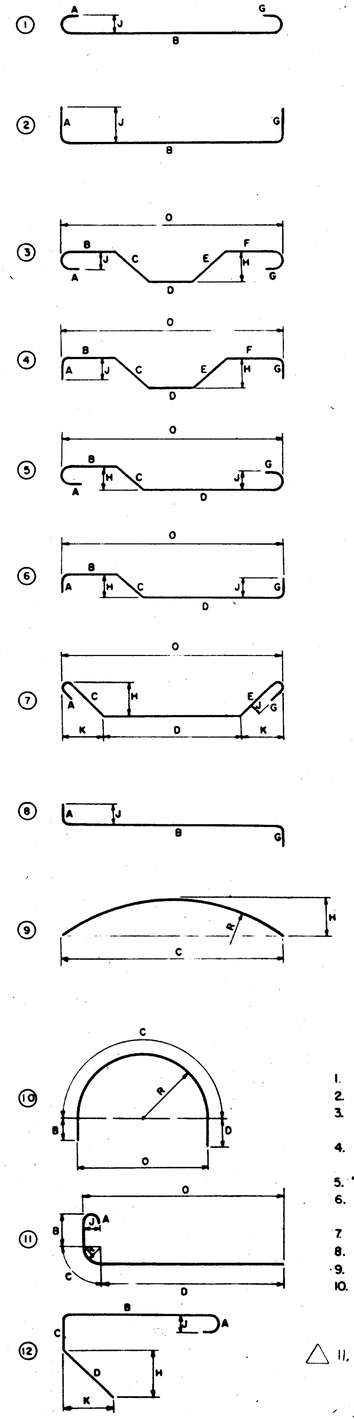
16/18

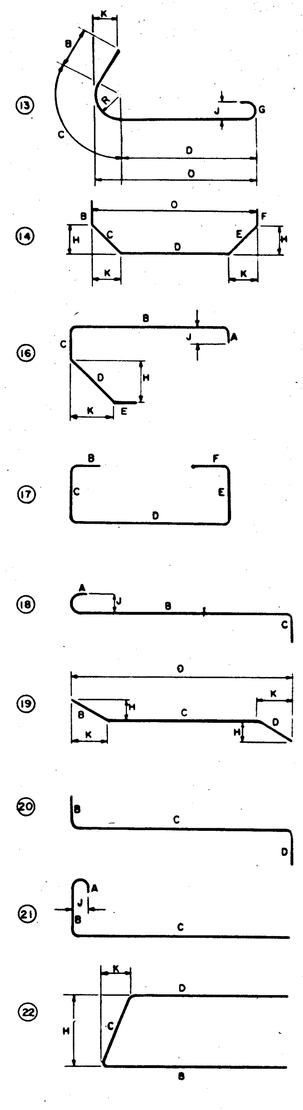
REINFORCING STEEL LIST

BRIDGE NO. HAM-126-1359
S.R. 126 EASTBOUND OVER
RELOCATED MILL CREEK
HAMILTON COUNTY STA. 54+99.13 to STA. 58+61.87

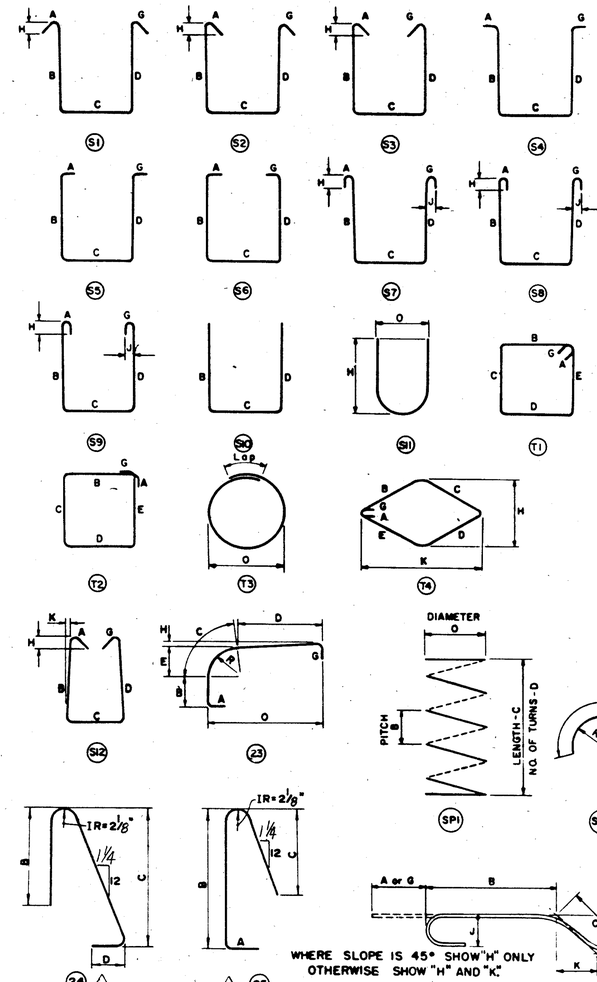
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
—	ABT	—	H.I.Z.			△ BALKE ENG. 11/85

MARK	TYPE	DIMENSIONS FOR BENDING A	B	C	D	E	F	G	H	J	K	R	O
A501	17		—	1'-7"	5'-7"	1'-7"	—	7"					
A503	1	7"	5'-11"					7"					
A504	1	7"	8'-1"										
A506	20		7'-8"	7'-8"	—								
A507	T1	5"	3'-0"	2'-2"	3'-0"	2'-2"		5"					
A508	17		—	1'-7"	2'-6 to 5'-9 by 1'-1"	1'-7"	—						
A510	2	6"	7'-11"										
A511	2	6"	8'-3"										
A512	2	6"	8'-11"										
A520	20		1'-0"	5'-1"	—								
A521	S10		1'-7"	3'-5"	1'-7"								
A522	S10		1'-7"	2'-11"	1'-7"								
A523	19		1'-4"	19'-0"	—				7¾"		1'-2"		
A529	2	9"	8'-4½" to 9'-5"	by ½"						10½"			
A530	2	9"	13'-3½" to 14'-2"	by ½"						10½"			
A581	2	6"	10'-9"										
A535	19		1'-7"	2'-0"	—				9¾"		1'-4¾"		
A536	20		2'-11"	7'-8"	—								
A547	24	7½"	2'-2"	2'-5"									
A549	2	6"	9'-10"										
A551	16	—	11'-9"	5"	1'-7"	—			1'-4⅝"		9¼"		
A553	S10		6'-6"	5"	6'-6"								
A554	19		7'-6"	7'-0"	—				5'-3⅝"		5'-3⅝"		
A555	19		1'-7"	7'-6"	—				1'-1⅜"		1'-1⅜"		
A556	20		1'-8"	9'-10"	—								
A557	20		1'-3"	14'-8"	—								
A563	S10		1'-7"	3'-8"	1'-7"								
A564	2	6"	10'-8"										
A572	1	7"	2'-1"							5"			
AG01	17		—	—	7'-11"	5'-4"	2'-7"						
AG02	17		—	—	8'-3"	5'-4"	2'-7"						
AG03	17		—	—	8'-11"	5'-4"	2'-7"						
AG604	14		7"	8½"	3'-0"				2"		8½"		
AG605	S10		5'-7"	1'-5"	5'-7"								
AG606	S10		3'-3"	11"	3'-3"								
AG08	20		1'-11"	8'-4½" to 9'-5" by ½"	—								
AG09	20		1'-11"	13'-3½" to 14'-2" by ½"	—								
AG612	14		8"	9½"	4'-4"				4"		8½"		
AG613	14		9"	10½"	2'-5"				6"		8½"		
AG614	14		8"	10"	5'-8"				5"		8½"		
AG615	14		9"	10½"	7'-0"				6"		8½"		
AG617	14		9"	10½"	4'-2"				6"		8½"		
AG618	14		7"	9"	3'-0"				3"		8½"		
AG619	14		8"	3½"	2'-11"				4"		8½"		
AG620	14		8"	10"	3'-6"				5"		8½"		
A704	20		4'-7"	7'-9"	—				2¼"		11½"		
A805	19		2'-1"	14'-10"	—				1'-9⅜"		1'-0⅞"		
A806	20		2'-6"	6'-3"	—								
AG807	5	11"	2'-7"	1'-5"	—			—	1'-0"	—			
A901	20		2'-10"	11'-5"	—								
B501	17		—	1'-7"	5'-7"	1'-7"	—	7"					
B503	1	7"	4'-6"					7"					
B505	1	7"	6'-2"										
B507	20		7'-8"	6'-2"	—								
B509	T1	5"	3'-0"	2'-2"	3'-0"	2'-2"		5"					
B512	2	6"	5'-10"										
B513	2	6"	6'-1"										
B514	2	6"	6'-4"										
B515	2	6"	6'-7"										
B516	2	6"	6'-10"										
B517	2	9"	7'-0"							10½"			
B518	2	9"	7'-10"							10½"			
B519	2	6"	9'-2"										
B520	S10		1'-7"	3'-5"	1'-7"								
B521	S10		1'-7"	3'-3"	1'-7"								
B522	S10		1'-7"	3'-0"	1'-7"								
B525	19		1'-4"	26'-10"	—				1'-1⅜"		7⅜"		
B542	2	9"	10'-0"							10½"			
B544	19		1'-7"	9'-0"	—				9¾"		1'-4¾"		
B545	20		2'-10"	7'-8"	—								
B547	2	6"	6'-0"					—					
B554	24		2'-2"	2'-5"	7½"								





15 NOT USED



NOTES

1. FIGURES IN CIRCLES SHOW BAR TYPES.
2. ALL DIMENSIONS ARE OUT TO OUT OF BAR.
3. "J" DIMENSION ON HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE, OTHERWISE STANDARD HOOKS ARE TO BE USED.
4. WHERE "J" IS NOT SHOWN "J" WILL BE KEPT EQUAL TO OR LESS THAN "H". WHERE J "CAN EXCEED "H" IT SHOULD BE SHOWN.
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7. RADIUS DIMENSION "R" IS TO OUTSIDE OF BAR.
8. THE LENGTH OF BENT BARS IS MEASURED ALONG THE CENTERLINE.
9. FOR STANDARD HOOK DIMENSIONS, SEE SECT. 509.05 OF THE SPECIFICATIONS.
10. FOR BAR TYPE SP1, THE NO. OF TURNS "D" IS THE LENGTH "C" DIVIDED BY THE PITCH "B", PLUS 3 TURNS (TOTAL NUMBER OF CLOSED COILS), EXPRESSED AS THE NEAREST WHOLE NUMBER. 1½ CLOSED COILS SHALL BE PROVIDED AT THE ENDS OF EACH SPIRAL UNIT.

△11. REFER TO CMS SECTIONS 106.03, 700, 709.01 THROUGH 709.05 AND 709.08. SUFFICIENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR SAMPLING. RANDOM SAMPLES SHALL BE REPLACED IN THE STRUCTURES BY THE ADDITIONAL STEEL, SPLICED IN ACCORDANCE WITH 509.08.

△12. "(E)" DENOTES EPOXY COATED REINFORCING BAR.

△13. SUBSTRUCTURE BARS NOT REVISED BY BALKE (Δ) SHALL HAVE A MINIMUM LAP OF 30 BAR DIAMETERS.

ENLARGED VIEW SHOWING BAR BENDING DETAILS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

HAM-75-9.93
HAM-126-13.00

6/9
7/8

VOGT, IVERS & ASSOCIATES 11/7/18
ENGINEERS ARCHITECTS
CINCINNATI CHICAGO

BAR BENDING DETAILS

BRIDGE NO. HAM-126-1359
S.R. 126 EASTBOUND OVER
RELOCATED MILL CREEK.
HAMILTON COUNTY STA. 54+99.13 to STA. 58+61.87

DESIGNED	DRAWN	TRACED	CHK'D.	REVIEWED	DATE	REVISED
—	E.F.F.	—	H.J.Z.			△ BALKE ENG. 11/85

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

620
787

HAM-75-9.93
HAM-126-13.00

DIMENSIONS FOR BENDING

MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
B558	S10		6'-8"	5"	6'-8"								
B559	19		7'-5"	7'-2"	—				5'-2⅜"		5'-2⅜"		
B561	20		1'-3"	9'-7"	—								
B562	19		1'-7"	7'-5"	—				1'-1⅜"		1'-1⅜"		
B563	20		1'-3"	14'-8"	—								
B568	2	6"	7'-1"					—					
△ B(E)578	1	7"	2'-1"							5"			
B602	20		4'-10"	7'-8"	—								
B605	17		2'-7"	5'-4"	5'-10"	—	—						
B606	17		2'-7"	5'-4"	6'-1"	—	—						
B607	17		2'-7"	5'-4"	6'-4"	—	—						
B608	17		2'-7"	5'-4"	6'-7"	—	—						
609	17		2'-7"	5'-4"	6'-10"	—	—						
B610	17		2'-7"	5'-4"	7'-1"	—	—						
B611	17		2'-7"	5'-4"	7'-5"	—	—						
(E)613	S10		3'-3"	11"	3'-3"								
△ B614	S10		5'-7"	1'-5"	5'-7"								
△ B620	20		1'-11"	4'-10"	—								
△ B621	20		1'-11"	4'-7"	—								
△ (E)626	14		3"	10½"	2'-5"	—	—		6"		8½"		
△ B(E)630	14		7"	8½"	2'-5"	—	—		2"		8½"		
△ B(E)631	14		7"	9"	2'-5"	—	—		3"		8½"		
△ B(E)632	14		8"	9½"	2'-5"	—	—		4"		8½"		
△ B(E)633	14		9"	10"	2'-5"	—	—		5"		8½"		
△ B(E)634	14		9"	10½"	2'-5"	—	—		6"		8½"		
B805	19		1'-10"	15'-3"	—				1'-7⅜"		10⅜"		
△ B(E)806	5	11"	2'-7"	1'-5"	—			—	1'-0"	—			
B901	20		2'-10"	10'-0"	—								
P501	S11								5'-7"				2'-8"
P502	S11								5'-0"				2'-8"
P505	S11								7'-8"				2'-8"
P509	S11								6'-6"				2'-8"
P511	2	6"	19'-0"					—					
P512	2	6"	17'-0"					—					
P513	S10		1'-6"	2'-8"	1'-6"								
P514	S10		1'-6"	2'-7"	1'-6"								
P515	S10		1'-6"	2'-4"	1'-6"								
P516	S10		1'-6"	3'-5"	1'-6"								
P517	S11								2'-9"				2'-4"
P519	S10		1'-6"	19'-0"	—								
P520	2	6"	18'-0"					—					
P521	2	6"	16'-0"					—					
301	1	1'-1"	9'-6"					1'-1"					
△ P802	2	1'-2"	6'-2"					—		1'-4"			
△ (E)804	2	10½"	1'-9"					—					
△ (E)805	16	—	10½"	1'-0"	10⅜"	9"			8½"		6"		
△ (E)806	24		2'-2"	2'-5"	7½"								

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫

⑬ ⑭ ⑯ ⑰ ⑱ ⑲ ⑳ ㉑ ㉒

⑮ NOT USED

㉔ △ ㉕

S1 S2 S3 S4 S5 S6 S7 S8 S9 S10 T1 T2 T3 T4 S12 23 SP1 SP2

WHERE SLOPE IS 45° SHOW "H" ONLY
OTHERWISE SHOW "H" AND "K."

ENLARGED VIEW SHOWING
BAR BENDING DETAILS

NOTES

1. FIGURES IN CIRCLES SHOW BAR TYPES.
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9. FOR STANDARD HOOK DIMENSIONS, SEE SECT. 509.05 OF THE SPECIFICATIONS.
10. FOR BAR TYPE SP1, THE NO. OF TURNS "D" IS THE LENGTH "C" DIVIDED BY THE PITCH "B", PLUS 3 TURNS (TOTAL NUMBER OF CLOSED COILS), EXPRESSED AS THE NEAREST WHOLE NUMBER. 1½ CLOSED COILS SHALL BE PROVIDED AT THE ENDS OF EACH SPIRAL UNIT.

△ 11. "(E)" denotes epoxy coated reinforcing bar.

△ 12. Refer to CMS sections 106.03, 700, 709.01 through 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structures by the additional steel, spliced in accordance with 509.08.

NOTES
△ 13. Substructure bars not revised by BALKE (△) shall have a minimum lap of 30 bar diameters.

VOGT, IVERS & ASSOCIATES
ENGINEERS ARCHITECTS
CINCINNATI CHICAGO

18/18

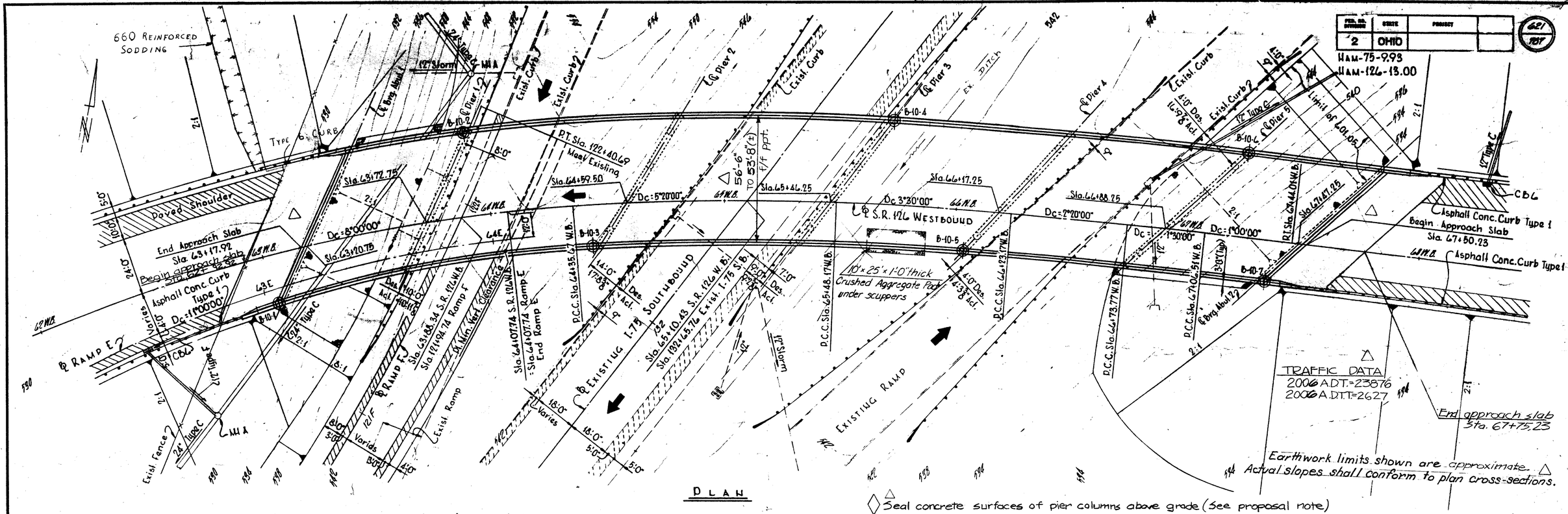
BAR BENDING DETAILS

BRIDGE NO. HAM-126-13.59
S.R. 126 EASTBOUND OVER
RELOCATED MILL CREEK
HAMILTON COUNTY STA. 54+99.13 to STA. 58+61.37

DESIGNED	DRAWN	TRACED	CHK. BY	REVIEWED	DATE	△ BALKE E.N.C. 11/85
—	E.F.F.	—	H.J.Z.			

FED. AID PROJECT	STATE	PROJECT		
2	OHIO			

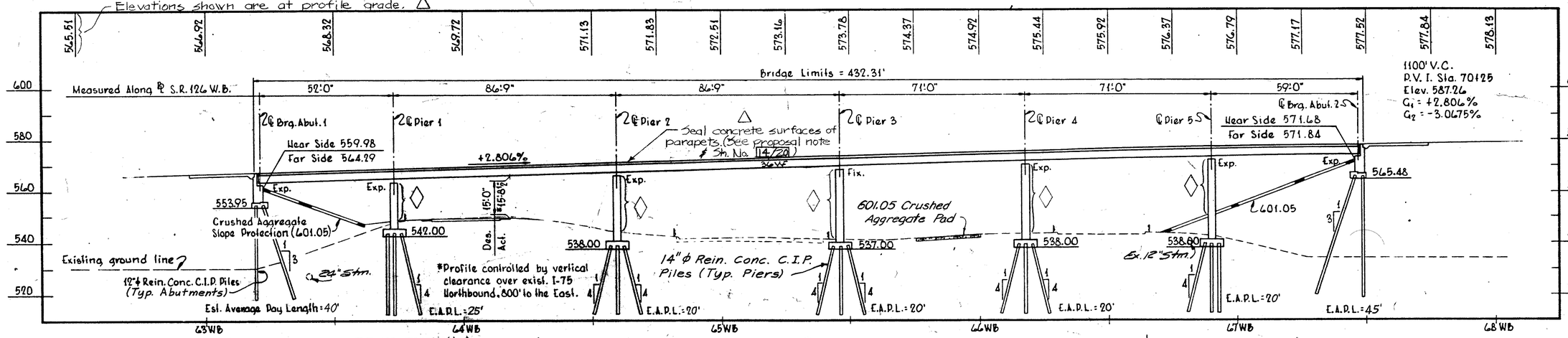
HAM-75-9.93
HAM-126-13.00



PLAN

◇△ Seal concrete surfaces of pier columns above grade (See proposal note)

Elevations shown are at profile grade. △



PROFILE

Curve Data W.B. S.R. 126

	CURVE NO.2 WB	CURVE NO.3 WB	CURVE NO.4 WB	CURVE NO.5 WB	CURVE NO.6 WB	CURVE NO.7 WB
P.I. Sta.	L0+76.92	L4+19.97	L5+85.68	L6+48.17	L6+89.84	L7+25.26
Δ	64°20'40"	6°00'00"	2°37'30"	1°40'00"	0°30'00"	0°22'30"
Dc	8°00'00"	5°20'00"	3°30'00"	2°20'00"	1°30'00"	1°00'00" △
Rc	716.20'	1074.30'	1637.02'	2455.58'	3819.72'	5729.58' △
T1	445.55'	T = 56.30'	T = 37.51'	T = 25.00'	T = 16.47'	T = 18.75' △
T2	460.83'	Lc = 112.50'	Lc = 75.00'	Lc = 50.00'	Lc = 33.33'	Lc = 37.50' △
Lc	804.30'					
Ls	400.00'					
Θ	16°00'00"					

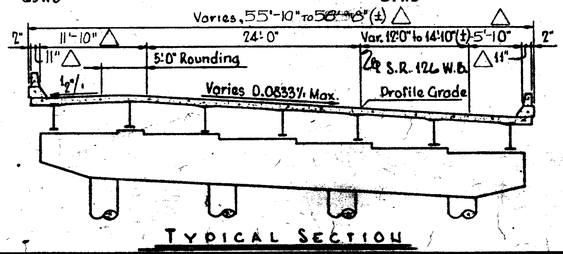
Drive Sample Boring △

Proposed Structure

TYPE: Continuous rolled steel beam with reinforced concrete deck & substructure
SPANS: 52'-0", 86'-9", 86'-9", 71'-0", 71'-0" & 59'-0"
ROADWAY: Varies, 56'-6" to 53'-8"(±) parapets
DESIGN LOAD: HS 20-44 Case I & the alternate Military Loading.
SKEW: Varies, see PLAN
WEARING SURFACE: 1¼" Latex Modified Overlay
APPROACH SLABS: AS-1-81 (25' long)
ALIGNMENT: Compound circular curves & tangent
SUPERELEVATION: Varies, 0.0833'/' max.

Curve Data Ramp F

CURVE NO. F-2
P.I. Sta. 121+01.45
Δ = 16°05'46"
Dc = 6°00'00"
Rc = 954.93'
T = 135.02'
Lc = 268.27'



TYPICAL SECTION

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISIONS
AERIAL	TWW	EDA	EDA	EEF / GJW	BALKE ENGRS 1/05

VOGT, IVERS, & ASSOCIATES
ENGINEERS CINCINNATI — ARCHITECTS CHICAGO
1 / 20

SITE PLAN

BRIDGE NO. HAM-126-1376
S.R. 126 WESTBOUND
OVER RAMP F, I-75 S.B. & EXIST. RAMP
HAMILTON COUNTY
STA. 63+17.92 to STA. 67+50.73

FED. RD. DIVISION	STATE	PROJECT		
2	OHIO			

622
787

HAM-75-9.93
HAM-126-13.00

ESTIMATED QUANTITIES

△ Revised by : TMB 12-2-85
Checked by : JAP 12-6-85

	ITEM	TOTAL	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPER-STRUCTURE	GENERAL	CHECKED BY	DATE
	503	Lump	Lump Sum	Cofferdams, Cribs and Sheeting.				Lump		
	503	1158	Cu. Yds.	Unclassified Excavation	393	765			E.F.F.	9-24-71
△	505	Lump	Lump Sum	Pile Driving Equipment Mobilization				Lump		
	507	1955	Lin. Ft.	12"ϕ Cast-in-place Reinforced Concrete Piles	1955				H.J.Z.	9-24-71
△	509	157262	Lbs.	Reinforcing Steel ; Grade 60	16917	140345				
△	511	798	Cu. Yds.	Class S Concrete, Superstructure			798		K.C.P.	8-10-71
	511	307	Cu. Yds.	Class "C" Concrete, Pier Caps and Columns		307			K.C.P.	8-10-71
△	511	175	Cu. Yds.	Class "C" Concrete, Abutments Above Footings					C.T.S.	8-10-71
	511	358	Cu. Yds.	Class "C" Concrete, Footings	116	242			C.T.S./K.C.P.	8-10-71
△	516	17	Lin. Ft.	PVC Waterstop as per Plan	17					
△	513	762430	Lbs.	Structural Steel (AISC Category I) (See Proposal Note)			762430			
△	514	762430	Lbs.	Field Painting of New Structural Steel, System A			762430			
	518	92	Cu. Yds.	Porous Backfill	92				H.J.Z.	9-23-71
△	518	129	Lin. Ft.	6" Perforated Helical Corrugated Steel Pipe, 707.01	129				H.J.Z.	9-23-71
△	518	127	Lin. Ft.	6" Non-Perforated Helical Corrugated Steel Pipe, Incl. Spec. 707.01	127				H.J.Z.	9-23-71
△	518	5	Each	Scuppers, Including Supports			5			
△	507	2630	Lin. Ft.	14"ϕ Cast-in-Place Reinforced Concrete Piles		2630				
	601	1127	Sq. Yds.	Crushed Aggregate Slope Protection				1127	T.E.C.	9-24-71
△	523	6	Hour	Dynamic Load Test				6	JAP	12-6-85
△	516	145	Lin. Ft.	Structural Expansion Joints Including Elastomeric Strip Seals	145				JAP	12-6-85
△	601	28	Sq. Yds.	Crushed Aggregate Pads, 1'-0" thick, under Scuppers				28	JAP	12-6-85
△	824	207861	Lbs.	Epoxy Coated Reinforcing Steel, Grade 60	4123		203738		JAP	12-6-85
△	SPECIAL	1329	Sq. Yds.	Sealing of Concrete Surfaces (See Proposal Note)		382	947		JAP	12-6-85
△	845	2587	Sq. Yds.	Latex Modified Concrete Overlay (1¼" thick) (See Proposal Note)			2587		JAP	12-6-85
△	*511	798	Cu. Yds.	Class S Concrete, Superstructure using shrinkage compensating cement 701.08			798		JAP	12-6-85

△ *Alternate Bid Item

REFERENCE SHALL BE MADE TO THE FOLLOWING:

STANDARD DRAWINGS:

AS-1-81	DATED 11-27-81
BR-1	DATED 5-29-79
SD-1-69	DATED 6-12-69
RB-1-55	DATED 2-2-59

STRIP SEAL JOINT

SUPPLEMENTAL SPECIFICATIONS:

836	DATED 11-12-85
824	DATED 10-8-82
845	DATED 2-25-86
953	DATED 8-21-80

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, 1983, INCLUDING THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:

DESIGN LOADING: HS 20-44, CASE I AND THE ALTERNATE MILITARY LOADING.

DESIGN STRESSES:

CONCRETE, CLASS S	COMPRESSIVE STRENGTH: 4500 PSI (SUPERSTRUCTURE)
CONCRETE, CLASS C	UNIT STRESS: 1333 PSI (SUBSTRUCTURE)
REINFORCING STEEL	ASTM A615, A616, A617, GRADE 60, MINIMUM YIELD STRENGTH: 60,000 PSI. (SUPERSTRUCTURE) GRADE 60, UNIT STRESS 24,000 PSI SPIRAL REINFORCEMENT MAY BE PLAIN BARS ASTM A82 OR A615. (SUBSTRUCTURE)
STRUCTURAL STEEL	ASTM A36, UNIT STRESS 20,000 PSI
DECK PROTECTION METHOD	EPOXY COATED REINFORCING STEEL WITH 3" CONCRETE COVER OF WHICH 1-1/4" IS A LATEX MODIFIED CONCRETE OVERLAY.
BOLTS	1" DIAMETER HIGH STRENGTH STEEL BOLTS CONFORMING TO ASTM A325. UNLESS OTHERWISE NOTED.

△ GENERAL NOTES

PILES shall be driven to a minimum bearing capacity of 35 tons per pile for the abutments and 45 tons per pile for the piers.

EMBANKMENT CONSTRUCTION: The embankments shall be constructed to the level of the subgrade for a minimum distance of 200 feet back of the abutments. Excavation shall then be made for the abutments and Pier 5. Contractor shall wait 60 days after placing fill before constructing abutments.

UTILITY LINES: All expense involved in relocating (installing) the affected utility lines shall be borne by the Owner(s). The Contractor and Owner(s) are requested to cooperate by arranging their work in such a manner that inconvenience to either would be held to a minimum.

MAINTENANCE OF TRAFFIC: Three lanes of traffic must be maintained on I-75 southbound at all times. Temporary Road No. 1 shall be constructed from the existing ramp near Abutment 1 to the completed portion of proposed Ramp F. The proposed Ramp F shall then be completed and traffic maintained on Ramp F during construction of the bridge; for details see Sh. 310 A of Roadway Plans.

CONSTRUCTION PROCEDURE: The embankment at abutment 1 shall not be constructed above the approximate roadway elevation of Temporary Road No. 1 until Ramp F has been constructed and Temporary Road No. 1 has been removed from within the embankment limits. Pier 1 may be constructed before the embankment at Abutment 1 has been placed and after Temporary Road No. 1 has been removed within the pier limits.

PREBORED HOLES: The Contractor may, at his option and expense, prebore holes through the embankment fill before driving the abutment piles.

ITEM 523 - DYNAMIC LOAD TESTS - Shall be performed as directed by the Engineer.

ITEM 511: CLASS S CONCRETE, SUPERSTRUCTURE, USING SHRINKAGE COMPENSATING CEMENT, 701.08.

THE FOLLOWING RESTRICTIONS SHALL APPLY TO THE SUPERSTRUCTURE CONCRETE USING SHRINKAGE COMPENSATING CEMENT, 701.08.

1. CEMENT SHALL BE EXPANSIVE HYDRAULIC CEMENT, ASTM C845, TYPE K.
2. THE MAXIMUM WATER/CEMENT RATIO GIVEN FOR CLASS S CONCRETE IN 499.03 SHALL BE REVISED FROM 0.44 TO 0.50.
3. MAXIMUM SLUMP AT THE TIME AND PLACE OF CONCRETE PLACEMENT SHALL BE 6 INCHES.
4. CHEMICAL ADMIXTURES, WHEN REQUIRED BY 511.06, SHALL BE LIMITED TO 705.12 TYPE D.
5. MAXIMUM AMBIENT TEMPERATURE AT TIME OF PLACEMENT OF CONCRETE SHALL BE 80° F.
6. MEMBRANE CURING PER SS836 WILL NOT BE PERMITTED FOR ANY CONCRETE PLACED BETWEEN SEPTEMBER 1 AND MARCH 31. SUCH CONCRETE SHALL BE CURED BY METHOD (A) WATER CURING.
7. IF REQUIRED BY THE ENGINEER, THE SURFACE OF THE CONCRETE SHALL BE GIVEN A FOG SPRAY OF WATER. THIS MAY BE REQUIRED PRIOR TO EITHER WATER CURING OR MEMBRANE CURING IF WEATHER CONDITIONS DICTATE. EQUIPMENT SHALL BE ON HAND.

CONSTRUCTION CLEARANCES: Three lanes of traffic with a minimum horizontal width of 38'-0" and a minimum vertical clearance of 13'-6" shall be maintained on Existing I-75 Southbound at all times.

Two lanes of traffic with a minimum horizontal width of 29'-0" and a minimum vertical clearance of 13'-6" shall be maintained on existing ramp at all times.

One lane of traffic with a minimum horizontal width of 24'-0" and a minimum vertical clearance of 13'-6" shall be maintained on Ramp F at all times.

All substructure bars not revised by Balke Engineers (△) shall have a minimum lap of 30 bar diameters.

△ 12/20

VOGT, IVERS, & ASSOCIATES
ENGINEERS CINCINNATI ARCHITECTS CHICAGO

ESTIMATED QUANTITIES & GENERAL NOTES
BRIDGE NO. HAM-126-1376
S.R. 126 WESTBOUND
OVER RAMP F, I-75 S.B. & EXIST. RAMP
HAMILTON COUNTY STA. 63+17.92 to STA. 67+50.23

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
—	H.J.Z.	—	R.L.S.			△ BALKE ENGRS 12/85

CALC. BY		OHIO	622-A 787
CHKD. BY		FHWA REGION 5	
DATE	DATE		

HAM-75-9.93
HAM-126-13.00

GENERAL NOTES
PLAN REVISIONS BY BALKE ENGINEERS

REVISIONS WERE MADE TO SUBSTRUCTURE DRAWINGS TO INCORPORATE THE FOLLOWING:

- o REVISE PARAPETS TO STANDARD SAFETY PARAPET SHAPE.
- o PROVIDE EPOXY-COATED REINFORCEMENT IN CORROSION-PRONE CONCRETE AREAS.
- o SEAL CONCRETE SURFACES OF PIER COLUMNS.
- o NUMBER PILES AND ADD DETAIL NOTES.
- o REVISE ABUTMENTS TO RECEIVE FULL WIDTH APPROACH SLAB PER AS-1-81.
- o REPLACE SLIDING PLATE EXPANSION JOINTS WITH STRIP SEAL JOINTS.
- o LENGTHEN PIER COLUMN TO FOOTING DOWELS AS REQUIRED BY AASHTO.

AT THE REQUEST OF THE OHIO DEPARTMENT OF TRANSPORTATION, ALL SUBSTRUCTURE REINFORCEMENT IS TO BE GRADE 60.

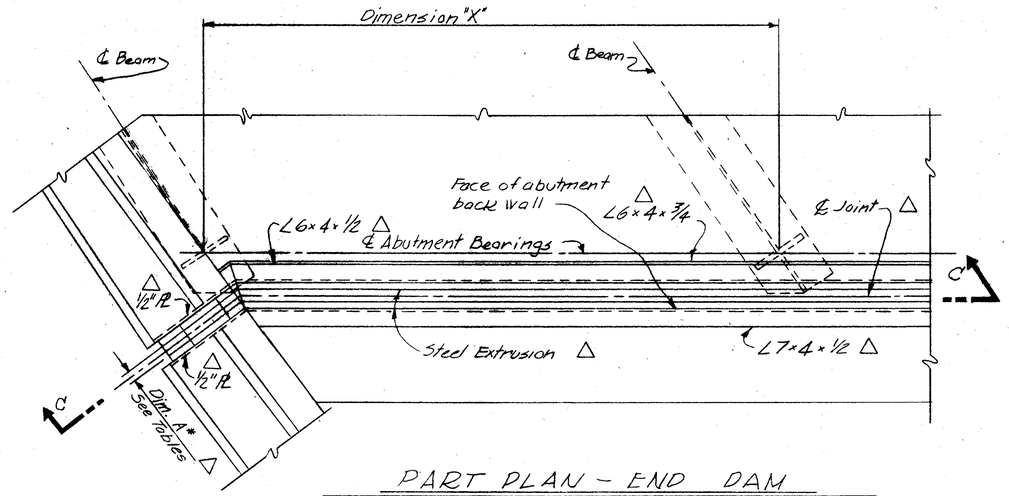
REVISIONS MADE BY BALKE ENGINEERS ARE DENOTED BY (Δ) SYMBOL.

OTHER THAN NOTED REVISIONS, SUBSTRUCTURES ARE THE DESIGN AND DETAILING OF VOGT, IVERS, AND ASSOCIATES, INC.

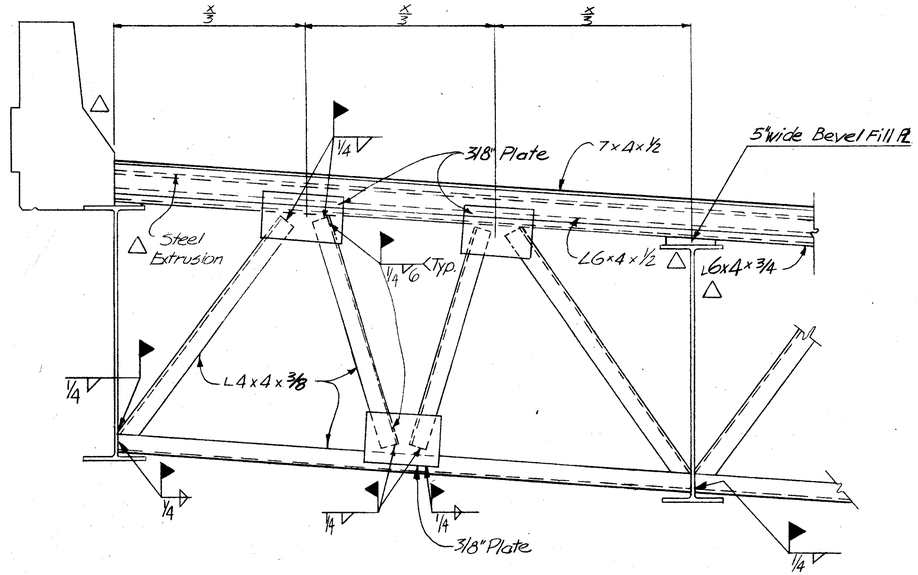
ANALYSIS OF THE ORIGINAL SUPERSTRUCTURE DESIGN HAS BEEN COMPARED TO THE REVISED SUPERSTRUCTURE DESIGN TO ASSURE THAT LOADINGS HAVE NOT INCREASED ON SUBSTRUCTURES PROVIDED BY VOGT, IVERS AND ASSOCIATES, INC. DESIGN OF THESE SUBSTRUCTURES REMAINS THE RESPONSIBILITY OF VOGT, IVERS, AND ASSOCIATES.

REVISED SUPERSTRUCTURE DESIGN AND DETAILING WAS PREPARED TO CONFORM WITH UPDATED DESIGN STANDARDS.

DESIGN AND DETAILING BY BALKE ENGINEERS WAS PERFORMED IN ACCORDANCE WITH THE AASHTO SPECIFICATIONS FOR HIGHWAY BRIDGES, THIRTEENTH EDITION, 1983, AASHTO INTERIM SPECIFICATIONS FOR BRIDGES 1984, AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.



PART PLAN - END DAM
(Abutment #1 Shown)



SECTION C-C
Typical end crossframe at Abutment #1

△ ABUTMENT 1
JOINT SETTING TABLE

TEMP°F	0	20	40	60	80	100
A*	3 3/8"	3 1/16"	2 13/16"	2 1/2"	2 3/16"	1 15/16"

Strip Seal Gland to be Watson-Bowman S-400E or D.S. Brown SS-400.

△ ABUTMENT 2
JOINT SETTING TABLE

TEMP°F	0	20	40	60	80	100
A*	3 1/16"	3"	2 3/4"	2 1/2"	2 1/4"	2"

Strip Seal Gland to be Watson-Bowman S-500E or D.S. Brown SS-500.

△ NOTES

1. Details of End Dam and Crossframe at Abutment #2 are similar.
2. For Expansion Joint Details and Notes not shown, see Strip Seal Details, Sheets 488 A, B, C & D.
3. For Details and Notes of End Crossframes not shown, see Std. Dwg. No. SD-1-69.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

2A 20

GENERAL NOTES AND END DAM DETAIL

BRIDGE NO. HAM-126-1376
S.R. 126 WESTBOUND
OVER RAMP F, I-75 S.B. AND EXIST. RAMP
HAMILTON COUNTY
STA. 63+17.92 TO STA. 67+50.23

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
SJA	ADS	~	TMB	CRS 12/85	

OHIO BLUE PRINT 142053

FED. RD. DESIGNATION	STATE	PROJECT	
2	OHIO		

HAM-75-9.93
HAM-126-13.00

BEAM	B1	B2	B3	B4	B5	B6	B7
ANGLE A	54°55'15"	54°09'29"	55°24'35"	54°40'24"	53°57'03"	53°14'28"	52°32'40"

N

℄ S.R. 126 WESTBOUND
Ahead Stations
Approach Slab Seat
Limits of Porous Backfill
Contraction Joint
WINGWALL 1
WINGWALL 2
REFERENCE LINE
72°36'45"
℄ B7
℄ B6 Sta 63+20.75
℄ B5
℄ B4
℄ B3
℄ B2
℄ B1
℄ Brg. Abut. 1
Angle A (Typ. B1 thru B7, see Table above)
4:9½"
1'-6" Typ
3:8 13/16"
10:9¾"
25:11½"
26:1⅞"
10:9¾"
10:9¾"
10:0 3/16"
38 @ 10:9 3/8" = 32'-5¼"
42:11⅞"
45:4¼"
72:1½"
53:9 15/16"
2'10 13/16"
2'4½"
7½"
2'-0"
6'-0"
16'-9"
8'-0"
16'-1"
12'-10 5/16"
10'-1"
15'-9¼"
7'-9 1/16"
10'-8¼"
12'-9"
A524 in Fillet

PLAN

69-AL09, 69-AL10 & 69-A(E)611 @ 12" = 68'-0"
38-A(E)810 @ 1'-6" ±
1-AL12 & 1-A(E)613
1'-0" 6"
6'-2½" Rounding
7'-8½"
El. 570.05
El. 569.88
El. 569.89
El. 567.93
El. 567.69
1-A(E)569 N.F.
1-A(E)570 F.F.
1-A(E)521 E.F.
1-A(E)573 E.F.
1-A571
1-A572
Approach Slab Seat
Contraction Joint
El. 565.37
El. 565.36
El. 565.29
El. 560.98
El. 561.88
El. 562.78
El. 563.67
El. 564.54
3-A519 N.F. & 3-A520 F.F. @ 15" = 2'-6"
3-A518 N.F. & 3-A523 F.F. @ 15" = 2'-6"
3-A517 E.F. @ 15" = 2'-6"
5-A516
5-A513
3-A514
3-A512
1-A601 F.F.
3-A506 N.F. & 3-A507 F.F. @ 19" 3'-2"
5-A505
Typ. between Beam Seats
6-A525 @ 18" = 9'-0"
3-A510 N.F. & 3-A511 F.F. @ 19" = 3'-2"
6-A525 @ 6" = 2'-6"
Typ. under Beam Seats
1-A510 N.F. & 1-A511 F.F.
5-A524 in Fillet
El. 553.95
12"ϕ Pile (Typ.)
8-A504 N.F. & 9-A601 F.F.
7-A505 N.F. & 7-A602 F.F.
8-A506 N.F. & 8-A603 F.F.
7-A507 N.F. & 7-A604 F.F.
8-A508 N.F. & 8-A605 F.F.
7-A509 N.F. & 7-A606 F.F.
3-A509 N.F.
Spacing between piles same as shown for Footing
1'-6"
3"
9"

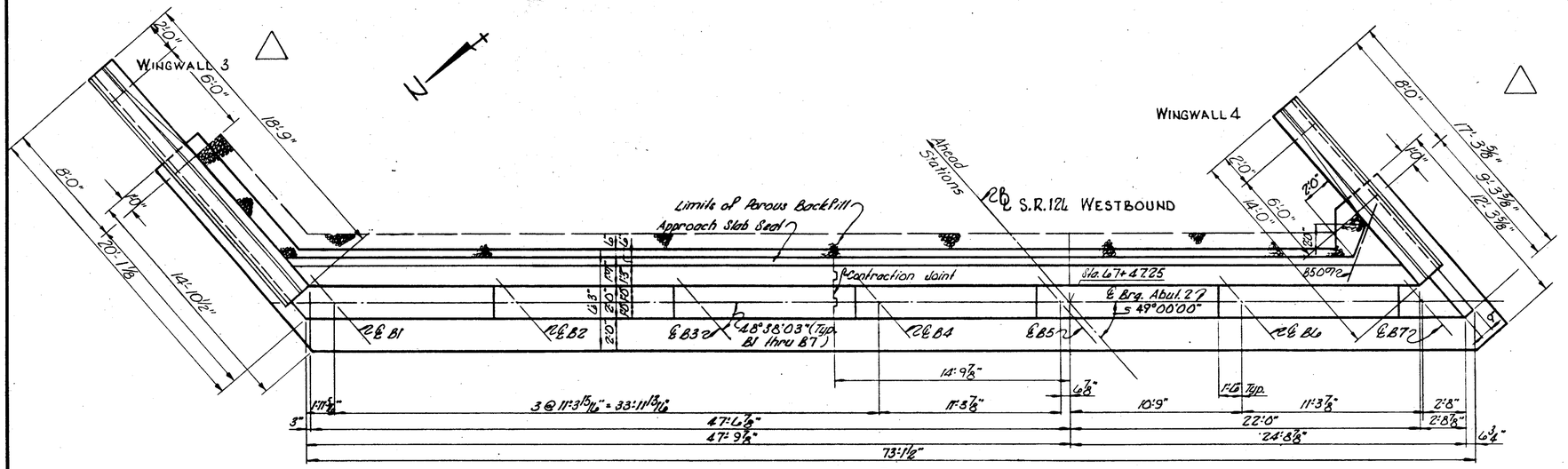
ELEVATION

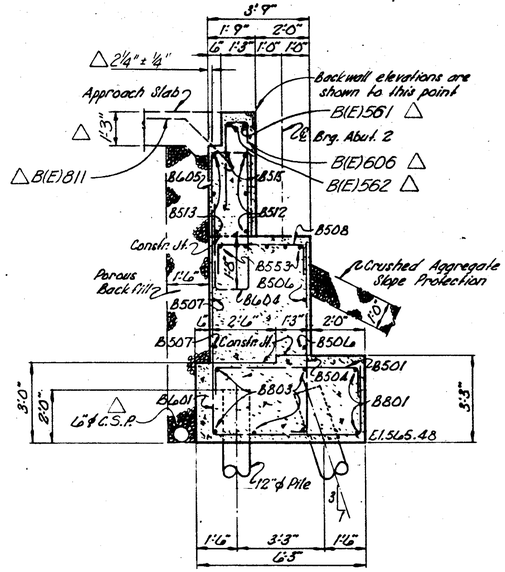
1-AB09 Top & Bolt
Non-perforated Helical C.S.P.
℄ S.R. 126 WESTBOUND
Perforated Helical C.S.P.
Ahead Stations
Sta 63+20.75
Conslt Jt.
℄ Piles
1-AB08 Bolt
1-AB07 Top & Bolt
1-AB04 Top & Bolt
1-AB02 Top & Bolt
1-AB01 Top & Bolt
1-AB06 Top & Bolt
1-AB05 Bolt
2-AB03 Top & 3-AB03 Bolt
except as shown
9 @ 3@17" = 4'-3"
9 @ 9" Typ. between piles
21-AB04 Top & Bolt
49-A502 Top
12 @ 5'-10" = 70'-0"
26:7⅞"
38:9½"
25:8¼"
45:10½"
73:7½"
58:9 15/16"
8'-8⅜"
8'-0"
9'-1 5/16"
5'-1"
4'-8 7/16"
2'-0"
3'-6"
3'-0"
6'-8"
6'-3"
6'-4"
6'-5"
6'-6"
6'-7"
6'-8"
6'-9"
6'-10"
6'-11"
7'-0"
7'-1"
7'-2"
7'-3"
7'-4"
7'-5"
7'-6"
7'-7"
7'-8"
7'-9"
7'-10"
7'-11"
8'-0"
8'-1"
8'-2"
8'-3"
8'-4"
8'-5"
8'-6"
8'-7"
8'-8"
8'-9"
8'-10"
8'-11"
9'-0"
9'-1"
9'-2"

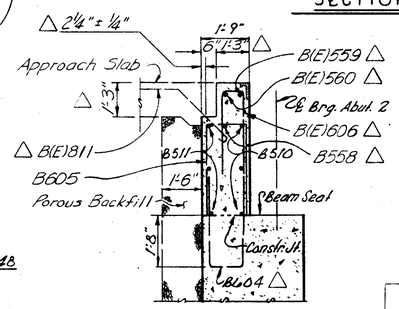
FED. RD. DESIGNATION	STATE	PROJECT	
2	OHIO		

684
787

HAM-75-9.93
HAM-126-13.00







△ NOTE
Contractor shall wait 60 days after placing fill before constructing abutments.

LEGEND
- = 12"ϕ Cast-in-Place Reinforced Concrete Pile
- = Roller Pile 5:1 in the direction of the arrow
- E.F. = Each Face
- N.F. = Near Face
- E.F. = Each Face
- ⬡ = Pile Number △

NOTES
1. For Wingwall 3 and 4 details, see Sh. 5/20
2. For Reinforcing Steel List, see Sh. 17/20
3. For Contraction Joint detail, see Sh. 5/20
4. For termination of 6"ϕ Non-perforated helical C.S.P. on the side slope, see Sh. 5/20
5. For additional Notes, see Sh. 5/20
6. △ "(E)" denotes epoxy coated reinforcing bar. △

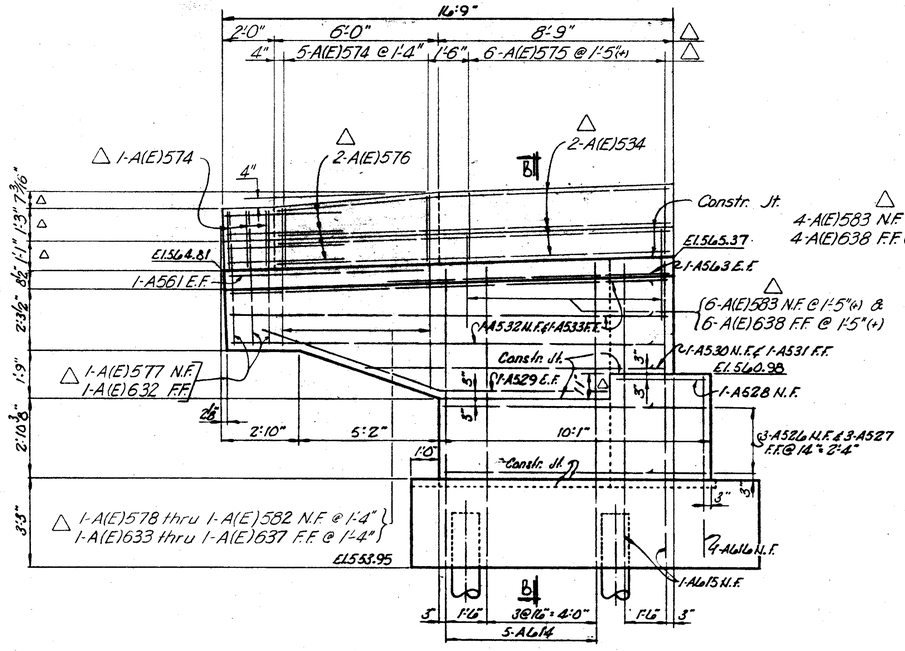
VOGT, IVERS, & ASSOCIATES, INC. 4/20
ENGINEERS ARCHITECTS
CINCINNATI

ABUTMENT 2
BRIDGE NO. HAM-126-13.76
S.R. 126 WESTBOUND
OVER RAMP F, I-75 SB & EXIST. RAMP
HAMILTON COUNTY STA. 63+17.92 TO STA. 67+50.73

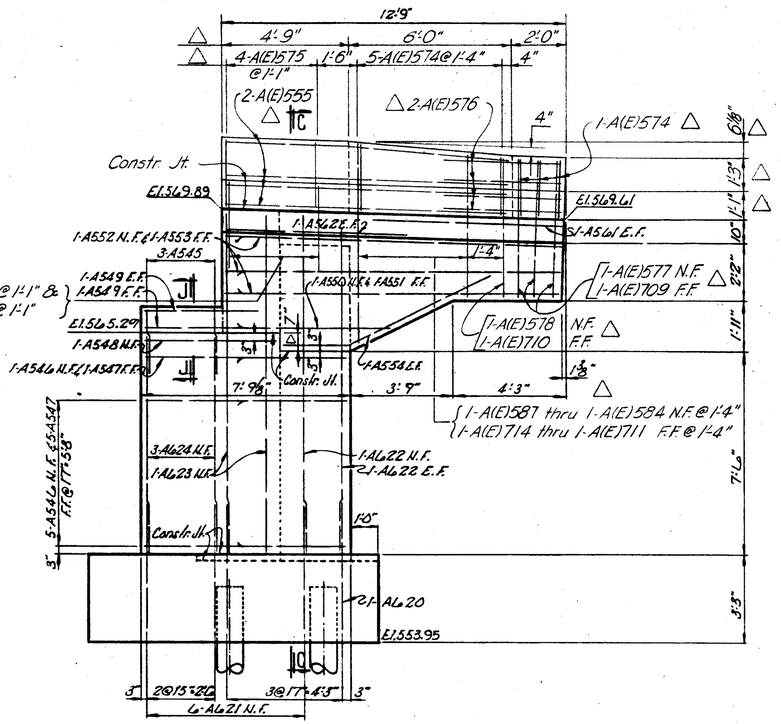
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
E.P.A.	G.J.W.		D.S.M.			△ BALKE ENGRS 12/85

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

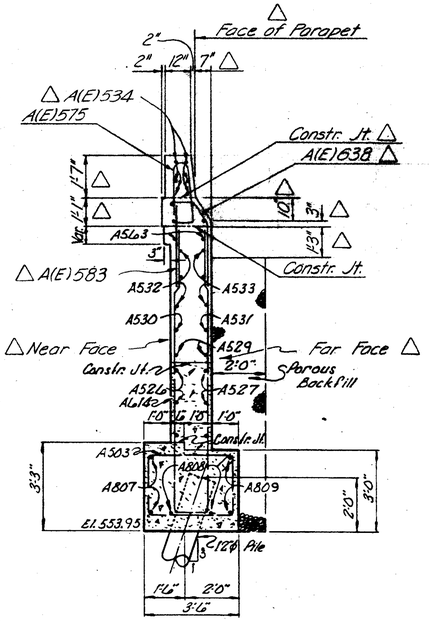
HAM-75-9.973
HAM-126-13.00



ELEVATION - WINGWALL 2

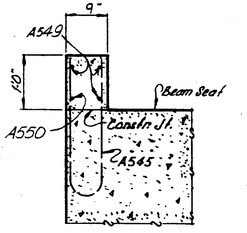


ELEVATION - WINGWALL 1



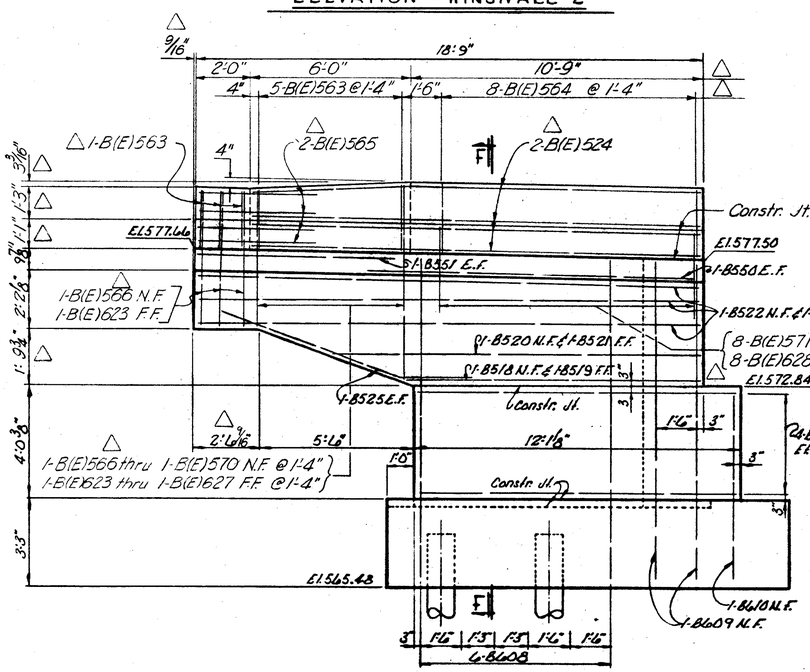
SECTION B-B

SECTIONS C-C, F-F & G-G SIMILAR

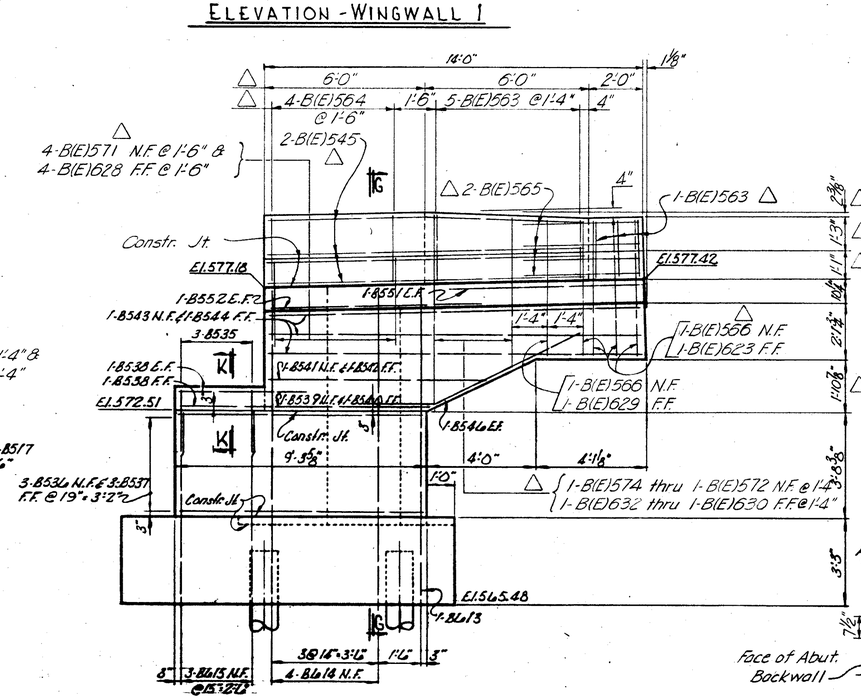


SECTION J-J

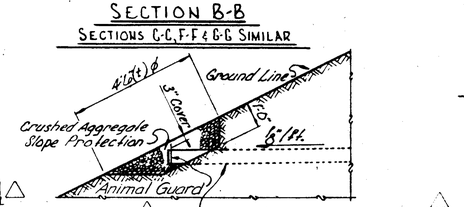
SECTION K-K SIMILAR



ELEVATION - WINGWALL 3



ELEVATION - WINGWALL 4



TERMINATING 6" CSP ON THE SIDE SLOPE

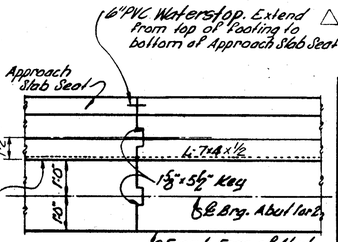
LEGEND

C.F. = Each Face
N.F. = Near Face
F.F. = Far Face

NOTES

1. For Abutment 1 details, see Sh. 3/20
2. For Abutment 2 details, see Sh. 4/20
3. For General Notes, see Sh. 2/20
4. For Reinforcing Steel List, see Sh. 17/20
5. For End Dam & Strip Seal Expansion Jt. Details see Sh. 2A/20 and Sh. 7/20
6. Porous Backfill, 1'-6" thick, shall extend up to the plane of the subgrade.

△ 7" "(E)" denotes epoxy coated reinforcing bar.



CONTRACTION JOINT DETAIL

VOGT, IVERS, & ASSOCIATES, INC. 5/20
ENGINEERS ARCHITECTS
CINCINNATI

ABUTMENT DETAILS
BRIDGE NO. HAM-126-13.76
S.R. 126 WESTBOUND
OVER RAMP F, I-75 SB & EXIST. RAMP
HAMILTON COUNTY STA. 43+17.92 TO STA. 47+50.23

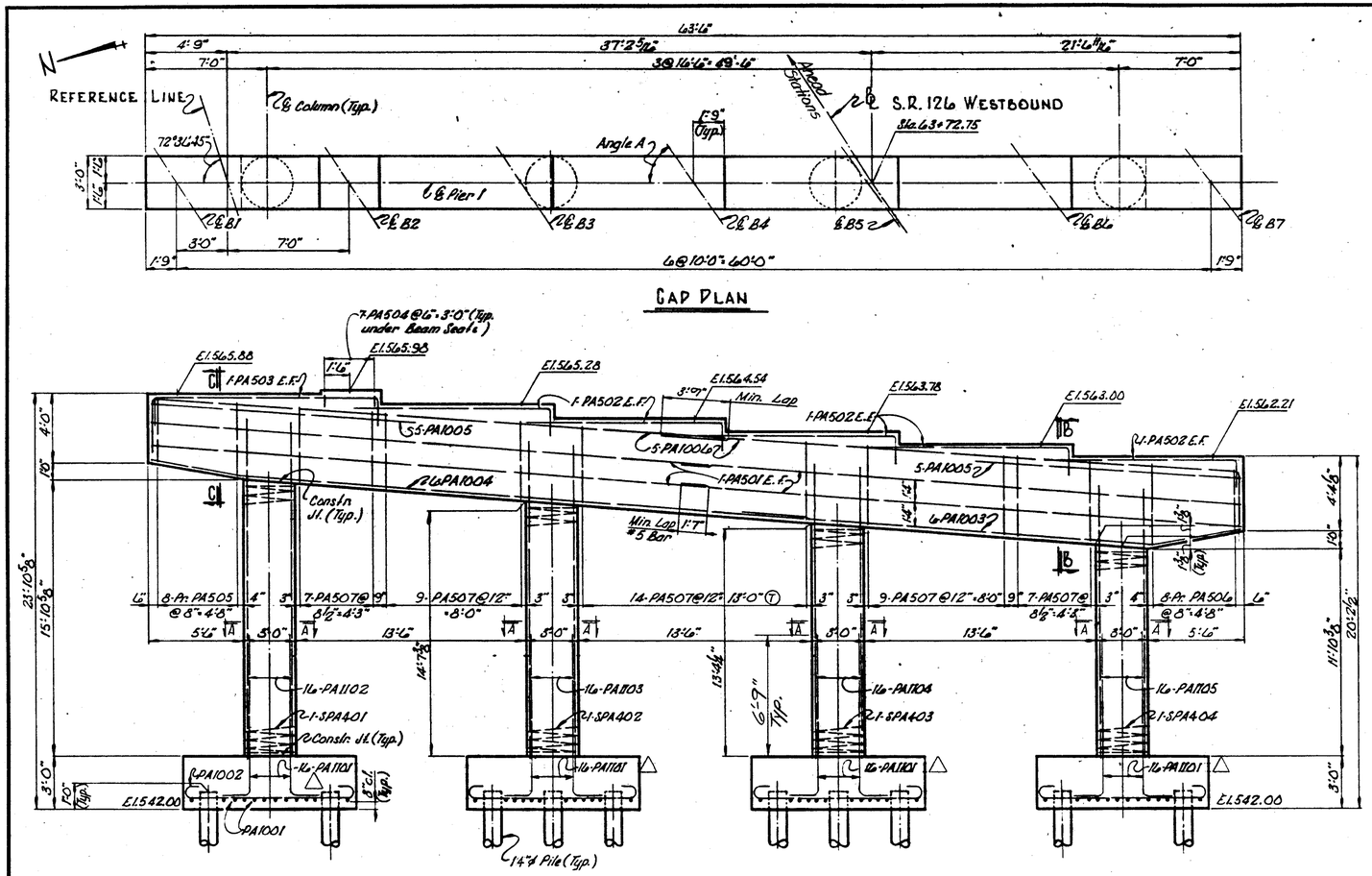
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
E.P.A.	G.J.M.	—	P.S.M.			△ ZALKIE ENGRS. 12/85

BEAM	B1	B2	B3	B4	B5	B6	B7
ANGLE A	56°55'18"	56°09'29"	55°24'33"	54°40'24"	53°57'03"	53°14'28"	52°32'40"

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

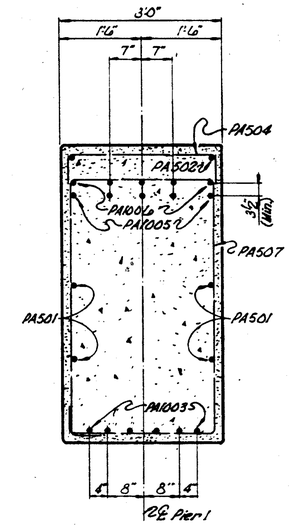
626/787

HAM-75-9.93
HAM-126-13.00

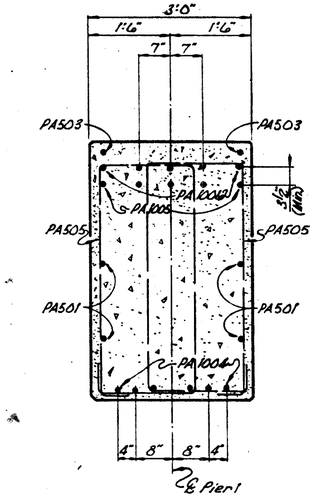


CAP PLAN

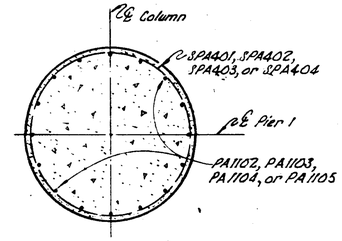
ELEVATION



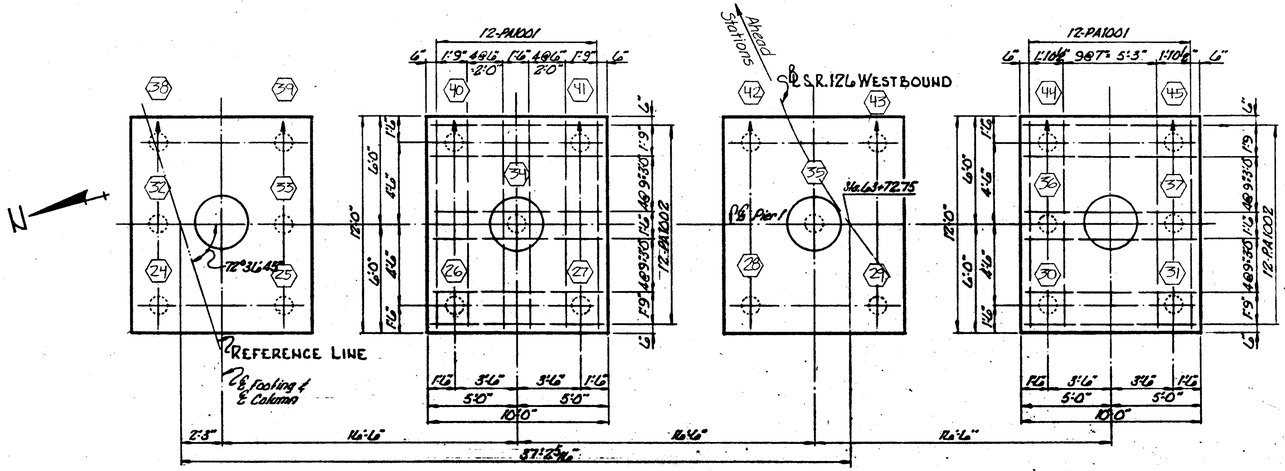
SECTION B-B



SECTION C-C



SECTION A-A



FOOTING PLAN

NOTES

1. For General Notes, see Sh. 2/20 & Sh. 2A/20
2. For Reference Line Layout, see Sh. 11/20
3. For Reinforcing Steel List, see Sh. 17/20
4. Minimum clearance between any reinforcing steel and surface of footing shall be 3".
5. Place dowels in footing to insure correct spacing of main column steel.
6. Except as otherwise shown, provide hooks in the stirrups in the bottom of the cap.

LEGEND

- = 14"ϕ Cast-in-Place Reinforced Concrete Pile
- = Batter Pile 1:4 in the direction of the arrow
- E.F. = Each Face
- Ⓣ = Hooks in stirrups are located in top of the cap.
- △ ⬡ = Pile Number

VOGT, IVERS, & ASSOCIATES, INC. 6/20
ENGINEERS ARCHITECTS
CINCINNATI

PIER 1
BRIDGE NO. HAM-126-1376
S.R. 126 WESTBOUND
OVER RAMP F, I-75 SB & EXIST. RAMP
HAMILTON COUNTY STA. 63+17.92 TO STA. 67+50.23

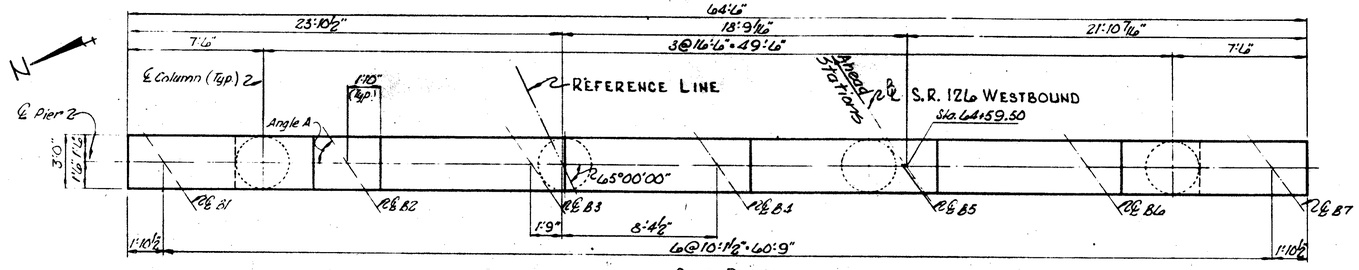
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
G.K.S.	G.J.W.	—	GKS			BALKE ENGRS. 12/85

BEAM	B1	B2	B3	B4	B5	BL6	B7
ANGLE A	55°13'17"	54°56'35"	54°39'16"	54°21'20"	54°02'45"	55°43'27"	53°23'25"

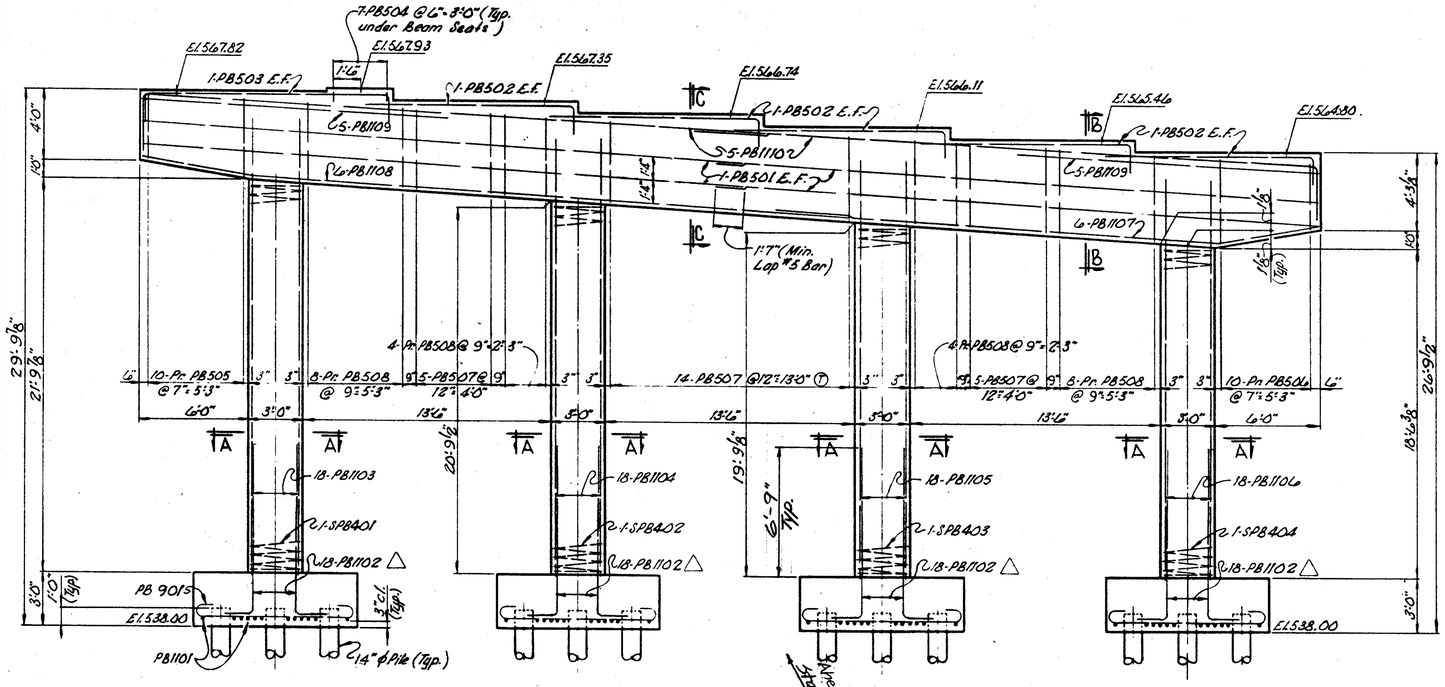
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

627
787

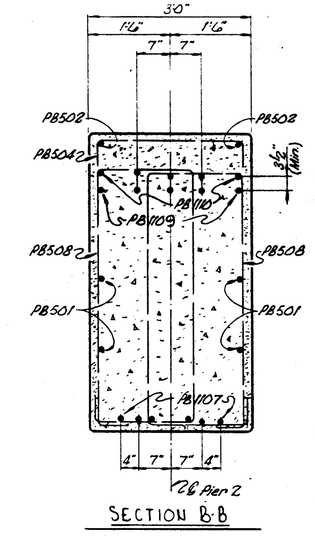
HAM-75-0.793
HAM-126-13.00



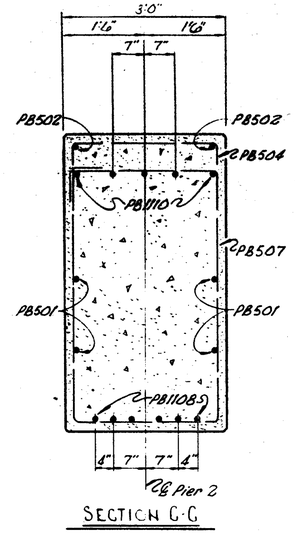
CAP PLAN



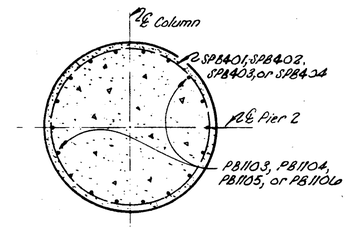
FOOTING PLAN



SECTION B-B



SECTION C-C



SECTION A-A

NOTES

1. For Notes, see Sh. 6 of 20

LEGEND

- ⊕ = 14" ϕ Cast-in-Place Reinforced Concrete Pile
- ⊕ = Batter Pile 1:4 in the direction of the arrow
- E.F. = Each Face
- Ⓣ = Hooks in stirrups are located in top of the cap
- △ ⬡ = Pile Number

△ 7/20

VOGT, IVERS, & ASSOCIATES, INC. ENGINEERS ARCHITECTS CINCINNATI

PIER 2
BRIDGE NO. HAM-126-13.76
S.R. 126 WESTBOUND
OVER RAMP F, I-75 S.B. & EXIST. RAMP
HAMILTON COUNTY STA. 63+17.92 TO STA. 67+50.23

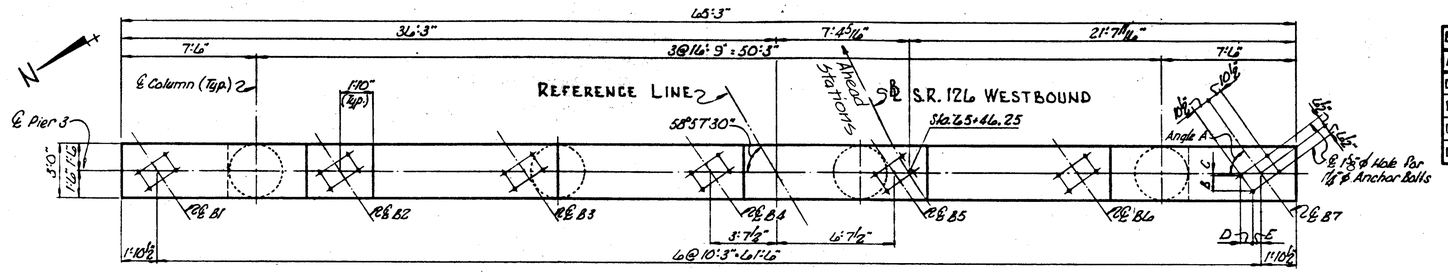
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
G.K.S	G.J.W.	—	GKS			△ BALKE ENGRS 12/85

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

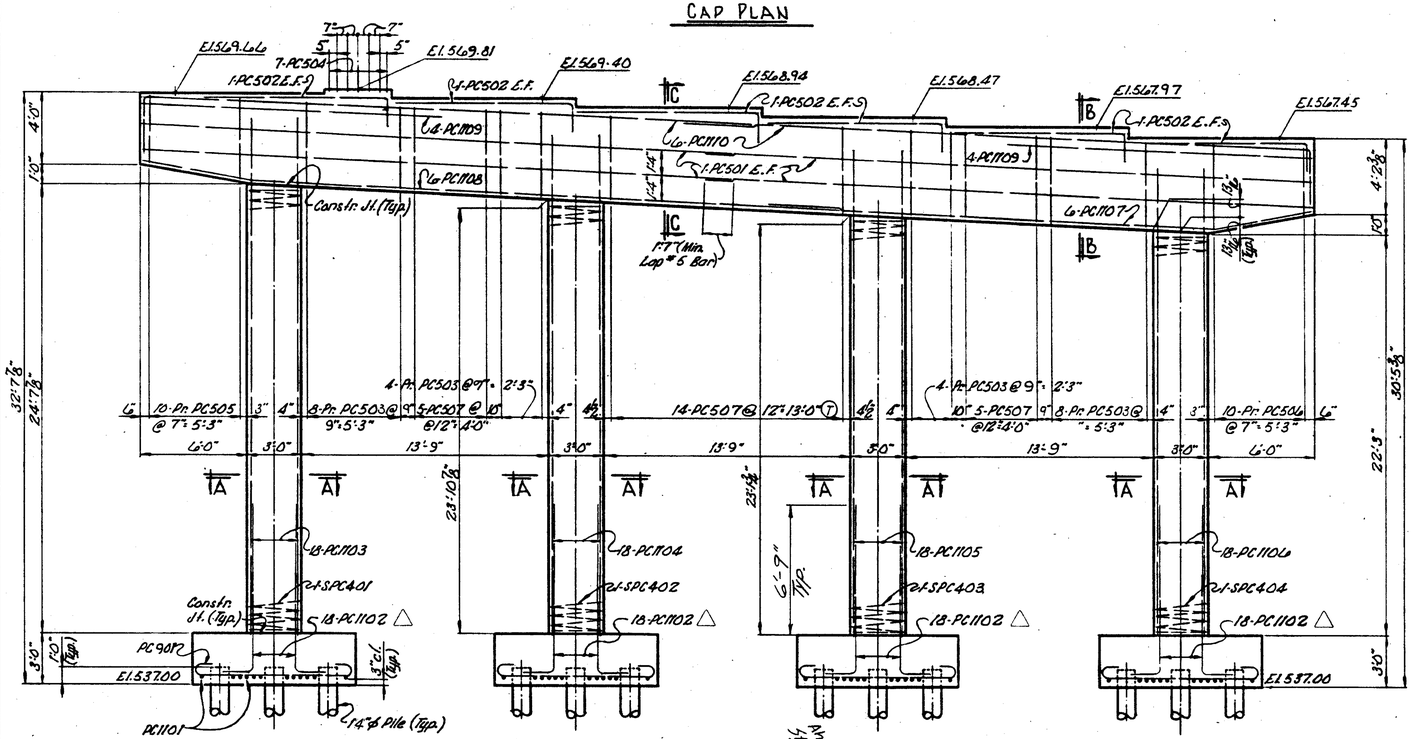
628
787

HAM-75-07.93
HAM-126-13.00

BEAM	B1	B2	B3	B4	B5	B6	B7
ANGLE A	56°12'02"	55°54'03"	55°35'28"	55°16'13"	54°56'16"	54°35'39"	54°14'15"
DIM. B	10 11/16"	10 3/4"	10 3/4"	10 11/16"	10 5/8"	10 5/8"	10 9/16"
DIM. C	7 1/16"	1/2"	9 1/16"	5/8"	11 1/16"	13 1/16"	7/8"
DIM. D	7 1/4"	7 5/16"	7 3/8"	7 3/8"	7 7/16"	7 9/16"	7 5/8"
DIM. E	5 1/8"	5 1/16"	5"	4 15/16"	4 7/8"	4 13/16"	4 3/4"

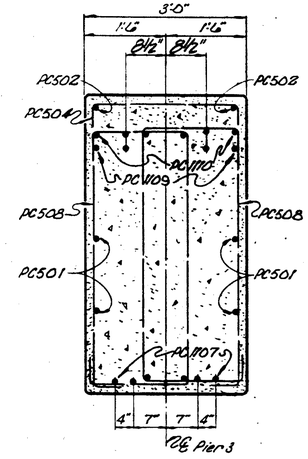


CAP PLAN

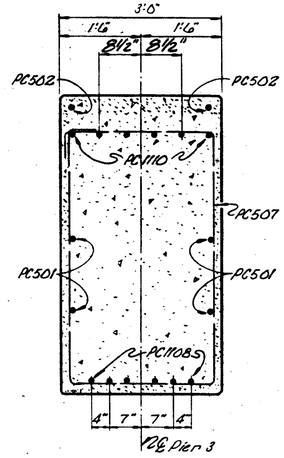


ELEVATION

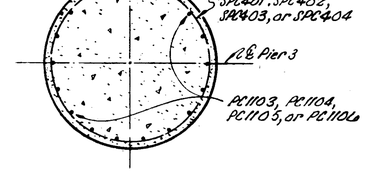
FOOTING PLAN



SECTION B-B



SECTION C-C



SECTION A-A

NOTES

1. Special care shall be taken in placing reinforcing steel in the cap so as to avoid interference with the drilling of anchor bolt holes.
2. For additional Notes, see Sh. 6 / 20

LEGEND

- 14"ϕ Cast-in-Place Reinforced Concrete Pile
- Roller Pile 1:4 in the direction of the arrow
- E.F. = Each Face
- (T) = Hooks in the stirrups are located in top of the cap.
- △ ⬡ = Pile Number

△ 8/20

VOGT, IVERS, & ASSOCIATES, INC. ENGINEERS ARCHITECTS
CINCINNATI

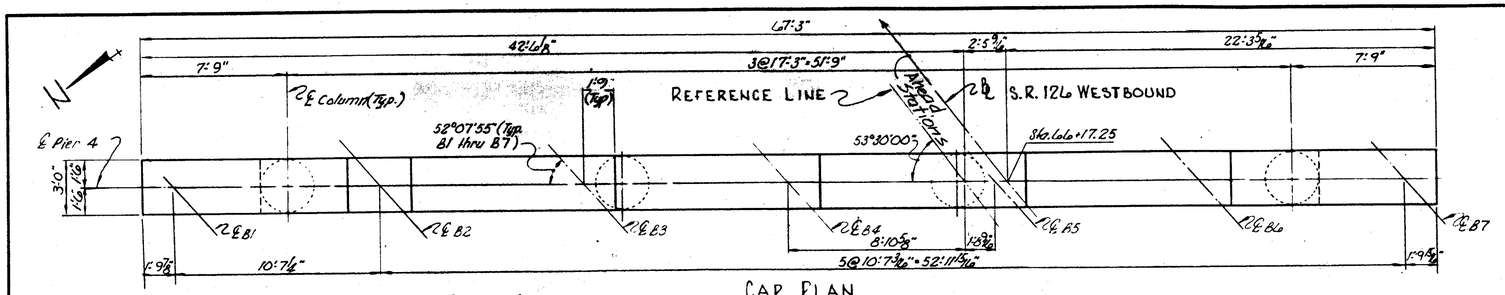
PIER 3
BRIDGE NO. HAM-126-13.76
S.R. 126 WESTBOUND
OVER RAMP F, I-75 SB & EXIST. RAMP
HAMILTON COUNTY STA. 63+17.92 TO STA. 67+50.23

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
G.K.S.	G.J.W.	—	GKS			△ BALKE KINGS 12/95

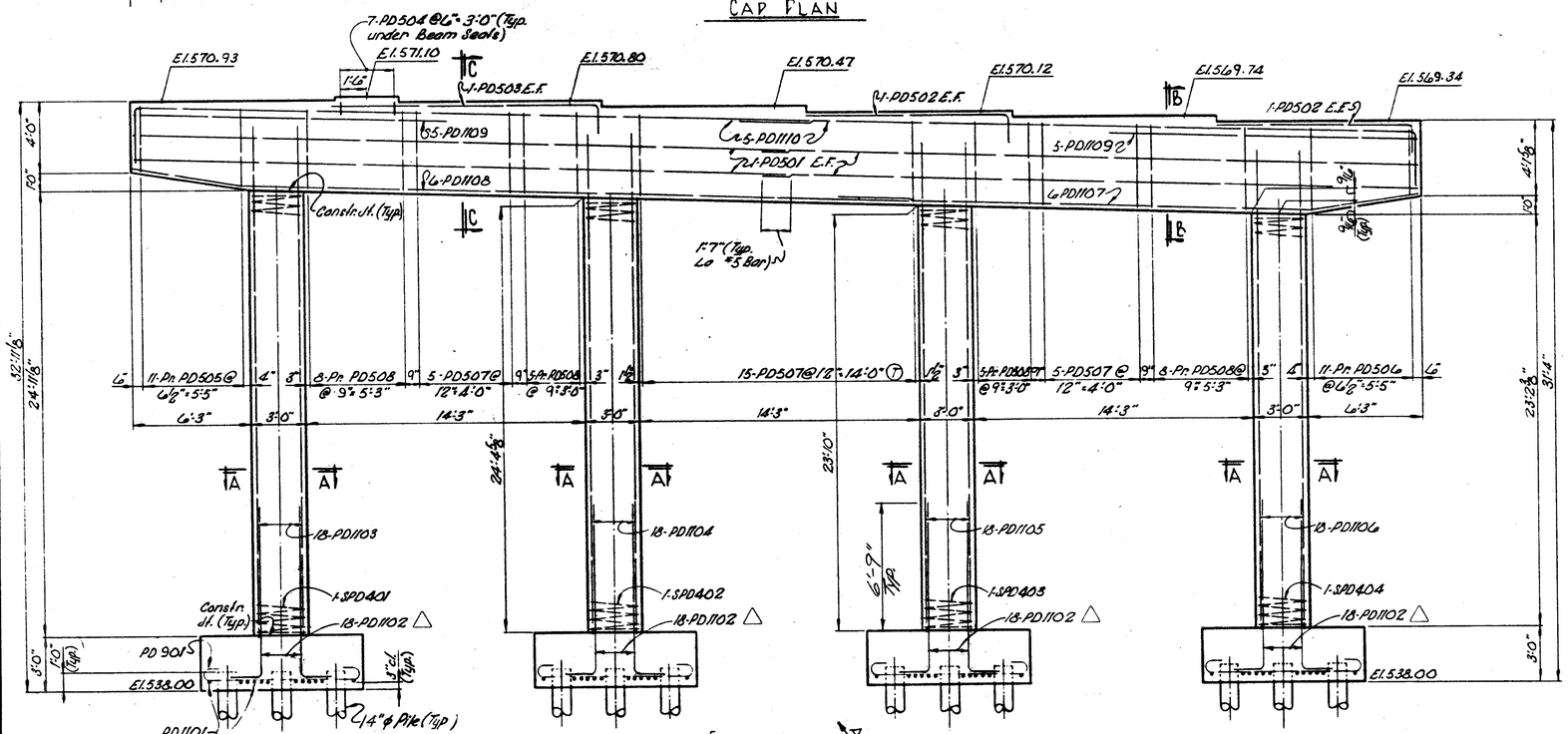
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

G22
787

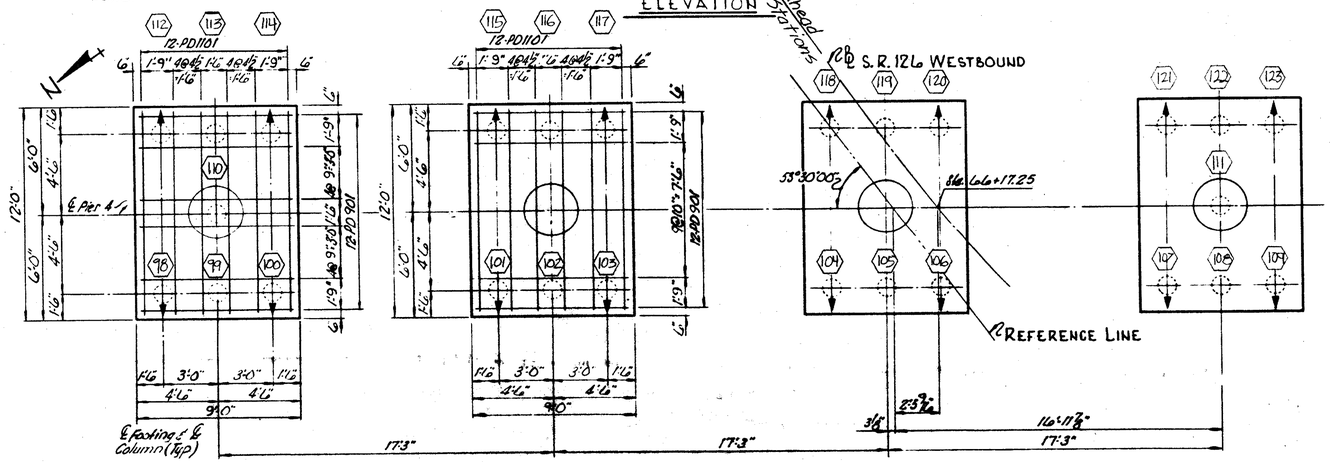
HAM-75-7.73
HAM-126-13.00



CAP PLAN



ELEVATION



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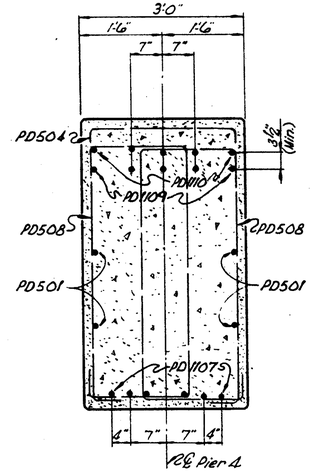
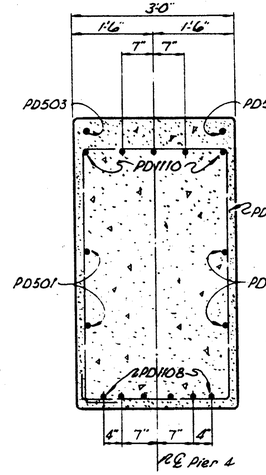


SECTION B-B



SECTION C-C

SECTION A-A

NOTES
1. For Notes, see Sh G120

LEGEND
- 14" ϕ Cast-in-Place Reinforced Concrete Pile
- Roller Pile 1:1 in the direction of the arrow
- E.F. = Each Face
- (T) = Hooks in stirrups are located in top of the cap.
- △ ⬡ = Pile Number

△ 9/20

VOGT, IVERS, & ASSOCIATES, INC. ENGINEERS ARCHITECTS CINCINNATI

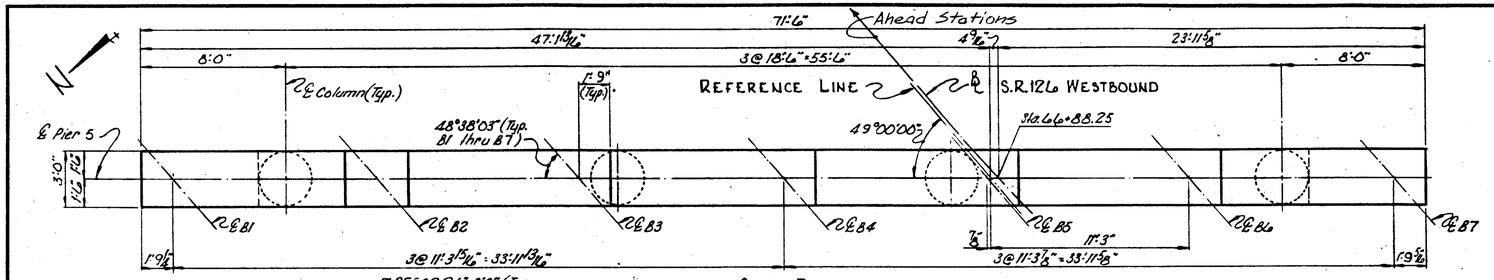
PIER 4
BRIDGE NO. HAM-126-13.76
S.R. 126 WESTBOUND
OVER RAMP F, I-75 SB & EXIST. RAMP
HAMILTON COUNTY
STA. 63+17.092 TO STA. 67+50.23

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
G.K.S.	G.J.W.		G.K.S.			△ JALKE ENGRS 12/85

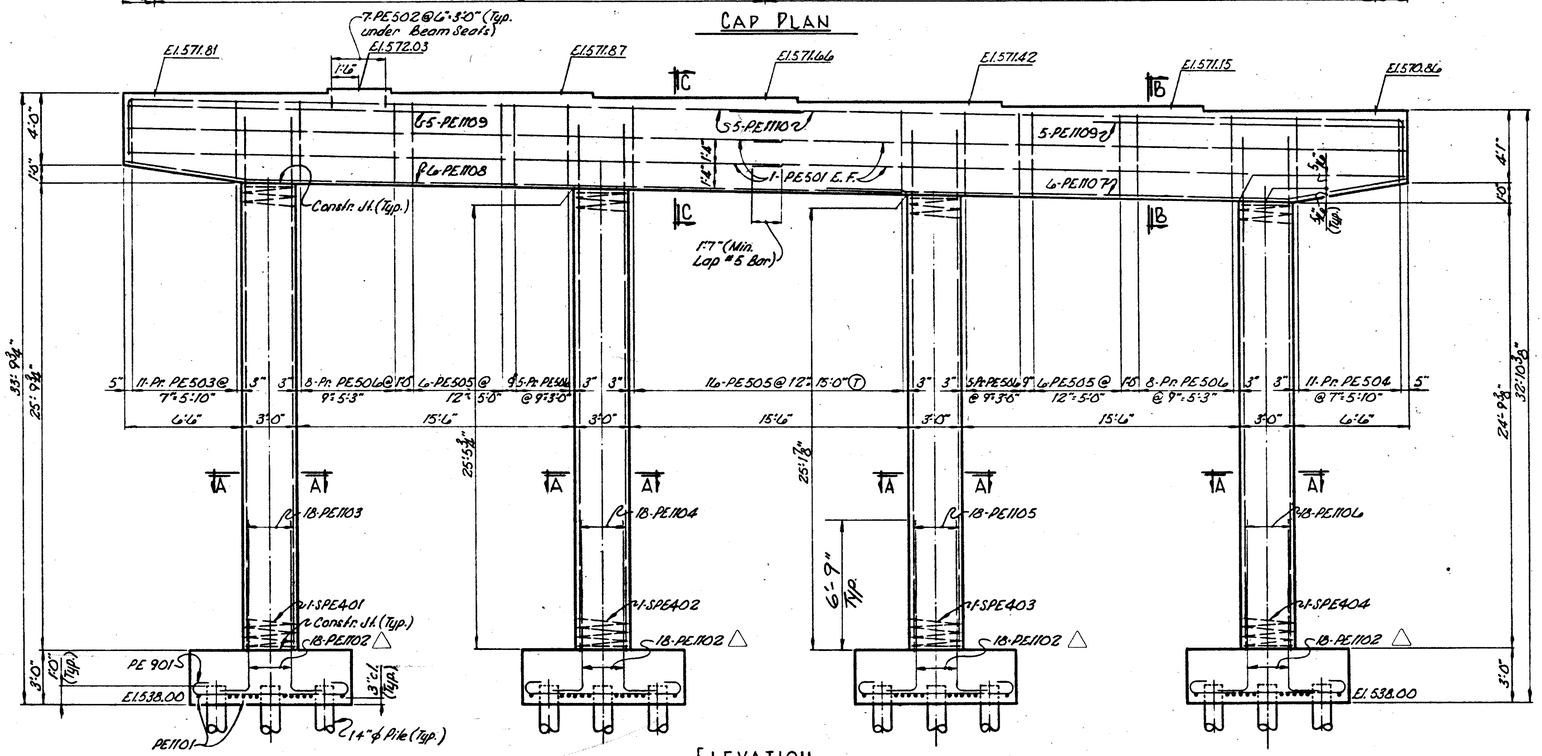
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

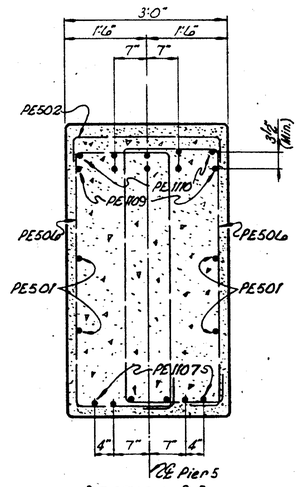
630
181

HAM-75-07.973
HAM-126-13.00

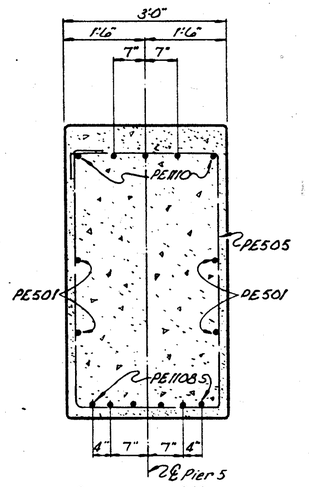


CAP PLAN

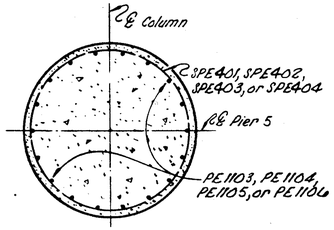




SECTION B-B

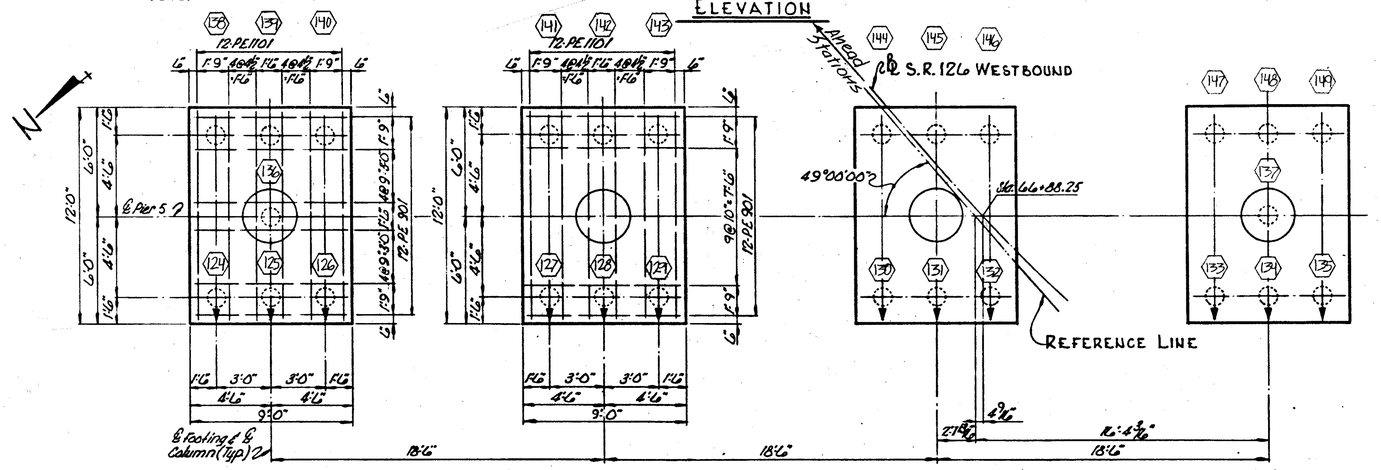


SECTION C-C



SECTION A-A

ELEVATION



FOOTING PLAN

NOTES

1. For Notes, see Sh. G170

LEGEND

- 14"ϕ Cast-in-Place Reinforced Concrete Pile
- Batter Pile 1:4 in the direction of the arrow
- E.F. = Each Face
- (T) = Hooks in stirrups are located in top of the cap
- △ ⬡ = Pile Number

△ 10/20

VOGT, IVERS, & ASSOCIATES, INC. ENGINEERS ARCHITECTS CINCINNATI

PIER 5
BRIDGE NO. HAM-126-13.76
S.R. 126 WESTBOUND
OVER RAMP F, I-75 SB & EXIST. RAMP
HAMILTON COUNTY STA. 63+17.92 TO STA. 67+50.23

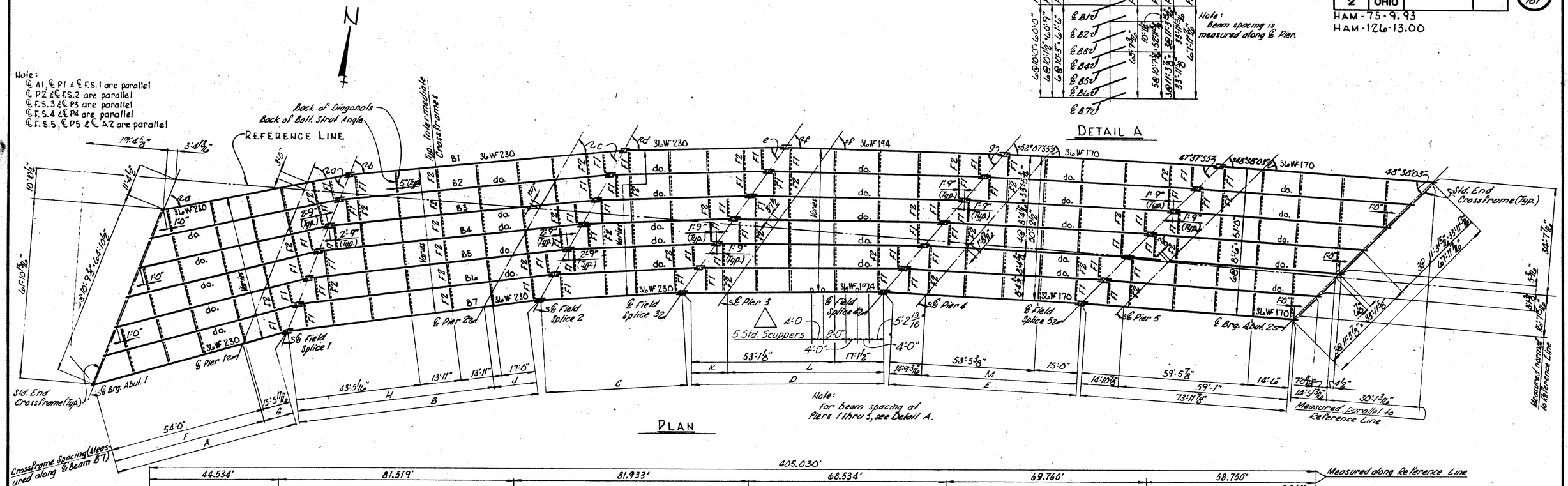
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED
G.K.S.	G.J.W.		GKS			BALKE ENGRS. 12/15

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

HAM-75-9.93
HAM-126-13.00

631
787

Note:
℄ A1, ℄ P1 & ℄ F.S.1 are parallel
℄ P2 & ℄ F.S.2 are parallel
℄ F.S.3 & ℄ P3 are parallel
℄ F.S.4 & ℄ P4 are parallel
℄ F.S.5, ℄ P5 & ℄ A2 are parallel

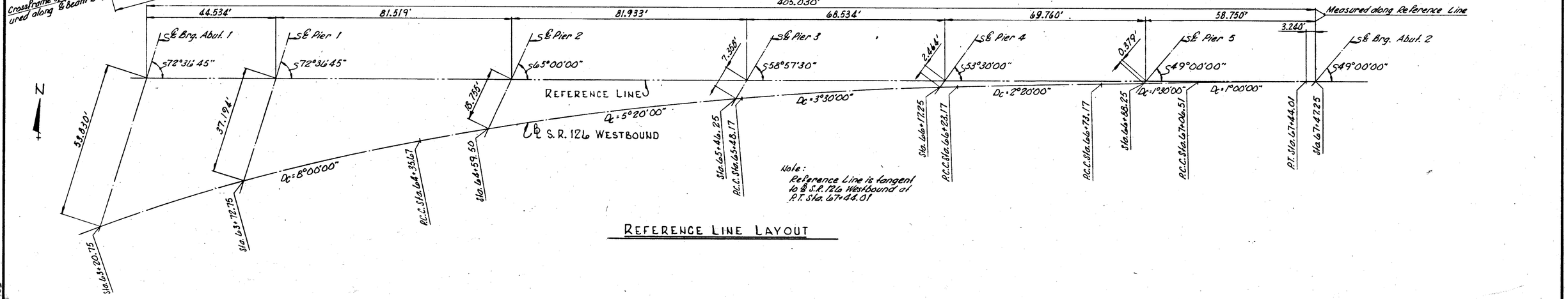


Note:
For beam spacing at Piers 1 thru 5, see Detail A.

PLAN

Note:
Beam spacing is measured along ℄ Pier.

DETAIL A



Note:
Reference Line is tangent to ℄ S.R. 126 Westbound at P.T. Sta. 67+44.01

REFERENCE LINE LAYOUT

FRAMING DIMENSIONS AND ANGLES

	DIMENSIONS												ANGLES						
	A	B	C	D	E	F	G	H	J	K	L	M	a	b	c	d	e	f	g
B 1	65'-9 13/16"	95'-8 3/8"	54'-2 3/8"	75'-10 3/16"	75'-2 7/16"	50'-8 5/8"	15'-1 3/16"	76'-5 5/16"	19'-2 7/16"	15'-6 3/8"	60'-3 13/16"	60'-5 1/4"	56°55'13"	62°50'02"	55°13'17"	59°22'42"	53°20'12"	51°12'02"	56°44'32"
B 2	66'-4 15/16"	94'-5 1/16"	55'-1 7/16"	74'-10 13/16"	74'-0 7/8"	51'-2"	15'-2 15/16"	75'-2 1/8"	19'-3 1/16"	15'-7 1/16"	59'-3 3/4"	59'-3 1/16"	58°09'29"	62°33'20"	54°56'35"	59°03'06"	53°00'31"	55°54'08"	50°26'35"
B 3	66'-11 5/16"	93'-2 5/16"	54'-0 1/16"	73'-11 7/16"	72'-11 3/8"	51'-7 1/2"	15'-4 1/16"	73'-10 5/16"	19'-4"	15'-7 11/16"	58'-3 3/4"	58'-2 3/4"	55°24'33"	62°11'01"	54°39'16"	58°43'12"	52°40'47"	55°35'28"	50°07'58"
B 4	67'-7 3/16"	91'-11 3/8"	52'-11 3/8"	73'-0 1/8"	71'-9 7/8"	52'-1 1/16"	15'-6 1/8"	72'-6 1/2"	19'-4 7/8"	15'-8 5/16"	57'-3 11/16"	57'-0 11/16"	54°40'24"	61°58'05"	54°21'20"	58°23'00"	52°20'30"	55°11'13"	49°48'48"
B 5	68'-2 7/16"	90'-8 9/16"	51'-10 5/16"	72'-0 15/16"	70'-8 3/8"	52'-2 3/4"	15'-7 13/16"	71'-2 3/4"	19'-5 3/16"	15'-9 9/16"	56'-3 3/4"	55'-11 3/16"	53°57'05"	61°39'30"	54°02'45"	55°07'30"	52°00'00"	54°51'16"	49°28'45"
B 6	68'-10 1/16"	89'-5 3/4"	50'-9 3/16"	71'-1 3/4"	69'-6 7/8"	53'-3 9/16"	15'-9 1/2"	69'-11"	19'-6 3/4"	15'-10"	55'-3 3/4"	54'-9 11/16"	53°14'28"	61°20'12"	53°43'27"	57°41'44"	51°39'14"	54°35'39"	49°08'09"
B 7	69'-5 11/16"	88'-3 1/16"	49'-8"	70'-2 5/8"	68'-5 3/8"	53'-4 7/16"	15'-11 1/16"	68'-7 5/16"	19'-7 3/4"	15'-10 15/16"	54'-3 1/16"	53'-8 3/16"	52°37'40"	61°00'10"	53°23'25"	57°20'43"	51°18'13"	54°14'13"	48°46'45"

NOTES

1. For Beam Elevation, see Sh. 17/20
2. For Field Splice 1 thru 5 details, see Sh. 12/20
3. For Typical Intermediate Crossframe (F1 & F2) details see Sh. 12/20
4. For Elevation Layout, see Sh. 13/20
5. For Scupper Details, see Std. Dwg. SD-1-69, Sheet 3 of 4.
6. For expansion dam details see sheet 2A/20.
7. For Std. End Crossframe, see sheet 2A/20

VOGT, IVERS, & ASSOCIATES, INC. 11/20
ENGINEERS ARCHITECTS
CINCINNATI

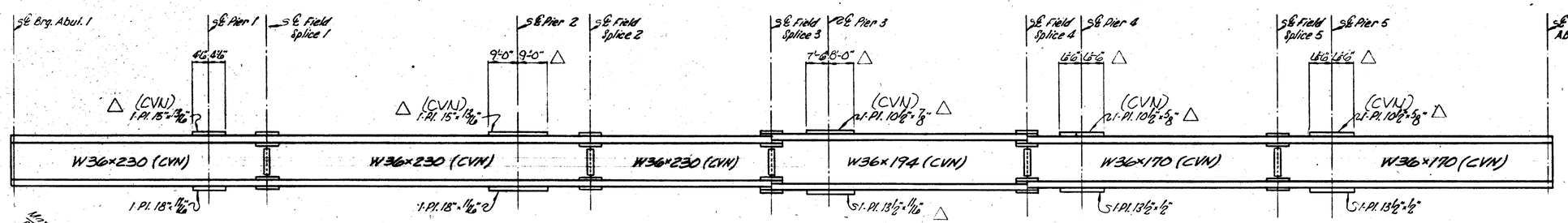
FRAMING PLAN
BRIDGE NO. HAM-126-13.76
S.R. 126 WESTBOUND
OVER RAMP F, I-75 SB & EXIST. RAMP
HAMILTON COUNTY STA. 63+17.92 TO STA. 67+50.23

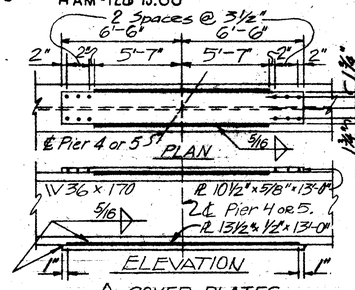
DESIGNED	DRAWN	TRACED	CHECKED	REVISIONS	DATE	SCALE
A.Y.	G.J.H.	—	RLS			STATE ENGRS. 12/85

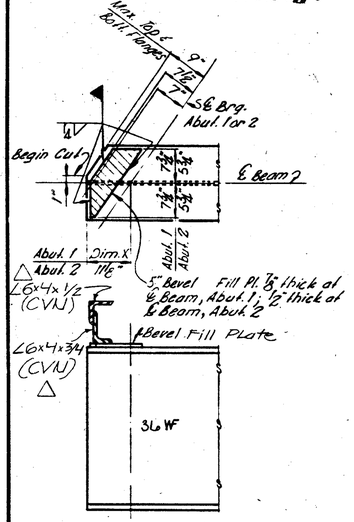
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

632
TBT

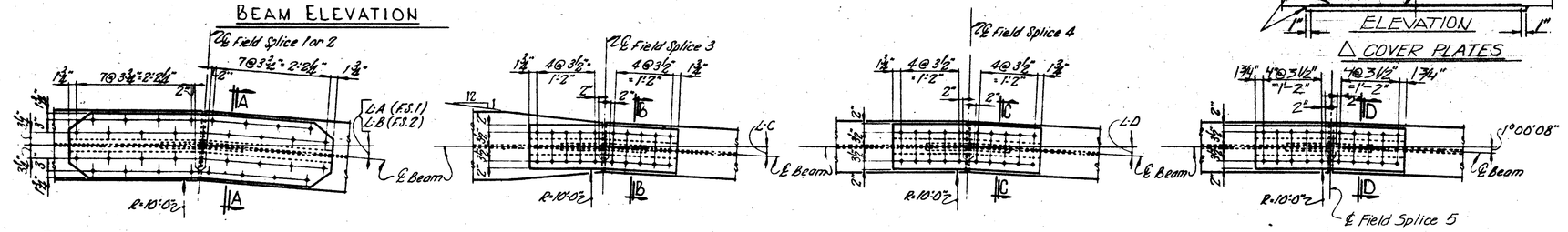
HAM-75-9.93
HAM-126-13.00

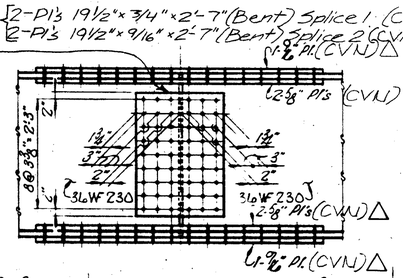


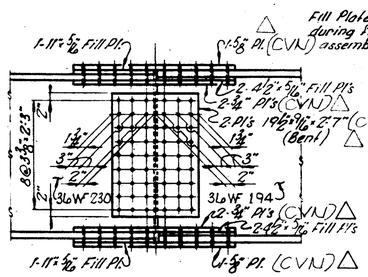


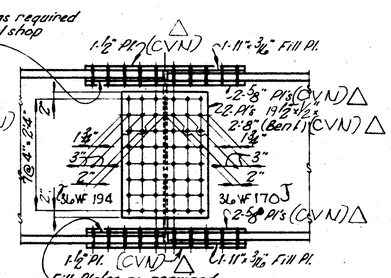


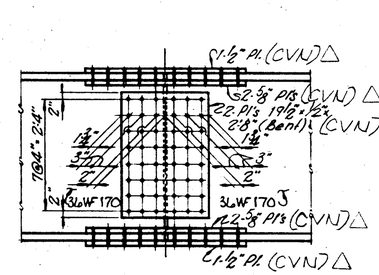
BEAM ELEVATION





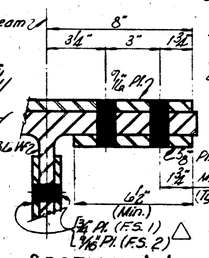




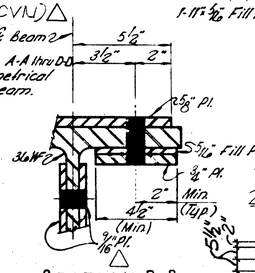


BEAM	DIM. X
B1	10 1/16"
B2	10 3/16"
B3	10 1/4"
B4	10 5/16"
B5	10 3/8"
B6	10 1/2"
B7	10 9/16"

ERECTION BOLTS: Hole diameter in the crossframes and L6×4×3/8 shall be respectively 1/16" & 1/4" larger than the diameter of the erection bolts. Unless replaced by permanent high strength bolts, erection bolts shall remain in place. Lock washers shall be furnished for other than fully torqued high strength erection bolts. Bolts shall be furnished as part of 513. In lieu of erection bolts and at the option of the contractor, alternate means of temporary bracing may be used, subject to the approval of the director (501.06).



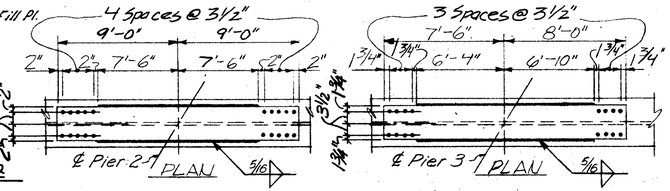
SECTION A-A



SECTION B-B
SECTIONS C-C & D-D SIMILAR

Note: Sections A-A thru D-D are symmetrical about ℄ Beam.

Note: For Field Splices 1 thru 5 use 1" ϕ High Strength Bolts.



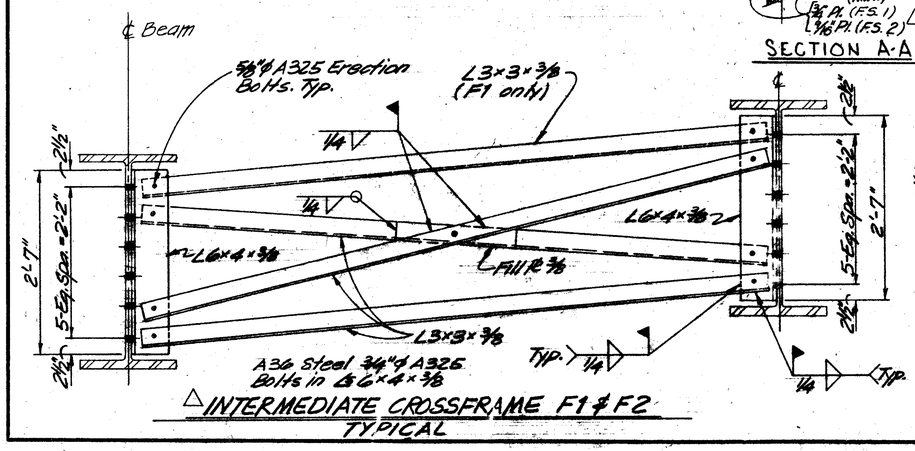
△ END BOLTED COVER PLATES

BOLT HOLES IN COVER PLATE AND FLANGE MUST BE DRILLED PRIOR TO WELDING TO ENSURE FRICTION TYPE CONNECTION. CONTACT SURFACES MUST BE BLAST CLEANED AND COMPLETELY FREE OF RESIDUE.

RECOMMENDED FABRICATION METHOD

1. DRILL STANDARD HOLES IN COVER PLATE AND FLANGE.
2. CLEAN CONTACT SURFACES TO BE BOLTED.
3. TACK WELD COVER PLATE TO FLANGE.
4. INSTALL AND TIGHTEN HIGH-STRENGH BOLTS.
5. FILLET WELD COVER PLATE TO FLANGE.

STEP NUMBERS 4 AND 5 CAN BE INTERCHANGED IF DESIRED.

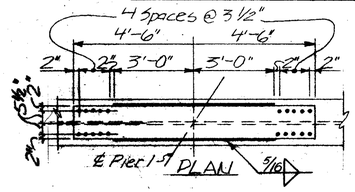


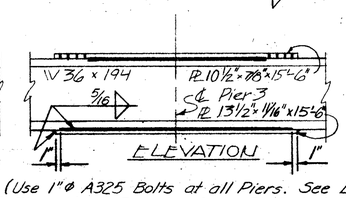
△ INTERMEDIATE CROSSFRAME F1 & F2
TYPICAL

NOTES

1. For Notes, see Sh. 11/20
△ 2. Where a shape or plate is designated (CVN), the material shall meet specified minimum notch toughness requirements as specified in 711.01 of CMS.

△ 12/20





△ COVER PLATES: (Use 1" ϕ A325 Bolts at all Piers. See End Bolted Cover Plate Note. See also Cover Pl. Detail for Piers 4 & 5 above.)

For additional information see Std. Dwg. SD-1-69.

FIELD SPLICE ANGLES							
BEAM	B1	B2	B3	B4	B5	B6	B7
ANGLE A	5° 54' 49"	5° 23' 51"	5° 51' 28"	7° 17' 41"	7° 42' 27"	8° 05' 44"	8° 27' 30"
ANGLE B	4° 09' 25"	4° 06' 31"	4° 03' 56"	4° 01' 40"	3° 59' 45"	3° 58' 17"	3° 57' 18"
ANGLE C	2° 51' 50"	2° 55' 27"	2° 54' 46"	2° 55' 43"	2° 56' 18"	2° 56' 25"	2° 56' 07"
ANGLE D	1° 23' 23"	1° 41' 22"	1° 59' 57"	2° 19' 12"	2° 39' 01"	2° 59' 46"	3° 21' 10"

VOGT, IVERS, & ASSOCIATES, INC. 12/20
ENGINEERS ARCHITECTS
CINCINNATI

FRAMING DETAILS
BRIDGE NO. HAM-126-13.76
S.R. 126 WESTBOUND
OVER RAMP F, I-75 SB & EXIST. RAMP
HAMILTON COUNTY STA. 63+17.92 TO STA. 67+50.23

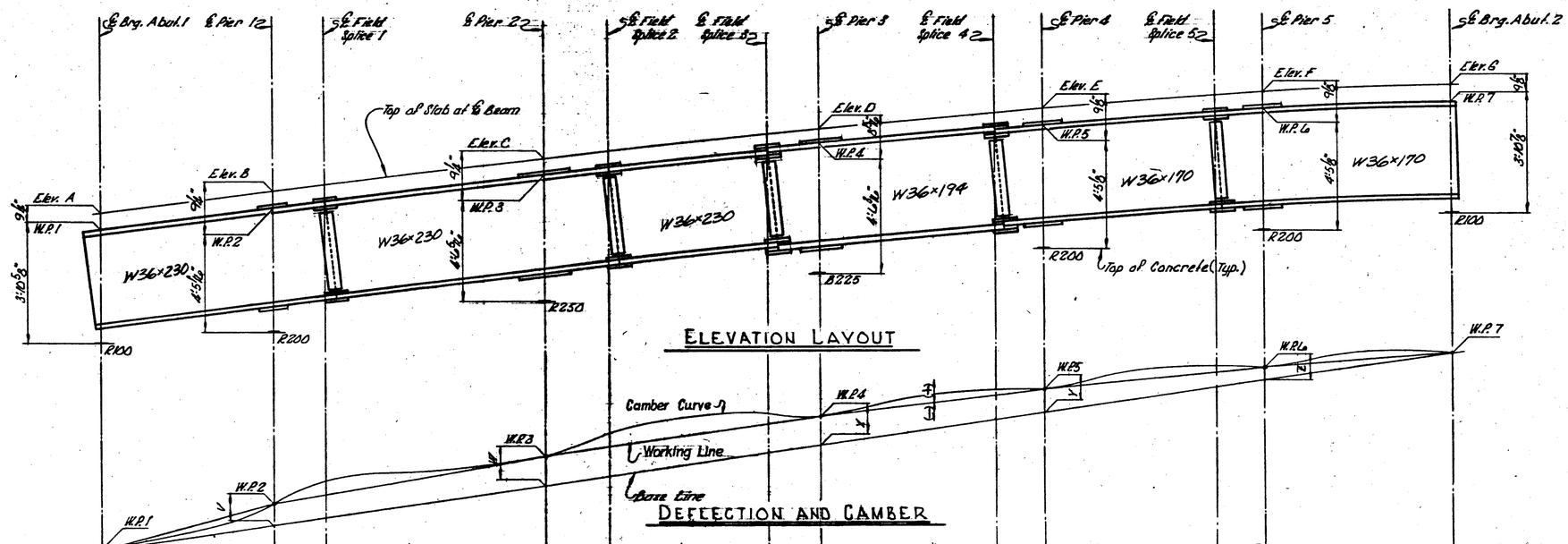
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
A.Y.	G.J.W.		RLS		

△ REVISED BALKE ENGRS. 12/85

FED. ROAD DIVISION	STATE	PROJECT	
2	OHIO		

233
1137

HAM-75-9.93
HAM-126-13.00



See Table of Dimensions & Angles, Sh. 11/20

		A1	l/4	l/2	3/4	P1	FS1	l/2	3/4	P2	ES2	l/2	FS3	P3	l/4	l/2	FS4	P4	l/4	l/2	FS5	P5	l/4	l/2	3/4	A2
Deflection due to Steel Dead Load	B1	0	0	0	0	0	+1 1/16"	+3 1/8"	+1 11/16"	0	+1 1/16"	+3 1/8"	+1 1/16"	0	0	+1 1/16"	0	0	+1 1/16"	+1 1/16"	0	0	0	+1 1/16"	+1 1/16"	0
	B2 & B3	0	0	0	0	0	+1 1/16"	+3 1/8"	+1 1/8"	0	+1 1/16"	+3 1/8"	+1 1/16"	0	0	+1 1/16"	0	0	+1 1/16"	+1 1/16"	0	0	0	+1 1/16"	+1 1/16"	0
	B4	0	0	0	0	0	+1 1/16"	+3 1/8"	+1 1/8"	0	+1 1/16"	+3 1/8"	+1 1/16"	0	0	+1 1/16"	0	0	+1 1/16"	+1 1/16"	0	0	0	+1 1/16"	+1 1/16"	0
	B5 & B6	0	0	0	0	0	+1 1/16"	+1 1/8"	+1 1/16"	0	+1 1/16"	+1 1/8"	+1 1/16"	0	0	+1 1/16"	0	0	+1 1/16"	+1 1/16"	0	0	0	+1 1/16"	+1 1/16"	0
	B7	0	0	0	0	0	+1 1/16"	+1 1/8"	+1 1/16"	0	+1 1/16"	+1 1/8"	+1 1/16"	0	0	+1 1/16"	0	0	+1 1/16"	+1 1/16"	0	0	0	+1 1/16"	+1 1/16"	0
Deflection due to Remaining Dead Load	B1	0	0	0	-1 1/16"	0	+1 1/4"	+1 11/16"	+5 1/16"	0	+5 1/16"	+9 1/16"	+3 1/16"	0	+1 1/16"	+3 1/16"	+1 1/16"	0	+3/4"	+3/8"	+1/8"	0	+1/8"	+1/4"	+1/4"	0
	B2 & B3	0	0	0	-1 1/16"	0	+5 1/16"	+3/4"	+3/8"	0	+1/4"	+1 1/16"	+1 1/16"	0	+1 1/16"	+3 1/16"	+1/4"	0	+1/4"	+7/16"	+3 1/16"	0	+1/8"	+5/16"	+1/4"	0
	B4	0	0	0	-1 1/16"	0	+5/8"	+11/16"	+3/8"	0	+1/4"	+5/8"	+5/16"	0	+1 1/16"	+1/4"	+1/8"	0	+1/4"	+7/16"	+3 1/16"	0	+1/8"	+5/16"	+1/4"	0
	B5 & B6	0	+1 1/16"	+1 1/16"	0	0	+1/4"	+9/16"	+1/4"	0	+1/8"	+5/16"	+1/8"	0	+1/4"	+5/16"	+1/8"	0	+3 1/16"	+5/16"	+1/8"	0	+1/8"	+5/16"	+5/16"	0
	B7	0	+1 1/16"	+1 1/16"	0	0	+3 1/16"	+1/2"	+1/4"	0	+1/8"	+1/4"	+1/16"	0	+1 1/16"	+3 1/16"	+1/16"	0	+1/8"	+1/4"	+1/16"	0	+1/16"	+1/4"	+1/4"	0
Correction for Vertical & Horizontal Curves	B1	0	+3 1/16"	+3 1/16"	+3 1/16"	0	-5 1/16"	+1/8"	+3 1/16"	0	+1/16"	+1/16"	+1/16"	0	+1/16"	+1/16"	+1/16"	0	+3/8"	+1/2"	+1/4"	0	+3 1/16"	+3 1/16"	+1/16"	0
	B2	0	-3 1/16"	-1/4"	-3 1/16"	0	+3/16"	-3/16"	-3 1/16"	0	+9 1/16"	+5/16"	+3/16"	0	+5/16"	+3/16"	+1/16"	0	+5 1/16"	+7/16"	+1/16"	0	+3 1/16"	+1/16"	+3 1/16"	0
	B3	0	-5 1/16"	-3/8"	-5 1/16"	0	+5/16"	-1/16"	-3 1/16"	0	+13/16"	+7/16"	+3/16"	0	+1/16"	+3/16"	+1/16"	0	+5 1/16"	+3/16"	+1/16"	0	+3/16"	+1/16"	+3 1/16"	0
	B4	0	-5 1/16"	-7 1/16"	-5 1/16"	0	+3/16"	-1/4"	-3 1/16"	0	+13/16"	+7/16"	+3/16"	0	+1/16"	+3/16"	+1/16"	0	+1/4"	+3/16"	+1/16"	0	+3/16"	+1/16"	+3 1/16"	0
	B5	0	-5 1/16"	-7 1/16"	-5 1/16"	0	+3/16"	-3 1/16"	-1/4"	0	+3/16"	+11/16"	+9 1/16"	0	+1/16"	+3/16"	+1/16"	0	+1/4"	+3/16"	+1/16"	0	+3/16"	+1/16"	+3 1/16"	0
	B6	0	-1/4"	-1/2"	-3/8"	0	+1/8"	-1/8"	-1/4"	0	+3/16"	+11/16"	+9 1/16"	0	+1/16"	+3/16"	+1/16"	0	+1/4"	+3/16"	+1/16"	0	+3/16"	+1/16"	+3 1/16"	0
	B7	0	-11 1/16"	-11 1/16"	-7 1/16"	0	+1/16"	-3 1/16"	-1/4"	0	+3/16"	+11/16"	+9 1/16"	0	+1/16"	+3/16"	+1/16"	0	+1/4"	+3/16"	+1/16"	0	+3/16"	+1/16"	+3 1/16"	0
Total Camber Required	B1	0	+3 1/16"	+3 1/16"	+1/8"	0	0	+1/16"	+9 1/16"	0	+5 1/16"	+11/16"	+1/4"	0	+1/16"	+3/16"	+1/16"	0	+5/8"	+15/16"	+3/8"	0	+5 1/16"	+1/2"	+3/8"	0
	B2	0	-3 1/16"	-1/4"	-1/4"	0	+9 1/16"	+3/4"	+5 1/16"	0	+1/8"	+1/2"	+11/16"	0	+5/16"	+11/16"	+5 1/16"	0	+5/8"	+15/16"	+1/2"	0	+5 1/16"	+5/8"	+1/2"	0
	B3	0	-5 1/16"	-3/8"	-3/8"	0	+1/16"	+11/16"	+3 1/16"	0	+1/8"	+5/16"	+3/8"	0	+1/8"	+3/8"	+1/8"	0	+5/8"	+1/16"	+5/8"	0	+5 1/16"	+1/2"	+1/2"	0
	B4	0	-5 1/16"	-7 1/16"	-3/8"	0	+1/16"	+5/8"	+3 1/16"	0	+1/8"	+5/16"	+3/8"	0	+1/8"	+3/8"	+1/8"	0	+9 1/16"	+1/8"	+1/2"	0	+5 1/16"	+5/8"	+1/2"	0
	B5	0	-1/4"	-3/8"	-5 1/16"	0	+1/8"	+1/2"	+1/16"	0	+1/16"	+5/16"	+1/8"	0	+5/16"	+5/8"	+7/16"	0	+1/2"	+3/4"	+3/8"	0	+5 1/16"	+5/8"	+9 1/16"	0
	B6	0	-3/8"	-7 1/16"	-5 1/16"	0	+1/8"	+9 1/16"	+1/16"	0	+1/16"	+1/8"	+1/8"	0	+5/16"	+5/8"	+7/16"	0	+1/2"	+3/4"	+3/8"	0	+5 1/16"	+5/8"	+9 1/16"	0
	B7	0	-5/8"	-5/8"	-1 1/16"	0	+1/16"	+9 1/16"	+1/16"	0	+1/16"	+1/16"	+1/16"	0	+5/16"	+1/16"	+1/2"	0	+1 1/16"	+5/8"	+1/2"	0	+5 1/16"	+3/4"	+1/2"	0

Elevations and Dimensions

	Dimensions								Elevations							Dimensions				
	N	P	Q	R	S	T	U	AA	A	B	C	D	E	F	G	V	W	X	Y	Z
B1	30'-8 3/8"	45'-9 3/16"	26'-3 3/16"	29'-11 3/16"	37'-6 1/2"	22'-9 5/16"	37'-8 11/16"	22'-9 3/16"	569.944	571.075	573.119	574.917	576.118	576.999	577.509	5 3/16"	8 1/16"	11'-0 1/16"	10'-5 3/16"	1'-6"
B2	29'-11 5/8"	45'-2 1/2"	25'-8 5/8"	29'-6 13/16"	37'-0 1/2"	22'-1 3/4"	37'-1 5/16"	22'-2 3/8"	570.014	571.174	573.228	575.071	576.286	577.222	577.760	5 3/16"	8 1/2"	11'-3"	10'-5 3/16"	1'-6"
B3	29'-2 5/8"	44'-7 3/8"	25'-2 1/16"	28'-10 3/8"	36'-6 1/2"	21'-9 1/4"	36'-6 9/16"	21'-7 5/8"	569.192	570.474	572.549	574.258	575.991	577.055	577.709	5 3/16"	8 5/16"	11'-3"	10'-5 3/16"	1'-6"
B4	28'-6 1/16"	44'-0 3/8"	24'-7 7/16"	28'-3 5/8"	36'-0 1/2"	21'-3 1/4"	35'-11 5/16"	21'-0 7/8"	568.322	569.732	572.038	574.202	575.939	576.844	577.615	5 3/16"	8 5/16"	11'-3"	10'-5 3/16"	1'-6"
B5	27'-9 1/2"	43'-5 1/4"	24'-0 5/8"	27'-9 1/2"	35'-6 1/2"	20'-9 1/4"	35'-5 11/16"	20'-6 1/8"	567.433	568.913	571.408	573.726	575.504	576.507	577.494	5 3/16"	8 5/16"	11'-3"	10'-5 3/16"	1'-6"
B6	27'-0 3/4"	42'-10 1/4"	23'-5 3/16"	27'-3"	35'-0"	20'-3 5/16"	34'-10 5/16"	19'-11 3/8"	566.532	568.190	570.760	573.226	574.972	576.142	577.267	5 3/16"	8 5/16"	11'-3"	10'-5 3/16"	1'-6"
B7	26'-4"	42'-4 3/8"	22'-11 1/8"	26'-8 1/2"	34'-6 1/2"	19'-9 5/16"	34'-3 9/16"	19'-4 5/8"	565.632	567.402	570.093	572.709	574.525	576.051	577.174	5 3/16"	8 5/16"	11'-3"	10'-5 3/16"	1'-6"

Notes for Elevation Layout

1. Working Points (W.P.) are at top of top Flange.
2. The Base Line is a straight line between W.P.1 & W.P.7.
3. Working Lines are straight lines between the calculated Working Points (W.P.).
4. Tabulated values in the Deflection and Camber Table shall be measured from the Working Lines.
5. For Radius R100, R200 & R250 and Radius R225 shown, see Std. Dwg. BR-1-65.
6. For Dimensions E, G, J, K see sheet HK 120

VOGT, IVERS, & ASSOCIATES, INC. 13/20
ENGINEERS ARCHITECTS
CINCINNATI

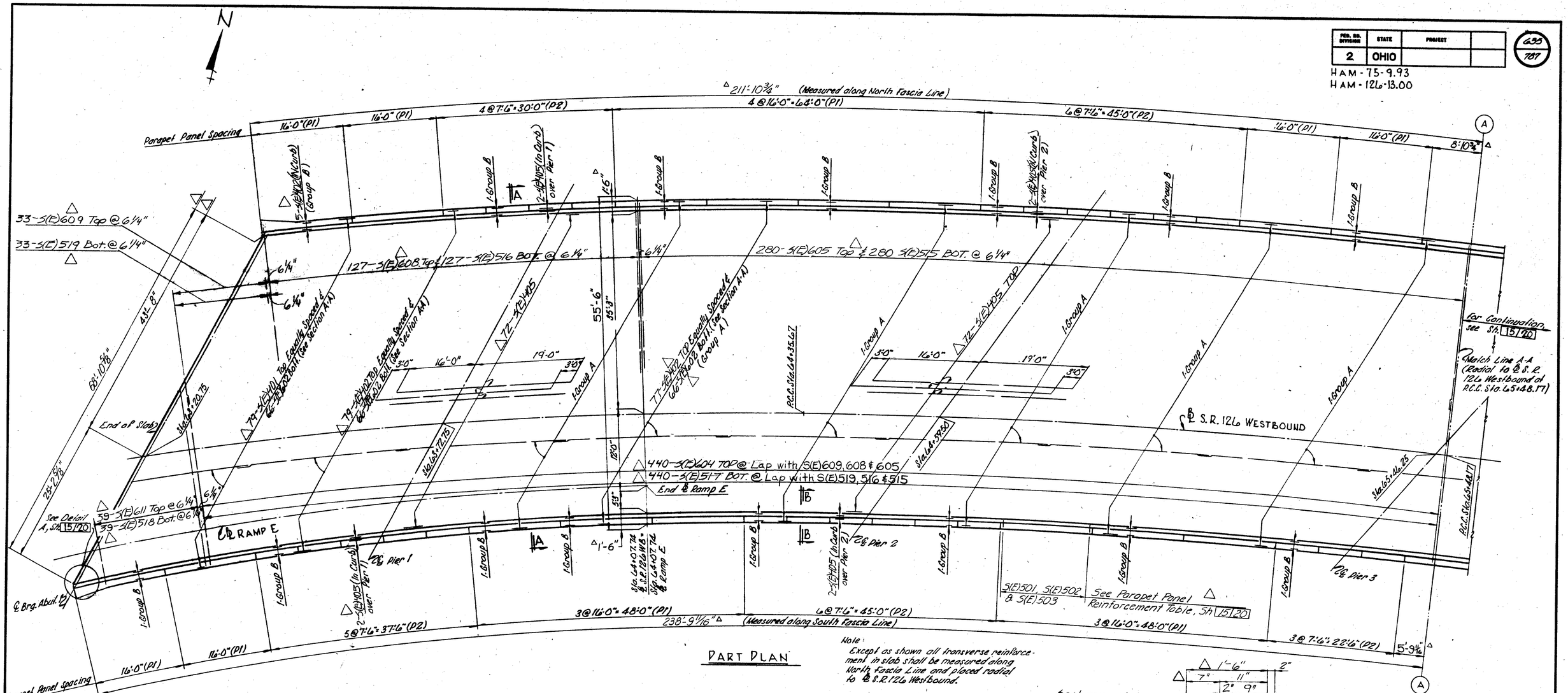
Framing Details
Bridge No. HAM-126-13.76
S.R. 126 Westbound
over Ramp F, I-75 SB & Exist. Ramp
HAMILTON COUNTY STA. 63+17.92 TO STA. 67+50.25

DESIGNED	DRAWN	TRACED	CHECKED	REVISIONS	DATE	REVISED
A.Y.	G.J.M.	—	RLS/DSM			△ BRIDGE ENGRS. 12/85

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

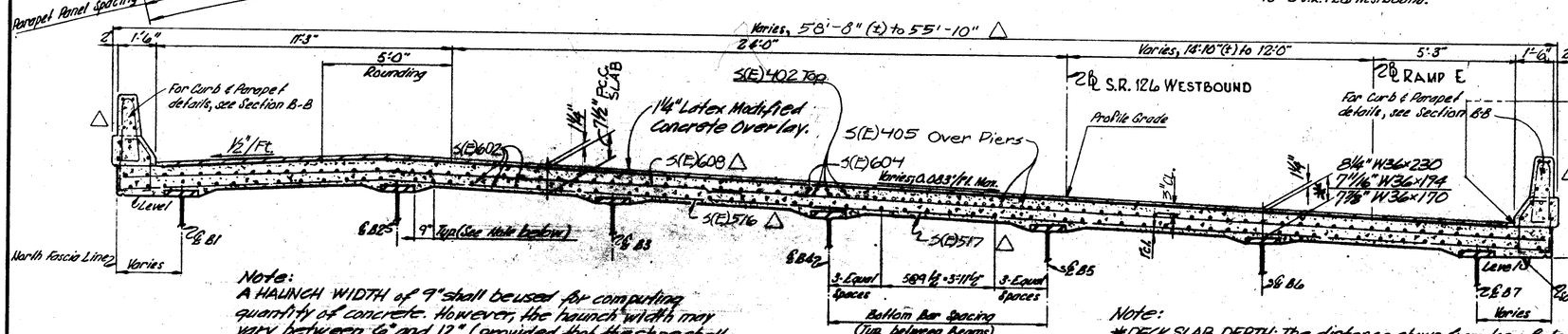
635
707

HAM-75-9.93
HAM-126-13.00



PART PLAN

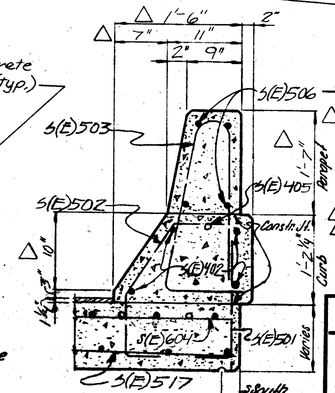
Note:
Except as shown all transverse reinforcement in slab shall be measured along North Fascia Line and placed radial to ℄ S.R. 126 Westbound.



Note:
A HAUNCH WIDTH of 9" shall be used for computing quantity of concrete. However, the haunch width may vary between 6" and 12" (provided that the slope shall be not more than 1:4 for a haunch less than 9" width.)

SECTION A-A

Note:
*DECK SLAB DEPTH: The distance shown from top of deck slab to top of steel beam is the design dimension. The quantity of deck concrete to be paid for shall be based on this dimension, even though deviation from it may be necessary because the top flange of the beam may not have the exact camber or conformation required to place it parallel to the finished grade.



SECTION B-B
PARAPET & CURB DETAILS

NOTES

1. For Reinforcing Steel List, see Sh. 17/20
△2. For Scupper Spacing, see Framing Plan Sh. 11/20
3. For Fascia Offsets, see Sh. 16/20
4. For Pavement & Screed Elevations, see Sh. 16/20
5. For additional Notes, see Sh. 15/20
△6. "(E)" denotes epoxy coated reinforcing bar.
△7. For parapet panel reinforcement See sheet 15/20.

△

VOGT, IVERS. & ASSOCIATES, INC. 14/20
ENGINEERS ARCHITECTS
CINCINNATI

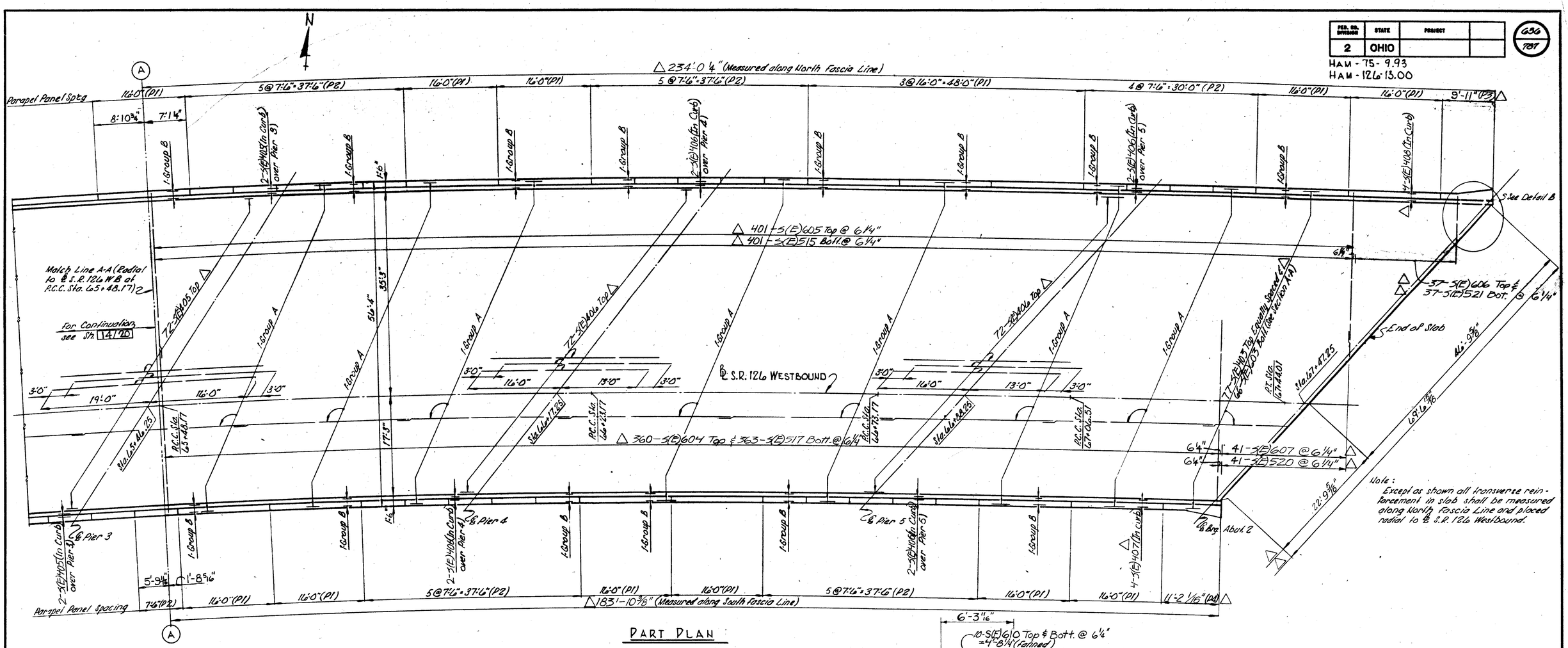
ROADWAY SLAB
BRIDGE NO. HAM-126-1376
S.R. 126 WESTBOUND
OVER RAMP F, I-75 SB & EXIST. RAMP
HAMILTON COUNTY STA. 63+17.92 TO STA. 67+50.23

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED
A.Y.	G.dM	—	R.L.S			DALKE ENGRS. 12/85

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

HAM - 75 - 9.93
HAM - 126 - 13.00

G&O 787

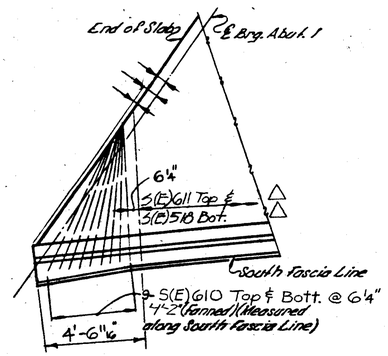


PART PLAN

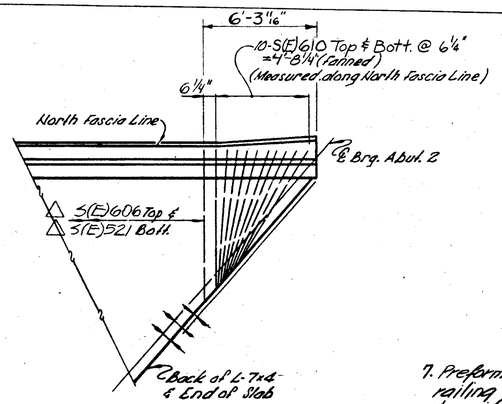
Panel	Parapet Panel Reinforcement (Per Panel) △	No. of Panels
P1	12-S(E)501, 12-S(E)502, 12-S(E)503 & 4-S(E)505	30
P2	6-S(E)501, 6-S(E)502, 6-S(E)503 & 4-S(E)506	49
P3	7-S(E)501, 7-S(E)502, 7-S(E)503 & 4-S(E)507	1
P4	8-S(E)501, 8-S(E)502, 8-S(E)503 & 4-S(E)508	1

Space S(E)501, S(E)502, & S(E)503 @ 1'-6" Max.

△ PARAPET PANELS



DETAIL A



DETAIL B

NOTES

1. For Reinforcing Steel List, see Sh. 17/20
2. For Scupper spacing, see Framing Plan Sh. 11/20
3. For Fascia Offsets, see Sh. 16/20
4. For Pavement & Screed Elevations, see Sh. 16/20

△S(E) denotes epoxy coated reinforcing bar.

△6 For End Dam details, See Strip Seal Joint Std. Dwg. and Sht. 2A/20.

7. Preformed expansion joint filler in the railing parapet deflection joints may be either ¼" gray sponge rubber or ½" gray cellular polyvinyl chloride (PVC) sponge.

VOGT, IVERS, & ASSOCIATES, INC. ENGINEERS ARCHITECTS CINCINNATI 15/20

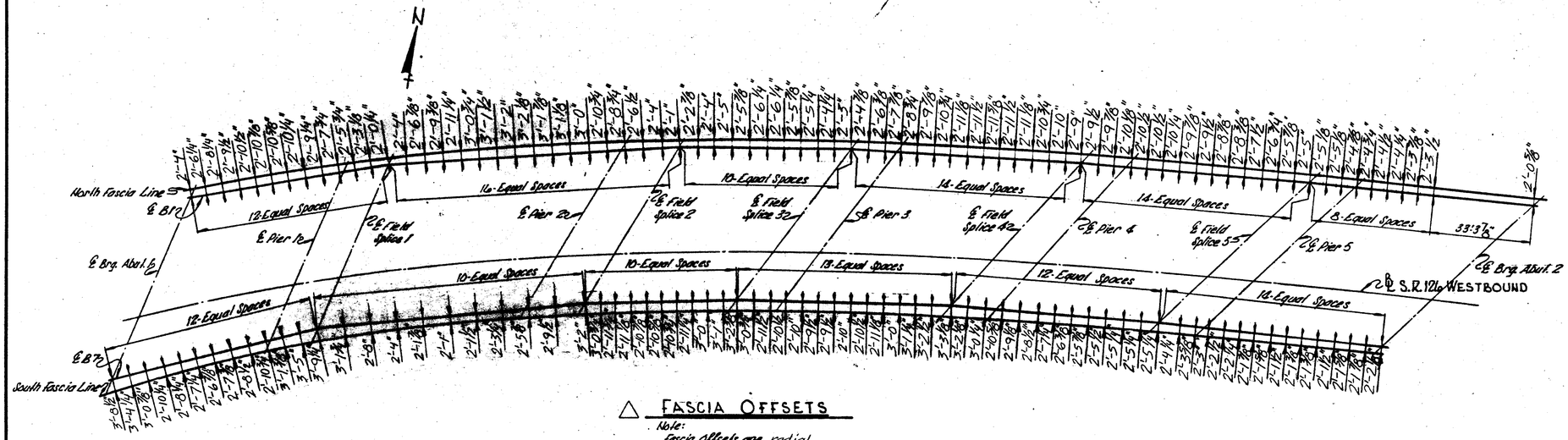
ROADWAY SLAB
BRIDGE NO. HAM-126-1376
S.R. 126 WESTBOUND
OVER RAMP F, I-75 SB & EXIST. RAMP
HAMILTON COUNTY STA. 63+17.92 TO STA. 67+50.23

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
A.Y.	G.J.W.	—	R.L.S			△ BALKE ENGRS. 12/85

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

637
787

HAM-75-9.93
HAM-126-13.00



△ FASCIA OFFSETS

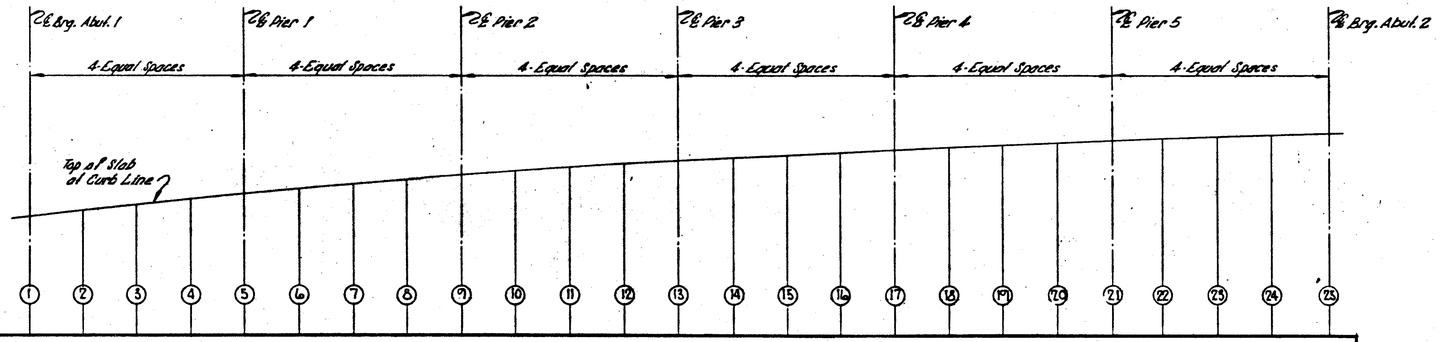
Note:
Fascia offsets are radial to baseline.

PAVEMENT ELEVATIONS (TOP OF L.M.C. OVERLAY) △

STATION	63+00	+25	+50	+75	64+00	+25	+50	+75	65+00	+25	+50	+75	66+00	+25	+50	+75	67+00	+25	+50	+75
SOUTH CURB LINE	565.25	566.06	566.92	567.74	568.54	569.33	570.11	570.89	571.65	572.38	573.08	573.75	574.38	574.98	575.54	576.07	576.57	577.03	577.46	577.85
PROFILE GRADE	566.92	567.62	568.32	569.02	569.72	570.42	571.13	571.83	572.51	573.16	573.78	574.37	574.92	575.44	575.92	576.37	576.79	577.17	577.52	577.84
24' LT. OF P.G.	568.92	569.59	570.18	570.77	571.36	571.95	572.54	573.13	573.71	574.25	574.75	575.23	575.67	576.08	576.45	576.79	577.10	577.37	577.61	577.83
29' LT. OF P.G.	569.02	569.69	570.27	570.85	571.43	572.01	572.59	573.17	573.73	574.26	574.75	575.21	575.64	576.04	576.40	576.73	577.02	577.29	577.51	577.72
NORTH CURB LINE	568.76	569.43	570.01	570.59	571.17	571.75	572.33	572.91	573.47	574.00	574.49	574.95	575.38	575.78	576.14	576.47	576.76	577.02	577.25	577.46

Note:
Profile Grade @ ℄ S.R. 126 Westbound

△ The above table was provided by Vogt, Ivers, & Associates, Inc.



SCREED △ ELEVATIONS (Top of Portland Cement Concrete)

POINT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
SOUTH CURB LINE	565.31	565.76	566.24	566.71	567.18	567.91	568.61	569.27	569.93	570.62	571.31	571.94	572.53	573.01	573.49	573.93	574.36	574.79	575.20	575.57	575.93	576.24	576.54	576.81	577.06
NORTH CURB LINE	569.82	570.10	570.38	570.66	570.94	571.48	572.01	572.50	572.96	573.49	573.96	574.40	574.78	575.11	575.43	575.70	575.97	576.24	576.49	576.69	576.87	577.02	577.16	577.28	577.39
24' LT. OF P.G.	569.38	569.70	570.00	570.31	570.62	571.17	571.66	572.15	572.66	573.17	573.67	574.14	574.58	574.92	575.25	575.56	575.85	576.13	576.38	576.63	576.85	577.03	577.19	577.34	577.48

NOTE:
△ The screed elevations shown have been obtained by adding the dead load deflection due to the weight of concrete slab, latex modified concrete overlay, bridge parapet and future wearing surface, and steel beams to the required final elevations.

△

VOGT, IVERS, & ASSOCIATES, INC. ENGINEERS ARCHITECTS CINCINNATI | 16/20

ROADWAY SLAB
BRIDGE NO. HAM-126-13.76
S.R. 126 WESTBOUND
OVER RAMP F, I-75 SB & EXIST. RAMP

HAMILTON COUNTY STA. 63+17.92 TO STA. 67+50.23

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED
A.Y.	G.J.W.	—	RLS/CTS			△ ZALKE ENGRS 12/85

ABUTMENT 1

MARK	NO.	LENGTH	TYPE	WEIGHT
A501	2	3'-11"	Bt.	8
A502	49	8'-2"	Bt.	417
A503	16	10'-7"	Bt.	177
A504	9	7'-0"	Bt.	66
A505	7	7'-11"	Bt.	58
A506	8	8'-10"	Bt.	74
A507	7	9'-9"	Bt.	71
A508	8	10'-7"	Bt.	88
A509	10	11'-5"	Bt.	119
A510	4	40'-10"	Str.	170
A511	4	36'-0"	Str.	150
A512	3	15'-3"	Str.	48
A513	13	13'-7"	Bt.	184
A514	1	27'-5"	Bt.	29
A515	1	23'-0"	Bt.	24
A516	5	14'-7" to 16'-7" by 6", 1 ea.	Bt.	81
A517	6	26'-11"	Str.	168
A518	3	32'-6"	Str.	102
A519	3	15'-2"	Str.	47
A520	3 △	15'-7"	Str.	49
A521	2 △	25'-4"	Str.	53
A523	3	33'-9"	Str.	106
A524	9	5'-5"	Str.	51
A525	78	4'-5"	Bt.	359
A526	3	11'-4"	Bt.	35
A527	3	7'-10"	Str.	25
A528	1	3'-5"	Str.	4
A529	2	13'-2"	Bt.	27
A530	1	13'-2"	Bt.	14
A531	1	10'-11"	Str.	11
A532	3	17'-8"	Bt.	55
A533	3	15'-9"	Str.	49
A534	8 △	14'-5"	Str.	120
A545	3	5'-1"	Bt.	16
A546	6	7'-11"	Bt.	50
A547	6	4'-3"	Str.	27
A548	1	4'-10"	Str.	5
A549	3	3'-0"	Str.	9
A550	1	9'-1"	Str.	9
A551	1	5'-6"	Str.	6
A552	3	13'-9"	Bt.	43
A553	3	9'-5"	Str.	29
A554	2	8'-3"	Bt.	17
A555	8 △	10'-5"	Str.	87
A561	4	7'-5"	Str.	31
A562	2	6'-10"	Str.	14
A563	2	10'-10"	Str.	23
A564	3	5'-2"	Str.	16
A565	5	8'-2"	Bt.	43
A566	3	30'-7"	Str.	96
A567	3	33'-9"	Str.	106
A568	1 △	33'-6"	Str.	35
A569	1 △	32'-6"	Str.	34
A570	1 △	33'-6"	Str.	35
A571	1 △	25'-4"	Str.	26
A572	1 △	15'-11"	Str.	17
A573	2 △	15'-11"	Str.	33
A574	16 △	2'-8"	Bt.	45
A575	10 △	5'-3"	Bt.	55
A576	16 △	4'-4"	Str.	72
A577	6 △	5'-0"	Str.	31
A578	2 △	5'-1"	Str.	11
A579	1 △	5'-6"	Str.	6
A580	1 △	6'-1"	Str.	6
A581	1 △	6'-7"	Str.	7
A582	1 △	7'-2"	Str.	7
A583	10 △	3'-0"	Str.	31
A584	1 △	5'-2"	Str.	5
A585	1 △	5'-8"	Str.	6
A586	1 △	6'-5"	Str.	7
A587	1 △	7'-2"	Str.	7
A601	10	13'-11"	Bt.	209
A602	7	14'-10"	Bt.	156
A603	8	15'-9"	Bt.	189
A604	7	16'-8"	Bt.	175
A605	8	17'-6"	Bt.	210
A606	7	18'-4"	Bt.	193
A609	69	9'-5"	Bt.	976
A610	69	7'-1"	Bt.	734

ABUTMENT 1

MARK	NO.	LENGTH	TYPE	WEIGHT
AE6611	69	△ 6'-7"	Bt.	682
A612	1	10'-1"	Bt.	15
AE1613	1	△ 3'-9"	Bt.	6
A614	5	△ 21'-6"	Bt.	161
A615	2	△ 11'-6"	Bt.	35
A616	1	7'-3"	Bt.	11
A620	1	10'-8"	Bt.	16
A621	6	5'-7"	Bt.	50
A622	3	△ 12'-5"	Str.	56
A623	2	△ 12'-6"	Str.	38
A624	3	8'-0"	Str.	36
AE1632	3	△ 4'-2"	Bt.	19
AE1633	1	△ 4'-3"	Bt.	6
AE1634	1	△ 4'-7"	Bt.	7
AE1635	1	△ 5'-2"	Bt.	8
AE1636	1	△ 5'-8"	Bt.	9
AE1637	1	△ 6'-3"	Bt.	9
AE1638	10	△ 3'-9"	Bt.	56
AE1704	3	△ 4'-2"	Bt.	26
AE1710	1	△ 4'-3"	Bt.	9
AE1711	1	△ 4'-3"	Bt.	9
AE1712	1	△ 4'-9"	Bt.	10
AE1713	1	△ 5'-5"	Bt.	11
AE1714	1	△ 6'-3"	Bt.	13
A801	2	35'-10"	Str.	191
A802	2	38'-2"	Bt.	204
A803	10	37'-7"	Str.	1003
A804	2	12'-5"	Bt.	66
A805	2	8'-6"	Str.	45
A806	2	7'-5"	Str.	40
A807	2	15'-0"	Bt.	80
A808	2	11'-8"	Str.	62
A809	2	9'-5"	Str.	50
AE1810	38	△ 4'-11"	Bt.	499

ABUTMENT 2

MARK	NO.	LENGTH	TYPE	WEIGHT
B501	53	8'-2"	Bt.	451
B502	2	4'-7"	Bt.	10
B503	19	10'-7"	Bt.	210
B504	36	7'-5"	Bt.	278
B505	17	7'-0"	Bt.	124
B506	2	39'-8"	Str.	83
B507	2	34'-1"	Str.	71
B508	78	4'-5"	Bt.	359
B509	7	5'-2"	Str.	38
B510	3	△ 34'-7"	Str.	108
B511	3	△ 35'-9"	Str.	112
B512	3	36'-11"	Str.	116
B513	3	△ 37'-2"	Str.	116
B515	1	△ 37'-7"	Str.	39
B516	4	13'-4"	Bt.	56
B517	4	9'-10"	Str.	41
B518	1	△ 12'-3"	Bt.	13
B519	1	△ 10'-10"	Str.	11
B520	1	15'-5"	Bt.	16
B521	1	13'-5"	Str.	14
B522	3	19'-10"	Bt.	62
B523	3	17'-10"	Str.	56
AE524	8	△ 16'-5"	Str.	137
B525	2	△ 9'-4"	Bt.	19
B535	3	5'-1"	Bt.	16
B536	3	9'-6"	Bt.	30
B537	3	2'-5"	Str.	8
B538	3	4'-9"	Str.	15
B539	1	△ 9'-4"	Str.	10
B540	1	△ 3'-0"	Str.	3

ABUTMENT 2

MARK	NO.	LENGTH	TYPE	WEIGHT
B541	1	9'-6"	Bt.	10
B542	1	4'-11"	Str.	5
B543	3	15'-0"	Bt.	47
B544	3	10'-5"	Str.	33
AE6545	8	△ 11'-8"	Str.	97
B546	2	△ 8'-2"	Bt.	17
B550	2	12'-8"	Str.	26
B551	4	7'-4"	Str.	31
B552	2	7'-11"	Str.	17
B553	5	37'-4" to 39'-8" by 7", 1 ea.	Str.	201
B554	5	32'-8" to 35'-4" by 8", 1 ea.	Str.	177
B555	2	32'-9"	Str.	68
B556	2	35'-9"	Str.	75
B558	1	△ 35'-3"	Str.	37
AE6559	1	△ 34'-7"	Str.	36
AE6560	1	△ 35'-3"	Str.	37
AE6561	1	△ 36'-8"	Str.	38
AE6562	1	△ 37'-7"	Str.	39
AE6563	16	△ 2'-8"	Bt.	45
AE6564	12	△ 5'-3"	Bt.	66
AE6565	16	△ 4'-4"	Str.	72
AE6566	9	△ 5'-0"	Str.	47
AE6567	1	△ 5'-5"	Str.	6
AE6568	1	△ 5'-11"	Str.	6
AE6569	1	△ 6'-5"	Str.	7
AE6570	1	△ 6'-11"	Str.	7
AE6571	12	△ 3'-0"	Str.	38
AE6572	1	△ 5'-6"	Str.	6
AE6573	1	△ 6'-3"	Str.	7
AE6574	1	△ 6'-11"	Str.	7
B601	38	14'-4"	Bt.	818
B602	14	13'-11"	Bt.	293
B604	71	10'-1"	Bt.	1075
B605	70	7'-5"	Bt.	780
AE6606	70	6'-7"	Bt.	692
AE6607	1	△ 5'-0"	Bt.	8
B608	6	△ 23'-2"	Bt.	209
B609	2	△ 12'-5"	Bt.	37
B610	1	△ 7'-9"	Bt.	12
B613	1	△ 23'-8"	Bt.	36
B614	4	△ 11'-4"	Bt.	68
B615	3	7'-3"	Bt.	33
AE6623	8	△ 4'-2"	Bt.	50
AE6624	1	△ 4'-6"	Bt.	7
AE6625	1	△ 5'-0"	Bt.	8
AE6626	1	△ 5'-5"	Bt.	8
AE6627	1	△ 5'-11"	Bt.	9
AE6628	12	△ 3'-9"	Bt.	68
AE6629	1	△ 4'-1"	Bt.	6
AE6630	1	△ 4'-8"	Bt.	7
AE6631	1	△ 5'-3"	Bt.	8
AE6632	1	△ 5'-11"	Bt.	9
B801	2	37'-7"	Str.	201
B802	2	39'-11"	Bt.	213
B803	10	38'-0"	Str.	1015
B804	2	14'-1"	Bt.	75
B805	2	10'-0"	Str.	53
B806	2	8'-0"	Str.	43
B807	2	17'-1"	Bt.	91
B808	2	13'-4"	Str.	71
B809	2	10'-6"	Str.	56
B810	2	11'-0"	Str.	59
AE6811	36	△ 4'-11"	Bt.	473
TOTAL ABUTMENTS (Includes 4123 Lbs. Epoxy Coated)				21040

PIER 1

MARK	NO.	LENGTH	TYPE	WEIGHT
PA501	8	32'-5"	Str.	270
PA502	10	12'-10"	Bt.	134
PA503	2	16'-0"	Bt.	38
PA504	49	3'-8"	Bt.	187
PA505	16	11'-9" to 13'-4" by 3", 2 ea.	Bt.	208
PA506	16	11'-1" to 13'-5" by 4", 2 ea.	Bt.	204
PA507	46	15'-3"	Bt.	732
PA1001	48	14'-8"	Bt.	2060
PA1002	48	12'-4"	Bt.	2547
PA1003	6	29'-6"	Bt.	762
PA1004	6	38'-0"	Bt.	981
PA1005	10	15'-4"	Str.	660
PA1006	10	34'-2"	Bt.	1556
PA1101	64	△ 11'-2"	Bt.	3797
PA1102	16	20'-1"	Str.	1707
PA1103	16	18'-9"	Str.	1594
PA1104	16	17'-6"	Str.	1488
PA1105	16	16'-3"	Str.	1381
SPA401	1	15'-7"	Bt.	296
SPA402	1	14'-4"	Bt.	273
SPA403	1	13'-0"	Bt.	249
SPA404	1	11'-9"	Bt.	227

PIER 2

MARK	NO.	LENGTH	TYPE	WEIGHT
PB501	8	32'-11"	Str.	275
PB502	10	13'-0"	Bt.	136
PB503	2	16'-4"	Bt.	34
PB504	49	3'-8"	Bt.	187
PB505	20	11'-9" to 13'-3" by 2", 2 ea.	Bt.	261
PB506	20	11'-1" to 13'-4" by 3", 2 ea.	Bt.	255
PB507	24	15'-3"	Bt.	382
PB508	48	13'-5"	Bt.	672
PB901	48	11'-0"	Bt.	1705
PB1101	48	14'-8"	Bt.	3740
PB1102	72	△ 11'-2"	Bt.	4272
PB1103	18	26'-0"	Str.	2486
PB1104	18	25'-0"	Str.	2391
PB1105	18	23'-11"	Str.	2287
PB1106	18	22'-11"	Str.	2192
PB1107	6	30'-0"	Bt.	956
PB1108	6	38'-6"	Bt.	1227
PB1109	10	16'-10"	Str.	894
PB1110	10	36'-10"	Bt.	1957
SPB401	1	21'-7"	Bt.	403
SPB402	1	20'-7"	Bt.	385
SPB403	1	19'-7"	Bt.	367
SPB404	1	18'-6"	Bt.	348

PIER 3

MARK	NO.	LENGTH	TYPE	WEIGHT
PC501	8	33'-3"	Str.	277
PC502	12	11'-5"	Bt.	143
PC503	48	13'-5"	Bt.	672
PC504	49	3'-8"	Bt.	187
PC505	20	13'-3" to 11'-9" by 2", 2 ea.	Bt.	261
PC506	20	13'-5" to 11'-2" by 3" 2 ea.	Bt.	256
PC507	24	15'-3"	Bt.	382
PC901	48	11'-0"	Bt.	1705
PC1101	48	14'-8"	Bt.	3740
PC1102	72	△ 11'-2"	Bt.	4272
PC1103	18	28'-10"	Str.	2757
PC1104	18	28'-1"	Str.	2686
PC1105	18	27'-4"	Str.	2614
PC1106	18	26'-7"	Str.	2542
PC1107	6	30'-2"	Bt.	962
PC1108	6	39'-0"	Bt.	1243
PC1109	8	16'-10"	Str.	715
PC1110	12	37'-3"	Bt.	2375

PIER 3

MARK	NO.	LENGTH	TYPE	WEIGHT
SPC401	1	24'-4"	Bt.	452
SPC402	1	23'-7"	Bt.	439
SPC403	1	22'-10"	Bt.	425
SPC404	1	22'-1"	Bt.	412

PIER 4

MARK	NO.	LENGTH	TYPE	WEIGHT
PD501	8	34'-3"	Str.	286
PD502	4	11'-5"	Bt.	48
PD503	2	16'-5"	Bt.	34
PD504	49	4'-5"	Bt.	226
PD505	22	11'-7" to 13'-3" by 2", 2 ea.	Bt.	285
PD506	22	11'-3" to 13'-4" by 2½", 2 ea.	Bt.	282
PD507	25	15'-3"	Bt.	398
PD508	52	13'-5"	Bt.	728
PD901	48	11'-0"	Bt.	1705
PD1101	48	14'-8"	Bt.	3740
PD1102	72	△ 11'-2"	Bt.	4272
PD1103	18	29'-6"	Str.	2781
PD1104	18	28'-6"	Str.	2726
PD1105	18	28'-0"	Str.	2678
PD1106	18	27'-5"	Str.	2622
PD1107	6	30'-10"	Bt.	983
PD1108	6	40'-2"	Bt.	1280
PD1109	10	17'-1"	Str.	908
PD1110	10	38'-3"	Bt.	2032

PIER 5

MARK	NO.	LENGTH	TYPE	WEIGHT
PE501	8	36'-5"	Str.	304
PE502	49	4'-5"	Bt.	226
PE503	22	11'-7" to 13'-3" by 2", 2 ea.	Bt.	285
PE504	22	11'-3" to 13'-4" by 2½", 2 ea.	Bt.	282
PE505	28	15'-3"	Bt.	445
PE506	52	13'-5	Bt.	728
PE901	48	11'-0"	Bt.	1705
PE1101	48	14'-8"	Bt.	3740
PE1102	72	△ 11'-2"	Bt.	4272
PE1103	18	30'-0"	Str.	2869
PE1104	18	29'-8"	Str.	2837
PE1105	18	29'-4"	Str.	2805
PE1106	18	29'-0"	Str.	2773
PE1107	6	32'-5"	Bt.	1033
PE1108	6	43'-3"	Bt.	1379
PE1109	10	17'-4"	Str.	921
PE1110	10	40'-4"	Bt.	2143
SPE401	1	25'-8"	Bt.	476
SPE402	1	25'-4"	Bt.	470
SPE403	1	25'-0"	Bt.	464
SPE404	1	24'-8"	Bt.	458
TOTAL ALL PIERS				140345

SUPER STRUCTURE

MARK	NO.	LENGTH	TYPE	WEIGHT
SIEM101	79	15'-8"	Str.	827
SIEM102	1196	30'-0"	Str.	23968
SIEM103	77	7'-0" to 30'-3" by 3¾", 1 ea.	Str.	958
SIEM106	228	35'-0"	Str.	5332
SIEM108	152	29'-0"	Str.	2944
SIEM107	4	21'-0"	Str.	56
SIEM109	4	15'-8"	Str.	42
SIE1501	669	2'-5"	Bt.	1686
SIE1502	669	2'-11"	Bt.	20235
SIE1503	669	5'-3"	Bt.	3663
SIE1505	120	15'-8"	Str.	1961
SIE1506	196	7'-2"	Str.	1465
SIE1507	4	9'-7"	Str.	40
SIE1508	4	10'-10"	Str.	45
SIE1515	280	28'-1"	Str.	8201
SIE1516	127	29'-9"	Str.	3941
SIE1517	800	28'-9"	Str.	23989
SIE1518	39	6'-7" to 32'-8" by 8¼", 1 ea.	Str.	798
SIE1519	33	6'-7" to 28'-8" by 8¼", 1 ea.	Str.	607
SIE1520	41	2'-3" to 25'-6" by 7¼", 1 ea.	Str.	594
SIE1521	37	7'-9" to 29'-4" by 7¼", 1 ea.	Str.	716
SIE1602	990	30'-0"	Str.	44610
SIE1603	66	3'-11" to 27'-2" by 4½", 1 ea.	Str.	1541
SIE1604	800	32'-9"	Str.	39352
SIE1605	681	24'-5"	Str.	24975
SIE1606	37	7'-9" to 29'-4" by 7¼", 1 ea.	Str.	1031
SIE1607	41	6'-7" to 30'-11" by 7¼", 1 ea.	Str.	1154
SIE1608	127	25'-9"	Str.	4916
SIE1609	33	3'-0" to 25'-0" by 8¼", 1 ea.	Str.	694
SIE1610	38	7'-10"	Str.	447
SIE1611	39	6'-7" to 32'-8" by 8¼", 1 ea.	Str.	1150
TOTAL SUPERSTRUCTURE				203738

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

488 / 101

HAM-75-9.93
, HAM-126-13.00

NOTES

1. SPIRAL REINFORCING BARS : THE "LENGTH" SHOWN IN THE STEEL LIST FOR THE SPIRAL BARS IS THE DISTANCE FROM TOP OF THE FOOTING TO THE BOTTOM OF CAP, OR TO WITHIN 2" (±) OF THE TOP OF COLUMN FOR PIERS WITHOUT CAPS, TO THE NEAREST INCH.

2. FOUR STEEL ANGLE SPACERS, WEIGHING NOT LESS THAN 0.80 LB. PER LIN. FT. OF SPACER SHALL BE PROVIDED FOR EACH SPIRAL UNIT UP TO 15'-0" IN HEIGHT AND FOUR STEEL ANGLE SPACERS WEIGHING NOT LESS THAN 1.01 LB. PER LIN. FT. OF SPACER SHALL BE PROVIDED FOR EACH SPIRAL UNIT OVER 15'-0" IN HEIGHT, THEY SHALL BE EQUALLY SPACED ALONG THE PERIPHERY OF THE COIL. THE NUMBER OF POUNDS OF THESE SPACERS, BASED ON 0.80 OR 1.01 LB. PER LIN. FT. WILL BE PAID FOR AS REINFORCING STEEL AND IS INCLUDED IN THE TABULATED QUANTITY OF SPIRAL BARS.

3. SEE SHEET 118 120 FOR BENDING DETAILS 119 120 120 120

△ 4. Reinforcing bars not revised by Balke (△) shall have a minimum lap of 30 bar diameters.

△ 117 / 20

VOGT, IVERS & ASSOCIATES
ENGINEERS CINCINNATI — ARCHITECTS CHICAGO

REINFORCING STEEL LIST

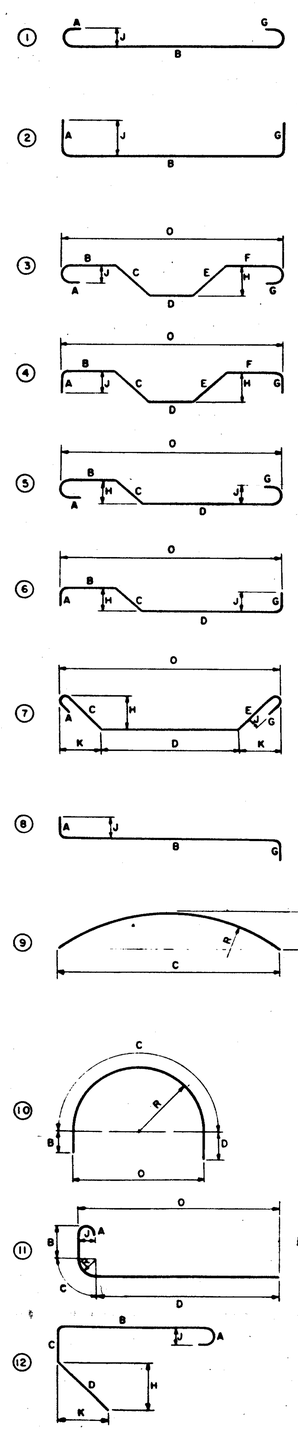
BRIDGE NO. HAM-126-13.76
S.R. 126 WESTBOUND
OVER RAMP F, I-75 S.B. & EXIST. RAMP
HAMILTON COUNTY STA. 63+17.92 to STA. 67+50.23

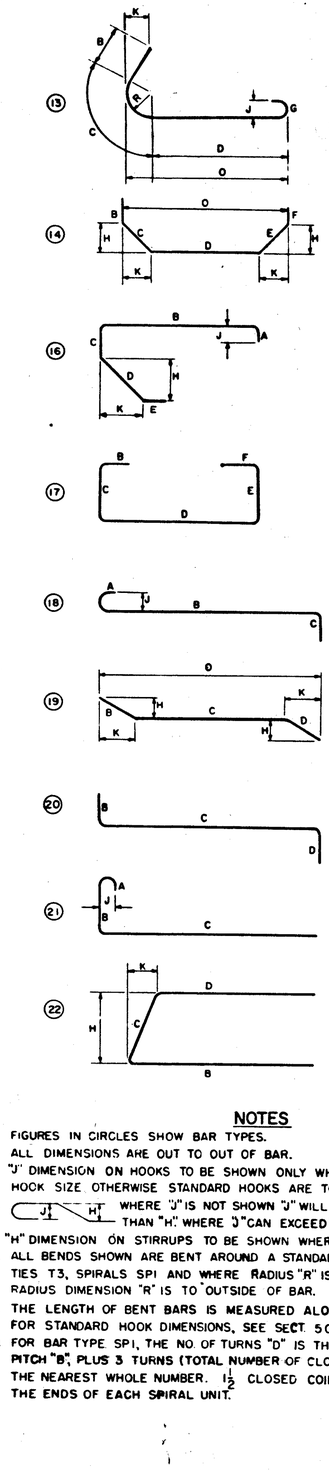
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
—	P.W.D.	—	B.C.S.			△ BALKE ENGRS. 12/85

FED. RD DIVISION	STATE	PROJECT		659 / 181
2	OHIO			

HAM-75-9.93
HAM-126-13.00

MARK	TYPE	DIMENSIONS FOR BENDING A	B	C	D	E	F	G	H	J	K	R	O
A501	10		1'-7"	2'-4"	—				1'-3"		11"		—
A502	17		—	1'-7"	5'-3"	1'-7"	—						
A503	T1	5"	3'-0"	2'-1"	3'-0"	2'-1"		5"					
A504	2	6"	6'-6"					—					
A505	2	6"	7'-5"					—					
A506	2	6"	8'-4"					—					
A507	2	6"	9'-3"					—					
A508	2	6"	10'-1"					—					
A509	2	6"	10'-11"					—					
A513	20		1'-7"	12'-2"	—								
A514	20		1'-7"	26'-0"	—								
A515	20		1'-7"	21'-7"	—								
A516	20		1'-7"	18'-2"+15'-2"=6	—								
A525	2	6"	3'-5"					6"					
A526	19		1'-7"	9'-9"	—				1'-2"		1'-0"		—
A529	19		6'-2"	7'-0"	—				1'-10"		5'-10"		—
A530	20		1'-7"	11'-9"	—								
A532	20		1'-7"	16'-3"	—								
A545	511								2'-5"				5"
A546	2	6"	7'-5"					—					
A552	20		1'-6"	12'-5"	—								
A554	19		2'-5"	5'-10"	—				1'-1"		2'-2"		—
A565	20		1'-7"	6'-9"	—								
△ AE574	1	7"	2'-1"										
△ AE575	24		2'-2"	2'-5"	7½"								
A601	17		2'-6"	5'-3"	6'-6"	—	—						
A602	17		2'-6"	5'-3"	7'-5"	—	—						
A603	17		2'-6"	5'-3"	8'-4"	—	—						
A604	17		2'-6"	5'-3"	9'-3"	—	—						
A605	17		2'-6"	5'-3"	10'-1"	—	—						
A606	17		2'-6"	5'-3"	10'-11"	—	—						
A609	17		—	4'-2"	1'-5"	4'-2"	—						
A610	17		—	3'-0"	1'-5"	3'-0"	—						
△ AE611	17		—	3'-1"	9"	3'-1"	—						
A612	17		—	4'-6"	1'-5"	4'-6"	—						
△ AE613	2	8"	3'-1"					—					
△ A614	17		—	10'-4"	1'-2"	10'-4"	—						
△ A615	2	8"	11'-0"					—					
A616	2	8"	6'-7"					—					
A620	17												
A621	2	8"	4'-11"					—					
△ AE632	14		7"		3'-0"				2"		8½"		
△ AE633	14		7"		3'-1"				2"		8½"		
△ AE634	14		7"		3'-5"				3"		8½"		
△ AE635	14		8"		3'-11"				4"		8½"		
△ AE636	14		8"		4'-5"				5"		8½"		
△ AE637	14		9"		4'-11"				6"		8½"		
△ AE638	14		9"		2'-5"				6"		8½"		
△ AE709	14		7"		3'-0"				2"		8½"		
△ AE710	14		7"		3'-1"				2"		8½"		
△ AE711	14		7"		3'-1"				3"		8½"		
△ AE712	14		8"		3'-5"				4"		8½"		
△ AE713	14		8"		4'-2"				5"		8½"		
△ AE714	14		9"		4'-11"				6"		8½"		
A802	19		2'-4"	35'-10"	—				1'-5"		1'-10"		—
A804	20		2'-4"	10'-4"	—								
A807	19		2'-6"	12'-6"	—				1'-9"		1'-8"		
△ AE810	26												
B501	17		—	1'-7"	5'-3"	1'-7"	—						
B502	19		1'-7"	3'-0"	—				1'-3"		1'-1"		—
B503	T1	5"	3'-0"	2'-1"	3'-0"	2'-1"		5"					
B504	2	6"	6'-11"					—					
B505	2	6"	6'-6"					—					
B508	2	6"	3'-5"					6"					
B516	19		1'-7"	11'-9"	—				1'-2"		1'-0"		—
△ B518	20		1'-7"	10'-10"	—								
B520	20		1'-7"	14'-0"	—								
B522	20		1'-7"	18'-5"	—								
B525	19		2'-4"	7'-0"	—				9"		2'-2½"		—
B535	511								2'-5"				5"
B536	20		9"	8'-11"	—								
B541	20		1'-6"	8'-2"	—								
B543	20		1'-6"	13'-8"	—								
B546	19		1'-7"	6'-0"	—				8½"		1'-5"		—
BE563	1	7"	2'-1"										
BE564	24		2'-2"	2'-5"	7½"								
B601	17		2'-6"	5'-3"	6'-11"	—	—						
B602	17		2'-6"	5'-3"	6'-6"	—	—						
△ B604	17		—	4'-6"	1'-5"	4'-6"							
△ B605	17		—	3'-2"	1'-5"	3'-2"							
△ BE606	17		—	3'-1"	0'-9"	3'-1"							
△ BE607	2	6"	4'-6"					—					
B608	17		—	11'-2"	1'-2"	11'-2"	—						
B609	2	10"	11'-7"					—					
B610	2	10"	6'-11"					—					





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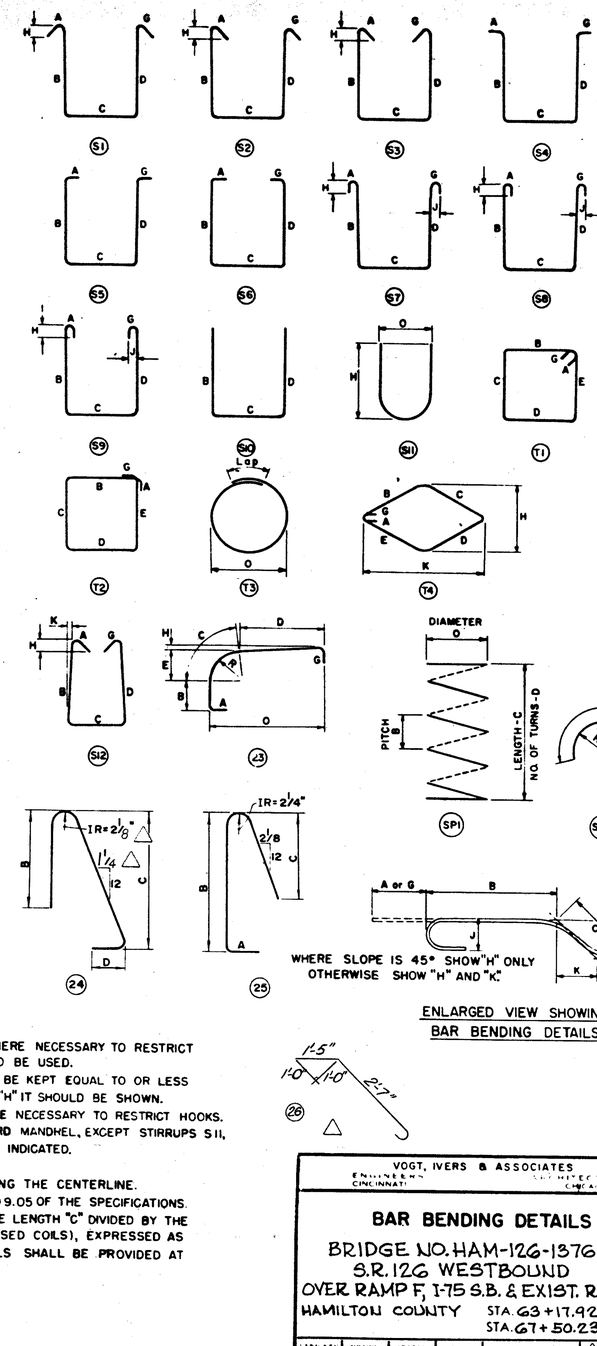

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ENLARGED VIEW SHOWING BAR BENDING DETAILS

VOGT, IVERS & ASSOCIATES
ENGINEERS — CINCINNATI — ARCHITECTS — CHICAGO

18/20

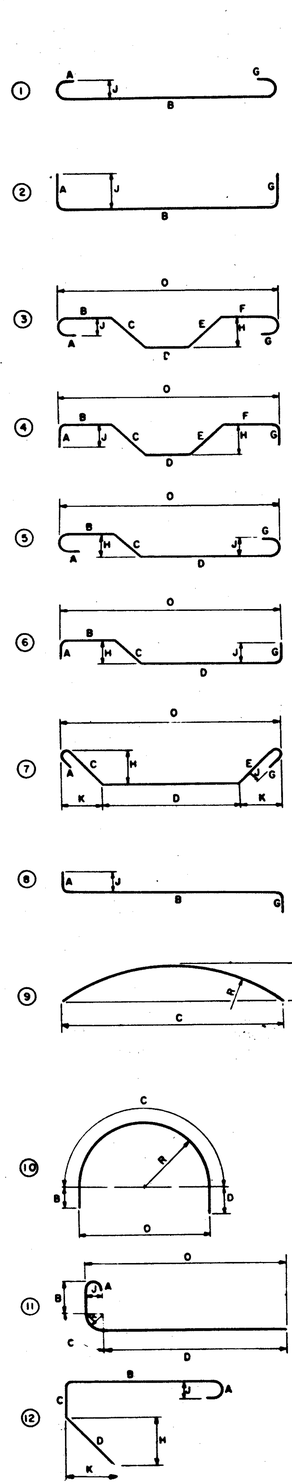
BAR BENDING DETAILS

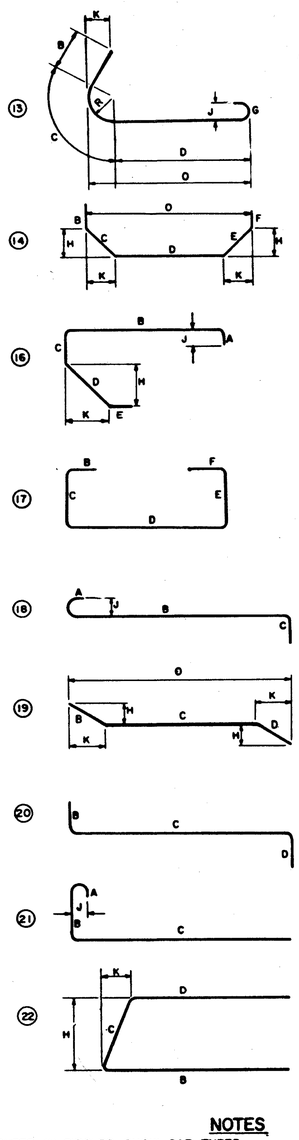
BRIDGE NO. HAM-126-1376
S.R. 126 WESTBOUND
OVER RAMP F, I-75 S.B. & EXIST. RAMP
HAMILTON COUNTY STA. 63+17.92 to STA. 67+50.23

DESIGNED	DRAWN	TRACED	CHK'D	REVIEWED	DATE
—	Y.W.N.O.	—	TEC		

△ REVISED BALKE ENGRS 12/85

MARK	TYPE	DIMENSIONS FOR BENDING A	B	C	D	E	F	G	H	J	K	R	O
△ BB13	17		—	11'-5"	1'-2"	11'-5"	—	—					
△ BB14	2	8"	10'-10"					—					
BB15	2	8"	6'-7"					—					
BB16	14		7½"	1'-3"	4'-6"	—	—		9"		11½"		
△ BB623	14		7"		3'-0"				2"		8½"		
△ BB624	14		7"		3'-4"				3"		8½"		
△ BB625	14		8"		3'-9"				4"		8½"		
△ BB626	14		8"		4'-2"				5"		8½"		
△ BB627	14		9"		4'-7"				6"		8½"		
△ BB628	14		9"		2'-5"				6"		8½"		
△ BB629	14		7"		2'-11"				3"		8½"		
△ BB630	14		8"		3'-5"				4"		8½"		
△ BB631	14		8"		4'-0"				5"		8½"		
△ BB632	14		9"		4'-7"				6"		8½"		
BB02	19		2'-4"	37'-7"	—				1'-7"		1'-10"		—
BB04	20		2'-4"	12'-0"	—								
BB07	19		2'-6"	141'-7"	—				1'-10"		1'-8"		—
△ BB811	26												
PA502	20		1'-7"	11'-5"	—								
PA503	17		—	1'-7"	13'-2"	1'-7"	—						
PA504	2	6"	2'-8"					6"					
PA505	T2	6"	1'-9"	3'-9" to 4'-7½" by 1½"	1'-9"	3'-9" to 4'-7½" by 1½"		6"					
PA506	T2	6"	1'-9"	3'-1½" to 4'-8" by 2"	1'-9"	3'-1½" to 4'-8" by 2"		6"					
PA507	T2	6"	2'-8"	4'-8"	2'-8"	4'-8"		6"					
PA1001	1	1'-5"	11'-6"					1'-5"					
1002	1	1'-5"	9'-6"					1'-5"					
PA1003	19		5'-6"	24'-0"	—				1'-5"		5'-4"		—
PA1004	19		5'-4"	32'-8"	—				1'-7"		5'-4"		—
PA1006	20		3'-0"	33'-6"	—								
△ PA1101	2	1'-8"	9'-6"					—					
SPA401	SP1		4'2"	15'-7"	45								2'-8"
SPA402	SP1		4'2"	14'-4"	41								2'-8"
SPA403	SP1		4'2"	13'-0"	38								2'-8"
SPA404	SP1		4'2"	11'-9"	34								2'-8"
PB502	20		1'-7"	11'-7"	—								
PB503	17		—	1'-7"	13'-6"	1'-7"	—						
PB504	2	6"	2'-8"					6"					
PB505	T2	6"	1'-9"	3'-9" to 4'-7" by 1"	1'-9"	3'-10" to 4'-7" by 1"		10"					
PB506	T2	6"	1'-9"	3'-6" to 4'-7½" by 1½"	1'-9"	3'-6" to 4'-7½" by 1½"		6"					
PB507	T2	6"	2'-8"	4'-8"	2'-8"	4'-8"		6"					
PB508	T2	6"	1'-9"	4'-8"	1'-9"	4'-8"		6"					
PB901	1	1'-3"	8'-6"					1'-3"					
PB1101	1	1'-7"	11'-6"					1'-7"					
△ PB1102	2	1'-8"	9'-6"					—					
PB1107	19		6'-0"	24'-0"	—				1'-4"		5'-10"		—
PB1108	19		5'-10"	32'-8"	—				7"		5'-10"		—
PB1110	20		3'-0"	34'-2"	—								
SPB401	SP1		4'2"	21'-7"	61								2'-8"
SPB402	SP1		4'2"	20'-7"	58								2'-8"
SPB403	SP1		4'2"	19'-7"	55								2'-8"
SPB404	SP1		4'2"	18'-6"	52								2'-8"
PC502	20		1'-7"	10'-0"	—								
PC503	T2	6"	1'-9"	4'-8"	1'-9"	4'-8"		6"					
PC504	2	6"	2'-8"					6"					
PC505	T2	6"	1'-9"	4'-7½" to 3'-10" by 1"	1'-9"	4'-7" to 3'-10" by 1"		6"					
PC506	T2	6"	1'-9"	4'-8" to 3'-6½" by 1½"	1'-9"	4'-8" to 3'-6½" by 1½"		6"					
PC507	T2	6"	2'-8"	4'-8"	2'-8"	4'-8"		6"					
PC901	1	1'-3"	8'-6"					1'-3"					
PC1101	1	1'-7"	11'-6"					1'-7"					
△ PC1102	2	1'-8"	9'-6"					—					
PC1107	19		5'-11"	24'-3"	—				1'-3"		5'-10"		—
PC1108	19		5'-10"	33'-2"	—				8½"		5'-10"		—
PC1110	20		3'-0"	34'-7"	—								
SPC401	SP1		4'2"	24'-4"	68								2'-8
C402	SP1		4'2"	23'-7"	66								2'-8"
SPC403	SP1		4'2"	22'-10"	64								2'-8"
SPC404	SP1		4'2"	22'-1"	62								2'-8"
PD502	20		1'-7"	10'-0"	—								
PD503	20		1'-7"	15'-0"	—								
PD504	17		—	1'-0"	2'-8"	1'-0"	—						
PD505	T2	6"	1'-9"	3'-9" to 4'-7" by 1"	1'-9"	3'-9" to 4'-7" by 1"		6"					
PD506	T2	6"	1'-9"	3'-7" to 4'-7½" by 1¼"	1'-9"	3'-7" to 4'-7½" by 1¼"		6"					
PD507	T2	6"	2'-8"	4'-8"	2'-8"	4'-8"		6"					
PD508	T2	6"	1'-9"	4'-8"	1'-9"	4'-8"		6"					
PD901	1	1'-3"	8'-6"					1'-3"					
PD1101	1	1'-7"	11'-6"					1'-7"					
△ PD1102	2	1'-8"	9'-6"					—					
PD1107	19		6'-1"	24'-9"	—				1'-2"		5'-11"		—
PD1108	19		6'-0"	34'-2"	—				9"		5'-11"		—





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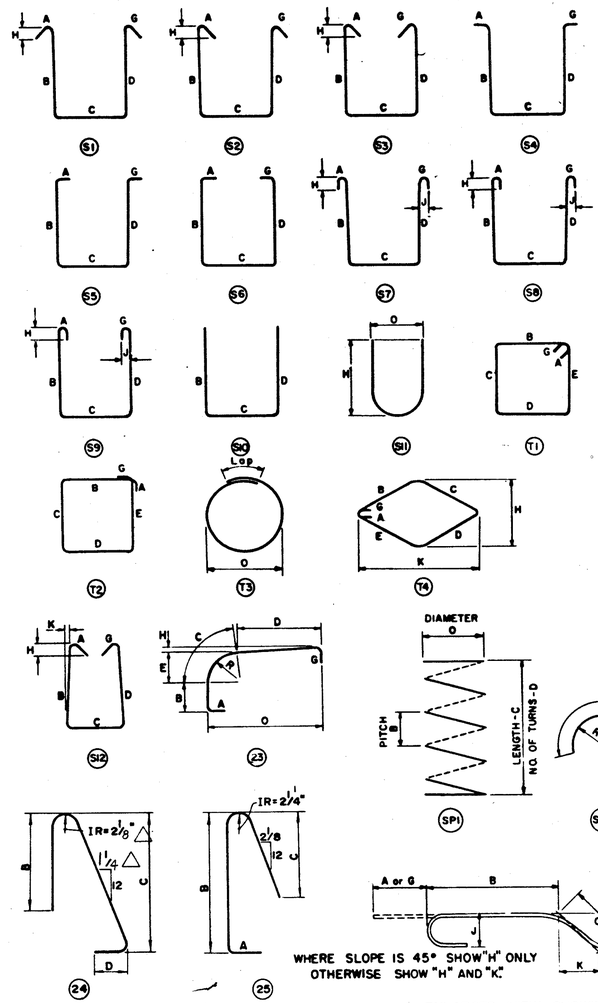

WHERE SLOPE IS 45° SHOW "H" ONLY
OTHERWISE SHOW "H" AND "K"

ENLARGED VIEW SHOWING
BAR BENDING DETAILS

NOTES

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FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

610
137

HAM-75-9.93
HAM-126-13.00

VOGT, IVERS & ASSOCIATES
ENGINEERS — CINCINNATI
ARCHITECTS — CHICAGO

19/20

BAR BENDING DETAILS

BRIDGE NO. HAM-126-1376
S.R. 126 WESTBOUND
OVER RAMP F, I-75 S.B. & EXIST. RAMP
HAMILTON COUNTY STA. 63+17.92 to STA. 67+50.23

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
—	TWH.	—	TEC			△ BALKE ENGRS. 12/85

FED. AID DIVISION	STATE	PROJECT	
2	OHIO		

641
15F

HAM-75-9.93
HAM-126-13.00

MARK	TYPE	DIMENSIONS FOR BENDING A	B	C	D	E	F	G	H	J	K	R	O
PD1110	20		3'-0"	35'-7"	—								
SPD401	SP1		4½"	24'-9"	69								2'-8"
SPD402	SP1		4½"	24'-3"	68								2'-8"
SPD403	SP1		4½"	23'-8"	66								2'-8"
SPD404	SP1		4½"	23'-1"	65								2'-8"
PE502	17		—	1'-0"	2'-8"	1'-0"	—						
PE503	T2	6"	1'-0"	3'-9" to 4'-7" by 1"	1'-0"	3'-9" to 4'-7" by 1"		6"					
PE504	T2	6"	1'-0"	5'-7" to 6'-7½" by 1/2	1'-0"	5'-7" to 6'-7½" by 1/2		6"					
PE505	T2	6"	2'-8"	4'-8"	2'-8"	4'-8"		6"					
PE506	T2	6"	1'-0"	4'-8"	1'-0"	4'-8"		6"					
PE001	1	1'-3"	8'-6"					1'-3"					
PE1101	1	1'-7"	11'-6"					1'-7"					
△ PE1102	2	1'8"	9'6"					—					
PE1107	19		4'-5"	24'-0"	—				1'-1½"		6'-4"		—
PE1108	19		4'-5"	34'-10"	—				10½"		6'-4"		—
PE1110	20		3'-0"	37'-8"	—								
SPE401	SP1		4½"	25'-8"	71								2'-8"
SPE402	SP1		4½"	25'-4"	71								2'-8"
SPE403	SP1		4½"	25'-0"	70								2'-8"
SPE404	SP1		4½"	24'-8"	69								2'-8"
△ 9501	2	10½	1'-8"					—					
△ 9502	16	—	10½"	8"	10½"	9"			8½"	—	6"		
△ SP1503	24		2'-2"	2'-5"	7½"								

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫

⑬ ⑭ ⑯ ⑰ ⑱ ⑲ ⑳ ㉑ ㉒

⑮ NOT USED

㉔ ㉕

S1 S2 S3 S4 S5 S6 S7 S8 S9 S10 S11 T1 T2 T3 T4 S12 23

SP1 SP2

WHERE SLOPE IS 45° SHOW "H" ONLY
OTHERWISE SHOW "H" AND "K"

ENLARGED VIEW SHOWING
BAR BENDING DETAILS

㉖ 1'-5" 1'-0" 1'-0" 2'-7"

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△

VOGT, IVERS & ASSOCIATES 20/20
ENGINEERS CINCINNATI — ARCHITECTS CHICAGO

BAR BENDING DETAILS

BRIDGE NO. HAM-126-1376
S.R. 126 WESTBOUND
OVER RAMP F, I-75 S.B. & EXIST. RAMP
HAMILTON COUNTY STA. 63+17.92 to STA. 67+50.23

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
—	T.W.D.	—	TEC			△ BAKKE ENGRS. 12/85

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

Old 787

HAM - 75 - 9.93
HAM - 126 - 13.00

Skew = 63°25'20" Piers No. 3 to 6 & Abut. No. 2
Skew = 59°19'00" Abut. No. 1 & Piers No. 1 & 2

Existing I-75 N.B.

END APPROACH SLAB STA. 70+13.44

BEGIN APPROACH SLAB STA. 69+88.44

STA. 71+56.31 ℄ S.R. 126 W.B. = STA. 126+84.87 ℄ Exist. I-75 N.B.

POINT OF MIN VERTICAL CL.

140'-0" Rad. (Act. Cl.)

℄ PIER NO. 1 STA. 71+12.50

℄ PIER NO. 2 STA. 72+83.50

℄ PIER NO. 3 STA. 73+40.50

STA. 74+35.84 ℄ S.R. 126 W.B. = STA. 35+17.79 ℄ MILL CREEK

℄ PIER NO. 4 STA. 74+51.00

℄ PIER NO. 5 STA. 75+84.00

℄ PIERS NO. 6 STA. 77+11.00

END APPROACH SLAB STA. 78+46.27

PT STA 40+35.65

BEGIN APPROACH SLAB STA. 78+21.27

PC STA 36+57.06

END RET. WALL STA. 80+41.00

℄ S.R. 126 W.B.

℄ S.R. 126 E.B.

MILL CREEK

Transmission Tower

6" Reinf. Conc. Riprap

Exist. Riprap

Rock Channel Protection

Prop. Channel

54" San. (Abandoned)

NOTE:
EARTHWORK LIMITS SHOWN ARE *APPROXIMATE*. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

TRAFFIC DATA
2006 A.D.T. = 23,876
2006 A.D.T.T. = 2,626

P L A N

VERTICAL CURVE DATA

P.V.I. STA. 70+25.00	P.V.I. STA. 81+50.00
ELEV. 587.26	ELEV. 552.75'
V.C. = 1100.00'	V.C. = 600.00'
G1 = +2.8060%	G1 = -3.0675%
G2 = -3.0675%	G2 = +2.5993%

ALL PILES ARE 12" DIA. CAST-IN-PLACE REINFORCED CONC. PILES. THE ESTIMATED AVERAGE PAY-LENGTHS ARE:

ABUTMENT NO 1 -	55'	PIERS NO. 3, 4 & 5 -	25'
PIER NO. 1 -	30'	PIERS NO. 6 -	40'
PIER NO. 2 -	45'	ABUTMENT NO. 2 -	50'
		RETAINING WALL -	50'

ELEVATIONS SHOWN ARE AT PROFILE GRADE.

578.13 578.38 578.59 578.78 578.93 579.05 579.13 579.18 579.20 579.18 579.13 579.05 578.94 578.79 578.60 578.39 578.14 577.85 577.54 577.19 576.81 576.39 575.94 575.46 574.94 574.39 573.81 573.19 572.54 571.86 571.14 570.39 569.62 568.09 566.55 565.02 563.49 561.95

BRIDGE LIMITS = 807.83'

PROPOSED PROFILE

TOP OF SLOPE Elev. 570.5 S. to 569.7 N.

CRUSHED AGGREGATE SLOPE PROTECTION (TYP.)

Existing Ground Line

Ex. 36" Stm.

33" Conduit

Elev. 563.60

Elev. 545.00

Reqd. Cl. = 15'-0" Act. Cl. = 16'-3"

Elev 545.00

℄ Exist. I-75 N.B.

Exist. 54" San. ℄ Elev. 515.3

CONCRETE SLAB CHANNEL LINING (ROADWAY ITEM)

Elev. 517.00

LOW STEEL

Corp of Engineers - 100 yr. H.W. Flood Elev. 533.6

Low Water Elev. 520.0

Elev. 513.00

Ex 21" San.

Elev. 518.6

Ex 54" San. Abandoned

TOP OF WEB-WALL Elev. 532.00, TYP. PIERS NO 3, 4, & 5

CONCRETE SLAB CHANNEL LINING (ROADWAY ITEM)

Elev. 513.00

TOP OF SLOPE Elev 554.6 S. to 551.5 N

Elev 547.00 S. 545.50 N

Elev. 531.00

-3.0675%

2:1 (Normal)

EXP. FIX.

Seal Concrete surfaces of columns of Piers 1 & 2 (See Proposal Note)

Seal Concrete surfaces of parapets (See Proposal Note and Sheet No. 12122)

Trapezoidal Channel (Proposed)

P R O F I L E ALONG ℄

HEADWATER FLOOD DATA
D.A. = 115 Sq. miles
Q_{100} = 23,000 Cfs.
V = 12.3 Ft./Sec.
Depth of Flow = 15 Ft.

PROPOSED STRUCTURE

TYPE: Continuous welded steel plate girders with reinforced concrete deck and substructures.

SPANS: 94.00', 121.00', 107.00', 110.50', 130.00', 130.00', 104.50 measured along ℄ S.R. 126 W.B.

LOADING: HS 20-44 Case I and the Alternate Military Loading.

SKEWS: Abut No 1 and Piers No. 1 & 2 = 59°19'00" L.F. Piers No. 3 to 6 and Abut. No. 2 = 63°25'20" L.F.

ALIGNMENT: Tangent. SUPERELEVATION: None.

ROADWAY: 41'-8" face to face of parapets

WEARING SURFACE: 1½" Latex modified concrete overlay.

APPROACH SLABS: AS-1-81 (25' long).

1 / 22

VOGT, IVERS, & ASSOCIATES
ENGINEERS CINCINNATI ARCHITECTS CHICAGO

SITE PLAN

BRIDGE NO. HAM-126-1389
S R 126 W.B. OVER
I-75 N B AND RELOCATED MILL CREEK
HAMILTON COUNTY
STA. 70+13.44 TO STA. 78+21.27

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISIONS
AERIAL	H.R.S.	V.K.	D.W.M	S.S.C.	BAKER ENGRS. '78

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

GAS 787

HAM - 75 - 9.93
HAM - 126 - 13.00

GENERAL NOTES △

REFERENCE SHALL BE MADE TO THE FOLLOWING:

STANDARD DRAWINGS:

AS-1-81	DATED 11-27-81
BR-1	DATED 5-29-79
SD-1-69	DATED 6-12-69
RB-1-55	REV. 2-2-59

SUPPLEMENTAL SPECIFICATIONS:

836	DATED 11-12-85
824	DATED 10-8-82
927	DATED 10-19-85
845	DATED 2-25-86
953	DATED 8-21-80

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, 1983, INCLUDING THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:

DESIGN LOADING: HS 20-44, CASE I AND THE ALTERNATE MILITARY LOADING.

DESIGN STRESSES:

CONCRETE, CLASS S	COMPRESSIVE STRENGTH: 4500 PSI (SUPERSTRUCTURE)
CONCRETE, CLASS C	UNIT STRESS: 1333 PSI (SUBSTRUCTURE)
REINFORCING STEEL	ASTM A615, A616, A617, GRADE 60, MINIMUM YIELD STRENGTH: 60,000 PSI. (SUPERSTRUCTURE)
STRUCTURAL STEEL	ASTM A36, UNIT STRESS: 20,000 PSI
DECK PROTECTION METHOD	EPOXY COATED REINFORCING STEEL WITH 3" CONCRETE COVER OF WHICH 1-1/4" IS A LATEX MODIFIED CONCRETE OVERLAY.
BOLTS	7/8" DIAMETER HIGH STRENGTH STEEL BOLTS CONFORMING TO ASTM A325.

EMBANKMENT CONSTRUCTION:
THE EMBANKMENTS SHALL BE CONSTRUCTED TO THE LEVEL OF THE SUBGRADE FOR A MINIMUM DISTANCE OF 200 FEET BACK OF THE ABUTMENTS. EXCAVATION SHALL THEN BE MADE FOR THE ABUTMENTS AND FOR PIERS NO. 1 AND 6.

PILES SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 35 TONS PER PILE FOR THE ABUTMENTS AND 45 TONS PER PILE FOR THE PIERS.

UTILITY LINES:
ALL EXPENSE INVOLVED IN RELOCATING THE AFFECTED UTILITY LINES SHALL BE BORNE BY THE OWNERS. THE CONTRACTOR AND OWNERS ARE REQUESTED TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WOULD BE HELD TO A MINIMUM.

REINFORCING STEEL	ASTM A615, A616, A617, GRADE 60 UNIT STRESS: 24,000 PSI SPIRAL REINFORCEMENT MAY BE PLAIN BARS ASTM A82 OR A615 (SUBSTRUCTURE)

ITEM 511: CLASS S CONCRETE, SUPERSTRUCTURE, USING SHRINKAGE COMPENSATING CEMENT, 701.08.

THE FOLLOWING RESTRICTIONS SHALL APPLY TO THE SUPERSTRUCTURE CONCRETE USING SHRINKAGE COMPENSATING CEMENT, 701.08.

1. CEMENT SHALL BE EXPANSIVE HYDRAULIC CEMENT, ASTM C845, TYPE K.
2. THE MAXIMUM WATER/CEMENT RATIO GIVEN FOR CLASS S CONCRETE IN 499.03 SHALL BE REVISED FROM 0.44 TO 0.50.
3. MAXIMUM SLUMP AT THE TIME AND PLACE OF CONCRETE PLACEMENT SHALL BE 6 INCHES.
4. CHEMICAL ADMIXTURES, WHEN REQUIRED BY 511.06, SHALL BE LIMITED TO 705.12 TYPE D.
5. MAXIMUM AMBIENT TEMPERATURE AT TIME OF PLACEMENT OF CONCRETE SHALL BE 80° F.
6. MEMBRANE CURING PER SS836 WILL NOT BE PERMITTED FOR ANY CONCRETE PLACED BETWEEN SEPTEMBER 1 AND MARCH 31. SUCH CONCRETE SHALL BE CURED BY METHOD (A) WATER CURING.
7. IF REQUIRED BY THE ENGINEER, THE SURFACE OF THE CONCRETE SHALL BE GIVEN A FOG SPRAY OF WATER. THIS MAY BE REQUIRED PRIOR TO EITHER WATER CURING OR MEMBRANE CURING IF WEATHER CONDITIONS DICTATE. EQUIPMENT SHALL BE ON HAND.

ESTIMATED QUANTITIES

	ITEM	TOTAL	UNIT	DESCRIPTION	RET.WALL	SUPER.	PIERS	ABUT.	GEN.	AS BUILT
	503	Lump	Sum	Cofferdams, cribs, and sheeting					Lump	
	503	2400	Cu. Yd.	Unclassified excavation	310		1445	645		
△	505	Lump	Sum	Pile Driving Equipment Mobilization					Lump	
△	506	Lump	Sum	Static Load Test			Lump			
△	507	11760	Lin. Ft.	12" cast-in-place, reinforced concrete piles	1300		7520	2940		
△	509	158,977	Lb.	Reinforcing steel, Grade 60	4532		129373	25134		
△	511	1064	Cu. Yd.	Class S concrete, superstructure		1064				
△	511	270	Cu. Yd.	Class C concrete, abutments above footing				270		
	511	810	Cu. Yd.	Class C concrete, piers above footing			810			
	511	766	Cu. Yd.	Class C concrete, footings	78		512	176		
△	511	69	Cu. Yd.	Class C concrete, retaining wall above footing	69					
△	511*	1064	Cu. Yd.	Class S concrete, superstructure using Shrinkage compensating cement 701.08		1064				
△	513	1,173,700	Lb.	Structural steel (AISC Category III) (See Proposal Note)		1,173,700				
△	514	1,173,700	Lb.	Field painting of new structural steel, System A		1,173,700				
	516	25	Sq.Ft.	1" preformed expansion joint filler	25					
△	516	271	Lin. Ft.	Structural expansion Joints including elastomeric strip seals		94		177		
	516	33	Lin.Ft.	PVC Waterstop, as per plan	33					
	518	195	Cu.Yd.	Porous backfill	40			155		
△	518	180	Lin. Ft.	6", perforated, helical, corrugated steel pipe, 707.01				180		
△	518	120	Lin. Ft.	6", non-perforated, helical, corrugated steel pipe, including specials, 707.01				120		
	601	1283	Sq.Yd.	Crushed aggregate slope protection					1283	
△	523	6	Hour	Dynamic Load Test					6	
△	824	297,023	Lb.	Epoxy-Coated Reinforcing Steel, Grade 60	2560	290083		4380		
△	845	3658	Sq.Yd.	Latex Modified Concrete Overlay (1¼" Thick)**		3658				
△	Special	1756	Sq.Yd.	Sealing of Concrete Surfaces **		1550	206			

Computed by: SSC Date: 6 .22, 1971 — Revised by: SJA 10-19-85
Checked by: J.R.P Date: 6 .23, 1971 — Checked by: BJS 10-26-85

**See Proposal Note

* Alternate Bid Item

All substructure bars not revised by BALKE (△) shall have a minimum lap of 30 bar diameters.

2 / 22

VOGT, IVERS. & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

GENERAL NOTES & ESTIMATED QUANTITIES
BRIDGE NO. HAM-126-1389
S.R. 126 W.B. OVER
I-75 N.B. AND RELOCATED MILL CREEK
HAMILTON COUNTY
STA. 70 + 13.44 TO STA. 78 + 21.27

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED BALKE ENGRS. 9/85
S.S.C.	D.W.M	—	J.R.P	OK	6-23-71	△

CALC. BY		HAMILTON COUNTY	OHIO	643-A
DATE		HAM-126-1389	FHWA REGION 5	787
CHKD. BY				
DATE				

166
Yellow
643A-686

HAM-75-9.93
HAM-126-13.00

ITEM 516 ELASTOMERIC STRIP SEAL

DESCRIPTION:
THIS ITEM SHALL INCLUDE THE FURNISHING OF ALL MATERIALS AND THE NECESSARY LABOR TO FACILITATE, ASSEMBLE, CONSTRUCT AND INSTALL ELASTOMERIC STRIP SEAL OF THE TYPE, SIZE AND KIND SPECIFIED.

MATERIALS:
STEEL EXTRUSIONS -
THE EXTRUSIONS SHALL BE A588 OR A36 STEEL WITH SYSTEM A FIELD PAINTED EXPOSED SURFACES. SEE CMS SECTION 514.05 (a).
NEOPRENE EXTRUSIONS -
THE NEOPRENE MATERIAL IN THE SEAL ELEMENTS SHALL CONFORM TO ASTM D2628, MODIFIED FOR HARDNESS AND EXCLUSIVE OF RECOVERY TESTS. THE NEOPRENE EXTRUSIONS SHALL RUN CONTINUOUSLY THROUGH THE BRIDGE DECK.

PHYSICAL PROPERTIES OF NEOPRENE EXTRUSIONS:	ASTM METHOD
• TENSILE STRENGTH, MINIMUM PSI 2000	D 412-62T
• ELONGATION @ BREAK, MINIMUM PERCENT 250	D 412-51T
• HARDNESS, TYPE A DUROMETER 60+/-7	D 2240 (MODIFIED)
• COMPRESSION SET, 70 HRS @ 212°F, MAXIMUM 40%	D 395, METHOD B, (MODIFIED)
• OVEN AGING, 70 HRS @ 212°F, 20% TENSILE STRENGTH, 20% ELONGATION, LOSS, MAXIMUM 20% HARDNESS, TYPE A DUROMETER (POINTS CHANGE) 0 TO +10	D 573
• OIL SWELL, ASTM OIL 3, 70 HRS, @ 212°F, WEIGHT CHANGE, MAXIMUM 45%	D 471
• OZONE RESISTANCE, 70 HRS @ 104°F, 20% STRAIN, 300 PPHM IN AIR (WIPED WITH TOULENE TO REMOVE CONTAMINATION). NO CRACKS.	D 1149

APPROVED MANUFACTURERS:
STRIP SEAL SHALL ALLOW 6" OF TOTAL MOVEMENT AT ABUTMENT 1 AND AT THE HINGE AND 8" OF TOTAL MOVEMENT AT ABUTMENT 2. STRIP SEALS SHALL BE WATSON-BOWMAN S-800E OR AN APPROVED ALTERNATE.

ADHESIVE:
ADHESIVES SHALL BE SIKASTIX 360, FEL-POXY SP-101 OR AN APPROVED ALTERNATE.

PREPARATIONS FOR INSTALLATION:
TO AVOID THE SUBSEQUENT CONTAMINATION OF PREPARED SURFACES, ALL SURFACES OF ELASTOMERIC STRIP SEALS SHALL BE CLEANED WITH METHYL ETHYL KETONE (MEK), TOLUENE (T) OR OTHER APPROVED SOLVENT USING CLEAN, DISPOSABLE CLOTHS.

THE BONDING SURFACES OF THE STEEL EXTRUSION (THE INTERIOR OF THE ANCHOR GROOVES) SHALL BE PREPARED TO GRADE SA 3, ASTM D2200. PREPARATION SHALL BE ACCOMPLISHED NOT MORE THAN 24 HOURS PRIOR TO ADHESIVE BONDING.

INSTALLATION:
IMMEDIATELY PRIOR TO ADHESIVE APPLICATION, BONDING SURFACES SHALL BE CLEAN, DRY AND WARMER THAN 45°F AND THEY SHALL BE MAINTAINED AT ABOVE THIS TEMPERATURE UNTIL THE ADHESIVE HAS CURED. ADHESIVE SHALL BE APPLIED LIBERALLY TO BOTH THE STEEL AND ELASTOMERIC BONDING SURFACES USING A STIFF BRUSH IF NECESSARY TO ACHIEVE A COMPLETE AND RELATIVELY UNIFORM COATING. THEN, THE BULBED EDGES OF THE ELASTOMERIC SEAL SHALL BE INSERTED INTO THE ANCHOR GROOVES. AFTER INSTALLATION, EXCESS ADHESIVE SHALL BE REMOVED FROM THE EXPOSED SEAL SURFACES.

METHOD OF MEASUREMENT:
THE QUANTITY SHALL BE THE ACTUAL LINEAR FEET OF NEOPRENE EXTRUSIONS.

BASIS OF PAYMENT:
PAYMENT WILL BE MADE AT CONTRACT PRICE FOR ITEM 516, LINEAR FEET, STRUCTURAL EXPANSION JOINTS INCLUDING ELASTOMERIC STRIP SEALS. THIS ITEM SHALL INCLUDE FURNISHING AND PLACING THE ELASTOMERIC JOINT SEAL INCLUDING STEEL EXTRUSIONS, NEOPRENE EXTRUSIONS AND ANCHOR BARS. (no)

ITEM 523 DYNAMIC LOAD TEST - SHALL BE PERFORMED AS DIRECTED AS BY THE ENGINEER.

△ 2A/22

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

GENERAL NOTES

BRIDGE NO. HAM-126-1389
S.R. 126 W.B. OVER
I-75 N.B. AND RELOCATED MILL CREEK
HAMILTON COUNTY STA. 70+13.44-78+21.27

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
TMB	JAG	~	SJA	CRS 2/86	

OHIO BLUE PRINT 1400053

CALC. BY DATE	HAM - 75 - 9.93 HAM - 126 - 13.00	OHIO	643-B 787
CHKD. BY DATE		FHWA REGION 5	

GENERAL NOTES
PLAN REVISIONS BY BALKE ENGINEERS

REVISIONS WERE MADE TO SUBSTRUCTURE DRAWINGS TO INCORPORATE THE FOLLOWING:

- o REVISE PARAPETS TO STANDARD SAFETY PARAPET SHAPE.
- o PROVIDE EPOXY-COATED REINFORCEMENT IN CORROSION-PRONE CONCRETE AREAS.
- o SEAL CONCRETE SURFACES OF PIER COLUMNS *AND PARAPETS.*
- o NUMBER PILES AND ADD DETAIL NOTES.
- o REVISE ABUTMENTS TO RECEIVE FULL WIDTH APPROACH SLAB PER AS-1-81.
- o REPLACE SLIDING PLATE EXPANSION JOINTS WITH STRIP SEAL JOINTS
- o LENGTHEN PIER COLUMN TO FOOTING DOWELS AS REQUIRED BY AASHTO.

AT THE REQUEST OF THE OHIO DEPARTMENT OF TRANSPORTATION, ALL SUBSTRUCTURE REINFORCEMENT IS TO BE GRADE 60.

REVISIONS MADE BY BALKE ENGINEERS ARE DENOTED BY (△) SYMBOL.

OTHER THAN NOTED REVISIONS, SUBSTRUCTURES ARE THE DESIGN AND DETAILING OF VOGT, IVERS, AND ASSOCIATES, INC.

ANALYSIS OF THE ORIGINAL SUPERSTRUCTURE DESIGN HAS BEEN COMPARED TO THE REVISED SUPERSTRUCTURE DESIGN TO ASSURE THAT LOADINGS HAVE NOT INCREASED ON SUBSTRUCTURES PROVIDED BY VOGT, IVERS AND ASSOCIATES, INC. DESIGN OF THESE SUBSTRUCTURES REMAINS THE RESPONSIBILITY OF VOGT, IVERS, AND ASSOCIATES.

REVISED SUPERSTRUCTURE DESIGN AND DETAILING WAS PREPARED TO CONFORM WITH UPDATED DESIGN STANDARDS.

DESIGN AND DETAILING BY BALKE ENGINEERS WAS PERFORMED IN ACCORDANCE WITH THE AASHTO SPECIFICATIONS FOR HIGHWAY BRIDGES, THIRTEENTH EDITION, 1983, AASHTO INTERIM SPECIFICATIONS FOR BRIDGES 1984, AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

2B/22

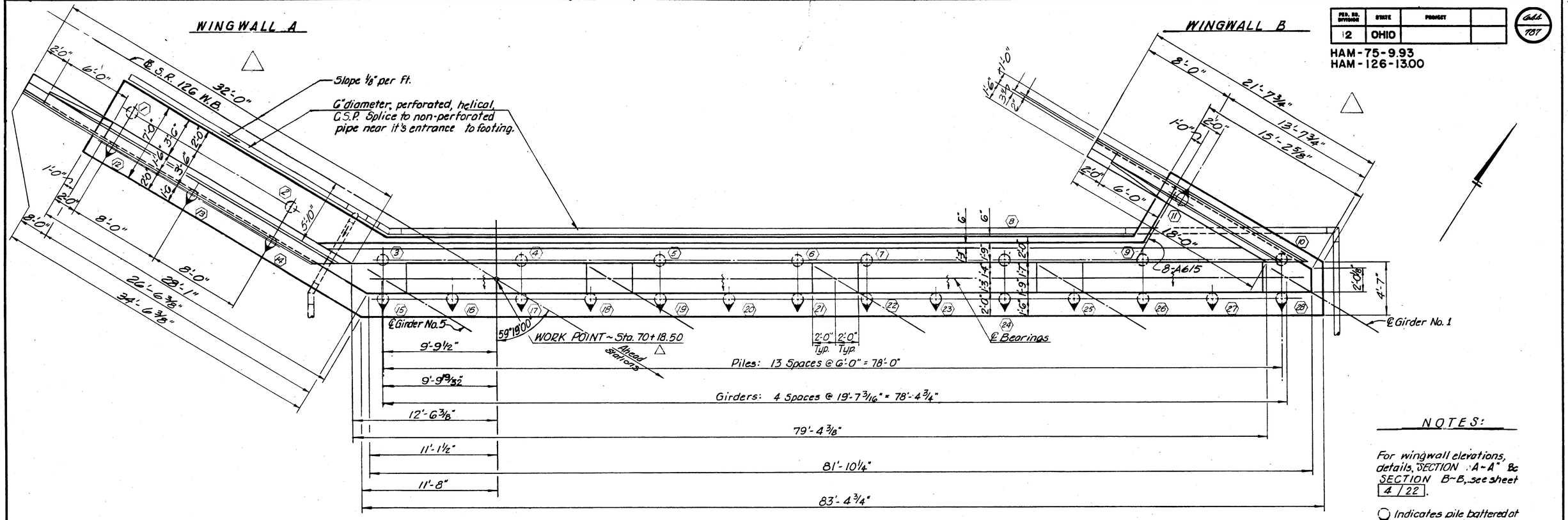
GENERAL NOTES

BRIDGE NO. HAM-126-1389
S.R. 126 W.B. OVER
I-75 N.B. AND RELOCATED MILL CREEK
HAMILTON COUNTY STA. 70+13.44-78+21.27

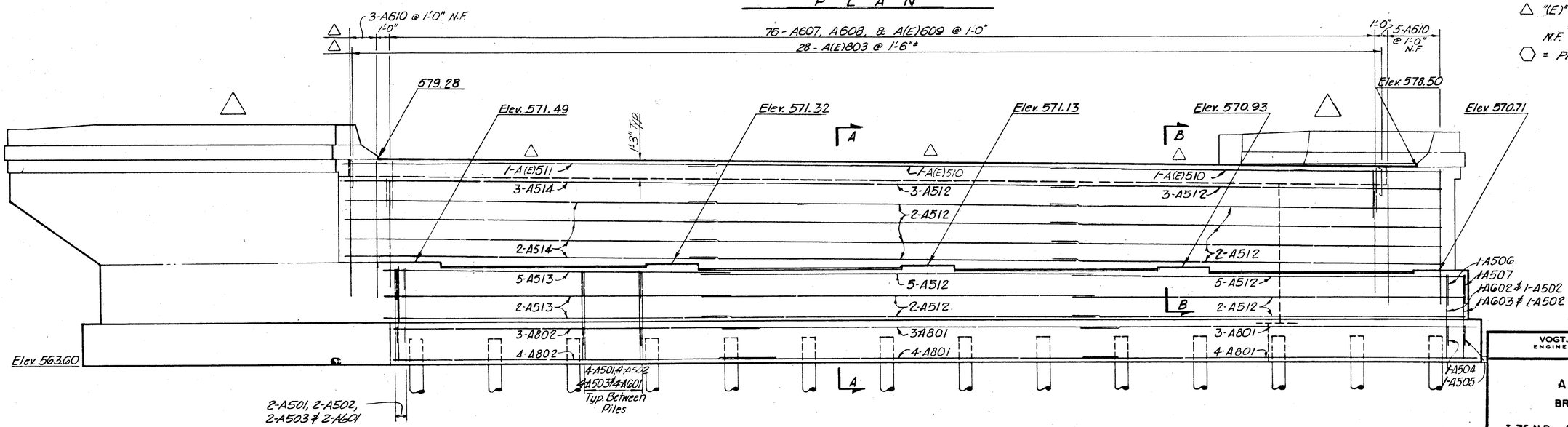
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
TMB	ALH	~	SJA	CRS 2/86	

FED. RD. DIVISION	STATE	PROJECT	
12	OHIO		

HAM-75-9.93
HAM-126-13.00



PLAN



ELEVATION

NOTES:

For wingwall elevations, details, "SECTION A-A" & SECTION B-B, see sheet 4/22.

Indicates pile battered at 1:4 in the direction of arrow.

△ "(E)" denotes epoxy coated reinforcing bar.
N.F. = Near Face
⬡ = Pile Number

3/22

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

ABUTMENT NO. 1

BRIDGE NO. HAM-126-1389
S.R. 126 W.B. OVER
I-75 N.B. AND RELOCATED MILL CREEK

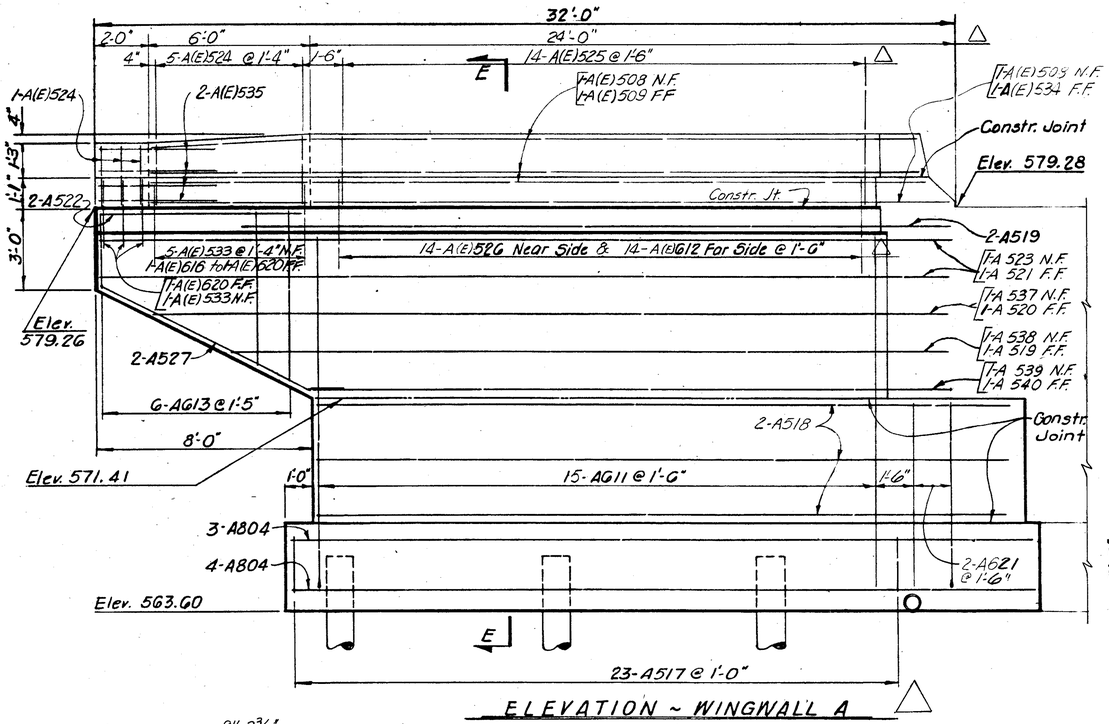
HAMILTON COUNTY

STA. 70 + 13.44 TO
STA. 78 + 21.27

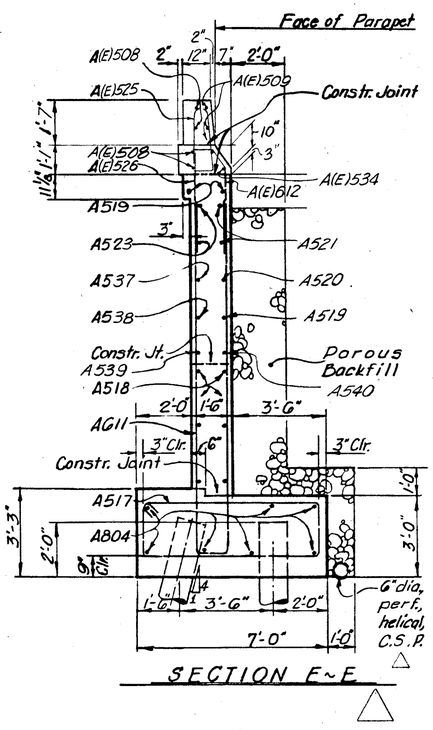
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.K.	J.R.P.	D.W.M.	S.S.C.	OK.	6-23-71	△ BALKE ENGRS. 9/85

FED. ROAD DIVISION	STATE	PROJECT	
2	OHIO		

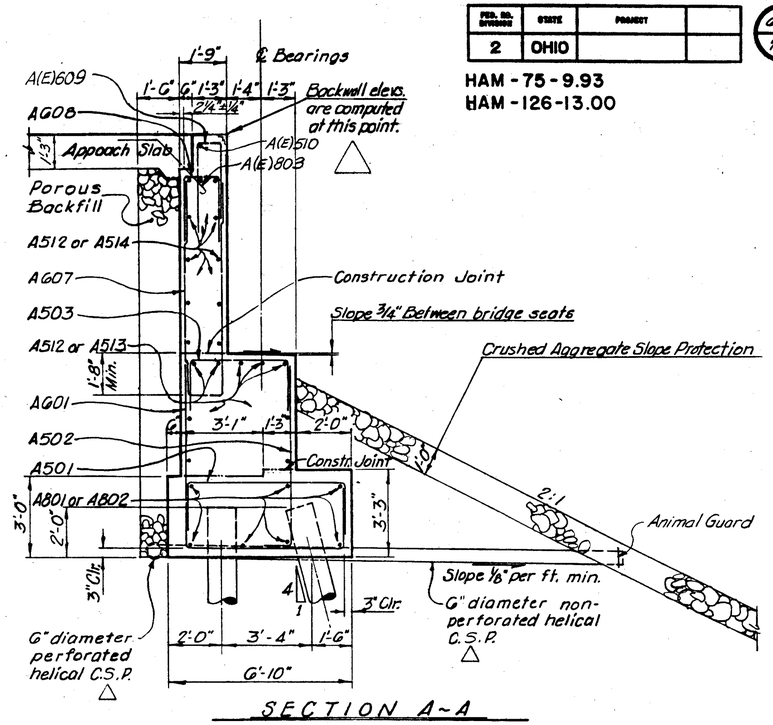
HAM - 75 - 9.93
HAM - 126 - 13.00



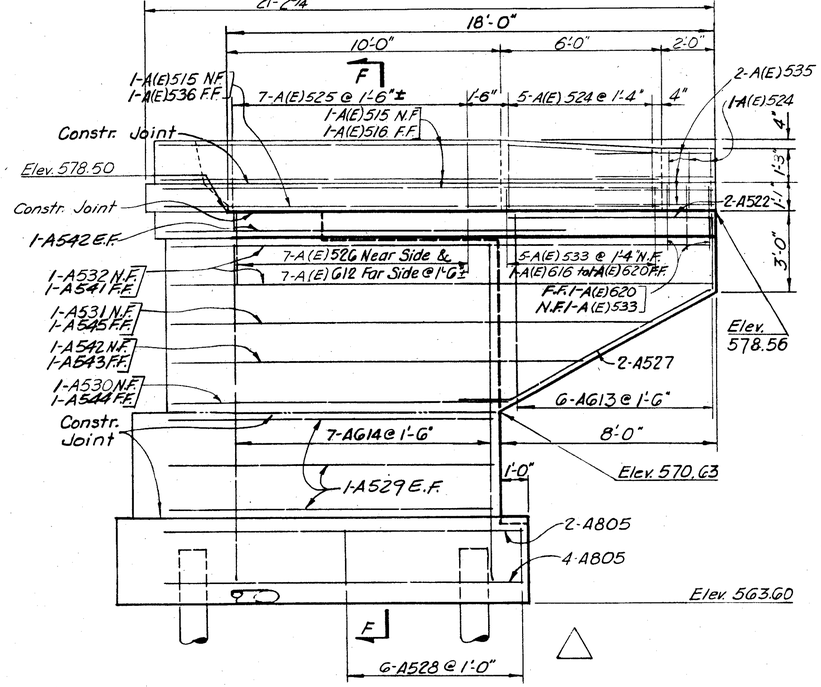
ELEVATION ~ WINGWALL A



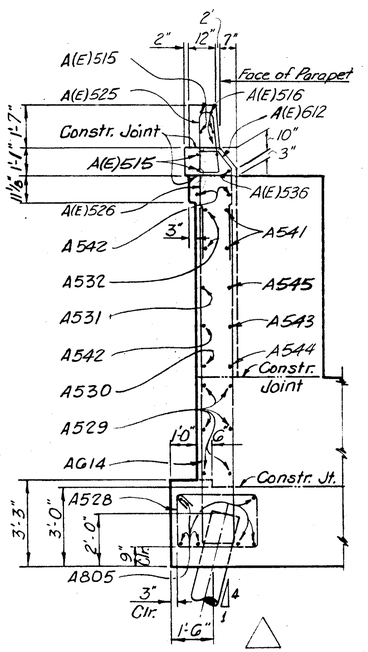
SECTION E~E



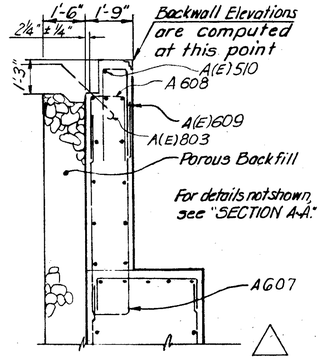
SECTION A~A



ELEVATION ~ WINGWALL B



SECTION F~F



SECTION B~B

NOTES:

FOR PLAN of wingwalls A & B, see sheet 3/22.

POROUS BACKFILL, thickness shown, shall extend up to the plane of the subgrade and laterally to the ends of the wingwalls.

BAR MARKS shown in sections A~A & B~B are for abutment no. 1; Sections A~A & B~B for abutment no. 2 are similar.

△ "(E)" denotes epoxy coated reinforcing bar.

4/22

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

ABUTMENT NO. 1 DETAILS

BRIDGE NO. HAM-126-1389
S.R. 126 W.B. OVER
I-75 N.B. AND RELOCATED MILL CREEK

HAMILTON COUNTY
STA. 70 + 13.44 TO STA. 78 + 21.27

DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE	REVISED
J.R.P.	J.R.P.	D.W.M.	S.S.C.	No.	6-23-71	△ BALKE ENGRS. 9/85

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

646
787

HAM-75-9.93
HAM-126-13.00

WINGWALL C

WINGWALL D

Wall & Footing
Piles
7'-0"
2'-0"
1'-6"
3'-6"
3'-6"
2'-0"
1'-6"
Cap or Plug
Slope 1/8" per ft. to connection to non-perforated outlet pipe.
Limits of Porous Backfill for Abutment
1" Preformed Exp. Jt. Filler
RETAINING WALL E
5'-11"
15'-2 7/8"
14'-9 1/8"
6" diameter, perforated, helical, C.S.P. Splice to non-perforated pipe near its entrances to footing.
3'-0" Footing Step
32'-0"
℄ S.R. 126 W.B. Ahead Stations
8'-0"
22'-4 5/8"
14'-4 5/8"
16'-0"
2'-0"
1'-0"
2'-0"
6'-0"
18'-0"
1'-1 5/8"
4'-7"
6"
6"
2'-0"
1'-9"
1'-7"
1'-6"
1'-9"
1'-3"
1'-4"
1'-3"
2'-0" Typ.
2'-0" Typ.
℄ Girder No. 1
℄ Bearings
WORK POINT ~ STA. 78+15.50
℄ Girder No. 5
Piles: 15 Spaces @ 5'-11" = 88'-9"
Girders: 4 Spaces @ 22'-4 3/16" = 89'-4 3/4"
90'-6 1/4"
93'-3 1/2"
94'-9 1/4"
11'-0"
11'-2 3/32"
9'-0 7/8"
13'-7 7/8"
14'-7 7/8"

PLAN

3-B611 @ 1'-0" N.F.
1'-0"
91-B608, 91-B609, 91-B(E)610 @ 1'-0"
28-B(E)807 @ 1'-6"±
1'-0"
4-B621 @ 1'-0" N.F.
1'-3" (Typ.)
Elev. 560.28
Elev. 552.60
Elev. 553.32
Elev. 554.08
Elev. 554.85
Elev. 563.32
Elev. 555.61
1-B(E)518
3-B514
2-B514
5-B514
2-B514
1-B(E)518
3-B514
2-B514
5-B517
2-B514
2-B515
3-B803
4-B802
3-B801
4-B801
4-B805
1-B(E)518
3-B514
2-B514
5-B517
2-B514
3-B803
4-B802
1-B(E)519
3-B520
2-B520
5-B516
2-B515
2-B520
3-B801
4-B801
3-B507
1-B504
1-BG02
1-B506
1-B505
1-B502
1-BG01
Elev. 545.50
Elev. 547.00
4-B501, B502, B503 & BG01 Typ. Between Piles
61-B501, B502, B503, & BG01

ELEVATION

NOTES:

For EXPANSION JOINT detail, see sheet G | 22.

For SECTIONS A~A & B~B, & additional notes, see sheet 4 | 22.

For WINGWALLS C & D elevations, see sheet G | 22.

For RETAINING WALL E, see sheets 7 | 22 & 8 | 22.

Indicates pile battered at 1:4 in the direction of arrow.

△ "(E)" denotes epoxy coated reinforcing bar. N.F. = Near face

△ ⬡ = Pile Number

5 | 22

VOGT, IVERS. & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

ABUTMENT NO. 2

BRIDGE NO. HAM-126-1389
S.R. 126 W.B. OVER
I-75 N.B. AND RELOCATED MILL CREEK

HAMILTON COUNTY

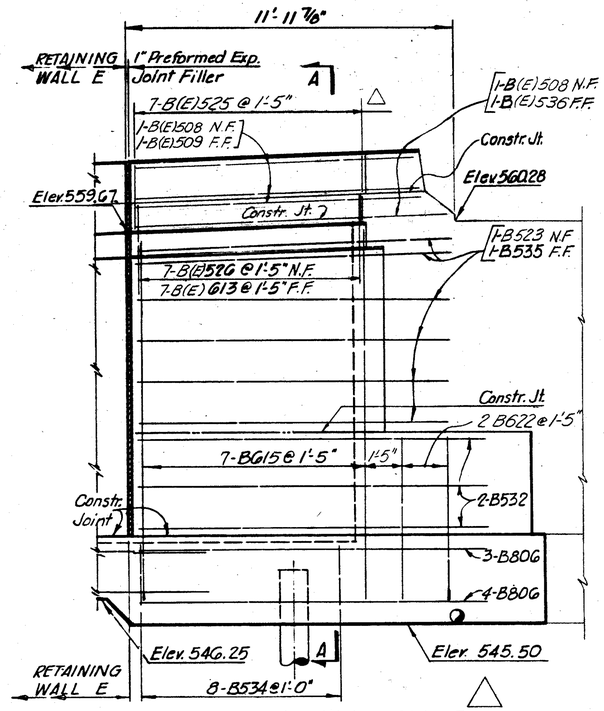
STA. 70 + 13.44 TO
STA. 78 + 21.27

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.R.P.	J.R.P.	D.W.M.	S.S.C.	[illegible]	6-23-71	△ GALLE ENGRS. 9/85

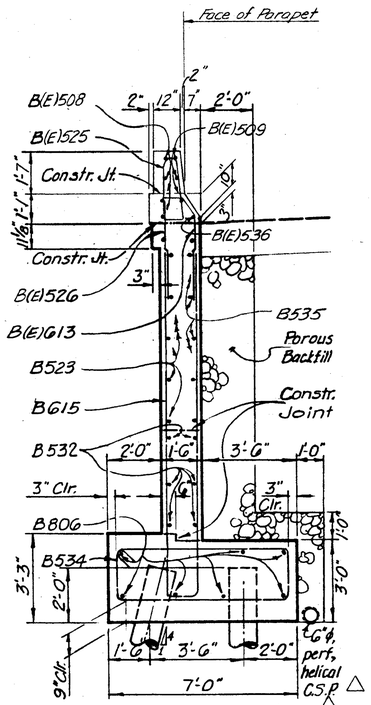
HAM-75-9.93
HAM-126-1300

FED. RD. DESIGNATION	STATE	PROJECT	
2	OHIO		

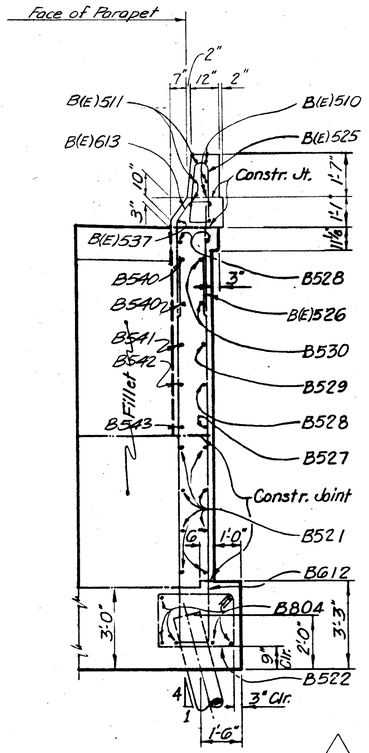
647
787



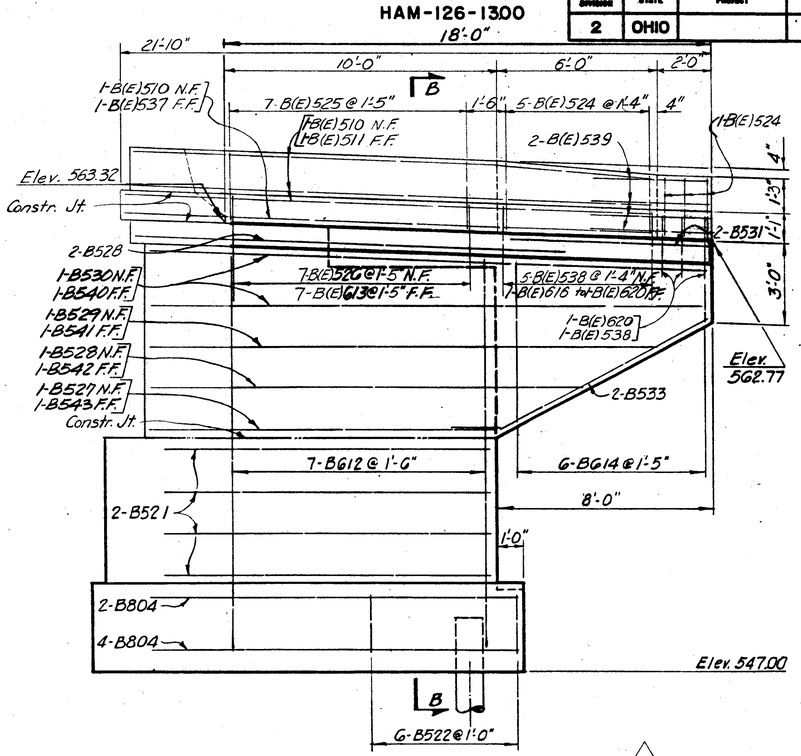
ELEVATION ~ WINGWALL C



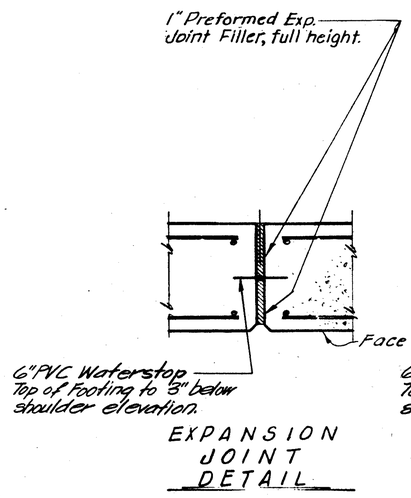
SECTION A~A



SECTION B~B

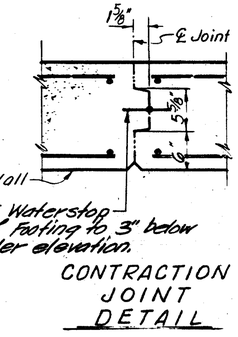


ELEVATION ~ WINGWALL D



EXPANSION JOINT DETAIL

NOTE: Delete key above construction joint at shoulder elevation.



CONTRACTION JOINT DETAIL

NOTES:

For RETAINING WALL E, see sheets 7/22 8/22.

For PLAN of wingwalls C & D, see sheet 5/22.

POROUS BACKFILL of thickness shown, shall extend up to the plane of the subgrade and laterally to the ends of the wingwalls.

△ "(E)" denotes epoxy coated reinforcing bar.

For parapet details and notes not shown, see Standard Dwg. BR-1.

6/22

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

ABUTMENT NO. 2 DETAILS

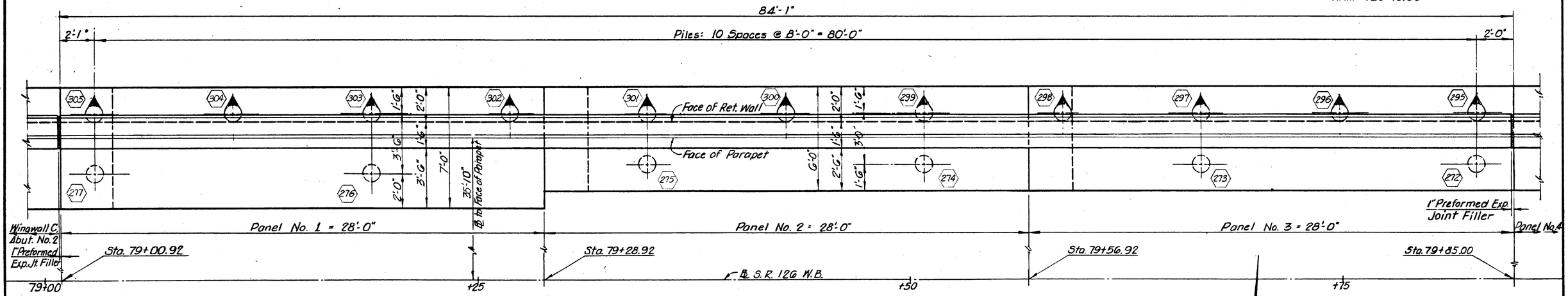
BRIDGE NO. HAM-126-1389
S.R. 126 W.B. OVER
I-75 N.B. AND RELOCATED MILL CREEK
HAMILTON COUNTY
STA. 70 + 13.44 TO STA. 78 + 21.27

DESIGNED	DRAWN	TRACED	CHECKED	DATE	REVISED BALKE ENGRS. 9/85
J.R.P.	J.R.P.	D.W.M.	S.S.C.	6-23-71	

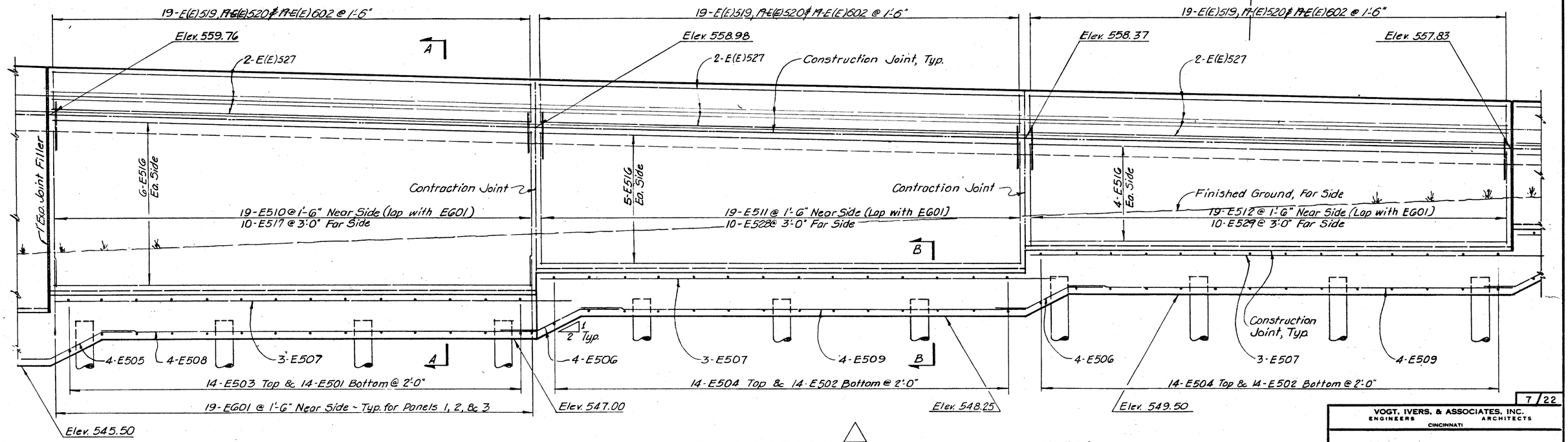
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

648
787

HAM-75-9.93
HAM-126-13.00



PLAN



ELEVATION

NOTES:
For notes, Section A-A, & Section B-B, see sheet 8/22.
△ "(E)" denotes epoxy coated reinforcing bar.
△ ⬡ = Pile Number

7/22

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

RETAINING WALL E

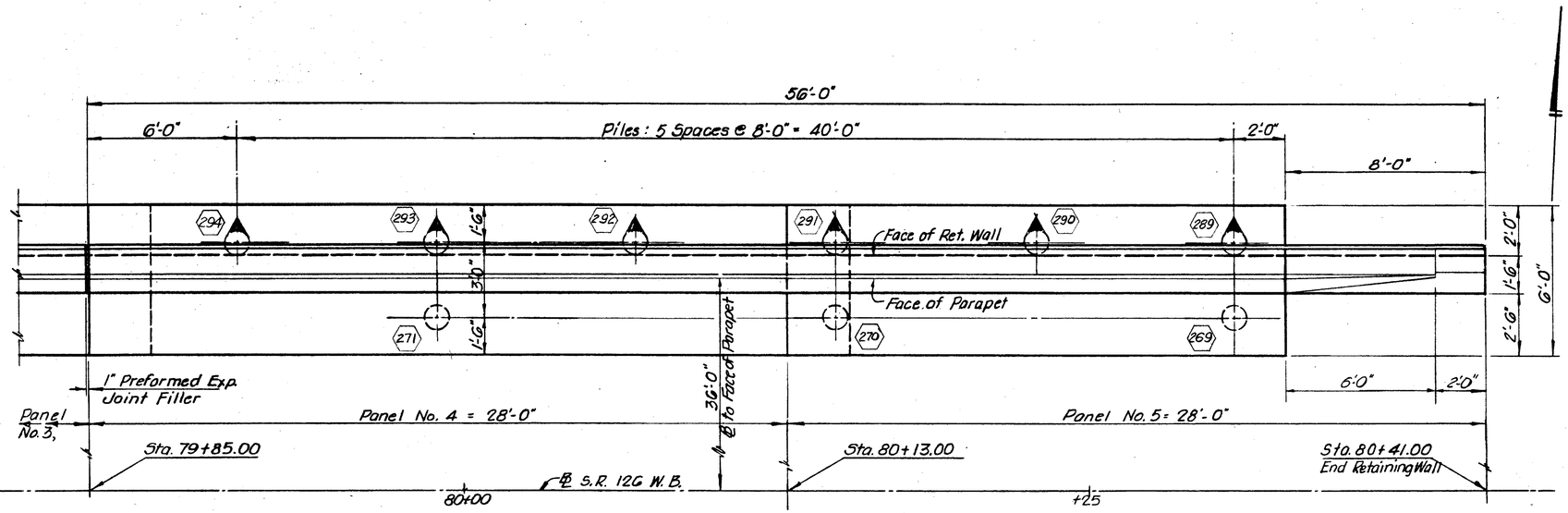
BRIDGE NO. HAM-126-1389
S.R. 126 W.B. OVER
I-75 N.B. AND RELOCATED MILL CREEK
HAMILTON COUNTY
STA. 70+13.44 TO STA. 78+21.27

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.R.P.	J.R.P.	D.W.M	V.K.		6-23-71	△ BALKE ENGRS. 9/85

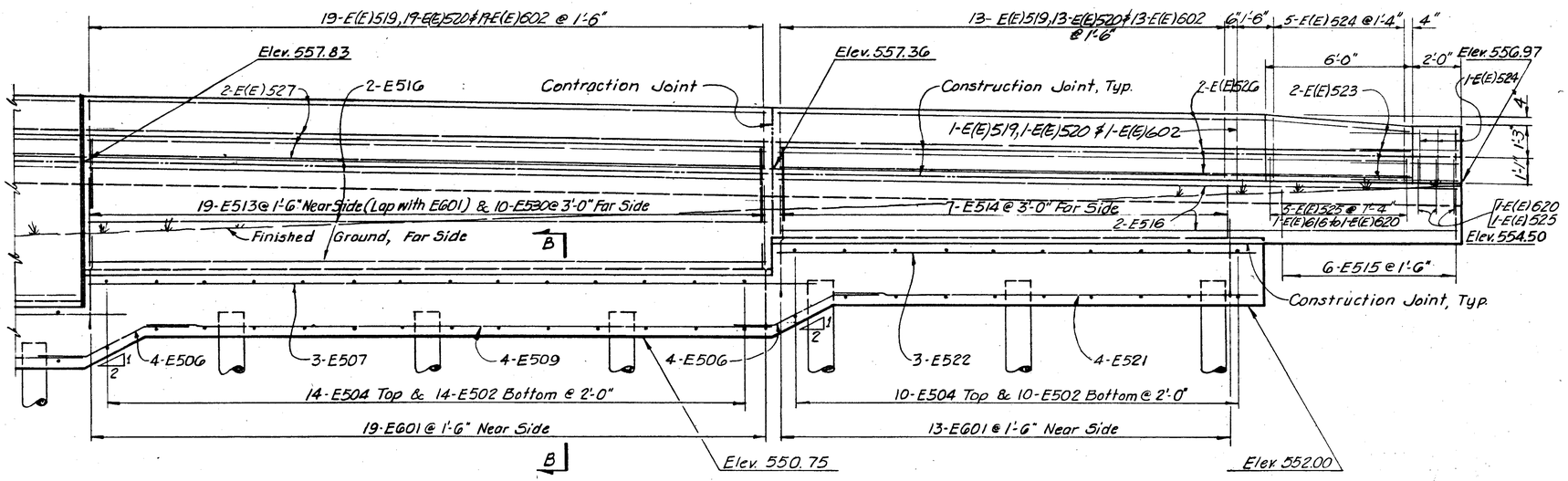
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

6A2 / 101

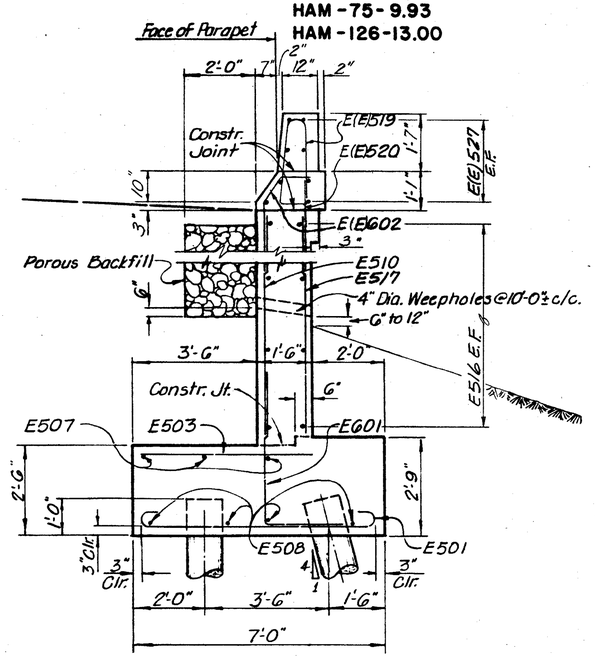
HAM-75-9.93
HAM-126-13.00



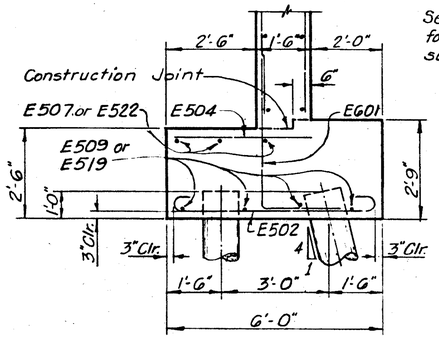
PLAN



ELEVATION



SECTION A-A PANEL 1



Section B~B above footing is similar to section A-A.

SECTION B~B: TYPICAL FOOTING for PANELS 2, 3, 4, & 5

NOTES:

- Indicates pile battered at 1:4 in the direction of arrow.
- △ ⬡ = Pile Number
- For EXPANSION & CONTRACTION joint details, see sheet 6 / 22.
- For parapet details and notes not shown see Standard Drawing BR-1 △
- POROUS BACKFILL, 2'-0" thick, shall extend up to the plane of the subgrade for the full length of the wall.
- △ "(E)" denotes epoxy coated reinforcing bar

8 / 22

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

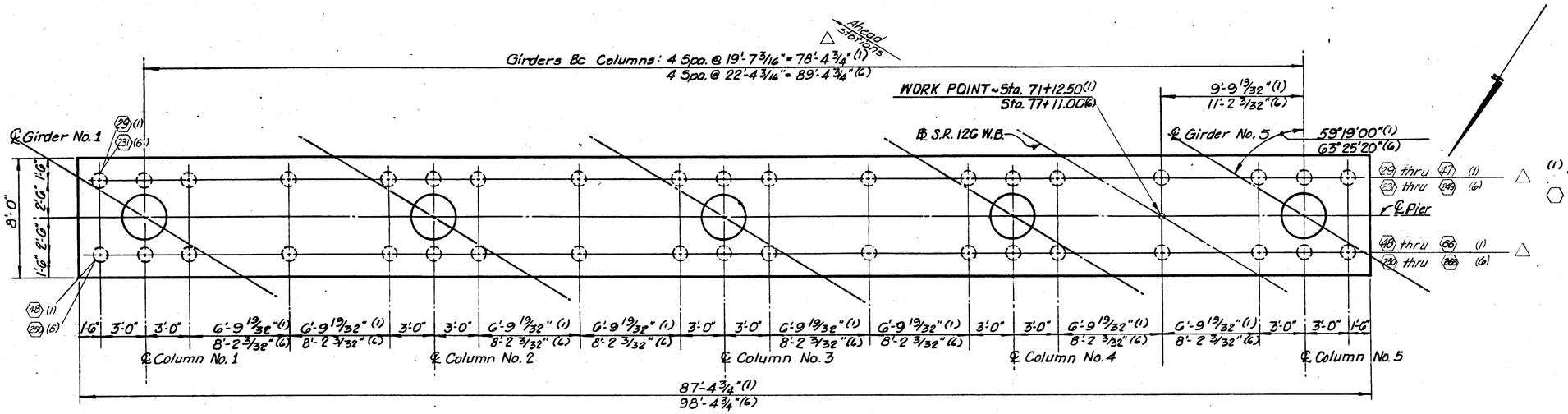
RETAINING WALL E
BRIDGE NO. HAM-126-1389
S.R. 126 W.B. OVER
I-75 N.B. AND RELOCATED MILL CREEK
HAMILTON COUNTY
STA. 70 + 13.44 TO STA. 78 + 21.27

DESIGNED	DRAWN	TRACED	CHECKED	REVISIONS	DATE	BURKE ENGRS. 7/85
J.R.P.	J.R.P.	D-W-M	V.K.		6-23-71	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

650
787

HAM-75-9.93
HAM-126-13.00

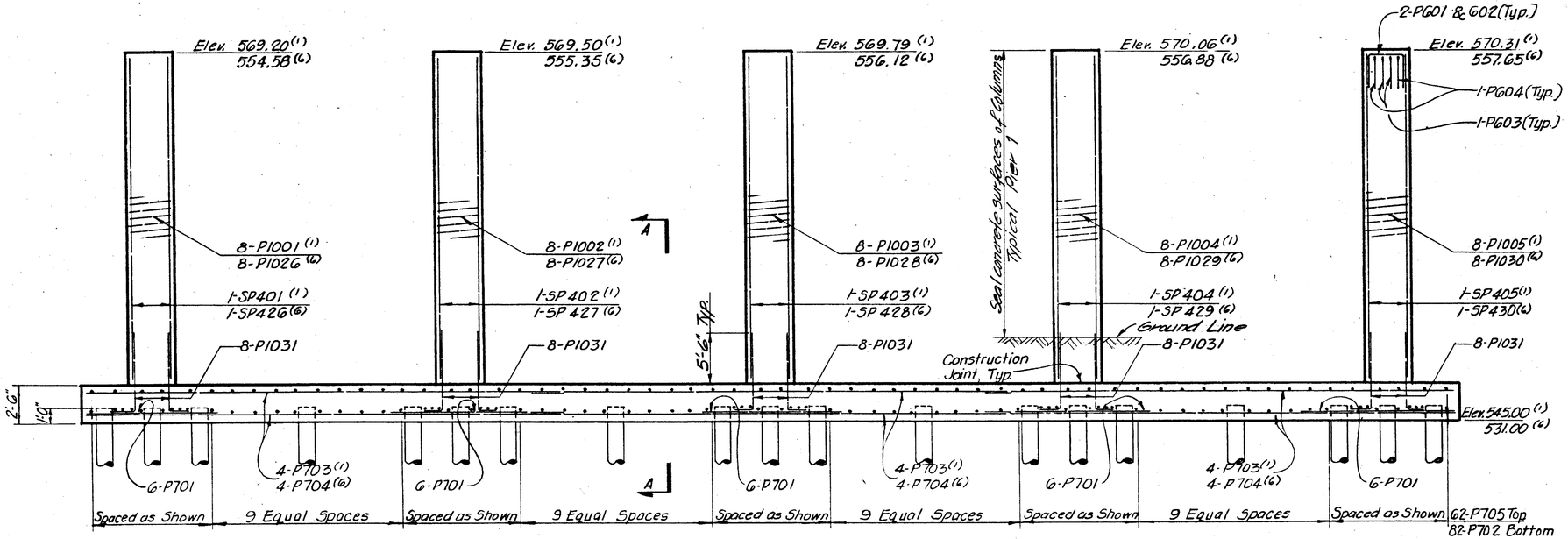


PLAN

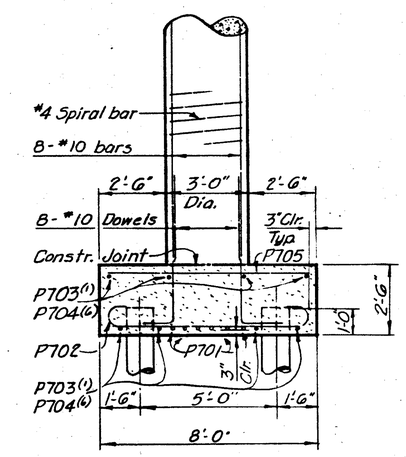
NOTE:

(1) and (6) indicates the pier no.

○ = Pile Number



ELEVATION



SECTION A-A

9/22

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

PIERS NO. 1 & 6
BRIDGE NO. HAM-126-1389
S.R. 126 W.B. OVER
I-75 N.B. AND RELOCATED MILL CREEK

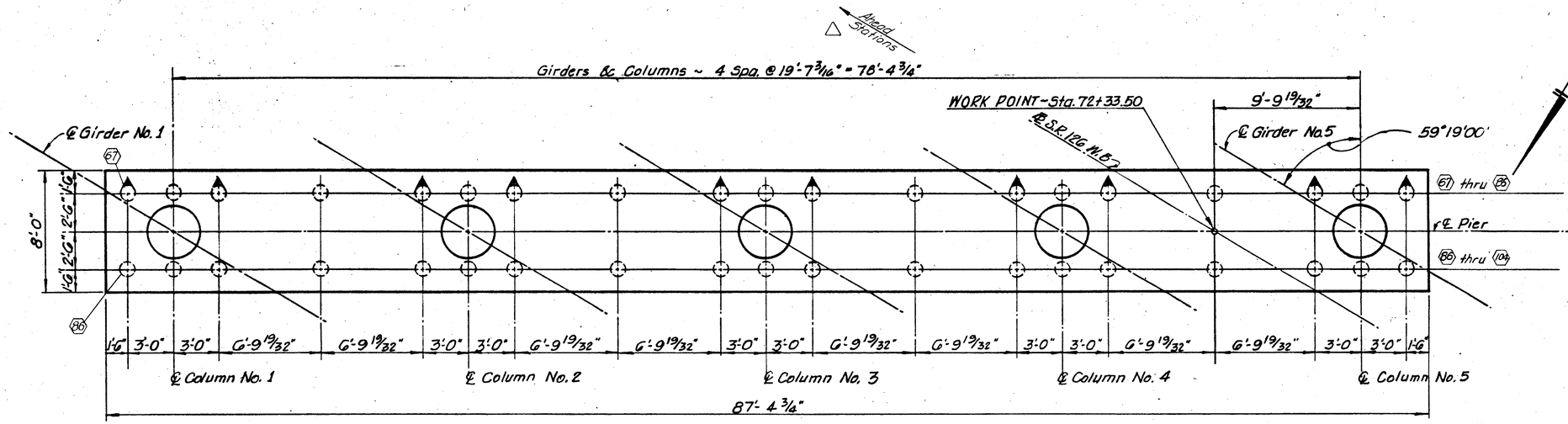
HAMILTON COUNTY
STA. 70 + 13.44 TO STA. 78 + 21.27

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
S.S.C.	S.S.C.	D.W.M.	J.R.P.	[illegible]	6-23-71	BALKE ENGRS. 9/85

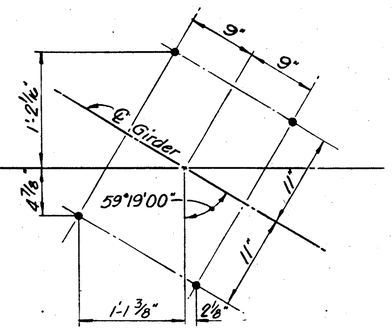
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

631
787

HAM-75-9.93
HAM-126-13.00



PLAN

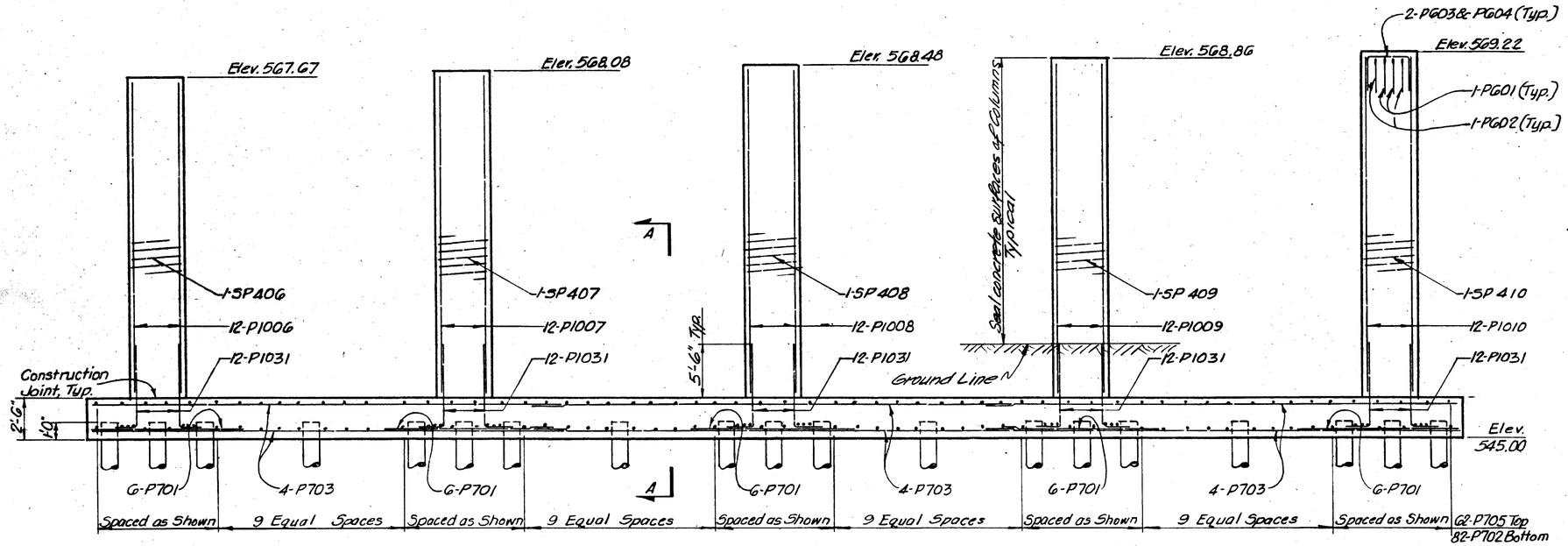


ANCHOR BOLT LAYOUT

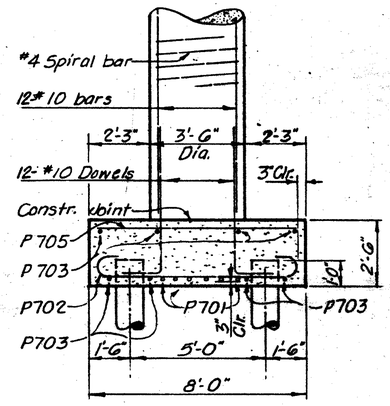
BRIDGE SEAT REINFORCING: Special care shall be taken in placing the reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor bolt holes.

Indicates pile battered at 1:4 in the direction of the arrow.

⬡ = Pile Number



ELEVATION



SECTION A-A

10/22

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

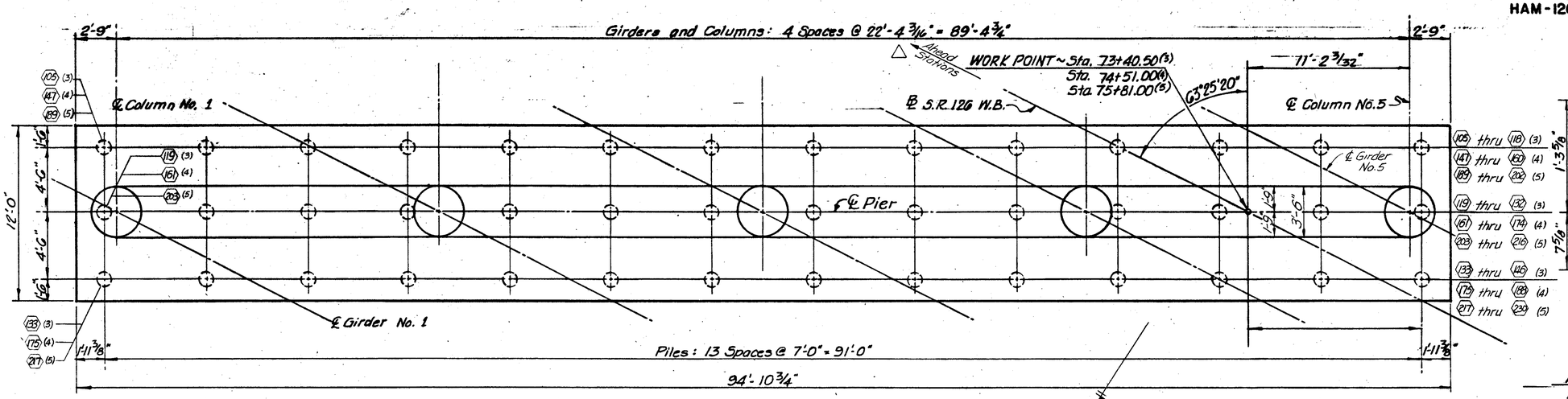
PIER NO. 2
BRIDGE NO. HAM-126-1389
S.R. 126 W.B. OVER
I-75 N.B. AND RELOCATED MILL CREEK
HAMILTON COUNTY
STA. 70 + 13.44 TO STA. 78 + 21.27

DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE	BRIDGE ENGRS. FILE
SSC	D.W.M.	D.W.M.	J.R.P.	0	6-23-71	

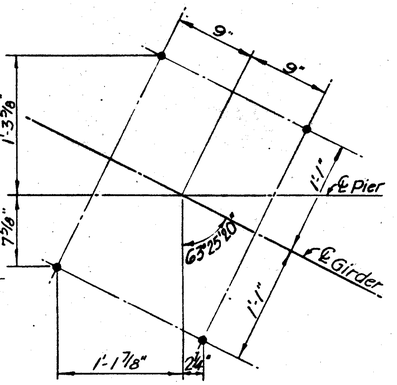
HAM-75-9.93
HAM-126-13.00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

632
787



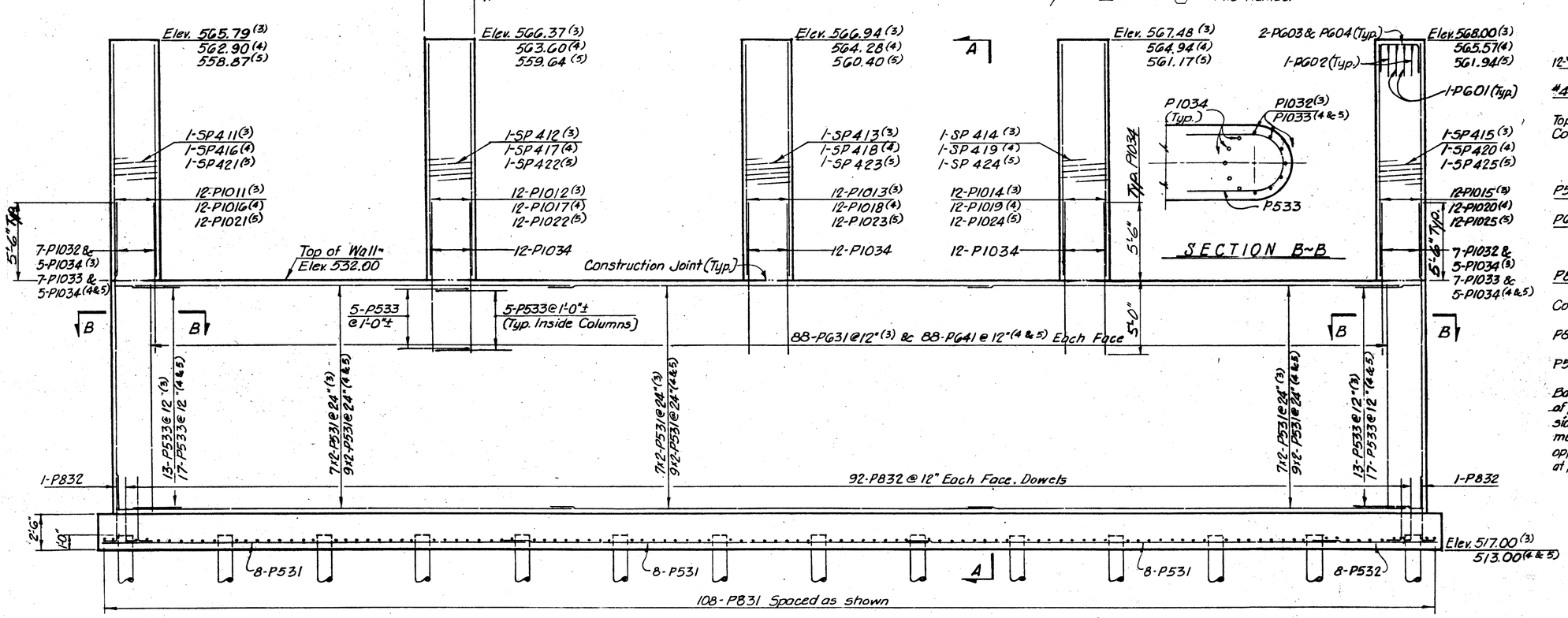
PLAN



ANCHOR BOLT LAYOUT ~ PIERS NO. 4 & 5

BRIDGE SEAT REINFORCING: Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor bolt holes.

NOTE: (3), (4), and (5) indicates the pier number.
△ ⬡ = Pile Number



ELEVATION

SECTION A~A

11/22

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

PIERS NO. 3, 4, & 5

BRIDGE NO. HAM-126-1389
S.R. 126 W.B. OVER
I-75 N.B. AND RELOCATED MILL CREEK

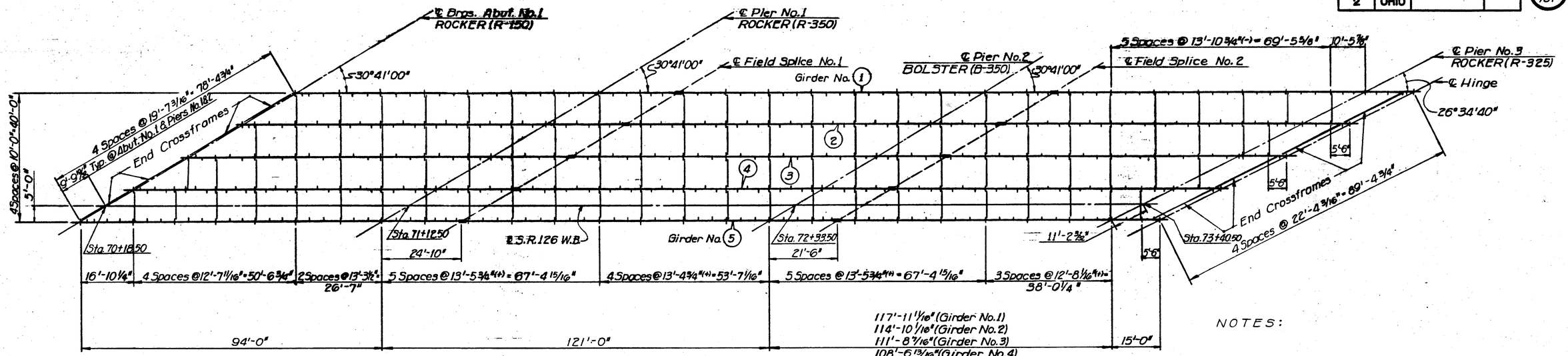
HAMILTON COUNTY
STA. 70 + 13.44 TO STA. 78 + 21.27

DESIGNED	DRAWN	TRACED	CHECKED	RECEIVED DATE	REVISIONS
S.S.C.	S.S.C.	D.W.M.	J.R.P.	6-23-71	DALE ENGR. 9/25

HAM-75-9.93
HAM-126-13.00

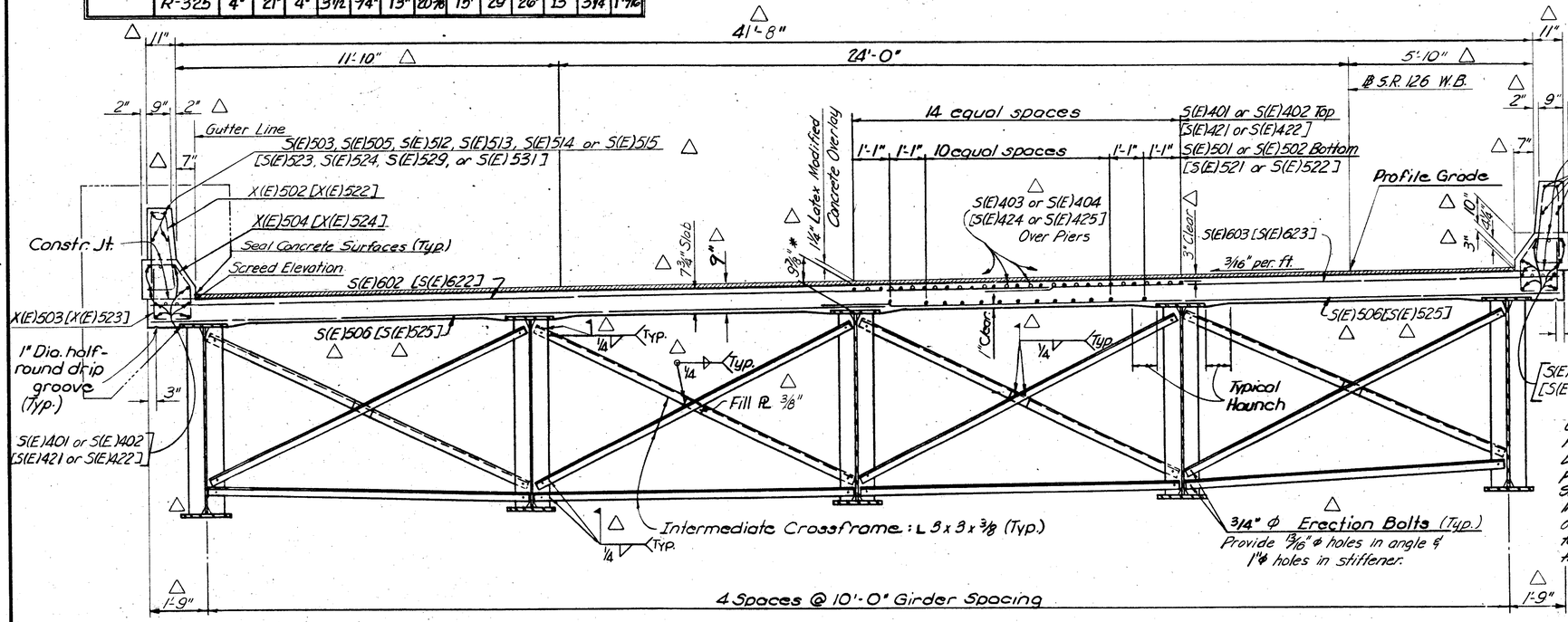
FED. ROAD DIVISION	STATE	PROJECT	
2	OHIO		

633
787



BOLSTER	ROCKERS	ROCKER & BOLSTER DIMENSIONS												
		A	B	C	D	F	G	H	K	L	M	R	T	V
	R-150	3"	12"	3"	2 1/4"	1/2"	8 1/2"	13 3/16"	11 1/2"	22"	19"	8 1/2"	1 3/4"	1 7/16"
	R-350	4"	19"	4"	3 1/2"	3/4"	14"	23 1/16"	15"	25"	24 1/4"	15 1/2"	3 1/2"	1 15/16"
B-350		4"	22"	4"	3 1/2"	3/4"		23 1/16"	15"	26"		15 1/2"	3 1/2"	1 15/16"
	R-325	4"	21"	4"	3 1/2"	3/4"	13"	20 3/16"	15"	29"	26"	13"	3 1/4"	1 15/16"

FRAMING PLAN ~ SECTION I △



TRANSVERSE SECTION ~ TYPICAL

NOTES:

*This is the design dimension. The quantity of deck concrete to be paid for shall be based upon this dimension, even though deviation from it may be necessary because the top flange of the girder may not have the exact camber or conformation required to place it parallel to the finished grade. Deduction shall be made for volume of encased steel plates as per 511.18.

A HAUNCH WIDTH of 9" shall be used for computing quantity of concrete. However, the haunch width may vary between 6" and 12" (provided that the slope shall be not more than 1:4 for a haunch less than 9" width.) △

△ Bar Marks shown with a [ ] are for SECTION NO.2.

For notes and details of Rockers and Bolsters, See Standard Drawing RB-1-55.

△ For additional notes and details of Parapet, See Standard Drawing BR-1.

△ "(E)" denotes epoxy-coated reinforcing bar.

△ WELDED ATTACHMENT of supports for concrete deck finishing machine may be made to areas of the fascia stringer flanges designated "Compression". Attachments shall not be made to areas designated "Tension". Fillet welds to compression flanges shall be not closer than 1" from edge of flange, be not more than 2" long, and be not smaller than the minimum size required by AASHTO.

Erection Bolts: Hole diameter in the crossframes and girder stiffeners shall be respectively 1/16" and 1/8" larger than the diameter of the erection bolts. Unless replaced by permanent high strength bolts, erection bolts shall remain in place. Lock washers shall be furnished for other than fully torqued high strength erection bolts. Bolts shall be furnished as part of 513.

In lieu of erection bolts and at the option of the contractor, alternative means of temporary bracing may be used subject to the approval of the Director (501.06).

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VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS · ARCHITECTS
CINCINNATI

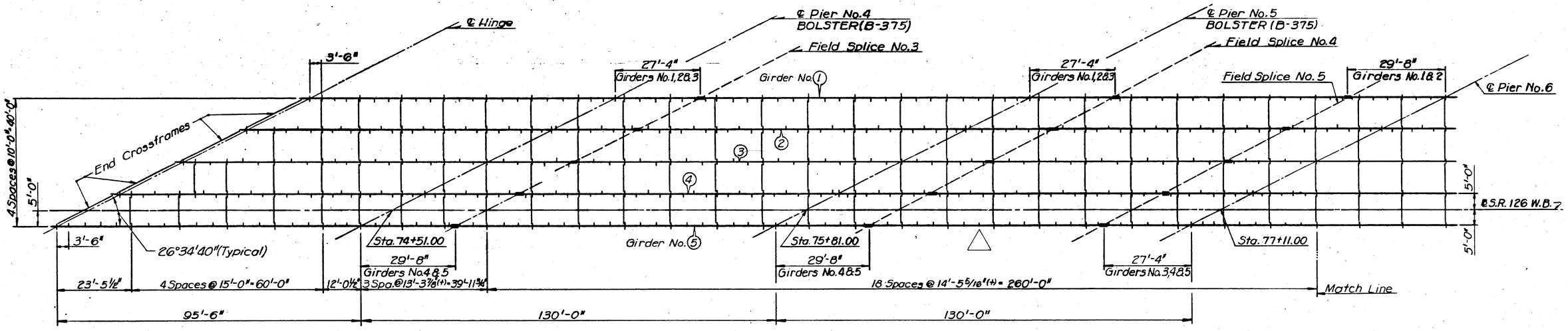
SUPERSTRUCTURE DETAILS

BRIDGE NO. HAM-126-1389
S.R. 126 W.B. OVER
I-75 N.B. AND RELOCATED MILL CREEK
HAMILTON COUNTY
STA. 70+13.44 TO STA. 78+21.27

DESIGNED	DRAWN	TRACED	CHECKED	SUPERVISOR	DATE	REVISED
V.K.	V.K.	L.B.F.	S.S.C.	S.N.	6-23-71	△ BALKE ENGRS. 9/85

FED. NO. DIVISION	STATE	PROJECT	
2	OHIO		

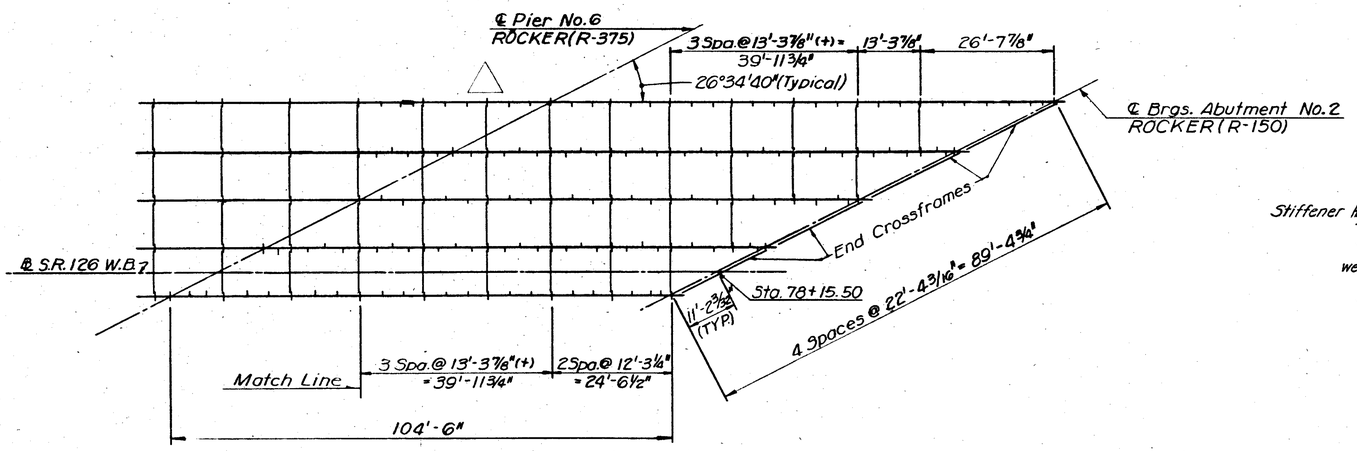
HAM-75-9.93
HAM-126-13.00

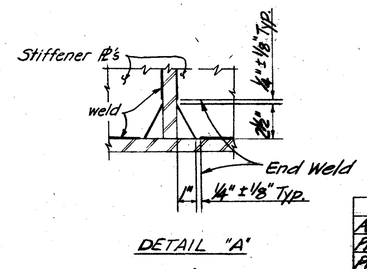


BOLSTER	ROCKER	ROCKER & BOLSTER DIMENSIONS												
		A	B	C	D	F	G	H	K	L	M	R	T	Y
B-375		4'	22"	4½"		⅞"		22⅜	16'	30"		14"	3¾"	1 15/16"
	R-375	4'	19"	4½"	3¾"	⅞"	14"	26⅛	16'	25"	24¼	17¾	3¾"	1 15/16"

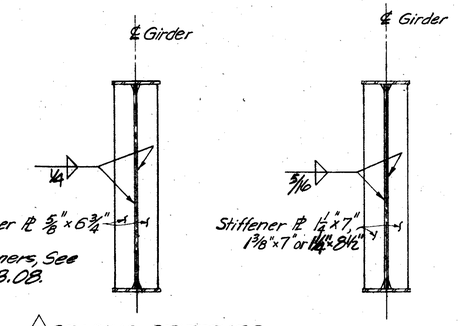
FRAMING PLAN - SECTION NO.2

NOTE
For details and notes of ROCKERS & BOLSTERS, See Standard drawing RB-1-55
For End Crossframe Details, See Section B-B on Sheet 18 22.





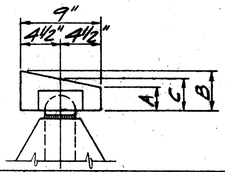
DETAIL "A"



△ BEARING STIFFENER ABUTMENTS

△ BEARING STIFFENER PIER

INTERMEDIATE STIFFENER △



	TYPE	B	C	A
Abut. 1	R-150	3 9/32"	3"	2⅛"
Pier 1	R-350	4 9/32"	4"	3⅛"
Pier 2	R-350	4 9/32"	4"	3⅛"
Pier 3	R-325	4 9/32"	4"	3⅛"
Pier 4	B-375	4 21/32"	4½"	4⅜"
Pier 5	B-375	4 21/32"	4½"	4⅜"
Pier 6	R-375	4 21/32"	4½"	4⅜"
Abut. 2	R-150	3 9/32"	3"	2⅛"

BEVELED ROCKER OR BOLSTER
For additional details see Std. Dwg. RB-1-55

△ Note: Intermediate Stiffeners are used each side of Web Pl only where required for attaching Intermediate Crossframe. See Detail A this sheet, and Transverse Section, Sheet 12 22. Weld to both tension and compression flanges when stiffener is used to attach intermediate crossframe.

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VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

SUPERSTRUCTURE DETAILS

BRIDGE NO. HAM-126-1389
S.R. 126 W.B. OVER
I-75 N.B. AND RELOCATED MILL CREEK

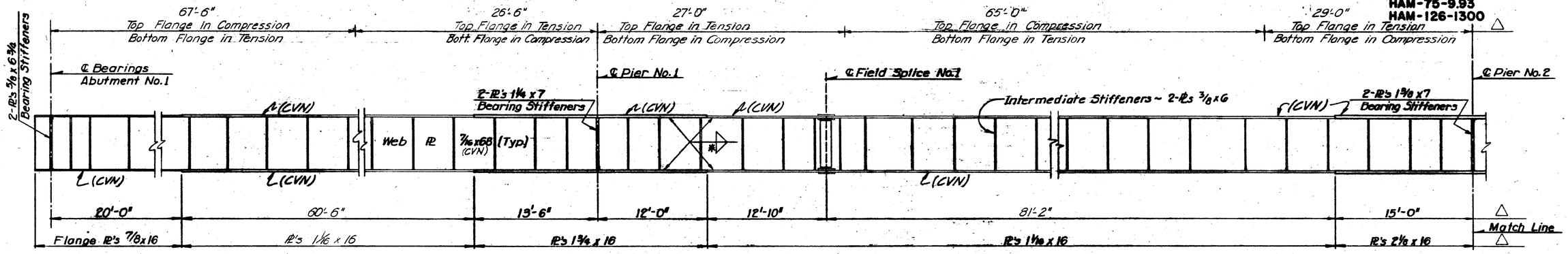
HAMILTON COUNTY
STA. 78 + 13.44 TO STA. 78 + 21.27

DESIGNED	DRAWN	TRACED	CHECKED	REVISIONED	DATE
V.K.	V.K.	T.D.S.	S.S.C.	J.V.	6-23-71

△ BALKE ENGRS. 9/82

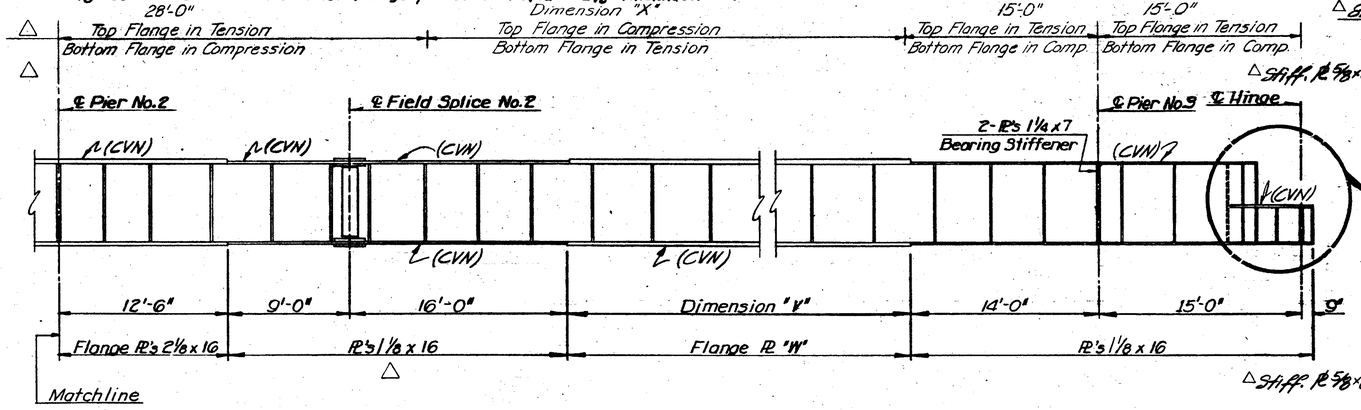
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

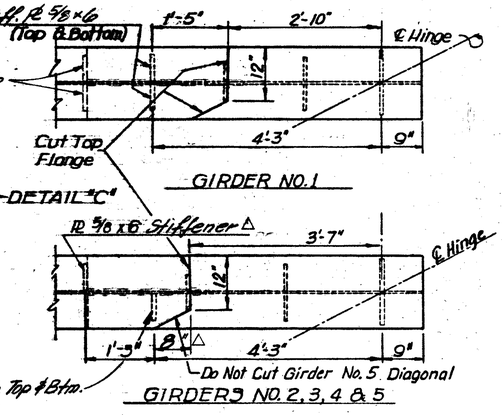
HAM-75-9.93
HAM-126-1300

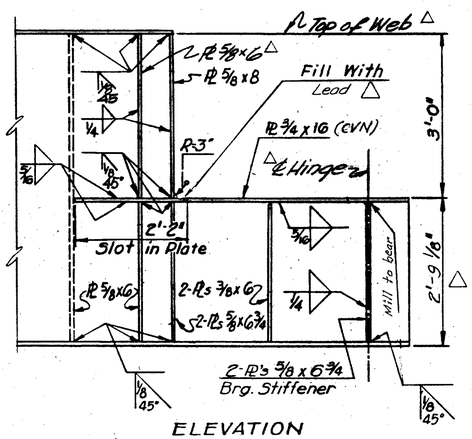


* 5/16" Continuous fillet welds for flange plates of 7/8" thru 1 7/16" thickness.
3/8" Continuous fillet welds for flange plates of 1 3/4" and 2 1/8" thickness.

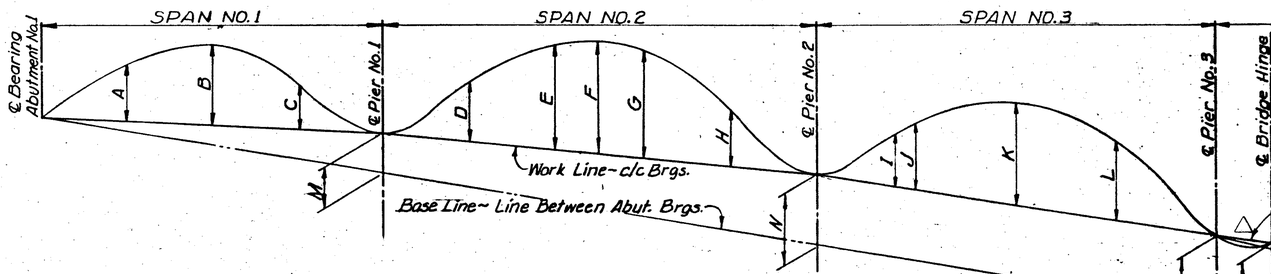
TYPICAL GIRDER ELEVATION ~ SECTION NO.1
(GIRDER NO.3 SHOWN)







△Stiffeners shall be clipped as shown in Detail "A" on Sheet 13/22 to avoid intersection of welds.



DEFLECTION & CAMBER DIAGRAM

DETAIL "C"

NOTES:

1. For intermediate stiffener spacing, see sheet 12/22.
2. For additional girder details, see sheet 16/22.
△3. Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements as specified in 711.01 of C.M.S.

DEFLECTION & CAMBER

	SPAN NO.1			SPAN NO.2					SPAN NO.3			
	1/4 PT.	1/2 PT.	3/4 PT.	SPLICE NO.1 & 1/10 PT.	1/2 PT.	4/10 PT.	6/10 PT.	8/10 PT.	SPLICE NO.2	1/4 PT.	1/2 PT.	3/4 PT.
	A	B	C	D	E	F	G	H	I	J	K	L
△ DEFLECTION DUE TO WEIGHT OF STEEL	3/32"	3/32"	1/16"	1/16"	1/8"	1/8"	1/32"	3/32"	1/16"	3/32"	5/32"	1/8"
△ DEFLECTION DUE TO REMAINING DEAD LOAD	17/32"	19/32"	1/4"	5/16"	11/16"	3/4"	11/16"	9/32"	3/16"	5/16"	11/16"	1/2"
△ ADJUSTMENT REQUIRED FOR VERTICAL CURVE	17/32"	23/32"	17/32"	3/4"	1 1/16"	1 3/16"	1 1/8"	3/4"	5/8"	3/4"	1"	3/4"
△ REQUIRED SHOP CAMBER	1 5/32"	1 13/32"	27/32"	1 1/8"	1 15/16"	2 1/16"	1 15/16"	1 1/16"	7/8"	1 5/32"	1 27/32"	1 5/8"

DIMENSIONS

Girders	M	N	P	Q △
No.1	1'-5 13/16"	2'-8 7/16"	3'-1 1/16"	3'-1 7/16"
No.2	1'-6 1/4"	2'-9 3/8"	3'-3 1/8"	3'-3 1/16"
No.3	1'-6 9/16"	2'-10 1/8"	3'-4 3/16"	3'-4 1/4"
No.4	1'-6 7/8"	2'-10 3/16"	3'-5 1/8"	3'-5 1/4"
No.5	1'-7 1/8"	2'-11 3/8"	3'-5 5/16"	3'-6 1/8"

GIRDER	DIMENSION X	DIMENSION Y	FLANGE PL's W	
No.1	74'-11 5/16"	66'-5 1/16"	PL's 1 1/16 x 16	△
No.2	71'-10 1/16"	63'-4 1/16"	PL's 1 1/16 x 16	△
No.3	68'-8 7/16"	60'-2 7/16"	PL's 1 3/8 x 16	△
No.4	65'-6 13/16"	57'-0 13/16"	PL's 1 5/16 x 16	△
No.5	62'-5 3/16"	53'-11 3/16"	PL's 1 3/16 x 16	△

14/22

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

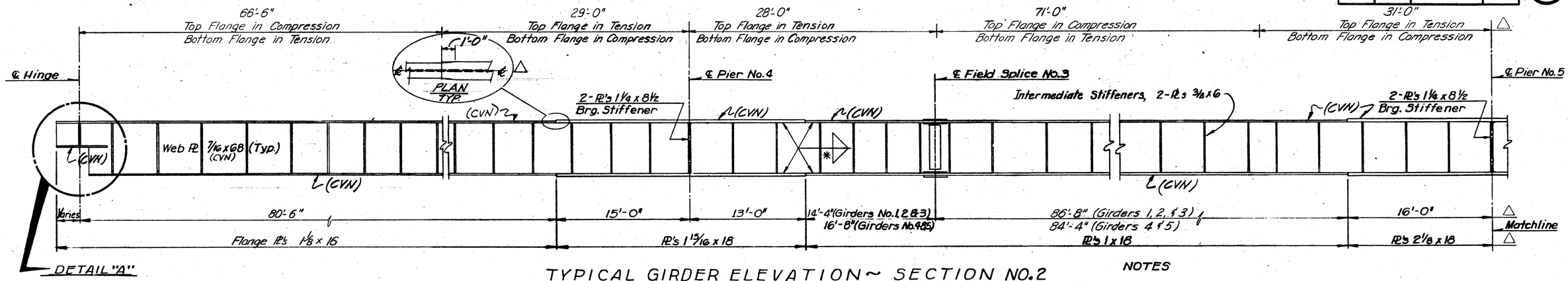
SUPERSTRUCTURE DETAILS
BRIDGE NO. HAM-126-1389
S.R. 126 W.B. OVER
I-75 N.B. AND RELOCATED MILL CREEK
HAMILTON COUNTY
STA. 70 + 13.44 TO STA. 78 + 21.27

DESIGNED	DRAWN	TRACED	CHECKED	DATE	REVISED
V.K.	V.K.	T.D.S.	S.S.C.	6-23-71	△ BALKE ENGRS 7/85

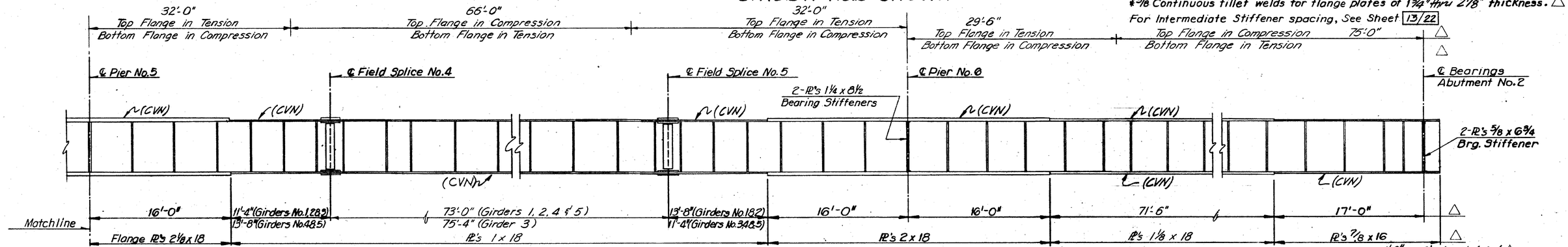
HAM-75-9.93
HAM-126-1300

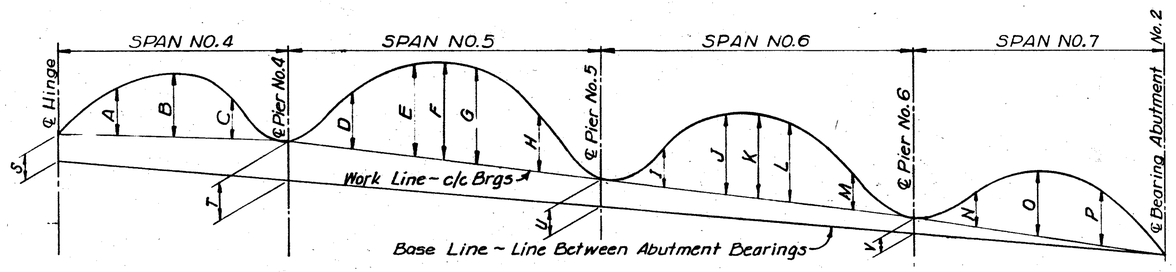
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

636 / 707

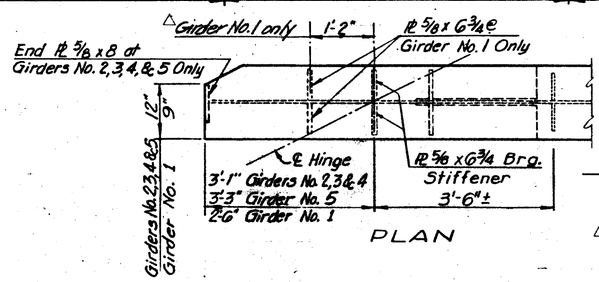


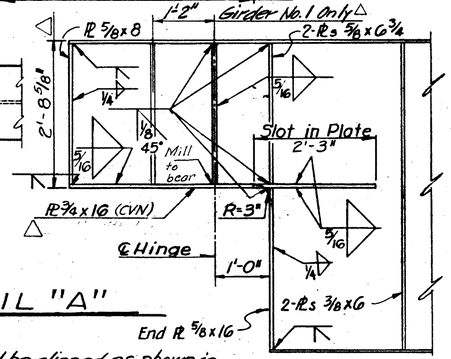
TYPICAL GIRDER ELEVATION ~ SECTION NO.2
GIRDER NO.3 SHOWN





DEFLECTION & CAMBER DIAGRAM





DETAIL "A"

△ Stiffeners shall be clipped as shown in Detail "A" on Sheet 13/22 to avoid intersection of welds.

NOTES

*5/16 Continuous fillet welds for flange plates of ⅞" thru 1 15/16" thickness. △
*⅜ Continuous fillet welds for flange plates of 1¾" thru 2⅛" thickness. △
For Intermediate Stiffener spacing, See Sheet 13/22

STEEL NOTCH TOUGHNESS REQUIREMENT (Charpy V-Notch)
△ Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements as specified in 711.01 of CMS.

DEFLECTION & CAMBER

	HINGE	SPAN NO.4 (Right of Hinge)			SPAN NO.5 ~ GIRDERS NO.1&2					SPAN NO.5 ~ GIRDERS NO.3,4 & 5					SPAN NO.6					SPAN NO.7 GIRDERS NO.2,3,4&5			SPAN NO.7 GIRDER NO.1		
		¼ PT.	½ PT.	¾ PT.	SPLICE NO.3	4/10 PT.	½ PT.	6/10 PT.	8/10 PT.	SPLICE NO.3	4/10 PT.	½ PT.	6/10 PT.	8/10 PT.	SPLICE NO.4	4/10 PT.	½ PT.	6/10 PT.	SPLICE NO.5	¼ PT.	½ PT.	¾ PT.	¼ PT.	½ PT.	¾ PT.
		A	B	C	D	E	F	G	H	D	E	F	G	H	I	J	K	L	M	N	O	P	N	O	P
Deflection due to Weight of Steel	-1/32"	1/16"	3/32"	1/32"	3/32"	3/16"	3/16"	3/16"	1/16"	3/32"	3/16"	3/16"	3/16"	1/16"	1/16"	1/8"	5/32"	1/8"	1/16"	1/16"	5/32"	5/32"	1/16"	5/32"	5/32"
Deflection due Remaining Dead Load	-1/8"	3/8"	7/16"	5/32"	15/32"	15/16"	1"	29/32"	3/8"	15/32"	15/16"	1"	29/32"	3/8"	9/32"	23/32"	13/16"	3/4"	9/32"	11/32"	13/16"	23/32"	11/32"	13/16"	23/32"
Adjustment Required for Vertical Curve	5/32"	21/32"	13/16"	19/32"	1/2"	29/32"	21/32"	17/32"	1/4"	29/32"	1 5/16"	1 11/32"	1 3/16"	7/8"	0	0	0	0	0	0	0	0	-3/16"	-1 11/32"	-17/32"
Required Shop Camber	0"	1 3/32"	1 11/32"	25/32"	1 1/16"	1 27/32"	1 21/32"	1 5/8"	1 1/16"	1 15/32"	2 7/16"	2 17/32"	2 13/32"	1 5/16"	11/32"	27/32"	31/32"	7/8"	11/32"	13/32"	31/32"	7/8"	7/32"	5/8"	11/32"

△

DIMENSIONS				
	S	T	U	V
Girders				
No.1	3'-1 3/16"	2'-10 7/16"	1'-10½"	0'-9 5/8"
No.2	3'-3 1/16"	3'-0 9/16"	2'-0 5/8"	0'-10 3/8"
No.3	3'-4 1/4"	3'-2 1/4"	2'-2 3/8"	0'-11 13/16"
No.4	3'-5 1/4"	3'-3 3/4"	2'-4 1/4"	1'-0 5/8"
No.5	3'-6 1/8"	3'-5 1/8"	2'-6 1/8"	1'-1 7/16"

△

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

SUPERSTRUCTURE DETAILS

BRIDGE NO. HAM-126-1389
S.R.126 W.B. OVER
I-75 N.B. AND RELOCATED MILL CREEK

HAMILTON COUNTY
STA. 70 + 13.44 TO STA. 78 + 21.27

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
V.K.	V.K.	T.D.S.	S.S.C.	D.V.	6-23-71

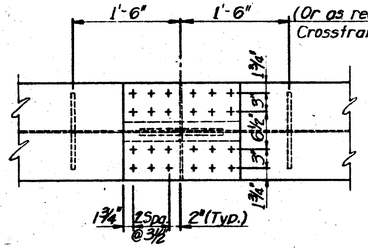
△ REVISED BALKE ENGRS. 9/85

15 / 22

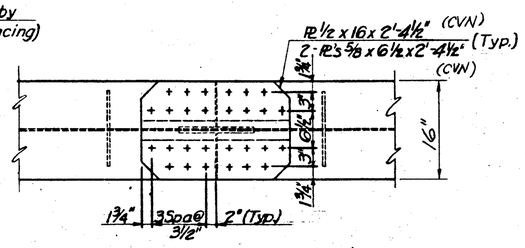
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

637
787

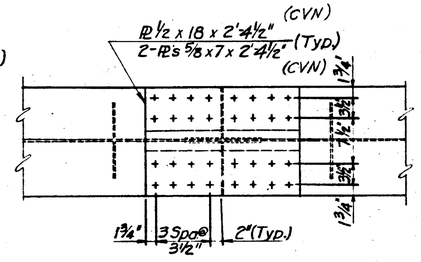
HAM-75-9.93
HAM-126-1300



PLAN



PLAN-FIELD SPLICE NO.2
(Web Splice Same As For No.1)



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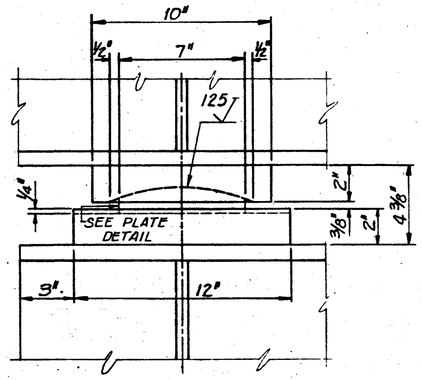
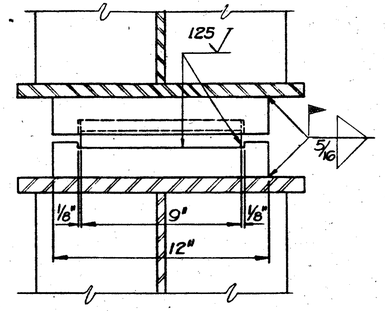
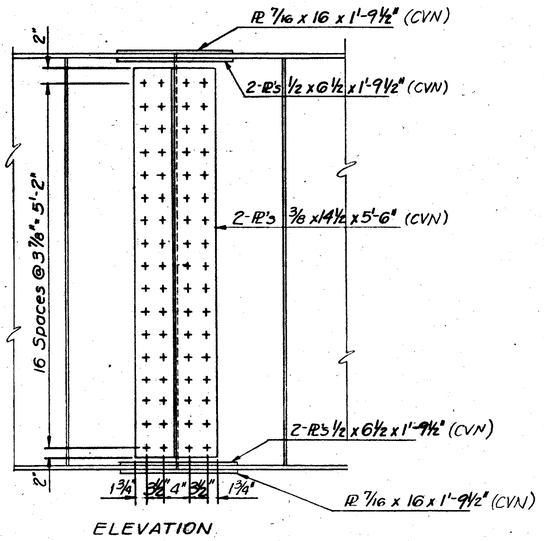


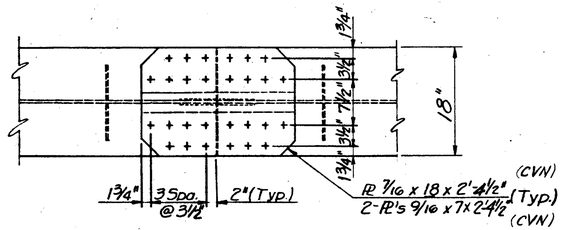


SLIDING BEARING AT HINGE

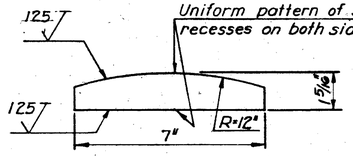


ELEVATION

FIELD SPLICE NO.1



PLAN-FIELD SPLICE NO.3 & NO.5
(Web Splice Same As For No.1)



SELF-LUBRICATING
BRONZE PLATE DETAIL

NOTE:
HIGH STRENGTH BOLTS shall be ⅞" ϕ diameter unless otherwise noted.

6/22

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

SUPERSTRUCTURE DETAILS

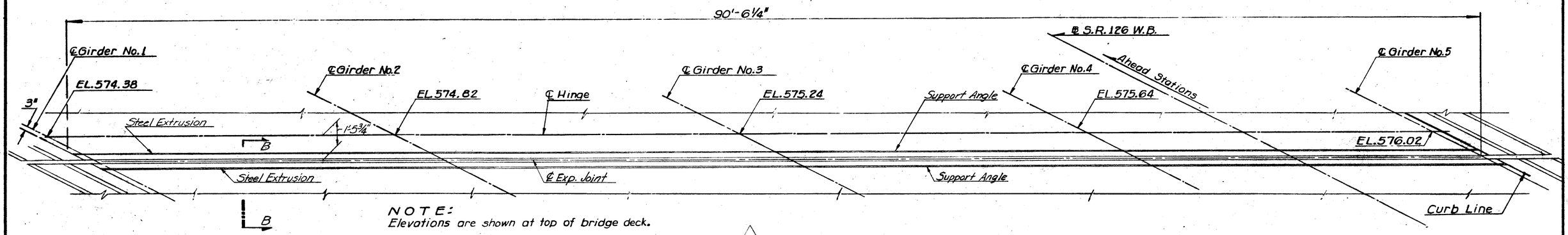
BRIDGE NO. HAM-126-1389
S.R. 126 W.B. OVER
I-75 N.B. AND RELOCATED MILL CREEK

HAMILTON COUNTY
STA. 70 + 13.44 TO
STA. 78 + 21.27

DESIGNED	DRAWN	TRACED	CHECKED	REVISED DATE	APPROVED
V. K.	V. K.	T.D.S.	S.S.C.	6-23-71	BALKE ENGRS. 7/85

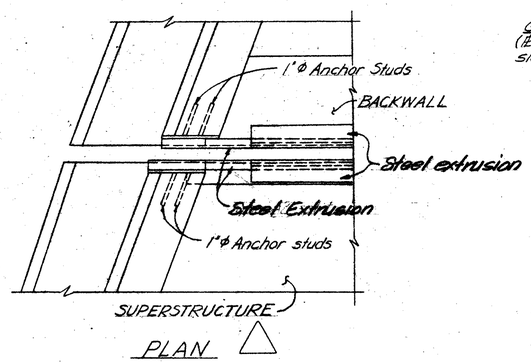
HAM-75-9.93
HAM-126-1300

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

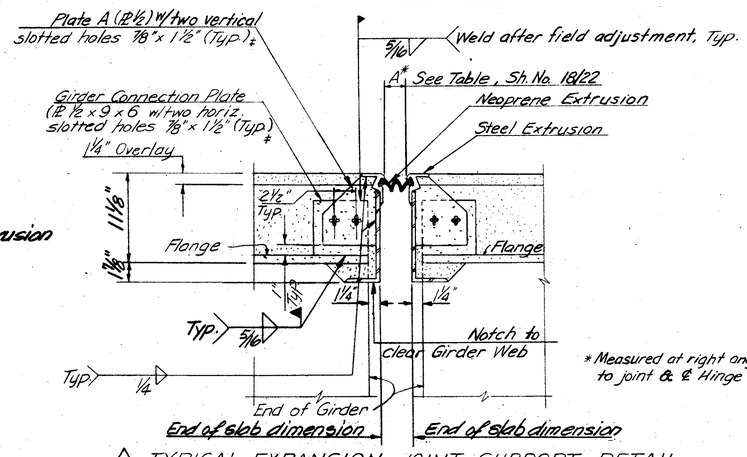


NOTE:
Elevations are shown at top of bridge deck.

PLAN OF DECK JOINT



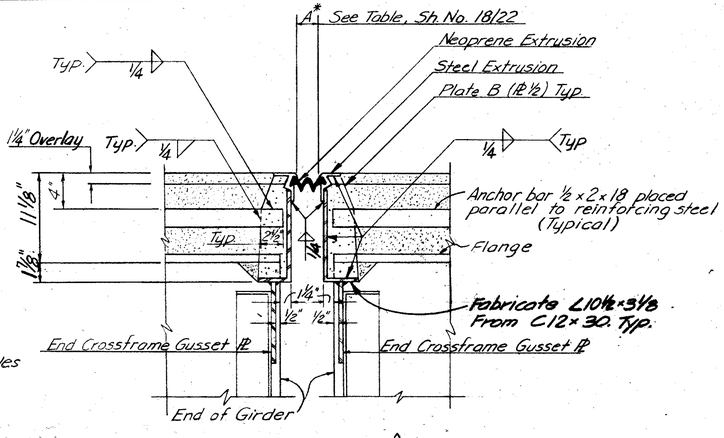
PLAN



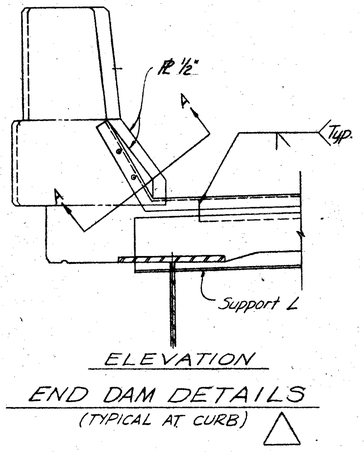
* Measured at right angles to joint & ℄ Hinge

TYPICAL EXPANSION JOINT SUPPORT DETAIL

‡ ¾" ϕ H.S. hex head bolts, nuts, and washers required.

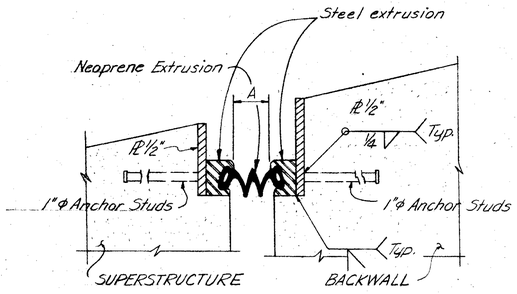


SECTION B-B
STRIP SEAL EXPANSION JOINT



ELEVATION

END DAM DETAILS
(TYPICAL AT CURB)



SECTION A-A

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VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

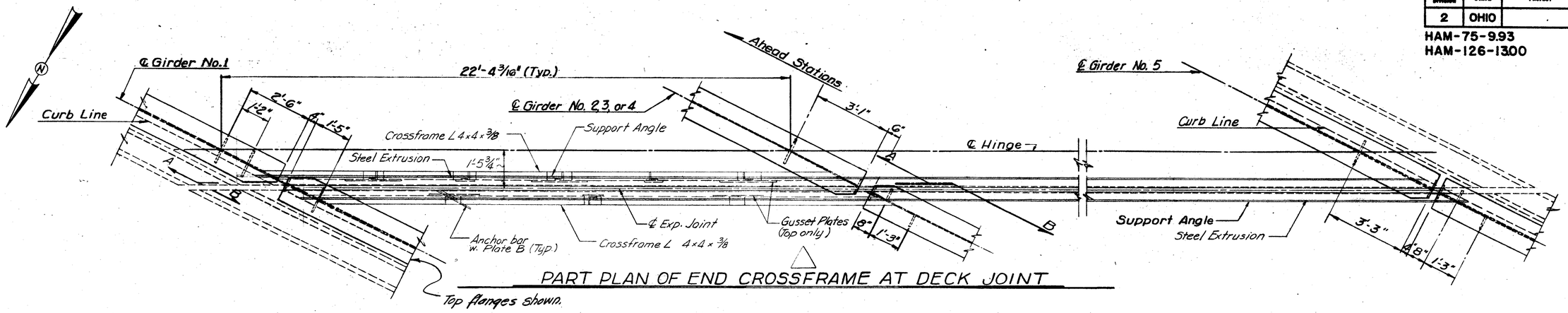
SUPERSTRUCTURE DETAILS

BRIDGE NO. HAM-126-1389
S.R. 126 W.B. OVER
I-75 N.B. AND RELOCATED MILL CREEK
HAMILTON COUNTY
STA. 70 + 13.44 TO
STA. 78 + 21.27

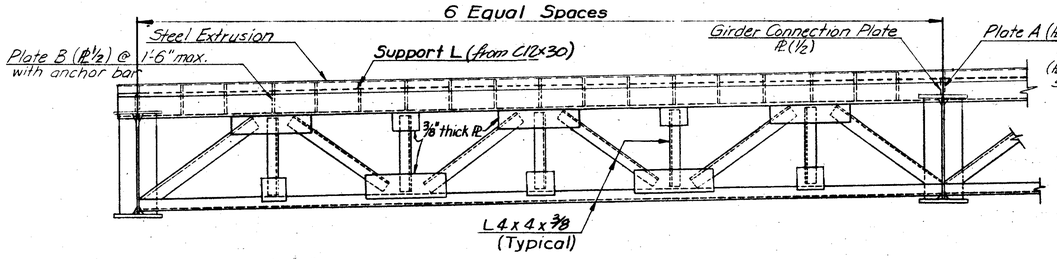
DESIGNED	DRAWN	TRACED	CHECKED	REVISIONS DATE	
V. K.	V. K.	T.D.S.	S.S.C.	6-23-71	BALKE ENGRS. 7/75

FED. RD. DESIGNATION	STATE	PROJECT	
2	OHIO		

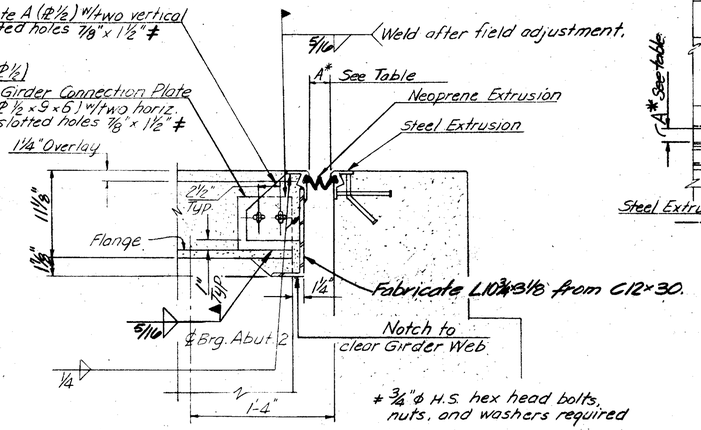
HAM-75-9.93
HAM-126-13.00



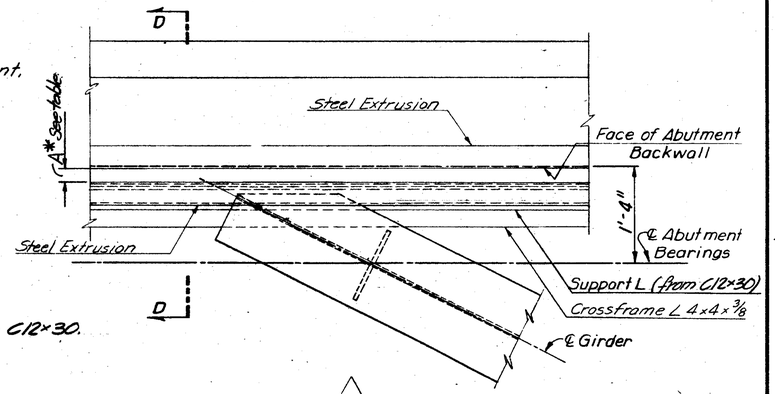
PART PLAN OF END CROSSFRAME AT DECK JOINT



SECTION A-A

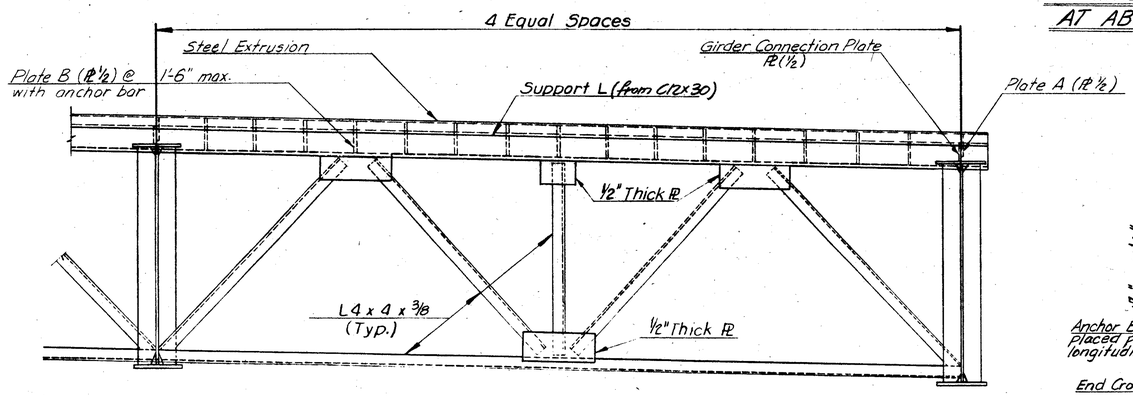


TYPICAL EXPANSION JOINT SUPPORT DETAIL AT ABUTMENT (Abutment No. 1 Similar)

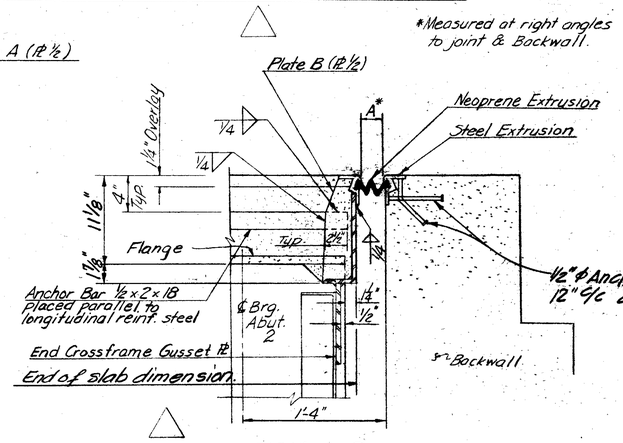


PART PLAN OF END DAM

(At Abutment No. 2 Shown, At Abutment No. 1 Similar)



SECTION B-B



SECTION D-D
STRIP SEAL EXPANSION JOINT

NOTES:
End crossframes at abutments are similar to end crossframe shown in "SECTION B-B"

For more details, notes and welding of end crossframes, see Standard Drawing SD-1-69, Sheet 1 of 4.

	JOINT SETTING TABLE						
	Temperature °F	0	20	40	60	80	100
Abut. 2	A	3 1/8"	2 13/16"	2 11/16"	2 1/2"	2 5/16"	2 1/16"
Abut. 1	A	3"	2 13/16"	2 11/16"	2 1/2"	2 7/16"	2 3/16"
Hinge	A	2 5/8"	2 3/8"	2 3/16"	2"	1 13/16"	1 5/8"

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VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

SUPERSTRUCTURE DETAILS

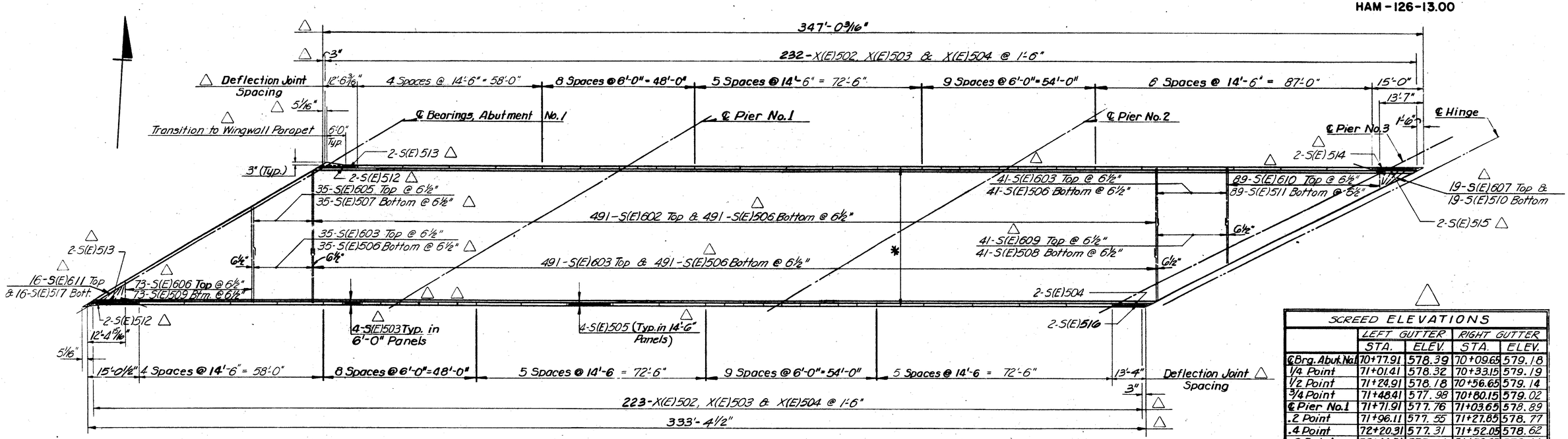
BRIDGE NO. HAM-126-1389
S.R. 126 W.B. OVER
I-75 N.B. AND RELOCATED MILL CREEK
HAMILTON COUNTY
STA. 70 + 13.44 TO STA. 78 + 21.27

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V. K.	V. K.	T.D.S.	S.S.C.		6-2371	BAUKE ENGRS. 9/05

FED. AID. DIVISION	STATE	PROJECT	
2	OHIO		

660
187

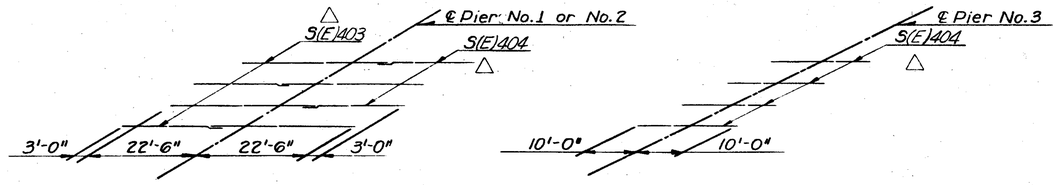
HAM-75-9.93
HAM-126-13.00



DECK PLAN ~ SECTION NO.1

SCREED ELEVATIONS

	LEFT GUTTER STA.	LEFT GUTTER ELEV.	RIGHT GUTTER STA.	RIGHT GUTTER ELEV.
℄ Brg. Abut. No.1	70+77.91	578.39	70+09.65	579.18
1/4 Point	71+01.41	578.32	70+33.15	579.19
1/2 Point	71+24.91	578.18	70+56.65	579.14
3/4 Point	71+48.41	577.98	70+80.15	579.02
℄ Pier No.1	71+71.91	577.76	71+03.65	578.89
.2 Point	71+96.11	577.55	71+27.85	578.77
.4 Point	72+20.31	577.31	71+52.05	578.62
.6 Point	72+44.51	577.01	71+76.25	578.41
.8 Point	72+68.71	576.65	72+00.45	578.13
℄ Pier No.2	72+92.91	576.26	72+24.65	577.84
1/4 Point	73+22.92	575.80	72+50.99	577.53
1/2 Point	73+51.94	575.31	72+77.33	577.19
3/4 Point	73+81.45	574.71	73+03.67	576.77
℄ Pier No.3	74+10.96	574.05	73+30.01	576.28
℄ Hinge	74+25.96	573.70	73+45.01	576.00



ADDITIONAL REINFORCEMENT OVER PIERS

NOTES

*Longitudinal reinforcing steel: 11 sets of 69-S(E)401 & 1 Set of 69-S(E)402 in top of slab & parapets
11 sets of 56-S(E)501 & 1 Set of 56-S(E)502 in bottom of slab.

NOTE:
△ The screed elevations shown have been obtained by adding the dead load deflection due to the weight of concrete slab, latex modified concrete overlay, bridge parapet and future wearing surface to the required final elevation.

△ "(E)" denotes epoxy coated reinforcing bar.

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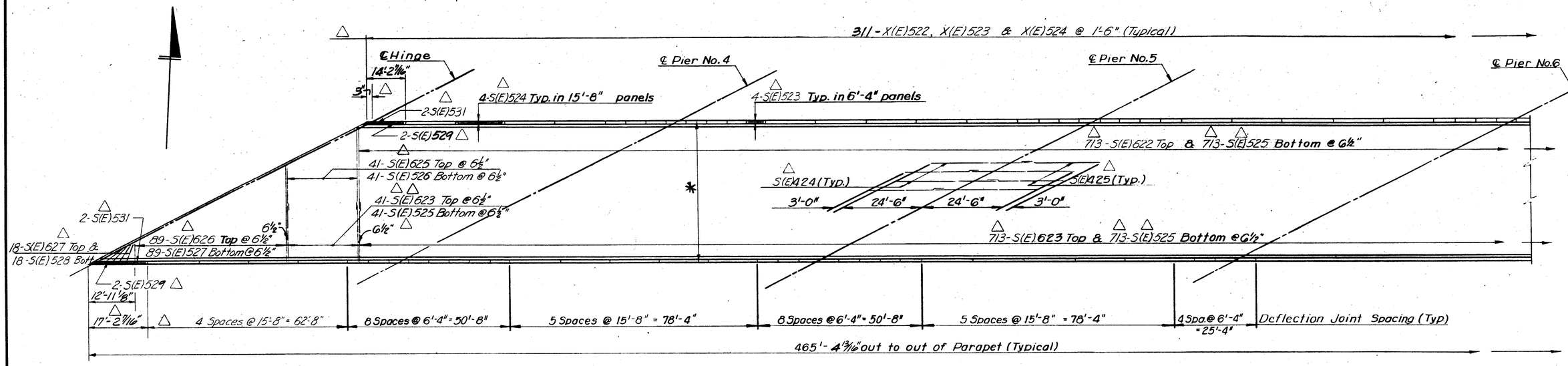
VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

DECK PLAN
BRIDGE NO. HAM-126-1389
S.R. 126 W.B. OVER
I-75 N.B. AND RELOCATED MILL CREEK
HAMILTON COUNTY
STA. 70 + 13.44 TO STA. 78 + 21.27

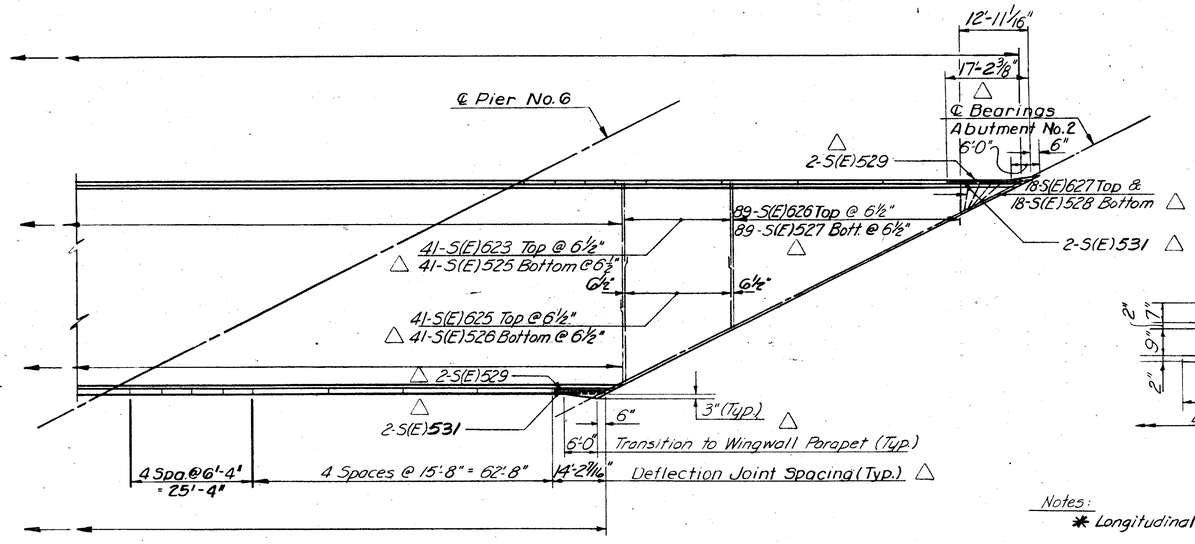
DESIGNED	DRAWN	TRACED	CHECKED	REVISED DATE	REVISED
V.K.	V.K.	T.D.S.	S.S.C.	6-23-71	△ BALKE ENGRS. 9/85

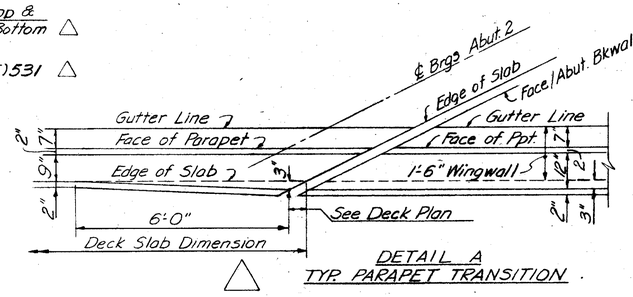
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

HAM - 75 - 9.93
HAM - 126 - 13.00



DECK PLAN ~ SECTION NO. 2





DETAIL A
TYP. PARAPET TRANSITION

SCREED ELEVATIONS				
	LEFT GUTTER		RIGHT GUTTER	
	STA.	ELEV.	STA.	ELEV.
℄ Hinge	74+25.96	573.70	73+45.01	576.00
1/4 Point	74+49.84	573.19	73+68.89	575.59
1/2 Point	74+73.71	572.60	73+92.76	575.11
3/4 Point	74+97.59	571.96	74+16.64	574.57
℄ Pier No.4	75+21.46	571.30	74+40.51	574.01
.2 Point	75+47.46	570.59	74+66.51	573.42
.4 Point	75+73.46	569.86	74+92.51	572.79
.6 Point	75+99.46	569.06	75+18.51	572.09
.8 Point	76+25.46	568.22	75+44.51	571.31
℄ Pier No.5	76+51.46	567.39	75+70.51	570.50
.2 Point	76+77.46	566.61	75+96.51	569.73
.4 Point	77+03.46	565.85	76+22.51	568.98
.6 Point	77+29.46	565.06	76+48.51	568.17
.8 Point	77+55.46	564.22	76+74.51	567.34
℄ Pier No.6	77+81.46	563.40	77+00.51	566.52
1/4 Point	78+07.59	562.63	77+26.64	565.74
1/2 Point	78+33.71	561.86	77+52.76	564.98
3/4 Point	78+59.84	561.06	77+78.89	564.17
℄ Brg. Abut. No.2	78+85.96	560.26	78+05.01	563.31

Notes:
* Longitudinal reinforcing steel: 16 sets of 69-S(E)421, & 1-~~Set~~ of 69-S(E)422 in top of slab.
16 sets of 56-S(E)521 & 1-set of 56-S(E)522 in bottom of slab.
△ "(E)" denotes epoxy cooted reinforcing bar.
For additional notes, See Sheet 19/22

20/22

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

DECK PLAN

BRIDGE NO. HAM-126-1389
S.R. 126 W.B. OVER
I-75 N.B. AND RELOCATED MILL CREEK

HAMILTON COUNTY
STA. 70 + 13.44 TO
STA. 78 + 21.27

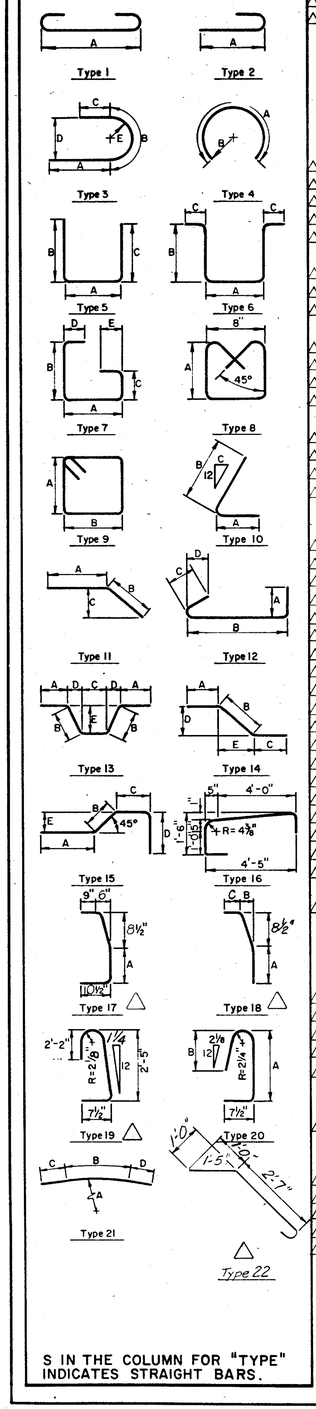
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.K.	V.K.	T.D.S.	S.S.C.	[illegible]	6-23-71	BALKE ENGRS. 7/85

REINFORCING STEEL LIST

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

HAM-75-9.93
HAM-126-13.00

BENDING DIAGRAM



S IN THE COLUMN FOR "TYPE" INDICATES STRAIGHT BARS.

ABUTMENT NO. 1

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
△A621	2	21-0	63	5	1-2	14-6	6-8		
△A645	1	16-0	19	S					
A501	54	8-10	498	5	5-11	1-7	1-7		
A502	56	7-0	409	5	6-6	0-7½	0		
A503	54	8-5	474	5	4-0	2-4	2-4		
A504	1	7-9	8	5	4-10	1-7	1-7		
A505	1	7-1	7	5	4-2	1-7	1-7		
A506	1	5-10	6	5	2-11	1-7	1-7		
A507	1	5-2	5	5	2-3	1-7	1-7		
△A(E)508	4	27-11	116	S					
△A(E)509	3	28-11	90	S					
△A(E)510	2	30-0	63	S					
△A(E)511	1	29-0	30	S					
△A512	40	30-0	1252	S					
A513	9	26-0	244	S					
△A514	11	28-7	328	S					
△A(E)515	4	17-5	73	S					
△A(E)516	3	16-5	51	S					
A517	23	17-5	418	9	6-6	2-0			
△A518	6	26-2	164	S					
△A519	3	26'-4"	82	S					
△A520	1	29'-0"	30	S					
△A521	2	31-3	65	S					
A522	4	7-3	30	S					
△A523	2	29-8	62	S					
△A(E)524	16	2-8	45	2	2-1				
△A(E)525	21	5-3	115	19					
△A(E)526	21	3-0	66	S					
A527	4	10-1	42	11	8-6	1-7	0-9		
A528	6	10-5	65	9	3-0	2-0			
△A529	6	13-6	84	S					
△A530	1	12-8	13	S					
△A531	2	18'-0	37	S					
△A532	2	19-9	41	S					
△A(E)533	16	4-7	76	S					
△A(E)534	1	29-8	31	S					
△A(E)535	16	4-4	72	S					
△A(E)536	1	15-8	16	S					
△A537	1	27-3	28	S					
△A538	1	24-7	26	S					
△A539	1	21-11	23	S					
△A540	1	23-8	25	S					
△A601	54	14-9	1196	5	5-11	6-7	2-7		
△A602	1	13-6	20	5	4-8	6-7	2-7		
△A603	1	13-0	20	5	4-2	6-7	2-7		
△A607	76	17-1	1950	5	1-5	8-0	8-0		
△A608	76	7-1	809	5	1-5	3-0	3-0		
△A(E)609	76	7-1	866	5	0-11	3-6	3-6		
△A610	8	11-6	138	S					
△A611	15	30-0	676	5	1-2	14-7	14-7		
△A(E)612	21	3-9	118	18	2-5	0-6	0-9		
△A613	12	6-6 to 14-10	192	5	1-2	2-10 to 7-0	2-10 to 7-0	2 Sets of 6, Vary B&C by 10"	
△A614	7	26-10	282	5	1-2	13-0	13-0		
△A615	8	6-6	78	S					
△A(E)616	2	3-9	11	18	2-5	0-6	0-9		
△A(E)617	2	3-8	11	18	2-5	0-5	0-8		
△A(E)618	2	3-8	11	18	2-5	0-4	0-8		
△A(E)619	2	3-7	11	18	2-5	0-3	0-7		
△A(E)620	8	3-7	43	18	2-5	0-2	0-7		
△A801	14	30-0	1121	S					
△A802	7	28-0	523	S					
△A(E)803	28	4-11	368	22					
△A804	7	28-0	523	S					
△A805	6	15-0	240	S					
△A541	2	17-9	37	S					
△A542	3	15-3	48	S					
△A543	1	13-3	14	S					
△A544	1	10-8	11	S					
△TOTAL	ABUTMENT NO.1	14645 (Includes 2283 Lbs Epoxy Coated)							
	ABUTMENT NO. 2								
B501	61	8-10	562	5	5-11	1-7	1-7		
B502	62	7-1	458	5	6-7	0-7½	0		
B503	61	8-5	535	5	4-0	2-4	2-4		
B504	3	4-7 to 6-1	17	5	1-8 to 3-2	1-7	1-7	1 Set of 3, Vary A by 9"	

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
B505	3	6-6 to 8-0	23	5	3-7 to 5-1	1-7	1-7	1 Set of 3, Vary A by 9"	
B506	3	8-8	27	5	8-2	0-7½	0		
B507	3	6-11	22	5	4-0	1-7	1-7		
△B(E)508	4	8-10	37	S					
△B(E)509	3	10-0	31	S					
△B(E)510	4	20-2	84	S					
△B(E)511	3	19-0	59	S					
B514	48	30-0	1502	S					
B515	4	20-0	83	S					
B516	5	26-0	136	S					
B517	10	24-0	250	S					
△B(E)518	3	30-0	94	S					
△B(E)519	1	14-0	15	S					
△B520	13	14-0	190	S					
△B521	8	14-0	117	S					
B522	6	10-5	65	9	3-0	2-0			
△B523	6	8-10	55	S					
△B(E)524	8	2-8	22	2	2-1				
△B(E)525	14	5-3	77	19					
△B(E)526	14	3-0	44	S					
△B527	1	12-5	13	S					
△B528	3	15-6	48	S					
△B529	1	18-6	19	S					
△B530	2	19-10	41	S					
B531	2	7-3	15	S					
B532	6	14-6	91	S					
B533	2	10-0	21	11	8-5	1-7	0-10		
B534	8	17-5	145	9	6-6	2-0			
△B535	6	11-2	70	S					
△B(E)536	1	11-2	12	S					
△B(E)537	1	17-10	19	S					
△B(E)538	8	4-7	38	S					
△B(E)539	8	4-4	36	S					
△B540	2	17-10	37	S					
△B541	1	16-6	17	S					
B601	62	14-9	1374	5	5-11	6-7	2-7		
B602	3	13-11 to 15-5	66	5	3-6 to 5-0	8-2	2-7	1 Set of 3, Vary A by 9"	
△B608	91	17-1	2335	5	1-5	8-0	8-0		
△B609	91	7-1	968	5	1-5	3-0	3-0		
△B(E)610	91	7-7	1037	5	0-11	3-6	3-6		
△B611	3	11-1	60	S					
B612	7	30-10	324	5	1-2	15-0	15-0		
△B(E)613	14	3-9	79	18	2-5	0-6	0-9		
B614	6	6-10 to 14-4	95	5	1-2	3-0 to 6-9	3-0 to 6-9	1 Set of 6, Vary B&C by 9"	
△B615	7	27-0	284	5	1-2	13-1	13-1		
△B542	1	13-6	14	S					
△B543	1	10-5	11	S					
△B(E)616	1	3-9	6	18	2-5	0-6	0-9		
△B(E)617	1	3-8	6	18	2-5	0-5	0-8		
△B(E)618	1	3-8	6	18	2-5	0-4	0-8		
△B(E)619	1	3-7	5	18	2-5	0-3	0-7		
△B(E)620	4	3-7	22	18	2-5	0-2	0-7		
△B621	4	12-8	76	S					
△B622	2	20-7	62	5	1-2	13-8	6-1		
B801	14	30-0	1121	S					
B802	8	19-0	406	5					
B803	6	22-0	352	5					
B804	6	15-6	248	5					
B805	4	8-4	89	14	2-6	3-4	2-6	1-6	3-0
B806	7	14-9	276	S					
△B(E)807	28	4-11	368	22					
Total Abutment No. 2		14807 (Incl. 2099 Lbs. Epoxy Coated)							
Total Abutments		29452 (Includes 4380 Lbs. Epoxy coated.)							
		RETAINING WALL							
E501	14	7-8	112	1	6-6				
E502	52	6-8	362	1	5-6				
E503	14	5-0	73	5					
E504	52	4-0	217	5					

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
E505	4	6-6	27	14	1-7	3-4	1-7	1-6	3-0
E506	16	5-11	99	14	1-7	2-9	1-7	1-3	2-6
E507	12	29-6	369	5					
E508	4	25-0	104	5					
E509	12	26-0	325	5					
△E510	19	7-3 to 10-0	191	5	1 Set of 19 Vary by ½"				
△E511	19	7-4 to 8-1	153	5	1 Set of 19 Vary by ½"				
△E512	19	5-6 to 6-3	116	5	1 Set of 19 Vary by ½"				
△E513	19	3-11½ to 4-4	82	5	1 Set of 19 Vary by ¼"				
△E514	7	2-6	18	5					
E515	6	5-0	31	5	1-2	2-0½	2-0½		
△E516	40	27-8	1154	5					
△E517	10	9-0 to 9-9	98	5	1 Set of 10 Vary by 1"				
E518	10	2-0	21	5					
△E(E)519	90	5-3	493	19					
△E(E)520	90	3-0	282	5					
E521	4	17-6	73	5					
E522	3	19-6	61	5					
△E(E)523	8	4-4	36	5					
△E(E)524	8	2-8	22	2	2-1				
△E(E)525	8	4-7	38	5					
△E(E)526	8	25-8	214	5					
△E(E)527	32	27-8	923	5					
△E528	10	7-1 to 7-10	78	5	1 Set of 10 Vary by 1"				
E601	89	5-0	668	5	4-4	0-10	0		
△E(E)602	90	3-9	507	18	2-5	0-6	0-9		
△E(E)616	1	3-9	6	18	2-5	0-6	0-9		
△E(E)617	1	3-8	6	18	2-5	0-5	0-8		
△E(E)618	1	3-8	6	18	2-5	0-4	0-8		
△E(E)619	1	3-7	5	18	2-5	0-3	0-7		
△E(E)620	4	3-7	22	18	2-5	0-2	0-7		
△E529	10	5-3 to 6-0	59	5	1 Set of 10 Vary by 1"				
Total Retaining Wall		7092 (Includes 2560 Lbs. Epoxy coated)							
△E630	10	3-8½ to 4-1	41	5	1 Set of 10 Vary by ½"				
		PIER NO. 1							
P601	20	6-2	185	5	2-6	2-0	2-0		
P602	20	5-8	170	5	2-0	2-0	2-0		
P701	30	10-0	613	5					
P702	82	9-2	1536	1	7-6				
P703	24	30-0	1472	5					
P705	62	7-6	950	5					
P1001	8	21-6	740	5					
P1002	8	21-10	752	5					
P1003	8	22-1	760	5					
P1004	8	22-5	772	5					
P1005	8	22-8	780	5					
P1031	40	9-2	1578	5	7-8	1-8½	0		
	Spirals		2060						
Total Pier No.1			12368						
		PIER NO.2							
P603	20	6-8	200	5	3-0	2-0	2-0		
P604	20	6-2	185	5	2-6	2-0	2-0		
P701	30	10-0	613	5					
P702	82	9-2	1536	1	7-6				
P703	24	30-0	1472	5					
P705	62	7-6	950	5					
P1006	12	20-0	1033	5					
P1007	12	20-5	1054	5					
P1008	12	20-10	1076	5					
P1009	12	21-2	1093	5					
P1010	12	21-7	1114	5					
P1031	60	9-2	2369	5	7-8	1-8½	0		
	Spirals		2221						
Total Pier No. 2			14914						

△ NOTES

Refer to CMS Sections 106.03, 700, 709.01 thru 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structures by the additional steel, spliced in accordance with 509.08.

"(E)" denotes epoxy coated reinforcing bar.

MARK	NO.	LENGTH (HEIGTH)	WEIGHT
SPIRALS - Core Diam. 32" o/o - Pitch 4½" c/c - Other details in accordance with C.M.S.I. standard practice			
	PIER NO.1		
SP401	1	21-6	401
SP402	1	21-10	407
SP403	1	22-1	412
SP404	1	22-5	418
SP405	1	22-8	422
Spirals Pier No. 1			2060
	PIER NO.6		
SP426	1	20-11	391
SP427	1	21-8	404
SP428	1	22-5	418
SP429	1	23-2	431
SP430	1	24-0	446
Spirals Pier No. 6			2090

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

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S.R. 126 W.B. OVER
I-75 N.B. AND RELOCATED MILL CREEK

HAMILTON COUNTY
STA. 70 + 13.44 TO STA. 78 + 21.27

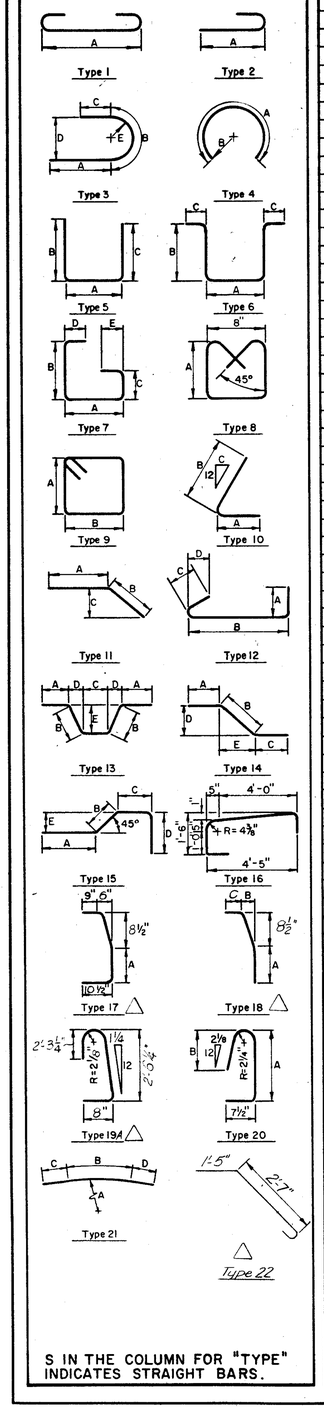
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED
S.S.C.	T.D.S.	——	J.R.P.	[illegible]	6-23-71	△ REVISED BALKE ENGRS. 7/85

REINFORCING STEEL LIST

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

HAM-75-9.93
HAM-126-13.00

BENDING DIAGRAM



S IN THE COLUMN FOR "TYPE" INDICATES STRAIGHT BARS.

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
		PIER NO.3							
P531	66	30-0	2065	5					
P532	8	9-2	76	5					
P533	56	10-0	584	3	2-8	4-8	2-8	2-11½	1-5¾
P603	20	6-8	200	5	3-0	2-0	2-0		
P604	20	6-2	185	5	2-6	2-0	2-0		
P631	186	12-4	3445	5					
P831	108	13-8	3941	1	11-6				
P832	186	6-10	3374	5	5-8	1-4	0		
P1011	12	33-7	1734	5					
P1012	12	34-2	1764	5					
P1013	12	34-9	1794	5					
P1014	12	35-4	1824	5					
P1015	12	35-10	1850	5					
P1032	14	18-0	1084	6					
P1034	46	10-6	2078	5					
		Spirals	3692						
Sub-Total		Pier No.3	29710						
		PIER NO.4							
P531	78	30-0	2441	5					
P532	8	9-2	76	5					
P533	64	10-0	668	3	2-8	4-8	2-8	2-11½	1-5¾
P603	20	6-8	200	5	3-0	2-0	2-0		
P604	20	6-2	185	5	2-6	2-0	2-0		
P641	186	16-4	4563	5					
P831	108	13-8	3941	1	11-6				
P832	186	6-10	3374	5	5-8	1-4	0		
P1016	12	30-9	1588	5					
P1017	12	31-5	1622	5					
P1018	12	32-1	1657	5					
P1019	12	32-9	1691	5					
P1020	12	33-5	1726	5					
P1033	14	22-0	1325						
P1034	46	10-6	2078	5					
		Spirals	3417						
Total		Pier No.4	30572						
		PIER NO.5							
P531	78	30-0	2441	5					
P532	8	9-2	76	5					
P533	64	10-0	668	3	2-8	4-8	2-8	2-11½	1-5¾
P603	20	6-8	200	5	3-0	2-0	2-0		
P604	20	6-2	185	5	2-6	2-0	2-0		
P641	186	16-4	4563	5					
P831	108	13-8	3941	1	11-6				
P832	186	6-10	3394	5	5-8	1-4	0		
P1021	12	26-8	1377	5					
P1022	12	27-5	1416	5					
P1023	12	28-3	1459	5					
P1024	12	29-0	1497	5					
P1025	12	29-9	1536	5					
P1033	14	22-0	1325	5					
P1034	46	10-6	2078	5					
		Spirals	3017						
Total		Pier No.5	29173						

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
		PIER NO. 6							
P601	20	6-2	185	5	2-6	2-0	2-0		
P602	20	5-8	170	5	2-0	2-0	2-0		
P701	30	10-0	613	5					
P702	82	9-2	1536	1	7-6				
P704	24	33-8	1652	5					
P705	62	7-6	950	5					
P1026	8	20-11	720	5					
P1027	8	21-8	746	5					
P1028	8	22-5	772	5					
P1029	8	23-2	798	5					
P1030	8	24-0	826	5					
P1031	40	9-2	1578	5	7-8	1-8½	0		
		Spirals	2090						
Total		Pier No.6	12636						
TOTAL		PIERS	129373						
		SUPERSTRUCTURE ~ SECTION NO.1 △							
S(E)401	759	30-0	15210	5					
	6	20-0	80	5					
	15	23-0	230	5					
	14	26-0	243	5					
S(E)402	14	29-0	271	5					
	14	32-0	299	5					
	6	33-0	132	5					
S(E)403	124	29-8	2457	5					
S(E)404	186	20-0	2485	5					
S(E)511	16	6-10	114	5					
S(E)501	616	30-0	19275	5					
S(E)502	56	25-0 to 36-0	1781	5	7 Sets of 8, Vary each set by 1'-10"				
S(E)503	136	5-8	804	5					
S(E)504	2	15-1	31	5					
S(E)505	116	14-2	1714	5					
S(E)506	1058	22-8	25013	5					
S(E)507	35	9-6 to 20-10	554	5	Vary each bar by 4"				
S(E)508	41	9-8 to 20-6	645	5	Vary each bar by 3¼"				
S(E)509	73	6-10 to 30-1	1405	5	Vary each bar by 3⅛"				
S(E)510	19	6-5	127	5					
S(E)511	89	6-5 to 30-3	1702	5	Vary each bar by 3¼"				
S(E)512	4	13-11	58	5					
S(E)513	4	12-7	52	5					
S(E)514	2	13-10	27	5					
S(E)515	2	12-1	25	5					
S(E)516	2	13-5	28	5					
S(E)602	491	27-6	20281	5					
S(E)603	567	17-10	15187	5					
S(E)605	35	14-9 to 25-9	1065	5	Vary each bar by 3⅞				
S(E)606	73	6-10 to 30-1	2024	5	Vary each bar by 3⅞				
S(E)607	19	6-5	183	5					
S(E)609	41	14-10 to 25-8	1247	5	Vary each bar by 3¼"				
S(E)610	89	6-5 to 30-3	2451	5	Vary each bar by 3¼"				
S(E)611	16	6-10	164	5					
X(E)502	455	5-6	2610	19A					
X(E)503	455	2-4	1107	5	0-10½	1-7	0-0		
X(E)504	455	3-0	1424	17	0-9				
Sub-Total, Superstructure			122507						
		SUPERSTRUCTURE ~ SECTION NO. 2 △							
S(E)421	1104	30-0	22124	5					
S(E)422	69	8-0	369	5					
S(E)424	186	30-3	3759	5					
S(E)425	186	23-6	2920	5					
S(E)521	896	30-0	28036	5					
S(E)522	56	13-0	759	5					
S(E)523	192	6-0	1202	5					
S(E)524	144	15-4	2303	5					
S(E)525	1508	22-8	35651	5					
S(E)526	82	9-4 to 20-2	1262	5	2 Sets of 41, Vary each bar by 3¼"				
S(E)527	178	6-1 to 29-11	3342	5	2 Sets of 89, Vary each bar by 3¼"				

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
S(E)528	36	6-1	228	5					
S(E)529	8	16-0	134	5					
S(E)531	8	14-4	120	5					
S(E)622	713	27-6	29450	5					
S(E)623	795	17-10	21295	5					
S(E)625	82	14-6 to 25-4	2453	5	2 Sets of 41, Vary each bar by 3¼"				
S(E)626	178	6-1 to 29-11	4812	5	2 Sets of 89, Vary each bar by 3¼"				
S(E)627	36	6-1	329	5					
X(E)522	622	5-6	3568	19A					
X(E)523	622	2-4	1514	5	0-10½	1-7	0		
X(E)524	622	3-0	1946	17	0-9				
Sub-Total Superstructure			167576						
Total Superstructure			290083						

△ NOTES

Refer to CMS Sections 106.03, 700, 709.01 thru 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structures by the additional steel, spliced in accordance with 509.08.

"(E)" denotes epoxy coated reinforcing bar.

MARK	NO.	LENGTH (HEIGTH)	WEIGHT
SPIRALS - Core Diam. 38" c/c - Pitch 4½" o/o - Other details in accordance with C.R.S.I. standard practice			
	PIER NO.2		
SP406	1	20-0	428
SP407	1	20-5	436
SP408	1	20-10	445
SP409	1	21-2	452
SP410	1	21-7	460
Spirals	Pier No.2		2221
	PIER NO.3		
SP411	1	33-7	714
SP412	1	34-2	727
SP413	1	34-9	739
SP414	1	35-4	751
SP415	1	35-10	761
Spirals	Pier No.3		3692
	PIER NO.4		
SP416	1	30-9	656
SP417	1	31-5	670
SP418	1	32-1	683
SP419	1	32-9	697
SP420	1	33-5	711
Spirals	Pier No.4		3417
	PIER NO.5		
SP421	1	26-8	571
SP422	1	27-5	587
SP423	1	28-3	604
SP424	1	29-0	620
SP425	1	29-9	635
Spirals	Pier No.5		3017

22/22

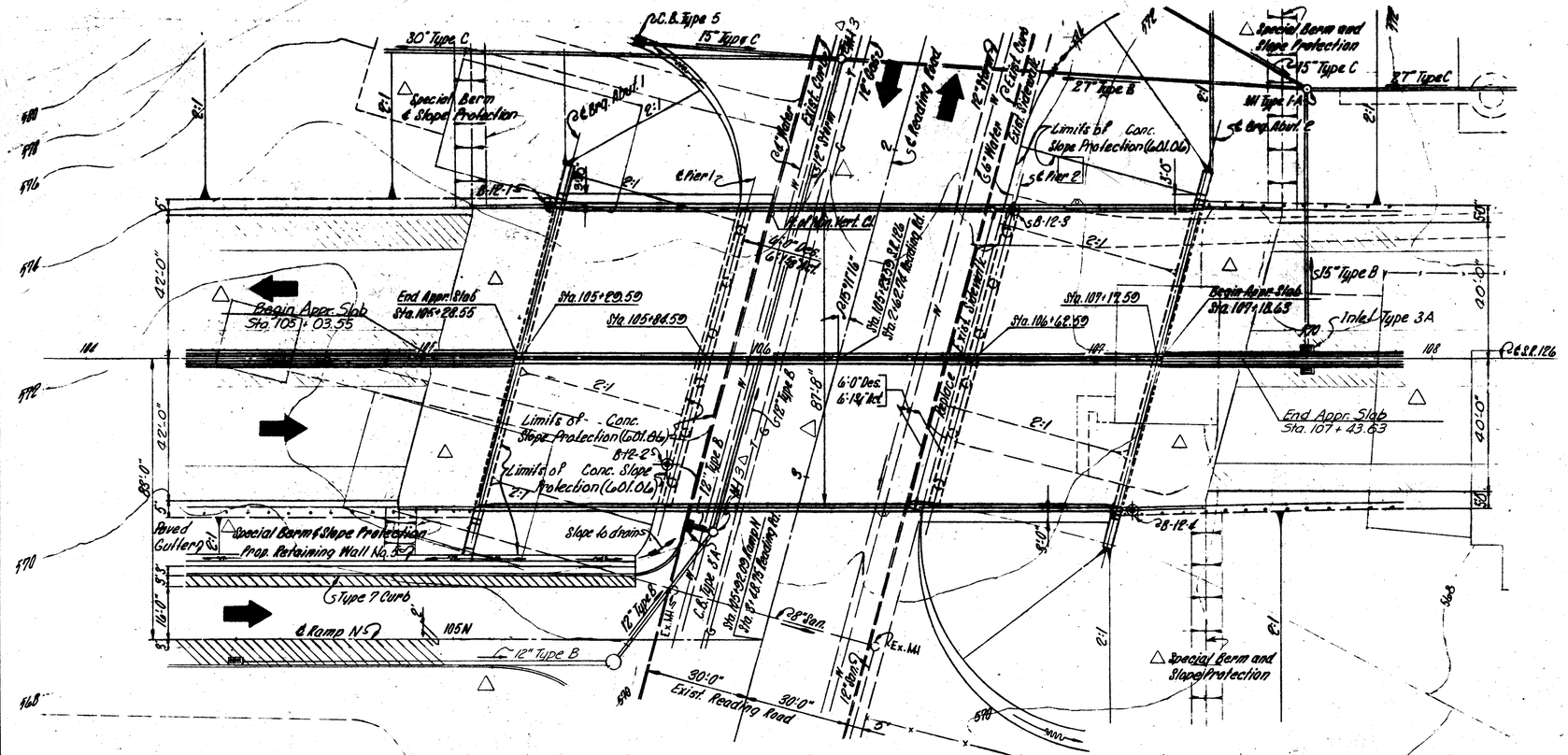
VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

REINFORCING STEEL LIST
BRIDGE NO. HAM-126-1389
S.R. 126 W.B. OVER
I-75 N.B AND RELOCATED MILL CREEK
HAMILTON COUNTY
STA. 70 + 13.44 TO STA. 78 + 21.27

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
S.S.C.	T.D.S.	——	J.R.P.		6-23-71	△ BURKE ENGRS. 7/85

FED. ROAD DIVISION	STATE	PROJECT		
2	OHIO			

HAM-75-2.93
HAM-126-13.00


30° Type C
15" Type C
Special Berm & Slope Protection
℄ Brg. Abut. 1
℄ Pier 1
℄ Pier 2
℄ Brg. Abut. 2
Begin Appr. Slab Sta. 105+03.55
End Appr. Slab Sta. 106+28.55
Sta. 105+29.50
Sta. 105+84.50
Sta. 106+62.50
Sta. 107+17.50
Begin Appr. Slab Sta. 107+18.63
End Appr. Slab Sta. 107+43.63
Limits of Conc. Slope Protection (601.06)
Inlet Type 3A
S15" Type B
27" Type B
27" Type C
42'-0"
40'-0"
88'-0"
Paved Gutter
Special Berm & Slope Protection
Prop. Retaining Wall No. 1
Slope to drains
Type 7 Curb
℄ Ramp NS
105N
℄ 12" Type B
12" Type B
C.B. Type 3A
Ex. MH
28" Conc.
30'-0" Exist. Reading Road
30'-0"
Exist. Reading Road
12" Water
Exist. Gas Main
Exist. Overhead Wire
Exist. Telephone
Exist. Underground Elec.
Exist. Fence
Exist. Guard Rail
Ex. Inlet
Ex. MH
Ex. Manhole
Ex. Gas Valve
Ex. Water Valve
Ex. Water Meter
Ex. Sign
Ex. Light
Ex. Tree
Ex. Bush
Ex. Hydrant
Ex. Post
Ex. Utility Pole
Ex. Guy Anchor
Ex. Gas Meter
Ex. Water Box
Ex. Gas Box
Ex. Telephone Box
Ex. Electric Box
Ex. Mail Box
Ex. Sanitary Manhole
Ex. Storm Manhole
Ex. Catch Basin
Ex. Inlet
Ex. Manhole
Ex. Gas Valve
Ex. Water Valve
Ex. Water Meter
Ex. Sign
Ex. Light
Ex. Tree
Ex. Bush
Ex. Hydrant
Ex. Post
Ex. Utility Pole
Ex. Guy Anchor
Ex. Gas Meter
Ex. Water Box
Ex. Gas Box
Ex. Telephone Box
Ex. Electric Box
Ex. Mail Box
Ex. Sanitary Manhole
Ex. Storm Manhole
Ex. Catch Basin
Ex. Inlet
Ex. Manhole
Ex. Gas Valve
Ex. Water Valve
Ex. Water Meter
Ex. Sign
Ex. Light
Ex. Tree
Ex. Bush
Ex. Hydrant
Ex. Post
Ex. Utility Pole
Ex. Guy Anchor
Ex. Gas Meter
Ex. Water Box
Ex. Gas Box
Ex. Telephone Box
Ex. Electric Box
Ex. Mail Box
Ex. Sanitary Manhole
Ex. Storm Manhole
Ex. Catch Basin
Special Berm and Slope Protection
Special Berm and Slope Protection
Limits of Conc. Slope Protection (601.06)
℄ Brg. Abut. 1
℄ Brg. Abut. 2
℄ Pier 1
℄ Pier 2
B-12-15
B-12-25
B-12-9
B-12-4
S.R. 126
Prop. Gas Main
Prop. Water Main
Prop. Sanitary Sewer
Prop. Storm Sewer
Prop. Underground Elec.
Prop. Overhead Wire
Prop. Telephone
Prop. Fence
Prop. Guard Rail
Prop. Inlet
Prop. MH
Prop. Manhole
Prop. Gas Valve
Prop. Water Valve
Prop. Water Meter
Prop. Sign
Prop. Light
Prop. Tree
Prop. Bush
Prop. Hydrant
Prop. Post
Prop. Utility Pole
Prop. Guy Anchor
Prop. Gas Meter
Prop. Water Box
Prop. Gas Box
Prop. Telephone Box
Prop. Electric Box
Prop. Mail Box
Prop. Sanitary Manhole
Prop. Storm Manhole
Prop. Catch Basin
Prop. Inlet

FED. RD. DIVISION	STATE	PROJECT		
2	OHIO			

665
787

HAM-75-9.93
HAM-126-13.00

ESTIMATED QUANTITIES

Revised by: BJA 9-5-85
Checked by: BJS 10-10-85

	ITEM	TOTAL	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPER-STRUCTURE	GENERAL	CHECKED BY	DATE
	503	592	C.Y.	Unclassified excavation	289	303			H.J.Z.	10-14-71
	507	1360	Lin. Ft.	14" ø Cast-in-place reinforced concrete piles		1360				
	507	1980	Lin. Ft.	12" ø Cast-in-place reinforced concrete piles	1980				H.J.Z.	10-14-71
△	509	54105	Lbs.	Reinforcing Steel, Grade 60	14696	39409				
△	511	524	C.Y.	Class S concrete, superstructure			524		D.S.M.	10-15-71
	511	162	C.Y.	Class C concrete, pier caps and columns		162			H.J.Z.	10-14-71
	511	96	C.Y.	Class C concrete, abutments above footings	96				H.J.Z.	10-14-71
	511	172	C.Y.	Class C concrete, footings	74	98			H.J.Z.	10-14-71
△	516	222	Lin. Ft.	PVC WATERSTOP (AS PER PLAN)	222					
△	513	407100	Lbs.	Structural steel, A.I.S.C. Category I (SEE PROPOSAL NOTE)			407100		H.J.Z.	10-14-71
△	514	407100	Lbs.	Field painting of new structural steel, System A			407100		H.J.Z.	10-14-71
△	516	24	Ea.	LAMINATED ELASTOMERIC BEARINGS, 1/2"x10"x18" pad with (1x1½") beveled steel load plate		24				
△	516	132	Sq. Ft.	¼" preformed expansion joint filler.	132				D.S.M.	10-15-71
△	516	222	Sq. Ft.	1" preformed expansion joint filler.	222				D.S.M.	10-15-71
	518	93	C.Y.	Porous backfill	93				D.S.M.	10-15-71
△	518	229	Lin. Ft.	16" perforated helical corrugated steel pipe, 707.01	229				D.S.M.	10-15-71
△	518	29	Lin. Ft.	16" non-perforated helical corrugated steel pipe including specials, 707.01	29				D.S.M.	10-15-71
△	*511	524	C.Y.	Class S concrete, superstructure using shrinkage compensating cement, 701.08			524			
△	523	6	Hrs.	Dynamic Load Test				6		
△										
△	601	1544	Sq. Yd.	concrete slope protection				1544		
	503	Lump	Sum	Cofferdams, cribs and sheeting						
△	505	Lump	Sum	Pile Driving Equipment Mobilization				Lump. Lump		
△	824	137100	Lbs.	Epoxy Coated Reinforcing Steel, Grade 60			137100			
△	845	1774	Sq. Yd.	Latex Modified concrete overlay (1½" thick) (See Proposal Note)			1774			
△	Special	1085	Sq. Yd.	Sealing of concrete surfaces (See Proposal Note)		264	821			

△ *Alternate Bid Item

ITEM 511: CLASS S CONCRETE, SUPERSTRUCTURE, USING SHRINKAGE COMPENSATING CEMENT, 701.08.

THE FOLLOWING RESTRICTIONS SHALL APPLY TO THE SUPERSTRUCTURE CONCRETE USING SHRINKAGE COMPENSATING CEMENT, 701.08.

1. CEMENT SHALL BE EXPANSIVE HYDRAULIC CEMENT, ASTM C845, TYPE K.
2. THE MAXIMUM WATER/CEMENT RATIO GIVEN FOR CLASS S CONCRETE IN 499.03 SHALL BE REVISED FROM 0.44 TO 0.50.
3. MAXIMUM SLUMP AT THE TIME AND PLACE OF CONCRETE PLACEMENT SHALL BE 6 INCHES.
4. CHEMICAL ADMIXTURES, WHEN REQUIRED BY 511.06, SHALL BE LIMITED TO 705.12 TYPE D.
5. MAXIMUM AMBIENT TEMPERATURE AT TIME OF PLACEMENT OF CONCRETE SHALL BE 80° F.
6. MEMBRANE CURING PER SS836 WILL NOT BE PERMITTED FOR ANY CONCRETE PLACED BETWEEN SEPTEMBER 1 AND MARCH 31. SUCH CONCRETE SHALL BE CURED BY METHOD (A) WATER CURING.
7. IF REQUIRED BY THE ENGINEER, THE SURFACE OF THE CONCRETE SHALL BE GIVEN A FOG SPRAY OF WATER. THIS MAY BE REQUIRED PRIOR TO EITHER WATER CURING OR MEMBRANE CURING IF WEATHER CONDITIONS DICTATE. EQUIPMENT SHALL BE ON HAND.

REFERENCE SHALL BE MADE TO THE FOLLOWING:

STANDARD DRAWINGS:
- AS-1-81 DATED 11-27-81
- BR-1 DATED 5-29-79
- SD-1-69 DATED 6-12-69

SUPPLEMENTAL SPECIFICATIONS:
- 836 DATED 11-12-85
- 824 DATED 10-8-82
- 845 DATED 2-25-86
- 953 DATED 8-21-80

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1983, INCLUDING THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:

DESIGN LOADING: HS 20-44, CASE I AND THE ALTERNATE MILITARY LOADING.

DESIGN STRESSES:

CONCRETE, CLASS S	COMPRESSIVE STRENGTH: 4500 PSI (SUPERSTRUCTURE)	
CONCRETE, CLASS C	UNIT STRESS: 1333 PSI (SUBSTRUCTURE)	
REINFORCING STEEL	ASTM A615, A616, A617, GRADE 60, MINIMUM YIELD STRENGTH: 60,000 PSI. (SUPERSTRUCTURE)	GRADE 60, UNIT STRESS: 24,000 PSI SPIRAL REINFORCEMENT MAY BE PLAIN BARS ASTM A82 OR A615 (SUBSTRUCTURE)
STRUCTURAL STEEL	ASTM A36, UNIT STRESS: 20,000 PSI	
BOLTS	1" DIAMETER HIGH STRENGTH STEEL BOLTS CONFORMING TO ASTM A325 UNLESS NOTED OTHERWISE.	

△

GENERAL NOTES

DECK PROTECTION METHOD: EPOXY COATED REINFORCING STEEL WITH 3" CONCRETE COVER OF WHICH 1-1/4" IS A LATEX MODIFIED CONCRETE OVERLAY.

PILES shall be driven to a minimum bearing capacity of 35 tons per pile for the abutments and 45 tons per pile for the piers.

EMBANKMENT CONSTRUCTION: The embankments shall be constructed to the level of the subgrade for a minimum distance of 200 feet back of the abutments. Excavation shall then be made for the piers and pier piles driven. After a waiting period of 60 days, excavation for the abutments shall be made and abutment piles driven.

UTILITY LINES: All expense involved in relocating (installing) the affected utility lines shall be borne by the Owner(s). The Contractor and Owner(s) are requested to cooperate by arranging their work in such a manner that inconvenience to either would be held to a minimum.

MAINTENANCE OF TRAFFIC: Two lanes of traffic with a minimum horizontal width of 26'-0" and a minimum vertical clearance of 13'-6" shall be maintained on Reading Road at all times.

SEALING OF CONCRETE SURFACES: The following concrete areas are to be sealed per proposal note:
Superstructure Parapets (See Sheet 6/11)
Piers Columns adjacent to Roadways (See Sheet 7/11)

PREBORED HOLES: The Contractor may, at his option and expense, prebore holes through the embankment fill before driving the abutment piles.

Substructure bars not revised by Balke Engineers shall have a minimum lap of 30 bar diameters.

ITEM 523 DYNAMIC LOAD TEST
Dynamic Load Test shall be performed as directed by the Engineer.

VOGT, IVERS, & ASSOCIATES, INC. ENGINEERS CINCINNATI ARCHITECTS 2/11

ESTIMATED QUANTITIES & GENERAL NOTES
BRIDGE NO. HAM-126-1456
S.R. 126 OVER READING ROAD
HAMILTON COUNTY STA. 105+28.55 to STA. 107+18.63

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RLS	GJW	~	D.S.M. R.F.E.			BALKE COMMENTS 9/85

CALC. BY	HAM - 75 - 9.93	OHIO	665-A
DATE	HAM - 126 - 13.00	FHWA REGION 5	787
CHKD. BY			
DATE			

GENERAL NOTES
PLAN REVISIONS BY BALKE ENGINEERS

REVISIONS WERE MADE TO SUBSTRUCTURE DRAWINGS TO INCORPORATE THE FOLLOWING:

- o REVISE PARAPETS TO STANDARD SAFETY PARAPET SHAPE.
- o PROVIDE EPOXY-COATED REINFORCEMENT IN CORROSION-PRONE CONCRETE AREAS.
- o SEAL CONCRETE SURFACES OF PIER COLUMNS *AND PARAPETS.*
- o NUMBER PILES AND ADD DETAIL NOTES.
- o REVISE ABUTMENTS TO RECEIVE FULL WIDTH APPROACH SLAB PER AS-1-81.
- o REPLACE SLIDING PLATE EXPANSION JOINTS WITH STRIP SEAL JOINTS
- o LENGTHEN PIER COLUMN TO FOOTING DOWELS AS REQUIRED BY AASHTO.

AT THE REQUEST OF THE OHIO DEPARTMENT OF TRANSPORTATION, ALL SUBSTRUCTURE REINFORCEMENT IS TO BE GRADE 60.

REVISIONS MADE BY BALKE ENGINEERS ARE DENOTED BY (△) SYMBOL.

OTHER THAN NOTED REVISIONS, SUBSTRUCTURES ARE THE DESIGN AND DETAILING OF VOGT, IVERS, AND ASSOCIATES, INC.

ANALYSIS OF THE ORIGINAL SUPERSTRUCTURE DESIGN HAS BEEN COMPARED TO THE REVISED SUPERSTRUCTURE DESIGN TO ASSURE THAT LOADINGS HAVE NOT INCREASED ON SUBSTRUCTURES PROVIDED BY VOGT, IVERS AND ASSOCIATES, INC. DESIGN OF THESE SUBSTRUCTURES REMAINS THE RESPONSIBILITY OF VOGT, IVERS, AND ASSOCIATES.

REVISED SUPERSTRUCTURE DESIGN AND DETAILING WAS PREPARED TO CONFORM WITH UPDATED DESIGN STANDARDS.

DESIGN AND DETAILING BY BALKE ENGINEERS WAS PERFORMED IN ACCORDANCE WITH THE AASHTO SPECIFICATIONS FOR HIGHWAY BRIDGES, THIRTEENTH EDITION, 1983, AASHTO INTERIM SPECIFICATIONS FOR BRIDGES 1984, AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

2A / 11

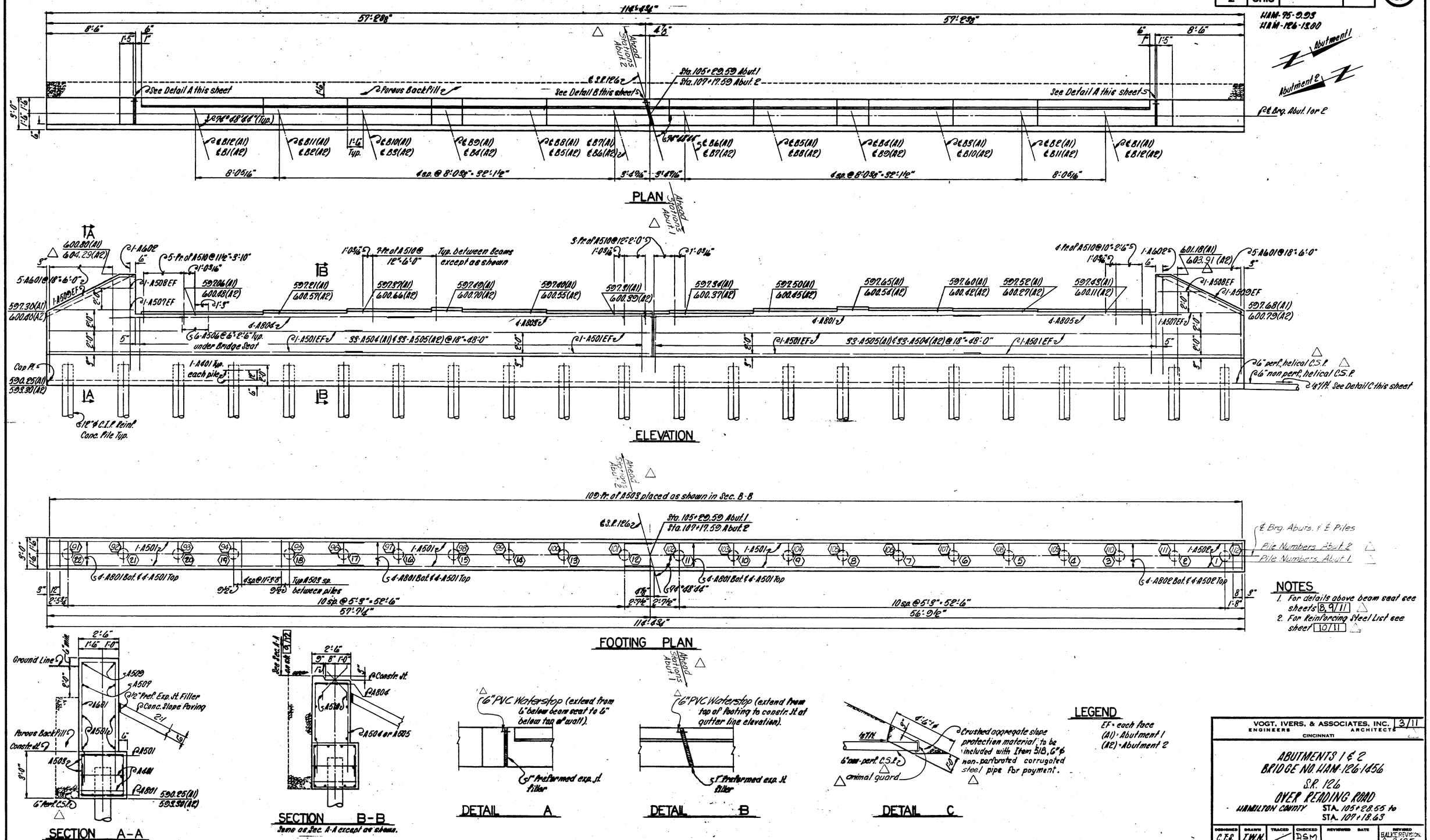
GENERAL NOTES
BRIDGE NO. HAM-126-1456
S.R. 126 OVER READING ROAD
HAMILTON COUNTY
STA. 105+28.55 to STA. 107+18.63

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
-	ALH	-	TMB	CRS 3/86	-

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

666
787

HAM-75-9.93
HAM-126-13.00



NOTES

1. For details above beam seat see sheets 8, 9/11
2. For Reinforcing Steel List see sheet 10/11

LEGEND

EF = each face
(A1) = Abutment 1
(A2) = Abutment 2

VOGT, IVERS, & ASSOCIATES, INC. 3/11
ENGINEERS ARCHITECTS
CINCINNATI

ABUTMENTS 1 & 2
BRIDGE NO. HAM-126-1456
S.R. 126
OVER READING ROAD
HAMILTON COUNTY STA. 105+28.55 to STA. 107+18.63

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.T.S.	T.W.N.		DSM			BALKE REVISION 9/85

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

GGT / TST

HAM-75-0.93
HAM-126-13.00

PLAN

SECTION A-A

SECTION B-B

SECTION C-C

SECTION D-D

ELEVATION

TYP. EXT. FOOT.

TYP. INT. FOOT.

FOOTING PLAN

TYPICAL DETAIL

Conc. Slope Protection

Pier Column

½" Preformed Exp. Jt. Filler (Include with Conc. Slope Protection for payment)

NOTES

1. For details of Laminated Elastomeric Bearings, See Sheet 5/11.
2. Place dowels in footing to insure correct spacing of main column steel.
3. For Reinforcing Steel List see sheet 11/11

LEGEND

(P1) = Pier 1
(P2) = Pier 2
Symbol indicates pile to be battered 1:4 in the direction of the arrow
Symbol indicates vertical pile
EF = Each Face
(T) = Hooks in stirrups will be located on the top of the cap.
(B) = Hooks in stirrups will be located on the bottom of the cap.
⬡ = Pile Number
41 thru 56 (P1)
75 thru 90 (P2)
23 thru 38 (P1)
57 thru 72 (P2)

VOGT, IVERS, & ASSOCIATES, INC. 4/11
ENGINEERS ARCHITECTS
CINCINNATI

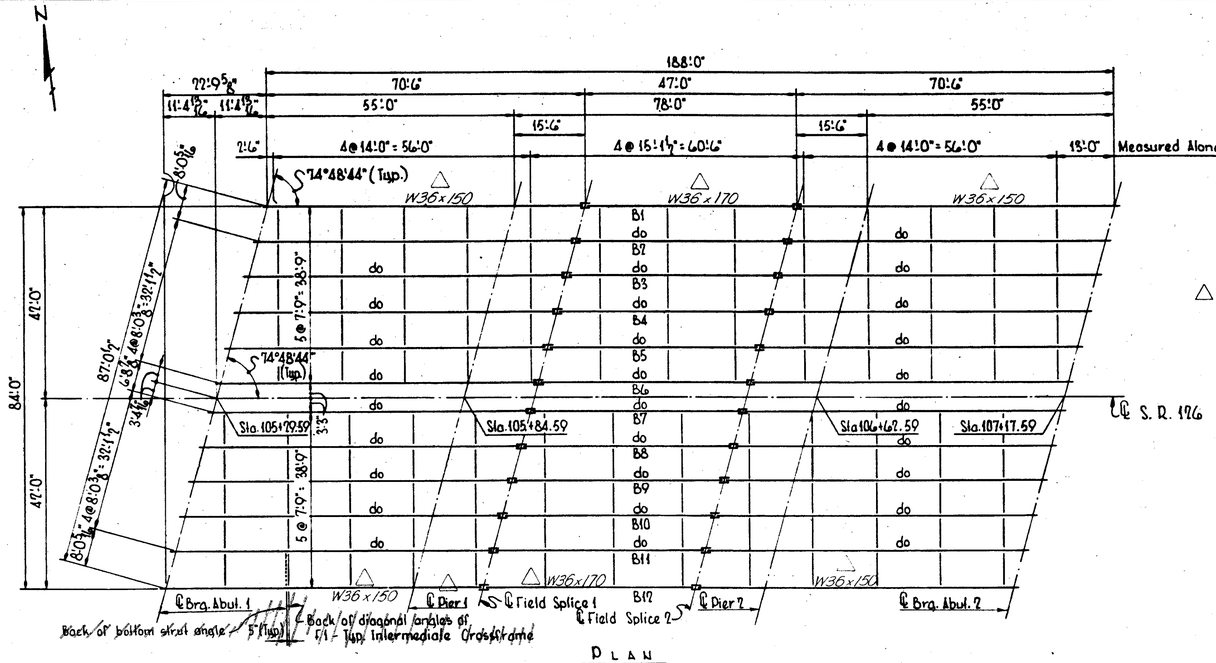
PIERS 1 AND 2
BRIDGE NO. HAM-126-1856
S.R. 126
OVER READING ROAD
HAMILTON COUNTY STA. 105+28.55 to STA. 107+18.63

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
K.C.P.	I.W.N.		D.S.M.			BALE REVISIONS 9/82

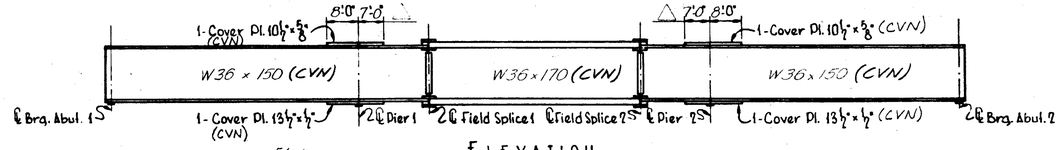
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

668 / 1587

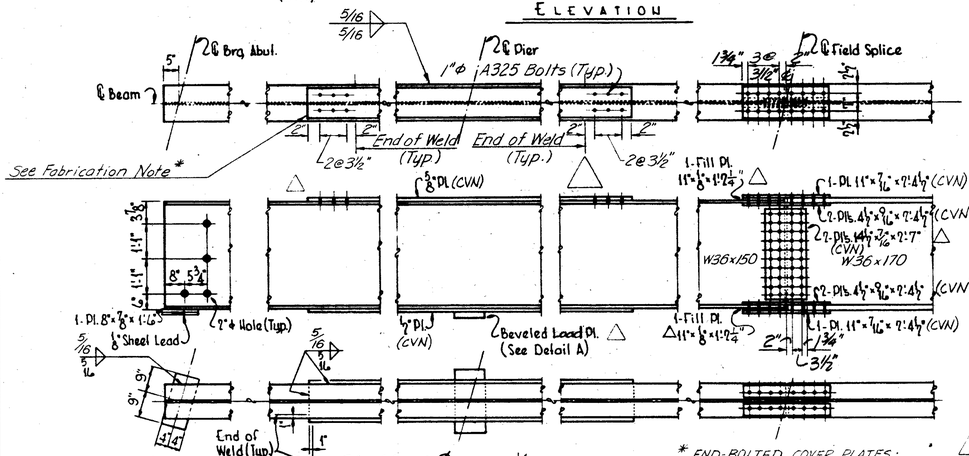
HAM-75-9.93
HAM-126-13.00



PLAN



ELEVATION



ELEVATION

SECTION

DETAIL A

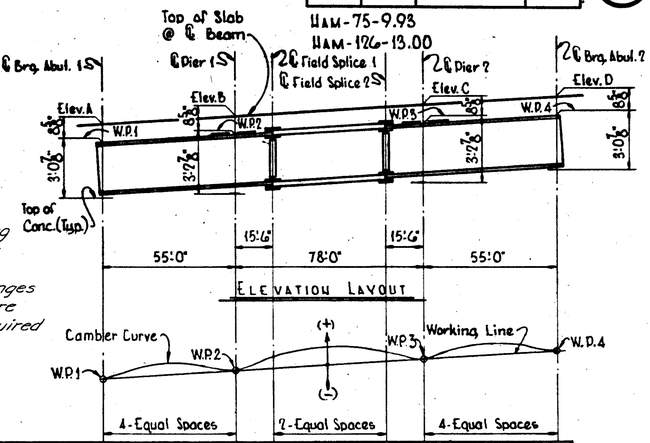
Elastomeric Pad (50 Durometer) t_i = .2734" t_e = .1953"
4-Steel laminates @ .0747" thick each.

t_i : internal layer of elastomer.
t_e : external layer.

NOTES FOR ELEVATION LAYOUT

1. Working Points (W.P.) are at top of beam.
2. The Working Line is a straight line through W.P. 1, 2, 3, and 4.
3. Tabulated values in the Deflection and Camber Table are measured from the Working Line.

△ WELDED ATTACHMENT of supports for concrete deck finishing machine may be made to areas of the fascia stringer flanges designed "Compression". Attachments shall not be made to areas designated "Tension". Fillet welds to compression flanges shall be not closer than 1" from edge of flange, be not more than 2" long, and be not smaller than the minimum size required by AASHTO.



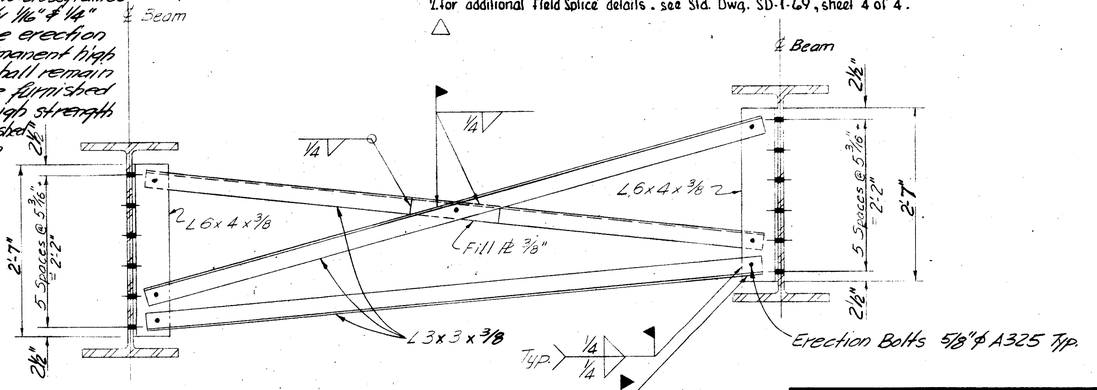
Beam	Elev. A	Elev. B	Elev. C	Elev. D
B1	601.921	602.114	603.381	604.274
B2	601.908	602.201	603.468	604.361
B3	601.895	602.208	603.555	604.448
B4	601.883	602.336	603.603	604.496
B5	601.888	602.181	603.448	604.341
B6	601.933	602.096	603.292	604.185
B7	601.104	601.997	603.264	604.157
B8	601.191	602.084	603.351	604.244
B9	601.278	602.171	603.438	604.331
B10	601.162	602.055	603.321	604.214
B11	601.006	601.899	603.166	604.059
B12	600.851	601.744	603.011	603.904

	Beam	A1	¼	½	¾	D1	FS1	½	FS2	D2	⅛	½	¾	A2
Deflection due to Steel DL	B1 thru B12	0	0	0	0	0	+1/16"	+1/8"	+1/16"	0	0	0	0	0
Deflection due to Remaining DL	B1	0	+1/8"	+1/8"	+1/16"	0	+1/4"	+9/16"	+1/4"	0	+1/16"	+1/8"	+1/8"	0
	B2 thru B5	0	+3/16"	+3/16"	+1/16"	0	+1/4"	+9/16"	+1/4"	0	+1/16"	+3/16"	+3/16"	0
	B6	0	+1/8"	+1/8"	0	0	+3/16"	+1/8"	0	0	+1/8"	+1/8"	+1/8"	0
	B7	0	+3/16"	+3/16"	+1/16"	0	+5/16"	+5/8"	+1/4"	0	+1/16"	+3/16"	+3/16"	0
	B8 thru B11	0	+3/16"	+3/16"	+1/16"	0	+1/4"	+5/8"	+1/4"	0	+1/16"	+3/16"	+3/16"	0
	B12	0	+1/8"	+1/8"	+1/16"	0	+1/4"	+9/16"	+1/4"	0	+1/16"	+1/8"	+1/8"	0
Total Camber Required	B1	0	+1/8"	+1/8"	+1/16"	0	+5/16"	+11/16"	+5/16"	0	+1/16"	+1/8"	+1/8"	0
	B2 thru B5	0	+3/16"	+3/16"	+1/16"	0	+5/16"	+11/16"	+5/16"	0	+1/16"	+3/16"	+3/16"	0
	B6	0	+1/8"	+1/8"	0	0	+1/4"	+5/8"	+1/4"	0	0	+1/8"	+1/8"	0
	B7	0	+3/16"	+3/16"	+1/16"	0	+5/16"	+3/4"	+5/16"	0	+1/16"	+3/16"	+3/16"	0
	B8 thru B11	0	+3/16"	+3/16"	+1/16"	0	+5/16"	+3/4"	+5/16"	0	+1/16"	+3/16"	+3/16"	0
	B12	0	+1/8"	+1/8"	+1/16"	0	+5/16"	+11/16"	+5/16"	0	+1/16"	+1/8"	+1/8"	0

△ ELEVATIONS IN THIS TABLE ARE AT TOP OF 1¼" LATEX MODIFIED CONCRETE OVERLAY

NOTES

1. For General Notes, see sheet 2 / 11
2. For additional Field Splice details, see Std. Dwg. SD-1-69, sheet 4 of 4.



A36 Steel
¾"ϕ A325 Bolts

△ TYPICAL INTERMEDIATE CROSSFRAME

ERECTION BOLTS: Hole diameter in the crossframes and angles shall be respectively 1/16" & 1/4" larger than the diameter of the erection bolts. Unless replaced by permanent high strength bolts, erection bolts shall remain in place. Lock washers shall be furnished for other than fully torqued high strength erection bolts. Bolts shall be furnished as part of 513. In lieu of erection bolts and at the option of the contractor, alternate means of temporary bracing may be used, subject to the approval of the director (501.06).

* END-BOLTED COVER PLATES:
BOLT HOLES IN COVER PLATE AND FLANGE MUST BE DRILLED PRIOR TO WELDING TO ENSURE FRICTION TYPE CONNECTION. CONTACT SURFACES MUST BE BLAST-CLEANED AND COMPLETELY FREE OF RESIDUE.

RECOMMENDED FABRICATION METHOD
1). DRILL STANDARD HOLES IN COVER PLATE AND FLANGE
2). CLEAN CONTACT SURFACES TO BE BLASTED
3). TACK **WELD** COVER PLATE TO FLANGE
4). INSTALL AND **TIGHTEN HIGH STRENGTH** BOLTS
5). FILLET **WELD** COVER PLATE TO FLANGE.
STEPS NUMBERS 4 AND 5 CAN BE INTERCHANGED IF DESIRED.

STEEL NOTCH TOUGHNESS REQUIREMENT (CHARPY V-NOTCH)
WHERE A SHAPE OR PLATE IS DESIGNATED (CVN) THE MATERIAL SHALL MEET SPECIFIED MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01 OF CMS.

VOGT, IVERS, & ASSOCIATES, INC. ENGINEERS ARCHITECTS CINCINNATI — 5/11

FRAMING PLAN

BRIDGE NO. HAM-126-1456
S.R. 126
OVER READING ROAD
HAMILTON COUNTY STA. 105+28.55 to STA. 107+18.63

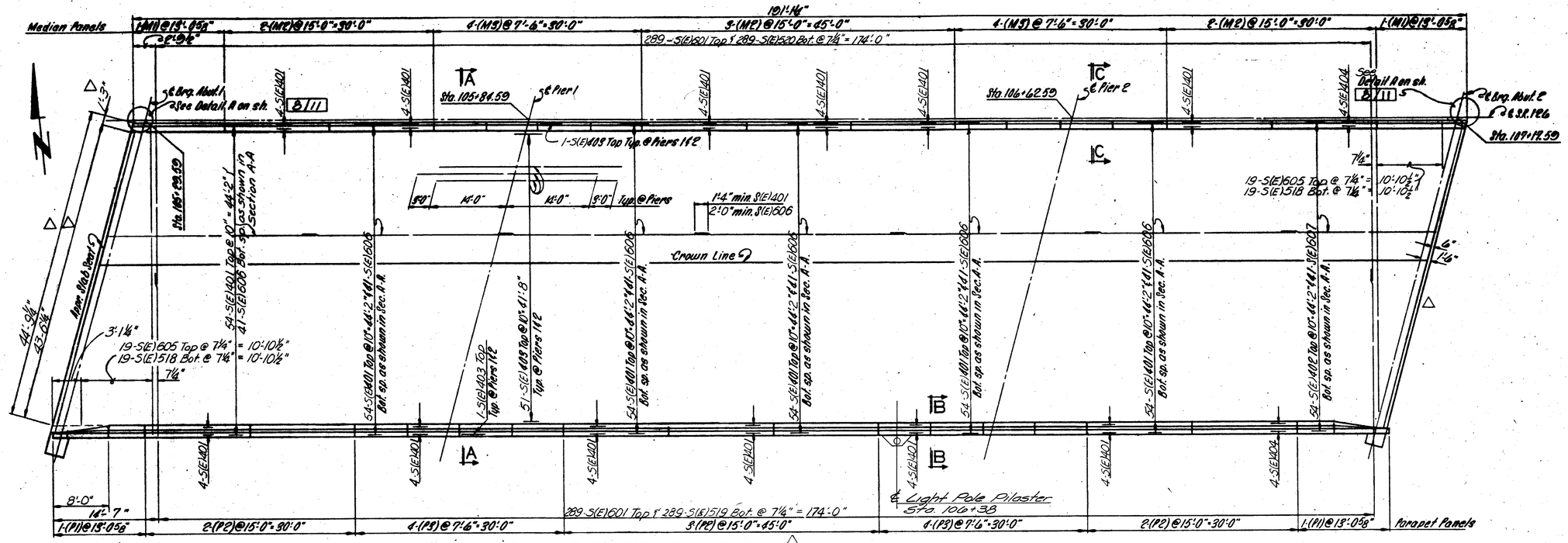
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
AV	CWM	—	DSM			SOUTH REVISIONS △ 9/85

REVISED 7/29/86

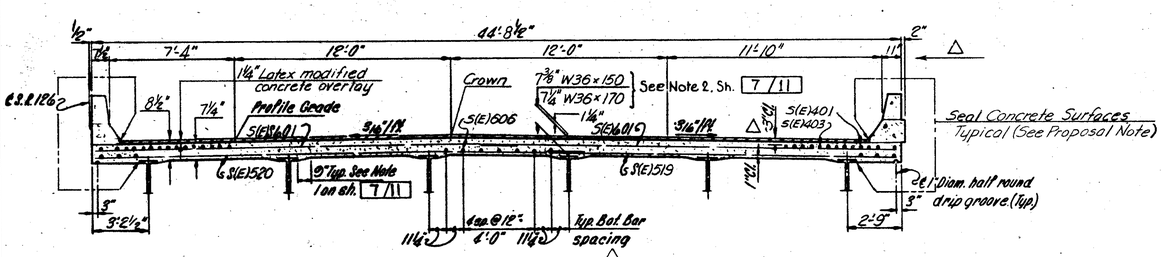
FED. ROAD DESIGNATION	STATE	PROJECT	
2	OHIO		

667
107

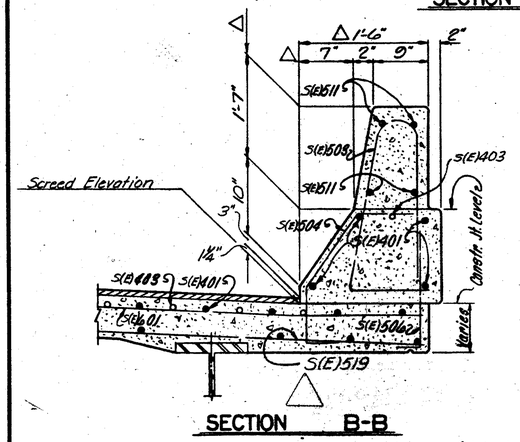
HAM-75-9.03
HAM-126-13.00



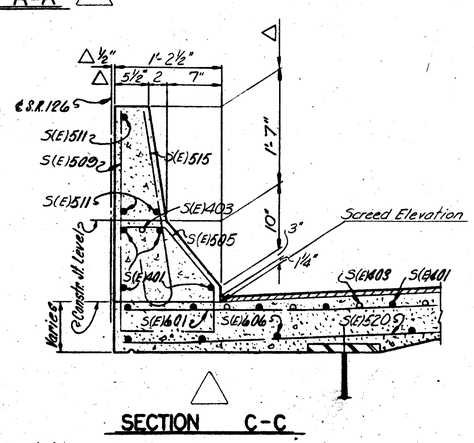
EASTBOUND SLAB PLAN



SECTION A-A



SECTION B-B



SECTION C-C

(Not to Scale)

PAVEMENT ELEVATIONS*				
Station	North Curb	P.G.	Crown	South Curb
105+25.00	601.02	601.12	601.31	600.94
105+50.00	601.42	601.52	601.71	601.35
105+75.00	601.83	601.93	602.12	601.75
106+00.00	602.23	602.34	602.52	602.16
106+25.00	602.64	602.74	602.93	602.57
106+50.00	603.05	603.15	603.34	602.97
106+75.00	603.45	603.55	603.74	603.38
107+00.00	603.86	603.96	604.15	603.78
107+25.00	604.26	604.37	604.55	604.19

*ON TOP OF 1¼" LATEX OVERLAY

△ The screed elevations shown have been obtained by adding the dead load deflection due to the weight of concrete slab, latex modified concrete overlay, bridge parapet, future wearing surface, and steel beams to the required final elevations.

℄ Brg. Abut 1 — equal spaces — ℄ Pier 1 — equal spaces — ℄ Pier 2 — equal spaces — ℄ Brg. Abut 2

SCREED ELEVATIONS (Top of Portland Cement Concrete)												
North Curb	600.97	601.21	601.44	601.65	601.87	602.22	602.55	602.85	603.13	603.36	603.60	603.82	604.03
South Curb	600.73	600.96	601.10	601.40	601.62	601.96	602.30	602.60	602.89	603.11	603.35	603.59	603.78

NOTES

1. For Notes, Median and Parapet Panel Details, see sheet 7/11 △
2. For details on the end of Slab see s/s 8/11
3. For Abutments 1 and 2, see sheet 3/11 △
4. For Reinforcing Steel List see sheet 11/11 △
5. For Details of Light Pole Pilaster See Sheet 9/11

△ "(E)" denotes epoxy coated reinforcing bar.

VOGT, IVERS, & ASSOCIATES 6/11
ENGINEERS CINCINNATI — ARCHITECTS CHICAGO △

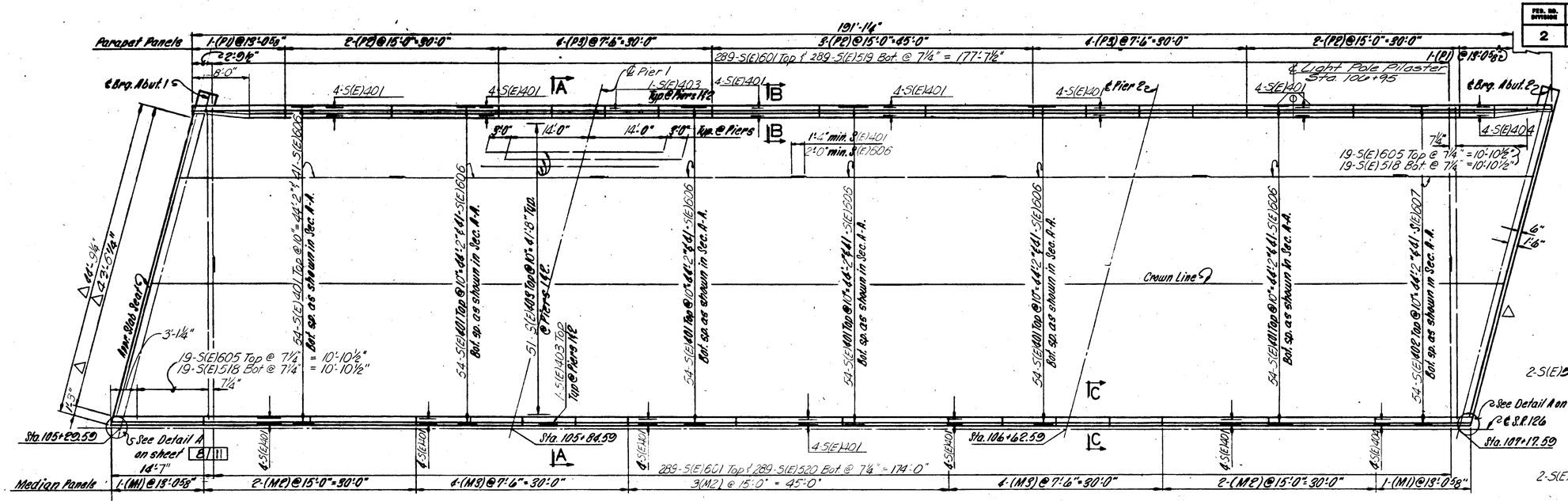
ROADWAY SLAB - EASTBOUND
BRIDGE NO. HAM-126-1656
S.R. 126
OVER READING ROAD
HAMILTON COUNTY STA. 105+28.55 to STA. 109+12.63

DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE	REVISION DALE REVISIONS 5/85 △
R.V.	I.W.N	—	D.S.M.			

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

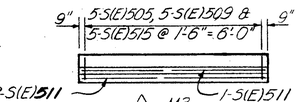
670
187

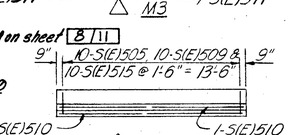
HAM-75-9.98
HAM-126-13.00

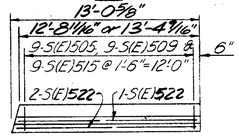


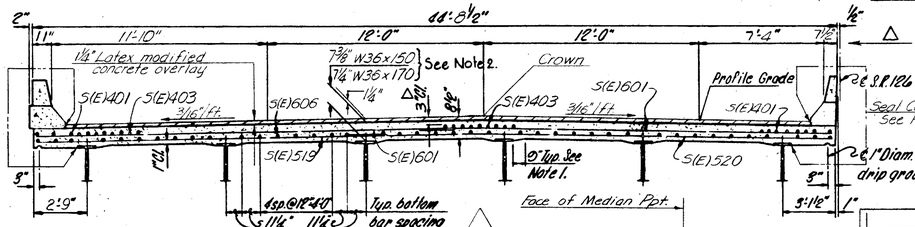
WESTBOUND SLAB PLAN

MEDIAN PANELS		
MARK	LENGTH	NO.
M1	13'-0 5/8"	4
M2	15'-0"	14
M3	7'-6"	16

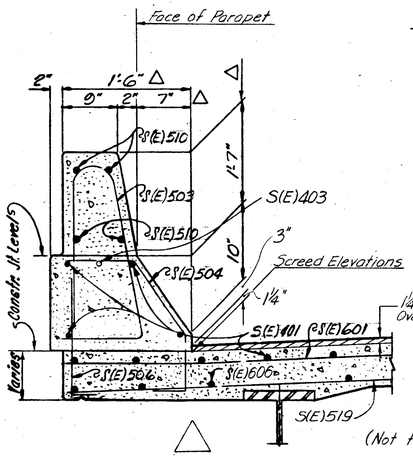




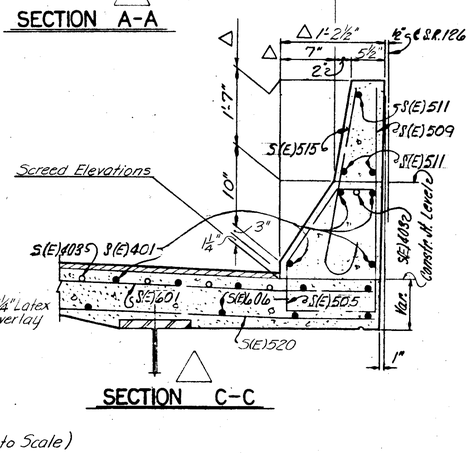




SECTION A-A

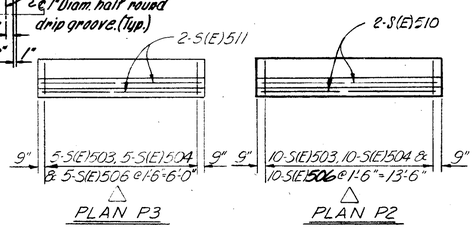


SECTION B-B
Sec. F-F similar



SECTION C-C

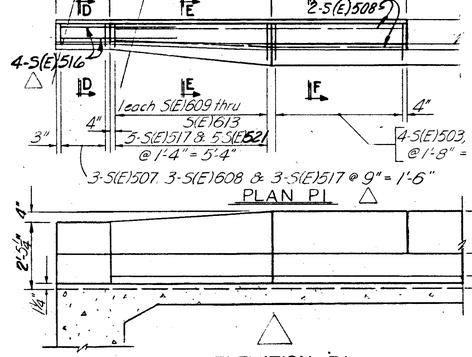
PARAPET PANELS		
MARK	LENGTH	NO.
P1	13'-0 5/8"	4
P2	15'-0"	14
P3	7'-6"	16



PLAN P3 PLAN P2

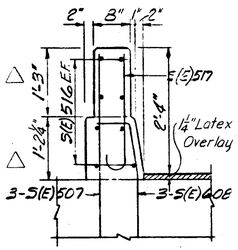
PAVEMENT ELEVATIONS *				
Station	North Curb	Crown	P.G.	South Curb
105+25.00	600.94	601.31	601.12	601.02
105+50.00	601.35	601.71	601.52	601.42
105+75.00	601.76	602.12	601.93	601.83
106+00.00	602.16	602.52	602.34	602.23
106+25.00	602.57	602.93	602.74	602.64
106+50.00	602.97	603.34	603.15	603.05
106+75.00	603.38	603.74	603.55	603.45
107+00.00	603.78	604.15	603.96	603.86
107+25.00	604.19	604.55	604.37	604.26

*TOP OF LATEX OVERLAY.

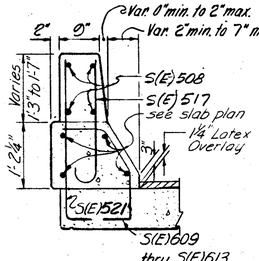


PLAN P1

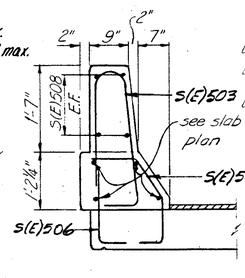
ELEVATION P1



SECTION D-D



SECTION E-E



SECTION F-F

(Top of Portland Cement Concrete) SCREED ELEVATIONS													
	℄ Brg. Abut. 1			℄ Pier 1			℄ Pier 2			℄ Brg. Abut. 2			
	equal spaces			equal spaces			equal spaces						
North Curb	601.11	601.34	601.57	601.78	602.00	602.36	602.58	602.98	603.29	603.49	603.78	603.95	604.16
South Curb	600.99	601.23	601.45	601.66	601.88	602.23	602.57	602.86	603.15	603.37	603.61	603.83	604.04

△ The screed elevations shown have been obtained by adding the dead load deflection due to the weight of concrete slab, latex modified concrete overlay, bridge parapet, future wearing surface and steel beams to the required final elevations.

NOTES

△ M1 (Also Opposite Hand)

1. A typical haunch width of 9" shall be used for computing the quantity of concrete; however, the haunch width may vary between 6" and 12" provided that the slope shall not be more than 1:4 for a haunch less than 9" in width.
△ 2. The distance shown from top of deck slab to top of steel beam is the design dimension. The quantity of deck concrete to be paid for shall be based on this dimension, even though deviation from it may be necessary because the top flange of the beam may not have the exact camber or conformation required to place it parallel to the finished grade.
3. For Details of Light Pole Pilaster see Sheet 9 11
△ 4. For details on the end of Slab see sheet 9 11
△ 5. For Abutments 1 and 2 see sheet 9 11
△ 6. For Reinforcing Steel List see sheet 10 11
7. "(E)" denotes epoxy coated reinforcing bar.

VOGT, IVERS, & ASSOCIATES
ENGINEERS CINCINNATI ARCHITECTS CHICAGO
7 11

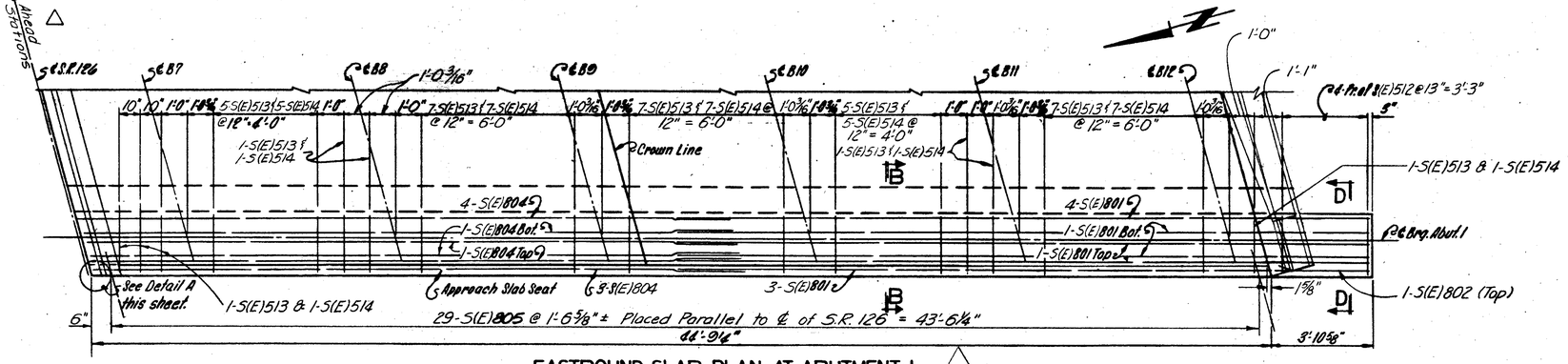
ROADWAY SLAB - WESTBOUND
BRIDGE NO. HAM-126-1456
S.R. 126
OVER READING ROAD
HAMILTON COUNTY STA. 105+28.55 to STA. 107+18.65

DESIGNED	DRAWN	TRACED	CHECKED	REVISIONS	DATE	REVISED (ALL DIVISIONS) 1/85
A.V.	I.W.K.		D.S.M.			

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

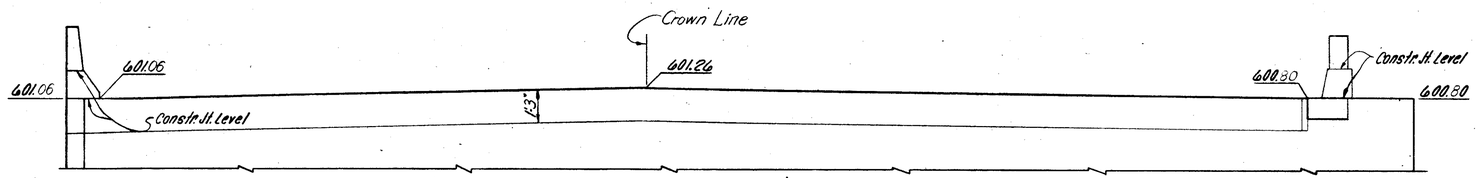
671/787

HAM-75-9.93
HAM-126-13.00

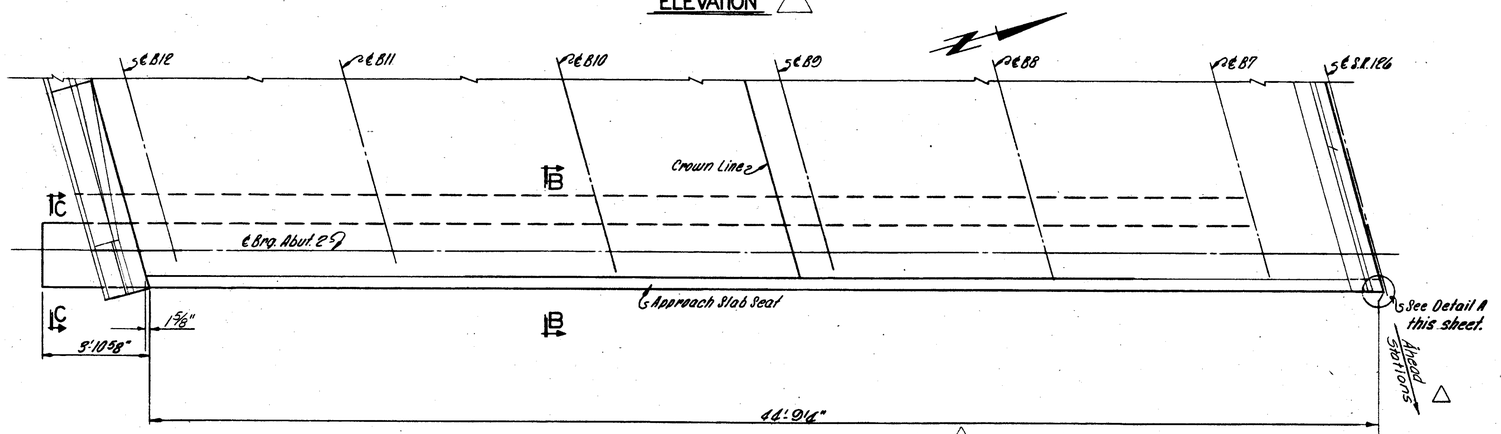


EASTBOUND SLAB PLAN AT ABUTMENT 1

Reinforcing Steel at Abut. 2 opposite hand

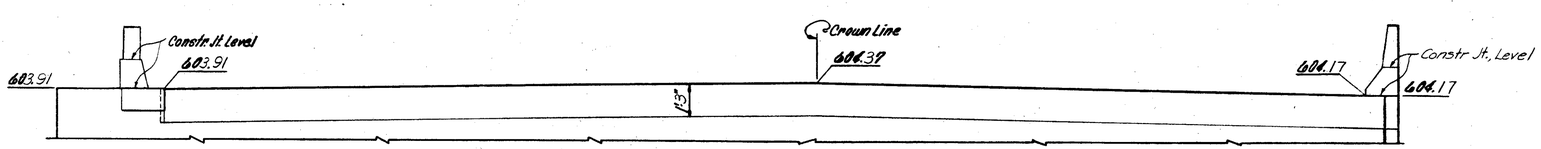


ELEVATION

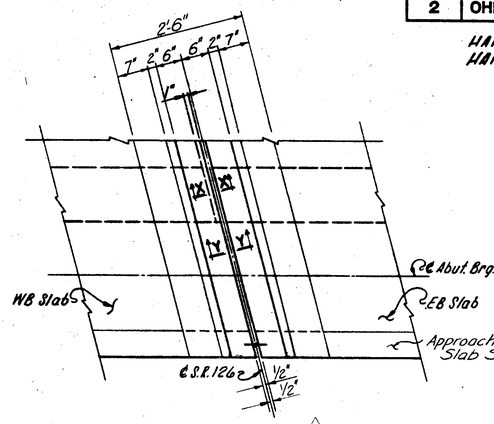


EASTBOUND SLAB PLAN AT ABUTMENT 2

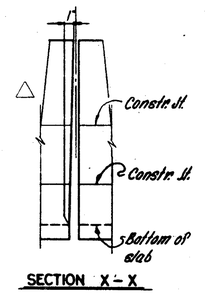
Reinforcing Steel same as shown at Abut. 1



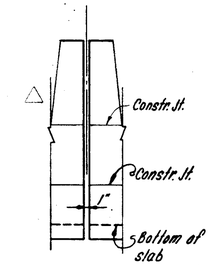
ELEVATION



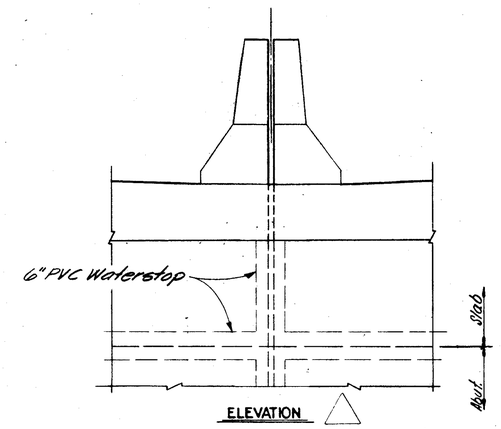
PLAN



SECTION X-X



SECTION Y-Y



ELEVATION

DETAIL A

NOTES

1. For Notes see sheet 6/11 & 7/11
2. For Reinforcing Steel List see sh. 10/11
3. For Sections B-B, C-C and D-D see sh. 9/11
4. "(E)" denotes epoxy coated reinforcing bar

VOGT, IVERS, & ASSOCIATES, INC. 8/11
ENGINEERS ARCHITECTS
CINCINNATI

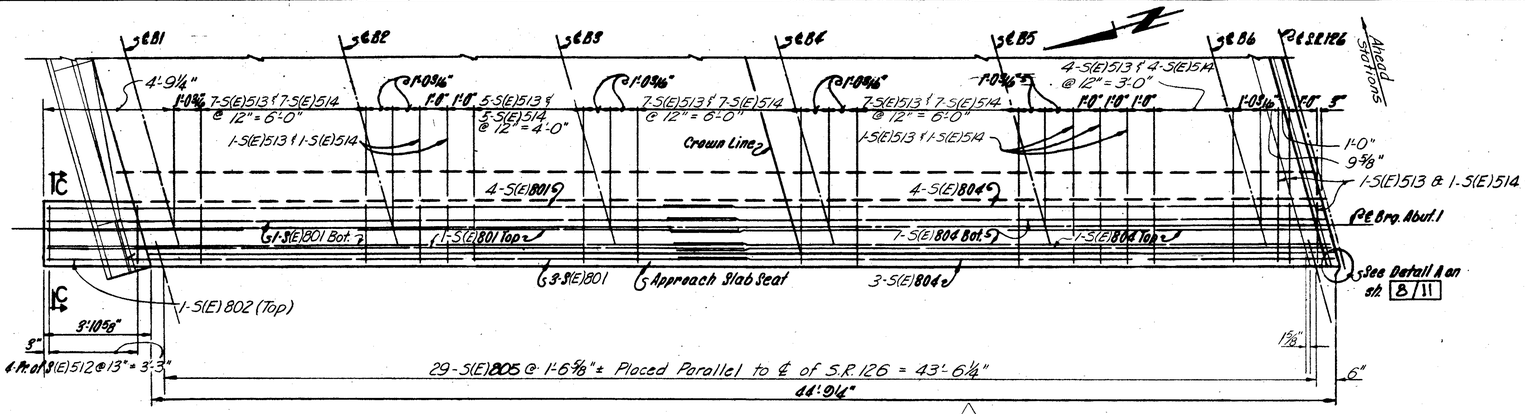
ROADWAY SLAB - DETAILS E.B.
BRIDGE NO. HAM-126-1456
S.R. 126
OVER READING ROAD
HAMILTON COUNTY STA. 105+28.55 to STA. 107+18.63

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
A.Y.	T.W.N.		D.S.M.			BALKE REVISIONS 7/85

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

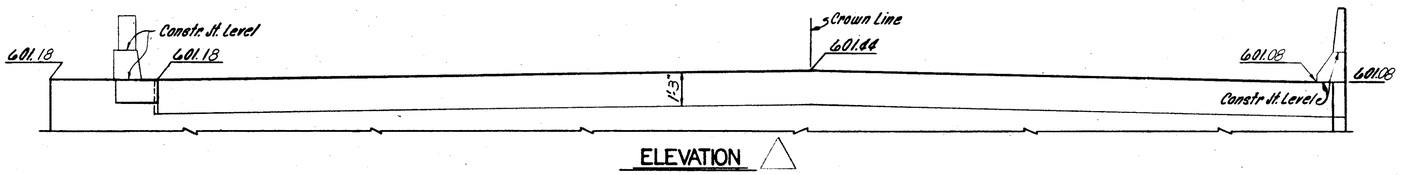
GTZ 787

HAM-75-0.98
HAM-126-13.00

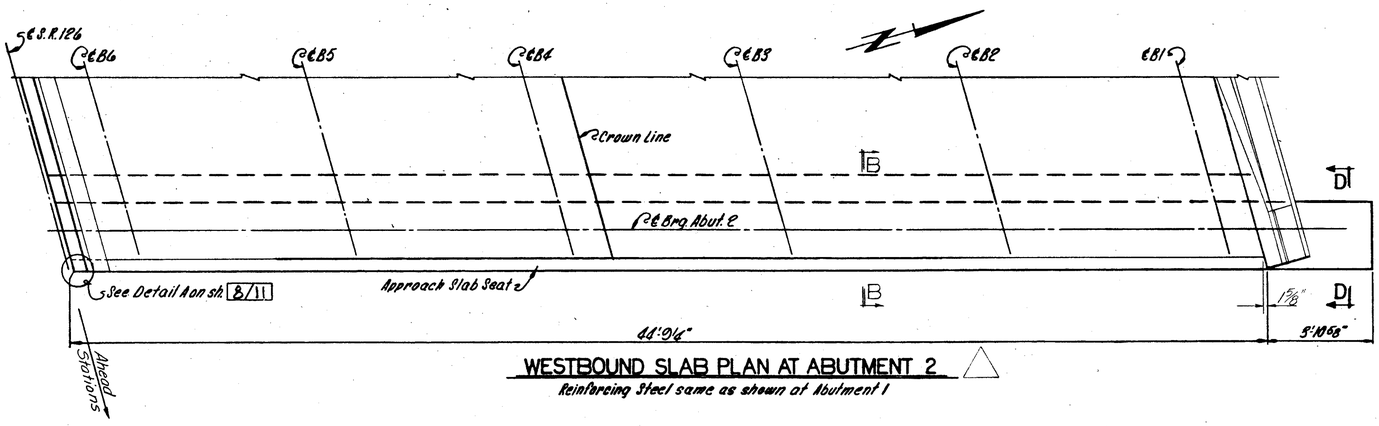


WESTBOUND SLAB PLAN AT ABUTMENT 1

Reinforcing Steel at Abut. 2 opposite hand

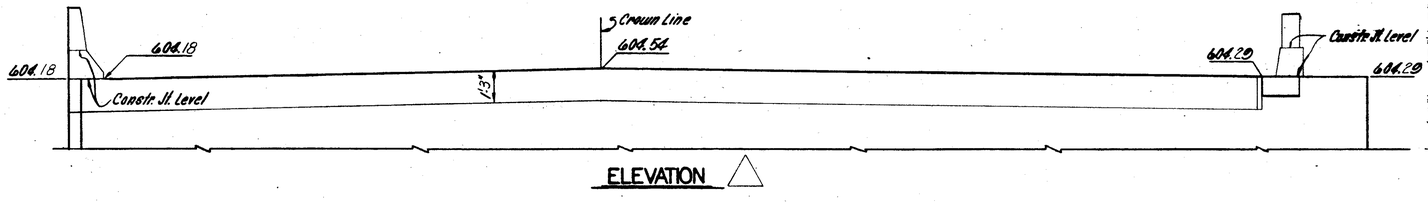


ELEVATION

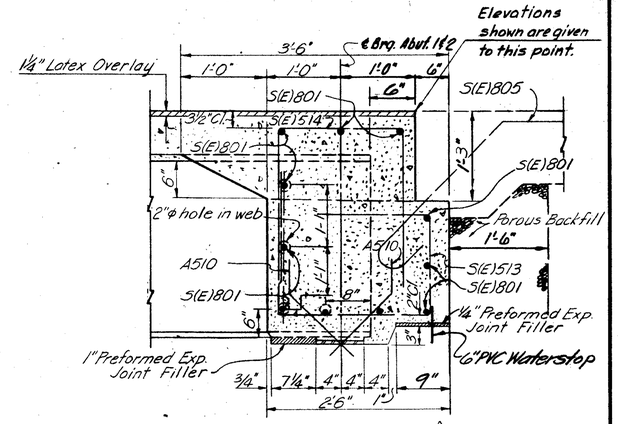


WESTBOUND SLAB PLAN AT ABUTMENT 2

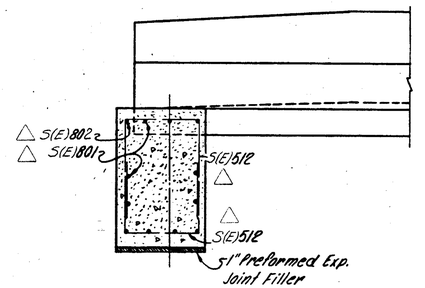
Reinforcing Steel same as shown at Abutment 1



ELEVATION

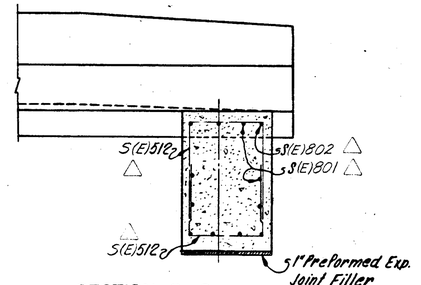


SECTION B-B



SECTION D-D

Eastbound opposite hand

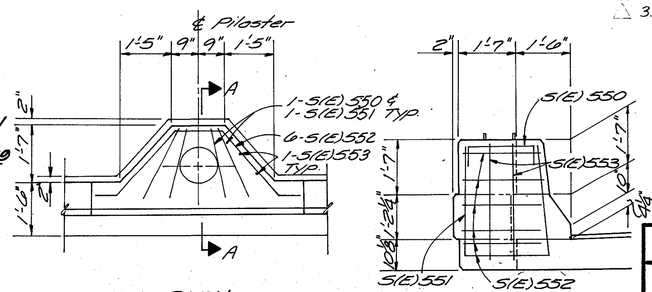


SECTION C-C

Eastbound opposite hand

NOTES

△ 1. For additional Notes see sheet 7/11
△ 2. For Reinforcing Steel List, see sheet 10/11
△ 3. "(E)" denotes epoxy coated reinforcing bar.



PLAN

SECTION A-A

LIGHT POLE PILASTER

For Additional Information Refer to Std. Construction Dwgs. HL-3 & HL-4.

VOGT, IVERS, & ASSOCIATES, INC. 9/11
ENGINEERS ARCHITECTS
CINCINNATI

ROADWAY SLAB - DETAILS WB
BRIDGE NO. HAM-126-1456
S.R. 126
OVER READING ROAD
HAMILTON COUNTY STA. 105+28.55 to STA. 107+18.69

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED SHEET REVISIONS 7/85
A.V.	Z.W.N.		D.S.M.			

ABUTMENT 1

MARK	NO.	LENGTH	TYPE	WEIGHT
A401	44	9'-2"	Bt.	269
A501	34	30'-0"	Str.	1064
A502	6	28'-10"	Str.	180
A503	218	6'-5"	Bt.	1459
A504	33	13'-0"	Bt.	447
A505	33	13'-4"	Bt.	459
A506	72	3'-10"	Bt.	288
A507	4	7'-9"	Str.	32
A508	4	3'-9"	Str.	16
A509	4	8'-10"	Bt.	37
A510	100	3'-2"	Bt.	330
A601	10	14'-2" to 20'-2" by 1'-6" (4 ea.)	Bt.	258
A602	2	20'-10"	Bt.	63
A801	16	30'-0"	Str.	1282
A802	4	31'-7"	Str.	337
A803	4	25'-4"	Str.	271
A804	4	29'-0"	Str.	310
A805	4	23'-0"	Str.	246

ABUTMENT 2

MARK	NO.	LENGTH	TYPE	WEIGHT
A401	44	9'-2"	Bt.	269
A501	34	30'-0"	Str.	1064
A502	6	28'-10"	Str.	180
A503	218	6'-5"	Bt.	1459
A504	33	13'-0"	Bt.	447
A505	33	13'-4"	Bt.	459
A506	72	3'-10"	Bt.	288
A507	4	7'-9"	Str.	32
A508	4	3'-9"	Str.	16
A509	4	8'-10"	Bt.	37
A510	100	3'-2"	Bt.	330
A601	10	14'-2" to 20'-2" by 1'-6" (4 ea.)	Bt.	258
A602	2	20'-10"	Bt.	63
A801	16	30'-0"	Str.	1282
A802	4	31'-7"	Str.	337
A803	4	25'-4"	Str.	271
A804	4	29'-0"	Str.	310
A805	4	23'-0"	Str.	246

PIER 1

MARK	NO.	LENGTH	TYPE	WEIGHT
P501	24	9'-9" to 11'-5" by 4" (4 ea.)	Bt.	265
P502	72	13'-3"	Bt.	995
P503	14	13'-1"	Bt.	191
P504	72	4'-5"	Bt.	332
P505	4	23'-3"	Str.	97
P801	96	10'-10"	Bt.	2777
P802	20	8'-10"	Bt.	472
P803	12	22'-11"	Bt.	734
P804	12	24'-6"	Str.	785
P901	4	17'-10"	Bt.	243
P902	6	15'-5"	Str.	315
P903	8	13'-0"	Str.	354
P904	8	14'-6"	Str.	394
P905	6	17'-0"	Str.	347
P906	4	20'-3"	Bt.	275
P907	10	19'-0"	Str.	646
P1001	48	9'-9"	Bt.	2014
P1002	24	27'-3"	Str.	2814
P1004	24	27'-0"	Str.	2788
SP401	3	24'-0"	Bt.	1339
SP403	3	23'-9"	Bt.	1325

PIER 2

MARK	NO.	LENGTH	TYPE	WEIGHT
P501	24	9'-9" to 11'-5" by 4" (4 ea.)	Bt.	265
P502	72	13'-3"	Bt.	995
P503	14	13'-1"	Bt.	191
P504	72	4'-5"	Bt.	332
P505	4	23'-3"	Str.	97
P801	96	10'-10"	Bt.	2777
P802	20	8'-10"	Bt.	472
P803	12	22'-11"	Bt.	734
P804	12	24'-6"	Str.	785
P901	4	17'-10"	Bt.	243
P902	6	15'-5"	Str.	315
P903	8	13'-0"	Str.	354
P904	8	14'-6"	Str.	394
P905	6	17'-0"	Str.	347
P906	4	20'-3"	Bt.	275
P907	10	19'-0"	Str.	646
P1001	48	9'-9"	Bt.	2014
P1003	24	28'-7"	Str.	2952
P1005	24	28'-3"	Str.	2917
SP402	3	25'-4"	Bt.	1410
SP404	3	25'-0"	Bt.	1392

SUPERSTRUCTURE △

MARK	NO.	LENGTH	TYPE	WEIGHT
S(E)401	744	30'-0"	Str.	14910
S(E)402	108	17'-9"	Str.	1281
S(E)403	212	31'-0"	Str.	4390
S(E)404	16	19'-0"	Str.	203
S(E)501-502		Not Used		
S(E)503	236	5'-6"	Bt.	1354
S(E)504	236	3'-2"	Bt.	779
S(E)505	256	2'-9"	Bt.	734
S(E)506	236	2'-4"	Bt.	574
S(E)507	12	4'-7"	Str.	57
S(E)508	16	10'-8"	Str.	178
S(E)509	256	3'-11"	Bt.	1046
S(E)510	98	14'-8"	Str.	1499
S(E)511	112	7'-2"	Str.	837
S(E)512	32	6'-11"	Bt.	231
S(E)513	154	7'-7"	Bt.	1218
S(E)514	154	6'-11"	Bt.	1111
S(E)515	256	3'-0"	Bt.	801
S(E)516	32	4'-6"	Str.	150
S(E)517	32	2'-8"	Bt.	89
S(E)518	76	1'-9⅛" to 4'-11" by 2'-2¾" (4 ea.)	Str.	1732
S(E)519	578	19'-2"	Str.	11555
S(E)520	578	27'-0"	Str.	16277
S(E)521	20	3'-7"	Bt.	75
S(E)522	12	12'-8"	Str.	159
S(E)601	1156	23'-3"	Str.	40369
S(E)602		Not Used		
S(E)603		Not Used		
S(E)604		Not Used		
S(E)605	76	1'-9½" to 4'-11" by 2'-2¾" (4 ea.)	Str.	2495
S(E)606	492	30'-0"	Str.	22170
S(E)607	82	22'-0"	Str.	2710
S(E)608	12	3'-7"	Bt.	65
S(E)609	4	2'-6"	Bt.	15
S(E)610	4	2'-9"	Bt.	17
S(E)611	4	2'-11"	Bt.	18
S(E)612	4	3'-0"	Bt.	18
S(E)613	4	3'-1"	Bt.	19
S(E)801	44	30'-0"	Str.	3524
S(E)802	4	3'-6"	Str.	37
S(E)803	116	4'-11"	Bt.	1523
S(E)804	44	22'-10"	Str.	2682
S(E)550	8	2'-10"	Bt.	24
S(E)551	8	8'-5"	Bt.	70
S(E)552	12	7'-3"	Bt.	91
S(E)553	8	3'-2"	Str.	26

MARK	NO.	LENGTH	TYPE	WEIGHT

FED. RD. DIVISION	STATE	PROJECT		
2	OHIO			

(674 787)

HAM-75-9.93
HAM-126-13.00

NOTES

△

2. SPIRAL REINFORCING BARS: THE "LENGTH" SHOWN IN THE STEEL LIST FOR THE SPIRAL BARS IS THE DISTANCE FROM TOP OF THE FOOTING TO THE BOTTOM OF CAP, OR TO WITHIN 2" (±) OF THE TOP OF COLUMN FOR PIERS WITHOUT CAPS, TO THE NEAREST INCH

FOUR STEEL ANGLE SPACERS, WEIGHING NOT LESS THAN 0.80 LB. PER LIN. FT. OF SPACER SHALL BE PROVIDED FOR EACH SPIRAL UNIT UP TO 15'-0" IN HEIGHT AND FOUR STEEL ANGLE SPACERS WEIGHING NOT LESS THAN 1.01 LB. PER LIN. FT. OF SPACER SHALL BE PROVIDED FOR EACH SPIRAL UNIT OVER 15'-0" IN HEIGHT. THEY SHALL BE EQUALLY SPACED ALONG THE PERIPHERY OF THE COIL. THE NUMBER OF POUNDS OF THESE SPACERS, BASED ON 0.80 OR 1.01 LB. PER LIN. FT. WILL BE PAID FOR AS REINFORCING STEEL AND IS INCLUDED IN THE TABULATED QUANTITY OF SPIRAL BARS.

△3. SEE SHEET 11/11 FOR BENDING DETAILS

△4. Refer to C.M.S. Sections 106.03, 709.01 thru 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structures by the additional steel, spliced in accordance with 509.08.

△5. "(E)" denotes epoxy coated reinforcing bar.

△6. Substructure bars not revised by Balke Engineers (△) shall have a minimum lap of 30 bar diameters.

VOGT, IVERS & ASSOCIATES, INC. ENGINEERS CINCINNATI ARCHITECTS 10/11 △

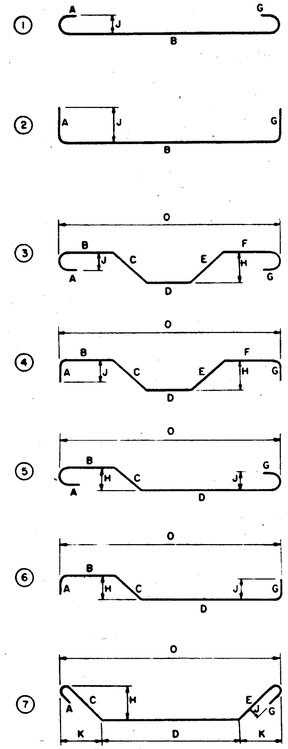
REINFORCING STEEL LIST

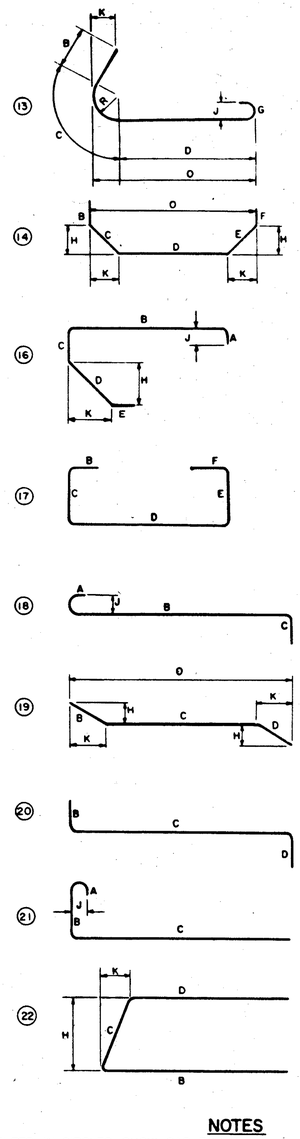
BRIDGE NO. HAM-126-1456
S.R. 126 OVER READING ROAD

HAMILTON COUNTY STA. 105+28.55 to STA. 107+18.63

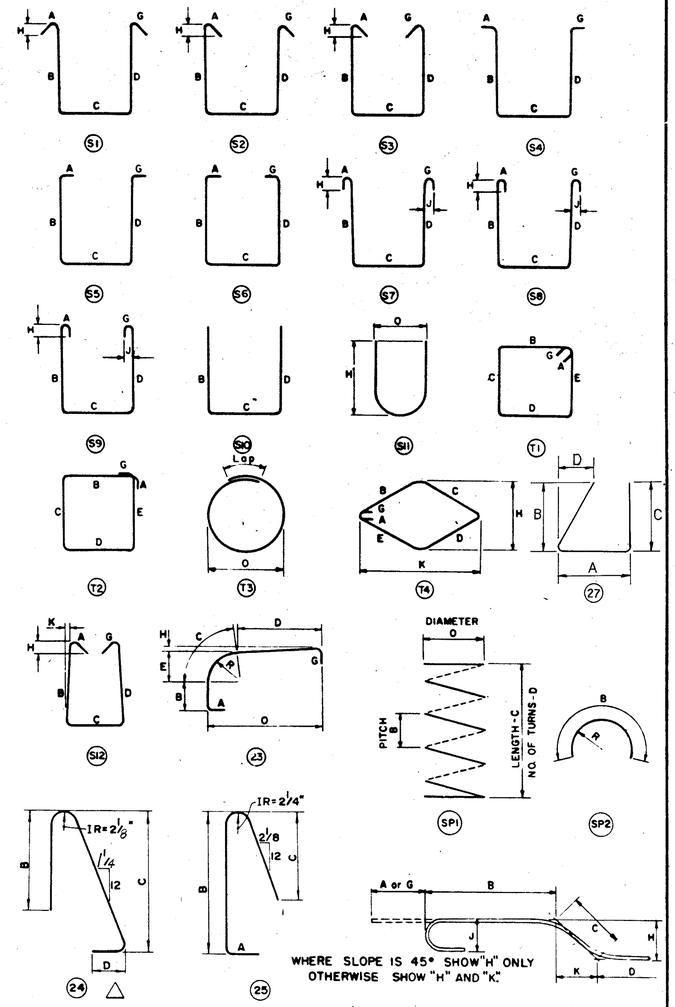
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
—	HJZ	—	E.F.F.			△ 9/85 REVISIONS

MARK	TYPE	DIMENSIONS FOR BENDING A	B	C	D	E	F	G	H	J	K	R	O
A401	T1	4½"	1'-9"	2'-8"	1'-9"	2'-8"		4½"					
A503	17		—	2'-0"	2'-8"	2'-0"	—						
A504	S10		5'-7"	2'-1"	5'-7"								
A505	S10		5'-9"	2'-1"	5'-9"								
A506	17		—	1'-0"	2'-1"	1'-0"	—						
A509	19		7'-6"	1'-4"	—				3'-4"		6'-8"		
A510	19		6"	2'-2"	6"				4'-4"		4'-4"		
A601	S10		6'-2"to9'-2"by9"(4ea)	2'-2"	6'-2"to9'-2"by9"(4ea)								
A602	S10		9'-6"	2'-2"	9'-6"								
P501	T1	5"	1'-10½"	3'-8"to2'-10"by2"(8ea)	1'-10½"	3'-8"to2'-10"by2"(8ea)		5"					
P502	T1	5"	2'-8"	3'-10"	2'-8"	3'-10"		5"					
P503	T1	5"	2'-8"	3'-9"	2'-8"	3'-9"		5"					
P504	17		—	1'-0"	2'-8"	1'-0"	—						
P801	1	1'-1"	8'-8"					1'-1"					
P802	1	1'-1"	6'-8"					1'-1"					
P803	19		4'-6"	18'-5"	—				1'-0"		4'-5"		22'-10"
P901	20		2'-8"	15'-5"	—								
P906	20		3'-6"	17'-0"	—								
P1001	2	1'-8½"	8'-3"					—					
SP401	SP1		4½"	24'-0"	67								2'-8"
SP402	SP1		4½"	25'-4"	71								2'-8"
SP403	SP1		4½"	23'-9"	66								2'-8"
SP404	SP1		4½"	25'-0"	70								2'-8"
△S(E)503	24		2'-3¼"	2'-6¼"	8"								
△S(E)504	16	—	10½"	11"	10⅜"	9"			8½"		6"		
△S(E)505	16	—	10½"	11"	10⅜"	4"			8½"		6"		
△S(E)506	2	10½"	1'-7"					—		10½			
△S(E)509	2	9"	3'-2"					—		10½			
△S(E)512	S10		2'-6"	2'-2"	2'-6"								
△S(E)513	17		—	2'-3"	2'-1"	1'-9"	1'-10½"						
△S(E)514	S10		2'-9"	1'-8"	2'-9"								
△S(E)515	1	7"	2'-5"					—		5"			
△S(E)517	1	7"	2'-1"					—		5"			
△S(E)521	2	9"	2'-10"					—		10½			
△S(E)608	16	—	—	2'-5"	8½"	7"			8½"		2"		
△S(E)609	16	—	7½"	11"	8½"	7"			8½"		2"		
△S(E)610	16	—	9"	11"	9"	7½"			8½"		3"		
△S(E)611	16	—	10½"	11"	9½"	8"			8½"		4"		
△S(E)612	16	—	10½"	11"	10"	8½"			8½"		5"		
△S(E)613	16	—	10½"	11"	10½"	9"			8½"		6"		
△S(E)803	26	11"	2'-7"	1'-5"					1'-0"	8"	1'-0"		
S(E)550	2	7"	1'-10"	—	—	—	—	7"	—				
S(E)551	27	2'-4"	3'-2"	3'-2"	6½"	—	—	—	—				
S(E)552	4	—	6"	2'-7"	1'-4"	2'-7"	6"	—	1'-10"				



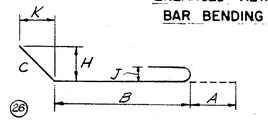


⑮ NOT USED

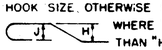


WHERE SLOPE IS 45° SHOW "H" ONLY
OTHERWISE SHOW "H" AND "K."

ENLARGED VIEW SHOWING
BAR BENDING DETAILS



NOTES

1. FIGURES IN CIRCLES SHOW BAR TYPES.
2. ALL DIMENSIONS ARE OUT TO OUT OF BAR.
3. "J" DIMENSION ON HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE. OTHERWISE STANDARD HOOKS ARE TO BE USED.
4.  WHERE "J" IS NOT SHOWN "J" WILL BE KEPT EQUAL TO OR LESS THAN "H." WHERE "J" CAN EXCEED "H" IT SHOULD BE SHOWN.
5. "H" DIMENSION ON STIRRUPS TO BE SHOWN WHERE NECESSARY TO RESTRICT HOOKS.
6. ALL BENDS SHOWN ARE BENT AROUND A STANDARD MANDREL, EXCEPT STIRRUPS S11, TIES T3, SPIRALS SP1 AND WHERE RADIUS "R" IS INDICATED.
7. RADIUS DIMENSION "R" IS TO OUTSIDE OF BAR.
8. THE LENGTH OF BENT BARS IS MEASURED ALONG THE CENTERLINE.
9. FOR STANDARD HOOK DIMENSIONS, SEE SECT 509.05 OF THE SPECIFICATIONS.
10. FOR BAR TYPE SP1, THE NO OF TURNS "D" IS THE LENGTH "C" DIVIDED BY THE PITCH "B", PLUS 3 TURNS (TOTAL NUMBER OF CLOSED COILS), EXPRESSED AS THE NEAREST WHOLE NUMBER. 1½ CLOSED COILS SHALL BE PROVIDED AT THE ENDS OF EACH SPIRAL UNIT.

△ 11. "(E)" denotes epoxy coated reinforcing bar.

FED. RD DIVISION	STATE	PROJECT	
2	OHIO		

675
787

HAM-75-9.93
HAM-126-13.00

VOGT, IVERS & ASSOCIATES, INC. ENGINEERS ARCHITECTS
CINCINNATI

11/11

BAR BENDING DETAILS

BRIDGE NO. HAM-126-1456
S.R. 126 OVER READING ROAD
HAMILTON COUNTY STA. 105+28.55 to STA. 107+18.63

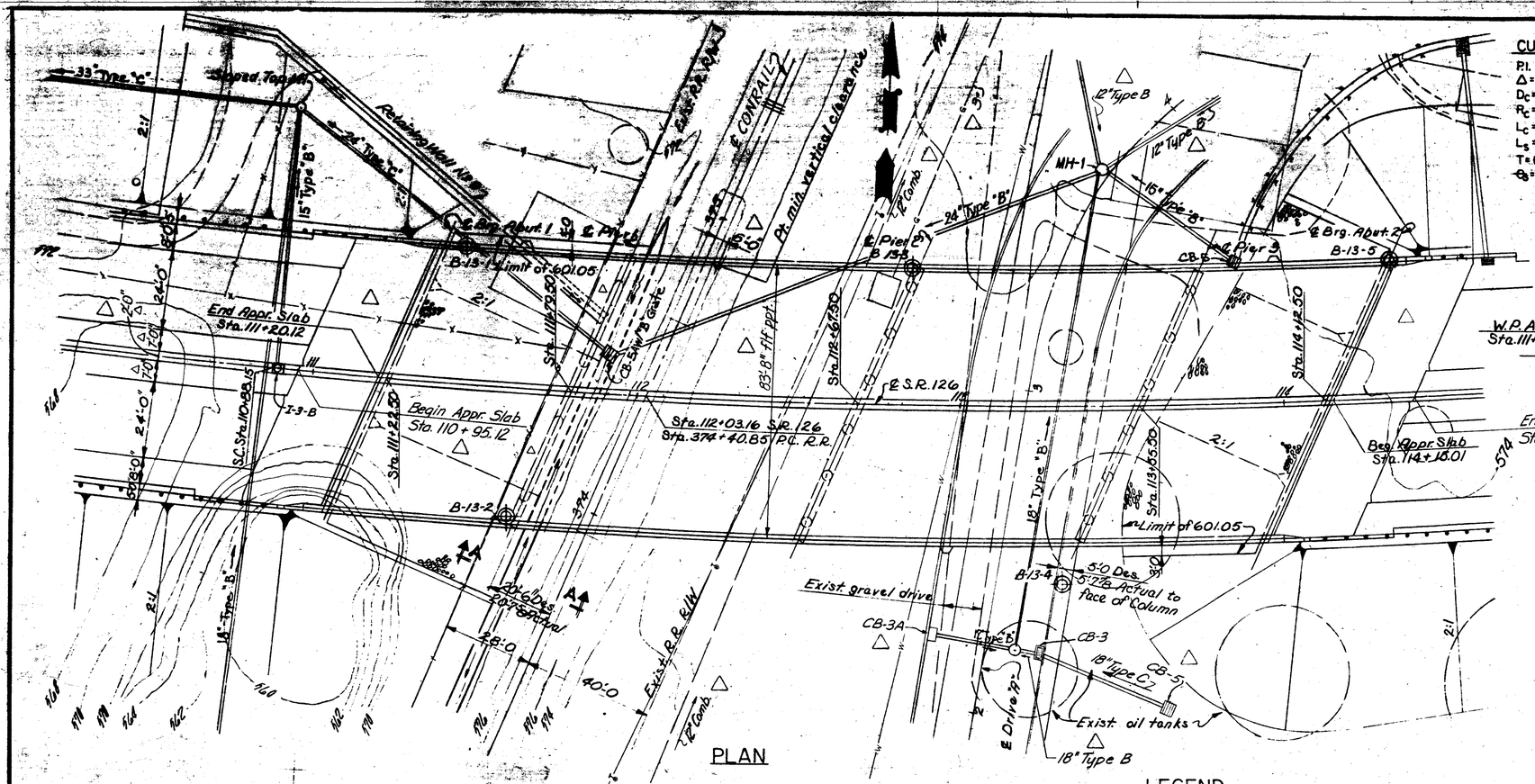
DESIGNED	DRAWN	TRACED	CHK BY	REVIEWED	DATE	REVISIONS
—	HJZ	—	E.F.F.			9/82

SHT. NO.	STATE	PROJECT	
2	OHIO		

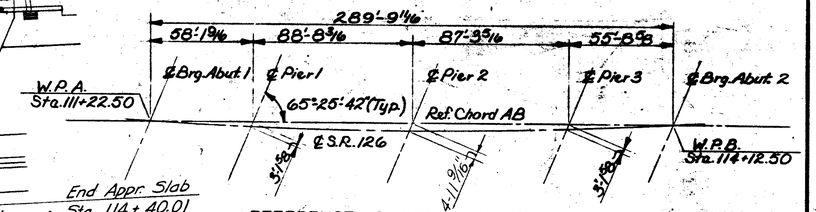
HAM-75-9.93
HAM-126-13.00

CURVE DATA @ S.R. 126

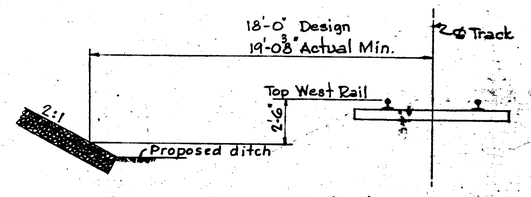
P.I. STA. 114+56.68
$\Delta = 24°17'39.3"$
$D_c = 2°30'00"$
$R_c = 2291.83'$
$L_c = 721.77'$
$L_s = 250.00'$
$T = 618.53'$
~~$\theta_s = 3°07'30"$~~



PLAN

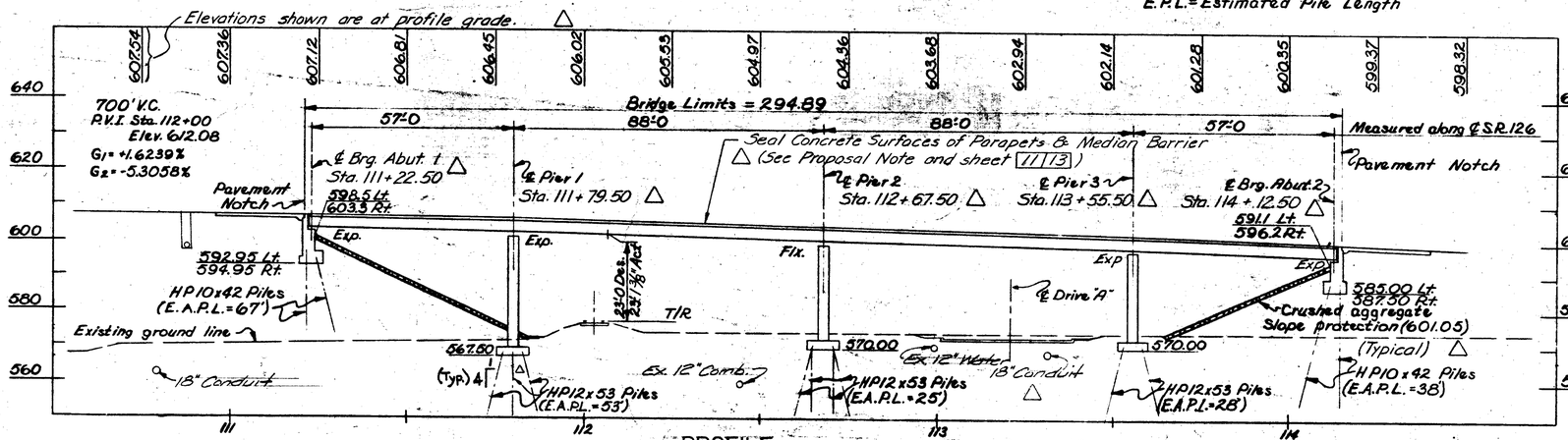


REFERENCE CHORD LAYOUT



SECTION A-A

LEGEND
Drive Sample and/or Core Boring
E.P.L. = Estimated Pile Length



PROFILE

Earthwork limits shown are approximate. Actual slopes shall conform to plan cross-sections.

△ TRAFFIC DATA

Eastbound S.R. 126
2006 ADT: 13205
2006 ADTT: 1453

Westbound S.R. 126
2006 ADT: 11757
2006 ADTT: 1294

PROPOSED STRUCTURE

TYPE: Continuous rolled steel beam with reinf. concr. deck and substructure.
SPANS: 57'-0, 88'-0, 88'-0, 57'-0
ROADWAY: 83'8" t/f of parapets. (includes 2'-6" Median Barrier)
DESIGN LOAD: HS 20-44 Case I and the Alternate Military Loading.
SKEW: 24°34'18" L.F. with ref. chord
WEARING SURFACE: 1¼" Latex Modified Concrete Overlay
APPROACH SLABS: AS-1-81 (25' Long)
ALIGNMENT: 2°30'00" Curve left
SUPERELEVATION: 0.059 ft

VOGT, IVERS, & ASSOCIATES 1/13
ENGINEERS CINCINNATI · ARCHITECTS CHICAGO

SITE PLAN
BRIDGE NO. HAM-126-1467
S.R. 126
OVER CONRAIL
HAMILTON COUNTY STA. 111+20.12 to STA. 114+15.01

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
AERIAL	T.H.I.	E.P.R.	E.P.R.	E.R.H.	△ BALKE ENGRS. 7/86

SUPERCEDED by Sht. 676 A. 9/29/86

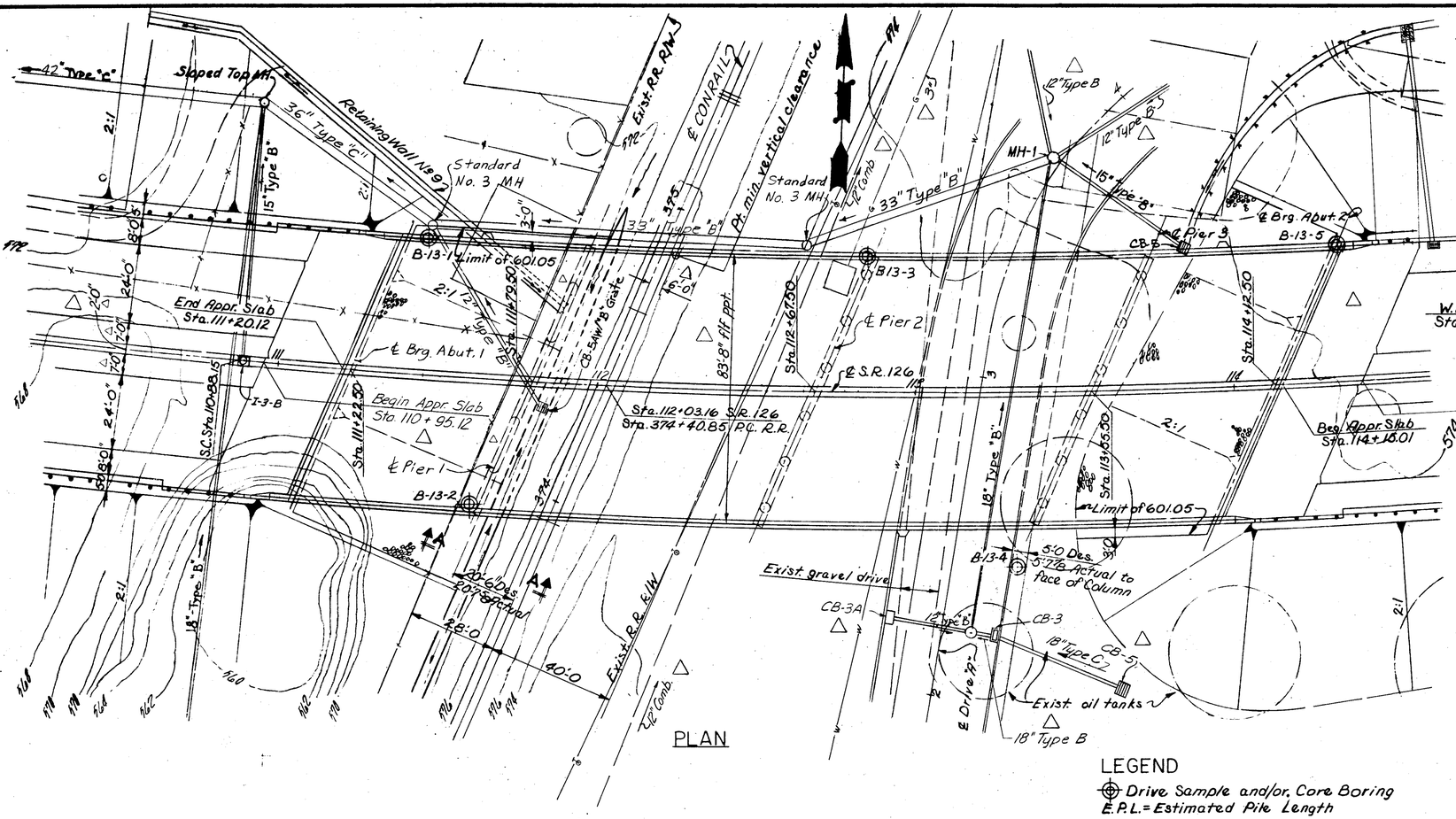
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

676A

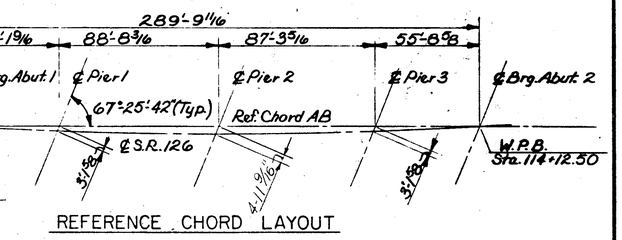
HAM-75-9.93
HAM-126-13.00

CURVE DATA ℄ S.R. 126

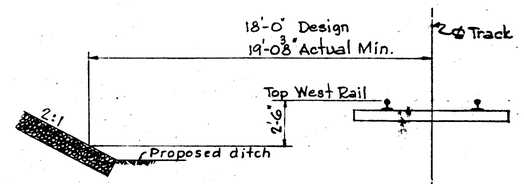
P.I. STA. 114+56.68
Δ = 24°17'39.31"
D_C = 2°30'00"
R_C = 2291.83'
L_C = 721.77'
L_S = 250.00'
T = 618.53'
Θ_S = 3°07'30"



PLAN



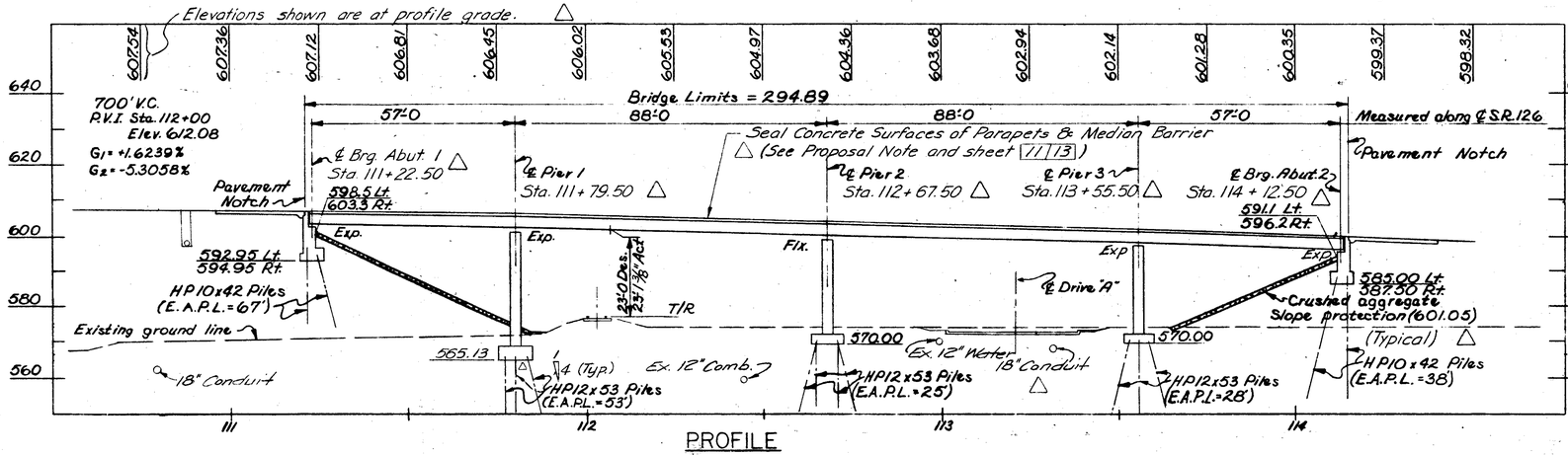
REFERENCE CHORD LAYOUT



SECTION A-A

LEGEND
⊕ Drive Sample and/or, Core Boring
E.P.L. = Estimated Pile Length

Elevations shown are at profile grade.



PROFILE

Earthwork limits shown are approximate. Actual slopes shall conform to plan cross-sections.

△ TRAFFIC DATA

Eastbound S.R. 126
2006 ADT: 13205
2006 ADTT: 1453

Westbound S.R. 126
2006 ADT: 11757
2006 ADTT: 1294

PROPOSED STRUCTURE

TYPE: Continuous rolled steel beam with reinf. concr. deck and substructure.
SPANS: 57'-0, 88'-0, 88'-0, 57'-0
ROADWAY: 83'-8" t/f of parapets. (includes 2'-6" Median Barrier)
DESIGN LOAD: HS20-44 Case I and the Alternate Military Loading.
SKEW: 22°34'18" L.F. with ref. chord
△ WEARING SURFACE: 1¼" Latex Modified Concrete Overlay
△ APPROACH SLABS: AS-1-81 (25' Long)
ALIGNMENT: 2°30'00" Curve left
SUPERELEVATION: 0.059 ft

VOGT, IVERS, & ASSOCIATES
ENGINEERS CINCINNATI — ARCHITECTS CHICAGO
IAI 13

SITE PLAN

BRIDGE NO. HAM-126-1467
S.R. 126
OVER CONRAIL
HAMILTON COUNTY STA. 111+20.12 to STA. 114+15.01

PRESENT TOPOGRAPHY		PROPOSED WORK				
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISIONS	
AERIAL	T.W.I. & D.	E.P.A.	E.P.A.	E.R.H.	△ BRIDGE ENGR.	9/29/86

REVISED 9/29/86
SUPERCEDES SHT 676

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

677
787

HAM-75-9.93
HAM-126-13.00

ESTIMATED QUANTITIES

	ITEM	TOTAL	UNIT	DESCRIPTION	ABUTMENT	PIERS	SUPER-STRUCTURE	GENERAL			QUANTITIES CHECKED BY	QUANTITIES CHECKED DATE
	503	Lump	Sum	Cofferdams, Cribs and Sheeting				Lump				
	503	~~913~~ 1031	CU. YDS	Unclassified Excavation	545	~~368~~ 436					BC	7-16-71
△	505	Lump	Lump Sum	Pile Driving Equipment Mobilization				Lump				
	507	2978	LIN. FT.	Steel Piles HP 10x42, AS PER PLAN	2978	~~3648~~ 3966					SND	8-25-71
△	507	~~3648~~ 3966	LIN. FT.	Steel Piles HP 12x53, AS PER PLAN								
△	509	~~91171~~ 130511	Pounds	Reinforcing Steel, Grade 60	20955	~~109558~~	76792					
△	511	714	CU. YDS.	Class S Concrete - Superstructure			714					
	511	~~364321~~	CU. YDS.	Class C Concrete - Piers Above Footings		321364					SL	6-17-71
	511	~~356340~~	CU. YDS.	Class C Concrete - Pier and Abutment Footings	152	188204					TDW	6-17-71
	511	225	CU. YDS.	Class C Concrete - Abutments Above Footings	225							
△	513	760000	Pounds	Structural Steel (AISC Category I) (See Proposal Note)			760000					
△	514	760000	Pounds	Field Painting of New Structural Steel, System A			760000					
	518	127	CU. YDS.	Porous Backfill	127						BC	7-15-71
△	516	190	LIN. FT.	Structural Expansion Joints Including Elastomeric Strip Seals	190							
	518	173	LIN. FT.	6" Perforated Helical C.S.P. (707.01)				173			SND	8-26-71
	518	110	LIN. FT.	6" Non-Perforated Helical C.S.P. including Specials (707.01)				110			SND	8-26-71
	601	1310	SQ. YDS.	Crushed Aggregate Slope Protection				1310			SND	8-26-71
△	824	222,300	Lb.	Epoxy-Coated Reinforcing Steel, Grade 60	5271		217029					
△	Special	1282	Sq. Yd.	Sealing of Concrete Surfaces (See Proposal Note)	38		1244					
△	845	2595	Sq. Yd.	Latex Modified Concrete Overlay (1¼" Thick) (See Proposal Note).			2595					
△	523	6	Hour	Dynamic Load Tests.				6				
△	*511	714	CU. YDS.	Class S Concrete, superstructure using shrinkage compensating cement, 701.08			714					

Quantities revised by BJS 10-9-85
Revisions checked by SJA 10-14-85

△ *Alternate Bid Item

GENERAL NOTES △

REFERENCE SHALL BE MADE TO THE FOLLOWING:

STANDARD DRAWINGS:

AS-1-81	DATED 11-27-81
BR-1	DATED 5-29-79
SD-1-69	DATED 6-12-69
RB-1-55	*REVISED 2-2-59*

SUPPLEMENTAL SPECIFICATIONS:

836	DATED *11-12-85*
824	DATED 10-8-82
845	*DATED 2-25-86*
953	*DATED 8-21-80*

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, 1983, INCLUDING THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:

DESIGN LOADING: HS 20-44, CASE I AND THE ALTERNATE MILITARY LOADING.

DESIGN STRESSES:

CONCRETE, CLASS S	COMPRESSIVE STRENGTH: 4500 PSI (SUPERSTRUCTURE)
CONCRETE, CLASS C	*UNIT STRESS 1333 PSI* (SUBSTRUCTURE)
REINFORCING STEEL	ASTM A615, A616, A617, GRADE 60, MINIMUM YIELD STRENGTH: 60,000 PSI. *(SUPERSTRUCTURE) GRADE 60, UNIT STRESS 24000 PSI (SUBSTRUCTURE) SPIRAL REINFORCEMENT MAY BE PLAIN BARS, ASTM A82 OR A615*
STRUCTURAL STEEL	ASTM A36, *UNIT STRESS, 20000 PSI*
DECK *PROTECTION METHOD*	EPOXY COATED REINFORCING STEEL WITH 3" CONCRETE COVER OF WHICH 1-1/4" IS A LATEX MODIFIED CONCRETE OVERLAY.
BOLTS	1" DIAMETER HIGH STRENGTH STEEL BOLTS CONFORMING TO ASTM A325.

PILES shall be driven to refusal on bedrock. Refusal shall be considered as attained by penetrating soft bedrock with a minimum resistance of 20 blows per inch, or refusal shall be considered as attained after the pile has contacted hard bedrock and the pile has then received at least 20 blows.
The Design Load is 35 tons per pile for the abutment piles. The design load is 70 tons per pile for pier 1. The Design Load is 50 tons per pile for pier 2 and pier 3.

PILE DRIVING CONSTRAINTS: Prior to driving piles at the abutments, the spill-thru slope embankment shall be constructed to the level of the subgrade for a minimum distance of 200 feet back of each abutment. After the embankment is completed within the above required limits, the excavation for the abutment footings and Pier No. 1 shall be made and then the piles can be driven.

PILE HAMMER: The pile hammer used to install the steel "H" piles shall have a State's energy rating of not less than 18,000 foot pounds. This requirement does not relieve the Contractor from 108.05 which states that the Contractor is to provide sufficient equipment for prosecuting the required work. Refer to "ODOT's" "Manual of Procedures for Structures" to obtain the State's Energy Rating.

ITEM 511: CLASS S CONCRETE, SUPERSTRUCTURE, USING SHRINKAGE COMPENSATING CEMENT, 701.08.

THE FOLLOWING RESTRICTIONS SHALL APPLY TO THE SUPERSTRUCTURE CONCRETE USING SHRINKAGE COMPENSATING CEMENT, 701.08.

1. CEMENT SHALL BE EXPANSIVE HYDRAULIC CEMENT, ASTM C845, TYPE K.
2. THE MAXIMUM WATER/CEMENT RATIO GIVEN FOR CLASS S CONCRETE IN 499.03 SHALL BE REVISED FROM 0.44 TO 0.50.
3. MAXIMUM SLUMP AT THE TIME AND PLACE OF CONCRETE PLACEMENT SHALL BE 6 INCHES.
4. CHEMICAL ADMIXTURES, WHEN REQUIRED BY 511.06, SHALL BE LIMITED TO 705.12 TYPE D.
5. MAXIMUM AMBIENT TEMPERATURE AT TIME OF PLACEMENT OF CONCRETE SHALL BE 80° F.
6. MEMBRANE CURING PER SS836 WILL NOT BE PERMITTED FOR ANY CONCRETE PLACED BETWEEN SEPTEMBER 1 AND MARCH 31. SUCH CONCRETE SHALL BE CURED BY METHOD (A) WATER CURING.
7. IF REQUIRED BY THE ENGINEER, THE SURFACE OF THE CONCRETE SHALL BE GIVEN A FOG SPRAY OF WATER. THIS MAY BE REQUIRED PRIOR TO EITHER WATER CURING OR MEMBRANE CURING IF WEATHER CONDITIONS DICTATE. EQUIPMENT SHALL BE ON HAND.

⊕ QUANTITIES SHOWN INCLUDE QUANTITIES FOR PIER NO. 1 WHICH ARE BASED ON PRELIMINARY DESIGN AND ARE APPROXIMATE, TO BE USED DURING BIDDING PROCESS. FINAL DESIGN SHALL BE COMPLETED AND ACTUAL QUANTITIES WITH REPLACEMENT DETAILED DRAWINGS AND REINFORCING BAR LIST SHALL BE PRESENTED TO THE SUCCESSFUL CONTRACTOR ON OR BEFORE THE PRECONSTRUCTION MEETING. THE CONTRACTOR IS ASKED TO USE THESE APPROXIMATE QUANTITIES AND SCHEMATIC DRAWINGS IN PREPARING A BID PACKAGE.

PLAN REVISIONS BY BALKE ENGINEERS

REVISIONS WERE MADE TO SUBSTRUCTURE DRAWINGS TO INCORPORATE THE FOLLOWING:

- REVISE PARAPETS TO STANDARD SAFETY PARAPET SHAPE.
- PROVIDE EPOXY-COATED REINFORCEMENT IN CORROSION-PRONE CONCRETE AREAS.
- SEAL CONCRETE SURFACES.
- NUMBER PILES AND ADD DETAIL NOTES.
- REVISE ABUTMENTS TO RECEIVE FULL WIDTH APPROACH SLABS PER AS-1-81.
- REPLACE SLIDING PLATE EXPANSION JOINTS WITH STRIP SEAL JOINTS.
- LENGTHEN PIER COLUMN TO FOOTING DOWELS AS REQUIRED BY AASHTO.

AT THE REQUEST OF THE OHIO DEPARTMENT OF TRANSPORTATION, ALL SUBSTRUCTURE REINFORCEMENT IS TO BE GRADE 60.

REVISIONS MADE BY BALKE ENGINEERS ARE DENOTED BY (△) SYMBOL.

OTHER THAN NOTED REVISIONS, SUBSTRUCTURES ARE THE DESIGN AND DETAILING OF VOGT, IVERS, AND ASSOCIATES, INC.

ANALYSIS OF THE ORIGINAL SUPERSTRUCTURE DESIGN HAS BEEN COMPARED TO THE REVISED SUPERSTRUCTURE DESIGN TO ASSURE THAT LOADINGS HAVE NOT INCREASED ON SUBSTRUCTURES PROVIDED BY VOGT, IVERS AND ASSOCIATES, INC. DESIGN OF THESE SUBSTRUCTURES REMAINS THE RESPONSIBILITY OF VOGT, IVERS, AND ASSOCIATES.

REVISED SUPERSTRUCTURE DESIGN AND DETAILING WAS PREPARED TO CONFORM WITH UPDATED DESIGN STANDARDS.

DESIGN AND DETAILING BY BALKE ENGINEERS WAS PERFORMED IN ACCORDANCE WITH THE AASHTO SPECIFICATIONS FOR HIGHWAY BRIDGES, THIRTEENTH EDITION, 1983, AASHTO INTERIM SPECIFICATIONS FOR BRIDGES 1984, AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

PILES shall be driven to a minimum bearing capacity of 35 tons per pile for abutments and 50 tons per pile for the piers.

EMBANKMENT CONSTRUCTION:

The embankments shall be constructed to the level of the subgrade for a minimum distance of 200 feet back of the abutments. Excavation shall then be made for the abutments and for Pier No. 1.

CONSTRUCTION CLEARANCE of 20' vertically above the top of the railroad rails and 8' horizontally from the center of tracks shall be maintained at all times.

SEALING OF CONCRETE SURFACES: The following concrete areas are to be sealed per proposal note:

- Superstructure: Parapets and Median Barrier. See sheet 11/13.
- Wingwall Parapets. See sheet 5/13.

SUBSTRUCTURE BARS not revised by Balke (△) shall have a minimum lap of 30 bar diameters.

VOGT, IVERS, & ASSOCIATES, INC. ENGINEERS ARCHITECTS CINCINNATI — 2/13

ESTIMATED QUANTITIES AND GENERAL NOTES
BRIDGE NO. HAM-126-1467
S.R. 126
OVER CONRAIL
HAMILTON COUNTY STA. 111+20.12 to STA. 114+15.01

DESIGNED	DRAWN	TRACED	CHECKED	REVISED DATE	△ REVISED BALKE ENGRS. 1985
–	M.D.	–	S.D.	ERH 9/1/71	

REVISED 9/29/86

CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO	677A 787
CHKD. BY			FHWA REGION 5	
DATE				

ITEM 516. ELASTOMERIC STRIP SEAL

DESCRIPTION:
THIS ITEM SHALL INCLUDE THE FURNISHING OF ALL MATERIALS AND THE NECESSARY LABOR TO FACILITATE, ASSEMBLE, CONSTRUCT AND INSTALL ELASTOMERIC STRIP SEAL OF THE TYPE, SIZE AND KIND SPECIFIED.

MATERIALS:
STEEL EXTRUSIONS -
THE EXTRUSIONS SHALL BE A588 *OR A36 STEEL WITH SYSTEM A FIELD PAINTED EXPOSED SURFACES. SEE C.M.S., SECTION 514.05 (a).*
NEOPRENE EXTRUSIONS -
THE NEOPRENE MATERIAL IN THE SEAL ELEMENTS SHALL CONFORM TO ASTM D2628, MODIFIED FOR HARDNESS AND EXCLUSIVE OF RECOVERY TESTS. THE NEOPRENE EXTRUSIONS SHALL RUN CONTINUOUSLY THROUGH THE BRIDGE DECK.

PHYSICAL PROPERTIES OF NEOPRENE EXTRUSIONS:	ASTM METHOD
• TENSILE STRENGTH, MINIMUM PSI 2000	D 412-62T
• ELONGATION @ BREAK, MINIMUM PERCENT 250	D 412-51T
• HARDNESS, TYPE A DUROMETER 60+/-7	D 2240 (MODIFIED)
• COMPRESSION SET, 70 HRS @ 212°F, MAXIMUM 40%	D 395, METHOD B, (MODIFIED)
• OVEN AGING, 70 HRS @ 212°F, 20% TENSILE STRENGTH, 20% ELONGATION, LOSS, MAXIMUM 20% HARDNESS, TYPE A DUROMETER (POINTS CHANGE) 0 TO +10	D 573
• OIL SWELL, ASTM OIL 3, 70 HRS, @ 212°F, WEIGHT CHANGE, MAXIMUM 45%	D 471
• OZONE RESISTANCE, 70 HRS @ 104°F, 20% STRAIN, 300 PPHM IN AIR (WIPED WITH TOULENE TO REMOVE CONTAMINATION). NO CRACKS.	D 1149

APPROVED MANUFACTURERS:
STRIP SEAL SHALL ALLOW 4" OF TOTAL MOVEMENT. STRIP SEAL SHALL BE WATSON-BOWMAN S-400E *WITH TYPE M STEEL EXTRUSION OR AN APPROVED ALTERNATE.*

ADHESIVE:
ADHESIVES SHALL BE SIKASTIX 360, FEL-POXY SP-101 OR AN APPROVED ALTERNATE.

PREPARATIONS FOR INSTALLATION:
TO AVOID THE SUBSEQUENT CONTAMINATION OF PREPARED SURFACES, ALL SURFACES OF ELASTOMERIC STRIP SEALS SHALL BE CLEANED WITH METHYL ETHYL KETONE (MEK), TOLUENE (T) OR OTHER APPROVED SOLVENT USING CLEAN, DISPOSABLE CLOTHS.

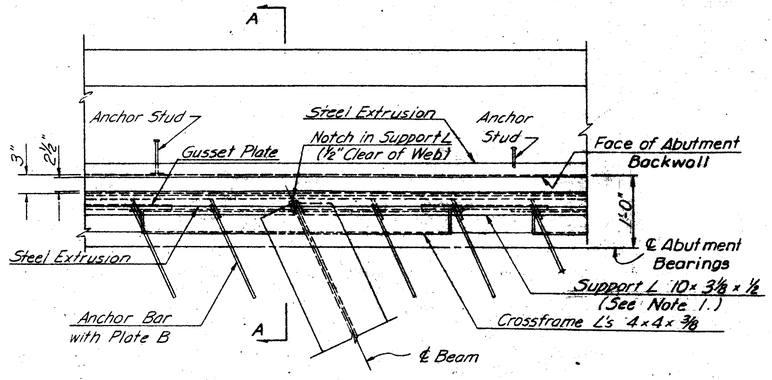
THE BONDING SURFACES OF THE STEEL EXTRUSION (THE INTERIOR OF THE ANCHOR GROOVES) SHALL BE PREPARED TO GRADE SA 3, ASTM D2200. PREPARATION SHALL BE ACCOMPLISHED NOT MORE THAN 24 HOURS PRIOR TO ADHESIVE BONDING.

SEE STRIP SEAL EXTRUSION DETAIL

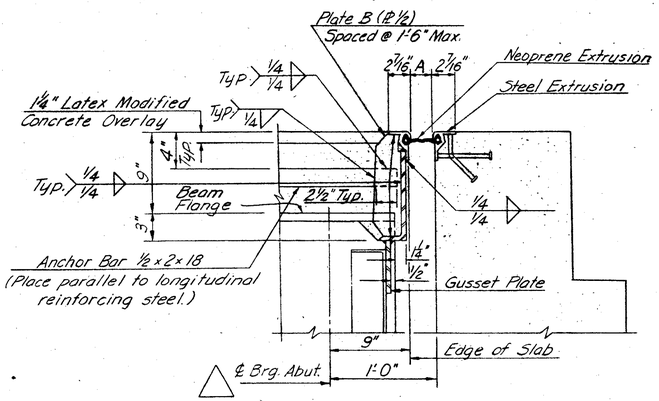
INSTALLATION:
IMMEDIATELY PRIOR TO ADHESIVE APPLICATION, BONDING SURFACES SHALL BE CLEAN, DRY AND WARMER THAN 45°F AND THEY SHALL BE MAINTAINED AT ABOVE THIS TEMPERATURE UNTIL THE ADHESIVE HAS CURED. ADHESIVE SHALL BE APPLIED LIBERALLY TO BOTH THE STEEL AND ELASTOMERIC BONDING SURFACES USING A STIFF BRUSH IF NECESSARY TO ACHIEVE A COMPLETE AND RELATIVELY UNIFORM COATING. THEN, THE BULBED EDGES OF THE ELASTOMERIC SEAL SHALL BE INSERTED INTO THE ANCHOR GROOVES. AFTER INSTALLATION, EXCESS ADHESIVE SHALL BE REMOVED FROM THE EXPOSED SEAL SURFACES.

METHOD OF MEASUREMENT:
THE QUANTITY SHALL BE THE ACTUAL LINEAR FEET OF NEOPRENE EXTRUSIONS.

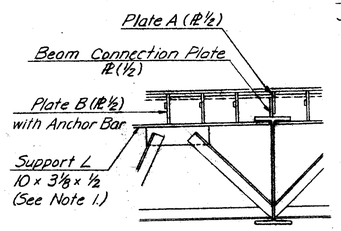
BASIS OF PAYMENT:
PAYMENT WILL BE MADE AT CONTRACT PRICE FOR ITEM 516, LINEAR FEET, STRUCTURAL EXPANSION JOINTS INCLUDING ELASTOMERIC STRIP SEALS. THIS ITEM SHALL INCLUDE FURNISHING AND PLACING THE ELASTOMERIC JOINT SEAL INCLUDING STEEL EXTRUSIONS, NEOPRENE EXTRUSIONS AND ANCHOR BARS.



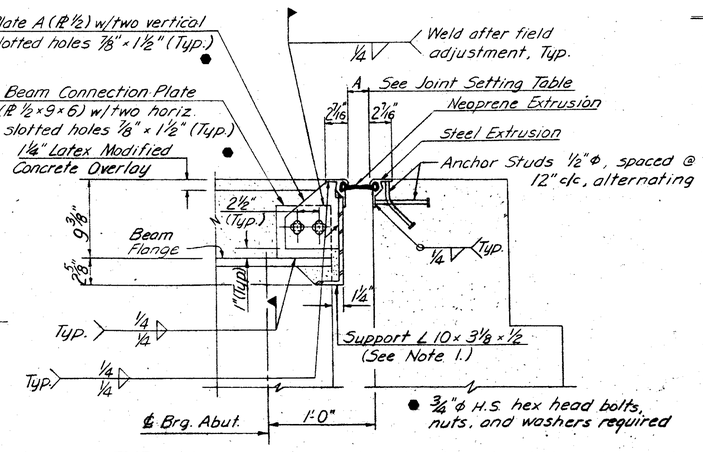
PART PLAN OF END DAM
(At Abutment No.2 Shown, At Abutment No.1 Similar)



SECTION A-A
STRIP SEAL EXPANSION JOINT



PART ELEVATION OF END DAM



TYPICAL EXPANSION JOINT SUPPORT DETAIL AT ABUTMENT 2 (Abutment No. 1 Similar)

JOINT SETTING TABLE						
A (Joint width measured normal to joint)						
Temperature °F	0	20	40	60	80	100
Abutment 1	3⅛"	2 15/16"	2 7/16"	2½"	2 5/16"	2 1/16"
Abutment 2	3⅛"	2 15/16"	2 7/16"	2½"	2 5/16"	2 1/16"

NOTES

1. Support L 10 × 3⅛ × ½ to be fabricated from C12 × 30 and notched to clear beam web.
2. For End Dam details at curb, see sheet 2B13

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

2A13

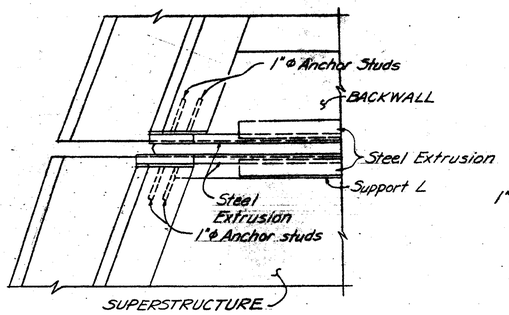
STRIP SEAL EXPANSION JOINT

BRIDGE NO HAM-126-1467
S.R. 126
OVER CONRAIL
HAMILTON COUNTY STA. 111+20.12 to STA. 114+15.01

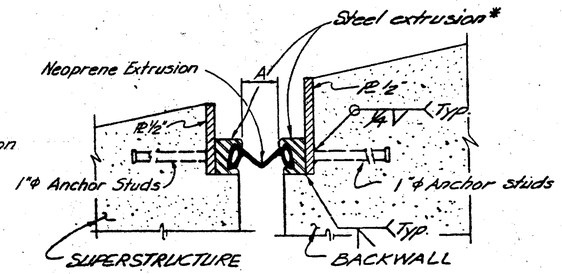
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	JAG	~	SJA	CRS 3/86	

OHIO BLUE PRINT 760523

CALC. BY	HAM-75-9.93	OHIO	677B
DATE	HAM-126-13.00	FHWA REGION 5	787
CHKD. BY			
DATE			

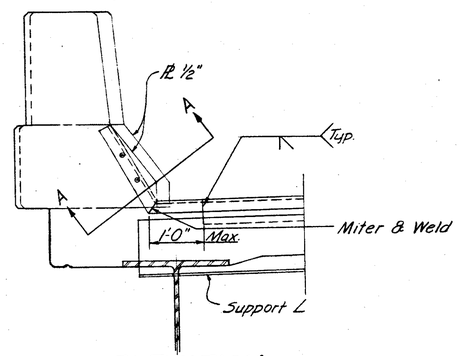


PLAN



SECTION A-A

* Use of split type extrusion is optional.
For details see Strip Seal Details; Sheets 488A, B, C & D.



ELEVATION

END DAM DETAILS
(TYPICAL AT CURB)

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

2B/13

STRIP SEAL EXPANSION JOINT

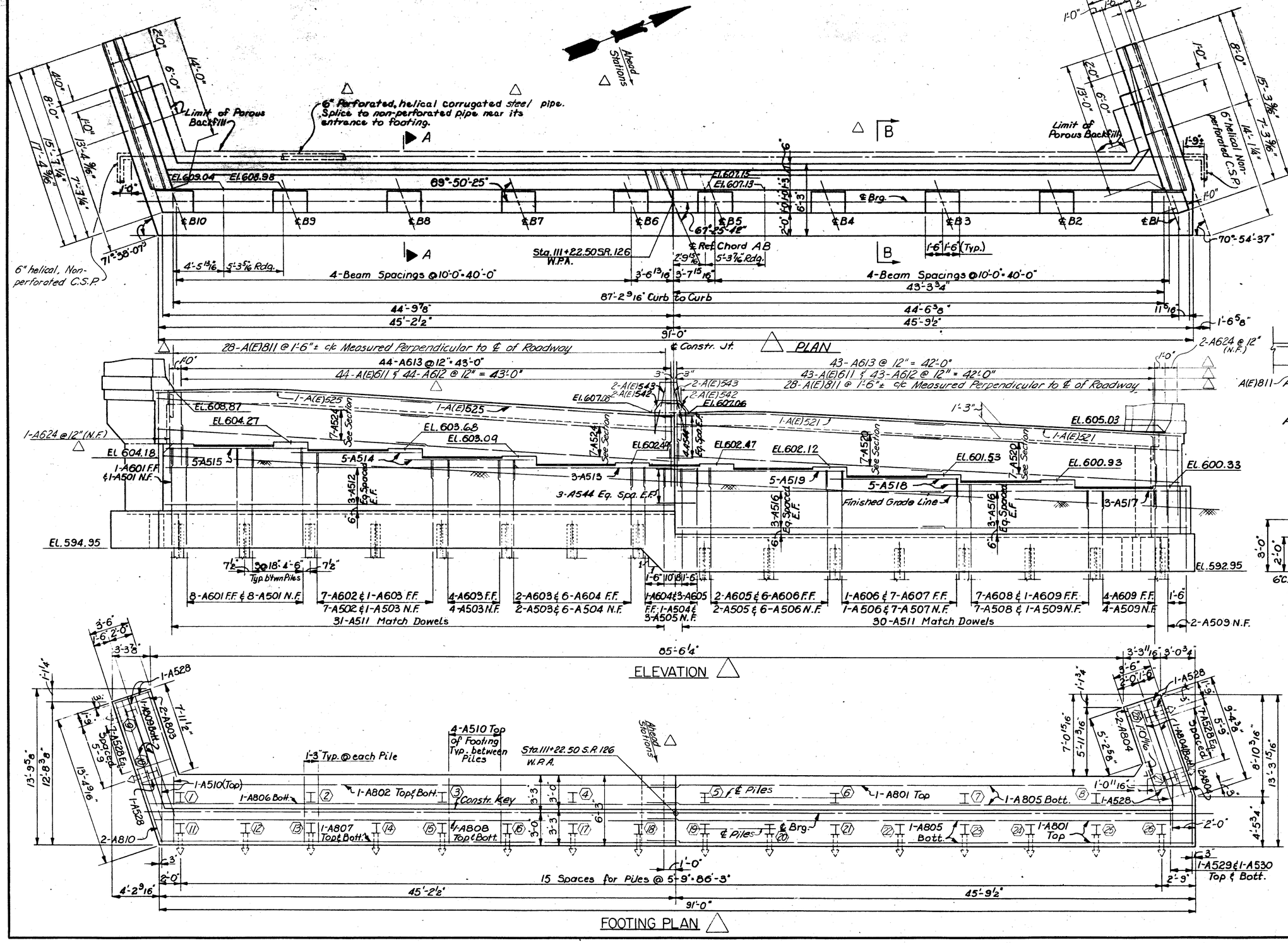
BRIDGE NO. HAM-126-1467
S.R. 126
OVER CONRAIL
HAMILTON COUNTY STA. 111+20.12 to STA. 114+15.01

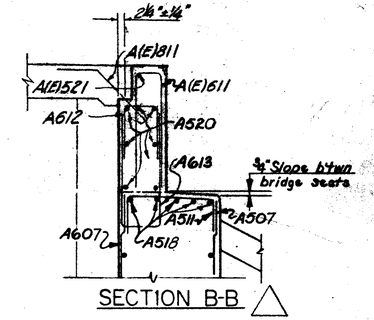
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	JAG	~	SJA	CRS 3/86	

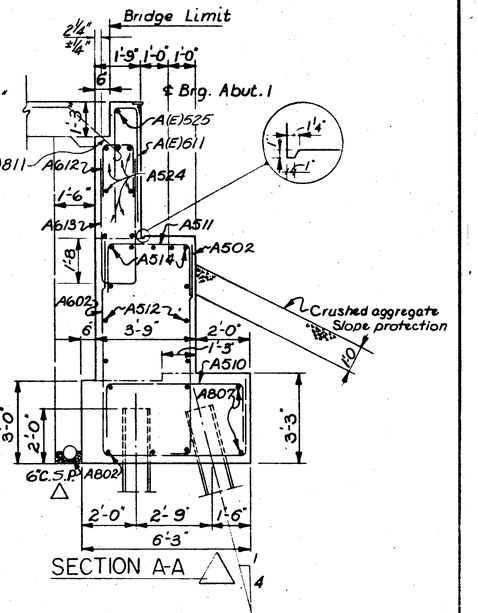
FED. HIGHWAY DIVISION NO.	STATE	PROJECT	
2	OHIO		

678
787

HAM-75-9.93
HAM-126-13.00







NOTE: "(E)" denotes epoxy coated reinforcing bar.

LEGEND: E.F. = Each Face
N.F. = Near Face
F.F. = Far Face
I = Piles (Vertical)
I = Piles battered 1:4 in direction of arrow
⬡ = Pile number.

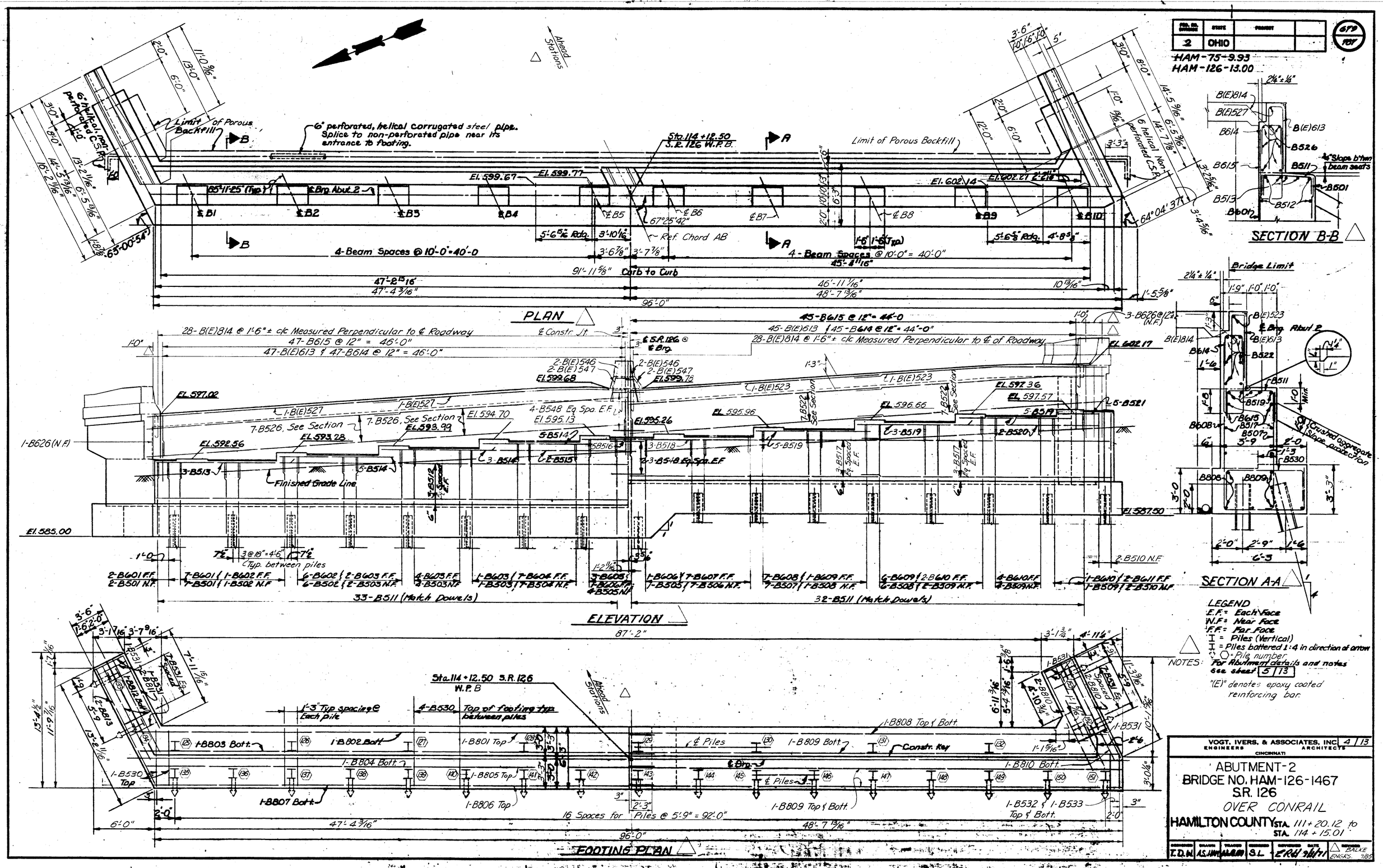
NOTE: For Abutment Details and notes see Sheet 5 / 13

3 / 13

VOGT, IVERS, & ASSOCIATES, INC. ENGINEERS ARCHITECTS
CINCINNATI

ABUTMENT-1
BRIDGE NO. HAM-126-1467
SR. 126
OVER CONRAIL
HAMILTON COUNTY STA. 111 + 20.12 to STA. 114 + 15.01

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
T.D.W.	A.S.	A.S.	S.L.	ZKH	9/1/71	△ BALKE ENGRS. 9/85

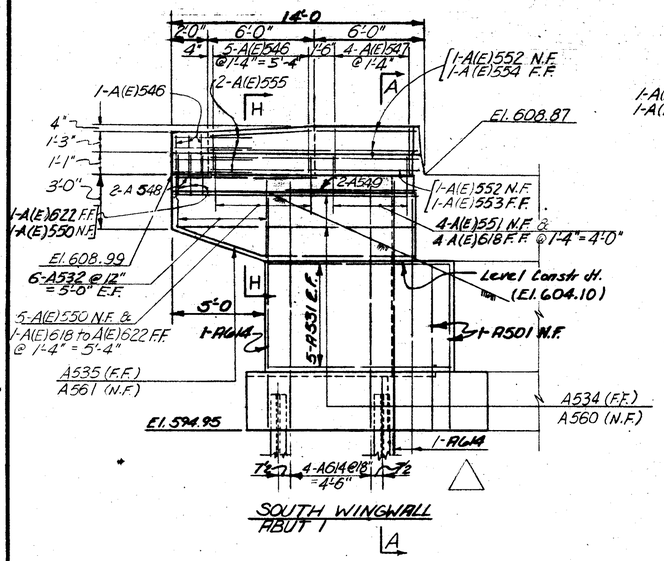


2 OHIO
HAM-75-9.93
HAM-126-13.00
679
707
PLAN
ELEVATION
FOOTING PLAN
SECTION B-B
SECTION A-A
Limit of Porous Backfill
6" perforated, helical corrugated steel pipe. Splice to non-perforated pipe near its entrance to footing.
Sta. 114+12.50 S.R. 126 W.P.B.
Ahead Stations
4-Beam Spaces @ 10'-0" = 40'-0
91'-11 5/8" Curb to Curb
96'-0"
28-B(E)814 @ 1'-6" ± c/c Measured Perpendicular to ℄ Roadway
47-B615 @ 12" = 46'-0"
47-B(E)613 & 47-B614 @ 12" = 46'-0"
45-B615 @ 12" = 44'-0
45-B(E)613 & 45-B614 @ 12" = 44'-0"
Finished Grade Line
33-B511 (Match Dowels)
32-B511 (Match Dowels)
87'-2"
16 Spaces for Piles @ 5'-9" = 92'-0"
Bridge Limit
Crushed aggregate Slope protection
LEGEND
E.F. = Each Face
N.F. = Near Face
F.F. = Far Face
I = Piles (Vertical)
I = Piles battered 1:4 in direction of arrow
○ = Pile number
NOTES: For Abutment details and notes see sheet 5/13
"(E)" denotes epoxy coated reinforcing bar.
VOGT, IVERS, & ASSOCIATES, INC. ENGINEERS ARCHITECTS CINCINNATI 4/13
ABUTMENT-2
BRIDGE NO. HAM-126-1467
S.R. 126
OVER CONRAIL
HAMILTON COUNTY STA. 111+20.12 to STA. 114+15.01
T.D.W. A.S.J.W. S.L. E.R.H. 9/6/71 BALKE ENGRS. 7/85

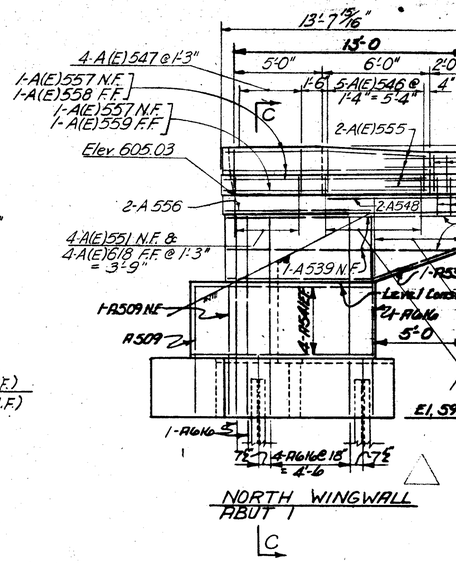
FED. AID. DIVISION	STATE	PROJECT	
2	OHIO		

680
187

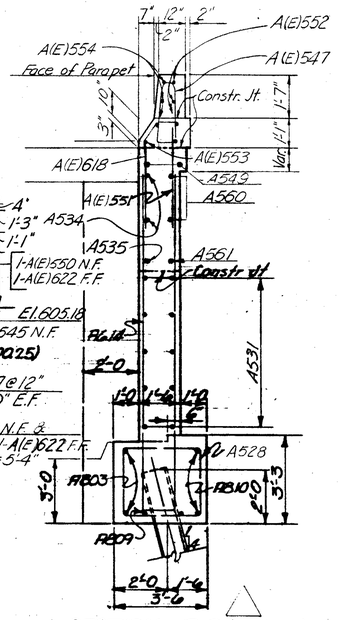
HAM-75-9.93
HAM-126-13.00



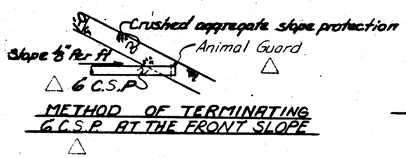
SOUTH WINGWALL
ABUT 1



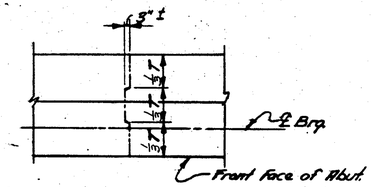
NORTH WINGWALL
ABUT 1



SECTION A-A (as shown)
SECTION C-C (similar)

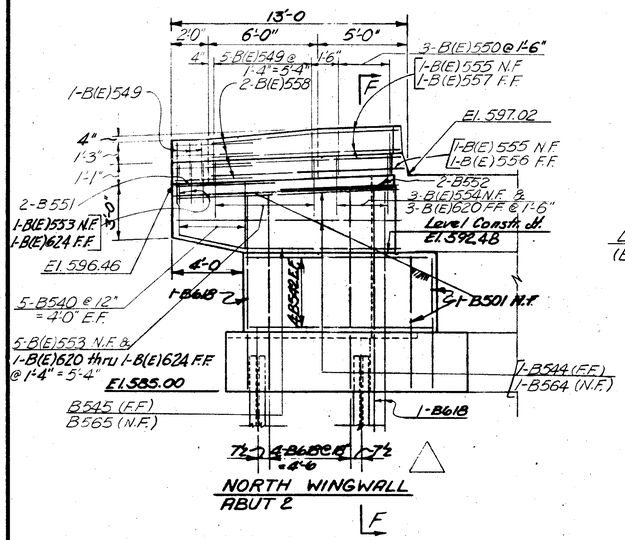


METHOD OF TERMINATING
6 C.S.P. AT THE FRONT SLOPE

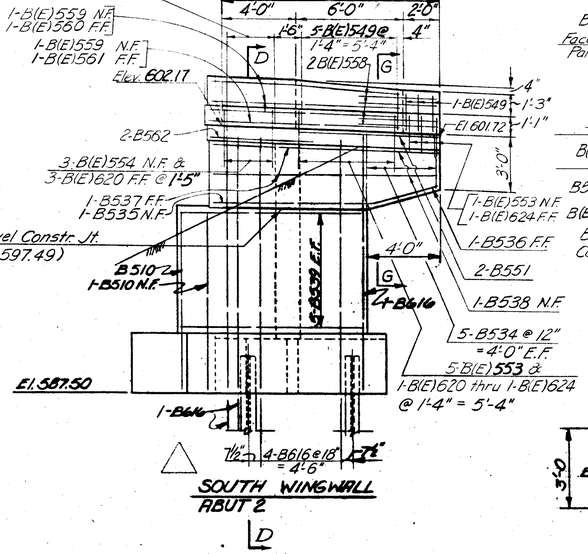


CONSTRUCTION JOINT DETAIL

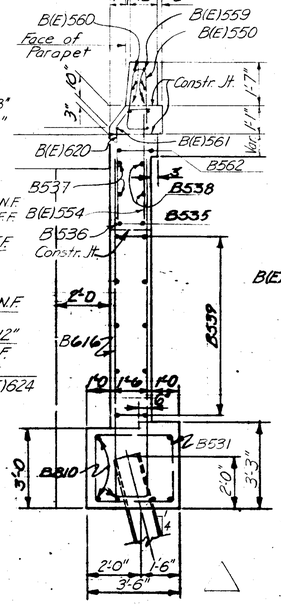
NOTES:
1. Porous Backfill, 1'-6" thick full length of abutment and 2'-0 thick full length of wings, shall extend up to the bottom of approach slab or paved shoulder. Excavation therefore in excess of that required for construction of the abutment shall be considered as paid for in the bid price per cubic yard paid for porous backfill.
△ 2. For End Dam Details see sheets 24/13 & 28/13
3. For Reinforcing steel list see sheet 12/13
4. For Abutment 1 Details see sheet 3/13
5. For Abutment 2 Details see sheet 4/13
△ 6. "(E)" denotes epoxy coated reinforcing bar.
△ 7. For parapet details and notes not shown see Standard Dwg. BR-1.



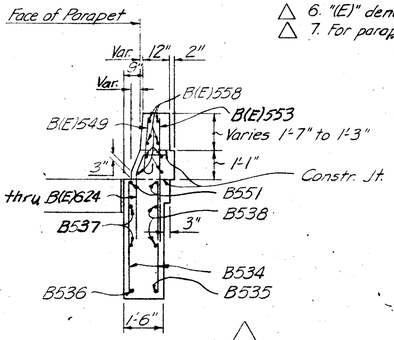
NORTH WINGWALL
ABUT 2



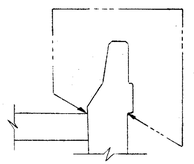
SOUTH WINGWALL
ABUT 2



SECTION D-D (as shown)
SECTION F-F (similar)



SECTION G-G (as shown)
SECTION H-H (similar)



△ Seal Concrete Surfaces of Wingwall Parapets Between the Limits Indicated (Typ.)

VOGT, IVERS, & ASSOCIATES, INC. 5/13
ENGINEERS ARCHITECTS
CINCINNATI

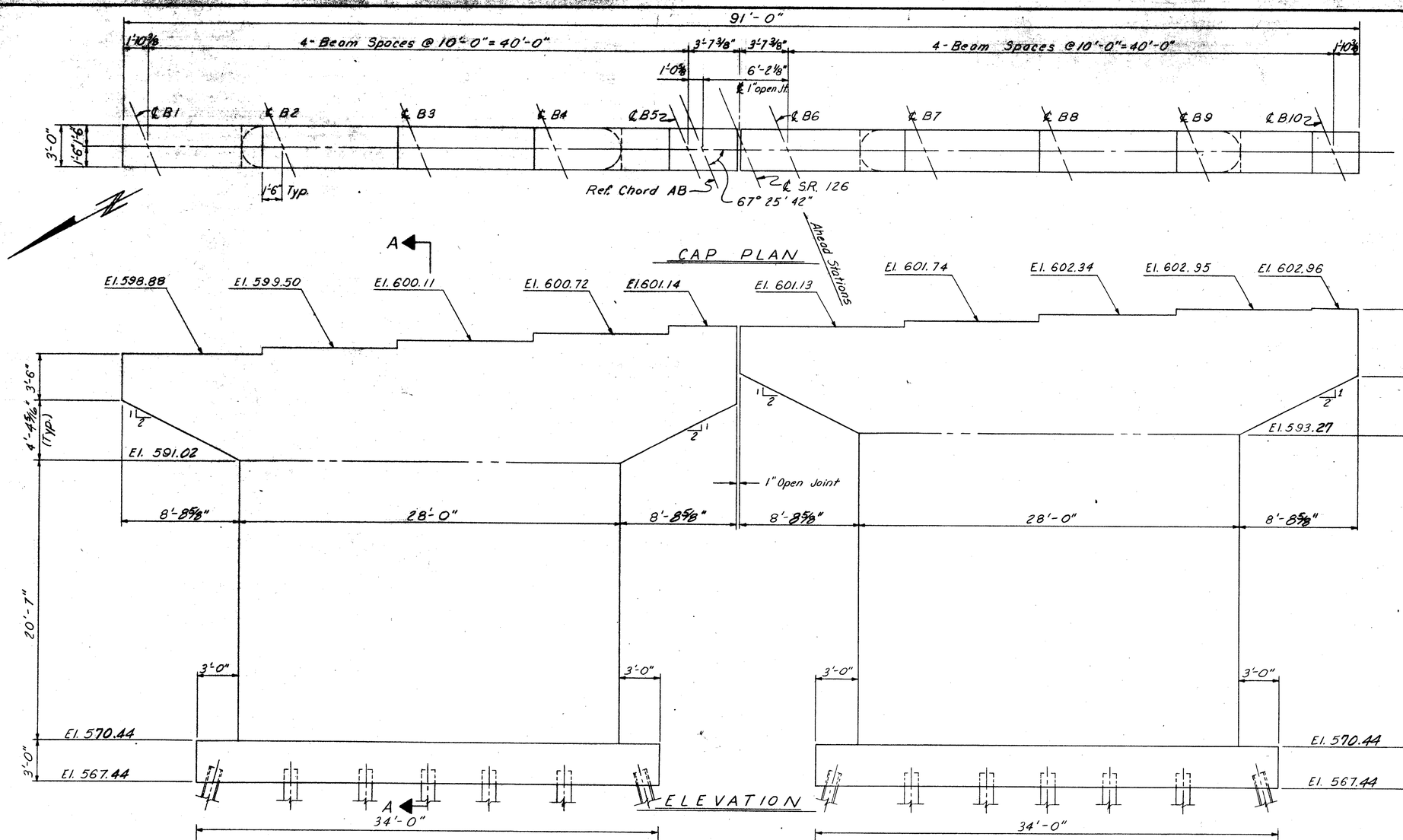
ABUTMENT DETAILS
BRIDGE No. HAM-126-1467
S.R 126
OVER CONRAIL
HAMILTON COUNTY
STA. 111+20.12 to
STA. 114+15.01

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
S.L.	H.A.M	H.A.M	S.L	E.C.H	9/1/11	DATE

CALC. BY		HAM - 75 - 9.93 HAM - 126 - 13.00	OHIO FHWA REGION 5	681 787
CHKD. BY				
DATE				

PRELIMINARY ESTIMATED QUANTITIES
Class C concrete - Pier above footing - 212 C.Y.
Class C concrete - footings - 83 C.Y.
Reinforcing Steel - Grade 60 - 73,750 Lbs.
Unclassified Excavation - 243 C.Y.

QUANTITIES SHOWN ARE QUANTITIES FOR PIER NO. 1 WHICH ARE BASED ON PRELIMINARY DESIGN AND ARE APPROXIMATE, TO BE USED DURING BIDDING PROCESS. FINAL DESIGN SHALL BE COMPLETED AND ACTUAL QUANTITIES WITH REPLACEMENT DETAILED DRAWINGS AND REINFORCING BAR LIST SHALL BE PRESENTED TO THE SUCCESSFUL CONTRACTOR ON OR BEFORE THE PRECONSTRUCTION MEETING. THE CONTRACTOR IS ASKED TO USE THESE APPROXIMATE QUANTITIES AND SCHEMATIC DRAWINGS IN PREPARING A BID PACKAGE.



For Reinforcing Steel list see sh 13/13
For Reference Chord AB Layout see sh 1/13

△ ⬡ = Pile Number

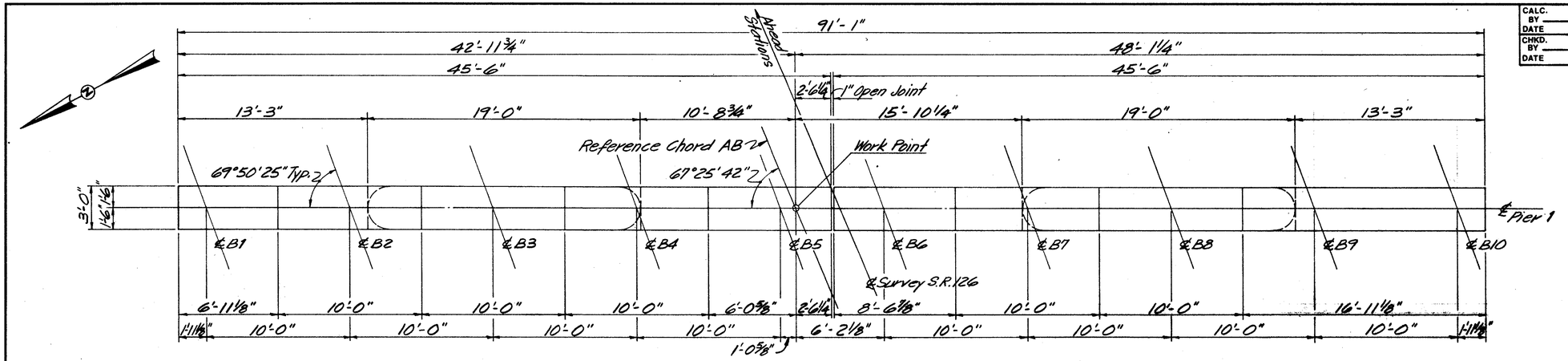
▼ = Pile battered 1:4 in direction shown

BALKE ENGINEERS 7762 READING ROAD CINCINNATI, OHIO 45237					6/13
PIER 1 BRIDGE NO. HAM-126-1467 S.R. 126 OVER CONRAIL RAILROAD HAMILTON COUNTY STA. 111+20.12 to STA. 114+15.01					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
CRS	ALH	—	TMB	CRS 3/86	—

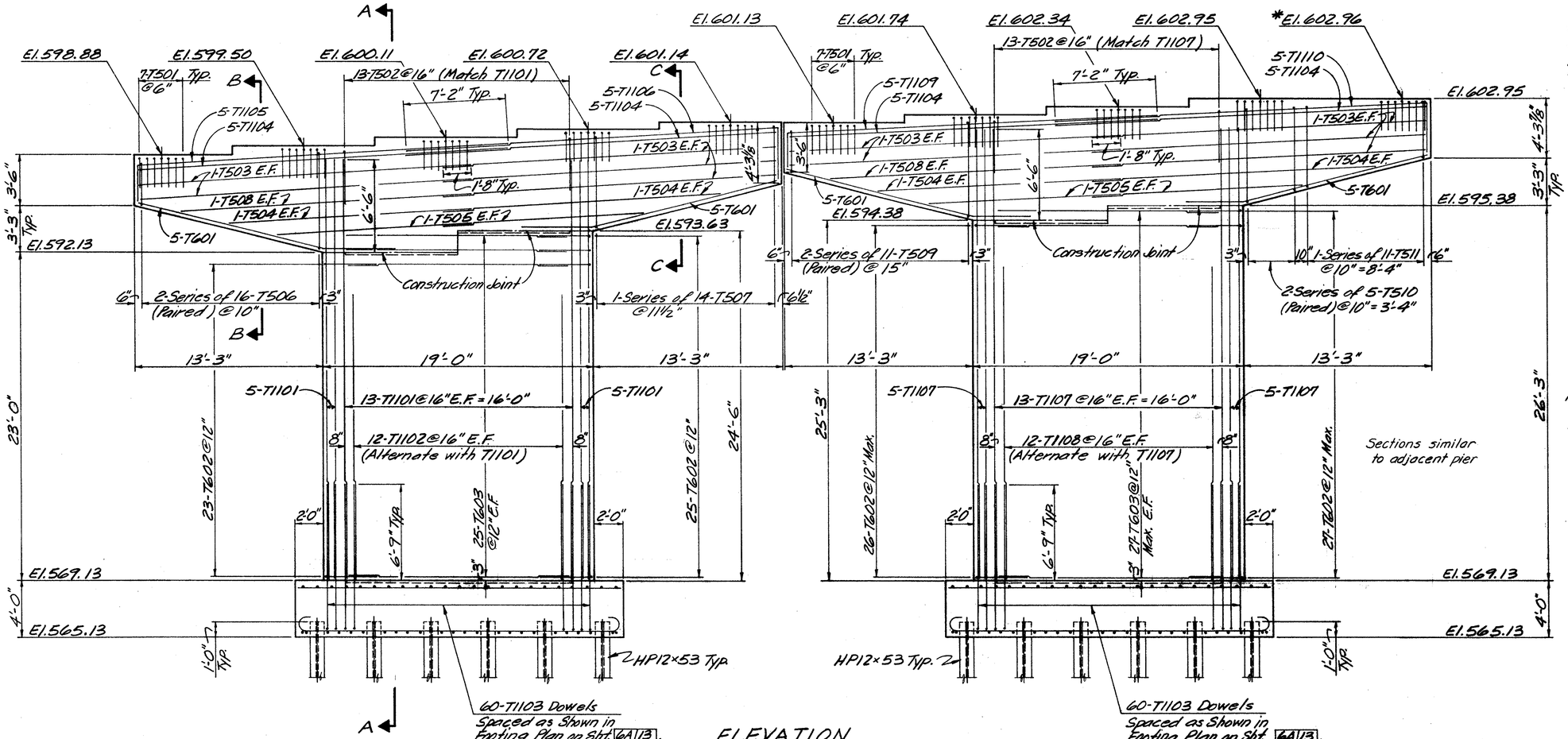
SUPERCEDED BY SHT 681A. 9/29/86

OHIO BLUE PRINT 760503

CALC. BY / DATE	HAM-75-9.93	OHIO	681A
CHKD. BY / DATE	HAM-126-13.00	FHWA REGION 5	787



CAP PLAN



ELEVATION

* This Bearing requires ¼" sheet lead or preformed bearing pad instead of the ⅛" called for on Std. Dwg. RB-1-55.

NOTES:
1. For Footing Plan See Sheet 6A13.
2. For Sections A-A, B-B & C-C See Sheet 6A13.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

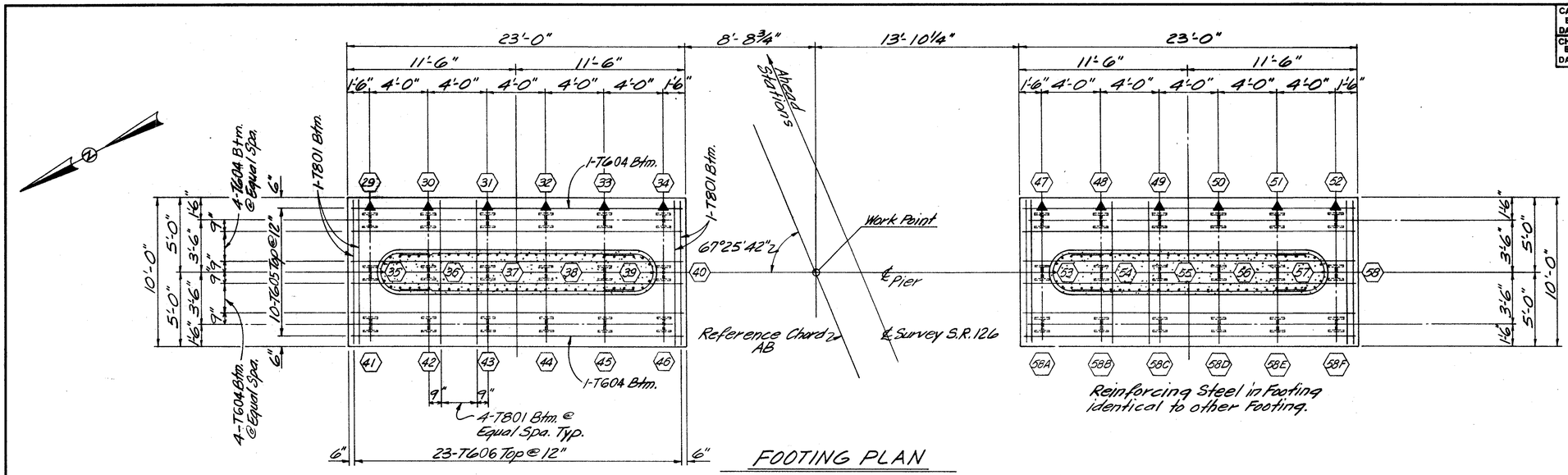
6A13

PIER 1
BRIDGE NO. HAM-126-1467
S.R. 126 OVER
CONRAIL RAILROAD
HAMILTON COUNTY OHIO
STA. 111+20.12 TO STA. 114+15.01

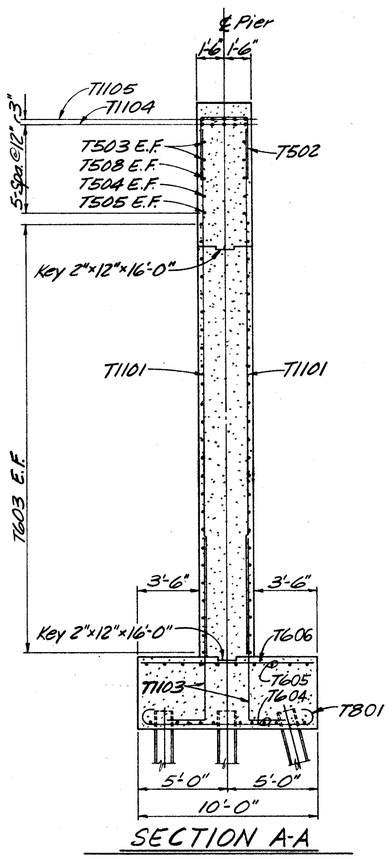
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	WJH	~	SJA	CRS	

REVISED 9/29/86
SUPERCEDES SHT. 681

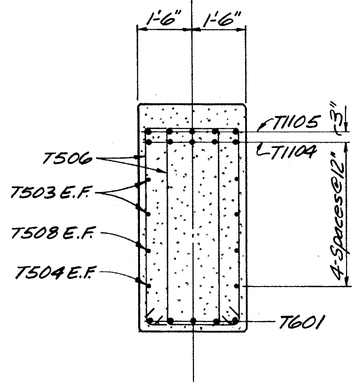
CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO	681B 787
CHKD. BY			FHWA REGION 5	
DATE				



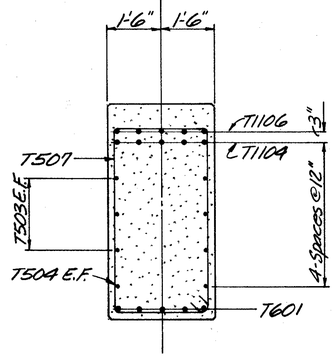
FOOTING PLAN



SECTION A-A



SECTION B-B



SECTION C-C

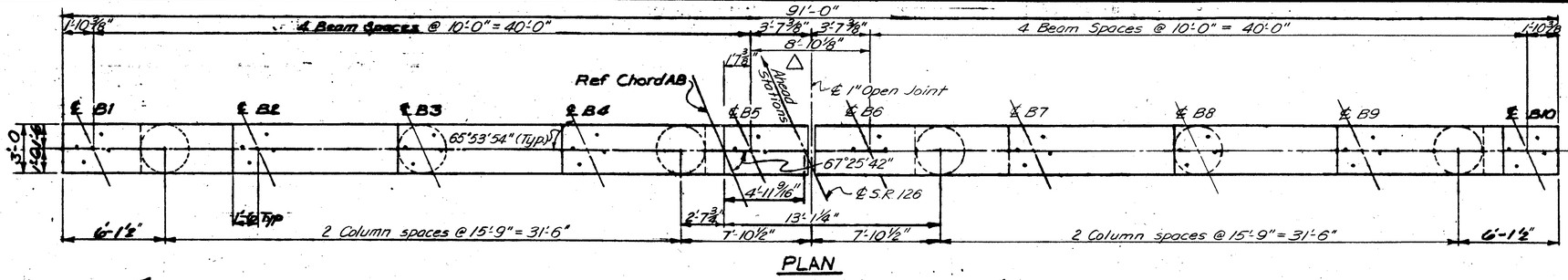
Notes:
1. All Piles are HP12x53 piles.
2. ▼ Designates Pile battered 1:4 in direction of arrow.
3. ⬡ Designates Pile Number.
   Note: Pile Numbers 58A, 58B, 58C, 58D, 58E, & 58F used.
4. For Pier 1 Cap Plan & Elevation See Sht. 6/13.
5. All stirrup hooks shall be placed downward.

BALKE ENGINEERS 7762 READING ROAD CINCINNATI, OHIO 45237						68/13
PIER 1 BRIDGE NO. HAM-126-1467 S.R. 126 OVER CONRAIL RAILROAD HAMILTON COUNTY OHIO STA. 111+20.12 TO STA. 114+15.01						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
BJS	WJH	~	SJA	CRS		

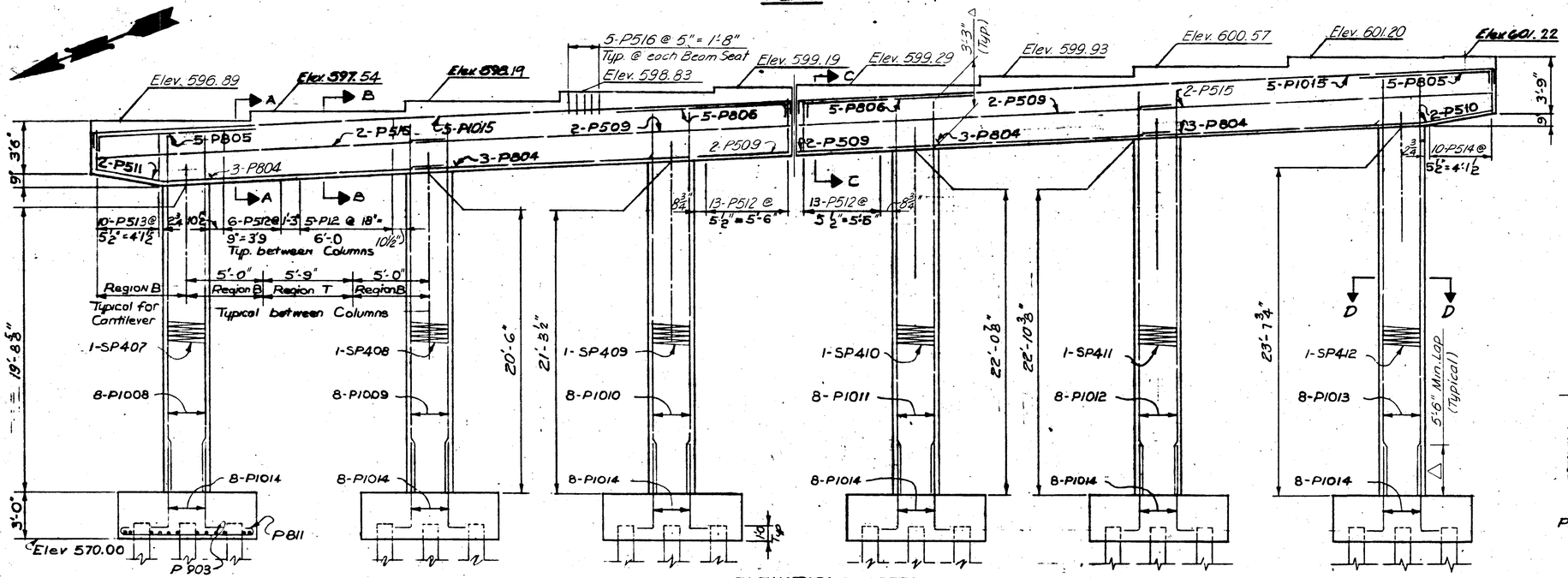
SHT. ADDED 9/29/86

OHIO BLUE PRINT

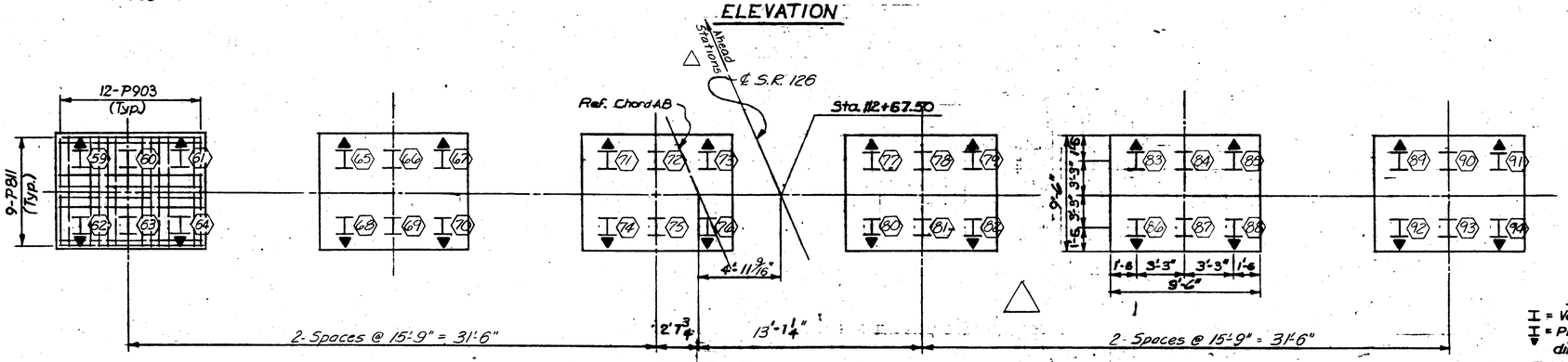
FED. ROAD DIST. NO.	STATE	PROJECT	
2	OHIO		



PLAN



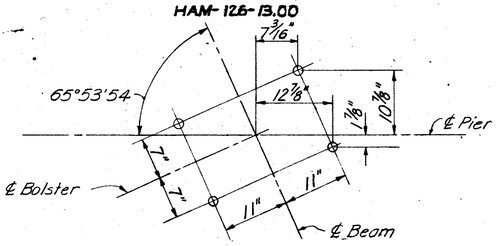
ELEVATION



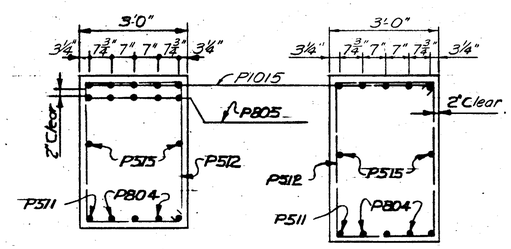
FOOTING PLAN

Legend
- I = Vertical piles
- I = Piles battered 1:4 in the direction of arrow
- △ ⬡ = Pile number

HAM-75-9.93
HAM-126-13.00

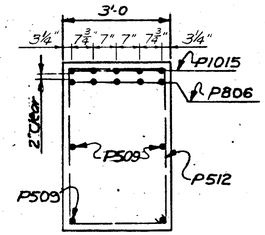


TYPICAL ANCHOR BOLT LAYOUT

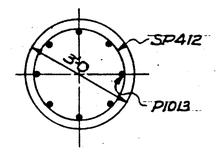


SECTION A-A

SECTION B-B



SECTION C-C



SECTION D-D

Notes:
1. The hooked corner of stirrups shall be placed in the bottom of the cap within Region B and in the top of the cap within Region T.
2. All piles are HP 12 x 53.
3. Min. cover for reinforcing steel in footings shall be 3".
4. For Reinforcing steel list see sheet. 13 / 13
5. For Ref. Chord AB Layout see sheet. 1 / 13
6. BRIDGE SEAT REINFORCING: Reinforcing steel in the vicinity of the bridge seat shall be accurately placed to avoid interference with the drilling of anchor bar holes.

VOGT, IVERS, & ASSOCIATES, INC. ENGINEERS ARCHITECTS CINCINNATI 7 / 13

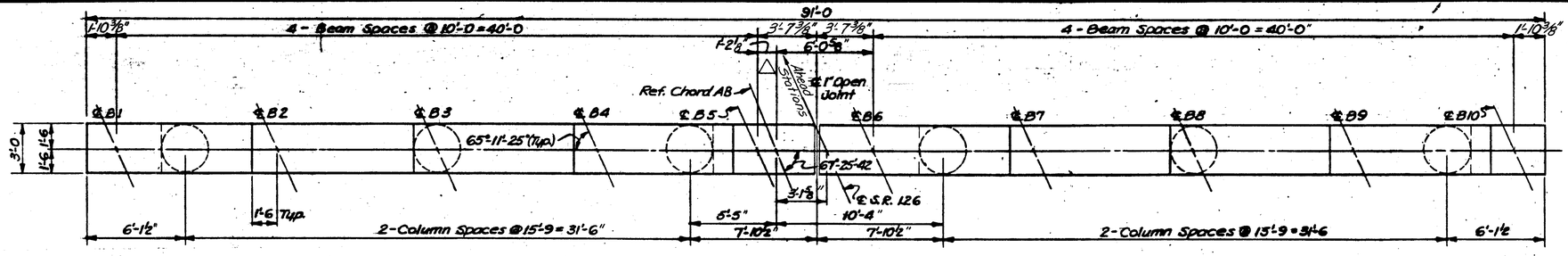
PIER 2
BRIDGE NO. HAM-126-1467
S.R. 126
OVER CONRAIL
HAMILTON COUNTY STA. 111+20.12 to STA. 114+15.01

DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE	BALKE ENGRS. 7185
SL	JT	JT	SD	2	9/1/71	

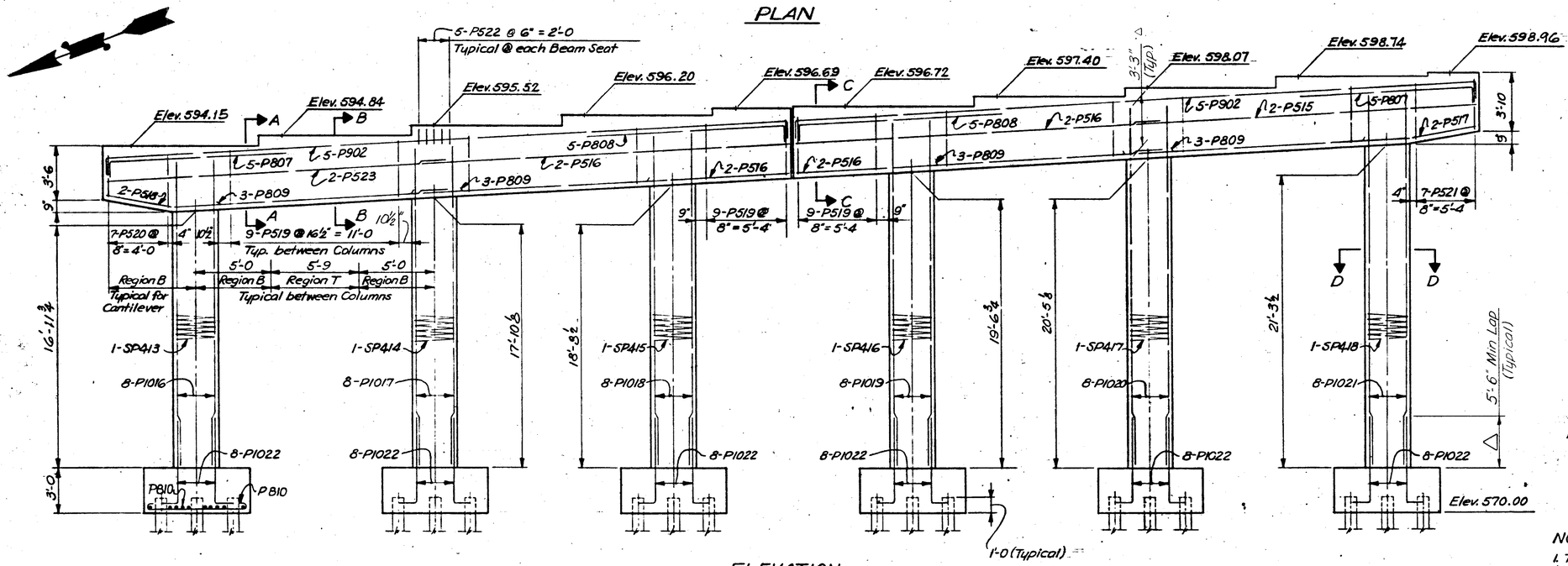
FED. NO.	STATE	PROJECT	
2	OHIO		

668
787

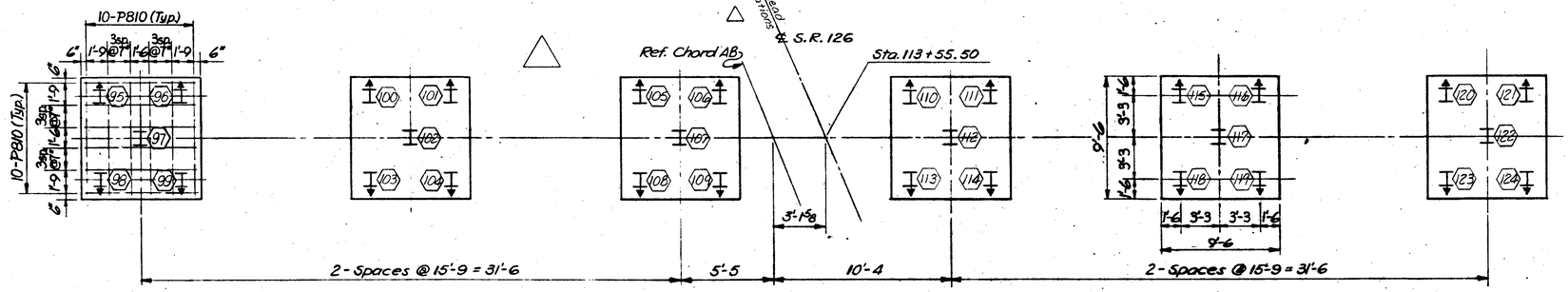
HAM-75-9.93
HAM-126-13.00



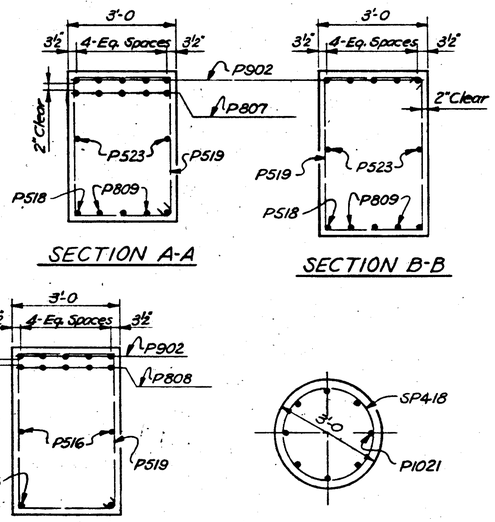
PLAN



ELEVATION



FOOTING PLAN



NOTES:

1. The hooked corner of stirrups shall be placed in the bottom of the cap within Region B and in the top of the cap within Region T.
2. All piles are HP 12x53.
3. Minimum cover for Reinforcing Steel in footings shall be 3".
4. For Reinforcing Steel List see Sheet 13/13
5. For Reference Chord Layout see Sheet 1/13

LEGEND:

= Piles battered 1:4 in direction of arrow.

△ ⬡ = Pile number

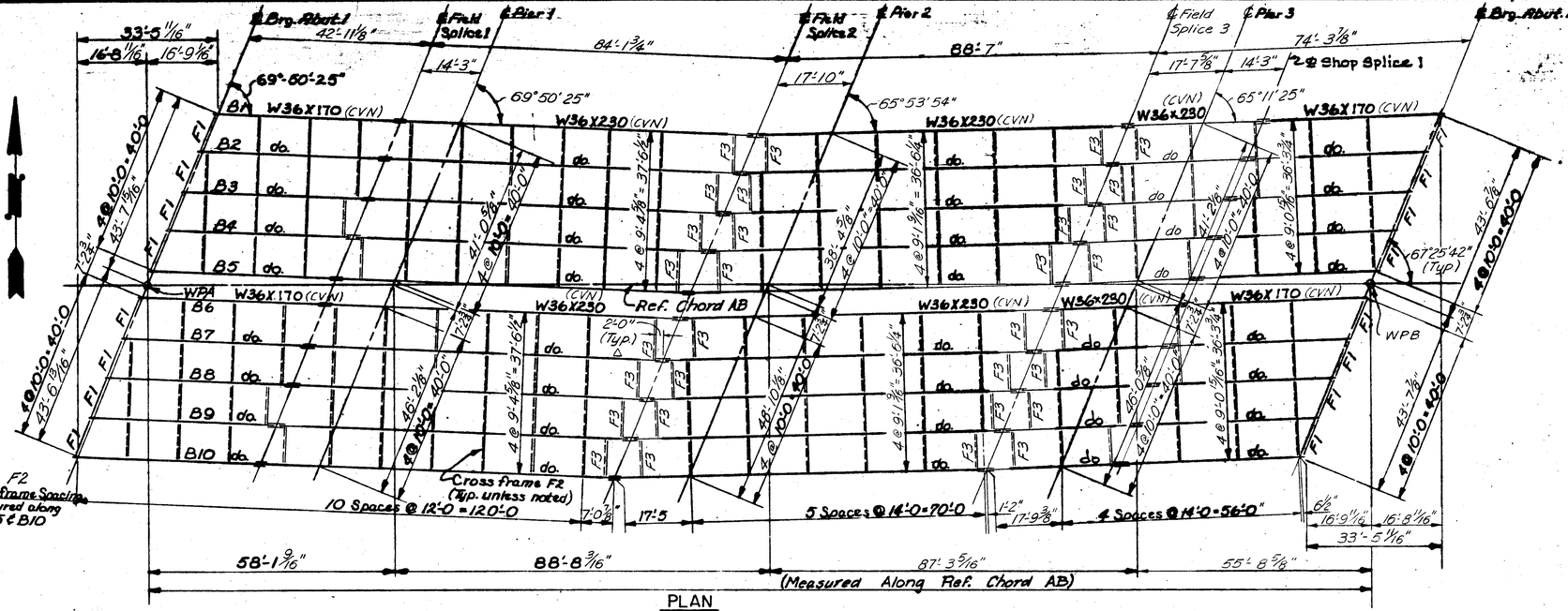
VOGT, IVERS, & ASSOCIATES, INC. 8/13
ENGINEERS ARCHITECTS
CINCINNATI

PIER 3
BRIDGE NO. HAM-126-1467
S.R. 126
OVER CONRAIL
HAMILTON COUNTY STA. 111+20.12 to STA. 114+15.01

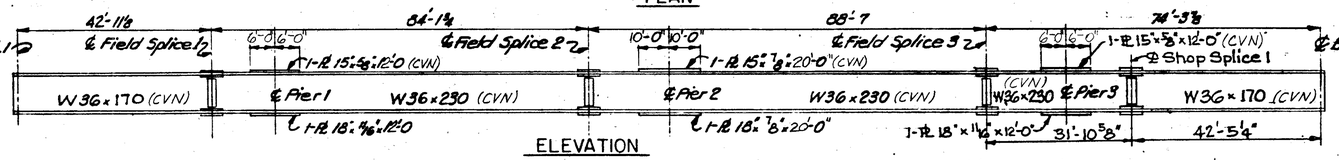
DESIGNED	DRAWN	TRACED	CHECKED	APPROVED	DATE	BALKE ENGRS. 1185
S.L.	M.D.	-	SD	ZKH	9/1/71	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

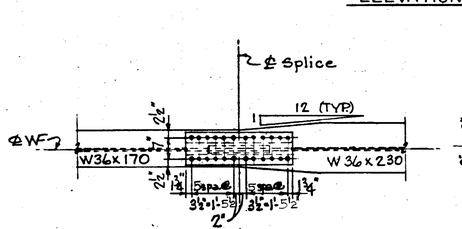
HAM-75-9.93
HAM-126-13.00

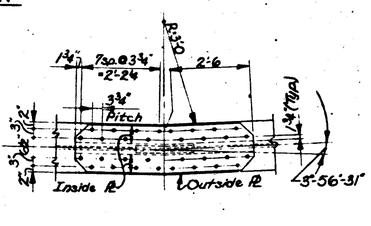


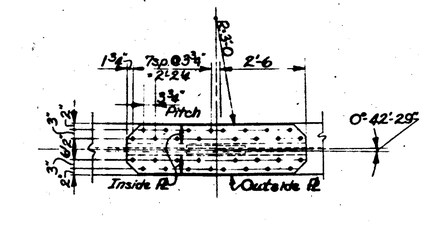
PLAN

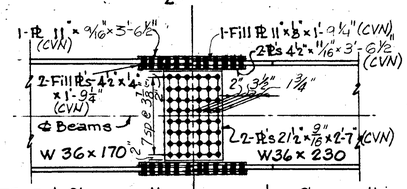


ELEVATION



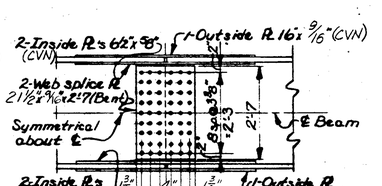




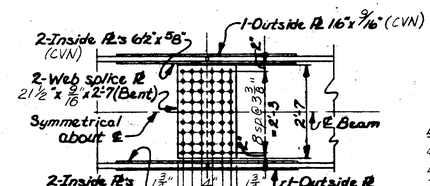


NOTE: Bot. flange splice same as top flange splice

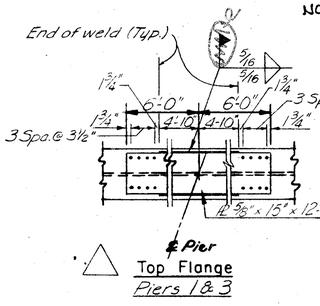
Field Splice 1 (or Shop Splice 1)

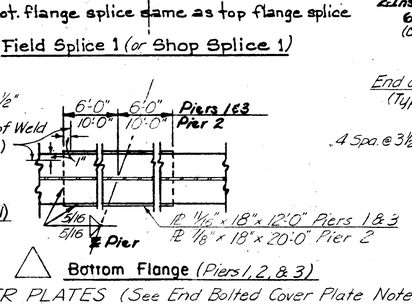


Field Splice 2

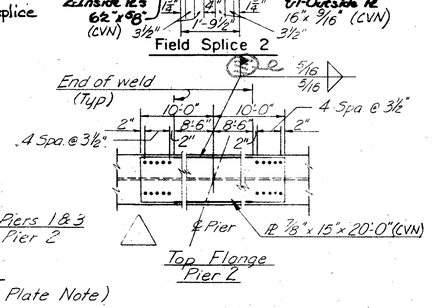


Field Splice 3





COVER PLATES (See End Bolted Cover Plate Note)

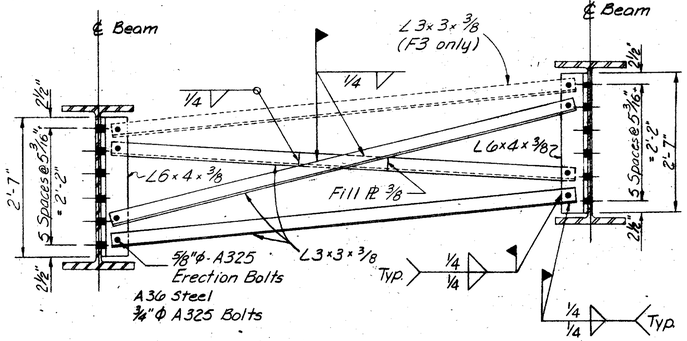


NOTES △

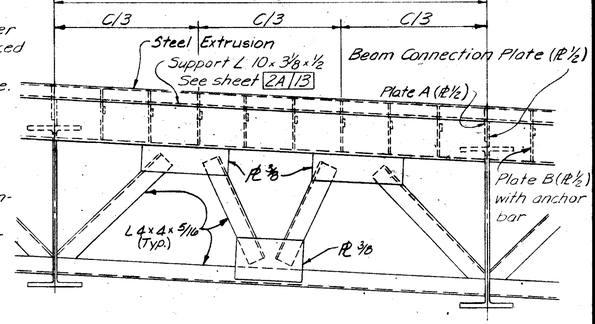
1. For Details of End Dam see Sheets 2A/13 and 2B/13
2. For Elevation Layout see Sheet 10/13
3. For Reference Chord Layout see Sheet 1/13
4. HIGH STRENGTH BOLTS shall be 1" diameter A325 unless otherwise noted.

ERECTION BOLTS: Hole diameter in the crossframes and angle stiffeners shall be respectively 1/16" and 1/4" larger than the diameter of the erection bolts. Unless replaced by permanent high strength bolts, erection bolts shall remain in place. Lock washers shall be furnished for other than fully torqued high strength erection bolts. Bolts shall be furnished as part of 513.

In lieu of erection bolts and at the option of the Contractor, alternative means of temporary bracing may be used subject to the approval of the Director (501.06).



INTERMEDIATE CROSSFRAME F_2 & F_3
TYPICAL △



END CROSSFRAME F_1 △

END BOLTED COVER PLATES:
BOLT HOLES IN COVER PLATE AND FLANGE MUST BE DRILLED PRIOR TO WELDING TO ENSURE FRICTION TYPE CONNECTION. CONTACT SURFACES MUST BE BLAST-CLEANED AND COMPLETELY FREE OF FESIDUE.

RECOMMENDED FABRICATION METHOD

1.) DRILL STANDARD HOLES IN COVER PLATE AND FLANGE.
2.) CLEAN CONTACT SURFACES TO BE BOLTED.
3.) TACK WELD COVER PLATE TO FLANGE.
4.) INSTALL AND TIGHTEN HIGH-STRENGTH BOLTS.
5.) FILLET WELD COVER PLATE TO FLANGE.

STEPS NUMBERS 4 AND 5 CAN BE INTERCHANGED IF DESIRED.

STEEL NOTCH TOUGHNESS REQUIREMENT
(CHARPY V-NOTCH)

Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements as specified in 711.01 of CMS.

VOGT, IVERS, & ASSOCIATES, INC. 9/13
ENGINEERS ARCHITECTS
CINCINNATI

FRAMING PLAN
BRIDGE NO. HAM-126-1467
SR. 126
OVER CONRAIL
HAMILTON COUNTY STA. 111+20.12 to STA. 114+15.01

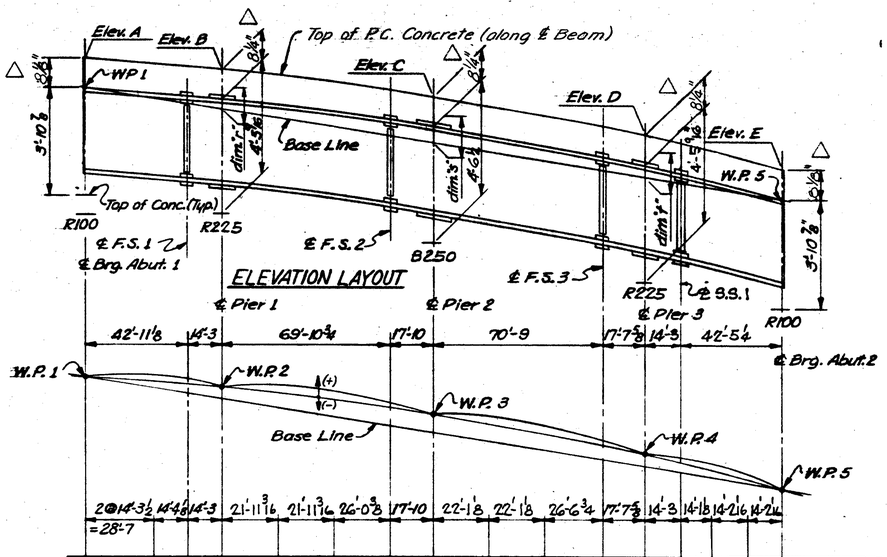
DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE	BLAKE ENGRS. 9185
SL	BWC	BWC	DW	[illegible]	9/1/11	

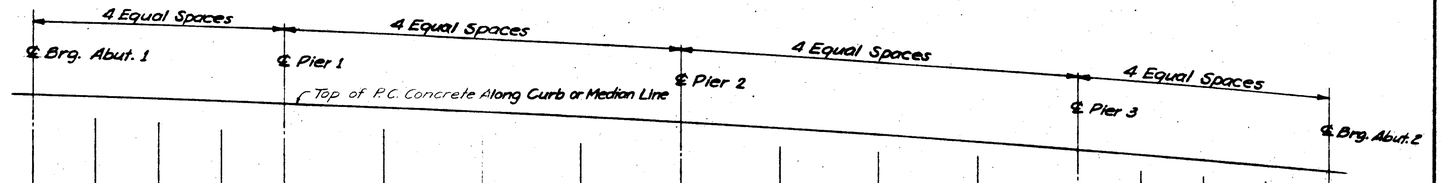
REVISED 9/29/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

683
187

HAM-75-9.93
HAM-126-13.00





North Curb	604.92	604.74	604.53	604.30	604.04	603.65	603.19	602.64	602.03	601.43	600.78	600.03	599.22	598.69	598.15	597.58	596.97
N. Median	606.94	606.79	606.61	606.39	606.17	605.82	605.40	604.89	604.34	603.78	603.19	602.49	601.74	601.24	600.74	600.21	599.64
S. Median	606.94	606.79	606.61	606.40	606.18	605.83	605.42	604.91	604.36	603.81	603.21	602.52	601.77	601.28	600.78	600.25	599.69
South Curb	608.76	608.63	608.47	608.29	608.09	607.77	607.40	606.94	606.44	605.93	605.39	604.75	604.05	603.60	603.13	602.64	602.11

SCREED ELEVATIONS AT TOP OF P.C. CONCRETE △
(See Note 5)

STATION	111+25.00	111+50.00	111+75.00	112+00.00	112+25.00	112+50.00	112+75.00	113+00.00	113+25.00	113+50.00	113+75.00	114+00.00	114+25.00
Profile Grade	607.120	606.815	606.447	606.018	605.527	604.974	604.359	603.682	602.944	602.143	601.281	600.357	599.371
N. Median	607.022	606.716	606.349	605.919	605.428	604.875	604.260	603.584	602.845	602.045	601.182	600.258	599.272
North Curb		604.853	604.486	604.056	603.565	603.012	602.397	601.720	600.982	600.181	599.319	598.395	597.409
South Curb	608.698	608.392	608.025	607.595	607.104	606.551	605.936	605.259	604.521	603.720	602.858		
S. MEDIAN	607.017	606.711	606.344	605.914	605.423	604.870	604.755	603.579	602.840	602.040	601.177	600.253	599.267

PAVEMENT ELEVATIONS AT TOP OF LATEX OVERLAY △

BEAM	Elev. A	Elev. B	Elev. C	Elev. D	Elev. E	Dim. "r"	Dim. "s"	Dim. "t"
1	604.916	604.033	602.121	599.301	597.147	7¾"	1'-0 5/16"	7½"
2	605.514	604.648	602.769	599.988	597.861	7⅜"	1'-0 13/16"	7 7/16"
3	606.110	605.263	603.416	600.673	598.573	7⅛"	1'-0¼"	7⅜"
4	606.705	605.875	604.060	601.355	599.282	7½"	1'-0⅜"	7¾"
5	607.055	606.290	604.418	601.836	599.715	8 1/16"	1'-0½"	8 1/8"
6	607.078	606.279	604.517	601.875	599.847	7⅜"	1'-0½"	7¼"
7	607.670	606.888	605.157	602.550	600.548	7 5/16"	1'-0 7/16"	7 3/16"
8	608.261	607.496	605.794	603.224	601.247	7 5/16"	1'-0 3/16"	7 1/8"
9	608.851	608.102	606.430	603.894	601.942	7¼"	1'-0⅛"	7 1/16"
10	608.761	608.114	606.453	604.106	602.157	7¼"	11 3/4"	7¼"

ELEVATIONS AT TOP OF P.C. CONCRETE △

NOTES:
1. Working points are to top of beam.
2. Base Line is a chord between W.P. 1 & W.P. 5. Working lines are chords between working points.
3. For details of Rockers and Bolsters see Standard Drawing RB-1-55.
4. For Framing Plan and Elevation see Sheet 9 | 13
△ 5. The screed elevations shown have been obtained by adding the dead load deflection due to the weight of: concrete slab, latex modified concrete overlay, bridge parapet, future wearing surface, and steel beams to the required final elevations.
△ 6. WELDED ATTACHMENT of supports for concrete deck finishing machine may be made to areas of the fascia stringer flanges designated "Compression". Attachment shall not be made to areas designated "Tension". Fillet welds to compression flanges shall be not closer than 1" from edge of flange, be not more than 2" long, and be not smaller than the minimum size required by AASHTO.

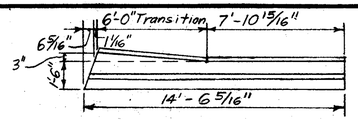
| | | | | | | | | | | | | | | |

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

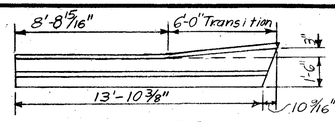
686
707

HAM-75-9.93
HAM-126-13.00

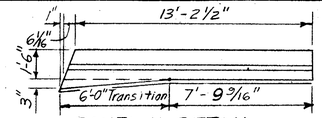
PANEL 3 DETAIL



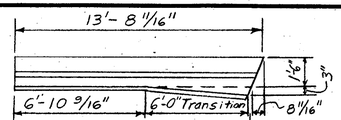
PANEL 4 DETAIL

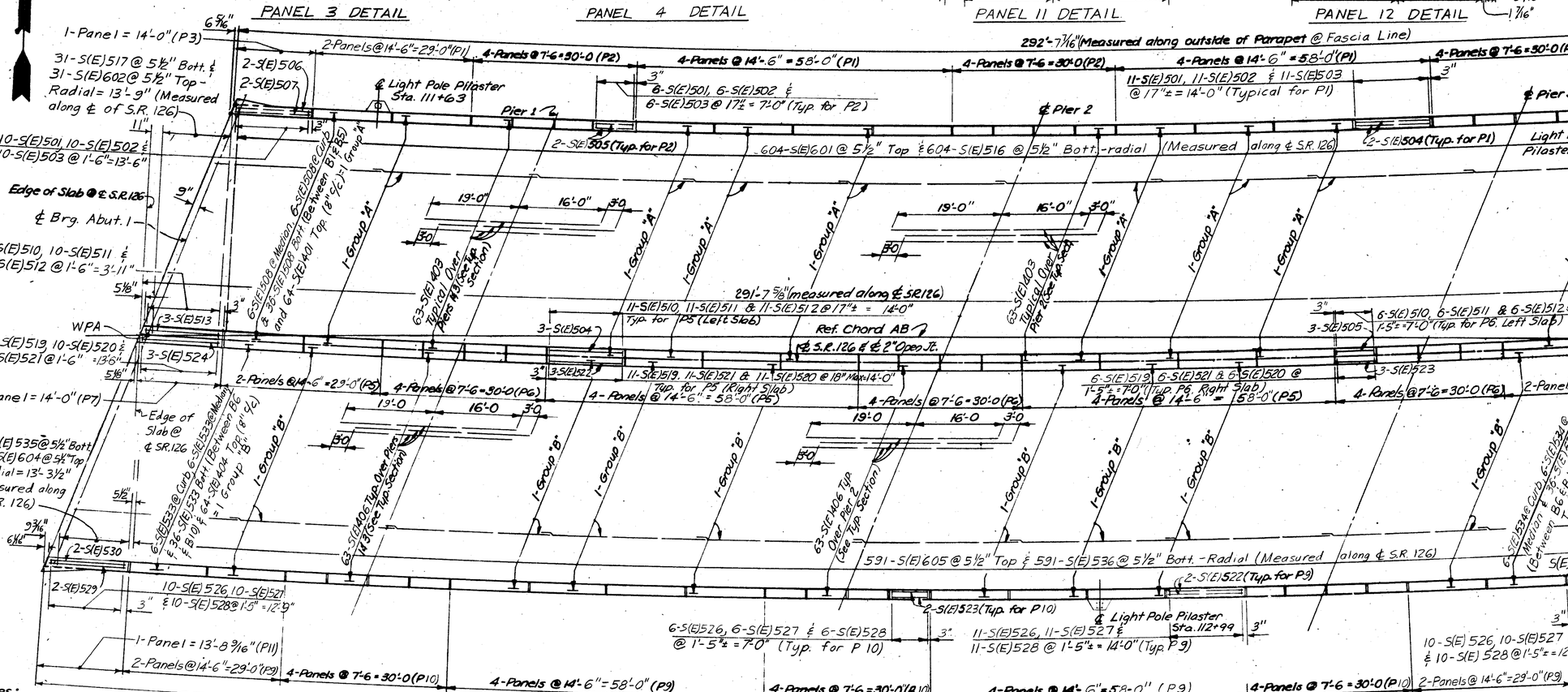


PANEL 11 DETAIL



PANEL 12 DETAIL

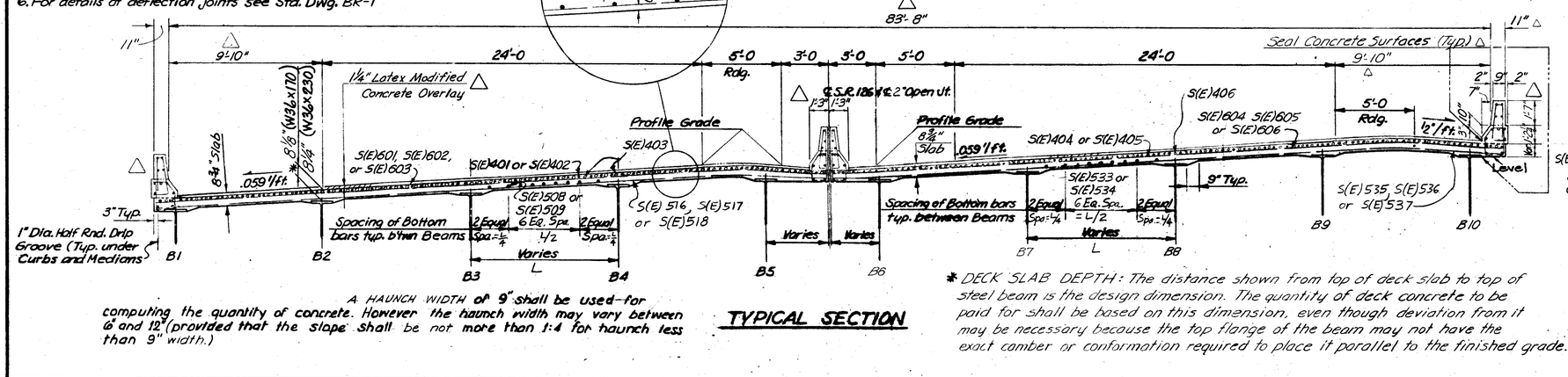




PLAN

Notes:

1. Slab thickness includes 1 1/2" Latex Modified Concrete Overlay △
2. "(E)" denotes epoxy coated reinforcing bar. △
3. For details of end dams see sheets 2A/13 & 2B/13 △
4. For adjusted curb line and median elevations see Sh. 10/13
5. For fascia offsets see Sh. 10/13
6. For details of deflection joints see Std. Dwg. BR-1



A HAUNCH WIDTH of 9" shall be used for computing the quantity of concrete. However the haunch width may vary between 6" and 12" (provided that the slope shall be not more than 1:4 for haunch less than 9" width.)

TYPICAL SECTION

* DECK SLAB DEPTH: The distance shown from top of deck slab to top of steel beam is the design dimension. The quantity of deck concrete to be paid for shall be based on this dimension, even though deviation from it may be necessary because the top flange of the beam may not have the exact camber or conformation required to place it parallel to the finished grade.

MEDIAN DETAIL

CURB DETAIL

▼ Transition Median Barrier on approach slabs to meet Std. Type A Barrier on roadway.

NOTE: For Light Pole Pilaster Details See Sheet 13/13

VOGT, IVERS, & ASSOCIATES, INC. 11/13
ENGINEERS ARCHITECTS
CINCINNATI

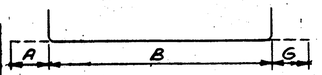
ROADWAY SLAB
BRIDGE NO. HAM-126-1467
S.R. 126
OVER CONRAIL
HAMILTON COUNTY STA. 111+20.12 to STA. 114+15.01

C.L.	M.E.D.	M.D.	D.W.	DATE 9/6/77	BALKE ENGRS. 7/85

MARK	NO	LENGTH	TYPE	WEIGHT
		ABUTMENT 1		
R501	11	9'-2	1	105
R502	7	8'-8	1	63
R503	7	8'-1	1	59
R504	7	7'-6	1	55
R505	5	9'-5	1	49
R506	7	9'-1	1	66
R507	7	8'-6	1	62
R508	7	7'-11	1	58
R509	8	7'-4	1	61
R510	62	8'-2	2	328
R511	61	6'-2	2	392
R512	6	44'-4	Str	277
R513	3	13'-6	Str.	42
R514	10	11'-5	Str.	119
R515	5	12'-5	Str.	65
R516	12	23'-4	Str.	292
R517	3	11'-7	Str.	36
R518	10	11'-5	Str.	119
R519	5	14'-10	Str.	77
R520	14	△ 23'-6"	Str.	343
A(E)521	2	△ 23'-6"	Str	49
R524	14	△ 24'-0"	Str.	350
A(E)525	2	△ 24'-0"	Str.	50
R528	21	10'-9	3	235
R529	2	7'-5	2	15
R530	2	7'-11	2	17
R531	10	10'-3	Str	107
R532	12	2'-9" to 4'-5" by 4"- 2 ea	Str	45
R534	2	13'-8	Str	29
R535	1	14'-0	4	15
R537	12	2'-9 to 4'-5 by 4"- 2 ea.	Str	45
R538	1	13'-0	4	14
R539	2	13'-1	Str	27
R540	2	12'-8	Str.	26
R541	8	9'-11	Str	83
A(E)542	4	△ 3'-2	5	13
A(E)543	4	△ 3'-11	Str	16
A544	14	△ 5'-8	Str	75
A545	1	△ 13'-4	4	14
A(E)546	16	△ 2'-8	7	45
A(E)547	8	△ 5'-3	9	44
A548	4	△ 7'-7	Str.	32
A549	2	△ 7'-10	Str.	16
A(E)550	16	△ 4'-7	Str.	76
A(E)551	8	△ 3'-0	Str.	25
A(E)552	4	△ 11'-3	Str.	47
A(E)553	1	△ 11'-8	Str.	12
A(E)554	3	△ 11'-6	Str.	36
A(E)555	16	△ 4'-4	Str.	72
A556	2	△ 6'-10	Str.	14
A(E)557	4	△ 11'-1	Str.	46
A(E)558	3	△ 10'-10	Str.	34
A(E)559	1	△ 10'-8	Str.	11
A560	2	△ 13'-3	Str.	28
A561	1	△ 13'-7	4	14
A601	9	16'-2	2	219
A602	7	15'-8	2	165
A603	7	15'-1	2	159
A604	7	14'-6	2	152
A605	5	16'-5	2	123
A606	7	16'-1	2	169
A607	7	15'-6	2	163
A608	7	14'-11	2	157
A609	5	14'-4	2	108
A(E)611	87	9'-0	2	1176
A612	87	△ 6'-11	2	904

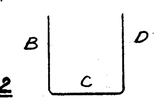
MARK	NO	LENGTH	TYPE	WEIGHT
		ABUT 1 CONT'D		
		10'-6	2	1372
		△ 27'-0	2	284
		△ 23'-4	2	245
		△ 3'-9	5	56
		△ 3'-8	5	11
		△ 3'-8	5	11
		△ 3'-7	5	43
		△ 7'-1	Str.	43
MARK	NO	ABUTMENT 2		
B501	11	7'-6	1	86
B502	7	8'-2	1	60
B503	7	8'-11	1	65
B504	7	9'-8	1	71
B505	5	10'-1	1	53
B506	7	7'-8	1	56
B507	7	8'-5	1	61
B508	7	9'-1	1	66
B509	7	9'-9	1	71
B510	5	10'-0	1	52
B511	65	6'-2	2	418
B512	6	46'-8	Str	292
B513	3	13'-9	Str	43
B514	13	11'-5	Str	155
B515	2	24'-5	Str	51
B516	5	4'-5	Str	23
B517	12	24'-10	Str	311
B518	3	13'-8	Str	43
B519	13	11'-5	Str.	155
B520	2	23'-6	Str	49
B521	5	3'-6	Str	18
B522	14	△ 25'-0	Str.	365
B(E)523	2	△ 25'-0	Str.	52
B526	14	△ 25'-3	Str.	369
B(E)527	2	△ 25'-3	Str.	53
B530	66	8'-2	2	362
B531	20	10'-9	3	224
B532	2	6'-5	2	13
B533	2	6'-11	2	14
B534	10	2'-9 to 3'-11 by 3½"- 2 ea.	Str	35
B535	1	△ 12'-5	4	13
B536	1	11'-10	4	12
B537	2	11'-8	Str	24
B538	2	△ 12'-3	Str	26
B539	10	10'-1	Str	105
B540	10	2'-8 to 3'-8 by 3"- 2 ea.	Str	35
B542	8	10'-1	Str	84
B544	2	△ 12'-6	Str	26
B545	1	△ 12'-7	4	13
B(E)546	4	△ 3'-11	Str.	16
B(E)547	4	△ 3'-2	5	13
B548	14	△ 5'-2	Str.	75
B(E)549	16	△ 2'-8	7	45
B(E)550	6	△ 5'-3	9	33
B551	4	△ 7'-7	Str.	32

MARK	NO	LENGTH	TYPE	WEIGHT
		ABUTMENT 2 CONT'D		
B552	2	△ 6'-10	Str.	14
B(E)553	16	△ 4'-7	Str.	76
B(E)554	6	△ 3'-0	Str.	19
B(E)555	4	△ 10'-1	Str.	42
B(E)556	1	△ 10'-8	Str	11
B(E)557	3	△ 10'-5	Str.	33
B(E)558	16	△ 4'-4	Str.	72
B(E)559	4	△ 10'-2	Str	42
B(E)560	3	△ 9'-11	Str.	31
B(E)561	1	△ 9'-8	Str.	10
B562	2	△ 5'-10	Str.	12
B564	2	△ 12'-1	Str.	25
B565	1	△ 12'-2	4	13
B601	9	14'-6	2	196
B602	7	15'-2	2	159
B603	7	15'-11	2	167
B604	7	16'-8	2	175
B605	3	17'-1	2	77
B606	2	19'-7	2	59
B607	7	14'-8	2	154
B608	7	15'-5	2	162
B609	7	16'-1	2	169
B610	7	16'-9	2	176
B611	2	17'-0	2	51
B(E)613	92	9'-0	2	1244
B614	92	△ 6'-11	2	956
B615	92	△ 10'-3	2	1416
B616	7	△ 28'-2	2	296
B618	7	△ 22'-2	2	233
B(E)620	8	△ 3'-9	5	45
B(E)621	2	△ 3'-8	5	11
B(E)622	2	△ 3'-8	5	11
B(E)623	2	△ 3'-7	5	11
B(E)624	8	△ 3-7	5	43
B626	4	△ 7'-0	Str	42
B801	1	51'-6	Str.	138
B802	1	58'-1	4	155
B803	1	57'-1	4	152
B804	1	56'-7	4	151
B805	1	52'-0	Str.	139
B806	1	51'-4	Str.	137
B807	1	55'-11	4	149
B808	2	47'-0	Str	251
B809	5	48'-6	Str.	647
B810	6	10'-9	Str.	172
B811	2	7'-11	Str.	42
B812	2	10'-3	Str.	55
B813	2	12'-8	Str.	68
B(E)814	56	△ 4'-11	12	735



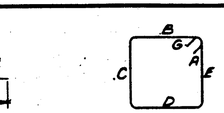
TYPE 1

Mark	A	B	G
R501	6"	8'-8"	
R502	6"	8'-6"	
R503	6"	7'-7"	
R504	6"	7'-0"	
R505	6"	8'-11"	
R506	6"	8'-7"	
R507	6"	8'-0"	
R508	6"	7'-5"	
R509	6"	6'-10"	
B501	6"	7'-0	
B502	6"	7'-8	
B503	6"	8'-5	
B504	6"	9'-2	
B505	6"	9'-7	
B506	6"	7'-2	
B507	6"	7'-11	
B508	6"	8'-7	
B509	6"	9'-3	
B510	6"	9'-6	



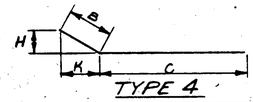
TYPE 2

Mark	B	C	D
R510	1'-7	5'-3	1'-7
R511	1'-7	3'-3	1'-7
R529	2'-1	3'-6	2'-1
R530	2'-1	4'-0	2'-1
A601	8'-8	5'-3	2'-6
A602	8'-2	5'-3	2'-6
A603	7'-7	5'-3	2'-6
A604	7'-0	5'-3	2'-6
A605	8'-11	5'-3	2'-6
A606	8'-7	5'-3	2'-6
A607	8'-0	5'-3	2'-6
A608	7'-5	5'-3	2'-6
A609	6'-10	5'-3	2'-6
A611	4'-2	11"	8'-2
A612	2'-11	1'-5	2'-11
A613	4'-8	1'-5	4'-8
A614	13'-2	1'-0	13'-2
A616	11'-4	1'-0	11'-4
B511	1'-7	3'-3	1'-7
B530	1'-7	5'-3	1'-7
B532	2'-1	2'-6	2'-1
B535	2'-1	3'-0	2'-1
B601	7'-0	5'-3	2'-6
B602	7'-8	5'-3	2'-6
B603	8'-5	5'-3	2'-6
B604	9'-2	5'-3	2'-6
B605	9'-7	5'-3	2'-6
B606	9'-7	5'-3	5'-0
B607	7'-2	5'-3	2'-6
B608	7'-11	5'-3	2'-6
B609	8'-7	5'-3	2'-6
B610	9'-3	5'-3	2'-6
B611	9'-6	5'-3"	2'-6
B613	4'-2	11"	4'-2"
B614	2'-11	1'-5	2'-11
B615	4'-7	1'-5	4'-7
B616	13'-9	1'-0	13'-9
B618	10'-9	1'-0	10'-9



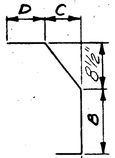
TYPE 3

MARK	A \ G	B \ D	C \ E
A528	5"	3'-0	2'-2
B531	5"	3'-0	2'-2



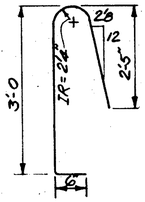
TYPE 4

MARK	H	K	B	C
R535	1'-9	4'-10	5'-2	8'-10
R535B	1'-10	4'-10	5'-2	7'-10
△ A561	1'-9	4'-10	5'-2	8'-5
B805	4'-6	4'-6	6'-5	46'-3
△ B535	1'-1	3'-10	4'-0	8'-5
B536	1'-1	3'-10	4'-0	7'-10
△ B545	10"	3'-10	3'-11	8'-3
△ B565	10"	3'-10	3'-11	8'-3
B802	5'-0	5'-0	7'-1	51'-0
B803	5'-0	5'-0	7'-1	50'-0
B804	5'-0	5'-0	7'-1	49'-6
B807	6'-0	5'-0	7'-1	40'-10
△ A545	1'-10	4'-10	5'-2	8'-3

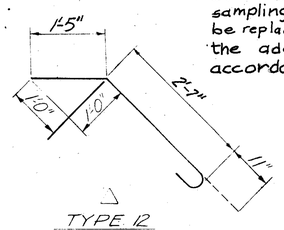


TYPE 5

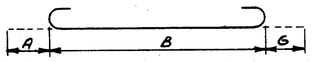
MARK	A	B	C	D
△ A(E)542	—	1'-9"	5"	9"
△ A(E)618	—	2'-5"	6"	9"
△ A(E)619	—	2'-5"	5"	8"
△ A(E)620	—	2'-5"	4"	8"
△ A(E)621	—	2'-5"	3"	7"
△ A(E)622	—	2'-5"	2"	7"
△ B(E)547	—	1'-9"	5"	9"
△ B(E)620	—	2'-5"	6"	9"
△ B(E)621	—	2'-5"	5"	8"
△ B(E)622	—	2'-5"	4"	8"
△ B(E)623	—	2'-5"	3"	7"
△ B(E)624	—	2'-5"	2"	7"



TYPE 6



TYPE 12
A(E)811 & B(E)814



TYPE 7

MARK	A	B	G
△ A(E)546	7"	2'-1	—
△ B(E)549	7"	2'-1	—

169 Yellow
687- 725

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

687
707

HAM-75-9.93
HAM-126-13.00

NOTES

△

- Spiral reinforcing bars: The "length" shown in the steel list for the spiral bars is the distance from top of the footing to the bottom of cap.

- Four steel channel, tee or angle spacers weighing not less than 0.80 lbs. per lin. foot of spacer shall be provided for each Spiral unit. They shall be equally spaced along the periphery of the Coil. The number of pounds of these spacers based on 0.80 lbs. per lin ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.
- All dimensions are out to out of bar.
- Radius dimension "R" is to outside of bar, except as noted (I.R.).
- The length of bent bars is measured along the center-line.
- For standard hook dimensions, see Sect. 509.05 of the specifications.
- For bar type SP8, the number of turns "D" is the length "C" divided by the pitch "B", plus 3 turns (total number of closed coils), expressed as the nearest whole number. One and one-half closed coil shall be provided at the ends of each spiral Unit.

△ • "(E)" denotes epoxy coated reinforcing bar.

△ • Refer to CMS Sections 106.03, 700, 709.01 thru 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structures by the additional steel, spliced in accordance with 509.08.

△ • For additional bending details, see sheet 13/13

VOGT, IVERS, & ASSOCIATES, INC. 12/13
ENGINEERS ARCHITECTS
CINCINNATI

REINFORCING STEEL LIST
BRIDGE NO. HAM-126-1467
SR-126
OVER CONRAIL

HAMILTON COUNTY STA. 111+20.12 to STA. 114+15.01

DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE	REVISED BALKE ENGRS. 7/85
	WAM		DW	ERH	9/1/71	

FED. ROAD DIVISION	STATE	PROJECT	
2	OHIO		

688 / 187

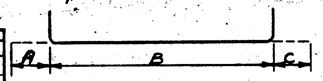
HAM-75-9.93
HAM-126-13.00

MARK	Total No.	17'	R	LENGTH	TYPE	WEIGHT
				PIER 1		
P501	4	2	2	22'-6	Str	94
P502	8	4	4	24'-3	Str	202
P503	2	-	2	22'-6½	4	47
P504	2	2	-	22'-7½	4	47
P505	54	27	27	12'-11	3	727
P506	7	7	-	11'-0 to 12'-9 by 3½"/ea	3	87
P507	7	-	7	11'-9 to 12'-7½ by 8½"/ea	3	89
P508	50	25	25	4'-7	2	239
P801	10	5	5	11'-11	1	318
P802	10	5	5	13'-8	1	365
P803	12	6	6	12'-9	Str	409
P810	120	60	60	11'-2	7	3578
P901	10	5	5	47'-0	1	1598
P1001	8	8	-	27'-6	Str	947
P1002	8	8	-	28'-3	Str	972
P1003	8	8	-	29'-0	Str	998
P1004	8	-	8	29'-9	Str	1084
P1005	8	-	8	30'-6	Str	1050
P1006	8	-	8	31'-3	Str	1076
P1007	48	24	24	7'-0	1	1440
SP4/3	1	1	-	19'-6½	SP8	366
SP4/4	1	1	-	20'-1½	SP8	377
SP4/5	1	1	-	21'-0	SP8	393
SP4/6	1	-	1	21'-10½	SP8	408
SP4/7	1	-	1	22'-9	SP8	424
SP4/8	1	-	1	23'-7½	SP8	440
				PIER 2		
P509	8	4	4	24'-3	Str	207
P510	2	-	2	22'-6½	4	47
P511	2	2	-	22'-7½	4	47
P512	70	35	35	12'-11	3	943
P513	10	10	-	11'-0½ to 12'-11½ by 5½"/ea	3	125
P514	10	-	10	11'-11½ to 12'-11 by ½"/ea	3	130
P515	4	2	2	22'-6	Str	94
P516	50	25	25	4'-7	2	239
P804	12	6	6	12'-9	Str	409
P805	10	5	5	11'-11	1	318
P806	10	5	5	13'-8	1	365
P811	54	27	27	11'-2	7	1610
P903	72	36	36	11'-6	7	2815
P1008	8	8	-	23'-1	Str	795
P1009	8	8	-	23'-10	Str	820
P1010	8	8	-	24'-8	Str	849
P1011	8	-	8	25'-5	Str	875
P1012	8	-	8	26'-3	Str	904
P1013	8	-	8	27'-0	Str	929
P1014	48	24	24	△ 9'-9"	1	2014
P1015	10	5	5	47'-0	1	2022
SP4/7	1	1	-	19'-6½	SP8	366
SP4/8	1	1	-	20'-5	SP8	382
SP4/9	1	1	-	21'-3½	SP8	398
SP4/10	1	-	1	21'-10½	SP8	408
SP4/11	1	-	1	22'-9	SP8	424
SP4/12	1	-	1	23'-7½	SP8	440
				PIER 3		
P517	2	-	2	22'-6½	4	47
P518	2	2	-	22'-7½	4	47
P519	54	27	27	12'-11	3	727
P520	7	7		11'-0 to 12'-9 by 3½"/ea	3	87
P521	7	-	7	11'-9 to 12'-7½ by 8½"/ea	3	89
P522	50	25	25	4'-7	2	239
P523	4	2	2	22'-6	Str	94
P524	8	4	4	24'-3	Str	202
P807	10	5	5	11'-11	1	318
P808	10	5	5	13'-8	1	365
P809	12	6	6	12'-9	Str	409
P810	120	60	60	11'-2	7	3578
P902	10	5	5	47'-0	1	1598
P1016	8	8	-	20'-4	Str	670
P1017	8	8	-	21'-2	Str	729
P1018	8	8	-	22'-0	Str	757
P1019	8	-	8	22'-11	Str	789
P1020	8	-	8	23'-9	Str	818
P1021	8	-	8	24'-7	Str	846
P1022	48	24	24	△ 9'-9"	1	2014

Pier 1 Estimate 250#/C.Y. x 295 C.Y. = 73,750 Lbs.
See Sht. 6.88A for Pier 1 re-steel

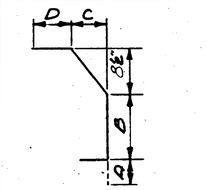
MARK	Total No.	17'	R	LENGTH	TYPE	WEIGHT
				PIER 3 (Cont'd)		
P519	54	27	27	12'-11	3	727
P520	7	7		11'-0 to 12'-9 by 3½"/ea	3	87
P521	7	-	7	11'-9 to 12'-7½ by 8½"/ea	3	89
P522	50	25	25	4'-7	2	239
P523	4	2	2	22'-6	Str	94
P524	8	4	4	24'-3	Str	202
P807	10	5	5	11'-11	1	318
P808	10	5	5	13'-8	1	365
P809	12	6	6	12'-9	Str	409
P810	120	60	60	11'-2	7	3578
P902	10	5	5	47'-0	1	1598
P1016	8	8	-	20'-4	Str	670
P1017	8	8	-	21'-2	Str	729
P1018	8	8	-	22'-0	Str	757
P1019	8	-	8	22'-11	Str	789
P1020	8	-	8	23'-9	Str	818
P1021	8	-	8	24'-7	Str	846
P1022	48	24	24	△ 9'-9"	1	2014
SP4/3	1	1	-	19'-6½	SP8	366
SP4/4	1	1	-	20'-1½	SP8	377
SP4/5	1	1	-	21'-0	SP8	393
SP4/6	1	-	1	21'-10½	SP8	408
SP4/7	1	-	1	22'-9	SP8	424
SP4/8	1	-	1	23'-7½	SP8	440

MARK	NO	LENGTH	TYPE	WEIGHT
		LEFT ROADWAY SLAB		
S(E)401	576	△ 30'-0"	Str	11543
S(E)402	64	△ 36'-0"	Str	1539
S(E)403	189	△ 35'-0"	Str	4419
S(E)501	224	△ 5'-3"	9	1227
S(E)502	224	△ 2'-7"	1	604
S(E)503	224	△ 3'-1"	5	720
S(E)504	86	△ 14'-2"	Str.	1271
S(E)505	84	7'-2"	Str.	628
S(E)506	2	△ 13'-9"	Str.	29
S(E)507	4	△ 13'-11"	Str.	58
S(E)508	432	30'-0"	Str.	13,517
S(E)509	48	△ 38'-0"	Str.	1902
S(E)510	224	△ 3'-11"	1	915
S(E)511	224	△ 3'-1"	10	720
S(E)512	224	△ 2'-7"	5	604
S(E)513	3	△ 13'-6"	Str.	42
S(E)514	3	△ 13'-5"	Str.	42
S(E)515	6	△ 35'-0"	Str.	219
S(E)516	604	△ 42'-4"	Str.	26669
S(E)517	31	△ 1'-7½" to 41'-0" by 1'-3¾"-1ea	Str.	689
S(E)518	44	△ 2'-0" to 41'-5" by 11"-1ea.	Str.	996
S(E)601	604	△ 42'-4"	Str.	38,405
S(E)602	31	△ 1'-7½" to 41'-0" by 1'-3¾"-1ea	Str.	992
S(E)603	44	△ 2'-0" to 41'-5" by 11"-1ea	Str.	1435
S(E)550	8	2'-10"	1	24
S(E)551	8	8'-5"	12	72
S(E)552	12	7'-3"	13	90
S(E)553	8	3'-2"	Str.	26
		RIGHT ROADWAY SLAB		
S(E)404	576	△ 30'-0"	Str	11543
S(E)405	64	△ 34'-0"	Str.	1454
S(E)553	189	△ 35'-0"	Str.	4419
S(E)519	224	△ 3'-11"	1	915
S(E)520	224	3'-1"	10	720
S(E)521	224	△ 2'-7"	5	604
S(E)522	84	△ 14'-2"	Str.	1241
S(E)523	84	△ 7'-2"	Str.	628
S(E)524	3	△ 13'-9"	Str.	43
S(E)525	5	△ 13'-0"	Str.	68
S(E)526	224	△ 5'-3"	9	1227
S(E)527	224	△ 2'-7"	1	604
S(E)528	224	△ 3'-1"	5	720
S(E) 529	2	△ 13'-4"	Str	28
S(E)530	2	△ 13'-2"	Str	27
S(E)531	2	△ 12'-9"	Str	27
S(E)532	6	△ 35'-0"	Str	219
S(E)533	432	△ 30'-0"	Str.	13,517
S(E)534	48	△ 37'-0"	Str.	1852
S(E)535	30	△ 1'-4'8" to 40'-11" by 1'-4 3/8"-1ea	Str.	661
S(E)536	591	△ 42'-4"	Str	26,095
S(E)537	43	△ 2'-0'4" to 41'-10" by 11 3/8"-1ea	Str	983
S(E)604	30	△ 1'-4'8" to 40'-11" by 1'-4 3/8"-1ea	Str.	952
S(E)605	591	△ 42'-4"	Str.	37,579
S(E)606	43	△ 2'-0'4" to 41'-10" by 11 3/8"-1ea	Str.	1416
S(E)550	4	2'-10"	1	12
S(E)561	4	8'-5"	12	36
S(E)562	6	7'-3"	13	45
S(E)563	4	3'-2"	Str.	13



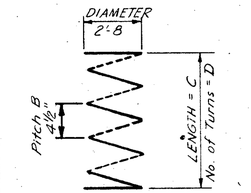
TYPE 1

MARK	A	B	C
P801	11"	11'-0	-
P802	11"	12'-9	-
P805	11"	11'-0	-
P806	11"	12'-9	-
P807	11"	11'-0	-
P808	11"	12'-9	-
P901	1'-0	45'-0	1'-0
P902	1'-0	45'-0	1'-0
P1007	1'-1	5'-11	-
△ P1014	1'-8½	8'-3	-
P1015	1'-1	45'-0	1'-1
△ P1022	1'-8½	8'-3	-
△ S(E)502	9"	1'-10"	-
△ S(E)510	9"	3'-2"	-
△ S(E)519	9"	3'-2"	-
△ S(E)527	9"	1'-10"	-



TYPE 5 △

MARK	A	B	C	D
△ S(E)503	9"	9½"	6"	9"
△ S(E)512	9"	9½"	6"	4"
△ S(E)521	9"	9½"	6"	4"
△ S(E)528	9"	9½"	6"	9"



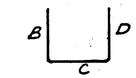
TYPE SP8

MARK	C	D
SP401	24'-2½	68
SP402	24'-9½	69
SP403	25'-8	71
SP404	26'-3	73
SP405	27'-1½	75
SP406	27'-8½	77
SP407	19'-6½	55
SP408	20'-5	57
SP409	21'-3½	60
SP410	21'-10½	61
SP411	22'-9	64
SP412	23'-7½	66
SP413	19'-6½	55
SP414	20'-1½	57
SP415	21'-0	59
SP416	21'-10½	61
SP417	22'-9	64
SP418	23'-7½	66



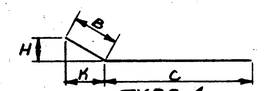
TYPE 3

MARK	B/G	B/D	C/E
P505	5"	2'-8	3'-7
P506	5"	2'-8	2'-7½ to 3'-6 by 3½"/ea
P507	5"	2'-8	3'-0 to 3'-3½ by 8½"/ea
P512	5"	2'-8	3'-7
P513	5"	2'-8	2'-7½ to 3'-7 by 1/4-/ea.
P514	5"	2'-8	3'-1½ to 3'-7 by 8½"/ea
P519	5"	2'-8	3'-7
P520	5"	2'-8	2'-7½ to 3'-6 by 3½"/ea
P521	5"	2'-8	3'-0 to 3'-3½ by 8½"/ea



TYPE 2

MARK	B	C	D
P508	1'-1	2'-8	1'-1
P516	1'-1	2'-8	1'-1
P522	1'-1	2'-8	1'-1



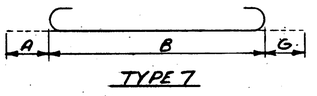
TYPE 4

MARK	H	H	B	C
P503	6"	4'-6	4'-6½	18'-0
P504	1'-0	4'-6	4'-7½	18'-0
P510	6"	4'-6	4'-6½	18'-0
P511	1'-0	4'-6	4'-7½	18'-0
P517	6"	4'-6	4'-6½	18'-0
P518	1'-0	4'-6	4'-7½	18'-0

△ "(E)" denotes epoxy coated reinforcing bar.

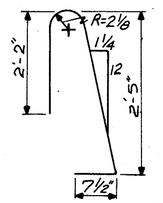
Note: For additional reinforcing steel list, bending detail and notes see sheet 12 / 13

See Estimated Quantities

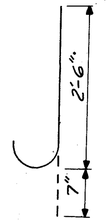


TYPE 7

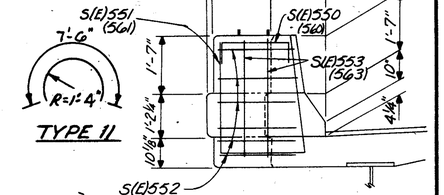
Mark	A	B	G
P810	13"	9'-0	13"
P811	13"	9'-0	13"
P903	15"	9'-0.	15"



TYPE 9 △
△ S(E)501 & S(E)526
△ A(E)547 & B(E)550

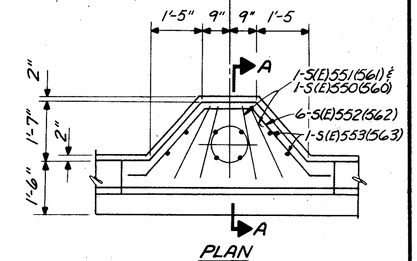


TYPE 10 △
S(E)511 & S(E)520

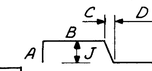


TYPE 11

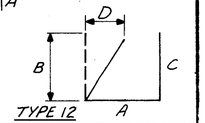
SECTION A-A



PLAN



TYPE 13



TYPE 12

MARK	TYPE	A	B	C	D	J	G
S(E)550 (560)	1	7"	1'-10"	7"	—	—	—
S(E)552 (562)	13	—	6"	1'-10"	1'-4"	1'-10"	
S(E)551 (561)	12	2'-4"	3'-2"	3'-2"	6½"		

VOGT, IVERS, & ASSOCIATES, INC. 13 / 13
ENGINEERS ARCHITECTS
CINCINNATI

REINFORCING STEEL LIST
BRIDGE NO. HAM-126-1467
S.R 126
OVER CONRAIL

HAMILTON COUNTY
STA. 111+20.12 to
STA. 114+15.01

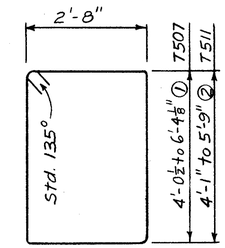
DESIGNED	DRAWN	TRACED	CHECKED	REVISED DATE	REVISED
	HAM		DW	ERH 9/19/91	△ BALKE ENG'S 9/85

REVISED 9/29/86

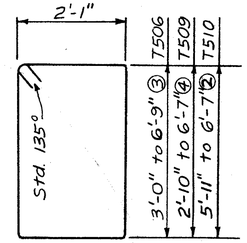
REINFORCING STEEL LIST

PIER 1

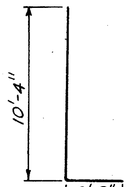
MARK	NO.	LENGTH	WEIGHT	SHP.	MARK	NO.	LENGTH	WEIGHT	SHP.
T1101	36	29'-6"	5642	Str.		2	16'-7"		
T1102	24	20'-0"	2550	Str.	T510	Series of 5	to ⑥ 17'-11"	180	B
T1103	120	12'-0"	7651	B		1	14'-1"		
T1104	20	26'-3"	2789	Str.	T511	Series of 11	to ⑥ 17'-5"	181	B
T1105	5	28'-5"	755	B					
T1106	5	29'-8"	788	B			TOTAL	40986	
T1107	36	31'-9"	6073	Str.					
T1108	24	21'-0"	2678	Str.					
T1109	5	28'-5"	755	B					
T1110	5	29'-8"	788	B					
T801	48	11'-4"	1452	B					
T601	20	17'-5"	523	B					
T602	101	8'-2"	1239	B					
T603	104	16'-0"	2499	Str.					
T604	20	23'-10"	716	B					
T605	20	22'-6"	676	Str.					
T606	46	9'-6"	656	Str.					
T501	70	6'-5"	468	B					
T502	26	9'-5"	255	B					
T503	20	23'-6"	490	Str.					
T504	8	19'-3"	161	Str.					
T505	8	15'-3"	127	Str.					
T506	2	10'-9"	242	B					
	Series of 16	to ⑦ 18'-3"							
	1	13'-11½"							
T507	Series of 14	to ⑤ 18'-6¾"	237	B					
T508	4	21'-6"	90	Str.					
	2	10'-5"							
T509	Series of 11	to ⑧ 17'-11"	325	B					



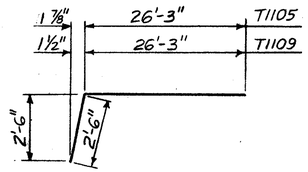
T507, T511



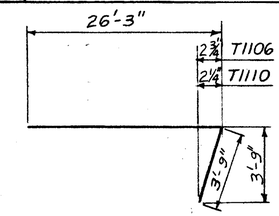
T506, T509, T510



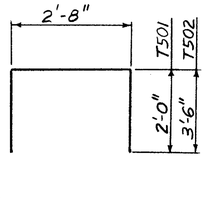
T1103



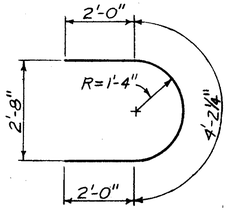
T1105, T1109



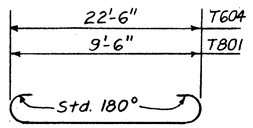
T1106, T1110



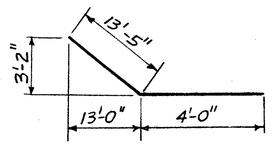
T501, T502



T602



T604, T801



T601

① Varies by 2⅛" increments
② Varies by 2" increments
③ Varies by 3" increments
④ Varies by 4½" increments
⑤ Varies by 4¼" increments
⑥ Varies by 4" increments
⑦ Varies by 6" increments
⑧ Varies by 9" increments

NOTES:

For Pier 2 & 3 Left and Right Bridges reinforcing see Sheet 13/13.

REINFORCING STEEL SAMPLES:
Refer to CMS Sections 106.03, 700, 709.01 through 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structures by the additional steel, spliced in accordance with 509.08.

CALC. BY DATE
CHKD. BY DATE

HAM-75-9.93
HAM-126-13.00

OHIO
FHWA REGION 5

688A
787

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

13A/13

REINFORCING STEEL
BRIDGE NO. HAM-126-1469
S.R. 126 OVER
CONRAIL RAILROAD
HAMILTON COUNTY OHIO
STA. 111+20.12 TO STA. 114+15.01

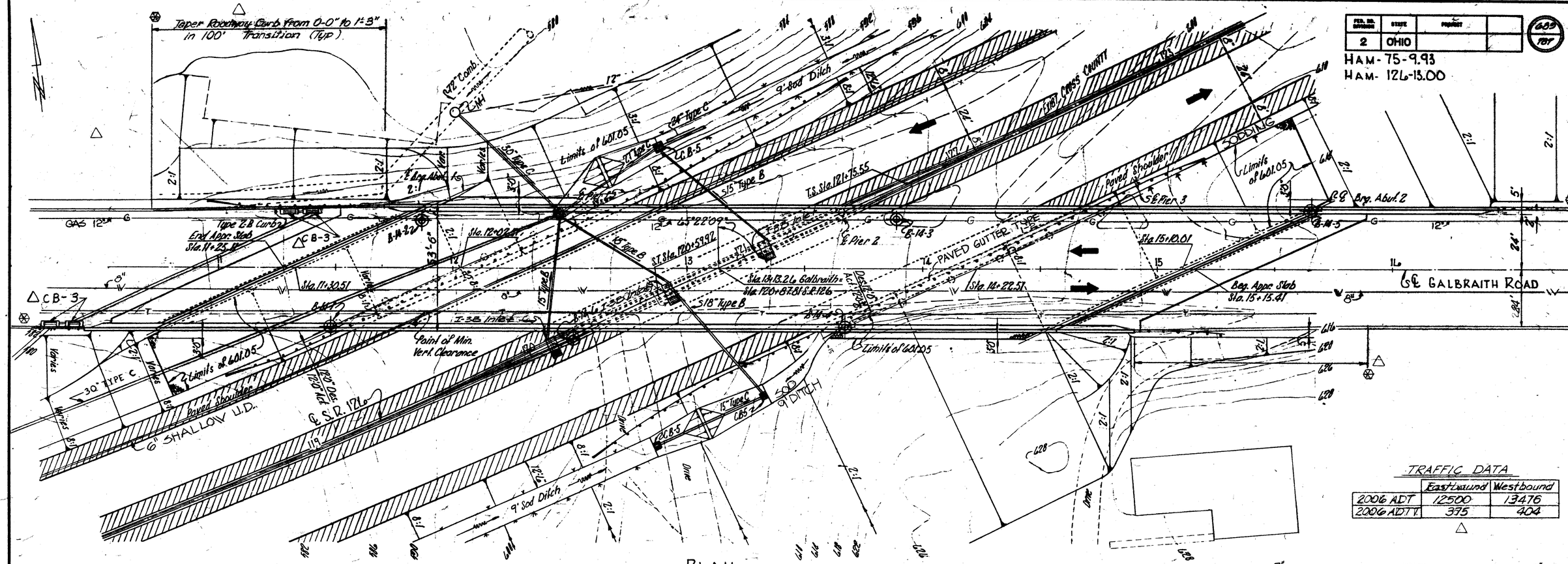
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	WJH	~	SJA	CRS	

SHT. ADDED 9/29/86

OHIO BLUE PRINT H60633

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

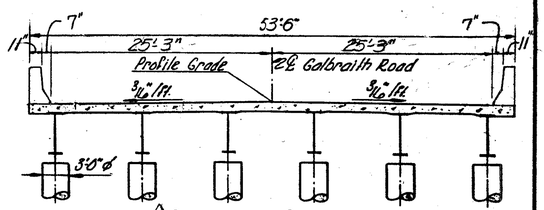
HAM-75-9.93
HAM-126-13.00



PLAN

TRAFFIC DATA

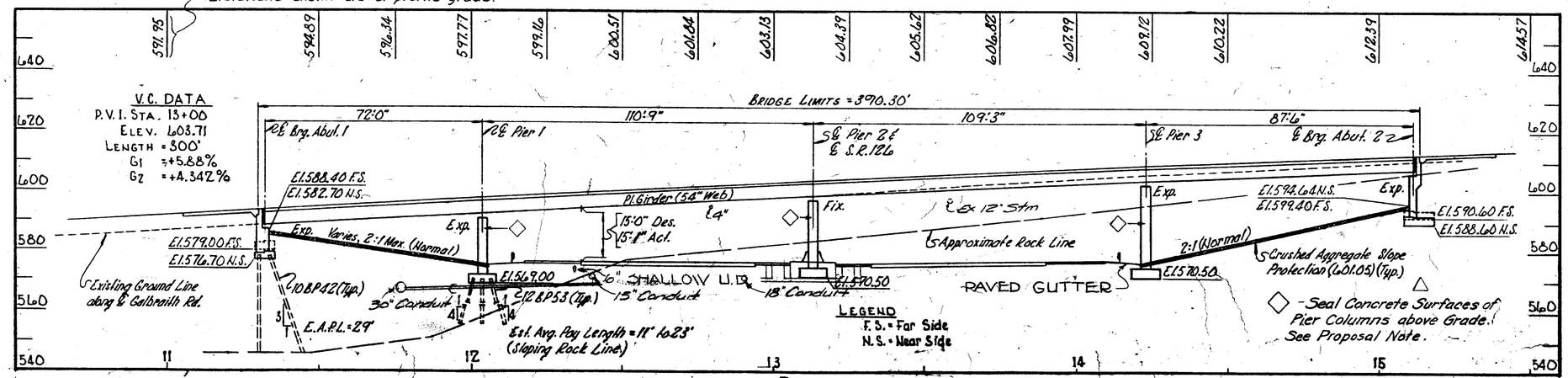
	Eastbound	Westbound
2006 ADT	12500	13476
2006 ADTT	375	404



BRIDGE SECTION

⊕ = Drive Sample and/or Core Boring

Earthwork limits shown are approximate
Actual slopes shall conform to plan cross-sections.



PROFILE

PROPOSED STRUCTURE

TYPE: Continuous welded plate girder with reinforced concrete deck and substructure.
SPANS: 72'-0", 110'-9", 109'-3", & 87'-6"
DESIGN LOADING: HS20-44 - Case II
SKEW: 65°22'09" L.F.
ALIGNMENT: Tangent
WEARING SURFACE: 1¼" Latex Modified Concrete Overlay
APPROACH SLABS: AS-1-81 (25' Long)
ROADWAY: 51'-8" Face to Face of Parapets

VOGT, IVERS, & ASSOCIATES
ENGINEERS CINCINNATI — ARCHITECTS CHICAGO

1/15

SITE PLAN

BRIDGE NO. HAM-126-1483
S.R. 126 UNDER
GALBRAITH ROAD
HAMILTON COUNTY STA. 11+25.11 TO STA. 15+15.41

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISIONS
AERIAL	T.W.N.	T.W.N.	G.J.W.	E.F.F.	BALKE REV. 9/85

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

690
787

HAM-75-9.93
HAM-126-13.00

ESTIMATED QUANTITIES

Revised by: BJS 10-4-85
Checked by: SJA 10-11-85

ITEM	TOTAL	UNIT	DESCRIPTION	ABUIMENTS	PIERS	SUPER-STRUCTURE	GENERAL	CHECKED BY	DATE
503	644	Cu. Yd.	Unclassified Excavation	495	149			R.R	9-24-71
503	964	Cu. Yd.	Rock or Shale Excavation	684	280			R.R	9-24-71
△ 505	Lump	Lump Sum	Pile Driving Equipment Mobilization				Lump		
507	1250	Lin. Ft.	Steel Piles HP10×42	1250				BCS	9-21-71
507	510	Lin. Ft.	Steel Piles HP12×53		510			BCS	9-21-71
△ 509	106259	Lb.	Reinforcing Steel, Grade 60	59285	46974			BCS	9-21-71
△ 511	602	Cu. Yd.	Class "S" Concrete - Superstructure			602			
511	110	Cu. Yd.	Class "C" Concrete - Pier Columns		110			BCS	9-21-71
△ 511	510	Cu. Yd.	Class "C" Concrete - Abut. Above Footings	510					
511	484	Cu. Yd.	Class "C" Concrete - Footings	318	166			BCS	9-21-71
507	30	Ea.	Pile Points		30				
△** 513	595,000	Lb.	Structural Steel (AISC Category III) (See Proposal Note)			595,000			
△** 514	595,000	Lb.	Field Painting of new Structural Steel, System A			595,000			
516	54	Sq. Ft.	1" Preformed Expansion Joint Filler	54				BCS	9-22-71
△ 516	141	Lin. Ft.	PVC Waterstop as per plan	141					
518	370	Cu. Yd.	Porous Backfill	370				BCS	9-22-71
△ 518	323	Lin. Ft.	6" Perforated, Helical Corrugated Steel Pipe, 707.01	323				BCS	9-21-71
△ 518	156	Lin. Ft.	6" Non-Perforated, Helical Corrugated Steel pipe Including Specials 707.01	156				BCS	9-21-71
△ 516	248	Lin. Ft.	Structural Expansion Joints Including Elastomeric Strip Seals			248			
601	1479	Sq. Yd.	Crushed Aggregate Slope Protection				1479	HJZ	9-22-71
625		———	See Sheet 350 1787 for Lighting Summary					DSM	9-2-71
△ * 511	602	Cu. Yd.	Class "S" Concrete, Superstructure using			602			
△			shrinkage compensating cement, 701.08						
△ 824	177,573	Lb.	Epoxy Coated Reinforcing Steel, Grade 60	6593		170,980			
△ 845	2150	Sq. Yd.	Latex Modified Concrete Overlay (1¼" Thick) (See Proposal Note)			2150			
△ Special	1175	Sq. Yd.	Sealing of Concrete Surfaces (See Proposal Note)		375	800			

Materials in the approach slabs are not included in the above estimated quantities.

REFERENCE SHALL BE MADE TO THE FOLLOWING:

STANDARD DRAWINGS:	AS-1-81	DATED 11-27-81
	BR-1	DATED 5-29-79
	SD-1-69	DATED 6-12-69
	RB-1-55	REV. 2-2-59
	HL-3	DATED 7-27-73
	HL-4	DATED 1-12-76
SUPPLEMENTAL SPECIFICATIONS:		
	836	DATED 11-12-85
	824	DATED 10-8-82
	845	DATED 2-25-86
	953	DATED 8-21-80

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, 1983, INCLUDING THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS AND 1984 INTERIM SPECIFICATIONS.

DESIGN DATA:

DESIGN LOADING: HS 20-44, CASE II.

DESIGN STRESSES:

CONCRETE, CLASS S	COMPRESSIVE STRENGTH: 4500 PSI (SUPERSTRUCTURE)	
CONCRETE, CLASS C	UNIT STRESS: 1333 PSI (SUBSTRUCTURE)	
REINFORCING STEEL	ASTM A615, A616, A617, GRADE 60, MINIMUM YIELD STRENGTH: 60,000 PSI. (SUPERSTRUCTURE)	GRADE 60, UNIT STRESS 24,000 PSI SPIRAL REINFORCEMENT MAY BE PLAIN BARS, ASTM A82 OR A615 (SUBSTRUCTURE)
STRUCTURAL STEEL	ASTM A36, UNIT STRESS: 20,000 PSI	
DECK PROTECTION METHOD	EPOXY COATED REINFORCING STEEL WITH 3" CONCRETE COVER OF WHICH 1-1/4" IS A LATEX MODIFIED CONCRETE OVERLAY.	
BOLTS	1" DIAMETER HIGH STRENGTH STEEL BOLTS CONFORMING TO ASTM A325 UNLESS NOTED OTHERWISE.	

* Alternate Bid Item

** Includes 2540 lbs. Structural Steel for the supports for the telephone ducts. This shall be paid for by The Cincinnati Bell, Inc.

TELEPHONE CONDUIT: The contractor shall furnish and install the support angles for the Cincinnati Bell, Inc. conduit system. The cost of labor and materials shall be included in the unit price bid for Item 513 & Item 514 and is chargeable to Cincinnati Bell, Inc. The plastic ducts together with couplings, spacers and anchors will be furnished by Cincinnati Bell, Inc. See Sheet 10/15 & 11/15.

PILES shall be driven with a hammer of not less than 11,000 ft. lbs. per blow to firm contact with bedrock. If the length of penetration is approximately equal to the depth to bedrock according to the bridge foundation investigation report, the firm contact shall be considered as attained when the capacity, according to the formula in 507.05, is not less than the following value for a pile hammer of the indicated energy rating.

For the abutment 1 piles

44 tons per pile using an 11,000 ft. lb. hammer
38 tons per pile using a 15,000 ft. lb. or greater hammer

For the pier 1 piles

76 tons per pile using an 11,000 ft. lb. hammer
71 tons per pile using a 15,000 ft. lb. or greater hammer

The design load is 35 tons per pile for abutment 1 and 45 tons per pile for pier 1.

FOUNDATION BEARING PRESSURE: Piers 2, 3 and Abutment 2 footings are designed for a maximum bearing pressure of 5 tons per square foot.

FOOTINGS shall be placed in bedrock at the elevation shown.

EMBANKMENT CONSTRUCTION: The embankment shall be constructed to the level of the subgrade for a minimum distance of 200 feet back of the abutments. Excavation shall then be made for abutments.

UTILITY LINES: All expense involved in relocating (installing) the affected utility lines shall be borne by the Owner(s). The Contractor and Owner(s) are requested to cooperate by arranging their work in such a manner that inconvenience to either would be held to a minimum.

ITEM 511: CLASS S CONCRETE, SUPERSTRUCTURE, USING SHRINKAGE COMPENSATING CEMENT, 701.08.

THE FOLLOWING RESTRICTIONS SHALL APPLY TO THE SUPERSTRUCTURE CONCRETE USING SHRINKAGE COMPENSATING CEMENT, 701.08.

1. CEMENT SHALL BE EXPANSIVE HYDRAULIC CEMENT, ASTM C845, TYPE K.
2. THE MAXIMUM WATER/CEMENT RATIO GIVEN FOR CLASS S CONCRETE IN 499.03 SHALL BE REVISED FROM 0.44 TO 0.50.
3. MAXIMUM SLUMP AT THE TIME AND PLACE OF CONCRETE PLACEMENT SHALL BE 6 INCHES.
4. CHEMICAL ADMIXTURES, WHEN REQUIRED BY 511.06, SHALL BE LIMITED TO 705.12 TYPE D.
5. MAXIMUM AMBIENT TEMPERATURE AT TIME OF PLACEMENT OF CONCRETE SHALL BE 80° F.
6. MEMBRANE CURING PER SS836 WILL NOT BE PERMITTED FOR ANY CONCRETE PLACED BETWEEN SEPTEMBER 1 AND MARCH 31. SUCH CONCRETE SHALL BE CURED BY METHOD (A) WATER CURING.
7. IF REQUIRED BY THE ENGINEER, THE SURFACE OF THE CONCRETE SHALL BE GIVEN A FOG SPRAY OF WATER. THIS MAY BE REQUIRED PRIOR TO EITHER WATER CURING OR MEMBRANE CURING IF WEATHER CONDITIONS DICTATE. EQUIPMENT SHALL BE ON HAND.

MAINTENANCE OF TRAFFIC: Existing Galbraith Road shall be closed to traffic from Sta. 9+00 to Sta. 16+00 and traffic shall be re-routed and maintained over Temporary Road No. 2; for details see Sh. 310 B of Roadway Plans.

SEALING OF CONCRETE SURFACES: The following concrete areas are to be sealed per proposal note:
Superstructure Parapets (See Sht. 12/15).
Pier Columns adjacent to Roadways (See Sht. 8/15 & 9/15).

Substructure bars not revised by BALKE ENGINEERS (△) shall have a minimum lap of 30 bar diameters.

ITEM 507 - PILE POINTS
Pier 1 piles shall be fitted with cast steel pile points.

VOGT, IVERS, & ASSOCIATES 2/15
ENGINEERS CINCINNATI ARCHITECTS CHICAGO

ESTIMATED QUANTITIES & GENERAL NOTES
BRIDGE NO. HAM-126-1483
S.R. 126 UNDER
GALBRAITH ROAD
HAMILTON COUNTY STA. 11+25.11 to STA. 15+15.41

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
—	E.F.F.	—	RLS			△ SJJE REV. 7/86

CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO
CHKD. BY			FHWA REGION 5
DATE			

690-A 787

ITEM 516 ELASTOMERIC STRIP SEAL

DESCRIPTION:
THIS ITEM SHALL INCLUDE THE FURNISHING OF ALL MATERIALS AND THE NECESSARY LABOR TO FABRICATE, ASSEMBLE, CONSTRUCT AND INSTALL ELASTOMERIC STRIP SEAL OF THE TYPE, SIZE AND KIND SPECIFIED.

MATERIALS:
STEEL EXTRUSIONS -
THE EXTRUSIONS SHALL BE A588 OR A36 STEEL WITH SYSTEM B FIELD PAINTED EXPOSED SURFACES. SEE CMS SECTION 514.05 (b).

NEOPRENE EXTRUSIONS -
THE NEOPRENE MATERIAL IN THE SEAL ELEMENTS SHALL CONFORM TO ASTM D2628, MODIFIED FOR HARDNESS AND EXCLUSIVE OF RECOVERY TESTS. THE NEOPRENE EXTRUSIONS SHALL RUN CONTINUOUSLY THROUGH THE BRIDGE DECK.

PHYSICAL PROPERTIES OF NEOPRENE EXTRUSIONS:	ASTM METHOD
• TENSILE STRENGTH, MINIMUM PSI 2000	D 412-62T
• ELONGATION @ BREAK, MINIMUM PERCENT 250	D 412-51T
• HARDNESS, TYPE A DUROMETER 60+/-7	D 2240 (MODIFIED)
• COMPRESSION SET, 70 HRS @ 212°F, MAXIMUM 40%	D 395, METHOD B, (MODIFIED)
• OVEN AGING, 70 HRS @ 212°F, 20% TENSILE STRENGTH, 20% ELONGATION, LOSS, MAXIMUM 20% HARDNESS, TYPE A DUROMETER (POINTS CHANGE) 0 TO +10	D 573
• OIL SWELL, ASTM OIL 3, 70 HRS @ 212°F, WEIGHT CHANGE, MAXIMUM 45%	D 471
• OZONE RESISTANCE, 70 HRS @ 104°F, 20% STRAIN, 300 PPHM IN AIR (WIPED WITH TOULENE TO REMOVE CONTAMINATION). NO CRACKS.	D 1149

APPROVED MANUFACTURERS:
STRIP SEAL SHALL ALLOW 8" OF TOTAL MOVEMENT. STRIP SEAL SHALL BE WATSON-BOWMAN S-800E, OR AN APPROVED ALTERNATE.

ADHESIVE:
ADHESIVES SHALL BE SIKASTIX 360, FEL-POXY SP-101 OR AN APPROVED ALTERNATE.

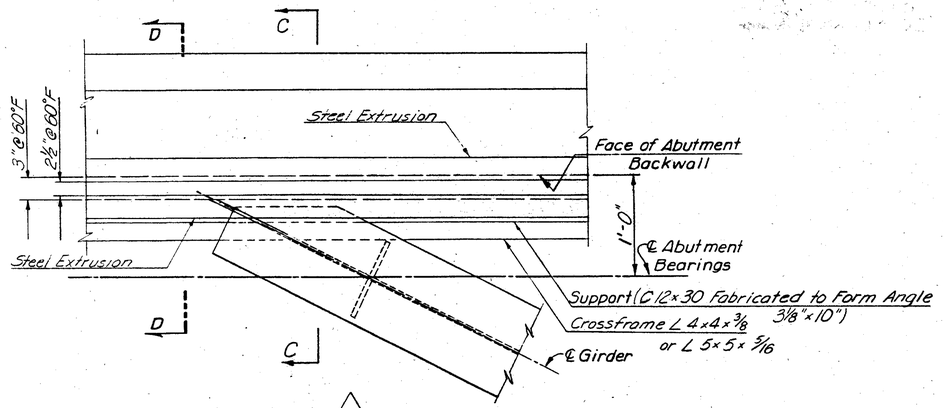
PREPARATIONS FOR INSTALLATION:
TO AVOID THE SUBSEQUENT CONTAMINATION OF PREPARED SURFACES, ALL SURFACES OF ELASTOMERIC STRIP SEALS SHALL BE CLEANED WITH METHYL ETHYL KETONE (MEK), TOLUENE (T) OR OTHER APPROVED SOLVENT USING CLEAN, DISPOSABLE CLOTHS.

THE BONDING SURFACES OF THE STEEL EXTRUSION (THE INTERIOR OF THE ANCHOR GROOVES) SHALL BE PREPARED TO GRADE SA 3, ASTM D2200. PREPARATION SHALL BE ACCOMPLISHED NOT MORE THAN 24 HOURS PRIOR TO ADHESIVE BONDING.

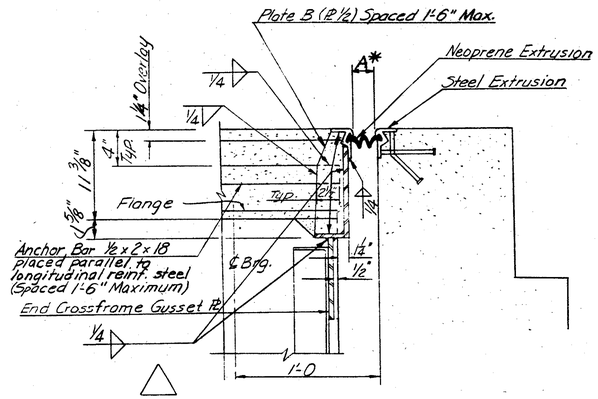
INSTALLATION:
IMMEDIATELY PRIOR TO ADHESIVE APPLICATION, BONDING SURFACES SHALL BE CLEAN, DRY AND WARMER THAN 45°F AND THEY SHALL BE MAINTAINED AT ABOVE THIS TEMPERATURE UNTIL THE ADHESIVE HAS CURED. ADHESIVE SHALL BE APPLIED LIBERALLY TO BOTH THE STEEL AND ELASTOMERIC BONDING SURFACES USING A STIFF BRUSH IF NECESSARY TO ACHIEVE A COMPLETE AND RELATIVELY UNIFORM COATING. THEN, THE BULBED EDGES OF THE ELASTOMERIC SEAL SHALL BE INSERTED INTO THE ANCHOR GROOVES. AFTER INSTALLATION, EXCESS ADHESIVE SHALL BE REMOVED FROM THE EXPOSED SEAL SURFACES.

METHOD OF MEASUREMENT:
THE QUANTITY SHALL BE THE ACTUAL LINEAR FEET OF NEOPRENE EXTRUSIONS.

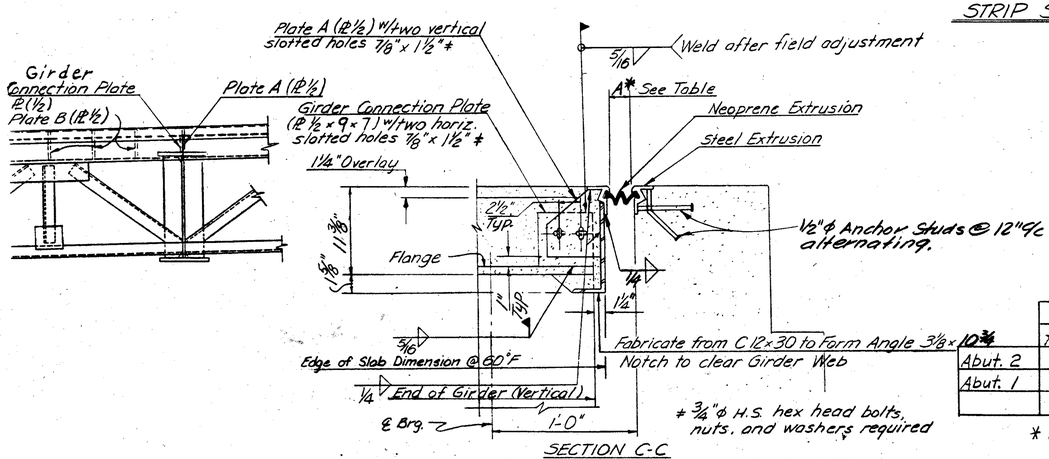
BASIS OF PAYMENT:
PAYMENT WILL BE MADE AT CONTRACT PRICE FOR ITEM 516, LINEAR FEET, STRUCTURAL EXPANSION JOINTS INCLUDING ELASTOMERIC STRIP SEALS. THIS ITEM SHALL INCLUDE FURNISHING AND PLACING THE ELASTOMERIC JOINT SEAL INCLUDING STEEL EXTRUSIONS, NEOPRENE EXTRUSIONS AND ANCHOR BARS, ½" PLATES, FABRICATED CHANNELS AND TOP END CROSSFRAME GUSSET PLATES.



PART PLAN OF END DAM
(At Abutment No.2 Shown, At Abutment No.1 Similar)



SECTION D-D
STRIP SEAL EXPANSION JOINT (BETWEEN GIRDERS)



SECTION C-C
TYPICAL EXPANSION JOINT SUPPORT DETAIL AT ABUTMENT 2 (Abutment No. 1 Similar) (AT GIRDERS)

JOINT SETTING TABLE

Temperature °F	0	20	40	60	80	100
Abut. 2 A*	2⅞"	2¾"	2⅝"	2½"	2⅜"	2¼"
Abut. 1 A*	2⅞"	2¾"	2⅝"	2½"	2⅜"	2¼"

* A = Joint Width (inches) measured normal to Joint.

NOTES:
For more details, notes and welding of Abutment End Dams, see sheet 11/15.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

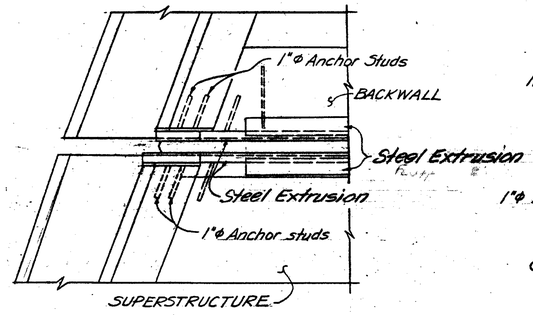
2A/15

STRIP SEAL EXPANSION JOINT
BRIDGE NO. HAM-126-1483
S.R. 126 UNDER
GALBRAITH ROAD
HAMILTON COUNTY STA. 11+25.11 to STA. 15+15.41

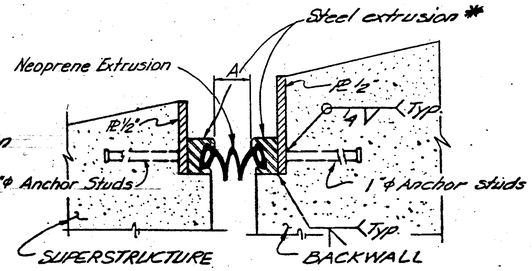
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
SJA	SJA	~	TMB	CRS 2/86	

OHIO BLUE PRINT HA0053

CALC. BY	HAM-75-9.93 HAM-126-13.00	OHIO	690-B 787
DATE		FHWA REGION 5	
CHKD. BY			
DATE			

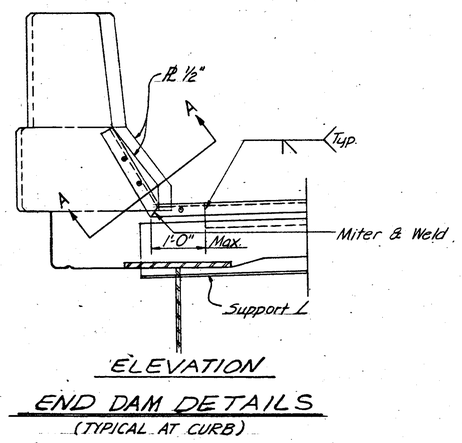


PLAN



SECTION A-A

*Use of split type extrusion is optional. For details see Strip-Seal Details, Sheets 488 A, B, C & D.



ELEVATION

END DAM DETAILS

(TYPICAL AT CURB)

BALKE ENGINEERS 7762 READING ROAD CINCINNATI, OHIO 45237					28/15
STRIP SEAL EXPANSION JOINT BRIDGE NO. HAM-126-1483 S.R. 126 UNDER GALBRAITH ROAD HAMILTON COUNTY STA. 11+25.11 to STA. 15+15.41					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	WJH	~	SJA	CRS 2/86	

OHIO BLUE PRINT HA0053

CALC. BY / DATE	HAM - 75 - 9.93 HAM - 126 - 13.00	OHIO
CHKD. BY / DATE		FHWA REGION 5

690-C
787

GENERAL NOTES
PLAN REVISIONS BY BALKE ENGINEERS

REVISIONS WERE MADE TO SUBSTRUCTURE DRAWINGS TO INCORPORATE THE FOLLOWING:

- o REVISE PARAPETS TO STANDARD SAFETY PARAPET SHAPE.
- o PROVIDE EPOXY-COATED REINFORCEMENT IN CORROSION-PRONE CONCRETE AREAS.
- o SEAL CONCRETE SURFACES OF PIER COLUMNS *AND PARAPETS*.
- o NUMBER PILES AND ADD DETAIL NOTES.
- o REVISE ABUTMENTS TO RECEIVE FULL WIDTH APPROACH SLAB PER AS-1-81.
- o REPLACE SLIDING PLATE EXPANSION JOINTS WITH STRIP SEAL JOINTS
- o LENGTHEN PIER COLUMN TO FOOTING DOWELS AS REQUIRED BY AASHTO.

AT THE REQUEST OF THE OHIO DEPARTMENT OF TRANSPORTATION, ALL SUBSTRUCTURE REINFORCEMENT IS TO BE GRADE 60.

REVISIONS MADE BY BALKE ENGINEERS ARE DENOTED BY (△) SYMBOL.

OTHER THAN NOTED REVISIONS, SUBSTRUCTURES ARE THE DESIGN AND DETAILING OF VOGT, IVERS, AND ASSOCIATES, INC.

ANALYSIS OF THE ORIGINAL SUPERSTRUCTURE DESIGN HAS BEEN COMPARED TO THE REVISED SUPERSTRUCTURE DESIGN TO ASSURE THAT LOADINGS HAVE NOT INCREASED ON SUBSTRUCTURES PROVIDED BY VOGT, IVERS AND ASSOCIATES, INC. DESIGN OF THESE SUBSTRUCTURES REMAINS THE RESPONSIBILITY OF VOGT, IVERS, AND ASSOCIATES.

REVISED SUPERSTRUCTURE DESIGN AND DETAILING WAS PREPARED TO CONFORM WITH UPDATED DESIGN STANDARDS.

DESIGN AND DETAILING BY BALKE ENGINEERS WAS PERFORMED IN ACCORDANCE WITH THE AASHTO SPECIFICATIONS FOR HIGHWAY BRIDGES, THIRTEENTH EDITION, 1983, AASHTO INTERIM SPECIFICATIONS FOR BRIDGES 1984, AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

OHIO BLUE PRINT HAM83

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

2C/15

GENERAL NOTES
BRIDGE NO HAM-126-1483
S.R. 126 Under
GALBRAITH ROAD
HAMILTON COUNTY
STA. 11+25.11 to
STA. 15+15.41

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
-	ALH	-	TMB	CRS 3/86	-

FED. ROAD DIST. NO. 2	STATE OHIO	PROJECT	

691
107

HAM-75-9.93
HAM-126-13.00

WINGWALL 1

WINGWALL 2

℄ GALBRAITH ROAD

Sta. 11+30.51

6" ± Opening

℄ 6-5" I.D. Steel Sleeves & ℄ Telephone Duct Opening

Porous Backfill

Approach Slab Seat

Roadway Crown

℄ Brg.

24°37'51" (Typ.)

Ahead Stations

Typ. Except As Shown

35-A(E)815 @ 1'-6" ± ℄ meased perpendicular to ℄ roadway (Ref. Std. Dwg. AS-1-81)

PLAN

37-A608, 37-A609 & 37-A(E)610 @ 17" = 36'0"

35-A608, 35-A609 & 35-A(E)610 @ 17" = 32'0"

33-A608, 33-A609 & 33-A(E)610 @ 17" = 32'0"

17-A608, 17-A609 & 17-A(E)610 @ 17" = 18'0"

1'-6" ±

4-A510NF @ 18" = 4'0"

596.42

595.45

593.60

593.88

591.98

589.75

589.97

587.75

585.90

585.14

585.77

584.85

579.00

576.70

1-A608, 1-A609 & 1-A(E)610

1-A(E)571FF

1-A(E)569FF

Approach Slab Seat

F-A(E)571FF

14-A577 @ 17" = 18'5" (Typ. between Girder Seals)

1-A515

Contraction Jt. (See Note 1)

1-A595

1-A515 EF @ 18" = 3'0"

1-A515 EF & 3-A516

1-A515 EF

1-A516

1-A517

1-A518

1-A519

1-A520

1-A521 WF & 4-A522

1-A523 WF & 4-A524

1-A506 WF

1-A507 WF & 1-AL01 FF

1-A506 WF & 1-AL05 FF

5-A528 @ 18" = 4'0"

4-A560 @ 18" = 4'0"

4-A577 @ 6" = 2'6", Typ. Each Girder Seal Contraction Jt.

3-A564

3-A513

1-A511 WF & 1-A512 FF

4-A504 WF @ 12" = 4'0" = 4'0"

8 - AL03 FF @ 12" = 4'0"

15-A504 WF & 15-AL03 FF @ 12" = 19'5"

4-A505 WF & 4-AL04 FF @ 12" = 4'0" = 4'0"

7, 12-A505 WF & 12-AL04 FF @ 12" = 15'1"

Conslr. Jt.

6" Helical Perf. CSP

11-A506 WF & 11-AL05 FF @ 12" = 13'9"

6" Helical Non-Perf. CSP

5-A507 WF & 5-AL06 FF

11-A506 WF & 11-AL05 FF @ 12" = 5'6"

7, 19-A506 WF & 19-AL05 FF @ 12" = 11'6"

6-A509 WF @ 12" = 6'10"

10 BD42 (Typ.)

ELEVATION

℄ GALBRAITH ROAD

Sta. 11+30.51

6" Helical Perf. CSP

3-A501 Top & 1-AL01 Bot.

3-A801 Top & 4-A801 Bot.

4-A802 Top & 5-A802 Bot.

24-A802 Top & 5-A802 Bot.

1-A805 Top & Bot.

6" Helical Non-Perf. CSP (See Detail T)

85-A501 Top & 85-AL01 Bot. @ 12" = 119'9"

5-A803 Top & 5-A803 Bot.

5-A804 Top & 4-A804 Bot.

1-A804 Top & Bot.

4-A509 @ 18" = 5'0"

1-A801 Top & Bot.

1-A501 Top & 6-AL01 Bot. @ 12" = 10'4"

Vertical Pile Spacing

Battered Pile Spacing

FOOTING PLAN

Note: Several Piles have not been shown. Their numbers are consecutive between the numbered piles.

LEGEND

- = Pile battered 4 vertical to 1 horizontal in the direction of the arrow
- = Vertical pile
- EF = Each Face
- NF = Near Face
- FF = Far Face
- = Pile Number

Crushed Aggregate Slope Protection

ANIMAL GUARD

8'/ft.

6" Helical Non-Perf. CSP

DETAIL T

Method of terminating 6" Helical Non-Perf. CSP

NOTES

1. For details of Contraction Joint, see sheet 2A / 15.
2. For Plan and Elevation Wingwall 1, Elevation Wingwall 2 and Section S-S, see sheet 4 / 15.
3. For General Notes, see sheet 2 / 15.
4. For Reinforcing Steel List, see sheet 13 / 15.
5. The clearance between reinforcing steel and the surface of footing concrete shall be 3".
6. Porous Backfill, full length of the abutment, shall extend up to the bottom of the Approach Slab. Excavation therefore, in excess of that required for construction of the abutment shall be considered as paid for in the bid price per cubic yard paid for porous backfill.
7. Contractor shall supply steel sleeves, grouting and other materials necessary to install telephone ducts. Cost of labor & materials is chargeable to Cincinnati Bell, Inc. Plastic ducts shall be furnished by Cincinnati Bell, Inc.
8. For Section B-B, see sheet 5 / 15.
9. △ "(E)" denotes epoxy coated reinforcing bar.

VOGT, IVERS, & ASSOCIATES, INC. ENGINEERS ARCHITECTS CINCINNATI — 3 / 15

ABUTMENT 1

BRIDGE NO. HAM-126-1483

S.R. 126 UNDER

GALBRAITH ROAD

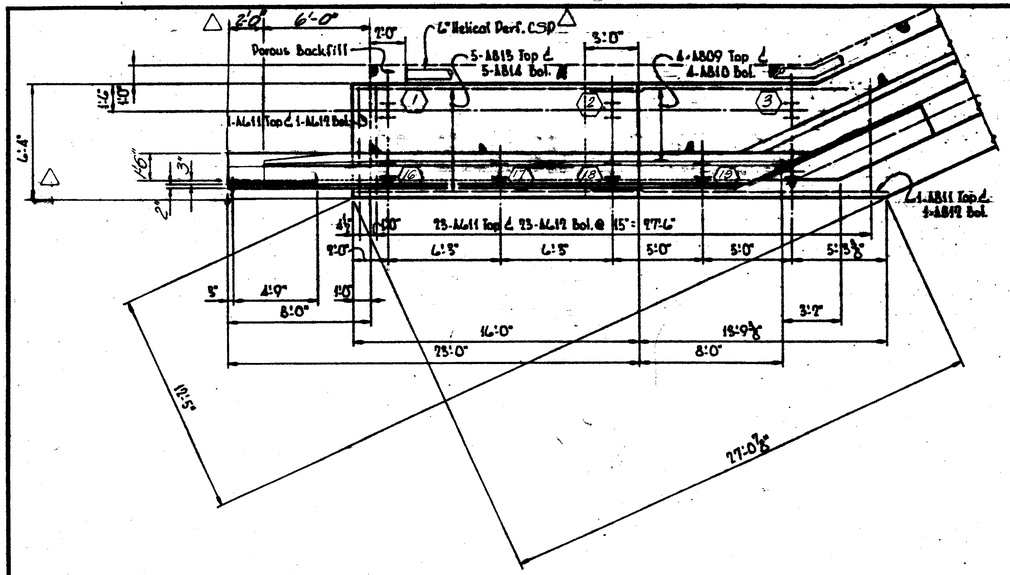
HAMILTON COUNTY STA. 11+25.11 to STA. 15+15.41

EPI	CWM	TRACED	D.S.M.		DATE	BALKE REV. 1/85

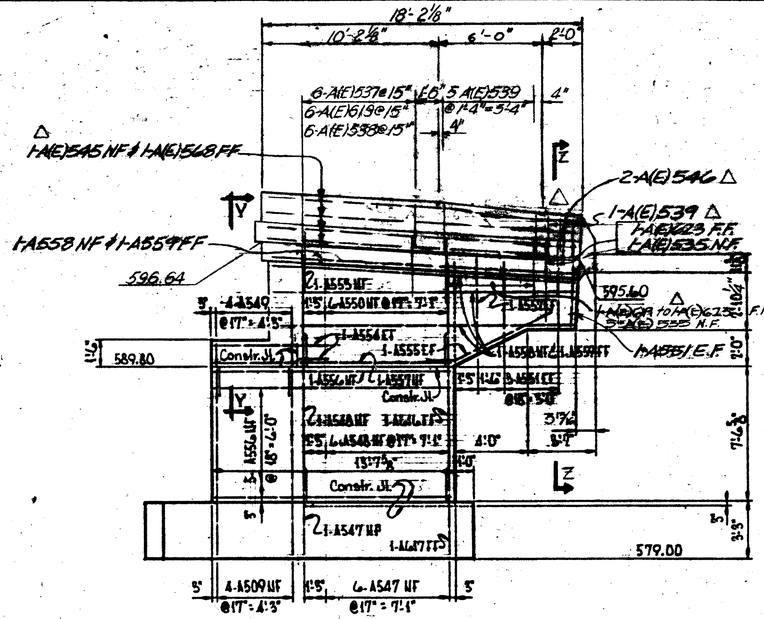
	STATE	PROJECT	
	OHIO		

692
157

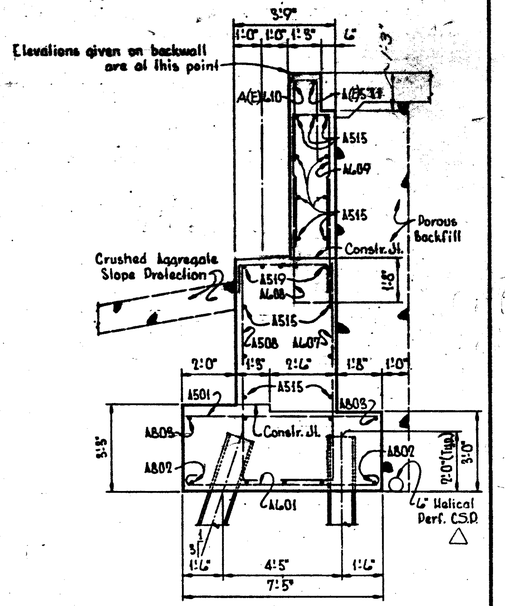
HAM-75-9.93
HAM-126-13.00



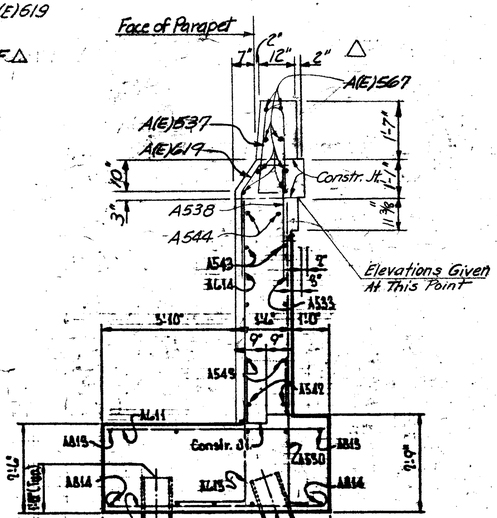
PLAN — WINGWALL 1



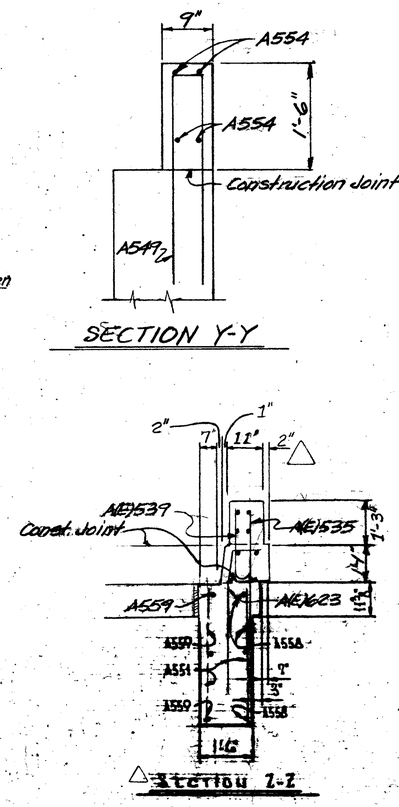
ELEVATION — WINGWALL 2



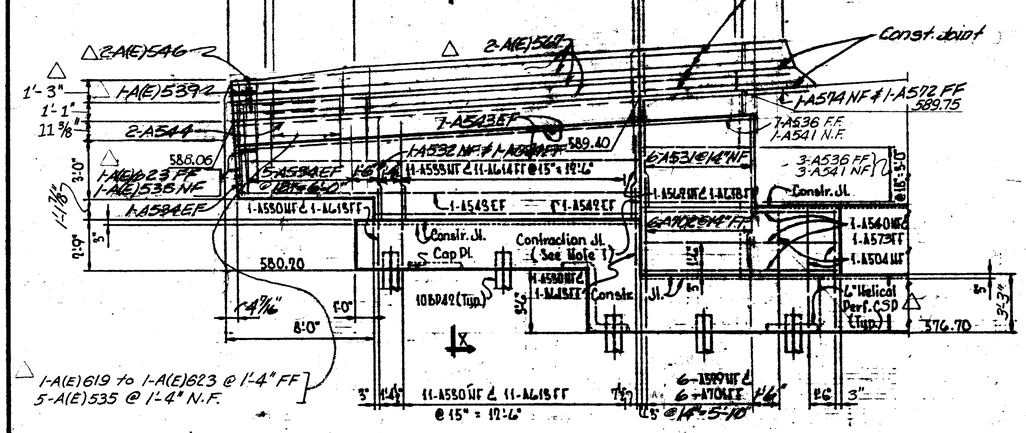
SECTION S-S



△ELEVATION — WINGWALL 1



SECTION Y-Y



△ELEVATION — WINGWALL 1

Section Z-Z

△Section X-X

NOTES

1. For details of Contraction Joint, see Detail U sheet 6 / 15
△2. For additional parapet details see Std. Dwg. BR-1.
△3. "(E)" denotes epoxy coated reinforcing bar.
4. For additional Notes, see sheet 3 / 15.

LEGEND

- = Pile battered 3 vertical to 1 horizontal in the direction of the arrow
- = Vertical pile
- EF = Each Face
- NF = Near Face
- FF = Far Face
- ⬡ = Pile Number

VOGT, IVERS, & ASSOCIATES, INC. 4 / 15
ENGINEERS ARCHITECTS
CINCINNATI

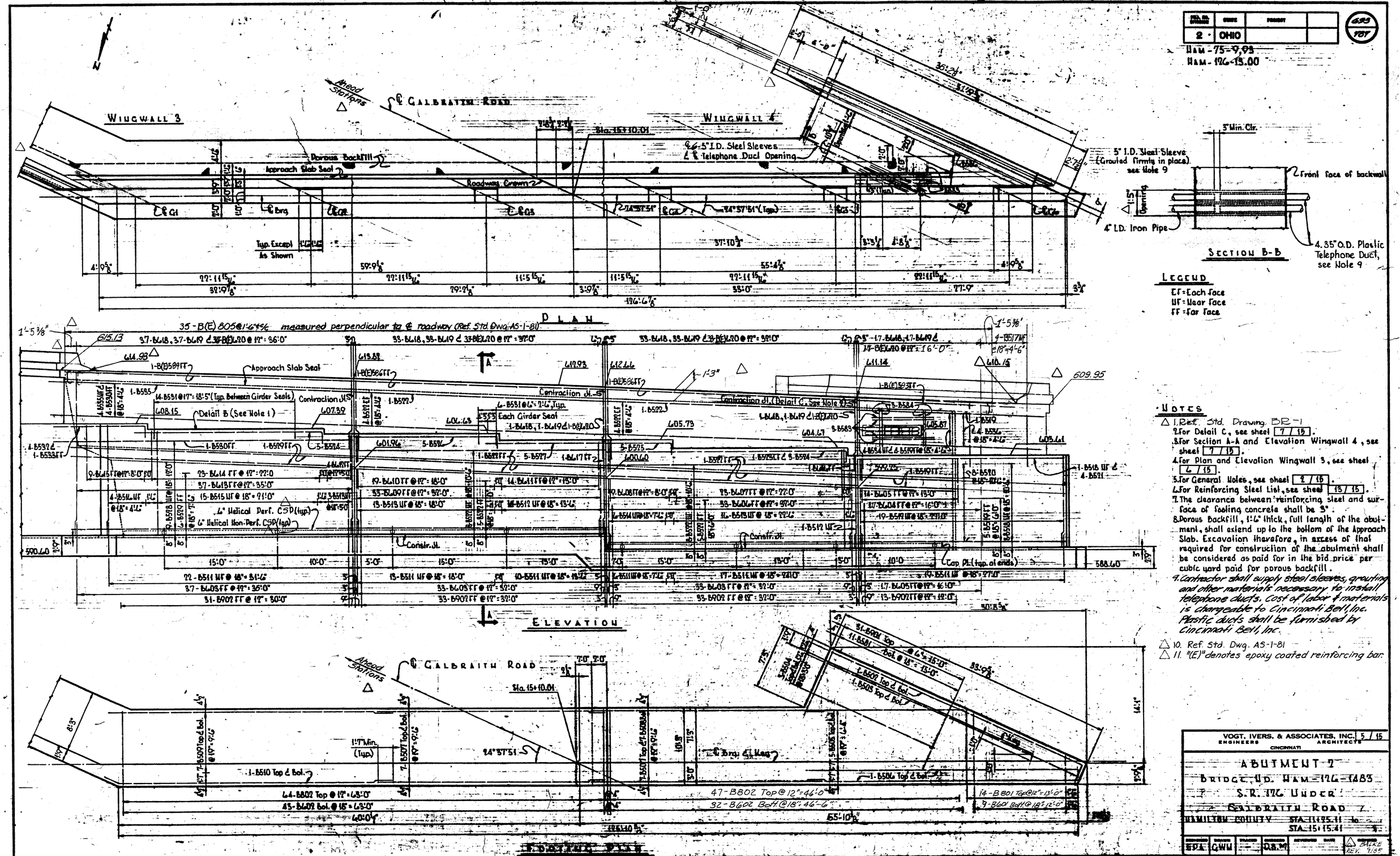
ABUTMENT 1 DETAILS

BRIDGE NO. HAM-126-1483
S.R. 126 UNDER
GALBRAITH ROAD
HAMILTON COUNTY STA. 11+25.17 to STA. 15+15.43

EDS	DRAWN GWM	TRACED —	CHECKED D&M	REVISIONS DATE	△ DATE REV. 9/85

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

HAM-75-9.93
HAM-126-13.00



LEGEND

EF = Each Face
NF = Near Face
FF = Far Face

NOTES

△ 1. Ref. Std. Drawing BR-1
2. For Detail C, see sheet 7/15.
3. For Section A-A and Elevation Wingwall 4, see sheet 7/15.
4. For Plan and Elevation Wingwall 3, see sheet 6/15.
5. For General Notes, see sheet 2/15.
6. For Reinforcing Steel List, see sheet 13/15.
7. The clearance between reinforcing steel and surface of footing concrete shall be 3".
8. Porous Backfill, 1'-6" thick, full length of the abutment, shall extend up to the bottom of the Approach Slab. Excavation therefore, in excess of that required for construction of the abutment shall be considered as paid for in the bid price per cubic yard paid for porous backfill.
9. Contractor shall supply steel sleeves, grouting and other materials necessary to install telephone ducts. Cost of labor & materials is chargeable to Cincinnati Bell, Inc. Plastic ducts shall be furnished by Cincinnati Bell, Inc.
△ 10. Ref. Std. Dwg. AS-1-81
△ 11. "(E)" denotes epoxy coated reinforcing bar.

VOGT, IVERS, & ASSOCIATES, INC. 5/15
ENGINEERS ARCHITECTS
CINCINNATI

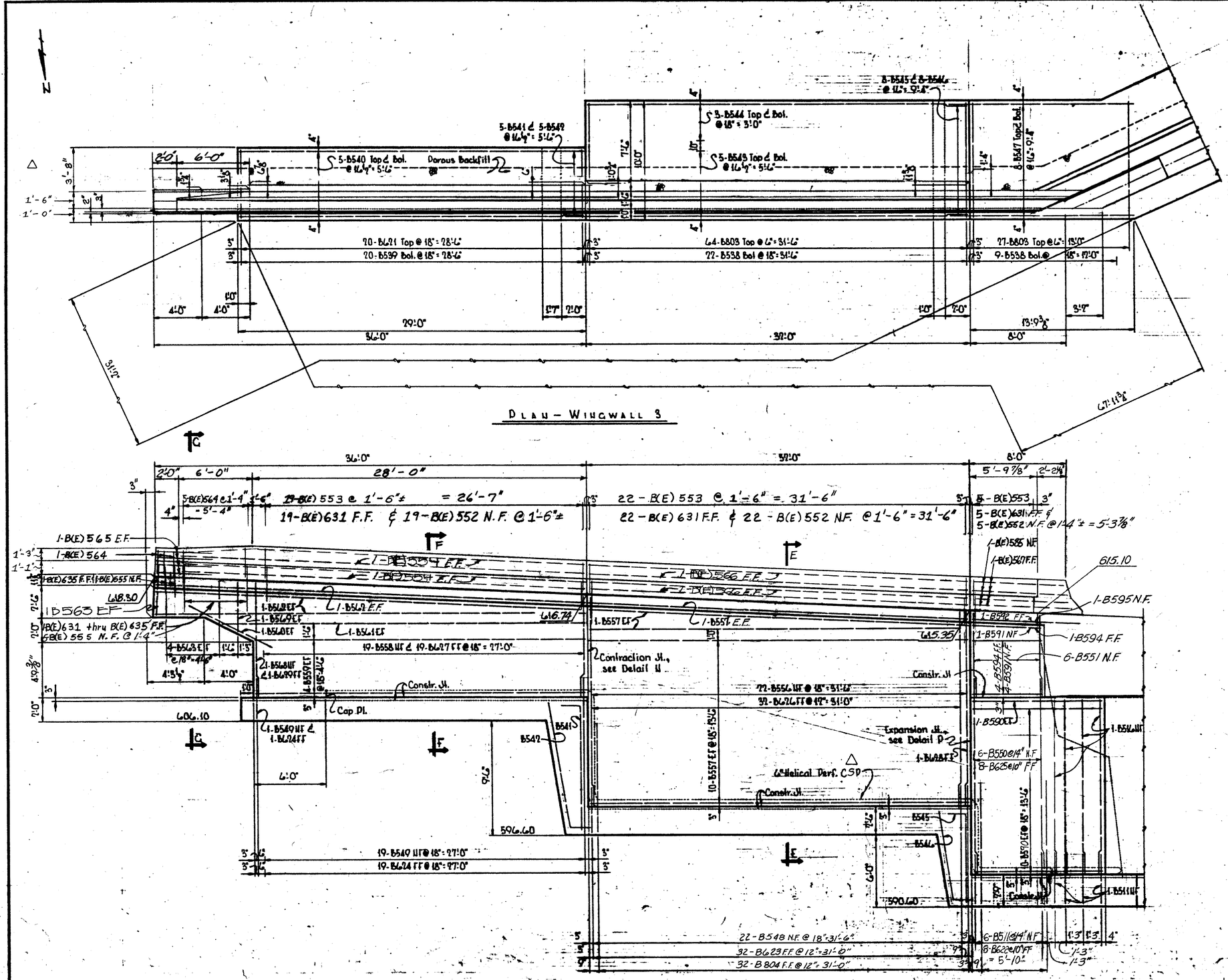
ABUTMENT 2
BRIDGE NO. HAM-126-1483
S.R. 126 UNDER
GALBRAITH ROAD
HAMILTON COUNTY STA. 11+25.11 to STA. 15+15.41

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
EPA	GWM	—	D.S.M.			△ BALKE REV. 9/85

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

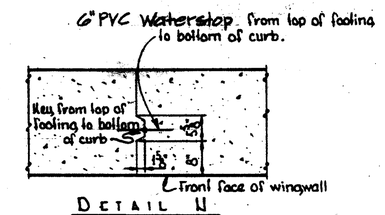
634
787

HAM-75-9.93
HAM-126-13.00

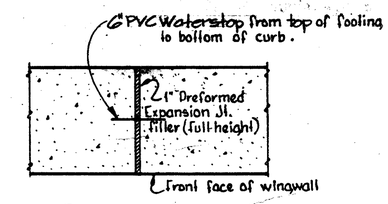


PLAN - WINGWALL 3

△ ELEVATION - WINGWALL 3



DETAIL H



DETAIL P

NOTES

1. For Sections E-E, F-F and G-G, see sheet 7/15
2. For additional Notes, see sheet 5/15.
△ 3. "(E)" denotes epoxy coated reinforcing bar.

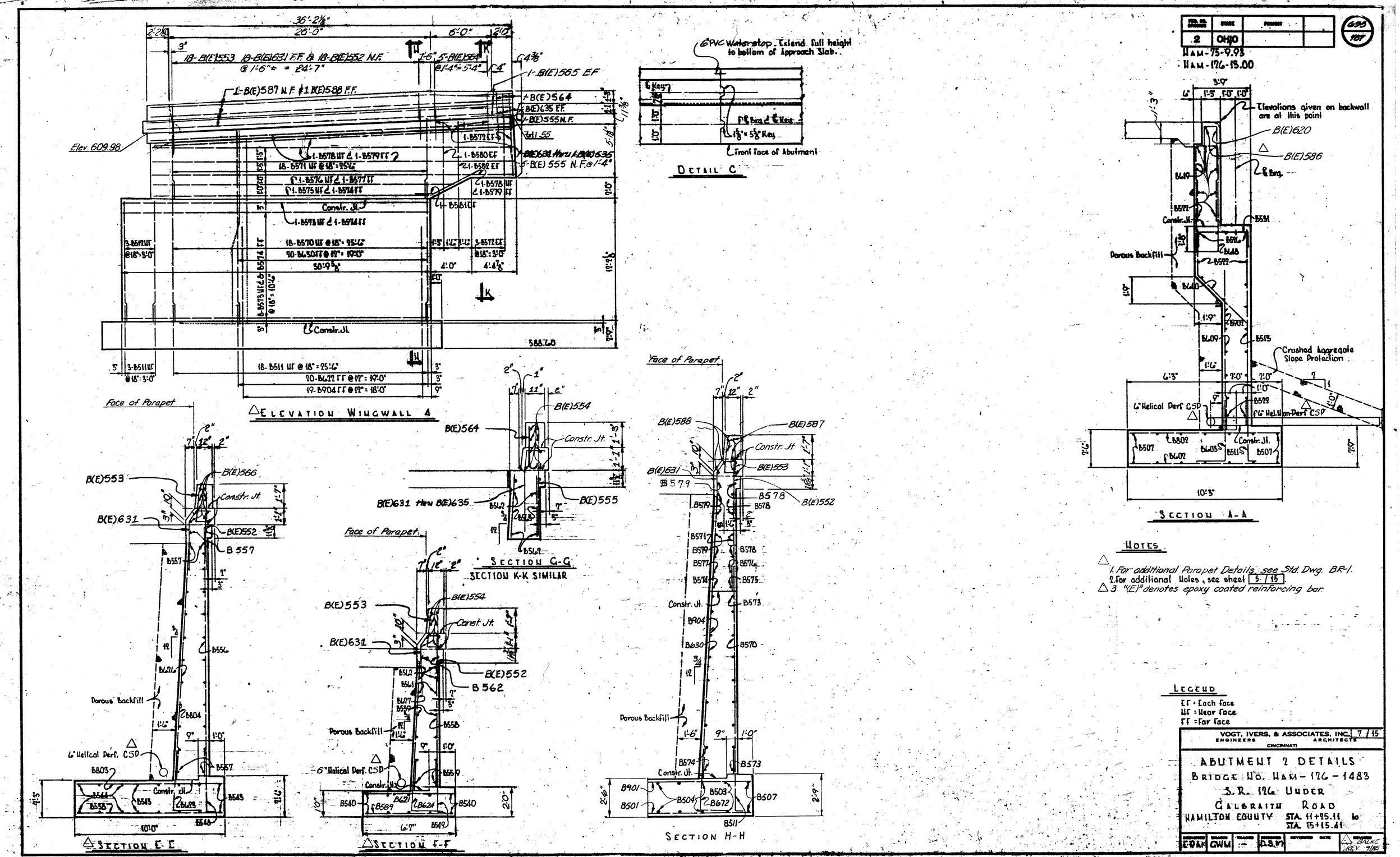
LEGEND

E.F. = Each Face
N.F. = Near Face
F.F. = Far Face

VOGT, IVERS, & ASSOCIATES, INC. 6/15
ENGINEERS ARCHITECTS
CINCINNATI

WINGWALL 3
BRIDGE NO. HAM-126-1483
S.R. 126 UNDER
GALBRAITH ROAD
HAMILTON COUNTY STA. 11+25.11 to STA. 15+15.41

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
EPA	GWM	—	DSM			△ BALKE REV. 9/85

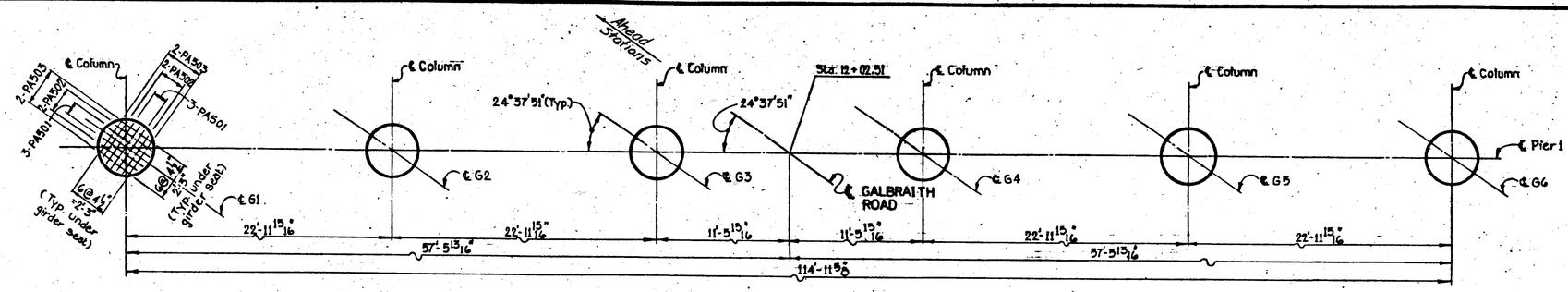


2 OHIO
HAM-75-9.93
HAM-126-13.00
695
787
ELEVATION WINGWALL 4
DETAIL C
6" PVC Waterstop. Extend full height to bottom of Approach Slab.
Front face of Abutment
SECTION A-A
Elevations given on backwall are at this point
Porous Backfill
Crushed Aggregate Slope Protection
6" Helical Perf CSP
6" Hel. Non-Perf CSP
SECTION G-G
SECTION K-K SIMILAR
SECTION E-E
SECTION F-F
SECTION H-H
Face of Parapet
Porous Backfill
6" Helical Perf. CSP
Constr. Jt.
Elev. 609.98
NOTES
1. For additional Parapet Details, see Std. Dwg. BR-1.
2. For additional Notes, see sheet 5/15.
3. "(E)" denotes epoxy coated reinforcing bar.
LEGEND
EF = Each Face
NF = Near Face
FF = Far Face
VOGT, IVERS, & ASSOCIATES, INC. 7/15
ENGINEERS ARCHITECTS
CINCINNATI
ABUTMENT 2 DETAILS
BRIDGE NO. HAM-126-1483
S.R. 126 UNDER
GALBRAITH ROAD
HAMILTON COUNTY STA. 11+25.11 to STA. 15+15.41
GWM
D.S.M.
BALKE
REV. 9/85

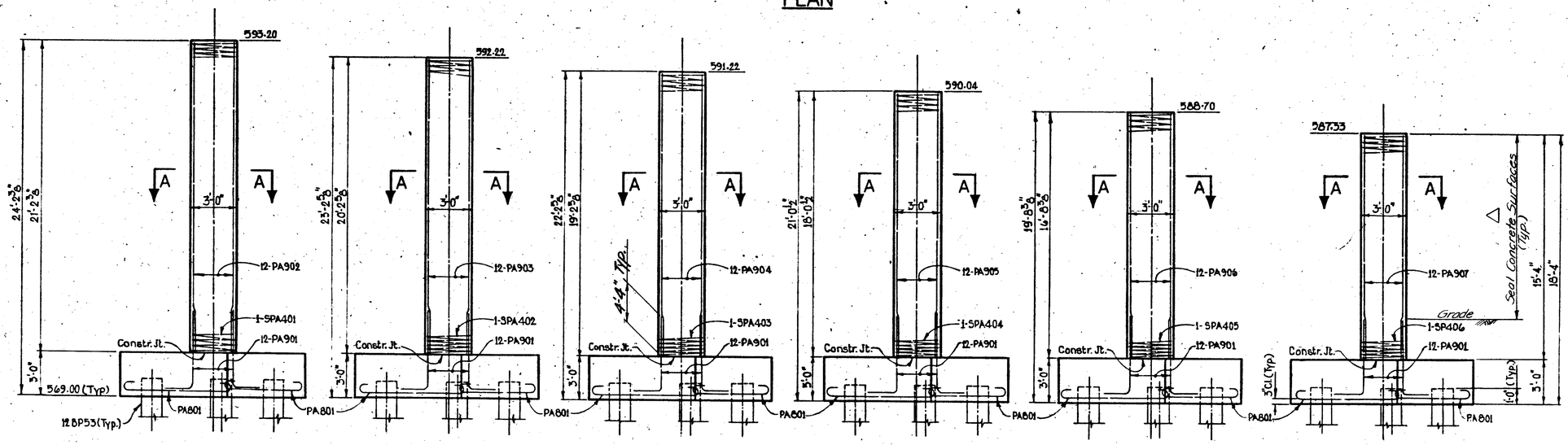
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

696
TBT

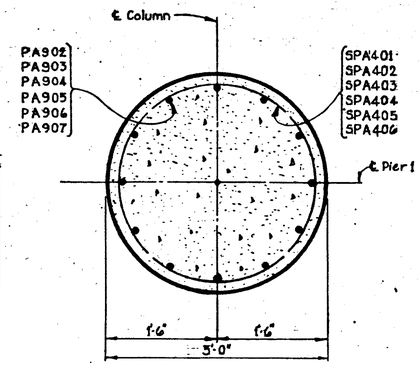
HAM-75-9.93
HAM-126-13.00



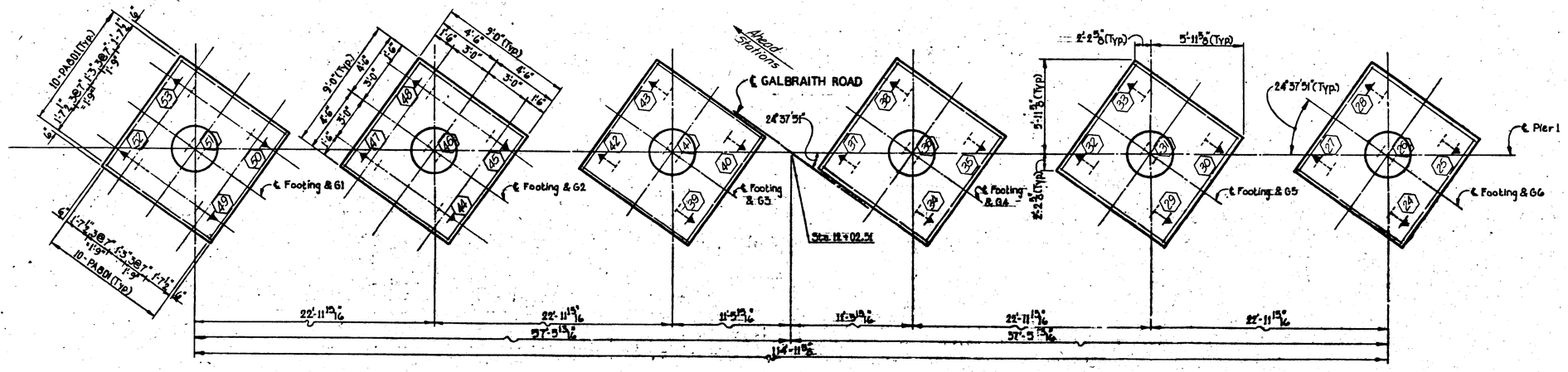
PLAN



ELEVATION



SECTION A-A



FOOTING PLAN

Note: All Footings are Vertical

LEGEND

I = Vertical pile.

I = Pile battered 4 vertical to 1 horizontal in the direction of the arrow.

⬡ = Pile Number

NOTES

1. For Reinforcing Steel List, see sh. 13/15
2. Place dowels in footing to insure correct spacing of main column steel.

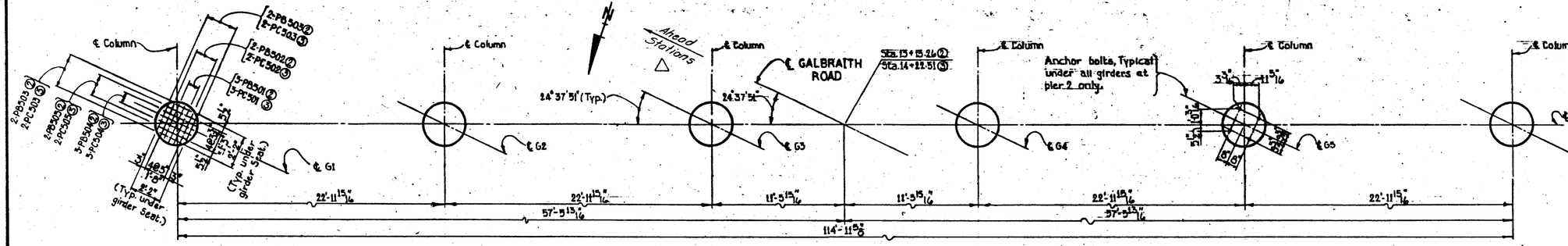
VOGT, IVERS, & ASSOCIATES, INC. 8/15
ENGINEERS ARCHITECTS
CINCINNATI

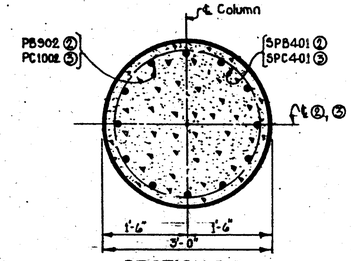
PIER 1
BRIDGE NO. HAM-126-1483
S.R. 126 UNDER GALBRAITH ROAD
HAMILTON COUNTY STA. 11+25.41 TO STA. 13+15.41

DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE	REVISED
C.I.S.	B.C.S.	—	RES			BALKE, REV. 7/85

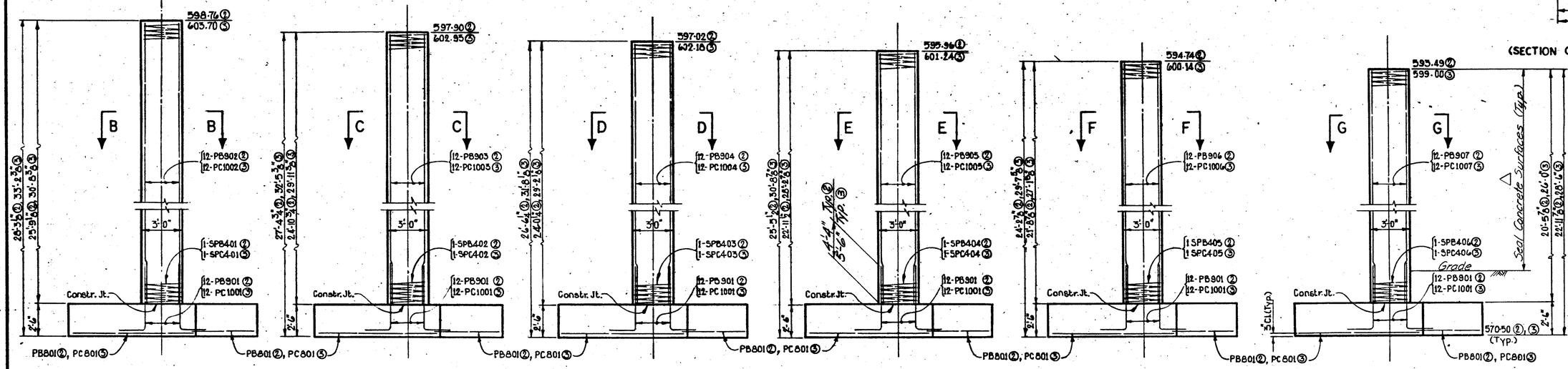
FED. ROAD DESIGNATION	STATE	PROJECT	
2	OHIO		

HAM-75-9.93
HAM-126-13.00

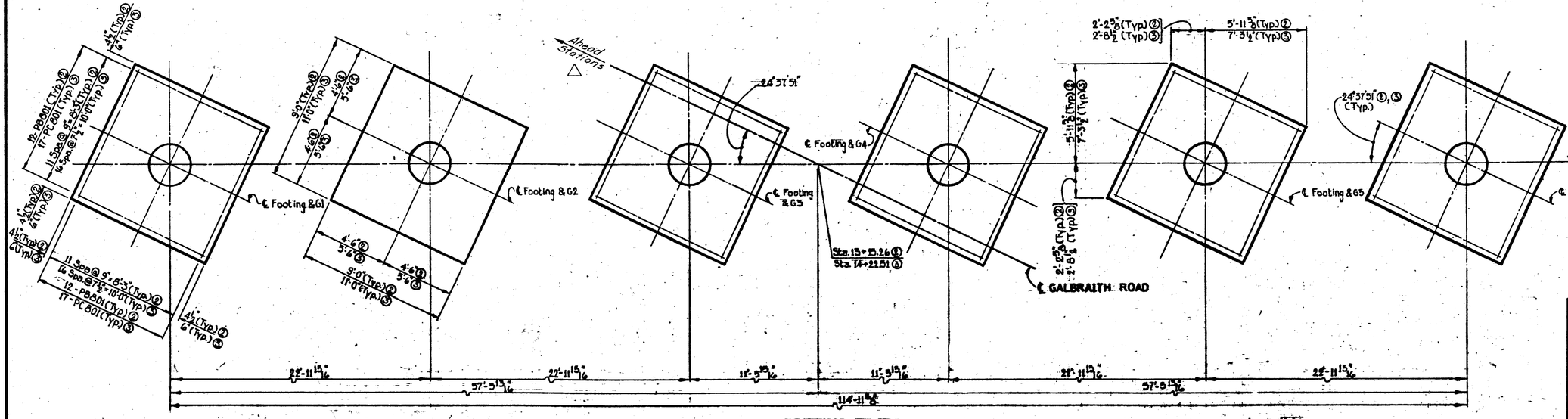




SECTION B-B
(SECTION C-C, D-D, E-E, F-F, G-G SIMILAR)



ELEVATION



FOOTING PLAN

LEGEND

② = Pier 2.
③ = Pier 3.

NOTES.

1. Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seats so as to avoid interference with the drilling of anchor bolt holes in Pier 2.
2. For additional notes, see sh. 8/15

Note:
All Footings @ Pier 2 are identical to each other.
All Footings @ Pier 3 are identical to each other.

VOGT, IVERS, & ASSOCIATES, INC. 9/15
ENGINEERS ARCHITECTS
CINCINNATI

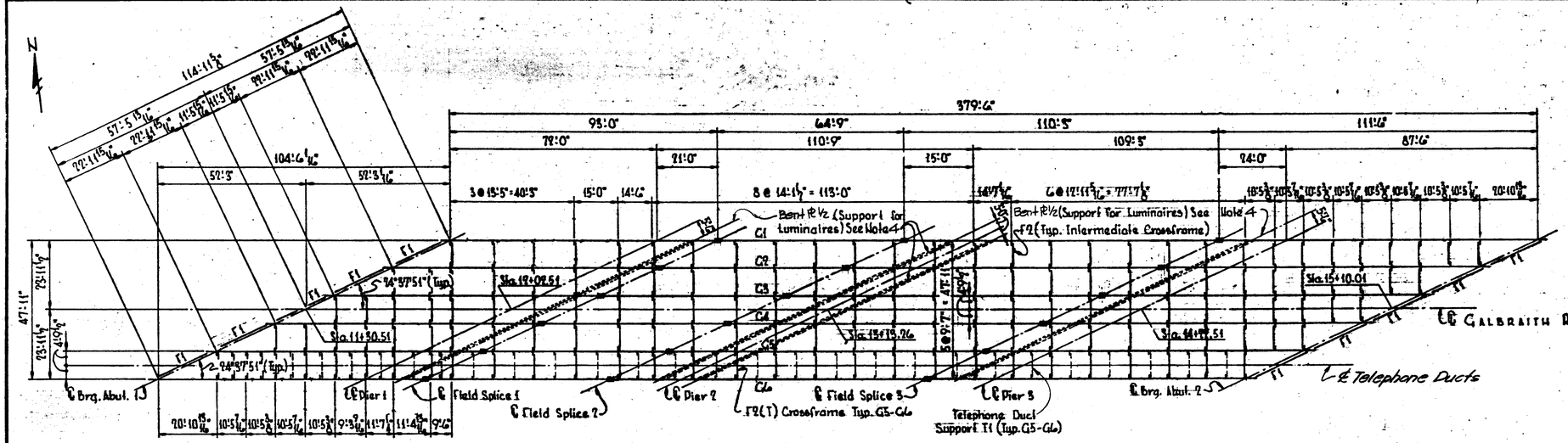
PIERS 2 & 3
BRIDGE NO. HAM-126-1483
S.R. 126 UNDER
GALBRAITH ROAD
HAMILTON COUNTY STA. 11+25.11 TO STA. 15+15.41

DESIGNED	DRAWN	TRACED	CHECKED	REVISIONS	DATE	REVISIONS
C.T.S.	B.C.S.	---	R.L.S			BALKE REV. 7/85

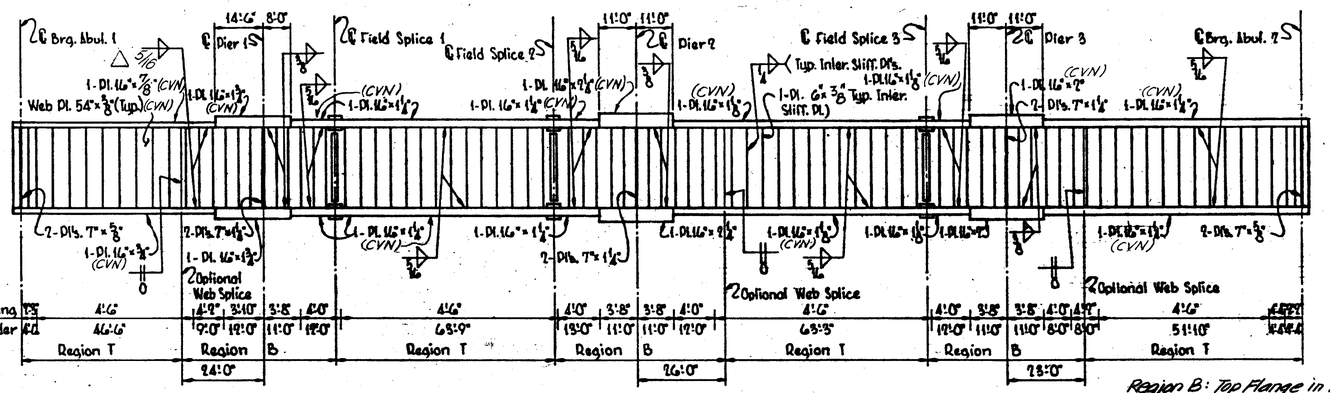
FED. ROAD DISTRICT	STATE	PROJECT	
2	OHIO		

606
787

HAM-75-9.93
HAM-126-13.00

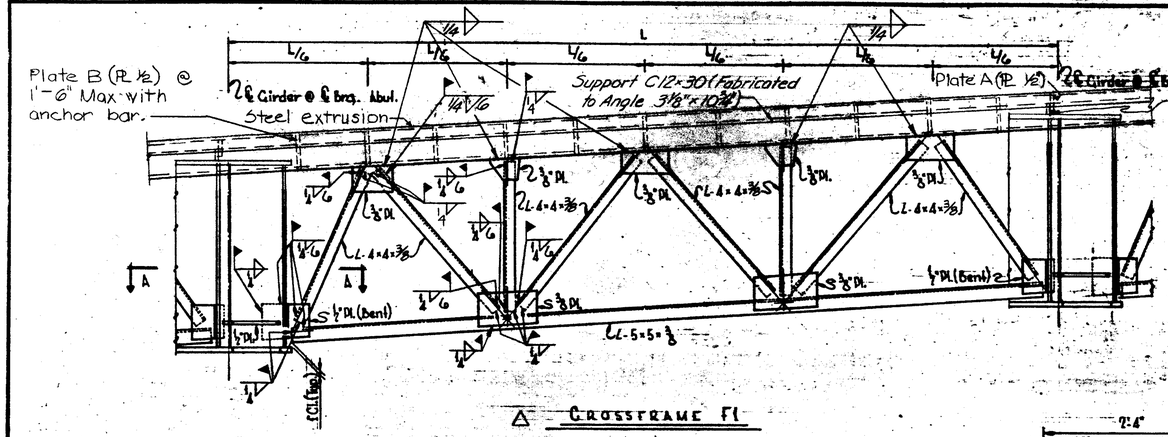


PLAN

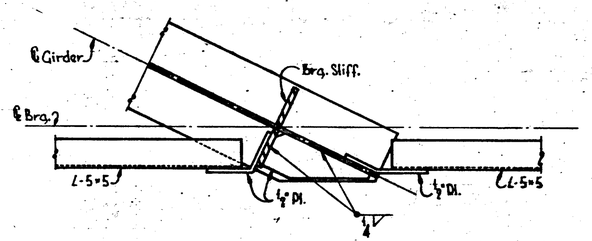

Brg. Abut. 1
Pier 1
Field Splice 1
Field Splice 2
Pier 2
Field Splice 3
Pier 3
Brg. Abut. 2
14'-6"
8'-0"
11'-0"
11'-0"
11'-0"
11'-0"
Web Pl. 54"×⅜" (Typ.) (CVN)
1-Pl. 16"×⅞" (CVN)
1-Pl. 16"×1⅛" (CVN)
1-Pl. 16"×1¼" (CVN)
1-Pl. 16"×⅞" (CVN)
1-Pl. 16"×1⅛" (CVN)
1-Pl. 16"×⅞" (CVN)
1-Pl. 16"×1⅛" (CVN)
1-Pl. 16"×1⅛" (CVN)
1-Pl. 16"×1⅛

FED. AID PROJECT	STATE	PROJECT	
2	OHIO		

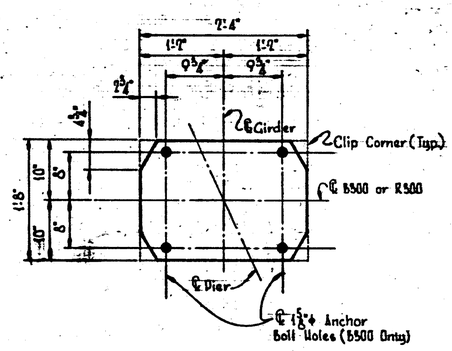
HAM-75-9.93
HAM-126-13.00



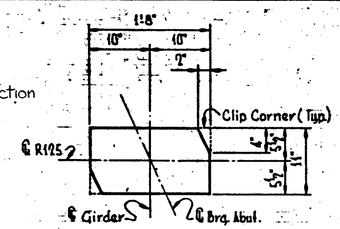
△ CROSSFRAME F1



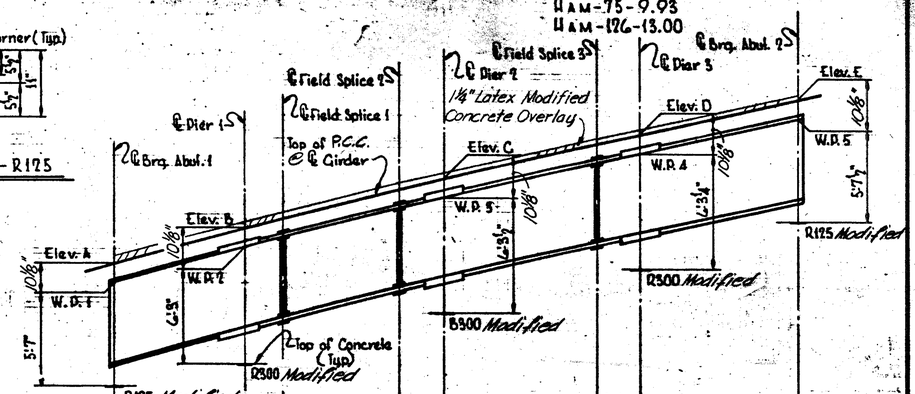
SECTION A-A



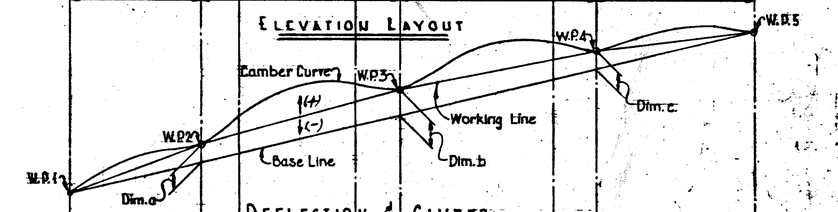
MODIFIED BASE PLATE
B300 & R300



MODIFIED BASE PLATE – R125



ELEVATION LAYOUT



DEFLECTION & CAMBER

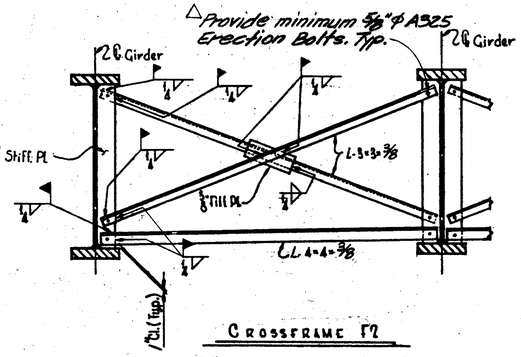
	Girder	b1	℄	℄	¾	D1	FS1	℄	FS2	D2	℄	℄	FS3	D3	℄	℄	¾	D4
Deflection due to Steel DL	G1 thru G6	0	+1⅛"	+1⅛"	0	0	+1⅛"	+3⅛"	+1⅛"	0	+1⅛"	+1⅛"	+1⅛"	0	+1⅛"	+1⅛"	+1⅛"	0
Deflection due to Remaining DL	G1 thru G6	0	+5⅛"	+5⅛"	+1⅛"	0	+5⅛"	+3"	+5⅛"	0	+1⅛"	+5⅛"	+5⅛"	0	+1⅛"	+5⅛"	+5⅛"	0
Camber Required for DL	G1 thru G6	0	+1⅛"	+1⅛"	+1⅛"	0	+1⅛"	+15⅛"	+3⅛"	0	+1⅛"	+5⅛"	+1⅛"	0	+5⅛"	+5⅛"	+3⅛"	0
Correction for Vertical Curve	G1	0	+5⅛"	+5⅛"	+5⅛"	0	+9⅛"	+15⅛"	+11⅛"	0	+5⅛"	+15⅛"	+5⅛"	0	0	0	0	0
	G2	0	+5⅛"	+5⅛"	+5⅛"	0	+9⅛"	+15⅛"	+11⅛"	0	+4⅛"	+15⅛"	+5⅛"	0	0	0	0	0
	G3	0	+1⅛"	+3⅛"	+3⅛"	0	+9⅛"	+15⅛"	+11⅛"	0	+11⅛"	+15⅛"	+5⅛"	0	+1⅛"	+1⅛"	0	0
	G4	0	+1⅛"	+1⅛"	+1⅛"	0	+9⅛"	+15⅛"	+11⅛"	0	+11⅛"	+15⅛"	+5⅛"	0	+1⅛"	+1⅛"	+1⅛"	0
	G5	0	+1⅛"	+1⅛"	+1⅛"	0	+9⅛"	+15⅛"	+11⅛"	0	+11⅛"	+15⅛"	+5⅛"	0	+3⅛"	+1⅛"	+1⅛"	0
	G6	0	0	0	0	0	+9⅛"	+15⅛"	+11⅛"	0	+11⅛"	+15⅛"	+5⅛"	0	+3⅛"	+1⅛"	+1⅛"	0
Total Camber Required	G1	0	+5⅛"	+5⅛"	+5⅛"	0	+15⅛"	+17⅛"	+11⅛"	0	+15⅛"	+17⅛"	+15⅛"	0	+5⅛"	+5⅛"	+9⅛"	0
	G2	0	+5⅛"	+5⅛"	+5⅛"	0	+15⅛"	+17⅛"	+11⅛"	0	+1"	+15⅛"	+5⅛"	0	+3⅛"	+1⅛"	+9⅛"	0
	G3	0	+1"	+3⅛"	+3⅛"	0	+15⅛"	+17⅛"	+11⅛"	0	+1"	+15⅛"	+5⅛"	0	+5⅛"	+1⅛"	+9⅛"	0
	G4	0	+1"	+1⅛"	+1⅛"	0	+15⅛"	+17⅛"	+11⅛"	0	+1"	+15⅛"	+5⅛"	0	+5⅛"	+1⅛"	+9⅛"	0
	G5	0	+1⅛"	+1⅛"	+1⅛"	0	+15⅛"	+17⅛"	+11⅛"	0	+1"	+15⅛"	+5⅛"	0	+5⅛"	+1⅛"	+9⅛"	0
	G6	0	+1"	+1⅛"	+1⅛"	0	+15⅛"	+17⅛"	+11⅛"	0	+1"	+15⅛"	+5⅛"	0	+5⅛"	+1⅛"	+9⅛"	0

TABLE OF SCREED ELEVATIONS & DIMENSIONS △

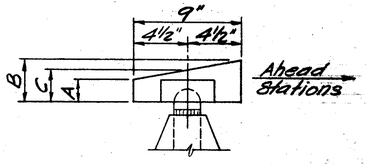
Girder	Elev. A	Elev. B	Elev. C	Elev. D	Elev. E	Dim. a	Dim. b	Dim. c
G1	596.311	600.290	605.893	610.820	614.619	6⅝"	9⅝"	5⅛"
G2	595.255	599.312	605.034	610.062	613.861	6⅝"	9⅝"	5⅛"
G3	594.179	598.311	604.152	609.297	613.103	6⅝"	10⅝"	6⅛"
G4	592.950	597.139	603.098	608.360	612.196	7⅛"	10⅝"	7⅛"
G5	591.572	595.794	601.871	607.250	611.138	6⅝"	10⅝"	7⅛"
G6	590.193	594.426	600.623	606.119	610.081	5⅝"	10⅝"	7⅛"

NOTES FOR ELEVATION LAYOUT

1. Working Points (W.P.) are at top of web.
2. Working Lines are straight through the indicated Working Points.
3. The Base Line is a straight Line through W.P. 1 and W.P. 5.
△4. Tabulated values in the Deflection and Camber Table are measured from the working lines.
△5. For details of R-125, R-300 and B-300 see Std. Dwg. RB1-55, except for modified base plates and beveled plates shown on this Sheet.

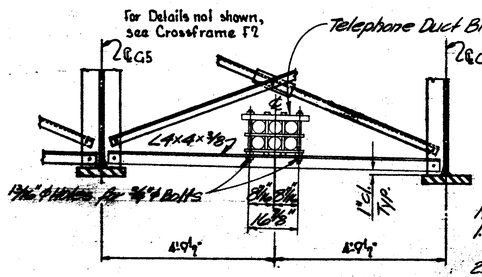


CROSSFRAME F2

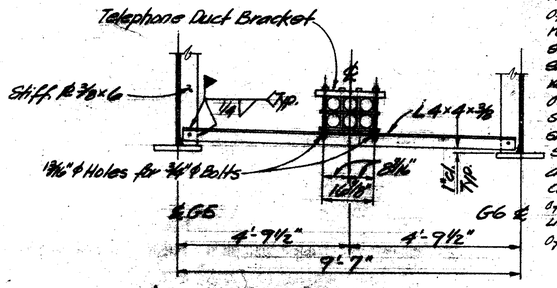


	TYPE	B	C	A
Abut. 1	R-125	3¼"	3"	2⅜"
Pier 1	R-300	3 31/32"	3½"	3 31/32"
Pier 2	B-300	3 13/16"	3½"	3 13/16"
Pier 3	R-300	3 13/16"	3½"	3 13/16"
Abut. 2	R-125	3 1/32"	3"	2 31/32"

△ BEVELED ROCKER OR BOLSTER
(For additional details see Std. Dwg. RB1-55



CROSSFRAME F2(T)



△ TELEPHONE CONDUIT SUPPORT T1

Notes: △
1. Telephone Conduit: See General Notes on Sht. 2 / 15
2. Erection Bolts: Hole diameter in the crossframes and girder stiffeners shall be respectively 1/16" ϕ 1/8" larger than the diameter of the erection bolts. Unless replaced by permanent high strength bolts, erection bolts shall remain in place. Lock washers shall be furnished for other than fully forged high strength erection bolts. Bolts shall be furnished as part of 513. In lieu of erection bolts and at the option of the contractor, alternate means of temporary bracing may be used, subject to the approval of the Director (501.06).

VOGT, IVERS, & ASSOCIATES, INC. ENGINEERS ARCHITECTS CINCINNATI
11 / 15

FRAMING DETAILS
BRIDGE NO. HAM-126-1483
S.R. 126 UNDER
CELBRAITH ROAD
HAMILTON COUNTY STA. 11+95.11 ℄
STA. 15+15.41 ℄

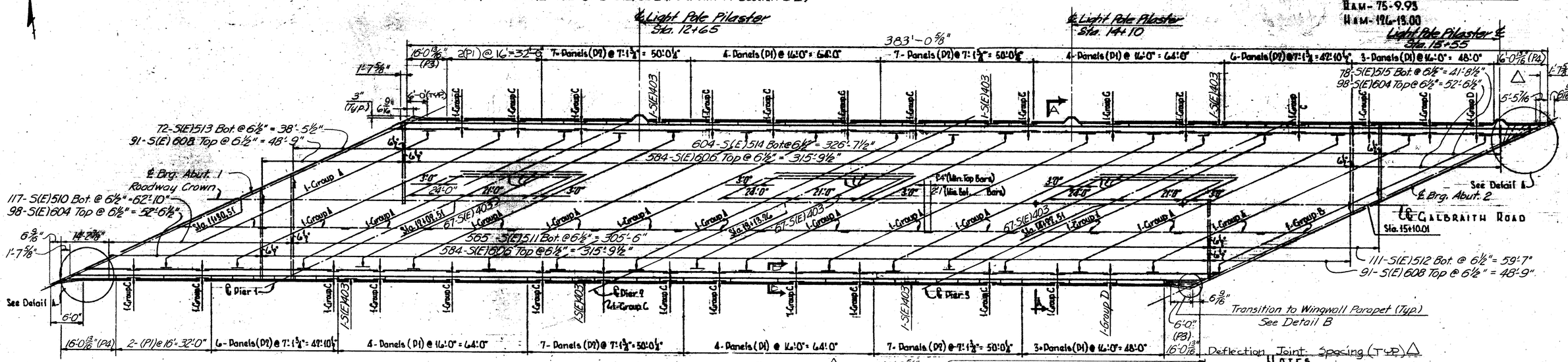
BY CHK DESIGN DATE BALKE REV. 7/85

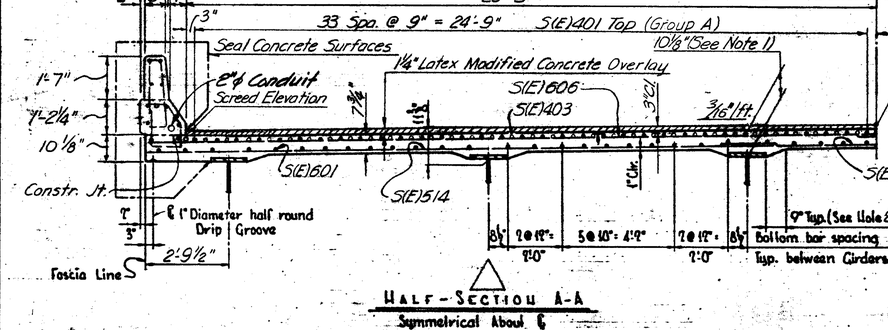
1-Group A = 68-S(E)401 Top & 50-S(E)601 Bot. (As shown in Section A-A)
1-Group B = 68-S(E)402 Top & 50-S(E)602 Bot.
1-Group C = 6-S(E)401 & 3-S(E)601 (As shown in Section B-B).
1-Group D = 6-S(E)402 & 3-S(E)602 (As shown in Section B-B)

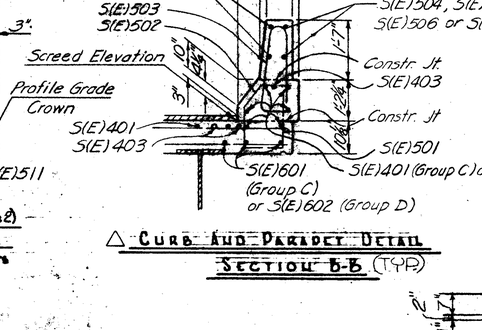
FED. ROAD DESIGNATION	STATE	PROJECT	
2	OHIO		

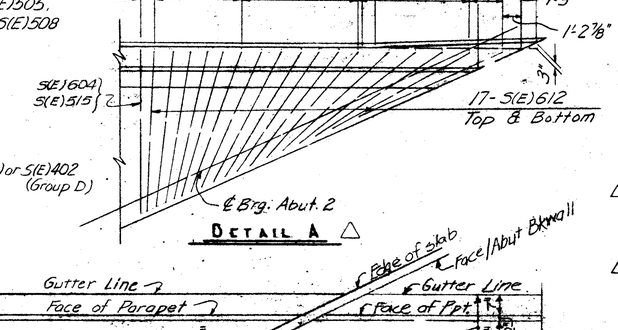
100 / 101

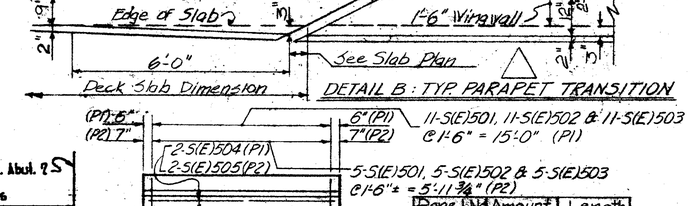
HAM-75-9.95
HAM-126-13.00

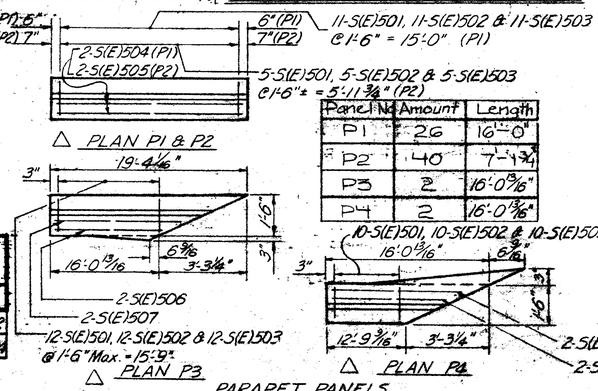


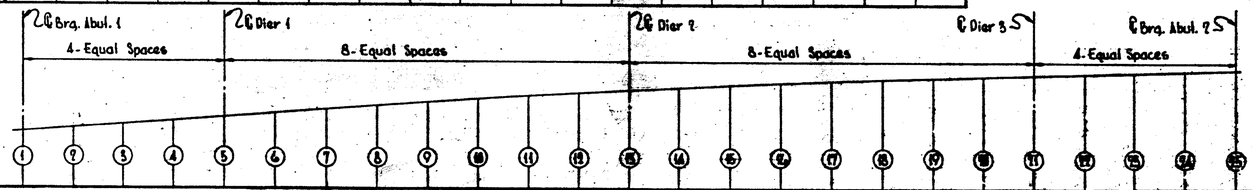












FINISHED PAVEMENT ELEVATIONS (At Top of 1 1/4" Latex Overlay)

Station	11+00	11+25	11+50	11+75	12+00	12+25	12+50	12+75	13+00	13+25	13+50	13+75	14+00	14+25	14+50	14+75	15+00	15+25	15+50
North Curb Line	—	—	—	—	597.37	598.76	600.12	601.44	602.74	604.00	605.23	606.43	607.59	608.73	609.83	610.91	612.00	613.06	614.17
Profile Grade	—	—	594.89	596.34	597.77	599.16	600.51	601.84	603.13	604.39	605.62	606.82	607.99	609.12	610.22	611.31	612.39	—	—
South Curb Line	591.56	593.03	594.50	595.95	597.37	598.76	600.12	601.44	602.74	604.00	605.23	606.43	607.59	608.73	609.83	—	—	—	—

△ SCREED ELEVATIONS (See Note 7)
(Top of Portland Cement Concrete)

Point	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
North Curb Line	596.45	597.48	598.48	599.45	600.42	601.17	601.91	602.64	603.35	604.03	604.70	605.36	606.01	606.65	607.31	607.95	608.57	609.17	609.76	610.34	610.92	611.89	612.86	613.81	614.72
South Curb Line	590.01	591.08	592.14	593.18	594.21	595.07	595.83	596.62	597.49	598.24	598.98	599.71	600.45	601.19	601.91	602.62	603.35	604.00	604.66	605.32	605.96	607.02	608.04	609.02	609.94

NOTES

△ 1. This is the design dimension. The quantity of deck concrete to be paid for shall be based upon this dimension, even though deviation from it may be necessary because the top flange of the girder may not have the exact camber or conformation required to place it parallel to the finished grade. Deduction shall be made for volume of encased steel plates as per 511.18.
2. A typical haunch width of 9" shall be used for computing the quantity of concrete. However, the haunch width may vary between 6" and 12" provided that the slope shall not be more than 1:4 for a haunch less than 9" in width.
△ 3. For additional details of deflector parapets, see Std. Dwg. BR-1.
4. For General Notes, see sheet 2 / 15.
5. For Reinforcing Steel List, see sheet 13 / 15.
△ 6. (E) denotes epoxy coated reinforcing bars.
7. The screed elevations shown have been obtained by adding the dead load deflection due to the weight of concrete slab, latex modified concrete overlay, bridge parapet, future wearing surface, and steel beams to the required final elevations.
8. For details of Light Pole Pilaster see Sheet 13 / 15.

VOGT, IVERS, & ASSOCIATES, INC. 12 / 15
ENGINEERS ARCHITECTS
CINCINNATI

ROADWAY SLAB
BRIDGE, No. HAM-126-1483
S.R. 126 UNDER
GALBRAITH ROAD
HAMILTON COUNTY STA. 11+15.16 ℄ STA. 16+15.41

DES.	DRWN.	CHKD.	QUAN.		

△ DATE REV. 9/85

ABUTMENT 1

MARK	NO.	LENGTH	TYPE	WEIGHT
A501	36	6'-11"	Str.	670
A502	6	3'-2" to 6'-3½" by 7½" (1 Each)	Str.	30
A503	4	9'-11"	Bl.	41
△ A504	22	7'-0"	Bl.	161
A505	18	8'-4"	Bl.	156
A506	30	9'-9"	Bl.	305
A507	6	7'-5"	Bl.	46
A508	16	8'-8"	Bl.	145
A509	10	10'-9"	Bl.	117
△ A510	4	9'-5"	Bl.	39
A511	3	34'-1"	Bl.	107
A512	7	39'-6"	Str.	288
A513	3	34'-6"	Str.	108
A514	5	8'-5"	Bl.	44
△ A515	31	32'-8"	Str.	1056
A516	3	17'-9"	Str.	56
A517	5	18'-3"	Bl.	95
A518	3	7'-7"	Str.	24
A519	5	28'-3"	Bl.	147
A520	5	5'-4"	Bl.	28
A521	5	27'-5"	Str.	143
△ A522	13	24'-8"	Str.	334
A523	1	9'-8"	Bl.	10
A524	4	4'-10"	Bl.	20
△ A525	5	36'-10"	Str.	192
A526	4	23'-1"	Str.	96
A527	106	5'-2"	Bl.	571
△ A528	5	8'-0"	Bt.	31
△ A529	6	8'-10"	Bl.	55
A530	13	4'-7"	Bl.	62
△ A531	6	5'-6" to 5'-8½" @ ½" (1 Ea)	Str.	35
△ A532	1	5'-5"	Str.	6
△ A533	11	5'-5½" to 6'-2" by ⅞" (1 Each)	Str.	67
△ A534	12	3'-8"	Str.	46
△ A(E)535	16	4'-7"	Str.	76
△ A536	4	8'-2"	Str.	34
△ A(E)537	21	5'-3"	Bt.	115
△ A(E)538	21	3'-0"	Bt.	66
△ A(E)539	16	2'-8"	Bt.	45
A540	3	10'-10"	Str.	34
△ A541	4	6'-6"	Str.	27
A542	2	14'-8"	Str.	31
A543	6	22'-3"	Str.	139
△ A544	2	22'-5"	Str.	47
△ A(E)545	4	16'-2"	Str.	67
△ A(E)546	16	4'-4"	Str.	72
A547	7	5'-5"	Bl.	40
A548	7	9'-1"	Str.	66
A549	4	6'-0"	Bl.	25
△ A550	6	5'-10⅛" to 6'-4" by 1" (1 Each)	Str.	38
△ A551	8	3'-8"	Str.	31
△ A552	2	4'-11"	Str.	10
△ A553	1	6'-5"	Str.	7
A554	4	6'-2"	Str.	26
A555	2	7'-10"	Bl.	16
A556	6	13'-3"	Str.	83
A557	1	8'-6"	Str.	9
△ A558	4	16'-4"	Str.	68
△ A559	4	14'-5"	Str.	60
△ A560	4	5'-10"	Bt.	17
A561	1	7'-9"	Str.	7
△ A(E)562	4	6'-0"	Str.	25
A563	12	8'-0"	Str.	100
A564	12	5'-0"	Str.	63
A(E)565	4	7'-1"	Str.	30
△ A(E)566	8	21'-0"	Str.	175
△ A(E)567	4	14'-0"	Str.	58
△ A(E)568	1	38'-6"	Str.	40

NO. 5 Bars Cont'd Next Column

MARK	NO.	LENGTH	TYPE	WEIGHT
A601	86	8'-3"	Bl.	1066
A602	6	3'-10" to 6'-11½" by 7½" (1 Each)	Bl.	49
△ A603	23	8'-4"	Bl.	288
A604	18	9'-8"	Bl.	261
A605	99	11'-1"	Bl.	483
A606	6	8'-9"	Bl.	79
A607	16	10'-0"	Bl.	240
△ A608	122	12'-3"	Bl.	2245
△ A609	122	10'-11"	Bl.	2000
△ A(E)610	122	6'-7"	Bl.	1206
A611	24	5'-10"	Str.	210

ABUTMENT 2

MARK	NO.	LENGTH	TYPE	WEIGHT
A612	24	7'-2"	Bl.	258
A613	13	5'-11"	Bl.	116
A614	11	5'-8⅛" to 6'-5" by ⅞" (1 Each) △	Str.	100
A615	1	6'-7"	Str.	10
A616	1	14'-9"	Str.	22
A617	1	6'-5"	Bl.	10
A618	1	7'-5"	Str.	11
A(E)619	23	△ 3'-9"	Bt.	130
A(E)620	2	△ 3'-8"	Bt.	11
A(E)621	2	△ 3'-8"	Bt.	11
A(E)622	2	△ 3'-7"	Bt.	11
A(E)623	8	△ 3'-7"	Bt.	43
A701	6	△ 7'-1"	Bl.	87
A702	6	△ 9'-6" to 9'-8½" by ½" (1 Ea)	Str.	118
A624	1	△ 5'-8"	Str.	9
A(E)570	1	△ 23'-0"	Str.	24
A(E)571	2	△ 32'-8"	Str.	68
A572	1	△ 8'-6"	Str.	9
A573	3	△ 13'-2"	Str.	41
A801	7	15'-6"	Str.	290
A802	18	30'-0"	Str.	1447
A803	9	34'-3"	Bl.	823
A804	7	24'-0"	Bl.	486
A805	2	14'-1"	Bl.	75
A806	2	35'-11"	Str.	192
A807	2	18'-10"	Bl.	101
A808	4	15'-3"	Str.	163
A809	4	14'-6"	Str.	155
A810	4	70'-0"	Bl.	214
A811	1	16'-6"	Str.	44
A812	1	22'-0"	Bl.	59
A813	5	21'-0"	Bl.	280
A814	5	15'-6"	Str.	207
A(E)815	35	△ 4'-11"	Bt.	459
A574	1	△ 6'-0"	Str.	6

MARK	NO.	LENGTH	TYPE	WEIGHT
B501	11	9'-6"	Str.	109
B502	2	35'-7"	Bl.	74
B503	2	33'-3"	Str.	69
B504	6	17'-6"	Str.	110
B505	10	20'-6"	Str.	214
B506	4	34'-6"	Str.	144
B507	21	30'-0"	Str.	657
B508	7	34'-7"	Bt.	252
B509	14	35'-0"	Str.	511
B510	2	34'-11"	Bl.	77
B511	118	△ 4'-4"	Bt.	533
B512	33	12'-0"	Str.	413
B513	32	13'-0"	Str.	434
B514	6	14'-1"	Str.	88
B515	15	13'-9"	Str.	215
B516	8	△ 14'-6"	Str.	121
B517	4	△ 8'-10"	Bl.	37
B518	9	27'-5"	Str.	257
B519	12	△ 14'-6"	Str.	181
B520	8	6'-9"	Bl.	56
B521	4	24'-0"	Str.	100
B522	50	△ 32'-8"	Str.	1704
B523	2	33'-2"	Bl.	69
B524	8	25'-10"	Bl.	216
B525	5	10'-2"	Bl.	53
B526	5	20'-2"	Bl.	105
B527	5	15'-2"	Str.	79
B528	9	34'-1"	Bl.	320
B529	8	37'-2"	Str.	310
B530	5	△ 39'-6"	Str.	206
B531	106	5'-2"	Bl.	571
B532	4	7'-0"	Bl.	29
B533	1	13'-8"	Bl.	14
B534	4	23'-1"	Str.	96
B535	5	34'-10"	Str.	192
B536	4	△ 5'-4"	Str.	22
B537	2	6'-1"	Bl.	13
B538	31	9'-6"	Str.	307
B539	20	5'-8"	Str.	118
B540	10	28'-6"	Str.	297

MARK	NO.	LENGTH	TYPE	WEIGHT
B541	5	12'-2"	Bl.	63
B542	5	12'-2"	Bl.	63
B543	10	33'-6"	Str.	349
B544	6	31'-6"	Str.	197
B545	8	9'-2"	Bl.	76
B546	8	9'-2"	Bt.	76
B547	16	15'-6"	Str.	259
B548	22	4'-1"	Bl.	94
B549	20	3'-7"	Bt.	75
B550	6	16'-4"	Str.	102
B551	6	6'-0½" to 7'-0" by ½" (1 Each) △	Str.	43
B552	64	△ 3'-0"	Str.	200
B553	64	△ 5'-3"	Bt.	350
B554	8	△ 33'-8"	Str.	281
B555	16	△ △ 4'-7"	Str.	76
B556	22	15'-11½" to 17'-3½" by ¾" (1 Each)	Str.	381
B557	26	△ 31'-8"	Str.	859
B558	19	8'-4" to 9'-5½" by ¾" (1 Each)	Str.	176
B559	8	27'-8"	Str.	231
B560	2	7'-9"	Str.	16
B561	2	30'-8"	Str.	64
B562	6	△ 35'-8"	Str.	223
B563	10	△ 2'-11"	Str.	30
B564	16	△ 2'-8"	Bt.	45
B565	16	△ 4'-4"	Str.	72
B566	8	△ 31'-8"	Str.	264
B567	4	△ 7'-1"	Str.	30
B568	1	10'-6"	Str.	11
B569	2	△ 4'-0"	Str.	8
B570	18	13'-9"	Str.	258
B571	18	△ 6'-3" to 6'-11½" by ½" (1 Each)	Str.	124
B572	8	△ 5'-5"	Str.	45
B573	9	30'-5"	Str.	286
B574	10	21'-3"	Str.	222
B575	1	△ 27'-6"	Str.	29
B576	1	△ 29'-6"	Str.	31
B577	1	23'-3"	Str.	24
B578	5	△ 35'-4"	Str.	184
B579	5	△ 33'-0"	Str.	172
B580	2	△ 6'-8"	Str.	14
B581	2	7'-10"	Bl.	16
B582	2	△ 5'-11"	Str.	12
B583	12	8'-0"	Str.	100
B584	12	5'-0"	Str.	63
B(E)585	4	△ 6'-0"	Str.	25
B(E)586	2	△ 32'-8"	Str.	68
B(E)587	4	△ 34'-0"	Str.	142
B(E)588	4	△ 32'-0"	Str.	134

NO. 5 Bars Cont'd Next Column

MARK	NO.	LENGTH	TYPE	WEIGHT
B601	9	3'-6" to 9'-0" by 8¾" (1 Each)	Str.	84
B602	75	9'-9"	Str.	1098
B603	120	△ 5'-11"	Bl.	1066
B604	17	△ 10'-1"	Str.	257
B605	14	6'-9" to 7'-3½" by ½" (1 Each)	Bl.	148
B606	33	11'-5"	Str.	566
B607	23	6'-10½" to 7'-9½" by ½" (1 Each)	Bl.	253
B608	9	7'-6½" to 7'-10½" by ½" (1 Each)	Bl.	104
B609	33	10'-9"	Str	533
B610	19	7'-1" to 7'-10" by ½" (1 Each)	Bl.	213
B611	14	6'-11½" to 7'-6" by ½" (1 Each)	Bl.	152
B612	4	7'-1" to 7'-2½" by ½" (1 Each)	Bl.	43
B613	37	△ 12'-1"	Str.	672
B614	23	6'-9" to 7'-8" by ½" (1 Each)	Bl.	249
B615	9	7'-7" to 7'-11" by ½" (1 Each)	Bl.	105
B616	2	6'-9"	Bl.	20
B617	1	7'-6"	Bl.	11
B618	122	△ 12'-3"	Bl.	2245
B619	122	△ 10'-11"	Bl.	2000
B(E)620	122	△ 6'-7"	Bl.	1206
B621	20	5'-8"	Str.	170
B622	28	5'-11"	Bl.	249
B623	32	5'-8"	Bl.	272
B624	20	5'-7"	Bl.	155
B625	△ 8	21'-8" to 21'-11½" by ½" (1 Each)	Str.	274
B626	△ 32	16'-2" to 17'-5½" by ½" (1 Each)	Str.	808
B627	△ 19	8'-7" to 9'-8½" by ¾" (1 Each)	Str.	261
B628	1	△ 16'-2"	Str.	24
B629	1	10'-9"	Str.	16
B630	△ 20	18'-11½" to 19'-9" by ½" (1 Each)	Str.	581
B(E)631	66	△ 3'-9"	Bt.	372
B(E)632	2	△ 3'-8"	Bt.	11

PIER 1

MARK	NO	LENGTH	TYPE	WEIGHT
PA501	36	4'-2"	Bt.	156
PA502	24	3'-8"	Bl.	92
PA503	24	2'-8"	Bl.	67
PA801	120	10'-8"	Bl.	3418
PA901	72	△ 8'-5"	Bl.	2060
PA902	12	21'-0"	Str.	857
PA903	12	20'-1"	Str.	819
PA904	12	19'-1"	Str.	779
PA905	12	17'-10"	Str.	728
PA906	12	16'-6"	Str.	673
PA907	12	15'-2"	Str.	619
SPA401	1	21'-0"	Bl.	393
SPA402	1	20'-1"	Bl.	376
SPA403	1	19'-1"	Bl.	358
SPA404	1	17'-10"	Bl.	336
SPA405	1	16'-6"	Bl.	312
SPA406	1	15'-2"	Bl.	288

PIER 2

MARK	NO	LENGTH	TYPE	WEIGHT
PB501	18	4'-1"	Bt.	77
PB502	12	3'-8"	Bl.	46
PB503	24	3'-1"	Bl.	77
PB504	18	4'-2"	Bl.	78
PB505	12	4'-0"	Bl.	50
PB801	144	8'-6"	Str.	3268
PB901	72	△ 7'-11"	Bl.	1939
PB902	12	25'-7"	Str.	1044
PB903	12	24'-9"	Str.	1010
PB904	12	23'-10"	Str.	972
PB905	12	22'-9"	Str.	928
PB906	12	21'-7"	Str.	881
PB907	12	20'-4"	Str.	830
SPB401	1	25'-7"	Bl.	475
SPB402	1	24'-9"	Bl.	460
SPB403	1	23'-10"	Bl.	443
SPB404	1	22'-9"	Bl.	424
SPB405	1	21'-7"	Bl.	403
SPB406	1	20'-4"	Bl.	381

PIER 3

MARK	NO	LENGTH	TYPE	WEIGHT
PC501	18	4'-1"	Bl.	77
PC502	12	3'-8"	Bl.	46
PC503	24	3'-1"	Bl.	77
PC504	18	4'-2"	Bl.	78
PC505	12	4'-0"	Bl.	50
PC801	204	10'-6"	Str.	5719
PC1001	72	△ 9'-3"	Bl.	2866
PC1002	12	30'-6"	Str.	1575
PC1003	12	29'-9"	Str.	1536
PC1004	12	29'-2"	Str.	1506
PC1005	12	28'-1"	Str.	1450
PC1006	12	27'-0"	Str.	1394
PC1007	12	25'-10"	Str.	1334
SPC401	1	30'-6"	Bl.	563
SPC402	1	29'-9"	Bl.	549
SPC403	1	29'-2"	Bl.	539
SPC404	1	28'-1"	Bl.	519
SPC405	1	27'-0"	Bl.	500
SPC406	1	25'-10"	Bl.	479

△ SUPERSTRUCTURE

MARK	NO.	LENGTH	TYPE	WEIGHT
E401	1040	30'-0"	STR	20842
E402	80	10'-1"	STR	539
E403	207	45'-0"	STR	6222
E501	530	2'-7"	BT.	1428
E502	530	3'-4"	BT.	1843
E503	530	5'-6"	BT.	3040
E504	104	15'-8"	STR	1699
E505	160	6'-9"	STR	1126
E506	4	16'-3"	STR	68
E507	4	17'-2"	STR	72
E508	4	15'-2"	STR	63
E509	4	14'-3"	STR	59
E510	117	6'-0" TO 35'-0" BY 3" (1EA)	STR	2502
E511	565	32'-0"	STR	18857
E512	111	4'-3" TO 31'-9" BY 3" (1EA)	STR	2084
E513	72	5'-0" TO 22'-9" BY 3" (1EA)	STR	1042
E514	604	23'-0"	STR	14489
E515	78	6'-0" TO 25'-3" BY 3" (1EA)	STR	1271
E601	728	30'-0"	STR	32804
E602	56	19'-10"	STR	1668
E604	196	6'-0" TO 30'-3" BY 3" (2EA)	STR	5336
E606	1168	27'-8"	STR	48537
E608	182	5'-0" TO 27'-6" BY 3" (2EA)	STR	4442
E612	72	5'-10"	STR	831
E516	12	8'-5"	BT.	105
E517	12	2'-10"	BT.	35
E518	18	7'-3"	BT.	136
E519	12	3'-2"	STR.	40

DES. BD. DIVISION	STATE	PROJECT		
2	OHIO			

101 / 787

HAM-75-9.93
HAM-126-13.00

NOTES

2. SPIRAL REINFORCING BARS : THE "LENGTH" SHOWN IN THE STEEL LIST FOR THE SPIRAL BARS IS THE DISTANCE FROM TOP OF THE FOOTING TO THE BOTTOM OF CAP, OR TO WITHIN 2" (±) OF THE TOP OF COLUMN FOR PIERS WITHOUT CAPS, TO THE NEAREST INCH.

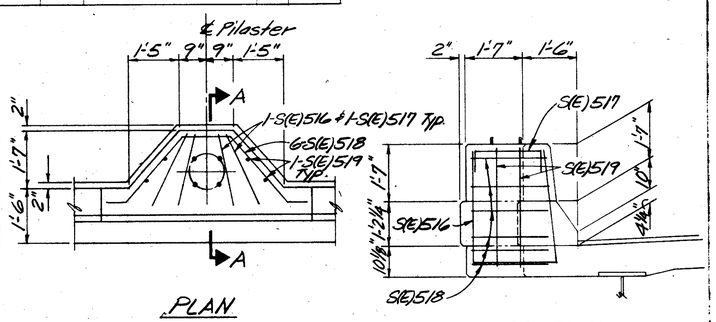
FOUR STEEL CHANNEL, TEE OR ANGLE SPACERS, WEIGHING NOT LESS THAN 0.90 LB. PER LIN. FT. OF SPACER, SHALL BE PROVIDED FOR EACH SPIRAL UNIT. THEY SHALL BE EQUALLY SPACED ALONG THE PERIPHERY OF THE COIL. THE NUMBER OF POUNDS OF THESE SPACERS, BASED ON 0.80 LB. PER LIN. FT., WILL BE PAID FOR AS REINFORCING STEEL AND IS INCLUDED IN THE TABULATED QUANTITY OF SPIRAL BARS.

3. SEE SHEET 14,15 / 15 FOR BENDING DETAILS.

△4. REFER TO CMS SECTIONS 106.03, 700, 709.01 THRU 709.05 AND 709.08. SUFFICIENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR SAMPLING. RANDOM SAMPLES SHALL BE REPLACED IN THE STRUCTURE BY THE ADDITIONAL STEEL SPLICED IN ACCORDANCE WITH 509.08.

△5. "(E)" denotes epoxy coated reinforcing bar.

△6. * Bend in field where necessary.



LIGHT POLE PILASTER

For additional information refer to Std. Construction Dwgs HL-3 & HL-4.

VOGT, IVERS & ASSOCIATES — ENGINEERS CINCINNATI — ARCHITECTS CHICAGO — 13 / 15

REINFORCING STEEL LIST
BRIDGE NO. HAM-126-1483
S.R. 126 UNDER
GALBRAITH ROAD
HAMILTON COUNTY — STA. 11+25.11 to STA. 15+15.41

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
-	GWM	—	E.F.F.			△ BALKE REV. 9/85

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

702
787

HAM-75-9.93.
HAM-126-13.00

MARK	TYPE	DIMENSIONS FOR BENDING A	B	C	D	E	F	G	H	J	K	R	O
A503	T1	5"	2'-9"	2'-0"	2'-9"	2'-0"		5"					
A504	2	6"	6'-6"					—					
A505	2	6"	7'-10"					—					
A506	2	6"	9'-3"					—					
A507	2	6"	6'-11"					—					
A508	2	6"	8'-2"					—					
A509	2	6"	10'-3"					—					
A510	2	6"	8'-11"					—					
A511	19		1'-7"	32'-6"	—				7⅛"		1'-5¼"		
A514	20		2'-0"	6'-7"	—								
A517	20		2'-0"	16'-5"									
A519	20		2'-0"	26'-5"	—								
A520	20		2'-0"	3'-6"	—								
A523	20		2'-0"	8'-0"	—								
A524	20		2'-0"	3'-0"	—								
A527	610		1'-0"	3'-5"	1'-0"								
△ A528	20		1'-7"	6'-6"									
A529	2	6"	8'-4"					—					
A530	2	6"	4'-1"					—					
△ A(E)537	25	2'-2"	2'-5"	7½"									
△ A(E)539	24	7"	2'-1"							5"			
A547	2	6"	4'-11"					—					
A549	610		2'-11"	5"	2'-11"								
A555	19		1'-7"	6'-3"	—				8½"		1'-5"		
△ A560	20		1'-7"	4'-4"									
A601	1	8"	6'-11"					8"					
A602	1	8"	3'-2"to6'-3½"by7½"					—					
A603	20		1'-11"	6'-7"	—								
A604	20		1'-11"	7'-11"	—								
A605	20		1'-11"	9'-4"	—								
A606	20		1'-11"	7'-0"	—								
A607	20		1'-11"	8'-3"	—								
△ A608	510		5'-7"	1'-5"	5'-7"								
A609	510		4'-11"	1'-5"	4'-11"								
△ A(E)610	510		3'-0"	11"	3'-0"								
A612	1	8"	5'-10"					8"					
A613	20		1'-11"	4'-2"	—								
A617	20		1'-11"	4'-8"	—								
△ A(E)619	10	9"	2'-5"	6"									
△ A(E)620	10	8"	2'-5"	5"									
△ A(E)621	10	8"	2'-5"	4"									
△ A(E)622	10	7"	2'-5"	3"									
△ A(E)623	10	7"	2'-5"	2"									
A701	20		2'-3"	5'-0"									
A803	20		4'-6"	30'-0"	—								
A805	19		2'-6"	11'-7"	—				1'-0⅛"		2'-3¼"		
A807	19		2'-0"	16'-10"	—				1'-9⅞"		10"		
A810	20		5'-9"	14'-6"	—								
A812	20		5'-9"	16'-6"	—								
A813	20		5'-9"	15'-6"									
△ A(E)815	5	1'-0"	2'-7"										
B502	20		2'-6"	33'-3"	—								
B508	19		4'-5"	30'-2"	—				3'-1½"		3'-1½"		
B510	19		1'-7"	35'-4"	—				7⅞"		1'-5¼"		
B511	2	6"	3'-10"					—					
B517	2	6"	8'-4"					—					
B520	19		3'-4"	3'-5"	—				8½"		3'-3⅛"		
B523	20		1'-6"	31'-10"	—								
B524	20		1'-6"	24'-6"	—								
B525	20		1'-6"	8'-10"	—								
B526	20		1'-6"	18'-10"	—								
B528	19		1'-7"	32'-6"	—				7⅞"		1'-5¼"		
B531	510		1'-0"	3'-5"	1'-0"								
B532	20		1'-6"	5'-8"	—								
B533	20		1'-6"	12'-4"	—								
B537	12		4'-8"	8"	11"	—	—		1⅝"		8"		
B541	20		1'-7"	10'-9"	—								
B542	19		1'-7"	10'-9"	—				1'-6¾"		3⅛"		
B545	20		1'-7"	7'-9"	—								
B546	19		1'-7"	7'-9"	—				1'-6¾"		3⅛"		
B548	2	6"	3'-7"					—					
B549	2	6"	3'-1"					—					
△ B(E)553	25	2'-2"	2'-5"	7½"									
△ B(E)564	24	7"	2'-1"							5"			
B581	19		1'-7"	6'-3"	—				8½"		1'-5"		

① A J G E

② A J G E

③ O B J C E F H G A D

④ O B J C E F H G A D

⑤ △ J I A B

⑥ O E A H C J G D

⑦ O C H E J G A K D K

⑧ A J B G

⑨ R H C

⑩ △ A C 8½" B

⑪ O J A B C D

⑫ B J A C D H K

⑬ K B R C J G D O

⑭ O B H C E F H D K K

⑯ B J A C D H K

⑰ B F C E D

⑱ A J B C

⑲ O H K B C D H K

⑳ B C D

㉑ A J B C

㉒ K D H C B

⑮ NOT USED

S1 S2 S3 S4 S5 S6 S7 S8 S9 S10 S11 T1 T2 T3 T4

SP1 SP2

DIAMETER O; PITCH B; LENGTH-C; NO. OF TURNS-D

S12 △24

23 △25 T.R. = 2⅛"

WHERE SLOPE IS 45° SHOW "H" ONLY
OTHERWISE SHOW "H" AND "K"

A or G E J C H K D

NOTES

1. FIGURES IN CIRCLES SHOW BAR TYPES.
2. ALL DIMENSIONS ARE OUT TO OUT OF BAR.
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4. WHERE "J" IS NOT SHOWN "J" WILL BE KEPT EQUAL TO OR LESS THAN "H." WHERE "J" CAN EXCEED "H" IT SHOULD BE SHOWN.
5. "H" DIMENSION ON STIRRUPS TO BE SHOWN WHERE NECESSARY TO RESTRICT HOOKS.
6. ALL BENDS SHOWN ARE BENT AROUND A STANDARD MANDREL, EXCEPT STIRRUPS S11, TIES T3, SPIRALS SP1 AND WHERE RADIUS "R" IS INDICATED.
7. RADIUS DIMENSION "R" IS TO OUTSIDE OF BAR.
8. THE LENGTH OF BENT BARS IS MEASURED ALONG THE CENTERLINE.
9. FOR STANDARD HOOK DIMENSIONS, SEE SECT. 509.05 OF THE SPECIFICATIONS.
10. FOR BAR TYPE SP1, THE NO. OF TURNS "D" IS THE LENGTH "C" DIVIDED BY THE PITCH "B", PLUS 3 TURNS (TOTAL NUMBER OF CLOSED COILS), EXPRESSED AS THE NEAREST WHOLE NUMBER. 1½ CLOSED COILS SHALL BE PROVIDED AT THE ENDS OF EACH SPIRAL UNIT.

△ 11. "(E)" denotes epoxy coated reinforcing bar.

ENLARGED VIEW SHOWING BAR BENDING DETAILS

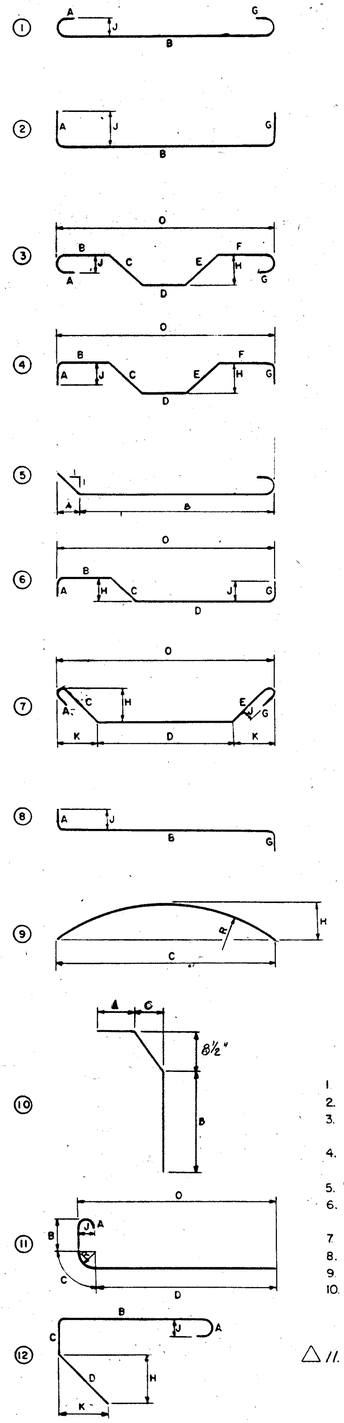
VOGT, IVERS & ASSOCIATES 14/15
ENGINEERS ARCHITECTS
CINCINNATI CHICAGO

BAR BENDING DETAILS

BRIDGE No. HAM-126-1483
S.R. 126 UNDER
GALBRAITH ROAD
HAMILTON COUNTY STA. 11+25.11 to STA. 15+15.41

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
—	H.J.Z.	—	C.T.S. E.F.F.			△ BALKE REV. 9/85

MARK	TYPE	DIMENSIONS FOR BENDING A	B	C	D	E	F	G	H	J	K	R	O
B603	S10		4'-2"	1'-11"	—								
B605	19		4'-5"	2'-4"to2-10½"by2½"	—				3'-1½"		3'-1½"		
B607	19		4'-5"	2'-5½"to3-4½"by2½"	—				3'-1½"		3'-1½"		
B608	19		4'-5"	3'-1½"to3-5½"by2½"	—				3'-1½"		3'-1½"		
B610	19		4'-5"	2'-8"to3-5"by2½"	—				3'-1½"		3'-1½"		
B611	19		4'-5"	2'-6½"to3-1"by2½"	—				3'-1½"		3'-1½"		
B612	19		4'-5"	2'-8"to2-9½"by2½"	—				3'-1½"		3'-1½"		
B614	19		4'-5"	2'-4"to3-3"by2½"	—				3'-1½"		3'-1½"		
B615	19		4'-5"	3'-2"to3-8"by2½"	—				3'-1½"		3'-1½"		
B616	19		4'-5"	2'-4"	—				3'-1½"		3'-1½"		
B617	19		4'-5"	3'-1"					3'-1½"		3'-1½"		
△ B618	S10		5'-7"	1'-5"	5'-7"								
B619	S10		4'-11"	1'-5"	4'-11"								
△ B(E)620	S10		3'-0"	11"	3'-0"								
B622	22		1'-11"	4'-2"	—				4'-2"		3⅛"		
B623	22		1'-11"	3'-11"	—				3'-11"		3"		
B624	22		1'-11"	3'-5"	—				3'-5"		2⅝"		
△ B(E)631	10	9"	2'-5"	6"									
△ B(E)632	10	8"	2'-5"	5"									
△ B(E)633	10	8"	2'-5"	4"									
△ B(E)634	10	7"	2'-5"	3"									
△ B(E)635	10	7"	2'-5"	2"									
B804	22		9'-9"	2'-6"	—				2'-6"		2"		
△ B(E)805	5	1'-0"	2'-7"										
B902	20		2'-10"	10'-1"	—								
B903	22		2'-10"	10'-1"	—				10'-1"		7⅝"		
B904	22		2'-10"	12'-10"	—				12'-0"		9"		
PA501	17		—	1'-0"	2'-5"	1'-0"	—						
PA502	17		—	1'-0"	1'-11"	1'-0"	—						
PA503	17		—	1'-0"	0'-11"	1'-0"	—						
PA801	1	1'-1"	8'-6"					1'-1"					
PA901	2	1'-6"	7'-1"					—					
SPA401	SP1		4½"	21'-0"	59								2'-8"
SPA402	SP1		4½"	20'-1"	57								2'-8"
SPA403	SP1		4½"	19'-1"	54								2'-8"
SPA404	SP1		4½"	17'-10"	51								2'-8"
SPA405	SP1		4½"	16'-6"	47								2'-8"
SPA406	SP1		4½"	15'-2"	46								2'-8"
PB501	17		—	1'-0"	2'-4"	1'-0"	—						
PB502	17		—	1'-0"	1'-11"	1'-0"	—						
PB503	17		—	1'-0"	1'-4"	1'-0"	—						
PB504	17		—	1'-0"	2'-5"	1'-0"	—						
PB505	17		—	1'-0"	2'-3"	1'-0"	—						
PB901	2	1'-6"	6'-7"					—					
SPB401	SP1		4½"	25'-7"	71								2'-8"
SPB402	SP1		4½"	24'-9"	69								2'-8"
SPB403	SP1		4½"	23'-10"	67								2'-8"
SPB404	SP1		4½"	22'-9"	64								2'-8"
SPB405	SP1		4½"	21'-7"	61								2'-8"
SPB406	SP1		4½"	20'-4"	57								2'-8"
PC501	17		—	1'-0"	2'-4"	1'-0"	—						
PC502	17		—	1'-0"	1'-11"	1'-0"	—						
PC503	17		—	1'-0"	1'-4"	1'-0"	—						
PC504	17		—	1'-0"	2'-5"	1'-0"	—						
PC505	17		—	1'-0"	2'-3"	1'-0"	—						
PC1001	2	1'-9½"	7'-9"					—					
SPC401	SP1		4½"	30'-6"	84								2'-8"
SPC402	SP1		4½"	29'-9"	82								2'-8"
SPC403	SP1		4½"	29'-2"	81								2'-8"
SPC404	SP1		4½"	28'-1"	78								2'-8"
SPC405	SP1		4½"	27'-0"	75								2'-8"
SPC406	SP1		4½"	25'-10"	72								2'-8"
△ S(E)501	26	9"	1'-10"							10½"			
△ S(E)502	27	10½"	1'-1"	10½"	9"				8½"		6"		
△ S(E)503	25	2-3¼"	2'-6¼"	8"									
RE402	SP2		7'-6"									1'-4"	
△ S(E)516	15	2'-4"	3'-2"	3'-2"	6½"								
△ S(E)517	2	7"	1'-10"					7"					
△ S(E)518	4	—	6"	2'-7"	1'-4"	2'-7"	6"	—	1'-10"	—			



ENLARGED VIEW SHOWING BAR BENDING DETAILS

NOTES

1. FIGURES IN CIRCLES SHOW BAR TYPES.
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△ 11. "(E)" denotes epoxy coated reinforcing bar.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

709
787

HAM.-75 - 9.93
HAM -126 -13.00

VOGT, IVERS & ASSOCIATES
ENGINEERS — ARCHITECTS
CINCINNATI — CHICAGO

115/15

BAR BENDING DETAILS

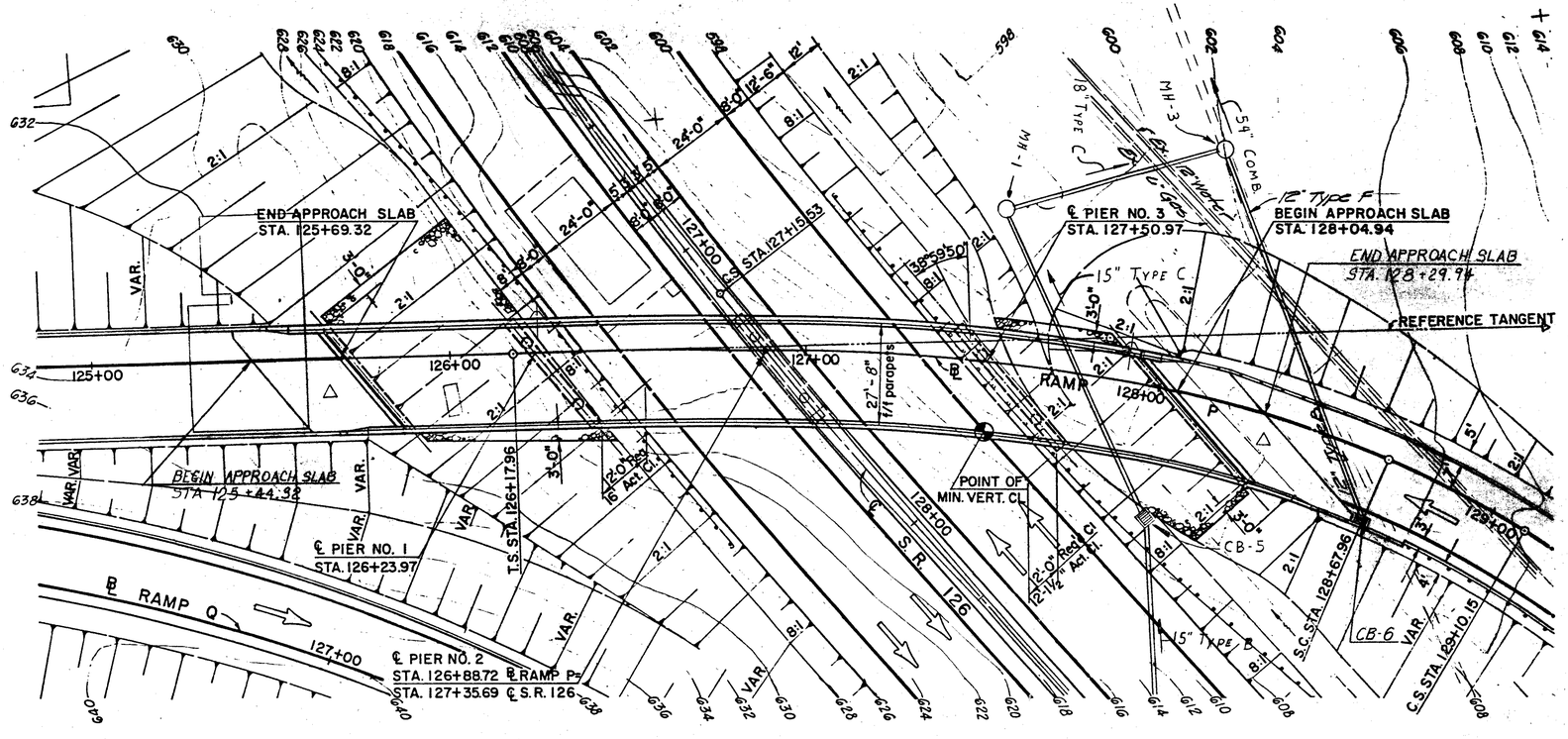
BRIDGE No. HAM-126-1483
S.R. 126 UNDER
GALBRAITH ROAD
HAMILTON COUNTY STA. 11+25.11 to STA. 15+15.41

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
—	H.J.Z.	—	E.F.F.			△ BALKE REV. 9/85

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

104 / 107

HAM - 75 - 9.93
HAM - 126 - 13.00



PLAN

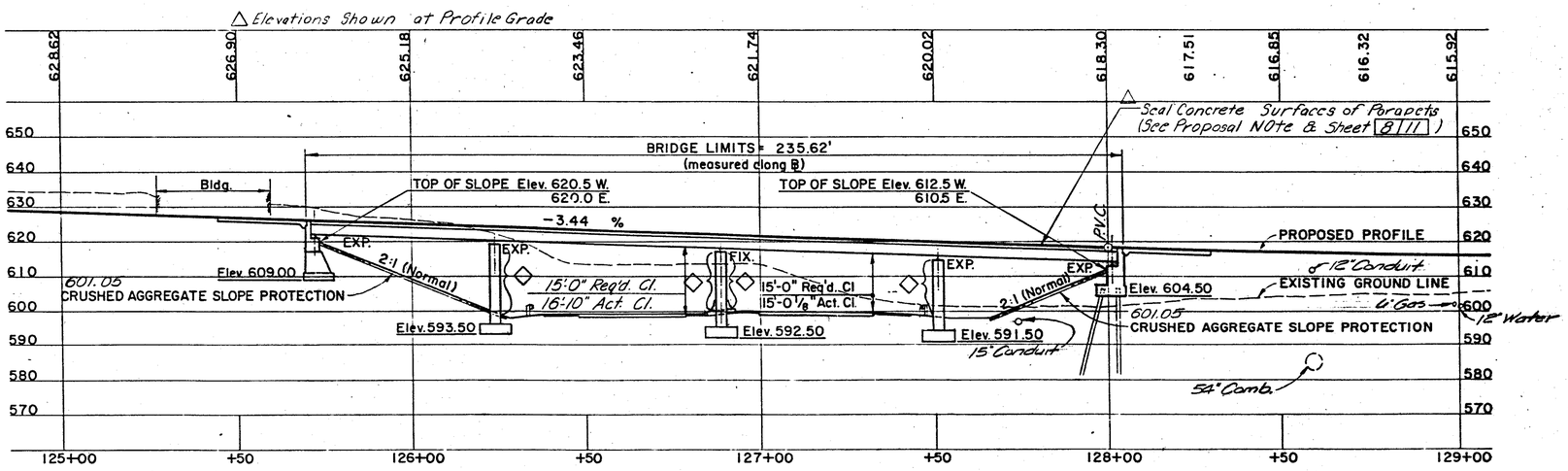
HORIZONTAL CURVE DATA — RAMP P

P.I. STA. 129+07.43
Δ = 58°25'55" RIGHT
Δc = 08°25'55"
Dc = 20°00'00"
Rc = 286.48'
Lc = 42.16'
Ls = 250.00'
Θs = 25°00'00"
Ts = 289.47'

NOTE:
△ EARTHWORK LIMITS SHOWN ARE APPROXIMATE, ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

△ TRAFFIC DATA

2006 ADT	5886
2006 ADTT	648



PROFILE

◇ Seal Concrete Surfaces of Columns and Piers 1, 2, and 3 (See Proposal Note)

VERTICAL CURVE DATA

P.V.I. STA. 130+00.00
ELEV. 611.42
Lc = 400'
G1 = -3.44 %
G2 = +5.062 %

ALL PILES ARE HP 10x 42 STEEL "H" PILES. THE ESTIMATED AVERAGE PAY-LENGTHS ARE:
ABUT. NO. 2 - 22'

PROPOSED STRUCTURE

△ TYPE: Continuous rolled steel beam with composite reinforced concrete deck and reinforced concrete substructures.
SPANS: 51.75', 64.75', 62.25', & 50.25'
△ LOADING: HS 20-44. CASE II
SKEW: 38° 59' 50" R.F. to ref. tangent
△ ROADWAY: 27'-8" face to face of parapets.
△ WEARING SURFACE: 1¼" latex modified concrete overlay.
△ APPROACH SLABS: AS-1-81 (25' long).
ALIGNMENT: Tangent & 250' spiral right.
SUPERELEVATION: Varies, 0.0833' per ft. max.

1 / 11

VOGT, IVERS, & ASSOCIATES
ENGINEERS CINCINNATI ARCHITECTS CHICAGO

SITE PLAN

BRIDGE NO. HAM-126-1497
S. R. 126 UNDER
RAMP P

HAMILTON COUNTY
STA. 125 + 69.32 to
STA. 128 + 04.94

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISIONS
AERIAL	T.W.N.	V. K.	D·W·M	S. S. C.	△ BALVE ENG. CO.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

705
707

HAM-75-9.93
HAM-126-13 00

GENERAL NOTES △

REFERENCE SHALL BE MADE TO THE FOLLOWING:

STANDARD DRAWINGS:

AS-1-81	DATED 11-27-81
BR-1	DATED 5-29-79
SD-1-69	DATED 6-12-69
RB-1-55	REV. 2-2-59

SUPPLEMENTAL SPECIFICATIONS:

836	DATED 3-12-75
824	DATED 10-8-82
845	DATED 2-28-86
953	DATED 8-21-80

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, 1983, INCLUDING THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:

DESIGN LOADING: HS 20-44, CASE II

DESIGN STRESSES:

CONCRETE, CLASS S	COMPRESSIVE STRENGTH: 4500 PSI (SUPERSTRUCTURE)
CONCRETE, CLASS C	UNIT STRESS 1333 PSI (SUBSTRUCTURE)
REINFORCING STEEL	ASTM A615, A616, A617, GRADE 60, MINIMUM YIELD STRENGTH: 60,000 PSI. (SUPERSTRUCTURE)

** CONT'D AT BOTTOM OF SHEET

ITEM 511: CLASS S CONCRETE, SUPERSTRUCTURE, USING SHRINKAGE COMPENSATING CEMENT, 701.08.

THE FOLLOWING RESTRICTIONS SHALL APPLY TO THE SUPERSTRUCTURE CONCRETE USING SHRINKAGE COMPENSATING CEMENT, 701.08.

1. CEMENT SHALL BE EXPANSIVE HYDRAULIC CEMENT, ASTM C845, TYPE K.
2. THE MAXIMUM WATER/CEMENT RATIO GIVEN FOR CLASS S CONCRETE IN 499.03 SHALL BE REVISED FROM 0.44 TO 0.50.
3. MAXIMUM SLUMP AT THE TIME AND PLACE OF CONCRETE PLACEMENT SHALL BE 6 INCHES.
4. CHEMICAL ADMIXTURES, WHEN REQUIRED BY 511.06, SHALL BE LIMITED TO 705.12 TYPE D.
5. MAXIMUM AMBIENT TEMPERATURE AT TIME OF PLACEMENT OF CONCRETE SHALL BE 80° F.
6. MEMBRANE CURING PER SS836 WILL NOT BE PERMITTED FOR ANY CONCRETE PLACED BETWEEN SEPTEMBER 1 AND MARCH 31. SUCH CONCRETE SHALL BE CURED BY METHOD (A) WATER CURING.
7. IF REQUIRED BY THE ENGINEER, THE SURFACE OF THE CONCRETE SHALL BE GIVEN A FOG SPRAY OF WATER. THIS MAY BE REQUIRED PRIOR TO EITHER WATER CURING OR MEMBRANE CURING IF WEATHER CONDITIONS DICTATE. EQUIPMENT SHALL BE ON HAND.

EMBANKMENT CONSTRUCTION:
THE EMBANKMENTS SHALL BE CONSTRUCTED TO THE LEVEL OF THE SUBGRADE FOR A MINIMUM DISTANCE OF 200 FEET BACK OF THE ABUTMENT NO. 2. EXCAVATION SHALL THEN BE MADE FOR THE ABUTMENT NO. 2.

AFTER THE PEDESTALS HAVE BEEN BUILT THE EMBANKMENT SHALL BE CONSTRUCTED TO THE LEVEL OF THE SUBGRADE FOR A MINIMUM DISTANCE OF 200 FEET BACK OF THE ABUTMENT NO. 1. EXCAVATION SHALL THEN BE MADE FOR THE ABUTMENT NO. 1 CROSS BEAM.

PILES:
PILES SHALL BE DRIVEN TO REFUSAL ON BEDROCK. REFUSAL SHALL BE CONSIDERED AS ATTAINED BY PENETRATING SOFT BEDROCK WITH A MINIMUM RESISTANCE OF 20 BLOWS PER INCH, OR REFUSAL SHALL BE CONSIDERED AS ATTAINED AFTER THE PILE HAS CONTACTED HARD BEDROCK AND THE PILE HAS THEN RECEIVED AT LEAST 20 BLOWS.

THE DESIGN LOAD IS 35 TONS PER PILE FOR THE ABUTMENT PILES.

FOUNDATION BEARING PRESSURE:
ABUTMENT NO. 1 FOOTINGS ARE DESIGNED FOR A MAXIMUM BEARING PRESSURE OF 3 TONS PER SQ. FT. AND PIER FOOTINGS FOR 4.5 TONS PER SQ. FT.

FOOTINGS FOR ABUTMENT NO. 1 AND PIERS SHALL EXTEND A MINIMUM OF 3 INCHES INTO BEDROCK. IF NECESSARY, THE FOOTINGS SHOULD BE LOWERED. HOWEVER, IF THE LOW POINT OF THE SURFACE OF THE BEDROCK OCCURS 2 FEET OR MORE ABOVE PLAN ELEVATION, THE FOOTINGS MAY BE RAISED, AFTER APPROVAL BY THE DIRECTOR, BUT TO AN ELEVATION NOT HIGHER THAN ≠PIER #1 - 595.0, PIER #2 594.0 AND PIER #3 - 593.0. STEPPING OF INDIVIDUAL FOOTINGS WILL NOT BE PERMITTED UNLESS SHOWN ON THE PLANS.

≠ ABUTMENT NO. 1 - 612.5

UTILITY LINES:
ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES SHALL BE BORNE BY THE OWNERS. THE CONTRACTOR AND OWNERS ARE REQUESTED TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WOULD BE HELD TO A MINIMUM.

REINFORCING STEEL: ** UNIT STRESS - 24,000 PSI (SUBSTRUCTURE) SPIRAL REINFORCEMENT MAY BE PLAIN BARS, ASTM A82 OR A615

STRUCTURAL STEEL: ASTM A36 - UNIT STRESS 20,000 PSI

DECK PROT METHOD: EPOXY COATED REINFORCING STEEL WITH 3" CONCRETE COVER OF WHICH 1-1/4" IS A LATEX MODIFIED CONCRETE OVERLAY.

BOLTS: 1" DIAMETER HIGH STRENGTH STEEL BOLTS CONFORMING TO ASTM A325.

ESTIMATED QUANTITIES

	ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	PIERS	ABUT.	GEN.	AS BUILT	
	503	Lump	Sum	Cofferdams, cribs, & sheeting				Lump		
	503	72	Cu. Yd.	Shale excavation		72				
	503	337	Cu. Yd.	Unclassified excavation			337			
△	505	Lump	Sum	Pile Driving Equipment Mobilization				Lump		
	507	290	Lin. Ft.	Steel piles, HP 10x42			290			
	507	13	Ea.	Steel points			13			
△	509	31749	Lb.	Reinforcing steel, Grade 60.		20545	11204			
	511	253	Cu. Yd.	Class S concrete, superstructure	253					
	511	115	Cu. Yd.	Class C concrete, abutments above footing			115			
	511	84	Cu. Yd.	Class C concrete, piers above footing		84				
	511	115	Cu. Yd.	Class C concrete, footings		45	70			
△	*511	253	Cu. Yd.	Class S concrete, superstructure, using shrinkage compensating cement 701.08	253					
△	513	1880	Ea.	Welded Stud Shear Connectors	1880					
△	513	171600	Lb.	Structural steel (AISC Category I)(See Proposal Note)	171600					
△	514	171600	Lb.	Field painting of new structural steel, System A	171600					
△	516	88	Lin. Ft.	Structural Expansion Joints including Elastomeric Strip Seal			88			
	518	62	Cu. Yd.	Porous backfill			62			
	518	70	Lin. Ft.	6", perforated, helical, corrugated steel pipe, 707.01			70			
	518	90	Lin. Ft.	6", non-perforated, helical, corrugated steel pipe, including specials, 707.01			90			
	601	552	Sq. Yd.	Crushed aggregate slope protection				552		
△	824	58982	Lb.	Epoxy Coated Reinforcing Steel, Grade 60	56083		2899			
△	Special	680	Sq. Yd.	Sealing of Concrete Surfaces (See Proposal Note)	520	80	80			
△	845	689	Sq. Yd.	Latex Modified Concrete Overlay (1 V4" thick) (See Proposal Note)	689					

Computed by: SSC Date: 5.19, 1971 — Quantities Revised by TMB 12-11-85

Checked by: DRP Date: 5 .20, 1971 — Revisions Checked by JAP 12-18-85

△ * Alternate Bid Item

SEALING OF CONCRETE SURFACES: THE FOLLOWING CONCRETE AREAS ARE TO BE SEALED PER PROPOSAL NOTE:
- SUPERSTRUCTURE PARAPETS. SEE SHEET 8 /11
- PIERS 1 & 2. SEE SHEET 6 /11
- PIER 3. SEE SHEET 7 /11
- WINGWALL PARAPETS. SEE SHEET 5 /11

REINFORCING STEEL:
SUBSTRUCTURE REINFORCING BARS NOT REVISED BY BALKE
(△) SHALL HAVE A MINIMUM LAP OF 30 BAR DIAMETERS.

2 / 11

VOGT, IVERS & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

GENERAL NOTES & ESTIMATED QUANTITIES

BRIDGE NO. HAM-126-1497
S R. 126 UNDER
RAMP P

HAMILTON COUNTY

STA. 125 + 69 32
STA. 128 + 04 94

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	APPROVED
DWS	D.W.M	—	SSC	DRP	5-21-71	△ BALKE ENG. 1/86

CALC. BY	HAM - 75 - 9.93	OHIO	705-A
DATE	HAM - 126 - 13.00	FHWA REGION 5	787
CHKD. BY			
DATE			

GENERAL NOTES
PLAN REVISIONS BY BALKE ENGINEERS

REVISIONS WERE MADE TO SUBSTRUCTURE DRAWINGS TO INCORPORATE THE FOLLOWING:

- o REVISE PARAPETS TO STANDARD SAFETY PARAPET SHAPE.
- o PROVIDE EPOXY-COATED REINFORCEMENT IN CORROSION-PRONE CONCRETE AREAS.
- o SEAL CONCRETE SURFACES OF PIER COLUMNS *AND PARAPETS.*
- o NUMBER PILES AND ADD DETAIL NOTES.
- o REVISE ABUTMENTS TO RECEIVE FULL WIDTH APPROACH SLAB PER AS-1-81.
- o REPLACE SLIDING PLATE EXPANSION JOINTS WITH STRIP SEAL JOINTS
- o LENGTHEN PIER COLUMN TO FOOTING DOWELS AS REQUIRED BY AASHTO.

AT THE REQUEST OF THE OHIO DEPARTMENT OF TRANSPORTATION, ALL SUBSTRUCTURE REINFORCEMENT IS TO BE GRADE 60.

REVISIONS MADE BY BALKE ENGINEERS ARE DENOTED BY (△) SYMBOL.

OTHER THAN NOTED REVISIONS, SUBSTRUCTURES ARE THE DESIGN AND DETAILING OF VOGT, IVERS, AND ASSOCIATES, INC.

ANALYSIS OF THE ORIGINAL SUPERSTRUCTURE DESIGN HAS BEEN COMPARED TO THE REVISED SUPERSTRUCTURE DESIGN TO ASSURE THAT LOADINGS HAVE NOT INCREASED ON SUBSTRUCTURES PROVIDED BY VOGT, IVERS AND ASSOCIATES, INC. DESIGN OF THESE SUBSTRUCTURES REMAINS THE RESPONSIBILITY OF VOGT, IVERS, AND ASSOCIATES.

REVISED SUPERSTRUCTURE DESIGN AND DETAILING WAS PREPARED TO CONFORM WITH UPDATED DESIGN STANDARDS.

DESIGN AND DETAILING BY BALKE ENGINEERS WAS PERFORMED IN ACCORDANCE WITH THE AASHTO SPECIFICATIONS FOR HIGHWAY BRIDGES, THIRTEENTH EDITION, 1983, AASHTO INTERIM SPECIFICATIONS FOR BRIDGES 1984, AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

PILE POINTS: STEEL PILE POINTS SHALL BE USED TO PROTECT THE TIPS OF THE PROPOSED STEEL "H" PILING. THE STEEL POINTS SHALL BE FURNISHED BY ASSOCIATED PILE AND FITTING CORPORATION, 262 RUTHERFORD BOULEVARD, CLIFTON, NEW JERSEY 07014; INTERNATIONAL CONSTRUCTION EQUIPMENT, INC., 301 WAREHOUSE DRIVE, MATTHEWS, NORTH CAROLINA 28015; DOUGHERTY FOUNDATION PRODUCTS, INC., P.O. BOX 688, FRANKLIN LAKES, NEW JERSEY 07417; VERSA STEEL INC., 3601 N.W. YEON AVE., P.O. BOX 10559, PORTLAND, OREGON 97210 OR BY A MANUFACTURER THAT CAN FURNISH A STEEL POINT THAT IS ACCEPTABLE TO THE DIRECTOR. THE PILE POINTS SHALL SATISFY OR EXCEED THE REQUIREMENTS OF ASTM A27 (GRADE 65/35) OR ASTM A148 (GRADE 90/60).

△ 2A/11

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

GENERAL NOTES
BRIDGE NO. HAM-126-1497
S.R. 126 UNDER RAMP P

HAMILTON COUNTY — STA. 125+69.32 to STA. 128+04.94

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
-	JAG	-	THB	CRS 3/86	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

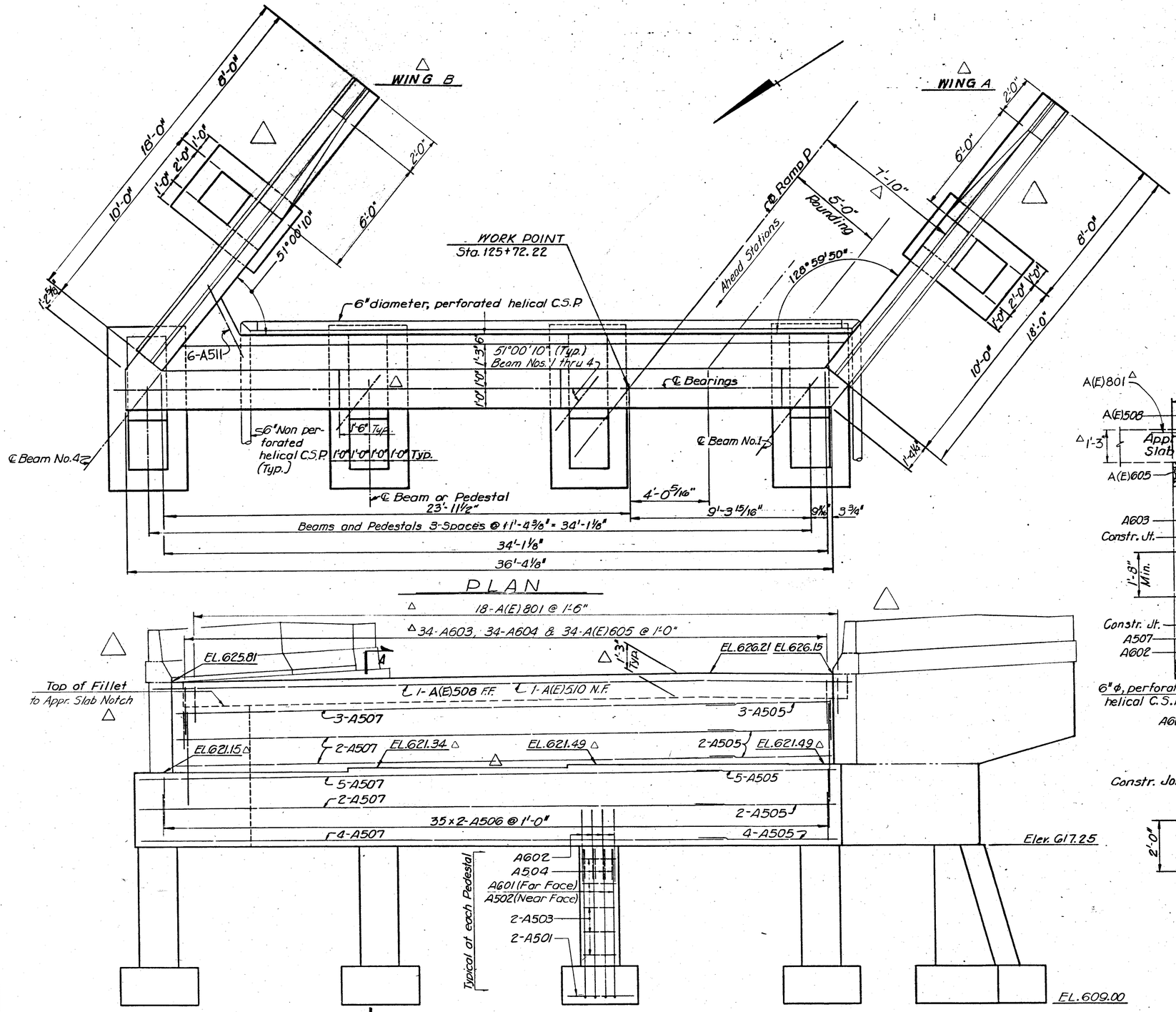
706
787

HAM - 75 - 9.93
HAM - 126 - 13.00

△ LEGEND

"(E)" denotes epoxy coated reinforcing bar.

F.F. = Far Face
N.F. = Near Face



NOTES:

For location of WORK POINT, see "framing plan" sheet 8/11.

For WINGWALL ELEVATIONS, see sheet 5/11.

POROUS BACKFILL, thickness shown, shall extend up to the plane of the subgrade and laterally to the ends of the wingwalls.

3/11

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

ABUTMENT NO. 1

BRIDGE NO. HAM-126-1497
S. R. 126 UNDER
RAMP P

HAMILTON COUNTY

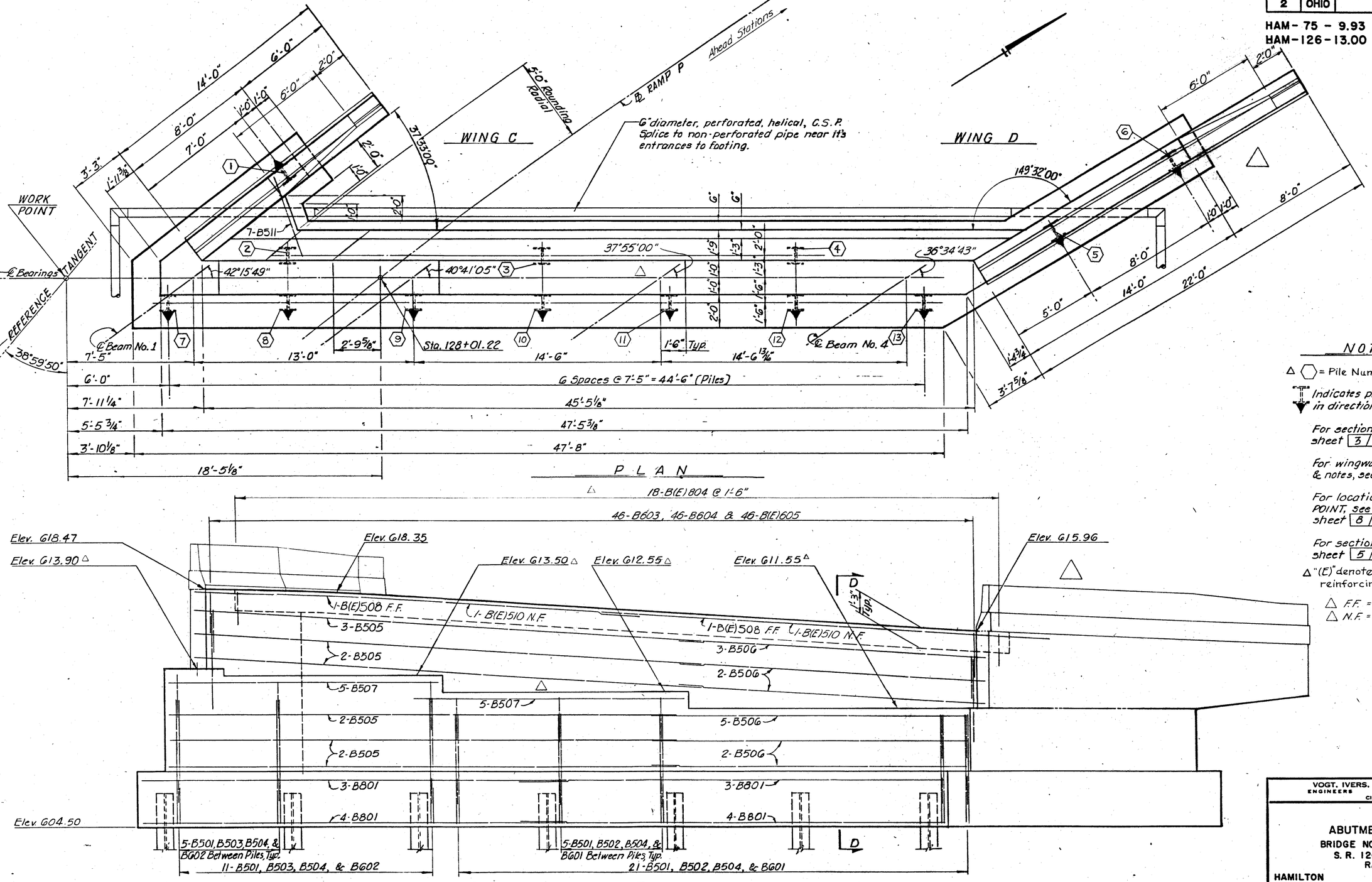
STA. 125 + 69.32 to
STA. 128 + 04.94

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	APPROVED
S.S.C.	S.S.C.	T.D.S.	J.R.P.		5-21-71	△ DALLUE ENG. 1/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

707
787

HAM-75-9.93
HAM-126-13.00



NOTES:

△ ⬡ = Pile Number

Indicates pile battered 1:4 in direction of the arrow.

For section B~B, see sheet 3/11.

For wingwall elev., details, & notes, see sheet 5/11.

For location of WORK POINT, see "Framing Plan", sheet 8/11.

For section D~D, see sheet 5/11.

△ "(E)" denotes epoxy coated reinforcing bar.

△ F.F. = Far Face
△ N.F. = Near Face

4/11

VOGT, IVERS. & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

ABUTMENT NO. 2
BRIDGE NO. HAM-126-1497
S. R. 126 UNDER
RAMP P

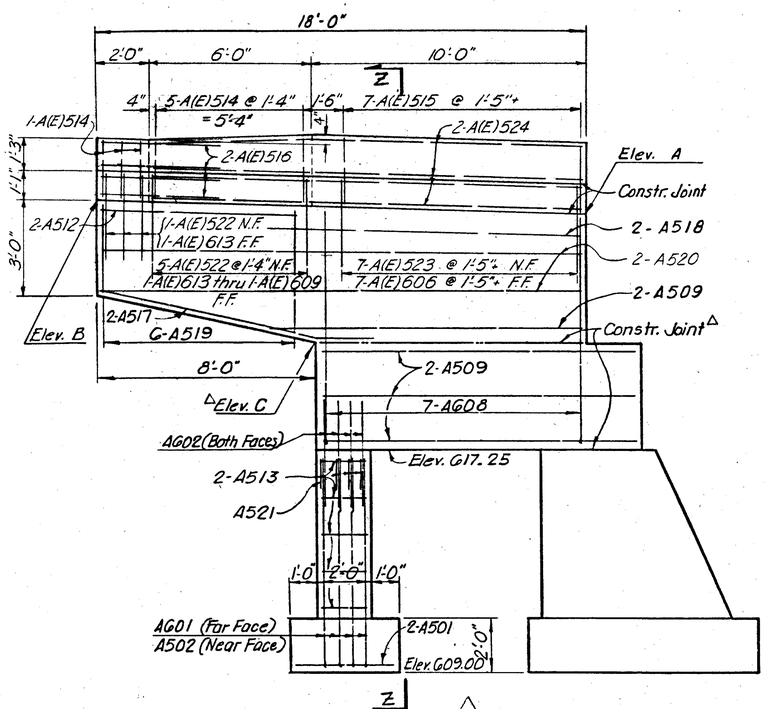
HAMILTON COUNTY
STA. 125 + 69.32 to
STA. 128 + 04.94

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.W.S.	D.W.S.	D.W.M.	S.S.C.		5-21-71	△ BALUE ENG. 1/86

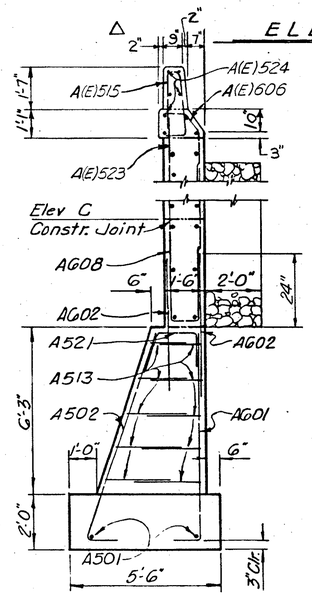
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

708
787

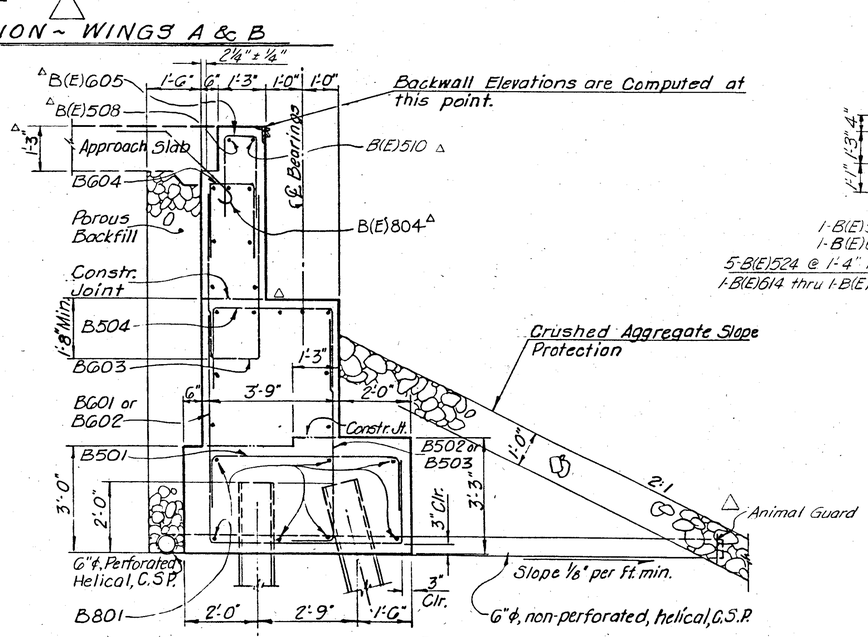
HAM-75 - 9.93
HAM-126 - 13.00



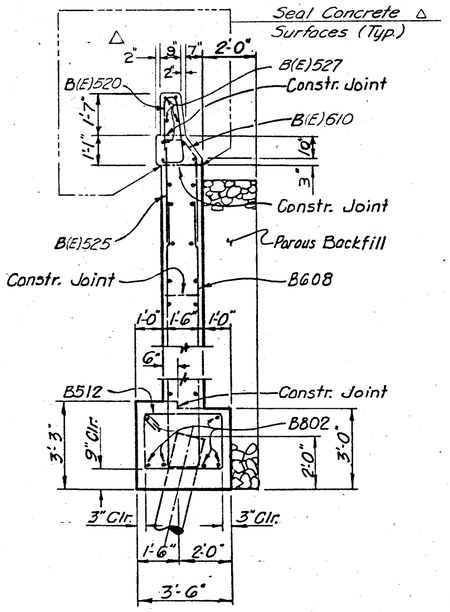
ELEVATION ~ WINGS A & B



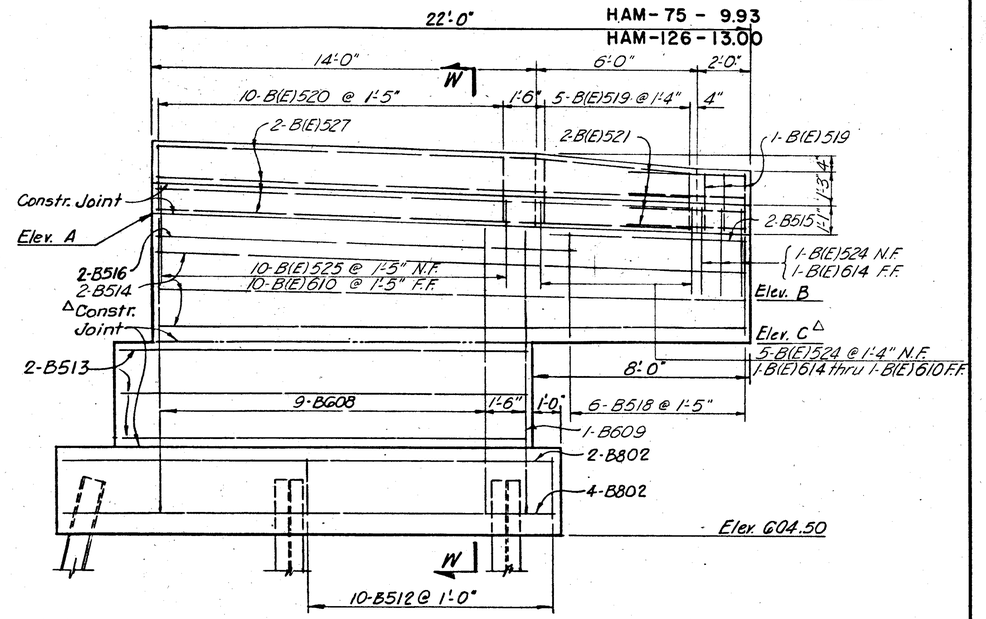
SECTION Z~Z



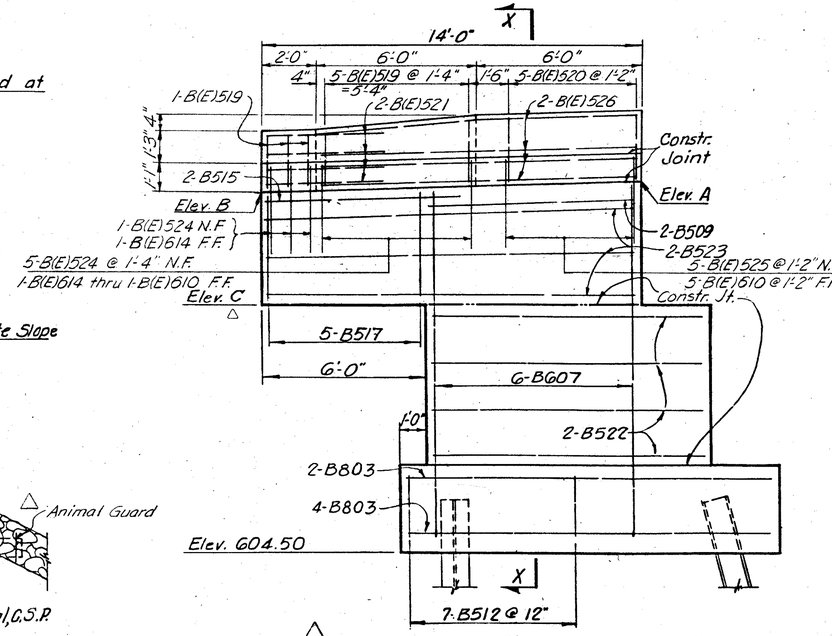
SECTION D ~ D



SECTION W~W
SECTION X~X is Similar



ELEVATION ~ WING D



ELEVATION ~ WING C

NOTES:
△ "(E)" denotes epoxy coated rainforcing bar.
N.F. = Near Face
F.F. = For Face

WING ELEVATIONS			
WING	Elev. A	Elev. B	Elev. C
A	626.15	626.77	621.49
B	625.81	626.43	621.16
C	618.47	618.00	613.91
D	615.96	615.20	611.57

NOTES:
For additional Parapet Details & notes, see Std. Dwg. BR-1

Porous backfill, thickness shown, shall extend up to the plane of the subgrade and laterally to ends of the wingwalls.

5 / 11

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

WINGWALL DETAILS

BRIDGE NO. HAM-126-1497
S. R. 126 UNDER
RAMP P

HAMILTON COUNTY

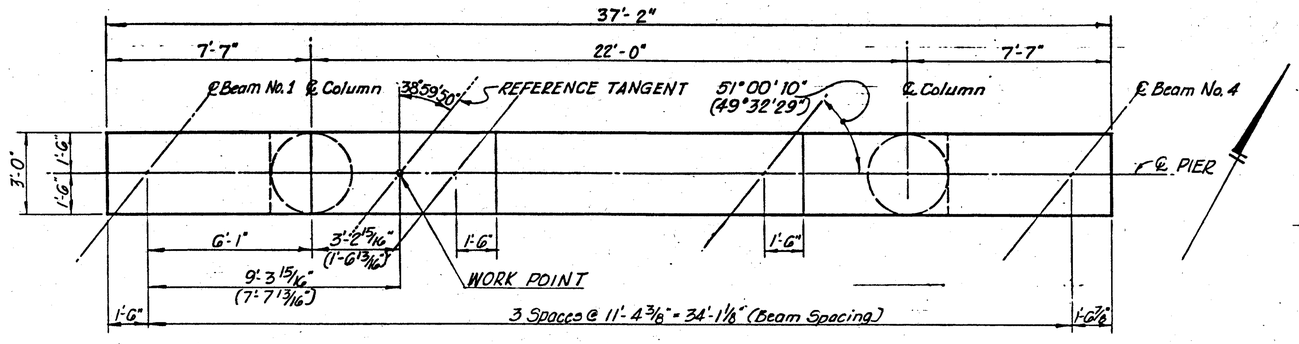
STA. 125 + 69.32 to
STA. 128 + 04.94

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.W.S.	D.W.S.	D.W.M.	S.S.C.	[illegible]	5-21-71	△ BALKE ENG. 1/86

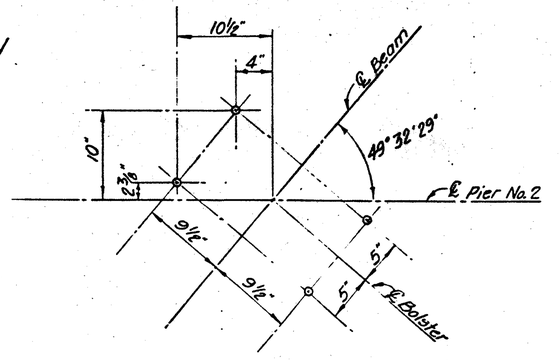
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

702
187

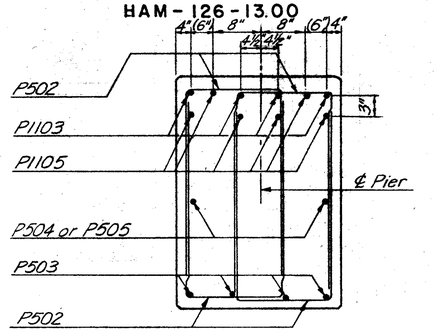
HAM - 75 - 9.93
HAM - 126 - 13.00



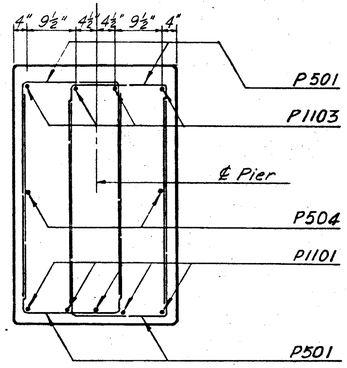
CAP PLAN



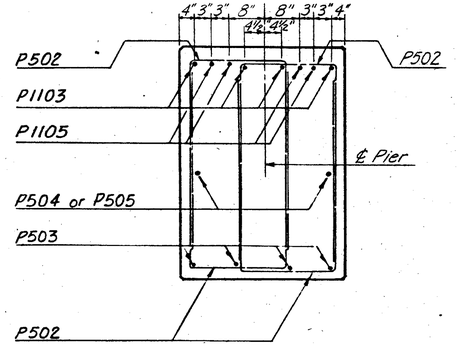
TYPICAL ANCHOR BOLT LAYOUT FOR PIER NO. 2



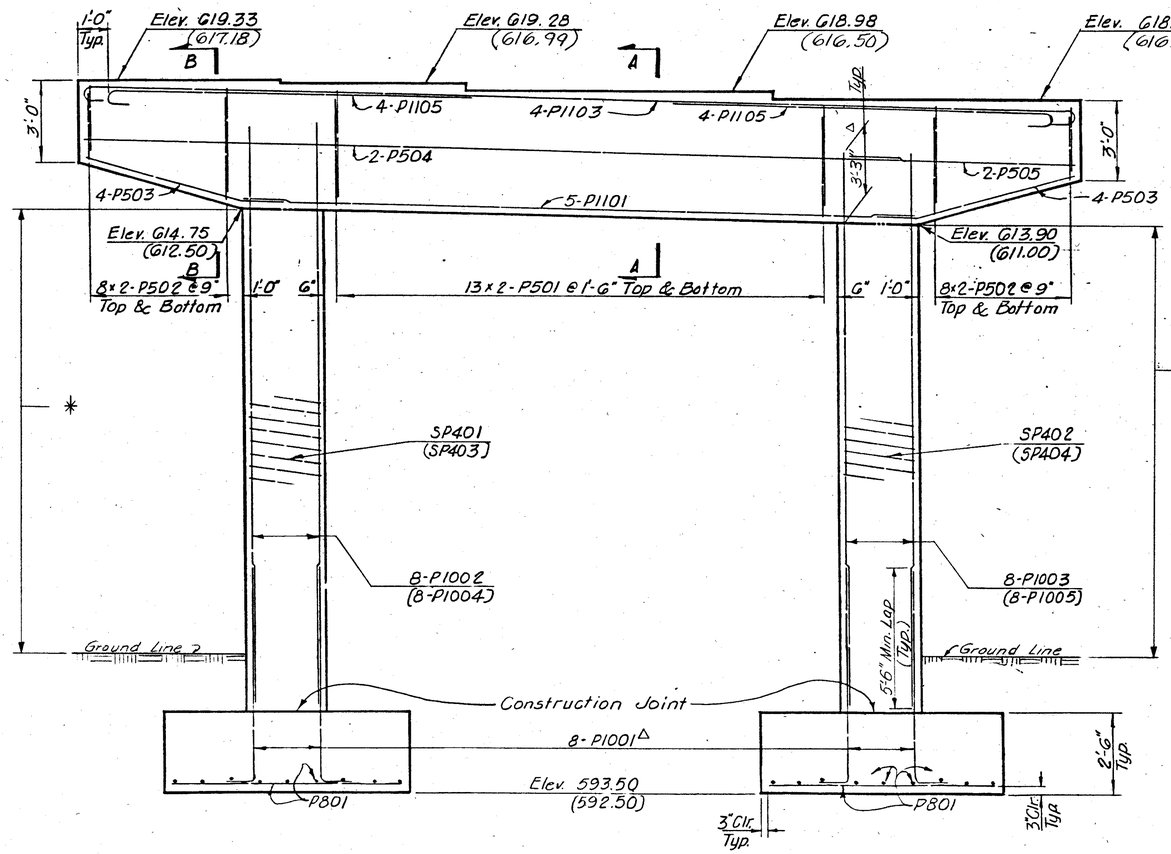
SECTION B-B, PIER NO. 2



SECTION A-A

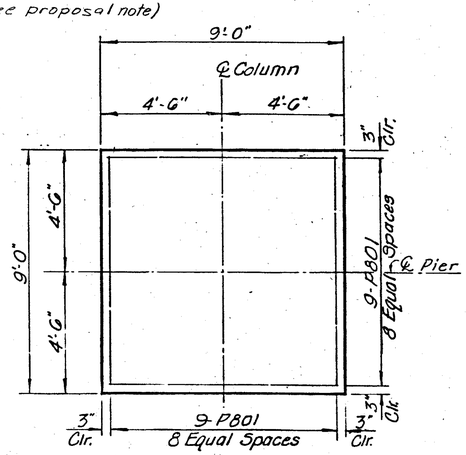


SECTION B-B, PIER NO. 1



ELEVATION

* △ Seal concrete surfaces (Piers 1 & 2) (See proposal note)



TYPICAL FOOTING PLAN

NOTES:

( ) = Pier No. 2 dimensions, elevations and bar marks. Unless so indicated Pier No. 2 dimensions, etc. are the same as those for Pier No. 1.

For location of the WORK POINT, see "framing plan", sheet 8 11.

BRIDGE SEAT REINFORCING: Reinforcing steel in the vicinity of the bridge seat shall be accurately placed to avoid interference with the drilling of anchor bar holes.

6 / 11

VOGT, IVERS. & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

PIERS NO. 1 & NO. 2

BRIDGE NO. HAM-126-1497
S. R. 126 UNDER
RAMP P

HAMILTON COUNTY

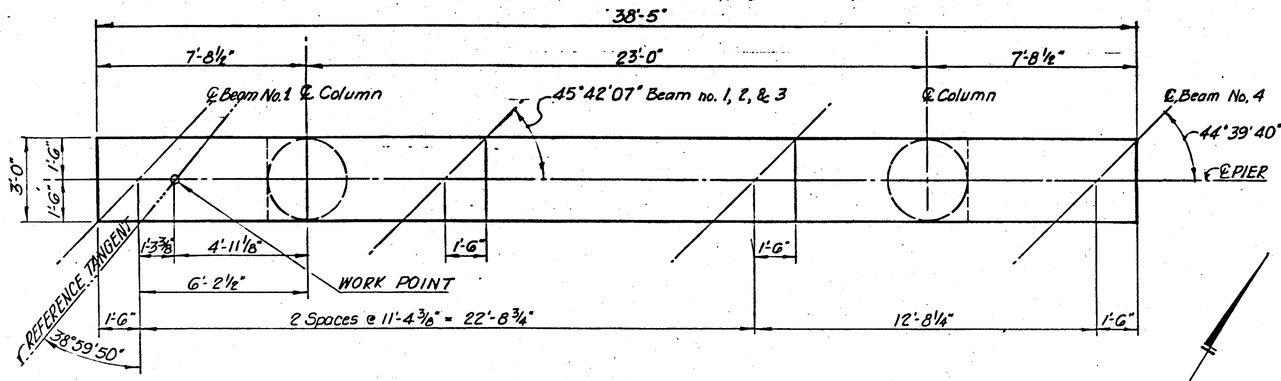
STA. 125 + 69.32 to
STA. 128 + 04.94

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.W.S.	D.W.S.	D-W-M	S.S.C.	H.I.	5-21-71	△ BALUE ENG. 1/86

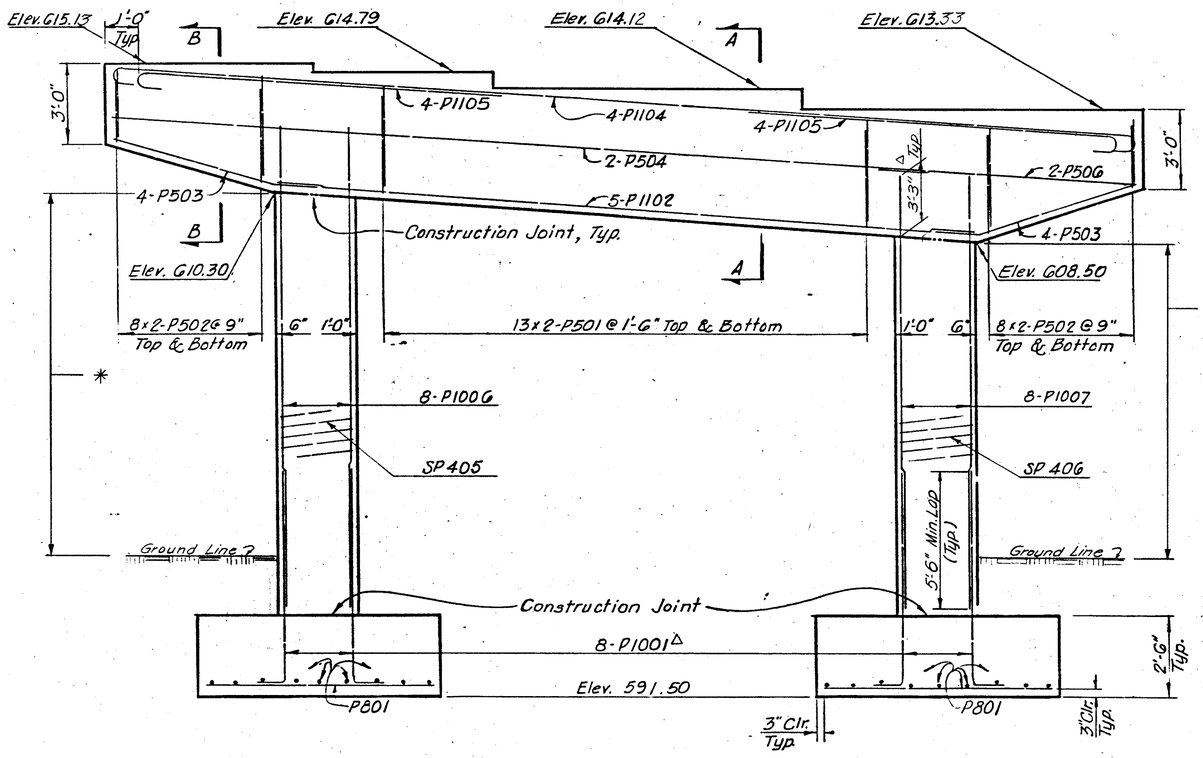
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

710
787

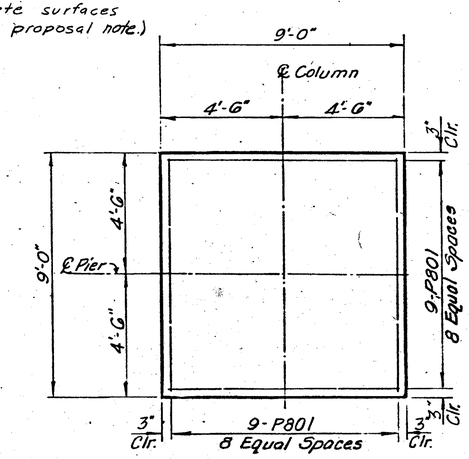
HAM- 75 - 9.93
HAM-126-13.00



CAP PLAN



ELEVATION



TYPICAL FOOTING PLAN

NOTES:

Sections A-A & B-B are similar to Sections A-A & B-B (Pier No.1), sheet 6/11
All dimensions are the same.
For location of WORK POINT, see "framing plan", sheet 8/11.

7/11

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

PIER NO. 3

BRIDGE NO. HAM-126-1497
S. R. 126 UNDER
RAMP P

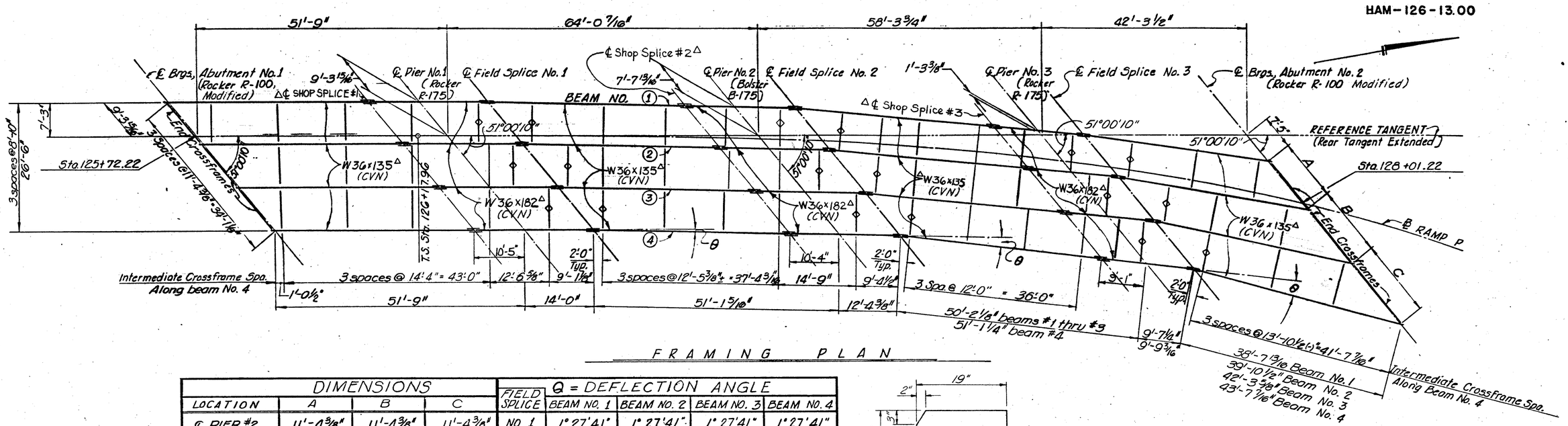
HAMILTON COUNTY

STA. 125 + 69.32 to
STA. 128 + 04.94

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.W.S.	D.W.S.	D.W.M.	S.S.C.	W.	5-21-71	Δ BALVE ENG. 1/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

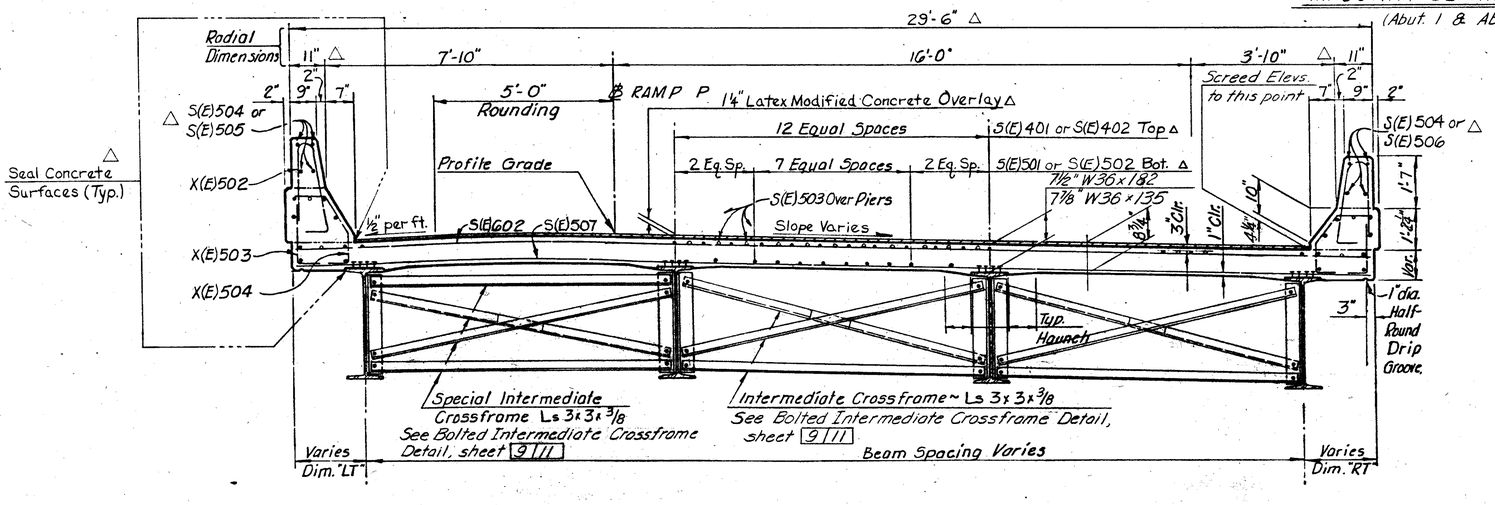
HAM- 75 - 9.93
HAM-126-13.00



FRAMING PLAN

DIMENSIONS				℄ = DEFLECTION ANGLE				
LOCATION	A	B	C	FIELD SPLICE	BEAM NO. 1	BEAM NO. 2	BEAM NO. 3	BEAM NO. 4
℄ PIER #2	11'-4 3/8"	11'-4 3/8"	11'-4 3/8"	NO 1.	1°27'41"	1°27'41"	1°27'41"	1°27'41"
℄ PIER #3	11'-4 3/8"	11'-4 3/8"	12'-8 1/4"	NO. 2	3°50'22"	3°50'22"	3°50'22"	4°52'49"
℄ BRGS. ABUT. #2	13'-0"	14'-6"	14'-6 13/16"	NO. 3	3°26'18"	5°01'02"	7°47'07"	8°04'57"

MASONRY BEARING PLATES (Abut. 1 & Abut. 2)



△TRANSVERSE SECTION

WELDED ATTACHMENT of supports for concrete deck finishing machine may be made to areas of the fascia stringer flanges designated "Compression." Attachments shall not be made to areas designated "Tension." Fillet Welds to compression flanges shall be not closer than 1" from edge of flange, be not more than 2" long and be not smaller than the minimum size required by AASHTO.

NOTES

DECK SLAB DEPTH: The distance shown from top of deck slab to top of steel beam is the design dimension. The quantity of deck concrete to be paid for shall be based on this dimension even though deviation from it may be necessary because the top flange of the beam may not have the exact camber or conformation required to place it parallel to the finished grade.

A HAUNCH WIDTH of 9" shall be used for computing quantity of concrete. However, the haunch width may vary between 6" and 12" provided that the slope shall be not more than 1:4 for a haunch less than 9" in width.

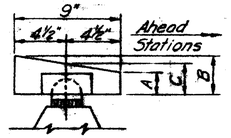
△"(E)" denotes epoxy coated reinforcing bar.

◇ indicates special intermediate crossframe (4 angles).

FOR END DAM & END CROSSFRAME details & notes, reference is made to Std. Dwg. SD-1-69, sheets 1 & 2 of 4, and Strip Seal Details, Sheets 488 A,B,C&D.

Use of split type extrusion at joint upturns is optional.

△DIMENSIONS	℄ Brgs. Abut.#1	℄ Pier #1	℄ Field Splice#1	℄ Pier #2	℄ Field Splice#2	℄ Pier #3	℄ Field Splice#3	℄ Brgs. Abut.#2
"LT"	1'-6"	1'-6"	1'-6"	2'-1 3/8"	2'-0"	2'-11 1/4"	2'-7 7/8"	1'-11 3/8"
"RT"	1'-6"	1'-6"	1'-7"	2'-8 5/8"	2'-0 3/4"	2'-5"	3'-0"	2'-9 1/4"



	A	C	B
ABUT 1	2 11/32"	2½"	2 21/32"
PIER 1	3 11/32"	3½"	3 21/32"
PIER 2	3 11/32"	3½"	3 21/32"
PIER 3	3 11/32"	3½"	3 21/32"
ABUT 2	2 11/32"	2½"	2 21/32"

BEVELED ROCKER OR BOLSTER
(For additional details see Std. Dwg. RB-1-55)

8 / 11

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

SUPERSTRUCTURE DETAILS

BRIDGE NO. HAM-126-1497
S. R. 126 UNDER RAMP P

HAMILTON COUNTY
STA. 125 + 69.32 to STA. 128 + 04.94

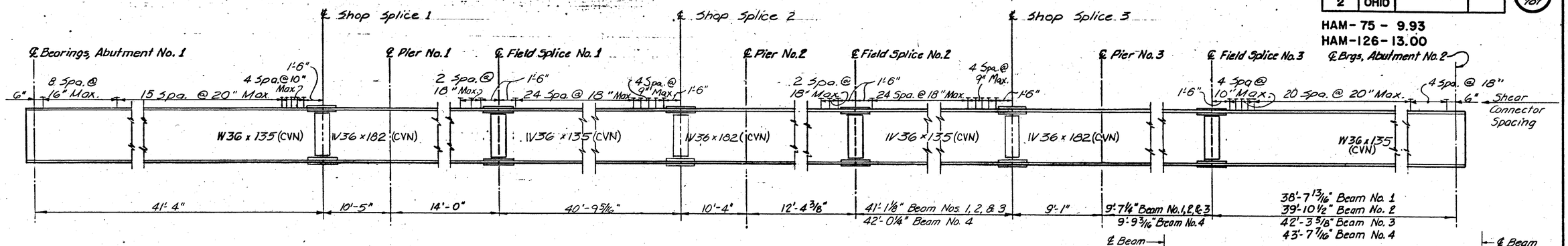
DESIGNED	DRAWN	TRACED	CHECKED	APPROVED	DATE
V.K.	D.W.M.	—	S.S.C.		5-21-71

△ BALVE ENG. 1/86

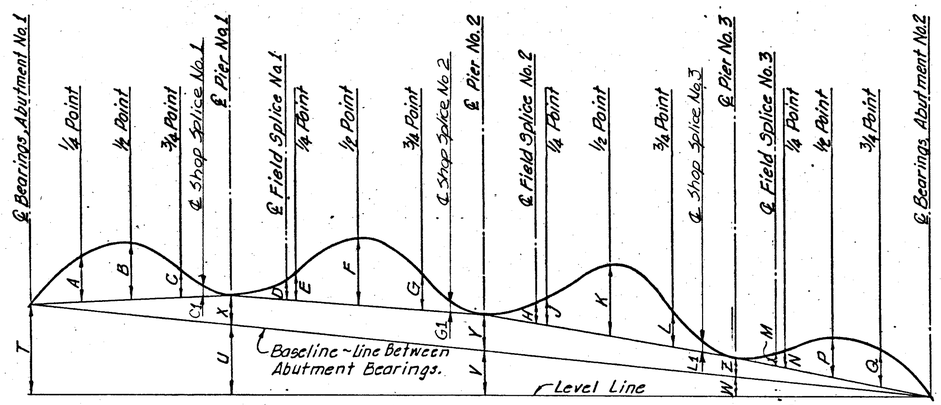
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

112
187

HAM-75 - 9.93
HAM-126-13.00



TYPICAL BEAM ELEVATION



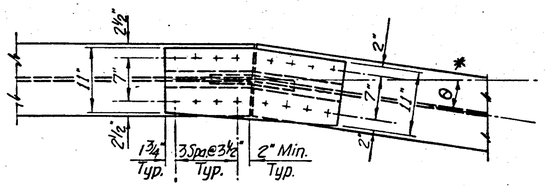
CAMBER DIAGRAM

△ DEFLECTION & CAMBER

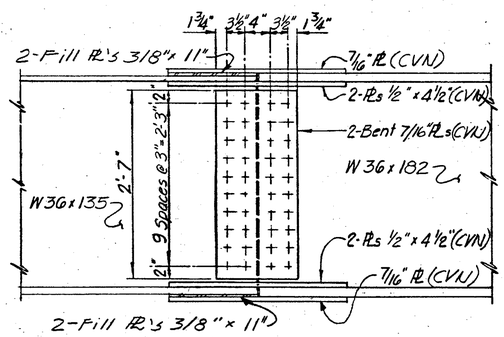
LOCATION →	1/4 Pt. A	1/2 Pt. B	3/4 Pt. C	SS1 C1	F51 D	1/4 Pt. E	1/2 Pt. F	3/4 Pt. G	SS2 G1	F52 H	1/4 Pt. J	1/2 Pt. K	3/4 Pt. L	SS3 L1	F53 M	3/4 Pt. N	1/2 Pt. P	3/4 Pt. Q
Deflection due to weight of steel	1/32	1/32	1/32	0	1/32	1/32	1/16	1 1/32	1/32	0	1/32	1/32	1/32	0	0	1/32	1/16	1/32
Deflection due to remaining dead load	7/32	1/4	3/32	1/16	5/32	3/16	11/32	3/16	3/32	1/16	1/8	7/32	1/8	1/32	3/32	1/8	9/32	1/4
Adjustment req'd for Vert. & Horiz. curves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+1/16	-1/8	-5/16	-1/4
Required shop camber	1/4	9/32	1/8	1/16	3/16	7/32	13/32	1/8	1/8	1/16	5/32	1/4	3/32	1/32	1/32	1/32	3/16	1/32

DIMENSIONS

BEAM NO.	T	U	V	W	X	Y	Z
1	7'-7"	5'-10 5/16"	3'-8 1/4"	1'-7 1/4"	-0 3/16"	-0 3/32"	+0 13/32"
2	7'-11 7/8"	6'-2 3/16"	3'-10 7/8"	1'-8 11/16"	+0 1/32"	-0 1/8"	-0 13/32"
3	8'-9 1/2"	6'-9 29/32"	4'-4 3/16"	1'-11 21/32"	+0 3/16"	+0 1/16"	+0 1/16"
4	9'-7 3/32"	7'-5 19/32"	4'-9 17/32"	2'-2 9/32"	+0 13/32"	+0 21/32"	-0 1/16"



PLAN

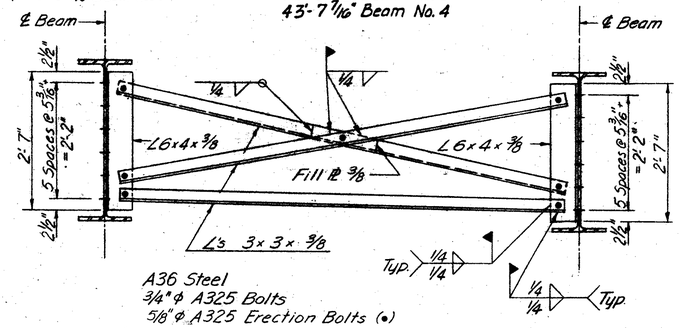


ELEVATION

TYPICAL FIELD & SHOP SPLICE

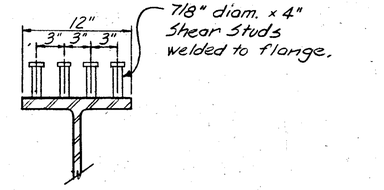
* Shop Splice Plates are not bent, ∴ Angle θ = 0°

Note: All field and shop splice material except fill plates shall be CVN.



BOLTED INTERMEDIATE CROSSFRAME

(Special Intermediate Crossframe similar except for added 'horizontal' angle @ top)



△ TYPICAL SHEAR CONNECTOR DETAIL

STEEL NOTCH TOUGHNESS REQUIREMENT (CHARPY V-NOTCH)

Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements as specified in 711.01 of CMS.

NOTES:

High strength bolts shall be 1" diameter A325 unless otherwise noted.
For angle θ, see sheet 8 / 11.
For details & notes not shown, reference is made to Standard Drawing SD-1-69, sheets 3 & 4.
ERECTION BOLTS: Hole diameter in the crossframes and angle stiffeners shall be respectively 1/16" and 1/4" larger than the diameter of the erection bolts. Unless replaced by permanent high strength bolts, erection bolts shall remain in place. Lock washers shall be furnished for other than fully torqued high strength erection bolts. Bolts shall be furnished as part of 513.

In lieu of erection bolts and at the option of the Contractor, alternative means of temporary bracing may be used subject to the approval of the Director (501.06).

9 / 11

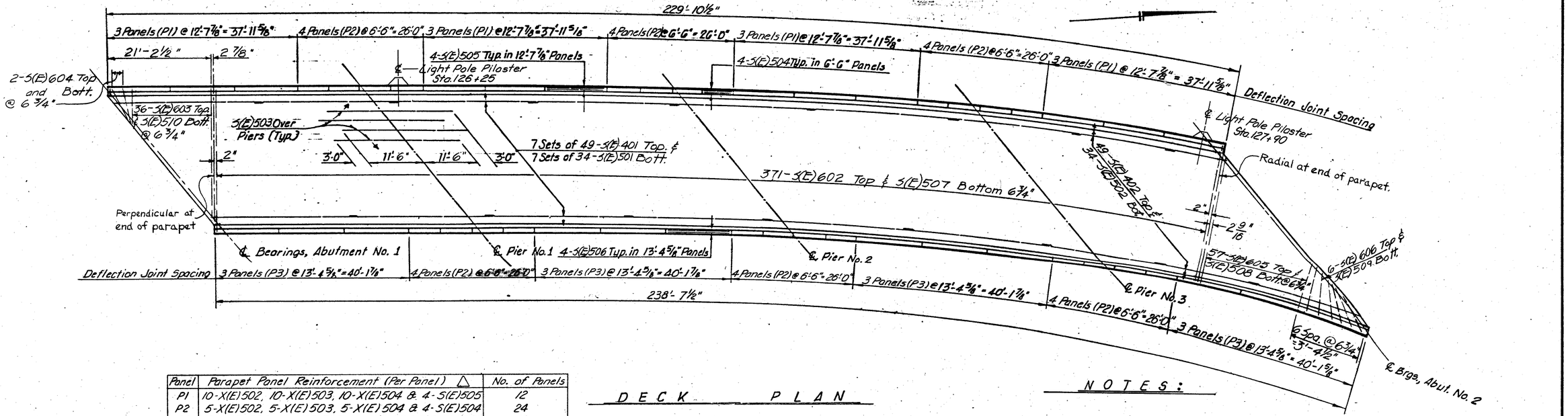
VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

SUPERSTRUCTURE DETAILS
BRIDGE NO. HAM-126-1497
S. R. 126 UNDER
RAMP P
HAMILTON COUNTY
STA. 125 + 69.32 to
STA. 128 + 04.94

DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE	REVISED
D.W.S.	D.W.M.	D.W.M.	J.R.P.	R.	5-21-71	△ BATHE ENG 7/80

FED. AID DIVISION	STATE	PROJECT		
2	OHIO	-		

HAM - 75 - 9.93
HAM - 126 - 13.00



Panel	Parapet Panel Reinforcement (Per Panel) △	No. of Panels
P1	10-X(E)502, 10-X(E)503, 10-X(E)504 & 4-S(E)505	12
P2	5-X(E)502, 5-X(E)503, 5-X(E)504 & 4-S(E)504	24
P3	10-X(E)502, 10-X(E)503, 10-X(E)504 & 4-S(E)506	12

Space X(E)502, X(E)503, & X(E)504 @ 1'-6" Max.

△ SCREED ELEVATIONS *

	LOCATION	WEST CURB Station	WEST CURB Elev.	EAST CURB Station	EAST CURB Elev.
SPAN NO. 1	℄ Bearings, Abutment No. 1	125+66.35	626.00	125+87.81	625.67
	¼ Point	125+79.29	625.61	126+00.75	625.19
	½ Point	125+92.23	625.18	126+13.68	624.68
	¾ Point	126+05.16	624.71	126+26.62	624.13
SPAN NO. 2	℄ Pier No. 1	126+18.10	624.26	126+39.56	623.58
	¼ Point	126+34.19	623.76	126+56.17	622.94
	½ Point	126+50.28	623.25	126+72.78	622.29
	¾ Point	126+66.37	622.68	126+89.39	621.58
SPAN NO. 3	℄ Pier No. 2	126+82.47	622.10	127+06.00	620.87
	¼ Point	126+97.74	621.61	127+20.12	620.32
	½ Point	127+13.02	621.13	127+34.13	619.78
	¾ Point	127+28.29	620.59	127+48.37	619.18
SPAN NO. 4	℄ Pier No. 3	127+43.57	620.05	* 127+62.50	618.57
	¼ Point	127+55.69	619.66	127+79.19	617.90
	½ Point	127+67.82	619.29	127+95.88	617.25
	¾ Point	127+79.94	618.87	128+12.57	616.57
	℄ Bearings, Abutment No. 2	127+92.07	618.42	128+29.25	615.93

* Station not located over pier 3.
*At top of P.C. Concrete

DECK PLAN

Abutment No. 1
Joint setting table

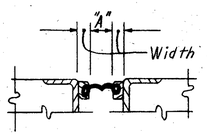
Temp °F	0°	20°	40°	60°	80°	100°
Dim. "A"	2 7/16"	2 5/16"	2 1/8"	2"	1 7/8"	1 11/16"

Strip seal gland to be Watson-Bowman S-300 or D.S. Brown SS-300.

Abutment No. 2
Joint setting table

Temp °F	0°	20°	40°	60°	80°	100°
Dim. "A"	2 15/16"	2 3/4"	2 5/8"	2 1/2"	2 3/8"	2 1/4"

Strip Seal gland to be Watson-Bowman S-400 or D.S. Brown SS-400.



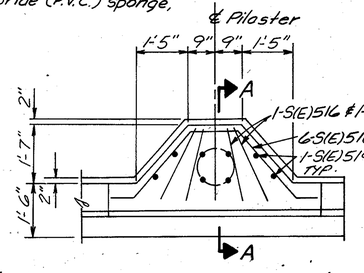
PARTIAL SECTION THROUGH EXPANSION JOINT SHOWING DIMENSION "A"

For details not shown, see Strip Seal Details, Sheets 488A, B, C & D.

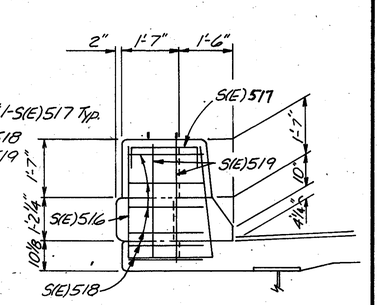
NOTES:

PLACE TRANSVERSE REINFORCING STEEL radially with spacing measured along centerline of bridge.

PREFORMED EXPANSION JOINT FILLER in the railing parapet deflection joints may be either ¼" gray sponge rubber, or ¼" gray cellular polyvinyl chloride (P.V.C.) sponge.



PLAN



SECTION A-A

△ LIGHT POLE PILASTER

For additional information refer to Std. Construction Dwgs HL-3 & HL-4

△ "(E)" denotes epoxy coated reinforcing bar:
△ The screed elevations shown have been obtained by adding the dead load deflection due to the weight of: concrete slab, latex modified concrete overlay, bridge parapet future wearing surface, and steel beams to the required final elevations.

10 / 11

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS CINCINNATI ARCHITECTS

DECK PLAN
BRIDGE NO. HAM-126-1497
S. R. 126 UNDER
RAMP P
HAMILTON COUNTY
STA. 125 + 69.32 to
STA. 128 + 04.94

DESIGNED	DRAWN	TRACED	CHECKED	REVISED DATE	△ DATE
V K	D.W.M.	—	J.R.P.	5-21-71	FILED ENG. 1/66

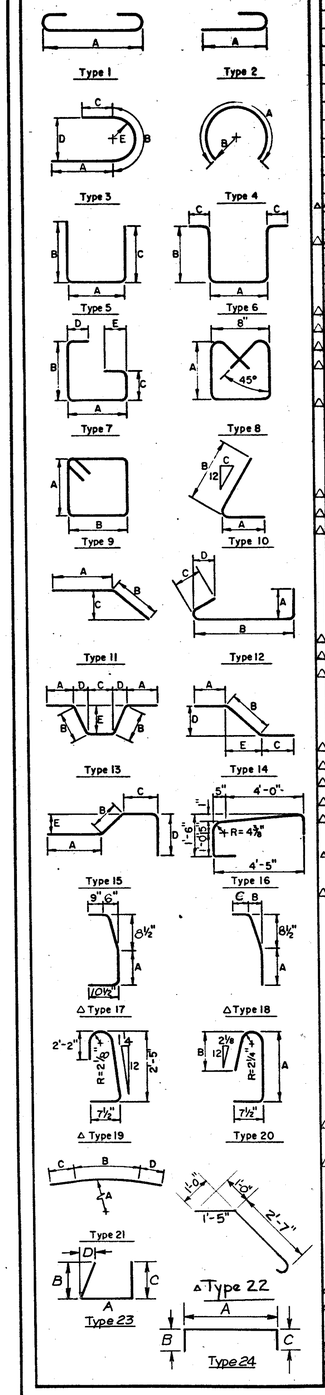
REINFORCING STEEL LIST

FED. RD. DIVISION	STATE	PROJECT		
2	OHIO			

714
707

HAM-75 - 9.93
HAM-126-13.00

BENDING DIAGRAM



ABUTMENT NO.1 ~ RAMP P

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
A501	12	3-6	44	S					
A502	24	8-3	207	10	0-7½	7-9	5¼		
A503	40	8-11	372	S	1-8	3-9	3-9		
A504	16	7-0	117	15	0	1-7	3-11	1-7	0-7¾
A505	18	9-6	178	S					
A506	70	9-0	657	S	3-5	2-11	2-11		
A507	18	30-0	563	S					
△ A508	1	37-6	39	S					
A509	16	11-0	184	S					
△ A(E)510	1	36-3	38	S					
A511	6	5-0	31	S					
A512	4	7-3	30	S					
A513	20	5-5	113	S	1-8	2-0	2-0		
△ A(E)514	16	2-8	45	2	2-1				
△ A(E)515	14	5-3	77	19					
△ A(E)516	16	4-4	72	S					
△ A517	4	10-3	43	11	8-2	2-2	0-7		
A518	4	11-8	49	S					
△ A519	12	6-3 to 9-7	99	S	1-2	2-8 to 4-4	2-8 to 4-4	2 Sets of 6. Vary B&C by 4".	
A520	8	17-8	147	S					
A521	8	4-9	40	15	0	1-7	1-8	1-7	0-7¾
△ A(E)522	16	4-7	76	S					
△ A(E)523	14	3-0	44	S					
△ A(E)524	16	15-8	261	S					
A601	24	8-6	306	S	0-10	7-10			
A602	48	4-0	288	S					
A603	34	11-1	566	S	1-5	5-0	5-0		
A604	34	5-1	260	S	1-5	2-0	2-0		
A(E)605	34	6-3	319	S	0-11	2-10	2-10		
△ A(E)606	14	3-9	79	18	2-5	0-6	0-9		
△ A607	Not Used								
△ A608	14	18-0 to 18-6	384	S	1-2	8-7 to 8-10	8-7 to 8-10	2 Sets of 7. Vary B&C by ½".	
△ A(E)609	2	3-9	11	18	2-5	0-6	0-9		
△ A(E)610	2	3-8	11	18	2-5	0-5	0-8		
△ A(E)611	2	3-8	11	18	2-5	0-4	0-8		
△ A(E)612	2	3-7	11	18	2-5	0-3	0-7		
△ A(E)613	8	3-7	43	18	2-5	0-2	0-7		
△ A(E)801	18	4-11	238	22					
△ Total Abutment No. 1			6051	(Includes 1373 Lbs Epoxy Coated.)					

ABUTMENT NO.2 ~ RAMP P

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
B501	32	8-3	275	5	5-4	1-7	1-7		
B502	21	6-11	152	5	6-5	0-7½	0		
B503	11	8-11	102	5	8-5	0-7½	0		
B504	32	8-4	278	5	3-5	2-7	2-7		
B505	13	30-0	407	5					
B506	16	20-0	334	5					
B507	10	16-0	167	5					
△ B(E)508	2	26-2	55	5					
B509	2	7-8	16	5					
△ B(E)510	2	25-8	54	5					
B511	7	5-0	37	5					
B512	17	10-5	185	9	2-0	3-0			
B513	6	15-0	94	5					
B514	6	21-8	136	5					
B515	4	7-3	30	5					
B516	2	15-8	33	5					
△ B517	5	8-7	45	5	1-2	3-10	3-10		
△ B518	6	7-5 to 8-3	49	5	1-2	3-3 to 3-8	3-3 to 3-8	Vary B&C by 1".	
△ B(E)519	16	2-8	45	2	2-1				
△ B(E)520	15	5-3	82	19					
△ B(E)521	16	4-4	72	5					
△ B(E)522	6	10-0	83	5					
△ B523	6	13-8	86	5					
△ B(E)524	16	4-7	76	5					
△ B(E)525	15	3-0	47	5					
△ B(E)526	8	11-8	97	5					
△ B(E)527	8	19-8	164	5					
B601	21	14-0	442	5	5-4	2-7	6-5		
B602	11	16-0	264	5	5-4	2-7	8-5		
B603	46	11-1	766	5	1-5	5-0	5-0		
B604	46	6-7	455	5	1-5	2-9	2-9		
B(E)605	46	6-3	432	5	0-11	2-10	2-10		
B606	Not Used								
△ B607	6	26-2 to 27-0	240	5	1-2	12-8 to 13-1	12-8 to 13-1	Vary B&C by 1"	
△ B608	9	21-2 to 21-10	291	5	1-2	10-2 to 10-6	10-2 to 10-6	Vary B&C by ½".	
△ B609	1	21-0	32	5	1-2	10-1	10-1		
△ B(E)610	16	3-9	90	18	2-5	0-6	0-9		
△ B(E)611	2	3-8	11	18	2-5	0-5	0-8		
△ B(E)612	2	3-8	11	18	2-5	0-4	0-8		
△ B(E)613	2	3-7	11	18	2-5	0-3	0-7		
△ B(E)614	8	3-7	43	18	2-5	0-2	0-7		
B801	14	28-0	1047	5					
B802	6	18-0	288	5					
B803	6	12-0	192	5					
△ B(E)804	18	4-11	236	22					
△ Total Abutment No. 2			8052	(Includes 1526 Lbs. Epoxy Coated)					
△ Total Abutments			14103	(Includes 2899 Lbs Epoxy Coated)					

SUPERSTRUCTURE

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
△ S(E)501	343	30-0	6874	S					
△ S(E)502	49	27-5 to 38-8	1049	S	37 Bars - Vary by 3" each; 6 Bars @ 27'5" and 6 Bars @ 36'8"				
△ S(E)501	238	30-0	7447	S					
△ S(E)502	34	29-7 to 38-4	1240	S	30 Bars - Vary by 3½" each; 2 Bars @ 29'7" and 2 Bars @ 38'4"				
S(E)503	80	26-0	2169	S					
△ S(E)504	96	6-2	617	S					
△ S(E)505	48	12-4	617	S					
△ S(E)506	48	13-0	651	S					
△ S(E)507	371	29-2	11286	S					
△ S(E)508	57	3-6 to 27-5	919	S	57 Bars - Vary 5⅛" each.				
△ S(E)509	6	3-5	21	S					
△ S(E)510	36	2-10 to 27-1	562	S	36 Bars - Vary by 8 1/16" each.				
△ S(E)602	371	29-2	16253	S					
△ S(E)603	36	2-10 to 27-1	809	S	36 Bars - Vary by 8 1/16" each.				
△ S(E)604	4	3-0	18	S					
△ S(E)605	57	3-6 to 27-5	1323	S	57 Bars - Vary by 5⅛" each.				
△ S(E)606	6	3-5	31	S					
△ X(E)502	360	5-3	1890	19					
△ X(E)503	360	2-5	907	5	0-10½	1-8	0-0		
△ Y(E)504	360	3-2	1189	17	0-10½				
△ S(E)516	8	8-5	70	23	2-4	3-2	3-2	6½"	
△ S(E)517	8	2-10	24	24	1-10	7"	7"		
△ S(E)518	12	7-3	91	13	6"	2-7	1-4	1-10	1-10
△ S(E)519	8	3-2	26	Str.					
Total Superstructure			56083	△					

PIER NO.1

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
P501	52	7-7	411	5	1-10	3-0	3-0		
P502	64	7-1	473	5	1-10	2-9	2-9		
P503	8	7-7	63	11	6-0	1-7	0-6		
P504	2	30-0	63	5					
P505	2	8-6	18	5					
P801	36	8-6	817	5					
△ P1001	16	9-3	637	5	7-9	1-9½	0		
P1002	8	22-0	757	5					
P1003	8	21-0	723	5					
P1101	5	25-0	664	5					
P1103	4	40-0	850	1	36-10				
P1105	12	14-7	930	2	13-0				
Sub-Total			6406						

PIER NO.2

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
P501	52	7-7	411	5	1-10	3-0	3-0		
P502	64	7-1	473	5	1-10	2-9	2-9		
P503	8	7-7	63	11	6-0	1-7	0-6		
P504	2	30-0	63	5					
P505	2	8-6	18	5					
P801	36	8-6	817	5					
△ P1001	16	9-3	637	5	7-9	1-9½	0		
P1004	8	20-6	706	5					
P1005	8	19-0	654	5					
P1101	5	25-0	664	5					
P1103	4	40-0	850	1	36-10				
P1105	12	14-7	930	2	13-0				
Sub-Total			6286						

PIER NO.3

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
P501	52	7-7	411	5	1-10	3-0	3-0		
P502	64	7-1	473	5	1-10	2-9	2-9		
P503	8	7-7	63	11	6-0	1-7	0-6		
P504	2	30-0	63	5					
P506	2	9-8	20	5					
P801	36	8-6	817	5					
△ P1001	16	9-3	637	5	7-9	1-9½	0		
P1006	8	19-1	657	5					
P1007	8	17-6	602	5					
P1102	5	26-0	690	5					
P1104	4	41-3	877	1	38-1				
P1105	8	14-7	620	2	13-0				
Sub-Total	~		5930						
Total Piers ~			20545	(Including Spirals) △					

NOTES

△ 2. "(E)" denotes epoxy coated reinforcing bar.
△ 3. Reinforcing bars not revised by BALKE (△) shall have a minimum lap of 30 bar diameters.

MARK	NO.	LENGTH (HEIGTH)	WEIGHT
SPIRALS - Core Diam. 32" c/c - Pitch 4½" c/c - Other details in accordance with C.R.S.I. standard practice			
		PIER NO.1	
SP401	1	18-11	355
SP402	1	18-1	340
		PIER NO.2	
SP403	1	17-8	333
SP404	1	16-2	306
		PIER NO.3	
SP405	1	16-5	310
SP406	1	14-8	279
Total Spirals			1,923

Note:
△ 4. Refer to CMS sections 106.03, 700, 709.01 thru 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structures by the additional steel spliced in accordance with 509.08.

11/11

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

REINFORCING STEEL LIST

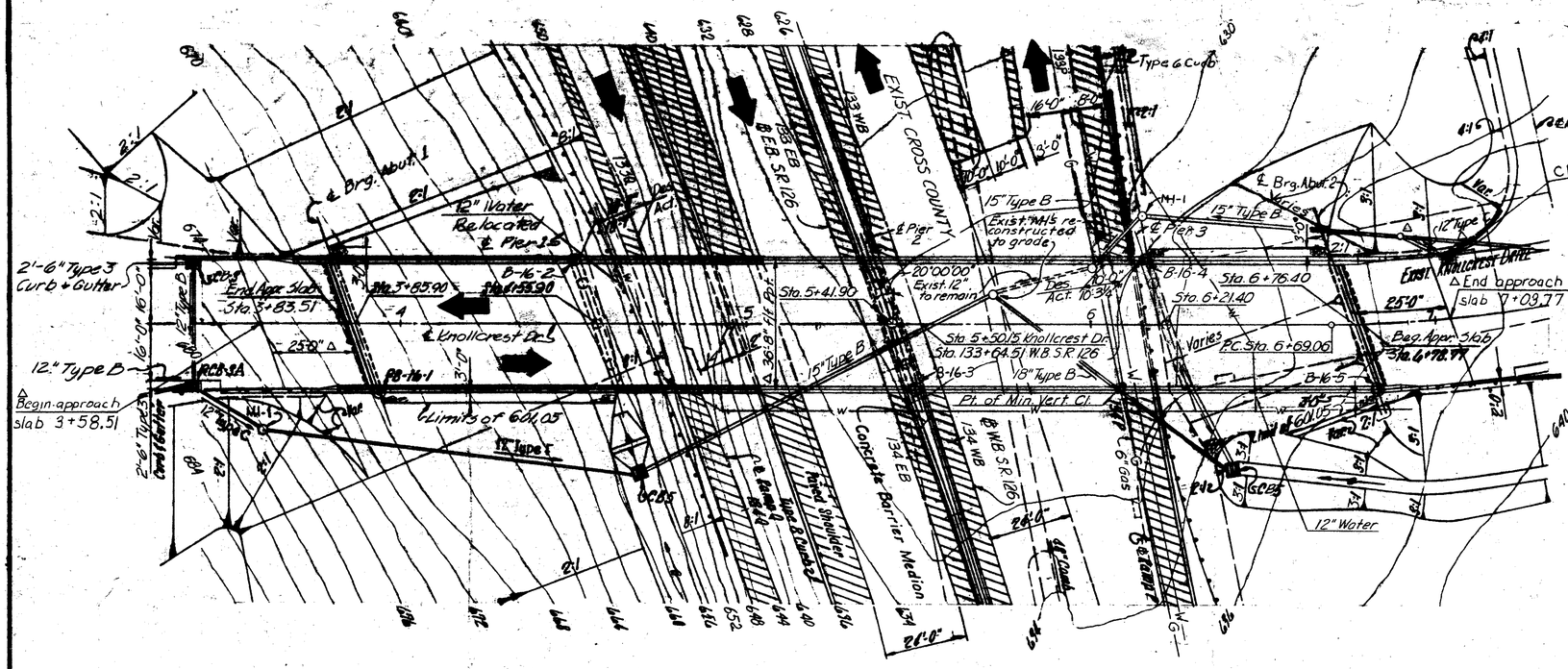
BRIDGE NO. HAM-126-1497
S.R. 126 UNDER
RAMP P

HAMILTON COUNTY
STA. 125 + 69 32 to
STA 128 + 04 94

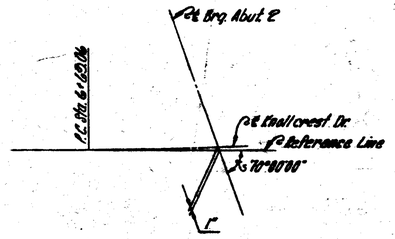
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
DWS	TDS	-	SSC	[illegible]	5-21-71	△ BALKE ENG. 1/86

2	OHIO			715 787

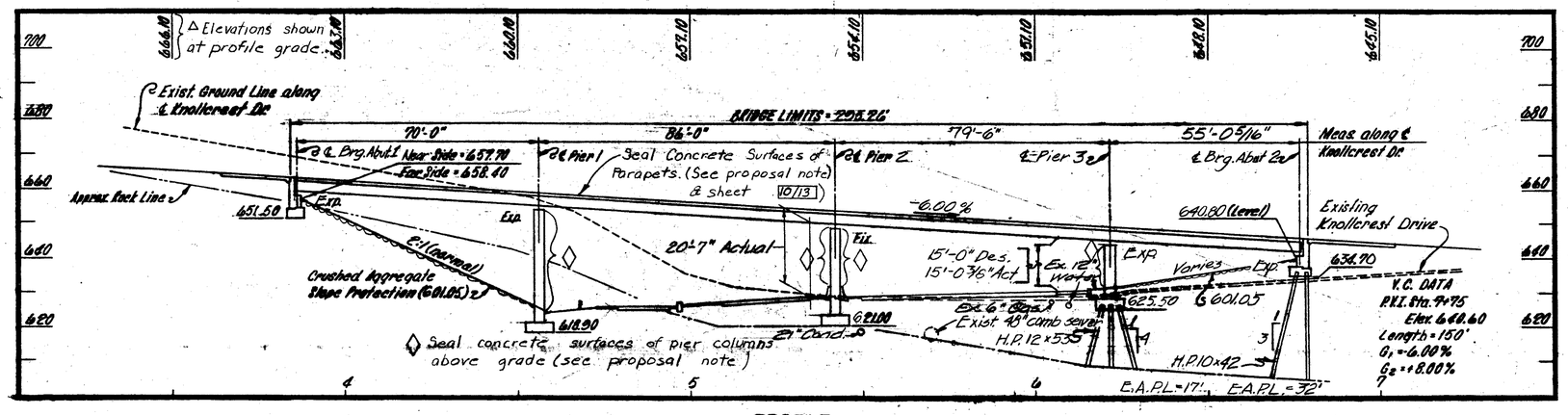
HAM-75-2.95
HAM-126-15.04



PLAN



REFERENCE LINE LAYOUT



PROFILE

CURVE DATA WB S.R. 126
P.I. Sta. 135+12.70
L_c = 27.95'
L_s = 300.00'
D_c = 3°00'00"
Q = 4°30'00"
R = 1909.86'
T = 314.41'
Δ = 9°49'57" Rt.

CURVE DATA EB S.R. 126
P.I. Sta. 135+86.66
L_c = 27.95'
L_s = 300.00'
D_c = 3°00'00"
Q = 4°30'00"
R = 1909.86'
T = 314.41'
Δ = 9°49'57" Rt.

CURVE DATA RAMP P
P.I. Sta. 134+22.66
L_c = 817.00'
D_c = 2°00'00"
R = 2864.79'
T = 458.66'
Δ = 16°20'24" Lt.

CURVE DATA RAMP Q
P.I. Sta. 132+91.92
L_c = 437.00'
D_c = 2°00'00"
R = 2864.79'
T = 218.92'
Δ = 8°44'24" Rt.

CURVE DATA KNOLLCREST DR.
P.I. Sta. 8+21.27
L_c = 282.15'
D_c = 16°22'18"
R = 350.00'
T = 152.21'
Δ = 47°00'26" Lt.

Earthwork limits shown are approximate Actual slopes shall conform to plan cross-sections.

TRAFFIC DATA Δ

	2006 A.D.T.	2006 A.D.T.T.
Northbound	1164	116
Southbound	1216	122

⊕ Drive Sample and/or Core Boring

PROPOSED STRUCTURE

SPANS: 70'-0", 86'-0", 79'-6", 55'-05/16"
Δ DESIGN LOADING: HS 20-44 Case II
SKEW: 20°00'00" R.F.
ALIGNMENT: Tangent & 16°22'18" curve left
Δ WEARING SURFACE: 1¼" Latex Modified Concrete
Δ APPROACH SLABS: AS-1-81 (25'-0" Long)
SUPERELEVATION: Varies, .0156 ft/ft Max.
Δ ROADWAY: 56'-8" Face To Face of Parapets
Δ TYPE: Continuous Rolled Steel Beam With Composite Reinforced Concrete Deck And Reinforced Concrete Substructures.

VOGT, IVERS, & ASSOCIATES
ENGINEERS CINCINNATI ARCHITECTS CHICAGO
1 / 13

SITE PLAN

BRIDGE NO. HAM-126-15.16
S.R. 126, RAMP P & RAMP Q UNDER KNOLLCREST DRIVE
HAMILTON COUNTY STA. 3+83.51 to STA. 6+78.77

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISIONS
AERIAL	T.W.I.	T.W.I.	T.W.I.	AY	Δ BALE ENGRS 11/06

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

HAM-75-9.93
HAM-126-13.00

ESTIMATED QUANTITIES

△ Revised by TMB 12-30-85
Checked by SJA 2-26-86

ITEM	TOTAL	UNIT	DESCRIPTION	ABUIMENTS	PIERS	SUPER-STRUCTURE	GENERAL	CHECKED BY	DATE
503	294	Cu. Yd.	Unclassified excavation	169	125			G.J.W.	10-22-71
503	110	Cu. Yd.	Rock Excavation	44	66			G.J.W.	10-22-71
503	Lump	Lump Sum	Cofferdams, cribs and sheeting				Lump		
△ 505	Lump	Lump Sum	Pile driving equipment mobilization				Lump		
507	270	Lin. Ft.	Steel piles, HP12x53		270			B.C.S.	10-21-71
507	510	Lin. Ft.	Steel piles, HP10x42	510				B.C.S.	10-21-71
△ 509	40282	Lb.	Reinforcing steel, Grade 60	8859	31423				
△ 511	330	Cu. Yd.	Class S concrete, superstructure			330		B.C.S.	10-20-71
511	106	Cu. Yd.	Class C concrete, pier caps and columns		106			H.J.Z.	10-21-71
511	111	Cu. Yd.	Class C concrete, abutments above footings	111				B.C.S.	10-20-71
511	110	Cu. Yd.	Class C concrete, footings	57	53			H.J.Z.	10-21-71
△ * * 513	344,413	Lb.	Structural steel (AISC Category I) (See Proposal Note)			344,413			
△ * * 514	344,413	Lb.	Field painting of New Structural Steel, System A			344,413			
518	54	Cu. Yd.	Porous backfill	54				H.J.Z.	10-22-71
518	67	Lin. Ft.	6" perforated, helical corrugated steel/△pipe, 707.01	67				G.J.W.	10-22-71
518	98	Lin. Ft.	6" non-perforated helical corrugated steel/△ pipe including specials, 707.01	98				G.J.W.	10-22-71
△ 518	2	Each	Scuppers including supports			2			
△ 518	26	Lin. Ft.	8" Pipe Horizontal Conductors, including specials			26			
△ 518	21	Lin. Ft.	8" Pipe Downspout including specials			21			
601	843	Sq. Yd.	Crushed aggregate slope protection				843	G.J.W.	10-22-71
507	16	Ea.	Pile Points		16				
△ 513	2415	Each	Welded Stud Shear Connectors			2415			
△ 516	88	Lin. Ft.	Structural Expansion Joints including Elastomeric Strip Seals	88					
△ 824	86364	Lbs.	Epoxy Coated Reinforcing Steel, Grade 60	3080		83284			
△ SPECIAL	828	Sq. Yds.	Sealing of Concrete Surfaces (See Proposal Note)	56	123	649			
△ 845	1152	Sq. Yds.	Latex Modified Concrete Overlay (1¼" Thick) (See Proposal Note)			1152			
△ * 511	330	Cu. Yds.	Class S Concrete, Superstructure, using shrinkage compensating cement 701.08			330			

△ *Alternate Bid Item.

△
* * Includes 3184 lbs. Structural Steel for the supports for the telephone ducts.
This shall be paid for by Cincinnati Bell, Inc.

△

ITEM 511: CLASS S CONCRETE, SUPERSTRUCTURE, USING SHRINKAGE COMPENSATING CEMENT, 701.08.

THE FOLLOWING RESTRICTIONS SHALL APPLY TO THE SUPERSTRUCTURE CONCRETE USING SHRINKAGE COMPENSATING CEMENT, 701.08.

1. CEMENT SHALL BE EXPANSIVE HYDRAULIC CEMENT, ASTM C845, TYPE K.
2. THE MAXIMUM WATER/CEMENT RATIO GIVEN FOR CLASS S CONCRETE IN 499.03 SHALL BE REVISED FROM 0.44 TO 0.50.
3. MAXIMUM SLUMP AT THE TIME AND PLACE OF CONCRETE PLACEMENT SHALL BE 6 INCHES.
4. CHEMICAL ADMIXTURES, WHEN REQUIRED BY 511.06, SHALL BE LIMITED TO 705.12 TYPE D.
5. MAXIMUM AMBIENT TEMPERATURE AT TIME OF PLACEMENT OF CONCRETE SHALL BE 80° F.
6. MEMBRANE CURING PER SS836 WILL NOT BE PERMITTED FOR ANY CONCRETE PLACED BETWEEN SEPTEMBER 1 AND MARCH 31. SUCH CONCRETE SHALL BE CURED BY METHOD (A) WATER CURING.
7. IF REQUIRED BY THE ENGINEER, THE SURFACE OF THE CONCRETE SHALL BE GIVEN A FOG SPRAY OF WATER. THIS MAY BE REQUIRED PRIOR TO EITHER WATER CURING OR MEMBRANE CURING IF WEATHER CONDITIONS DICTATE. EQUIPMENT SHALL BE ON HAND.

GENERAL NOTES

△

REFERENCE SHALL BE MADE TO THE FOLLOWING:

STANDARD DRAWINGS:

AS-1-81	DATED 11-27-81
BR-1	DATED 5-29-79
SD-1-69	DATED 6-12-69
RB-1-55	REV. 2-2-59

SUPPLEMENTAL SPECIFICATIONS:

836	DATED 11-12-85
824	DATED 10-8-82
845	DATED 2-25-86
953	DATED 8-21-80

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, 1983, INCLUDING THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:
DESIGN LOADING: HS 20-44, CASE II

DESIGN STRESSES:

CONCRETE, CLASS S	COMPRESSIVE STRENGTH: 4500 PSI (SUPERSTRUCTURE)
CONCRETE, CLASS C	UNIT STRESS 1333 P.S.I. (SUBSTRUCTURE)
REINFORCING STEEL	ASTM A615, A616, A617, GRADE 60, MINIMUM YIELD STRENGTH: 60,000 PSI. (SUPERSTRUCTURE)

REINFORCING STEEL	ASTM A615, A616 or A617 GRADE 60 UNIT STRESS 24,000 P.S.I. SPIRAL REINFORCEMENT MAY BE PLAIN BARS, ASTM A82 or A615 (SUBSTRUCTURE)
STRUCTURAL STEEL	ASTM A36 UNIT STRESS 20,000 P.S.I.
DECK PROT. METHOD	EPOXY COATED REINFORCING STEEL WITH 3" CONCRETE COVER OF WHICH 1-1/4" IS A LATEX MODIFIED CONCRETE OVERLAY.
BOLTS	1" DIAMETER HIGH STRENGTH STEEL BOLTS CONFORMING TO ASTM A325.

EMBANKMENT CONSTRUCTION: The embankment shall be constructed to the level of the subgrade for its full length in back of abutment 2. Excavation shall then be made for the abutment.
Piles Shall Be Driven To Refusal On Bedrock. Refusal Shall Be Considered As Attained By Penetrating Soft Bedrock With a Minimum Resistance Of 20 Blows Per Inch, Or Refusal Shall Be Considered As Attained After The Pile Has Contacted Hard Bedrock And The Pile Has Recieved At Least 20 Blows. The Design Load Is 35 Tons Per Pile For The Abutment Piles And 45 Tons Per Pile For The Pier Piles.
TELEPHONE CONDUIT: The contractor shall furnish and install the support angles for the Cincinnati Bell, Inc. conduit system. The cost of labor and materials shall be included in the unit price bid for Item 513 * Item 514 and is chargeable to Cincinnati Bell, Inc. The plastic ducts together with couplings, spacers, and anchors will be furnished by Cincinnati Bell, Inc.
See Sheet 8/13 * 9/13.

FOUNDATION BEARING PRESSURE: Abutment 1 footings are designed for a maximum bearing pressure of 5.0 tons per sq. ft. and Pier 1 and Pier 2 footings are designed for a maximum bearing pressure of 5.0 tons per sq. ft.

FOOTINGS of Abutment 1, Pier 1 and Pier 2 shall extend a minimum of 3 inches into bedrock or to the elevation shown, whichever is lower.

Item 507 - Pile Points: ..... , pier 3 piles shall be fitted with cast steel pile points.

UTILITY LINES: All expense involved in relocating (installing) the affected utility lines shall be borne by the Owner(s). The Contractor and Owner(s) are requested to cooperate by arranging their work in such a manner that inconvenience to either would be held to a minimum.

MAINTENANCE OF TRAFFIC: Two way traffic shall be maintained on existing Knollcrest Drive until such time as the Contractor has constructed and opened to traffic Temporary Road No. 5 as referred to on Sheet No. 17 of Roadway Plans.

△ SEALING OF CONCRETE SURFACES: The following concrete areas are to be sealed per Proposal Note:
- Pier columns adjacent to underpassing roads. See Sheets 1/13 5/13 6/13 7/13.
- Wingwall parapets. See Sheets 3/13 and 4/13.
- Superstructure parapets. See Sheet 10/13.

△ NOTE:
1. SUBSTRUCTURE REINFORCING BARS NOT REVISED BY BALKE (△) SHALL HAVE A MINIMUM LAP OF 30 BAR DIAMETERS.

VOGT, IVERS, & ASSOCIATES, INC. ENGINEERS CINCINNATI ARCHITECTS 2/13

ESTIMATED QUANTITIES & GENERAL NOTES
BRIDGE NO. HAM-126-1516
S.R. 126, RAMP P & RAMP Q
UNDER KNOLLCREST DRIVE
HAMILTON COUNTY STA. 3+83.51 to STA. 6+78.77

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED BALKE ENGRS 1/86
—	H.J.Z.	—	A.J. E.F.F.			

CALC. BY	HAMILTON COUNTY	OHIO	716-A
DATE	HAM-126-1516	FHWA REGION 5	787
CHKD. BY			
DATE			

HAM-75-9.93
HAM-126-13.00

GENERAL NOTES
PLAN REVISIONS BY BALKE ENGINEERS

REVISIONS WERE MADE TO SUBSTRUCTURE DRAWINGS TO INCORPORATE THE FOLLOWING:

- o REVISE PARAPETS TO STANDARD SAFETY PARAPET SHAPE.
- o PROVIDE EPOXY-COATED REINFORCEMENT IN CORROSION-PRONE CONCRETE AREAS.
- o SEAL CONCRETE SURFACES OF PIER COLUMNS.
- o NUMBER PILES AND ADD DETAIL NOTES.
- o REVISE ABUTMENTS TO RECEIVE FULL WIDTH APPROACH SLAB PER AS-1-81.
- o REPLACE SLIDING PLATE EXPANSION JOINTS WITH STRIP SEAL JOINTS
- o LENGTHEN PIER COLUMN TO FOOTING DOWELS AS REQUIRED BY AASHTO.

AT THE REQUEST OF THE OHIO DEPARTMENT OF TRANSPORTATION, ALL SUBSTRUCTURE REINFORCEMENT IS TO BE GRADE 60.

REVISIONS MADE BY BALKE ENGINEERS ARE DENOTED BY (Δ) SYMBOL.

OTHER THAN NOTED REVISIONS, SUBSTRUCTURES ARE THE DESIGN AND DETAILING OF VOGT, IVERS, AND ASSOCIATES, INC.

ANALYSIS OF THE ORIGINAL SUPERSTRUCTURE DESIGN HAS BEEN COMPARED TO THE REVISED SUPERSTRUCTURE DESIGN TO ASSURE THAT LOADINGS HAVE NOT INCREASED ON SUBSTRUCTURES PROVIDED BY VOGT, IVERS AND ASSOCIATES, INC. DESIGN OF THESE SUBSTRUCTURES REMAINS THE RESPONSIBILITY OF VOGT, IVERS, AND ASSOCIATES.

REVISED SUPERSTRUCTURE DESIGN AND DETAILING WAS PREPARED TO CONFORM WITH UPDATED DESIGN STANDARDS.

DESIGN AND DETAILING BY BALKE ENGINEERS WAS PERFORMED IN ACCORDANCE WITH THE AASHTO SPECIFICATIONS FOR HIGHWAY BRIDGES, THIRTEENTH EDITION, 1983, AASHTO INTERIM SPECIFICATIONS FOR BRIDGES 1984, AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

2A/13

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

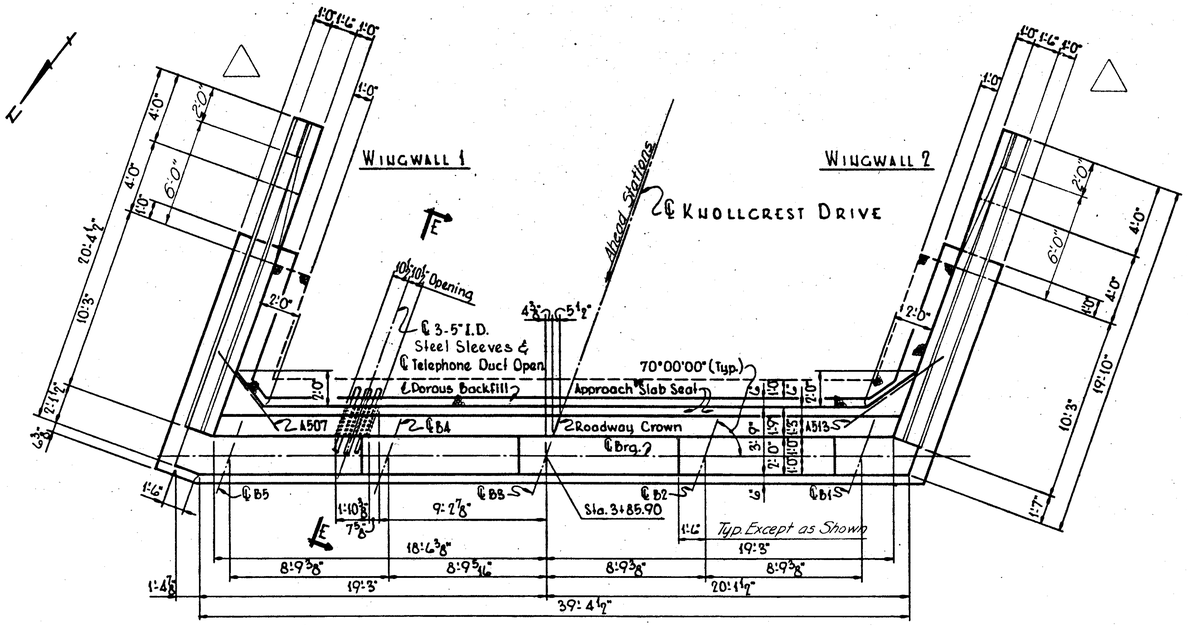
GENERAL NOTES
Bridge No. HAM-126-1516
S.R. 126, Ramp P & Ramp Q Under
Knollcrest Drive
Hamilton County Sta. 3+83.57 to
Sta. 6+78.77

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
–	ALH	–	SJA	CRS 2/86	

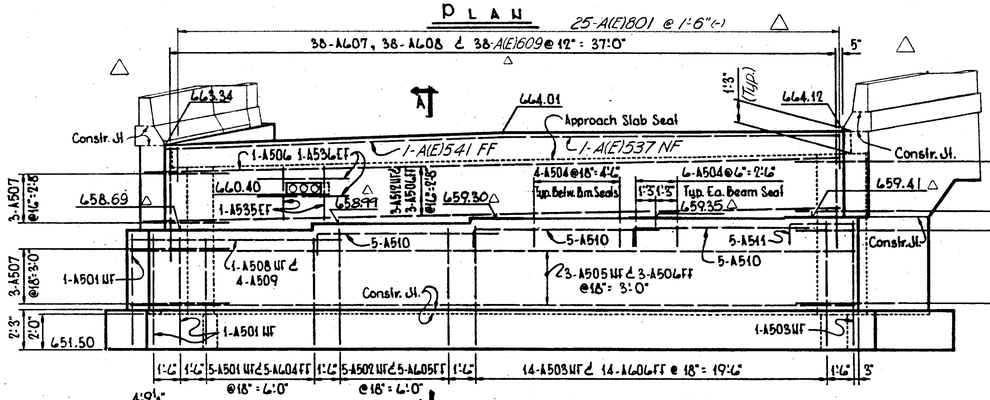
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

HAM-75-9.93
HAM-126-13.00

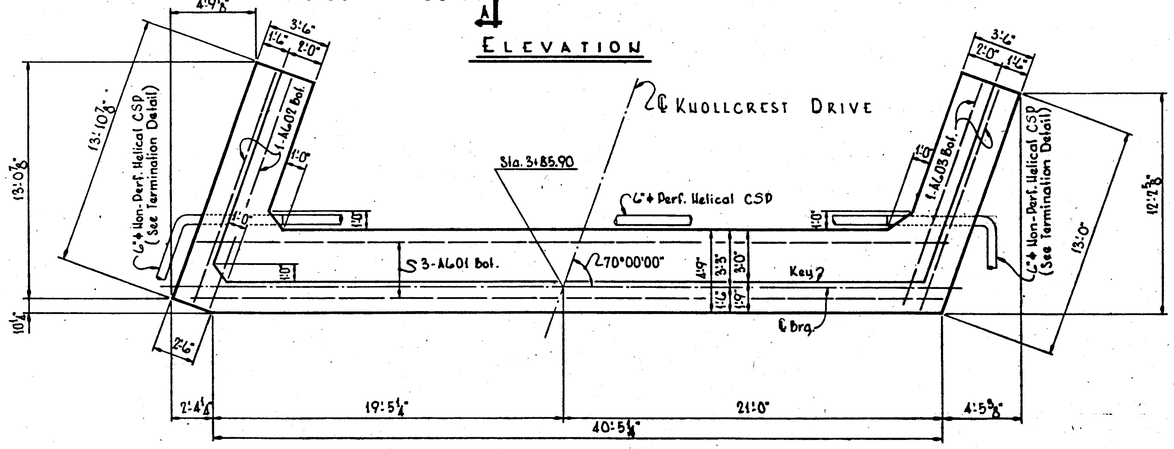
11
787



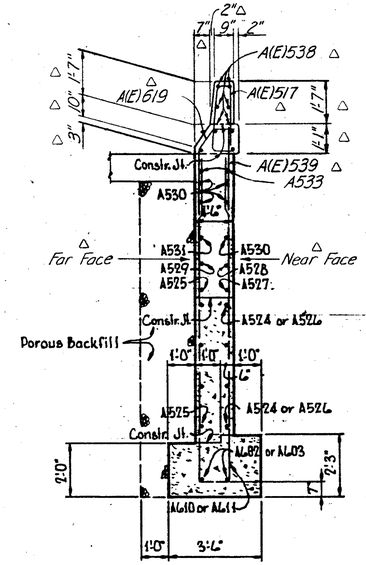
PLAN



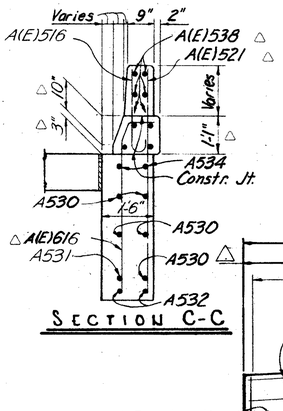
ELEVATION



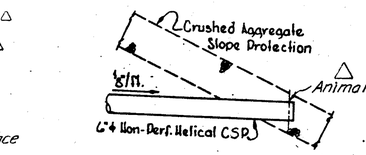
FOOTING PLAN



SECTION B-B



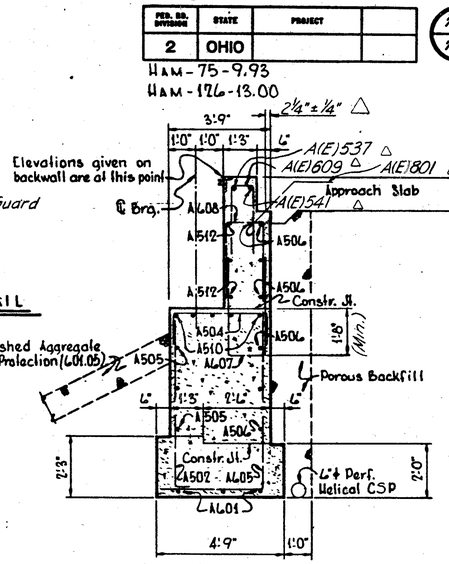
SECTION C-C



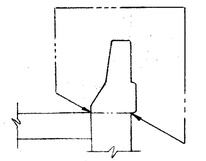
PIPE TERMINATION DETAIL

LEGEND

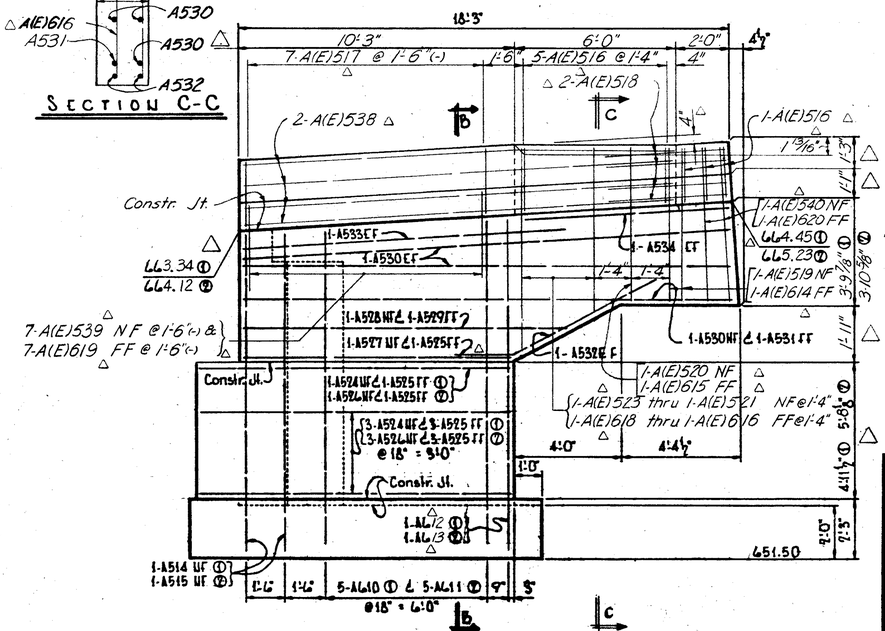
EF = Each Face
NF = Near Face
FF = Far Face
① = Wingwall 1
② = Wingwall 2
△ "(E)" denotes epoxy coated reinforcing bar.



SECTION A-A



Seal Concrete Surfaces of Wingwall Parapets Between the Limits Indicated. (Typ)



ELEVATION WINGWALLS 1 & 2
WINGWALL 2 SHOWN

NOTES

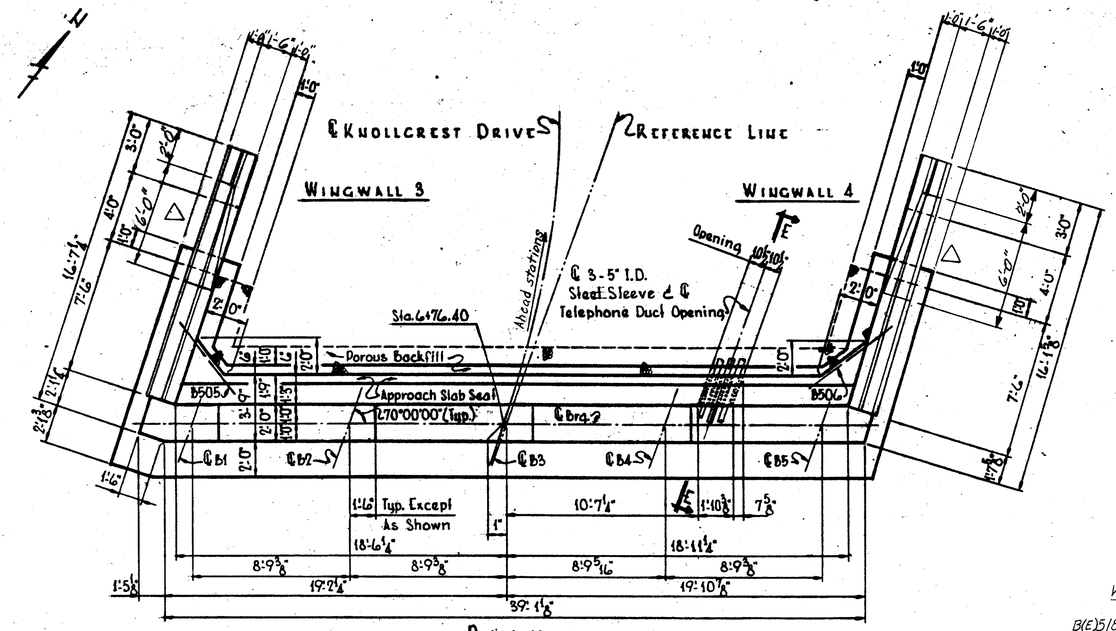
1. For General Notes, see sheet 2 13.
2. For Reinforcing Steel List, see sheet 11 13.
3. The clearance between reinforcing steel and the surface of footing concrete shall be 3".
4. Porous Backfill, full length of the abutment, shall extend up to the bottom of the Approach Slab. Excavation therefore, in excess of that required for construction of the abutment shall be paid for in the bid price per cubic yard paid for porous backfill.
5. Contractor shall furnish steel sleeves, grouting, and other materials necessary to install telephone ducts. Cost of labor and materials is chargeable to Cincinnati Bell, Inc. Plastic ducts shall be furnished by Cincinnati Bell, Inc.
6. For Section E-E, see sheet 4 13
7. For Parapet Details and Notes not shown, see Std. Dwg. BR-1

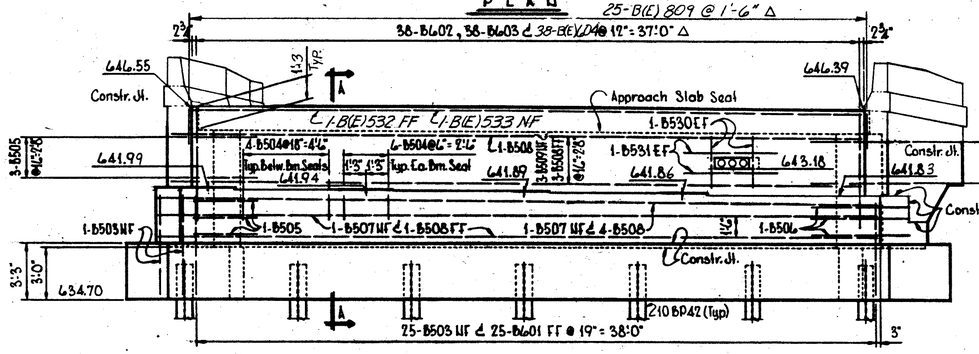
VOGT, IVERS, & ASSOCIATES, INC. 3 13
ENGINEERS ARCHITECTS
CINCINNATI

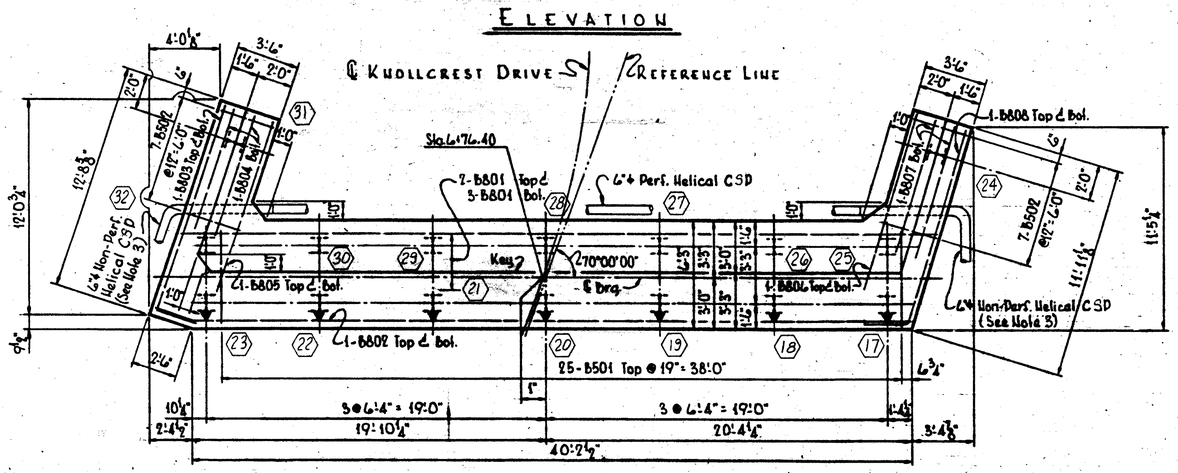
ABUTMENT 1
BRIDGE NO. HAM-126-1516
S.R. 126, RAMP P & RAMP Q UNDER KNOLLCREST DRIVE
HAMILTON COUNTY STA. 3+83.51 to STA. 6+78.77

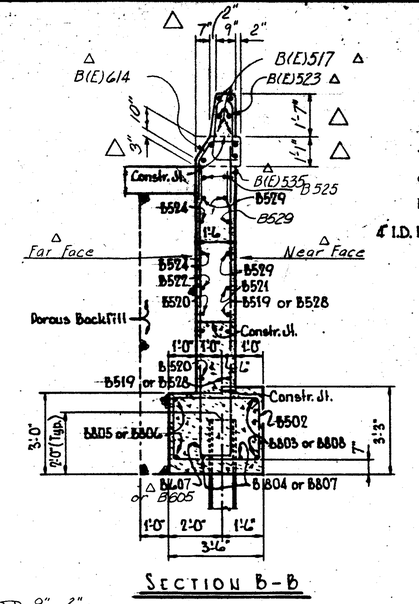
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
EPA	GWM	—	EPA			△ BALKE ENGRS. 1/86

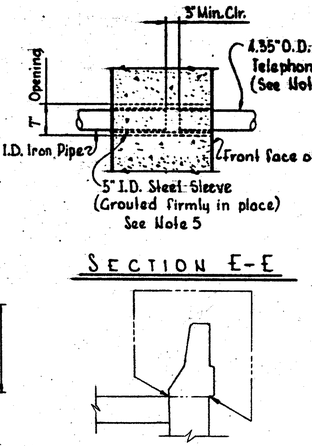
HAM-75-9.93
HAM-126-13.00
2 Sht. x Vu

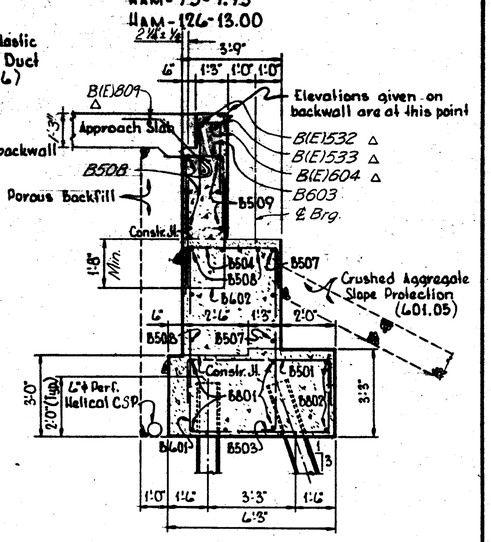


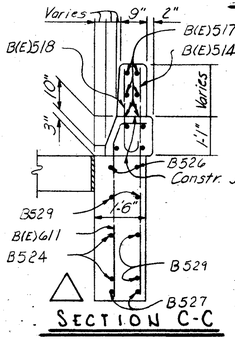






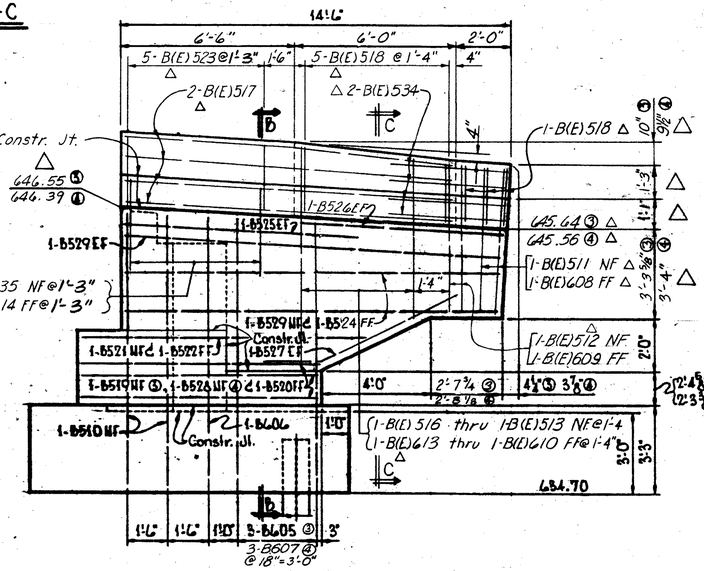






LEGEND

- = Pile battered 3 vertical to 1 horizontal in the direction of the arrow
- = Vertical pile
- EF = Each face
- NF = Near face
- FF = Far face
- ⑤ = Wingwall 3
- ④ = Wingwall 4
- △ ⬡ = Pile number
- △ "(E)" = denotes epoxy coated reinforcing bar.



NOTES

1. For Reference Line Layout, see sheet 1/3.
2. For treatment of pipe at front slope, see Pipe Termination Detail, sheet 3/3.
3. For additional notes, see sheet 3/3.
4. Contractor shall furnish steel sleeves, grouting, and other materials necessary to install telephone ducts. Cost of labor and materials is chargeable to Cincinnati Bell, Inc. Plastic ducts shall be furnished by Cincinnati Bell, Inc.

△ 5. For Parapet Details and Notes not shown, see Std. Dwg. BR-1.

VOGT, IVERS, & ASSOCIATES, INC. 4/13
ENGINEERS CINCINNATI ARCHITECTS

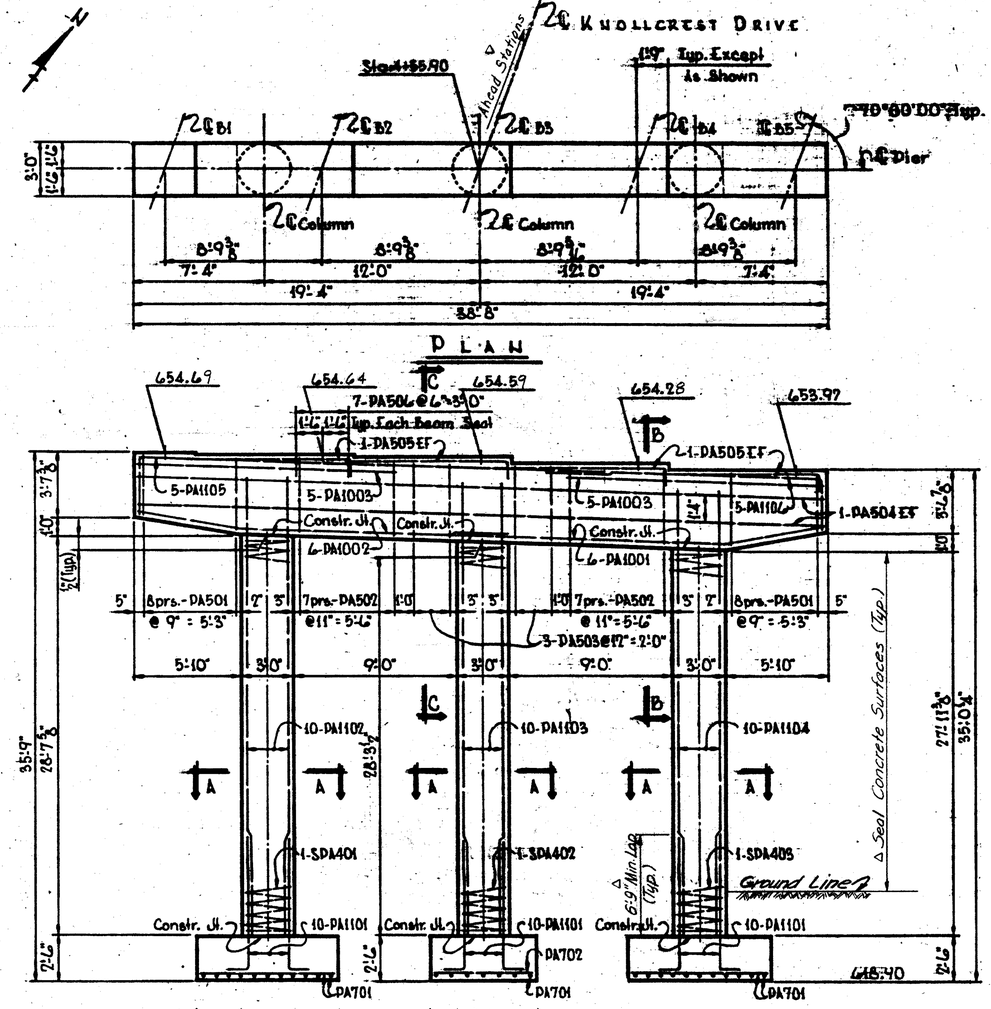
ABUTMENT 2

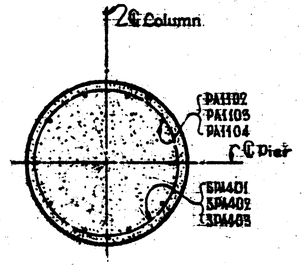
BRIDGE NO. HAM-126-1516
S.R. 126, RAMP P ℄ RAMP Q UNDER KNOLLCREST DRIVE
HAMILTON COUNTY STA. 3+83.51 to STA. 4+78.77

DESIGNED	DRAWN	TRACED	CHECKED	REVISED DATE	APPROVED
EPA	GWM	—	EPA		△ BALKE ENGRS. 1/86

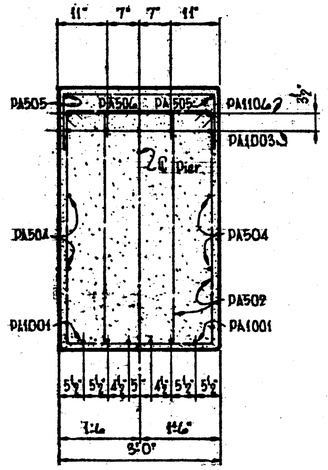
SHEET NO.	STATE	PROJECT	
2	OHIO		

HAM-75-9.93
HAM-126-13.00





SECTION A-A



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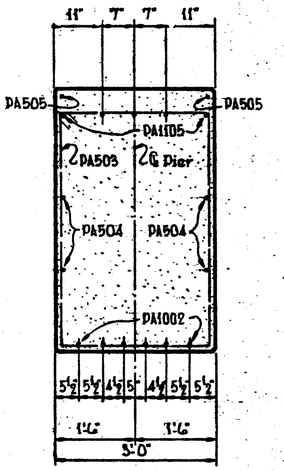

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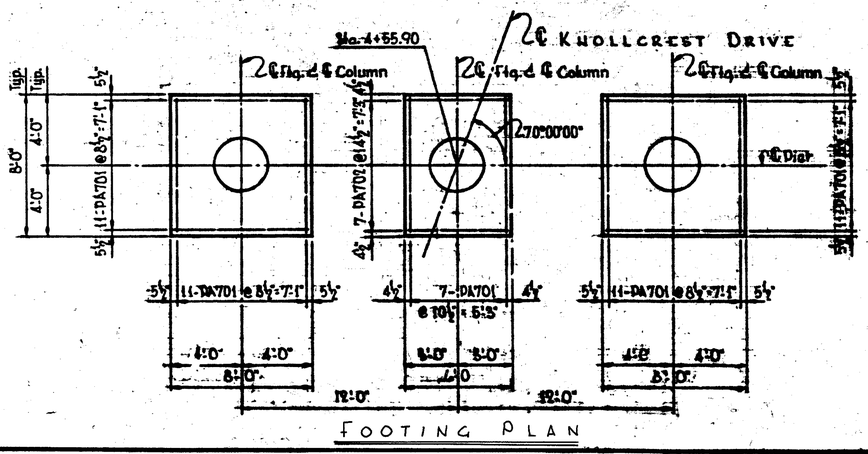


LEGEND
EF = Each Face

NOTES

1. For Reinforcing Steel List, see sheet 11/13.
2. For General Notes, see sheet 2/13.
3. The clearance between reinforcing steel and the surface of footing concrete shall be 3".
4. Place dowels in footing to insure correct spacing of main column steel.
5. Place stirrup bars in cap with hooks down.

VOGT, IVERS, & ASSOCIATES, INC. ENGINEERS ARCHITECTS CINCINNATI 5/13

PIER 1

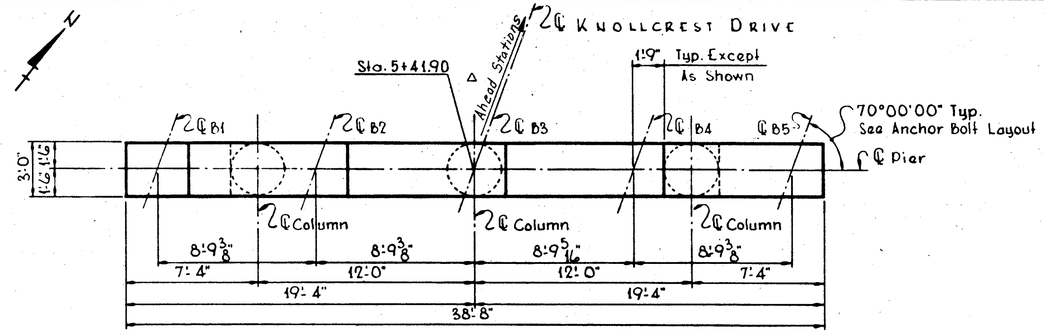
BRIDGE NO. HAM-126-1516
S.R. 126, RAMP D & RAMP Q UNDER
KNOLLCREST DRIVE
HAMILTON COUNTY STA. 3+89.51 to STA. 6+78.77

DESIGNED	DRAWN	TRACED	CHECKED	REVISIONS	DATE	
AV	GWM	—	E.F.F.			BAIRE ENGRS 1186

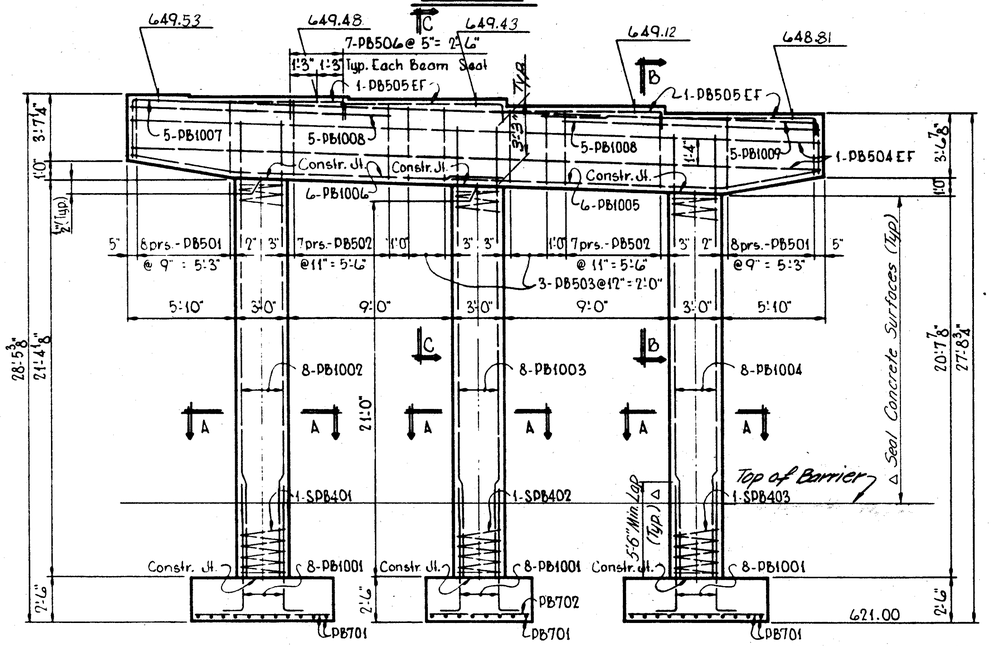
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

720
787

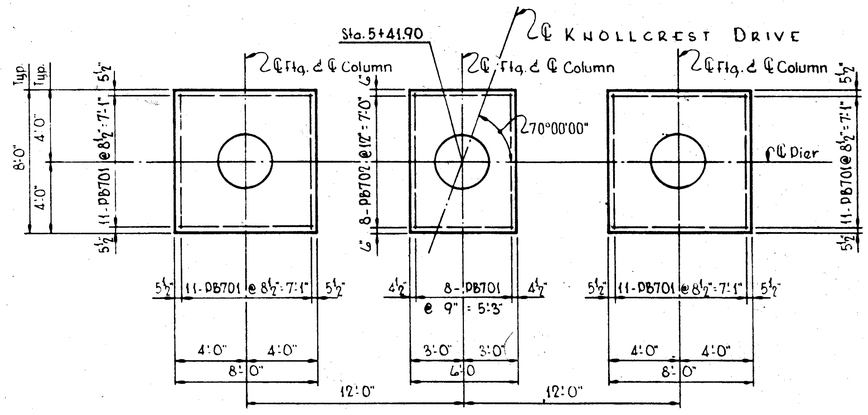
HAM-75-9.93
HAM-126-13.00



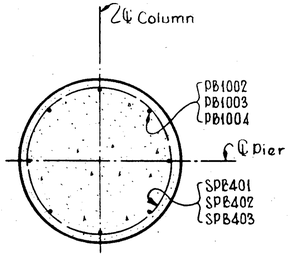
PLAN



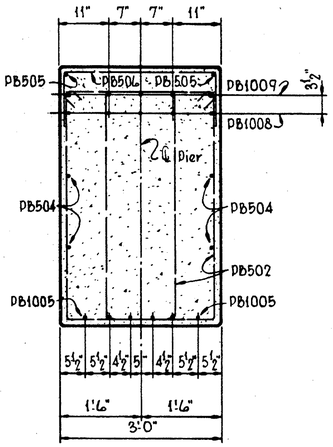
ELEVATION



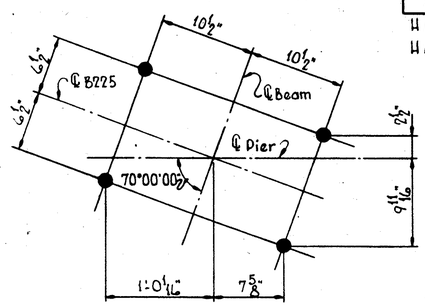
FOOTING PLAN



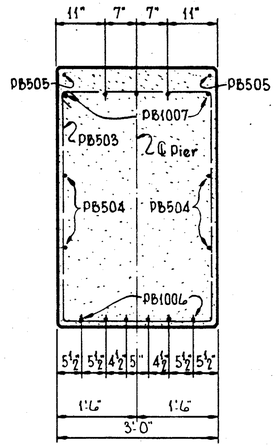
SECTION A-A



SECTION B-B



ANCHOR BOLT LAYOUT



SECTION C-C

NOTES

1. Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor bolt holes.
2. For additional NOTES, see sheet 5/13. △
3. For location of pier mounted luminaires and other lighting details, see Lighting Plans.
4. Footing shall extend a minimum of 3' into bedrock. However, if the low point of the surface of the bedrock occurs 2' or more above plan elevation, the footings may be raised, after approval by the Director, but to an elevation not higher than 624.00. Stepping of individual footings shall not be permitted.

LEGEND

EF = Each Face

△ 6/13

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

PIER 2

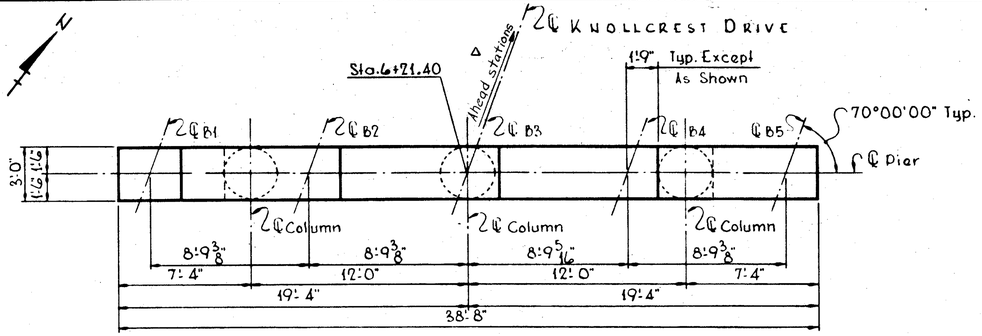
BRIDGE NO. HAM-126-1516
S.R. 126, RAMP P & RAMP Q UNDER
KNOLLCREST DRIVE
HAMILTON COUNTY STA. 3+83.51 to STA. 6+78.77

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
AV	GWM	—	E.F.F.			△ BAKE ENGRS. 1/86

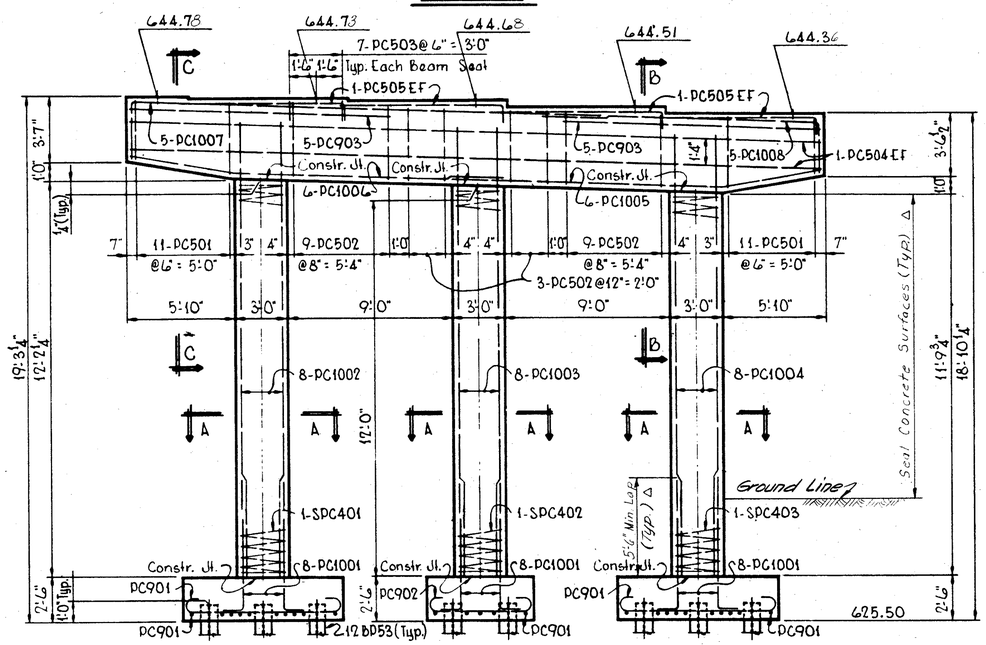
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

HAM-75-9.93
HAM-126-13.00

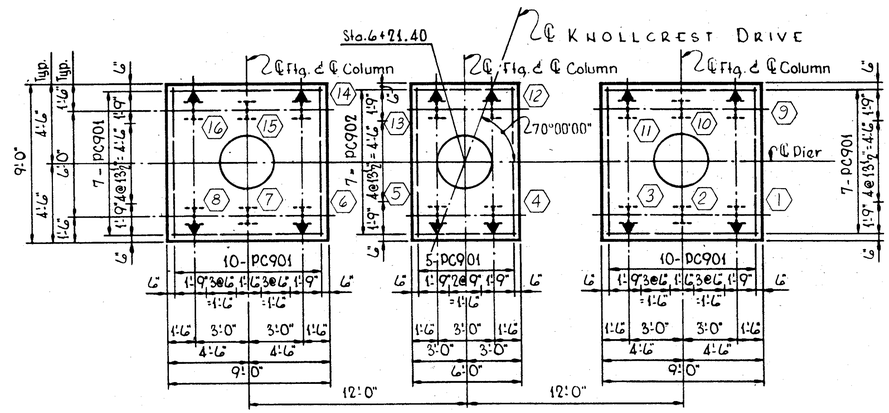
721
787



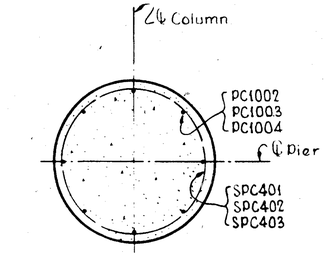
PLAN



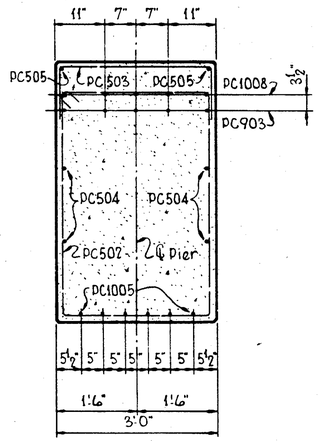
ELEVATION



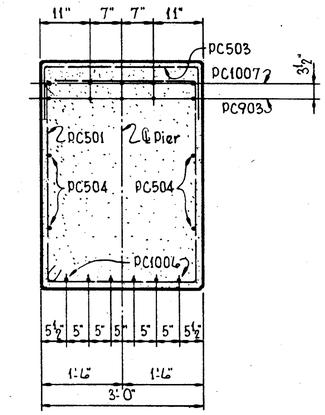
FOOTING PLAN



SECTION A-A



SECTION B-B



SECTION C-C

LEGEND

EF = Each Face

= Pile battered 4 vertical to 1 horizontal in the direction of the arrow

= Vertical pile

△ ⬡ = Pile Number

For NOTES, see sheet 5/13

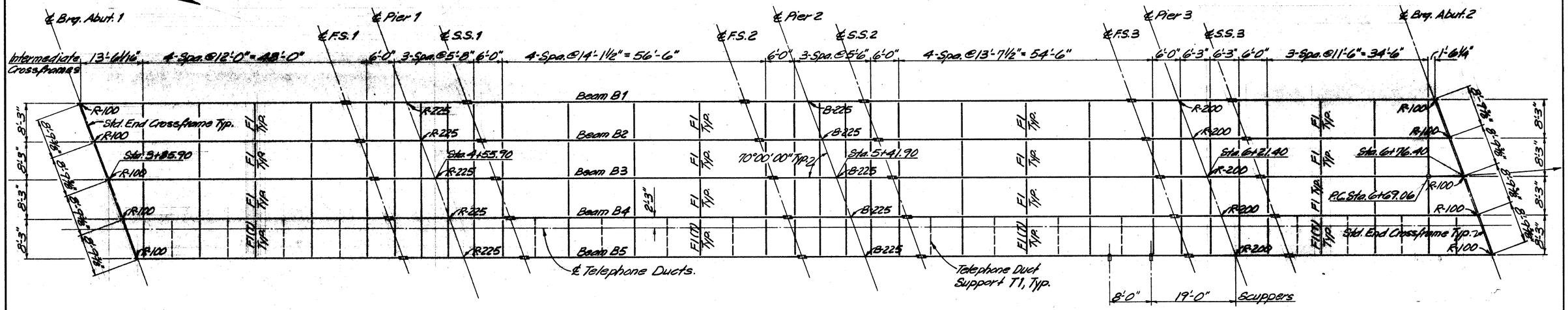
VOGT, IVERS, & ASSOCIATES, INC. 7/13
ENGINEERS ARCHITECTS
CINCINNATI

PIER 3

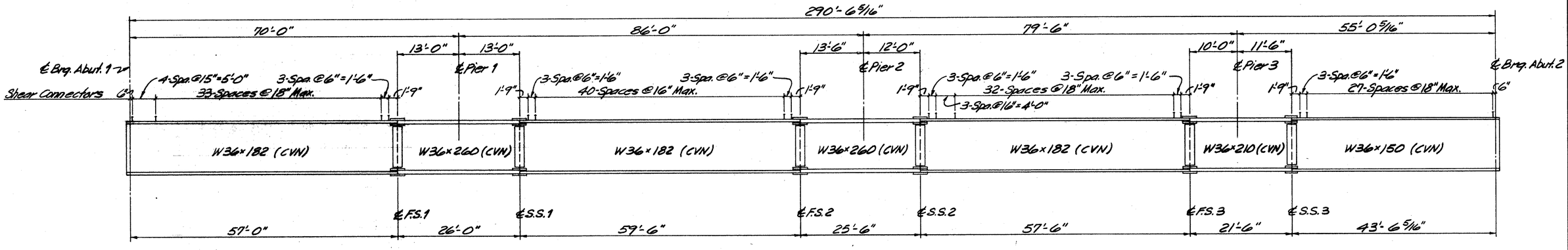
BRIDGE NO. HAM-126-1516
S.R. 126, RAMP P & RAMP Q UNDER KNOLLCREST DRIVE
HAMILTON COUNTY STA. 3+83.51 to STA. 6+78.77

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
AV	CWM	—	E.F.F.			△ BALKE ENGRS. 1/86

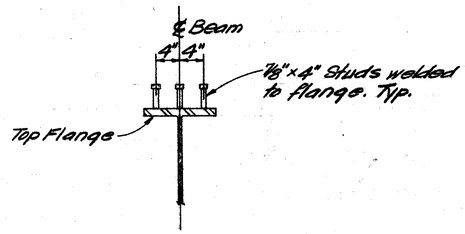
CALC. BY		HAM-75-9.93 HAM-126-13.00	OHIO	122 787
CHKD. BY			FHWA REGION 5	
DATE				



FRAMING PLAN



BEAM ELEVATION
TYPICAL



SHEAR CONNECTOR DETAIL

Notes:
1. F.S. = Field Splice ; S.S. = Shop Splice. For Splice Details see Sht. 8A/13.
2. For Standard End Crossframes refer to Std. Dwg. SD-1-69.
3. For Intermediate Crossframes Fl and Fl(T) see Sht. 9/13.
4. For Telephone Duct Support T1 see Sheet 9/13.
5. For Expansion Bearings R-100, R-200, R-225 and Fixed Bearing B-225 refer to Std. Dwg. RB-1-55. Also see details for beveled rocker or bolster plate on Sheet 8A/13.
6. Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements as specified in 711.01 of C.M.S.
7. For scupper details see Sheet 9A/13.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

8/13

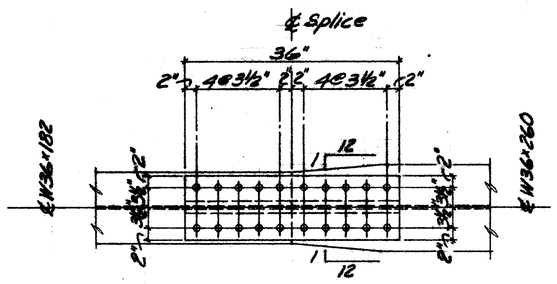
FRAMING PLAN

BRIDGE NO. HAM-126-15/16
S.R. 126, RAMP P & RAMP Q
UNDER KNOLLCREST DRIVE
HAMILTON COUNTY OHIO
STA. 3+83.51 TO STA. 6+78.77

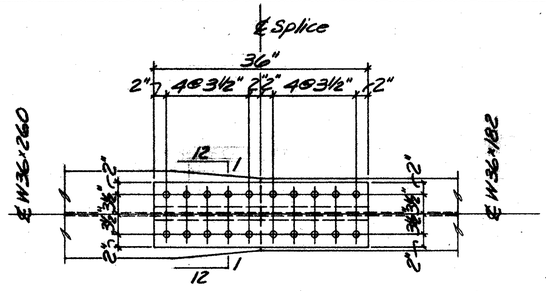
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
SJA	WJH	~	TMB	CRS 2/86	

OHIO BLUE PRINT 146093

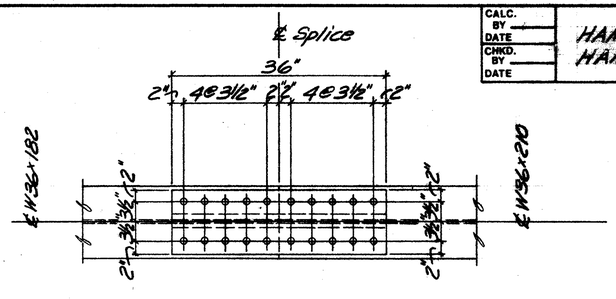
CALC. BY		HAM-75-7.93 HAM-126-13.00	OHIO	122-A 787
DATE			FHWA REGION 5	
CHKD. BY				
DATE				



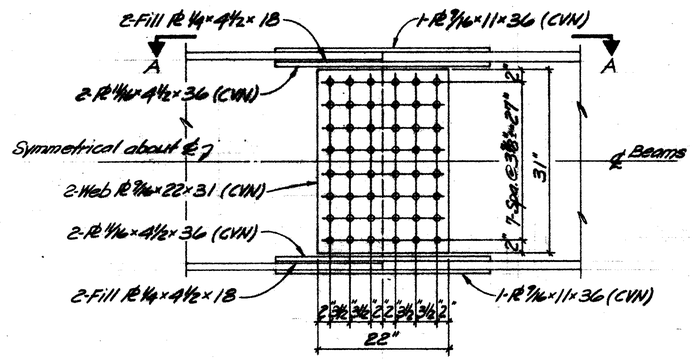
VIEW A-A



VIEW B-B

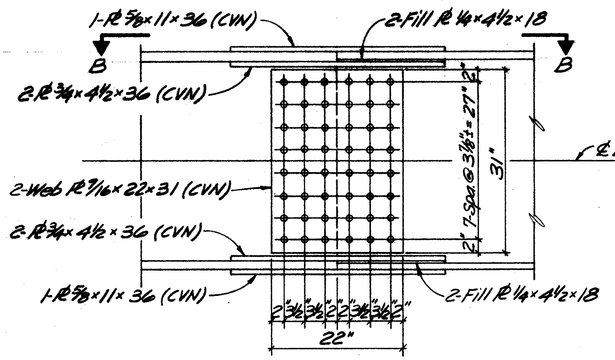


VIEW C-C

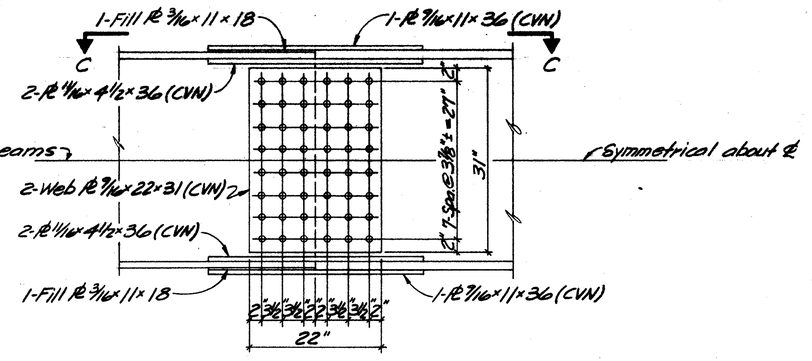


SPLICE DETAIL : F.S. 1, S.S* 1, F.S. 2

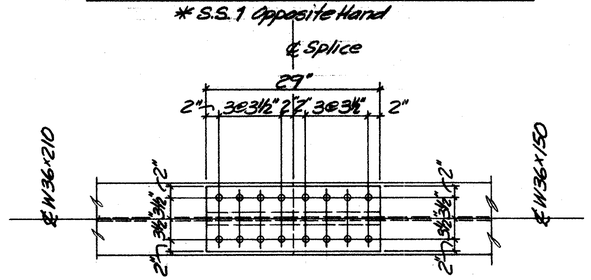
* S.S. 1 Opposite Hand



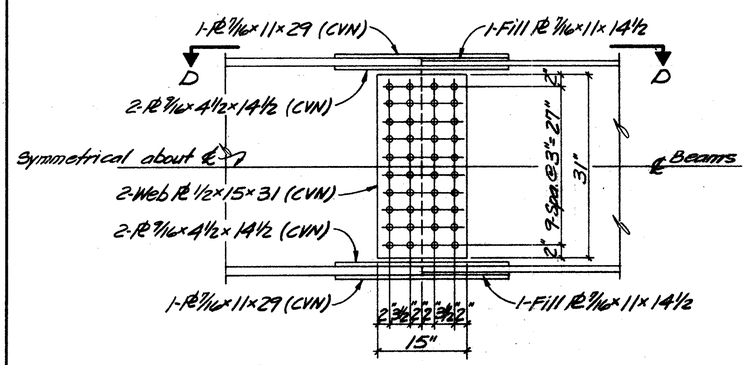
SPLICE DETAIL : S.S. 2



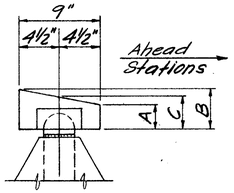
SPLICE DETAIL : F.S. 3



VIEW D-D



SPLICE DETAIL : S.S. 3



	TYPE	B	C	A
Abut. 1	R-100	2 25/32"	2½"	2 7/32"
Pier 1	R-225	3 25/32"	3½"	3 7/32"
Pier 2	B-225	3 25/32"	3½"	3 7/32"
Pier 3	R-200	3 25/32"	3½"	3 7/32"
Abut. 2	R-100	2 25/32"	2½"	2 7/32"

BEVELED ROCKER OR BOLSTER

For additional details see Std. Dwg. RB-1-55.

Notes:

1. High Strength Bolts shall be 1" diameter A325 unless otherwise noted.
2. For additional information refer to Std. Dwg. SD-1-69, Sheet 4 of 4.
3. F.S. = Field Splice ; S.S. = Shop Splice.
4. Where a plate is designated (CVN) the material shall meet specified minimum notch toughness requirements. as specified in 711.01 of C.M.S.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

8A/13

SPLICE DETAILS

BRIDGE NO. HAM-126-1516
S.R. 126, RAMP P & RAMP Q
UNDER KNOLLCREST DRIVE
HAMILTON COUNTY OHIO
STA. 3+33.51 TO STA. 6+78.77

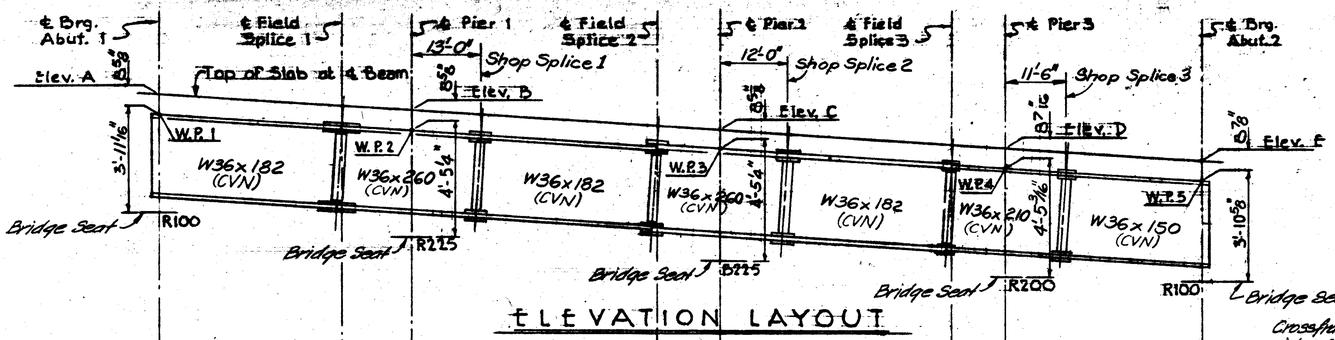
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
SJA	WJH	~	TMB	CRS 2/86	

OHIO BLUE PRINT M60053

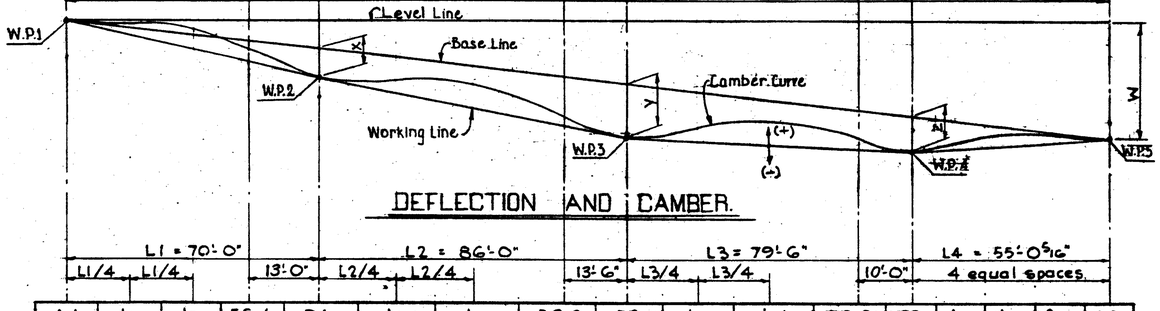
12	OHIO		

123
127

HAM-75-9.93
HAM-126-13.00



ELEVATION LAYOUT



DEFLECTION AND CAMBER.

L1 = 70'-0" (L1/4, L1/4) | 13'-0" | L2 = 86'-0" (L2/4, L2/4) | 13'-6" | L3 = 79'-6" (L3/4, L3/4) | 10'-0" | L4 = 55'-0 5/16" (4 equal spaces)

		A1	l4	l2	F.S.1	P1	l4	l2	F.S.2	P2	l4	l2	F.S.3	P3	l4	l2	¾	A2
Deflection Due To Steel Dead Load	B1,5 B2,3,4	0	+1/8"	+1/8"	+1/32"	0	+1/16"	+1/8"	+1/32"	0	+1/16"	+1/8"	+1/32	0	0	+1/32"	+1/32"	0
Deflection Due To Remaining Dead Load	B1,5 B2,3,4	0	+1/16"	+3/16"	+5/32"	0	+5/16"	+17/32"	+5/32"	0	+7/32"	+15/32"	+1/8"	0	+1/16"	+7/32"	+7/32"	0
Correction For Horizontal Curve and Transition in Superelevation	B1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+1/16"	
	B2														0	+1/16"	+1/16"	
	B3														0	0	0	0
	B4										-7/16"	-3/8"	-1/8"	0	0	+1/16"	+1 1/16"	
	B5										-7/8"	-5/8"	-1/4"		+1 1/16"	+3/16"	+1/4"	
TOTAL CAMBER REQUIRED	B1	0	+5/8"	+11/16"	+3/16"	0	+3/8"	+23/32"	+3/16"	0	+9/32"	+17/32"	+5/32"	0	+1/16"	+1/4"	+5/16"	0
	B2										+9/32"	+17/32"	+5/32"		+1/16"	+5/16"	+5/16"	
	B3										+9/32"	+17/32"	+5/32"		+1/16"	+1/4"	+1/4"	
	B4										-5/32"	+7/32"	+1/32"		+1/16"	+5/16"	+5/16"	
	B5										-17/32"	-1/32"	-3/32"		+1/8"	+1/16"	+1/2"	

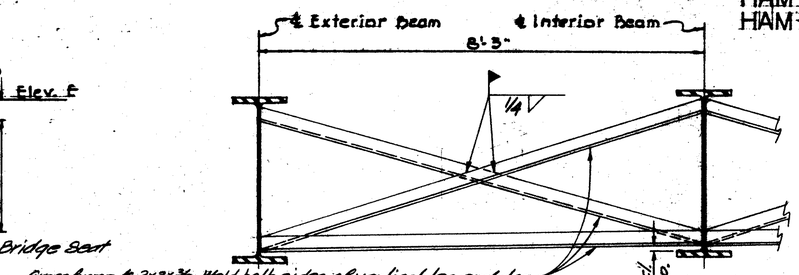
NOTE: All dimensions (+) except as shown

TABLE OF ELEVATIONS & DIMENSIONS

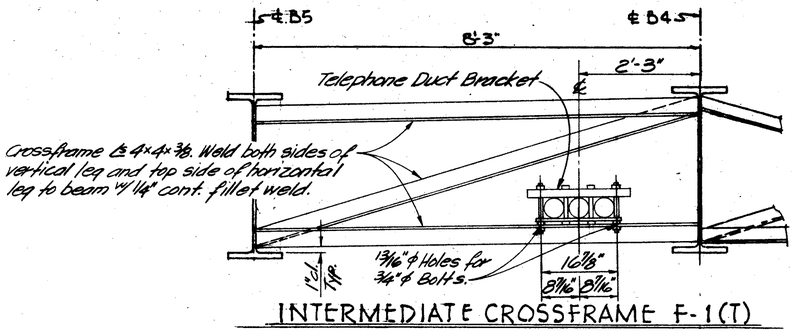
	Elev. A	Elev. B	Elev. C	Elev. D	Elev. E	Dim. W	Dim. X	Dim. Y	Dim. Z
B1	664.049	659.849	654.689	649.919	646.613	17'-5 5/16"	0	0	0
B2	663.997	659.797	654.637	649.867	646.560	17'-5 3/16"	0	0	0
B3	663.946	659.746	654.586	649.816	646.516	17'-5 1/16"	0	0	0
B4	663.637	659.437	654.277	649.650	646.480	17'-1 13/16"	-13/16"	-1 15/16"	-1"
B5	663.328	659.128	653.968	649.499	646.452	16'-10 7/16"	-1 5/8"	-3 5/8"	-1 7/8"

NOTES FOR ELEVATION LAYOUT

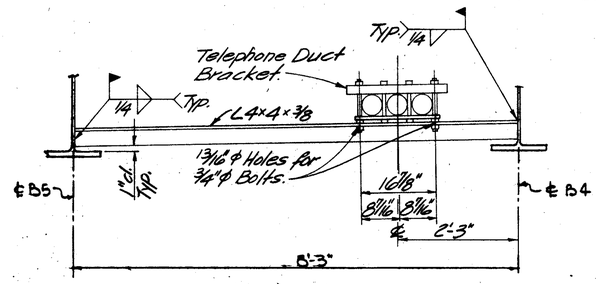
1. Working points (W.P.) are at top of top flange.
2. Working lines are straight lines between the indicated Working points (W.P.).
3. The Base Line is a straight line between W.P. 1 and W.P. 5.
4. Tabulated values in the deflection and Camber table shall be measured from the Working Lines.



INTERMEDIATE CROSSFRAME F-1



INTERMEDIATE CROSSFRAME F-1(T)



TELEPHONE CONDUIT SUPPORT T-1

△ WELDED ATTACHMENT of supports for concrete deck finishing machine may be made to areas of the fascia stringer flanges designated "Compression." Attachments shall not be made to areas designated "Tension." Fillet welds to compression flange shall be not closer than 1" from edge of flange, be not more than 2" long, and be not smaller than the minimum size required by AASHTO. △

Abutment No. 1
Joint setting table

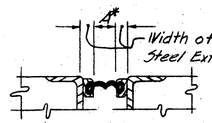
Temp °F	0°	20°	40°	60°	80°	100°
DIM. A*	2 1/16"	2 1/16"	2 1/4"	2"	1 3/4"	1 9/16"

Strip seal gland to be Watson - Bowman S-400 or D.S. Brown 55.-400.

Abutment No. 2
Joint setting table

Temp °F	0°	20°	40°	60°	80°	100°
Dim. A*	2 3/16"	2 3/8"	2 3/4"	2"	1 3/16"	1 5/8"

Strip seal gland to be Watson - Bowman S-400 or D.S. Brown 55.-400.



PARTIAL SECTION THROUGH EXPANSION JOINT SHOWING DIMENSION A.

For expansion joint details not shown see "STRIP SEAL DETAILS" Sheets 488 A, B, C & D.

WORK THIS SHEET WITH SHEET 8 / 13 △

VOGT, IVERS, & ASSOCIATES, INC. 9/13
ENGINEERS ARCHITECTS
CINCINNATI

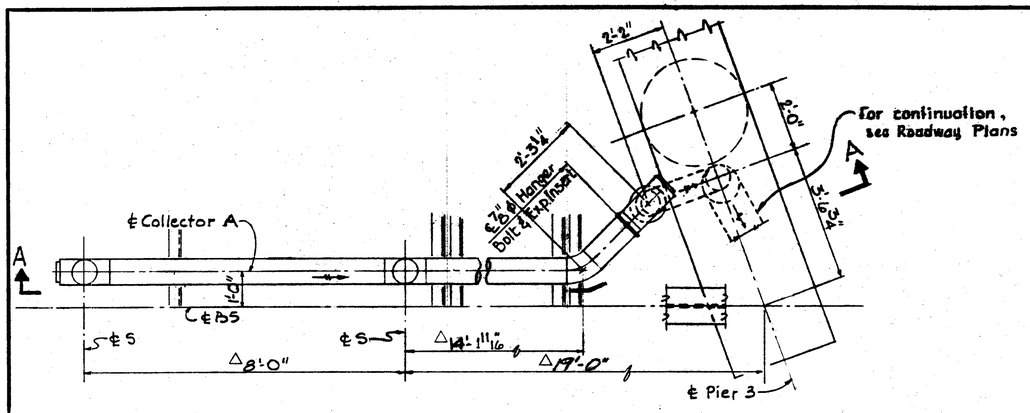
ELEVATION LAYOUT

BRIDGE NO. HAM-126-1516
S.R. 126, RAMP P & RAMP Q
UNDER KNOLLCREST DRIVE
HAMILTON COUNTY STA. 3+83.51 TO STA. 6+78.77

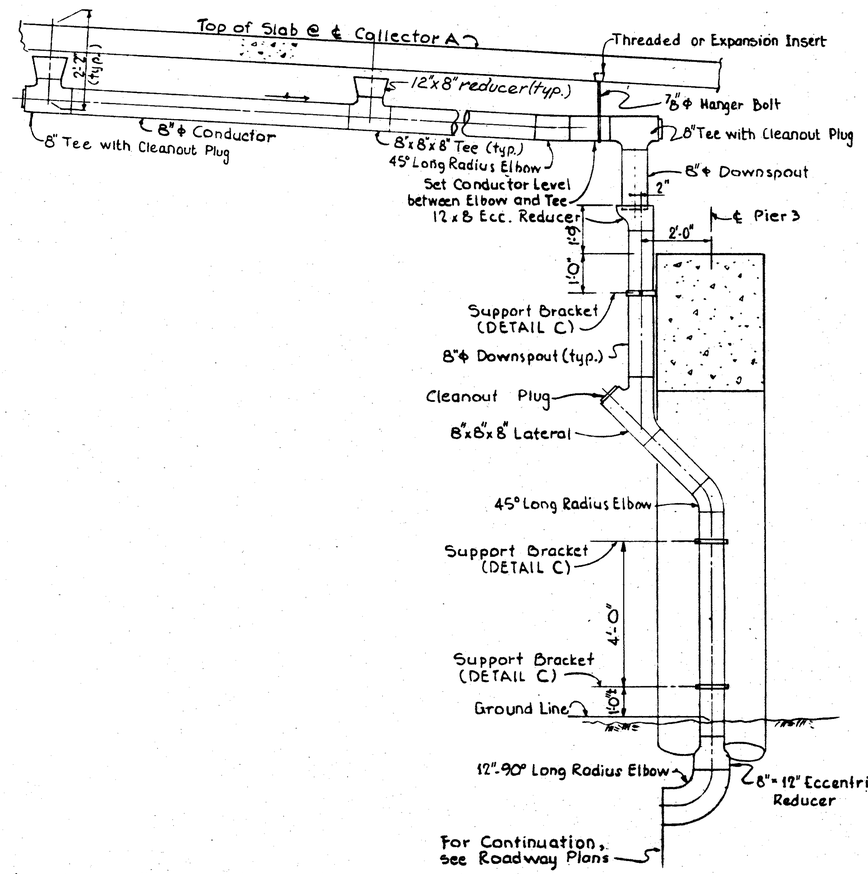
DESIGNED	DRAWN	TRACED	CHECKED	REVISED DATE	△ BALKE ENGRS. 1/86
AY	TEC	X	E.F.F.		

FED. AID DIVISION	STATE	PROJECT	
2	OHIO		

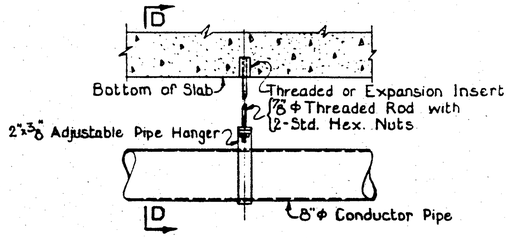
HAM-75-9.93
HAM-126-13.00



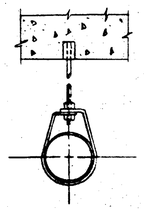
PLAN
COLLECTOR A



SECTIONAL ELEVATION A-A

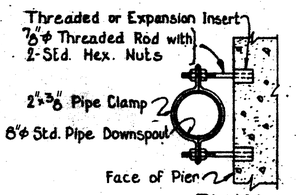


ELEVATION

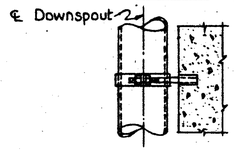


SECTION D-D

TYPICAL PIPE HANGER

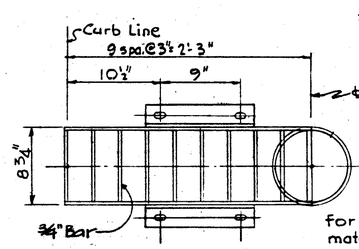


PLAN



ELEVATION

DETAIL – C
PIPE SUPPORT



≠ Extend 2" into 12x8 reducer.

for all details, dimensions and material not shown or noted, see Std. Dwg. SD-1-69.

PLAN OF SCUPPERS

NOTES

△1. For crossframe & telephone duct support location see Framing Plan on Sheet 8/13.
2. Scuppers, including supports, shall be included for payment under Item 518.
3. 8"ϕ Conductor Pipe, including all specials, shall be included for payment under Item 518, 8" Pipe Horizontal Conductors.
4. 8"ϕ Downspout Pipe shall be included for payment under Item 518, Standard Pipe Downspout, including specials.

VOGT, IVERS, & ASSOCIATES, INC. 9A/13
ENGINEERS ARCHITECTS
CINCINNATI

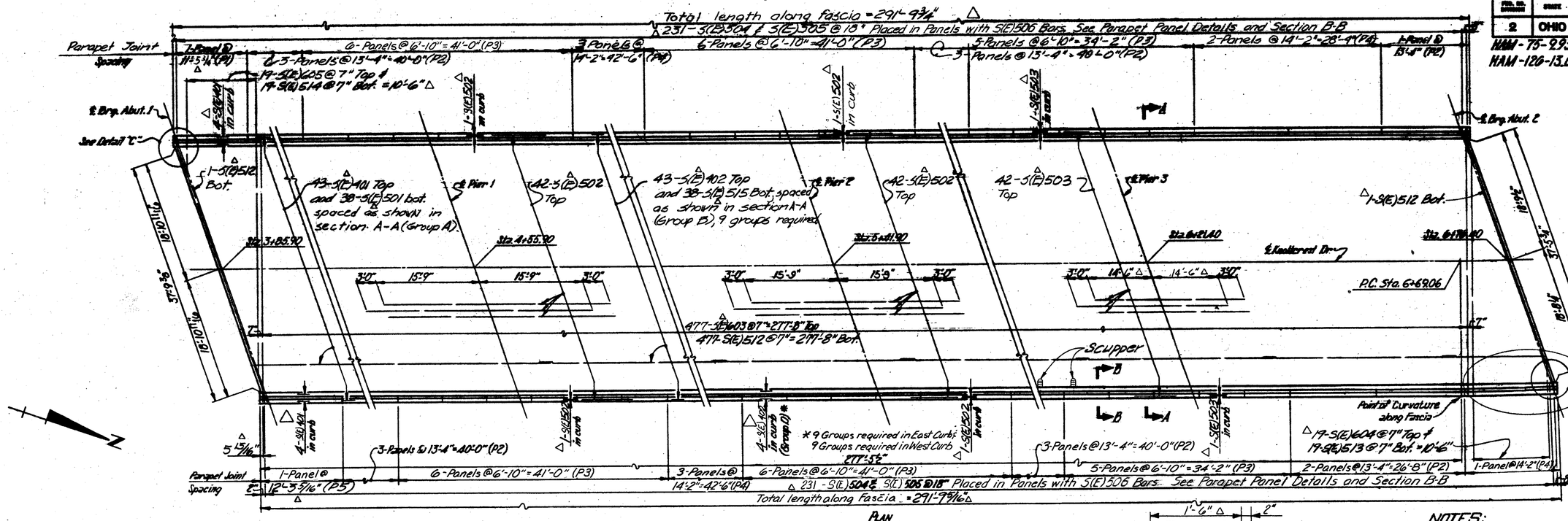
DRAINAGE DETAILS
BRIDGE NO. HAM-126-15.16
S.R. 126, RAMP P & RAMP Q
UNDER KNOLLCREST DRIVE
HAMILTON COUNTY STA. 3+83.51 To STA. 6+78.77

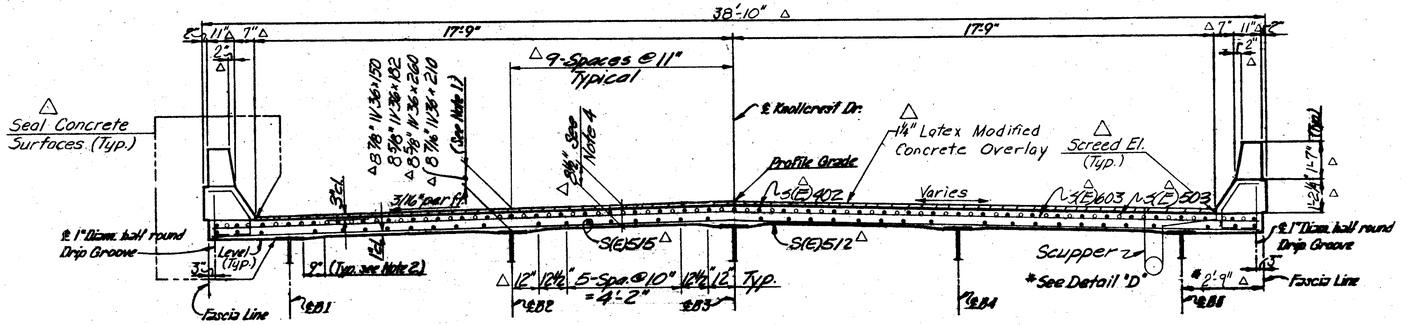
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
TEC	TEC BCS	✕	E.F.F.			△ BALKE ENGRS. 2/80

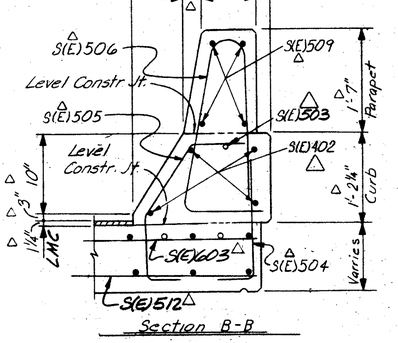
SHEET NO.	STATE	PROJECT	
2	OHIO		

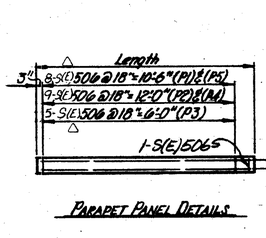
723
787

HAM-75-2.93
HAM-126-13.00

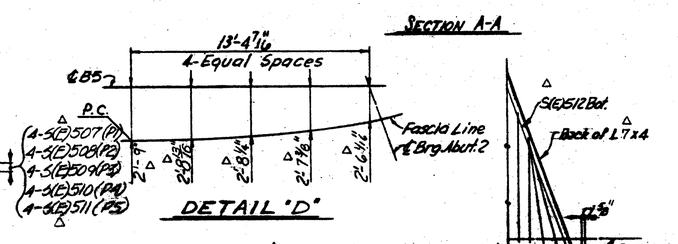








Panels		
Mark	Length	No.
P1	11'-5 3/4"	1
P2	13'-4"	15
P3	6'-10"	34
P4	14'-2"	9
P5	12'-3 5/16"	1



PAVEMENT ELEVATIONS

STATION	3+75	4+00	4+25	4+50	4+75	5+00	5+25	5+50	5+75	6+00	6+25	6+50	6+75	7+00
WEST CURB LINE	664.32	662.82	661.32	659.82	658.32	656.82	655.32	653.88	652.32	650.82	649.32	647.82	646.32	644.82
PROFILE GRADE	664.60	663.10	661.60	660.10	658.60	657.10	655.60	654.10	652.60	651.10	649.60	648.10	646.60	645.10
EAST CURB LINE	664.32	662.88	661.32	659.82	658.32	656.82	655.32	653.82	652.36	650.99	649.63	648.27	646.88	645.38

△ SCREED ELEVATION (TOP OF PORTLAND CEMENT CONCRETE)

	Abut. 1	1/4	1/2	3/4	Pier 1	1/4	1/2	3/4	Pier 2	1/4	1/2	3/4	Pier 3	1/4	1/2	3/4	Abut. 2
WEST CURB LINE	663.96	662.99	661.94	660.83	659.76	658.52	657.28	655.92	654.60	653.44	652.30	651.05	649.83	649.01	648.21	647.39	646.52
EAST CURB LINE	663.18	662.21	661.17	660.06	658.98	657.74	656.50	655.14	653.82	652.67	651.63	650.47	649.38	648.63	647.92	647.17	646.35

△ Note:
The Screed Elevations shown have been obtained by adding the dead load deflection due to the weight of concrete slab, latex modified concrete overlay, bridge parapets, future wearing surface, and steel beams to the required final elevations.

NOTES:

△ℓ 1. The distance shown from top of deck slab to top of steel beam is the design dimension. The quantity of deck concrete to be paid for shall be base on this dimension even though deviation from it may be necessary because the top flange of the beam may not have the exact chamber or conformation required to place it parallel to the finished grade

2. A typical haunch width of 9" shall be used for computing the quantity of concrete; however, the haunch width may vary between 6" & 12" provided that the slope shall not be more than 1:4 for a haunch less than 9" in width.

△ 3. For Reinforcing Steel List see Sheet 11/13

△ 4. Slab thickness includes 1 1/4" Latex Modified Concrete Overlay.

5. For Scupper details see sheet 9A/13

△ 6. For Scupper locations see sheet 9A/13

△ 7. For Parapet Details & Notes not shown see Std. Dwg. BR1

8. Preformed expansion joint filler in the railing parapet deflection joints may be either 1/4" gray sponge rubber or 1/4" gray cellular polyvinyl chloride (PVC) sponge.

9. Cut or spread reinforcing steel as necessary to clear scuppers.

△ 10. "(E)" denotes epoxy coated reinforcing bar.

11. For End Dam details refer to "STRIP SEAL JOINT" Std. Dwg.

△ 10/13

VOGT, IVERS, & ASSOCIATES, INC.
ENGINEERS ARCHITECTS
CINCINNATI

ROADWAY SLAB
BRIDGE NO. HAM-126-1516
I.R. 726, RAMP P & RAMP Q UNDER
KNOLLCREST DRIVE

HAMILTON COUNTY STA. 3+83.51 to STA. 6+78.77

DESIGNED	DRAWN	TRACED	CHECKED	REVISIONS - DATE
JAY	MBT		E.F.F.	

△ BALKE ENGRS. 1/86

ABUTMENT 1

MARK	NO.		LENGTH	TYPE	WEIGHT
A501	8		7'-1"	Bl.	59
A502	5		7'-5"	Bl.	39
A503	15		7'-9"	Bl.	121
A504	46		5'-2"	Bl.	248
A505	3		40'-6"	Bl.	127
A506	7		38'-0"	Str.	277
A507	6		5'-6"	Str.	34
A508	1		12'-1"	Bl.	13
A509	4		10'-6"	Str.	44
A510	15		11'-1"	Bl.	173
A511	5		4'-7"	Bl.	24
A512	3		40'-7"	Bl.	127
A513	7		6'-9"	Str.	49
A514	2	△	11'-10"	Bl.	25
A515	2	△	12'-7"	Bl.	26
A(E)516	16	△	2'-8"	Bt.	45
A(E)517	14	△	5'-3"	Bt.	77
A(E)518	16	△	4'-4"	Str.	72
A(E)519	4	△	5'-8"	Str.	24
A(E)520	2	△	5'-6"	Str.	11
A(E)521	2	△	6'-2"	Str.	13
A(E)522	2	△	6'-10"	Str.	14
A(E)523	2	△	7'-5"	Str.	15
A524	4		13'-2"	Bl.	55
A525	10		8'-6"	Str.	89
A526	4		13'-1"	Bl.	55
A527	2		11'-3"	Bl.	23
A528	2		13'-2"	Bl.	27
A529	2		10'-6"	Str.	22
A530	10		17'-11"	Str.	187
A531	2		16'-6"	Str.	34
A532	4	△	8'-5"	Bl.	35
A533	4		12'-1"	Str.	50
A534	4		7'-5"	Str.	31
A535	4		3'-0"	Str.	13
A536	4		5'-0"	Str.	21
A(E)537	1	△	39'-9"	Str.	41
A(E)538	16	△	15'-11"	Str.	266
A(E)539	14	△	3'-5"	Str.	44
A(E)540	4	△	5'-9"	Str.	24
A(E)541	1	△	40'-8"	Str.	42
A601	3		41'-6"	Str.	187
A602	7		13'-4"	Str.	40
A603	7		12'-6"	Str.	38
A604	5		10'-3"	Bl.	77
A605	5		10'-7"	Bl.	79
A606	14		10'-11"	Bl.	230
A607	38		9'-1"	Bl.	518
A608	38		6'-7"	Bl.	376
A(E)609	38	△	6'-7"	Bl.	376
A610	5	△	23'-4" to 24'-0" by 2"(1ea.)	Bl.	178
A611	5	△	25'-0" to 25'-8" by 2"(1ea.)	Bl.	190
A612	1	△	24'-10"	Bl.	37
A613	1	△	26'-6"	Bl.	40
A(E)614	4	△	4'-10"	Bl.	29
A(E)615	2	△	4'-7"	Bl.	14
A(E)616	2	△	5'-3"	Bl.	16
A(E)617	2	△	5'-10"	Bl.	18
A(E)618	2	△	6'-5"	Bt.	19
A(E)619	14	△	3'-9"	Bt.	79
A(E)620	4	△	4'-11"	Bt.	30
A(E)801	25	△	4'-11"	Bt.	328
△ Total Abutment 1 (Includes 1597 Lbs Epoxy-coated) △					5615

ABUTMENT 2

MARK	NO.		LENGTH	TYPE	WEIGHT
B501	25		8'-3"	Bl.	215
B502	14		10'-9"	Bl.	157
B503	27		7'-0"	Bl.	197
B504	46		5'-2"	Bl.	248
B505	6		5'-6"	Str.	34
B506	6		6'-9"	Str.	42
B507	3		40'-3"	Bl.	126
B508	10		38'-0"	Str.	396
B509	3		40'-1"	Bl.	125
B510	4	△	11'-6"	Bl.	48
B(E)511	4	△	5'-5"	Str.	23
B(E)512	4	△	5'-6"	Str.	23
B(E)513	2	△	5'-11"	Str.	12
B(E)514	2	△	6'-9"	Str.	14
B(E)515	2	△	7'-7"	Str.	16
B(E)516	2	△	8'-1"	Str.	17
B(E)517	16	△	12'-2"	Str.	203
B(E)518	16	△	2'-8"	Bt.	45
B519	3		10'-5"	Bl.	33
B520	6		5'-6"	Str.	34
B521	2		12'-2"	Bl.	25
B522	2		8'-0"	Str.	17
B(E)523	10	△	5'-3"	Bt.	55
B524	4		12'-0"	Str.	50
B525	4		8'-4"	Str.	35
B526	4		7'-5"	Str.	31
B527	4	△	8'-5"	Bl.	35
B528	3		10'-4"	Bl.	32
B529	8		13'-10"	Str.	115
B530	4		3'-0"	Str.	13
B531	4		5'-0"	Str.	21
B(E)532	1	△	40'-3"	Str.	42
B(E)533	1	△	39'-5"	Str.	41
B(E)534	16	△	4'-4"	Str.	72
B(E)535	10	△	3'-0"	Str.	31
B601	25		14'-1"	Bl.	529
B602	38		9'-1"	Bl.	518
B603	38		6'-7"	Bl.	376
B(E)604	38	△	6'-7"	Bl.	376
B605	30	△	22'-2" to 22'-6" by 2"(1ea.)	Bl.	101
B606	2	△	22'-4"	Bl.	67
B607	33	△	21'-10" to 22'-2" by 2"(1ea.)	Bl.	99
B(E)608	4	△	4'-6"	Bl.	27
B(E)609	4	△	4'-7"	Bl.	28
B(E)610	2	△	5'-0"	Bl.	15
B(E)611	2	△	5'-10"	Bl.	18
B(E)612	2	△	6'-7"	Bl.	20
B(E)613	2	△	7'-1"	Bt.	21
B(E)614	10	△	3'-9"	Bt.	56
B801	5		42'-0"	Str.	561
B802	2		42'-2"	Bl.	225
B803	2		14'-2"	Bl.	76
B804	2		7'-0"	Str.	37
B805	2		10'-0"	Str.	53
B806	2		10'-3"	Str.	55
B807	2		7'-9"	Str.	41
B808	2		13'-11"	Bl.	74
B(E)809	25	△	4'-11"	Bt.	328
△ Total Abutment 2 (Includes 1483 Lbs Epoxy-coated) △					6324
TOTAL ABUTMENTS △ (Includes 3080 Lbs. Epoxy-coated) △					11939

PIER 1

MARK	NO.		LENGTH	TYPE	WEIGHT
PA501	32	10'-7" to 12'-11" by 4" (4 Each)		Bl.	392
PA502	28		12'-11"	Bl.	377
PA503	6		14'-1"	Bl.	88
PA504	4		38'-4"	Str.	160
PA505	8		9'-10"	Bl.	82
PA506	35		4'-5"	Bl.	161
PA701	51		7'-6"	Str.	787
PA702	7		5'-6"	Str.	79
PA1001	6		20'-10"	Bl.	538
PA1002	6		20'-10"	Bl.	538
PA1003	10		14'-3"	Str.	613
PA1101	30	△	10'-8"	Bl.	1700
PA1102	10		32'-3"	Str.	1713
PA1103	10		31'-11"	Str.	1696
PA1104	10		31'-7"	Str.	1678
PA1105	5		29'-0"	Bl.	770
PA1106	5		18'-10"	Bl.	500
SPA401	1		28'-6"	Bl.	527
SPA402	1		28'-3"	Bl.	522
SPA403	1		27'-11"	Bl.	516
△ Total Pier 1					13432

PIER 2

MARK	NO.		LENGTH	TYPE	WEIGHT
PB501	32	10'-7" to 12'-11" by 4" (4 Each)		Bl.	392
PB502	28		12'-11"	Bl.	377
PB503	6		14'-1"	Bl.	88
PB504	4		38'-4"	Str.	160
PB505	8		9'-10"	Bl.	82
PB506	35		4'-5"	Bl.	161
PB701	52		7'-6"	Str.	797
PB702	8		5'-6"	Str.	90
PB1001	24	△	9'-3"	Bl.	955
PB1002	8		24'-7"	Str.	846
PB1003	8		24'-4"	Str.	838
PB1004	8		24'-0"	Str.	826
PB1005	6		20'-10"	Bl.	538
PB1006	6		20'-10"	Bl.	538
PB1007	5		29'-0"	Bl.	624
PB1008	10		14'-3"	Str.	613
PB1009	5		18'-6"	Bl.	398
SPB401	1		21'-3"	Bl.	397
SPB402	1		20'-11"	Bl.	391
SPB403	1		20'-7"	Bl.	385
△ Total Pier 2					9496

PIER 3

MARK	NO.		LENGTH	TYPE	WEIGHT
PC501	22	12'-0" to 14'-1" by 2'-9" (2 Each)		Bl.	299
PC502	24		14'-1"	Bl.	353
PC503	35		4'-5"	Bl.	161
PC504	4		38'-4"	Str.	160
PC505	8		9'-10"	Bl.	82
PC901	39		11'-0"	Bl.	1459
PC902	7		8'-0"	Bl.	190
PC903	10		13'-11"	Str.	473
PC1001	24	△	9'-3"	Bl.	955
PC1002	8		15'-5"	Str.	531
PC1003	8		15'-3"	Str.	525
PC1004	8		15'-1"	Str.	519
PC1005	6		20'-10"	Bl.	538
PC1006	6		20'-10"	Bl.	538
PC1007	5		29'-0"	Bl.	624
PC1008	5		18'-6"	Bl.	398
SPC401	1		12'-1"	Bl.	233
SPC402	1		11'-11"	Bl.	230
SPC403	1		11'-9"	Bl.	227
△ Total Pier 3					8495

SUPERSTRUCTURE

MARK	NO.		LENGTH	TYPE	WEIGHT
S(E)401	51	△	34'-0"	Str.	1158
S(E)402	459	△	30'-0"	Str.	9198
S(E)501	38	△	37'-0"	Str.	1406
S(E)502	88	△	34'-6"	Str.	3167
S(E)503	44	△	32'-0"	Str.	1469
S(E)504	462	△	2'-5"	Bt.	1165
S(E)505	462	△	3'-1"	Bt.	1486
S(E)506	462	△	5'-3"	Bt.	2530
S(E)507	4	△	11'-2"	Str.	49
S(E)508	60	△	13'-0"	Str.	814
S(E)509	136	△	6'-6"	Str.	922
S(E)510	86	△	13'-10"	Str.	519
S(E)511	4	△	12'-0"	Str.	50
S(E)512	479	△	38'-2"	Str.	19068
S(E)513	19	△	6'-11½" to 35'-10" by 1'-7½"	Str.	424 △
S(E)514	19	△	7'-5" to 36'-3½" by 1'-7½"	Str.	433 △
S(E)515	342	△	30'-0"	Str.	10701
S(E)516	3	△	6'-1"	Str.	19
S(E)517	3	△	5'-4"	Str.	17
S(E)603	477	△	38'-2"	Str.	29345
S(E)604	19	△	6'-11½" to 35'-10" by 1'-7½"	Str.	611 △
S(E)605	19	△	7'-5" to 36'-3½" by 1'-7½"	Str.	624 △
S(E)606	3	△	6'-1"	Str.	27
S(E)607	3	△	5'-4"	Str.	24
Total Superstructure △					83284

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

126
127

HAM-75-9.93
HAM-126-13.00

NOTES

1. BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST DIGIT WHERE THREE DIGITS ARE USED AND THE FIRST TWO DIGITS WHERE FOUR ARE USED, INDICATE THE BAR SIZE NUMBER.
2. SPIRAL REINFORCING BARS - THE "LENGTH" SHOWN IN THE STEEL LIST FOR THE SPIRAL BARS IS THE DISTANCE FROM TOP OF THE FOOTING TO THE BOTTOM OF CAP, OR TO WITHIN 2" (±) OF THE TOP OF COLUMN FOR PIERS WITHOUT CAPS, TO THE NEAREST INCH.

FOUR STEEL ANGLE SPACERS, WEIGHING NOT LESS THAN 0.80 LB. PER LIN. FT. OF SPACER SHALL BE PROVIDED FOR EACH SPIRAL UNIT UP TO 15'-0" IN HEIGHT AND FOUR STEEL ANGLE SPACERS WEIGHING NOT LESS THAN 1.01 LB. PER LIN. FT. OF SPACER SHALL BE PROVIDED FOR EACH SPIRAL UNIT OVER 15'-0" IN HEIGHT. THEY SHALL BE EQUALLY SPACED ALONG THE PERIPHERY OF THE COIL. THE NUMBER OF POUNDS OF THESE SPACERS, BASED ON 0.80 OR 1.01 LB. PER LIN. FT. WILL BE PAID FOR AS REINFORCING STEEL AND IS INCLUDED IN THE TABULATED QUANTITY OF SPIRAL BARS. △

3. SEE SH. 13, 14 / 14 FOR BENDING DETAILS

△ 4. Reinforcing bars not revised by BALKE (△) shall have a minimum lap of 30 bar diameters.

△ 5. "(E) denotes epoxy coated reinforcing bar.

△ 6. Reinforcing Steel Samples: Refer to CMS Sections 106.03, 700, 709.01 thru 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structure by the additional steel, spliced in accordance with 509.08.

△ △

VOGT, IVERS & ASSOCIATES, INC. ENGINEERS CINCINNATI ARCHITECTS 11 / 13

REINFORCING STEEL LIST

BRIDGE NO. HAM-126-1516
S.R. 126, RAMP P & RAMP Q
UNDER KNOLLCREST DRIVE
HAMILTON COUNTY STA. 3+83.51 to STA. 6+78.77

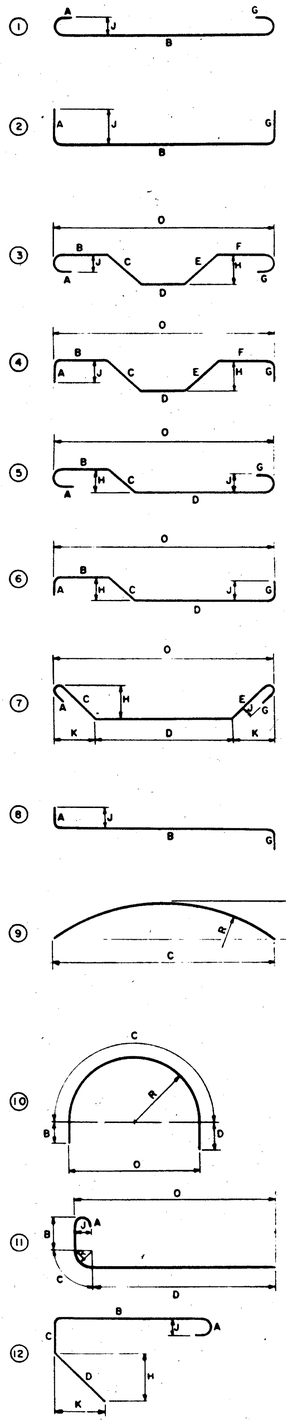
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	△ REVISED BALKE ENGRS. 1/86
—	GWM	—	EPA			

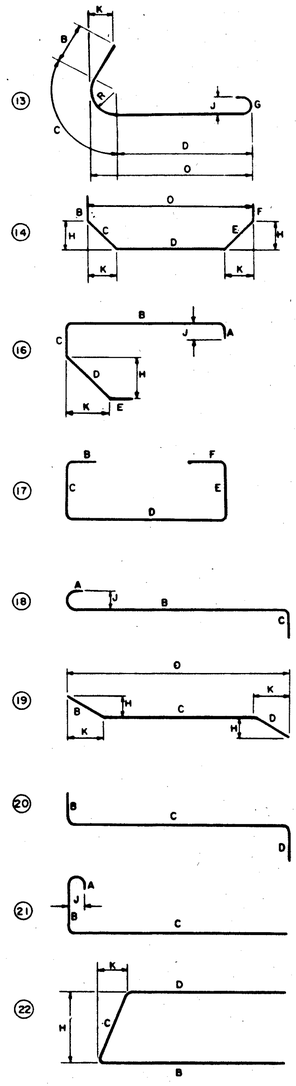
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

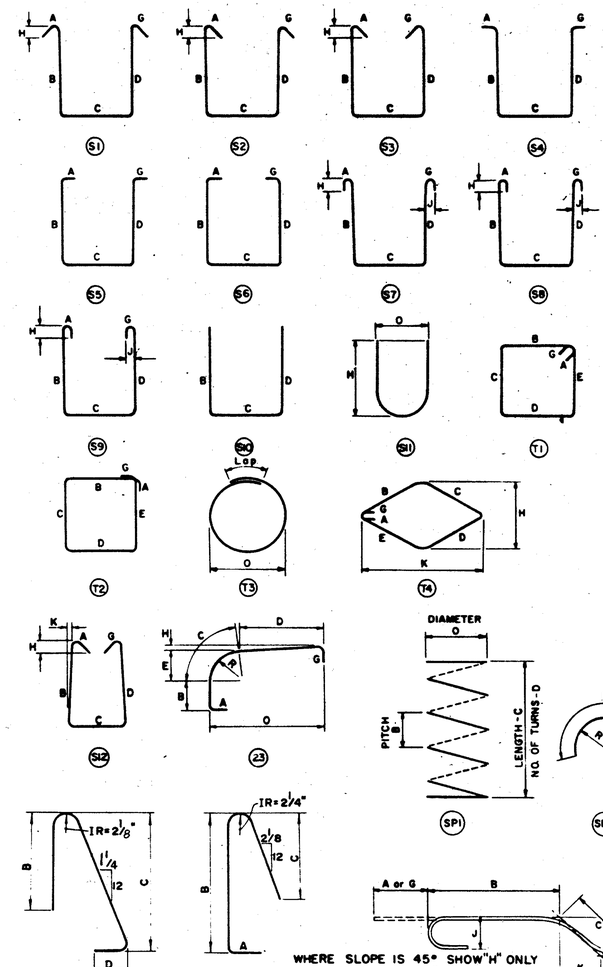
127
127

HAM-75-9.93
HAM-126-13.00

MARK	TYPE	DIMENSIONS FOR BENDING A	B	C	D	E	F	G	H	J	K	R	O
A501	2	6"	4:7"					-					
A502	2	6"	4:11"					-					
A503	2	6"	7:3"					-					
A504	S10		1:0"	3:5"	1:0"								
A505	19		1:4"	39:7"	-				5½"		1:3"		
A508	19		1:4"	10:9"	-				5½"		1:3"		
A510	20		1:0"	10:3"	-								
A511	20		1:0"	3:9"	-								
A512	19		1:4"	39:3"	-				5½"		1:3"		
△ A514	2	6"	11'-5½"					-					
△ A515	2	6"	12:3"					-					
△ A516	1	7"	2:2"										
△ A517	24		2:2"	2:5"	7½"								
A524	20		1:4"	12:0"	-								
A526	19		1:7"	11:6"	-				1:5⅞"		6½"		
A527	20		1:4"	10:1"	-								
A528	20		1:4"	12:0"	-								
△ A532	19		2:2"	6:3"	-				11"		1'-11"		
A604	S10		6:8"	3:9"	-								
A605	S10		7:0"	3:9"	-								
A606	S10		7:4"	3:9"	-								
A607	S10		4:0"	1:5"	4:0"								
A608	S10		2:9"	1:5"	2:9"								
△ A609	S10		3:0"	11"	3:0"								
△ A610	S10		11'3" to 11'7" by 1"	1:2"	11'3" to 11'7" by 1"								
△ A611	S10		12'1" to 12'5" by 1"	1:2"	12'1" to 12'5" by 1"								
△ A612	S10		12:0"	1'-2"	12:0"								
△ A613	S10		12:10"	1'-2"	12:10"								
△ A6614	14		7"		3:8"				2"		8½"		
△ A6615	14		7"		3:5"				3"		8½"		
△ A6616	14		8"		4:0"				4"		8½"		
△ A6617	14		8"		4:7"				5"		8½"		
△ A6618	14		9"		5:1"				6"		8½"		
△ A6619	14		9"		2:5"				6"		8½"		
△ A6620	14		7"		3:9"				2"		8½"		
△ A6801	26												
B501	S10		1:7"	5:4"	1:7"								
B502	T1	5"	2:2"	3:0"	2:2"	3:0"		5"					
B503	2	6"	4:6"					-					
B504	S10		1:0"	3:5"	1:0"								
B507	19		1:4"	38:11"	-				5"		1:3⅛"		
B509	19		1:4"	38:9"	-				5"		1:3⅛"		
△ B510	2	6"	11'-2"					-					
△ B518	1	7"	2:1"										
△ B519	20		1:4"	9:3"	-								
△ B521	20		1:4"	11:0"	-								
△ B523	24		2:2"	2:5"	7½"								
△ B527	19		2:5"	4:3"	-				11½"		1'-11"		
△ B528	19		1:7"	8:9"	-				1:6¼"		5⅜"		
DL01	17		-	2:6"	5:4"	6:7"							
DL02	S10		4:0"	1:5"	4:0"								
DL03	S10		2:9"	1:5"	2:9"								
△ DL04	S10		3:0"	11"	3:0"								
△ DL05	S10		10'8" to 10'10" by 1"	1:2"	10'8" to 10'10" by 1"								
△ 206	S10		10'9"	1:2"	10'9"								
△ DL07	S10		10'6" to 10'8" by 1"	1'-2"	10'6" to 10'8" by 1"								
△ DL608	14		7"		3:4"				2"		8½"		
△ DL609	14		7"		3:5"				2"		8½"		
△ DL610	14		7"		3'-10"				3"		8½"		
△ DL611	14		8"		4'-7"				4"		8½"		
△ DL612	14		8"		5:4"				5"		8½"		
△ DL613	14		9"		5:9"				6"		8½"		
△ DL614	14		9"		2:5"				6"		8½"		
DL802	19		2:3"	39:11"	-				8½"		2:1 5⅛"		
DL803	20		2:3"	12:7"	-								
108	19		2:6"	11:5"	-				2:4 3⅛"		8½"		
△ DL809	26												
DA501	T1	5"	2:1"	3:0" to 4:2" by 2"	2:1"	3:0" to 4:2" by 2"		5"					
DA502	T1	5"	2:1"	4:2"	2:1"	4:2"		5"					
DA503	T1	5"	2:8"	4:2"	2:8"	4:2"		5"					
DA505	20		1:0"	9:0"	-								
DA506	S10		1:0"	2:8"	1:0"								
DA1001	19		5:8"	15:2"	-				1:2"		5:7"		
DA1002	19		5:8"	15:2"	-				10"		5:7"		







NOTES

1. FIGURES IN CIRCLES SHOW BAR TYPES.
2. ALL DIMENSIONS ARE OUT TO OUT OF BAR.
3. "J" DIMENSION ON HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE, OTHERWISE STANDARD HOOKS ARE TO BE USED.
4. WHERE "J" IS NOT SHOWN "J" WILL BE KEPT EQUAL TO OR LESS THAN "H". WHERE "J" CAN EXCEED "H" IT SHOULD BE SHOWN.
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7. RADIUS DIMENSION "R" IS TO OUTSIDE OF BAR.
8. THE LENGTH OF BENT BARS IS MEASURED ALONG THE CENTERLINE.
9. FOR STANDARD HOOK DIMENSIONS, SEE SECT. 509.05 OF THE SPECIFICATIONS.
10. FOR BAR TYPE SP1, THE NO. OF TURNS "D" IS THE LENGTH "C" DIVIDED BY THE PITCH "B", PLUS 3 TURNS (TOTAL NUMBER OF CLOSED COILS), EXPRESSED AS THE NEAREST WHOLE NUMBER. 1½ CLOSED COILS SHALL BE PROVIDED AT THE ENDS OF EACH SPIRAL UNIT.

ENLARGED VIEW SHOWING BAR BENDING DETAILS

△ △

VOGT, IVERS & ASSOCIATES, INC. ENGINEERS ARCHITECTS CINCINNATI 12/13

BAR BENDING DETAILS

BRIDGE NO. HAM-126-1516
S.R. 126, RAMP P & RAMP Q
UNDER KNOLLCREST DRIVE
HAMILTON COUNTY STA. 3+83.51 to STA. 6+78.77

DESIGNED	DRAWN	TRACED	CHK'D.	REVIEWED	DATE	REVISED
—	GWM	—	EPA			△ BALKE ENGRS. 1/86

MARK	TYPE	DIMENSIONS FOR BENDING A	B	C	D	E	F	G	H	J	K	R	O
DA1101	2	1'-8"	9'-0"					–					
DA1105	20		3'-7"	24'-2"	–								
DA1106	20		3'-0"	16'-2"	–								
SP1401	SP1		4½"	28'-6"	79								2'-8"
SP1402	SP1		4½"	28'-3"	78								2'-8"
SP1403	SP1		4½"	27'-11"	77								2'-8"
PD501	T1	5"	2'-1"	3'-0" to 4'-2" by 2"	2'-1"	3'-0" to 4'-2" by 2"		5"					
PD502	T1	5"	2'-1"	4'-2"	2'-1"	4'-2"		5"					
PD503	T1	5"	2'-8"	4'-2"	2'-8"	4'-2"		5"					
PD505	20		1'-0"	9'-0"	–								
PD506	S10		1'-0"	2'-8"	1'-0"								
PD1001	2	1'-6"	7'-9"					–					
PD1005	19		5'-8"	15'-2"	–				1'-2"		5'-7"		
PD1006	19		5'-8"	15'-2"	–				10"		5'-7"		
PD1007	20		3'-2"	24'-2"	–								
PD1009	20		3'-0"	15'-10"	–								
SP1401	SP1		4½"	21'-3"	60								2'-8"
SP1402	SP1		4½"	20'-11"	59								2'-8"
SP1403	SP1		4½"	20'-7"	58								2'-8"
DC501	T1	5"	2'-8"	3'-0" to 4'-2" by 1½	2'-8"	3'-0" to 4'-2" by 1½		5"					
DC502	T1	5"	2'-8"	4'-2"	2'-8"	4'-2"		5"					
DC503	S10		1'-0"	2'-8"	1'-0"								
DC505	20		1'-0"	9'-0"	–								
DC901	1	1'-3"	8'-6"					1'-3"					
DC902	1	1'-3"	5'-6"					1'-3"					
DC1001	2	1'-6"	7'-9"					–					
DC1005	19		5'-8"	15'-2"	–				1'-1"		5'-7"		
DC1006	19		5'-8"	15'-2"	–				11"		5'-7"		
DC1007	20		3'-2"	24'-2"	–								
DC1008	20		3'-0"	15'-10"	–								
SPC401	SP1		4½"	12'-1"	35								2'-8"
SPC402	SP1		4½"	11'-11"	35								2'-8"
SPC403	SP1		4½"	11'-9"	34								2'-8"
△ SEE504	2	10½"	1'-8"					–					
△ SEE505	16	–	10½"	9½"	10½"	9"			8½"		6"		
△ SEE506	24		2'-2"	2'-5"	7'-2"								

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑯ ⑰ ⑱ ⑲ ⑳ ㉑ ㉒

△ ㉔

⑮ NOT USED

㊶ ㊷ ㊸ ㊹ ㊺ ㊻ ㊼ ㊽ ㊾ ㊿ ㊿ Lap T1 T2 T3 T4 SP1 SP2 ㉜ ㉓

WHERE SLOPE IS 45° SHOW "H" ONLY
OTHERWISE SHOW "H" AND "K"

ENLARGED VIEW SHOWING
BAR BENDING DETAILS

△ ㉕ ㉖

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FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

HAM-75-9.93
HAM-126-13.00

125
127

△ △ 13/13

VOGT, IVERS & ASSOCIATES
ENGINEERS CINCINNATI — ARCHITECTS CHICAGO

BAR BENDING DETAILS

BRIDGE NO. HAM-126-1516
S.R. 126, RAMP P & RAMP Q UNDER
KNOLLCREST DRIVE
HAMILTON COUNTY STA. 3+83.51 to STA. 6+78.77

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
–	GWM	–	EDA			△ BALKE ENGRS. 1/86

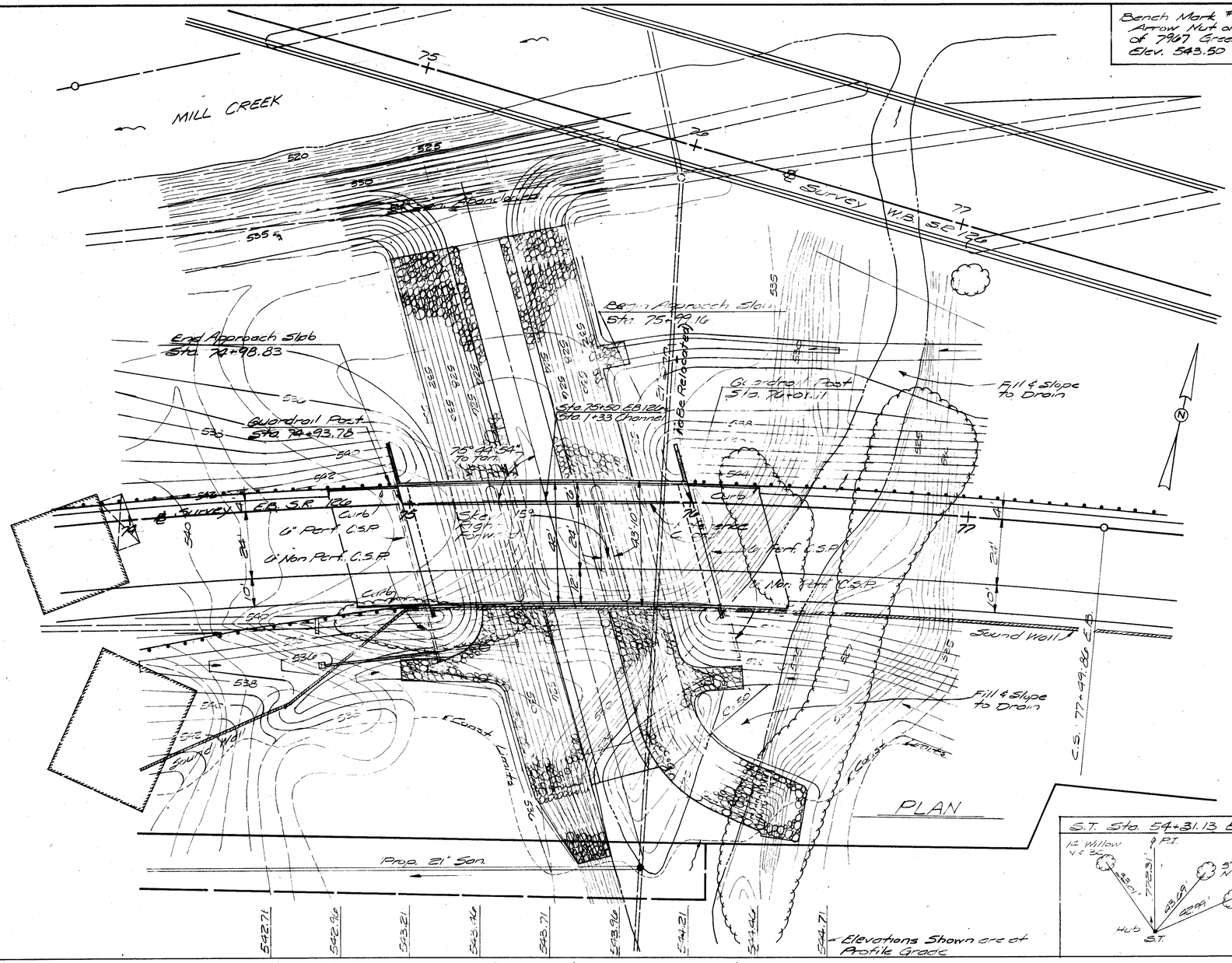
Bench Mark #16
Arrow Nut on Fire Hydrant in front of 7967 Greenland
Elev. 543.50

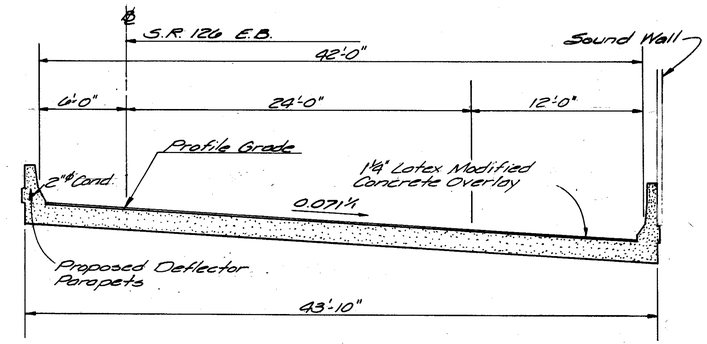
168
Yellow
729-763

FHWA REGION	STATE	PROJECT	
5	OHIO		

729
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY





TYPICAL SECTION

HORIZONTAL CURVE DATA

P.I. Sta.	= 73+88.78
Δ	= 52°55'41"
D	= 3°00'00"
R	= 1909.86'
T1	= 953.19'
T2	= 1099.21'
Lc	= 1614.27'
Le	= 300.00'

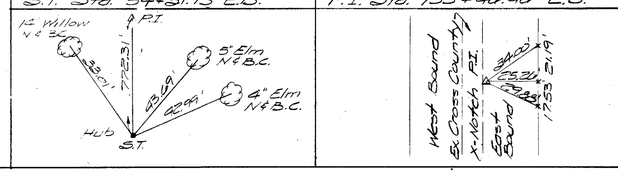
TRAFFIC DATA (SR 126 EB)

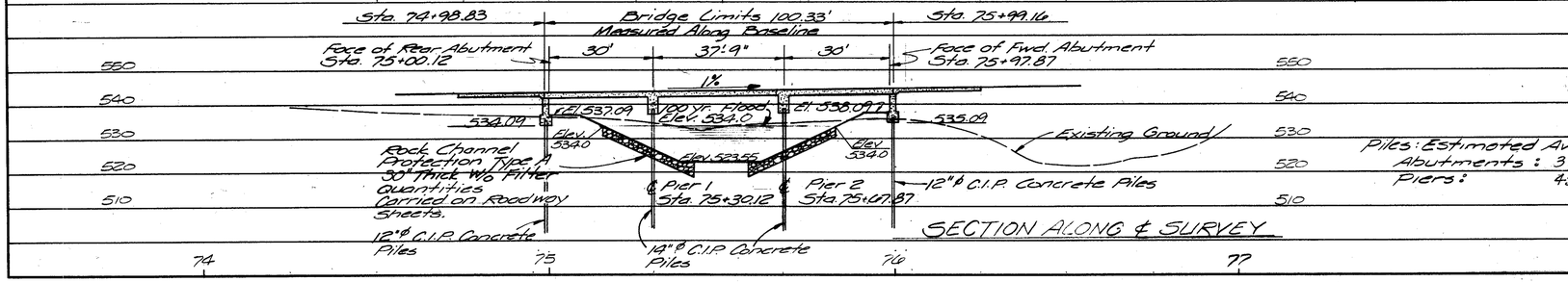
ADT (1989) =	9769
ADT (2006) =	12544
ADTT (2006) =	878

DRAINAGE DATA

	Check Storm	Design Storm
* Drainage Area	4.0 Sq.Mile	4.0 Sq.Mile
Storm	100 Yr.	50 Yr.
* Q Cfs	4699	4285
* V fps	18.5	18.1
* Depth Flow	7.0'	6.7'
* Elevation (South Parapet) Center Sturct.	530.1' ±	529.3±
Flood Elevation with Backwater effect from Mill Creek	534.0	533.0

* Without Backwater Effect





PROPOSED STRUCTURE

Type Reinforced Concrete Slab Bridge on Capped Pile Piers & Abutments.
Span 30'-0", 37'-9", 30'-0"
Roadway: 42' Face to Face of Parapets
Loading: H5-20-44 and Alternate Military Loading
Skew: 15°00'00" To Ref. Chord, Right Forward
Wearing Surface: 1½ Latex Modified Concrete Overlay
Approach Slab: AS-1-81 25'-0" Long
Alignment: 3°00'00" Curve Right
Superelevation: 0.071%

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

1 / 11

SITE PLAN

BRIDGE NO. HAM-126-1400
over
Tributary of Mill Creek

SEC.
STA. 74+98.83
75+99.16
SCALE 1" = 20'

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
Field	L.E.H.	B.J.S.	L.E.H.	S.A.	CRS. 2-86

CALC. BY / DATE	HAMILTON COUNTY HAM 75/12.0-9.93/13.00	OHIO	729A 787
CHKD. BY / DATE		FHWA REGION 5	

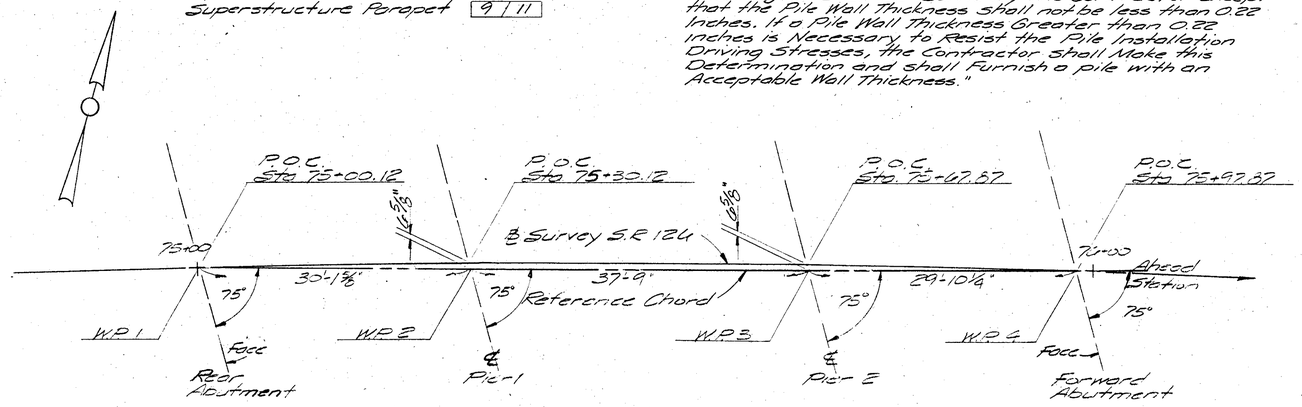
ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	REAR ABUTMENT	FORWARD ABUTMENT	PIER 1	PIER 2	SUPER-STRUCTURE	GENERAL
503	128	Cu.Yd.	Unclassified Excavation	64	64	—	—	—	—
505	L.S.	L.S.	Pile Driving Equipment Mobilization			—	—	—	Lump Sum
507	700	Lin.Ft.	12" Cast-in-Place Reinforced Concrete Piles, As Per Plan	350	350				
507	900	Lin.Ft.	14" Cast-in-Place Reinforced Concrete Piles, As Per Plan	—	—	450	450	—	—
509	10377	Lb.	Reinforcing Steel, Grade 60	3849	3353	1335	1337	—	—
824	70483	Lb.	Epoxy Coated Reinforcing Steel, Grade 60	384	384	921	921	67843	—
511	45	Cu.Yd	Class C Concrete, Footings	23	22	—	—	—	—
511	32	Cu.Yd.	Class C Concrete, Abutments above Footings	16	16	—	—	—	—
511	15	Cu.Yd.	Class C Concrete, Pier Caps	—	—	14	14	—	—
511	280	Cu.Yd.	Class S Concrete, Superstructure	—	—	—	—	267	—
* 511	280	Cu.Yd.	Class S Concrete Superstructure using Shrinkage Compensating Cement 701.08	—	—	—	—	267	—
Special			Noise Barrier (Quantities are Included in Roadway Plans, See Roadway Quantities)						
518	30	Cu.Yd	Porous Backfill	15	15	—	—	—	—
Special	228	Sq.Yd.	Sealing of Concrete Surfaces (See Proposal Note)	—	—	—	—	228	—
846	455	Sq.Yd.	1½" Latex Concrete Modified Overlay (See Proposal Note)	—	—	—	—	455	—

* Alternate Bid Item

SEALING OF CONCRETE SURFACES: The following concrete areas are to be sealed per Proposal Note:
Superstructure Parapet 9/11

"PILE WALL THICKNESS: The Responsibility of Choosing and Providing a Satisfactory Pile Wall Thickness for this Project shall be Borne by the Contractor Except that the Pile Wall Thickness shall not be less than 0.22 Inches. If a Pile Wall Thickness Greater than 0.22 Inches is Necessary to Resist the Pile Installation Driving Stresses, the Contractor Shall Make this Determination and shall Furnish a pile with an Acceptable Wall Thickness."



STAKEOUT PLAN

"PILE DRIVING CONSTRAINTS: Prior to Driving Piles at the Abutments, the Spill-thru Slope Embankment shall be Constructed to the Level of the Subgrade for a Minimum Distance of 200 Feet Back of Each Abutment. After the Embankment is Completed Within the above Required Limits, the Excavation for the Abutment Footings shall be Made and then the Piles can be Driven."

"PILE HAMMER: The Pile Hammer used to Install the Cast-in-place Reinforced Concrete Piles shall have a State's Energy Rating of not less than 14,000 foot-pounds. This Requirement does not Relieve the Contractor from 108.05 which States that the Contractor is to Provide Sufficient Equipment for Prosecuting the Required Work. Refer to "ODOT's Manual of Procedures for Structures" to Obtain the State's Energy Rating."

GENERAL NOTES

REFERENCE SHALL BE MADE TO THE FOLLOWING STANDARD DRAWINGS:

AS-1-81	DATED 11-27-81
BR-1	DATED 5-29-79
CPA-2-73	DATED 4-10-73
CPP-2-73	DATED 4-10-73
CS-2-73 (SHEETS 1 & 2)	DATED 4-10-73

SUPPLEMENTAL SPECIFICATIONS:

836	DATED 11-12-85
845	DATED 2-25-86
953	DATED 8-21-80
824	DATED 10-8-82

DESIGN SPECIFICATIONS:
THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" - ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1983, AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:

DESIGN LOADING	HS 20-44, AND THE ALTERNATE MILITARY LOADING
CONCRETE, CLASS C	COMPRESSIVE STRENGTH: 4000 PSI (SUBSTRUCTURE)
CONCRETE, CLASS S	COMPRESSIVE STRENGTH: 4500 PSI (SUPERSTRUCTURE)
REINFORCING STEEL	ASTM A615, A616, A617, GRADE 60, MINIMUM YIELD STRESS: 60,000 PSI
DECK PROTECTION METHOD	EPOXY-COATED REINFORCING STEEL WITH 3-INCH CONCRETE COVER OF WHICH 1-1/4-INCH IS A LATEX MODIFIED CONCRETE OVERLAY

PILE DESIGN LOAD:
THE DESIGN LOAD FOR THE ABUTMENT PILES IS 41 TONS PER PILE. THE DESIGN LOAD FOR THE PIER PILES IS 42 TONS PER PILE.

ITEM 507 - 12" AND 14" DIAMETER CAST-IN-PLACE REINFORCED CONCRETE PILES, AS PER PLAN:

12-INCH PRECAST, PRESTRESSED CONCRETE PILES MAY BE SUBSTITUTED FOR THE 12-INCH CAST-IN-PLACE REINFORCED CONCRETE PILES SHOWN ON THESE PLANS. 14-INCH PRECAST, PRESTRESSED CONCRETE PILES MAY BE SUBSTITUTED FOR THE 14-INCH CAST-IN-PLACE REINFORCED CONCRETE PILES SHOWN ON THESE PLANS. DRAWINGS SHOWING DETAILS OF AND SPECIFICATIONS FOR PRESTRESSED CONCRETE PILES ARE AVAILABLE FROM THE DIRECTOR (BUREAU OF BRIDGES).

IF THE PRESTRESSED PILE ALTERNATE IS CHOSEN, THE METHOD OF MEASUREMENT AND BASIS OF PAYMENT SHALL BE THE SAME AS FOR CAST-IN-PLACE REINFORCED CONCRETE PILES PER 507.

ITEM 518 - POROUS BACKFILL:
POROUS BACKFILL, 16" THICK, SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE AND LATERALLY TO THE END OF THE WINGWALLS.

ITEM SPECIAL, SEALING OF CONCRETE SURFACES:
A CONCRETE SEALER, EITHER SILANE OR AN EPOXY SEALER, SHALL BE APPLIED TO THE CONCRETE SURFACES AS SHOWN ON SHEET 9/11. SEE THE PROPOSAL FOR SURFACE PREPARATION REQUIREMENTS, APPLICATION RATES, MATERIAL REQUIREMENTS AND APPLICATION PROCEDURES.

ITEM 601 - ROCK CHANNEL PROTECTION
TYPE A, 30-INCHES THICK, WITHOUT FILTER, INCLUDED IN ROADWAY QUANTITIES.

ITEM 511 - CLASS S CONCRETE, SUPERSTRUCTURE, USING SHRINKAGE-COMPENSATING CEMENT, 701.08

THE FOLLOWING RESTRICTIONS SHALL APPLY TO THE SUPERSTRUCTURE CONCRETE USING SHRINKAGE-COMPENSATING CEMENT, 701.08:

1. CEMENT SHALL BE EXPANSIVE HYDRAULIC CEMENT, ASTM C845, TYPE K.
2. THE MAXIMUM WATER/CEMENT RATIO GIVEN FOR CLASS "S" CONCRETE IN 499.03 SHALL BE REVISED FROM 0.44 TO 0.50.
3. MAXIMUM SLUMP AT THE TIME AND PLACE OF CONCRETE PLACEMENT SHALL BE 6-INCHES.
4. CHEMICAL ADMIXTURES, WHEN REQUIRED BY 511.06, SHALL BE LIMITED TO 705.12, TYPE D.
5. MAXIMUM AMBIENT TEMPERATURE AT TIME OF PLACEMENT OF CONCRETE SHALL BE 80°F.
6. MEMBRANE CURING PER SS836 WILL NOT BE PERMITTED FOR ANY CONCRETE PLACED BETWEEN SEPTEMBER 1 AND MARCH 31. SUCH CONCRETE SHALL BE CURED BY METHOD (A) WATER CURING.
7. IF REQUIRED BY THE ENGINEER, THE SURFACE OF THE CONCRETE SHALL BE GIVEN A FOG SPRAY OF WATER. THIS MAY BE REQUIRED PRIOR TO EITHER WATER CURING OR MEMBRANE CURING IF WEATHER CONDITIONS DICTATE. EQUIPMENT SHALL BE ON HAND.

NOTE:
EXPOSED STEEL PILES AND PILE CASEING IN CAPPED PILE PIERS SHALL HAVE PILE ENCASEMENT SIMILAR TO THAT SHOWN ON STANDARD DRAWING CPP-2-73, REGARDLESS OF STEAM PH. THE ENCASEMENT SHALL CONSIST OF CLASS C CONCRETE PLACED WITHIN A SHELL OF EXTRA STRENGTH VITRIFIED CLAY PIPE, GALVANIZED CORRUGATED STEEL PIPE, OR PLAIN OR CORRUGATED PLASTIC PIPE ALL HAVING A MINIMUM INSIDE DIAMETER OF APPROXIMATELY 19" FOR 12" C.I.P. CONCRETE PILES, AND 21" FOR 14" CAST-IN-PLACE CONCRETE PILES. ENCASEMENT SHALL EXTEND APPROXIMATELY 4' BELOW AND 4' ABOVE THE FLOWLINE OR GROUND LINE.

AS AN ALTERNATE TO ENCASEMENT OF CAST-IN-PLACE CONCRETE PILES, AN EPOXY COATING MAY BE USED. THE COATING SHALL BE A MOISTURE-INSENSITIVE 100 PERCENT SOLID EPOXY RESIN WITH A BLEND OF FILLERS MADE EXPRESSLY FOR PILING AND PIER PROTECTION. IT SHALL BE APPLIED APPROXIMATELY 3/16-INCH THICK TO SURFACES PREPARED ACCORDING TO THE EPOXY MANUFACTURER'S INSTRUCTIONS.

COST OF ENCASEMENT SHALL BE INCLUDED WITH THE PILES FOR PAYMENT.

EMBANKMENT CONSTRUCTION
THE EMBANKMENTS SHALL BE CONSTRUCTED TO THE LEVEL OF THE SUBGRADE FOR A MINIMUM DISTANCE OF 200 FEET BACK OF THE ABUTMENTS. EXCAVATION MAY THEN BE MADE FOR THE ABUTMENTS AND PILES DRIVEN.

EXISTING CHANNEL SHALL BE FILLED TO ELEV. 535 & SLOPED TO DRAIN

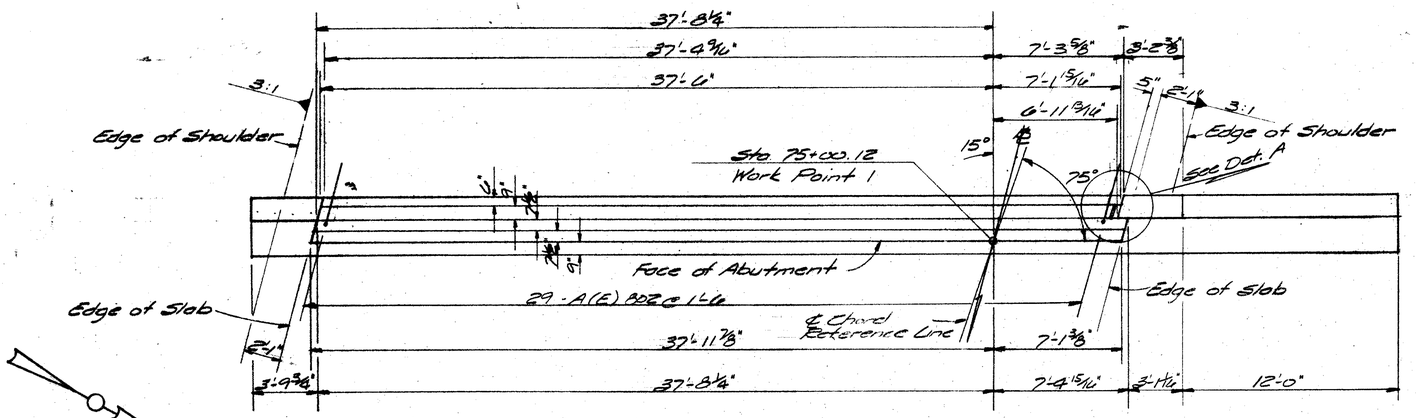
BALKE ENGINEERS 7762 READING ROAD CINCINNATI, OHIO 45237	2/11

ESTIMATED QUANTITIES, STAKE-OUT PLAN, & GENERAL NOTES
Bridge No. HAM-126-1400
S.R. 126 EB over
Tributary of Mill Creek
Hamilton County Ohio
Sta 74+98.83 to Sta 75+99.16

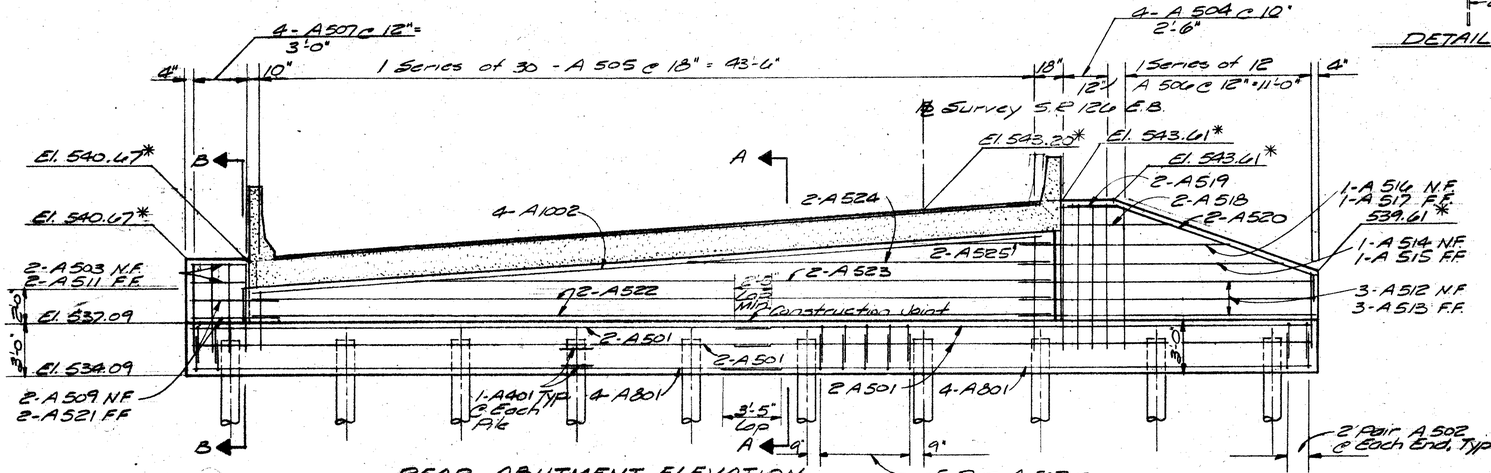
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
SJS	LEH	S	S.A.	CRS 2-86	

OHIO BLUE PRINT 140503

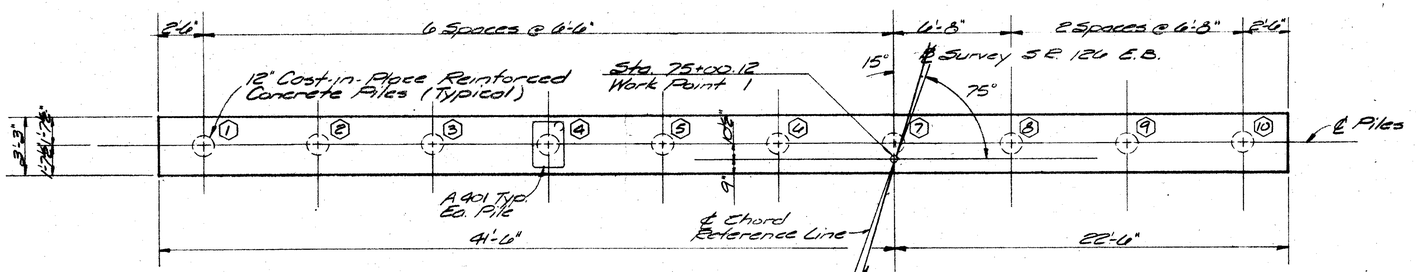
CALC. BY		HAMILTON COUNTY, HAM 75/126-9.93/13.00	OHIO	289-E 787
DATE			FHWA REGION 5	
CHKD. BY				
DATE				



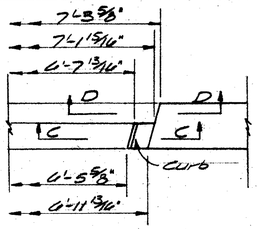
REAR ABUTMENT PLAN



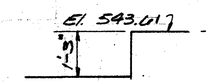
REAR ABUTMENT ELEVATION



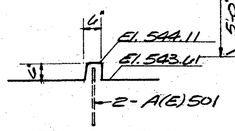
FOOTING & PILING PLAN



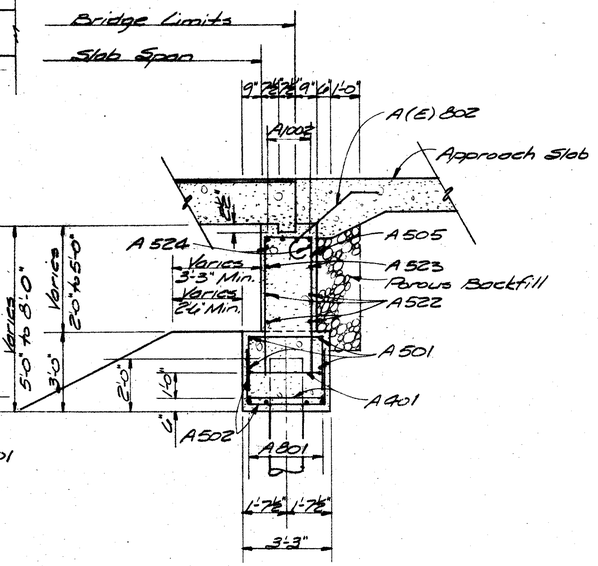
DETAIL A



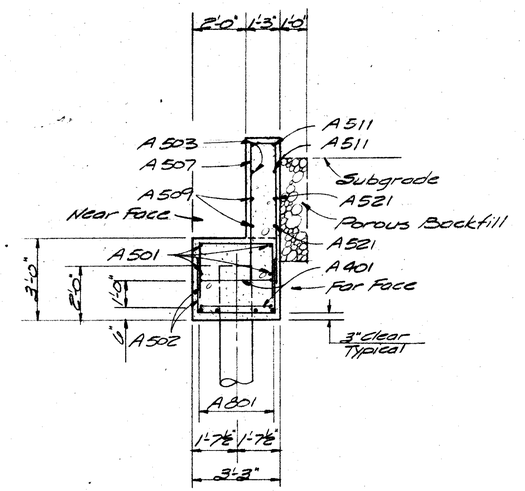
DETAIL D-D



DETAIL C-C



SECTION A-A



SECTION B-B

*Near Face of Wingwall or Backwall
For General Notes See Sheet 2 | 11
F.F. For Face
N.F. Near Face

BALKE ENGINEERS 7762 READING ROAD CINCINNATI, OHIO 45237						3 | 11
REAR ABUTMENT Bridge No. HAM-126-1400 S.R. 126 EB over Tributary of Mill Creek Hamilton County Ohio Sta. 74+98.83 to Sta 75+99.16						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED	
BJS	LEH	S	S.A.	CRS 2-86		

OHIO BLUE PRINT M2053

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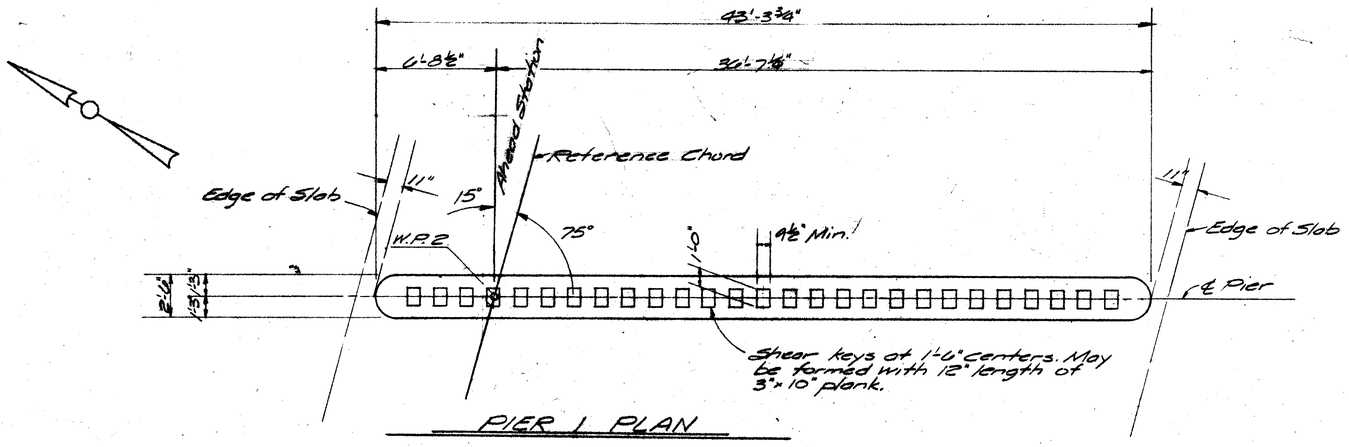
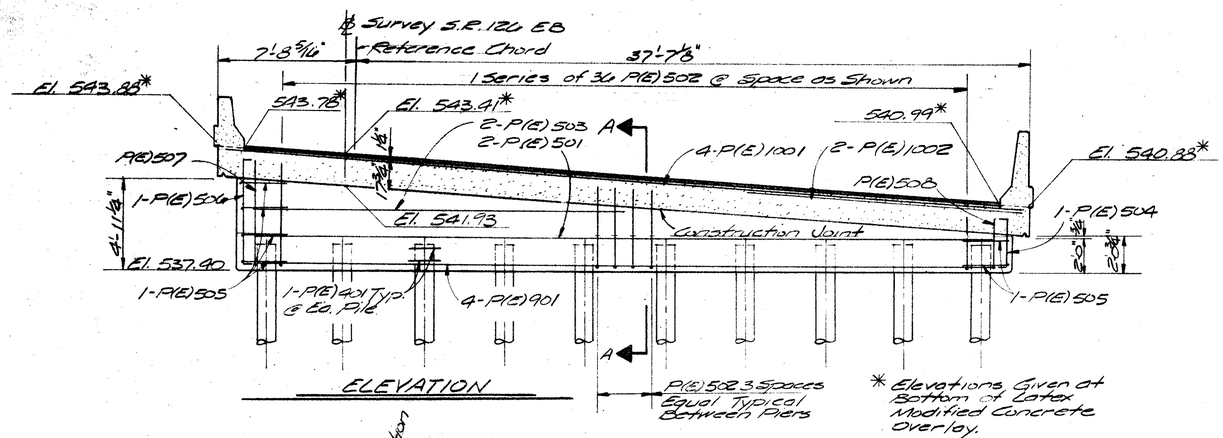
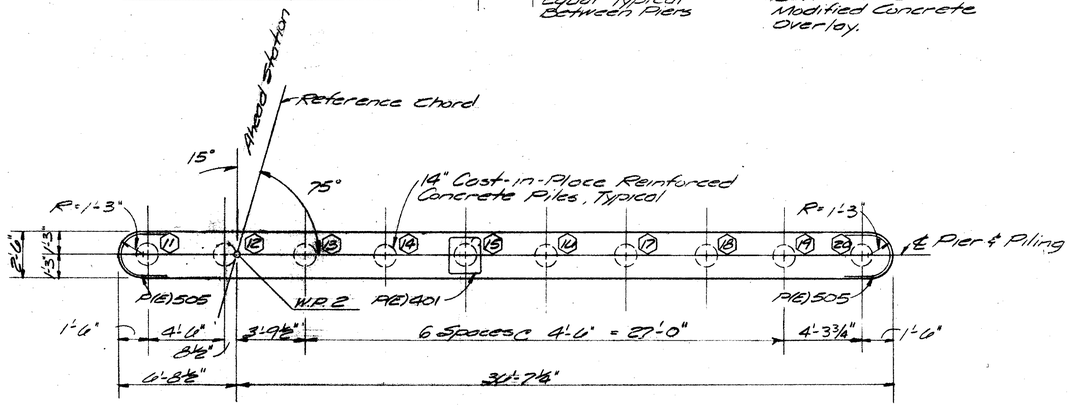
DATE			FHWA REGION 5	
CHKD. BY				
DATE				



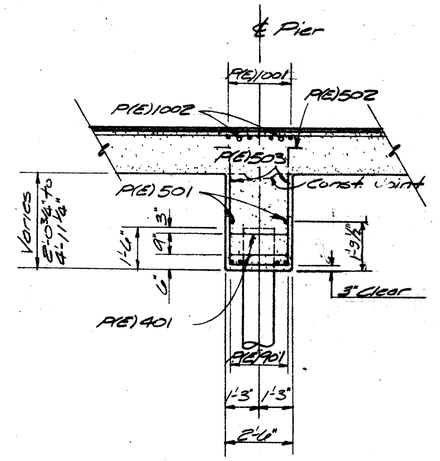
PIER 1 PLAN



ELEVATION



PILING PLAN



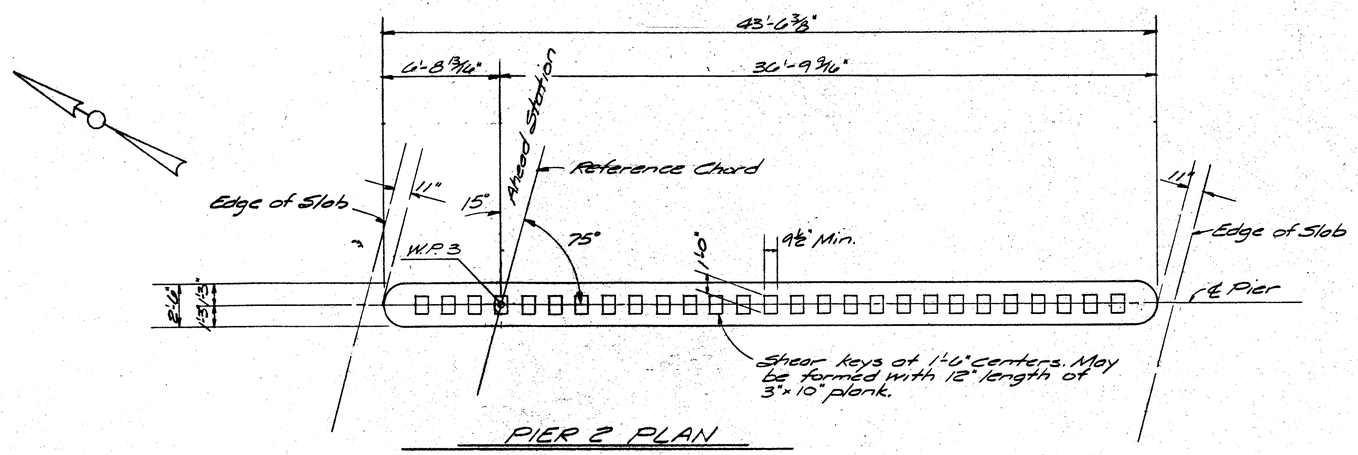
SECTION A-A

For General Notes See Sheet 2/11

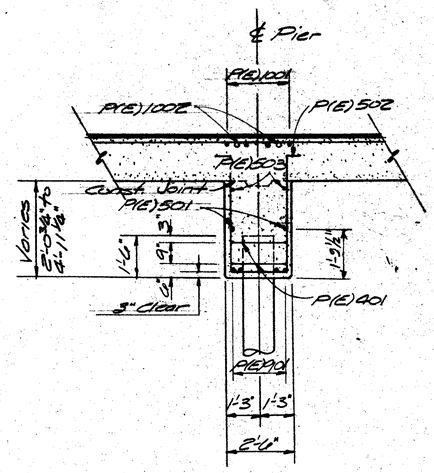
BALKE ENGINEERS 7762 READING ROAD CINCINNATI, OHIO 45237						4/11
PIER 1 DETAIL Bridge No. HAM-126-1900 SR 126 EB over Tributary of Mill Creek Hamilton County Ohio Sta. 74+98.83 to Sta. 75+99.16						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED	
BJS	LEH	S	S.A.	CRS. 2-86		

OHIO BLUE PRINT 140833

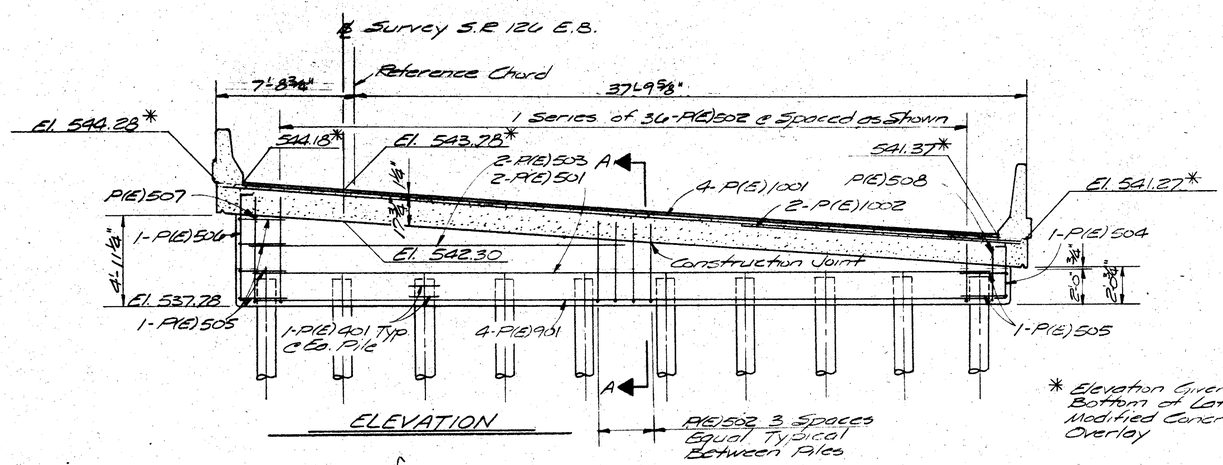
CALC. BY	HAMILTON COUNTY	OHIO	729-D
DATE	HAM 75/126-9.93/13.00	FHWA REGION 5	787
CHKD. BY			
DATE			



PIER 2 PLAN

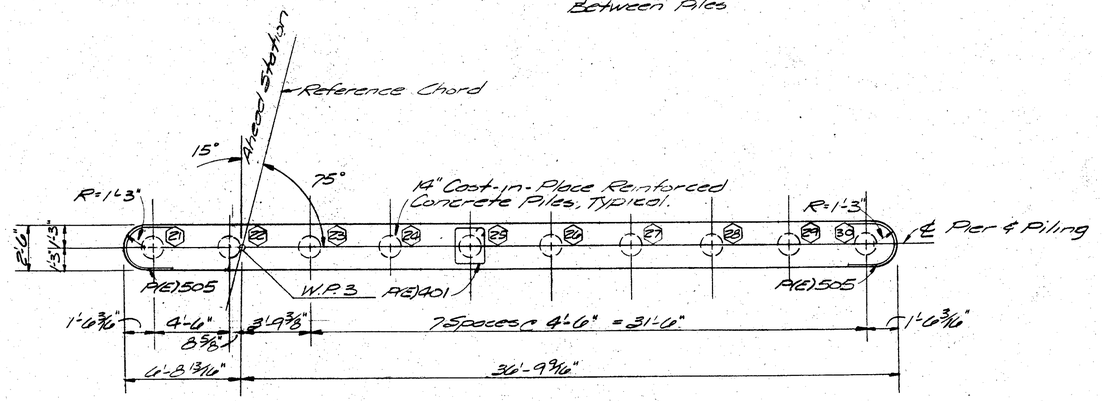


SECTION A-A



ELEVATION

* Elevation Given at Bottom of Latex Modified Concrete Overlay



PILING PLAN

For General Notes See Sheet 2/11

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

5/11

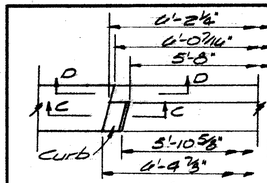
PIER 2 DETAIL

Bridge No. HAM-126-1400
S.R. 126 EB over
Tributary of Mill Creek

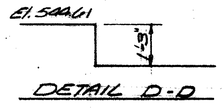
Hamilton County Ohio
Sta. 74+98.83 to Sta. 75+99.16

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	LEH	∽	S.A.	CRS. 2-86	

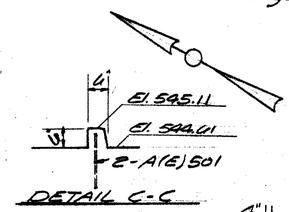
CALC. BY / DATE	HAMILTON COUNTY HAM 75/12.26-9.93/13.00	OHIO FHWA REGION 5	729e 787
CHKD. BY / DATE			



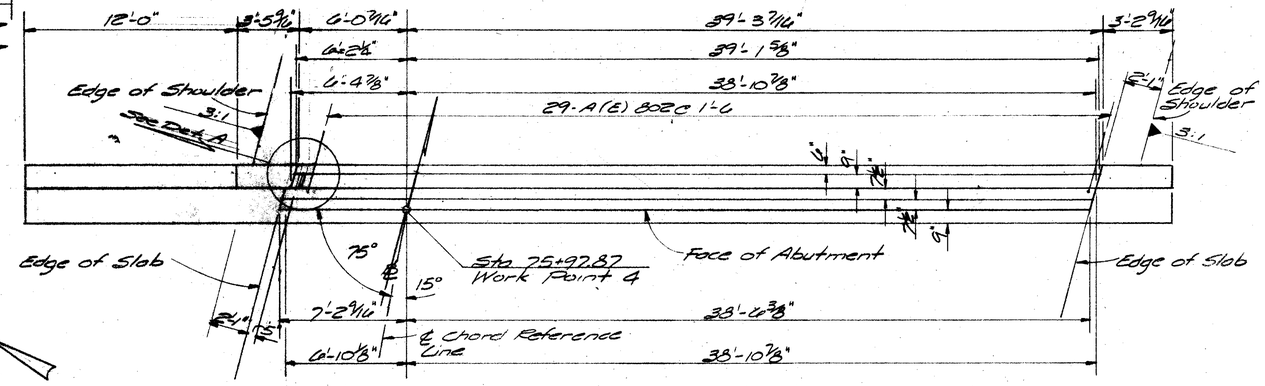
DETAIL A



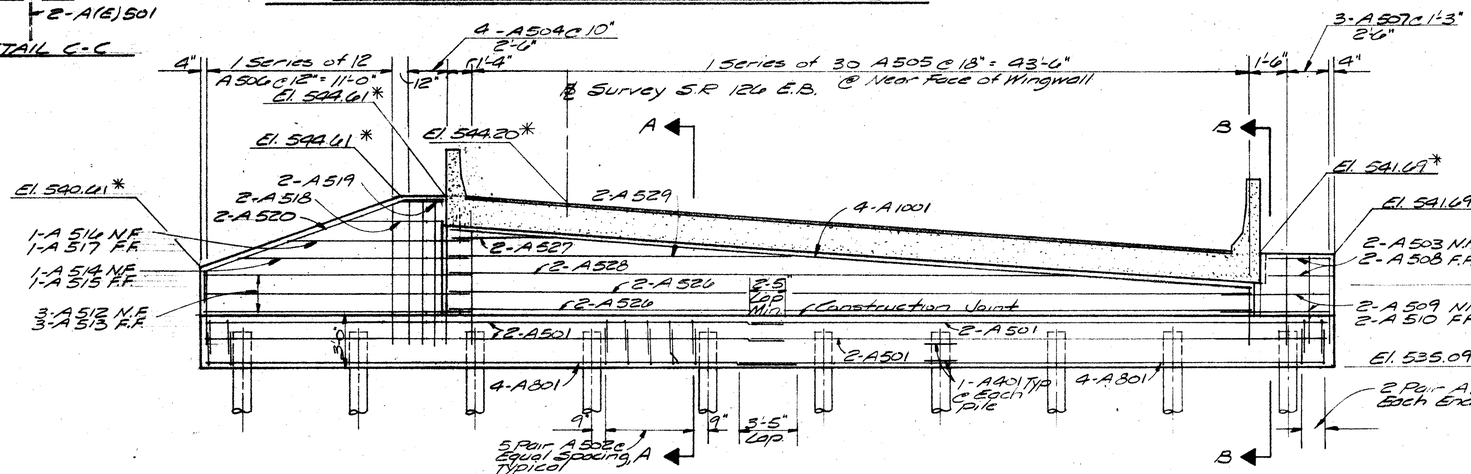
DETAIL D-D



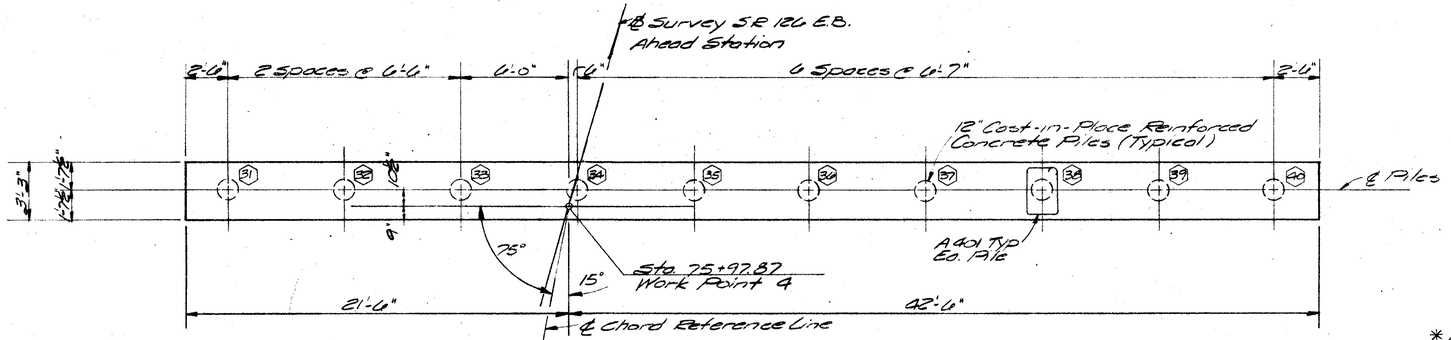
DETAIL C-C



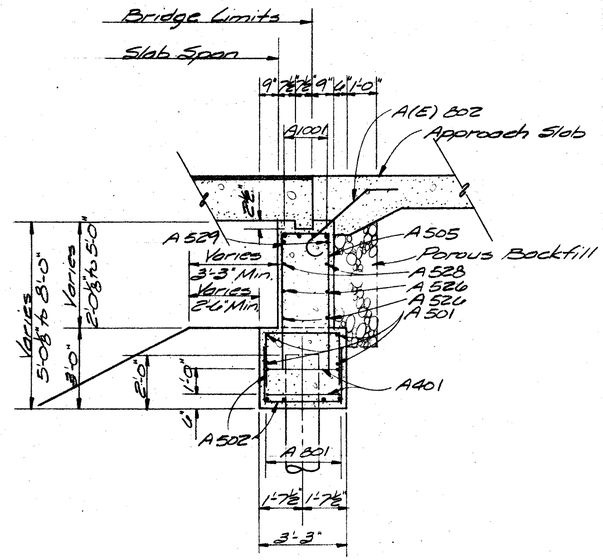
FORWARD ABUTMENT PLAN



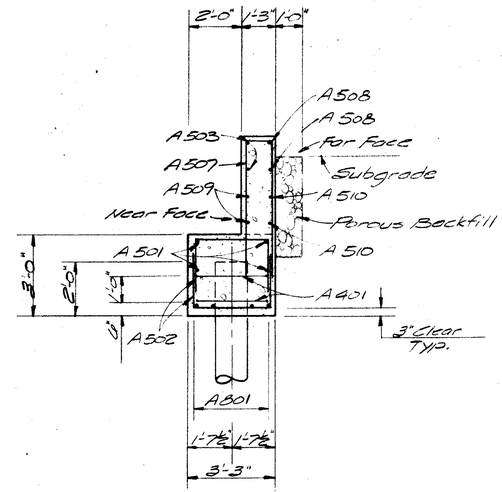
FORWARD ABUTMENT ELEVATION



FOOTING & PILING PLAN



SECTION A-A



SECTION B-B

* Near Face of Wingwall or Backwall
For General Notes See Sheet 2 | 11
F.F. For Face
N.F. Near Face

BALKE ENGINEERS 7762 READING ROAD CINCINNATI, OHIO 45237	6 | 11

FORWARD ABUTMENT

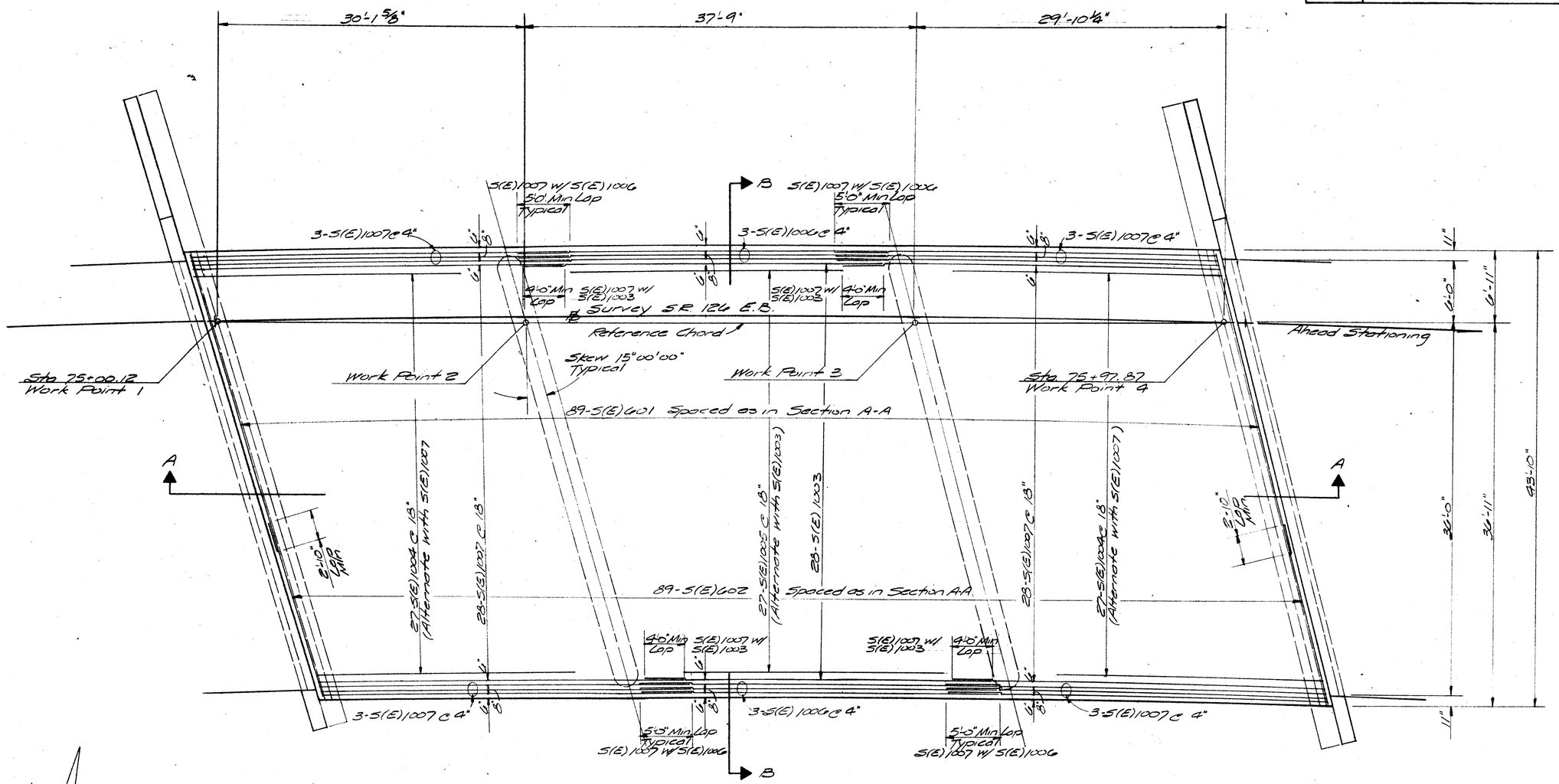
Bridge No. HAM-126-1400
S.R. 126 EB over
Tributary of Mill Creek

Hamilton County Ohio
Sta. 74+98.83 to Sta. 75+99.16

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	LEH	∽	S.A.	CRS 2-84	

OHIO BLUE PRINT 740233

CALC. BY / DATE	HAMILTON COUNTY HAM 75/126-9.93/13.00	OHIO FHWA REGION 5	729-P 787
CHKD. BY / DATE			



SLAB PLAN

SHOWING BOTTOM REINFORCEMENT

Notes:
For General Notes, See Sheet 2/11
For Sections A-A & B-B, See Sheet 9/11
For Top Bars, See Sheet 8/11.

BALKE ENGINEERS
7782 READING ROAD
CINCINNATI, OHIO 45237

7/11

SUPERSTRUCTURE DETAILS

Bridge No. HAM-126-1900
S.R. 126 EB. over
Tributory of Mill Creek
Hamilton County Ohio
Sta. 74+98.83 to Sta. 75+99.16

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	LEH	S	S.A.	ORS 2-86	

OHIO BLUE PRINT M6053

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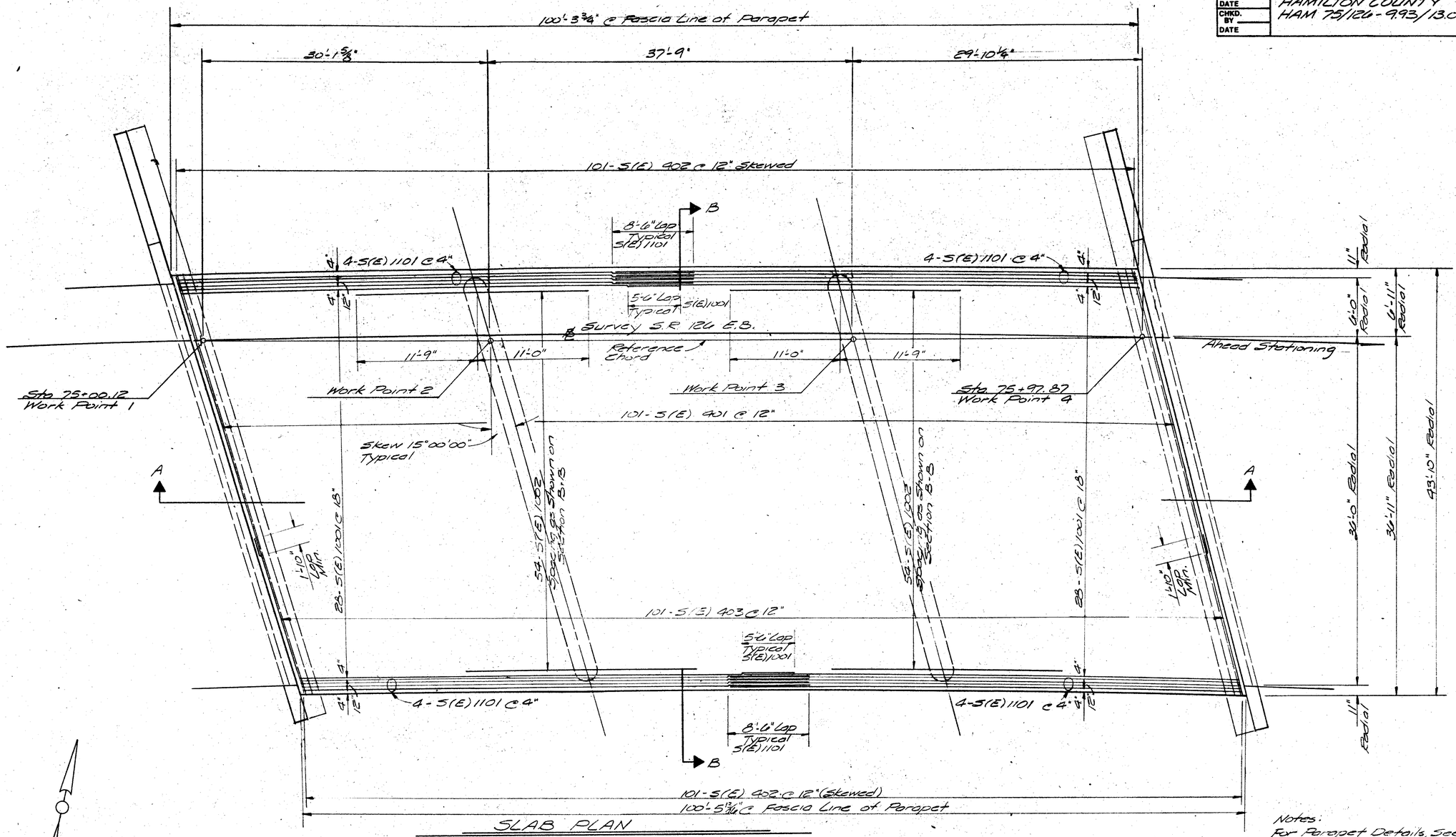

SLAB PLAN
SHOWING TOP REINFORCEMENT

Notes:
For Parapet Details, See Sheet 10/11
For General Notes, See Sheet 2/11
For Sections A-A & B-B, See Sheet 9/11
For Bottom Bars, See Sheet 7/11

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

6/11

SUPERSTRUCTURE DETAILS
Bridge No. HAM-126-1900
S.R. 126 EB over
Tributary of Mill Creek
Hamilton County Ohio
Sta. 74+98.83 to Sta. 75+99.16

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	LEH	S	S.A.	CRS 2-86	

OHIO BLUE PRINT 140033

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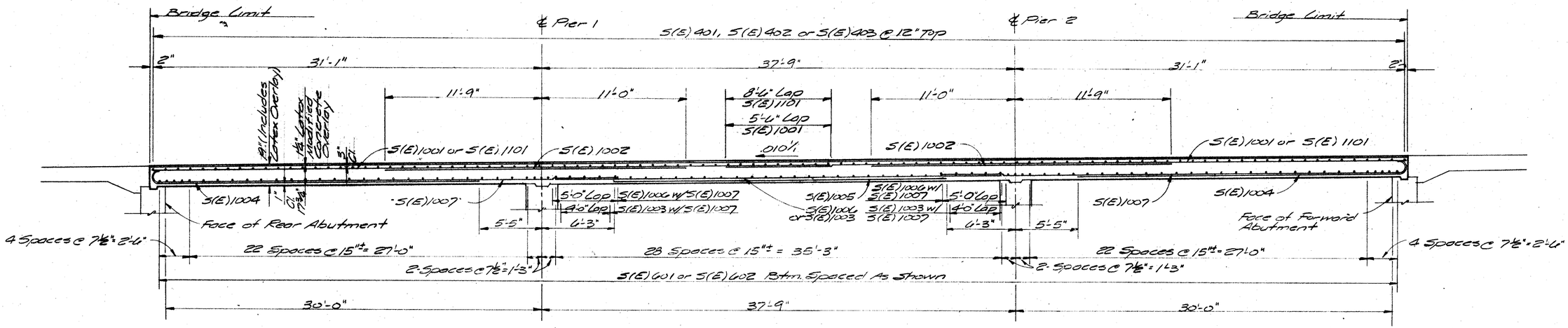
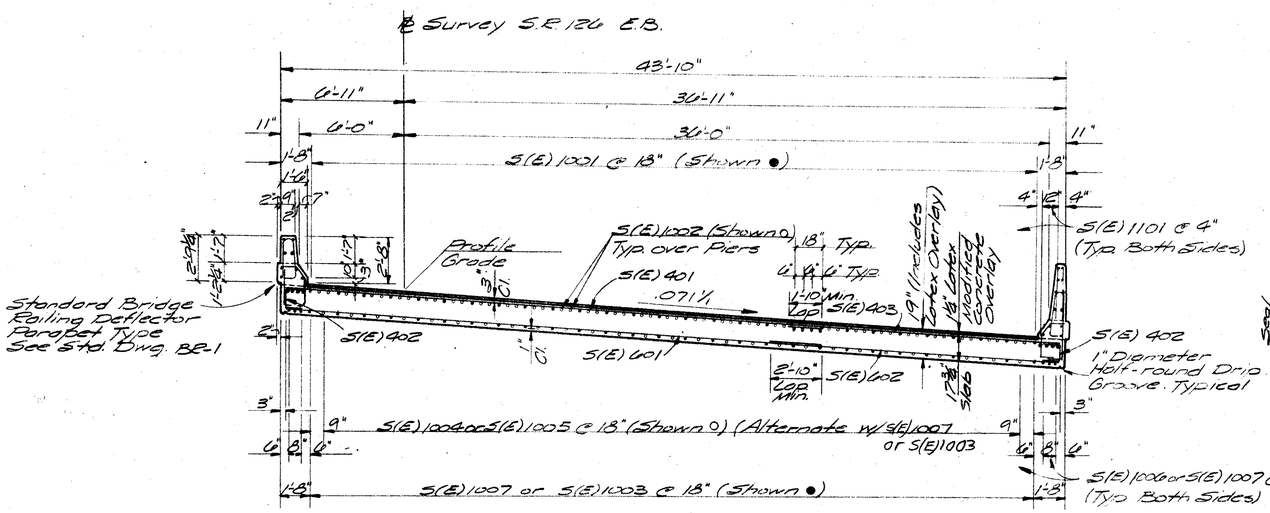
CHKD. BY / DATE		FHWA REGION 5	787

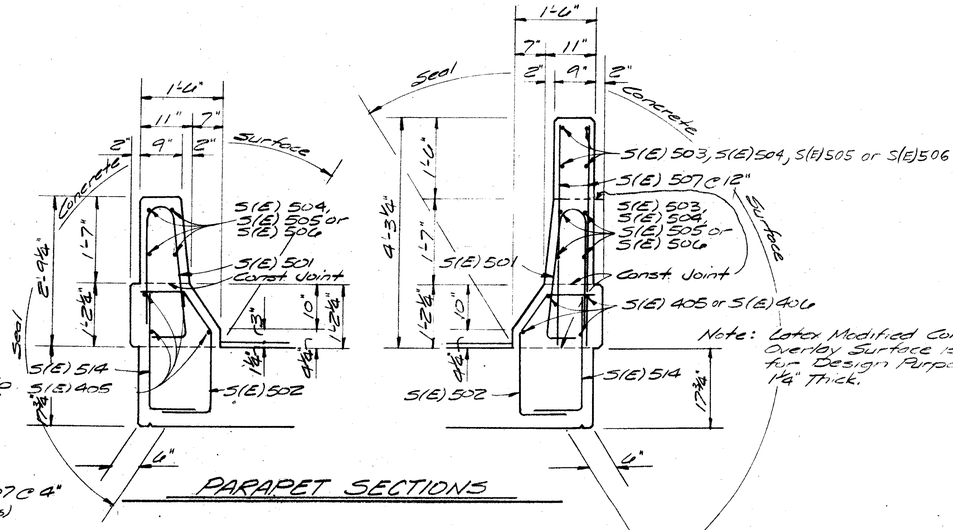


SECTION A-A

Note: Rebar Spacing Shown in Section A-A is Measured Along ℄ Survey.



SECTION B-B



PARAPET SECTIONS

Note: Latex Modified Concrete Overlay Surface is Assumed, for Design Purposes, to be 1½" Thick.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

9/11

SUPERSTRUCTURE DETAILS

Bridge № HAM-126-1400
S.R. 126 EB. over
Tributary of Mill Creek

Hamilton County Ohio
Sta. 74+98.83 to Sta. 75+99.16

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	LEH	S	S.A.	ORS 2-86	

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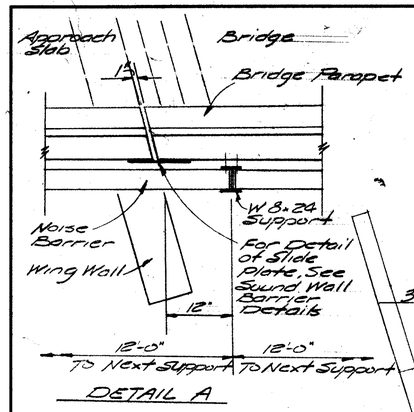
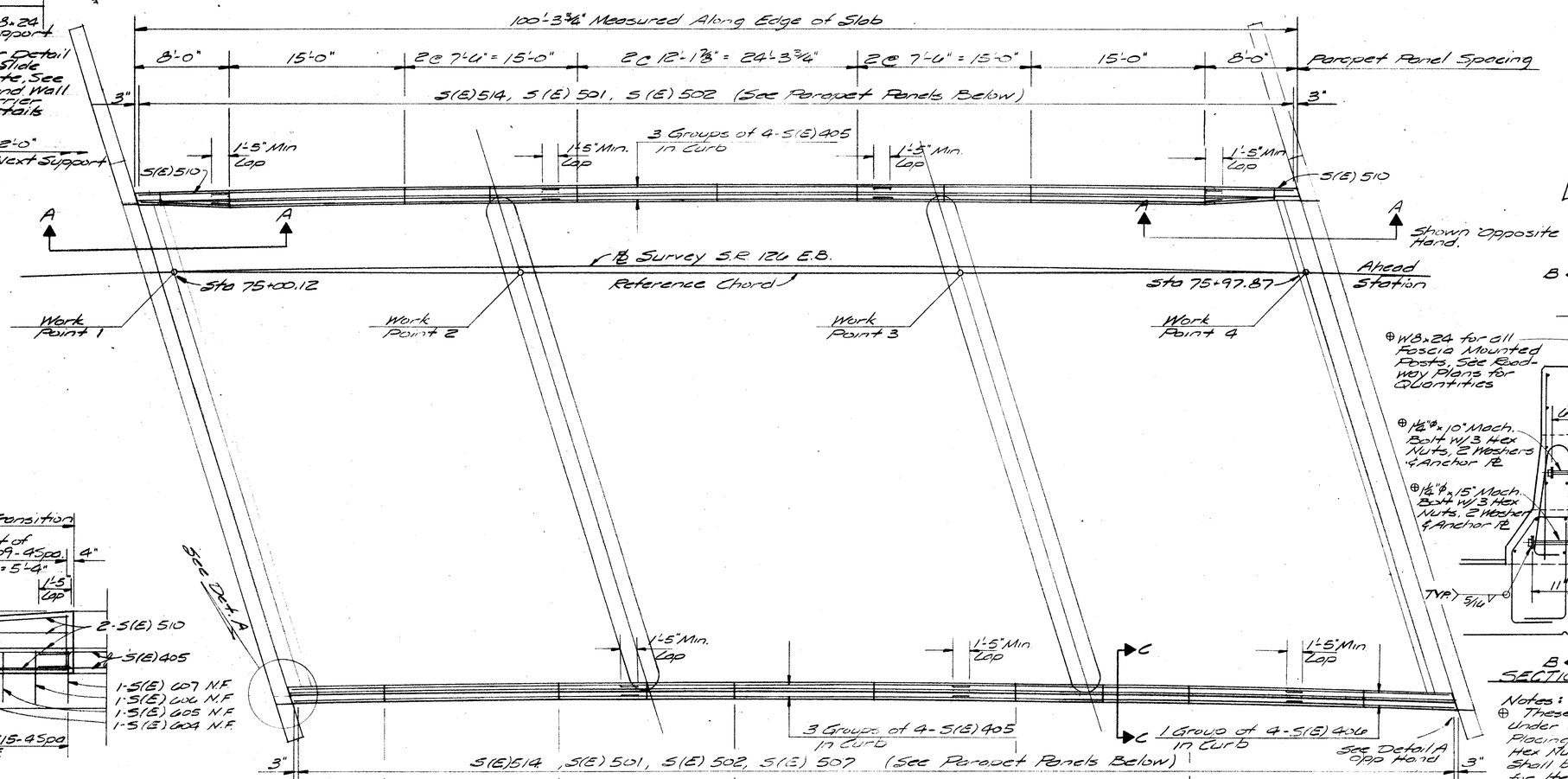
CHKD. BY / DATE		FHWA REGION 5	



DETAIL A



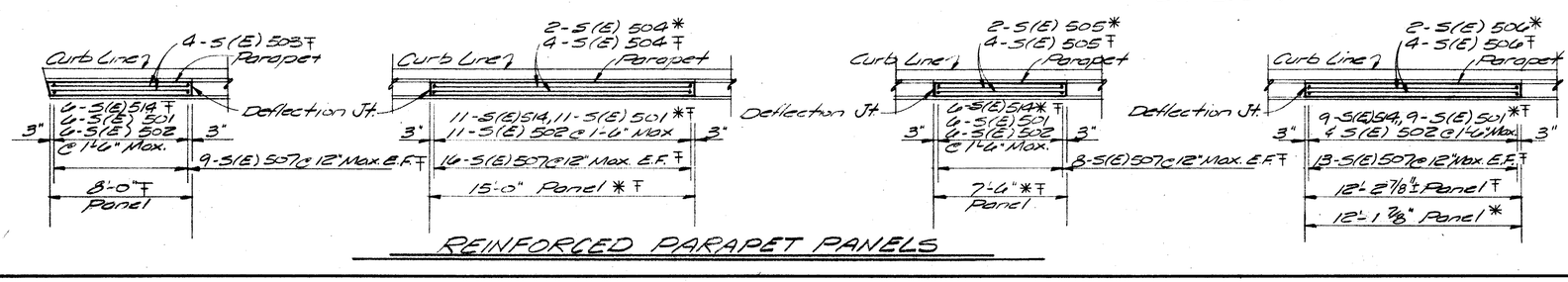
ELEVATION A-A
(Typ. End Panel)

PLAN

Notes:
* = Indicates North Side Parapet Panels
∓ = Indicates South Side Parapet Panels
E.F. = Each Face

Notes:
⊕ These Items Shall be Furnished Under Roadway Quantities. Cost of Placing the 1 1/8" Machine Bolts W/3 Hex Nuts, 2 Washers and Anchor Pl. Shall be Included in the Unit Price for Item "511 Class S Concrete, Superstructure."
⊕ For Noise Barrier Quantities Including W8x24, Bolts, Washers, Nuts, and Anchor Pl, See Roadway Quantities. For Additional Details Refer to "Noise Barrier Details" Sheets 69-69D

NOISE BARRIER SUPPORT DETAIL



REINFORCED PARAPET PANELS

Notes:
* = Indicates North Side Parapet Panels
∓ = Indicates South Side Parapet Panels
E.F. = Each Face

BALKE ENGINEERS 7762 READING ROAD CINCINNATI, OHIO 45237						10/11
SUPERSTRUCTURE DETAILS Bridge No. HAM-126-19.00 SR 126 EB over Tributary of Mill Creek Hamilton County, Ohio Sta. 74+98.83 to Sta 75+99.16						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED	
BJS	LEH	S	SA	CRS 2-86		

OHIO BLUE PRINT 140033

CALC. BY / DATE	HAMILTON COUNTY HAM 75/126-9.93/11.300	OHIO FHWA REGION 5	729 787
CHKD. BY / DATE			

ABUTMENTS

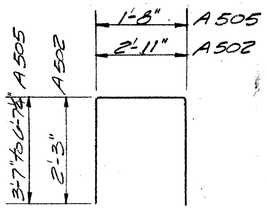
	Mark	No.	Length	Weight	Shape	Rear Abutment	Forward Abutment	Pier 1	Pier 2
*	A1001	4	45'-6"	784	S		4		
*	A1002	4	44'-10"	772	S	4			
	A801	16	33'-6"	1432	S	8	8		
	A(E)802	58	4'-11"	762	B	29	29		
	A501	16	33'-0"	551	S	8	8		
	A502	196	7'-2"	1466	B	98	98		
	A503	4	3'-3"	14	S	2	2		
	A504	8	17'-1"	142	B	4	4		
	A505	2 Set of 30	③ 8'-7" thru 14'-7½"	725	B	1 Set of 30	1 Set of 30		
	A506	2 Set of 12	④ 9'-3" thru 16'-7"	322	B	1 Set of 12	1 Set of 12		
	A507	7	11'-3"	83	B	4	3		
	A508	2	2'-11"	6	S		2		
	A509	4	6'-3"	26	S	2	2		
	A510	2	3'-1"	7	S		2		
	A511	2	3'-7"	8	S	2			
	A512	6	17'-6"	110	S	3	3		
	A513	6	15'-6"	97	S	3	3		
	A514	2	15'-4"	32	S	1	1		
	A515	2	13'-4"	28	S	1	1		
	A516	2	12'-4"	26	S	1	1		
	A517	2	10'-4"	22	S	1	1		
	A518	4	7'-4"	31	S	2	2		
	A519	4	4'-4"	18	S	2	2		
	A520	4	16'-8"	70	B	2	2		
	A521	2	3'-9"	8	S	2			
*	A522	4	44'-10"	187	S	4			
	A523	2	38'-10"	81	S	2			
	A524	2	23'-8"	49	S	2			
	A525	2	8'-6"	18	S	2			
*	A526	4	45'-5"	190	S		4		
	A527	2	9'-1"	19	S		2		
	A528	2	39'-5"	82	S		2		
	A529	2	24'-3"	51	S		2		
	A401	40	9'-2"	345	B	20	20		
	A(E)501	4	1'-6"	6	S	2	2		

PIERS

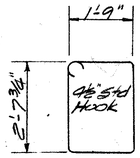
	Mark	No.	Length	Weight	Shape	Rear Abutment	Forward Abutment	Pier 1	Pier 2
*	P(E)1001	8	45'-0"	1549	S			4	4
	P(E)1002	4	17'-0"	293	S			2	2
*	P(E)901	8	41'-0"	1115	S			4	4
*	P(E)501	4	41'-0"	171	S			2	2
	P(E)502	2 Set of 36	② 9'-2" thru 15'-0"	907	B			1 Set of 36	1 Set of 36
	P(E)503	4	22'-0"	92	S			2	2
	P(E)504	2	4'-6"	10	B			1	1
	P(E)505	12	8'-0"	100	B			6	6
	P(E)506	2	7'-4"	16	B			1	1
	P(E)507	2	14'-11"	31	B			1	1
	P(E)508	2	9'-1"	19	B			1	1
	P(E)401	40	8'-0"	814	B			20	20

SUPERSTRUCTURE

	Mark	No.	Length	Weight	Shape	Super-structure
*	S(E)1101	16	54'-3"	4612	S	16
*	S(E)1001	56	52'-9"	12711	S	56
	S(E)1002	108	22'-9"	10572	S	108
	S(E)1003	28	33'-10"	4016	S	28
	S(E)1004	54	27'-1"	6793	B	54
	S(E)1005	27	25'-3"	2934	S	27
	S(E)1006	6	30'-0"	930	S	6
	S(E)1007	68	33'-7"	11290	B	68
	S(E)601	89	30'-0"	4010	S	89
	S(E)602	89	18'-3"	2440	S	89
	S(E)501	140	5'-2"	767	B	140
	S(E)502	140	3'-9"	555	B	140
	S(E)503	16	7'-6"	126	S	16
	S(E)504	24	14'-6"	363	S	24
	S(E)505	48	7'-0"	350	S	48
	S(E)506	24	11'-9"	294	S	24
	S(E)507	108	3'-11"	441	S	108
	S(E)508	Not	Used			
	S(E)509	2 Set of 5	① 2'-8" thru 3'-0"	30	B	2 Set of 5
	S(E)510	16	5'-9"	96	S	16
	S(E)511	16	4'-4"	73	S	16
	S(E)512	6	2'-8"	17	B	6
	S(E)513	Not	Used			
	S(E)514	140	2'-11"	426	B	140
	S(E)515	2 Set of 5	① 4'-2" thru 4'-6"	45	B	2 Set of 5
	S(E)401	101	3'-0"	2024	S	101
	S(E)402	202	4'-8"	630	B	202
	S(E)403	101	17'-3"	1164	S	101
	S(E)404	Not	Used			
	S(E)405	24	3'-0"	481	S	24
	S(E)406	4	15'-6"	41	S	4
	S(E)516	6	4'-2"	26	B	6
	S(E)603	8	3'-6"	42	B	8
	S(E)604	2	3'-7"	11	B	2
	S(E)605	2	3'-7"	11	B	2
	S(E)606	2	3'-8"	11	B	2
	S(E)607	2	3'-8"	11	B	2



A502, A505



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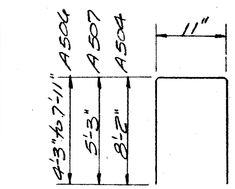
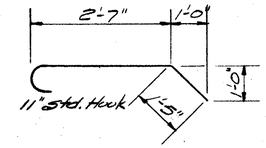
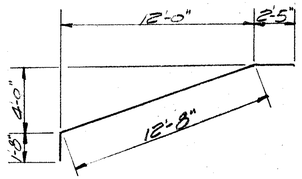


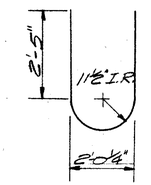
A504, A506, A507



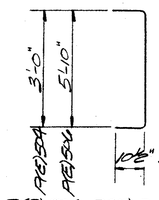
A(E) 802



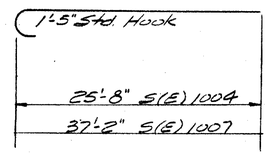
A520



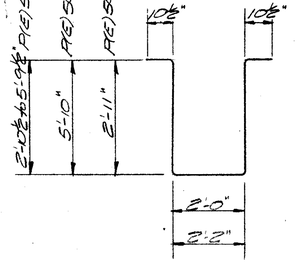
P(E)505



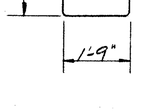
P(E)504, P(E)506



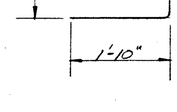
S(E)1004, S(E)1007



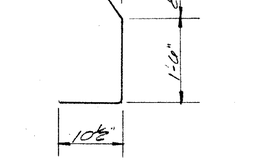
P(E)502, P(E)507, P(E)508



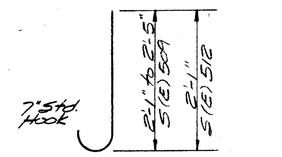
P(E)401



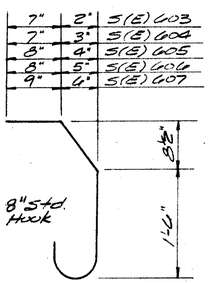
S(E) 402



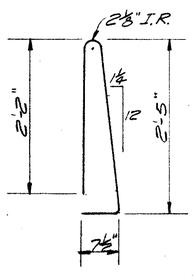
S(E) 502



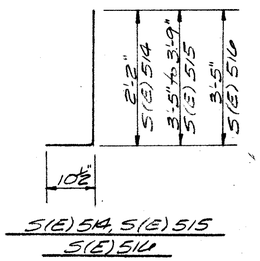
S(E) 509, S(E) 512



S(E) 603, S(E) 604, S(E) 605, S(E) 606, S(E) 607



S(E) 501



S(E) 514, S(E) 515 S(E) 516

Notes

* At the Option of the Contractor, Bars (Listed in Table below) Shall be supplied in Two Lengths with a Sufficient Lap Length or a Mechanical Splice.

Reinforcing Steel Samples: Refer to CMS. Section 106.03, 700, 709.01 thru 709.05, & 709.08. Sufficient Additional Reinforcing Steel shall be Provided for Sampling. Random Samples shall be Replaced in the Structure by the Additional Steel, Spliced in Accordance with 509.08.

All Steel shall be Grade 60

For General Notes, See Sheet 2 / 11

* Contractors option	Min Lap
S(E) 1001	7'-3"
S(E) 1101	11'-1"
P(E) 1001	9'-0"
A 526	2'-5"
A 522	2'-5"
A 1001	9'-0"
A 1002	9'-0"
P(E) 501	2'-5"
P(E) 901	5'-1"

① Varies by Increments of 1"
② Varies by Increments of 2"
③ Varies by Increments of 2½"
④ Varies by Increments of 8"

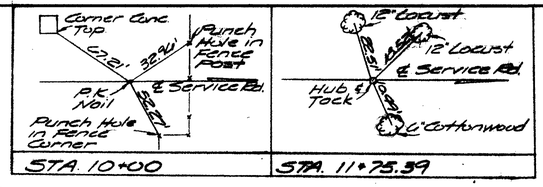
BALKE ENGINEERS 7762 READING ROAD CINCINNATI, OHIO 45237	11/11

REINFORCING STEEL
Bridge No. HAM-126-1400
SR 126 EB over
Tributary of Mill Creek
Hamilton County Ohio
Sta. 74+98.83 to Sta. 75+99.16

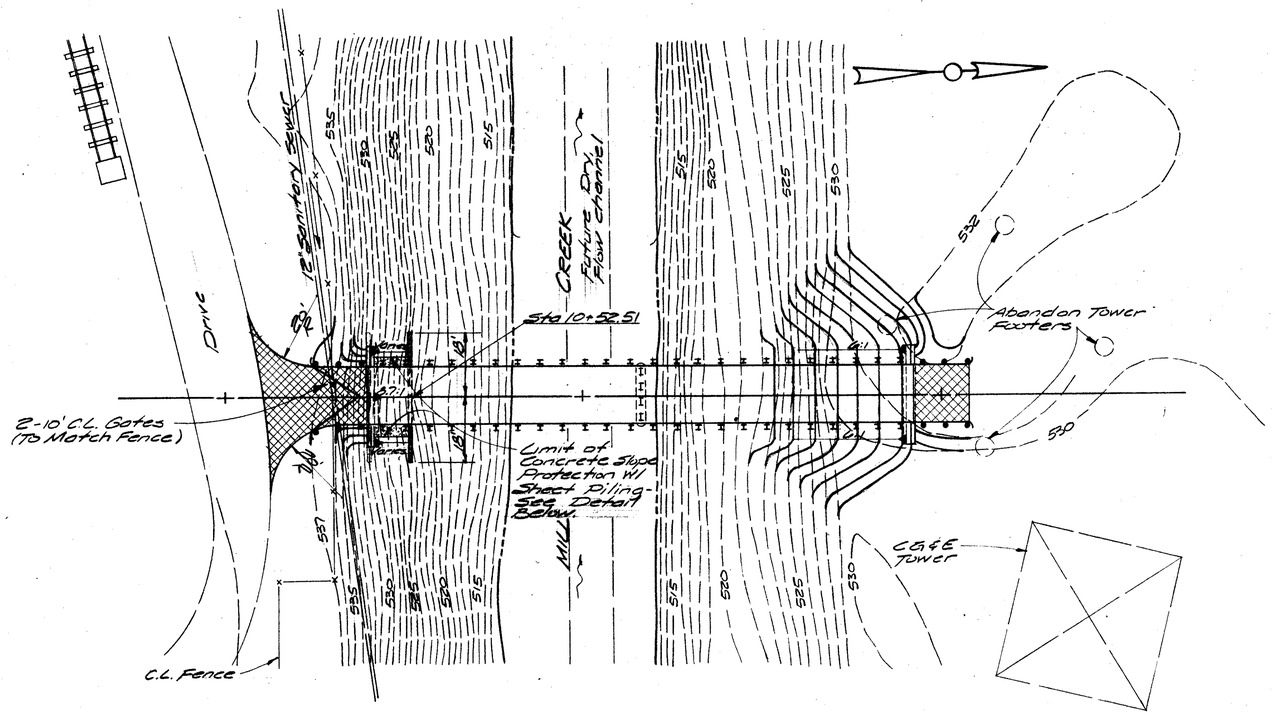
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	LEH	V	S.A.	CRS 2-86	

OHIO BLUE PRINT 760503

Benchmark : NW Abutment ℄ I-75 S.B. Bridge (Sta. 89+00) Elev. = 536.03



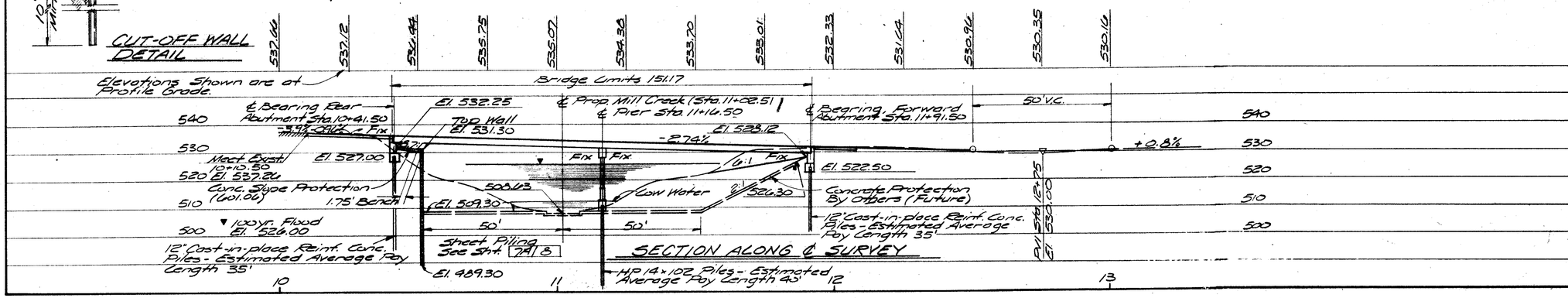
CALC. BY DATE	HAMILTON COUNTY HAM 75/12.64 - 9.93/13.00	OHIO	730 78"
CHKD. BY DATE		FHWA REGION 5	



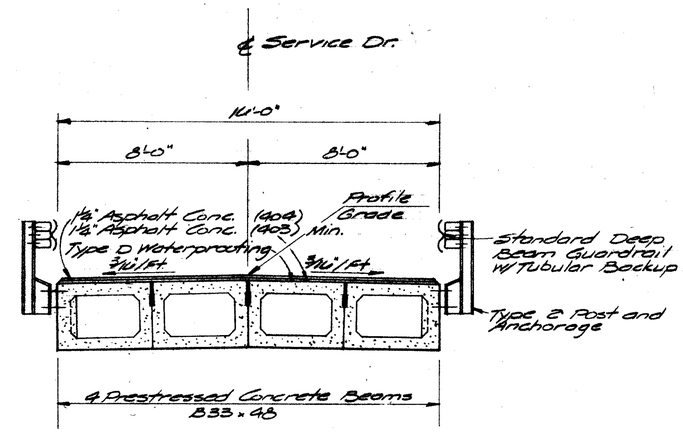
PLAN

CUT-OFF WALL DETAIL

Note: Cost for Sheet Piling shall be included in the Unit Price Bid for Item 601.06 Conc. Slope Protection.



SECTION ALONG ℄ SURVEY



TYPICAL SECTION

DRAINAGE AREA

Drainage Area	= 115 Sq. Mi.
Q100 Elev.	= 523.06
Velocity	= 13.6 Ft/Sec.

PROPOSED STRUCTURE

TYPE: Continuous over Pier Prestressed Conc. Beams w/ Reinf. Conc. Substructure
SPAN: 75', 75' on ℄ Bearing
ROADWAY: 10'-0" Face to Face of Guardrail
LOADING: HS-20-44 and Special Overload Vehicle Ref. Sheet 2 8
SKEW: None
WEARING SURFACE: 2½" Minimum Asphalt Concrete
APPROACH SLAB: None
ALIGNMENT : Tangent

BALKE ENGINEERS
7782 READING ROAD
CINCINNATI, OHIO 45237

1 8

SITE PLAN

Bridge № HAM-
Service Road over Mill Creek
Hamilton County, Ohio
Sta. 10+30.92 to Sta. 11+82.08

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	LEH	~	SA	CRS 3-86	7-86

CALC. BY		HAMILTON COUNTY	OHIO	730A
DATE		HAM-75/12.6-9.93/13.00	FHWA REGION 5	787
CHKD. BY				
DATE				

ESTIMATED QUANTITIES

	ITEM	TOTAL	UNIT	DESCRIPTION	REAR ABUTMENT	FORWARD ABUTMENT	PIER	SUPER STRUCTURE	GENERAL
	403	13	Cu.Yd.	Asphalt Concrete (AC-20)				13	
	404	10	Cu.Yd.	Asphalt Concrete (AC-20)				10	
	503	96	Cu.Yd.	Unclassified Excavation	48	48			
*	504	564	Sq.Ft.	Sheet Piling Left in place (min. section modulus 30.2 in³/ft. of wall) as per plan.					564
*	504	1512	Sq.Ft.	Sheet Piling Left in place (min. section modulus 48.5 in³/ft. of wall) as per plan					1512
	505	Lump	Lump	Pile Driving Equipment Mobilization					Lump Sum
	507	280	Lin.Ft.	12" Cast in Place Reinforced Concrete Piles, as per plan	140	140			
	507	160	Lin.Ft.	HP 14x102 Steel piles, as per plan			160		
	508	Lump	Lump	Cofferdams, cribs and sheeting					Lump Sum
	509	5847	Lb.	Reinforcing Steel, Grade 60	2230	2249	1368		
	824	250	Lb.	Epoxy Coated Reinforcing Steel, Grade 60				250	
	510	16	Each	Dowel Holes	4	4	8		
	511	20	Cu.Yd.	Class C Concrete, Footings	10	10			
	511	27	Cu.Yd.	Class C Concrete, Abutments above Footing	13	14			
	511	10	Cu.Yd.	Class C Concrete, Pier			10		
	511	2	Cu.Yd.	Class S Concrete Super Structure (high early strength)				2	
	512	276	Sq.Yd.	Type D Waterproofing				276	
	515	604	Lin.Ft.	Prestressed Concrete Members (B.33x48) (See proposal note)				604	
	516	123	Sq.Ft.	1" Preformed Expansion Joint Filler	50	50	23		
	516	32	Each	1.32+6+13" Elastomeric Laminated Bearings	8	8	16		
	516	34	Lin.Ft.	Joint Sealer, 705.01 or 705.02	17	17			
	517	325	Lin.Ft.	Railing, (Steel Deep Beam Rail with Steel Tubular Backup & Steel Type 2 Posts & Bolts)				325	
	518	33	Cu.Yd.	Porous Backfill	16	17			
	523	3	Hour	Dynamic Load Test (HP14 x 102)					3
	Special	110	Sq.Yd.	Sealing of Concrete Surfaces (See Proposal Note)				110	
*	Special	Lump	Lump	Coal-Tar Epoxy					Lump Sum
	601	34	Sq.Yd.	Concrete Slope Protection, as per plan					34

* To Be Paid For By The Corp. of Engineers.

"PILE DRIVING CONSTRAINTS: Prior to Driving Piles at the Abutments, the Spill-thru Slope Embankment shall be Constructed to the Level of the Subgrade for a Minimum Distance of 200 Feet Back of Each Abutment. After the Embankment is Completed Within the Above Required Limits, the Excavation for the Abutment Footings Shall be Made and then the Piles can be Driven."

"PILE HAMMER: The Pile Hammer used to Install the Cast-in-place Reinforced Concrete Piles Shall have a Stated Energy Rating of not less than 16,000 Foot-Pounds. This Requirement Does not Relieve the Contractor from 108.05 Which States that the Contractor is to Provide Sufficient Equipment for Prosecuting the Required Work. Refer to "ODOT's Manual of Procedures for Structures" to Obtain the State's Energy Rating."

"PILE WALL THICKNESS: The Responsibility of Choosing and Providing a Satisfactory Pile Wall Thickness for this Project Shall be Borne by the Contractor Except that the Pile Wall Thickness Shall not be less than 0.22 Inches. If a Pile Wall Thickness Greater than 0.22 Inches is Necessary to Resist the Pile Installation Driving Stresses, the Contractor Shall Make this Determination and Shall Furnish a Pile with an Acceptable Wall Thickness."

All Steel For Sheet Pilings Including Tierods, Connections, Etc. Are To Be Coal-Tar Epoxy Coated At Factory.

All Exposed Areas That Are Marred Are To Be Touched-Up In Field With Coal-Tar Epoxy.

Placement Of Sheet Piling As Per Plan Shall Be Installed Prior To Placement Of Embankment.
Embankment Construction To Be Per CMS-203.

The coating shall consist of three coats of Coal-tar Epoxy, Formula C-200, as per the Corps of Engineers' Specification for Painting Hydraulic and Appurtent Works.

GENERAL NOTES

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS:

DBR-2-73	DATED 4-10-73
PSBD-1-81 (SHTS 1-4)	DATED 9-18-81

REFERENCE SHALL BE MADE TO SUPPLEMENTAL SPECIFICATIONS:

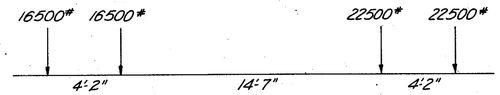
824	**DATED 10-8-82**
836	DATED 11-12-85

DESIGN SPECIFICATIONS"
THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1983, INCLUDING THE 1984 AND 1985 INTERIM SPECIFICATIONS, AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:

DESIGN LOADING	HS 20-44 *AND SPECIAL OVERLOAD VEHICLE (SEE BELOW)*
CLASS C CONCRETE	COMPRESSIVE STRENGTH: 4000 PSI (SUBSTRUCTURE)
CLASS S CONCRETE	**COMPRESSIVE STRENGTH 4500 PSI (HIGH EARLY STRENGTH)(SUPER STRUCTURE)**
REINFORCING STEEL	ASTM A615, A616, OR A617 MINIMUM YIELD STRESS: 60,000 PSI **MINIMUM YIELD STRESS 40000 PSI PRESTRESSED BOX BEAMS.**
CONCRETE FOR PRE-STRESSED BEAMS	UNIT STRESS: 2,200 PSI COMPRESSION: 444 PSI TENSION Fc" = 5,500 PSI Fc"I = 4,000 PSI
PRESTRESSING STRANDS	ASTM A416 F'S = 270,000 PSI INITIAL STRESS = 0.70 F'S SHALL BE 1/2-INCH DIAMETER, SEVEN WIRE, UNCOATED STRESS RELIEVED TENDONS, WITH AN AREA NOT LESS THAN 0.1531 SQUARE INCH. CALCULATED CAMBER AT TIME OF PAVING, INCLUDING ALLOWANCE FOR CAMBER GROWTH DUE TO CREEP, IS 1-1/2". CALCULATED DEFLECTION, DUE TO WEIGHT OF SURFACE COURSE AND RAILING, IS 7/16-INCH. NET FINAL CAMBER OF BEAMS IS 1-1/16-INCH. THIS IS 1-1/16-INCH IN EXCESS OF THE AMOUNT REQUIRED TO PLACE THE TOP OF THE BEAM PARALLEL TO PROFILE GRADE. THE EXCESS AMOUNT SHALL BE COMPENSATED FOR BY THICKENING THE 403 LEVELING COURSE FROM 1-1/4" AT CENTER OF SPANS TO 2-5/16" AT ENDS OF SPANS.

PILE DESIGN LOAD:
THE DESIGN LOAD FOR THE ABUTMENT PILES IS 42 TONS PER PILE. THE DESIGN LOAD FOR THE PIER PILES IS 54 TONS PER PILE WITH ADDITIONAL MOMENT.



Special Overload Design Vehicle

BRIDGE SEAT REINFORCEMENT:
REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT SHALL BE ACCURATELY PLACED TO AVOID INTERFERENCE WITH THE DRILLING OF ANCHOR DOWEL HOLES.

ITEM 518 - POROUS BACKFILL
1.5-FOOT THICK POROUS BACKFILL SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE AND LATERALLY TO THE END OF THE WINGWALLS.

DECK PROTECTION METHOD:
TYPE "D" WATERPROOFING AND ASPHALT CONCRETE OVERLAY.

ITEM SPECIAL, SEALING OF CONCRETE SURFACES:
A CONCRETE SEALER, EITHER SILANE OR AN EPOXY SEALER, SHALL BE APPLIED TO THE CONCRETE SURFACES AS SHOWN ON SHEET 7 | 8. SEE THE PROPOSAL FOR SURFACE PREPARATION REQUIREMENTS, APPLICATION RATES, MATERIALS REQUIREMENTS AND APPLICATION PROCEDURES.

NOTE:
EXPOSED STEEL PILES AND PILE CASINGS IN CAPPED PILE PIERS SHALL HAVE PILE ENCASEMENT SIMILAR TO THAT SHOWN ON STANDARD DRAWING CPR-2-73, REGARDLESS OF STEAM PH. THE ENCASEMENT SHALL CONSIST OF CLASS "C" CONCRETE PLACED WITHIN A SHELL OF EXTRA STRENGTH VITRIFIED CLAY PIPE, GALVANIZED CORRUGATED STEEL PIPE, OR PLAIN OR CORRUGATED PLASTIC PIPE ALL HAVING A MINIMUM INSIDE DIAMETER OF APPROXIMATELY 21-INCHES FOR HP 14X102 STEEL PILES. ENCASEMENT SHALL EXTEND APPROXIMATELY 1-FOOT BELOW AND 4-FEET ABOVE THE FLOWLINE.

AS AN ALTERNATE TO ENCASEMENT OF HP 14X102 STEEL PILES, AN EPOXY COATING MAY BE USED. THE COATING SHALL BE A MOISTURE-INSENSITIVE, 100-PERCENT SOLID EPOXY RESIN WITH A BLEND OF FILLERS MADE EXPRESSLY FOR PILING AND PIER PROTECTION. IT SHALL BE APPLIED APPROXIMATELY 3/16-INCH THICK TO SURFACES PREPARED ACCORDING TO THE EPOXY MANUFACTURER'S INSTRUCTIONS.

COST OF ENCASEMENT SHALL BE INCLUDED WITH THE PILES FOR PAYMENT.

ASPHALT CONCRETE SURFACE COURSE SHALL CONSIST OF A VARIABLE THICKNESS OF 403 AND 1-1/4" THICKNESS OF 404. THE 403 SHALL BE PLACED IN TWO OPERATIONS. THE FIRST COURSE SHALL BE OF 1-1/4" UNIFORM THICKNESS. THE SECOND COURSE SHALL BE FEATHERED TO PLACE THE SURFACE PARALLEL TO AND 1-1/4" BELOW FINAL PAVEMENT SURFACE ELEVATION.

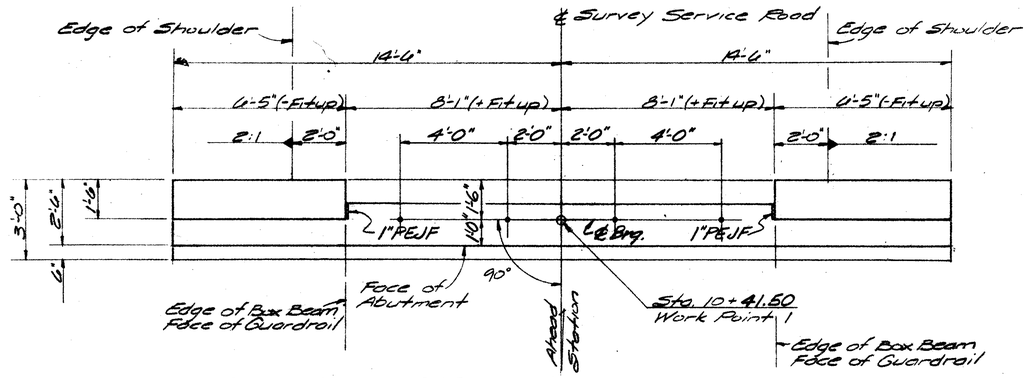
ITEM 507 - 12" DIAMETER CAST-IN-PLACE REINFORCED CONCRETE PILES, AS PER PLAN:

12-INCH PRECAST PRESTRESSED CONCRETE PILES MAY BE SUBSTITUTED FOR THE 12-INCH CAST-IN-PLACE REINFORCED CONCRETE PILES SHOWN ON THESE PLANS. DRAWINGS SHOWING DETAILS OF AND SPECIFICATIONS FOR PRESTRESSED CONCRETE PILES ARE AVAILABLE FROM THE DIRECTOR (BUREAU OF BRIDGES). IF THE PRESTRESSED PILE ALTERNATE IS CHOSEN, THE METHOD OF MEASUREMENT AND BASIS OF PAYMENT SHALL BE THE SAME AS FOR CAST-IN-PLACE REINFORCED CONCRETE PILES PER 507.

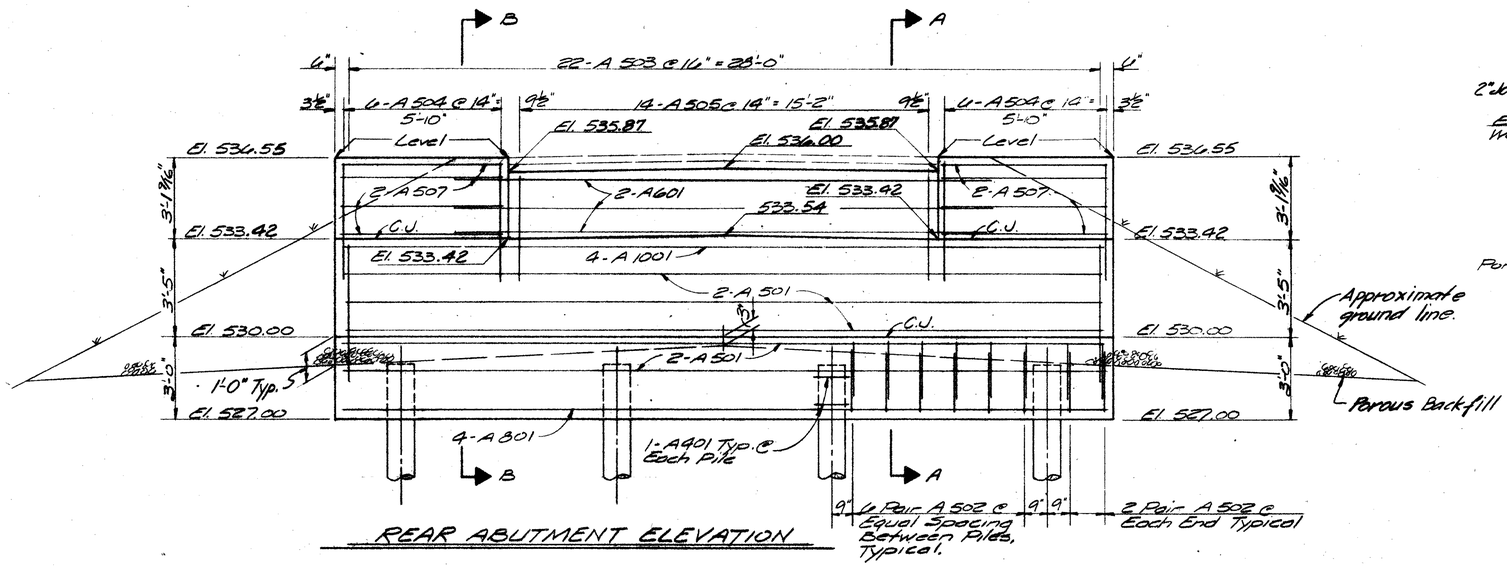
BALKE ENGINEERS 7762 READING ROAD CINCINNATI, OHIO 45237					2/8
ESTIMATED QUANTITIES & GENERAL NOTES Bridge 11² HAM-Service Road over Mill Creek Hamilton County, Ohio Sta 10+30.92 to Sta 11+32.05					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	LEH	~	SA	CPD 5-86	7-86

OHIO BLUE PRINT 748053

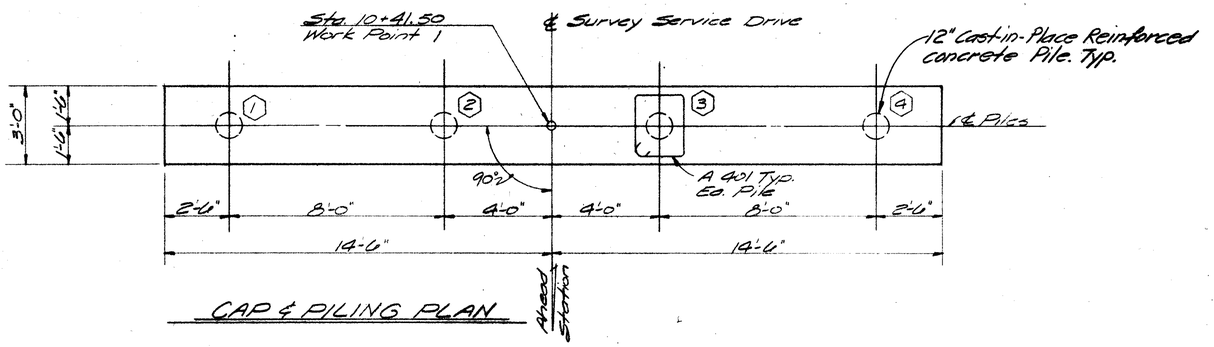
CALC. BY		HAMILTON COUNTY HAM-75/12.6-9.93/13.00	OHIO	730B 787
DATE			FHWA REGION 5	
CHKD. BY				
DATE				



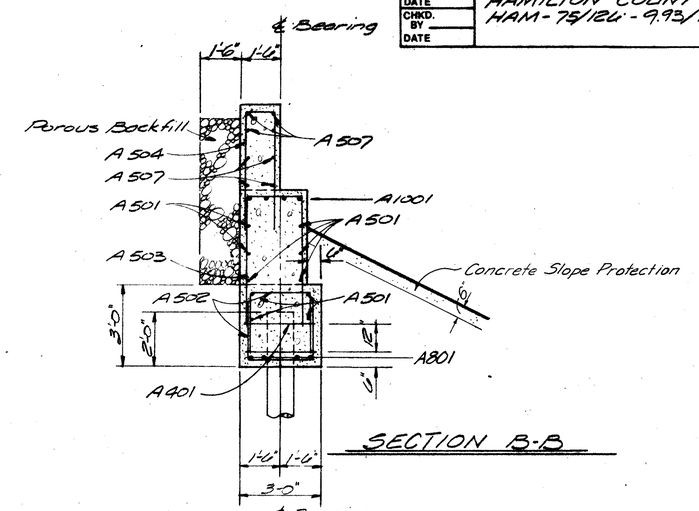
REAR ABUTMENT PLAN



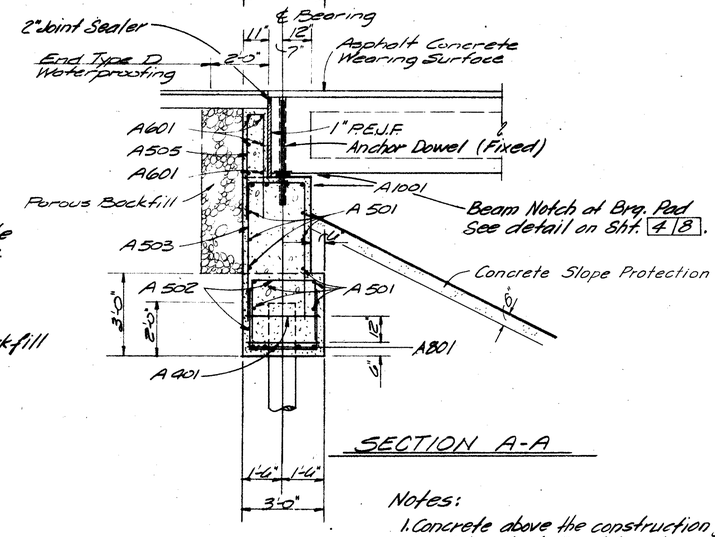
REAR ABUTMENT ELEVATION



CAP & PILING PLAN



SECTION B-B



SECTION A-A

Notes:

1. Concrete above the construction joint at the bridge seat level shall not be placed until the beams have been erected.
2. For General Notes See Sheet 2 / 8
3. Porous Backfill shall extend upward to the plane of the subgrade, and laterally to the surface of the embankment slopes.
4. BRIDGE SEAT REINFORCING: Reinforcing steel in the vicinity of the bridge seat shall be accurately placed to avoid interference with the drilling of anchor bar holes.

Legend

C.S.P.: Corrugated Steel Pipe
P.E.J.F.: Preformed Expansion Joint Filler
C.J.: Construction Joint

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

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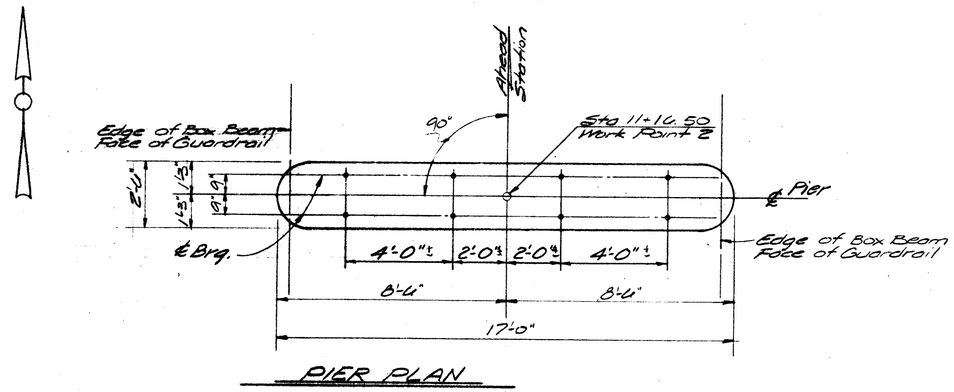
REAR ABUTMENT

Bridge № HAM-
Service Road over Mill Creek
Hamilton County, Ohio
Sta. 10+30.92 to Sta. 11+82.08

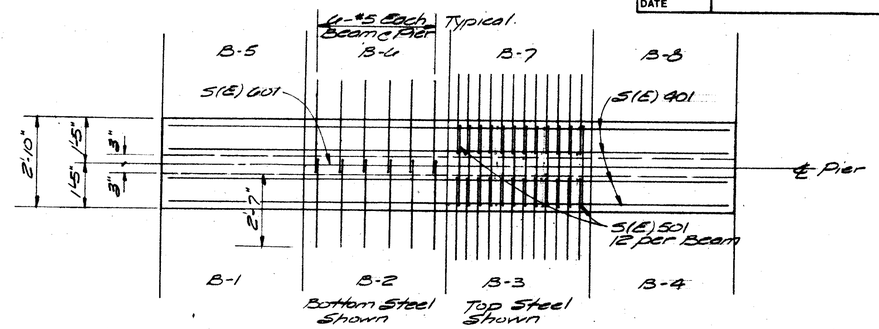
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	LEH	~	SA	CRS 3-86	

OHIO BLUE PRINT

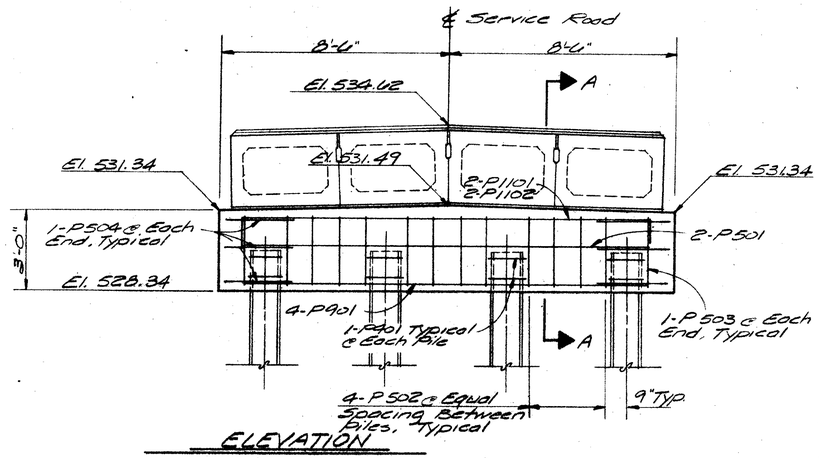
CALC. BY		HAMILTON COUNTY HAM-75/12L-9.93/13.00	OHIO	730C 787
DATE			FHWA REGION 5	
CHKD. BY				
DATE				



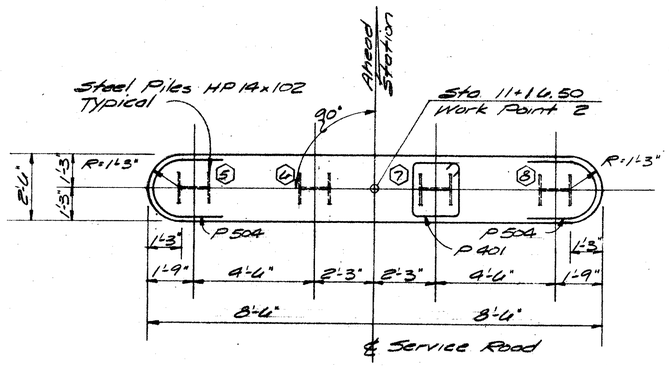
PIER PLAN



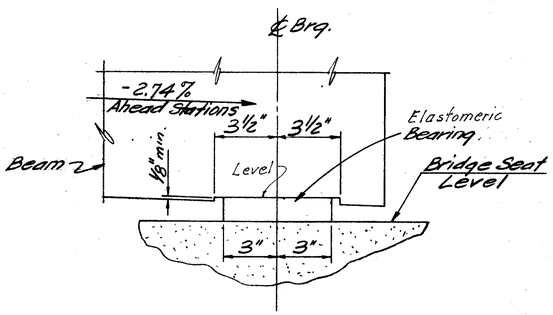
PLAN - BEAM CONNECTION OVER PIER



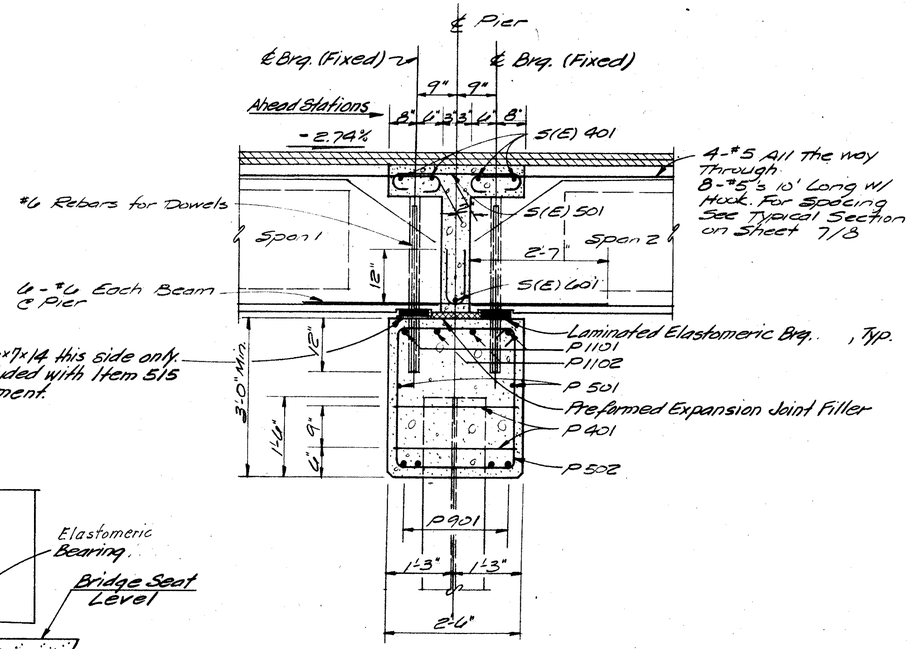
ELEVATION



PILING PLAN



BEAM NOTCH DETAIL
TYPICAL



SECTION A-A

Shim ℄ ½"x7"x14" this side only. Cost included with Item 515 for payment.

Notes:

1. BRIDGE SEAT REINFORCING: Reinforcing steel in the vicinity of the bridge seat shall be accurately placed to avoid interference with the drilling of anchor bar holes.

2. For General Notes see Sheet 2 | 8

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

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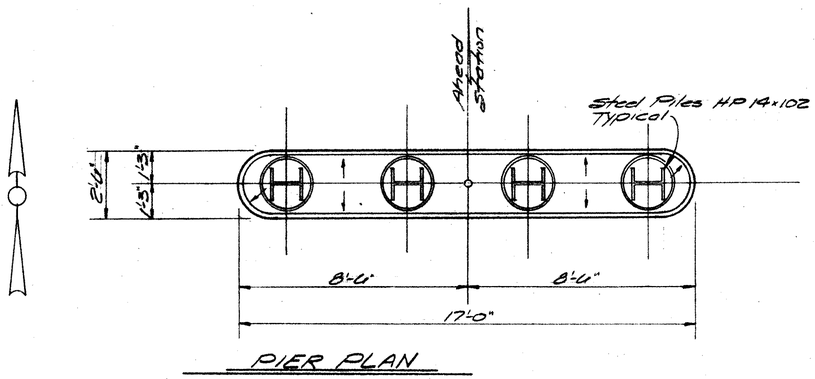
PIER DETAILS

Bridge № HAM
Service Road over Mill Creek
Hamilton County, Ohio
Sta. 10+30.92 to Sta. 11+82.08

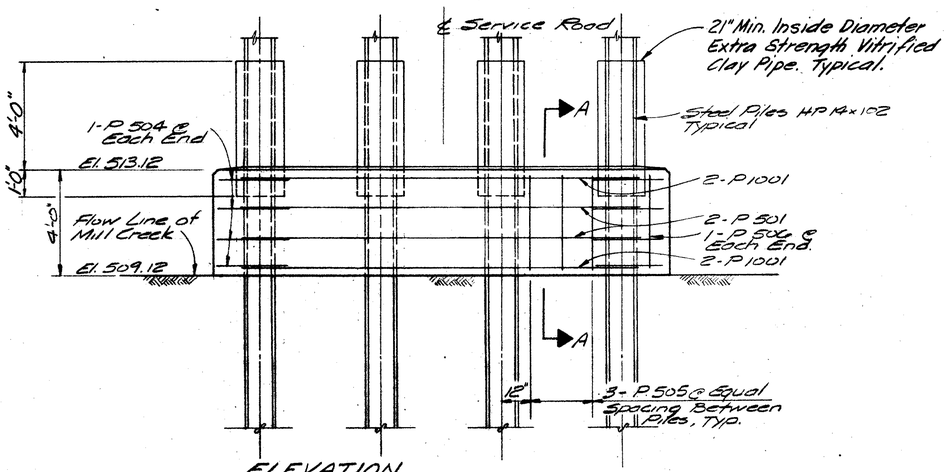
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	LEH	~	SA	CRS 3-86	

OHIO BLUE PRINT H40053

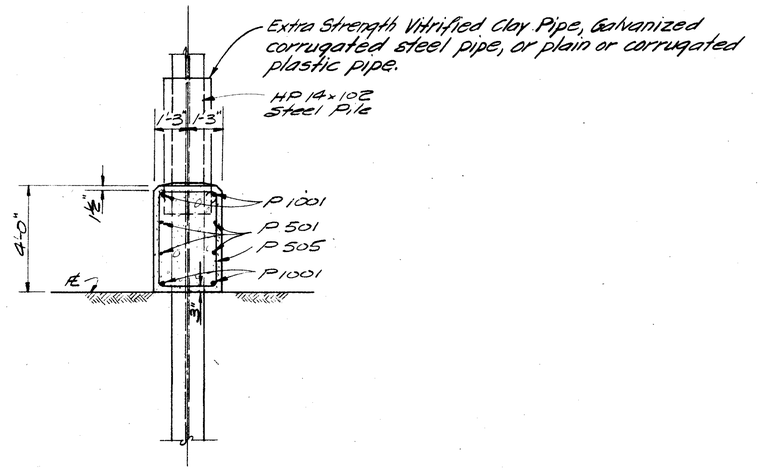
CALC. BY	HAMILTON COUNTY	OHIO	730D
DATE	HAM-75/126-9.93/13.00	FHWA REGION 5	787
CHKD. BY			
DATE			



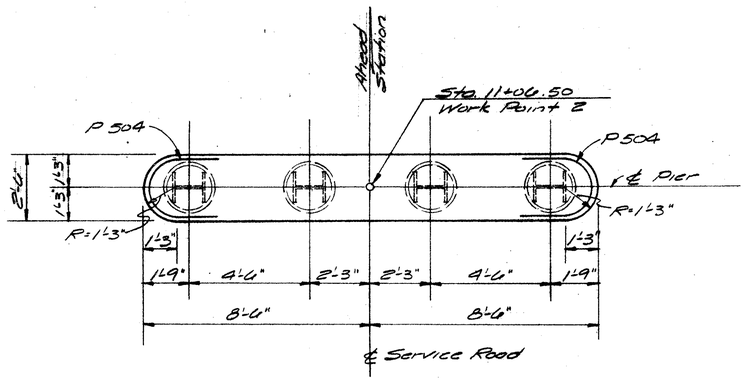
PIER PLAN



ELEVATION



SECTION A-A



PILING PLAN

For General Notes See Sheet 2/8

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

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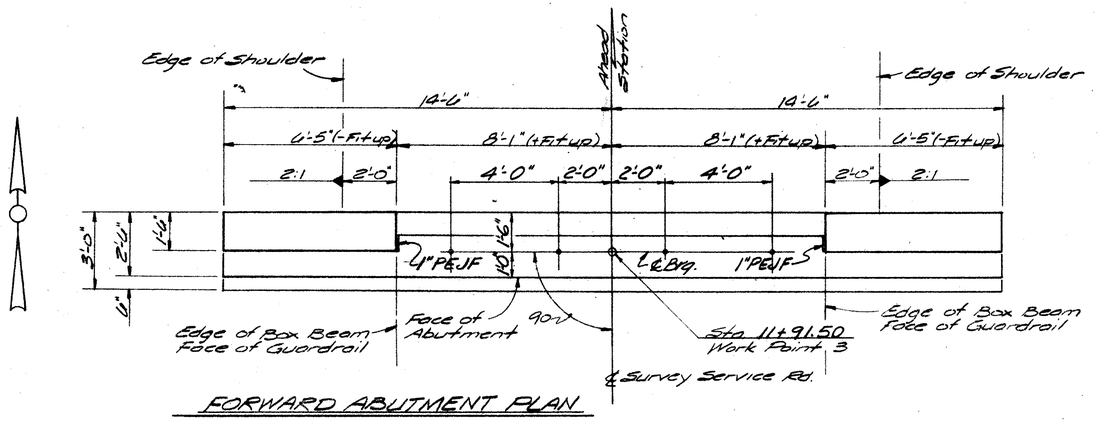
PIER DETAILS

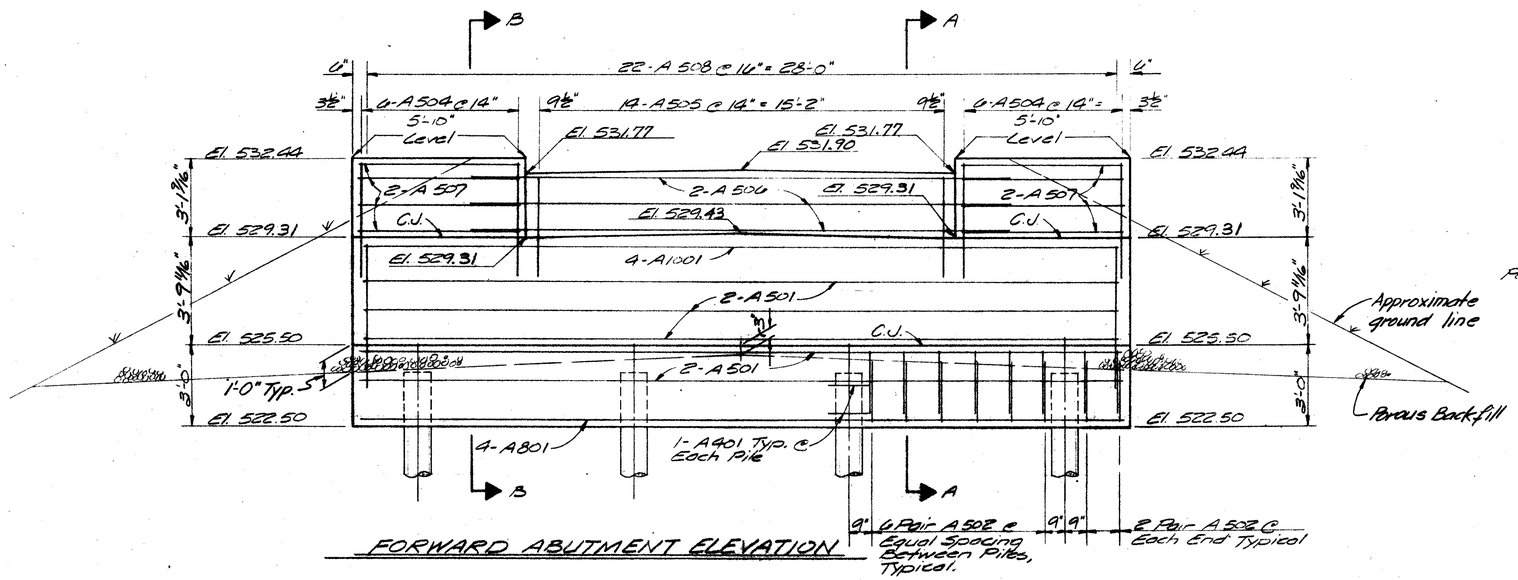
Bridge No HAM
Service Road over Mill Creek
Hamilton County, Ohio
Sta. 10+30.92 to Sta. 11+82.08

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	LEH	~	SA	CRS 3-86	

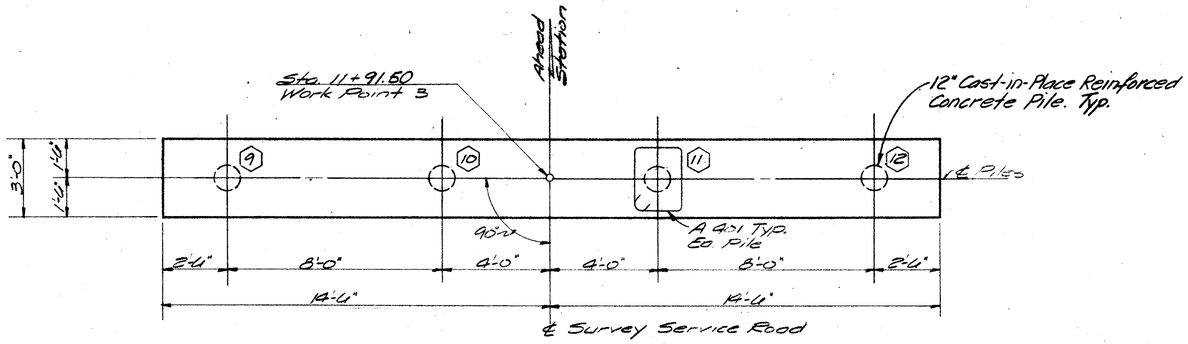
CALC. BY	HAMILTON COUNTY	OHIO	730E
DATE	HAM-75/126-9.93/13.00	FHWA REGION 5	787
CHKD. BY			
DATE			



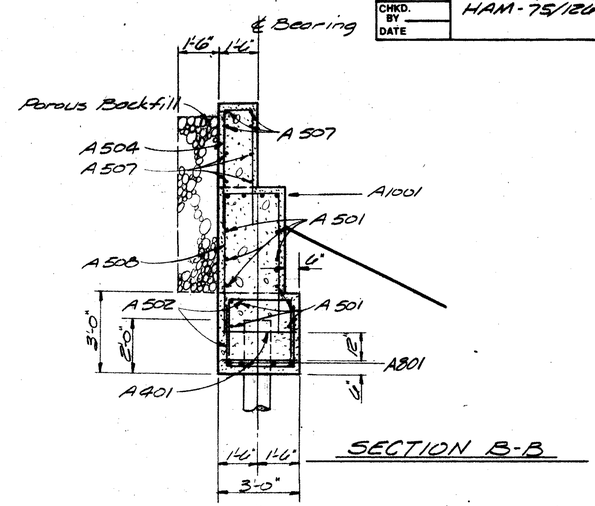
FORWARD ABUTMENT PLAN



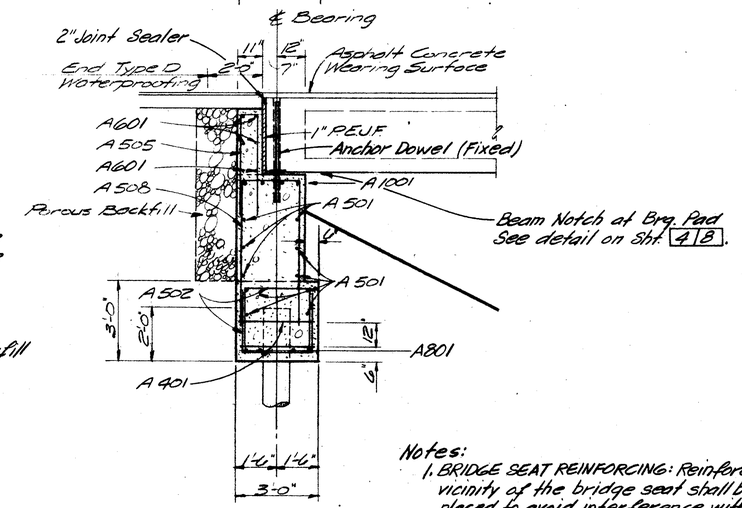
FORWARD ABUTMENT ELEVATION



CAP & PILING PLAN



SECTION B-B



SECTION A-A

Notes:

1. BRIDGE SEAT REINFORCING: Reinforcing steel in the vicinity of the bridge seat shall be accurately placed to avoid interference with the drilling of anchor bar holes.
2. Concrete above the construction joint at the bridge seat level shall not be placed until the beams have been erected.
3. For General Notes See Sheet 2/8.
4. Porous Backfill shall extend upward to the plane of the subgrade, and laterally to the surface of the embankment slopes.

Legend

C.S.P.: Corrugated Steel Pipe
P.E.J.F.: Preformed Expansion Joint Filler
C.J.: Construction Joint

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

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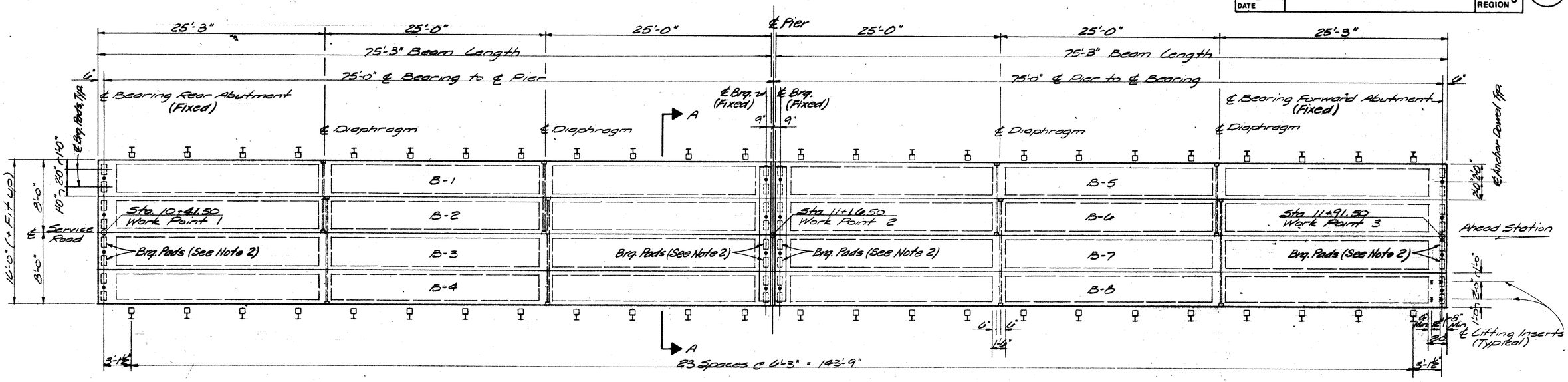
FORWARD ABUTMENT

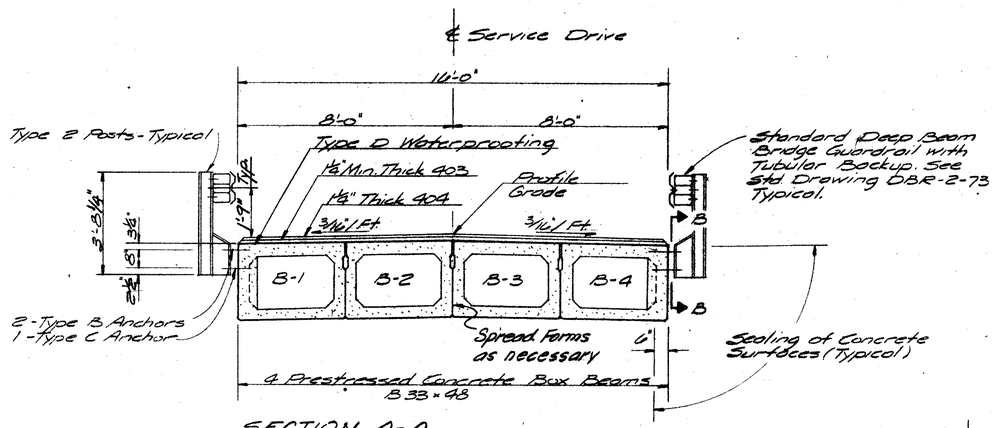
Bridge No HAM-
Service Road over Mill Creek
Hamilton County, Ohio
Sta. 10+30.92 to Sta. 11+82.08

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	LEH	✓	SA	CRS 3-86	

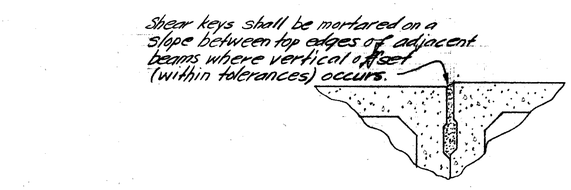
CALC. BY DATE	HAMILTON COUNTY HAM-75/12.6-9.93/13.00	OHIO	730P 787
CHKD. BY DATE		FHWA REGION 5	



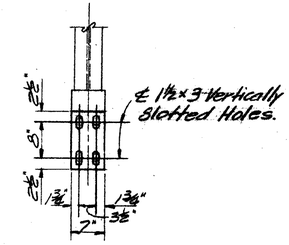
FRAMING PLAN



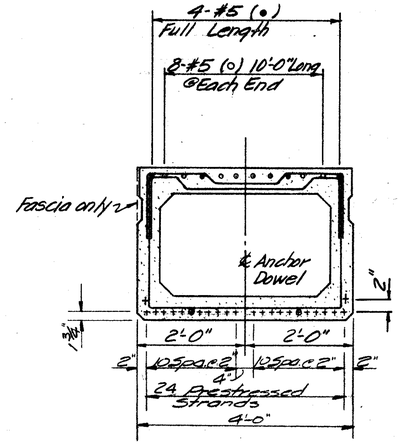
SECTION A-A



SHEAR KEY DETAIL



SECTION B-B



TYPICAL SECTION

B 33 x 48

⊕ Debond Strand 1'-6" from Each End (2 Strands out of 24)
S-Bars shall be spaced at 6".

For Additional Details Refer to Standard Drawing P3BD-1-81

Notes:

1. Mortar For Shear Keys: The mortar as described herein shall be used in lieu of the mortar described on Sheet 1 of 4 in PSBD-1-81 standard drawing. The grout for the joints (keyways) between the prestressed beams shall be a nonshrinking mortar. It shall be nonmetallic and shall have a minimum compressive strength at 28 days of 5500 pounds per square inch according to the Corps of Engineers specifications CRD-C621-82B when prepared to a moderate fluidity (124-145% flow table flow).
   The Grout shall be: Upcon Multi-Purpose Construction Grout
   Sikagrout 212
   Masterflow 713
   Set Non-Shrink
   The grouted joint shall be prepared, placed, and cured according to the manufacturer's recommendations.
2. LAMINATED ELASTOMERIC BEARING, 1.324" x 6" x 13", 60 durometer hardness. Thickness of external elastomers = 5/8". Thickness of internal steel laminate = .074" (14 gage). Total thickness = 1.324". Typical for abutments and pier.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

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SUPERSTRUCTURE DETAILS

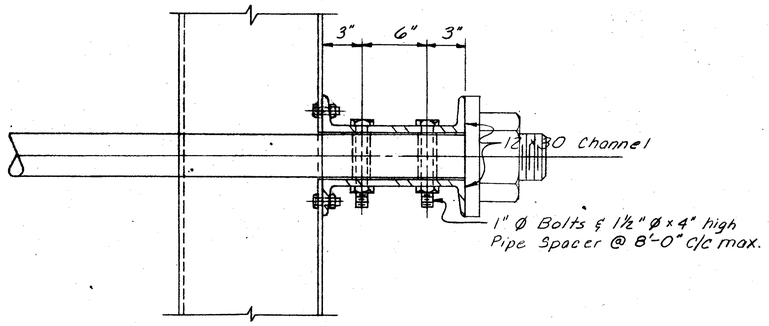
Bridge No. HAM-
Service Road over Mill Creek
Hamilton County, Ohio
Sta 10+30.92 to Sta 11+82.08

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	LEH	✓	SA	CRS 3-86	JULY 21 1986

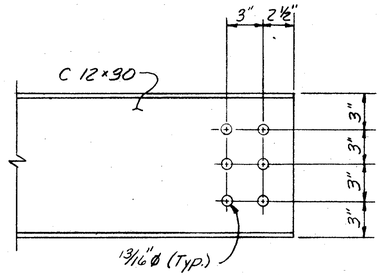
REVISED 9/29/86

OHIO BLUE PRINT H40533

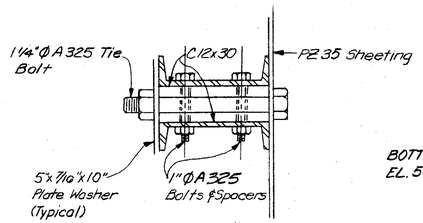
CALC. BY		HAMILTON COUNTY	OHIO	730G
DATE		HAM-75/12.6 - 9.93/13.00	FHWA REGION 5	787
CHKD. BY				
DATE				



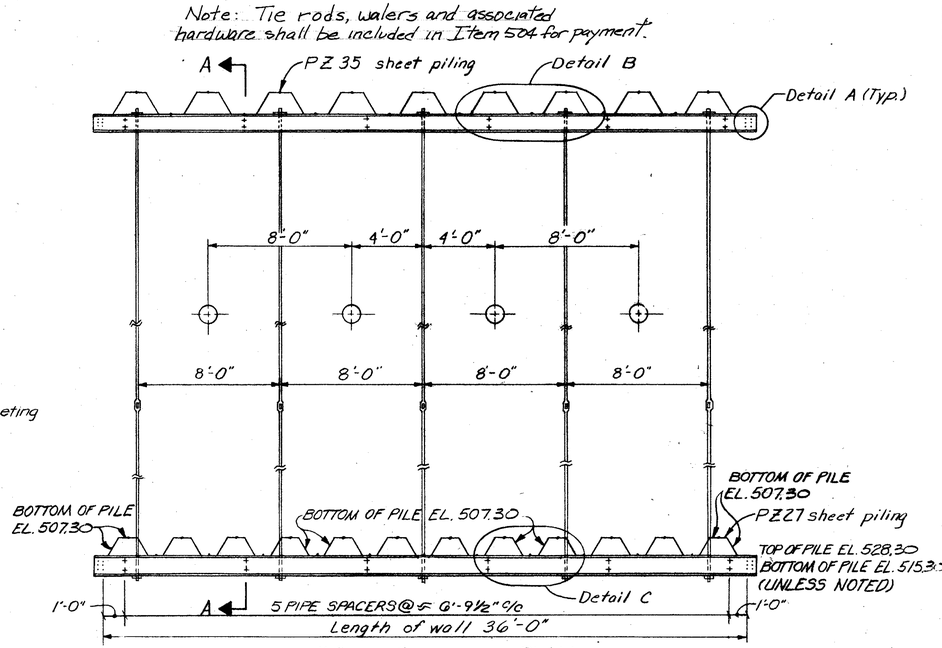
SECTION B-B
NTS



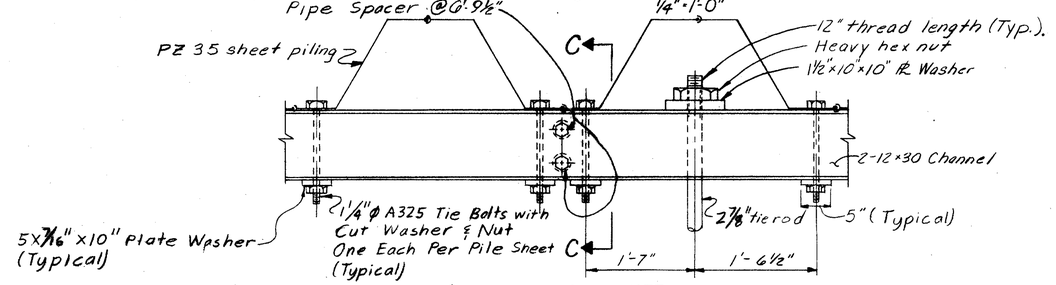
DETAIL A
NTS

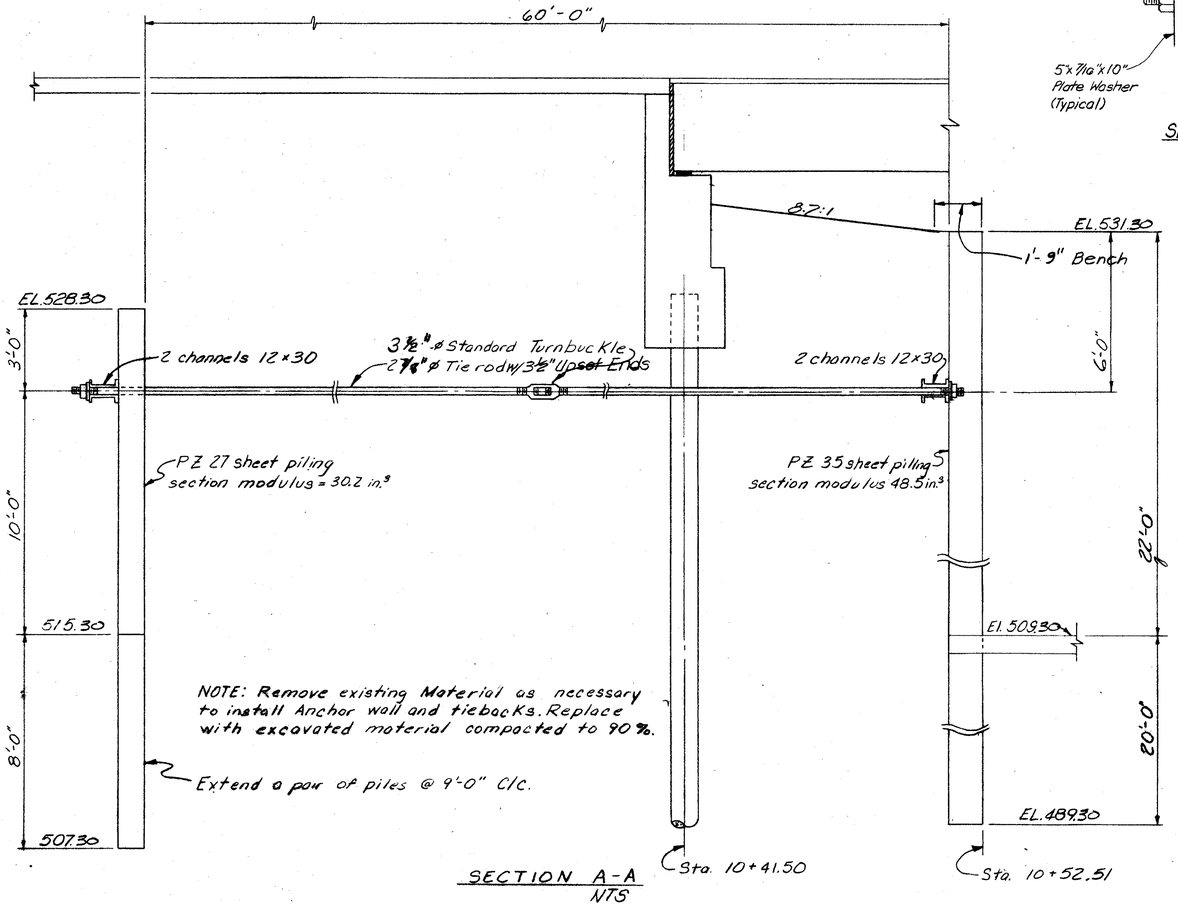


SECTION C-C
1½"=1'-0"

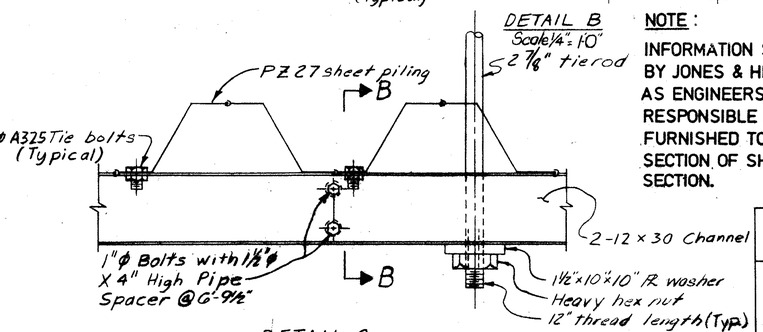


PLAN
¼"=1'-0"





SECTION A-A
NTS



DETAIL C

NOTE:

INFORMATION SHOWN ON THIS DRAWING IS FURNISHED BY JONES & HENRY CONSULTANT, SERVICES BY CORPS AS ENGINEERS. BALKE ENGINEERS ARE NOT RESPONSIBLE FOR THE DESIGN. THIS INFORMATION IS FURNISHED TO THE CONTRACTOR TO BUILD THIS SECTION OF SHEET PILING WITH THE BRIDGE CROSS SECTION.

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

7A/8

Sheet Piling Details

Bridge No. HAM-
Service Road over Mill Creek
Hamilton County, Ohio
Sta. 10+32.92 to Sta. 11+82.08

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	ALH	~	TMB	CRS 3-86	4-86

OHIO BLUE PRINT

CALC. BY	HAMILTON COUNTY	OHIO	730H
DATE	HAM-75/126-9.93/13.00	FHWA REGION 5	787
CHKD. BY			
DATE			

ABUTMENTS

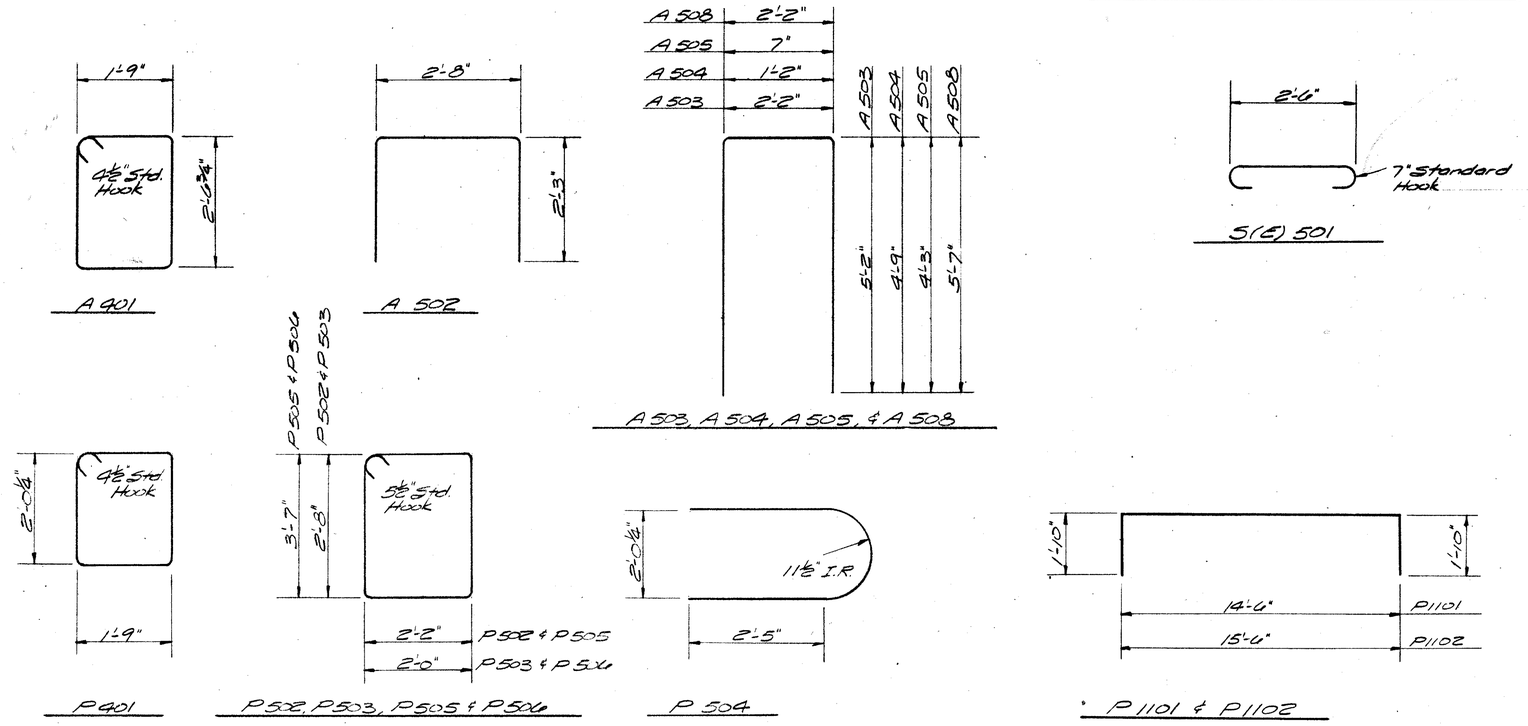
Mark	No	Length	Weight	Shape	Rear Abutment	Forward Abutment	Pier
A1001	8	28'-6"	981	S	4	4	
A801	8	28'-6"	609	S	4	4	
A601	12	21'-0"	379	S	6	6	
A501	20	28'-6"	595	S	10	10	
A502	88	6'-11"	635	B	44	44	
A503	22	12'-3"	281	B	22		
A504	24	10'-5"	261	B	12	12	
A505	28	8'-10"	258	B	14	14	
A506	Not	Used					
A507	32	6'-0"	200	S	16	16	
A508	22	13'-1"	300	B		22	
A401	16	9'-0"	96	B	8	8	

PIER

Mark	No	Length	Weight	Shape	Rear Abutment	Forward Abutment	Pier
P1101	2	17'-6"	186	B			2
P1102	2	18'-6"	197	B			2
P1001	4	14'-6"	250	S			4
P901	4	14'-6"	198	S			4
P501	6	14'-6"	91	S			6
P502	12	10'-2	127	B			12
P503	2	9'-10"	21	B			2
P504	14	8'-0"	117	B			14
P505	9	12'-0"	113	B			9
P506	2	11'-8"	25	B			2
P401	8	8'-0"	43	B			8

SUPERSTRUCTURE

Mark	No.	Length	Weight	Shape	Super-Structure
S(E) 601	1	15'-8"	24	S	1
S(E) 401	4	15'-8"	42	S	4
S(E) 501	48	3'-8"	184	B	48



Notes:

1. Reinforcing Steel Samples: Refer to C.M.S. Sections 106.03, 700, 709.01 thru 709.05 & 709.08. Sufficient Additional Reinforcing Steel Shall be Provided for Sampling. Random Samples Shall be Replaced in the Structure by the Additional Steel, Spliced in Accordance with 509.08.
2. All Steel shall be Grade 60
3. For General Notes See Sheet 2/8

BALKE ENGINEERS
7762 READING ROAD
CINCINNATI, OHIO 45237

8/8

REINFORCING STEEL

Bridge No HAM-
Service Road over Mill Creek
Hamilton County, Ohio
Sta. 10+30.92 to Sta 11+82.08

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
BJS	LEH	~	SA	CRS 3-86	

LOCATION PLAN

HAM - 75 - 9.93
HAM - 126 - 13.00

CITY OF CINCINNATI — CITY OF READING
SYCAMORE TOWNSHIP - SPRINGFIELD TOWNSHIP
HAMILTON COUNTY

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-75-1 (84) U-1133 (1)	

733 787

HAM-75-9.93
HAM-126-13.00
R/W PLANS
LIMITED ACCESS
SCALE-1" = 200'

1/30

SHEET 1 OF 3

END PROJECT	BEGIN PROJECT
HAM-75-9.93	HAM-126-13.00

I-75-1(84) U-1133(1)

0 200 400 600

END PROJECT HAM-I-75-10.93 Sta. 502+64.57 WB
BEGIN PROJECT HAM-126-13.00 Sta. 502+64.57 WB
U-1133(2)
U-1133(1)
B. & O. R.R.
P.R.
HAMILTON COUNTY
CITY OF CINCINNATI
SEC. 4, T-3 E.R.I
SEC. 4, T-3 E.R.I
BURNS AVE.
SPRINGFIELD TWP.
SPRINGFIELD TWP.
DE CAMP AVE.
Station Equation
P.O.T. 510+41.31 Ahd. =
P.O.T. 22+94.46 Ahn.
C.S.
E.B. 1-A
W.B. 1-A
P.T. 510+69.90 Ahd.
P.O.T. 22+94.46 Ahn.
Station Equation
Sta. 397+48.91 @ E.B. S.R. 126 =
Sta. 13264+39.26 R.R. Val. Sta. &
Sta. 397+77.87 @ Ramp D
Sta. 13265+69.36 @ R.R. Valuation Sta.
OAKMONT ST.
AVALON ST.
WINDSOR AVE.
S77°09'33"E
See Detail "C"
S76°18'18"E
Sta. 41+13.00 @ W.B. S.R. 126 =
Sta. 13263+03.35 @ R.R. Val. Sta.
ANTHONY WAYNE AVE.
See Detail "E"
N11°49'54"E
Sta. 63+80.85 @ Ramp E
Sta. 121+80.85 @ Ramp F
Sta. 64+07.74 W.B. = P.T. 64+07.74 E. End @ Ramp E
N13°24'17"E
N27°53'06"E
Sta. 50+00.00 L. Shift @ 16 Rt.
℄ I-75 S.B.
℄ I-75 N.B.
See Detail "F"
℄ S.R. 126 W.B.
℄ S.R. 126 E.B.
℄ Ramp E
℄ Ramp F
Begin ℄ Ramp C Pt. 26+20.00 Sta. 26+30.00 L. ℄
Sta. 30+76.75 E.B. S 12°45'30" E
CARTHAGE FAIR GROUNDS
END PROJECT HAM-126-13.00
BEGIN PROJECT HAM-75-9.93
U-1133(1)
I-75-1(84)
S76°18'18"E
Sta. 30+49.00 @ Ramp C Sta. 13264+79.79 R.R. Valuation Sta.
Sta. 41+13.00 @ W.B. S.R. 126 = Sta. 13263+03.35 @ R.R. Val. Sta.
Sta. 13270+00
Sta. 13260+00
℄ S.R. 126 W.B.
℄ Ramp C
See Detail "D"
℄ Ramp F
Sta. 44+24.00 E. = Sta. 44+24.00 E. Begin ℄ Ramp I
N10°57'03"W
N25°03'22"E
Sta. 44+00.00 E. Begin ℄ Ramp J
Sta. 44+00.00 E. ℄ S.R. 126
BEGIN PROJECT HAM-126-13.00
END PROJECT HAM-75-9.93
I-75-1(84) U-1133(1)
Sta. 71+56.31 W.B. ℄ S.R. 126 = Sta. 126+84.87 N.B. ℄ I-75
N80°39'03"E
HARTLAND DR.
PLACE
GLENORCHARD DR.
DEBONAIR
SPRINGFIELD TWP. SEC. 2, T-3 E.R.I
GALBRAITH ROAD T-3 E.R.I
VILLAGE OF ARLINGTON HEIGHTS
CITY OF CINCINNATI
Sta. 64+07.74 W.B. @ S.R. 126 = Sta. 126+84.87 N.B. @ I-75
N11°56'50"E
SECTION RD.
PENN-CENTRAL R.R.
℄ Ramp C
N26°27'10"E
N27°53'06"E
See Detail "A"
CREEK
See Detail "B"
℄ Ramp D
N27°53'06"E
Sta. 30+27.80 L. Shift @ 24 Left
Sta. 43+88.60 Ahd. @ S.R. 126 = Sta. 97+06.37 @ I-75
Sta. 43+88.60 Ahd. @ S.R. 126 = Sta. 60+12.46 @ Ramp D
CITY OF CINCINNATI
Sta. 43+06.30 E.B. S.R. 126 = Sta. 96+12.30 @ I-75
Sta. 59+44.09 @ C
Sta. 59+14.09 @ D
Sta. 49+35.27 @ Ramp O
W.B. S.R. 126
91°08'45"
S77°09'33"E
Ramp D
Detail "C" No Scale
Sta. 51+00.00 W.B. Shift @ 16 Rt.
Sta. 51+00.00 E.B. Begin ℄ Ramp D
Sta. 79+88.00 E. = Sta. 59+88.00 E. Begin ℄ Ramp F
N26°27'10"E
91°25'56"
℄ Ramp F
N27°53'06"E ℄ Ex. I-75
Detail "D" No Scale
GREENLAND ROAD
DAWN
CREST HILL AVE.
CITY OF CINCINNATI
SPRINGFIELD TWP.
SYCAMORE TWP.
HAMILTON COUNTY
STILLWELL ROAD
CHAUCER DR.
SEC. 1, T-3, E.R.I
SEC. 31, T-4, E.R.I
SUMMIT ROAD
EASEMENT
ABBIE TERRACE
WOODLAND
SECTION RD.
CORPORATION LINE
Pedestrian Overpass
75 ℄ Ex. I-75
End ℄ Ramp C Sta. 41+95.25 Ahd. Sta. 41+70.00 @ I-75
End ℄ Ramp D Sta. 83+44.80 L. @ I-75
Sta. 103+64.45 Sta. Ahead Sta. 103+63.04 Hb Ahead
Ex. ℄ S.R. 126 E.B. N27°53'06"E
Ex. ℄ I-75 N27°53'06"E
Ex. ℄ I-75 N27°53'06"E
Ex. ℄ I-75

LOCATION PLAN

HAM - 75 - 9.93
HAM - 126 - 13.00

CITY OF CINCINNATI - CITY OF READING
SYCAMORE TOWNSHIP - SPRINGFIELD TOWNSHIP
HAMILTON COUNTY

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-75-1(88) U-1193-(1)	

734
787

HAM-75-9.93
HAM-126-13.00
R/W PLANS
LIMITED ACCESS

2
30

SHEET 2 OF 3

0 200 400 600

SPRINGFIELD TWP. Sec. 2 T3 E.B.R.1
TWP. SEC. 32, T4 E.B.R.1
SYCAMORE
VILLAGE OF ARLINGTON
CITY OF READING
GALBRAITH
CREEK
VILLAGE OF ARLINGTON
CINCINNATI
MILL
CITY OF READING
HAMILTON COUNTY
N 88°30'48"E
See Detail "A"
& Ramp T
N80°59'03"E
CITY OF CINCINNATI
SPRINGFIELD TWP.
SYCAMORE TWP.
HAMILTON COUNTY
CHAUCER
E.B. @ Sta. 84+72.64
T.S. 07°44.00 & S.R. 126 Ahd.
Sta. 07+44.00 W.B. & Bk.
Sta. 07+24.35 E.B. & Bk.
Sta. 20+00.00 & S.R. 126
P.C. 20+00.00 L
Begin & Ramp U
Sta. 21+75.00 & S.R. 126
P.T. 21+75.00 T
End & Ramp T
N 88° 30' 44" E
& Ramp T
91°25'56"
90°
& S.R. 126
Detail "A"
No Scale
HAMILTON COUNTY
CITY OF READING
CORPORATION LINE
N 80°59'03"E
HAMILTON COUNTY
N 88°30'48"E
See Detail "A"
& Ramp T
N 72°45'30"E
N 63°37'56"E
CITY OF READING
& Ex. Reading Rd.
N21°33'20"E
Sta. 105+92.09 & Ramp N =
Sta. 3+48.75 & Reading Rd.
D.B.
Sta. 106+23.59 & SR 126 =
Sta. 2+62.74 & Reading Rd.
N21°49'51"E
Sta. 112+09.45 & SR 126 =
Sta. 3+41+40.81
PENN R.R.
N17°17'50"E
Drive "A"
Sta. 113+26.50 & SR. 126 =
Sta. 2+96.31 & Drive "A"
& Galb. Rd.
S83°17'44"E
N45°12'15"E
& Drive "B"
N34°21'17"E
DB 2
DB 1
Sta. 16+25.00 & Galb. Rd.
Sta. 6+19.46 & Drive "B"
N16°22'16"E
CITY OF READING
CORPORATION LINE
VILLAGE OF AMBERLEY
& E.B. S.R. 126
30°
49'
91°25'56"
& Ramp Q
Sta. 134+50.00 E.B.
P.T. 134+50.00 Q
End & Ramp
Detail "C"
No Scale
*I-75-(1)CB ROADWAY
CLARK ST.
MERRELL LANE
BURKHART ST.
ROAD
READING RD.
SHERMAN ST.
PENN-CENTRAL R.R.
End Construction
Sta. 98+79.54 & Ramp T
Sta. 97+85.62 & S.R. 126
263.53 Lt. of Edge of Pvt.
N17°00'51"E
Sta. 100+00.00 & Galb. Rd. =
Sta. 5+36.43 & Drive "A"
& Merrell Dr.
N21°41'00"E
Sta. 101+01.42 & Galb. Rd. =
Sta. 0+00.00 & Merrell Dr.
N 72°04'25"E
& Drive "C"
N 72°04'25"E
& Ramp P
Sta. 120+37.81 & S.R. 126 =
Sta. 13+13.26 & Galb. Rd.
N 72°04'25"E
& S.R. 126
N5°10'30"E
& Ramp Q
N 42°40'59"E
Sta. 18+85.43 & Galbraith Rd. =
Sta. 123+75.77 & Ramp P
Sta. 10+43.70 & Galbraith Rd. =
Sta. 125+20.64 & Ramp Q
N63°56'18"E
Sta. 5+33.31 & Knollcrest =
Sta. 133+58.65 & S.R. 126
Sta. 4+78.58 & Knollcrest =
Sta. 133+40.92 & Ramp Q
S85°19'15"E
SYCAMORE TWP.
N5°24'16"E
SYCAMORE TWP.
Sec. 32 T4 E.B.R.1
Sec. 31 T4 E.B.R.1
Sec. 26 T4 E.B.R.1
Sec. 25 T4 E.B.R.1
SYCAMORE TWP.
CITY OF READING
VILLAGE OF AMBERLEY
CITY OF READING
VILLAGE OF AMBERLEY
SYCAMORE TWP.
CITY OF READING
VILLAGE OF AMBERLEY
SYCAMORE TWP.
CORPORATION LINE
MARYCREST
KNOLLCREST ST.
E. Kodak Dr.
Sta. 127+35.69 & S.R. 126 =
Sta. 126+88.72 & Ramp P
Sta. 10+28.42 & Galb. Rd. =
Sta. 0+00.00 & Hill St.
See Detail "D"
N62°56'40"E
& Ramp P
HILL ST.
N 28°19'00"E
Sta. 5+50.15 & Knollcrest Dr. =
Sta. 133+64.51 & WB. S.R. 126
Sta. 6+05.97 & Knollcrest Dr. =
Sta. 133+78.40 & Ramp P
& WB S.R. 126
N60°18'25"E
& E.B. S.R. 126
N65°32'20"W
Detail "D"
No Scale
WB. & S.R. 126
& S.R. 126
N30°28'28"E
90°
T.S. 131+98.28 WB. & Ah. =
Sta. 131+98.28 EB. & Ah. =
Sta. 131+98.28 & S.R. 126 Bk.
EB. & S.R. 126
Detail "B"
No Scale
Sta. 139+42.03 WB. & Bk. =
Sta. 135+59.79 E.B. & Ah. =
S.T. 135+59.79 E.B. & Bk.
See Detail "B"
N 60°18'25"E
& S.R. 126
Sta. 1+44+20.21
Ex. Cross County Highway
T4 E.R.1
T4 E.R.1
See Detail "C"
END PROJECT
HAM-126-13.00
STA. 150+59.79 WB.
U-1193(1)
Ex. Cross County
HAM-453-A
STA. 135+59.79
MARYCREST ST. AVE.
C.T.
CITY OF READING
VILLAGE OF AMBERLEY
CORPORATION LINE

CENTERLINE REFERENCE MONUMENTS

STATION	OFFSET	DESCR.	STATION	OFFSET	DESCR.	STATION	OFFSET	DESCR.
@ S.R. 126 EB.			@ S.R. 126 WB.			@ S.R. 126		
510+69.90*	5'Lt.	S.T.	510+39.86	10'Rt.	S.T.	87+44.00	47'Lt.	T.S.
30+00.00	5'Lt.	P.O.T.	31+29.48*	27'Rt.	T.S.	95+33.53	43'Lt.	S.T.
35+00.00*	5'Lt.	P.O.T.	35+29.48*	6'Rt.	S.C.	100+00.00	43'Lt.	P.O.T.
45+50.00*	10'Lt.	P.O.C.	45+00.00*	35'Lt.	P.O.C.	105+00.00	43'Lt.	P.O.T.
50+31.13 *	35'Lt.	C.S.	49+26.73*	35'Lt.	C.S.	108+38.15	41'Lt.	T.S.
54+31.13 *	5'Lt.	S.T.	53+26.73*	35'Lt.	S.T.	115+00.00	41'Lt.	P.O.C.
59+52.26*	5'Lt.	P.C.	60+07.41*	35'Lt.	S.C.	119+00.00	41'Lt.	P.O.C.
65+00.00	5'Lt.	P.O.C.	69+00.00*	35'Lt.	P.O.T.	125+75.55	41'Lt.	S.C.
70+00.00	5'Lt.	P.O.C.	81+69.05	35'Lt.	P.C.	131+98.28	41'Lt.	P.O.T.
75+00.00	5'Lt.	P.O.C.				136+59.79	44'Lt.	P.O.T.
80+49.46	5'Lt.	S.T.	Drive B			KNOLLCREST		
			1+88.61	20'Lt.	P.C.	1+50.00	22'Rt.	P.O.T.
Drive A			3+24.23	20'Lt.	P.T.	3+50.00	22'Rt.	P.O.T.
1+00	14'Lt.	P.O.T.	3+73.02	20'Lt.	P.C.	9+56.21	22'Rt.	P.T.
4+50	14'Lt.	P.O.T.	5+65.52	20'Lt.	P.T.			

2
30

DATE	REVISED	BY

LOCATION PLAN

FOR FOR TRANS

RECD FOR RECORD
JUDGE OF PROBATE
72 APR 11 AM 10:01

11 AM 9:35

LOCATION PLAN

CURVE DATA

Note: Add 1,000,000.00 To All East Coordinates

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-75-1 (84) U-1133 (1)	

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

735 / 787

3 / 30

SHEET 3 OF 3

Curve No.	Δ	Dc	R	Spiral No.1	Spiral No.2	θ No.1	θ No.2	Curve Length	Tangent No.1	Tangent No.2	E	P.I. Sta.	P.I. N	P.I. E	P.C.C., P.C. Or T.S. Sta.	P.C.C., P.C. Or T.S. N	P.C.C., P.C. Or T.S. E	S.C. Sta.	S.C. N	S.C. E	C.S Sta.	C.S N	C.S E	P.C.C., P.T. Or S.T. Sta.	P.C.C., P.T. Or S.T. N	P.C.C., P.T. Or S.T. E
1 E.B.	0°22'30"	1°00'00"	5729.58	—	—	—	—	37.50	18.75	18.75	0.03	41+16.90	444,708.06	442,615.65	40+98.15	444,711.86	442,597.28	—	—	—	—	—	—	41+35.65	442,704.38	442,634.03
2 E.B.	0°30'00"	1°30'00"	3819.72	—	—	—	—	33.33	16.67	16.67	0.04	41+52.31	444,701.11	442,650.37	41+35.65	444,704.38	442,634.03	—	—	—	—	—	—	41+68.98	444,697.98	442,666.74
3 E.B.	1°10'00"	2°20'00"	2455.53	—	—	—	—	50.00	25.00	25.00	0.13	41+93.98	444,693.29	442,691.30	41+68.98	444,697.98	442,666.74	—	—	—	—	—	—	42+18.98	444,689.10	442,715.95
4 E.B.	2°37'30"	3°30'00"	1637.02	—	—	—	—	75.00	37.51	37.51	0.43	42+56.49	444,682.81	442,752.92	42+18.98	444,689.10	442,715.95	—	—	—	—	—	—	42+93.98	444,678.22	442,790.15
5 E.B.	6°00'00"	5°20'00"	1074.30	—	—	—	—	112.50	56.30	56.30	1.47	43+50.28	444,671.33	442,846.03	42+93.98	444,678.22	442,790.15	—	—	—	—	—	—	44+06.48	444,670.32	442,902.32
6 E.B.	65°38'20"	8°00'00"	716.20	—	400.00	—	16°00'00"	624.65	375.02	660.20	143.21	48+81.50	444,661.79	443,377.26	44+06.48	444,670.32	442,902.32	—	—	—	50+31.13	444,916.00	443,455.23	62+31.13	445,259.86	443,656.86
7 E.B.	1°20'00"	1°20'00"	4297.18	—	—	—	—	100.00	50.00	50.00	0.29	60+02.26	445,777.24	443,898.73	59+52.26	445,791.94	443,877.56	—	—	—	—	—	—	60+52.26	445,822.03	443,920.96
8 E.B.	1°40'00"	2°00'00"	2864.79	—	—	—	—	83.33	41.67	41.67	0.30	60+93.93	445,859.36	443,939.48	60+52.26	445,822.03	443,920.96	—	—	—	—	—	—	61+35.59	445,896.13	443,959.08
9 E.B.	52°55'41"	3°00'00"	1909.86	—	300.00	—	4°30'00"	1614.27	953.19	1099.21	224.65	70+88.78	446,737.31	444,407.40	61+35.59	445,896.13	443,959.08	—	—	—	77+89.86	446,852.82	445,198.15	80+49.86	446,909.56	445,893.03
10 E.B.	5°49'57"	3°00'00"	1909.86	300.00	300.00	4°30'00"	4°30'00"	27.75	314.41	314.41	9.02	135+46.46	447,769.61	450,707.34	132+32.04	447,569.51	450,464.82	135+32.04	447,754.26	450,701.07	135+59.79	447,770.02	450,723.01	138+59.79	447,925.36	450,980.67
1 W.B.	89°51'46"	5°00'00"	1145.92	400.00	400.00	10°00'00"	10°00'00"	1397.25	1348.77	1348.77	480.92	48+78.24	444,683.78	442,979.63	31+29.48	444,957.18	441,658.86	35+29.48	444,899.08	442,054.07	49+26.73	445,618.36	443,151.69	53+26.73	446,003.89	443,256.19
2 W.B.	64°20'40"	8°00'00"	716.20	400.00	—	16°00'00"	—	604.30	645.55	460.83	135.45	60+76.92	446,738.13	443,410.01	54+31.37	446,106.30	443,277.64	58+31.37	446,497.16	443,395.27	—	—	—	64+35.67	446,848.24	443,857.49
3 W.B.	6°00'00"	5°20'00"	1074.30	—	—	—	—	112.50	56.30	56.30	1.47	64+91.97	446,841.69	444,912.16	64+35.67	446,848.24	443,857.49	—	—	—	—	—	—	65+48.17	446,860.35	443,967.94
4 W.B.	2°37'30"	3°30'00"	1637.02	—	—	—	—	75.00	37.51	37.51	0.43	65+85.68	446,874.46	444,005.10	65+48.17	446,869.35	443,967.94	—	—	—	—	—	—	66+23.17	446,877.85	444,042.45
5 W.B.	1°10'00"	2°20'00"	2455.53	—	—	—	—	50.00	25.00	25.00	0.13	66+48.17	446,880.12	444,067.35	66+23.17	446,877.85	444,042.45	—	—	—	—	—	—	66+73.17	446,881.88	444,092.29
6 W.B.	0°30'00"	1°30'00"	3819.72	—	—	—	—	33.33	16.67	16.67	0.04	66+89.84	446,883.05	444,108.91	66+73.17	446,881.88	444,092.29	—	—	—	—	—	—	67+06.51	446,884.08	444,125.55
7 W.B.	0°22'30"	1°00'00"	5729.58	—	—	—	—	37.50	18.75	18.75	0.03	67+25.26	446,885.23	444,144.26	67+06.51	446,884.08	444,125.55	—	—	—	—	—	—	67+44.01	446,886.26	444,162.98
8 W.B.	5°51'33"	1°15'00"	4583.66	—	—	—	—	468.73	234.57	234.57	6.00	84+03.62	446,977.65	445,320.08	81+69.05	446,964.78	445,085.86	—	—	—	—	—	—	86+37.78	447,014.41	446,051.75
9 W.B.	0°49'57"	3°00'00"	1909.86	300.00	300.00	4°30'00"	4°30'00"	27.75	314.41	314.41	9.02	135+12.70	447,760.47	450,671.11	131+98.28	447,560.37	450,428.59	134+98.28	447,745.12	450,664.85	135+26.03	447,760.88	450,687.69	138+26.03	447,916.21	450,944.21
1	15°23'01"	3°30'00"	1637.02	350.00	350.00	6°07'30"	6°07'30"	82.53	396.45	396.45	18.01	91+40.45	447,085.28	446,569.46	87+44.00	447,023.15	446,157.90	90+94.00	447,065.63	446,505.14	91+83.53	447,067.70	446,594.64	95+33.53	447,041.31	446,943.46
2	24°17'39"	2°30'00"	2291.83	250.00	250.00	3°07'30"	3°07'30"	721.77	618.53	618.53	53.65	114+56.68	446,828.01	445,854.75	108+38.15	446,896.61	443,854.03	110+88.15	446,873.41	443,888.92	118+07.92	446,985.79	443,204.06	120+57.92	447,018.39	443,443.25
3	21°35'57"	4°00'00"	1432.39	400.00	400.00	8°00'00"	8°00'00"	139.98	473.99	473.99	30.56	126+49.54	447,199.87	450,004.25	121+75.55	447,053.98	449,553.27	125+75.55	447,194.55	449,907.39	127+15.53	447,261.80	450,050.09	131+15.53	447,501.53	450,369.85
C-1	5°34'48"	2°00'00"	2864.79	—	—	—	—	279.00	139.61	139.61	3.40	27+89.61	444,241.85	441,308.62	26+50.00	444,970.15	441,171.90	—	—	—	—	—	—	29+29.00	444,900.39	441,441.93
C-2	5°34'48"	3°00'00"	1909.86	—	—	—	—	186.00	93.07	93.07	2.27	32+21.33	444,813.45	441,721.07	31+28.26	444,841.22	441,632.20	—	—	—	—	—	—	33+14.26	444,794.72	441,812.21
C-3	104°45'28"	12°00'00"	477.47	200.00	400.00	12°00'00"	24°00'00"	572.98	734.65	825.62	318.95	41+85.78	444,618.06	442,665.64	34+51.13	444,764.98	441,946.24	36+51.13	444,712.98	442,138.41	42+24.11	444,255.34	442,623.56	46+24.11	443,878.88	442,297.85
D.B-1	10°50'55"	8°00'00"	716.20	—	—	—	—	135.62	68.01	68.01	—	2+56.72	446,684.84	449,607.53	1+88.61	446,623.70	449,569.55	—	—	—	—	—	—	3+24.23	446,732.16	449,635.00
D.B-2	36°30'00"	20°00'00"	286.48	—	—	—	—	192.50	100.04	100.04	—	4+73.07	446,887.63	449,761.42	3+73.02	446,787.56	449,690.98	—	—	—	—	—	—	5+65.52	446,926.97	449,773.10
G.R-1	32°46'00"	12°00'00"	477.465	—	—	—	—	273.06	140.37	140.37	—	20+00.00	446,946.80	450,151.83	18+59.63	446,963.19	450,012.40	—	—	—	—	—	—	21+32.69	447,008.47	450,277.23
W.B.-1 A	35°14'30"	4°00'00"	1432.39	400.00	400.00	8°00'00"	8°00'00"	481.04	656.30	656.30	75.40	50+45.12	445,259.76	440,197.08	49+58.82	445,739.26	439,748.95	50+58.82	445,460.28	440,035.13	50+39.86	445,225.86	440,452.60	51+39.86	445,126.73	440,839.76
E.B.-1 A	35°14'30"	4°00'00"	1432.39	400.00	400.00	8°00'00"	8°00'00"	481.04	656.30	656.30	75.40	50+45.16	445,210.51	440,188.37	49+58.86	445,690.00	439,740.24	50+58.86	445,411.03	440,026.41	50+69.90	445,176.60	440,443.88	51+69.90	445,077.47	440,831.04
I E I-75	16°04'00"	1°06'00"	5208.71	—	—	—	—	1460.61	735.13	735.13	51.62	78+70.00	442,951.47	441,389.46	71+34.87	442,422.23	441,379.25	—	—	—	—	—	—	85+95.48	443,601.24	442,233.28
I N.B. I-75	34°09'30"	1°15'00"	4583.66	—	—	—	—	2732.67	2732.67	2732.67	211.47	119+25.66	446,543.77	443,812.34	105+17.37	445,209.00	443,183.69	—	—	—	—	—	—	132+50.04	447,203.99	445,056.29
D-1	4°24'26"	1°00'00"	5729.58	—	—	—	—	440.72	220.47	220.47	4.24	34+47.78	444,866.28	441,964.98	32+27.27	444,915.28	441,750.03	—	—	—	—	—	—	36+67.99	444,833.95	442,183.07
D-2	7°13'11"	4°00'00"	1432.39	—	—	—	—	180.50	90.37	90.37	2.85	42+73.65	444,760.95	442,784.52	41+83.28	444,774.20	442,695.13	—	—	—	—	—	—	43+63.78	444,759.03	442,874.87
D-3	41°19'28"	8°00'00"	716.20	—	—	—	—	516.54	270.08	270.08	49.23	46+33.86	444,753.31	443,144.89	43+63.78	444,759.03	442,874.87	—	—	—	48+80.32	444,927.31	443,351.45	—	—	—
* D-4	46°00'00"			200.00	—	7°54'26"	38°05'34"	—	127.18	83.32	—	50+07.50	444,009.25	443,448.72	—	—	—	50+80.32	445,002.38	443,454.37	48+80.32	444,927.31	443,351.45	—	—	—
D-5	156°00'20"	38°00'00"	150.78	—	200.00	—	38°00'00"	310.54	736.29	832.53	600.79	58+16.61	445,826.97	443,504.33	—	—	—	50+80.32	445,092.38	443,454.37	53+90.87	445,240.23	443,242.34	55+90.87	445,091.11	443,114.96
D-6	5°06'27"	2°00'00"	2864.79	—	—	—	—	255.37	127.78	127.78	2.85	60+82.65	444,699.28	442,889.53	59+14.88	444,812.21	442,949.29	—	—	—	—	—	—	61+70.25	444,581.47	442,840.06
D-7	13°00'00"	2°00'00"	2864.79	—	—	—	—	650.00	326.40	326.40	18.53	65+57.17	444,224.73	442,690.26	62+30.76	444,525.67	442,816.63	—	—	—	—	—	—	63+80.76	443,959.72	442,699.48
D-8	7°20'52"	1°30'00"	3819.72	—	—	—	—	489.88	245.28	245.28	7.87	71+26.04	443,746.90	442,375.51	68+80.76	443,945.89	442,518.91	—	—	—	—	—	—	73+70.65	443,531.20	442,258.74
E-1	12°38'24"	4°00'00"	1432.39	—	—	—	—	316.00	158.64	158.64	8.76	52+81.61	445,894.23	443,315.01	51+22.97	445,751.70	443,265.35	—	—	—	—	—	—	54+38.97	446,048.55	443,351.79
E-2		11°00'00"	520.87	300.00	—	6°30'00"	—	400.33							57+07.41	446,305.87	443,429.56	60+07.41	446,588.65	443,526.39	—	—	—	64+07.74	446,829.50	443,833.82
F-1	1°25'56"	0°30'00"	11459.16	—	—	—	—	286.42	143.22	143.22	0.89	109+08.29	445,688.05	443,233.97	107+65.07	445,559.83	443,170.17	—	—	—	—	—	—	110+51.49	445,814.64	443,300.95
F-2	16°03'08"	6°00'00"	954.93	—	—	—	—	267.54	134.65	134.65	9.45	121+03.62	446,744.60	443,793.03	119+68.97	446,625.58	443,730.05	—	—	—	—	—	—	122+36.50	446,876.39	443,820.64
H-1	8°30'13"	4°00'00"	1432.39	—	—	—	—	212.59	106.49	106.49	3.95	39+34.29	444,204.01	442,687.09	38+27.80	444,113.49	442,631.01	—	—	—	—	—	—	40+40.39	444,285.25	442,755.94
H-2	24°00'00"	8°00'00"	716.20	—	—	—	—	300.00	152.23	152.23	16.00	41+92.62	444,401.39	442,854.37	40+40.39	444,285.25	442,755.94	—	—	—	—	—	—	43+40.39	444,467.85	442,991.52
H-3	39°17'09"	8°00'00"	716.20	—	—	—	—	491.07	255.63	255.63	48.25	48+39.61	444,684.09	443,441.28	45+83.98	444,573.16	443,210.97	—	—	—	—	—	—	50+75.05	444,915.78	443,349.30
I-1	40°28'51"	10°00'00"	572.96	—	—	—	—	408.14	213.16	213.16	38.37	49+07.16	444,813.11	443,374.34	46+94.00	444,733.36	443,178.66	—	—	—	—	—	—	51+02.14	445,002.68	443,413.82
I-2	27°49'48"	5°30'00"	1041.76	—	—	—	—	506.00	258.09	258.09	31.50	53+60.24	445,232.21	443,591.84	51+02.14	445,002.68	443,413.82	—	—	—	—	—	—	52+08.14	445,490.29	443,589.06
I-3	26°09'30"	8°00'00"	716.20	—	—	—	—	326.98	166.39	166.39	19.07	58+88.70	445,771.00	443,602.04	57+22.31	445,604.62	443,603.83	—	—	—	—	—	—	60+49.29	445,921.13	443,673.78
I-4 .	16°10'58"	4°00'00"	1432.39	—	—	—	—	404.57	203.64	203.64	14.40	62+52.93	446,104.87	443,761.58	60+49.29	445,921.13	443,673.78	—	—	—	—	—	—	64+53.86	446,256.86	443,897.11
N-1	16°00'00"	4°00'00"	1432.39	—	—	—	—	400.00	201.31	201.31	14.08	92+01.31	447,034.83	446,616.14	90+00.00	447,012.64	446,815.88	—	—	—	—	—	—	94+00.00	446,997.09	446,814.24
N-2	3°32'35"	2°00'00"	2864.79	—	—	—	—	193.82	96.95	96.95	1.64	97+94.19	446,928.93	447,202.15	96+97.24	446,946.17	447,106.74	—	—	—	—	—	—	98+91.07	446,918.17	447,298.50
P-1	58°25'55"	20°00'00"	286.48	250.00	250.00	25°00'00"	25°00'00"	42.16	289.47	289.47	—	129+07.43	447,490.37	450,086.13	126+17.96	447,202.08	450,059.99	128+67.96	447,443.12	450,117.86	129+10.15	447,477.87	450,141.65	131+60.15	447,619.02	450,345.44
P-2	6°20'24"	2°00'00"	2864.79	—	—	—	—	317.00	158.66	158.66	—	134+22.66	447,735.69	450,580.60	132+64.00	447,665.17	450,438.47	—	—	—	—	—	—	135+81.00	447,821.47	450,714.08
Q-1	37°30'09"	20°00'00"	286.48	—	200.00	—	20°00'00"	87.51	106.77	189.30	—	126+75.74	447,115.22	450,110.35	125+68.97	447,008.89	450,100.71	—	—	—	126+56.49	447,093.50	450,121.70	128+56.49	447,254.38	450,239.60
Q-2	8°44'24"	2°00'00"	2864.79	—	—	—	—	437.00	218.92	218.92	8.35	132+31.92	447,530.37	450,493.21	130+43.00	447,369.43	450,344.70	—	—	—	—	—	—	134+50.00	447,666.88	450,666.36
T-1	71°29'53"	38°00'00"	150.78	150.00	—	28°30'00"	—	113.15	180.86	115.04	38.87	97+71.05	447,140.19	447,181.90	95+90.18	447,135.49	447,001.09	97+40.18	447,163.72	447,146.74	—	—	—	98+53.33	447,250.19	447,215.56
KD-1	41°00'25"	16°22'13"	350.00	—	—	—	—	287.15	152.21	152.21	31.66	8+21.27	447,922.18	450,471.48	6+69.06	447,777.87	450,510.86	—	—	—	—	—	—	9+56.21	447,985.21	450,332.93

* Compound Spiral Dc, = 8°00'00", Dc2 = 38°00'00", Δ, = 7°54'26", Δ2 = 38°05'34"

DATE	REVISED	BY

3 / 30

CURVE DATA

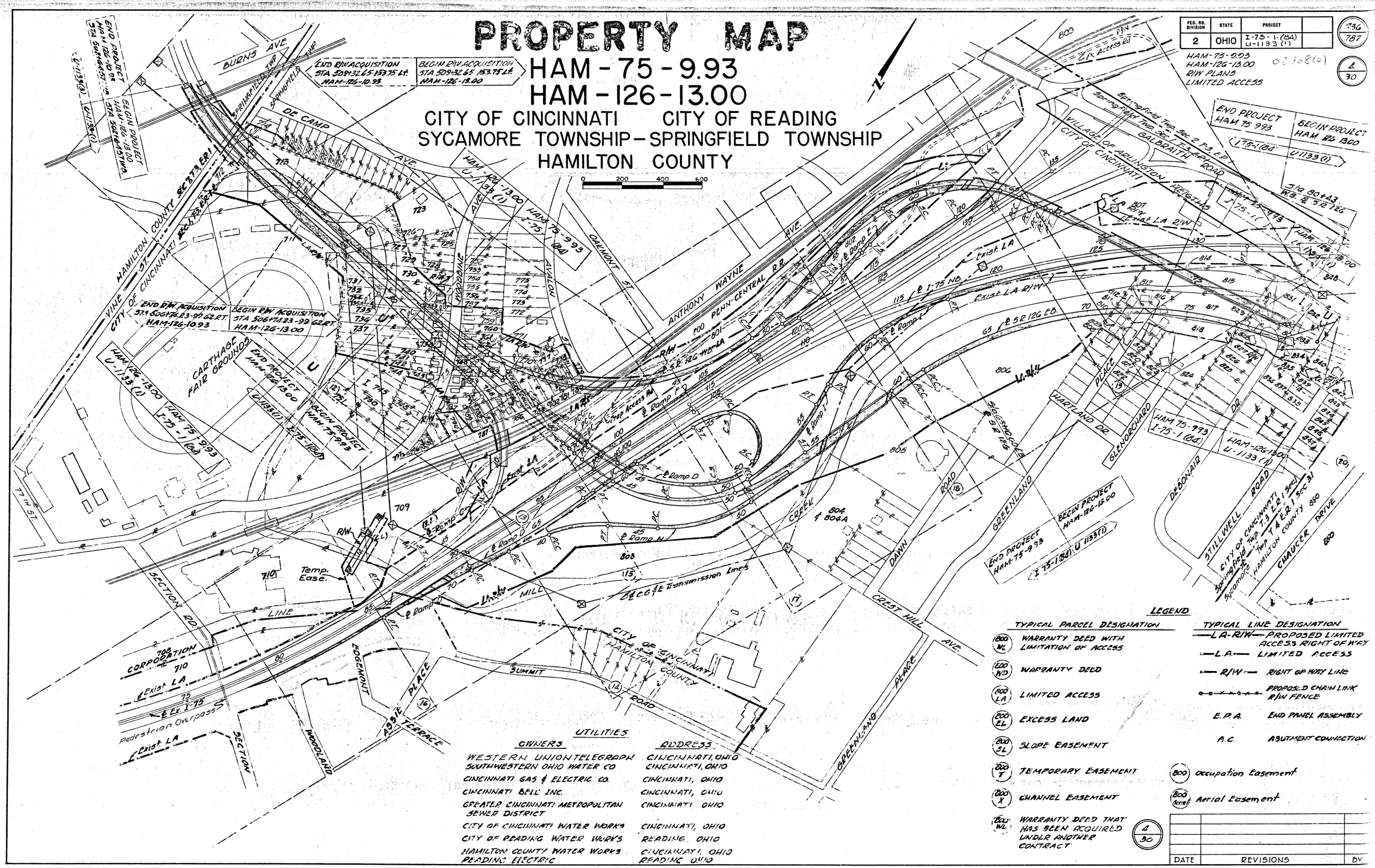
PROPERTY MAP

HAM - 75 - 9.93
HAM - 126 - 13.00

CITY OF CINCINNATI CITY OF READING
SYCAMORE TOWNSHIP - SPRINGFIELD TOWNSHIP
HAMILTON COUNTY

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-75-1-(84) U-1133 (1)	

HAM-75-9.93
HAM-126-13.00
R/W PLANS
LIMITED ACCESS



UTILITIES

OWNERS	ADDRESS
WESTERN UNION TELEGRAPH	CINCINNATI, OHIO
SOUTHWESTERN OHIO WATER CO	CINCINNATI, OHIO
CINCINNATI GAS & ELECTRIC CO.	CINCINNATI, OHIO
CINCINNATI BELL INC.	CINCINNATI, OHIO
GREATER CINCINNATI METROPOLITAN SEWER DISTRICT	CINCINNATI OHIO
CITY OF CINCINNATI WATER WORKS	CINCINNATI, OHIO
CITY OF READING WATER WORKS	READING, OHIO
HAMILTON COUNTY WATER WORKS	CINCINNATI, OHIO
READING ELECTRIC	READING OHIO

LEGEND

TYPICAL PARCEL DESIGNATION

- (800 WL) WARRANTY DEED WITH LIMITATION OF ACCESS
- (800 WD) WARRANTY DEED
- (800 LA) LIMITED ACCESS
- (800 EL) EXCESS LAND
- (800 SL) SLOPE EASEMENT
- (800 T) TEMPORARY EASEMENT
- (800 X) CHANNEL EASEMENT
- (800 WL) WARRANTY DEED THAT HAS BEEN ACQUIRED UNDER ANOTHER CONTRACT

TYPICAL LINE DESIGNATION

- —LA-R/W— PROPOSED LIMITED ACCESS RIGHT OF WAY
- —L.A.— LIMITED ACCESS
- —R/W— RIGHT OF WAY LINE
- —o—x—x—o—x— PROPOSED CHAIN LINK R/W FENCE
- E.P.A. END PANEL ASSEMBLY
- A.C. ABUTMENT CONNECTION
- (800) Occupation Easement
- (800 Aerial) Aerial Easement

4/30

DATE	REVISIONS	BY

PROPERTY MAP

PROPERTY MAP

HAM-75-9.93
HAM-126-13.00

CITY OF CINCINNATI CITY OF READING
SYCAMORE TOWNSHIP - SPRINGFIELD TOWNSHIP
HAMILTON COUNTY

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-75-1(84) U-1133(1)	

737 / 787

HAM-75-9.93
HAM-126-13.00
R/W PLANS
LIMITED ACCESS

5 / 30

0 200 400 600

END R/W ACQUISITION
STA 144+55.35 50.00'LT
HAM-126-13.00

Easement

END PROJECT
STA 138+59.79
HAM-126-13.00

EX CROSS CO.
HAM 453 A
STA 138+59.79

U 1133-1

END R/W ACQUISITION
STA 143+85.07 50.00 RT
HAM-126-13.00

CITY OF CINCINNATI
SPRINGFIELD TWP.
SYCAMORE TWP.
HAMILTON COUNTY

SPRINGFIELD TWP Sec 2, T3 E.B.I.
TWP. SEC 35, T4, E.B.I

SYCAMORE

VILLAGE OF ARLINGTON
CITY OF READING

EX LA

GALBRAITH

EX R/W HAMILTON COUNTY

CITY OF READING

OHIO AVE.

OHIO CIRCLE

CLARK ST.

MERRELL LANE

BURKHART ST.

READING RD.

SHERMAN ST.

PENN. CENTRAL R.R.

HILL ST.

HILL ST.

KUHLCREST DR.

E. Kuhlcrest Drive

E Ramp P

E Ramp Q

E Ramp A

E Ramp B

E Ramp C

E Ramp D

CHAUCER

HAMILTON COUNTY

CITY OF READING

R/W

L.A

L.A-R/W

EX. R.R. 126

Drive A

Drive B

DR.

CITY OF READING
VILLAGE OF AMBERLEY

EX CROSS COUNTY HWY.

MARYCREST AVE.

MARYCREST CT.

SYCAMORE TWP Sec. 32, T4 E.B.I.

SYCAMORE TWP Sec. 31 T4 E.B.I.

SYCAMORE TWP Sec. 26 T4 E.B.I.

SYCAMORE TWP Sec. 25 T4 E.B.I.

HAMILTON COUNTY
CITY OF READING - CORPORATION LINE

CORPORATION LINE
VILLAGE OF AMBERLEY

LAKESHORE

DATE	REVISED	BY
6-3-76	Remove Trees 10 Hill St Rt.	S.H.
8/13/76	Changed 909 to 913	P.R.C.
4/12/74	Added Par 871	P.R.C.

5 / 30

PROPERTY MAP

R/W JOB NUMBER	FED. RD. DIVISION	STATE	PROJECT	
08708 (0)	2	OHIO	I-75-1(84) U-1133(1)	

738/787

HAM-75-9.03
HAM-126-13.00
R/W PLAN
LIMITED ACCESS

6/30

SUMMARY OF ADDITIONAL RIGHT OF WAY REQUIRED

TOTAL NUMBER OF---
135 Owners
75(69) Total Takes
82 Owner With Structures Involved

*See C.G.&E tower rearrangment sheets 30B & 30C for new Parcels

PARCEL NO.	OWNER	RECORDED BOOK	RECORDED PAGE	DEED AREA (SQ.FT.)	TOTAL P.R.O. (SQ.FT)	GROSS TAKE (SQ. FT.)	P.R.O IN TAKE (SQ FT)	NET TAKE LAND (SQ. FT.)	NET TAKE BLDG.	NET RESIDUE LEFT (SQ.FT.)	NET RESIDUE RIGHT (SQ.FT)	SHEET NO.	TYPE FUND	REMARKS
611 WL	The Tresler Oil Company	3481	384									12		
612 WL	The Progress Laundry Company Inc.	RL.15	3916									12		Acquired Under HAM-126-10.93
616 WL	Bessie L. Foster	RL.153	55330									12		
617 WL	Phillip Manzi	RL.171	62029									12		
618 WL	Shirley P. Itskin	RL.127	45353									12		
708 T2						899	0	899						Const. Portion of a Service Rd. Bridge
708 WL	State of Ohio (Miami & Erie Canal)	Loose 220	199			414	0	414	—			15	I	Includes overlap with 708 WL & 708 T Leased by National Distillers Products Corp.
708 T						250		250				15	I	N.K.A. National Distillers & Chemical Corp.
709 WL	The Cincinnati Gas & Electric Company	1442	418	284,447	0	12,495	0	12,495	—	255,571	0	14,15	I	
709 WD	" " " "					10,985	0	10,985				14,15	I	
709 T2						6,396 12,245	8	5396 12245						Construct Service Rd. Bridge
710 WL	National Distillers & Chemical Corporation	1702	372	299,780	0	1860	0	1860	—	294,716	0	15	I	See Misc. Bk. 18 Pg 315 for Corporate Name Change
710 T	A.K.A. National Distillers Products Corporation	"	"			854	0	854	—			15	I	Construct Slope & Grade & Seed
710 U	" " " " "	"	"			2240	0	2240	—			15	I	Acquired For Metropolitan Sewer District.
710						3204	0	3204						
710 T2						28,840	0	28,840						Const. Portion of a Service Rd. Bridge
* 711 WL	Board of Commissioners of Hamilton County (Fee Holder)	272	497	43.61Ac.	0	18,847	0	18,847	Yes	0	41.91 Ac.	12,13	U	Includes overlap with 710WL, 710T & 710U
	Hamilton County Agricultural Society (Lessee)	513	135				0							
711 X	" " "	734	474			280,590	0	280,590	Yes			12,13,25	U	Channel Easement
711 S	" " "					2,200	0	2,200	—			12	U	Sewer Easement
* 712 WL	Hamilton County Commissioners	1104	227	10,514	0	8,970	0	8,970	—	0	1,544	12	U	Total Take
712 WD	" " "	"	"			1,544	0	1,544	—			12	U	
* 713 WL	"Estate of Abe Byer, Deceased"	3811	555	217,503	0	196,544	0	196,544	Yes	0	0	12,13	U	Total Take
713 WD	" " " " "	"	"			20,959	0	20,959	—			12	U	
714 thru 722														Not Needed
723 WL	Acme Barrel & Drum Company	2797	102	68,391	0	16,352	0	16,352	—	52,039	0	13	U	
724 thru 725														Not Needed
726 WL	Miriam Fisher	3184	533	2,800	0	213	0	213	—	2,596	0	13	U	
727 WL	Earl L. Mofford	3689	306	13,695	0	4,575	0	4,575	—	9,120	0	13	U	
728 WL	The Cincinnati Gas & Electric Company	2602	113	24,525	0	24,525	0	24,525	Yes	0	0	13	U	Total Take Transmission Tower
729 WL	Jessie E. Kramer and Wanda M. Gidley	3028	411	32,056	0	21,031	0	21,031	—	10,425	0	13	U	
730 WL	Charles A. Speak and Sue Speak	1749	70	36,777	0	26,866	0	26,866	—	9,911	0	13	U	
731 WL	Flora A. Rayls	1801	504	26,421	0	23,254	0	23,254	Yes	0	0	13	U&I	Total Take U=20171 Sq.Ft. I=3083 Sq.Ft.
731 WD	" " "	"	"			3,167	0	3,167	Yes			13	I	
732 WL	Ethel M. Grote, Herbert E. Grote, Raymond A. Grote	3435	324	21,175	0	19,975	0	19,975	Yes	0	0	13	U&I	Total Take U=16,175 Sq.Ft. I=3,800 Sq.Ft.
732 WD	" " " " " " " " " "	"	"			1,200	0	1,200	—			13	I	
733 WL	Carol F. Frary	2854	181	6,250	0	6,250	0	6,250	Yes	0	0	13	I	Total Take
734 WL	Ernest Walker and Martha Ann Walker	2854	113	16,230	0	16,230	0	16,230	—	0	0	13	U	Total Take
735 WL	Ernest Walker and Martha Ann Walker	2854	191	21,230	0	21,230	0	21,230	—	0	0	13	U&I	Total Take U=16,230 Sq.Ft. I=5,000 Sq.Ft.
735A-WL	Ray Kirk " " "	3845	497	4,057	0	4,057	0	4057	—	0	0	13	U	Total Take
736 WL	Fred Cain and Ina J. Cain	2019	436	26,611	0	26,611	0	26,611	Yes	0	0	13	U&I	Total Take U=20,361 Sq.Ft. I=6,250 Sq.Ft.
737 WL	Martha Ann Walker	2802	402	46,381	0	46,381	0	46,381	Yes	0	0	13	I	Total Take
738 WL	Roy Bryce	3909	28	7,000	0	7,000	0	7,000	Yes	0	0	13	I	Total Take
739														Not Used
740 WL	Fred Brummett and Zona Brummett	3512	585	15037	0	15,637	0	15,637	Yes	0	0	13	I	Total Take
741 WL	Preston Godbey and Lola Godbey	2416	68	15,436	0	15,436	0	15,436	Yes	0	0	13	I	Total Take
742 WL	Emel Nickols & James Nickols	3300	217	16193	0	16,193	0	16,193	Yes	0	0	13	I	Total Take D.B. 2267 P. 359 D.B. 2856 P. 507

LEGEND

State — Acquired Prior to Authorization

I Interstate Fund — 90% Federal, 10% State

U Urban Funds — 25% State, 25% County, 50% Federal

State — Acquired prior to Authorization

A.P. Advance Procurement
R/L. Registered Land

Note: Under No Circumstances Are The Temporary Easements For Purpose Of Removal Of Buildings To Be Used For Storage Of Material And Equipment. Upon The Completion Of Work In This Area, The Temporary Easement Shall Be Immediately Vacated.

REV.	DATE	DESCRIPTION
P.R.D.	2/13/76	Deleted owner coord by 1 (Par 309)
P.W.F.	3/12/76	Name Change Par 706 & 708
E.H.	2-28-75	Name Chg. Par. 711
H.J.	11-1-74	Rev Par 710 WL, 710T, 710U.
H.J.	11-1-74	Added Par 708T & Rev 708 WL.
E.H.	6-21-74	Rev. 710 S to 710 U Name of Met. Sewer Dist.
E.H.	4-30-74	Chg. "U" quantity Par 735
E.H.	3-13-74	Chg. Par. 712X to 712 WD
E.H.	12-27-73	Name Chg. par 713
E.H.	11-28-73	Name Chg, D.B.&P, Par 738
E.H.	11-9-73	Name Chg. Par. 713 Byers to Byer See Deed
E.H.	11-2-73	Chg D.B.&P Par 709

6/30

R/W JOB NUMBER	FED. RD. DIVISION	STATE	PROJECT	
08708(0)	2	OHIO	I-75-1(34) U-1133(1)	

739
787

7
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HAM-75-0.93
HAM-126-13.00
D/W IN PLAN
LIMITED ACCESS

SUMMARY OF ADDITIONAL RIGHT OF WAY REQUIRED

TOTAL NUMBER OF---
_____ Owners
_____ Total Takes
_____ Owner With Structures Involved

*See C.G.&E. tower rearrangment sheets 308 & 30C for new Parcels

	PARCEL NO.	OWNER	RECORDED BOOK	RECORDED PAGE	DEED AREA (SQ. FT.)	TOTAL P.R.O. (SQ. FT.)	GROSS TAKE (SQ. FT.)	P.R.O. IN TAKE (SQ. FT.)	NET TAKE LAND	NET TAKE BLDG.	NET RESIDUE LEFT (SQ. FT.)	NET RESIDUE RIGHT (SQ. FT.)	SHEET NO.	TYPE FUND	REMARKS
	743 WL	Olline Bertram	2690	438	5044	0	5044	0	5044	Yes	0	0	13	I	Total Take
	744 WL	Eunice Crase	3031	522	19611	0	99	0	99	—	0	19512	13	I	
	744 S	" "	"	"			170	0	170	—			13	I	Sewer Easement
	744 X	" "	"	"			350	0	350	—			13	I	Channel Easement
*	745 S	William J. Blom Sr.	3533	318	68036	0	2664	0	2664	—	0	68036	13	I	Sewer Easement - overlaps 745-X By 2630"
*	745 X	" " "	"	"			23185	0	23185	—			13&25	I	Channel Easement
*	746 thru 749														
*	750 X	Zella Helmkamp	2548	311	31157	0	7352	0	7352	—	0	31157	25	I	Channel Easement See Misc. Bk. 18 Pg. 315 for Corporate Change
*	751 X	National Distillers Products Corporation N.E.A. National Distillers & Chemical Corporation	2068	105	127021	0	16967	0	16967	—	0	127021	25	I	Channel Easement
	752 thru 757														Not Needed
	758 WL	Taylor McKee and Edna McKee	3536	246	8406	0	8406	0	8406	Yes	0	0	13	I	Total Take
	759 WL	Gaylord U. Seilkop and Lillian L. Seilkop	3313	512	8406	0	8406	0	8406	Yes	0	0	13	I	Total Take
	760 WL	William E. Bockman and Mable Bockman	3055	493	8406	0	8406	0	8406	Yes	0	0	13	I	Total Take
	761 WL	Genevieve Thomas	3021	187	8406	0	8406	0	8406	Yes	0	0	13	I	Total Take
	762 WL	Dora Winterod	1486	481	16813	0	16813	0	16813	Yes	0	0	13	I	Total Take
	763 WL	Cecil R. Long and Emma L. Long	2463	56	7403	0	7403	0	7403	Yes	0	0	13	I	Total Take
	764 WL	Lawrence C. Sims and Serena F. Sims	1750	205	7273	0	7273	0	7273	Yes	0	0	13	I	Total Take
	765 WL	Juelle B. Holbert	2750	141	7285	0	7285	0	7285	Yes	0	0	13	I	Total Take
	766 WL	Matilda Gruber	3086	395	7450	0	7450	0	7450	Yes	0	0	13	I	Total Take
	767 WL	Charles B. Ward and Rose E. Ward	3326	654	10589	0	7775	0	7775	Yes	0	0	13	I	Total Take
	767 WO	" " " " " " "	"	"			2814	0	2814	Yes			13	I	
	768 WL	Chris C. Raney	2943	255	18787	0	18787	0	18787	—	0	0	13	I	Total Take
	769 WL	Edna McKinney, Kathleen Miller, Opal Chambers, Charlotte Haynes, Helen Bradley, Mildred Fox, Joy Propes	3962	582	9124	0	9124	0	9124	Yes	0	0	13	I	Total Take
	770 WL	Robert F. Bauer	2752	24	13687	0	13687	0	13687	Yes	0	0	13	I	Total Take
	771 WL	Lawrence Austin Williams	3686	7	45316	0	15487	0	15487	—	20827	0	13	I	
	772 thru 775														Not Needed
	776 WL	GENE MARCUM & RONALD WATSON, TRUSTEES	3902	99+	7485	0	2155	0	2155	No	5330	0	13	I	
	779 WL	Mary Effinger	1414	636	7136	0	7136	0	7136	Yes	0	0	13	I	Total Take
	778 WL	Lee Hall and Loraine Hall	2861	344	7527	0	7527	0	7527	Yes	0	0	13	I	Total Take
	779 WL	Church of God of Prophecy of Cincinnati	3259	580	5533	0	5533	0	5533	Yes	0	0	13	I	Total Take
	780 WL	Eula Cochran, AKA. Eula Cochron Castle	3466 3601	705 358	4839	0	4839	0	4839	Yes	0	0	13	I	Total Take
	781 WL	Albert F. DuChemin	2201	533	3510	0	3510	0	3510	Yes	0	0	13	I	Total Take
	782 WL	STATE OF OHIO (CARRIE E. KUENNEMEIR)	3674	794	9020	0	9020	0	9020	Yes	0	0	13	I	Total Take Acquired by State of Ohio AK-3674 PG 794
	783 WL	Glenn E. Allen and Yvonne Allen	3038	30	9800	0	9800	0	9800	Yes	0	0	13	I	Total Take
	784 WL	Robert F. Bauer and Mary C. Bauer	3301	30	6505	0	6505	0	6505	Yes	0	0	13	I	Total Take
	785 WL	Evelyn M. Sadler	2940	91	6614	0	6614	0	6614	Yes	0	0	13	I	Total Take
	786 WL	Irene Rothenbuecher	1692	301	5430	0	5430	0	5430	Yes	0	0	13	I	Total Take

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REV.	DATE	DESCRIPTION
P.W.F.	3/13/75	Name Change Par. 751
P.W.F.	7/11/74	Name Change Par. 769
P.W.F.	11-15-73	Deleted Garage Qty. 776
N.M.	12-0-73	Par 776WL, Name Change, Rev Rec Area & Res
J.T.C.	7-26-72	Name Change Par. 780

SUMMARY OF ADDITIONAL RIGHT OF WAY

R/W JOB NUMBER	FED. RD. DIVISION	STATE	PROJECT	
08708 (0)	2	OHIO	I-75-1(84) U453(1)	

740 / 787

HAM-75-0.03
HAM-126-13.00
R/W PLAN
LIMITED ACCESS

8 / 30

SUMMARY OF ADDITIONAL RIGHT OF WAY REQUIRED

TOTAL NUMBER OF---
_____ Owners
_____ Total Takes
_____ Owner With Structures Involved

PARCEL NO.	OWNER	RECORDED BOOK	RECORDED PAGE	DEED AREA (SQ.FT.)	TOTAL P.R.O. (SQ.FT.)	GROSS TAKE (SQ.FT.)	P.R.O IN TAKE (SQ.FT.)	NET TAKE LAND (SQ.FT.)	NET TAKE BLDG.	NET RESIDUE LEFT (SQ.FT.)	NET RESIDUE RIGHT (SQ.FT.)	SHEET NO.	TYPE FUND	REMARKS
787 WL	Lelo Cain	3204	567	4807	0	4807	0	4807	Yes	0	0	13	I	Total Take
788 WL	Ruby Toulbee	3312	412	4868	0	4868	0	4868	Yes	0	0	13	I	Total Take
789 WL	Sam J. Martin and Joy Martin	3794	769	6322	0	6322	0	6322	Yes	0	0	13	I	Total Take
790 WL	Sylvia L. Rauchman and Jane R. Reisenfeld	3320	244	11458	0	2268	0	2268	—	0	2100	13	I	
* 791 thru 796														
* 797														
798 WL	Fred J. Holthaus	1785	220	42470	0	29,050	0	29,050	Yes	13,429	0	21	U	
798 T	" " "	3978	587			2922	0	2922	Yes			21	U	Remove Building & Grade & Seed
799														Not Used
800 WL-1	Penn-Central Transportation Company	2400	582			88,687	0	88,687	—			14,15,26	I	
800 WL-2	" " " "	"	"			44,671	0	44,671	—			17,18	I	
800 WU-1	" " " "	"	"			176,926	0	176,926	—			17,18	I	
800 WU-4	" " " "	"	"			360	0	360	—			14,17,26	I	
800 WU-3	" " " "	"	"			52,934	0	52,934	—			15,26	I	
800 AR-1	" " " "	"	"			8,630	0	8,630	—			14,26	I	Aerial Easement
800 AR-2	" " " "	"	"			10,387	0	10,387	—			14,26	I	" "
800 AR-3	" " " "	"	"			4,531	0	4,531	—			14,26	I	" "
800-1	" " " "	"	"			247	0	247	—			14,26	I	Occupational Easement
800-2	" " " "	"	"			308	0	308	—			14,26	I	" "
800-3	" " " "	"	"			517	0	517	—			14,26	I	" "
800-4	" " " "	"	"			111	0	111	—			14,26	I	" "
800-5	" " " "	"	"			341	0	341	—			14,26	I	" "
800-6	" " " "	"	"			86	0	86	—			14,26	I	" "
800-7	" " " "	"	"			765	0	765	—			14,26	I	" "
800-T-1	" " " "	"	"			6623	0	6623	—			14,26	I	Construct Drive & Grade & Seed
800-T-2	" " " "	"	"			5058	0	5058	—			14,26,27	I	" " " "
800-WU-2	" " " "	936	448			70,830	26,970	43,860	—			19,27	I	
801 WL	Metromedia Incorporated	3393	198	191,129	0	140,516	0	140,516	Yes	0	0	14,17	I	Total Take
801 WU	" "	"	"			50,613	0	50,613	—			14,17	I	
802 WL	City of Cincinnati	2015	51	191,827	0	173,356	0	173,356	—	(93,054)	0	17,18	I	
802 WD	" "	"	"			5,276	0	5,276	—			18	I	
802 ER	" "	"	"			13,195	0	13,195						
■ 803 WL	Jewish Federation of Cincinnati	3860	870	2,242,796	26750	753,898	0	753,898	Yes	0	1,278,307	14,15,17	I	Transmission Tower Removed
803 SL	" " " " "	3005	309			2,479	0	2,479	—			18	I	Slope Easement not to be acquired ①
803 X	" " " " "					19212	0	19,212	—			14,17	I	Channel Easement
803-S-1	" " " " "					1,200	0	1,200	—			15	I	Sewer Easement not to be acquired ①
803-S-2	" " " " "					500	0	500	—			17	I	" " " " " ①
803-S-3	" " " " "					3,100	0	3,100	—			14	I	" " " " " ①
803 EL	" " " " "					183,849		183,849	—			14,15,17	S	
804 WL	Marguerite McIntosh	3745	669	173,771	0	6,973	0	6,973	—	0	166,798	17	I	
■ 804 X	" " " " "	"	"			36,021	0	36,021	—	0		17	I	Channel Easement
■ 803 X-1	Jewish Federation of Cincinnati					67,028		67,028				14,17	I	" " not to be acquired ** ①
805 WL	Hebrew Day School Realty, Incorporated	148	53250	219310	0	92,093	0	92,093	Yes	0	127217	17	I	(R.L.)
805 T	" " " " " "	"	"			249	0	249	Yes	0		19	I	Remove Playground Equipment
805 Te	" " " " "	"	"			2681	0	2681	—					
806 WL	Kaal Kodesch Bene Israel	86	30098	719499	0	557,251	0	557,251	—	0	162,248	17,18,19	I	(R.L.) *205335 Sq. Ft.
806 S	" " "	"	"			536	0	536	—			18	I	Sewer Easement
■ 804AT	Gumm, Raymond and Edna M.	4017	1438	166,798		12,101	0	12,101	—		166,798	17	I	
807 WL	Borden Company, The, AKA Borden, Inc.	130	46710	168,097	0	5,730	0	5,730	—	0	162,368	19	I	(R.L.)
807 X	" " "	"	"			10,052	0	10,052	Yes				I	Channel Easement - Transmission Tower
807 U	" " "					10,585		10,585	—				I	48" dia. leg piers new tower 8NR(53) beyond toe of slope
808 S	Mr. D. Realty Co.	119	42377	6,203	0	200	0	200	—	0	6,803	19	I	To Construct 12" Sanitary Sewer (R.L.)
809 WL	Irving Kutas and Esther L. Kutas	164	50380	6,203	0	2,605	0	2,605	Yes	0	0	19	I	Total Take (R.L.)
809 WD	" " " " " "	"	"			3,598	0	3,598	Yes			19	I	
810 WL	Marvin Sarg and Jean D. Sarg	188	68331	6,205	0	5,470	0	5,470	Yes	0	0	19	I	Total Take (R.L.)
810 WD	" " "	"	"			735	0	735	Yes			19	I	
811 WL	Herbert Segal and Eleanor Segal	144	51625	6,206	0	6,206	0	6,206	Yes	0	0	19	I	Total Take (R.L.)
812 WL	Mr. D. Realty Co.	131	47002	6,518	0	6,518	0	6,518	Yes	0	0	19	I	Total Take (R.L.) *637 Sq. Ft.

*See C.G.&E. tower rearrangment sheets 30B & 30C

*Existing Channel Easement from HAM-75-0.30 Project for Plan See Sheets 18, 19 & 20

NOTE: ① PARCELS 803SL, 803S-1, 803S-2, 803S3 & 803X-1 ARE INCLUDED IN PARCEL 803EL

** 803X-1 completely within Par 803EL

REV.	DATE	DESCRIPTION
DTM	3/3/86	Add Par. 804AT
DTM	3/3/86	Add Par 805Te
E.H.	11-5-75	chg take Par 803x
P.R.D.	4-10-75	Par. 803 - add Sepia revisions to linens
S E W	1-10-74	Added AKA to Par. 807
E.H.	12-20-74	name chg. Par. 803
E.H.	12-18-74	deleted Par 803S-2, 803S-3 & 803SL, rev 803X, & 803SL, add par. 803EL - see details on Sepias
E.H.	8-12-74	Add new owner Par 798
E.H.	6-6-74	Add Par 807-U
E.H.	5-24-74	chg. par 802E to 802ER
S E W	4-1-74	Added Par. 802 E
E.H.	3/28/74	gen. rev. to date
W & L	2/13/73	Rev. Par. 798 WL & 798T
W & L	2/14/73	Rev. Record Area Par. 801
W & L	9/24/73	Added Parcel 800 WU-2
P.W.S.	10/4/73	Add P. 800 WU-1, WU-3, WU-4 Rev 800 T-1
E.H.	12/7/73	chg. Par 801 WD to WU
W & L	12/7/73	Rev. Parcels 800 WU-2 & 800 WU-3
E.H.	3/4/74	rev. Par 809 to aggree with appra Plat

8 / 30

R/W JOB NUMBER	FED. RD. DIVISION	STATE	PROJECT	
08708(0)	2	OHIO	I-75-1(84) U-1133(1)	

741
787

SUMMARY OF ADDITIONAL RIGHT OF WAY REQUIRED

TOTAL NUMBER OF---
_____Owners
_____Total Takes
_____Owner With Structures Involved

HAM-75-9.03
HAM-126-13.00
R/W PLAN
LIMITED ACCESS

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PARCEL NO.	OWNER	RECORDED BOOK	RECORDED PAGE	DEED AREA (SQ. FT.)	TOTAL P.R.O (SQ. FT.)	GROSS TAKE (SQ. FT.)	P.R.O IN TAKE (SQ. FT.)	NET TAKE LAND (SQ. FT.)	NET TAKE BLDG.	NET RESIDUE LEFT (SQ. FT.)	NET RESIDUE RIGHT (SQ. FT.)	SHEET NO.	TYPE FUND	REMARKS
813 WL	Louis and Matilda Long	188	68216	5199	0	5199	0	5199	Yes	0	0	19	I	Total Take (R.L.) *754 Sq. Ft.
814 WL	Charlotte Widmeyer	2318	387	17380	0	17380	0	17380	—	0	0	19, 20	I	Total Take (R.L.) *17380 Sq. Ft.
815 WL	Vogue Construction Company	131	46082	77745	0	77745	0	77745	—	0	0	19, 20	I	Total Take (R.L.) *77745 Sq. Ft.
816 WL	Cecil Oxlander and Shirley A. Cohen	137	40265	8059	0	8059	0	8059	Yes	0	0	19	I	Total Take (R.L.)
817 WL	Dorothy Stiebel	135	48428	59566	0	59566	0	59566	Yes	0	0	19	I	Total Take (R.L.)
818 WL	Mr. D. Realty Co.	162	58362	86598	0	29893	0	29893	Yes	0	56701	19, 20	I	(R.L.)
818 T	" " " "	"	"			4520	0	4520	Yes			19	I	(R.L.) Remove Structure, Grade & Seed
818 S	" " " "	"	"			7398		7,398	Yes			19, 20	I	Sewer Easement
819 thru 826														Not Needed
827 WL	Adele Marks	3168	466	11314	0	1147	0	1147	—	0	10167	20	I	
828 WL	Morris L. Stein and Fay Stein	3210	226	10879	0	9411	0	9411	Yes	0	0	20	I	Total Take
828 WD	" " "	3122	653			1468	0	1468	Yes			20	I	
829 WL	Mary Lou Dental	3501	370	8200	0	8200	0	8200	Yes	0	0	20	I	Total Take
830 WL	Alfred M. Kuhr	3071	155	16709	0	16709	0	16709	Yes	0	0	20	I	Total Take Acquired by State of Ohio DE 3116 Pg 782 *5541 Sq. Ft.
831 WL	Samuel Nodel and Gloria Rose Nodel	3099	390	28341	0	28341	0	28341	Yes	0	0	20	I	Total Take *18708 Sq. Ft.
832 WL	Hanna Reinbach	3095	71	26626	0	26626	0	26626	Yes	0	0	20	U, I	Total Take *14970 Sq. Ft. U=18820 Sq. Ft. I=8000 Sq. Ft.
833 WL	Irwin H. Aronoff and Edis Aronoff	3075	84	10145	0	10145	0	10145	Yes	0	0	20	U, I	Total Take Acquired by State of Ohio DE 3738 Pg 005 *4321 Sq. Ft.
834 WL	Helma Appel	3142	67	10438	0	10438	0	10438	Yes	0	0	20	U	Total Take
835 thru 839		(2983 3698	586 789											Not Needed
840 WL	Sam Benjamin and Mildred Benjamin	3682	623	23219	0	17203	0	17203	Yes	0	0	20	U	Total Take *5831 Sq. Ft.
840 WD	" " " " "	4008	915			5026	0	5026	Yes			20	U	
841 WL	Dorothy C. Siegel	2881	89	50401	0	45728	0	45728	Yes		0	20	U	Total Take *33467 Sq. Ft.
841 WD-1	" " "	"	"			2925	0	2925	No			20	U	
841 WD-2	" " "	"	"			10748	0	10748	No			20	U	*10742 Sq. Ft.
842 WL	Lillian Willis	2010	80	30338	0	16764	0	16764	Yes	0	0	20	U	Total Take *6509 Sq. Ft.
842 WD-1	" "	"	"			12463	0	12463	Yes			20	U	
842 WD-2	" "	"	"			1111	0	1111	No			20	U	*1112 Sq. Ft.
843 thru 849														Not Needed
850 WL-1	Hugh F. Culverhouse	166	60150	1,487,950	0	49000	0	49000	Yes	0		20	U	(R.L.)
850 WL-2	" " "	3470	339			5815	0	5815	—		1432,859	21	U	Record Area & Residue include Chaucer Drive & Burkhart St. (153,989 Sq. Ft.
850 WL-3	" " "	"	"			810	0	810	—			21	U	
850 WL-4	" " "	"	"			1466	0	1466	—			21	U	
850 T-1	" " "	"	"			2465	0	2465	Yes			20	U	Remove Pool & Grade & Seed
850 T-2	" " "	"	"			1400	0	1400	Yes			20	U	Remove Structure & Grade & Seed
851 WL-1	Galbraith Industrial Center Incorporated	147	52767	52,070	0	33,103	0	33,103	—	19,876	0	21	U	(R.L.)
851 WL-2	" " " "	3097	697	163,623	4013	78,052	0	78,052	—	1,750 79,802	0	20, 21	U	(Not R.L.) *12466 Sq. Ft.
851 S-1	" " " "					3,629	0	3,629	—			20	U	Sewer Easement
851 S-2	" " " "					1,600	0	1,600	—			20		" "
852														Not Needed
853 WL	Walter J. Arnold and Mary Arnold	3264	281	23,628	0	21,878	0	21,878	Yes		0	20, 21	U	(R.L.)
853 EL						1750		1750						
854														Not Needed
855 WL	S. Ted Isaacs & Ann F. Isaacs	(34 RL 3331	47956 583	13215		13215		13215	Yes	0	0	21	U	Total take
856 WL	Alberta V. Geers	3165	90	38,064	0	34,978	0	34,978	Yes	3486	0	21	U	
857 WL	Standard Oil Co., The	3103	506	21,000	0							21		Not Needed

* Existing Channel Easement from HAM-75-9.30 Project. For Plan See Sheets 18, 19 & 20.

U= 19162 Sq. Ft.
I= 893 Sq. Ft.

9
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REV.	DATE	DESCRIPTION
E.H.	2/22/74	Add Note in Remarks Par-850
P.R.D.	2/14/74	Change Par 853 E to 853 EL
E.H.	1/24/73	Add Par. 853E
E.H.	3/29/72	gen. Rev. To date
W.J.K	12/11/72	Rev. Residue Par. 850
W.J.K	2/13/73	Rev. Par. 851 WL-1, 851 WL-2, 853 WL, 856 WL, and Deleted Par. 857 WL
E.H.	9-27-73	Note added to Lots 3 & 4, & Pt. added
E.H.	10-1-73	Deleted out Sale To Paris Inc. from Par 851
E.H.	11-21-73	Noted P.R.O. & Chg. Residue Par 850
E.H.	12-3-73	Rev. Record Area P.R.O. & R.T. Res. Par 850

R/W JOB NUMBER	FED. RD. DIVISION	STATE	PROJECT	
08708(0)	2	OHIO	I-75-1(84) U-1139(1)	

742
787

10
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HAM-75-9.93
HAM-126-13.00
R/W PLAN
LIMITED ACCESS

SUMMARY OF ADDITIONAL RIGHT OF WAY REQUIRED

TOTAL NUMBER OF---
_____ Owners
_____ Total Takes
_____ Owner With Structures Involved

PARCEL NO.	OWNER	RECORDED BOOK	RECORDED PAGE	DEED AREA (SQ.FT.)	TOTAL P.R.O.	GROSS TAKE (SQ. FT.)	P.R.O IN TAKE (SQ. FT.)	NET TAKE LAND (SQ. FT.)	NET TAKE BLDG.	NET RESIDUE LEFT (SQ. FT.)	NET RESIDUE RIGHT (SQ. FT.)	SHEET NO.	TYPE FUND	REMARKS
858 WL	George Matre A.K.A. George J. Matre	1787	78	30567	0	30567	0	30567	Yes	0	0	21	U	Total Take
859 WL	Robert F. Denninger and Velda Denninger	2486	505	11703	0	11703	0	11703	Yes	0	0	21	U	Total Take
860 WL	Chris C. Roney	1965	345 282	41154	0	32801	0	32801	Yes	8353	0	21	U	
860 T	" " "	"	"			660	0	660	Yes			21	U	Remove Structure & Grade & Seed
861														Not Needed
862 WL	Edna L. Smith	3045	178	18050	0	11478	0	11478	—	6572	0	21	U	
863 WL	Helen I. Dernick	3282	36	12066	0	12066	0	12066	Yes	0	0	21	U	Total Take
864 WL	Ewald E. Van Droag & Delores C. Van Droag	3751	272	24887	0	10239	0	10239	—	14648	0	21	U	
865 WL	George R. Dugger and Emma Dugger	3035	447	7701	0	7701	0	7701	Yes	0	0	21	U	Total Take
866 WL	Beatrice Krabbe	2144	9	7500	0	7500	0	7500	Yes	0	0	21	U	Total Take
867 WL	Anne S. Brockmeier	3891	666	14986	0	8585	0	8585	Yes	0	0	21	U	Total Take
867 WD	" "					6401	0	6401	Yes			21	U	
868		3350 3324 3484 3324	822 335 458 287											Not Needed
869 WL	Robt E & Mary E. Gardiner 1/2 Ethel Marie Stanton 1/2	3745 3328 3484	929 855 473	54756	0	54756	0	54756	Yes	0	0	21	U	Total Take
870 WL	Frank T. Burkwinkel & Virginia H. Burkwinkel	3483 3453	552 22	22183	0	3077	0	3077	—	19406	0	21	U	
871														Not Needed
872 WL	Alfred J. Tuchfarber; Marian Tiernan, Walter Tuchfarber Edith Benge, and Roger Tuchfarber	3449	66	17699	0	17699	0	17699	Yes	0	0	21	U	Total Take
873														Not Needed
874 WL	The Robert J. Blum Trust	3328	655	97368	13028	3717	2580	1137	—	0	83203	21	U	
874 T						291		291					U	Grade & Seed
875														Not Needed
876 WL	The Liquid Carbonic Corporation	1041	317	136328	4866	95942	4866	91076	Yes	0	40388(LL)	22	U	(LL.)
876 T	" " " "	"	"			6095	0	6095	—			22	U	Remove Sludge Pit & Grade & Seed
877 WL	Lawrence M. Paul	3718	795	36107	3150	36107	3150	32957	Yes	0	0	22	U	Total Take
878														Not Needed
879 WL	Burdox Inc.	3997	297	33217	3606	6881	0	6881	No	22305	0	22	U	
879 T	" " " " " "	"	"			727	0	727	No			22	U	Remove Slab & Grade & Seed
879	" " " " " "	"	"			425	0	425	No			22	U	Occupational Easement
880 AR	Penn-Central Transportation Company					8457	0	8457	—			22, 28	U	
880	" " " "					700	0	700	—			22, 28	U	
880 X	" " " "					2258	0	2258	—			22, 28	U	Channel Easement
880 T	" " " "					2336	0	2336	—			22, 28	U	Grade & Seed
880 S	" " " "					434	0	434				2228	U	Sewer Easement
881 WL	The Amity Realty Investment Company	2868	540	130073	0	7815	0	7815	—	0	122890	22	State	(A.P.) Acquired by State of Ohio Bk 3761 Pg 913
881 EL	" " " " "	"	"			3540	0	3540	—			22		
881 WD	" " " " "	"	"			4810	0	4810	—			22		
881 T	" " " " "	"	"			4327	0	4327	—			22	State	Construct Drive & Grade & Seed
882 WL	The Childe Oil Company	1974	260	70362	6831	70362	6831	72531	Yes	0	0	22	U	Total Take
883 WL	Sybron Corporation	256	93683	6600835	144475	98900	144475	84425	—	0	5601903	22	U	(R.L.)
883 S	" " "					5783	0	5783	—			22	U	Sewer Easement
883 T	" " "					2451	0	2451	—			22	U	Construct Drive & Grade & Seed
883	" " "					32	0	32	—			22	U	Occupational Easement
884 WL-1	Richardson-Merrell Inc.	2235	388	888710	7348	17414	7348	10066	—	858,476	0	22, 23	U	
884 WL-2	" " " "	1778	196			615	0	615	—			23	U	
884 LA	" " " "	4005	1357			—	—	—	—			23	U	
884 T-1	" " " "					8452	0	8452	—			22	U	Construct Drive & Grade & Seed

REV.	DATE	DESCRIPTION
D.D.	3/10/76	Rev. Par. 884, Residue
P.W.F.	10/30/75	Name Change Par 883
P.W.F.	2/21/75	Name Change Par. 884
P.W.F.	11/26/74	Name Change Par. 879
E.H.	7-5-74	Name Chg & Add D.B. & Page Par 858
P.R.D.	6-11-74	871 & 878 - not needed
E.H.	5-30-74	Rev. Deed area & Residue Par 884
E.H.	4-30-74	Rev. Sq. ft. Par 8835
P.R.D.	4/15/74	Added Ease. - Par. 883
P.R.D.	4/12/74	Changed Total P.R.O-879
P.R.D.	4/12/74	Changed Deed A. & Net Res-879
P.R.D.	4/11/74	Added Par. 871 & Ease. Par 878, ~~874~~ 879
E.H.	3/11/74	Rev. 874 WL & Add 874T
E.H.	12/28/73	Deleted Structure Par. 879
E.H.	11/14/73	Change Areas Par 865 & 866
W.J.K.	9/4/73	Name Change Parcel 867
W.J.K.	7/27/73	Deleted Parcel 864 T
W.J.K.	6/8/73	Revised Parcels 877 WL & 879 WL
E.H.	4/19/73	Name chg. & Add D.B. & P. Par. 869
W.J.K.	12/12/72	Delete Par. 871 and Revise Par. 869

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SUMMARY OF ADDITIONAL RIGHT OF WAY

R/W JOB NUMBER	FED. RD. DIVISION	STATE	PROJECT	
08708(10)	2	OHIO	I-75-1(84) U-1139(1)	

743 / 787

HAM-75-0.93
HAM-126-13.00
R/W PLAN
LIMITED ACCESS

11 / 30

SUMMARY OF ADDITIONAL RIGHT OF WAY REQUIRED

TOTAL NUMBER OF---
_____Owners
_____Total Takes
_____Owner With Structures Involved

PARCEL NO.	OWNER	RECORDED BOOK	RECORDED PAGE	DEED AREA (SQ. FT.)	TOTAL P.R.O. (SQ.FT.)	GROSS TAKE (SQ.FT.)	P.R.O IN TAKE (SQ. FT.)	NET TAKE LAND (SQ.FT.)	NET TAKE BLDG.	NET RESIDUE LEFT (SQ. FT.)	NET RESIDUE RIGHT (SQ. FT.)	SHEET NO.	TYPE FUND	REMARKS
884 T-2	Richardson-Merrell, Inc. (Cont'd)	4005	1357			9947	0	9947	—			22	U	Grade & Seed
884	" " "					4857	0	4857	—			22	U	
884 T-3	" " "					5000	0	5000	—			22	U	Construct Portion of a Private Drive
884 T-4	" " "					7074	0	7074	—			22	U	Grade & Seed
885														Not Needed
886 WL	Robert M. Blatt	153	55070	1,003,832	8726	36563	5726	30837	—	0	964,269	22, 23	U	(R.L.)
886 T-1	" " "	3994	995			15067	0	15067	—			22, 23	U	Construct Drive & Grade & Seed
886 T-2	" " "					3137	0	3137	—			22	U	Remove Pavement & Grade & Seed
886 S	" " "					1333	0	1333	—			22	U	Sewer Easement
887 WL	Robert A. Hosea	3102	50	23498	3000	14750	3000	11750	—	0	0	23	U	Total Take
887 WD	" " "	"	"			8748	0	8748	—			23	U	
888 WD	Erna M. Schnelle & Carl B. Schnelle	3770	440	20842	3810	20842	3810	26032	Yes	0	0	23	U	Total Take
889 T	Carl B. Schnelle	2080	633 636	26075	3000	1750	0	1750	—	0	26075	23	U	Construct Drive & Grade & Seed
890 T	Barry W. Kimball & Darlene K. Kimball	3992	2	10612	2250	1275	0	1275	—	0	8362	23	U	Construct Drive & Grade & Seed
891 T	Robert J. Corsmeier and Nancy Lee Corsmeier	2873 3430	30 972	30903	3750	1,875	0	1875	—	0	27158	23	U	Construct Drive & Grade & Seed
892 thru 893														Not Needed
894 WL	Anna L. Hillard	2479	50	30156	3450	30156	3450	26706	Yes	0	0	23	U	Total Take
895 WL	Clifford & Katherine Colver	3749	251	34435	2895	34435	2895	31540	Yes	0	0	23	U	Total Take
896 WL	Kathryn E. Berg	2516	364	8018	0	8018	0	8018	Yes	0	0	23	U	Total Take
897 WL	Geraldine Ewing and Robert S. Ewing	2833	560	6627	0	6627	0	6627	Yes	0	0	23	U	Total Take
898 WL	Warner consolidated corporation (Delaware)	3947	53 53	547006	0	290055	0	290055	—	0	247951	23,24,25	State	U=205,568 S.F. C=23,887 S.F.
899 T	Manuel Gil and Edna M. Gil	3404	753	6943	0	187	0	187	—	0	6943	23	U	Construct Temporary Road & Grade & Seed
900 thru 904														Not Needed
905 WL	Lona Jones	2491 2516 3887	340 364 257	12081	0	3358	0	3358	—	0	8723	24	U	
906 thru 908														Not Needed
913 WL-1	Marvin L. Warner	3400	906	58157	0	1526	0	1526	—	56631	0	24	U	
913 LA	" " "	"	"			—	—	—	—			23,24	U	
913 T-1	" " "	"	"			8726	0	8726	—			23, 24	U	Construct Drive & Grade & Seed
910 T	Twelve-Eleven, Inc.	3406	417	60385	0	1776	0	1776	—	60385	0	24	U	Grade & Seed
911 thru 912														Not Needed
913 WD	Joan E. Sheridan	3237 3397	118 287	50870	0	35	0	35	—	50835	0	24	U	
914 WD	H & F Investment Company	4105	685	115150	0	1000	0	1000	—	114150	0	24		
914 T	" " "					7440	0	7440	—			24		Construct Drive & Grade & Seed
914 T-1	" " "					2674		2674				24		" temp road "5 " " "
915 WL-2	Marvin L. Warner	3400	906	10080	0	1050	0	1050	—	14,448	0	24		
915 WD	" " "	"	"			4479	0	4479	—			24		
915 T-2	" " "	"	"			11,965	0	11,965	—			24		Construct Drive & Grade
916 WL	Valley Metalworks Inc.	3697	370	18597	0	724	0	724		17600	0	24	U	
916 WD	" " "	"	"			273	0	273				24	U	
916 T-1	" " "	"	"			2307	0	2307				24	U	Construct Drive & Grad & Seed
916 T-2	" " "	"	"			724	0	724				24	U	Grade & Seed
917 LA	J. James Brickweg & Dorothy Ann Brickweg	2668	441	546220	10134	—	—	—	—	546220	0	25	U	Deed A. includes 40,000 S.F. Residential
918 WL	To Vel Inc.	3528	410	60642	0	2800	0	2800	—	57842	0	24, 25	U	
918 T	" " "					2800	0	2800	—			24, 25	U	
918 PR	" " "													for access to McLean Drive
919 WL	J. James Brickweg & Dorothy Ann Brickweg	2668	441	24133	0	24133	0	24133	—	0	0	25	U	Total Take

Includes overlap area of 2573 sq. ft. with par 884 T-1

Includes overlap area of 4359 sq. ft. with par 884 T-1

Record area & residue includes par 889 acquired by Robert M. Blatt on 10-23-74

this parcel acquired by Rob't M. Blatt 10-23-74

REV.	DATE	DESCRIPTION
J.L.M	1-23-80	Add Par. 884, 884 T-3, 884 T-4
A.A.B.	11-14-80	Rev. Par. 914 Owner & Deed Ref.
A.A.B.	2-2-79	Rev. WD, T-2 & Res., Par. 915.
P.R.D.	2/13/76	Change 909 to 915 & re-designated takes
P.W.F.	2/21/75	Name Change Par. 884
E.H.	1-31-75	Add Par 914 T-1
E.H.	1-4-74	Add D.B. & P. Chg. Quant. Add notes 884
E.H.	10-23-74	Name Chg. D.B. & P. Par. 890
P.R.D.	9-9-74	Add. Note Par 917
E.H.	8-28-74	Add Par 918 PR
E.H.	8-27-74	Name chg., D.B. & page Par 898
E.H.	6-3-74	Remove Drive Rt. Hollhill St. Rev. Par 884-T-2 Add Trees Light stds., Bank Poles, Perk Tile etc. To be Saved
E.H.	6-3-74	Removed Par. 884-S1 & 884-S2, Rev. 884-T2
E.H.	1-11-74	Name Chg. D.B. & P. Par 905
E.H.	1-10-74	Name Change D.B. & P. Par 890
P.W.F.	10-11-72	Corrected Residue Par. 898

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SUMMARY OF ADDITIONAL RIGHT OF WAY

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-75-1 (84) U-1133-(1)	

711
787

12
30

HAM-75-9.23
HAM-12G-13.00
R/W PLANS
LIMITED ACCESS
SCALE: 1"=50'

END R/W ACQUISITION
STA. 509+32.65-153.75 LT.
HAM-12G-10.93

BEGIN R/W ACQUISITION
STA. 509+32.65-153.75 LT.
HAM-12G-13.00

END PROJECT
STA. 502+64.57WB
HAM-12C-10.93

BEGIN PROJECT
STA. 502+64.57WB
HAM-12C-13.00

U-1133(3) U-1133(1)

END R/W ACQUISITION
STA. 506+74.23-99.62 RT.
HAM-12G-10.93

BEGIN R/W ACQUISITION
STA. 506+74.23-99.62 RT.
HAM-12G-13.00

DE CAMP AVE.
Ex. R/W
N 82°-22'-31"E
108'
Ex. R/W
40'
SUB. LOTS 90-94 HARTWELL (R.L.C.S.) No. 12135
Conc. Mon.
LA-R/W
508' Line
Const. Limits
N 82°-29' 31"E
Cont. 196,544 Sq. Ft.
7/13 WL
P.P.C. COOK
HOUSE BLDG. ASS'N.
HAM. CO. R 18 R.O.
HARTWELL P.B.S
77 P.B.S
93
94
CREEK
Storm Sewer
Ø 910+99.80 Rt.
Storm Sewer
Ø 910+13.3 Rt.
Storm Sewer
Ø 910+69.20 Rt.
Storm Sewer
Ø 910+99.80 Rt.
22°-24'46" Rt.
22°-24'46" Rt.
22°-24'46" Rt.
508' Line
N 87°-55'-20"N
231'
W.B. & S.R. 126
25
S 78°-18'-18"E
E.B. & S.R. 126
510
Cont. = 73,847 Sq. Ft.
54" San.
1 3/4 Conc. Blk. Barn
LA-R/W
320.60 N 78°-18'-18"W
Board of Commissioners of Hamilton County, Ohio (Fee Holder), Hamilton County Agricultural Society (Lessee) - 711
107.00'
310+49.61
1530
1531
℄ Prop. Relocated Channel
1529
217.00'
310+49.63
1528
Conc. Wall
Channel Bottom
711 X
Cont. 280,590 Sq. Ft
527
342.95
N 76°-08'-42"W
160
1528+30
NEW TWR. S (2N)
Construction Limits
991.57'
S 8°-11'-23"W
1°41'43"
℄ NEW TWRS.
NEW TWR. 25
℄ NEW TWRS.
125
1525+00
0°37'12"
℄ NEW TWRS.
HAMILTON COUNTY
CITY OF CINCINNATI
SPRINGFIELD TOWNSHIP
SEC. 1, T.3, ER.1
SEC. 7, T.3, ER.1
MILL CREEK
54" San.
NEW TWR. 15
NEW TWR. 60 (IN)
75°-52'-50"
BALTIMORE
OHIO
℄ NEW TWRS.
℄ NEW TWRS.
℄ NEW TWRS.

END PROJECT	BEGIN PROJECT
HAM-126-13.00	HAM-75-9.93, HAM-126-13.00
U-1133 (1)	I-75-1 (84)

HAM-126-13.00	HAM-75-9.93
U-1133(1)	I-75-1 (84)

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-75-1(84)	
		U-1133(1)	

HAM-75-9.93
HAM-126-13.00
R/W PLANS
LIMITED ACCESS
SCALE: 1" = 50'

(731 WL) Flora D. Rayls
Cont. = 23,254 Sq. Ft.

(731 WD-1) Cont. = 3,167 Sq. Ft.

(732 WL) Ethel M. Grafte, Herbert E. Grafte, Raymond D. Grafte
Cont. 19,975 Sq. Ft.

(732 WD) Cont. = 1200 Sq. Ft.

(733 WL) Carrol F. Frary
Cont. = 6,250 Sq. Ft.

(758 WL) Taylor McKee & Edna McKee
Cont. = 8406 Sq. Ft.

(759 WL) Gaylord U. & Lillian Seifried
Cont. = 8406 Sq. Ft.

(760 WL) William E. Bockman & Mable Bockman
Cont. = 8406 Sq. Ft.

(761 WL) Genevieve Thomas
Cont. = 8406 Sq. Ft.

(762 WL) Dora Winterod & NEW TWPS.
Cont. = 16,813 Sq. Ft.

(763 WL) Cecil R. Long & Emma L. Long
Cont. = 7403 Sq. Ft.

(764 WL) Lawrence C. Sims and Serena F. Sims
Cont. = 7,273 Sq. Ft.

(765 WL) Juelle B. Holbert
Cont. = 7,285 Sq. Ft.

(766 WL) Matilda Gruber
Cont. = 7,450 Sq. Ft.

(767 WL) Charles B. Ward & Rose E. Ward
Cont. = 7,774 Sq. Ft.

(767 WD) Cont. = 2,814 Sq. Ft.

(768 WL) Chris C. Raney
Cont. = 13,787 Sq. Ft.

(769 WL) Edna Mc Kinney et al.
Cont. = 9,124 Sq. Ft.

(770 WL) Robert F. Bauer
Cont. = 13,687 Sq. Ft.

(771 WL) Lawrence Austin Williams
Cont. = 15,487 Sq. Ft.

(772 WL) Gene Marcum & Ronald Watson, Trustees
Cont. = 2,155 Sq. Ft.

(777 WL) Mary Eftinger
Cont. = 7136 Sq. Ft.

(778 WL) Lee & Loraine Hall
Cont. = 7,527 Sq. Ft.

(779 WL) Church of God of Prophecy of Cincinnati. Cont. = 5533 Sq. Ft.

(780 WL) Eula Cochran. AKA Eula Cochran Castle
Cont. = 4,839 Sq. Ft.

(781 WL) Albert F. Du Chemin
Cont. = 3,519 Sq. Ft.

(782 WL) State of Ohio
Cont. = 3,020 Sq. Ft.

(783 WL) Glen E. Allen & Yvonne Allen
Cont. = 9,800 Sq. Ft.

(784 WL) Robert F. & Mary C. Bauer
Cont. = 6,505 Sq. Ft.

(785 WL) Evelyn M. Sadler
Cont. = 6,614 Sq. Ft.

(786 WL) Irene Rothenbuecher
Cont. = 5,430 Sq. Ft.

(787 WL) Lelo Cain
Cont. = 4,807 Sq. Ft.

(788 WL) Ruby Taulbee
Cont. = 4,868 Sq. Ft.

(789 WL) Sam J. Martin and Joy Martin
Cont. = 6,322 Sq. Ft.

(790 WL) Sylvia L. Rauchmon & Jane R. Reisenfeld
Cont. = 2268 Sq. Ft.

(713 WL) Estate of Abe Byers
Deed Closed

(723 WL) Cont. = 16,352 Sq. Ft.

(727 WL) Cincinnati Gas & Electric Company

(728 WL) Cont. = 24,523 Sq. Ft.

(729 WL) Jessie E. Kramer, Wanda M. Gholson
Cont. = 21,454 Sq. Ft.

(730 WL) Charles Sue
Cont. = 5000 Sq. Ft.

(731 WL) Cont. = 26,864 Sq. Ft.

(732 WL) Cont. = 16,230 Sq. Ft.
Estate of Ethel Ann Walker

(733 WL) Cont. = 16,237 Sq. Ft.
Preston Godley & Lola Godbey
Cont. = 15,496 Sq. Ft.

(734 WL) Cont. = 2230 Sq. Ft.
Estate of Mary Ethel Ann Walker

(735 WL) Cont. = 2230 Sq. Ft.
Estate of Mary Ethel Ann Walker

(736 WL) Cont. = 46,381 Sq. Ft.
Estate of Mary Ethel Ann Walker

(737 WL) Cont. = 15,037 Sq. Ft.
Long Drummett

(738 WL) Cont. = 15,193 Sq. Ft.
Preston Godley & Lola Godbey

(739 WL) Cont. = 16,193 Sq. Ft.
Preston Godley & Lola Godbey

(740 WL) 533.98' E

(741 WL) Sq. Ft.

(742 WL) Sq. Ft.

(743 WL)

(744 WL) Eunice Crase
Cont. = 9994 Sq. Ft.

(744 X)

(744 3)

(745 3)

(745 X)

(746 WL)

(747 WL)

(748 WL)

(749 WL)

(750 WL)

(751 WD)

(752 WL)

(753 WL)

(754 WL)

(755 WL)

(758 WL)

(759 WL)

(760 WL)

(761 WL)

(762 WL)

(763 WL)

(764 WL)

(765 WL)

(766 WL)

(767 WL)

(768 WL)

(769 WL)

(770 WL)

(771 WL)

(772 WL)

(773 WL)

(774 WL)

(775 WL)

(776 WL)

(777 WL)

(778 WL)

(779 WL)

(780 WL)

(781 WL)

(782 WL)

(783 WL)

(784 WL)

(785 WL)

(786 WL)

(787 WL)

(788 WL)

(789 WL)

(790 WL)

(71 X)

(711 WL)

(712 WL)

(718 WD)

(719 WL)

(720 WL)

(721 WL)

(722 WL)

(723 WL)

(724 WL)

(725 WL)

(726 WL)

(727 WL)

(728 WL)

(729 WL)

(730 WL)

(731 WL)

(732 WL)

(733 WL)

(734 WL)

(735 WL)

(736 WL)

(737 WL)

(738 WL)

(739 WL)

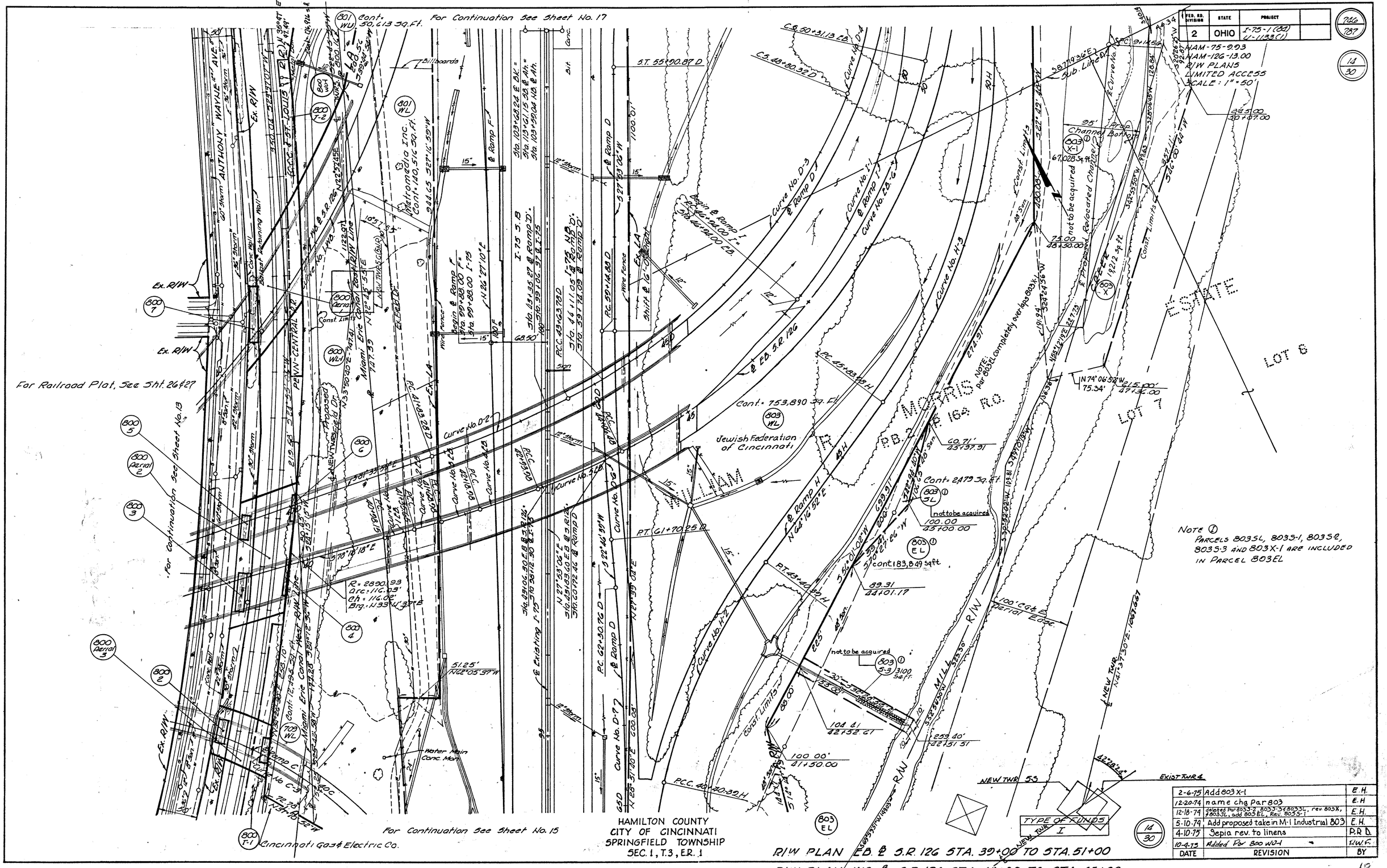
(740 WL)

(741 WL)

(742 WL)

(743 WL)

(744 WL)



DATE	REVISION	BY
2-6-75	Add 803 X-1	E.H.
12-20-74	name chg Par 803	E.H.
12-18-74	deleted Par 803S-2, 803S-3 & 803SL, rev. 803X, & 803SL, add 803EL, Rev. 803S-1.	E.H.
5-10-74	Add proposed take in M-1 Industrial 803	E.H.
4-10-75	Sepia rev. to linens	P.R.D.
10-9-73	Added Par 800 WD-1	H.W.F.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-75-1(84) U-1133(1)	

HAM-75-9.93
HAM-126-13.00
R/W PLANS
LIMITED ACCESS
SCALE: 1"=50'

747
787

15
30

N

NEW TWRS

ANTHONY WAYNE AVE.

EX. R/W

PENN CENTRAL RR

C.C.C. & ST. LOUIS RR

Cork Wall

Ballast Retaining Wall

12" Storm

8" San.

Wall

Ballast

N 40° 49' 34" E

NEW TWR 57 (NR)

14782'
40+05.32

800 T-1

800 WU-4

N 31° 26' 44" W
191.87'

N 31° 26' 30" E
72.78'
N 31° 10' 52" W

709 WL
Cont = 12,495 Sq Ft.

38.12'
40+22.83

NEW TWRS

Cincinnati Gas & Electric Co. (LL)

EXIST Tower

EXIST TWR 3

NEW TWR 45

Tower

NEW TWRS

Sub Line

42° 50'

10° 50'

32° 14' 15"

Miami Erie Canal West R/W Line

N 28° 42' 55" E

294.24

N 25° 42' 58" E
110.00'

145.16 @ C
41+96.80

Contains 52,934 Sq. Ft.

800 WU-3

710 U

710 T

710 WL

Wall

Culvert

Miami Erie Canal West R/W Line

N 25° 42' 58" E
175.00'

20,985 Sq Ft
Cont.
58 Ac.

State of Ohio
CITY OF CINCINNATI
HAMILTON COUNTY

Miami Erie Canal East R/W Line

Const Limits

Chain Link Fence

Conc. Retaining Wall

Curve No 1 E

708 WL

708 T

45° Storm

12" Storm

Penn Central R.R.

ST 46+24.11 C

N 26° 59' 51" W 115.00'

End & Ramp C
Sta 41+05.32 C.
Beg. 40:1 Taper

N 26° 42' 10" E

71.62 @ C
43+81.24

N 26° 10' 46" E
354.93'

Wire Fence

EX. L-A

24"

80.00

45.60'
42+83.47

S 21° 09' 12" W

Proposed Field Dr

Ex Field Dr

395.40' L.A.

800 WL-1

Curve No. C-3

For Railroad Plat See Sheet 26 & 27

For Continuation See Sheet No. 9A

NB. I-75

Conc. Retaining Wall

Const. Limits

Guardrail

Conc. Traffic Barrier

DETAIL 'A'

58.72

PT 83+95.48

21° 25' 26"

90°

85.50'

End & Ramp D
Sta 83+66.60 E I-75
PT 73+70.65 D

Begin 40:1 Taper

12" Storm

& Existing I-75

N 27° 33' 05" E

PT 69+80.16 D
Shift & 24.0' Lt

Guardrail

Curve No D-87

54.75 @ D
70+73.43

EX LA

170.00' @ 11° 36' 23" E

N 28° 51' 40" E

Curve No D-7

600.05

Wire Fence

& Ramp H

Curve No H-1

40+

For Continuation See Sheet No. 14

SUMMIT

EX LA

S 80° 57' 15" W

803 WL
Cont = 153,890 Sq Ft
Jewish Federation of Cincinnati

100' Gas Aerial Easement

28' Storm

15"

170.00' @ D
69+70

S 00° 57' 15" W
41.00'

233.70'

WM. MORRIS EST.

PB 3 PG 332

S 38° 30' 34" W
332.30' A.R.M.

Sta 69+80.16 D
PC 38°12'00" H
Begin & Ramp H

Const. Limits

178.26
39+09.17

80'

10'

803 EL

MILL CREEK

S 30° 51' W
266.56

803 S-1

120036 Sq Ft

170.00'
40+00.00

232.97 @ H
39+16.06

CITY OF CINCINNATI
HAMILTON COUNTY

EX. R/W

EX. L-A

HAMILTON COUNTY
CITY OF CINCINNATI
SPRINGFIELD TWP.
SEC. 1, T-3, E.R.-1

LOT 7

TYPE OF FUNDS
I

15
30

NOTE 1
PARCELS 8033I, 8035-1, S-2, S-3 & 803X-1 ARE INCLUDED IN PARCEL 803 EL

Miami Erie Canal West R/W

Cont = 250 SF

708 T

N 2° 45' 36" E
92.94'

75.00
84+00

708 WL

N 39° 49' 07" W
93.64'

N 39° 27' 06" W
49.92'

530 Lt M&E Canal
10385+48.57

72.56 @ I-75
84+50.00

EX LA

60.00'
N 3° 14' 30" W

153.59'
86+59.29

R = 40'
Arc = 28.62
Ch. = 28.02
Brg. N 23° 44' 30" W

710 U

Cont = 2240 SF

10"

18"

23.45'
N 44° 14' 30" W

84+19.5
74.50'

75.55'
85+00.42

128.57 @ I-75
86+07.93

M.E Canal R/W

S 42° 33' 15" E
15.79'

106.60'
85+90.45

N 13° 54' 31" E
181.48'

S 13° 54' 31" W
160.07'

87.09'
PROP. L.A. R/W

S 18° 30' 53" W
22.69'

88.16'
84.36' @ I-75
85+82.04

N 36° 24' 50" E
10.67'

710 WL

Cont = 1860 SF

710 T

Cont = 854 S.F.

DETAIL 'A'
(No scale)

DATE	REVISIONS	BY
4-10-75	Sepia revisions to linens	PRD
3-18-75	Rev. Par. 710-Name Change	PWF
11-1-74	Rev Parr 710 WL, 710T, & 710 U	H.J.
11-1-74	Rev Parr 708 WL & Added Parr 708-T	H.J.
6-21-74	Rev Tits to 710 U in name of Met. Sewer Dist.	E.H.
12-17-73	Rev Parcel 800 WU-3	WJK
10-4-73	Added Par 830 WU-4	DWF
10-4-73	Changed Par 800 WU-3 to 800 WU-3	DWF

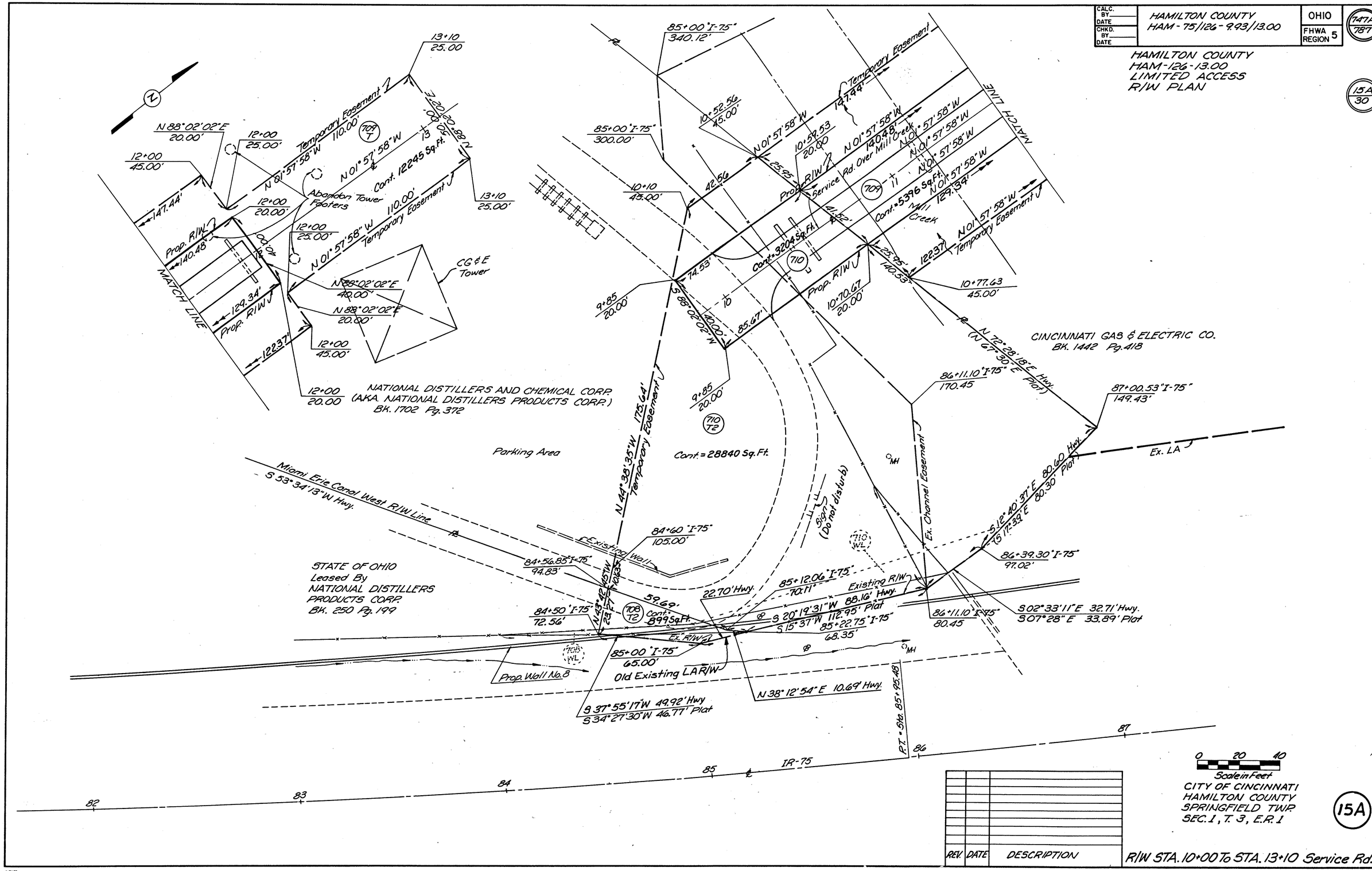
R/W PLAN & RAMP C STA 40+50 TO STA 47+95

R/W PLAN & RAMP H STA 69+50 TO STA 73+70

CALC. BY	HAMILTON COUNTY	OHIO	747A
DATE	HAM-75/126-9.93/13.00	FHWA REGION 5	787
CHKD. BY			
DATE			

HAMILTON COUNTY
HAM-126-13.00
LIMITED ACCESS
R/W PLAN

15A
30



CITY OF CINCINNATI
HAMILTON COUNTY
SPRINGFIELD TWP.
SEC. 1, T. 3, E.R. 1

15A

REV.	DATE	DESCRIPTION

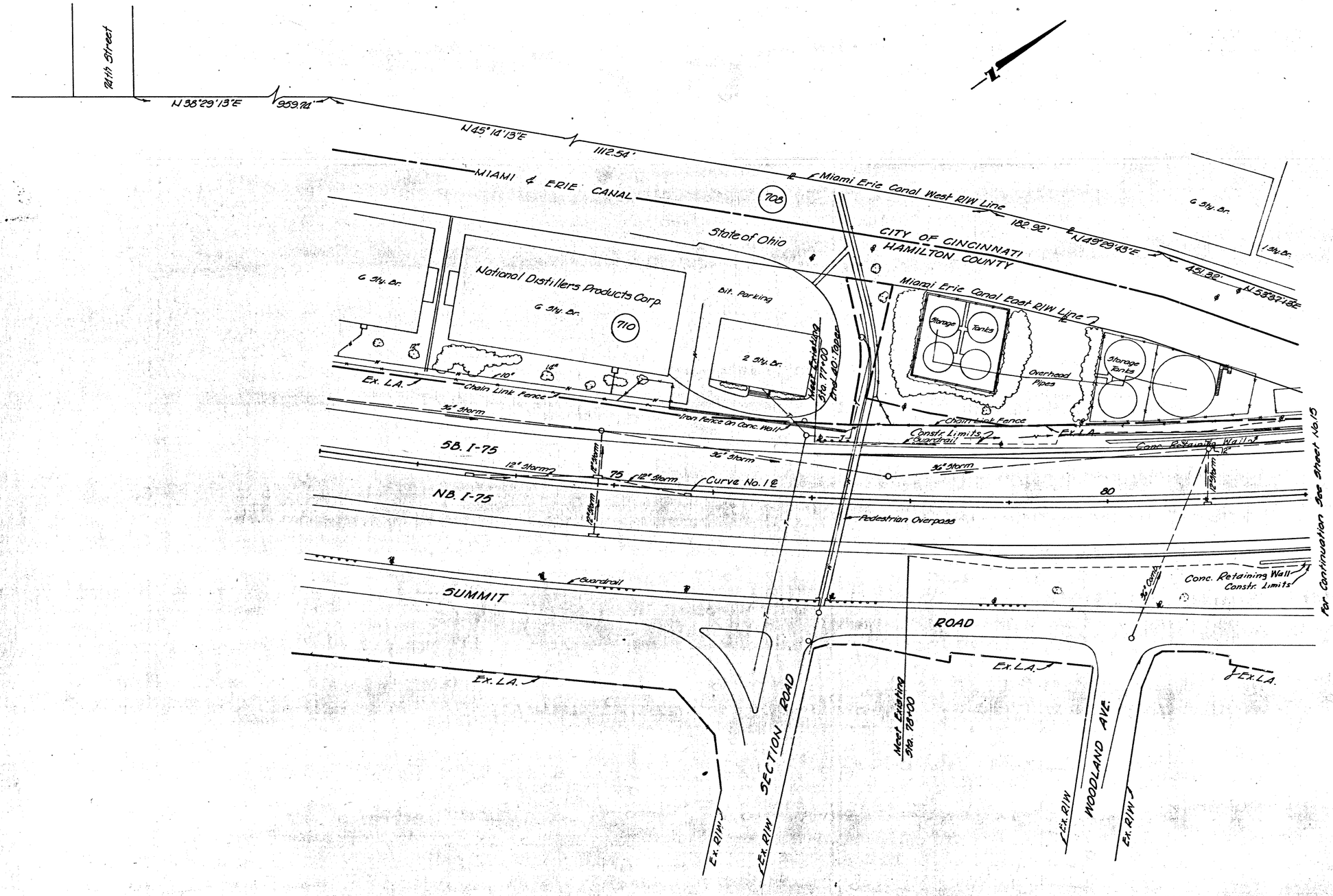
R/W STA. 10+00 To STA. 13+10 Service Rd.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-75-1(84) 21-1133(1)	

748
787

16
30

HAM-75-9.93
HAM-126-13.00
R/W PLANS
LIMITED ACCESS
SCALE: 1" = 50'



HAMILTON COUNTY
CITY OF CINCINNATI
SPRINGFIELD TWP.
SEC. 1, T-3, E.R. 1

TYPE OF FUNDS
I

16
30

DATE	REVISIONS	BY

I-75 STA. 72+00 TO STA. 82+00

FED. RD. \ DIVISION	STATE	PROJECT	
2	OHIO	I-75-1(84) U-1133(C)	

719
787

17
30

HAM-75-9.93
HAM-126-13.00
R/W PLANS
LIMITED ACCESS
SCALE: 1"=50'

Kaal Kodesh Bene Israel

(800 WL-6) Cont= 44,671 Sq. Ft.

For Continuation See Sheet No. 18

(806 WL) Cont= 557,251 Sq. Ft.

GEORGE N. GREY'S RESTORED PLATS

LOT 3

P.L. Cert. No. 59094

Hebrew Day School Realty Inc. R.L. Cert. No. 53250

(805 WL) Cont= 92,093 Sq. Ft.

(802 WL) City of Cincinnati Cont= 1,179,382 Sq. Ft.

(800 WL-1)

(801 WL)

(803 WL) Cont= 753,890 Sq. Ft.

Jewish Federation of Cincinnati

(804 AT) Cont= 6,973 Sq. Ft.

Raymond and Edna M. Gumm D.B. 4017 Pg. 1438

(804 X) Cont= 36,021 Sq. Ft.

(803 X-1) Cont= 67,020 Sq. Ft.

(805 7) Cont= 249 Sq. Ft.

(805 72)

(803 32)

Cincinnati Hebrew Day School #7835 1 Sty. Br.

Horizontal Ladder

Steeler Letter Base 3 swing

Stand Box

DETAIL 'A'

DETAIL 'A' (NO SCALE)

DETAIL 'B' (NO SCALE)

NOTE ①
PARCELS 803SL, 803S-1, S-2, S-3, & 803X-1 ARE INCLUDED IN PARCEL 803 EL

ANTHONY WAYNE AVE.

ST. LOUIS AVE.

PENN-CENTRAL R.R. (C.C.C. & ST. L.)

Miami Erie Canal, West 47.46'

Miami Erie Canal

Ex. R/W

R/W

Ex. LA

L.A. R/W

Ex. LA 1

Ex. LA 2

Ex. LA 3

Ex. LA 4

Ex. LA 5

Ex. LA 6

Ex. LA 7

Ex. LA 8

Ex. LA 9

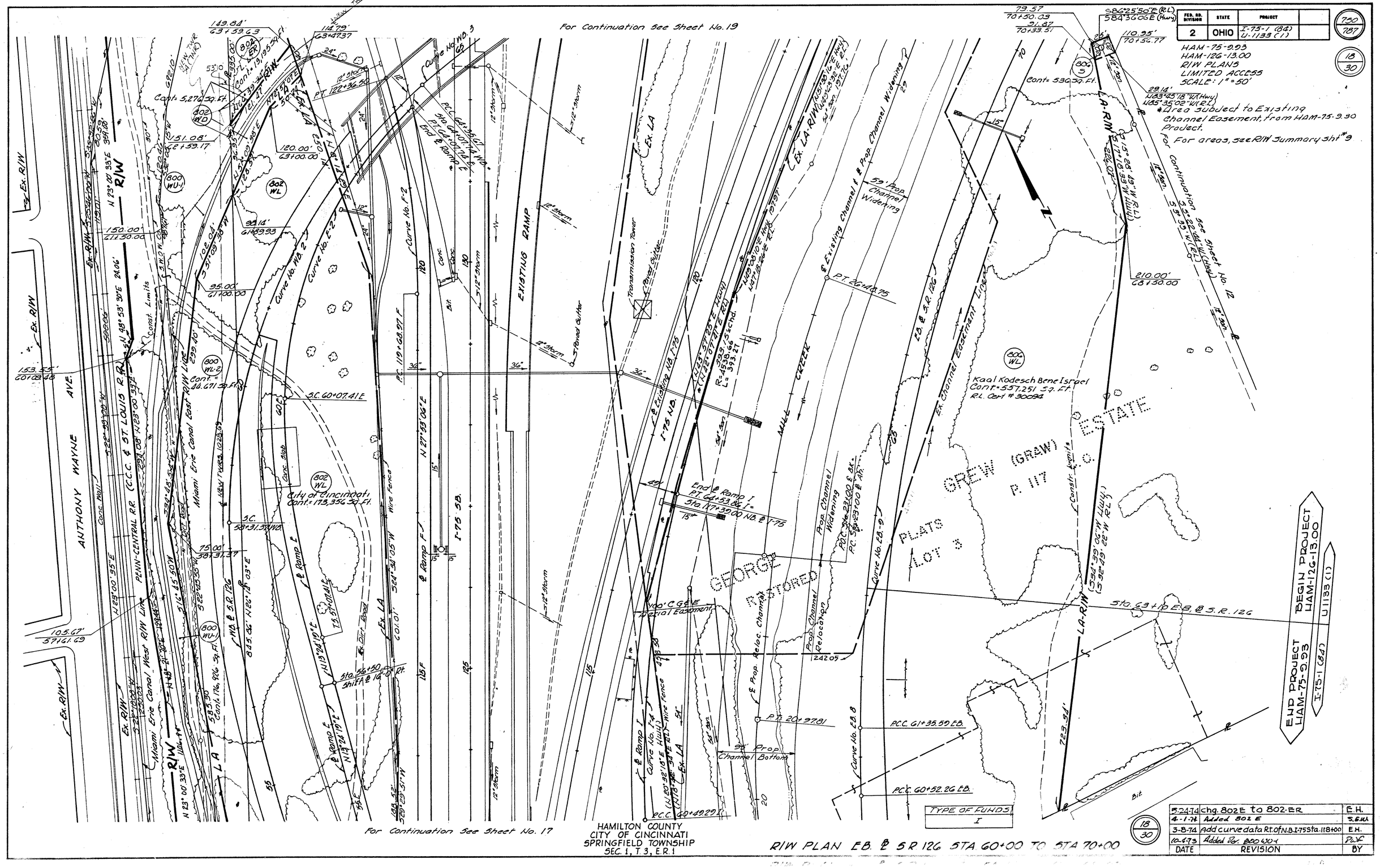
Ex. LA 10

Ex. LA 11

Ex. LA 12

Ex. LA 13

Ex. LA



FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-75-1 (84) U-1133 (1)	

750/787

18/30

DATE	REVISION	BY
5-24-74	chg. 802E to 802-ER	E.H.
4-1-74	Added 802 E	S.E.W.
3-8-74	Add curve data Rt. of N.B. I-75 Sta. 118+00	E.H.
10-4-73	Added Per. 800 WU-1	P.W.F.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-75-1(84) U-1133(1)	

751
787

19
30

HAM-75-9.93
HAM-126-13.00
R/W PLANS
LIMITED ACCESS
SCALE: 1"=50'

* Area Subject to Existing Channel Easement From HAM-75-9.93 Project For Areas See R/W Summary Sht. No. 9 of 10

For Continuation See Sheet No. 20

For Continuation See Sheet No. 18

(809 WL) Irving Kutas & Esther Lee Kutas
Cont.= 2605 Sq. Ft.
R.L. Cert. # 59380

(809 WD) Cont.= 3598 Sq. Ft.

(810 WL) Cont.= 5474 Sq. Ft.

Marvin Sorg and Jean D. Sorg
R.L. Cert. # 68331

(810 WD) Cont.= 731 Sq. Ft.

(811 WL) R.L. Cert. # 51625
Herbert & Eleanor Segal
Cont.= 6206 Sq. Ft.

(812 WL) Mr. D. Realty Co.
Cont.= 6518 Sq. Ft.

(813 WL) R.L. Cert. # 68216
Louis and Matilda Long
Cont.= 5199 Sq. Ft.

(814 WL) R.L. Cert. # 49345
Cecil Oslander & Shirley A. Cohen
Cont.= 8059 Sq. Ft.

(817 WL) R.L. Cert. # 48928
Dorothy Striebel
Cont.= 39,566 Sq. Ft.

(800 WU-2) See Detail Sheet 27
Cont.= 43,860 SF
P.R.O.= 26,970 SF
TOTAL= 70,830 SF

(800 WD-1) Cont.= 1,139 Sq. Ft.

(800 WU-1) Cont.= 19,135 Sq. Ft.

(807 WL) Cont.= 1,230 Sq. Ft.

(807 WD) Cont.= 1,230 Sq. Ft.

(606 WL) Cont.= 1,230 Sq. Ft.

(606 WD) Cont.= 1,230 Sq. Ft.

(607 WL) Cont.= 1,230 Sq. Ft.

(607 WD) Cont.= 1,230 Sq. Ft.

(613 WL) Cont.= 1,230 Sq. Ft.

(613 WD) Cont.= 1,230 Sq. Ft.

(617 WL) Cont.= 1,230 Sq. Ft.

(618 WL) Cont.= 1,230 Sq. Ft.

(618 WD) Cont.= 1,230 Sq. Ft.

(800 WU-3) Cont.= 1,230 Sq. Ft.

(800 WU-4) Cont.= 1,230 Sq. Ft.

(800 WU-5) Cont.= 1,230 Sq. Ft.

(800 WU-6) Cont.= 1,230 Sq. Ft.

(800 WU-7) Cont.= 1,230 Sq. Ft.

(800 WU-8) Cont.= 1,230 Sq. Ft.

(800

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-75-1(84) U-1133(1)	

752
787

20
30

HAM-75-9.93
HAM-126-13.00
R/W PLANS
LIMITED ACCESS
SCALE: 1" = 50'

END PROJECT HAM-75-9.93 | BEGIN PROJECT HAM-126-13.00

I-75-1(84) | U1133(1)

814 WL Charlotte Widmeyer Cont.= 17,380 Sq. Ft.

827 WL Adele Marks Cont.= 1,147 Sq. Ft.

828 WL Morris L. Stein & Fay Stein, h & w Cont.= 9,411 Sq. Ft.

828 WD Cont.= 1,468 Sq. Ft.

829 WL Mary Lou Dental Cont.= 8,200 Sq. Ft.

830 WL Alfred M. Kuhn Cont.= 16,709 Sq. Ft.

834 WL Helma Appel Cont.= 10,438 Sq. Ft.

VILLAGE OF ARLINGTON HEIGHTS
CITY OF CINCINNATI

SPRINGFIELD TWP. SEC. 1, T. 3, E.R. 1
SYCAMORE TWP. SEC. 31, T. 4, E.R. 1
SEC. 2, T. 3, E.R. 1
SEC. 1, T. 3, E.R. 1
SEC. 32, T. 4, E.R. 1
SEC. 31, T. 4, E.R. 1

CITY OF READING
HAMILTON COUNTY
GALBRAITH ROAD

I-75 HD
MILL CREEK & S.R. 126
EX. LA-R/W
EX. R/W
VILLAGE OF ARLINGTON HEIGHTS
CITY OF CINCINNATI
Ex. Channel Easement Cont. 42858 SQ. FT.
Ex. Channel Easement
Ex. Channel Easement Outside Wtr. Basement Cont. 42858 SQ. FT.
Ex. Channel Easement Cont. 1600 Sq. Ft.
Ex. Channel Easement Cont. 78,052 Sq. Ft.
Ex. Channel Easement Cont. 21,877 Sq. Ft.
Ex. Channel Easement Cont. 14,000 Sq. Ft.
Ex. Channel Easement Cont. 14,000 Sq. Ft.
Ex. Channel Easement Cont. 12,000 Sq. Ft.
Ex. Channel Easement Cont. 12,000 Sq. Ft.
Ex. Channel Easement Cont. 12

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-71-1(68) U-1139(0)	

753 / 787

21 / 30

HAM-75-9.03
HAM-126-13.00
R/W PLANS
LIMITED ACCESS
SCALE: 1" = 50'

DETAIL "C" No Scale

DETAIL "E" No Scale

DETAIL "A" No Scale

DETAIL "B" No Scale

CITY OF READING
HAMILTON COUNTY
GALBRAITH ROAD (AMITY RD.)
SEC. 32, T-4, E.R.1
SEC. 31, T-4, E.R.1
GALBRAITH INDUSTRIAL CENTER
P.B. 95 P. 58 R.L.
BURKHART DRIVE
CHAUCER DRIVE
READING RD.
HAMILTON COUNTY CITY OF READING
CITY OF READING (200' Deed)
SYCAMORE TOWNSHIP
SEC. 31, T-4, E.R.1
STANDARD OIL CO., THE
Drake Motel
Carrousel Towers
Chris C. Raney
Fred J. Holthaus
S. Ted Isaacs
Hugh F. Culverhouse R.L. # 60154
Virginia H. Burwinkel
Frank T. Burwinkel & Virginia M. Burwinkel
Ethel Marie Stanton 1/2
Robert E. & Mary Ellen Gardiner (Hwy) 1/2
Ewald A. Von Prader & Doris C. Von Prader
Albert V. Geatsy
Underground Gas Tanks
Gas Pumps
Conc. Retain. Wall No. 52
Conc. Retaining Wall
Metal Shed
Pool
Drive-in Banking
Lights on Ground
Conc. Curbs
Bit. Parking Easement
Ingress & Egress Easement
Conc. Blk. Wall
Bit. Parking
Conc. Slab with Picnic Tables
Gravel
Bit.
Conc.
Brick
Frame
Stone Wall
Wood Fence
Chain Link Fence
Guard Rail
Sign
Utility Pole
Guy Wire
Fire Hydrant
Catch Basin
Inlet
Manhole
Tree
Stump
Shrub
Swingset
Flag Pole
Air Cond.
Gas Pump
Underground Gas Tank
Oil Pump
Storage Tank
Drill
Chemical Tank
Const. Limits
Existing R/W
Proposed R/W
Limited Access R/W
Property Line
Lot Line
Center Line
Curve Data
Tangent Data
Detail Reference
Continuation See Sheet No. 20
Continuation See Sheet No. 22
Cont. = 660 Sq. Ft.
Cont. = 870 Sq. Ft.
Cont. = 3,077 Sq. Ft.
Cont. = 1,793 Sq. Ft.
Cont. = 33,193 Sq. Ft.
Cont. = 21,877 Sq. Ft.
Cont. = 32,801 Sq. Ft.
Cont. = 11,479 Sq. Ft.
Cont. = 10,239 Sq. Ft.
Cont. = 90,567 Sq. Ft.
Cont. = 28,050 Sq. Ft.
Cont. = 54,756 Sq. Ft.
Cont. = 11,099 Sq. Ft.
Cont. = 1,466 Sq. Ft.
Cont. = 810 Sq. Ft.
Cont. = 5711 Sq. Ft.
PRO. = 2580 Sq. Ft.
Total = 8291 Sq. Ft.
Cont. = 3717 Sq. Ft.
PRO = 2580 Sq. Ft.
Net = 1137 Sq. Ft.
Cont. = 291 Sq. Ft.
Cont. = 1 Sty. Br. 34,789 Sq. Ft.
Cont. = 1 Sty. Br. 4,215 Sq. Ft.
Cont. = 1 Sty. Br. & Conc. Blk. 4,215 Sq. Ft.
Cont. = 1 Sty. Conc. Block 4,215 Sq. Ft.
Cont. = 1 Sty. Conc. Block 4,215 Sq. Ft.
Cont. = 1 Sty. Br. & Conc. Blk. 4,215 Sq. Ft.
Cont. = 1 Sty. Br. 4,215 Sq. Ft.
Cont. = 1 Sty. Br. 4,215 Sq. Ft.
Cont. = 1 Sty. Br

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-75-1(32) 1-1(33)11	

754
787

22
30

HAM-75-0.93
HAM-126-13.00
R/W PLANS
LIMITED ACCESS
SCALE: 1"=50'

884A - Cont. = 4857 Sq. Ft.
884A T-1 - Cont. = 8452 Sq. Ft.
884A T-2 - Cont. = 9947 Sq. Ft.
884A T-3 - Cont. = 5000 Sq. Ft.
884A T-4 - Cont. = 7074 Sq. Ft.

DETAIL 'A'

DETAIL 'B'

DETAIL 'C'

DETAIL 'D'

DETAIL 'E'

DETAIL 'F'

NOTE:
For Penn-Central R.R., See Sht No 2

HAMILTON COUNTY
CITY OF READING
SYCAMORE TOWNSHIP
SEC. 31, T-4, E.R. 1
SEC. 32, T-4, E.R. 1

884 WD - Cont. = 4,819 Sq. Ft.
884 WL - Cont. = 7,815 Sq. Ft.
884 EL - Cont. = 3,549 Sq. Ft.
884 T - Cont. = 4927 Sq. Ft.

The Amity Investment Co.

Richardson-Merrell Inc.

CLARK'S ESTATE
P.B. 236 PG.
LOT 5

Vacated Ord. No. 82-33

Sta. 5+96.24 & Galbraith Rd
Sta. 5+36.63 & Drive "A"
30.08' & Galbraith Rd
5+87.92
0.07' & Galbraith Rd
5+80.09

GALBRAITH ROAD (AMITY ROAD)

SHERMAN ROAD

READING ROAD

PENN-CENTRAL R.R. (PHILA. BALTO. & WASHINGTON R.R.)

Lawrence M. Paul
Cont. = 32,957 Sq. Ft.
P.R.O. = 3,350 Sq. Ft.
Total = 36,107 Sq. Ft.

Liquid Carbonic Co.
Cont. = 91,076 Sq. Ft.
P.R.O. = 4866 Sq. Ft.
Total = 95,942 Sq. Ft.

Sybron Corporation
Cont. = 64,065 Sq. Ft.
P.R.O. = 14,775 Sq. Ft.
Total = 78,840 Sq. Ft.

Burdox Inc.

Armor Cryogenics Inc.

The Childe Oil Co.

Cont. = 10,066 Sq. Ft.
P.R.O. = 7,348 Sq. Ft.
Total = 17,414 Sq. Ft.

Cont. = 30,837 Sq. Ft.
P.R.O. = 5762 Sq. Ft.
Total = 36,563 Sq. Ft.

Cont. = 5,783 Sq. Ft.

3/07/66	Par. 884 884 T, T2, T3	J.L.M.
1/23/68	Revised Merrell Dr. Ent.	J.L.M.
11/29/68	Add Parcel 884 T-3 T-4	J.L.M.
0/00/70	Name Change Par 883	P.W.F.
3/30/72	Add deed dist. to N. line, Par 871 & 878	R.E.D.
4/12/75	Name Change Par. 883	P.W.F.
11/20/74	Name Change Par. 879	P.W.F.
6-11-74	871 & 878 - not needed	P.R.O.
6-3-74	Abandon 4" & 6" water Par 883	E.H.

20 APR 74	Change of Line Bkg. 883S	P.R.O.
10 APR 74	Added Par 871	P.R.O.
10 APR 74	Added Easement Par 878, 879, 883, 871 & DETAIL 'F'	P.R.O.
6-8-73	Revised Parcels 871 WL # 877 WL & RL	W.J.K.
DATE	REVISIONS	BY

TYPE OF FUNDS
U

Remove Drive Pt Hot Hill St. Rev Par 884 T2 Add Trees Fence Mailbox etc.

Curve #111
Curve #112
Curve #113

Meet Existing @ Sta. 11+15.37

Continued

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-75-7(84). U-1133(1)	

765 / 787

23 / 30

HAM-75-9.93
HAM-126-13.00
R/W PLANS
LIMITED ACCESS
SCALE: 1" = 50'

Morvin L. Warner
Cont.= 7942 Sq. Ft.

915 LA

915 T-1

884 WL-2

884 LA

884 T-2

For Continuation See Sheet No.24

Richardson-Merrell Inc.

LOT 12

INDUSTRIAL

AMITY

P.B. 108

P. 21

R.

Bit. Parking

Metal Carport

Conc. Block

Standard Textile Co. Inc.

Sub Line

Chain Link Fence

69.79'
129+59.68

N 5°12'42" E

43.77 ℄ P
129+23.66

DETAIL 'B'

45.27 ℄ P
128+81.95

170.89'
127+05.96

Chain Link Fence

Transformer

Conc.

Metal Bldg.

Sub Line 2

℄ C.A.

Gravel

Water Valve

Water Meter

Vacated Alley

4 Guard Posts

189.91'
124+50.40

Bit. Parking

O.C.A.

LOT 2

Richardson-Merrell Inc.

Transformer

Conc. Slab

#110

2 Sty. Dr.

Richardson Merrell Inc.

Brick

Bit.

Conc.

M.H.

12" Storm

121.33
120+40.76

Building Under Construction

Gravel

4 Sty.

Conc.

C.O.

M.H.

T.S. 121+78.55

108.31
121+51.27

Ex. R/W

Ex. Curb

Ex. Const. Limits

Ex. Storm Sewer

Ex. Sanitary Sewer

Ex. Water Line

Ex. Gas Line

Ex. Overhead Wires

Ex. Fence

Ex. Trees

Ex. Bldg.

Ex. Drive

Ex. Pole

Ex. Manhole

Ex. Catch Basin

Ex. Inlet

Ex. Hydrant

Ex. Valve

Ex. Gas Valve

Ex. Gas Meter

Ex. Mail Box

Ex. Sign

Ex. Flood Light

Ex. Guard Rail

Ex. Curb Inlet

Ex. Gas Vent

Ex. Telephone Pedestal

Ex. Telephone Manhole

Ex. Telephone Booth

Ex. Electric Manhole

Ex. Electric Pedestal

Ex. Electric Meter

Ex. Electric Transformer

Ex. Electric Vault

Ex. Electric Box

Ex. Electric Light

Ex. Electric Sign

Ex. Electric Conduit

Ex. Electric Duct

Ex. Electric Cable

Ex. Electric Wire

Ex. Electric Pole

Ex. Electric Guy

Ex. Electric Anchor

Ex. Electric Brace

Ex. Electric Arm

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-75-1(84) U-1133(1)	

756 787

24 30

HAM-75-9.93
HAM-126-13.00
R/W PLANS
LIMITED ACCESS
SCALE: 1" = 50'

MATCH LINE SEE SH. 25

For Continuation See Sheet No. 25

For Continuation See Sheet No. 23

E.W.D. PROJECT HAM-453-A
STA. 138+62.03
HAM-126-13.00
U-1133(1)
EX. CROSS COUNTY

DETAIL "A"
No Scale

DETAIL "B"
No Scale

DETAIL "C"
No Scale

DETAIL "D"
No Scale

DETAIL "E"
No Scale

DETAIL "F"
No Scale

HAMILTON COUNTY
CITY OF READING
SYCAMORE TOWNSHIP
SEC. 32, T-4, E.R. 1

DATE	REVISIONS	BY
8-23-83	Add Parking Lot to Par. 914	D.A.S.
3-31-81	Add Pars. 914 T & T-1 Lines.	A.A.B.
11-17-80	Rev. Par. 914 Owner.	A.A.B.
2-2-79	Rev. Par's 915 WD & T-2.	A.A.B.
12-8-78	redesignated 915	D.B.
2/13/76	Changed 909 to 915 & redesignated takes	P.E.D.
5-12-75	Add Par. 914T-1 & temp Rd No 5	E.H.
9 May 75	Add Sign left Sta 134+00 ℄	N.M.
8-28-74	Add Par 918 PR	E.H.
8-27-74	Name Chg. D.B & Page Par. 898	E.H.

Type of Funds
U

24 30

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-75-1 (180) U-1133 (1)	

757
787

25
30

HAM-75-9.93
HAM-126-13.00
R/W PLANS
LIMITED ACCESS
SCALE : 1" = 50'

END R/W ACQUISITION
STA. 144+55.35 50.00 LT.
HAM-126-13.00

AMITY
INDUSTRIAL SUB.
P.B. 106 P. 21 R.O.
#360
1 Sty. Br.
To Vel Inc.
Cont= 28003q.ft.
3 B.C. Data Processing Center
Cont 2800 Sq. Ft

J. James Brickweg & Dorothy Ann Brickweg

CITY OF READING
VILLAGE OF AMBERLEY

SUB LINE
12785
LOT 14
64.00'
140+66.00
57.00
140+66.00
329°41'55"E
194.53
918 WL
918 T
917 LA
3 Lights
100.00'
LA-RW
Const. Limits
Ex. R/W
N60°18'25"E
389.35'
℄ LA
50.00'
140+66.00
℄ S.R. 126
310. 144+20.21
50.00'
144+55.35
48' Comb.
140
N60°18'25"E
48' Comb.
℄ S.R. 126
48' Comb.
145
122.23
N60°18'25"E
423.07'
Ex. R/W
J. James Brickweg & Dorothy Ann Brickweg
180.88'
398 WL
919 WL
50.00'
143+85.07
S78°58'25"W
Cont= 299,455 Sq. Ft.
Cont= 28,493 Sq.Ft.
Warner Consolidated Corp. (Delaware)
360.88'
180.00'
S11°08'14"W
209.64'
LA-RW
107.82
141+33.37
Sub Line
141.17'
140.30'
N5°24'18"E
JOHN CLARK'S EST.
PB 2 P 236 R.O.
LOT 10
LOT 11
565.00'
163.50
143+03.30
VILLAGE OF AMBERLEY
CITY OF READING
Ex. R/W
36.07
S85°57'45"W
304.17'
S75°47'15"W
RIMGALBRAITH ROAD
Sec. 32, T-4, E.R.1
Sec. 26, T-4, E.R.1
END R/W ACQUISITION
STA. 143+85.07 50.00 RT.
HAM-126-13.00
MATCH LINE SEE SHT #2
For Continuation See Sheet No. 13
32A
31
126
25

HAMILTON COUNTY
CITY OF READING
SYCAMORE TOWNSHIP
SEC. 32, T-4, E.R. 1

Type of Funds
U

U — I

For Continuation See Sheet No. 13

℄ NEW TWPS.

P.T. Sta. 1537+15.34

Board of Commissioners of Hamilton Co. Ohio
Fee Holder, Ham. Co. Agricultural Society

745 X
William J. Blom
Cont= 23,185 Sq. Ft.

711 X
Cont= 28059 Sq. Ft.

750 X
Zello Helmkamp
Cont= 1,852 Sq. Ft.

751 X

NEW TWP. 58 (3N)
140.00'
S86°39'38"W
621.19' ℄ C
91+88.92
97.84
S86°39'38"W
280.00'
Sub Line
WOODBINE AVE.
N28°38'16"
℄ NEW TWPS.
150.00
1538+00
N28°38'16"W
255.92
N8°58'58"W
Const. Limits
Ex. R/W
N28°38'16"W
Bethesda Hospitals Inc.
Hamilton Co. Ohio
Parcel No. 510-0012-0139-00
Deed Ref. Vol. 3111 Pg. 1621
Area = 16,927 Sq. Ft.
0.389 Ac.
1339
1626.26'
Dept. Refuse Chemical
Products Co.
Parcel No. 510-0012-0139-00
Deed Ref. Vol. 3111 Pg. 1621
Area = 16,927 Sq. Ft.
0.389 Ac.
N28°38'16"W
239.51'
S26°31'17"W
PUMP HOUSE
DO NOT DISTURB
Edge of Pavement
℄ NEW TWPS.
NEW TWP. 3S
Sub Line
ANDREW DIEHL'S SUB
P.B. 13, P. 38 R.O.
Sub Line
Meet Ex. Channel
S89°23'31"W
150.40
20.00
46.65'
1340+00
47.32
1340+18.33
12" WATER LINE
3" ELECTRIC DUCT
SURFACE TREATED TRUCK PARKING AREA
Iron Pin & Cap Found
Iron Pin & Cap Found

Type of Funds
U & I

25
30

DATE	REVISIONS	BY
6-26-75	Added Fences on Par. 745	P.E.D.
3/14/75	Name Change Par. 751	P.W.C.
30 Apr. 74	Add Truck Park, Units & Pump House Par. 751	N.M.

STA. 144+00 — DETAILS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-75-1(84) U-1133(1)	

750/787

HAM-75-9.95, HAM-126-13.00
R/W PLAN - LIMITED ACCESS

26/30

PENN-CENTRAL TRANSPORTATION CO.

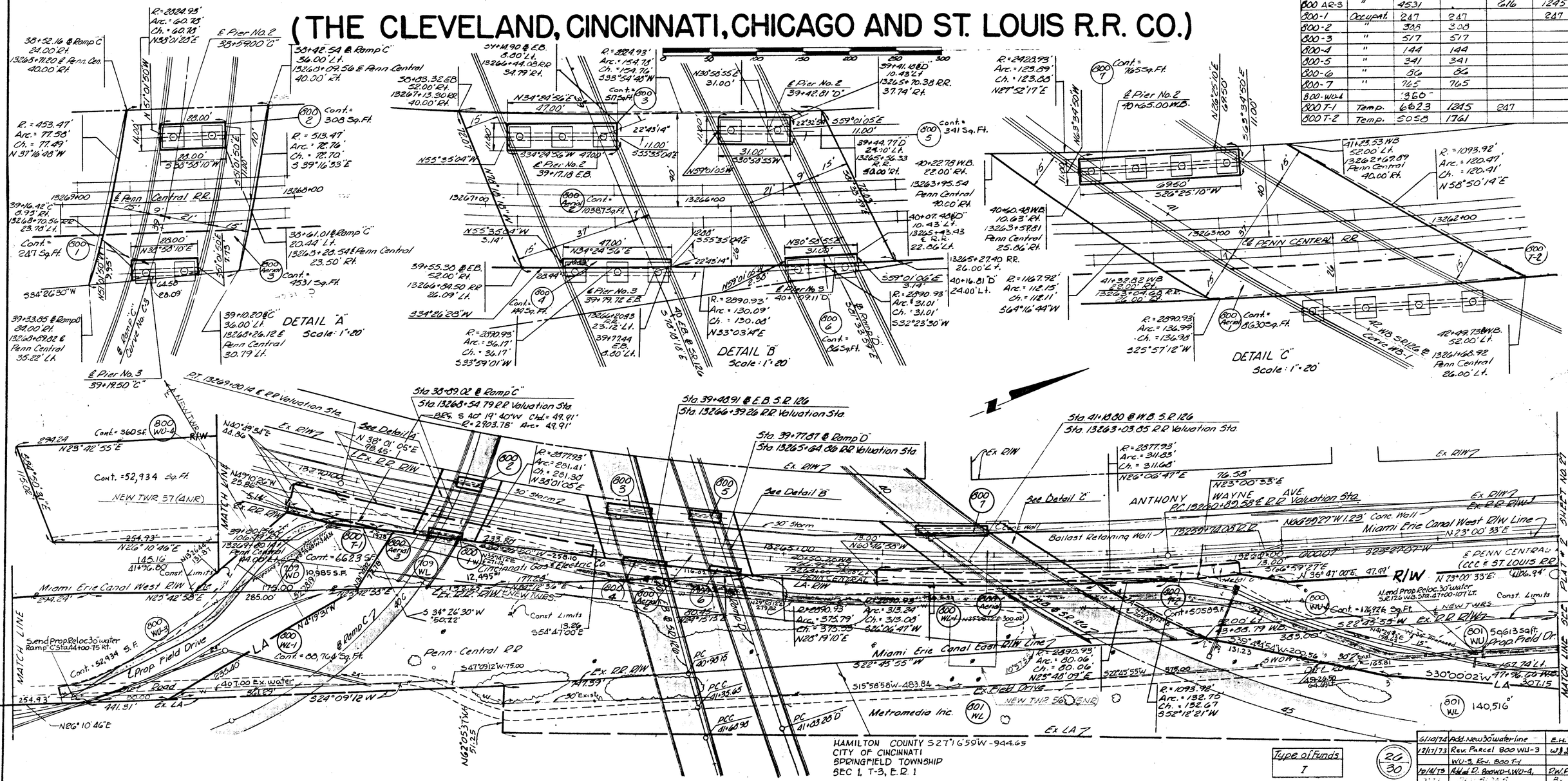
(WARRANTY DEED, OCCUPATIONAL, AERIAL AND TEMPORARY EASEMENTS)

FORMERLY

(THE CLEVELAND, CINCINNATI, CHICAGO AND ST. LOUIS R.R. CO.)

PENN CENTRAL RAILROAD
Curve Data
P.I. - Sta. 13265+38.4847
Δ = 17°48'37"
R = 2864.9338
Dc. = 2°-00'-00"
Lc. = 890.5589'
T. = 448.8999'

Parcel Number	Type of Easement	Total Area (S.F.)	Area of Overlap (S.F.) Aerial	Occupation	Temp.
800 WL-1	Warranty Deed	88,687			
800 WL-2	"	44,671			
800 WU-1	"	176,926			
800 WU-2	"	70,830			
800 WU-3	"	52,934			
800 AR-1	Aerial	8630		765	1761
800 AR-2	"	10387		1088	
800 AR-3	"	4531		616	1245
800-1	Occupat.	247	247		247
800-2	"	308	308		
800-3	"	517	517		
800-4	"	144	144		
800-5	"	341	341		
800-6	"	86	86		
800-7	"	765	765		
800-WU-4		360			
800 T-1	Temp.	6623	1245	247	
800 T-2	Temp.	5058	1761		



HAMILTON COUNTY S27°16'59"W - 944.65
CITY OF CINCINNATI
SPRINGFIELD TOWNSHIP
SEC 1, T-3, E.R. 1

Type of Funds
I

26/30

6/10/74	Add. New 30" water line	E.H.
12/17/73	Rev. Parcel 800 WU-3	W.J.L.
	WU-3, Rev. 800 T-1	
10/4/73	Added D. 800 WU-1, WU-4,	D.W.F.
	Rev. 500 S	B.

PENN-CENTRAL TRANSPORTATION CO.

FORMERLY

(THE CLEVELAND, CINCINNATI, CHICAGO AND ST. LOUIS R.R. CO.)

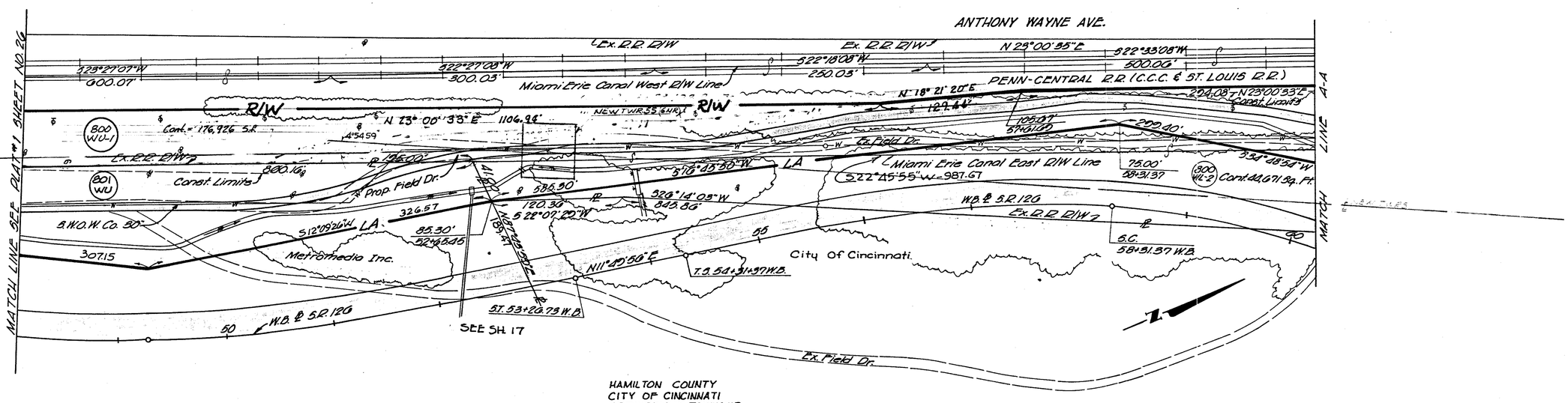
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-75-1(184) U-1133(1)	

760
787

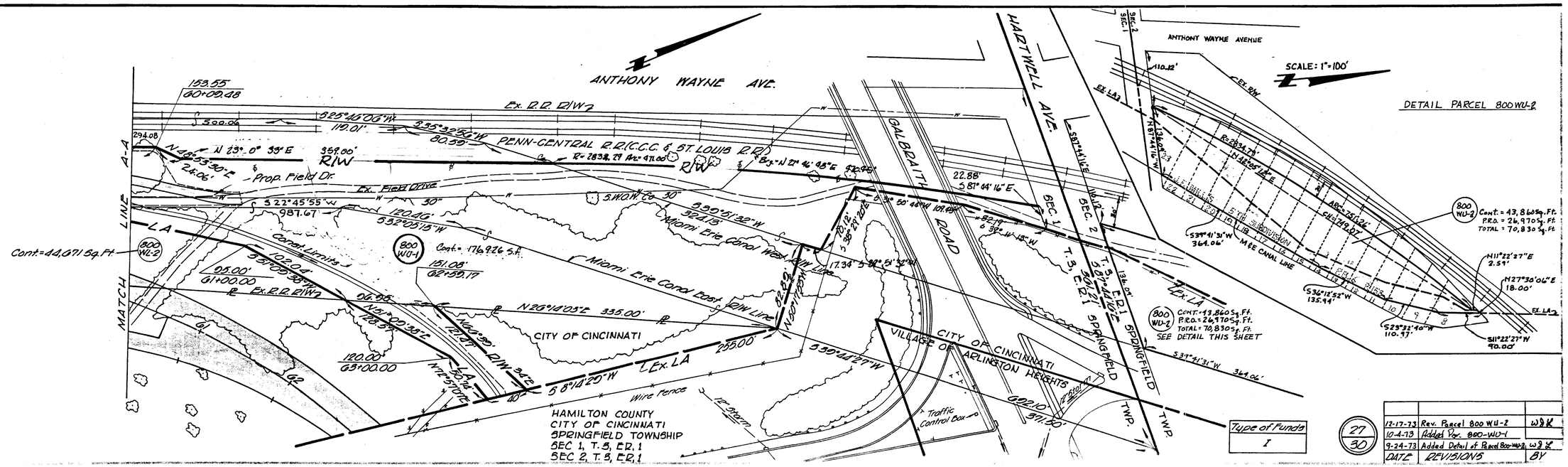
27
30

HAM-75-9.03
HAM-126-13.00
R/W PLAN
LIMITED ACCESS

SCALE: 1"=50'



HAMILTON COUNTY
CITY OF CINCINNATI
SPRINGFIELD TOWNSHIP
SEC 1, T. 3, ER. 1



Type of Funds
I

27
30

DATE	REVISIONS	BY
12-17-73	Rev. Parcel 800 WU-2	WBK
10-4-73	Added Par. 800-WU-1	
9-24-73	Added Detail of Parcel 800-WU-2	WBK

PENN CENTRAL RR PLAT #2

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-75-1(84) U-1133(1)	

701
787

28
30

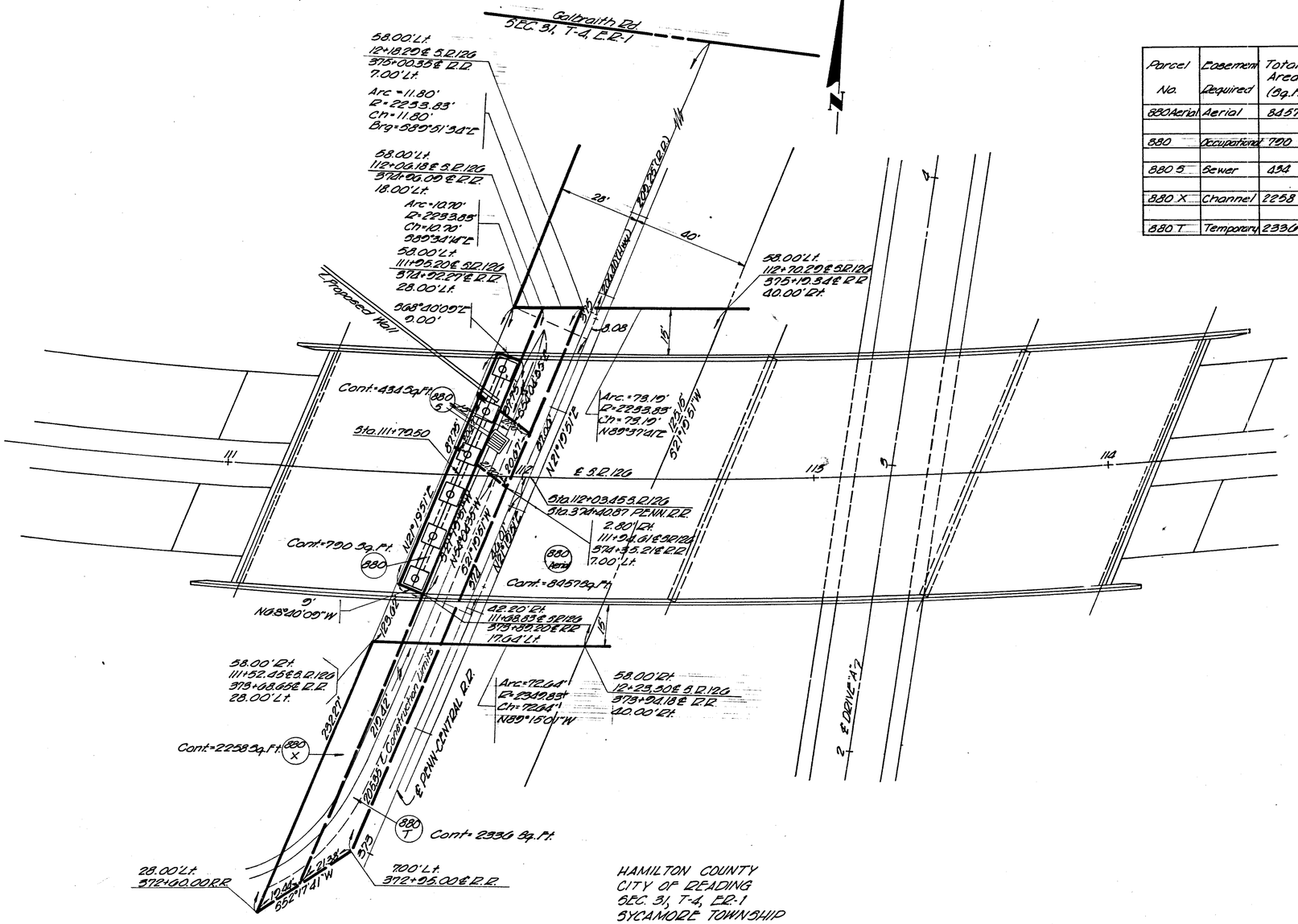
HAM-75-0.93
HAM-126-1.300
R/W PLANS
LIMITED ACCESS
SCALE: 1"=20'

PENN-CENTRAL TRANSPORTATION CO.

(OCCUPATIONAL, AERIAL, SEWER, TEMPORARY AND CHANNEL EASEMENTS)

FORMERLY

(THE PHILADELPHIA, BALTIMORE AND WASHINGTON RAILROAD)



Parcel No.	Easement Required	Total Area (Sq.Ft.)	Area of Overlap (Sq. Ft.)				
			Aerial	Occupation	Channel	Temporary	Sewer
880 Aerial	Aerial	8457		700	1237	1363	406
880	Occupational	790	790			759	31	170
880 S	Sewer	494	406	170	207	227	
880 X	Channel	2258	1237	759			207
880 T	Temporary	2336	1363	31			227

HAMILTON COUNTY
CITY OF READING
SEC. 31, T-4, E.R.-1
SYCAMORE TOWNSHIP

Type of Funds
U

28
30

DATE	REVISIONS	BY

CENTRAL R.R. PLAT #3

FENCING PLAN

0 200 400 600 800

CALC'D REA DATE 3/84

CHK'D DS DATE 3/84

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	IR-75-1(96)10 F-2(13)	

762
787

HAM-75-9.93
HAM-126-13.00
R/W PLANS
LIMITED ACCESS
SCALE 1"=200'

SHEET 1 OF 3

END PROJECT	BEGIN PROJECT
HAM-75-9.93	HAM-126-13.00
STA. 80+48.00	STA. 80+48.00

IR-75-1(96)10 F-2(13)

HAMILTON COUNTY SEC. 7, T-3 E.R.1
CITY OF CINCINNATI
SPRINGFIELD TWP. SEC. 1, T-3, E.R.1
SEC. 2, T-3, E.R.1
SEC. 1, T-3, E.R.1
SEC. 31, T-4, E.R.1
SPRINGFIELD TWP.
SYCAMORE TWP.
VILLAGE OF ADDINGTON HEIGHTS
CITY OF CINCINNATI

CARTHAGE FAIR GROUNDS
PENN-CENTRAL R.R.
SECTION RD.
CORPORATION LINE
CREST HILL AVE.
DAWN ROAD
GREENLAND
DEBONAIR
STILLWELL ROAD
CHAUCER DR.
GLENORCHARD
HARTLAND DR.
PLACE
SUMMIT ROAD
ABBIE TERRACE
WOODLAND
MILL CREEK
BURNS AVE.
SPRINGFIELD TWP.
GALBRAITH ROAD
ANTHONY WAYNE AVE.
DALEMONT AVE.
AVALON ST.
DE CAMP AVE.
Prop Access Rd
Ex. Access Rd
Soundwall
Conc. Retain. Wall No. 1
Conc. Retain. Wall No. 2
Conc. Retain. Wall No. 3
Conc. Retain. Wall No. 4
Conc. Retain. Wall No. 5
Conc. Retain. Wall No. 6
Conc. Retain. Wall No. 7
Conc. Retain. Wall No. 8
Ex. Woven Wire
Ex. CL Fence
Ex. LA
LA-R/W
Ex. LA-R/W
Ex. LA-E/W
Ex. LA-I
Ex. LA-J
Ex. LA-Z
B & O R.R.
I-75 NB.
I-75 SB.
@ Ramp C
@ Ramp D
@ Ramp E
@ Ramp F
@ Ramp G
@ Ramp H
@ Ramp I
@ Ramp J
@ Ramp K
@ Ramp L
@ Ramp M
@ Ramp N
@ Ramp O
@ Ramp P
@ S.R. 126 EB.
@ S.R. 126 WB.
@ I-75 SB.
@ I-75 NB.
@ Ex. I-75
@ Ex. I-75 SB.
@ Ex. I-75 NB.
@ Ex. I-75 SB.
@ Ex. I-75 NB.
@ Ex. I-75 SB.
@ Ex. I-75 NB.

FENCING PLAN

0 200 400 600 800

CALC. REA DATE 3/86

CHKD. JS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	IR-75-1(96)10 F-2(13)	

765
787

HAM-75-9.93
HAM-126-13.00
R/W PLANS
LIMITED ACCESS
SCALE: 1"=200'

SHEET 2 OF 3

SPRINGFIELD TWP. Sec. 2 T-3 E.R.1
SYCAMORE TWP. Sec. 32 T-4 E.R.1
VILLAGE OF ARLINGTON
CITY OF READING
CALBRAITH
CREEK
MILL
SPRINGFIELD TWP. Sec. 31 T-4 E.R.1
SYCAMORE TWP. Sec. 31
E.P.A. 16'± @ 126 88+02.35
E.P.A. 53'± @ T 93+92.78
E.P.A. 98'± @ T 95+93.67
End CLT Fence E.P.A. 61'± @ T 97+66.00
HAMILTON COUNTY
CITY OF READING
E.P.A. 133'± @ 126 90+71.09
E.P.A. 52'± @ 126 93+20.52
E.S.R. 126
Begin CLT Fence E.P.A. 9'± @ T 98+42.5
E.P.A. 124'± 98+43.53
E.P.A. 85'± @ W.B. 85+50.00
Ramp F
BURKHART ST.
READING RD.
SHERMAN ST.
CLARK ST.
NEEPER LANE
PENN-CENTRAL R.R.
HILL ST.
ROAD
CHAUCER
E.P.A. 177'± @ 126 103+30.51
E.P.A. 126'± @ 126 104+28.25
E.P.A. 82'± @ 126 104+96.61
E.P.A. 45'± @ 126 105+43.13
A.C. 45'± @ 126 107+08.51
A.C. 45'± @ 126 107+58.51
E.P.A. 20'± @ 126 108+20.51
E.P.A. 124'± @ 126 107+17.51
E.P.A. 108'± @ 126 108+07.79
L.A. R/W
Tie To Well A.C. 21'± @ N 100+91.00
C.P.A. 36'± @ N 100+91.09
C.P.A. 51'± @ N 101+41.93
C.P.A. 36'± @ N 102+62.72
C.P.A. 21'± @ N 102+72.57
E.P.A. 205'± @ N 105+05.75
End CLT Fence
Well No. 3
Drive
E.P.A. 90'± @ 126 111+70.00
E.P.A. 179'± @ 126 111+79.96
E.P.A. 189'± @ 126 113+72
E.P.A. 110'± @ 126 113+79.96
A.C. 45'± @ 126 116+00.00
HAMILTON COUNTY
CITY OF READING CORPORATION LINE
CORPORATION LINE
VILLAGE OF AMBERLEY
CITY OF READING
A.C. 45'± @ 126 111+70.00
E.P.A. 59'± @ 126 118+00
E.P.A. 89'± @ 126 119+00
E.P.A. 163'± @ 126 119+33.16
E.P.A. 188'± @ 126 119+77.42
E.P.A. 179'± @ G.R. 14+71.73
A.C. 29'± @ Galb. Rd. 121+55±
A.C. 10'± @ 'D' 125+63±
E.P.A. 147'± @ 'G' 120+93.14
CPA. 160'± @ 126 115+50
A.C. 27'± @ Galb. Rd. 107+75±
A.C. 27'± @ Galb. Rd. 111+35±
A.C. 43'± @ 126 113+42±
A.C. 27'± @ Galb. Rd. 111+93±
E.P.A. 79'± @ 126 120+100.00
E.P.A. 55'± @ Galb. Rd. 111+73±
E.P.A. 169'± @ 126 121+03.54
E.P.A. 89'± @ 126 120+150.00
E.P.A. 79'± @ 126 121+100.00
E.P.A. 76'± @ 126 124+00.00
E.S.R. 126
℄ Ramp Q
℄ Galbraith Rd.
A.C. 27'± @ Galb. Rd. 125+00
E.P.A. 58'± @ P 1231+59.68
E.P.A. 42'± @ P 1231+43.66
E.P.A. 44'± @ P 128+81.35
E.P.A. 4'± @ P 131+04.98
E.P.A. 61'± @ 'Q' 1271+70.13
E.P.A. 198'± @ 'Q' 131+74.58
E.P.A. 172'± @ 'Q' 1341+05.03
A.C. 21'± Knollcrest Dr. 3195 ± Dr.
A.C. 21'± Knollcrest 3182± Dr.
E. Knollcrest Dr.
E. Kodak Dr.
E. McLean Dr.
℄ Knollcrest Drive
END PROJECT HAM-126-13.00 STA. 138+50.70 WB
F-2(13)
EX. CROSS COUNTY HAM-453-A STA 138+59.79
E.P.A. 202'± @ 126 138+59.79
MARYCREST AVE.
MARYCREST CT.
CITY OF READING
VILLAGE OF AMBERLEY
E.P.A. 56'± @ 126 140+66.00
End CLT Fence E.P.A. 49'± @ 126 140+55.35
E.P.A. 49'± @ 126 140+66.00
Ex. Cross County Highway End CLT Fence E.P.A. 49'± @ 126 143+85.07
E.P.A. 164'± @ 126 143+03.90
E.P.A. 106'± @ 126 141+33.37
SYCAMORE TWP. Sec. 32 T-4 E.R.1
SYCAMORE TWP. Sec. 31 T-4 E.R.1
SYCAMORE TWP.
SYCAMORE TWP.
SYCAMORE TWP. Sec. 32 T-4 E.R.1
CITY OF READING
VILLAGE OF AMBERLEY
SYCAMORE TWP. Sec. 25 T-4 E.R.1
SYCAMORE TWP. Sec. 36 T-4 E.R.1
CORPORATION LINE

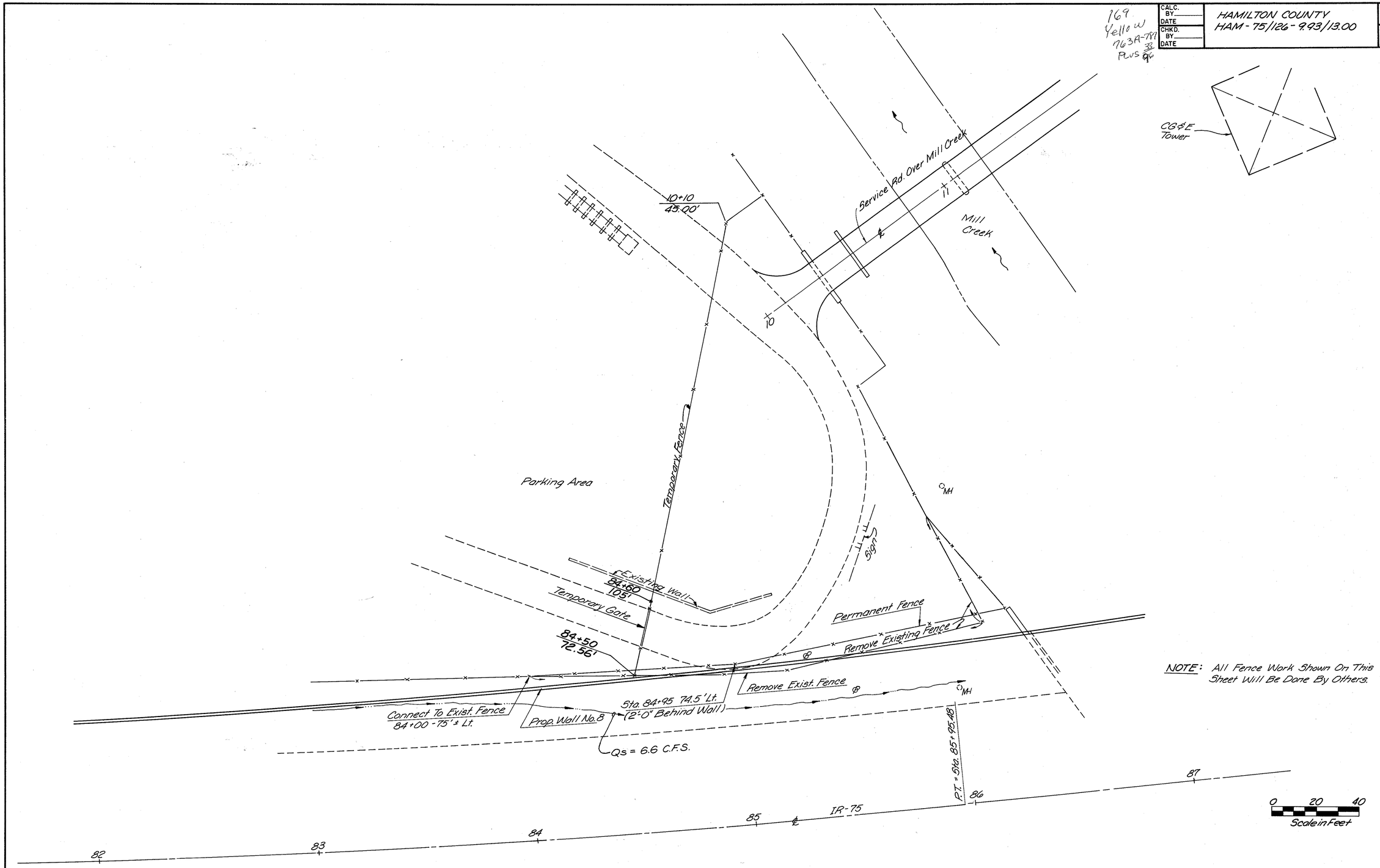
30
30

3-29-74	102+72 to 105+06, Rt. "N"	RAP
DATE	REVISED	BY

FENCING PLAN

169
Yellow
763A-787
Plus 33/96

CALC. BY	HAMILTON COUNTY	OHIO	763A 787
DATE	HAM-75/126-9.93/13.00	FHWA REGION 5	
CHKD. BY			
DATE			



NOTE: All Fence Work Shown On This Sheet Will Be Done By Others.

FENCING PLAN

STA. 84+00 To STA. 86+25 Lt. IR - 75

CALC. REA DATE 3/86

CHKD JAS. DATE 3/86

FED. RD DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO		

764/787

HAM-75/126-9.93/13.00

CONRAIL R.R.

P.I. Sta. 13+44.83
Δ = 43° 28' Rt.

NOTE:
See Sh T66 for Anchor Blocks at Pipe Bends

SOUTH END PROP RELOC.
Sta. 10+00.52

R/W

Prop. 30" Water Line Relocation

℄ Prop. Service Road

Const. Limits

32°13'

30° Ex.

LA

40C

45C

P.I. Sta. 10+01.38 =
Ramp C Sta. 44+00, 75' Rt.

℄ Ramp C

Sta. 14+85
Air Release Valve

P.I. Sta. 16+15.95
Δ = 5° 24' Lt.

SWOW CO.

30"

Ex. Dirt Service Road

℄ EB SR 126

P.C. 40+95.15

P.C.C. 41+39.65

P.C.C. 41+68.98

P.C. 41+89.88 D

Ex LA

P.C.C. 42+18.98

P.C.C. 42+93.98

℄ Ramp D

P.C. 43+68.78 D

℄ Existing I-75

95

100

ANTHONY WAYNE AVE

CONRAIL R.R.

Prop. Service Rd

Const. Limits

20

℄ Prop. 30" Water Line Relocations

P.I. Sta. 18+95.77
Δ = 4° 42' Lt.

Sta. 21+75
Air Release Valve

P.I. Sta. 21+95.79
Δ = 4° 39' Lt.

30' Ex.

WB ℄ SR 126

45

P.I. Sta. 24+01.16
Δ = 21° 00' Rt.

P.I. Sta. 25+99.78 =
SR 126 W.B. Sta. 41+00
107' Lt.

R/W

Prop. 30" Water Line Reloc.

25

Prop. Service Road

30' Ex.

LA

Ex. LA

NORTH END PROP RELOC.
Sta. 26+02.74

℄ Ramp F

℄ Existing I-75

SOUTH END PROP RELOC.
Sta. 10+00.52
Pipe ℄ El. = 515.32

Existing Ground Line

10% Max.

Ex. 30" W.M.

+50 Profile Continued Below

10

11

STATIONS ON ℄ 30" WATER LINE

Ramp C
Sta. 39+38

Ramp D
Sta. 40+30

SR 126 E.B.
Sta. 40+00

SR 126 W.B.
Sta. 42+10

See Sh T66 for Thrust Blocks at Pipe Bends

+50 Profile Continued Above

Old Canal Tow Path

℄ Prop. Service Rd.

10% Max.

Prop. 30" Water Main

Sta. 14+85
Air Release Valve

Sta. 14+85
El. ℄ Pipe = 543.5

Proposed Finished Grade

Existing Ground Line

Sta. 21+73
El. ℄ Pipe = 548.00

Sta. 21+75
Air Release Valve

Proposed Finished Grade

℄ Prop. Ditch

Ex. Ground Line

Prop. 12" Conduit

Prop. 30" W.M.

NORTH END PROP RELOC.
Sta. 26+02.74
Pipe ℄ El. = 520.92

Ex. 30" W.M.

SCALE: HOR. 0 25 50 100
VERT. 0 5 10 20

530 520 510 580 570 560 550 540 530 520 510 540 530 520 510

STATIONS ON ℄ 30" WATER LINE

12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

SWOW CO. 30" WATER LINE RELOCATION

764

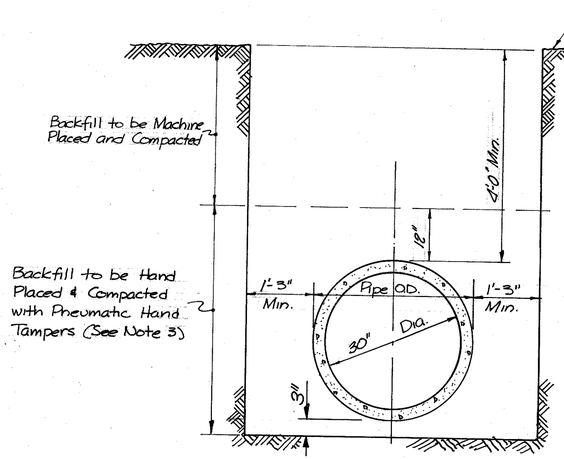
CALC. DS DATE 3/86

CHK'D. JAS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO		

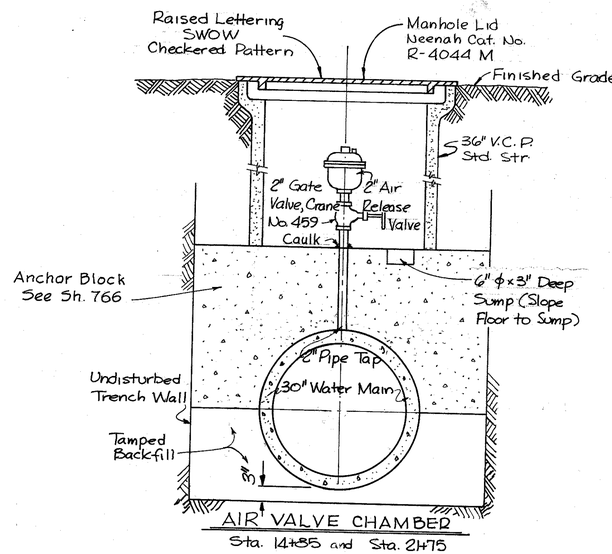
HAM-75/126-9.93/13.00

765
787



TYPICAL PIPE TRENCH

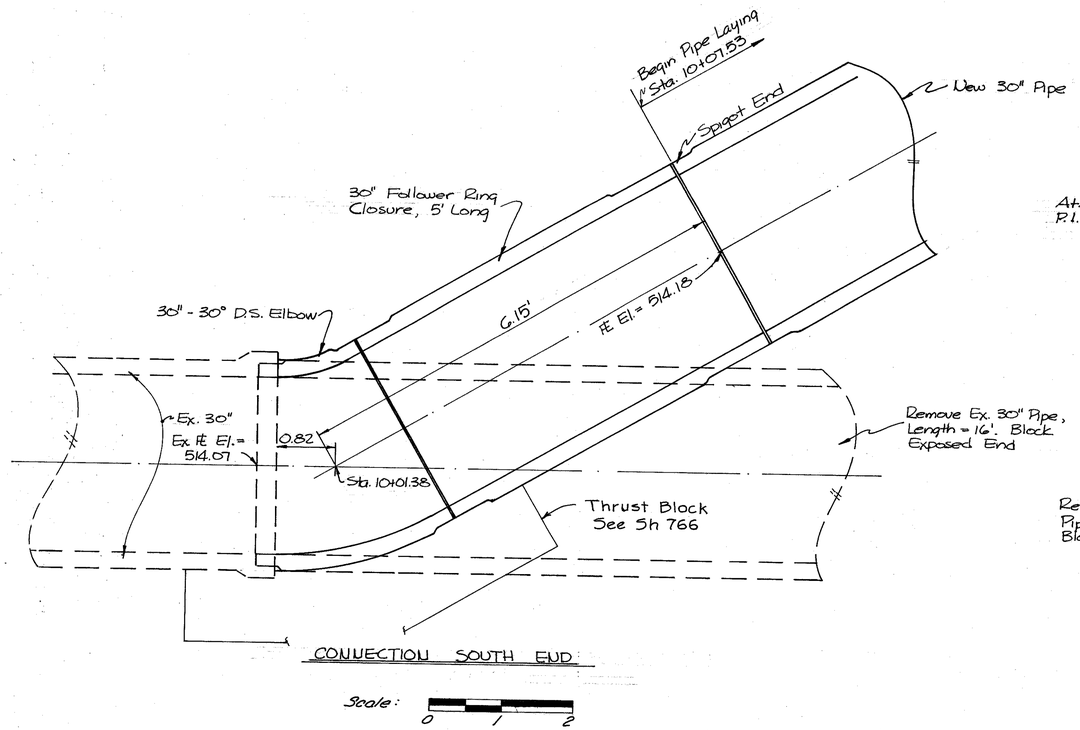
1. Excavation, Backfill, Pipe Laying and Joining to Conform to Sec. 603 for Type C Conduits Unless Otherwise Noted.
2. Pipe to be Protected Against Overloads from Heavy Construction Equipment.
3. Hand Placed Backfill Around Anchor Blocks to be Carried 2'-0" Above Top of Anchor Block.



AIR VALVE CHAMBER

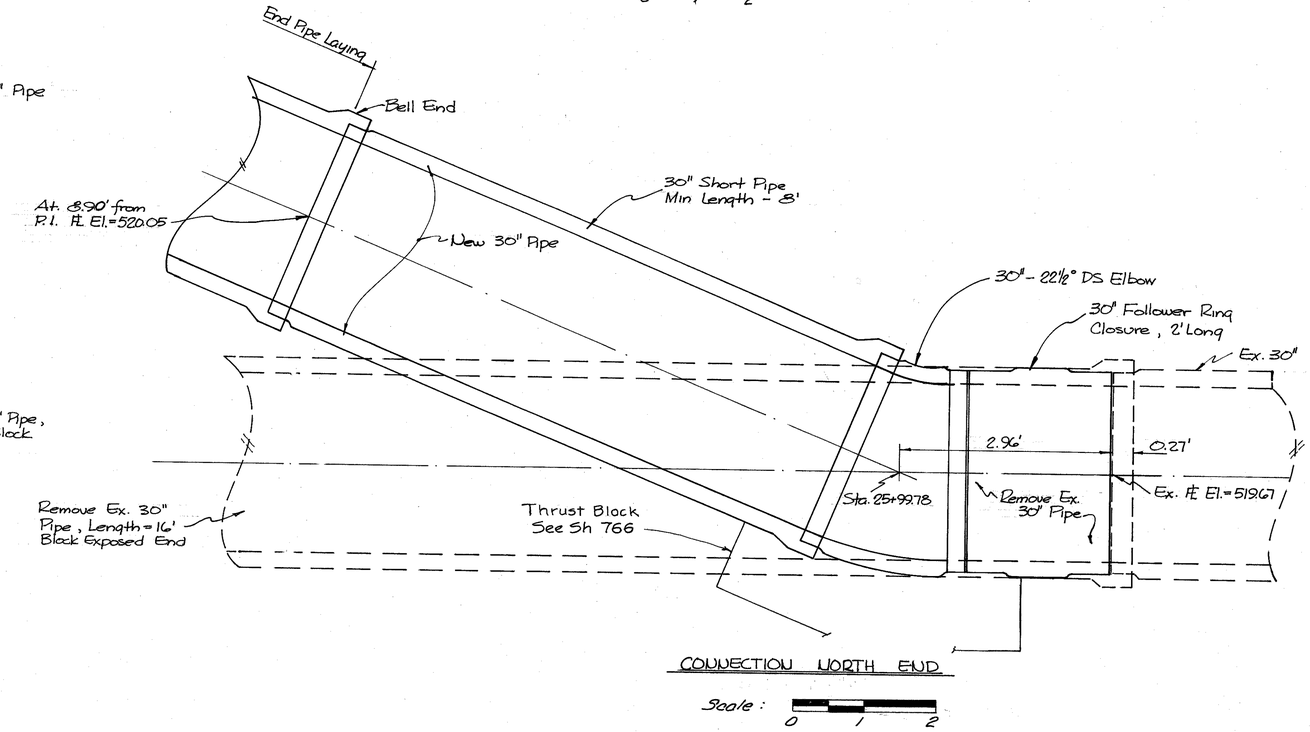
Sta. 14+85 and Sta. 21+75

Scale: 0 1 2



CONNECTION SOUTH END

Scale: 0 1 2



CONNECTION NORTH END

Scale: 0 1 2

CALC. REA DATE 3/86

CHK'D JAS DATE 3/86

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO		

766
787

30" WATER LINE RELOCATION

All materials and labor, equipment, tools, etc. required for the relocation of the 30" industrial water main owned by the Southwestern Ohio Water Company between approximate Sta. 44 00 Ramp C, 75' Rt. and Sta. 47 00 W.B. - S.R. 126, 107' Lt. including pipe, fittings, closure pieces, bulkheads for testing, air release valves and chambers, concrete and reinforcing steel for thrust blocks, shall be furnished and installed as shown on the plans and as specified herein.

Highway embankment in the area of the relocated water line shall be placed and fully compacted to a minimum height of four feet above the top of the pipe before excavation for the pipe laying is begun. The cost of furnishing and placing of anchor blocks shall be included in the unit price bid and paid per lineal foot for 30" water line, complete in place. Extra excavation and backfill, including the removing and disposal of unsuitable materials encountered at design profile grade elevation and backfilling with non-cohesive material to the design grade elevation, when directed in writing by the Engineer, shall be compensated for under Pay Item Special - Extra Excavation and Backfill.

Pipe and fittings shall be 30" concrete pressure pipe, steel cylinder type, prestressed, Designation SP-5 as manufactured by the Price Brothers Co., P.O. Box 825, Dayton, Ohio, 45401.

Air release valves shall be 2-inch size for automatically bleeding air which accumulates at high points in the line without loss of water from the pipe. They shall be similar and equal to the 2" No. 200-A valve manufactured by Valve and Primer Corp., 625 West 58th Street, Chicago, Ill., 60621, or the Crispin A-381 valve manufactured by the Multiplex Manufacturing Co., 600 Fowler Ave., Berwick, Pa. 18603.

The proposed water line with appurtenant fittings, anchors and air release valves shall be completed and satisfactorily tested before connection to the existing supply line at either end. *Both tie-in connections must be made on a weekend as scheduled by the Southwestern Ohio Water Company. Work on each connection shall be done simultaneously by separate work crews and shall be carried on day and night until water service is restored. The personal, equipment and method of laying the pipe and making these connections shall be presented to, and shall meet the approval of Southwestern before such work is begun. Personnel from Southwestern and from the pipe Manufacturer will be on hand for advice and technical assistance.*

The work to be accomplished *during the tie-in procedure* shall include the breaking into and removal of a 16-foot length of existing concrete and steel cylinder pipe at each end of the relocation, placing of new elbows, short pipe and closure pieces, grouting of the joints, pouring and setting of the reinforced concrete anchor block at each new elbow, all as shown on the drawings.

Backfill placing and compaction shall be completed immediately after the connections are made.

Testing shall consist of a leakage test to be made on all reaches of pipe and appurtenances completed prior to final connections. All concrete anchor blocking within the reaches of piping to be tested shall have been in place for a period of at least seven (7) days. The test shall be performed on a day mutually agreed upon in the presence of the Engineer and/or Southwestern. Methods of performing the test must meet with the approval of the Engineer and no tracer agents shall be introduced into the line unless the Contractor agrees to drain and flush the line after testing.

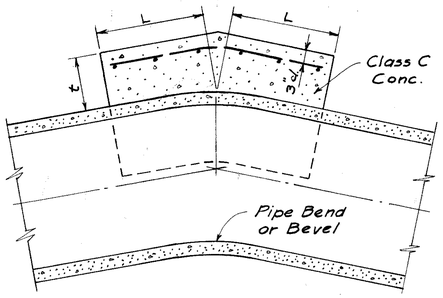
Southwestern shall supply the water, and the Contractor shall furnish all necessary equipment, piping, pumps, fittings, gages and operating personnel to properly conduct the test. The line shall be subjected to a pressure test of two hundred fifty pounds per square inch (250#/in^2) which shall be maintained over a period of not less than twelve (12) consecutive hours. All make-up water required to maintain test pressure shall be accurately metered into the line. The leakage as measured by the metered make-up water averaged over the twelve hour period shall not exceed one hundred gallons (100 gal.) per inch of diameter, per mile of pipe, per twenty-four (24) hours. The pipe line shall not be accepted by Southwestern until a successful twelve-hour leakage test has been accomplished.

30" WATER LINE ITEMS

Item	Description	Unit	Quantity
Special	30" Prestressed Concrete Pressure Pipe, complete in place	L.F.	1,580
Special	Connection to Existing 30" Water Line (2)	L.S.	L.S.
Special	2" Air Valve Chamber, Complete	Ea.	2
Special	Extra Excavation & Backfill	C.Y.	10

Note: Cubic yards of extra excavation shall be measured as a solid, bounded on top by the design profile grade, on the bottom by the elevation to which the unsuitable material is removed, on the sides by the specified width of trench and on the ends by the limits of such extra excavation.

NOTES
1. *Hand placed backfill around thrust blocks to be carried 2'-0" above top of block.*
2. *Excavation for thrust blocks to be made immediately prior to pouring of concrete. Earth walls for block support shall be vertical, and all loose material shall be removed.*

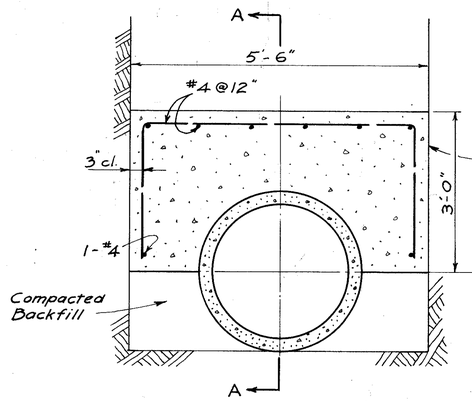


SECT A-A

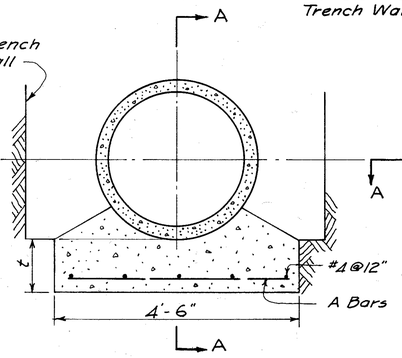
HAM-75/126-9.93/13.00

LOCATION & DIMENSIONS OF THRUST BLOCKS

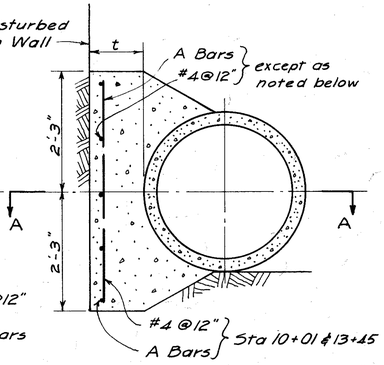
Station	Type of Bend	Dim. L	Min. t	A Bars
10+01	Horiz. Lt.	2'-6	12"	#6 @ 5"
11+20	Vert. Up	1'-0	12"	#5 @ 12"
12+00	Vert. Dn.	2'-0	1'-6	#4 @ 12"
12+20	Vert. Dn.	4'-0	1'-6	#4 @ 12"
12+75	Vert. Up	1'-0	12"	#4 @ 12"
12+95	Vert Up	1'-0	12"	#5 @ 12"
13+45	Horiz. Rt.	5'-0	1'-6	#9 @ 7"
14+65	Vert. Dn.	2'-0	1'-6	#4 @ 12"
14+85	Vert. Dn.	4'-0	1'-6	#4 @ 12"
15+05	Vert. Dn.	3'-6	1'-6	#4 @ 12"
16+05	Vert. Up	1'-0	12"	#5 @ 12"
16+16	Horiz. Lt	2'-0	12"	#4 @ 12"
16+56	Vert. Up	1'-0	12"	#4 @ 12"
17+56	Vert. Dn.	2'-0	1'-6	#4 @ 12"
18+96	Horiz. Lt.	2'-0	12"	#4 @ 12"
20+16	Vert. Up	1'-0	12"	#4 @ 12"
20+76	Vert. Up	1'-0	12"	#5 @ 12"
21+55	Vert. Dn.	3'-6	1'-6	#4 @ 12"
21+75	Vert. Dn.	4'-0	1'-6	#4 @ 12"
21+96	Horiz. Lt	2'-0	12"	#4 @ 12"
22+36	Vert. Dn.	3'-0	1'-6	#4 @ 12"
23+35	Vert. Up	1'-0	12"	#5 @ 12"
24+01	Horiz. Rt	2'-0	12"	#6 @ 7"
24+41	Vert. Dn.	3'-6	1'-6	#4 @ 12"
25+40	Vert. Up	1'-0	12"	#4 @ 12"
25+60	Vert. Up	1'-0	12"	#5 @ 12"
26+00	Horiz. Lt.	2'-0	12"	#6 @ 7"



DOWNWARD VERTICAL



UPWARD VERTICAL



HORIZONTAL

GENERAL PROVISIONS

WATER MAIN ITEMS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, CONSTRUCTION AND MATERIAL SPECIFICATIONS, DATED JANUARY 1, 1985, AND MODIFIED BY THE CITY OF CINCINNATI SUPPLEMENT TO SAID STATE OF OHIO SPECIFICATIONS, EFFECTIVE JANUARY 1, 1985, AND ANY SUPPLEMENTS OR CHANGES THERETO.

WHEN CROSSING SANITARY AND COMBINATION SEWERS, A VERTICAL CLEARANCE OF 18 INCHES MUST BE MAINTAINED.

ALL BACKFILL TO BE METHOD "A" EXCEPT WHERE OTHERWISE NOTED.

NO PART OF ANY FIRE HYDRANT SETTING SHALL BE INSTALLED CLOSER THAN 5 FEET TO ANY DRIVEWAY, INLET, UTILITY POLE, OR GUY WIRE ANCHOR.

ALL VALVES TO BE PURCHASED FROM THE CINCINNATI WATER WORKS.

THE CINCINNATI WATER WORKS SHALL FURNISH ALL FERRULES. THE CONTRACTOR WILL BE RESPONSIBLE FOR THEIR PROPER INSTALLATION.

NO EXTRA PAYMENT WILL BE MADE FOR LEAD JOINTS.

COPIES OF THE STATE SPECIFICATIONS ARE ON FILE AT THE OFFICE OF CONTRACT SALES OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, 25 SOUTH FRONT STREET, COLUMBUS, OHIO, AND AT THE OFFICES OF THE CITY ENGINEER OF CINCINNATI, OHIO.

ALL INSTRUCTIONS SHALL BE WORKED THROUGH THE PROJECT ENGINEER. ALL WATER MAIN WORK SHALL BE DONE UNDER THE DIRECTION, SUPERVISION AND INSPECTION OF THE CINCINNATI WATER WORKS AND THE PROJECT ENGINEER.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR REMOVAL AND REPLACEMENT OF ANY POLES AND GUYS NECESSARY FOR THE INSTALLATION OF THE PROPOSED WATER MAINS, AND ANY COST CONNECTED THERETO SHALL BE HIS EXPENSE.

ALL PIPE AND SPECIALS SHALL BE IN ACCORDANCE WITH CITY OF CINCINNATI SPECIFICATION NO. 40-110-79.

ALL PROPOSED WATER MAINS WILL BE HYDROSTATICALLY TESTED FOR LEAKAGE IN ACCORD WITH 1101.054, 'HYDROSTATIC TEST FOR LEAKAGE,' OF ITEM 1101, "LAYING PIPE AND FITTINGS." THIS TEST WILL BE CONDUCTED BY THE CONTRACTOR.

THE CONTRACTOR IS RESPONSIBLE FOR ALL PIPE SEWERS DISTURBED IN THE COMPLETION OF THIS PROJECT. IN THE EVENT IT BECOMES NECESSARY TO REPAIR OR REPLACE EXISTING PIPE SEWERS, THE CONTRACTOR MUST NOTIFY SEWER MAINTENANCE, 352-4905, BEFORE PROCEEDING WITH THE WORK.

SPECIAL PROVISIONS

IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ADEQUATE WATER SUPPLY FOR DOMESTIC AND FIRE FIGHTING PURPOSES. IN ORDER TO ACCOMPLISH THE WATER MAIN CONNECTIONS WITH A MINIMUM AMOUNT OF INCONVENIENCE TO THE CONSUMERS, IT MAY BE NECESSARY TO DO THE WORK AT OTHER THAN NORMAL WORKING HOURS OR AS MAY BE SCHEDULED BY THE CINCINNATI WATER WORKS.

THE CONTRACTOR IS ADVISED THAT AS NOTED IN THE SUGGESTED BILL OF MATERIAL, DUAL PURPOSE SLEEVES ARE BEING PROPOSED FOR USE FOR THIS PROJECT. THE CONTRACTOR MUST DETERMINE IF THE EXISTING PIPE WILL ACCOMMODATE A DUAL PURPOSE SLEEVE. IN THE EVENT, A DUAL PURPOSE SLEEVE CANNOT BE USED, A POURED JOINT SLEEVE MUST BE USED. NO EXTRA PAYMENT WILL BE MADE TO THE CONTRACTOR FOR THE INSTALLATION OF THE POURED JOINT SLEEVE.

THE CONTRACTOR IS ADVISED THAT THE PROPOSED 18" STEEL CASING ACROSS CROSS COUNTY HIGHWAY ON SHEET 781 (8 OF 15) MAY BE INSTALLED IN CONJUNCTION WITH THE PROPOSED WATER MAIN INSTALLATIONS. THE CASINGS IN THESE AREAS WILL NOT BE REQUIRED TO BE INSTALLED BY THE BORING AND JACKING METHOD.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN AN ADEQUATE WATER SUPPLY FOR DOMESTIC AND FIRE FIGHTING PURPOSES AT ALL TIMES. IN THE EVENT IT BECOMES NECESSARY, THE CONTRACTOR WILL BE REQUIRED TO INSTALL TEMPORARY LINES TO RETAIN WATER SERVICE. NO EXTRA PAYMENT WILL BE MADE FOR THIS ITEM.

PARTICIPATION:
"E" FUNDS (2) HAM. CNTY. 12.5%
STATE ~~12.5%~~
~~FEDERAL 75.0%~~
HAMILTON CNTY.
100% PROJECT "E" FUNDS (2)

PARTICIPATION:
14.06 % - 100% HAM. CNTY
125% HAM. CNTY
85.94% (2) STATE ~~12.5%~~ ~~75.0% FEDERAL~~
GALBRAITH RD.
12" WATER MAIN STA. 5+75 - 10+49
85.94% - PROJECT
14.06% - HAMILTON CNTY
(2) "E" FUNDS

PARTICIPATION:
PROJECT CITY OF CINCINNATI (2) "E" 12.5% (1) ~~"R"~~ 5%
STATE ~~12.5%~~ ~~5%~~
~~FEDERAL~~ 75.0% 90%

PARTICIPATION:
PROJECT CITY OF READING (2) "E" 12.5%
STATE ~~12.5%~~
~~FEDERAL~~ 75.0%

ITEM NO.	100% PROJECT "E" FUNDS (2)	(2) "E" FUNDS	~~"E"~~ (2) FUNDS READING OHIO	~~"E"~~ (2) FUNDS CINCINNATI OHIO	~~"R"~~ (1) FUNDS CINCINNATI OHIO	~~"E"~~ (2) FUNDS 100 % PROJECT	TOTAL QUAN.	UNIT	DESCRIPTION	CINCINNATI SPEC NO.
Special	33	—	191	—	—	—	224	Lin.ft.	Furnishing & Laying 4" Ductile Iron Pipe & Fittings	1101
"	48	—	—	14	28	—	90	Lin.ft.	Furnishing & Laying 6" Ductile Iron Pipe & Fittings	1101
"	1814	—	—	—	—	119	1933	Lin.ft.	Furnishing & Laying 8" Ductile Iron Pipe & Fittings	1101
"	1644	473	—	—	—	—	2117	Lin.ft.	Furnishing & Laying 12" Ductile Iron Pipe & Fittings	1101
"	2	—	—	—	—	—	2	Each	Furnishing & Installing 6" Plug In Existing Water Main	1105
"	—	—	2	—	—	—	2	Each	Furnishing & Installing 4" Plug In Existing Water Main	1105
"	90	—	—	—	—	—	90	Lin.ft.	Furnishing & Installing 18" Steel Casing	1108
"	12	1	2	1	1	—	17	Cu.yd.	Concrete, Class "C"	1110
"	6	—	—	—	—	—	6	Each	8" Valve Chamber	1111
"	4	1	—	—	—	—	5	Each	12" Valve Chamber	1111
"	1	—	1	1	—	—	3	Each	*Furnish & Installing 6" Fire Hydrant Extensions (12" Long)	1115
"	—	—	—	2	—	—	2	Each	Hauling & Installing 6" Fire Hydrant	1112
"	5	—	1	2	—	—	8	Each	Relocating Existing Fire Hydrant	1113
"	3	—	—	—	—	—	3	Each	Remove Existing Fire Hydrant	1114
"	11	—	1	2	2	—	16	Each	Furnishing & Installing Valve Box Complete	1116
"	20	20	—	—	—	—	40	Cu.yd.	*Additional Excavation	1119
"	9	—	—	—	—	—	9	Cu.yd.	Filling Abandoned Water Works Chambers	1121
"	3	—	—	—	—	—	3	Each	Removing Existing Valve Box	1122
"	—	1	—	—	—	—	1	Each	Remove Existing M.H.C. & C.	1122
"	30	10	—	—	—	—	40	Lin.ft.	Changing Pipe Sewers 8" & Under	1123
"	30	10	—	—	—	—	40	Lin.ft.	Changing Pipe Sewers 10" thru 24"	1123
"	20	—	—	—	—	—	20	Lin.ft.	Hauling & Installing & Connecting 2" Copper Service Pipe	1126
"	20	—	—	—	40	—	60	Lin.ft.	Hauling & Installing & Connecting 1" Copper Service Pipe	1126
"	53	—	—	30	—	—	83	Lin.ft.	Hauling & Installing & Connecting 3/4" Copper Service Pipe	1126
"	6	—	—	—	16	—	22	Each	Disconnecting Existing 5/8" Service Branches	1130
"	2	—	2	5	—	—	10	Each	Disconnecting Existing 3/4" Service Branches	1130
"	—	—	—	—	1	—	1	Each	Disconnecting Existing 1" Service Branch	1130
"	—	—	2	—	—	—	2	Each	Disconnecting Existing 1 1/2" Service Branches	1130
"	4	—	—	1	1	—	6	Each	Hauling & Installing Curb & Roadway Boxes	1131
"	1	—	—	—	—	—	1	Each	Resetting Existing Curb & Roadway Boxes	1132
"	1	—	—	—	—	—	1	Each	Relocating Existing 1" Frost Proof Meter Setting	1134
"	—	—	—	—	—	—	—	Each	Relocating Existing 2" Frost Proof Meter Setting	1134
"	1	—	—	—	—	1	1	Each	Relocating Existing 6" Meter & Constructing Pit	1137
"	8	—	—	—	—	—	8	Each	Removing Existing Curb & Roadway Boxes	1138
509	1661	92	140	60	30	—	1983	Lbs.	Reinforcing Steel	509
SPECIAL	1	1	—	—	—	—	2	MFBM	* Sheeting & Bracing Ordered left In Place	626
601	15	—	—	—	—	—	15	Sq.yd.	Grouted Rip Rap	601
602	10	10	—	—	—	—	20	Cu.yd.	*Brick Masonry	602

* CONTINGENCY ITEM

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

774
787

HAM-75-993
HAM-126-13.00
HAMILTON COUNTY

CODE
(1) 95% State 5% Hamilton County
(2) 87.5% State 12.5% City or County

STATE CONTRACT

CROSS COUNTY HIGHWAY

800' W. OF VINE ST. TO KNOLLCREST DR.

PROPOSED 12" & 8" WATER MAIN

APPROVED:

STATE OF OHIO
JOSEPH R. ZISTLER
E-046969
REGISTERED PROFESSIONAL ENGINEER

SCALE: 1" = 50' HOR.
1" = 10' VER.

Joseph R. Zistler
SENIOR ENGINEER - DESIGN
Robert P. Bolsbe
SUPERVISING ENGINEER - SYSTEM FACILITIES
Wm. S. Flynn
CHIEF ENGINEER

CINCINNATI WATER WORKS
ENGINEERING DIVISION

FEBUARY 1986

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

775
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

END PROJECT
HAM-126-10.03
Sta. 502+64.57 WB

BEGIN PROJECT
HAM-126-13.00
Sta. 502+64.57 WB

U-1133(3) | U-1133(1)

END PROJECT HAM-126-10.03 Sta. 502+64.57 WB
BEGIN PROJECT HAM-126-13.00 Sta. 502+64.57 WB
F-2(3)

BEGIN WORK
HAM-75-9.93
HAM-126-13.00
I-75-1(84)10

END WORK
STA. 127+39

END PROJECT HAM-126-13.00
I-75-1(84)10

BEGIN PROJECT HAM-126-13.00
I-75-1(84)10

RESUME PROJECT HAM-126-13.00
I-75-1(84)10 | U-1133(1)

B. & O. R.R.

VINE ST.

DE CAMP AVE.

Station Equation S.T.

Station Equation S.T.

CARTHAGE FAIR GROUNDS

77TH ST.

SECTION RD.

SUMMIT ROAD

WOODBINE AVE.

ANTHONY WAYNE AVE.

PARKWAY AVE.

MYSTIC AVE.

AVALON

ORIENTONY

PENN-CENTRAL TRANSPORTATION CO.

GALBRAITH ROAD

MILL CREEK

DAWN

CROSSHILL AVE.

HARTLAND DR.

GLENORCHARD

DE DONAIRE DR.

GREENLAND

Bridge No. HAM-126-1328

Bridge No. HAM-126-1330

Bridge No. HAM-126-1335

Bridge No. HAM-126-1350

Bridge No. HAM-126-1376

Bridge No. HAM-126-1389

Bridge No. HAM-75-1010

℄ Ramp C

℄ Ramp D

℄ Ramp E

℄ Ramp F

℄ Ramp H

℄ Ramp I

℄ I-75 N.B.

℄ I-75 S.B.

℄ Ramp I

℄ Ramp D

℄ Ramp E

℄ I-75 N.B.

℄ I-75 S.B.

Exist. 36" RCP

Exist. 24" RCP

Exist. 18" RCP

Exist. 12" RCP

Exist. 8" RCP

Exist. 6" RCP

Exist. 15" RCP

Exist. 30" RCP

Exist. 42" RCP

Exist. 48" RCP

Exist. 54" RCP

Exist. 60" RCP

Exist. 66" RCP

Exist. 72" RCP

Exist. 78" RCP

Exist. 84" RCP

Exist. 90" RCP

Exist. 96" RCP

Exist. 102" RCP

Exist. 108" RCP

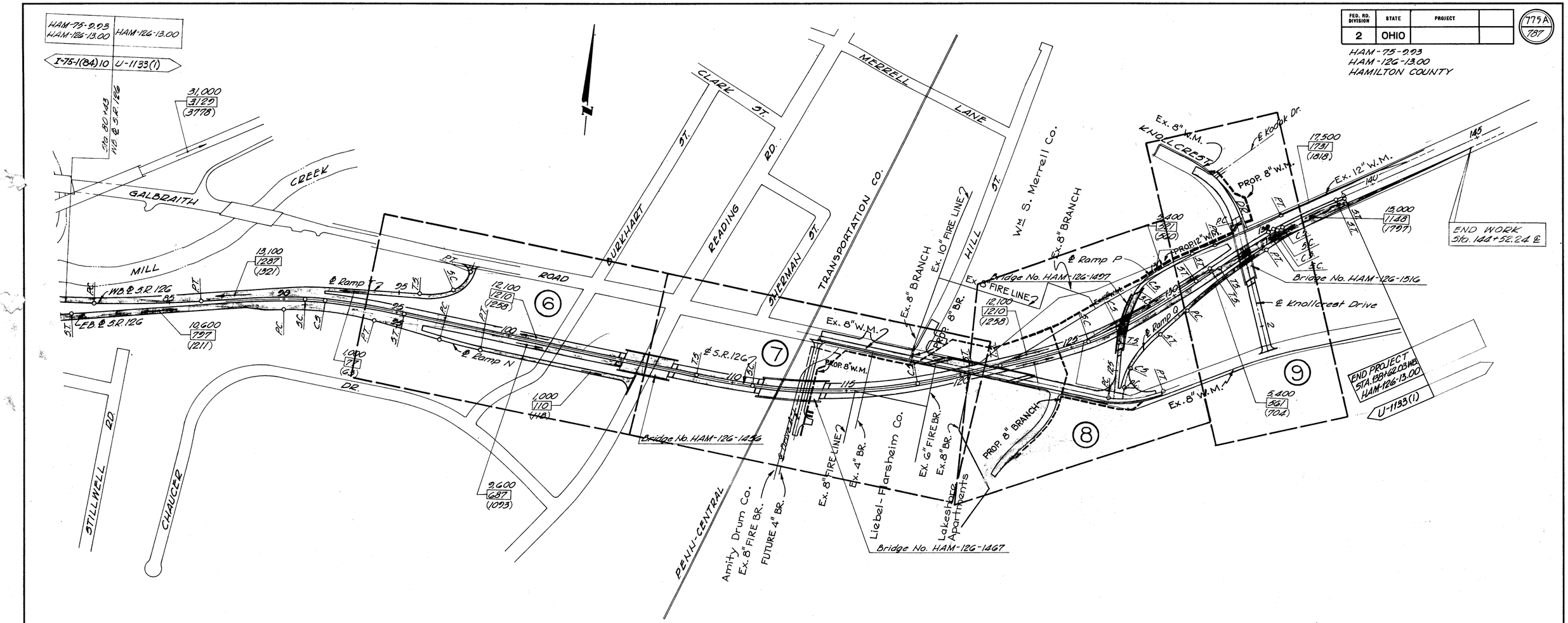
Exist. 114" RCP

Exist.

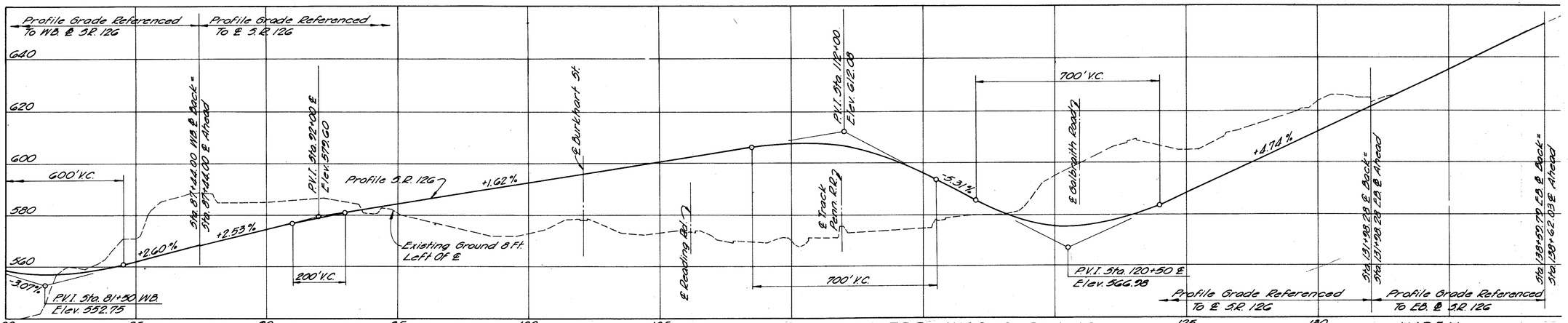
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

775A / 787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



Scale: 1" = 200'



WATER WORKS PLANS INDEX

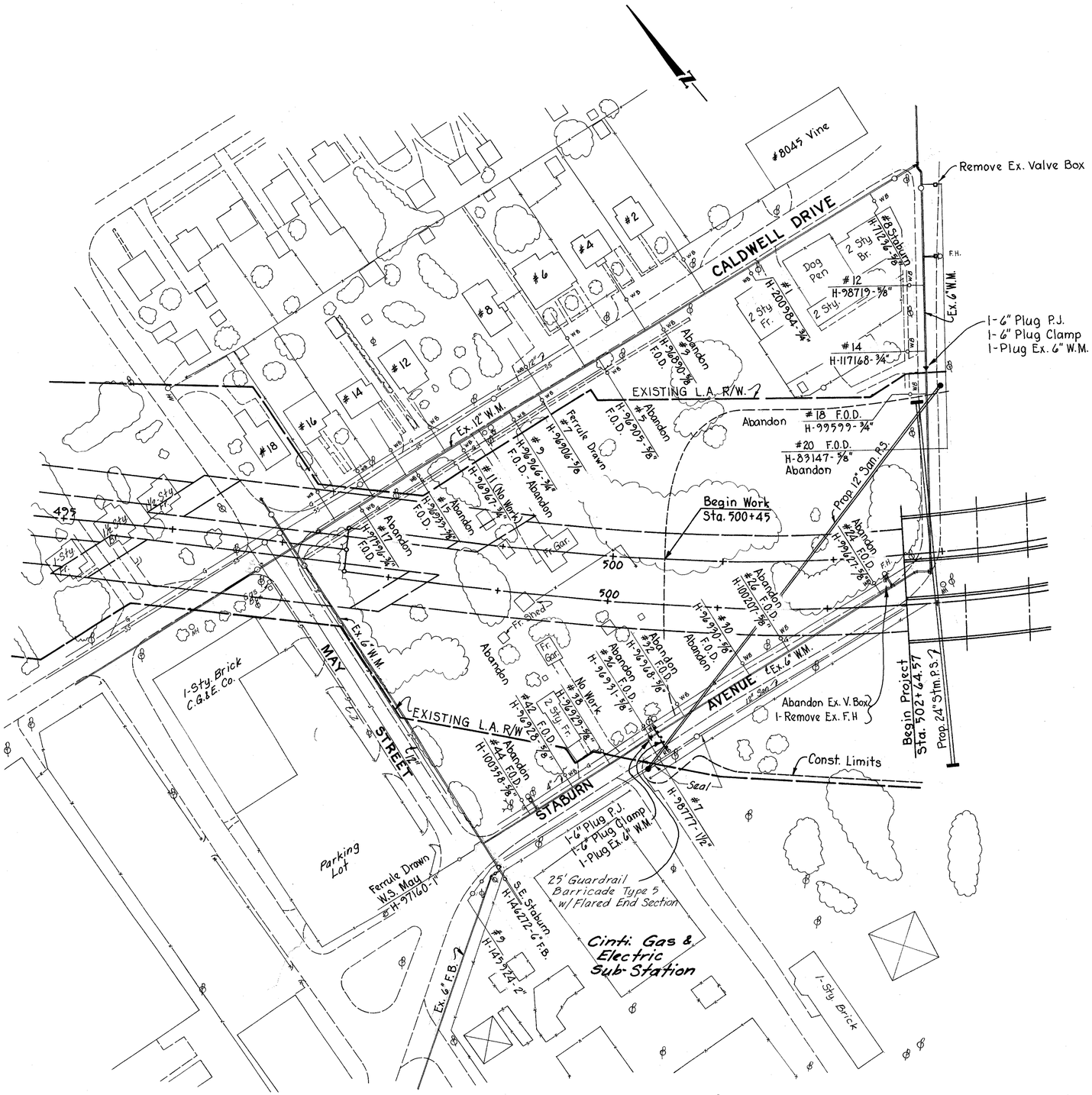
DRAWING No. D-871-G
SCALE: 1" = 200'
Sheet No. 2A of 15

2-24-71

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

776
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



PARTICIPATION: "F" FUNDS
FEDERAL -75.0%
STATE -12.5%
HAMILTON COUNTY -12.5%

THE FOLLOWING SERVICE BRANCHES ARE TO HAVE CURB OR ROADWAY BOX REMOVED:
CALDWELL DRIVE: #7 MAY STREET: W.S.
STABURN AVENUE: #18, #24, #26, #30, #32, #36

THE FOLLOWING SERVICE BRANCHES ARE TO BE DISCONNECTED:
CALDWELL DRIVE: #3, #5, #9, #15, #17
STABURN AVENUE: #20, #42, #44

8-DISCONNECT EX. 5/8" TO 1" SERVICE BRANCHES.
2-PLUG EX. 6" W.M.
1-REMOVE EX. VALVE BOX
8-REMOVE EX. CURB OR ROADWAY BOX

CALC. MK DATE 2-24-86
CHK'D. BEP DATE 3-10-86

WATER WORKS PLANS

CALDWELL DRIVE
MAY STREET
STABURN AVENUE

DRAWING NO. D-871-G
SCALE: 1" = 50'
SHEET NO. 3 OF 15

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

1-6" Solid Sleeve- D.P
2-6" 90° Bend-2 M.J.
1-6" Valve-C.J.
1-Valve Box Complete
1-6" Fire Hydrant (B.T.)

† Furnished by C.W.W.

PARTICIPATION "IR"-FUNDS
FEDERAL - 90%
STATE - 5%
CINCINNATI - 5%

Renew
#8053 H-72666-1"
40-Lin.ft. 1" Copper Service Pipe
1-1" Ferrule
1-1" Stop Cock
1-Curb Box
1-1"x1" Copper to Lead Coupling

THE FOLLOWING SERVICE BRANCHES ARE TO BE ABANDONED.

WOODBINE AVE.
#8035, #8036, #8039, #8040, #8043, #8044, #8048, #8052, #8053, #8061, #8064, #8065, #8066, #8067, #8068, #8070, #8071

THE FOLLOWING SERVICE BRANCHES ARE TO BE DISCONNECTED

ANTHONY WAYNE AVE.
#8037, #8041, #8043, #8047, #8053, #8057, #8061, #8065 (C.O.), #8067, #8069, #8071.

SCHICKS CT.
H-485 1" BRANCH

WOODBINE AVE.
#8030, #8073, #8077

AVALON ST.
#283, #285, #295

18-DISCONNECT EX. 5/8" TO 1" SERVICE BRANCHES

1-6" Solid Sleeve-D.P
1-6" 90° Bend-2 M.J.
1-6" Valve-C.J.
1-Valve Box Complete
1-6" Fire Hydrant (B.T.)

CALC. G.E.K DATE 11-23-71
CHK'D. E.L.B DATE 11-24-71

WATER WORKS PLANS

WOODBINE AVE.
ANTHONY WAYNE AVE.

Revised-10-18-85
Revised-1-23-77
Revised 5-6-75

DRAWING NO. D-871-G
SCALE: 1" = 50'
SHEET NO. 3A OF 15

FED. RD. DIVISION	STATE	PROJECT	
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HAM-75-3.93
HAM-126-13.00
HAMILTON COUNTY

PARTICIPATION : "F" FUNDS
FEDERAL —75.0%
STATE —12.5%
CINCINNATI-12.5%

GALBRAITH ROAD
ANTHONY WAYNE AVE.
PENNSYLVANIA R.R. (CCC & ST. LOUIS R.R.)
EXISTING RAMP
EXISTING RAMP
I-75 S.B.
I-75 N.B.
I-75 NB.
Traffic Control Box
Concrete Wall
Guardrail
Metal Beam Guardrail
Sign
Sign Bridge
Transmission Tower
Chain Link Fence
1 Sty. Conc. Blk.
The Borden Chemical Co. Ink Division
Gravel
Loading Dock
Conc.
Gate
Bit.
Bit.
Conc.
Conc. Wall
Guardrail
Metal Guardrail
Metal Guardrail
Mill Creek
Hot Found
Curve No. 1 E.D.
Curve No. 2 E.D.
Curve No. 3 E.D.
Curve No. 4 E.D.
Curve No. 5 E.D.
Curve No. 6 E.D.
Curve No. 7 E.D.
Curve No. 8 E.D.
Curve No. 9 E.D.
Curve No. 10 E.D.
Curve No.

FED. RD. DIVISION	STATE	PROJECT	
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HAM-126-13.00
HAMILTON COUNTY

I-75 N.B.
WEST FORK MILL CK.
GALBRAITH ROAD
EAST FORK MILL CREEK
LA-R/W
Curve No.8 N.B.
Curve No.9 E.B.
Curve No.1
W.B. & S.R. 126
E.B. & S.R. 126
E. Ramp N
DEBONAIR DRIVE
STILLWELL ROAD
DONZICH COURT
CHAUCER DRIVE
Chain Link Fence
Dip Rap
Bit.
Conc.
Abandon
Traffic Control Box
Not Found
Texaco Sign
Billboard
Paved Ditch
Gas Pumps
Wood Fence
Swimming Pool
Bit. Parking
Bit. Curb
Stone Wall
Gravel Parking
Ex. R/W
Begin 40:1 Taper
PC. 87°45'00" Rt.
PT. 86°30'78" Rt.
Sta. 87+44.00 W.B. & E.B.
Sta. 80+00.00 E.B.
Sta. 80+00.00 N.
Begin E. Ramp N
Exp. 18"
Ex. 8" W.M.
Ex. 6" W.M.
Ex. 12" W.M.
12" Storm
27" Storm
Ex. 24" Storm
Ex. 15" C.M.P.
Ex. 12" San.
Ex. 8" San.
Ex. 6" San.
Ex. 12" San.
Ex. 8" Gas
Ex. 12" Gas
Ex. 6" Gas
Ex. 2" Gas
Ex. 4" Gas
Ex. 8" Tel.
Ex. 12" Tel.
Ex. 4" Tel.
Ex. 6" Tel.
Ex. 8" Elec.
Ex. 12" Elec.
Ex. 4" Elec.
Ex. 6" Elec.
Ex. 8" Elec. Ser. Br.
Ex. 12" Elec. Ser. Br.
Ex. 4" Elec. Ser. Br.
Ex. 6" Elec. Ser. Br

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

GALBRAITH ROAD

(CITY READING) 2-Disconnect Ex. 1½" Service Branches

(CITY READING) 1-Disconnect Ex. 3/4" Service Branch

(CITY READING) 4-Disconnect Ex. 3/4" Service Branches

Std. Type 2-A Curb

(CITY READING)
1-4" Solid Sleeve - D.P.
1-4" 90° Bend - 2 M.J.
1-4" Valve - M.J.
1-Valve Box Complete
1-Relocate Ex. Fire Hydrant Head

End 40:1 Taper Sta. 21+75 T = Sta. 21+75 R & Begin R Ramp T

Sta. 95+30.18 T

T.S. 95+30.18 T

S.C. 97+40.18 T

Curve No. T-1

Ramp T 95T

Std. Type 7 Curb

Std. Type 8 Curb

℄ S.R. 126

Curve No. 1

Curve No. N-1

℄ Ramp N 95N

P.C. 96+97.24 N

Curve No. N-2

P.T. 98+91.07 N

Sta. 95+33.53 T

Sta. 95+33.53 R

Sta. 96+15.15 R

Sta. 105+92.09 ℄ Ramp N = Sta. 3+48.75 ℄ Reading Rd.

Abandon Ex. Ser. Br.

1-Disconnect Ex. 3/4" Ser. Br.

Relocate Tee Ridge Walls

Concrete Retaining Wall

Std. Type 7 Curb

Toe of Fill

Cable Retaining Wall

Metal Shed

Pool

1 Sty. Conc. Block #8109 Drake Motel

4 Sty. #8075 Carrousel Towers

2 M. Boxes

Lights On Ground

Conc. Curbs

Drive-In Banking

Air Cond.

Conc. Blk. Wall

Conc. Curb

Gas Pumps

Underground Gas Tanks

Oil Tank Below Conc. Blk. Wall

Stone Wall

Wood Fence

Screened Porch

Electric Outlet

Tele. Booth

Sign

Gravel

Bit. Parking

Bit. Curb

Conc. Curb

Conc. Retaining Wall

Stone Grill

Fence

Hedge

Tree

Stump

Manhole

Catch Basin

Inlet

Storm Manhole

Conc. Bit. Pavement

Bit. Pavement

Conc. Pavement

Gravel Pavement

Bit. Driveway

Conc. Driveway

Gravel Driveway

Bit. Curb

Conc. Curb

Conc. Gutter

Bit. Gutter

Conc. Bit. Gutter

Conc. Bit. Curb

Conc. Bit. Curb & Gutter

Conc. Bit. Curb & Gutter

Conc. Bit. Curb & Gutter

FED. RD. DIVISION	STATE	PROJECT	
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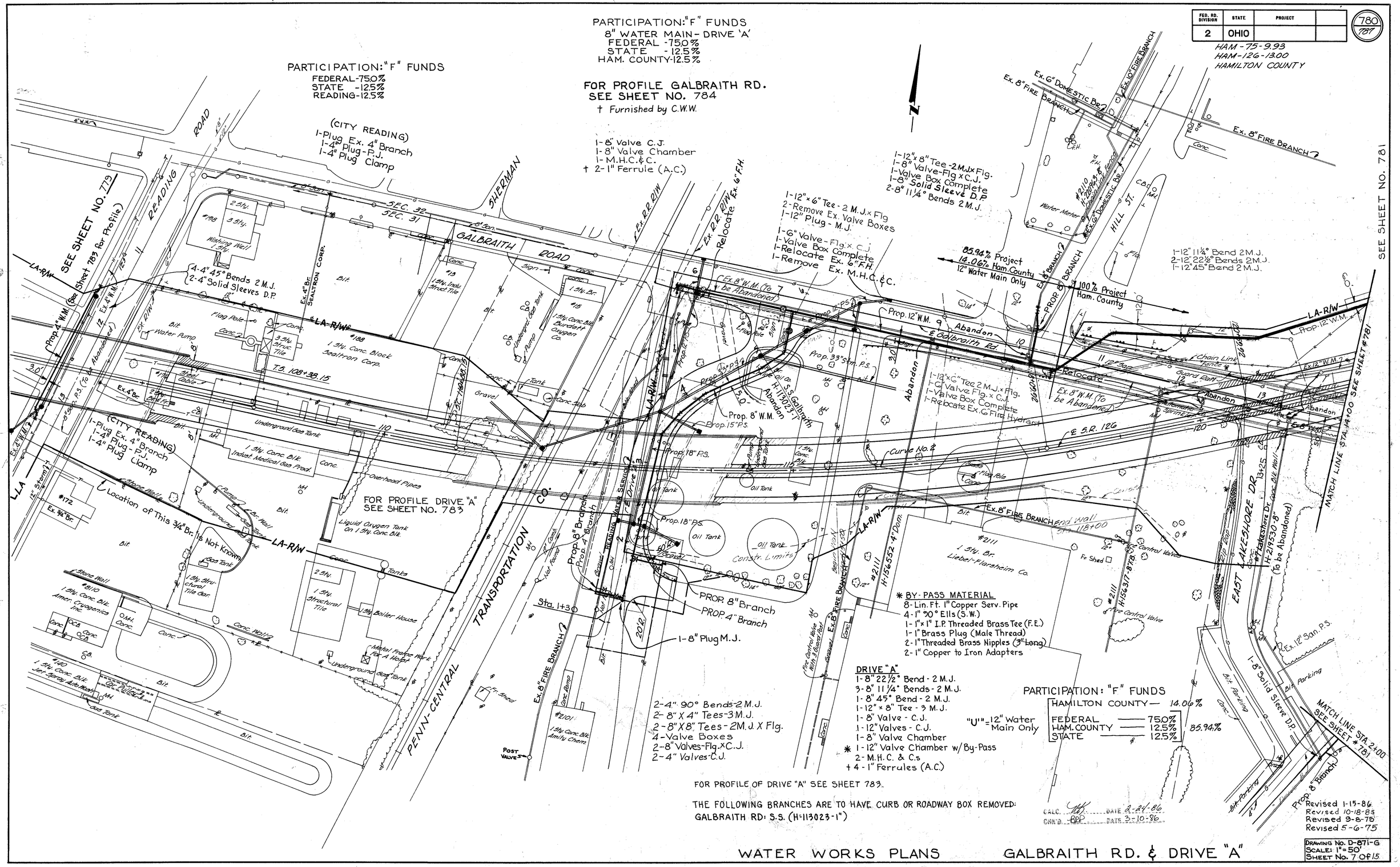
HAMILTON COUNTY

PARTICIPATION: "F" FUNDS
8" WATER MAIN - DRIVE 'A'
FEDERAL - 75.0%
STATE - 12.5%
HAM. COUNTY - 12.5%

PARTICIPATION: "F" FUNDS
FEDERAL - 75.0%
STATE - 12.5%
READING - 12.5%

FOR PROFILE GALBRAITH RD.
SEE SHEET NO. 784
† Furnished by C.W.W.



* BY-PASS MATERIAL
8-Lin. Ft. 1" Copper Serv. Pipe
4-1" 90° Ells (S.W.)
1-1" x 1" I.P. Threaded Brass Tee (F.E.)
1-1" Brass Plug (Male Thread)
2-1" Threaded Brass Nipples (3" Long)
2-1" Copper to Iron Adapters

DRIVE "A"
1-8" 22½° Bend - 2 M.J.
3-8" 11¼° Bends - 2 M.J.
1-8" 45° Bend - 2 M.J.
1-12" x 8" Tee - 3 M.J.
1-8" Valve - C.J.
1-12" Valves - C.J.
1-8" Valve Chamber
* 1-12" Valve Chamber w/ By-Pass
2-M.H.C. & C.s
+ 4-1" Ferrules (A.C.)

"U" = 12" Water Main Only

PARTICIPATION: "F" FUNDS

HAMILTON COUNTY	14.06%	
FEDERAL	75.0%	85.94%
HAM. COUNTY	12.5%	
STATE	12.5%	

FOR PROFILE OF DRIVE "A" SEE SHEET 783.

THE FOLLOWING BRANCHES ARE TO HAVE CURB OR ROADWAY BOX REMOVED:
GALBRAITH RD: S.S. (H=113023-1")

CALC. [illegible] DATE 2-24-86
CHK'D. BPP DATE 3-10-86

Revised 1-15-86
Revised 10-18-85
Revised 9-8-75
Revised 5-6-75

WATER WORKS PLANS GALBRAITH RD. & DRIVE "A"

DRAWING No. D-871-G
SCALE: 1" = 50'
SHEET No. 7 OF 15

FED. RD. DIVISION	STATE	PROJECT	
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HAM-126-13.00
HAMILTON COUNTY

SUGGESTED BILL OF MATERIAL

(Furnished By Contractor)

117 - 18' Lengths 12" Ductile Iron Pipe C.J. Th. Cl. 56
105 - 18' Lengths 8" Ductile Iron Pipe C.J. Th. Cl. 55
4 - 18' Lengths 6" Ductile Iron Pipe C.J. Th. Cl. 55
12 - 20' Lengths 4" Ductile Iron Pipe C.J. Th. Cl. 55
1 - Each 12" 45° Bend - 2 M.J.
2 - Each 12" 22½° Bend - 2 M.J.
2 - Each 12" 11¼° Bend - 2 M.J.
6 - Each 8" 45° Bend - 2 M.J.
3 - Each 8" 22½ Bend - 2 M.J.
7 - Each 8" 11¼° Bend - 2 M.J.
1 - Each 12" Offset Bend - M.J. x P.E. - 18" Drop
4 - Each 6" 90° Bend - 2 M.J.
2 - Each 6" Offset Bend - M.J. x P.E. - 18" Drop
3 - Each 4" 90° Bend - 2 M.J.
1 - Each 12" Plug - M.J.
1 - Each 8" Plug - M.J.
2 - Each 4" Plug -
2 - Each 4" Plug Clamp
1 - Each 12" x 8" Reducers - 2 P.E.
1 - Each 12" Solid Sleeves - M.J.
2 - Each 8" Solid Sleeve - M.J.
4 - Each 6" Solid Sleeves - D.P.
2 - Each 4" Solid Sleeve - D.P.
1 - Each 12" x 12" Tee - 3 M.J.
2 - Each 12" x 8" Tee - 3 M.J.
3 - Each 12" x 6" Tee - 3 M.J.
2 - Each 8" x 4" Tee - 3 M.J.
3 - Each 8" x 8" Tee - 3 M.J.
2 - Each 8" x 6" Tee - 3 M.J.
5 - Each 12" Valves - C.J.
6 - Each 8" Valves - C.J.
4 - Each 8" Valves - FLG. x C.J.
3 - Each 6" Valves - C.J.
2 - Each 4" Valves - C.J.
11 - Each M.H. C. & C.
8 - Each Valve Boxes Complete (Plas.)
2 - Each 12" x 8" Tee - 2 M.J. x FLG.
90 - Lin. Ft. 18" Steel Casing 5/16" Plate Thickness

4 - 4" 45° Bends 2 M.J.
2 - 6" Plugs P.J.
2 - 6" Plug Clamps
1 - 6" Solid Sleeve M.J.
1 - 8" x 6" Tee 2 M.J. x Flg.
2 - 12" x 6" Tees 2 M.J. x Flg.
3 - 6" Valves Flg. x C.J.
1 - 8" Valve M.J.
8 - Valve Boxes (Iron)
2 - Each 6" Fire hydrant, B.T. (furn. by C.F.D.)
2 - Each 8" Solid sleeve D.P.
1 - Each 4" Valve M.J.
3 - Each 6" Valve M.J.

129 - Each 30" Wide Polyethylene Flattened Tube, 8 Mil Thickness, 20' Length
116 - Each 24" Wide Polyethylene Flattened Tube, 8 Mil. Thickness, 20' Length
5 - Each 20" Wide Polyethylene Flattened Tube, 8 Mil. Thickness, 20' Length
14 - Each 16" Wide Polyethylene Flattened Tube, 8 Mil. Thickness, 20' Length
31 - Each 1½" Wide Polyethylene Tape with Adhesive, 100' Roll

The above list is a suggested bill of material necessary to perform the water main and branch relocation work as proposed on the drawings. The contractor shall furnish additional material where needed. No allowance will be made for unused material nor will any extra payment be made for additional specials required to complete the water main work. The contractor is responsible for making his own field measurement before ordering material.

SERVICE BRANCH MATERIAL (FURNISHED BY C.W.W.)

20 - Lin. ft. 2" Copper Service Pipe

8'x2=16 76 - 76 - Lin. ft. 1" Copper Service Pipe
89 - Lin. ft. 3/4" Copper Service Pipe
1 - Each 2" Ferrule
3x3=9 24 - 24 - Each 1" Ferrules
10 - Each 3/4" Ferrules

2 - Each 1" Stop Cocks
5 - Each 3/4" Stop Cocks
1 - Each 1" x 1" Copper to Lead Coupling

1 - Each 2" x 2" Copper to Copper Coupling
5 - Each 3/4" x 3/4" Copper to Copper Coupling
5 - Each Curb Boxes
1 - Each 8" x 2" Service Saddle
1 - Each Roadway Box

4x2=8 20 - 20 - Each 1" 90° Ells (Sweat fitting)
1x2=2 5 - 5 - Each 1" x 1" Brass Tee (I.P. threads, female ends)
1x2=2 5 - 5 - Each 1" Brass Plugs (male threads)
2x2=4 10 - 10 - Each 1" Threaded Brass nipples, 3" long
2x2=4 10 - 10 - Each 1" Copper to Iron adapters

2 - Remove ex. fire hydrants

1 - 12" x 8" tee 2 M.J. x Flg.
1 - 8" Valve Flg. x C.J.
1 - 8" 45° bend 2 M.J.
1 - 8" Solid sleeve M.J.
1 - Valve box complete (iron)

#2292 H-1288923-3/4" NO WORK
#2288 H-1181244-3/4" NO WORK
#2284 H-1282218-3/4" F.O.D. Abandon ex. curb box
#2280 H-1452290-3/4" F.O.D. 4-24-85 Abandon ex. curb box
#2264 H-1266688-3/4" F.O.D. 8-2-79 Abandon ex. curb box
#2232 H-1264484-3/4" F.O.D. Abandon ex. curb box
#2301 H-1609998-3/4" NO WORK
#2297 H-1613774-3/4" NO WORK

1 - Relocate ex. 6" fire hydrant
1 - Fill and abandon ex. valve box
1 - Fill and abandon ex. valve chamber

2 - 8" 45° bends 2 M.J.
1 - 8" Solid sleeve M.J.
1 - 8" x 6" tee 2 M.J. x Flg.
1 - 6" Valve Flg. x C.J.
1 - Valve box complete (iron)
1 - 6" fire hydrant extension, 12" long

#2285 H-1301645-3/4"
17 - lin. ft. 3/4" copper service pipe
1 - 3/4" Ferrule
1 - 3/4" stop cock
1 - 3/4" x 3/4" copper to copper coupling
1 - Curb box

#2281 H-1465094-3/4"
13 - lin. ft. 3/4" copper service pipe
1 - 3/4" ferrule
1 - 3/4" stop cock
1 - 3/4" x 3/4" copper to copper coupling
1 - Roadway box

#2277 H-1127775-3/4"
13 - lin. ft. 3/4" copper service pipe
1 - 3/4" ferrule
1 - 3/4" x 3/4" copper to copper coupling
1 - Curb box

#2265 H-1338876-3/4"
10 - lin. ft. 3/4" copper service pipe
1 - 3/4" ferrule
1 - 3/4" stop cock
1 - Curb box

1 - 8"x6" tee 3 M.J.
1 - 6" Valve C.J.
1 - 6" 90° bend 2 M.J.
1 - Valve box complete (iron)

#2249 H-1439419-3/4"

1 - Relocate ex. 6" fire hydrant
3 - 8" Valve chambers
1 - Fill and abandon ex. valve box

1 - 8" x 8" tee 3 M.J.
3 - 8" valves C.J.
3 - M.H. C. & C.
6 - 1" ferrules (A.C.)

2 - 12" Valve Chambers w/ By-Pass
1 - 8" Valve Chamber
2 - 12" Valves C.J.
1 - 8" Valve C.J.
3 - M.H.C. & C.
6 - 1" Ferrules (A.C.)
16 - Lin. Ft. Copper Service Pipe
8 - 1" x 1" Ells (S.W.)
2 - 1" Brass Threaded Brass Tees (F.E.)
2 - 1" Brass Plugs (Male Thread)
4 - 1" Threaded Brass Nipples (3" long)
4 - 1" Copper to Iron Adapters

2 - 8" 22½° Bends 2 M.J.
1 - 12" 11¼° Bend 2 M.J.
1 - 12" x 8" Tee 3 M.J.

MATCH LINE STA. 130+00 SEE SHEET # 782
MATCH LINE STA. 14+00 SEE SHEET 780
MATCH LINE STA. 24+00 SEE SHEET # 780

FOR PROFILE SEE SHEET 784

HAMILTON COUNTY
PARTICIPATION: "F" FUNDS
FEDERAL: — 75.0%
STATE: — 12.5%
COUNTY — 12.5%

CALC. J.E.K. DATE 11-22-71
CHK'D. E.L.B. DATE 11-24-71
CALC. GPD DATE 3-10-86
CHK'D. BBP DATE 3-10-86

Revised 2-27-86
Revised 1-15-86
Revised 10-18-85
Revised 1-25-77
Revised 3-8-75
Revised 5-6-75

RAMP P
RAMP Q
GALBRAITH ROAD
DRIVE 'B'

DRAWING No. D-871-G
SCALE: 1"=50'
SHEET No. 8 OF 15

BILL OF MATERIAL & WATER WORKS PLANS

FED. RD. DIVISION	STATE	PROJECT	
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HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

11 Knollcrest Dr.
H-226449

† 15-Lin.ft. 1½" Copper Service Dr.
1-Relocate Ex. 1½" Frost-Proof Meter Setting

#360
1 Sty. Br.
SBC Data Processing Center

Sta. 138+62.03 WB & Bk. =
S.T. 138+50.79 EB. & Bk. =
Sta. 138+62.03 & Ah.
End Conc. Median
S.T. 138+26.03

END PROJECT
STA. 138+62.03 WB
HAM-126-13.00

U-1133(11)

#14 Knollcrest Dr. H-229939-2" Branch
20-Lin.ft. 2" Copper Service
1-2" Ferrule Saddle
1-2" Stop Ex. 2" Frost-Proof Copper Coupling
†1-Relocate Ex. 2" Copper to
†1-2"x2" Copper Adapter

2 Sty. Br.
Eastman Kodak
Marketing Center

Transformer

KODAK DRIVE

Bit. Parking

#14
H-229939
Ex. 2" Branch

6"x6" Tee-3 M.J.
1-6" 90° Bend-2 M.J.
1-6" Valve Box Comp. F.H.
1-Valve Ex. 6"
1-Relocate Ex. 6" F.H.

McLEAN DRIVE

Wood Crib Wall (Bit.)

Ex. 12" W.M.

28" Storm

Curve No. 9 Lt.

Curve No. 10 Lt.

12" Storm

18" Storm

1+00

Ramp P

1-12"x12" Solid Sleeve-M.J.
1-12" 11¼° Bend-2 M.J.

LA-R/W

Fill & Abandon Ex. Water Works Chamber

PROP. 8" W.M.

R/W

Abandon

0+00

Ex. 8" W.M.

Ramp Q

Ex. 8" W.M.

#10
H-218791
Ex. 1½" Br.
1 Sty. Conc. Blk.
Ackerman Instr. Inc.
& Sherwin-Rebock Inc.

Close Ex. Curb Box

#2
H-222058
Ex. 1" Br.
1 Sty. Conc. Blk.
Allstates Design
& Development Co.

Light Fixtures

Ex. R/W

Bit. Parking

#19 Knollcrest Dr. H-219664-1"
20-Lin.ft. 1" Copper Service Pipe
†3-1" Ferrule
1-1" Stop Cock
1-Relocate Ex. 1" Frost-Proof Meter Setting

1-12" Valve-C.J.
1-12"x12" Valve Chamber w/By-Pass
2-1" Ferrules (A.C.)
1-M.H.C.&C.

1-Remove Ex. 6" F.H.

P.C. 132+64.00

Honeywell Inc.
#19
H-219664
Ex. 1" Br.
18" Storm

Fill & Abandon Ex. Water Works Chamber

PROP. 12" W.M.

Ex. 12" W.M.

P.T. 131+15.53

P.C. 130+13.00 Q

Abandon Ex. 12" W.M.

Ex. R/W

Ex. 8" W.M.

Bit. Parking

#15
1 Sty. Stone
Buick Motor Div.
G.M. Corp.

H-226208
Ex. 2" Branch

Bit. Parking

Ex. 8" W.M.

Ex. R/W

Bit. Parking

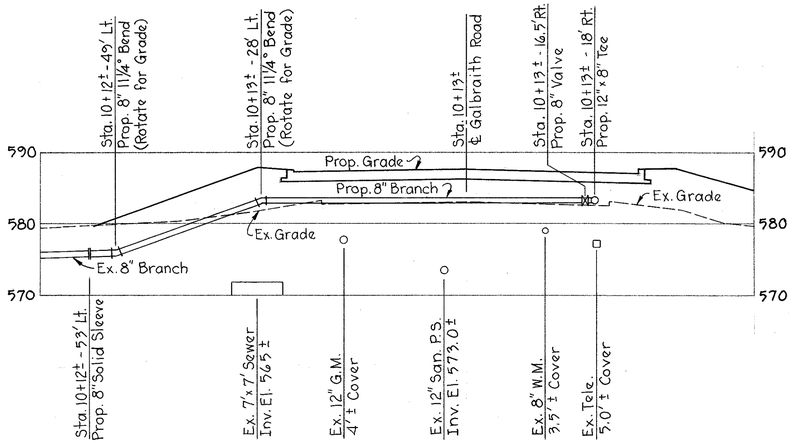
Bit. Parking

Bit. Parking

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

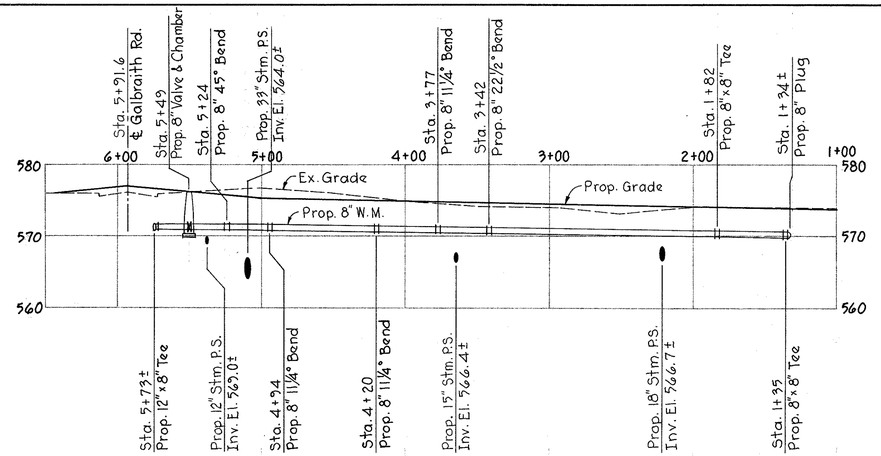
783
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



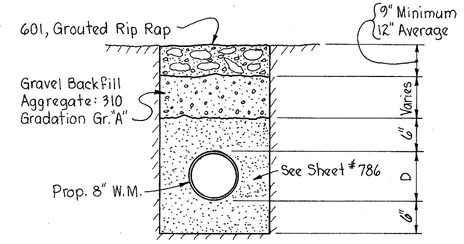
SECTION - GALBRAITH ROAD - 10+13±

(See Plan Sheet 780)



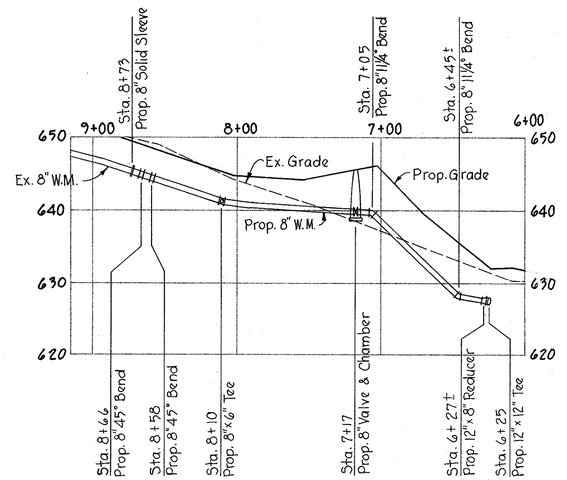
DRIVE "A"

(See Plan Sheet 780)



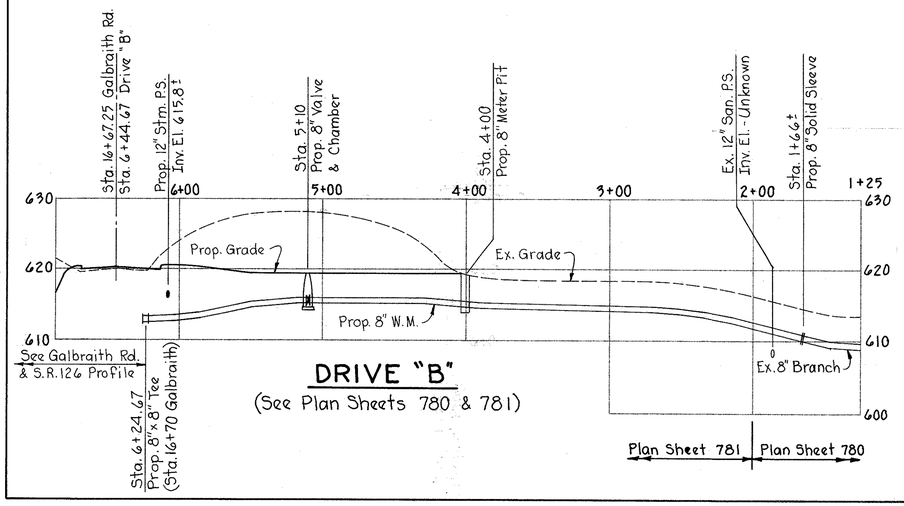
GROUTED RIP RAP DETAIL

(See Profile Sheet 784)



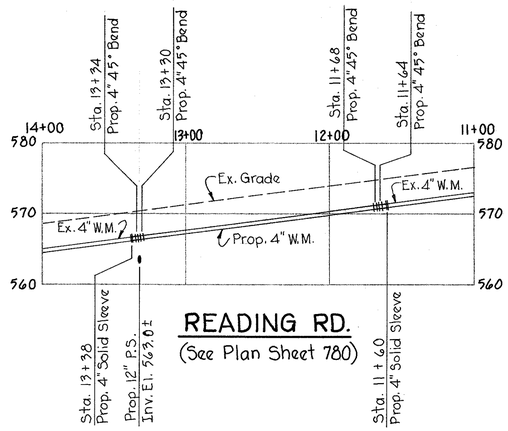
KNOLLCREST DRIVE

(See Plan Sheet 782)



DRIVE "B"

(See Plan Sheets 780 & 781)



READING RD.

(See Plan Sheet 780)

CALC. ____ DATE 2-26-86
CHK'D ____ DATE 3-10-86

Revised: 2-21-86

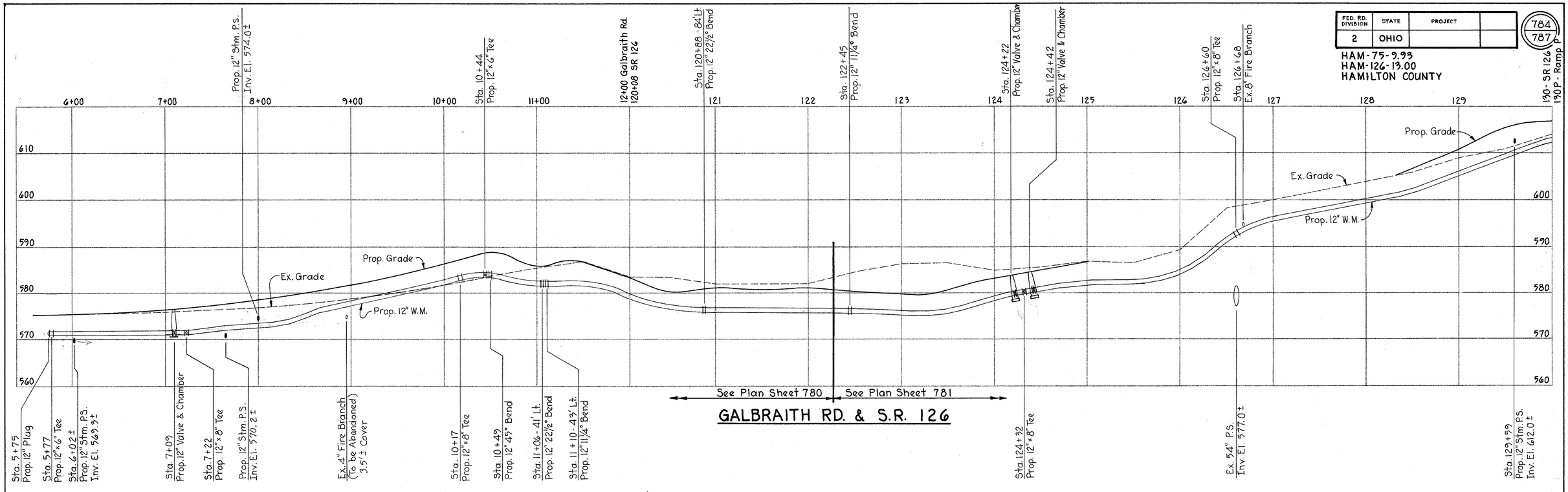
DRAWING NO.: D-871-G
SCALE: 1"=50' HOR. & 10' VER.
SHEET NO.: 10 OF 15

WATER WORKS PLANS - PROFILES

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

784
787
190-SR 126
190P-Ramp P

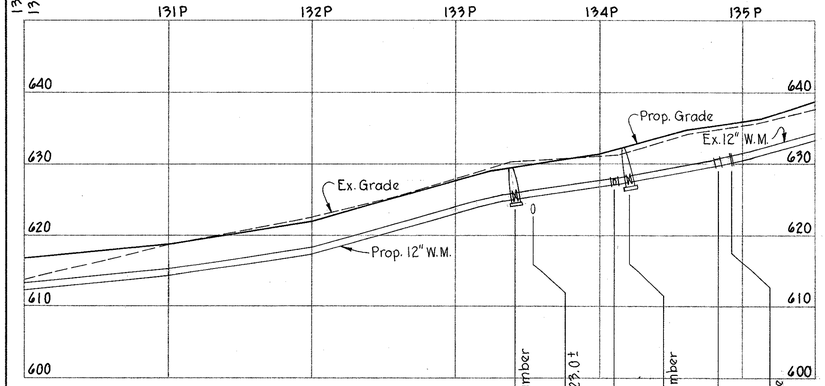
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY



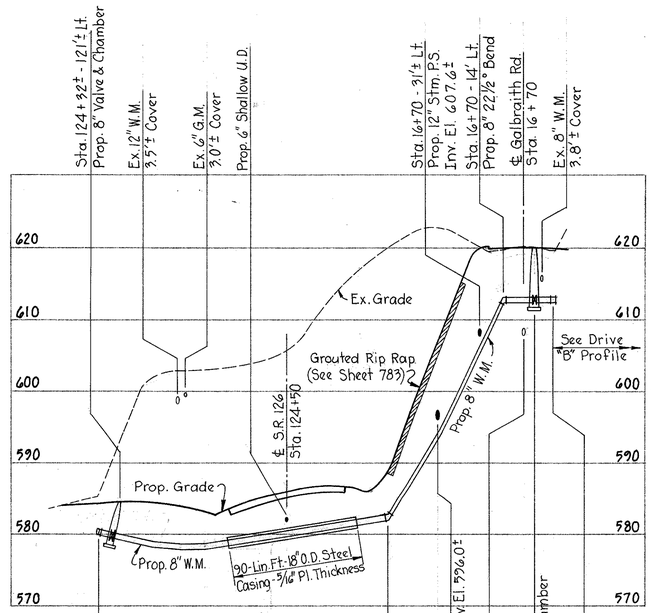
GALBRAITH RD. & S.R. 126

CALC. _____ DATE 2-14-86
CHK'D. BRP DATE 3-10-86

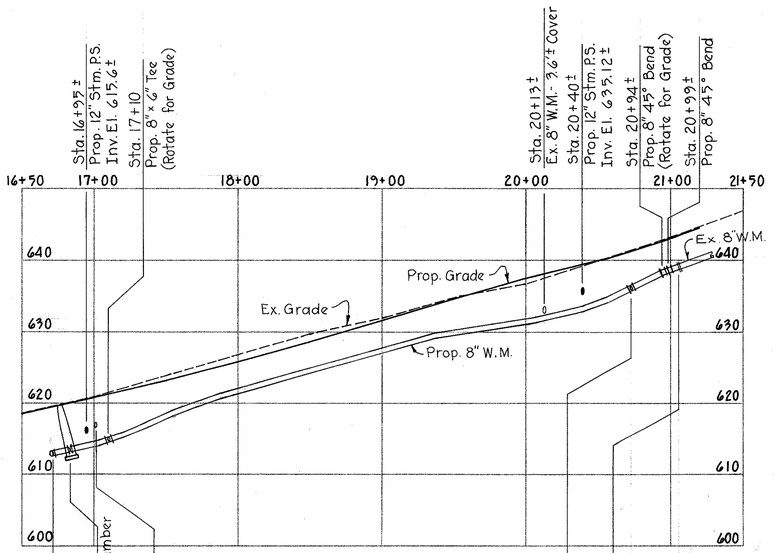
130-SR126
130P-Ramp P



RAMP "P"
(See Plan Sheet 782)



GALBRAITH RD. & S.R. 126
(See Plan Sheet 781)



GALBRAITH RD.
(See Plan Sheet 781)

REVISED: 2-14-86
DRAWING NO. D-871-G
SCALE 1"=50' Hor. & 10' Ver.
SHEET NO. 11 OF 15

WATER WORKS PLANS - PROFILES

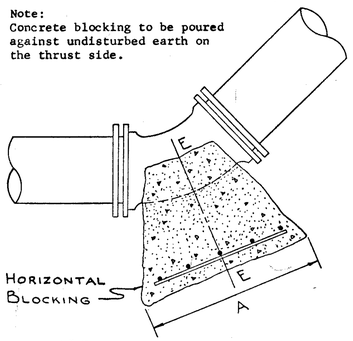
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

785
787

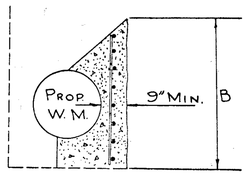
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

Note:
Pressure ranges, as shown, are operating pressures. Concrete and steel quantities are calculated using operating pressure plus 50 p.s.i.

Note:
Concrete blocking to be poured against undisturbed earth on the thrust side.



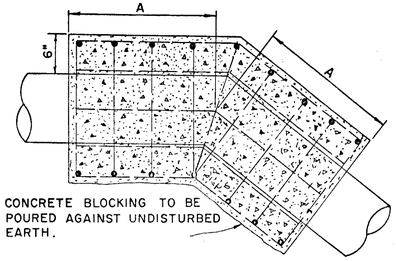
3/4" REINFORCING BARS TO BE PLACED ON THRUST SIDE 6" O.C.



HORIZONTAL SECTION E-E

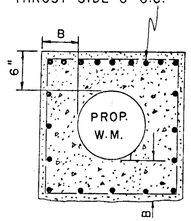
SIZE	DEGREE BEND	125 TO 200 P.S.I. A	B	CU.YDS. CONC.	LBS. STEEL
4	11 1/4	1'6"	1'6"	0.1	14
	22 1/2	1'6"	1'6"	0.1	14
	45	1'6"	1'6"	0.1	14
6	11 1/4	1'6"	1'6"	0.1	14
	22 1/2	1'6"	1'6"	0.1	14
	45	2'0"	1'6"	0.1	16
8	11 1/4	1'6"	1'9"	0.1	17
	22 1/2	1'6"	1'9"	0.1	17
	45	2'6"	2'0"	0.2	24
12	11 1/4	1'6"	2'0"	0.2	18
	22 1/2	2'6"	2'6"	0.3	30
	45	3'6"	3'6"	0.6	63

TYPICAL BLOCKING DETAIL
CAST IRON BENDS
HORIZONTAL



CONCRETE BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH.

ALL BARS 3/4" ϕ 12" O.C. EXCEPT LONG BARS ON THRUST SIDE 6" O.C.

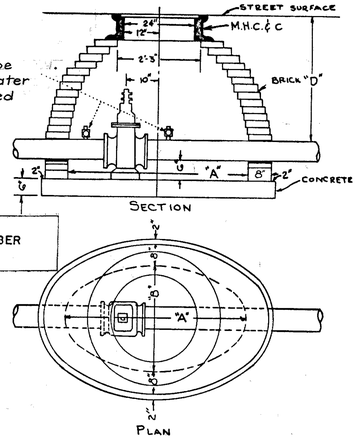


NOTE:
PRESSURE RANGES AS SHOWN ARE OPERATING PRESSURES. CONCRETE AND STEEL QUANTITIES ARE CALCULATED USING OPERATING PRESSURE PLUS 50 P.S.I.

SIZE	DEGREE BEND	125 TO 200 P.S.I. A	B	CU.YDS. CONC.	LBS. STEEL
4	11 1/4	1'0"	0'9"	0.2	36
	22 1/2	1'6"	0'9"	0.3	55
	45	2'0"	1'0"	0.7	100
6	11 1/4	1'6"	0'9"	0.4	67
	22 1/2	2'0"	0'9"	0.5	89
	45	3'0"	1'0"	1.1	174
8	11 1/4	1'6"	0'9"	0.5	79
	22 1/2	2'6"	1'0"	1.1	150
	45	5'0"	1'0"	2.1	300
12	11 1/4	2'0"	0'9"	0.8	119
	22 1/2	4'0"	1'0"	2.1	240
	45	9'0"	1'0"	4.7	605

TYPICAL BLOCKING DETAIL
CAST IRON BENDS
TOP VERTICAL

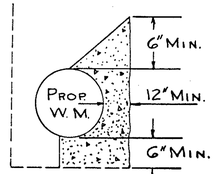
1" Ferrules to be Furnished by Water Works & Installed by Contractor.



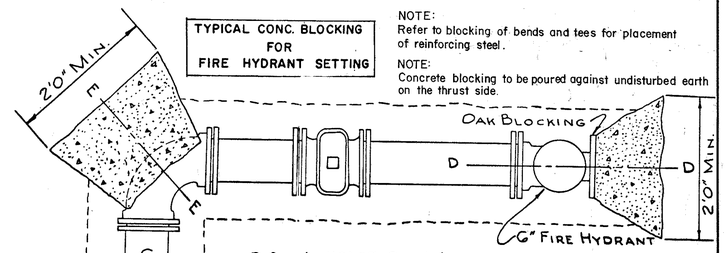
VALVE CHAMBER
4" TO 12"

SIZE OF VALVE	A	B	D	Conc. CU YDS	Brick CU YDS
4"-6"-8"	5'-0"	5'-0"	5'-0"	0.5	1.3
10"-12"	5'-0"	4'-0"	5'-0"	0.6	1.6

SPECIAL REQUIREMENTS
1. WHERE THE DIMENSIONS INDICATED WILL NOT PERMIT THE BLOCKING TO BEAR AGAINST UNDISTURBED EARTH, WATER MAIN SHALL BE ENCASED AS SHOWN ON CITY OF CINCINNATI STANDARD DRAWING FOR TOP AND BOTTOM VERTICLE BENDS, FULL ENCASEMENT, SHALL APPLY.
2. WHERE THE DISTANCE BETWEEN CONCRETE BLOCKING FOR A TOP VERTICLE BEND AND BLOCKING FOR A BOTTOM VERTICLE BEND IS LESS THAN 3 FEET APART, CITY OF CINCINNATI STANDARD DRAWING FOR TOP AND BOTTOM VERTICLE BENDS, FULL ENCASEMENT, SHALL APPLY.



TYPICAL CONC. BLOCKING FOR FIRE HYDRANT SETTING



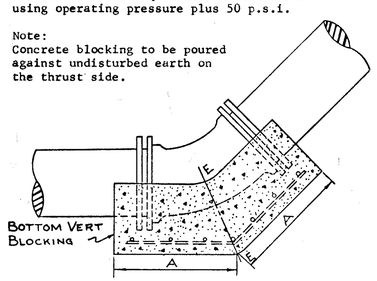
NOTE:
Refer to blocking of bends and tees for placement of reinforcing steel.

NOTE:
Concrete blocking to be poured against undisturbed earth on the thrust side.

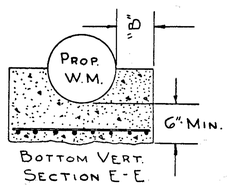
Refer to 1101.05 Special Construction for Restraining Fittings

Note:
Pressure ranges as shown are operating pressures. Concrete and steel quantities are calculated using operating pressure plus 50 p.s.i.

Note:
Concrete blocking to be poured against undisturbed earth on the thrust side.

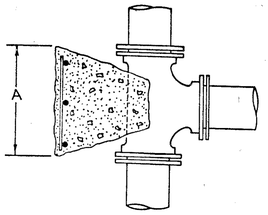


3/4" REINFORCING BARS TO BE PLACED ON THRUST SIDE 6" O.C.

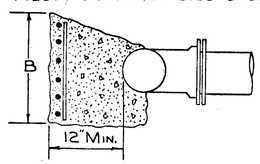


SIZE	DEGREE BEND	125 TO 200 P.S.I. A	B	CU.YDS. CONC.	LBS. STEEL
4	11 1/4	1'0"	0'6"	0.1	15
	22 1/2	1'0"	0'6"	0.1	15
	45	1'0"	0'6"	0.1	15
6	11 1/4	1'0"	0'6"	0.1	16
	22 1/2	1'0"	0'6"	0.1	16
	45	1'0"	0'6"	0.1	16
8	11 1/4	1'-0"	0'-6"	0.1	20
	22 1/2	1'-0"	0'-6"	0.1	20
	45	1'-6"	0'-6"	0.2	30
12	11 1/4	1'0"	0'6"	0.2	22
	22 1/2	1'6"	0'6"	0.3	31
	45	3'0"	0'6"	0.5	58

TYPICAL BLOCKING DETAIL
CAST IRON BENDS
BOTTOM VERTICAL



CONC. BLOCK TO BE POURED AGAINST SOLID GROUND.
3/4" Reinforcing Bars To Be Placed on Thrust Side 6" O.C.



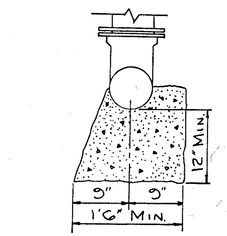
SIZE RUN	SIZE BRANCH	125 TO 200 P.S.I. A	B	CU.YDS. CONC.	LBS. STEEL
6	6	2'0"	2'0"	0.2	30
8	6	2'0"	2'0"	0.2	30
12	6	2'0"	2'0"	0.2	30
8	8	3'-0"	2'-3"	0.2	32
10	8	3'-0"	2'-3"	0.2	32
12	8	3'-0"	2'-3"	0.3	32
12	12	4'6"	3'6"	0.7	95

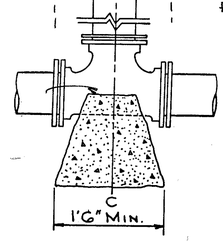
TYPICAL BLOCKING DETAIL
CAST IRON TEES

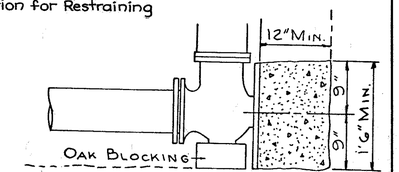
Note:
Pressure ranges as shown are operating pressures. Concrete and steel quantities are calculated using operating pressure plus 50 p.s.i.
Note:
Concrete blocking to be poured against undisturbed earth on the thrust side.

SPECIAL REQUIREMENTS
1. WHERE THE DISTANCE BETWEEN CONCRETE BLOCKING FOR A TOP VERTICAL BEND AND BLOCKING FOR A BOTTOM VERTICAL BEND IS LESS THAN 3 FEET APART, CITY OF CINCINNATI STANDARD DRAWING FOR TOP AND BOTTOM VERTICLE BENDS, FULL ENCASEMENT, SHALL APPLY.

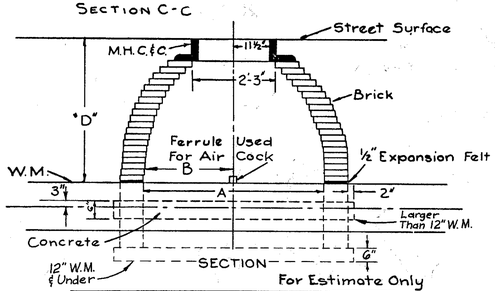
CALC. D.E.K. DATE 11-22-71
CHK'D. E.L.G. DATE 11-24-71

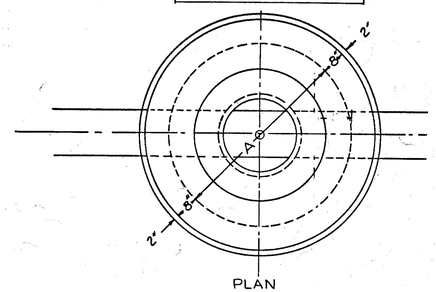






AIR COCK CHAMBER





SIZE of WATER MAIN	Size of Ferrule	A	B	D	Cu. Yds Conc.	Cu. Yds. Brick
12" & Under	1"	5'-0"	2'-6"	3'-6"	0.6	1.6
Larger than 12"	1½" to 2"	5'-0"	2'-6"	4'-0"	0.6	1.4

WATER WORKS PLANS

STANDARDS

Revised 10-21-85
Revised 5-6-75

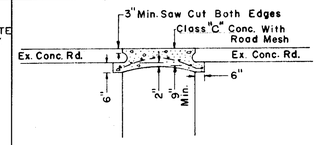
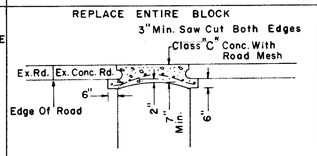
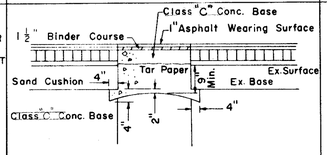
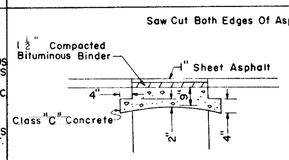
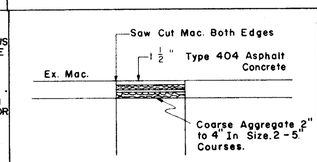
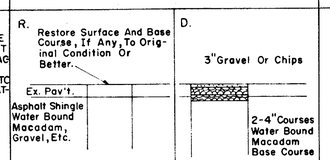
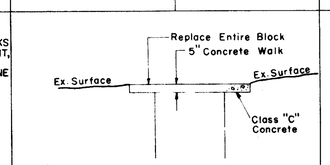
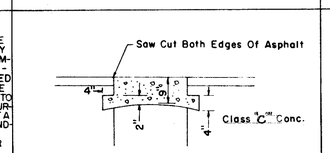
DRAWING No. D-871-G
SCALE: 1"=50'
SHEET No. 12 OF 15

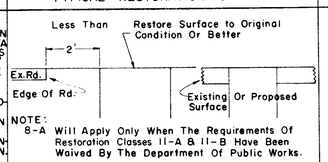
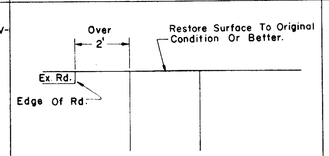
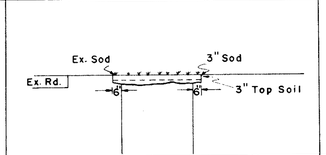
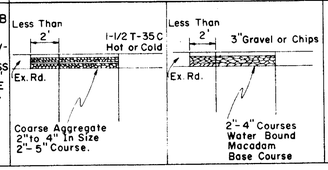
FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

786
787

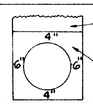
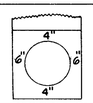
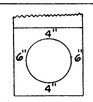
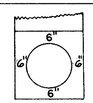
HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

TYPICAL RESTORATION SECTIONS WITHIN CINCINNATI CORP LIMITS- SURFACE RESTORATION REQUIREMENTS

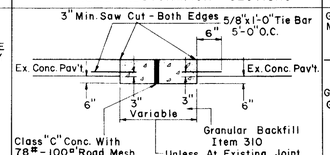
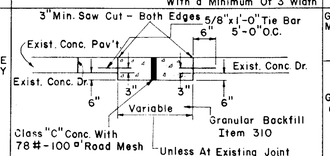
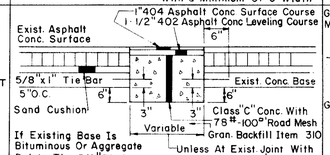
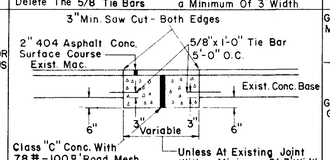
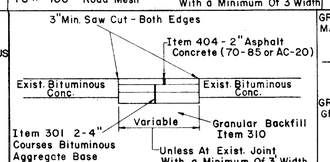
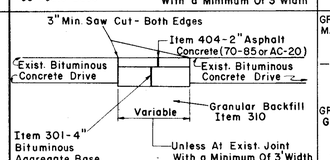
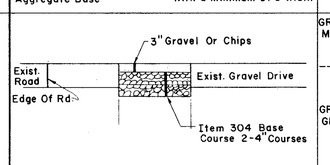
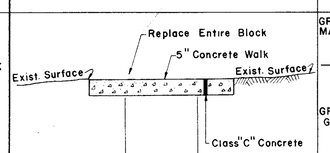
Restoration Class	TYPICAL RESTORATION SECTIONS	Backfill
I-R CONCRETE ROADWAY		A
I-D CONCRETE DRIVE		A
2 BRICK OR BLOCK PAVEMENT		A
3 ASPHALT OR OTHER BITUMINOUS PAVEMENTS ON CONCRETE ETC. BASE OR MACHINE PAVED BITUMINOUS PAVEMENT.		A
4-R BITUMINOUS ON STONE BASE OR SURFACE TREATED OR OILED MACADAM STREET OR DRIVE.		A
5-R LOW TYPE PAVEMENT PLAIN MACADAM, GRAVEL ETC NOT TREATED OR OILED. 5-D GRAVEL SURFACE DRIVE		A
6 SIDEWALKS OF CEMENT, BRICK, FLAGSTONE ETC.		A
7 CONCRETE BASE ONLY OR ANY SIMILAR MATERIAL USED AS A BASE INCIDENT TO THE RESURFACING OF A STEET UNDER CONTRACT OR BY CITY FORCES.		A

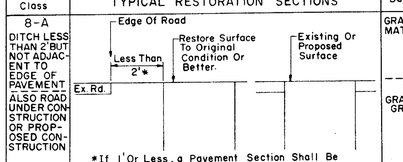
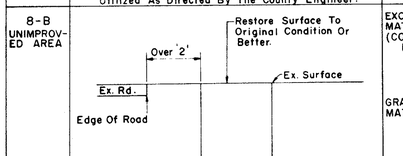
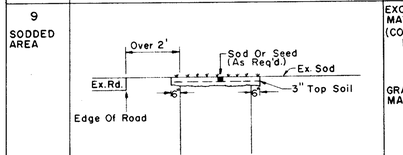
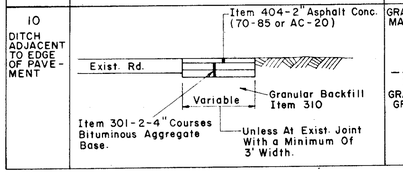
Restoration Class	TYPICAL RESTORATION SECTIONS	Backfill
8-A OTHER THAN PAVED AREA DITCH LESS THAN 2.0' FROM THE ROADWAY ALSO STREET UNDER CONSTRUCTION OR PROPOSED CONSTRUCTION.	 NOTE: 8-A Will Apply Only When The Requirements Of Restoration Classes II-A & II-B Have Been Waived By The Department Of Public Works.	A
8-B UNIMPROVED.		A or B
9 SODDED AREAS		A or B
II-A&II-B OTHER THAN PAVED AREA DITCH LESS THAN 2.0' FROM THE ROADWAY.		A

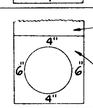
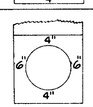
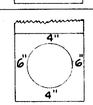
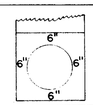
TYPICAL BACKFILL REQUIREMENTS

BACKFILL CROSS SECTION	METHOD DESIGNATION	FOR NOMINAL PIPE SIZES	PIPE AREA	BALANCE OF BACKFILL
	A	UNDER 12"	EMBEDMENT MATERIAL	BACKFILL GRAVEL
	B	UNDER 12"	EMBEDMENT MATERIAL	COARSE FILL
	A	12" & 16"	EMBEDMENT MATERIAL	BACKFILL GRAVEL
	B	12" & 16"	EMBEDMENT MATERIAL	COARSE FILL
	A	20" & OVER	EMBEDMENT MATERIAL	BACKFILL GRAVEL

TYPICAL RESTORATION SECTIONS IN HAMILTON COUNTY, OHIO BUT OUTSIDE CORPORATION LIMITS OF CITY OF CINCINNATI

Restoration Class	TYPICAL RESTORATION SECTIONS	Backfill
I-R CONCRETE ROADWAY		GRANULAR MATERIAL 310 GRADATION GRADE "A"
I-D CONCRETE DRIVEWAY		GRANULAR MATERIAL 310 GRADATION GRADE "A"
2 BRICK OR BLOCK PAVEMENT		GRANULAR MATERIAL 310 GRADATION GRADE "A"
3 ASPHALT OR BITUMINOUS MATERIAL ON CONCRETE BASE		GRANULAR MATERIAL 310 GRADATION GRADE "A"
4-R BITUMINOUS MACADAM ON STONE BASE		GRANULAR MATERIAL 310 GRADATION GRADE "A"
4-D MACADAM DRIVE		GRANULAR MATERIAL 310 GRADATION GRADE "A"
5-D GRAVEL SURFACE DRIVE		GRANULAR MATERIAL 310 GRADATION GRADE "A"
6 SIDEWALK		GRANULAR MATERIAL 310 GRADATION GRADE "A"

Restoration Class	TYPICAL RESTORATION SECTIONS	Backfill
8-A DITCH LESS THAN 2' BUT NOT ADJACENT TO EDGE OF PAVEMENT ALSO ROAD UNDER CONSTRUCTION OR PROPOSED CONSTRUCTION	 *If 1'Or Less, a Pavement Section Shall Be Utilized As Directed By The County Engineer.	GRANULAR MATERIAL 310 GRADATION GRADE "A"
8-B UNIMPROVED AREA		EXCAVATED MATERIAL (COARSE FILL) Or GRANULAR MATERIAL
9 SODDED AREA		EXCAVATED MATERIAL (COARSE FILL) Or GRANULAR MATERIAL
10 DITCH ADJACENT TO EDGE OF PAVEMENT		GRANULAR MATERIAL 310 GRADATION GRADE "A"

BACKFILL CROSS SECTION	METHOD DESIGNATION	FOR NOMINAL PIPE SIZES	PIPE AREA	BALANCE OF BACKFILL
	A	UNDER 12"	EMBEDMENT MATERIAL	GRANULAR MATERIAL
	B	UNDER 12"	EMBEDMENT MATERIAL	COARSE FILL
	A	12" & 16"	EMBEDMENT MATERIAL	GRANULAR MATERIAL
	B	12" & 16"	EMBEDMENT MATERIAL	COARSE FILL
	A	20" & OVER	EMBEDMENT MATERIAL	GRANULAR MATERIAL

Revised 5-6-75

WATER WORKS PLANS

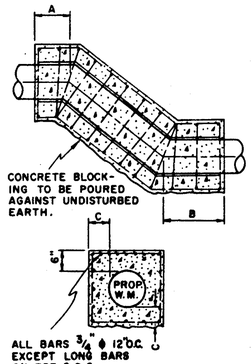
CALC. D.E.K. DATE 11-22-71
CHK'D. E.L.G. DATE 11-24-71

RESTORATION SECTIONS

DRAWING NO. D-871-G
SHEET NO. 130 OF 15

FED. AID PROJECT	STATE	PROJECT		786A / 787
2	OHIO			

HAM-75-8.93
HAM-126-13.00
HAMILTON COUNTY

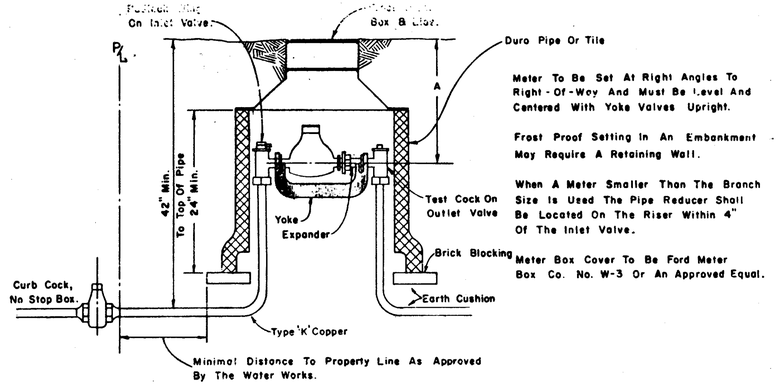


FOR ESTIMATING ONLY

SIZE	DEGREE BEND	75 TO 125 P.S.I. A	B	C	CONC. C.Y./LIN.FT.	STEEL LBS./LIN.FT.	125 TO 200 P.S.I. A	B	C	CONC. C.Y./LIN.FT.	STEEL LBS./LIN.FT.
8	11 1/4	1'-6"	1'-0"	0'9"	.17	26	1'-6"	1'-0"	0'9"	.17	26
	22 1/2	2'-0"	1'-0"	0'9"	.17	26	2'-6"	1'-0"	1'-0"	.23	30
	45	3'-6"	1'-0"	1'-0"	.23	30	5'-0"	1'-6"	1'-0"	.23	30
12	11 1/4	1'-6"	1'-0"	0'9"	.20	30	2'-0"	1'-0"	0'9"	.20	30
	22 1/2	2'-6"	1'-0"	1'-0"	.26	40	4'-0"	1'-6"	1'-0"	.26	40
	45	6'-0"	2'-0"	1'-0"	.26	40	9'-0"	3'-0"	1'-0"	.26	40

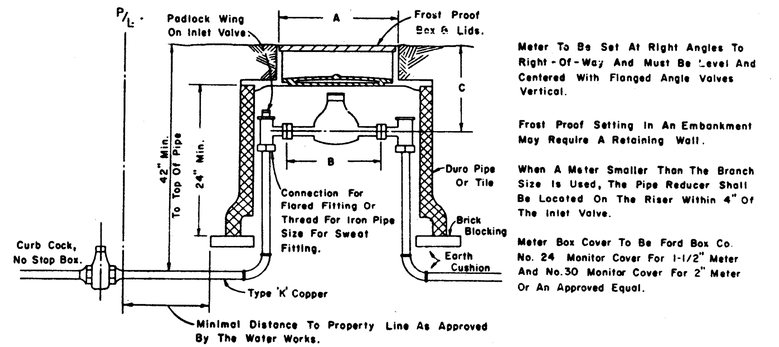
NOTE:
PRESSURE RANGES AS SHOWN ARE OPERATING PRESSURES. CONCRETE AND STEEL QUANTITIES ARE CALCULATED USING OPERATING PRESSURE PLUS 50 P.S.I.

TOP AND BOTTOM
VERTICAL BENDS
FULL ENCASEMENT



Meter Size	Tile or Duro Pipe Dia.	A
5/8" 3/4"	20"	15"-19"

STANDARD OUTSIDE METER SETTING FOR 5/8", 3/4" AND 1" METERS



Meter Size	Tile or Duro Pipe Dia.	A	B	C
1-1/2"	24"	20-3/4"	13"	15"-19"
2"	30"	20-3/4"	17"	15"-19"

STANDARD OUTSIDE METER SETTING FOR 1-1/2" AND 2" METERS

MATERIAL & CONSTRUCTION SPECIFICATIONS FOR METER PIT CONSTRUCTION

GENERAL NOTES

THE FOLLOWING SPECIFICATIONS ARE MINIMUM REQUIREMENTS, WHERE LOCATIONS, SOIL CONDITIONS, GROUND WATER, OR SIMILAR CONDITIONS DICTATE, INDIVIDUAL PIT DESIGN MAY BE SUBMITTED TO THE WATER WORKS FOR APPROVAL
METER PIT WALLS ARE TO BE 8" THICK AND ARE TO BE CONSTRUCTED OF CONCRETE BRICK, CONCRETE BLOCK, OR REINFORCED CONCRETE.
TOP SLAB CONSTRUCTION IS TO CONSIST OF 8" REINFORCED CONCRETE WITH 5/8" REINFORCING RODS, 4", ON CENTER SHORT SPAN AND 18" ON CENTER LONG SPAN, 5/8" RODS 2' LONG IN TOP AND BOTTOM OF SLAB DIAGONALLY AT CORNERS OF OPENINGS.
METER PIT FLOOR TO BE CONSTRUCTED OF CONCRETE 6" IN DEPTH.
THE TOP CONCRETE SLAB AND CASTING SHALL BE SET TO THE FINISHED GRADE OR HIGHER.

CONSTRUCTION SPECIFICATIONS

BRICK MASONRY AND CONCRETE BLOCK CONSTRUCTION

ALL BRICK AND CONCRETE BLOCK USED IN METER PIT CONSTRUCTION SHALL BE CLEAN AND ENTIRELY FREE, FROM DIRT, PAINT, GREASE, AND OTHER FOREIGN SUBSTANCES AND SHALL BE THROUGHLY WETTED BEFORE LAYING IN MORTAR.
THE INTERIOR MORTAR JOINTS SHALL BE NEATLY POINTED UP AND THE SURFACE CLEANED OF ALL SURPLUS MORTAR, OUTSIDE JOINTS SHALL BE ENTIRELY FILLED WITH MORTAR.
MORTAR SHALL BE COMPOSED OF ONE PART CEMENT AND TWO PARTS SAND BY VOLUME. THE MATERIALS SHALL BE MIXED DRY UNTIL THE COLOR IS UNIFORM; THEN WATER SHALL BE ADDED.
WATER FOR MIXING MORTAR AND WETTING BRICKS SHALL BE CINCINNATI HYDRANT WATER OR EQUAL.

CONCRETE CONSTRUCTION

ALL CONCRETE USED IN CONSTRUCTION OF METER PIT WALLS, FLOORS, AND REINFORCED SLABS SHALL BE COMPOSED OF ONE PART CEMENT, TWO PARTS SAND AND THREE PARTS AGGREGATE BY WEIGHT AND A MAXIMUM WATER CEMENT RATIO OF 0.50.
BEFORE CONCRETE IS PLACED, THE FORMS, REINFORCEMENT, WATER STOPS, AND ANCHOR BOLTS, SHALL BE RIGIDLY SECURED IN PROPER POSITION.
ALL DIRT, MUD, WATER, DEBRIS, AND OTHER FOREIGN MATTER SHALL BE REMOVED FROM THE SPACE TO BE OCCUPIED BY THE CONCRETE.
CONCRETE SHALL BE DEPOSITED AND COMPACTED IN THE WALL FORMS BEFORE ANY REINFORCING IS PLACED IN THE SLAB AREA AND SHALL SETTLE AT LEAST 2 HOURS BEFORE THE SLAB CONCRETE IS POURED.
CONCRETE SHALL BE PROTECTED FROM LOSS OF MOISTURE FOR A CURING PERIOD OF AT LEAST 7 DAYS.

REINFORCING STEEL

ALL REINFORCING STEEL SHALL BE FREE FROM DIRT, OIL, GREASE OR AVOIDABLE RUST, WHEN PLACED IN THE CONCRETE, IT SHALL BE CLEAN AND FREE FROM LOOSE RUST.
REINFORCING STEEL SHALL BE SECURELY HELD IN PLACE DURING THE CONCRETE OPERATION, IN NO CASE SHALL REINFORCING STEEL BE DRIVEN OR FORCED INTO THE CONCRETE AFTER IT HAS TAKEN ITS INITAL SET.
THE REINFORCING STEEL IN CONCRETE ROOF SLABS SHALL BE LOCATED IN THE BOTTOM PORTION OF THE SLAB, 2 INCHES FROM THE SURFACE OF THE CONCRETE.

WATERPROOFING

THE EXTERIOR SIDE OF PIT WALLS SHALL BE WATERPROOFED WITH TWO COATS OF ONE OF THE FOLLOWING MATERIALS APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THOROSEAL; U.S.S. CHEMICAL TARMASTIC #102; KOPPERS BITUMASTIC SUPER SERVICE BLACK; DAMCHEX; AMERCOAT #78, OR AN APPROVED EQUAL.
VOIDS BETWEEN PIPES AND CHAMBER WALLS SHALL BE GROUTED WITH A HYDRAULIC CEMENT SUCH AS WATERPLUG OR AN APPROVED EQUAL.

DRAIN

EACH PIT SHALL BE DRAINED BY MEANS OF A 4" DRAIN LEADING TO A STORM SEWER OR A GRAVEL FILLED SUMP 3' X 3' X 3'.
THE PIT FLOOR SHALL BE SLOPED TO A FLOOR DRAIN PLACED IN A CORNER OPPOSITE THE LID. THE FLOOR DRAIN CASTING SHALL HAVE A 4" OUTLET AND A RAISED OR BEEHIVE DOME GRATE SIMILAR TO WADE #1634; JOSAM #7324-N; OR AN APPROVED EQUAL

PITS IN PARKING AREAS

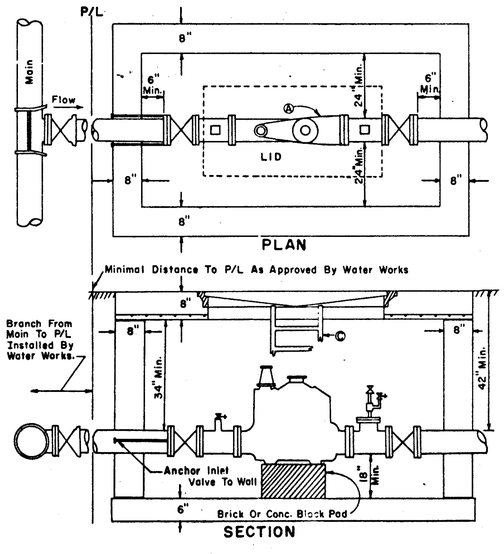
PITS CONSTRUCTED IN PARKING AREAS SHALL HAVE A GUARD POST SET IN THE GROUND AT EACH CORNER OF THE ROOF SLAB, OR HAVE THE ROOF SLAB RAISED ABOVE GROUND LEVEL TO PREVENT PARKING ON THE PIT.
PITS SUBJECT TO HEAVY TRAFFIC LOADS SHALL BE EQUIPPED WITH CASTINGS AND LIDS AS FOLLOWS;
2' X 2' SIZE; NEENAH CO. R-6662-KH WITH AN ALUMINUM LID, OR AN APPROVED EQUAL.
2' X 4' SIZE; NEENAH CO. R-6663-KH WITH ONE ALUMINUM LID, OR AN APPROVED EQUAL.

PIPE AND FITTINGS

SERVICE BRANCHES 3/4" THROUGH 2" SHALL BE SOFT ANNEALED TYPE "K" COPPER CONFORMING TO A.S.T.M. - B 88, FROM THE MAIN TO THE METER. VALVES, FITTINGS AND NIPPLES FOR GAGES, TEST TEES AND DETECTOR CHECK ASSEMBLIES SHALL BE BRASS.
SERVICE BRANCHES LARGER THAN 2" SHALL BE EITHER TYPE "K" COPPER, GREY CAST IRON, OR DUCTILE IRON FROM THE MAIN TO THE METER SETTING OUTLET VALVE. GREY IRON AND DUCTILE IRON PIPE AND FITTINGS SHALL CONFORM TO CINCINNATI SPECIFICATION NO. 10-110-70 OR THE LATEST REVISION THEREOF AND SHALL BE INSPECTED AT THE MANUFACTURING PLANT BY THE WATER WORKS.

BACKFLOW PREVENTERS

THE LOCATION OF THE BACKFLOW PREVENTER AND THE TYPE TO BE USED SHALL BE DETERMINED BY THE WATER WORKS. ANY BACKFLOW PREVENTER USED SHALL BE ONE THAT HAS BEEN APPROVED BY BOTH THE WATER WORKS AND THE OHIO ENVIRONMENTAL PROTECTION AGENCY.



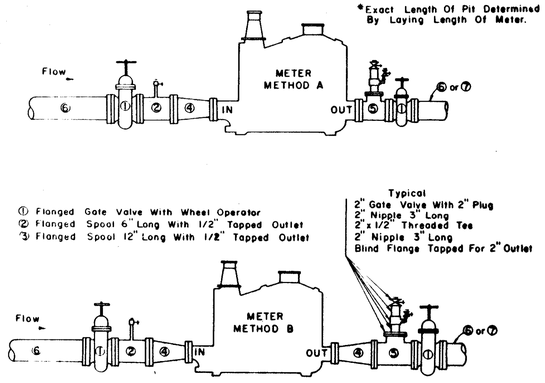
LID: Neenah Co. R-6661-LH With Type G Lift Handles & Ratchets, Or Approved Equal. To Be Centered Lenghtways Over Domestic Meter.

Ⓐ See 108-5 For Piping Arrangement For Domestic Meters 3" & Larger.

Ⓑ See 108-182 For Material & Construction Specifications.

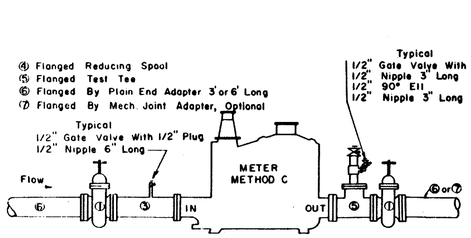
Ⓒ Removable Metal Ladder To Reach From Pit Floor Into Pit Opening.

STANDARD METER SETTING DOMESTIC METERS 3" OR LARGER



Branch Size	Meter Size	Test Tee Size	Approx. Pit Width & Lgth.
8"	6"	6"x6"	5"x9"
METHOD A			

Branch Size	Meter Size	Test Tee Size	Approx. Pit Width & Lgth.
8"	6"	8"x6"	5"x10"
METHOD B			



Branch Size	Meter Size	Test Tee Size	Approx. Pit Width & Lgth.
8"	8"	8"x6"	5"x10"
METHOD C			

PIPING ARRANGEMENT DOMESTIC METERS 3" & LARGER

CALC. J.G.K. DATE 11-22-71
CHK'D E.E.D. DATE 11-24-71

Revised Jan. 27, 1986
Revised Oct. 21, 1985
Revised Jan. 25, 1977
Revised Sept. 8, 1975
Revised May 6, 1975
Revised Feb. 22, 1973

Drawing No. D-371-6
SCALE: None
Sheet No. 14 Of 15

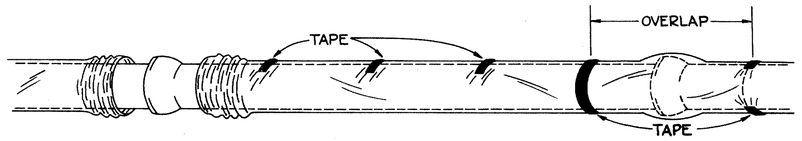
FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

787
787

HAM-75-9.93
HAM-126-13.00
HAMILTON COUNTY

TAPE MATERIAL

POLYETHYLENE TAPE 1-½" WIDE AS RECOMMENDED BY THE FILM MANUFACTURER.



MATERIAL SPECIFICATIONS

IN ACCORDANCE WITH ASTM D-1248
TYPE I, CLASS A OR C, GRADE E-1
FLOW RATE 0.4 MAX. DIELECTRIC
STRENGTH VOLUME RESISTIVITY
MIN. OHM-$CM^3 = 10^{15}$

POLYETHYLENE FILM THICKNESS 8 MILS

TENSILE STRENGTH	1200 P.S.I. MIN.
ELONGATION	300% MIN.
DIELECTRIC STRENGTH	800 VOLTS/MIL

THE FOLLOWING METHOD ILLUSTRATES THE PROCEDURE FOR APPLYING POLYETHYLENE:

CUT POLYETHYLENE TUBE TO A LENGTH APPROXIMATELY TWO FEET LONGER THAN THE LENGTH OF THE PIPE SECTION, SLIP THE TUBE AROUND THE PIPE, CENTERING IT TO PROVIDE A ONE-FOOT OVERLAP ON EACH ADJACENT PIPE SECTION, AND BUNCHING IT ACCORDION FASHION LENGTHWISE UNTIL IT CLEARS THE PIPE ENDS.

LOWER THE PIPE INTO THE TRENCH AND MAKE UP THE PIPE JOINT WITH THE PRECEDING SECTION OF PIPE, A SHALLOW BELL HOLE MUST BE MADE AT JOINTS TO FACILITATE INSTALLATION OF THE POLYETHYLENE TUBE.

AFTER ASSEMBLING THE PIPE JOINT, MAKE THE OVERLAP OF THE POLYETHYLENE TUBE, PULL THE BUNCHED POLYETHYLENE FROM THE PRECEDING LENGTH OF PIPE, SLIP IT OVER THE END OF THE NEW LENGTH OF PIPE AND SECURE IN PLACE. THEN OF THE FIRST WRAP UNTIL IT OVERLAPS THE JOINT AT THE END OF THE PRECEDING LENGTH OF PIPE, SECURE THE OVERLAP IN PLACE, TAKE UP THE SLACK WIDTH TO MAKE SNUG, BUT NOT TIGHT, FIT ALONG THE BARREL OF PIPE, SECURING THE FOLD AT QUARTER POINTS.

REPAIR ANY RIPS, PUNCTURES, OR OTHER DAMAGE TO THE POLYETHYLENE WITH ADHESIVE TAPE OR WITH A SHORT LENGTH OF POLYETHYLENE TUBE CUT OPEN, WRAPPED AROUND THE PIPE, AND SECURED IN PLACE. PROCEED WITH INSTALLATION OF THE NEXT SECTION OF PIPE IN THE SAME MANNER.

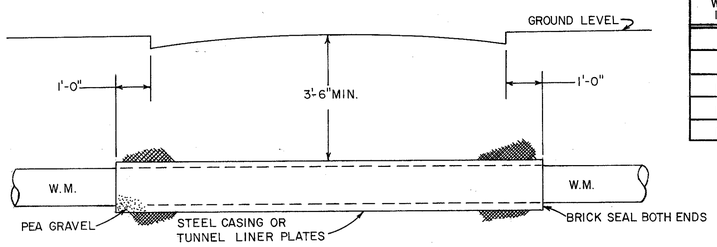
PIPE SHAPED APPURTENANCES:

BEND, REDUCERS, OFFSETS AND OTHER PIPE-SHAPED APPURTENANCES SHALL BE COVERED WITH POLYETHYLENE IN THE SAME MANNER AS THE PIPE.

JUNCTIONS BETWEEN WRAPPED AND UNWRAPPED PIPE:

WHERE POLYETHYLENE WRAPPED PIPE JOINTS A PIPE WHICH IS NOT WRAPPED, EXTEND THE POLYETHYLENE TUBE TO COVER THE UNWRAPPED PIPE A DISTANCE OF AT LEAST TWO FEET, SECURE THE END WITH CIRCUMFERENTIAL TURNS OF TAPE.

HIGHWAY CASING CROSSING



STEEL CASING FOR 16" W.M. & SMALLER		
W.M. I.D.	CASING O.D.	PLATE THICKNESS
6"	16"	5/16"
8"	18"	5/16"
10"	20"	5/16"
12"	24"	5/16"
16"	30"	3/8"

CROSSING PROVISIONS

CASING PIPE MAY HAVE A PLATE THICKNESS 1/16" LESS THAN AS LISTED, IF IT'S CATHODICALLY PROTECTED.

ODD SHAPPED APPURTENANCES:

VALVES, TEES, CROSSES AND OTHER ODD-SHAPED PIECES WHICH CANNOT BE WRAPPED PRACTICALLY IN A TUBE SHALL BE WRAPPED WITH A FLAT SHEET OR SPLIT LENGTH OF POLYETHYLENE TUBE, THE SHEET SHALL BE PASSED UNDER THE APPURTENANCE AND BROUGHT UP AROUND THE BODY. SEAMS SHALL BE MADE BY BRINGING THE EDGES TOGETHER, FOLDING OVER TWICE, AND TAPING DOWN, SLACK WIDTH AND OVERLAPS AT JOINTS SHALL BE HANDLED AS DESCRIBED ABOVE, TAPE POLYETHYLENE SECURELY IN PLACE AT VALVE STEM AND OTHER PENETRATIONS.

OPENINGS IN ENCASEMENT:

OPENINGS FOR BRANCHES, SERVICE TAPS, BLOW-OFFS, AIR VALVES, AND SIMILAR APPURTENANCES SHALL BE MADE BY MAKING AN X-SHAPED CUT IN POLYETHYLENE AND TEMPORARILY FOLDING THE FILM BACK. AFTER THE APPURTENANCE IS INSTALLED, TAPE THE SLACK SECURELY TO THE APPURTENANCE AND REPAIR THE CUT, AS WELL AS ANY OTHER DAMAGED AREAS IN THE POLYETHYLENE, WITH TAPE.

BACKFILL FOR POLYETHYLENE WRAPPED PIPE:

BACKFILL MATERIAL SHALL BE THE SAME AS SPECIFIED FOR PIPE WITHOUT POLYETHYLENE WRAPPING, SPECIAL CARE SHOULD BE TAKEN TO PREVENT DAMAGE TO THE POLYETHYLENE WRAPPING WHEN PLACING BACKFILL, BACKFILL MATERIAL SHOULD BE FREE FROM CINDERS, REFUSE, BOULDERS, ROCKS, STONES OR OTHER MATERIAL THAT COULD DAMAGE POLYETHYLENE.

TUBE SIZE REQUIRED	
PIPE DIAMETER	MIN. FLAT TUBE WIDTH (inches)
4	16
6	20
8	24
10	27
12	30
16	37
20	45

CALC MK DATE 2-24-86
CHK'D RPC DATE 3-10-86