

FED. RD. DIVISION	STATE	PROJECT
5	OHIO	1-675-8(15)54

GRE-675-5.37
GREENE COUNTY

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

GRE-675-5.37

GRADE SEPARATION WITH THE CONSOLIDATED RAIL CORPORATION

(MAD RIVER TOWNSHIP) (MONTGOMERY COUNTY) BEAVER CREEK TOWNSHIP GREENE COUNTY

LIMITED ACCESS

This improvement has been declared a limited access highway or freeway by action of the Director of Highways in accordance with the provisions of Section 5511.02, Revised Code of Ohio,

1979 SPECIFICATIONS

The standard specifications of the State of Ohio, Department of Transportation including changes and supplemental specifications listed in the proposal shall govern this improvement.

I hereby approve these plans and declare that the making of this improvement will not require the closing to traffic of the highway and that provisions for the maintenance and safety of traffic will be as set forth on the plans and estimates.

Approved: *William W. Crawford*
Date: 1-5-82 District Deputy Director of Transportation

Approved: *Robert C. Pfeifer*
Date: 3-3-82 Engineer, Bureau of Bridges and Structural Design

Approved: *J. Howard C. Nelson*
Date: 4-5-82 Chief Engineer, Planning and Design

Approved: *David L. Wei*
Date: 4-5-82 Director, Department of Transportation

Sheet 411 revised 1-16-82 E.S.L.
Sheet 2 revised 6-21-82 S.M.K.
Sheet 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 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2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394,

MICROFILMED
AUG 25 1989

SCHEMATIC PLAN



FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

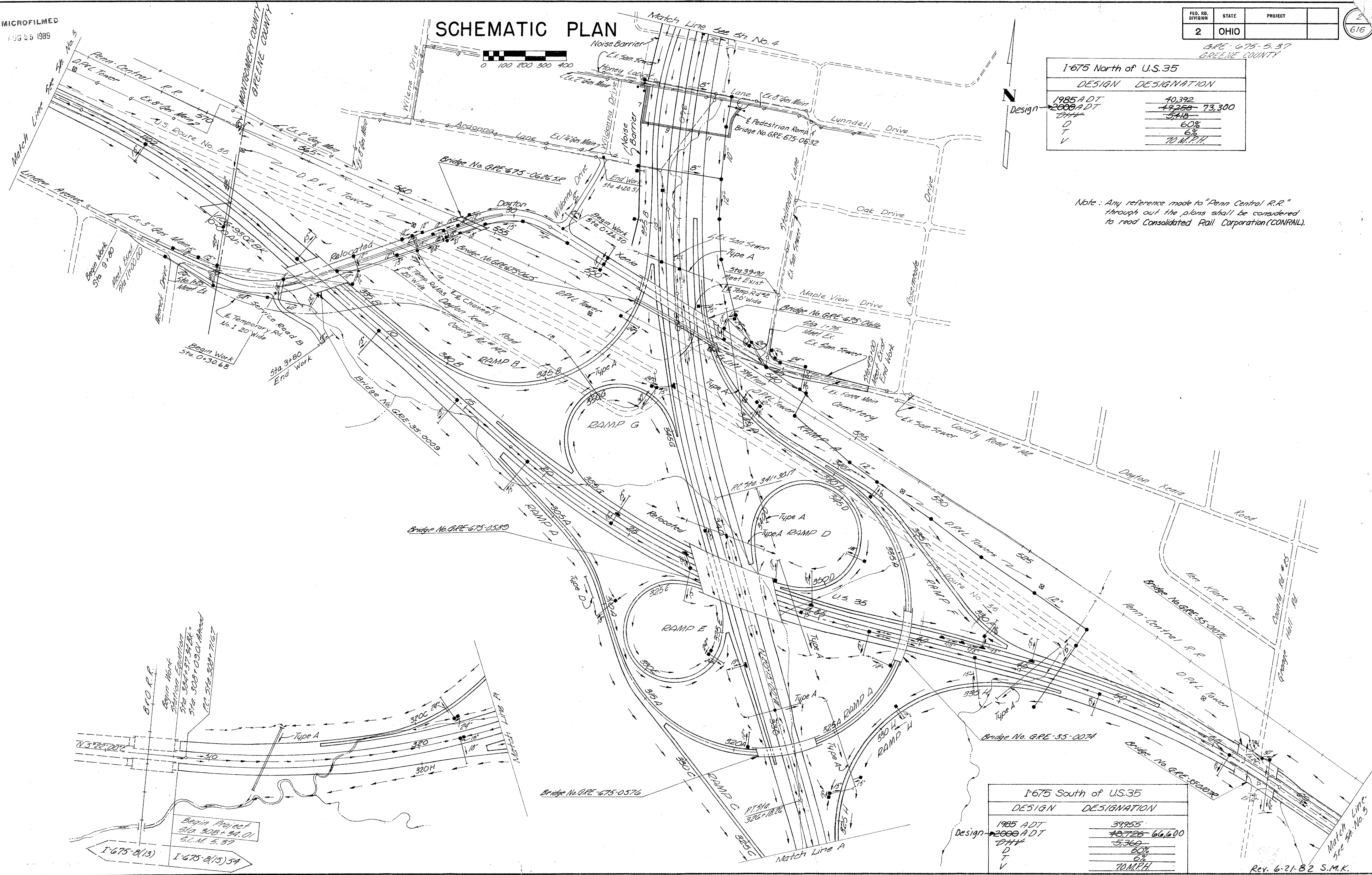
616

GRE-675-5.37
GREENE COUNTY

I-675 North of U.S.35

DESIGN	DESIGNATION
1985 ADT	40,392
2000 ADT	49,250 - 73,300
DIV	5418
D	60%
T	6%
V	70 MPH

Note: Any reference made to "Penn Central R.R." through out the plans shall be considered to read Consolidated Rail Corporation (CONRAIL).



I-675 South of U.S.35

DESIGN	DESIGNATION
1985 ADT	39,955
2000 ADT	48,725 - 66,600
DIV	5360
D	60%
T	6%
V	70 MPH

Begin Project
Sta. 308+94.01
S.C.M. 5.37

I-675-8(13) I-675-8(15)54

Rev. 6-21-82 S.M.K.

SCHEMATIC PLAN, DRAINAGE PATTERN & DESIGN DESIGNATION

MICROFILMED
AUG 25 1989

SCHEMATIC PLAN

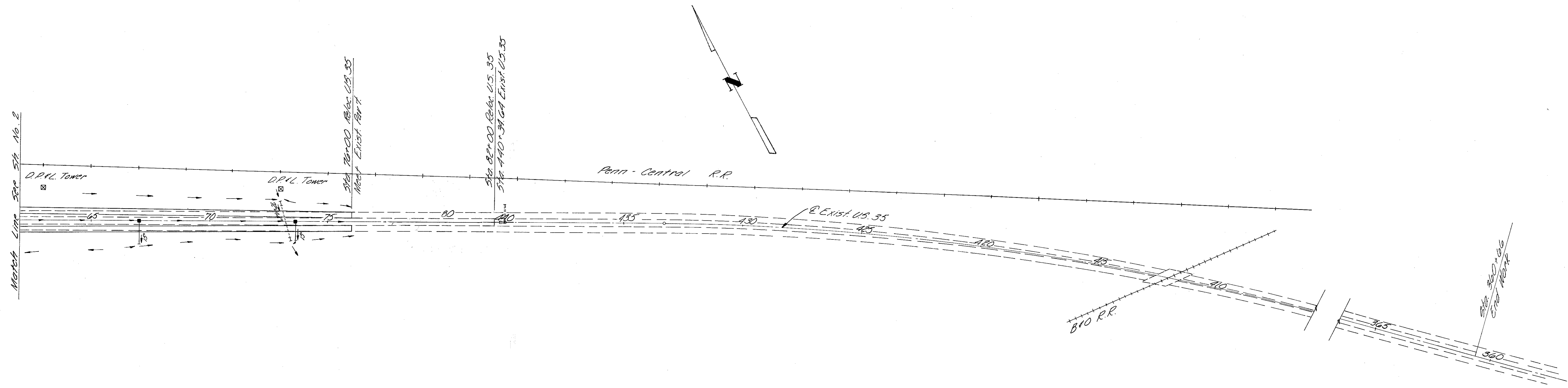
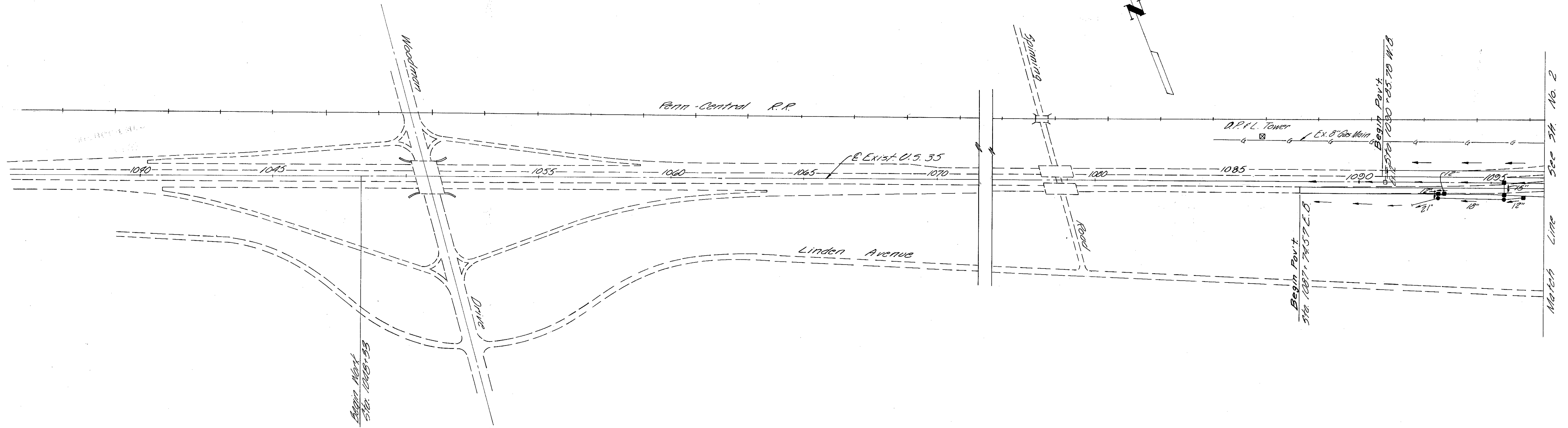


MICROFILMED
JUN 17 1965

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

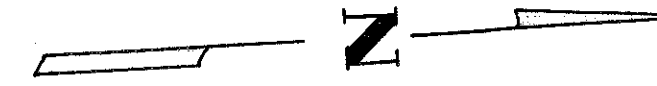
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616

CRE - 675-5.37
GREENE COUNTY



MICROFILMED
AUG 25 1989

SCHEMATIC PLAN



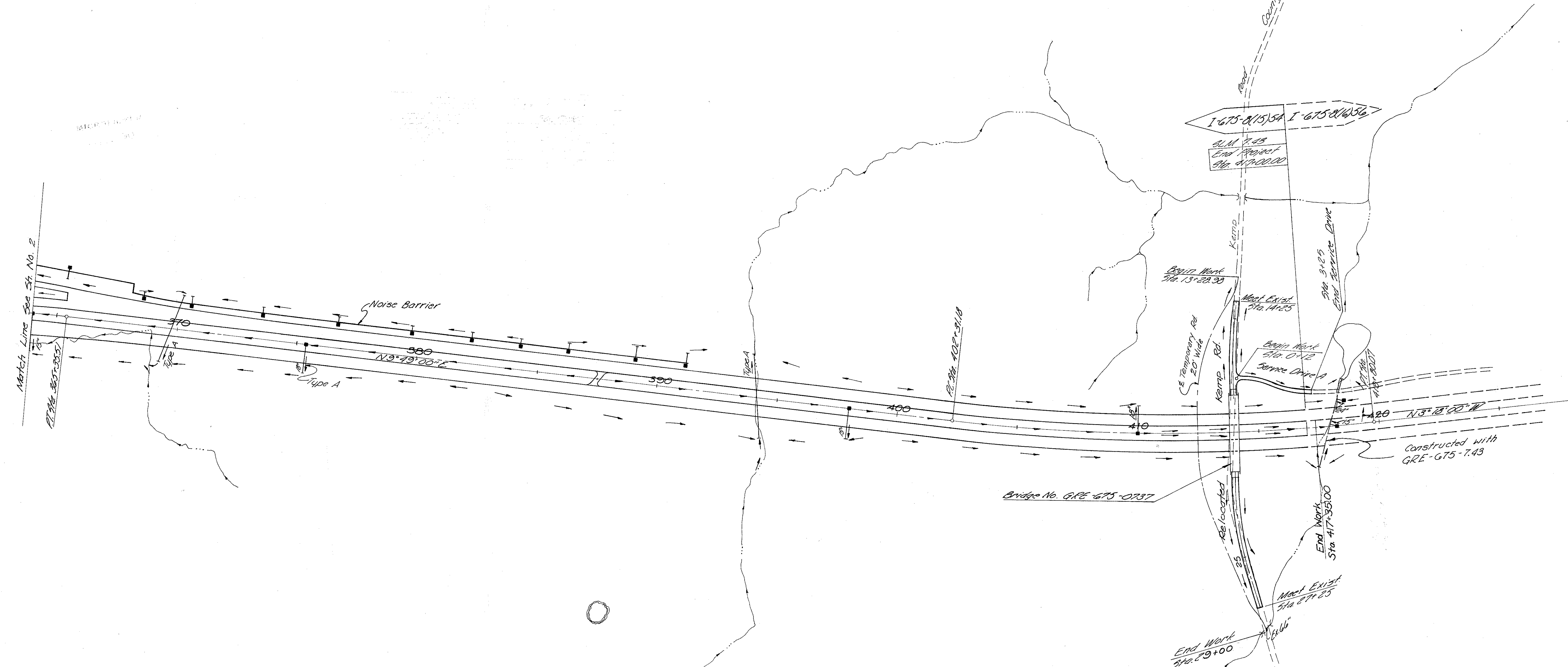
MICROFILMED
JUN 17 1955

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

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GRE-675-5.37
GREENE COUNTY

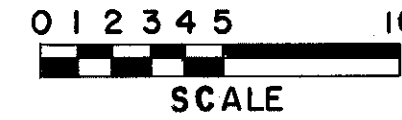
Wilene Drive



UTILITY OWNERSHIP		
TYPE	NAME	ADDRESS
Telephone	Ohio Bell Telephone Co.	3233 Woodman Dr, Dayton, Ohio
Electric	Dayton Power & Light Co.	25 North Main St, Dayton, Ohio
Gas	Dayton Power & Light Co.	25 North Main St, Dayton, Ohio
Sanitary	Greene County San. Engineer	P.O. Box 116, Alpha, Ohio

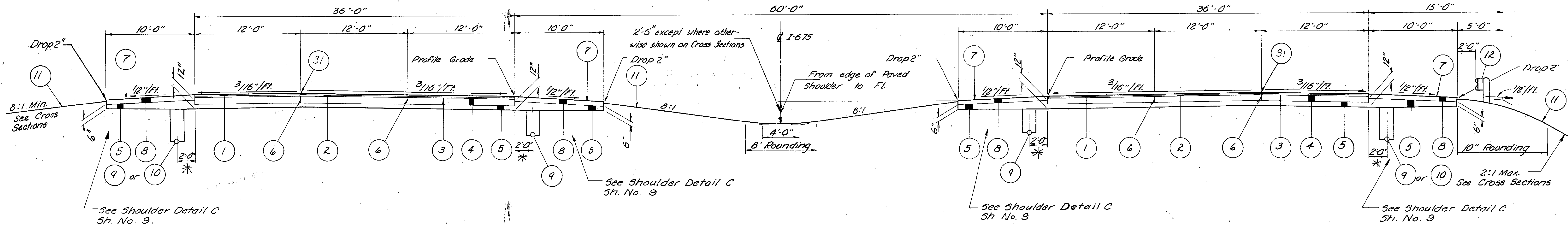
TYPICAL SECTIONS

TYPE 848 ON 305



FHWA REGION	STATE	PROJECT	
5	OHIO		5 6/6

GRE-675-537
GREENE COUNTY



NORMAL SECTION

(See Pav't Details for Slope & Width Variations)
Sta. 329+25.00 (N.B. § 3B) to Sta. 338+00.00 (N.B. § 3B)

*The location of Underdrains has been changed during the development of the Plans. They shall be offset as indicated on these Typical Sections irrespective of where they are shown on the Plan and Profile Sheets.

LEGEND

848, ASPHALT CONCRETE

Subsequent to the completion of plans, the asphalt concrete used on this project has been revised from items 402, 403, and 404 to supplemental specification 848. All reference to 402, 403, and 404 appearing on the plans shall be considered to read as follows: 402 becomes 848 Asphalt Concrete Intermediate Course, Type 2; 403 becomes 848 Asphalt Concrete Intermediate Course, Type 1; 404 becomes 848 Asphalt Concrete Surface Course, Type 1.

On this project, item 848, table 2-2, properties of mixtures shall be for **HEAVY** traffic volumes.

(1)	404	1 1/4"	Asphalt Concrete, AC-20	(22)	404	1"	Asphalt Concrete, AC-20
(2)	402	1 3/4"	Asphalt Concrete, AC-20	(23)	402	1 1/2"	Asphalt Concrete, AC-20
(3)	407		Tack Coat RC-250, MS-2, RS-1, SS-1, or SS-1/4 applied at the rate of 0.1 Gal. per Sq. Yd.	(24)	304	6"	Aggregate Base
(4)	305	9"	Portland Cement Concrete Base	(25)	404	1 1/2"	Asphalt Concrete, AC-20
(5)	310		Subbase Type II 6" Thickness except as noted	(26)	402	2"	Asphalt Concrete, AC-20
(6)			Standard Longitudinal Joint	(27)	301	4"	Bituminous Aggregate Base AC-20, RT-11 or RT-12
(7)	409		Seal Coat, Bituminous Material MC-800, MC-3000; CBAE 800, RS-1, RS-2, CRS-1, CRS-2, RT-9, RT-10 applied at the rate of 0.3 Gal. / Sq. Yd. & No. 8 Aggregate applied at the rate of 0.008 Cu. Yd. / Sq. Yd.	(28)	402	0"	Min., 4" Max. Asphalt Concrete, AC-20
(8)	301	6"	Bituminous Aggregate Base AC-20 or RT-11 or RT-12	(29)	609		Asphalt Concrete Curb, AC-20, Std. Type 1
(9)	605	6"	Pipe Underdrain, 30" cover - bottom of subbase to top of pipe except where otherwise noted. (See Plans for Locations) Shallow	(30)	402	1"	Asphalt Concrete, AC-20
(10)	605	6"	Pipe Underdrain, 50" cover - bottom of subbase to top of pipe except where otherwise noted. (See Plans for Locations) Deep	(31)			Hot Longitudinal Joints
(11)	659		Seeding and Mulching (See General Notes)	(32)	605	6"	Pipe Underdrain, 18" cover - bottom of subbase to top of pipe except where otherwise noted. (See Plans for Locations)
(12)	606		Guard Rail - Type 5 (See Plans for Locations)	(33)	601		Paved Gutter, Standard Type 2
(13)	622		Concrete Barrier, Std. Type B	(34)	304	12"	Aggregate Base
(14)	408		Bituminous Prime Coat RT-2 or RT-3, MC-30, MC-70, Primer-20; applied at the rate of 0.4 Gal. per Sq. Yd.	(35)	612	4"	Concrete Median, as per plan, (See Sheet No. 22)
(15)	304	8"	Aggregate Base, except as noted	(36)			Special Construction of Railroad Track
(16)	609		Curb, Std. Type 2-B	(37)	609		Curb, Std. Type 6
(17)	605		Aggregate Drains (See General Notes)	(38)	451	9"	Reinforced Portland Cement Concrete Pavement using 701.0B Expansive Hydraulic Cement See General Notes & Note in Proposal.
(18)	404		Variable Thickness Asphalt Concrete AC-20, 1 1/2" Max.				
(19)	606		Guard Rail, Type 5 Barrier Design				
(20)	612		Concrete Median, Std. Type, Modified as per plan (See sheet 19)				
(21)	609		Curb Std. Ty. 6 (Modified as per plan See sheet 17)				

305 PORTLAND CEMENT CONCRETE BASE

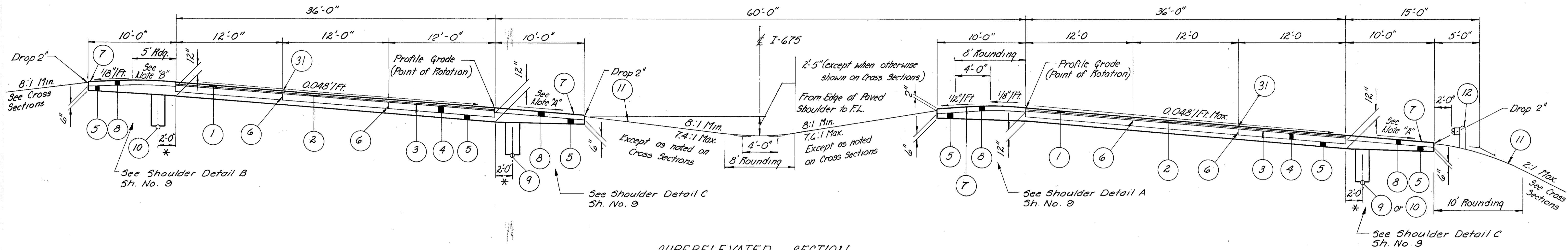
All references to Item 801 Portland Cement Concrete Base appearing throughout this plan shall be construed as Item 305 Portland Cement Concrete Base.

TYPICAL SECTIONS

TYPE 848 ON 305



GRE-675-5.37
GREENE COUNTY



SUPERELEVATED SECTION

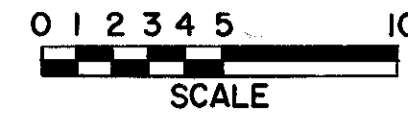
(See Pavt. Details for Slopes & Width Variations)
(See Superelevation Tables for Edge Elevations)
Sta. 303 + 34.01 (N.B. of S.B.) to Sta. 329 + 25.00 (N.B. of S.B.)
Sta. 338 + 00.00 (N.B.) to Sta. 355 + 00.00 (N.B.)
Sta. 338 + 00.00 (S.B.) to Sta. 365 + 35.51 (S.B.)

* The location of Underdrains has been changed during the development of the plans. They shall be offset as indicated on these Typical Sections irrespective of where they are shown on the Plan and Profile Sheets.

Note "A", 1/8"/ft. or S.E. Rate whichever is greater
Note "B", For Shoulder Slopes adjacent to Collector Distributor see Sh. No. 12 of Pavt. Details

TYPICAL SECTIONS

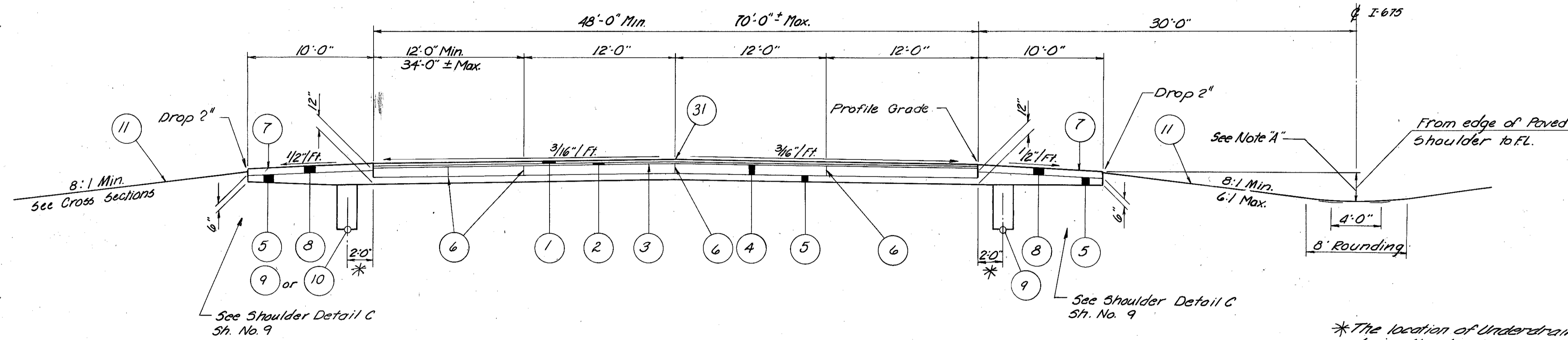
TYPE 848 ON 305



FHWA REGION	STATE	PROJECT	
5	OHIO		

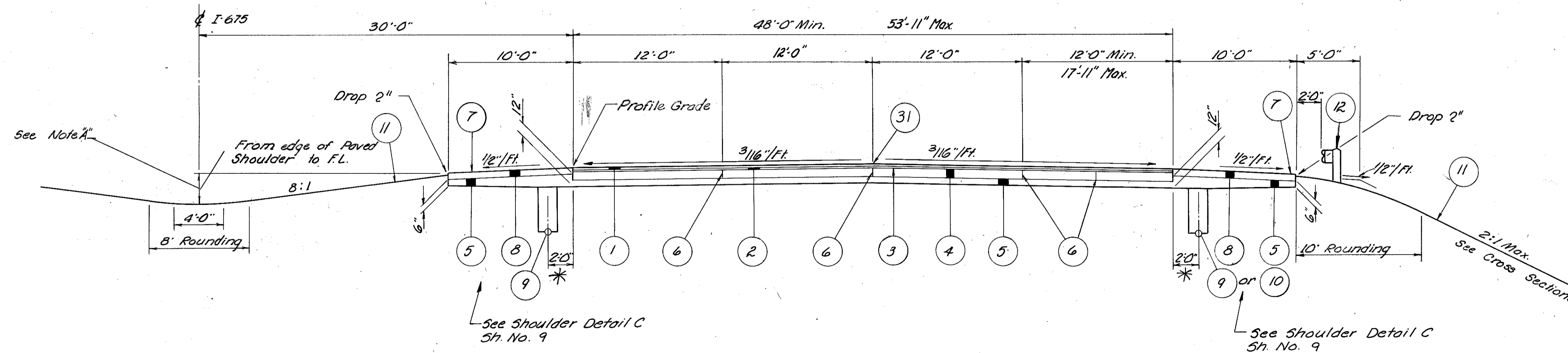
7
6/6

GRE-675-537
GREENE COUNTY



*The location of Underdrains has been changed during the development of the Plans. They shall be offset as indicated on these Typical Sections irrespective of where they are shown on the Plan and Profile Sheets.

Note A, 2'-5" except where otherwise shown on Cross Sections

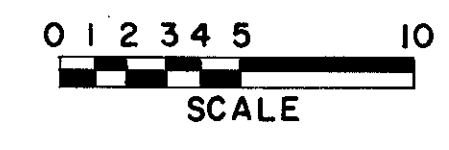


NORMAL SECTION
(See Pav't. Details for Slope & Width Variations)
Sta. 368+25.00 (N.B. f. S.B.) to Sta. 399+75.00 (N.B. f. S.B.)

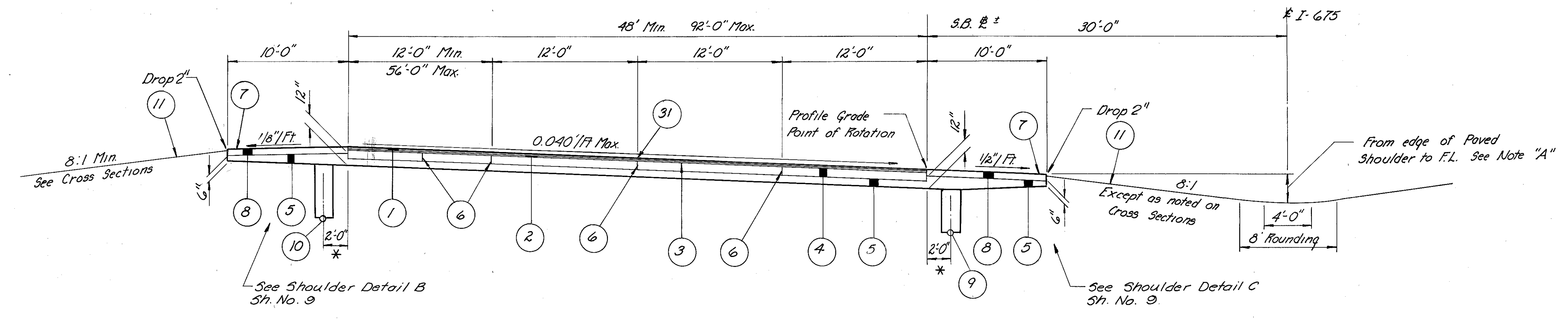
Note: For Item Legend see Sh. No. 5

TYPICAL SECTIONS

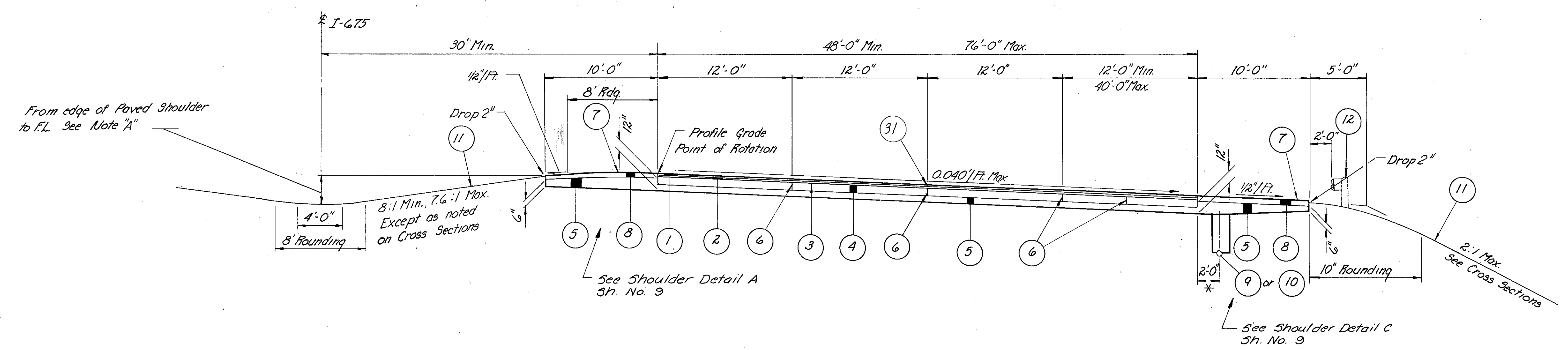
TYPE 848 ON 305



GRE-675-537
GREENE COUNTY



Note "A", 2'-5" except where shown otherwise on Cross Sections



SUPERELEVATED SECTION

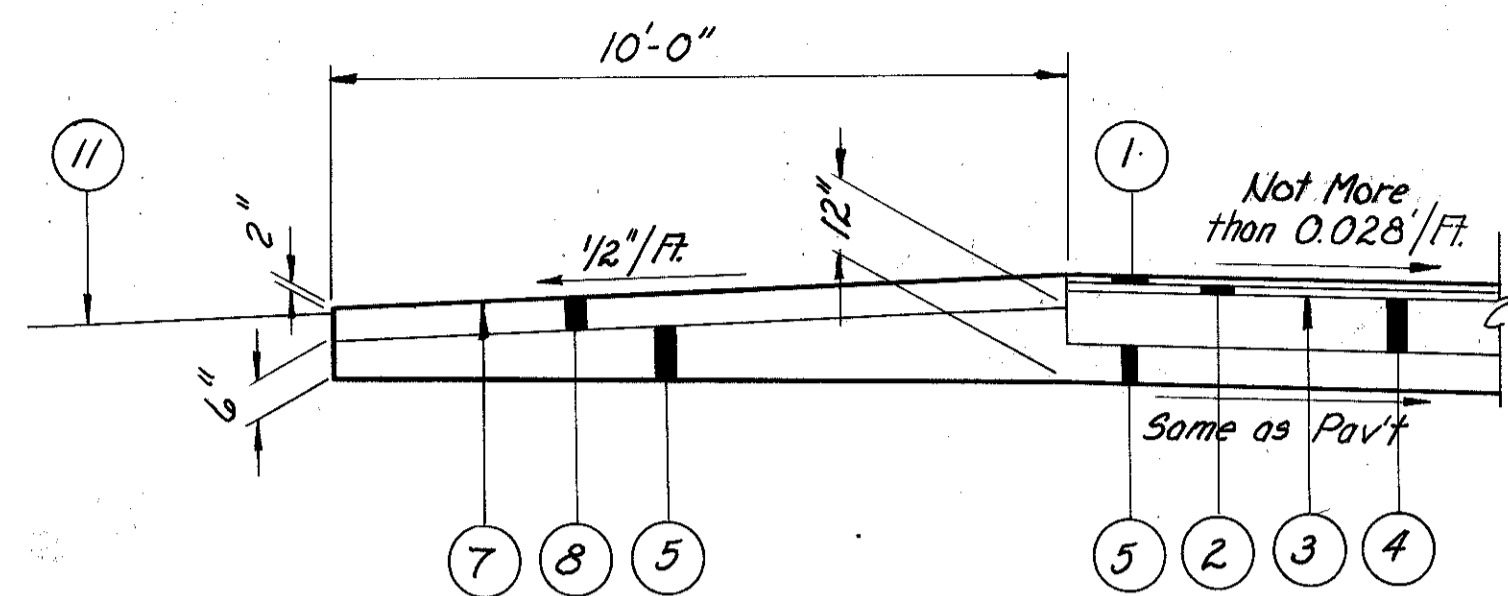
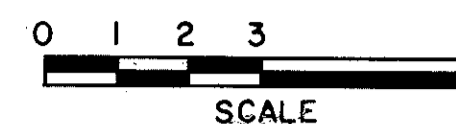
(See Pav't. Details for slope & Width Variations)
(See Superelevation Tables for Edge Elevations)

Sta. 355 + 00.00 (N.B.) to Sta. 368 + 25.00 (N.B.)
Sta. 365 + 35.51 (S.B.) to Sta. 368 + 25.00 (S.B.)
Sta. 399 + 75.00 (N.B. & S.B.) to Sta. 417 + 00.00 (N.B. & S.B.)

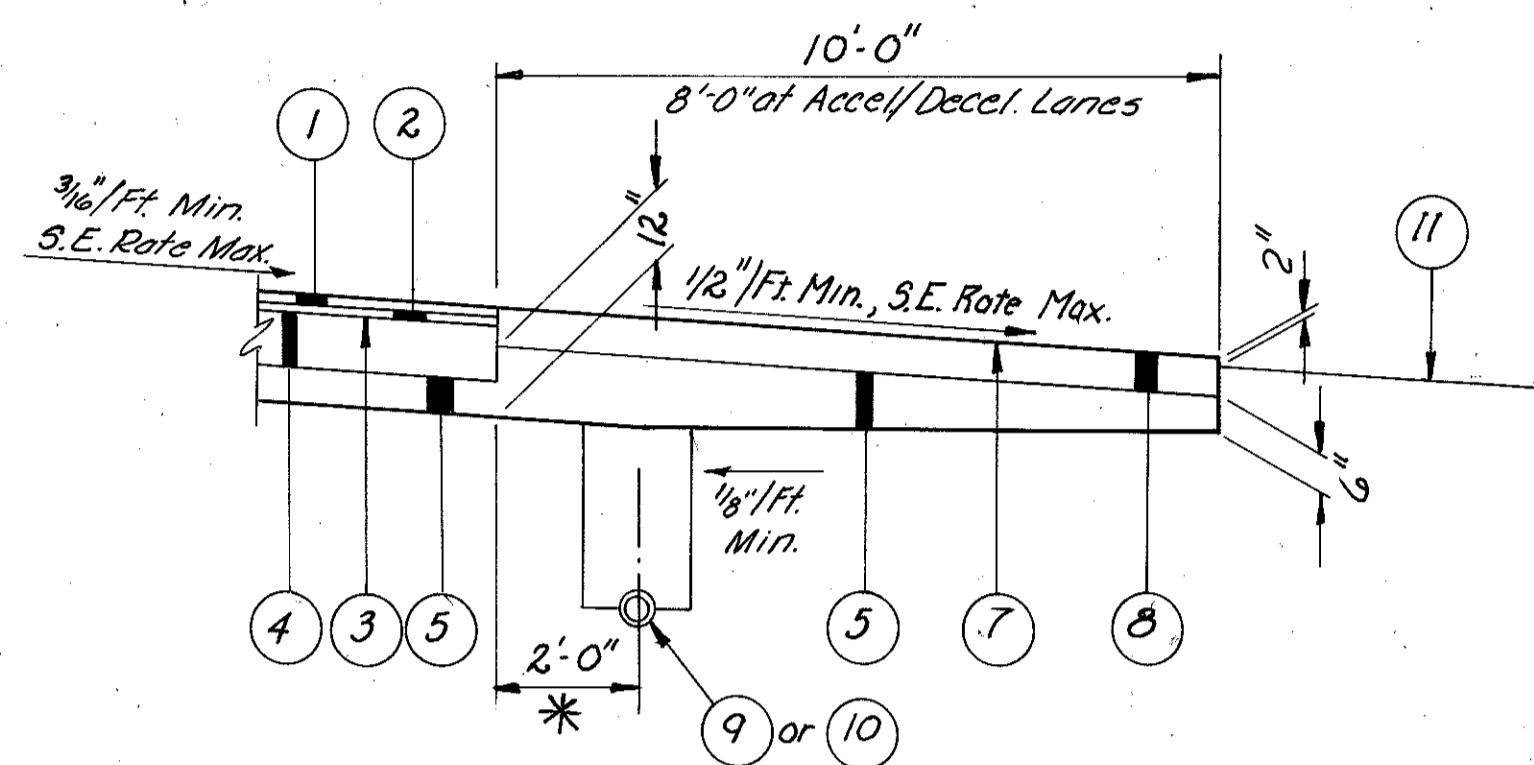
* The location of Underdrains has been changed during the development of the Plans. They shall be offset as indicated on these Typical Sections irrespective of where they are shown on the Plan and Profile Sheets.

Note: For Item Legend, see Sh. No. 5

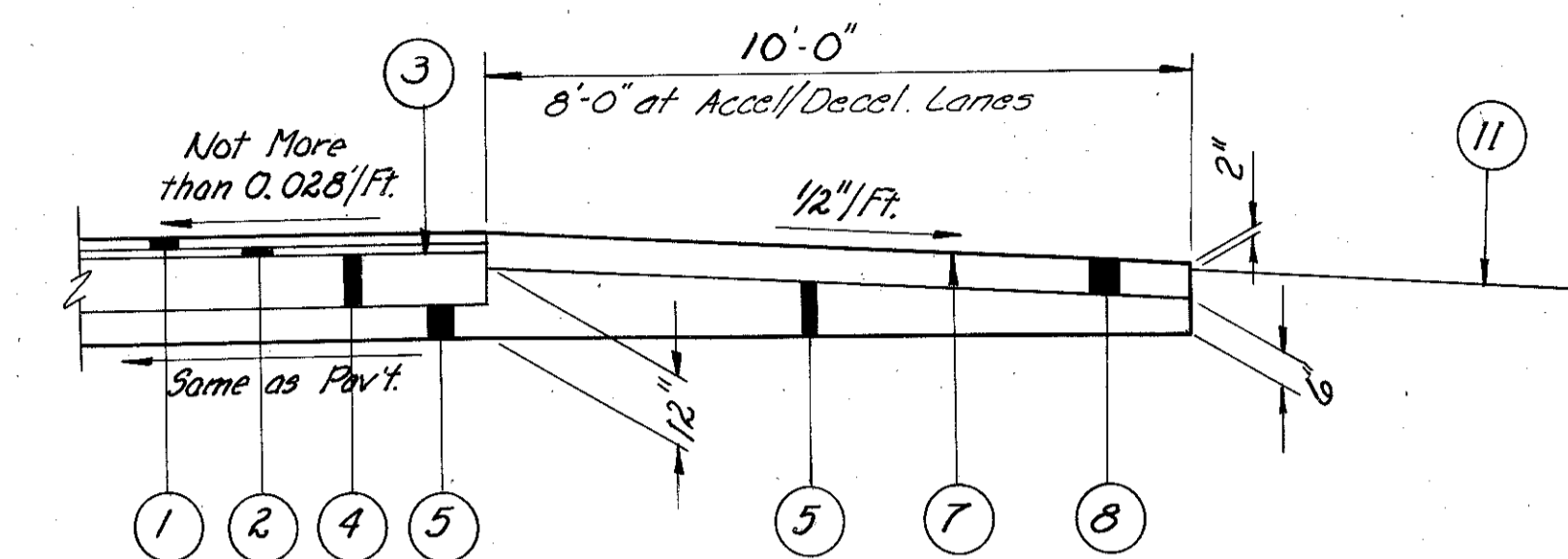
PAVED SHOULDER DETAILS



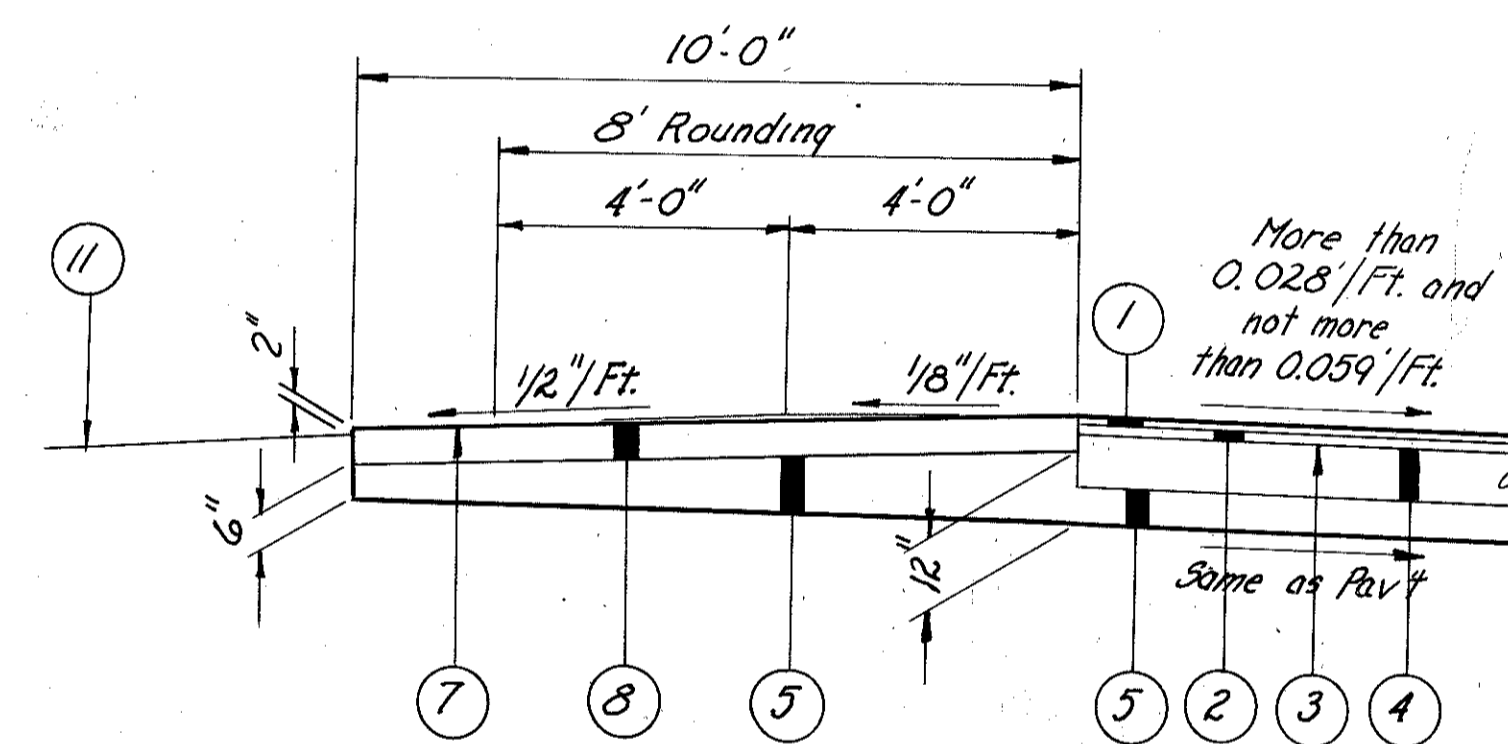
DETAIL A



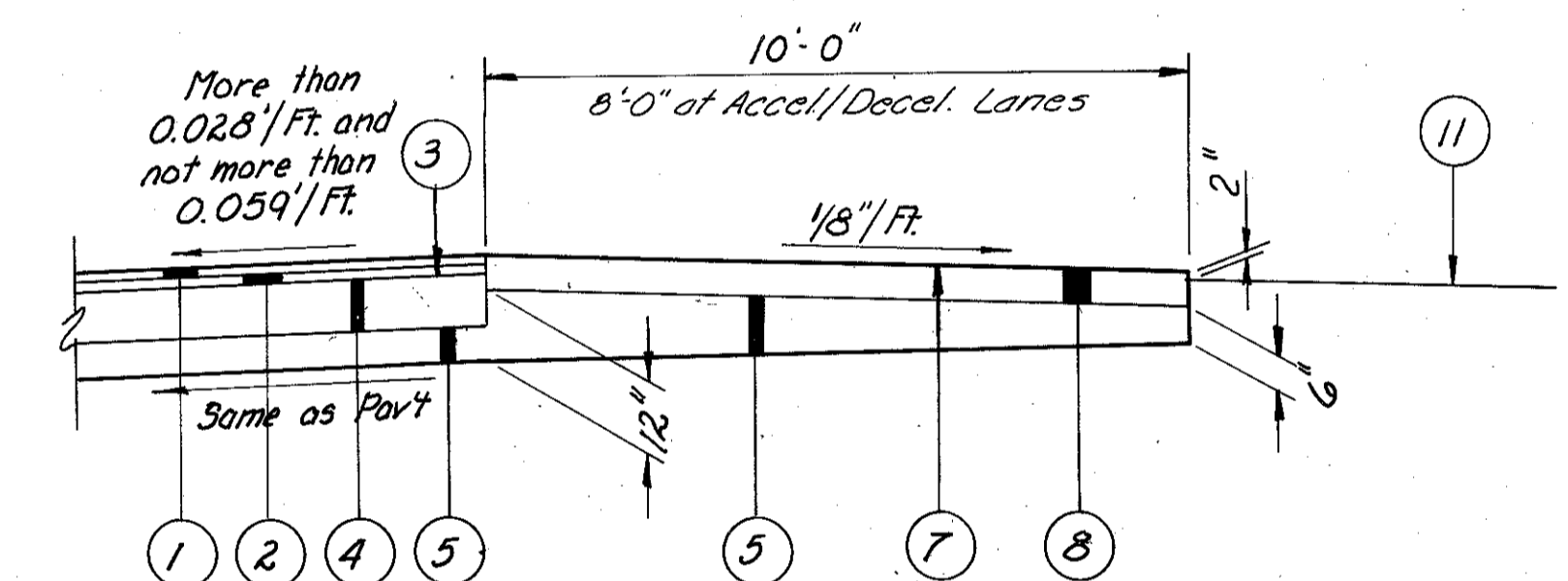
DETAIL C



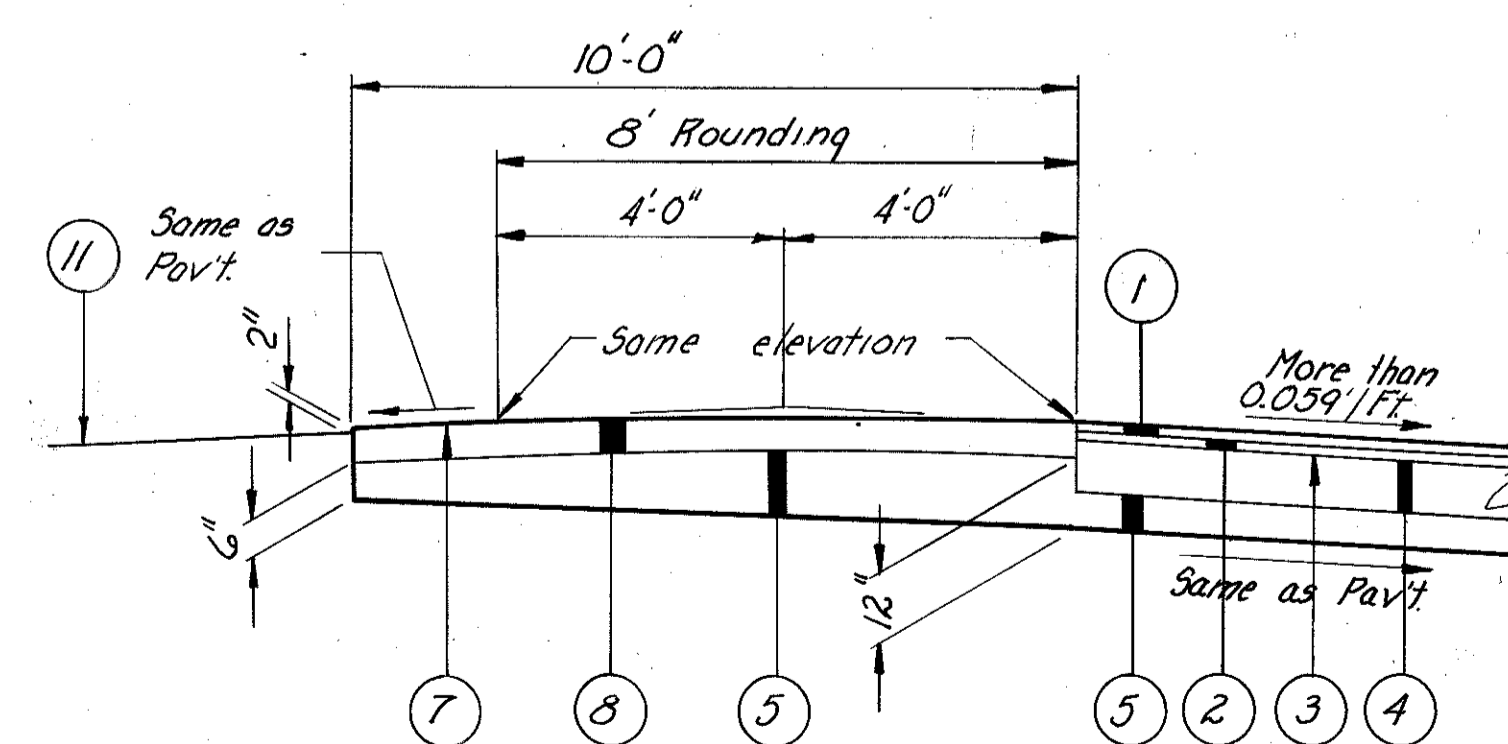
DETAIL B



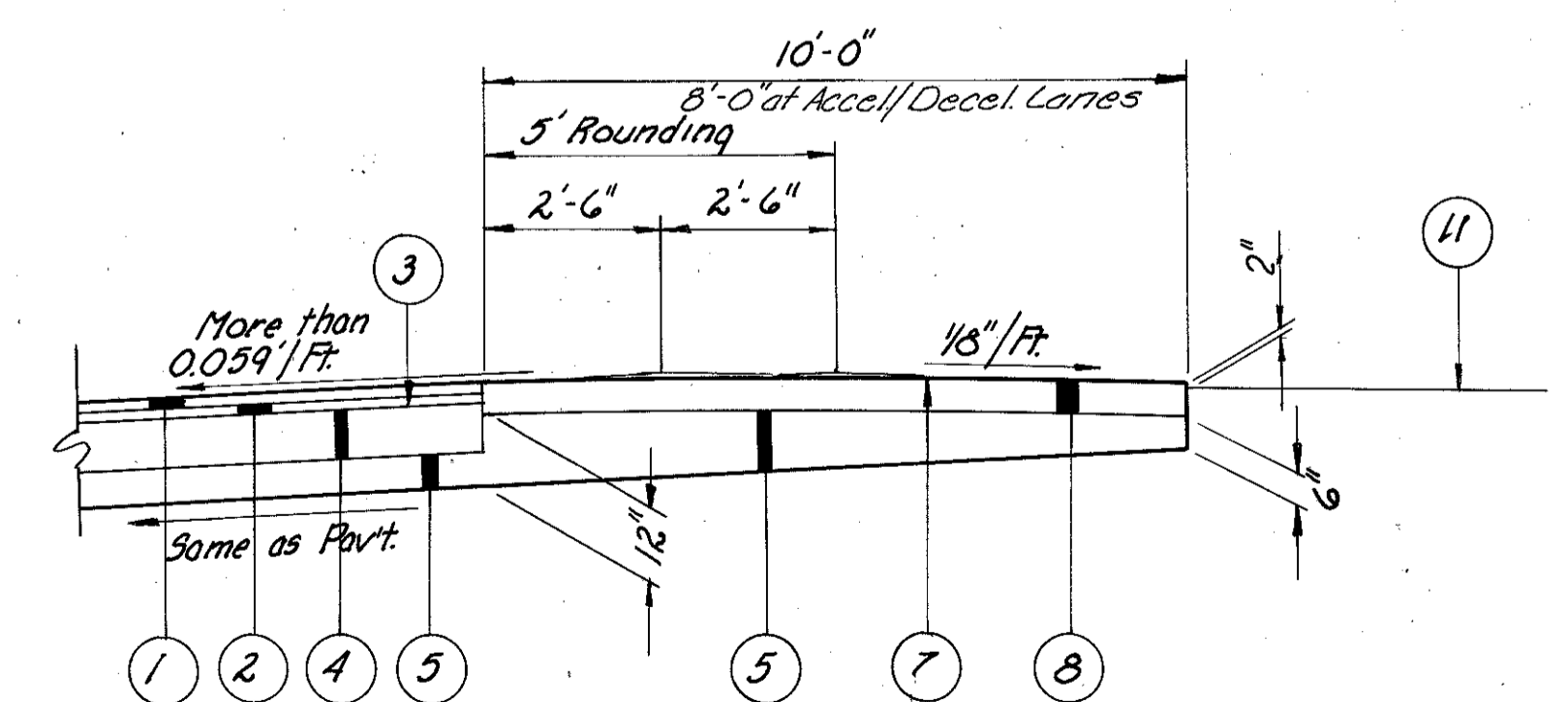
DETAIL A



DETAIL B



DETAIL A



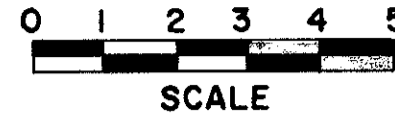
DETAIL B

* The location of Underdrains has been changed during the development of the Plans. They shall be offset as indicated on these Typical Sections irrespective of where they are shown on the Plan and Profile Sheets.

Note: For Item Legend See Sh.No. 5

TYPICAL SECTIONS

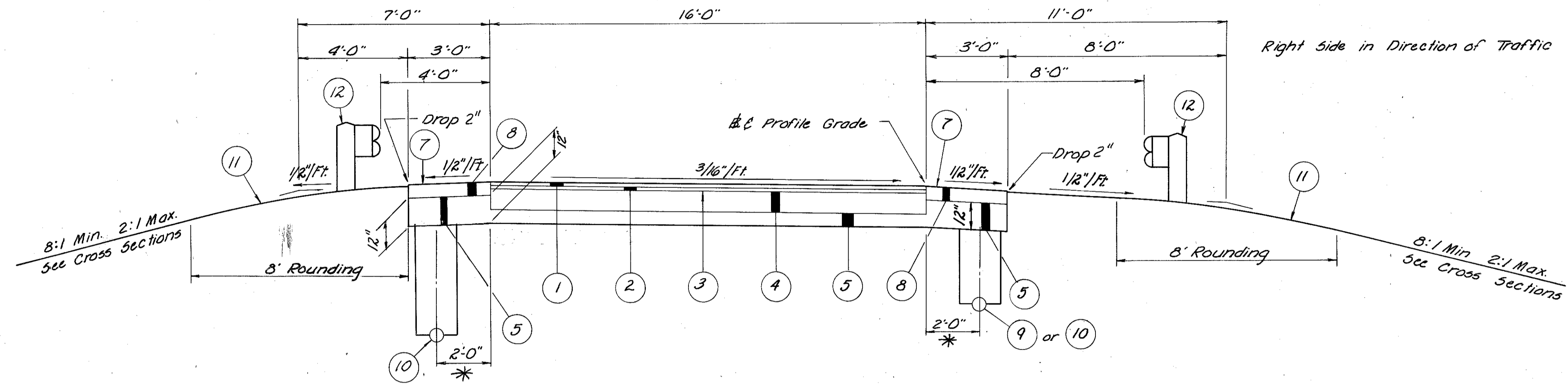
TYPE 848 ON 305



FHWA REGION	STATE	PROJECT	
5	OHIO		

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6/6

GRE-675-5.37
GREENE COUNTY

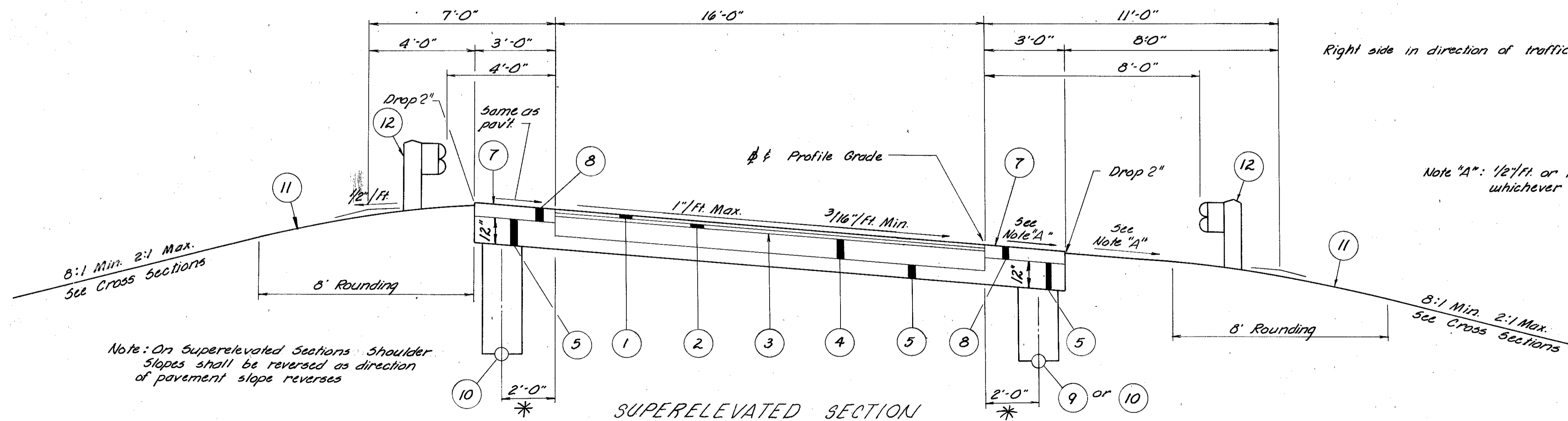


NORMAL SECTION

(See Pavement Details for Slope & Width Variations)

Ramp B Sta. 331+73.16 to Sta. 338+00.00
Ramp C Sta. 324+50.00 to Sta. 331+90.03

* The location of Underdrains has been changed during the development of the Plans. They shall be offset as indicated on these Typical Sections irrespective of where they are shown on the Plan and Profile sheets.



SUPERELEVATED SECTION

(See Pavement Details for Slope and Width Variations)

(See Superelevation Tables for Edge Elevations)

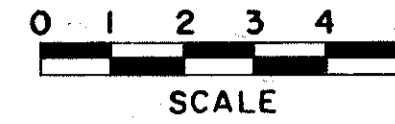
Ramp B Sta. 338+00.00 to Sta. 352+92.93
Ramp C Sta. 315+25.00 to Sta. 324+50.00
Ramp D Sta. 337+83.02 to Sta. 352+11.41
Ramp E Sta. 322+38.15 to Sta. 335+01.54
Ramp F Sta. 328+19.32 to Sta. 333+50.00
Ramp F Sta. 333+50.00 to Sta. 340+58.57 (Opposite Hand for Superelevation)
Ramp G Sta. 344+72.18 to Sta. 354+01.66
Ramp H Sta. 323+21.06 to Sta. 338+85.09

Note "A": 1/2"/ft. or rate of superelevation whichever is greater

Note: For Item Legend, see Sht. No. 5

TYPICAL SECTIONS

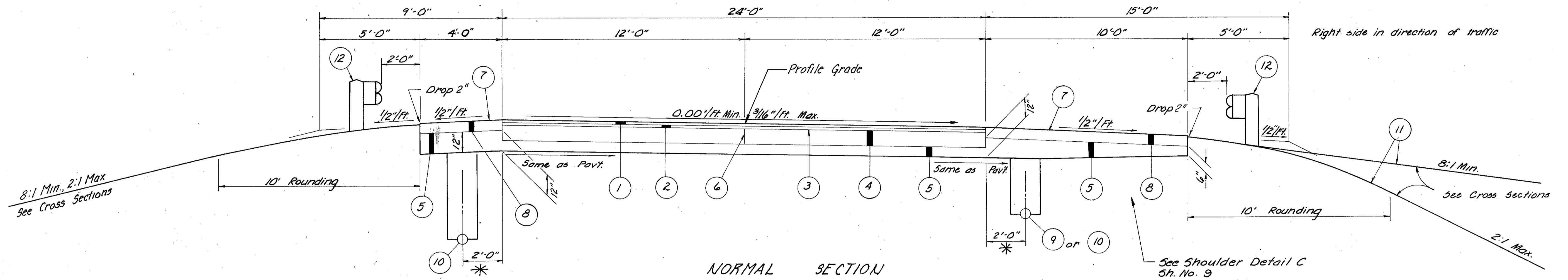
TYPE 848 ON 305



FHWA REGION	STATE	PROJECT
5	OHIO	

11
616

GRE-675-537
GREENE COUNTY

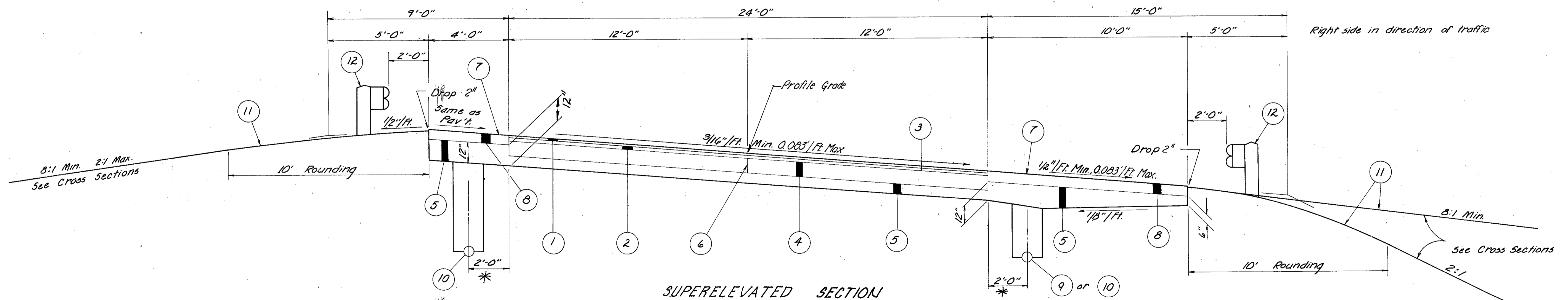


NORMAL SECTION

(See Pavement Details for Slope & Width Variations)

- Ramp A Sta. 301+17.15 to Sta. 304+81.91
- Ramp A Sta. 310+15.24 to Sta. 310+60.84
- Ramp A Sta. 310+60.84 to Sta. 311+06.43 (Opposite Hand for Pavement Slopes)
- Ramp A Sta. 340+58.57 to Sta. 341+18.54 (Opposite Hand for Pavement Slopes)
- Ramp A Sta. 341+18.54 to Sta. 341+78.50

*The location of Underdrains has been changed during the development of the Plans. They shall be offset as indicated on these Typical Sections irrespective of where they are shown on the Plan and Profile Sheets.



SUPERELEVATED SECTION

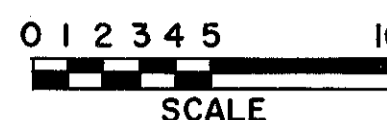
(See Pavement Details for Slope & Width Variations)
(See Superelevation Tables for Edge Elevations)

- Ramp A Sta. 304+81.91 to Sta. 310+15.24
- Ramp A Sta. 311+06.43 to Sta. 320+84.18 (Opposite Hand for Superelevation)
- Ramp A Sta. 320+84.18 to Sta. 324+21.88 Structure No. GRE-675-0576 of Approach Slabs (Opposite Hand for Superelevation)
- Ramp A Sta. 324+21.88 to Sta. 329+47.42 (Opposite Hand for Superelevation)
- Ramp A Sta. 329+47.42 to Sta. 332+39.66 Structure No. GRE-35-0074 of Approach Slabs (Opposite Hand for Superelevation)
- Ramp A Sta. 332+39.66 to Sta. 340+58.57 (Opposite Hand for Superelevation)
- Ramp A Sta. 341+78.50 to Sta. 355+00.00

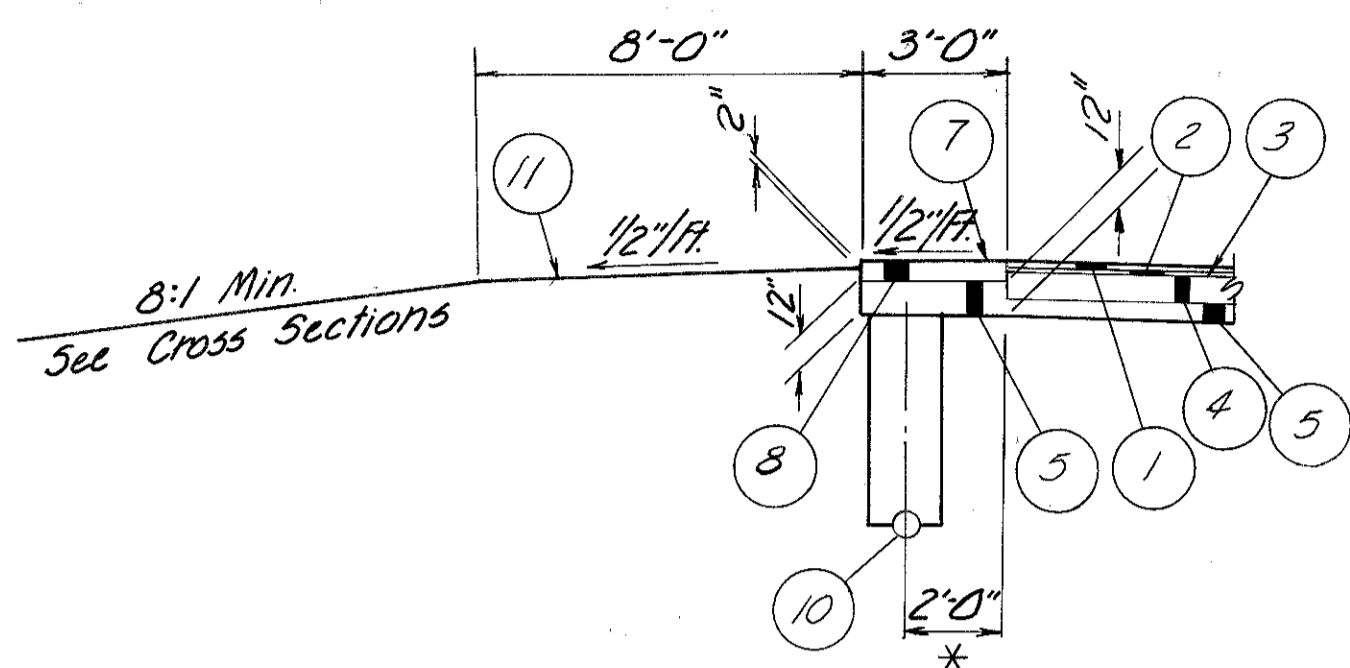
Note: For Item Legend see Stn. No. 5

TYPICAL SECTIONS

TYPE 848 ON 305

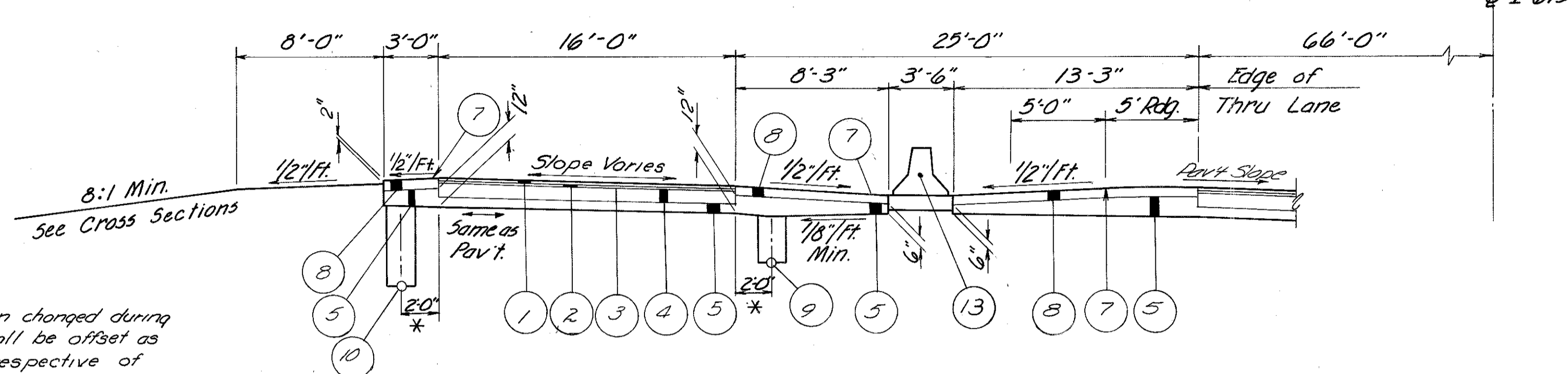


GRE-675-5.37
GREENE COUNTY

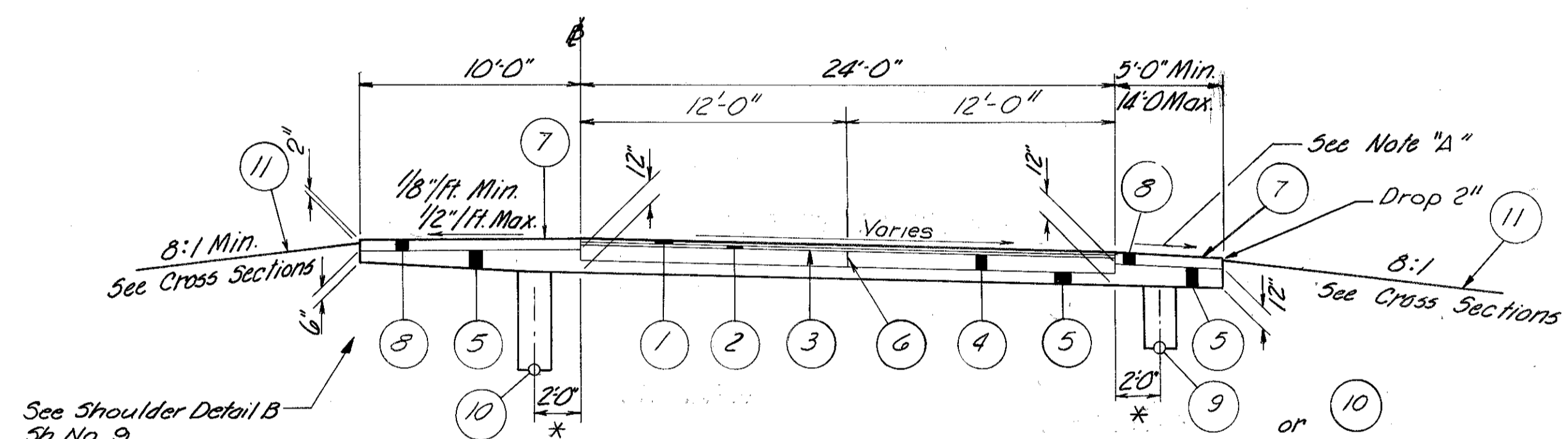


3' SHOULDER DETAIL

* The location of Underdrains has been changed during the development of the Plans. They shall be offset as indicated on these Typical Sections irrespective of where they are shown on the Plan and Profile Sheets.

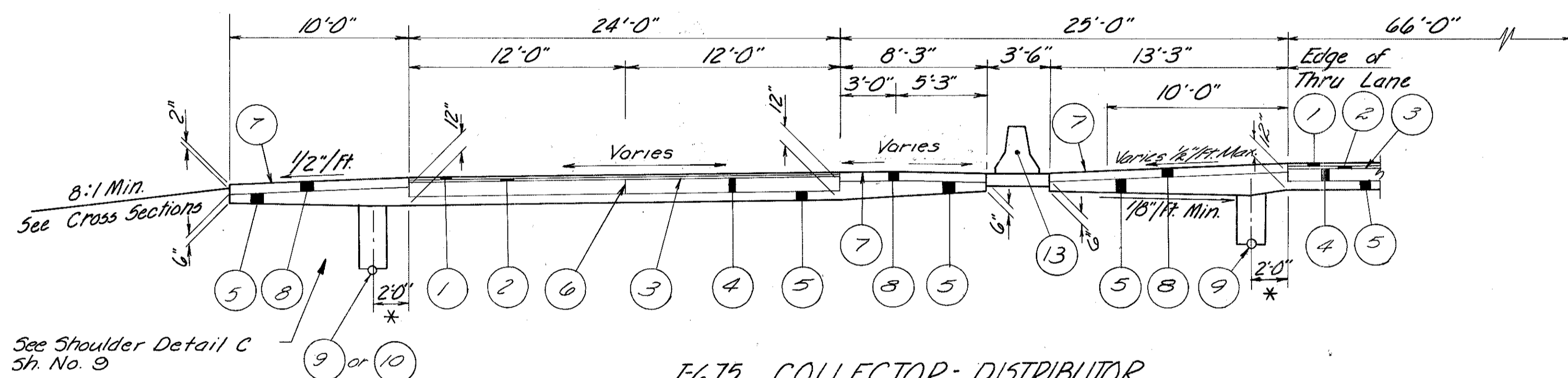


I-675 COLLECTOR DISTRIBUTOR
(See Pavt. Details for Slope & Width Variations & Edge Elevations)
I-675 Sta. 344+67.74 to Sta. 348+00.00



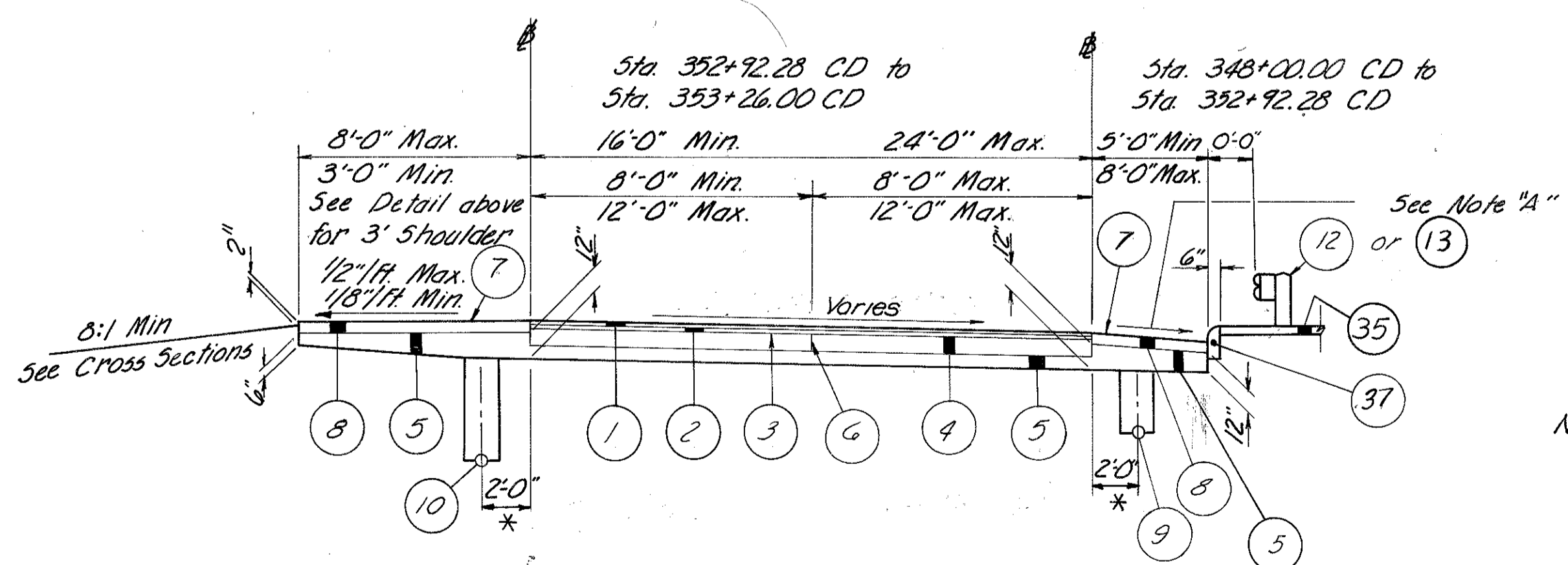
I-675 COLLECTOR - DISTRIBUTOR

(See Pavt. Details for Slope & Width Variations & Edge Elevations)
Sta. 353+26.00 CD to Sta. 365+89.72 CD



I-675 COLLECTOR - DISTRIBUTOR

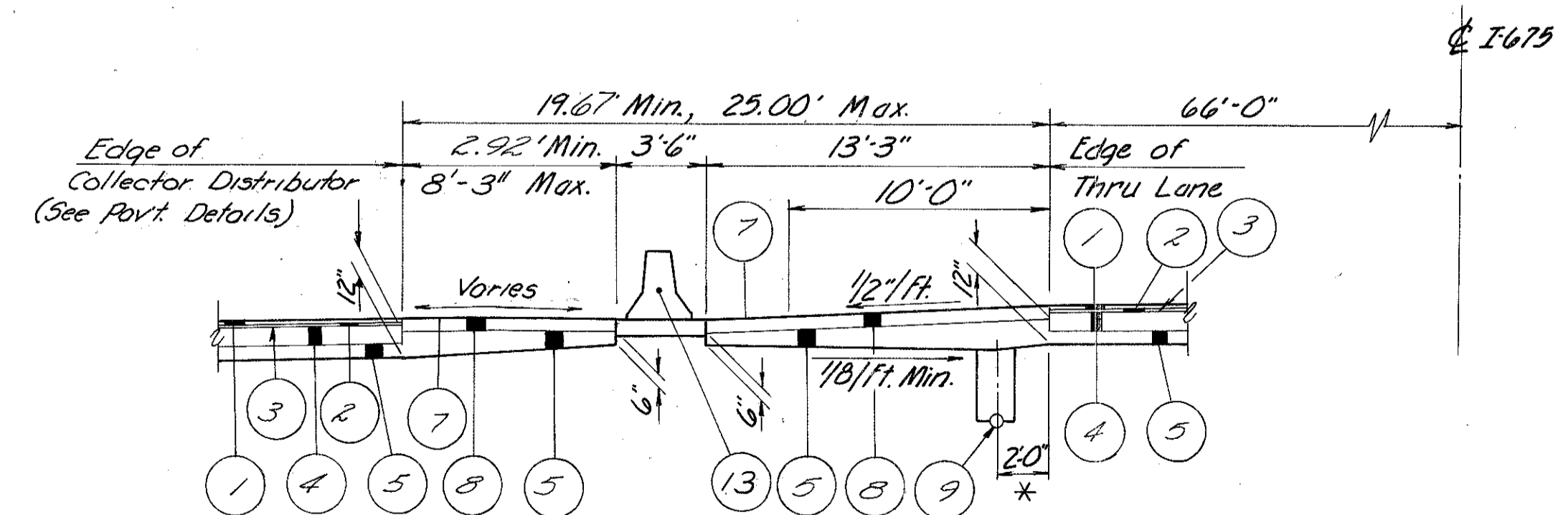
(See Pavt. Details for Slope & Width Variations & Edge Elevations)
I-675 Sta. 334+99.46 to Sta. 344+67.74



I-675 COLLECTOR DISTRIBUTOR

(See Pavt. Details for Slope & Width Variations & Edge Elevations)
Sta. 348+00.00 CD to Sta. 353+26.00 CD

Note "A", 1/2"/ft. or 5E. rate whichever is greater



I-675 COLLECTOR - DISTRIBUTOR

(See Pavt. Details for Slope & Width Variations & Edge Elevations)
I-675 Sta. 332+94.62 to Sta. 334+99.46

Note: For Item Legend see Sh. No. 5

TYPICAL SECTIONS

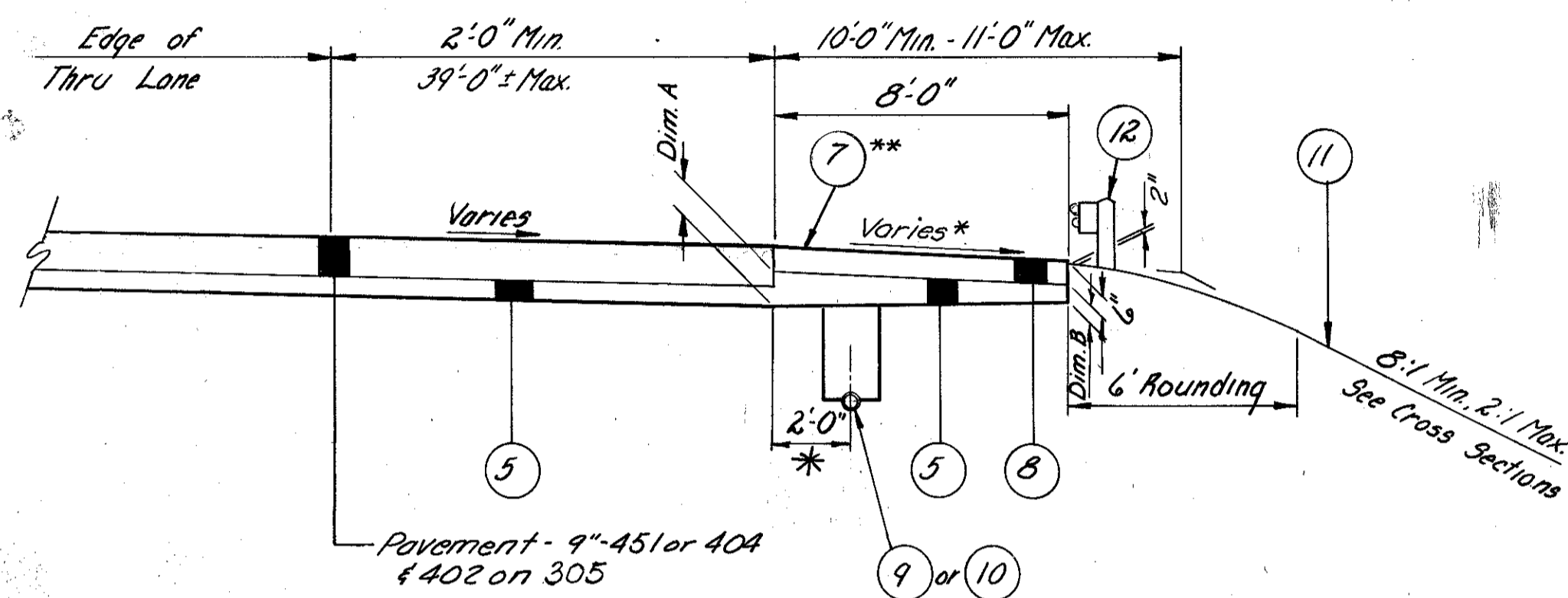
MISCELLANEOUS DETAILS

NO SCALE

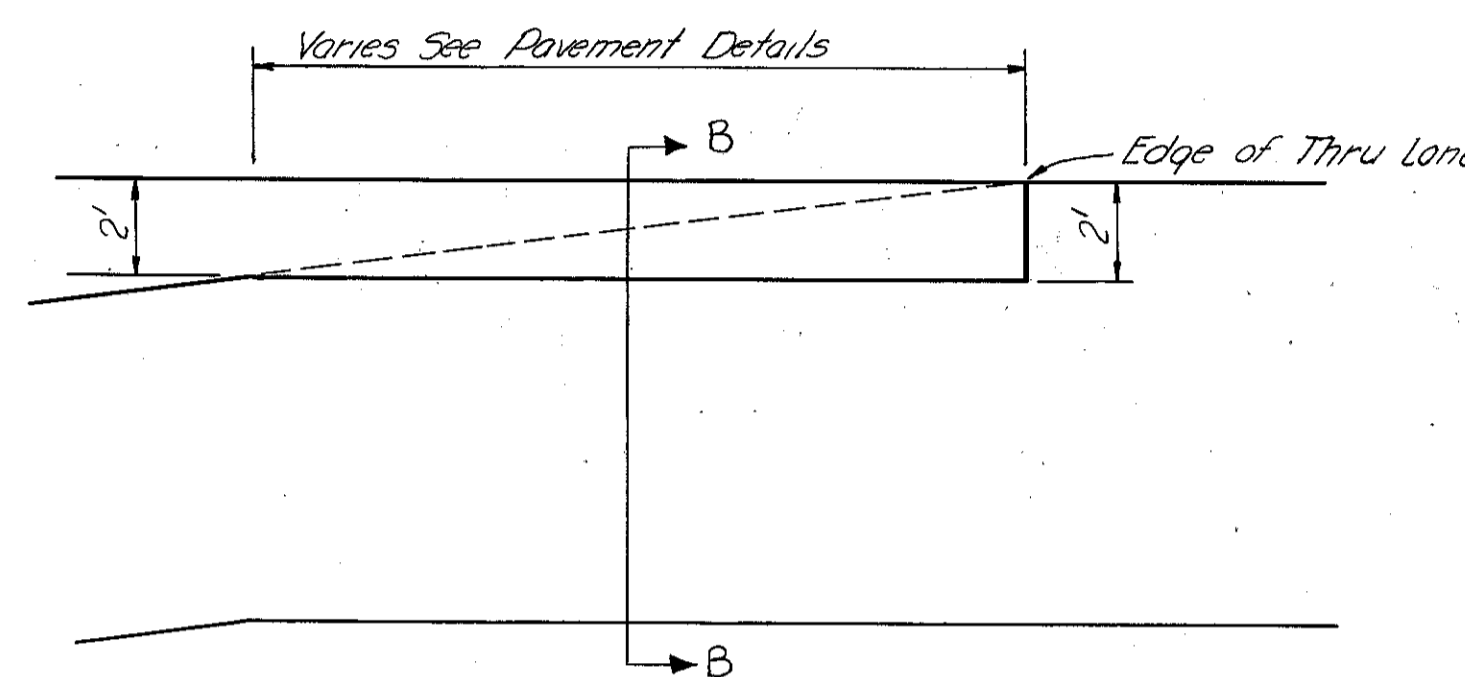
FHWA REGION	STATE	PROJECT	
5	OHIO		

13
616

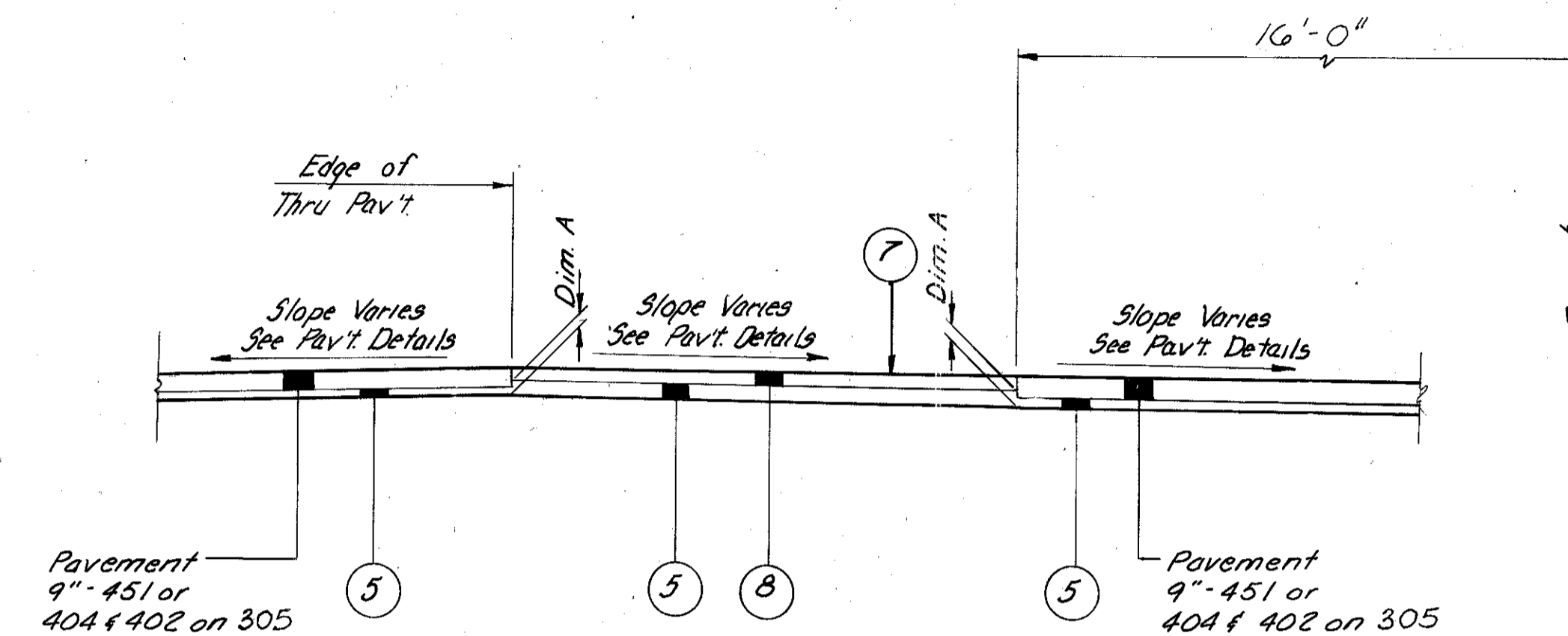
GRE-675-5.37
GREENE COUNTY



ACCELERATION & DECELERATION LANES - NORMAL



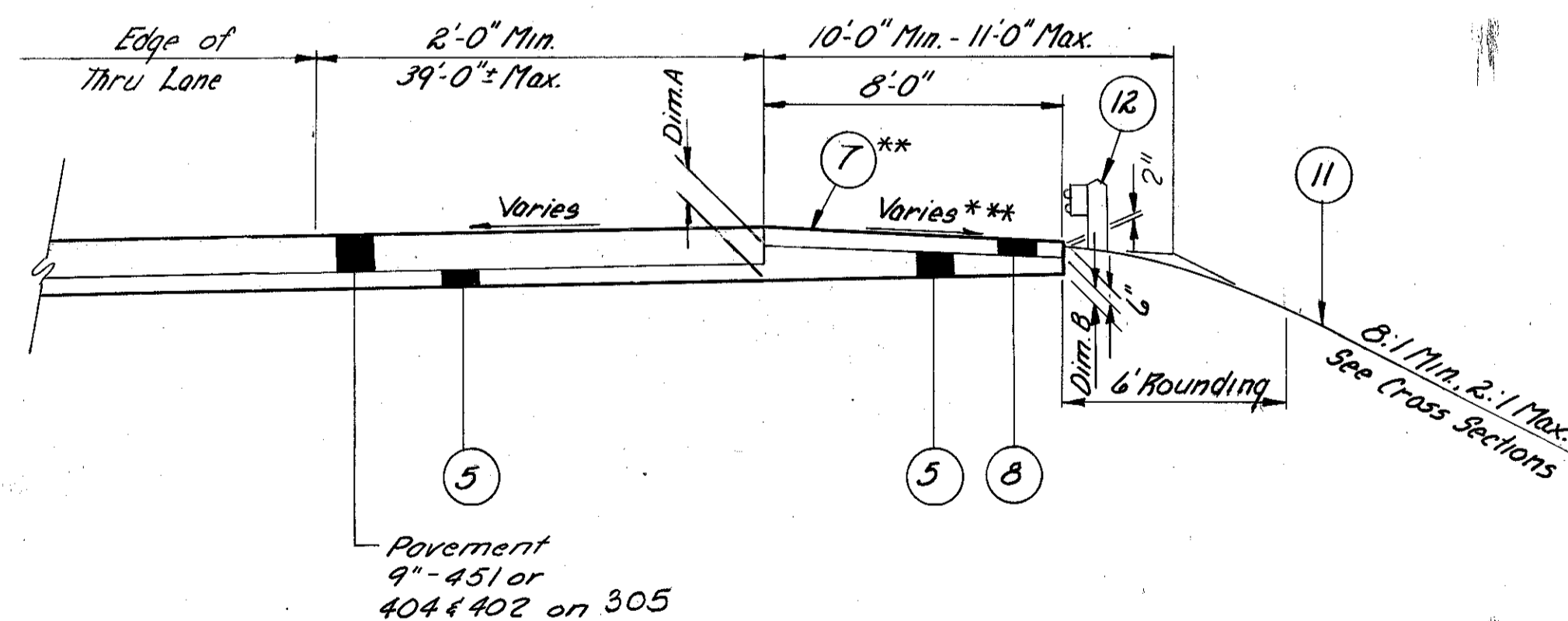
PLAN VIEW
END TREATMENT FOR SPEED CHANGE LANE TAPERS



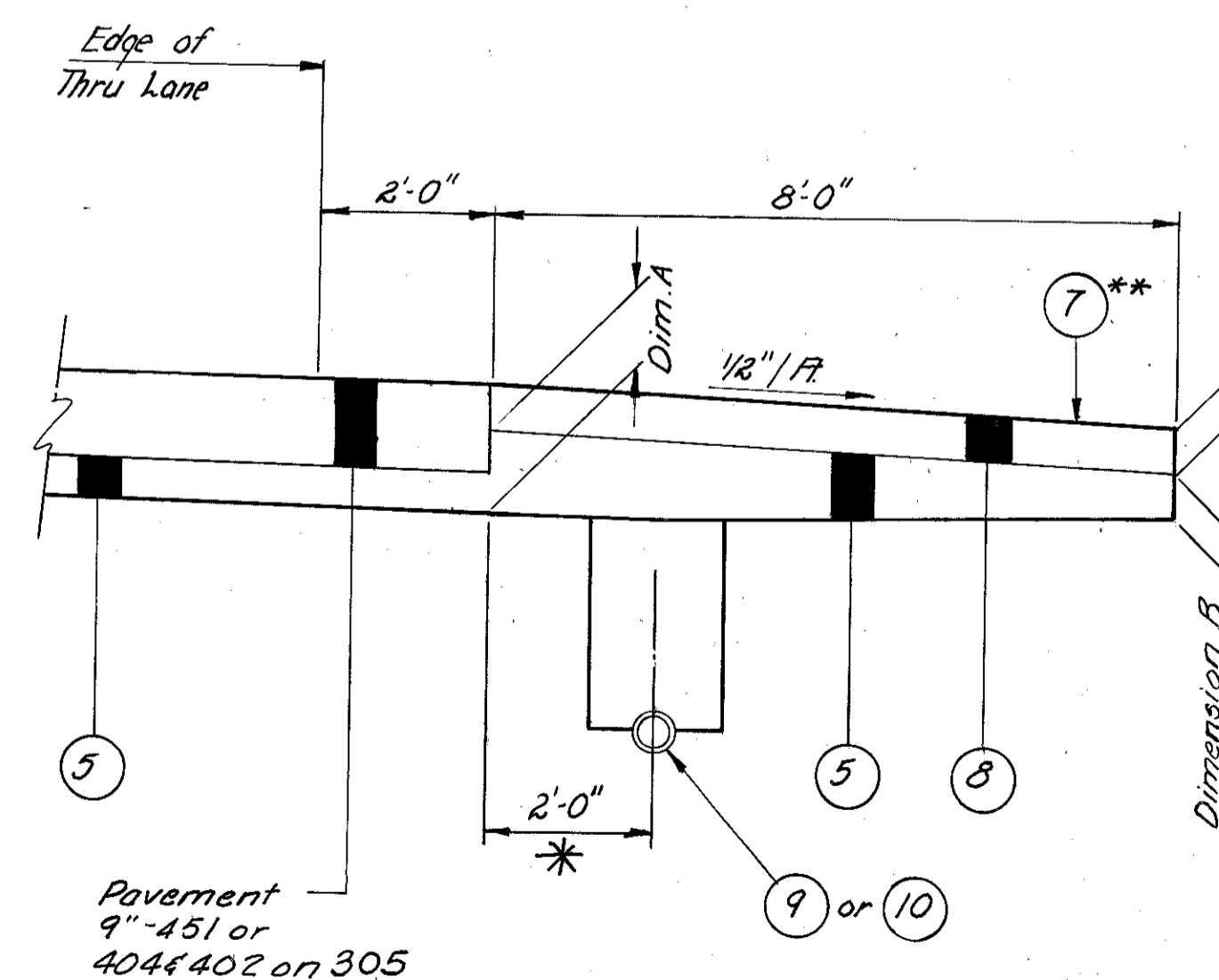
NORMAL SECTION OR HIGH SIDE OF SUPERELEVATION

* The location of Underdrains has been changed during the development of the Plans. They shall be offset as indicated on these Typical Sections irrespective of where they are shown on the Plan and Profile Sheets.

**Omit when adjacent to Concrete Pavement.



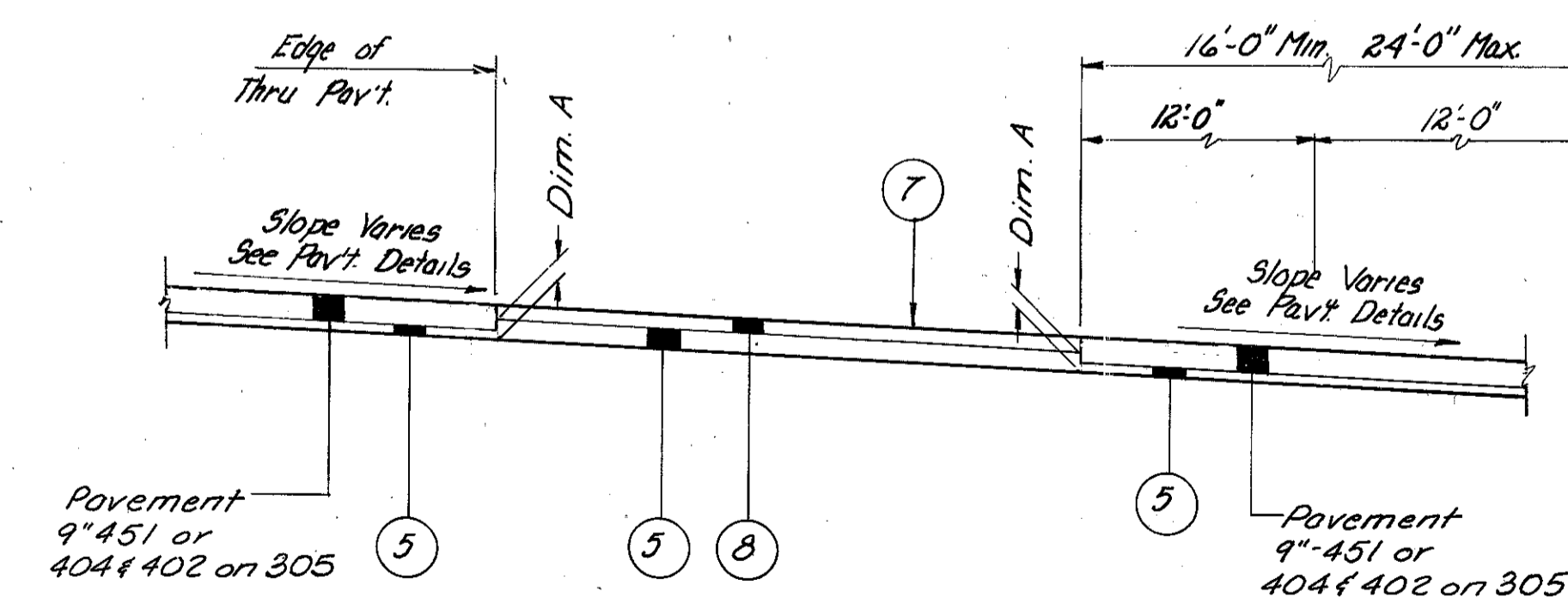
ACCELERATION & DECELERATION LANES - SUPERELEVATED



SECTION B-B

PAVEMENT ITEMS 404 & 402 on 305
Dimension A = 12"
Dimension B = 6"

PAVEMENT ITEM 451
Dimension A = 9"
Dimension B = 3"



LOW SIDE OF SUPERELEVATION

*** See Shoulder Details, Sh. No. 9

NOTES:
See Pavement Details for Joint Locations
See Sheet No. 5 for Item Legend.

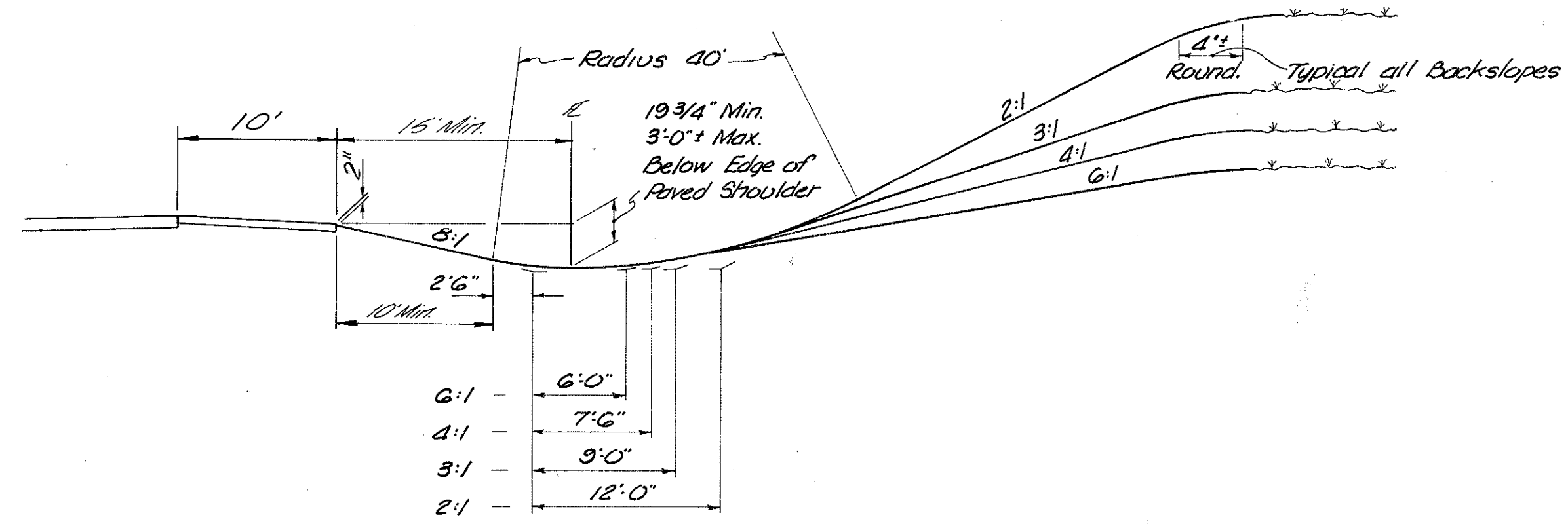
GRADING DETAILS

NO SCALE

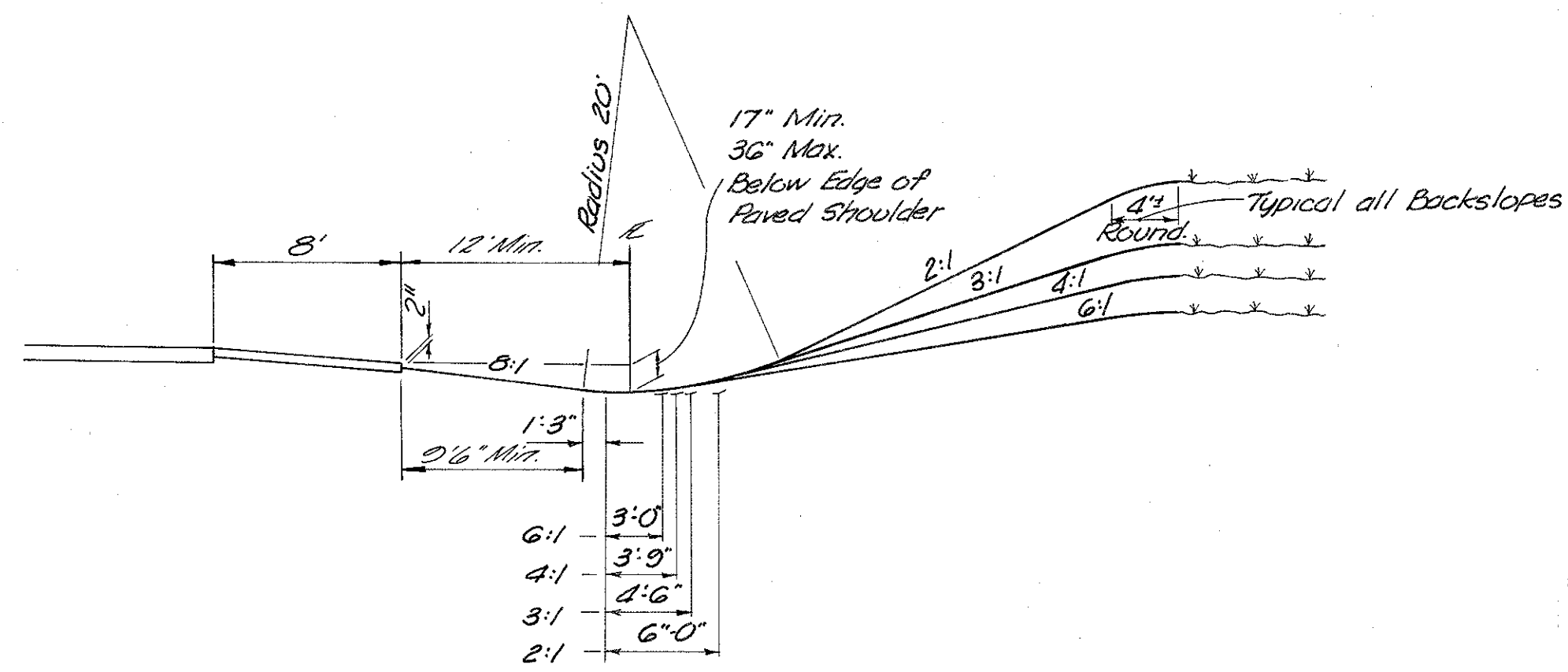
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

14
616

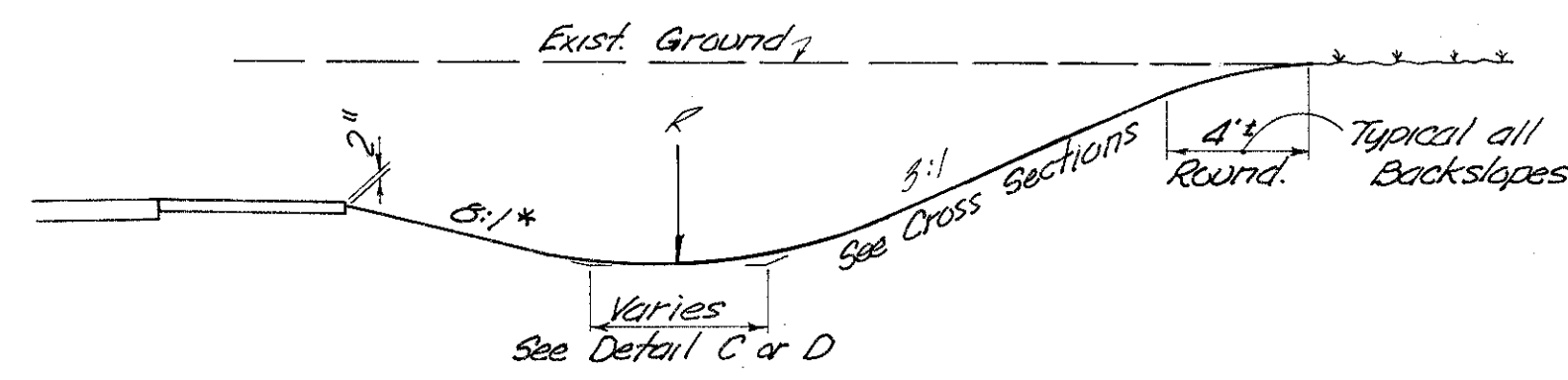
G.R.E.-675-5.37
GREENE COUNTY



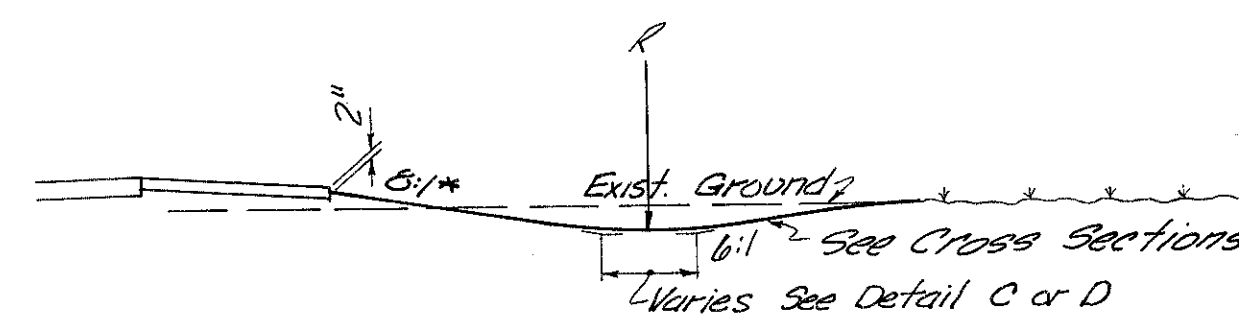
DETAIL C
I-675, US 35 & RAMPS
CUT SECTION - 40' RADIUS



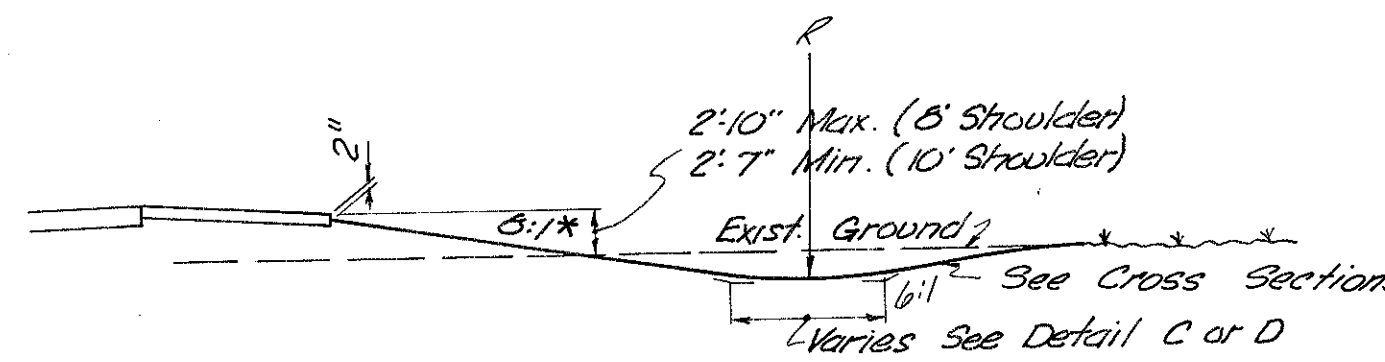
DETAIL D
ALL OTHER ROADS
CUT SECTION - 20' RADIUS



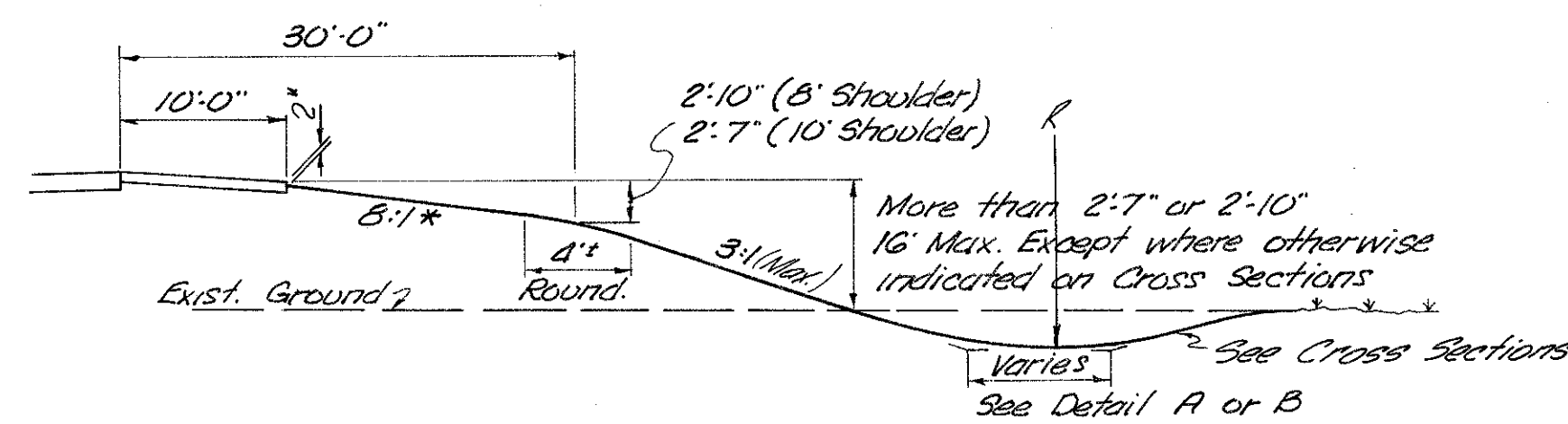
DEEP CUT IN SOIL



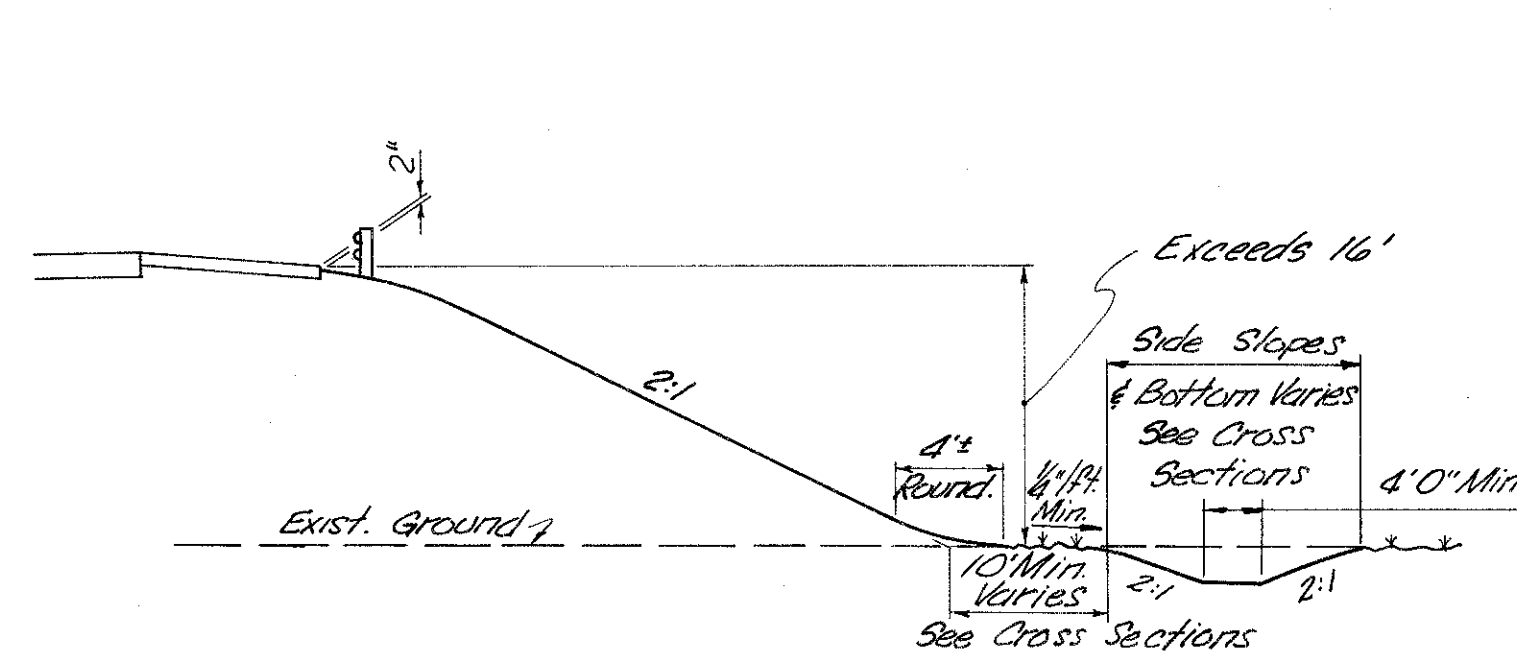
SHALLOW CUT



LOW FILL

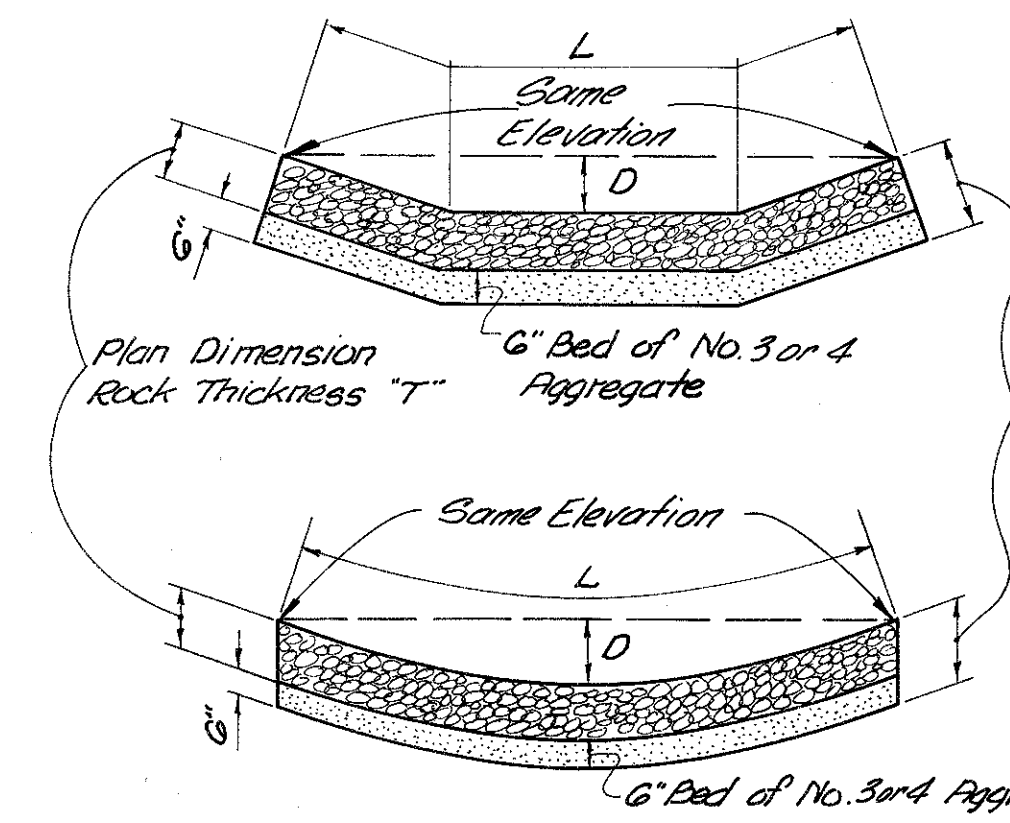


MEDIUM FILL



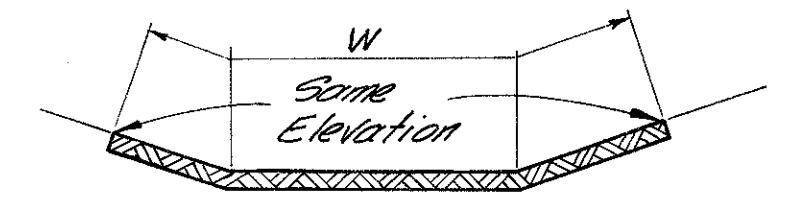
DEEP FILL

* For Slope Variations at Noise Barrier, See Noise Barrier Details.



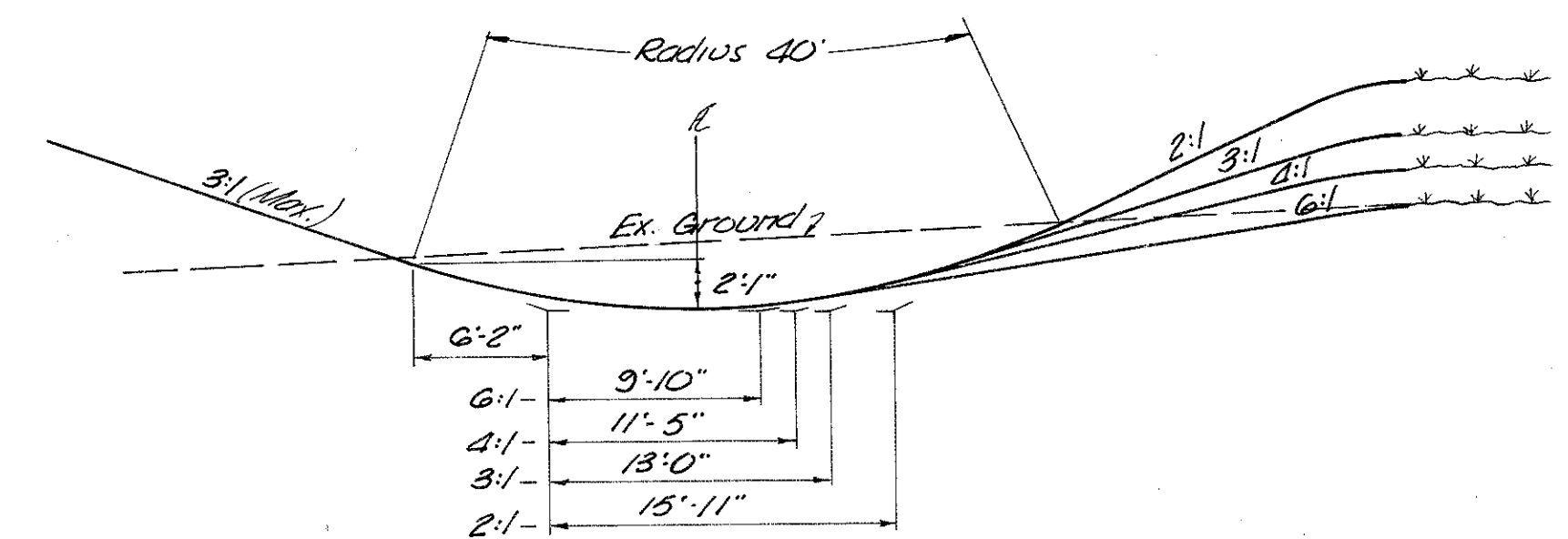
ROCK CHANNEL PROTECTION

Note: Sod shall be centered on flow line of circular ditches.
See plans for dimensions D, L, T, & W

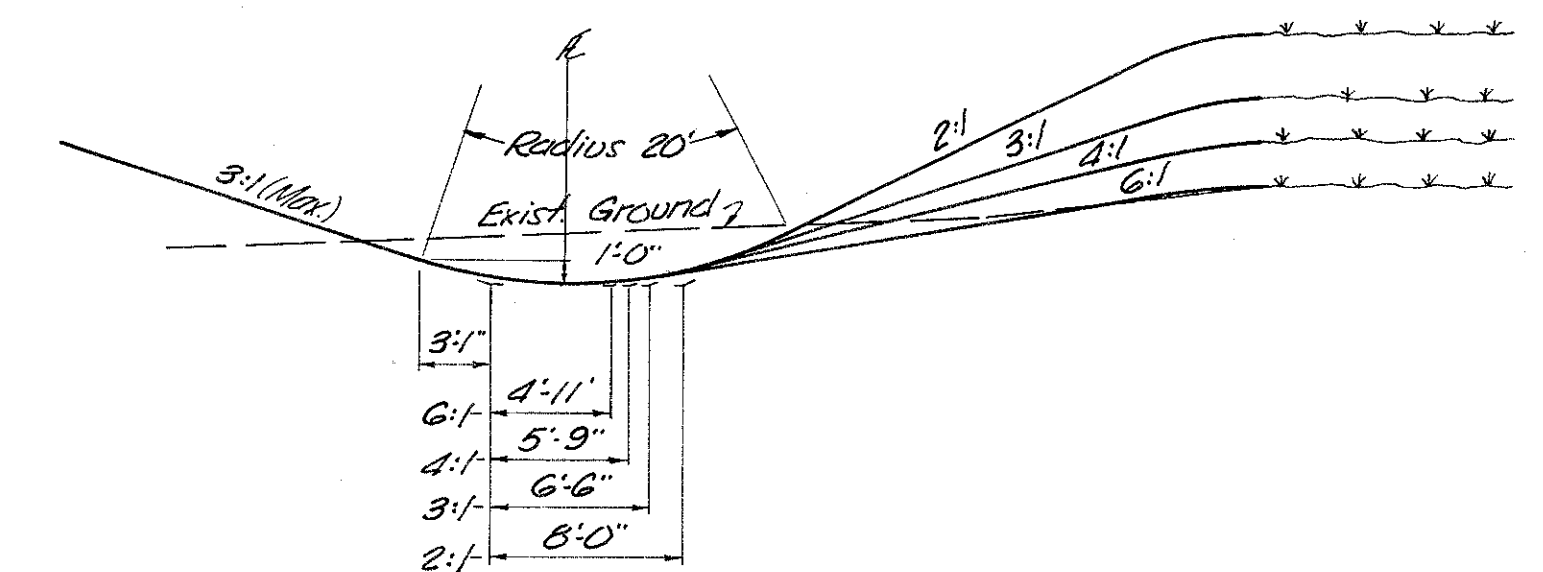


SOD CHANNEL LINING

Thickness used for Computing Quantity of Item 601 Rock Channel Protection



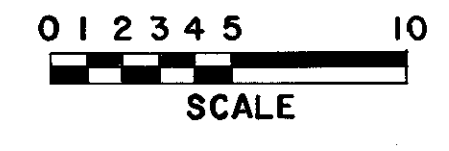
DETAIL A
I-675, US 35 & RAMPS
40' RADIUS



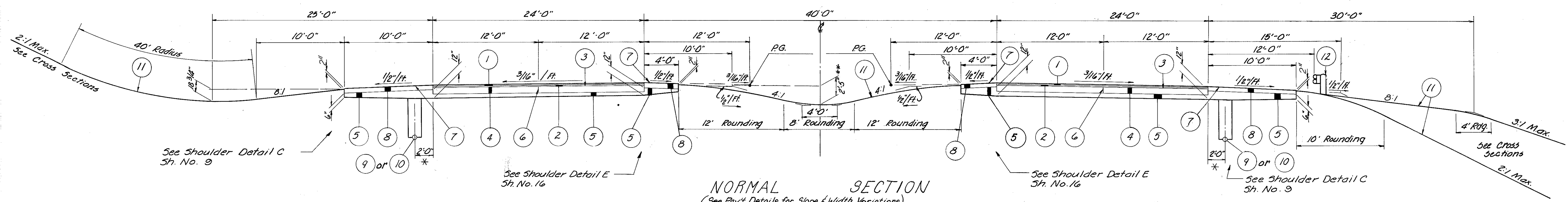
DETAIL B
ALL OTHER ROADS
20' RADIUS

TYPICAL SECTIONS

TYPE 848 ON 305

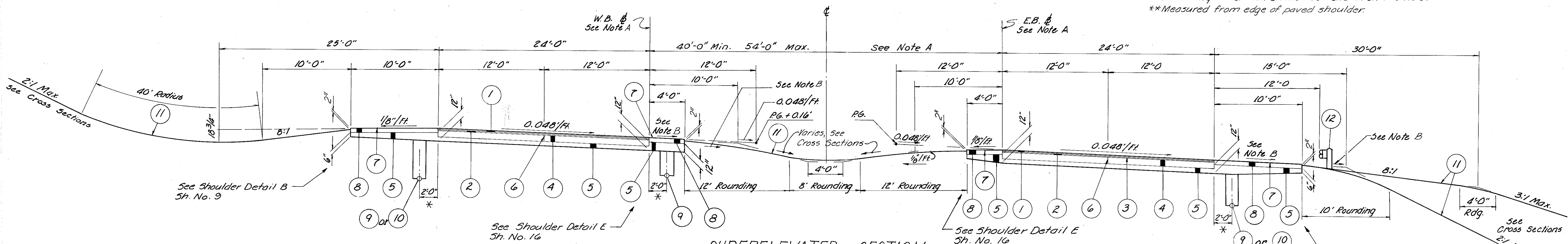


GDE-675-5.37
GREENE COUNTY



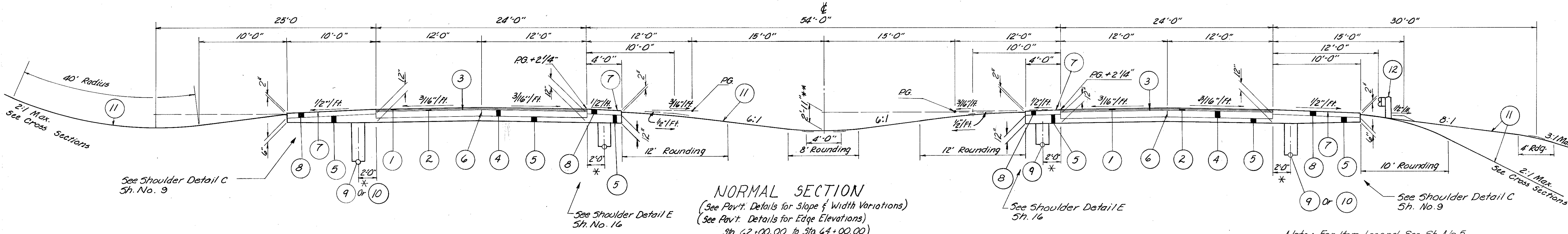
NORMAL SECTION
(See Pav't Details for Slope & Width Variations)
Sta. 1087+74.57 Rt & 1090+85.78 Lt. to Sta. 1094+75.00

* The location of Underdrains has been changed during the development of the Plans. They shall be offset as indicated on these Typical Sections irrespective of where they are shown on the Plan and Profile Sheets.
** Measured from edge of paved shoulder.



SUPERELEVATED SECTION
(See Pavement Details for Slope & Width Variations)
(See Pavement Details for Edge Elevations)
Sta. 1094+75.00 to Sta. 4+28.35 (Station Equation: Sta 1106 + 93.02 Bk + Sta 0+00.00 Alt'd)
Sta. 4+28.35 to Sta. 6+58.90 Structure No. GRE-35-0009 & Approach Slabs
Sta. 56+07.82 to Sta. 58+72.02 Structure No. GRE-35-0107 R/L & Approach Slabs
Sta. 58+72.02 to Sta. 62+00.00 (See Note "A")

Note "A" From Sta. 44+00.00 to Sta. 62+00.00 Median Width Varies
(See Plans for Eastbound & Westbound Base Lines)
Note "B" 1/2" / Ft. Min., 0.048" / Ft. Max.



NORMAL SECTION
(See Pav't. Details for Slope & Width Variations)
(See Pav't. Details for Edge Elevations)
Sta. 62+00.00 to Sta. 64+00.00

Note: For Item Legend See Sh. No. 5

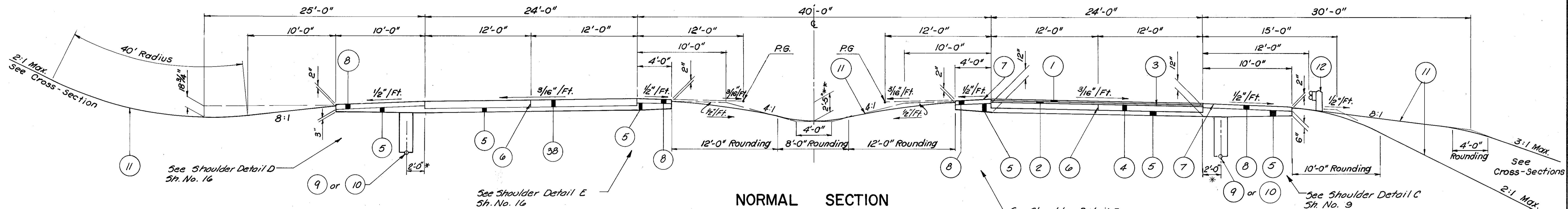
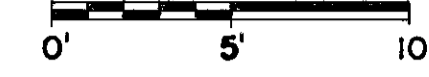
US 35 TYPICAL SECTION

TYPICAL SECTIONS

F.H.W.A. REGION	STATE	PROJECT
5	OHIO	

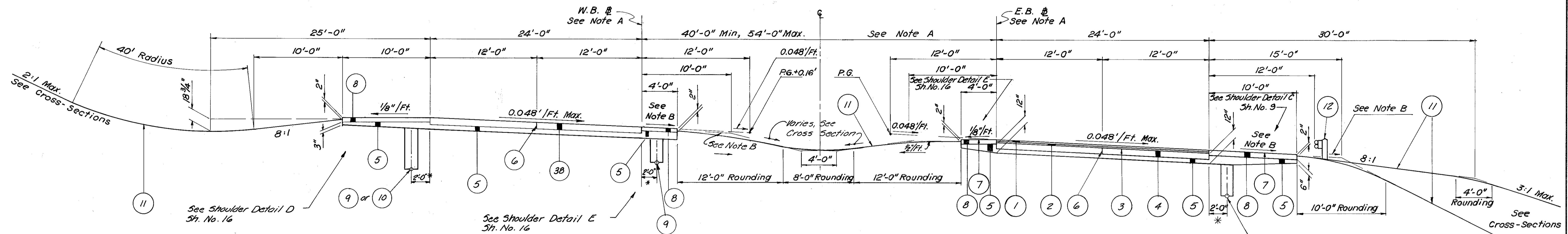
15A
616

GRE - 675-537
GREENE COUNTY



NORMAL SECTION

(See Pavement Details for Slope & Width Variations)
Sta. 6+58.90 to Sta. 14+25.00
Sta. 40+00.00 to Sta. 41+50.00



SUPERELEVATED SECTION

(See Pavement Details for Slope & Width Variations & Edge Elevations)
Sta. 14+25.00 to Sta. 28+51.00
Sta. 28+51.00 to Sta. 33+22.62 Structure No. GRE-675-0589 & Approach Slabs
Sta. 33+22.62 to Sta. 40+00.00
Sta. 41+50.00 to Sta. 44+00.00
Sta. 44+00.00 to Sta. 56+07.82 (See Note A)

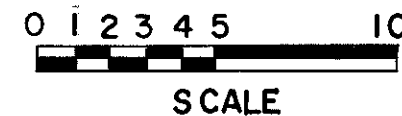
Note A:
From Sta. 44+00.00 to Sta. 62+00.00 Median Width Varies
(See Plans for Eastbound & Westbound Base Lines)

Note B:
1/2" / Ft. Min, 0.048' / Ft. Max.

NOTE: For Item Legend See Sheet No. 5.

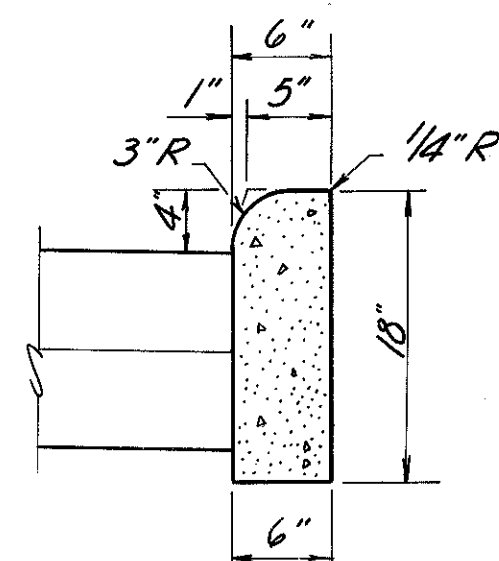
TYPICAL SECTIONS

MISCELLANEOUS DETAILS

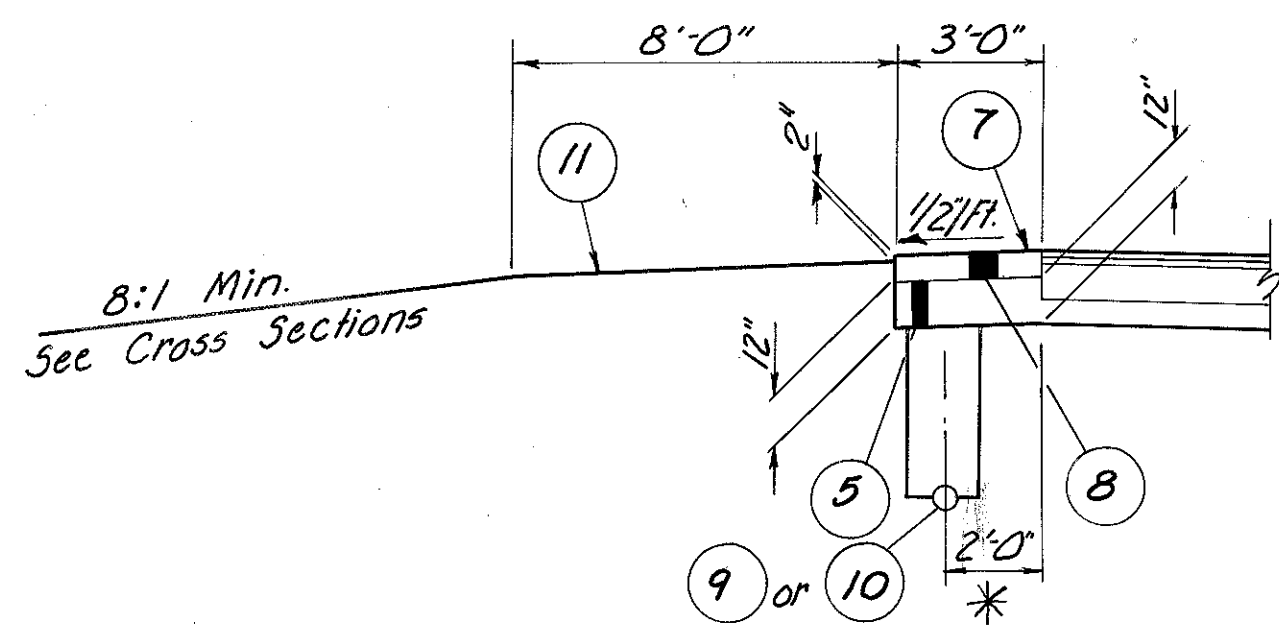


GRE - 675 - 5.37
GREENE COUNTY

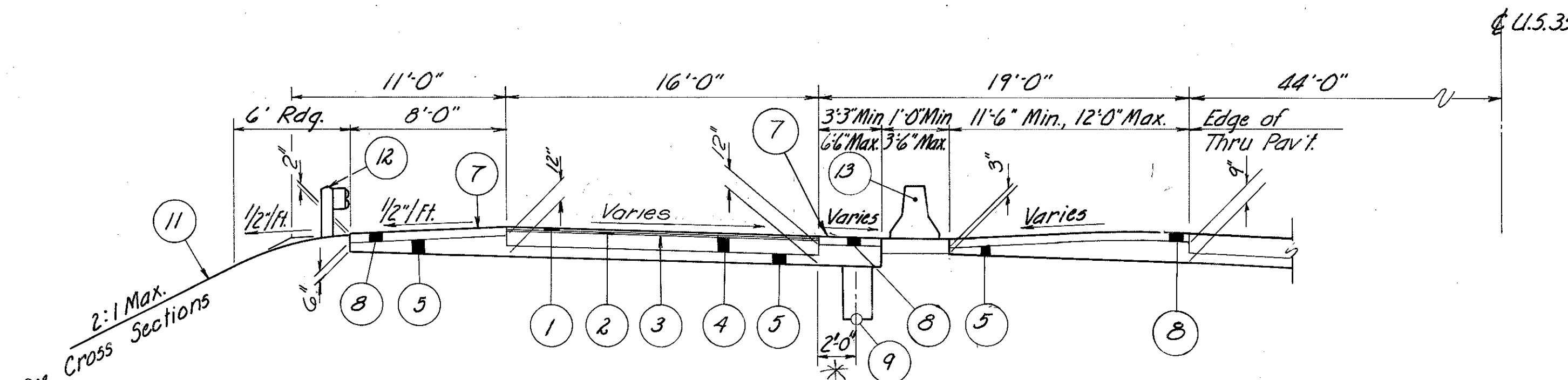
17
6/6



CONCRETE CURB
TYPE 6, MOD. AS PER PLAN
Not to Scale



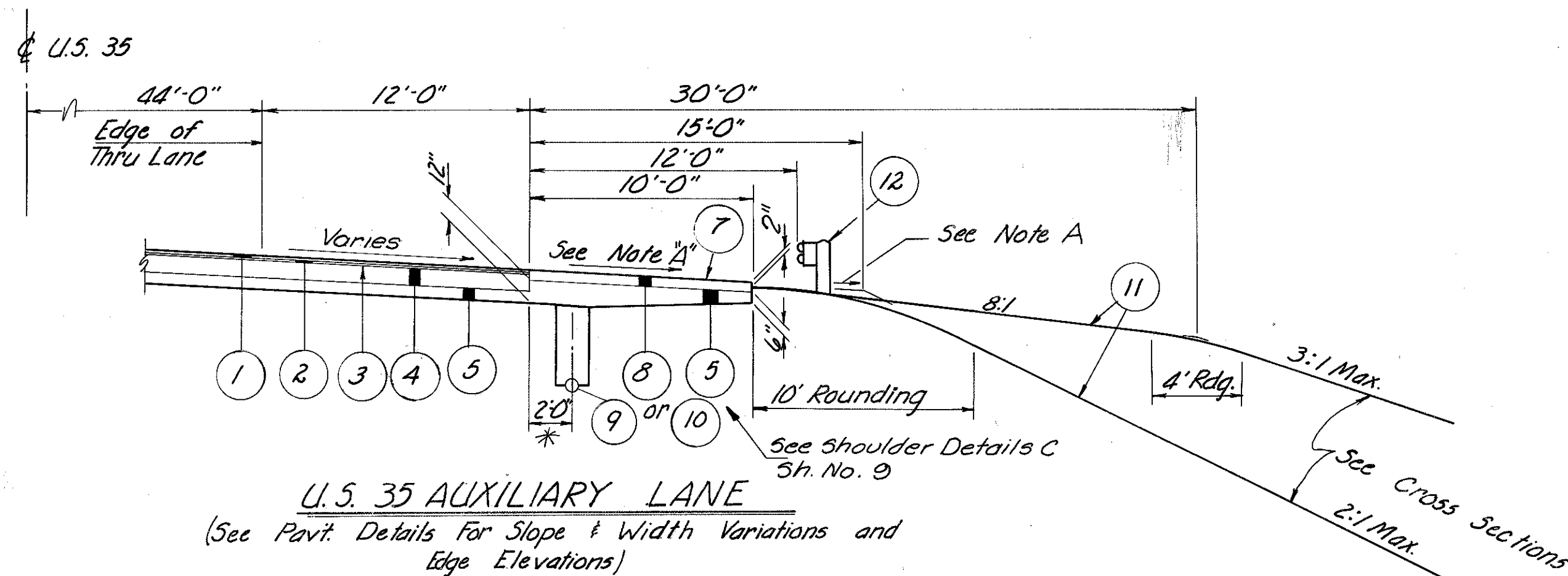
SHOULDER DETAIL FOR 16'
COLLECTOR - DISTRIBUTOR PAV'T.



U.S. 35 COLLECTOR - DISTRIBUTOR

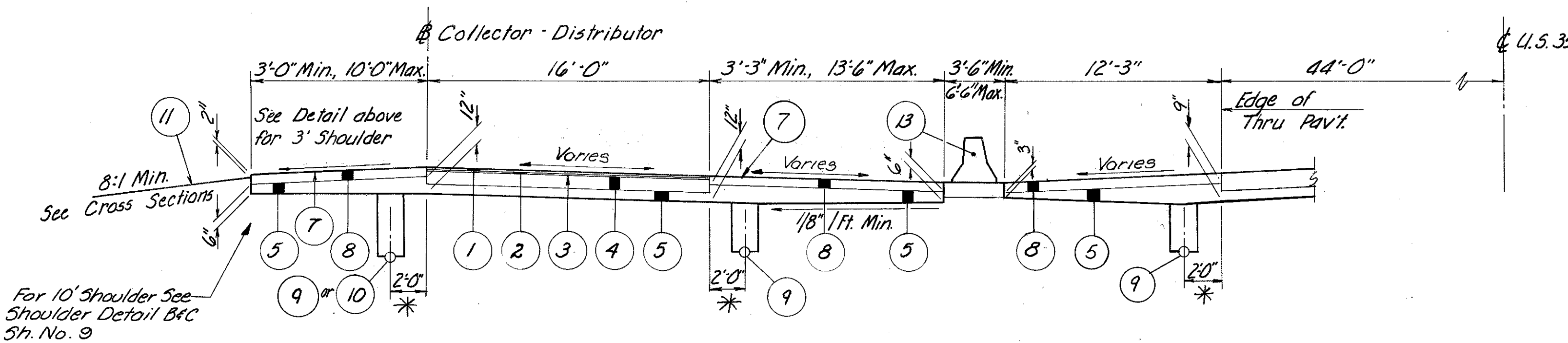
(See Pav't Detail for Slope & Width Variations & Edge Elevations)
Sta. 46+10.00 W.B. to Sta. 51+85.12 W.B.

Note "A": 1/2" / Ft. or S.E. Rate whichever is greater.



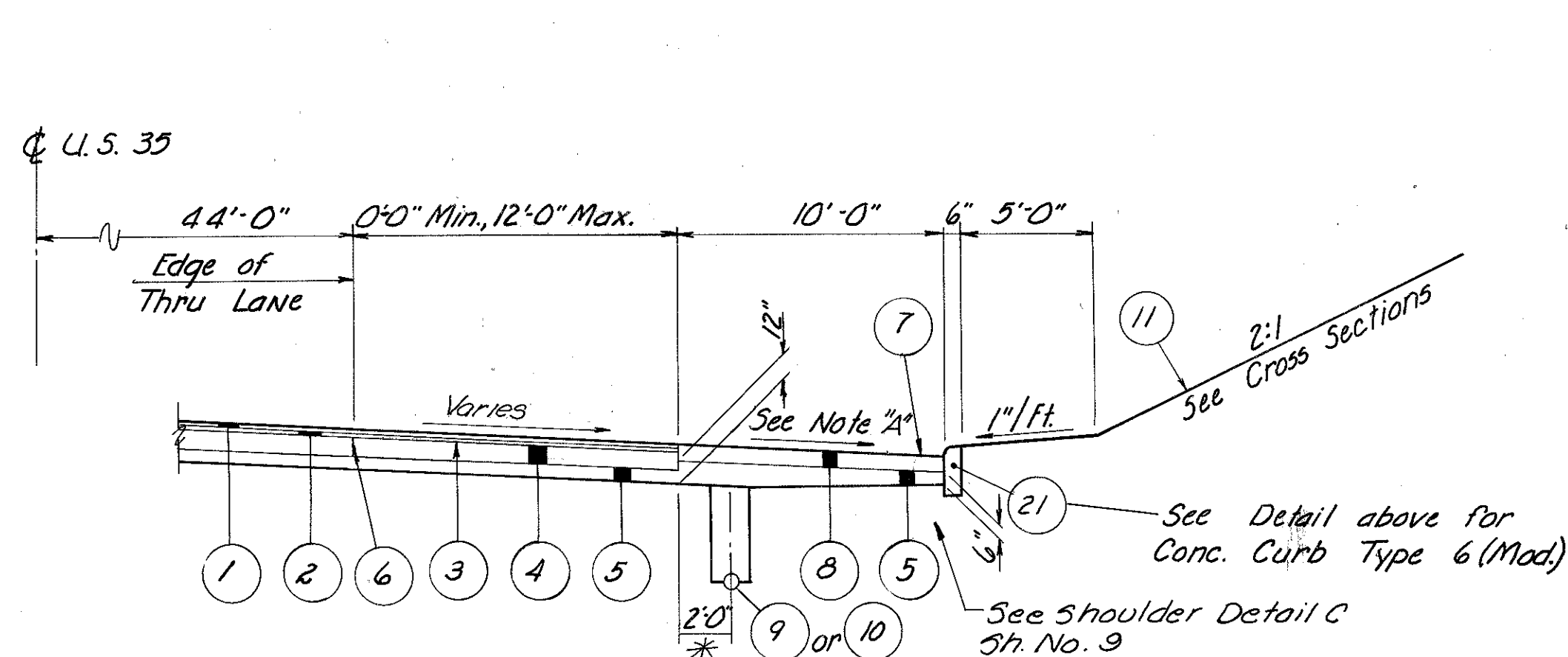
U.S. 35 AUXILIARY LANE

(See Pav't Details for Slope & Width Variations and Edge Elevations)
Sta. 1099+00.00 to Sta. 1106+93.02
Sta. 0+00.00 to Sta. 10+00.02



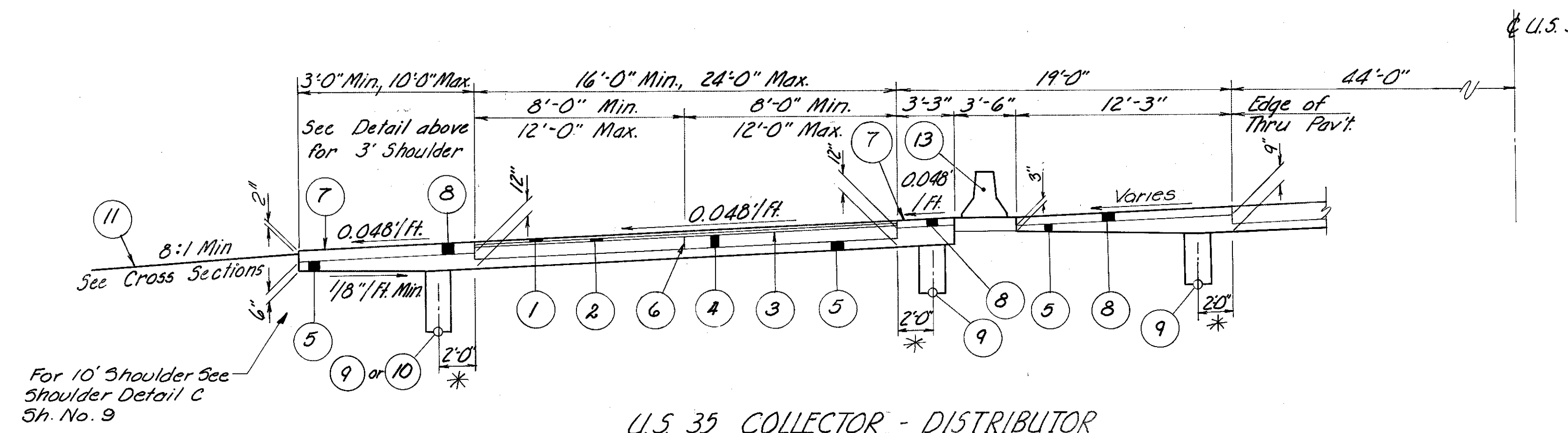
U.S. 35 COLLECTOR - DISTRIBUTOR

(See Pav't Details for Slope & Width Variations & Edge Elevations)
Sta. 36+39.20 C.D. to Sta. 46+11.66 C.D.



U.S. 35 AUXILIARY LANE & SPECIAL CURB SECTION

(See Pav't. Details for Slope & Width Variations and Edge Elevations)
Sta. 1092+90 to Sta. 1099+00.00



U.S. 35 COLLECTOR - DISTRIBUTOR

(See Pav't Details for Slope & Width Variations & Edge Elevations)
Sta. 19+59.00 to Sta. 36+39.20

* The location of Underdrains has been changed during the development of the Plans. They shall be offset as indicated on these Typical Sections irrespective of where they are shown on the Plan and Profile Sheets.

Note: For Item Legend See Sh. No. 5

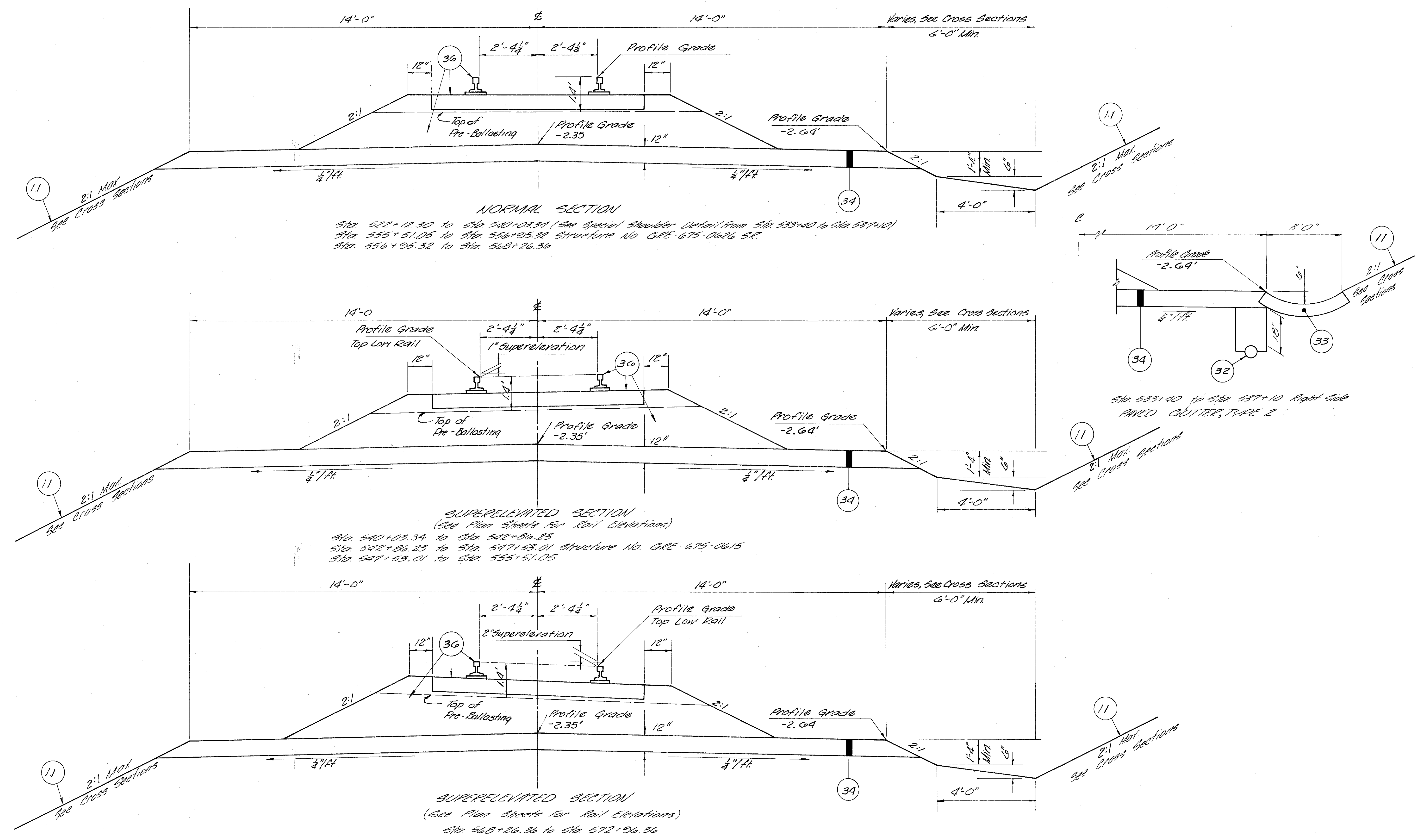
TYPICAL SECTIONS



PENN-CENTRAL RAILROAD

FED. RD. DIVISION	STATE	PROJECT	18 6/6
2	OHIO		

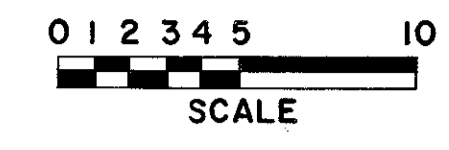
GRE-675-5.37
GREENE COUNTY



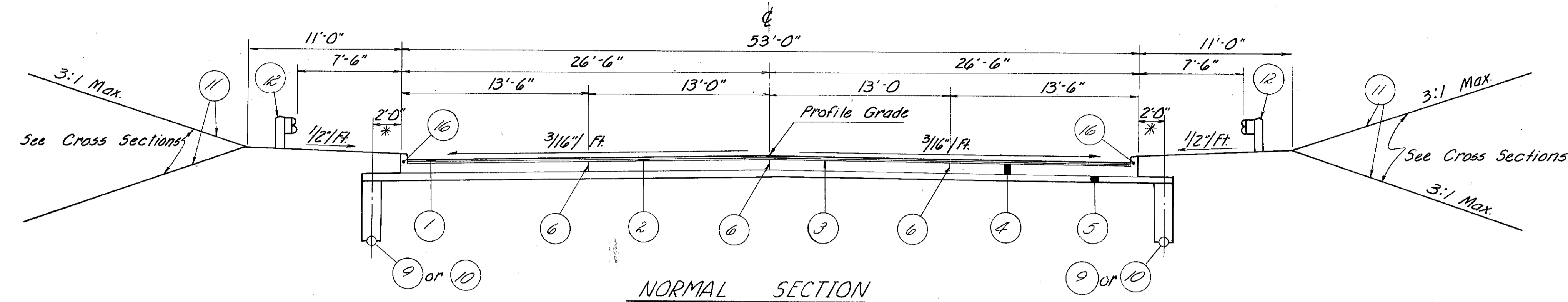
Note: For Item Legend, See Sht. No. 5

TYPICAL SECTIONS

TYPE 848 ON 305

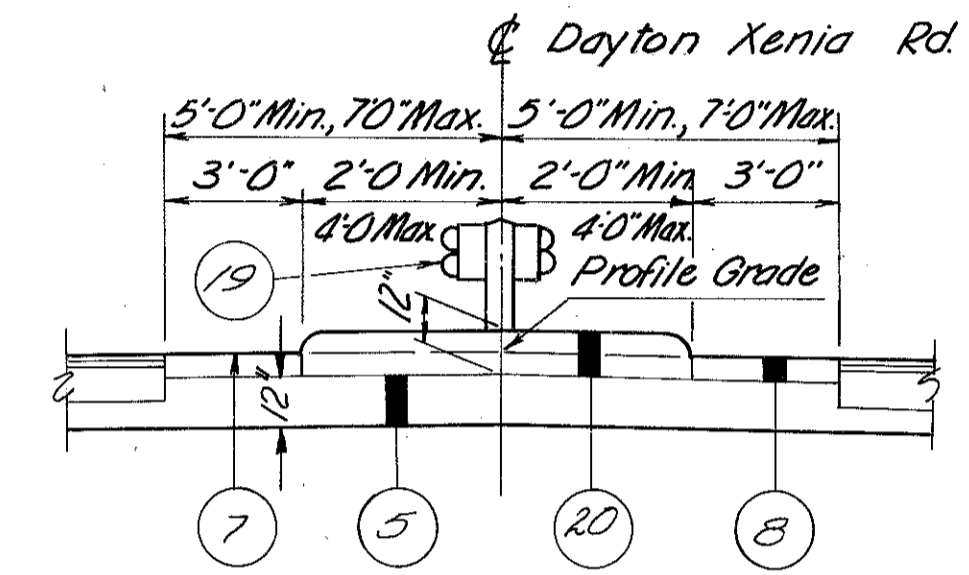


GRE - 675 - 5.37
GREENE COUNTY

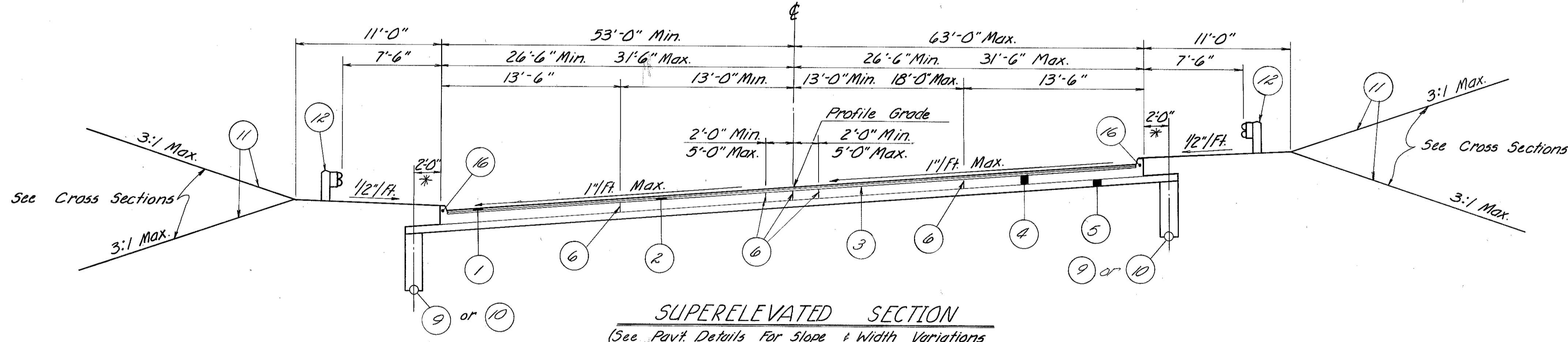


(See Pavt. Details For Slope & Width Variations)
Sta. 36+00.00 to Sta. 36+67.50
Sta. 36+67.50 to Sta. 41+39.64 Structure No. GRE-675-0616 & Approach Slabs
Sta. 41+39.64 to Sta. 41+50.00

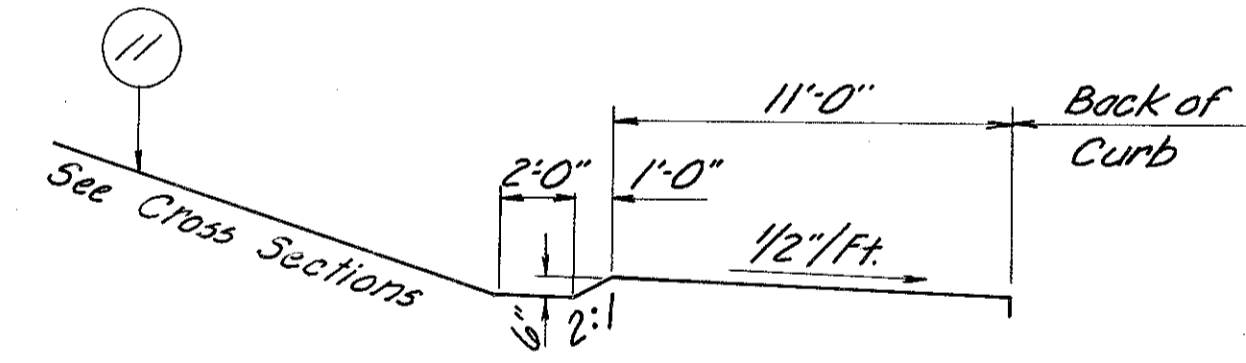
*The location of Underdrains has been changed during the development of the Plans. They shall be offset as indicated on these Typical Sections irrespective of where they are shown on the Plan and Profile Sheets.



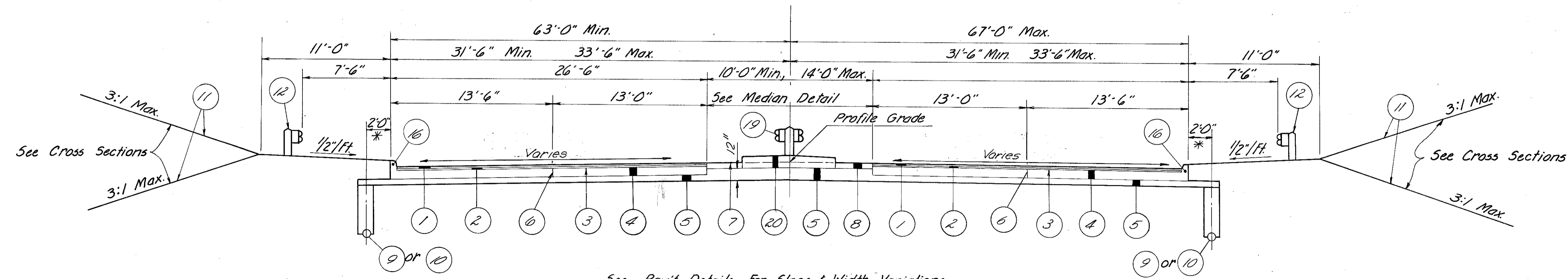
(See Pavt. Details For Median Width Variations)
Sta. 18+30.89 to Sta. 29+39.77
See Sheet 22 for additional details



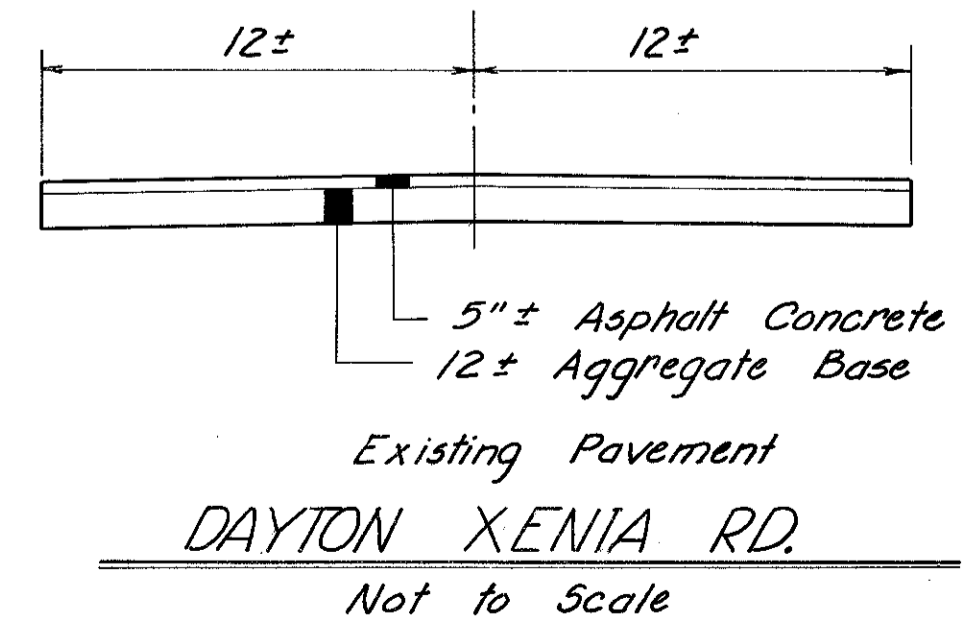
(See Pavt. Details For Slope & Width Variations & Edge Elevations)
Sta. 14+14.50 to Sta. 18+30.89
Sta. 29+39.77 to Sta. 36+00.00 (See Special Ditch Section, Left Side)
Sta. 41+50.00 to Sta. 45+50.84



Sta. 28+00 to Sta. 32+00, Left Side



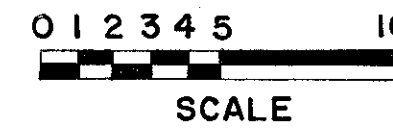
(See Pavt. Details For Slope & Width Variations & Edge Elevations)
Sta. 18+30.89 to Sta. 29+39.77 (See Special Ditch Section, Left Side)



Note: For Item Legend, See Sh. No. 5

TYPICAL SECTIONS

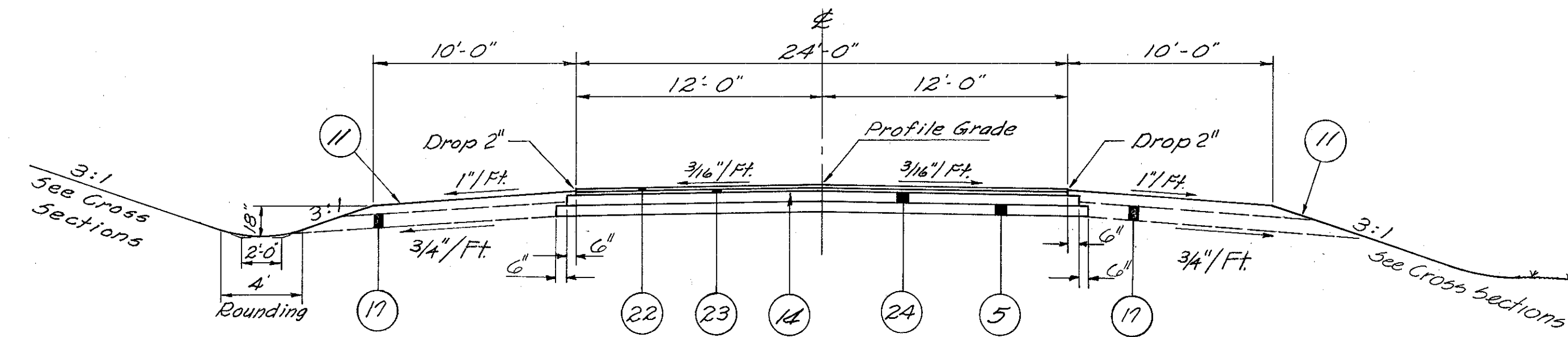
TYPE 848 ON 304



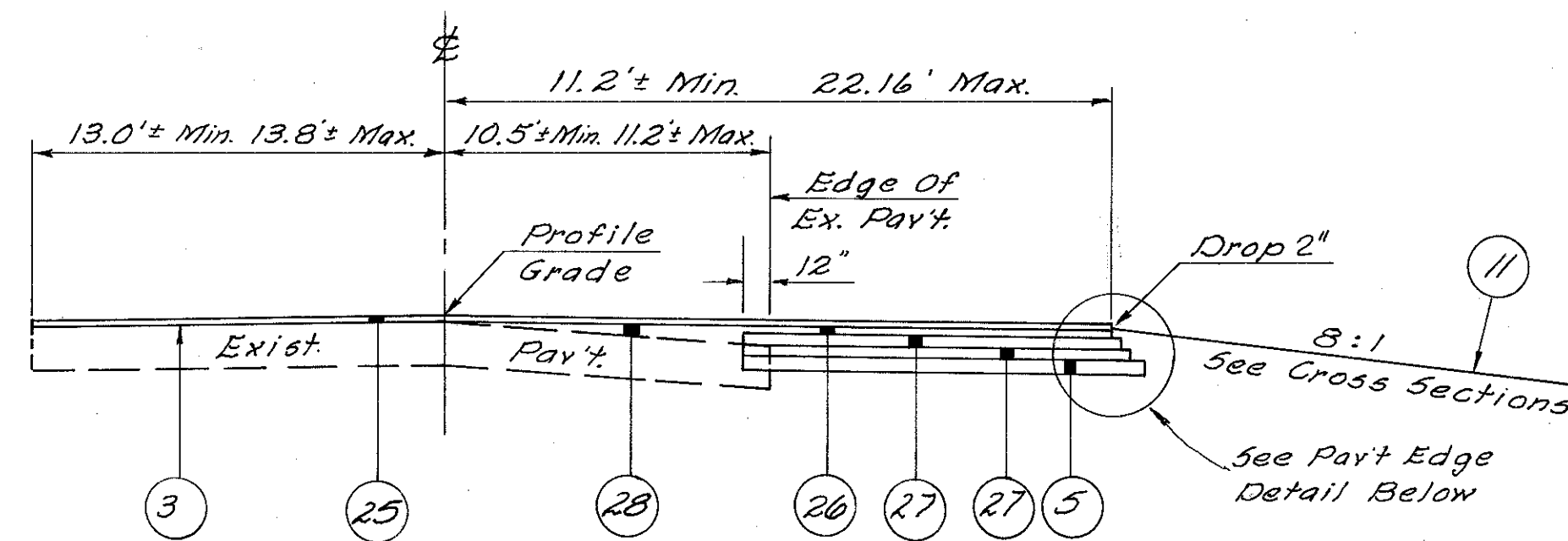
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

20
616

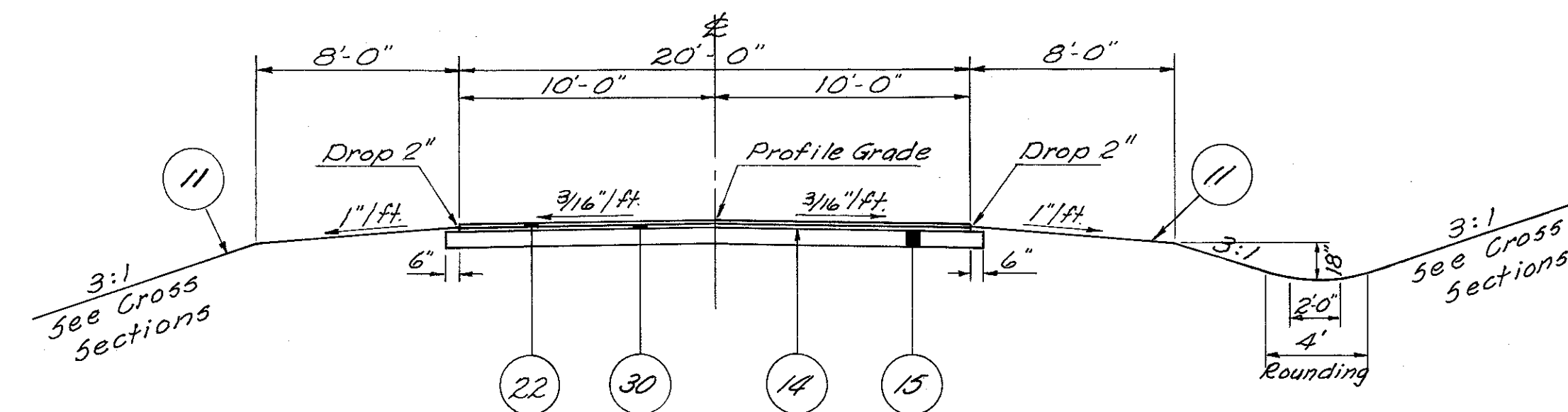
GRE-675-5.37
GREENE COUNTY



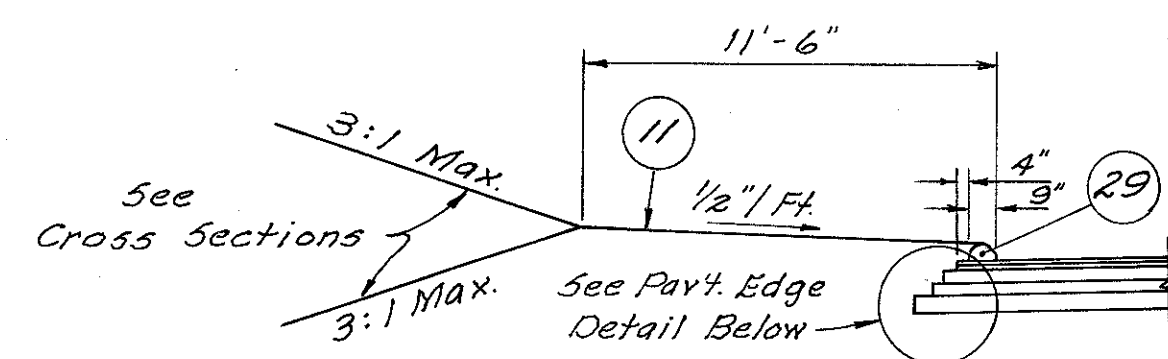
WILDONNA DRIVE
(See Pav't Details For Slope & Width Variations)
Sta. 0+76.00 to Sta. 4+10



DAYTON XENIA RD.
(See Pav't Details For Slope & Width Variations)
Sta. 46+50.00 to Sta. 49+00.00

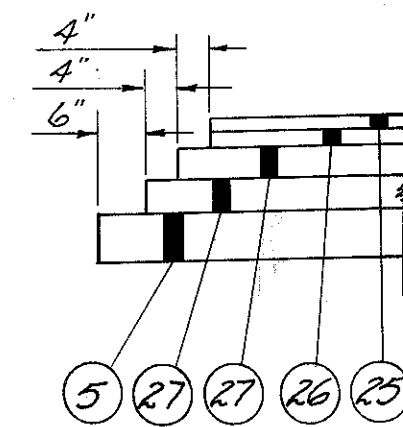


SERVICE ROAD B
(See Pav't Details For Slope & Width Variations)
Sta. 0+64.48 to Sta. 3+80.00



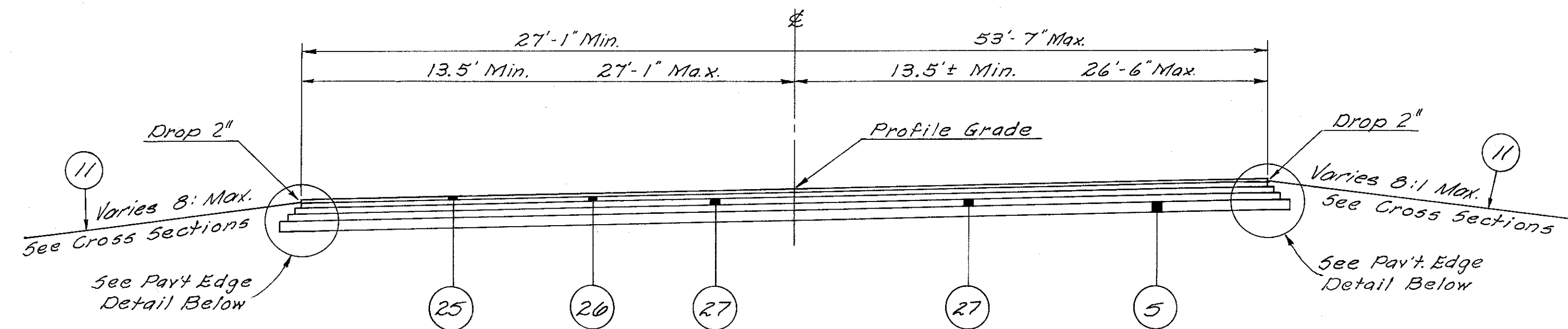
SHOULDER TREATMENT WITH ASPHALT CURB

See Std. Drwg. BP-5 For Details Of Asphalt Concrete Curb



PAVEMENT EDGE DETAIL

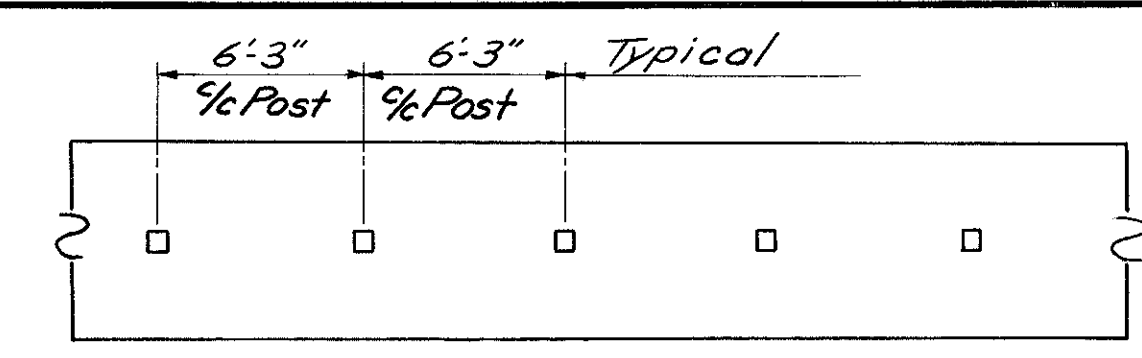
No Scale



DAYTON XENIA RD.
(See Pav't Details For Slope & Width Variations)
Sta. 11+00.00 to Sta. 14+74.50 (See Detail For Shoulder Treatment With Asphalt Curb)
Sta. 45+50.84 to Sta. 46+50.00 (See Detail For Shoulder Treatment With Asphalt Curb)

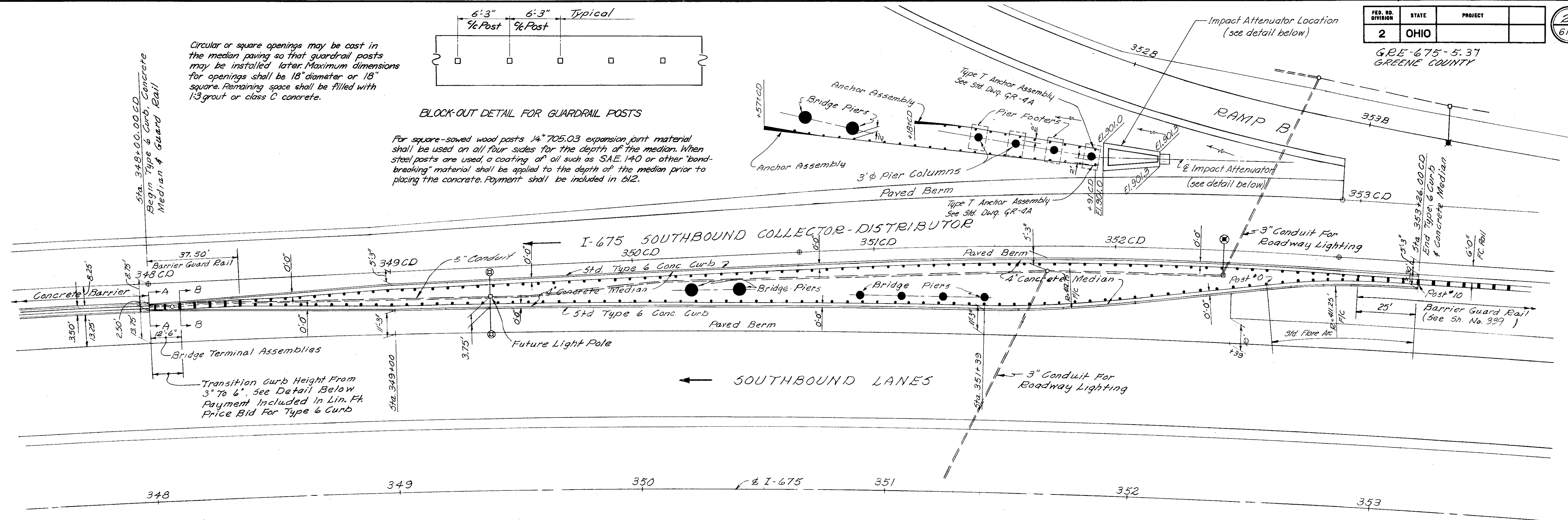
For Item Legend, See Sh. No. 5
For Slope Treatment, See Sh. No. 14

Circular or square openings may be cast in the median paving so that guardrail posts may be installed later. Maximum dimensions for openings shall be 18" diameter or 18" square. Remaining space shall be filled with 1:3 grout or class C concrete.



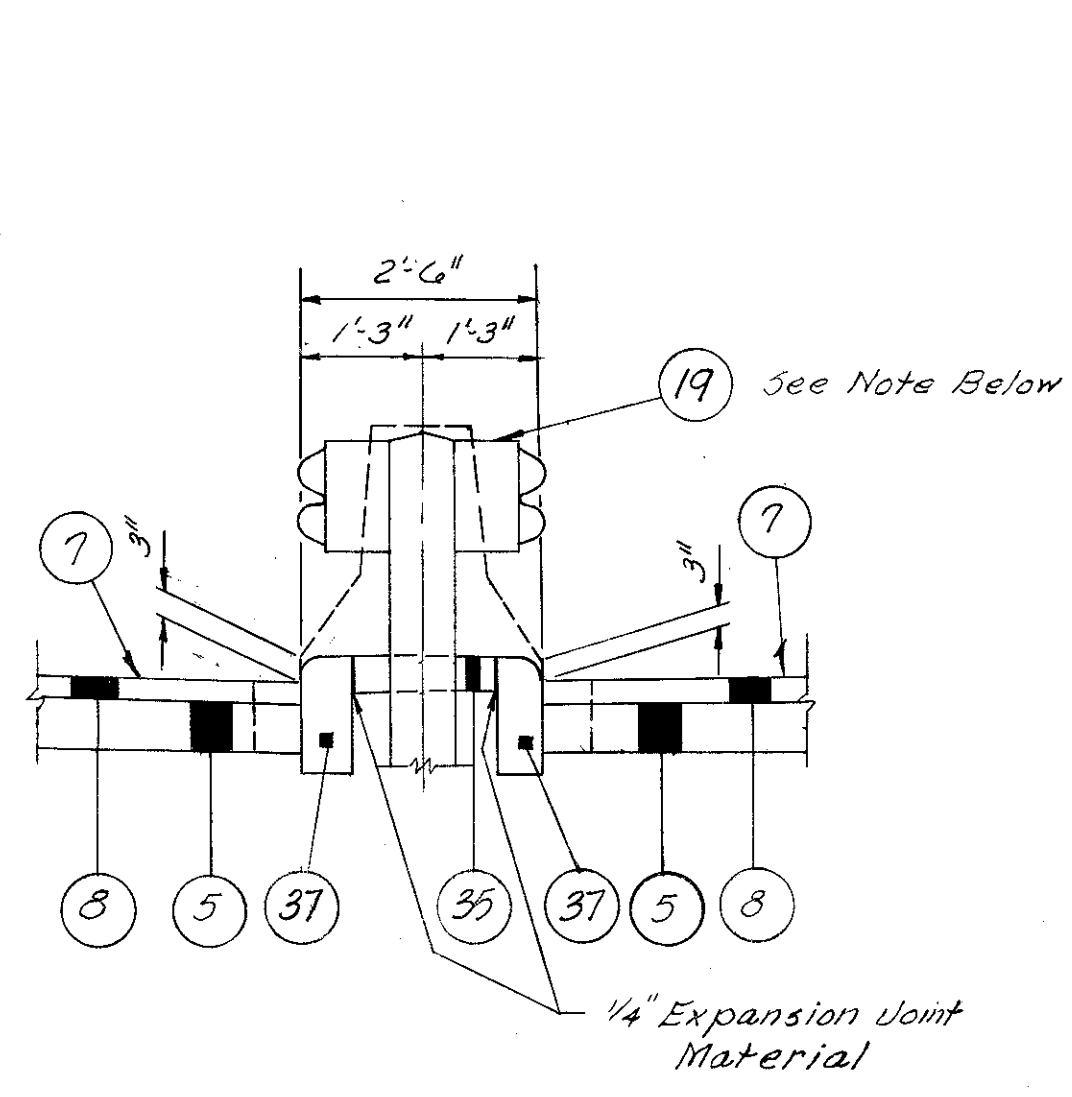
BLOCK-OUT DETAIL FOR GUARDRAIL POSTS

For square-sawed wood posts 1/4" 705.03 expansion joint material shall be used on all four sides for the depth of the median. When steel posts are used, a coating of oil such as SAE 140 or other "bond-breaking" material shall be applied to the depth of the median prior to placing the concrete. Payment shall be included in B12.



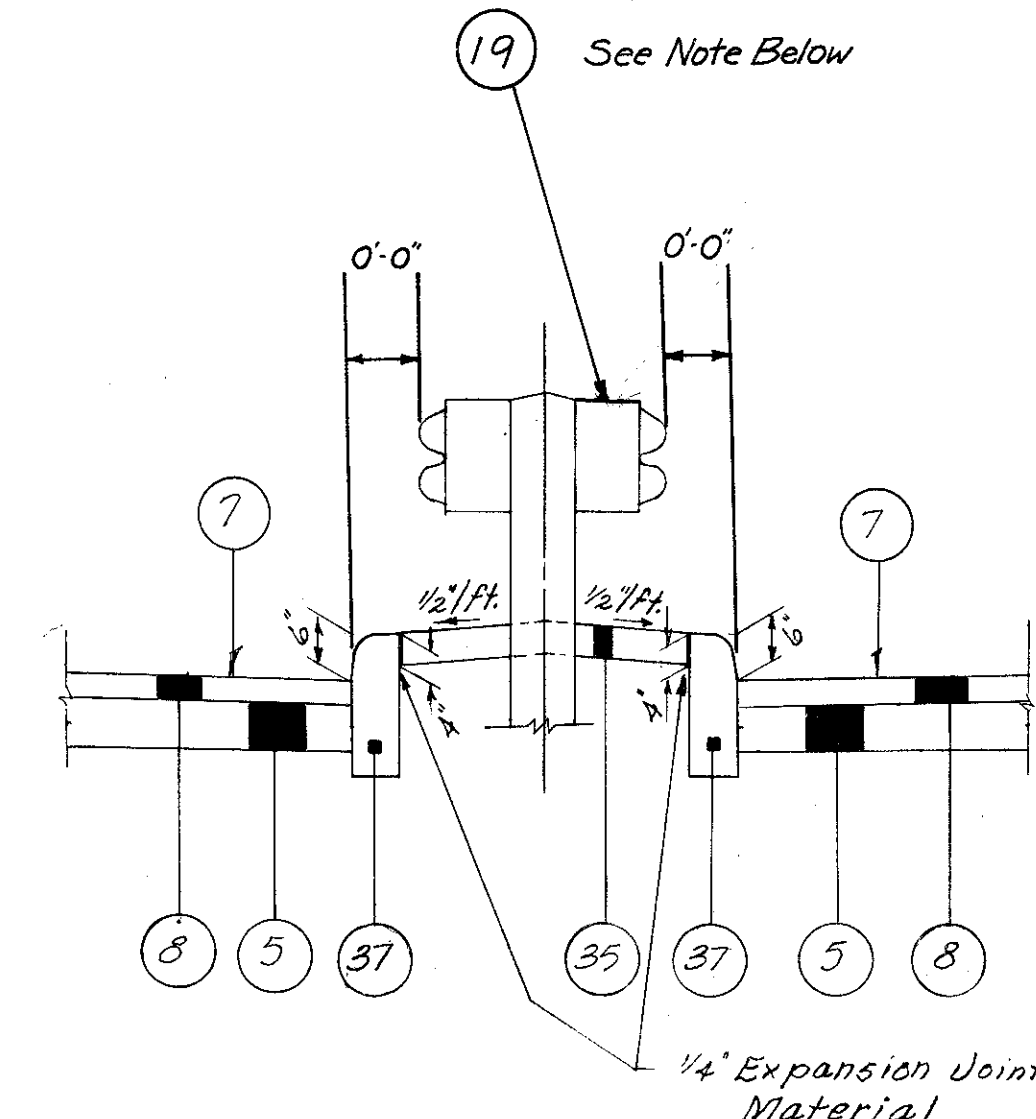
Note:
All Dimensions Shown To Guard Rail Are To The Face Of Guard Rail.

DETAIL
CONCRETE MEDIAN - STA 348+00CD TO STA. 353+26
SCALE: 1"=20'

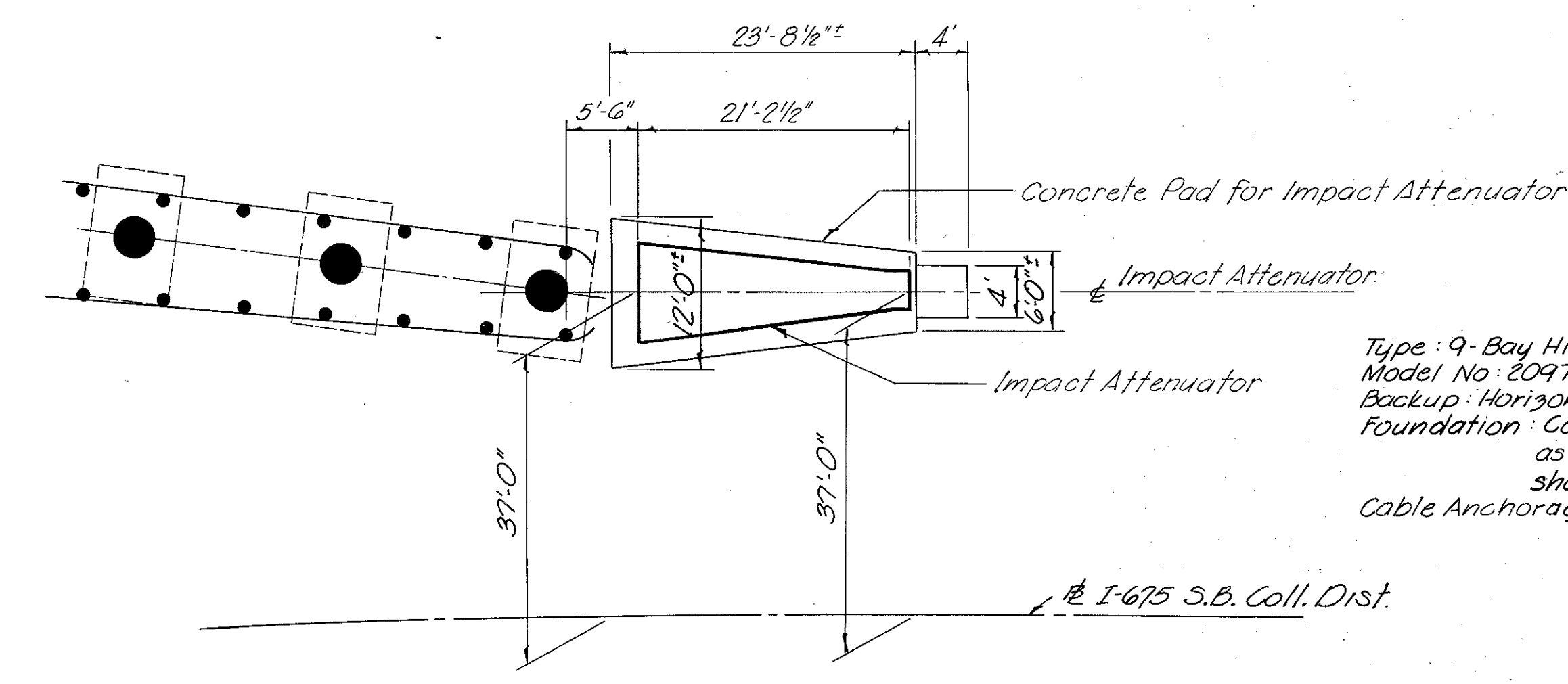


SECTION A-A

NOTE:
Thickness Of Spacer Blocks Shall Be Varied Between Section A-A & Section B-B So That The Rail Elements Can Be Attached To The Face Of The Concrete Barrier As Per Standard Drawing GR-3.



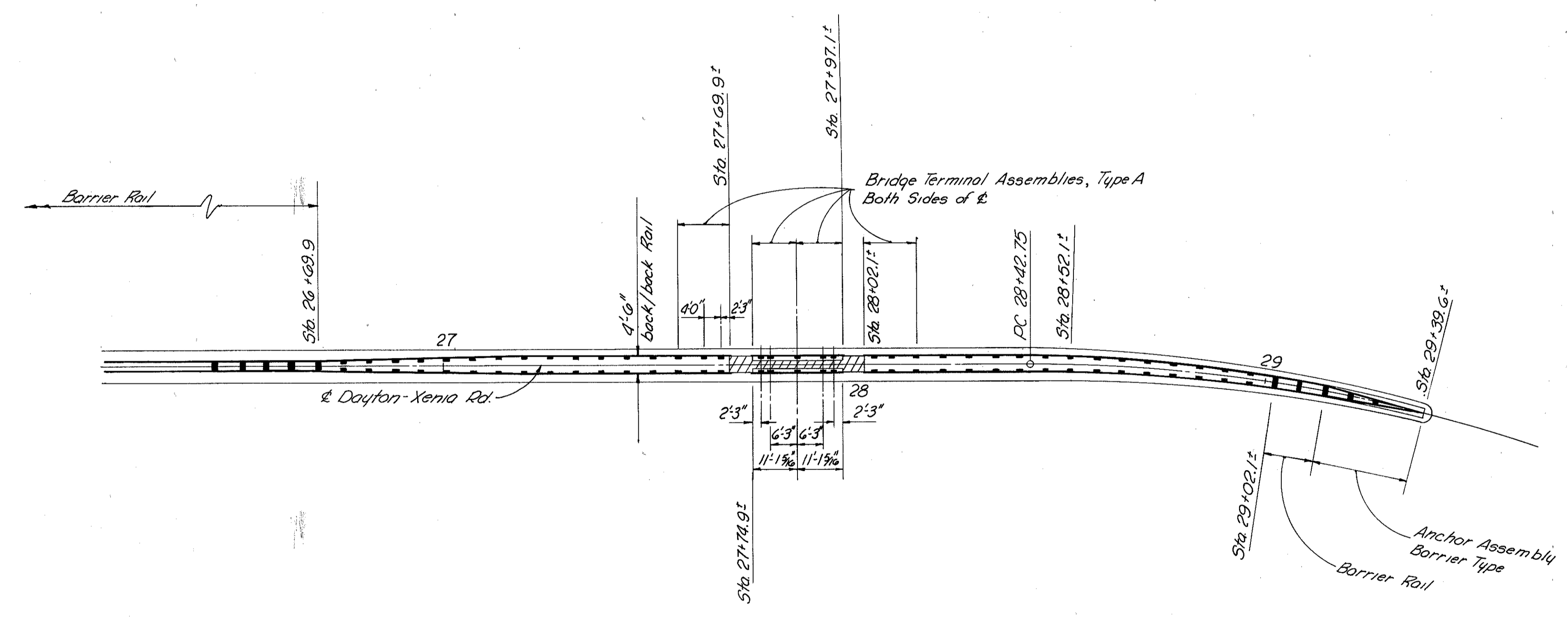
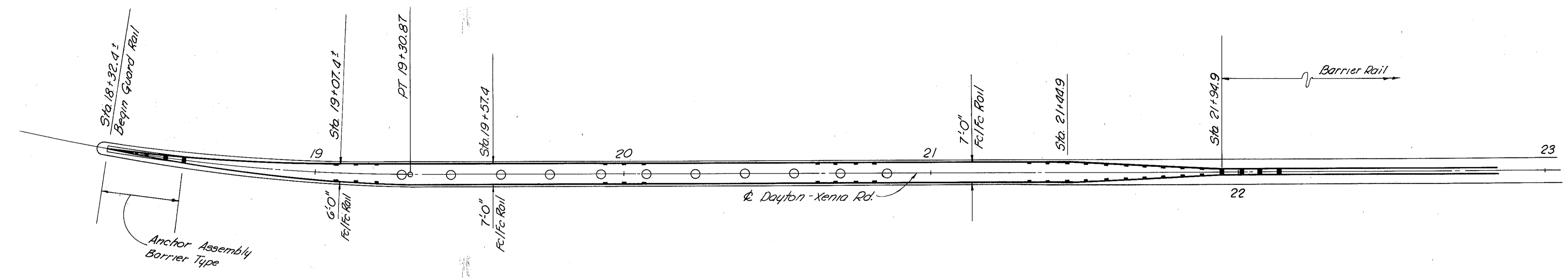
SECTION B-B



IMPACT ATTENUATOR
DETAIL

Type: 9-Bay Hi-Dro Crash Cushion
Model No: 209711595
Backup: Horizontal Bracing
Foundation: Concrete Leveling Pad as necessary. Dimensions shown are approximate.
Cable Anchorage: Plate Anchor Assembly

All Guard Rail and Appurtenances shall be in Accordance with the Standard Drawings.

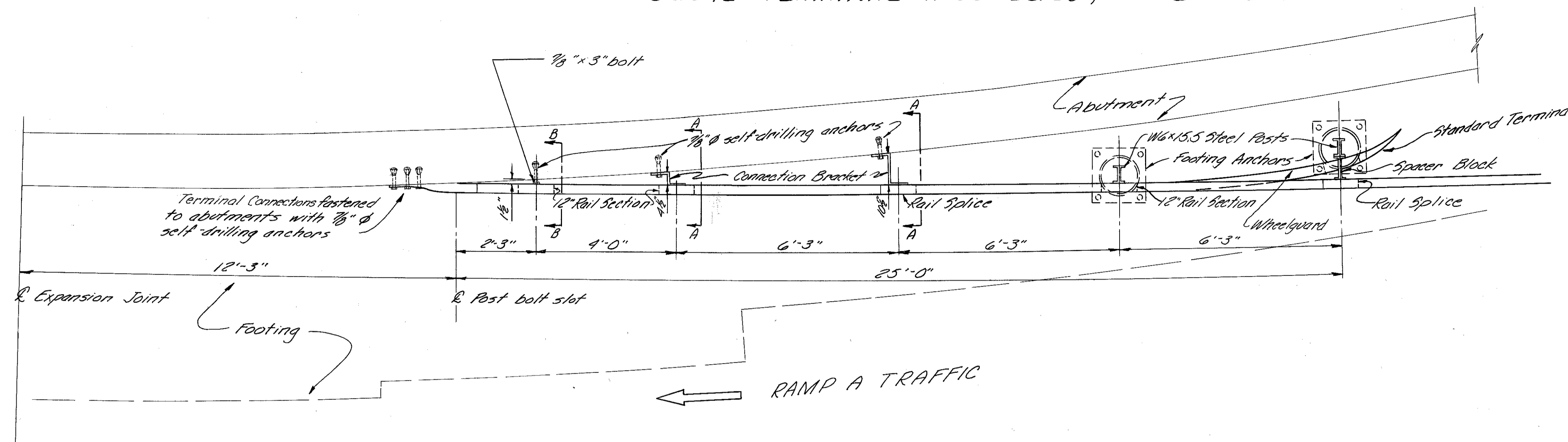


BRIDGE TERMINAL ASSEMBLIES, AS PER PLAN

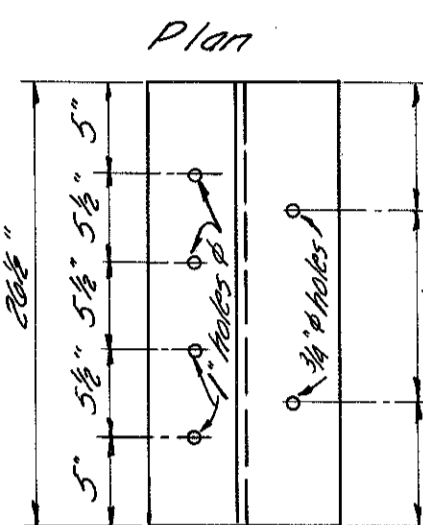
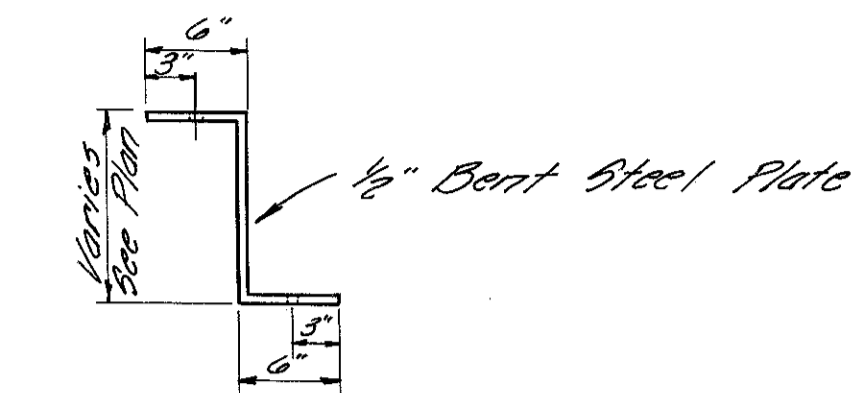
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

24
616

GRE-675-5.37
GREENE COUNTY



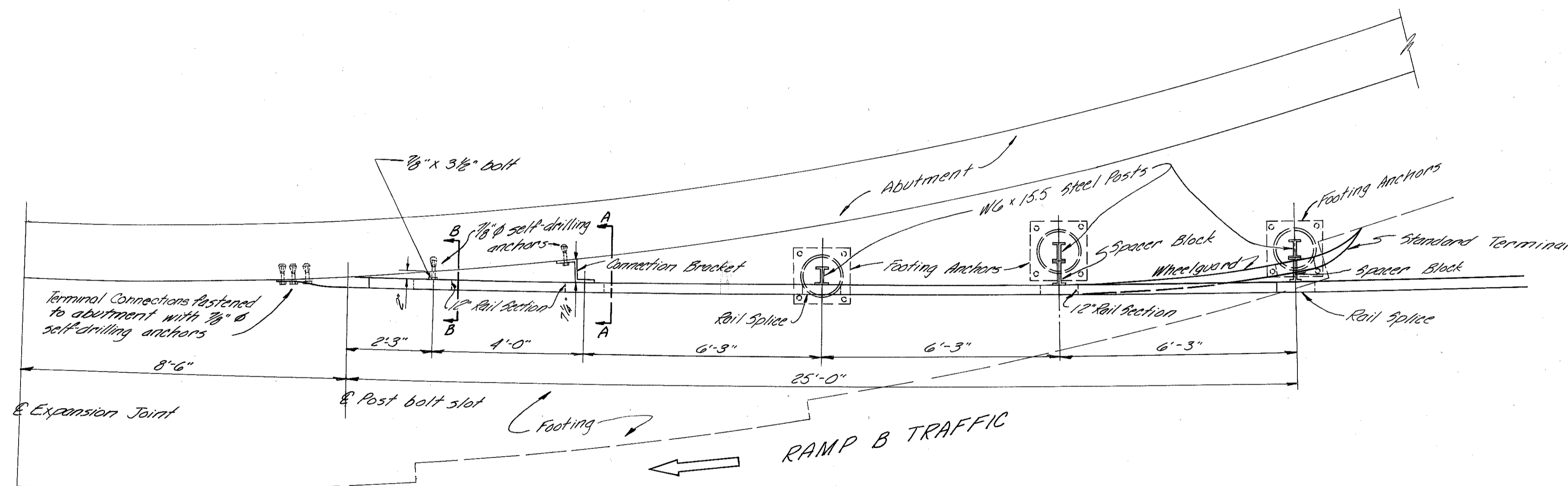
SOUTHEAST WING WALL
ABUTMENT NO. 2
BRIDGE NO. GRE-675-0615



Elevation

CONNECTION BRACKET

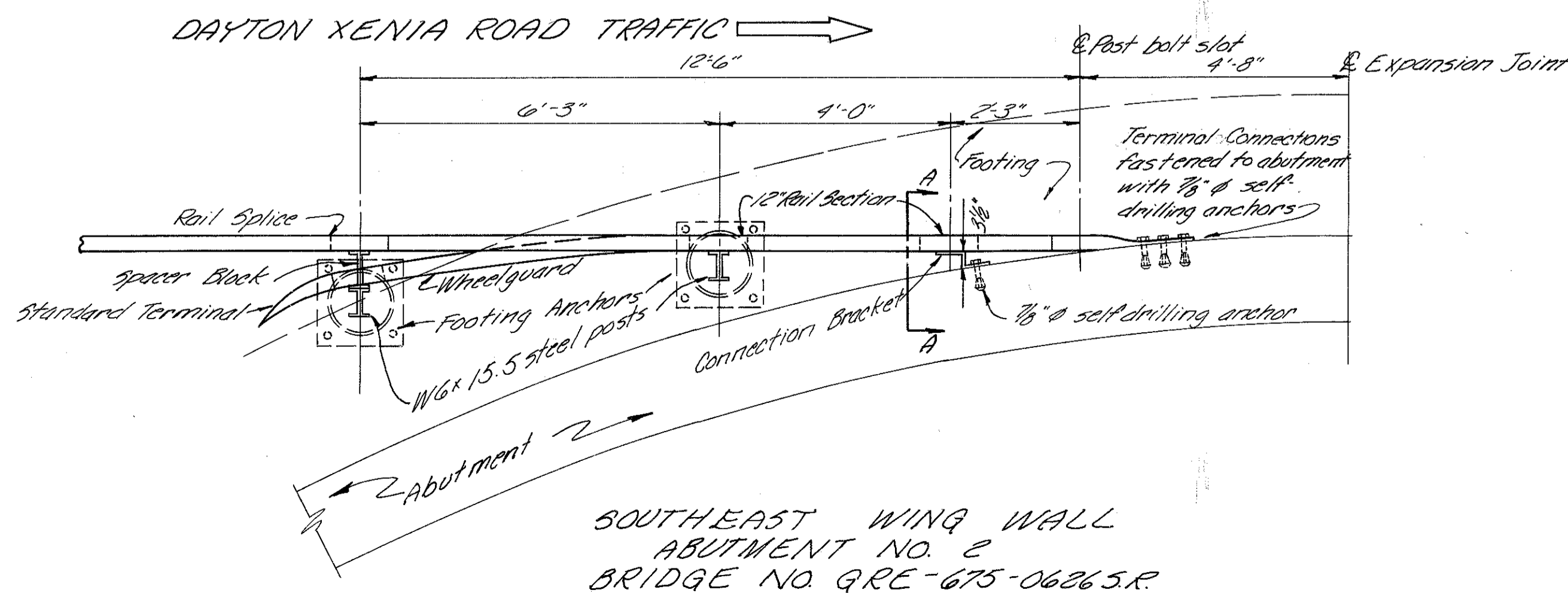
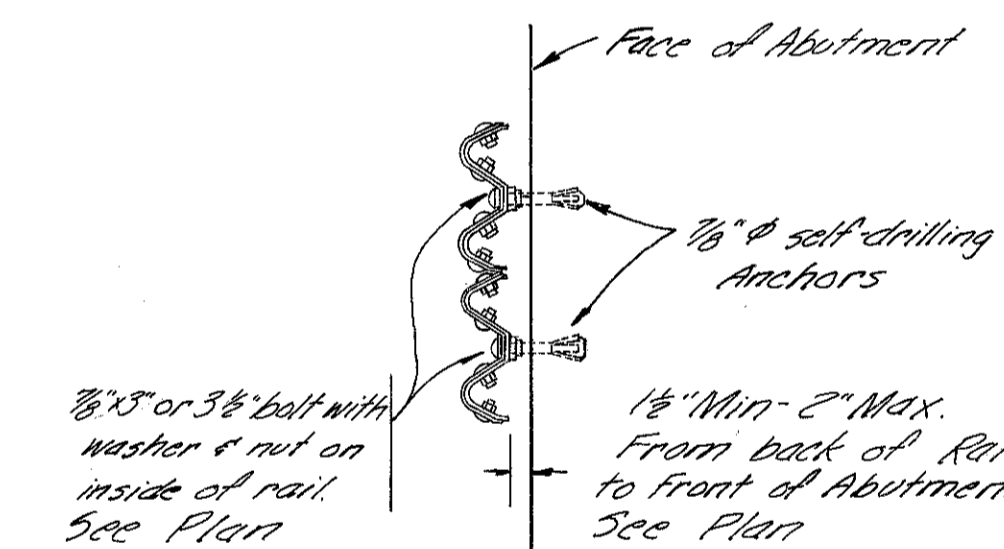
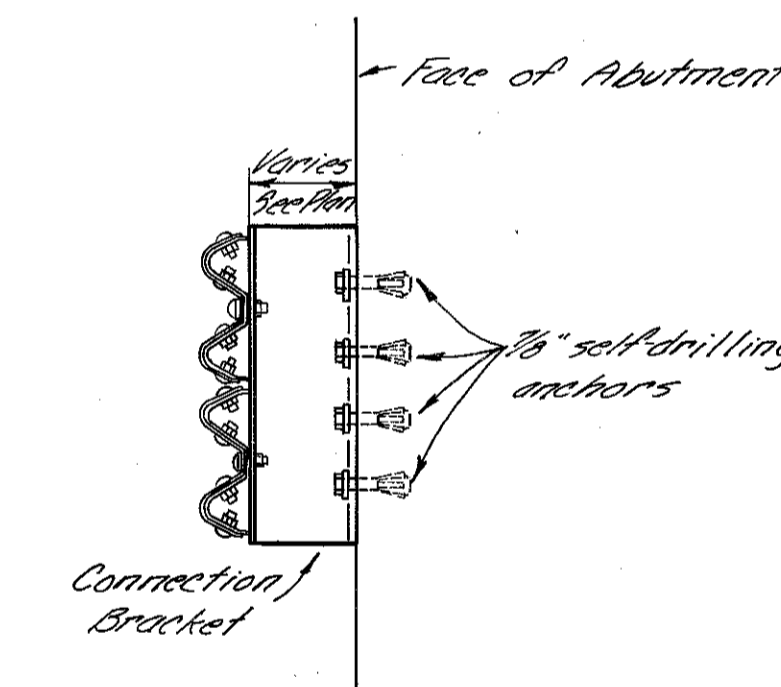
Note:
All 1/2\"/>



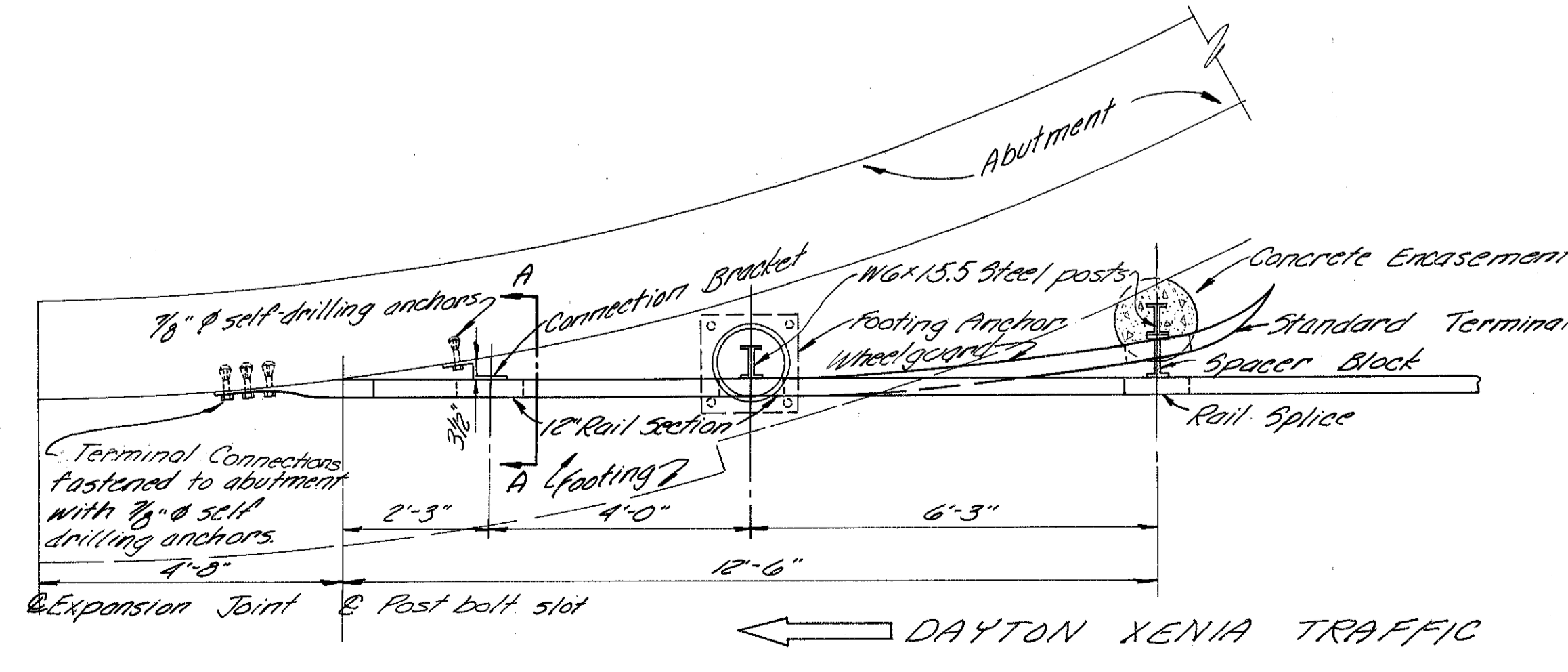
NORTHWEST WING WALL
ABUTMENT NO. 1
BRIDGE NO. GRE-675-0616

SECTION A-A

SECTION B-B



SOUTHEAST WING WALL
ABUTMENT NO. 2
BRIDGE NO. GRE-675-0626 S.R.



NORTHWEST WING WALL ABUTMENT NO. 1
BRIDGE NO. GRE-675-0626 S.R.

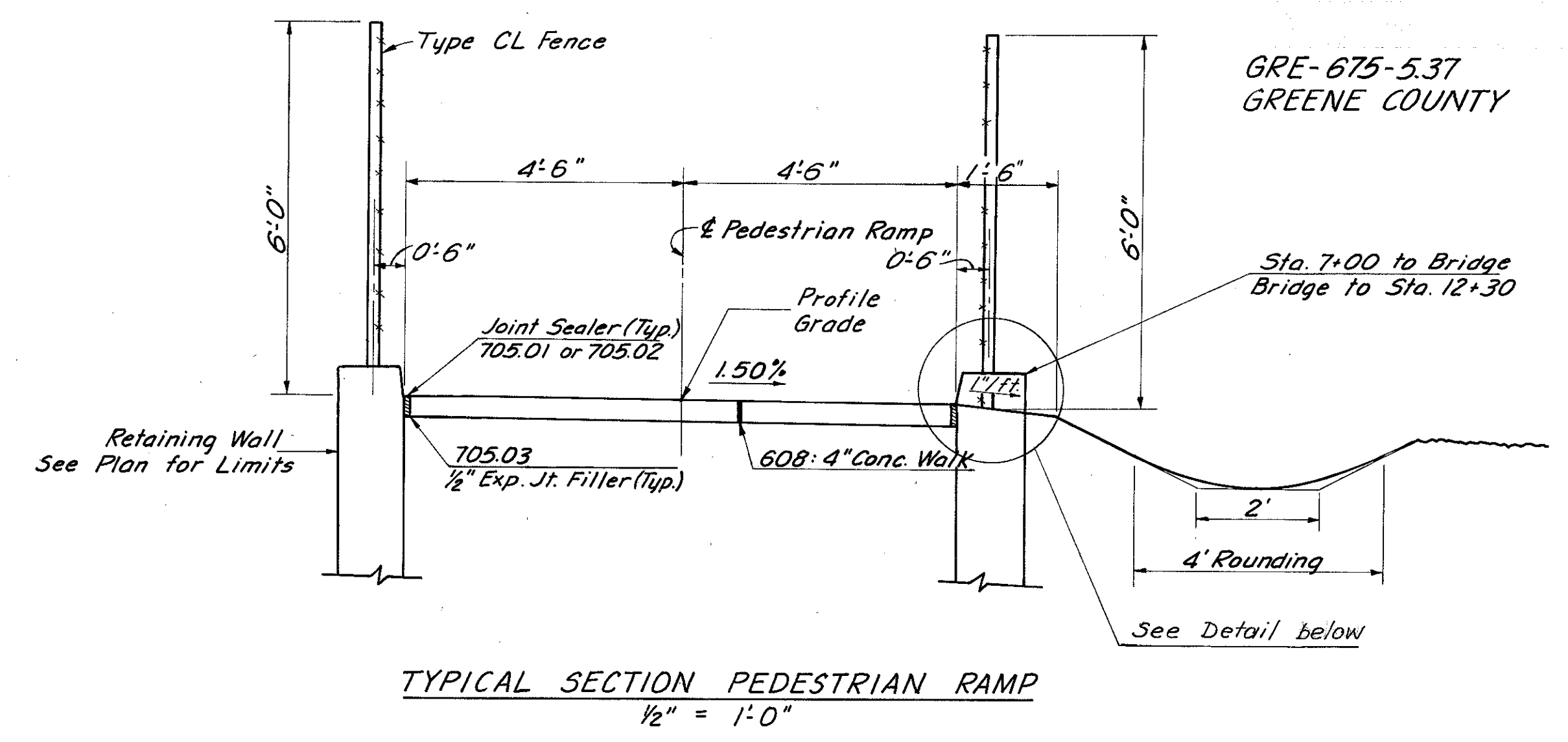
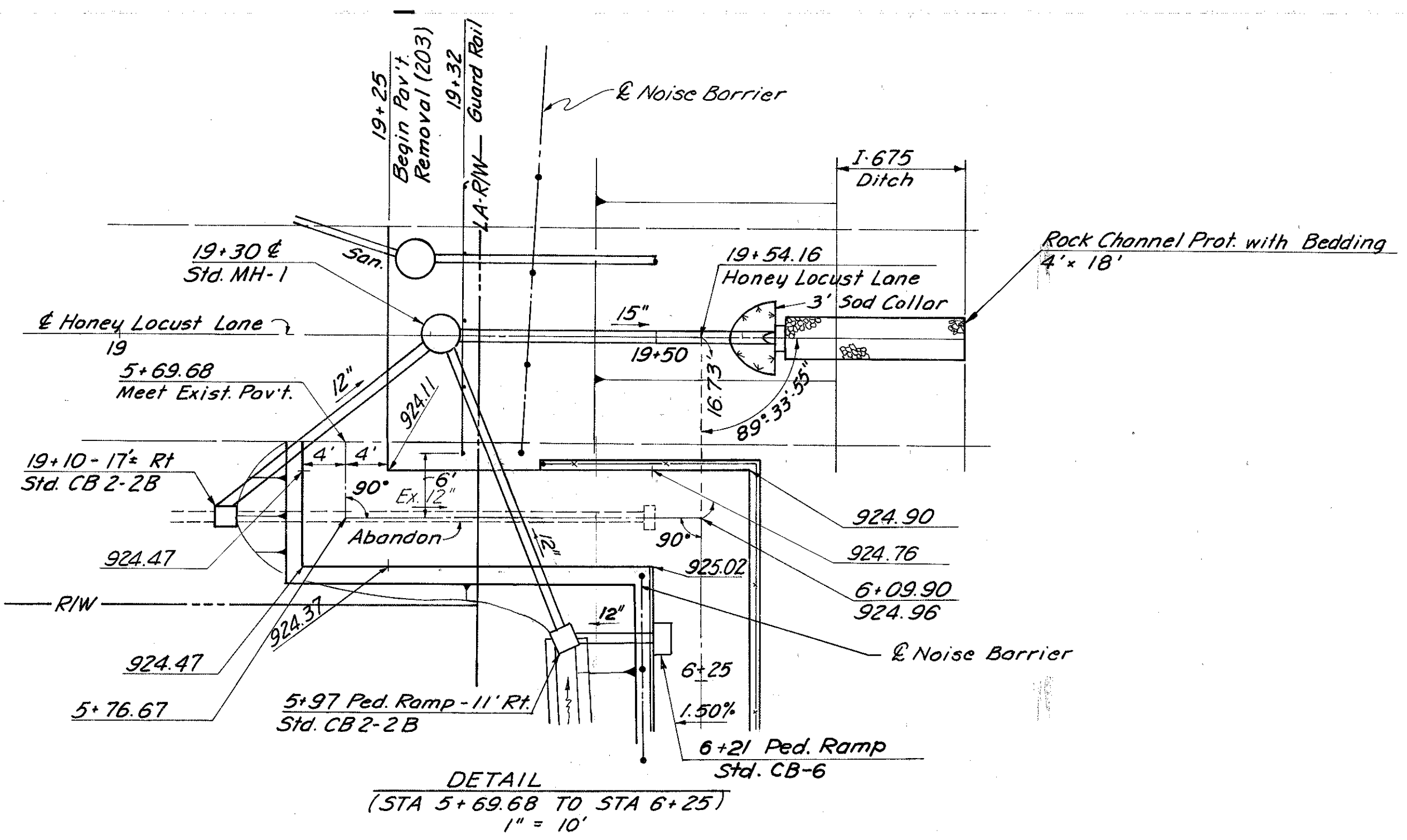
ITEM 606 - Bridge Terminal Assemblies
As per plan.

PAYMENT: The Unit Price bid for Bridge Terminal Assemblies as per plan, shall include the additional cost, in excess of normal guard rail cost, for steel posts, concrete encasement, wheel guards, terminal connections, connection brackets, self-drilling anchors and incidentals necessary to complete this item. Cost of footing anchors shall be included in the unit price bid for guardrail.

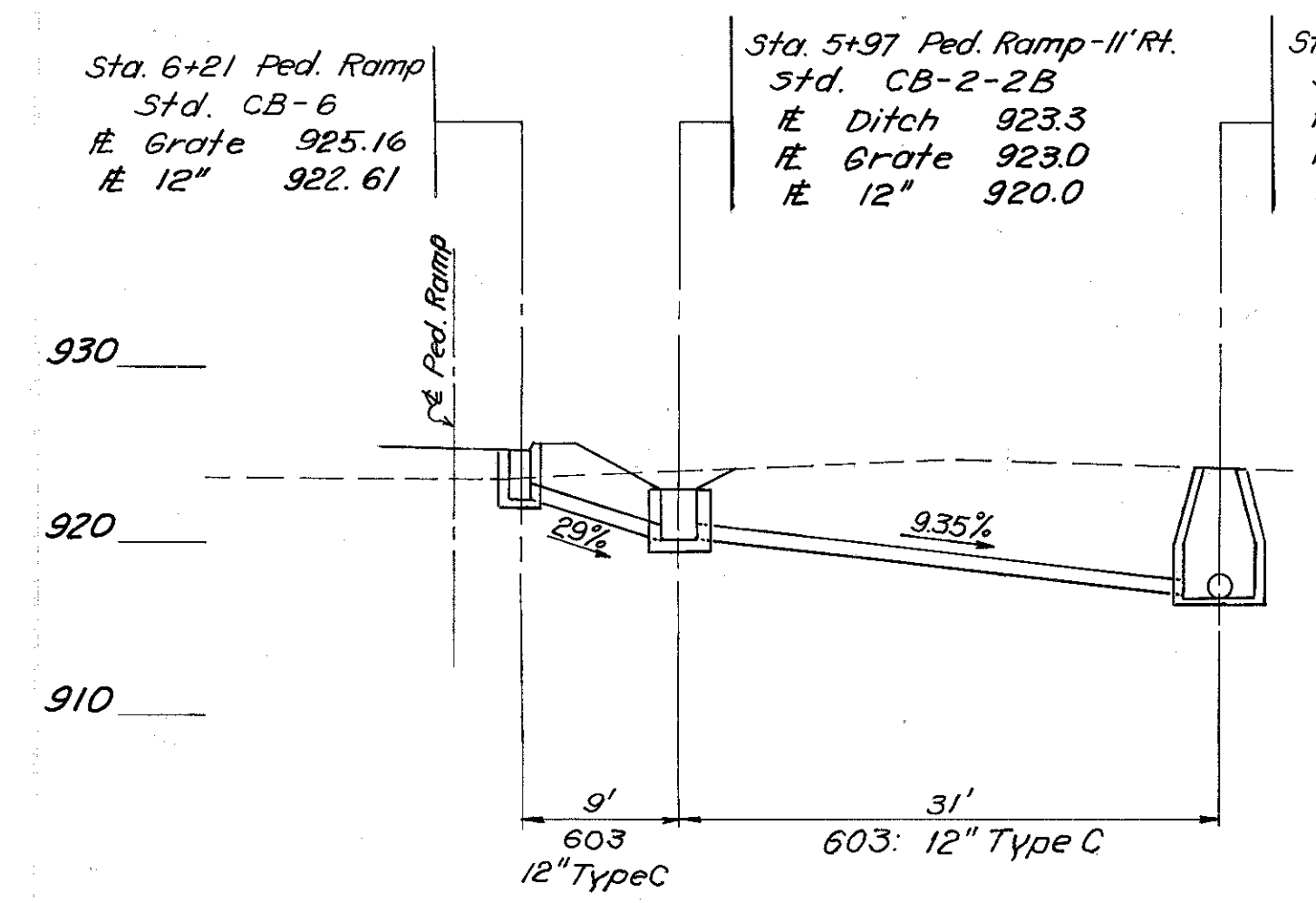
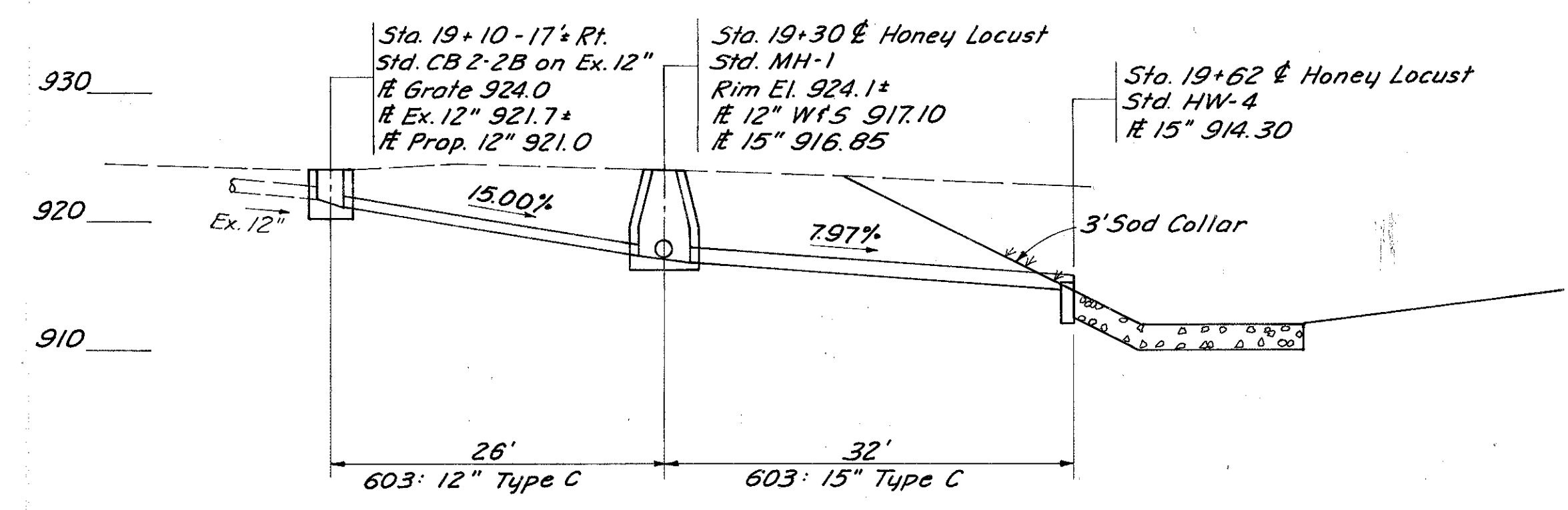
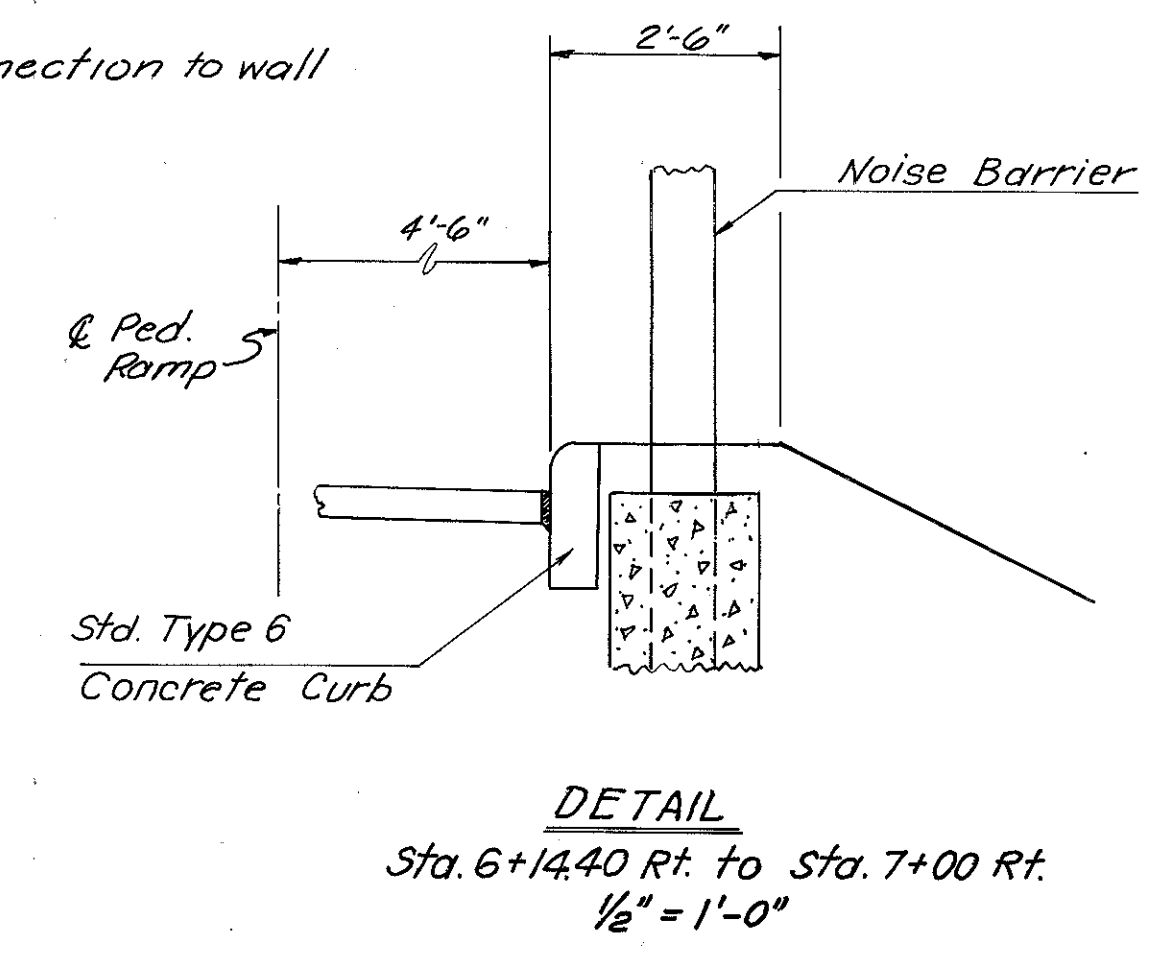
For detail of fastening terminal connectors to abutment, see Std. Drawing No. GR-3.

All Guard Rail and Appurtenances shall be in accordance with the Standard Drawings.

For detail of Footing Anchors, see Standard Drwg. No. GR-1.



See Bridge Dwgs. for CL Post connection to wall



* 2 Cu.Yds. of this Item is "as per plan"; See Sht. No. 373
ESTIMATED QUANTITIES Carried to Sht. No. 104

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection, Type B, Bedding	5 *	Cu. Yd.
602	Masonry	0.27	Cu. Yd.
603	12" Conduit, Type C	66	Lin. Ft.
603	15" Conduit, Type C	32	Lin. Ft.
604	Std. CB 2-2B	2	Ea.
604	Std. MH-1	1	Ea.
660	Sodding	3	Sq. Yd.
604	Std. CB-6	1	Ea.

Quantities Calculated: D.H.S., 11/77
Quantities Checked: I.E.H., 12/77
Revised: B.O.B., 9/81

GENERAL NOTES

MOBILIZATION AS PER PLAN ~ The Contractor shall provide a suitable field office having a minimum of 800 sq. ft. of floor space which shall be in accordance with 619.01 and 619.02. Payment shall be included in the lump sum price bid for Item 624, Mobilization, as per plan.

ELEVATION DATUM

ALL ELEVATIONS ARE BASED ON U.S.C. & G. S. DATUM.

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.

UNDERGROUND UTILITIES

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS HAVE BEEN OBTAINED BY DILIGENT FIELD CHECKS AND SEARCHES OF AVAILABLE RECORDS. IT IS BELIEVED THAT THEY ARE ESSENTIALLY CORRECT, BUT THE STATE OF OHIO MAKES NO GUARANTEE AS TO THEIR ACCURACY OR COMPLETENESS.

ESTIMATED QUANTITIES

SPECIFIC LOCATIONS AND USAGE OF ESTIMATED QUANTITIES SET UP ON THIS PLAN TO BE USED "AS DIRECTED BY THE ENGINEER" SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT. ESTIMATED QUANTITIES OF MATERIALS SHALL NOT BE ORDERED FOR DELIVERY TO THE PROJECT UNLESS AUTHORIZED BY THE ENGINEER.

LOCATION AND SIZE OF EXISTING PIPES

THE LOCATION, SIZE, TYPE AND DEPTH OF ALL EXISTING PIPES ARE SHOWN AS NEAR EXACT AS THE AVAILABLE INFORMATION WILL PERMIT. THE STATE WILL NOT BE RESPONSIBLE FOR ANY VARIATIONS.

TEMPORARY EASEMENTS

UNDER NO CIRCUMSTANCES ARE THE TEMPORARY EASEMENTS FOR PURPOSES OF REMOVAL OF BUILDINGS TO BE USED FOR STORAGE OF MATERIAL AND EQUIPMENT. UPON THE COMPLETION OF WORK IN THIS AREA, THE TEMPORARY EASEMENTS SHALL BE IMMEDIATELY VACATED.

EARTHWORK COMPUTATION METHOD

THE QUANTITIES OF EXCAVATION AND EMBANKMENT BETWEEN CROSS SECTIONS ON CURVED ALIGNMENT HAVE BEEN COMPUTED BY A METHOD THAT MAKES A CORRECTION IN ARC LENGTH BETWEEN THE AREA CENTROIDS OF EACH SECTION. THE FORMULA USED TO COMPUTE THE PLAN QUANTITIES SHOWN ON THE CROSS SECTIONS IS AS FOLLOWS:

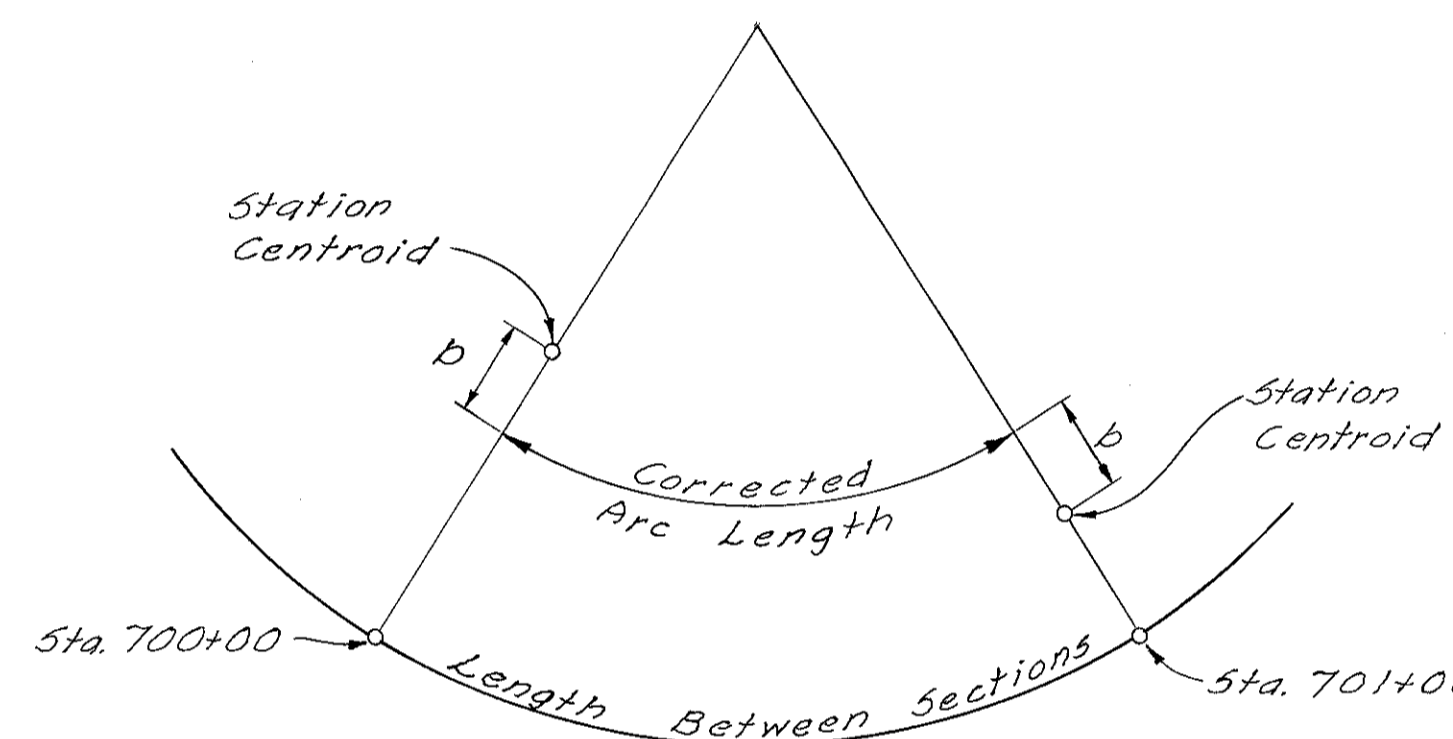
EARTHWORK COMPUTATION METHOD -- CONTINUED

VOLUME = AVERAGE AREA X ADJUSTED ARC LENGTH

$$V = \left(\frac{A_1 + A_2}{2} \right) \times \left[(STA_2 - STA_1) \left(\frac{R_2 + E_2}{2R_2} + \frac{R_1 + E_1}{2R_1} \right) \right] \times \frac{1}{27}$$

WHERE:

- V = VOLUME OF EARTHWORK IN CUBIC YARDS.
- A₁ = AREA OF FIRST CROSS SECTION IN SQUARE FEET.
- A₂ = AREA OF NEXT CROSS SECTION IN SQUARE FEET.
- STA₁ = BASE LINE STATION IN FEET OF THE FIRST CROSS SECTION.
- STA₂ = BASE LINE STATION IN FEET OF THE NEXT CROSS SECTION.
- R₁ = RADIUS IN FEET OF CURVED ALIGNMENT AT FIRST CROSS SECTION.
- R₂ = RADIUS IN FEET OF CURVED ALIGNMENT AT THE NEXT CROSS SECTION.
- E = THE ECCENTRICITY OF THE CENTROID WITH RESPECT TO THE BASE LINE LOCATION (E IS CONSIDERED POSITIVE IF LOCATED ON THE OUTSIDE OF THE CURVE, AND CONSIDERED NEGATIVE IF LOCATED ON THE INSIDE OF THE CURVE.)



EXAMPLE

FOR THE VOLUME BETWEEN A CROSS SECTION LOCATED ON A CURVE AND AN ADJOINING CROSS SECTION LOCATED ON A TANGENT THE VALUE OF $(R + e)/(2R)$ IN THE ABOVE FORMULA FOR THE CROSS SECTION LOCATED ON THE TANGENT IS ONE HALF (1/2).

THE ABOVE EQUATION HAS BEEN USED FOR CROSS SECTIONS LOCATED ON SPIRALS BY COMPUTING THE EFFECTIVE BASE LINE RADIUS AT EACH CROSS SECTION WITH THE FOLLOWING EQUATION:

$$R = rL/L$$

WHERE:

- R = RADIUS AT STATION ON SPIRAL IN FEET
- r = RADIUS OF THE CURVE ADJACENT TO THE SPIRAL IN FEET
- L = LENGTH OF SPIRAL IN FEET
- L = LENGTH FROM SPIRAL TS TO STATION ON SPIRAL.

WHERE THE ADJUSTED ARC LENGTHS WERE USED TO COMPUTE EARTHWORK VOLUMES ON CURVED ALIGNMENTS, THE LENGTHS ARE SHOWN ON THE CROSS SECTIONS IN THE END AREA COLUMNS OPPOSITE THEIR RESPECTIVE VOLUMES.

REMOVAL OF EXISTING PIPE

THE REMOVAL OF ALL EXISTING PIPE DRAINS WITHIN THE LIMITS OF PROPOSED EXCAVATION ITEMS SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICES BID FOR THE RESPECTIVE EXCAVATION ITEMS, UNLESS OTHERWISE ITEMIZED IN THE PLANS.

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.

REMOVAL OF TREES AND 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 THAT 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
18"	1335	83
30"	283	47
48"	20	2
60"	2	0

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.

LOCATIONS OF GUARD RAIL

THE LOCATIONS OF GUARD RAIL RUNS AS SHOWN IN THESE PLANS ARE SUBJECT TO ADJUSTMENT TO ASSURE THAT THE PLANNED INSTALLATIONS WILL AFFORD MAXIMUM PROTECTION FOR TRAFFIC.

SEEDING:

1. INTERSTATE ROADWAY, RAMPS AND INTERCHANGE ROADS

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 TEMPORARY EASEMENTS, SLOPE EASEMENTS OR CHANNEL EASEMENTS.

2. RELOCATED LOCAL ROADS

QUANTITIES FOR SEEDING ARE CALCULATED FOR THE SOIL AREAS BETWEEN LINES TEN (10) FEET OUTSIDE WORK LIMITS, AS SHOWN ON THE CROSS SECTIONS, OR TO THE RIGHT-OF-WAY LINE, IF SUCH LINE IS LESS THAN TEN (10) FEET FROM THE WORK LIMITS.

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 FOR EACH "DRILLED ^{Water} WELL ABANDONED" SHALL INCLUDE PAYMENT FOR ALL LABOR, TOOLS, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM.

ARCHAEOLOGICAL SITES ADJACENT TO RIGHT-OF-WAY

AS A RESULT OF A CULTURAL RESOURCE SURVEY, ARCHAEOLOGICAL SENSITIVE AREAS HAVE BEEN IDENTIFIED ADJACENT TO THE PROPOSED RIGHTS-OF-WAY. THESE ARCHAEOLOGICALLY SENSITIVE AREAS HAVE BEEN DENOTED ON MAPPING THAT IS AVAILABLE FOR REVIEW AT THE OHIO HISTORICAL CENTER, 1982 VELMA AVENUE, COLUMBUS, OH; THE BUREAU OF CONTRACT SALES, 25 SOUTH FRONT STREET, COLUMBUS, OH; AND THE DISTRICT 8 OFFICE, ON SR 741 NEAR LEBANON. THESE IDENTIFIED AREAS CANNOT BE USED FOR BORROW, WASTE OR ANY OTHER PROJECT RELATED ACTIVITIES SUCH AS TEMPORARY OFF SITE STORAGE OR FIELD OFFICE PLACEMENT ETC., UNLESS PRIOR APPROVAL IS OBTAINED FROM THE OHIO HISTORIC PRESERVATION OFFICE AT THE OHIO HISTORICAL CENTER IN COLUMBUS.

UTILITIES ALERT ~ At least 48 hours before digging, the Contractor should call the Ohio Utilities Protection Service, toll free, 800-362-2764. Non-member utility companies must be called directly.

FOR UTILITY OWNERS, SEE SHEET NO. 4

GENERAL NOTES

QUANTITY CALCULATIONS
 BY DJP DATE 2-28-78
 AND HLF DATE 4-3-78
 KING AND GAVARIS
 CONSULTING ENGINEERS

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FARM DRAINS -- CONTINUED

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 603 8" CONDUIT, TYPE B 400 LIN. FT.
 ITEM 603 10" CONDUIT, TYPE B 400 LIN. FT.
 ITEM 603 6" CONDUIT, TYPE C 250 LIN. FT.
 ITEM 603 8" CONDUIT, TYPE C 250 LIN. FT.
 ITEM 603 6" CONDUIT, TYPE E 250 LIN. FT.
 ITEM 603 8" CONDUIT, TYPE E 250 LIN. FT.
 ITEM 603 6" CONDUIT, TYPE F 50 LIN. FT.
 ITEM 603 8" CONDUIT, TYPE F 50 LIN. FT.
 ITEM 601 ROCK CHANNEL PROTECTION, TYPE B 10 Cu. Yds. WITH BEDDING

NECESSARY BENDS OR BRANCHES SHALL BE INCLUDED FOR PAYMENT IN THE PERTINENT CONDUIT ITEM.

NONE OF THE ABOVE MATERIALS SHALL BE ORDERED BY THE CONTRACTOR UNTIL REQUESTED BY THE ENGINEER, AND IN CASE NONE IS ENCOUNTERED THE ITEM SHALL BE NON-PERFORMED.

ITEM 605 AGGREGATE DRAINS FOR KEMP RD. ONLY

AGGREGATE DRAINS SHALL BE PLACED AT FIFTY (50) FOOT INTERVALS ON EACH SIDE OF NORMAL CROWNED SECTIONS AND AT TWENTY-FIVE (25) FOOT INTERVALS ON THE LOW SIDE ONLY OF SUPER-ELEVATED SECTIONS, EXCEPT WHERE ITEM 605 PIPE UNDERDRAINS HAVE BEEN PROVIDED.
 SEE SHEET 372.

203 PROOF ROLLING

AN ESTIMATED QUANTITY FOR THIS ITEM HAS BEEN PROVIDED IN THE GENERAL SUMMARY FOR USE IN PROOF ROLLING OF SUBGRADE FOR THE MAINLINE, RAMPS, U. S. 35 AND DAYTON-XENIA ROAD, PAVEMENTS, AND FOR PAVED SHOULDERS.

EROSION CONTROL

ITEMS 207, 601, 660 & 667 ARE PROVIDED IN THESE PLANS FOR EROSION CONTROL. ROCK OR TURF OF A STABLE NATURE WILL NOT BE REMOVED IN ORDER TO PLACE ANY OF THESE ITEMS. THE ENGINEER SHALL CHECK AND NON-PERFORM QUANTITIES OR ADJUST LOCATIONS AND QUANTITIES FOR THESE ITEMS WHERE INDICATED BY FIELD CONDITIONS DURING CONSTRUCTION. WHEREVER PAVED GUTTER OR RIPRAP USING 6" REINFORCED CONCRETE IS INDICATED IN THE PLAN, THE UPPER EDGE SHALL BE 3" TO 6" BELOW FINISHED GRADE. ALL SOD SHALL BE PLACED ON A MINIMUM OF 6" OF SOIL AS PER 203.02.

EROSION PROTECTION AT CULVERTS AND OTHER OUTLETS

EROSION PROTECTION, SUCH AS PAVED GUTTERS, ROCK CHANNEL PROTECTION, ETC., WHERE PROVIDED IN THE PLAN AT STRUCTURES AND OTHER PIPE OUTLETS, SHALL BE PLACED IMMEDIATELY AFTER INSTALLATION OF THE PIPE OR STRUCTURE.

PROJECT FEATHERS

THE LENGTH OF PROJECT FEATHERS ARE INDICATED ON THE PLAN SHEETS. THE BUTT JOINT TYPE FEATHER SHALL BE USED WHERE THE FEATHER IS ON EXISTING ASPHALT PAVEMENT AND THE FEATHER EDGE TYPE SHALL BE USED WHERE THE FEATHER IS ON EXISTING CONCRETE PAVEMENT. SEE STANDARD CONSTRUCTION DRAWING BP-5 FOR DETAILS OF PLACING FEATHERED AREAS.

FARM DRAINS

ALL FARM DRAINS WHICH ARE ENCOUNTERED DURING CONSTRUCTION SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS UNDER THE DIRECTION OF THE ENGINEER. EXISTING COLLECTORS WHICH ARE LOCATED BELOW THE ROADWAY DITCH ELEVATIONS AND WHICH CROSS THE ROADWAY SHALL BE REPLACED WITHIN THE RIGHT-OF-WAY LIMITS BY 603 CONDUIT, TYPE B, ONE COMMERCIAL SIZE LARGER THAN THE EXISTING CONDUIT.

EXISTING COLLECTORS AND ISOLATED FARM DRAINS WHICH ARE ENCOUNTERED ABOVE THE ELEVATION OF THE ROADWAY DITCHES SHALL BE OUTLETTED INTO THE ROADWAY DITCH BY 603 TYPE F CONDUIT. THE OPTIMUM OUTLET ELEVATION SHALL BE, IF POSSIBLE, ONE FOOT ABOVE THE FLOWLINE ELEVATION OF THE DITCH. LATERAL TILE FIELDS WHICH CROSS THE ROADWAY SHALL BE INTERCEPTED BY 603 TYPE E CONDUIT AND CARRIED IN A LONGITUDINAL DIRECTION TO AN ADEQUATE OUTLET OR ROADWAY CROSSING.

THE LOCATION, TYPE, SIZE AND GRADE OF REQUIRED REPLACEMENTS SHALL BE DETERMINED BY THE ENGINEER DURING CONSTRUCTION AND PAYMENT SHALL BE MADE ON FINAL MEASUREMENTS.

TREATED SANITARY FLOW INTO THE NON-INTERSTATE HIGHWAY DRAINAGE SYSTEMS

TREATED SANITARY FLOW MAY BE DISCHARGED INTO THE NON-INTERSTATE HIGHWAY DRAINAGE SYSTEM PROVIDED THE OWNER HAS SECURED THE APPROVAL OF THE LOCAL HEALTH AUTHORITIES AND HAS ACQUIRED FROM THE DEPT. OF TRANSPORTATION THE OFFICIAL PERMIT TO HAVE THE CONNECTION MADE.

IN EACH CASE WHERE A PERMIT HAS BEEN ISSUED FOR A SANITARY CONNECTION TO BE MADE INTO A HIGHWAY DRAINAGE CONDUIT, IT SHALL BE PROVIDED WITH AN INSPECTION WELL, IN ACCORDANCE WITH THE DETAIL SHOWN ON STANDARD DRAWING MC-8.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY, FOR USE AS DIRECTED BY THE ENGINEER, IN MAKING THE ABOVE DESCRIBED CONNECTIONS:

ITEM 603, 6" CONDUIT, TYPE C 100 LIN. FT.
 *ITEM 604, INSPECTION WELLS 2 EACH

AND NECESSARY BENDS AND BRANCHES SHALL BE INCLUDED FOR PAYMENT IN THE PERTINENT CONDUIT ITEM.

NONE OF THE ABOVE MATERIALS SHALL BE ORDERED BY THE CONTRACTOR UNTIL AUTHORIZED BY THE ENGINEER, AND IN CASE NONE IS ENCOUNTERED THE ITEM SHALL BE NON-PERFORMED.

*NO INSPECTION WELL IS REQUIRED IF EFFLUENT IS DISCHARGED INTO AN OPEN DITCH, CHANNEL, CATCH BASIN OR MANHOLE.

SANITARY FLOW INTO INTERSTATE HIGHWAY DRAINAGE SYSTEMS

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

SANITARY FLOW INTO INTERSTATE HIGHWAY DRAINAGE SYSTEMS -- CONTINUED

EXISTING PIPE CARRYING FLOW WHICH COMES WITHIN THE CATEGORY OUTLINED ABOVE SHALL BE PLUGGED WITH CLASS C CONCRETE AT THE RIGHT-OF-WAY LINE. PAYMENT FOR SAID PLUGGING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 203 EXCAVATION, NOT INCLUDING EMBANKMENT CONSTRUCTION.

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- 100 LIN. FT. 6" CONDUIT, TYPE C, 706.01, 706.02, 706.08 WITH JOINTS AS PER 706.11 OR 706.12
 ITEM 603- 100 LIN. FT. 6" CONDUIT, TYPE B, 706.01, 706.02, or 706.08 with joints, as per 706.11 or 706.12.

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

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.

SPRING DRAINS

REFERENCE IS MADE TO THE DETAILED DRAWING ON STANDARD 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, 6" UNCLASSIFIED PIPE UNDERDRAIN, 707.01 TYPE III, 707.12 TYPE III OR 707.15, AS PER PLAN 100 LIN. FT.
 ITEM 605, AGGREGATE DRAINS FOR SPRINGS, 30 LIN. FT.

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

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 NONPERFORMED FOR THE AREAS WHERE TESTS SHOW THAT THE 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 AND INCLUDED FOR PAYMENT IN THE PRICE BID FOR ITEM 203 EMBANKMENT. THE CONTRACTOR SHALL USE EITHER SUITABLE OR UNSUITABLE MATERIAL 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 LAYERS IN WHICH THE EMBANKMENTS ARE PLACED AND THEIR COMPACTION SHALL, IN LIEU OF THE REQUIREMENTS OF ITEM 203, CONFORM WITH ACCEPTABLE CONSTRUCTION PRACTICES AS DETERMINED BY THE ENGINEER.

NO PROVISION OF THE SPECIFICATIONS SHALL BE WAIVED FOR EMBANKMENTS WHICH SUPPORT ANY PORTION OF THE NEW ROADBED OR STRUCTURAL MEMBERS.

AN ESTIMATED QUANTITY OF 5 CUBIC YARDS HAS BEEN PROVIDED IN THE PLANS FOR CHANNEL EMBANKMENT. See Sheet 393 for location and estimated quantity.

ATTACHMENT OF GUARDRAIL TO CONCRETE PARAPETS:

CONCRETE INSERT ANCHOR ASSEMBLIES PER STANDARD CONSTRUCTION DRAWINGS GR-3 AND GR-1 SHALL BE PLACED DURING PARAPET CONSTRUCTION.

COATED DOWEL BARS

Dowel bars required on Std. Dwg. BP-4 shall be coated in accordance with Supplemental Specification 948.

GENERAL NOTES

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		28 616

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ITEM 202 - SANITARY LIFT STATION - REMOVED FOR STORAGE

THIS ITEM SHALL CONSIST OF THE REMOVAL FOR STORAGE OF THE EXISTING SANITARY LIFT STATION. THE LIFT STATION CONSISTS OF 2 SEWAGE PUMPS (400 G.P.M., 40' T.D.H.), AN 8' DIAMETER X 7'± STEEL PLATE PUMP CHAMBER WITH A 3' DIAMETER X 12'± STACK AND A CONC. MANHOLE (WET WELL) 19'± DEEP.

THIS ITEM SHALL BE PAID FOR AT THE LUMP SUM PRICE BID FOR "ITEM SPECIAL - SANITARY LIFT STATION, REMOVED FOR STORAGE" WHICH PAYMENT SHALL CONSTITUTE FULL COMPENSATION FOR EXCAVATION, REMOVING AND STORING OF LIFT STATION AND EQUIPMENT, BACKFILLING, AND FOR ALL LABOR, TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM, THE LIFT STATION SHALL BE STORED ON THE PROJECT FOR PICKUP BY THE GREENE COUNTY SANITARY ENGINEER.

MEDIAN PAVED SHOULDERS

THE MEDIAN PAVED SHOULDERS ON THE MAINLINE ARE 10' WIDE AS SHOWN ON THE TYPICAL SECTIONS. THE QUANTITIES FOR THE SHOULDERS AND EARTHWORK HAVE BEEN CALCULATED FOR THE 10' SHOULDERS, BUT THE CROSS SECTIONS AND DETAIL SHEETS HAVE NOT BEEN REVISED.

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	1,000 M.GAL.
659	MOWING	2,000 M.Sq.Ft.

LONGITUDINAL SLOPE DRAINS

ERODIBLE GRANULAR MATERIAL MAY BE ENCOUNTERED IN THE CUT SLOPES BETWEEN STA. 25+00± AND STA. 32+00±, DAYTON-XENIA RD. AN ESTIMATED QUANTITY OF 3,600 LIN. FT. OF UNCLASSIFIED PIPE UNDERDRAIN USING 6" 707.01 OR 707.12 HAS BEEN PROVIDED IN THE GENERAL SUMMARY TO BE USED AS LONGITUDINAL SLOPE DRAINS AS DIRECTED BY THE ENGINEER.

ITEM 203 EMBANKMENT AS PER PLAN

IT IS ANTICIPATED THAT THE MATERIAL TO MAKE THE EMBANKMENT ON THIS PROJECT WILL BE SANDY SILT OR GRANULAR MATERIAL. THE OUTER 12 INCHES OF GRANULAR EMBANKMENT SHALL BE CONSTRUCTED OF "SOIL" AND THE CUT SLOPES IN GRANULAR MATERIAL SHALL BE UNDERCUT TO A DEPTH OF 12 INCHES BELOW FINISHED GRADE AND THE UNDERCUT MATERIAL REPLACED WITH "SOIL" AS DEFINED UNDER 203.02 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS.

THE MATERIAL PLACED ON THE OUTER 12 INCHES OF THE EMBANKMENT SHALL BE PLACED CONCURRENTLY, IN THE SAME LIFTS, AND COMPACTED WITH THE REMAINDER OF THE EMBANKMENT SECTION, AND UNDER NO CIRCUMSTANCES SHALL IT BE PLACED AS A SEPARATE LAYER OVER PREVIOUSLY COMPLETED EMBANKMENT. PAYMENT FOR THE REMOVAL OF 12 INCH DEPTH OF GRANULAR MATERIAL WILL BE AT THE UNIT PRICE BID FOR 203 EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION. PAYMENT FOR "SOIL" TO REPLACE THE GRANULAR MATERIAL WILL BE AT THE UNIT PRICE BID FOR 203 EMBANKMENT, AS PER PLAN.

AREAS TO BE UNDERCUT WILL BE DESIGNATED BY THE ENGINEER. IT IS ANTICIPATED THAT UNDERCUTTING WILL BE REQUIRED IN THE FOLLOWING AREAS:

I-675:	350+00 - 366+00 Rt.	RAMP A:	302+00 - 315+00 Rt.
	403+00 - 416+00 Rt.		340+00 - 347+00 Rt.
	337+00 - 340+00 Lt.		
	353+61 - 364+00 Lt.	RAMP B:	340+00 - 346+00 Lt.
	404+00 - 416+62 Lt.		349+00 - 351+00 Lt.
U.S.35:	1090+00 - 1093+00 Rt.	RAMP H:	324+00 - 326+90 Rt.
	1092+00 - 1099+00 Lt.		
	1095+00 - 1101+00 Rt.	DAYTON-XENIA:	13+50 - 17+00 Rt.
	1106+00 - 1106+93.02 Lt. Bk.		16+00 - 26+00 Lt.
	0+00 AH - 4+00 Lt.		20+00 - 21+00 Rt.
	7+00 - 13+00 Lt.		27+00 - 28+00 Rt.
	6+00 - 19+00 Rt.		28+00 - 33+00 Lt.
			29+00 - 30+00 Rt.
		WILDONNA:	1+00 - 3+50 Rt. & Lt.
		KEMP RD.:	22+00 - 24+00 Lt.
			22+00 - 26+00 Rt.

ITEM 203 - EMBANKMENT AS PER PLAN - CONTINUED

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 203 - EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION	21,051 Cu. Yd.
ITEM 203 - EMBANKMENT, AS PER PLAN	21,051 Cu. Yd.

ADDITIONAL EXCAVATION

ON RELOCATED DAYTON-XENIA RD. BETWEEN STA. 22+00 AND STA. 28+00 FROST SUSCEPTIBLE SILT IS ANTICIPATED AT SUBGRADE. TO THIS EXTENT THE CONTRACTOR SHALL EXCAVATE AN ADDITIONAL 2 FEET OF MATERIAL EXTENDING EACH WAY FROM THE CENTERLINE TO THE PIPE UNDERDRAIN TRENCH AND REPLACE THE EXCAVATED MATERIAL WITH 310 SUBBASE MATERIAL.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 203 - EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION	3,312 Cu. Yd.
ITEM 310 - SUBBASE, TYPE II	3,312 Cu. Yd.

ITEM 451- 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT USING 701.08, EXPANSIVE HYDRAULIC CEMENT ~ SEE NOTE IN PROPOSAL

THIS WORK SHALL CONSIST OF CONSTRUCTING A 9" REINFORCED CONCRETE PAVEMENT, USING 701.08, EXPANSIVE HYDRAULIC CEMENT AT PORTIONS OF WESTBOUND U.S. 35 AS INDICATED ON TYPICAL SECTION SHEET 15A AND THE PAVEMENT CALCULATIONS.

ITEM SPECIAL: SEEDING AND NYLON FIBER MATTING

The work shall consist of furnishing, placing and maintaining seeding and nylon fiber matting on areas shown on the plans as directed by the engineer. The nylon fiber mat shall meet the requirements of supplemental specification 940, Type I. Prior to placement of the matting the area to be covered shall be prepared in accordance with Item 659 with the following exceptions:

- The surface shall be free of rock, clods, and foreign material 1/2" or greater in dimension.
- No mulch shall be applied.

Nylon fiber matting shall be placed in accordance with 667 with exception that 12"x3"x1" Triangular wooden stakes be used in lieu of wire staples.

After the fiber mat has been installed in place, a layer of dry fine soil shall be placed to fill the voids in the mat. The layer shall be no deeper than the mat and care should be taken so as not to disturb the prepared surface.

REVIEW OF DRAINAGE FACILITIES - Before any work is started on the project, and again before final acceptance by the State, representatives 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 from 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 above-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 pertinent 603 conduit items of the contract.

MONUMENTS

MONUMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAILS SHOWN ON STANDARD DRAWING MC-1. FOR LOCATIONS, SEE SHEET No. 565, 566

APPROACH SLAB

JACKING HOLES, AS SHOWN ON AS-1-72, SHALL BE OMITTED. THE REINFORCING IN THE TOP OF SLAB SHALL BE 3" CLEAR.

ELEVATIONS SHOWN ON CROSS SECTIONS

IN THE CROSS SECTIONS OF THIS SET OF PLANS, THE FIRST ELEVATION SHOWN TO THE NEAREST TENTH OF A FOOT IS THE EXISTING GROUND ELEVATION, AND THE SECOND ELEVATION SHOWN TO THE NEAREST HUNDREDTH OF A FOOT IS THE PROFILE GRADE ELEVATION.

EXAMPLE:	STA. 330+00	CENTERLINE STATION
	873.9	EXISTING GROUND ELEVATION
	875.30	PROFILE GRADE ELEVATION

WATER POLLUTION, SOIL EROSION AND SILTATION CONTROL

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER FOR EROSION AND SILTATION CONTROL MEASURES.

ITEM	TOTAL	UNIT	DESCRIPTION
207	176,000	Sq. Yd.	TEMPORARY SEEDING AND MULCHING
659	400	M. GAL.	WATER
207	8,580	LIN. FT.	TEMPORARY SLOPE DRAINS
207	1,500	Cu. Yd.	TEMPORARY BENCHES, DIKES, DAMS, AND SEDIMENT BASINS
659	44,000	Sq. Yd.	REPAIR SEEDING & MULCHING
659	38	TON	COMMERCIAL FERTILIZER
659	2,000	M.Sq.Ft.	MOWING
207	8,000	EACH	STRAW OR HAY BALES
601	50	Cu.Yd.	TYPE C ROCK CHANNEL PROTECTION (WITHOUT BEDDING)

FUTURE LANE CONSTRUCTION

TO PROVIDE FOR FUTURE LANE CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE AND INSTALL STANDARD LONGITUDINAL JOINTS WITH FEMALE END OF THE STANDARD HOOK BOLT CAST INTO THE CONCRETE PAVEMENT AT 30" SPACING AS CALLED FOR ON STANDARD DRAWING BP-3.

THE ABOVE JOINTS SHALL BE PLACED AT THE FOLLOWING LOCATIONS:

U.S. 35 EASTBOUND LANES - STA. 1087+74.57 TO STA. 76+00	MEDIAN SIDE
EASTBOUND LANES - STA. 64+00 TO STA. 76+00	OUTER SIDE
WESTBOUND LANES - STA. 1090+85.78 TO STA. 76+00	MEDIAN SIDE
WESTBOUND LANES - STA. 64+00 TO STA. 76+00	OUTER SIDE

AFTER THE FORMS HAVE BEEN REMOVED, THE 5/8" TAP BOLT SHALL BE RE-INSERTED INTO THE HOOK BOLT TO PROTECT THE THREADS AND LEFT IN PLACE IN LIEU OF THE MALE END OF THE HOOK BOLT. THE EXPOSED METAL SHALL THEN BE PAINTED WITH TWO COATS OF ASPHALT VARNISH.

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

GENERAL NOTES

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ITEM SPECIAL - CONSTRUCTION OF RAILROAD TRACK

NOTE: ALL REFERENCES IN THESE PLANS TO THE PENN-CENTRAL RAILROAD SHALL BE CONSIDERED TO READ THE CONSOLIDATED RAIL CORPORATION (CONRAIL).

SCOPE OF WORK - GENERAL

THIS WORK INCLUDES THE FURNISHING AND INSTALLATION OF ALL MATERIALS REQUIRED FOR LAYING, BALLASTING, RAISING, LINING AND SURFACING OF TRACKS AS COVERED BY THE PLANS AND THE REMOVAL OF THE EXISTING TRACK AFTER THE PERMANENT TRACK HAS BEEN PLACED IN SERVICE.

APPROXIMATE LENGTH OF WORK AND SCOPE OF CONTRACTOR'S WORK:

1. THE TOTAL LENGTH OF TRACK RELOCATION IS APPROXIMATELY 5,080 LINEAL FEET. IN THE TRACK TRANSITION AREAS, STA. 522+12± TO STA. 532+56± AND STA. 568+59± TO STA. 572+96±, THE RAILROAD WILL MOVE THE TRACK AND SUPPLY THE BALLAST. BETWEEN STA. 532+56± AND STA. 568+59± THE CONTRACTOR SHALL PERFORM THE EARTHWORKS AND CONSTRUCT THE SUBBALLAST, BALLAST AND TRACK. IN THE TRACK TRANSITION AREAS THE CONTRACTOR SHALL PERFORM THE EARTHWORK AND CONSTRUCT THE NEW SUBBALLAST.
2. CO-ORDINATE WORK AT THE ENDS OF THE NEWLY CONSTRUCTED TRACK AND CO-OPERATE WITH OTHERS WHO WILL BE LINING OVER AND CONNECTING UP EXISTING TRACK TO THE NEWLY CONSTRUCTED TRACK.
3. REMOVE APPROXIMATELY 3,600 LINEAL FEET OF EXISTING TRACK AFTER THE NEW TRACK HAS BEEN PLACED IN PERMANENT SERVICE.
4. DO OFFICE AND FIELD ENGINEERING AS REQUIRED ON ALL CONSTRUCTION FOR THE RELOCATION AND REMOVAL OF THE RAILROAD. THIS INCLUDES LAYOUT WORK, PROVIDING AND MAINTAINING ALL GRADE, SURFACE AND LINE STAKES.
5. THE CONTRACTOR MUST WORK CLOSELY WITH THE RAILROAD FORCES AND CO-ORDINATE THE COMPLETION OF HIS WORK WITH THE REQUIREMENTS OF THE RAILROAD AND THE STATE.

ALL OF THE TRACK WORK IS TO BE DONE ON SUBGRADE PREVIOUSLY PREPARED, INCLUDING SUBBALLAST ACCORDING TO THE PLANS OR BRIDGE DECK. THE SUBGRADE, INCLUDING THE SUBBALLAST PREVIOUSLY PREPARED AS DETAILED ON SHEET NO. 18 AND THE BRIDGE STRUCTURES ARE NOT INCLUDED IN THIS WORK.

ALL WORK IS TO BE PERFORMED IN A FIRST CLASS WORKMANLIKE MANNER AND SHALL CONFORM TO ALL PROVISIONS OF THE RAILROAD'S M.W.-4. WHILE NOT RELIEVING THE CONTRACTOR FROM COMPLYING WITH ANY OTHER SECTION, THE CONTRACTOR'S ATTENTION IS ESPECIALLY DIRECTED TO THE FOLLOWING SECTIONS:

ITEM	SECTION
A. ALIGNMENT	55,0 - 55,3
B. BALLAST	103,0 - 103,5
C. CROSS SECTION	103,3, 37,0, 35,0
D. CROSS TIES	107,0 - 109,0
E. DRAINAGE	33,0
F. GUAGE	53,0 - 53,1
G. GEOMETRY	57,0 - 59,3, 63,0 - 63,3
H. MATERIAL HANDLING	101,2 - 101,3, 113,7
I. RAIL	113,0 - 113,5, 113,9 - 113,12, 119,0 - 119,8
J. RAIL ANCHORS	125,0 - 125,4
K. RAIL JOINTS	121,0 - 121,2
L. SPIKING	127,0 - 127,2
M. TIE PLATES	123,0 - 123,2

THE CHIEF ENGINEER, DESIGN AND CONSTRUCTION, OR HIS DULY AUTHORIZED REPRESENTATIVE, SHOULD BE SUBSTITUTED FOR CHIEF ENGINEER, MAINTENANCE OF WAY, OR EQUIVALENT TERMS AS REFERRED TO IN THE M.W.4.

RAIL

THE RAIL FURNISHED FOR THE TRACK SHALL BE CONTINUOUS WELDED RAIL (C.W.R.) MEETING ALL PROVISIONS FOR CONRAIL MAIN TRACK RAIL AS DEFINED IN M.W. 4. THE RAIL SHALL BE OF 132# OR 140# NEW RE SECTION, OR 131#, 132#, 133#, OR 140# R.E., 127# DUDLEY, 152#, OR 155# PS SECTION. ANY SUBSTITUTIONS OF OTHER WEIGHT RAIL SECTIONS MUST BE SPECIFICALLY APPROVED IN WRITING BY THE CHIEF ENGINEER, DESIGN & CONSTRUCTION IN ADVANCE OF THEIR USE.

CONTINUOUS WELDED RAIL USED ON THIS PROJECT MUST BE OBTAINED FROM A SOURCE APPROVED IN WRITING BY THE CHIEF ENGINEER AND TRANSPORTED AND HANDLED IN A MANNER APPROVED BY HIM. ANY APPROVAL OF SUPPLIER CANNOT BE CONSTRUED TO MEAN THAT RAIL ACTUALLY RECEIVED ON THE JOB SITE WILL BE ACCEPTABLE. ALL RAIL MUST MEET PROVISIONS OF M.W. 4 ON THE JOB SITE AND MAY BE REJECTED FOR ANY REASON THEREIN OR FOR REASON OF DAMAGE IN TRANSIT. RAIL SHALL FURTHER BE WARRANTED TO BE FREE FROM DEFECTS DETECTABLE BY SPERRY OR SIMILAR RAIL TEST CAR. ANY RAIL OR PORTION OF CWR RAIL STRING FOUND DEFECTIVE WITHIN ONE YEAR BY TESTING CAR SHALL BE REPLACED BY CUTTING-OUT AND FIELD-WELDING-IN A SOUND RAIL SEGMENT.

RAIL - CONTINUED

ALL STRINGS OF C.W.R. SHALL BE JOINED BY FIELD WELDS PRODUCED BY A PROCESS APPROVED BY THE CHIEF ENGINEER AND WHICH SHALL BE PROVIDED WITH SAFETY STRAPS. WHERE INSULATED JOINTS ARE REQUIRED FOR SIGNAL CIRCUITS, GLUED, FACTORY PREFABRICATED INSULATED JOINTS WILL BE INSTALLED. THESE JOINTS ARE TO MEET ALL REQUIREMENTS OF M.W. 4 AND SHALL BE FIELD-WELDED INTO C.W.R. STRINGS.

BALLAST

BALLAST SHALL CONFORM TO CONRAIL STANDARD SPECIFICATION M.W. 170 "SPECIFICATIONS FOR STONE BALLAST" DATED 4-77. CLASS "A" BALLAST SHALL BE USED.

BALLAST SHALL BE PLACED ACCORDING TO THE LIMITS SHOWN ON SHEET NO. 18. IT SHALL BE PLACED IN APPROXIMATELY EQUAL LIFTS AND PROPERLY COMPACTED BY VIBRATORY ROLLERS AND/OR TAMPERS TO AN ELEVATION TWO INCHES (2") BELOW THE FINAL ELEVATION OF THE BOTTOM OF TIE. BALLAST ABOVE THIS LINE SHALL BE PLACED WITH TRACK AND TAMPED WHEN TRACK IS RAISED TO FINAL GRADE.

THE TERM "PRE-BALLASTING" SHALL BE USED TO DESIGNATE THE PLACEMENT OF BALLAST BY GRADING TECHNIQUES TO 2" BELOW TIE BOTTOM.

TIES

ALL TIES MUST HAVE HAD A PRESERVATIVE PRESSURE TREATMENT OF DISTILLATE COAL TAR CREOSOTE SOLUTION TO A FINAL RETENTION OF 6 LBS. PER CUBIC FOOT. ANTI-SPLITTING DEVICES SHALL HAVE BEEN APPLIED TO THE ENDS OF ALL TIES. TIES SHALL CONFORM TO CONRAIL SPECIFICATION C.E. 22 "SPECIFICATIONS FOR CROSS TIES," DATED 6/10/77. ALL TIES SHALL BE SIZE 4 OR 5 AND PLACED ACCORDING TO M.W. 4.

TIE PLATES

TIE PLATES SHALL BE OF STANDARD SIZE FOR THE RAIL FURNISHED, CONFORM TO A.R.E.A. SPECIFICATIONS, OF EQUIVALENT AND ACCEPTABLE QUALITY TO THOSE IN EXISTING TRACK. TIE PLATES SHALL BE USED UNDER RUNNING RAILS ON ALL CROSS TIES, PROPERLY PLACED ON THE TIE AND WITH THE SHOULDER OF THE TIE PLATE IN FULL BEARING AGAINST THE RAIL.

RAIL ANCHORS

AN APPROVED TYPE OF ANCHOR SUCH AS IMPROVED FAIR, WOODINGS OR TRUE TEMPER CHANNELOC SHALL BE USED. RAIL ANCHORS SHALL BE EQUIVALENT TO THOSE IN EXISTING TRACK AND BE OF A SIZE TO CORRESPOND TO THE RAIL SECTION USED. EACH CWR STRING IS TO BE ANCHORED: A) FOR 200' AT EACH END IN BOTH DIRECTIONS ON EVERY TIE; B) THROUGHOUT THE REMAINDER OF THE RAIL ON EVERY OTHER TIE. CWR LESS THAN 400 FEET IN LENGTH AND ALL BUFFER RAIL IS TO BE ANCHORED IN BOTH DIRECTIONS ON EVERY TIE.

SPIKES

ALL SPIKES SHALL BE 5/8" x 6" FULL THROATED. FOUR SPIKES SHALL BE APPLIED IN EACH TIE PLATE - 2 RAIL-HOLDING SPIKES AND 2 PLATE-HOLDING SPIKES. SPIKES SHALL BE DRIVEN VERTICALLY WITH HEAD POINTING TOWARDS THE RAIL. BENT, THROAT-CUT, BADLY RUSTED OR BROKEN SPIKES SHALL NOT BE USED.

FINAL SURFACE AND LINE

THE TRACK, AFTER CONSTRUCTED ON THE BALLAST BED, SHALL THEN BE RAISED ON ADDITIONAL BALLAST AS REQUIRED, BY LIFTS TO ITS FINAL GRADE AND PROPERLY TAMPED BY AN APPROVED METHOD. AS WORKED UPON, THE TRACK SHALL BE MAINTAINED IN APPROXIMATELY TRUE ALIGNMENT. IN MAKING ALL LIFTS, CARE SHOULD BE TAKEN TO LOOSEN JOINTS AND RESEAT THEM IF NECESSARY, MAINTAINING PROPER EXPANSION SPACE TO PREVENT KINKING OR BENDING. BOTH RAILS TO BE RAISED AT THE SAME TIME AS UNIFORMLY AS POSSIBLE.

THE FINAL RAISE SHALL BE MADE TO THE FINAL GRADE AND THOROUGHLY TAMPED BY AN APPROVED METHOD FROM THE ENDS OF TIES TO 15" INSIDE OF EACH RAIL. THE SPACE AT THE CENTER OF THE TIES SHALL BE COMPLETELY FILLED WITH BALLAST, BUT NOT TAMPED. THE CONTRACTOR SHALL LINE AND DRESS THE BALLAST TO CONFORM TO THE STANDARD ROADBED SECTION SHOWN ON THE PLANS. SUPERELEVATION FOR THE MAIN TRACK SHALL BE IN ACCORDANCE WITH THE PLANS AND RAILROAD'S M.W. 4. AFTER FINAL TAMPING, TRACKS SHALL BE BROUGHT TO AN ACCEPTABLE FINAL ALIGNMENT AS DEFINED IN THE M.W. 4.

GENERAL

UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL CLEAN UP, REMOVE AND DISPOSE OF ALL RUBBISH AND WASTE RESULTING FROM HIS OPERATIONS AND SHALL REMOVE FROM THE RIGHT OF WAY ANY AND ALL TEMPORARY STRUCTURES AND/OR FACILITIES IN CONNECTION WITH THE WORK.

WORK BY RAILROAD FORCES

ALL REALIGNMENT AND DISCONNECTION WORK ON EXISTING MAIN TRACK IN SERVICE AND EXISTING LIVE TRACK CONNECTIONS WILL BE DONE BY CONRAIL FORCES. AFTER CONSTRUCTED BY THE CONTRACTOR, THE FINAL CONNECTIONS FOR THE NEW TRACKS TO THE EXISTING TRACKS WILL BE MADE BY THE RAILROAD FORCES.

BASIS OF PAYMENT

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM SPECIAL - CONSTRUCTION OF RAILROAD TRACK.

ITEM SPECIAL - NOISE BARRIER

DESCRIPTION:

This work shall consist of furnishing and installing Steel Noise Barrier Wall in accordance with this provision and in reasonably close conformity with the dimensions, lines and grades shown on the plans, or as directed by the Engineer.

MATERIAL:

Transmission Loss: The Barrier shall provide a Transmission Loss of no less than 22 dB (A-Weighted) Based on Generalized Truck Noise Spectrum.

Interlocking Panels: Steel Facing Material shall be cold formed steel conforming to ASTM A446, Grade B. The Steel Panels shall have a minimum covering width of 16 inches, with a minimum section modulus of 0.019 in³ per inch, and a minimum thickness of 22 Gage. To prevent vibration and noise leaks, each panel shall have a male and female rib providing a friction interlock connection with adjacent panels. The friction interlock connection shall provide sufficient connection strength to support its own weight without the use of fasteners when connected to another panel and held in the vertical and horizontal positions. Panels shall be galvanized in accordance with ASTM A525, Class G-90.

Protective Color Coating: All Panels and Flashings shall be Polyvinyl Fluoride Film (PVF) (Tedlar) with a minimum thickness of 1-1/2 Mils coated on both sides.

The color shall be determined later. The PVF Film shall be factory applied by a qualified laminator to a cleaned and chemically treated galvanized steel surface per Federal Specification TT-C-490.

Posts: Posts shall be fabricated from hot rolled steel conforming to ASTM A36 and galvanized in accordance with 711.02, except that the coating weight shall be a minimum of 2.0 ounces per square foot of surface. Post size shall be as shown on the plans.

Girts: Girts shall be fabricated from hot rolled steel conforming to ASTM A36 and galvanized in accordance with 711.02, except that the coating weight shall be a minimum of 2.0 ounces per square foot of surface. Girt size shall be as shown on the plans.

Steel Flashing and Caps: All corner flashings, caps and other flashings shall be of the same material as the steel panels. The protective coating requirements shall be the same as that of the panels.

Self-Drilling Screws: All Self-Drilling Screws shall be of Class 410 Stainless Steel, conforming to Federal Specification QQ-S-763-C. Cadmium coated in accordance with ASTM A165.

Bolts and Nuts: Bolts and Nuts shall be of the size shown on the plans and galvanized per 711.02.

Anchor Bolts, Nuts, Washers for attaching Posts to Pedestrian Overpass Wall shall be galvanized in accordance with 711.02.

CONSTRUCTION

The Noise Barrier shall be installed in accordance with Plan Details. Minor surface scratches shall be sealed with color-matching enamels in accordance with Manufacturer's recommendations. Joints and Connections shall be secured in such a manner as to be structurally sound with no visible openings to decrease Noise Attenuation efficiency. The Face of the Noise Barrier Wall shall be vertically aligned so as to not deviate from the vertical by more than 1/2 inch in ten feet.

Concrete in the drilled shafts shall be vibrated with special care being given not to over vibrate.

ITEM SPECIAL - NOISE BARRIER

This Item shall consist of installing Noise Barriers of varying heights. The Location and Construction Details are shown in this Plan.

This Item shall be paid for at the Unit Price Bid per square foot for Item Special - Noise Barrier which payment will constitute Full Compensation for providing all Panels, Posts, Flashings, Girts, Hardware and Concrete and for all Labor, Tools, Equipment, and incidentals necessary to complete this Item.

MAINTENANCE OF TRAFFIC

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

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616

GRE-675-5,37

GENERAL

IT IS THE INTENTION TO PERFORM THE REQUIRED WORK WITH THE LEAST INCONVENIENCE TO, AND THE MAXIMUM SAFETY OF THE CONTRACTOR AND THE TRAVELING PUBLIC. ANY VARIANCES FROM THESE MAINTENANCE OF TRAFFIC NOTES MUST BE APPROVED IN ADVANCE IN WRITING BY THE ENGINEER, EXCEPT AS MODIFIED BELOW OR AS SHOWN IN THE MAINTENANCE OF TRAFFIC PLANS. THE REQUIREMENTS FOR MAINTAINING TRAFFIC AS INDICATED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION, AS OF DATE OF BID AND PERTINENT ITEMS OF THE SPECIFICATIONS AND PROPOSAL SHALL APPLY.

EQUIPMENT, VEHICLES AND MATERIAL SHALL NOT BE STORED OR PARKED ON THE PROJECT WITHIN THIRTY (30) FEET OF THE EDGE OF THE TRAVELED PAVEMENT, UNLESS BEHIND GUARD RAIL.

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 TRAVELED PAVEMENT SAFELY.

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE PROPOSED PAVEMENT, TEMPORARY ROADS AND TEMPORARY PAVEMENT, EXCEPT WHERE MODIFIED BY SUBSEQUENT NOTES OR APPROVED BY THE ENGINEER.

IT IS NOT INTENDED THAT TEMPORARY ROADWAYS SHALL BE USED EXCLUSIVELY FOR MAINTAINING TRAFFIC ON THIS PROJECT, BUT THAT MAXIMUM USAGE BE MADE OF THE EXISTING AND PROPOSED PAVEMENTS.

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.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TRAFFIC CONTROL AND TRAFFIC CONTROL DEVICES REQUIRED BY THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" CURRENT EDITION, AS OF DATE OF BID, THESE PLANS AND PERTINENT ITEMS OF THE SPECIFICATIONS AND PROPOSAL SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

U. S. 35

TWO LANES OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES ON THE EXISTING PAVEMENT IN BOTH THE EASTBOUND AND WESTBOUND DIRECTIONS, EXCEPT THAT ONE LANE OF TRAFFIC IN EACH DIRECTION WILL BE PERMITTED ON THE EXISTING WESTBOUND PAVEMENT WHILE WORK IS BEING PERFORMED CONNECTING THE PROPOSED EASTBOUND PAVEMENT TO THE EXISTING EASTBOUND PAVEMENT AND ONE LANE OF TRAFFIC IN EACH DIRECTION WILL BE PERMITTED ON THE PROPOSED EASTBOUND PAVEMENT, WHILE WORK IS BEING PERFORMED CONNECTING THE PROPOSED WESTBOUND PAVEMENT TO THE EXISTING WESTBOUND PAVEMENT. TO PROVIDE FOR ONE LANE DIRECTIONAL TRAFFIC, THE CONTRACTOR SHALL CONSTRUCT MEDIAN CROSSOVERS PAVED WITH CLASS B TEMPORARY PAVEMENT AND TEMPORARY CONCRETE MEDIAN BARRIER AND INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS DETAILED ON SHEETS 32 - 36.

GRANGE HALL ROAD

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES ON THE EXISTING PAVEMENT. DURING THE ERECTION OF STEEL FOR THE BRIDGES ON U.S. 35 OVER GRANGE HALL RD., THE CONTRACTOR MAY CLOSE THE ROAD TO TRAFFIC FOR A MAXIMUM OF 20 MINUTES AT HOURS OTHER THAN 6-9 A.M., 3-6 P.M.

DAYTON-XENIA ROAD

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES ON THE EXISTING PAVEMENT, PROPOSED PAVEMENT OR TEMPORARY ROADS PAVED WITH CLASS B TEMPORARY PAVEMENT AS DETAILED ON SHEET NOS. 35, 37, 38 AND 39 UNTIL SUCH TIME AS THE PROPOSED PAVEMENT IS AVAILABLE TO TRAFFIC. DURING THE ERECTION OF STEEL FOR BRIDGE NOS. GRE-675-0615 AND GRE-675-0616 THE CONTRACTOR MAY CLOSE THE ROAD TO TRAFFIC FOR A MAXIMUM OF 20 MINUTES AT HOURS OTHER THAN 6-9 A.M., 3-6 P.M.

HONEY LOCUST LANE

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES UNTIL DAYTON-XENIA RD. AND WILDONNA DRIVE ARE AVAILABLE TO TRAFFIC.

KEMP ROAD

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES ON THE EXISTING PAVEMENT OR TEMPORARY ROADS PAVED WITH CLASS B TEMPORARY PAVEMENT AS DETAILED ON SHEET NOS. 35, 40, 121 AND 122 UNTIL SUCH TIME AS THE PROPOSED PAVEMENT IS AVAILABLE TO TRAFFIC.

SEQUENCE OF CONSTRUCTION

THE FOLLOWING SEQUENCE OF CONSTRUCTION IS A GUIDE TO THE CONTRACTOR FOR THE MAINTENANCE OF TRAFFIC IN THE U.S. 35 AREA. SHOULD THE CONTRACTOR ELECT TO PURSUE ALTERNATE METHODS, HE SHALL PRESENT THE ALTERNATE METHODS TO THE ENGINEER IN WRITING PRIOR TO INITIATING HIS OPERATIONS.

STAGE 1:

1. CONSTRUCT THE SANITARY SEWER SYSTEM SERVING THE AREA NORTH OF U.S. 35 AND THE PORTION OF THE SANITARY SEWER CROSSING DAYTON-XENIA RD. AT STATION 14+80±.
2. CONSTRUCT RELOCATED U.S. 35 (EB & WB) FROM STA. 10+00± TO STA. 44+00± EB & WB, INCLUDING THE FOLLOWING BRIDGES:
 - U.S. 35 OVER I-675
 - RAMP A OVER U.S. 35

STAGE 2: (AFTER COMPLETION OF STAGE 1.)

3. CONSTRUCT TEMPORARY ROADS-NO. 1 & 2 FOR DAYTON-XENIA RD. AND DETOUR TRAFFIC. SEE SHEET NOS. 37, 39.
4. CONSTRUCT DAYTON-XENIA RD. FROM STA. 11+00± TO STA. 22+00±, INCLUDING THE PIERS FOR THE U.S. 35 BRIDGE OVER DAYTON-XENIA RD. AND THE FOLLOWING BRIDGES:
 - A. CONRAIL R.R. OVER DAYTON-XENIA RD.
 - B. CONRAIL R.R. OVER I-675.
 - C. DAYTON-XENIA RD. OVER I-675.
5. COMPLETE RELOCATED CONRAIL R.R.
6. AFTER COMPLETION OF DAYTON-XENIA RD. FROM STA. 11+00± TO STA. 22+00± CONSTRUCT TEMPORARY ROAD NO. 3 FOR DAYTON-XENIA RD. AS DETAILED ON SHEET NO. 37. REMOVE TEMPORARY RD. NO. 1 AND CONSTRUCT RELOCATED U.S. 35 (EB & WB) FROM STA. 0+00± TO STA. 10+00±.

STAGE 3: (AFTER COMPLETION OF STAGE 2)

7. CONSTRUCT MEDIAN CROSSOVERS ON U.S. 35 AS DETAILED ON SHEET NOS. 33, 34, 35. CONSTRUCT U.S. 35 (EB) FROM STA. 1087+74.57 TO STA. 1106+93.02 AND FROM STA. 44+00 EB TO STA. 76+00. TRAFFIC IS TO BE MAINTAINED BY USE OF CROSSOVERS AND ONE LANE OF TRAFFIC IN EACH DIRECTION WILL BE PERMITTED ON THE EXISTING WESTBOUND LANES, EXCEPT FOR THE AREA AROUND THE U.S. 35 AND DAYTON-XENIA RD. INTERSECTIONS WHERE THE EASTBOUND TRAFFIC IS TO BE DIVERTED BACK TO THE EXISTING EASTBOUND LANES AS SHOWN ON SHEET NO. 32. THE TIME TO COMPLETE THIS PHASE OF THE WORK SHALL NOT EXCEED 120 CALENDAR DAYS.
8. CONSTRUCT U.S. 35 (WB) FROM STA. 1090+85.78 TO STA. 1106+93.02 AND FROM STA. 44+00 WB TO STA. 76+00. TRAFFIC IS TO BE MAINTAINED BY USE OF CROSSOVERS AND ONE LANE OF TRAFFIC IN EACH DIRECTION WILL BE PERMITTED ON PORTIONS OF THE NEW EASTBOUND LANES AS DETAILED ON SHEET NOS. 33, 34. THE TIME TO COMPLETE THIS PHASE OF THE WORK SHALL NOT EXCEED 120 CALENDAR DAYS.

STAGE 4: (AFTER COMPLETION OF STAGE 3)

9. AFTER U.S. 35 EB & WB IS COMPLETED AND OPEN TO TRAFFIC, COMPLETE DAYTON-XENIA RD. AND WILDONNA DRIVE.
10. COMPLETE REMAINDER OF INTERCHANGE.

EACH STAGE OF CONSTRUCTION SHALL BE COMPLETED PRIOR TO COMMENCING THE NEXT STAGE.

LIGHTS AND SIGNS AT ADJACENT ROAD INTERSECTIONS

IN ADDITION TO THE GENERAL REQUIREMENTS OF ITEM 614 ON THIS PROJECT, THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD R-75 "ROAD CLOSED" SIGNS, SIGN SUPPORTS AND LIGHTS DURING THE PERIODS THAT THE AFFECTED ROADS ARE CLOSED TO TRAFFIC AT THE LOCATIONS INDICATED ON SHEETS 32, 39.

PRIOR TO PROHIBITING THE TURNS FROM U.S. 35 AT GRANGE HALL RD., THE CONTRACTOR SHALL ERECT "GRANGE HALL RD. EXIT CLOSED AHEAD" SIGNS. TWO SIGNS SHALL BE ERECTED ON THE EASTBOUND APPROACH APPROXIMATELY 1/2 MILE WEST OF THE WOODMAN DRIVE INTERCHANGE AND TWO SIGNS SHALL BE ERECTED ON THE WESTBOUND APPROACH APPROXIMATELY 1/2 MILE EAST OF THE PATTERSON RD. INTERSECTION.

SIMILARLY, PRIOR TO ELIMINATING THE TURNS AT THE DAYTON-XENIA RD. INTERSECTION, THE CONTRACTOR SHALL REMOVE THE ABOVE SIGNS AND ERECT "DAYTON-XENIA RD. EXIT CLOSED AHEAD" SIGNS AT THE SAME LOCATIONS.

THE CONTRACTOR SHALL PROVIDE, ERECT, MAINTAIN AND SUBSEQUENTLY REMOVE LIGHTS, SIGNS AND BARRICADES AT THE WORK LIMITS ON ALL INTERSECTING ROADS WHICH REMAIN OPEN TO TRAFFIC, AND MOVABLE GATES ON INTERSECTING ROADS CLOSED TO TRAFFIC AT ALL POINTS WHERE LOCAL TRAFFIC MOVEMENTS TERMINATE. BARRICADES AND GATES SHALL BE AS DETAILED ON STANDARD DRAWING MC-3.

TEMPORARY LIGHTING

SEE SHEET NO. 147 FOR REQUIREMENTS.

TEMPORARY TRAFFIC CONTROL, TEMPORARY RDS. #1, #2, #3 AND KEMP RD. TEMPORARY RD.

THE CONTRACTOR'S ATTENTION IS DIRECTED TO FIGURE C-24 IN THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" CURRENT EDITION, AS OF DATE OF BID FOR THE TRAFFIC CONTROL REQUIREMENTS FOR THE KEMP RD. TEMPORARY RD. AND TEMPORARY RDS. #1, #2 AND #3. THE SPEED INDICATED ON THE OW-143 SIGNS SHALL BE AS FOLLOWS:

CURVE RADIUS	SPEED
150'	20 MPH
200'	25 MPH
716'	40 MPH
955'	45 MPH

RADI OF CENTERLINE MARKINGS SHALL CONFORM TO THE RADI OF THE TEMPORARY RDS. EXCEPT WHERE OTHERWISE INDICATED.

PAVEMENT MARKINGS

PAVEMENT MARKINGS AS INDICATED IN THE MAINTENANCE OF TRAFFIC PLANS SHALL BE INSTALLED ON ALL NEWLY PAVED AREAS BEFORE THEY CAN BE OPENED TO TRAFFIC.

ALL EXISTING OR TEMPORARY PAVEMENT MARKINGS THAT WILL CONFLICT WITH PROPER TRAFFIC FLOW SHALL BE REMOVED BY THE CONTRACTOR WHEN DIRECTED BY THE ENGINEER. REMOVAL SHALL BE ACCOMPLISHED BY GRINDING, SANDBLASTING OR OTHER METHODS APPROVED BY THE ENGINEER EXCEPT THAT PAINTING (BLACK) OVER PAVEMENT MARKINGS IS NOT AN ACCEPTABLE METHOD.

PAYMENT FOR ALL OF THE ABOVE SHALL BE MADE UNDER ONE OF THE FOLLOWING:

- ITEM 614 TEMPORARY CENTERLINE, Class I
- ITEM 614 TEMPORARY EDGE LINES, Class I
- ITEM 621 REMOVAL OF PAVEMENT MARKINGS

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 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 NEW DRUMS IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUMS.

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 CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. PAYMENT FOR THE NEW SIGNS SHALL BE MADE AT THE BID PRICE PER SQUARE FOOT FOR "ITEM SPECIAL, REPLACEMENT SIGNS." 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.

MAINTENANCE OF TRAFFIC

ESTIMATED QUANTITIES
 By: DJP 2-28-72
 CHKD: HLF 4-03-72
 REVISED: IEH 5-30-79

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

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6/6

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ESTIMATED QUANTITIES

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN PROVIDED IN THE GENERAL SUMMARY FOR MAINTAINING TRAFFIC. THE MATERIAL USED FOR ITEM 404 FOR MAINTAINING TRAFFIC SHALL CONSIST OF ITEM 301, ITEM 402, ITEM 404 OR A PREMIXED MATERIAL APPROVED BY THE ENGINEER. THE MATERIAL USED FOR ITEM 410, TRAFFIC COMPACTED SURFACE, AS PER PLAN, SHALL COMPLY WITH THE MATERIAL SPECIFICATIONS OF 304.02:

ITEM 404	BITUMINOUS CONCRETE FOR MAINTAINING TRAFFIC	100 CU. YD.
ITEM 410	TRAFFIC COMPACTED SURFACE, AS PER PLAN	600 CU. YD.
ITEM 616	WATER	12 M GAL.
ITEM 616	CALCIUM CHLORIDE	12 TON
ITEM 614	Temporary Edge Lines, Class I	3 Miles
ITEM 614	Temporary Center Lines, Class I	1 Mile
ITEM 621	REMOVAL OF PAVEMENT MARKING LINES	8,000 LIN. FT.
ITEM 606	GUARD RAIL, TYPE 6	6,812.5 LIN. FT.
ITEM 606	ANCHOR ASSEMBLY, AS PER PLAN	2 EACH
ITEM 202	GUARD RAIL REMOVED, INCLUDING ANCHOR ASSEMBLY	6,862.5 LIN. FT.
ITEM 622	TEMPORARY Concrete Barrier	14,348 LIN. FT.
ITEM SPECIAL	REPLACEMENT SIGNS	200 SQ. FT.
ITEM SPECIAL	REPLACEMENT DRUMS	200 EACH

AN ESTIMATED QUANTITY OF 500 M GAL. OF ITEM 616 WATER AND 50 TONS OF ITEM 616 CALCIUM CHLORIDE HAVE BEEN PROVIDED IN THE GENERAL SUMMARY FOR DUST CONTROL.

PAYMENT FOR ALL OF THE ABOVE INCLUDING PROVIDING, ERECTING, MAINTAINING (EXCEPT AS PROVIDED FOR ELSEWHERE IN THESE PLANS) AND REMOVING ALL LIGHTS, SIGNS, BARRICADES, DRUMS, CONES, ELECTRIC FLASHING ARROWS, REGULATORY SIGNS, AND ALL OTHER TRAFFIC CONTROL DEVICES BUT NOT INCLUDING:

ITEM 404	BITUMINOUS CONCRETE FOR MAINTAINING TRAFFIC
ITEM 410	TRAFFIC COMPACTED SURFACE, AS PER PLAN
ITEM 615	TEMPORARY ROADS
ITEM 615	TEMPORARY PAVEMENT, TYPE B
ITEM 616	WATER
ITEM 616	CALCIUM CHLORIDE
ITEM 614	TEMPORARY PAVEMENT MARKING Lines
ITEM 621	REMOVAL OF PAVEMENT MARKINGS
ITEM 606	GUARD RAIL
ITEM 606	ANCHOR ASSEMBLY, AS PER PLAN
ITEM 202	GUARD RAIL REMOVED, INCLUDING ANCHOR ASSEMBLY
ITEM 622	TEMPORARY Concrete Barrier (See Std. Dwg. MC-9A)
ITEM SPECIAL	REPLACEMENT SIGNS
ITEM SPECIAL	REPLACEMENT DRUMS

For Item 606 Anchor Assembly as per plan See Sht. No. 146
 SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614, MAINTAINING TRAFFIC.

MAINTENANCE OF EXISTING TRAFFIC SIGNAL CONTROLS

DURING THE CONSTRUCTION OF THIS PROJECT, THE EXISTING TRAFFIC SIGNAL CONTROLS AT THE INTERSECTIONS OF U.S. 35 WITH DAYTON-XENIA ROAD AND U.S. 35 WITH GRANGE HALL ROAD SHALL BE MAINTAINED BY THE CONTRACTOR AS LONG AS THESE INTERSECTIONS ARE USED BY TRAFFIC.

THE EXISTING TRAFFIC SIGNAL CONTROLS SHALL BE MAINTAINED WITH EXISTING CONTROLLERS AND SIGNAL HEADS AND/OR OTHER EQUIPMENT AS MAY BE REQUIRED. ALL SIGNAL EQUIPMENT FURNISHED BY THE CONTRACTOR SHALL MEET THE APPLICABLE REQUIREMENTS OF THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" CURRENT EDITION AND SHALL BE APPROVED BY THE ENGINEER. USED EQUIPMENT IN GOOD CONDITION MAY BE FURNISHED.

THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF U.S. 35 AND DAYTON-XENIA ROAD IS AN ACTUATED SIGNAL. IF THE ALIGNMENT OF A TEMPORARY ROADWAY OR OTHER CONSTRUCTION WORK SHOULD INTERFERE WITH THE OPERATION OF THE EXISTING VEHICLE DETECTORS OR THEIR LEAD-IN CABLES, THE CONTRACTOR SHALL PROVIDE TEMPORARY VEHICLE DETECTION EQUIPMENT.

THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF U.S. 35 AND GRANGE HALL ROAD IS AN ACTUATED SIGNAL. BEFORE MAKING ANY REVISIONS OR ADJUSTMENTS TO THE EXISTING SIGNALS OPERATION THE CONTRACTOR SHALL HAVE OBTAINED THE ENGINEER'S APPROVAL OF PROPOSED REVISIONS OR ADJUSTMENTS.

DURING THE CONSTRUCTION PHASE THAT TWO-WAY TRAFFIC IS MAINTAINED ON U.S. 35 AT GRANGE HALL ROAD ON THE EXISTING WESTBOUND LANES A TEMPORARY SIGNAL SHALL BE IN OPERATION. THE CONTRACTOR SHALL SUBMIT A TEMPORARY SIGNAL PLAN TO THE ENGINEER FOR APPROVAL. THE TEMPORARY SIGNAL PLAN SHALL MEET THE FOLLOWING REQUIREMENTS:

MAINTENANCE OF EXISTING TRAFFIC SIGNAL CONTROLS - CONTINUED

1. A MINIMUM OF TWO SIGNAL HEADS FACING EACH APPROACH SUPPORTED OVER THE PAVEMENT BEING USED TO MAINTAIN TRAFFIC, IN PROPER VIEW OF THE APPROACHING TRAFFIC, AT A DISTANCE OF NOT LESS THAN THIRTY-FIVE FEET NOR MORE THAN NINETY FEET FROM THE STOP LINE LOCATION.
2. THE NORTHBOUND GRANGE HALL ROAD APPROACH SHALL HAVE AN ADDITIONAL HEAD SIDE MOUNTED ON A TRAFFIC SIGNAL POLE APPROXIMATELY 12'-0" ABOVE THE INTERSECTION PAVEMENT, VISABLE FOR NOT LESS THAN 500 FEET, AFTER ERECTION OF THE PROPOSED EASTBOUND U.S. 35 BRIDGE STEEL.
3. EACH APPROACH SHALL HAVE NOT LESS THAN TWO NO TURNS (R-22-36) SIGNS.
4. CONTROLLER MAY BE PRE-TIMED WITH THREE DIALS (TIME CLOCK SELECTED) WITH PHASING, TIMING SPLITS AND HOURS FOR EACH DIAL AS DIRECTED BY THE ENGINEER.
5. SHALL HAVE MANUAL CONTROL ACCESSIBLE TO POLICE OFFICIALS.
6. SHALL HAVE AN EMERGENCY FLASHER UNIT WIRED TO FLASH RED IN ALL DIRECTIONS.

THE CONTRACTOR SHALL ARRANGE WITH THE DAYTON POWER & LIGHT CO. FOR MAINTENANCE OF EXISTING SERVICE LINES OR CONSTRUCTION OF TEMPORARY SERVICE LINES AS REQUIRED FOR POWER SERVICE TO EXISTING AND/OR TEMPORARY TRAFFIC SIGNALS THAT HE IS MAINTAINING AS PART OF THIS PROJECT, AND SHALL PAY FOR THE ELECTRICAL ENERGY USED.

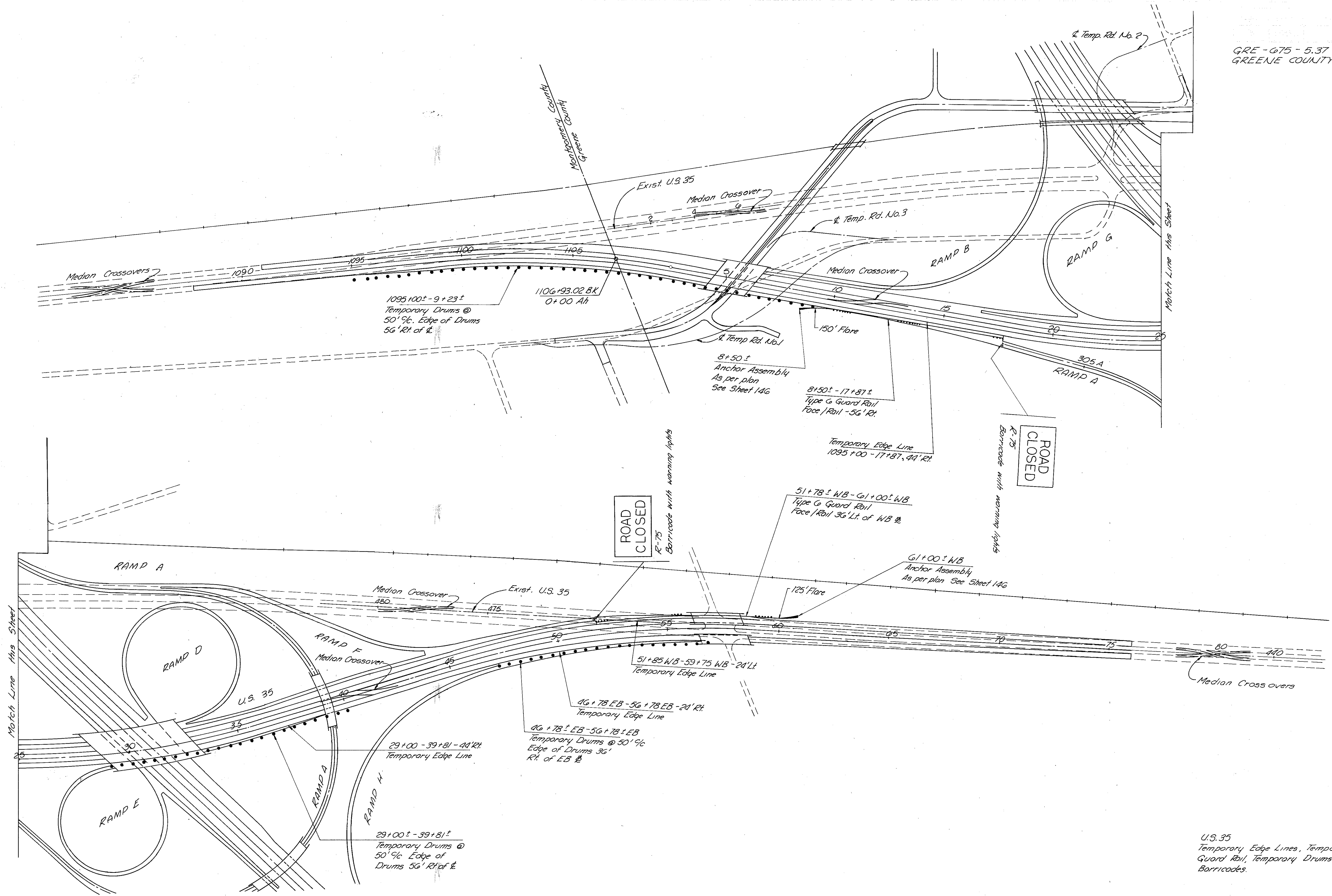
ALL EXISTING TRAFFIC SIGNAL EQUIPMENT AND ALL TEMPORARY EQUIPMENT FURNISHED BY THE CONTRACTOR SHALL BE REMOVED BY HIM AND SHALL BECOME HIS PROPERTY UPON THE COMPLETION OF THE PROJECT.

SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL REQUIREMENTS FOR ITEM 614 MAINTAINING TRAFFIC.

PAYMENT FOR ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED FOR THE MAINTENANCE OF TRAFFIC SIGNAL CONTROLS SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC.

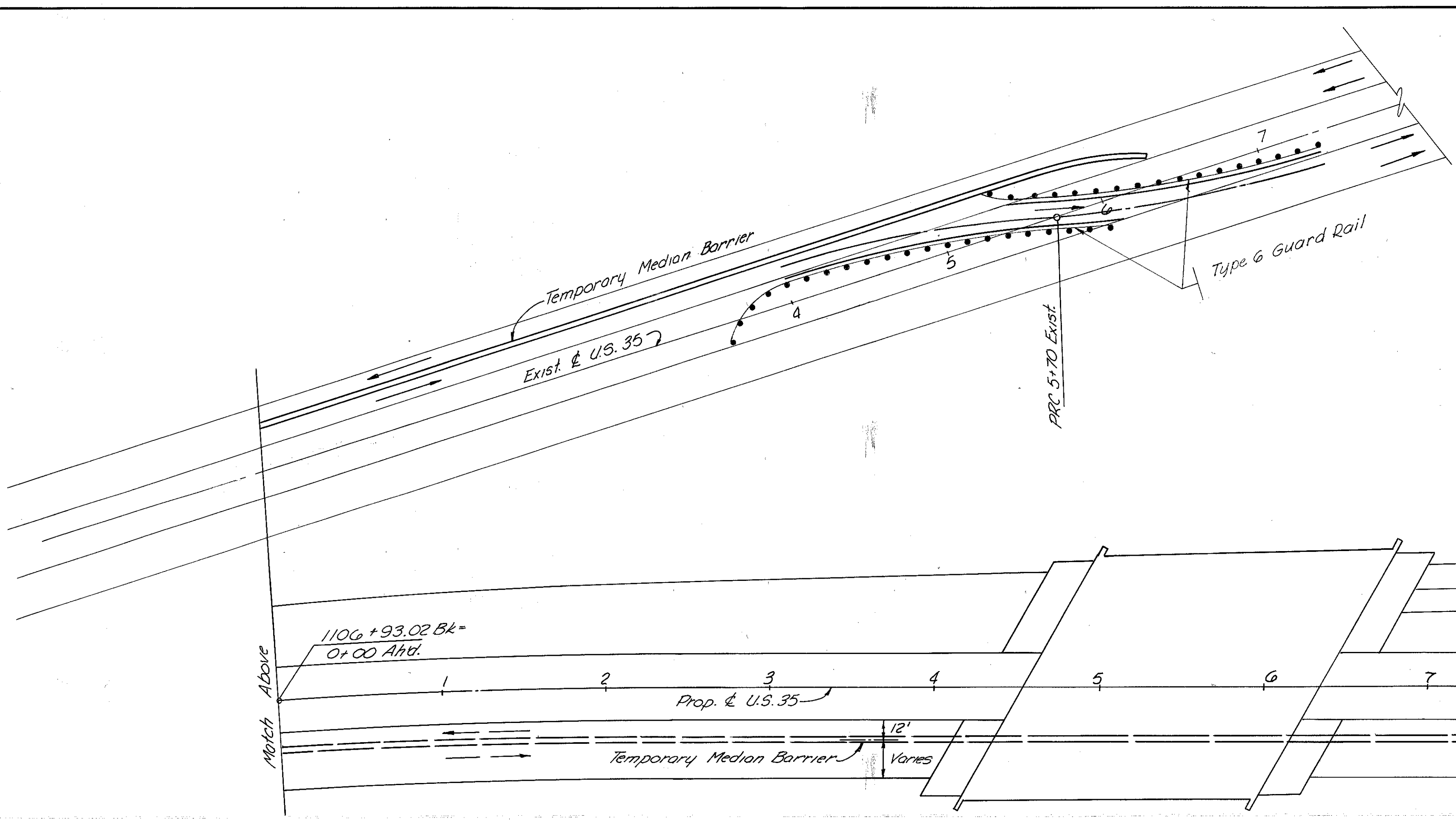
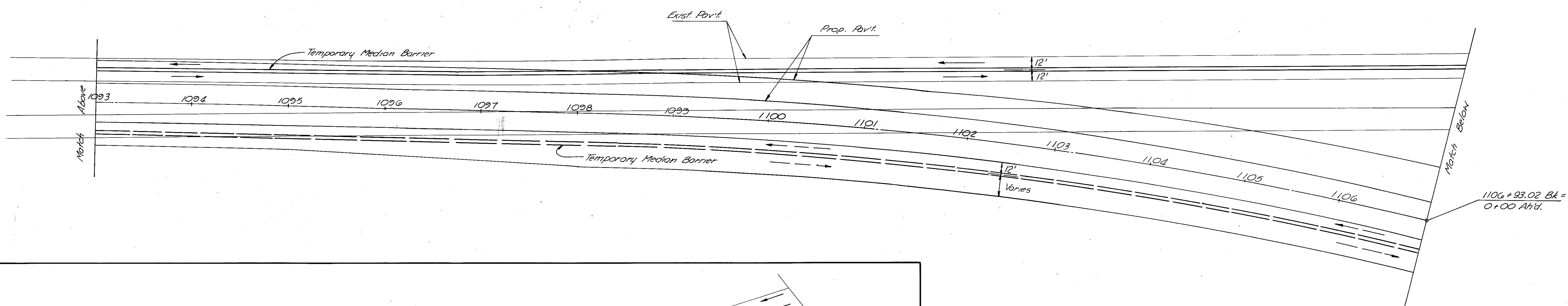
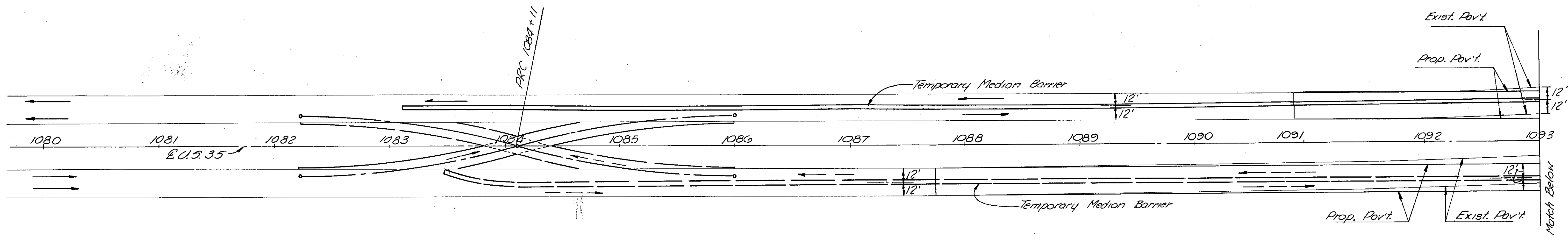
ITEM 615	TEMPORARY PAVEMENT C1,B	TEMPORARY ROADS
LOCATION	Sq. Yd.	LUMP
U. S. 35		
MEDIAN CROSS OVERS	2,438	LUMP
DAYTON-XENIA RD.		
TEMP. RD. No. 1 - STA. 10+00.00 TO STA. 27+82.61	3,489	LUMP
TEMP. RD. No. 2 - STA. 33+40.29 TO STA. 40+00.00	1,349	LUMP
TEMP. RD. No. 3 - STA. 50+00.00 TO STA. 56+00.05	1,111	LUMP
KEMP RD.		
TEMP. RD. - STA. 10+00.00 TO STA. 25+70.27	3,218	LUMP
TOTALS TO GENERAL SUMMARY	11,605	LUMP

GRE-675-5.37
GREENE COUNTY



U.S. 35
Temporary Edge Lines, Temporary
Guard Rail, Temporary Drums &
Barricades.

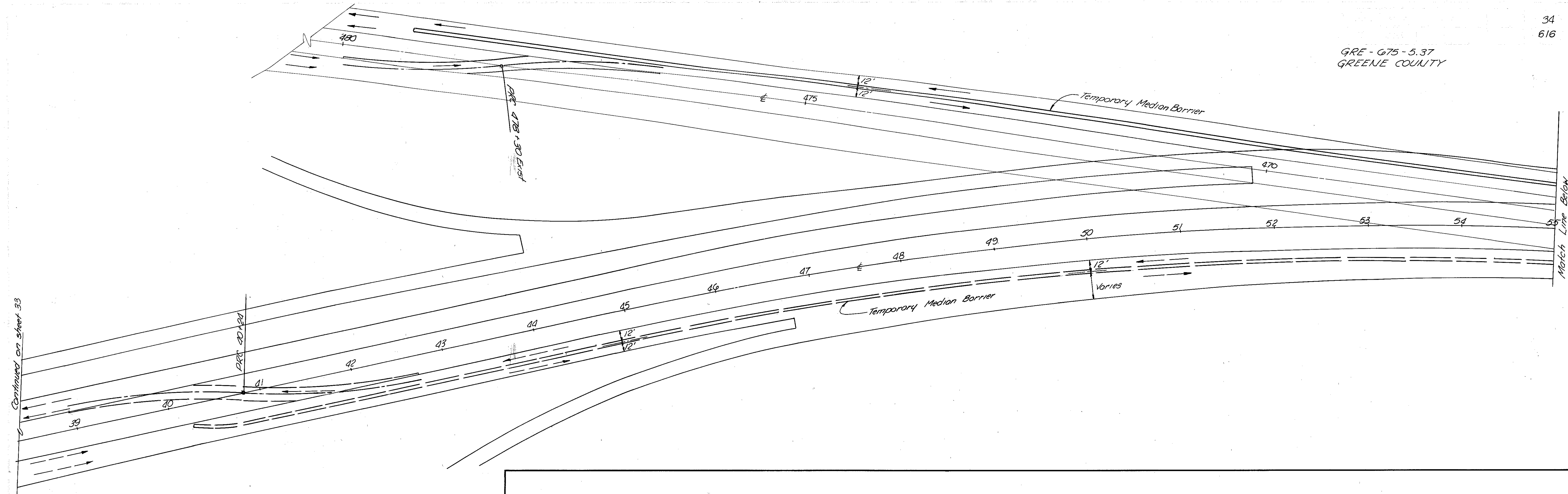
GRE-675-5.37
GREENE COUNTY



Notes:

- Eastbound Traffic shifted to WB Lanes
- Westbound Traffic shifted to EB Lanes
- For Traffic Control lead-in to cross overs and cross over details See Sheet 35
- For Temporary Lane Closures See Sheet 35
- For detail of Temporary Median Barrier See Std. Dwg. MC-9A

Continued on sheet 34

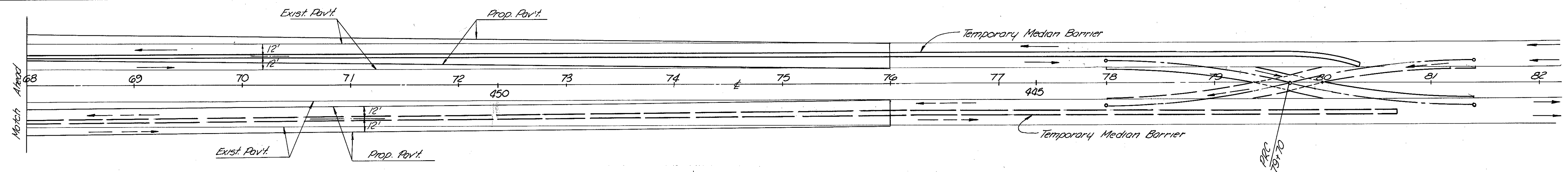
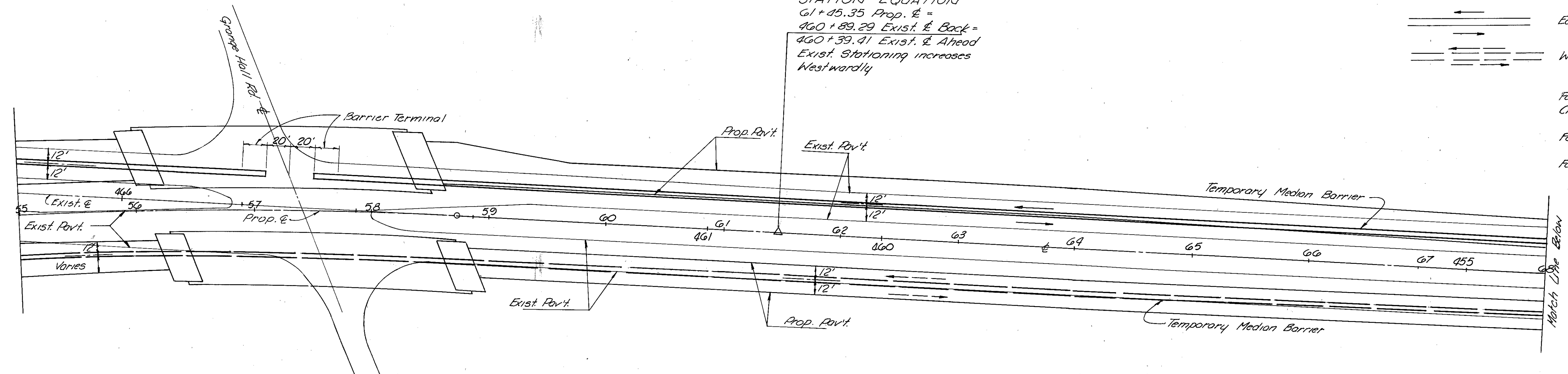


STATION EQUATION
 $G1 + 45.35$ Prop. \pm =
 $460 + 89.29$ Exist. \pm Back =
 $460 + 89.41$ Exist. \pm Ahead
 Exist. Stationing increases Westwardly

Notes:

- Eastbound Traffic shifted to WB Lanes
- Westbound Traffic shifted to EB Lanes

For Traffic Control lead-in to Cross overs and Cross over details See Sheet 35
 For Temporary Lane Closures See Sheet 35
 For detail of Temporary Median Barrier See Std. Dwg. MC9A



614 TEMPORARY PAVEMENT MARKINGS

GENERAL
THE CONTRACTOR SHALL EXTEND, INSTALL, MAINTAIN, AND WHEN NECESSARY REPAIR OR REPLACE THE TEMPORARY PAVEMENT MARKINGS THROUGHOUT THE PROJECT PERIOD. THE MARKINGS SHALL BE MAINTAINED AT ALL TIMES AND SHALL BE REPAIRED IMMEDIATELY UPON NOTIFICATION BY THE ENGINEER. THE MARKINGS SHALL BE MAINTAINED AT ALL TIMES AND SHALL BE REPAIRED IMMEDIATELY UPON NOTIFICATION BY THE ENGINEER.

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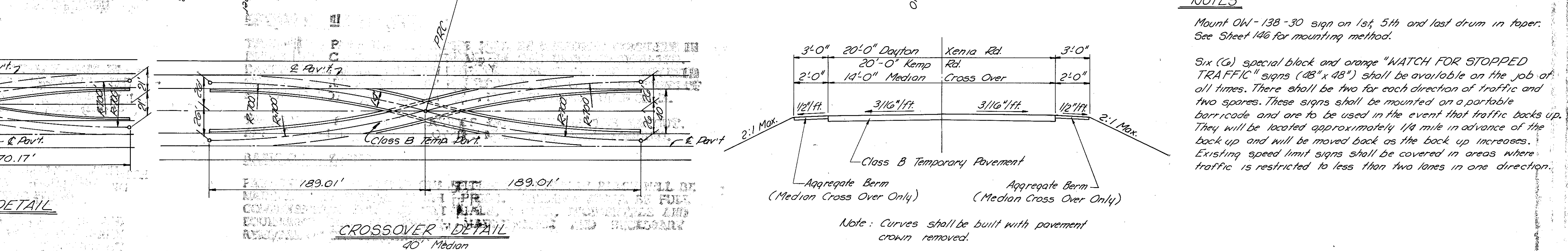
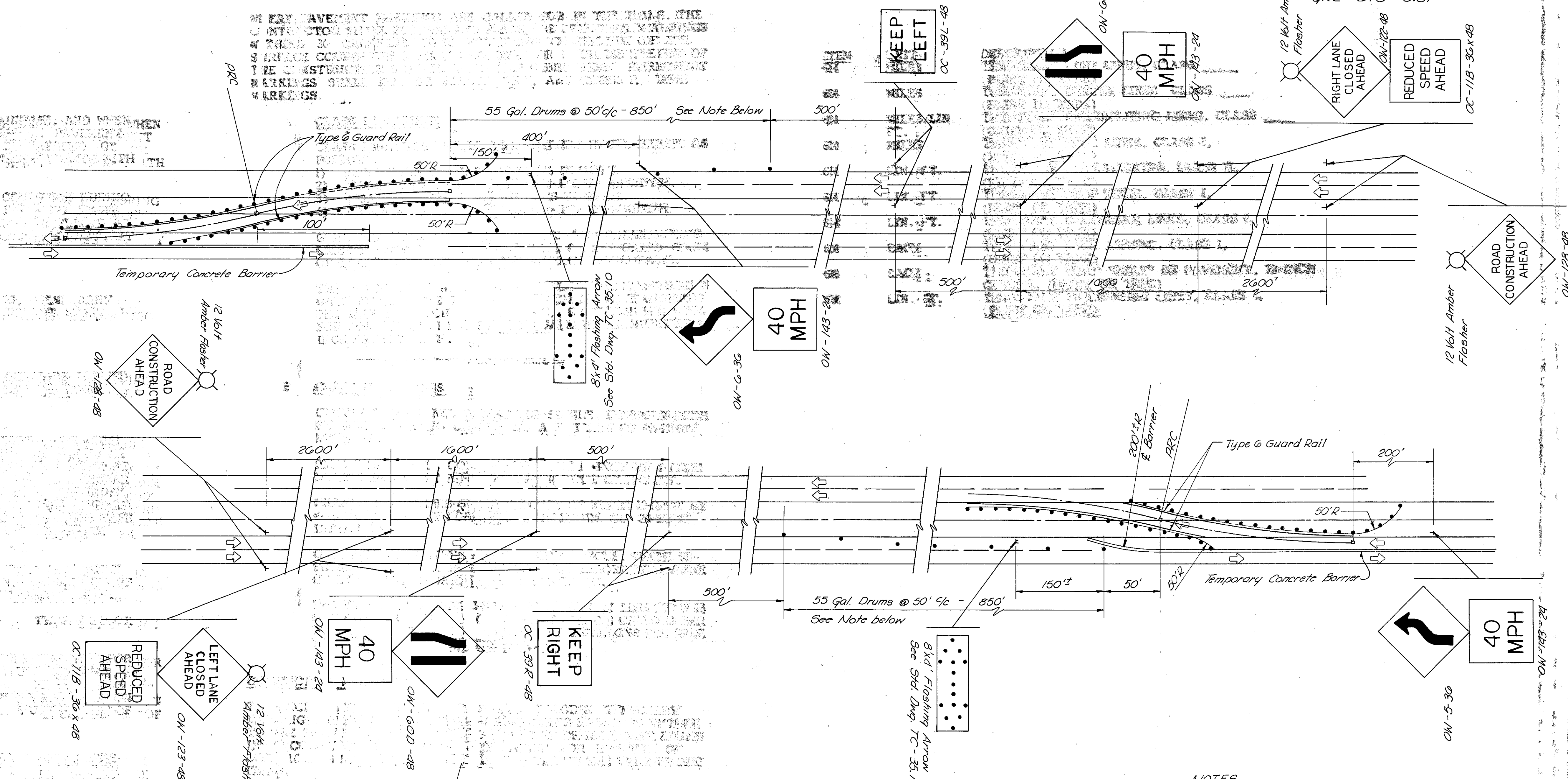
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NOTES
Mount OW-138-30 sign on 1st, 5th and last drum in taper. See Sheet 146 for mounting method.
Six (6) special black and orange "WATCH FOR STOPPED TRAFFIC" signs (48" x 48") shall be available on the job at all times. There shall be two for each direction of traffic and two spares. These signs shall be mounted on a portable barricade and are to be used in the event that traffic backs up. They will be located approximately 1/4 mile in advance of the back up and will be moved back as the back up increases. Existing speed limit signs shall be covered in areas where traffic is restricted to less than two lanes in one direction.

TYPICAL SECTION
TEMPORARY ROADS & MEDIAN CROSS OVERS
No Scale
614 TEMPORARY PAVEMENT MARKINGS

614 TEMPORARY PAVEMENT MARKINGS

GENERAL

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

THE MARKINGS SHALL BE MAINTAINED IN GOOD CONDITION DURING THE REQUIRED SERVICE PERIOD TO PROVIDE DAY AND NIGHT VISIBILITY. THE MARKINGS SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER TO MAINTAIN REQUIRED VISIBILITY AT NO ADDITIONAL COST TO THE STATE.

MATERIALS

UNLESS OTHERWISE INDICATED ON THE PLANS, TEMPORARY PAVEMENT MARKINGS MAY BE OF PAINT OR PAVEMENT MARKING TAPE.

A. PAINT

PAINT SHALL COMPLY WITH 709.14 AND SHALL BE APPLIED IN ACCORDANCE WITH 621 EXCEPT AS MODIFIED HEREIN.

B. PAVEMENT MARKING TAPE

FLEXIBLE RETROREFLECTIVE PREFORMED PRESSURE SENSITIVE TAPE SHALL HAVE STRAIGHT EDGES AND BE FREE OF CRACKS. THE TAPE SHALL CONSIST OF PIGMENT AND FILLERS WITH SUFFICIENT BINDER AND PLASTICIZER TO RETAIN GLASS BEADS HAVING A REFRACTIVE INDEX MEETING THE MINIMUM REFLECTIVE INTENSITY STANDARD STATED IN THE MANUFACTURER'S INFORMATION. THE TAPE SHALL BE FLEXOLITE "WET REFLECTIVE" 3M "SCOTCHLANE", OR AN APPROVED EQUAL.

THE GLASS BEADS SHALL BE DISTRIBUTED UNIFORMLY THROUGHOUT THE TAPE WITH SUFFICIENT SURFACE BEADS TO PROVIDE OPTIMUM REFLECTORIZATION AT ALL TIMES.

PAVEMENT MARKING TAPE SHALL COMPLY WITH THE COLOR REQUIREMENTS OF 709.14.

THE TAPE SHALL HAVE A PRECOATED ADHESIVE LAYER FOR PAVEMENT APPLICATION WITHOUT THE USE OF HEAT, SOLVENTS OR ADDITIONAL ADHESIVES. THE ADHESIVE SHALL BE SUFFICIENT TO RETAIN COMPLETE MARKINGS ON THE PAVEMENT SURFACE THROUGHOUT THE USEFUL LIFE OF THE MARKINGS.

IN ADDITION TO THE FOREGOING, ALL TEMPERATURE APPLICATION REQUIREMENTS AND OTHER APPLICABLE MANUFACTURER'S MATERIAL AND APPLICATION INSTRUCTIONS SHALL BE FOLLOWED.

LAYOUT

THE TEMPORARY MARKINGS SHALL BE ACCURATELY LAID OUT IN CONFORMANCE WITH 621.051 AND SHALL BE LOCATED IN A TRUE LINE ON THE CENTER LINE, LANE LINE, EDGE LINE, OR CHANNELIZING LINE WHERE PERMANENT MARKINGS WOULD LIE UNLESS OTHERWISE SPECIFIED IN THE PLANS.

PLACEMENT

TEMPORARY MARKINGS SHALL BE PLACED IN ACCORDANCE WITH (LAYOUTS ON SHEETS) AND THE FOLLOWING REQUIREMENTS, UNLESS OTHERWISE SPECIFIED IN THE PLANS.

TEMPORARY MARKINGS SHALL BE COMPLETE AND IN PLACE ON ALL PAVEMENT PRIOR TO EXPOSING IT TO TRAFFIC. WHEN TEMPORARY MARKINGS ARE NO LONGER NEEDED, THEY SHALL BE REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH 621.134 AND NECESSARY PAVEMENT MARKINGS INSTALLED BEFORE THE FLOW OF TRAFFIC IS CHANGED TO THE NEXT PHASE OR RETURNED TO ITS NORMAL CHANNEL.

WHERE PAVEMENT MARKINGS ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL FURNISH AND PLACE THE PERMANENT MARKINGS WITHIN 30 CALENDAR DAYS FOLLOWING COMPLETION OF ALL SURFACE COURSES IN A SINGLE ROADWAY OR PRIOR TO THE END OF THE CONSTRUCTION SEASON, WHICHEVER COMES FIRST. PERMANENT MARKINGS SHALL NOT BE PLACED OVER ANY CLASS I TAPE MARKINGS.

A. CLASS I MARKINGS

CLASS I MARKINGS SHALL BE AS DEFINED IN 621 EXCEPT AS FOLLOWS:

- 1) LANE LINES SHALL BE 4-INCHES IN WIDTH.
- 2) TRANSVERSE LINES SHALL BE 8-INCHES IN WIDTH.
- 3) STOP LINES SHALL BE 12-INCHES IN WIDTH.
- 4) CROSS WALK LINES SHALL BE 8-INCHES IN WIDTH.

GORE MARKINGS SHALL CONSIST OF TWO CHANNELIZING LINES PLACED AT THE THEORETICAL OR TEMPORARY GORE OF RAMPS AND DIVERGING OR CONVERGING ROADWAYS.

THE PAINT APPLICATION RATE SHALL BE NOT LESS THAN 16 GALLONS PER MILE FOR SOLID 4-INCH LINES, 24 GALLONS PER MILE FOR SOLID 6-INCH LINES, 48 GALLONS PER MILE FOR SOLID 12-INCH LINES, AND 4 GALLONS PER MILE FOR 4-INCH DASHED LINES.

B. CLASS II MARKINGS

CENTER LINES SHALL CONSIST OF SINGLE, YELLOW 12-INCH BY 4-INCH DASHES SPACED AT A MAXIMUM OF 40-FOOT INTERVALS.

LANE LINES SHALL CONSIST OF WHITE 12-INCH BY 4-INCH DASHES SPACED AT A MAXIMUM OF 40-FOOT INTERVALS.

CHANNELIZING LINES SHALL CONSIST OF WHITE 12-INCH BY 4-INCH DASHES SPACED AT A MAXIMUM OF 20-FOOT INTERVALS.

GORE MARKINGS SHALL BE TWO CONTINUOUS, WHITE 50-FOOT BY 4-INCH LINES PLACED AT THE THEORETICAL GORE OF AN EXIT RAMP OR DIVERGING ROADWAYS.

THE PAINT APPLICATION RATE SHALL BE NOT LESS THAN 16 GALLONS PER MILE FOR GORE MARKINGS, 0.8 GALLONS PER MILE FOR CHANNELIZING LINE, AND 0.4 GALLONS PER MILE FOR LANE LINE AND CENTER LINE.

CONFLICTING MARKINGS

THE CONTRACTOR SHALL, PRIOR TO PLACING TEMPORARY MARKINGS, REMOVE ALL EXISTING CONFLICTING 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 INCIDENTAL TO THE VARIOUS PAY ITEMS.

METHOD OF MEASUREMENT

TEMPORARY PAVEMENT MARKINGS WILL BE MEASURED COMPLETE IN PLACE, BY CLASS AND MATERIAL, IN THE UNITS DESIGNATED. DASHED LINE QUANTITIES WILL BE THE LENGTH OF THE COMPLETED STRIPE, INCLUDING GAPS, INTERSECTIONS, AND OTHER SECTIONS OF PAVEMENT NOT NORMALLY MARKED, IN ACCORDANCE WITH 621.15.

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

BASIS OF PAYMENT

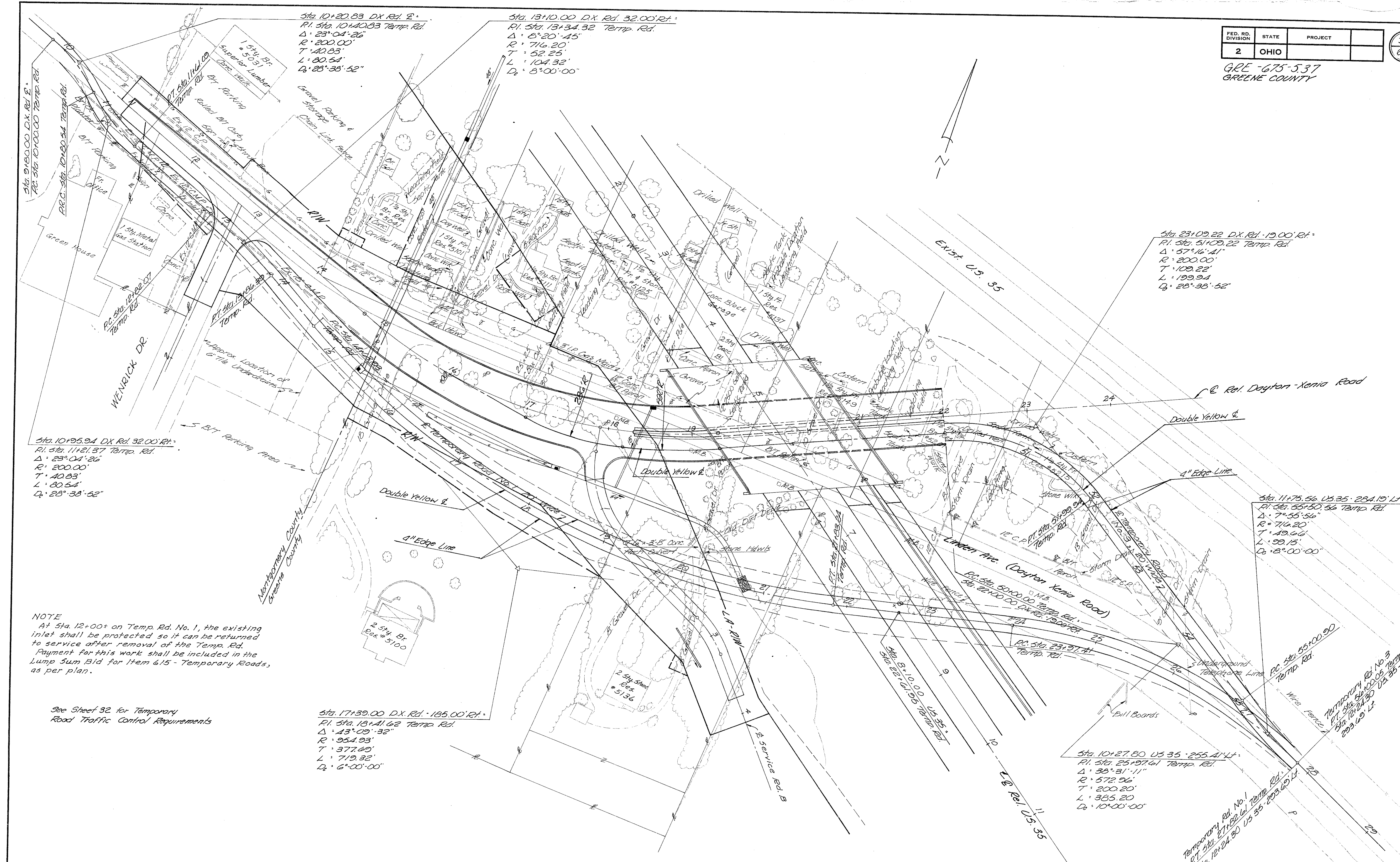
PAYMENT FOR ACCEPTED QUANTITIES COMPLETE IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR PLACEMENT, MAINTENANCE AND NECESSARY REMOVAL OF THE MARKINGS.

ITEM	UNIT	DESCRIPTION
614	MILES	TEMPORARY LANE LINES, CLASS I, (PAINT OR TAPE)
614	MILES	TEMPORARY CENTER LINES, CLASS I, (PAINT OR TAPE)
614	MILES/LIN. FT.	TEMPORARY CHANNELIZING LINES, CLASS I, (PAINT OR TAPE)
614	MILES	TEMPORARY EDGE LINES, CLASS I, (PAINT OR TAPE)
614	LIN. FT.	TEMPORARY GORE MARKING, CLASS II, (PAINT OR TAPE)
614	LIN. FT.	TEMPORARY STOP LINES, CLASS I, (PAINT OR TAPE)
614	LIN. FT.	TEMPORARY CROSSWALK LINES, CLASS I, (PAINT OR TAPE)
614	EACH	TEMPORARY LANE ARROWS, CLASS I, (PAINT OR TAPE)
614	EACH	TEMPORARY WORD "ONLY" ON PAVEMENT, 12-INCH, CLASS I, (PAINT OR TAPE)
614	LIN. FT.	TEMPORARY TRANSVERSE LINES, CLASS I, (PAINT OR TAPE)

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

37
6/6

GRE-675-537
GREENE COUNTY



Sta. 10+25.94 DX Rd. 32.00' RT.
 PI. Sta. 11+21.57 Temp. Rd.
 Δ° 23° 04' 26"
 R° 200.00'
 T° 10.83'
 L° 80.54'
 D° 28° 38' 52"

Sta. 13+10.00 DX Rd. 32.00' RT.
 PI. Sta. 13+34.32 Temp. Rd.
 Δ° 8° 20' 45"
 R° 716.20'
 T° 52.25'
 L° 104.32'
 D° 8° 00' 00"

Sta. 23+09.22 DX Rd. 19.00' RT.
 PI. Sta. 51+09.22 Temp. Rd.
 Δ° 57° 16' 41"
 R° 200.00'
 T° 109.22'
 L° 199.94'
 D° 28° 38' 52"

Sta. 11+75.56 US 35 - 284.19' LT.
 PI. Sta. 55+50.56 Temp. Rd.
 Δ° 7° 55' 56"
 R° 716.20'
 T° 49.66'
 L° 99.15'
 D° 8° 00' 00"

Sta. 17+39.00 DX Rd. 185.00' RT.
 PI. Sta. 18+41.62 Temp. Rd.
 Δ° 13° 09' 32"
 R° 954.93'
 T° 377.69'
 L° 719.32'
 D° 6° 00' 00"

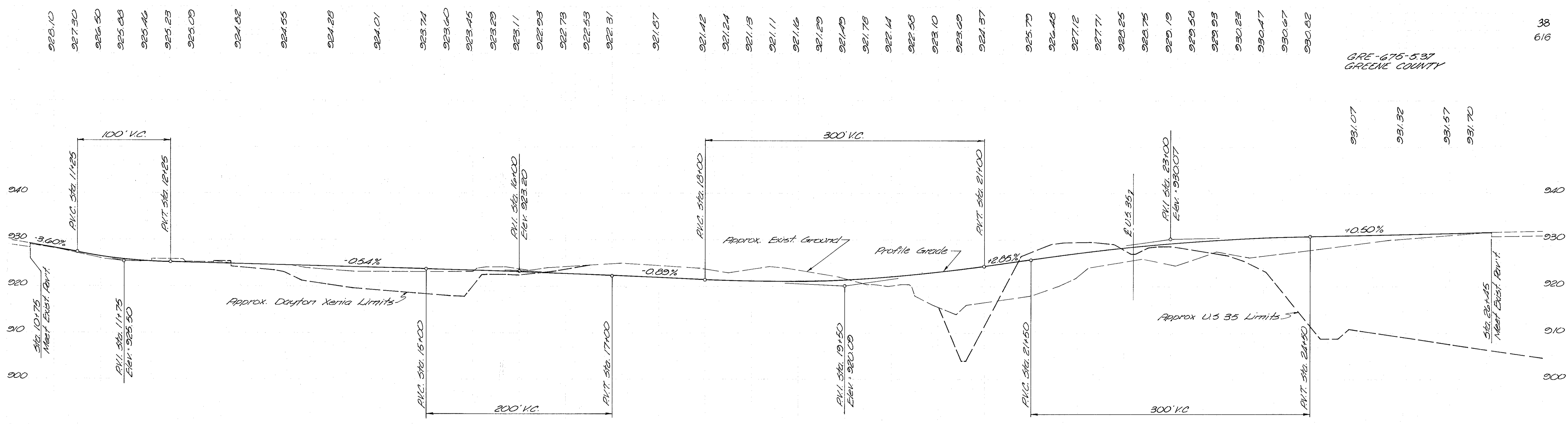
Sta. 10+27.80 US 35 - 255.41' LT.
 PI. Sta. 25+07.61 Temp. Rd.
 Δ° 38° 31' 11"
 R° 572.96'
 T° 200.20'
 L° 385.20'
 D° 10° 00' 00"

NOTE
 At Sta. 12+00+ on Temp. Rd. No. 1, the existing inlet shall be protected so it can be returned to service after removal of the Temp. Rd.
 Payment for this work shall be included in the Lump Sum Bid for Item 615 - Temporary Roads, as per plan.

See Sheet 32 for Temporary Road Traffic Control Requirements

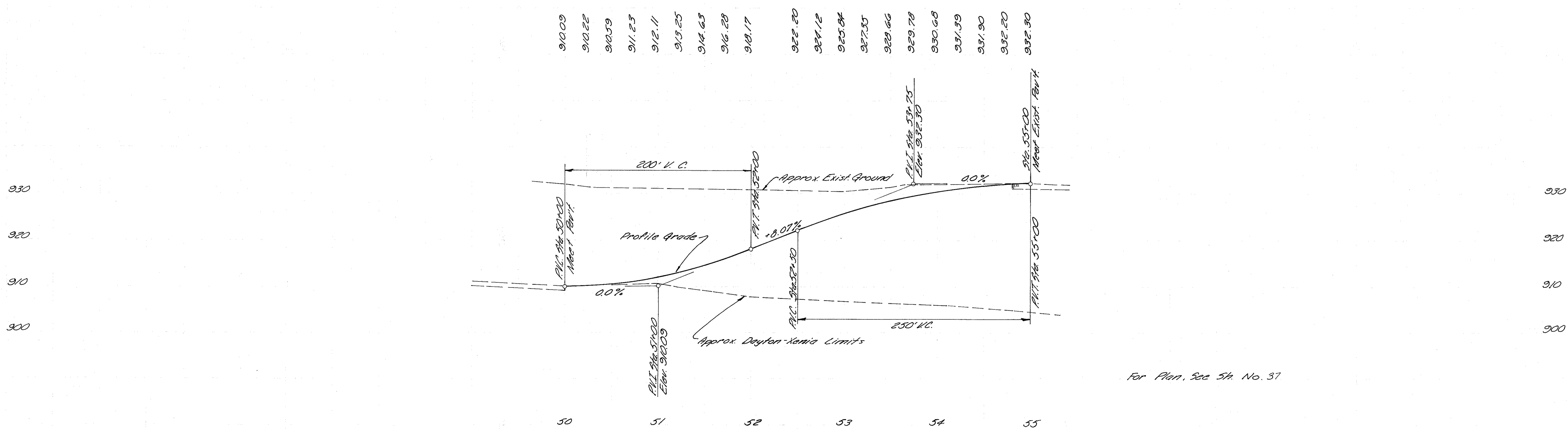
For Profiles Of Temporary Roads No. 1 & 3, See Sh. No. 38

TEMPORARY ROAD Nos. 1 & 3
 DAYTON XENIA TEMPORARY ROAD



For Plan, See Sh. No. 37

TEMPORARY ROAD NO. 1

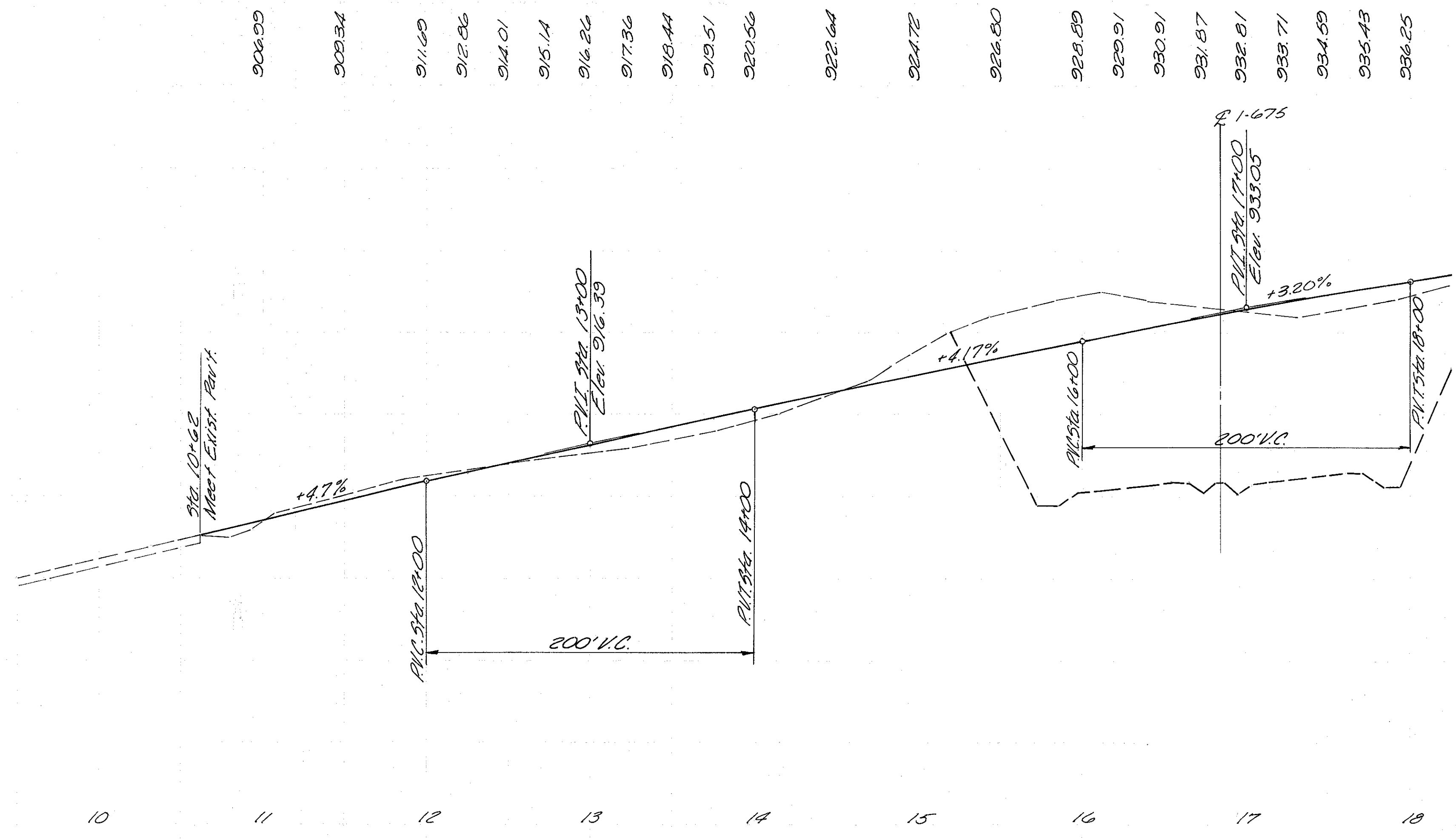


For Plan, See Sh. No. 37

TEMPORARY ROAD NO. 3

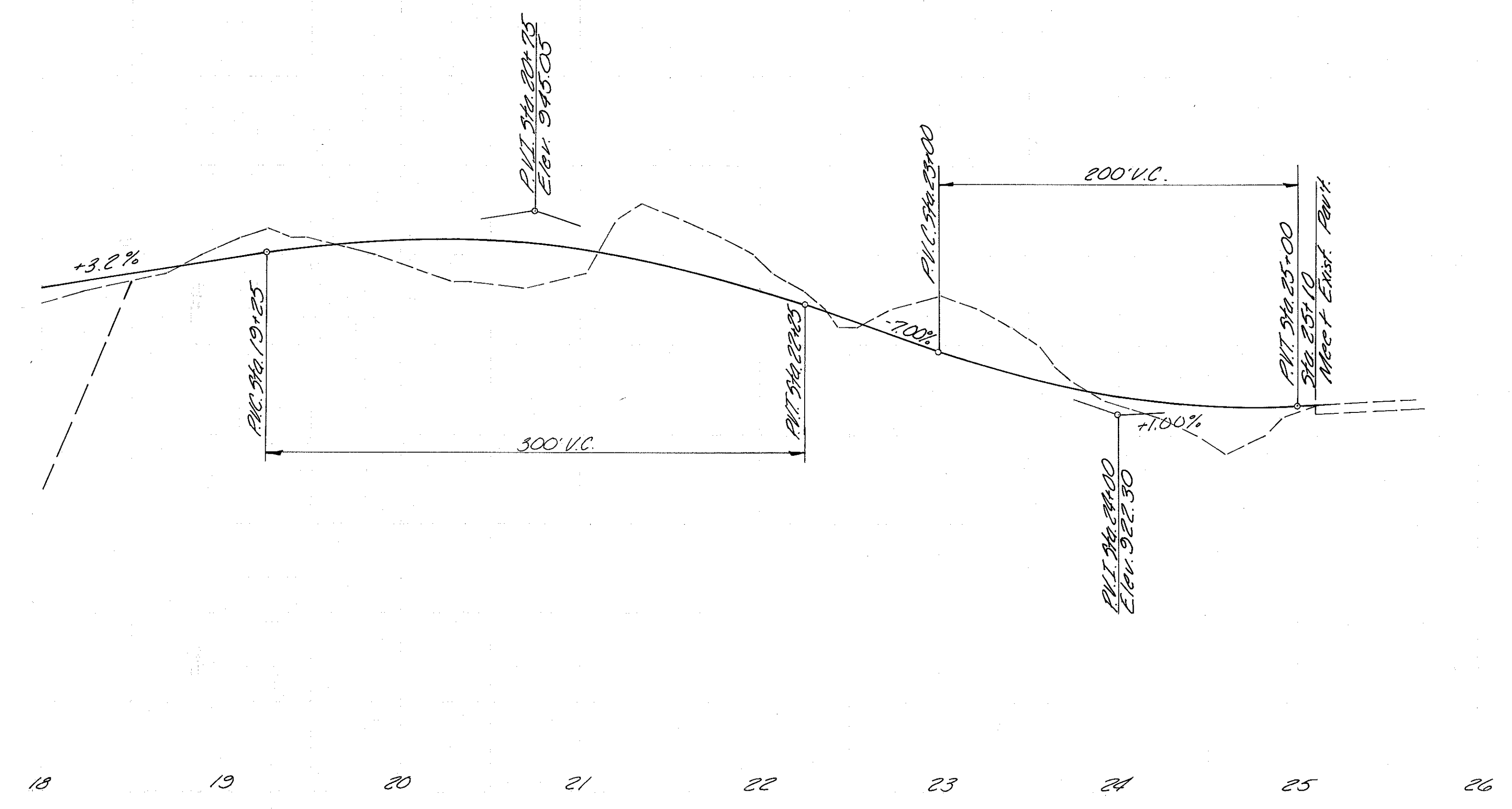
GRE-675-537
GREENE COUNTY

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For Plan, see Sh. No. 121 & 122

GRE-675-537
GREENE COUNTY
QUANTITY CALCULATIONS
BY DUB DATE 3-27-72
CRED. #66 DATE 4-3-72
KING AND GARIBO
CONSULTING ENGINEERS
Revised D.H.S. 3/79

SUMMARY OF EARTHWORK AND SEEDING

STATION		EXCAVATION		EMBANKMENT		SEEDING		STATION		EXCAVATION		EMBANKMENT		SEEDING		STATION		EXCAVATION		EMBANKMENT		SEEDING		
FROM	TO	CUBIC	YARDS	CUBIC	YARDS	SQUARE	YARDS	FROM	TO	CUBIC	YARDS	CUBIC	YARDS	SQUARE	YARDS	FROM	TO	CUBIC	YARDS	CUBIC	YARDS	SQUARE	YARDS	
I-675								US 35 INT. CONT.																
308 + 21.67	320 + 00	7,938		105,189		37,218		RAMP E		45,904		11,597		37,537		Est. Quam. Sta. No. 72		644		0				
320 + 00	330 + 00	7,129		18,111		16,750		322 + 00 - 330 + 00								Est. Quam. Sta. No. 73		0		3				
330 + 00	340 + 00	38,999		12,402		20,607		RAMP F		14,779		54,113		25,712		Est. Quam. Sta. No. 103		1480		5				
340 + 00	350 + 00	79,313		1,385		28,728		327 + 30 - 336 + 77								Est. Quam. Sta. No. 106		0		12				
350 + 00	360 + 00	105,278		1,110		28,800		RAMP G		38,505		7,824		35,303		Est. Quam. Sta. No. 118		28		28				
360 + 00	370 + 00	38,153		27,703		27,399		342 + 03 - 355 + 02								Est. Quam. Sta. No. 117		398		0				
370 + 00	380 + 00	5,662		44,746		25,067		RAMP H		6,510		39,395		24,070		Drainage Detail Sta. No.						1872		
380 + 00	390 + 00	4,035		31,034		25,000		DAYTON - XENIA RD.								Channel Encasements								
390 + 00	400 + 00	5,463		119,113		30,455		11 + 00 - 20 + 00		21,436		195		8,622		Parcel 325 X						436		
400 + 00	410 + 00	144,687		41		24,216		20 + 00 - 30 + 00		130,421		82		16,698		Parcel 361 X						131		
410 + 00	417 + 00	132,643		58		20,082		30 + 00 - 37 + 10		27,108		9,290		9,057		Parcel 362 T						532		
US 35 INTERCHANGE								41 + 09 - 49 + 00		1,174		9,520		4,418		Adjustment for Final Design Change		19,695		- 28,188				
US 35								WENRICK DRIVE		254		0		250										
1087 + 74.57	1095 + 00	4,671		186		9,385		WILDONNA DRIVE		3,957		18		2,096										
1095 + 00	1106 + 93.02	13,830		20,801		25,084		STEDMAN LAVE		80		63		313										
0 + 00	10 + 00	34,567		47,365		25,192		PENN - CENTRAL																
10 + 00	20 + 00	27,616		37,447		23,607		522 + 12.5 - 530 + 00		423		194		2,959										
20 + 00	29 + 01	13,260		54,203		18,187		530 + 00 - 540 + 00		4021		3916		7,460										
32 + 50	40 + 00	452		112,279		12,852		540 + 00 - 550 + 00		5656		12,621		5,837										
40 + 00	50 + 00	21,173		120,126		24,906		550 + 00 - 560 + 00		29,015		12,78		16,543										
50 + 00	60 + 00	2,032		106,636		21,857		560 + 00 - 572 + 06		16,816		161		15,765		TOTALS		1,412,089		1,336,052		903,950		
60 + 00	70 + 00	1,838		87,554		24,355		GRANGE HALL RD.		1,150		4,457		5,548		203 Total Excavation		1,412,089						
70 + 00	76 + 00	1,369		7,161		9,583		KEMP RD		7501		706		9,174		203 Total Embankment				1,336,052				
RAMP A								CHANNEL		125721		0		22,680		Seeding for Item 656 Roadside Clean Up Areas						10,333		
301 + 31	310 + 00	16,374		14,005		14,251		HONEY LOCUST LN.		205		47		569		Gross Area Between Seeding Limits (Exclusive of Paved Areas)						914,283		
310 + 00	321 + 37	28,909		16,574		16,130		SERVICE ROAD B		1,282		522		2,412		Deductions: Rock Channel Protection						2,198		
323 + 06	329 + 44	8,355		62,449		18,743		PEDESTRIAN RAMP		92		418		415		Rearrangement						7,637		
331 + 05	340 + 00	957		88,497		13,964		SERVICE ROAD A		81		0		0		Paved Buffer						370		
340 + 00	350 + 04	53,607		689		12,801		Incl. with M.L.								Total to be Deducted						- 10,205		
RAMP B																NET AREA FOR 659 LIMING & FERTILIZING						904,078		
330 + 13	353 + 08	73,259		638		25,062										Deductions: Seeding and Jute Matting						6,054		
RAMP C																Sodding						20,000		
318 + 08	333 + 42	11,306		14,314		26,573										Reinforced Sodding						1,064		
RAMP D																Total to be Deducted							- 27,118	
337 + 01	352 + 59	24,849		32,557		45,078										NET AREA TO BE SEEDDED AND MULCHED						876,960		

ITEM 203 SUBGRADE COMPACTION		ITEM 205 PROOF ROLLING	
	SQ. YD.		HOURS
I-675 Sta 308+34.01 to Sta. 417+00, Pavt. Paved Shoulders and Approach Slabs	160,800	160,800 54/3000	54
US-35 Ramps A, B, C, D, E, F, G and H, I-675 S.B. Coll.-Dist. and US-35 WB Coll.-Dist.-Pavt. Paved Shoulders and Approach Slabs	158,633	158,633 54/3000	53
Dayton Xenia Rd.- Pavt. and Approach Slabs	22,365	22,365 54/3000	7
Kemp Rd.- Pavt. Paved Shoulders and Approach Slabs	3,782	3,782 54/3000	1
TOTALS TO GENERAL SUMMARY	TOTAL 345,679	TOTAL	115

604 REFERENCE MONUMENTS *	
LOCATION	EACH
308+09.01 to 380+00.00 I-675	15
1098+44.25 to 75+00.00 US-35	18
380+00.00 to 417+00.00 I-675	9
TOTAL TO GENERAL SUMMARY	42

ITEM 607 GATE, TYPE CL *		
LOCATION	EACH	EACH
Sta. 23+00 Dayton Xenia Rd. Lt. (18' Wide)	1	
Sta. 26+00 Dayton Xenia Rd. Rt. (18' Wide)	1	
Sta. 367+99.07 I-675 Lt. (14' Wide)		1
TOTAL TO GENERAL SUMMARY	2	1

407 Cover Aggregate: 22,073 (Gal of Tack) x 10 x 7 1/2 x 1/2 ÷ 2000 = 774 Tons

ITEM 659 LIMING AND FERTILIZING		
	SQ. YD.	TONS
NET AREA to be Limed and Fertilized	904,078	
Commercial Fertilizer 20#/1000 Sq.Ft.	904,078	82
Agricultural Liming 100#/1000 Sq.Ft.	904,078	407

ITEM 607 TYPE 47 FENCE QUANTITIES *			
LOCATION	SIDE	UNI. FT.	
Bridge at B+O RR to Headwall of Prop. Pipe	Rt.	581	
Headwall of Prop. Pipe to Headwall of Prop. Pipe	Rt.	2360	
Headwall of Prop. Pipe to Bridge at Grange Hall Rd.	Rt.	1317	
Bridge at Grange Hall Rd to Headwall of Prop. Pipe	Rt.	1551	
Headwall of Prop. Pipe to 88.00' Rt. of Sta. 76+00 US-35	Rt.	263	
101.83' Lt. of Sta. 76+00 US-35 to Headwall of Prop. Pipe	Rt.	311	
Headwall of Prop. Pipe to Bridge at Grange Hall Rd.	Rt.	1598	
Rt. each side of Bridge at Grange Hall Rd.	Rt.	80	
Bridge at Grange Hall Rd. to Headwall of Prop. Pipe	Rt.	1160	
Headwall of Prop. Pipe to Penn Central RR Bridge at I-675	Rt.	2277	
Between Bridges at B+O RR Bridge	E	44	
Bridge at B+O RR to Headwall of Prop. Pipe	Lt.	658	
Headwall of Prop. Pipe to 193.00' Rt. of Sta. 8+00 US-35	Lt.	4311	
214.00' Lt. of Sta. 1105+50 US-35 to Headwall of Prop. Pipe	Lt.	98	
Headwall of Prop. Pipe to 154.00' Lt. of Sta. 21+00 Dayton Xenia Rd.	Lt.	600	
Dayton Xenia Rd. Bridge to exist. Penn Central RR R/W Fence	Rt.	1250	
TOTAL TO GENERAL SUMMARY		18,477	

* See R/W Plans for Locations

ITEM 607 TYPE CL FENCE QUANTITIES *			
LOCATION	SIDE	UNI. FT.	
Penn Central RR Bridge at I-675 to Dayton Xenia Rd. Bridge at I-675	Rt.	30	
Dayton Xenia Rd. Bridge at I-675 to Headwall of Prop. Pipe	Rt.	1980	
Headwall of Prop. Pipe to Headwall of Prop. Pipe	Rt.	2611	
Headwall of Prop. Pipe to Bridge at Kemp Rd.	Rt.	2071	
Bridge at Kemp Rd. to Headwall of Prop. Pipe	Rt.	306	
193.00' Rt. of Sta. 8+00 US-35 to US-35 Bridge at Dayton Xenia Rd.	Lt.	205	
US-35 Bridge at Dayton Xenia Rd. to 27.55' Rt. of Sta. 1005+20.02 US-35	Lt.	1614	
US-35 Bridge at Dayton Xenia Rd. to Penn Central RR Bridge at Dayton Xenia Rd. (Lt. Side of Dayton Xenia Rd.)	Lt.	708	
US-35 Bridge at Dayton Xenia Rd. to Penn Central RR Bridge at Dayton Xenia Rd. (Rt. Side of Dayton Xenia Rd.)	Lt.	657	
Penn Central RR Bridge at Dayton Xenia Rd. to Dayton Xenia Rd. Bridge at I-675	Lt.	762	
Penn Central RR Bridge at I-675 to Dayton Xenia Rd. Bridge at I-675	Lt.	39	
Dayton Xenia Rd. Bridge at I-675 to Noise Barrier Noise Barrier to Headwall of Prop. Pipe	Lt.	209	
Headwall of Prop. Pipe to Headwall of Prop. Pipe	Lt.	2403	
Headwall of Prop. Pipe to Bridge at Kemp Rd.	Lt.	2015	
Bridge at Kemp Rd. to 144.00' Lt. of Sta. 417+00 I-675	Lt.	268	
TOTAL TO GENERAL SUMMARY		16,312	

For fencing quantities at Pedestrian Overpass see sheet 106.

601 ROCK CHANNEL PROTECTION TYPE B FOR STREAM CROSSINGS * See Standard Drawing T-6					
STATION	SIDE	CU YD	STATION	SIDE	CU YD
308+27 E I-675	Rt.	10.7	1105+65 E US-35	Lt.	7.1
309+10 E I-675	Rt.	10.7	1106+10 E US-35	Lt.	7.1
310+20 E I-675	Rt.	31.1	4+90 E US-35	Lt.	7.1
312+20 E I-675	Rt.	13.3	11+85 E US-35	Rt.	8.9
			12+10 E US-35	Rt.	8.9
			40+15 E US-35	Lt.	5.3
315+25 E I-675	Rt.	13.3	43+50 E US-35	Rt.	7.1
325+75 E I-675	Lt.	10.7	44+30 E US-35	Rt.	5.3
350+70 E I-675	Rt.	7.1	45+60 E US-35	Lt.	14.2
			47+50 E US-35	Lt.	5.3
			53+65 E US-35	Rt.	10.7
			55+00 E US-35	Lt.	8.9
			56+60 E US-35	Rt.	10.7
363+65 E I-675	Rt.	5.3	58+10 E US-35	Lt.	10.7
			59+15 E US-35	Rt.	17.8
			60+70 E US-35	Rt.	10.7
			64+15 E US-35	Rt.	10.7
370+05 E I-675	Lt.	13.3	64+65 E US-35	Rt.	10.7
370+35 E I-675	Lt.	16.0	72+80 E US-35	Lt.	11.6
303+53 E I-675	Lt.	13.3	73+25 E US-35	Rt.	11.6
303+05 E I-675	Lt.	16.0			
394+06 E I-675	Rt.	17.8	46+45 E US-35	Lt.	7.1
394+91 E I-675	Rt.	17.8			
397+40 E I-675	Rt.	10.7			
TOTAL TO GENERAL SUMMARY		404.6			

LEGEND

- M.S. = Median Shoulder
- O.S. = Outer Shoulder
- N.B. = North Bound
- S.B. = South Bound

ESTIMATED QUANTITIES
 CALC. CET DATE 9-78
 CHKD. JRS DATE 10-78

F.H.W.A. REGION	STATE	PROJECT
5	OHIO	

43
616

ESTIMATED QUANTITIES

GRE-675-537
 GREENE COUNTY

STA. TO STA.	REMARKS	LENGTH ALONG CENTROID Ft.	404 : 1 1/4" Asphalt Conc. AC-20					305 : 9" Port. Cem. Conc. Base			409 : Seal Coat Bit. Mat'l. 0.3 Gal./S.Y.			310 : Subbase Type II thickness as noted	
			Average Width Ft.	404 Volume CY	402 Volume CY	407 Volume Gal.	305 Area S.Y.	310 Volume CY	Average Width Ft.	409 Volume Gal.	409 Volume CY	301 Volume CY	Average End Area S.F.	310 Volume CY	
GRE-675-537															
308+34.01-320+00.00	Pvt.	1,165.99	72.00	324.0	453.3	932.8	9,327.9	1,554.7							
320+00.00-334+00.00	Pvt.	1,400.00	72.00	389.0	544.3	1,120.0	11,200.0	1,866.7							
334+00.00-348+00.00	Pvt.	1,400.00	72.00	389.0	544.3	1,120.0	11,200.0	1,866.7							
348+00.00-362+00.00	Pvt.	1,400.00	72.00	389.0	544.3	1,120.0	11,200.0	1,866.7							
362+00.00-365+35.51	Pvt.	335.51	72.00	93.2	130.4	268.4	2,684.1	447.3							
365+35.51-371+80.00	Pvt. N.B.	644.49	36.00	89.5	125.3	257.8	2,578.0	429.7							
365+35.51-375+39.77	Pvt. S.B.	1,004.26	36.00	139.5	195.2	401.7	4,017.0	669.5							
371+80.00-402+31.18	Pvt. N.B.	3,051.18	48.00	565.2	790.9	1,627.3	16,273.0	2,712.2							
375+39.77-402+31.18	Pvt. S.B.	2,691.41	48.00	498.6	697.6	1,435.4	14,354.2	2,392.4							
402+31.18-417+00.00	Pvt.	1,468.82	36.00	544.2	761.4	1,566.7	15,667.4	2,611.2							
308+34.01-309+34.01	M.S. S.B.	99.32					7.00	23.2	0.6	12.9	5.75	21.2			
309+34.01-311+00.00	M.S. S.B.	164.93					10.00	55.0	1.5	30.5	7.75	47.3			
311+00.00-320+00.00	M.S. S.B.	894.24					10.00	298.1	7.9	165.6	7.90	261.6			
320+00.00-326+18.26	M.S. S.B.	614.30					10.00	204.8	5.5	113.8	7.90	179.7			
326+18.26-327+75.00	M.S. S.B.	156.74					10.00	52.2	1.4	29.0	7.50	43.5			
327+75.00-334+00.00	M.S. S.B.	625.00					10.00	208.3	5.6	115.7	8.20	189.8			
334+00.00-341+30.17	M.S. S.B.	730.17					10.00	243.4	6.5	135.2	8.20	221.8			
341+30.17-361+00.00	M.S. S.B.	1980.57					10.00	660.2	17.6	366.8	8.20	601.5			
361+00.00-365+35.51	M.S. S.B.	437.89					10.00	146.0	3.9	81.1	8.20	133.0			
365+35.51-376+00.00	M.S. S.B.	1064.49					10.00	354.8	9.5	197.1	8.20	323.3			
376+00.00-390+00.00	M.S. S.B.	1400.00					10.00	466.7	12.4	259.3	8.20	425.2			
390+00.00-401+25.00	M.S. S.B.	1125.00					10.00	375.0	10.0	208.3	8.20	341.7			
401+25.00-402+31.18	M.S. S.B.	106.18					10.00	35.4	0.9	19.7	7.50	29.5			
402+31.18-404+00.00	M.S. S.B.	168.17					10.00	56.1	1.5	31.2	7.50	46.7			
404+00.00-417+00.00	M.S. S.B.	1295.75					10.00	431.9	11.5	240.0	7.50	359.9			
308+34.01-309+34.01	M.S. N.B.	100.68					7.00	23.5	0.6	13.1	6.10	22.7			
309+34.01-320+00.00	M.S. N.B.	1072.81					10.00	357.6	9.5	198.7	8.20	325.8			
320+00.00-326+18.26	M.S. N.B.	622.22					10.00	207.4	5.5	115.2	8.20	189.0			
326+18.26-334+00.00	M.S. N.B.	781.76					10.00	260.6	6.9	144.8	8.20	237.4			
334+00.00-340+00.00	M.S. N.B.	600.00					10.00	200.0	5.3	111.1	8.20	182.2			
340+00.00-341+30.17	M.S. N.B.	130.17					10.00	43.4	1.2	24.1	7.50	36.2			
341+30.17-341+75.00	M.S. N.B.	44.59					10.00	14.9	0.4	8.3	7.50	12.4			
341+75.00-348+00.00	M.S. N.B.	621.59					10.00	207.2	5.5	115.1	7.80	179.6			
348+00.00-362+00.00	M.S. N.B.	1392.36					10.00	464.1	12.4	257.8	7.80	402.2			
362+00.00-364+75.00	M.S. N.B.	273.50					10.00	91.2	2.4	50.6	7.80	79.0			
364+75.00-365+35.51	M.S. N.B.	60.18					10.00	20.1	0.5	11.1	7.50	16.7			
365+35.51-366+50.00	M.S. N.B.	114.49					10.00	38.2	1.0	21.2	7.50	31.8			
366+50.00-376+00.00	M.S. N.B.	950.00					10.00	316.7	8.4	175.9	8.20	288.5			
376+00.00-390+00.00	M.S. N.B.	1400.00					10.00	466.7	12.4	259.3	8.20	425.2			
390+00.00-402+31.18	M.S. N.B.	1231.18					10.00	410.4	10.9	228.0	8.20	373.9			
402+31.18-404+00.00	M.S. N.B.	169.37					10.00	56.5	1.5	31.4	8.20	51.4			
404+00.00-417+00.00	M.S. N.B.	1304.25					10.00	434.8	11.6	241.5	8.20	396.1			
315+25.00-316+25.00	O.S. S.B.	98.18					10.04	32.9	0.9	18.3	10.04	36.5			
328+25.00-331+25.00	O.S. S.B.	300.00					12.13	121.3	3.2	67.4	12.13	134.7			
331+25.00-332+94.62	O.S. S.B.	169.62					17.46	98.7	2.6	54.8	17.46	109.7			
332+94.62-335+84.88	O.S. S.B.	290.26					13.25	128.2	3.4	71.2	10.60	114.0			
335+84.88-336+44.88	O.S. S.B.	60.00					12.75	25.5	0.7	14.2	10.30	22.9			
336+44.88-339+45.00	O.S. S.B.	300.12					12.25	122.5	3.3	68.1	9.80	108.9			
339+45.00-339+85.00	O.S. S.B.	40.00					12.75	17.0	0.5	9.4	10.30	15.3			
339+85.00-341+30.17	O.S. S.B.	145.17					13.25	64.1	1.7	35.6	10.10	54.3			
341+30.17-348+00.00	O.S. S.B.	680.44					13.25	300.5	8.0	167.0	9.90	249.5			
348+00.00-349+00.00	O.S. S.B.	101.58					12.50	42.3	1.1	23.5	9.40	35.4			
349+00.00-351+39.00	O.S. S.B.	242.73					11.25	91.0	2.4	50.6	8.40	75.5			
351+39.00-352+39.00	O.S. S.B.	101.61					15.62	52.9	1.4	29.4	11.7	44.0			
Sub-Totals				3,921.2	4,787.0	9850.1	98,501.6	16,417.1		8321.3	221.5	46229		7476.5	
TOTALS				3,421	4,787	9850	98,502	16,417		8321	222	4623		7477	

LEGEND

M.S. = Median Shoulder
 O.S. = Outer Shoulder
 N.B. = North Bound
 S.B. = South Bound

ESTIMATED QUANTITIES
 CALC. C.E.T. DATE 9-78
 CHKD. J.R.S. DATE 10-78

F.H.W.A. REGION	STATE	PROJECT
5	OHIO	

ESTIMATED QUANTITIES

GRE-675-537
 GREENE COUNTY

STA. TO STA.	REMARKS	LENGTH ALONG CENTROID	404 : 1 1/4" Asphalt Conc. AC-20 305 : 9" Port. Cem. Conc. Base						409 : Seal Coat Bit. Mat'l. 0.3 Gal./S.Y. 310 : Subbase Type II					
			Average Width	404 Volume	402 Volume	407 Volume	305 Area	310 Volume	Average Width	409 Volume	409 Volume	301 Volume	Average End Area	310 Volume
		Ft.	Ft.	C.Y.	C.Y.	Gal.	S.Y.	C.Y.	Ft.	Gal.	C.Y.	C.Y.	S.F.	C.Y.
<i>GRE-675-5.37 cont.</i>														
352+39.00-361+00.00	O.S. S.B.	874.34							10.00	291.4	7.8	161.9	7.50	242.9
361+00.00-363+35.51	O.S. S.B.	239.16							10.00	79.7	2.1	44.3	7.50	66.4
363+35.51-364+35.51	O.S. S.B.	101.57							12.00	40.6	1.1	22.6	9.00	33.9
364+35.51-365+35.51	O.S. S.B.	101.59							14.00	47.4	1.3	26.3	10.50	39.5
375+39.77-376+00.00	O.S. S.B.	60.23							10.00	20.1	0.5	11.2	8.20	18.3
376+00.00-390+00.00	O.S. S.B.	1400.00							10.00	466.7	12.4	259.3	8.20	425.2
390+00.00-402+31.18	O.S. S.B.	1231.18							10.00	410.4	10.9	228.0	8.20	373.9
402+31.18-404+00.00	O.S. S.B.	160.99							10.00	55.7	1.5	30.9	8.20	50.7
404+00.00-417+00.00	O.S. S.B.	1285.88							10.00	428.6	11.4	238.1	8.20	390.5
308+34.01-308+71.67	O.S. N.B.	37.66							10.00	12.6	0.3	7.0	7.50	10.5
308+71.67-309+00.00	O.S. N.B.	28.84							10.00	9.6	0.3	5.3	7.50	8.0
309+00.00-315+14.35	O.S. N.B.	625.52							10.00	208.5	5.6	115.8	7.50	173.8
323+14.35-326+18.26	O.S. N.B.	309.93							10.00	103.1	2.8	57.3	7.50	86.0
326+18.26-327+50.00	O.S. N.B.	131.74							10.00	43.9	1.2	24.4	7.50	36.6
327+50.00-329+83.86	O.S. N.B.	233.86							10.00	78.0	2.1	43.3	8.10	71.0
337+83.86-340+00.00	O.S. N.B.	216.14							10.00	72.0	1.9	40.0	8.20	65.6
340+00.00-341+30.17	O.S. N.B.	130.17							10.00	43.4	1.2	24.1	8.20	39.5
341+30.17-348+89.00	O.S. N.B.	747.08							10.00	249.0	6.6	138.3	8.20	226.9
371+80.00-376+00.00	O.S. N.B.	420.00							10.00	140.0	3.7	77.8	8.20	127.6
376+00.00-390+00.00	O.S. N.B.	1400.00							10.00	466.7	12.4	259.3	8.20	425.2
390+00.00-401+25.00	O.S. N.B.	1125.00							10.00	375.0	10.0	208.3	8.20	341.7
401+25.00-402+31.18	O.S. N.B.	106.18							10.00	35.4	0.9	19.7	7.70	30.3
402+31.18-417+00.00	O.S. N.B.	1434.78							10.00	494.9	13.2	275.0	7.50	412.4
348+89 - 355+00	O.S. N.B. Planimetered	13,708								456.9	12.2	253.9	13,708 x 1	507.7
<i>Ramp C, Speed Change Ln.</i>														
308+34.01-308+71.67	Pav't S.B.	37.66	11.00	1.6	2.2	4.6	46.0	7.7						
308+71.67-315+25.00	Pav't S.B.	640.77	18.20	45.0	63.0	129.5	1295.4	215.9						
308+34.01-308+71.67	O.S. S.B.	37.66							8.00	10.0	0.3	5.6	6.70	9.3
308+71.67-315+25.00	O.S. S.B.	638.58							8.00	170.3	4.5	94.6	6.70	158.5
<i>CD, Speed Change Ln.</i>														
316+25.00-317+21.00	Pav't S.B.	94.35	2.00	0.7	1.0	2.1	21.0	3.5						
317+21.00-326+18.26	Pav't S.B.	880.80	11.35	38.6	54.0	111.0	1110.3	185.0						
326+18.26-328+25.00	Pav't S.B.	206.74	22.85	18.2	25.5	52.5	524.8	87.5						
316+25.00-317+21.00	O.S. S.B.	94.20							10.12	31.8	0.8	17.7	10.12	35.3
317+21.00-318+25.00	O.S. S.B.	102.01							11.12	37.8	1.0	21.0	11.12	42.0
318+25.00-319+75.00	O.S. S.B. Planimetered	17643.5								58.8	1.6	32.7	1764 x 1	65.3
319+75.00-320+00.00	O.S. S.B.	24.50							8.00	6.5	0.2	3.6	6.70	6.1
320+00.00-326+18.26	O.S. S.B.	604.91							8.00	161.3	4.3	89.6	6.70	150.1
326+18.26-328+25.00	O.S. S.B.	206.74							8.00	55.1	1.5	30.6	6.70	51.3
365+35.51-375+39.77	Pav't S.B. Planimetered	24,775.5		103.3	144.6	297.5	2975.0	495.8						
365+35.51-375+39.77	O.S. S.B.	1003.00							10.00	334.3	8.9	185.7	8.20	304.6
<i>Ramp H, Speed Change Ln.</i>														
315+14.35-315+31.02	Pav't N.B.	16.67	2.00	0.1	0.2	0.4	3.7	0.6						
315+31.02-316+14.35	Pav't N.B. Planimetered	580 S.F.		2.2	3.1	6.4	64.5	10.7						
316+14.35-319+65.37	Pav't N.B.	357.49	12.00	16.6	23.2	47.7	476.7	79.4						
319+65.37H-323+21.06H	Pav't Planimetered	74675.5		28.8	40.3	83.0	829.6	138.3						
315+14.35-315+31.02	O.S. N.B.	16.98							8.74	4.9	0.1	2.7	6.56	4.1
315+31.02-316+14.35	O.S. N.B.	84.98							8.74	24.8	0.7	13.8	6.56	20.6
316+14.35-319+65.37	O.S. N.B.	358.39							8.00	95.6	2.5	53.1	6.00	79.6
319+65.37H-322+00.00H	O.S. N.B.	234.47							8.00	62.5	1.7	34.7	6.00	52.1
322+00.00H-323+21.06H	O.S. N.B.	120.98							8.00	32.3	0.9	17.9	6.70	30.0
<i>Sub-Totals</i>														
TOTALS				255.1	357.1	734.7	7,347	1224.4		5715.6	152.4	3,175.4		5,213

LEGEND

- M.S. = Median Shoulder
- O.S. = Outer Shoulder
- N.B. = North Bound
- S.B. = South Bound

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES
 CALC. C.E.T. DATE 9-78
 CHKD. J.R.S. DATE 10-78

F.H.W.A. REGION	STATE	PROJECT
5	OHIO	

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GRE-G75-537
 GREENE COUNTY

STA. TO STA.	REMARKS	LENGTH ALONG CENTROID Ft	404: 1 1/4" Asphalt Conc. AC-20			305: 9" Port. Cem. Conc. Base			409: Seal Coat Bit. Mat'l. 0.3 Gal./SY			310: Subbase Type II		
			Average Width Ft	404 Volume CY	402 Volume CY	407 Volume Gal.	305 Area SY	310 Volume CY	Average Width Ft	409 Volume Gal.	409 Volume CY	301 Volume CY	Average End Area S.F.	310 Volume CY
Ramp D Speed Change														
329+83.86-337+83.86	Pav't. N.B. Planimetered	13,102.8F		50.6	70.7	145.6	1455.7	242.6						
329+83.86-330+00.53	O.S. N.B.	16.67							8.84	4.9	0.1	2.7	7.30	4.5
330+00.53-330+83.86	O.S. N.B.	83.33							8.84	24.5	0.7	13.6	7.30	22.5
330+83.86-333+29.54	O.S. N.B.	245.68							8.00	65.5	1.7	36.4	6.70	61.0
333+29.54-337+83.02D	O.S. N.B.	453.01							8.00	120.8	3.2	67.1	6.70	112.4
Ramp A, Speed Change														
355+00.00-365+35.51	Pav't. Planimetered	31905.3F		123.1	172.3	354.5	3545.0	590.8						
365+35.51-371+80.00	Pav't.	644.69	17.37	43.2	60.5	124.4	1244.3	207.4						
355+00.00-361+00.00	O.S. N.B.	586.12							10.00	195.4	5.2	108.5	8.20	178.0
361+00.00-365+35.51	O.S. N.B.	426.26							10.00	142.1	3.8	78.9	8.20	129.5
365+35.51-370+60.00	O.S. N.B.	524.49							10.00	174.8	4.7	97.1	8.20	159.3
370+60.00-371+80.00	O.S. N.B.	120.00							10.00	40.0	1.1	22.2	8.20	36.4
I-675 Collector Distributor														
328+25.00-332+59.46	Pav't.	434.57	16.00	26.8	37.5	77.3	772.6	128.8						
332+59.46-334+99.46	Pav't.	240.22	20.00	18.5	25.9	53.4	533.8	89.0						
336+53.08-341+30.17	Pav't.	477.09	24.00	44.2	61.8	127.2	1272.2	212.0						
341+30.17-342+47.88	Pav't.	120.35	24.00	11.1	15.6	32.1	320.9	53.5						
344+67.54-348+00.00	Pav't.	339.64	16.00	21.0	29.3	60.4	603.8	100.6						
348+00.00-348+92.28CD	Pav't.	92.28	16.00	5.7	8.0	16.4	164.1	27.3						
348+92.28CD-350+69.75CD	Pav't.	177.47	17.77	12.2	17.0	35.0	350.4	58.4						
350+69.75CD-352+92.27CD	Pav't.	223.79	21.77	18.8	26.3	54.1	541.3	90.2						
357+79.48CD-364+39.72CD	Pav't.	656.09	24.00	60.8	85.0	175.0	1749.6	291.6						
364+39.72CD-365+89.72CD	Pav't.	150.00	24.00	13.9	19.4	40.0	400.0	66.7						
328+25.00-332+59.46	Rt.	434.57							8.00	115.9	3.1	64.4	6.70	107.8
332+59.46-334+99.46	Rt.	240.22							8.00	64.1	1.7	35.6	6.70	59.6
336+53.08-341+30.17	Rt.	477.09							10.00	159.0	4.2	88.4	8.20	144.9
341+30.17-342+47.88	Rt.	120.79							10.00	40.3	1.1	22.4	8.20	36.7
344+67.54-345+33.00	Rt. Planimetered	663.8F												
345+33.00-348+00.00	Rt.	273.32							3.00	27.3	0.7	15.2	3.00	30.4
348+00.00-348+92.28CD	Rt.	92.28							3.00	9.2	0.2	5.1	3.00	10.3
348+92.28CD-350+69.75CD	Rt.	177.47							4.11	24.3	0.6	13.5	3.05	22.7
350+69.75CD-352+92.27CD	Rt.	223.44							6.61	49.7	1.3	27.6	4.96	41.4
357+79.48CD-364+39.72CD	Rt.	661.97							10.00	220.7	5.9	122.6	7.50	183.9
364+39.72CD-365+89.72CD	Rt.	150.00							10.00	50.0	1.3	27.8	7.50	41.7
332+59.46-334+99.46	Lt.	204.84							5.59	38.1	1.0	21.2	4.55	34.5
334+99.46-335+84.88	Lt.	85.42							8.25	23.5	0.6	13.1	6.20	19.6
335+84.88-336+53.08	Lt.	68.20							7.25	16.5	0.4	9.2	5.44	13.7
336+53.08-338+75.00	Lt.	221.92							6.25	46.2	1.2	25.7	4.69	38.5
338+75.00-338+85.00	Lt.	10.00							6.75	2.3	0.1	1.3	5.06	1.9
338+85.00-339+44.50	Lt.	59.50							7.25	14.4	0.4	8.0	5.40	11.9
339+44.50-339+84.50	Lt.	40.00							7.75	10.3	0.3	5.7	5.81	8.6
339+84.50-341+00.00	Lt.	115.50							8.25	31.8	0.8	17.6	6.20	26.5
341+00.00-341+30.17	Lt.	30.17							8.25	8.3	0.2	4.6	6.90	7.7
341+30.17-348+00.00	Lt.	682.53							8.25	187.7	5.0	104.3	6.90	174.4
348+00.00-348+92.28CD	Lt.	92.28							7.25	22.3	0.6	12.4	6.10	20.8
348+92.28CD-350+69.75CD	Lt.	177.47							5.25	31.1	0.8	17.3	4.60	30.2
350+69.75CD-352+92.27CD	Lt.	222.21							5.25	38.9	1.0	21.6	4.60	37.9
352+92.27CD-357+71.87CD	Lt.	479.60							5.25	83.9	2.2	46.6	4.60	81.7
357+71.87CD-362+64.72CD	Lt.	485.98							5.25	85.0	2.3	47.2	4.60	82.8
362+64.72CD-364+39.72CD	Lt.	172.40							8.65	49.7	1.3	27.6	7.20	46.0
364+39.72CD-364+89.72CD	Lt.	50.00							13.03	21.7	0.6	12.1	10.50	19.4
364+89.72CD-365+89.72CD	Lt.	100.00							14.00	46.7	1.2	25.9	11.20	41.5
Sub-Totals				449.9	629.3	1295.4	12,953.7	2158.9		2309.0	61.2	1282.8		2105.2
TOTALS				450	629	1295	12,954	2159		2309	61	1283		2105

LEGEND

OS = Outer Shoulder
 MS = Median Shoulder
 EB = East Bound
 WB = West Bound

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES
 CALC. C.E.T. DATE 9-78
 CHKD. J.R.S. DATE 10-78

F.H.W.A. REGION	STATE	PROJECT
5	OHIO	

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616

GRE-675-5.37
 GREENE COUNTY

STA. TO STA.	REMARKS	LENGTH ALONG CENTROID FT.	404: 1/4" Asphalt Conc. AC-20			305: 9" Port. Cem. Conc. Base			409: Seal Coat Bit. Mat'l. 0.3 Gal./Sq. Yd.			310: Subbase Type II			451 9" Reinf. Conc. Pav't. S.Y.
			Average Width FT.	404 Volume CY	402 Volume CY	407 Volume Gal.	305 Area Sq. Yd.	310 Volume CY	Average Width FT.	409 Volume Gal.	409 Volume CY	301 Volume CY	Average End Area S.F.	310 Volume CY	
I-675 Coll. Dist. including Ramp E, Speed Change															
334+99.46-336+53.08	Pav't. Planimetered	5366 S.F.		20.7	29.0	59.6	596.3	99.4							
335+01.54E-336+53.08E	Lt.	149.42							10.00	49.8	1.3	27.7	8.20	45.4	
I-675 Coll. Dist. including Ramp G, Speed Change															
342+47.89-344+67.54	Pav't. Planimetered	6287 S.F.		24.3	34.0	69.9	698.6	116.4							
342+47.89G-344+72.18G	Lt.	224.01							10.00	74.7	2.0	41.5	8.20	68.0	
I-675 Coll. Dist. including Ramp B, Speed Change															
352+92.27C-D-357+79.48C-D	Pav't. Planimetered	17205 S.F.		66.4	92.9	191.2	1911.7	318.6							
352+92.93B-353+42.93B	Lt.	49.94							9.00	15.0	0.4	8.3	7.45	13.8	
353+42.93B-356+50.00B	Lt.	306.67							10.00	102.2	2.7	56.8	8.20	93.1	
356+50.00B-357+79.48B	Lt.	129.31							10.00	43.1	1.1	23.9	7.50	35.9	
Relocated U.S. 35															
1087+74.57-1090+85.78	Pav't. E.B.	311.21	24.00	28.8	40.3	83.0	829.9	138.3							
1090+85.78-1093+00.00	Pav't. E.B. & W.B.	214.22	48.00	39.7	55.5	114.3	1142.5	190.4							
1093+00.00-1095+00.00	Pav't. E.B. & W.B.	200.00	48.00	37.0	51.8	106.7	1066.7	177.8							
1095+00.00-1098+00.00	Pav't. W.B.	300.00	24.00	27.8	38.9	80.0	800.0	133.3							
1095+00.00-1098+00.00	Pav't. E.B.	300.00	30.17	34.9	48.9	100.6	1005.6	167.6							
1098+00.00-1098+44.25	Pav't. E.B. & W.B.	44.25	60.00	10.2	14.3	29.5	295.0	49.2							
1098+44.25-1106+93.02	Pav't. W.B.	555.72	24.00	79.3	110.9	228.2	2281.9	380.3							
1098+44.25-1106+93.02	Pav't. E.B.	840.51	36.00	116.8	163.4	336.2	3362.1	560.3							
0+00.00 - 2+41.20	Pav't. W.B.	243.18	24.00	22.5	31.5	64.8	648.5	108.1							
0+00.00 - 2+41.20	Pav't. E.B.	238.85	36.00	33.2	46.4	95.5	955.4	159.2							
2+41.20 - 4+46.55	Pav't. W.B.	205.35	24.00	19.0	26.6	54.8	547.6	91.3							
2+41.20 - 4+06.74	Pav't. E.B.	165.54	36.00	23.0	32.2	66.2	662.2	110.4							
6+77.10 - 14+00.00	Pav't. W.B.	722.90	24.00					321.3						1927.7	
6+37.29 - 10+00.02	Pav't. E.B.	362.73	36.00	50.4	70.5	145.1	1450.9	241.8							
10+00.02-17+86.93	Pav't. E.B.	786.91	24.00	72.9	102.0	209.8	2098.4	349.7							
14+00.00-16+60.00	Pav't. W.B.	260.00	24.00					115.6						693.3	
16+60.00-17+86.93	Pav't. W.B.	126.93	24.00					56.4						338.5	
17+86.93-28+79.49	Pav't. E.B.	1101.51	24.00	102.0	142.8	293.7	2937.4	489.6							
17+86.93-28+22.51	Pav't. W.B.	1027.10	24.00					456.5						2738.9	
33+03.82-36+39.20	Pav't. W.B.	332.63	24.00					147.8						887.0	
33+41.42-36+39.20	Pav't. E.B.	297.78	24.00	27.6	38.6	79.4	794.1	132.3							
36+39.20-44+00.00	Pav't. E.B.	760.80	24.00	70.5	98.6	202.9	2028.8	338.1							
36+39.20-44+00.00	Pav't. W.B.	760.80	24.00					338.1						2028.8	
44+00.00-44+68.90EB	Pav't. E.B.	68.90	24.00	6.4	8.9	18.4	183.7	30.6							
44+00.00-45+16.49WB	Pav't. W.B.	116.49	24.00					51.8						310.6	
44+68.90EB-55+00.00EB	Pav't. E.B.	1027.93	24.00	95.2	133.2	274.1	2741.2	456.9							
45+16.49WB-55+00.00WB	Pav't. W.B.	986.53	24.00					438.5						2630.7	
55+00.00EB-56+15.88EB	Pav't. E.B.	115.52	24.00	10.7	15.0	30.8	308.1	51.3							
55+00.00WB-56+00.02WB	Pav't. W.B.	100.33	24.00					44.6						2675	
58+15.88EB-61+91.61EB	Pav't. E.B.	309.08	24.00	28.6	40.1	82.4	824.2	137.4							
58+16.26WB-62+08.39WB	Pav't. W.B.	346.79	24.00	32.1	44.9	92.5	924.8	154.1							
62+00.00-76+00.00	Pav't. E.B. & W.B.	1400.00	48.00	259.3	362.9	746.7	7466.7	1247.4							
1087+74.57-1088+74.57	M.S. E.B.	100.00							4.50	15.0	0.4	8.3	3.38	12.5	
1088+74.57-1091+85.78	M.S. E.B.	311.21							4.00	41.5	1.1	23.1	3.00	34.6	
1090+85.78-1091+85.78	M.S. W.B.	100.00							4.50	15.0	0.4	8.3	3.38	12.5	
1091+85.78-1106+93.02	M.S. E.B. & W.B.	1507.24							8.00	401.9	10.7	223.3	6.81	380.2	
0+00.00 - 4+28.35	M.S. E.B. & W.B.	428.35							8.00	114.2	3.0	63.5	7.00	111.1	
6+69.14 - 17+86.93	M.S. W.B.	1135.79							4.00			84.1	3.32	139.7	
17+86.93 - 28+59.20	M.S. W.B.	1088.33							4.00			80.6	3.00	120.9	
6+23.66 - 17+86.93	M.S. E.B.	1181.27							4.00	157.5	4.2	87.5	3.31	144.8	
17+86.93 - Bridge	M.S. E.B.	1131.16							4.00	150.8	4.0	83.8	4.00	167.6	
Bridge - 36+39.20	M.S. E.B.	351.23							4.00	46.8	1.2	26.0	4.00	52.0	
Sub-Totals				1339.3	1874.1	3856.3	38562.3	8397.4		1227.5	32.5	846.7		1432.1	11823.0
TOTALS				1,339	1,874	3,856	38,562	8,397		1,228	33	847		1,432	11,823

Using Type A Shrinkage Compensating Cement

LEGEND

- M.S. = Median Shoulder
- O.S. = Outer Shoulder
- E.B. = East Bound
- W.B. = West Bound

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES
 CALC. C.E.T. DATE 9-78
 CHKD. J.R.S. DATE 10-78

F.H.W.A. REGION	STATE	PROJECT
5	OHIO	

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GRE-675-537
 GREENE COUNTY

STA. TO STA.	REMARKS	LENGTH ALONG CENTROID	404: 1 1/2" Asphalt Conc. AC-20 305: 9" Port. Cem. Conc. Base					409: Seal Coat Bit. Mat. 1.03 Gal./Sq. Yd. 310: Subbase Type II						
			Average Width Ft.	404 Volume CY	405 Volume CY	407 Volume Gal.	305 Area Sq. Yd.	310 Volume CY	Average Width Ft.	409 Volume Gal.	409 Volume CY	301 Volume CY	Average Final Area S.F.	310 Volume CY
Relocated U.S. 35 cont.														
36+39.20 - 44+68.90	M.S., E.B.	829.70						4.00	110.6	3.0	61.5	3.00	92.2	
44+68.90 - Bridge	M.S., E.B.	1140.52						4.00	152.1	4.1	84.5	3.00	126.7	
58+72.01 - 76+00.00	M.S., E.B. & W.B.	1727.99						8.00	460.8	12.3	256.0	7.81	499.8	
1087+74.57 - 1095+00.00	O.S., E.B.	725.43						10.00	241.8	6.4	134.3	8.20	220.3	
1095+00.00 - 1095+50.00	O.S., E.B.	50.00						9.00	15.0	0.4	8.3	7.45	13.8	
1095+50.00 - 1098+44.25	O.S., E.B.	294.25						10.00	98.1	2.6	54.5	8.20	89.4	
1098+44.25 - 1106+93.02	O.S., E.B.	835.52						10.00	278.5	7.4	154.7	8.20	253.7	
0+00.00 - 2+41.20	O.S., E.B.	237.43						10.00	79.1	2.1	44.0	8.20	72.1	
2+41.20 - 3+93.65	O.S., E.B.	152.45						10.00	50.8	1.4	28.2	8.20	46.3	
6+24.20 - 10+00.02	O.S., E.B.	375.82						10.00	125.3	3.3	69.6	8.20	114.2	
17+86.93 - 28+50.00	O.S., E.B.	1076.40						10.00	358.8	9.6	199.3	7.50	299.0	
28+50.00 - 28+96.00	O.S., E.B. - Planimetered	1270 S.F.							42.3	1.1	23.5	Avg. 7.100	47.0	
39+90.72 EB - 45+06.00 EB	O.S.	525.28						10.00	175.1	4.7	97.3	8.20	159.5	
45+06.00 EB - 46+78.04 EB	O.S. - Planimetered	2264 S.F.							75.5	2.0	41.9	Avg. 7.100	83.9	
58+90 EB - 75+00.00 EB	O.S., E.B.	1601.61						10.00	533.9	14.2	296.6	8.20	486.4	
75+00.00 - 76+00.00	O.S., E.B.	100.00						7.00	23.3	0.6	13.0	6.10	22.6	
1090+85.78 - 1097+00.00	O.S., W.B.	614.22						10.00	204.7	5.5	113.7	8.20	186.5	
1097+00.00 - 1098+44.25	O.S., W.B.	144.25						10.00	48.1	1.3	26.7	7.50	40.1	
1098+44.25 - 1101+53.02	O.S., W.B.	312.96						10.00	104.2	2.8	57.9	7.50	86.8	
16+60.00 - 17+86.93	O.S., W.B.	126.93						10.76			25.3	9.42	44.3	
17+86.93 - 19+39.00	O.S., W.B.	150.07						14.64			40.7	12.81	71.2	
19+39.00 - 19+59.00	O.S., W.B.	19.75						10.14			3.7	6.26	4.6	
19+59.00 - 21+03.72	O.S., W.B.	142.88						11.26			29.8	5.85	31.0	
21+03.72 - 21+75	O.S., W.B.	70.36						12.25			16.0	6.32	16.5	
21+75 - 22+15	O.S., W.B.	39.49						11.75			8.6	6.08	8.9	
22+15 - 22+25	O.S., W.B.	9.87						11.25			2.1	5.84	2.1	
22+25 - 22+65	O.S., W.B.	39.49						11.75			8.6	6.08	8.9	
22+65 - 28+05.64	O.S., W.B.	533.70						12.25			121.1	6.32	124.9	
Relocated U.S. 35														
32+92.78 - 36+39.20	O.S., W.B.	341.98						12.25			77.6	6.32	80.0	
36+39.20 - 44+65	O.S., W.B.	825.80						12.25			187.3	6.62	202.5	
44+65 - 45+05	O.S., W.B.	40.00						11.75			8.7	6.08	9.0	
45+05 - 45+15	O.S., W.B.	10.00						11.25			2.1	5.84	2.2	
45+15 E - 45+55 W.B.	O.S., W.B.	40.29						11.75			8.8	6.08	9.1	
45+55 W.B. - 48+00 W.B.	O.S.	246.89						12.25			56.0	6.32	57.8	
48+00 W.B. - 50+85.12 W.B.	O.S.	287.32						12.25			65.2	6.32	67.3	
50+85.12 W.B. - 51+85.12 W.B.	O.S.	100.76						11.25			21.0	5.84	21.8	
55+75 W.B. - 55+89.59 W.B.	O.S.	14.74						7.50			2.0	4.06	2.2	
59+7500 W.B. - 62+08.39 W.B.	O.S.	233.39						10.00	77.8	2.1	43.2	8.10	70.0	
62+00.00 - 75+00.00	O.S., W.B.	1300.00						10.00	433.3	11.6	240.7	8.20	394.8	
75+00.00 - 76+00.00	O.S., W.B.	100.00						7.00	23.3	0.6	13.0	6.10	22.6	
Bridge - 36+39.20	M.S., W.B.	369.07						4.00			27.3	3.00	41.0	
36+39.20 E - 45+16.49 W.B.	M.S., W.B.	877.29						4.00			65.0	3.42	111.1	
45+16.49 W.B. - Bridge	M.S., W.B.	1088.19						4.00			80.6	4.00	161.2	
Ramp A, Speed Change														
10+00.02 - 17+86.93	Port. E.B. - Planimetered	188803.5		72.9	102.0	209.8	2097.8	349.6						
293+31.33A - 30+17.15A	Rt.	785.36							10.00	261.8	7.0	145.4	8.20	238.5
Ramp E, Speed Change														
33+53.00 - 39+80.72	Port. E.B. - Planimetered	5037 S.F.		19.4	27.2	56.0	559.7	93.3						
33+60.00 - 36+39.20	O.S., E.B.	283.49							8.00	75.6	2.0	42.0	6.00	63.0
36+39.20 - 38+00.00	O.S., E.B.	160.80							8.00	42.9	1.1	23.8	6.00	35.7
38+00.00 - 39+80.72	O.S., E.B.	180.72							8.00	48.2	1.3	26.8	6.70	44.8
Ramp H, Speed Change														
46+78.04 EB - 56+20.54 EB	Port. E.B. Planimetered	12367.5		47.7	66.8	137.4	1374.1	229.0						
46+78.04 EB - 55+98.04 EB	O.S.	910.23							8.00	242.7	6.5	134.8	6.70	225.9
55+98.04 EB - 56+09.54 EB	O.S.	11.41							8.00	3.0	0.1	1.7	6.70	2.8
Sub-Totals														
				140.0	196.0	403.2	4031.6	671.9		4386.6	117.1	3,294.4		5,116.0
TOTALS				140	196	403	4032	672		4,387	117	3,294		5,116

LEGEND

- M.S. = Median Shoulder
- O.S. = Outer Shoulder
- W.B. = West Bound
- Lt. = Left Shoulder
- Rt. = Right Shoulder

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES
 CALC. C.E.T. DATE 9-78
 CHKD. J.R.S. DATE 10-78

F.H.W.A. REGION	STATE	PROJECT
5	OHIO	

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GRE-675-537
 GREENE COUNTY

STA. TO STA.	REMARKS	LENGTH ALONG CENTROID Ft.	404: 1 1/2" Asphalt Conc. AC-20 305: 9" Port. Cem. Conc. Base					409: Seal Coat Bit. Mat. 11.03 Gal./Sq. Yd. 310: Subbase Type II					451	9" Reinf. Conc. Pav't.	
			Average Width Ft.	404 Volume CY	402 Volume CY	407 Volume Gal.	305 Area Sq. Yd.	310 Volume CY	Average Width Ft.	409 Volume Gal.	409 Volume CY	301 Volume CY			Average End Area Sq. Ft.
Relocated U.S. 35 cont															
Ramp B. Speed Change															
1101+53.02 - 2+41.20	Pav't. W.B. Planimetered	7806.5 F		30.1	42.2	26.7	867.3	144.6							
2+41.20 - 4+00.00	Pav't. W.B.	158.80	21.52	13.2	18.4	38.0	379.6	63.3							
4+00.00 - 4+62.00	Pav't. W.B.	62.00	24.28	5.8	8.1	16.7	167.2	27.9							
1101+53.02 - 1102+33.02	O.S. W.B.	81.02							8.00	21.6	0.6	12.0	6.00	18.0	
1102+33.02 - 2+41.20	O.S. W.B.	711.75							8.00	189.8	5.1	105.4	6.00	158.2	
2+41.20 - 4+00.00	O.S. W.B.	158.80							8.00	42.3	1.1	23.5	6.00	35.3	
4+00.00 - 4+71.00	O.S. W.B.	71.00							8.00	18.9	0.5	10.5	6.70	17.6	
US-35 CD Speed Change															
6+84.5 - 10+00.00	Pav't. Planimetered	1476.5 F						27.3							164.0
10+00.00 - 16+00.00	Pav't.	6000.00	16.00					177.8							1066.7
16+00.00 - 16+60.00	Pav't.	6000.00	24.25					26.9							161.7
12+75.00 - 16+60.00	Lt.	385.00							8.00			57.0	4.00	57.0	
51+85.12 CD - 55+93.28 CD	Pav't. Planimetered	9947.5 F						184.2							1105.2
58+59.50 W.B. - 59+75.00 W.B.	Pav't. Planimetered	854.5 F		3.3	4.6	9.5	94.9	15.8							
51+85.12 CD - 54+45.99 CD	O.S. W.B.	261.60							8.00			38.6	4.30	41.5	
54+45.99 CD - 55+80.76 CD	O.S. W.B.	135.10							8.00			20.0	4.30	21.5	
58+50.00 W.B. - 58+75.00 W.B.	O.S.	25.00							8.00	6.7	0.2	3.7	6.00	5.6	
58+75.00 W.B. - 59+75.00 W.B.	O.S.	100.00							8.00	26.7	0.7	14.8	6.00	22.2	
6+89 - 12+75	Lt. Planimetered	8548.5 F										158.3	8548.5	277.0	
US-35 Collector Distributor															
16+60.00 CD - 16+82.16 CD	Pav't.	22.16	16.00	1.4	1.9	3.9	39.4	6.6							
16+82.16 CD - 18+57.62 CD	Pav't.	175.65	16.00	10.8	15.2	31.2	312.3	52.0							
18+57.62 CD - 20+97.62 CD	Pav't.	240.19	20.00	18.5	25.9	53.4	533.8	89.0							
22+69.16 US-35 - 27+82.38 US-35	Pav't.	503.37	24.00	46.6	65.2	134.2	1342.3	223.7							
32+80.00 US-35 - 36+39.20 US-35	Pav't.	352.67	16.00	21.8	30.5	62.7	627.0	104.5							
36+39.20 CD - 37+51.53 CD	Pav't.	112.56	16.00	7.0	9.7	20.0	200.1	33.4							
37+51.53 CD - 39+81.59 CD	Pav't.	230.06	16.00	14.2	19.9	40.9	409.0	68.2							
39+81.59 CD - 41+89.73 CD	Pav't.	207.71	16.00	12.8	17.9	36.9	369.3	61.5							
41+89.73 CD - 44+09.08 CD	Pav't.	219.35	16.00	13.5	19.0	39.0	390.0	65.0							
48+08.34 W.B. - 51+85.12 W.B.	Pav't.	381.70	16.00	23.6	33.0	67.9	678.6	113.1							
16+60.00 CD - 16+82.16 CD	Lt.	22.16							8.00	5.9	0.2	3.3	6.70	5.5	
16+82.16 CD - 18+57.62 CD	Lt.	175.37							8.00	46.8	1.2	26.0	6.70	43.5	
18+57.62 CD - 20+97.62 CD	Lt.	239.71							8.00	63.9	1.7	35.5	6.70	59.5	
22+69.16 US-35 - 27+82.38 US-35	Lt.	485.13							10.00	145.5	4.3	89.4	8.20	147.3	
32+78.80 - 33+65	Lt. Planimetered	756.5 F								25.2	0.7	14.0	756.5	28.0	
33+65.00 - 36+39.20	Lt.	268.55							3.00	26.9	0.7	14.9	3.00	29.8	
36+39.20 CD - 37+51.53 CD	Lt.	112.29							3.00	11.2	0.3	6.2	3.00	12.5	
37+51.53 CD - 39+81.59 CD	Lt.	230.06							3.00	23.0	0.6	12.8	3.00	25.6	
39+81.59 CD - 41+89.73 CD	Lt.	208.24							3.00	20.8	0.6	11.6	3.00	23.1	
41+89.73 CD - 42+34.08 CD	Lt.	44.35							3.00	4.4	0.1	2.5	3.00	4.9	
42+34.08 CD - 44+09.08 CD	Lt.	175.00							6.50	37.9	1.0	21.1	5.25	34.0	
48+08.34 W.B. - 51+85.12 W.B.	Lt.	382.86							8.00	102.1	2.7	56.7	6.00	85.1	
19+36.00 CD - 20+97.62 CD	Rt.	161.62							3.25	17.5	0.5	9.7	3.25	19.5	
21+03.72 US-35 - 27+98.05 US-35	Rt.	682.79							3.25	74.0	2.0	41.1	3.25	82.2	
32+84.50 - 36+39.20	Rt.	349.13							3.25	37.8	1.0	21.0	3.25	42.0	
36+39.20 CD - 37+51.53 CD	Rt.	112.86							3.93	14.8	0.4	8.2	3.93	16.4	
37+51.53 CD - 38+43 US-35	Rt.	91.00							5.81	17.6	0.5	9.8	5.81	19.6	
38+43 US-35 - 39+03 US-35	Rt.	60.00							6.50	13.0	0.3	7.2	4.88	10.8	
39+03 US-35 - 39+44 US-35	Rt.	41.00							6.60	9.0	0.2	5.0	4.95	7.5	
39+44 US-35 - 39+84 US-35	Rt.	40.00							9.50	12.7	0.3	7.0	7.13	10.6	
39+84 US-35 - 41+89.73 CD	Rt.	205.00							12.67	86.6	2.3	48.1	9.50	72.1	
41+89.73 CD - 44+74.50 CD	Rt.	284.77							9.07	86.1	2.3	47.8	6.80	71.7	
44+74.50 CD - 45+09.50 CD	Rt.	35.00							4.73	5.5	0.1	3.1	4.73	6.1	
45+09.50 CD - 45+44.50 CD	Rt.	35.00							3.85	4.5	0.1	2.5	3.85	5.0	
Sub-Totals				222.6	311.5	641.0	6410.8	1484.8		1198.7	32.3	948.3		1516.2	2497.6
TOTALS				223	312	641	6411	1485		1199	32	948		1516	2498

Using Type K Shrinkage Compensating Cement

LEGEND

- M.S. = Median Shoulder
- O.S. = Outer Shoulder
- Lt. = Left Shoulder
- Rt. = Right Shoulder

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES
 CALC. C.E.Z. DATE 9-78
 CHKD. J.R.S. DATE 10-78

F.H.W.A. REGION	STATE	PROJECT
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GRE-675-537
 GREENE COUNTY

STA. TO STA.	REMARKS	LENGTH ALONG CENTROID	404: 1 1/4" Asphalt Conc. AC-20 305: 9" Port. Cem. Conc. Base					409: Seal Coat Bit Mat'l 0.3 Gal./Sq. Yd. 310: Subbase Type II						
			Average Width	404 Volume	402 Volume	407 Volume	305 Area	310 Volume	Average Width	409 Volume	409 Volume	301 Volume	Average End Area	310 Volume
		FT.	FT.	C.Y.	C.Y.	Gal.	Sq. Yd.	C.Y.		Gal.	C.Y.	C.Y.	S.F.	C.Y.
404: 1 1/4" Asphalt Conc. AC-20 305: 9" Port. Cem. Conc. Base 402: 1 1/4" Asphalt Conc. AC-20 310: 6" Subbase Type II 407: Seal Coat 0.1 Gal./Sq. Yd.														
409: Seal Coat Bit Mat'l 0.3 Gal./Sq. Yd. 310: Subbase Type II 409: Seal Coat Aggregate 0.008 CM/Sq. Yd. thickness as noted. 301: 6" Bituminous Aggregate Base														
U.S. 35 Collector Distributor cont.														
45+44.50 CD-46+11.66 CD Rt.		67.16							3.58	8.0	0.2	4.4	3.58	8.9
46+10.00 WB-50+85.12 WB Rt.		480.15							3.25	52.0	1.4	28.9	3.25	57.8
50+85.12 WB-51+85.12 WB Rt.		101.04							4.25	14.3	0.4	8.0	4.25	15.9
Ramp G Speed Change														
21+03.72 US 35-22+69.16 US 35	Pvt. Planimetered	5638 S.F.		21.8	30.4	62.7	626.5	104.4						
354+01.66 G-355+60.96 G	Lt.	157.08							10.00	52.4	1.4	29.1	8.20	47.7
Ramp D Speed Change														
352+11.41 D-352+21.41 D	Pvt.	10.00	19.09	0.7	1.0	2.1	21.2	3.5						
Ramp F Speed Change														
44+09.08 CD-46+11.66 CD	Pvt. Planimetered	6936 S.F.		26.8	37.5	77.1	770.6	128.4						
46+10.00 WB-47+66.68 WB	Pvt. Planimetered	3457.5 F		13.3	18.7	38.4	384.1	64.0						
47+66.68 WB-48+08.34 WB	Pvt.	42.21	18.00	2.9	4.1	8.4	84.4	14.1						
326+70.87 F-328+19.32 F	Rt.	148.02							8.00	39.5	1.1	21.9	6.70	36.7
45+60.00 CD-46+11.66 CD	Lt.	51.66							8.00	13.8	0.4	7.7	6.00	11.5
46+10.00 WB-47+66.68 WB	Lt.	159.44							8.00	42.5	1.1	23.6	6.00	35.4
47+66.68 WB-48+08.34 WB	Lt.	42.35							7.00	9.9	0.3	5.5	5.25	8.2
Ramp A														
301+17.15 A-312+19.02 A	Pvt.	1101.87	24.00	102.1	142.8	293.8	2938.3	489.7						
312+19.02 A-316+47.18 A	Pvt.	428.16	24.00	39.7	55.5	114.2	1141.8	190.3						
316+47.18 A-320+84.18 A	Pvt.	437.00	24.00	40.5	56.6	116.5	1165.3	194.2						
324+21.83 A-329+47.42 A	Pvt.	525.54	24.00	48.7	68.1	140.1	1401.4	233.6						
332+39.66 A-340+58.57 A	Pvt.	818.91	24.00	75.8	106.1	218.4	2183.8	364.0						
340+58.57 A-348+58.57 A	Pvt.	800.00	24.00	74.1	103.7	213.3	2133.3	355.6						
348+58.57 A-352+00.00 A	Pvt.	341.43	24.00	31.6	44.2	91.0	910.5	151.7						
352+00.00 A-355+00.00 A	Pvt.	293.63	24.00	27.2	38.1	78.3	783.2	130.5						
301+17.15 A-304+81.91 A	Lt.	364.76							4.00	48.6	1.3	27.0	4.00	54.0
304+81.91 A-306+81.91 A	Lt.	201.95							4.00	26.9	0.7	15.0	4.00	29.9
306+81.91 A-308+15.24 A	Lt.	135.94							4.00	18.1	0.5	10.1	4.00	20.1
308+15.24 A-310+15.24 A	Lt.	201.95							4.00	26.9	0.7	15.0	4.00	29.9
310+15.24 A-311+06.43 A	Lt.	91.19							4.00	12.2	0.3	6.8	4.00	13.5
311+06.43 A-313+06.43 A	Lt.	198.05							4.00	26.4	0.7	14.7	4.00	29.3
313+06.43 A-320+80.00 A	Lt.	762.55							4.00	101.7	2.7	56.5	4.00	113.0
324+24.42 A-329+45.42 A	Lt.	515.27							4.00	67.7	2.0	38.2	4.00	76.3
332+43.42 A-338+58.57 A	Lt.	618.91							4.00	80.9	2.2	44.9	4.00	89.9
338+58.57 A-340+58.57 A	Lt.	198.05							4.00	26.4	0.7	14.7	4.00	29.3
340+58.57 A-341+78.50 A	Lt.	119.93							4.00	16.0	0.4	8.9	4.00	17.8
341+78.50 A-343+78.50 A	Lt.	201.59							4.00	26.9	0.7	14.9	4.00	29.9
343+78.50 A-348+98.00 A	Lt.	527.75							4.00	70.4	1.9	39.1	4.00	78.2
301+17.15 A-304+81.91 A	Rt.	364.76							10.00	121.6	3.2	67.5	8.20	110.8
304+81.91 A-306+81.91 A	Rt.	197.63							10.00	65.9	1.8	36.6	8.20	60.0
306+81.91 A-308+15.24 A	Rt.	130.17							10.00	43.4	1.2	24.1	8.20	39.5
308+15.24 A-310+15.24 A	Rt.	197.63							10.00	65.9	1.8	36.6	8.20	60.0
310+15.24 A-310+50.00 A	Rt.	34.76							10.00	11.6	0.3	6.4	8.20	10.6
310+50.00 A-311+06.43 A	Rt.	56.43							10.00	18.8	0.5	10.5	7.80	16.3
311+06.43 A-311+75.00 A	Rt.	68.85							10.00	23.0	0.6	12.8	7.50	19.1
311+75.00 A-312+19.02 A	Rt.	44.49							10.00	14.8	0.4	8.2	7.50	12.4
316+47.18 A-320+84.18 A	Rt.	447.37							10.00	149.1	4.0	82.8	7.90	130.9
Sub-Totals				505.2	706.8	1454.3	14,544.4	2424		1295.6	103.4	720.4		1292.8
TOTALS				505	707	1454	14,544	2424		1296	103	720		1293

LEGEND

Rt = Right Shoulder
Lt = Left Shoulder

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES
CALC. C.E.T. DATE 10-78
CHKD. J.R.S. DATE 11-78

F.H.W.A. REGION	STATE	PROJECT
5	OHIO	

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616

GRE-675-537
GREENE COUNTY

STA. TO STA.	REMARKS	LENGTH ALONG CENTROID	404: 1 1/4" Asphalt Conc. AC-20 305: 9" Port. Cem. Conc. Base 402: 1 1/4" Asphalt Conc. AC-20 310: 6" Subbase Type II 407: 1" Rock Coat 0.1 Gal./Sq. Yd.						409: Seal Coat Bit. Mat'l. 0.3 Gal./Sq. Yd. 310: Subbase Type II 409: Seal Coat Aggregate 0.0025 C.Y./Sq. Yd. Thickness as noted 301: 6" Bituminous Aggregate Base					
			Average Width	404 Volume	402 Volume	407 Volume	305 Area	310 Volume	Average Width	409 Volume	409 Volume	301 Volume	Average End Area	310 Volume
		Ft.	Ft.	C.Y.	C.Y.	Gal.	Sq. Yd.	C.Y.	Ft.	Gal.	C.Y.	C.Y.	S.F.	C.Y.
<i>Ramp A cont.</i>														
324+20A ⁺ -329+49A ⁺	Rt.	538.01							10.00	179.4	4.8	99.6	7.90	157.4
332+37A ⁺ -338+32.00A	Rt.	604.35							10.00	201.5	5.4	111.9	7.90	176.8
338+30.00A-340+58.57A	Rt. Planimeted	2350.3.F								78.3	2.1	43.5		87.0
348+58.57A-350+07.00	Rt.	145.40							12.00	58.2	1.6	32.3	9.70	52.2
350+07.00A-352+00.00A	Rt.	191.20							10.00	63.7	1.7	35.4	8.20	58.1
352+00.00A-355+00.00A	Rt.	292.57							10.00	97.5	2.6	54.2	8.20	88.9
<i>Ramp C, Speed Change</i>														
312+19.02A-313+06.43A	Povt. Planimeted	229.9.F		0.9	1.2	2.5	25.4	4.2						
313+06.43A-314+69.02A	Povt.	163.60	8.10		7.2	14.7	147.2	24.5						
314+69.02A-316+47.18A	Povt. Planimeted	3601.3.F		13.9	19.4	40.0	400.1	66.7						
312+19.02A-312+60.69A	Rt.	42.37							8.00	11.3	0.3	6.3	6.00	9.4
312+60.69A-312+75.00A	Rt.	14.61							8.00	3.9	0.1	2.2	6.00	3.2
312+75.00A-313+06.43A	Rt.	32.22							8.00	8.6	0.2	4.8	6.50	7.8
313+06.43A-314+69.02A	Rt.	168.06							8.00	44.8	1.2	24.9	6.50	40.5
333+73.99C-333+25.00C	Rt.	48.99							8.00	13.1	0.3	7.3	6.50	11.8
333+25.00C-331+90.03C	Rt.	134.97							8.00	36.0	1.0	20.0	6.00	30.0
<i>Ramp F, Speed Change</i>														
340+58.57A-341+78.50A	Povt.	119.93	18.50	8.6	12.0	24.7	246.5	41.1						
341+78.50A-343+78.50A	Povt.	197.31	14.50	11.0	15.4	31.8	317.9	53.0						
343+78.50A-347+78.57A	Povt.	393.04	7.00	10.6	14.9	30.6	305.7	50.9						
347+78.57A-348+58.57A	Povt.	78.82	2.00	0.6	0.9	1.8	17.5	2.9						
340+58.57A-341+25.00A	Rt.	66.43							8.00	17.7	0.5	9.8	6.00	14.8
341+25.00A-341+78.50A	Rt.	53.50							8.00	14.3	0.4	7.9	6.70	13.3
341+78.50A-343+78.50A	Rt.	196.54							8.00	52.4	1.4	29.1	6.70	48.8
343+78.50A-347+78.57A	Rt.	389.63							8.00	103.9	2.8	57.7	6.70	86.7
347+78.57A-348+51.07A	Rt.	71.02							8.00	18.9	0.5	10.5	6.70	17.6
348+51.07A-348+58.57A	Rt.	7.34							10.00	2.4	0.1	1.4	8.20	2.2
<i>Ramp B</i>														
334+10.00B-338+11.69B	Povt.	401.69	16.00	24.8	34.7	71.4	714.1	119.0						
338+11.69B-340+11.69B	Povt.	201.26	16.00	12.4	17.4	35.8	357.8	59.6						
340+11.69B-352+79.16B	Povt.	1283.41	16.00	79.2	110.9	228.2	2281.6	380.3						
352+79.16B-352+92.93B	Povt.	13.80	16.00	0.9	1.2	2.5	24.5	4.1						
339+85.69B-340+11.69B	Rt.	26.67							3.00	2.7	0.1	1.5	3.00	3.0
340+11.69B-352+79.16B	Rt.	1302.31							3.00	130.2	3.5	72.4	3.00	144.7
352+79.16B-352+92.93B	Rt.	13.83							3.00	1.4	0.1	0.8	3.00	1.5
334+17.00B-338+11.69B	Lt.	394.69							3.00	39.5	1.1	21.9	3.00	43.9
338+11.69B-340+11.69B	Lt.	199.76							3.00	20.0	0.5	11.1	3.00	22.2
340+11.69B-351+92.00B	Lt.	1177.53							3.00	117.8	3.1	65.4	3.00	130.8
351+92.00B-352+79.16B	Lt.	86.61							8.00	23.1	0.6	12.8	6.70	21.5
352+79.16B-352+92.93B	Lt.	13.76							8.00	3.7	0.1	2.0	6.70	3.4
<i>Ramp C</i>														
315+25.00C-318+25.00C	Povt.	293.39	16.00	18.1	25.3	52.2	521.6	86.9						
318+25.00C-322+85.81C	Povt.	465.31	16.00	28.7	40.2	82.7	827.2	137.9						
322+85.81C-331+90.03C	Povt.	904.22	16.00	55.8	78.1	160.8	1607.5	267.9						
319+67.50C-322+85.81C	Rt.	325.12							3.00	32.5	0.9	18.1	3.00	36.1
Sub-Totals				270.6	378.8	779.7	7794.6	1299		1376.8	37	764.8		1323.6
TOTALS				271	379	780	7795	1299		1377	37	765		1324

LEGEND

Lt. = Left Shoulder
Rt. = Right Shoulder

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES
CALC. C.E.T. DATE 9-78
CHKD. J.R.S. DATE 10-78

F.H.W.A. REGION	STATE	PROJECT
5	OHIO	

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GRE-675-537
GREENE COUNTY

STA. TO STA.	REMARKS	LENGTH ALONG CENTROID	404: 1 1/4" Asphalt Conc. AC-20 305: 9" Port Cem. Conc. Base 402: 1 3/4" Asphalt Conc. AC-20 310: 6" Subbase Type II 407: 70ck Coat 0.1 Gal. 13Y						409: Seal Coat Bit. Mat'l. 0.3 Gal./5Y 310: Subbase Type II 409: Seal Coat Aggregate 0.005 CY/5Y Thickness as noted 301: 6" Bituminous Aggregate Base					
			Average Width Ft.	404 Volume CY	402 Volume CY	407 Volume Gal.	305 Area 5Y	310 Volume CY	Average Width Ft.	409 Volume Gal.	409 Volume CY	301 Volume CY	Average End Area SF	310 Volume CY
<i>Ramp C cont</i>														
322+85.81C-331+90.03C	Rt	904.22						3.00	90.4	2.4	50.2	3.00	100.5	
315+25.00-318+25.00	Lt	292.46						8.00	78.0	2.1	43.3	6.70	72.6	
318+25.00C-319+75.00C	Lt	149.50						5.50	27.4	0.7	15.2	4.85	26.9	
319+75.00C-322+85.81C	Lt	310.24						3.00	31.0	0.8	17.2	3.00	34.5	
322+85.81C-330+90.03C	Lt	804.22						3.00	80.4	2.1	44.7	3.00	89.4	
330+90.03C-331+90.03C	Lt	100.00						5.50	18.3	0.5	10.2	4.85	17.9	
<i>Ramp D</i>														
337+83.02D-339+83.02D	Povt	203.42	16.00	12.6	17.6	36.2	361.6	60.3						
339+83.02D-350+61.41D	Povt	1113.01	16.00	68.7	96.2	197.9	1978.7	329.8						
350+61.41D-352+11.41D	Povt	152.83	16.00	9.4	13.2	27.2	271.7	45.3						
337+83.02D-338+83.02D	Rt	99.71							5.50	18.3	0.5	10.2	4.85	17.9
338+83.02D-339+83.02D	Rt	99.52							3.00	10.0	0.3	5.5	3.00	11.1
339+83.02D-350+61.41D	Rt	1071.90							3.00	107.2	2.9	59.5	3.00	119.1
350+61.41D-352+11.41D	Rt	148.85							6.50	32.3	0.9	17.9	5.60	30.9
337+83.02D-339+83.02D	Lt	207.48							3.00	20.7	0.6	11.5	3.00	23.1
339+83.02D-350+61.41D	Lt	1154.15							3.00	115.4	3.1	64.1	3.00	128.2
350+61.41D-351+29.50D	Lt	72.43							3.00	7.2	0.2	4.0	3.00	8.0
<i>Ramp E</i>														
323+12.00E-324+28.15E	Povt	127.54	16.00	7.9	11.0	22.7	226.7	37.8						
324+28.15E-334+26.54E	Povt	1022.89	16.00	63.2	88.4	181.8	1818.5	303.1						
334+26.54E-335+01.54E	Povt	76.68	16.00	4.7	6.6	13.6	136.3	22.7						
323+67.00E-324+28.15E	Rt	75.62							3.00	7.6	0.2	4.2	3.00	8.4
324+28.15E-334+26.54E	Rt	1063.86							3.00	106.4	2.8	59.1	3.00	118.2
334+26.54E-335+01.54E	Rt	78.67							3.00	7.9	0.2	4.4	3.00	8.7
323+02.15E-324+28.15E	Lt	134.93							5.46	24.6	0.7	13.6	4.85	24.2
324+28.15E-334+01.54E	Lt	957.08							3.00	95.7	2.6	53.2	3.00	106.3
334+01.54E-334+26.54E	Lt	24.81							3.44	2.8	0.1	1.6	3.44	3.2
334+26.54E-335+01.54E	Lt	74.27							6.94	17.2	0.4	9.5	6.05	16.6
<i>Ramp F</i>														
328+19.32F-331+00.11F	Povt	283.93	16.00	17.5	24.5	50.5	504.8	84.1						
331+00.11F-335+95.80F	Povt	495.69	16.00	30.6	42.8	88.1	881.2	146.9						
335+95.80F-338+58.57F	Povt	259.83	16.00	16.0	22.4	46.2	461.9	77.0						
338+58.57F-340+58.57F	Povt	200.00	16.00	12.3	17.3	35.6	355.6	59.3						
328+19.32F-329+19.32F	Rt	99.62							5.50	18.3	0.5	10.1	4.85	17.9
329+19.32F-331+00.11F	Rt	180.41							3.00	18.0	0.5	10.0	3.00	20.0
331+00.11F-335+95.80F	Rt	495.69							3.00	49.6	1.3	27.5	3.00	55.1
335+95.80F-338+58.57F	Rt	263.32							3.00	26.3	0.7	14.6	3.00	29.3
338+58.57F-340+58.57F	Rt	200.00							5.50	36.7	1.0	20.4	4.50	33.3
328+19.32F-331+00.11F	Lt	287.65							3.00	28.8	0.8	16.0	3.00	32.0
331+00.11F-335+95.80F	Lt	495.69							3.00	49.6	1.3	27.5	3.00	55.1
335+95.80F-338+24.80F	Lt	223.40							3.00	22.3	0.6	12.4	3.00	24.8
<i>Ramp G</i>														
344+72.18G-346+22.18G	Povt	152.57	16.00	9.4	13.2	27.1	271.2	45.2						
346+22.18G-353+26.66G	Povt	727.10	16.00	44.9	62.8	129.3	1292.6	215.4						
353+26.66G-354+01.66G	Povt	76.68	16.00	4.7	6.6	13.6	136.3	22.7						
345+50.00G-346+22.18G	Rt	76.28							3.00	7.6	0.2	4.2	3.00	8.5
346+22.18G-353+26.66G	Rt	753.97							3.00	75.4	2.0	41.9	3.00	83.8
353+26.66G-354+01.66G	Rt	78.67							3.00	7.9	0.2	4.4	3.00	8.7
344+72.18G-346+22.18G	Lt	148.96							6.5	32.3	0.9	17.9	5.6	30.9
<i>Sub-Totals</i>														
				301.9	422.6	869.8	8697.1	1449.6		1271.6	34.1	706		1365.1
TOTALS				302	423	870	8697	1450		1272	34	706		1365

LEGEND

Lt. = Left Shoulder
Rt. = Right Shoulder

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES
CALC. G.E.T. DATE 9-78
CHKD. J.R.S. DATE 10-78

F.H.W.A. REGION	STATE	PROJECT
5	OHIO	

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GRE-675-537
GREENE COUNTY

STA. TO STA.	REMARKS	LENGTH ALONG CENTROID	404: 1 1/4" Asphalt Conc. AC-20 402: 1 1/4" Asphalt Conc. AC-20 407: Tack Coat 0.1 Gal./Sq.					305: 9" Port. Cem. Conc. Base 310: G" Subbase Type II					409: Seal Coat Bit. Mat 1.0.3 Gal./Sq. 310: Subbase Type II 409: Seal Coat Aggregate 0.008 Ck./Sq. thickness as noted 301: G" Bituminous Aggregate Base					404: 1 1/4" Asphalt Conc. AC-20 402: 1 1/4" Asphalt Conc. AC-20 407: Tack Coat 0.1 Gal./Sq.					305: 9" Port. Cem. Conc. Base 310: G" Subbase Type II				
			Average Width	404 Volume	402 Volume	407 Volume	305 Area	310 Volume	Average Width	409 Volume	409 Volume	301 Volume	Average End Area	310 Volume	404 Volume	402 Volume	407 Volume	Average Width	305 Area	Average Width	310 Volume						
		Ft.	Ft.	C.Y.	C.Y.	Gal.	S.Y.	C.Y.	Ft.	Gal.	C.Y.	C.Y.	S.F.	C.Y.	C.Y.	C.Y.	Gal.	Ft.	S.Y.	Ft.	C.Y.						
<i>Ramp G (cont.)</i>																											
346+22.18	Lt.	675.39							3.00	67.5	1.8	37.5	3.00	75.0													
353+10.66	Lt.	24.81							3.88	3.2	0.1	1.8	3.63	3.3													
353+26.66	Lt.	74.23							7.38	18.2	0.5	10.1	6.23	17.1													
<i>Ramp H</i>																											
323+21.06	Rt.	100.14	16.00	6.2	8.7	17.8	178.0	29.7																			
324+21.06	Rt.	1096.14	16.00	67.7	94.7	194.9	1948.7	324.8																			
335+05.09	Rt.	382.92	16.00	23.6	33.1	68.1	680.7	113.5																			
323+21.06	Rt.	99.95							5.50	18.3	0.5	10.2	4.85	18.0													
324+21.06	Rt.	1081.76							3.00	108.2	2.9	60.1	3.00	120.2													
335+05.09	Rt.	179.74							3.00	18.0	0.5	10.0	3.00	20.0													
336+85.09	Rt.	199.47							5.50	36.6	1.0	20.3	4.85	35.8													
323+21.06	Lt.	100.31							3.00	10.0	0.3	5.6	3.00	11.1													
324+21.06	Lt.	1110.52							3.00	111.1	3.0	61.7	3.00	123.4													
335+05.09	Lt.	212.42							3.00	21.2	0.6	11.8	3.00	23.6													
<i>Reo Dayton Xenia Rd.</i>																											
14+74.50	Rt.	106.39	52.00												21.4	29.9	61.5	53.00	626.5	58.50	115.3						
15+80.89	Rt.	250.00	57.00												55.0	77.0	158.3	58.00	1611.1	63.50	294.0						
18+30.89	Rt.	100.00	52.00												20.1	28.1	57.8	53.00	588.9	58.50	108.3						
19+30.89	Rt.	911.86	52.00												183.0	256.1	526.9	53.00	5369.8	58.50	987.8						
28+42.75	Rt.	97.02	52.00												19.5	27.2	56.1	53.00	571.3	58.50	105.1						
29+39.77	Rt.	242.54	57.00												53.4	74.7	153.6	58.00	1563.0	63.50	285.2						
31+82.31	Rt.	485.19	52.00												97.4	136.2	280.3	53.00	2857.2	58.50	525.6						
41+39.64	Rt.	411.20	52.00												82.5	115.5	237.6	53.00	2421.5	58.50	445.5						
<i>Intersection Wildonna Dr</i>																											
0+26.50	Rt. Planimetered	2261 S.F.													8.7	12.2	25.1	2339 S.F.	259.9	2414 S.F.	44.7						
<i>Intersection Service Rd B.</i>																											
0+30.68	Rt. Planimetered	945 S.F.													3.6	5.1	10.5	992 S.F.	110.2	1043 S.F.	19.3						
<i>Intersection Stedman Lane</i>																											
0+46.3	Rt. Planimetered	3341 S.F.													12.9	18.0	37.1	3444 S.F.	382.7	3612 S.F.	66.9						
<i>Sub-Totals</i>																											
				97.5	136.5	280.8	2807.4	468		412.3	11.2	229.1		447.5	557.5	780	1604.8		16362.1		2997.7						
TOTALS				98	137	281	2807	468		412	11	229		448	558	780	1605		16362		2998						

LEGEND

Lt = Left Shoulder
Rt = Right Shoulder

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES
CALC. C.E.T. DATE 9-78
CHKD. J.R.S. DATE 10-78

F.H.W.A. REGION	STATE	PROJECT
5	OHIO	

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GRE-G75-5.37
GREENE COUNTY

STA. TO STA.	REMARKS	LENGTH ALONG CENTROID Ft.	404: 1 1/2" Asphalt Conc. AC-20 402: 2" Asphalt Conc. AC-20 407: Tack Coat 0.1 Gal./S.Y.					301: 8" Bit. Aggregate Base 310: 6" Subbase Type II					G12: Concrete Median 409: Seal Coat Bit. Mat'l. 0.3 Gal./S.Y. 409: Seal Coat Cover Appr. 0.008 C.Y./S.Y.					301: 8" Bit. Aggregate Base 310: Subbase, Type II thickness as noted					404: 1" Asphalt Concrete 402: 1/2" Asphalt Concrete 408: Prime Coat 0.4 Gal./S.Y.					304: 6" Aggregate Base 310: 6" Subbase, Type II				
			Average Width Ft.	404 Volume C.Y.	402 Volume C.Y.	Average Width Ft.	301 Volume C.Y.	Average Width Ft.	310 Volume C.Y.	407 Volume Gal.	G12 Area S.Y.	Average Width Ft.	409 Volume Gal.	409 Volume C.Y.	301 Volume C.Y.	Average Width Ft.	310 Volume C.Y.	404 Volume C.Y.	402 Volume C.Y.	408 Volume Gal.	Average Width Ft.	304 Volume C.Y.	Average Width Ft.	310 Volume C.Y.								
<i>Reb. Dayton Xenia Rd</i>																																
11+00.00 - 12+74.50	Part. Lt.	374.50	20.33	35.2	47.0	20.83	192.6	21.50	149.1																							
11+00.00 - 12+23.65	Part. Rt.	123.65	13.50	7.7	10.3	14.00	42.7	14.67	33.6																							
12+23.65 - 13+38.35	Part. Rt.	114.70	13.50	7.2	9.6	13.50	38.2	13.50	28.7																							
13+38.35 - 14+74.50	Part. Rt.	136.15	20.00	12.6	16.8	20.50	68.9	21.17	53.4																							
45+50.00 - 46+50.00	Part. Rt. f. Lt.	99.16	45.16	20.7	27.6	46.15	113.0	47.50																								
46+50.00 - 49+00.00	Part. Widening	250.00				7.48	46.2	8.15	37.7																							
46+50.00 - 49+00.00	Part. Surfacing	250.00	29.93	34.6	46.2				65.1 [ⓐ]																							
46+50.00 - 49+00.00	Part. Surfacing	250.00			30 [ⓑ]																											
<i>Intersection Merrick Dr</i>																																
0+14.08 - 0+53.49	Part. Planimetered	2043.9 F		9.5	12.6	2102.9 F	51.9	2180.9 F	40.4																							
<i>Concrete Median</i>																																
18+30.89 - 19+30.89		100.00	6.00							66.7	6.00	20.0	0.5	11.1	12.00	44.4																
19+30.89 - 28+42.75		911.86	8.00							810.5	6.00	1824	4.9	101.3	14.00	472.8																
28+42.75 - 29+39.77		97.02	6.00							64.7	6.00	19.4	0.5	10.8	12.00	43.1																
>Returns @ Etk. ends of median	Planimetered	13.0 S.F.								1.4																						
<i>Merrick Drive</i>																																
0+53.49 - 1+25.00	Part.	71.51	37.90														8.4	12.5	120.5	38.90	51.5	39.90	52.8									
<i>Stedman Lane</i>																																
1+23.58 - 1+75.00	Part.	51.42	22.15														3.5	5.3	50.6	23.15	22.0	24.15	23.0									
<i>Wildonia Drive</i>																																
0+76.00 - 3+77.20	Part.	301.20	24.00														22.3	33.5	321.3	25.00	139.4	26.00	145.0									
3+77.20 - 4+20.51	Part. Planimetered	1132.5 F															3.5	5.2	50.3	1179.59 F	21.8	1227.09 F	22.7									
	Resurfacing	755.5 F							8.4								2.3	3.5 [ⓑ]														
<i>Service Road B</i>																																
0+64.48 - 3+80.00	Part.	315.52	20.00														19.5	19.5 [ⓑ]	280.5	21.00	163.6											
<i>Sub-Totals</i>																																
				127.5	179.1		553.5		342.9	73.5				943.3		221.8	5.9	123.2	560.3	59.5	79.5	823.2	398.3	243.5								
<i>TOTALS</i>																																
				128	179		554		343	74				943		222	6	123	560	60	80	823	398	244								

ⓐ Variable Thickness ⓑ Thickness = 1"
 ⓐ Average Width = 23.45' ⓑ Thickness = 8"

ESTIMATED QUANTITIES UNDERDRAINS

ESTIMATED QUANTITIES
CALC. LEH DATE 2-79
CHKD. CET DATE 2-79

FHWA REGION	STATE	PROJECT	55 616
5	OHIO		

GRE-G75-5.37

Ref. No.	Station - Station	Side	605: 6" Pipe Underdrain			603 6" Conduit Type		6" Bends & Branches							Annual Guard	Other Type See Sh.	600 Seeding	Remarks		
			Shallow	Deep	Unclassified	B	F	30°	45°	90°	Tee	Cross	Wye	EA					LF	
1UD	308 + 40 - 322 + 00	RM																		
2UD	308 + 40 - 321 + 68C	L																		
3UD	319 + 75 - 330 + 68	L																		
4UD	322 + 03 - 330 + 68	RM																		
5UD	323 + 20 - 330 + 68	R																		
6UD	327 + 75 - 330 + 68	L, LM																		
7UD	330 + 78 - 333 + 18	L																		
8UD	330 + 75 - 339 + 65	LM																		
9UD	330 + 75 - 339 + 22	RM																		
10UD	330 + 82 - 338 + 50D	R																		
11UD	332 + 94 - 339 + 95	L																		
12UD	333 + 27 - 334 + 95	L																		
13UD	337 + 87D - 338 + 92 E	R																		
14UD	333 + 82E - 340 + 30 E	L																		
15UD	340 + 05 - 343 + 00	L																		
16UD	339 + 73 - 352 + 55	LM, RM																		
17UD	339 + 34 - 340 + 05	RM																		
18UD	339 + 05 - 354 + 95	R																		
19UD	340 + 42 E - 346 + 90 G	L																		
20UD	345 + 53 E - 352 + 87 CD	L																		
21UD	340 + 75 E - 352 + 95 CD	L, R																		
22UD	351 + 88 - 363 + 94	R																		
23UD	352 + 52.5 - 363 + 95	LM																		
24UD	352 + 88 - 365 + 30	L																		
25UD	353 + 30B - 370 + 50 CD	L																		
26UD	352 + 88 E - 365 + 85 CD	L, R																		
27UD	364 + 00 - 401 + 50	LM																		
28UD	364 + 06 - 375 + 45	R																		
29UD	366 + 75 - 375 + 45	RM																		
30UD	370 + 65 CD - 397 + 95 E	L																		
31UD	375 + 50 - 398 + 00	LM																		
32UD	375 + 55 - 397 + 95	R																		
33UD	398 + 05 - 409 + 95	L																		
34UD	398 + 05 - 416 + 95	RM																		
35UD	398 + 05 - 416 + 95	R																		
36UD	410 + 05 - 416 + 95	L, R																		
37UD	US 35: 1087 + 74.57 - 1095 + 45	R																		
38UD	US 35: 1091 + 02 - 1098 + 50	L																		
39UD	US 35: 1095 + 50 - 1101 + 95	R																		
40UD	US 35: 1096 + 75 - 4 + 20	LM																		
41UD	US 35: 1102 + 05 - 3 + 90	R																		
42UD	US 35: 4 + 00 - 4 + 65	L																		
43UD	6 + 31 US 35 - 310 + 32A	R																		
44UD	12 + 80 US 35 - 354 + 00 G	L, R																		
45UD	US 35: 16 + 25 - 28 + 87	RM																		
46UD	349 + 67G - 27 + 63 US 35	L																		
47UD	32 + 84 US 35 - 39 + 00 CD	L																		
48UD	US 35: 33 + 13 - 38 + 00	RM																		
49UD	US 35: 38 + 00 - 46 + 75 EB	R																		
50UD	39 + 00 CD - 43 + 00 I CD	R																		
51UD	US 35: 42 + 75 - 56 + 00 WB	LM																		
52UD	43 + 00 I CD - 45 + 60 CD	R																		
53UD	45 + 66 WB US 35 45 + 80 CD R/I	-																		
54UD	322 + 10H - 56 + 17 EB US 35	R																		
55UD	US 35: 58 + 75 WB - 73 + 60 E	LM																		
56UD	US 35: 58 + 93 EB - 66 + 95 E	R																		
57UD	US 35: 60 + 25 WB - 73 + 60 E	L																		
58UD	US 35: 60 + 25 EB - 66 + 95 E	RM																		
59UD	US 35: 67 + 05 - 73 + 55	RM																		
60UD	US 35: 67 + 05 - 73 + 55	R																		
61UD	US 35: 73 + 65 - 75 + 95	LM																		
62UD	US 35: 73 + 65 - 75 + 95	L																		
63UD	US 35: 73 + 65 - 75 + 95	RM																		
64UD	US 35: 73 + 65 - 75 + 95	R																		
Subtotal																				
			47513	13626	4030	776	1022	1	4	31	30	3	15	29		20				

Ref. No.	Station - Station	Side	605: 6" Pipe Underdrain			603 6" Conduit Type		6" Bends & Branches							Annual Guard	Other Type See Sh.	600 Seeding	Remarks		
			Shallow	Deep	Unclassified	B	F	30°	45°	90°	Tee	Cross	Wye	EA					LF	
65UD	306 + 50A - 310 + 15A	L																		Connect to 43 UD
66UD	310 + 25A - 320 + 75A	L																		
67UD	310 + 42A RI - 332 + 00 CLT																			
68UD	324 + 30A - 329 + 39A	L																		
69UD	332 + 50A - 344 + 20A	L																		
70UD	339 + 25 F - 345 + 00A	R																		
71UD	345 + 00A - 346 + 15A	R																		
72UD	345 + 75A - 348 + 50A	L																		
73UD	346 + 50A - 351 + 90A	R																		Connect to 72 UD
74UD	350 + 07B - 353 + 17B	L																		Connect to 75 UD
75UD	350 + 07B - 352 + 50B	R																		
76UD	334 + 22B - 349 + 93B	L																		Connect to 77 UD
77UD	340 + 00B - 349 + 93B	R																		
78UD	321 + 80C - 331 + 85C	L, R																		
79UD	338 + 72D - 347 + 93D	R																		
80UD	341 + 10D - 343 + 50D	L																		Connect to 79 UD
81UD	348 + 07D - 352 + 20D	R																		
82UD	323 + 10E - 333 + 75E	L																		
83UD	330 + 00E - 333 + 68E	R																		
84UD	326 + 75E - 339 + 25E	R, L																		Outlet @ 329 + 50, Connect to 70UD @ 339 + 25
85UD	349 + 80G - 352 + 25G	R																		
86UD	347 + 10G - 349 + 63G	L																		
87UD	347 + 10G - 349 + 68G	R																		Connect to 86 UD
88UD	D.X. Rd. 11 + 60 - 14 + 82	L																		
89UD	D.X. Rd. 15 + 11 - 25 + 00	L																		
90UD	D.X. Rd. 17 + 25 - 25 + 00	R																		
91UD	D.X. Rd. 25 + 00 - 36 + 70	R																		
92UD	D.X. Rd. 25 + 00 - 36 + 55	L																		
93UD	D.X. Rd. 41 + 15 - 43 + 05	L																		
94UD	D.X. Rd. 43 + 10 - 44 + 39	L																		
95UD	D.X. Rd. 44 + 39 - 44 + 50.84	L																		
96UD	308 + 69 I - G75	L																		Connect to 2 UD
97UD	308 + 69 I - G75	R																		Connect to 1 UD
98UD	4 + 25 I US 35	L																		Connect to 42 UD
99UD	3 + 69 I US 35	R																		Connect to 41 UD
100UD	6 + 63 I US 35	R																		Connect to 43 UD
101UD	7 + 15 I US																			

GENERAL SUMMARY

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GREENE COUNTY

ITEM	SHEET NUMBERS																				ITEM	GRAND TOTAL	UNIT	DESCRIPTION						
	27	28	31	55	41	42	72	22	73	79	80	103	104	105	106	117	118	119	120	122					406K					
ROADWAY																														
201																									201	Lump	Lump	Clearing & Grubbing		
202																									202	1,451	Ln.Ft.	Pipe Removed 24" & Under		
202																									202	491	Ln.Ft.	Pipe Removed Over 24"		
202																									202	Lump	Lump	Structures Removed		
202																									202	41,903	Sq.Yd.	Pavement Removed		
202																									202	372	Sq.Ft.	Walk Removed		
202																									202	1761	Ln.Ft.	Curb Removed		
202																									202	448	Ln.Ft.	Gutter Removed		
202																									202	1006	Sq.Yd.	Concrete Median Removed		
202																									202	423	Ln.Ft.	Guard Rail Removed		
202																									202	8	Each	Manhole Removed		
202																									202	12	Each	Inlet Removed		
202																									202	5	Each	Manhole Abandoned		
202																									202	6	Each	Inlet Abandoned		
202																									202	Lump	Lump	Remnants of Structures Removed		
202																									202	6862.5	Ln.Ft.	Guard Rail Removed, including Anchor Assembly		
203																									203	1436452	Cu.Yd.	Excavation not including Embankment Construction		
203																									203	1357103	Cu.Yd.	Embankment, as per plan		
203																									203	345679	Sq.Yd.	Subgrade Compaction		
203																									203	115	Hour	Gravel Rolling		
404																									404	100	Cu.Yd.	Bituminous Concrete for Maintaining Traffic		
410																									410	600	Cu.Yd.	Traffic Compacted Surface, as per plan		
604																									604	42	Each	Reference Monument, Standard		
606																									606	2	Each	Anchor Assembly, Modified as per plan		
606																									606	6812.5	Ln.Ft.	Guard Rail, Type G		
606																									606	21,531.0	Ln.Ft.	Guard Rail, Type 5		
606																									606	1012.5	Ln.Ft.	Guard Rail, Type 5, Barrier Design		
Special																									Special	55597	Special	55597	Sq.Ft.	Noise Barrier
606																									606	40	Each	Anchor Assembly, Standard Type T		
606																									606	46	Each	Anchor Assembly, Standard Type A		
606																									606	20	Each	Anchor Assembly, Barrier Design, Standard Type A		
606																									606	43	Each	Bridge Terminal Assembly, Standard Type A		
606																									606	4	Each	Bridge Terminal Assembly, Modified as per plan		
607																									607	81	Ln.Ft.	Fence, Type CL, 6 ft. High		
607																									607	19,477	Ln.Ft.	Fence, Type ST		
607																									607	16,312	Ln.Ft.	Fence, Type CL		
607																									607	1	Each	18' Gate, Type CL		
607																									607	2	Each	18' Gate, Type CL		
615																									615	Lump	Lump	Temporary Roads		
615																									615	11,605	Sq.Yd.	Temporary Pavement, Class B		
608																									608	3291	Sq.Ft.	4" Concrete Walk		
616																									616	512	M.Gal.	Water		
616																									616	62	Tons	Calcium Chloride		
622																									622	14,348	Ln.Ft.	Temporary Concrete Barrier		
656																									656	93	M.Sq.Ft.	Road Tree Clear up		
Special																									Special	12	Each	Drilled Water Well Abandoned		
202																									202	15	Each	Septic Tank Removed		
202																									202	2	Each	Privy Vault Removed		
Special																									Special	Lump	Lump	Construction of Railroad Track		
Special																									Special	1	Each	Impact Attenuation Hydro System, Model No. 209711S9S		
614																									614	3	Miles	Temporary Edge Lines, Class I		
614																									614	1	Mile	Temporary Center Lines, Class I		
621																									621	8000	Ln.Ft.	Removal of Pavement Marking Lines		
Special																									Special	200	Sq.Ft.	Replacement Signs		
Special																									Special	200	Each	Replacement Drums		
EROSION CONTROL																														
601																									601	213	Cu.Yd.	Rock Channel Protection, Type A with Bedding		
601																									601	1857	Cu.Yd.	Rock Channel Protection, Type B with Bedding		
601																									601	6	Cu.Yd.	Rock Channel Protection as per plan		
601																									601	7637	Sq.Yd.	Rip Rap using a Reinforced Concrete Slab		
601																									601	50	Cu.Yd.	Rock Channel Protection, Type C Without Bedding		
601																									601	370	Ln.Ft.	Paved Gutter, Standard Type 2		
601																									601	62	Cu.Yd.	Rock Channel Protection, Type C With Bedding		
659																									659	876,960	Sq.Yd.	Seeding and Mulching		
659																									659	120	Ton	Commercial Fertilizer		
659																									659	407	Ton	Agricultural Liming, As Per Plan		
660																									660	20,000	Sq.Yd.	Seeding		
660																									660	1064	Sq.Yd.	Reinforced Seeding, Standard		
667																									667	6,054	Sq.Yd.	Seeding and Jute Matting		
Special																									Special	857	Sq.Yd.	Seeding & Nylon Fiber Matting		
207																									207	176,000	Sq.Yd.	Temporary Seeding and Mulching		
207																									207	1400	Sq.Yd.	Temporary Seeding and Mulching		
207																									207	8580	Ln.Ft.	Temporary Gully Drains		
207																									207	1500	Cu.Yd.	Temporary Berches, Dikes, Dams and Sediment Basins		
659																									659	44,000	Sq.Yd.	Repair Seeding and Mulching		
659																									659	4000	M.Sq.Ft.	Mowing		
207																									207	8,000	Ln.	Straw or Hay Bales		

GENERAL SUMMARY

FED. RD. DIVISION	STATE	PROJECT
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G.P.E. - 675 - 5.37
GREENE COUNTY

ITEM	SHEET NUMBERS													ITEM	GRAND TOTAL	UNIT	DESCRIPTION	
	27	28	55	72	79	103	104	117	120	122								
																		DRAINAGE
G02																		G02 111.0 Cu.Yd. Masonry
G03				18.7	12.5	74.2	11	3.8	0.5	0.2								G03 67 Lin.Ft. Conduit Type A; 21" - 706.02 or 706.03; or 24" - 707.05
G03						249		67										G03 249 Lin.Ft. Conduit Type A; 30" - 706.02 1250 D-Load; or 36" - 707.05
G03				377														G03 377 Lin.Ft. Conduit Type A; 42" - 706.02; or 48" - 707.05
G03				654				62										G03 62 Lin.Ft. 48" Conduit Type A - 706.02 3000 D-Load under railroad as per plan
G03					297													G03 654 Lin.Ft. Conduit Type A; 48" - 706.02; or 54" - 707.05
G03					347													G03 297 Lin.Ft. Conduit Type A; 54" - 706.02; or 66" - 707.07
G03																		G03 347 Lin.Ft. Conduit Type A; 66" - 706.02 2000 D-Load; or 72" - 707.07
G03						251												G03 251 Lin.Ft. 72" Conduit Type A - 706.02
G03						312												G03 312 Lin.Ft. 72" Conduit Type A - 706.02 3000 D-Load under railroad as per plan
G03						30												G03 30 Lin.Ft. 71"x91" Conduit Type A - 707.05 (0.138")
G03				334														G03 334 Lin.Ft. Conduit Type A; 78" - 706.02 1750 D-Load; or 102" - 707.07 (0.109")
G03						394												G03 394 Lin.Ft. Conduit Type A; 84" - 706.02 2250 D-Load; or 96" - 707.07
G03						169												G03 169 Lin.Ft. Conduit Type A; 84" - 706.02; or 102" - 707.07
G03						485												G03 169 Lin.Ft. Conduit Type A; 84" - 706.02 2750 D-Load; or 108" - 707.07 (0.138")
G03						169												G03 485 Lin.Ft. Conduit Type A; 84" - 706.02 1250 D-Load; or 114" - 707.07
G03						278												G03 169 Lin.Ft. Conduit Type A; 84" - 706.02 3000 D-Load; or 114" - 707.07 (0.168")
G03						278												G03 278 Lin.Ft. Conduit Type A; 84" - 706.02 3000 D-Load; or 114" - 707.07 (0.168")
G03				1017														G03 1017 Lin.Ft. 6" Conduit Type B
G03	400																	G03 400 Lin.Ft. 8" Conduit Type B
G03	400																	G03 400 Lin.Ft. 10" Conduit Type B
G03						25		777										G03 802 Lin.Ft. 12" Conduit Type B
G03				78	280	213		773		52								G03 3601 Lin.Ft. 15" Conduit Type B
G03				129	233	264		188										G03 814 Lin.Ft. 18" Conduit Type B
G03						116		125										G03 241 Lin.Ft. 21" Conduit Type B
G03						302		547										G03 849 Lin.Ft. 24" Conduit Type B
G03						120												G03 120 Lin.Ft. 30" Conduit Type B
G03						109												G03 109 Lin.Ft. 48" Conduit Type B, 706.02 or 707.13
G03						281												G03 281 Lin.Ft. 48" Conduit Type B, 706.02 1750 D-Load or 707.13
G03	350							10										G03 360 Lin.Ft. 6" Conduit Type C
G03	250							113										G03 363 Lin.Ft. 8" Conduit Type C
G03						291		228										G03 425 Lin.Ft. 12" Conduit Type C
G03						80	144											G03 425 Lin.Ft. 12" Conduit Type C
G03						56	32											G03 658 Lin.Ft. 15" Conduit Type C
G03				344		250												G03 266 Lin.Ft. 18" Conduit Type C
G03				16		117												G03 117 Lin.Ft. 21" Conduit Type C
G03						86		322										G03 408 Lin.Ft. 24" Conduit Type C
G03								48										G03 48 Lin.Ft. 27" Conduit Type C
G03						42												G03 42 Lin.Ft. 30" Conduit Type C
G03						249												G03 249 Lin.Ft. 42" Conduit Type C 706.02, or 707.13
G03						196												G03 196 Lin.Ft. 48" Conduit Type C 706.02 or 707.13
G03						268												G03 268 Lin.Ft. 54" Conduit Type C 706.02 or 707.14
G03						217												G03 217 Lin.Ft. 60" Conduit Type C 706.02 or 707.14
G03						40												G03 40 Lin.Ft. 60" Conduit Type C 706.02 or 707.14, Radius Pipe, as per plan
G03																		G03 302 Lin.Ft. 12" Conduit Type D
G03																		G03 99 Lin.Ft. 15" Conduit Type D
G03							99											G03 99 Lin.Ft. 15" Conduit Type D
G03																		G03 46 Lin.Ft. 18" Conduit Type D
G03																		G03 110 Lin.Ft. Conduit Type D; 54" - 706.02; or 60" - 707.01
G03	250																	G03 250 Lin.Ft. 6" Conduit Type E
G03	250																	G03 250 Lin.Ft. 8" Conduit Type E
G03	50			1374														G03 1424 Lin.Ft. 6" Conduit Type F
G03	50																	G03 50 Lin.Ft. 8" Conduit Type F
G03					47													G03 144 Lin.Ft. 12" Conduit Type F
G03						316	102	106										G03 530 Lin.Ft. 12" Conduit Type F, 707.05
G03						479												G03 511 Lin.Ft. 15" Conduit Type F, 707.05
G03						56												G03 56 Lin.Ft. 18" Conduit Type F, 707.05
G04																		G04 13 Ea. Standard No. 2-2-B Catch Basin
G04																		G04 4 Ea. Standard No. 3 Catch Basin
G04																		G04 18 Ea. Standard No. 3A Catch Basin
G04																		G04 8 Ea. Standard No. 4 Catch Basin
G04																		G04 3 Ea. Standard No. 4A Catch Basin
G04																		G04 17 Ea. Standard No. 5 Catch Basin
G04																		G04 4 Ea. Standard No. 5 Catch Basin with Type B Grate
G04																		G04 1 Ea. Standard No. 5A Catch Basin
G04																		G04 5 Ea. Standard No. 5A Catch Basin with Type B Grate
G04																		G04 11 Ea. Standard No. 6 Catch Basin
G04																		G04 10 Ea. Standard No. 8 Catch Basin without apron
G04																		G04 14 Ea. Standard No. 8 Catch Basin
G04																		G04 10 Ea. Standard No. 7-3B Inlet
G04																		G04 6 Ea. Standard No. 1 Manhole
G04																		G04 2 Ea. Standard No. 3 Manhole
G04																		G04 1 Ea. Standard No. 5 Manhole
G04	2																	G04 3 Ea. Inspection Well, Standard

GENERAL SUMMARY

FED. RD. DIVISION	STATE	PROJECT
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GREENE COUNTY

ITEM	SHEET NUMBERS															SANITARY SEWER PARTICIPATION			ITEM	GRAND TOTAL	UNIT	DESCRIPTION		
	27	28	55	72	73	79	103	104	117	120	122	372	365	100% GREENE COUNTY	18.48% PROJECT 81.52% GREENE COUNTY	100% PROJECT								
605																		610	610	Lin.Ft.	Aggregate Drains			
605	30																		30	30	Lin.Ft.	Aggregate Drains for Springs		
605			55860																55860	55860	Lin.Ft.	6" Shallow Pipe Underdrains		
605			1188																1188	1188	Lin.Ft.	6" Shallow Pipe Underdrains, 707.01 Type III, 707.12 Type III or 707.15		
605			23801																23801	23801	Lin.Ft.	6" Deep Pipe Underdrains		
605			170																170	170	Lin.Ft.	6" Deep Pipe Underdrains, 707.01 Type III, 707.12 Type III or 707.15		
605	100		5798																5798	5798	Lin.Ft.	6" Unclassified Pipe Underdrains		
605		3600																	100	100	Lin.Ft.	6" Unclassified Pipe Underdrains, 707.01 Type III or 707.12 Type III or 707.15 as per plan		
605																			3600	3600	Lin.Ft.	6" Unclassified Pipe Underdrains, 707.01 Type III or 707.12 Type III		
SANITARY SEWER - TYPE CODE 4060																								
202																					LUMP	Sanitary Lift Station removed		
603																					833	833	Lin.Ft.	8" Conduit Type B, 706.01, 706.02, or 706.08 with 706.11 or 706.12 Joints
603																					18	18	Lin.Ft.	8" Conduit Type C, 706.01, 706.02, or 706.08 with 706.11 or 706.12 Joints
603																					18	18	Lin.Ft.	8" Conduit Type C, 706.01, Class 3, 706.02, or 706.08 EB with 706.11 or 706.12 Joints
603																					398	398	Lin.Ft.	10" Conduit Type C, 706.01, 706.02, or 706.08 with 706.11 or 706.12 Joints
603																					298	298	Lin.Ft.	12" Conduit Type B, 706.02 2500 D-Load with 706.11 Joints
603																					53	53	Lin.Ft.	12" Conduit Type B, 706.02 3000 D-Load with 706.11 Joints
603																					75	75	Lin.Ft.	12" Conduit Type B, 706.02 3000 D-Load with 706.11 Joints, Bore and Jack
603																					383	383	Lin.Ft.	12" Conduit Type C, 706.01, 706.02, or 706.08 with 706.11 or 706.12 Joints
603																					599	599	Lin.Ft.	12" Conduit Type C, 706.01 Class 3, 706.02, or 706.08 EB with 706.11 or 706.12 Joints
603																					370	370	Lin.Ft.	12" Conduit Type C, 706.02 with 706.11 Joints
603																					100	100	Lin.Ft.	12" Conduit Type C, 706.02 with 706.11 Joints, Bore & Jack
603																					918	918	Lin.Ft.	12" Conduit Type C, 706.02 2250 D-Load with 706.11 Joints
603																					272	272	Lin.Ft.	12" Conduit Type C, 706.02 2500 D-Load with 706.11 Joints
603																					320	320	Lin.Ft.	15" Conduit Type B, 706.02 2500 D-Load with 706.11 Joints
603																					130	130	Lin.Ft.	15" Conduit Type B, 706.02 2500 D-Load with 706.11 Joints, Bore and Jack
604																					14	14	Eq.	Standard No. 3 Manhole with 706.11 Joints
604																					3	3	Eq.	Standard No. 3 Manhole with Drop Pipe and 706.11 Joints
604																					2	2	Eq.	Standard No. 3 Manhole with 706.11 Joints & Watertight Frame & Cover
604																					2	2	Eq.	Manhole Reconstructed to Grade with 706.11 Joints
604																					3	3	Eq.	Manhole Adjusted to Grade
511																					15.9	15.9	cu.yd.	Class C Concrete for Encasement
Special																								
603	100																				100	100	Lin.Ft.	6" Conduit, Type B, 706.01, 706.02, or 706.08 with 706.11 or 706.12 joints
603	100																				100	100	Lin.Ft.	6" Conduit Type C, 706.01, 706.02 or 706.08 with 706.11 or 706.12 Joints
BUILDING REMOVALS																								
202																					202	Lump	Lump	Parcel No. 306 WL-1, Removal of two concrete silos, remains of concrete block milkhouse with foundation, ruins of frame shed, ruins of 1-story frame residence, ruins of 2-story frame residence with foundation, and one metal corn crib.
202																					202	Lump	Lump	Parcel No. 315 WL, Removal of 1-story brick over concrete block commercial garage, 500 gallon underground oil waste tank.
202																					202	Lump	Lump	Parcel No. 334 WL, Removal of one frame picnic house and barbeque pit
202																					202	Lump	Lump	Parcel No. 335 WD, Removal of one, 1-story concrete block building with full basement and concrete retaining wall
202																					202	Lump	Lump	Parcel No. 342 WL, WD, Removal of one, 1 story frame and concrete block shed and one frame shed

CENTERLINE TIES

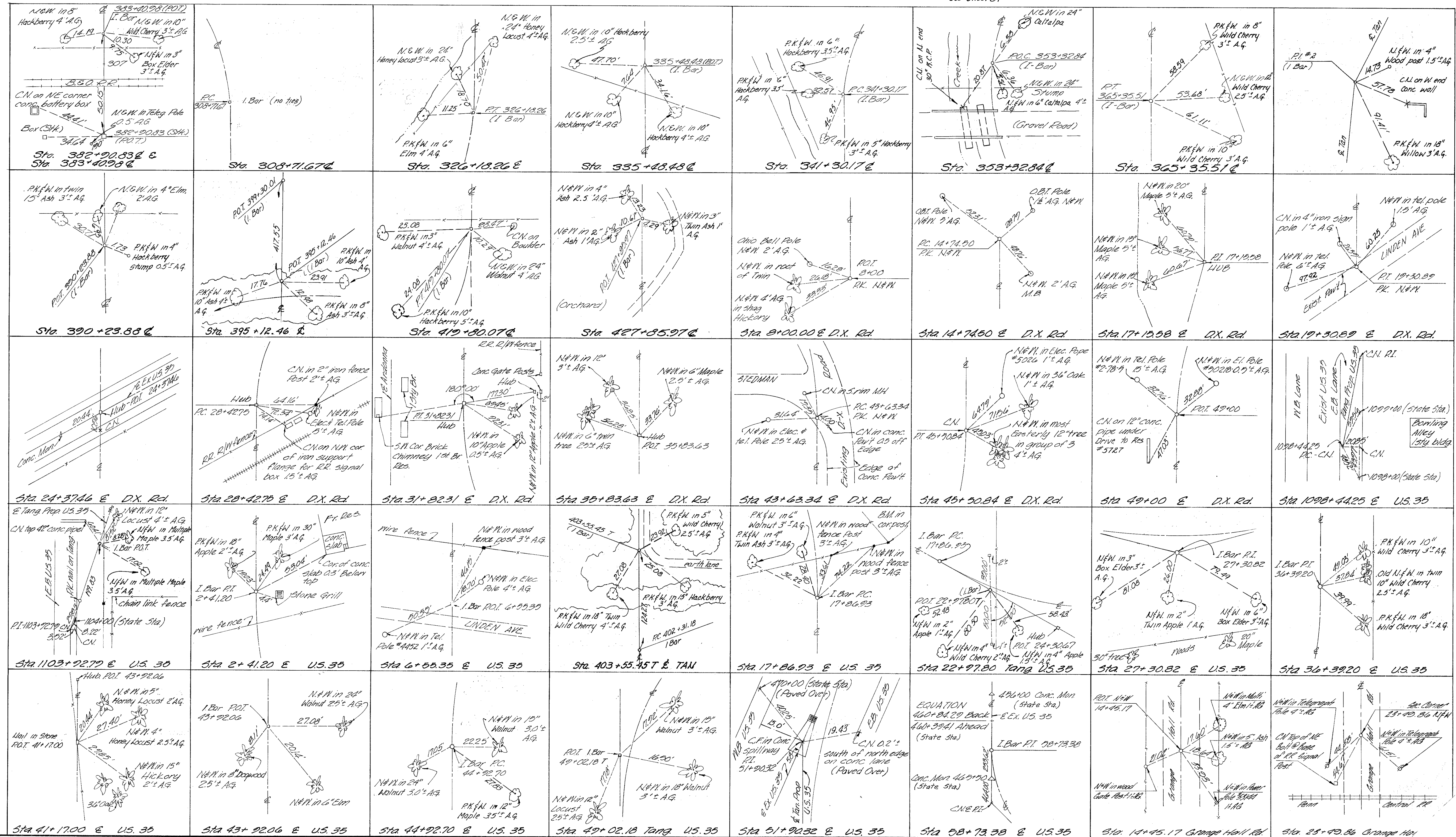
FED. RD. DIVISION	STATE	PROJECT	60
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GRE-675-5:37
GREENE COUNTY

NOTE

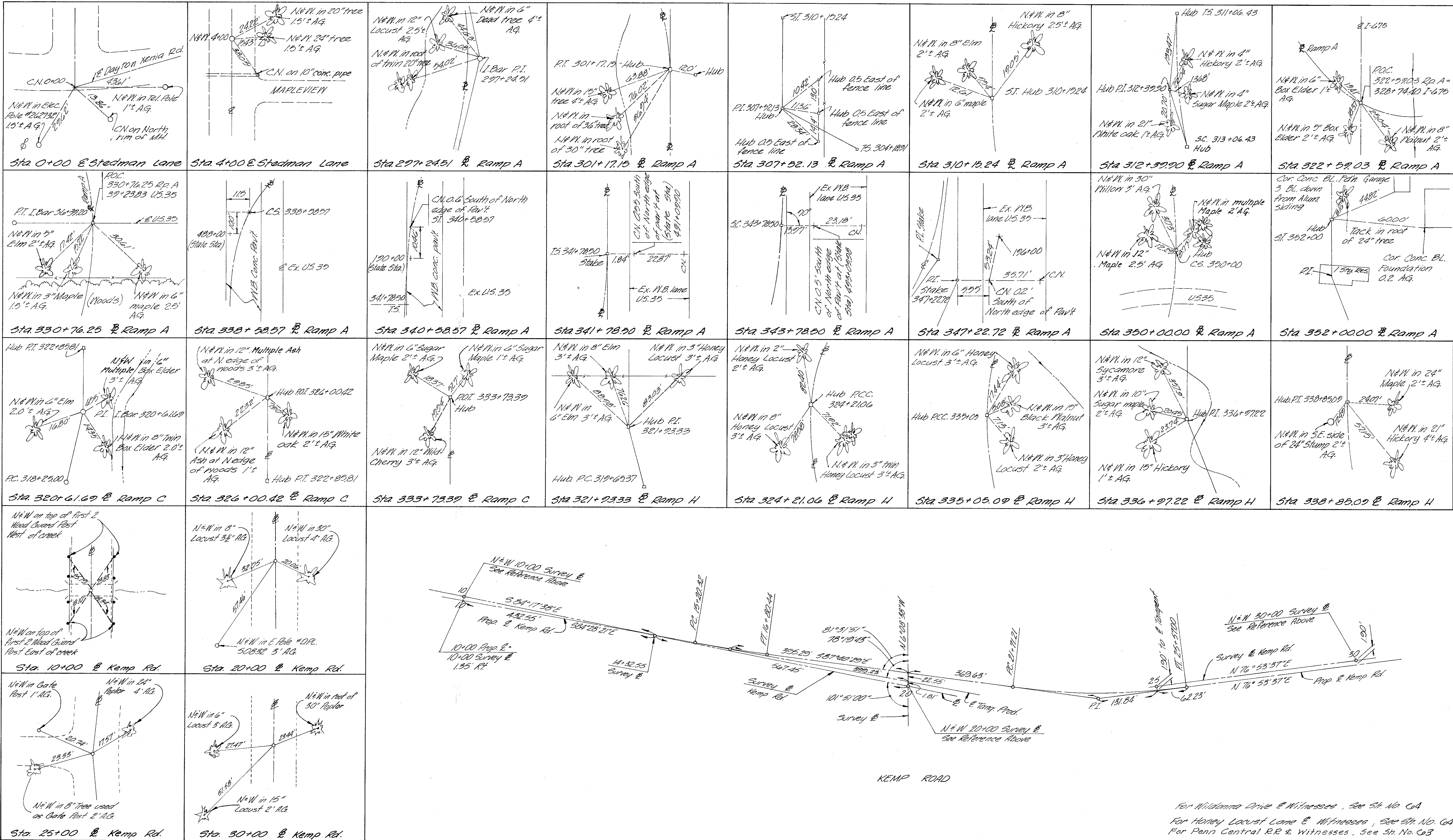
For additional Centerline, Mainline Ties see Sheet 64

For Penn Central RR & Witnesses See Sh. No. 63
For Linden Ave & Witnesses See Sh. No. 64
For Honey Locust Lane & Witnesses See Sh. No. 64



CENTERLINE TIES

G.R.E-675-537
GREENE COUNTY



For Wildanna Drive & Witnesses, See Sh. No. C4
For Honey Locust Lane & Witnesses, See Sh. No. C4
For Penn Central RR & Witnesses, See Sh. No. C3

CURVE DATA

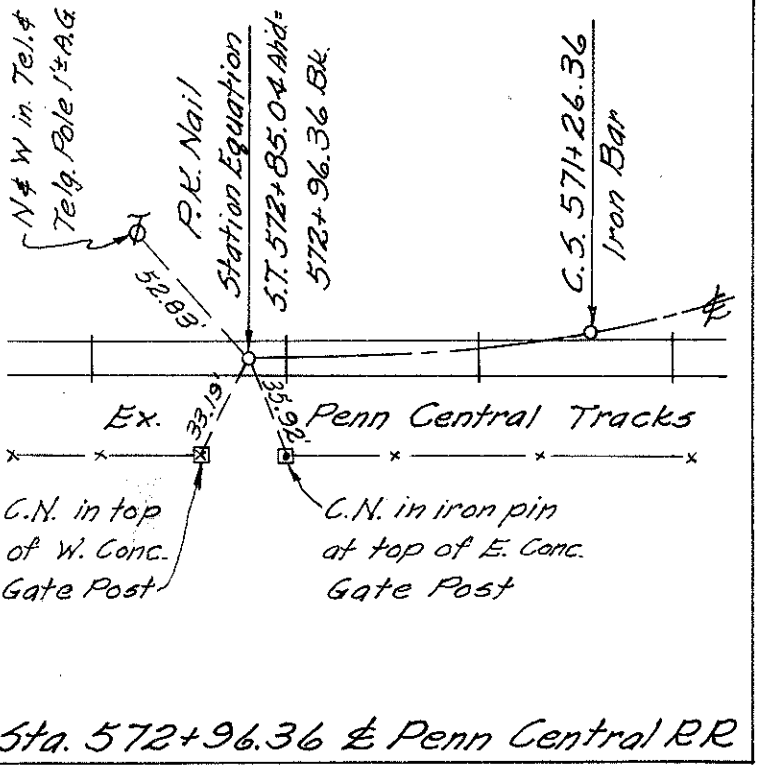
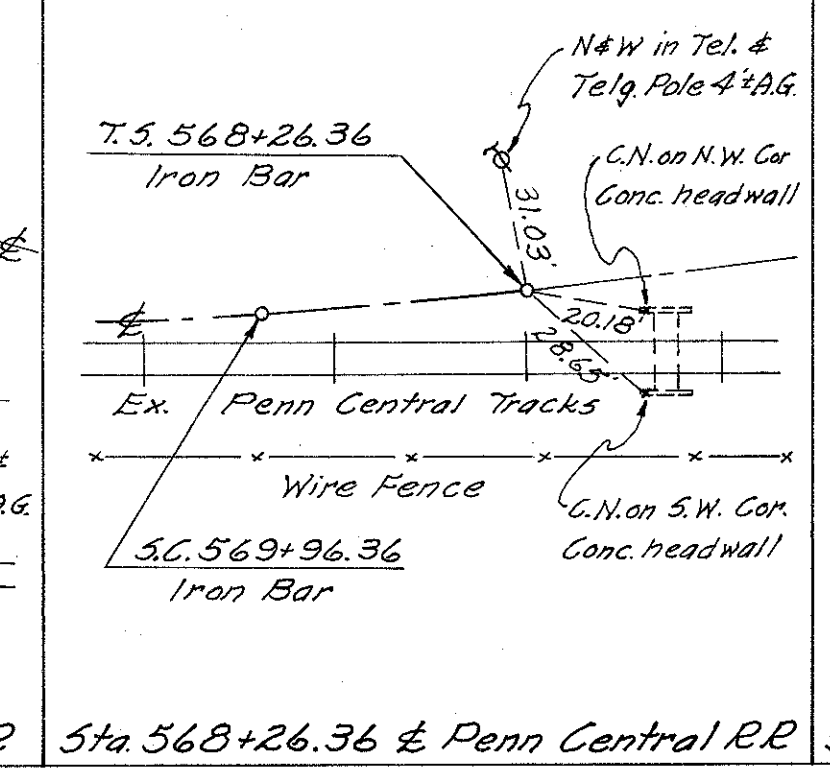
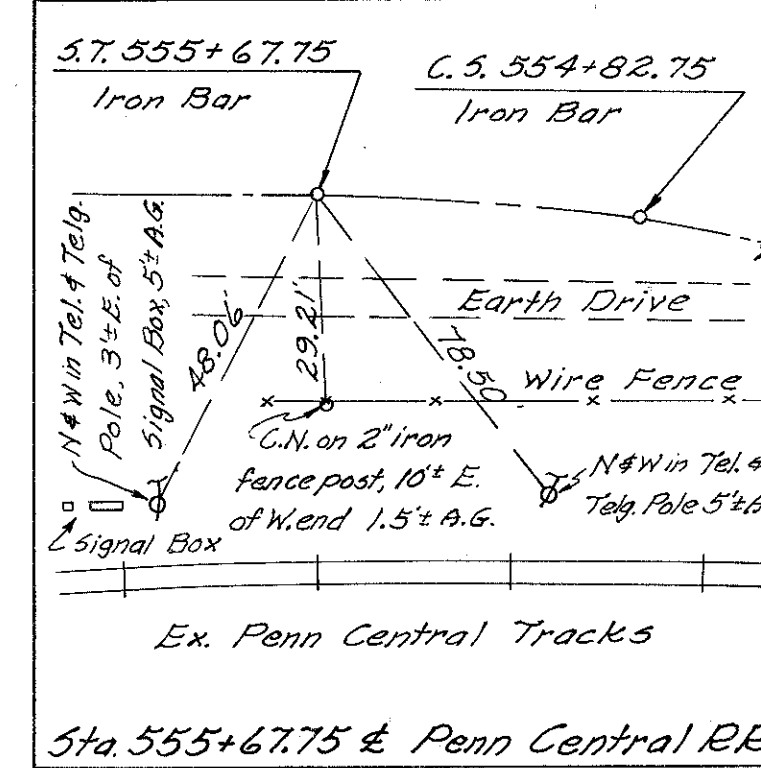
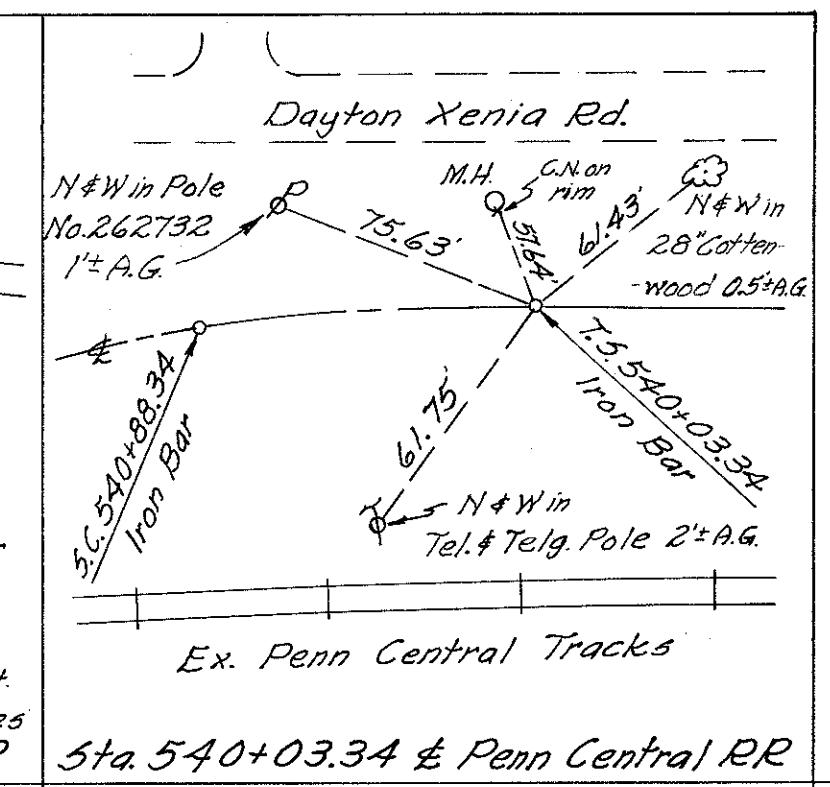
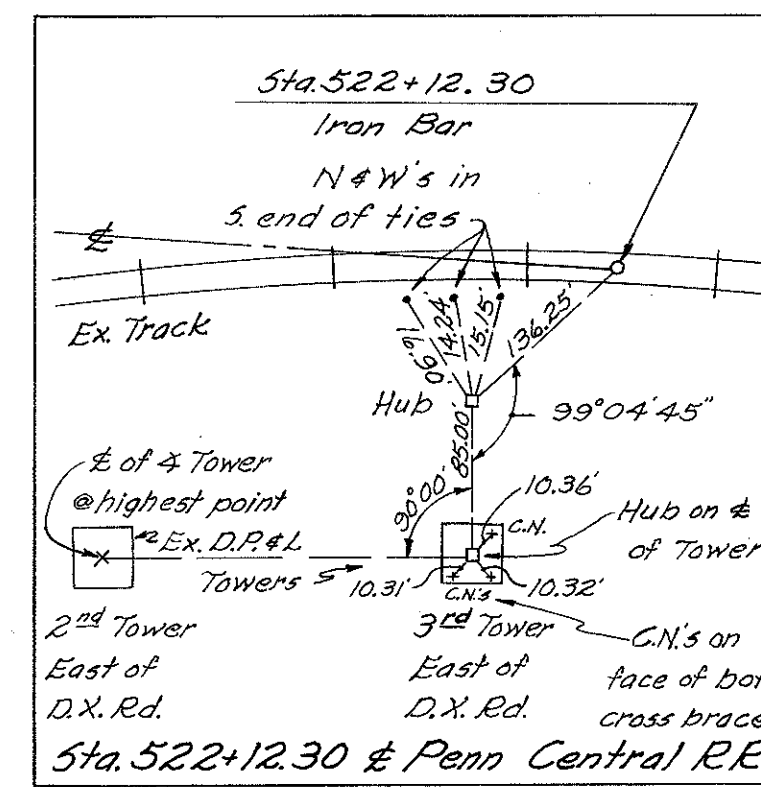
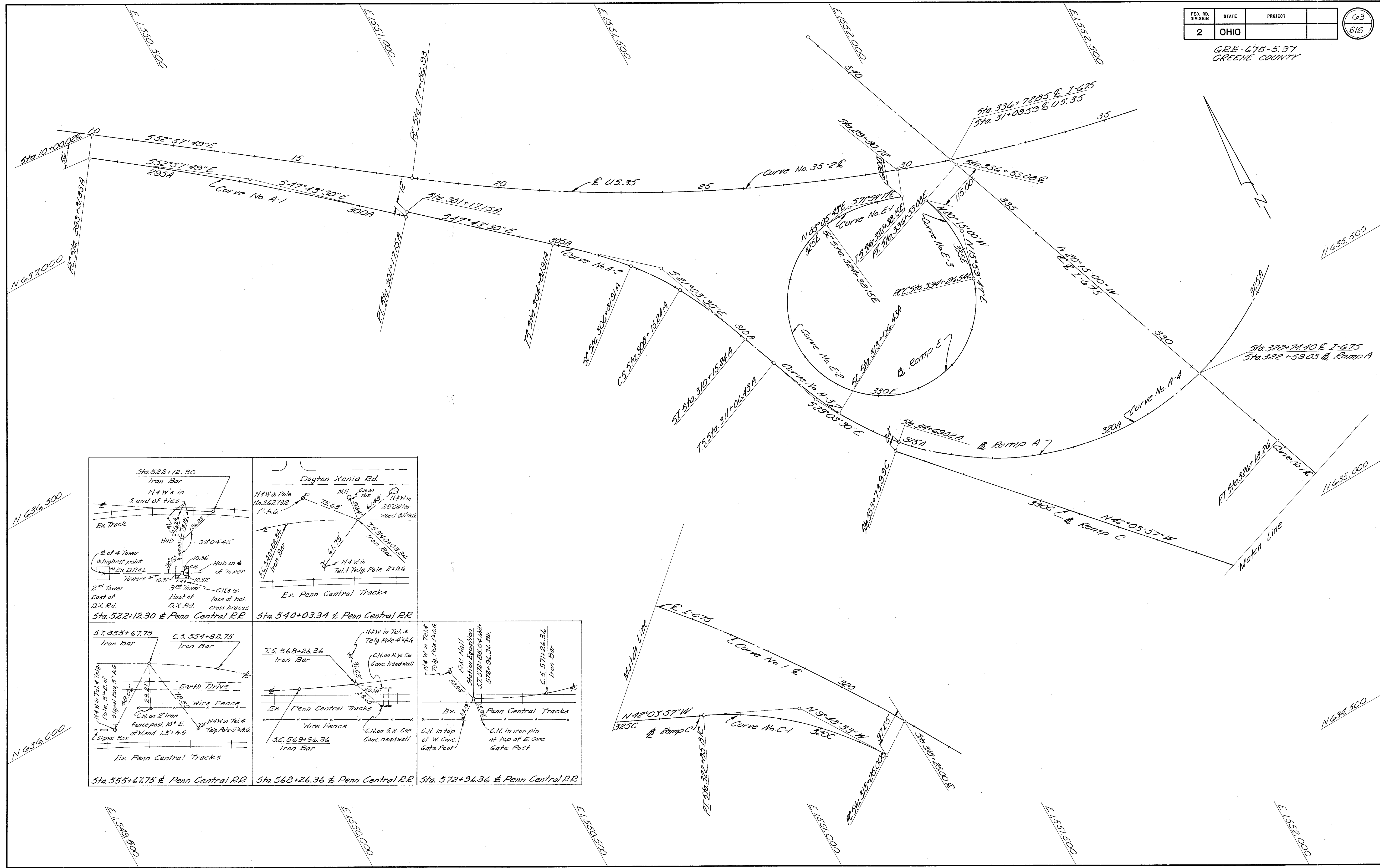
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	GRE-675-537



GREENE COUNTY GRE-675-537

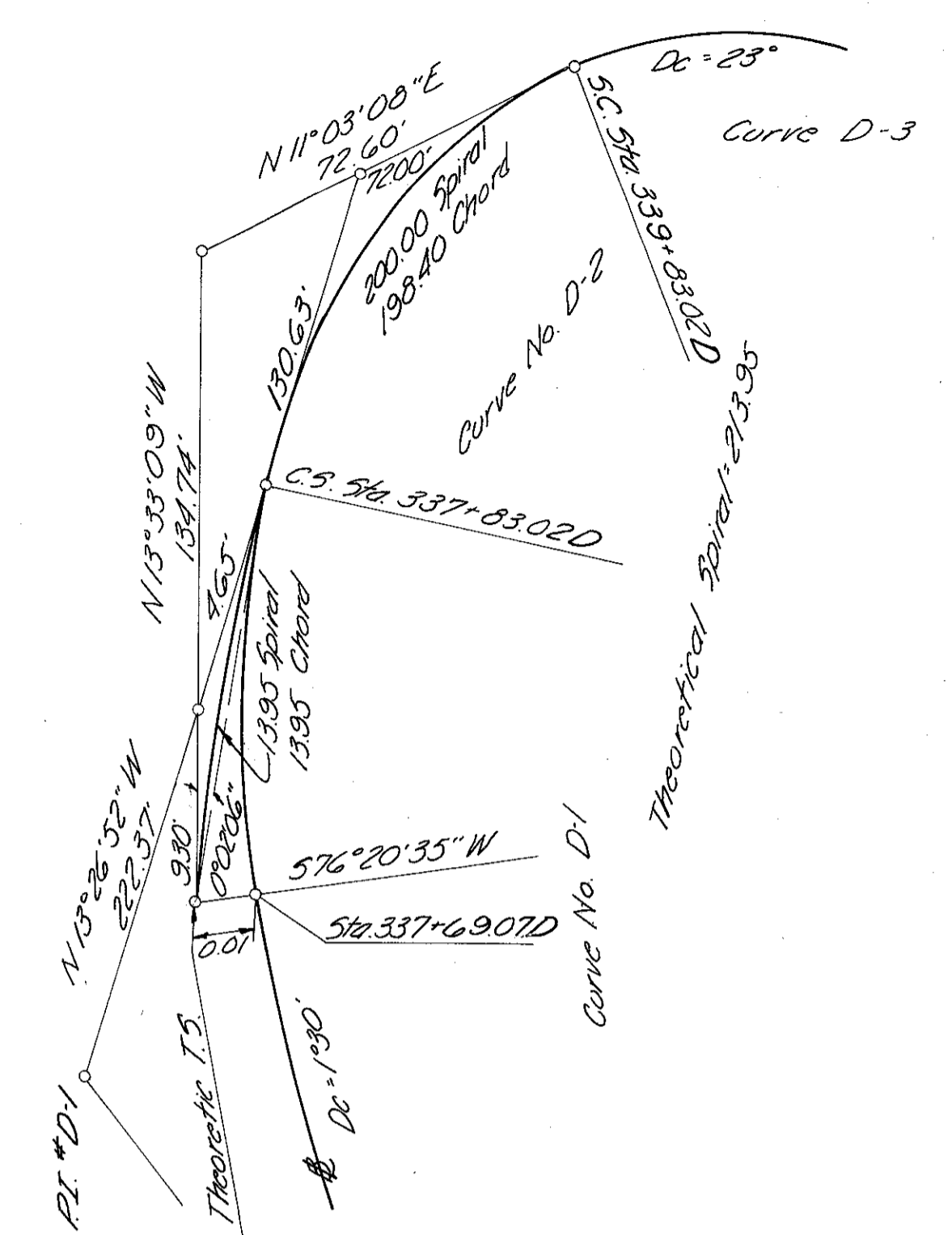
CURVE NO.	Δ	Dc	R	Ls	θs	T or Ts	Lc	E or Es	PI Station	P.I. Co-ordinates		P.C. or T.S. Station	P.C. or T.S. Co-ordinates		S.C. Station	S.C. Co-ordinates		C.S. Station	C.S. Co-ordinates		P.T. or S.T. Station	P.T. or S.T. Co-ordinates		Remarks	
										North	East		North	East		North	East		North	East		North	East		North
1 E	25°37'00"	1°26'00"	3906.53			888.14	1746.59	29.60	317+59.81	634333.38	1552746.47	308+71.67	633449.13	1552663.40							326+18.26	635166.62	1552439.07		
2 E	30°24'00"	1°15'00"	4583.66			1231.05	2405.33	162.44	353+61.22	637740.04	1551489.69	341+30.17	636535.08	1551915.77							365+35.51	635953.07	1551639.57		
3 E	15°07'00"	0°45'00"	7639.44			878.28	1748.89	50.32	411+09.46	648460.05	1552479.42	402+31.18	642594.63	1552329.67							419+80.07	644396.88	1552428.86		
35-1 E	15°59'10"	1°28'00"	3906.53			548.54	1089.96	38.33	1103+92.79	638021.96	1549232.95	1098+44.25	638218.99	1548721.01							2+41.20	637691.56	1549670.82		
35-2 E	27°10'00"	1°28'00"	3906.53			943.89	1852.27	112.41	27+30.82	636192.00	1551658.17	17+86.93	636740.53	1550904.71							36+39.20	636030.21	1552583.09		
35-3 E	20°15'00"	1°28'00"	3906.53			697.62	1380.68	61.80	51+90.32	635764.34	1551116.25	44+92.70	635883.92	1553128.95							58+73.98	635414.27	1551719.67		
35-3 E.B	20°15'00"	1°28'00"	3906.53			697.62	1380.68	61.80	51+66.52	635748.71	1554089.37	44+68.90	635883.92	1553102.08							58+49.59	635398.64	1554692.80		
35-3 W.B	20°15'00"	1°28'00"	3906.53			697.62	1380.68	61.80	52+14.11	635779.96	1554143.12	45+16.49	635883.92	1553485.82							58+97.18	635474.54	1554746.54		
A-1	5°14'19"	0°40'00"	8594.37			393.18	785.81	8.99	207+24.51	636952.98	1550556.29	293+31.33	637189.80	1550242.83							301+17.15	636628.49	1550847.61		
A-2	26°39'59"	8°00'00"	716.20	200.00	8°00'00"	270.23	133.33	22.23	307+52.13	636270.21	1551325.52	304+81.91	636451.99	1551125.58	306+81.91	636310.84	1551267.02	308+15.24	636200.98	1551342.22	310+15.24	636018.00	1551422.62		
A-3	8°00'00"			200.00	8°00'00"							311+06.43	635932.94	1551455.39	313+06.43	635749.99	1551835.79								
A-4	204°10'17"	8°00'00"	716.20			2552.14						313+06.43	635749.99	1551535.79							338+58.57	636671.56	1552590.55	Δ > 180°	
A-5	8°00'00"			200.00	8°00'00"													338+58.57	636671.56	1552590.55	340+58.57	636775.78	1552420.05		
A-6	53°23'52"	6°30'00"	881.47	200.00	6°30'00"	544.22	621.50	107.31	347+22.72	637095.43	1551837.89	341+78.50	636833.50	1552314.93	343+78.50	636936.26	1552113.48	350+00.00	637437.72	1551793.43	352+00.00	637634.57	1551763.73		
B-1	9°00'00"			200.00	9°00'00"							338+11.69	637243.10	1550406.21	340+11.69	637195.45	1550574.50								
B-2	114°04'22"	9°00'00"	636.62			981.68	1267.48	533.41	340+93.36	636695.83	1551462.24	340+11.69	637195.45	1550574.50							352+79.16	637676.85	1551495.60		
B-3	7°30'17"	1°30'00"	3819.72			250.52	500.32	8.21	355+29.68	637926.82	1551506.66	352+79.16	637676.85	1551495.60							357+79.48	638176.39	1551484.94		
C-1	32°15'24"	7°00'00"	818.51			236.69	460.81	33.54	320+61.69	634618.38	1552409.97	318+25.00	634385.15	1552540.29							322+85.81	634794.09	1552341.39		
D-1	6°48'08"	1°30'00"	3819.72			227.01	453.49	6.74	335+56.55	636073.91	1552187.49	333+29.54	635860.94	1552266.06							337+83.02	636294.70	1552134.70		
D-2	21°30'00"			200.00	21°30'00"										339+83.02	636492.41	1552118.12	337+83.02	636294.70	1552134.70					
D-3	248°01'41"	23°00'00"	249.11			1078.38						339+83.02	636492.41	1552118.12							350+61.41	636200.05	1552409.80	Δ > 180°	
D-4	20°15'00"			150.00	20°15'00"										352+11.41	636204.18	1552260.67	350+61.41	636200.05	1552409.80					
D-5	9°21'22"	4°00'00"	1432.39			117.21	233.90	4.79	353+28.62	636223.18	1552145.01	352+11.41	636204.18	1552260.67							354+45.31	636260.73	1552033.98		
E-1	25°00'00"			200.00	25°00'00"							322+38.15	636132.06	1551928.85	324+38.15	636165.73	1551733.41								
E-2	247°05'56"	25°00'00"	229.18			988.40						324+38.15	636165.73	1551733.41							334+26.54	636875.06	1551981.27	Δ > 180°	
E-3	36°14'47"	16°00'00"	368.10			117.21	226.54	18.69	335+43.75	635987.72	1552013.57	334+26.54	635875.06	1551981.27							336+83.08	636007.68	1551973.01		
F-1	34°22'16"	8°00'00"	716.20			221.50	429.64	33.47	328+91.97	636015.67	1553295.98	326+70.47	635962.12	1553510.91							331+00.11	636181.20	1553448.81		
F-2	21°01'19"	8°00'00"	716.20			132.88	262.77	12.22	337+28.68	636650.95	1552731.16	335+95.80	636551.65	1552819.45							338+58.57	636711.98	1552613.12		
G-1	37°29'17"	16°00'00"	368.10			121.52	234.30	20.06	354+48.17	636630.60	1551244.76	353+26.66	636742.83	1551193.16							355+60.96	636569.91	1551350.03		
G-2	162°01'49"	23°00'00"	249.11			1575.51	704.48	1345.98	361+37.69	638197.90	1550594.01	346+22.18	637000.20	1551617.61							353+26.66	636742.83	1551193.16		
G-3	15°22'30"			150.00	15°22'30"										346+22.18	637000.20	1551617.61	344+72.18	636869.13	1551629.13					
G-4	3°21'52"	1°30'00"	3819.72			112.18	224.30	1.65	343+60.06	636768.22	1551731.46	342+47.88	636650.01	1551767.57							344+72.18	636869.13	1551629.13		
H-1	4°33'25"	1°00'00"	5729.96			227.97	455.70	4.53	321+93.33	634776.56	1552647.95	319+65.37	634552.64	1552289.58							324+21.06	635003.23	1552623.06		
H-2	56°43'19"	8°00'00"	716.20			676.95	1084.03	268.89	330+97.41	635675.73	1552550.99	324+21.06	635003.23	1552623.06							335+05.09	635786.15	1553218.26		
H-3	20°34'00"	5°30'00"	1041.74			192.14	380.00	17.57	336+97.22	635817.51	1553407.82	335+05.09	635786.15	15533218.26							338+85.09	635779.19	1553596.10		
W-1	6°40'33"	3°00'00"	1909.86			111.39	222.53	3.25	361+81.14	637582.44	1551563.10	360+69.75	637478.44	1551586.02							352+92.27	637693.97	1551553.00		
W-2	20°22'07"	3°00'00"	1009.86			337.37	667.84	29.57	361+09.24	638504.80	1551455.03	357+71.87	638168.82	1551485.62							364+39.72	638530.92	1551541.41		
W-3	5°01'02"	0°30'00"	1459.16			502.04	1003.45	10.99	370+91.76	639461.23	1551708.34	365+89.72	638975.92	1551579.81							375+93.16	639055.92	1551793.94		
X-1	3°12'52"	0°42'28"	7405.58			207.79	415.46	2.91	18+89.95	636758.19	1551031.91	18+82.16	636879.16	1550262.97							20+97.62	636646.88	1551207.37		
X-2	1°40'53"	1°29'49"	3827.53			56.17	112.33	0.41	36+95.37	636098.42	1552656.97	36+39.20	636108.04	1552601.63							37+51.53	636090.42	1552712.56		
X-3	3°08'10"	1°28'00"	3906.53			104.10	208.16	1.39	40+85.69	636042.82	1553043.31	39+81.69	636057.65	1552940.27							41+89.73	636022.53	1553146.41		
X-4	10°22'06"	4°00'00"	1432.39			130.80	260.88	5.96	53+15.92	635740.77	1554244.58	51+85.12	635784.81	1554121.42							54+46.99	635675.15	1554357.78		
X-5	4°43'00"	3°30'00"	1637.02			67.42	134.76	1.39	55+13.41	635641.33	1554416.06	54+46.99	635675.15	1554357.78							55+80.76	635612.42	1554476.96		
PC-1	11°05'44"	0°45'00"	7639.44	85.00	0°19'07"	784.53	1394.41	36.99	547+87.88	637567.47	1551437.78	540+83.34	637176.28	1552122.92	540+83.34	637216.55	1552048.61								

GRE-675-5.37
GREENE COUNTY

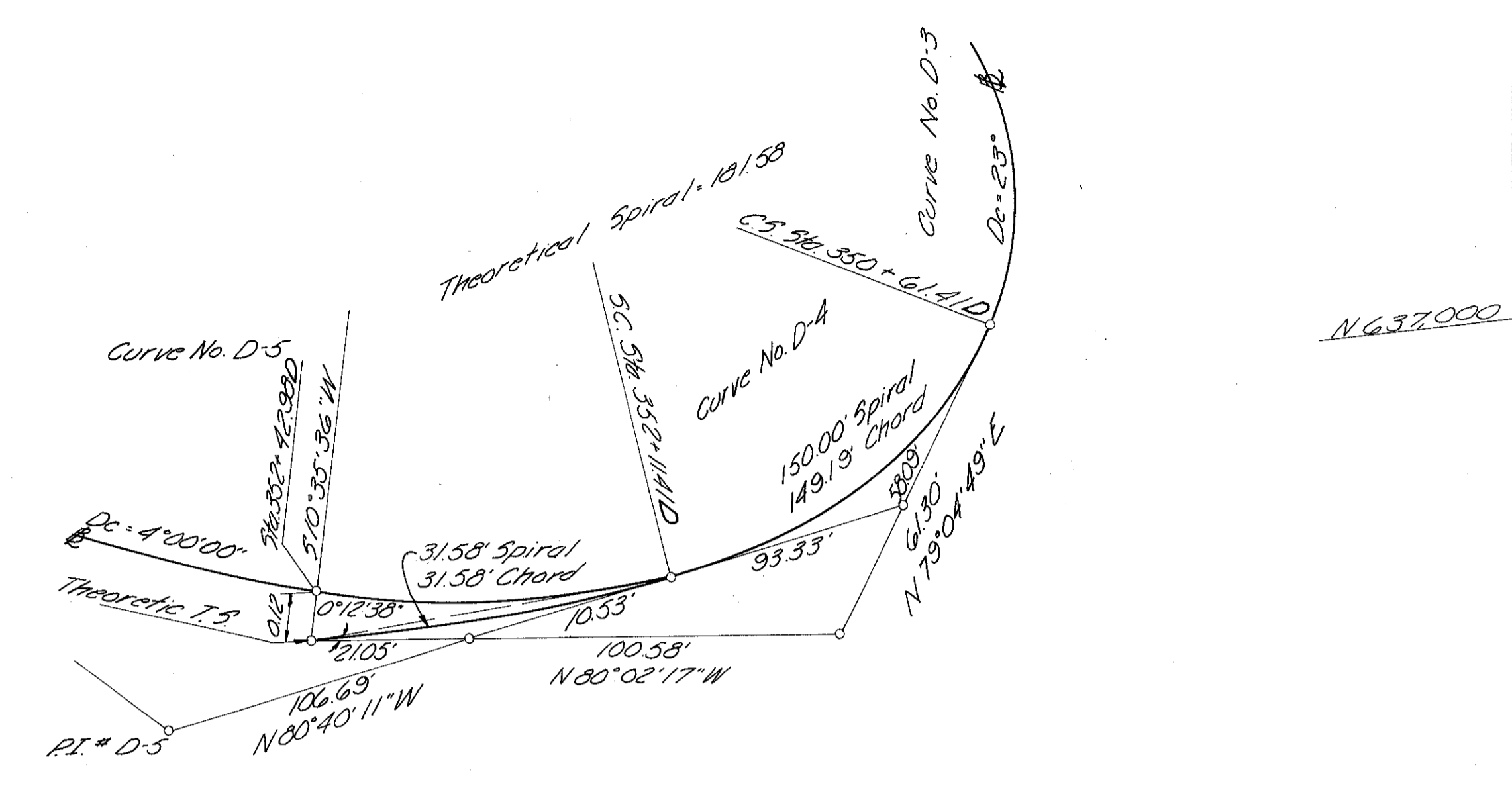









DETAIL - CURVE NO. D-2


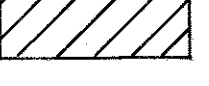
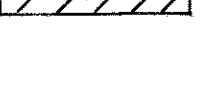




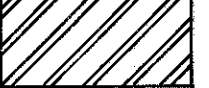
DETAIL - CURVE NO. D-4

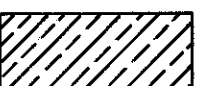





PAVEMENT LEGEND


-  404 1/4" Asphalt Concrete AC-20
-  402 1/4" Asphalt Concrete AC-20
-  407 Tack Coat RC-250, 702, 04, MS-2, RS-1, SS-1 or SS-1h applied at the rate of 0.1 Gal. per Sq. Yd.
-  301 9" Portland Cement Concrete Base
-  310 Subbase Type II 6" thickness except as noted



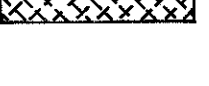

-  404 1" Asphalt Concrete AC-20
-  402 1/2" Asphalt Concrete AC-20
-  408 Bituminous Prime Coat RT-2 or RT-3, MC-30, MC-70, Primer 20, Applied at the rate of 0.4 gal. Per Sq. Yd.
-  304 6" Aggregate Base
-  310 6" Subbase Type II





-  304 6" Aggregate Base


-  304 8" Aggregate Base

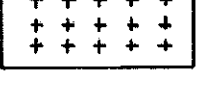
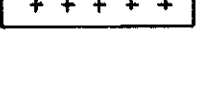

-  404 2" Asphalt Concrete AC-20
-  408 Bituminous Prime Coat RT-2 or RT-3, MC-30, MC-70, Primer 20, Applied at the rate of 0.4 gal. Per Sq. Yd.
-  304 6" Aggregate Base

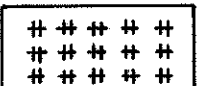
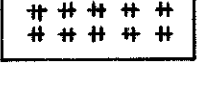

-  452 8" Plain Portland Cement Concrete Pavement

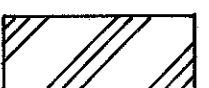
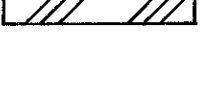

-  404 1/4" Asphalt Concrete AC-20
-  402 1/4" Asphalt Concrete AC-20
-  408 Bituminous Prime Coat RT-2 or RT-3, MC-30, MC-70, Primer 20, Applied at the rate of 0.4 gal. Per Sq. Yd.
-  304 8" Aggregate Base






-  404 1/2" Asphalt Concrete AC-20
-  402 2" Asphalt Concrete AC-20
-  301 2" Courses - Bituminous Aggregate Base AC-20 or RT-11 or RT-12
-  310 6" Subbase Type II

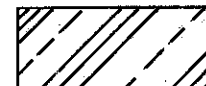
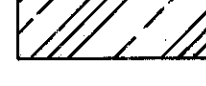
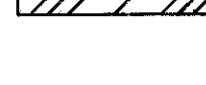

-  612 Concrete Median, Modified as Per Plan


-  404 1/2" Asphalt Concrete AC-20
-  402 0" Min. 4" Max. Asphalt Concrete AC-20
-  407 Tack Coat RC-250, 702, 04, MS-2, RS-1, SS-1 or SS-1h Applied at the rate of 0.1 Gal. Per Sq. Yd.

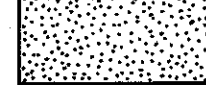

-  404 1" Asphalt Concrete AC-20
-  402 0" Min. 3" Max. Asphalt Concrete AC-20
-  407 Tack Coat RC-250, 702, 04, MS-2, RS-1, SS-1 or SS-1h Applied at the rate of 0.1 Gal. Per Sq. Yd.

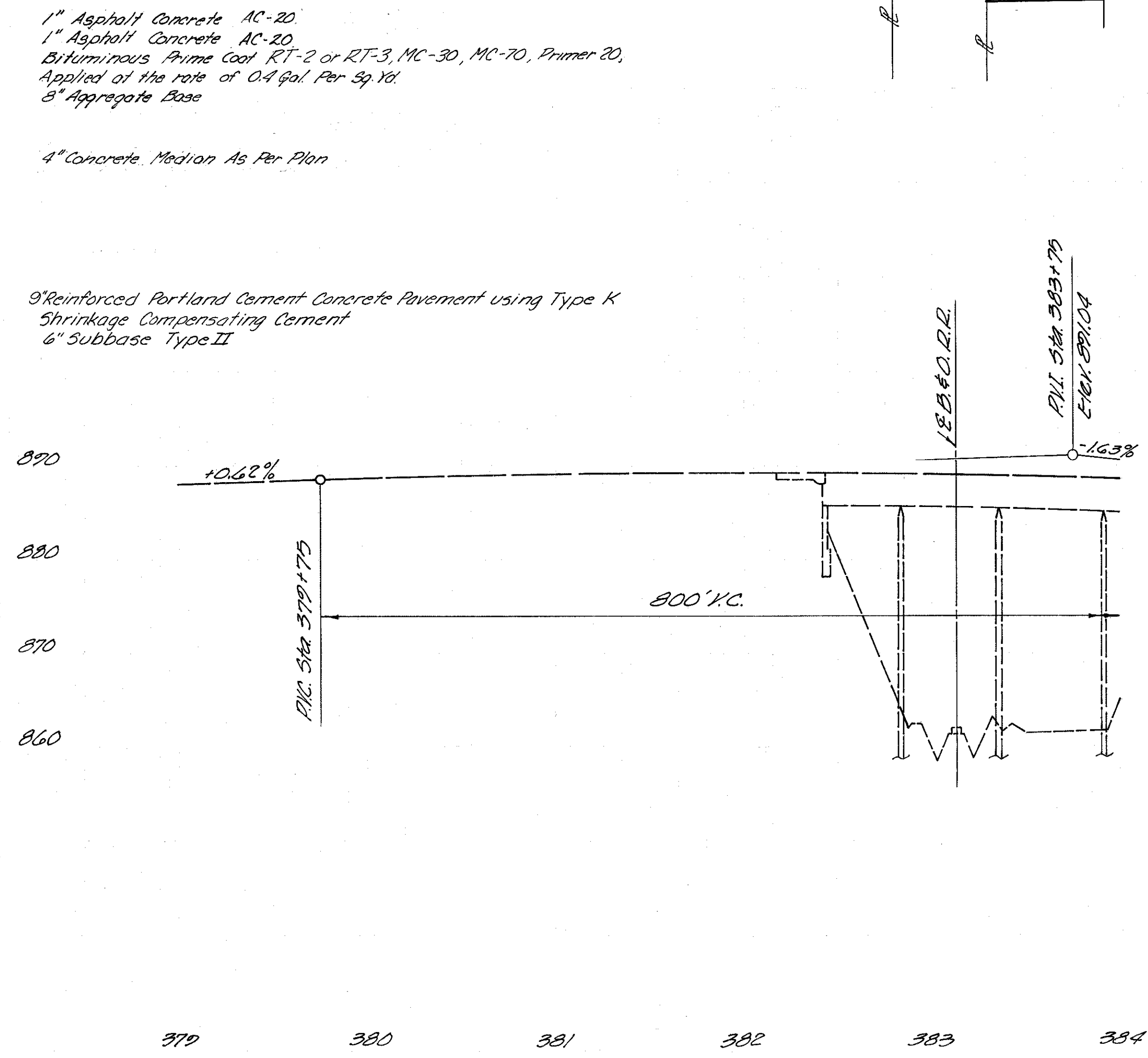
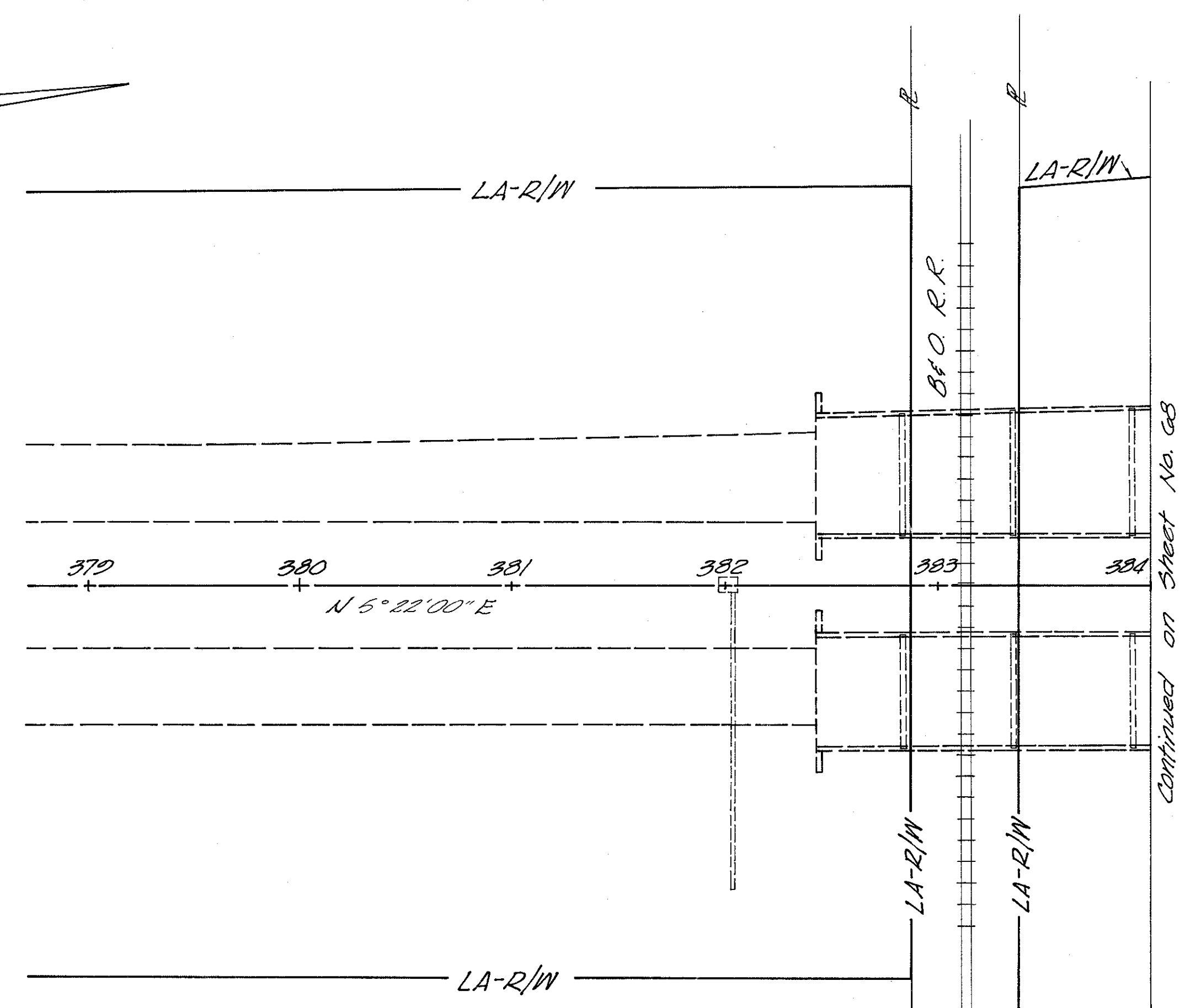
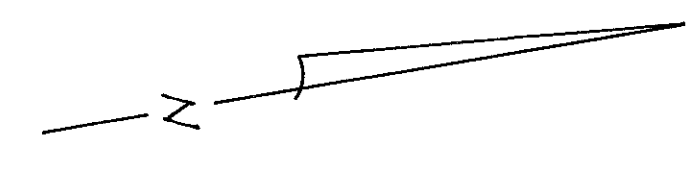
-  301 3" Bituminous Aggregate Base AC-20; or RT-11 or RT-12
-  304 6" Aggregate Base
-  310 6" Subbase Type II

-  404 1/4" Asphalt Concrete AC-20
-  402 1/4" Asphalt Concrete AC-20
-  407 Tack Coat RC-250, 702, 04, MS-2, RS-1, SS-1 or SS-1h Applied at the rate of 0.1 Gal. Per Sq. Yd.
-  305 8" Portland Cement Concrete Base
-  301 4" Bituminous Aggregate Base AC-20; or RT-11 or RT-12

-  404 1" Asphalt Concrete AC-20
-  402 1" Asphalt Concrete AC-20
-  408 Bituminous Prime Coat RT-2 or RT-3, MC-30, MC-70, Primer 20, Applied at the rate of 0.4 gal. Per Sq. Yd.
-  304 8" Aggregate Base

-  612 4" Concrete Median As Per Plan

-  451 9" Reinforced Portland Cement Concrete Pavement using Type K Shrinkage Compensating Cement
-  310 6" Subbase Type II



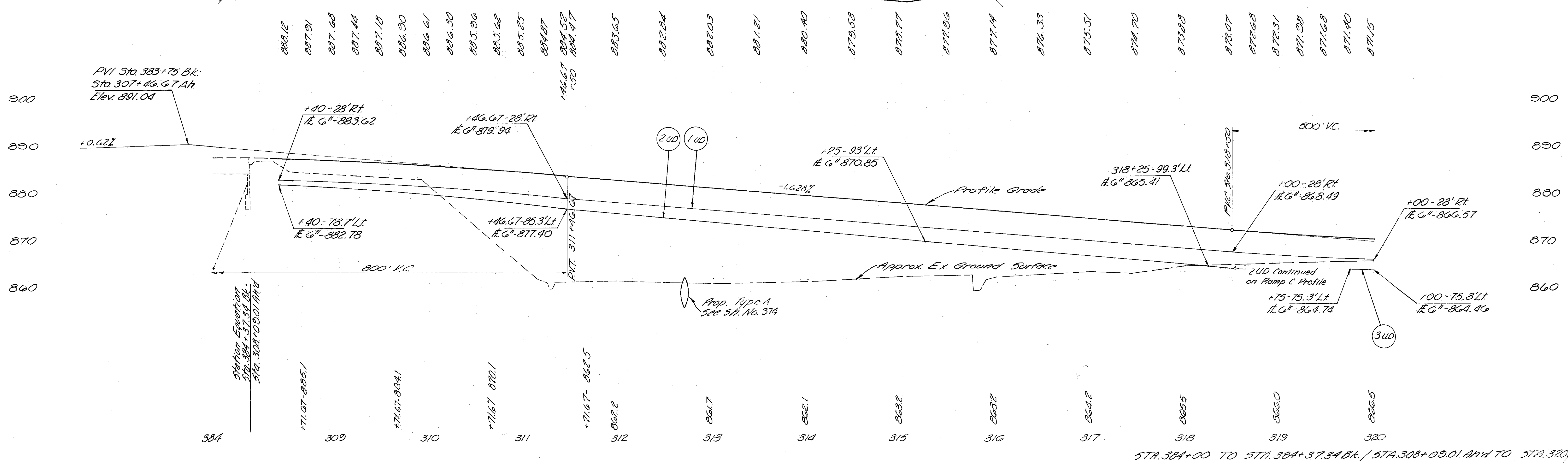
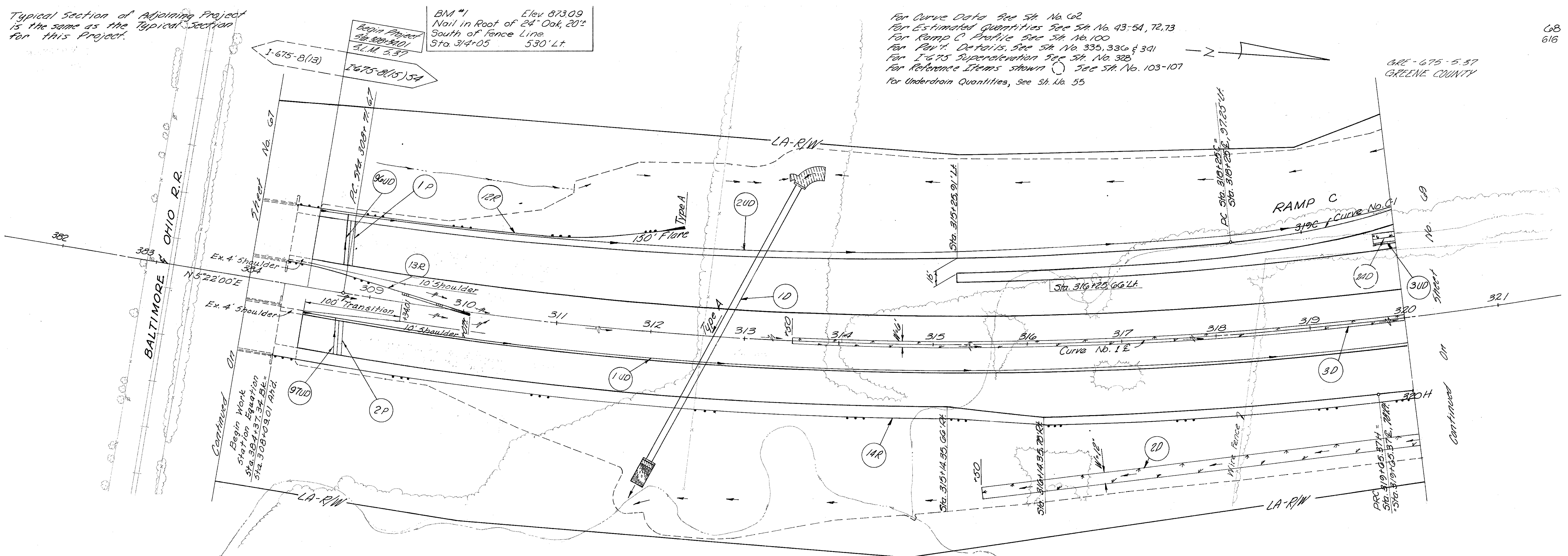
Continued on Sheet No. 68

P.L.C. Sta. 379+75
P.L.L. Sta. 383+75
Elev. 891.04

Typical Section of Adjoining Project is the same as the Typical Section for this Project.

BM #1 Elev 873.09
Nail in Root of 24" Oak, 20"
South of fence Line.
Sta 314+05 530' Lt.

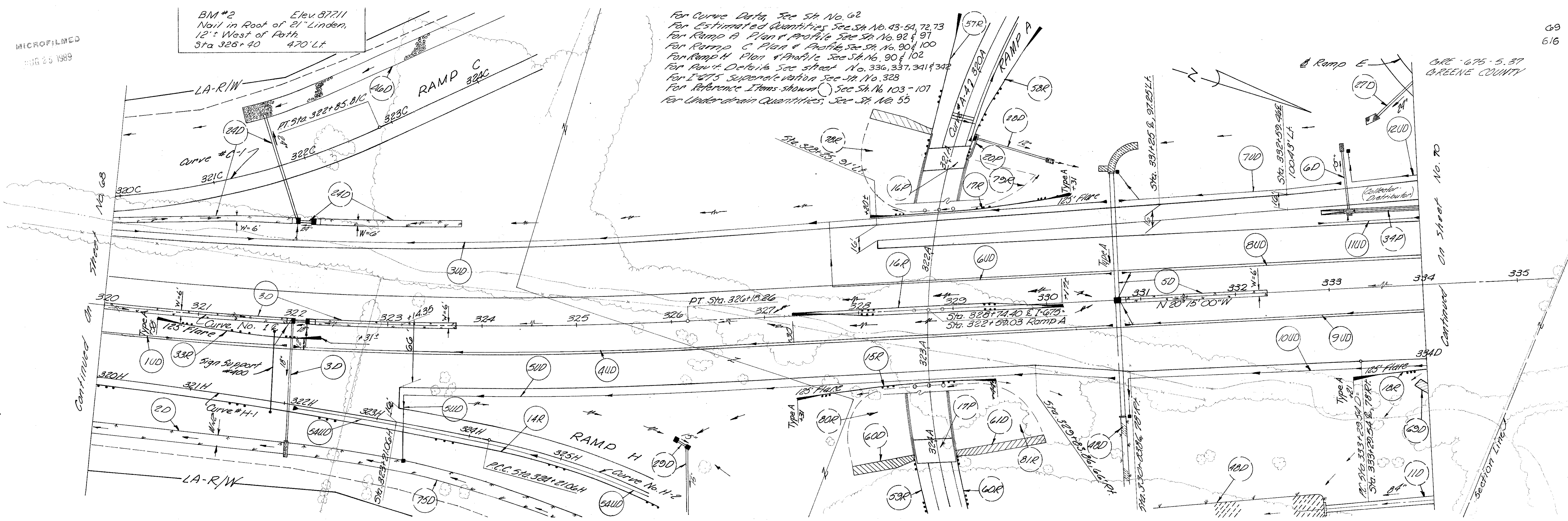
For Curve Data See Sh. No. 62
For Estimated Quantities See Sh. No. 43-54, 72, 73
For Ramp C Profile See Sh. No. 100
For Pav't. Details, See Sh. No. 335, 336 & 341
For I-675 Super-elevation See Sh. No. 328
For Reference Items shown See Sh. No. 103-107
For Underdrain Quantities, See Sh. No. 55



MICROFILMED
AUG 23 1989

BM #2 Elev 877.11
Nail in Root of 21" Linden,
12' West of Path,
Sta 326+40 470' Lt.

For Curve Data, See Sh. No. 62
For Estimated Quantities, See Sh. No. 43-54, 72, 73
For Ramp A Plan & Profile, See Sh. No. 92 & 97
For Ramp C Plan & Profile, See Sh. No. 90 & 100
For Ramp H Plan & Profile, See Sh. No. 90 & 102
For Pav. Details, See sheet No. 336, 337, 341 & 342
For I & T's Separate Station, See Sh. No. 328
For Reference Items shown, See Sh. No. 103 - 107
For Underdrain Quantities, See Sh. No. 55



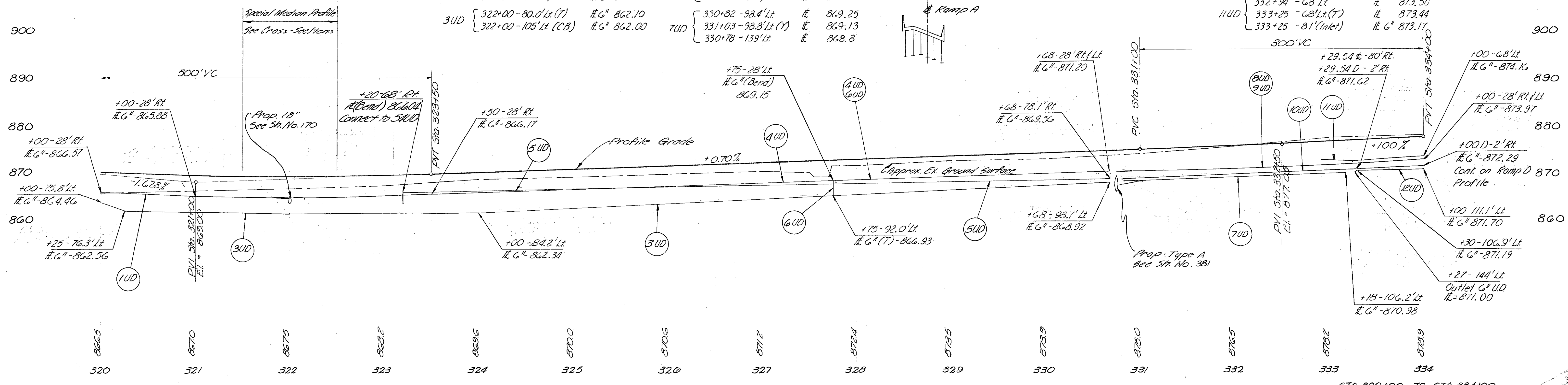
871.15	870.93	870.75	870.59	870.46	870.35	870.28	870.24	870.22	870.24	870.25	870.36	870.46	870.59	870.75	871.10	871.45	871.80	872.15	872.50	872.85	873.20	873.55	873.90	874.25	874.60	874.95	875.30	875.65	876.00	876.15	876.36	876.55	876.75	876.95	877.16	877.38	877.60	877.83	878.06	878.30	878.55
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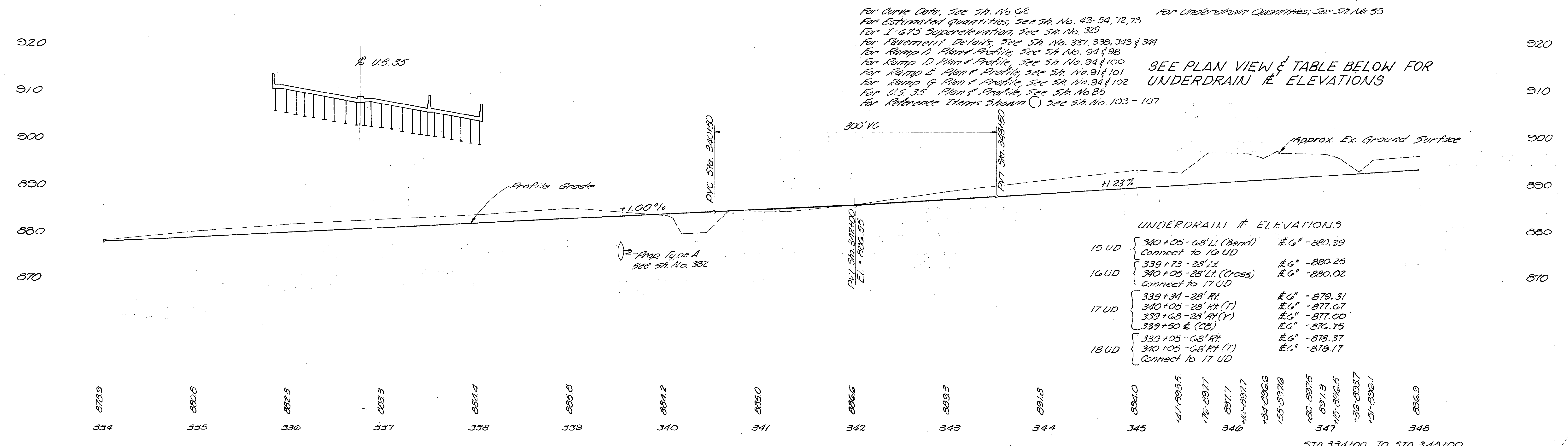
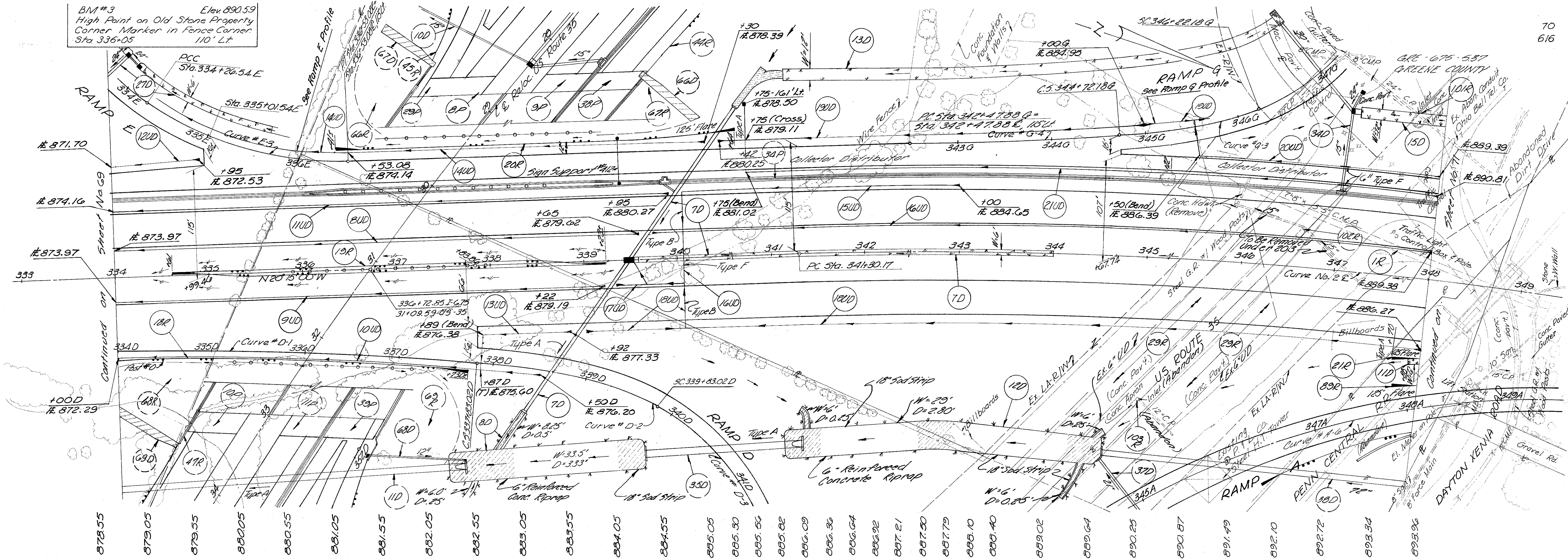
UNDERDRAIN # ELEVATIONS

1UD { 321+97 - 28' Rt. # 865.65 321+82 - 28' Rt. (Y) # 865.55 322+00 - 6' (CB) # 865.25	3UD { 322+00 - 80.0' Lt. (T) # 862.10 322+00 - 105' Lt. (CB) # 862.00	4UD { 322+03 - 28' Rt. # 865.75 322+16 - 28' Rt. (T) # 865.65 322+16 1/2 (CB) # 865.45	TUD { 330+82 - 98.4' Lt. # 869.25 331+03 - 98.8' Lt. (Y) # 869.13 330+78 - 139' Lt. # 868.8
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UNDERDRAIN # ELEVATIONS

8UD & 9UD { 330+82 - 28' Rt., 28' Lt. # 871.47 330+93 - 28' Rt., 28' Lt. (Y) # 871.37 330+75 1/2 (CB) # 871.00	10UD { 330+82 - 80' Rt. (Bend) # 869.63 330+82 - 122' Rt. # 869.50	11UD { 332+94 - 68' Lt. # 873.50 333+25 - 68' Lt. (T) # 873.44 333+25 - 81' (Inlet) # 873.17
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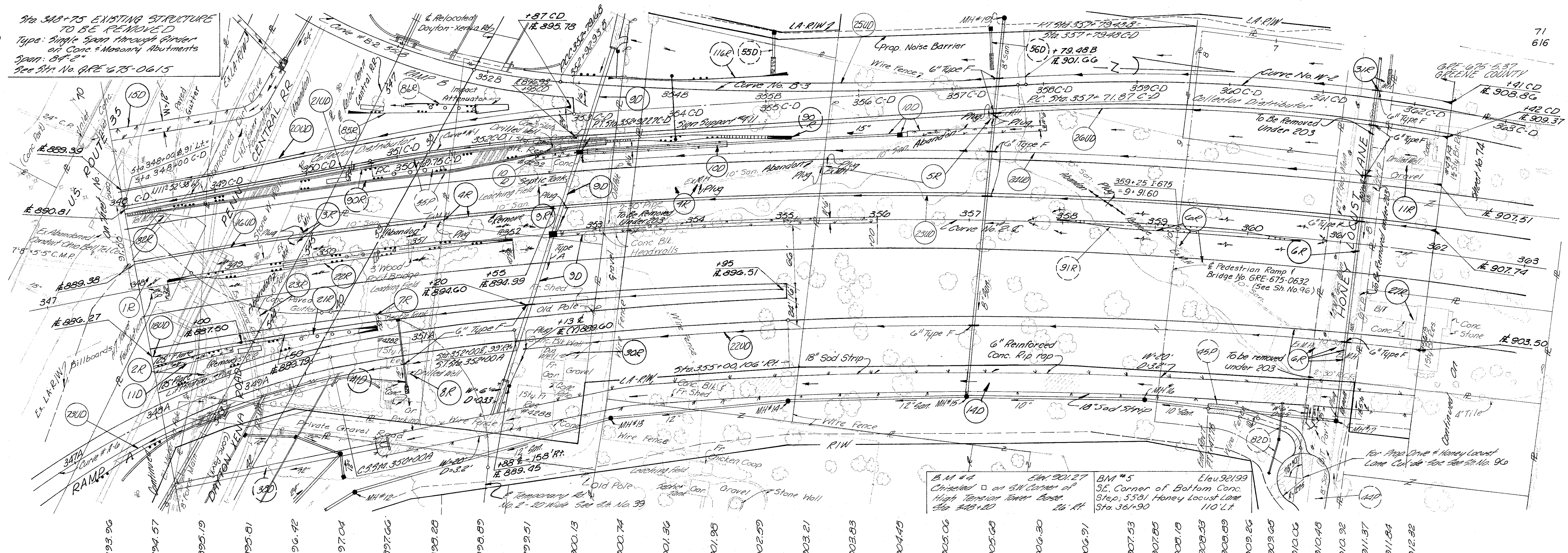


For Curve Data, See Sh. No. 62
 For Estimated Quantities, See Sh. No. 43-54, 72, 73
 For I-675 Superlevation, See Sh. No. 329
 For Pavement Details, See Sh. No. 337, 338, 343 & 344
 For Ramp A Plan & Profile, See Sh. No. 94 & 98
 For Ramp D Plan & Profile, See Sh. No. 94 & 100
 For Ramp E Plan & Profile, See Sh. No. 94 & 101
 For Ramp G Plan & Profile, See Sh. No. 94 & 102
 For U.S. 35 Plan & Profile, See Sh. No. 85
 For Reference Items Shown (C) See Sh. No. 103 - 107

SEE PLAN VIEW & TABLE BELOW FOR UNDERDRAIN ELEVATIONS

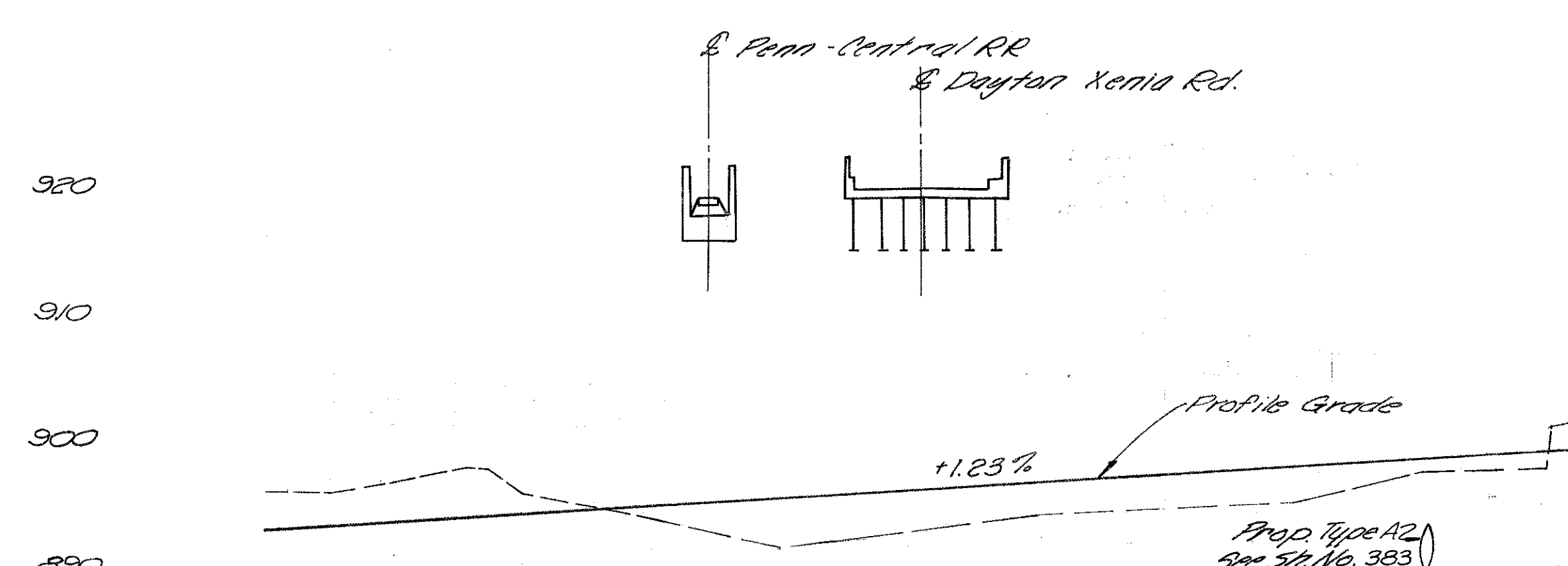
BM #3 Elev. 890.59
 High Point on Old Stone Property
 Corner Marker in Fence Corner
 Sta. 336+05 110' Lt

Sta 348+75 EXISTING STRUCTURE
TO BE REMOVED
Type: Single Span Through Girder
on Conc. & Masonry Abutments
Span: 84'-2"
See Sh. No. GRE 675-0615



893.96	894.57	895.19	895.81	896.42	897.04	897.66	898.28	898.89	899.51	900.13	900.74	901.36	901.98	902.59	903.21	903.83	904.45	905.06	905.68	906.30	906.91	907.53	908.15	908.77	909.39	909.99	910.61	911.23	911.84	912.46
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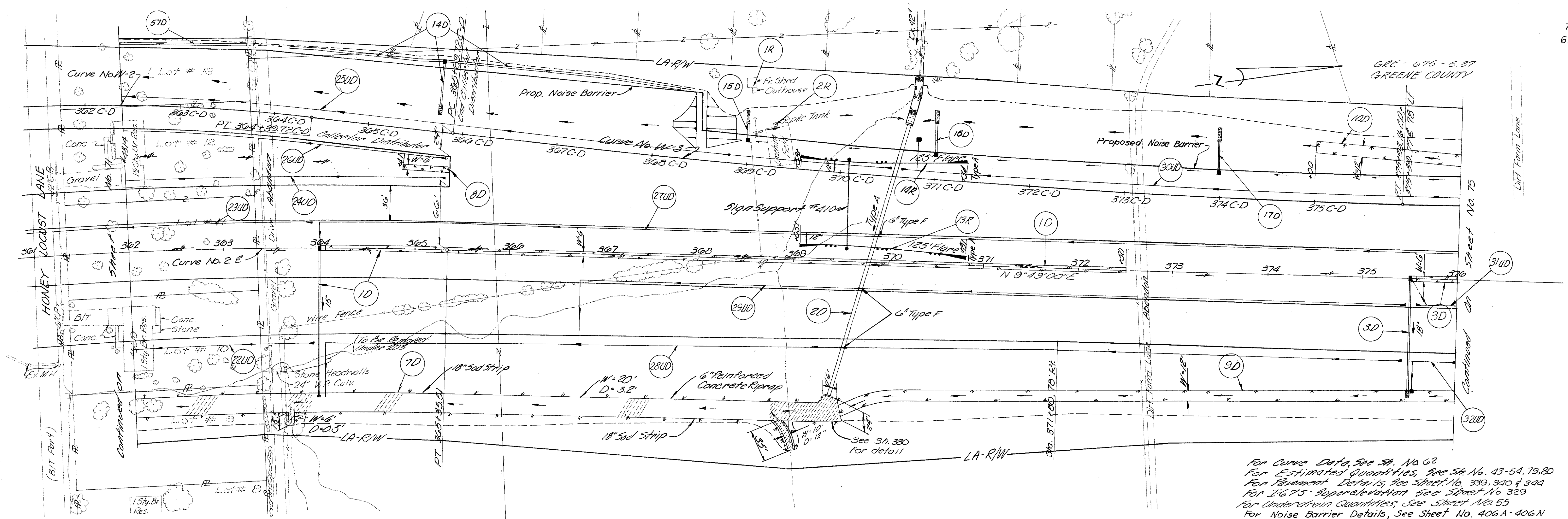
For Curve Data, See Sheet No. G2
 For Estimated Quantities, See Sh. No. 43-54, 72, 73
 For I-675 Support Variations, See Sh. No. 329
 For Part Details, See Sh. No. 338, 339, 343 & 344
 For Ramp A Plan & Profile See Sh. No. 94, 96 & 98
 For Ramp B Plan & Profile See Sh. No. 96 & 99
 For Collector Distributor Plan, See Sh. No. 94 & 96
 For Penn-Central RR Plan & Profile, See Sh. No. 114
 For Dayton-Kenid Rd. Plan & Profile See Sh. No. 109 & 110
 For Reference Points Shown See Sh. No. 103-107
 For Boundary Survey See Sh. No. 363-365
 For Underdrain Quantities, See Sh. No. 55
 For Noise Barrier Details, See Sh. Nos. 406A-406N



SEE PLAN VIEW & TABLE BELOW FOR UNDERDRAIN ELEVATIONS

23UD	{ 352+70-28' Lt. (Wye) - E 895.17	25UD	{ 353+30B-2' Lt. - E 895.60
	{ 352+52.5 E (CB) - E 6" - 894.58		{ 353+40B-2' Lt. (TEE) - E 895.48
24UD	{ 352+88-68' Lt. (Bend) - E 895.16		{ 353+40B-43' Lt. - E 895.25
	{ 352+88±-87' Lt. (CB) - E 6" - 895.00	26UD	{ 353+07C-D-26' Lt. (Wye) - E 897.07 (Plug open End)
			{ 352+88±-87' Lt. (CB) - E 6" - 896.75

896.9	896.8	897.7	898.2	898.9	899.6	900.3	901.0	901.7	902.4	903.1	903.8	904.5	905.2	905.9	906.6	907.3	908.0	908.7	909.4	910.1	910.8	911.5	912.2	912.9	913.6	914.3	915.0	915.7	916.4	917.1	917.8	918.5	919.2	919.9	920.6	921.3	922.0	922.7	923.4	924.1	924.8	925.5	926.2	926.9	927.6	928.3	929.0	929.7	930.4	931.1	931.8	932.5	933.2	933.9	934.6	935.3	936.0	936.7	937.4	938.1	938.8	939.5	940.2	940.9	941.6	942.3	943.0	943.7	944.4	945.1	945.8	946.5	947.2	947.9	948.6	949.3	950.0	950.7	951.4	952.1	952.8	953.5	954.2	954.9	955.6	956.3	957.0	957.7	958.4	959.1	959.8	960.5	961.2	961.9	962.6	963.3	964.0	964.7	965.4	966.1	966.8	967.5	968.2	968.9	969.6	970.3	971.0	971.7	972.4	973.1	973.8	974.5	975.2	975.9	976.6	977.3	978.0	978.7	979.4	980.1	980.8	981.5	982.2	982.9	983.6	984.3	985.0	985.7	986.4	987.1	987.8	988.5	989.2	989.9	990.6	991.3	992.0	992.7	993.4	994.1	994.8	995.5	996.2	996.9	997.6	998.3	999.0	999.7	1000.4	1001.1	1001.8	1002.5	1003.2	1003.9	1004.6	1005.3	1006.0	1006.7	1007.4	1008.1	1008.8	1009.5	1010.2	1010.9	1011.6	1012.3	1013.0	1013.7	1014.4	1015.1	1015.8	1016.5	1017.2	1017.9	1018.6	1019.3	1020.0	1020.7	1021.4	1022.1	1022.8	1023.5	1024.2	1024.9	1025.6	1026.3	1027.0	1027.7	1028.4	1029.1	1029.8	1030.5	1031.2	1031.9	1032.6	1033.3	1034.0	1034.7	1035.4	1036.1	1036.8	1037.5	1038.2	1038.9	1039.6	1040.3	1041.0	1041.7	1042.4	1043.1	1043.8	1044.5	1045.2	1045.9	1046.6	1047.3	1048.0	1048.7	1049.4	1050.1	1050.8	1051.5	1052.2	1052.9	1053.6	1054.3	1055.0	1055.7	1056.4	1057.1	1057.8	1058.5	1059.2	1059.9	1060.6	1061.3	1062.0	1062.7	1063.4	1064.1	1064.8	1065.5	1066.2	1066.9	1067.6	1068.3	1069.0	1069.7	1070.4	1071.1	1071.8	1072.5	1073.2	1073.9	1074.6	1075.3	1076.0	1076.7	1077.4	1078.1	1078.8	1079.5	1080.2	1080.9	1081.6	1082.3	1083.0	1083.7	1084.4	1085.1	1085.8	1086.5	1087.2	1087.9	1088.6	1089.3	1090.0	1090.7	1091.4	1092.1	1092.8	1093.5	1094.2	1094.9	1095.6	1096.3	1097.0	1097.7	1098.4	1099.1	1099.8	1100.5	1101.2	1101.9	1102.6	1103.3	1104.0	1104.7	1105.4	1106.1	1106.8	1107.5	1108.2	1108.9	1109.6	1110.3	1111.0	1111.7	1112.4	1113.1	1113.8	1114.5	1115.2	1115.9	1116.6	1117.3	1118.0	1118.7	1119.4	1120.1	1120.8	1121.5	1122.2	1122.9	1123.6	1124.3	1125.0	1125.7	1126.4	1127.1	1127.8	1128.5	1129.2	1129.9	1130.6	1131.3	1132.0	1132.7	1133.4	1134.1	1134.8	1135.5	1136.2	1136.9	1137.6	1138.3	1139.0	1139.7	1140.4	1141.1	1141.8	1142.5	1143.2	1143.9	1144.6	1145.3	1146.0	1146.7	1147.4	1148.1	1148.8	1149.5	1150.2	1150.9	1151.6	1152.3	1153.0	1153.7	1154.4	1155.1	1155.8	1156.5	1157.2	1157.9	1158.6	1159.3	1160.0	1160.7	1161.4	1162.1	1162.8	1163.5	1164.2	1164.9	1165.6	1166.3	1167.0	1167.7	1168.4	1169.1	1169.8	1170.5	1171.2	1171.9	1172.6	1173.3	1174.0	1174.7	1175.4	1176.1	1176.8	1177.5	1178.2	1178.9	1179.6	1180.3	1181.0	1181.7	1182.4	1183.1	1183.8	1184.5	1185.2	1185.9	1186.6	1187.3	1188.0	1188.7	1189.4	1190.1	1190.8	1191.5	1192.2	1192.9	1193.6	1194.3	1195.0	1195.7	1196.4	1197.1	1197.8	1198.5	1199.2	1199.9	1200.6	1201.3	1202.0	1202.7	1203.4	1204.1	1204.8	1205.5	1206.2	1206.9	1207.6	1208.3	1209.0	1209.7	1210.4	1211.1	1211.8	1212.5	1213.2	1213.9	1214.6	1215.3	1216.0	1216.7	1217.4	1218.1	1218.8	1219.5	1220.2	1220.9	1221.6	1222.3	1223.0	1223.7	1224.4	1225.1	1225.8	1226.5	1227.2	1227.9	1228.6	1229.3	1230.0	1230.7	1231.4	1232.1	1232.8	1233.5	1234.2	1234.9	1235.6	1236.3	1237.0	1237.7	1238.4	1239.1	1239.8	1240.5	1241.2	1241.9	1242.6	1243.3	1244.0	1244.7	1245.4	1246.1	1246.8	1247.5	1248.2	1248.9	1249.6	1250.3	1251.0	1251.7	1252.4	1253.1	1253.8	1254.5	1255.2	1255.9	1256.6	1257.3	1258.0	1258.7	1259.4	1260.1	1260.8	1261.5	1262.2	1262.9	1263.6	1264.3	1265.0	1265.7	1266.4	1267.1	1267.8	1268.5	1269.2	1269.9	1270.6	1271.3	1272.0	1272.7	1273.4	1274.1	1274.8	1275.5	1276.2	1276.9	1277.6	1278.3	1279.0	1279.7	1280.4	1281.1	1281.8	1282.5	1283.2	1283.9	1284.6	1285.3	1286.0	1286.7	1287.4	1288.1	1288.8	1289.5	1290.2	1290.9	1291.6	1292.3	1293.0	1293.7	1294.4	1295.1	1295.8	1296.5	1297.2	1297.9	1298.6	1299.3	1299.9	1300.6	1301.3	1302.0	1302.7	1303.4	1304.1	1304.8	1305.5	1306.2	1306.9	1307.6	1308.3	1309.0	1309.7	1310.4	1311.1	1311.8	1312.5	1313.2	1313.9	1314.6	1315.3	1316.0	1316.7	1317.4	1318.1	1318.8	1319.5	1320.2	1320.9	1321.6	1322.3	1323.0	1323.7	1324.4	1325.1	1325.8	1326.5	1327.2	1327.9	1328.6	1329.3	1330.0	1330.7	1331.4	1332.1	1332.8	1333.5	1334.2	1334.9	1335.6	1336.3	1337.0	1337.7	1338.4	1339.1	1339.8	1340.5	1341.2	1341.9	1342.6	1343.3	1344.0	1344.7	1345.4	1346.1	1346.8	1347.5	1348.2	1348.9	1349.6	1350.3	1351.0	1351.7	1352.4	1353.1	1353.8	1354.5	1355.2	1355.9	1356.6	1357.3	1358.0	1358.7	1359.4	1360.1	1360.8	1361.5	1362.2	1362.9	1363.6	1364.3	1365.0	1365.7	1366.4	1367.1	1367.8	1368.5	1369.2	1369.9	1370.6	1371.3	1372.0	1372.7	1373.4	1374.1	1374.8	1375.5	1376.2	1376.9	1377.6	1378.3	1379.0	1379.7	1380.4	1381.1	1381.8	1382.5	1383.2	1383.9	1384.6	1385.3	1386.0	1386.7	1387.4	1388.1	1388.8	1389.5	1390.2	1390.9	1391.6	1392.3	1393.0	1393.7	1394.4	1395.1	1395.8	1396.5	1397.2	1397.9	1398.6	1399.3	1399.9	1400.6	1401.3	1402.0	1402.7	1403.4	1404.1	1404.8	1405.5	1406.2	1406.9	1407.6	1408.3	1409.0	1409.7	1410.4	1411.1	1411.8	1412.5	1413.2	1413.9	1414.6	1415.3	1416.0	1416.7	1417.4	1418.1	1418.8	1419.5	1420.2	1420.9	1421.6	1422.3	1423.0	1423.7	1424.4	1425.1	1425.8	1426.5	1427.2	1427.9	1428.6	1429.3	1430.0	1430.7	1431.4	1432.1	1432.8	1433.5	1434.2	1434.9	1435.6	1436.3	1437.0	1437.7	1438.4	1439.1	1439.8	1440.5	1441.2	1441.9	1442.6	1443.3	1444.0	1444.7	1445.4	1446.1	1446.8	1447.5	1448.2	1448.9	1449.6	1450.3	1451.0	1451.7	1452.4	1453.1	1453.8	1454.5	1455.2	1455.9	1456.6	1457.3	1458.0	1458.7	1459.4	1460.1	1460.8	1461.5	1462.2	1462.9	1463.6	1464.3	1465.0	1465.7	1466.4	1467.1	1467.8	1468.5	1469.2	1469.9	1470.6	1471.3	1472.0	1472.7	1473.4	1474.1	1474.8	1475.5	1476.2	1476.9	1477.6	1478.3	1479.0	1479.7	1480.4	1481.1	1481.8	1482.5	1483.2	1483.9	1484.6	1485.3	1486.0	1486.7	1487.4	1488.1	1488.8	1489.5	1490.2	1490.9	1491.6	1492.3	1493.0	1493.7	1494.4	1495.1	1495.8	1496.5	1497.2	1497.9	1498.6	1499.3	1499.9	1500.6	1501.3	1502.0	1502.7	1503.4	1504.1	1504.8	1505.5	1506.2	1506.9	1507.6	1508.3	1509.0	1509.7	1510.4	1511.1	1511.8	1512.5	1513.2	1513.9	1514.6	1515.3	1516.0	1516.7	1517.4	1518.1	1518.8	1519.5	1520.2	1520.9	1521.6	1522.3	1523.0	1523.7	1524.4	1525.1	1525.8
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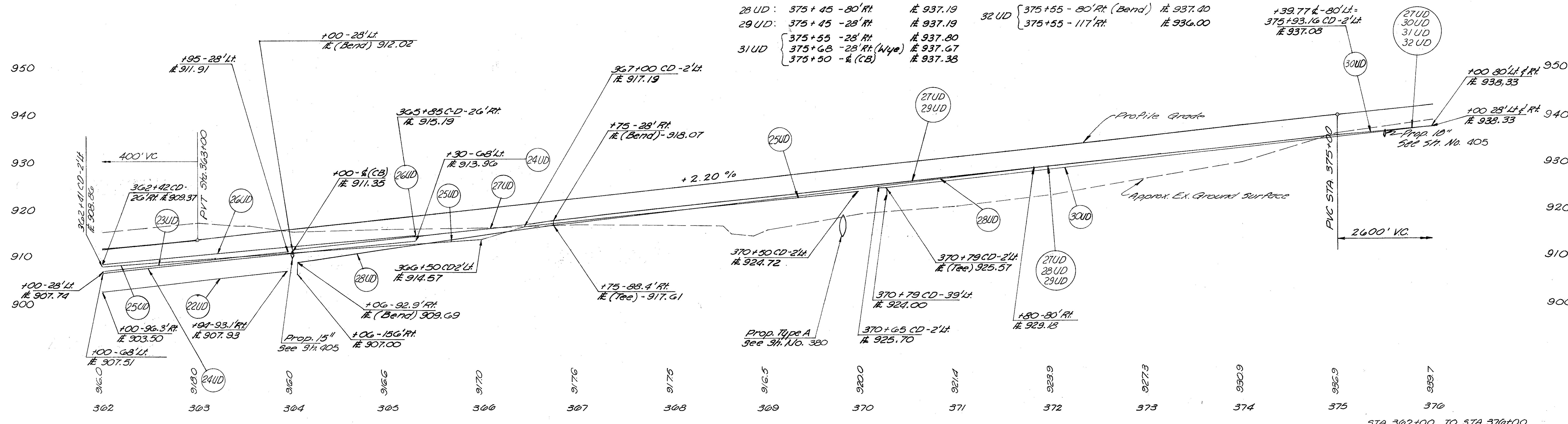


For Curve Data, See Sh. No. 62
 For Estimated Quantities, See Sh. No. 43-54, 79, 80
 For Pavement Details, See Sheet No. 339, 340 & 341
 For 1675 Superlevation, See Sheet No. 329
 For Underdrain Quantities, See Sheet No. 55
 For Noise Barrier Details, See Sheet No. 406A-406N

912.32	912.82	913.33	913.86	914.40	915.50	916.60	917.70	918.80	919.90	921.00	922.10	923.20	924.30	925.40	926.50	927.60	928.70	929.80	930.90	932.00	933.10	934.20	935.30	936.40	937.50	938.60	939.70	940.80	941.94	942.91
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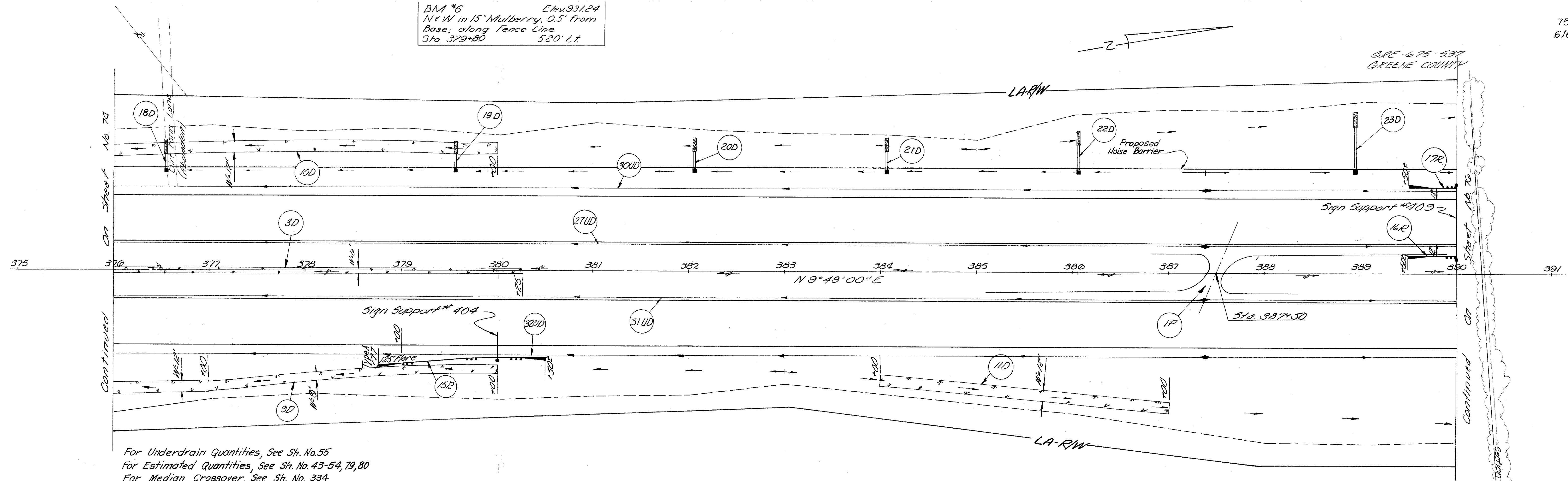
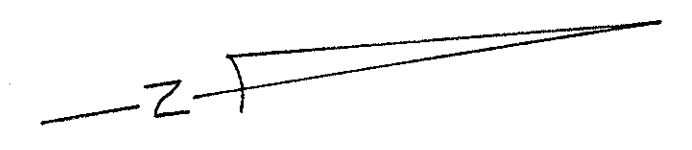
UNDERDRAIN # ELEVATIONS

28 UD: 375 + 45 - 80' RT	# 937.19	32 UD { 375 + 55 - 80' RT (Bend) # 937.40 375 + 55 - 117' RT # 936.00	+39.77' & -80' Lt. = 375 + 93.16 CD - 2' Lt. # 937.08
29 UD: 375 + 45 - 28' RT	# 937.19		
31 UD { 375 + 55 - 28' RT	# 937.80		27 UD 30 UD 31 UD 32 UD
375 + 63 - 28' RT (Wye)	# 937.67		
375 + 50 - & (CB)	# 937.33		



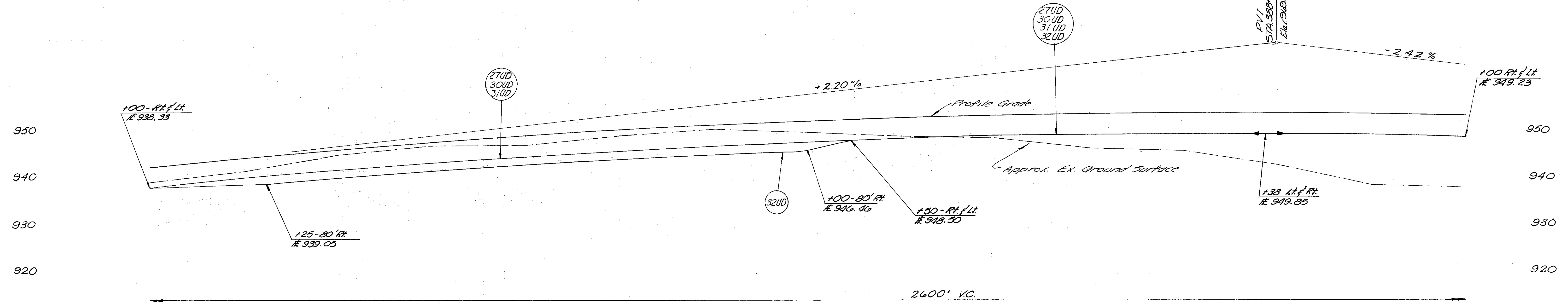
STA. 362+00 TO STA 376+00

BM #5 Elev. 931.24
N&W in 15' Mulberry, 0.5' from
Base, along Fence Line.
Sta. 379+80 520' Lt.



For Underdrain Quantities, See Sh. No. 55
For Estimated Quantities, See Sh. No. 43-54, 79, 80
For Median Crossover, See Sh. No. 334
For Noise Barrier Details, See Sh. No. 406A - 406N

942.9	943.4	943.9	944.38	944.84	945.30	945.74	946.18	946.60	947.01	947.41	947.80	948.18	948.55	948.90	949.25	949.58	949.90	950.21	950.51	950.80	951.08	951.35	951.60	951.85	952.08	952.30	952.51	952.71	952.90	953.08	953.25	953.40	953.55	953.68	953.80	953.92	954.02	954.10	954.18	954.25	954.31	954.35	954.38	954.41	954.42	954.42	954.41	954.39	954.35	954.31	954.25	954.19	954.11	954.02	933.92	933.81
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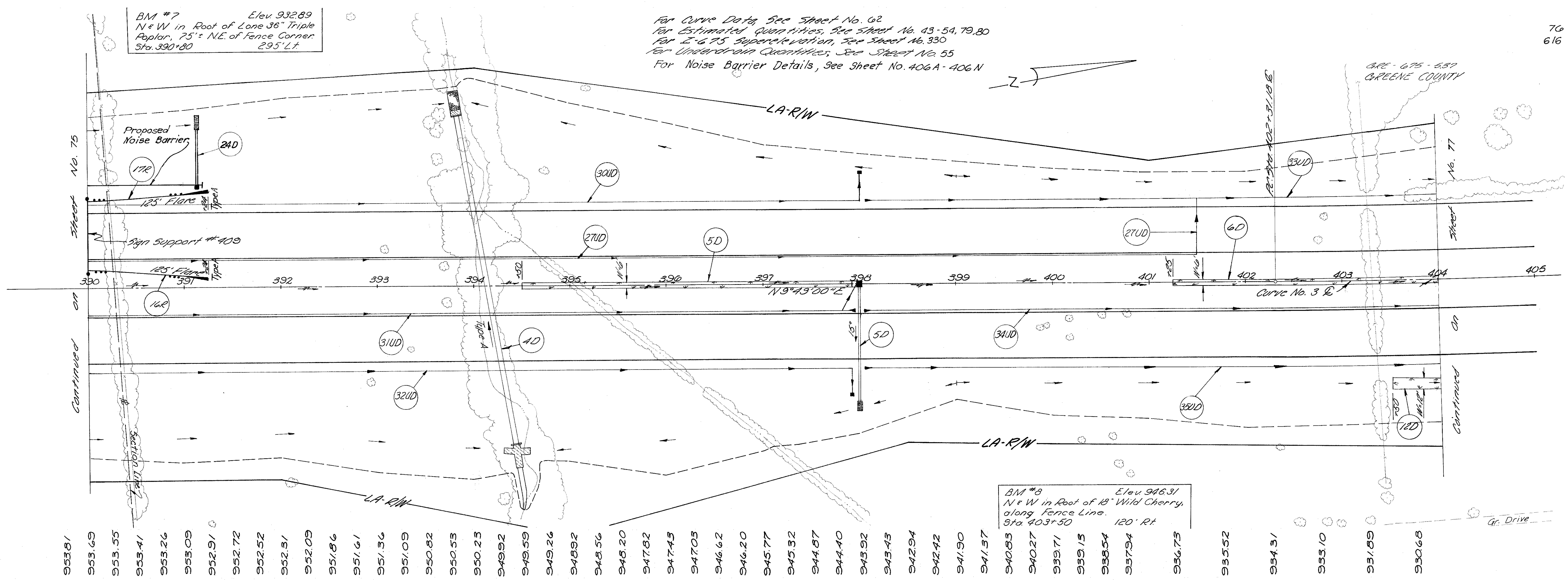
939.7	942.0	945.5	947.4	947.6	949.7	951.0	950.2	949.6	949.1	946.9	946.7	943.4	939.1	938.6
376	377	378	379	380	381	382	383	384	385	386	387	388	389	390

STA. 376+00 TO STA. 390+00

BM #7 Elev. 932.89
N & W in Root of Lone 36" Triple
Poplar, 75'± N.E. of Fence Corner
Sta. 390+80 295' Lt.

For Curve Data See Sheet No. 62
For Estimated Quantities, See Sheet No. 43-54, 79, 80
For L-6.75 Superelevation, See Sheet No. 330
For Underdrain Quantities, See Sheet No. 55
For Noise Barrier Details, See Sheet No. 406A-406N

GRE - 675 - 537
GREENE COUNTY

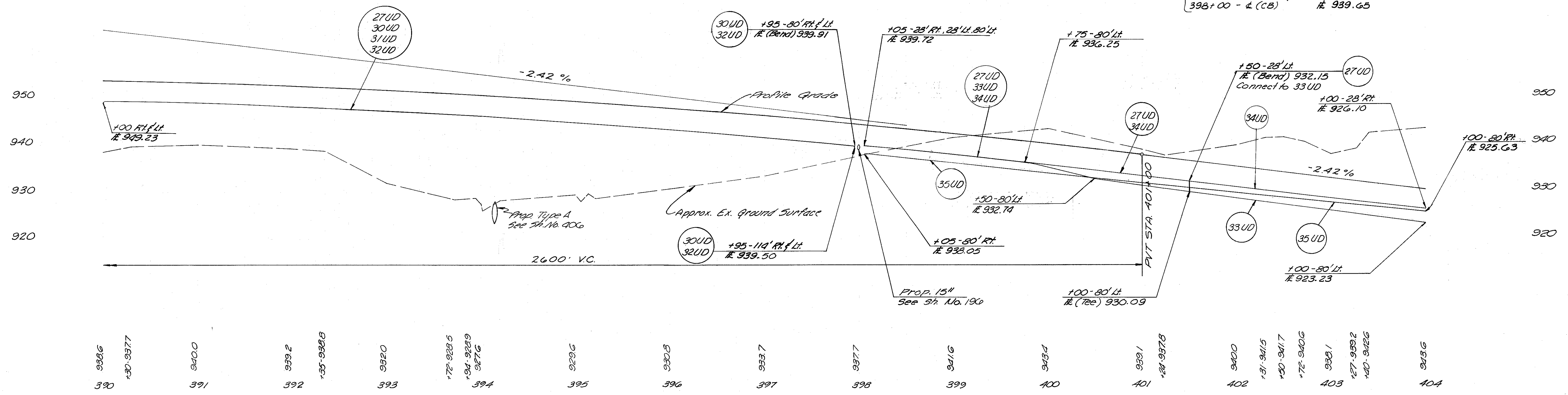


953.81	953.69	953.55	953.41	953.26	953.09	952.91	952.72	952.52	952.31	952.09	951.86	951.61	951.36	951.09	950.82	950.53	950.23	949.92	949.59	949.26	948.92	948.56	948.20	947.82	947.43	947.03	946.62	946.20	945.77	945.32	944.87	944.40	943.92	943.43	942.94	942.42	941.90	941.57	940.83	940.27	939.71	939.15	938.54	937.94	936.75	935.52	934.31	933.10	931.89	930.68
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BM #8 Elev. 946.31
N & W in Root of 18" Wild Cherry,
along Fence Line.
Sta. 403+50 120' Rt.

UNDERDRAINS & ELEVATIONS

31UD	397+95 - 28' Rt.	E 940.29
	397+82 - 28' Rt. (Wye)	E 940.16
	398+00 - 4 (CB)	E 939.65

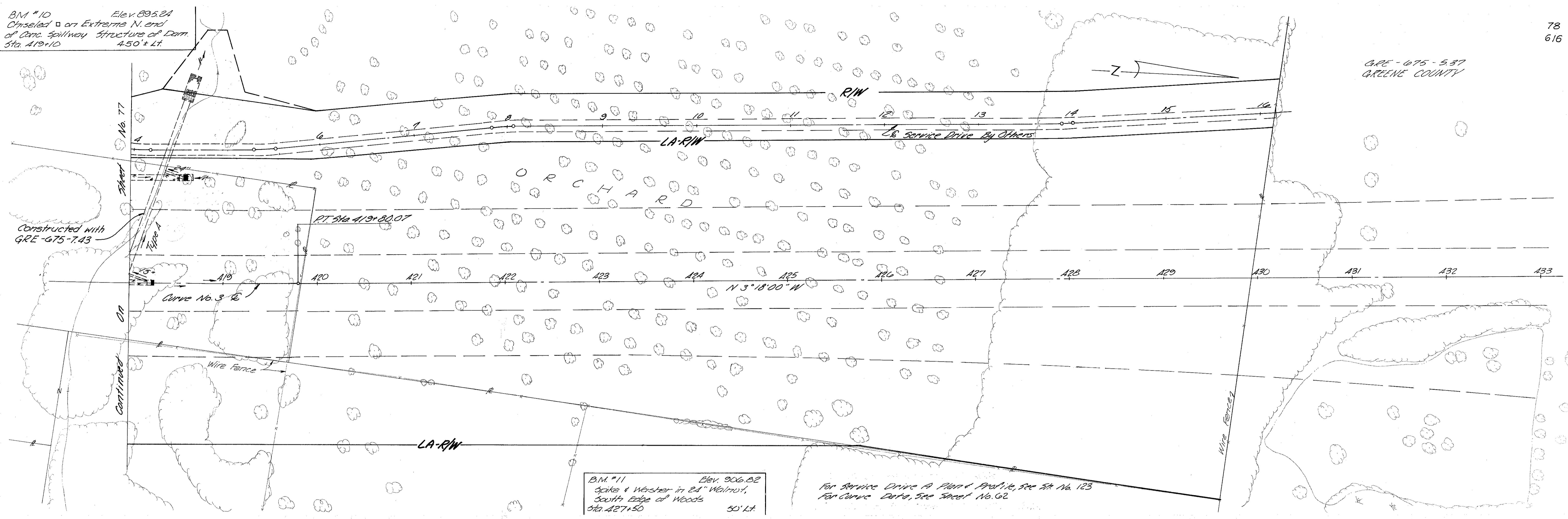


9386	+30-9377	9400	9392	+35-9388	9420	+72-9285	+94-9289	9295	9305	9337	9377	9416	9434	9391	+24-9378	9400	+31-9415	+50-9417	+72-9406	9381	+27-9392	+40-9426	9436
390		391	392		393		394	395	396	397	398	399	400	401		402		403		404			

STA. 390+00 TO 404+00

BM #10 Elev. 895.24
 Chiseled \square on Extreme N. end
 of Conc. Spillway Structure of Dam.
 Sta. 419+10 450' ± Lt.

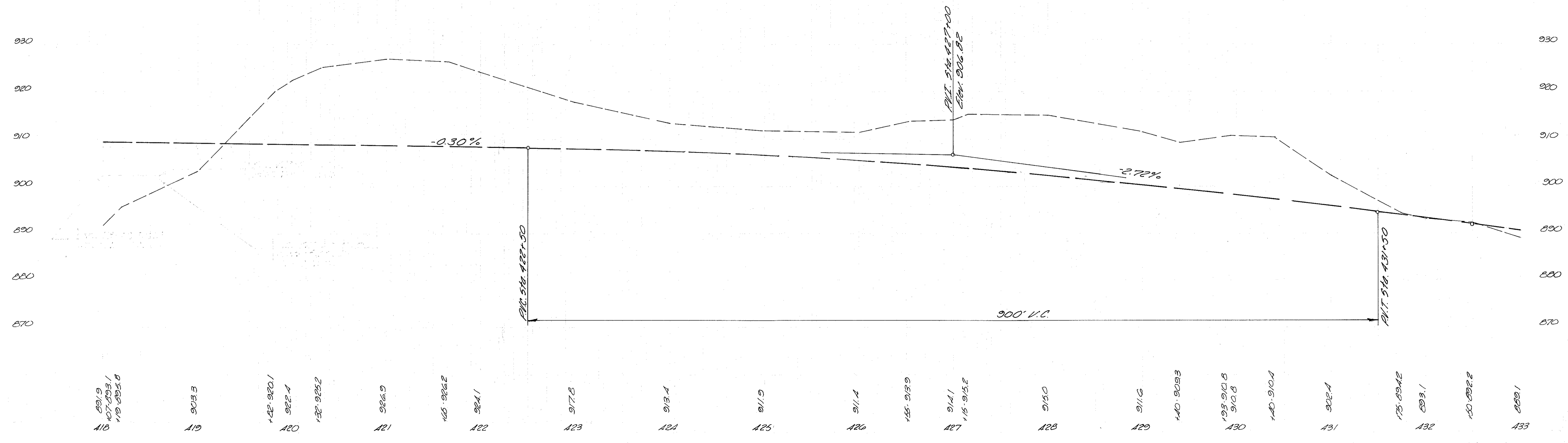
GRE-075-537
 GREENE COUNTY



908.5
 908.4
 908.2

BM #11 Elev. 906.82
 Spike & Washer in 2" Walnut,
 South Edge of Woods
 Sta. 427+50 50' Lt.

For Service Drive A Plan & Profile, see Sta. No. 123
 For Curve Data, see Sheet No. 62



891.9
 407-893.1
 119-895.8
 416

903.3
 419

920.1
 922.4
 925.2
 420

926.9
 421

926.2
 924.1
 422

917.8
 423

913.4
 424

911.9
 425

911.4
 426

909.9
 427

914.1
 915.2
 427

915.0
 428

911.6
 429

909.3
 430

910.8
 910.4
 430

902.4
 431

899.2
 432

899.1
 433

57A. 418+00 TO 57A. 433+00

ESTIMATED QUANTITIES

QUANTITY CALCULATIONS
 BY DP DATE 1-11-78
 CHECKED H.F. DATE 2-3-78
 KING AND GARDNER
 CONSULTING ENGINEERS
 Revised: 1.E.H. 3/79

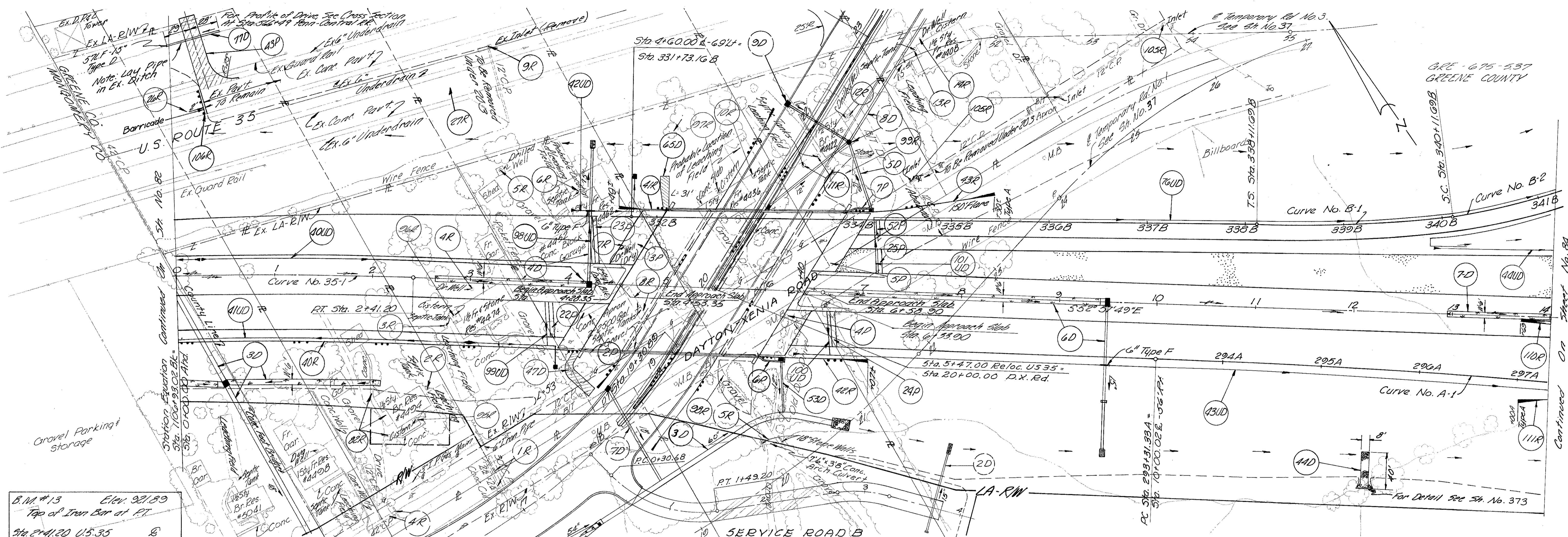
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

30
616

G.P.E. - 675 - 5.37
GREENE COUNTY

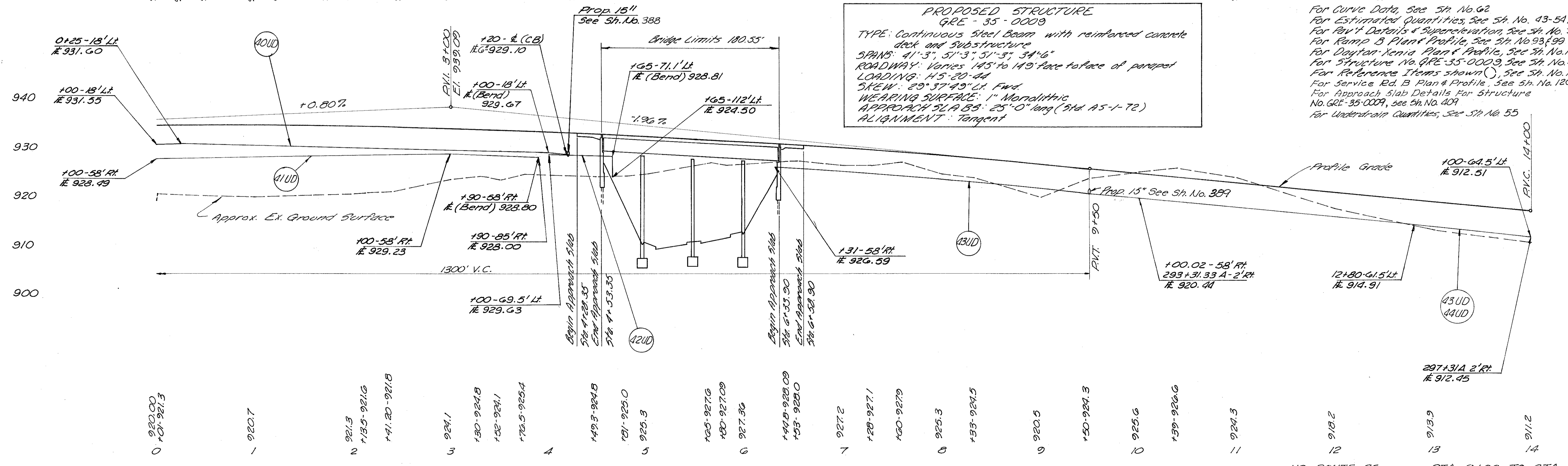
REF. NO.	STATION TO STATION	SIDE	606			Special			409		301	310	SEE SHEET NO.
			Record	Anchor	Anchor	Drilled	Privy	Septic	Seal	Seal	6"	Subbase	
			Rein. Type 5	Assembly	Assembly	Well	Vault	Tank	Coat	Coat	Aggregate	Type II	
			Each	Each	Each	Each	Each	Each	Each	Each	Each		
			Lin. Ft.	Each	Each	Each	Each	Each	Each	Each	Each		
<i>ROADWAY</i>													
1R	368+53	Lt.											
2R	368+76	Lt.										74	
3R	Not Used											74	
4R	415+20	Lt.										77	
5R	Not Used												
6R	Not Used												
7R	412+57 - 415+41	Med.	475.0		2							77	
8R	Not Used											77	
9R	Not Used												
10R	Not Used												
11R	Not Used												
12R	Not Used	Rt.											
13R	360+05 - 370+81	Med.	137.5	1	1							74	
14R	360+05 - 371+34	Lt.	137.5	1	1							74	
15R	373+77 - 380+50	Rt.	137.5	1	1							75	
16R	380+50 - 391+24	Med.	137.5	1	1							75, 76	
17R	380+50 - 391+24	Lt.	137.5	1	1							75, 76	
<i>Driveway</i>													
1P	381+30	Med.						51.4	1.4	28.5	28.5	75	
<i>SUB-TOTALS</i>			1162.5	5	5	2	1	1	1	51.4	1.4	28.5	28.5
TOTALS TO GENERAL SUMMARY			1162.5	5	5	2	1	1	1	52	2	29	29

Type A
Type T



B.M. #13 Elev. 921.89
Top of Iron Bar at RT.
Sta. 2+41.20 U.S. 35

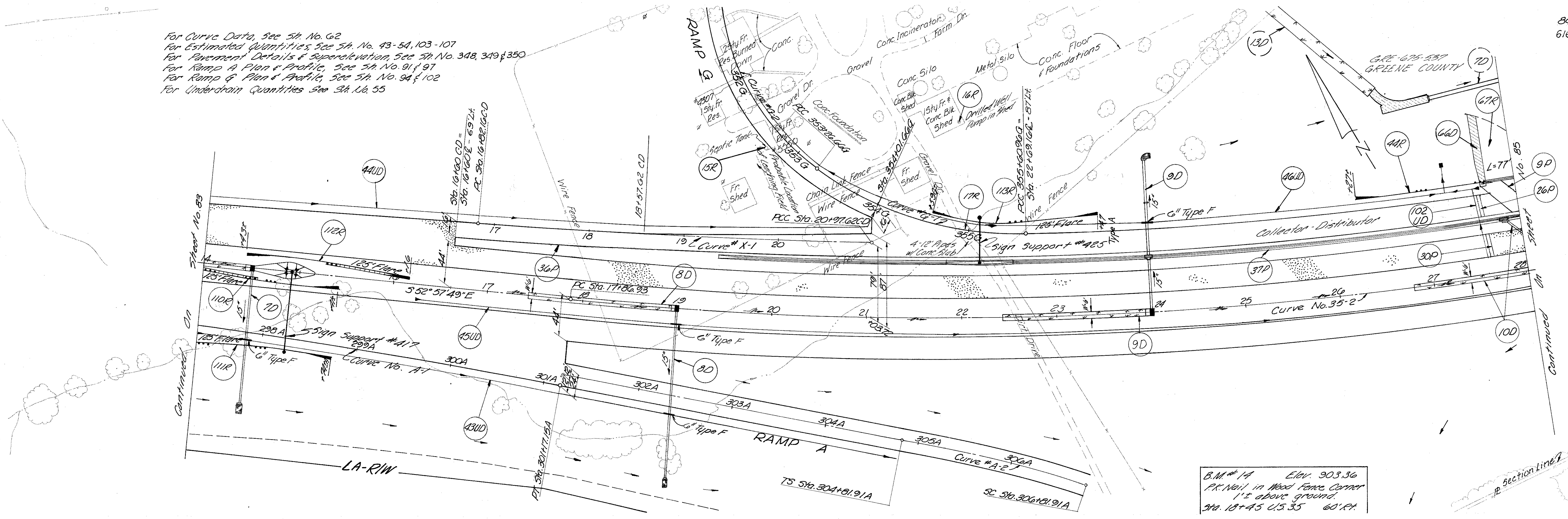
935.39	935.40	935.59	935.38	935.34	935.30	935.24	935.17	935.08	934.99	934.87	934.75	934.61	934.46	934.30	934.12	933.93	933.72	933.51	933.28	933.03	928.77	922.50	922.22	921.92	921.61	921.29	920.95	920.60	920.24	922.86	922.66	922.47	922.07	922.65	922.23	922.78	927.33	926.86	926.38	925.40	924.42	923.44	922.46	921.26	920.51	919.53	918.55	917.57
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For Curve Data, See Sta. No. 62
For Estimated Quantities, See Sta. No. 43-54, 103-107
For Pav't Details & Superstructure, See Sta. No. 346, 347 & 348
For Ramp B Plan & Profile, See Sta. No. 93 & 99
For Dayton Xenia Plan & Profile, See Sta. No. 108
For Structure No. GRE-35-0009, See Sta. No. 534
For Reference Items shown, See Sta. No. 117 & 119
For Service Rd. B Plan & Profile, See Sta. No. 120
For Approach Slab Details For Structure No. GRE-35-0009, See Sta. No. 409
For Underdrain Quantities, See Sta. No. 55

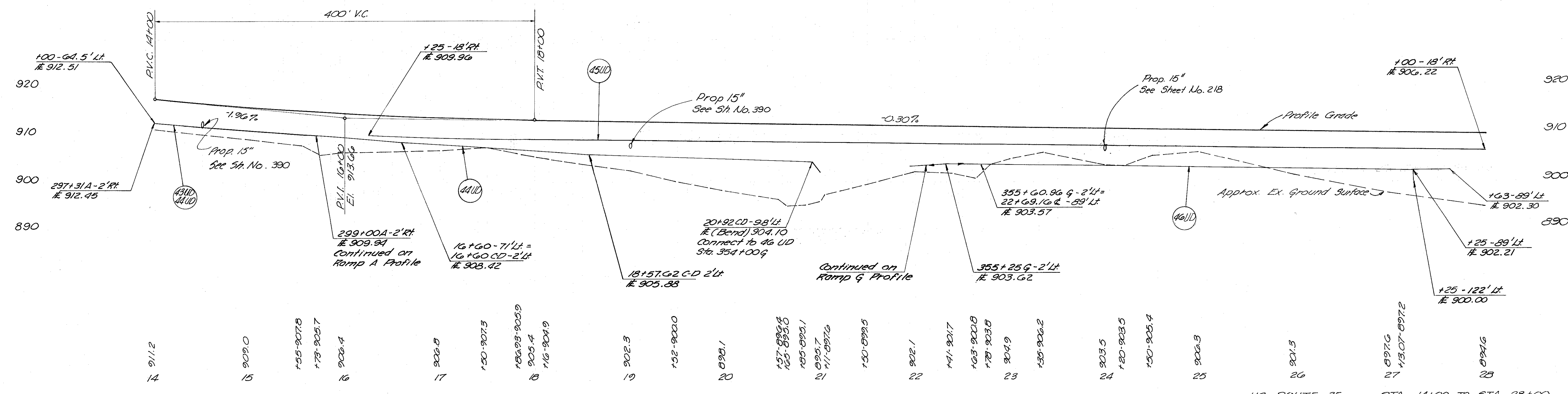
Continued On Sheet No. 84

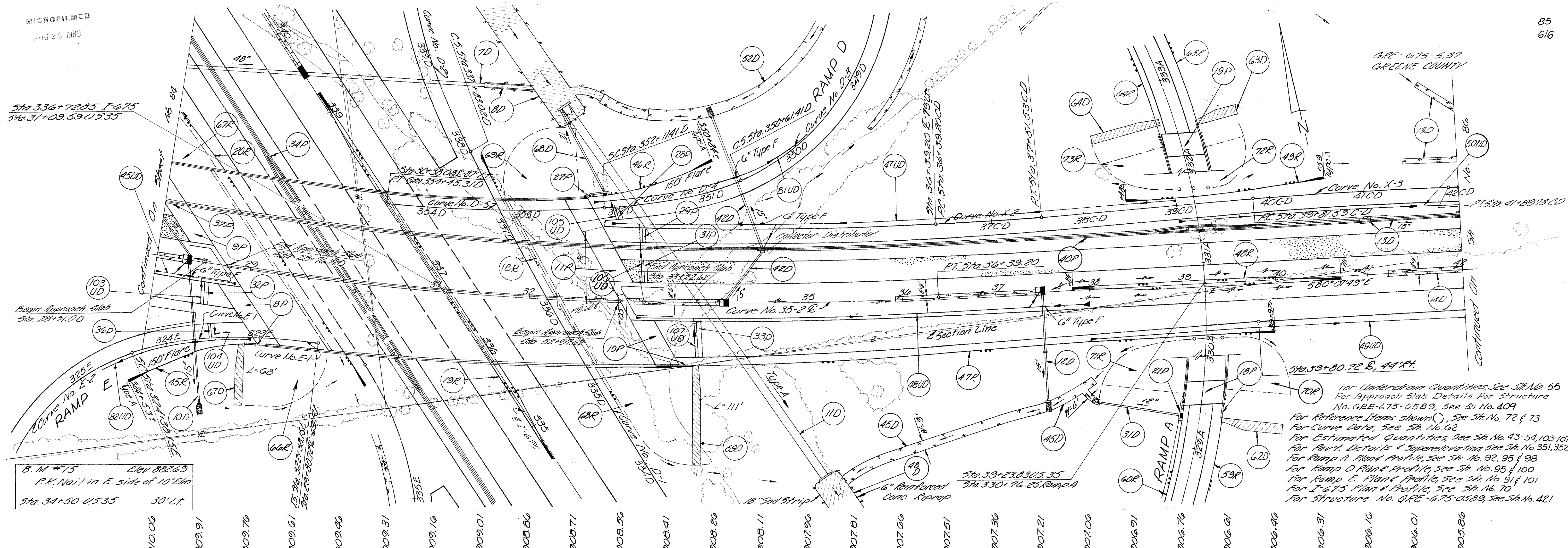
For Curve Data, See Sh. No. 62
 For Estimated Quantities, See Sh. No. 43-54, 103-107
 For Pavement Details & Superlevation, See Sh. No. 348, 349 & 350
 For Ramp A Plan & Profile, See Sh. No. 91 & 97
 For Ramp G Plan & Profile, See Sh. No. 94 & 102
 For Underdrain Quantities, See Sh. No. 55



917.57	917.10	916.65	916.22	915.82	915.45	915.10	914.78	914.49	914.22	913.98	913.76	913.57	913.40	913.26	913.15	913.06	912.91	912.76	912.61	912.46	912.51	912.01	911.86	911.71	911.56	911.41	911.26	911.11	910.96	910.81	910.66	910.51	910.36	910.21	910.06
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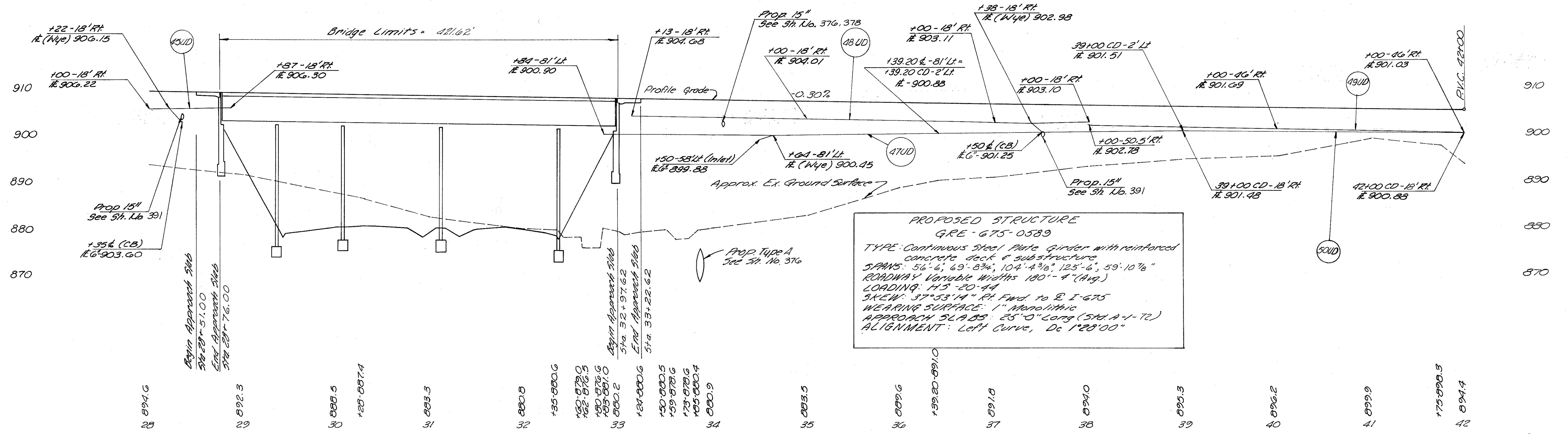
B.M. # 1A Elev. 903.36
 P.K. Nail in Wood Fence Corner
 1' above ground.
 Sta. 18+45 U.S. 35 60' P.K.



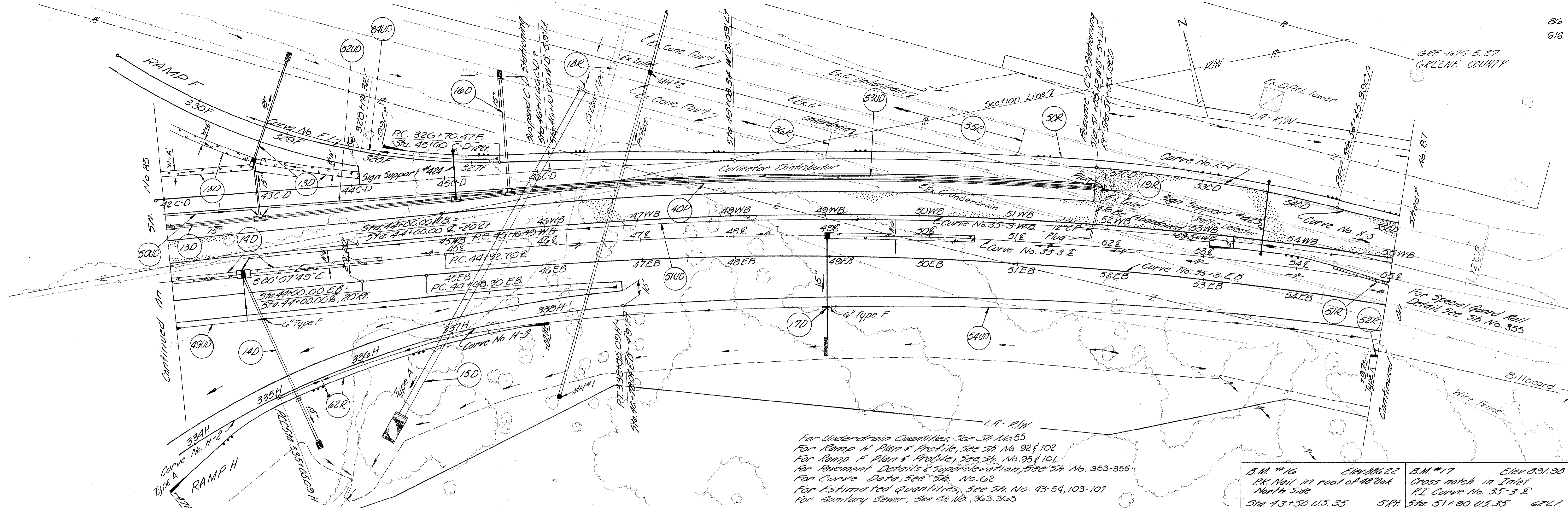


B.M. #15 Elev. 888.69
P.K. Nail in E. side of 10' Elm
Sta. 34+50 U.S. 35 30' LT.

For Underdrain Quantities, See Sh. No. 55
For Approach Slab Details For Structure
No. GRE-675-0589, See Sh. No. 409
For Reference Items shown, See Sh. No. 72 & 73
For Estimated Quantities, See Sh. No. 43-54, 103-107
For Part. Details & Super-elevation, See Sh. No. 351, 352
For Ramp A, Plant Profile, See Sh. No. 92, 95 & 98
For Ramp D, Plant Profile, See Sh. No. 95 & 100
For Ramp E, Plant Profile, See Sh. No. 91 & 101
For I-675 Plan & Profile, See Sh. No. 70
For Structure No. GRE-675-0589, See Sh. No. 421

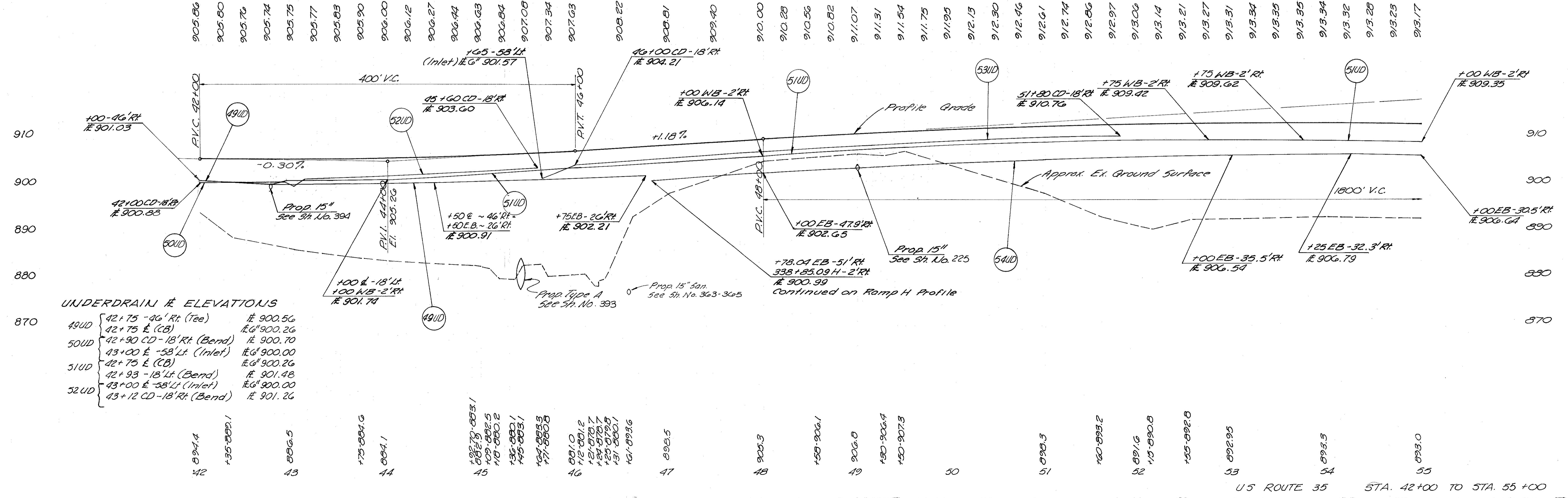


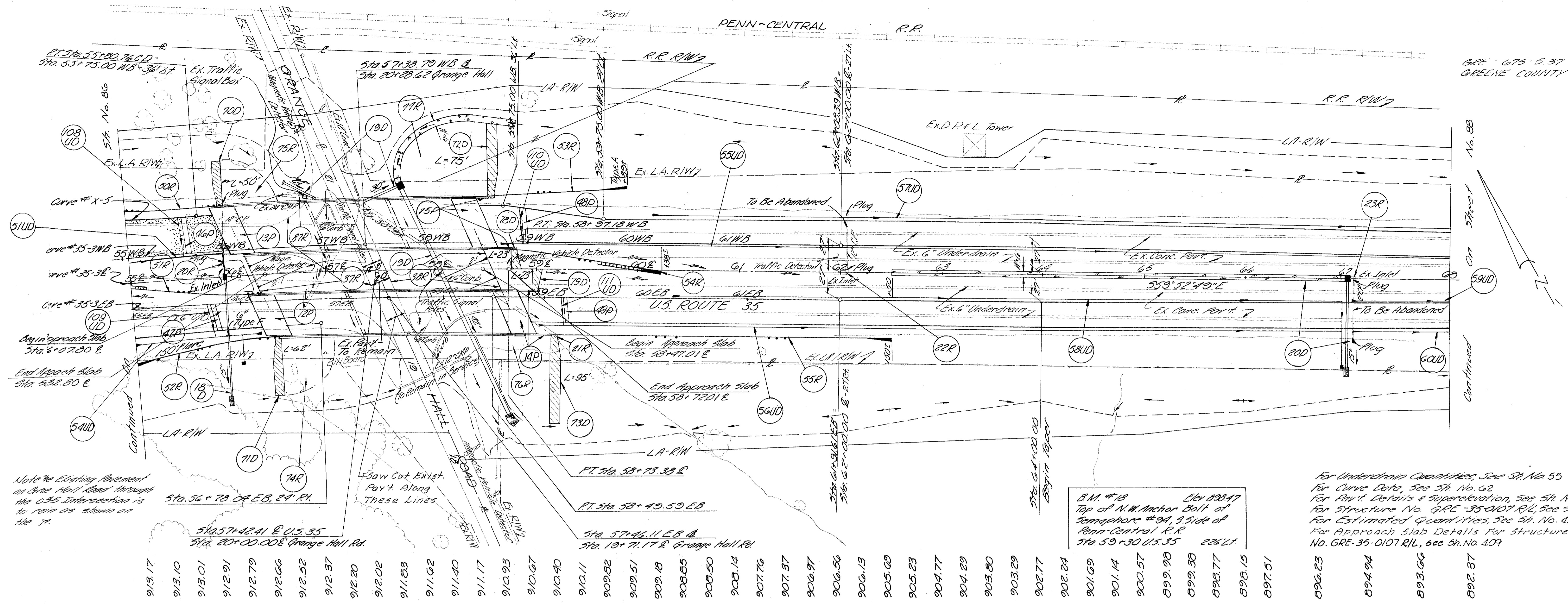
PROPOSED STRUCTURE
GRE-675-0589
TYPE: Continuous Steel Plate Girder with reinforced concrete deck & substructure
SPANS: 56'-6", 69'-8 3/4", 104'-4 3/8", 125'-6", 59'-10 1/8"
ROADWAY: Variable Widths 180'-4" (Avg.)
LOADING: HS-20-44
SKEW: 37° 53' 14" Rt. Fwd. to E. I-675
WEARING SURFACE: 1" Monolithic
APPROACH SLAB: 25'-0" Long (Sta. A-1-72)
ALIGNMENT: Left Curve, Dc 1° 28' 00"



For Underdrain Quantities, See Sta. No. 55
 For Ramp H Plan & Profile, See Sta. No. 92 & 102
 For Ramp F Plan & Profile, See Sta. No. 95 & 101
 For Pavement Details & Super-elevation, See Sta. No. 353-355
 For Curve Data, See Sta. No. 62
 For Estimated Quantities, See Sta. No. 43-54, 103-107
 For Sanitary Sewer, See Sta. No. 363, 365

B.M. #16	Elev. 891.22	B.M. #17	Elev. 891.98
P.N. Nail in root of 48" Oak		Cross notch in Inlet	
North Side		P.I. Curve No. 35-3 E	
Sta. 43+50 U.S. 35	5' RH	Sta. 51+00 U.S. 35	62' L





Note the Existing Alignment on Grange Hall Road through the U.S. 35 Intersection is to remain as shown on the 'P'.

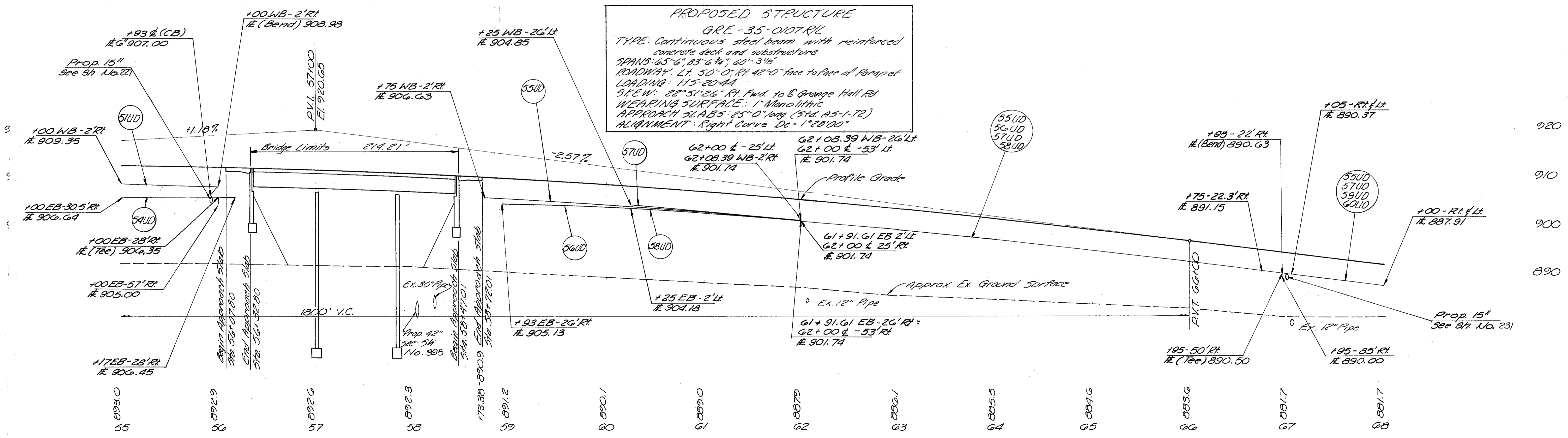
Saw Cut Exist. Pav't Along These Lines

S.M. #18 Elev. 898.47
Top of N.W. Anchor Bolt of Semaphore #94, S. Side of Penn-Central R.R.
Sta. 59+30 U.S. 35 226' LT.

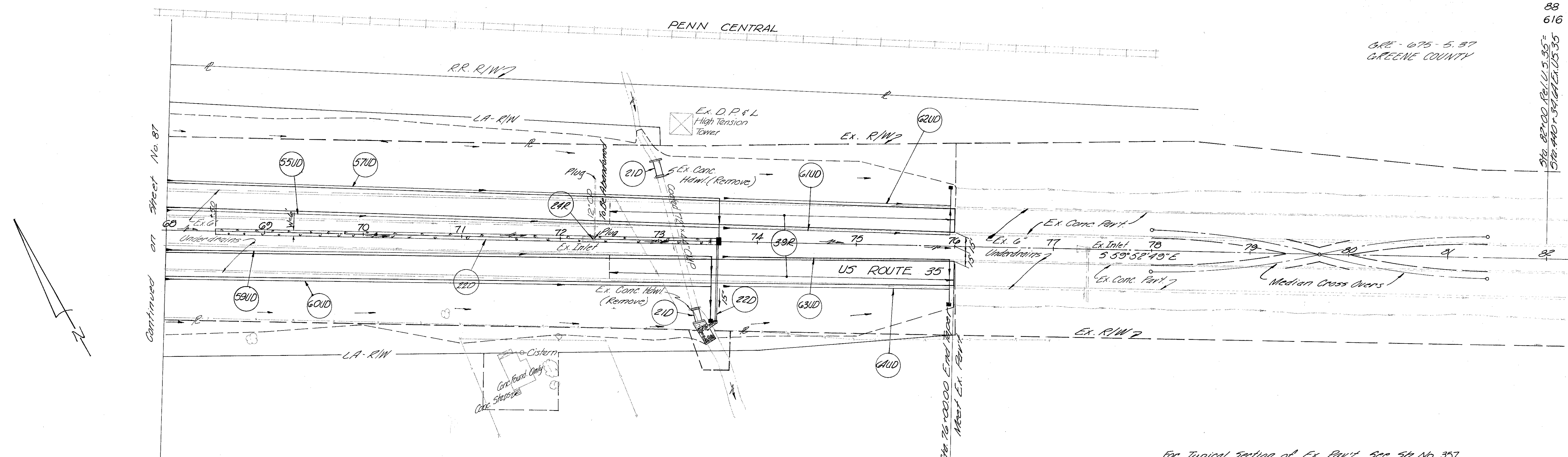
For Underdrain Quantities, See Sh. No. 55
For Curve Data, See Sh. No. 62
For Pav't Details & Super-elevation, See Sh. No. 355, 356 & 357
For Structure No. GRE-35-0107 R/L, See Sh. No. 548
For Estimated Quantities, See Sh. No. 43-54, 103-107
For Approach Slab Details For Structure No. GRE-35-0107 R/L, See Sh. No. 409

913.17	913.10	913.01	912.91	912.79	912.66	912.52	912.37	912.20	912.02	911.83	911.62	911.40	911.17	910.93	910.67	910.40	910.11	909.82	909.51	909.19	908.85	908.50	908.14	907.76	907.37	906.97	906.56	906.13	905.69	905.23	904.77	904.29	903.80	903.29	902.77	902.24	901.69	901.14	900.57	999.95	999.38	998.77	998.15	997.51	996.23	994.94	993.66	992.37
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PROPOSED STRUCTURE
GRE-35-0107 R/L
TYPE: Continuous steel beam with reinforced concrete deck and substructure
SPANS: 65'-6", 23'-6 3/4", 60'-3 1/2"
ROADWAY: Lt. 50'-0" Rt. 42'-0" face to face of Parapet
LOADING: H-15-20-44
SKEW: 20° 51' 26" Rt. Fwd. to E Grange Hall Rd.
WEARING SURFACE: 1" Monolithic
APPROACH SLABS: 25'-0" Long (Std. A5-1-72)
ALIGNMENT: Right Curve Dc = 1' 28' 00"



GRE - 675 - 5.87
GREENE COUNTY



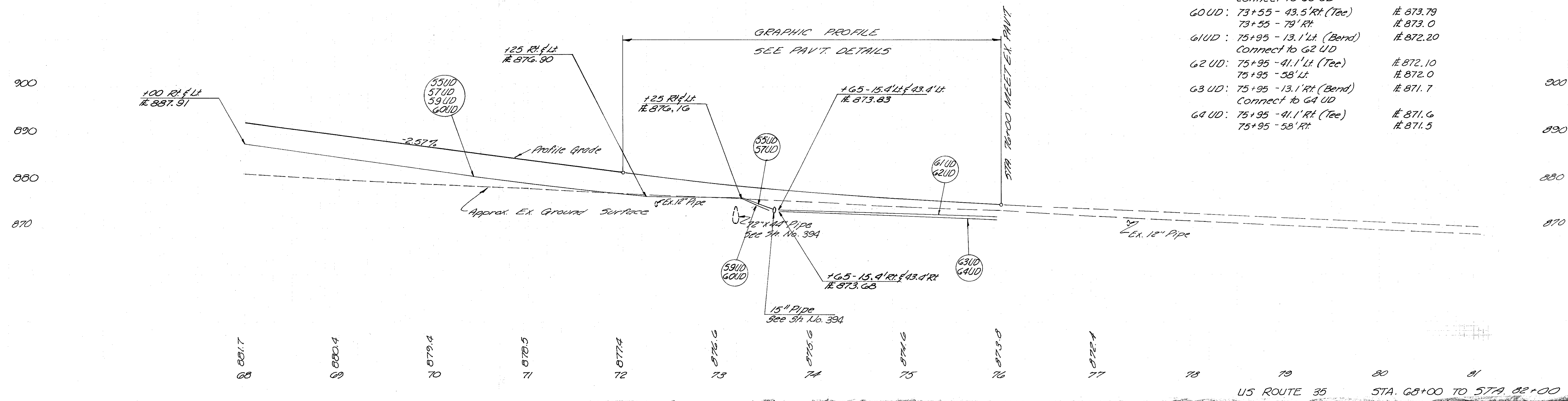
B.M. #19 Elev. 875.04
Nail in Wood Fence Corner,
25' E. East of Culvert
Sta. 73+75 U.S. 35 89+21

892.37
891.09
889.80
888.52
887.23
885.95
884.66
883.38
882.09

For Typical Section of Ex. Pav't, See Sht. No. 357
For Pavement Details & Edge Elevations, See Sht. No. 357
For Estimated Quantities, See Sht. No. 43-54, 103-107
For Median Cross Overs, See Sht. No. 33-35
For Underdrain Quantities, See Sht. No. 55

UNDERDRAIN # ELEVATIONS

57 UD: 73+60 - 43.4' Lt. (Bend)	# 873.93
Connect to 55 UD	
55 UD: 73+60 - 15.4' Lt. (Tee)	# 873.81
73+60 & (CB)	# 873.75
59 UD: 73+55 - 15.5' Rt. (Bend)	# 873.89
Connect to 60 UD	
60 UD: 73+55 - 43.5' Rt. (Tee)	# 873.79
73+55 - 79' Rt.	# 873.0
61 UD: 75+95 - 13.1' Lt. (Bend)	# 872.20
Connect to 62 UD	
62 UD: 75+95 - 41.1' Lt. (Tee)	# 872.10
75+95 - 58' Lt.	# 872.0
63 UD: 75+95 - 13.1' Rt. (Bend)	# 871.7
Connect to 64 UD	
64 UD: 75+95 - 41.1' Rt. (Tee)	# 871.6
75+95 - 58' Rt.	# 871.5



881.7	880.4	879.4	878.5	877.4	876.6	875.6	874.6	873.8	872.4
68	69	70	71	72	73	74	75	76	77

US ROUTE 35 STA. 68+00 TO STA. 82+00

FED. RD. DIVISION	STATE	PROJECT	89
2	OHIO		616

GRE-675-537
GREENE COUNTY

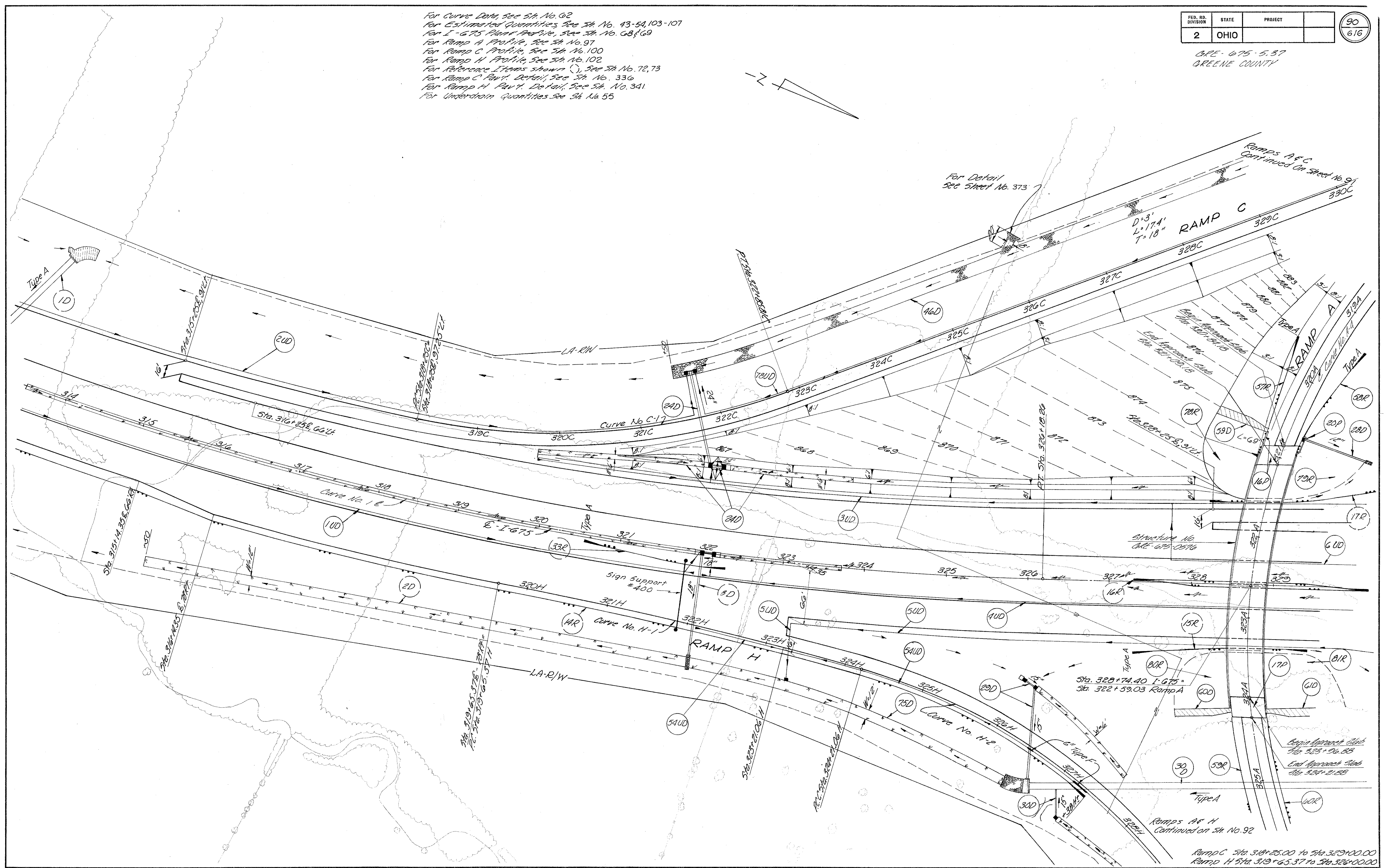
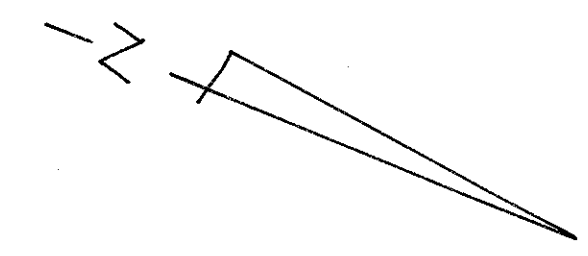
For Relocated US-35 See Sheet No. 81 & 88
 For Relocated Dayton-Xenia R.R. See Sheet No. 108 & 110
 For Relocated Penn Central R.R. See Sheet No. 112 & 116
 For Wildonna Dr. See Sheet No. 111
 For Service Rd. B, See Sheet No. 120

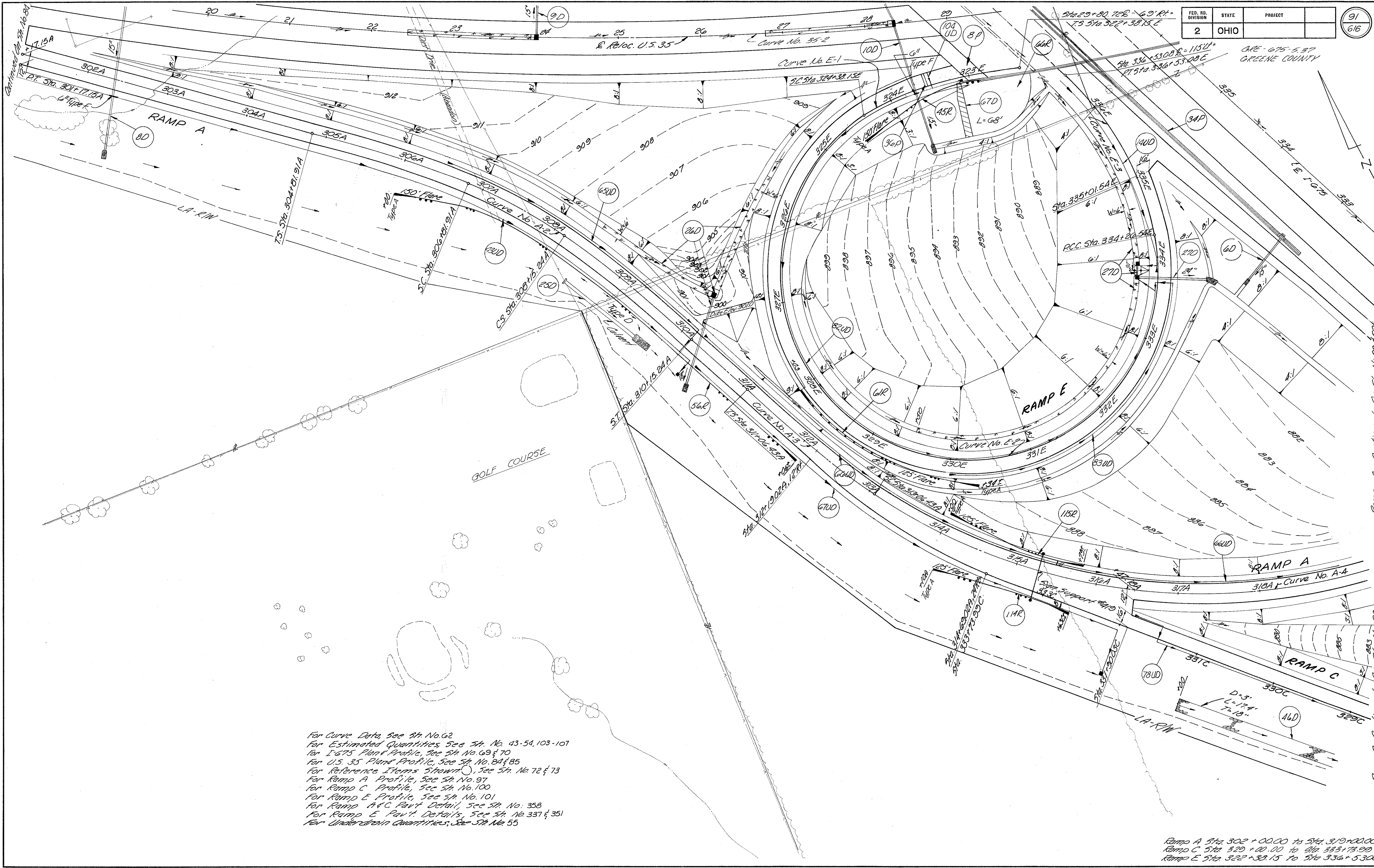


U.S. - 35 INTERCHANGE PLAN SHEET LAYOUT

GRE-675-537
GREENE COUNTY

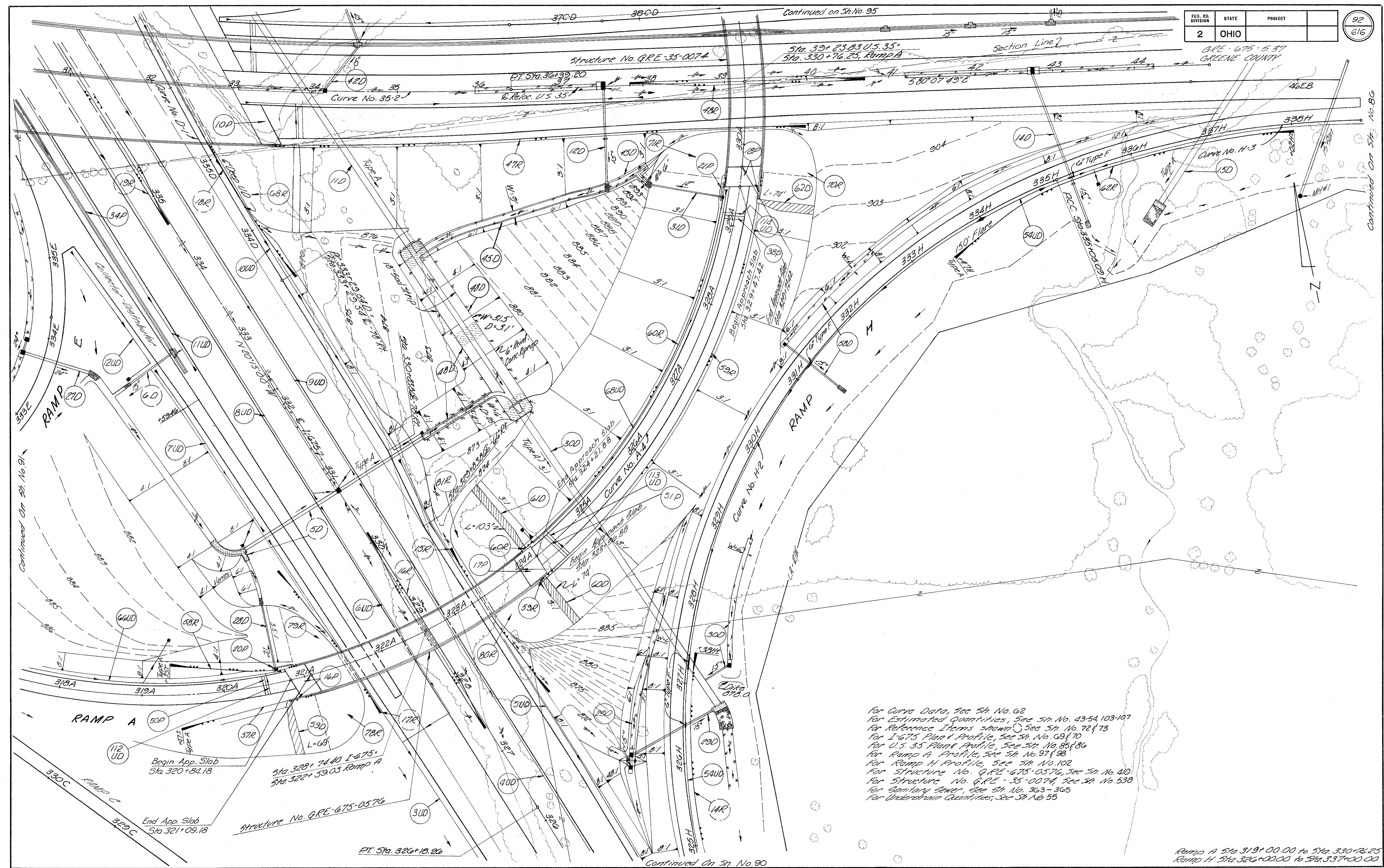
For Curve Data, See Sh. No. 62
 For Estimated Quantities, See Sh. No. 43-54, 103-107
 For I-675 Plan Profile, See Sh. No. 68 & 69
 For Ramp A Profile, See Sh. No. 97
 For Ramp C Profile, See Sh. No. 100
 For Ramp H Profile, See Sh. No. 102
 For Reference Items shown (), See Sh. No. 72, 73
 For Ramp C Pav't. Detail, See Sh. No. 336
 For Ramp H Pav't. Detail, See Sh. No. 341
 For Underdrain Quantities See Sh. No. 55





For Curve Data, See Sht. No. 62
 For Estimated Quantities, See Sht. No. 43-54, 103-107
 For I-675 Plan Profile, See Sht. No. 69 & 70
 For U.S. 35 Plan Profile, See Sht. No. 84 & 85
 For Reference Items Shown, See Sht. No. 72 & 73
 For Ramp A Profile, See Sht. No. 97
 For Ramp C Profile, See Sht. No. 100
 For Ramp E Profile, See Sht. No. 101
 For Ramp A & C Pav't Details, See Sht. No. 358
 For Ramp E Pav't Details, See Sht. No. 337 & 351
 For Underdrain Quantities, See Sht. No. 55

Ramp A Sta. 302+00.00 to Sta. 319+00.00
 Ramp C Sta. 320+00.00 to Sta. 333+78.00
 Ramp E Sta. 322+39.15 to Sta. 336+53.00

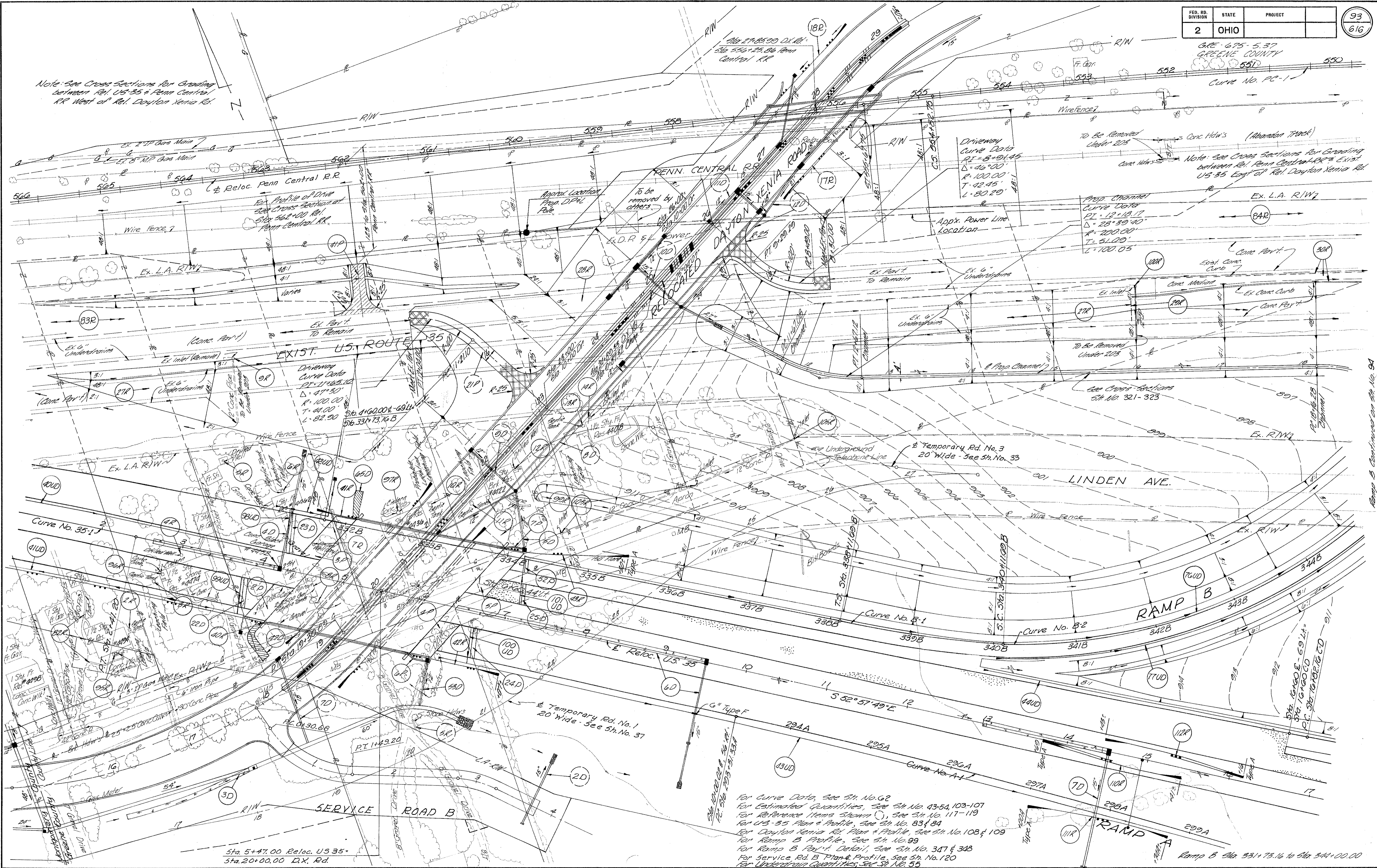


For Curve Data, See Sh. No. 62
 For Estimated Quantities, See Sh. No. 103-107
 For Reference Items shown, See Sh. No. 72 & 73
 For I-675 Plan & Profile, See Sh. No. 69 & 70
 For U.S. 35 Plan & Profile, See Sh. No. 85 & 86
 For Ramp A Profile, See Sh. No. 97 & 98
 For Ramp H Profile, See Sh. No. 102
 For Structure No. GRE-675-0576, See Sh. No. 410
 For Structure No. GRE-35-0074, See Sh. No. 538
 For Sanitary Sewer, See Sh. No. 363-365
 For Underdrain Quantities, See Sh. No. 55

RAMP A STA. 319+00.00 TO STA. 330+76.25
 RAMP H STA. 326+00.00 TO STA. 337+00.00

Note: See Cross Sections for Grading between Rel. US-35 & Penn Central RR West of Rel. Dayton Xenia Rel.

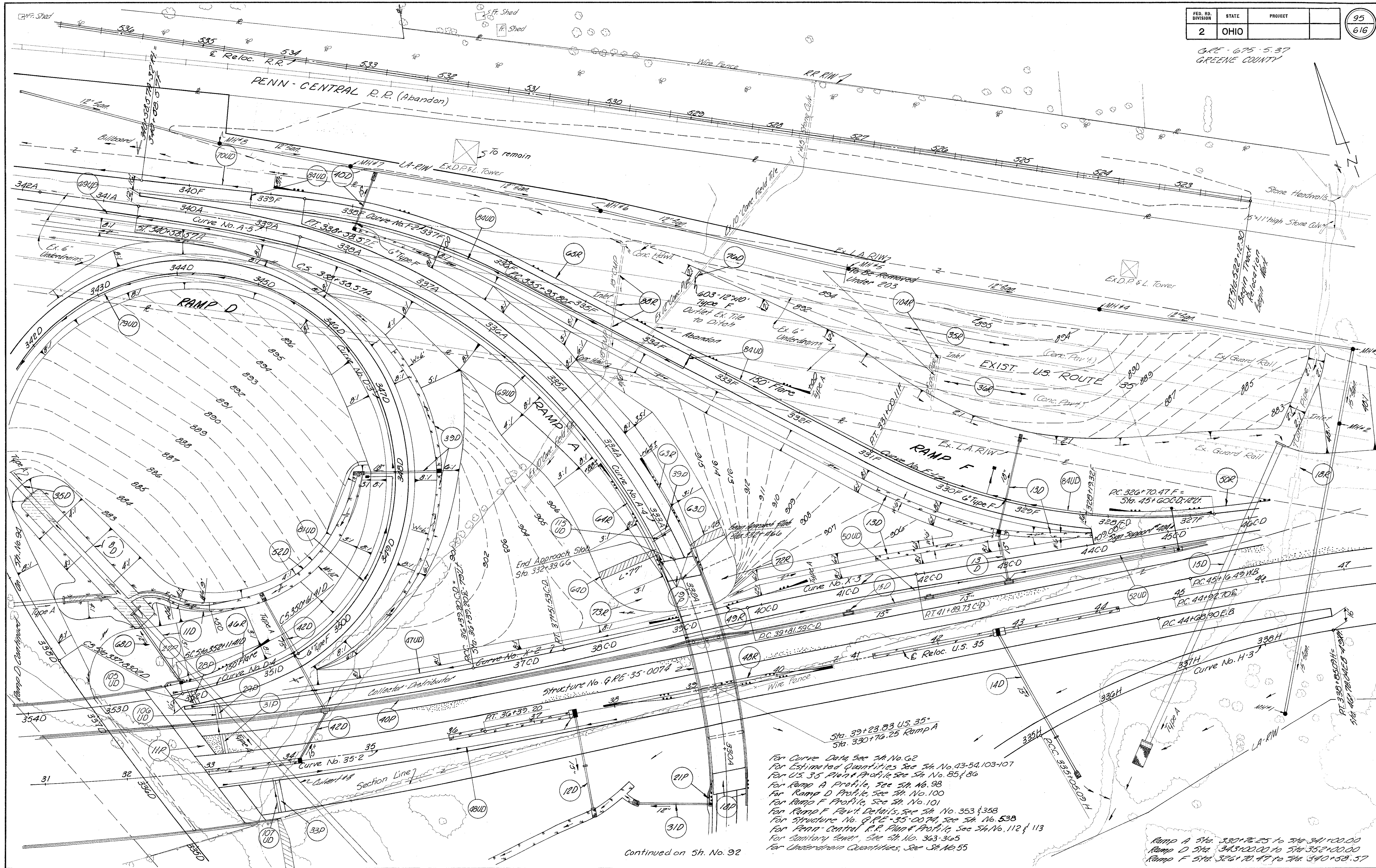
GRE. 675-537
GREENE COUNTY
Curve No. PC-1
Note: See Cross Sections for Grading between Rel. Penn Central RR & Exist. US-35 East of Rel. Dayton Xenia Rel.



Sta. 5+47.00 Reloc. US 35 - Sta. 20+00.00 D.X. Rd.
 For Curve Data, See Sh. No. 62
 For Estimated Quantities, See Sh. No. 43-54, 103-107
 For Reference Items Shown, See Sh. No. 117-119
 For US-35 Plan & Profile, See Sh. No. 83 & 84
 For Dayton Xenia Rel. Plan & Profile, See Sh. No. 108 & 109
 For Ramp B Profile, See Sh. No. 16-99
 For Ramp B Pav't. Detail, See Sh. No. 347 & 348
 For Service Rd. B Plan & Profile, See Sh. No. 120
 For Underdrain Quantities, See Sh. No. 55
 Ramp B Sta. 331+73.16 to Sta. 344+00.00

Ramp B Continued on Sh. No. 94

GRE-675-5.37
GREENE COUNTY



Sta. 39+23.83 U.S. 35
Sta. 330+76.25 RAMP A

For Curve Data See Sh. No. 62
For Estimated Quantities See Sh. No. 43-54, 103-107
For U.S. 35 Plant Profile See Sh. No. 85 & 86
For Ramp A Profile, See Sh. No. 98
For Ramp D Profile, See Sh. No. 100
For Ramp F Profile, See Sh. No. 101
For Ramp H Profile, See Sh. No. 102
For Structure No. GRE-35-0074, See Sh. No. 53B
For Penn-Central R.R. Plant Profile, See Sh. No. 112 & 113
For Sanitary Sewer, See Sh. No. 363-365
For Underdrain Quantities, See Sh. No. 55

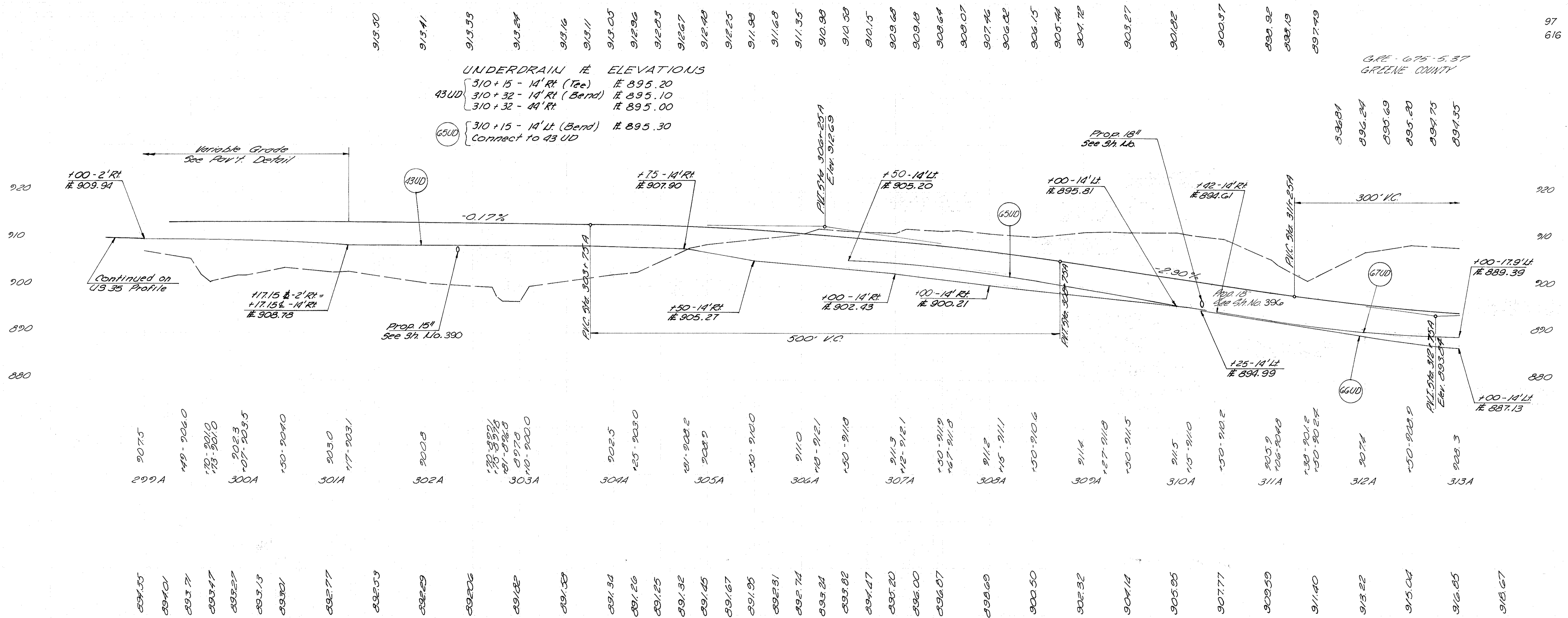
Ramp A Sta. 330+76.25 to 34+34+00.00
Ramp D Sta. 34+31+00.00 to 34+35+00.00
Ramp F Sta. 32+61+70.47 to 34+0+58.57

Continued on Sh. No. 92

GRE - 675-5.37
GREENE COUNTY

UNDERDRAIN ELEVATIONS

- 43UD { 310+15 - 14' Rt (Tee) E 895.20
- 310+32 - 14' Rt (Bend) E 895.10
- 310+32 - 44' Rt. E 895.00
- 65UD { 310+15 - 14' Lt (Bend) E 895.30
- Connect to 43 UD



PROPOSED STRUCTURE
GRE - 675-0576

TYPE: Continuous Chorded Plate Girder with reinforced concrete deck and substructure

SPAN: 41'-9", 105'-9", 91'-7", 54'-0"

ROADWAY: 42'-0" wide to face of parapet

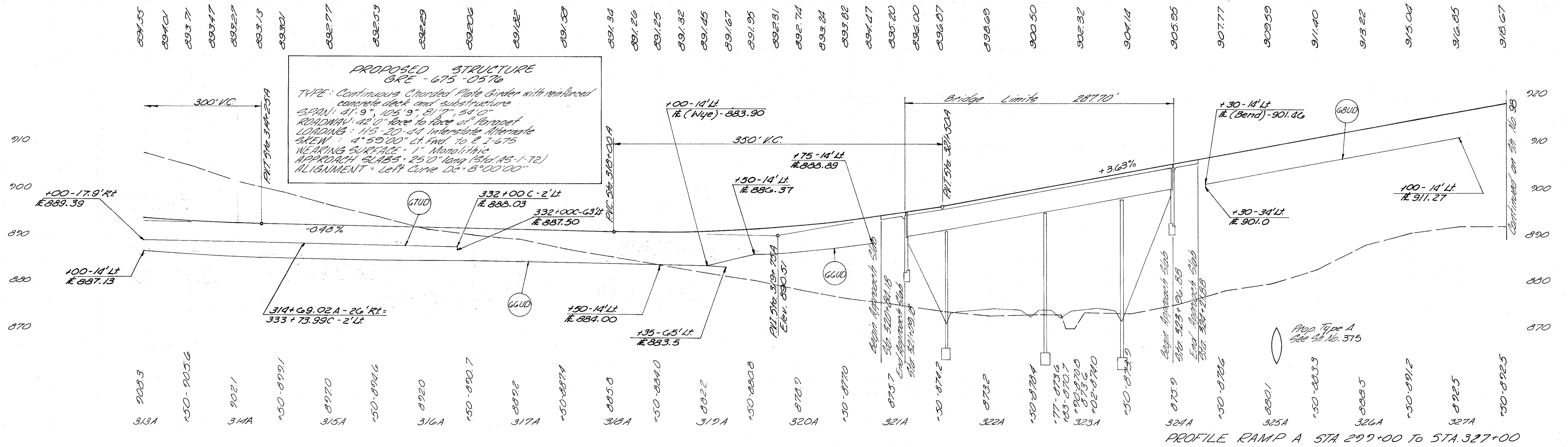
LOADING: 14'-3" 20'-44" Interstate Alternate

SKW: 4'-59" 00" Lt. End. to E 1-675

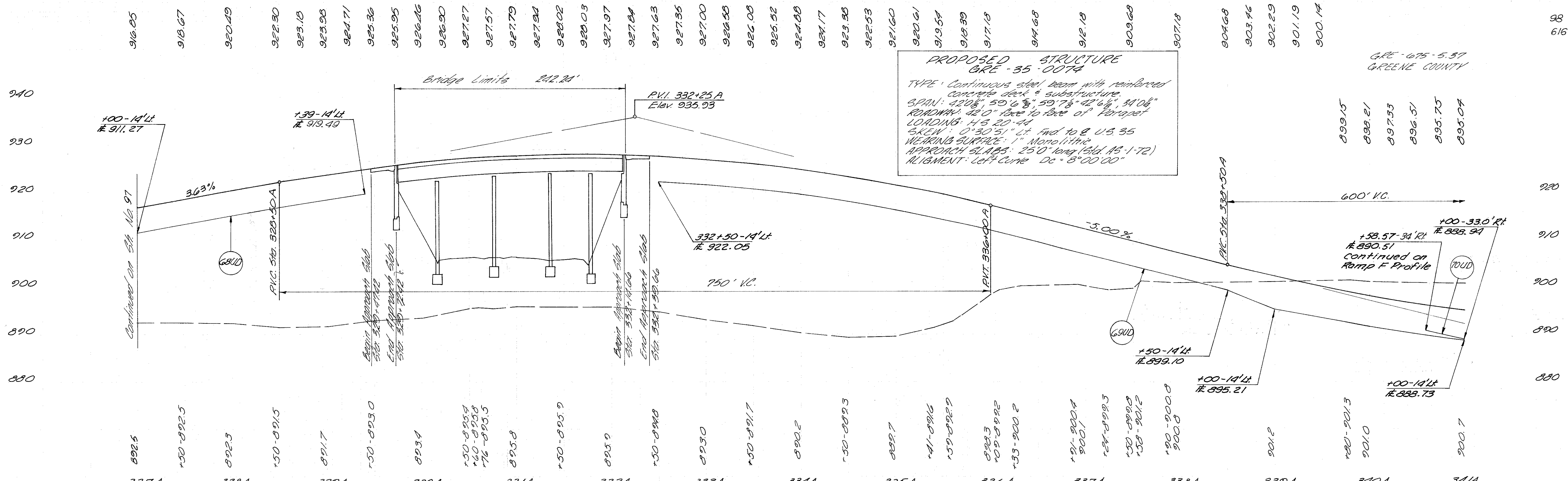
WEARING SURFACE: 1" Monolithic

APPROACH SLABS: 25'-0" long (Std. AS-1-72)

ALIGNMENT: Left Curve Dc = 8°00'00"



PROFILE RAMP A STA 299+00 TO STA 327+00

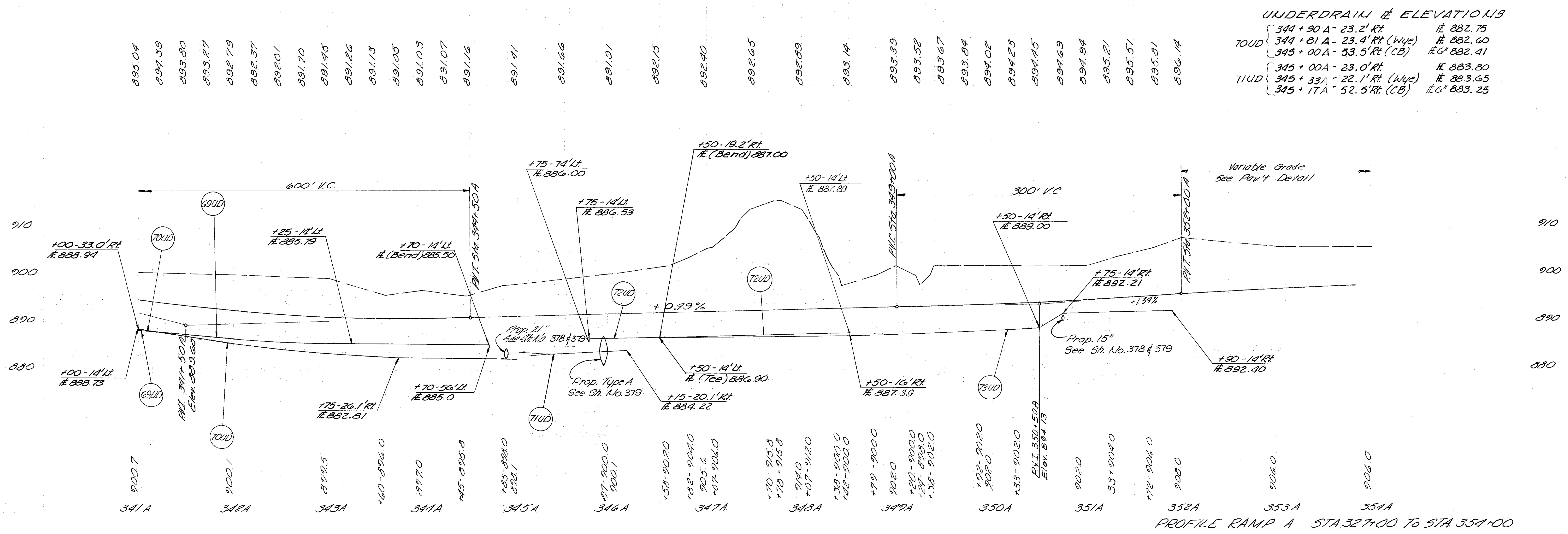


PROPOSED STRUCTURE
GRE-35-0074

TYPE: Continuous steel beam with reinforced concrete deck & substructure.
SPAN: 420'6", 50'6", 50'7", 42'6", 34'0"
ROADWAY: 42'0" from face of Parapet
LOADING: HS 20-44
SKEW: 0°30'51" Lt. from to E. U.S. 35
WEARING SURFACE: 1" Monolithic
APPROACH SLABS: 25'0" long, (old AS-1-72)
ALIGNMENT: Left Curve Dc = 8°00'00"

GRE-675-5.57
GREENE COUNTY

899.15
899.21
897.33
896.51
895.75
895.04



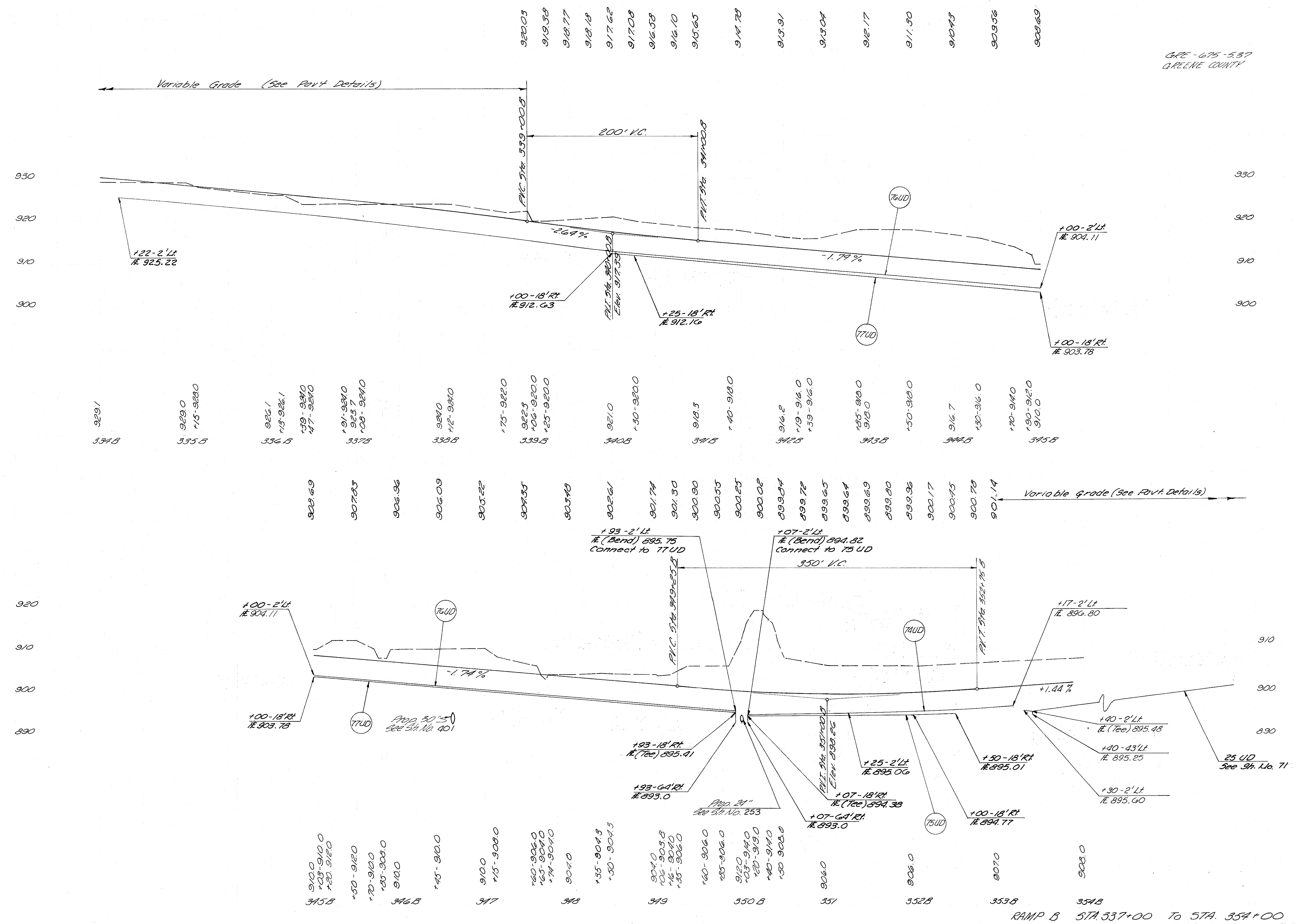
UNDERDRAIN ELEVATIONS

70UD { 344 + 90 A - 23.2' Rt. E 882.75
344 + 81 A - 23.4' Rt. (Wye) E 882.60
345 + 00 A - 53.5' Rt. (CB) E 882.41

71UD { 345 + 00 A - 23.0' Rt. E 883.80
345 + 33 A - 22.1' Rt. (Wye) E 883.65
345 + 17 A - 52.5' Rt. (CB) E 883.25

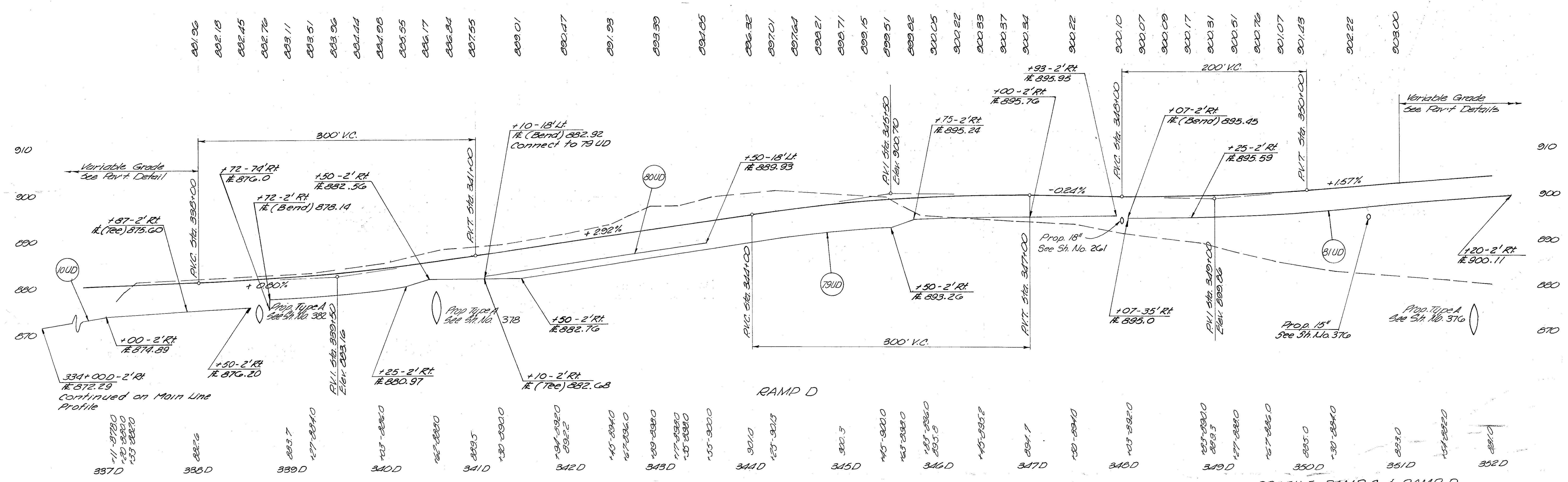
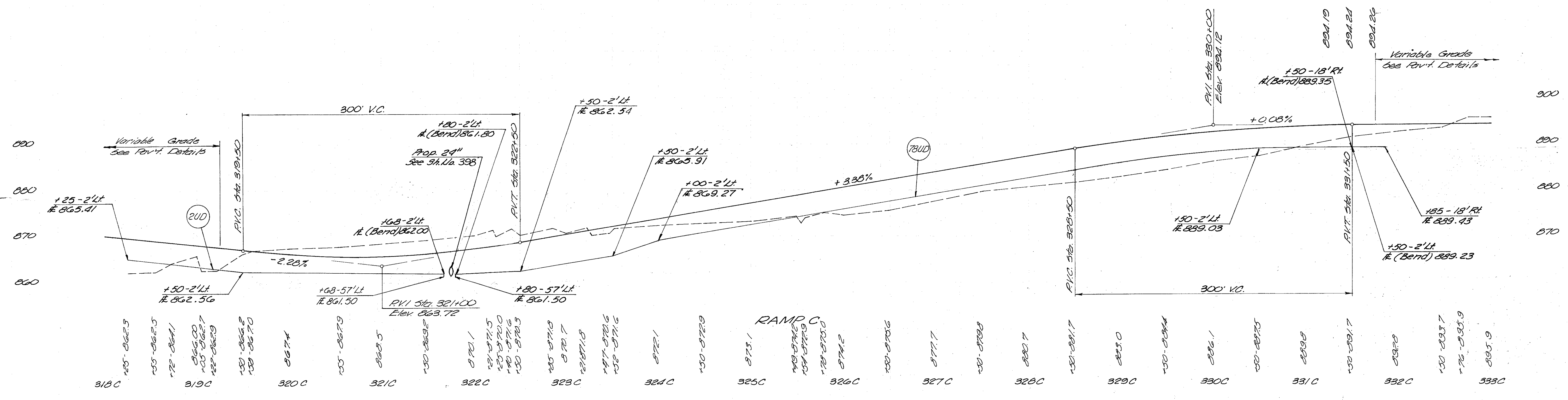
PROFILE RAMP A STA. 327+00 TO STA. 354+00

GRE-675-537
GREENE COUNTY

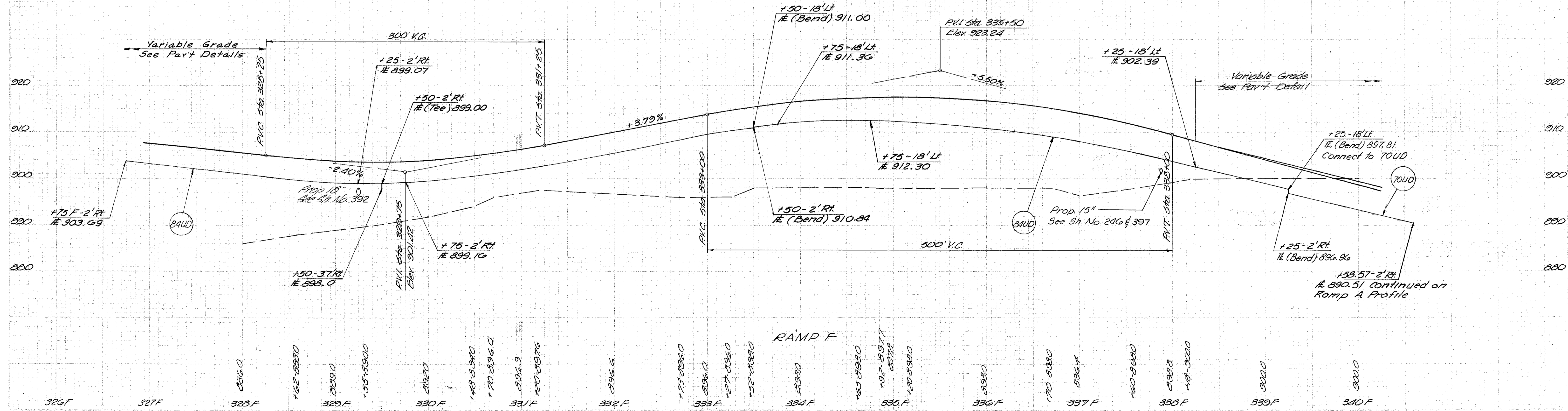
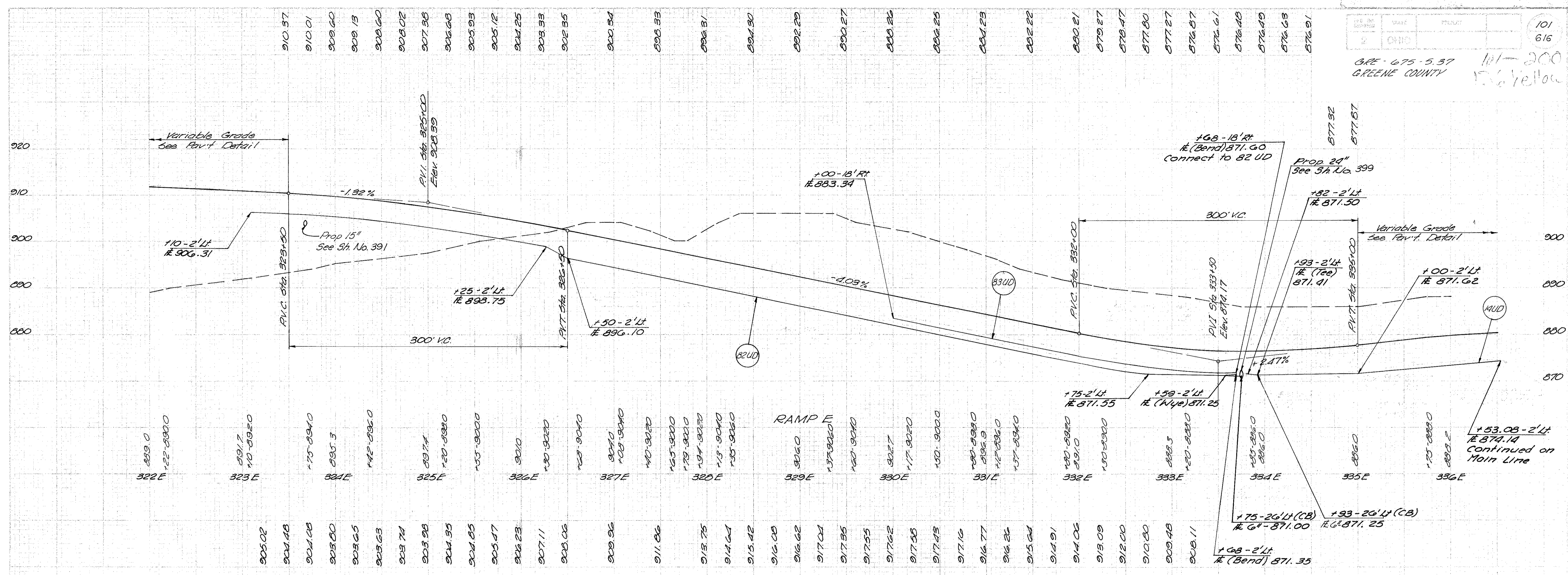


RAMP B STA 337+00 To STA. 354+00

CR - 675-5-37
GREENE COUNTY

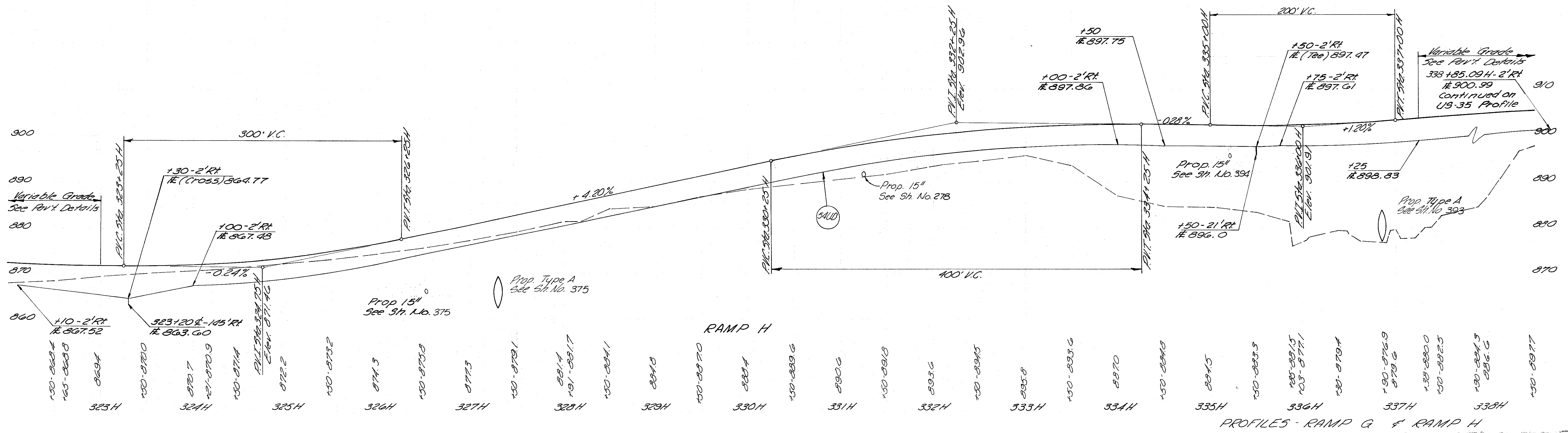
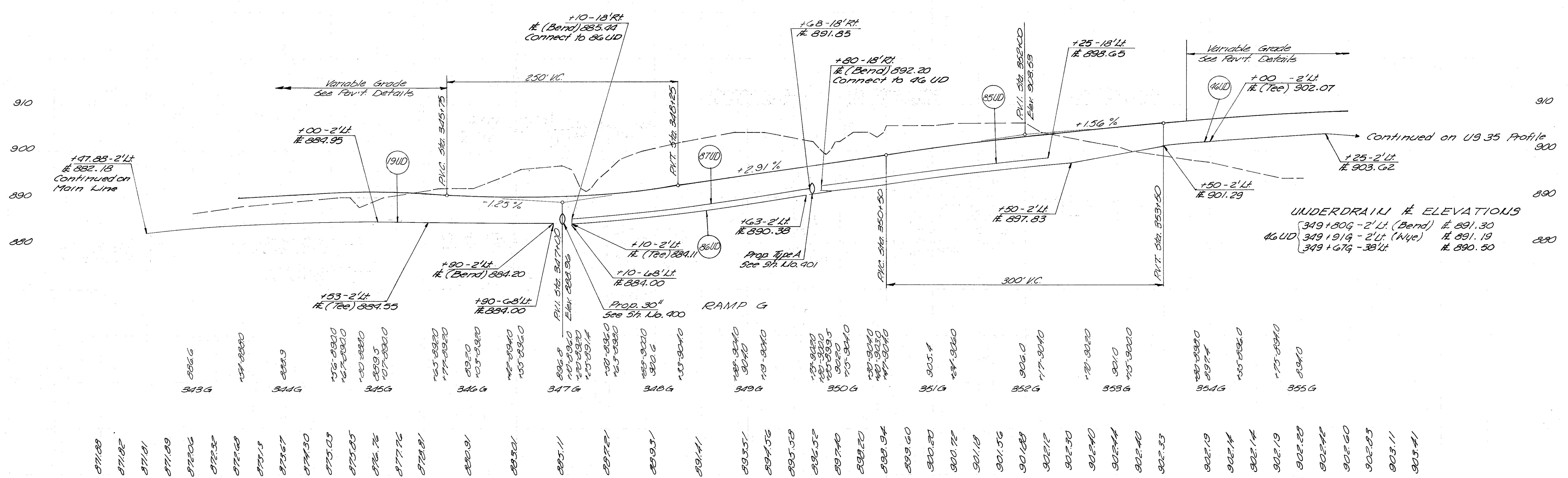


PROFILE RAMP C & RAMP D



PROFILES RAMP E & RAMP F

GRE-075-537
GREENE COUNTY



ESTIMATED QUANTITIES

QUANTITY CALCULATIONS
 BY DP DATE 11-14-71
 CHECKED BY HE DATE 4-3-72
 KING AND GARBER
 CONSULTING ENGINEERS
 Revised: I.E.H. 3/79

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

105
616

GRE - 675-537
 GREENE COUNTY

Note: All Stations Listed Below Refer To U.S. 55 Except Where Otherwise Noted

REF. NO.	STATION TO STATION	SIDE	202										606					SPECIAL	SEE SHEET NO.	
			Pipe Removed 24" Under	Pipe Removed Over 24"	Inlet Removed	Inlet Manholes	Exc. Structures	Exc. Con. Pav't	Exc. Curbs	Exc. Curbs	Exc. Con. Median	Septic Tank Removed	General Exc. Type 5	Asphalt Type 5	Anchor Base	Anchor Base	Anchor Base	Bridge Terminal		Drilled Well
			Lin. Ft.	Lin. Ft.	Each	Each	Lump	Sq. Yd.	Lin. Ft.	Lin. Ft.	Sq. Yd.	Each	Lin. Ft.	Lin. Ft.	Each	Each	Each	Each		Each
ROADWAY																				
1R	1106+25	Lt		174																82
2R	2+60	Rt																		83
3R	2+75	Rt																		83
4R	3+02	Rt																		83
5R	3+27	Lt																		83
6R	4+05	Lt																		83
7R	4+55	Lt																		83
8R	4+70	Rt																		83
9R	5+10	Lt																		83
10R	5+80	Lt																		83
11R	6+40	Lt																		83
12R	6+75	Lt																		83
13R	7+42	Lt																		83
14R	7+47	Lt																		83
15R	10+85	Lt																		84
16R	22+00	Lt																		84
17R	22+05	Lt																		84
18R	40+80	Lt																		86
19R	51+85	Lt																		86
20R	55+02	Lt																		87
21R	57+20 - 59+20	Lt+Rt		252																87
22R	62+06	Rt																		87
23R	67+00	Rt																		87
24R	72+34	Rt																		88
25R	1101+00	Lt+Rt		55																82
26R	1000+8278-0+51	Lt																		81,82,83
27R	1057+2457-13+63	Rt+Lt																		81,82,83,84
28R	5+10 - 10+00	Lt																		92
29R	13+63 - 21+85	Lt																		92,94
30R	13+63 - 21+80	Lt																		92,94
31R	21+50	Lt																		94
32R	10+00 - 21+00	Lt																		94
33R	10+20 - 21+60	Lt																		94
34R	22+40 - 24+20	Lt																		94
35R	27+25 - 51+00	Lt																		86,94,95
36R	27+25 - 40+00	Lt																		86,94,95
37R	50+22 - 57+30	Rt+Lt																		87
38R	57+51 - 58+57	Rt+Lt																		87
39R	70+50 - 76+00	Rt+Lt																		88
40R	1100+841 - Bridge	Rt																		82,83
41R	4+40 - Bridge	Lt																		83
42R	8+00 - Bridge	Lt																		83
43R	8+00 - Bridge	Lt																		83
44R	26+27 - Bridge	Lt																		84
45R	8+00 - 32+55	Lt																		85
46R	550+840 - Bridge	Rt																		85
47R	8+00 - 59+07	Rt																		85
48R	37+64 - 40+71	Med																		85
49R	85+45+100 - 40+50+100	Lt																		85
50R	37+900 - Bridge	Lt																		86,87
51R	53+100+WB - Bridge	Med																		86,87,88
52R	54+07 - Bridge	Rt																		86,87
53R	8+00 - 59+80	Lt																		87
54R	8+00 - 64+35	Med																		87
55R	8+00 - 62+80	Rt																		87
56R	30+100 - 30+100	Rt																		91
57R	50+47 - Bridge	Rt																		92
58R	50+35 - Bridge	Lt																		92
59R	8+00 - Bridge	Rt																		92
60R	8+00 - Bridge	Lt																		92
61R	328+06 - 330+34	Rt																		91
62R	333+07 - 333+07	Rt																		92
63R	8+00 - 333+65	Rt																		95
64R	8+00 - 333+88	Lt																		95
65R	332+00 - 333+07	Rt																		95
SUB-TOTALS				55	406	2	5	Lump	40,042	373	1680	1006	10							
TOTALS TO GENERAL SUMMARY				55	406	2	5	Lump	40,042	373	1680	1006	10							

ESTIMATED QUANTITIES

QUANTITY CALCULATIONS
 BY DR DATE 11-16-71
 CHECKED BY H.F. DATE 1-4-72
KING AND GARDNER
 CONSULTING ENGINEERS
 Revised: I.E.H. 3/79

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

106
616

GRE-675-5.37
GREENE COUNTY

Note: All Stations Listed Below Refer to US-35 Except Where Otherwise Noted

REF. NO.	STATION TO STATION	SIDE	202					205	606					608	607	656		607		SEE SHEET NO.																	
			Subgrade Removed	Pipe Removed at Shoulder	Inlet Removes	Sight Line Removals	Manholes Removed	F-11 Cistern	Concrete Rev. Type 5	Small Wall Type 5 Barrier Design	Anchor Assembly Barrier Design	Bridge Terminal Assembly Type A	Bridge Terminal Assembly Type A	4" Conc. Walk	Reeding & Joint Mortar	Banksh. Cleanup	Fence Type CL 6ft High																				
																					Sq. Ft.	Lin. Ft.	Each	Sq. Yd.	Each	Lin. Ft.	Lin. Ft.	Each	Each	Each	Sq. Ft.	Sq. Yd.	Sq. Ft.	Lin. Ft.			
<i>ROADWAY</i>																																					
66R	29 + 31	RT																		208	85																
67R	27 + 71	LT																		29.4	84,85																
68R	33 + 54	RT																		42.0	85																
69R	32 + 46	LT																		28.1	85																
70R	320 + 62.1	RT																		35.4	85																
71R	320 + 56.1	LT																		48.0	85																
72R	332 + 22.1	RT																		21.8	85																
73R	332 + 32.1	LT																		26.0	85																
74R	56 + 40	RT																		25.4	87																
75R	55 + 05	LT																		22.5	87																
76R	58 + 88	RT																		30.5	87																
77R	58 + 26	LT																		34.0	87																
78R	321 + 04.1	RT																		3.84	92																
79R	320 + 02.1	LT																		3.22	92																
80R	324 + 05.1	RT																		4.84	92																
81R	324 + 14.1	LT																		5.33	92																
82R	2 + 20	RT																		37.2	93																
83R	1105+70 - 4+15	LT																		4.5	82,93																
84R	0 + 80 - 17 + 70	LT																		4.8	93,94,96																
85R	350+57CD - 351+91CD	LT																		112.5	94,22																
86R	351+18CD - 351+91CD	LT																		50.0	96,22																
87R	56 + 70	LT																			87																
88R	337 + 55.1	RT<																		3.8	95																
89R	347 + 84.1 - 350+23.1	LT																		237.5	94,96																
90R	445+00CD - 355+25CD	RT																		112.5	96,22																
91R	357+94.1-675-360+56.1-675	E																		425.0	71,96																
92R	Not Used																																				
93R	348 + 25.1-675-46+50.1-DX	RT<																			179.2	96															
94R	357+25 - 1-675	LT																			40	96															
95R	2 + 48	RT																			4	93															
96R	2 + 85	RT																			4	93															
97R	5 + 48	LT																			4	93															
98R	5 + 02	RT																				201	93														
99R	6 + 85	LT																				148	93														
100R	344 + 00.5	LT																			1	93															
101R	347 + 35.5	RT																			2	94															
102R	346 + 22.5	RT																			1	94															
103R	345 + 40.1	LT																			1	94															
104R	330 + 75.1	RT																			1	95															
105R	334 + 00.5 + 357+20.5	LT																			3	93															
106R	0 + 30	LT																			25.0	83															
107R	350 + 30.5	LT																			1	93															
108R	340 + 30.5 - 348+20.5	LT																			37.5	93															
109R	19+32 Honey Locust	LT																			25.0	96															
110R	18+60	Med.																			75.0	83,84															
111R	207+00.1 - 205+21.1	RT																			137.5	83,84															
112R	21+45.5 - 16+15	Med.																			75.0	84															
113R	354 + 00.5 - 354+18.5	LT																			137.5	84															
114R	348 + 10.1 - 352+65.1	RT																			137.5	91															
115R	344 + 00.1 - 345+70.1	LT																			137.5	91															
116R	Bridge Abut. - 355+23.5	LT																			262.5	96,22															
117R	346+27.1 - 346.1	RT																			175.0	94,96,24															
118R	Pedestrian Ramp																					192.6	25,96														
119R	5+69.05 - 7+84.5	RT<																			136.5	25,96															
120R	Not Used																																				
121R	12+29.50 - 13+10	RT																				80.5	25,96														
TOTALS TO GENERAL SUMMARY																					372	223	10	1792	1	12	3175	262.5	7	11	5	2	2	3291	6054	03	80.5

This quantity carried to Sh. No. 41

ESTIMATED QUANTITIES

Quantity Calculations
by D.P. date 5-13-71
chkd. R.L.P. date 5-21-71
KING and GAVARIS
Consulting Engineers
Revised: D.H.S. 3-79

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

107
6/6

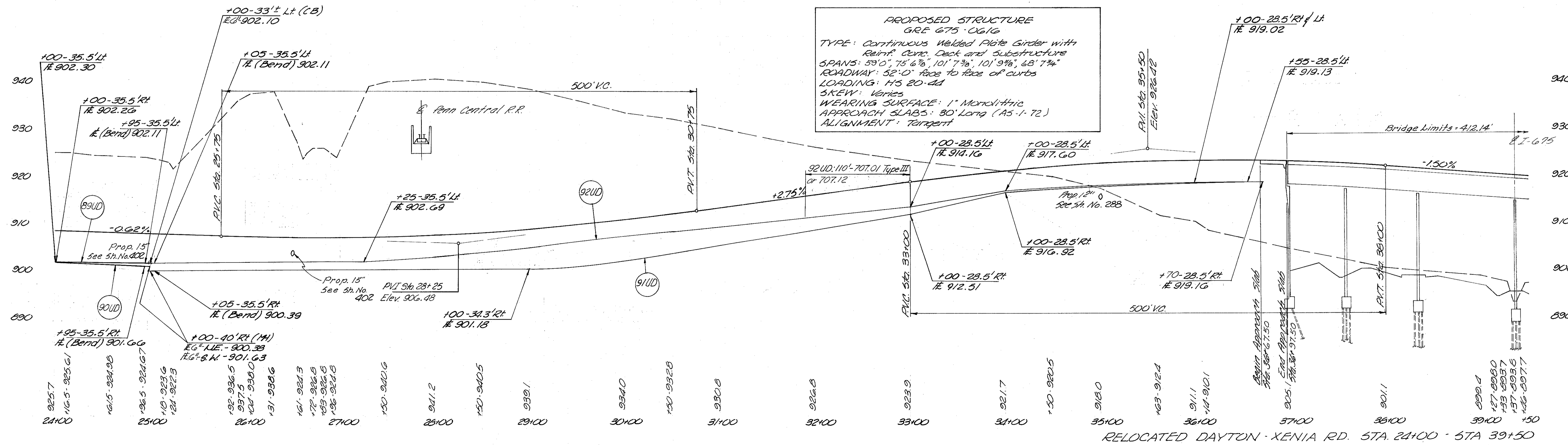
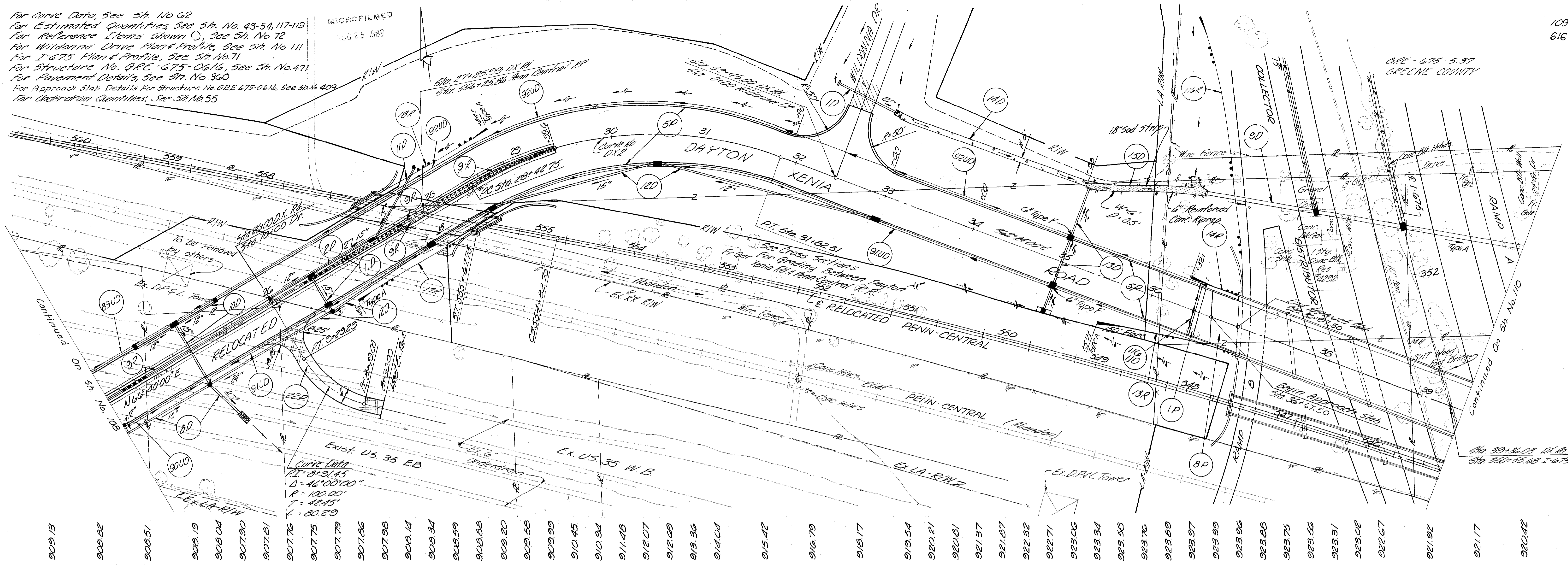
GRE -675-5.37
GREENE COUNTY

REF. NO.	STATION TO STATION	SIDE	301				310		402		404		408		409		Special	609		611		612		622		SEE SHEET NO.	
			6" Bit. Aggregate Base	6" Aggregate Base	8" Aggregate Base	6" Type II	1 1/2" Asphalt Concrete	1" Asphalt Concrete	Prime Coat	Seal Coat Bituminous Material	Seal Coat Cover Aggregate	Pressure Relief Joint	Concrete Curb Type C	Concrete Curb Type C Modified	Approach Slabs T=15"	4" Concrete Median as per plan	Concrete Barrier Type B	Concrete Barrier Type B Mod.									
			Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Gal.	Gal.	Cu. Yd.	Lim. Ft.	Lim. Ft.	Lim. Ft.	Sq. Yd.	Sq. Yd.	Lim. Ft.	Lim. Ft.									
<i>Pavement US -35</i>																											
1P	1092+90 - 1099+00	Rt.																									81, 82
2P	4+28.35 - 4+53.35	Rt.																									83
3P	4+28.35 - 4+53.35	Lt.																									83
4P	6+33.90 - 6+58.90	Rt.																									83
5P	6+33.90 - 6+58.90	Lt.																									83
6P	5+95 - 6+25	Rt.																									83
7P	6+80 - 7+08	Lt.																									83
8P	28+51.00 - 28+76.00	Rt.																									85, 421
9P	28+51.00 - 28+76.00	Lt.																									85
10P	32+97.62 - 33+81	Rt.																									85, 421
11P	32+97.62 - 33+22.62	Lt.																									85
12P	56+07.80 - 56+32.80	Rt.																									87
13P	56+07.80 - 56+32.80	Lt.																									87
14P	58+47.01 - 59+14	Rt.																									87, 548
15P	58+47.01 - 58+77	Lt.																									87, 548
<i>Ramp A</i>																											
16P	320+77 - 321+09.18																										92, 410
17D	323+96.88 - 324+21.88																										92
18P	329+37 - 329+72.42																										92
19P	332+14.66 - 332+60																										95
20P	320+60 - 320+88	Lt.																									95, 538
21P	329+29 - 329+57	Lt.																									95, 538
22P	3+73 ± U.S. 35	Rt.																									83
23P	4+27 ±	Lt.																									83
24P	6+70 ±	Rt.																									83
25P	7+17 ±	Lt.																									84
26P	27+61 ±	Lt.																									84
27P	352+06 ± D - 352+33 ± D	Rt.																									85
28P	351+98 D	Lt.																									85
<i>U.S. 35</i>																											
29P	33+19 ±	Rt.																									85
30P	27+65 ±	Lt.																									84
31P	33+23 ±	Lt.																									84
32P	28+57 ±	Rt.																									84
33P	33+80 ±	Rt.																									84
<i>I-675 SB "C-D"</i>																											
34P	332+59.76 - 348+00	Lt.																									91, 92, 94
35P	348+00 - 353+26	Rt.																									96
36P	323+49 ± E	Rt.																									85
<i>U.S.-35 WB C-D</i>																											
37P	19+13 - 28+20	Lt.																									84, 85, 85/
38P	329+12 ± A	E																									92
39P	332+76 ± A	E																									95
<i>U.S.-35 WB C-D</i>																											
40P	32+62 - 51+85.12	Lt.																									85, 86, 85/
41P	56+2+00 Penn Central	Lt.																									93
42P	550+00 Penn Central	Lt.																									94
43P	566+49 Penn Central	Lt.																									83
44P	Honey Locust Ln. Cul-de-sac																										96
45P	24+15 Honey Locust Ln. U.S.-35	Rt.																									96
46P	55+65 ± WB	Lt.																									87
47P	55+75 ± EB	Rt.																									87
48P	58+97 ± WB	Lt.																									87
49P	59+18 ± EB	Rt.																									87
50P	320+50 ± A	E																									92
51P	324+48 ± A	E																									92
52P	334+25 ± B	Rt.																									83
53P	6+14.40 - 7+00.00	Ped. Ramp Rt.																									96
<i>SUB-TOTALS</i>																											
			16.0	59.6	124.9	462.4		14.4	9.6	138.7	28.5	1.0	565	1426	610	2,306.8	716.4	3943.8	50								
TOTALS			16	60	125	463		15	10	139	29	1	565	1426	610	2,307	716	3944	50								

See Sht. No. 17 for modification See Sht. No. 22

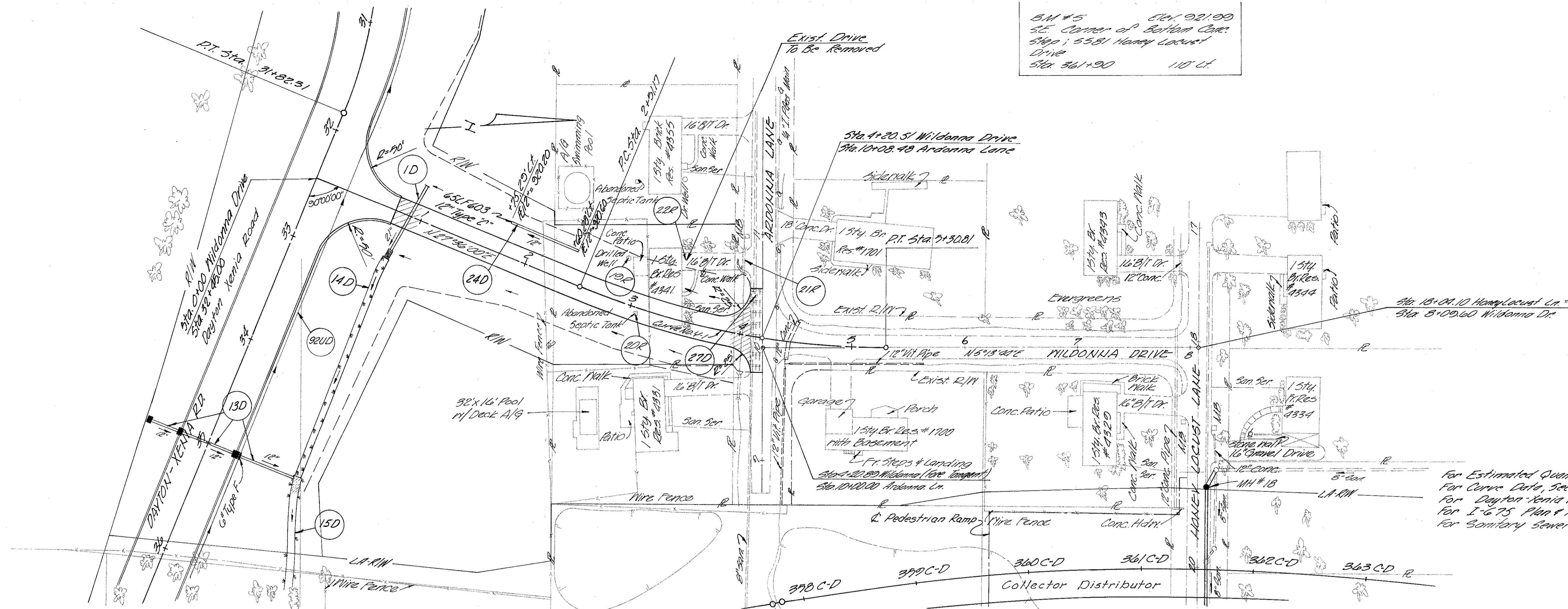
For Curve Data, See Sh. No. 62
 For Estimated Quantities, See Sh. No. 43-50, 117-119
 For Reference Items Shown, See Sh. No. 72
 For Wildonna Drive Plans/Profile, See Sh. No. 111
 For I-675 Plan & Profile, See Sh. No. 71
 For Structure No. GRE-675-0616, See Sh. No. 471
 For Pavement Details, See Sh. No. 360
 For Approach Slab Details For Structure No. GRE-675-0616, See Sh. No. 409
 For Underdrain Quantities, See Sh. No. 55

MICROFILMED
 105 25 1985



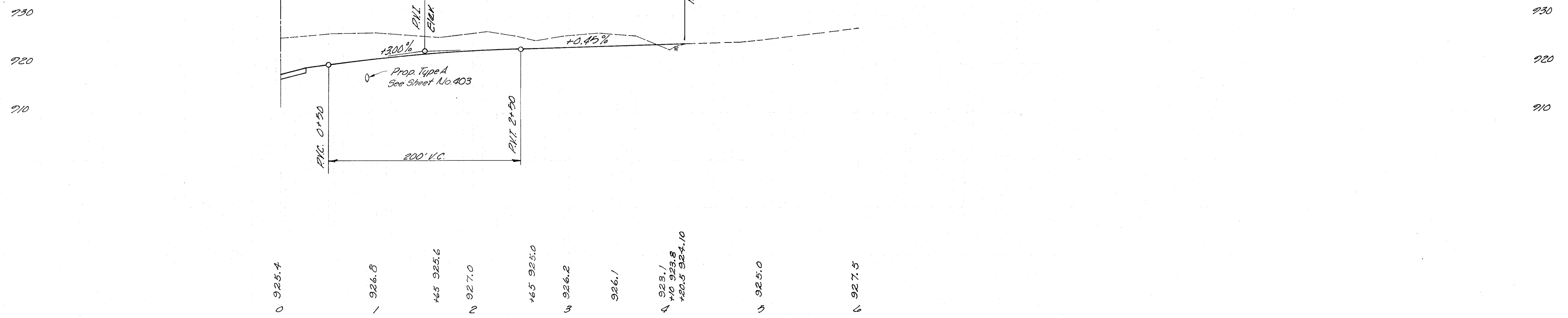
GRE-675-5.57
GREENE COUNTY

BM #5 Sta 921.99
S.E. Corner of Station Cont.
Sta 55.51 Honey Locust
Drive
Sta 361+90 110' Lt.



For Estimated Quantities, See Sta. No. 43-54, 118, 119
For Curve Data, See Sta. No. 62
For Dayton Xenia Rd. Plan & Profile, See Sta. No. 109
For I-675 Plan & Profile, See Sta. No. 71
For Sanitary Sewer, See Sta. No. 363-365

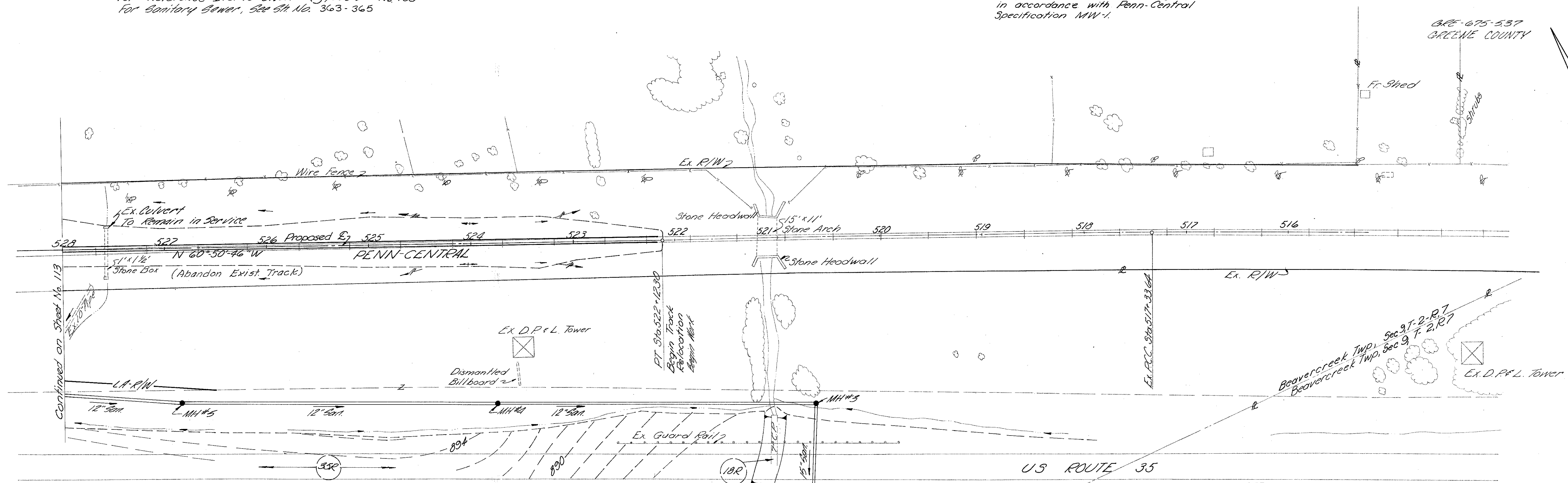
- 919.87
- 920.59
- 921.21
- 921.76
- 922.23
- 922.62
- 922.94
- 923.17
- 923.32
- 923.55
- 923.78
- 924.01



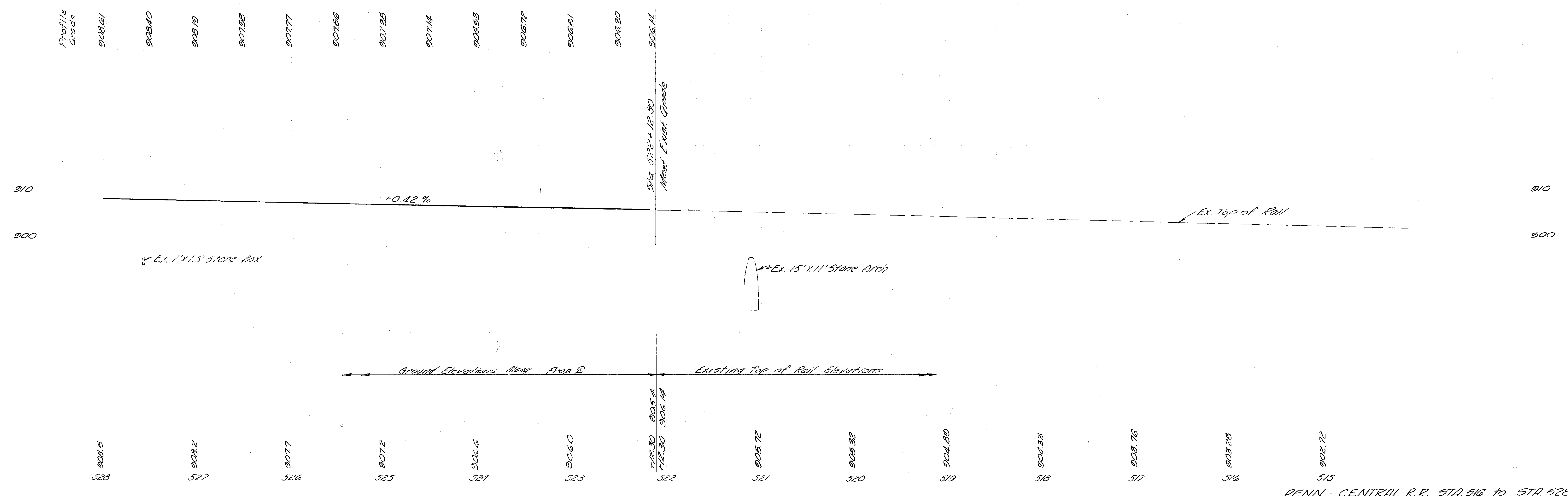
WILDONNA DR. STA. 0+00 to STA. 5+00

For Estimated Quantities, See Sht. No. 117.119
 For Reference Items shown (O), See Sht. No. 105
 For Sanitary Sewer, See Sht. No. 363-365

NOTE:
 Proposed Curve & Spiral Alignments are
 in accordance with Penn-Central
 Specification MW-1.



NOTE:
 Field measurement of existing track between Sta 517+33.64
 & Sta 523+66.92 indicates Degree of Curvature = 0°06'.

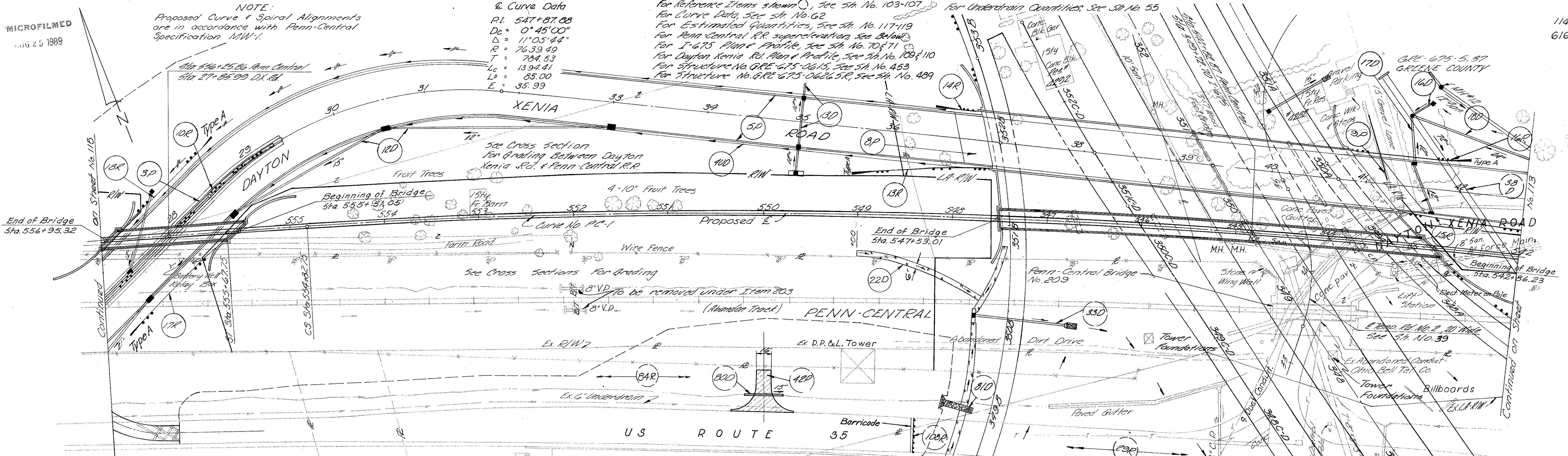


NOTE:
Proposed Curve & Spiral Alignments
are in accordance with Penn-Central
Specification MW-1.

Curve Data
P.I. 547+87.88
D.C. 0°45'00"
Δ = 11°05'44"
R = 7639.49
T = 784.53
Lc = 1394.41
Ls = 85.00
E = 35.99

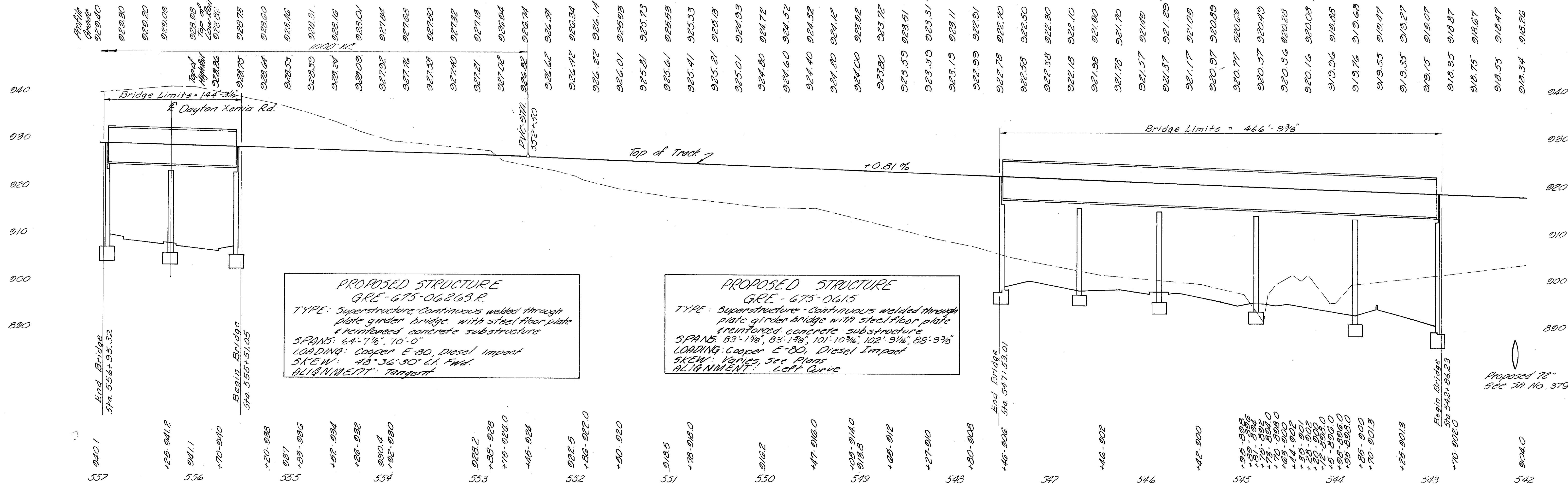
For Reference Items shown, see Sta. No. 103-107
For Curve Data, see Sta. No. 62
For Estimated Quantities, see Sta. No. 117-119
For Penn-Central R.R. super-elevation see Below
For I-675 Plans & Profile, see Sta. No. 705-711
For Dayton Xenia R.R. Plan & Profile, see Sta. No. 108 & 110
For Structure No. GRE-675-0615, see Sta. No. 453
For Structure No. GRE-675-0626 S.R., see Sta. No. 489

For Under-drain Quantities, see Sta. No. 55



Sta. 548+75 EXISTING STRUCTURE TO BE REMOVED
Type: Single Span through girder on Conc. & Masonry Abut.
Span: 54' 2"
See Sta. No. GRE-675-0615

For Sanitary Sewer, see Sta. No. 363-365



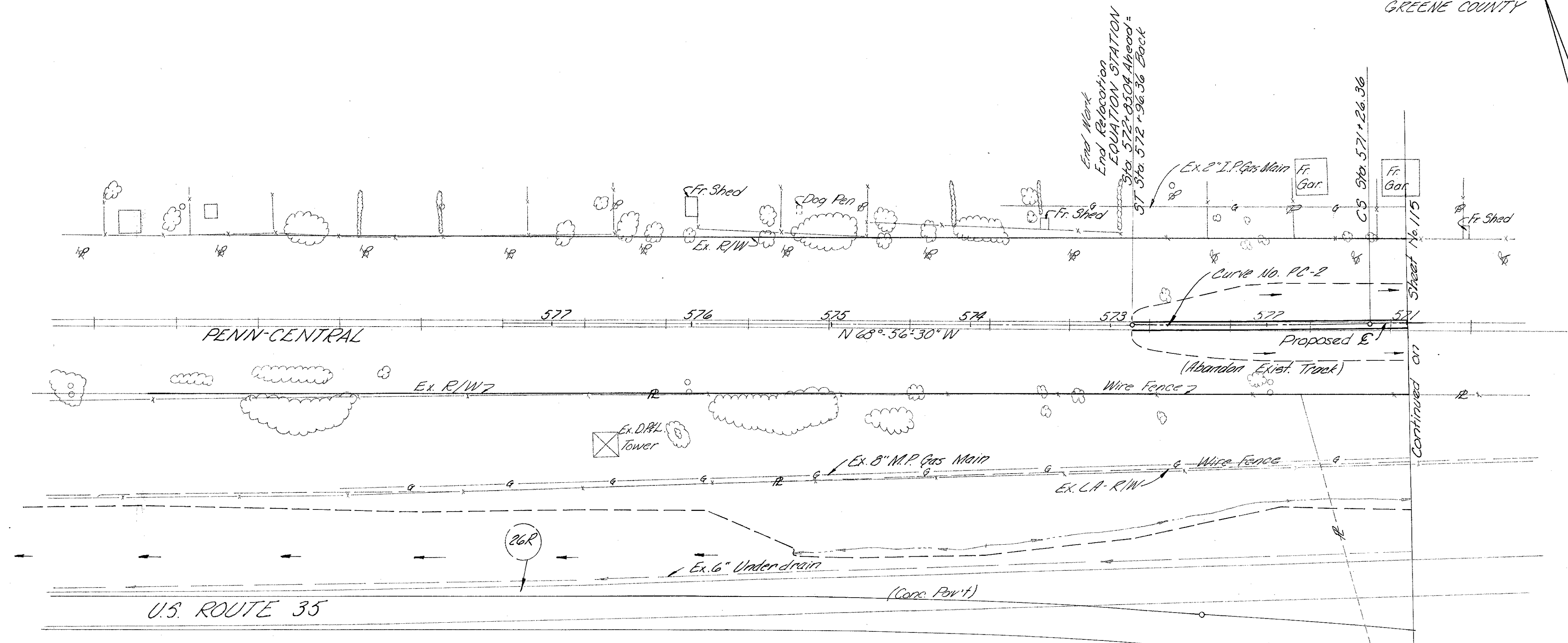
PROPOSED STRUCTURE
GRE-675-0626 S.R.
TYPE: Superstructure - Continuous welded through plate girder bridge with steel floor plate & reinforced concrete substructure
SPANS: 64'-7 1/8", 70'-0"
LOADING: Cooper E-80, Diesel Impact
SKEW: 28° 36' 30" Lt. Fwd.
ALIGNMENT: Tangent

PROPOSED STRUCTURE
GRE-675-0615
TYPE: Superstructure - Continuous welded through plate girder bridge with steel floor plate & reinforced concrete substructure
SPANS: 83'-1 3/8", 83'-1 3/8", 101'-10 3/8", 102'-9 1/8", 88'-9 3/8"
LOADING: Cooper E-80, Diesel Impact
SKEW: Varies, See Plans
ALIGNMENT: Left Curve

Proposed 72"
see Sta. No. 379

NOTE:
Proposed Curve & Spiral Alignments
are in accordance with Penn Central
Specification MW-1

GRE-675-537
GREENE COUNTY



For Curve Data, See Sht. No. 62
For Estimated Quantities, See Sht. No. 117, 119
For Reference Items shown \odot , See Sht. No. 103-107
For Penn-Central R.R. Super-elevation, See Below.

Profile Grade	928.36	928.54
Grade	928.45	928.88
Top of High Rail Low Rail	928.70	928.42
Meet Ex. Grade	928.55	928.46
	928.62	928.50
	928.68	928.54
	928.75	928.58
	928.79	928.62

940
930
920

Ex. Top of Rail 7
Meet Ex. Grade
Top of Rail
-0.16%

572+85.04 Ahead
572+00.30 Back

Ground Elevations Along Prop. E

574 573 572 571
PENN-CENTRAL R.R. STA. 571+00 to STA. 577+00

ESTIMATED QUANTITIES

QUANTITY CALCULATIONS
 BY: DF DATE: 5-24-71
 CHKD. BY: DATE 1-17-72
KING AND GARDNER
 CONSULTING ENGINEERS
 Revised D.H.S. 3-79

FED. RD. DIVISION	STATE	PROJECT			
2	OHIO				119 616

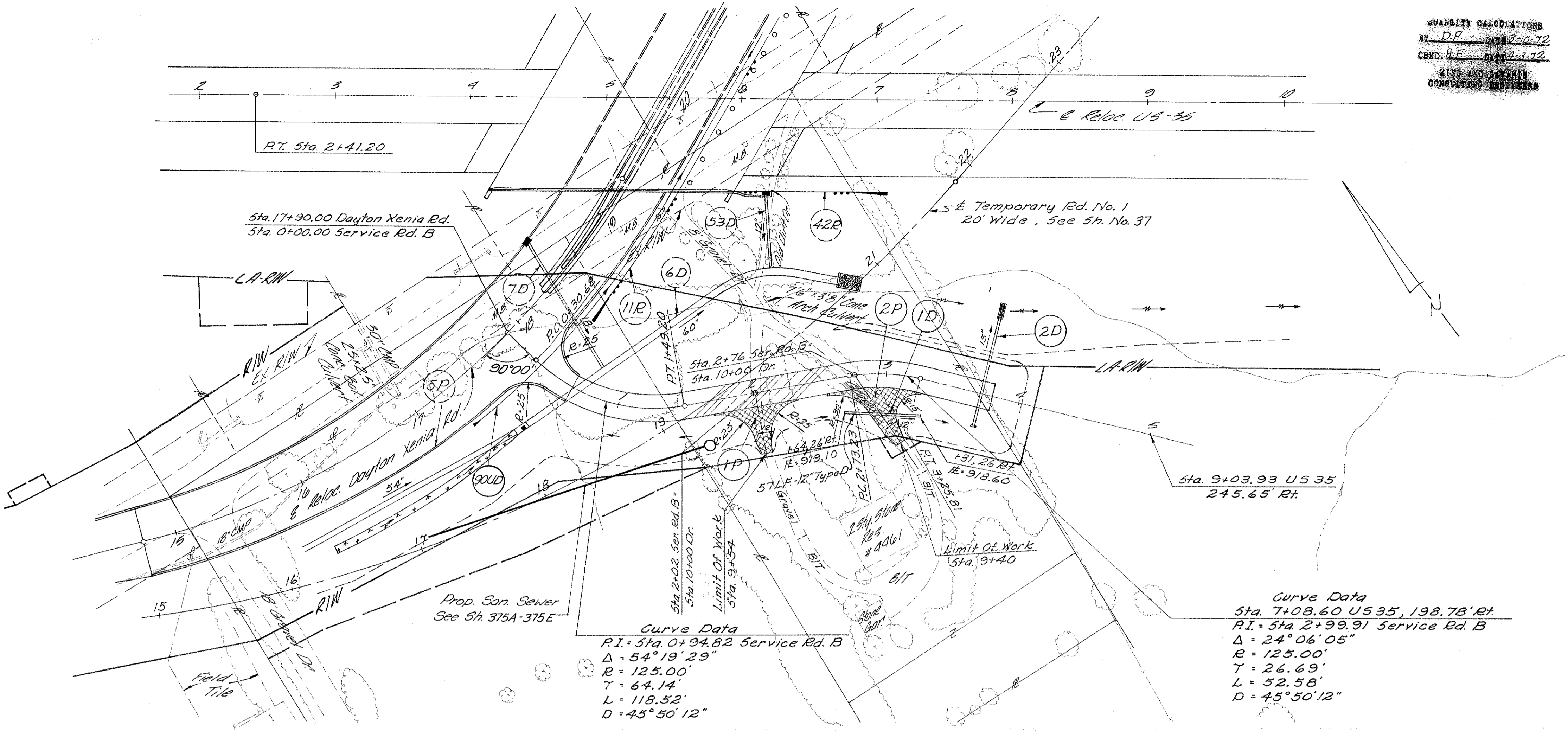
GRE-675-5.37
GREENE COUNTY

REF. NO.	STATION TO STATION	SIDE	304					310			402	404			408	452		609			611	Special Pressure Relief Joint Type A	Special Construction of Reinforced Trench	SEE SHEET NO.			
			12" Aggregate Base	6" Aggregate Base	3" Aggregate Base	6" Subbase Type II		1 1/2" Asphalt Concrete			1 1/2" Asphalt Concrete	1 1/2" Asphalt Concrete	2" Asphalt Concrete	Prime Coat	8" Plain Concrete	Asphalt Concrete Curb Type 1	Curb Type 2/B	Curb Type 6	Aggregate Slabs 7-17"								
			Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.		Cu. Yd.			Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Sq. Yd.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Sq. Yd.	Lin. Ft.	Lin. Ft.	Lin. Ft.					
PAVEMENT																											
Dayton-Xenia Rd.																											
1P	36+51																										
2P	41+88																										
3P	Not Used																										
4P	11+00.00 - 14+74.50	Lt.																									
5P	14+74.50 - 36+67.50	Rt.																									
6P	41+30.64 - 45+30.84	Rt.																									
7P	45+30.84 - 46+30.00	Lt.																									
8P	36+67.50 - 36+97.50	Rt.																									
9P	41+09.64 - 41+30.64	Rt.																									
10P	11 + 41	Lt.																									
11P	13 + 08	Lt.																									
12P	14 + 18	Lt.																									
13P	15 + 58	Lt.																									
14P	11+00 - 12+54	Rt.																									
15P	12 + 65	Rt.																									
16P	0+58 Merrick Dr	Rt.																									
17P	0+88-1+10 Merrick Dr	Rt.																									
18P	1+18 Merrick Dr	Rt.																									
19P	15 + 52	Lt.																									
20P	40+20 - 40+94	Rt.																									
21P	25 + 00	Lt.																									
22P	26 + 00	Rt.																									
23P	45 + 00	Lt.																									
24P	57 + 14	Lt.																									
25P	48 + 31	Lt.																									
26P	48 + 68	Lt.																									
PENN CENTRAL RR																											
	528+12.50 - 577+06.56																										
			3906.7																								
SUB-TOTALS			3906.7	40.4	74.3	61.2		8.9																			
TOTALS TO GENERAL SUMMARY			4022		61	9																					

QUANTITY CALCULATIONS
 BY D.P. DATE 3-10-72
 CHRD. H.E. DATE 2-3-72
 KING AND LAWRENCE
 CONSULTING ENGINEERS

120
616

GRE-675-537 GREENE COUNTY



408	Prime Coat	Gal.	280.5
404	1" Asp. Conc. C.Y.		19.5
402	1" Asp. Conc. C.Y.		19.5
304	6" 8" Agg. Base C.Y.		1636
	12.5		18.5

120
247

DRIVEWAYS

280.5 120
30.0 120
44.4 120

354.9
355

19.5 10.4
2.0 10

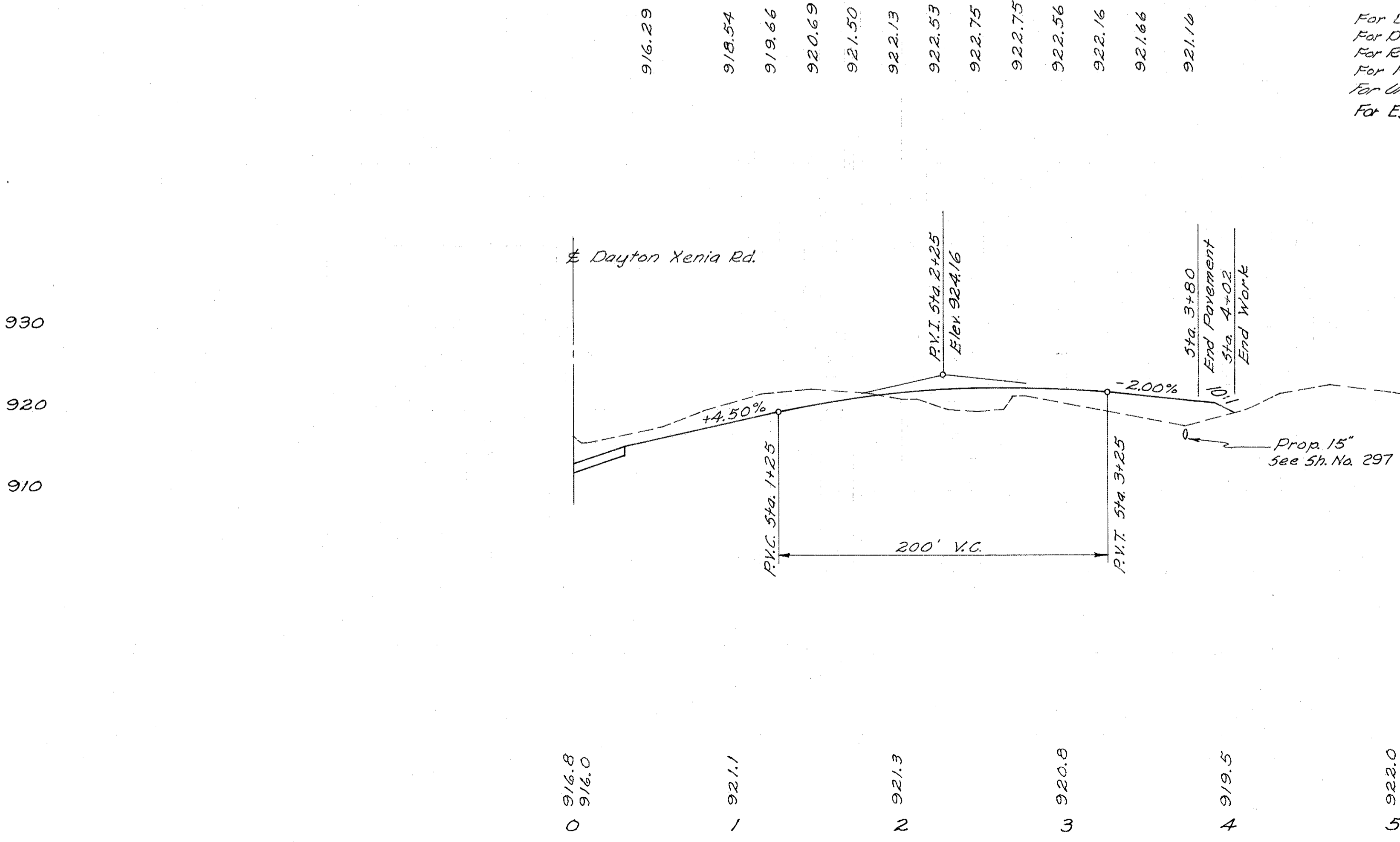
19.5 2.0

31.0 163.6
31 164

Curve Data
 P.I. = Sta. 0+94.82 Service Rd. B
 $\Delta = 54^{\circ}19'29''$
 $R = 125.00'$
 $T = 64.14'$
 $L = 118.52'$
 $D = 45^{\circ}50'12''$

Curve Data
 Sta. 7+08.60 US 35, 198.78' Rt.
 P.I. = Sta. 2+99.91 Service Rd. B
 $\Delta = 24^{\circ}06'05''$
 $R = 125.00'$
 $T = 26.69'$
 $L = 52.58'$
 $D = 45^{\circ}50'12''$

For US 35 Plan & Profile, See Sh. No. 83
 For Dayton Xenia Rd. Plan & Profile, See Sh. No. 108
 For Reference Items Shown, See Sh. No. 103-107, 117-119
 For Pav't Detail, See Sh. No. 359
 For Underdrain Quantities, See Sh. No. 55
 For Estimated Quantities See Sh. No. 43-54, 120



Bands 601	15' x 25'	1	3	0.54	57	32	52	6
Bands 602	Channel Masonry Type B	1	3	0.54	57	32	52	6
Bands 603	Type F Type B	1	3	0.54	57	32	52	6
Bands 660	RTOS Sodding	1	3	0.54	57	32	52	6

DEBRIS

1-D 2+64 - 3+31
2-D 3+72

PAVEMENT

0+64.48 - 5+60
1-P 2+00
2-P 2+76

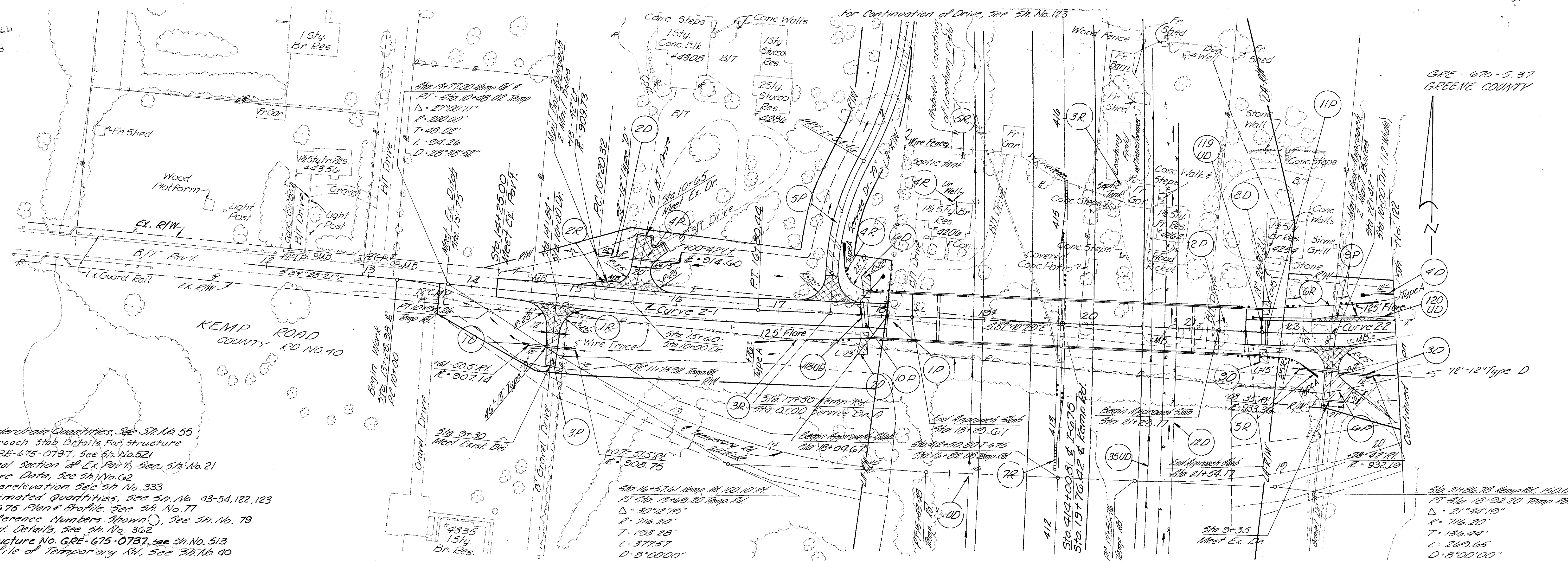
With Bedding

3 0.54 57 32 52 6

3 0.54 57 32 52 6

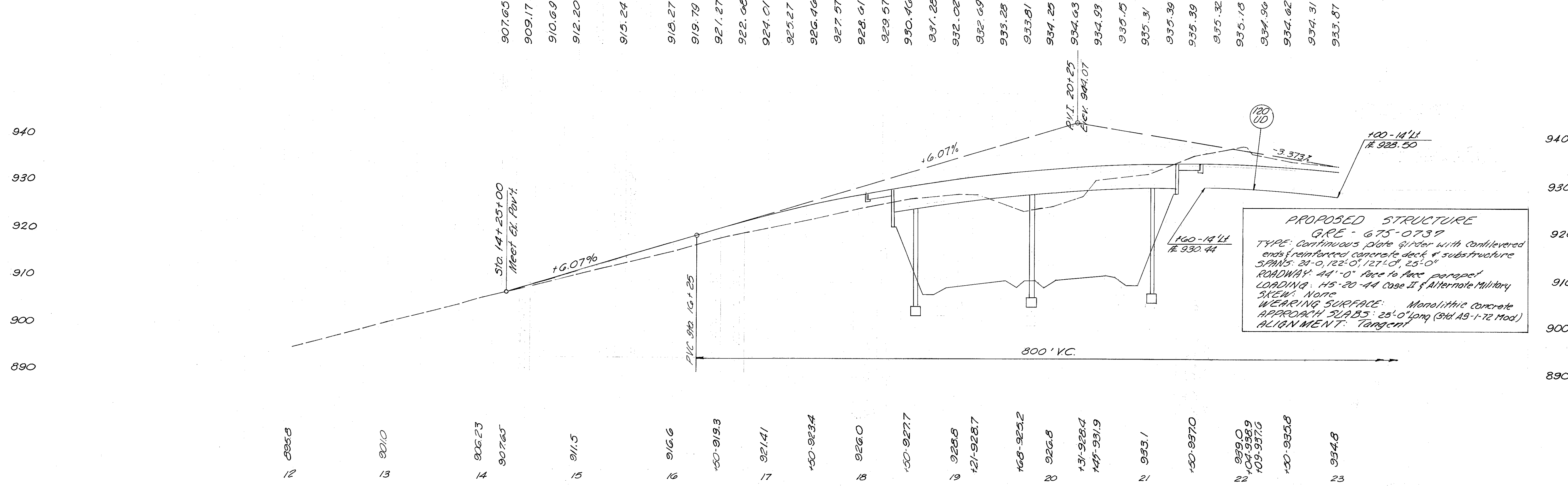
SUB-TOTALS
TO GENERAL SUMMARY

SERVICE ROAD B



For Underdrain Quantities, See Sht. No. 55
 For Approach Shts, Details, For Structure
 No. GRE-675-0737, See Sht. No. 521
 For Typical Section of Ex. Pav't, See Sht. No. 21
 For Curve Data, See Sht. No. 62
 For Superelevation, See Sht. No. 333
 For Estimated Quantities, See Sht. No. 43-54, 122, 123
 For I-675 Plan & Profile, See Sht. No. 77
 For Reference Numbers Shown, See Sht. No. 79
 For Pav't. Details, See Sht. No. 362
 For Structure No. GRE-675-0737, See Sht. No. 513
 For Profile of Temporary Rd., See Sht. No. 40

Sta. 21+86.75 Temp. Rd., 150.00' RH
 PT Sta. 18+92.20 Temp. Rd.
 $\Delta = 21^\circ 54' 10''$
 $R = 716.20'$
 $T = 136.44'$
 $L = 260.65'$
 $D = 8^\circ 00' 00''$



12	895.0	907.65	909.17	910.69	912.20	915.24	918.27	919.79	921.27	922.68	924.01	925.27	926.46	927.57	928.61	929.57	930.46	931.28	932.02	932.69	933.28	933.81	934.25	934.63	934.93	935.15	935.31	935.39	935.39	935.32	935.18	934.96	934.62	934.31	933.87
----	-------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------

TRAFFIC CONTROL GENERAL NOTES

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

GRE-675-5,37
GREENE COUNTY

124
616

TC-1
23

202 REMOVAL OF TEMPORARY BEAM RAIL

TEMPORARY BEAM RAIL 606.04 MOUNTED ON DRUMS, INCLUDING ALL ATTACHED POSTS, SIGNS, DELINEATORS, ETC., SHALL BE CAREFULLY DISMANTLED, REMOVED, AND THE SITE CLEANED FOR USE BY TRAFFIC. BEAM RAIL AND OTHER COMPONENTS SHALL BE DISPOSED OF.

TO ASSURE MAINTENANCE OF ADEQUATE TRAFFIC CONTROL AT ALL TIMES, NO ITEMS SHALL BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

PAYMENT WILL BE AT THE CONTRACT UNIT PRICE PER LINEAR FOOT OF TEMPORARY BEAM RAIL REMOVED AND DISPOSED OF.

858 BALLAST

SUPERSADING THE PROVISIONS OF SUPPLEMENTAL SPECIFICATION 858, BALLAST FOR MERCURY VAPOR LUMINAIRES SHALL BE LOCATED WITHIN THE LUMINAIRE HOUSING OR IN A WATERPROOF HOUSING CONTIGUOUS TO THE LUMINAIRE HOUSING.

858 ENCLOSURE PADLOCKS

DISCONNECT SWITCH ENCLOSURES FURNISHED IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 858 SHALL INCLUDE A PADLOCK EQUAL TO MASTER No. 4BKA OR WILSON BOHANNON 660, WITH LOCK BODY OF BRONZE OR BRASS, AND KEYING IN ACCORDANCE WITH THE FOREGOING SPECIFICATION.

857 SIGNS, ERECTED

IN ADDITION TO THE PROVISIONS OF SUPPLEMENTAL SPECIFICATION 857, THE FOLLOWING REQUIREMENTS SHALL APPLY. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A SCHEDULE OF SIGN ERECTION AT LEAST 120 DAYS IN ADVANCE OF ANY ERECTION WORK. THE SCHEDULE SHALL BE IN WRITING WITH 2 COPIES AND SHALL INCLUDE ERECTION DATES, SIGN NUMBERS AND DELIVERY POINT. THE COPIES WILL BE DISTRIBUTED BY THE ENGINEER TO THE FOLLOWING AGENCIES:

- (a) THE TRAFFIC ENGINEER OF THE AFFECTED FIELD DISTRICT OF THE DEPARTMENT.
- (b) BUREAU OF DESIGN SERVICES, 25 SOUTH FRONT STREET, COLUMBUS, OHIO 43215.

857 COVERING OF SIGNS

A QUANTITY OF 1617 SQUARE FEET FOR THIS ITEM HAS BEEN INCLUDED IN THE GENERAL SUMMARY.

857 NO. 3 POSTS FOR TEMPORARY SIGNS

POSTS FOR TEMPORARY SIGNS SHALL BE FURNISHED AND ATTACHED TO DRUMS OF 606.04 TEMPORARY BEAM RAIL OR 606.041 TEMPORARY DRUMS, IN ACCORDANCE WITH PLAN DETAILS.

PAYMENT WILL BE AT THE CONTRACT UNIT PRICE PER LINEAR FOOT OF POST FURNISHED AND IN PLACE.

857 MILE MARKER LOCATION

THE LOCATION OF MILE MARKERS ON THE PLANS ARE APPROXIMATE AND A MORE PRECISE LOCATION WILL BE PROVIDED BY THE DEPARTMENT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 30 DAYS IN ADVANCE OF THE PLANNED DATE OF MARKER INSTALLATION. THE ENGINEER WILL CONTACT THE BUREAU OF TECHNICAL SERVICES WHICH WILL LOCATE THE LONGITUDINAL POSITION OF MILE MARKERS BY MEANS OF A PAINT MARK ON THE PAVEMENT EDGE. ALTERNATE MARKS WILL NOT BE PROVIDED ON DIVIDED HIGHWAYS AND THE CONTRACTOR SHALL SET MARKERS FOR THE OPPOSITE ROADWAY ACROSS FROM THE PROVIDED MARK. DELINEATORS WHOSE NORMAL POSITION FALLS WITHIN 50 FEET OF A MILE MARKER SHALL BE OMITTED.

INSTALLATION AND/OR REMOVAL OF INTERIM TRAFFIC CONTROL ITEMS

INTERIM TRAFFIC CONTROL ITEMS MAY BE REQUIRED TO OPEN THE AVAILABLE PORTIONS OF THE EXPRESSWAY SYSTEM TO TRAFFIC AT THE TIME THAT THIS PROJECT IS COMPLETED. (INTERIM TRAFFIC CONTROL ITEMS ARE NOT INTENDED FOR USE AS TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION OF THIS PROJECT). THE PORTION OF THE I-675 ROUTE WHICH MAY BE OPENED TO TRAFFIC WHEN THIS PROJECT IS COMPLETED COULD BE: BOTH THE "NORTH" AND "SOUTH" ADJOINING CONSTRUCTION SECTIONS; EITHER SECTION; OR NONE. FOR ANY OF THESE CONDITIONS AN INTERIM TRAFFIC PLAN WILL BE SPECIFIED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE REMOVAL AND/OR INSTALLATION OF SPECIFIED INTERIM TRAFFIC CONTROL ITEMS OF THE TYPES LISTED BELOW, ON THIS PROJECT AND ON THE ADJOINING PROJECTS.

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE TRAFFIC CONTROL GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM	DESCRIPTION	QUANTITY
606	GUARD RAIL, TYPE 6	3950 LF
606	TEMPORARY DRUMS	225 EA
202	TEMPORARY BEAM RAIL REMOVED AND DISPOSED OF	3,400 LF
847	Removal of Pavement Markings	7,400 LF
614	Temporary Edge Lines, Class I, Tape	0.55 Mi
614	Temporary Lane Lines, Class I, Tape	0.23 Mi
857	Removal of Overlay Sign	5 EA
857	Temporary Sign Post, No. 3 Post	200 LF
620	TEMPORARY Delineator, Type D	30 EA
857	SIGNS, Flat Sheet	200 SF
857	GROUND MOUNTED SIGN SUPPORT, No. 4 POST	90 LF
606	ANCHOR ASSEMBLY, AS PER PLAN	2 EA

For Anchor Assemblies, See Sht. No. 146

857 Structural Support Mounted on Concrete Barrier, As Per Plan
This work shall consist of furnishing and installing No. 4 Posts as shown on sheet TC-17.

Work shall consist of placing a 6" pipe insert in the concrete barrier at the correct location to form the post mounting hole. A No. 4 Post, approximately 10 feet long shall be inserted into the mounting hole. The hole shall be filled as shown on sheet TC-17.

The quantity furnished and installed will be paid for at the contract price bid per Linear Foot, 857 Structural Support mounted on Concrete Barrier, As Per Plan, which price shall be full compensation for furnishing and installing the post, including necessary materials, hardware, labor and equipment.

GENERAL SUMMARY

TRAFFIC CONTROL

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

GRE-675-5.37
GREENE COUNTY

125
616

TC-2
23

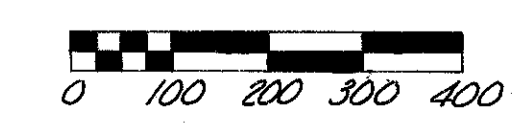
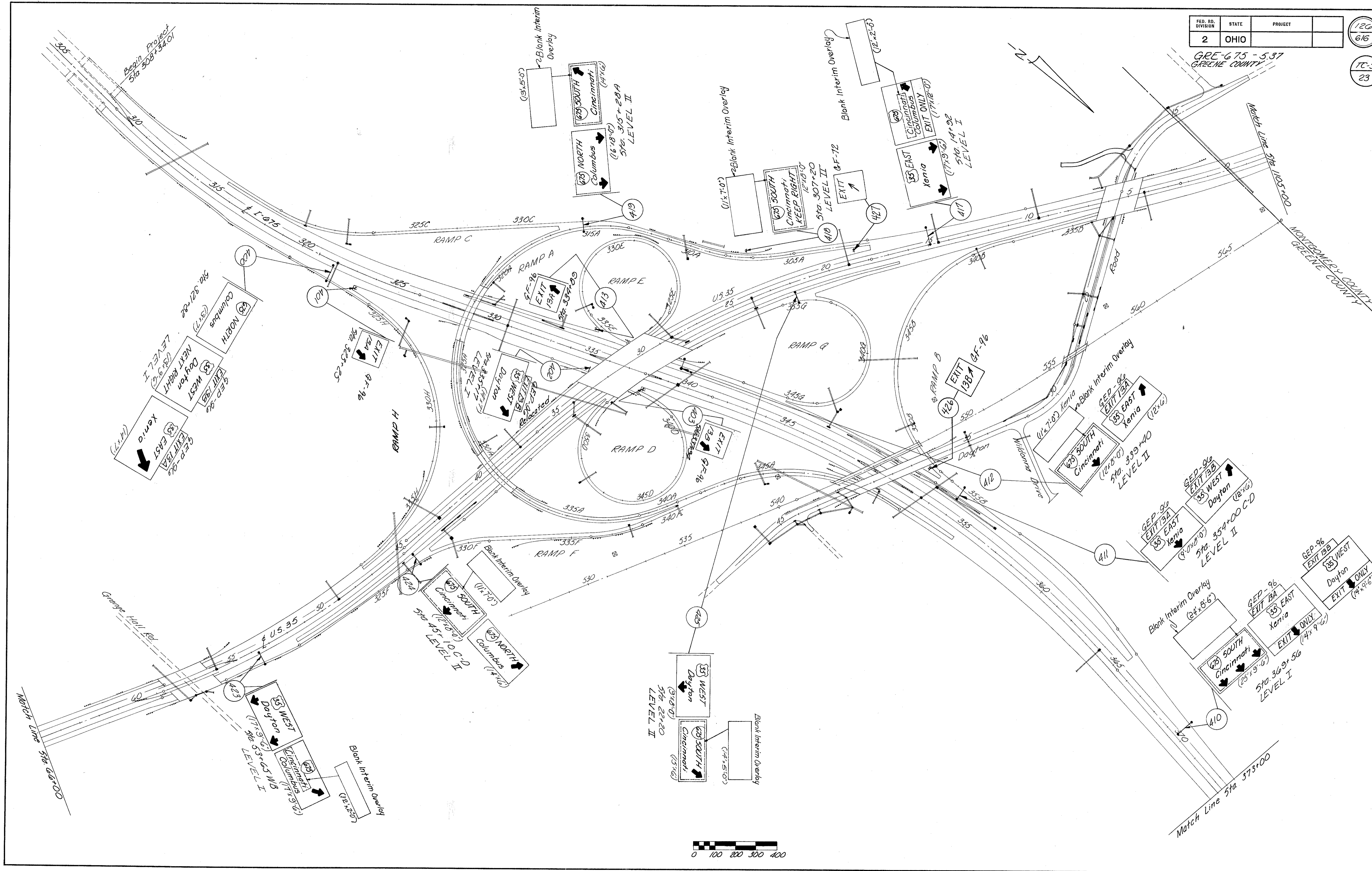
PROJECT PARTICIPATION EXCEPT AS NOTED												GRAND TOTAL	ITEM	UNIT	DESCRIPTION
TC-1	TC-11	TC-12	TC-13	TC-14	TC-15	TC-16									
		221.0										221.0	857	L.F.	Ground Mounted Support, No. 3 Post, driven
90.0		745.0										835.0	857	L.F.	Ground Mounted Support, No. 4 Post, driven
	33.0											33.0	857	L.F.	Ground Mounted Support, 34 x 27
	140.0											140.0	857	L.F.	Ground Mounted Support, W6 x 8.5
	139.0											139.0	857	L.F.	Ground Mounted Support, W8 x 17
	48.0											48.0	857	L.F.	Ground Mounted Support, W 10 x 21
	238.0											238.0	857	L.F.	Ground Mounted Support, W 12 x 31
	1											1	857	Eq.	Overhead Sign Support, No. 7.G.5, Design C, 47' Span
	1											1	857	Eq.	Overhead Sign Support, No. 7.G.5, Design C, 51' Span
	1											1	857	Eq.	Overhead Sign Support, No. 7.G.5, Design C, 52' Span
	1											1	857	Eq.	Overhead Sign Support, No. 7.G.5, Design C, 63' Span
	1											1	857	Eq.	Overhead Sign Support, No. 7.G.5, Design C, 71' Span
	2											2	857	Eq.	Overhead Sign Support, No. 7.G.5, Design B, 82' Span
	1											1	857	Eq.	Overhead Sign Support, No. 7.G.5, Design B, 87' Span
	1											1	857	Eq.	Overhead Sign Support, No. 7.G.5, Design B, 89' Span
	1											1	857	Eq.	Overhead Sign Support, No. 7.G.5, Design B, 97' Span
	2											2	857	Eq.	Overhead Sign Support, No. 12.30, Design 10, 30' Arm
	1											1	857	Eq.	Overpass Structure Mounted Sign Support, No. 18.20, Design 10
	3											3	857	Eq.	Overpass Structure Mounted Sign Support, No. 18.24
												20.0	857	L.F.	Structural Support Mounted on Concrete Barrier, as per plan
		123.9										123.9	857	C.Y.	Concrete for Anchor Base Foundations
		24.2										24.2	857	C.Y.	Concrete for Embedded Foundations
		20										20	857	Eq.	Breakaway Beam Connections
200		5466.5										745.5	857	S.F.	Signs, Flat Sheet
												5466.5	857	S.F.	Signs, Extrusheet
1617												1617	857	S.F.	Covering of Signs
		1055.5										1055.5	857	S.F.	Signs, Overlay
												5	858	Eq.	Sign Service
												21	858	Eq.	Signs Wired
												4	858	Eq.	Signs Wired, Overpass Structure Mounted
												15	858	Eq.	Disconnect Switch with Enclosure, Type X
												3	858	Eq.	Switch Enclosure Mounting Bracket Assembly
												49	858	Eq.	Ballast, Type CMR1-175-480
												8	858	Eq.	Ballast, Type CMR1-250-480
												49	858	Eq.	Mercury Vapor Luminaire Type T03121 with 175 Watt Lamp
												8	858	Eq.	Mercury Vapor Luminaire Type T03121 with 250 Watt Lamp
												15	625	Eq.	Ground Rod
												57	620	Eq.	Delimiters, Type A, Post Mounted
												1	620	Eq.	Delimiters, Type A, Bracket Mounted
												183	620	Eq.	Delimiters, Type C, Post Mounted
												17	620	Eq.	Delimiters, Type C, Bracket Mounted
												128	620	Eq.	Delimiters, Type D, Post Mounted
												2529	847	Mi.	4 Inch Edge Lines, 847.09
												75	847	L.F.	24 Inch Stop Lines, 847.09
												16.74	847	Mi.	4 Inch Lane Lines, 847.09
												10736	847	L.F.	8 Inch Channelizing Lines, 847.09
												3668	847	L.F.	24 Inch Broad Transverse Lines, 847.09
												0.87	847	Mi.	4 Inch Center Lines, 847.09
												3400	202	L.F.	Temporary Beam Rail Removed and Disposed of
3400												3950	606	L.F.	Guard Rail, Type G,
3950												225	606	Eq.	Temporary Drums,
225												30	620	Eq.	Temporary Delimiters, Type D
30												5	857	Eq.	Removal of Overlay Sign
5												0.55	614	Mi.	Temporary Edge Lines, Class I, Tape
0.55												0.23	614	Mi.	Temporary Lane Lines, Class I, Tape
0.23												7400	847	L.F.	Removal of Pavement Markings
7400												200	857	L.F.	Temporary Sign Post, No. 3 Post
200												2	606	Eq.	Anchor Assembly, Modified as per plan
2															

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

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616

TC-3
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GRE-675-537
GREENE COUNTY



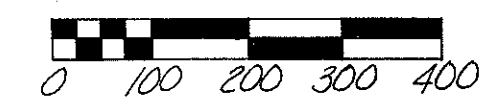
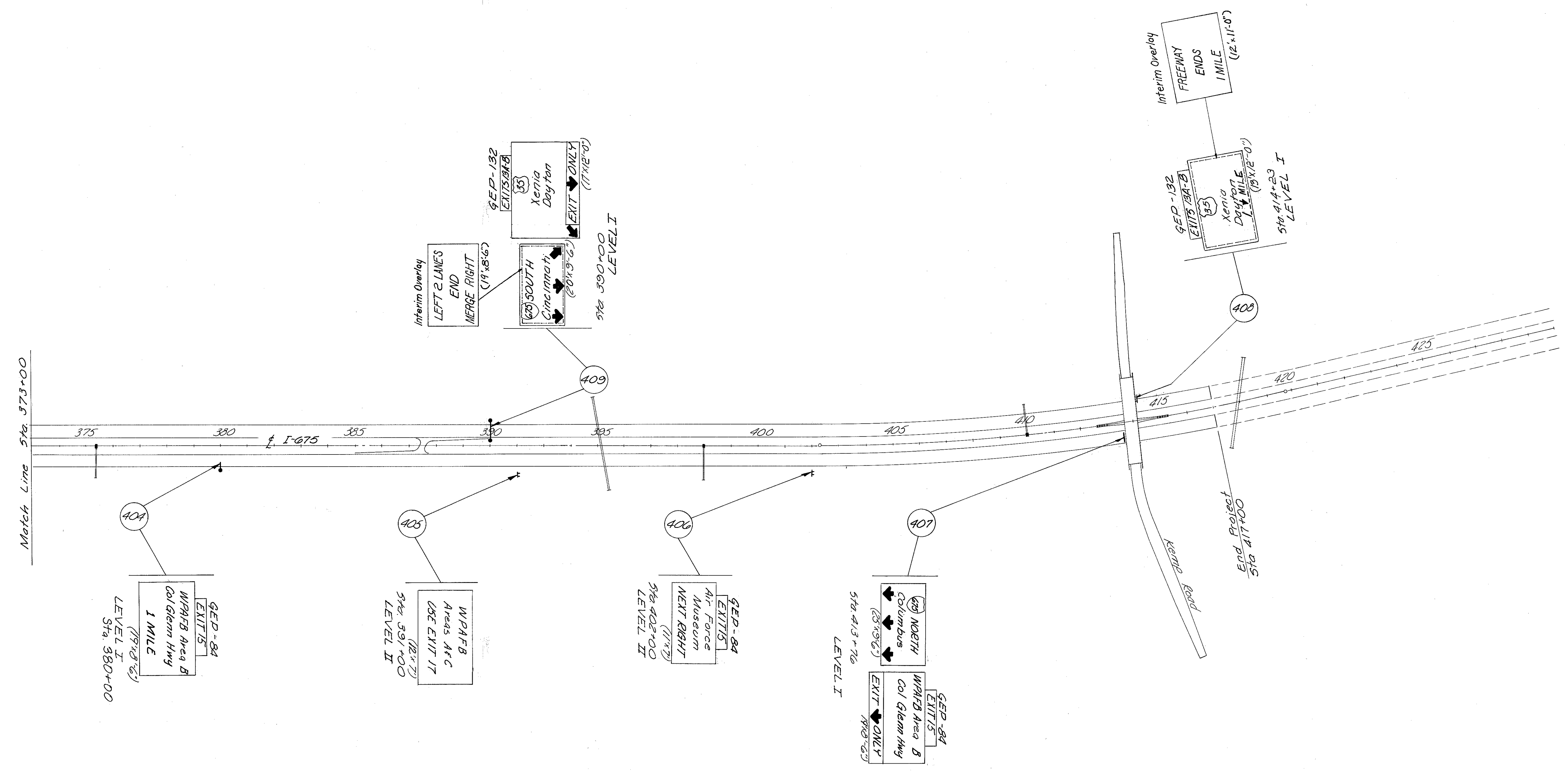
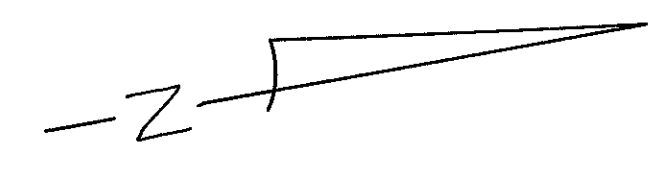
MAJOR GUIDE SIGN PLAN

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

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616

GRE-675-5.37
GREENE COUNTY

TC-4
23

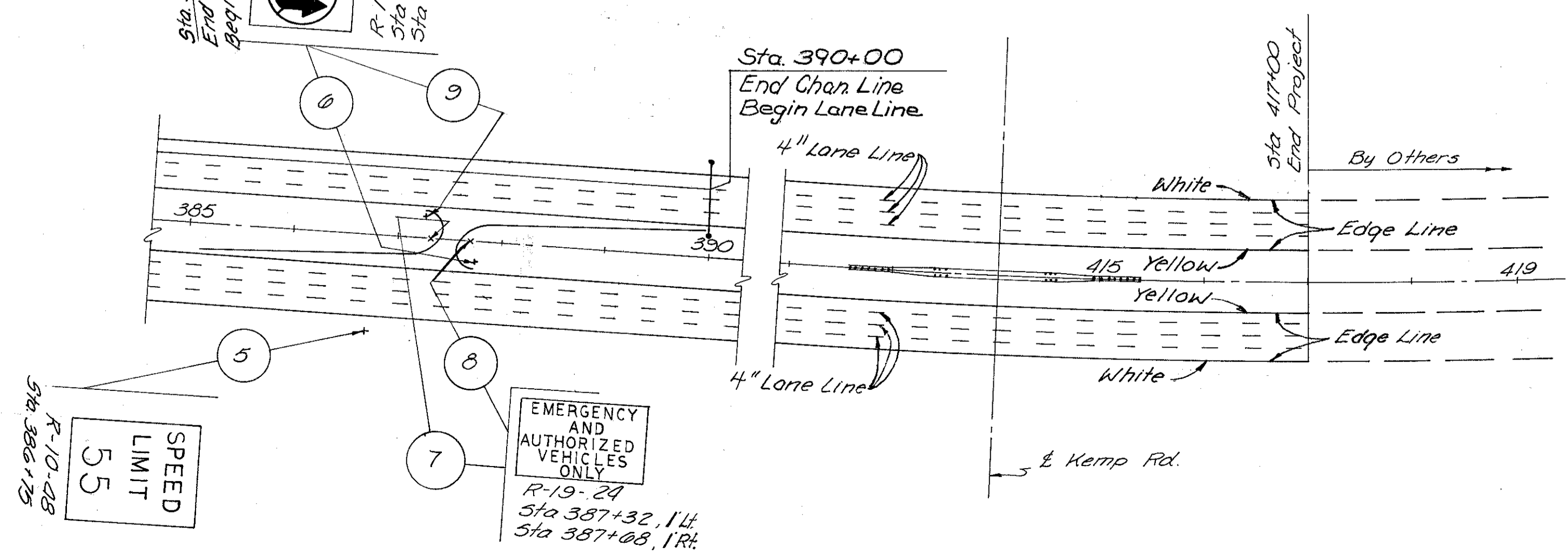
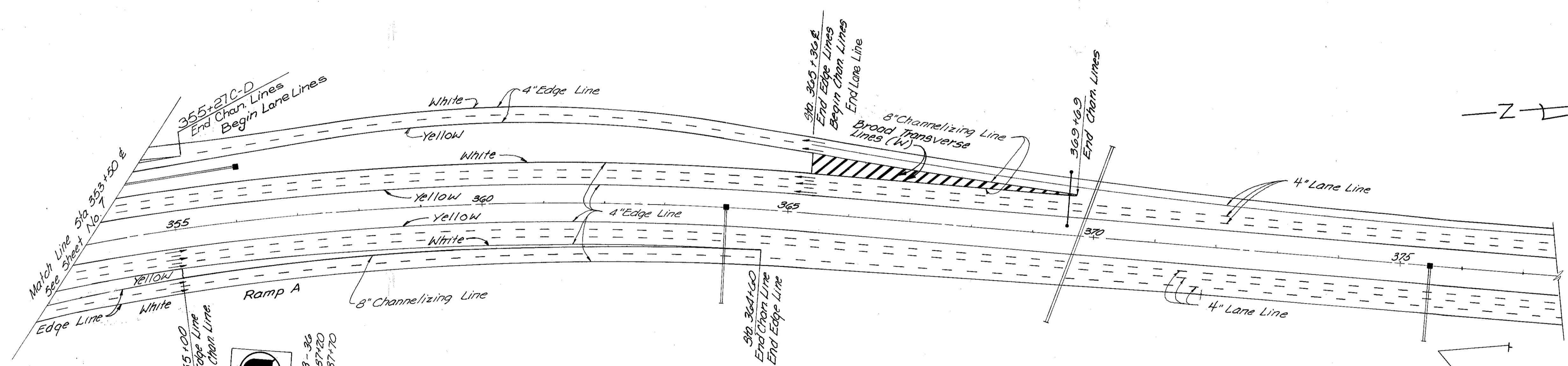
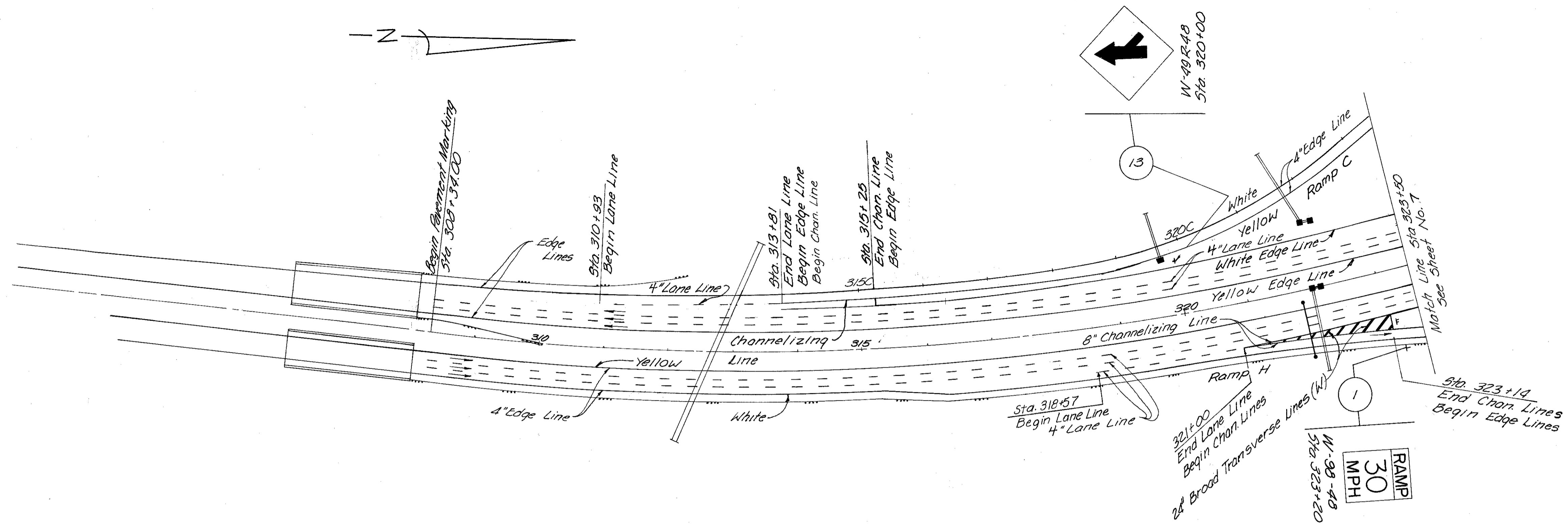


MAJOR GUIDE SIGN PLAN

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

GRE-675-5.37
GREENE COUNTY

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6/6
TC-6
23



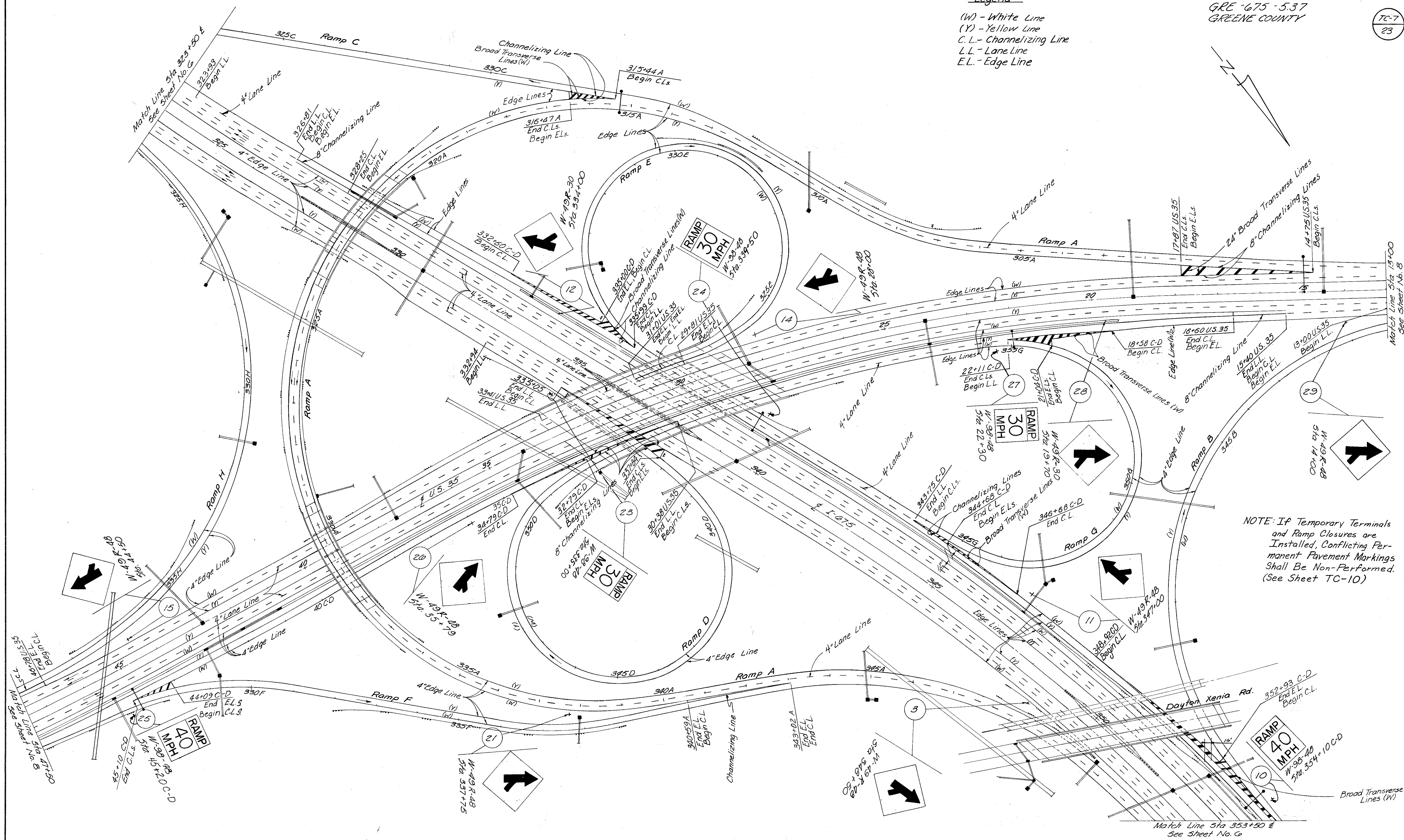
Note: Install signs 7/8 one foot off survey centerline so survey line of sight is not blocked. Mount 2 Type D Delineators back to back on each post.

NOTE: If Temporary Terminal is Installed, Conflicting Permanent Pavement Markings Shall Be Non-Performed. (See Sheet TC-10)

GRE 675-537
GREENE COUNTY

Legend

- (W) - White Line
- (Y) - Yellow Line
- C.L. - Channelizing Line
- L.L. - Lane Line
- E.L. - Edge Line

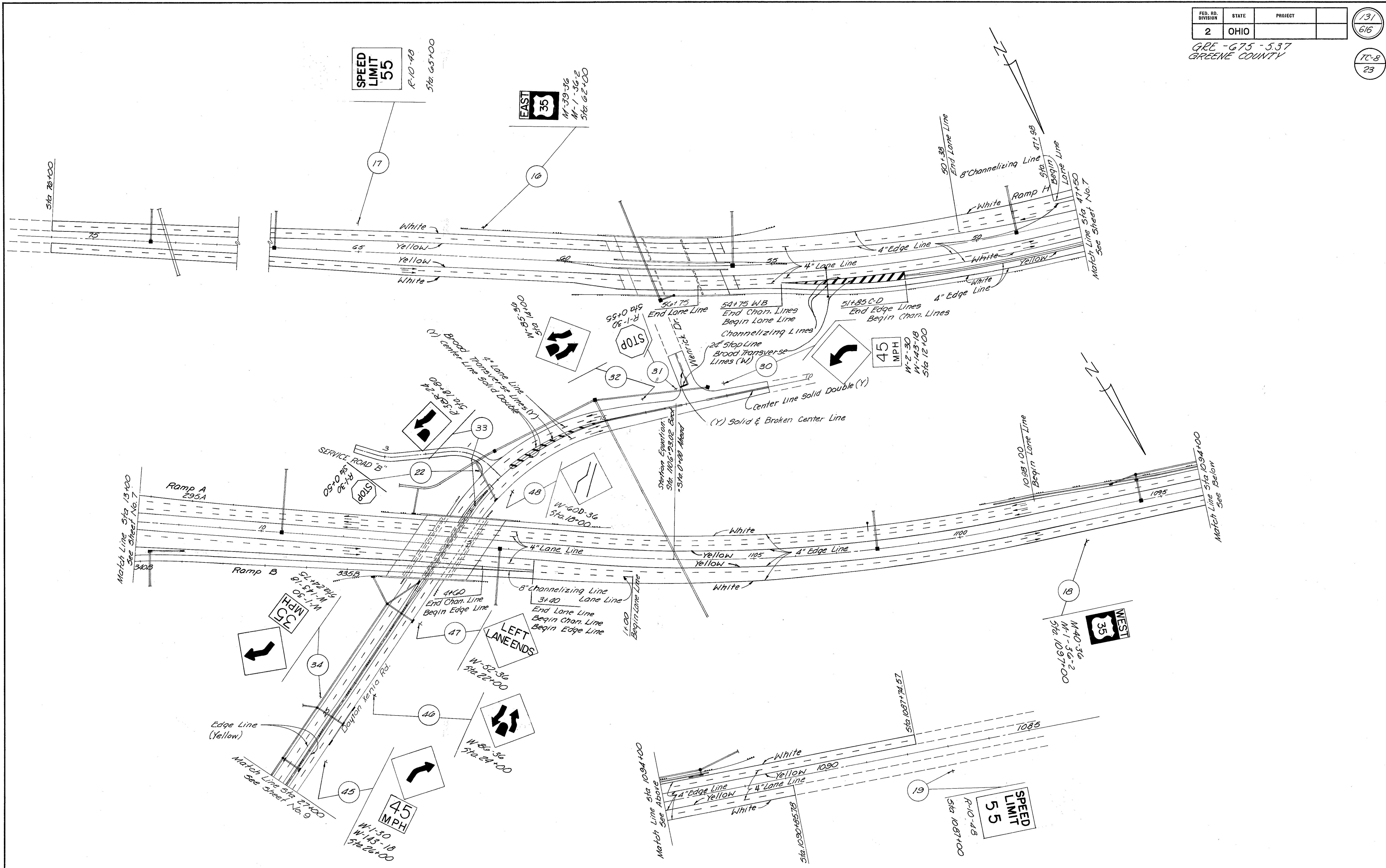


FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

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616

GRE-675-537
GREENE COUNTY

7C-8
23

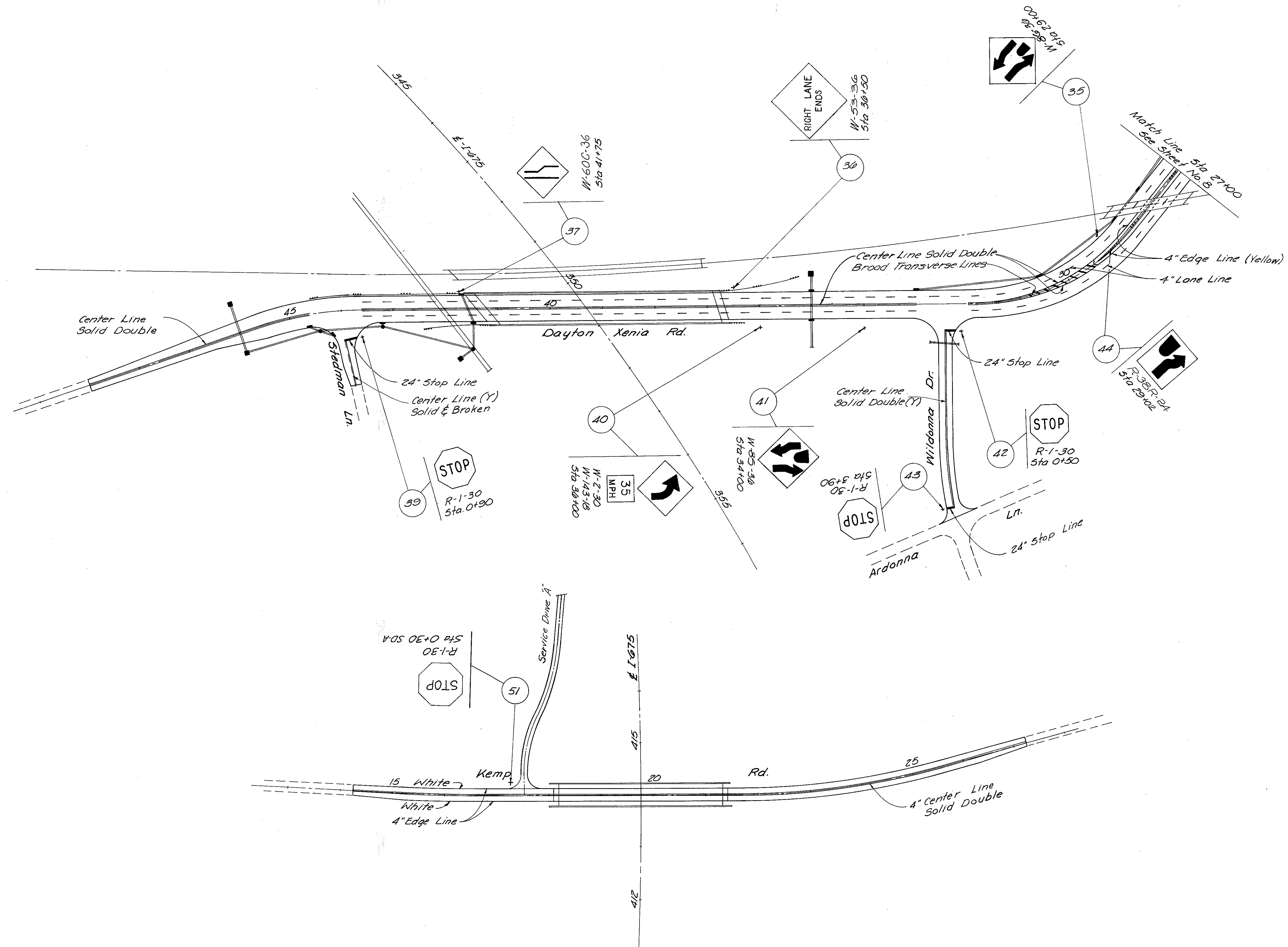


FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

132
616

GRE-075-5.37
GREENE COUNTY

TC-9
23





ITEM 858 SIGN LIGHTING QUANTITIES

QUANTITY CALCULATION
 BY ALH.H. DATE 2/79
 CHECKED C.E.T. DATE 3/79
 Revised N.H. 7-79

FED. RD. DIVISION	STATE	PROJECT
5	OHIO	

GRE - 675 - 5.37

130
616

7C-13
23

SHEET NO.	LOCATION			SIGN SERVICE	DISCONNECT SWITCH ENCLOSURE MOUNTING BRACKETS	DISCONNECT SWITCH	MERCURY VAPOR LUMINAIRE TYPE		BALLAST TYPE		625 GROUND ROD	SIGN'S WIRED	STRUCTURE MOUNTED SIGN WIRED	REMARKS		
	ROADWAY	STATION	REFERENCE NO.				EA.	EA.	EA.	EA.					EA.	EA.
	I-675	321+82	400 400A 400B 400C	/	/						/	/				
	I-675	335+17	402	/	/						/	/	/			
	I-675	380+00	404	/	/						/	/				
	I-675	413+70	407 407A 407B	/	/						/	/	/			
	I-675	414+23	408	/	/			2		2	/	/	/			
	I-675	390+00	409 409A 409B	/	/						/	/	/			
	I-675	369+56	410 410A 410B 410C	/	/						/	/	/			
	I-675 C-D	354+00 C-D	411 411A 411B	/	/						/	/	/			
	I-675 C-D	339+40 C-D	412 412A 412B	/	/						/	/	/			
	U.S. 35	1102+17	416	/	/			2		2	/	/				
	U.S. 35	14+92	417 417A 417B	/	/						/	/	/			
	Ramp A	315+28	419 419A 419B	/	/						/	/	/			
	U.S. 35	53+65 WB	423 423A 423B	/	/						/	/	/			
	U.S. 35	45+10 CD	424 424A 424B	/	/						/	/	/			
	U.S. 35	22+20	425 425A 425B	/	/						/	/	/			
	TOTAL			15		3	15				49	8				

PAVEMENT MARKING

Item 847 Except as Noted

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

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6/6

GRE-675-5.37
GREENE COUNTY

7C-14
23

QUANTITY CALCULATION
BY K. Frank DATE 5/27/77
CHECKED PLB DATE 2-2-78
Revised N.H.H. 7/79

ROADWAY	STA	TO	STA	SIDE	4"	4"	6"	24"	24"
					EDGE LINE	LANE LINE	CHANNEL LINE	BROAD TRANSVERSE LINES WHITE	STOP LINE
					LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.
U.S. 35	1087+74	to	1106+93	Rt.	1919 *				
	0+00	to	76+00	Rt.	7600 *				
	1087+74	to	1106+93	Rt.		1919			
	0+00	to	76+00	Rt.		7600			
	1095+00	to	1106+93	Rt.		893			
	0+00	to	10+00	Rt.		1000			
	1087+74	to	1106+93	Rt.	1919				
	0+00	to	10+00	Rt.	1000				
	17+87	to	31+01	Rt.	1314				
	39+81	to	47+98	Rt.	817				
56+78	to	76+00	Rt.	1922					
1090+86	to	1106+93	Lt.	1607*					
0+00	to	76+00	Lt.	7600*					
1090+86	to	1106+93	Lt.		1607				
0+00	to	76+00	Lt.		7600				
1090+86	to	1101+53	Lt.	1067					
3+40	to	4+60	Lt.	120					
13+40	to	51+85	Lt.	3645					
59+75	to	76+00	Lt.	1625					
Collector-Distributor U.S. 35	4+00	to	21+04	Lt.	1644				
	22+11	to	30+38	Lt./Rt.		827			
	22+69	to	30+38	Lt.	769				
	30+38	to	34+79	Lt.			441		
	30+38	to	34+79	Lt.				148	
	32+79 C-D	to	44+09 C-D	Rt.	1130				
	48+08 C-D	to	51+85 C-D	Rt.	377				
	51+85	to	59+75	Lt.	730				
	13+00	to	15+40	Lt.		240			
	15+40	to	16+60	Lt.			120		
16+60	to	51+85	Lt.	3525*					
51+85 C-D	to	54+81 C-D	Rt.			296			
51+85	to	54+75	Lt.				285		
51+85	to	54+70	Lt.						
54+75	to	56+75	Lt.			200			
SUB-TOTAL "A"					40,390	21,886	1142		574

ROADWAY	STA	TO	STA	SIDE	4"	4"	4"	6"	4" CENTER	LINE	24"	24"
					EDGE LINE	LANE LINE	LANE LINE	CHANNEL LINE	SOLID DOUBLE	BROKEN AND SOLID	BROAD TRANSVERSE LINES YELLOW	STOP LINE
					LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.
Dayton Xenia Road	11+00	to	12+24	Lt. & Rt.							124	
	13+38	to	15+81	Lt. & Rt.							243	
	15+81	to	17+60	Rt.							179	
	15+81	to	17+60	Lt.							179	
	18+25	to	29+42	Rt.	1117 *							
	18+25	to	29+42	Lt.	1117 *							
	29+42	to	31+83	Rt.							241	
	29+42	to	31+83	Lt.							241	
	33+07	to	43+09	Lt. & Rt.							1002	
	41+53	to	49+00	Lt. & Rt.							447	
14+74	to	17+60	Rt.							286		
18+25	to	43+09	Rt.							2484		
14+74	to	31+83	Lt.							1709		
33+07	to	43+09	Lt.							1002		
15+81	to	17+60	Lt. & Rt.								62	
29+42	to	31+83	Lt. & Rt.								112	
Wenrick Dr.	0+57	to	2+05	Lt.							148	
	0+55	to		Lt.								20
Wilbonna Dr.	0+50	to		Lt.								19
	3+90	to		Rt.								12
	0+52	to	3+88	Lt. & Rt.						336		
Stedman Ln.	0+90	to		Lt.								24
	0+92	to	2+40	Lt. & Rt.							148	
Kemp Rd.	14+25	to	27+25	Lt.	1300							
	14+25	to	27+25	Rt.	1300							
	14+25	to	27+25	Lt. & Rt.						1300		
SUB-TOTAL "B"					4834		5481		4292	296	174	75
SUB-TOTAL "A" LIN. FT.					40,390		21,886	1142			574	
SUB-TOTAL "B" LIN. FT.					4834		5481		4292	296	174	75
TOTAL LIN. FT. THIS SHEET					45,224		27,367	1142	4292	296	748	75
TOTAL MILES THIS SHEET					8.57		5.18		0.81	0.06		

* Yellow Edge Lines - Total Project Participation = 24,485 L.F. or 4.64 Mi.

PAVEMENT MARKING

Item 847 Except as Noted

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

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616

QUANTITY CALCULATION
By K. Frank DATE 5-20-77
CHECKED Z. J. DATE 2-10-77

GRE-075-5.37
GREENE COUNTY

7C-15
23

Revised: N.H.H. 7-79

ROADWAY	STA	TO	STA	SIDE	4" EDGE LINE	4" LANE LINE	8" CHANNEL LINE	24" BROAD TRANSVERSE LINES WHITE	
					LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	
I-675	308+34	to	417+00	Lt.	10866*				
	308+34	to	417+00	Lt.		10866			
	308+34	to	417+00	Lt.		10866			
	313+81	to	316+26	Lt.	245				
	326+81	to	365+36	Lt.	3855				
	375+40	to	417+00	Lt.	4160				
	390+00	to	417+00	Lt.		2700			
	308+34	to	417+00	Rt.	10866*				
	308+34	to	417+00	Rt.		10866			
	308+34	to	417+00	Rt.		10866			
	308+34	to	315+14	Rt.	680				
	323+14	to	329+84	Rt.	670				
	337+84	to	364+60	Rt.	2676				
	371+81	to	417+00	Rt.	4519				
371+81	to	417+00	Rt.		4519				
Collector-Distributor I-675	316+26	to	335+00	Lt.	1874				
	332+60	to	335+99	Lt.			339		
	332+60	to	335+99	Lt.				235	
	335+99	to	343+75	Lt.		776			
	343+75	to	346+68	Lt.			293		
	336+53	to	342+48	Lt.	595				
	334+68	to	352+93C-D	Lt.	825				
	348+92C-D	to	355+27C-D	Rt.			635		
	348+92C-D	to	355+27C-D	Lt.				435	
	357+80C-D	to	375+93C-D	Rt.	1813				
	323+93	to	326+81 E	Lt.			288		
	326+81	to	328+25	Lt.				144	
	328+25	to	365+90C-D	Rt.	3765*				
	365+90C-D	to	370+23C-D	Rt.			433		
365+36 E	to	369+69 E	Lt.				433		
365+36 E	to	369+69 E	Lt.						
365+36 E	to	390+00 E	Lt.				2464		
Ramp A	293+31A	to	314+69	Rt.	2138				
	316+47A	to	343+02A	Rt.	2655				
	340+59A	to	371+81A	Rt.	3122				
	293+31A	to	371+81A	Lt.		7850			
	298+05A	to	301+17A	Lt.			312		
	14+75 US 35	to	17+87 US 35	Rt.			312		
	298+05A	to	301+17A	Lt.				402	
	301+17A	to	355+00A	Lt.	5383*				
	355+00A	to	364+60A	Lt.			960		
	Ramp B	1101+53 US 35	to	1108+93 US 35	Lt.	540			
		0+00 US 35	to	4+60 US 35	Lt.	460			
		331+73 B	to	357+80 B	Rt.	2607			
		1+00 US 35	to	3+40 US 35	Lt.			240	
		3+40 US 35	to	4+60 US 35	Lt.				120
331+73 B		to	352+93 B	Rt.	2120*				
352+93 B	to	355+27 B	Rt.			234			
Ramp C	308+34 C	to	333+74 C	Rt.	2540				
	310+93 C	to	313+81 C	Rt.		288			
	313+81 C	to	315+25 C	Rt.			144		
	315+25 C	to	331+90 C	Rt.	1665*				
	331+90 C	to	333+00 C	Rt.			110		
	331+90 C	to	333+00 C	Rt.				108	
315+44 A	to	316+47 A	Rt.			103			
SUB-TOTAL "A"					70639	60125	7036	1931	

ROADWAY	STA	TO	STA	SIDE	4" EDGE LINE	4" LANE LINE	8" CHANNEL LINE	24" BROAD TRANSVERSE LINES WHITE
					LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.
Ramp D	329+84 E	to	354+45 D	Rt.	2461			
	332+94 D	to	335+05 D	Lt.		211		
	335+05 D	to	337+84 D	Lt.			279	
	335+05 D	to	337+84 D	Lt.				291
	335+05 E	to	337+84 E	Rt.				279
	337+84 D	to	362+11 D	Lt.	1427*			
352+11 D	to	354+45 D	Lt.			234		
Ramp E	39+81 US 35	to	29+81 US 35	Rt.	1000			
	322+38 E	to	336+53 E	Rt.	1415			
	33+41 US 35	to	31+01 US 35	Rt.		240		
	31+01 US 35	to	29+81 US 35	Rt.			120	
	322+38 E	to	335+00 E	Rt.	1262*			
	335+00 E	to	335+99 E	Rt.			99	
Ramp F	48+08 WB US 35	to	45+60 WB US 35	Lt.	248			
	326+70 F	to	340+59 F	Rt.	1389			
	327+20 F	to	328+19 F	Lt.			99	
	327+20 F	to	328+19 F	Lt.				94
	45+10 C-D	to	44+09 C-D	Rt.			101	
	328+19 F	to	340+59 F	Lt.	1240*			
340+59 A	to	343+02 A	Lt.			241		
Ramp G	342+48 G	to	355+01 G	Rt.	1313			
	343+75 G	to	344+72 G	Rt.			97	
	343+75 CD	to	346+68 CD	Rt.				87
	344+72 G	to	354+02 G	Rt.	930*			
	354+02 G	to	355+03 G	Rt.			101	
	354+02 G	to	354+93 G	Rt.				283
18+52 US 35	to	22+11 US 35	Lt.			353		
Ramp H	315+14 H	to	338+85 H	Rt.	2371			
	46+78 US 35	to	56+78 US 35	Rt.	1000			
	318+57 H	to	321+00 H	Lt.		243		
	321+00 H	to	323+21 H	Lt.			221	
	321+00 H	to	323+21 H	Lt.				234
	321+00 E	to	323+14 E	Rt.			214	
323+21 H	to	338+85 H	Lt.	1564*				
46+78 US 35	to	47+98 US 35	Lt.			120		
47+98 US 35	to	50+38 US 35	Lt.		240			
SUB-TOTAL "B"					17620	934	2558	989
SUB-TOTAL "A" LIN. FT.					70639	60125	7036	1931
SUB-TOTAL "B" LIN. FT.					17620	934	2558	989
TOTAL LIN. FT. THIS SHEET					88259	61059	9594	2920
TOTAL MILES THIS SHEET					16.72	11.56		

* Yellow Edge Lines - Project Participation - 41,092 L.F. or 7.78 M

ITEM 620 DELINEATORS

QUANTITY CALCULATIONS
 BY: N.H.H. DATE: 1-79
 CHECKED: C.E.I. DATE: 1-79

ROADWAY	STA	TO	STA	SIDE	SPACING	TYPE														
						A		B		C		D								
						POST	BRACKET	POST	BRACKET	POST	BRACKET	POST	BRACKET							
I-G75	310+00 - 314+00			Rt	400	2														
	323+25 - 329+25			Rt	400	2														
	338+00 - 348+00			Rt	400	4														
	373+00 - 417+00			Rt	400	12														
	352+50 - 364+50			Lt	400	4														
	377+00 - 413+00			Lt	400	11														
Collector Distributor (I-G75)	320+00 - 334+00			Lt	200					8										
	337+00 - 342+00			Lt	200					4										
	345+50 - 352+50			Lt	200					5										
	358+00 - 376+00			Lt	200					10										
Ramp A	294+10 - 305+10			Rt	200					7										
	305+10			Lt																
	305+90 - 309+40			Lt	80															
	310+20			Lt																
	310+20 - 311+20			Rt	200															
	312+00			Rt																
	312+00 - 316+50			Lt	80															
	316+50 - 321+00			Rt	80															
	321+50 - 324+00			Rt	80															
	324+50 - 329+00			Rt	80															
	329+50 - 332+00			Rt	80															
	332+50 - 338+00			Rt	80															
	338+00 - 340+00			Lt	80															
	340+80			Lt																
	341+80 - 348+40			Lt	90															
	348+40 - 352+00			Rt	90															
	353+00 - 371+00			Rt	200															
	Ramp B	1101+60 US35 - 1106+60 US35			Lt	200														
		01+30 US35 - 41+30 US35			Lt	200														
		332+40 - 333+40			Lt	200														
334+40 - 339+40				Lt	200															
340+20				Lt																
340+20 - 352+20				Rt	80															
352+20				Lt																
353+00 - 357+00			Lt	200																
Ramp C	308+80 - 319+80			Lt	200															
	319+80 - 322+80			Rt	90															
	322+80 - 331+80			Lt	200															
Ramp D	331+00 - 339+00			Rt	200															
	339+00 - 339+60			Lt	90															
	339+90 - 351+30			Lt	60															
	351+30			Rt																
	352+10 - 353+70			Rt	200															
Ramp E	39+00 US35 - 34+00 US35			Rt	200															
	33+00 US35 - 30+00 US35			Rt	200															
	323+20 - 323+80			Lt	90															
	323+80 - 334+90			Rt	60															
	334+90 - 336+10			Lt	60															
Ramp F	48+10 US35 - 45+10 US35			Lt	200															
	327+50 - 328+50			Rt	80															
	328+50 - 330+50			Lt	80															
	331+00 - 331+80			Lt	100															
	331+80 - 335+80			Rt	200															
	336+80 - 340+80			Rt	80															
	341+80 - 347+80			Rt	90															
Ramp G	343+60 - 345+60			Lt	200															
	345+60			Rt																
	345+90 - 353+10			Rt	60															
	353+50 - 353+90			Rt	70															
	353+90 - 355+50			Lt	70															
Ramp H	315+50 - 323+50			Rt	200															
	323+50 - 324+30			Lt	100															
	324+80 - 336+80			Lt	80															
	336+80 - 338+90			Rt	100															
	47+80 US35 - 55+80 US35			Rt	200															
SUB-TOTALS						35						151	12	124						

ROADWAY	STA	TO	STA	SIDE	SPACING	TYPE													
						A		B		C		D							
						POST	BRACKET	POST	BRACKET	POST	BRACKET	POST	BRACKET						
US 35	1089+00 - 1095+00			Rt	400	3													
	18+00 - 28+00			Rt	400	4													
	40+00 - 45+00			Rt	400	2													
	57+00			Rt															
	59+00 - 75+00			Rt	400	5													
	1092+00 - 1100+00			Lt	400	3													
	60+00 - 76+00			Lt	400	5													
US 35 Speed Change Lane	1086+00 - 1106+00			Rt	200														
	0+00 - 4+00			Rt	200														
	5+00			Rt															
	6+00 - 10+00			Rt	200														
Collector Distributor (US-35)	12+80 - 20+80			Lt	200														
	23+50 - 27+50			Lt	200														
	28+50 - 30+50			Lt	200														
	34+00 - 44+00			Lt	200														
	49+00 - 52+00			Lt	200														
	52+80 - 55+20			Lt	200														
	56+00 - 58+00			Lt	200														
	59+00			Lt															
I-G75	387+32																		
	387+68																		
SUB-TOTALS						22	1					32	5	4					

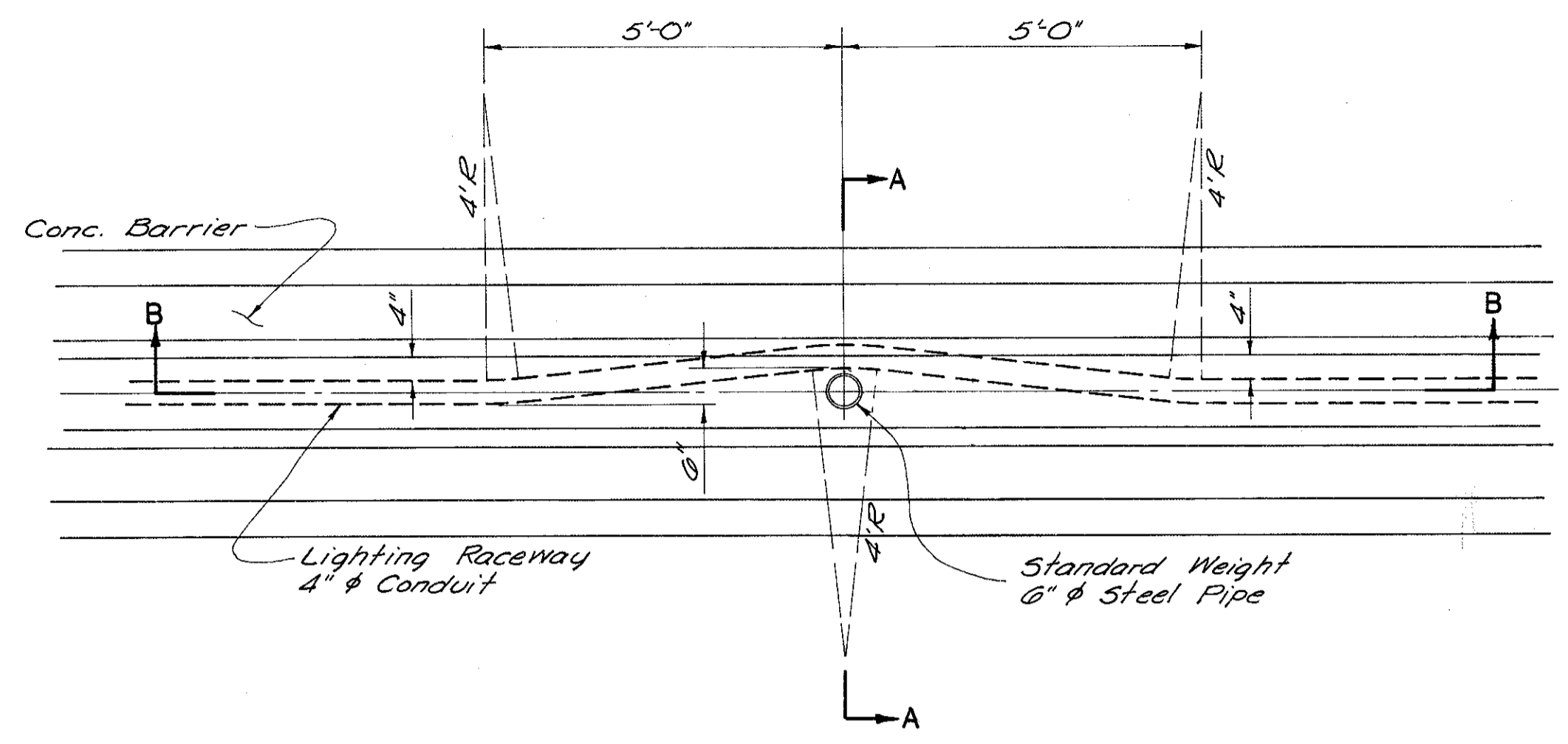
ROADWAY	STA	TO	STA
---------	-----	----	-----

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

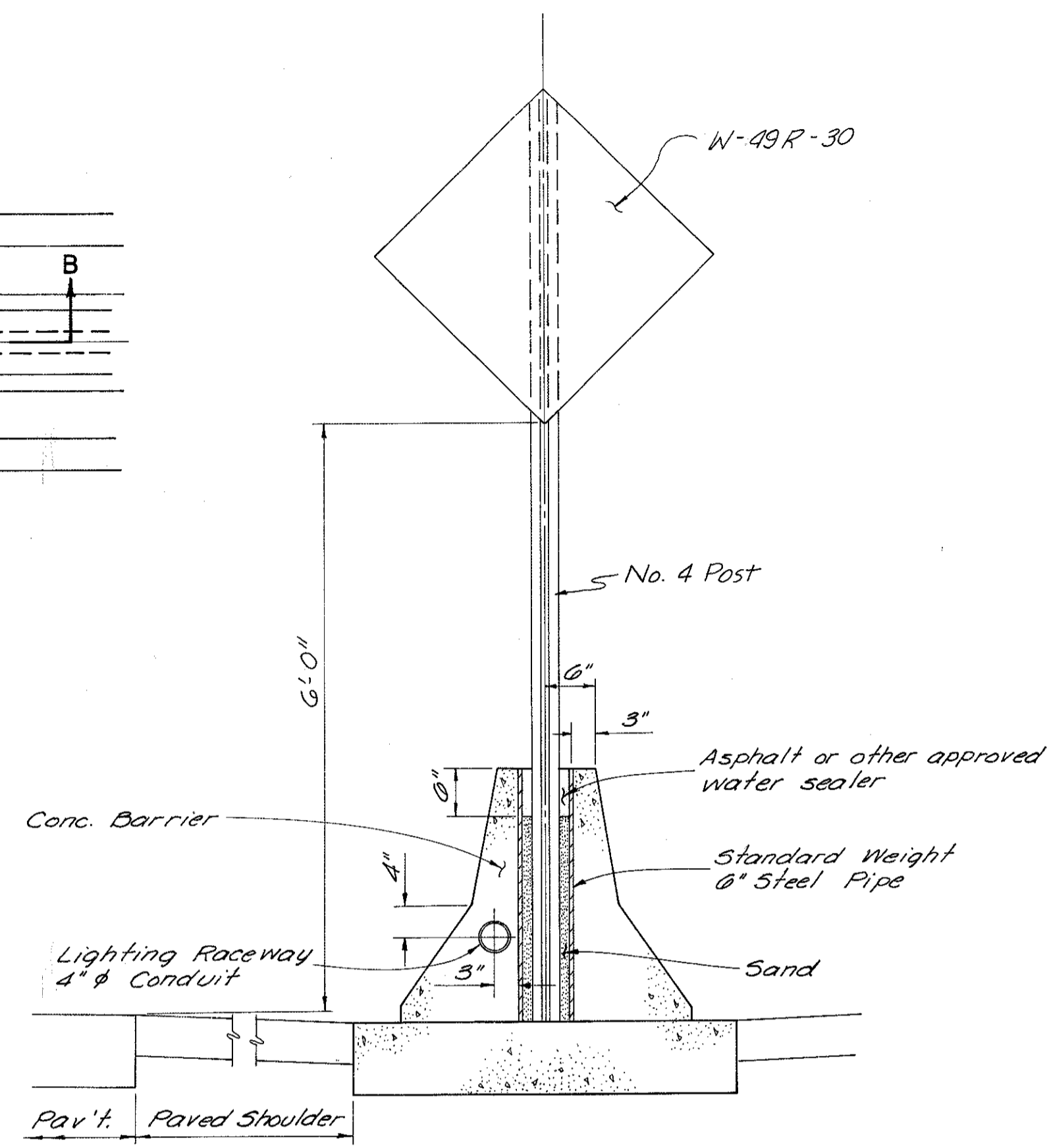
140
6/6

GRE-675-5.37
GREENE COUNTY

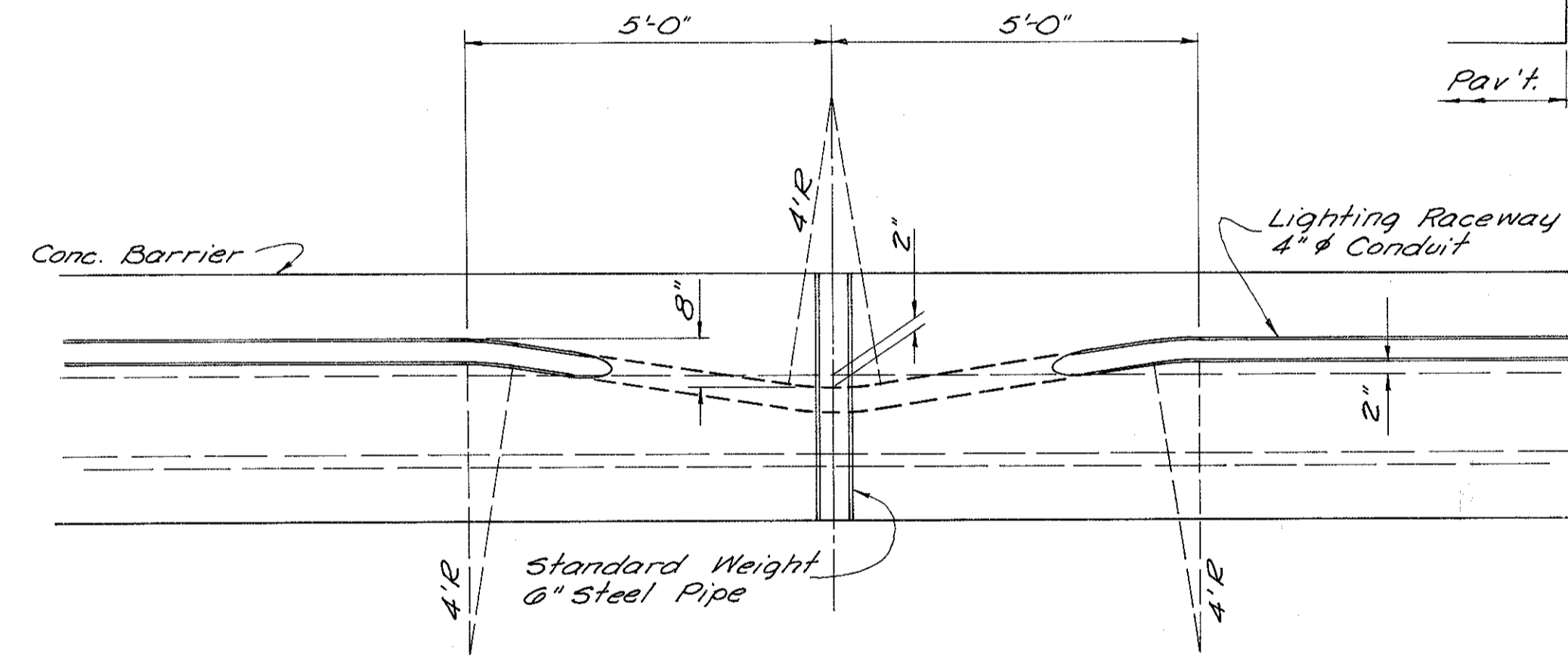
TC-17
23



PLAN

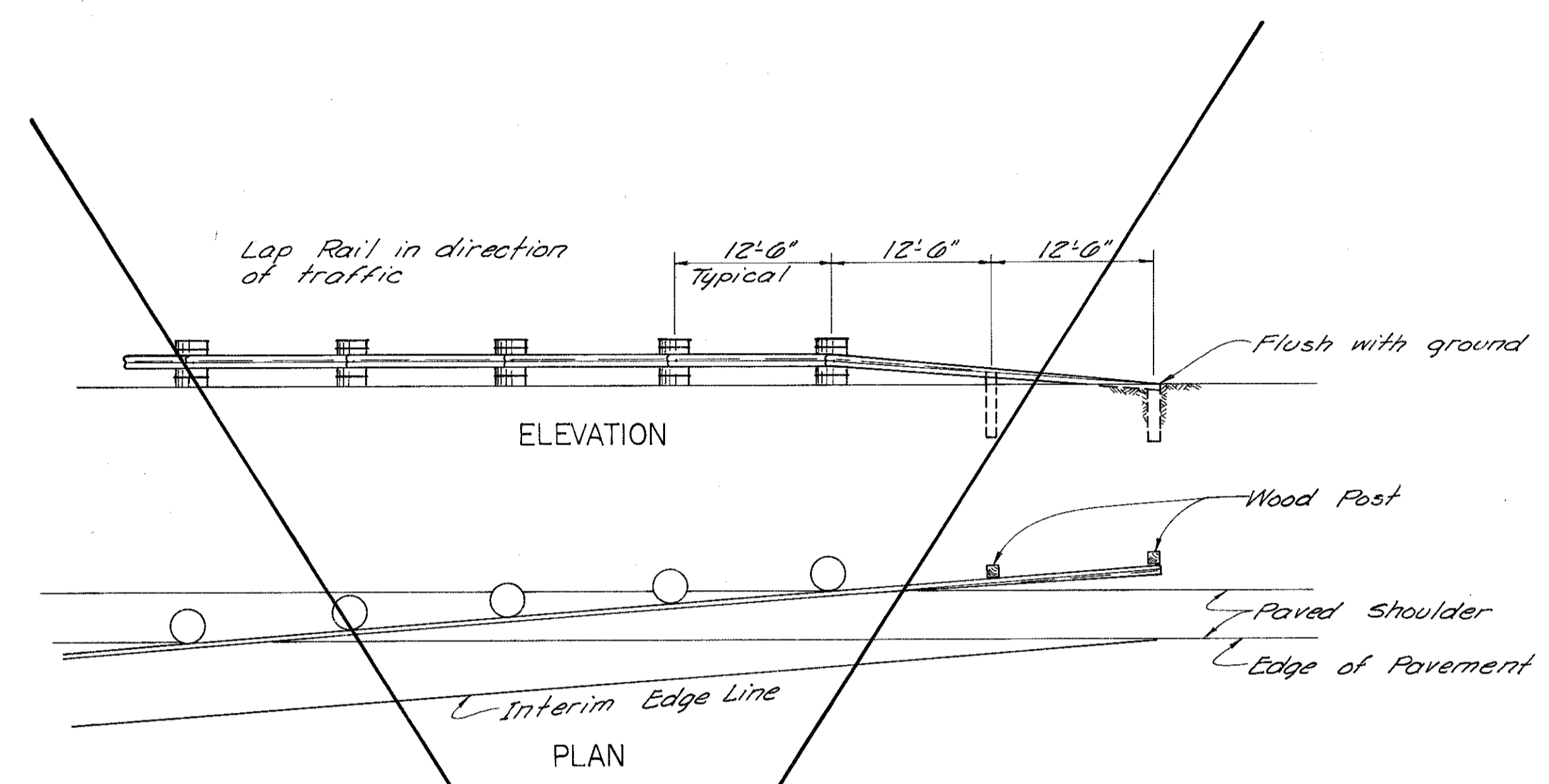


SECTION A-A

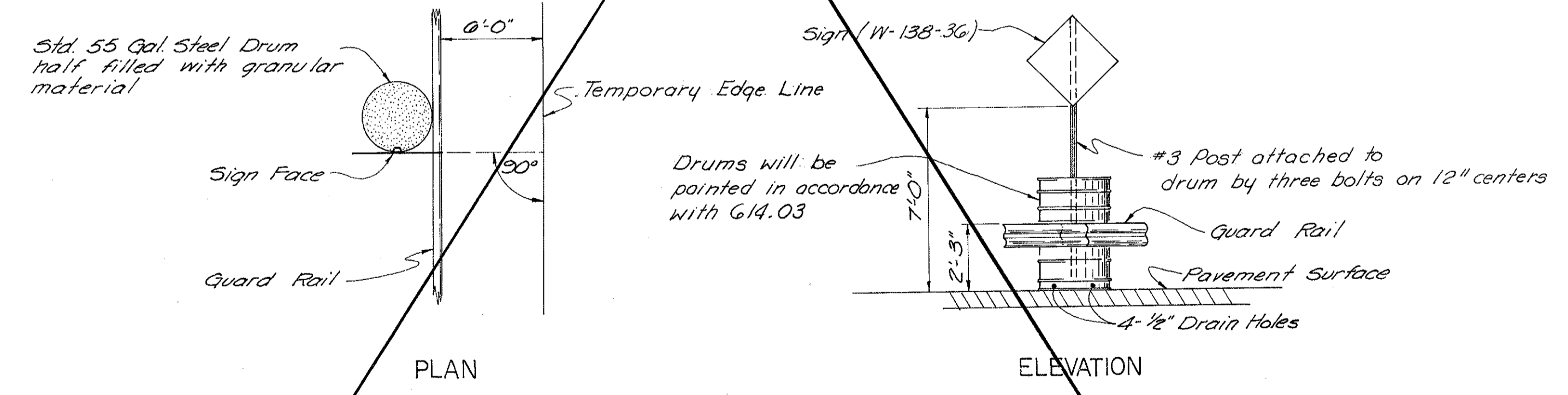


SECTION B-B

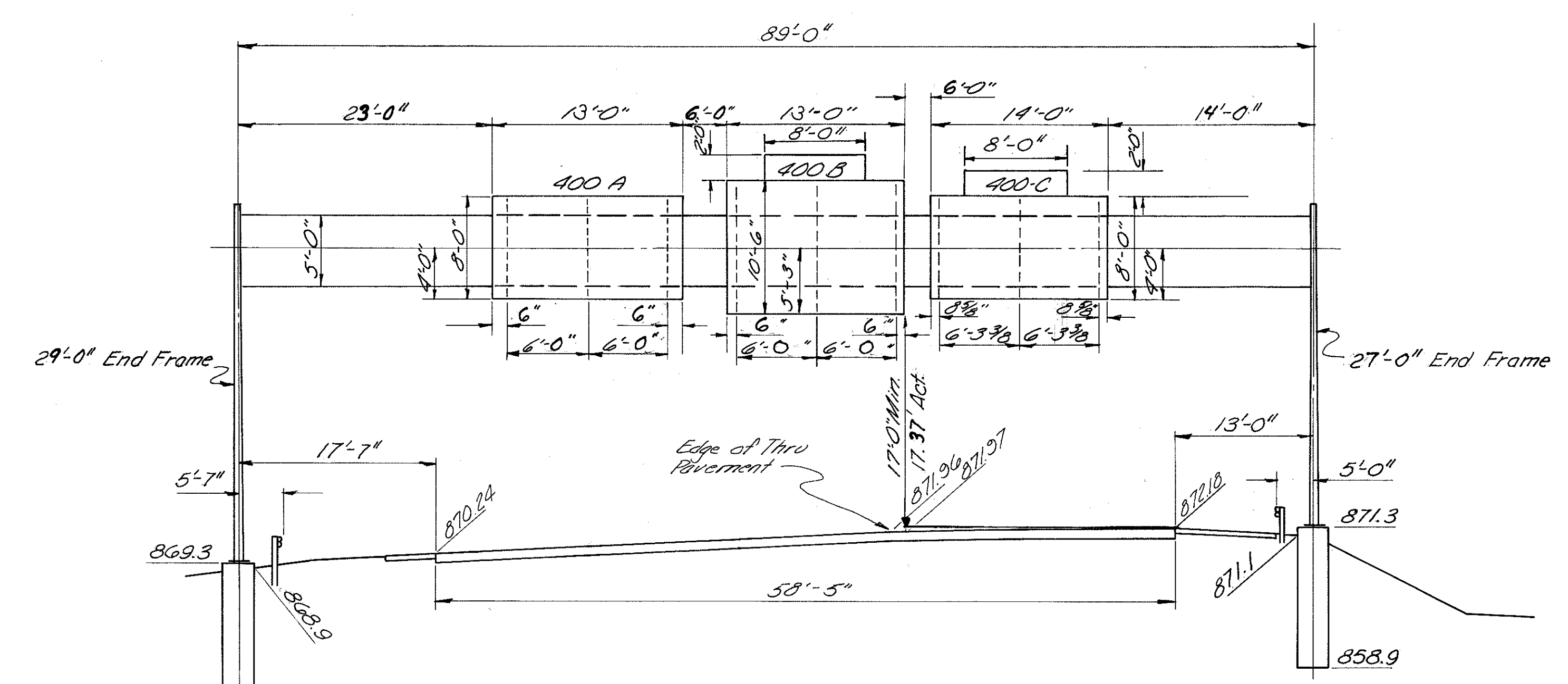
SIGN ATTACHMENT TO CONCRETE BARRIER



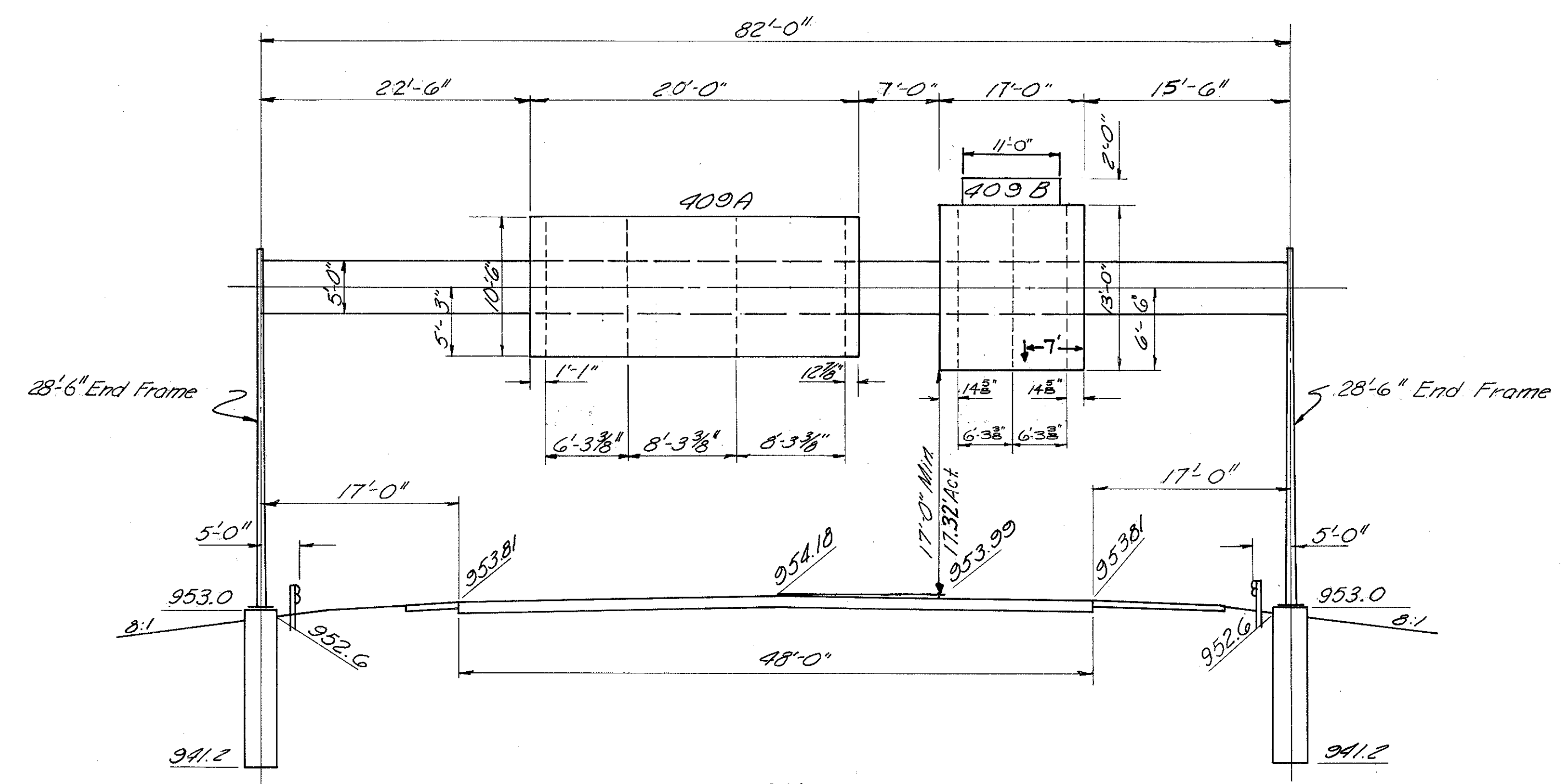
TEMPORARY BEAM RAIL - TYPE 6



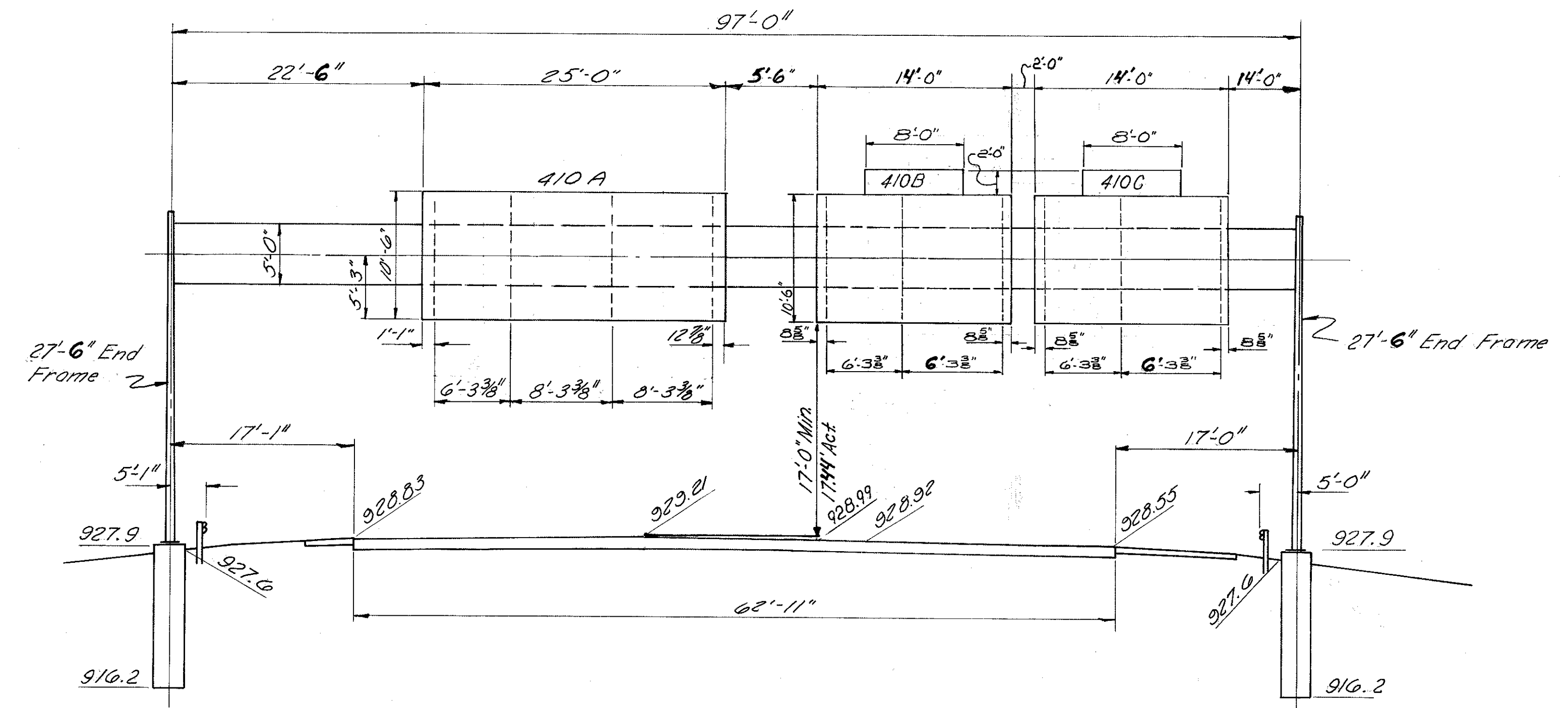
SIGN ATTACHMENT TO DRUM



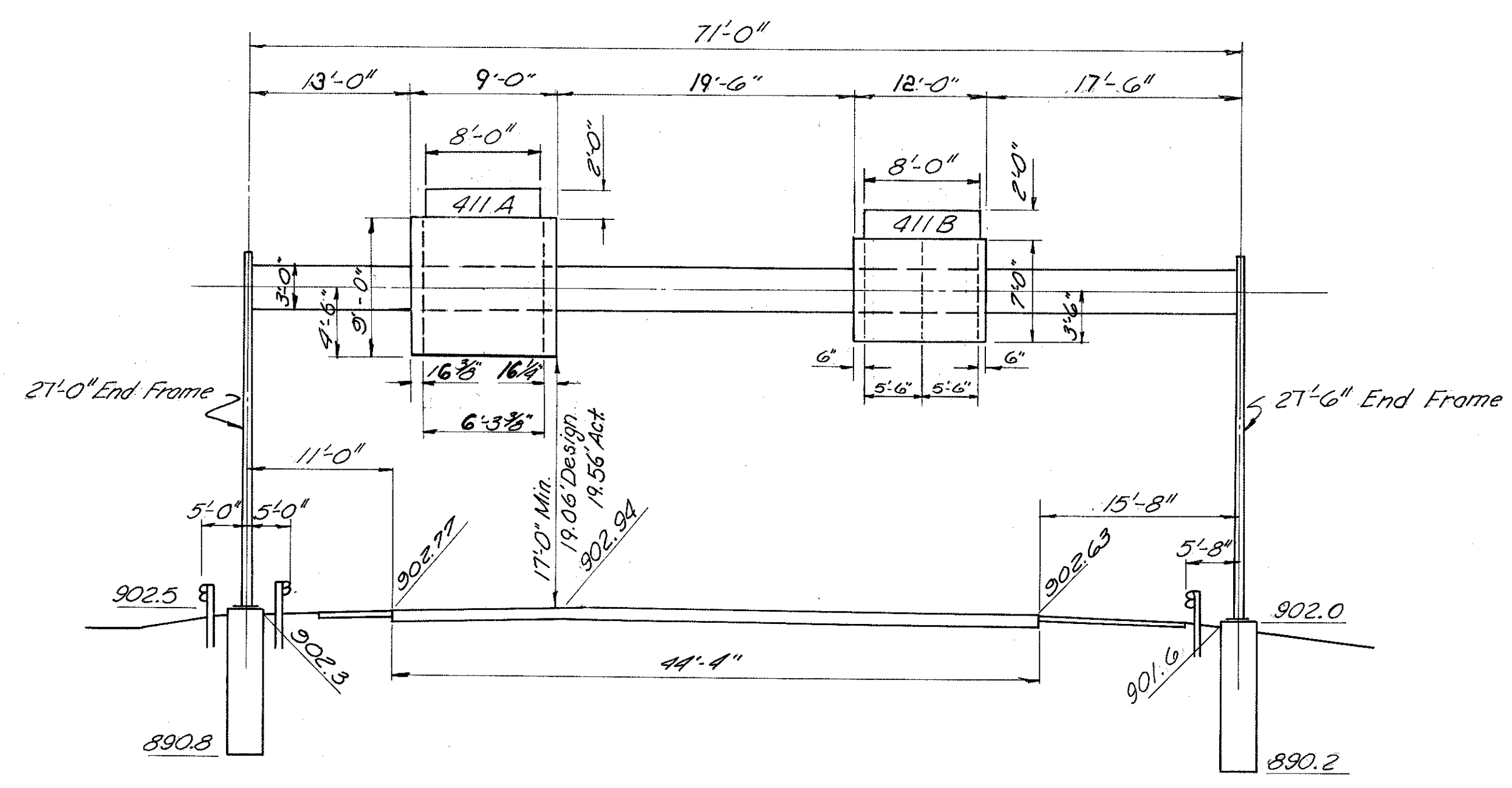
SIGN 400
No. 765 Design No. 8
Sta. 321+82 Northbound I-675



SIGN 409
No. 765 Design No. 8
Sta. 390+00 Southbound I-675



SIGN 410
No. 765 Design 8
Sta. 369+56 Southbound I-675



SIGN 411
No. 765 Design No. 6
Sta. 354+00 Collector Distributor
Southbound I-675

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

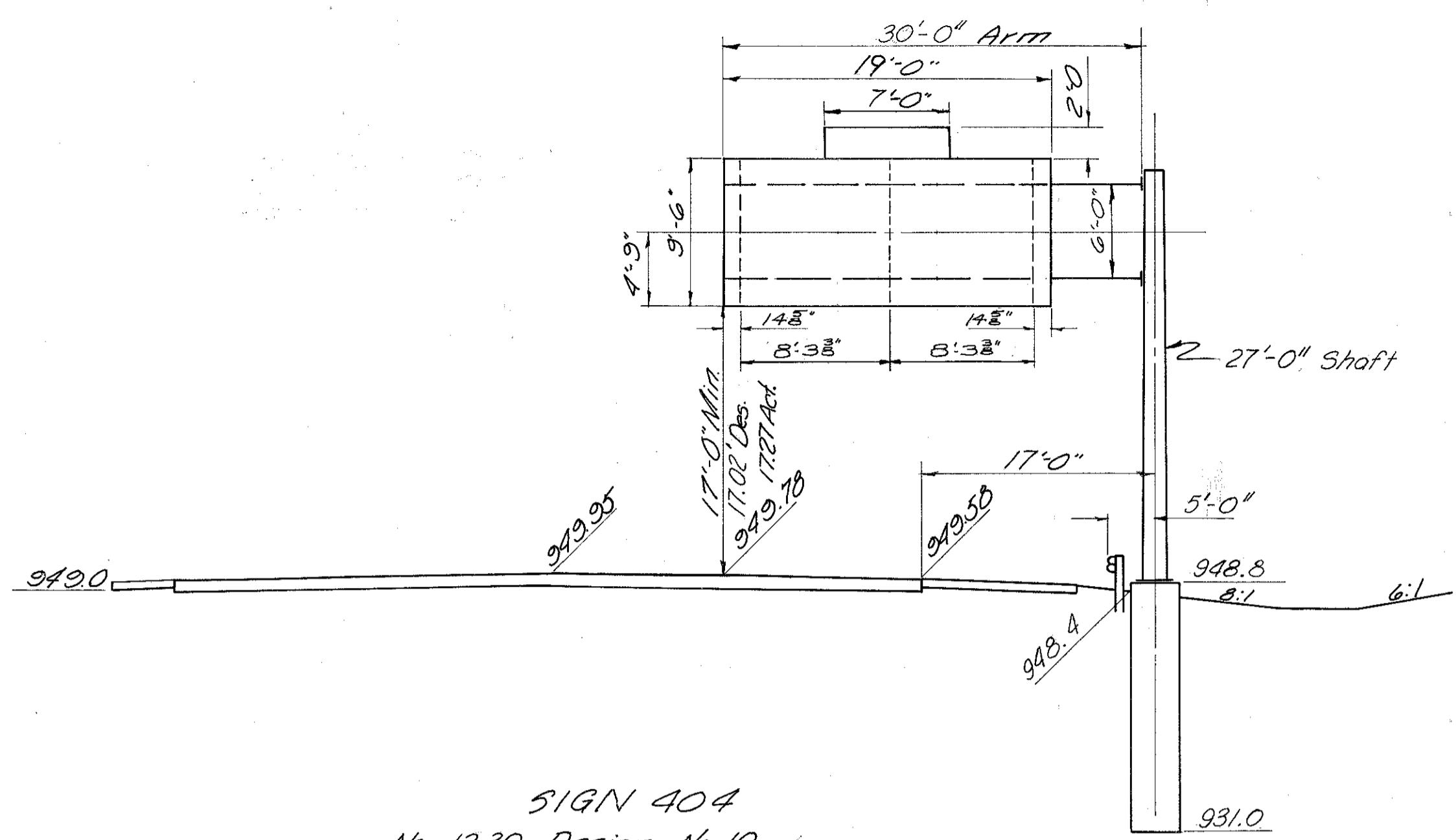
143
616

GRE-675-5.37
GREENE COUNTY

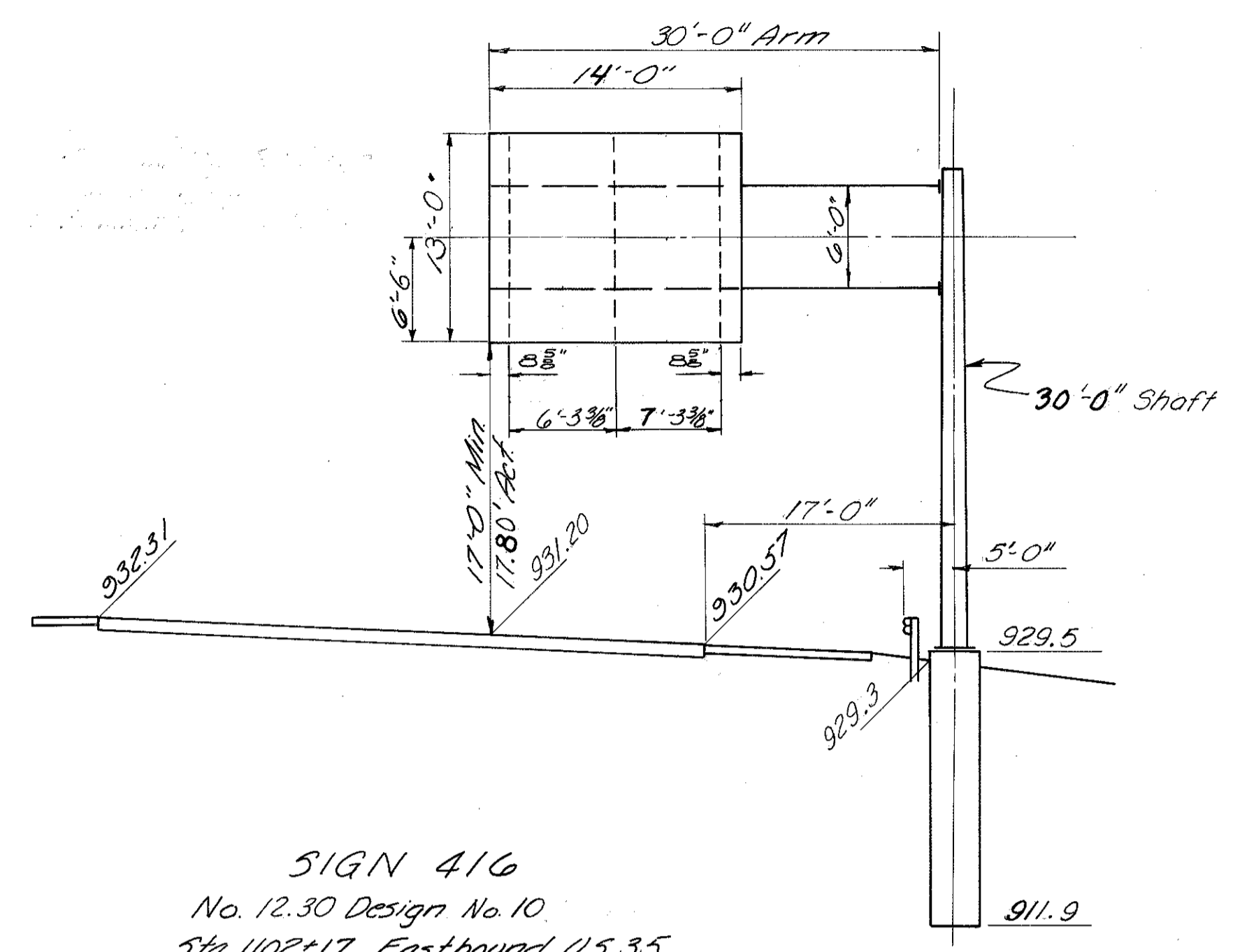
TC-20
23

Kemp Road

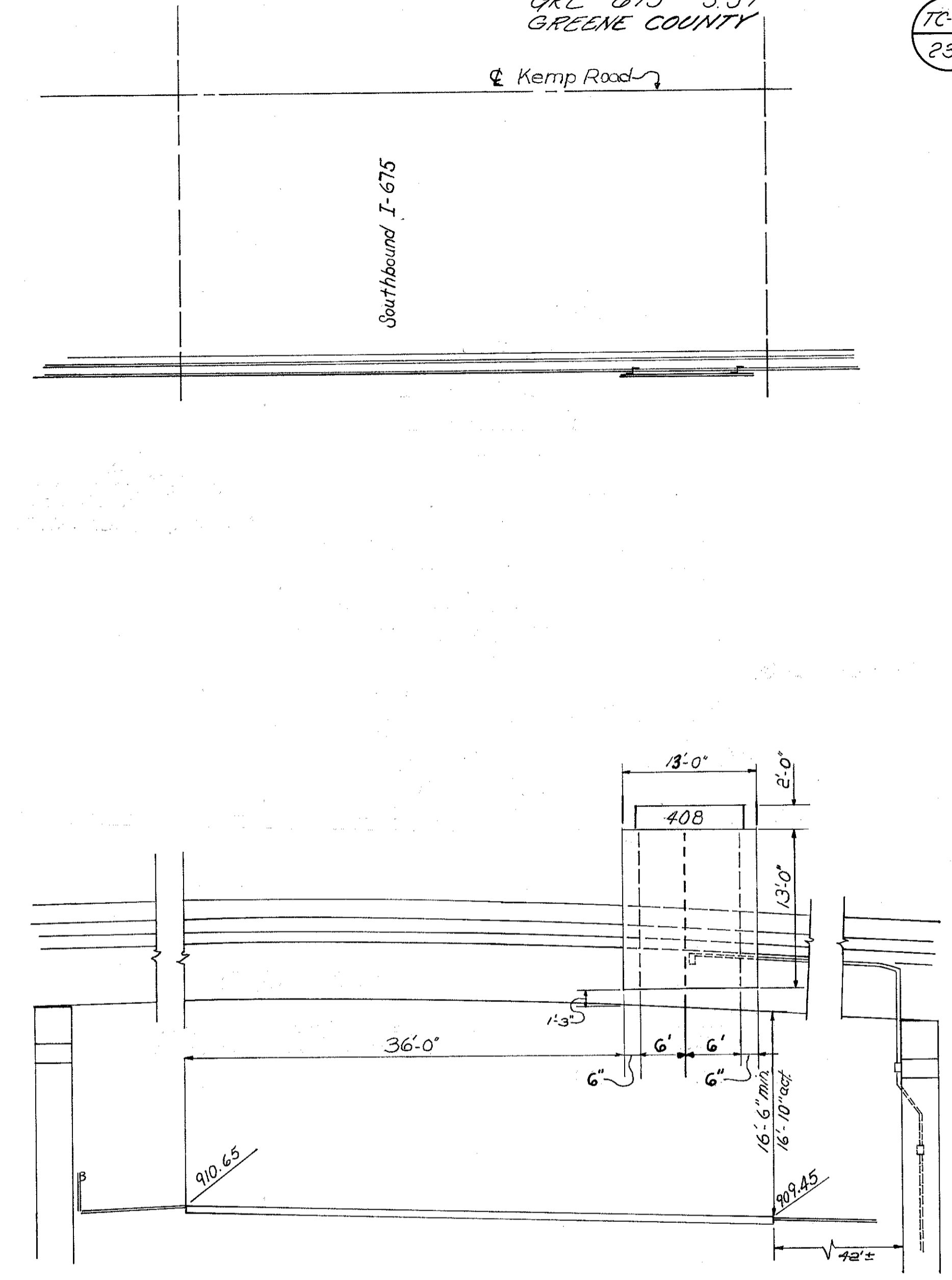
Southbound I-675



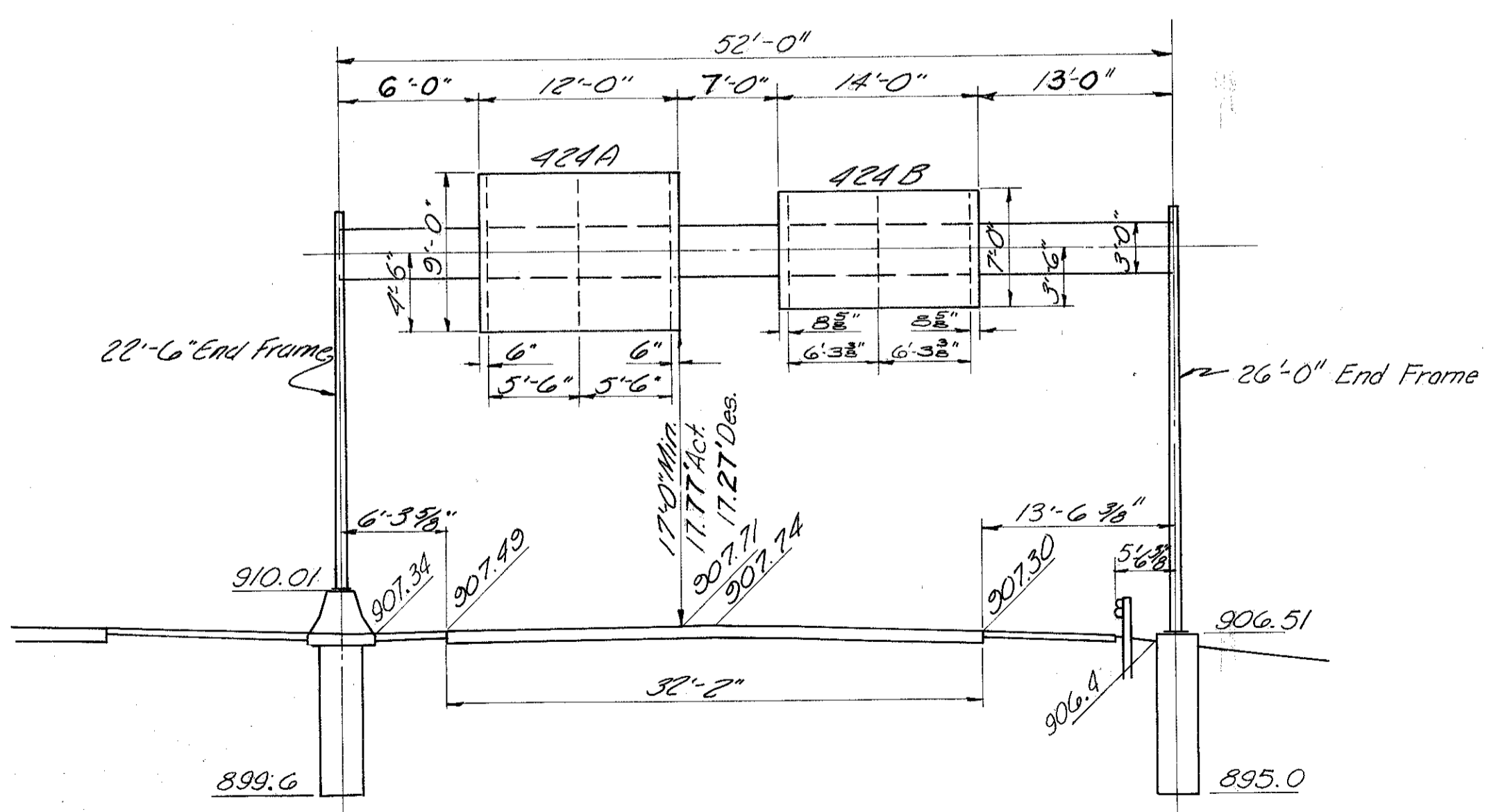
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No. 12.30 Design No. 10
Sta. 380+00 Northbound I-675



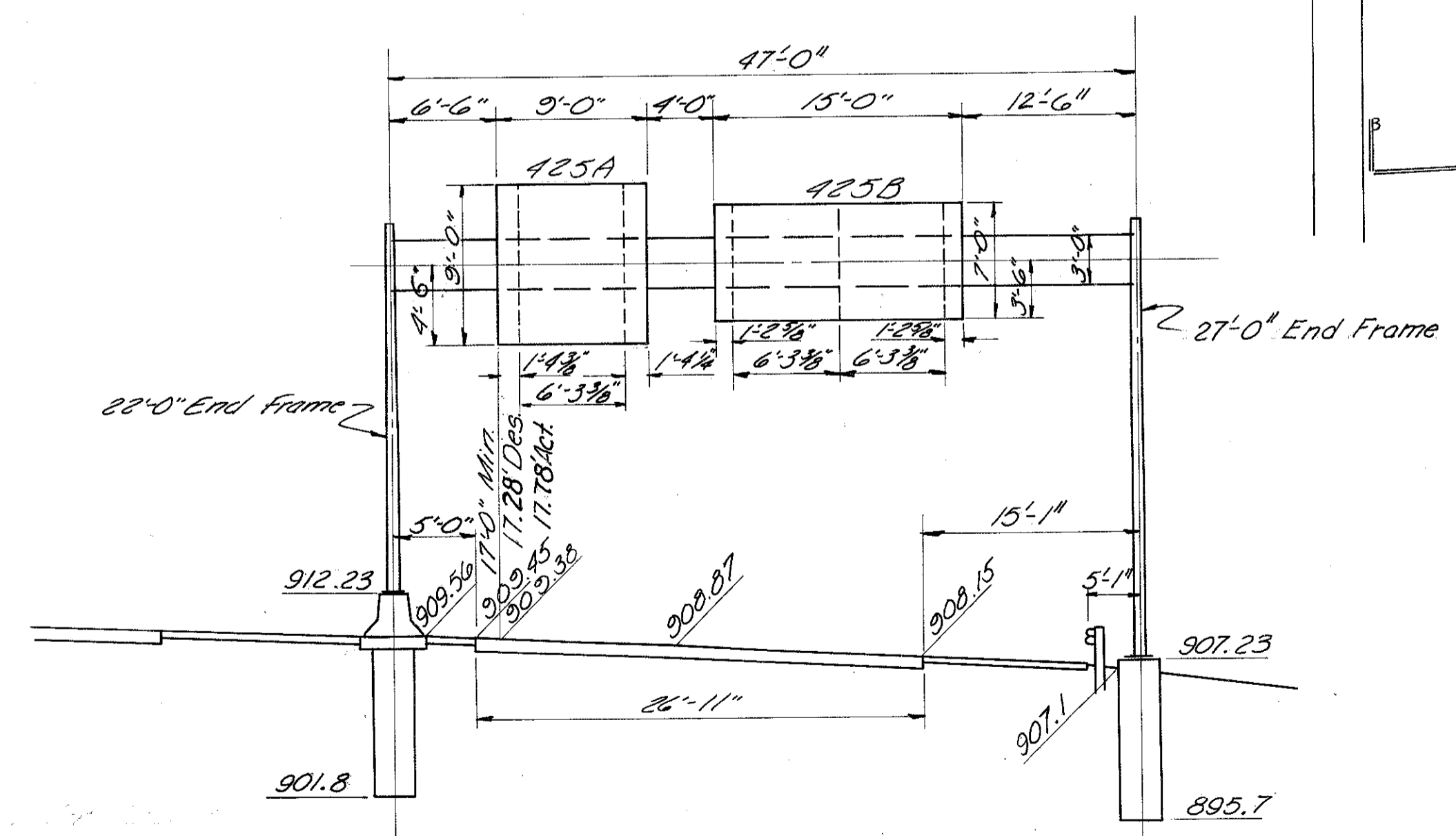
SIGN 416
No. 12.30 Design No. 10
Sta. 1102+17 Eastbound U.S. 35



SIGN 408
Structure Mounted Sign Support
Sta. 414+23 Southbound I-675
For details See Std. Dr. TC-18-24



SIGN 424
No. 7.65 Design No. 6
Sta. 45+10 Collector Distributor
Westbound U.S. 35



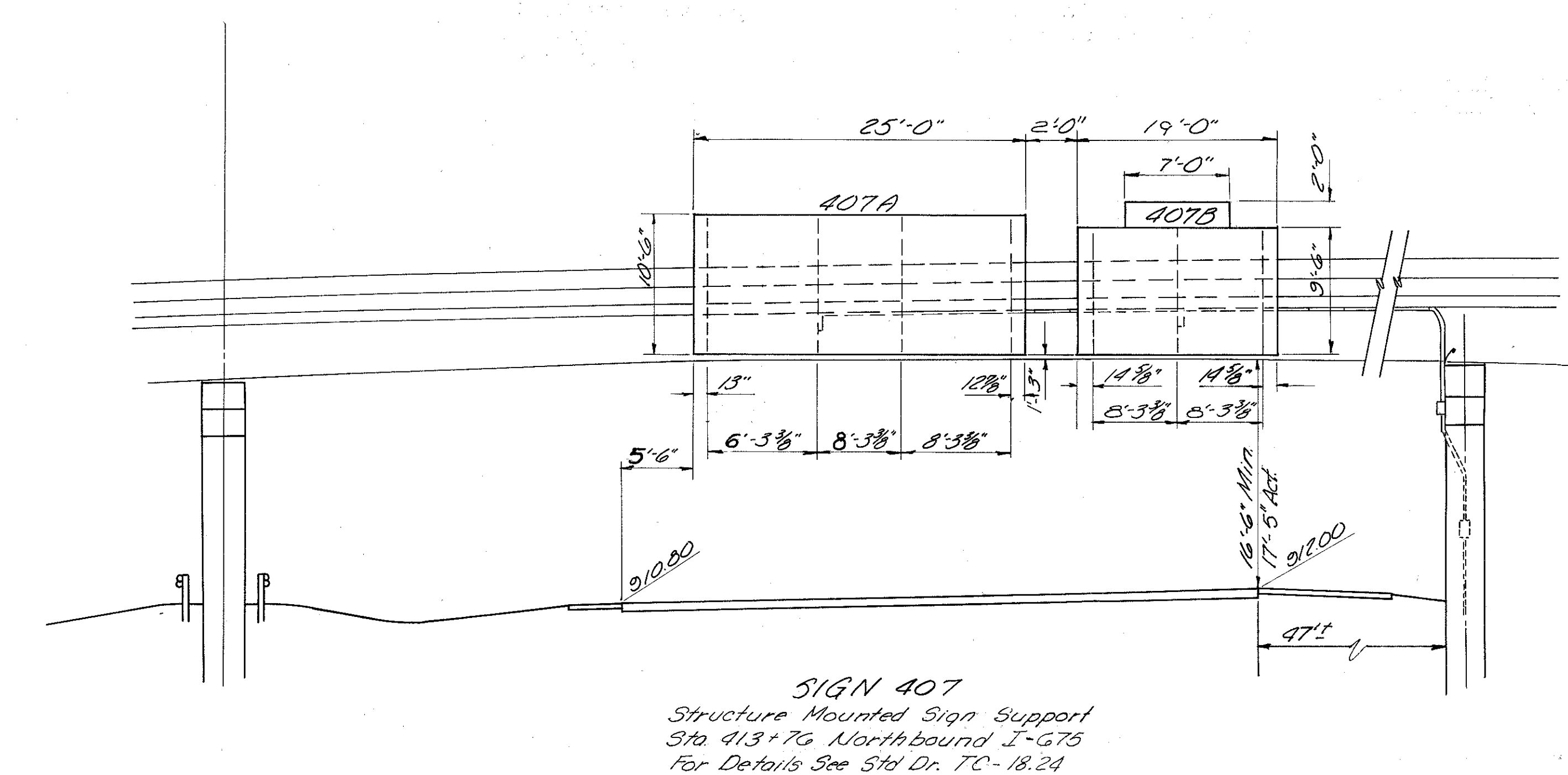
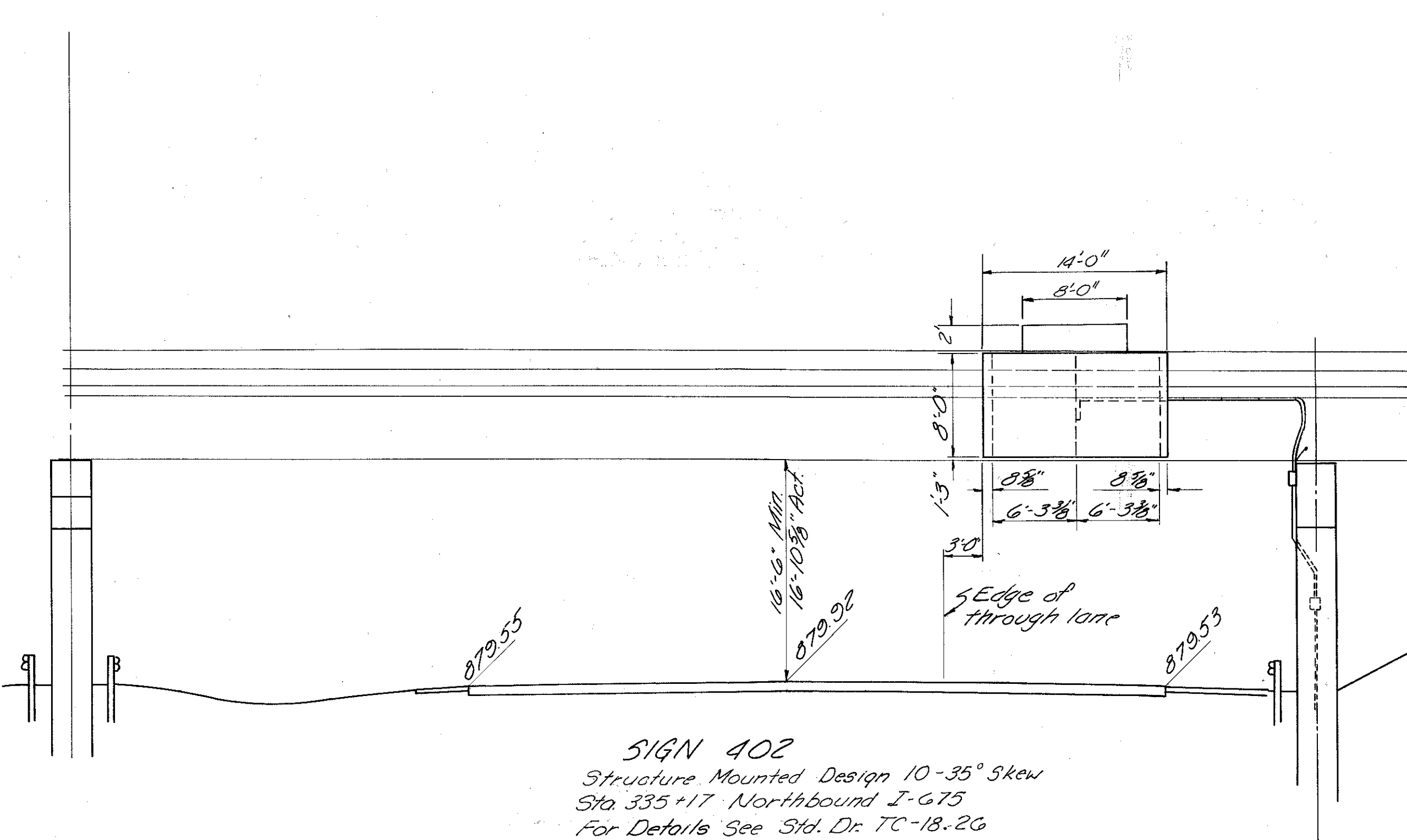
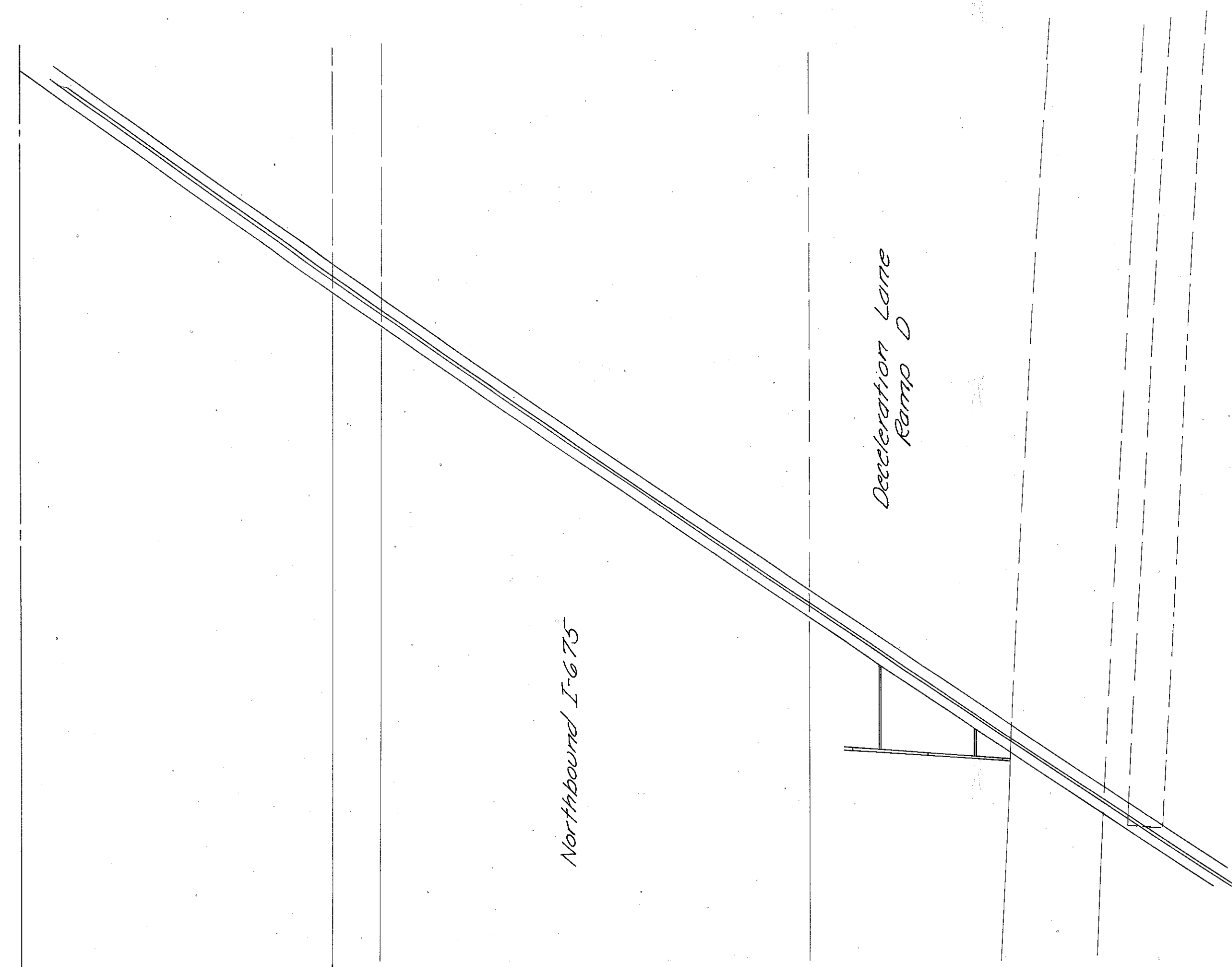
SIGN 425
No. 7.65 Design No. 9
Sta. 22+20 Collector Distributor
Westbound U.S. 35

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

194
616

GRE-675-5.37
GREENE COUNTY

TC-21
23

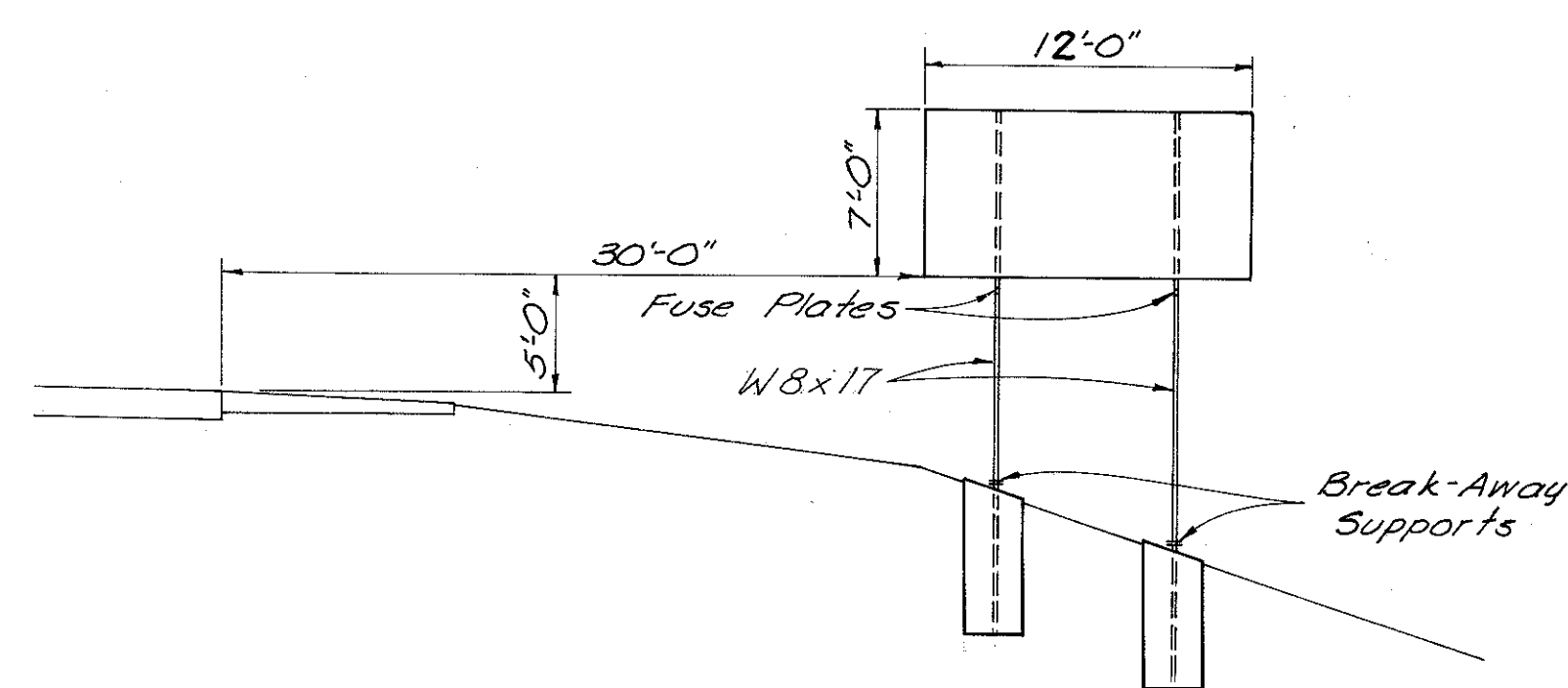


FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

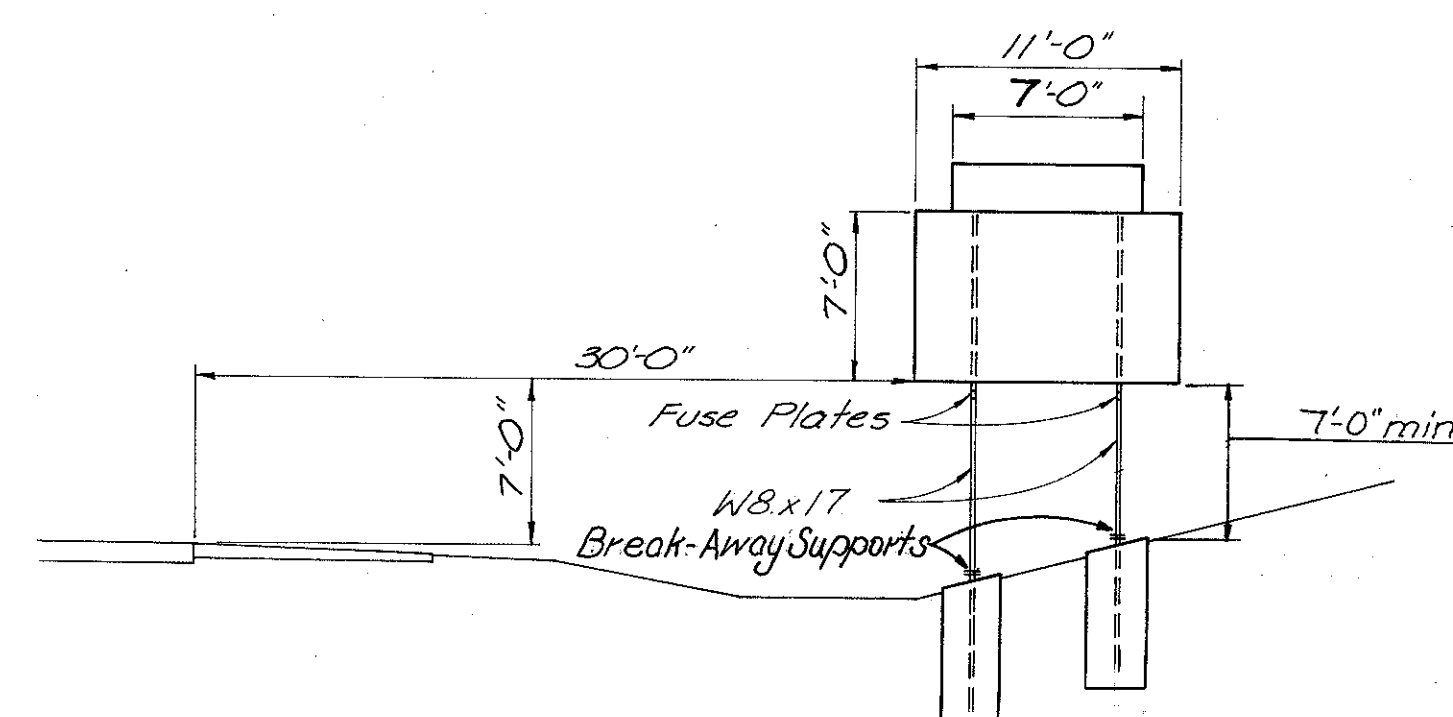
145
616

17-22
23

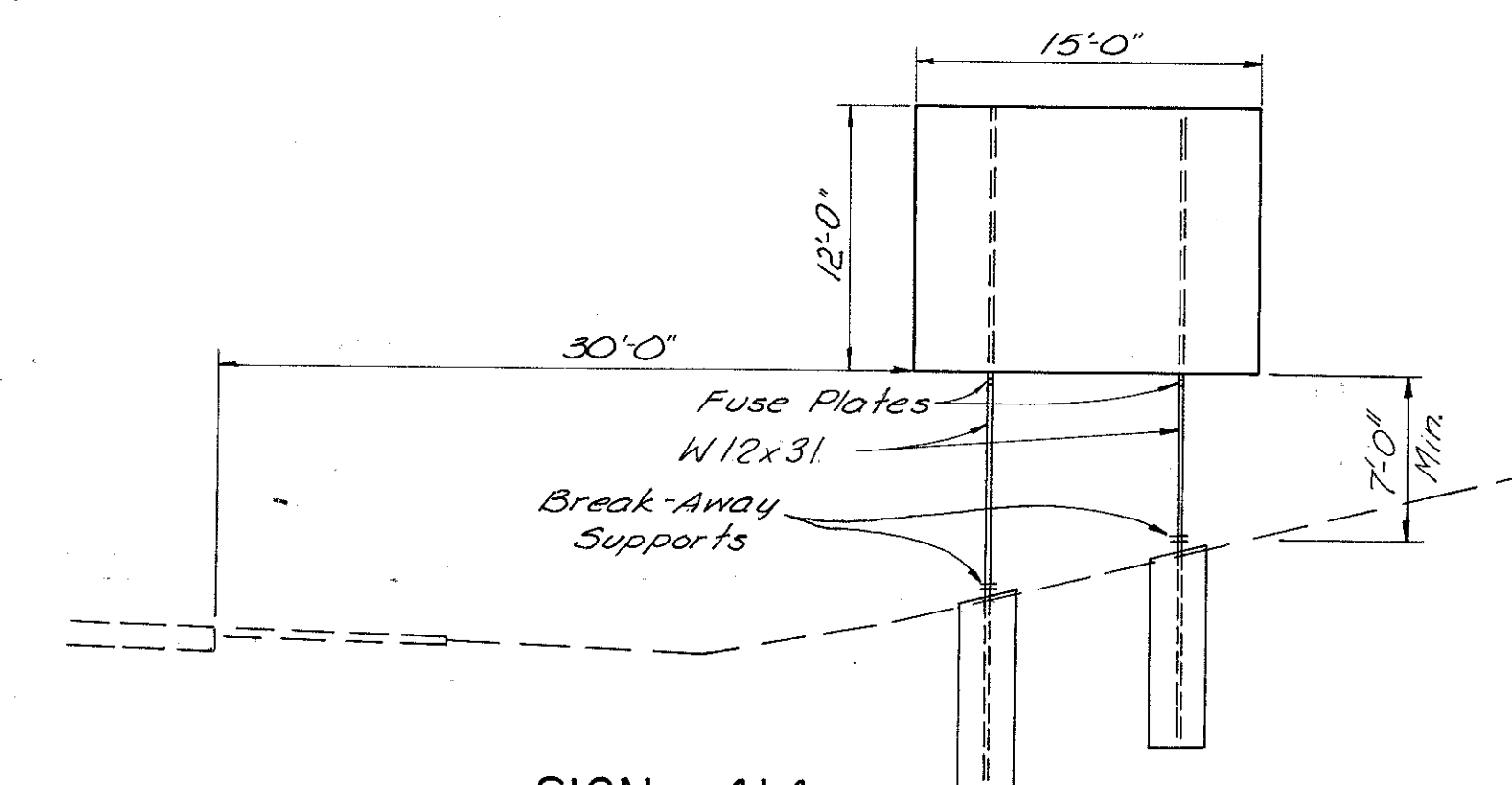
GRE - 675 - 537
GREENE COUNTY



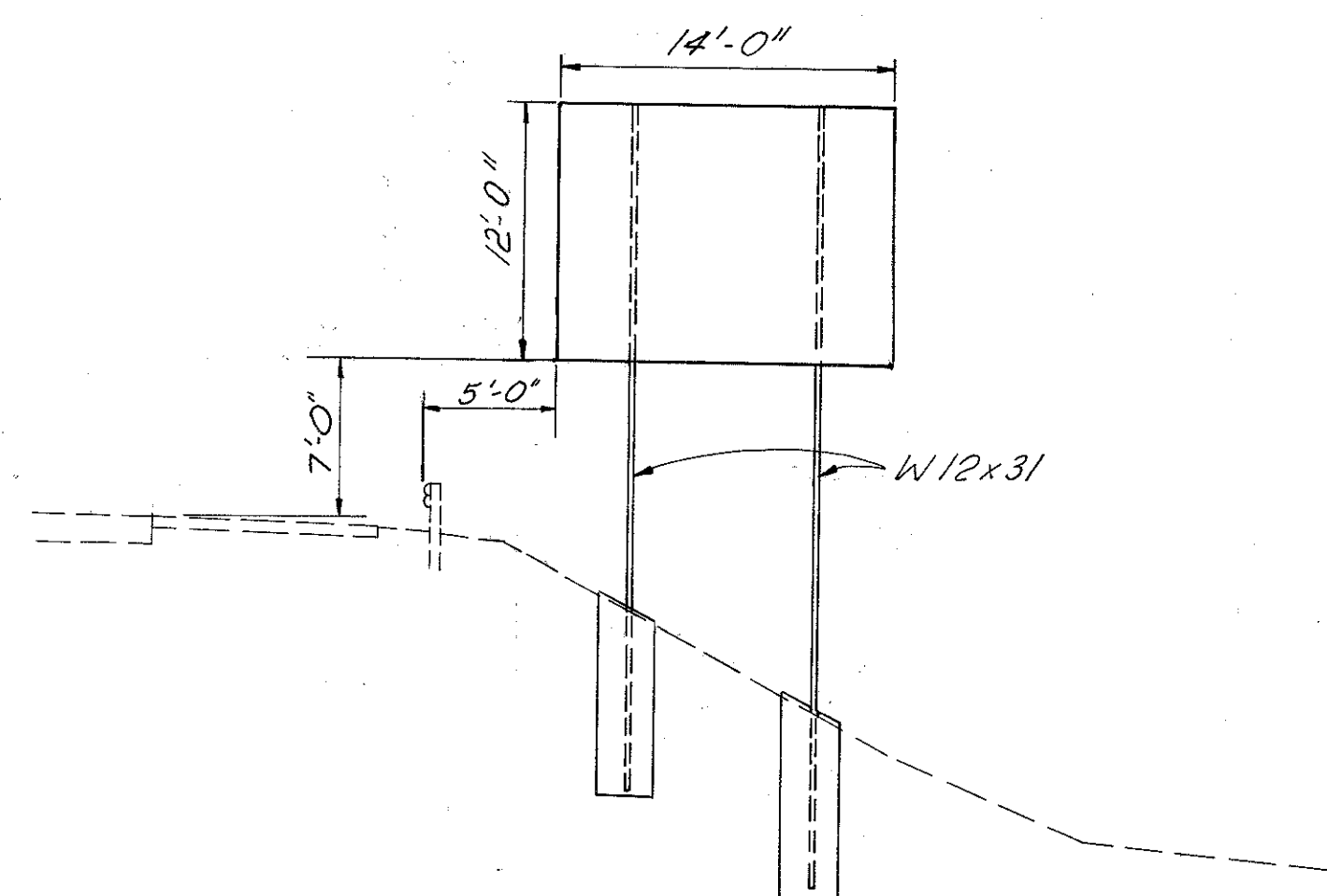
SIGN 405
STA 391+00 NORTHBOUND I-675



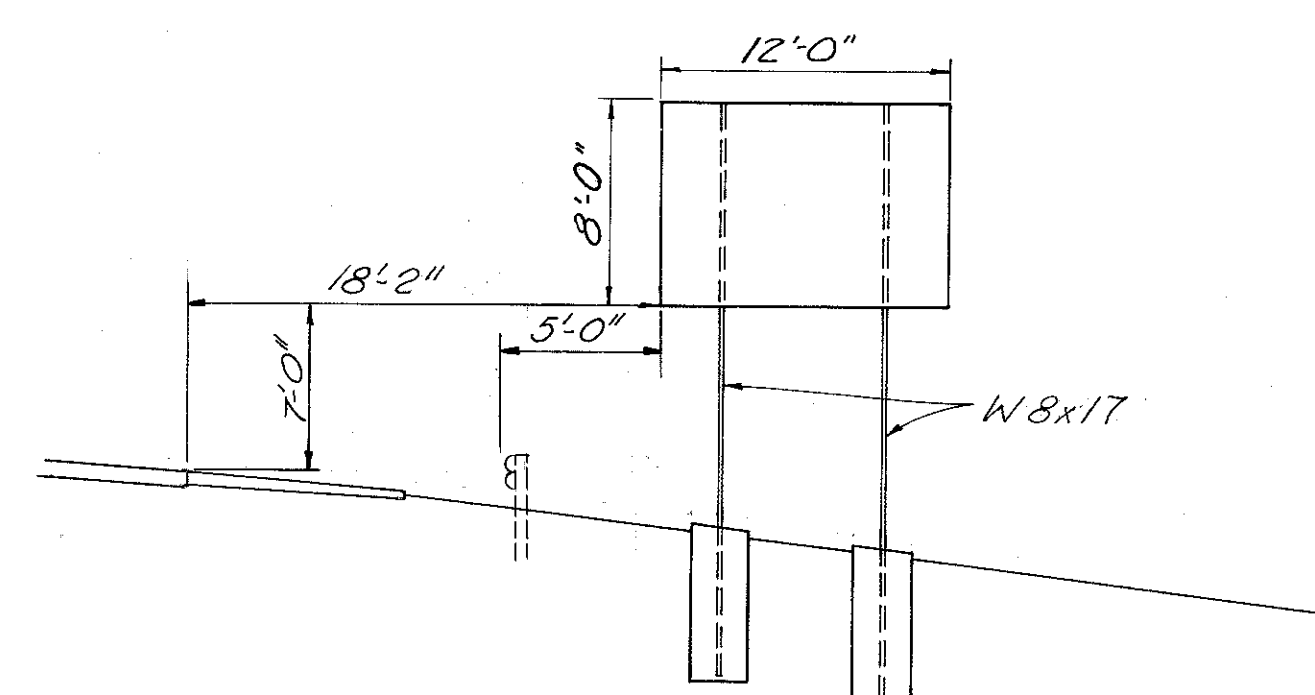
SIGN 406
STA 402+00 NORTHBOUND I-675



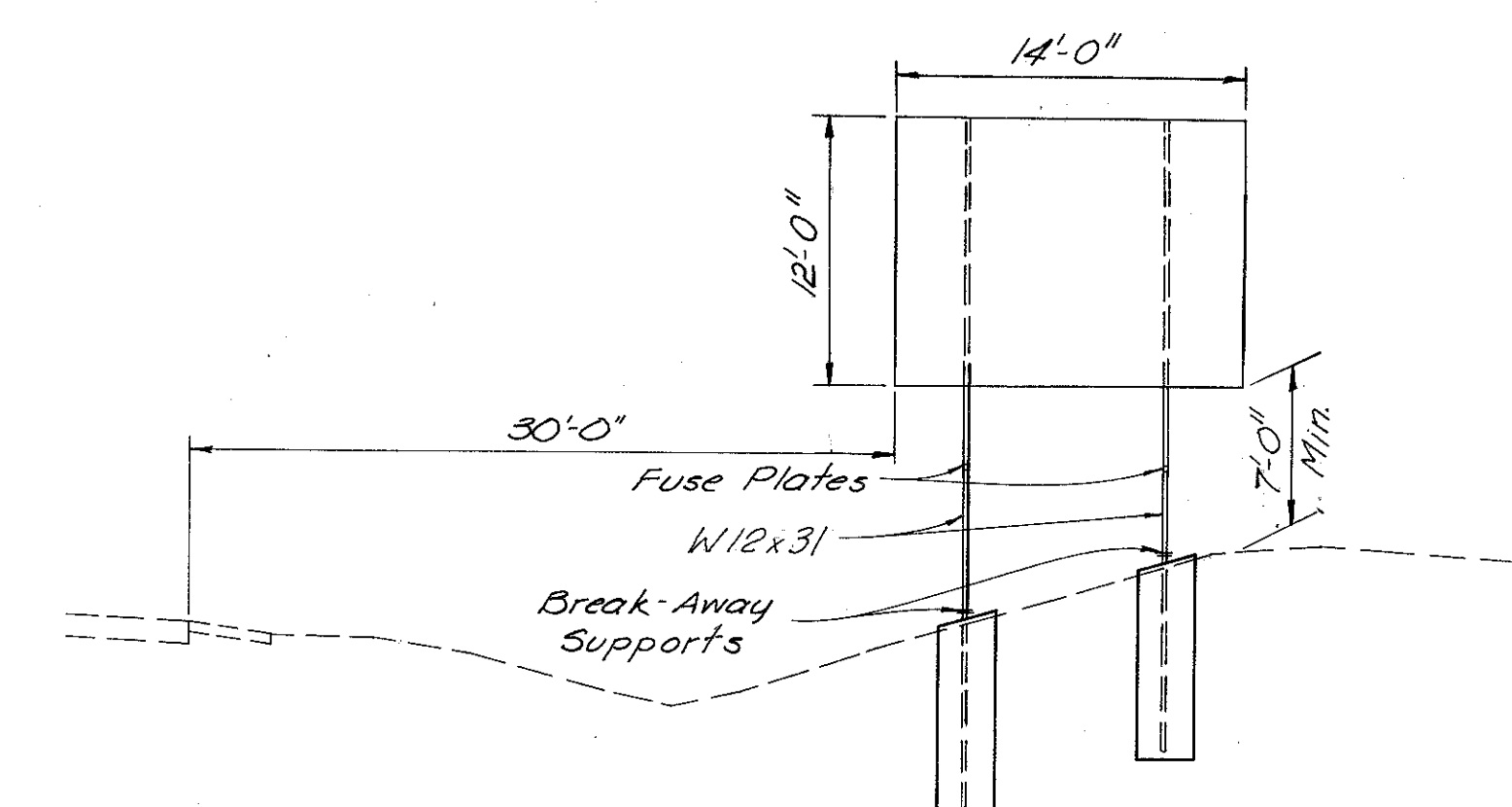
SIGN 414
STA 1049+75 EASTBOUND EXIST. U.S. 35



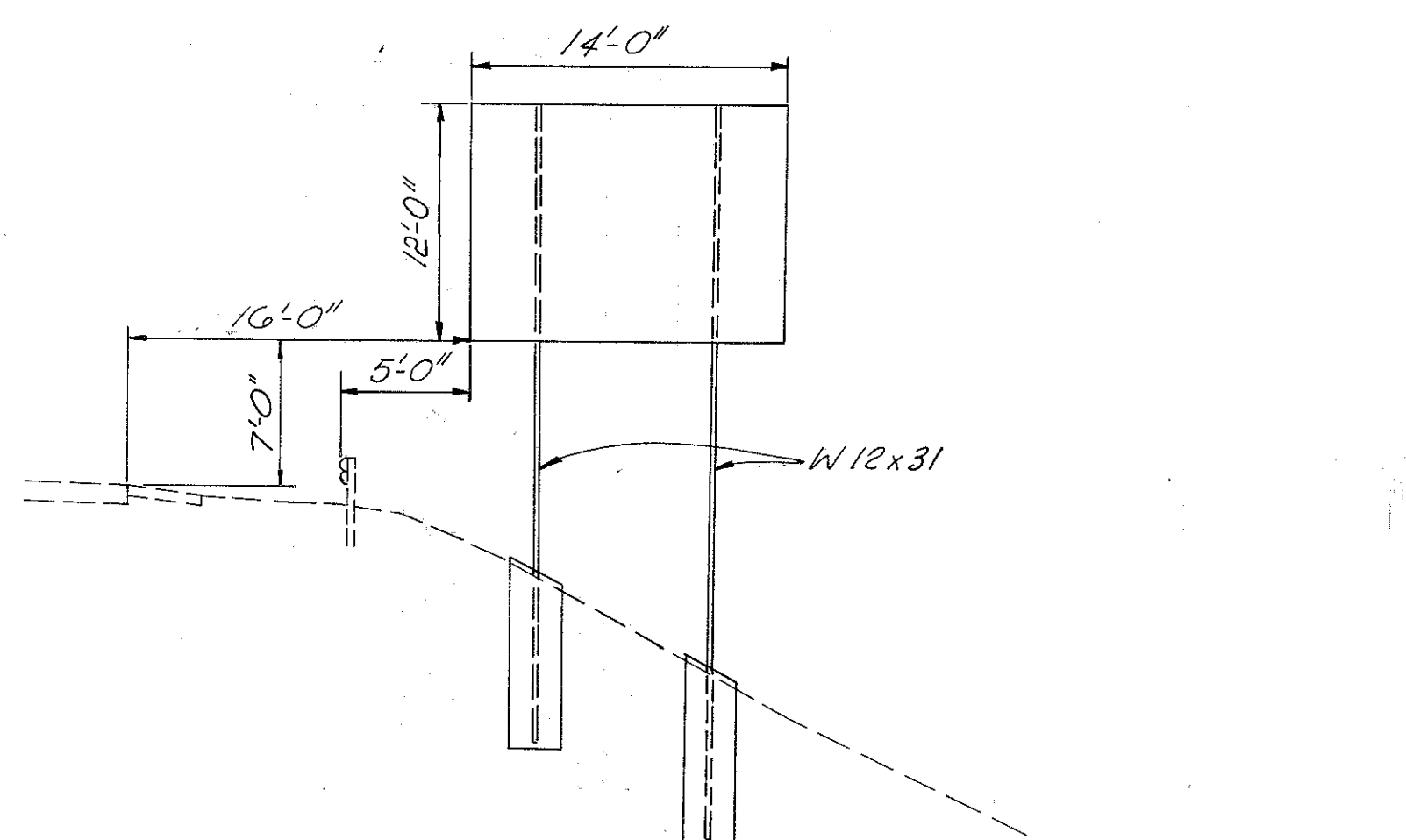
SIGN 415
STA 1077+00 EASTBOUND EXIST. U.S. 35



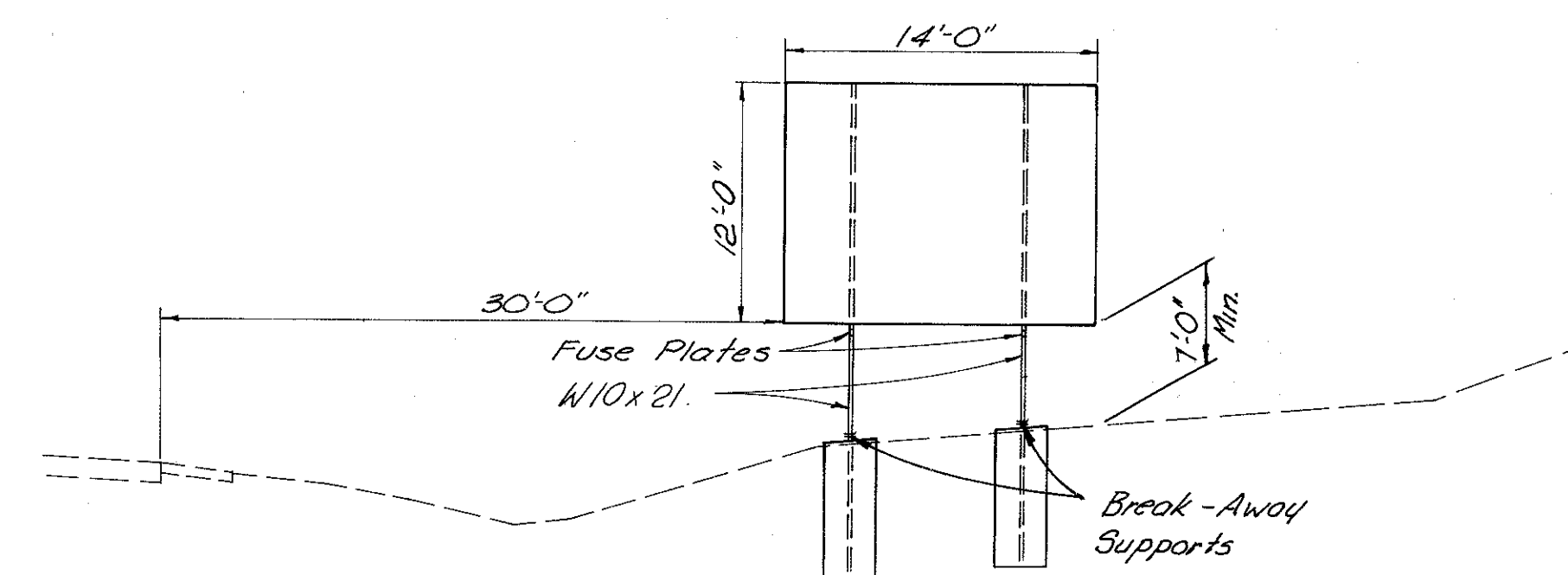
SIGN 418
STA 307+20 RAMP A



SIGN 420
STA 360+66 WESTBOUND EXIST. U.S. 35



SIGN 421
STA 414+95 WESTBOUND EXIST. U.S. 35

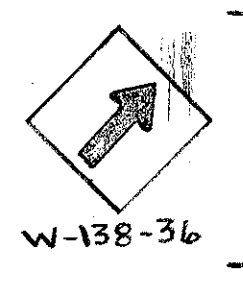


SIGN 422
STA 80+35 WESTBOUND EXIST. U.S. 35

FED. RD. DIVISION	STATE	PROJECT
5	OHIO	

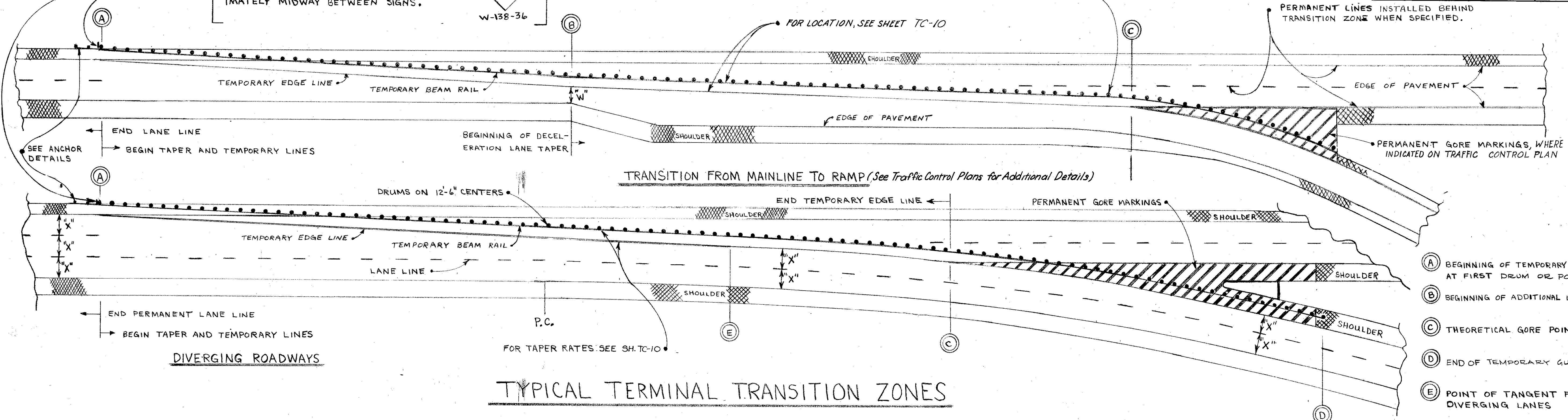
140
6/6
TC-23
23

ERECT ON FIRST DRUM THEN EVERY 100' FOR 300', THEN EVERY 200' THEREAFTER. ALSO ERECT AMBER DELINEATORS APPROXIMATELY MIDWAY BETWEEN SIGNS.



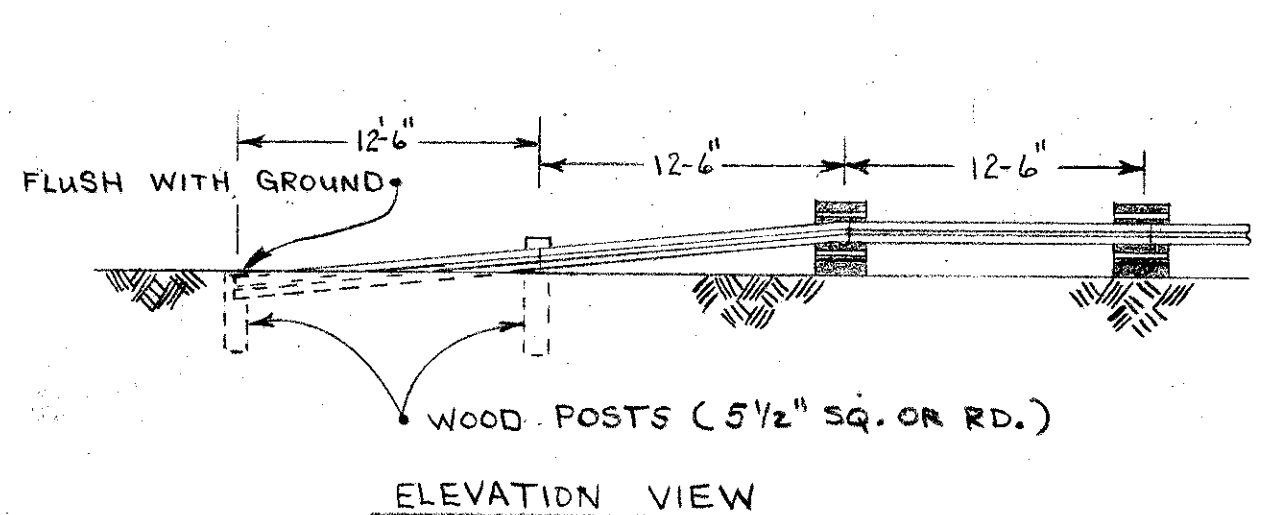
DRUMS ON 12'-6" CENTERS

PERMANENT LINES INSTALLED BEHIND TRANSITION ZONE WHEN SPECIFIED.

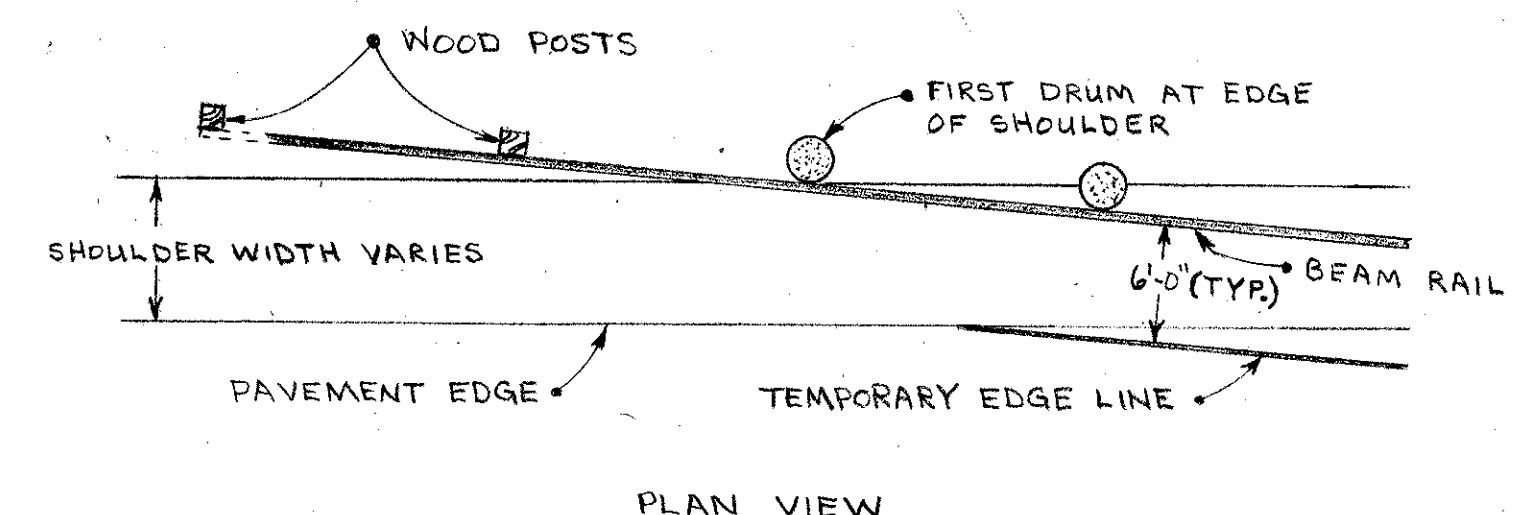


DIVERGING ROADWAYS

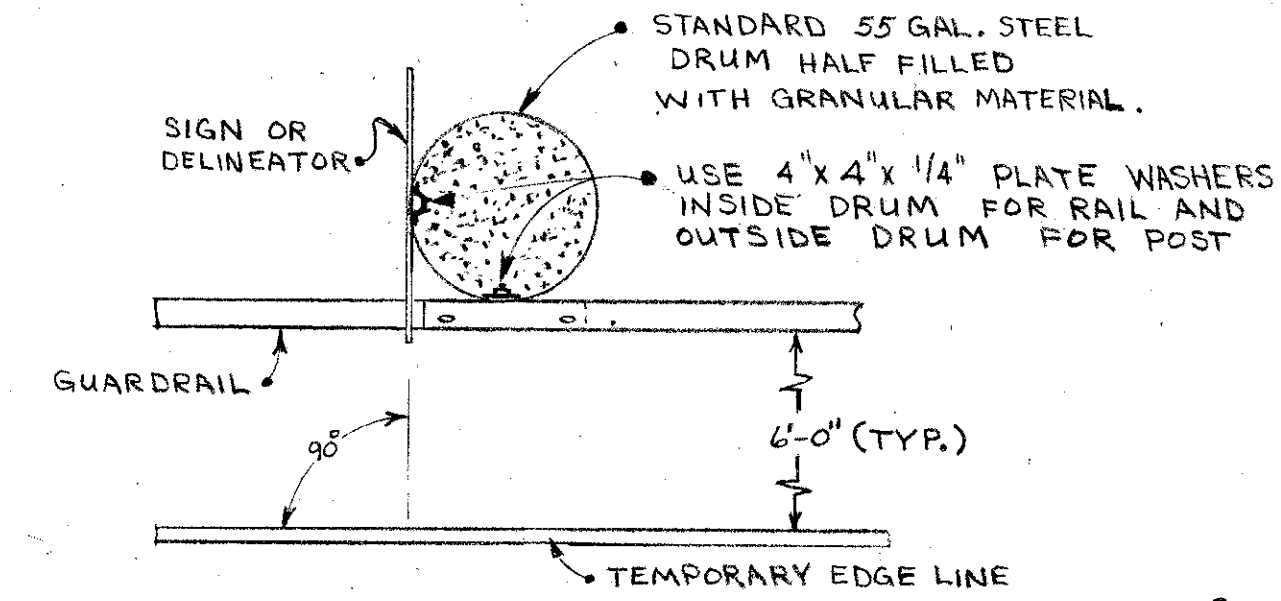
TYPICAL TERMINAL TRANSITION ZONES



ELEVATION VIEW



PLAN VIEW

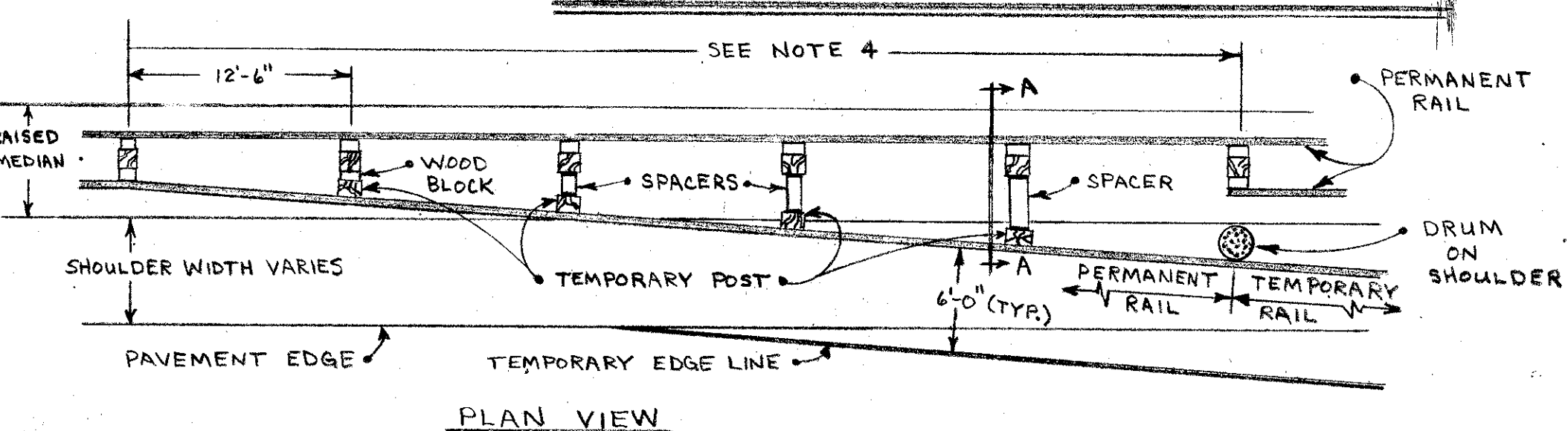


STANDARD 55 GAL. STEEL DRUM HALF FILLED WITH GRANULAR MATERIAL.
USE 4" X 4" X 1/4" PLATE WASHERS INSIDE DRUM FOR RAIL AND OUTSIDE DRUM FOR POST
SIGN OR DELINEATOR
GUARDRAIL
TEMPORARY EDGE LINE
6'-0" (TYR.)

BOLTS WITH WASHERS
1/2" X 3 1/2" WEDGE EXPANSION TYPE FOR CONCRETE
1/2" X 4" LAG SCREW FOR WOOD POSTS

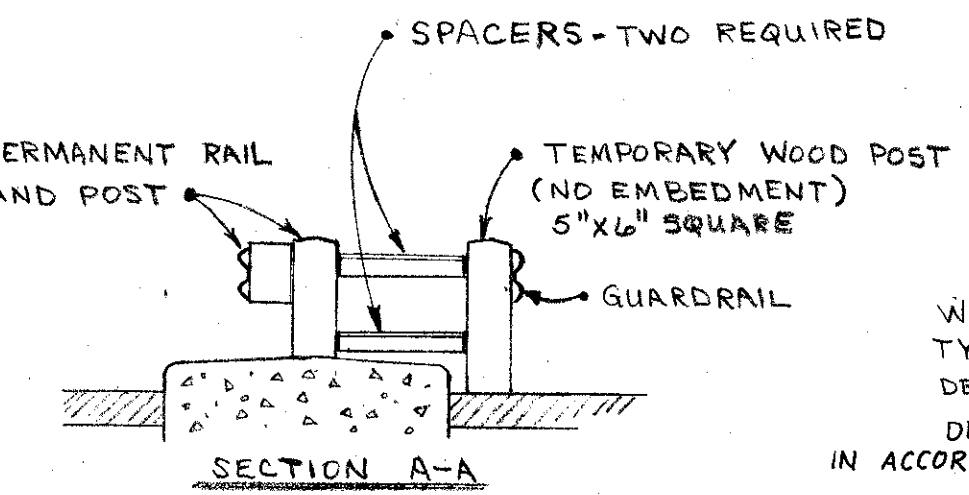
TWO - 9/16" HOLES
ANGLE AS REQ.
5/16" X 4" X 4" STEEL ANGLE
END PLATE OR CUT AND BEND THE STEEL ANGLE - WELD JOINTS

SPACER DETAIL

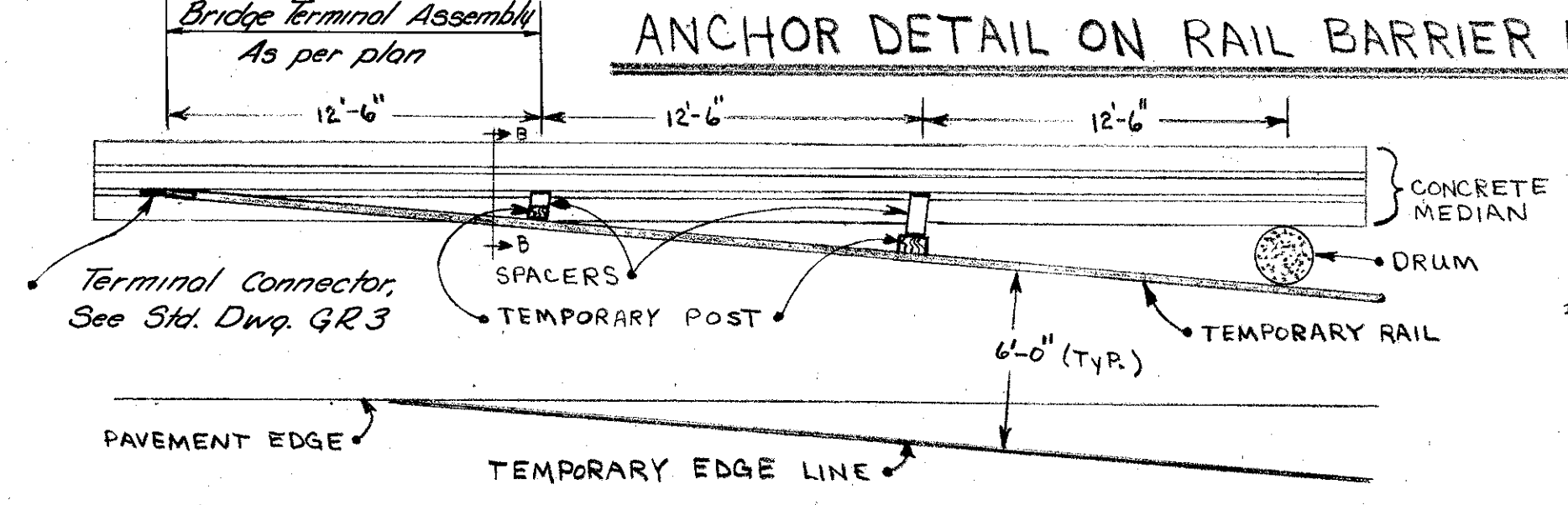


PLAN VIEW

ANCHOR DETAIL ON RAIL BARRIER MEDIAN

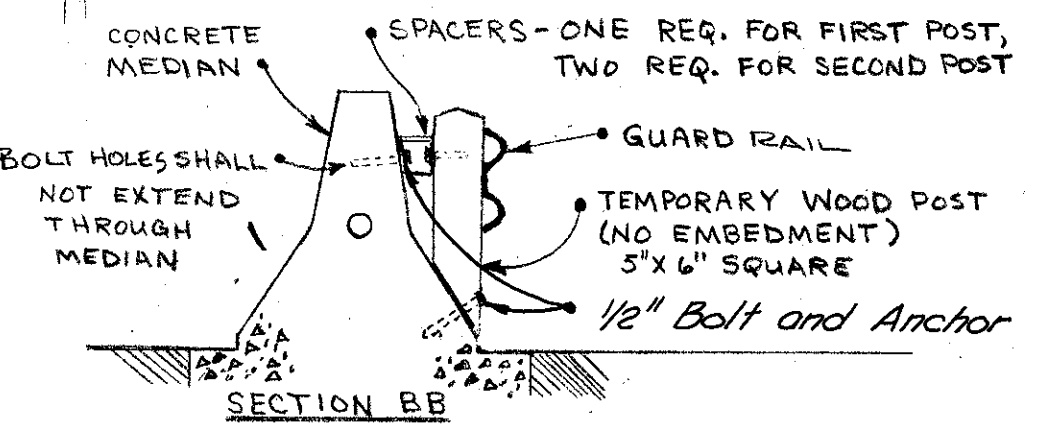


SECTION A-A

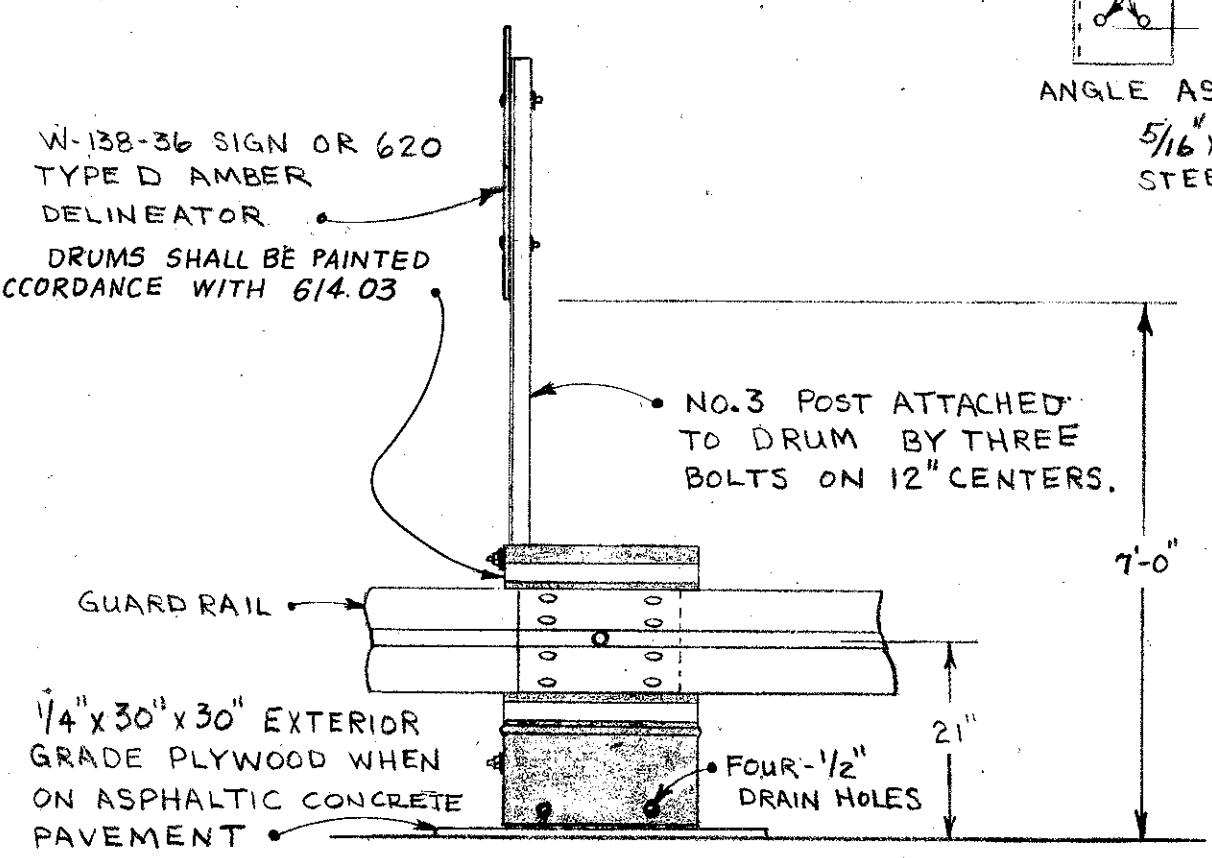


PLAN VIEW

ANCHOR DETAIL ON CONCRETE BARRIER MEDIAN



SECTION B-B



DRUM DETAILS

BUREAU OF DESIGN SERVICES
DIVISION OF HIGHWAYS
OHIO DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL

TEMPORARY TERMINAL TRANSITION DETAILS

DATE

APPROVED: _____ Engineer of Design Services

LIGHTING GENERAL NOTES

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

147
6/6

GRE-675-5,37

L-1
19

SPECIFICATIONS

THESE NOTES ARE SUPPLEMENTAL TO ITEMS 625 AND 713 OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS.

STANDARD CONSTRUCTION DRAWING HL-3

POLE BASE DETAILS SHOWN ON THIS DRAWING ARE ESSENTIALLY FOR GALVANIZED STEEL POLES. FOR ALUMINUM DESIGNS, OR OTHER PERMITTED STEEL MATERIAL DESIGNS, VARIATIONS FROM THESE DETAILS WILL BE ACCEPTABLE, AS APPROVED BY THE ENGINEER.

625.03 - GENERAL

THE POWER SUPPLYING AGENCY FOR THIS PROJECT IS THE DAYTON POWER & LIGHT COMPANY, COURT HOUSE PLAZA, SW, DAYTON, OHIO 45402. THIS PROJECT HAS BEEN DESIGNED ON THE BASIS OF 5% VOLTAGE DROP WITH A MAXIMUM UNIFORMITY OF 4.0 TO 1 FOR CONVENTIONAL UNITS.

625.07 - 713.11 LUMINAIRES

HORIZONTAL STYLE C LUMINAIRES, DESIGNED FOR USE WITH 310 WATT HIGH PRESSURE SODIUM LAMPS, SHALL HAVE SINGLE RATED 480 VOLT, 310 WATT INTEGRAL REGULATOR BALLASTS, STYLE C LUMINAIRES SHALL BE GENERAL ELECTRIC M-1000, WESTINGHOUSE OV50, ITT AMERICAN OR EQUAL APPROVED BY THE ENGINEER.

HORIZONTAL STYLE B LUMINAIRES, DESIGNED FOR USE WITH 200 WATT HIGH PRESSURE SODIUM LAMPS, SHALL HAVE SINGLE RATED 480 VOLT, 200 WATT INTEGRAL REGULATOR BALLASTS, STYLE B LUMINAIRES SHALL BE GENERAL ELECTRIC M-400, WESTINGHOUSE OV-25, TUDOR, ITT AMERICAN 400 OR EQUAL APPROVED BY THE ENGINEER.

THE HIGH PRESSURE SODIUM BALLAST, INCLUDING STARTING AIDS, MUST PROTECT ITSELF AGAINST NORMAL LAMP FAILURE MODES. THE BALLAST SHALL BE CAPABLE OF OPERATION WITH THE LAMP IN AN OPEN OR SHORT CIRCUIT CONDITION FOR SIX MONTHS WITHOUT SIGNIFICANT LOSS OF BALLAST LIFE. THE LUMINAIRE MANUFACTURER SHALL SUPPLY BALLAST ELECTRICAL DATA AND LAMP OPERATING VOLT-WATT TRACES FOR NOMINAL AND PLUS OR MINUS TEN PERCENT (±10%) RATED LINE VOLTAGE TO VERIFY BALLAST PERFORMANCE AND COMPLIANCE WITH LAMP SPECIFICATIONS, FOR THE RATED LIFE OF THE LAMP.

713.14 LAMPS

HIGH PRESSURE SODIUM LAMPS SHALL BE GENERAL ELECTRIC "LUCALOX", WESTINGHOUSE "CERAMALUX", SYLVANIA "LUMALUX", OR EQUAL APPROVED BY THE ENGINEER. ALL H.P.S. LAMPS SHALL BE OF THE 100 VOLT DESIGN, ANSI S56.

ITEM SPECIAL, LIGHT POLE ANCHOR BOLTS FOR BRIDGES

ANCHOR BOLTS FOR MOUNTING LIGHT POLES ON BRIDGES AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF 713.01 AND DETAILS SHOWN ON THE PLANS AND STANDARD DRAWINGS, OR THE APPROVED SHOP DRAWINGS, FOR THE RESPECTIVE POLES TO BE PLACED THEREON. PAYMENT SHALL BE MADE AT THE UNIT PRICE BID FOR EACH SET OF THE SIZE REQUIRED AND NECESSARY TO INSTALL ONE POLE, AND THIS PAYMENT SHALL CONSTITUTE FULL COMPENSATION FOR FURNISHING AND PLACING BOLTS.

625 STRUCTURE GROUNDING SYSTEM

THE CONTRACTOR SHALL INSTALL A COMPLETE STRUCTURE GROUNDING SYSTEM USING No. 4 AWG CABLE IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING HL-7 AND SECTION 625.20 FOR THE FOLLOWING BRIDGES:

- GRE-675-0576 - ONE FIXED PIER ON I-675 CENTERLINE, OTHERS EXPANSION TYPE
- GRE-675-0589 - ONE FIXED PIER ON I-675 CENTERLINE, OTHERS EXPANSION TYPE
- GRE-675-0616 - ONE FIXED PIER ON I-675 CENTERLINE, OTHERS EXPANSION TYPE
- GRE-675-0737 - ONE FIXED PIER ON I-675 CENTERLINE, OTHERS EXPANSION TYPE
- GRE-35-0009 - ONE FIXED PIER ON DAYTON-XENIA RD, CENTERLINE, OTHERS EXPANSION TYPE
- GRE-35-0074 - ONE FIXED PIER ON U.S. 35 CENTERLINE, OTHERS EXPANSION TYPE
- GRE-35-0107L - ONE FIXED PIER ON EAST SIDE OF GRANGE HALL RD., OTHERS EXPANSION TYPE
- GRE-35-0107R - ONE FIXED PIER ON EAST SIDE OF GRANGE HALL RD., OTHERS EXPANSION TYPE

FOR THIS WORK A QUANTITY OF 1 EACH, IS INCLUDED IN THE LIGHTING GENERAL SUMMARY FOR THE BID ITEMS 625 "STRUCTURE GROUNDING SYSTEM, BY BRIDGE NUMBER."

CONDUIT ON STRUCTURES

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. EACH EXPANSION FITTING SHALL HAVE A COPPER EXTERNAL BONDING JUMPER, INCLUDE IN GRE-675-0576, -0589, -0616, GRE-35-0009, -0074, -0107L, AND -0107R, STRUCTURES.

AT THE STRUCTURAL HINGE JOINT IN THE WEST SPAN OF BRIDGE GRE-675-0576 AND IN THE EAST SPAN OF BRIDGE GRE-675-0589 DEFLECTION FITTINGS SHALL BE INSTALLED IN THE CONDUIT. THE DEFLECTION FITTINGS SHALL BE OZ TYPE DX, SPRING CITY TYPE EDF, OR EQUAL APPROVED BY THE ENGINEER.

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 CONNECTOR KITS IN THE PULL BOX OR JUNCTION BOX. QUANTITIES FOR ELECTRICAL SERVICE FROM THE CONNECTOR KITS IN THE PULL BOX OR JUNCTION BOX TO THE SIGN ARE INCLUDED IN THE TRAFFIC CONTROL GENERAL SUMMARY.

HIGH VOLTAGE DIRECT CURRENT TEST

A HIGH VOLTAGE DIRECT CURRENT TEST, AS DESCRIBED IN SUPPLEMENTAL SPECIFICATION 839, SHALL BE PERFORMED ON ALL DISTRIBUTION CABLE AND DUCT CABLE SYSTEMS TO BE INSTALLED ON THIS PROJECT. THE TEST SHALL NOT BE PERFORMED UNTIL AFTER ALL NEW CONSTRUCTION, SUCH AS GUARD RAIL, FENCE, DELINEATOR POSTS, SIGN SUPPORTS, ETC., IN THE IMMEDIATE VICINITY OF THE LOCATION OF THE CABLE RUN BEING TESTED, HAS BEEN COMPLETED.

CONNECTOR KITS

AT THE OPTION OF THE CONTRACTOR, TYPE IX CABLE CONNECTIONS MAY BE SUBSTITUTED WHERE TYPE II OR III CABLE CONNECTIONS ARE SPECIFIED IN HAND HOLES OR TRANSFORMER BASES OF LIGHT POLES, TYPE I THROUGH TYPE VII CABLE CONNECTIONS IN PULL BOXES, JUNCTION BOXES, AND OTHER ENCLOSURES BELOW GROUND MAY BE ACCOMPLISHED BY USE OF EITHER OF FOLLOWING:

1. A SLEEVE OR TEE CABLE CONNECTOR CONFORMING TO THE GENERAL REQUIREMENTS OF STYLE "S" OR "H", OR OTHER CONNECTING DEVICE APPROVED BY THE ENGINEER. THE CONNECTOR SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS AND THE CONNECTION SHALL BE SEALED AND WATERPROOFED WITH A HI-DIELECTRIC COMPOUND SUCH AS "AQUA SEAL" AS MANUFACTURED BY KEARNEY, OR SCOTCH #2200 COMPOUND MANUFACTURED BY 3-M COMPANY, OR EQUAL APPROVED BY THE ENGINEER. THE SEALING MATERIAL SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS TO MAKE A WATERTIGHT CONNECTION. CONNECTIONS NOT ACCOMPLISHED IN-LINE OR IN TEE FORM SHALL BE ADDITIONALLY PROTECTED BY USE OF A HI-DIELECTRIC PVC, OR OTHER APPROVED MATERIAL, BOOT WITH AN APPROVED FASTENING DEVICE.
2. A PREASSEMBLED KIT, AS MANUFACTURED BY JOY OR BUSSMAN, OR APPROVED EQUAL, WITH A WATERPROOF OR WATERTIGHT RATING ACCEPTABLE TO THE ENGINEER.

625.07 - 713.13 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 A 10-AMPERE FUSE. THE INTEGRAL HIGH PRESSURE SODIUM BALLAST SHALL BE OF A REGULATOR TYPE RATED FOR 480 VOLTS, 100 WATTS.

ALUMINUM TRANSFORMER BASES

TRANSFORMER BASES SHALL BE MARKED OR LABELED TO IDENTIFY THAT THEY MEET THE REQUIREMENTS OF FHWA NOTICE N5040.20.

ITEM SPECIAL, SERVICE TO UNDERPASS LIGHTING

THIS ITEM SHALL CONSIST OF PROVIDING COMPLETE ELECTRICAL SERVICE, EXCEPT FOR LUMINAIRES, LAMPS, AND STRUCTURE GROUNDING, FOR AN UNDERPASS LIGHTING SYSTEM ON BRIDGE NOS, GRE-675-0589 AND GRE-35-0009. 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 ON SHEETS 162, 163 AND 164. 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

THE CONTRACTOR SHALL PROVIDE TEMPORARY LIGHTING FOR TEMPORARY MEDIAN CROSSOVERS AND LANE REDUCTION TRANSITIONS FROM TWO LANES TO ONE LANE ON U.S. 35. LIGHTING SHALL BE PROVIDED FOR THE FOLLOWING APPROXIMATE STATION LIMITS:

FROM	TO
STA. 1073+70±	STA. 1086+00±
STA. 3+00±	STA. 14+70±
STA. 476+00±	STA. 487+30±
STA. 77+00±	STA. 88+70±
STA. 9+50±	STA. 21+75±
STA. 31+25±	STA. 42+75±

FOR MEDIAN CROSSOVER DETAILS SEE SHEET NOS. 32-35.

TEMPORARY LIGHTING SHALL PROVIDE AN AVERAGE INITIAL INTENSITY OF 1.2 FOOTCANDLES AND SHALL BE INSTALLED BEFORE MEDIAN CROSSOVERS ARE USED FOR TRAFFIC.

THE CONTRACTOR SHALL SUBMIT FOUR (4) SETS OF HIS PROPOSED DETAILED TEMPORARY LIGHTING PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL. THESE PLANS SHALL SHOW LOCATION OF POLES, LENGTH OF BRACKET ARMS, TYPE AND SIZE OF LUMINAIRES AND LAMPS, MOUNTING HEIGHT, POWER SOURCE, AND OTHER PERTINENT INFORMATION.

RECONDITIONED OR APPROVED USED MATERIALS MAY BE FURNISHED FOR THE TEMPORARY LIGHTING SYSTEM. CONSTRUCTION MAY BE WITH WOOD POLES AND OVERHEAD WIRING. TEMPORARY OVERHEAD CONSTRUCTION SHALL NOT BE LESS THAN GRADE A FOR STRENGTH REQUIREMENTS AS DEFINED BY THE NATIONAL ELECTRIC SAFETY CODE. MOUNTING HEIGHT FOR TEMPORARY LUMINAIRES SHALL NOT BE LESS THAN 27 FEET AND MINIMUM OVERHEAD CONDUCTOR CLEARANCE SHALL BE 20 FEET. THE TEMPORARY LIGHTING INSTALLATIONS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR WHEN NO LONGER NEEDED.

THE CONTRACTOR SHALL FURNISH ALL ELECTRICAL ENERGY, MATERIALS, LABOR AND EQUIPMENT NECESSARY TO INSTALL, OPERATE, MAINTAIN AND REMOVE THE TEMPORARY LIGHTING.

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.

ITEM SPECIAL - CABLE SPLICING KIT

THIS ITEM SHALL CONSIST OF PROVIDING AND INSTALLING AN APPROVED CABLE SPLICING KIT AS DESCRIBED IN PARAGRAPH 5 OF SECTION 713.15 OF THE O.D.O.T. CONSTRUCTION AND MATERIAL SPECIFICATION. THE COST OF ALL MATERIALS, LABOR, AND EQUIPMENT NECESSARY FOR THIS ITEM SHALL BE INCLUDED IN THE UNIT PRICE BID FOR EACH "ITEM SPECIAL-CABLE SPLICING KIT."

LIGHTING GENERAL NOTES

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PULL BOXES WITH GRADE ADJUSTMENT EXTENSION

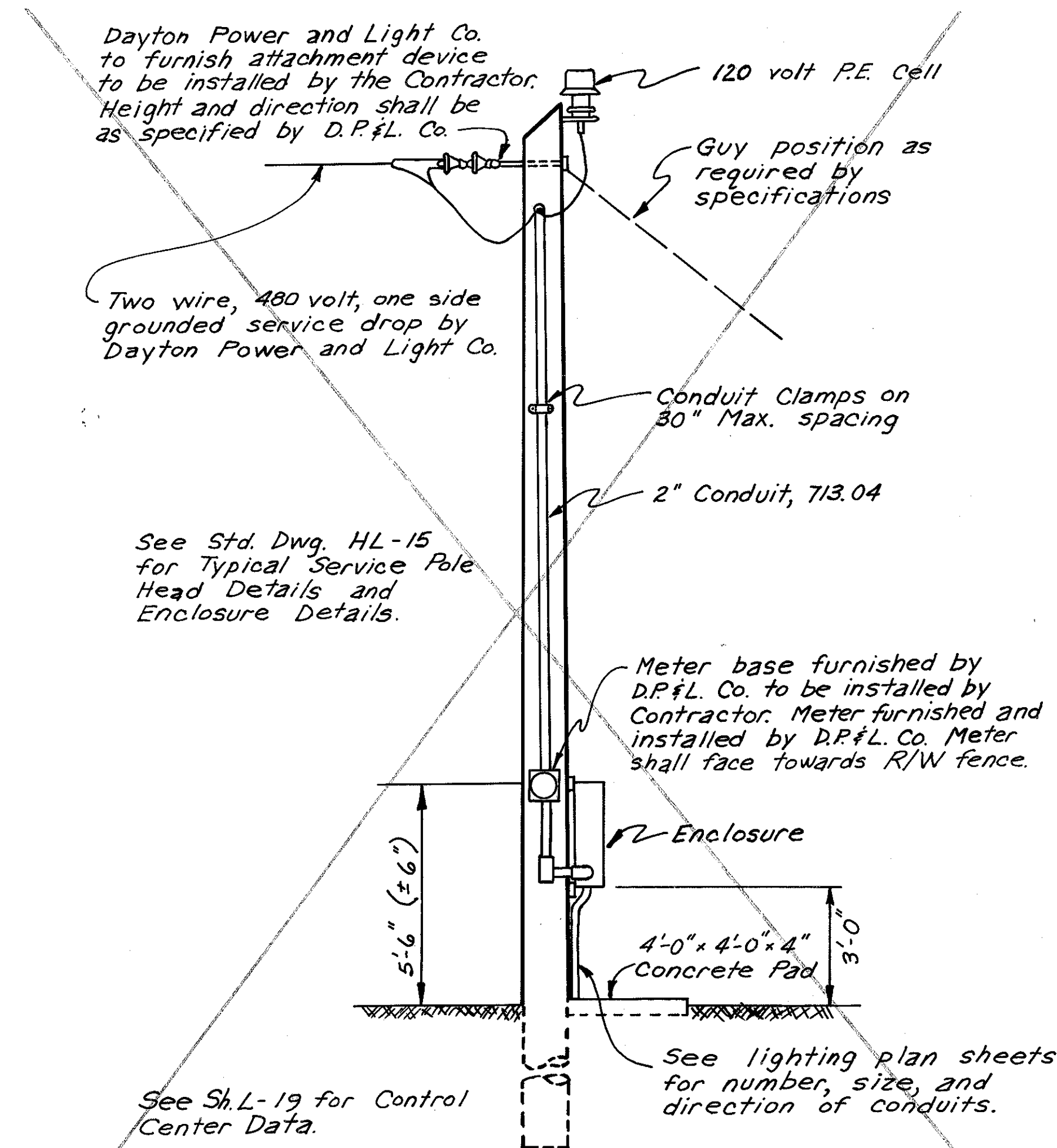
PULL BOXES INSTALLED IN DEPRESSED OR EARTH BARRIER MEDIANS AS PART OF A LIGHTING CABLE CROSSOVER SHALL BE LOCATED APPROXIMATELY 6 FEET FROM THE LOWEST POINT IN THE MEDIAN ALONG THE CENTERLINE OF THE CROSSOVER AND PROVIDED WITH GRADE ADJUSTMENT EXTENSIONS TO INSURE CONDUIT DRAINAGE. IN ADDITION, THE NORMAL AGGREGATE TYPE DRAIN, AS SHOWN ON STANDARD CONSTRUCTION DRAWING HL-10, SHALL BE EXTENDED FROM THE PULL BOX TO THE LOW POINT OF THE MEDIAN ALONG THE CENTERLINE OF THE CROSSOVER. PAYMENT FOR THE AGGREGATE DRAIN SHALL BE INCLUDED IN THE BID ITEM FOR "PULL BOX, 18" CIRCULAR, 713.09, WITH GRADE ADJUSTMENT EXTENSION."

ESTIMATED QUANTITIES

AN ESTIMATED QUANTITY OF "480 LIN. FT. OF 605, 4" SHALLOW PIPE UNDERDRAINS" IS PROVIDED IN THE LIGHTING GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER IN PROVIDING POSITIVE DRAINAGE FOR PULL BOXES IN FILL AREAS. IT IS INTENDED THAT ALL PULL BOXES IN THESE AREAS BE PROVIDED WITH SUCH DRAINAGE, PROVIDED THE LENGTH OF UNDERDRAIN NECESSARY TO OBTAIN A SATISFACTORY OUTFALL DOES NOT EXCEED 20 FEET APPROXIMATELY. A PERFORATED PVC PIPE OR CONDUIT MATERIAL APPROVED BY THE ENGINEER MAY BE USED IN THE CONSTRUCTION OF THIS ITEM.

POLYVINYL CHLORIDE PLASTIC CONDUIT

THIS SPECIFICATION COVERS POLYVINYL CHLORIDE PLASTIC CONDUIT FOR EITHER DIRECT BURIAL IN EARTH OR FOR ENCASEMENT IN CONCRETE AND SHALL BE OF THE SIZE AND TYPE SPECIFIED. DETAIL REQUIREMENTS. CONDUIT FURNISHED UNDER THIS SPECIFICATION SHALL CONFORM TO NEMA STANDARDS PUBLICATION NO. TC6-74 WITH THE EXCEPTION THAT CONDUIT AND CONDUIT FITTINGS COMPOSED OF ACRYLONITRILE-BUTADIENE-STYRENE (ABS) SHALL NOT BE ACCEPTABLE.



SERVICE POLES AND CONTROL CENTERS K, T & U

REFERENCE LETTER	DESIGN NUMBER	FOUNDATION ANCHOR BOLTS		TRANSFORMER BASE STYLE
		SIZE DIAM. x LENGTH	BOLT CIRCLE DIAM.	
A	AT25B41.7	1" x 40"	15"	AT-A
B	AT15B41.7	1" x 40"	15"	AT-A
C	A15B10B41.7	1 1/4" x 80"	19 3/4"	None *
D	A15B10B41.7 D1	1 1/4" x 80"	19 3/4"	None *
E	ST15B41.7	1" x 40"	15"	Steel
F	AT25B34.2	1" x 40"	15"	AT-A
G	AT15B34.2	1" x 40"	15"	AT-A
H	AT10B34.2	1" x 40"	15"	AT-A
I	A15B14.0 D2	1" x 40"	11"	None
J	A10B10.3 D3	1" x 40"	11"	None
K	ST12B41.7	1" x 40"	15"	Steel
L	A15B10B41.7D4	1 1/4" x 85"	19 3/4"	None *

* - Light pole mounted in barrier wall - For details of pole base see Standard Drawing HL-22
D1 - Provide luminaire and lamp for 10' bracket arm only. The 15' arm pole and bracket cable ends shall be taped and secured.
D2 - Light pole cut from shaft size 8" x 4.92" x 22'-0". See detail of light pole T-1-13 on Sheet No. L-18.
D3 - Light pole cut from shaft size 8" x 4.92" x 22'-0". See detail of light pole T-3-3 on Sheet No. L-18.
DA - Median mounted light pole on bridge - See Bridge Plans Provide luminaire and lamp for 10' bracket arm only. The 15' arm pole and bracket cable ends shall be taped and secured.

CONTROL CENTERS R & S

CONTROL CENTERS "R" AND "S" SHALL EACH HAVE THREE CONTROL PANELS AS DETAILED ON SHEET NO. L-19. THE COMBINATION FUSED SAFETY SWITCH AND LIGHTING CONTACTOR FOR ALL CIRCUITS EXCEPT CIRCUIT S-4 (DAYTIME UNDERPASS LIGHTING CIRCUIT) SHALL BE RATED 600 VOLTS, 30 AMPS. THE COMBINATION FUSED SAFETY SWITCH AND LIGHTING CONTACTOR FOR CIRCUIT S-4 SHALL BE RATED 600 VOLTS, 100 AMPS. CONTROL PANEL NO. 1 WILL OPERATE ROADWAY LIGHTING UNITS BY USE OF A PHOTO-ELECTRIC RELAY. CONTROL PANELS NO. 2 AND 3 WILL OPERATE NIGHTTIME AND DAYTIME UNDERPASS LIGHTING UNITS, RESPECTIVELY, BY USE OF 24 HOUR ASTRONOMICAL DIAL TIME CONTROLS WHICH SHALL AUTOMATICALLY ADJUST FOR SEASONAL CHANGES. THE SEQUENCE OF OPERATION FOR UNDERPASS LIGHTING SHALL BE AS FOLLOWS:

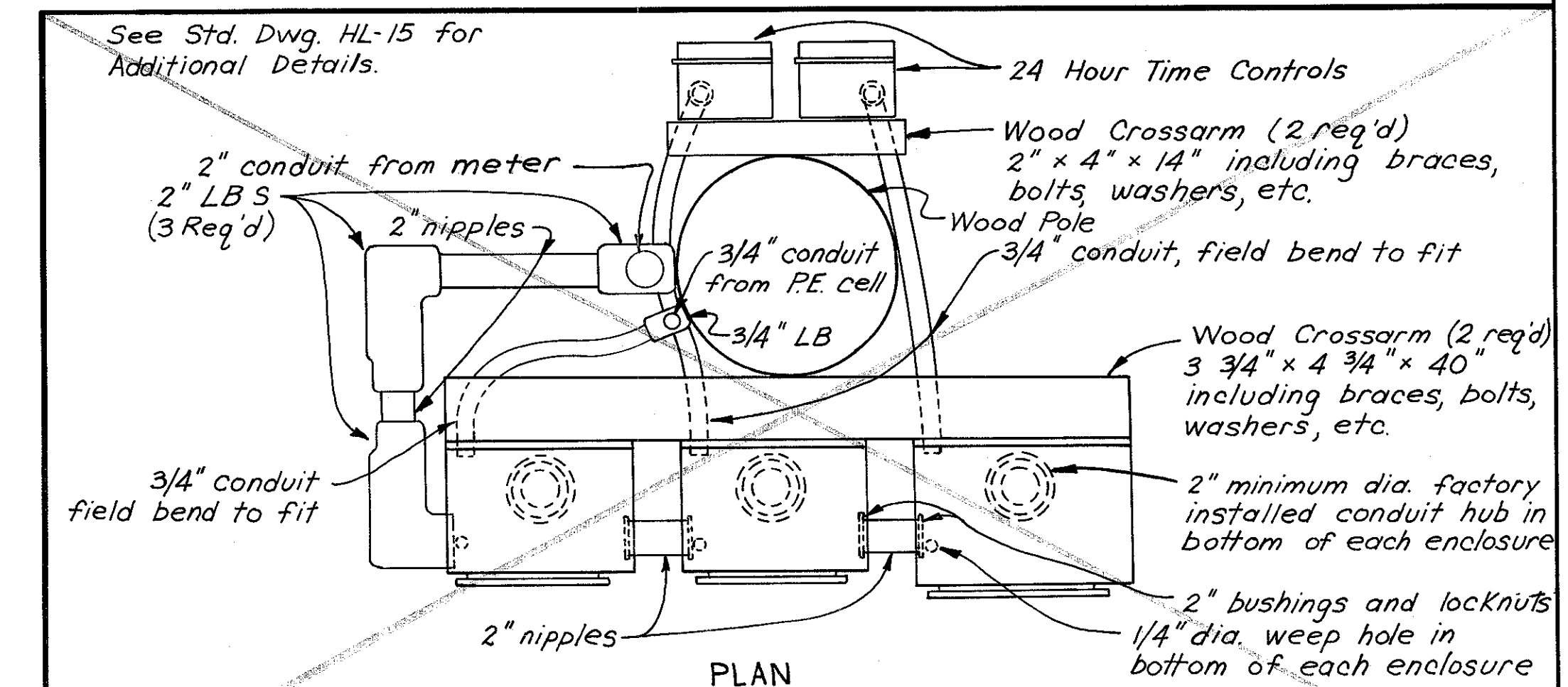
- 1) THE TIME CONTROL FOR DAYTIME UNDERPASS LIGHTING SHALL BE ADJUSTED TO TURN ON LIGHTS AUTOMATICALLY AT SUNRISE AND OFF AT SUNSET.
- 2) THE TIME CONTROL FOR NIGHTTIME UNDERPASS LIGHTING SHALL BE FIELD ADJUSTED TO TURN ON LIGHTS APPROXIMATELY 5 TO 8 MINUTES BEFORE DAYTIME LIGHTS TURN OFF AND TURN OFF THE NIGHTTIME LIGHTS APPROXIMATELY 5 TO 8 MINUTES AFTER DAYTIME LIGHTS TURN ON.

TIME CONTROLS SHALL HAVE THE FOLLOWING SPECIAL FEATURES:

- 1) A SPDT SWITCH WITH CONTACTS RATED AT 120 VOLTS, 40 AMPS.
- 2) MANUAL ON/OFF SWITCH

CONTROL CENTERS R & S (CONTINUED)

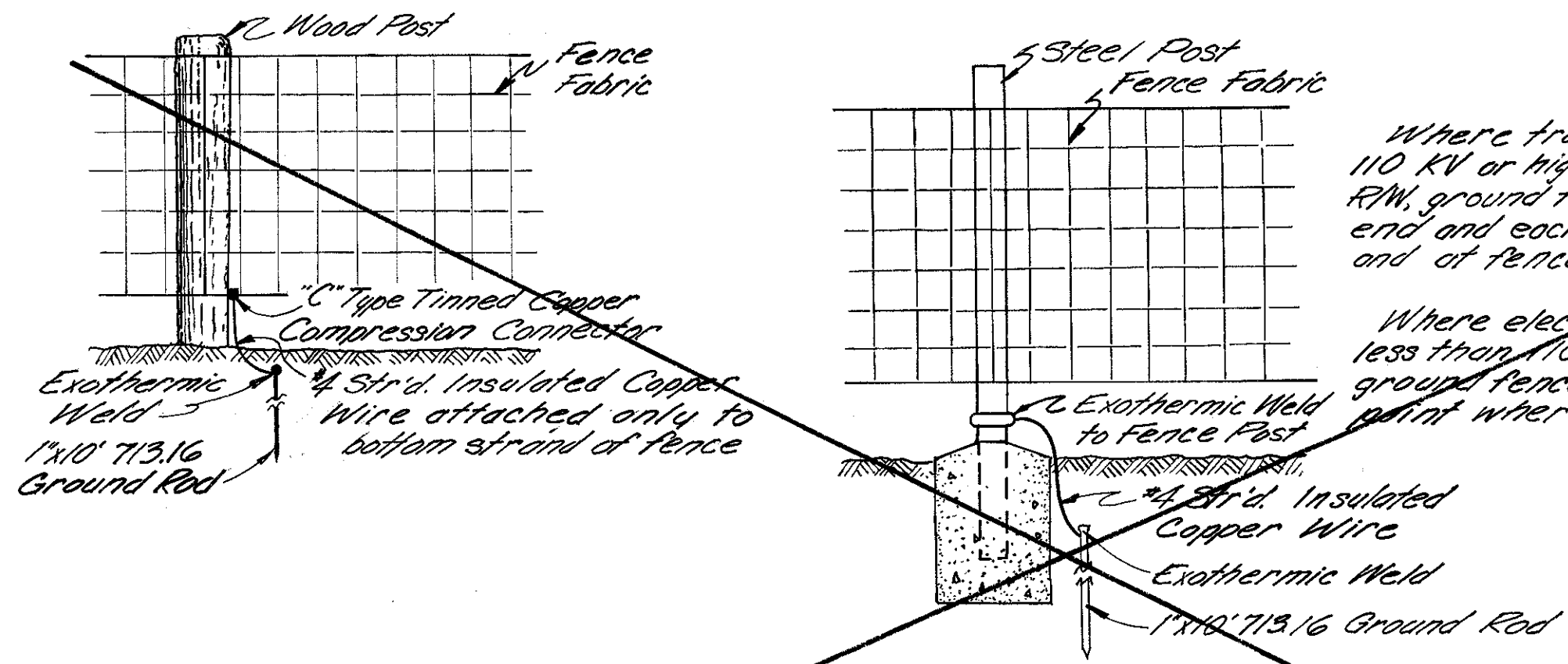
- 3) A SPRINGWOUND CARRY-OVER WHICH SHALL KEEP PRESET SCHEDULE ON TIME FOR 10 HOURS DURING A POWER OUTAGE, AND AUTOMATICALLY REWINDS AFTER POWER IS RESTORED.
- 4) A NEMA TYPE 3 INDOOR-OUTDOOR ENCLOSURE WITH HASP AND 3/4" KNOCKOUTS IN SIDES, BOTTOM AND BACK, MOUNTED ON THE SERVICE POLE AS SHOWN ON SHEET NO. L-1A. THE CONTRACTOR SHALL PROVIDE A PADLOCK FOR EACH TIMER. 24 HOUR ASTRONOMICAL DIAL TIME CONTROLS SHALL BE AMF PARAGON MODEL NO. 4215-00 SZ, INTERMATIC MODEL NO. V45475 SCR, OR EQUAL APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH AND INSTALL THE TIME CONTROLS AS PART OF THE LUMP SUM BID ITEM FOR "SERVICE POLE AND CONTROL CENTER."



SERVICE POLES AND CONTROL CENTERS R & S

Where transmission lines are rated 110 KV or higher and parallel Highway R/W, ground fences every 300' of each end and each discontinuous section, and at fence crossings.

Where electric power lines are rated less than 110 KV and cross fences, ground fences directly below the point where electric lines cross.

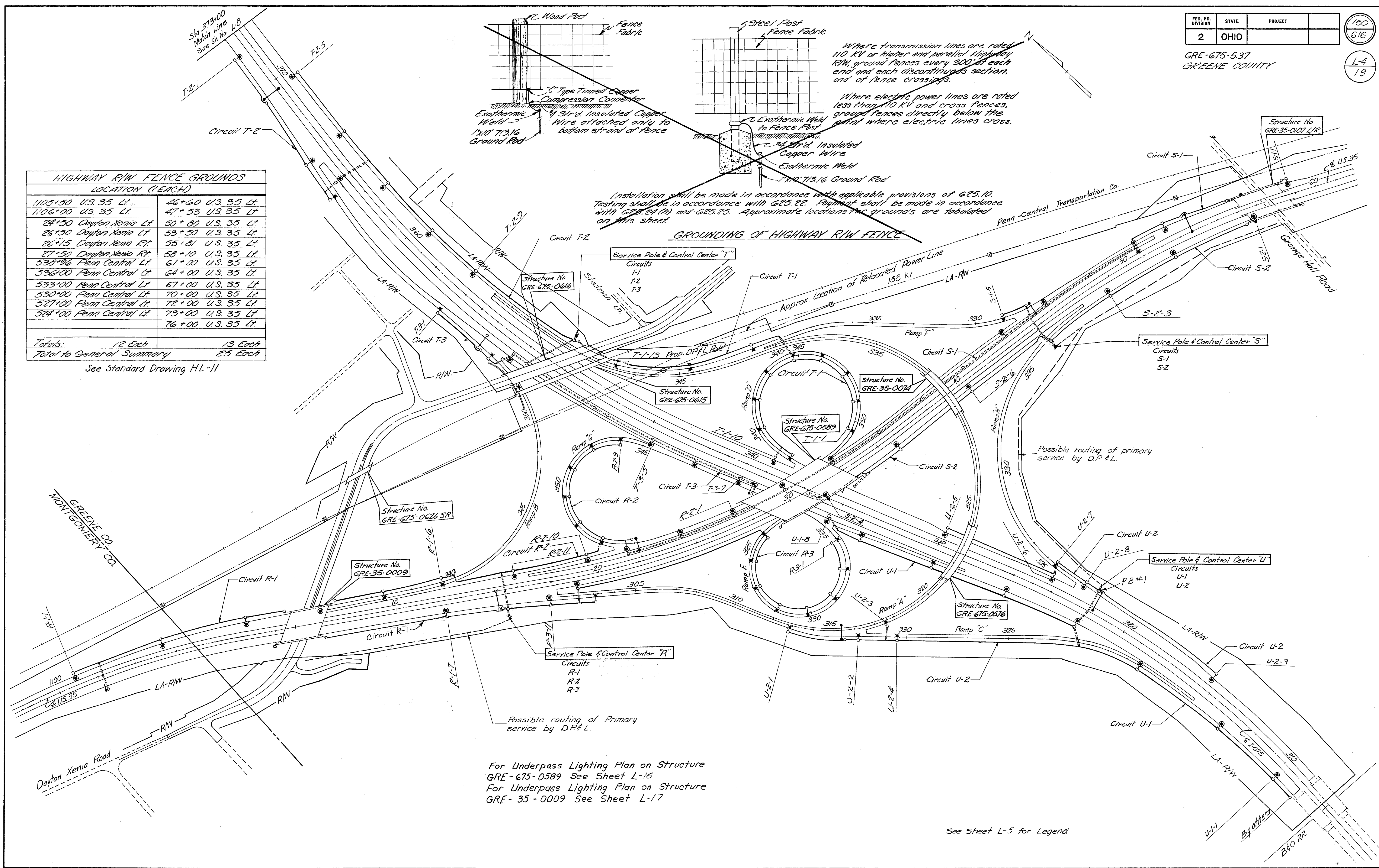


Installation shall be made in accordance with applicable provisions of G25.10. Testing shall be in accordance with G25.22. Payment shall be made in accordance with G25.24 (H) and G25.25. Approximate locations of the grounds are tabulated on this sheet.

GROUNDING OF HIGHWAY R/W FENCE

HIGHWAY R/W FENCE GROUNDS	
LOCATION (FEET)	
1105+50 U.S. 35 Lt.	46+60 U.S. 35 Lt.
1106+00 U.S. 35 Lt.	47+53 U.S. 35 Lt.
24+50 Dayton Xenia Lt.	50+80 U.S. 35 Lt.
26+50 Dayton Xenia Lt.	53+50 U.S. 35 Lt.
26+15 Dayton Xenia Rt.	55+81 U.S. 35 Lt.
27+50 Dayton Xenia Rt.	58+10 U.S. 35 Lt.
538+96 Penn Central Lt.	61+00 U.S. 35 Lt.
536+00 Penn Central Lt.	64+00 U.S. 35 Lt.
533+00 Penn Central Lt.	67+00 U.S. 35 Lt.
530+00 Penn Central Lt.	70+00 U.S. 35 Lt.
527+00 Penn Central Lt.	72+00 U.S. 35 Lt.
524+00 Penn Central Lt.	73+00 U.S. 35 Lt.
	76+00 U.S. 35 Lt.
Totals:	12 Each 13 Each
Total to General Summary	25 Each

See Standard Drawing HL-11



For Underpass Lighting Plan on Structure GRE-675-0589 See Sheet L-16
For Underpass Lighting Plan on Structure GRE-35-0009 See Sheet L-17

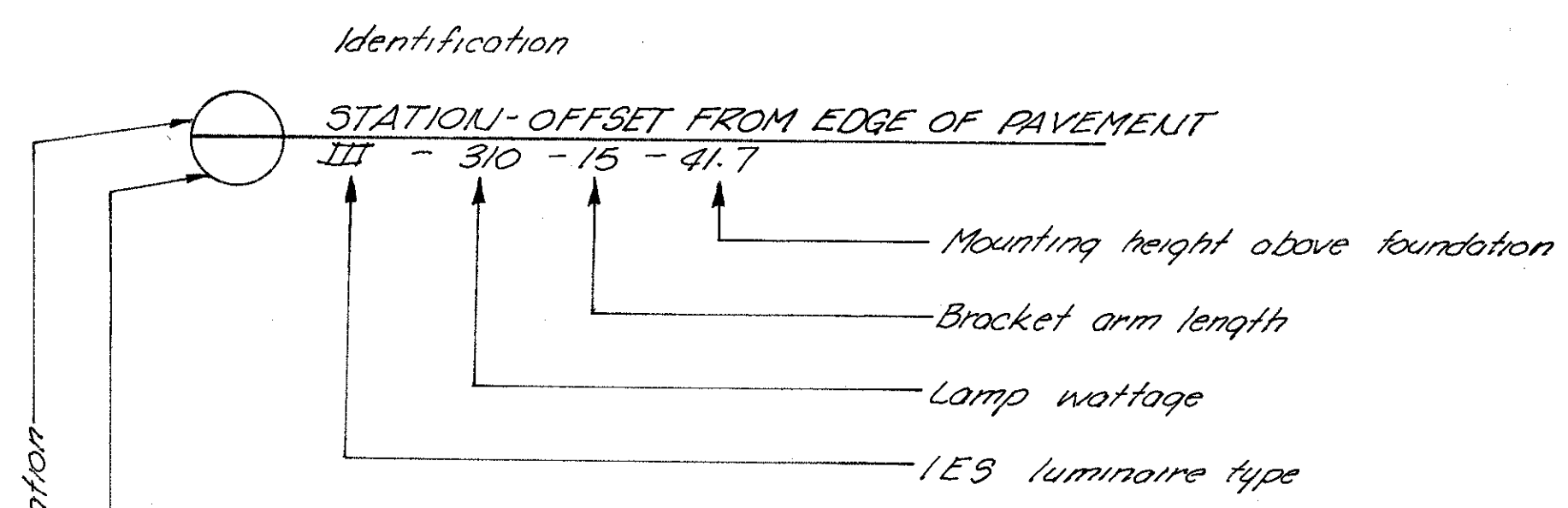
See Sheet L-5 for Legend

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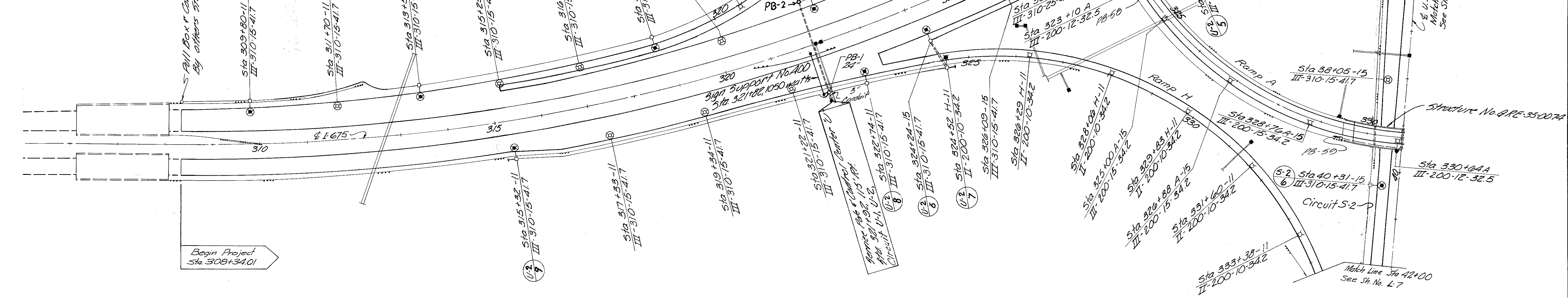
LEGEND

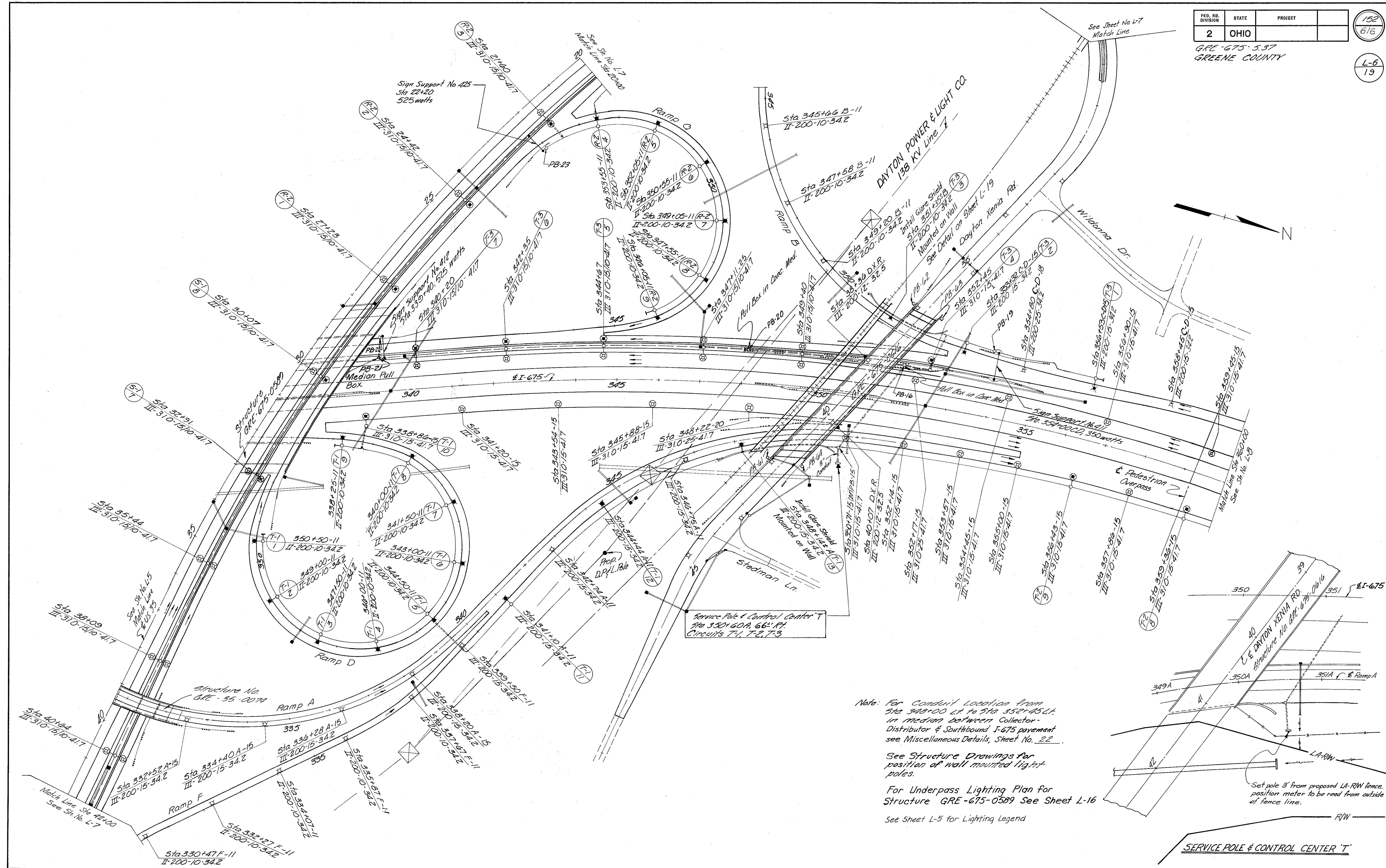
- ⊙ 310 watt Lighting Unit - HPS
- ⊙ 200 watt Lighting Unit - HPS
- ⊙ Future 310 watt Lighting Unit - HPS
- ⊙ Future 200 watt Lighting Unit - HPS
- ⬆ Service Pole & Control Center
- Pull Box - 18" or 24" Cir. Cor. Metal Junction Box
- Duct Cable
- Conduit 3", 713.04
- Conduit 2", 713.04
- ▲ Pilaster & Junction Box
- ⊙ Spoon Type Overhead Sign Structure
- ⊙ Cantilever Type Overhead Sign Structure
- ⊙ Bridge Mounted Overhead Sign Structure
- ⊙ Stub out conduit and cap

For Underpass Lighting Plan on Structure GRE-675-0589 See Sheet L-15.



Circuit identification
Pole number





Note: For Conduit Location from Sta 348+00 Lt. to Sta 352+45 Lt. in median between Collector-Distributor & Southbound I-675 pavement see Miscellaneous Details, Sheet No. 22.

See Structure Drawings for position of wall mounted light poles.

For Underpass Lighting Plan for Structure GRE-675-0589 See Sheet L-16

See Sheet L-5 for Lighting Legend

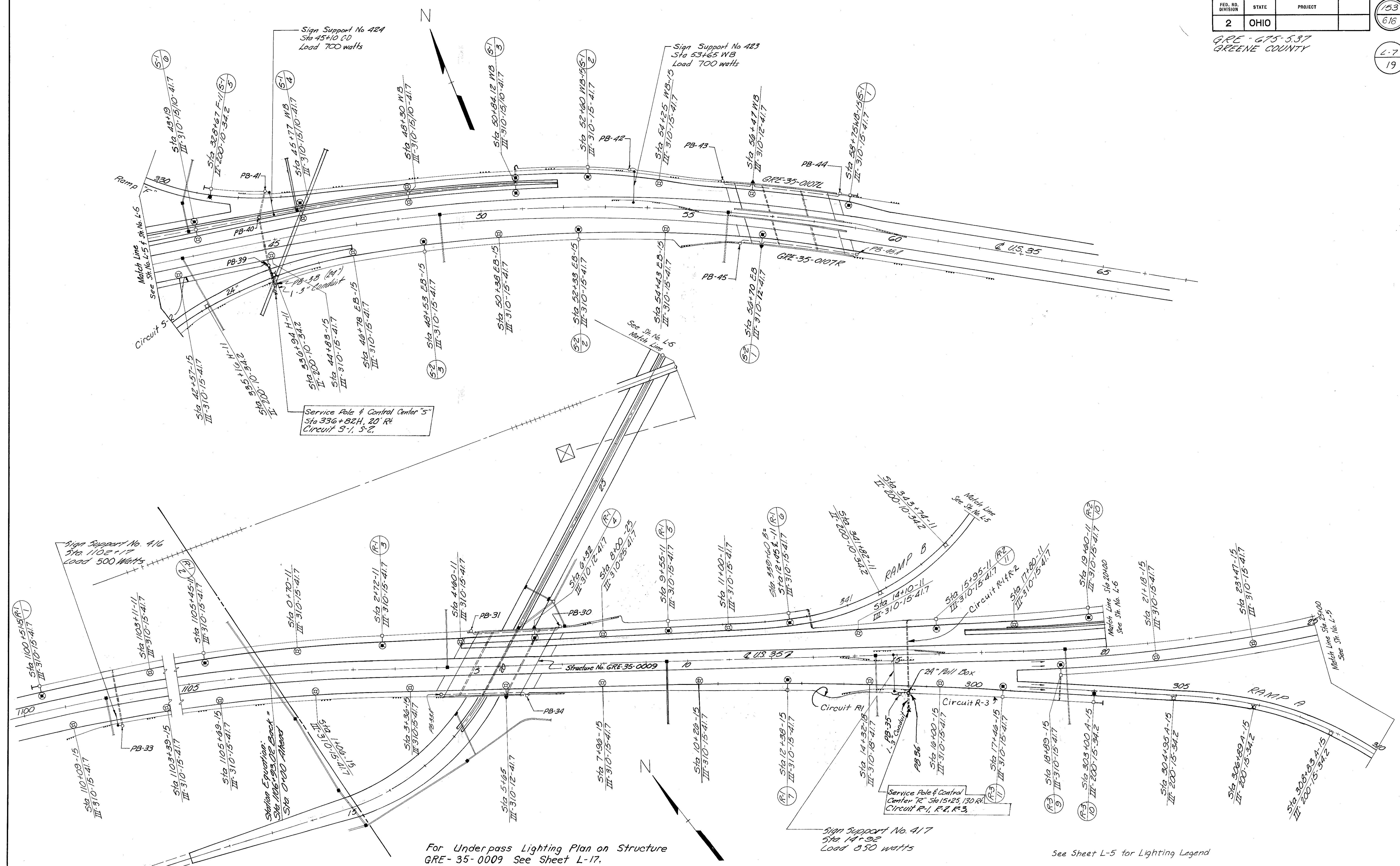
SERVICE POLE & CONTROL CENTER 'T'

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For Underpass Lighting Plan on Structure
GRE- 35- 0009 See Sheet L-17.

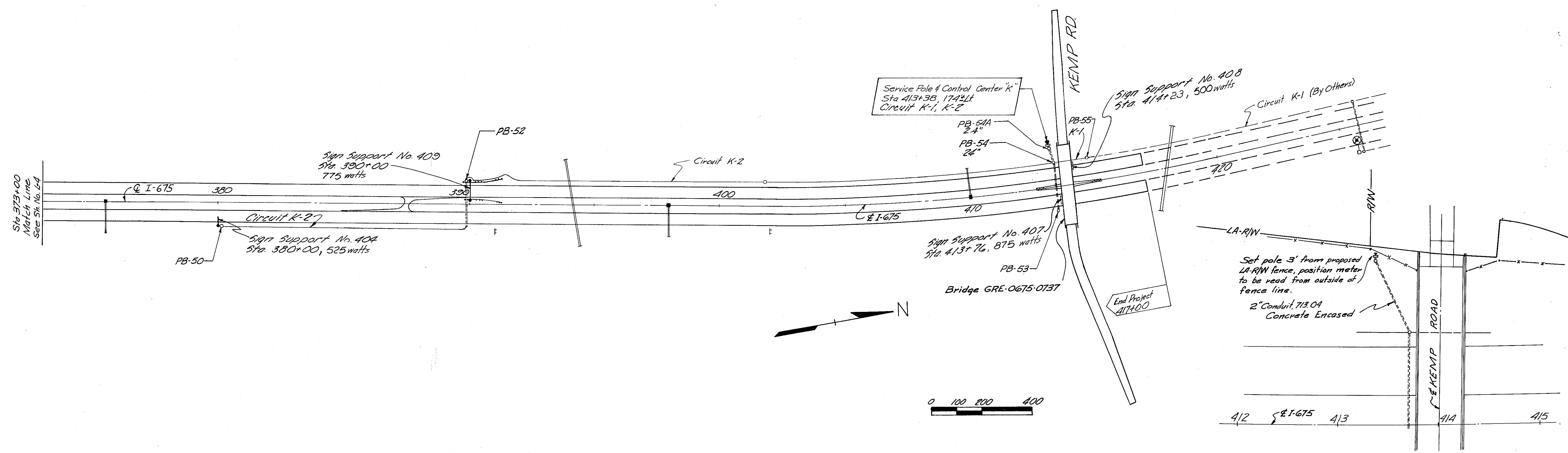
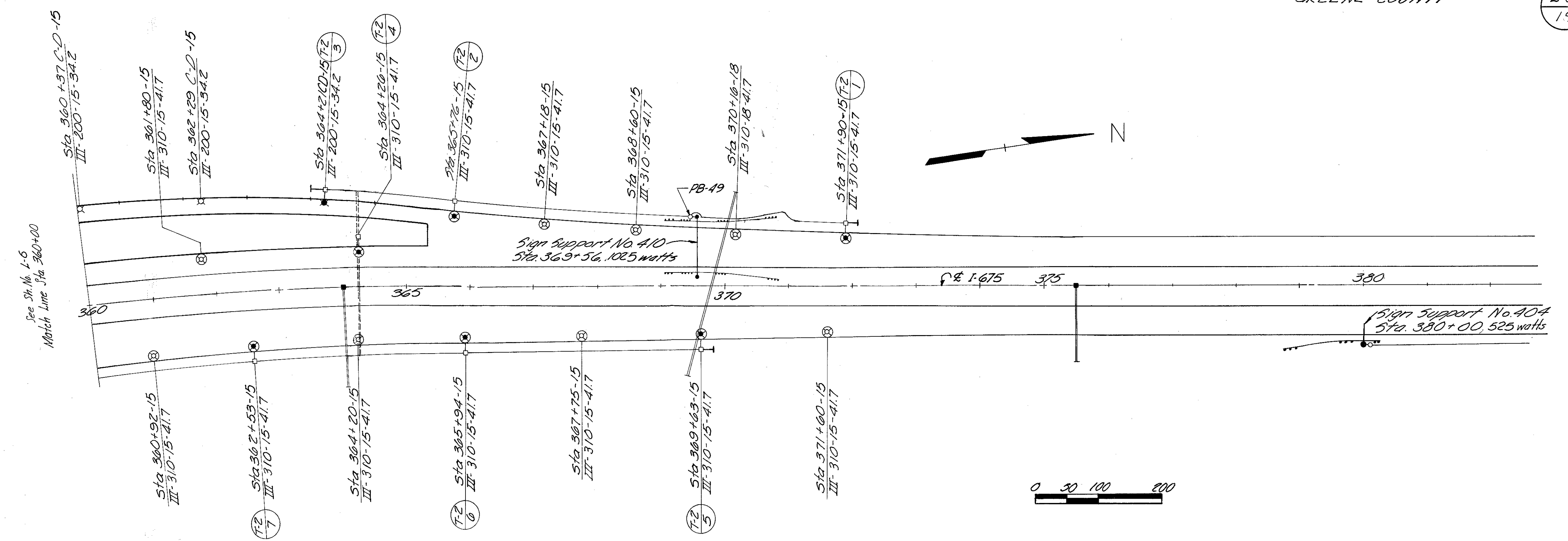
See Sheet L-5 for Lighting Legend

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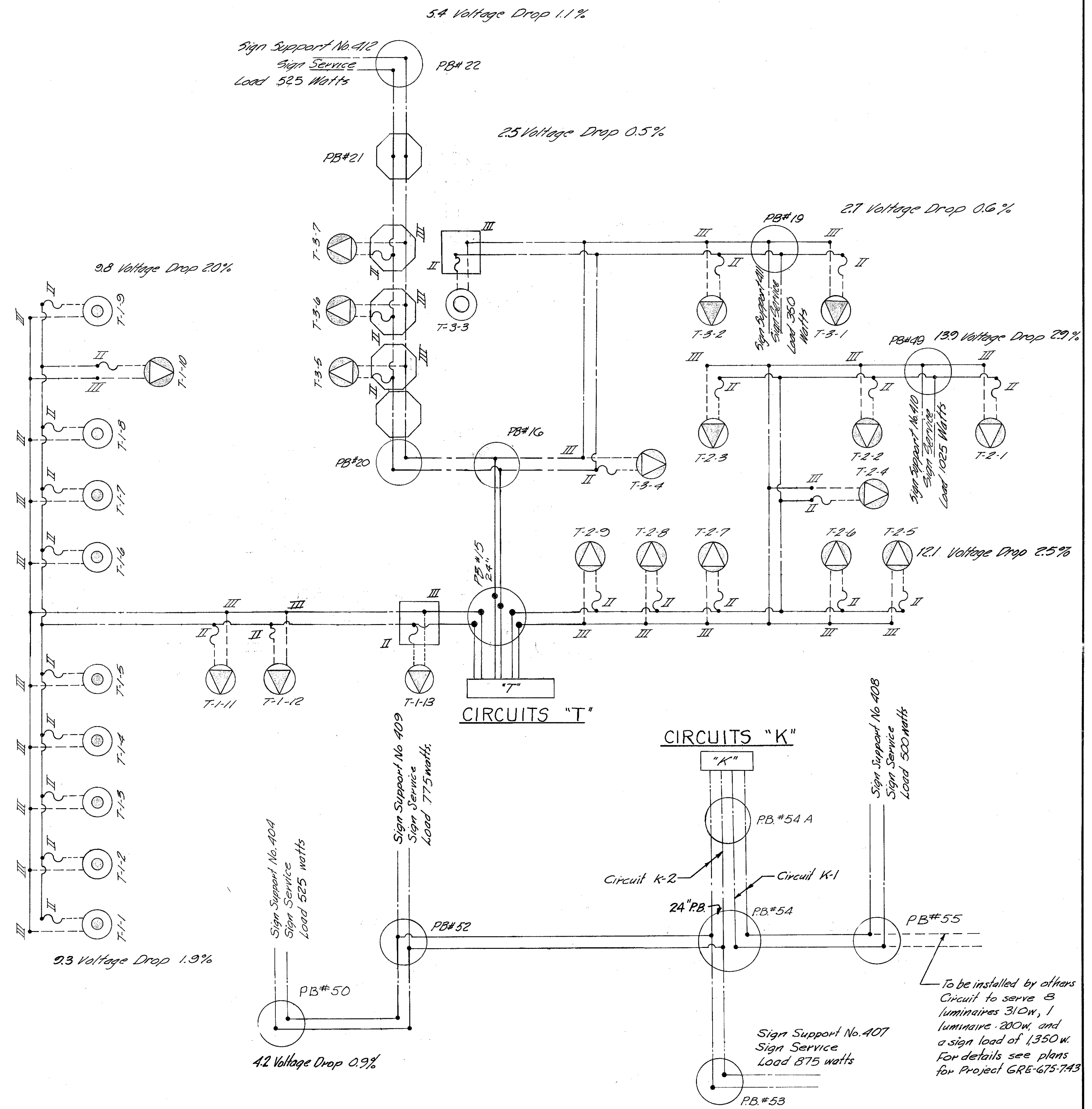
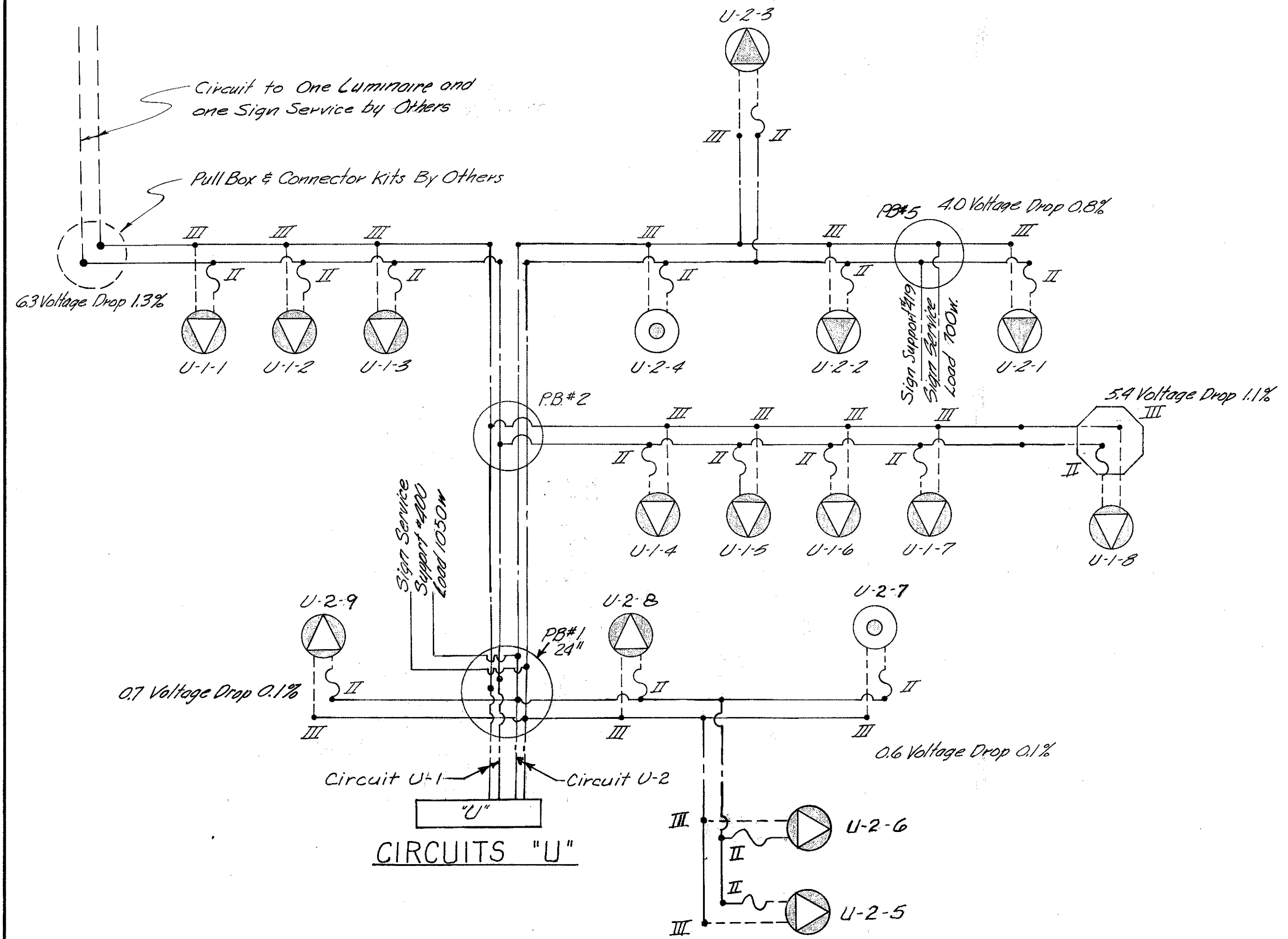
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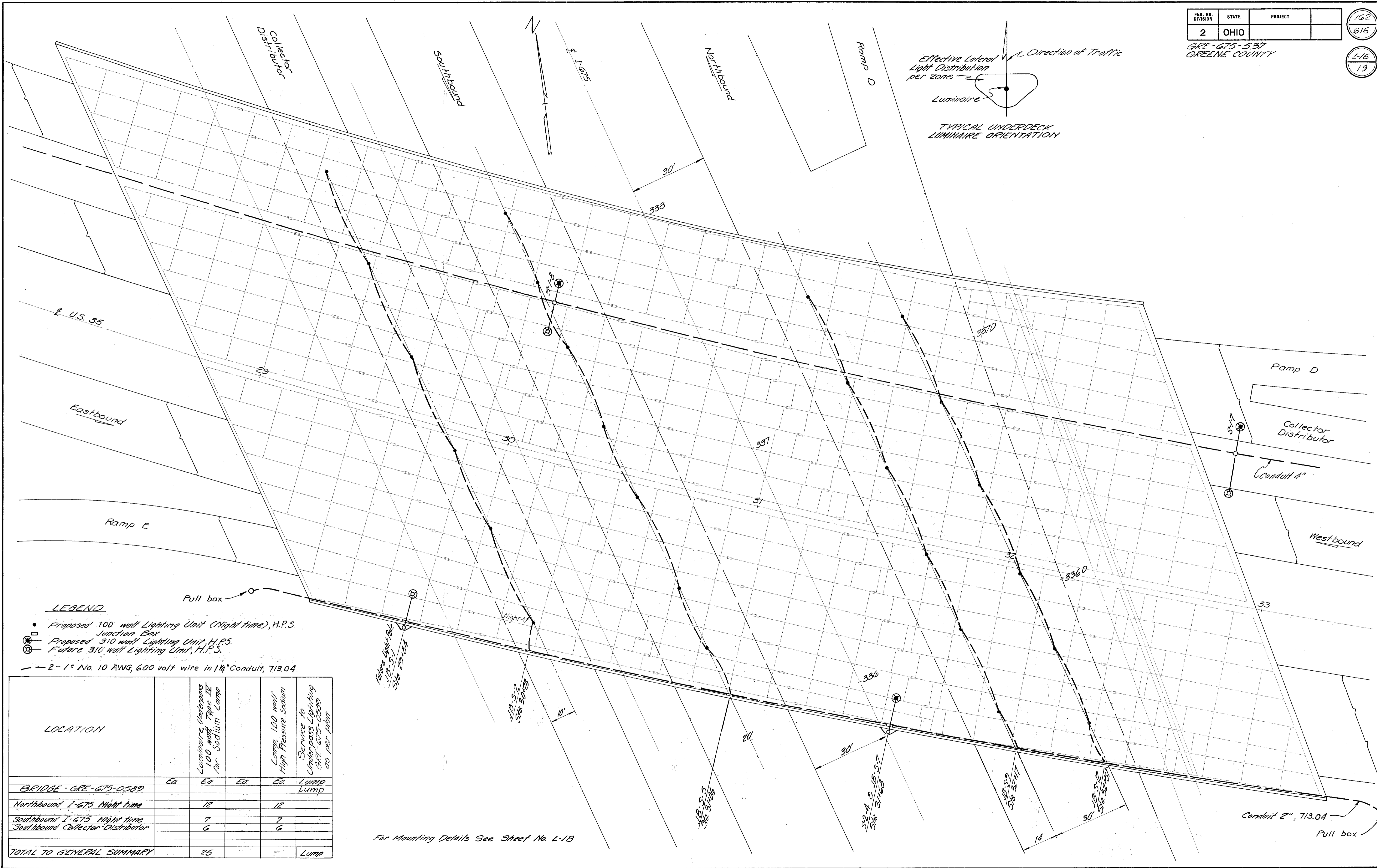
SERVICE POLE & CONTROL CENTER "K"

See Sheet L-5 For Lighting Legend

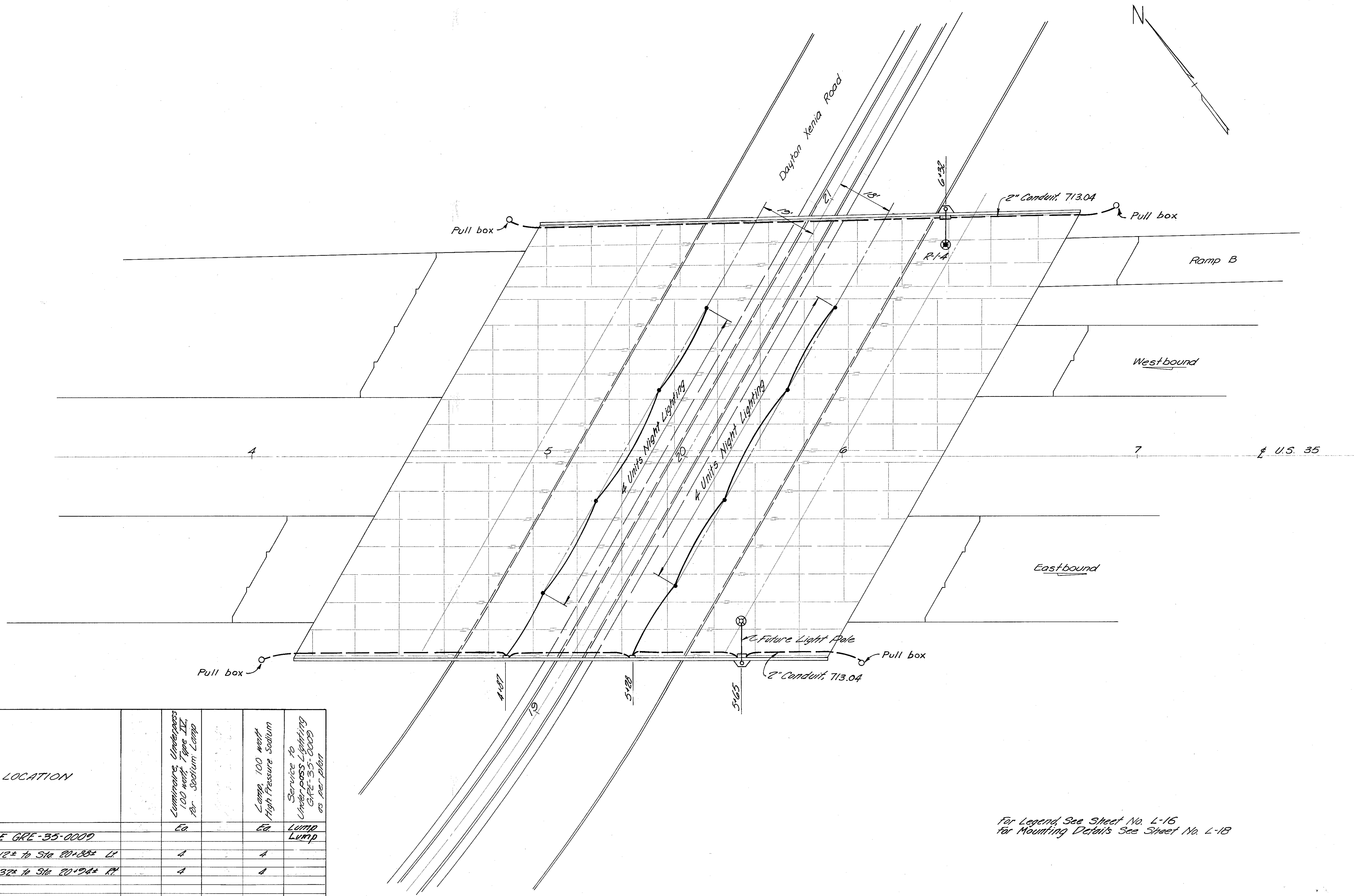


- LEGEND**
- Control Center
 - 310 watt High Pressure Sodium Luminaire
I.E.S. Medium Cut-off Type III
 - 200 watt High Pressure Sodium Luminaire
I.E.S. Medium Cut-off Type III
 - 200 watt High Pressure Sodium Luminaire
I.E.S. Medium Cut-off Type II
 - Pull Box, 18" Circ. (Unless marked otherwise)
 - Junction Box, 18"x8"x6"
 - Junction Box in Barrier Wall
 - Connector Kit (Type as shown)
 - One 2-14 No. 4 AWG Duct Cable
 - One 1-10 No. 10 AWG Pole & Bracket Cable
 - One 1-2 No. 2 AWG 600 volt Distribution Cable
 - One 2-14 No. 00 AWG Duct Cable
 - D-2-5 Control Center - Circuit - Pole Identification
 - Fuse

LIGHTING CIRCUIT DIAGRAM



UNDERDECK LIGHTING PLAN - BRIDGE GRE-675-0589



LOCATION	Luminaire, Underpass 100 watt, Type III, 18" Sodium Lamp	Lamp, 100 watt High Pressure Sodium	Service to Underpass Lighting GRE-55-0009 as per plan
BRIDGE GRE-35-0009	Ea	Ea	Lump Lump
Sta. 19+12+ to Sta. 20+00+ LI	4	4	
Sta. 19+32+ to Sta. 20+24+ RT	4	4	
TOTAL TO GENERAL SUMMARY	8	-	Lump

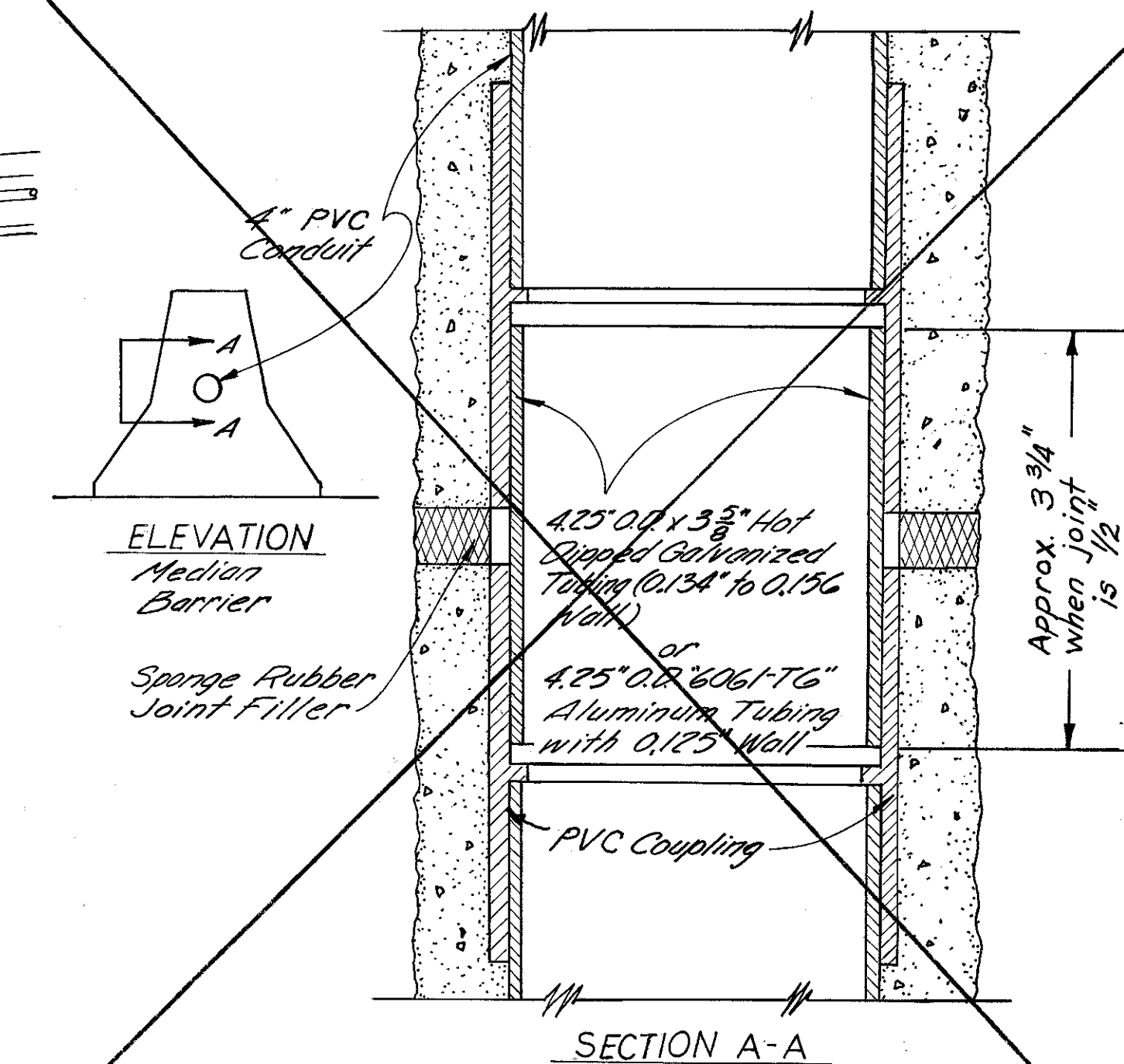
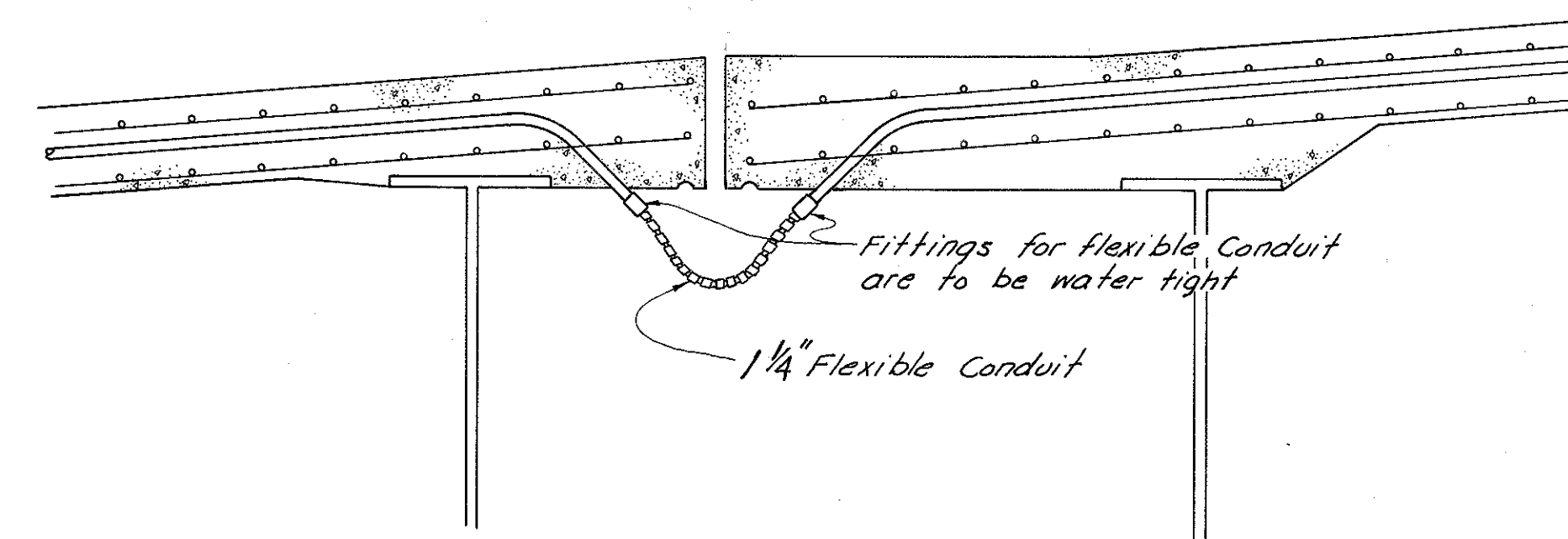
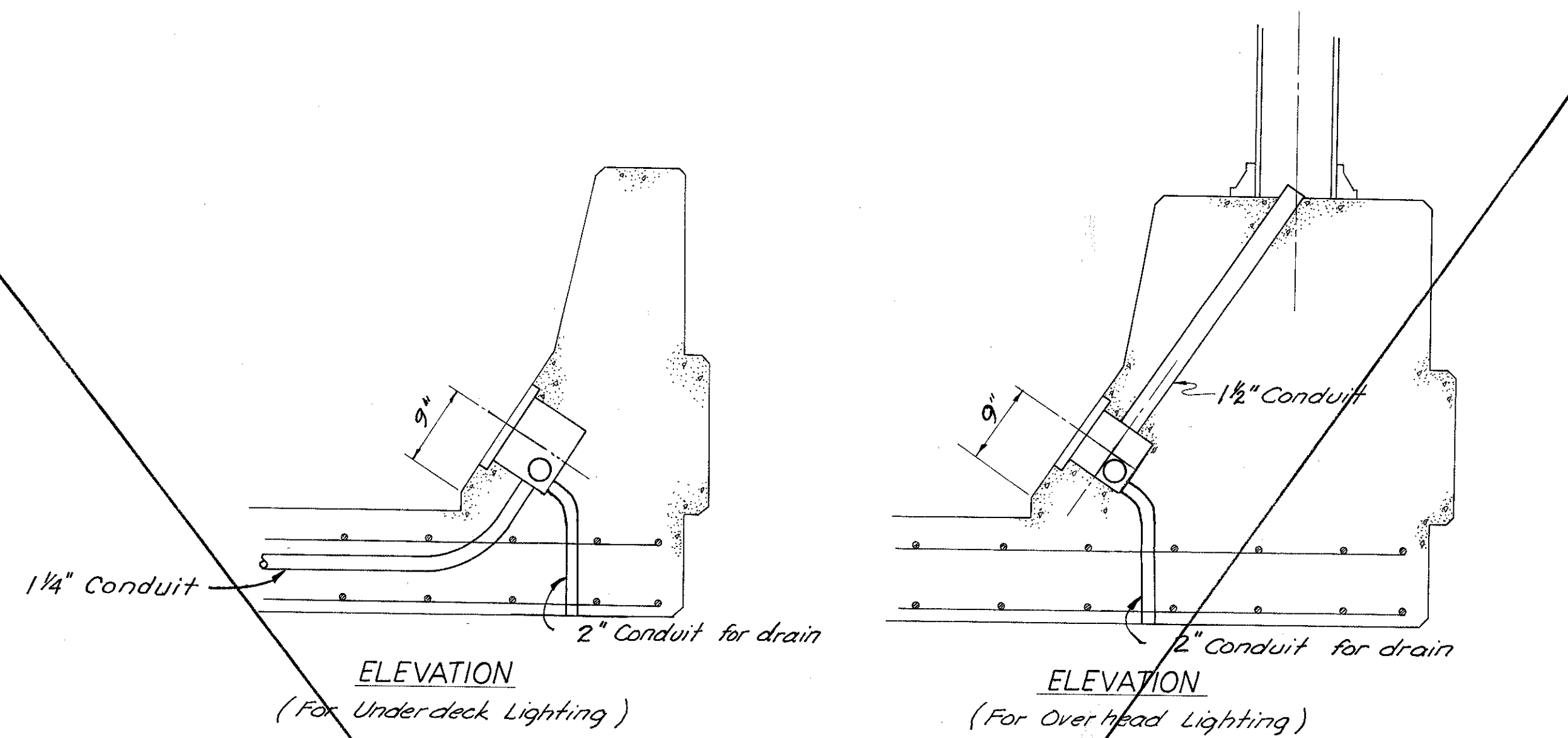
For Legend See Sheet No. L-16
For Mounting Details See Sheet No. L-18

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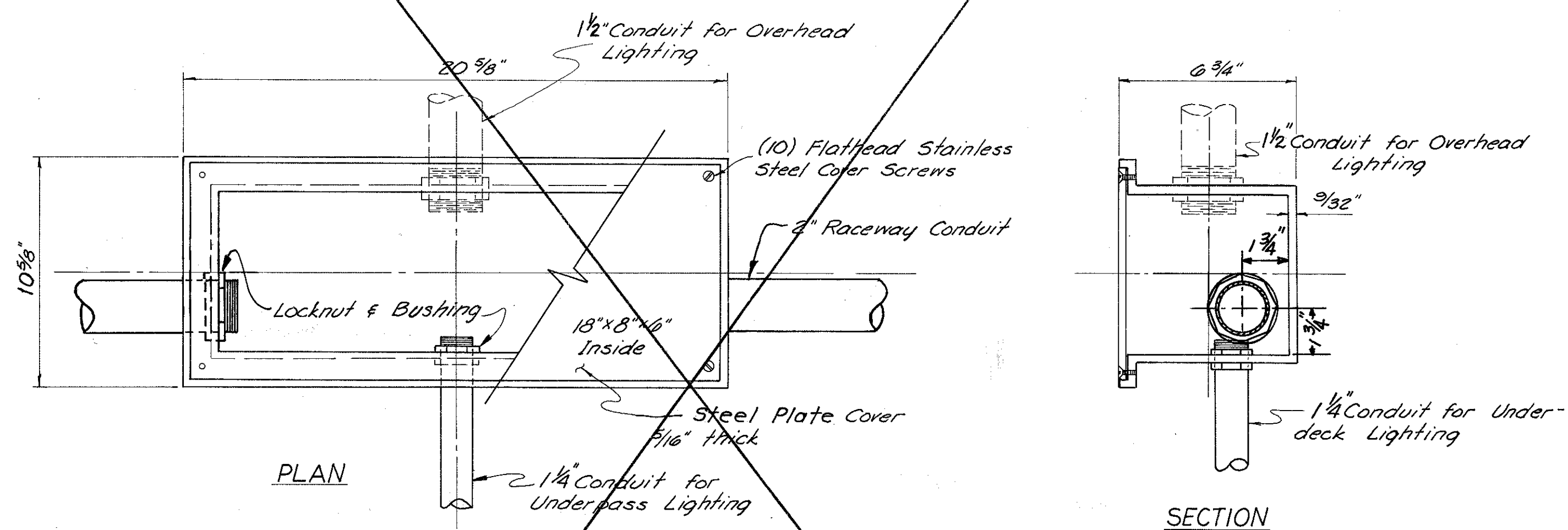
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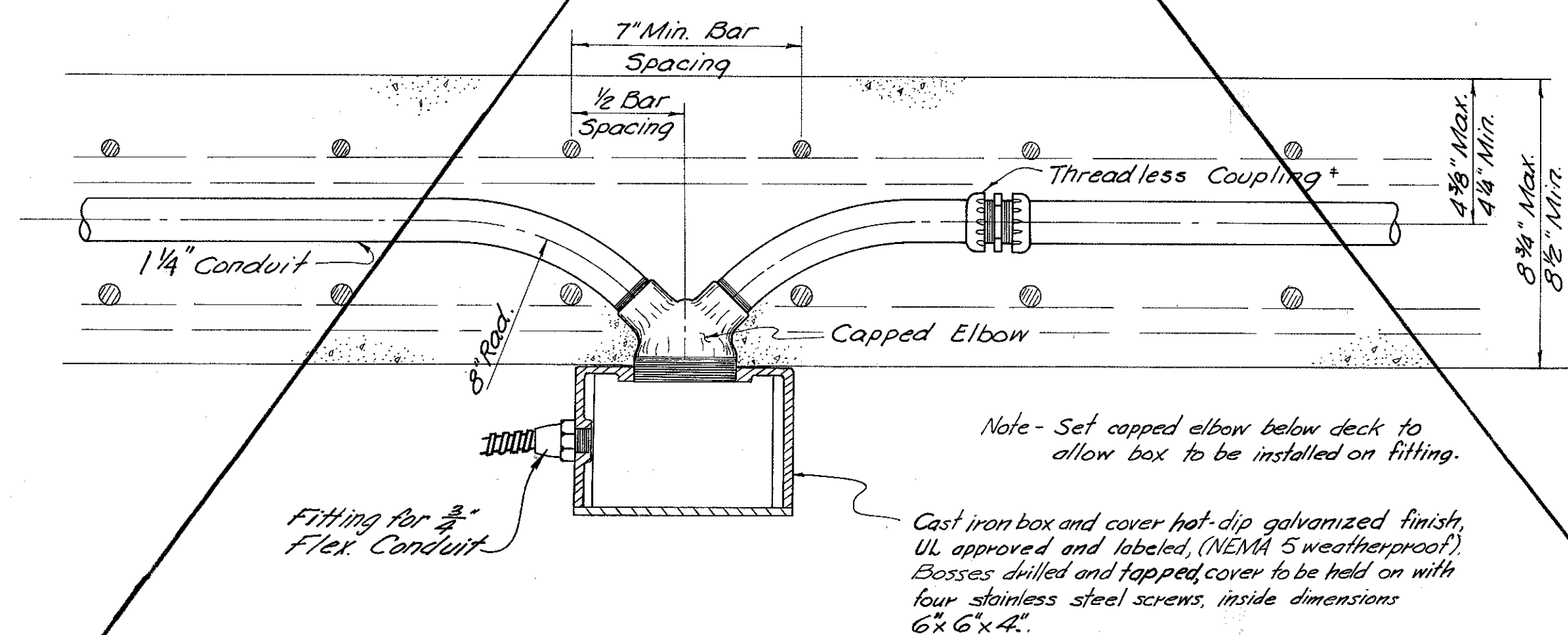
L-18
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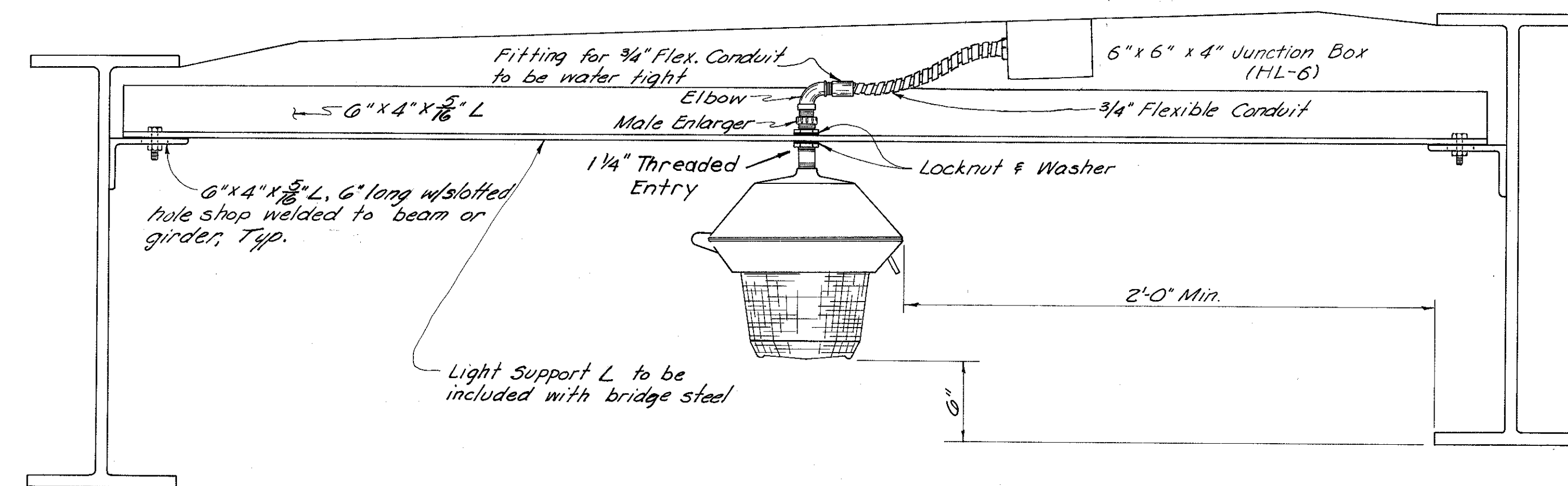
DETAIL OF CONSTRUCTION JOINT - 4" PVC COUPLING IN MEDIAN CONCRETE BARRIER



JUNCTION BOX
(For Additional Details See Std. Dwg. HL-4)



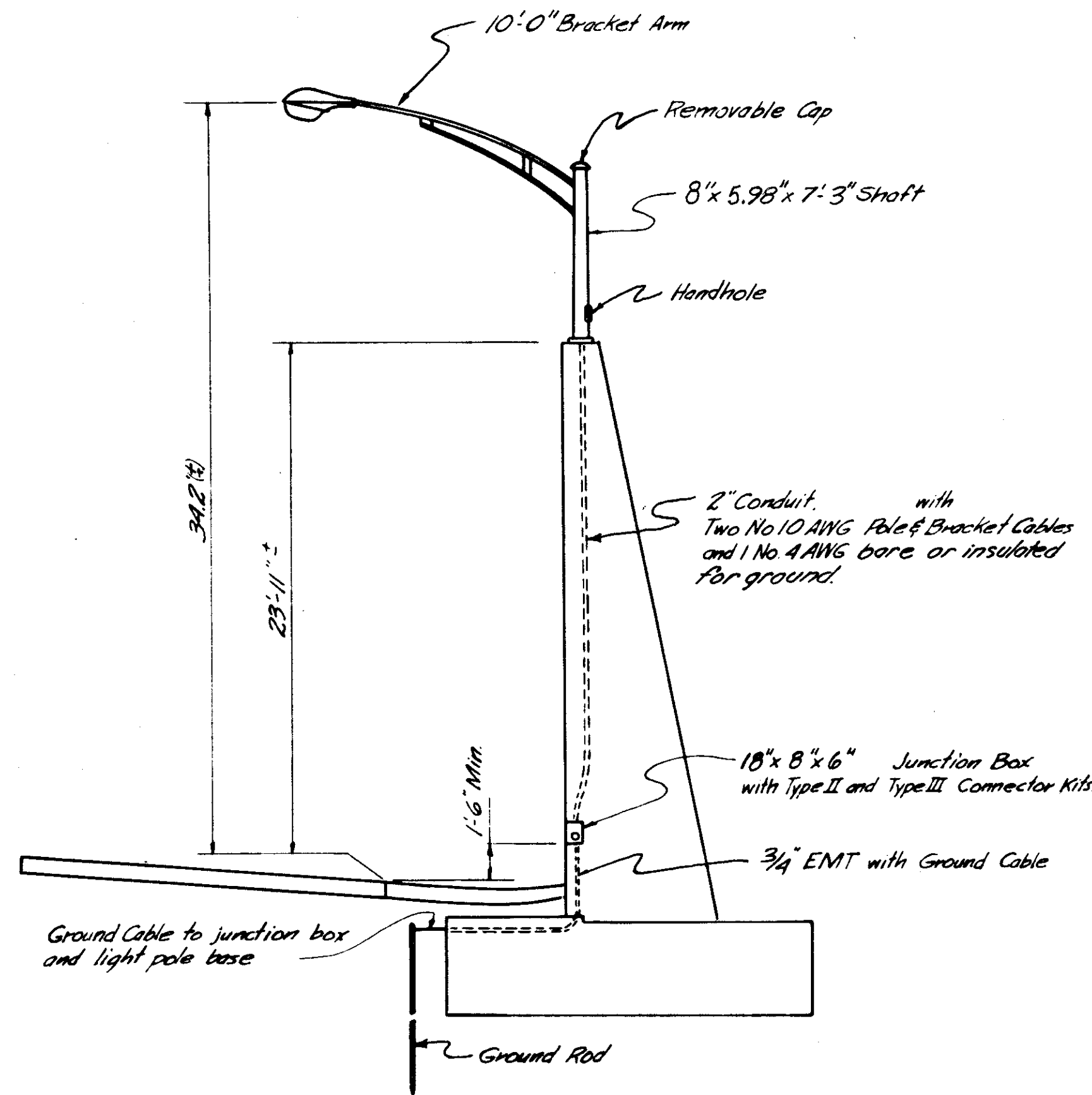
* Couplings to be used as needed for installation and are to be Conc. tight



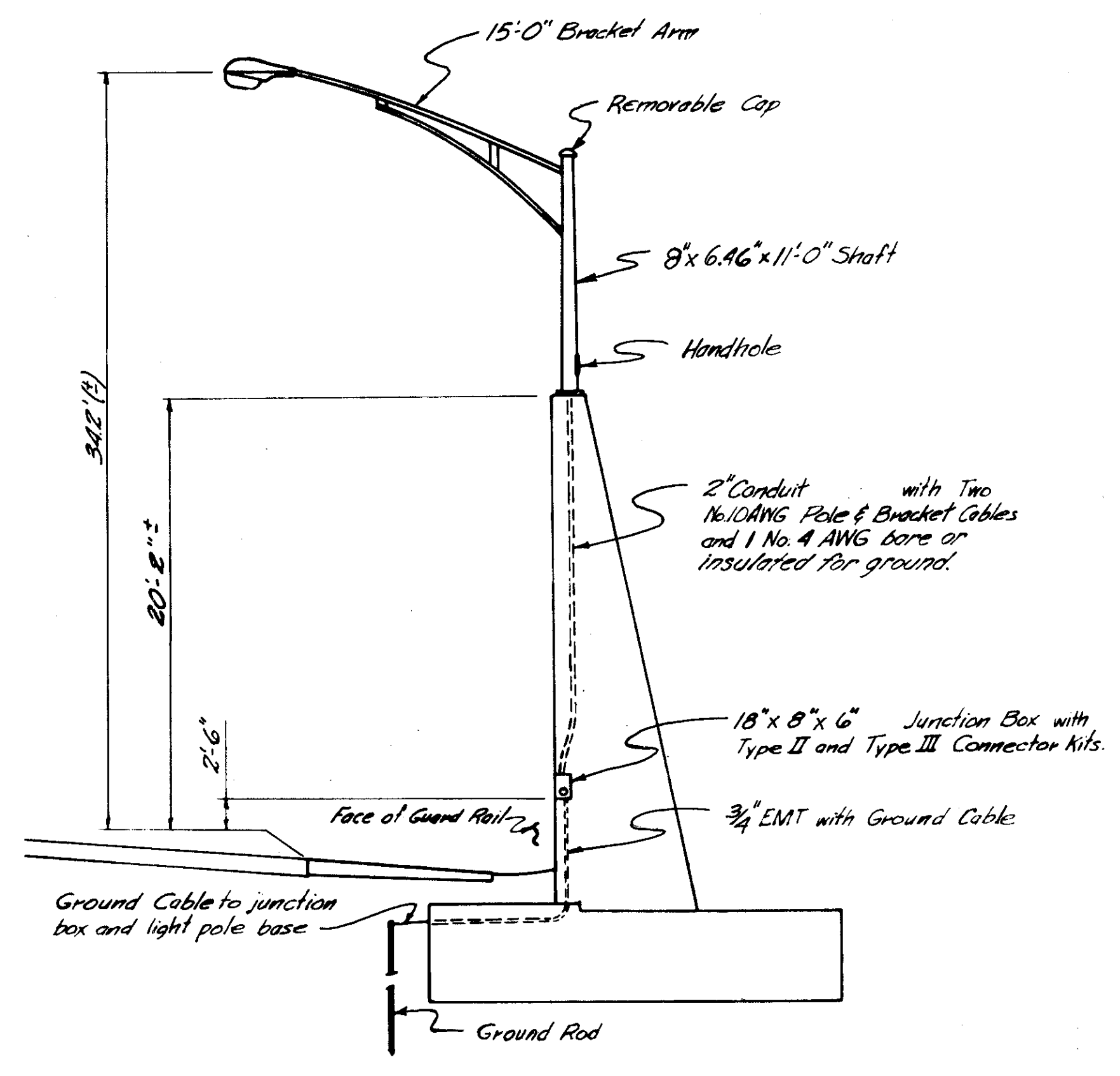
TYPICAL INSTALLATION UNDERDECK LUMINAIRE

For Additional Details See Std. Drwg. HL-6 & HL-19

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SECTION VIEW POLE T-3-3

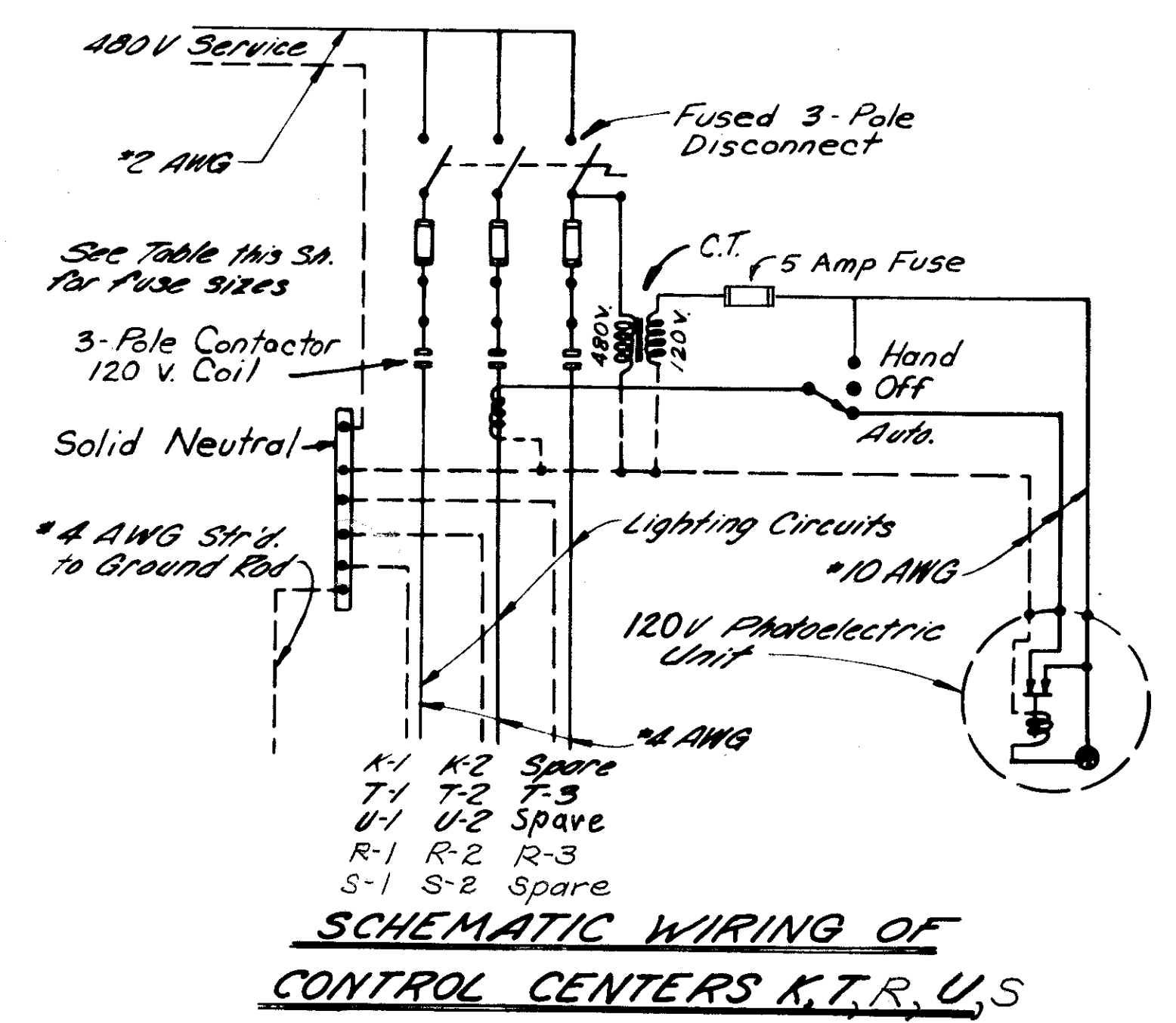


SECTION VIEW POLE T-1-13

CONTROL CENTER DATA:

CONTROL CENTER	CONNECTED LOAD	SERVICE ENTRANCE CONDUCTOR SIZE	ENCLOSURE TYPE *	CONTROL TRANSFORMER RATING	CIRCUIT			
					NO.	CONDUCTOR SIZE	LOAD	FUSE SIZE
K	75 KVA	# 2 AWG	SC-30	300 VA	K-1	# 4 AWG	11.2 AMPS	30 AMP
					K-2	# 4 AWG	4.5 AMPS	30 AMP
R	19.0 KVA	# 2 AWG	SC-30	300 VA	R-1	# 4 AWG	11.3 AMPS	30 AMP
					R-2	# 4 AWG	9.0 AMPS	30 AMP
					R-3	# 4 AWG	7.7 AMPS	30 AMP
S	47.8 KVA	# 2/0 AWG	SC-30	300 VA	S-1	# 4 AWG	10.4 AMPS	30 AMP
					S-2	# 4 AWG	13.6 AMPS	30 AMP
T	11.8 KVA	# 2 AWG	SC-30	300 VA	T-1	# 4 AWG	8.1 AMPS	30 AMP
					T-2	# 4 AWG	9.5 AMPS	30 AMP
					T-3	# 4 AWG	7.0 AMPS	30 AMP
U	9.1 KVA	# 2 AWG	SC-30	300 VA	U-1	# 4 AWG	8.8 AMPS	30 AMP
					U-2	# 4 AWG	10.1 AMPS	30 AMP

* See Std. Const. Dwg. HL-15 for enclosure dimensions

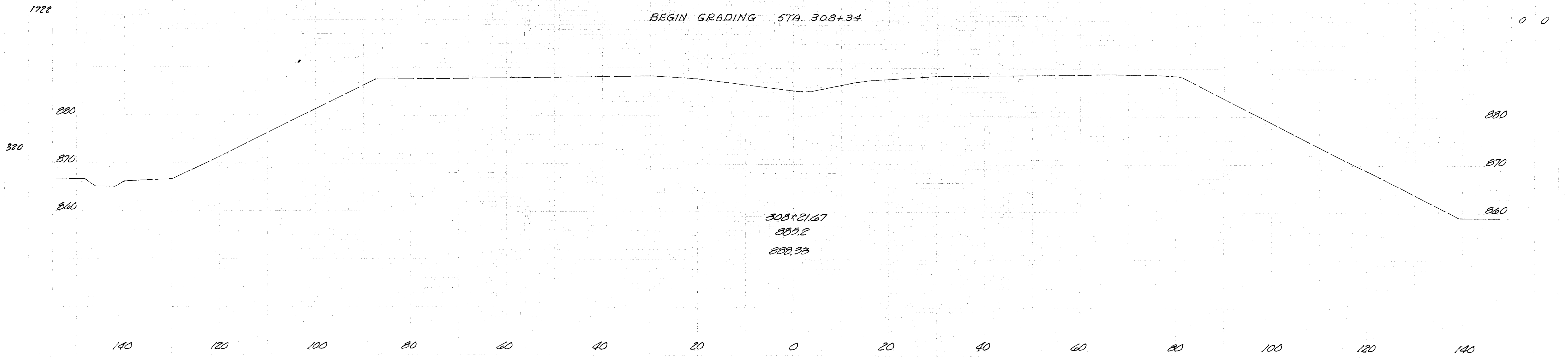
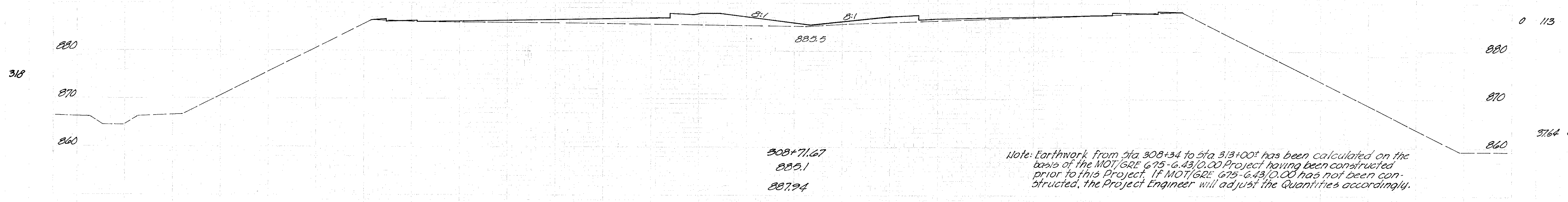
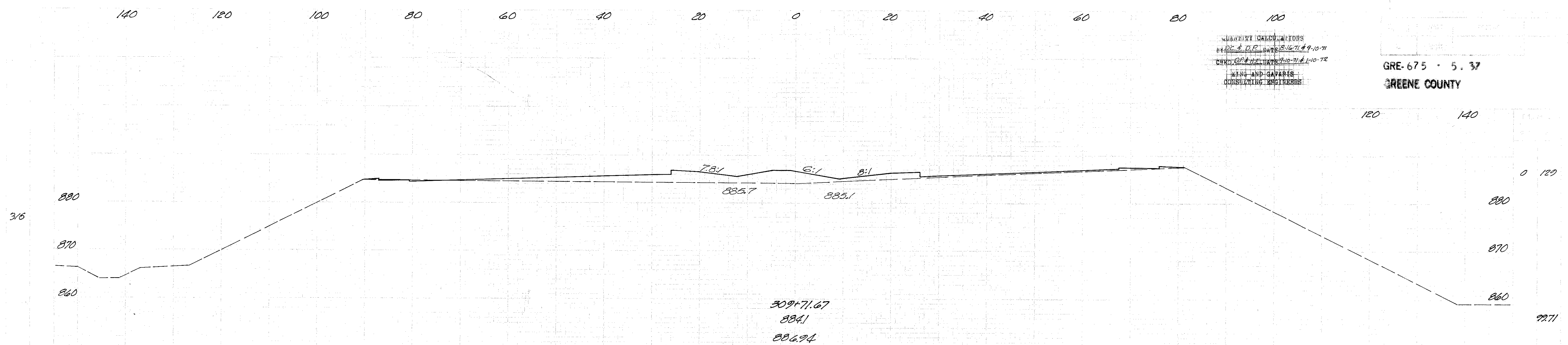


SCHEMATIC WIRING OF CONTROL CENTERS K, T, R, U, S

NIGHT CALCULATORS
 P.D.C. & D.F. DATE 8-16-71 # 9-10-71
 CHD. C.P. # 114 DATE 7-10-71 # 1-10-72
 KING AND GAVARIS
 CONSULTING ENGINEERS

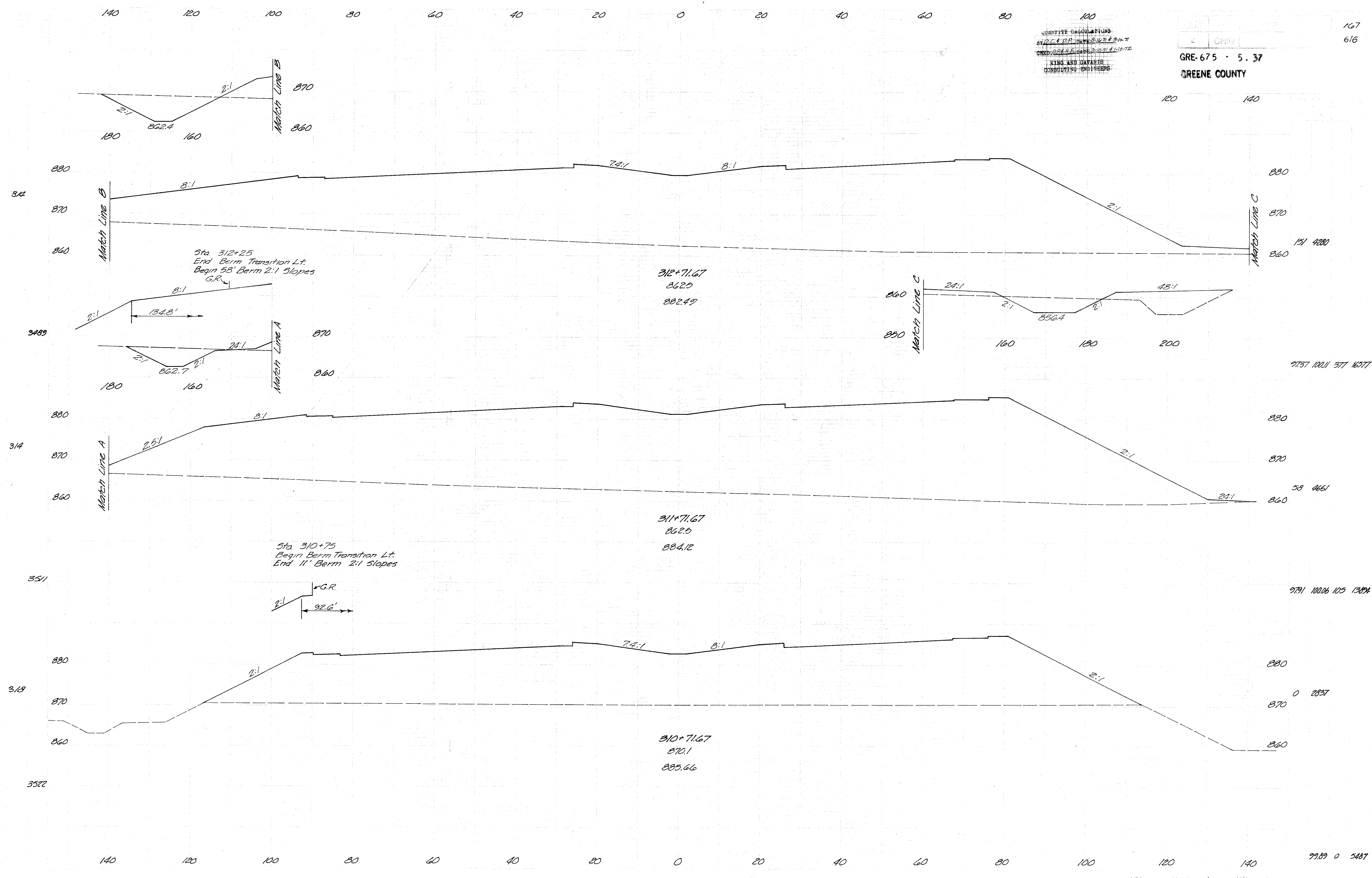
GRE-675 - 5.37
 GREENE COUNTY

166
 616



QUANTITY CALCULATIONS
 BY D.C. & D.F. DATE 8-16-71 # 8-10-71
 CHECKED BY E. GARDNER DATE 8-16-71 # 1-10-72
 KING AND GARDNER
 CONSULTING ENGINEERS

GRE-675 - 5.37
 GREENE COUNTY

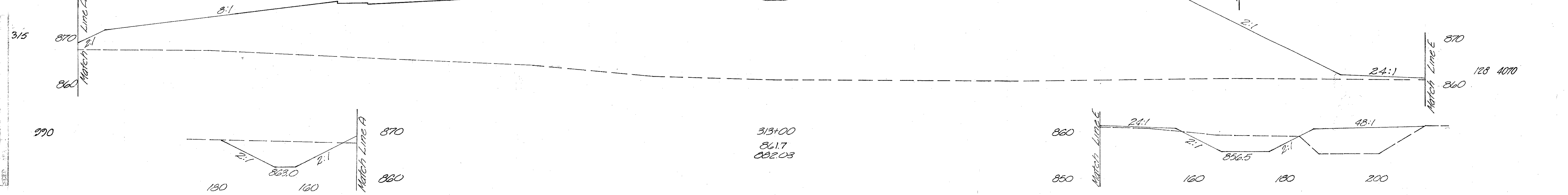
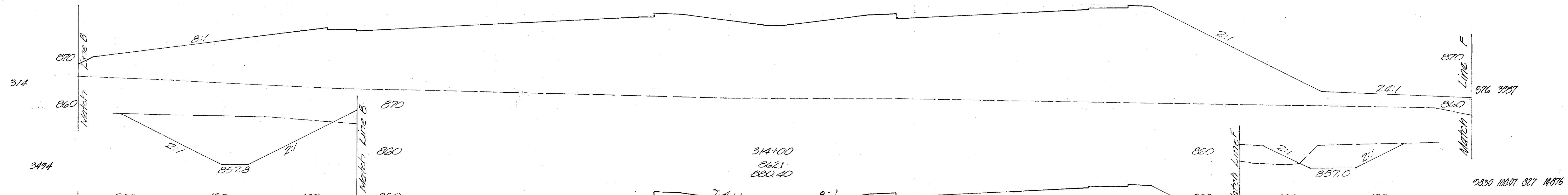
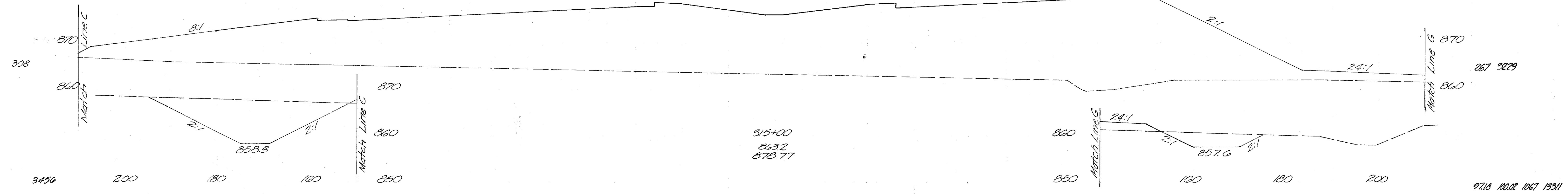
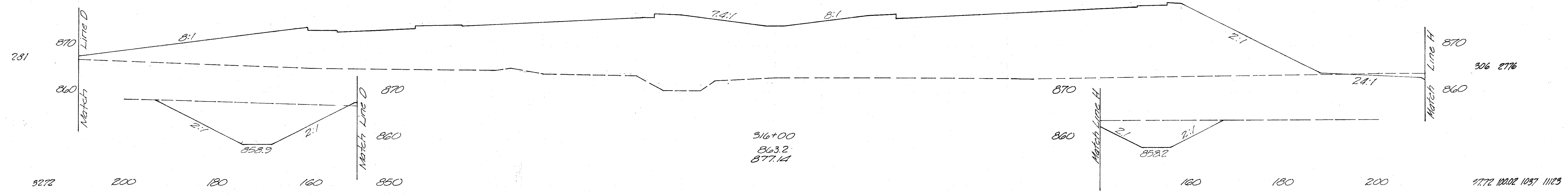


STA 310+71.67 to STA 312+71.67

167
616
151 4280
97.57 100.1 377 16577
53 4661
97.91 100.06 105 13894
0 2837
99.89 0 5487

QUALITY CALCULATIONS
BY D.C.A.D.P. DATE 8-10-71
CHECKED DATE 8-10-71
KING AND GAYLIS
CONSULTING ENGINEERS

GRE-675 - 5.37
GREENE COUNTY



STA 313+00 to STA 316+00

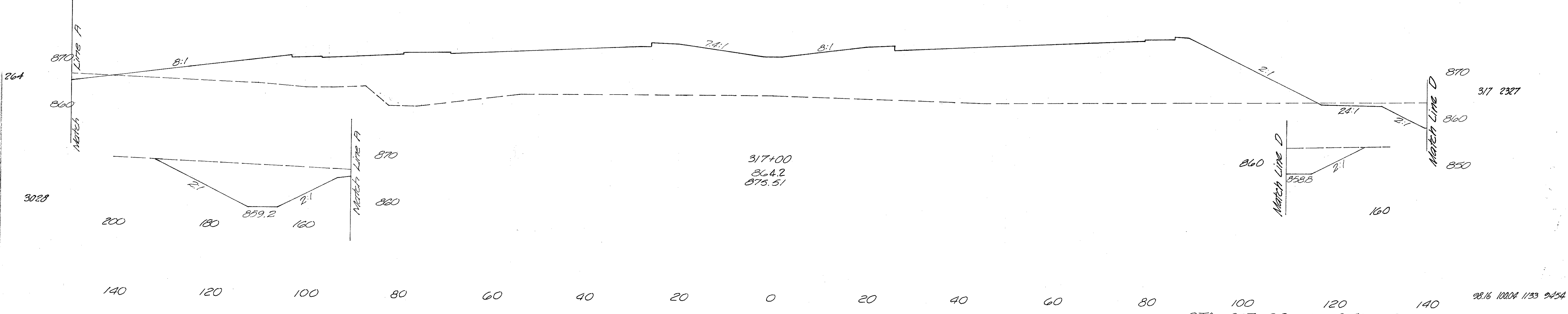
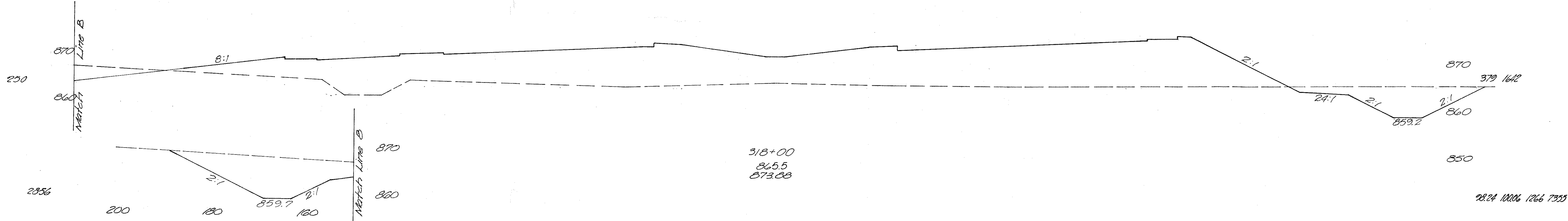
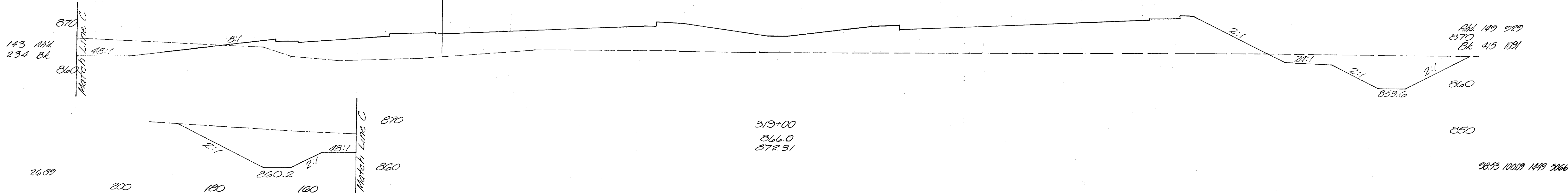
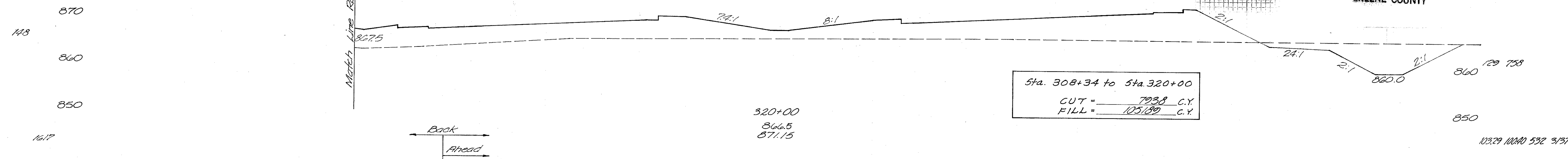
TEMPERATURE
BAROMETER
WIND
MOON
DATE

140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITY CALCULATIONS
BY E. G. DUNN, INC. 10-10-71
CHECKED BY: J. H. HARRIS 10-10-72
J. H. HARRIS
CONSULTING ENGINEER

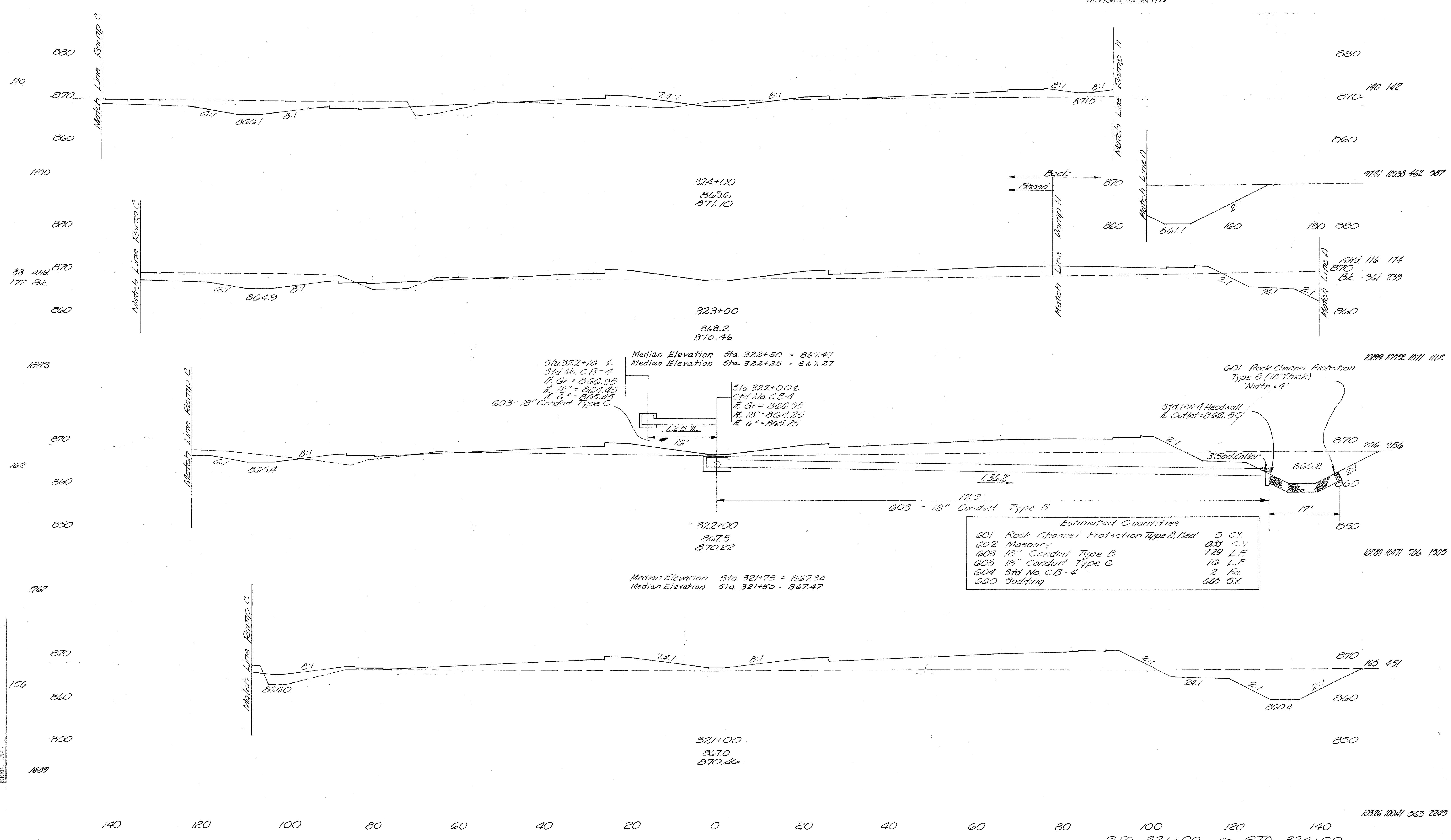
GRE-675 - 5.37
GREENE COUNTY

169
616



QUANTITY CALCULATIONS
 BY D. E. D. DATE 2/12/79
 CHKD BY J. P. DATE 2/12/79
 KING AND SHARIS
 CONSULTING ENGINEERS
 Revised: J.E.H. 1/1/79

2 000
 GRE-675 - 5.37
 GREENE COUNTY



Median Elevation Sta. 322+50 = 867.47
 Median Elevation Sta. 322+25 = 867.27
 Sta. 322+16 ±
 Std. No. CB-4
 E. Gr. = 866.95
 E. 18" = 864.45
 E. 6" = 865.45
 603-18" Conduit Type C
 12.5%
 16'

Sta. 322+00 ±
 Std. No. CB-4
 E. Gr. = 866.95
 E. 18" = 864.25
 E. 6" = 865.25

601 - Rock Channel Protection
 Type B (18" Thick)
 Width = 4'
 5' HW-4 Headwall
 E. Outlet = 862.50

Estimated Quantities

601 Rock Channel Protection Type B, Bed	5 CY.
602 Masonry	0.33 C.Y.
603 18" Conduit Type B	1.29 L.F.
603 18" Conduit Type C	16 L.F.
604 Std. No. CB-4	2 Ea.
605 Sodding	665 SY.

Median Elevation Sta. 321+75 = 867.34
 Median Elevation Sta. 321+50 = 867.47

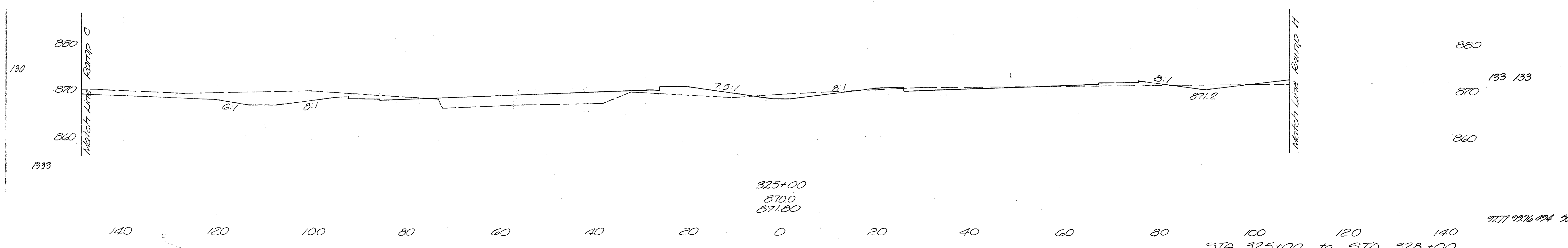
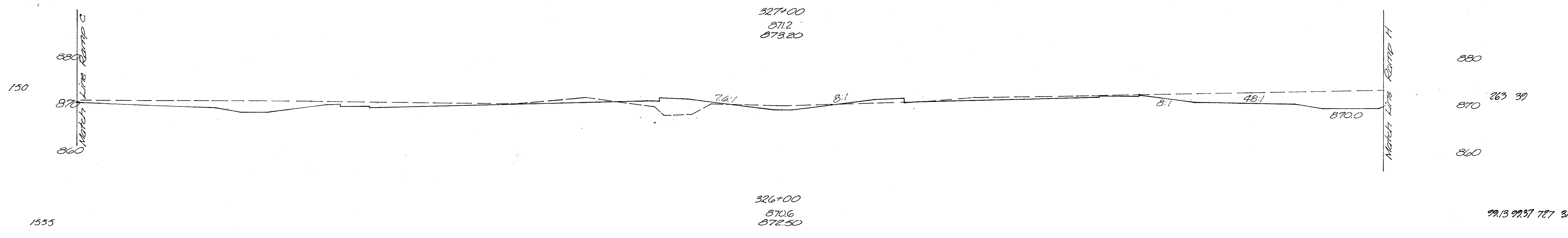
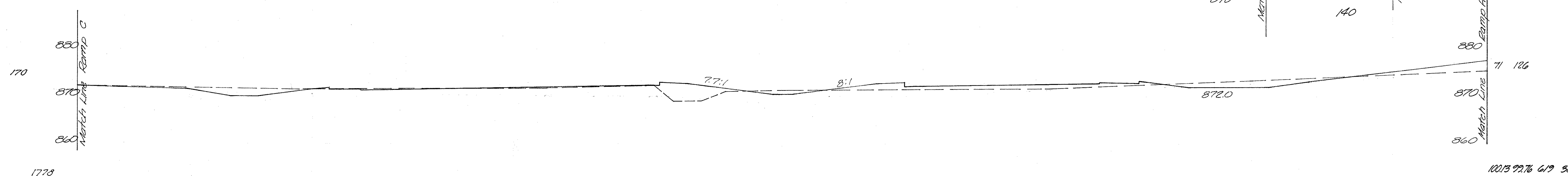
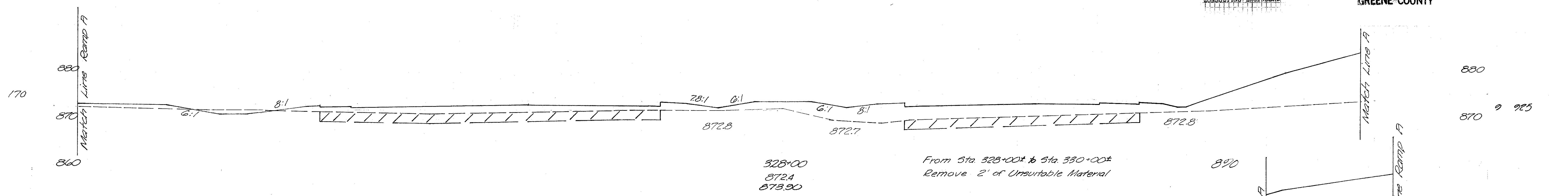
SURVEYED
 PLATTEN
 REPERIALE
 SANTI, AC.
 SEED.

140 120 100 80 60 40 20 0 20 40 60 80 100

PRELIMINARY CALCULATIONS
BY DATE 10/10/71
LEAD BY DATE 10/10/72
RING AND GARBARIS
CONSULTING ENGINEERS

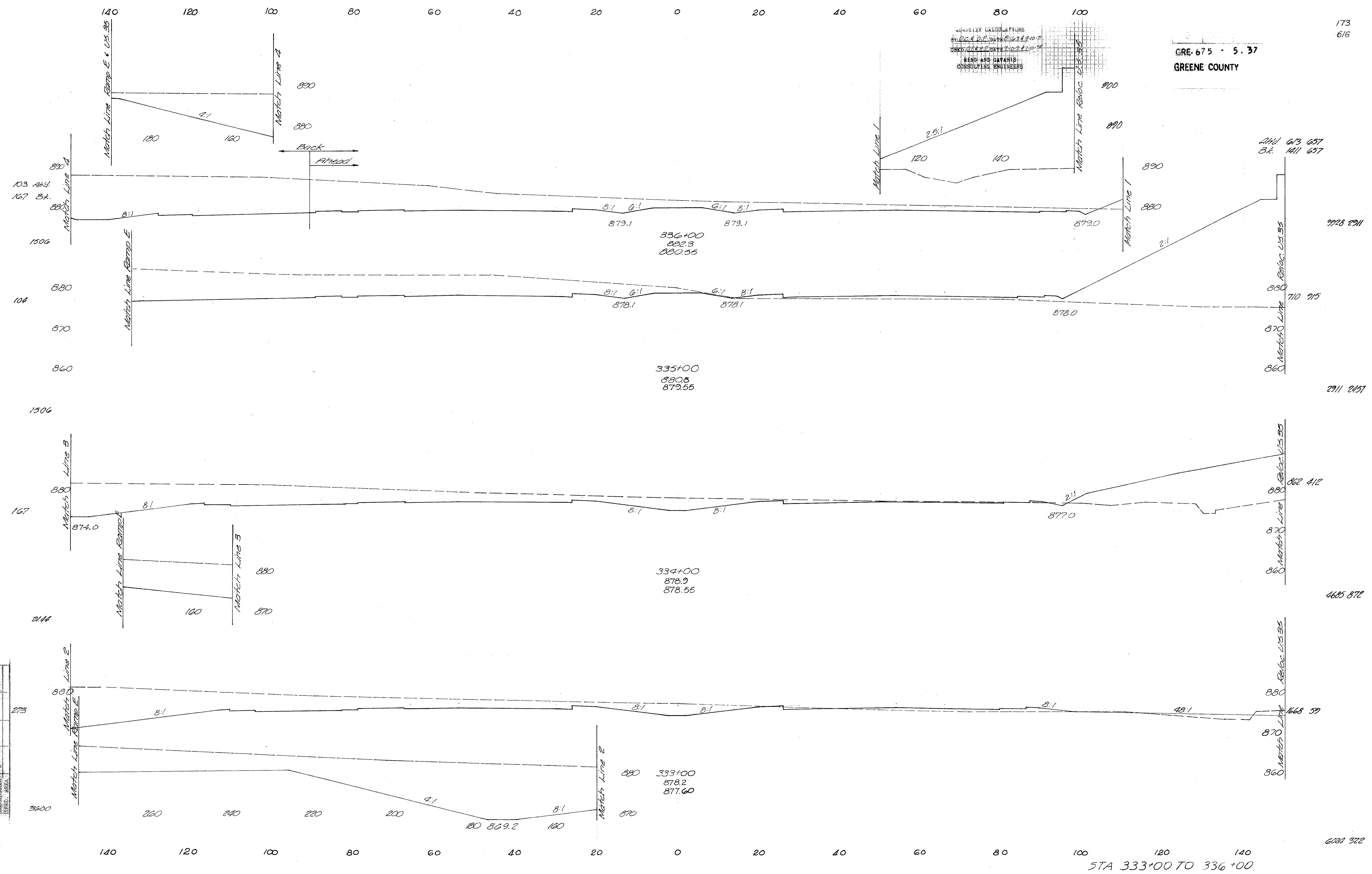
GRE-675 - 5.37
GREENE COUNTY

171
616



JOHN F. LEECH & ASSOCIATES
INCORPORATED
1000 N. W. 10th St., Ft. Lauderdale, Fla. 33304
TEL: (305) 467-1100
FAX: (305) 467-1101
KING AND GAVARIS
CONSULTING ENGINEERS

GRE-675 - 5.37
GREENE COUNTY

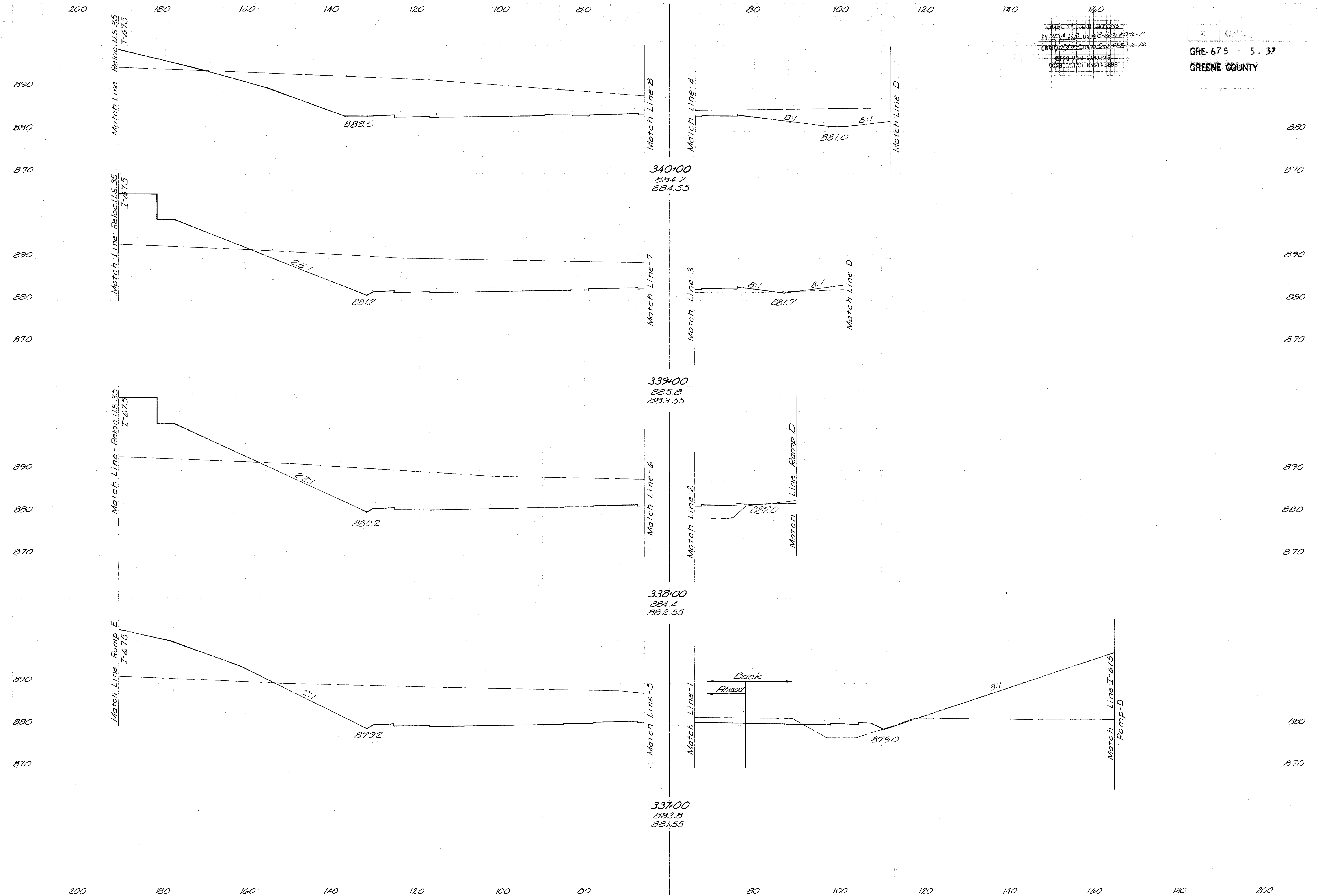


200 180 160 140 120 100 80 80 100 120 140 160

QUALITY CALCULATIONS
BY DR. J. D. BARRETT 9-10-77
CHECKED BY W. J. GIBSON 1-10-78
KING AND GATARI'S
CONSULTING ENGINEERS

2 0110
GRE-675 - 5.37
GREENE COUNTY

175
616



REPRODUCTION
SURVEY
NOTE BOOK
NO.

200 180 160 140 120 100 80 80 100 120 140 160 180 200
STA. 337+00 TO STA. 340+00-LEFT AND RIGHT

140 120 100 80 60 40 20 0 20 40 60 80 100 120

PARALLEL CALCULATIONS
BY DATE 5-18-71
CHKD. DATE 5-15-71
KING AND GAWRYS
CONSULTING ENGINEERS

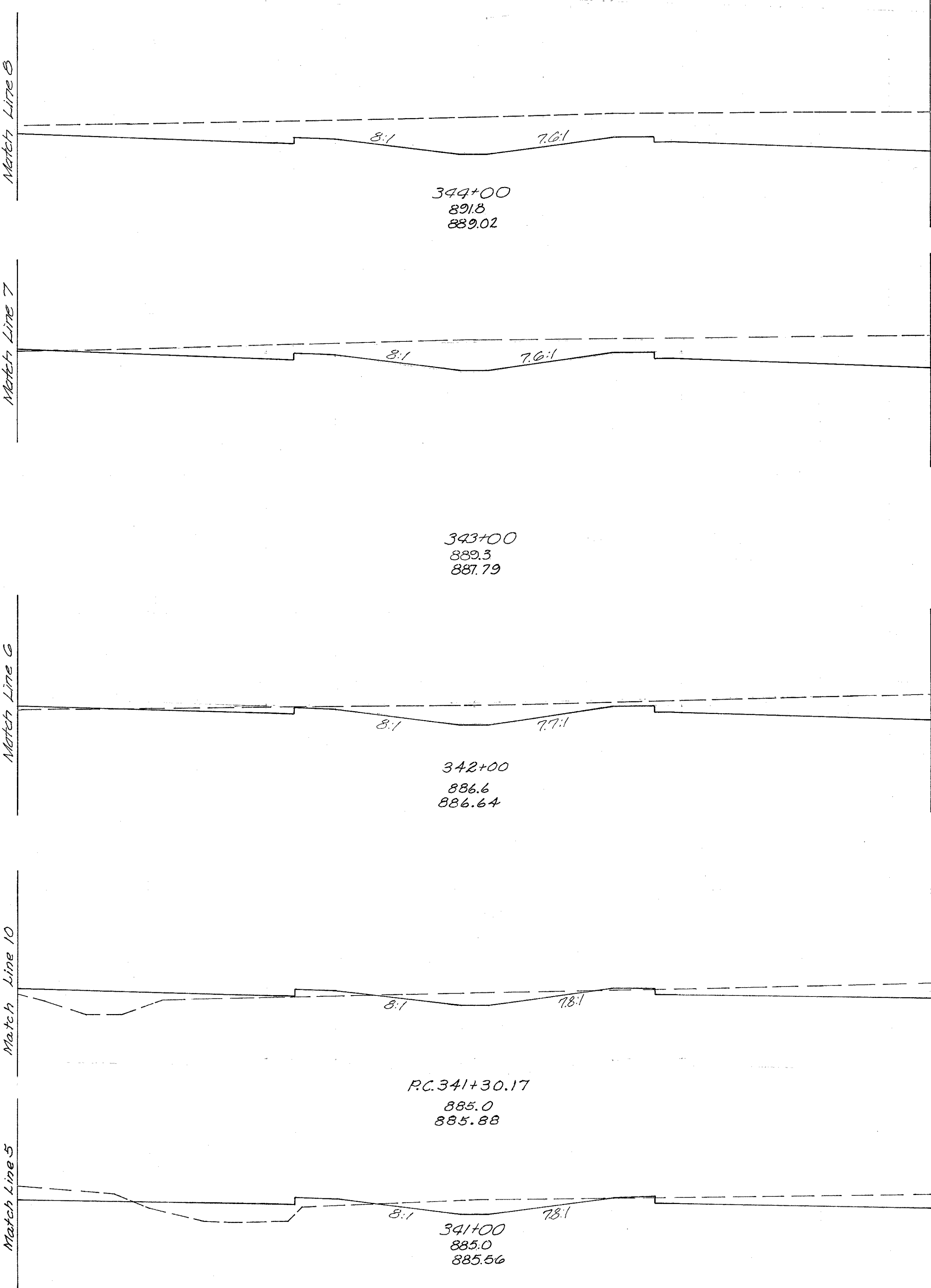
GRE-675 5.37
GREENE COUNTY

170
616

890
110 All
294 Bl
880
3624
890
371
880
870
860
4472
890
434
880
870
3677
890
256
880
731
890
180
880
1805

Match Line 4
Match Line 7
Match Line 6
Match Line 10
Match Line 5

Match Line 4
Match Line 8
Match Line 2
Match Line 9
Match Line 1



442.141 0
890
81.1007 6
880
99.42 102.63 8208 173
890
2651 85
880
870
860 97.14 102.17 10438 327
890
3151 88
880
870
6822 70.84 6763 201
890
2202 65
880
32.04 30.36 2088 68
890
1551 56
880

See Sheet 177 for Match Lines

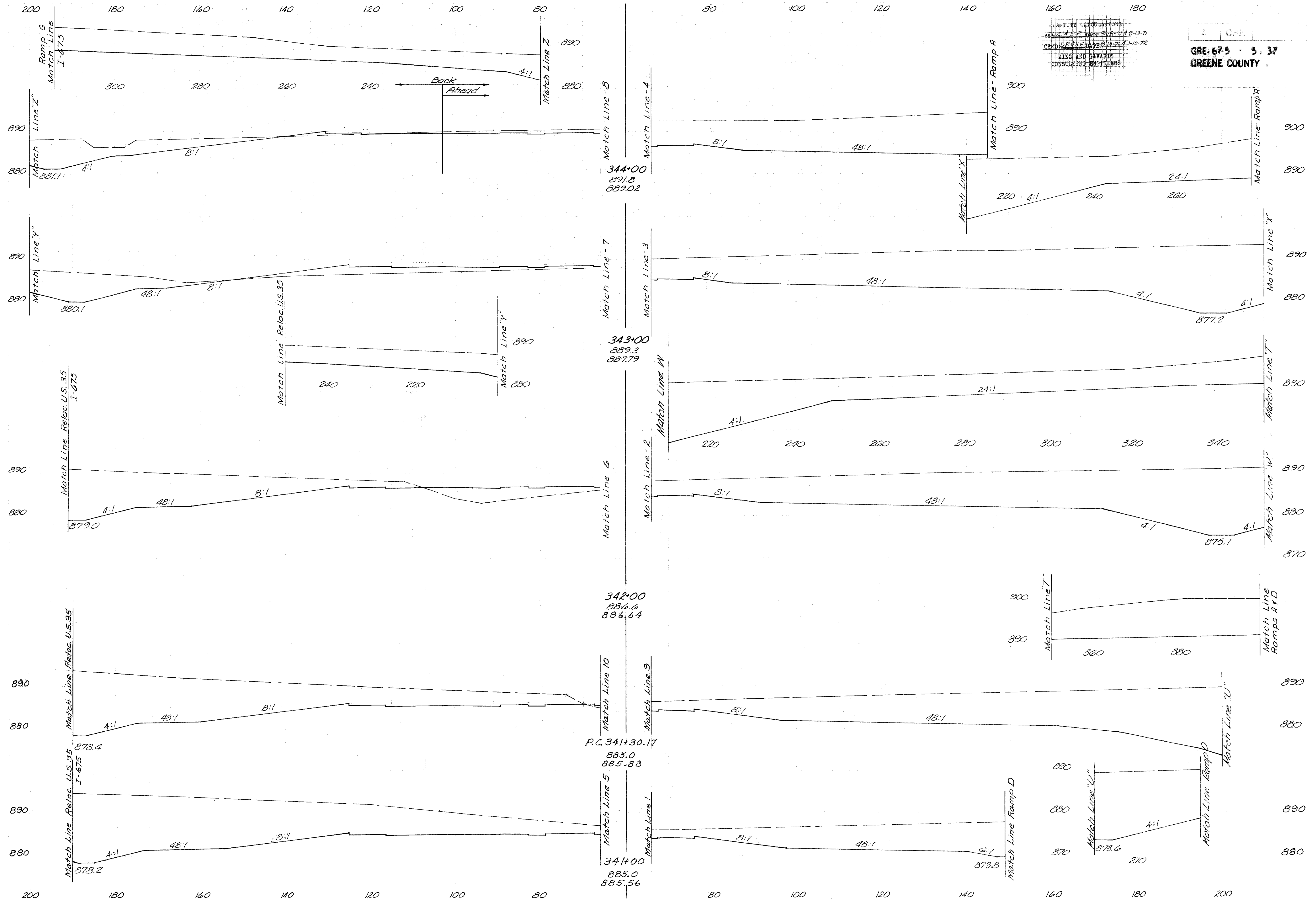
STA 341+00 TO 344+00

140 120 100 80 60 40 20 0 20 40 60 80 100 120

463 213

QUANTITY CALCULATIONS
 BY C. A. P. DATE 2/12/9-13-71
 CHECKED BY DATE 3/13/72
 KING AND GAVARIS
 CONSULTING ENGINEERS

2 ON 1
 GRE-675 - 5.37
 GREENE COUNTY



REVISION
 NO. 1
 DATE 10-1-71

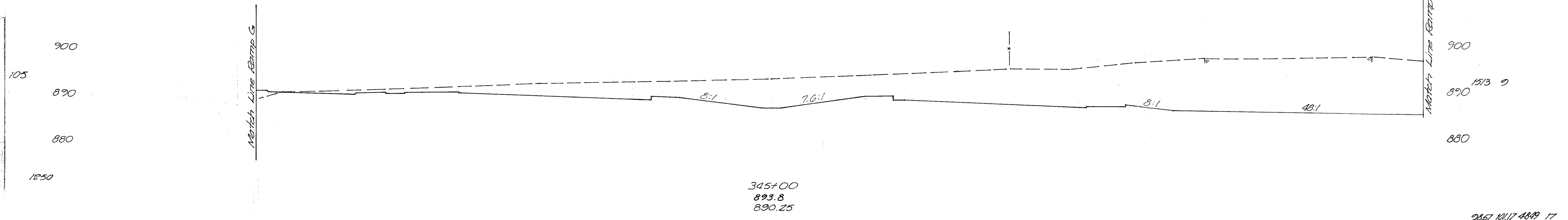
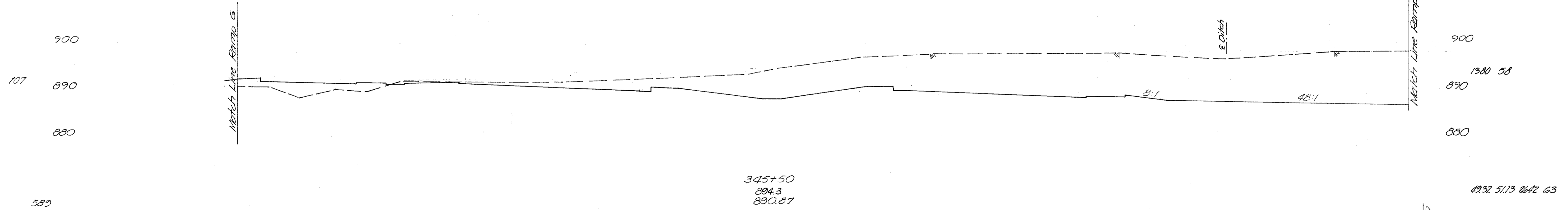
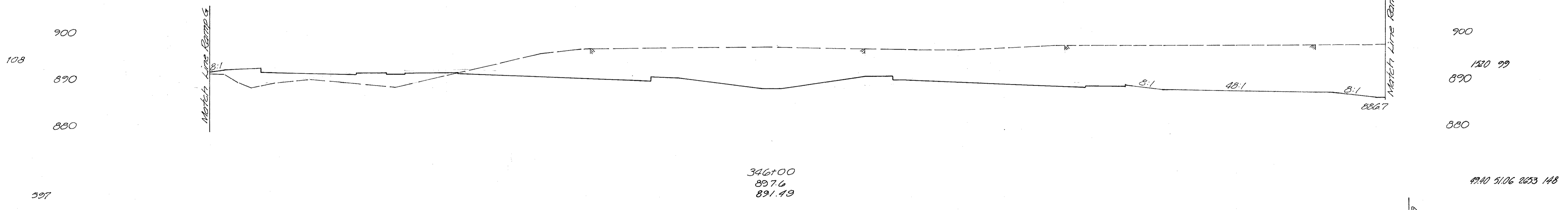
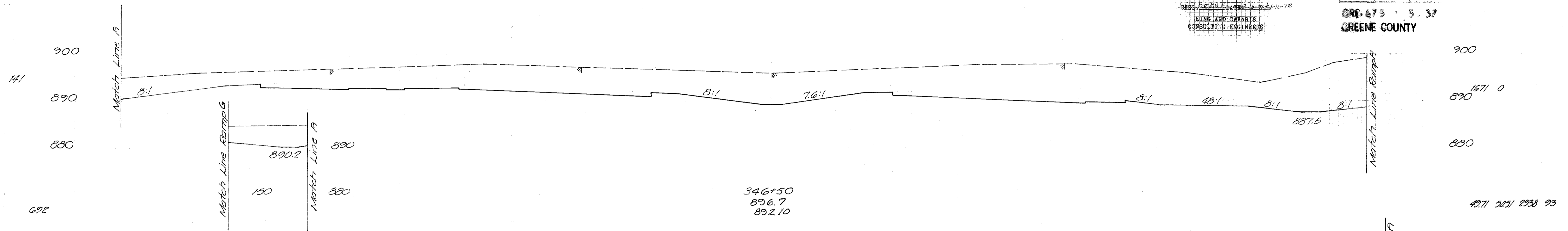
STA. 341+00 TO STA. 344+00 LEFT AND RIGHT

140 120 100 80 60 40 20 0 20 40 60 80 100

QUALITY CALCULATIONS
BY D.C. # 101 DATE 2/27/71 # 9-15-71
ORIG. FILE DATE 2-27-71-10-72
KING AND GAVARIS
CONSULTING ENGINEERS

ORE-675 - 5.37
GREENE COUNTY

178
616



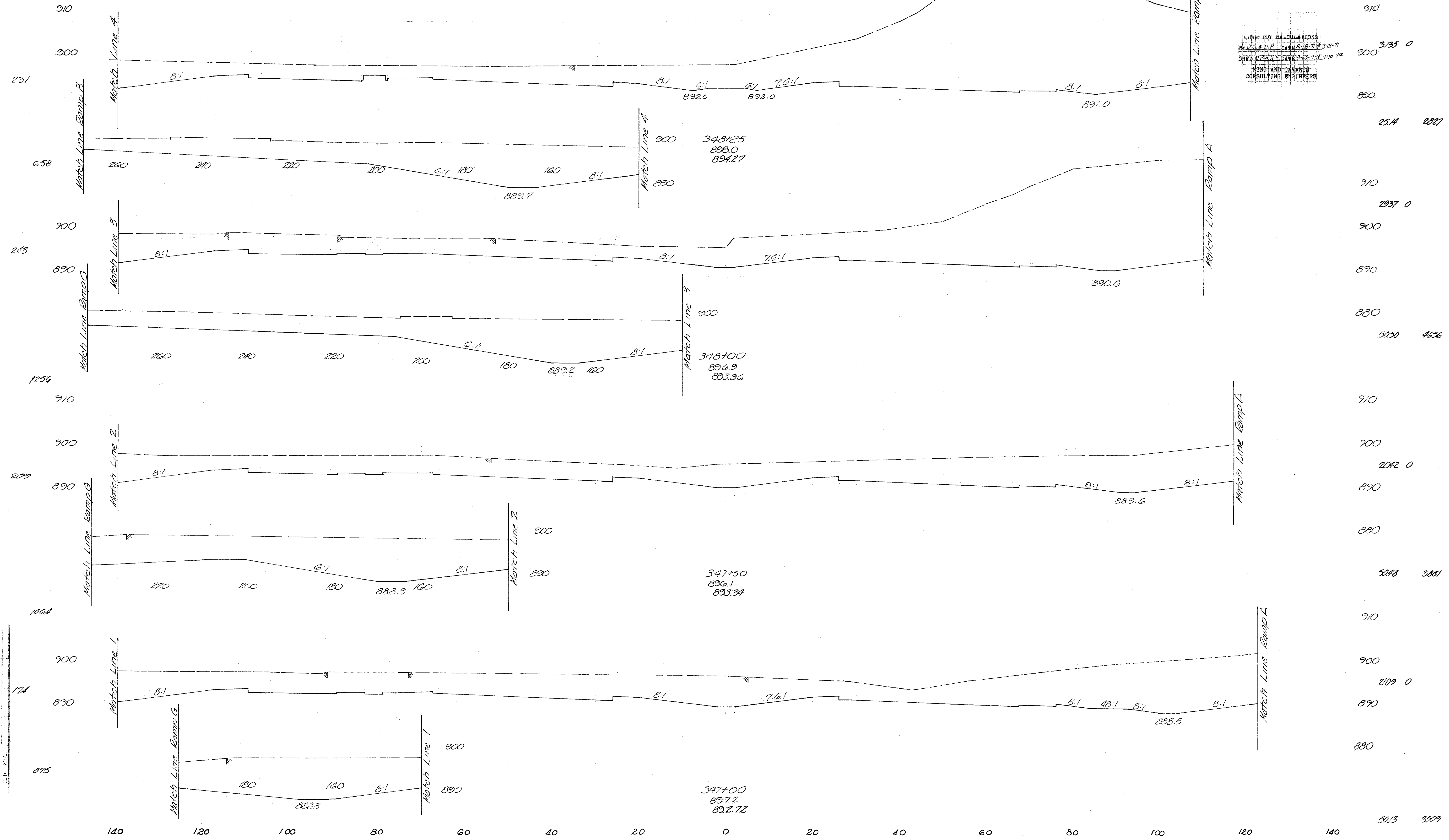
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STA 345+00 TO 346+50

DATE	
BY	
CHKD	
APPD	
DATE	

GRE-675 - 5.37
GREENE COUNTY

QUALITY CALCULATIONS
By D.C. # 108 Date 8-18-77 # 9-13-77
CHECKED DATE 2-13-77 # 1-10-72
KING AND GARRETT
CONSULTING ENGINEERS



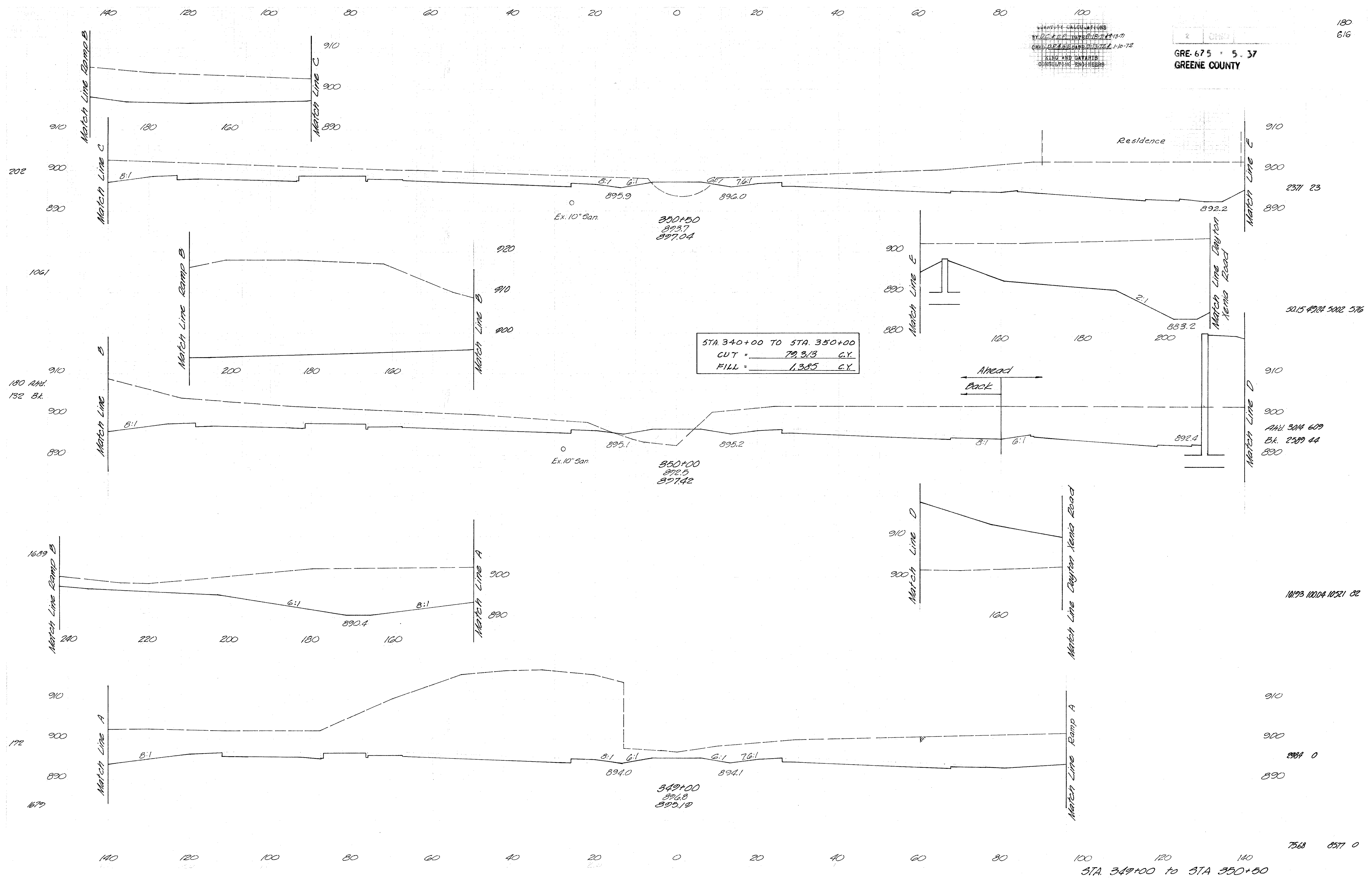
174
875
174
1064
209
1256
243
658
231

910
900
890
880
910
900
890
880
910
900
890
880
910
900
890
880
910
900
890
880
3/35 0
25.4 2827 0
2937 0
50.50 4656 0
2042 0
5048 3881 0
2109 0
5013 3529 0

QUANTITY CALCULATIONS
 BY G. E. + D. G. THRENTON 12-13-71
 CHECKED BY W. D. DAVIS 2-13-72 1-10-72
 KING AND GATARIS
 CONSULTING ENGINEERS

2 OND
 GRE-675 * 5.37
 GREENE COUNTY

180
 616



STA. 340+00 TO STA. 350+00
 CUT = 79,313 C.Y.
 FILL = 1,385 C.Y.

Ahead
 Back

STA. 349+00 TO STA. 350+00

10193 10104 10521 82

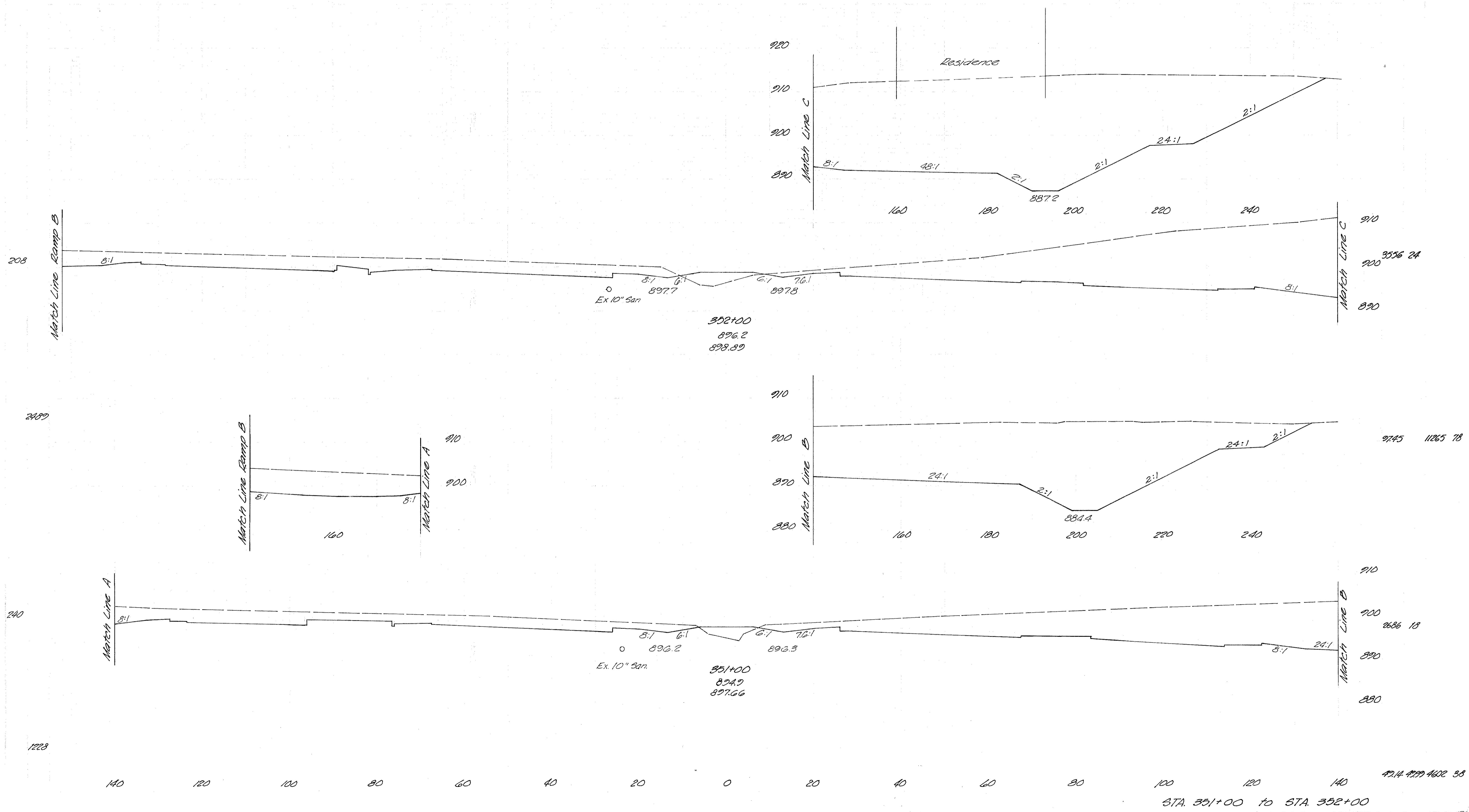
2889 0

7568 8577 0

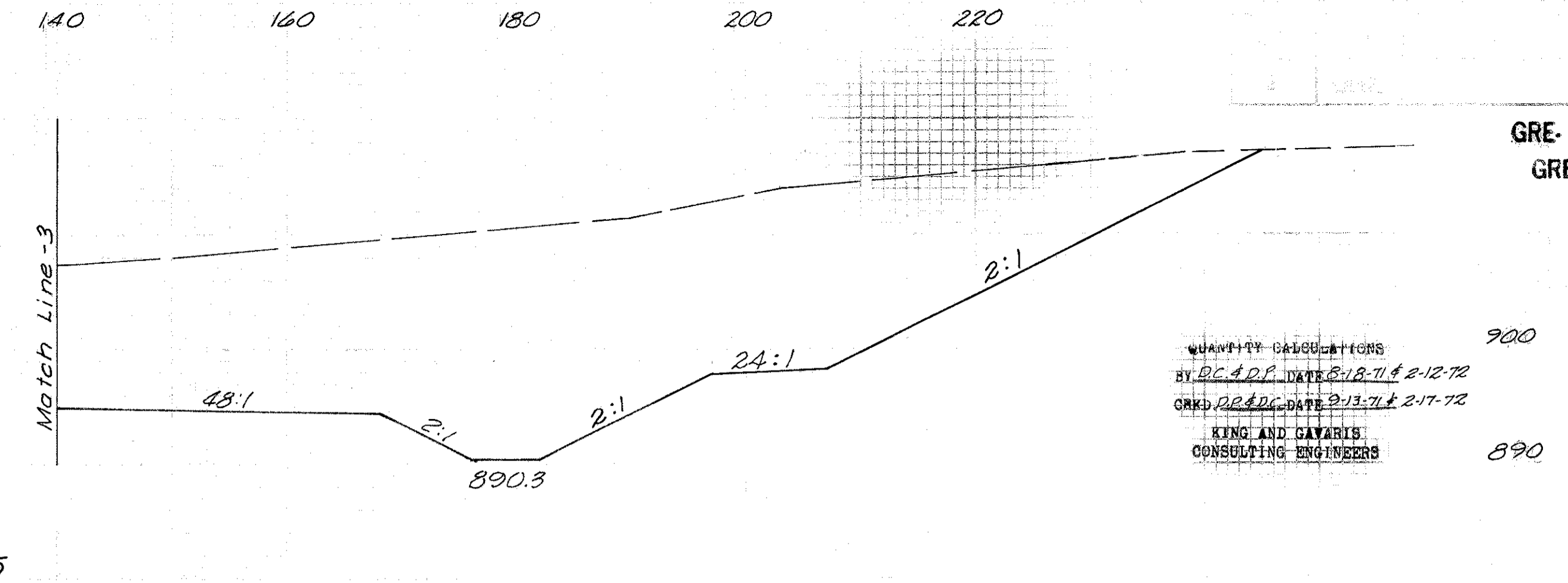
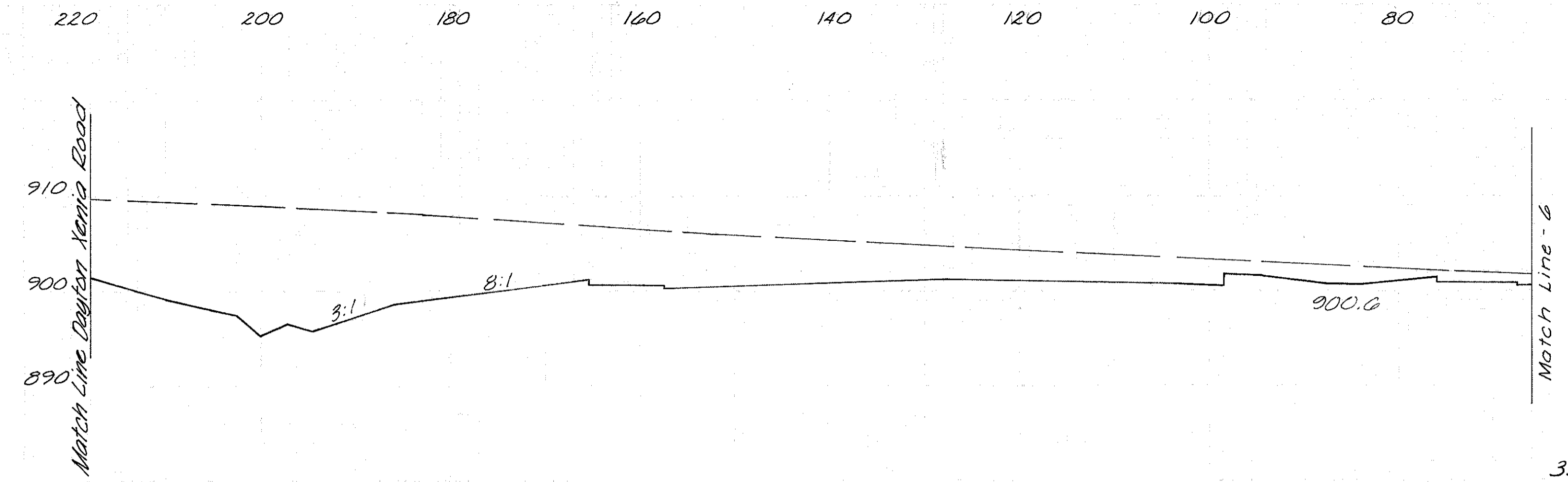
Ahd. 3014 609
 Bl. 2589 44
 890

5015 4924 5002 576

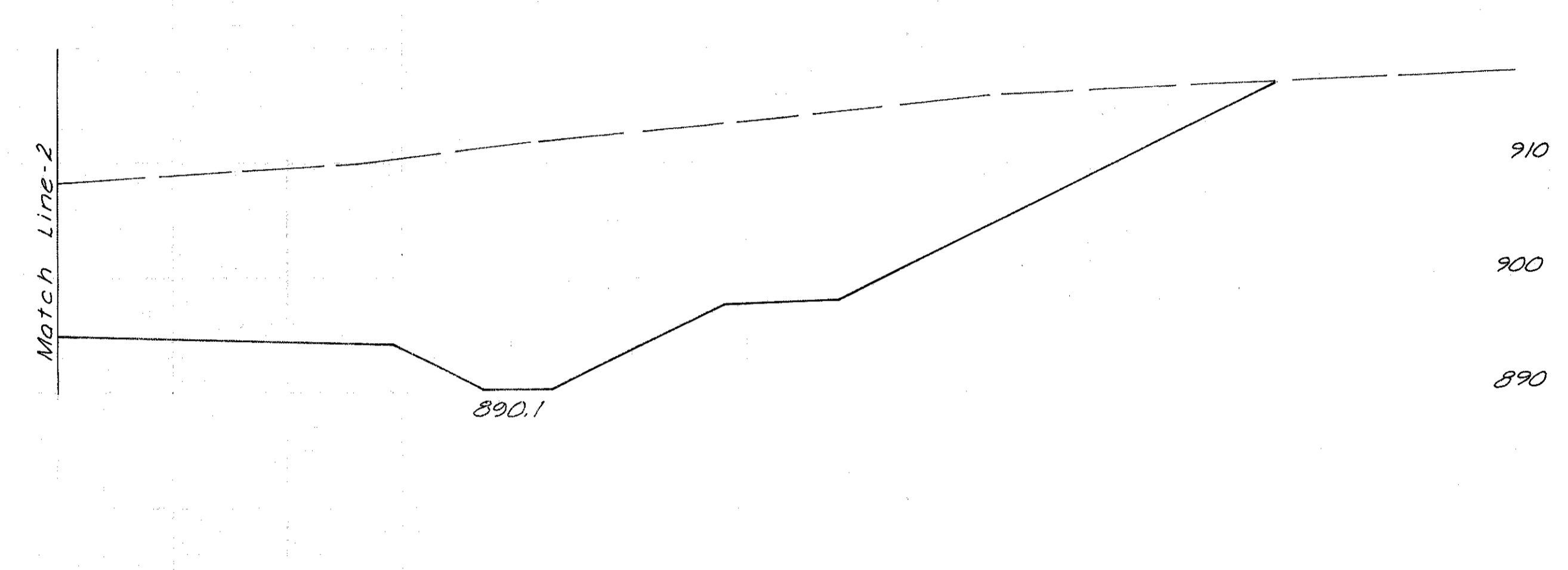
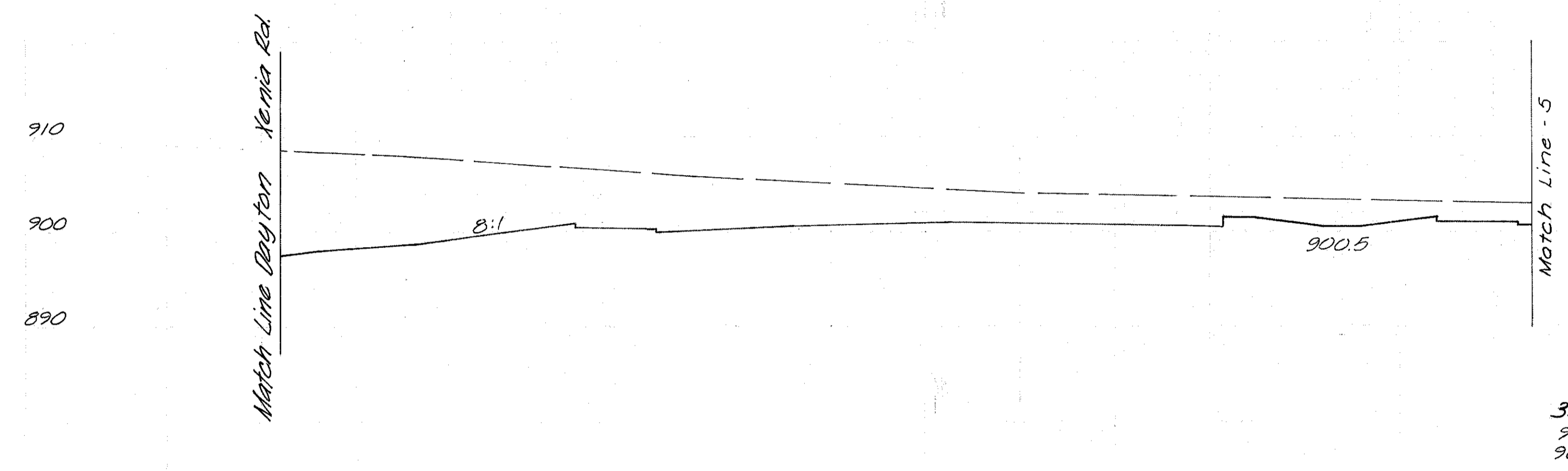
2371 23



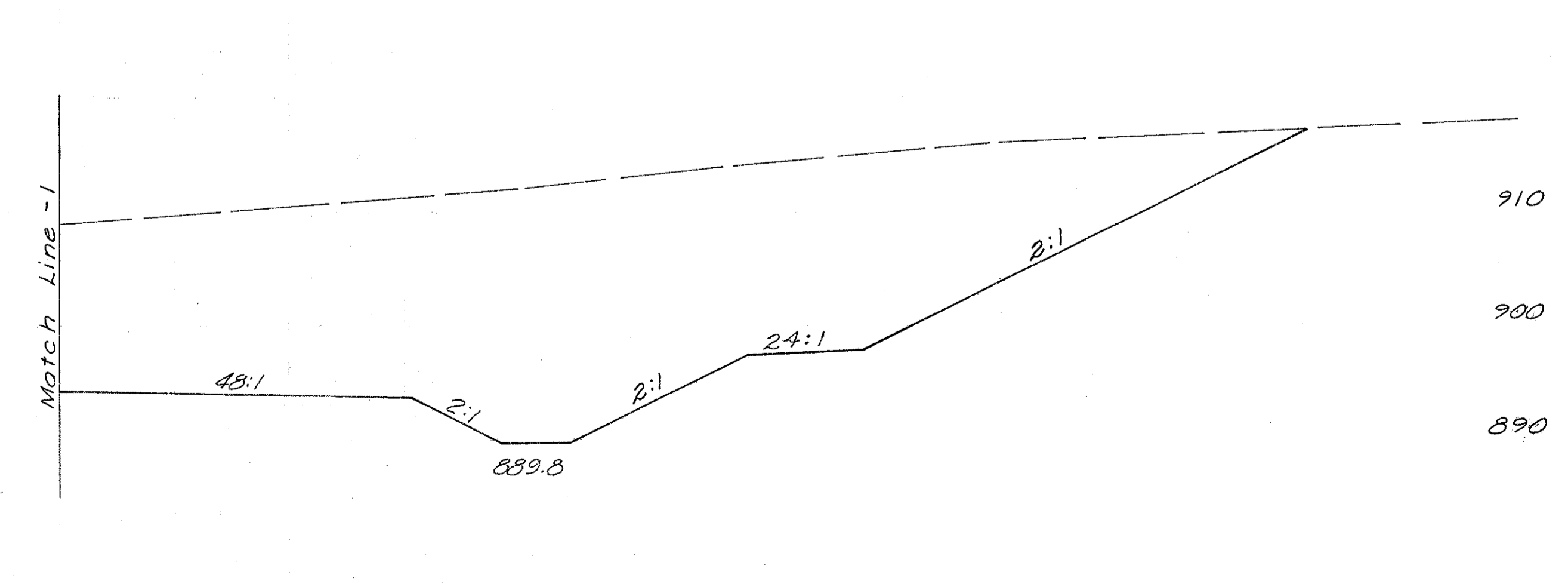
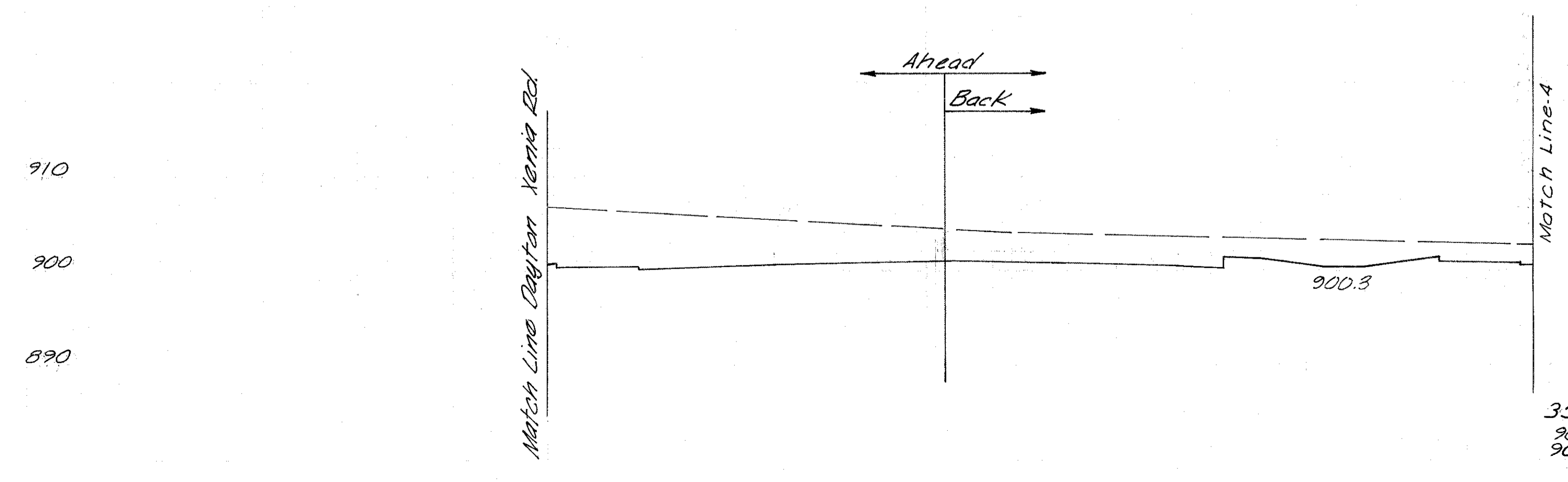
QUANTITY DELEGATIONS
BY B.C.A.D.P. DATE 8-18-71 & 8-12-72
ORD. D.B.D.C. DATE 2-13-71 & 2-17-72
KING AND GAYARIS
CONSULTING ENGINEERS



353+25
900.3
900.44



353+15
902.5
900.31



353+00
901.9
900.13

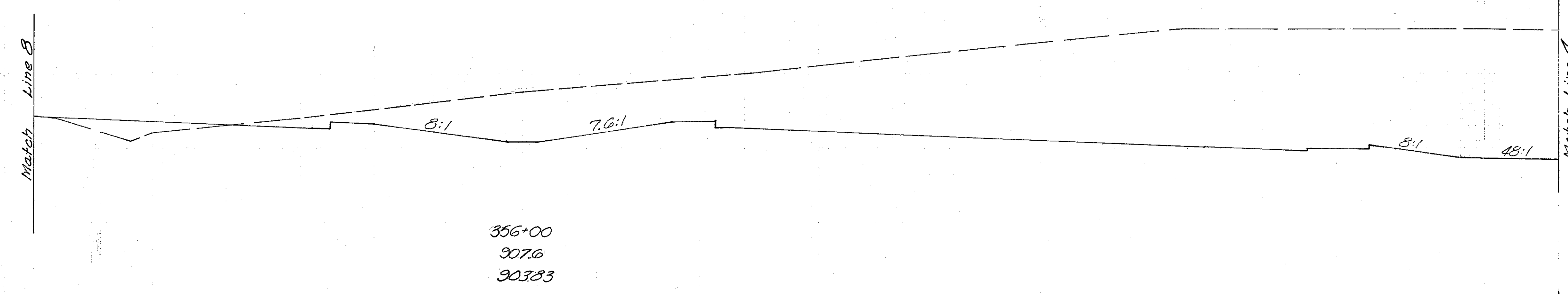
140 120 100 80 60 40 20 0 20 40 60 80 100

WARRANTY CALCULATIONS
BY D.C. & P. WARD 8/27/72
0466/024/20/5/17/72
KING AND SAVARIS
CONSULTING ENGINEERS

GRE-675 - 5.37
GREENE COUNTY

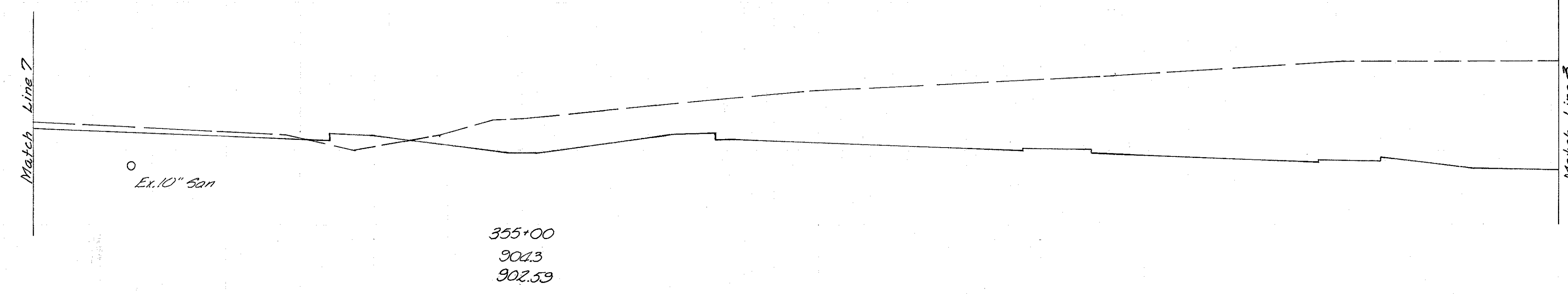
184
616

304
910
900
890
3089



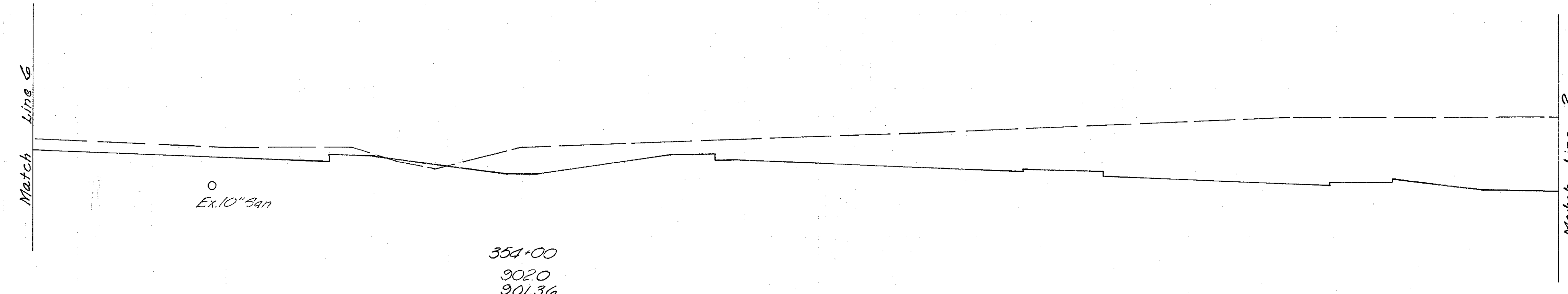
910
900
890
3461 22
28.14 100.80 1663 56

252
910
900
890
2944



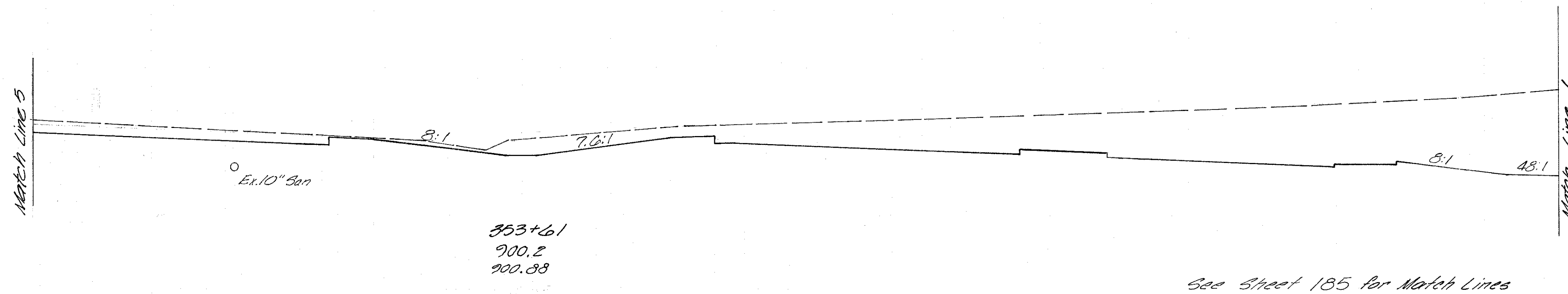
910
900
890
2996 8
9846 10023 10199 15

278
910
900
890
1226



910
900
890
2604 0
3853 3910 0

288 AM.
239 BK.
910
900
890
1002



910
900
890
3444 2875 0
BK. 2663 0
3549 3875 0

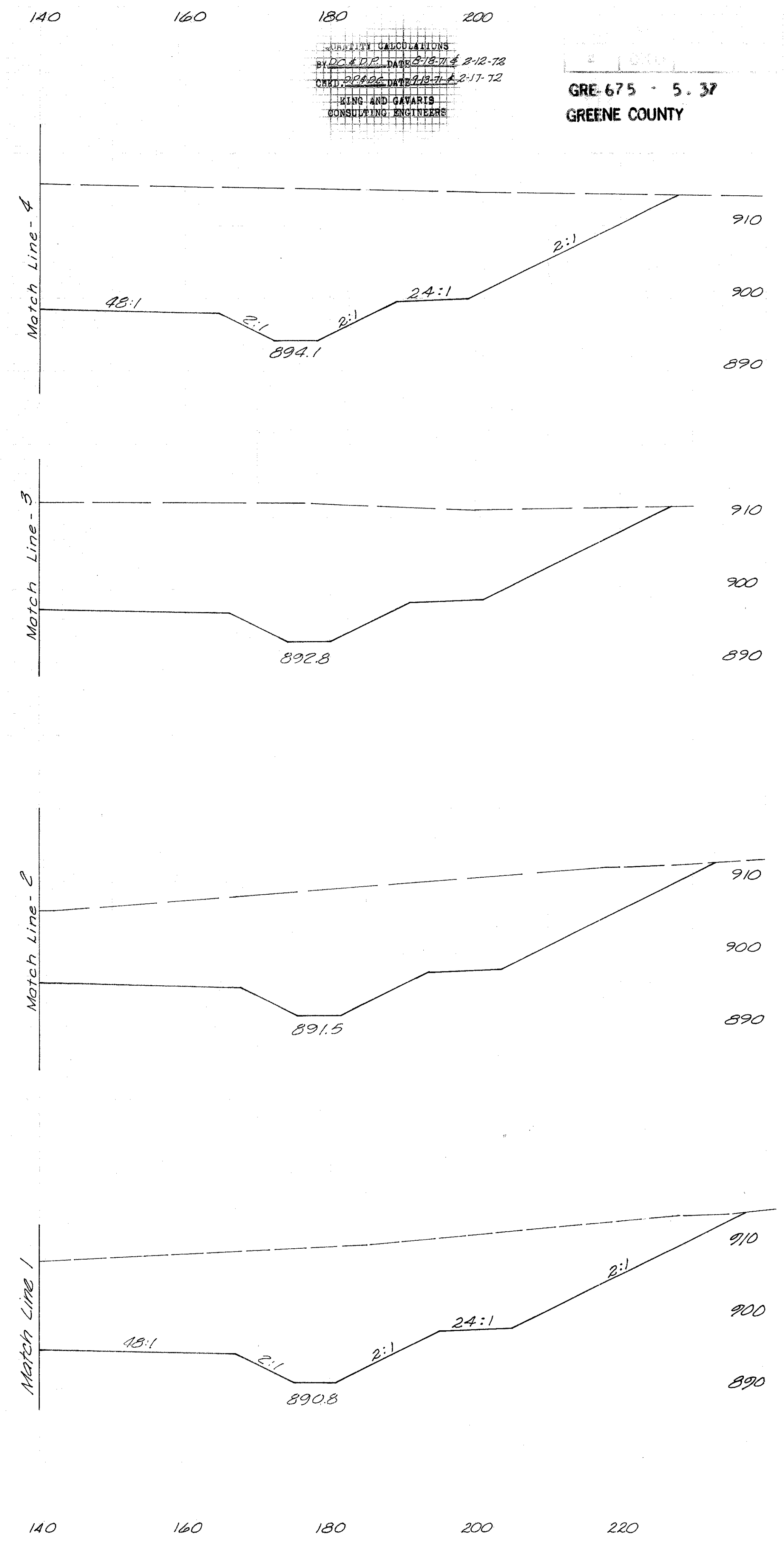
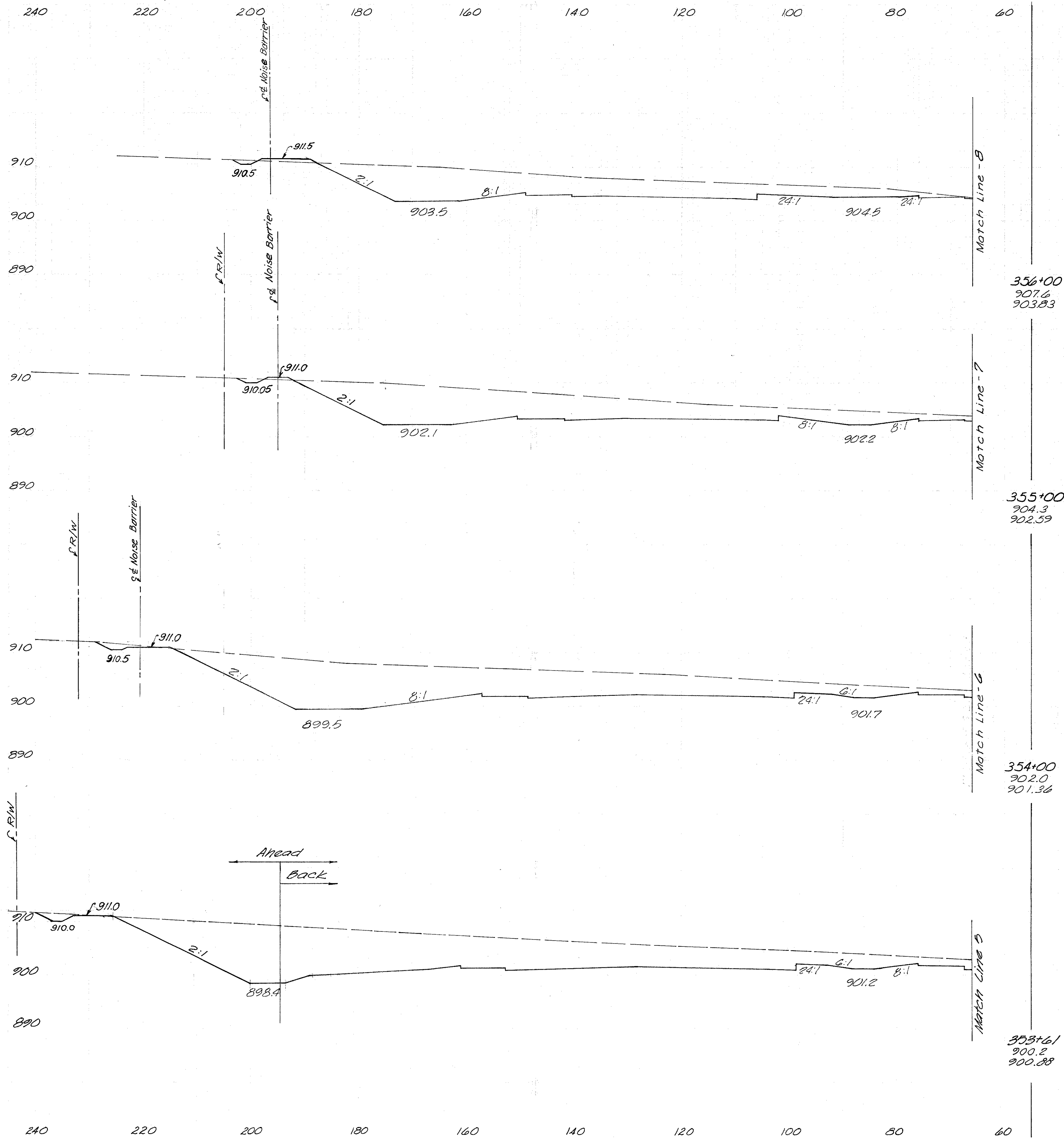
See Street 185 for Match Lines

STA. 353+61 TO STA. 356+00

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

SUBMITTAL CALCULATIONS
 BY D.C. & D.P. DATE 8/18/71 & 8-12-72
 CHECKED BY DATE 1/18/71 & 2-17-72
 KING AND GAVARIS
 CONSULTING ENGINEERS

GRE-675 - 5.37
 GREENE COUNTY



STA. 353+61 TO STA. 356+00 LEFT AND RIGHT

CURVE
NOTE BOOK
NO.

140 120 100 80 60 40 20 0 20 40 60 80 100

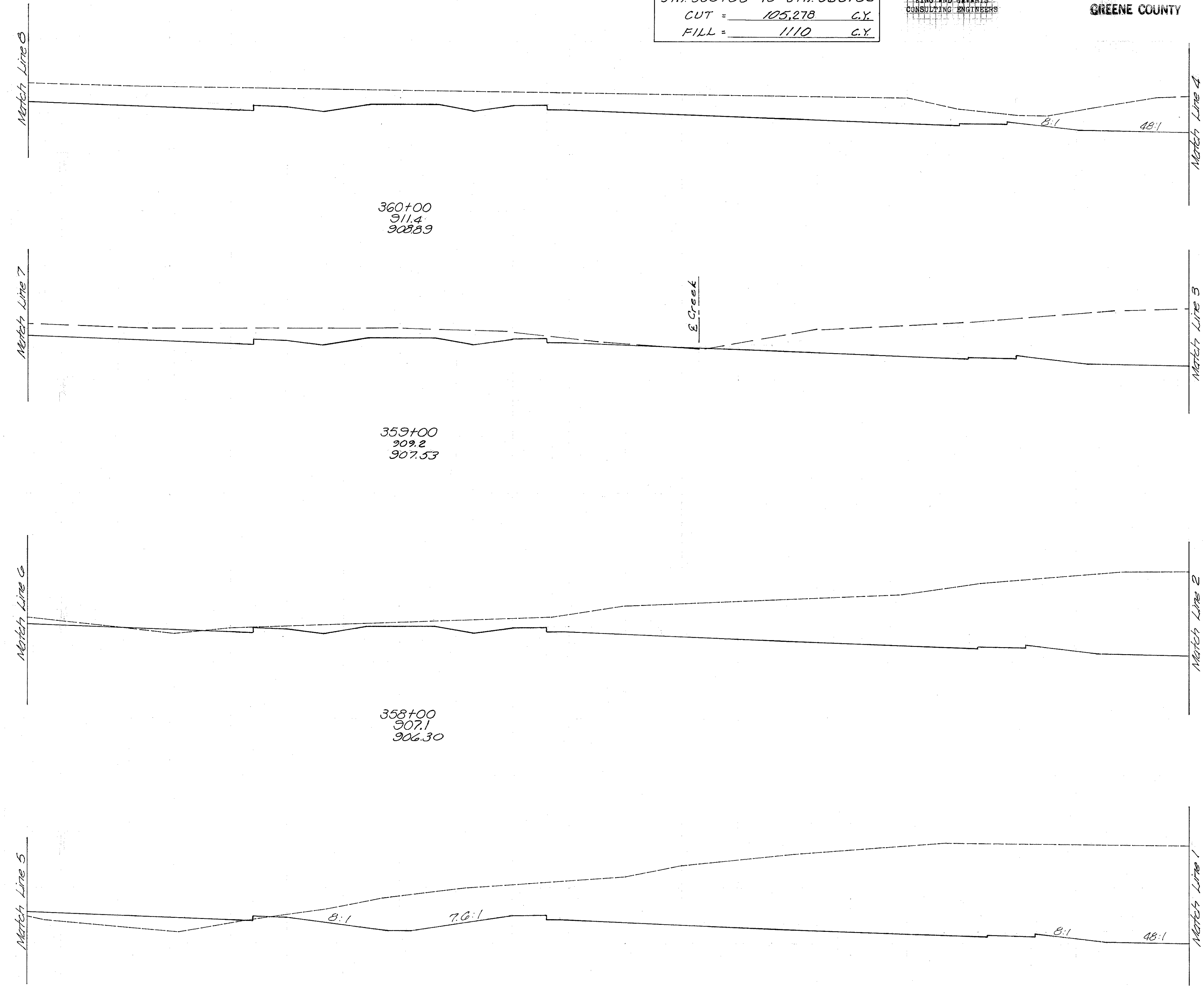
QUANTITY CALCULATIONS
BY D.C. F.O.P. DATE 2-18-72
CHKD. DATE 2-18-72
KINGLAND GAVARIS
CONSULTING ENGINEERS

GRE-675 - 5.37
GREENE COUNTY

186
616

STA. 350+00 TO STA. 360+00
CUT = 105,278 C.Y.
FILL = 1110 C.Y.

294
3200
292
3150
285
3233
297
3339

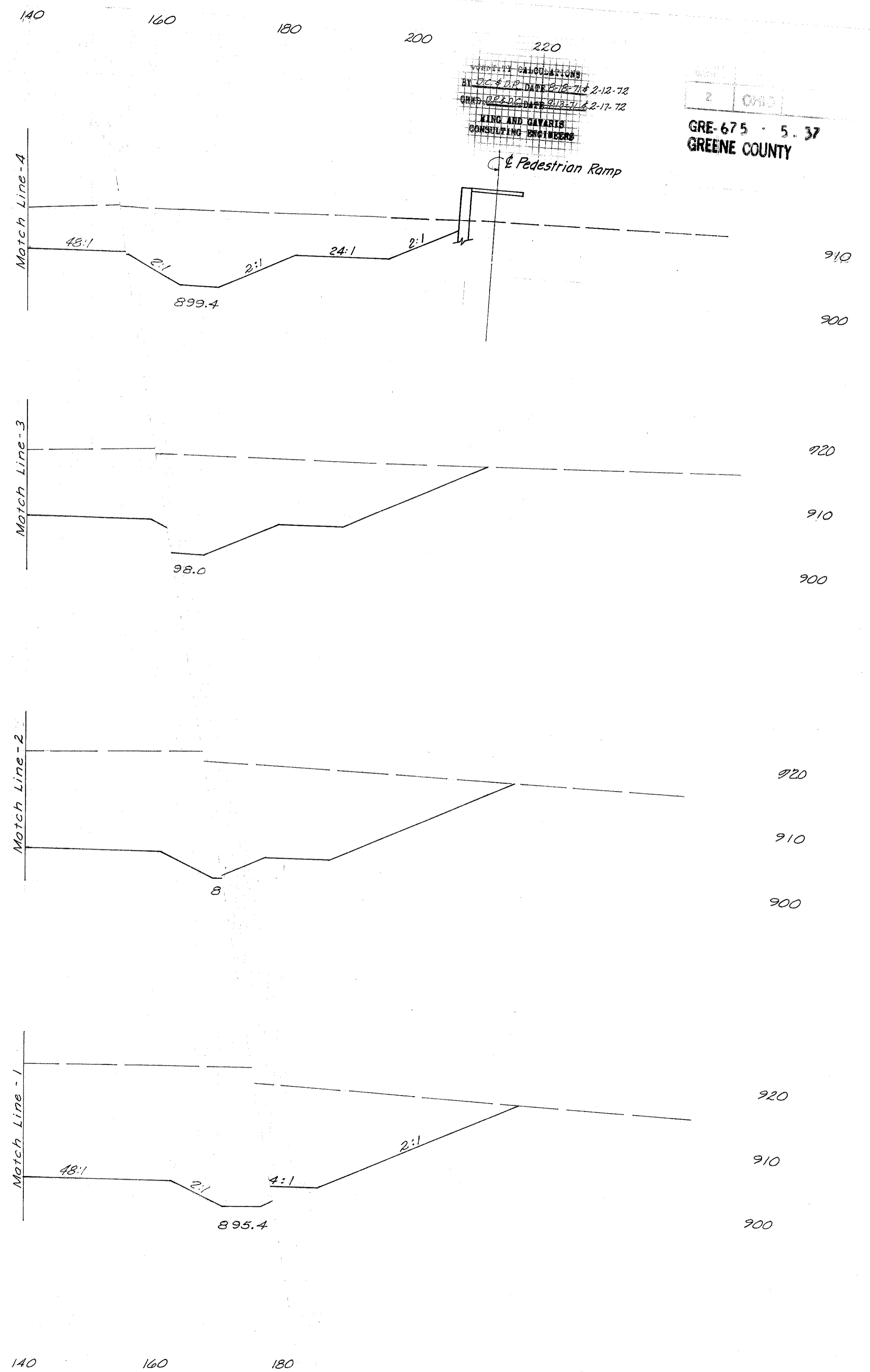
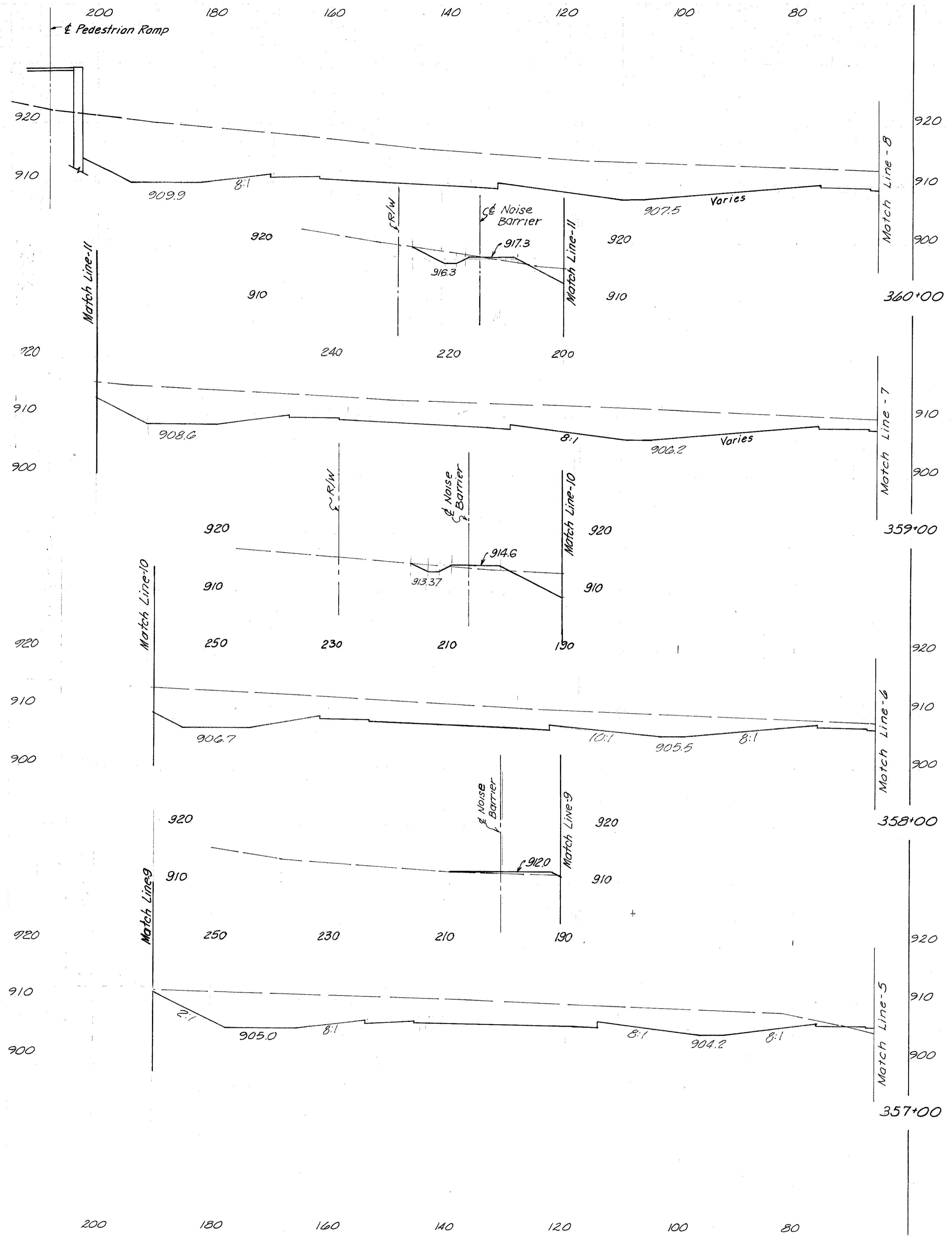


320
310
300
2064 0
320
310
300
2012 0
320
310
300
2653 5
320
310
300
3553 65
2863 9246 7520 0
2856 9991 8515 9
2844 10026 11279 131
2808 10109 12740 163

DATE	TIME	DATE	TIME
1/27/72	10:00	1/27/72	10:00
1/27/72	10:00	1/27/72	10:00
1/27/72	10:00	1/27/72	10:00
1/27/72	10:00	1/27/72	10:00
1/27/72	10:00	1/27/72	10:00
1/27/72	10:00	1/27/72	10:00
1/27/72	10:00	1/27/72	10:00
1/27/72	10:00	1/27/72	10:00
1/27/72	10:00	1/27/72	10:00
1/27/72	10:00	1/27/72	10:00

See Sheet 187 For Match Lines

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140
STA. 357+00 to STA. 360+00



PREPARED FOR: GREENE COUNTY
 BY: KING AND GAVARIS CONSULTING ENGINEERS
 DATE: 2-12-72
 CHECKED: 2-17-72

2 OHIO
 GRE-675-5.37
 GREENE COUNTY

187
616

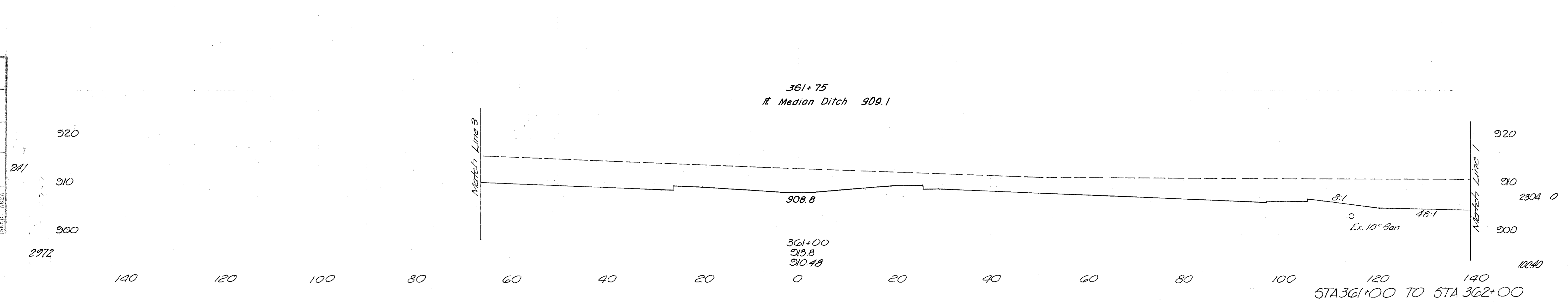
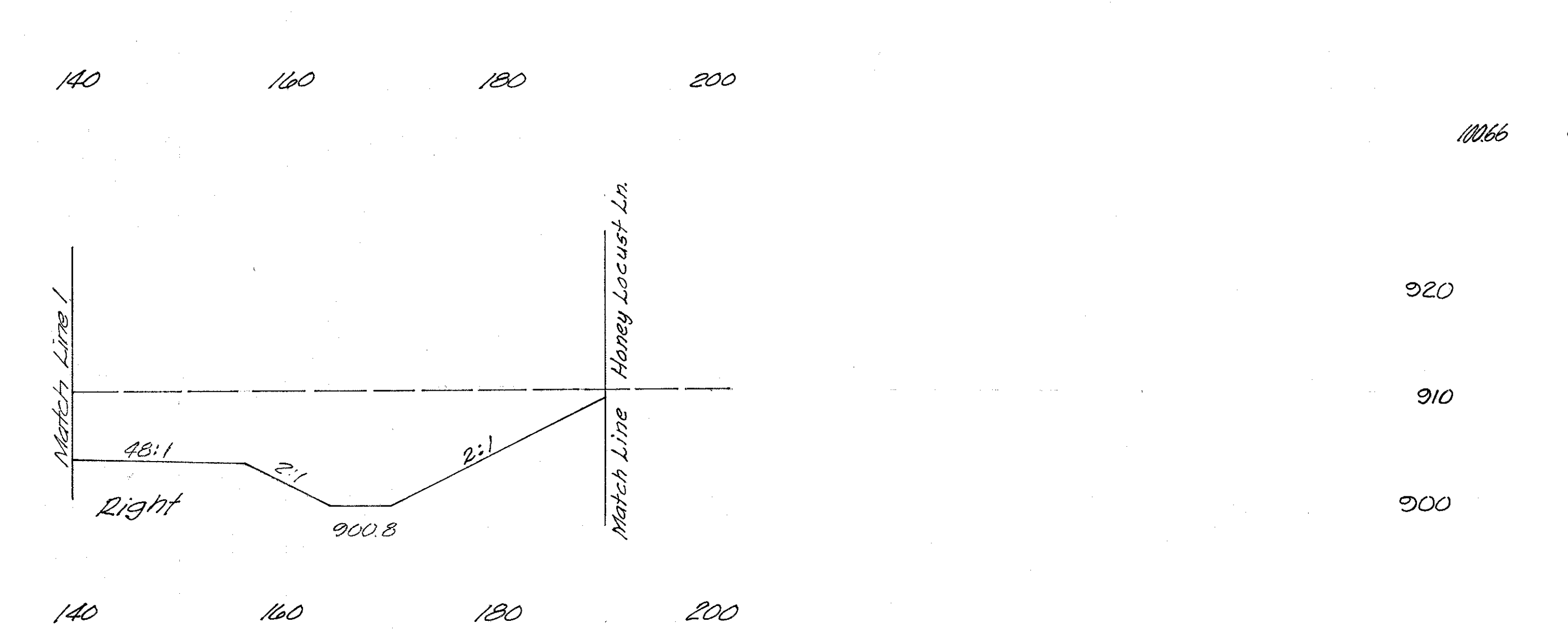
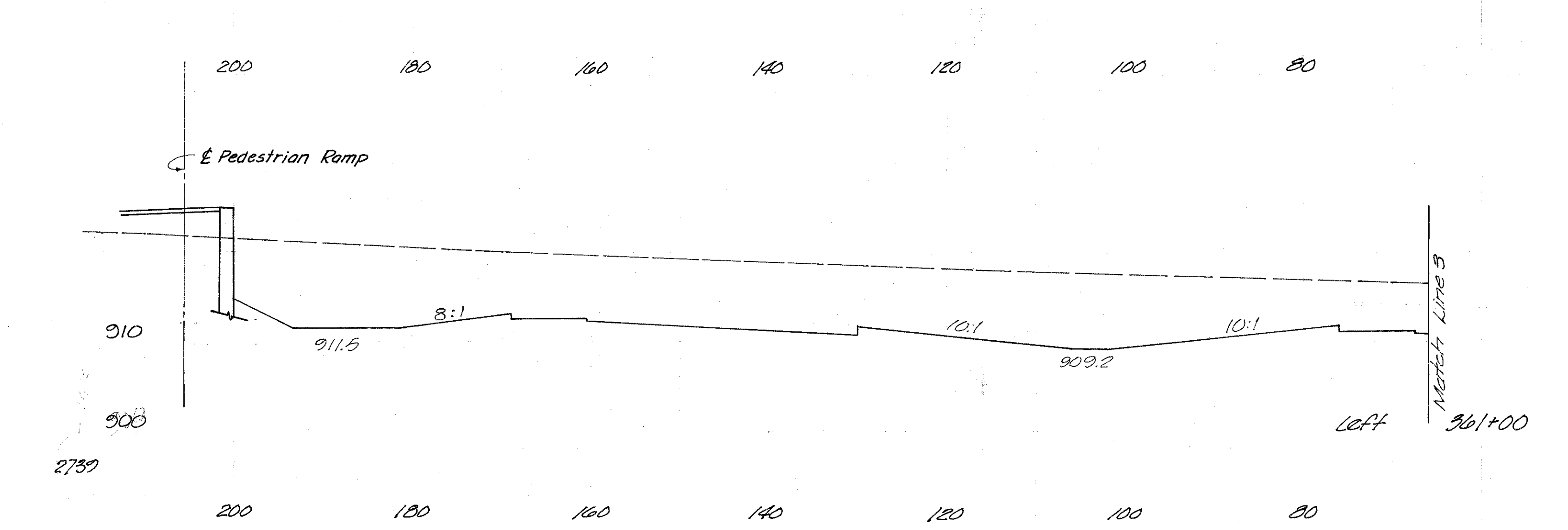
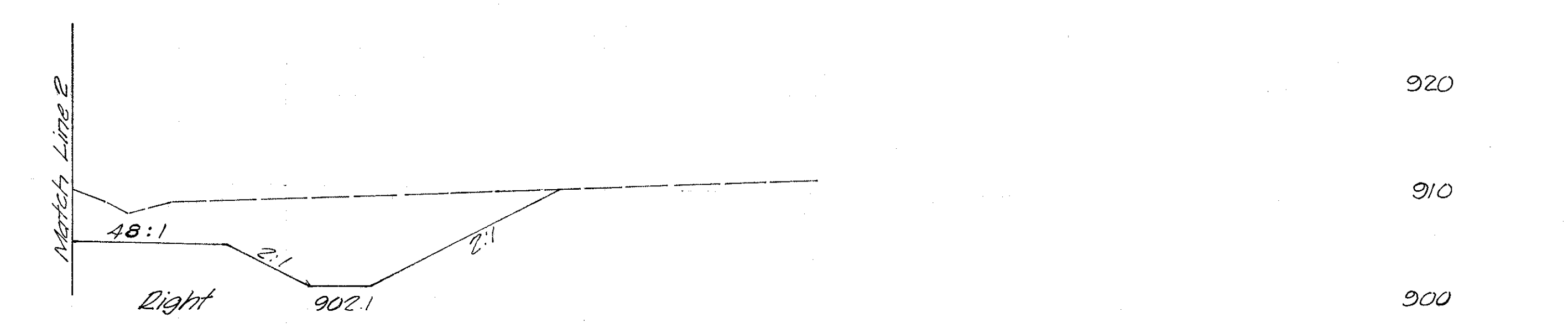
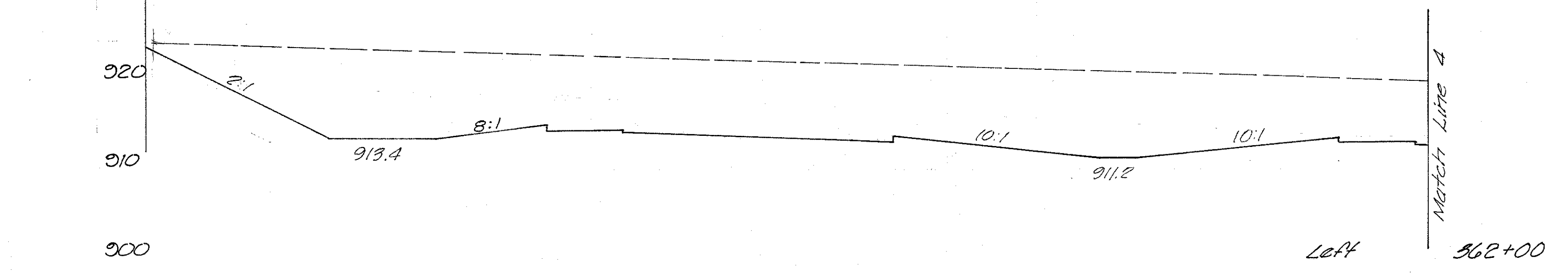
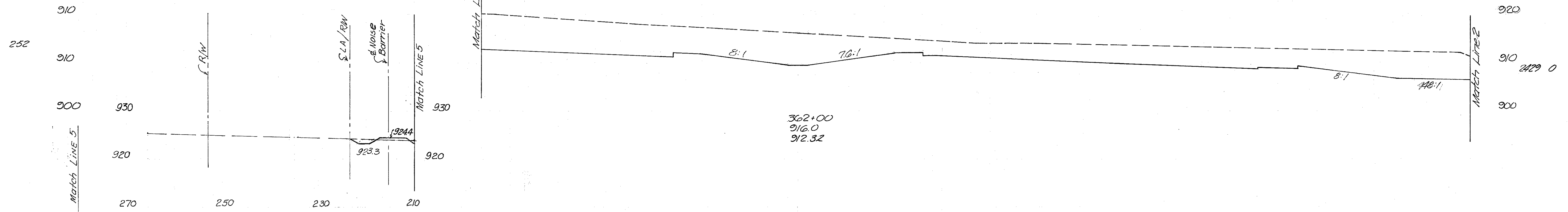
SURVEY
 NOTE BOOK

140 120 100 80 60 40 20 0 20 40 60 80 100

UNIVERSITY CALCULATIONS
BY B.C. & D.C. DATE 8-18-72
CHECKED BY D.C. DATE 11-17-72
KING AND GAVARIS
CONSULTING ENGINEERS

GRE-675 - 5.37
GREENE COUNTY

188
616



NO.	DATE	BY	DATE
1	5/13/70	BARBARA	
2	5/13/70	BARBARA	
3	5/13/70	BARBARA	
4	5/13/70	BARBARA	
5	5/13/70	BARBARA	
6	5/13/70	BARBARA	
7	5/13/70	BARBARA	
8	5/13/70	BARBARA	
9	5/13/70	BARBARA	
10	5/13/70	BARBARA	

241
2972

1066 8823 0
10040 8121 0

140 120 100 80

60 40 20 0 20 40 60

80

100

189
616

QUANTITY CALCULATIONS
BY D.C. & D.R. DATE 8-18-74 2-12-78
CHECKED DATE 2-13-78 2-17-78 920
KING AND GAVARIS
CONSULTING ENGINEERS

GRE 675 5.37
GREENE COUNTY

910

83 1639

307 5248

920

83 1175

910

311 3502

920

193 716

910

Additional Excavation &
Embankment For Unsuitable Material

533 533

2276 2944 1305 1705

920

512 210

910

10237 9851 2909 890

920

1053 4

910

5235 5151 2976 4

920

2037 0

4836 3672 0

920

2063 0

910

10091 8325 0

See Sheet 190 for Match Lines

STA. 363+00 TO STA. 368+00

257 920
910
2789
245 920
910
2667
235 920
910
2589
231 920
910
2600
237 920
910
1392
245 920
1315
248 920
910
2778

Match Line 12
Match Line 13
Match Line 12
Match Line 11
Match Line 10
Match Line 9
Match Line 8
Match Line 7

Match Line 7
Match Line 6
Match Line 5
Match Line 4
Match Line 3
Match Line 2
Match Line 1

368+00
917.5
925.40

367+00
917.6
923.20

366+00
917.0
921.00

365+00
916.6
918.80

364+00
916.0
916.60

363+48
917.4
915.50

363+00
918.0
914.40

From Sta. 365+75+ to Sta. 366+25+
Remove 4' of Unsuitable Material

E. Creek

8:1

8:1

8:1

7.9:1

8:1

7.8:1

8:1

7.7:1

8:1

7.6:1

8:1

7.6:1

DATE	7-2-78
BY	D.C. & D.R.
CHECKED	D.C. & D.R.
SCALE	AS SHOWN
AREA	
VOLUME	
WEIGHT	
PERCENT	
TOTAL	

140 120 100 80

60 40 20 0 20 40 60

80

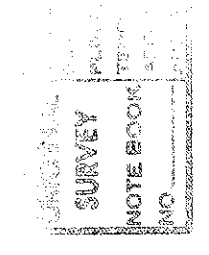
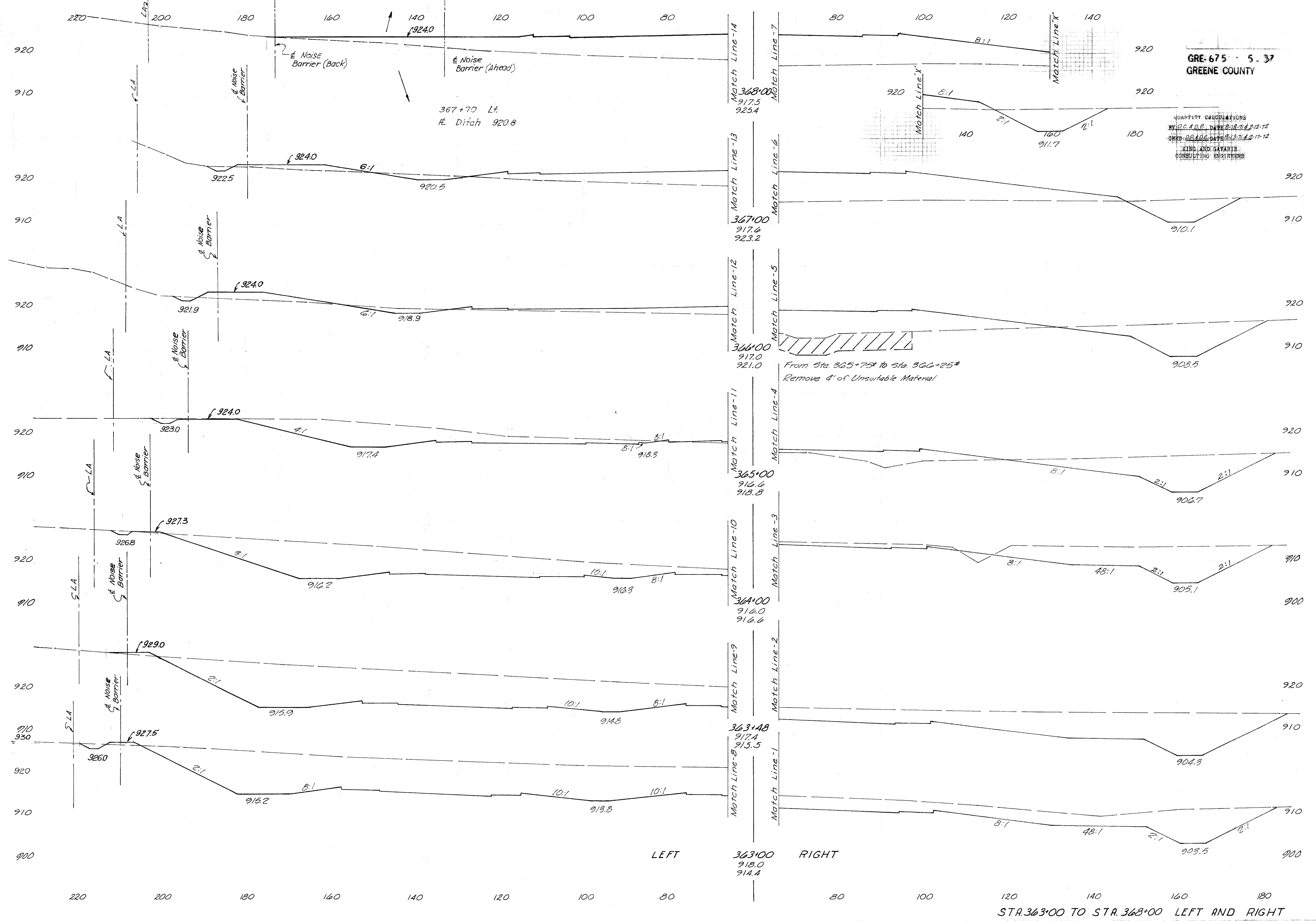
100

120

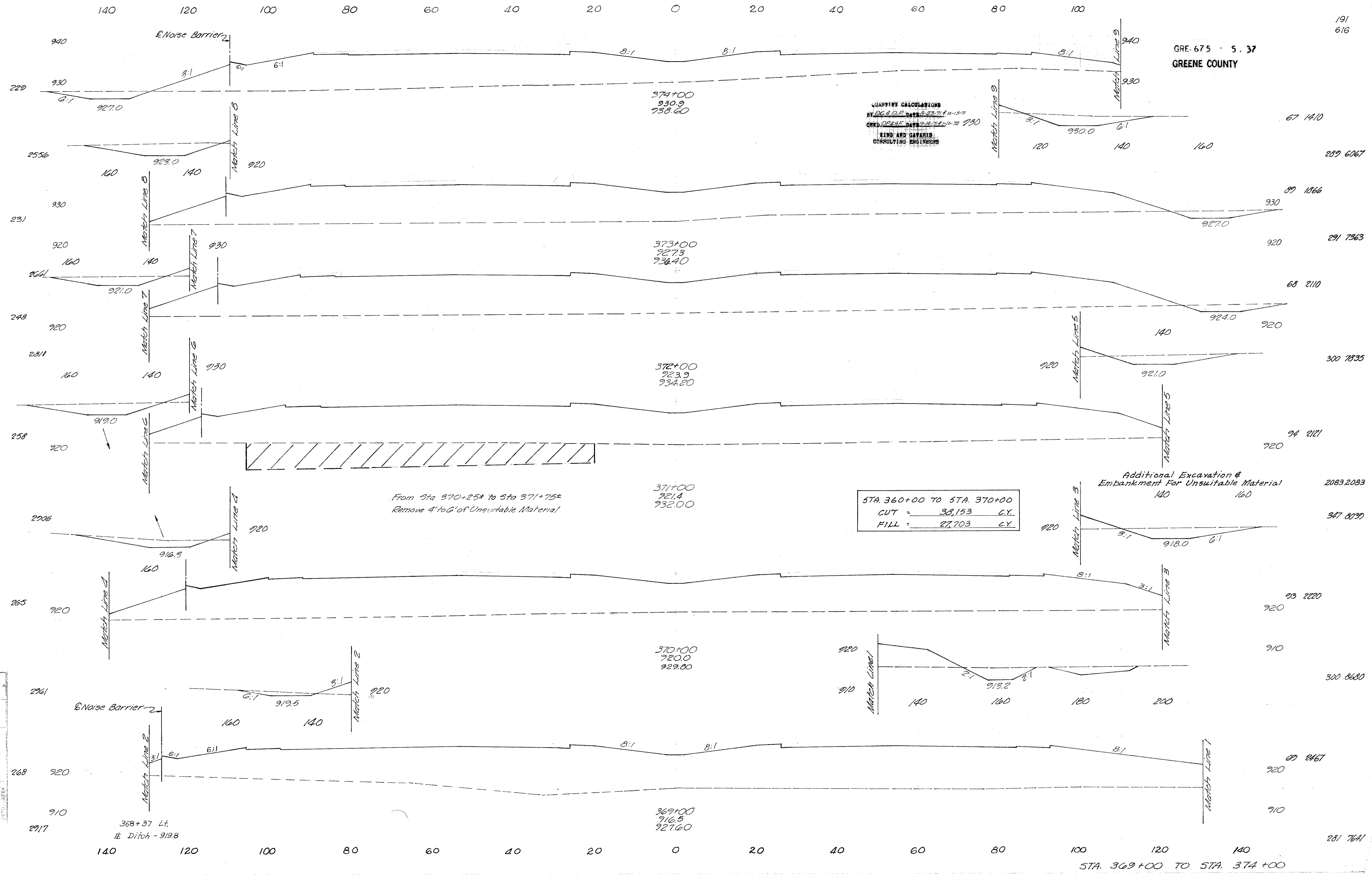
140

GRE-675 - 5.37
GREENE COUNTY

QUANTITY CALCULATIONS
BY D.C.A.D. DATE 8-18-78 2-12-78
ORIS - 20460 DATE 9-13-77 2-17-78
KING AND GAVARIS
CONSULTING ENGINEERS



GRE-675 5.37
GREENE COUNTY



QUANTITY CALCULATIONS
 BY DC & DP DATE 3-23-71 #10-15-71
 CHECKED DATE 3-24-71 #10-72 230
 KING AND GAVARIS
 CONSULTING ENGINEERS

5TA. 360+00 TO 5TA. 370+00
 CUT = 38,153 C.Y.
 FILL = 27,703 C.Y.

From Sta 370+25+ to Sta 371+75+
 Remove 4' to 6' of Unsuitable Material

Additional Excavation &
 Embankment For Unsuitable Material
 140 160

DATE	1968
BY	DC & DP
CHECKED	3-24-71
SCALE	AS SHOWN
PROJECT	GRE-675
SHEET NO.	5.37
TOTAL SHEETS	5

368+37 Lt.
 # Ditch - 919.8

STA. 369+00 TO STA. 374+00

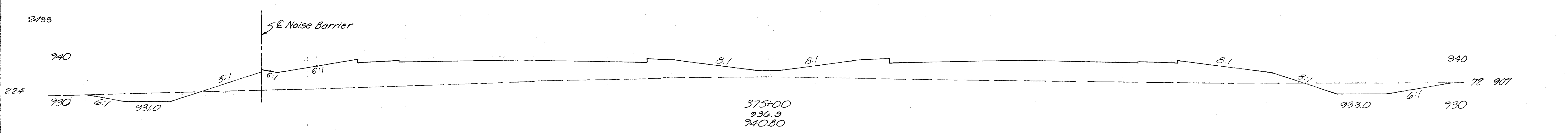
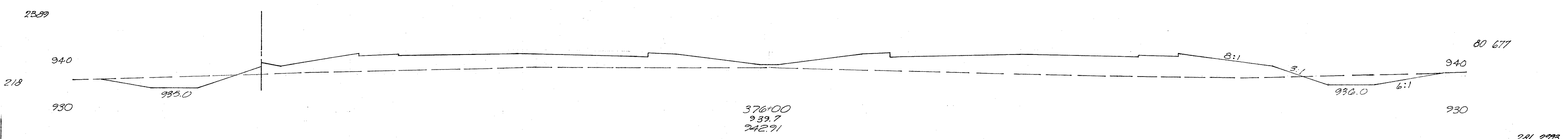
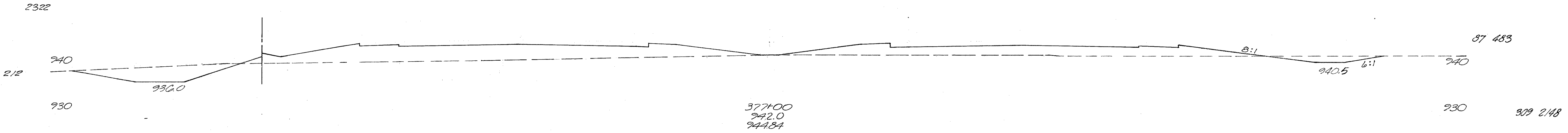
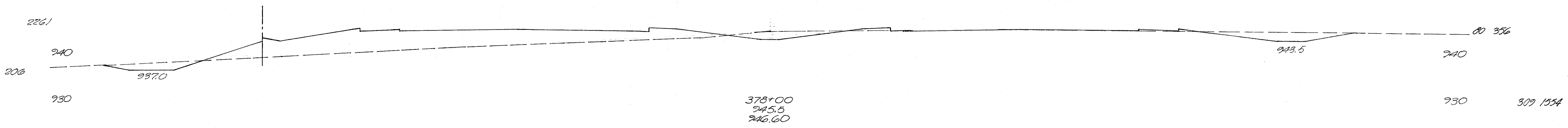
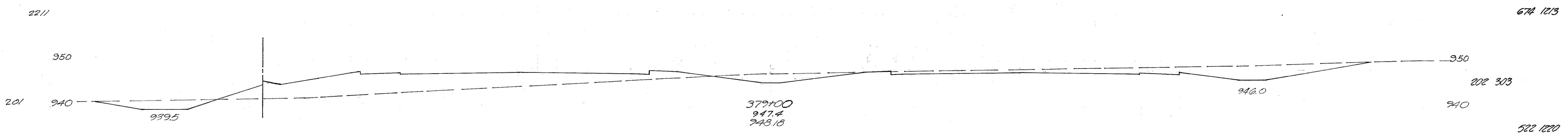
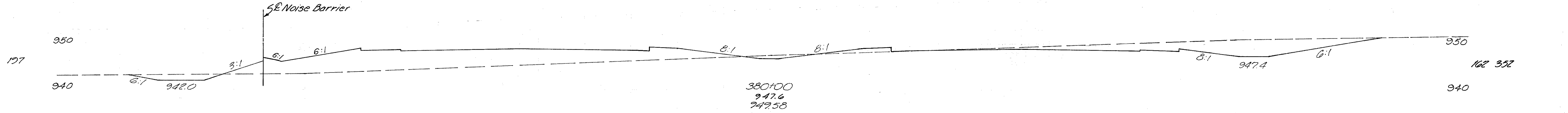
140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITY CALCULATIONS
BY D.C. & D.P. DATE 2-23-71 10-15-71
CHKD. D.P. & H.E. DATE 3-11-71 1-10-72
H. KING AND G. GAVRIS
CONSULTING ENGINEERS

192
6.16

STA. 370+00 TO STA. 380+00
CUT = 5662 C.Y.
FILL = 44746 C.Y.

GRE-675 - 5.37
GREENE COUNTY



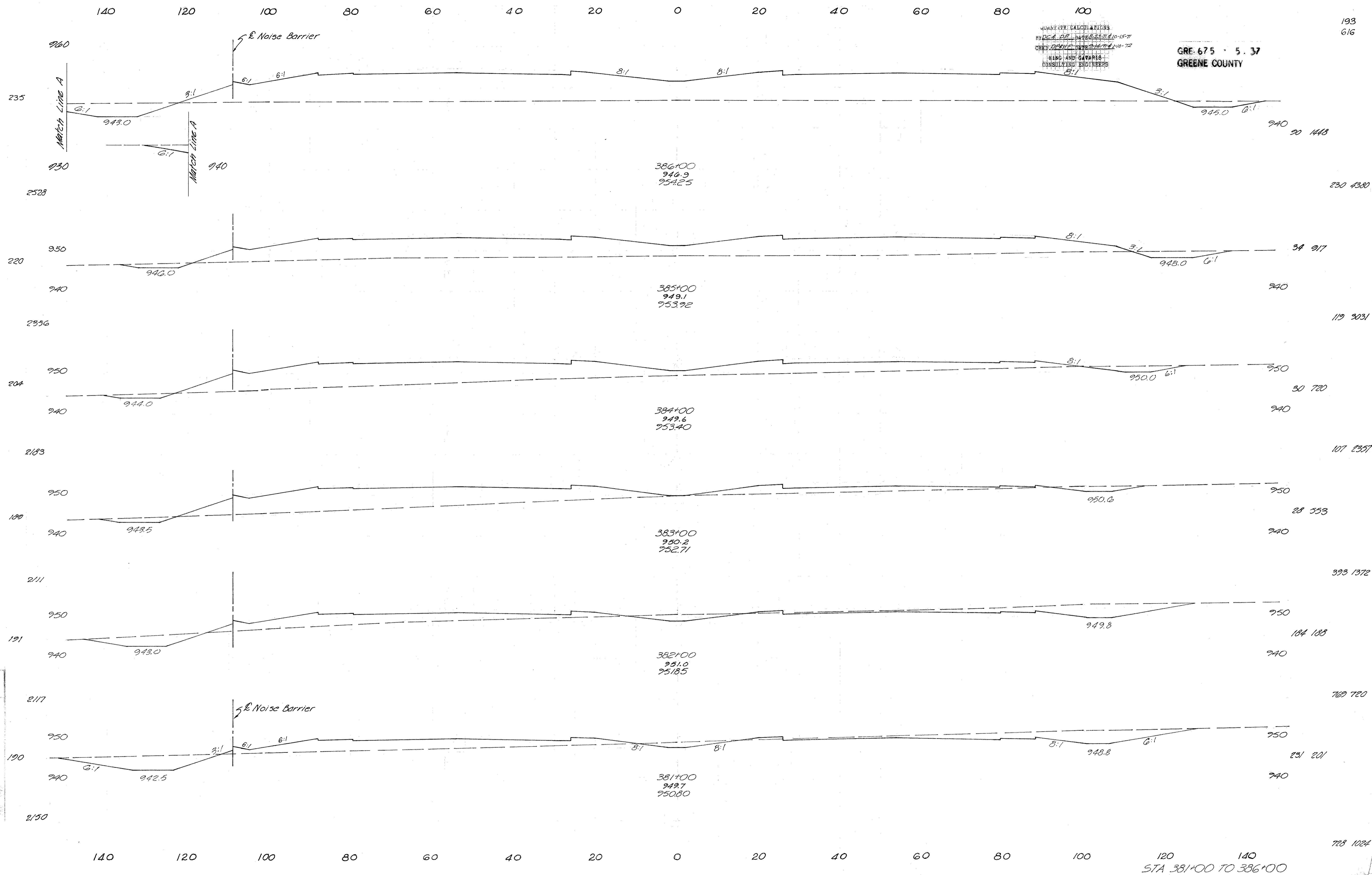
140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

STA. 375+00 TO STA. 380+00

DATE 5/9/69
BY D.P.C.
CHECKED BY H.E.
DATE 1-10-72

QUANTITY CALCULATIONS
BY DCA, DR. DATE 8-23-77 10-15-77
CHKD BY DATE 8-24-77 1-16-78
KING AND GATARIUS
CONSULTING ENGINEERS

GRE 675 · 5.37
GREENE COUNTY



NO.	DATE	REVISION
1	8/23/77	PREPARED
2	1/16/78	CHECKED

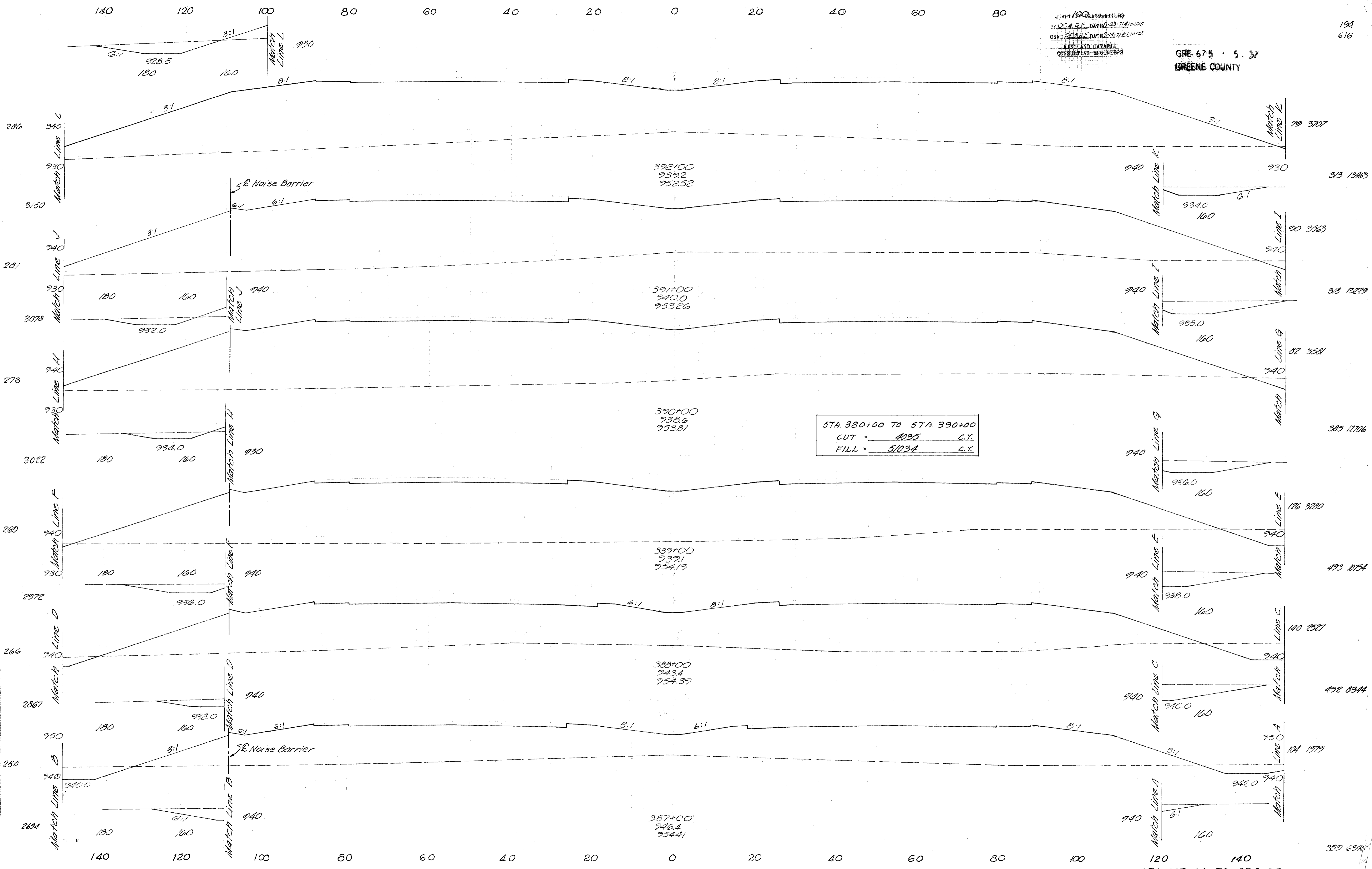
STA 381+00 TO 386+00

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

QUANTITY CALCULATIONS
BY: D.C. DP DATE: 23-7-10-1971
CHKD: D.C. DP DATE: 24-7-10-72
KING AND GAYARIS
CONSULTING ENGINEERS

GRE-675 - 5.37
GREENE COUNTY

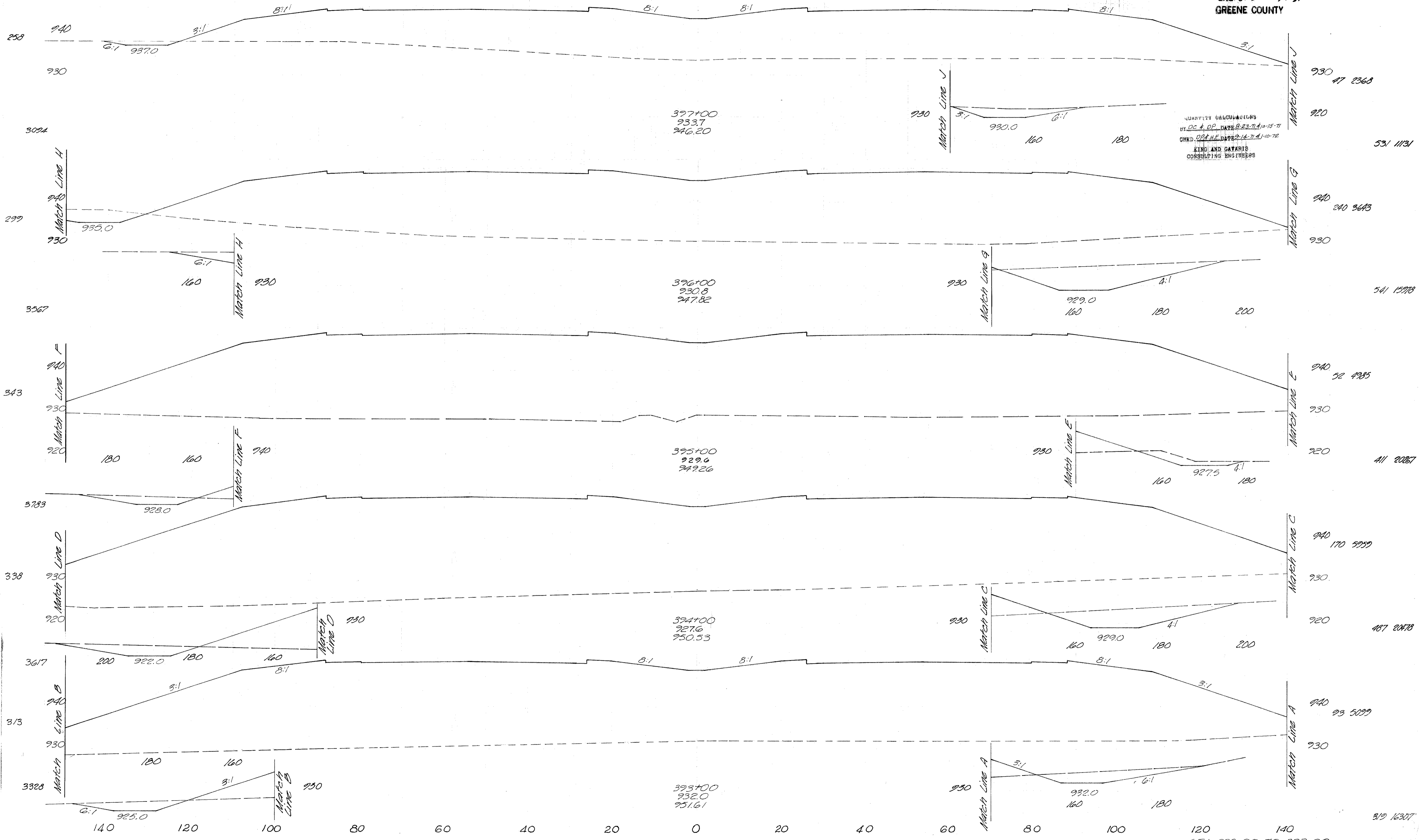
194
616



STA 387+00 TO 392+00

359 6346

GRE-675 - 5.37
GREENE COUNTY



531 1131

541 15778

52 4985

411 20267

170 5959

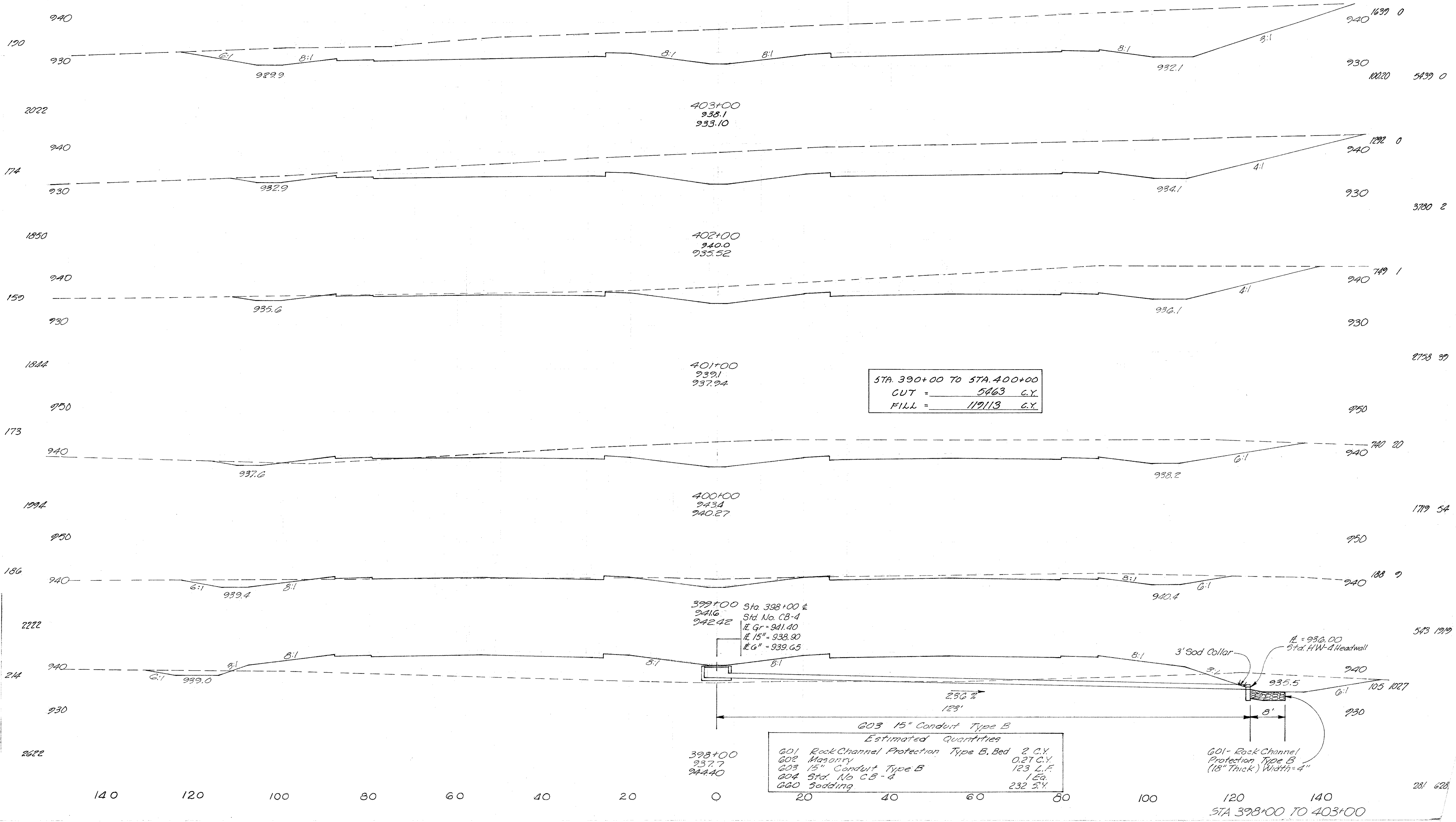
487 28778

23 5099

319 16307

PROPOSED CALCULATIONS
 BY: DCA DP DATE: 8-23-71 10-15-71
 CHKD: DPL/MS DATE: 9-14-71 1-10-72
 KING AND DATARIS
 CONSULTING ENGINEERS
 Revised: I.E.H. 1/79

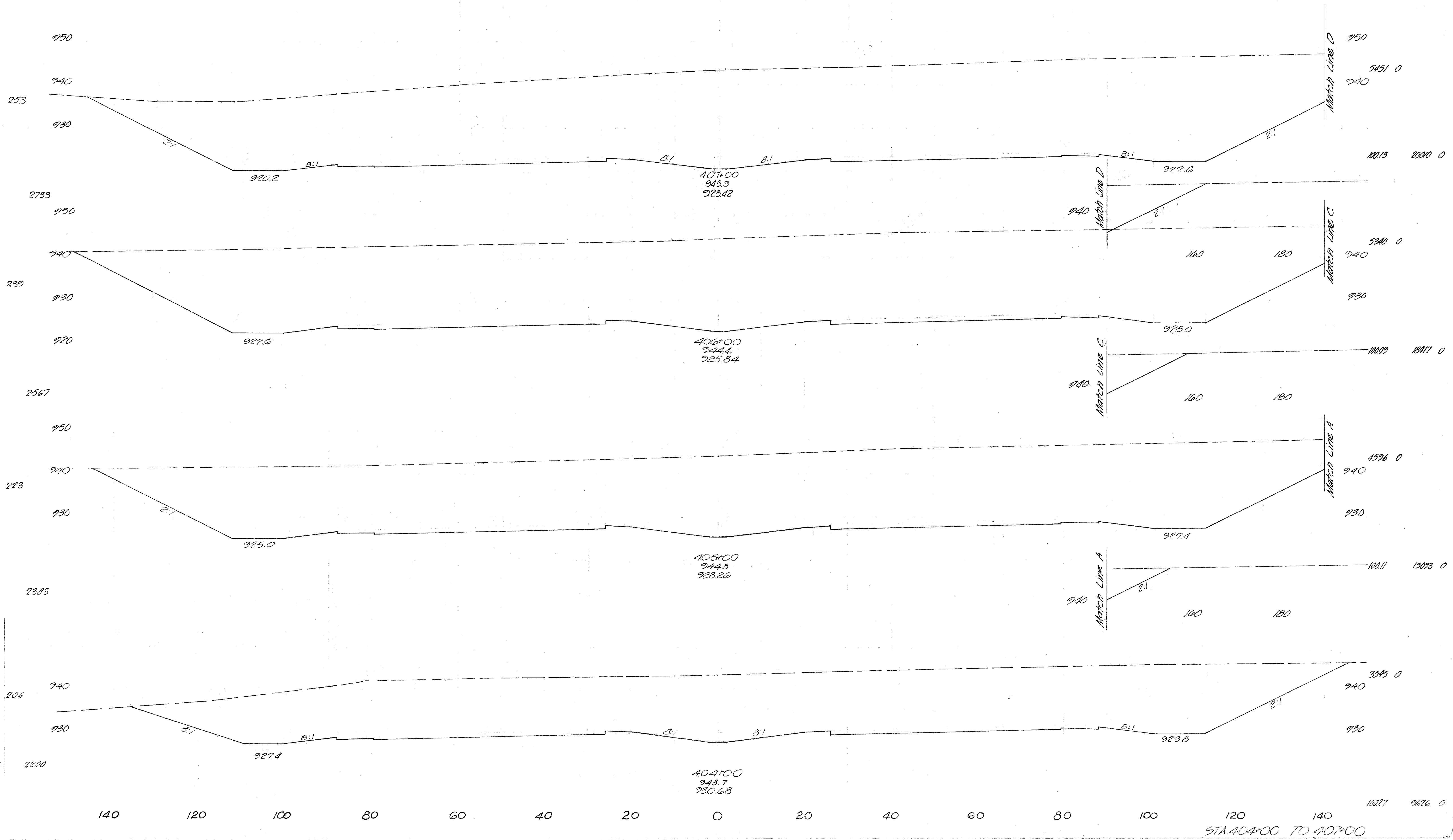
GRE: 675 - 5.37
 GREENE COUNTY



R.S. 1967

QUANTITY CALCULATIONS
BY D.C. & D.P. DATE 8-23-71 10-15-71
CHECKED BY J.F. DATE 9-14-71 1-10-72
KING AND GARNER
CONSULTING ENGINEERS

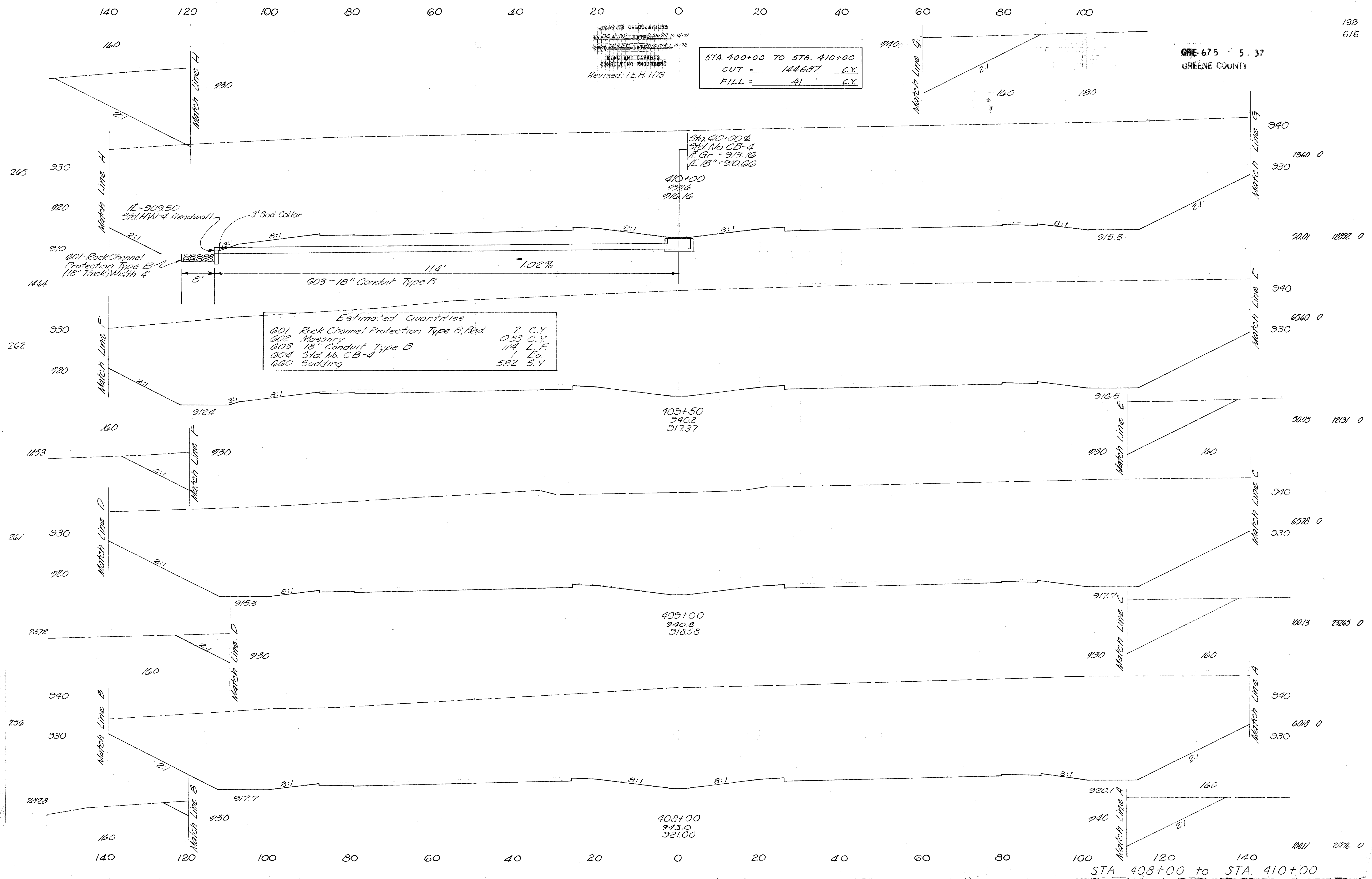
GRE-675 - 5.37
GREENE COUNTY



DATE OF CALCULATIONS
BY DC & DP DATE 2-23-74 10-15-71
CHKD. DATE 2/12/74 1-10-72
KING AND CASARIS
CONSULTING ENGINEERS
Revised: I.E.H. 1/79

STA. 400+00 TO STA. 410+00
CUT = 144.687 C.Y.
FILL = 41 C.Y.

GRE-675 - 5.37
GREENE COUNTY

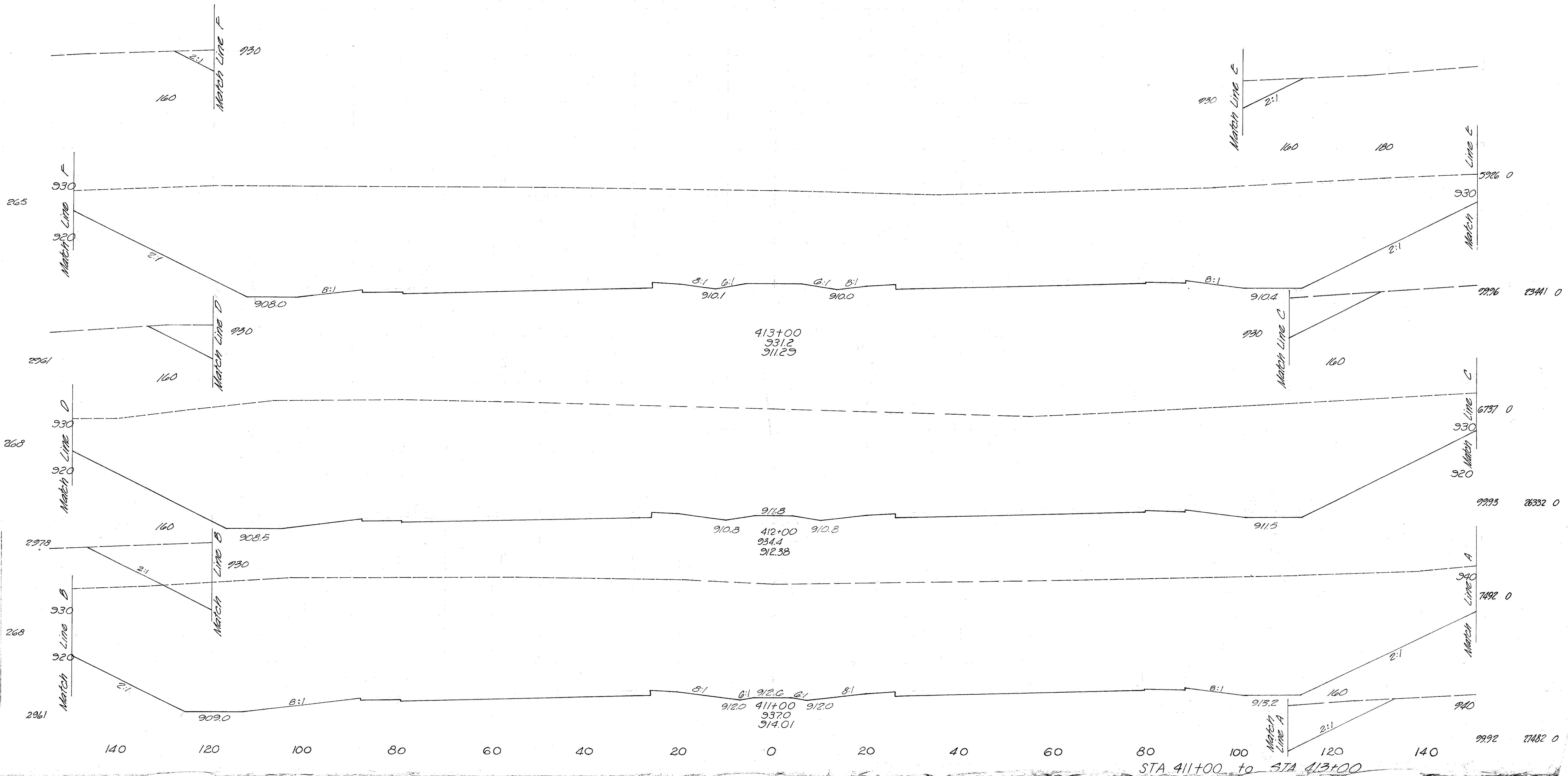


256
2828
160
140
120
100
80
60
40
20
0
20
40
60
80
100
120
140
160

STA. 408+00 to STA. 410+00

QUANTITY CALCULATIONS
 BY DC & DP DATE 8-23-74 10-15-74
 CHECKED DATE 9-14-74 1-10-72
 KING AND GAVARIS
 CONSULTING ENGINEERS

GRE-675 - 5.37
 GREENE COUNTY

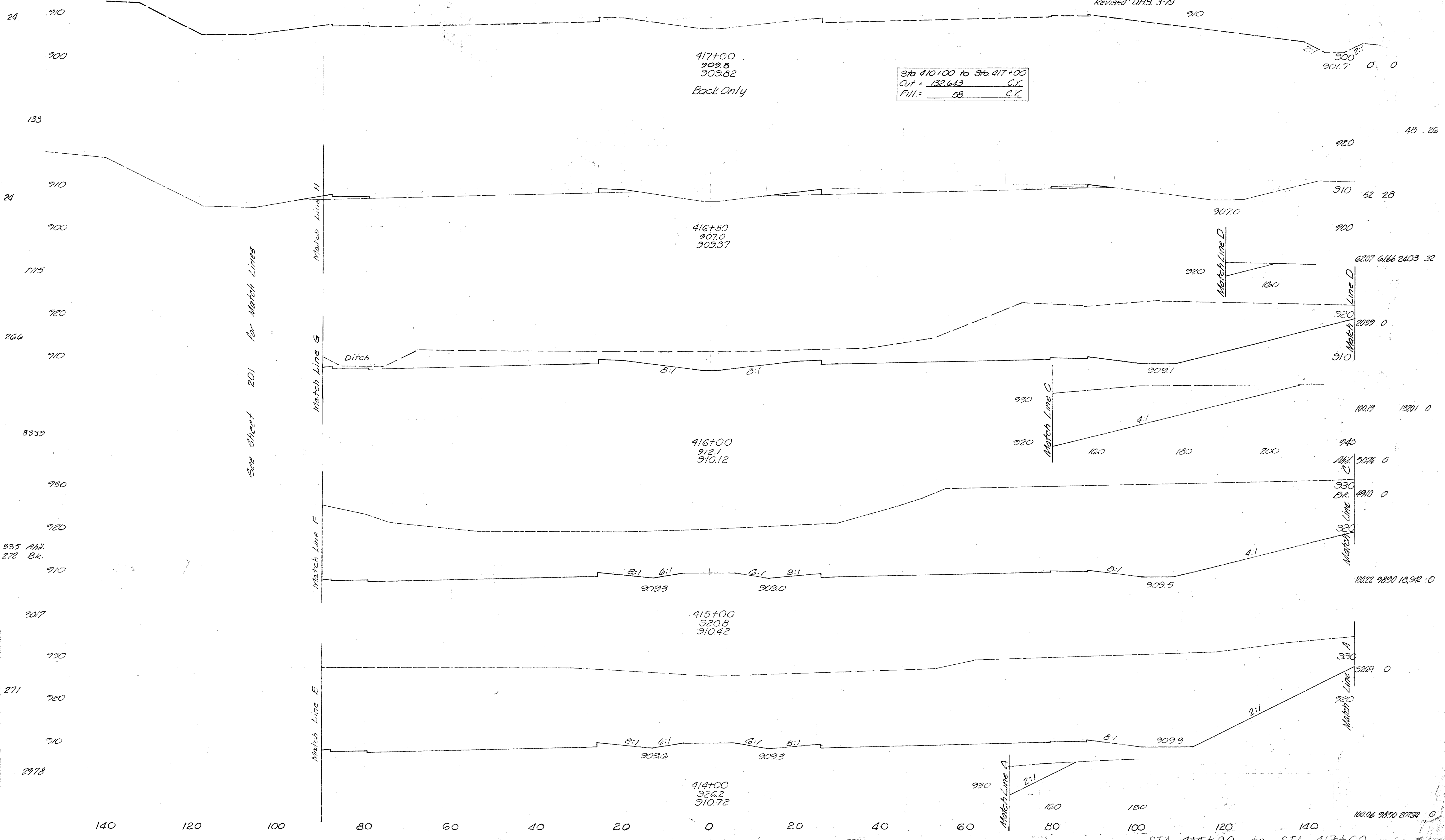


140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITY CALCULATIONS
BY DC & DP DATE 8-23-71 & 10-15-71
CHECKED BY DATE 9-14-71 & 1-10-72
RING AND GAVARIS
CONSULTING ENGINEERS
Revised: DHS 3-79

GRE. 67
GREENE COUNTY

200
616

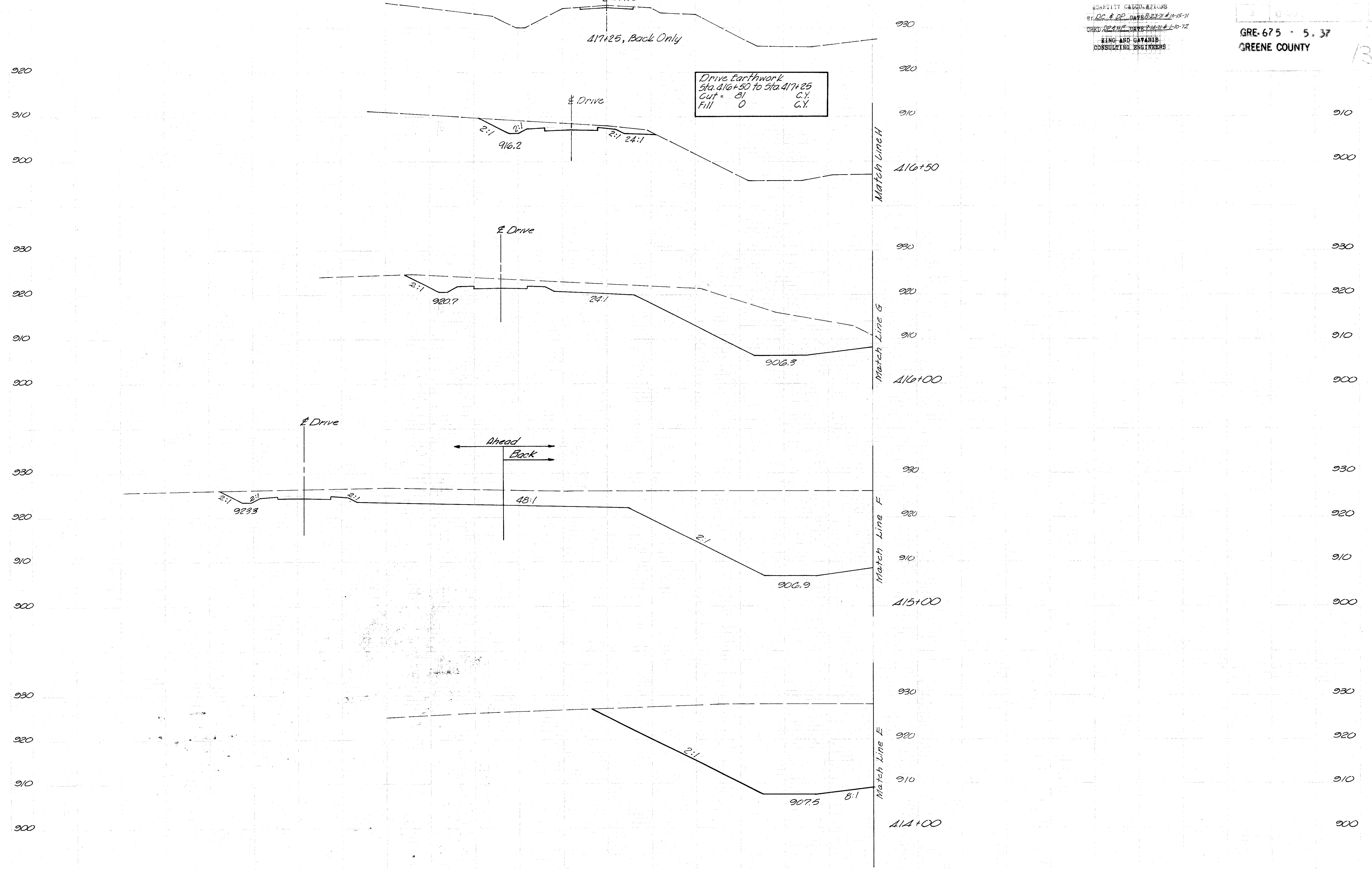


260 240 220 200 180 160 140 120 100

QUANTITY CALCULATIONS
BY: DC & DP DATE: 8/23/71 #10-15-71
CHECKED: DP & H DATE: 7/14/71 #10-12
KING AND GATARIS
CONSULTING ENGINEERS

GRE-675 - 5.37
GREENE COUNTY

201
616
1-300
137 Yellow



260 240 220 200 180 160 140 120 100

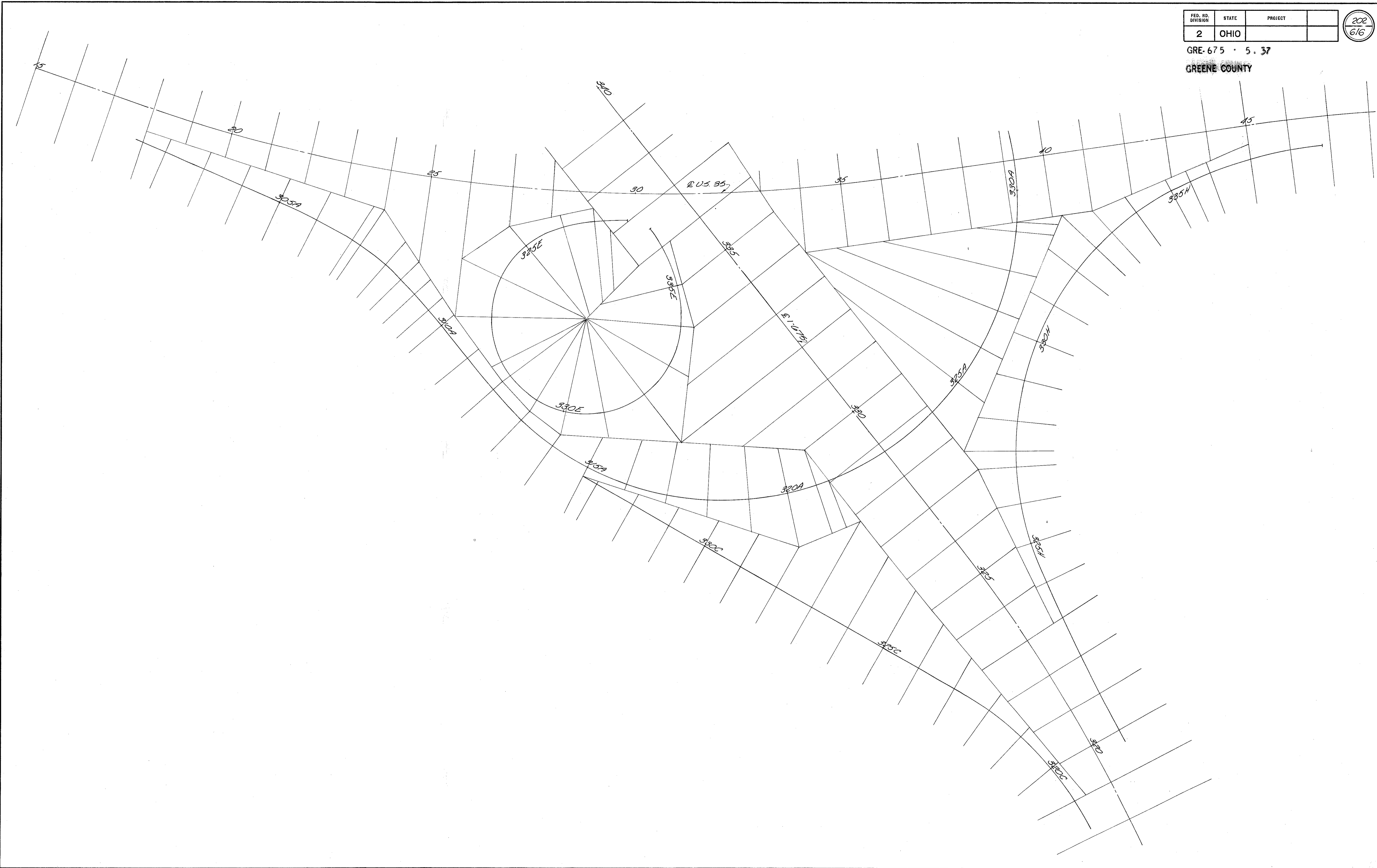
STA. 414+00 TO STA. 416+02 LEFT

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

202
6/6

GRE-675 · 5.37

GREENE COUNTY

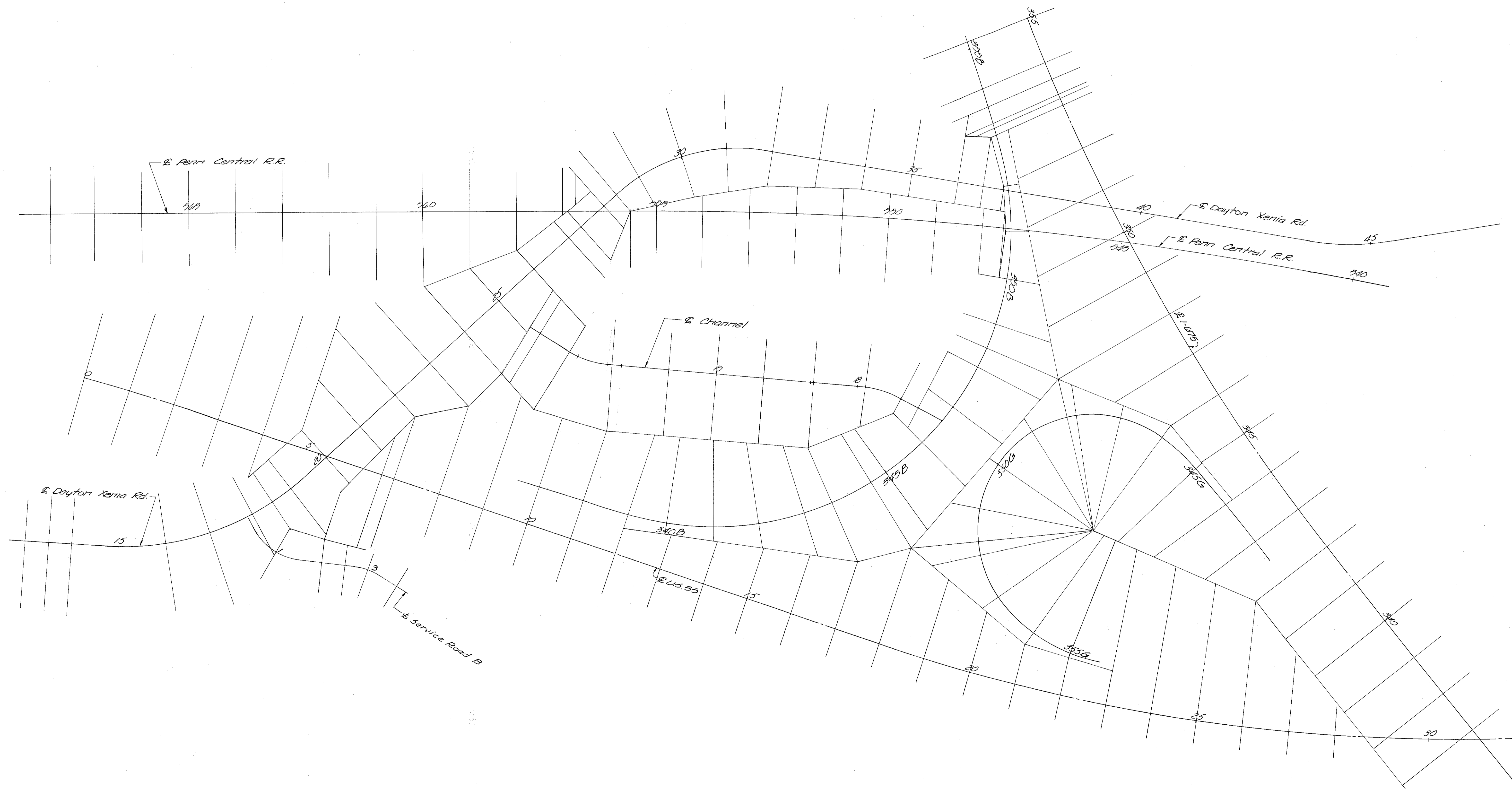


U.S. 35 INTERCHANGE CROSS SECTION LAYOUT

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

203
616

GRE-675 - 5.37
GREENE COUNTY

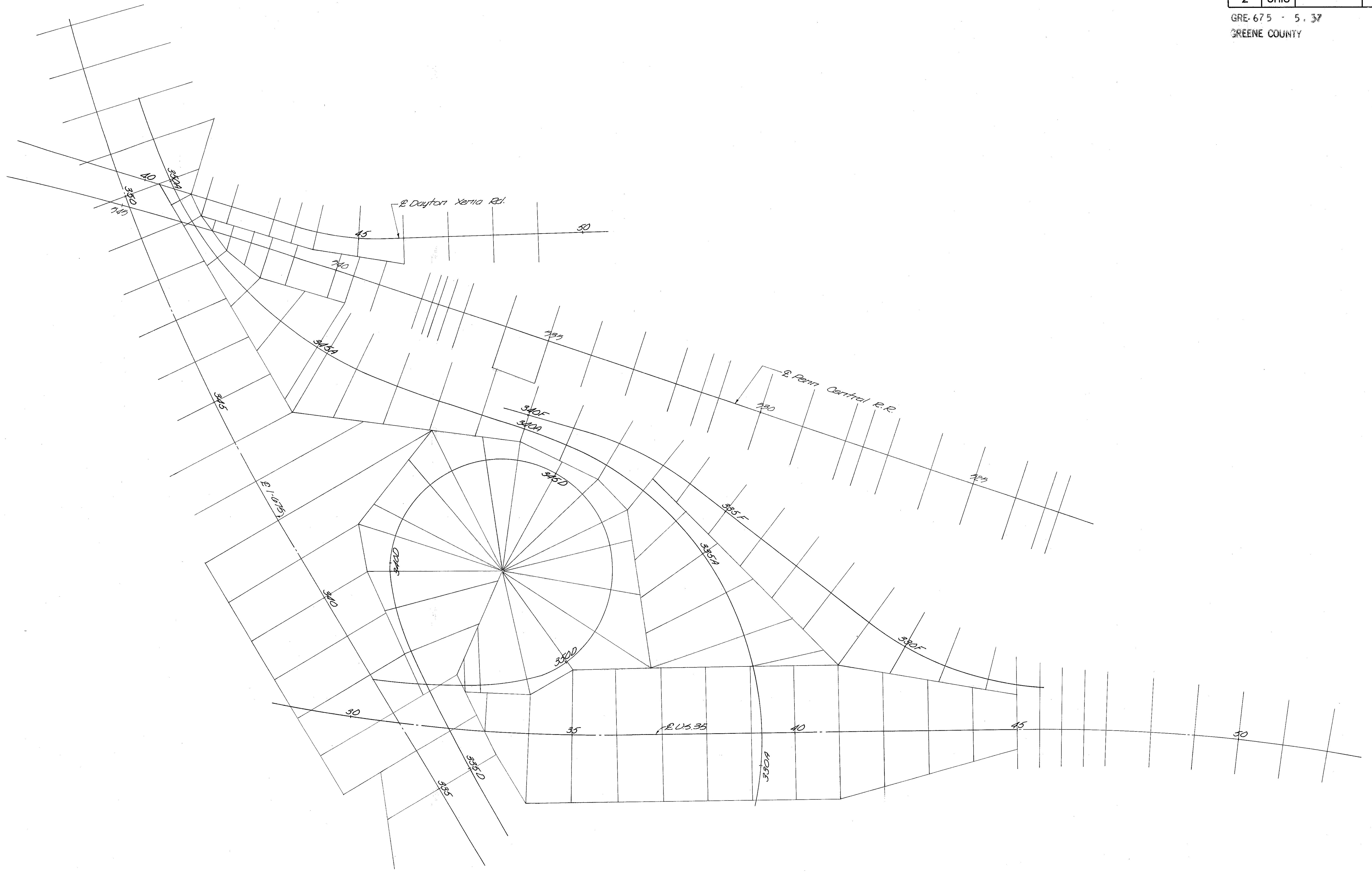


U.S. 35 INTERCHANGE CROSS SECTION LAYOUT

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

204
616

GRE-675 - 5.37
GREENE COUNTY



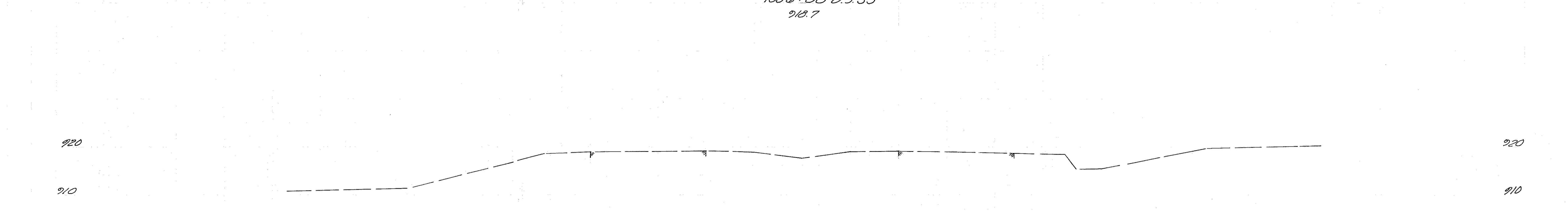
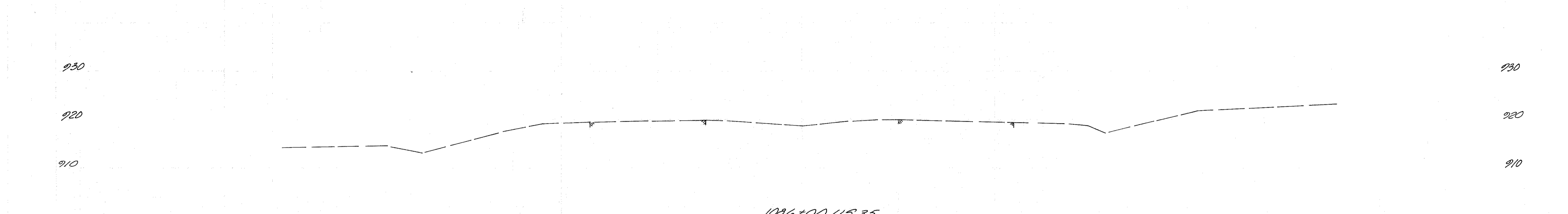
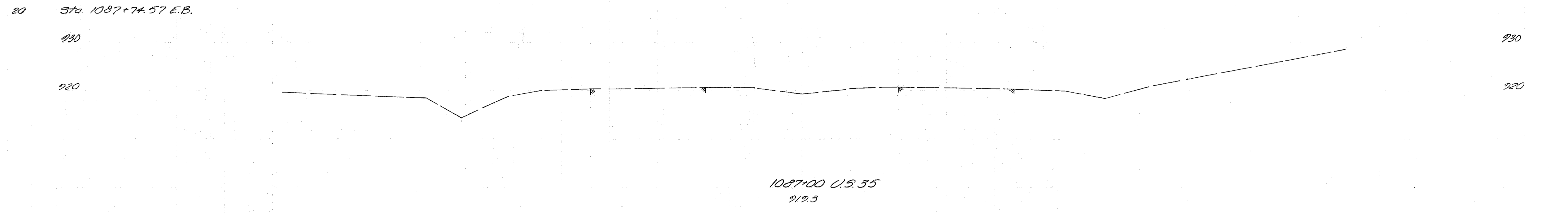
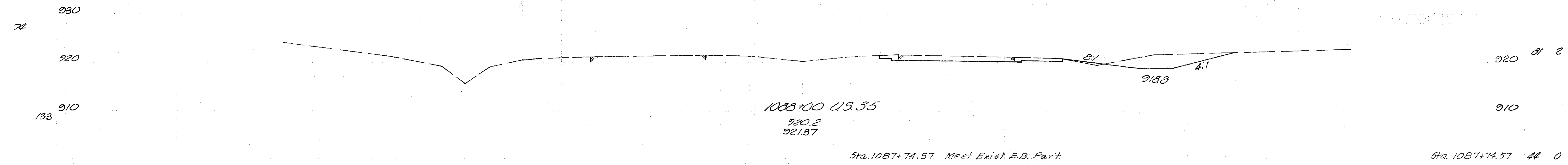
US 35 INTERCHANGE CROSS SECTION LAYOUT

140 120 100 80 60 40 20 0 20 40 60 80 100

UNIVERSITY CALCULATIONS
BY C. L. O'NEAL 10-18-71
CHECKED BY W. H. BENTLEY 11-11-72
KING AND GARLAND
CONSULTING ENGINEERS

2 GHD
GRE-675 - 5.37
GREENE COUNTY

205
6/6



140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

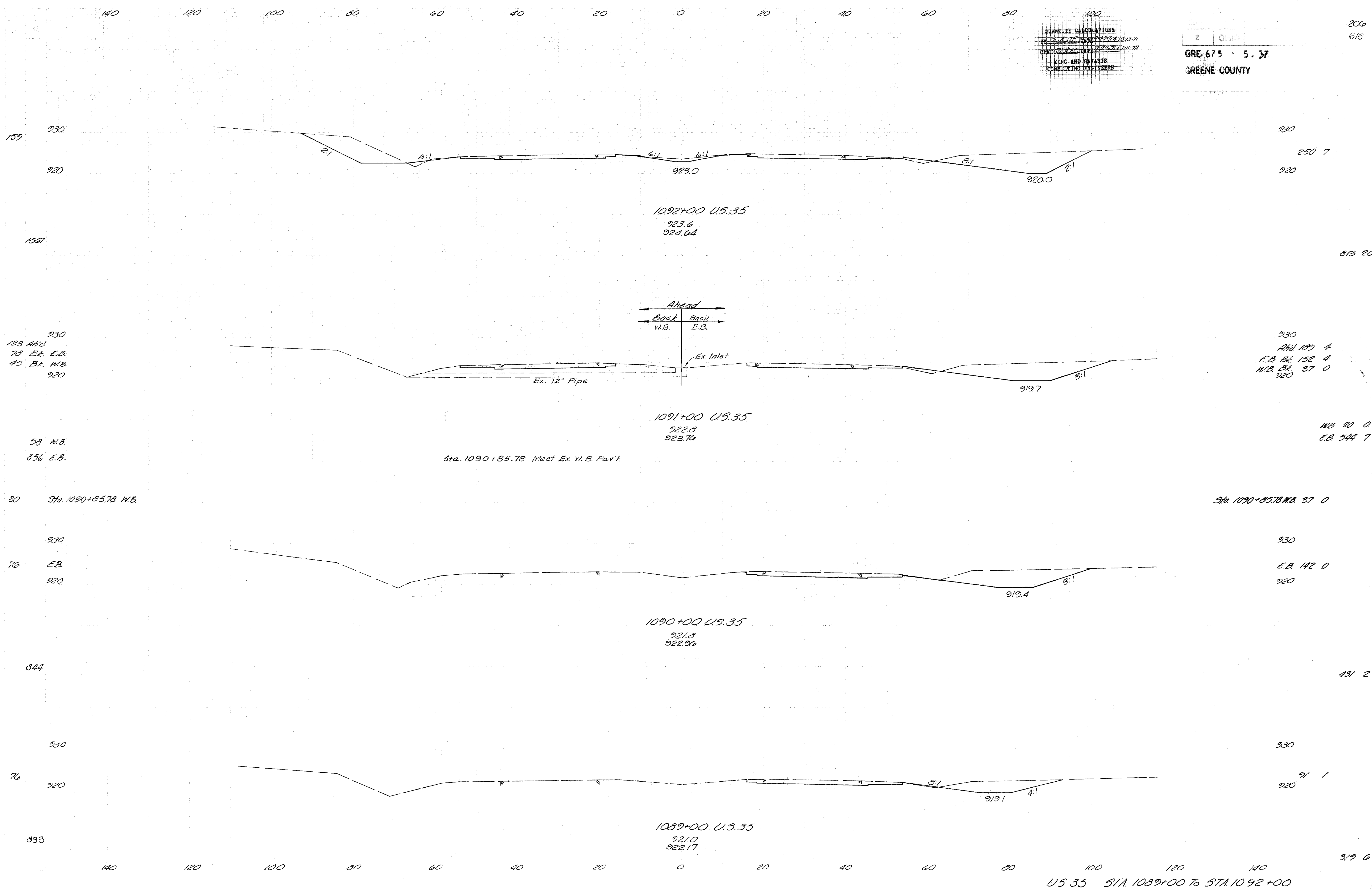
U.S. 35 STA. 1085+00 TO STA. 1088+00

QUANTITY CALCULATIONS
 BY: J.C. & W.C. DARR 9/27/71
 CHECKED: J.C. & W.C. DARR 10/29/71
 KING AND GAVARIS
 CONSULTING ENGINEERS

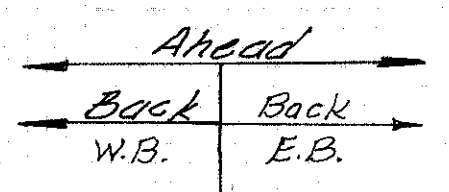
2 OHIO

GRE. 675 - 5.37
 GREENE COUNTY

206
 616



1092+00 U.S. 35
 923.6
 924.64



1091+00 U.S. 35
 922.8
 923.76

Sta. 1090+85.78 Meet Ex. W.B. Part

1090+00 U.S. 35
 921.8
 922.96

1089+00 U.S. 35
 921.0
 922.17

U.S. 35 STA. 1089+00 TO STA. 1092+00

159
 1567
 123 A.H.W.
 78 Bk. E.B.
 45 Bk. W.B.
 920
 58 W.B.
 856 E.B.
 30 Sta. 1090+85.78 W.B.
 76 E.B.
 920
 844
 76
 920
 833

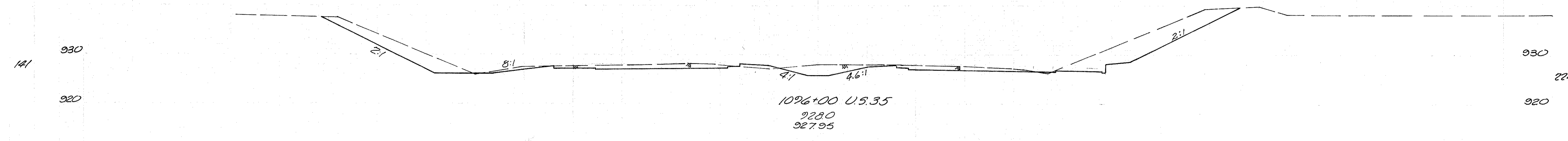
930
 250.7
 920
 813.20
 930
 A.H.W. 109 4
 E.B. Bk. 158 4
 W.B. Bk. 37 0
 920
 W.B. 20 0
 E.B. 544 7
 930
 E.B. 142 0
 920
 431.2
 930
 91 1
 920
 319.6

140 120 100 80 60 40 20 0 20 40 60 80 100

DATELY CALCULATIONS
BY DATE 2/27/10 10:13:11
CHKD DATE 7/29/10 4:11:12
RING AND GARIBO
CONSULTING ENGINEERS

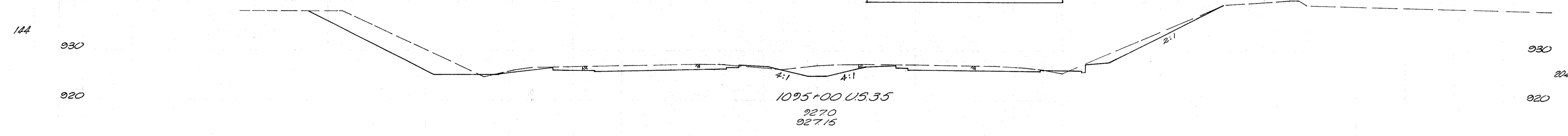
2 OKRD
GRE-675 - 5.37
GREENE COUNTY

207
616

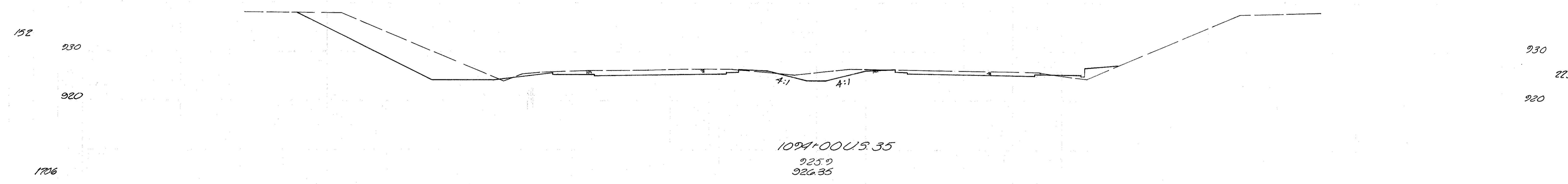


Sta 1087+74.57 to Sta 1095+00
Cut = 4671 CY
Fill = 186 CY

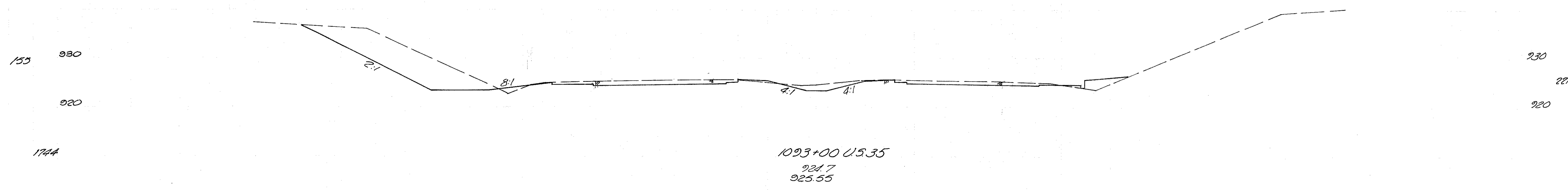
793 14



791 37



872 65



872 48

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

U.S. 35 STA. 1093+00 TO STA. 1096+00

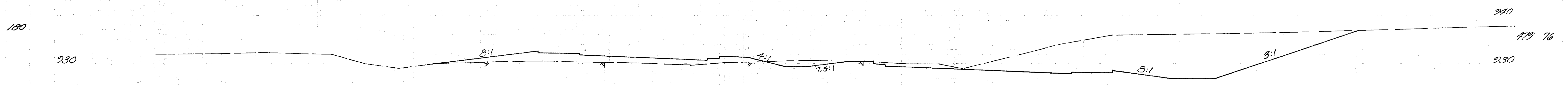
140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITY CALCULATIONS
BY D. E. DORR DATE 7/14/71
CHECKED BY J. W. WILSON DATE 1-11-72
KING AND GARDNER
CONSULTING ENGINEERS

2 018

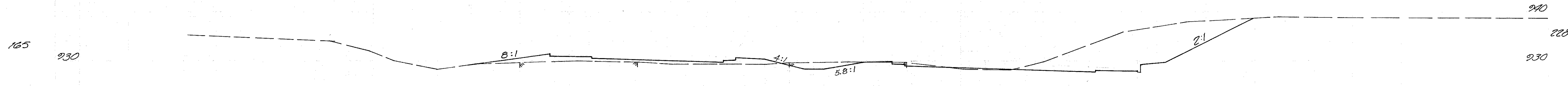
GRE-675 - 5.37
GREENE COUNTY

208
616



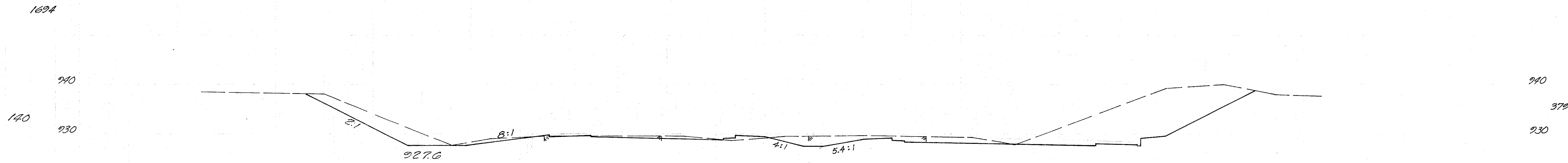
1100+00 U.S. 35
930.6
931.15

92.77 100.76 102.77 228



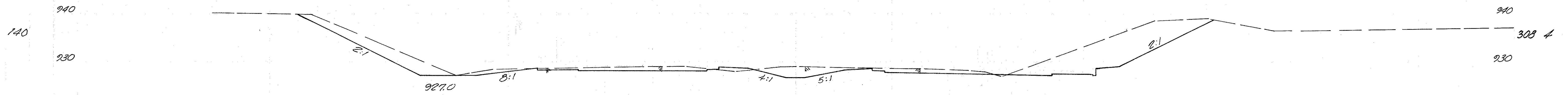
1099+00 U.S. 35
929.9
930.35

99.21 100.44 115.97



1098+00 U.S. 35
929.6
929.55

1872 19



1097+00 U.S. 35
928.9
928.75

985 15

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

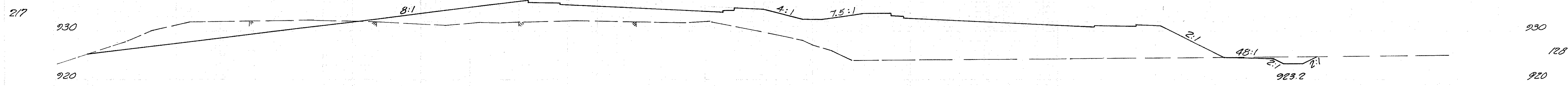
U.S. 35 STA 1097+00 TO STA 1100+00

140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITY CALCULATIONS
 BY D.L.P. DATE 7/14/79
 AND D.R.W. DATE 7/27/79
 KING AND GAVANIS
 CONSULTING ENGINEERS
 Revised - I.E.H. 1/79

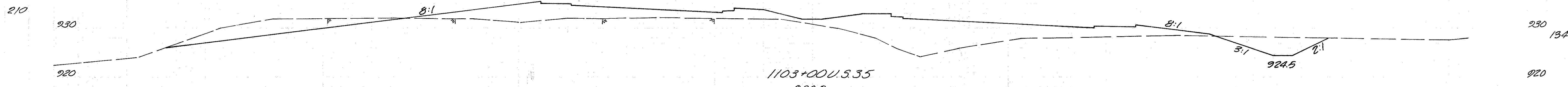
2 OHIO
 GRE-675 - 5.37
 GREENE COUNTY

209
 616



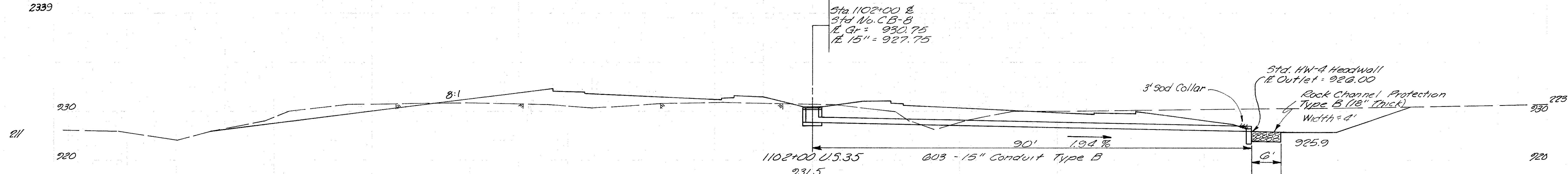
1104+00 U.S. 35
 927.1
 934.31

10102 927.9 494 2358



1103+00 U.S. 35
 930.9
 933.55

920



Sta 1102+00 E
 Std. No. CB-8
 L Gr = 930.75
 L 15" = 927.75

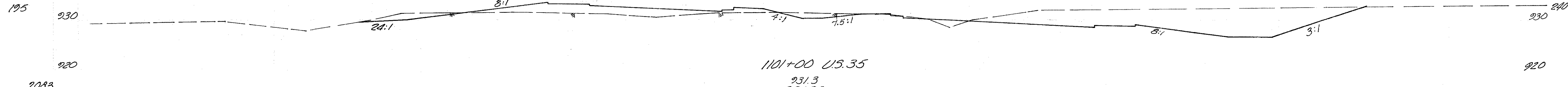
Std. HW-A Headwall
 L 6' Outlet = 926.00
 Rock Channel Protection
 Type B (18" Thick)
 Width = 4'

1102+00 U.S. 35
 931.5
 932.75

90' 1.94%
 603 - 15" Conduit Type B

Estimated Quantities		
601	Rock Channel Protection Type B, Bed	2 C.Y.
602	Masonry	0.27 C.Y.
603	15" Conduit Type B	90 L.F.
604	Std. No. CB-8	1 Ea.
605	Sodding	103 S.Y.

2258 10167 845 513



1101+00 U.S. 35
 931.3
 931.95

9831 10079 1309 2294

U.S. 35 STA. 1101+00 To STA. 1104+00

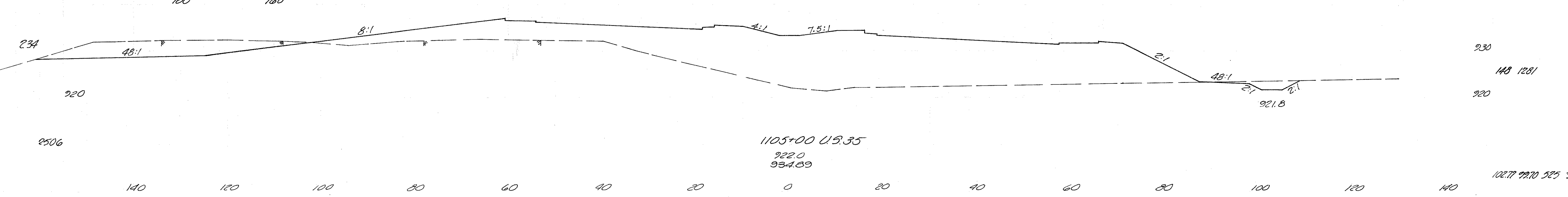
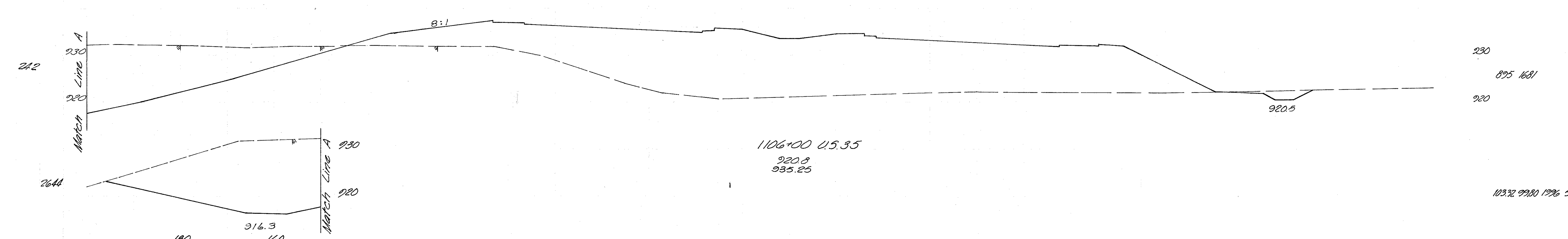
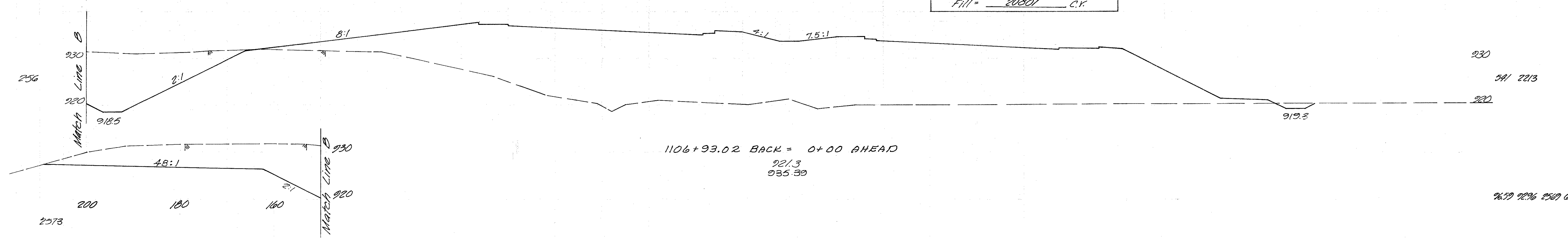
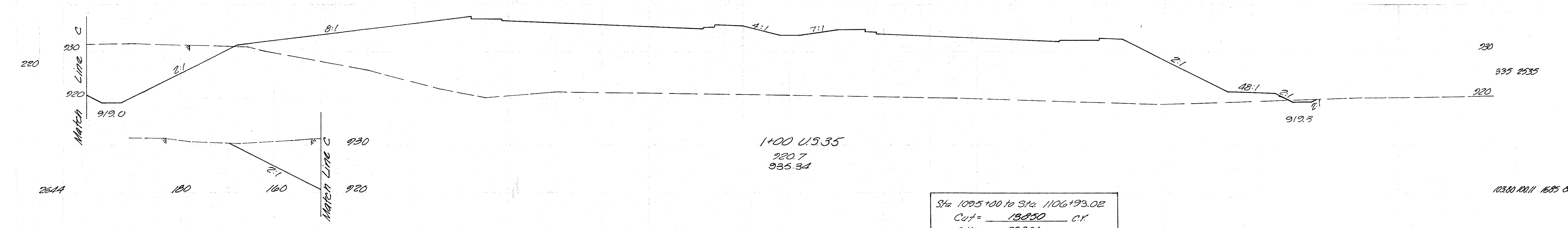
140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

140 120 100 80 60 40 20 0 20 40 60 80 100

WARRANTY DRAWING
BY KING AND BATAFIS 10-13-77
CHECKED BY DATE 1-23-78
KING AND BATAFIS
CONSULTING ENGINEERS

2 CIVIL
GRE-675 - 5.37
GREENE COUNTY

210
616



10380 10011 1685 8802

941 2213

9659 9296 2549 6704

895 1681

10332 9980 1996 5474

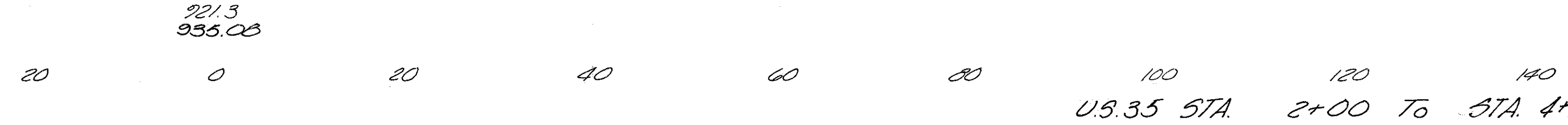
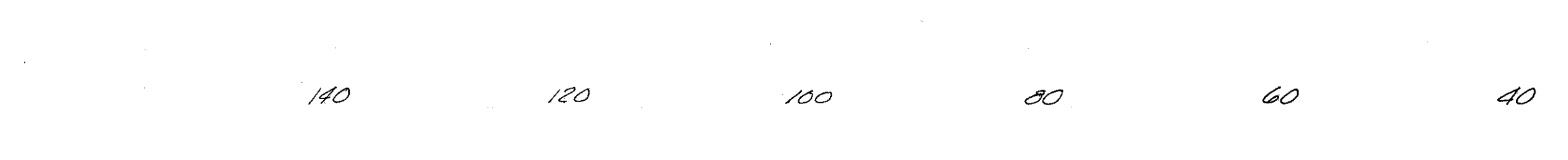
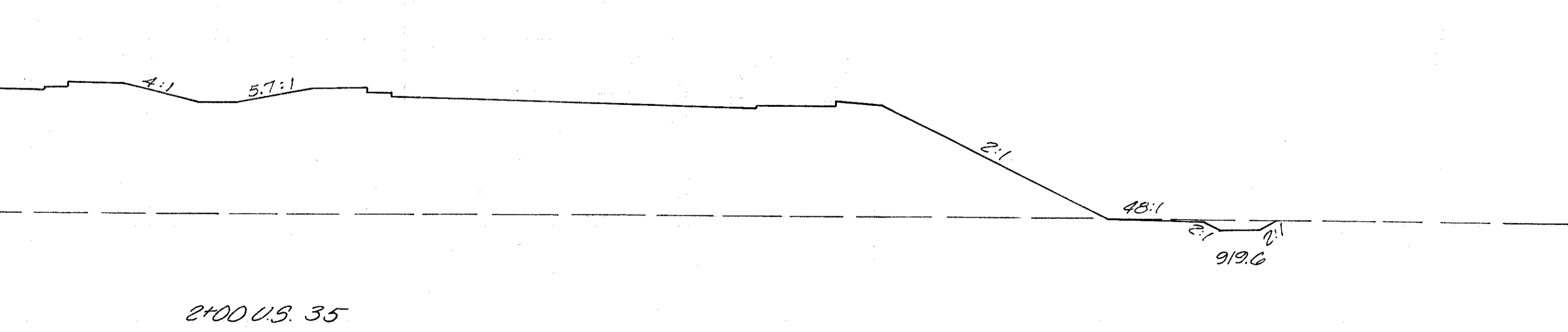
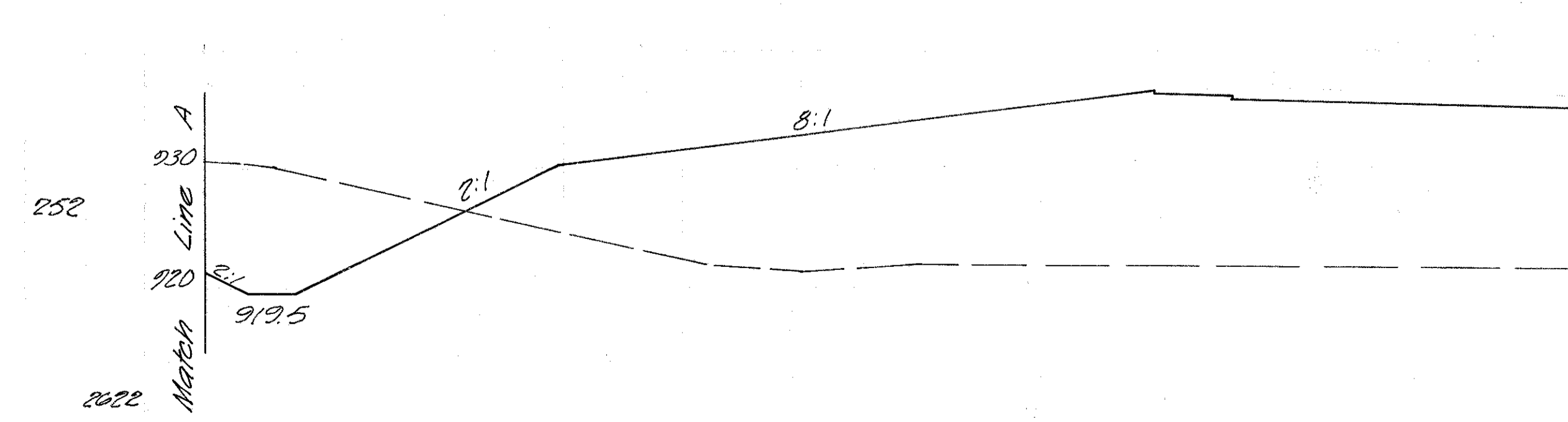
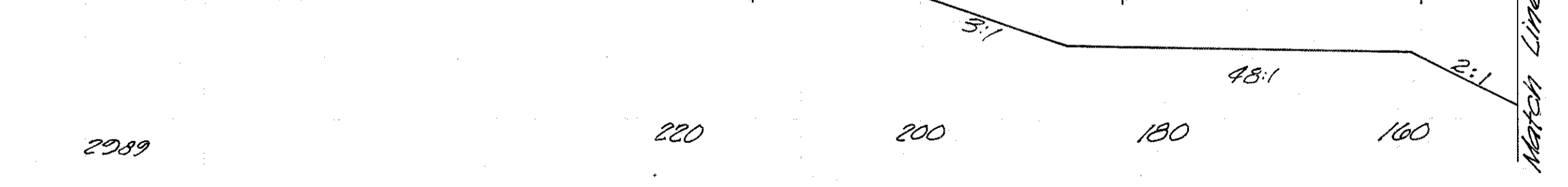
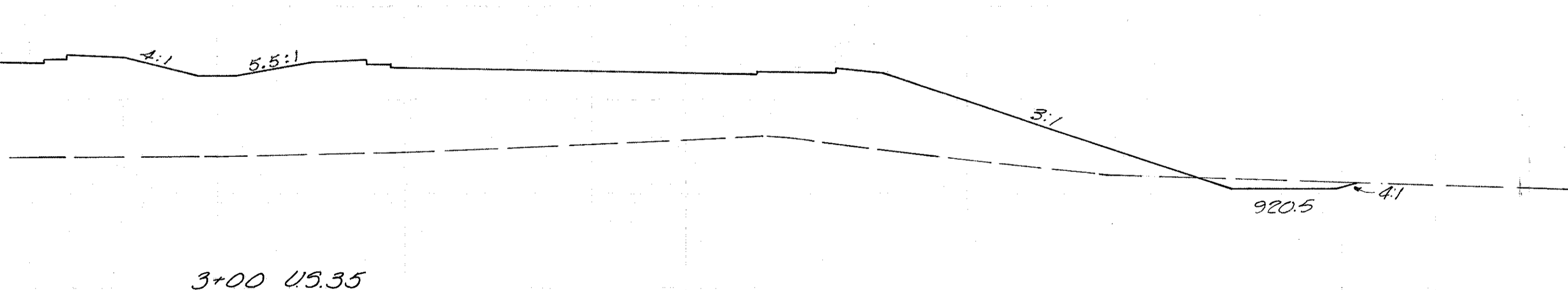
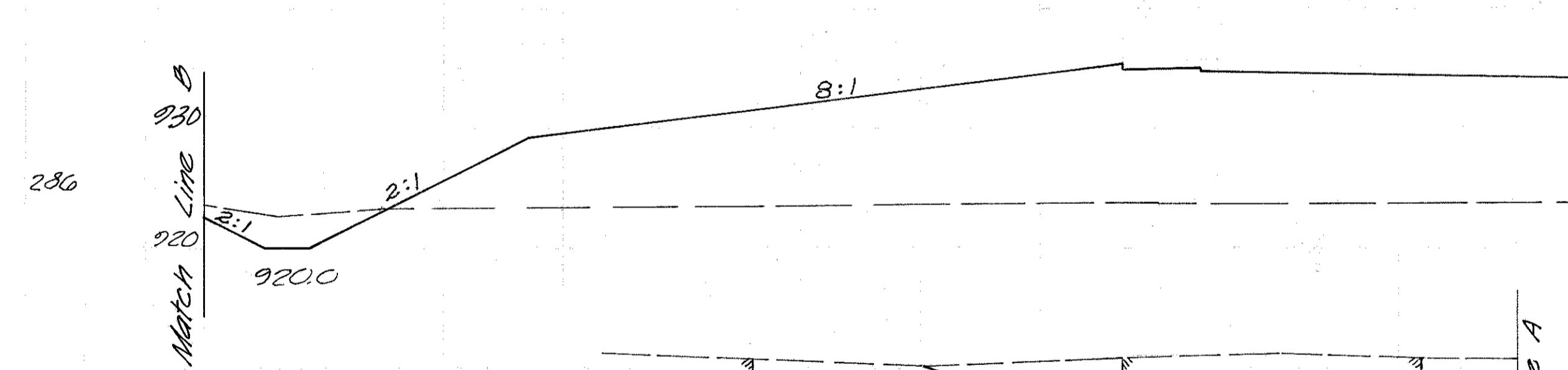
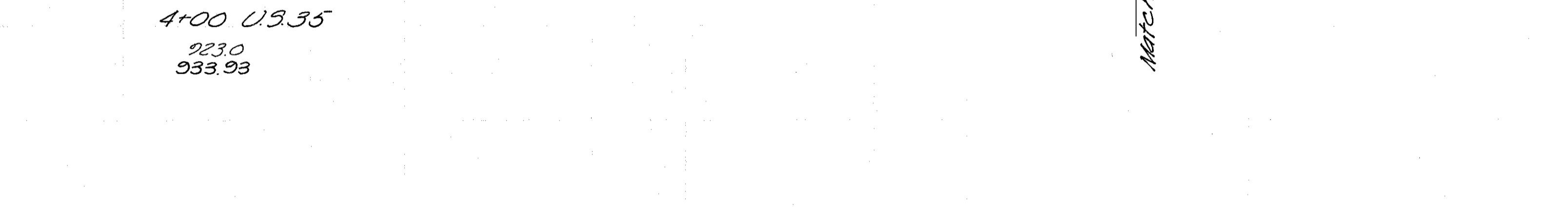
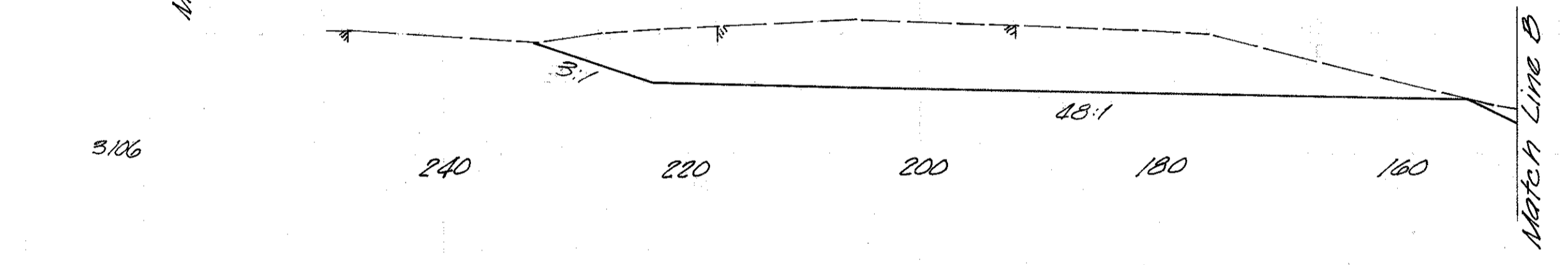
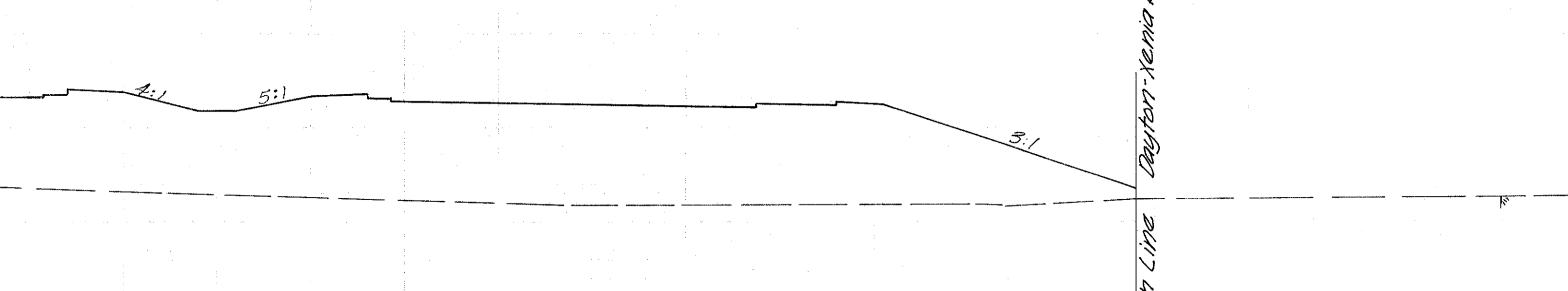
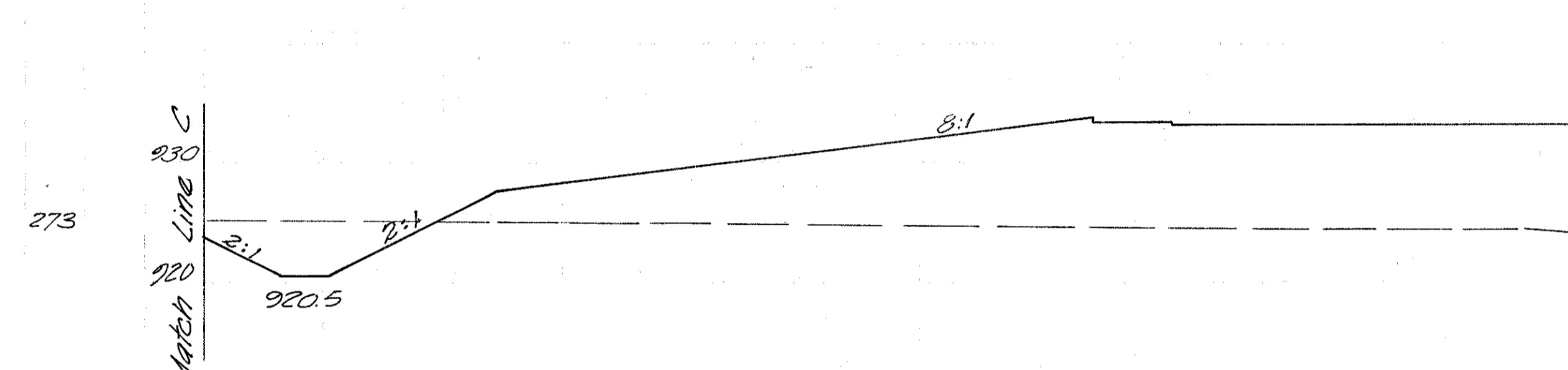
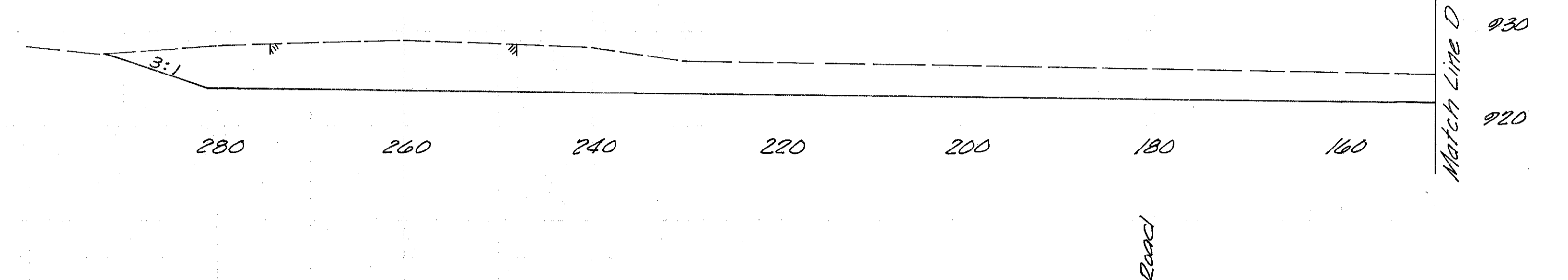
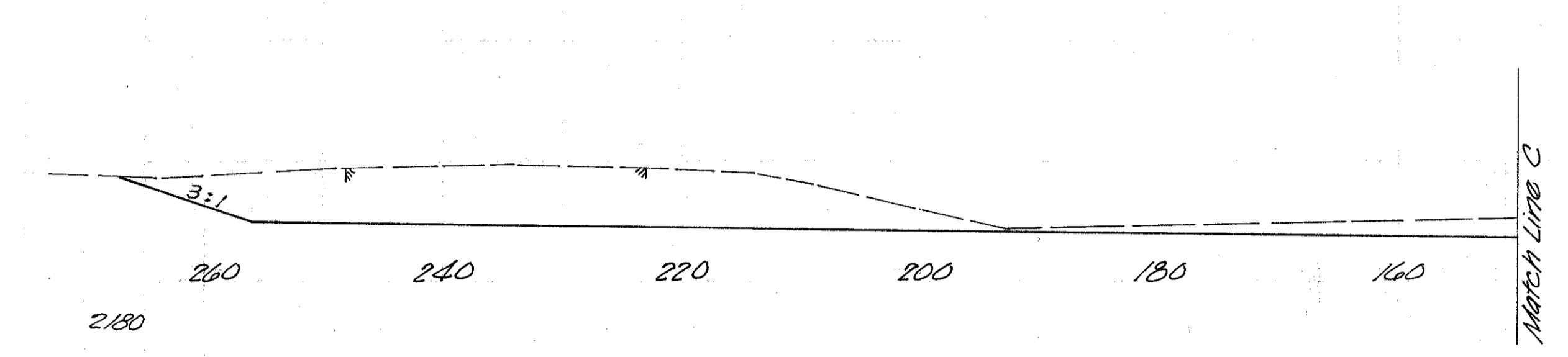
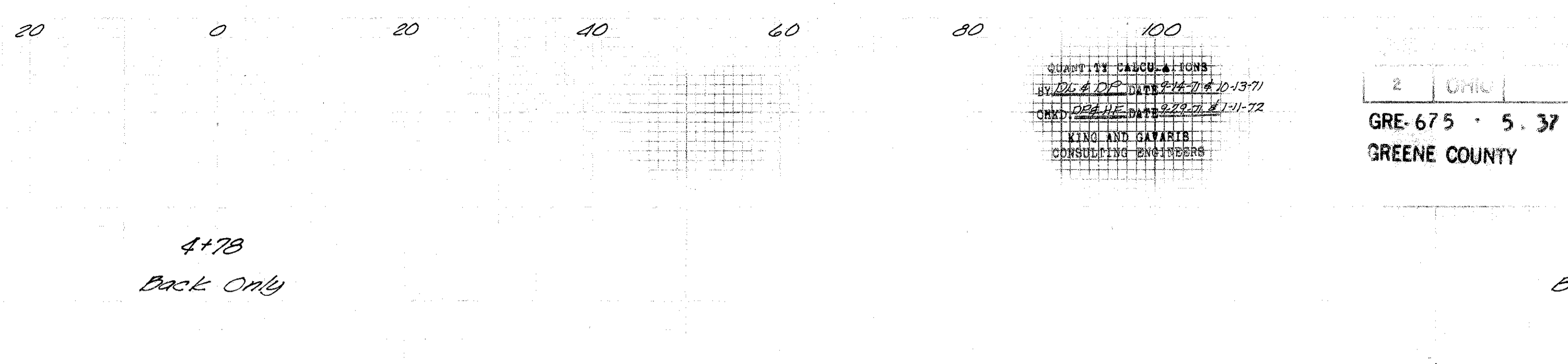
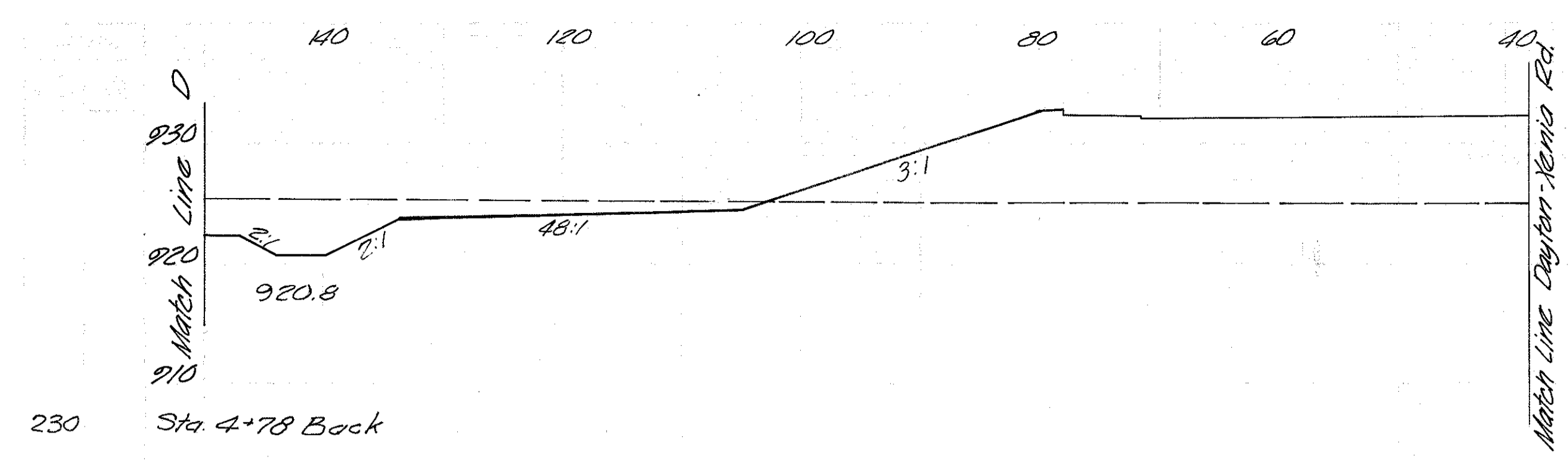
148 1281

10277 9970 525 3931

QUANTITY CALCULATIONS
 BY: D. A. D. DATE: 2-14-71
 CHECKED: J. E. DATE: 2-22-71
 KING AND GATZERT
 CONSULTING ENGINEERS

2 OHIO
 GRE-675 - 5.37
 GREENE COUNTY

211
 616



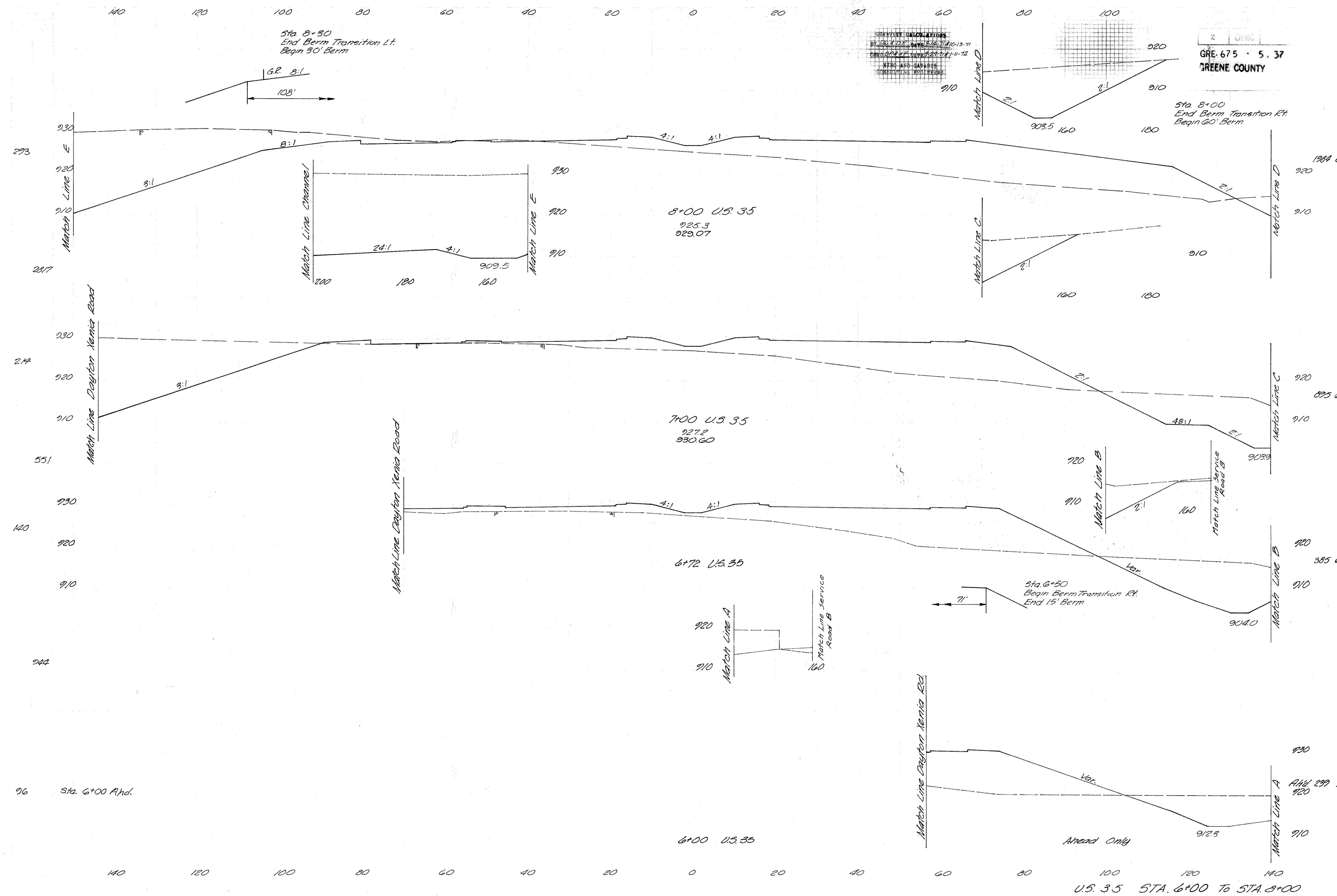
U.S. 35 STA. 2+00 TO STA. 4+78

2 2110
GRE-675 - 5.37
GREENE COUNTY

GRAVEL CALCULATIONS
BY: J. J. D. DATE: 11-10-13-11
CHECKED BY: DATE: 11-11-12
BY: AND DATE: 11-11-12
BY: AND DATE: 11-11-12

Sta 8+30
End Berm Transition Lt.
Begin 30' Berm

Sta 8+00
End Berm Transition Rt.
Begin 60' Berm

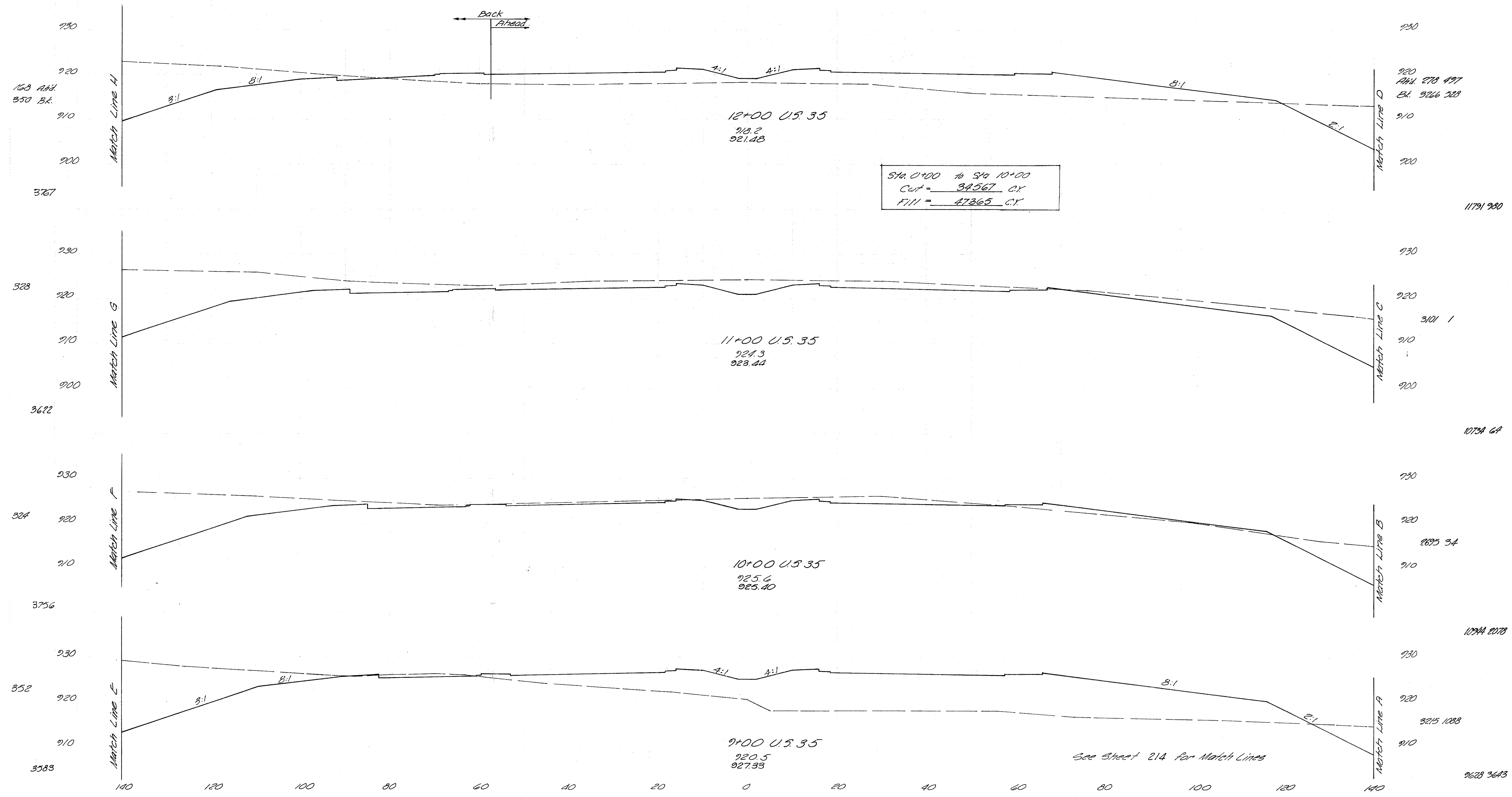


140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITY CALCULATIONS
BY DATE 10-13-71
CHECKED DATE 11-11-72
KING AND JAVARIS
CONSULTING ENGINEERS

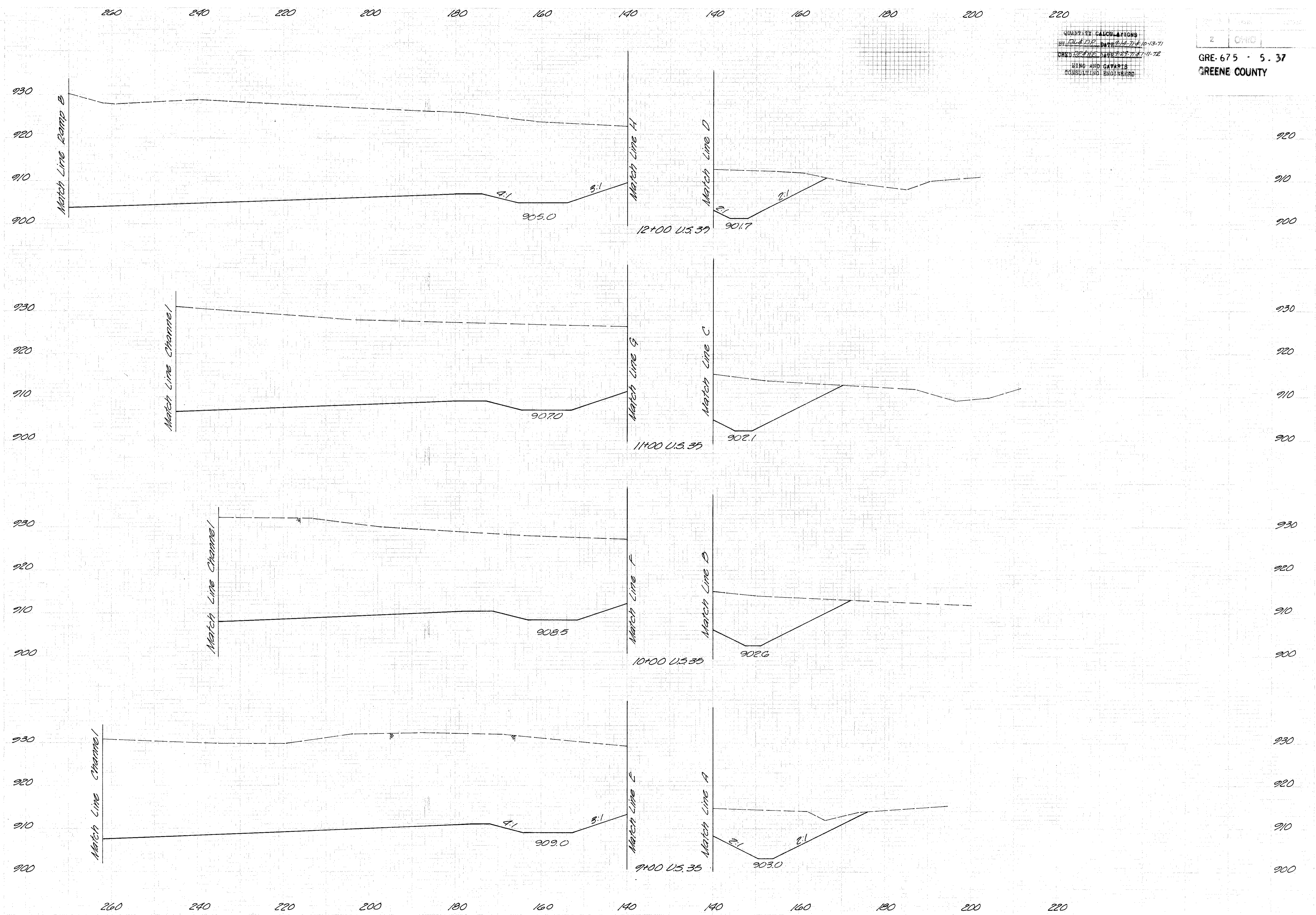
2 010
GRE-675 • 5.37
GREENE COUNTY

213
616



QUANTITY CALCULATIONS
 BY J. L. D. P. DATE 7-14-71
 CHECKED BY THE DATE 7-27-71
 WING AND GAVRIS
 CONSULTING ENGINEERS

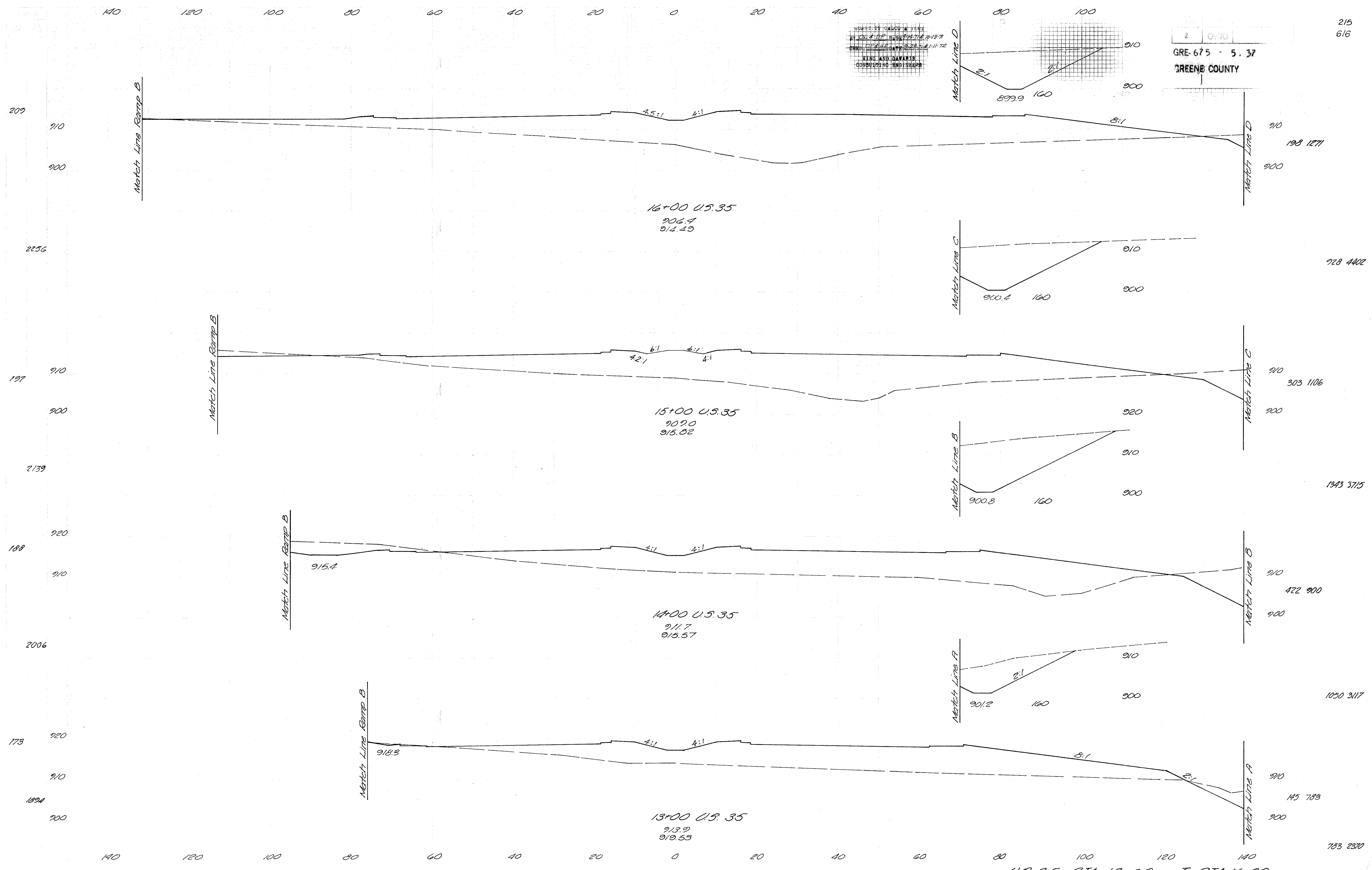
214
 616
 GRE-675 - 5.37
 GREENE COUNTY



US 35 STA. 9+00 to STA. 12+00 Left & Right

GREENE COUNTY
BY O.L.A. D.P. 6/28/94, T.H. 10-13-97
CHW. 12/24/94 DATE 3/23/96 1-11-92
KING AND GAVARIS
CONSULTING ENGINEERS

2 0+10
GRE-675 - 5.37
GREENE COUNTY



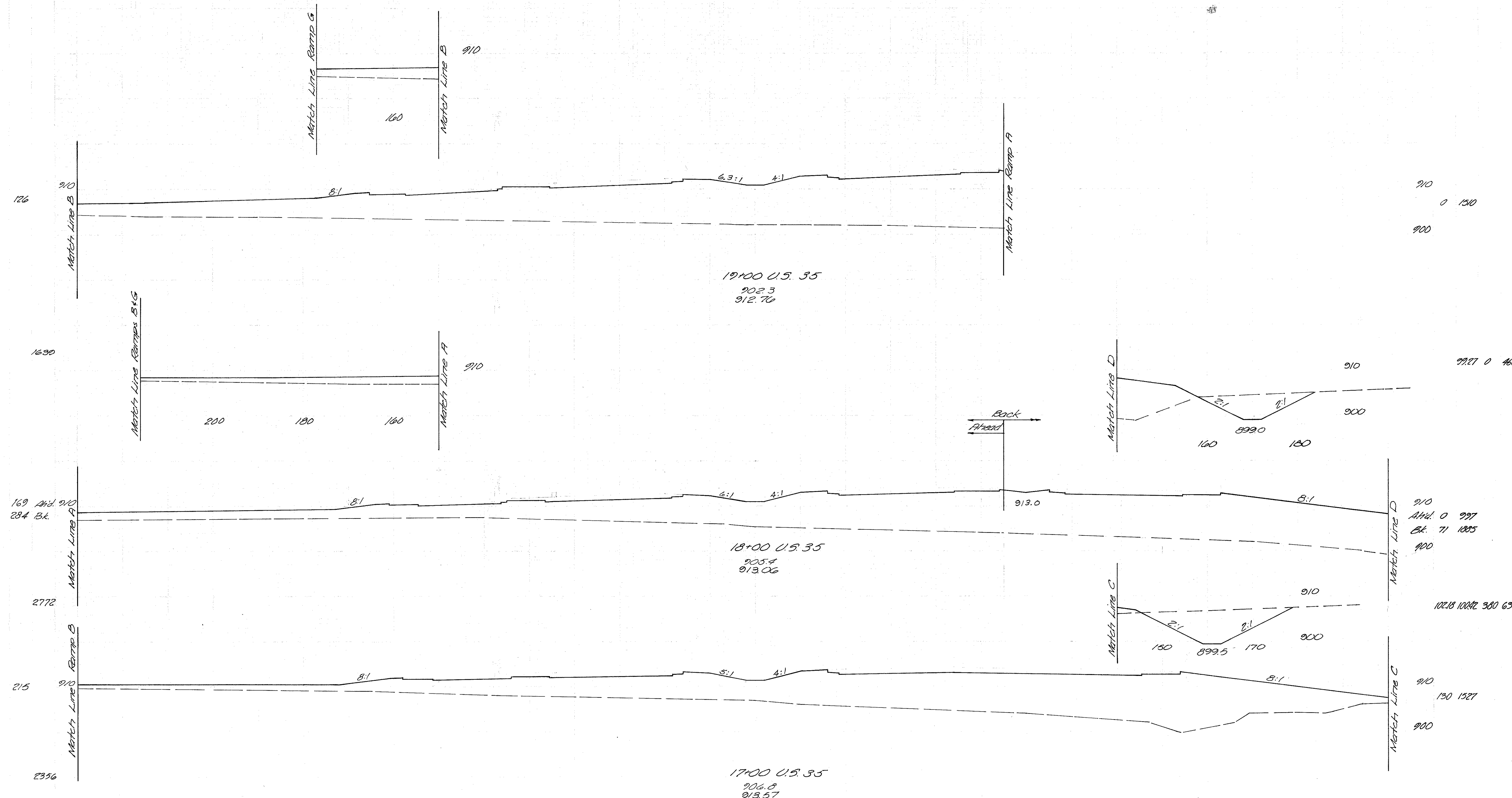
U.S. 35 STA. 13+00 To STA. 16+00

140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITY CALCULATIONS
BY D.L. & D.P. DATE 2/22/74 10-13-71
ON W.D. DATE 2/22/74 11-72
KING AND GAVANIS
CONSULTING ENGINEERS

2 Ohio
GRE-675 - 5.37
GREENE COUNTY

216
616



U.S. 35 STA. 17+00 TO STA. 19+00

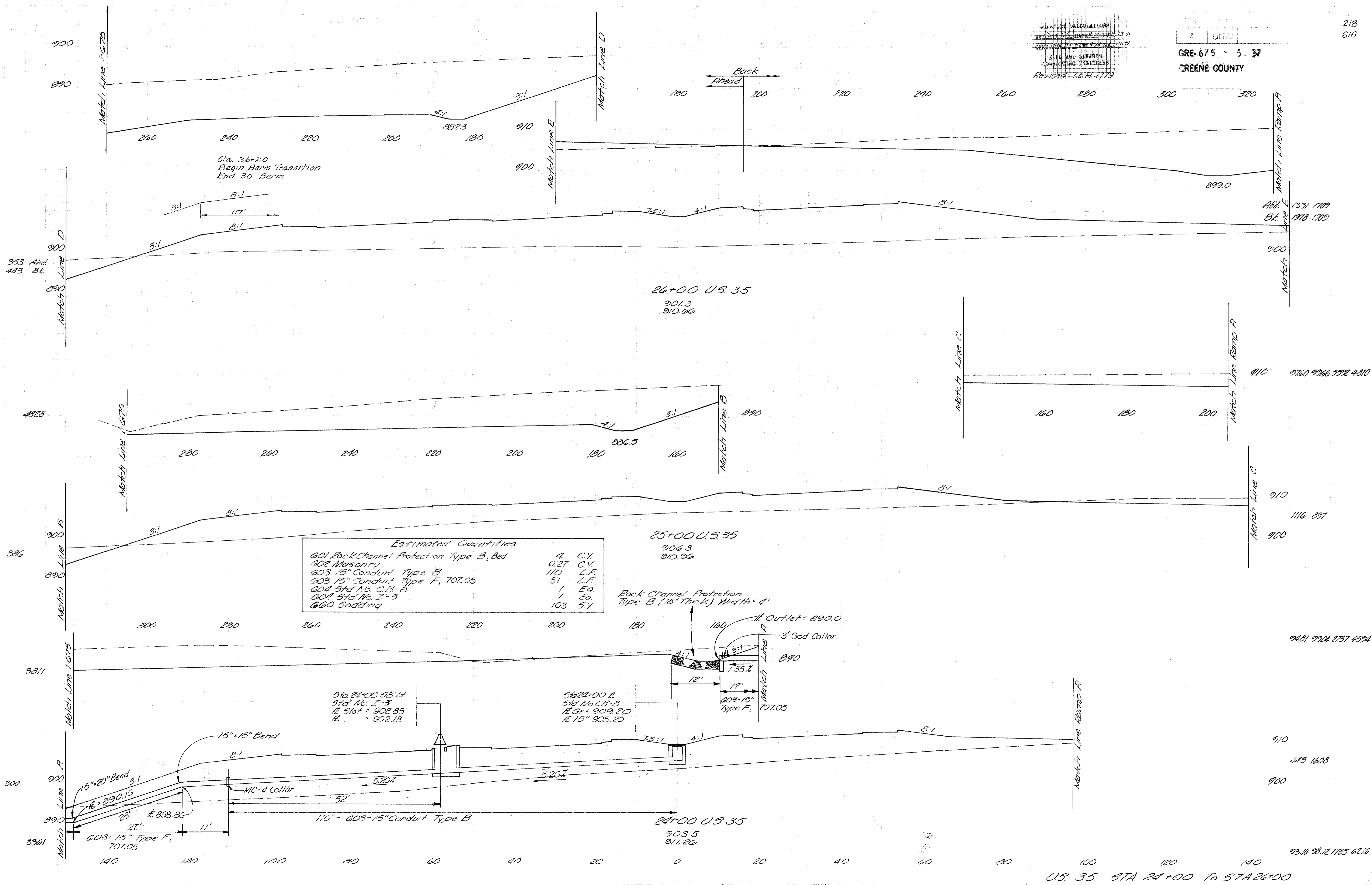
140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

607 5181

ANALYZED CALCULATIONS
 BY: J.L. & E.C. DAVIS 12-9-60-13-71
 DATE: 12-9-60 11-11-72
 SIND AND O'BRIEN
 CONSULTING ENGINEERS
 Revised: T.E.H. 1/79

2 OHIO
 GRE-675 - 5.37
 GREENE COUNTY

218
 616



Estimated Quantities

601 Rock Channel Protection Type B, Bed	4	C.Y.
602 Masonry	0.27	C.Y.
603 15" Conduit Type B	110	L.F.
603 15" Conduit Type F, 707.05	51	L.F.
604 Std No. C.B.-B	1	Ea.
604 Std No. I-3	1	Ea.
660 Sodding	103	S.Y.

Rock Channel Protection
 Type B (18" Thick) Width = 4'

Outlet = 890.0
 3' Sod Collar

Sta. 24+00.58 L.F.
 Std. No. I-3
 E. Spot = 908.85
 E. = 902.18

Sta. 24+00.58 E
 Std. No. C.B.-B
 E. Spot = 909.20
 E. = 905.20

U.S. 35 STA. 24+00 TO STA. 26+00

160 140 120 100 80 60 40 20 0 20 40 60

Note:
U.S. 35 Bridge
over I-675

DATE: 12/11/12
BY: D.L. D'S...
KING AND GAVRETT
SURVEYING ENGINEERS

2 ONIC
GRE-675 - 5.37
GREENE COUNTY

219
616

0 Bl. Sta. 29+01

36

17

50

1183

163

2867

Sta 20+00 to Sta 29+01
Cut = 13260 CY
Fill = 54203 CY

29+01 U.S. 35 (Back)

0 Cut
0 Fill

28+63 U.S. 35

893.1
909.87

28+00 U.S. 35

894.6
910.06

27+00 U.S. 35

897.6
910.36

U.S. 35 STA. 27+00 TO STA. 29+01

910

900

890

910

900

890

910

900

890

910

900

890

910

900

890

910

900

890

0 0

3813 0 638

0 903

6324 0 3130

0 2026

7793 7706 430 8251

237 2431

9526 1001 2766 7668

Match Line I-675

Match Line I-675

Match Line I-675

Match Line Ramp E

Match Line Ramp E

Match Line Ramp E

3:1

8:1

7.5:1

4:1

5:1

7.5:1

4:1

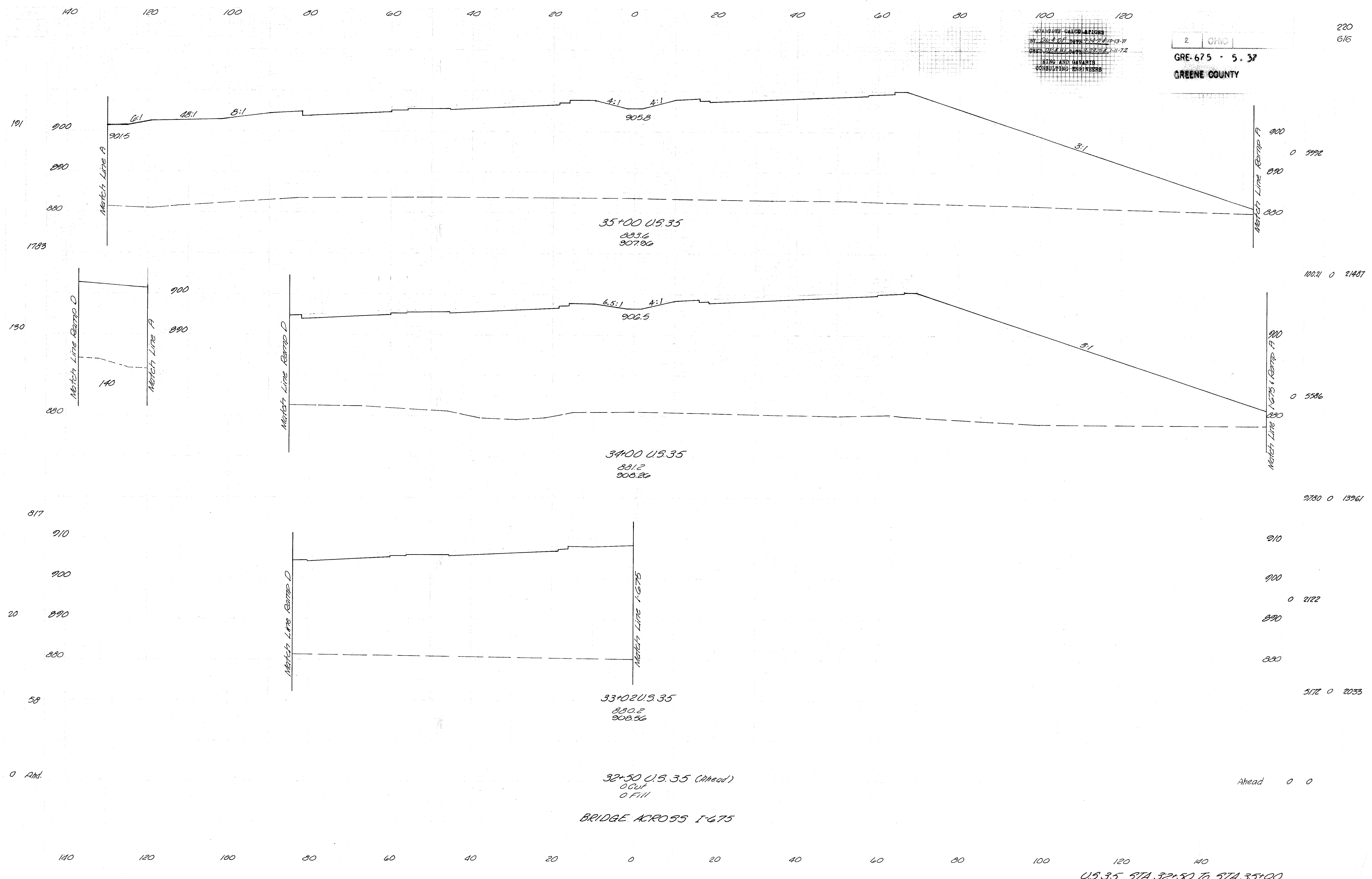
8:1

4:1

GRAVITY CALCULATIONS
 BY: E.A. OF DATE 7-14-71
 CHECKED BY: E.A. DATE 7-22-71
 KING AND GAVRIS
 CONSULTING ENGINEERS

2 OHIO
 GRE-675 - 5.37
 GREENE COUNTY

220
616

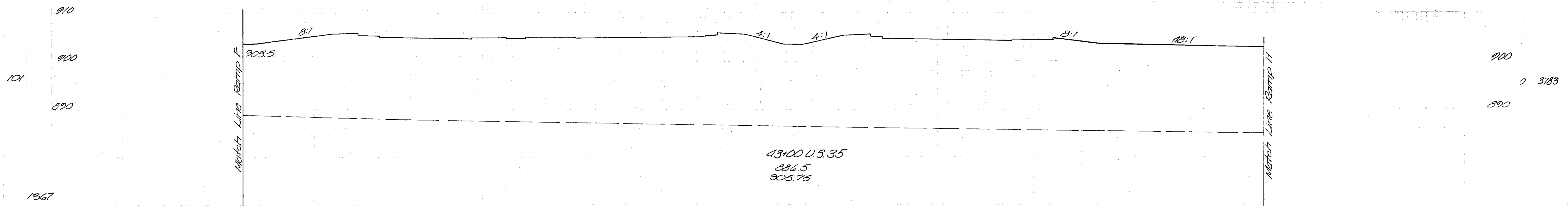


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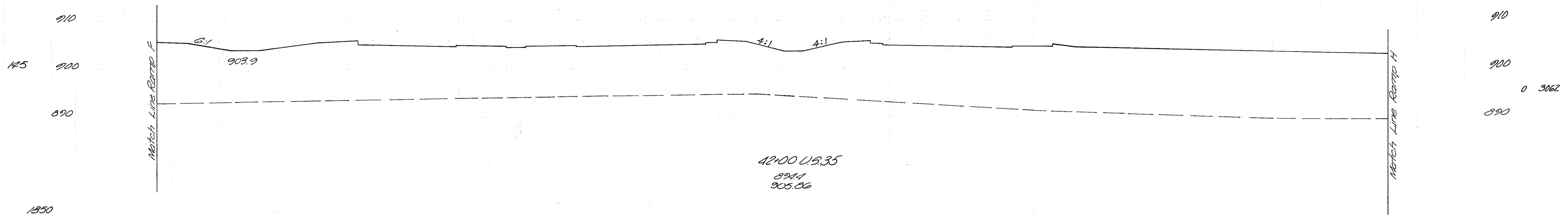
QUANTITY CALCULATIONS
BY J. L. DICK, CIVIL ENGINEER, 12-13-71
CHECKED BY DEBRA L. BROWN, CIVIL ENGINEER, 3-22-78, L.L. 72
RINE AND GAVARIS
CONSULTING ENGINEERS

2 0410
GRE-675 · 5.37
GREENE COUNTY

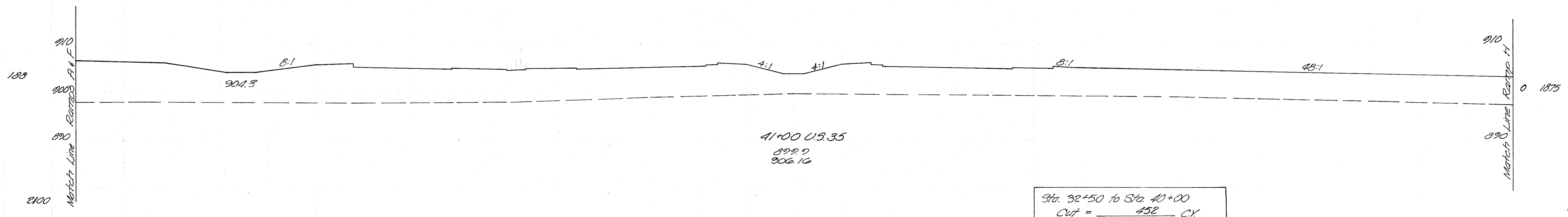
222
616



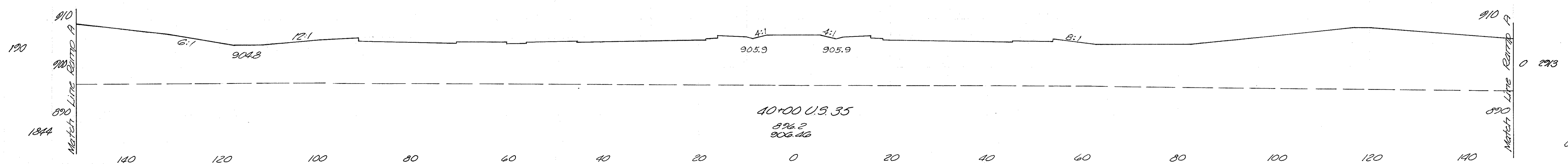
0 12676



0 9143



0 8866



0 14996

U.S. 35 STA. 40+00 TO STA. 43+00

140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITY CALCULATIONS
 BY J.L.D.P. DATE 9-10-71
 CHECKED BY J.L.D.P. DATE 9-10-71
 KING AND GATZERT
 CONSULTING ENGINEERS
 Revised: J.E.H. 1/79

Sta 335+00 Ramp H
 End Below Transition Pt.
 Begin 30' Barn
 8:1
 30' to Ramp H

2 0116
 GRE-675 - 5.37
 GREENE COUNTY

223
 616

Estimated Quantities

G01 Rock Channel Protection Type B, Bed.	2 C.Y.
G02 Masonry	0.27 C.Y.
G03 15" Conduit Type B	44 L.F.
G03 15" Conduit Type F, 707.05	82 L.F.
G04 Std. No. I-3	1 Ea.
G00 Sodding	3 B.Y.

Sta 45+65 W-38' Lt
 Std No I-3
 # 5/8" = 907.82
 # 1 1/2" = 900.82

46+00 U.S. 35
 881.0
 907.63

45+50 U.S. 35
 883.2
 907.08

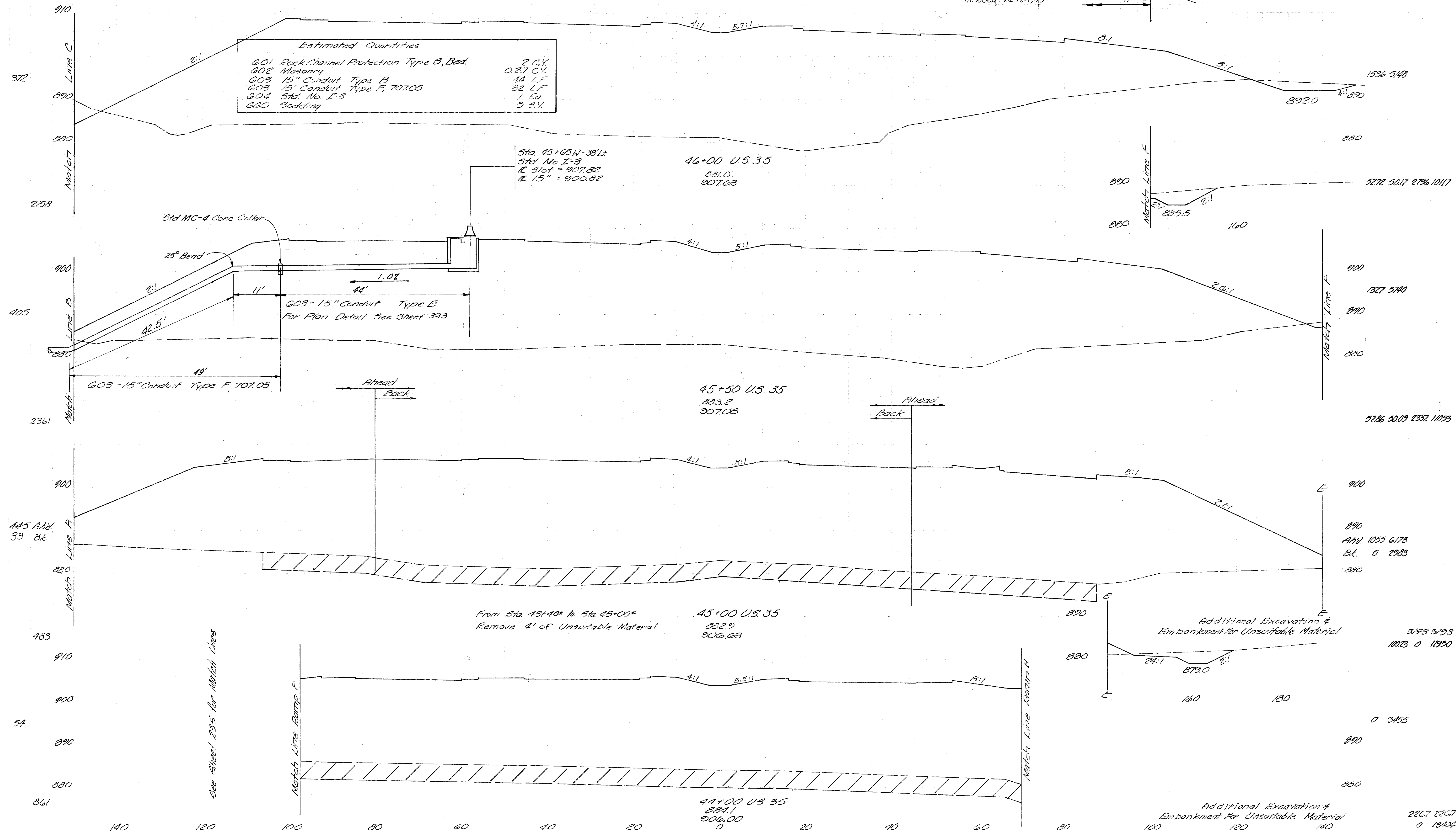
45+00 U.S. 35
 882.9
 906.63

44+00 U.S. 35
 884.1
 906.00

From Sta. 43+40* to Sta. 45+00*
 Remove 4' of Unsuitable Material

Additional Excavation &
 Embankment for Unsuitable Material

Additional Excavation &
 Embankment for Unsuitable Material
 U.S. 35 STA. 44+00 TO STA. 46+00



See Sheet 235 for Match Lines

910
 372
 890
 880
 2/58
 900
 405
 2361
 900
 445 Ahd.
 33 Bk.
 890
 483
 910
 900
 54
 890
 880
 861

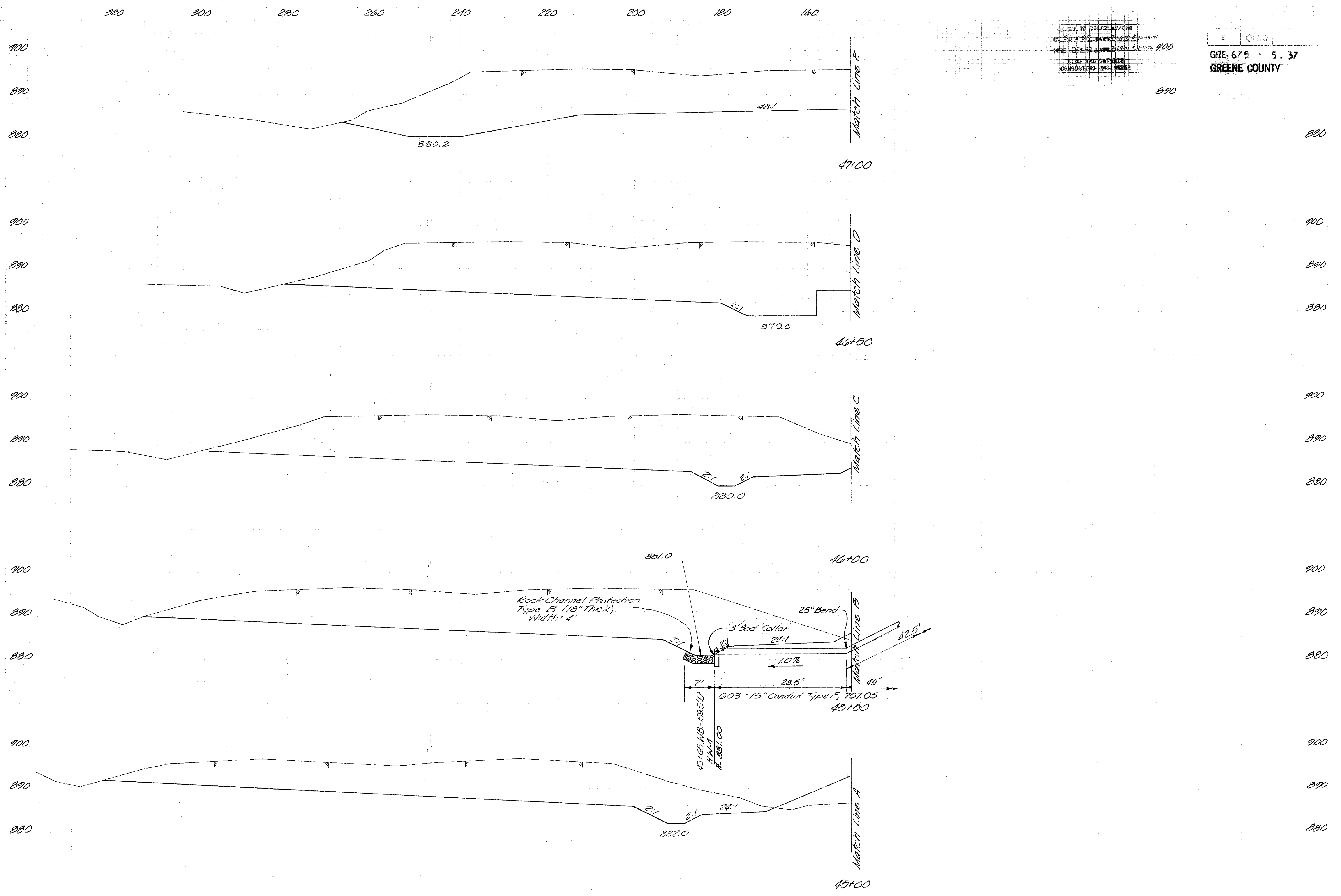
1536 5/48
 892.0
 880
 5272 50/17 2796 10/17
 885.5
 160
 900
 1377 5/40
 890
 880
 5286 50/09 2332 11/53
 900
 890
 Ahd. 1025 6/73
 Bk. 0 2983
 880
 900
 890
 5193 2/93
 10073 0 11950
 0 3455
 890
 880
 2267 2267
 0 13404

140 120 100 80 60 40 20 0 20 40 60 80

PROJECT: U.S. 35
 DATE: 10-13-71
 DRAWN: J. W. HARRIS
 KIM AND GAYLES
 CONSULTING ENGINEERS

2 OHIO
 GRE-675 - 5.37
 GREENE COUNTY

224
616



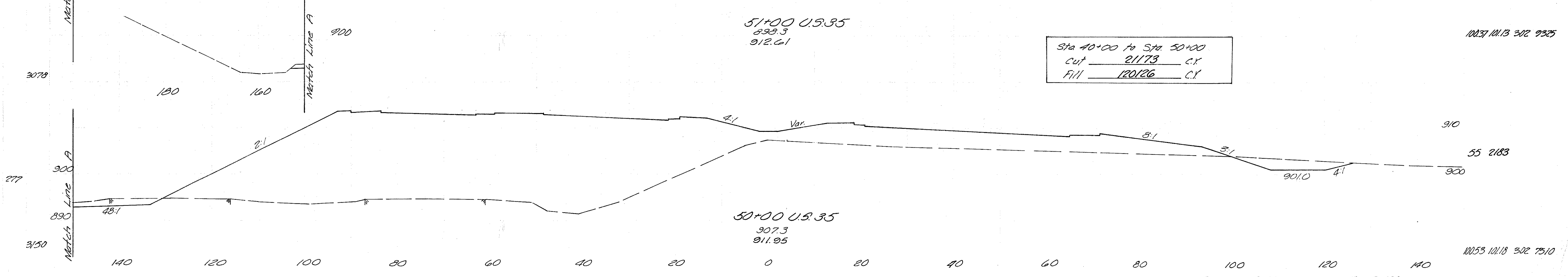
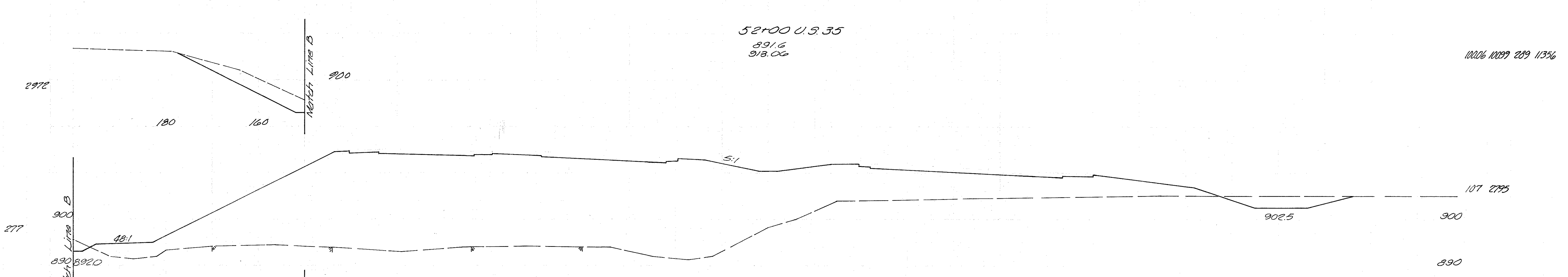
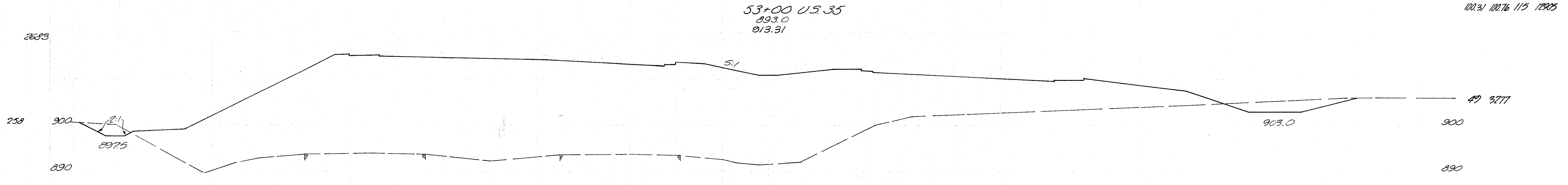
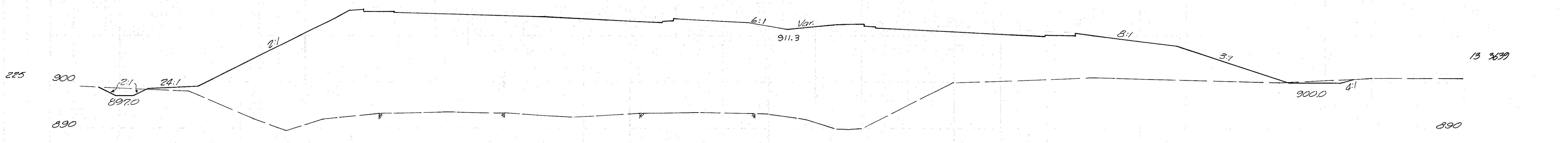
U.S. 35 STA. 45+00 to STA. 47+00 Left

140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITIES CALCULATED
BY D.L.A. FOR DATE 5/14/57
CHECKED DATE 5/20/57
WING AND BARBER
CONSULTING ENGINEERS

2 018
GRE-675 - 5.37
GREENE COUNTY

226
616



Sta 40+00 To Sta. 50+00	
Cut	21173 C.Y.
Fill	120126 C.Y.

U.S. 35 STA. 50+00 TO STA. 53+00

100.53 101.18 302 7510

100.57 101.13 302 9325

5412 101

100.06 100.99 289 11356

49 3277

100.31 100.76 115 12905

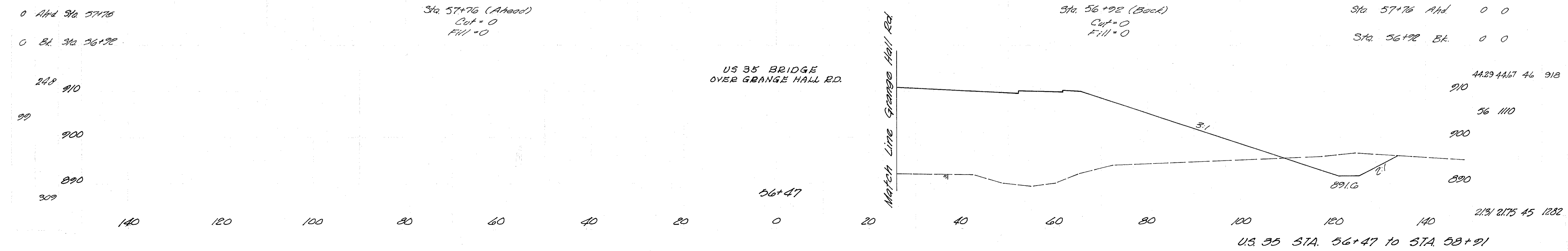
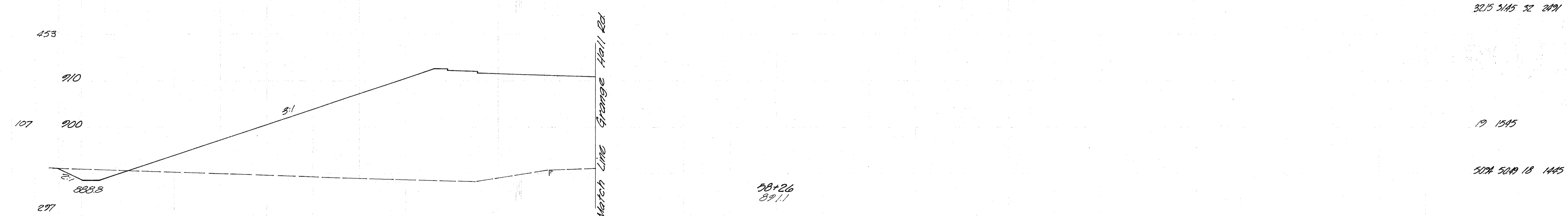
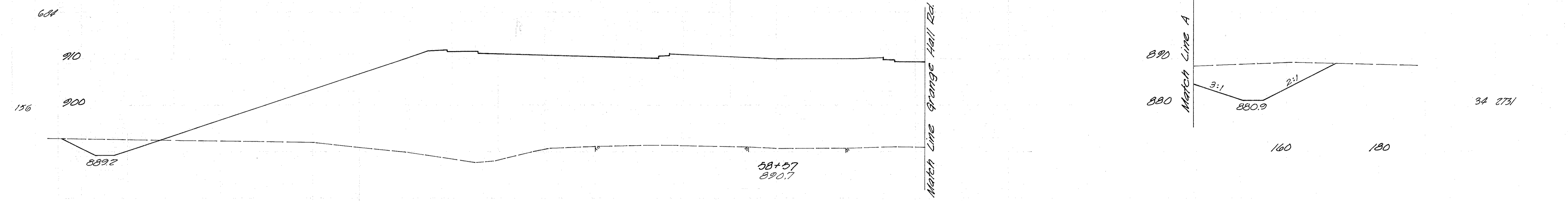
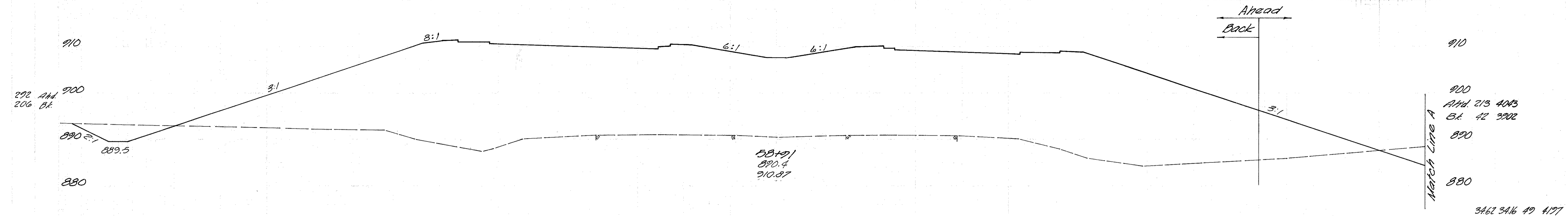
13 3639

140 120 100 80 60 40 20 0 20 40 60 80 100

QUALITY ASSURANCE
BY DATE 10/13/11
CITY OF GREENE COUNTY
ENGINE AND SURVEYOR
CONSULTING ENGINEERS

GRE-675 - 5.37
GREENE COUNTY

228
616



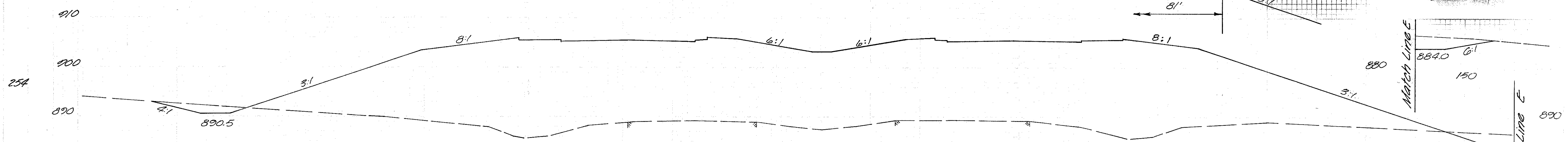
140 120 100 80 60 40 20 0 20 40 60 80 100

Sta 62+50
End Berm Transition Rt.
Begin 30' Berm

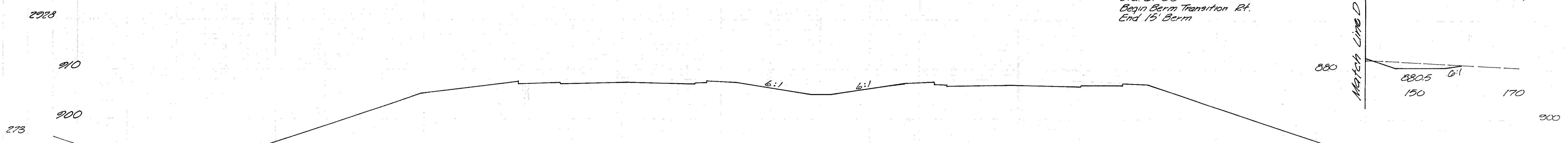
QUANTITIES CALCULATIONS
BY D.L. GIBBS, DATE 7/11/12
CITY OF GREENE, MISSOURI
GIBBS AND GAVRILE
CONSULTING ENGINEERS

GRE-675 · 5.37
GREENE COUNTY

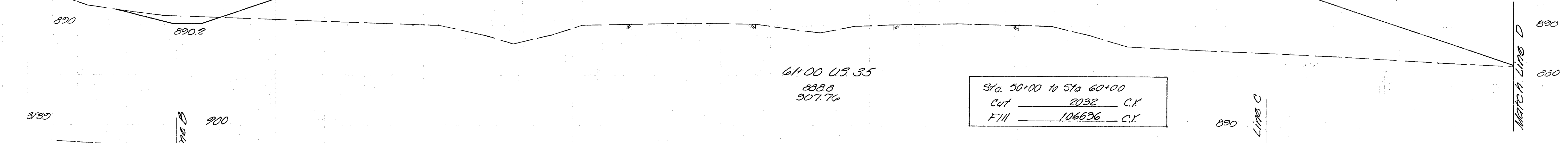
229
616



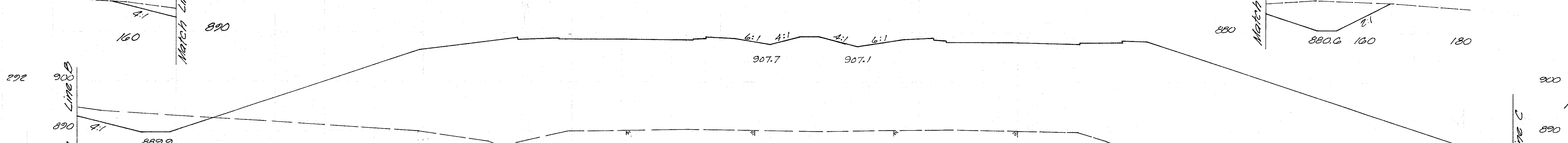
Sta 61+00
Begin Berm Transition Rt.
End 15' Berm



Sta. 50+00 to Sta 60+00	
Cut	2032 C.Y.
Fill	106636 C.Y.



End Berm Transition Sta 59+82 Lt.
Begin 30' Berm



U.S. 35 STA. 59+00 TO STA. 62+00

140 120 100 80 60 40 20 0 20 40 60 80 100

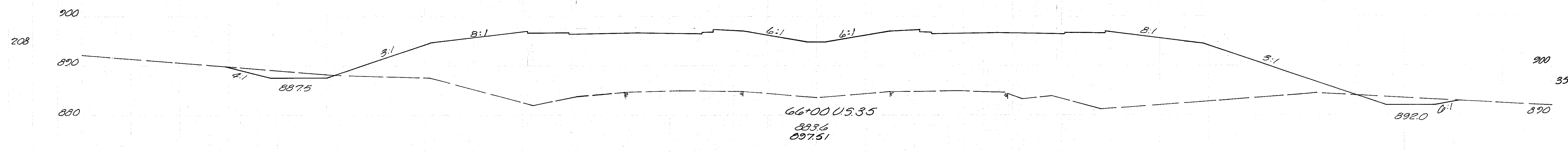
2100 2100 180 3141

140 120 100 80 60 40 20 0 20 40 60 80 100

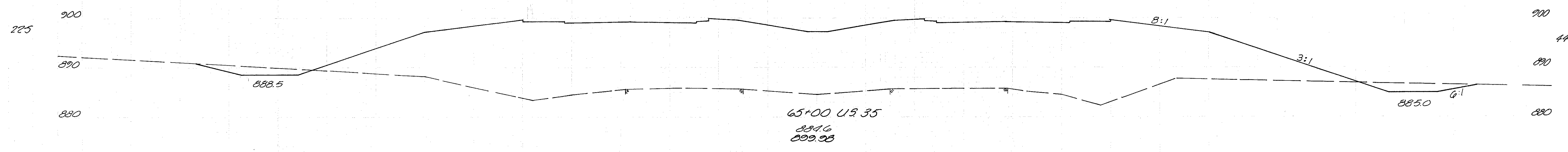
QUALITY CALCULATIONS
KYLE D. WATSON 04/14/10-13/11
DREW D. PYLE 04/14/10-11/12
KING AND GUYTON
CONSULTING ENGINEERS

2 0.10
GRE 675 - 5.37
GREENE COUNTY

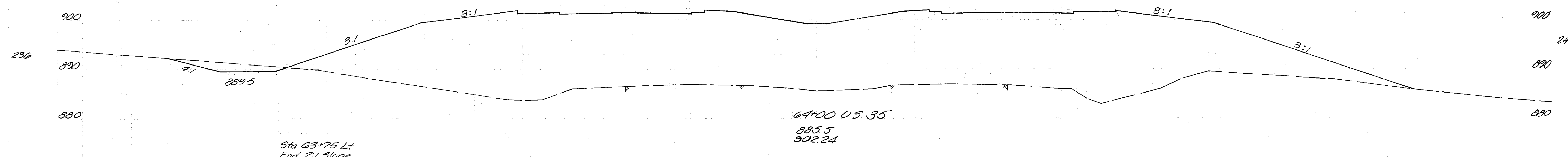
230
616



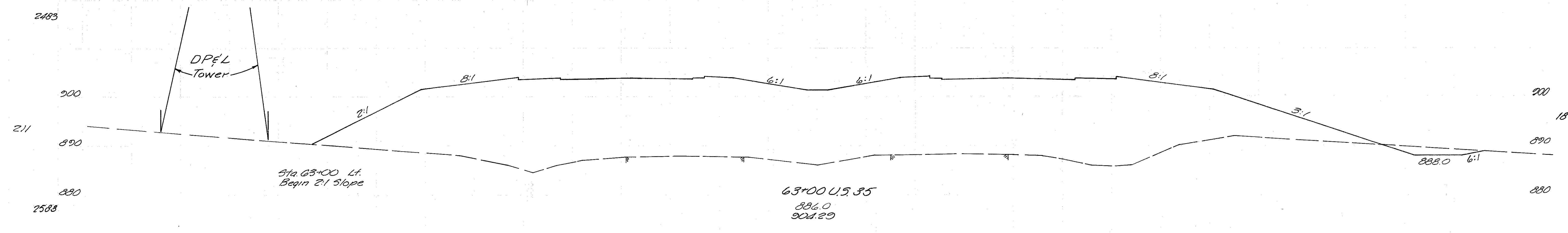
146 8854



126 9554



78 10311



146 11194

U.S. 35 STA. 63+00 TO STA. 66+00

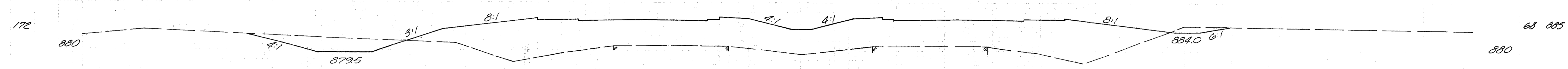
140 120 100 80 60 40 20 0 20 40 60 80 100

MINORITY CALCULATIONS
BY E.A. SP. DATE 2/14/78
GROUP DESIGNER DATE 2/14/78
KING AND GIBBONS
CONSULTING ENGINEERS
Revised 1/24/79

2 OHIO
GRE-675 - 5.37
GREENE COUNTY

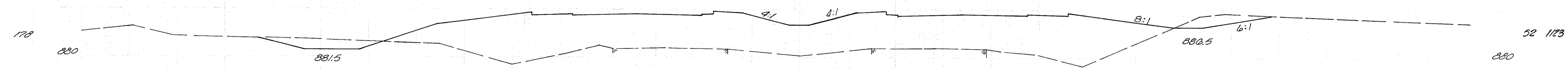
231
6/6

Sta. 60+00 to Sta. 70+00
Cut 1838 C.Y.
Fill 8755 C.Y.



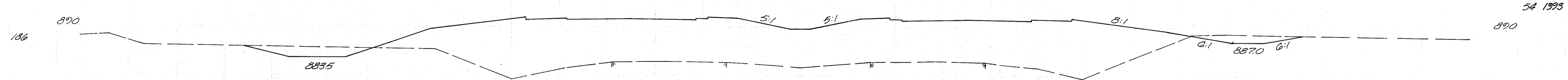
70+00 U.S. 35
879.4
887.23

222 379



69+00 U.S. 35
880.4
889.80

196 4659

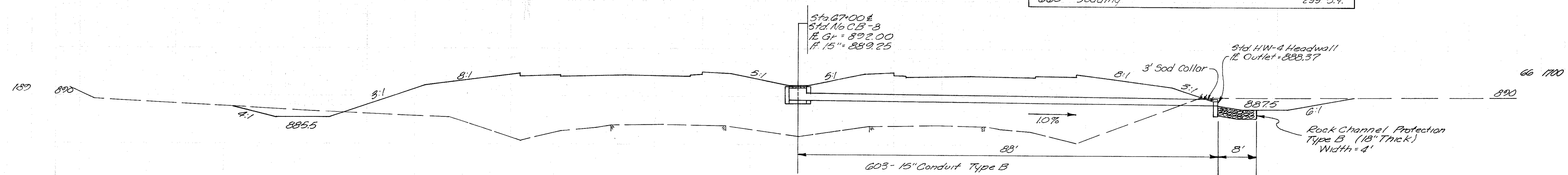


68+00 U.S. 35
881.7
892.37

222 5728

Estimated Quantities

601	Rock Channel Protection Type B, Bed	2 C.Y.
602	Masonry	0.27 C.Y.
603	15" Conduit Type B	88 L.F.
604	Std. No. CB-8	1 Ea.
605	Sodding	299 S.Y.



Sta. 67+00 ±
Std. No. CB-8
E.G. = 892.00
F. 15" = 889.25

67+00 U.S. 35
881.7
892.94

187 7156

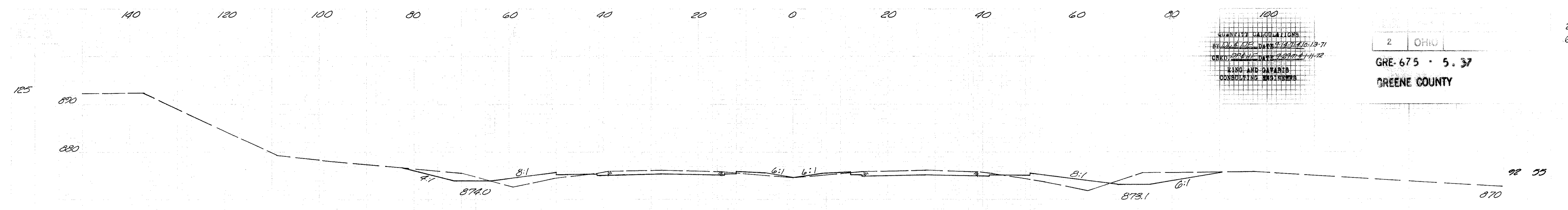
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U.S. 35 STA 67+00 TO STA 70+00

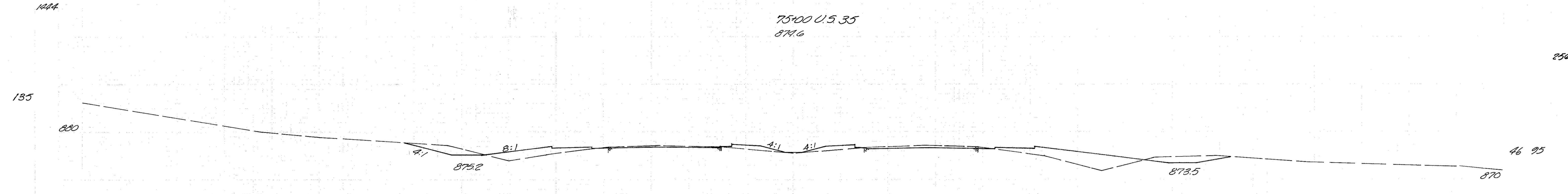
QUANTITY CALCULATIONS
 BY: J. W. D. DATE: 2/14/71 10:13-71
 CHECK: J. W. D. DATE: 2/27/71 8:11-71
 KING AND O'BARR
 CONSULTING ENGINEERS

2 OHIO
 GRE-675 - 5.37
 GREENE COUNTY

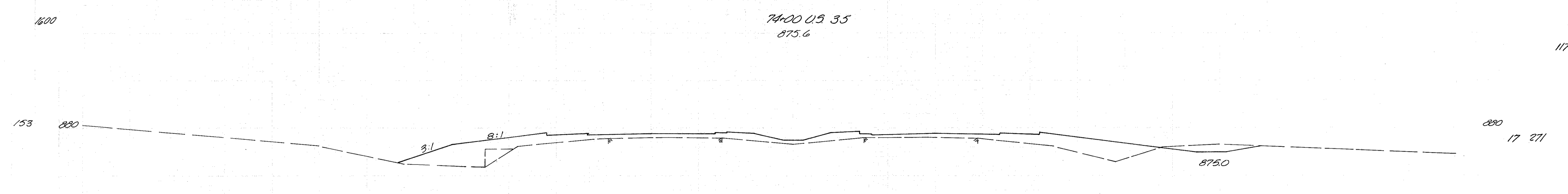
232
 616



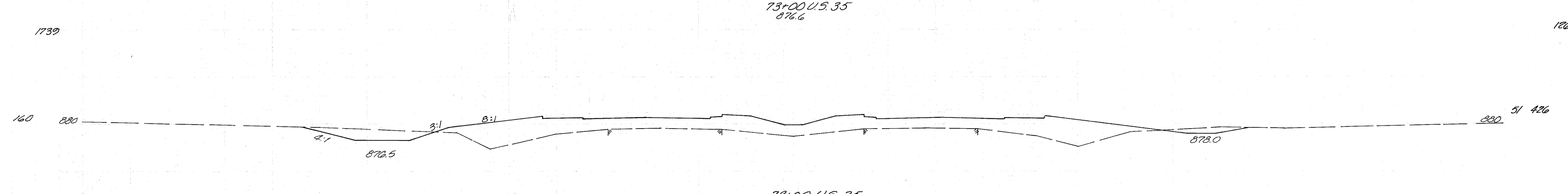
256 278



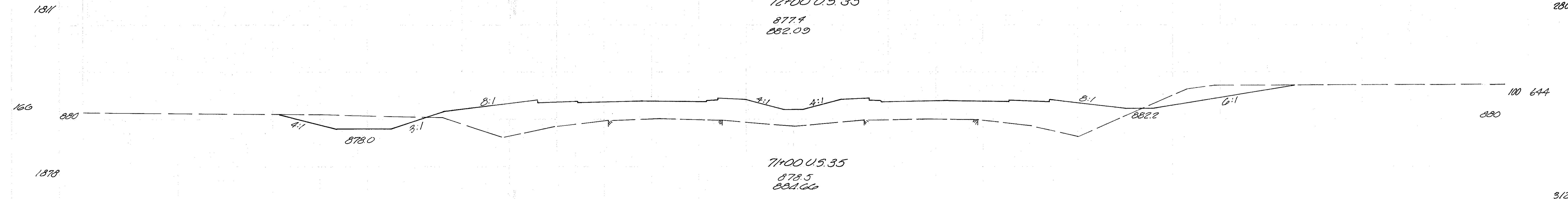
117 678



126 1291



280 1981



312 2831

U.S. 35 STA. 71+00 TO STA. 75+00

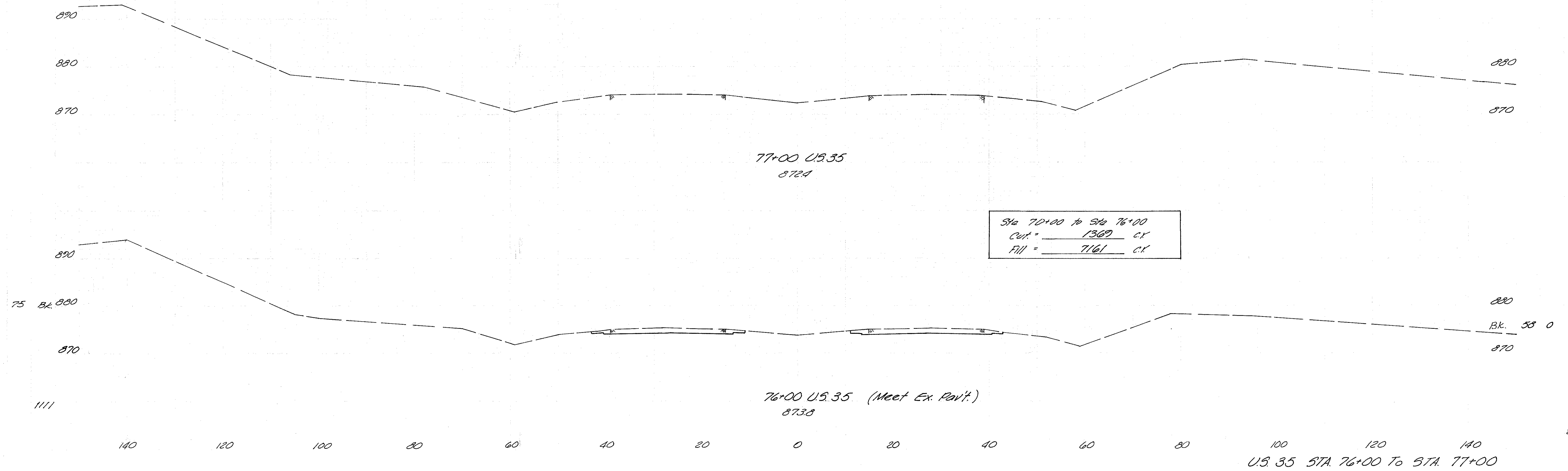
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100
QUANTITY CALCULATIONS
BY D.L.P. DATE 2-14-12
SHEET 2 OF 2 DATE 2-14-12
KING AND GATZERT
CONSULTING ENGINEERS

2	OHIO
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233
616

GRE-675 - 5.37
GREENE COUNTY



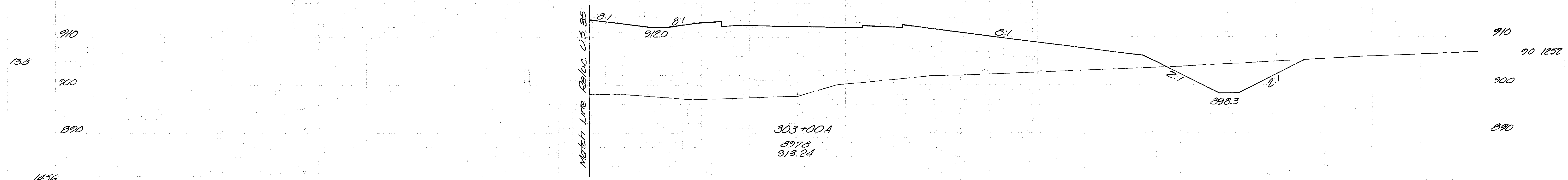
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QUANTITY CALCULATIONS
STATION & DATE 22271104-71
CHUCK GREENE DATE 02/27/72
KING AND GAYLOR
CONSULTING ENGINEERS

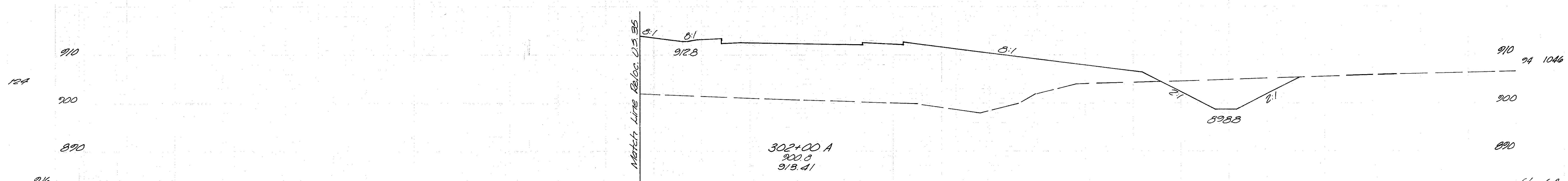
2	OHIO
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GHE-675 - 5.37
GREENE COUNTY

234
616



342 4856



61 68 186 2435

115 Sta. 301+31 A (Sta. 18+00 U.S. 35)

Sta. 301+31 A. (Sta. 18+00 U.S. 35) 71 888

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

RAMP A STA. 302+00 To STA. 303+00

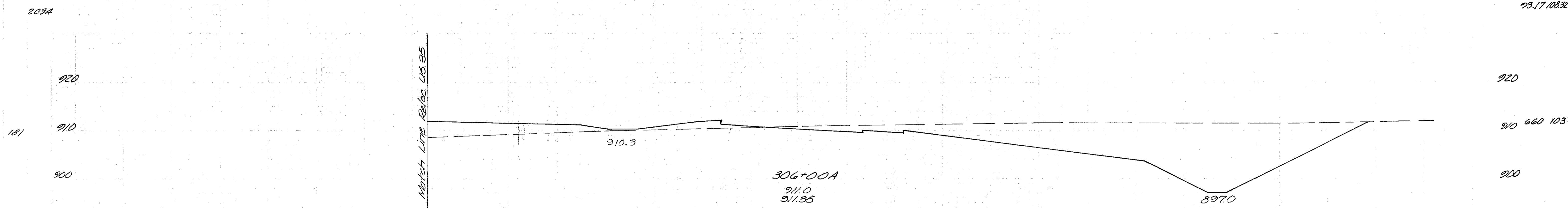
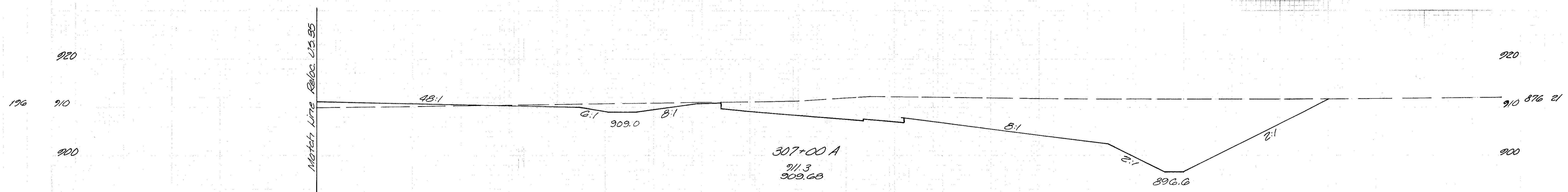
140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITY CALCULATIONS
BY: J.T. ADAMS DATE: 5-22-78 10-12-71
CHECKED BY: J.T. ADAMS DATE: 10-12-71 1-2-72
MING AND GAVARIS
CONSULTING ENGINEERS

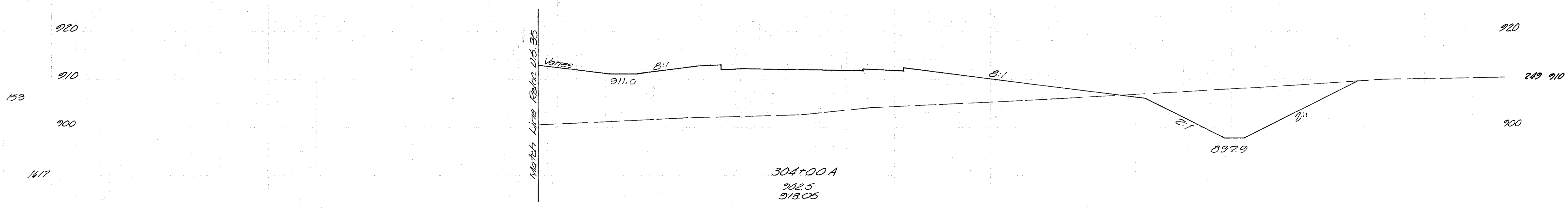
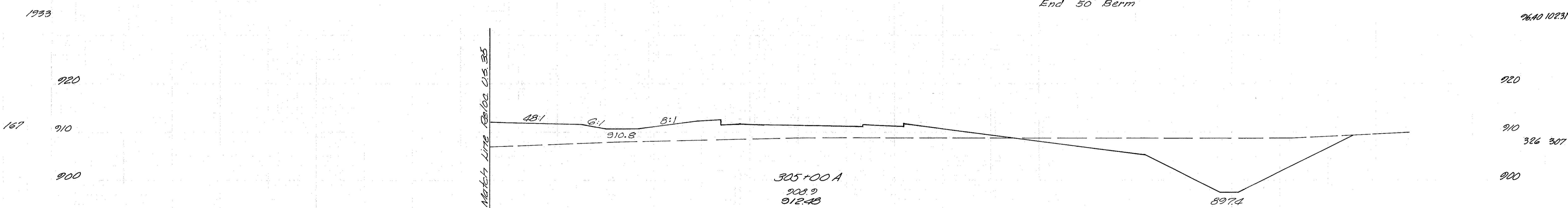
2 OHIO

GRE-675 - 5.37
GREENE COUNTY

235
616



Sta. 306+00 A
Begin Berm Transition Pt.
End 50' Berm



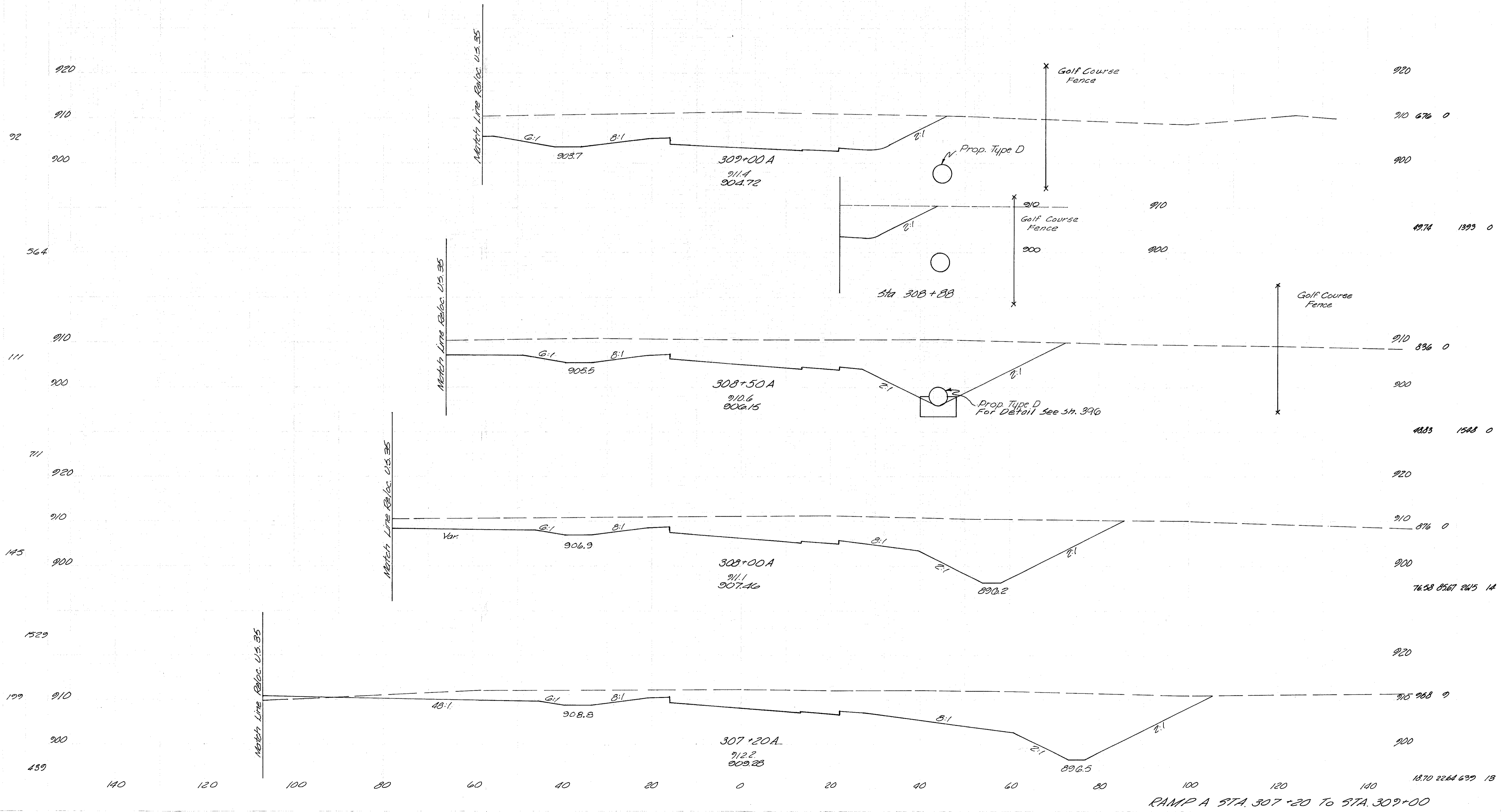
RAMP A STA. 304+00 TO STA. 307+00

140 120 100 80 60 40 20 0 20 40 60 80 100

628 4004

QUANTITY CALCULATIONS
BY D.A. F. O. P. DATE 3-22-71 12-71
OWNED BY H. E. DAVIS 10-27-71 1-2-72
KING AND GAYLES
CONSULTING ENGINEERS

2 OPHO
GRE-675 - 5.37
GREENE COUNTY



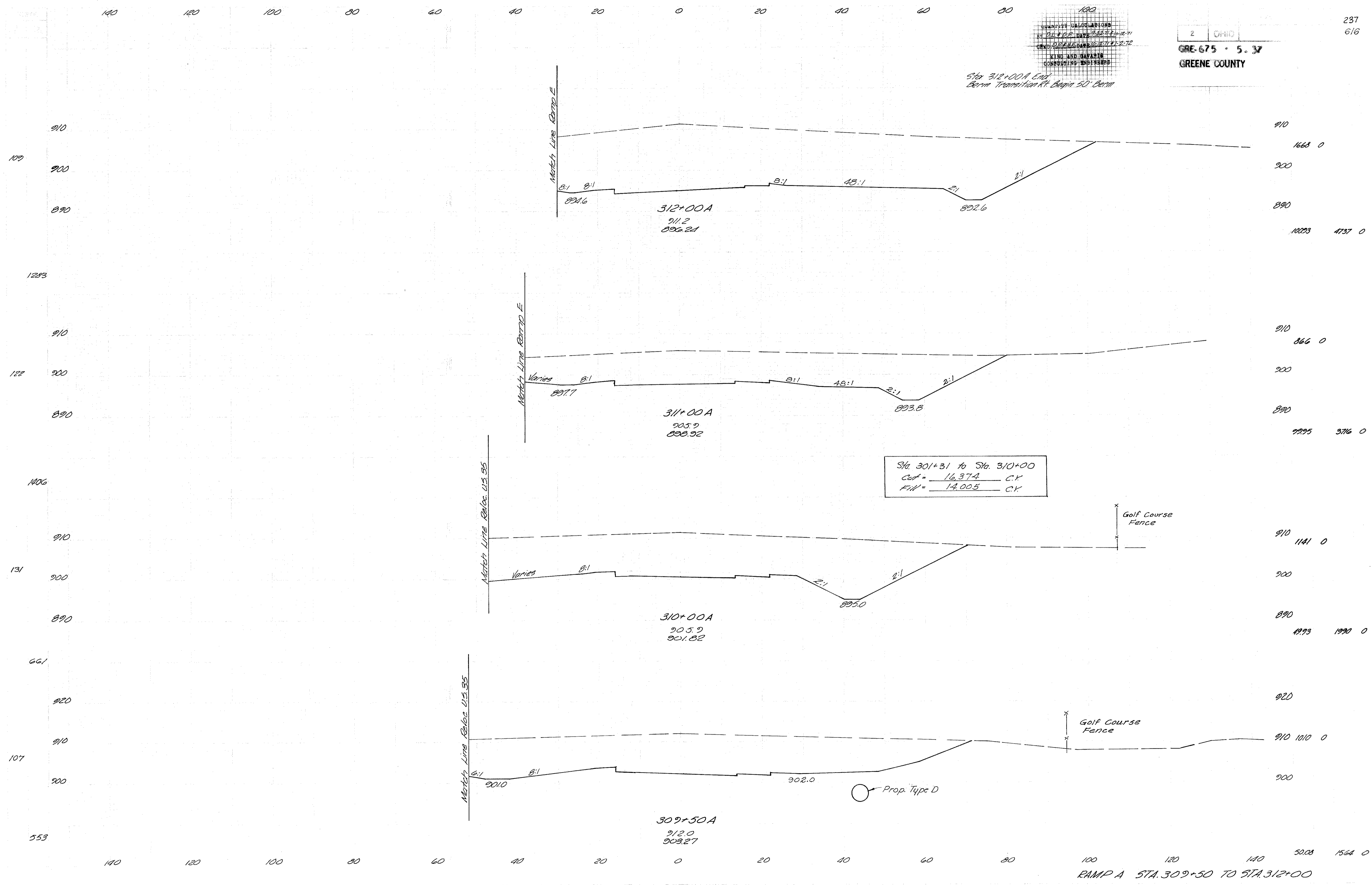
RAMP A STA. 307+20 TO STA. 309+00

QUANTITY CALCULATIONS
 BY: P.L. & D.P. DATE: 2-22-71
 CHECK: D.P. DATE: 2-22-71
 KING AND GARABIC
 CONSULTING ENGINEERS

2 OHIO
 GRE-675 - 5.37
 GREENE COUNTY

237
 6/6

Sta 312+00A End
 Berm Transition R.F. Begin 50' Berm



Match Line Ramp E

Match Line Ramp D E

Match Line Rebar U.S. 35

Match Line Rebar U.S. 35

Sta. 301+31 to Sta. 310+00
 Cut = 16,374 C.Y.
 Fill = 14,005 C.Y.

Prop. Type D

Golf Course Fence

Golf Course Fence

RAMP A STA. 309+50 TO STA. 312+00

910
 1668 0
 900
 890
 10023 4737 0

910
 866 0
 900
 890
 9995 3716 0

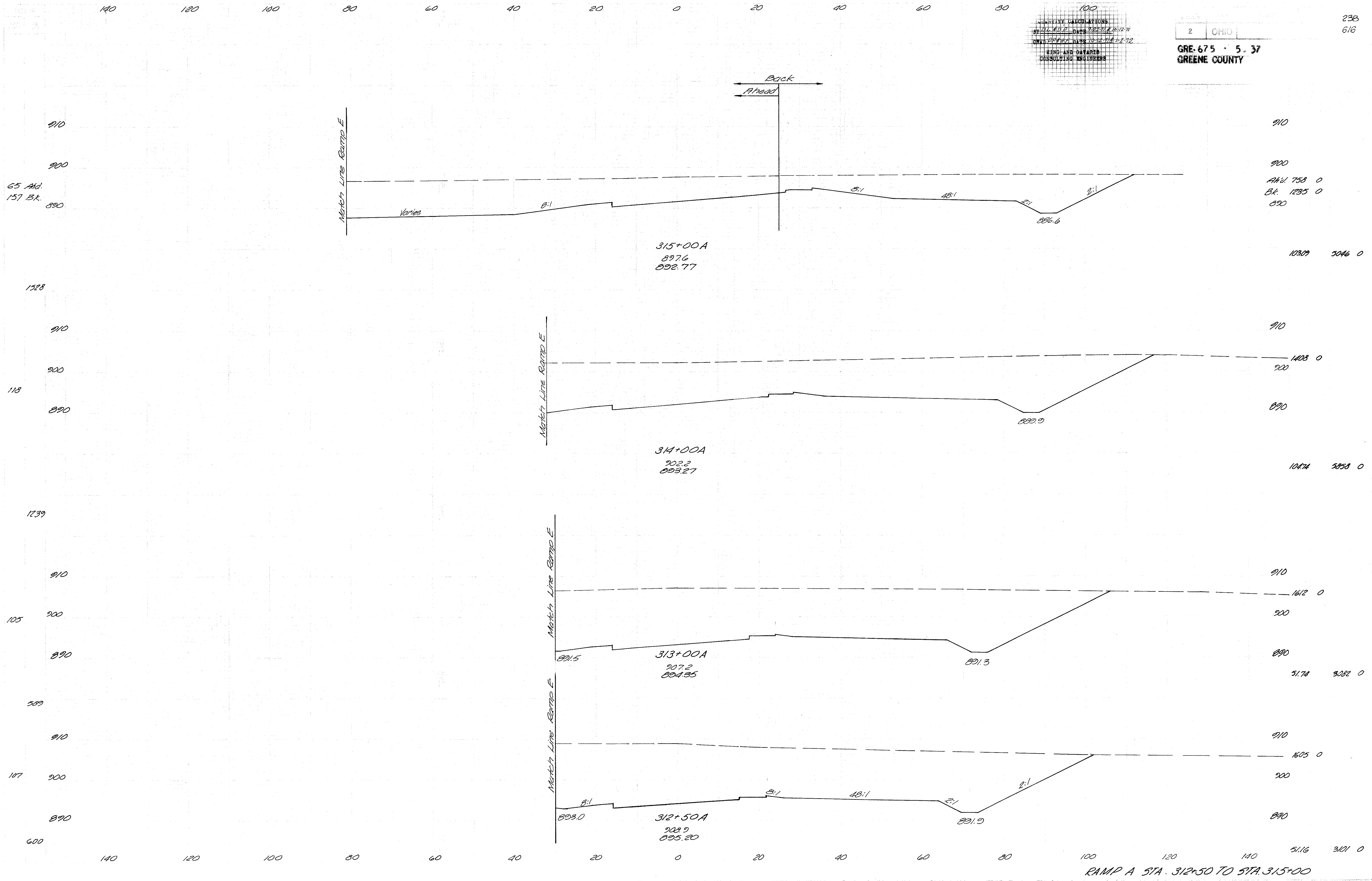
910
 1141 0
 900
 890
 4993 1990 0

920
 910 1010 0
 900

5008 1564 0

QUANTITY CALCULATIONS
 BY: J.L. B.D. DATE: 7-27-11 10:12-11
 CHECKED BY: J.L. B.D. DATE: 10-12-11 10:12-11
 KING AND DATARIS
 CONSULTING ENGINEERS

2 OHIO
 GRE-675 - 5.37
 GREENE COUNTY



65 Aft.
157 Bk.

AW 758 0
BK 1235 0

1528

10309 5046 0

118

1408 0

1239

10474 5858 0

105

1612 0

589

5174 3282 0

187

1605 0

600

5116 301 0

RAMP A STA. 312+50 TO STA. 315+00

140 120 100 80 60 40 20 0 20 40 60 80 100

100
CALCULATIONS
BY: E. D. P. DATE: 9-22-71 & 10-12-71
CHECKED: E. D. P. DATE: 10-11-71 & 1-2-72
KING AND GATZIS
CONSULTING ENGINEERS

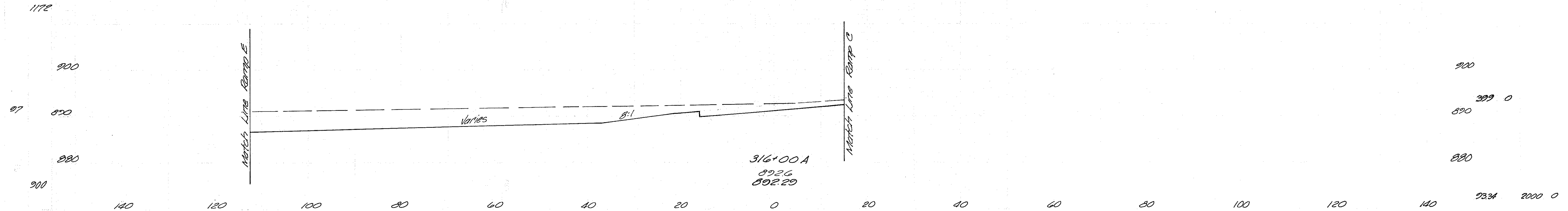
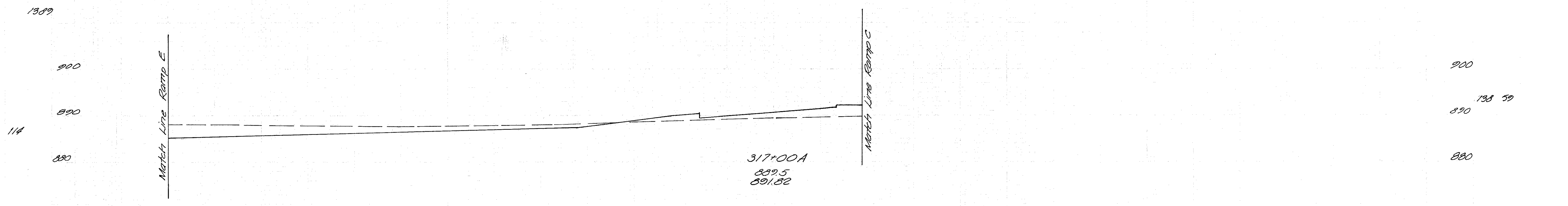
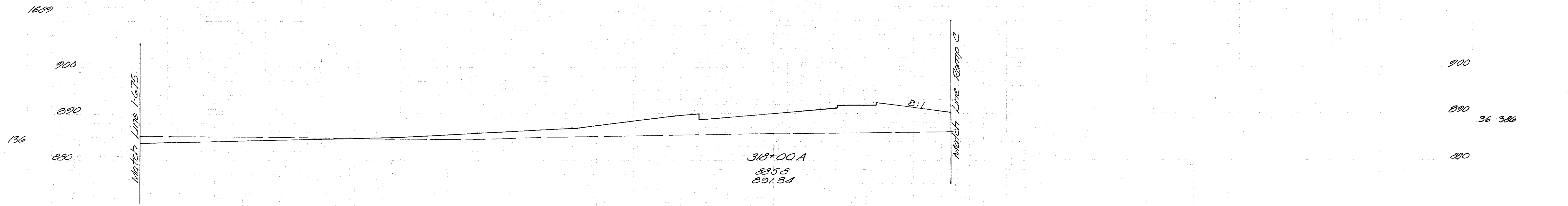
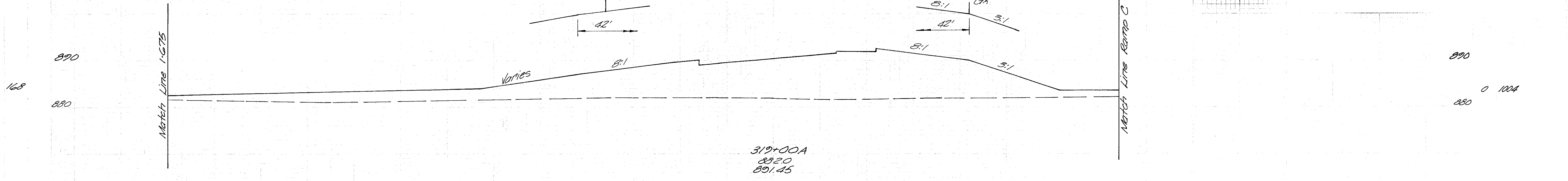
2 OHIO

GRE-675 • 5.37
GREENE COUNTY

239

Sta. 319+38 Begin
Berm Transition At End 30' Berm

Sta. 310+00 Begin
Berm Transition At End 30' Berm



140 120 100 80 60 40 20 0 20 40 60 80 100

RAMP A STA. 316+00 TO STA. 319+00

934 2000 0

140 120 100 80 60 40 20 0 20 40 60 80 100

SUBMITTAL CALCULATIONS
BY C.E. H.C.P. DATE 8-22-71
CROSS SECTION DATE 10-20-71
KING AND GATARIK
CONSULTING ENGINEERS

2 OHIO

GRE-675 - 5.37
GREENE COUNTY

240
616

BRIDGE OVER I-675

Sta 310+00 to Sta 321+37
Cut = 28,909 C.Y.
Fill = 16,574 C.Y.

0 Bl. Sta 321+37

321+37A (Back)
0 Cut - 0 Fill

Sta 321+37 Back 0 0

181 900

900 32.78 0 8.19

890

890

102 880

880

0 1348

Match Line I-675

Match Line RAMP C

510

321+05A
874.7
895.30

900 30.99 34.08 13 2734

900

890

890

880

880

176

23 2191

Match Line I-675

Match Line RAMP C

1544

320+72A
874.7
894.39

73.21 78.54 73 5156

900

900

890

890

210

880

31 1647

Match Line I-675

Match Line RAMP C

2100

320+00A
878.1
892.74

107.75 92.14 62 4882

140 120 100 80 60 40 20 0 20 40 60 80 100

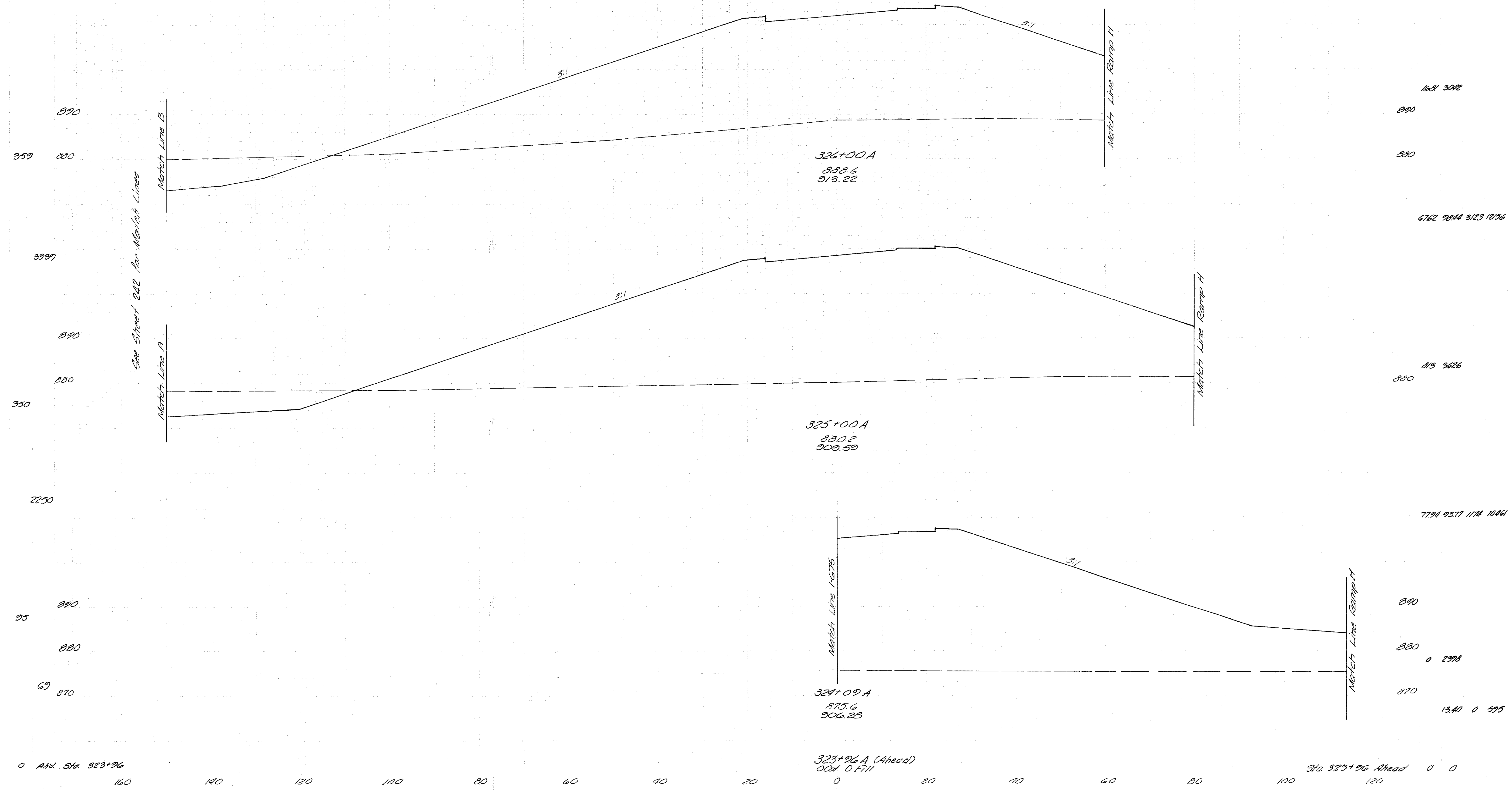
RAMPA STA 320+00 TO STA 321+37

160 140 120 100 80 60 40 20 0 20 40 60 80

SCALE: VERTICAL AS SHOWN
PL & D.E. DRAWING NO. 22-714 10-12-71
DATE: 10/22/71
KIND AND GARBER
CONSULTING ENGINEERS

2 OHIO
GRE 675 - 5.37
GREENE COUNTY

241
616



0 ANN. STA. 323+96

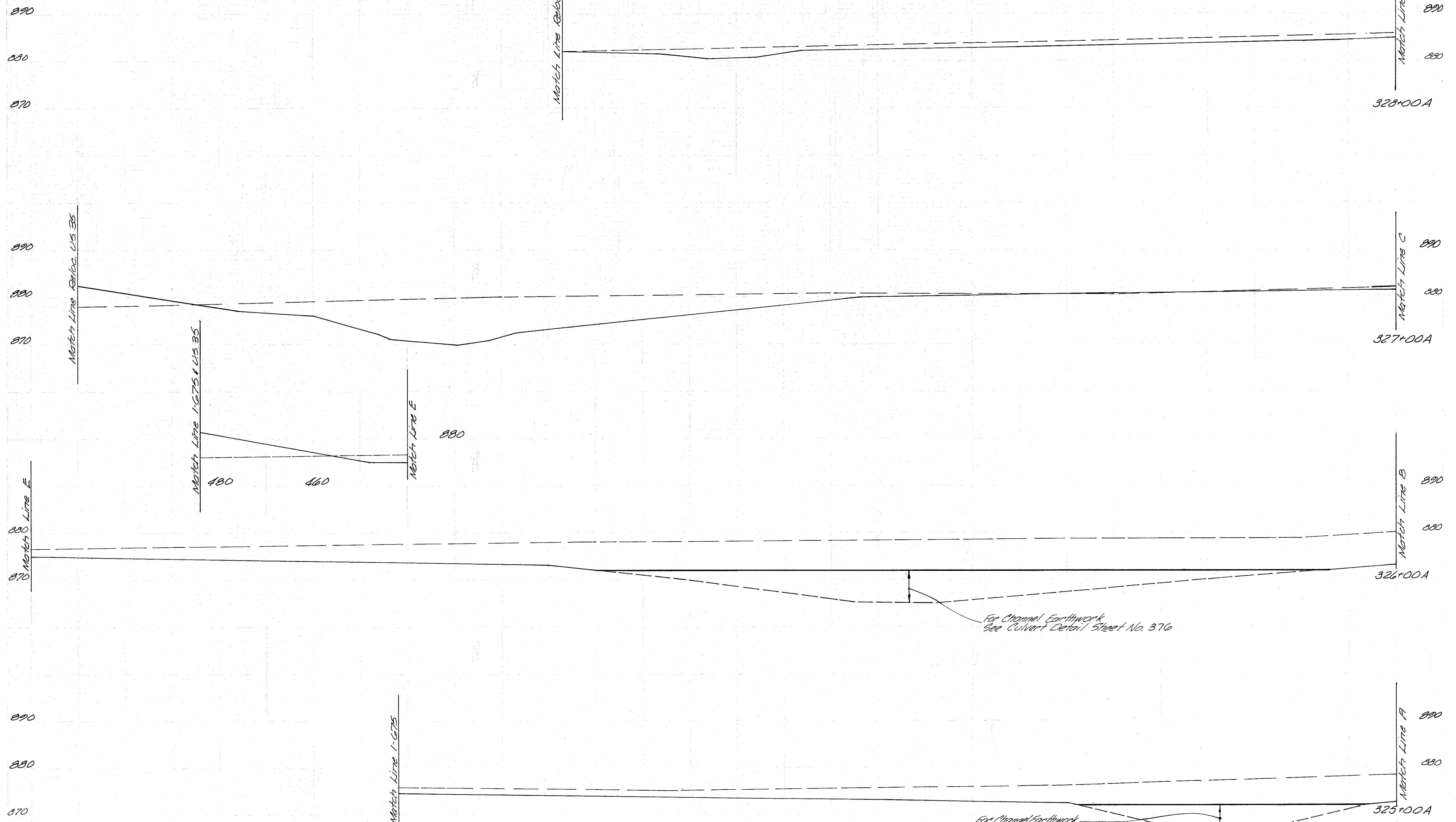
160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

440 420 400 380 360 340 320 300 280 260 240 220 200 180

QUANTITY CALCULATIONS
BY: J. D. P. DATE: 7-22-77 10-12-77
BY: J. D. P. DATE: 10-25-77 1-3-78
KING AND GAYLIS
CONSULTING ENGINEERS

2 OHIO
GRE-675 - 5.37
GREENE COUNTY

242
616

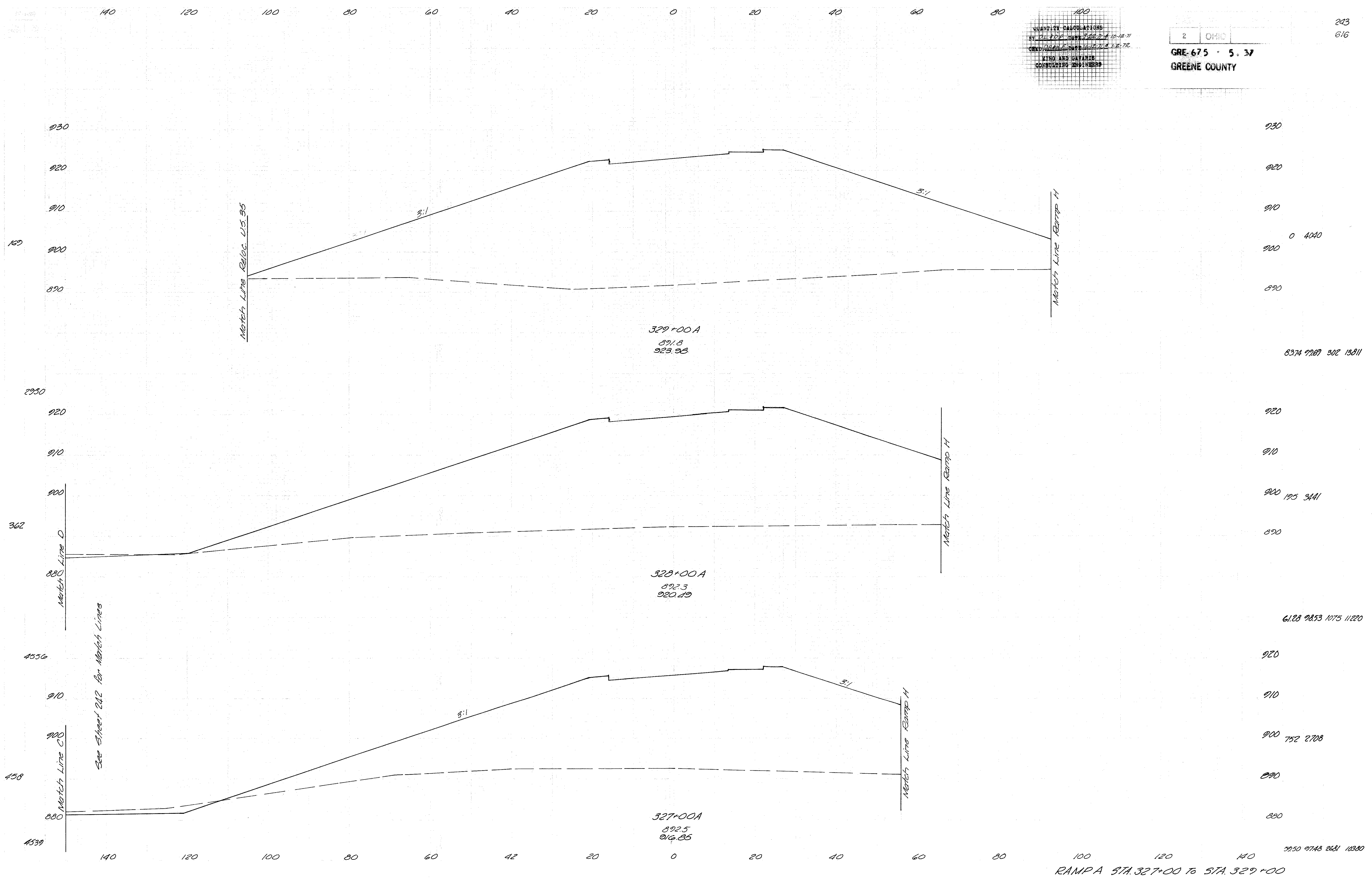


RAMP A STA. 325+00 TO STA. 328+00 150' LEFT

QUANTITY CALCULATIONS
 BY: C.L. DODD DATE: 7/22/71 10-12-71
 CORRECTED DATE: 10/27/81 1/2/72
 KING AND GAVARIS
 CONSULTING ENGINEERS

2 OMIC
 GRE-675 - 5.37
 GREENE COUNTY

243
 616



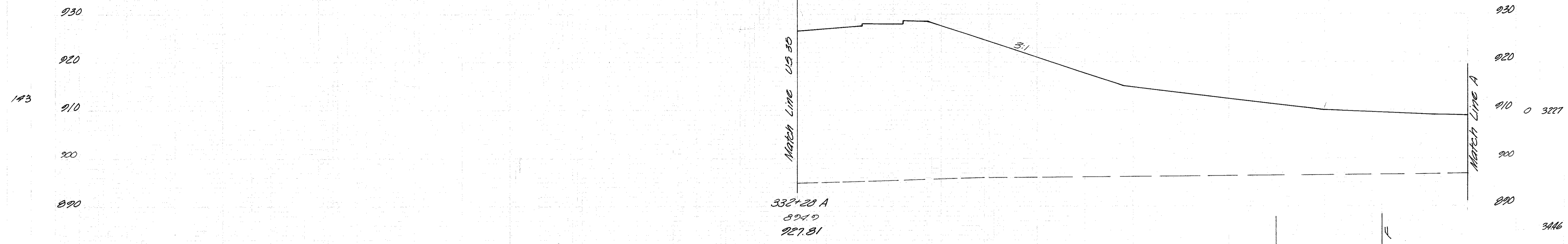
140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITY CALCULATIONS
BY: W.D.P. DATE: 12/27/10-12-11
CHECKED: W.D.P. DATE: 01/03/11
KING AND DATARIS
CONSULTING ENGINEERS

2	OHIO
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GRE-675 - 5.37
GREENE COUNTY

244
616



0 AND STA. 331+95

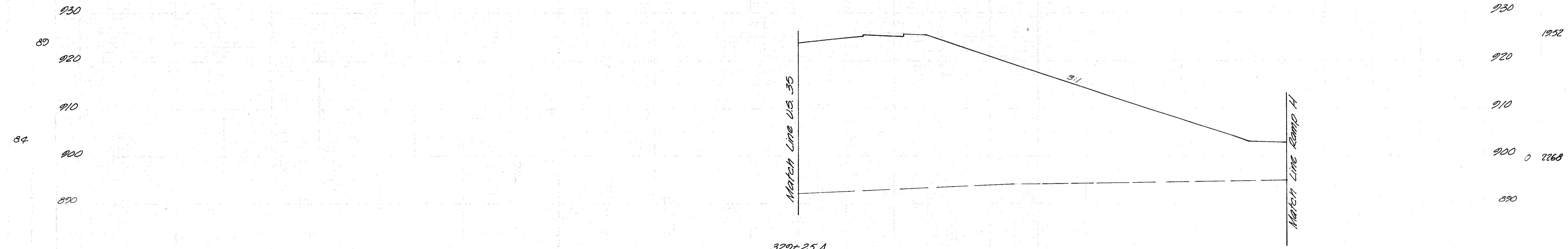
331+95 A (Ahead)
cut of fill

Sta. 331+95 Ahead 0 0

BRIDGE OVER U.S. 35 Relocated

0 Bk. Sta. 329+44

Sta 329+96 to Sta 329+44
Cut = 8355 CY
Fill = 62449 CY



329+25 A
892.0
924.71

Sta. 329+44 Back 0 0

RAMP A STA. 329+44 TO STA 332+28

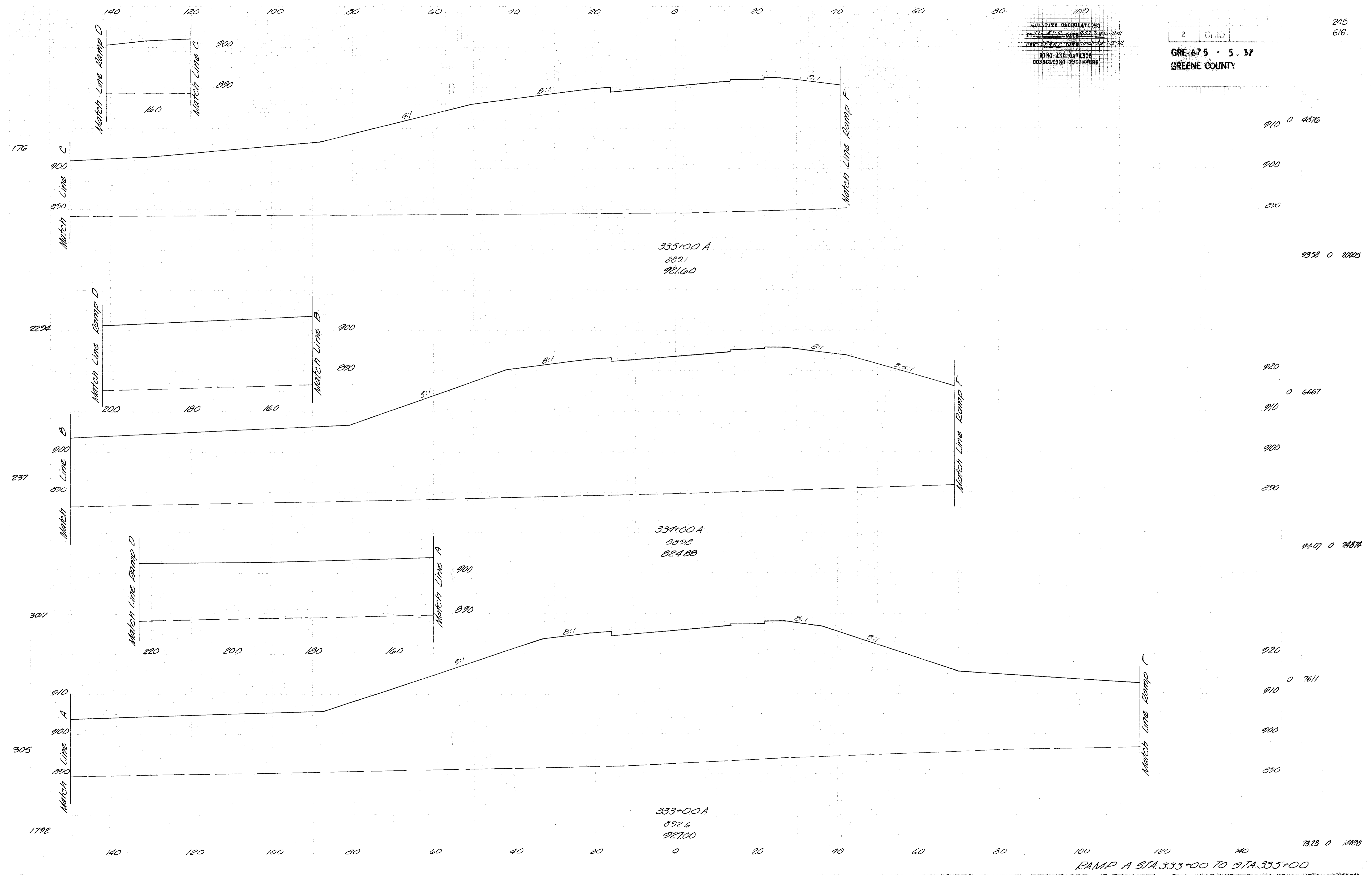
140 120 100 80 60 40 20 0 20 40 60 80 100

2573 0 3006

QUANTITY CALCULATIONS
 BY D.L. H.D.P. DATE 12-27-10 12-71
 DATE REVISED 10/27/12 1-2-12
 KING AND GARRIS
 CONSULTING ENGINEERS

2 OHIO
 GRE 675 - 5.37
 GREENE COUNTY

245
 616



910 0 4876

900

890

2358 0 2005

920

0 6667

910

900

890

9407 0 24874

920

0 7611

910

900

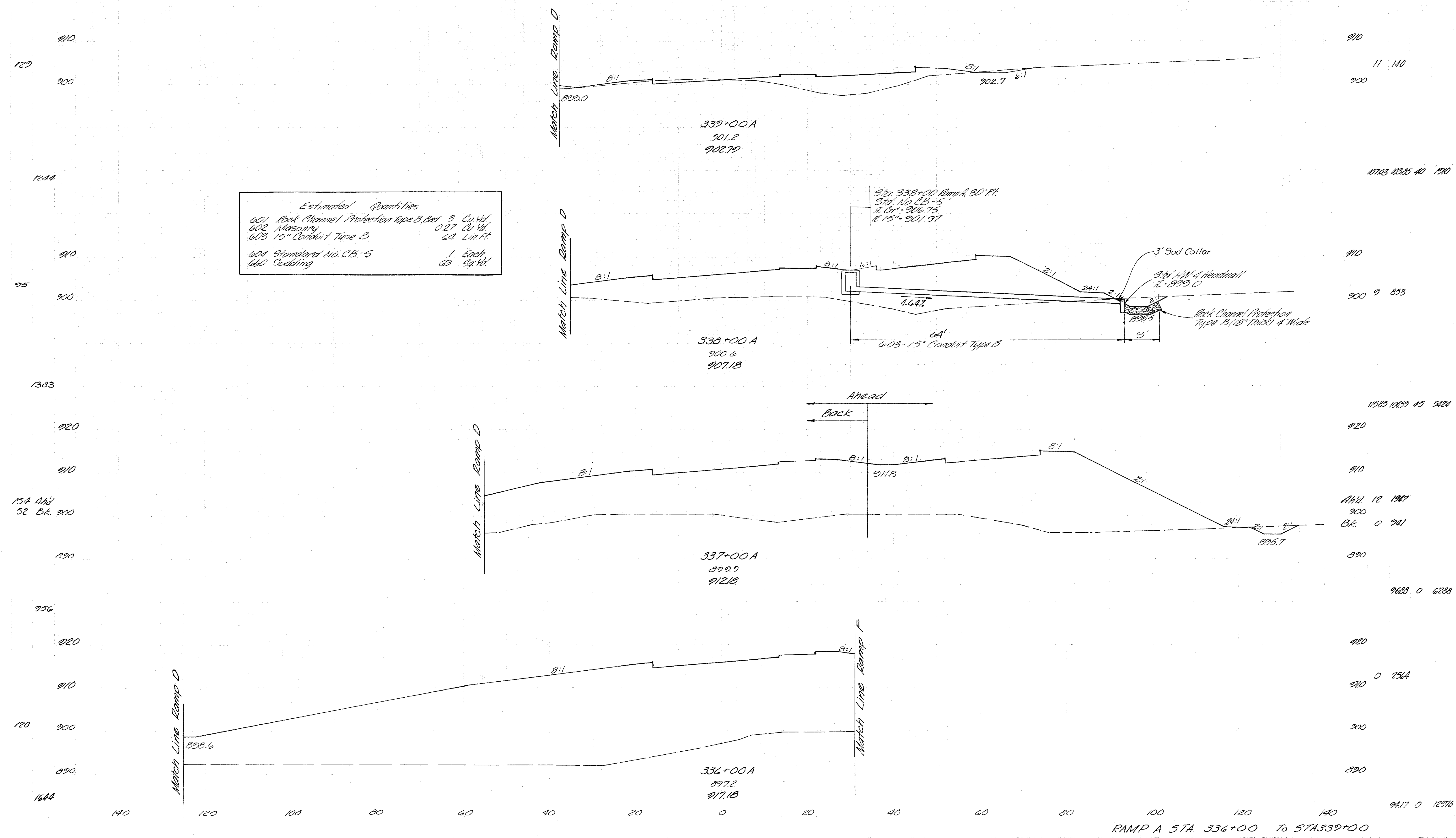
890

7325 0 14098

RAMP A STA. 333+00 TO STA. 335+00

QUANTITY CALCULATION SHEET
 BY: P.W. & D.B. DATE: 1-22-77 10-12-77
 CHECKED BY: DATE: 1-23-77 1-2-77
 KING AND COMPANY
 CONSULTING ENGINEERS
 Revised: 11/1/79

2 OHIO
 GRE-675-5.37
 GREENE COUNTY



Estimated Quantities

601 Rock Channel Protection Type B, Sect 3	3 Cu Yd.
602 Masonry	0.27 Cu Yd.
603 15" Conduit Type B	64 Lin. Ft.
604 Standard No. CB-5	1 Each
600 Sodding	69 Sq. Yd.

122
 1244
 910
 95
 200
 1383
 920
 910
 154 Ahd.
 52 Bk. 200
 890
 956
 920
 910
 120
 900
 890
 1644

910
 11 140
 200
 10723 10385 40 1790
 910
 200 853
 920
 11585 10650 45 5424
 920
 910
 Ahd. 12 1947
 200
 Bk. 0 941
 890
 9688 0 6288
 920
 910 2564
 200
 890
 9417 0 12976

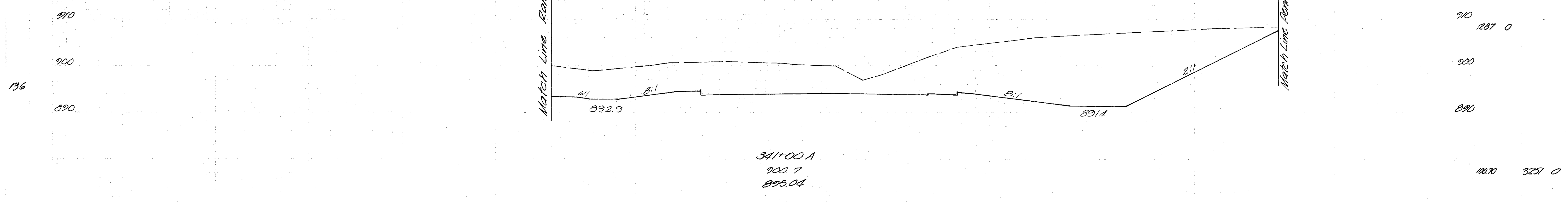
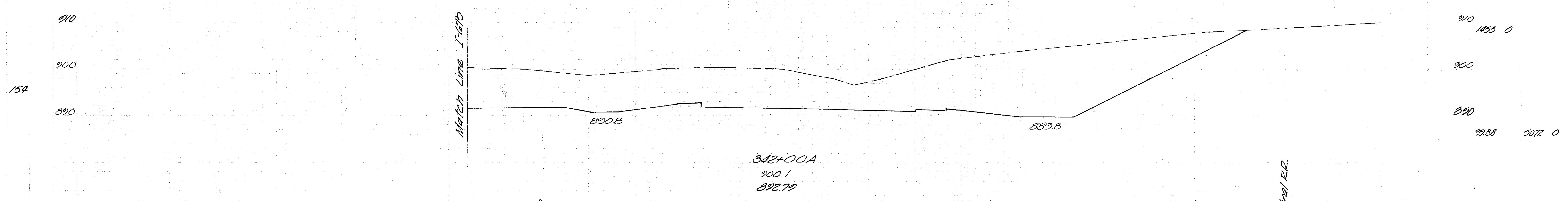
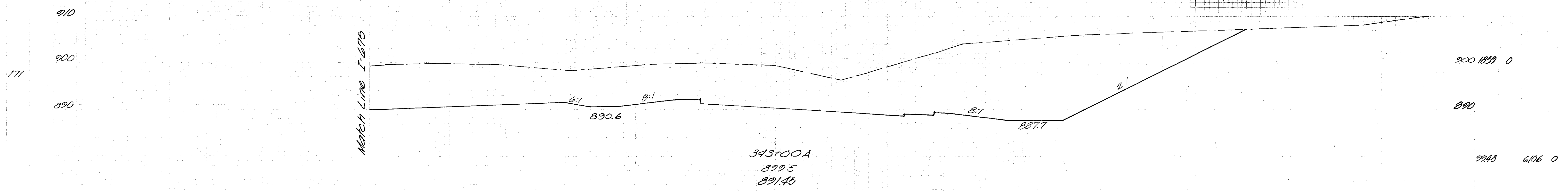
RAMP A STA. 336+00 To STA 339+00

140 120 100 80 60 40 20 0 20 40 60 80 100

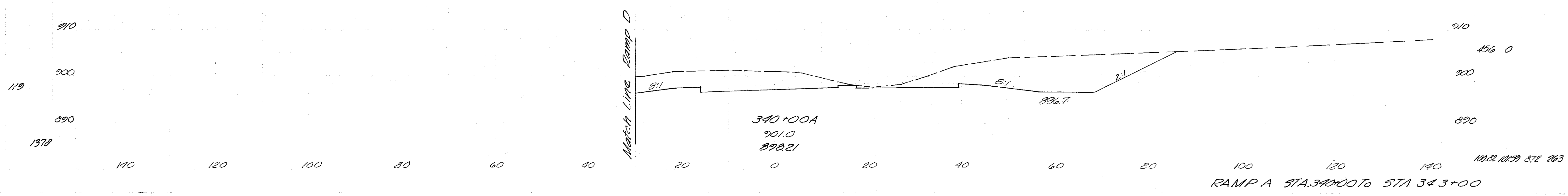
QUALITY CALCULATIONS
BY: J. D. ...
DATE: ...
PLACED AND CHECKED
CONSTRUCTION ENGINEER

2 G.M.D.
GRE-675 - 5.37
GREENE COUNTY

247
616



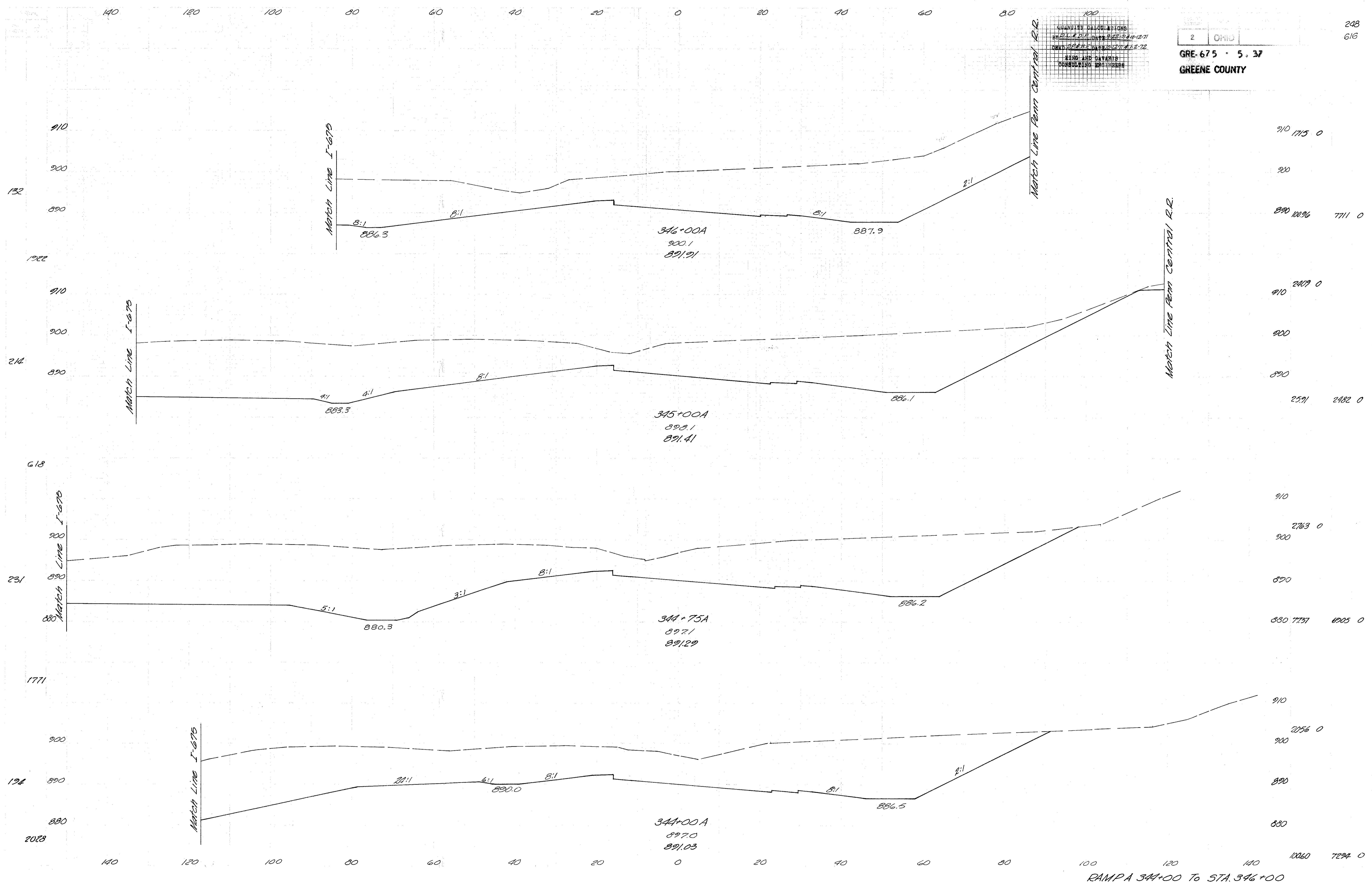
Sta 341+95 to Sta 340+00
Cut = 957 C.Y.
Fill = 88477 C.Y.



QUANTITY CALCULATIONS	
NO. OF PILES	DATE 9-22-71 11-12-71
DRILL LOGS	DATE 10-27-71 1-2-72
FIELD AND DATUMS	
CONSOLIDATING ENGINEERS	

2 OHIO
 GRE-675 - 5.37
 GREENE COUNTY

248
 616



QUANTITY CALCULATIONS
 BY: P.L. & D.P. DATE: 7-22-71 10-12-71
 PROJ: GREENE COUNTY, GEORGIA, I-75
 KING AND GAYARRI
 CONSULTING ENGINEERS

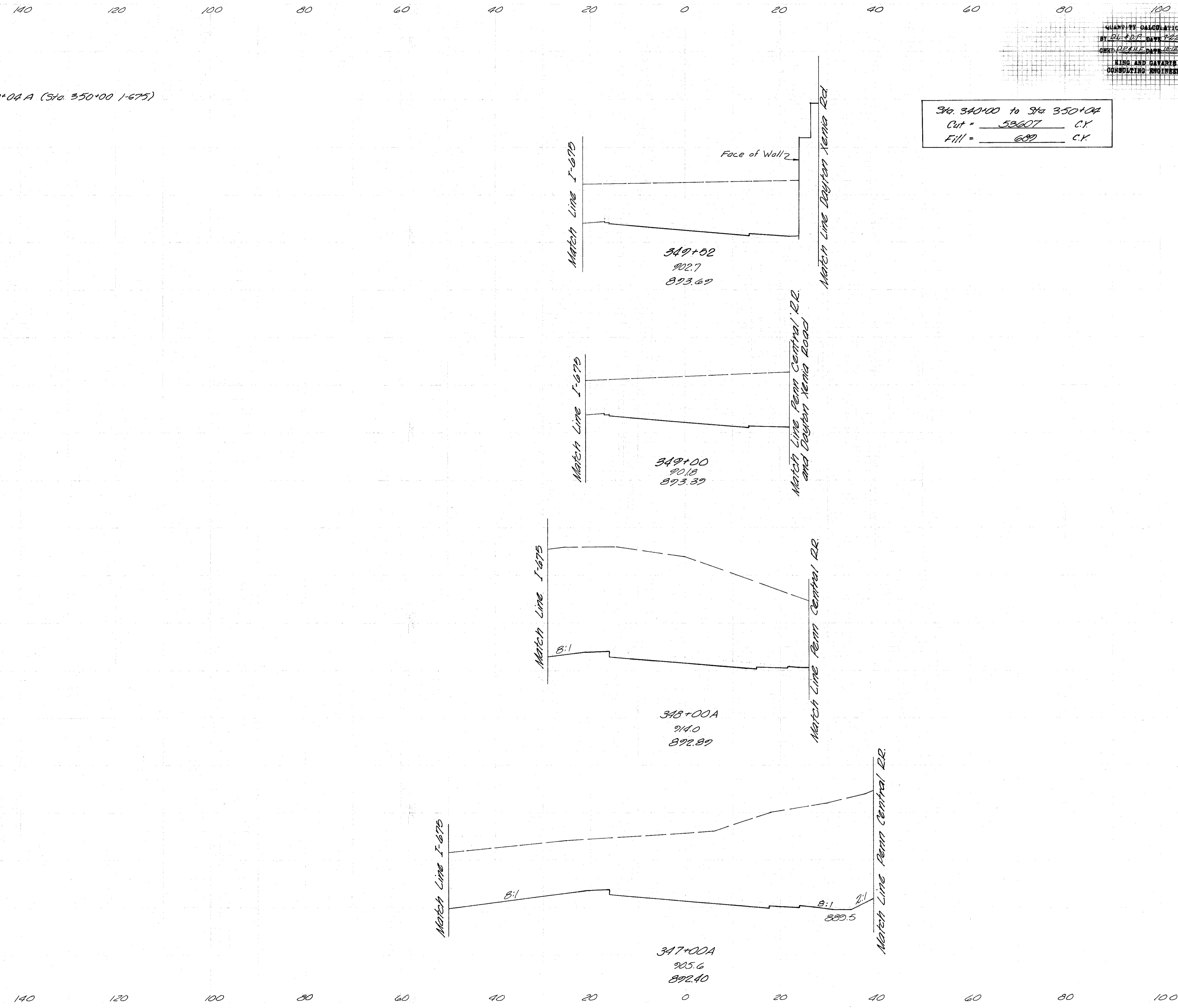
2 0110 249
 616
 GRE-675 - 5.37
 GREENE COUNTY

48 Sta. 350+04 A (Sta. 350+00 1-675)

Sta. 340+00 to Sta 350+04
 Cut = 53607 C.Y.
 Fill = 689 C.Y.

Sta 350+04 A (Sta. 350+00 1-675) 425 565

139
0
0
0
18
378
50
1011



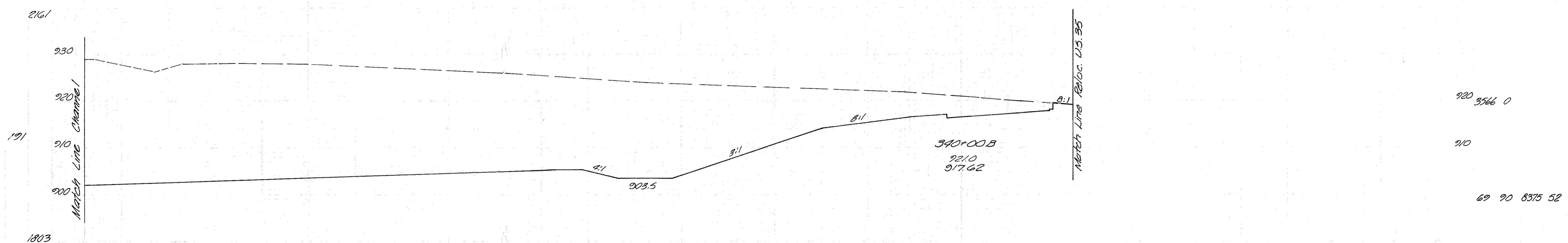
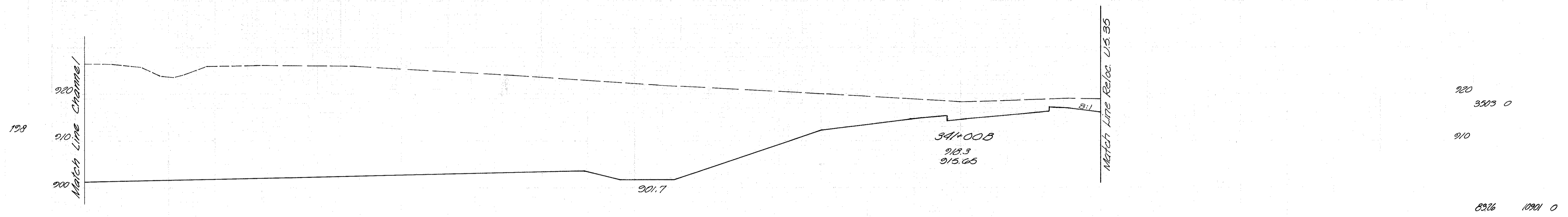
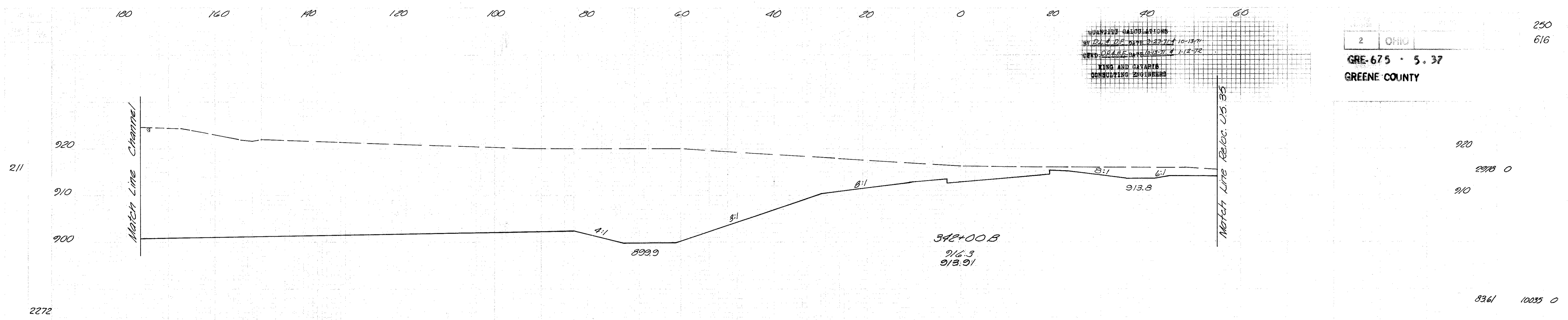
52.00 4900 849 599
 900
 457 95
 890
 5185 5123 832 90
 900
 409 0
 890
 1005 2848 0
 910
 900
 890 1128 0
 10009 4605 0
 910
 900
 890 1356 0
 9938 5652 0

RAMP A 347+00 To STA. 349+52

QUANTITIES CALCULATIONS
 BY D.L.A. DATE 2-23-71 10-13-71
 CHECKED DATE 2-23-71 1-12-72
 KING AND GAYLES
 CONSULTING ENGINEERS

2	OHIO	250
		616

GRE-675 - 5.37
 GREENE COUNTY



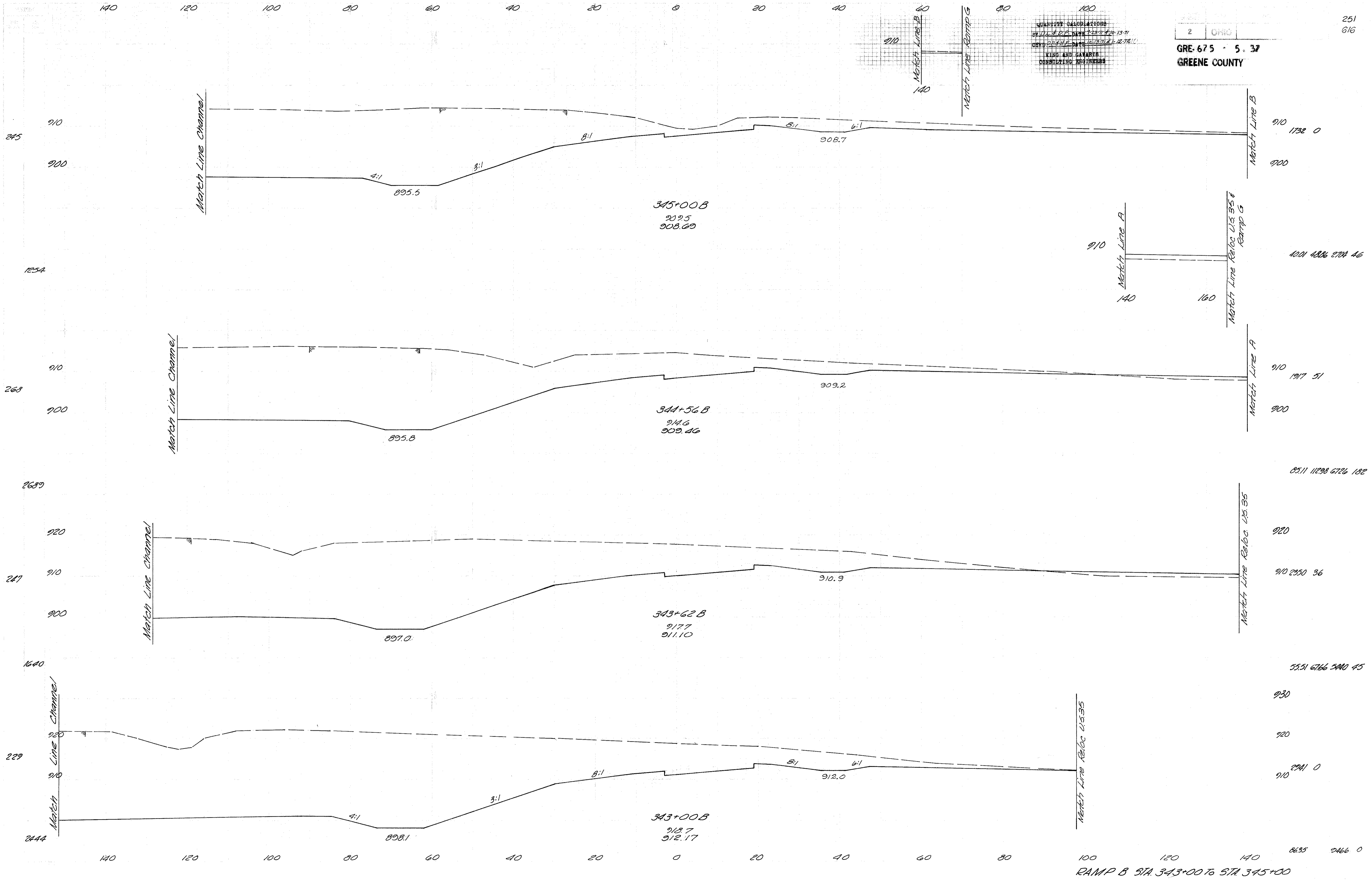
182 Sta. 339+13.3 (Sta. 12+00 U.S. 35)

Sta. 339+13.3 (Sta. 12+00 U.S. 35) 2288 31

RAMP B STA 340+00 TO STA. 342+00

QUANTITY CALCULATIONS
BY D.L.P. DATE 12-27-10
CITY OF GREENE COUNTY
VINO AND GAVARIS
CONSULTING ENGINEERS

2 OHIO
GRE-675 - 5.37
GREENE COUNTY

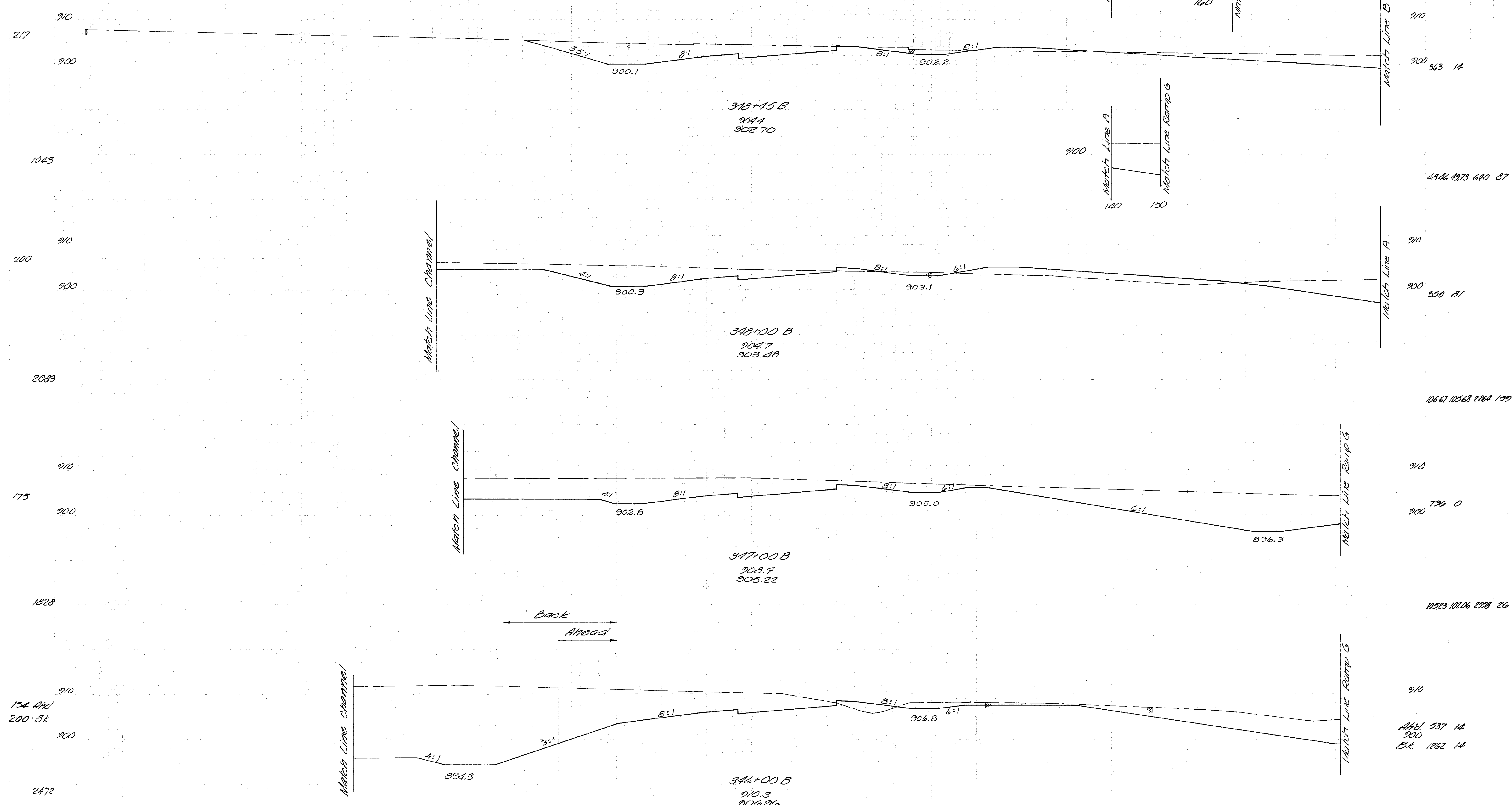


RAMP B STA 343+00 TO STA 345+00

140 120 100 80 60 40 20 0 20 40 60 80 100

SMALLER CALCULATIONS
BY D.L.F. DATE 9-23-71 #10-13-71
CAMPBELL ENGINEERING CO. EST. 1918-72
KING AND GAVRIS
CONSULTING ENGINEERS

2 OHIO 252
616
GRE-675 - 5.37
GREENE COUNTY



217 910 900 900.1 902.2 902.2 902.2

1043 910 900 900.9 903.1 903.1

2083 910 900 902.8 905.0 906.3

1828 910 900 894.3 906.8 906.8

154 Ahd. 200 Bk. 910 900

2472 910 900 894.3 906.8 906.8

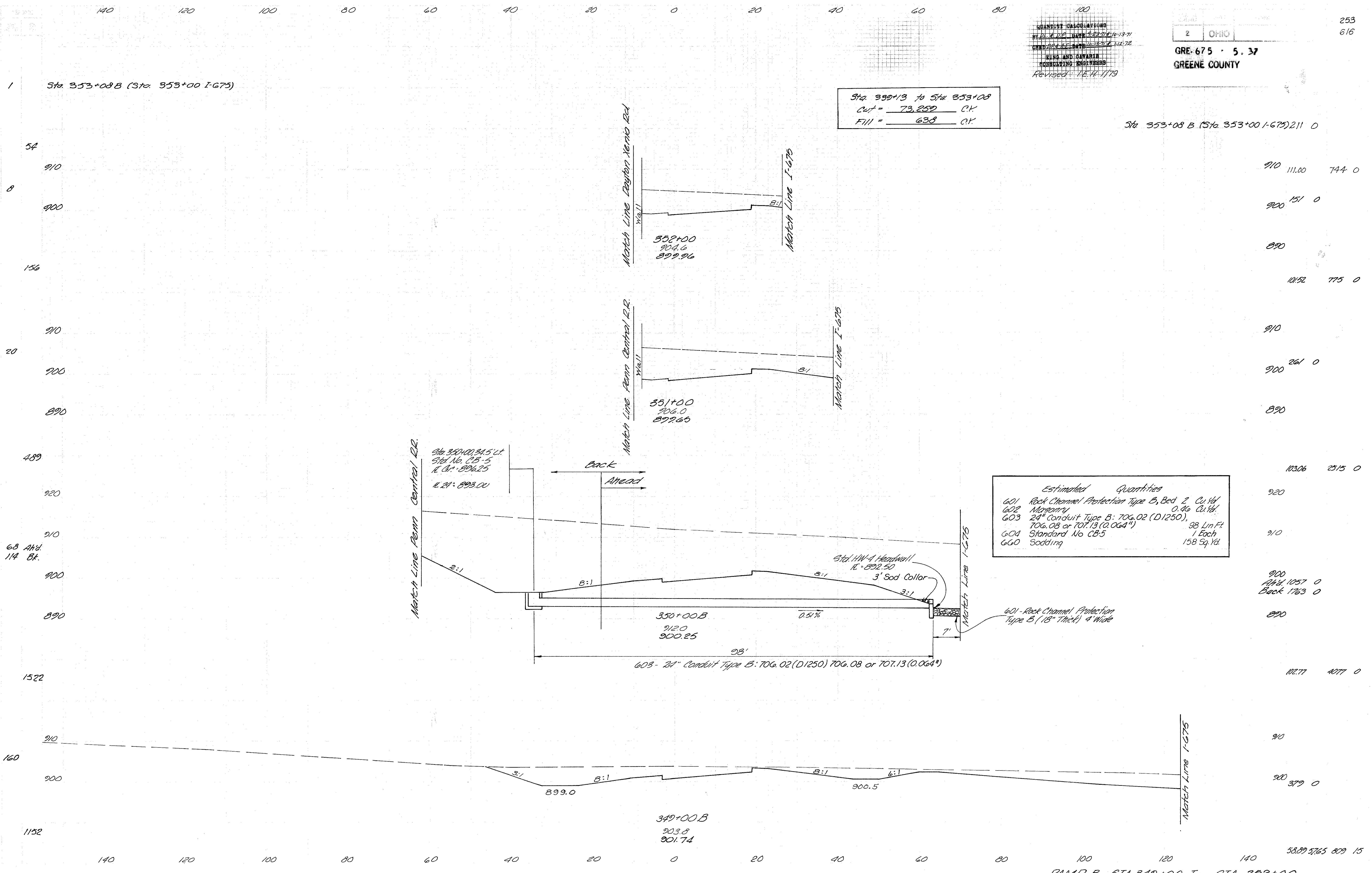
252 616 910 900 910 900 910 900 910 900 910 900 910 900

363 14 48.46 49.73 640 87 350 81 796 0 106.67 105.68 2264 159 22 252 90.26 2598 26 537 14 1762 14 2359 102.06 3290 26

RAMP B STA. 346+00 TO STA. 348+45

QUANTITY CALCULATIONS
 BY: P. A. DYE DATE: 4-23-78 (10-19-71)
 CHECKED BY: J. E. DAVIS DATE: 10-18-78
 KING AND GAVARIS
 CONSULTING ENGINEERS
 Revised: 11.11.1179

2 OHIO 253
 616
 GRE-675 - 5.37
 GREENE COUNTY



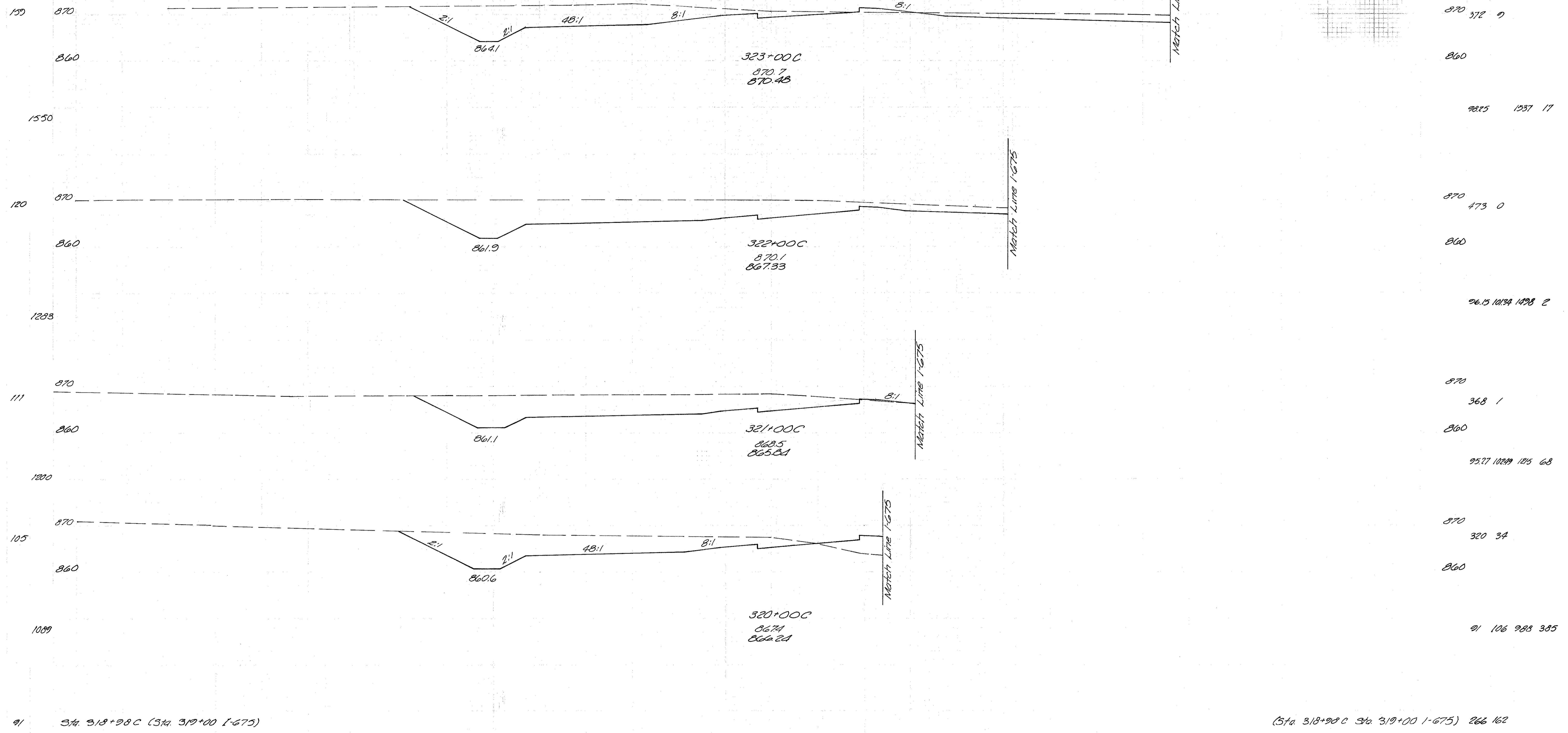
140 120 100 80 60 40 20 0 20 40 60 80 100

STATE OF OHIO
DIVISION OF HIGHWAYS
COLUMBUS, OHIO
ENGINEER
CONSULTING ENGINEERS

2 OHIO

GRE-675 - 5.37
GREENE COUNTY

254
616



91 Sta. 318+98.0 (Sta. 319+00 1-675)

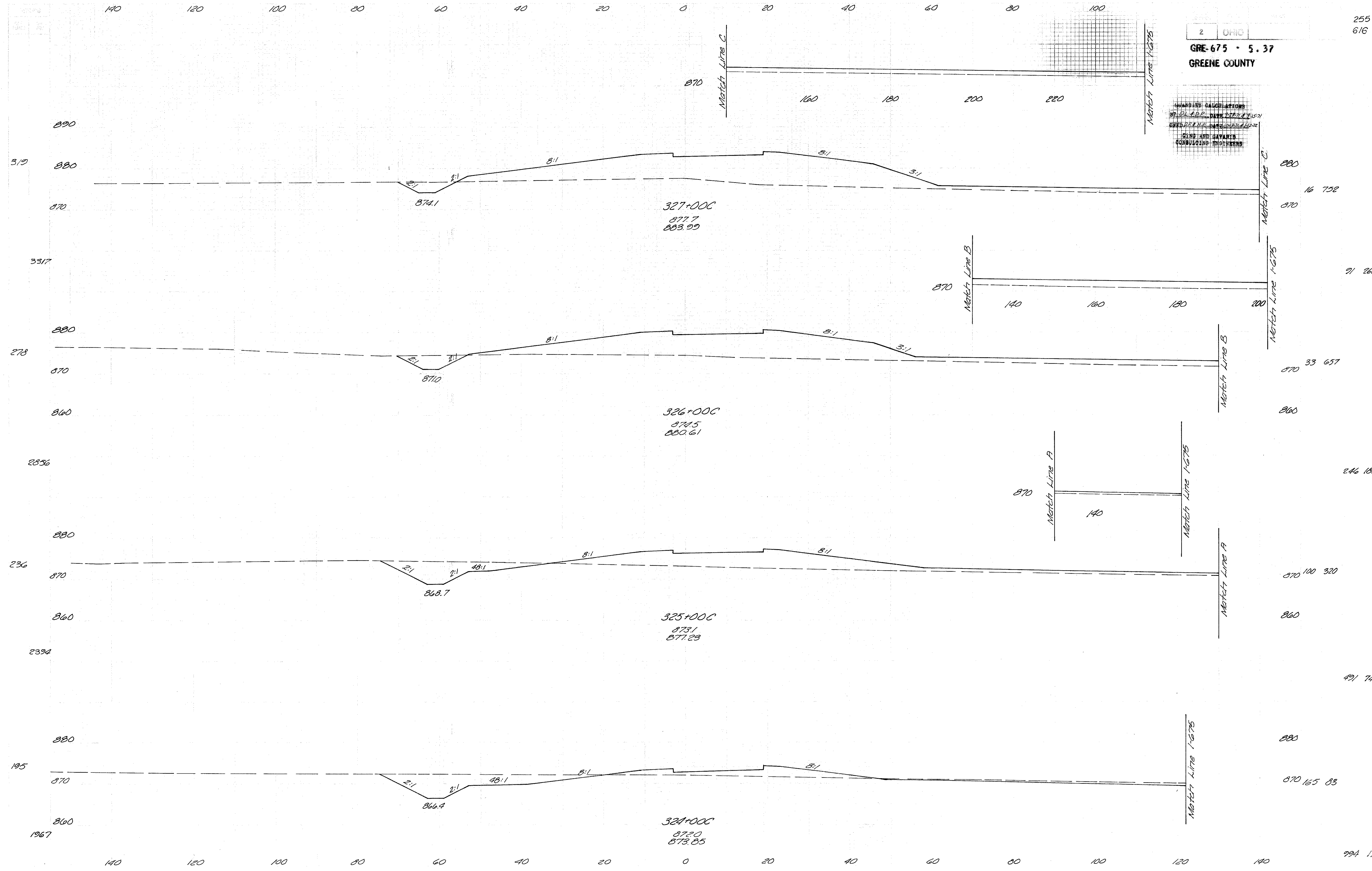
(Sta. 318+98.0 Sta. 319+00 1-675) 266 162

140 120 100 80 60 40 20 0 20 40 60 80 100

RAMP C STA. 320+00 TO STA. 323+00

2 OHIO
GRE-675 - 5.37
GREENE COUNTY

MADE BY CALCULATIONS
BY D.L.P. DATE 12/14/57
CHECKED BY J.W. DATE 1/15/58
ENGINE AND DRAFTSMAN
CONSULTING ENGINEERS



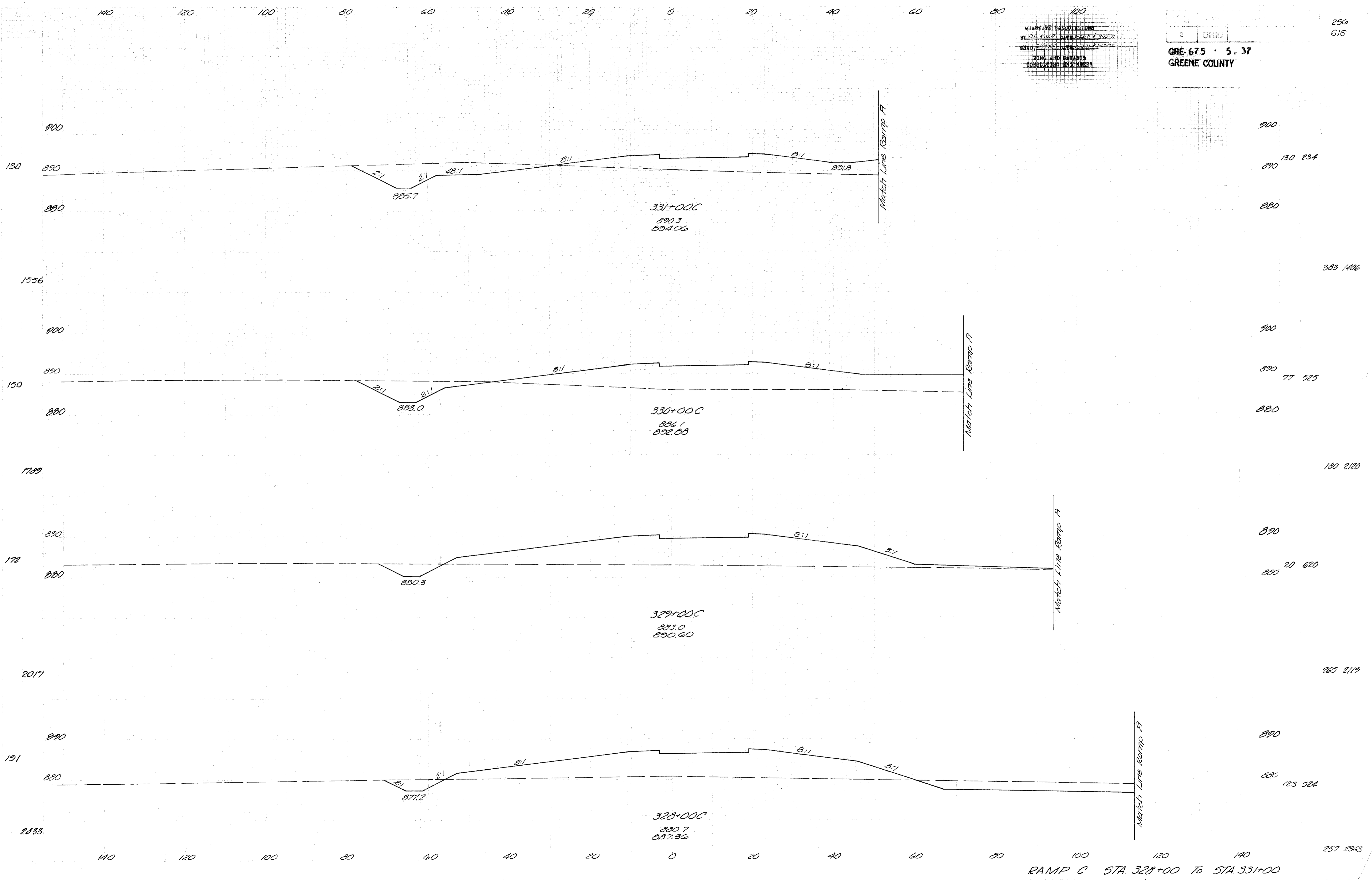
RAMP C STA. 324+00 To STA. 327+00

QUANTITY CALCULATIONS
 BY D.L.F.P. DATE 5-21-11
 CRED. PLANNING DEPT. 5/21/11
 KING AND GAYLOR
 CONSULTING ENGINEERS

2 OHIO

GRE-675 - 5.37
 GREENE COUNTY

256
 616



RAMP C STA. 328+00 TO STA. 331+00

140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITIES CALCULATIONS
BY D.L.A. DATE 7-28-11 8:15 AM
CHECKED DATE 8/15/12
KING AND GAYARIS
CONSULTING ENGINEERS

2 OHIO
GRE-675 - 5.37
GREENE COUNTY

257
616

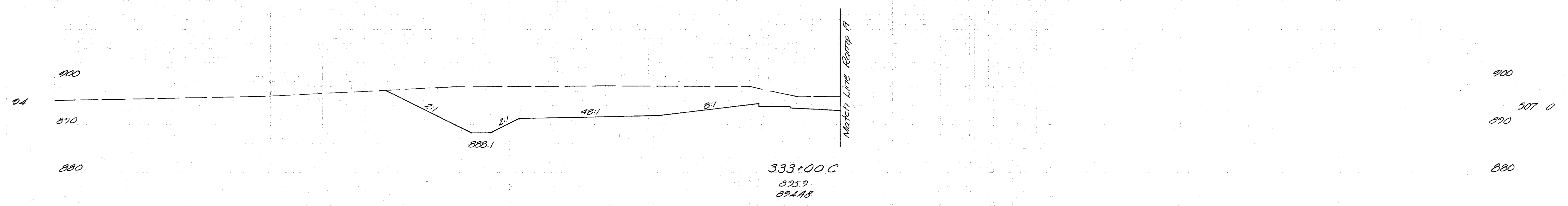
Sta 318+00 to Sta 333+42
Cut = 11,306 C.Y.
Fill = 14,314 C.Y.

72 Sta. 333+42 C (Sta. 315+00A)

Sta 333+42 C (Sta. 315+00A) 477 0

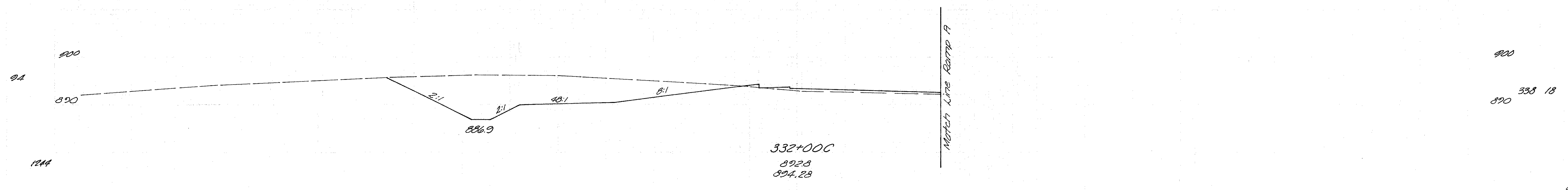
434

40 729 0



1565 33

1044



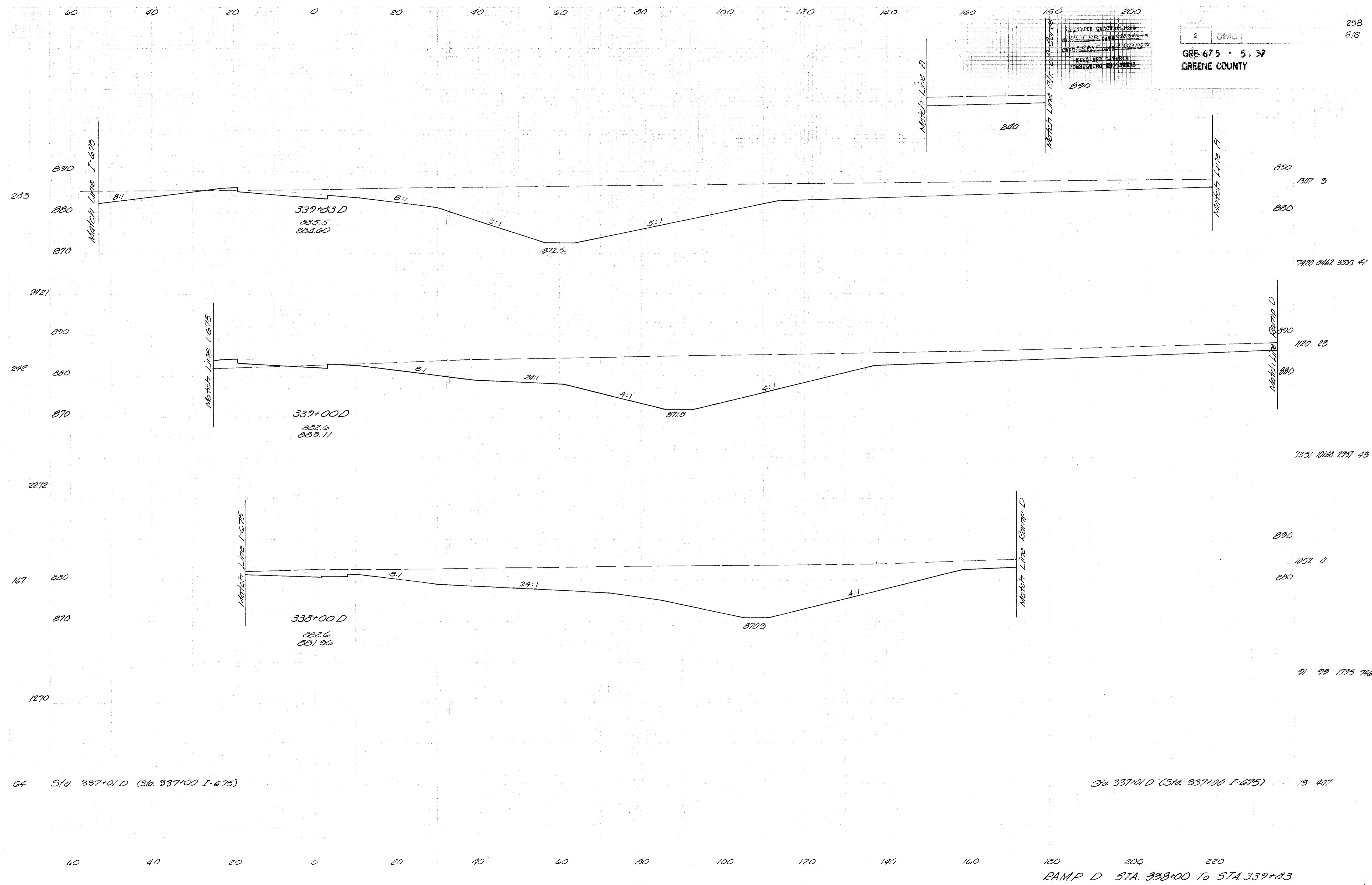
867 467

140 120 100 80 60 40 20 0 20 40 60 80 100

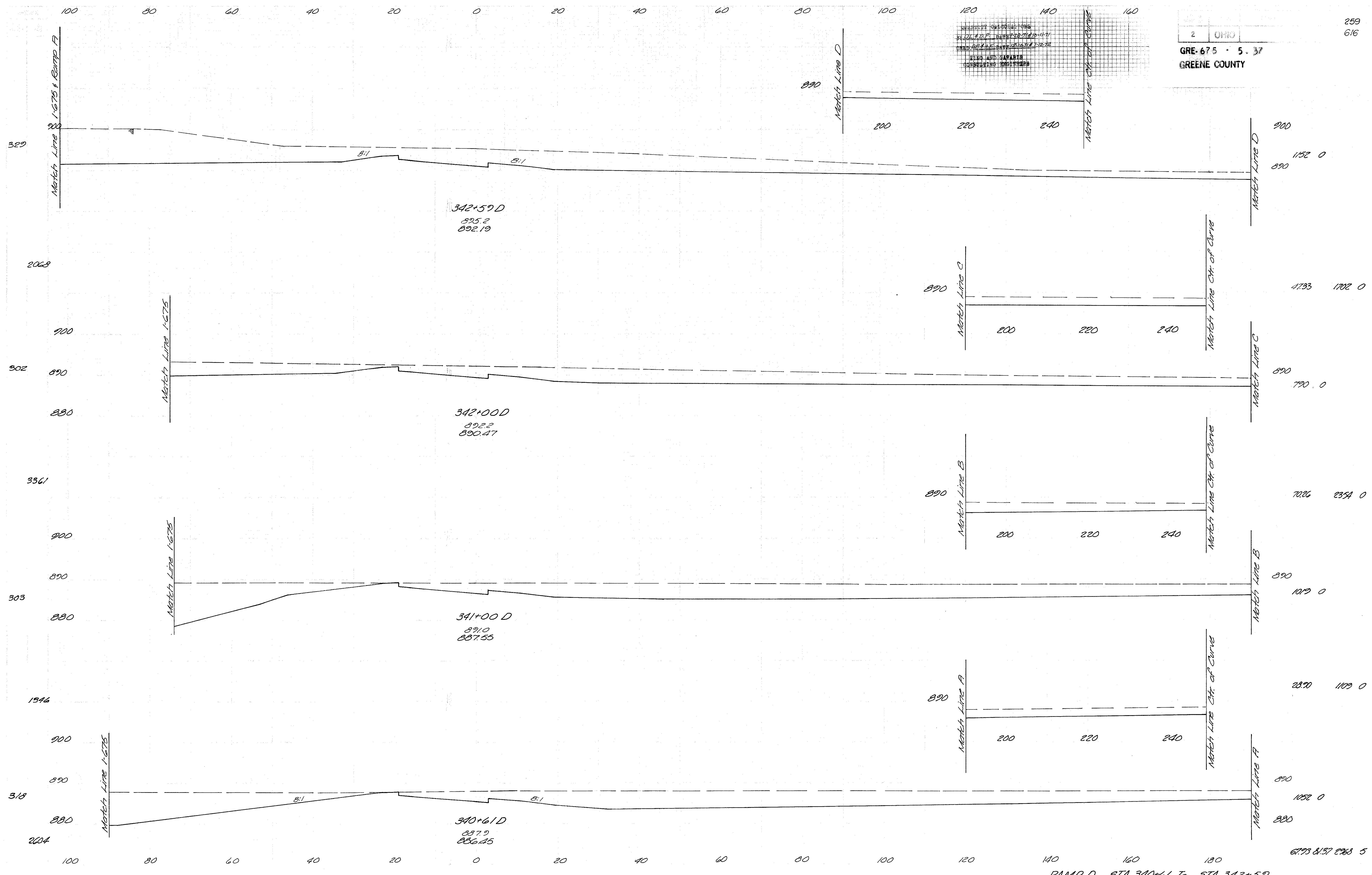
RAMP C STA. 332+00 TO STA. 333+42

2 OHIO
GRE-675 - 5.37
GREENE COUNTY

QUANTITY CALCULATIONS
BY D.L. & D.S. DATE 9/28/11
CHECKED BY DATE 10/11/11
LEND AND GAYLIS
CONSULTING ENGINEERS
890



DATE: 01-08-2010
 BY: D.J.P. DATE: 12-10-11
 PROJ: RAMP D STA 340+61 TO 342+59
 PLOT AND DWG
 CONSULTING ENGINEERS



RAMP D STA 340+61 TO STA 342+59

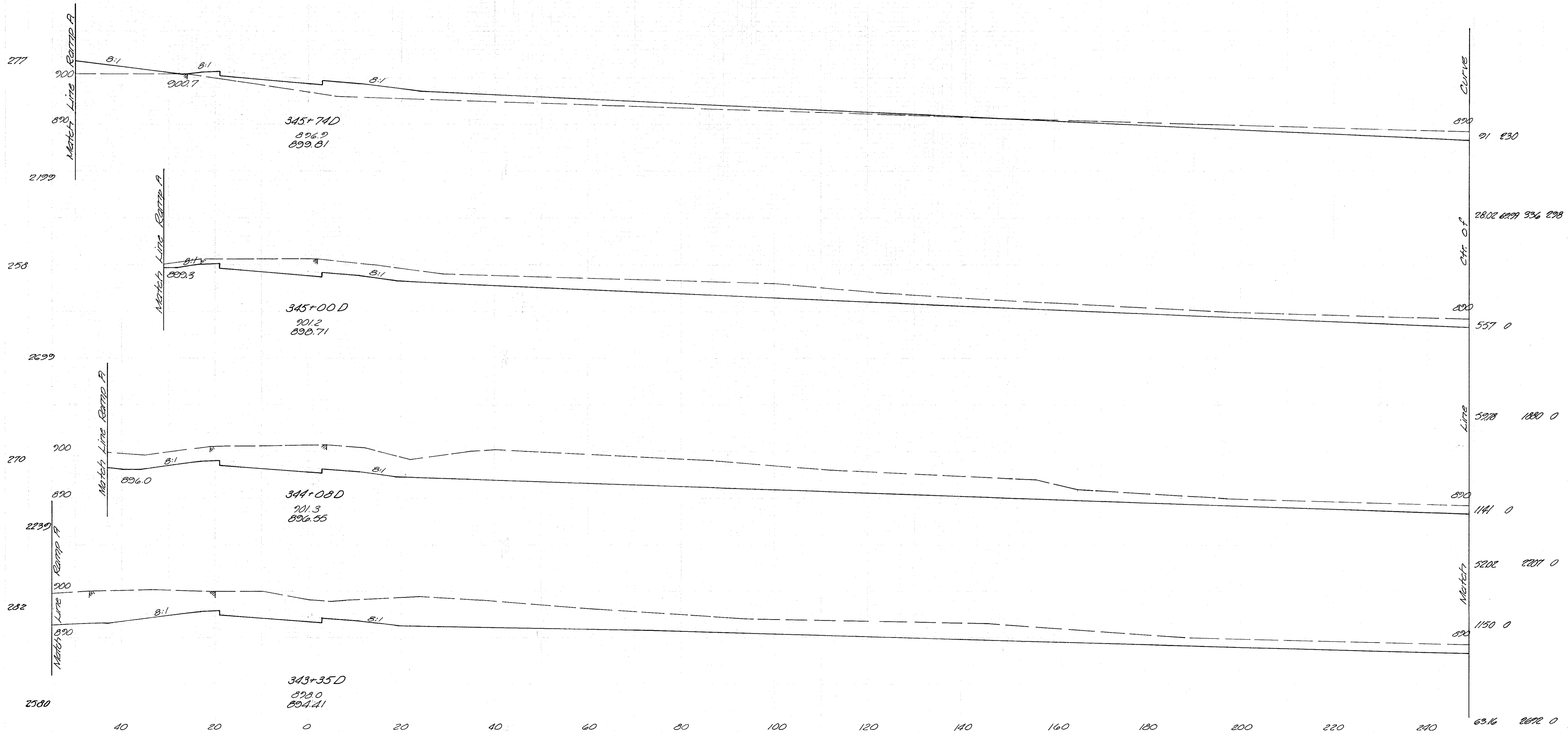
40 20 0 20 40 60 80 100 120 140 160 180 200

QUANTITY CALCULATIONS
BY W. D. F. DATE 12-11-77
CHECKED BY W. D. F. DATE 12-11-77
KING AND GARBER
CONSULTING ENGINEERS

2	OHIO
---	------

260
616

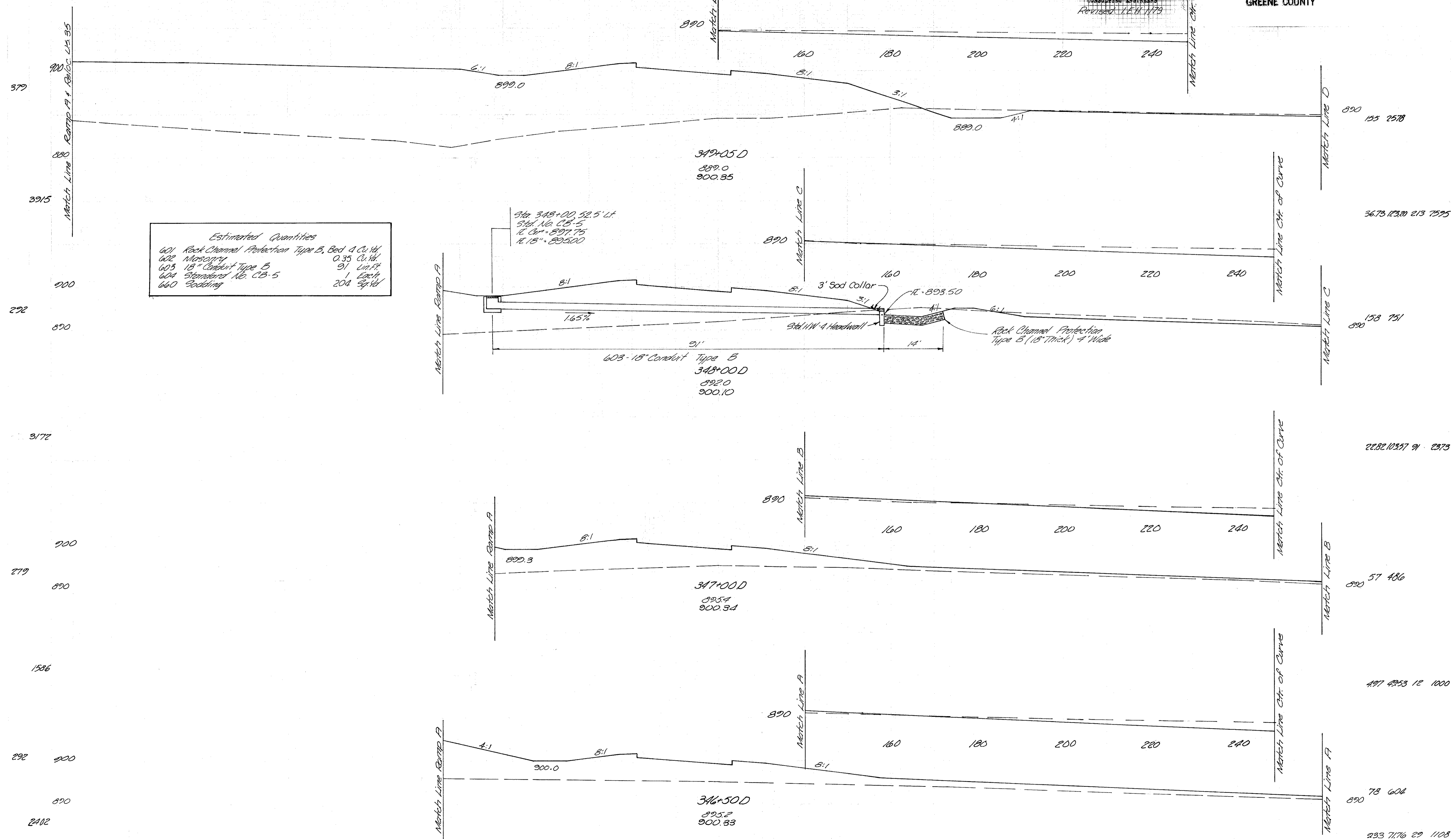
GRE-675 - 5.37
GREENE COUNTY



RAMP D STA. 343+35 To STA. 345+74

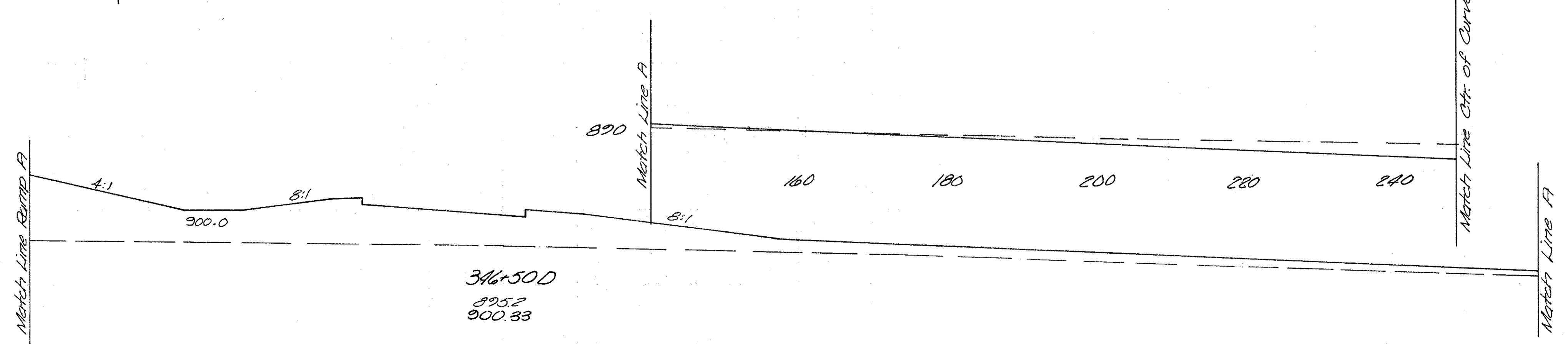
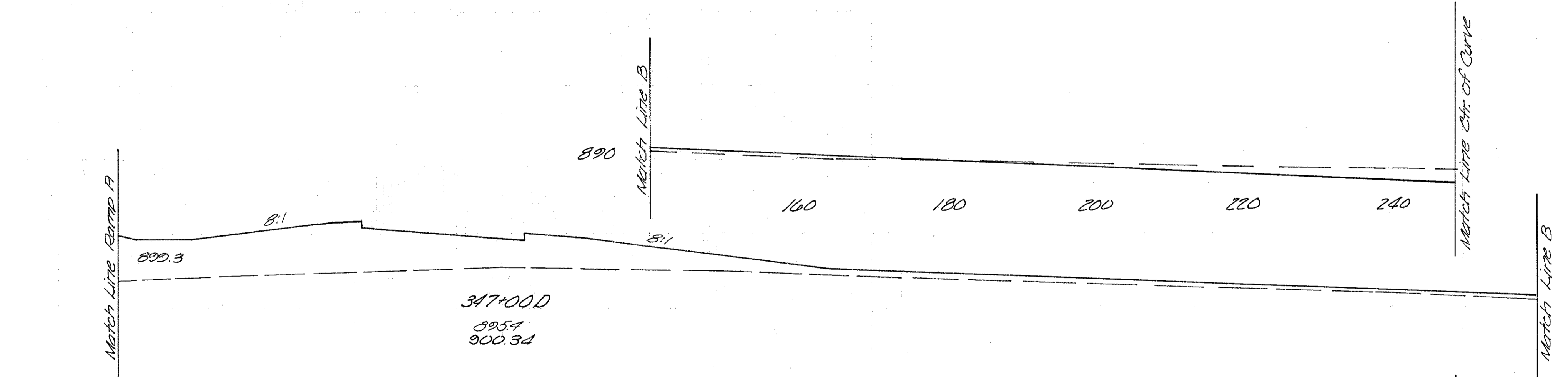
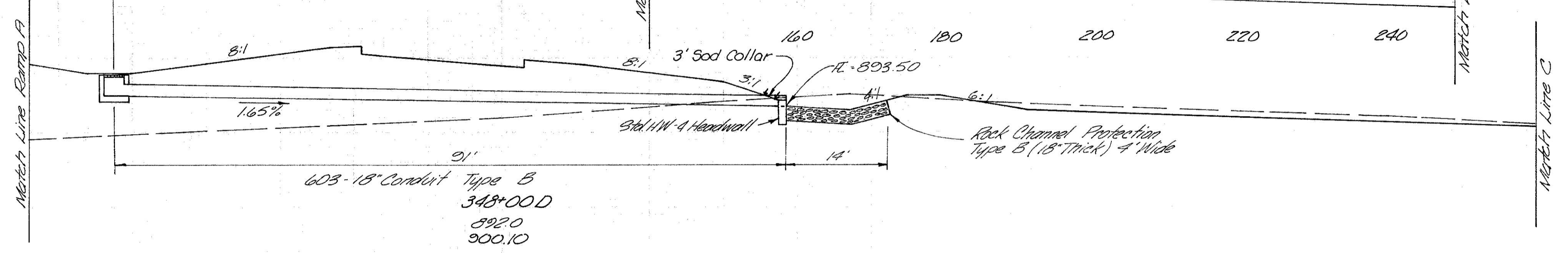
140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITY CALCULATIONS
 BY J. H. H. DATE 12/14/17
 CHECKED DATE 12/14/17
 KING AND CATYRE
 CONSULTING ENGINEERS
 Revised 12/14/17



Estimated Quantities	
601 Rock Channel Protection Type B, Bed 4 Cu. Yd.	
602 Masonry 0.35 Cu. Yd.	
603 18" Conduit Type B 91 Lin. Ft.	
604 Standard No. CB-5 1 Each	
660 Sodding 204 Sq. Yd.	

Sta 348+00 52.5' Lt.
 Std. No. CB-5
 12.0" x 8.0" x 7.5"
 12.15" x 8.5" x 5.0"



RAMP D STA 346+50 To STA 349+05

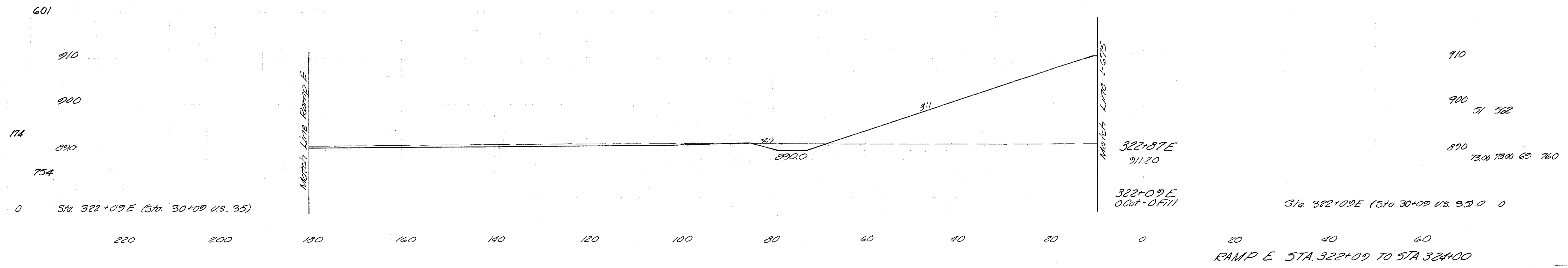
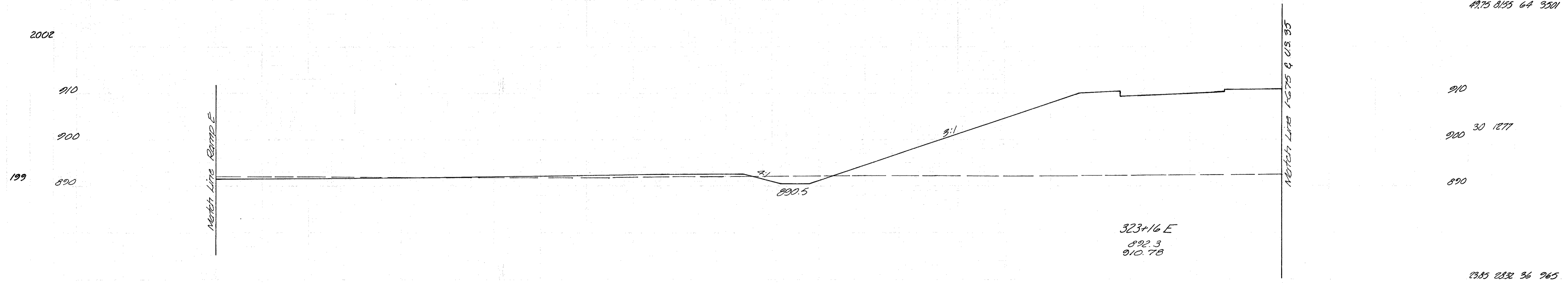
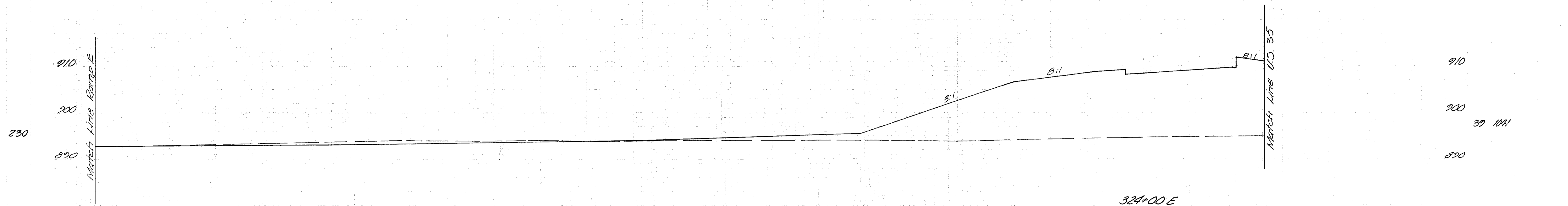
220 200 180 160 140 120 100 80 60 40 20 0 20

QUANTITY CALCULATIONS
BY DWG. OR DATE 4-29-71 10:11-71
CHECKED DATE 8-22-71 11-2-72
KING AND GAYLIS
CONSULTING ENGINEERS

2	0.00
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263
616

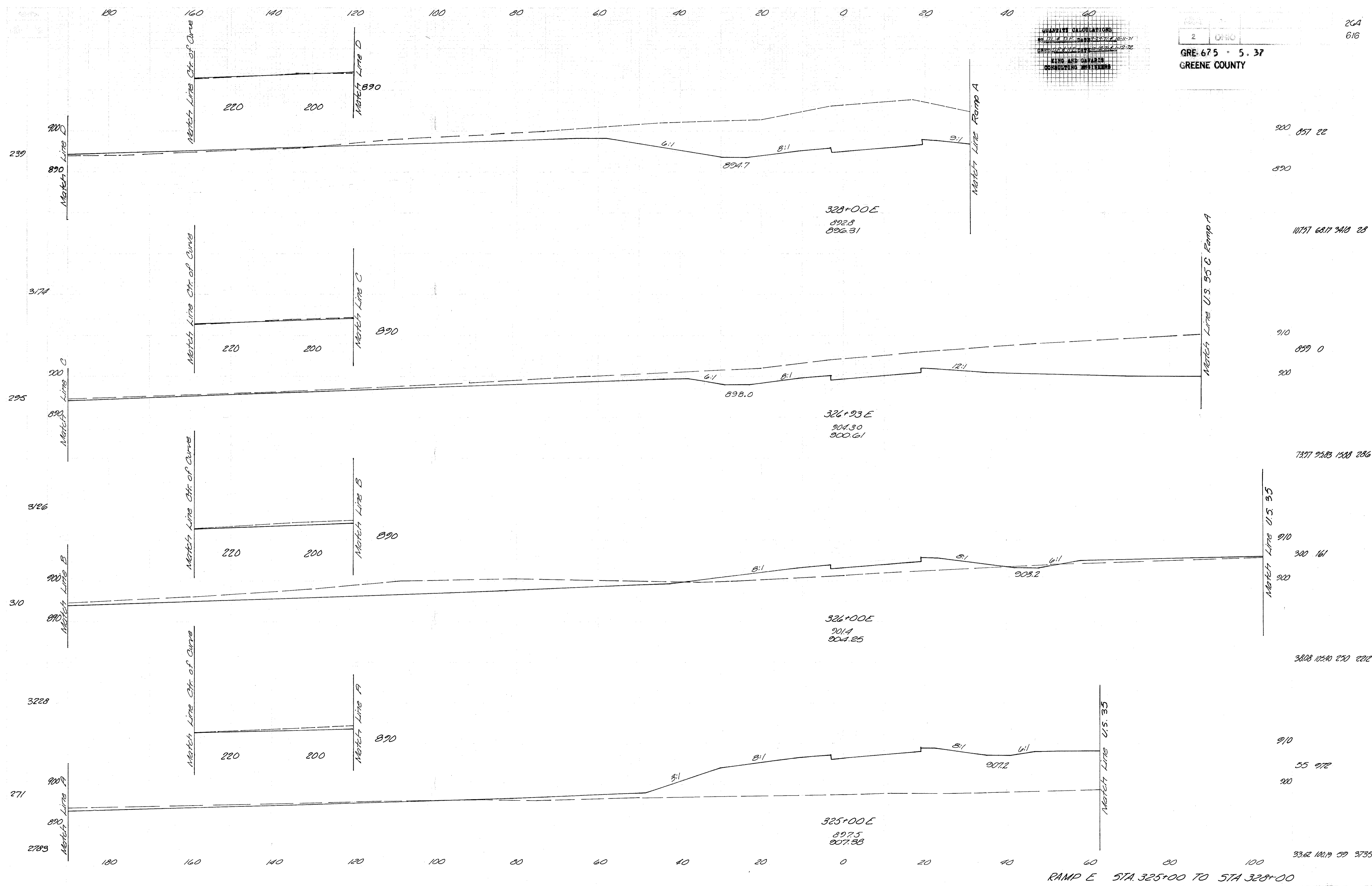
GRE 675 - 5.37
GREENE COUNTY



QUANTITY CALCULATIONS
 DATE: 05/23/11
 DRAWN BY: J. W. B. / J. W. B.
 KING AND GARBER
 CONSULTING ENGINEERS

2 080
 GRE-675 - 5.37
 GREENE COUNTY

264
 616



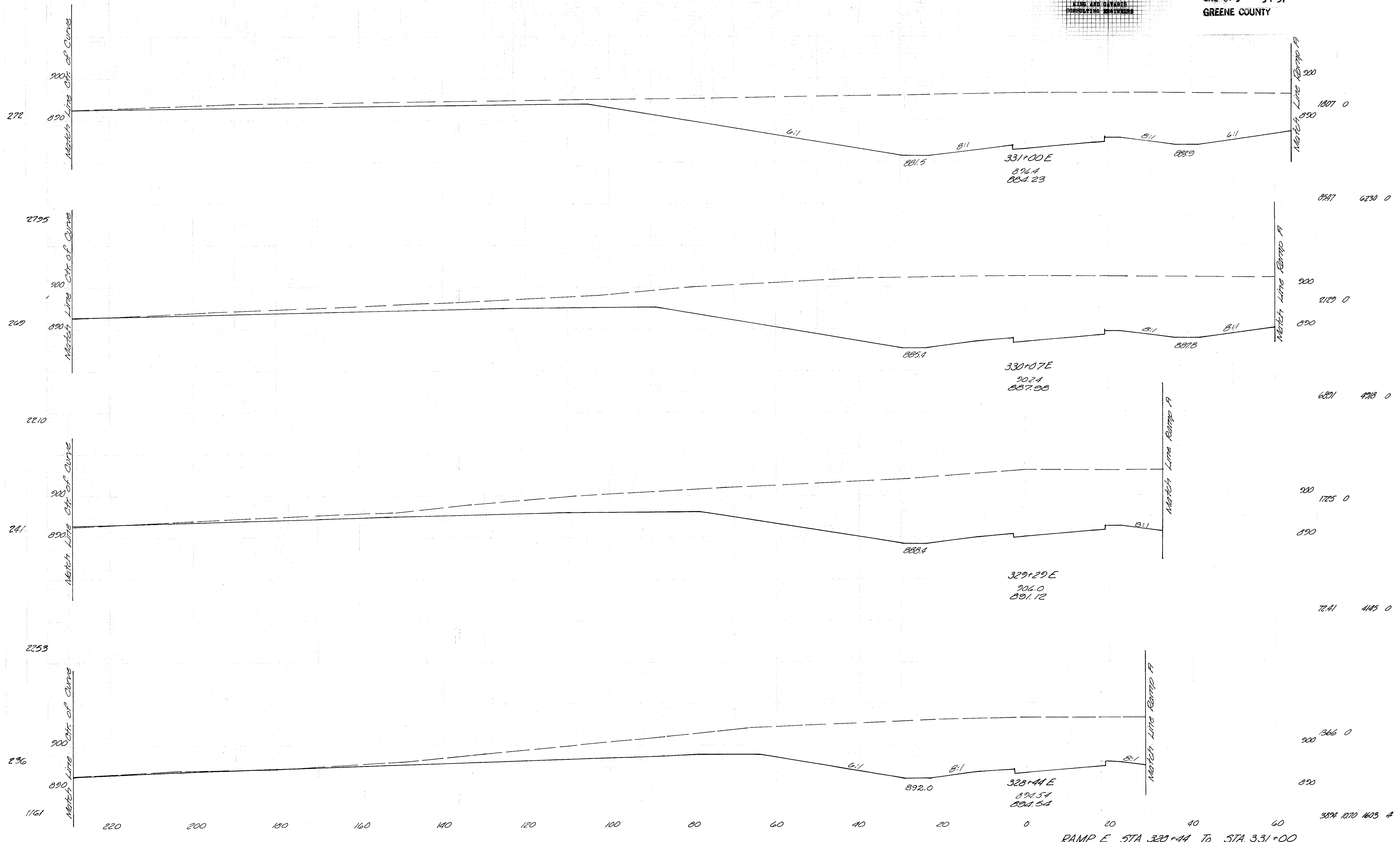
RAMP E STA. 325+00 TO STA 328+00

220 200 180 160 140 120 100 80 60 40 20 0 20

PROFESSIONAL CALCULATIONS
BY: [Signature]
DATE: 02/14/2017
KING AND GAVARIS
CONSULTING ENGINEERS

2 OHIO
GRE: 675 - 5.37
GREENE COUNTY

265
616



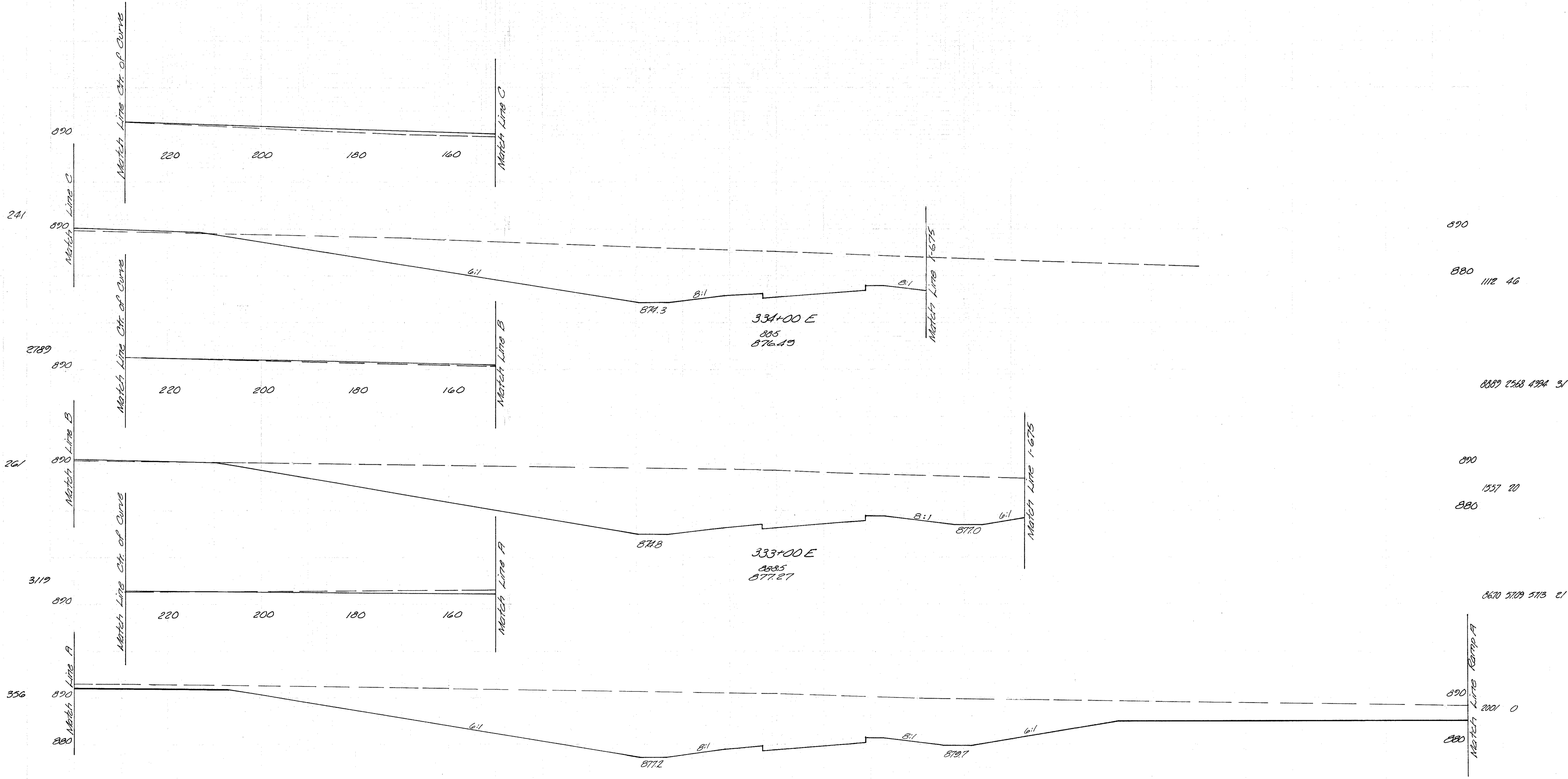
RAMP E STA. 328+44 TO STA. 331+00

140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITY CALCULATIONS
BY D.L.B. DATE 2-28-71
CHECKED BY DATE 10-12-72
KING AND GARDNER
CONSULTING ENGINEERS

2 OHIO
GRE 675 - 5.37
GREENE COUNTY

266
616



241

2789

261

3119

356

3803

890

880

880

890

880

860

890

880

140 120 100 80 60 40 20 0 20 40 60 80 100

RAMP E STA. 332+09 TO STA 334+00

277

220 200 180 160 140 120 100 80 60 40 20 0

QUANTITY CALCULATIONS
BY: *[Signature]* DATE: 1/22/11
CHECKED: DATE: 1/22/11
KEND AND GATARI
CONSULTING ENGINEERS

2 OHIO

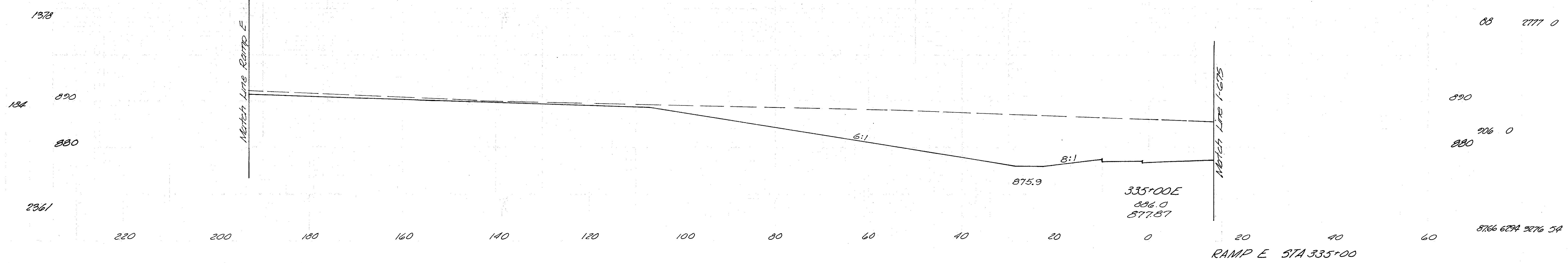
267
616

GRE-675 - 5.37
GREENE COUNTY

Sta 322+03 to Sta 336+00
Cut = 45904 C.Y.
Fill = 11597 C.Y.

64 Sta. 336+00E (Sta. 336+00 I-675)

Sta. 336+00E (Sta. 336+00 I-675) 798 0

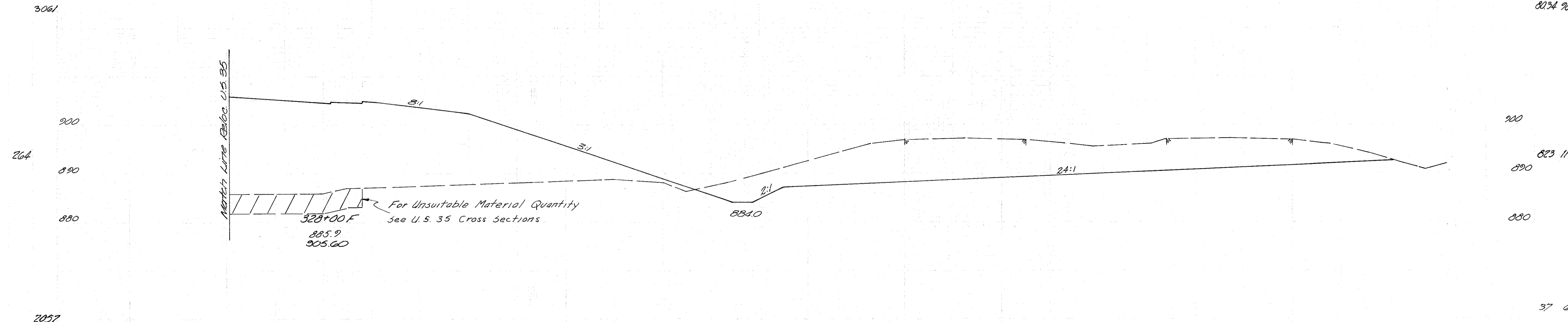
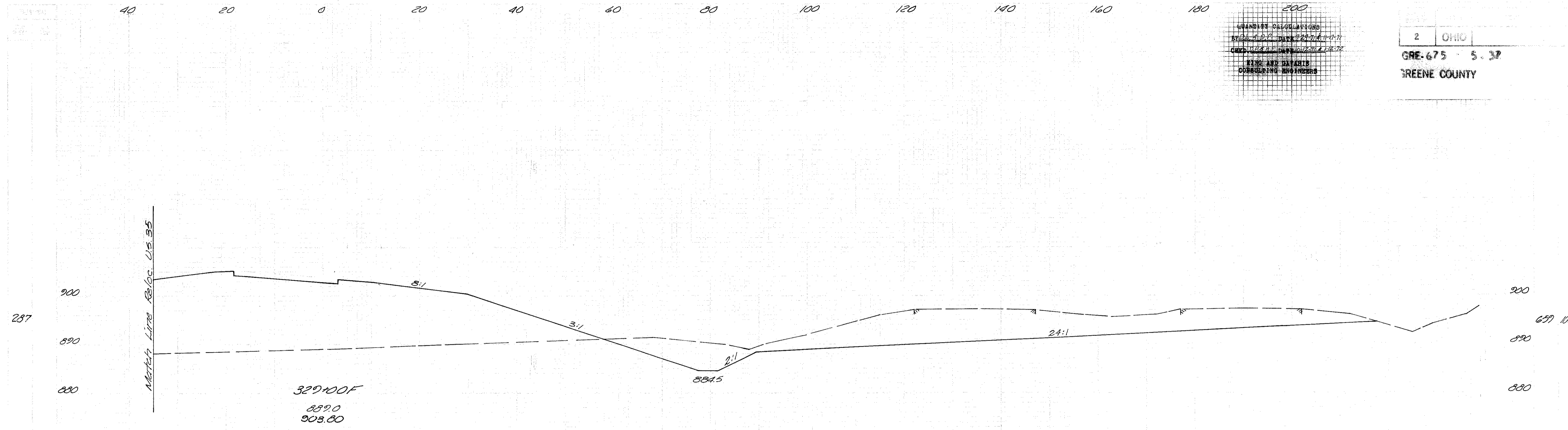


RAMP E STA 335+00

QUANTITY CALCULATIONS
 BY: J. L. B. DATE: 2/22/71
 CHECKED: J. L. B. DATE: 2/22/71
 ENGINE AND SURVEYING
 CONSULTING ENGINEERS

2 OHIO
 GRE-675 5.32
 GREENE COUNTY

268
 616

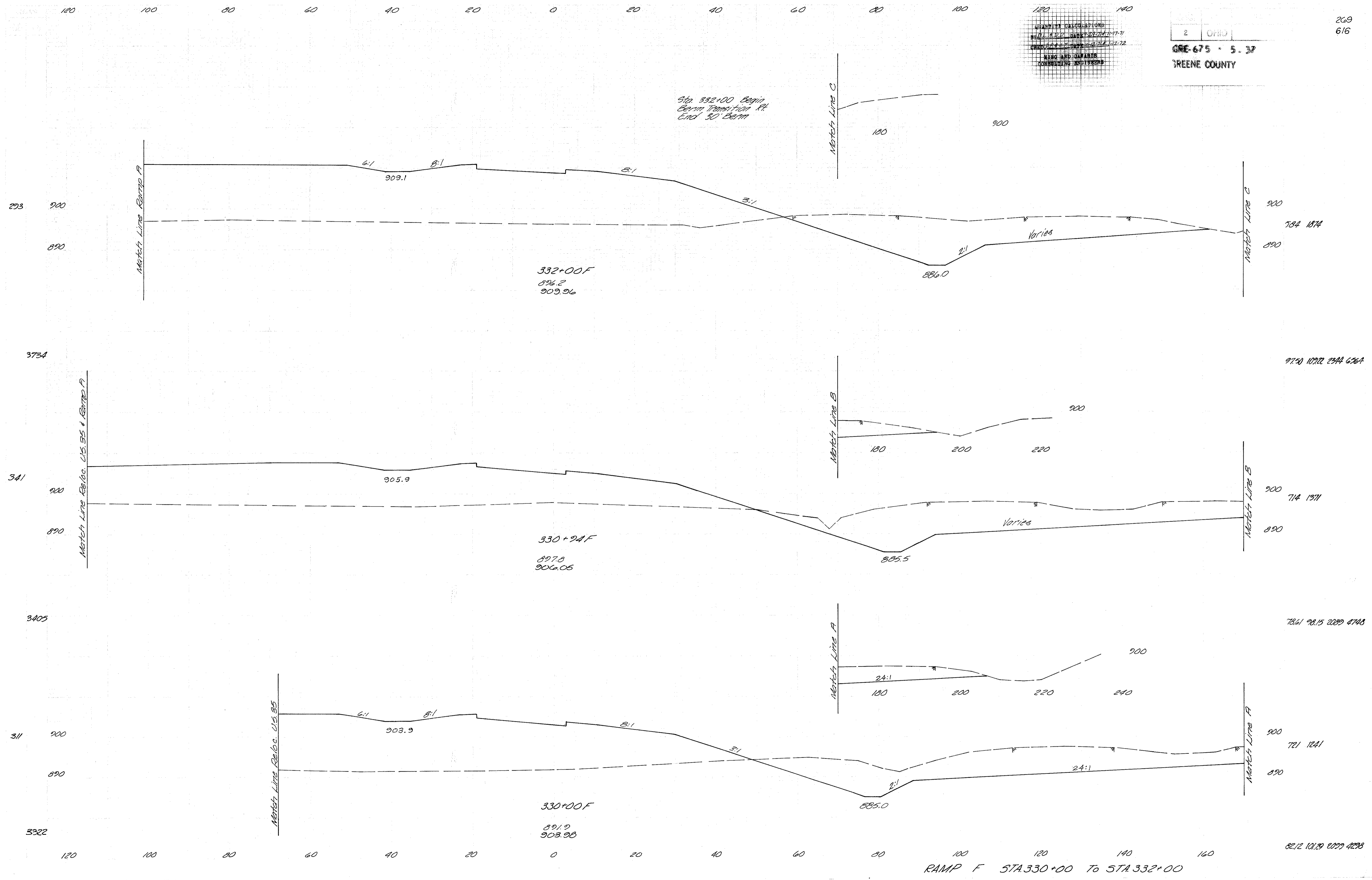


265 Sta. 327+30F (Sta. 45+00 U.S. 35)

Sta 327+30F (Sta. 45+00 U.S. 35) 1016 1303

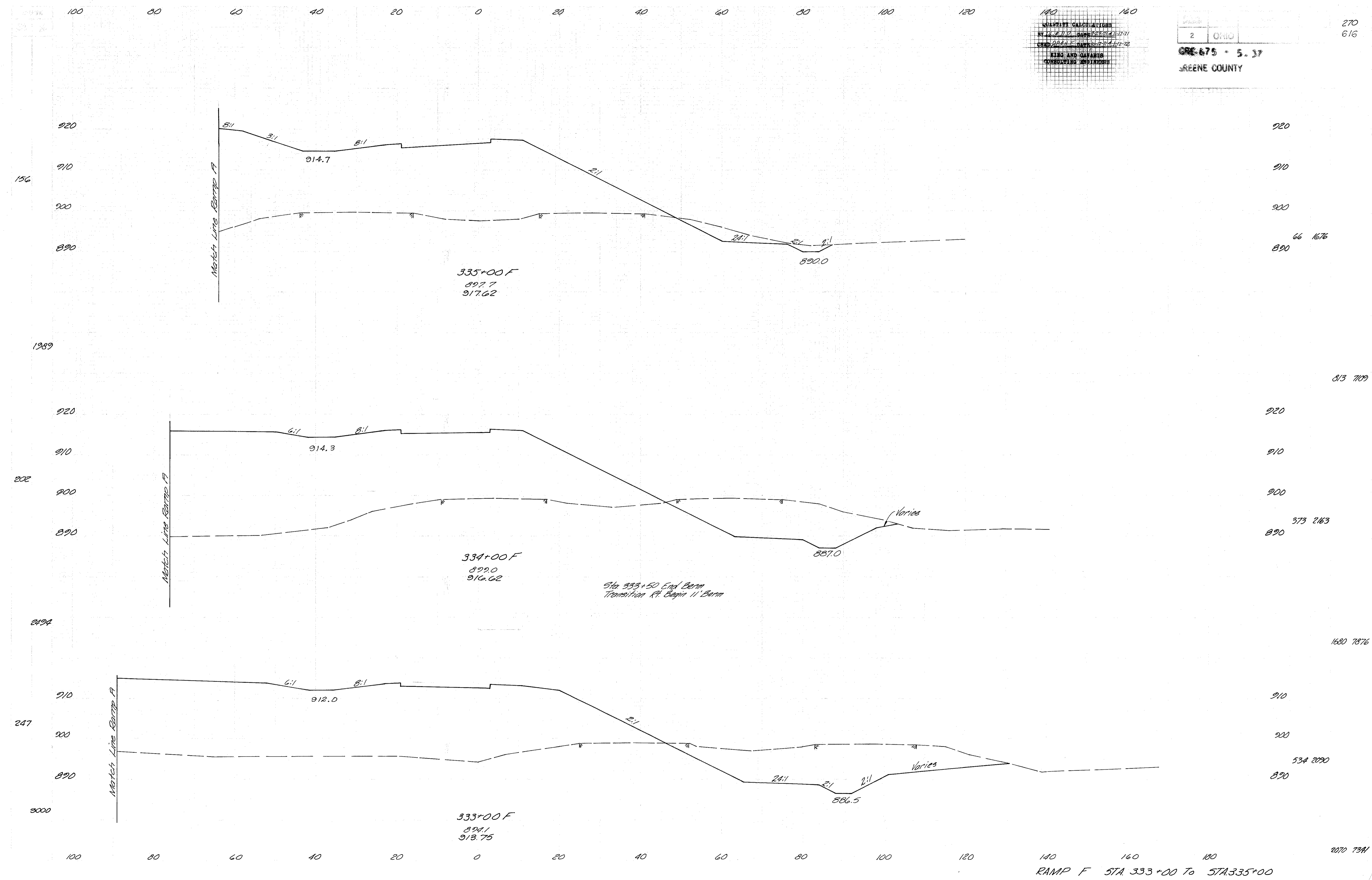
RAMP F STA. 328+00 TO STA. 329+00

QUANTITY CALCULATIONS
 BY D. J. DILLON DATE 7-27-74 11-17-77
 CHECKED BY E. STARK DATE 12-12-72
 KING AND GARLAND
 CONSULTING ENGINEERS



QUANTITY CALCULATIONS
 BY D. F. KING, DATE 12/14/71
 CHECKED BY E. GAVANES, DATE 12/14/71
 KING AND GAVANES
 CONSULTING ENGINEERS

PROJECT		270
SHEET	2	616
CITY	OHIO	
PROJECT NO.	GRE-675 - 5.37	
COUNTY	GREENE COUNTY	



RAMP F STA 333+00 To STA 335+00

100
 QUANTITY CALCULATIONS
 BY D.C. F.P.P. - DATE 7/28/74 - 11/77
 CADD: D.C. F.P.P. - DATE 8/2/74 - 11/77
 KING AND GAVIN'S
 CONSULTING ENGINEERS

2 OHIO
 271
 616

GRE-675 - 5.37
 GREENE COUNTY

Sta 327+30 to Sta 336+77
 Cut = 14,779 C.Y.
 Fill = 56,113 C.Y.

102 Sta 336+77 F (Sta. 337+00A)

Sta 336+77 F (Sta. 337+00A) 12 1006

1022

75 77 47 3419

137 900

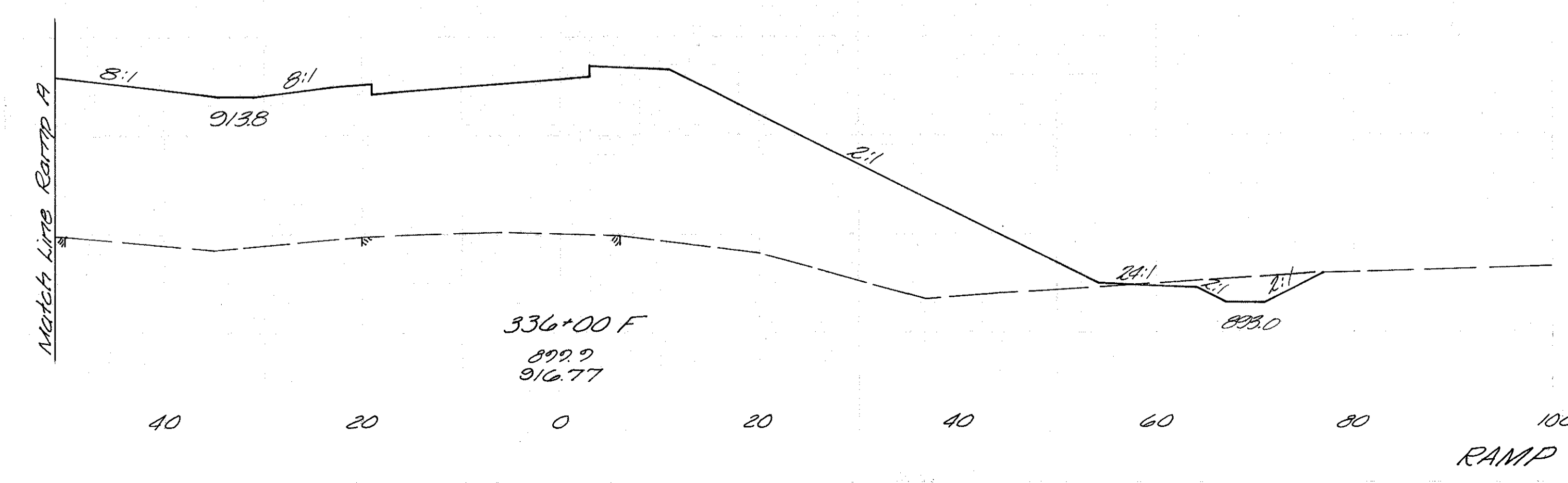
22 1392
 900

890

890

1628

10479 9264 171 5661



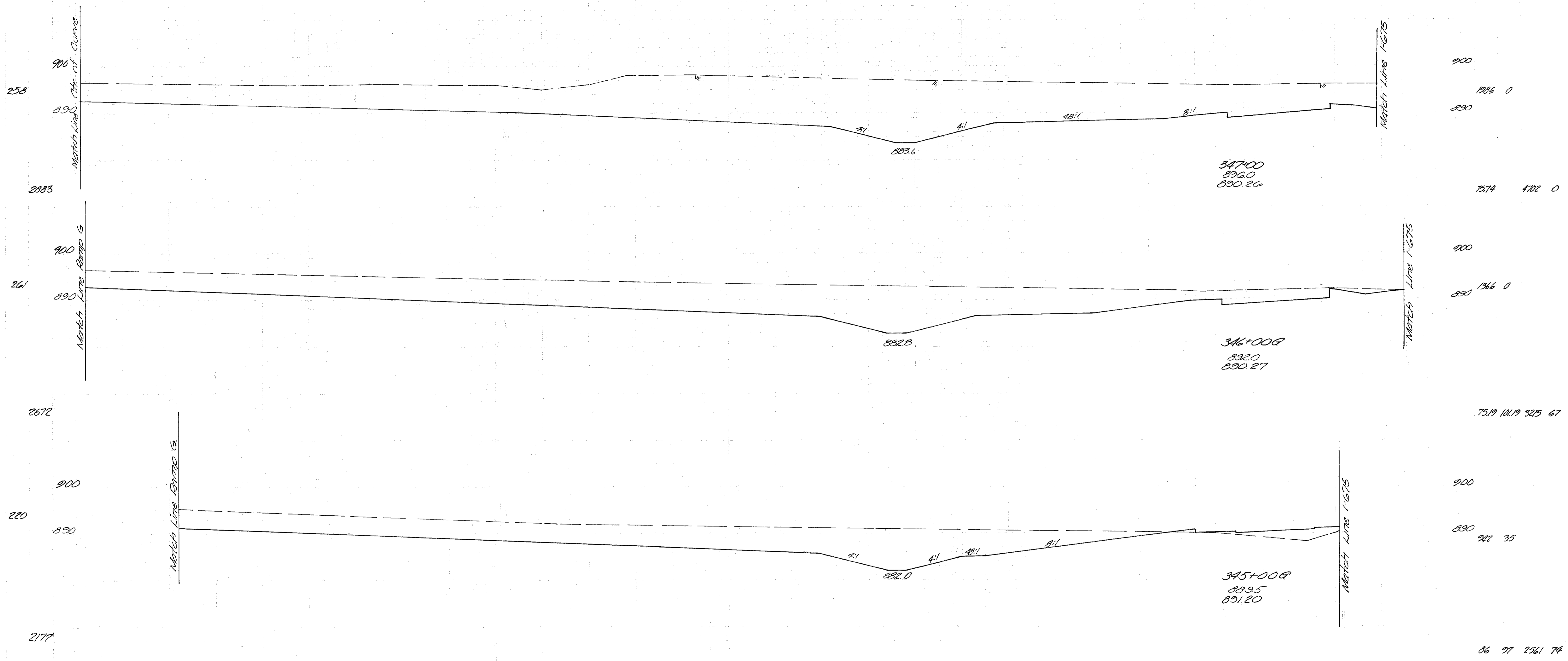
RAMP F STA 336+00

240 220 200 180 160 140 120 100 80 60 40 20

QUANTITY DIVISION
DATE 8-26-71
DESIGNED BY H. S. METZ
RING AND O'NEILL
CONSULTING ENGINEERS

2 OHIO
GRE-675 - 5.37
GREENE COUNTY

272
616



347+00
896.0
890.26

346+00 G
892.0
890.27

345+00 G
889.5
891.20

184 Sta. 344+03 G (Sta. 344+00 I-675)

Sta. 344+03 G (Sta. 344+00 I-675) 666 6

240 220 200 180 160 140 120 100 80 60 40 20 0 20 40
RAMP G STA. 345+00 to STA. 347+00

QUANTITY CALCULATIONS
 BY: J.L.P. DATE: 4-30-71
 CHECKED: J.P.H. DATE: 10-12-71
 KING AND GARRIS
 CONSULTING ENGINEERS

2 0111
 GRE-675 - 5.37
 GREENE COUNTY

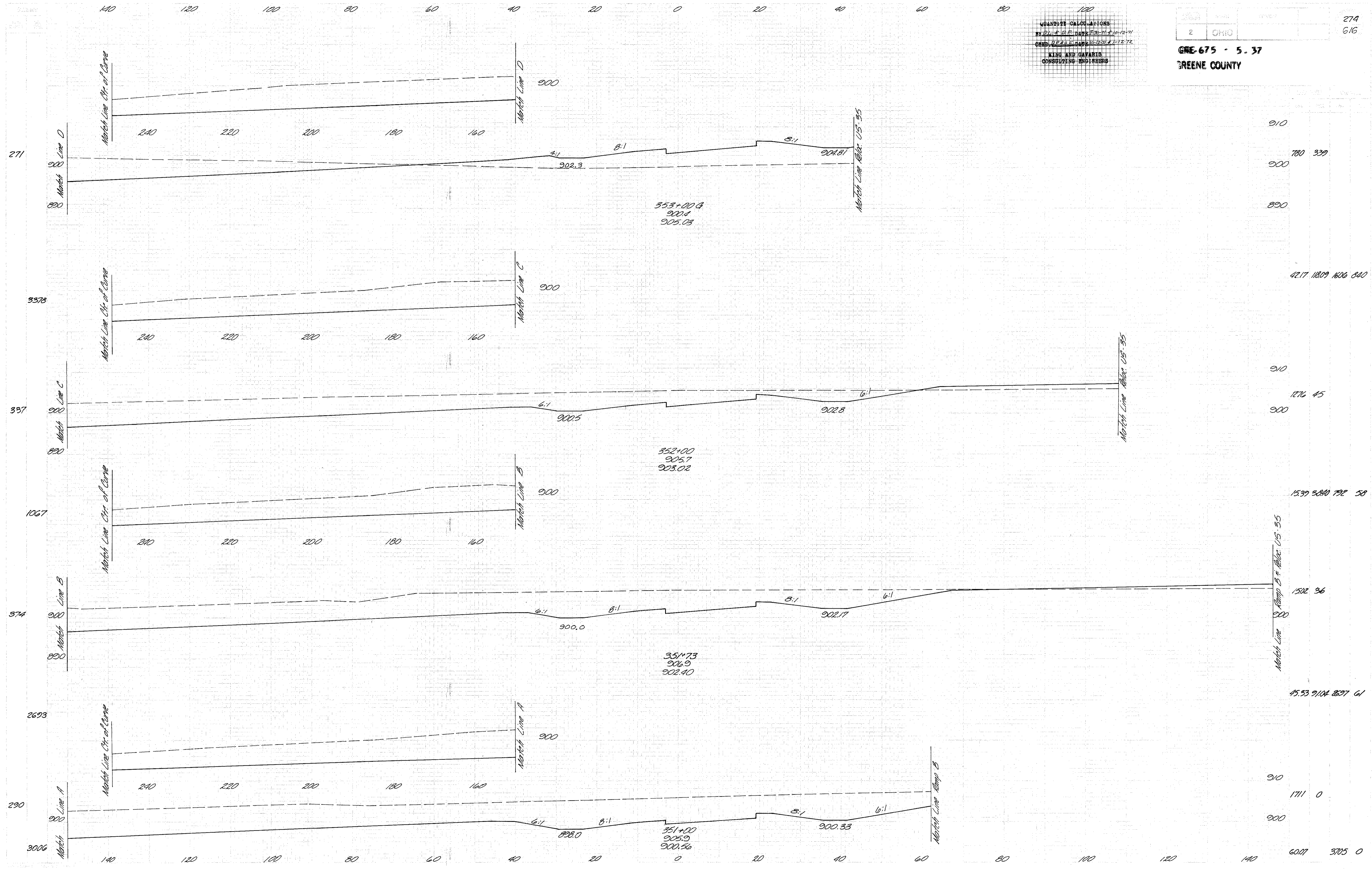
273
 616



QUANTITY CALCULATIONS
 BY D.L. & P. DATE 7-26-11 & 10-12-11
 CHECKED BY P.E. DATE 10-23-11 & 1-12-12
 KING AND GAYARTS
 CONSULTING ENGINEERS

Sheet No.	2	Scale	AS SHOWN	Station	274 616
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GRE-675 - 5.37
 GREENE COUNTY



RAMP G STA. 351+00 to STA. 353+00

260 240 220 200 180 160 140 120 100 80 60 40 20 0

PROPOSED CORRECTIONS
BY E. P. D.P. DATE 12-27-11
CHECKED BY DATE 12-27-11
KIND AND QUANTITY
CONSULTING ENGINEER

2 OHIO

GRE-675 - 5.37
GREENE COUNTY

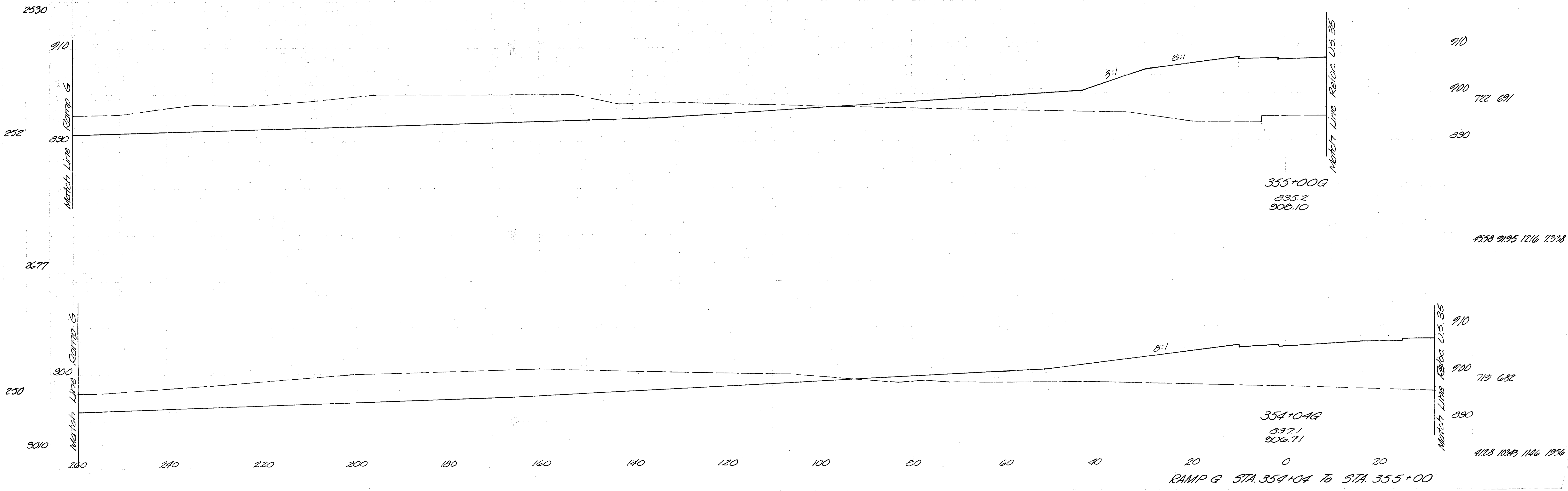
275
6/6

Sta 344+03 to Sta 355+92
Cut = 38,505 CY
Fill = 7,822 CY

Sta. 355+92 G. (Sta. 23+00 U.S. 35)

Sta. 355+92 G. (Sta. 23+00 U.S. 35) 563 800

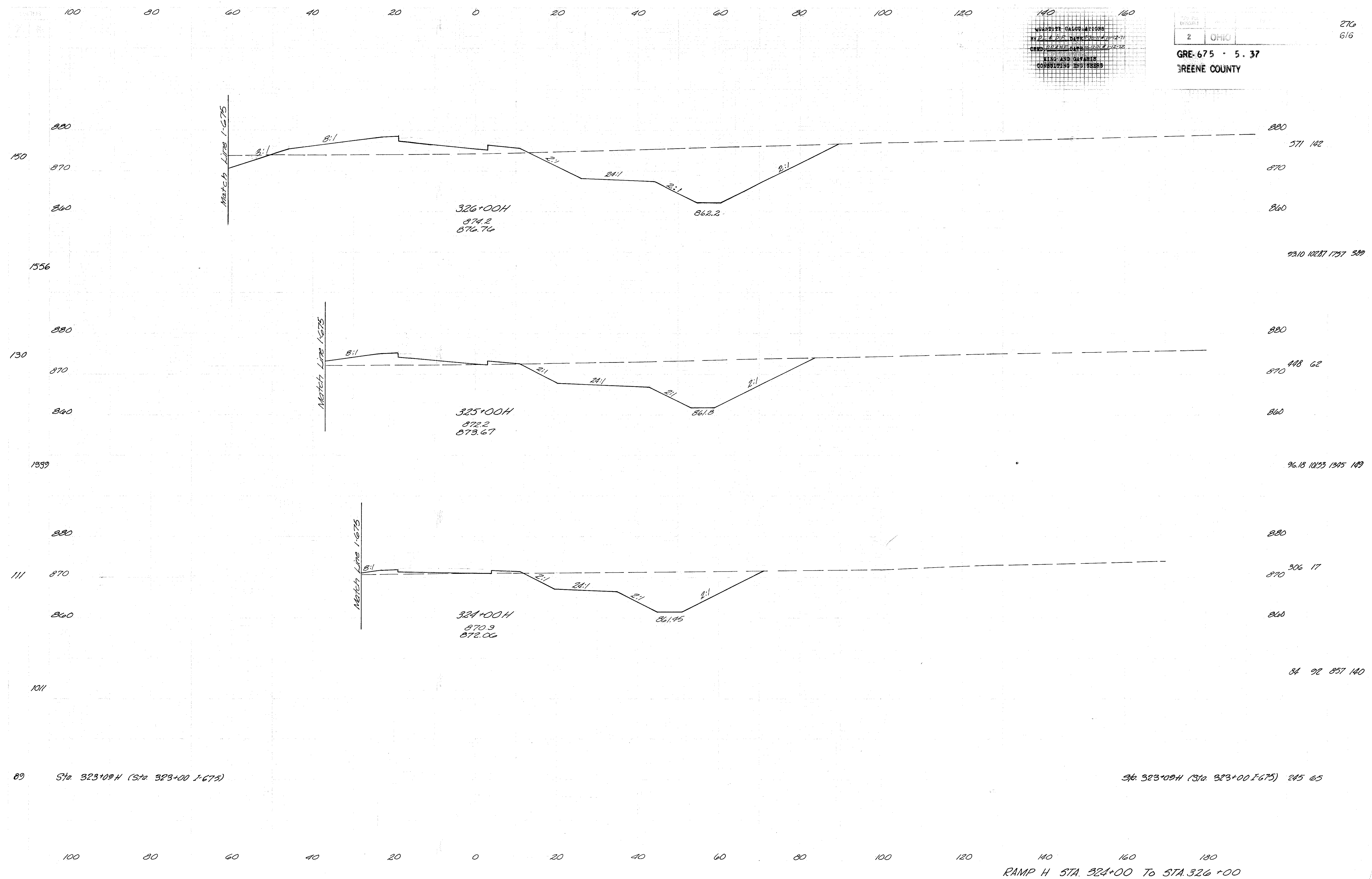
60 88 122 2490



QUANTITY CALCULATIONS
 BY P. L. KING CONSULTING ENGINEERS
 1100 W. STATE ST. COLUMBUS, OHIO 43260
 KING AND GATHERS
 CONSULTING ENGINEERS

2 OHIO
 GRE-675 - 5.37
 BREENE COUNTY

276
 616



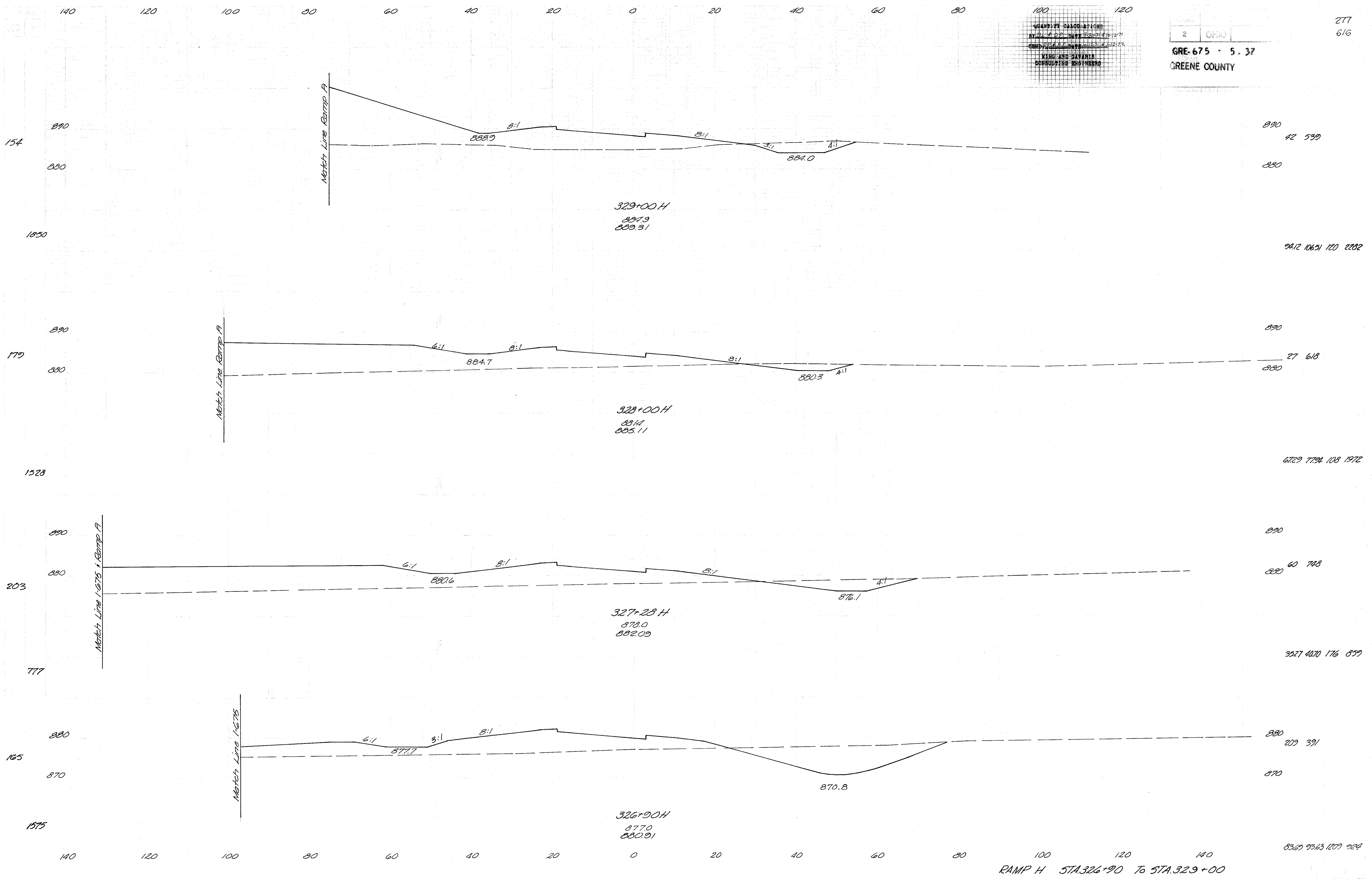
Sta. 323+00H (Sta. 323+00 I-675)

Sta. 323+00H (Sta. 323+00 I-675)

RAMP H STA. 324+00 TO STA. 326+00

QUANTITY CALCULATIONS
 BY D. A. D. DATE 7/20/14 12:27
 GREENE COUNTY
 KING AND GAYBIRN
 CONSULTING ENGINEERS

2 CHD
 GRE-675 - 5.37
 GREENE COUNTY
 277
 616
 94.12 106.51 120 2282
 27 618
 6729 7794.108 1972
 60 748
 3527 40.70 176 859
 209 391
 83.69 93.63 1209 924



RAMP H STA. 326+90 TO STA. 329+00

120 100 80 60 40 20 0 20 40 60 80 100 120

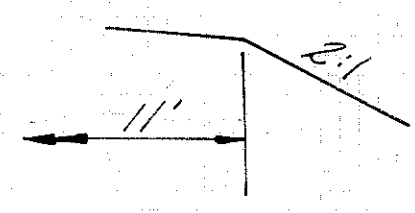
QUANTITY CALCULATIONS
BY PLA. B.C. SANDERSON 10/12/71
DISE. WILLIAM W. GIBSON 11/12/72
CIVIL AND SANITARY
CONSULTING ENGINEERS

2	0.00
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279
616

GRE-675 - 5.37
GREENE COUNTY

147 STA. 337+09 H (Sta. 45+00 U.S. 35)



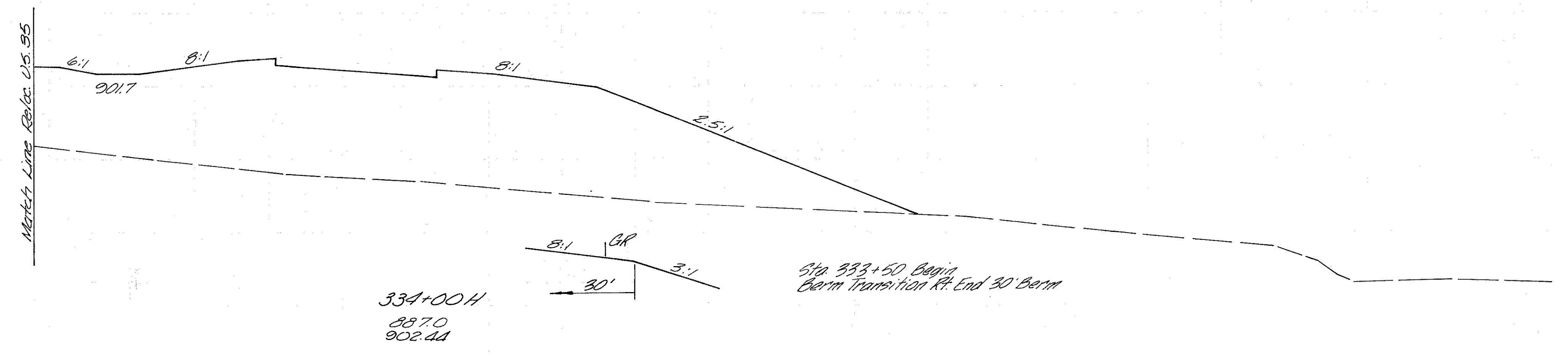
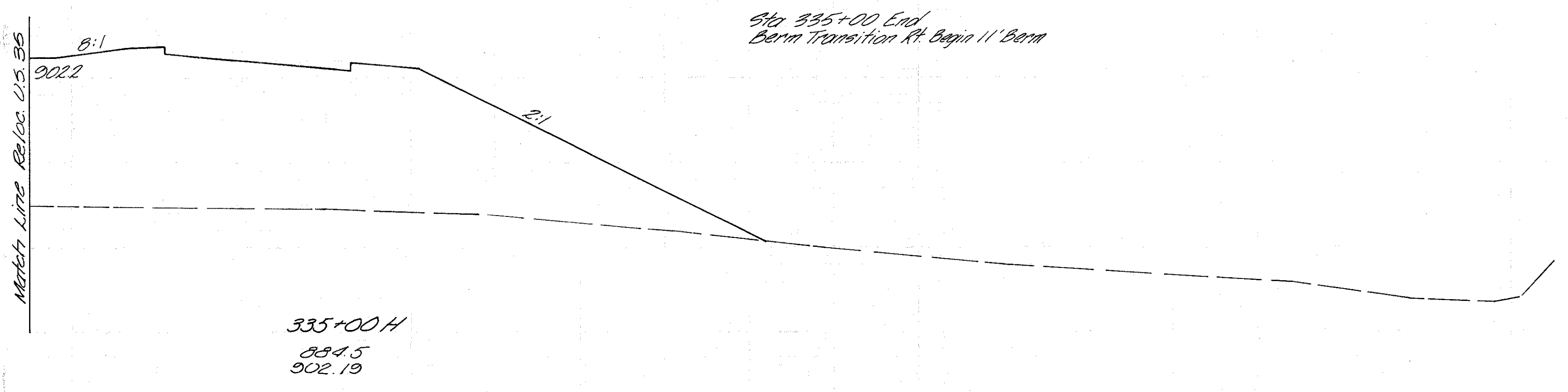
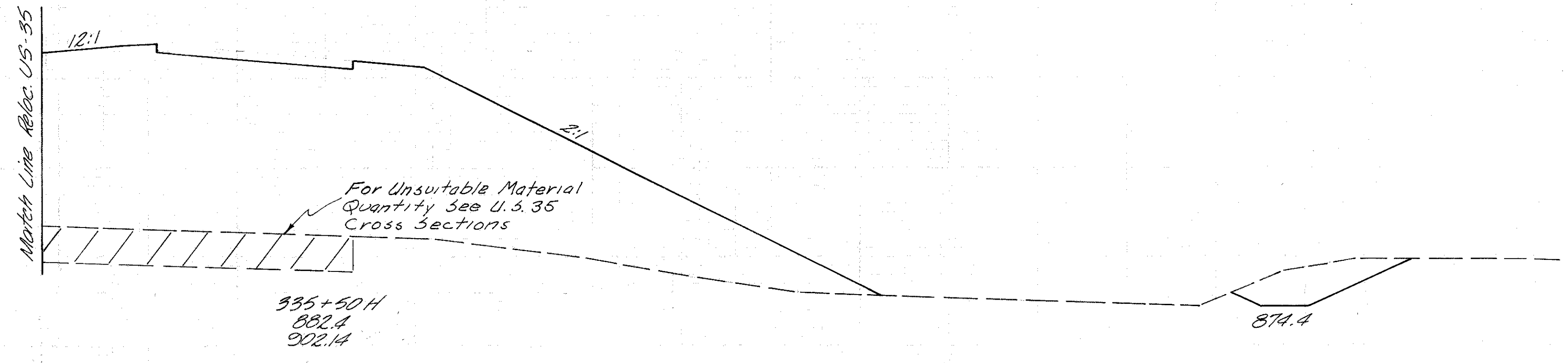
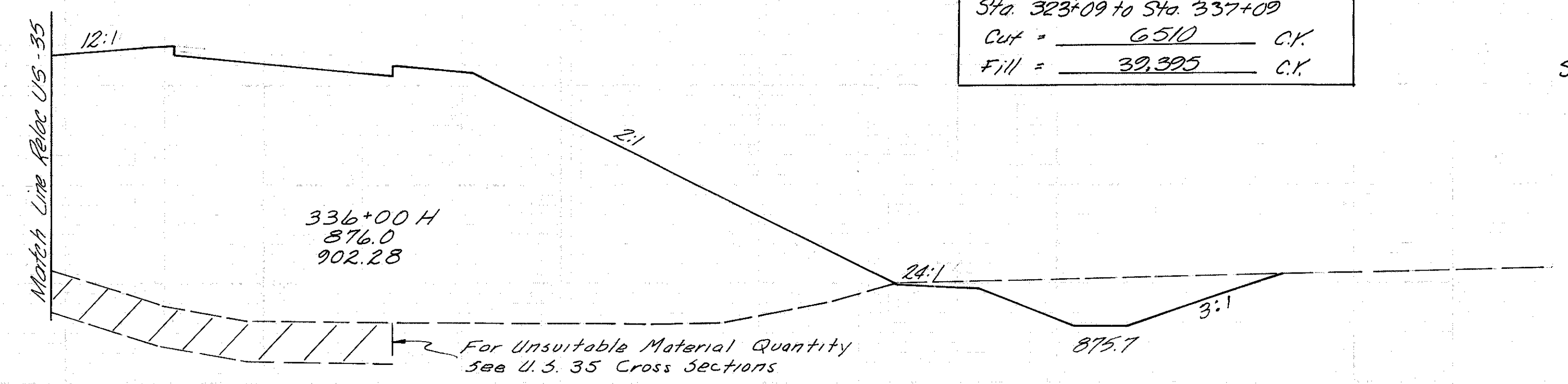
Sta. 336+50 Rt. Begin
Berm Transition End 11' Berm

Sta. 323+09 to Sta. 337+09
Cut = <u>6,510</u> C.Y.
Fill = <u>32,395</u> C.Y.

Sta. 337+09 H (Sta. 45+00 U.S. 35)

1859
160
892
161
892
160
1778
160
1950

900 39 1887
890 20 110 212 7217
880 88 1656
900 4551 4982 111 2766
890 44 1341
880 4732 4995 39 2292
900 0 1136
870 1007 0 4700
900 0 1400
880 7598 0 2280



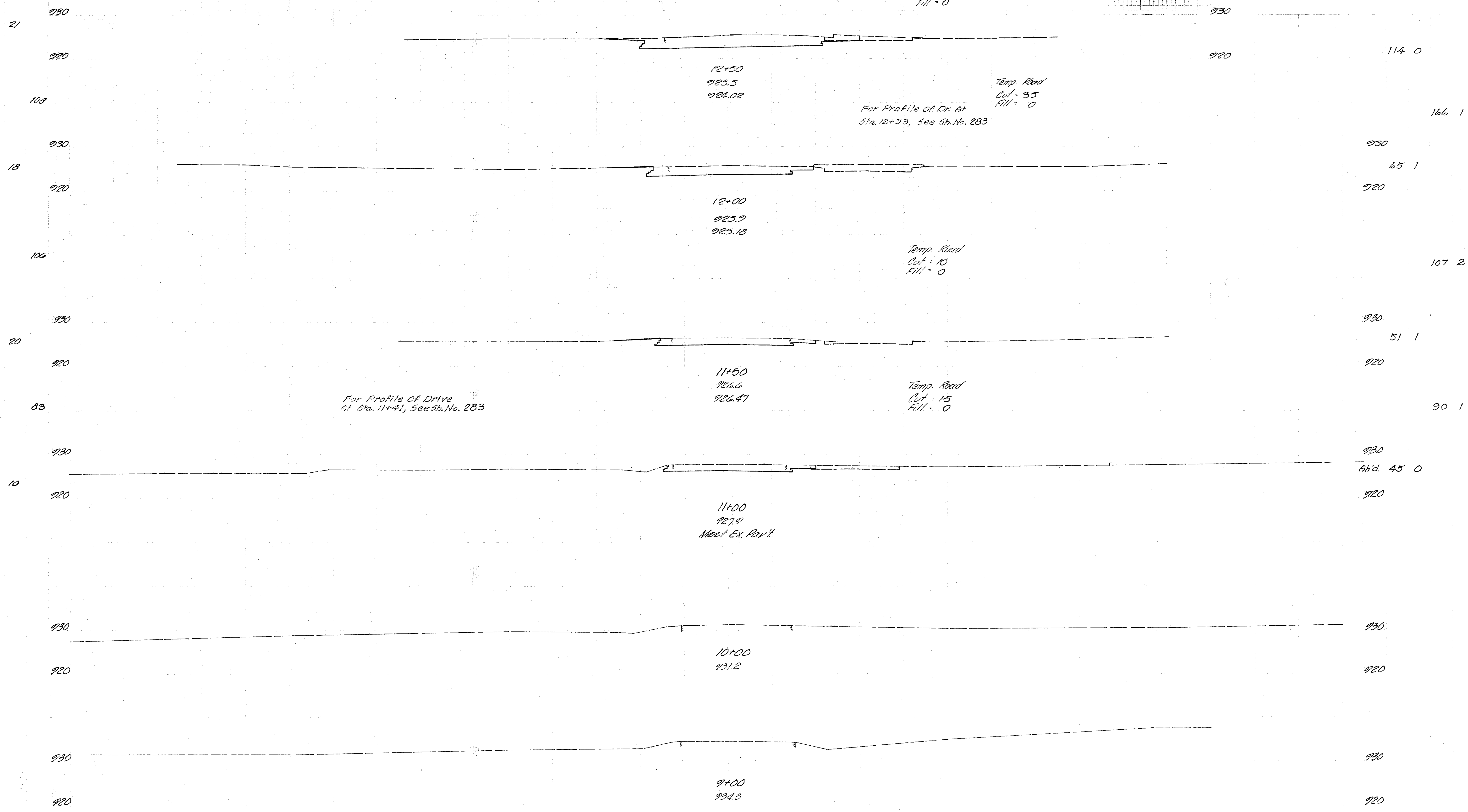
120 100 80 60 40 20 0 20 40 60 80 100 120 140 160
RAMP H STA. 334+00 TO STA. 336+00

140 120 100 80 60 40 20 0 20 40 60 80 100

CONTRACT CALCULATIONS
BY *26102* DATE *11/14/71*
CHECKED BY *10324* DATE *1/13/72*
VINO AND ALVARO
CONSULTING ENGINEERS

2 0113
GRE-675 - 5.37
GREENE COUNTY

280
616



21
108
18
106
20
83
10
930
920
930
920
930
920

930
920
114 0
930
920
166 1
930
920
65 1
107 2
930
920
51 1
930
920
90 1
930
920
Ahd. 45 0
930
920
930
920

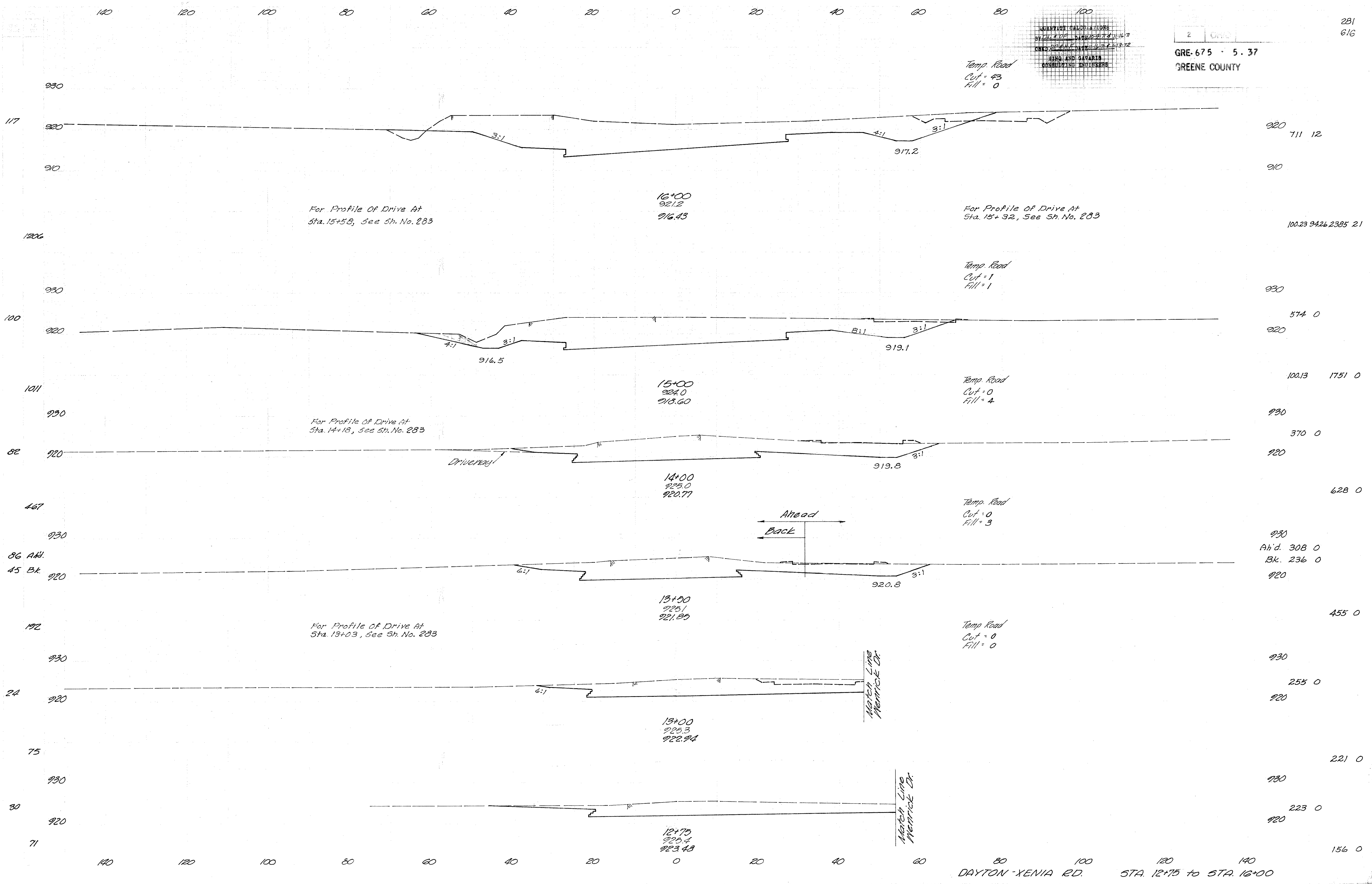
140 120 100 80 60 40 20 0 20 40 60 80 100 120 140
DAYTON-XENIA RD. STA. 9+00 to STA 12+50

8-12-70
310

QUANTITIES CALCULATED
 BY D.L. COPELAND DATE 4/11/14
 CHAS. P. HARRIS
 HARRIS AND GARRARD
 CONSULTING ENGINEERS

2 CIVIL
 GRE-675 5.37
 GREENE COUNTY

281
 616



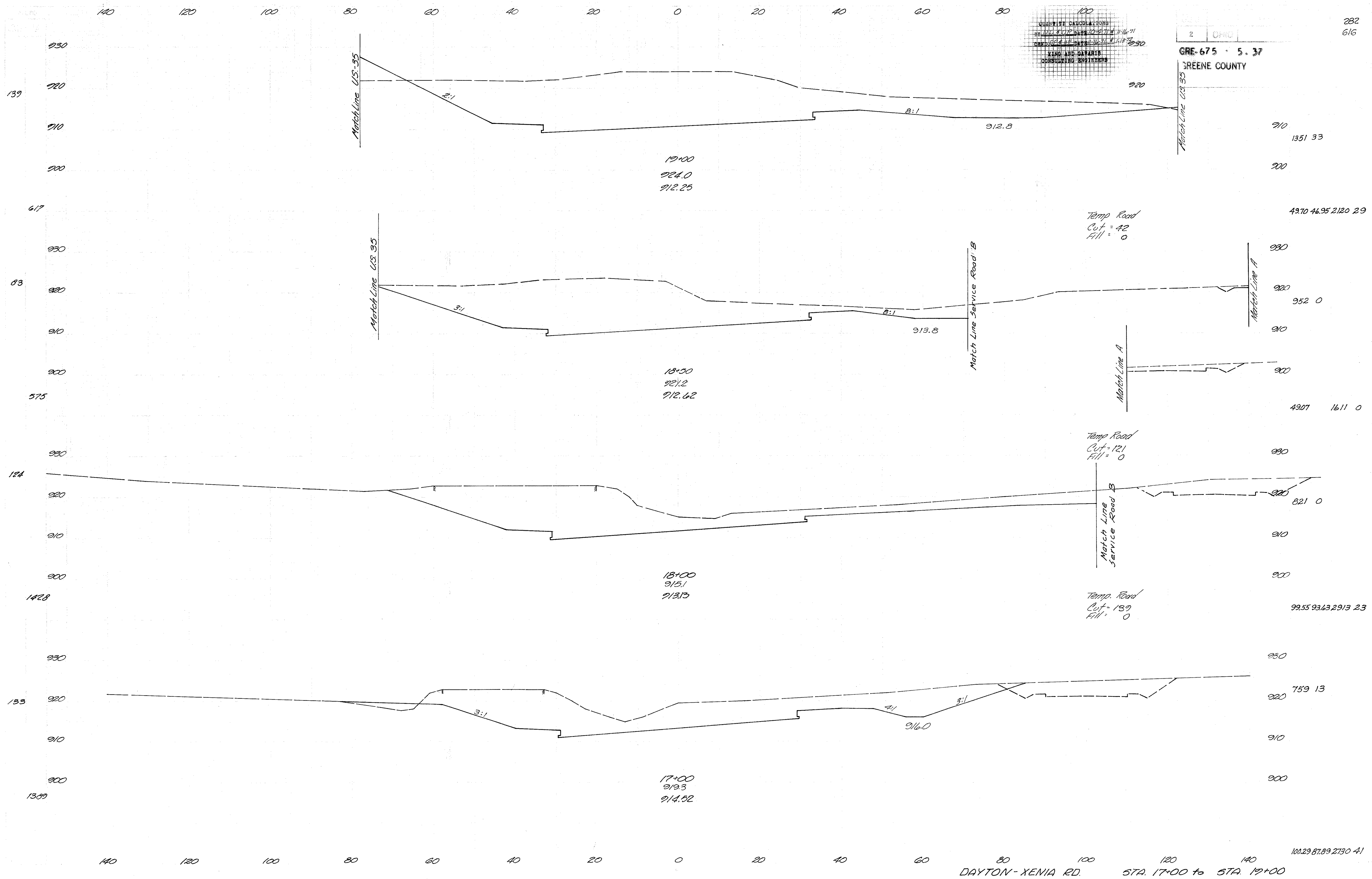
DAYTON-XENIA RD. STA. 12+75 to STA. 16+00

QUANTITY CALCULATED
 BY JAD 8/15/70 DATE 12-23-71
 JOB NO. 675 DATE 10-27-71
 KING AND GIBBIS
 CONSULTING ENGINEERS

2 OHIO

282
 616

GRE-675 - 5.37
 GREENE COUNTY



JAD 8/15/70

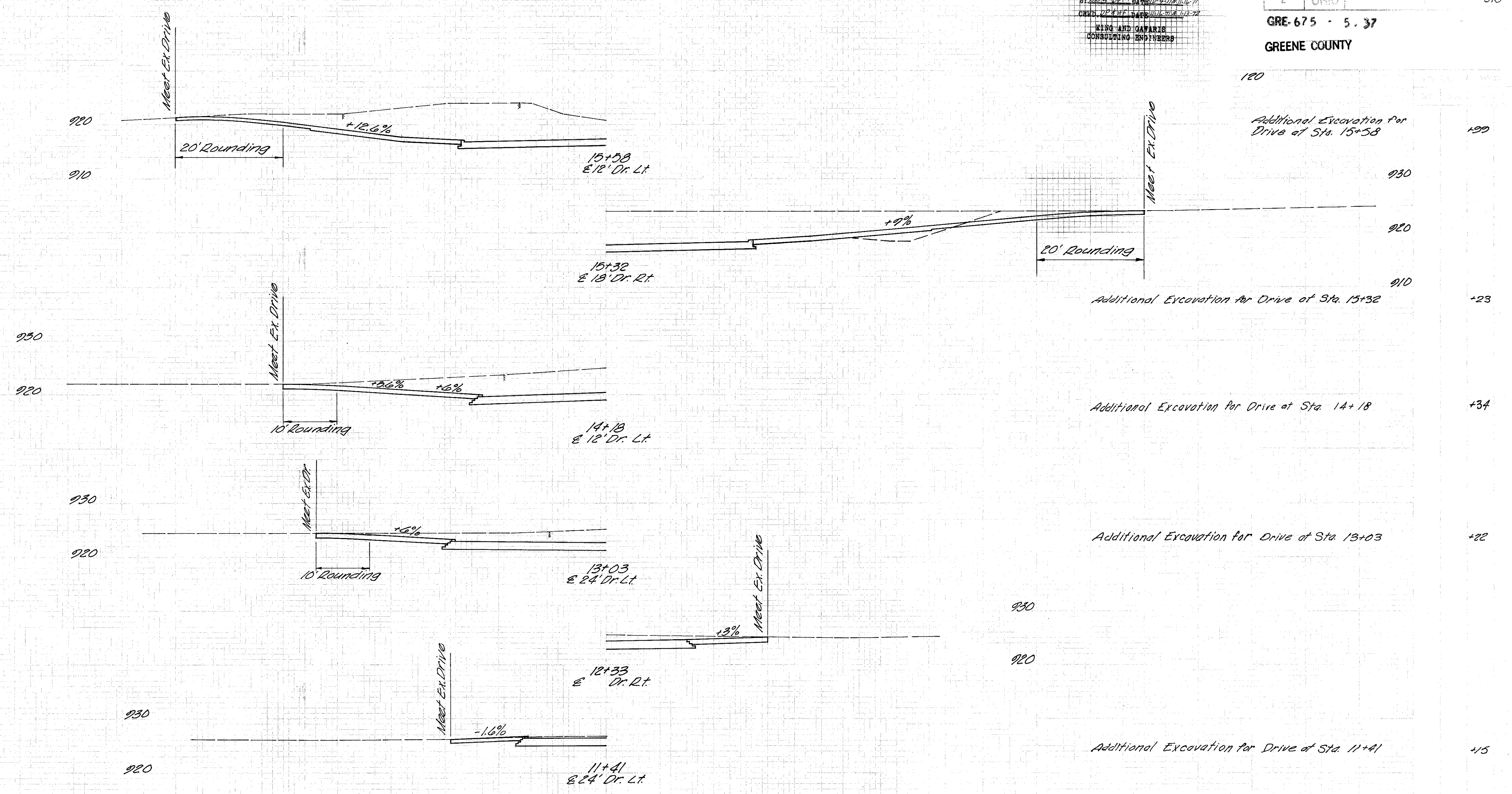
100.29 87.89 2730 41

DAYTON - XENIA RD. STA. 17+00 to STA. 19+00

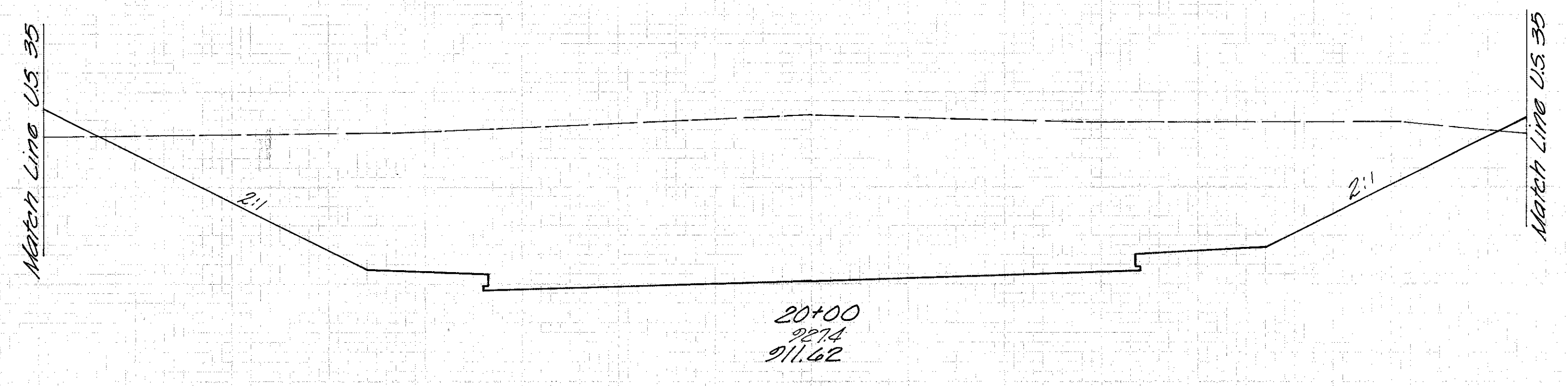
140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITY CALCULATIONS
BY DATE 100 - DATE 12/18/11
CADD 2247C - DATE 12/18/11
KING AND GAVRIS
CONSULTING ENGINEERS

2 0410 283
616
GRE-675 - 5.37
GREENE COUNTY



Sta. 11+00 to Sta. 20+00
Cut = 21,436 C.Y.
Fill = 195 C.Y.



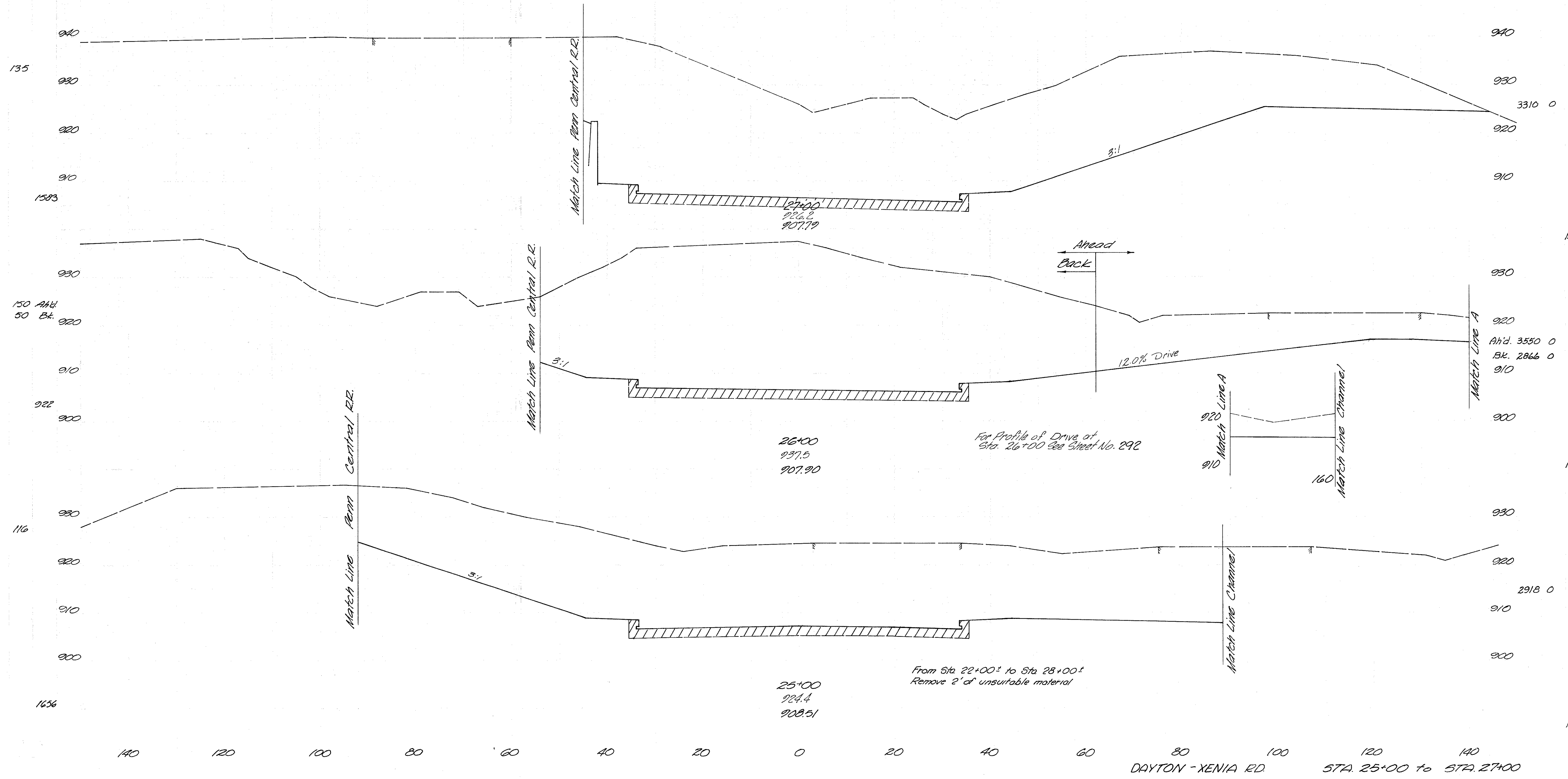
140 120 100 80 60 40 20 0 20 40 60 80 100 120

DAYTON XENIA RD. STA. 20+00

QUANTITY CALCULATIONS
BY E.C. DE WARD 11-16-71
CHECKED BY J.W. WARD 11-18-72
KING AND GAFARIS
CONSULTING ENGINEERS

2 OHIO

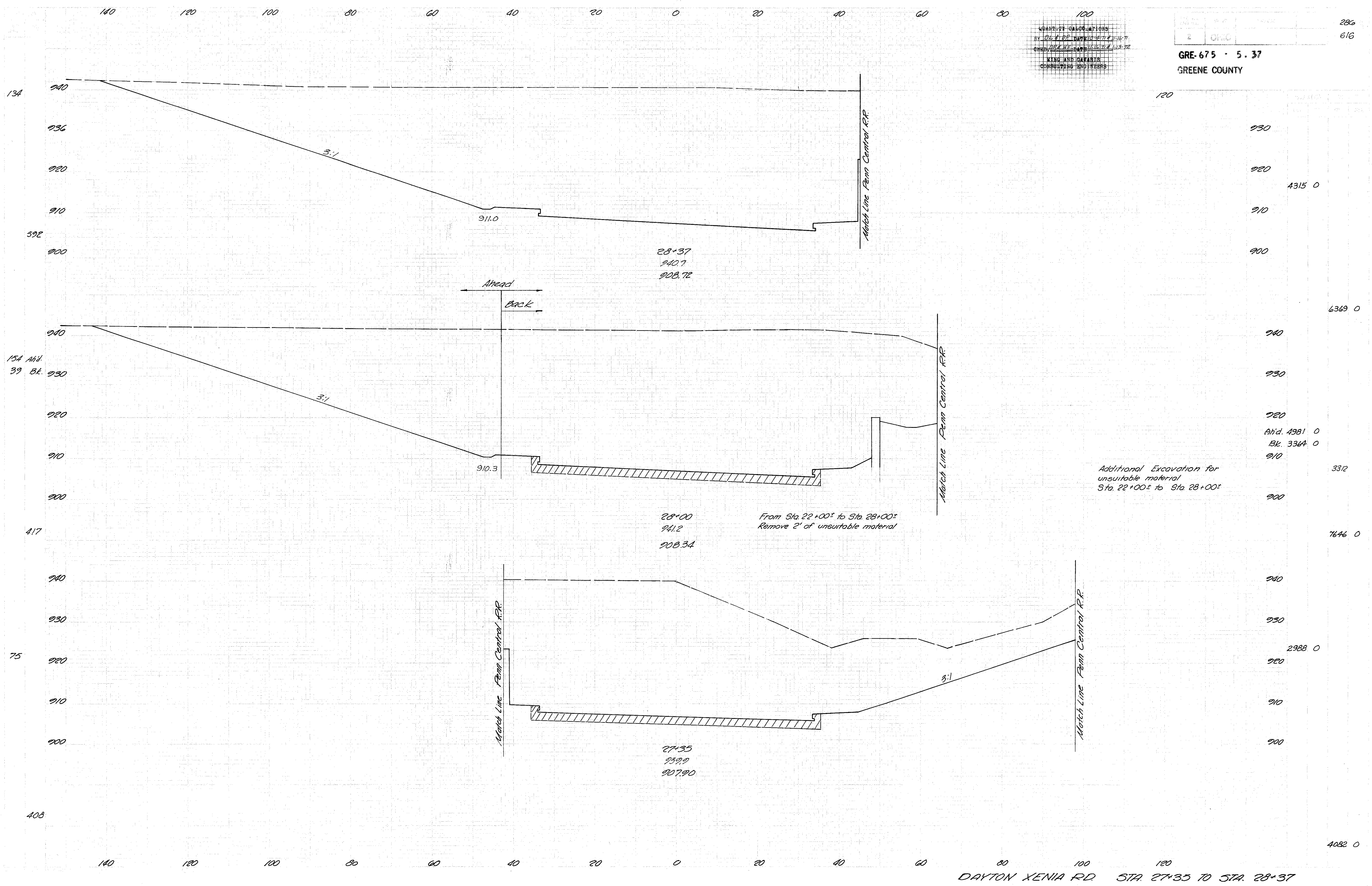
GRE-675 - 5.37
GREENE COUNTY



JAD 6/18/70

QUANTITY CALCULATIONS
 BY: D.G. W. DATE: 12-27-11
 CHECKED: D.G. W. DATE: 12-27-11
 KING AND GAVARIS
 CONSULTING ENGINEERS

2 01.0
 GRE-675 - 5.37
 GREENE COUNTY

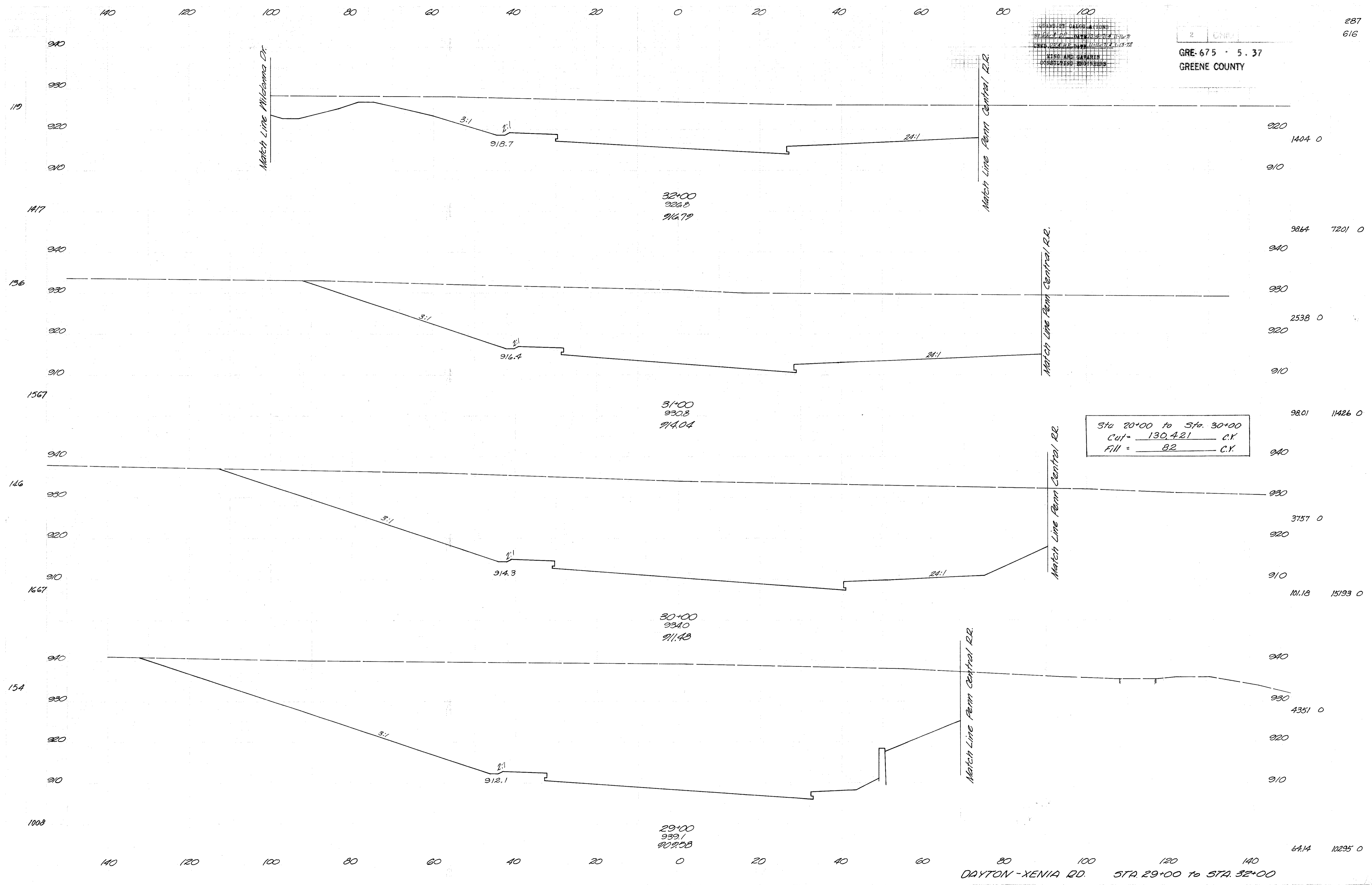


DAYTON XENIA RD STA. 27+35 TO STA. 28+37

QUANTITIES CALCULATIONS
 BY: J. P. ... DATE: 11-10-77
 SHEET NO. 1 OF 4
 WING AND GAVRIS
 CONSULTING ENGINEERS

GRE-675 - 5.37
 GREENE COUNTY

287
616

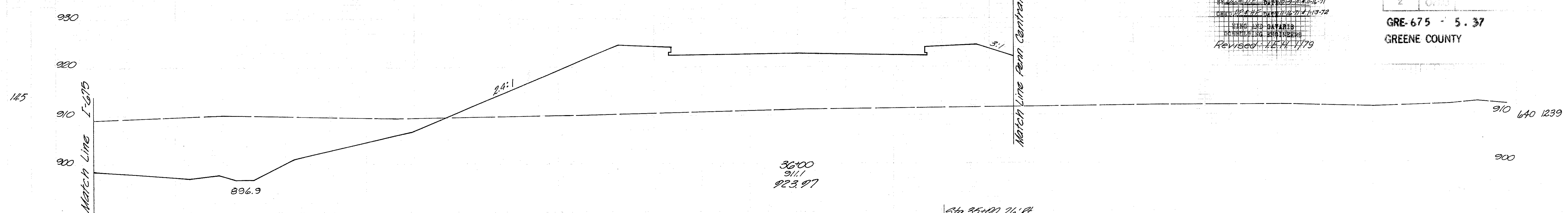


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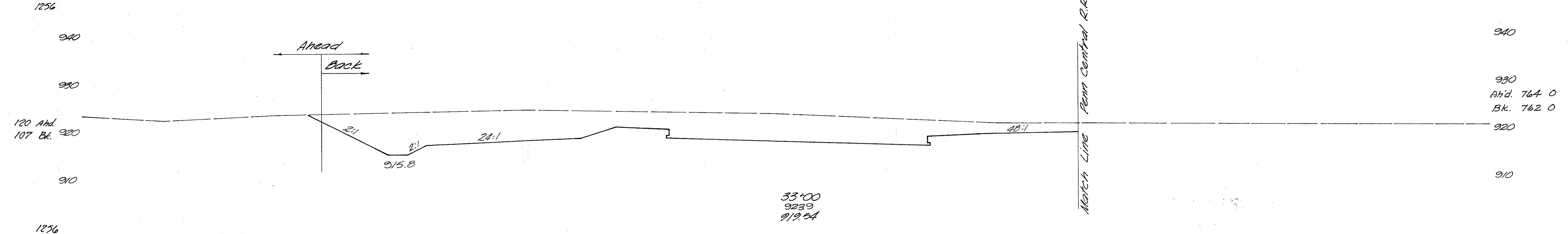
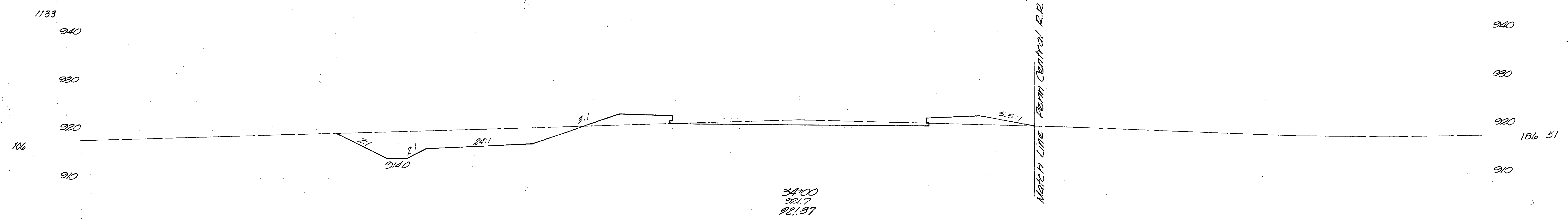
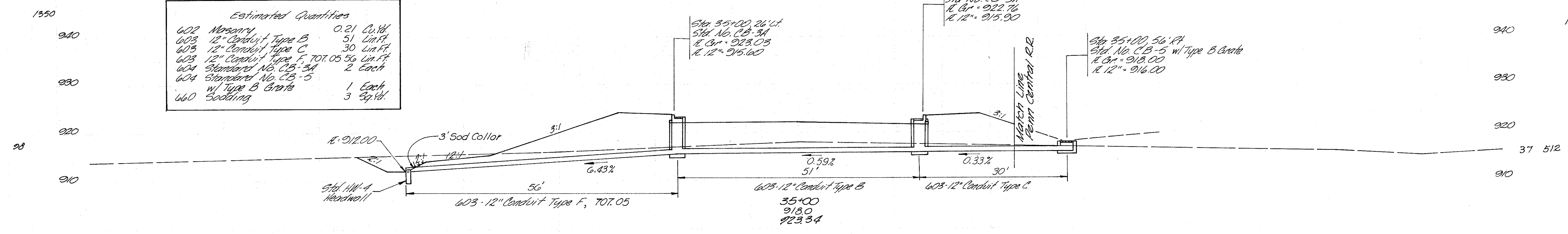
STANDARD CALCULATIONS
BY J. W. D. DATE 12-17-71
CHECKED BY J. W. D. DATE 1-13-72
J. W. D. BATES
REVISION 12/11/79

GRE-675 - 5.37
GREENE COUNTY

288
616



Estimated Quantities	
602 Masonry	0.21 Cu.Yd.
603 12" Conduit Type B	51 Lin.Ft.
603 12" Conduit Type C	30 Lin.Ft.
603 12" Conduit Type F	707.05 Lin.Ft.
604 Standard No. CB-3A	2 Each
604 Standard No. CB-5	1 Each
w/ Type B Grate	
660 Sodding	3 Sq.Yd.



DATE 8/1/90
JWAD

Ahead
Back

120 Ahd.
107 Bk.

1256

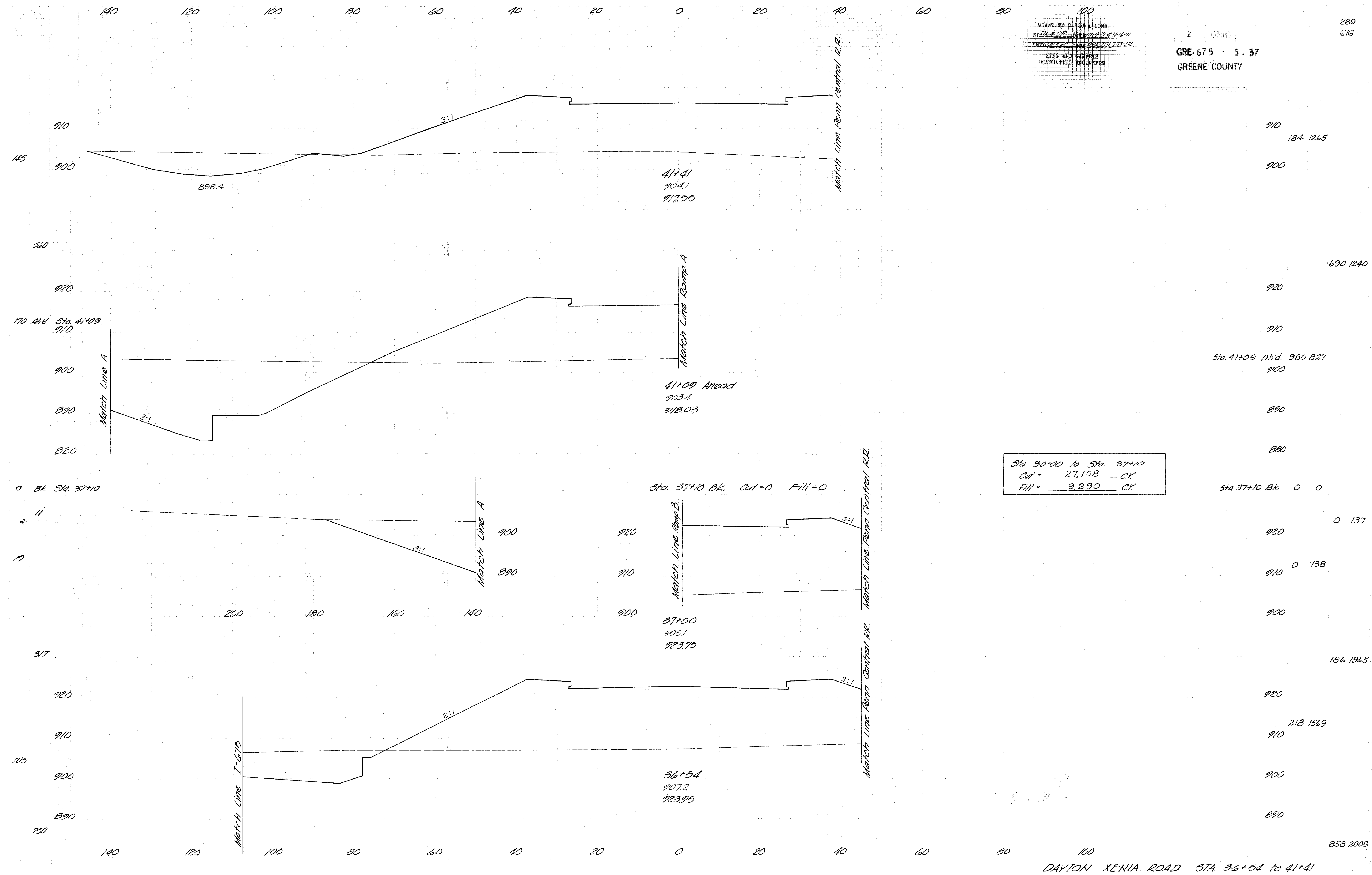
140 120 100 80 60 40 20 0 20 40 60 80 100 120 140
DAYTON XENIA RD. STA. 33+00 to STA. 36+00

4011 0

QUANTITY TAKEOFF SHEET
 PROJECT: DAYTON XENIA RD
 DATE: 11/13/72
 ENGINEER: KING AND GAVERTS
 CONSULTING ENGINEERS

2 CMO
 GRE-675 - 5.37
 GREENE COUNTY

289
 616

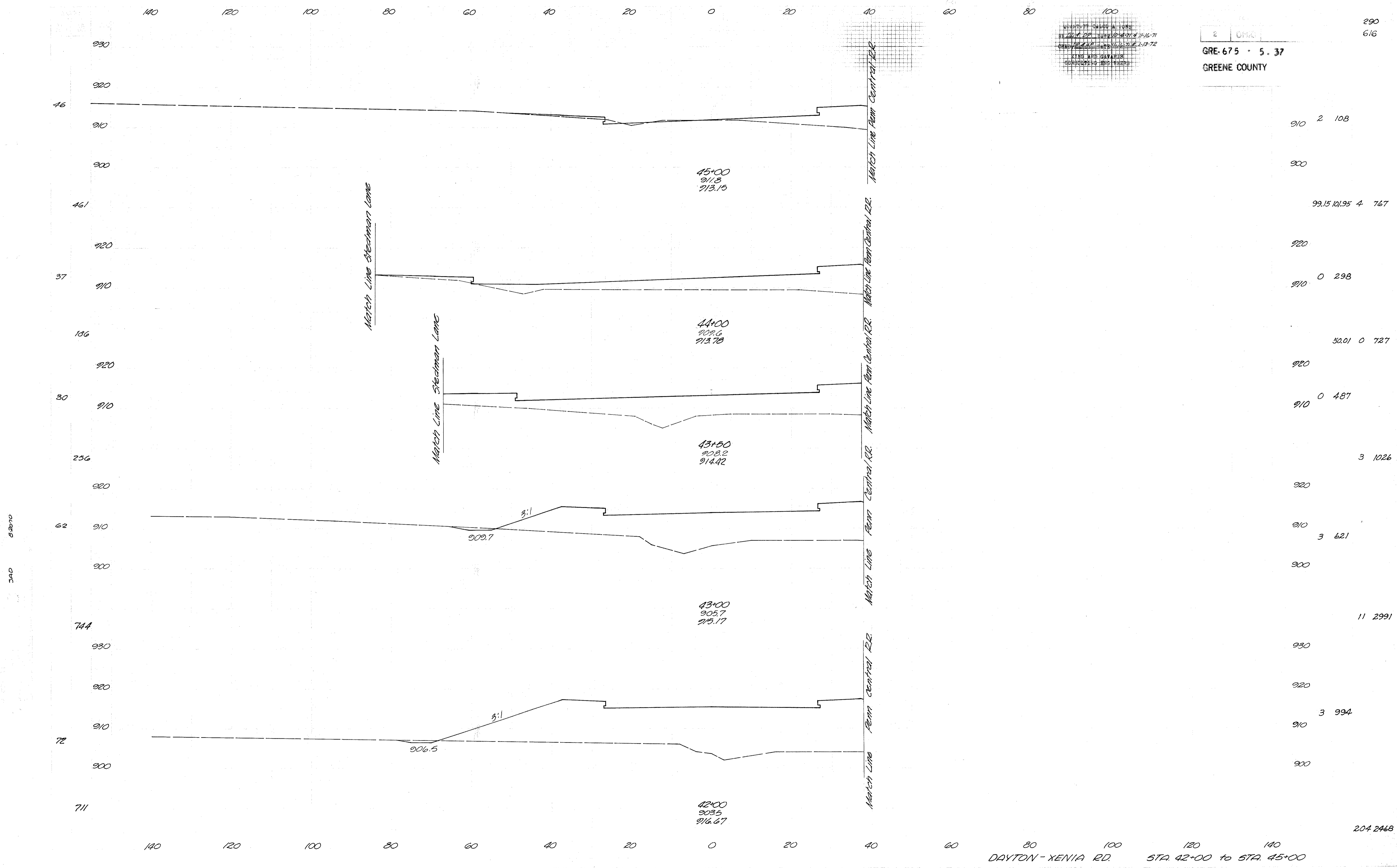


DAYTON XENIA ROAD STA. 36+54 TO 41+41

CONTRACT NO. 675-A-108
 BY DATE OF DRAWING 11-16-71
 KING AND GAYLOR
 CONSULTING ENGINEERS

2 CMC
 GRE-675 - 5.37
 GREENE COUNTY

290
616

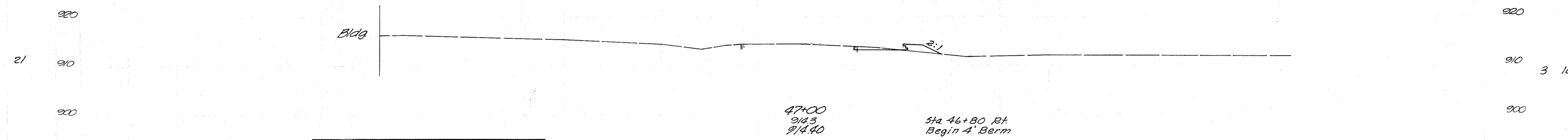
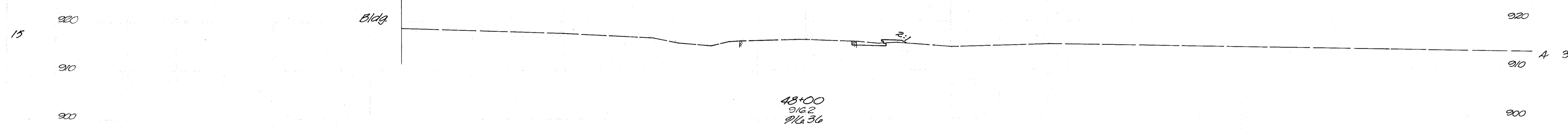
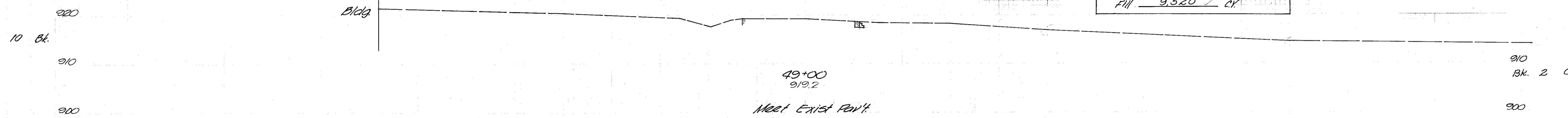


140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITY CALCULATIONS
BY DATE 10/11/71
CND. DATE 10/11/71
KING AND GAYNE
CONSULTING ENGINEERS

2 000 291
616
GRE-675 - 5.37
GREENE COUNTY

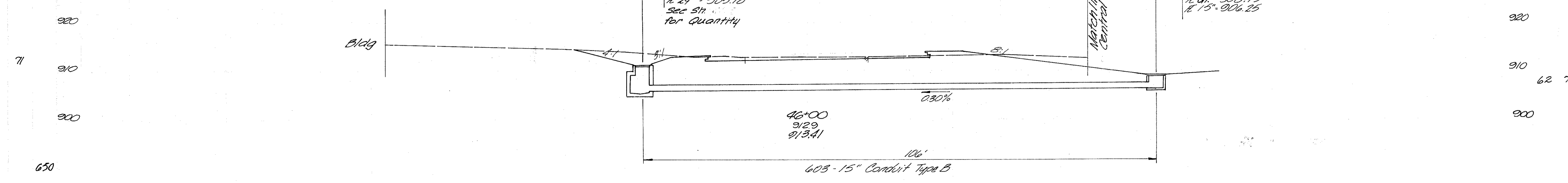
Sta 41+00 to Sta 42+00
Cut 1.174 CK
Fill 9.520 CK



Estimated Quantities
603 15" Conduit Type B 106 Lin. Ft.
604 Standard No. CB-5
w/ Type B Grate 1 Each
660 Siding 100 Sq. Yd.

Sta 46+00, 34' Lt.
Std. No. CB-5 w/ Type B Grate
E.G.P. = 910.75
E. 15" = 905.93
E. 24" = 905.18
See 511
for Quantity

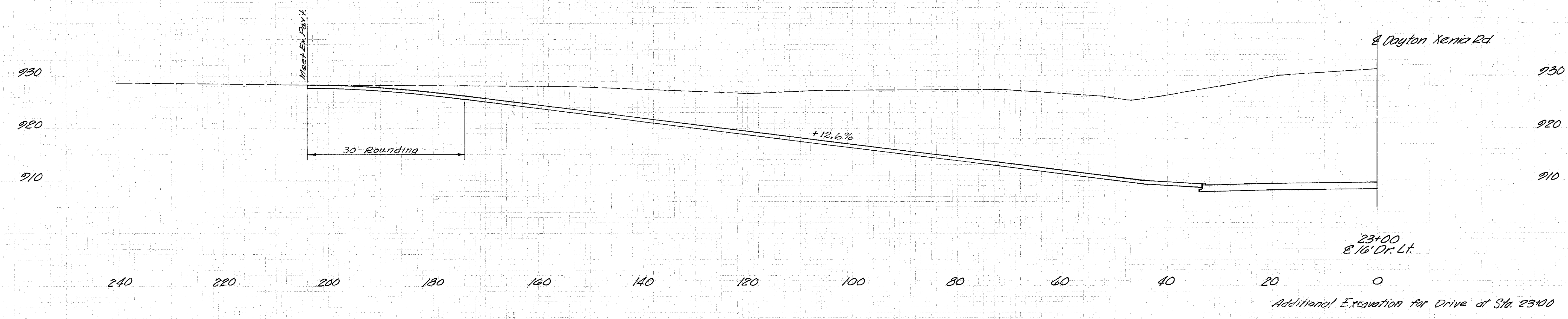
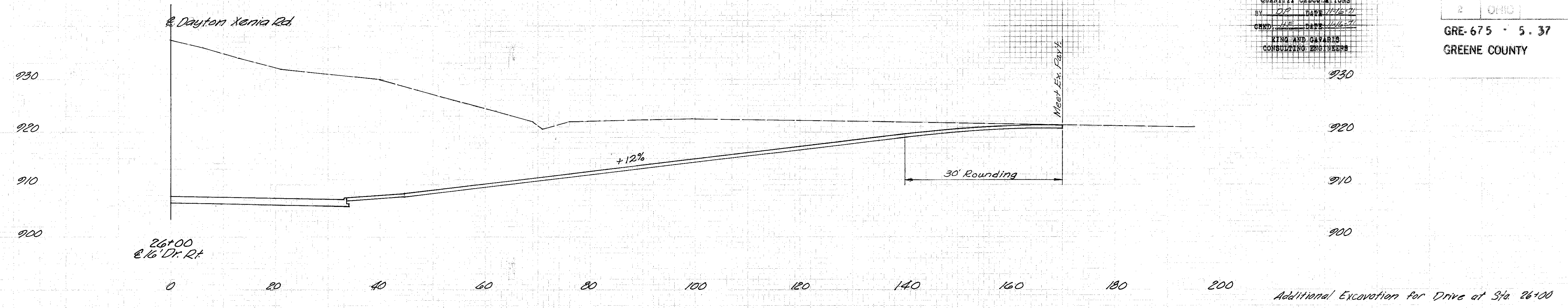
Sta 46+00, 72' Rt.
Std. No. CB-5 w/ Type B Grate
E.G.P. = 908.75
E. 15" = 906.25



140 120 100 80 60 40 20 0 20 40 60 80 100 120 140
DAYTON - XENIA RD. STA. 46+00 to STA. 49+00
99.15 101.93 118 217

QUANTITY CALCULATIONS
 BY: D.P. DATE: 11/16/21
 CHKD: J.E. DATE: 11/16/21
 KING AND GAVRIS
 CONSULTING ENGINEERS

292
 616
 GRE-675 - 5.37
 GREENE COUNTY



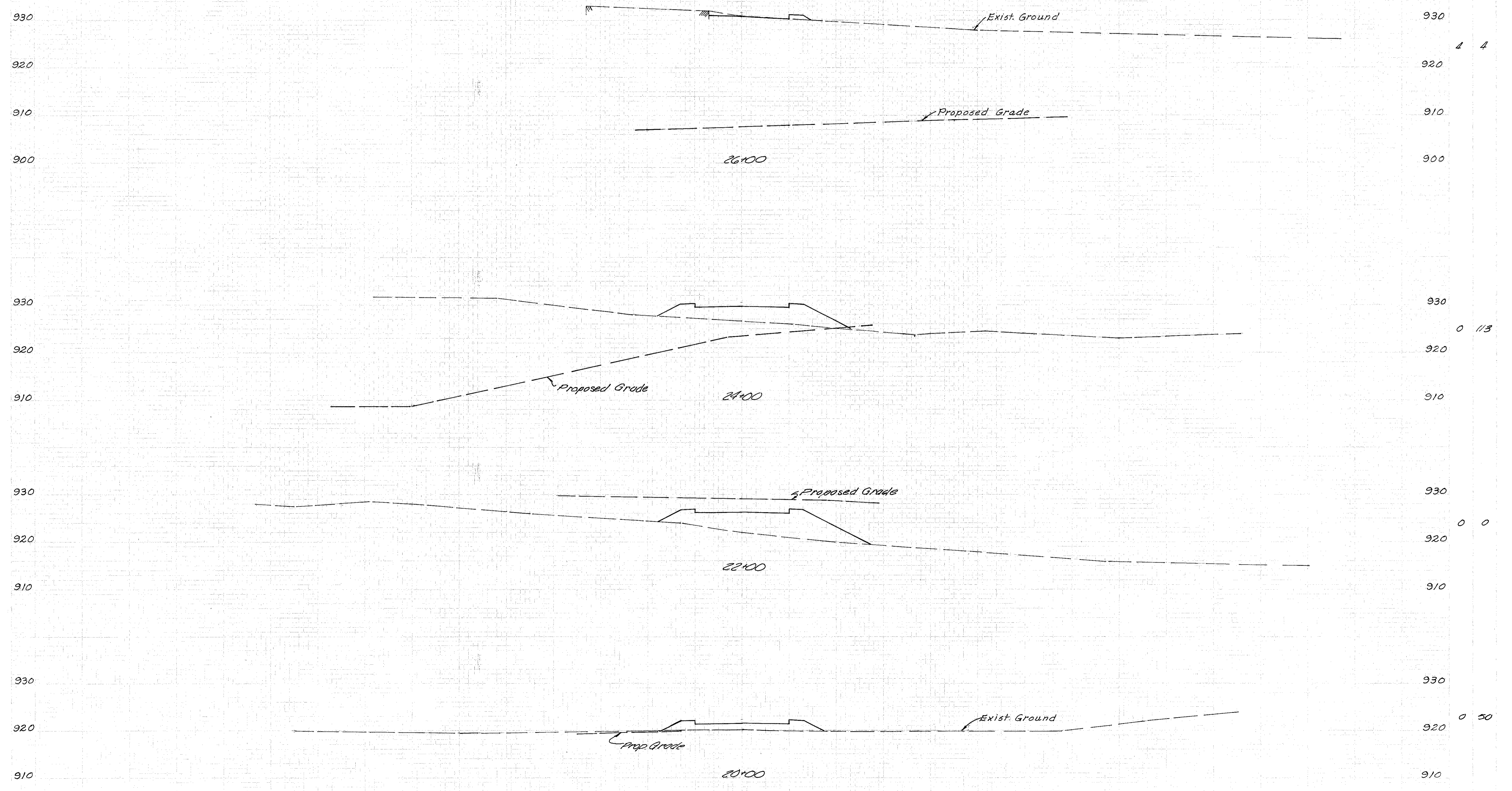
140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITY CALCULATIONS
BY: OP DATE: 11/16/21
CHKD: ME DATE: 11/16/21
KING AND GATZIS
CONSULTING ENGINEERS

2 OHIO
GRE-675 - 5.37
GREENE COUNTY

293
616

120 140



140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

140 120 100 80 60 40 20 0 20 40 60 80 100

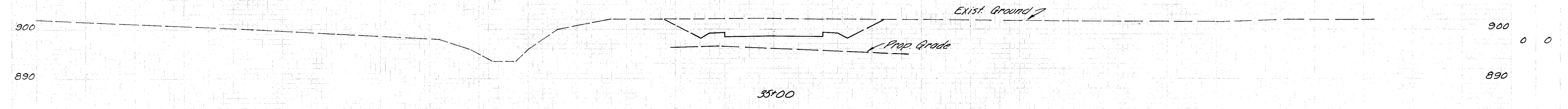
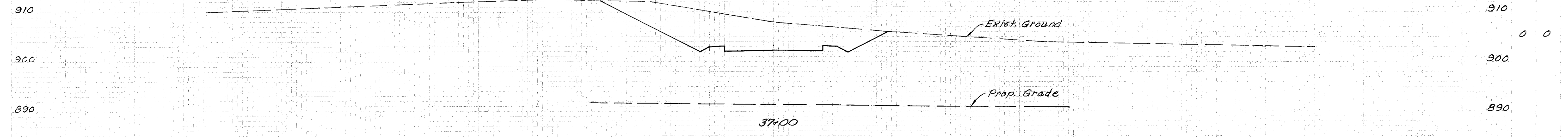
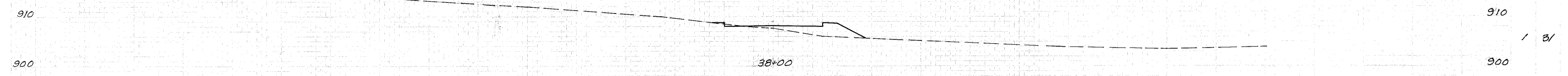
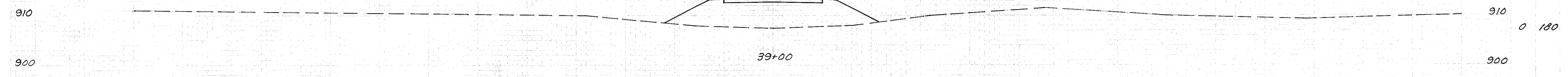
QUANTITY CALCULATIONS
BY D.P. SAND 1/16/71
CHKD. J.E. SAND 1/16/71
WING AND GARRIS
CONSULTING ENGINEERS

2	OHIO
---	------

GRE-675 - 5.37
GREENE COUNTY

294
616

120 140



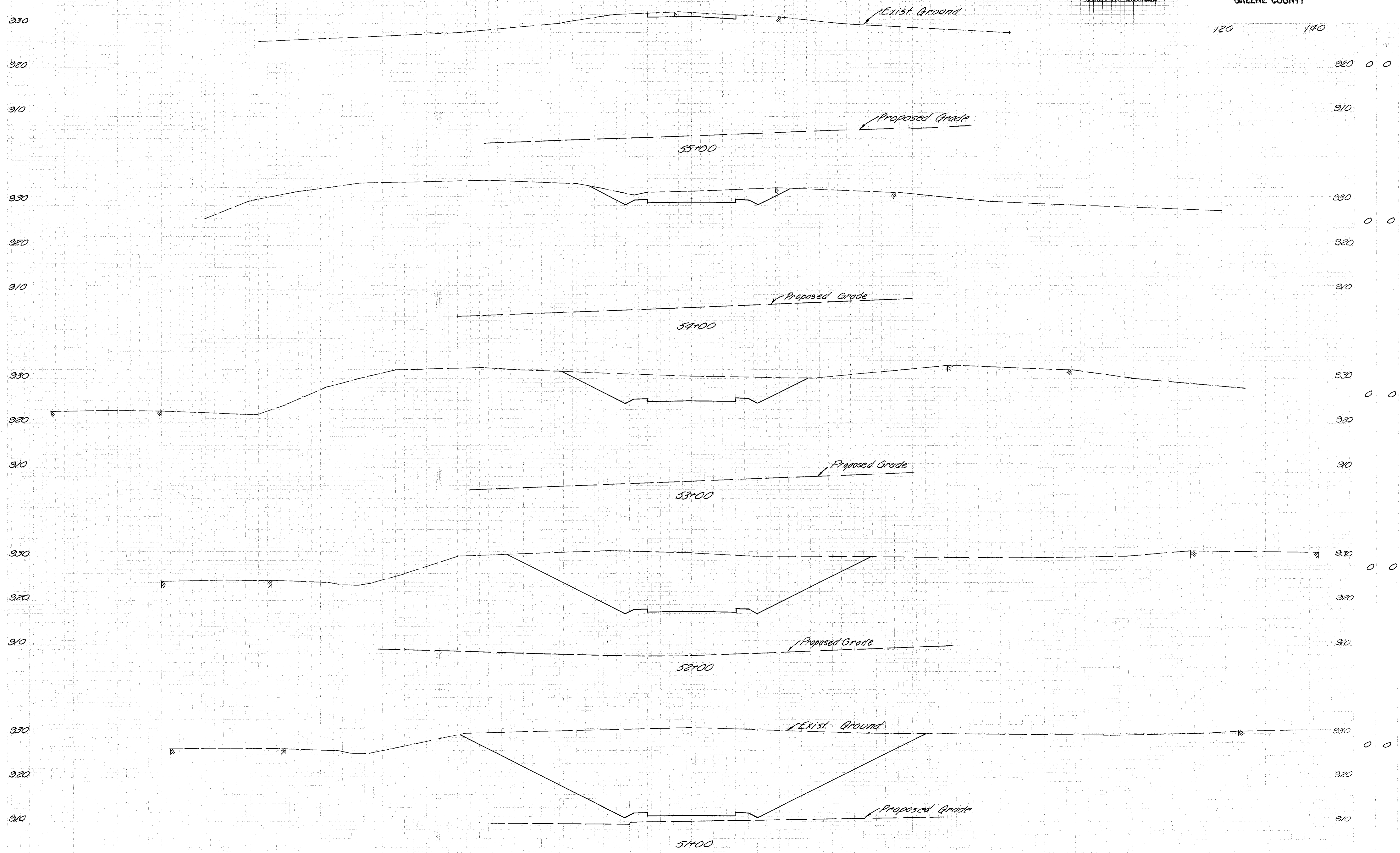
140 120 100 80 60 40 20 0 20 40 60 80 100

140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITY CALCULATIONS
BY DE DATE 11/16/71
CHECKED JHS DATE 11/16/71
KING AND GAFARIS
CONSULTING ENGINEERS

295
616

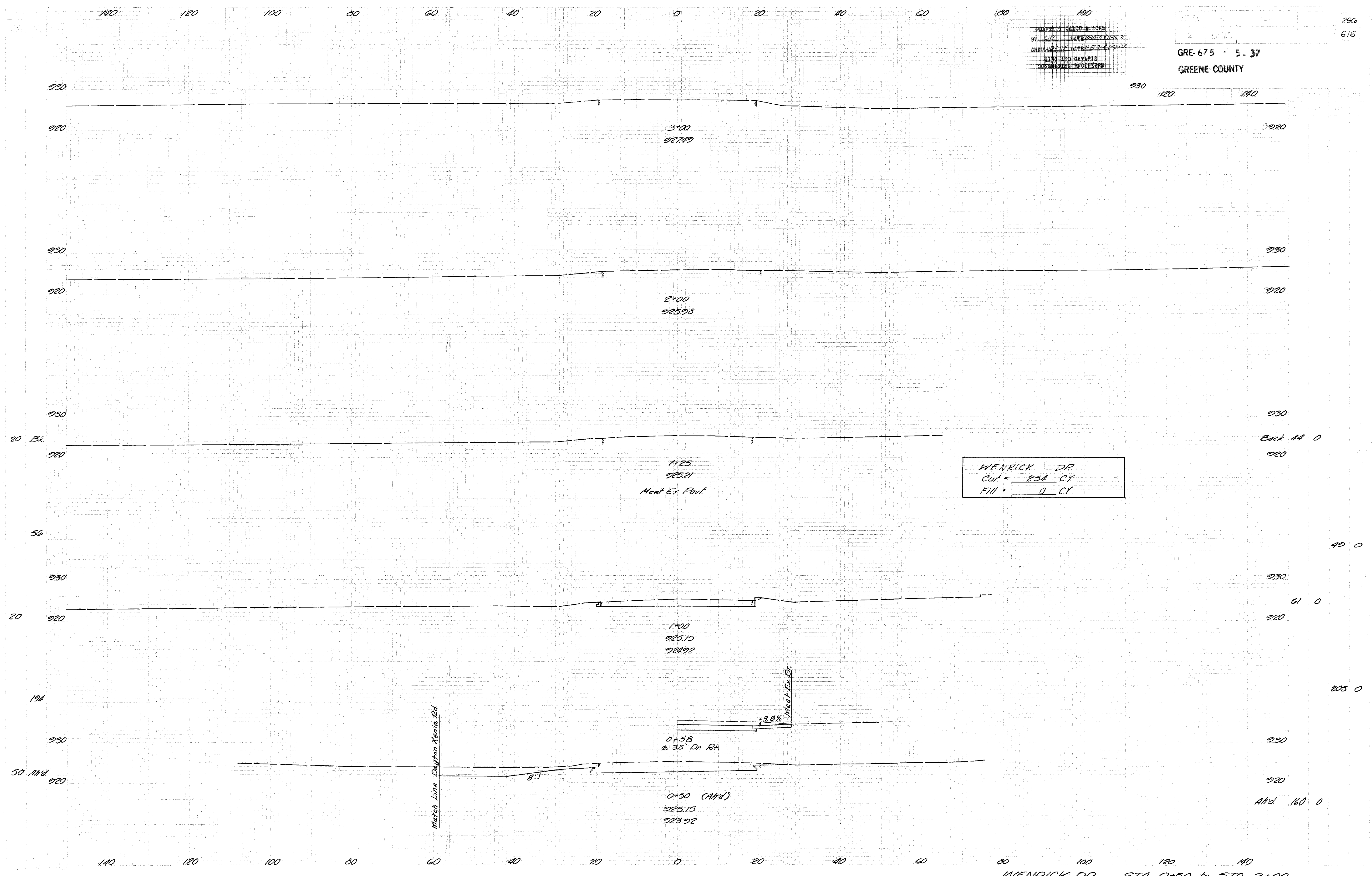
GRE-675 - 5.37
GREENE COUNTY



QUANTITY CALCULATIONS
 BY OP DATE 08/24/16
 CHECKED BY WENRICK DATE 08/24/16
 KING AND GARRETT
 CONSULTING ENGINEERS

GRE-675 - 5.37
 GREENE COUNTY

296
 616



WENRICK DR
 Cut = 254 CY
 Fill = 0 CY

3+00
 927.89

2+00
 925.98

1+25
 925.21
 Meet Ex. Pkwt.

1+00
 925.15
 924.92

0+58
 ± 35' Dr. Rt.

0+50 (Ahd.)
 925.15
 923.92

Match Line Dayton Xenia Rd.

WENRICK DR. STA 0+50 to STA 3+00

20 Bk

56

20

194

50 Ahd

Back 44 0

40 0

61 0

205 0

Ahd. 160 0

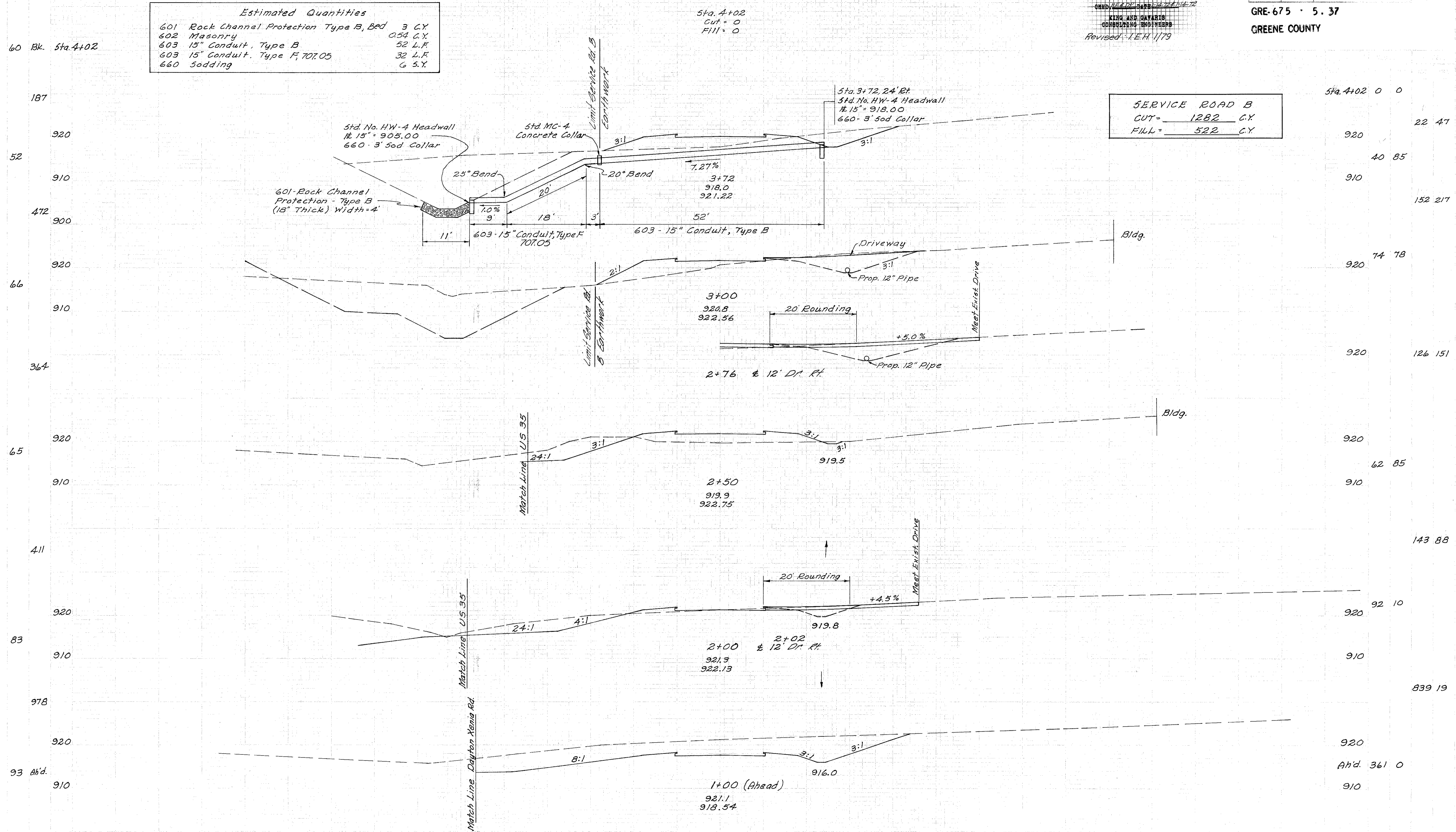
140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITY CALCULATIONS
 BY DPA W/ DATE 5-22-11-11-12
 CHD. HEADY DATE 5-22-11-11-12
 KING AND GAVITO
 CONSULTING ENGINEERS
 Revised: T.E.H. 1/79

2 OHIO 297
 616
 GRE-675 · 5.37
 GREENE COUNTY

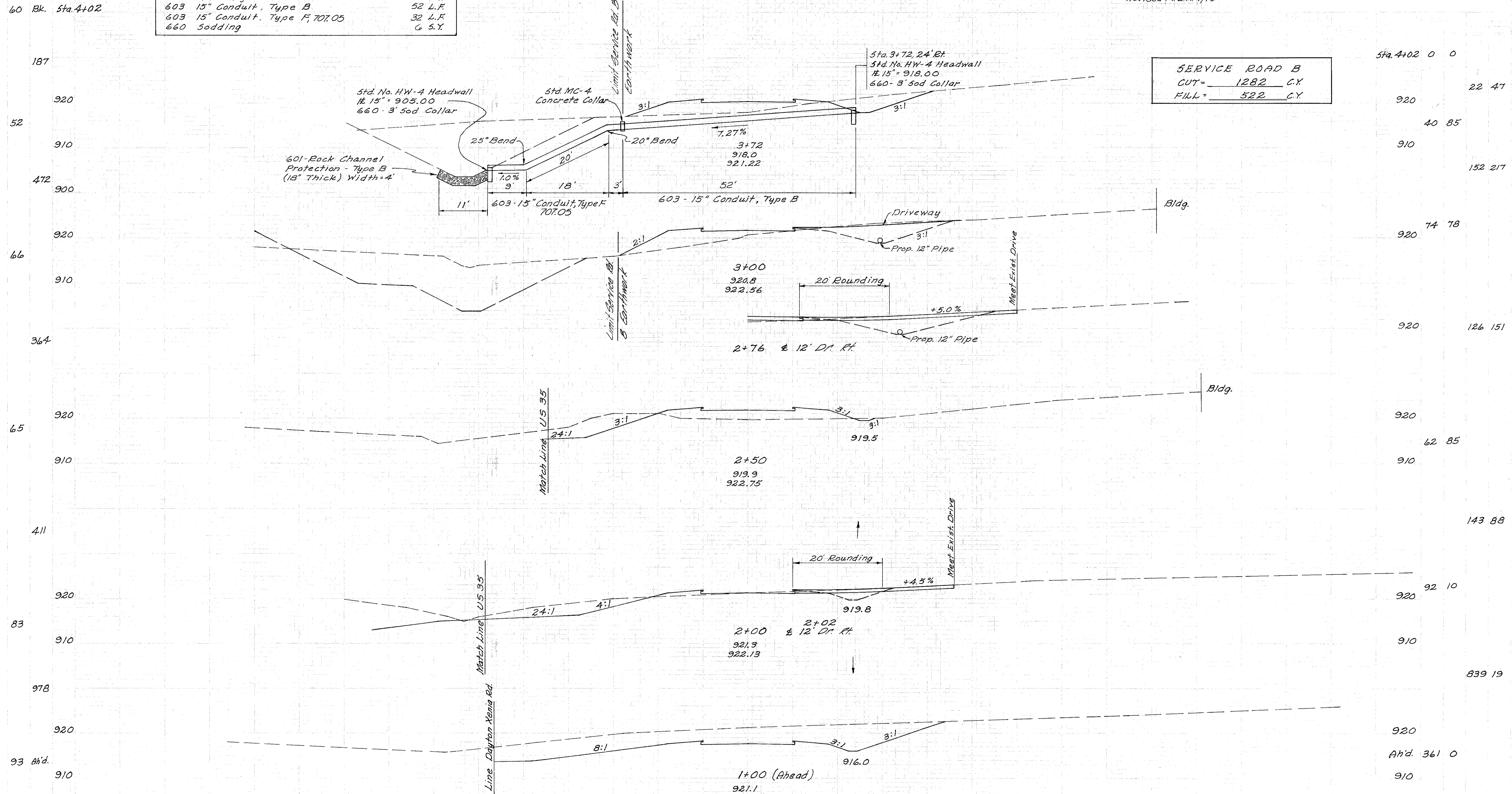
Estimated Quantities

601	Rock Channel Protection Type B, Bed	3 C.Y.
602	Masonry	0.54 C.Y.
603	15" Conduit, Type B	52 L.F.
603	15" Conduit, Type F, 707.05	32 L.F.
660	Sodding	6 S.Y.



SERVICE ROAD B

CUT	=	1282	C.Y.
FILL	=	522	C.Y.



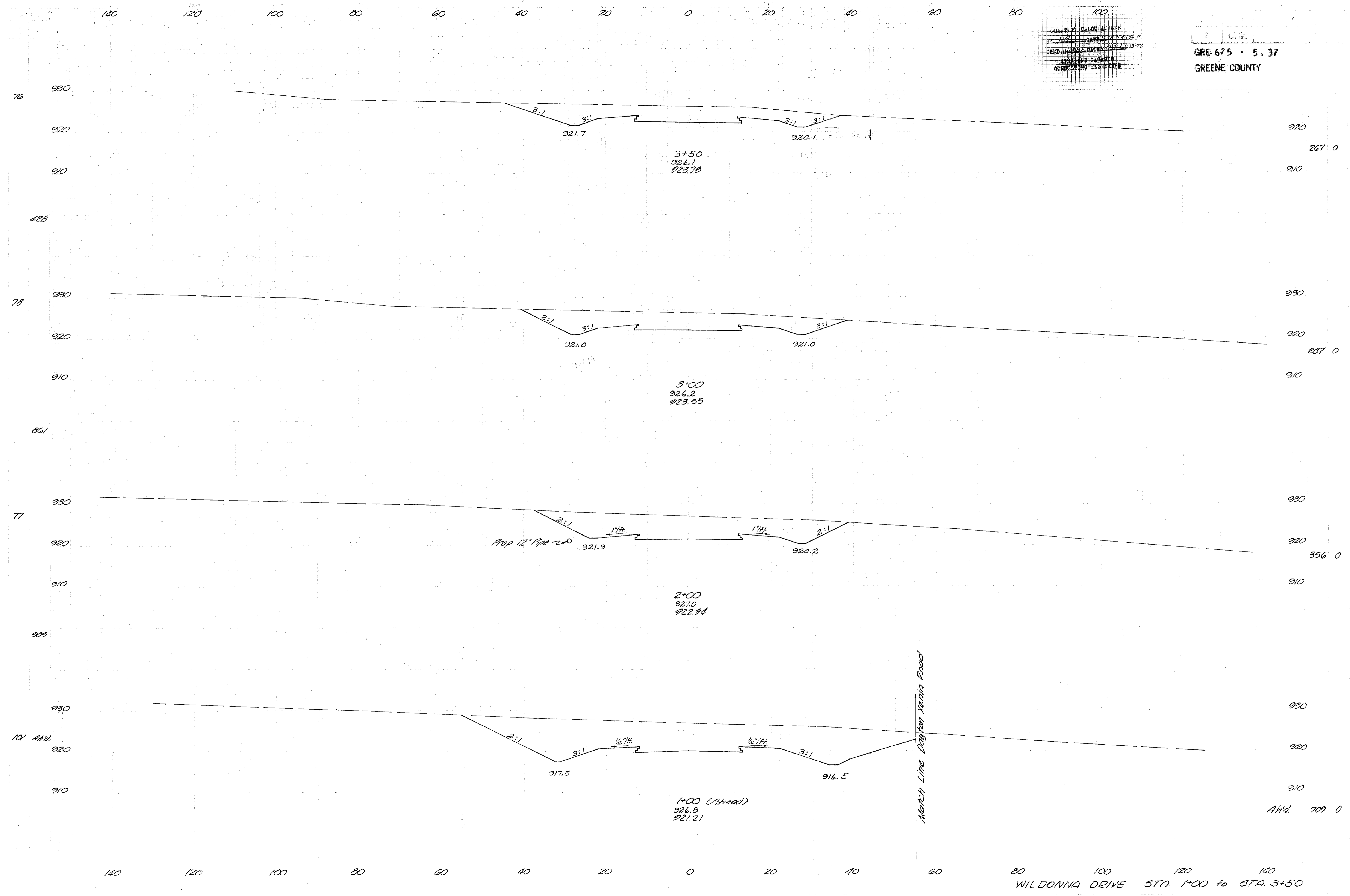
140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

SERVICE ROAD B Sta. 1+00 to Sta. 4+02

COUNTY MAJOR WORKS
 BY DATE 12/12/11-1/4-71
 DRN 12/12/12 WARD-10-11-13-72
 WINE AND GARIBO
 CONSULTING ENGINEERS

2 OHIO
 GRE-675 • 5.37
 GREENE COUNTY

298
616

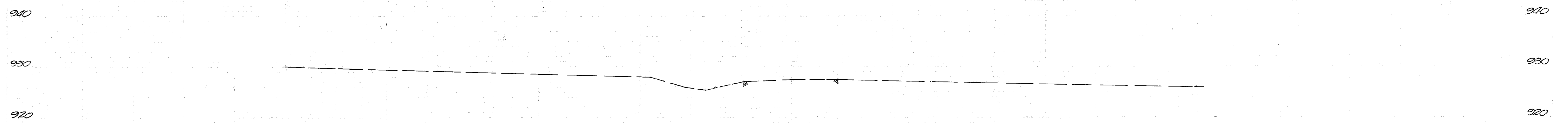


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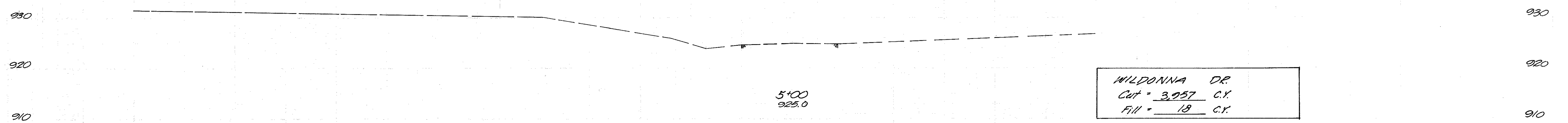
QUANTITY CALCULATION
BY J.P.P. DATE 11-16-77
ONE (1) SHEET TOTAL 1-13-78
KING AND MARTIN
CONSULTING ENGINEERS

GRE-675 - 5.37
GREENE COUNTY

299
616



6+00
927.5



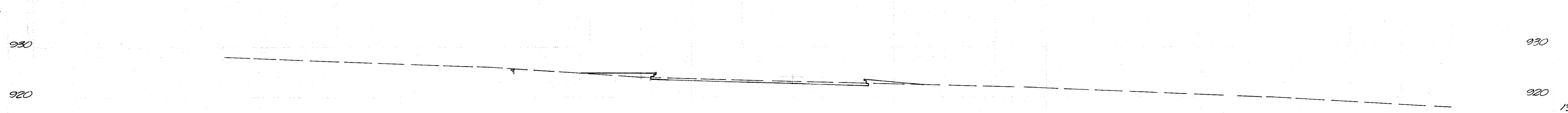
5+00
925.0

WILDONNA DR.	
Cut	= 3,957 C.Y.
Fill	= 18 C.Y.

Sta. 4+20.51

Sta. 4+20.51 Meet Exist. Pavt.

Sta. 4+20.51 Back 15 0



4+00
923.1
924.01

47

13 14

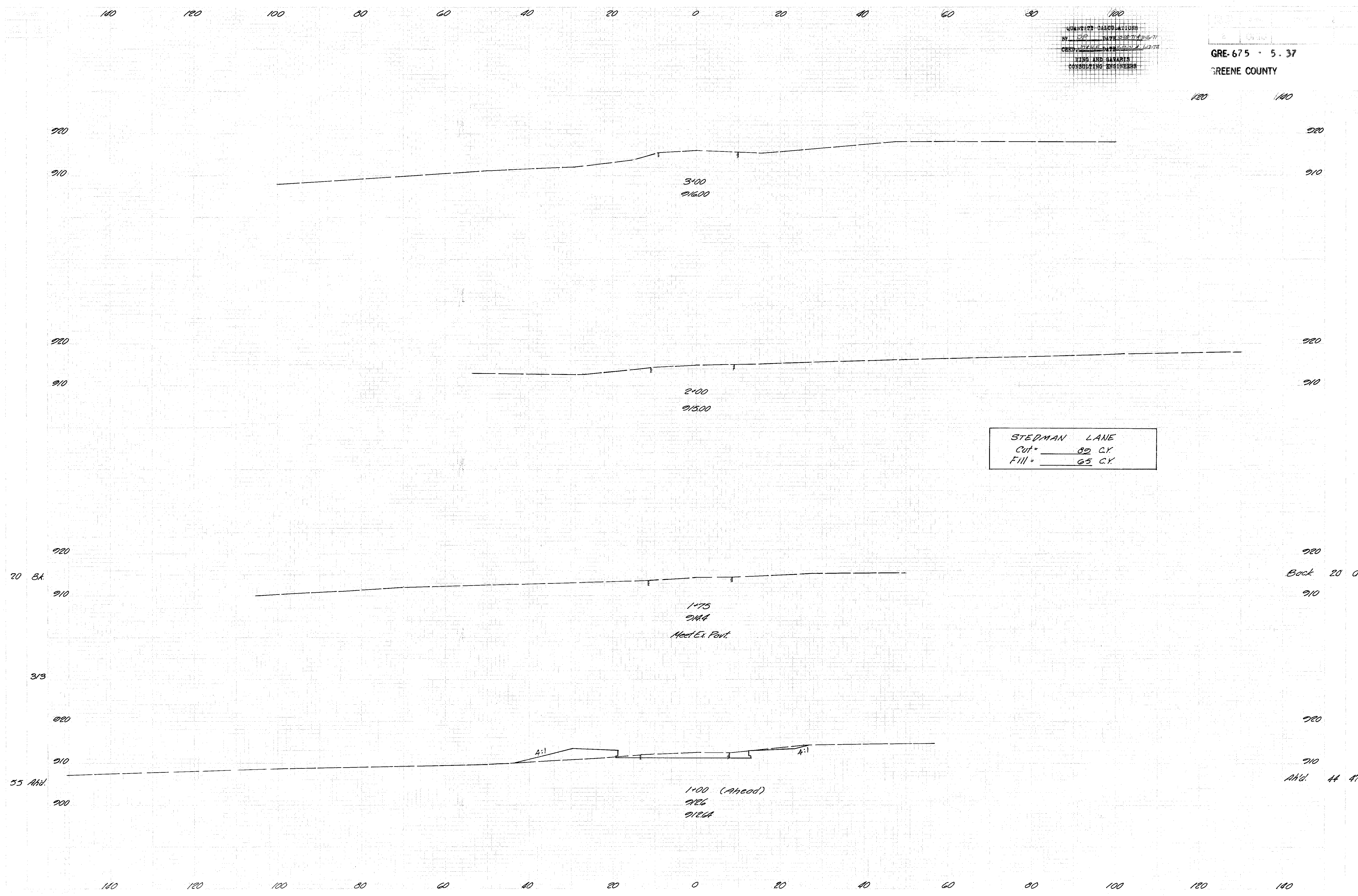
342

259 13

140 120 100 80 60 40 20 0 20 40 60 80 100
WILDONNA DRIVE STA. 4+00 to STA. 6+00

QUANTITY CALCULATIONS
BY *DF* DATE 10/18/71 11:16-71
CHECKED BY *DF* DATE 10/22/71 1:13-72
KING AND SARANTIS
CONSULTING ENGINEERS

GRE-675 - 5.37
GREENE COUNTY



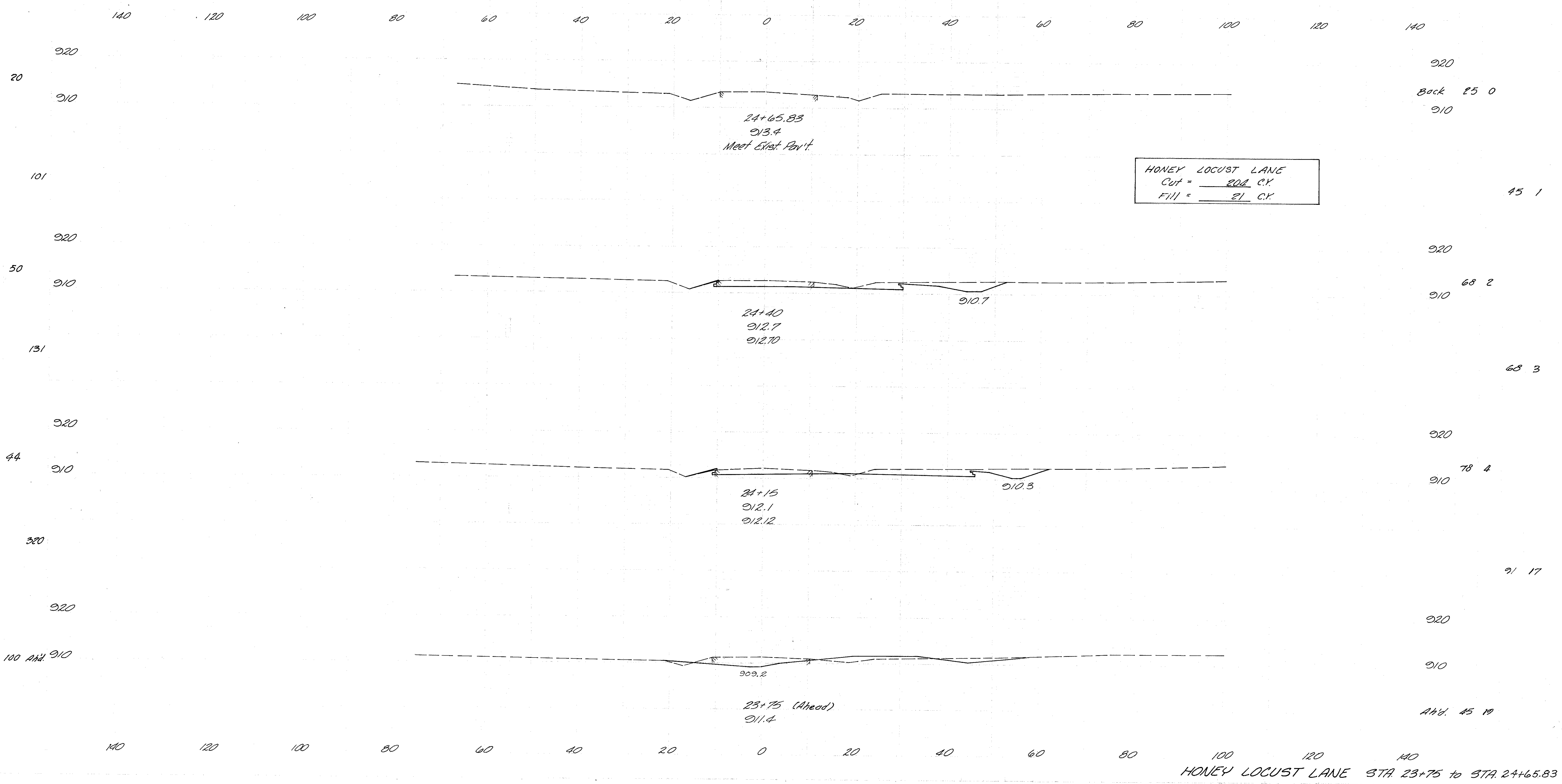
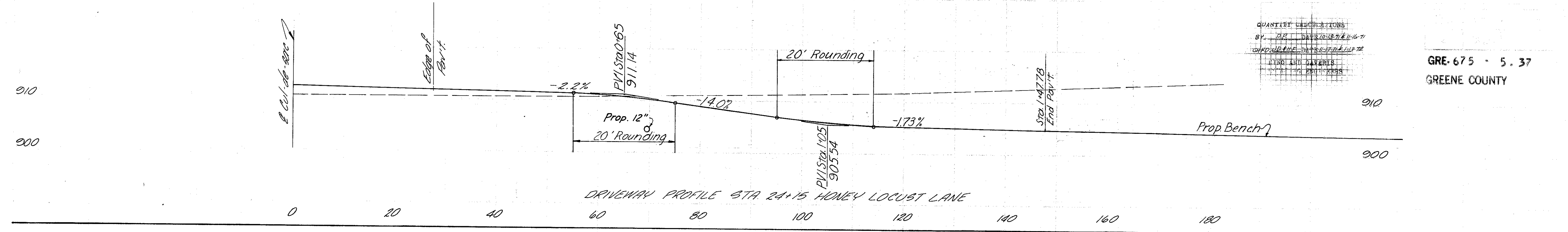
STEDMAN LANE
Cut = 82 C.Y.
Fill = 65 C.Y.

STEDMAN LANE STA 1+00 to STA 3+00

QUANTITY CALCULATIONS
 BY: [Signature]
 DATE: 11-16-77
 CHECKED BY: [Signature]
 DATE: 11-16-77
 DRAWN BY: [Signature]

GRE-675 - 5.37
 GREENE COUNTY

301
 616
 301-400
 138 yellow



HONEY LOCUST LANE
 Cut = 204 C.Y.
 Fill = 21 C.Y.

Back 25 0
 910

45 1

68 2
 910

68 3

78 4
 910

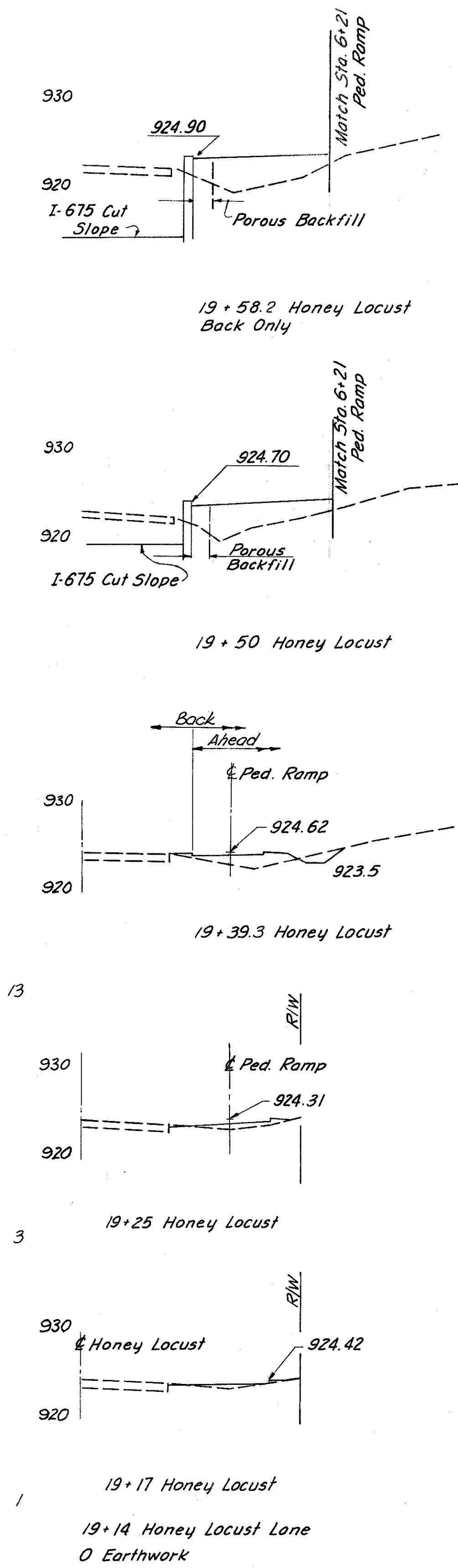
91 17

920
 910

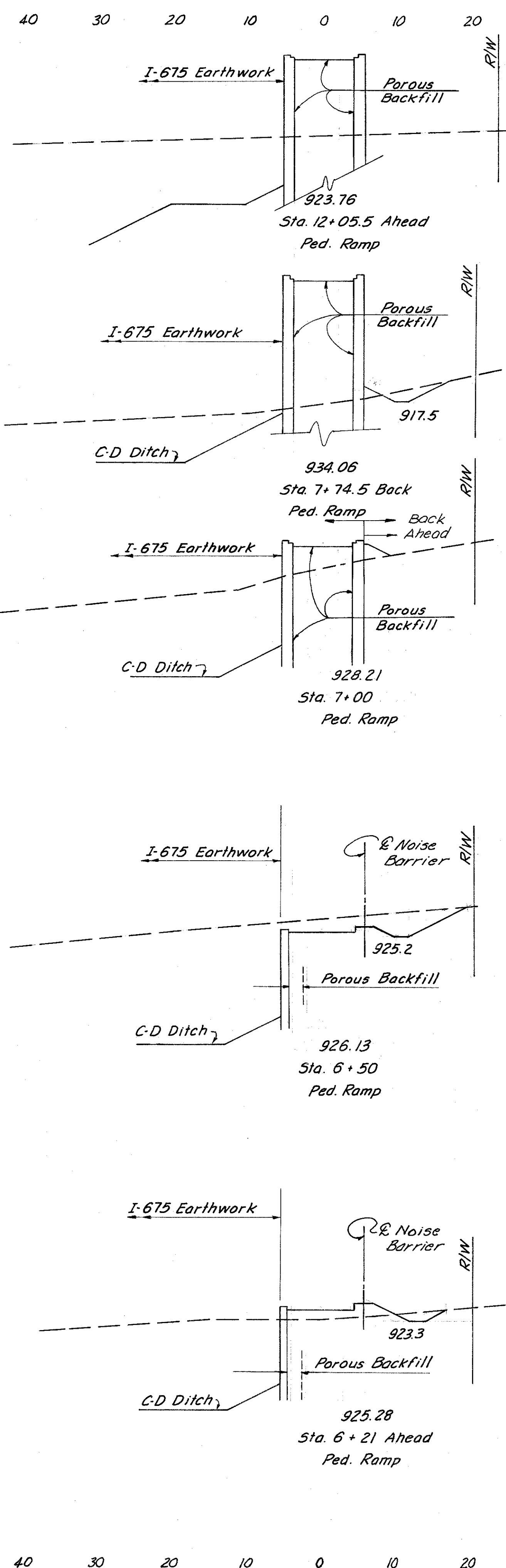
Ahd. 45 19

GRE - 675 - 5.37
GREENE COUNTY

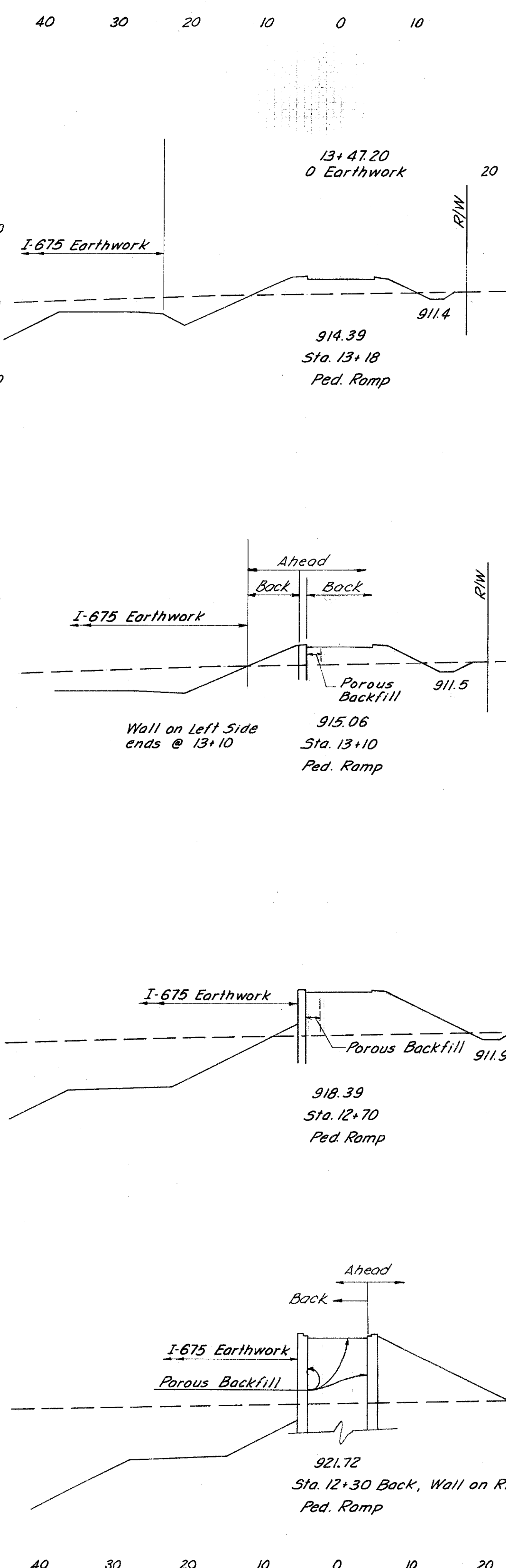
0 10 20 30 40



END AREA		VOLUME		SEEDING	
CUT	FILL	CUT	FILL	END WIDTH	SQ. YDS.
					38
					11
					35
					8
Ahead					4
Back					4
					6
					6
					1
					6
					2



END AREA		VOLUME		SEEDING	
CUT	FILL	CUT	FILL	END WIDTH	SQ. YDS.
					9
					2
					12
					8
					4
					26
					41
					24
					99
					44
					26
					8
					5
					15



END AREA		VOLUME		SEEDING	
CUT	FILL	CUT	FILL	END WIDTH	SQ. YDS.
					34
					9
					12
					8
					4
					26
					41
					24
					99
					44
					26
					8
					5
					15

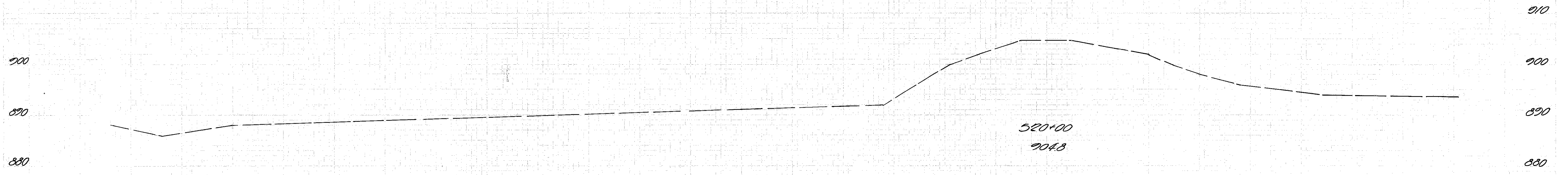
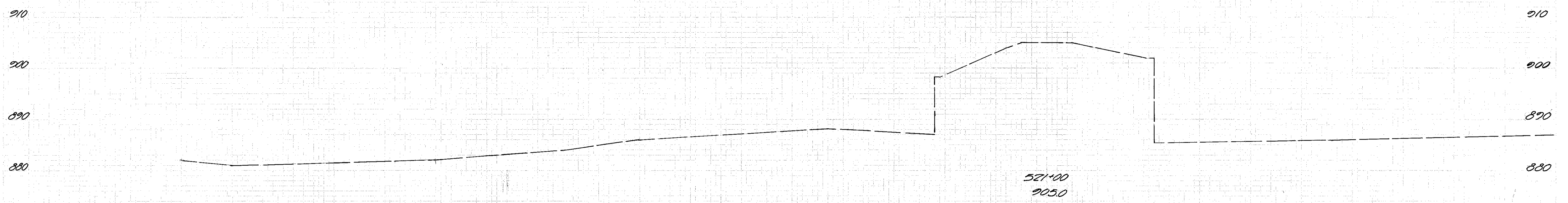
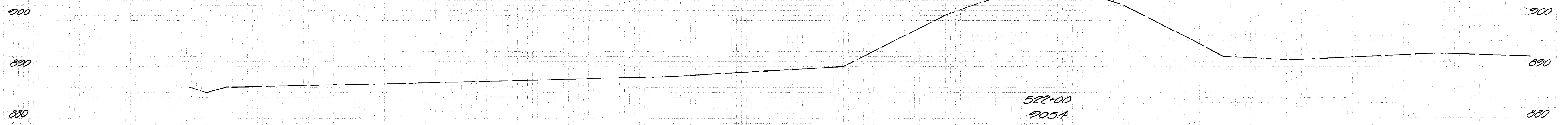
PEDESTRIAN RAMP

200 180 160 140 120 100 80 60 40 20 0 20 40 60

DATE: 12-11-71
BY: JUDGE
CHECKED: JUDGE
MIXED AND GRAVELS
CONSULTING: MOORE

GRE-675 - 5.37
GREENE COUNTY

303
616

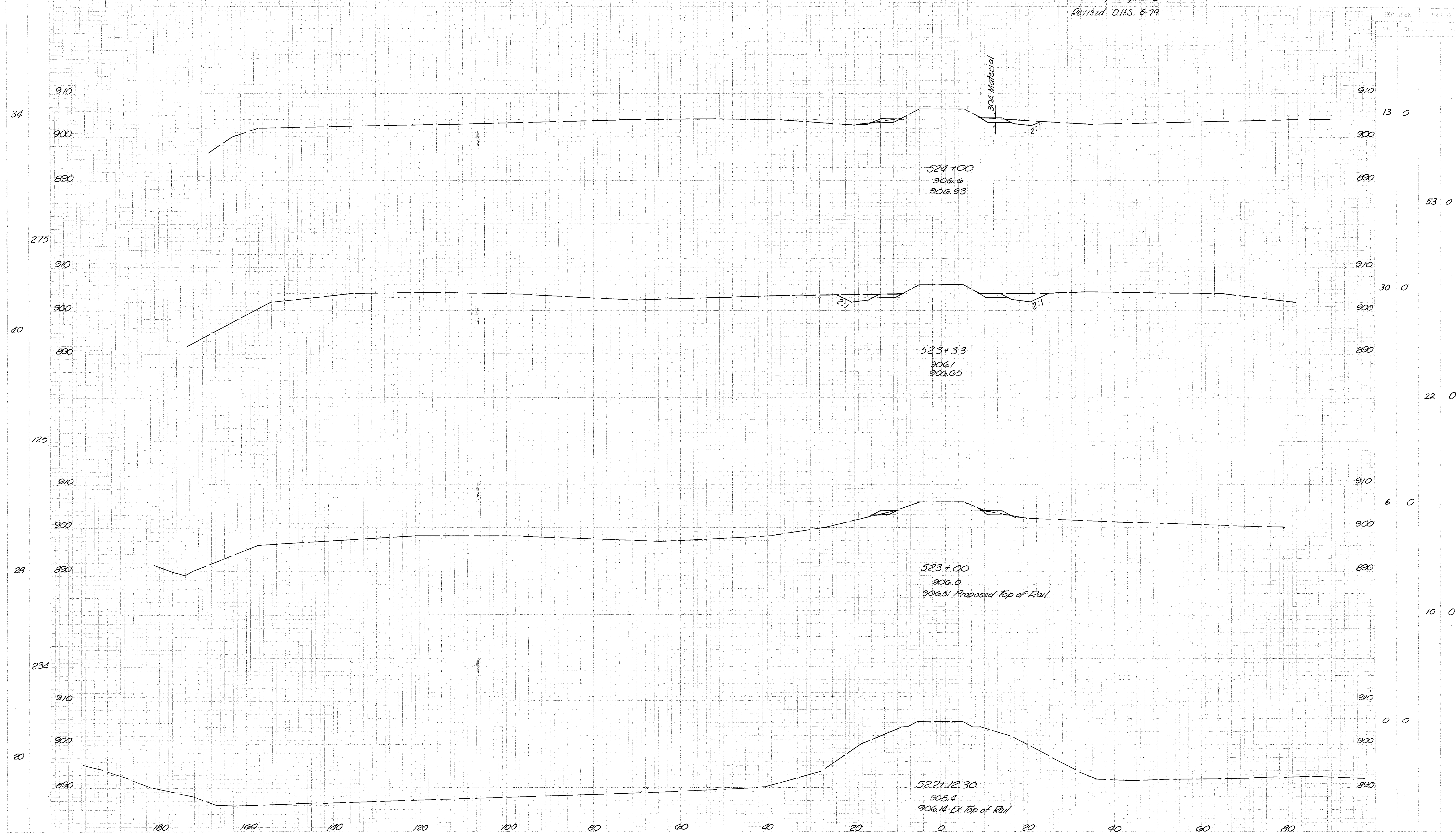


200 180 160 140 120 100 80 60 40 20 0 20 40 60 80

PENIN-CENTRAL RR. STA. 520+00 To STA. 522+00

Quantity Calculations
 By DP Date 10-15-71 & 11-17-71
 Chkd D.P.H.E. Date 11-16-71 & 1-13-72
 KING AND GAVARIS
 Consulting Engineers
 Revised D.H.S. 5-79

GRE-675-537
 GREENE COUNTY



AREA	FOOTING
13 0	
53 0	
30 0	
22 0	
6 0	
10 0	
0 0	

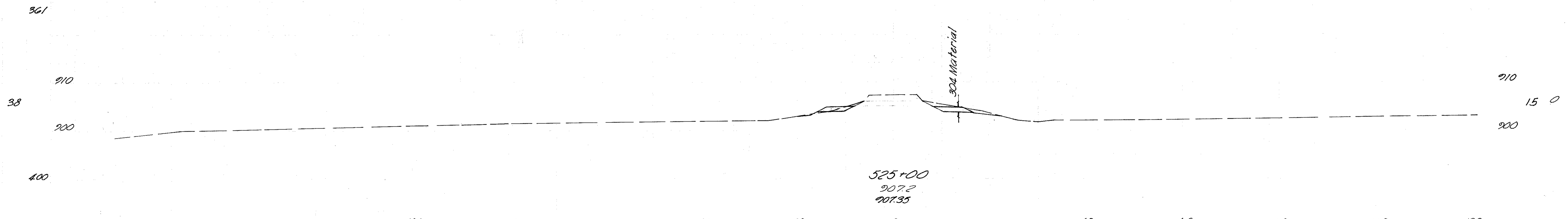
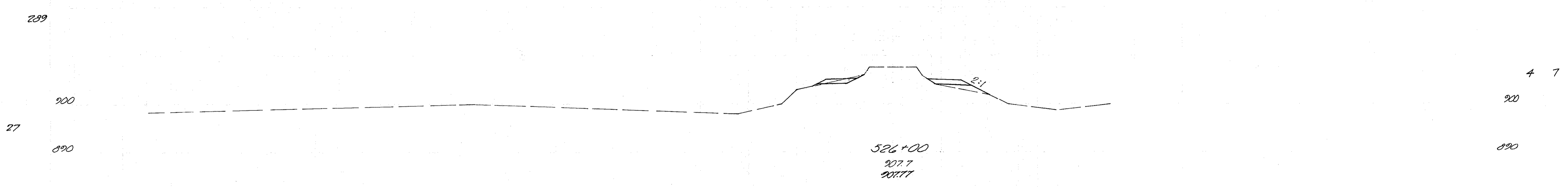
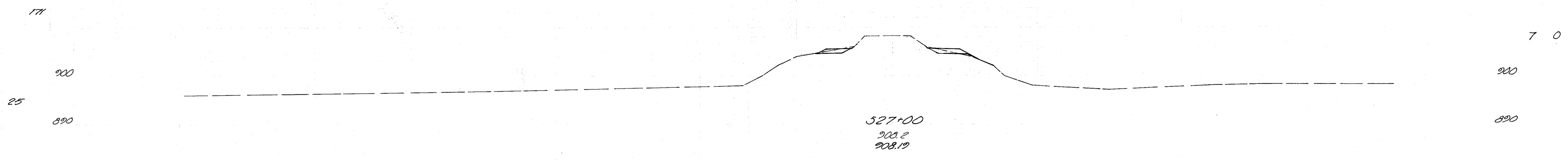
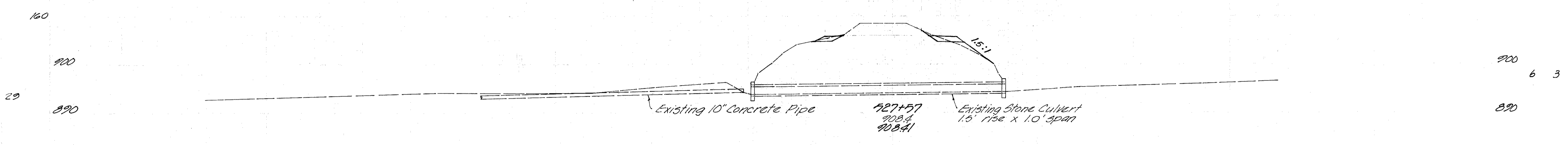
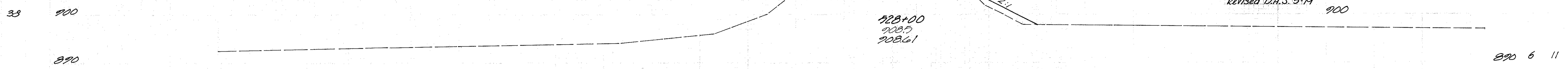
PENN CENTRAL R.R. STA. 522+12.30 TO STA. 524+00

140 140 120 100 80 60 40 20 0 20 40 60 80

DESIGNED BY: J.P. DAVIS DATE: 10-18-71
CHECKED BY: J.P. DAVIS DATE: 11-17-71
CONSTRUCTION: 11-17-71
REVISION: 5-79

2 0.40
GRE-675 5.37
GREENE COUNTY

305
6/6



160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

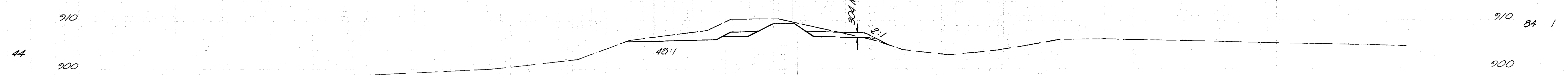
PENN-CENTRAL R.R. STA. 525+00 To STA. 528+00

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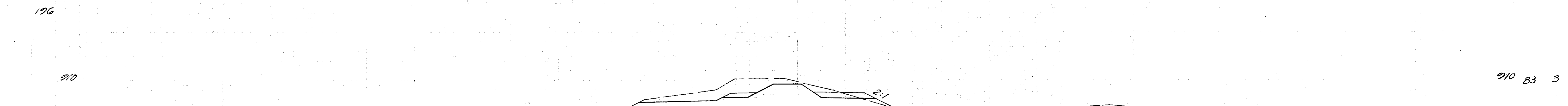
PROPOSED CALCULATIONS
BY: SP DATE: 10/18/71
GREENE COUNTY ENGINEERS
REVISION: 11/17/71
ENGINEER: W. J. GAVANIS
DRAWING NUMBER: GRE-675-5.37
REVISED D.H.S. 5-79

2
GRE-675-5.37
GREENE COUNTY

306
6/6

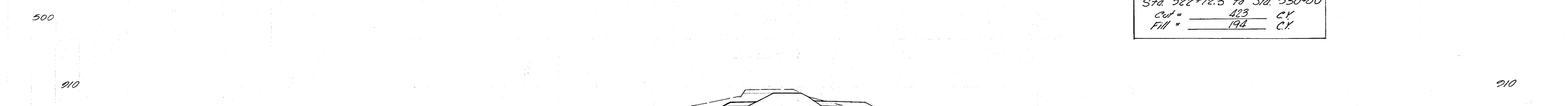


531+40
909.5
910.14

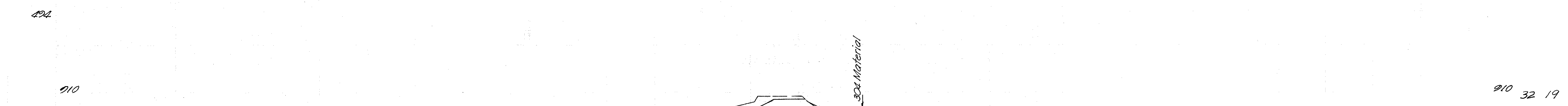


531+00
909.7
909.93

Sta. 522+12.3 to Sta. 530+00
Cut = 423 C.Y.
Fill = 194 C.Y.



530+00
909.6
909.45



529+00
909.1
909.03

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

PENN-CENTRAL STA. 529+ STA. 531+40

140 120 100 80 60 40 20 0 20 40 60 80 100

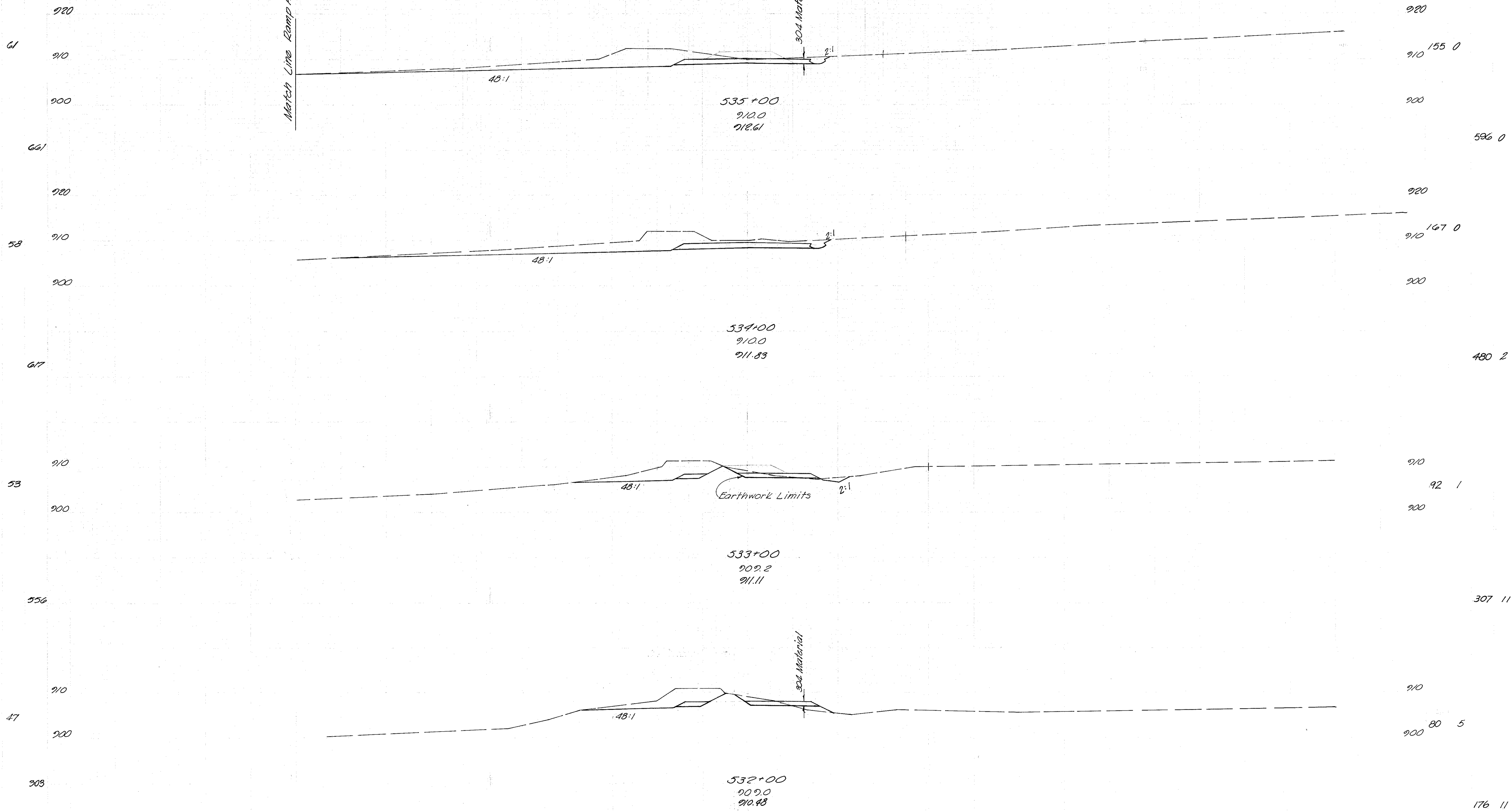
JUSTICE CARROLL LONG
BY DP DATE 5-11-77
CRD. W. J. W. DATE 5-11-77
KING AND GARDNER
CONSULTING ENGINEERS
Revised DWS 5-79

2 000
GRE 675 - 5.37
GREENE COUNTY

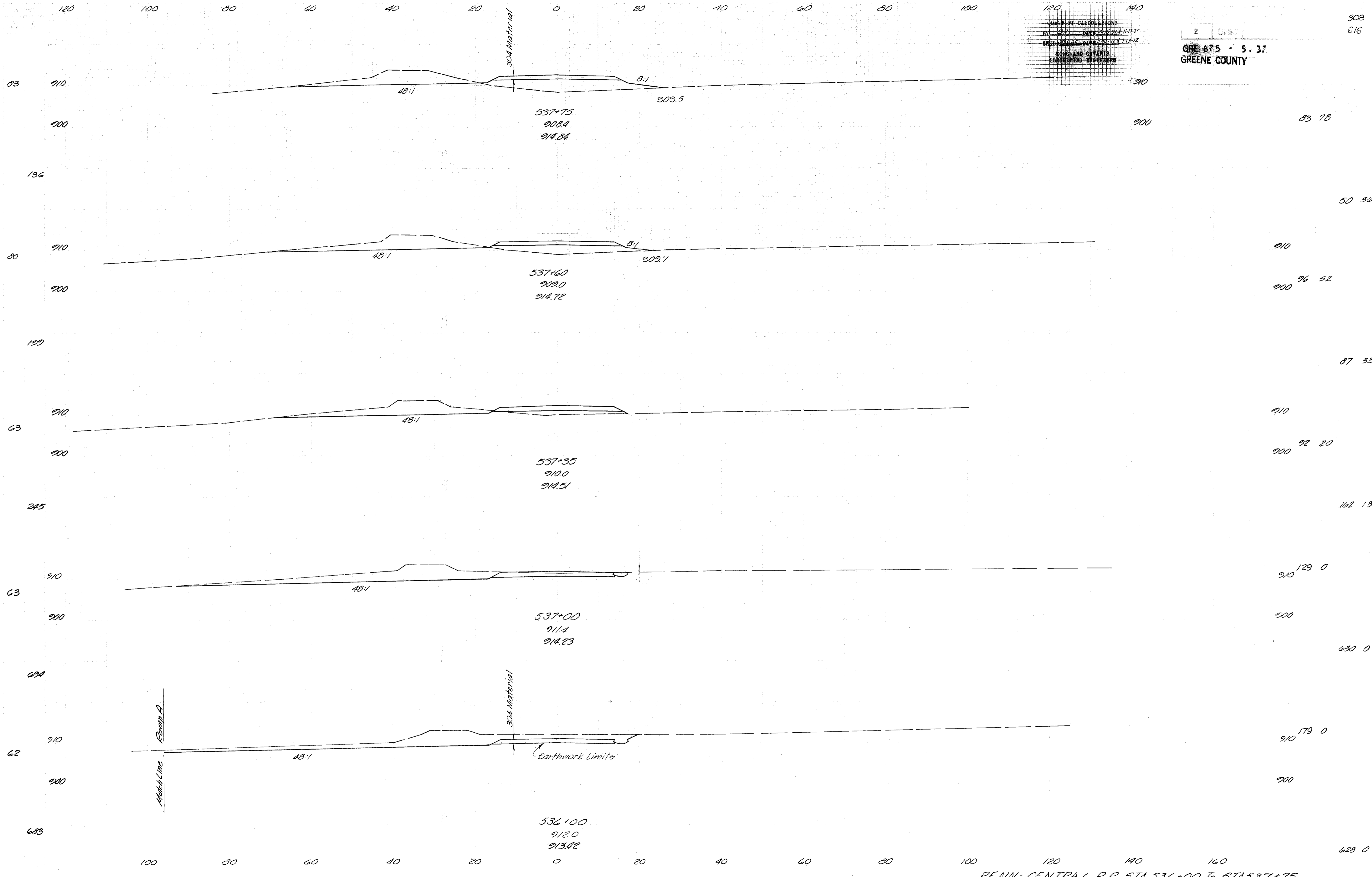
307
616

Match Line Ramp A

304 Material



PENN CENTRAL R.R. STA. 532+00 TO STA. 535+00



QUANTITIES CALCULATED
 BY G.P. DATE 10-15-71
 CHECKED BY DATE 12-16-71
 KING AND CATARIS
 CONSULTING ENGINEERS

2 0110
 GRE 675 - 5.37
 GREENE COUNTY

308
 616

83 78

50 30

910

900 96 52

87 33

910

900 92 20

162 13

910 129 0

900

630 0

910 179 0

900

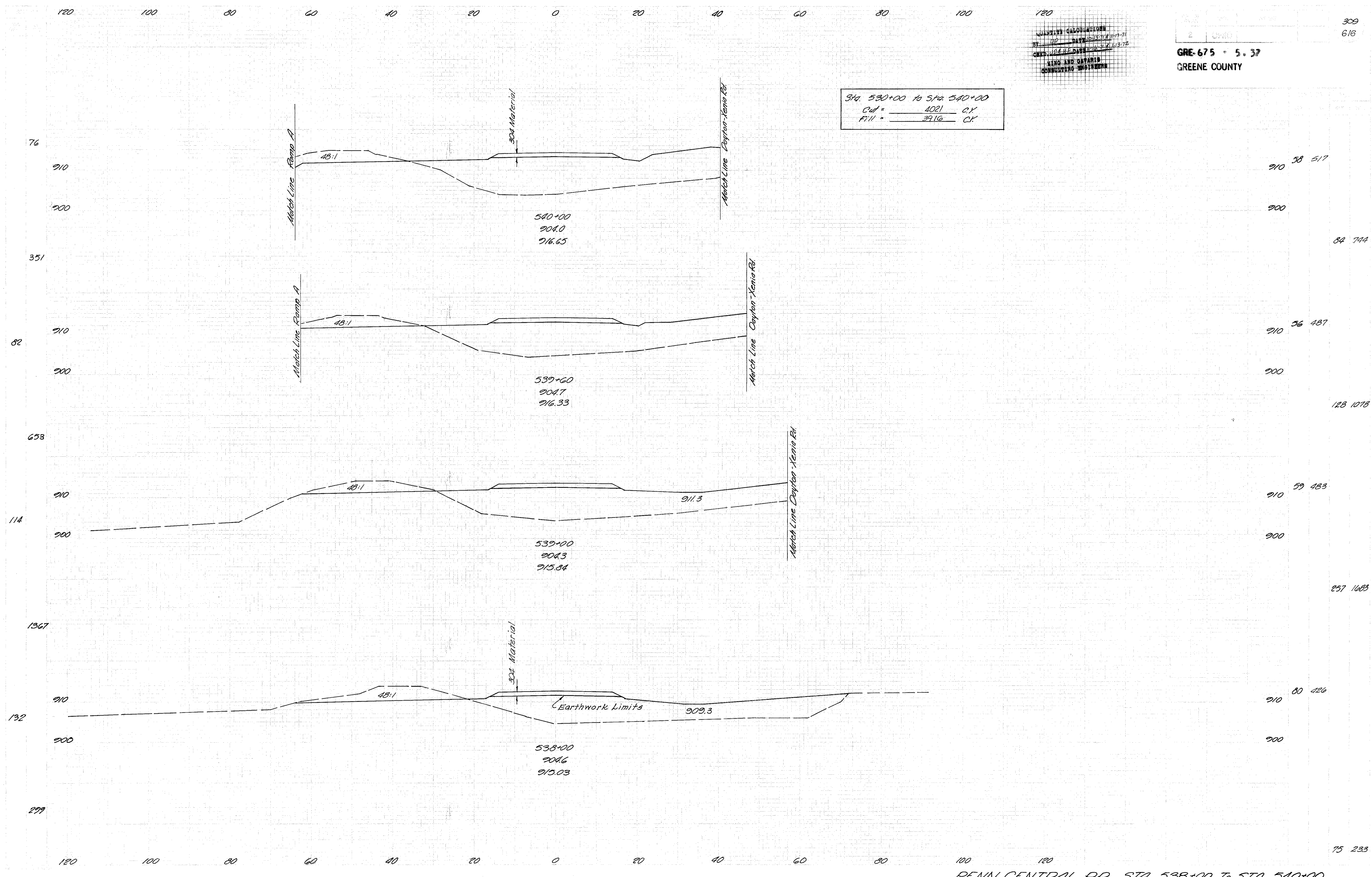
628 0

QUANTITY CALCULATION
 BY: DD DATE: 10/14/17
 CHECKED: 10/16/17 DATE: 10/17/17
 KING AND GAVIN
 CONSULTING ENGINEERS

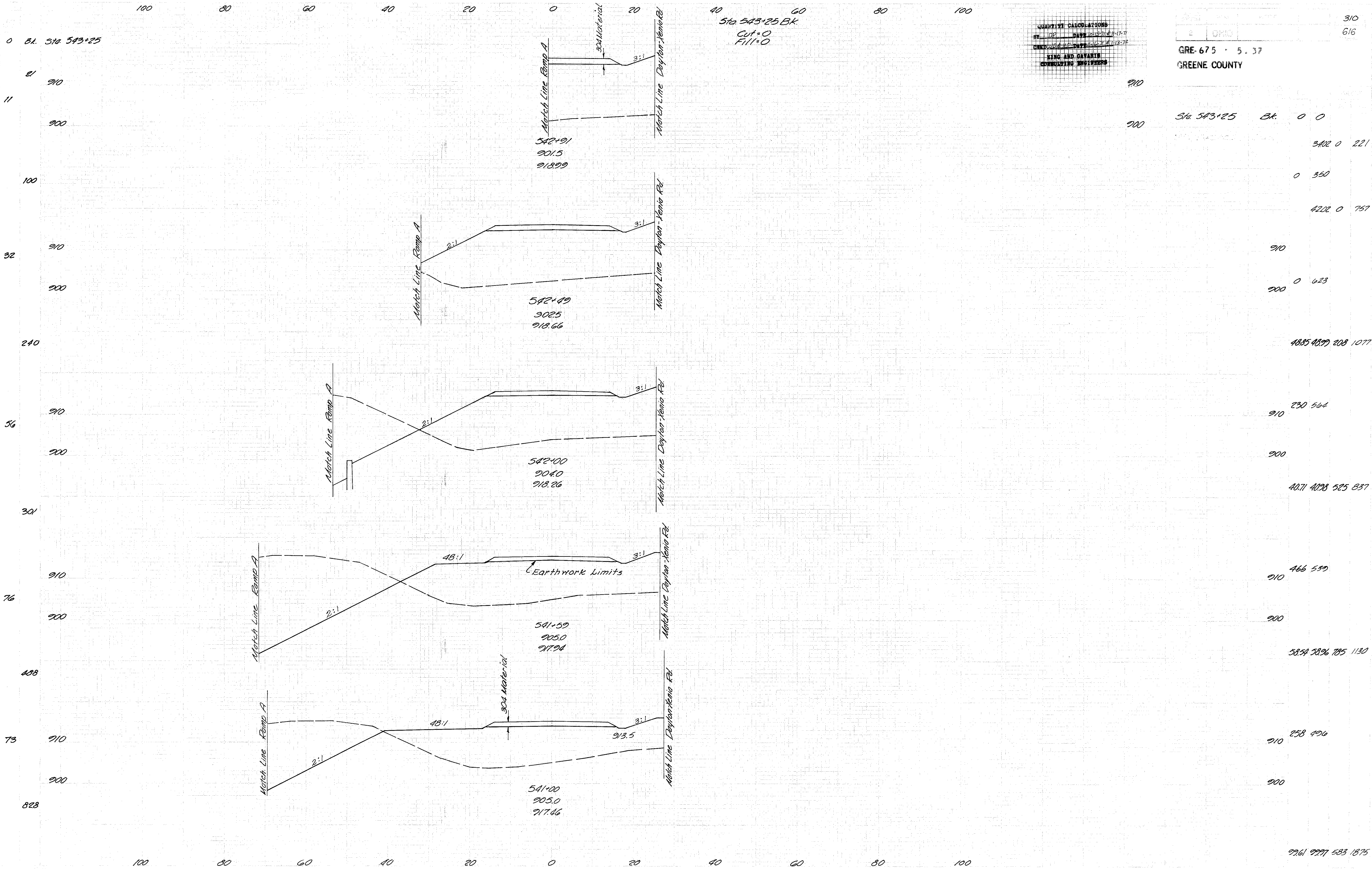
GRE-675 - 5.37
 GREENE COUNTY

309
616

Sta. 530+00 to Sta. 540+00
 Cut = 4021 CY
 Fill = 3916 CY



75 233



0 Bl. Sta 543+25
 21 910
 11 900
 100 910
 32 900
 240 910
 56 900
 301 910
 76 900
 403 910
 73 900
 823 910

40 60 80 100
 Sta 543+25 BK
 Cut=0
 Fill=0

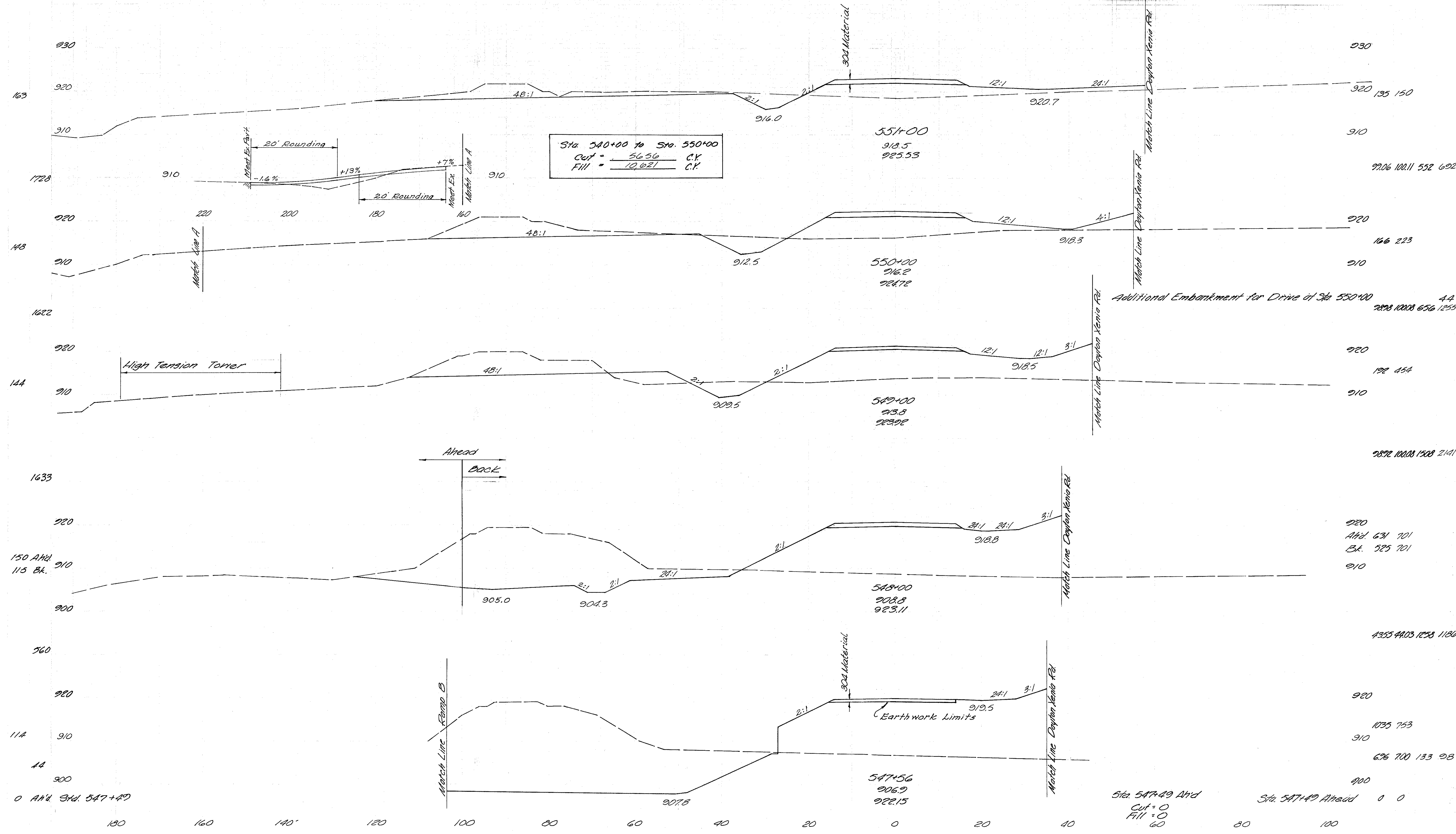
QUANTITIES CALCULATIONS
 BY: [Signature] DATE: 10/27/11
 CHECKED BY: [Signature] DATE: 10/27/11
 KING AND GAVRIS
 CONSULTING ENGINEERS

310	616
GRE-675	5.37
GREENE COUNTY	

200	Sta 543+25	Bk.	0	0	3402	0	221
100			0	350	4202	0	757
32			0	623	4885	4899	208 1077
240			910	730	564		
56			900	4071	4028	525	837
301			910	466	539		
76			900	5854	5896	785	1130
403			910	258	496		
73			900	9761	9797	583	1875

DATE: 05/10/1988
BY: J.P. [unclear]
CHECKED: [unclear]
SCALE AND CAPTION
CONTRACT NO. 675

311
616
GRE: 675 - 5.37
GREENE COUNTY



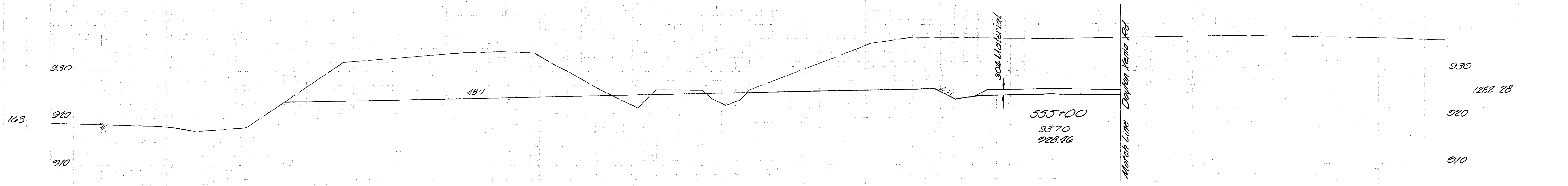
PENN CENTRAL RR. STA 547+56 TO STA 551+00

200 180 160 140 120 100 80 60 40 20 0 20 40

QUANTITY CALCULATIONS
BY: [Signature] DATE: 05/11/97
CHECKED: [Signature] DATE: 05/11/97
KIND AND QUANTITY
CONSTRUCTION ENGINEER

2 0111
GRE-675 5.37
GREENE COUNTY

3/2
6/6

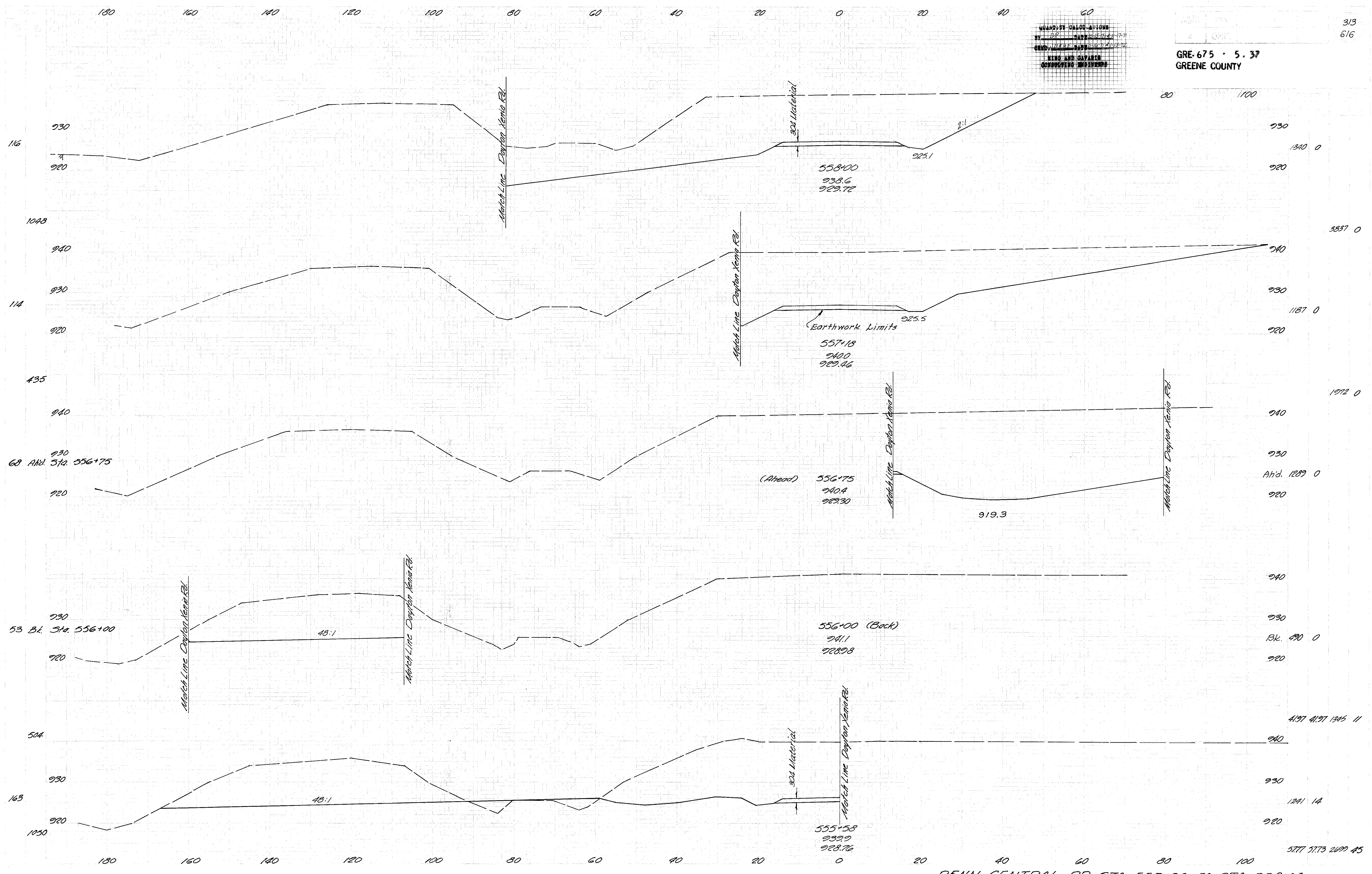


PENN CENTRAL STA. 552+00 TO STA. 555+00

QUANTITY CALCULATIONS
 BY: [unclear] DATE: 11-11-77
 CHECKED BY: [unclear] DATE: 11-11-77
 KING AND GAVARIN
 CONSULTING ENGINEERS

GRE-675 - 5.37
 GREENE COUNTY

313
 616



PENN CENTRAL RR STA. 555+58 TO STA. 558+00

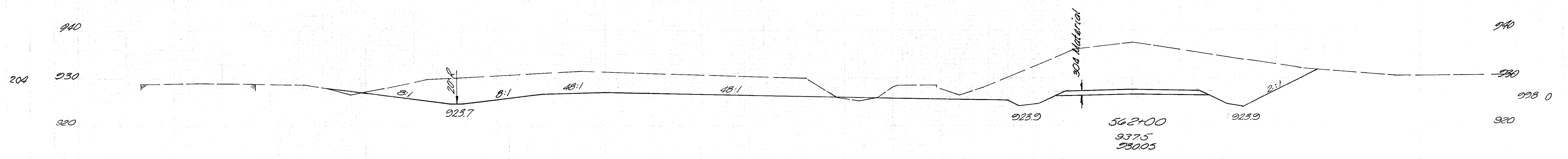
5771 5773 2490 45

220 200 180 160 140 120 100 80 60 40 20 0 20 40

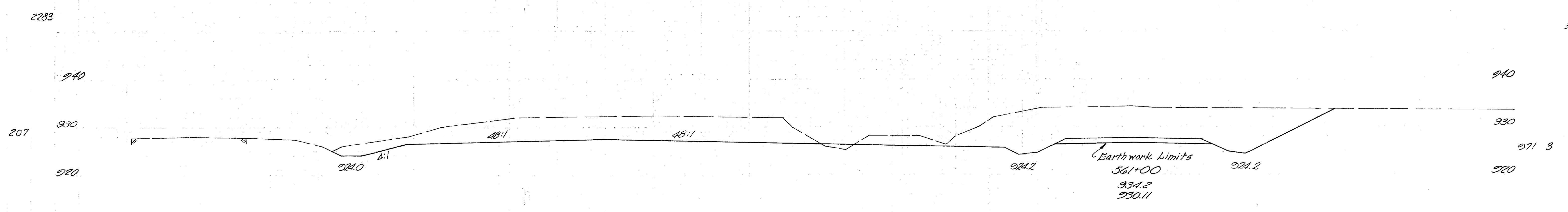
QUANTITIES CALCULATIONS
BY: [Signature] DATE: 12/15/71
CHECKED BY: [Signature] DATE: 1/13/72
KING AND GAYETS
CONSULTING ENGINEERS

2 0110
GRE 675 - 5.37
GREENE COUNTY

314
616

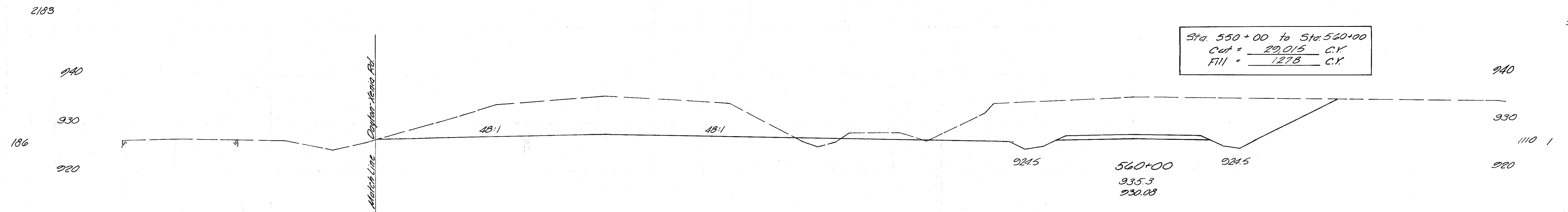


3646 6

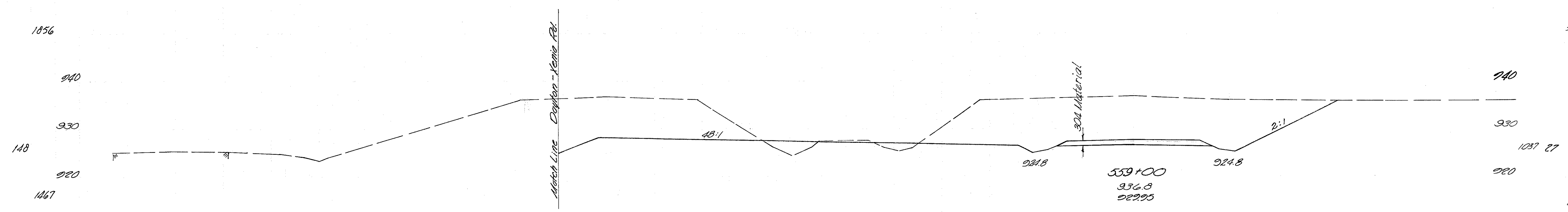


Sta. 550+00 to Sta. 560+00
Cut = 29,015 C.Y.
Fill = 1278 C.Y.

3854 7



3976 52



4402 50

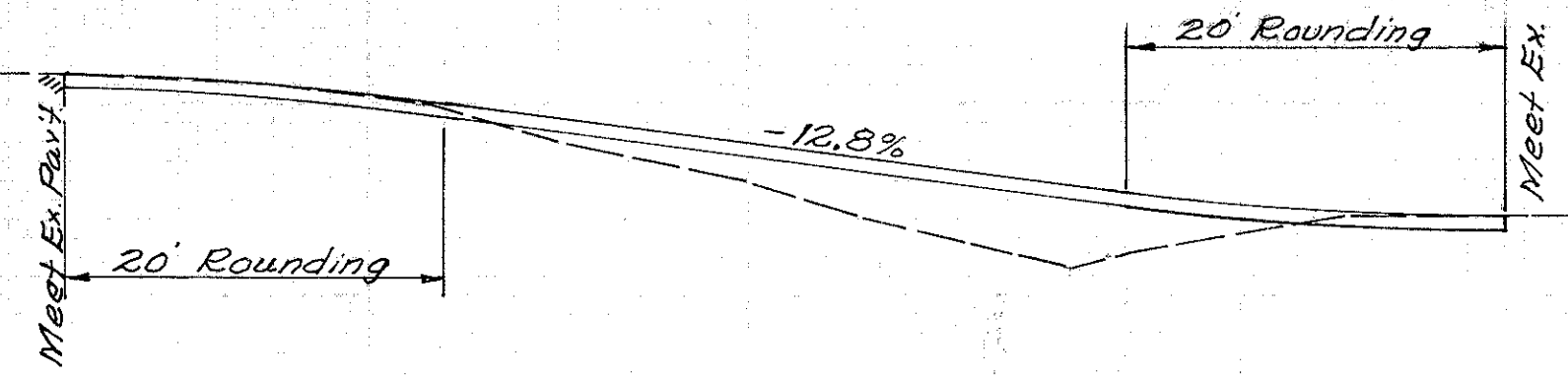
PENN CENTRAL RR. STA. 559+00 TO STA. 562+00

200 180 160 140 120 100 80 60 40 20 0 20 40

QUANTITY CALCULATIONS
BY: DEB DATE: 10-28-14 11:27 AM
CHECKED: JWC DATE: 11-10-14 10:12 AM
ENG: ASB GAFARIS
CONS: JCB WJG/SB/RSB

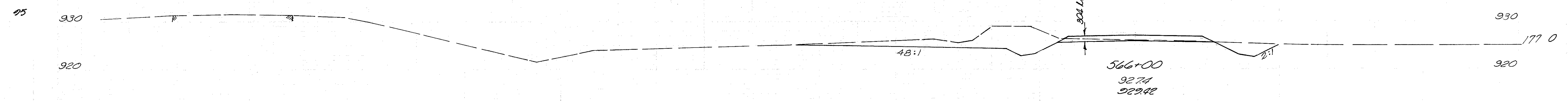
GRE-675 - 5.37
GREENE COUNTY

315
616

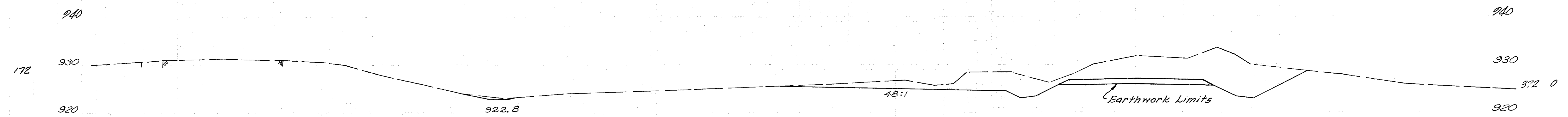


566+49
2 16' Dr. Lt.

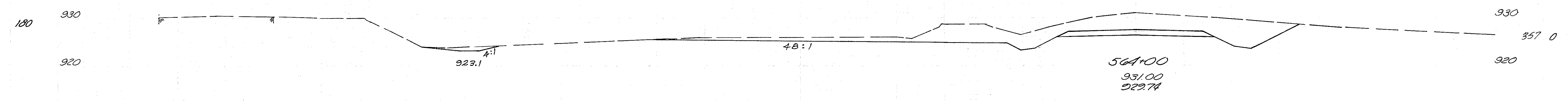
Additional Embankment for Drive at Sta. 566+49



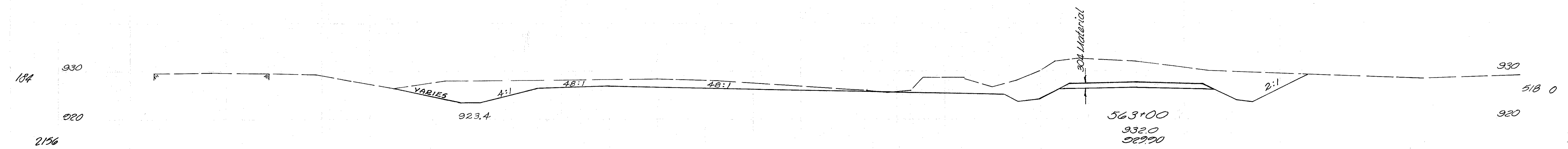
1543 1057 0



1877 1206 0



2022 1620 0



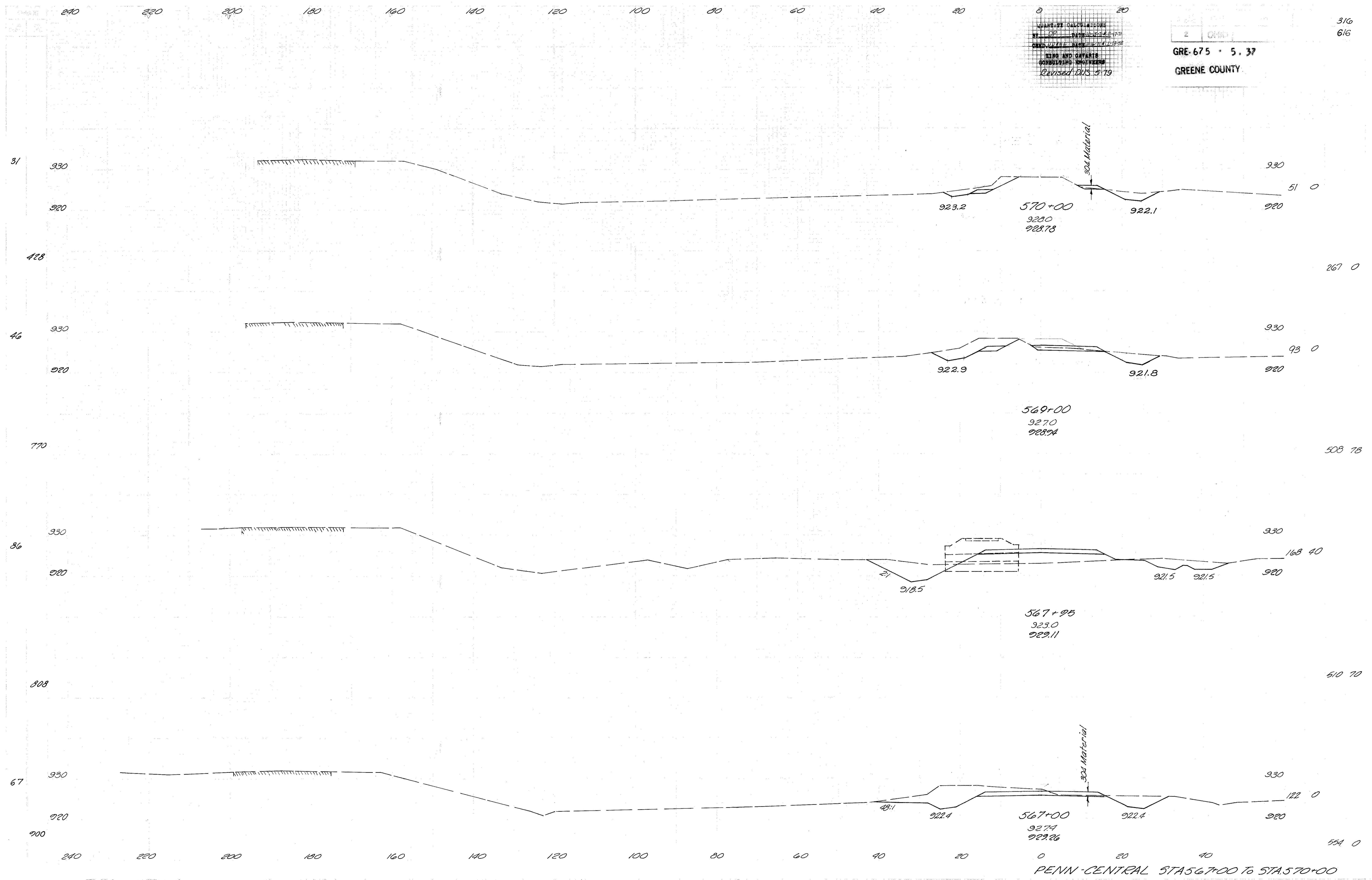
2156 2207 0

PENN CENTRAL R.R. STA. 563+00 TO STA. 566+00

QUANTITY CALCULATIONS
 BY: [unclear] DATE: 6-18-78 (1-17-78)
 CHECKED BY: [unclear] DATE: 6-18-78
 KING AND CARTER
 CONSULTING ENGINEERS
 Revised DUS 5:19

2 0101
 GRE-675 - 5.37
 GREENE COUNTY

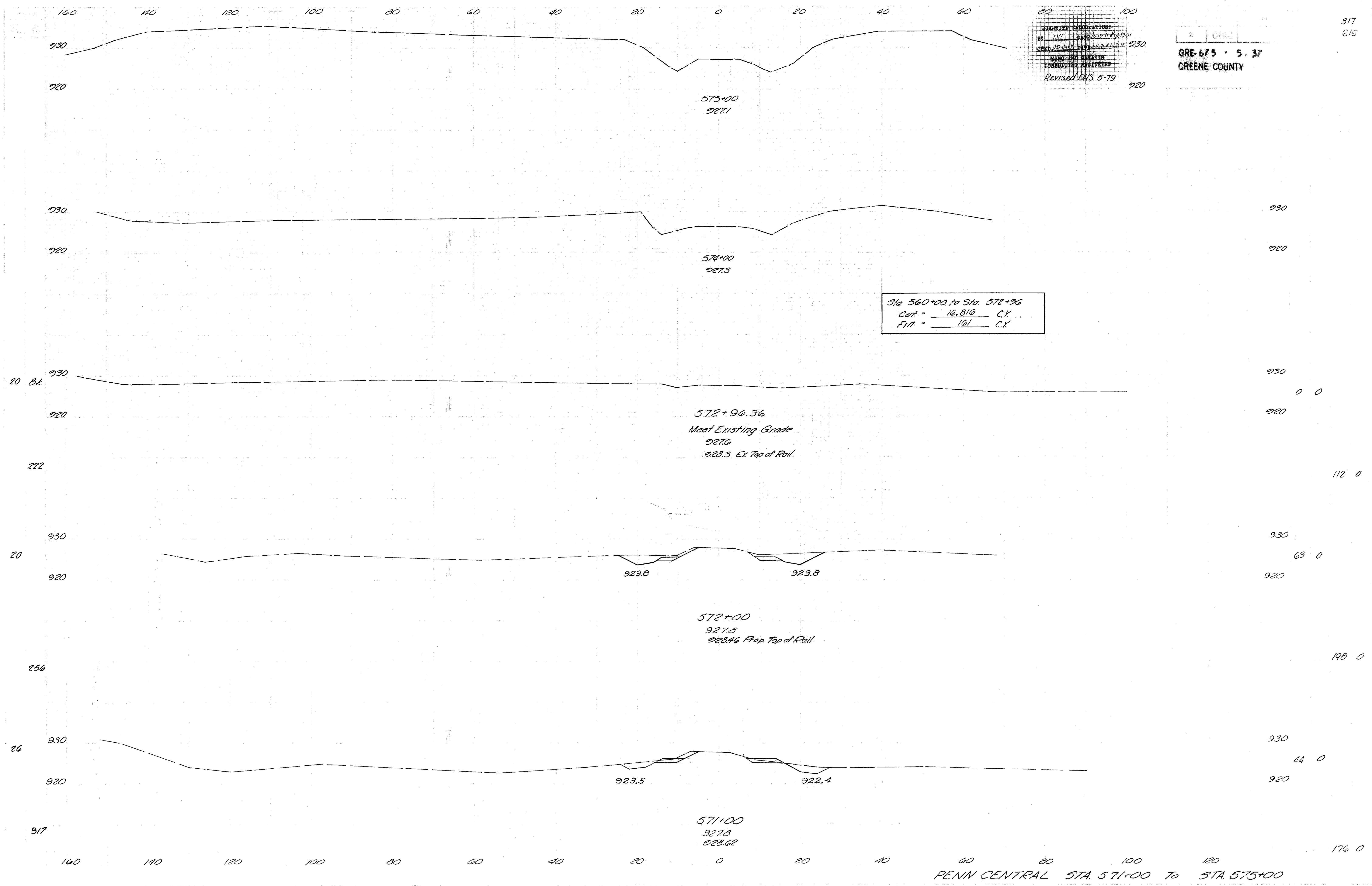
316
616



QUANTITIES CALCULATIONS
 BY DP DATE 2/21/71
 CHECKED BY WALTON
 ENGINEER AND SURVEYOR
 CONSULTING ENGINEERS
 Revised DHS 5-79

2 0100
 GRE 675 - 5.37
 GREENE COUNTY

317
 616



PENN CENTRAL STA. 571+00 To STA. 575+00

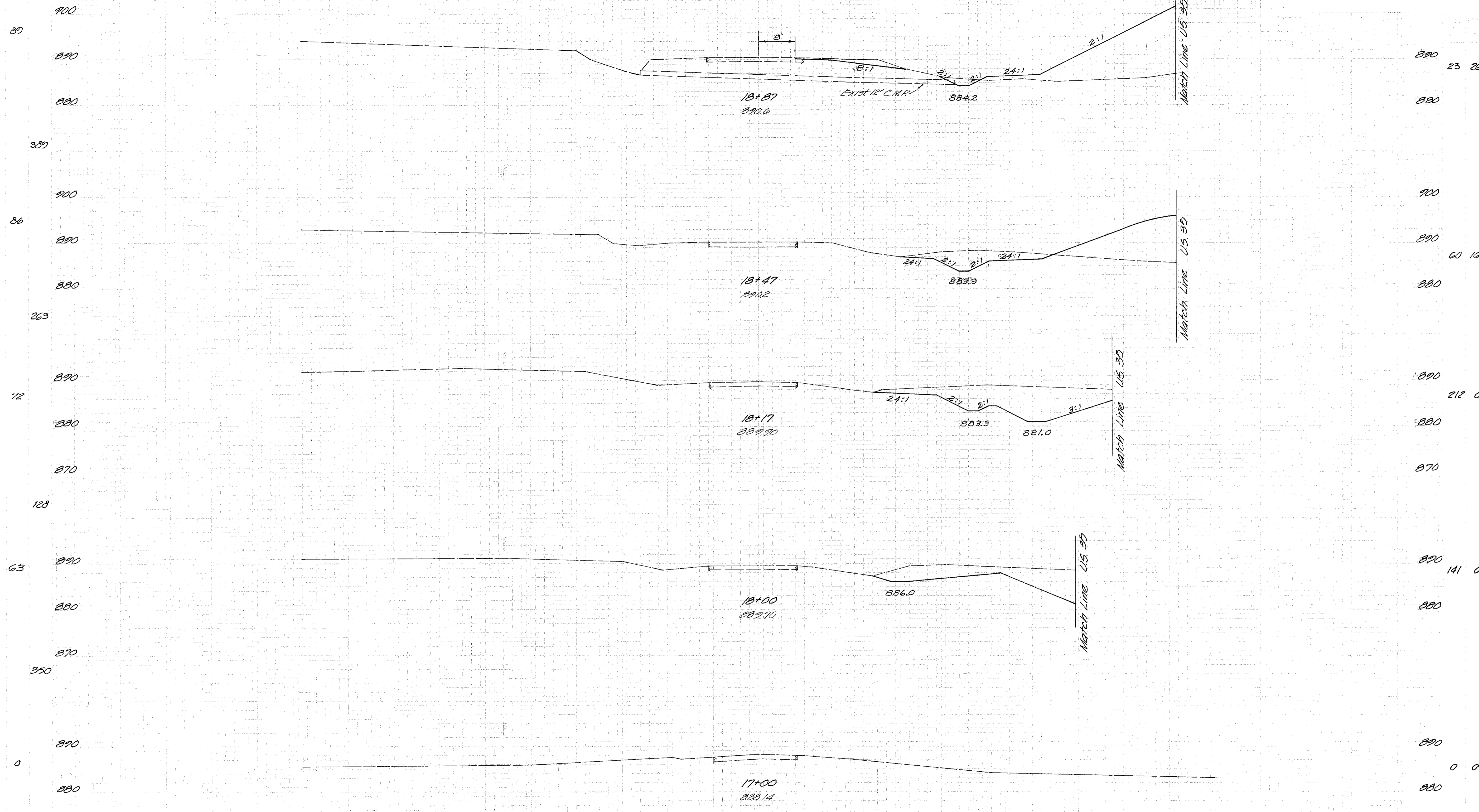
176 0

120 100 80 60 40 20 0 20 40 60 80 100

WHEELER CALCULATIONS
BY R. D. WILSON
DATE 10/24/57
KING AND GAVRILE
CONSULTING ENGINEERS

GRE 675 - 5.37
GREENE COUNTY

318
616



89
86
72
63
0

23 261
61 213
60 162
151 90
212 0
111 0
141 0
261 0
0 0

120 100 80 60 40 20 0 20 40 60 80 100 120

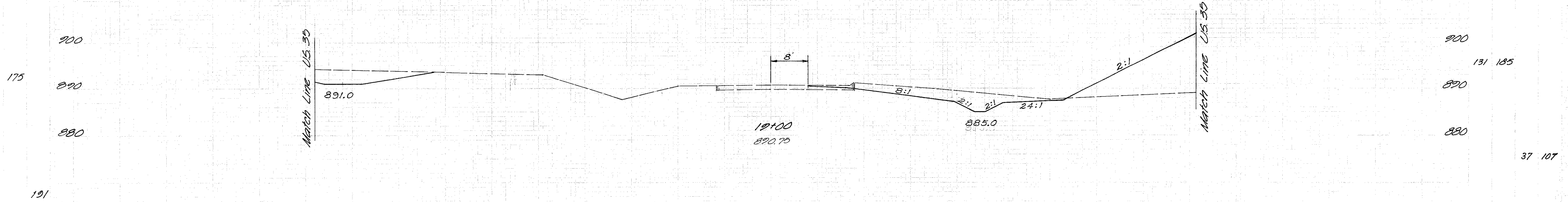
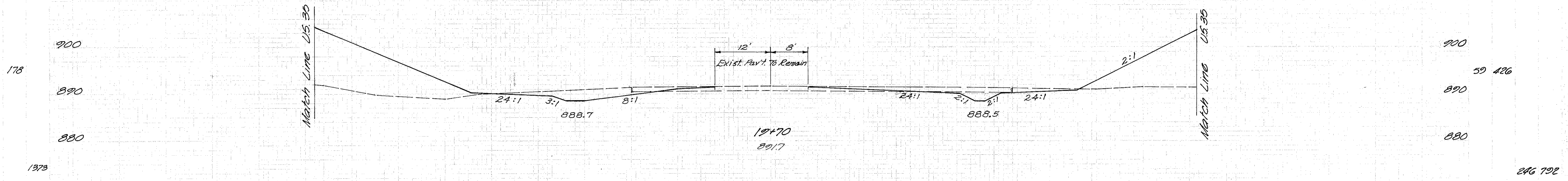
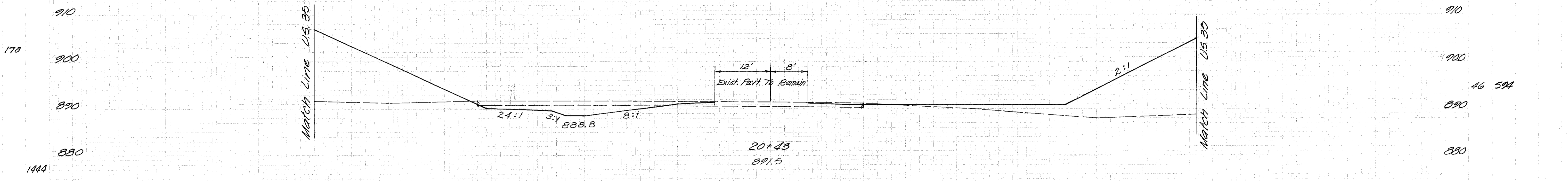
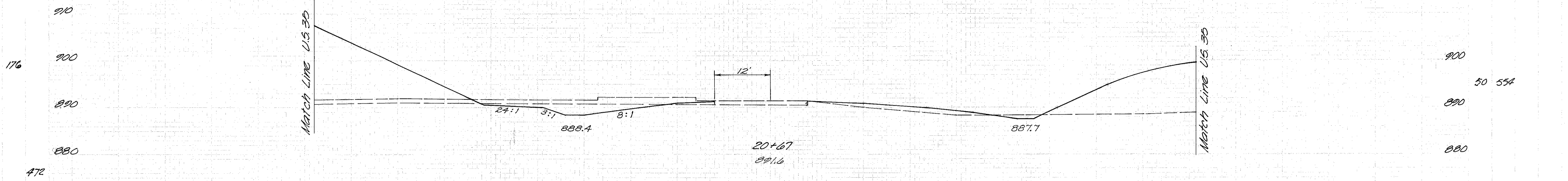
GRANGE HALL ROAD STA. 17+00 to 18+87

120 100 80 60 40 20 0 20 40 60 80 100

QUALITY CALCULATIONS
BY: [Signature] DATE: 10/14/11
CHECKED: [Signature] DATE: 10/14/11
MINE AND GAVRYS
CONSULTING ENGINEERS

GRE-675 - 5.37
GREENE COUNTY

319
616



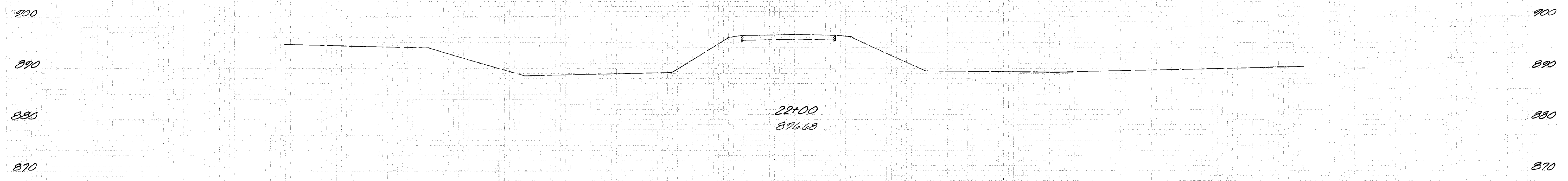
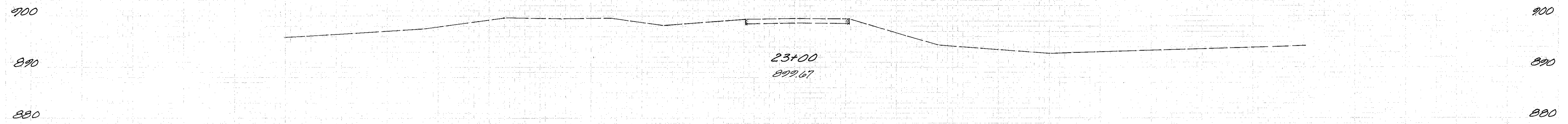
GRANGE HALL ROAD STA. 19+00 TO 20+67

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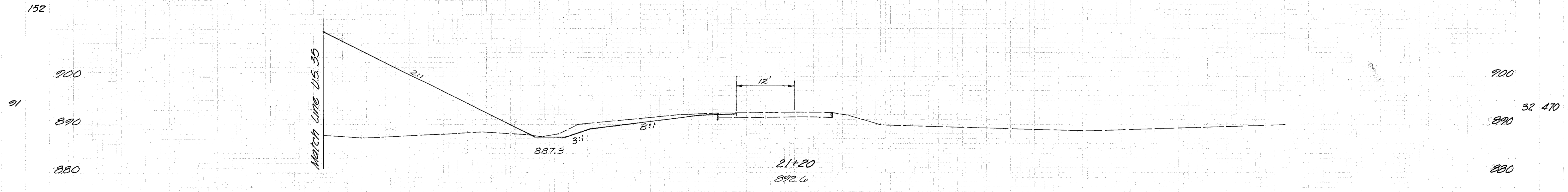
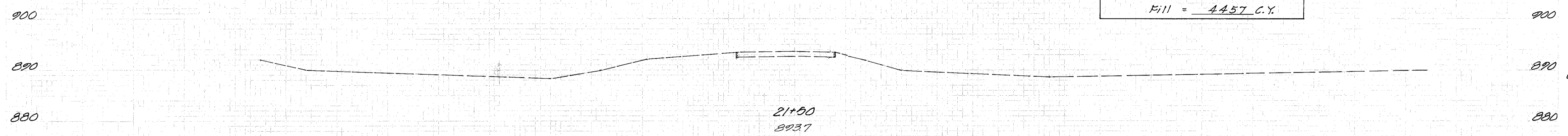
QUANTITY CALCULATIONS
SITE PLAN, PROFILE, ELEVATION
CHECKED BY: [Signature]
DATE: 12/18/2018
KING AND GAYLES
CONSULTING ENGINEERS

GRE-675 - 5.37
GREENE COUNTY

320
6/6



Sta. 17+00 to Sta. 21+50
Cut = 1150 C.Y.
Fill = 4457 C.Y.



786

120 100 80 60 40 20 0 20 40 60 80 100

GRANGE HALL ROAD STA. 21+20 to 23+00

18 261

32 470

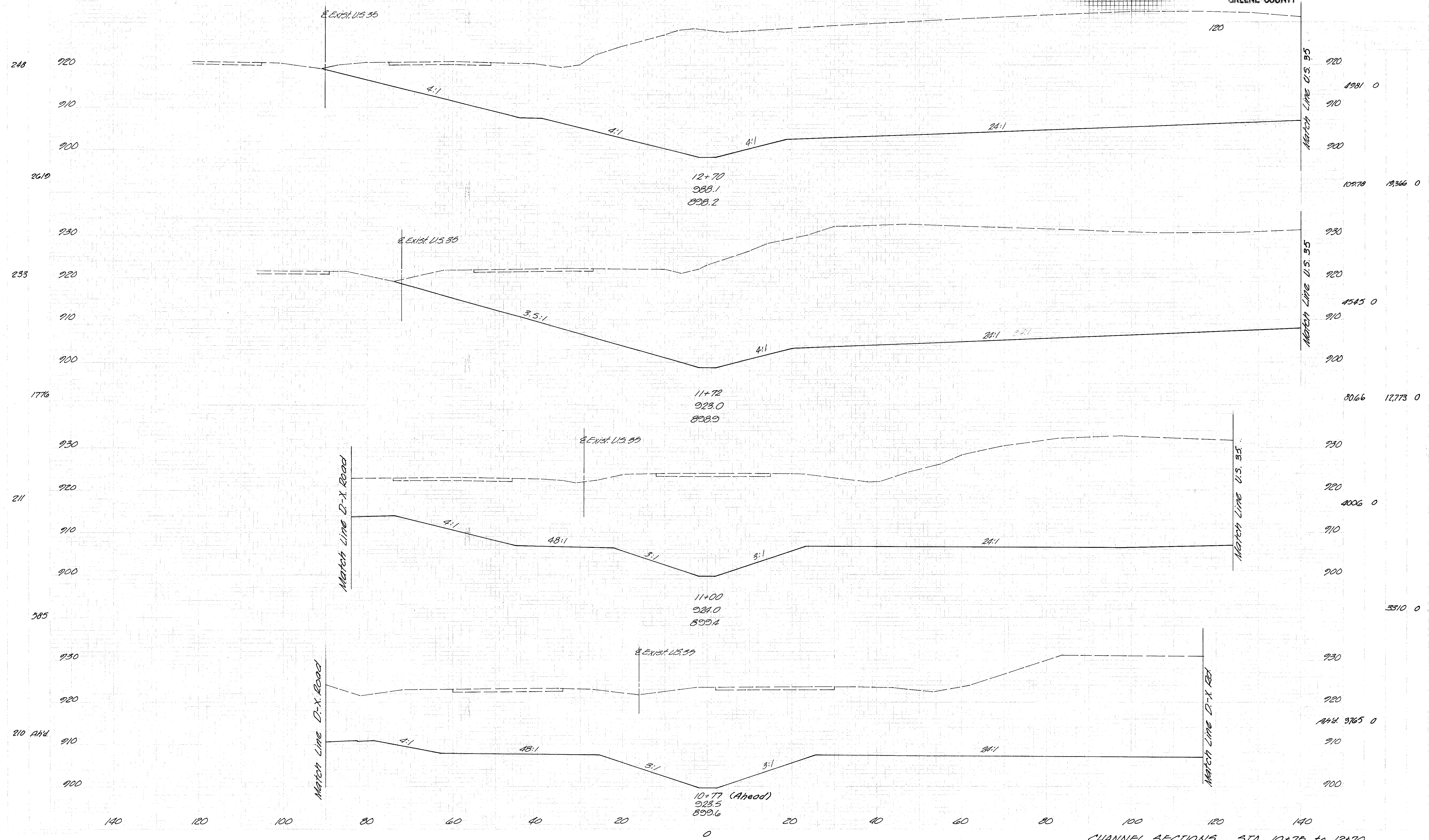
80 1005

140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITY CALCULATIONS
BY: [Signature] DATE: 12/11/11
CHECKED: [Signature] DATE: 12/12/11
KING AND CLARK
CONSULTING ENGINEERS

GRE-675 - 5.37
GREENE COUNTY

321
616

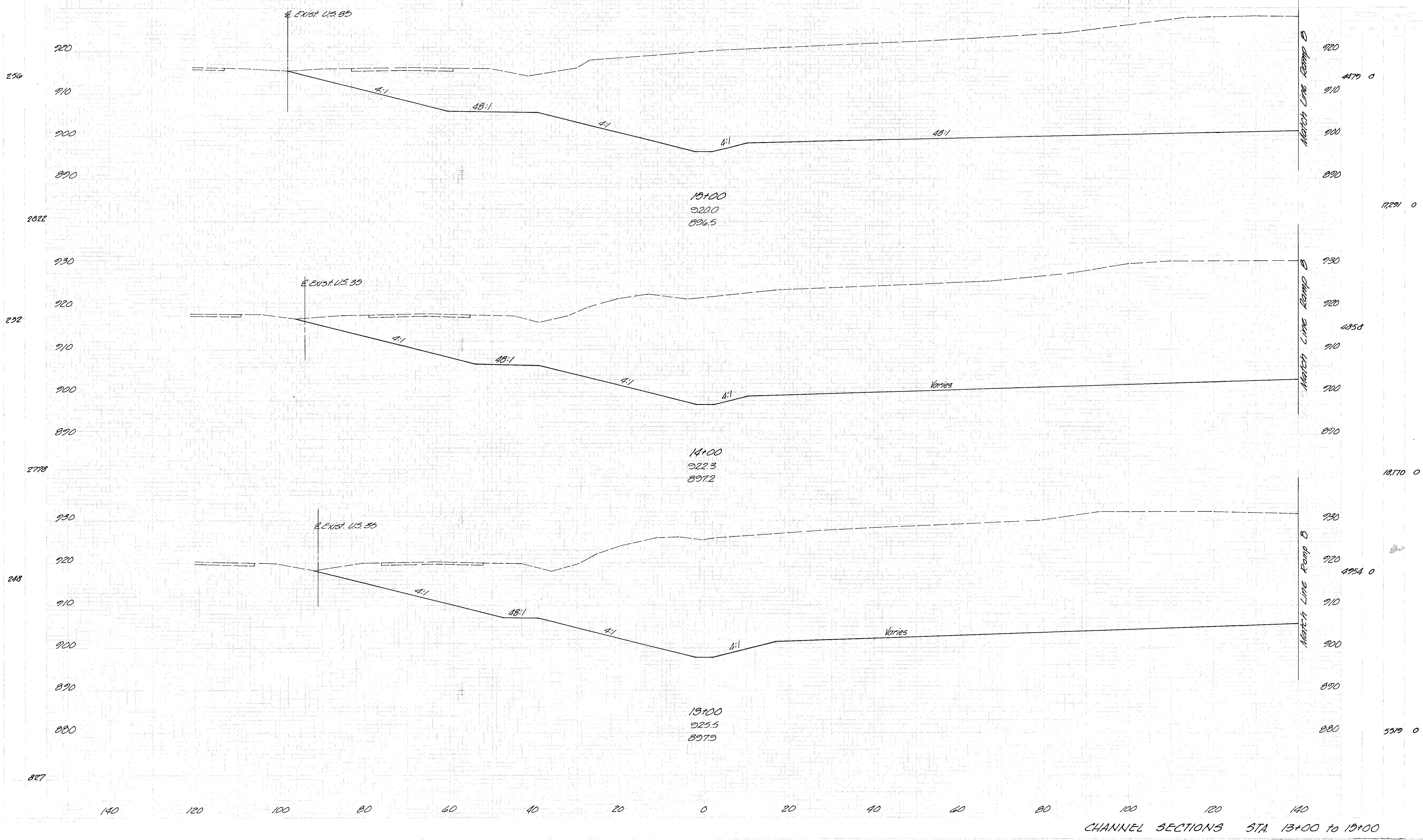


CHANNEL SECTIONS STA. 10+75 TO 12+70

QUANTITY CALCULATIONS
 BY: DRP DATE: 10/21/77
 CHD: W.F. SALES & E. BOSTE
 KING AND GATARIS
 CONSULTING ENGINEERS

GRE-675 - 5.37
 GREENE COUNTY

322
 6/6

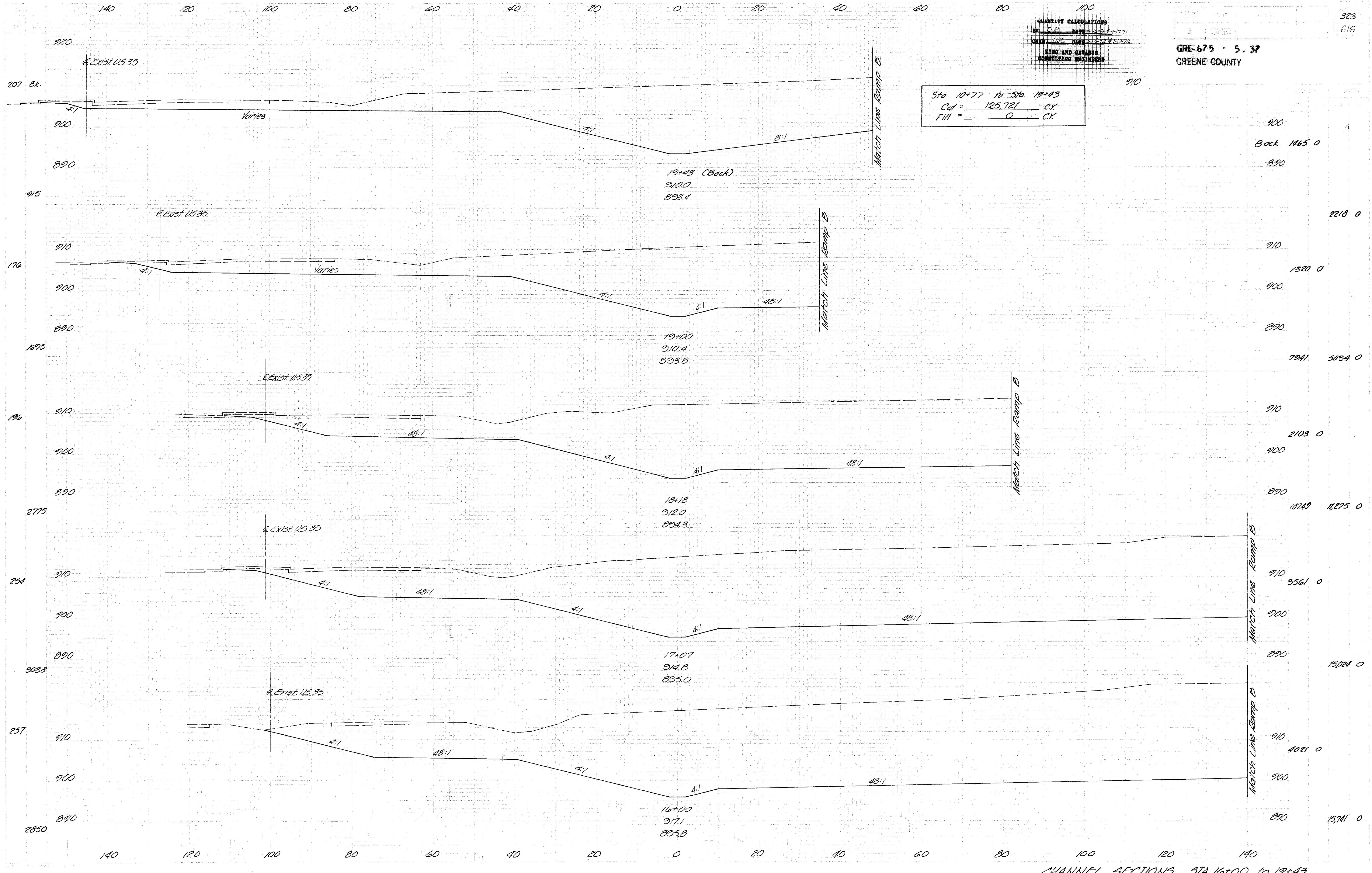


QUANTITY CALCULATIONS
 BY: JLE DATE: 11/14/1971
 CHECK: HLF DATE: 11/22/1972
 KING AND GAWRIS
 CONSULTING ENGINEERS

GRE-675 - 5.37
 GREENE COUNTY

323
 616

Sta 10+77 to Sta. 19+43
 Cut = 125,721 C.Y.
 Fill = 0 C.Y.



NOTES:
 1. ALL AREAS SHOWN ARE TO BE REGRADED TO THE PROPOSED CHANNEL CROSS SECTIONS.
 2. ALL EXISTING UTILITIES TO REMAIN.
 3. ALL EXISTING UTILITIES TO BE DELETED.
 4. ALL EXISTING UTILITIES TO BE RELOCATED.
 5. ALL EXISTING UTILITIES TO BE PROTECTED.
 6. ALL EXISTING UTILITIES TO BE RECONSTRUCTED.
 7. ALL EXISTING UTILITIES TO BE REPAIRED.
 8. ALL EXISTING UTILITIES TO BE REPLACED.
 9. ALL EXISTING UTILITIES TO BE REMOVED.
 10. ALL EXISTING UTILITIES TO BE MAINTAINED.

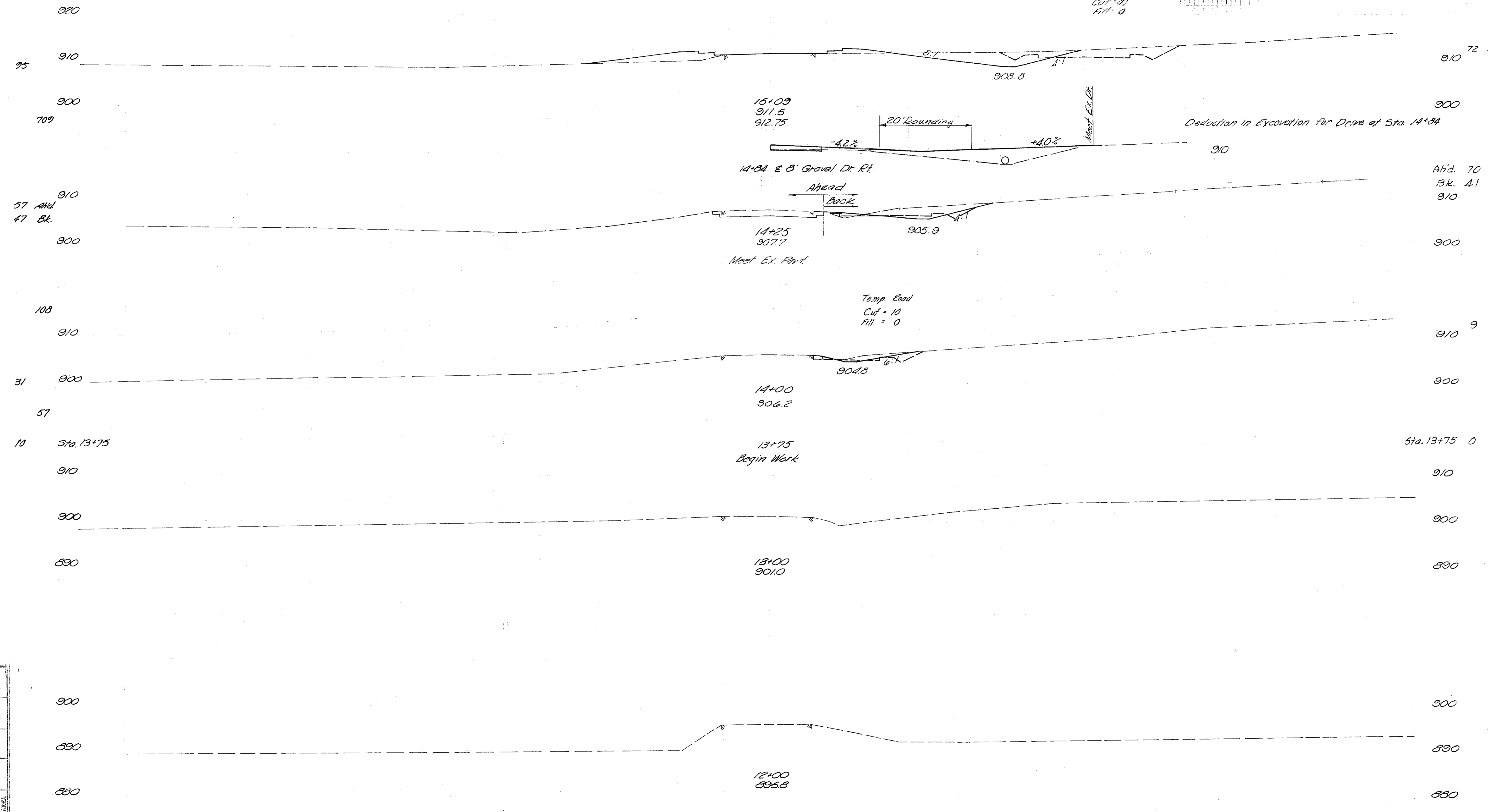
CHANNEL SECTIONS STA. 16+00 to 19+43

140 120 100 80 60 40 20 0 20 40 60 80 100

QUANTITY CALCULATIONS
BY D.P. [unclear] 11-17-71
CHECKED BY [unclear] 11-18-72
KING AND GARRIS
CONSULTING ENGINEERS

GRE 675 5 37
GREENE COUNTY

324
616



910 72 43
900 221 75
-83
Ahd. 70 5
Bk. 41 4
910
900
23 2
910 9 0
900 4 0
Sta. 13+75 0 0
910
900
890
900
890
880

NO.	DATE	PIKED	DATE

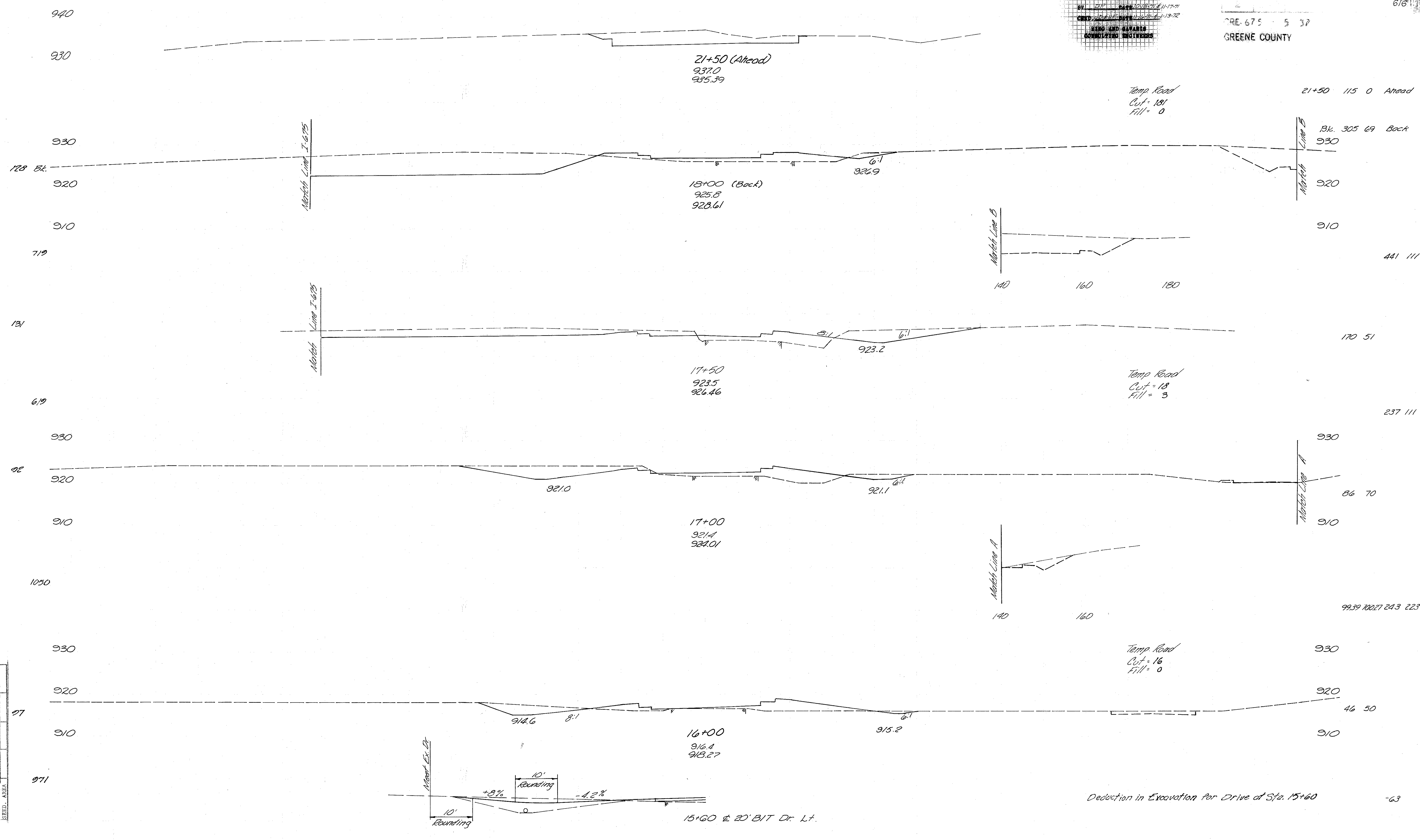
140 120 100 80 60 40 20 0 20 40 60 80 100 120 140
KEMP RD. STA. 12+00 TO STA. 15+09

140 120 100 80 60 40 20 0 20 40 60 80 100

SURVEYED, PLOTTED, EARTH AREA, SEED AREA
 DATE, DATE, DATE, DATE
 SURVEYED, PLOTTED, EARTH AREA, SEED AREA
 DATE, DATE, DATE, DATE
 SURVEYED, PLOTTED, EARTH AREA, SEED AREA
 DATE, DATE, DATE, DATE

PRE-675 5 37
GREENE COUNTY

325
616



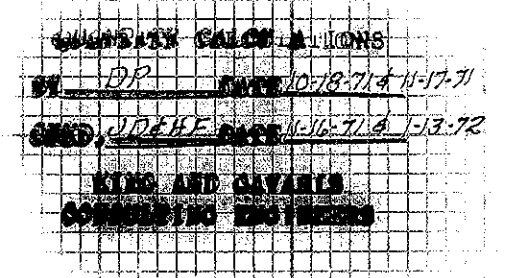
SURVEYED	DATE	DATE	DATE

140 120 100 80 60 40 20 0 20 40 60 80 100
KEMP RD. STA. 16+00 to STA. 18+00

90.44 91.24 198 159

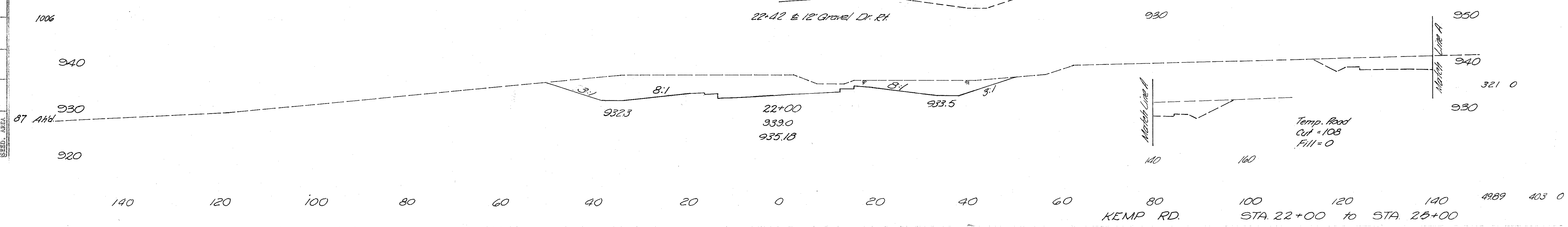
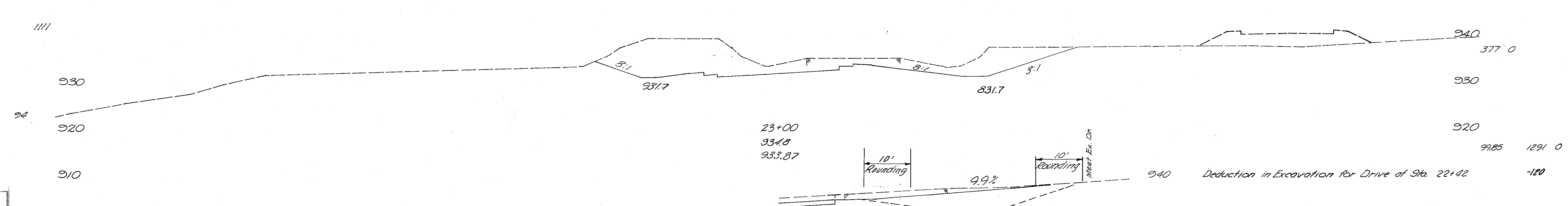
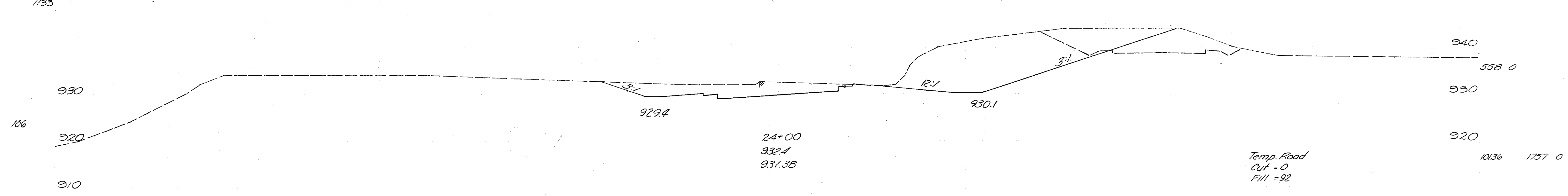
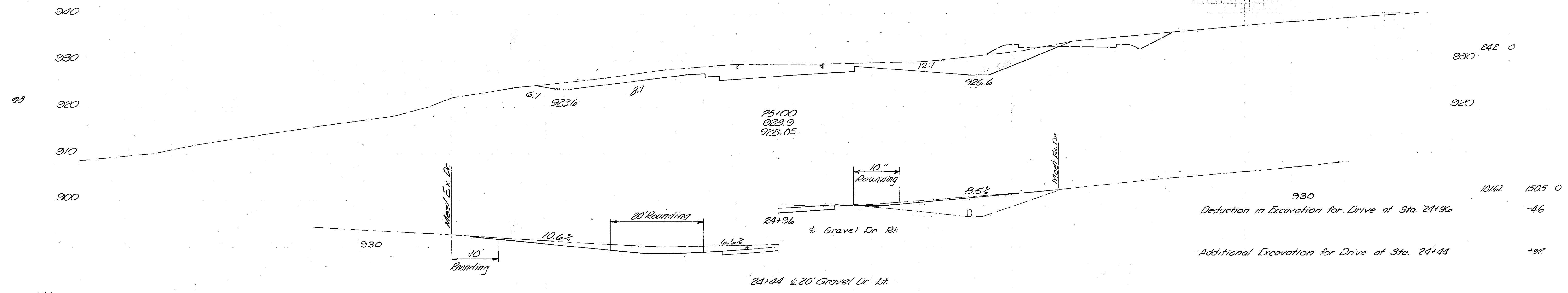
140 120 100 80 60 40 20 0 20 40 60 80 100

326
616



Temp. Road
Cut = 39
Fill = 10

GRE-675 · 5.37
GREENE COUNTY



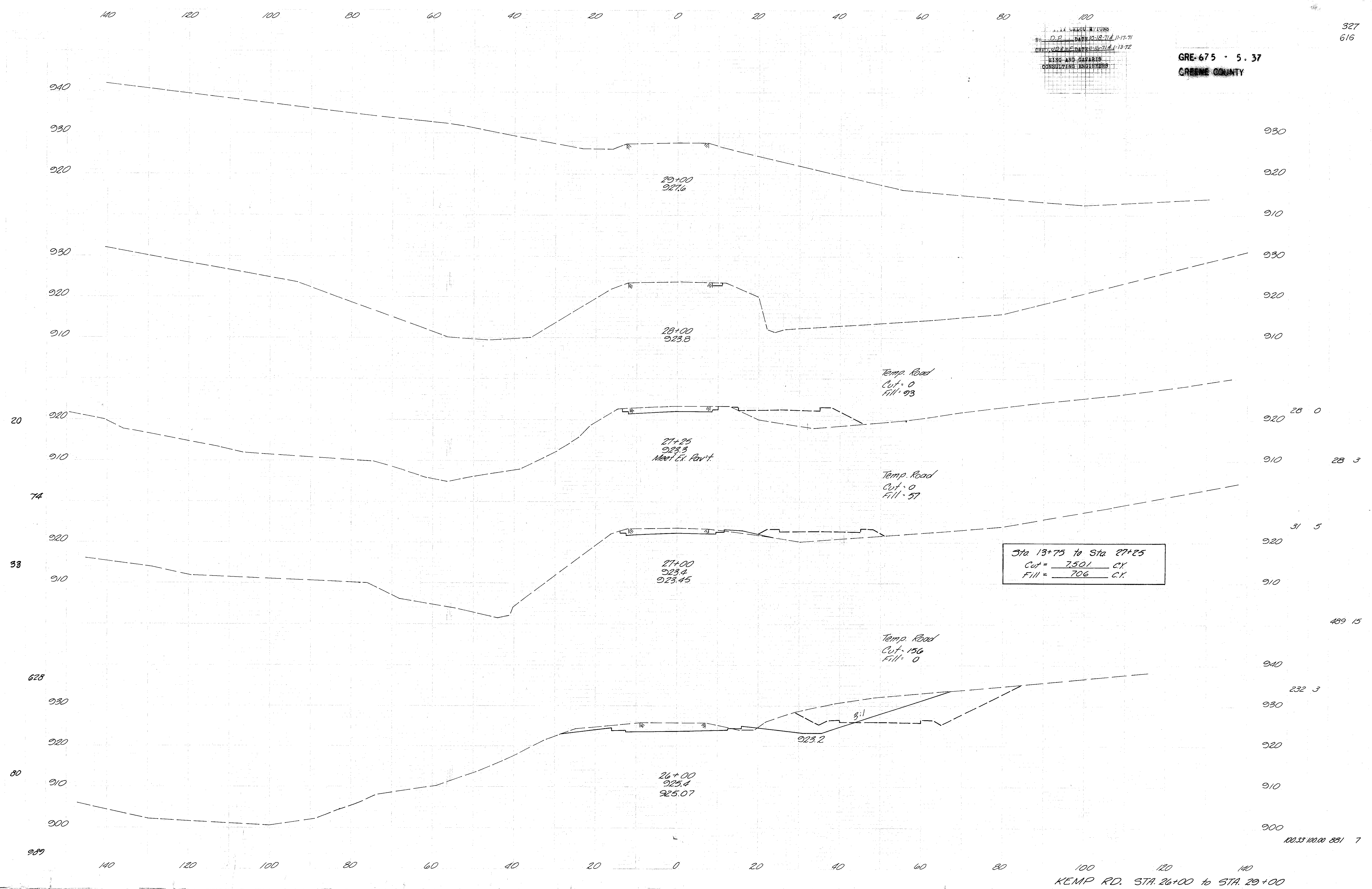
NO.	DATE	BY	DATE	BY

4989
403 0

ALL MEASUREMENTS
 BY D.P. DATE 12-18-71 11-17-71
 CHECKED BY DATE 1-16-72 1-13-72
 KING AND CAVARIS
 CONSULTING ENGINEERS

GRE-675 - 5.37
 GREENE COUNTY

327
 616



Sta 13+75 to Sta 27+25
Cut = 7,501 CY
Fill = 706 CY

KEMP RD. STA. 26+00 to STA. 29+00

GRE-675-5-37
GREENE COUNTY

AC Sta 305+71.67
PI Sta 326+13.26
Dc = 1°29'00"
SE = 0.043/AZ

Station	Profile Grade Elev 30'Lt of E	Elev 40'Lt of E	Elev 50'Lt of E	Station	Profile Grade Elev 30'Lt of E	Elev 40'Lt of E	Elev 50'Lt of E
307+00	888.99	888.80	888.43	307+00	888.99	888.43	889.18
307+25	888.89	888.51	888.33	307+25	888.89	888.51	889.26
307+50	888.77	888.39	888.21	307+50	888.77	888.39	889.14
307+75	888.63	888.45	888.07	307+75	888.63	888.45	889.01
308+00	888.48	888.29	887.86	308+00	888.48	888.29	888.85
308+25	888.31	888.09	887.67	308+25	888.31	888.09	888.73
308+50	888.12	887.86	887.36	308+50	888.12	887.86	888.62
308+75	887.91	887.62	887.32	308+75	887.91	887.62	888.49
309+00	887.74	887.35	886.71	309+00	887.74	887.35	888.34
309+25	887.58	887.07	886.54	309+25	887.58	887.07	888.18
309+50	887.44	886.78	886.34	309+50	887.44	886.78	887.99
309+75	887.18	886.46	885.97	309+75	887.18	886.46	887.79
310+00	886.90	886.16	885.58	310+00	886.90	886.16	887.56
310+25	886.61	885.82	885.17	310+25	886.61	885.82	887.33
310+50	886.30	885.48	884.75	310+50	886.30	885.48	887.11
310+75	885.96	885.14	884.31	310+75	885.96	885.14	886.77
311+00	885.62	884.81	883.89	311+00	885.62	884.81	886.40
311+25	885.25	884.48	883.52	311+25	885.25	884.48	886.02
311+50	884.87	884.29	883.14	311+50	884.87	884.29	885.62
311+75	884.47	883.89	882.74	311+75	884.47	883.89	885.21
312+00	884.06	883.48	882.33	312+00	884.06	883.48	884.81
312+25	883.65	883.08	881.93	312+25	883.65	883.08	884.40
312+50	883.25	882.67	881.52	312+50	883.25	882.67	884.00
312+75	882.84	882.26	881.11	312+75	882.84	882.26	883.58
313+00	882.43	881.86	880.70	313+00	882.43	881.86	883.18
313+25	882.03	881.45	880.30	313+25	882.03	881.45	882.77
313+50	881.62	881.04	879.89	313+50	881.62	881.04	882.36
313+75	881.21	880.64	879.48	313+75	881.21	880.64	881.96
314+00	880.80	880.23	879.08	314+00	880.80	880.23	881.55
314+25	879.99	879.82	878.67	314+25	879.99	879.82	881.14
314+50	879.58	879.41	878.26	314+50	879.58	879.41	880.74
314+75	879.17	879.01	877.86	314+75	879.17	879.01	880.33
315+00	878.76	878.60	877.45	315+00	878.76	878.60	880.00
315+25	878.35	878.19	877.04	315+25	878.35	878.19	879.59
315+50	877.94	877.79	876.63	315+50	877.94	877.79	879.18
315+75	877.53	877.38	876.23	315+75	877.53	877.38	878.77
316+00	877.12	876.97	875.82	316+00	877.12	876.97	878.36
316+25	876.71	876.56	875.41	316+25	876.71	876.56	881.96
316+50	876.30	876.16	875.01	316+50	876.30	876.16	881.55
316+75	875.89	875.75	874.60	316+75	875.89	875.75	881.14
317+00	875.48	875.34	874.19	317+00	875.48	875.34	880.74
317+25	875.07	874.94	873.78	317+25	875.07	874.94	880.33
317+50	874.66	874.53	873.38	317+50	874.66	874.53	879.92
317+75	874.25	874.12	872.97	317+75	874.25	874.12	879.51
318+00	873.84	873.72	872.56	318+00	873.84	873.72	879.11
318+25	873.43	873.31	872.16	318+25	873.43	873.31	878.70
318+50	873.02	872.90	871.75	318+50	873.02	872.90	878.29
318+75	872.61	872.49	871.34	318+75	872.61	872.49	877.87
319+00	872.20	872.10	870.93	319+00	872.20	872.10	877.48
319+25	871.79	871.74	870.52	319+25	871.79	871.74	877.07
319+50	871.38	871.36	870.11	319+50	871.38	871.36	876.66
319+75	870.97	870.95	869.70	319+75	870.97	870.95	876.26
320+00	870.56	870.58	869.29	320+00	870.56	870.58	875.85
320+25	870.15	870.22	868.88	320+25	870.15	870.22	875.44
320+50	869.74	870.17	868.47	320+50	869.74	870.17	875.04
320+75	869.33	870.01	868.06	320+75	869.33	870.01	874.63
321+00	868.92	869.88	867.65	321+00	868.92	869.88	874.22
321+25	868.51	869.71	867.24	321+25	868.51	869.71	873.83
321+50	868.10	869.40	866.83	321+50	868.10	869.40	873.44
321+75	867.69	869.11	866.42	321+75	867.69	869.11	873.05
322+00	867.28	868.72	866.01	322+00	867.28	868.72	872.66
322+25	866.87	868.31	865.60	322+25	866.87	868.31	872.27
322+50	866.46	867.90	865.19	322+50	866.46	867.90	871.88
322+75	866.05	867.49	864.78	322+75	866.05	867.49	871.49
323+00	865.64	867.08	864.37	323+00	865.64	867.08	871.10
323+25	865.23	866.67	863.96	323+25	865.23	866.67	870.71
323+50	864.82	866.26	863.55	323+50	864.82	866.26	870.32
323+75	864.41	865.85	863.14	323+75	864.41	865.85	870.00
324+00	864.00	865.44	862.73	324+00	864.00	865.44	870.00
324+25	863.59	865.03	862.32	324+25	863.59	865.03	870.00
324+50	863.18	864.62	861.91	324+50	863.18	864.62	870.00
324+75	862.77	864.21	861.50	324+75	862.77	864.21	870.00
325+00	862.36	863.80	861.09	325+00	862.36	863.80	870.00
325+25	861.95	863.39	860.68	325+25	861.95	863.39	870.00
325+50	861.54	862.98	860.27	325+50	861.54	862.98	870.00
325+75	861.13	862.57	860.00	325+75	861.13	862.57	870.00
326+00	860.72	862.16	860.00	326+00	860.72	862.16	870.00
326+25	860.31	861.75	860.00	326+25	860.31	861.75	870.00
326+50	860.00	861.34	860.00	326+50	860.00	861.34	870.00
326+75	859.59	860.93	860.00	326+75	859.59	860.93	870.00
327+00	859.18	860.52	860.00	327+00	859.18	860.52	870.00
327+25	858.77	860.11	860.00	327+25	858.77	860.11	870.00
327+50	858.36	859.70	860.00	327+50	858.36	859.70	870.00
327+75	857.95	859.29	860.00	327+75	857.95	859.29	870.00
328+00	857.54	858.88	860.00	328+00	857.54	858.88	870.00
328+25	857.13	858.47	860.00	328+25	857.13	858.47	870.00
328+50	856.72	858.06	860.00	328+50	856.72	858.06	870.00
328+75	856.31	857.65	860.00	328+75	856.31	857.65	870.00
329+00	855.90	857.24	860.00	329+00	855.90	857.24	870.00
329+25	855.49	856.83	860.00	329+25	855.49	856.83	870.00

CRF - 675 - 5.37
GREENE COUNTY

P.C. Sta 402+31.18
P.T. Sta 419+80.07

DC = 0°45'00"
SE = 0.025'/ft

Station	Profile Grade Elev. 30' Lt of E	Elev 42' Lt of E	Elev 54' Lt of E	Elev 66' Lt of E	Elev 78' Lt of E	Station	Profile Grade Elev. 30' Rt of E	Elev 42' Rt of E	Elev 54' Rt of E	Elev 66' Rt of E	Elev 78' Rt of E
399+75	940.83	941.01	941.20	941.01	940.83	399+75	940.83	941.01	941.20	941.01	940.83
400+00	940.27	940.45	940.64	940.45	940.26	400+00	940.27	940.46	940.65	940.46	940.28
400+25	939.71	939.86	939.82	939.82	939.63	400+25	939.71	939.89	940.08	939.93	939.78
400+50	939.13	939.25	939.37	939.18	938.99	400+50	939.13	939.32	939.50	939.38	939.26
400+75	938.54	938.63	938.72	938.53	938.34	400+75	938.54	938.73	938.91	938.82	938.73
401+00	937.94	938.00	938.06	937.87	937.68	401+00	937.94	938.13	938.32	938.26	938.20
401+25	937.34	937.36	937.39	937.20	937.01	401+25	937.34	937.52	937.71	937.68	937.66
401+50	936.73	936.72	936.72	936.53	936.34	401+50	936.73	936.92	937.11	937.11	937.12
401+75	936.13	936.06	936.00	935.81	935.62	401+75	936.13	936.31	936.50	936.56	936.63
402+00	935.52	935.40	935.28	935.10	934.91	402+00	935.52	935.71	935.90	936.01	936.13
402+25	934.92	934.74	934.57	934.38	934.19	402+25	934.92	935.10	935.29	935.46	935.64
402+50	934.31	934.10	933.89	933.68	933.47	402+50	934.31	934.52	934.73	934.94	935.15
402+75	933.71	933.46	933.22	932.98	932.74	402+75	933.71	933.95	934.19	934.43	934.67
403+00	933.10	932.83	932.55	932.28	932.01	403+00	933.10	933.37	933.65	933.92	934.19
403+25	932.50	932.20	931.90	931.60	931.30	403+25	932.50	932.80	933.10	933.40	933.70
403+50	931.89	931.59	931.29	930.99	930.69	403+50	931.89	932.19	932.49	932.79	933.09
403+75	931.29	930.99	930.69	930.39	930.09	403+75	931.29	931.59	931.89	932.18	932.48
404+00	930.68	930.38	930.08	929.78	929.48	404+00	930.68	930.98	931.28	931.58	931.88
404+25	930.08	929.78	929.48	929.18	928.88	404+25	930.08	930.38	930.68	930.98	931.27
404+50	929.47	929.17	928.87	928.57	928.27	404+50	929.47	929.77	930.07	930.37	930.67
404+75	928.87	928.57	928.27	927.97	927.67	404+75	928.87	929.17	929.47	929.77	930.07
405+00	928.26	927.96	927.66	927.36	927.06	405+00	928.26	928.56	928.86	929.16	929.46
405+25	927.66	927.36	927.06	926.76	926.46	405+25	927.66	927.96	928.26	928.56	928.86
405+50	927.05	926.75	926.45	926.15	925.85	405+50	927.05	927.35	927.65	927.95	928.25
405+75	926.45	926.15	925.85	925.55	925.25	405+75	926.45	926.75	927.05	927.34	927.64
406+00	925.84	925.54	925.24	924.94	924.64	406+00	925.84	926.14	926.44	926.74	927.04
406+25	925.24	924.94	924.64	924.34	924.04	406+25	925.24	925.54	925.84	926.14	926.43
406+50	924.63	924.33	924.03	923.73	923.43	406+50	924.63	924.93	925.23	925.53	925.83
406+75	924.03	923.73	923.43	923.13	922.83	406+75	924.03	924.33	924.63	924.93	925.23
407+00	923.42	923.12	922.82	922.52	922.22	407+00	923.42	923.72	924.02	924.32	924.62
407+25	922.82	922.52	922.22	921.92	921.62	407+25	922.82	923.12	923.42	923.72	924.02
407+50	922.21	921.91	921.61	921.31	921.01	407+50	922.21	922.51	922.81	923.11	923.41
407+75	921.61	921.31	921.01	920.71	920.41	407+75	921.61	921.91	922.21	922.51	922.80
408+00	921.00	920.70	920.40	920.10	919.80	408+00	921.00	921.30	921.60	921.90	922.20
408+25	920.40	920.10	919.80	919.50	919.20	408+25	920.40	920.70	921.00	921.30	921.60
408+50	919.79	919.49	919.19	918.89	918.59	408+50	919.79	920.09	920.39	920.69	920.99
408+75	919.19	918.89	918.59	918.29	917.99	408+75	919.19	919.49	919.79	920.09	920.39
409+00	918.58	918.28	917.98	917.68	917.38	409+00	918.58	918.88	919.18	919.48	919.78
409+25	917.98	917.68	917.38	917.08	916.78	409+25	917.98	918.28	918.58	918.88	919.17
409+50	917.37	917.07	916.77	916.47	916.17	409+50	917.37	917.67	917.97	918.27	918.57
409+75	916.77	916.47	916.17	915.87	915.57	409+75	916.77	917.07	917.37	917.67	917.96
410+00	916.16	915.86	915.56	915.26	914.96	410+00	916.16	916.46	916.76	917.06	917.36
410+25	915.57	915.27	914.97	914.67	914.37	410+25	915.57	915.87	916.17	916.47	916.77
410+50	915.02	914.72	914.42	914.12	913.82	410+50	915.02	915.32	915.62	915.92	916.22
410+75	914.49	914.19	913.89	913.59	913.29	410+75	914.49	914.79	915.09	915.39	915.69
411+00	914.01	913.71	913.41	913.11	912.81	411+00	914.01	914.31	914.61	914.91	915.21
411+25	913.55	913.25	912.95	912.65	912.35	411+25	913.55	913.85	914.15	914.45	914.75
411+50	913.13	912.83	912.53	912.23	911.93	411+50	913.13	913.43	913.73	914.03	914.33
411+75	912.74	912.44	912.14	911.84	911.54	411+75	912.74	913.04	913.34	913.64	913.94
412+00	912.38	912.08	911.78	911.48	911.18	412+00	912.38	912.68	912.98	913.28	913.58
412+25	912.06	911.76	911.46	911.16	910.86	412+25	912.06	912.36	912.66	912.96	913.26
412+50	911.77	911.47	911.17	910.87	910.57	412+50	911.77	912.07	912.37	912.67	912.97
412+75	911.51	911.21	910.91	910.61	910.31	412+75	911.51	911.81	912.11	912.41	912.71
413+00	911.29	910.99	910.69	910.39	910.09	413+00	911.29	911.59	911.89	912.19	912.49
413+25	911.09	910.79	910.49	910.19	909.89	413+25	911.09	911.39	911.69	911.99	912.29
413+50	910.94	910.64	910.34	910.04	909.74	413+50	910.94	911.24	911.54	911.84	912.14
413+75	910.81	910.51	910.21	909.91	909.61	413+75	910.81	911.11	911.41	911.71	912.01
414+00	910.72	910.42	910.12	909.82	909.52	414+00	910.72	911.02	911.32	911.62	911.92
414+25	910.65	910.35	910.05	909.75	909.45	414+25	910.65	910.95	911.25	911.55	911.84
414+50	910.57	910.27	909.97	909.67	909.37	414+50	910.57	910.87	911.17	911.47	911.77
414+75	910.50	910.20	909.90	909.60	909.30	414+75	910.50	910.80	911.10	911.40	911.70
415+00	910.42	910.12	909.82	909.52	909.22	415+00	910.42	910.72	911.02	911.32	911.62
415+25	910.35	910.05	909.75	909.45	909.15	415+25	910.35	910.65	910.95	911.25	911.55
415+50	910.27	909.97	909.67	909.37	909.07	415+50	910.27	910.57	910.87	911.17	911.47
415+75	910.20	909.90	909.60	909.30	909.00	415+75	910.20	910.50	910.80	911.10	911.39
416+00	910.12	909.82	909.52	909.22	908.92	416+00	910.12	910.42	910.72	911.02	911.32
416+25	910.05	909.75	909.45	909.15	908.85	416+25	910.05	910.35	910.65	910.95	911.24
416+50	909.97	909.67	909.37	909.07	908.77	416+50	909.97	910.27	910.57	910.87	911.17
416+75	909.90	909.60	909.30	909.00	908.70	416+75	909.90	910.20	910.50	910.80	911.10
417+00	909.82	909.52	909.22	908.92	908.62	417+00	909.82	910.12	910.42	910.72	911.02

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RAMP A			
Station	Profile Grade	Elev. 12' Lt.	Elev. 12' Rt.
From 293+31.33 To 301+27	See Pavement Details		
From 301+27 To 304+77	Normal Section		
304+75	912.67	912.86	912.48
305+00	912.48	912.74	912.21
305+25	912.25	912.61	911.88
305+50	911.98	912.44	911.52
305+75	911.68	912.25	911.12
306+00	911.35	912.02	910.68
306+25	910.98	911.75	910.22
306+50	910.58	911.45	909.71
306+75	910.15	911.12	909.18
307+00	909.68	910.68	908.68
307+25	909.18	910.18	908.18
307+50	908.64	909.64	907.64
307+75	908.07	909.07	907.07
308+00	907.46	908.46	906.46
308+25	906.82	907.78	905.86
308+50	906.15	907.01	905.29
308+75	905.44	906.20	904.68
309+00	904.72	905.37	904.06
309+25	903.99	904.54	903.44
309+50	903.27	903.72	902.81
309+75	902.54	902.89	902.19
310+00	901.82	902.06	901.57
310+25	901.09	901.24	900.94
310+50	900.37	900.41	900.32
310+75	899.64	899.58	899.70
311+00	898.92	898.75	899.08
311+25	898.19	897.93	898.45
311+50	897.49	897.13	897.85
311+75	896.84	896.38	897.31
312+00	896.24	895.68	896.81
312+25	895.69	895.03	896.36
312+50	895.20	894.43	895.97
312+75	894.75	893.88	895.62
313+00	894.35	893.38	895.33
313+25	894.01	893.01	895.01
313+50	893.71	892.71	894.71
313+75	893.47	892.47	894.46
314+00	893.27	892.27	894.27
314+25	893.13	892.13	894.13
314+50	893.01	892.01	894.01
314+75	892.89	891.89	893.89
315+00	892.77	891.77	893.77
315+25	892.65	891.65	893.65
315+50	892.53	891.53	893.53
315+75	892.41	891.41	893.41
316+00	892.29	891.29	893.29
316+25	892.18	891.18	893.17
316+50	892.06	891.06	893.06
316+75	891.94	890.94	892.94
317+00	891.82	890.82	892.82
317+25	891.70	890.70	892.70
317+50	891.58	890.58	892.58
317+75	891.46	890.46	892.46
318+00	891.34	890.34	892.34
318+25	891.26	890.26	892.26
318+50	891.25	890.25	892.25
318+75	891.32	890.32	892.32
319+00	891.45	890.45	892.45
319+25	891.67	890.67	892.66

RAMP A			
Station	Profile Grade	Elev. 12' Lt.	Elev. 12' Rt.
319+50	891.95	890.95	892.95
319+75	892.31	891.31	893.31
320+00	892.74	891.74	893.74
320+25	893.24	892.24	894.24
320+50	893.82	892.82	894.82
320+75	894.47	893.47	895.47
321+00	895.20	894.20	896.20
321+25	896.00	895.00	897.00
321+50	896.87	895.87	897.87
321+75	897.78	896.78	898.78
322+00	898.69	897.69	899.69
322+25	899.59	898.59	900.59
322+50	900.50	899.50	901.50
322+75	901.41	900.41	902.41
323+00	902.32	901.32	903.32
323+25	903.23	902.23	904.23
323+50	904.14	903.14	905.14
323+75	905.04	904.04	906.04
324+00	905.95	904.95	906.95
324+25	906.86	905.86	907.86
324+50	907.77	906.77	908.77
324+75	908.68	907.68	909.68
325+00	909.59	908.59	910.59
325+25	910.49	909.49	911.49
325+50	911.40	910.40	912.40
325+75	912.31	911.31	913.31
326+00	913.22	912.22	914.22
326+25	914.13	913.13	915.13
326+50	915.04	914.04	916.04
326+75	915.95	914.95	916.94
327+00	916.85	915.85	917.85
327+25	917.76	916.76	918.76
327+50	918.67	917.67	919.67
327+75	919.58	918.58	920.58
328+00	920.49	919.49	921.49
328+25	921.40	920.40	922.40
328+50	922.30	921.30	923.30
328+75	923.18	922.18	924.18
329+00	923.98	922.98	924.98
329+25	924.71	923.71	925.71
329+50	925.36	924.36	926.36
329+75	925.95	924.95	926.95
330+00	926.46	925.46	927.46
330+25	926.90	925.90	927.90
330+50	927.27	926.27	928.27
330+75	927.57	926.57	928.57
331+00	927.79	926.79	928.79
331+25	927.94	926.94	928.94
331+50	928.02	927.02	929.02
331+75	928.03	927.03	929.03
332+00	927.97	926.97	928.97
332+25	927.84	926.84	928.84
332+50	927.63	926.63	928.63
332+75	927.35	926.35	928.35
333+00	927.00	926.00	928.00
333+25	926.58	925.58	927.58
333+50	926.08	925.08	927.08
333+75	925.52	924.52	926.52
334+00	924.88	923.88	925.88
334+25	924.17	923.17	925.17

Structure No. GRE-675-0716

Structure No. GRE-675-0074

RAMP A			
Station	Profile Grade	Elev. 12' Lt.	Elev. 12' Rt.
334+50	923.38	922.39	924.38
334+75	922.53	921.53	923.53
335+00	921.60	920.60	922.60
335+25	920.61	919.61	921.61
335+50	919.54	918.54	920.54
335+75	918.39	917.39	919.39
336+00	917.18	916.18	918.18
336+25	915.93	914.93	916.93
336+50	914.68	913.68	915.68
336+75	913.43	912.43	914.43
337+00	912.18	911.18	913.18
337+25	910.93	909.93	911.93
337+50	909.68	908.68	910.68
337+75	908.43	907.43	909.43
338+00	907.18	906.18	908.18
338+25	905.93	904.93	906.93
338+50	904.68	903.68	905.68
338+75	903.46	902.53	904.39
339+00	902.29	901.46	903.13
339+25	901.19	900.46	901.92
339+50	900.14	899.51	900.77
339+75	899.15	898.62	899.67
340+00	898.21	897.79	898.64
340+25	897.33	897.01	897.66
340+50	896.51	896.29	896.73
340+75	895.75	895.61	895.88
341+00	895.04	894.98	895.10
341+25	894.39	894.41	894.37
341+50	893.80	893.90	893.70
341+75	893.27	893.44	893.09
342+00	892.79	893.06	892.51
342+25	892.37	892.74	891.99
342+50	892.01	892.48	891.53
342+75	891.70	892.28	891.12
343+00	891.45	892.13	890.77
343+25	891.26	892.04	890.48
343+50	891.13	892.01	890.24
343+75	891.05	892.04	890.06
344+00	891.03	892.03	890.03
344+25	891.07	892.07	890.07
344+50	891.16	892.16	890.16
344+75	891.29	892.29	890.29
345+00	891.41	892.41	890.41
345+25	891.53	892.53	890.53
345+50	891.66	892.66	890.66
345+75	891.78	892.78	890.78
346+00	891.91	892.90	890.91
346+25	892.03	893.03	891.03
346+50	892.15	893.15	891.15
346+75	892.28	893.28	891.28
347+00	892.40	893.40	891.40
347+25	892.52	893.52	891.52
347+50	892.65	893.65	891.65
347+75	892.77	893.77	891.77
348+00	892.89	893.89	891.89
348+25	893.02	894.02	892.02
348+50	893.14	894.14	892.14
348+75	893.26	894.26	892.27
349+00	893.39	894.39	892.39

From 349+00
To 352+00 See Pavement Details

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GREENE COUNTY

RAMP B		
Station	Profile Grade	Elev. 16' Rt.
From 334+25 To 339+00	See Pavement Details	
339+00	920.03	920.76
339+25	919.38	920.25
339+50	918.77	919.77
339+75	918.18	919.31
340+00	917.62	918.88
340+25	917.08	918.41
340+50	916.58	917.91
340+75	916.10	917.43
341+00	915.65	916.98
341+25	915.22	916.55
341+50	914.78	916.11
341+75	914.35	915.68
342+00	913.91	915.24
342+25	913.48	914.81
342+50	913.04	914.38
342+75	912.61	913.94
343+00	912.17	913.51
343+25	911.74	913.07
343+50	911.30	912.64
343+75	910.87	912.20
344+00	910.43	911.77
344+25	910.00	911.33
344+50	909.56	910.90
344+75	909.13	910.46
345+00	908.69	910.03
345+25	908.26	909.59
345+50	907.83	909.16
345+75	907.39	908.72
346+00	906.96	908.29
346+25	906.52	907.85
346+50	906.09	907.42
346+75	905.65	906.98
347+00	905.22	906.55
347+25	904.78	906.11
347+50	904.35	905.68
347+75	903.91	905.24
348+00	903.48	904.81
348+25	903.04	904.38
348+50	902.61	903.94
348+75	902.17	903.51
349+00	901.74	903.07
349+25	901.30	902.64
349+50	900.90	902.23
349+75	900.55	901.88
350+00	900.25	901.59
350+25	900.02	901.35
350+50	899.84	901.17
350+75	899.72	901.05
351+00	899.65	900.98
351+25	899.64	900.97
351+50	899.69	901.00
351+75	899.79	900.98
352+00	899.96	901.02
From 352+00 To 357+79.48	See Pavement Details	

RAMP C		
Station	Profile Grade	Elev. 16' Rt.
From 317+25 To 319+50	See Pavement Details	
319+50	867.14	868.47
319+75	866.63	867.96
320+00	866.24	867.57
320+25	865.96	867.29
320+50	865.80	867.14
320+75	865.76	867.10
321+00	865.84	867.17
321+25	866.04	867.37
321+50	866.35	867.68
321+75	866.78	868.12
322+00	867.33	868.67
322+25	868.00	869.25
322+50	868.79	869.91
322+75	869.63	870.64
323+00	870.48	871.36
323+25	871.32	872.08
323+50	872.16	872.81
323+75	873.01	873.53
324+00	873.85	874.26
324+25	874.70	874.98
324+50	875.54	875.79
From 324+50 To 330+75	Normal Section	
From 330+75 To 333+73.99	See Pavement Details	

RAMP D		
Station	Profile Grade	Elev. 16' Lt.
From 333+22.54 To 340+00	See Pavement Details	
340+00	884.98	886.31
340+25	885.55	886.88
340+50	886.17	887.50
340+75	886.84	888.17
341+00	887.55	888.88
341+25	888.28	889.61
341+50	889.01	890.34
341+75	889.74	891.07
342+00	890.47	891.80
342+25	891.20	892.53
342+50	891.93	893.26
342+75	892.66	893.99
343+00	893.39	894.72
343+25	894.12	895.46
343+50	894.85	896.19
343+75	895.58	896.92
344+00	896.32	897.65
344+25	897.01	898.35
344+50	897.64	898.98
344+75	898.21	899.54
345+00	898.71	900.04
345+25	899.15	900.48
345+50	899.51	900.85
345+75	899.82	901.15
346+00	900.05	901.39
346+25	900.22	901.56
346+50	900.33	901.66
346+75	900.37	901.70
347+00	900.34	901.67
347+25	900.28	901.61
347+50	900.22	901.55
347+75	900.16	901.49
348+00	900.10	901.43
348+25	900.07	901.40
348+50	900.09	901.43
348+75	900.17	901.51
349+00	900.31	901.65
349+25	900.51	901.84
349+50	900.76	902.09
349+75	901.07	902.40
350+00	901.43	902.76
From 350+00 To 354+42.31	See Pavement Details	

RAMP E		
Station	Profile Grade	Elev. 16' Rt.
From 322+38.15 To 324+50	See Pavement Details	
324+50	908.60	909.93
324+75	908.02	909.35
325+00	907.38	908.71
325+25	906.68	908.01
325+50	905.93	907.26
325+75	905.12	906.45
326+00	904.25	905.58
326+25	903.33	904.66
326+50	902.35	903.68
326+75	901.34	902.68
327+00	900.34	901.67
327+25	899.33	900.66
327+50	898.33	899.66
327+75	897.32	898.65
328+00	896.31	897.65
328+25	895.31	896.64
328+50	894.30	895.63
328+75	893.29	894.63
329+00	892.29	893.62
329+25	891.28	892.61
329+50	890.27	891.61
329+75	889.27	890.60
330+00	888.26	889.59
330+25	887.25	888.59
330+50	886.25	887.58
330+75	885.24	886.57
331+00	884.23	885.57
331+25	883.23	884.56
331+50	882.22	883.55
331+75	881.22	882.55
332+00	880.21	881.54
332+25	879.27	880.60
332+50	878.47	879.80
332+75	877.80	879.13
333+00	877.27	878.60
333+25	876.87	878.20
333+50	876.61	877.94
333+75	876.48	877.78
334+00	876.49	877.66
334+25	876.63	877.68
334+50	876.91	877.83
334+75	877.32	878.12
From 334+75 To 336+93.08	See Pavement Details	

RAMP F		
Station	Profile Grade	Elev. 16' Lt.
From 326+70.47 To 329+00	See Pavement Details	
329+00	903.80	905.13
329+25	903.65	904.99
329+50	903.63	904.97
329+75	903.74	905.08
330+00	903.98	905.31
330+25	904.35	905.68
330+50	904.95	906.18
330+75	905.47	906.81
331+00	906.23	907.56
331+25	907.11	908.31
331+50	908.06	909.13
331+75	909.01	909.94
332+00	909.96	910.76
332+25	910.91	911.57
332+50	911.86	912.39
332+75	912.80	913.20
333+00	913.75	914.02
333+25	914.64	914.78
333+50	915.42	915.42
333+75	916.08	915.94
334+00	916.62	916.35
334+25	917.04	916.64
334+50	917.35	916.82
334+75	917.55	916.88
335+00	917.62	916.82
335+25	917.58	916.65
335+50	917.43	916.36
335+75	917.16	915.96
336+00	916.77	915.44
336+25	916.26	914.93
336+50	915.64	914.31
336+75	914.91	913.58
337+00	914.06	912.72
337+25	913.09	911.75
337+50	912.00	910.67
337+75	910.80	909.47
338+00	909.48	908.15
From 338+00 To 340+98.57	See Pavement Details	

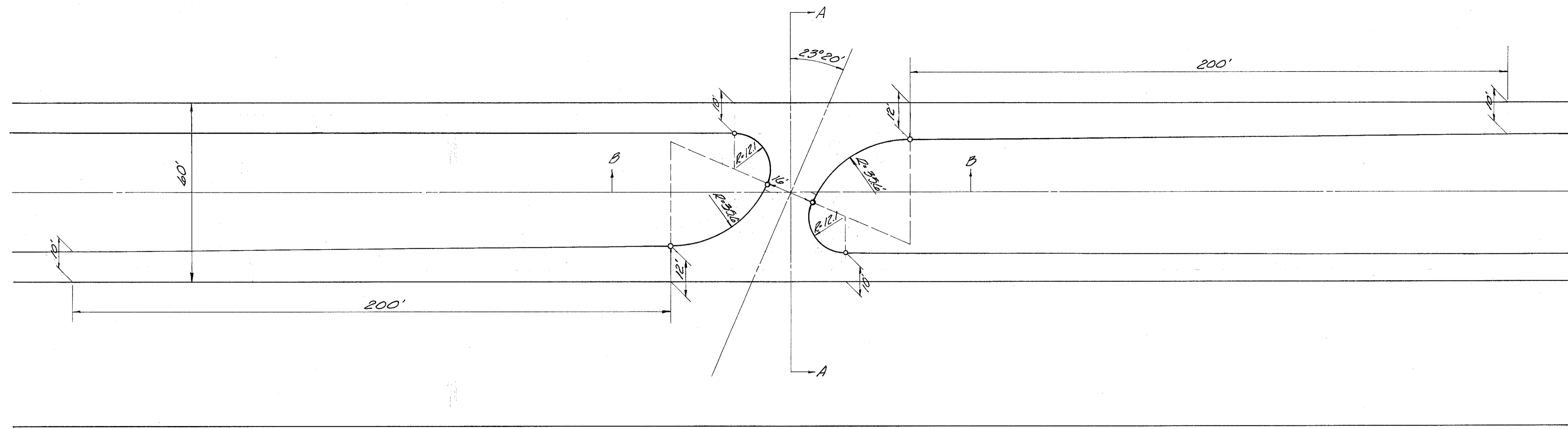
GRE - 675-5.37
GREENE COUNTY

RAMP G		
Station	Profile Grade	Elev. 16' Lt.
From 342+47.88 To 347+00	See Pavement Details	
347+00	890.26	891.60
347+25	890.52	891.85
347+50	890.89	892.22
347+75	891.35	892.69
348+00	891.93	893.26
348+25	892.60	893.94
348+50	893.33	894.66
348+75	894.06	895.39
349+00	894.79	896.12
349+25	895.52	896.85
349+50	896.25	897.58
349+75	896.97	898.31
350+00	897.70	899.03
350+25	898.43	899.76
350+50	899.16	900.49
350+75	899.87	901.21
351+00	900.56	901.89
351+25	901.22	902.55
351+50	901.85	903.18
351+75	902.45	903.78
352+00	903.02	904.36
352+25	903.57	904.90
352+50	904.08	905.42
352+75	904.57	905.91
353+00	905.03	906.37
From 353+00 To 357+40.96	See Pavement Details	

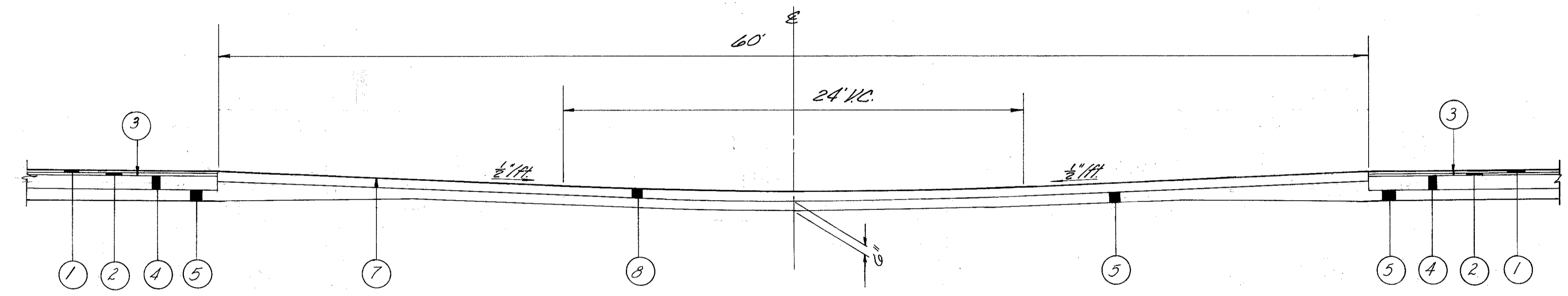
RAMP H		
Station	Profile Grade	Elev. 16' Lt.
From 317+47.37 To 324+50	See Pavement Details	
324+50	872.68	874.01
324+75	873.13	874.46
325+00	873.67	875.00
325+25	874.30	875.63
325+50	875.03	876.36
325+75	875.85	877.18
326+00	876.76	878.09
326+25	877.76	879.09
326+50	878.81	880.14
326+75	879.86	881.19
327+00	880.91	882.24
327+25	881.96	883.29
327+50	883.01	884.34
327+75	884.06	885.39
328+00	885.11	886.44
328+25	886.16	887.49
328+50	887.21	888.54
328+75	888.26	889.59
329+00	889.31	890.64
329+25	890.36	891.69
329+50	891.41	892.74
329+75	892.46	893.79
330+00	893.51	894.84
330+25	894.56	895.89
330+50	895.58	896.91
330+75	896.52	897.85
331+00	897.40	898.73
331+25	898.20	899.53
331+50	898.94	900.27
331+75	899.60	900.93
332+00	900.20	901.53
332+25	900.72	902.05
332+50	901.18	902.51
332+75	901.56	902.89
333+00	901.88	903.21
333+25	902.12	903.45
333+50	902.30	903.63
333+75	902.40	903.73
334+00	902.44	903.77
334+25	902.40	903.73
334+50	902.33	903.66
334+75	902.26	903.59
335+00	902.19	903.52
335+25	902.14	903.48
335+50	902.14	903.48
335+75	902.19	903.52
336+00	902.28	903.61
336+25	902.42	903.75
336+50	902.60	903.94
336+75	902.83	904.17
337+00	903.11	904.44
From 337+00 To 338+83.09	See Pavement Details	

KEMP ROAD			
P.C. 15+20.32 P.T. 16+80.44		Dc = 2°00'00" S.E. = 0.033/ft	
Station	Profile Grade	Elev. 12' Lt. of E	Elev. 12' Rt. of E
From 14+29 To 15+50	See Pavement Details		
15+50	915.24	914.90	915.59
16+00	916.76	916.36	917.15
16+25	918.27	917.87	918.66
16+50	919.79	919.40	920.19
16+75	921.27	920.92	921.62
17+00	922.68	922.45	922.91
17+25	924.01	923.82	924.11
17+50	925.27	925.08	925.26
17+75	926.46	926.27	926.38
18+00	927.57	927.38	927.43
	928.61	928.42	928.42

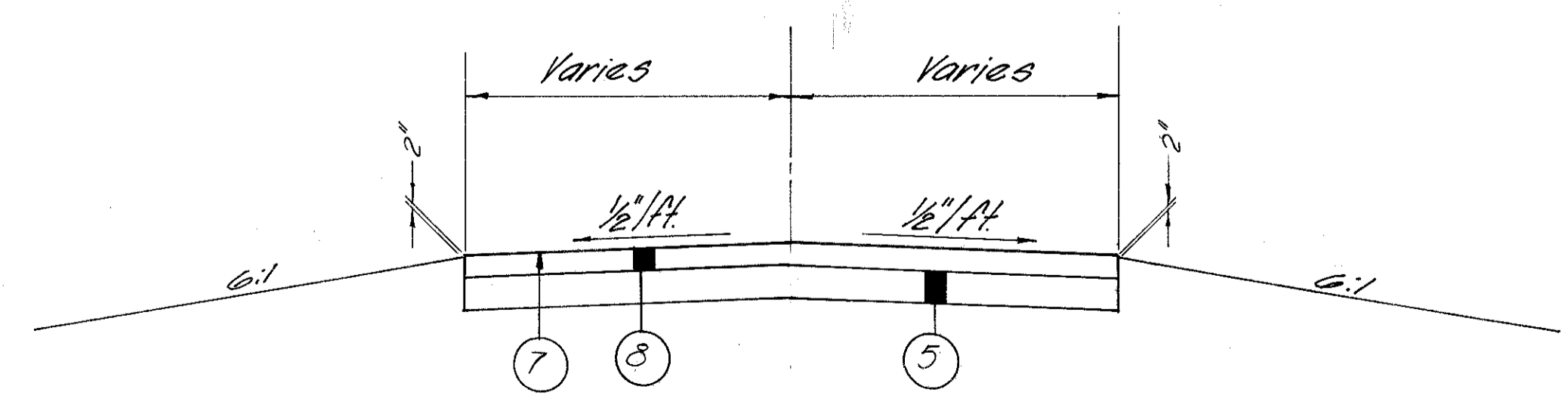
KEMP ROAD			
P.C. 21+71.21 P.T. 25+57.00		Dc = 4°00'00" S.E. = 0.066/ft	
Station	Profile Grade	Elev. 12' Lt. of E	Elev. 12' Rt. of E
20+00	934.25	934.06	934.06
20+25	934.63	934.44	934.46
20+50	934.93	934.74	934.83
20+75	935.15	934.96	935.11
21+00	935.31	935.13	935.35
21+25	935.39	935.20	935.56
21+50	935.39	935.10	935.68
21+75	935.32	934.90	935.78
22+00	935.18	934.64	935.72
22+25	934.96	934.29	935.62
22+50	934.67	933.88	935.46
22+75	934.31	933.51	935.10
23+00	933.87	933.08	934.66
23+25	933.36	932.57	934.15
23+50	932.78	931.99	933.57
23+75	932.12	931.32	932.91
24+00	931.38	930.59	932.17
24+25	930.58	929.79	931.37
24+50	929.74	928.95	930.53
24+75	928.89	928.09	929.68
25+00	928.05	927.37	928.78
25+25	927.21	926.65	927.77
25+50	926.41	925.97	926.84
25+75	925.70	925.39	926.00
From 25+75 To 27+25	See Pavement Details		



PLAN
Scale = 1" = 20'
Sta 387+50



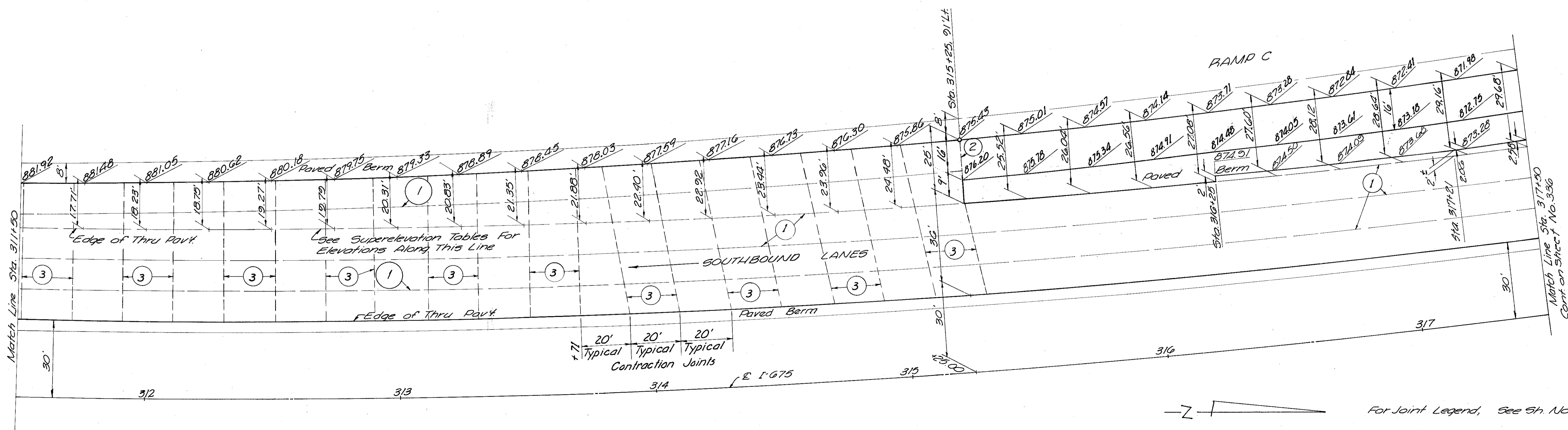
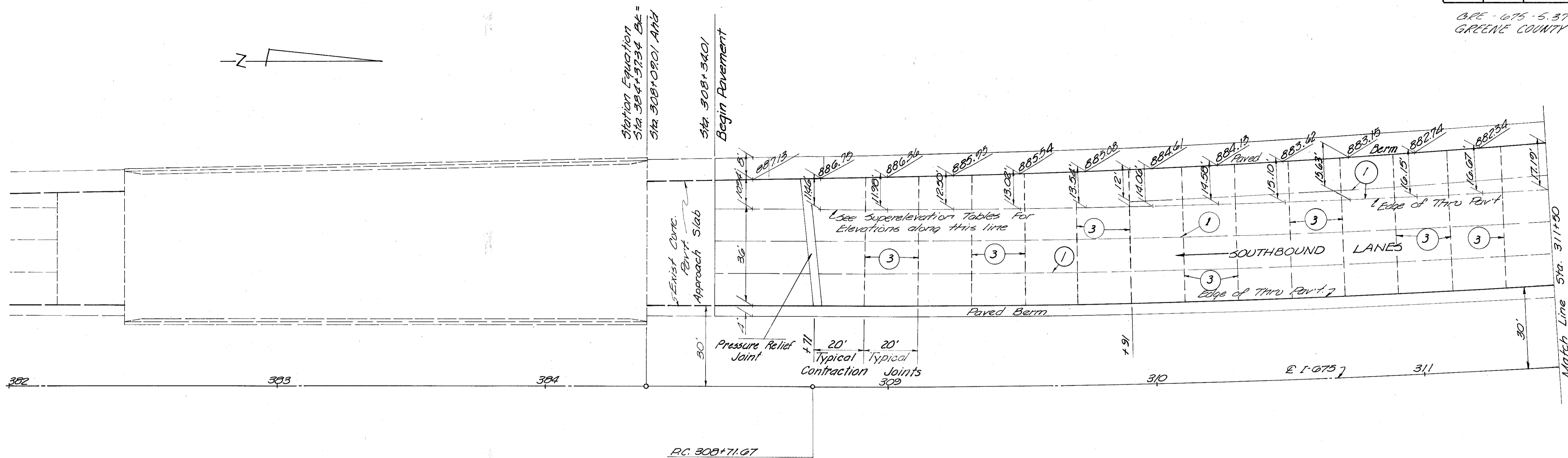
SECTION A-A
Scale 1/4" = 1'-0"



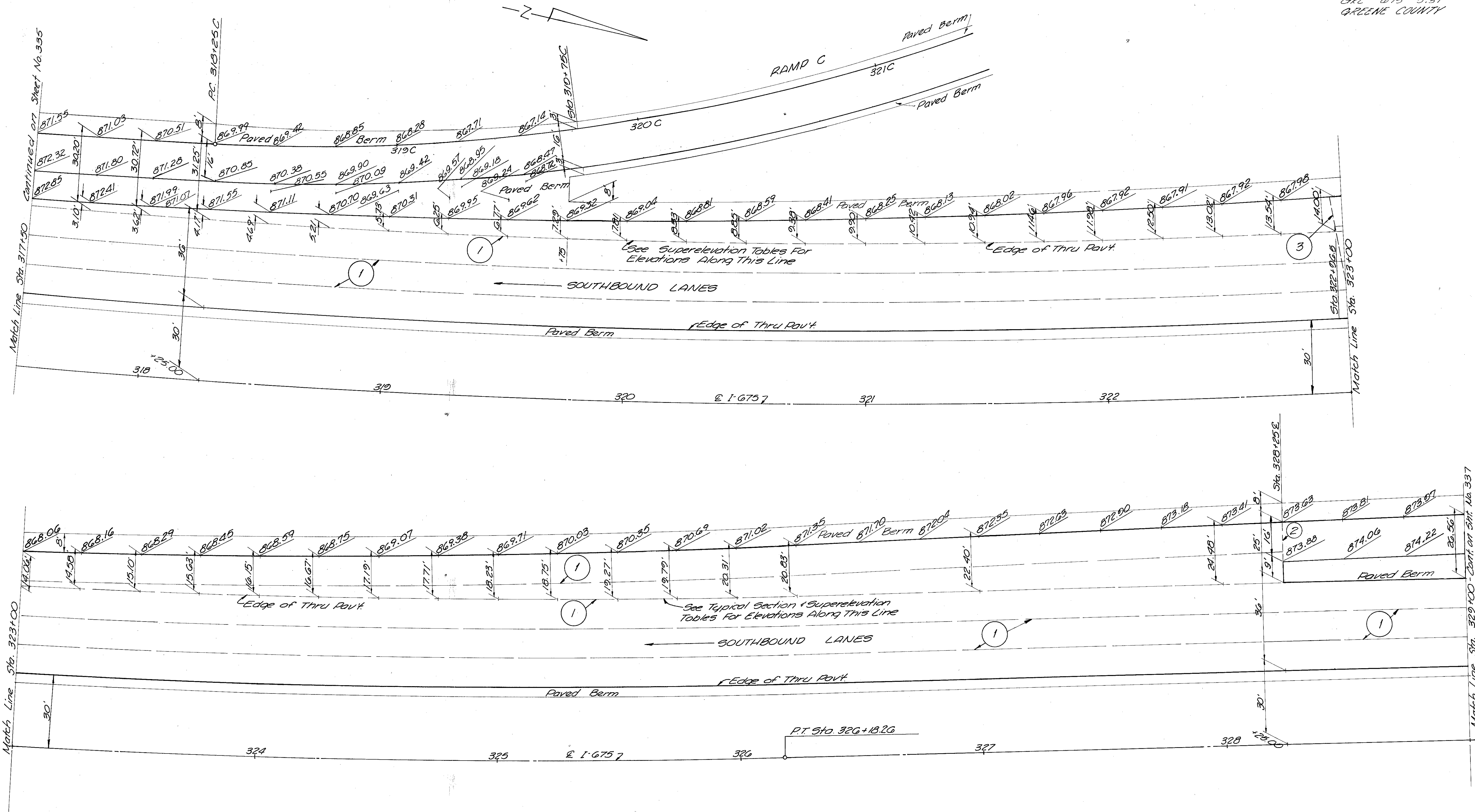
SECTION B-B
No Scale

- LEGEND**
- ① 404 1/4" Asphalt Concrete AC-20
 - ② 402 1/34" Asphalt Concrete AC-20
 - ③ 407 Tack Coat RC-250, MS-2, RS-1, SS-1, or SS-1h applied at the rate of 0.1 Gal. Per Sq. Yd.
 - ④ 801 9" Portland Cement Base
 - ⑤ 310 Subbase Type II, 6" thickness except as noted.
 - ⑦ 409 Seal Coat, Bituminous Material, MC-800, MC-3000; CBAE 800, RS-1, RS-2, CRS-1, CRS-2, RT-9, RT-10. Applied at the rate of 0.3 Gal. Per Sq. Yd. and no. 8 Aggregate applied at the rate of 0.008 Cu. Yd. Per Sq. Yd.
 - ⑧ 301 6" Bituminous Aggregate Base RT-11 or RT-12

CRF-675-5.37
GREENE COUNTY

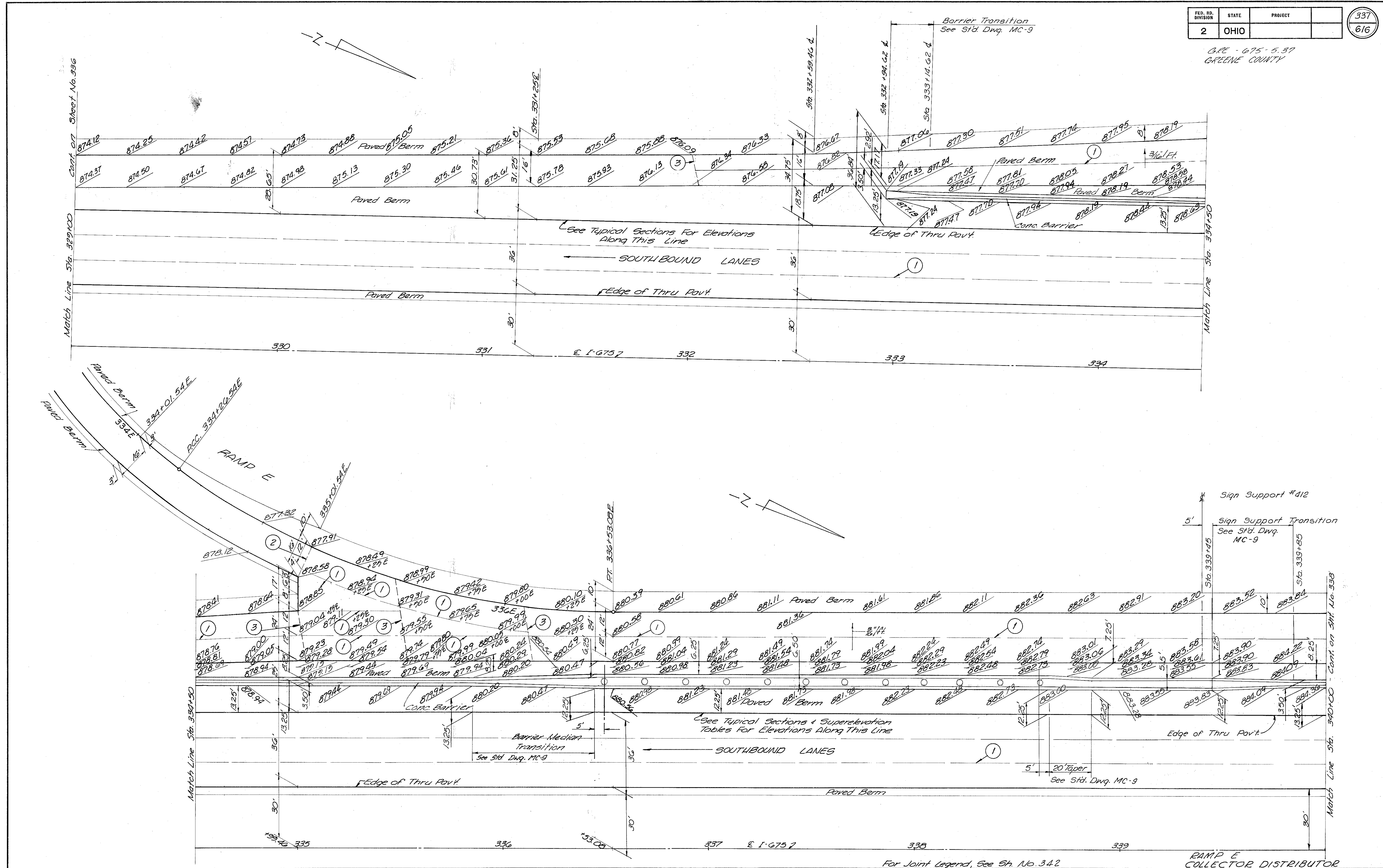


CRF - 675 - 5.37
GREENE COUNTY



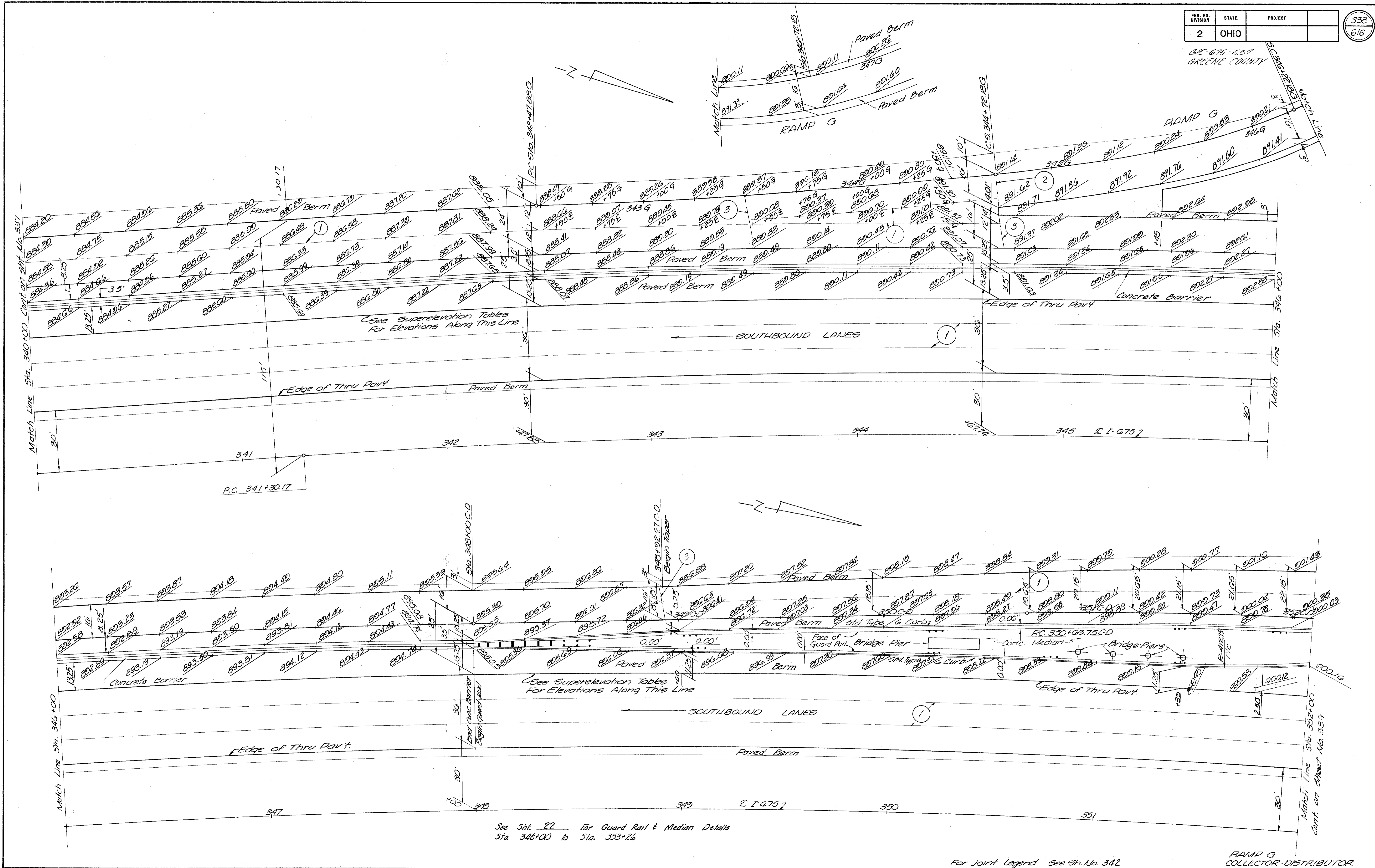
For Joint Legend, See Sh. No. 342

G.R.E. - 675-5.37
GREENE COUNTY



For Joint Legend, See Sh. No. 342
RAMP E
COLLECTOR DISTRIBUTOR
PAVEMENT DETAILS I-675 STA. 329+00 to STA. 340+00 LT.

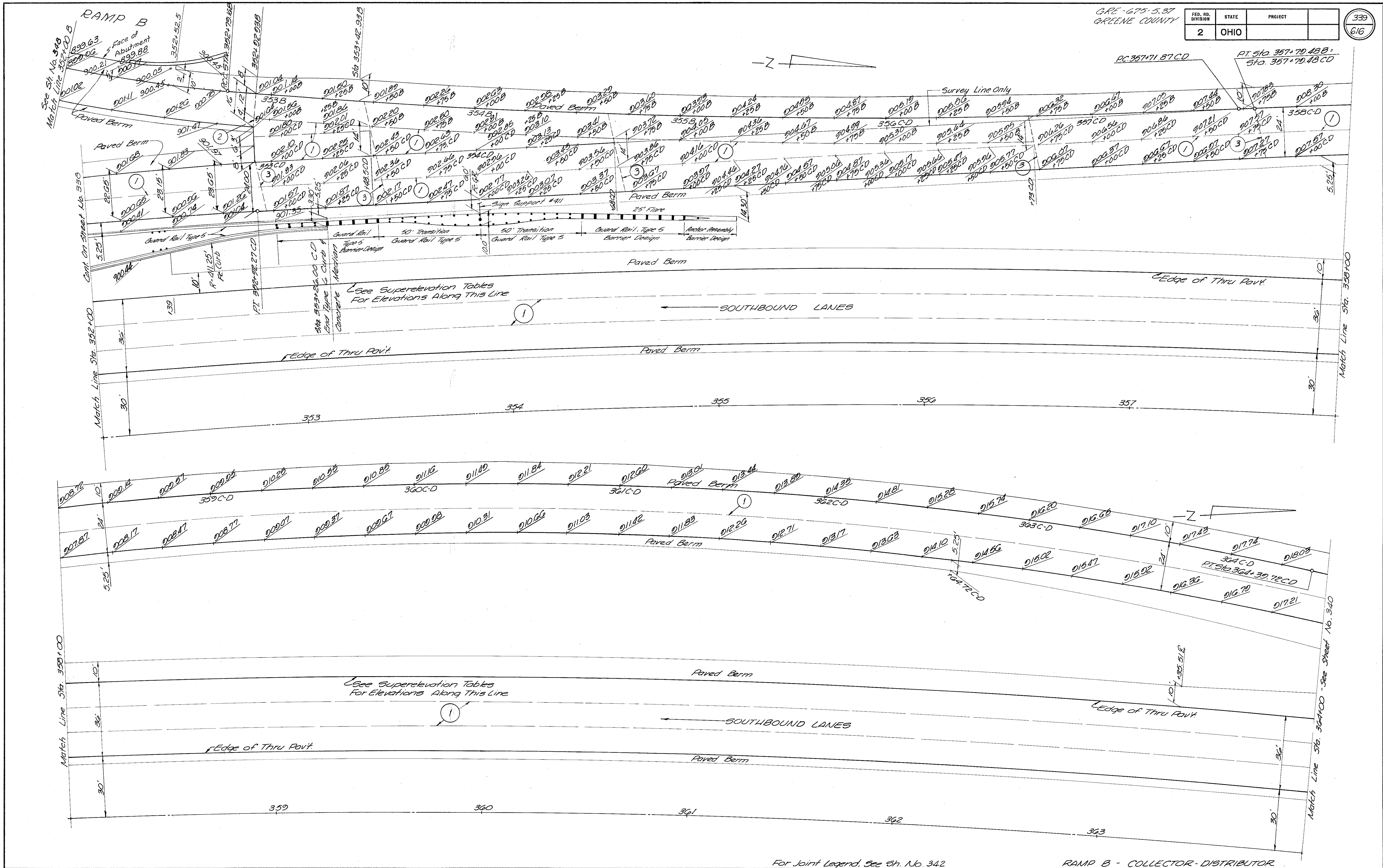
34E-675-637
GREENE COUNTY



See Sht. 22 For Guard Rail & Median Details
Sta. 348+00 to Sta. 353+26

For Joint Legend See Sht. No. 342
RAMP G
COLLECTOR-DISTRIBUTOR
PAVEMENT DETAILS I-675 STA. 340+00 to STA. 352+00 Lt.

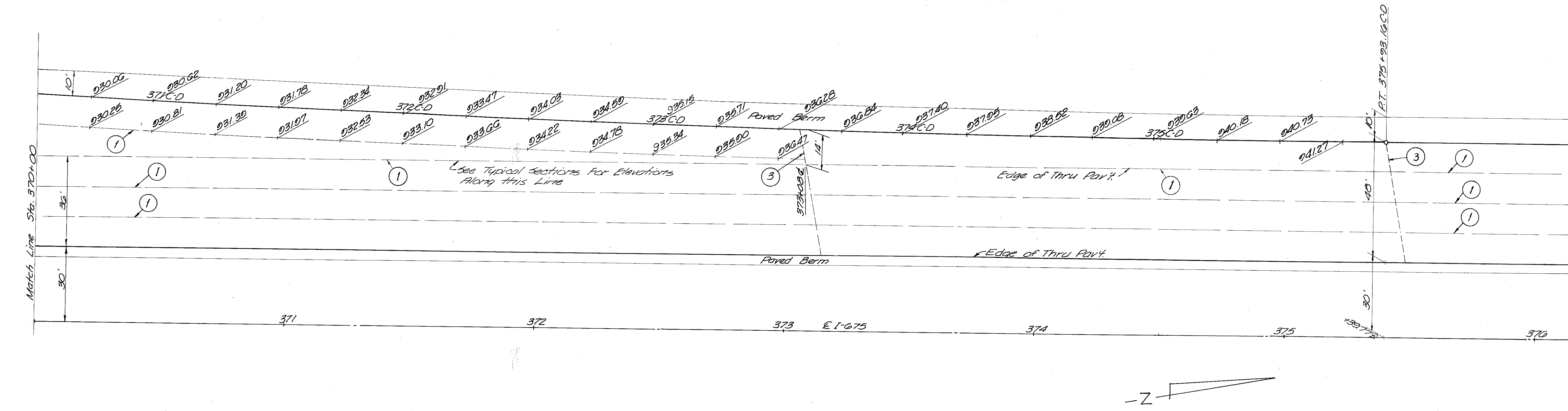
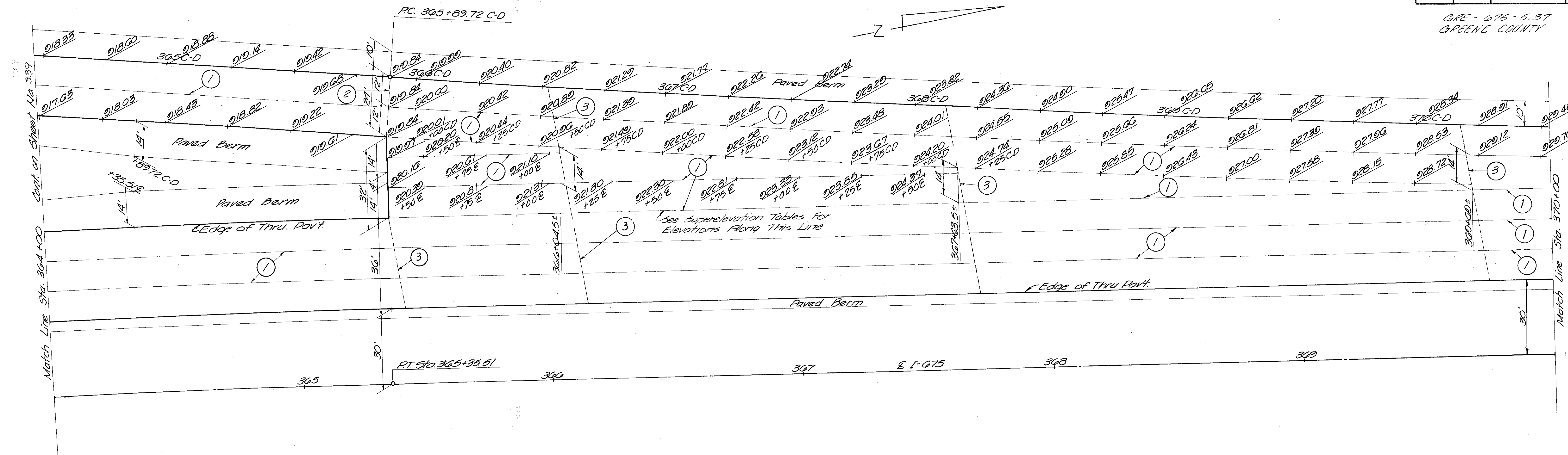
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	



FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

340
616

GRE - 675 - 5.57
GREENE COUNTY

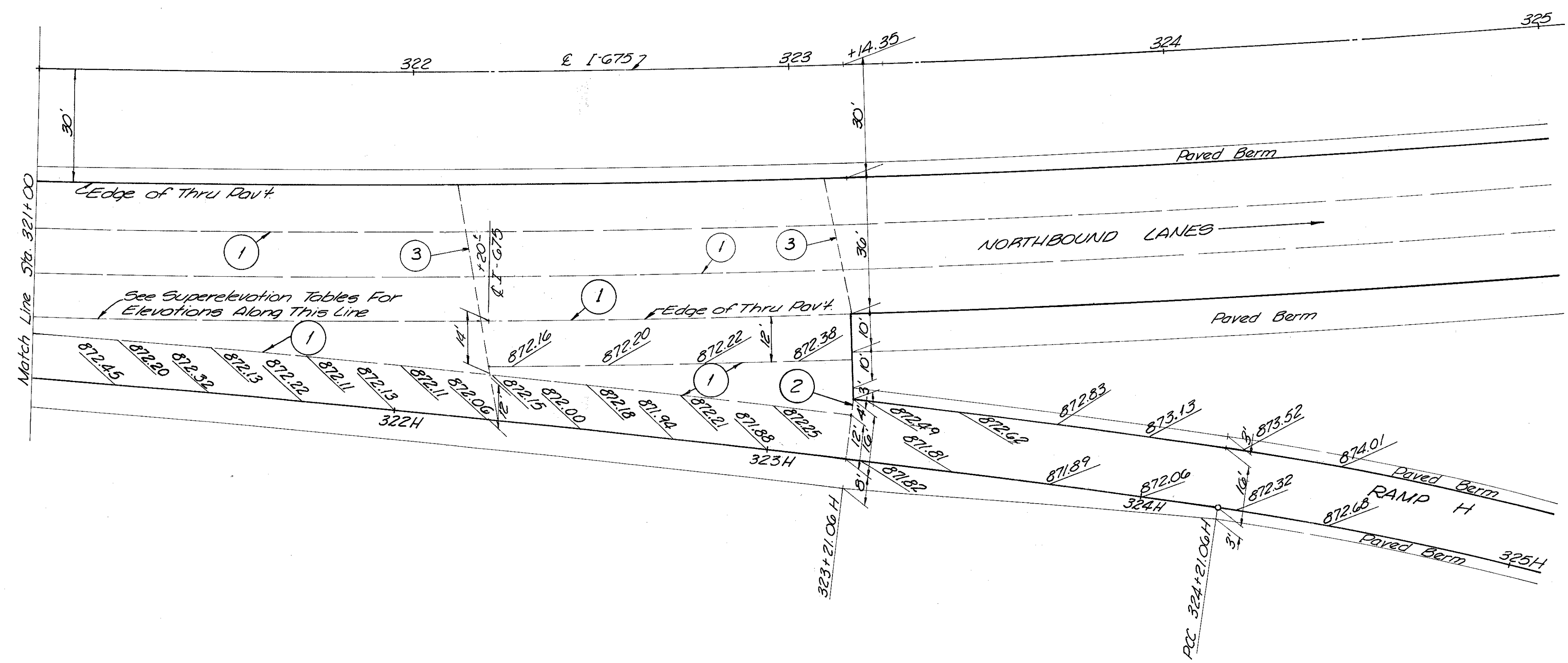
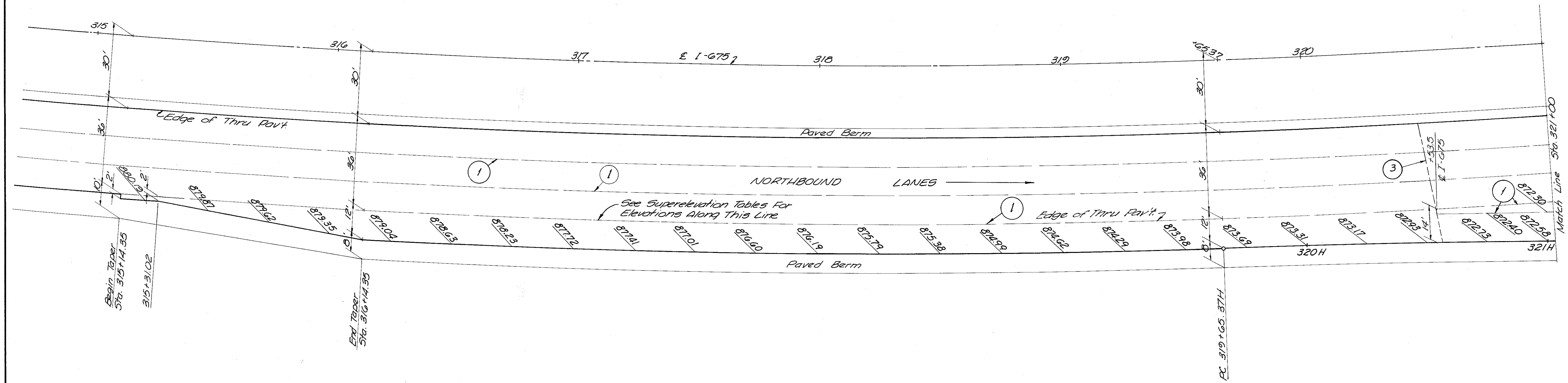
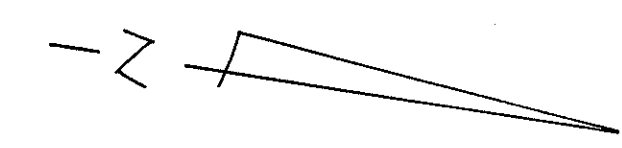


For Joint Legend, See Sh. No. 342

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

341
616

GRE-675-5.37
GREENE COUNTY

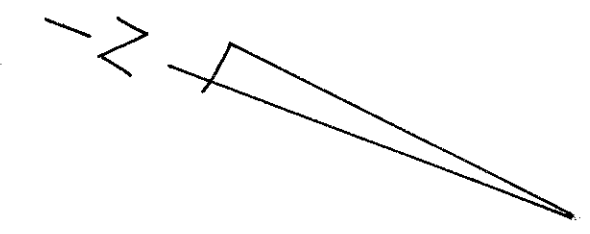
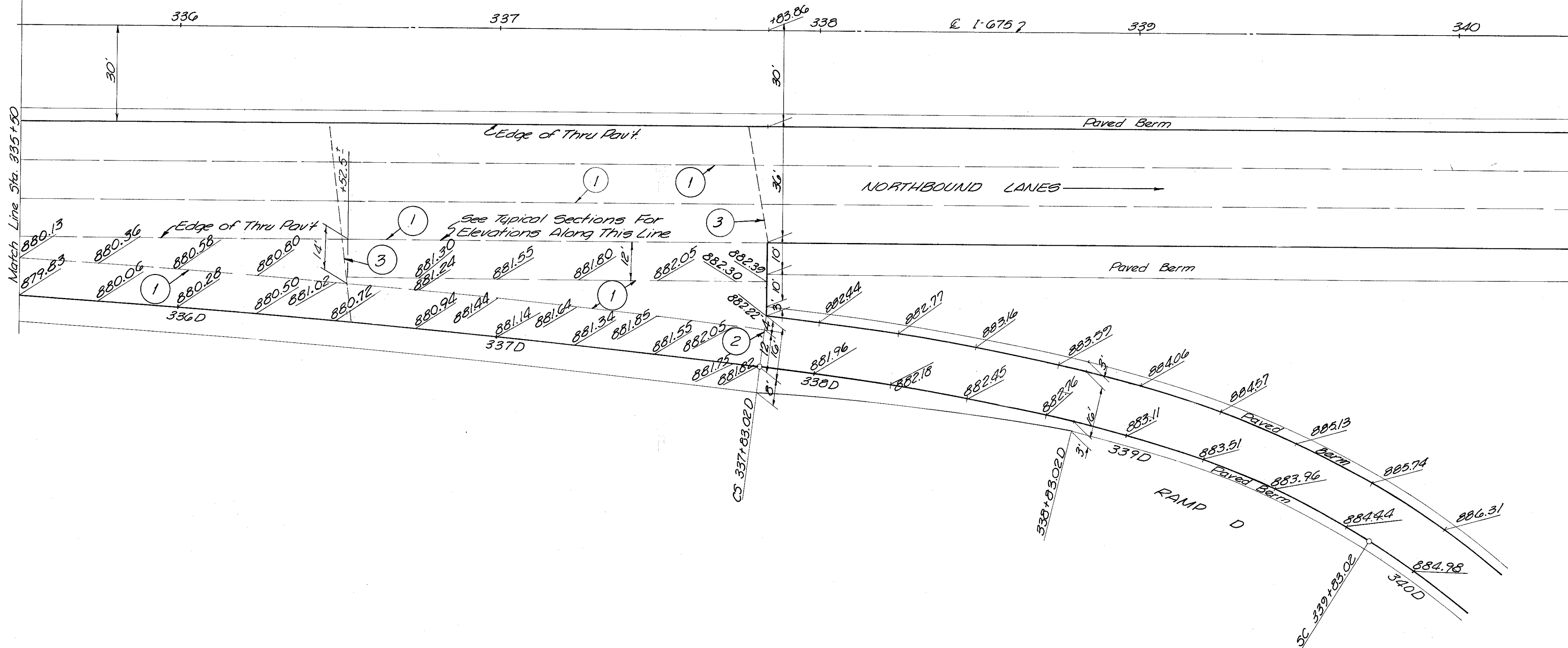
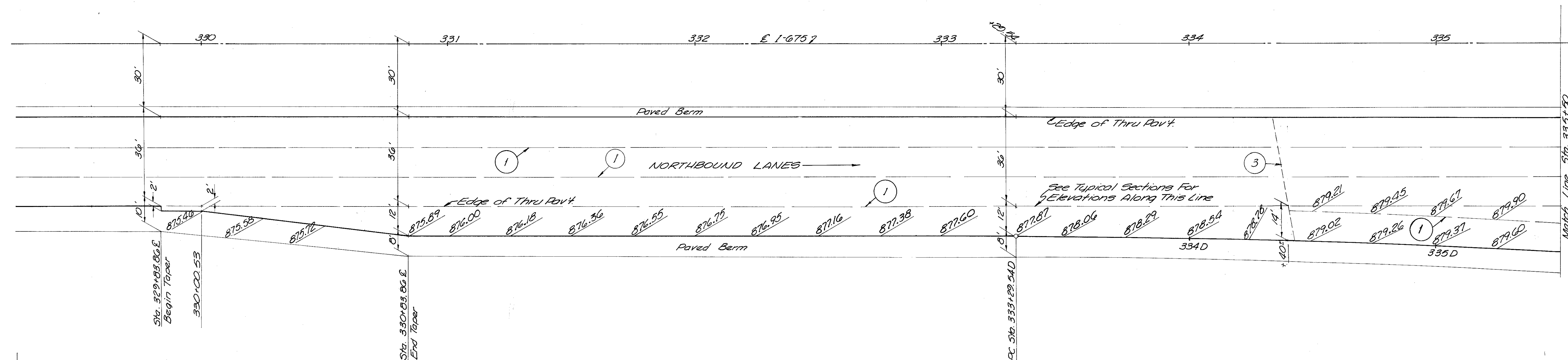
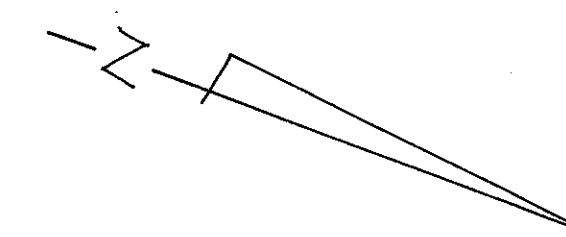


For Joint Legend, See Sh. No. 342

RAMP H

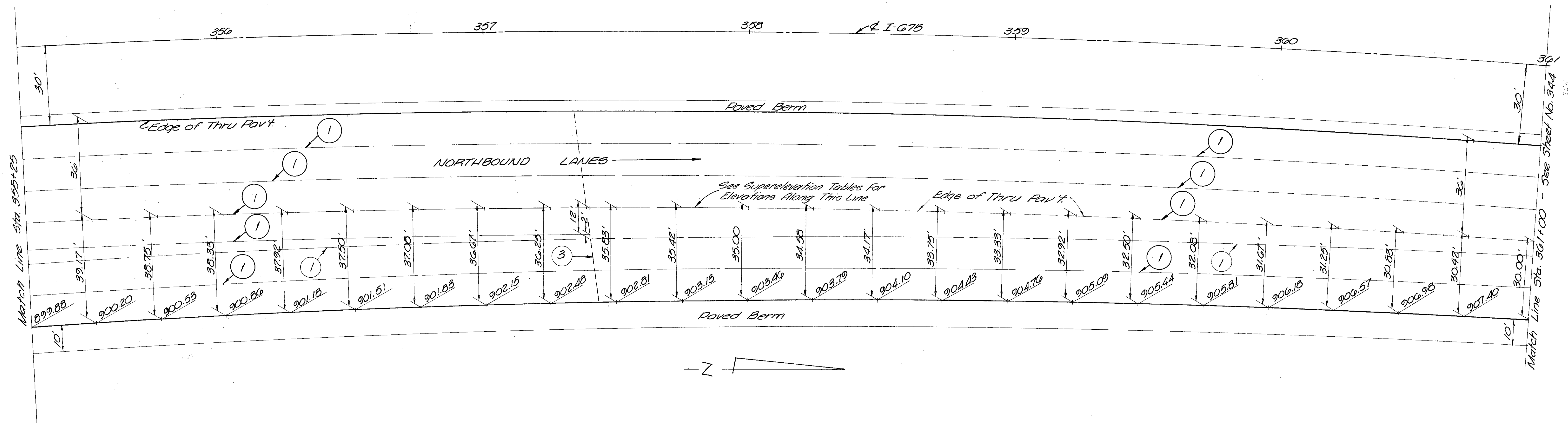
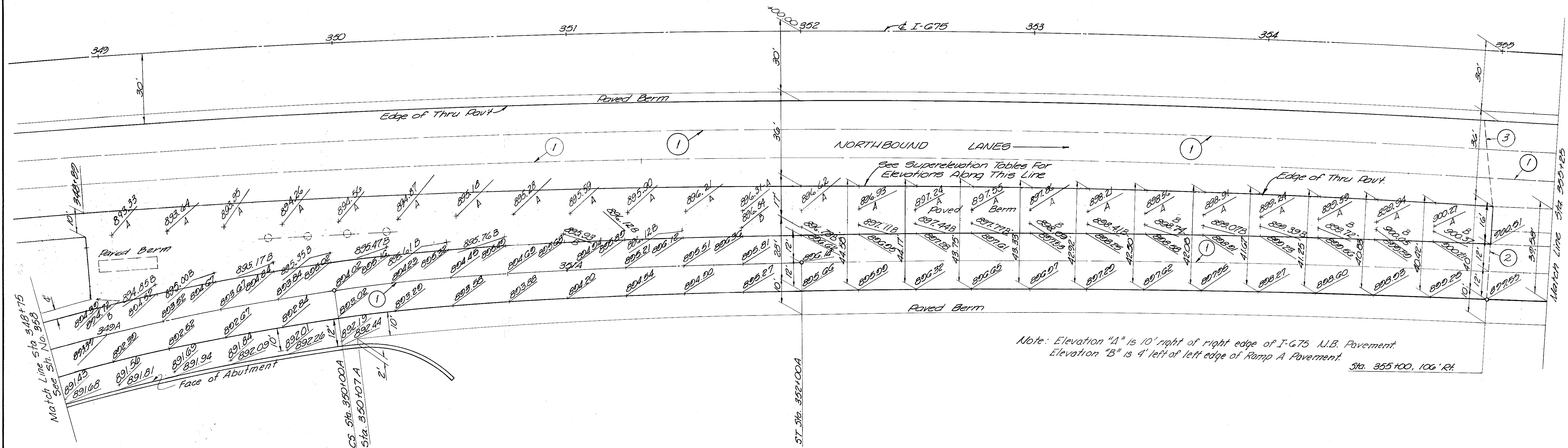
PAVEMENT DETAILS I-675 STA. 315+00 to STA. 325+00Rt.

CR-675-5.37
GREENE COUNTY

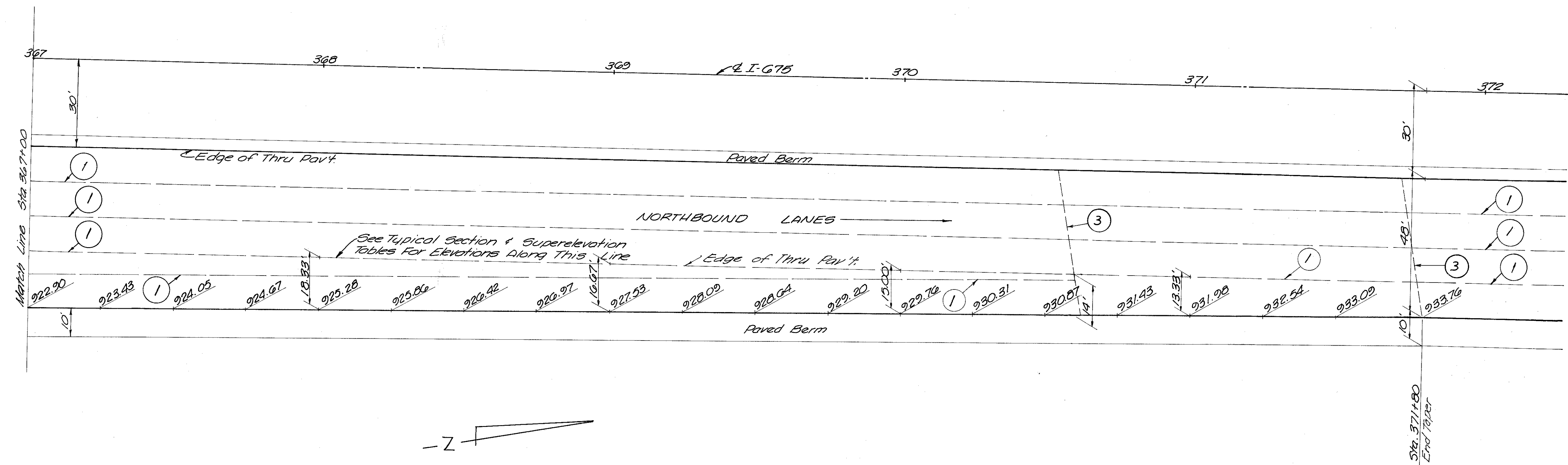
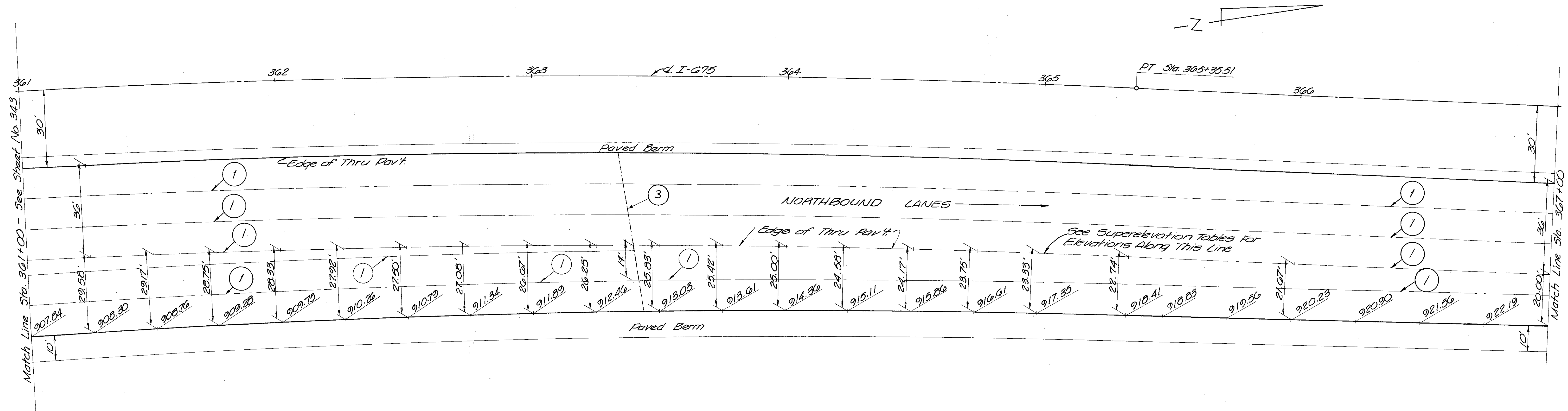


- JOINT LEGEND**
- ① Standard Longitudinal Joint
 - ② Standard Expansion Joint
 - ③ Standard Contraction Joint
 - ④ Butt Joint
 - ⑤ Expansion Joint Without Dowels

For Joint Legend, See Sta. No. 342 RAMP D



C.R.E. - 675-5.57
GREENE COUNTY



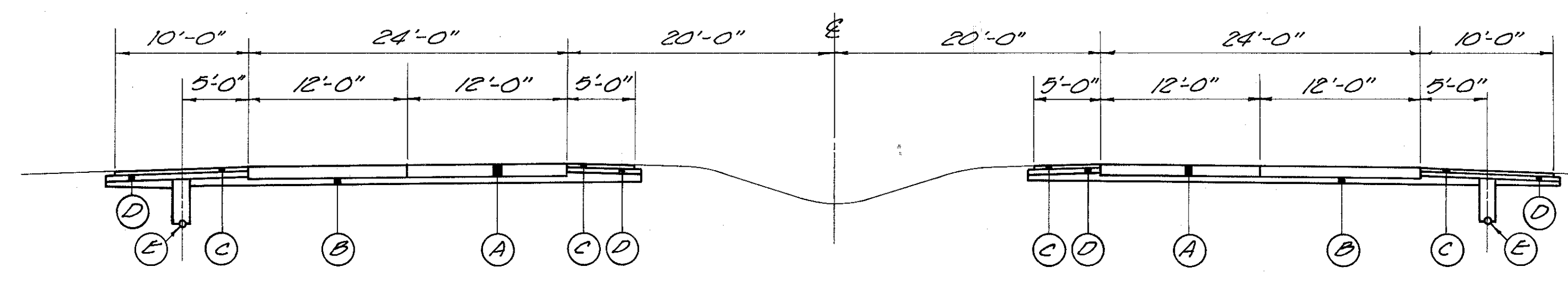
For Joint Legend, See Sh. No. 342

RAMP A

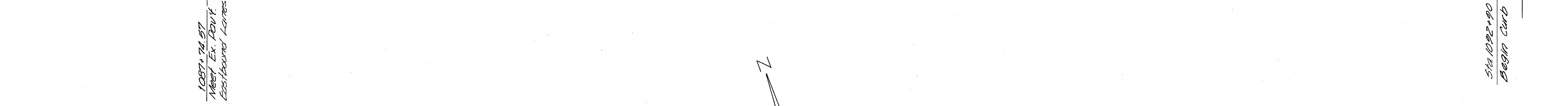
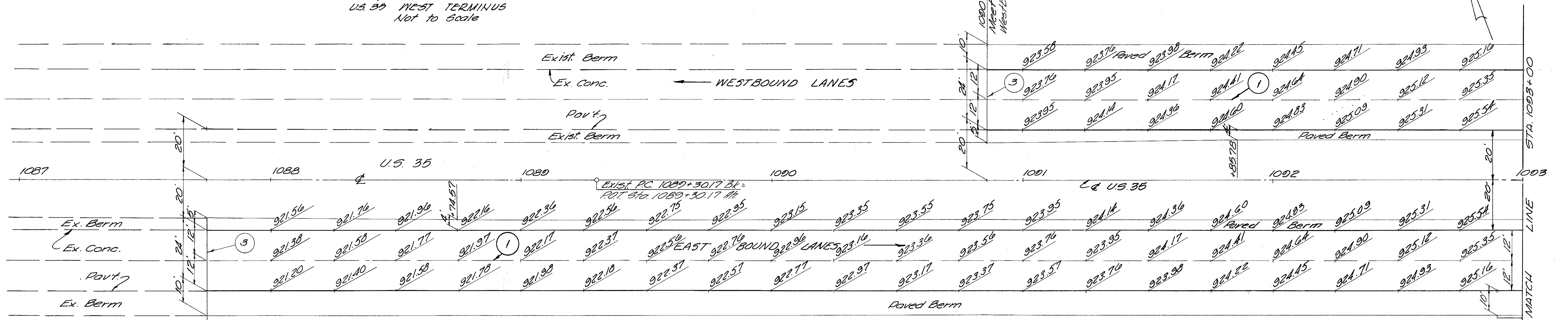
C.R.F. - 675 - 5.37
GREENE COUNTY

EXISTING TYPICAL SECTION
LEGEND

- (A) 9" Reinf. Concrete Pav't.
- (B) 6" Subbase
- (C) 3" Waterproofed Aggregate Base Course
- (D) 5" Stabilized Crushed Aggregate
- (E) Ex. 6" Underdrain

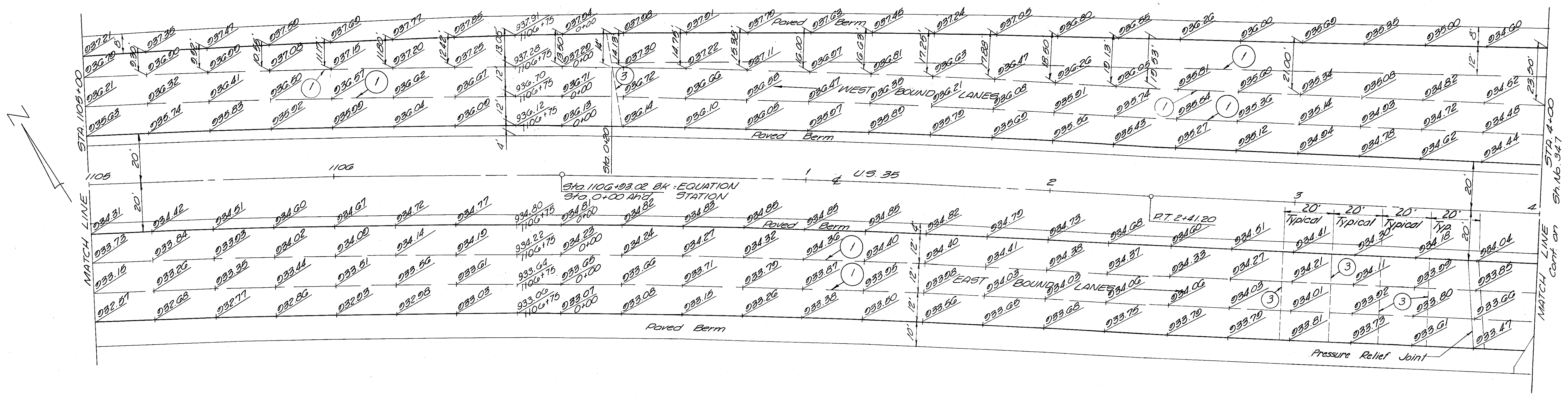
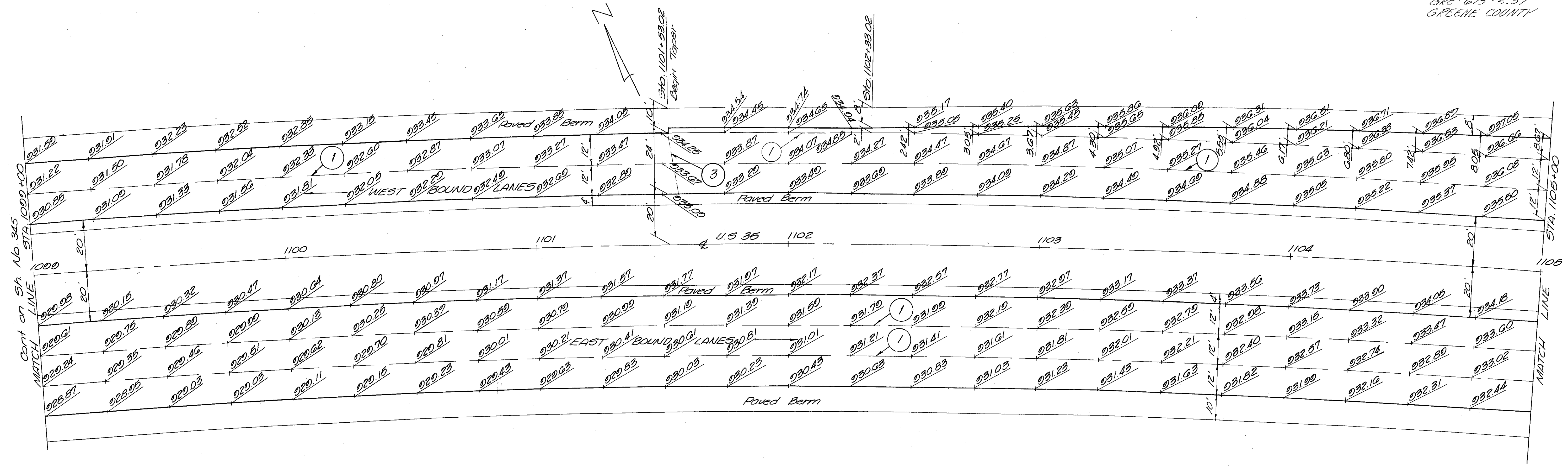


EXISTING PAVEMENT SECTION
U.S. 35 WEST TERMINUS
Not to scale



For Joint Legend, See Sh. No. 342

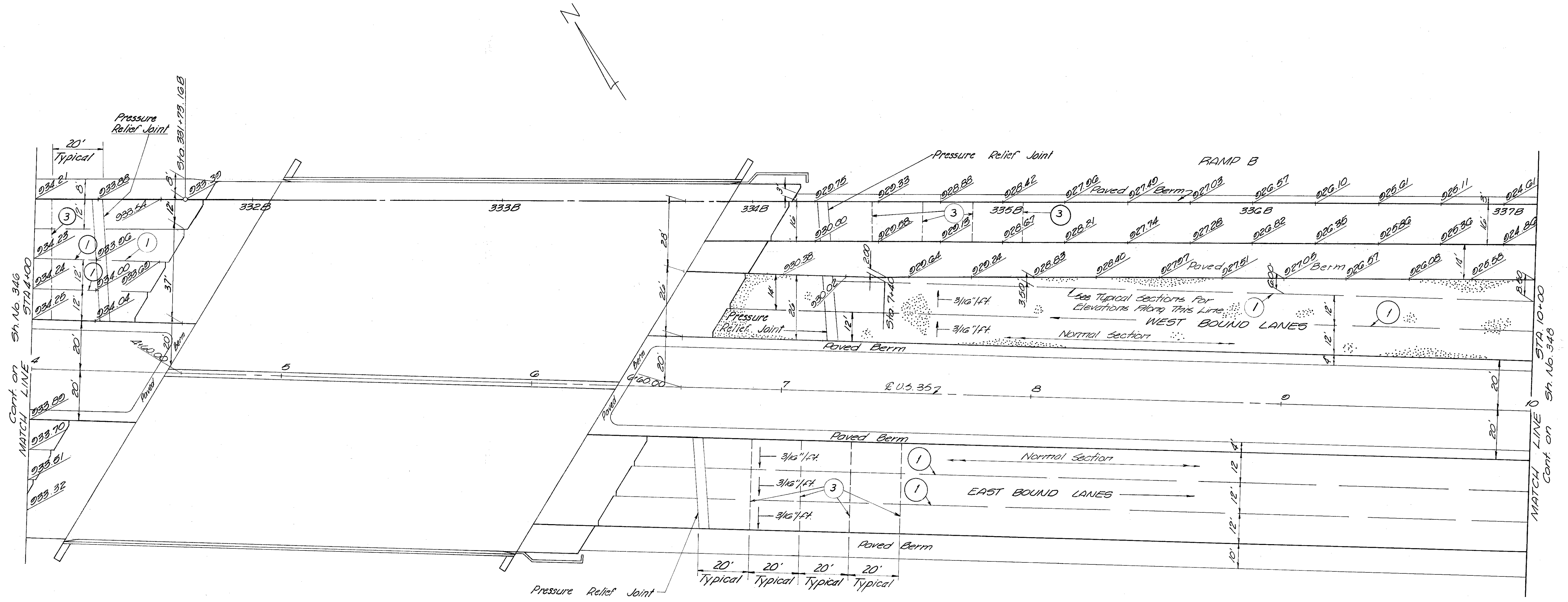
CRE-675-5.37
GREENE COUNTY



For Joint Legend, See Sh. No. 342

U.S. 35 PAVEMENT DETAILS - STA. 1000+00 to STA. 1140+00

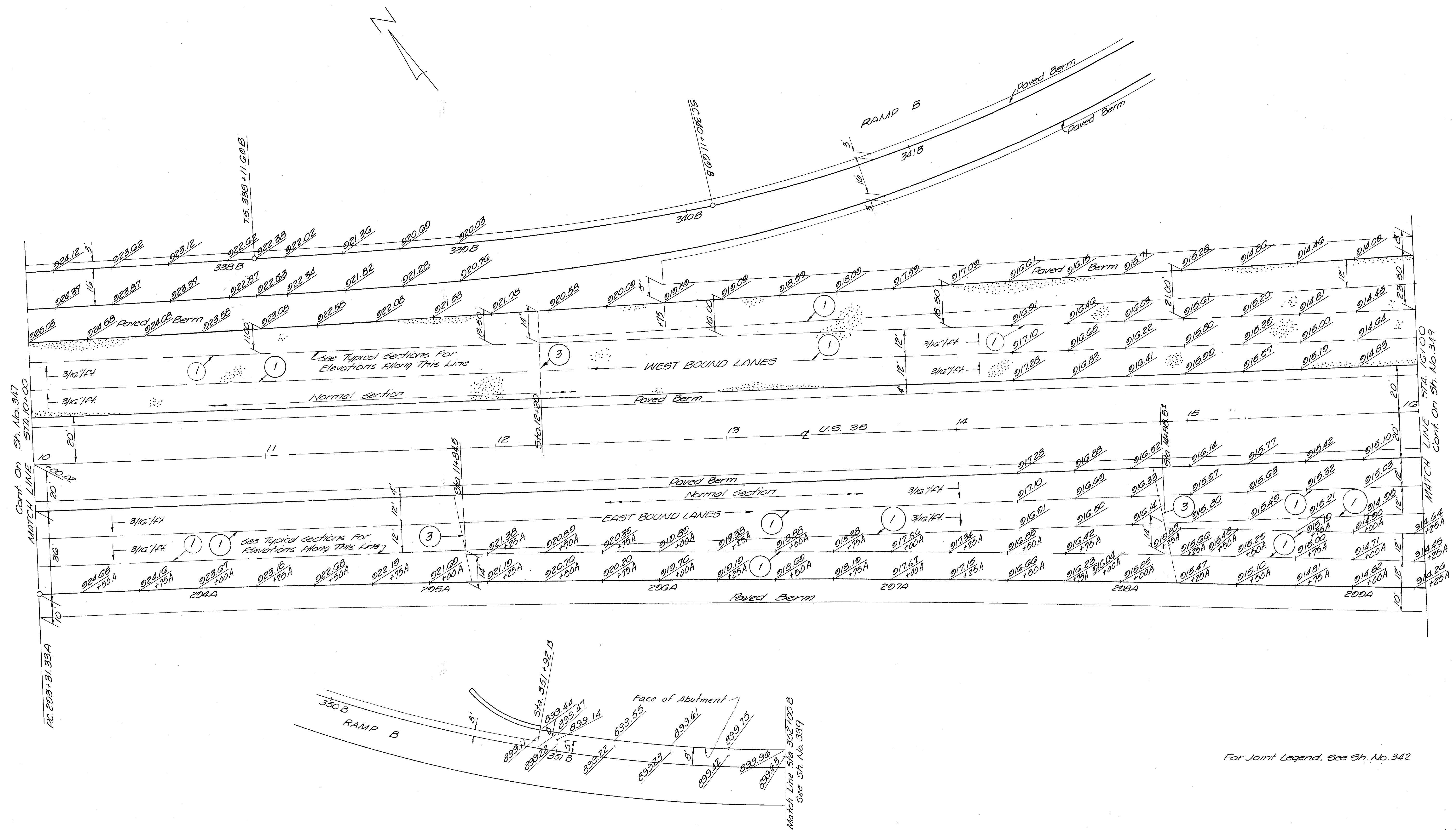
GRE-675-5.57
GREENE COUNTY



For Joint Legend See Sh. No. 342

RAMP B
COLLECTOR - DISTRIBUTOR

GRE - 675 - 5.37
GREENE COUNTY



For Joint Legend, See Sh. No. 342

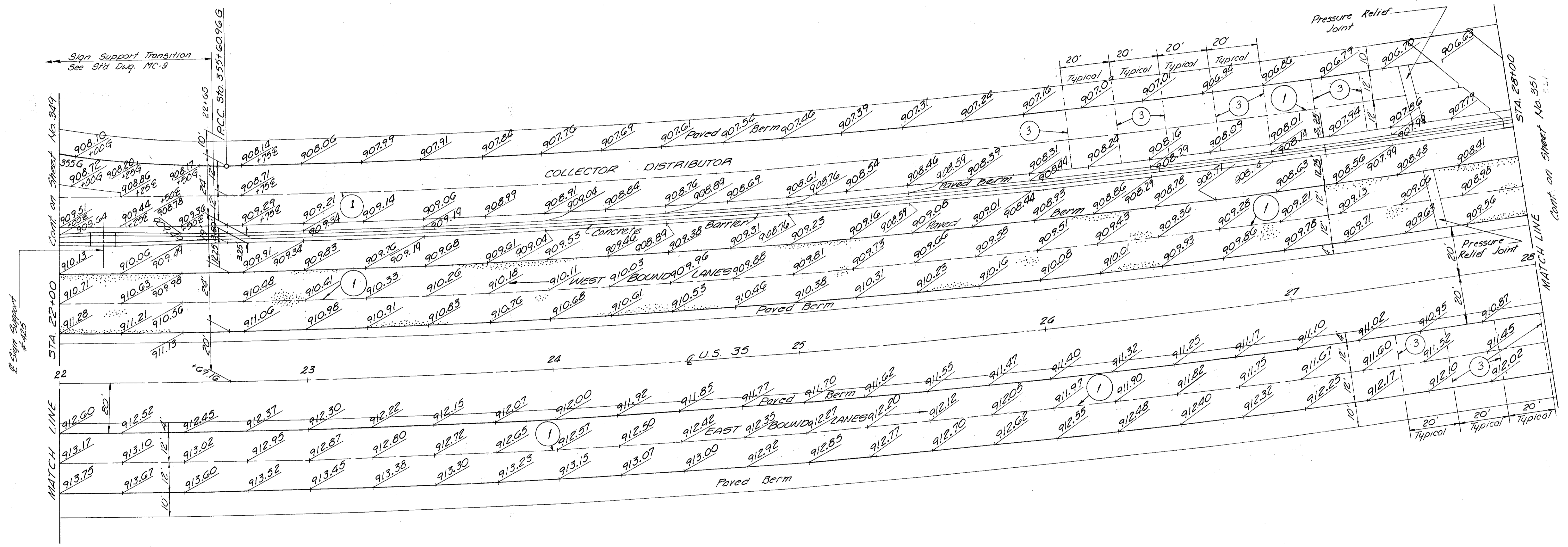
RAMP A
RAMP B
COLLECTOR - DISTRIBUTOR

CR-675-537
GREENE COUNTY



For Joint Legend, See Sh. No. 342

GRE-675-5.37
GREENE COUNTY

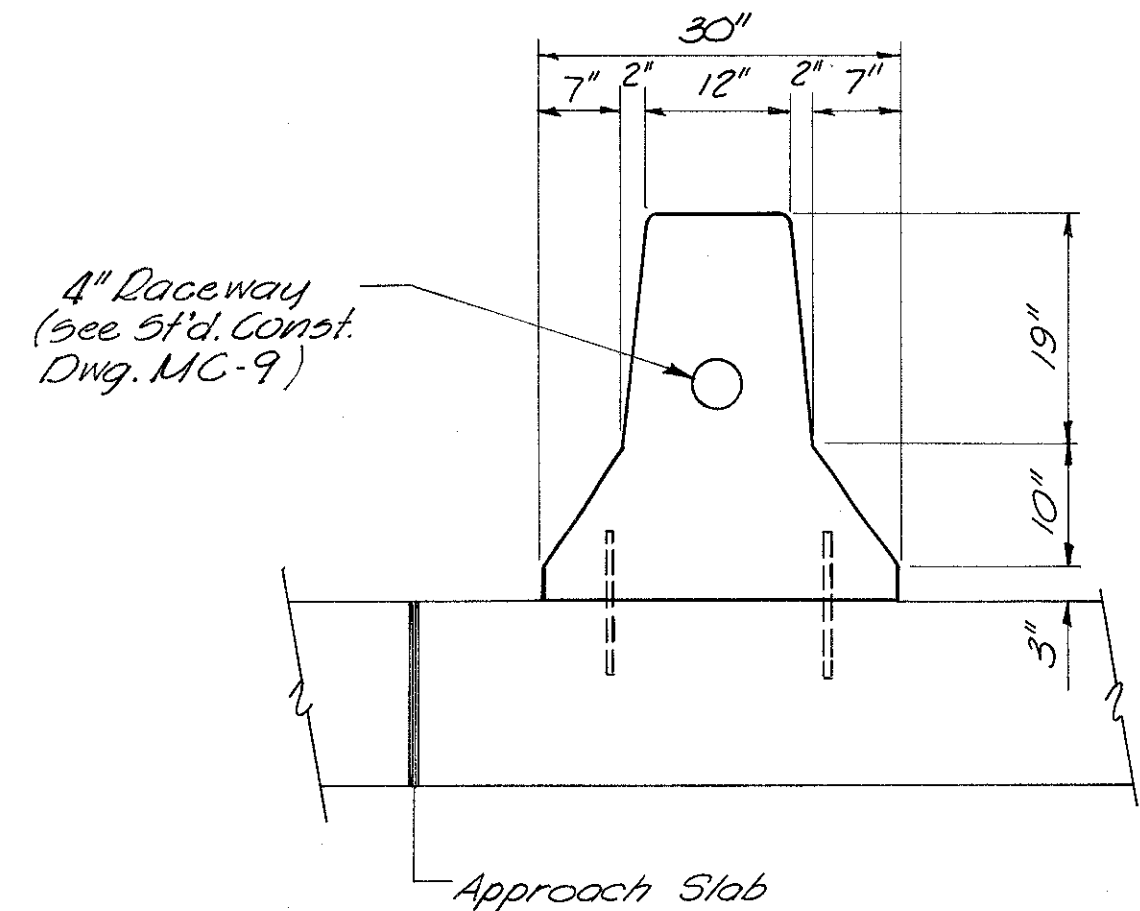


For Joint Legend, See Sh. No. 342

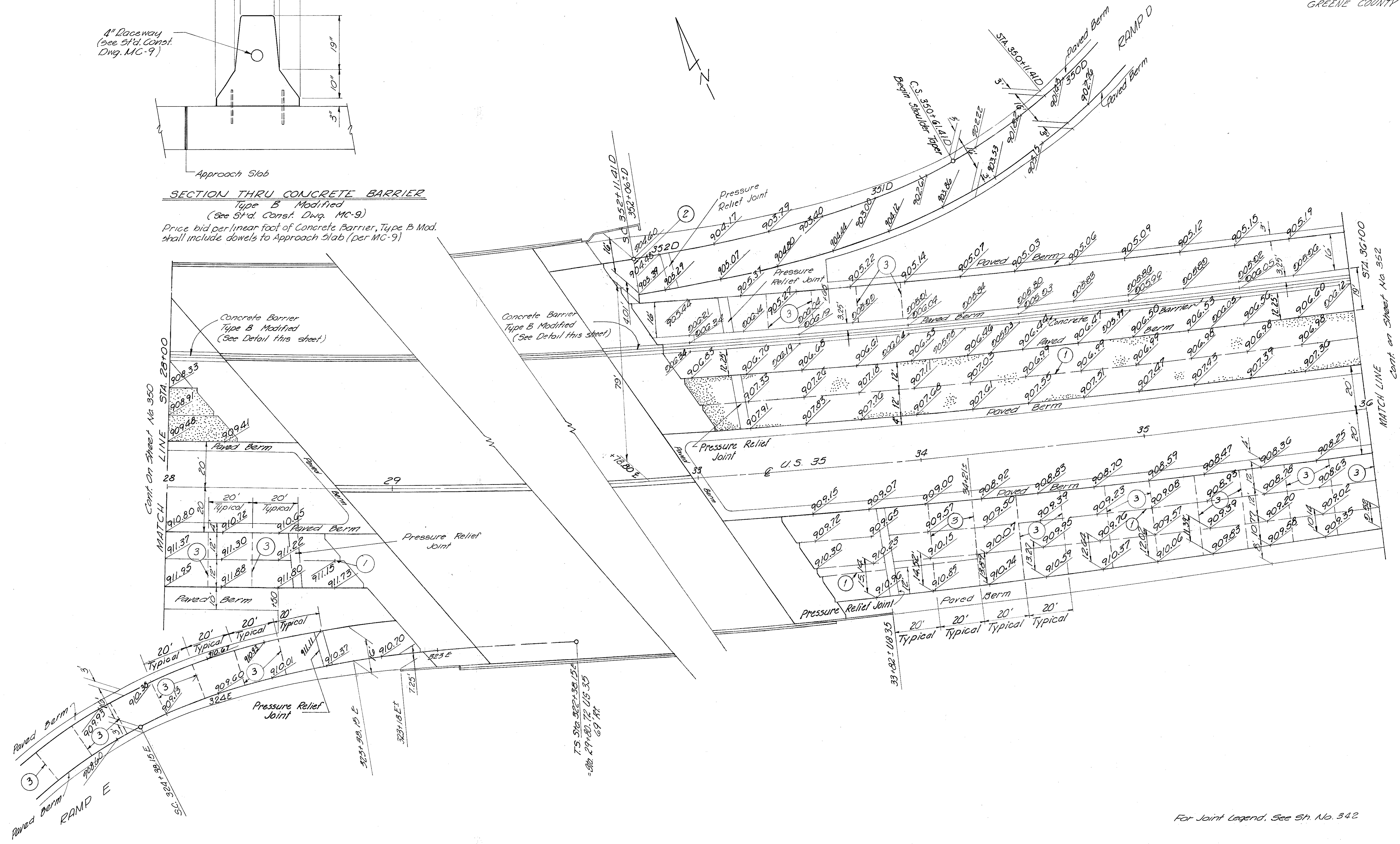
RAMP 5
COLLECTOR DISTRIBUTOR

U.S. 35 PAVEMENT DETAILS STA. 22+00 to STA. 28+00

GRE-675-5.57
GREENE COUNTY



SECTION THRU CONCRETE BARRIER
Type B Modified
(See St'd. Const. Dwg. MC-9)
Price bid per linear foot of Concrete Barrier, Type B Mod. shall include dowels to Approach Slab (per MC-9)

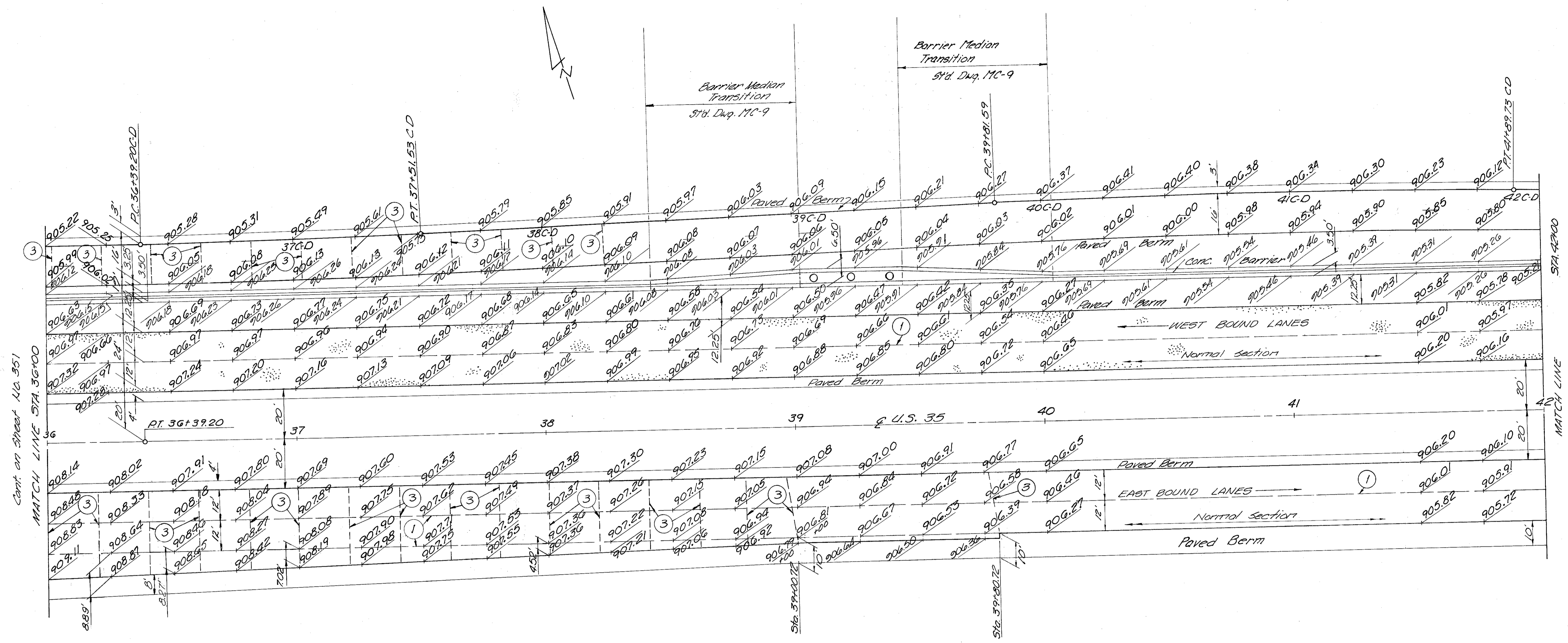


For Joint Legend, See Sh. No. 342

RAMP D
RAMP E
COLLECTOR DISTRIBUTOR

U.S. 35 PAVEMENT DETAILS STA. 28+00 to STA. 36+00

CRF - 675-537
GREENE COUNTY



Cont. on Sheet No. 351
MATCH LINE STA. 36+00

Cont. on Sheet No. 353
MATCH LINE STA. 42+00

For Joint Legend, See Sh. No. 342

GRE - 675-5.87
GREENE COUNTY

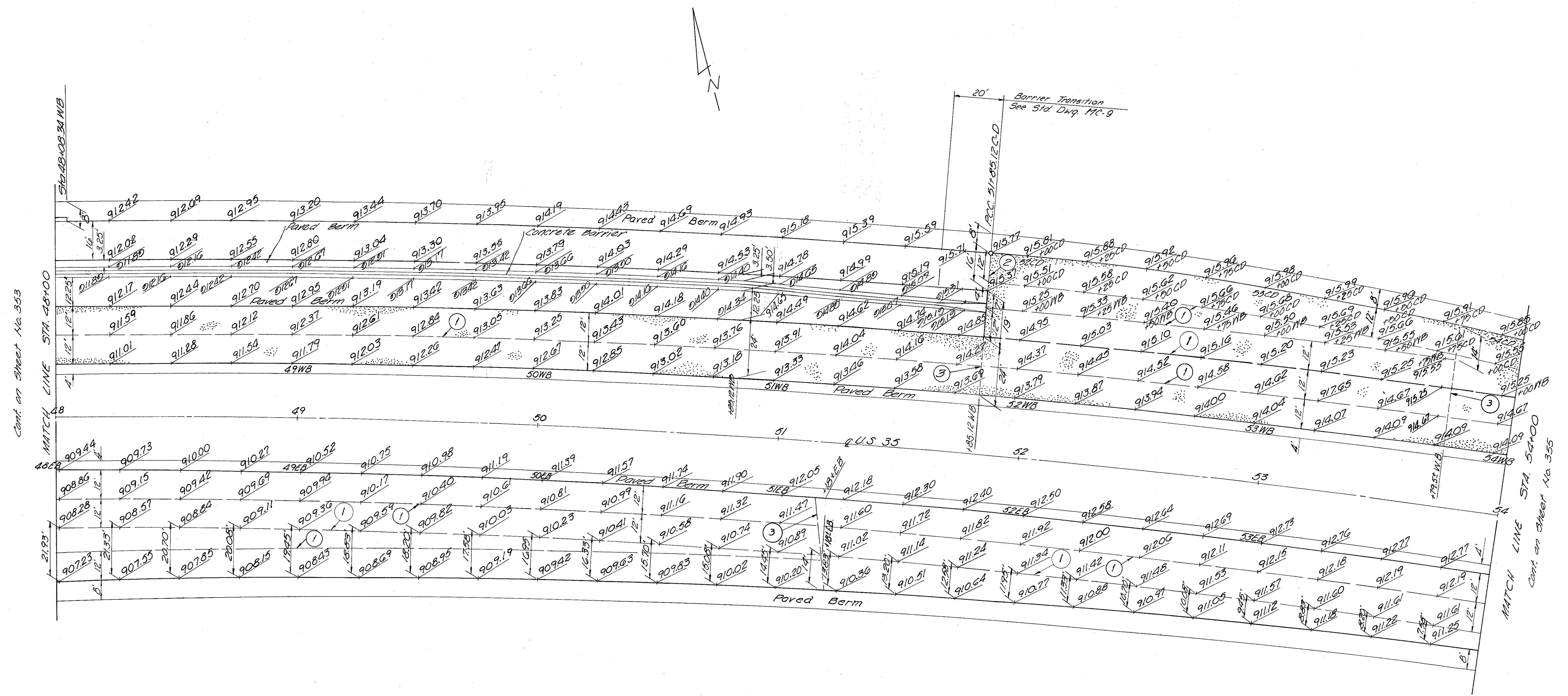


For Joint Legend, See Sh. No. 342

RAMP F
RAMP H
COLLECTOR DISTRIBUTOR

U.S. 35 PAVEMENT DETAILS STA. 42+00 to STA. 48+00

GRE - 075 - 5.37
GREENE COUNTY



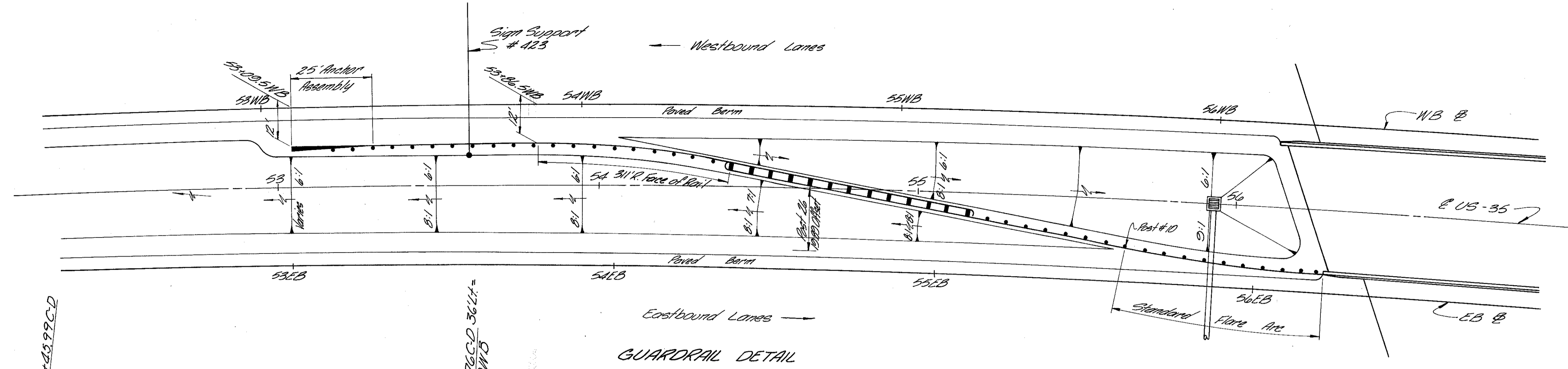
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Cont. on Sheet No. 355

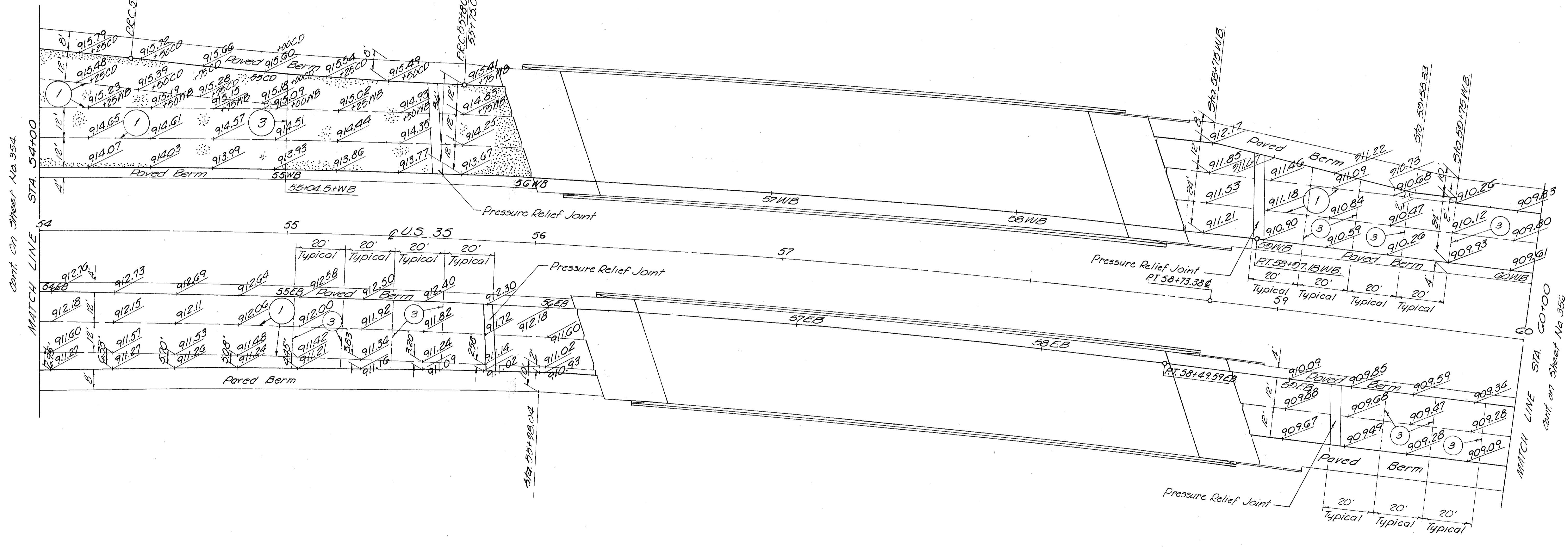
For Joint Legend, See Sheet No. 342

Ramp H
Collector - Distributor

BRE - 075-5.37
GREENE COUNTY



GUARDRAIL DETAIL



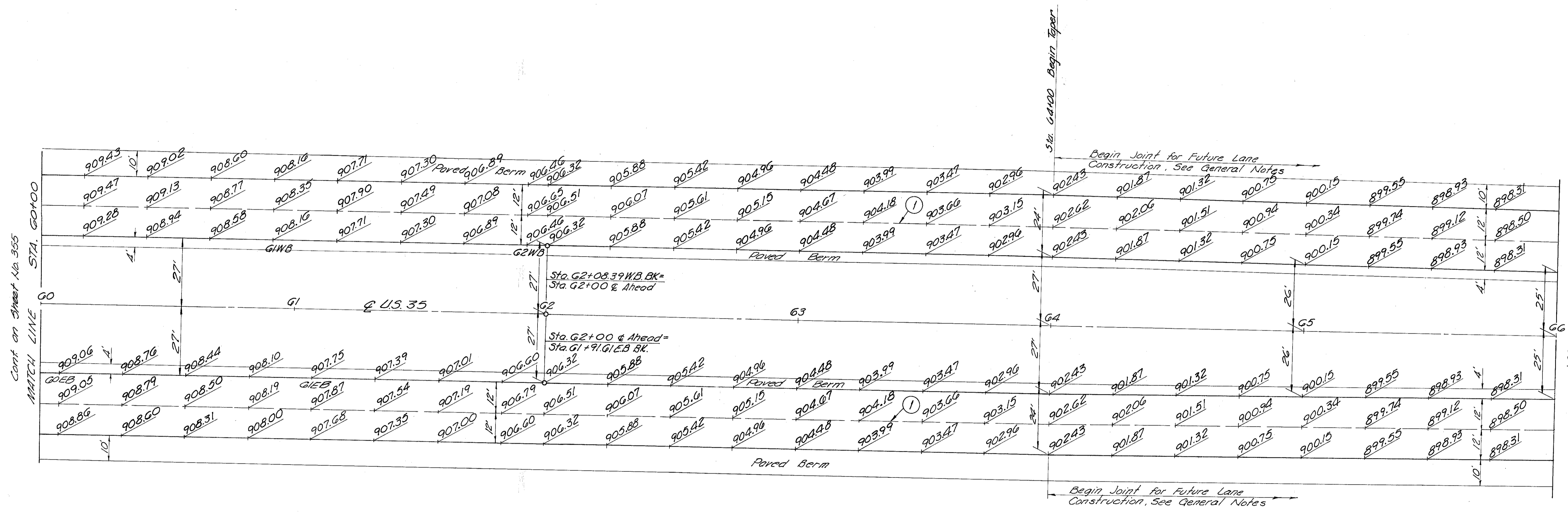
Cont. On Sheet No. 354

MATCH LINE STA. 60+00
Cont. on Sheet No. 356

For Joint Legend, See Sheet No. 342

Ramp 4
Collector - Distributor

GRE-675-5.37
GREENE COUNTY

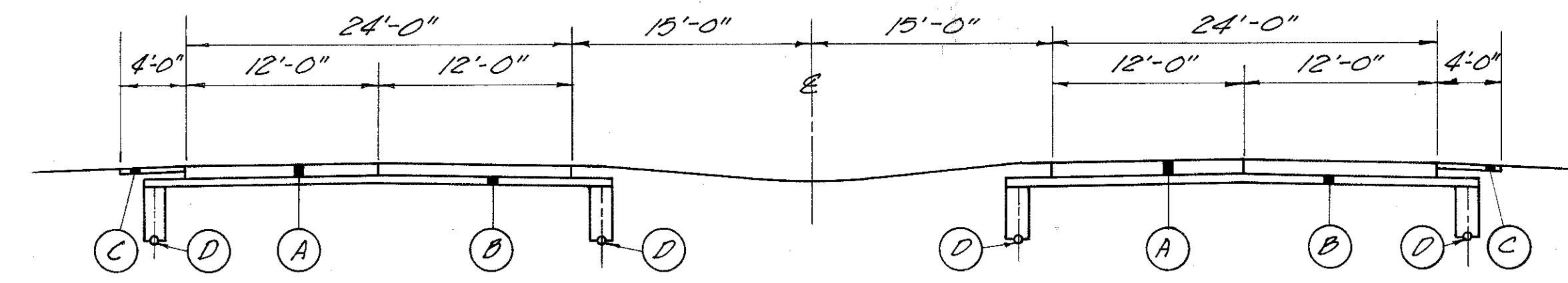
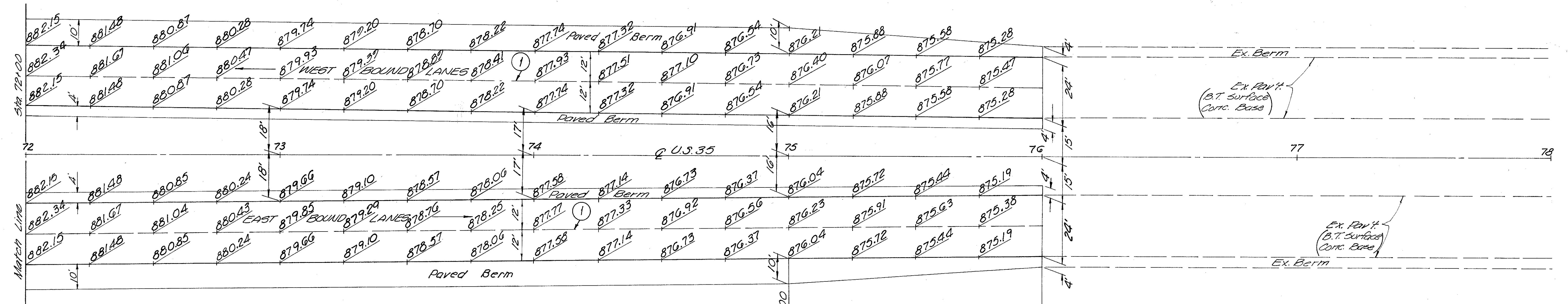
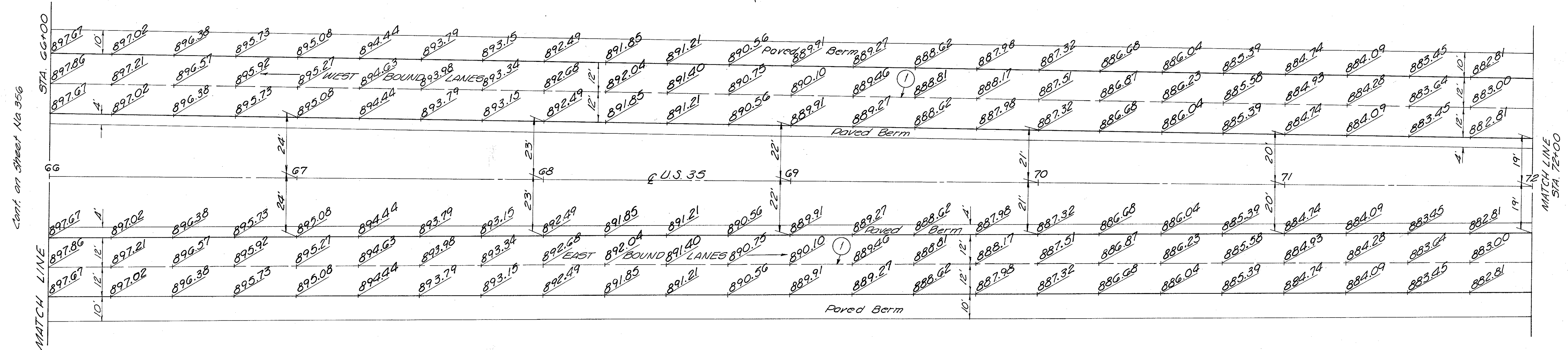
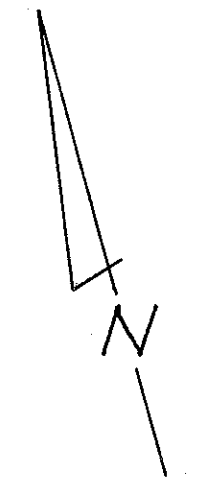


Cont. on Sheet No. 355
MATCH LINE STA. 60+00

MATCH LINE STA. 66+00
Cont. on Sheet No. 357

For Joint Legend, See Sp. No. 342

GRE - 675 - 5.37
GREENE COUNTY

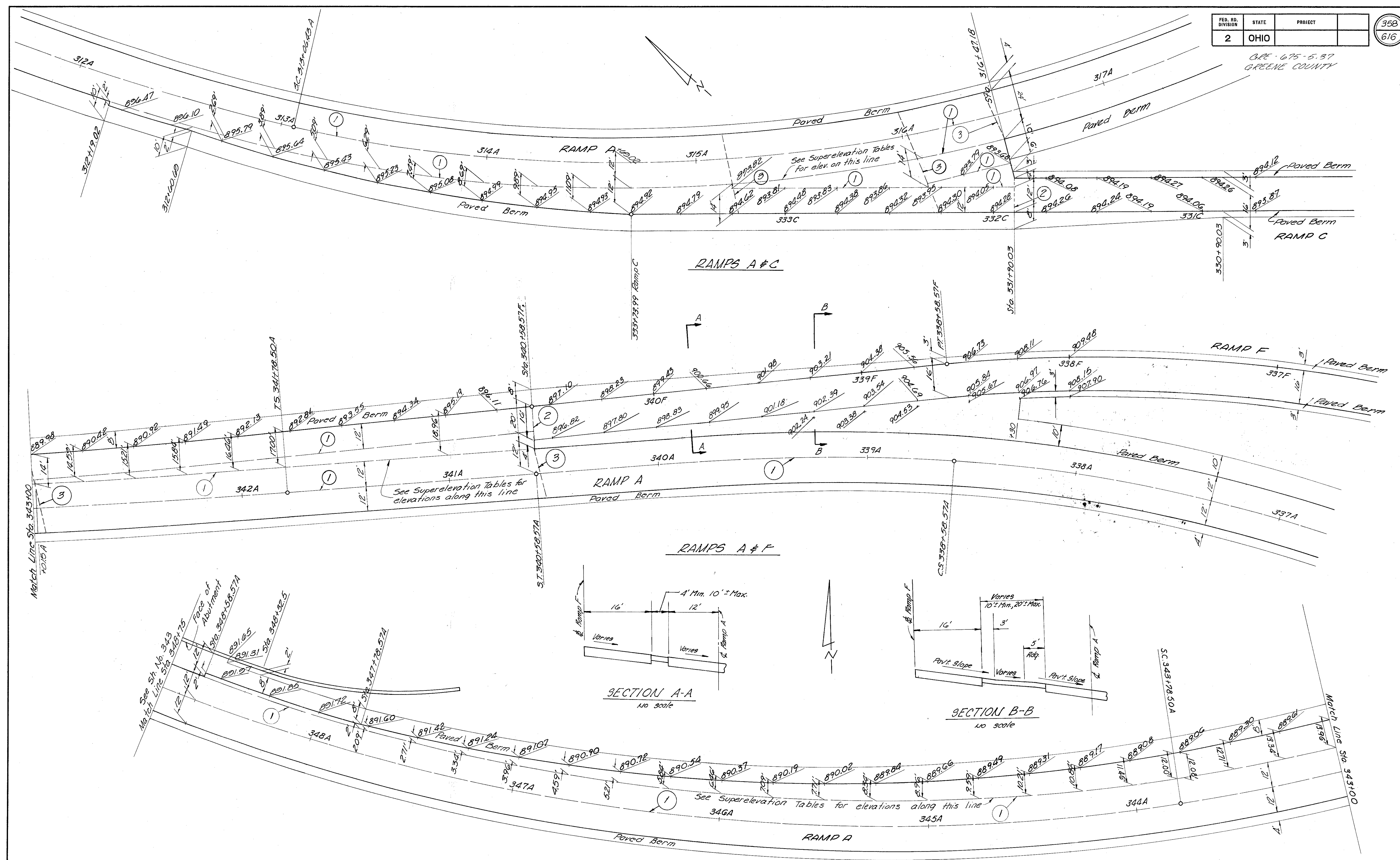


EXISTING PAVEMENT SECTION
U.S. 35 EAST TERMINUS
Not to Scale

- EXISTING TYPICAL SECTION
LEGEND
- (A) 9" Reinforced Concrete Pavement
 - (B) 6" Subbase
 - (C) 4" Stabilized Crushed Aggregate
 - (D) 6" Underdrain

For Joint Legend, See Sh. No. 342

GRE 675-5.37
GREENE COUNTY

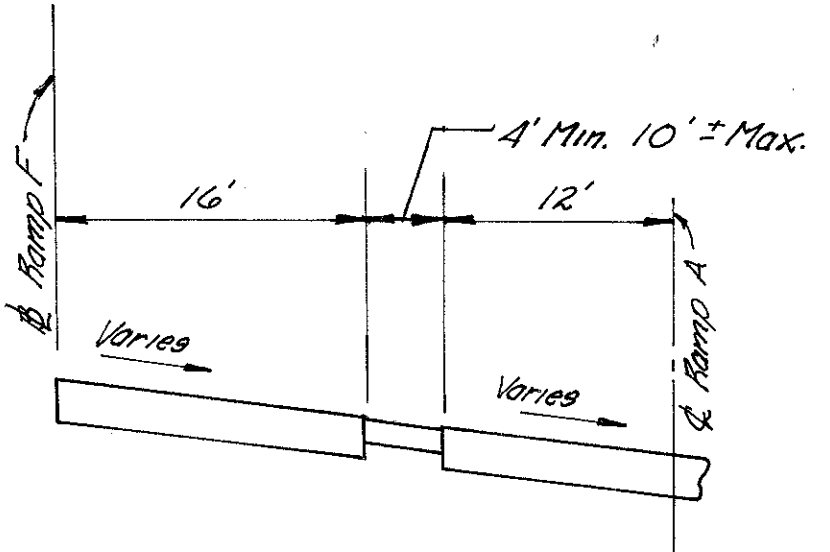


See Super-elevation Tables for elevations along this line

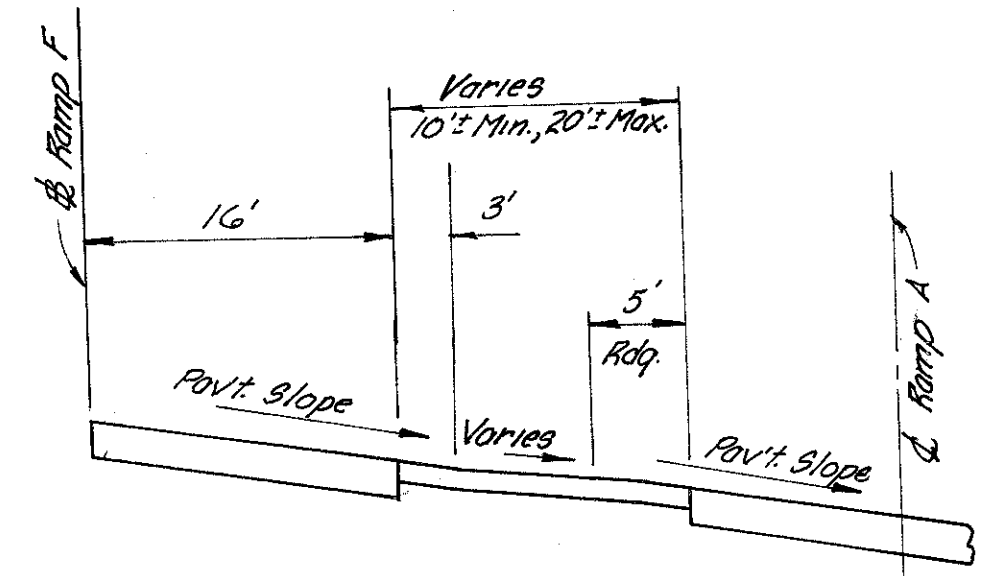
See Super-elevation Tables for elev. on this line

RAMPS A & F

RAMPS A & C



SECTION A-A
no scale



SECTION B-B
no scale

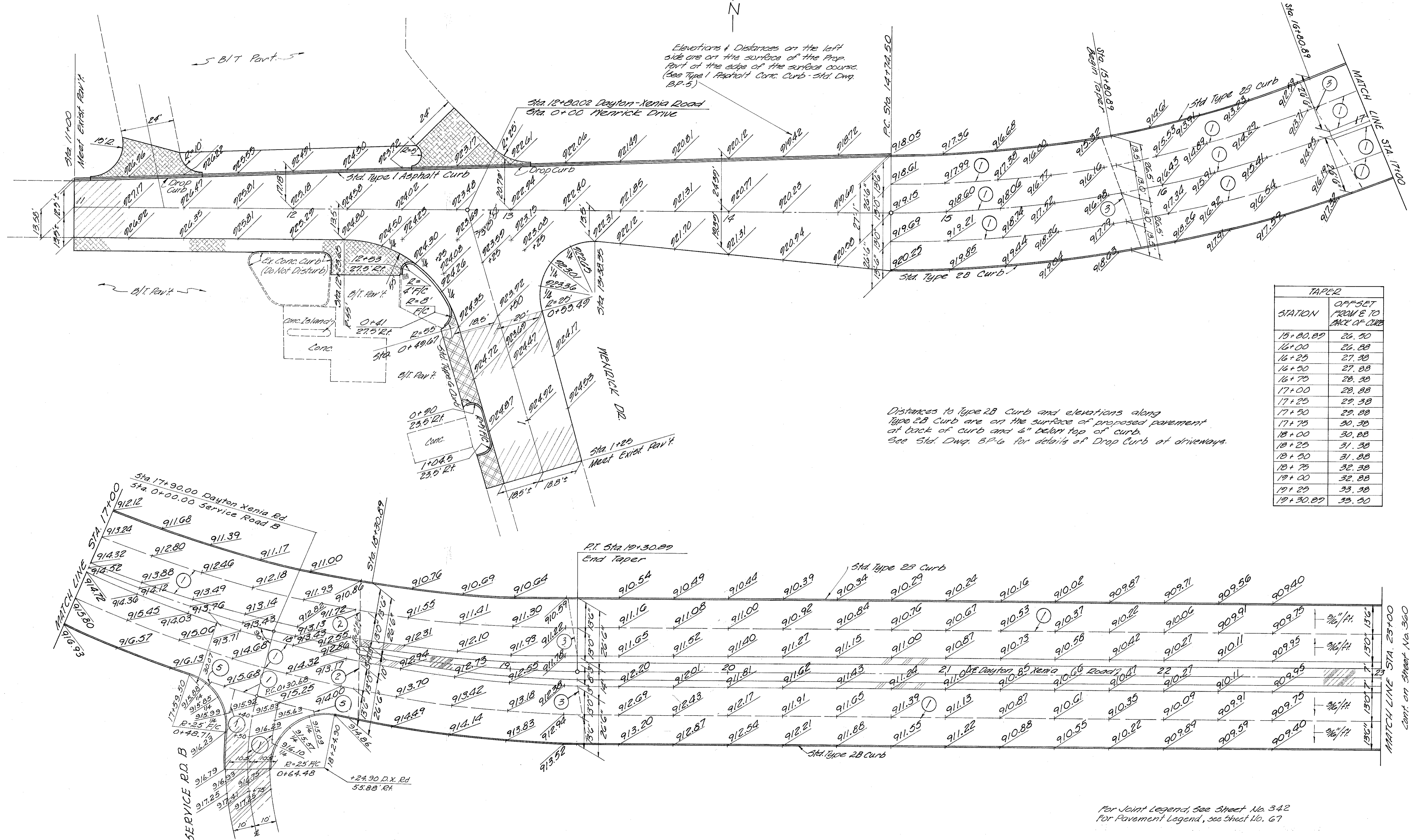
See Sh. No. 343
Match Line Sta. 343+75
Face of Abutment
Sta. 343+58.574

See Super-elevation Tables for elevations along this line

CR-675-5.37
GREENE COUNTY



Elevations & Distances on the left side are on the surface of the Prop. Pavt at the edge of the surface course. (See Type 1 Asphalt Conc. Curb - Std. Dwg. BP-5)



TAPER	
STATION	OFF-SET FROM E TO BACK OF CURB
15+80.89	26.50
16+00	26.88
16+25	27.38
16+50	27.88
16+75	28.38
17+00	28.88
17+25	29.38
17+50	29.88
17+75	30.38
18+00	30.88
18+25	31.38
18+50	31.88
18+75	32.38
19+00	32.88
19+25	33.38
19+30.89	33.50

Distances to Type 2B Curb and elevations along Type 2B Curb are on the surface of proposed pavement at back of curb and 6" below top of curb. See Std. Dwg. BP-6 for details of Drop Curb at driveways.

For Joint Legend, See Sheet No. 342
For Pavement Legend, see Sheet No. 67

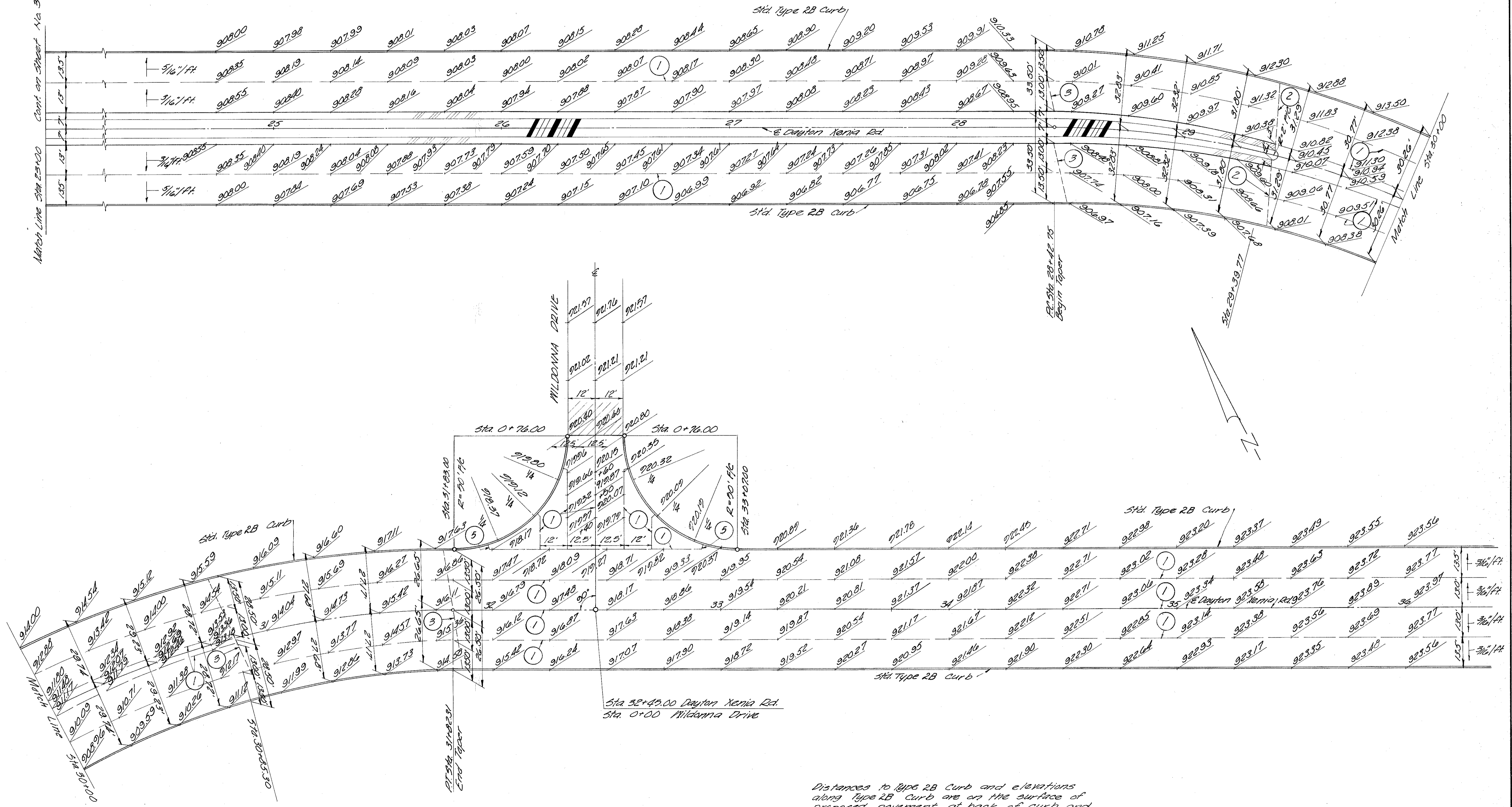
MATCH LINE STA. 23+00
Cont. on Sheet No. 360

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

360
616

CRF-675-5.37
GREENE COUNTY

Match Line Sta 23+00 Cont. on Sheet No. 359

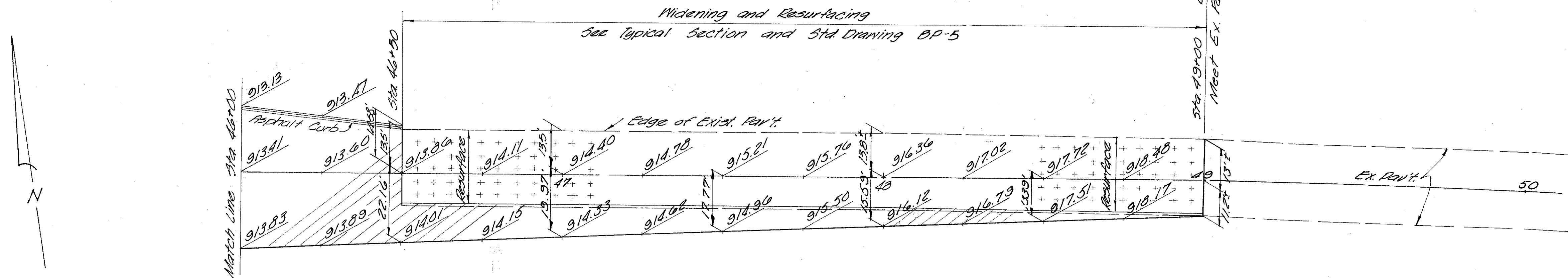
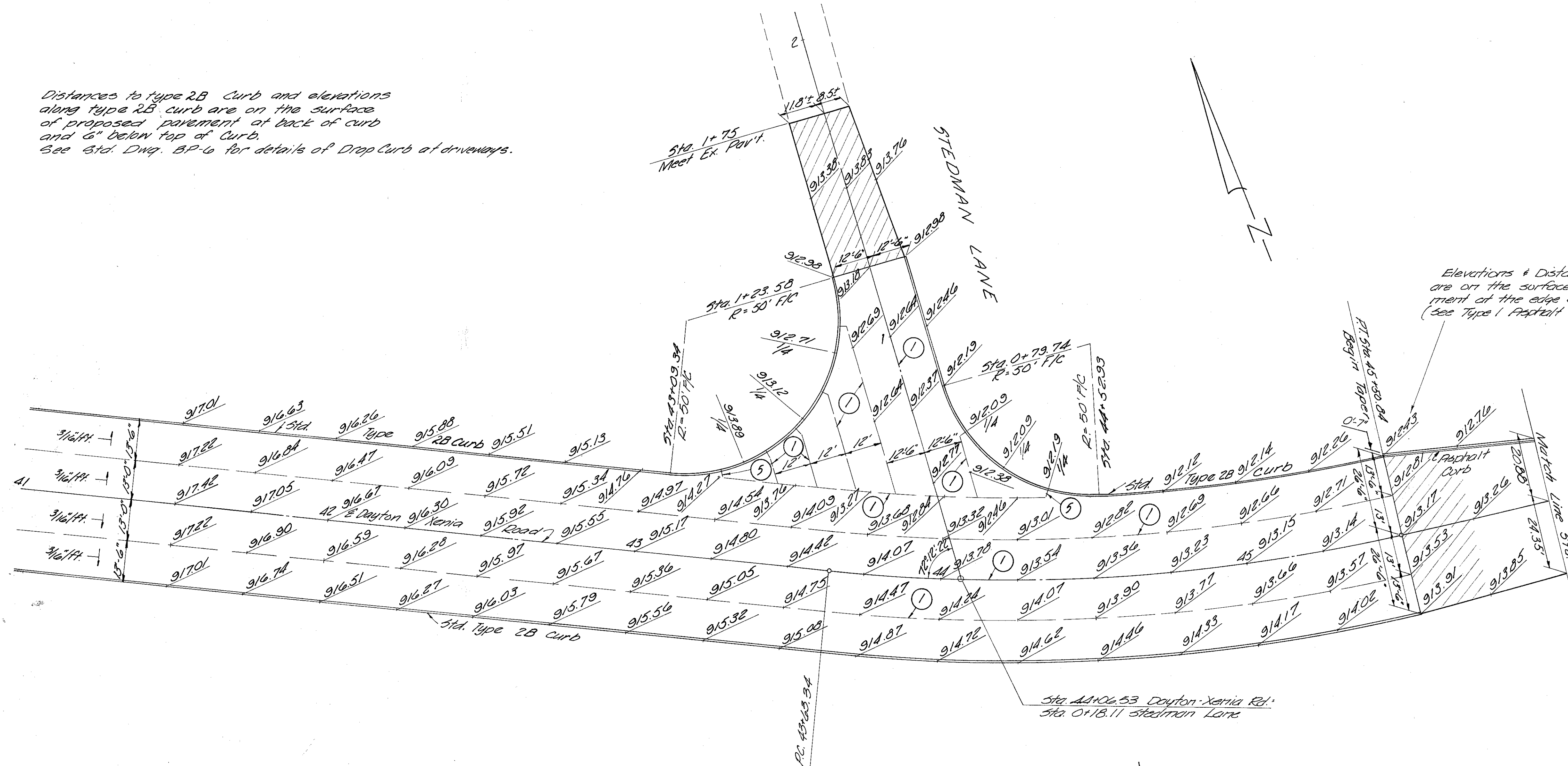


Distances to Type RB Curb and elevations along Type RB Curb are on the surface of proposed pavement at back of curb and 6" below top of curb. See Std. Dwg. B.P-6 for details of Drop Curb at driveways.

For Joint Legend, see Sheet No. 312
For Pavement Legend, see Sheet No. 67

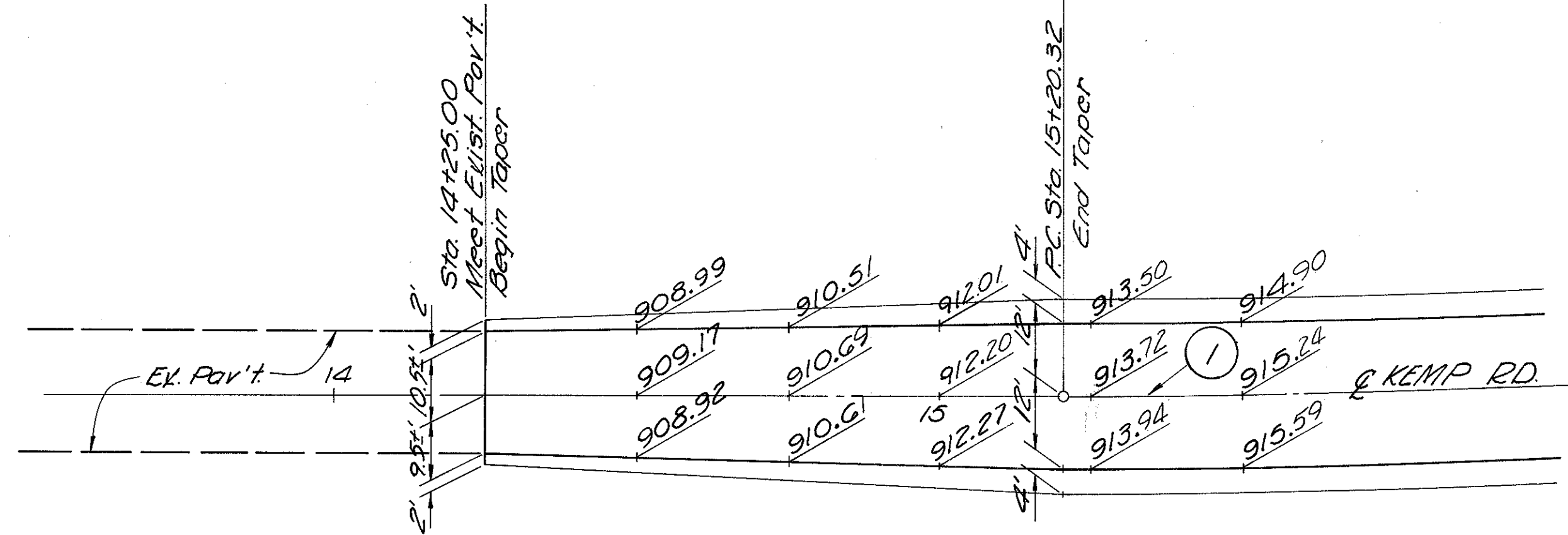
CRF - 675 - 5.37
GREENE COUNTY

Distances to Type 2B Curb and elevations along Type 2B curb are on the surface of proposed pavement at back of curb and 6" below top of Curb. See Std. Dwg. BP-6 for details of Drop Curb at driveways.

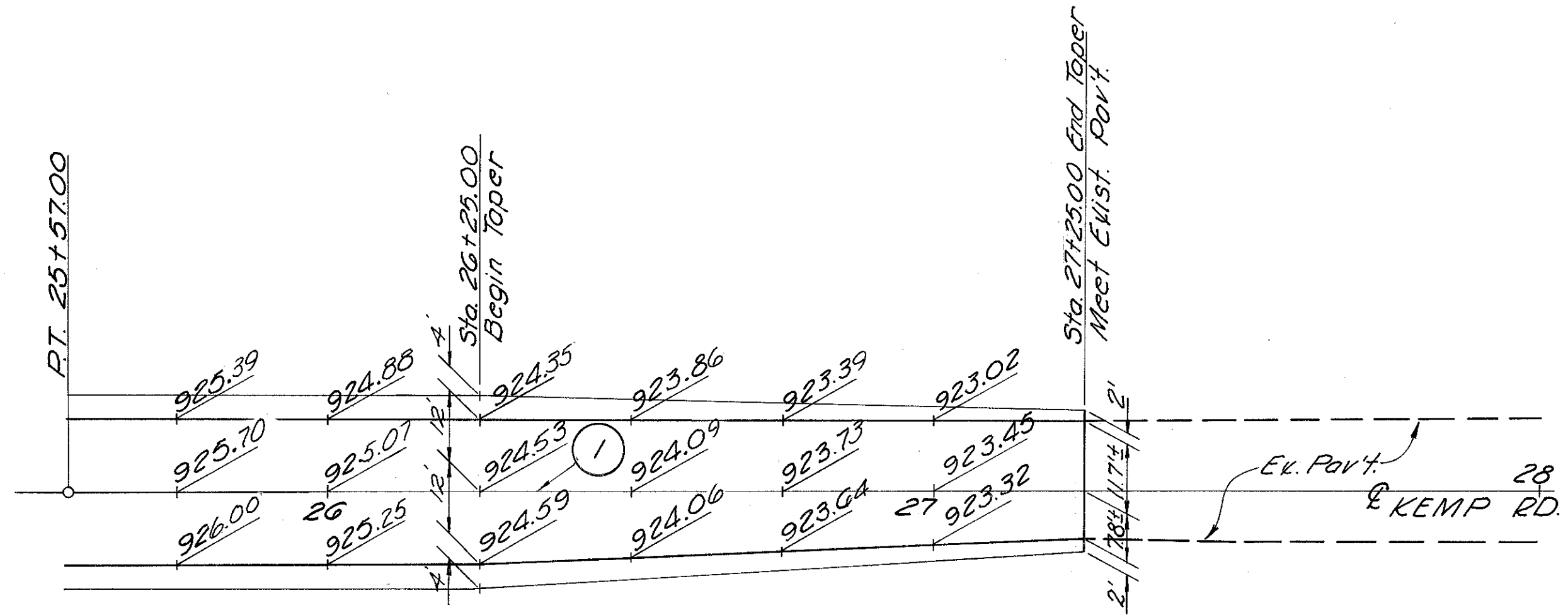


For Joint Legend See Sheet No. 342
For Pavement Legend, see Sheet No. 67

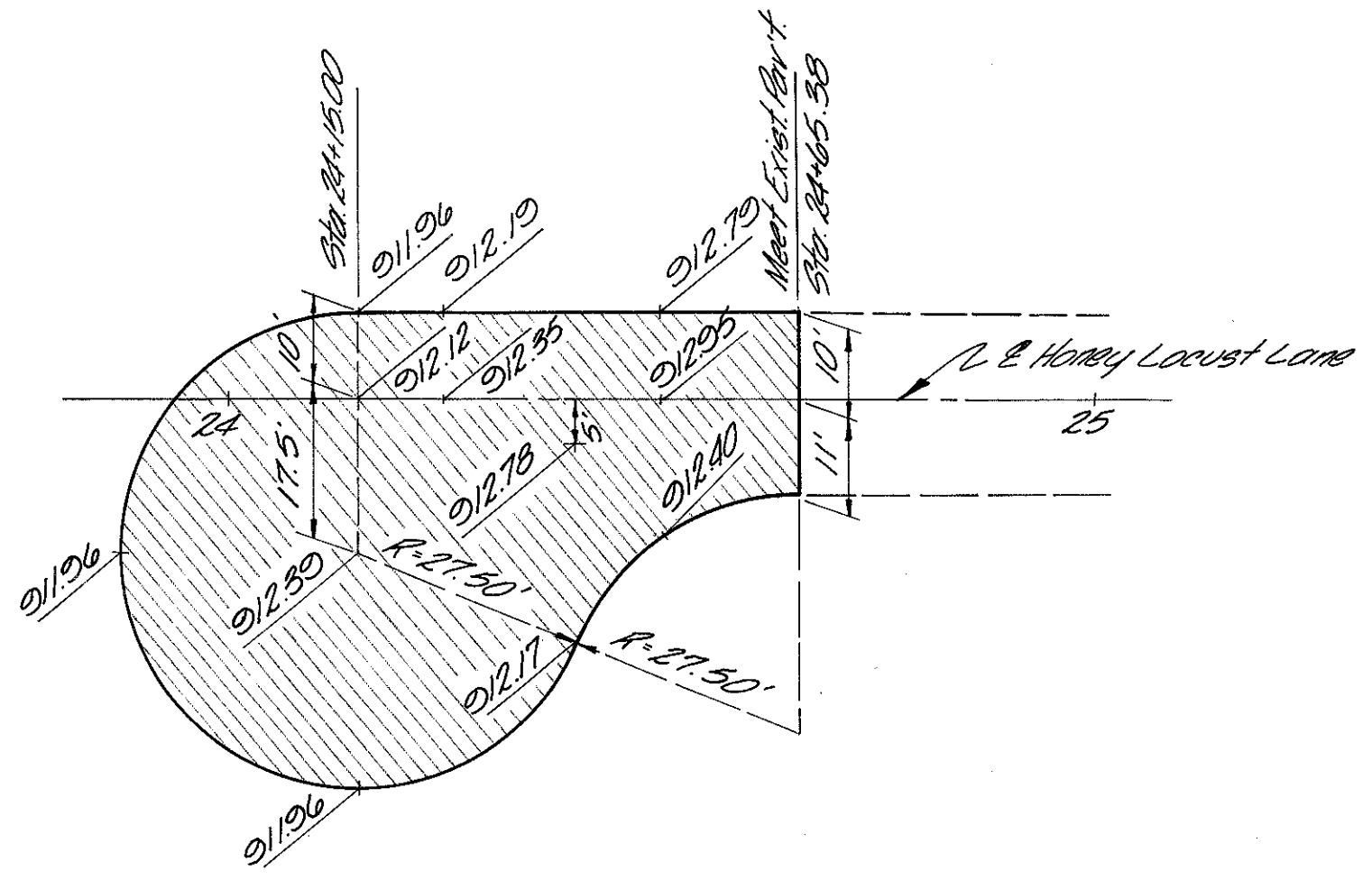
GRE-675-5.37
GREENE COUNTY



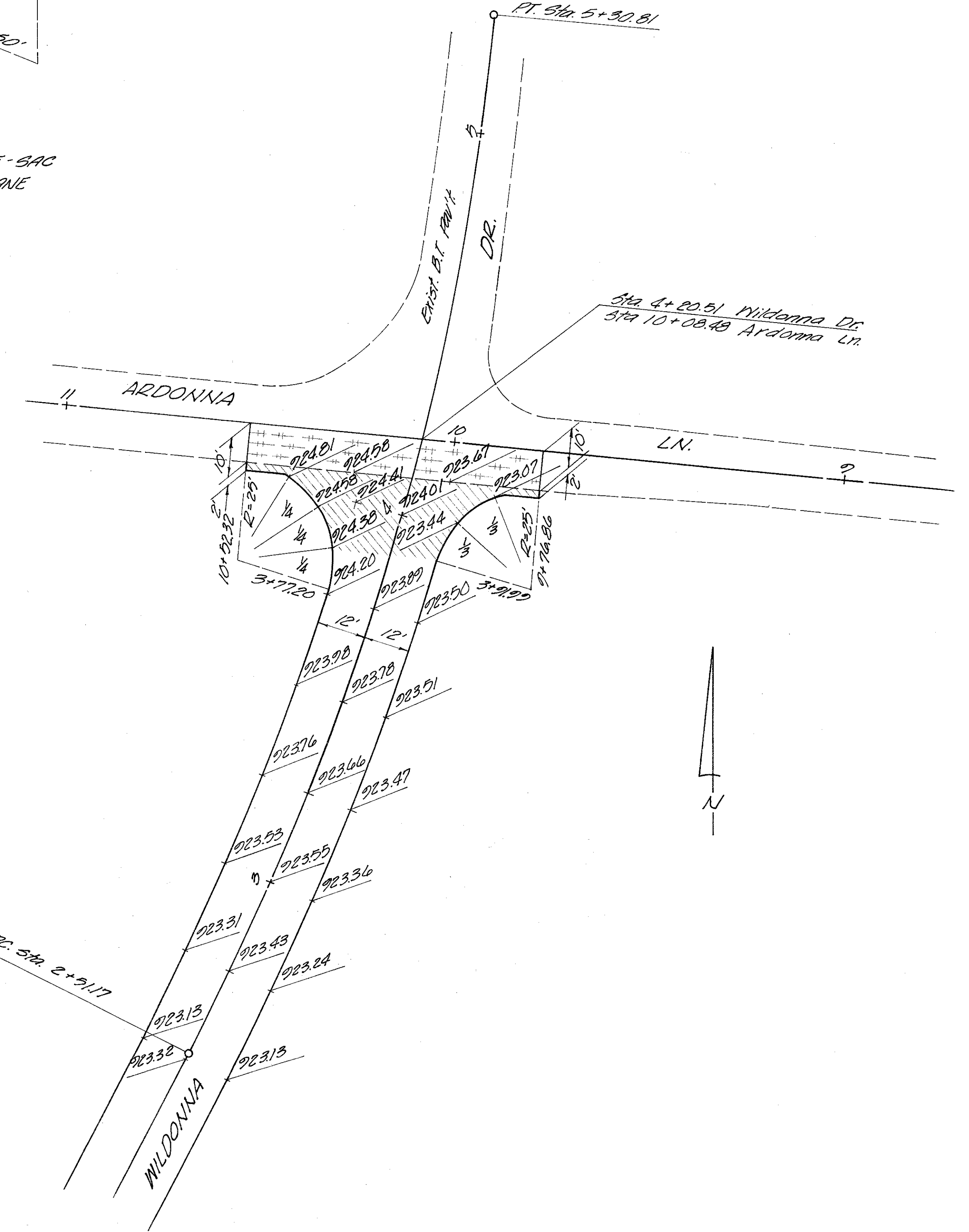
KEMP RD.



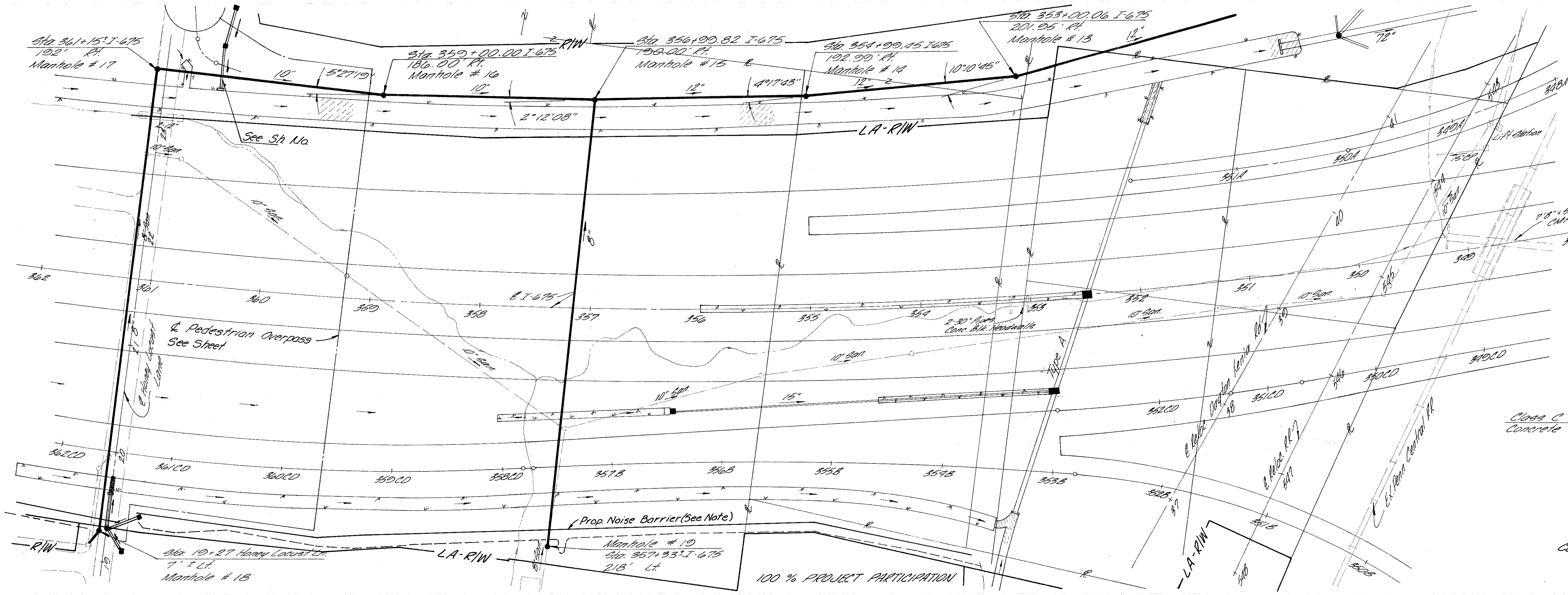
KEMP RD.



PROPOSED CUL-DE-SAC
HONEY LOCUST LANE

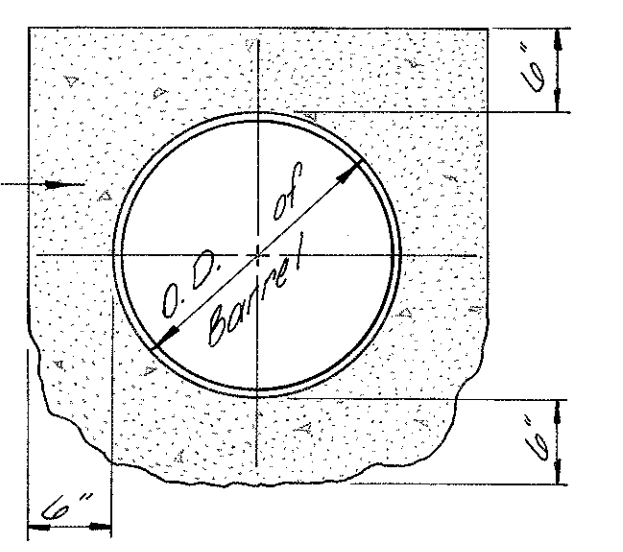
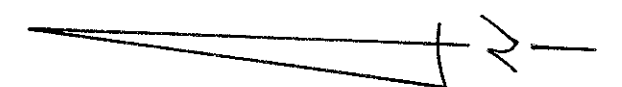


For Pavement Legend, see Sh. No. 67
For Joint Legend, see Sh. No. 342

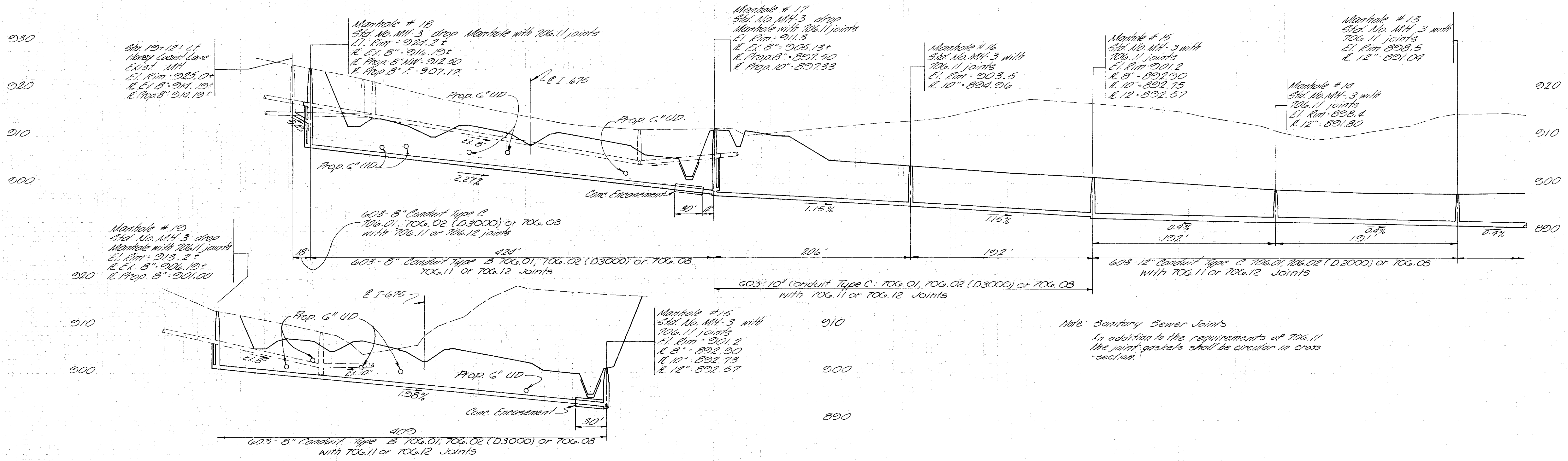


C.P.E. 675-5.37
GREENE COUNTY

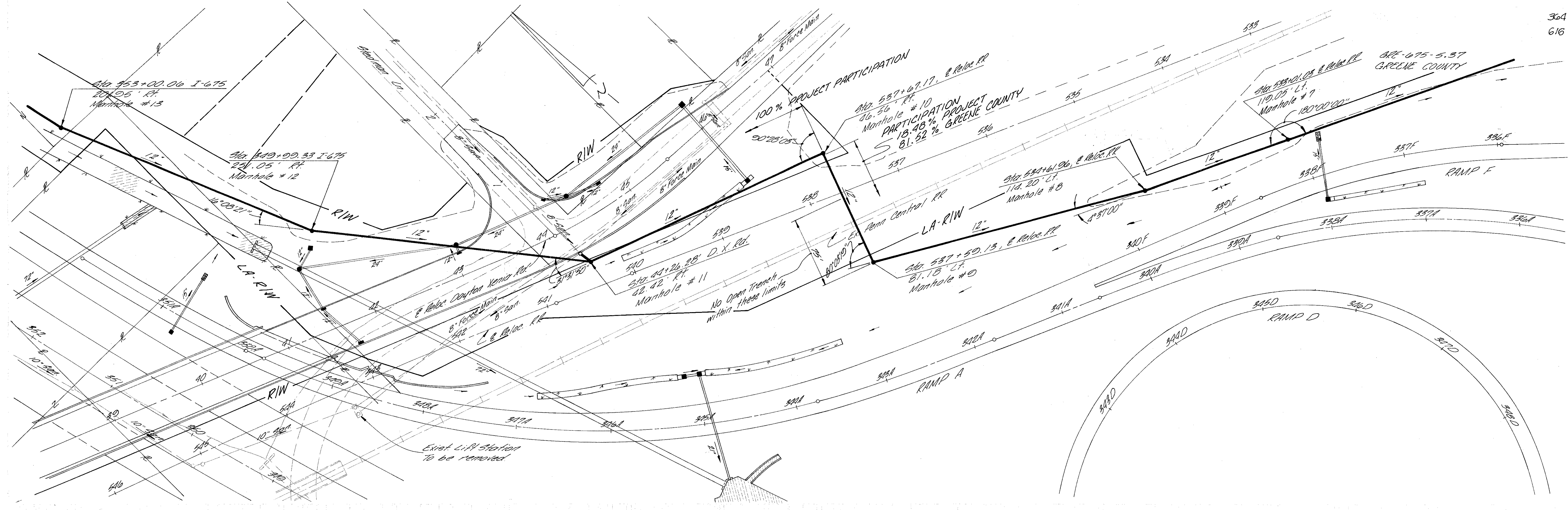
Note: Contractor shall locate Prop. Noise Barrier Posts prior to installing sewers to assure that the two installations do not conflict.



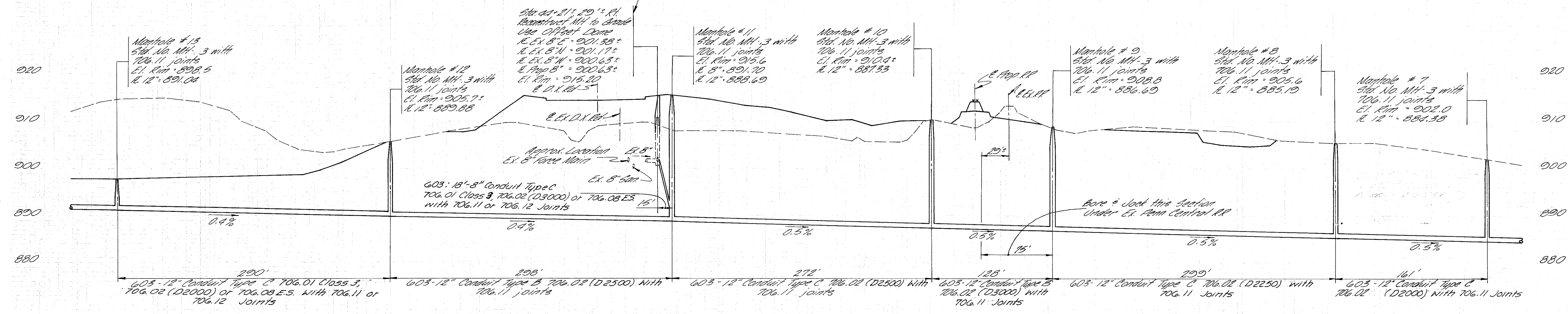
CONCRETE ENCASUREMENT DETAIL
No Scale



Note: Sanitary Sewer Joints
In addition to the requirements of 706.11 the joint gaskets shall be circular in cross-section.



Note: Payment for MH reconstruction is included in 200' sheet. 5" sewer conn. to prop. 12" 5" is included with these quantities.

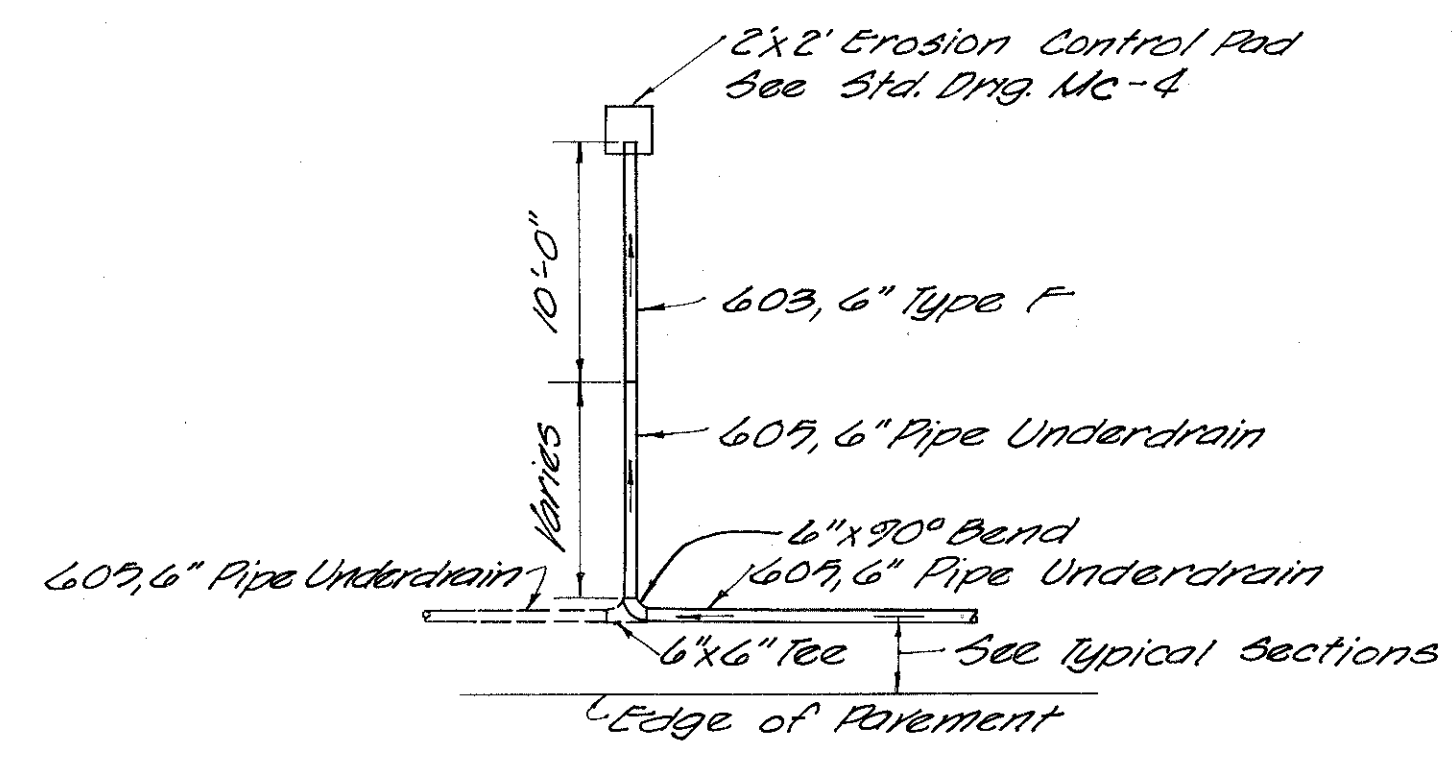


UNDERDRAIN OUTLET DETAILS

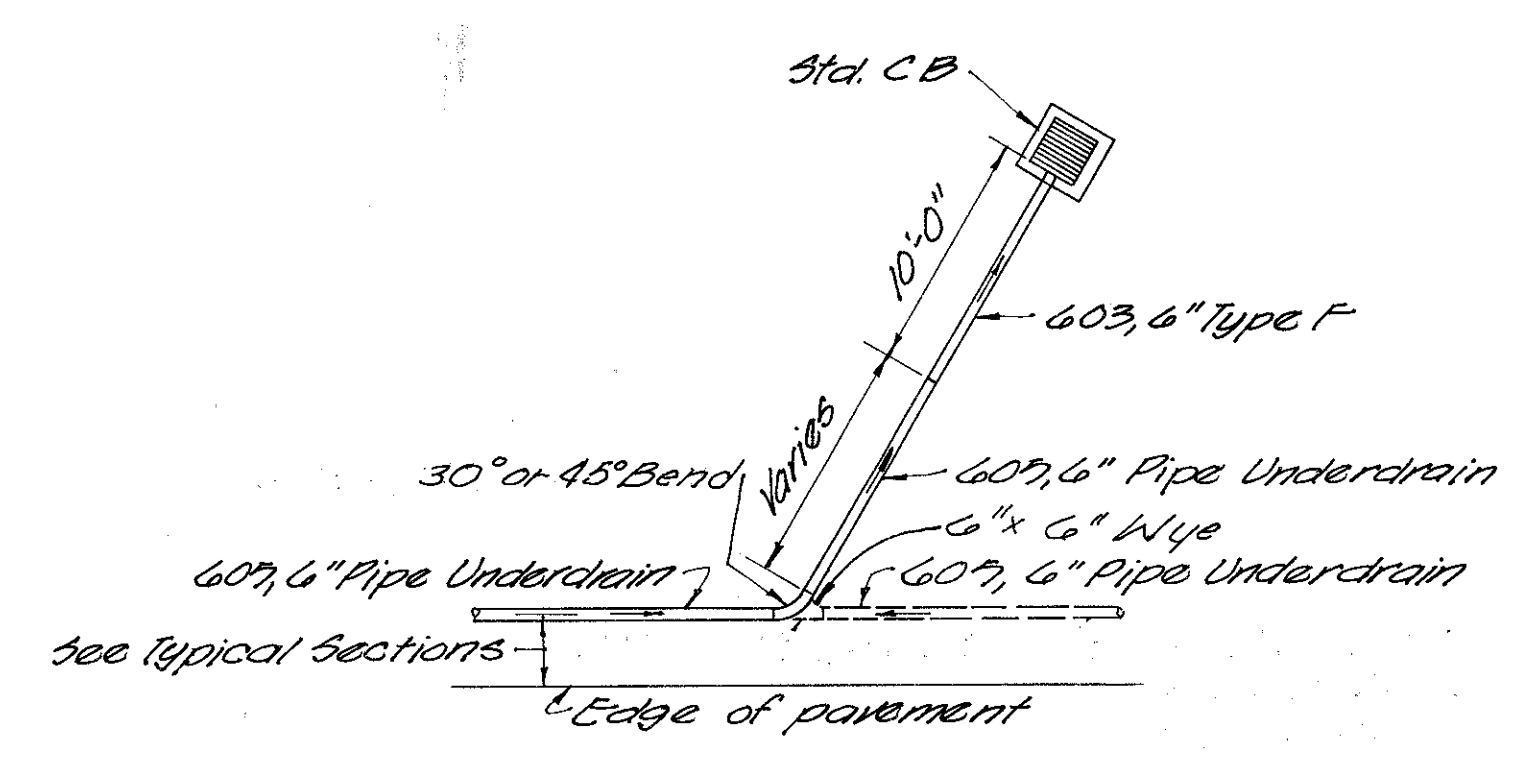
QUANTITY CALC. & IOWS
 BY H.L.F. DATE 10-4-71
 CHECKED D.P. DATE 12-13-71
 KING AND CATARIS
 CONSULTING ENGINEERS
 Revised: I.E.H. 12/78
 GRE-675-537
 GREENE COUNTY

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

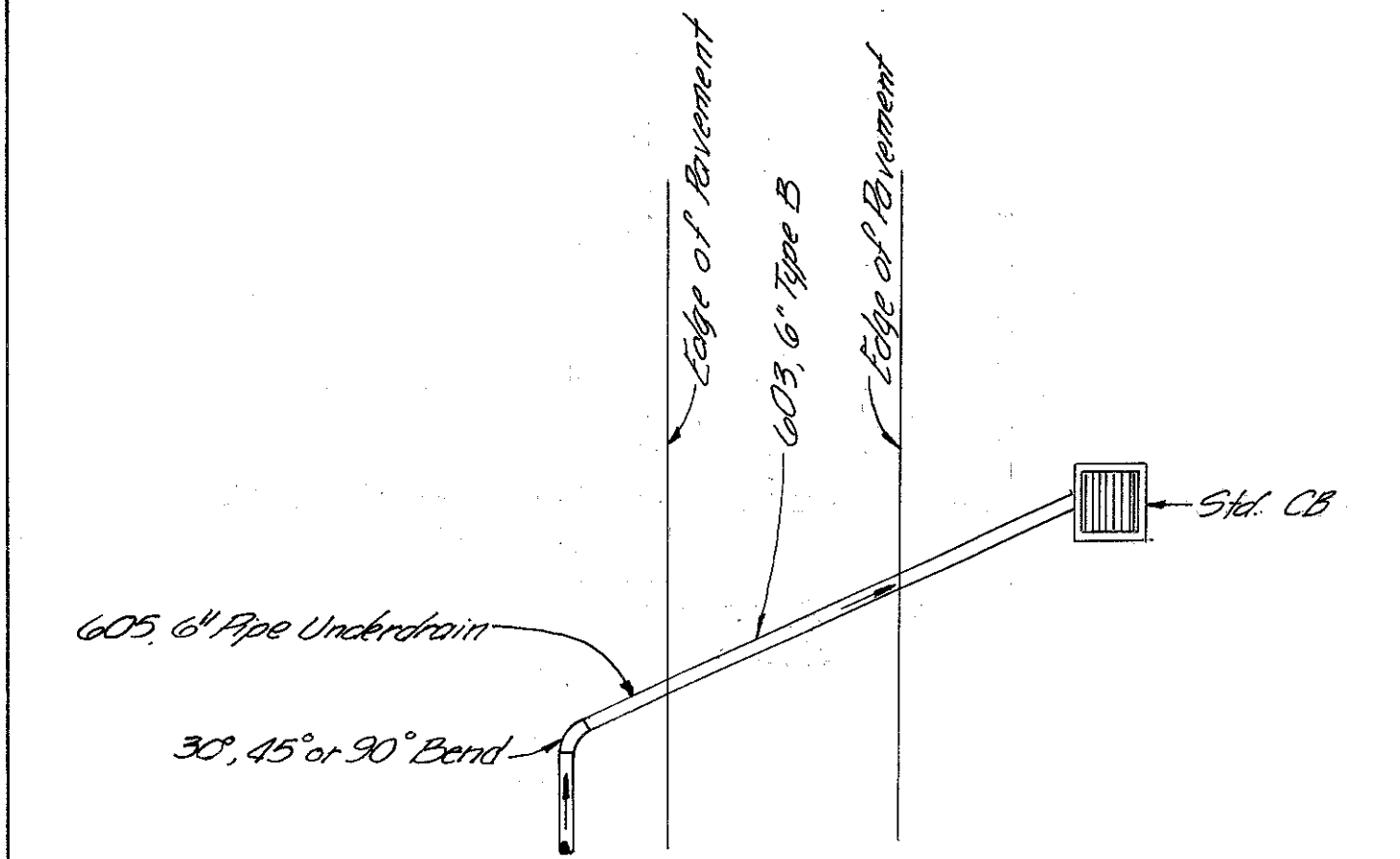
372
616



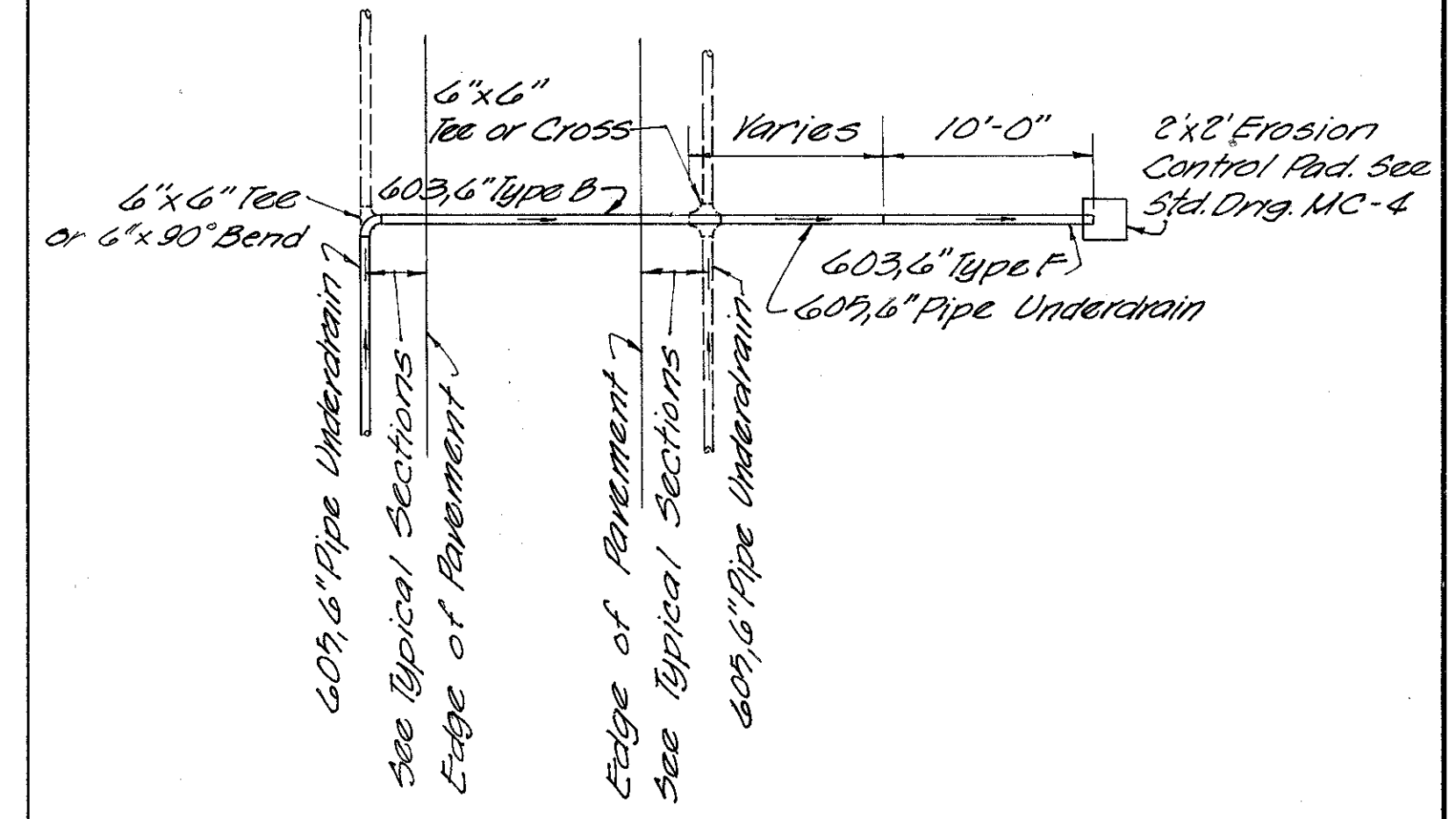
TYPE A



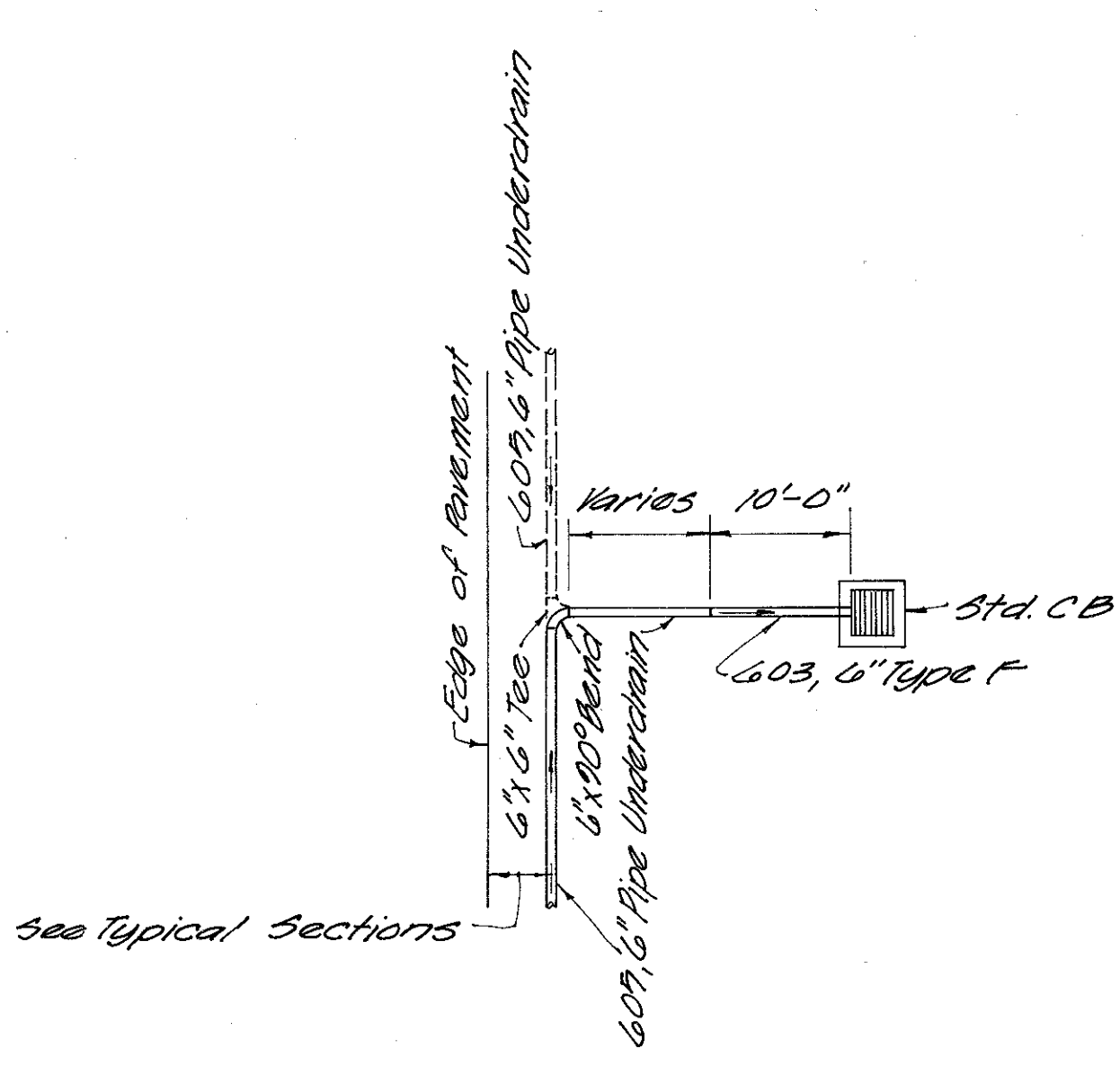
TYPE B



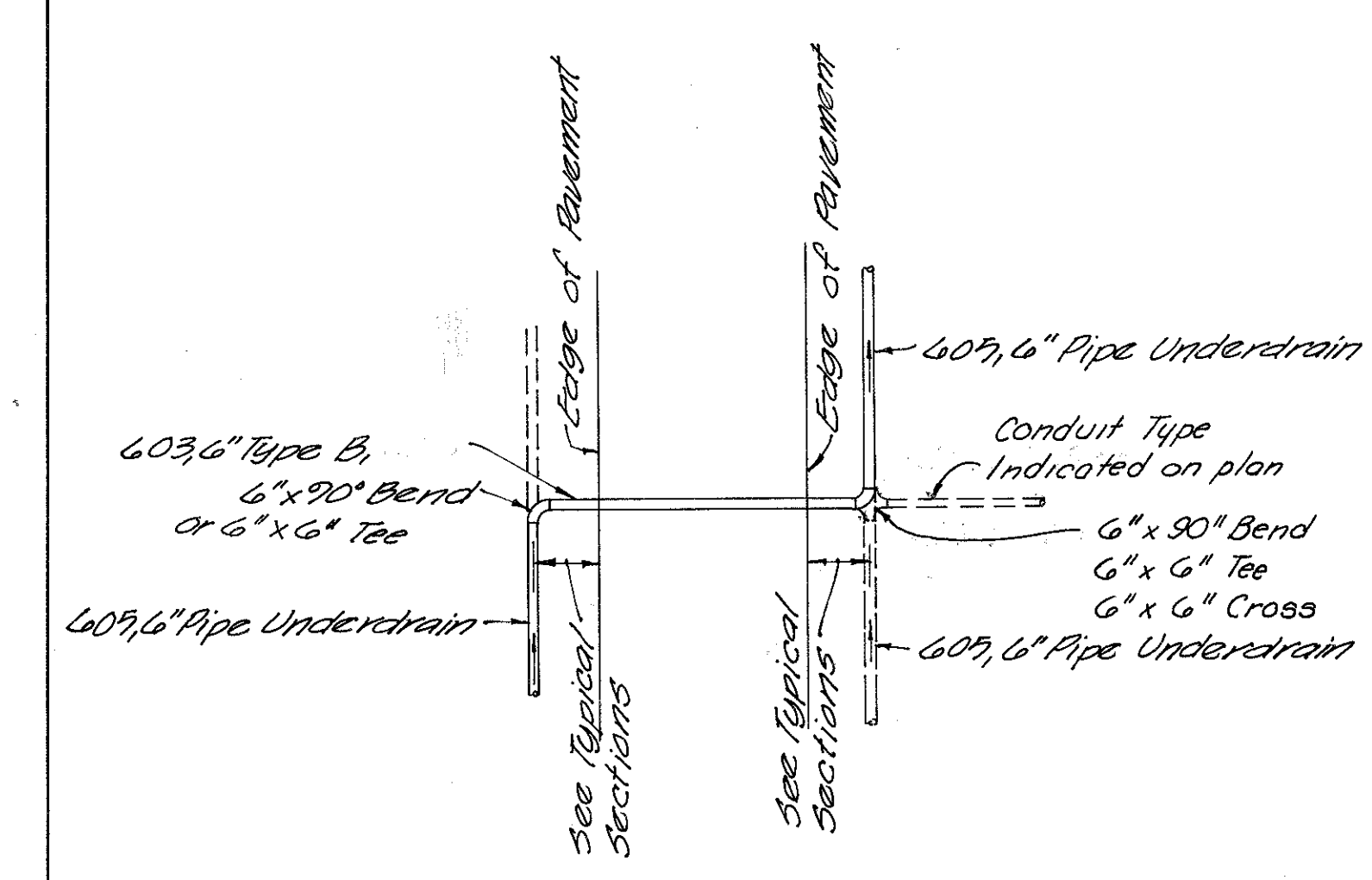
TYPE C



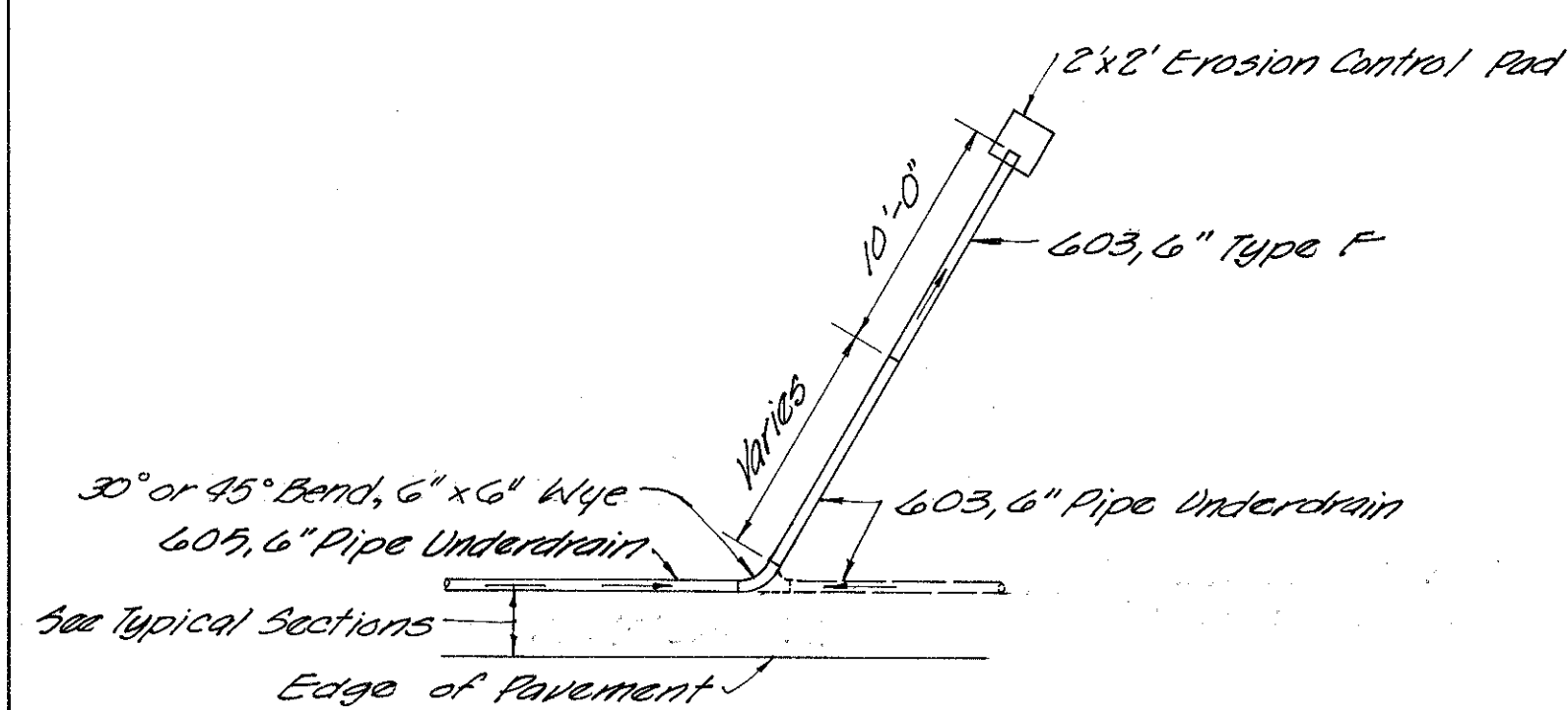
TYPE D



TYPE E

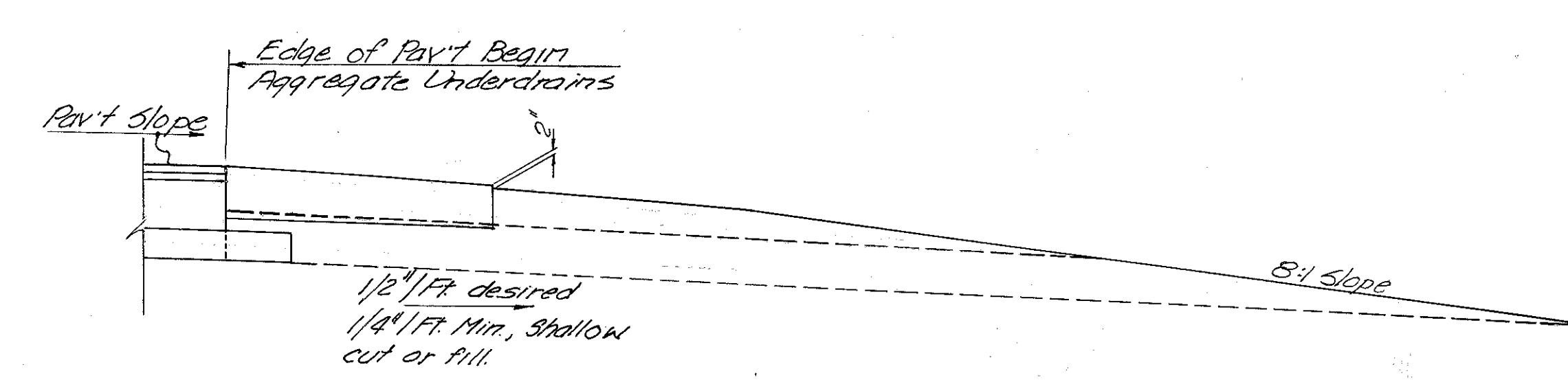


TYPE F



TYPE G

605 AGGREGATE DRAINS			
LOCATION	SIDE & LENGTH		
WILDONNA DRIVE	LEFT	RIGHT	
	14' Ea.	14' Ea.	
Sta. 1+00 - Sta. 2+00	2	3	
Sta. 2+50	1	1	
Sta. 3+00 - Sta. 3+50		2	
Total	3	6	



TYPICAL DETAILS - 605 AGGREGATE DRAINS
 Scale 1/2" = 1'-0"

605 AGGREGATE DRAINS								
LOCATION	SIDE & LENGTH							
Kemp Road	Left			Right				
	4' Ea.	12' Ea.	18' Ea.	22' Ea.	18' Ea.	20' Ea.	22' Ea.	
Sta 14+25 - Sta 17+25	1			12		1	1	
Sta 17+75			1			1		
Sta 25+50 - Sta 26+25		1	1	2				
Sta 26+50 - Sta 27+00	1	1				1	1	
Total	1	3	2	14	2	1	2	

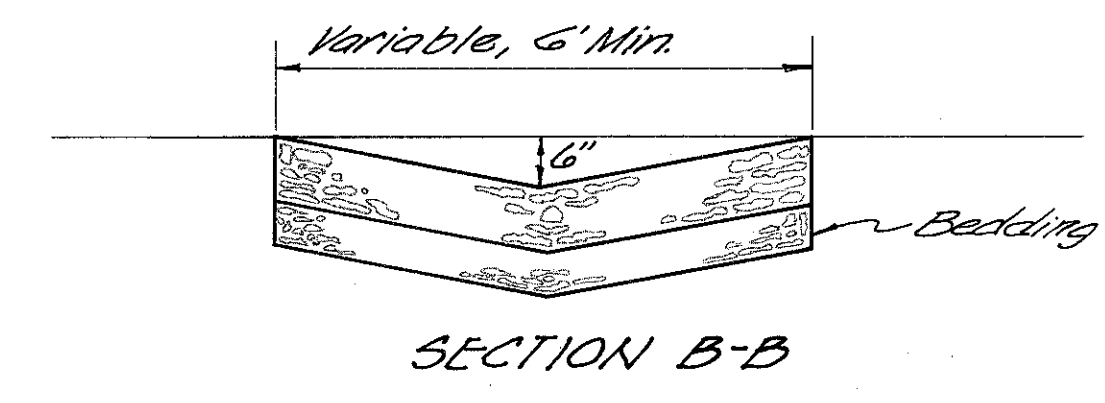
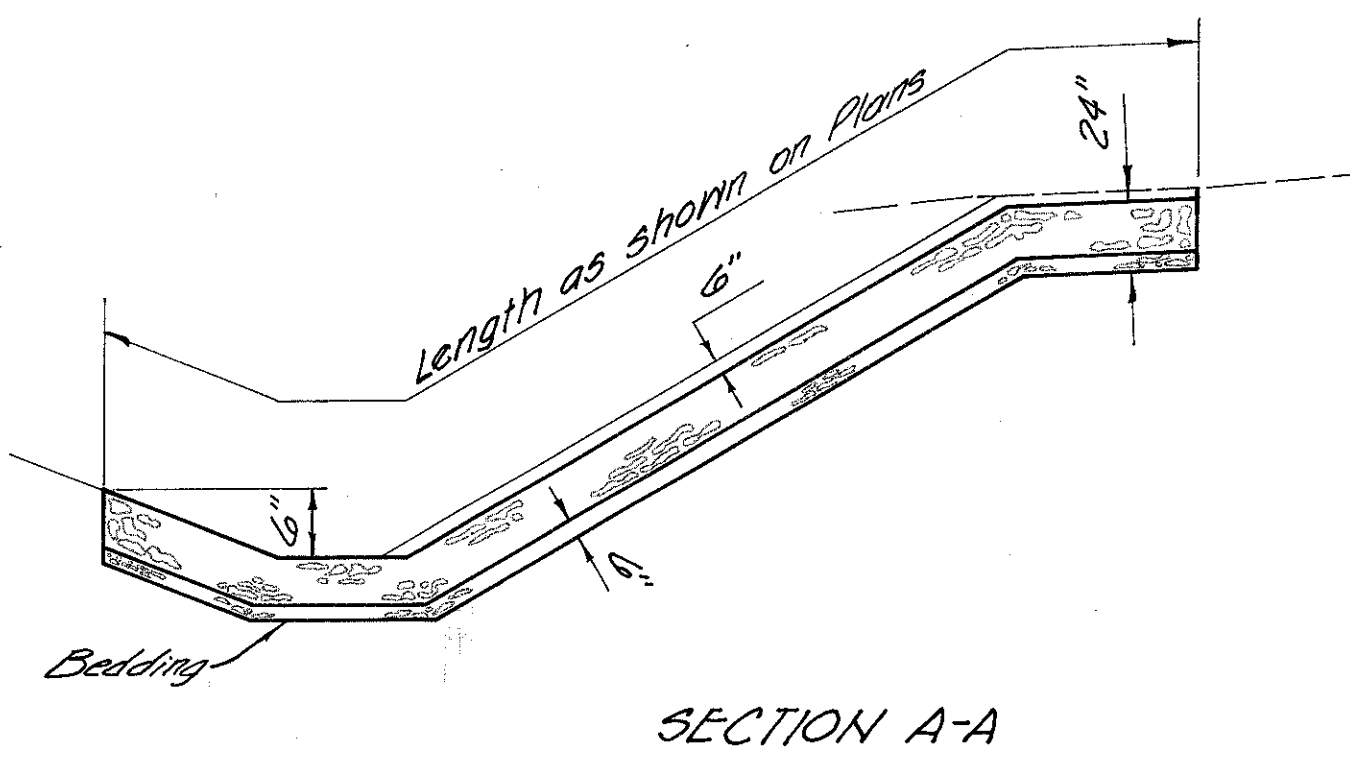
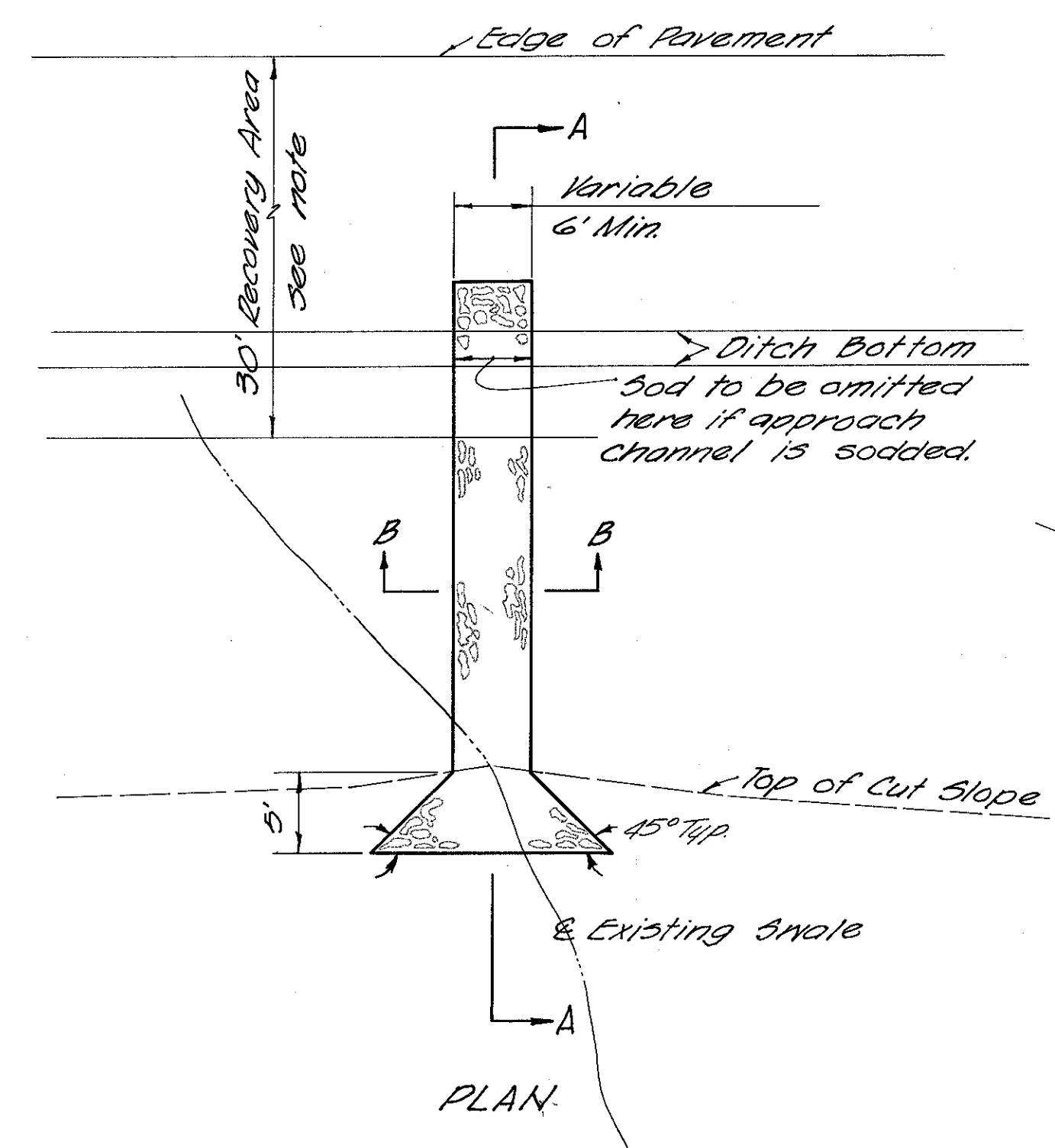
SUMMARY ITEM 605			
Length	Side	No.	Length x No.
4	Lt.	1	4
12	Lt.	3	36
18	Lt.	2	36
18	Rt.	2	36
20	Rt.	1	20
22	Lt.	14	308
22	Rt.	2	44
14	Lt.	3	42
14	Rt.	6	84
Total			610

QUANTITY CALCULATIONS
 BY H.L.F. DATE 10-4-71
 CRED. D.U.P. DATE 12-13-71
 KING AND GAYARIS
 CONSULTING ENGINEERS
 Revised: 1.E.H. 1/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

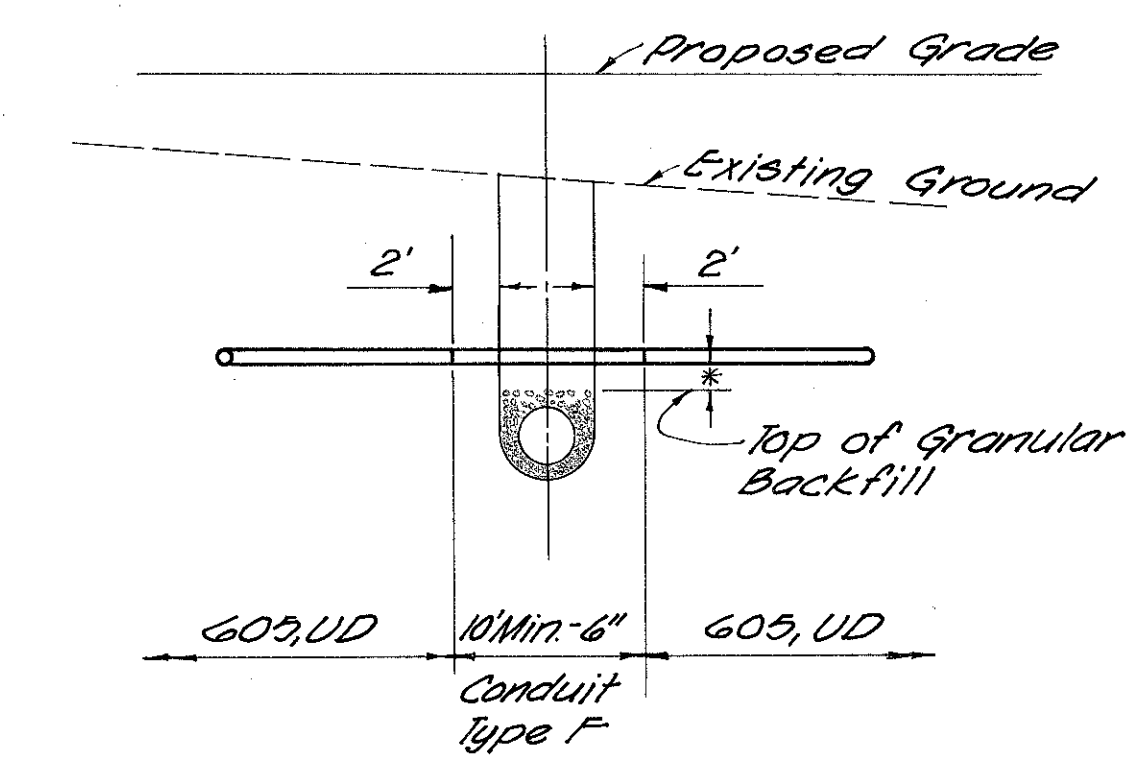
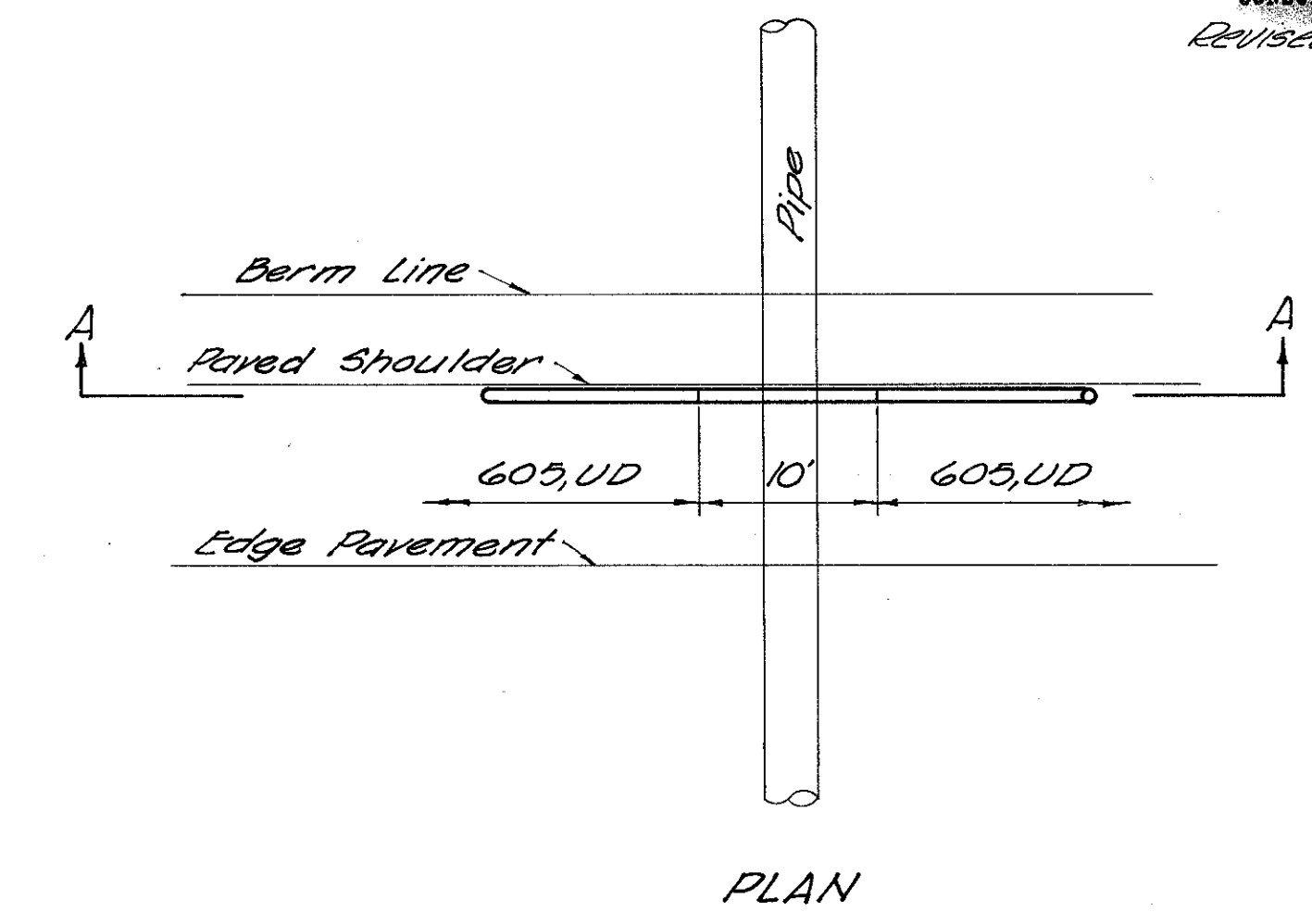
GRE-675-537
 GREENE COUNTY

373
 616



TYPICAL SWALE INTERCEPTION DETAIL
 no scale

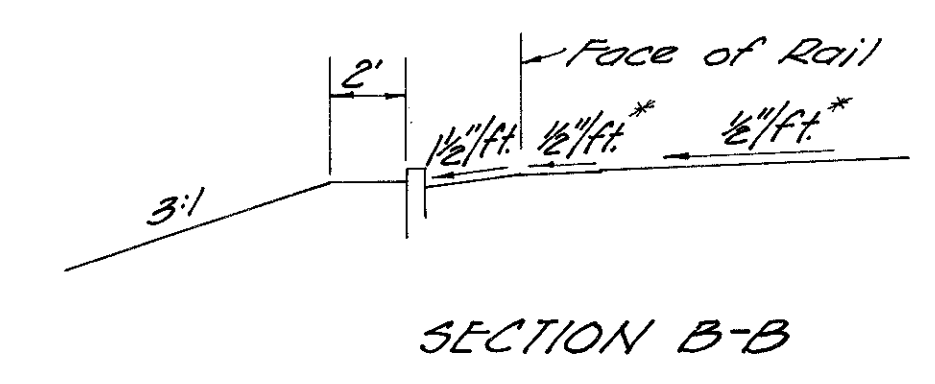
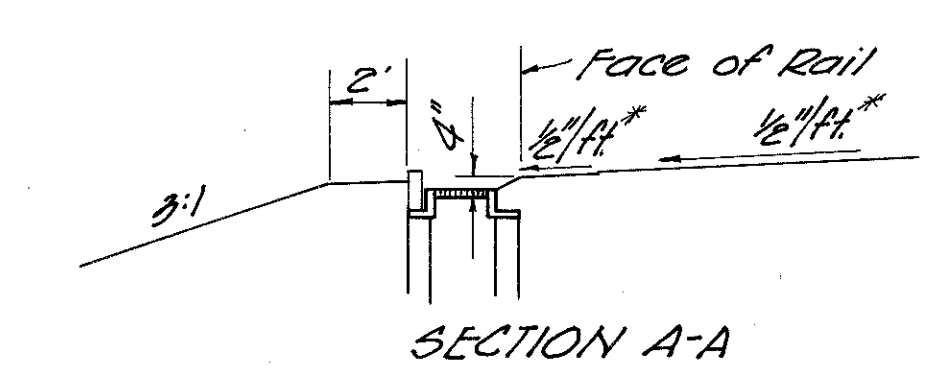
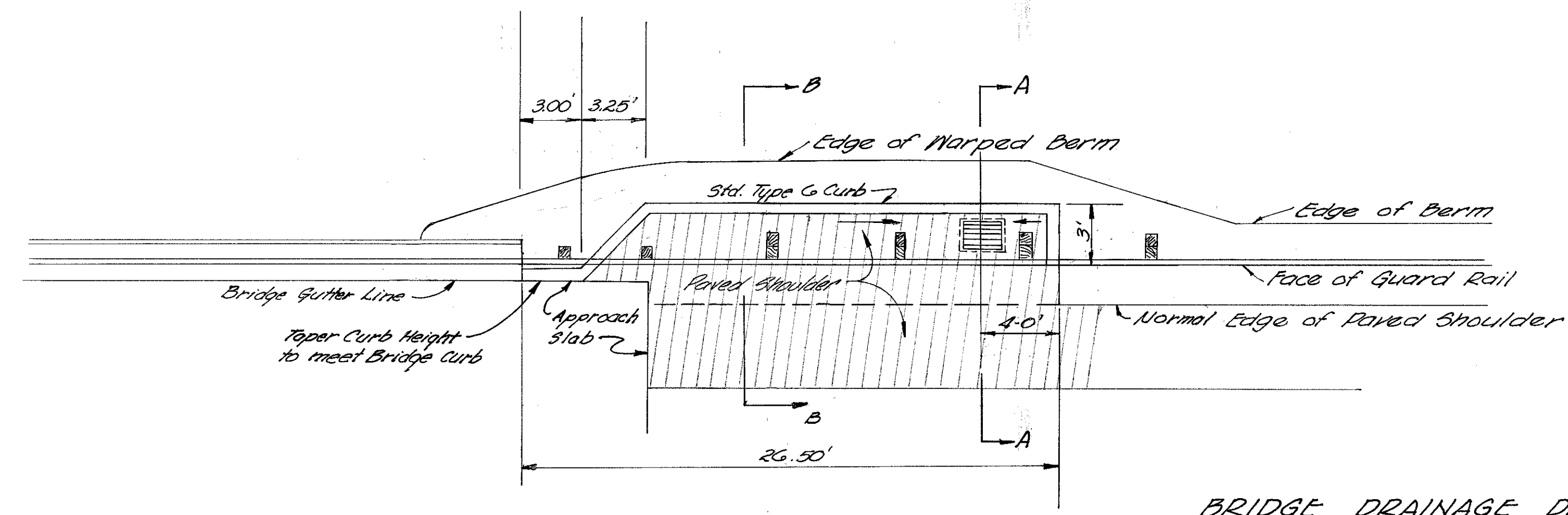
Note:
 That portion of the Rock Channel Protection falling within the recovery area shall conform to aggregate as per item 60.05 of the specifications. Quantities shall be separated into Rock Channel Protection Type B and Rock Channel Protection as per plan for that portion within the recovery area.



TYPICAL UNDERDRAIN CROSSING DETAIL

* If underdrain crosses a pipe trench within 2' of the granular backfill provide Type "F" conduit of sufficient length to span the trench. Minimum length 10 feet.

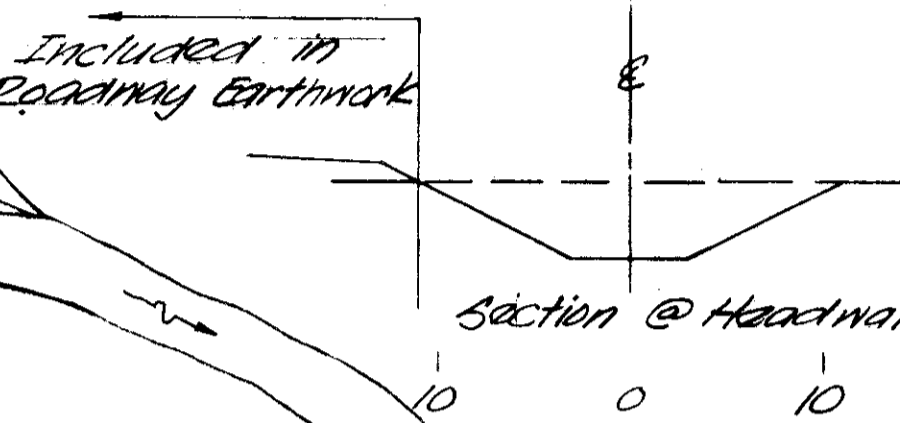
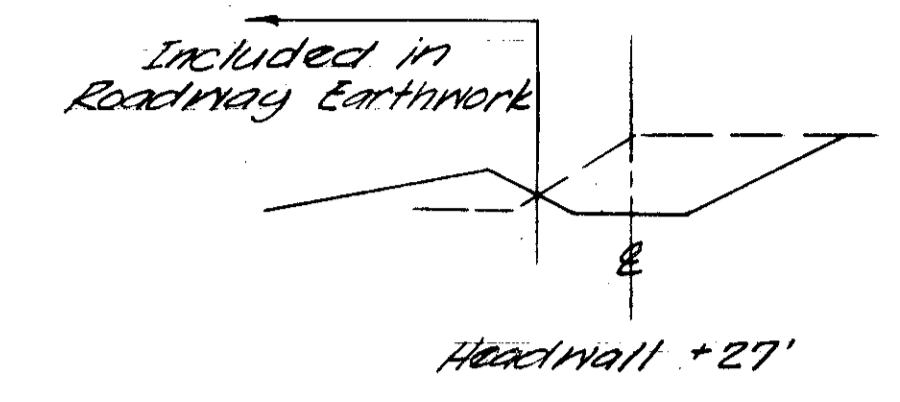
Note:
 For Plan Dimensions and Pay Dimensions of Rock Channel Protection See Sheet 14



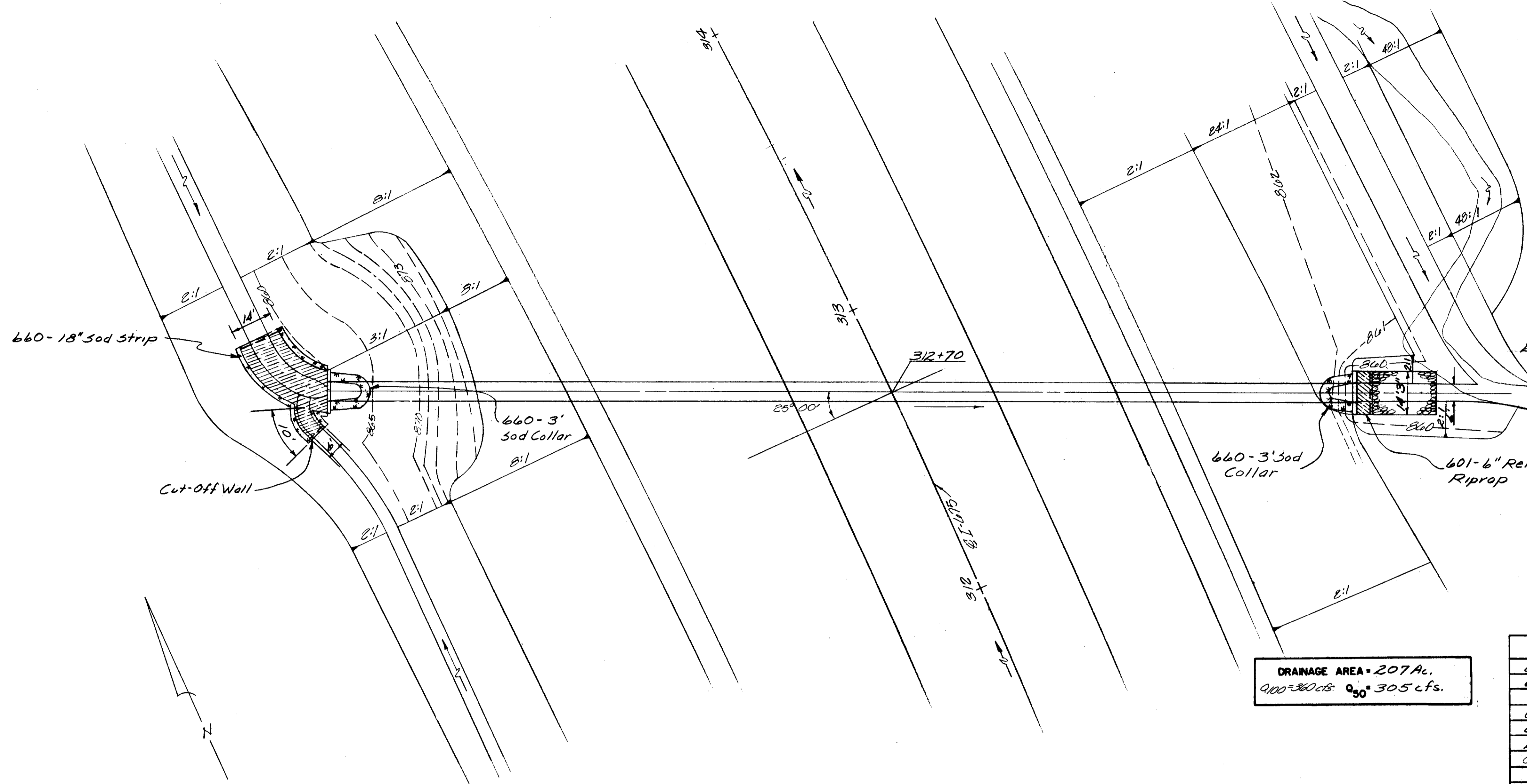
* Same as Superelevation, 1/8" ft min.

GRE-675 - 5.37
 GREENE COUNTY
 Zero Earthwork Back
 Headwall + 35'

Area	Vol.
Cut	Cut
S.F.	C.Y.
0	
	6
39	
	48
54	
Total	54



Outlet Channel Cross-Section

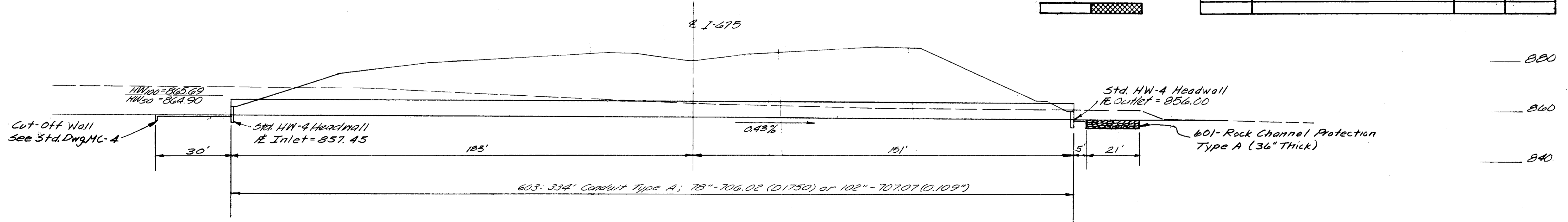


DRAINAGE AREA = 207 Ac.
 $Q_{100} = 360 \text{ cfs}$ $Q_{50} = 305 \text{ cfs}$



ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	6" Reinforced Concrete Riprap	61	S.Y.
601	Rock Channel Protection Type A, Bed	39	C.Y.
602	Masonry	10.56	C.Y.
660	Sodding	34	S.Y.
203	Excavation	54	C.Y.
603	Conduit Type A; 78" - 706.02 (0.1750) or 102" - 707.07 (0.109")	334	L.F.

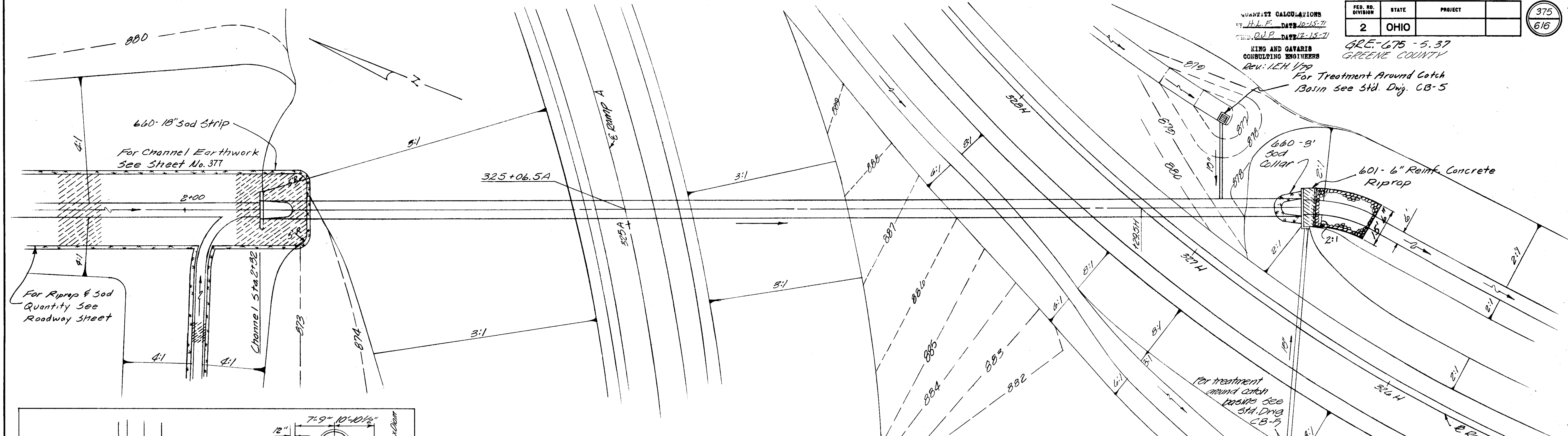


Sta 312+70 I-675

DRAINAGE DETAIL

QUANTITY CALCULATIONS
 BY H.L.F. DATE 10-15-77
 CHD. D.P. DATE 12-15-77
 KING AND GAVARIS
 CONSULTING ENGINEERS
 Rev. 1.E.H. 1/79

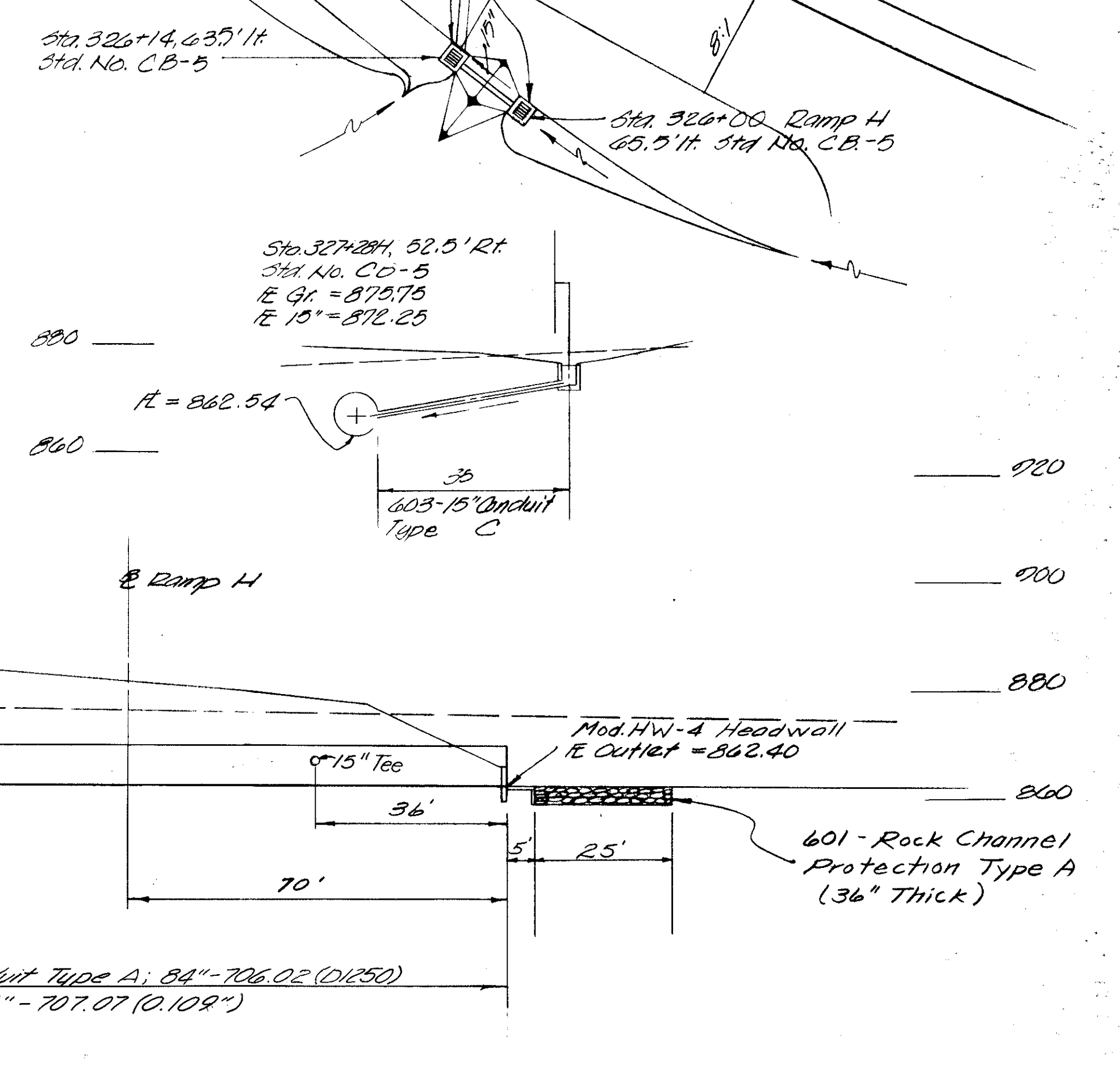
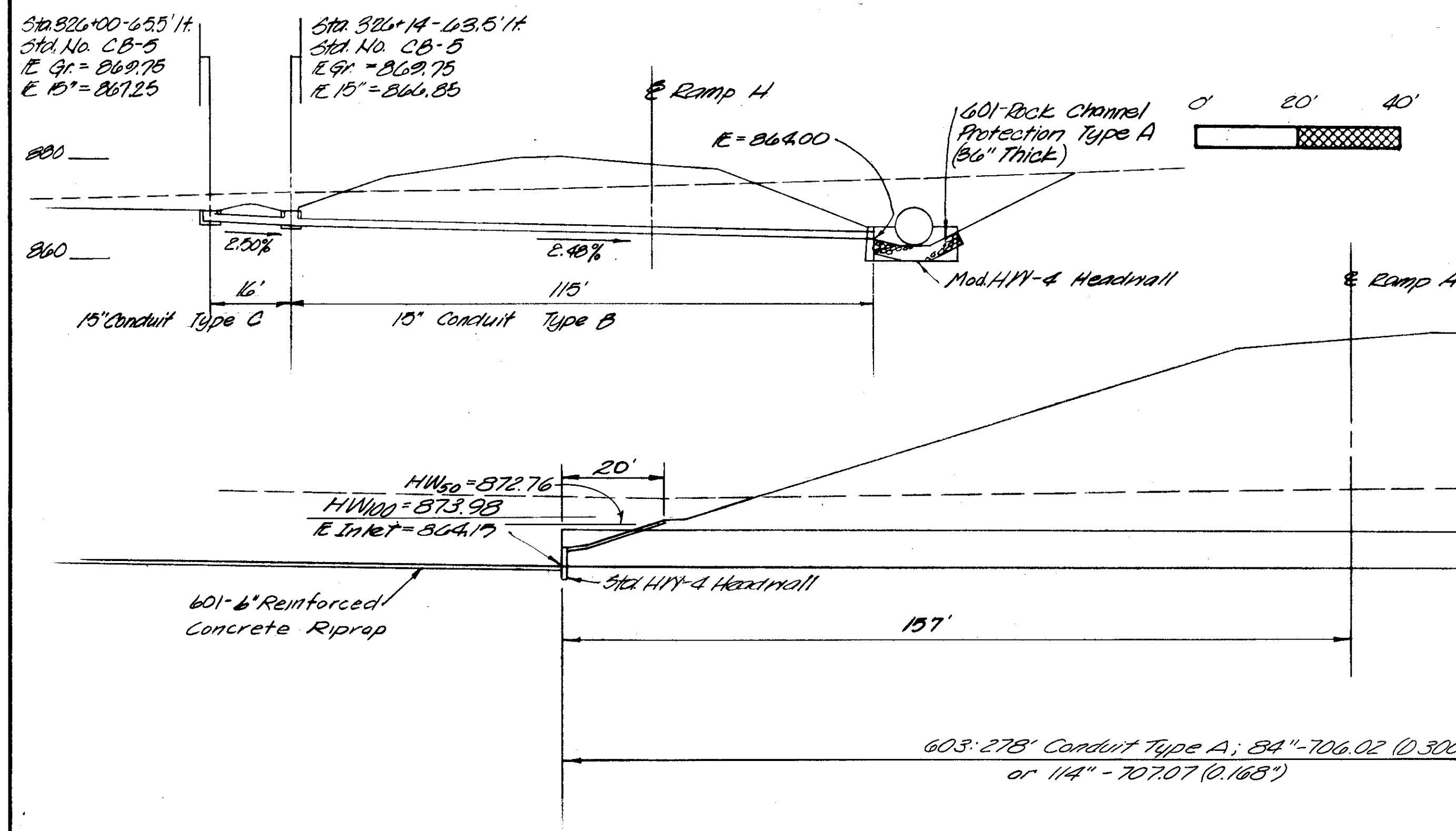
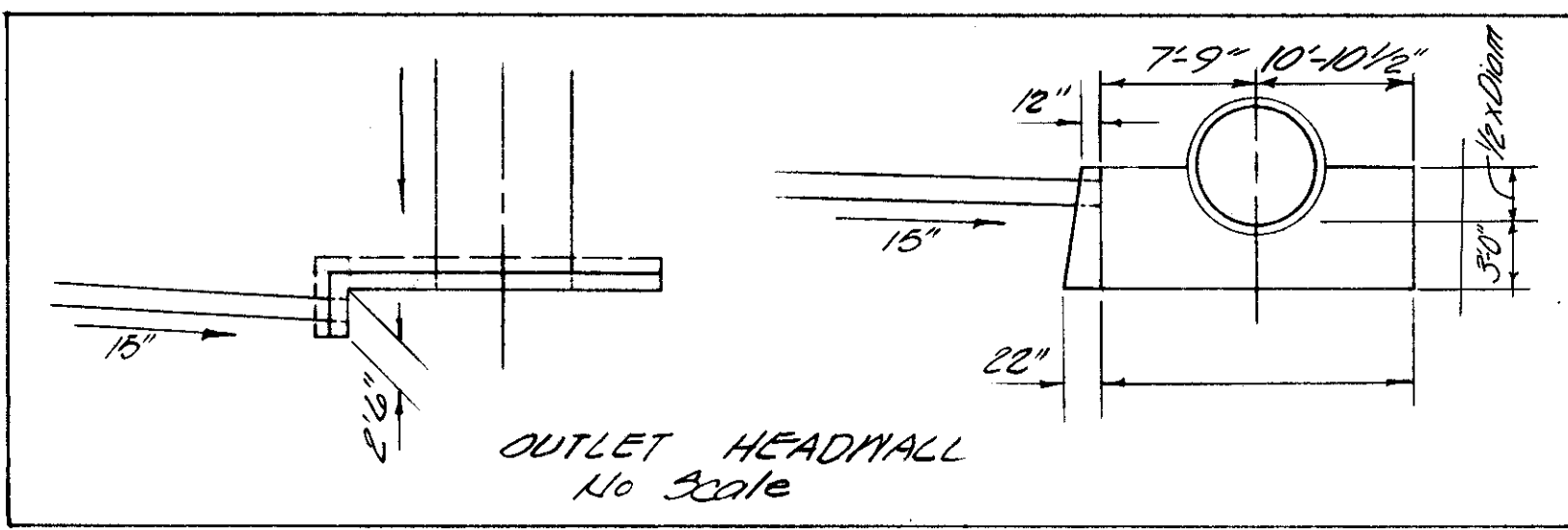
GRE-675-5.37
 GREENE COUNTY
 For Treatment Around Catch
 Basin See Std. Dwg. CB-5



ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	6" Reinforced Concrete Riprap	2	S.Y.
601	Rock Channel Protection Type A, Bed.	50	C.Y.
602	Masonry	14.73	C.Y.
603	15" Conduit Type B	115	L.F.
603	Conduit Type A; 84" - 706.02 (D3000) or 114" - 707.07 (D.168")	278	L.F.
603	Conduit Type A; 84" - 706.02 (D1250) or 114" - 707.07 (D.109")	169	L.F.
604	Std. No. CB-5	3	EO.
660	Sodding	211	S.Y.
603	15" Conduit Type C	51	L.F.

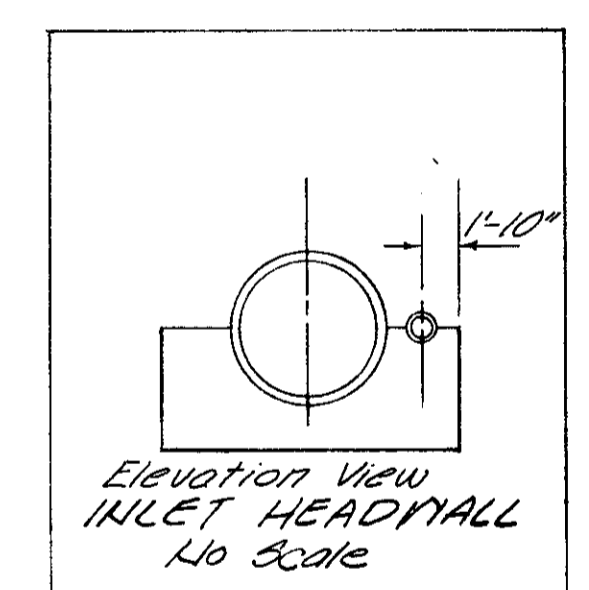
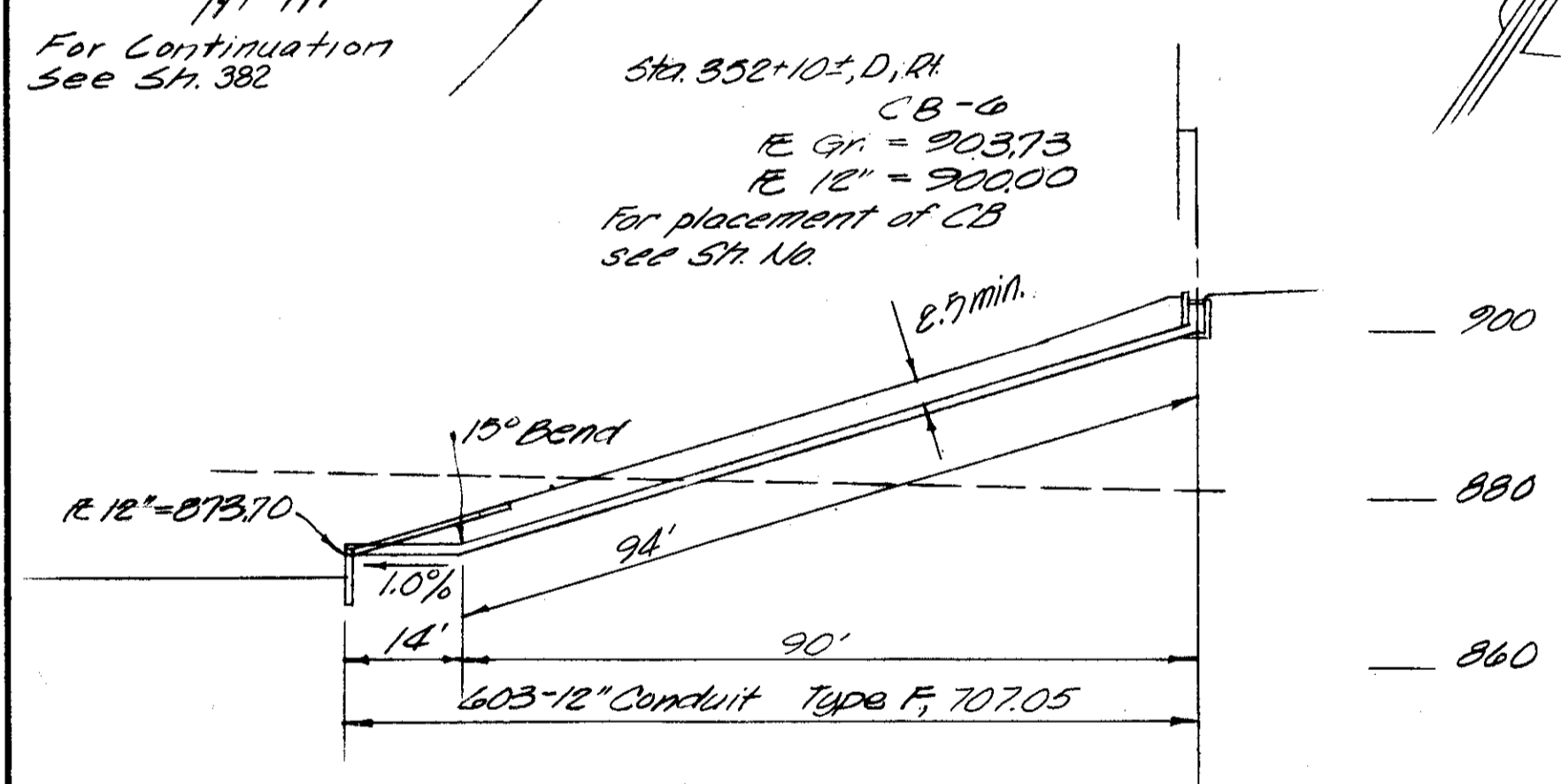
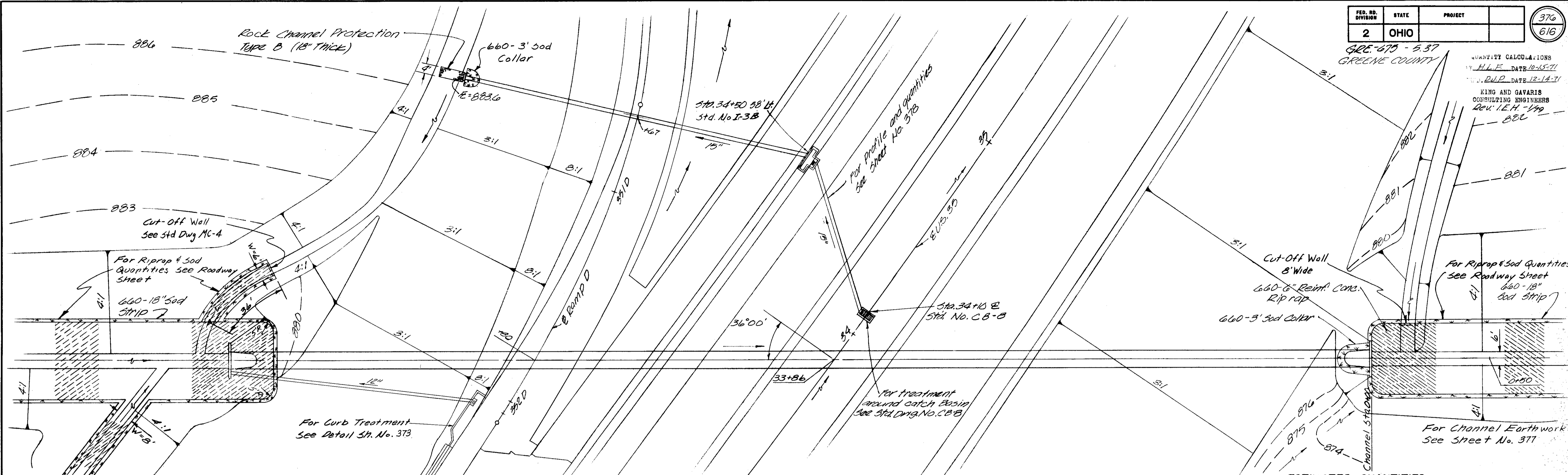
DRAINAGE AREA = 326 Ac.
 $Q_{100} = 4855 \text{ cfs}$ @ 50' 410 cfs.



Sta. 325+06.5 Ramp A

GRE-675 - 5.37
GREENE COUNTY

QUANTITY CALCULATIONS
BY H.L.F. DATE 10-15-71
REV. D.P.D. DATE 12-14-71
KING AND GAVARIS
CONSULTING ENGINEERS
REV. I.E.H. - 1/99

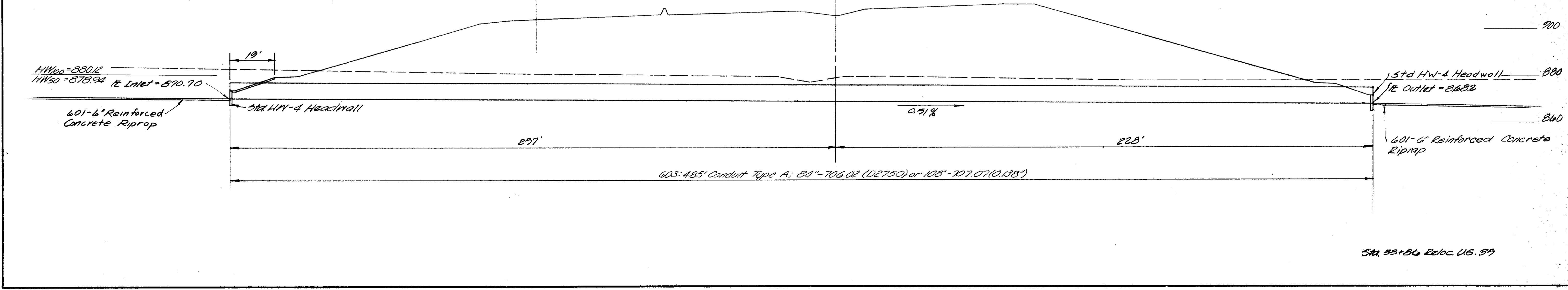


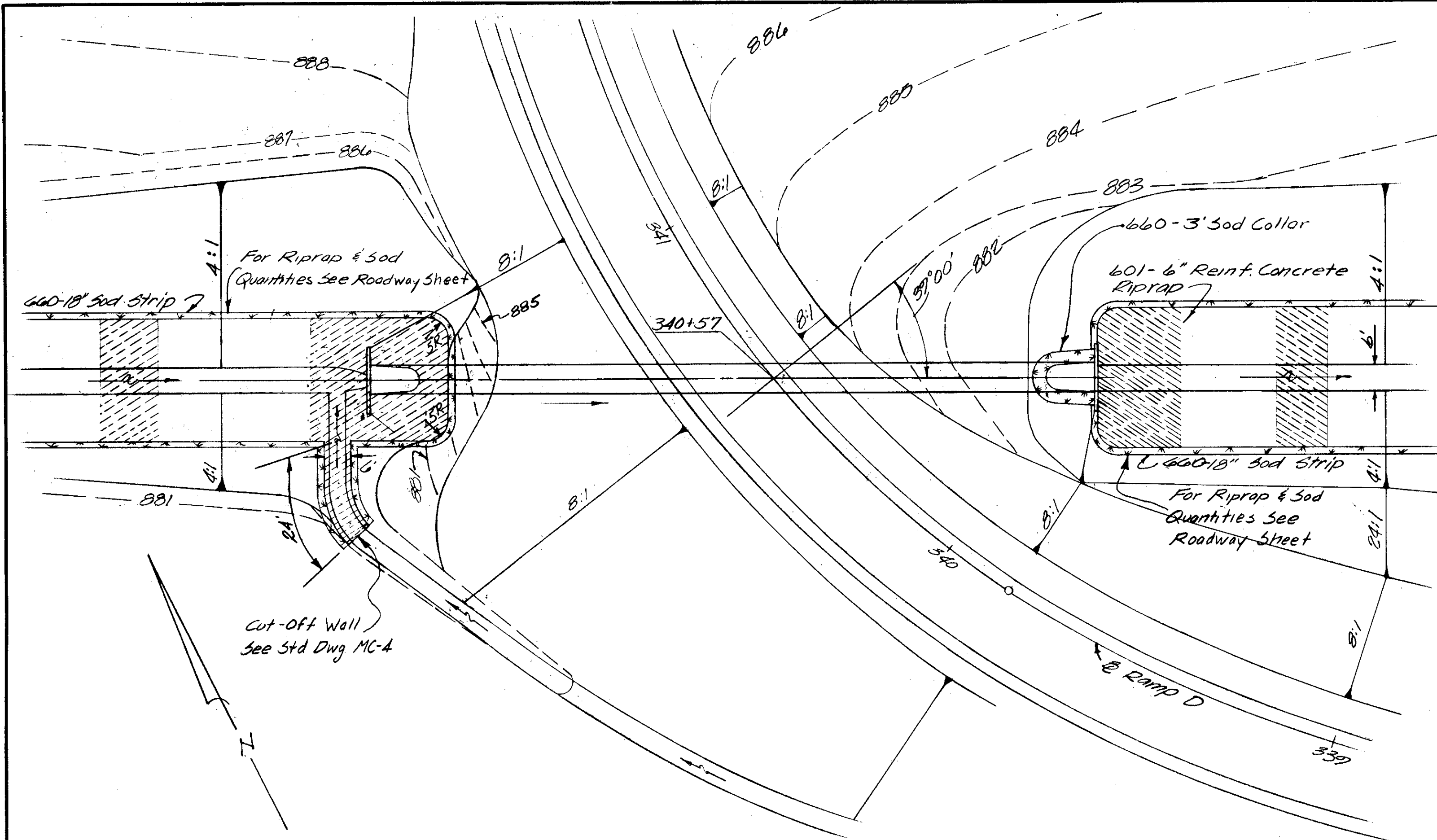
DRAINAGE AREA = 305 Ac.
 $Q_{100} = 466 cfs$, $Q_{50} = 394 cfs$.



ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
602	Masonry	12.42	C.Y.
603	Conduit Type A; 84"-706.02 (D2750) or 108"-707.07 (D1387)	485	L.F.
603	12" Conduit Type F, 707.05	108	L.F.
604	CB-6	1	Ea.
660	Sodding	13	S.Y.
203	Excavation	1465	C.Y.



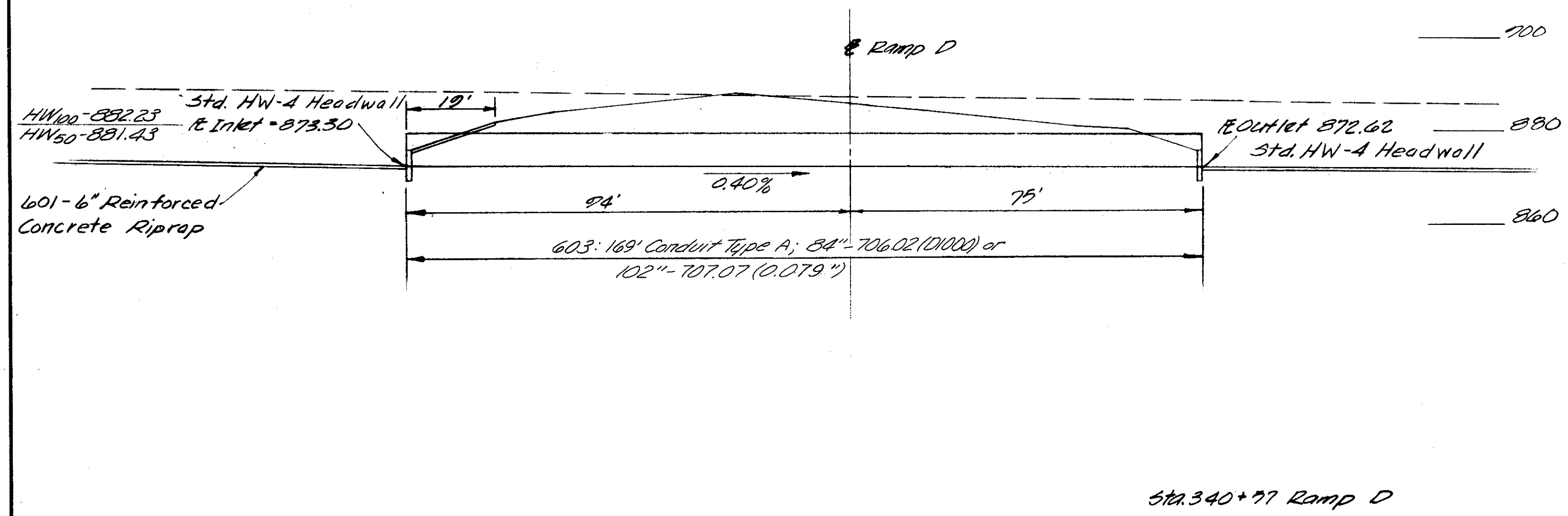


DRAINAGE AREA = 252 Ac.
 $Q_{100} = 410$ cfs $Q_{50} = 347$ cfs.



ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
602	Masonry	10.56	C.Y.
603	Conduit Type A: 84" - 706.02 (0.000) or 102" - 707.07 (0.079")	169	L.F.
660	Sodding	10	S.Y.



ESTIMATED QUANTITIES
 STA. 34+10 US 35-STA 350+670

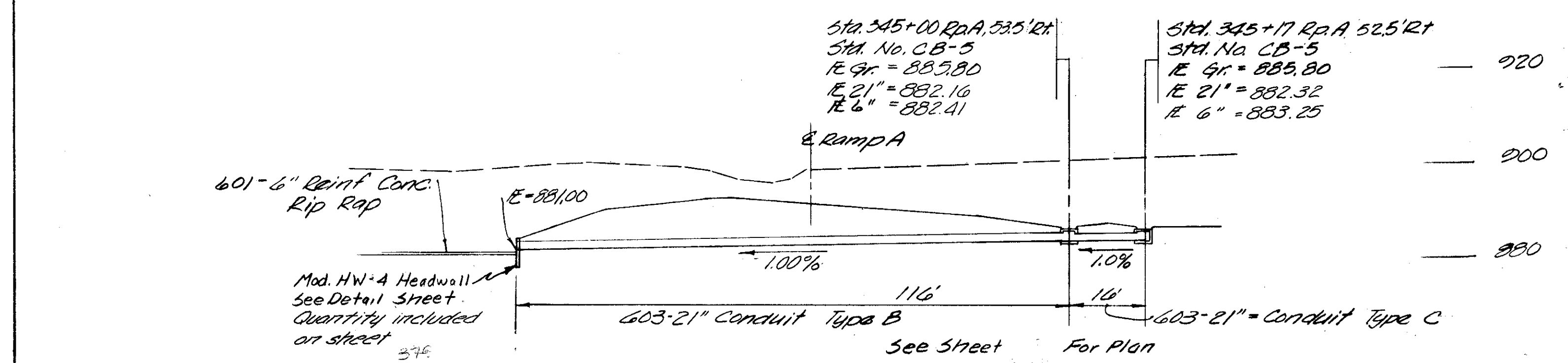
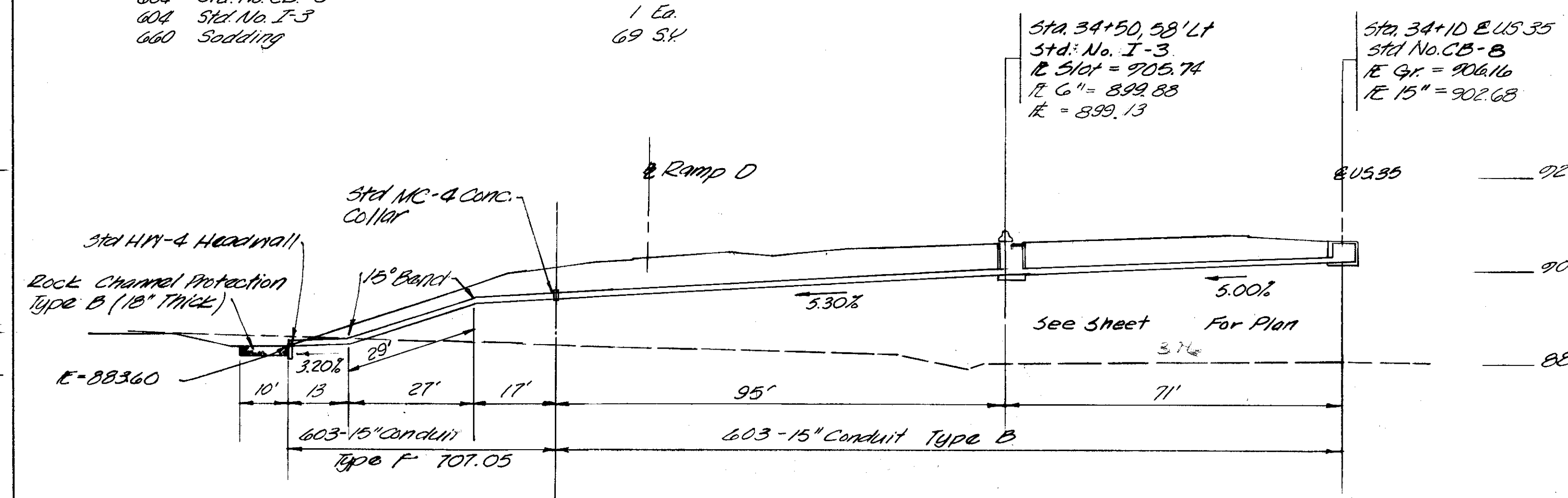
601	Rock Channel Protection, Type B, Bed.	3 C.Y.
602	Masonry	0.27 C.Y.
603	15" Conduit Type B	166 L.F.
603	15" Conduit Type F, 707.05	59 L.F.
604	Std. No. CB-8	1 Ea.
604	Std. No. I-3	1 Ea.
660	Sodding	69 S.Y.

QUANTITY CALCULATIONS
 H.W.F. DATE 10-15-71
 R.U.P. DATE 10-14-72
 KING AND GAVARIS
 CONSULTING ENGINEERS
 Revised: I.E.H.-V79

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

GRE-675-537
 GREENE COUNTY

378
616



ESTIMATED QUANTITIES
 STA. 344+89.54-345+17A

603	21" Conduit Type B	116 L.F.
603	21" Conduit Type C	16 L.F.
604	Std. No. CB-5	2 Ea.
660	Sodding	200 S.Y.

350+75 I-675-76' RT
 CB-6
 R. Swale - 895.28
 R. Grate - 895.11
 R. 15" 890.22

ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
	STA. 350+75 I-675		
601	Rock Channel Protection Type B, Bed.	2	C.Y.
602	Masonry	0.27	C.Y.
603	15" Conduit Type B	73	L.F.
604	Std. No. CB-6	1	Ea.
660	Sodding	5	S.Y.

Profiles
 US-35 Sta. 34+10 to 34+50
 Ramp A Sta. 345+00
 Ramp A Sta. 350+75



QUANTITY CALCULATIONS

H.L.F. DATE 12-15-71

D.P.P. DATE 12-14-71

KING AND GATARI'S CONSULTING ENGINEERS

Revised 12-14-71

FED. NO. DIVISION	STATE	PROJECT	
2	OHIO		

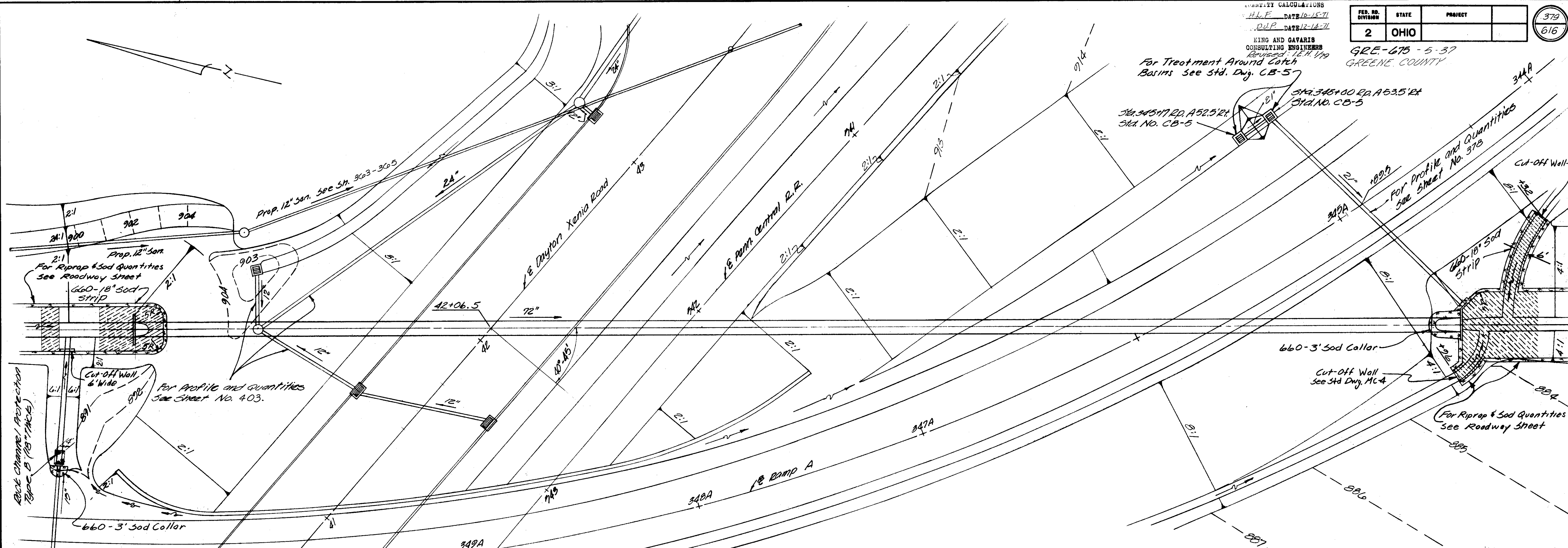
GRE-675-5-37
GREENE COUNTY

379
616

For Treatment Around Catch Basins See Std. Dwg. CB-5

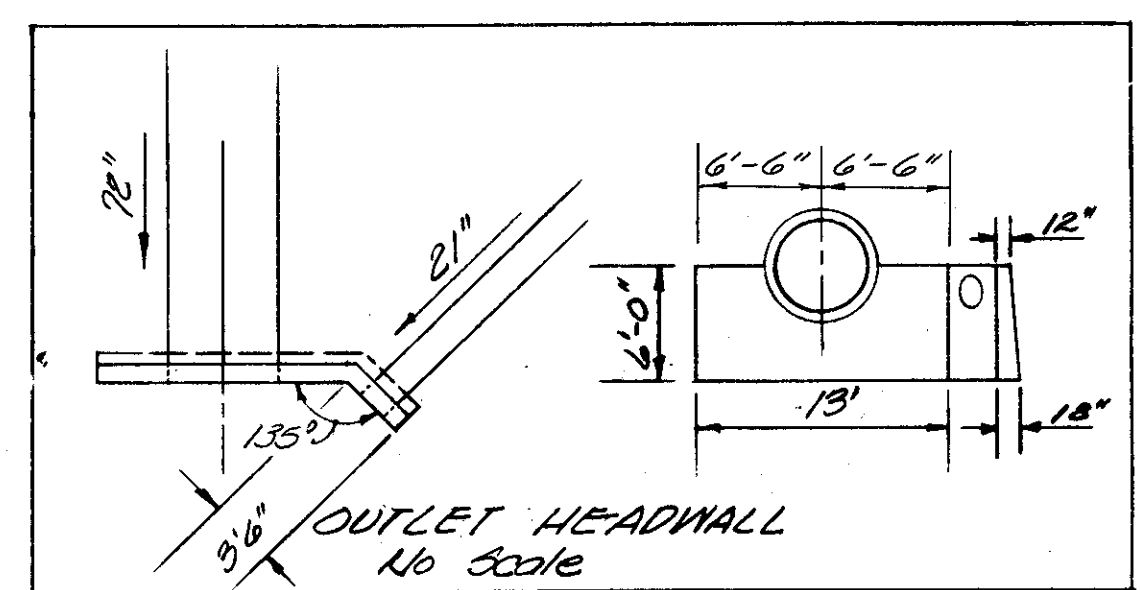
Sta. 345+00 R.P. A 53.5' RT
Sta. No. CB-5

For Profile and Quantities See Sheet No. 375



Prop. 12" Sorn. See SH. 303-305
Prop. 12" Sorn. See Roadway Sheet
660-18" Sod Strip
Cut-off Wall 6' Wide
For Profile and Quantities See Sheet No. 403.

660-3' Sod Collar
For Profile and Quantities See Sheet No. 375
Sta. 350+75 I-675-76' RT
CB-6



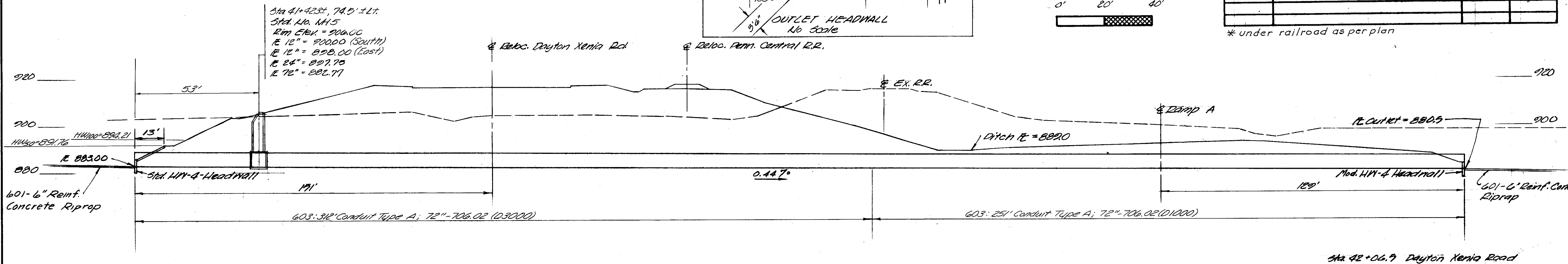
DRAINAGE AREA = 241 Ac.
0.00400 cfs @ 90" 338 cfs.



ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
602	Masonry	666	C.Y.
603	72" Conduit Type A 706.02 (D1000)	251	L.F.
603	72" Conduit Type A 706.02 (D3000)	312	L.F.
660	Sodding	9	S.Y.
604	Std. MH-5	1	Ea.

* under railroad as per plan



Sta. 41+42.31, 74.5' I.L.T.
Std. No. MH-5
Rim Elev. = 206.00
E 12" = 200.00 (South)
E 12" = 202.00 (East)
E 24" = 207.70
E 72" = 202.77

920
900
880
H.W. 594.21
H.W. 591.76
E 883.00
601-6" Reinf. Concrete Riprap
Std. MH-4 Headwall
171'

@ Reinc. Dayton Xenia Rd

@ Reinc. Penn. Central R.R.

@ EX. R.R.

@ Damp A

Ditch E = 8820

E Outlet = 8805

603: 312' Conduit Type A; 72"-706.02 (D3000)

603: 251' Conduit Type A; 72"-706.02 (D1000)

Mod. MH-4 Headwall
601-6" Reinf. Conc. Riprap

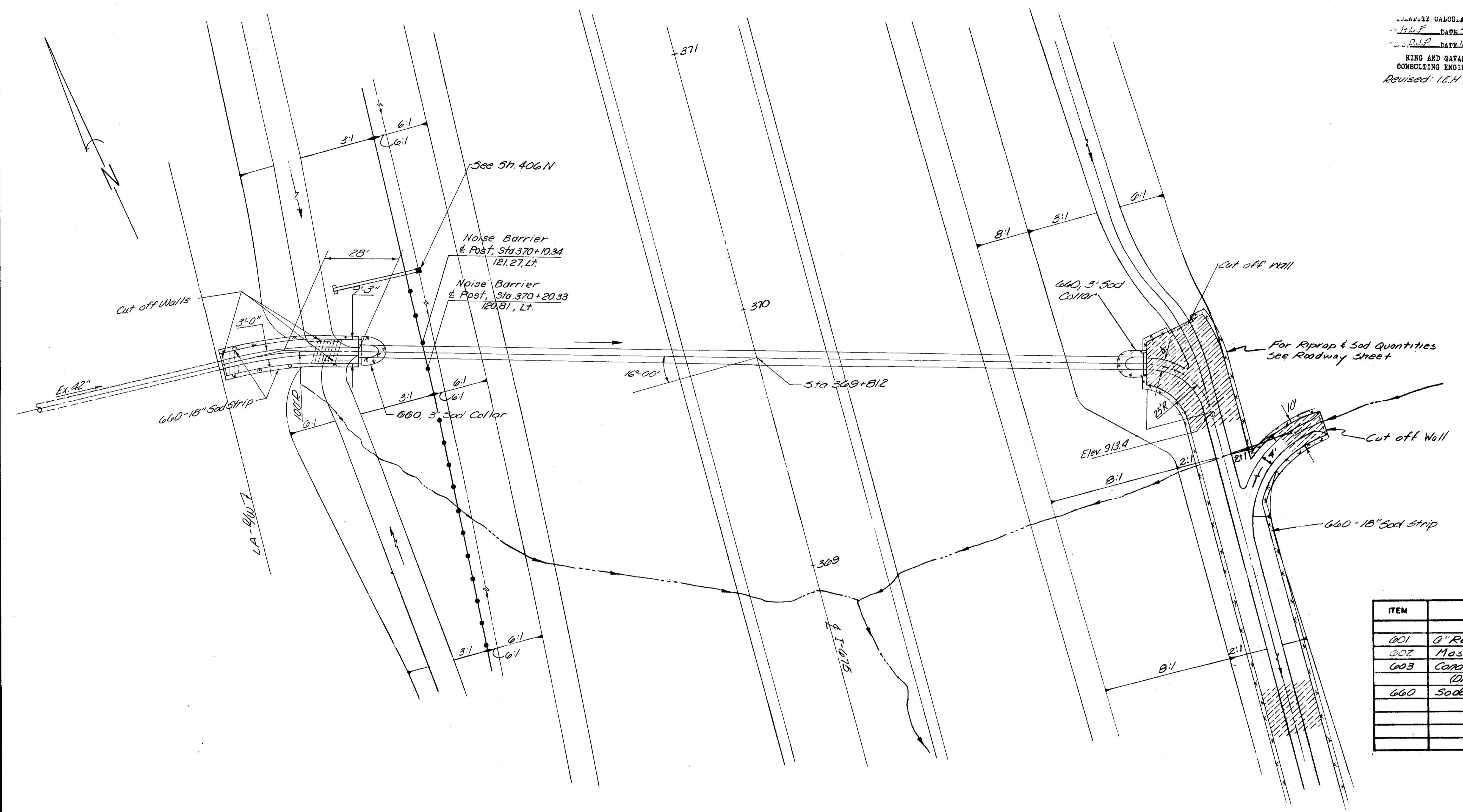
Sta. 42+06.9 Dayton Xenia Road

DRAINAGE DETAIL

ANALYSIS CALCULATIONS
 H.K.F. DATE 9-21-71
 J.S.D. DATE 11-17-71
 KING AND GAVARIS
 CONSULTING ENGINEERS
 Revised: I.E.H. 1/79

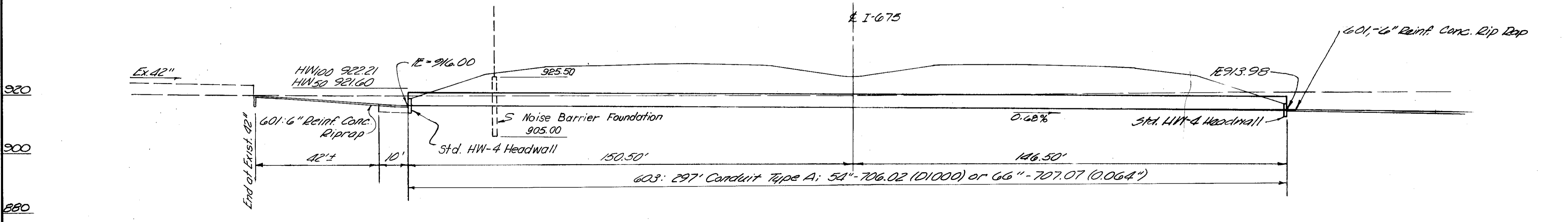
GRE-675 - 5.37
 GREENE COUNTY

DRAINAGE AREA = 58 Ac.
 Q₁₀₀ = 154 cfs. Q₅₀ = 130 c.f.s.



ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	6" Reinforced Concrete Riprap	53	S.Y.
602	Masonry	4.12	C.Y.
603	Conduit Type A; 54" 706.02 (D1000) or 66" 707.07 (D064")	297	LF
660	Sodding	35	S.Y.

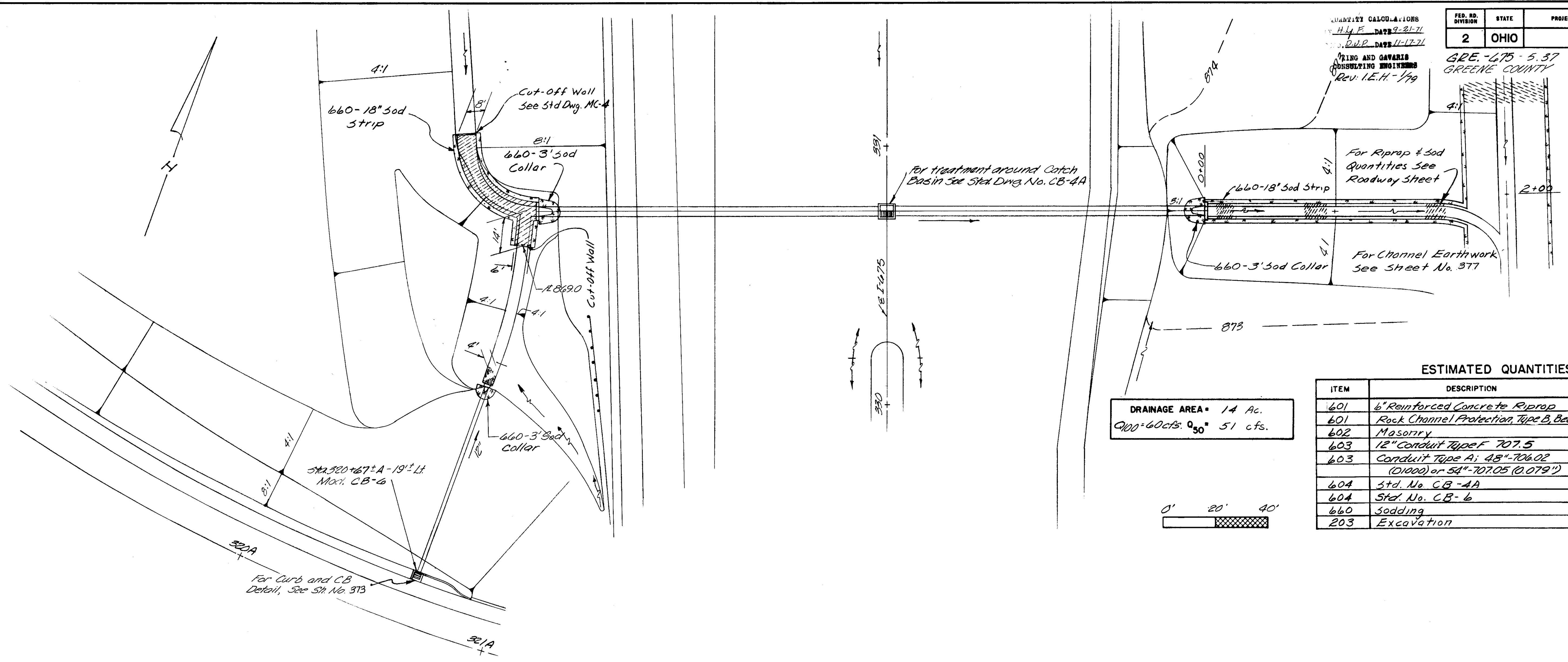


NOTE: The Contractor shall co-ordinate the installation of the pipe with the installation of the Noise Barrier Posts to assure that the two do not conflict.

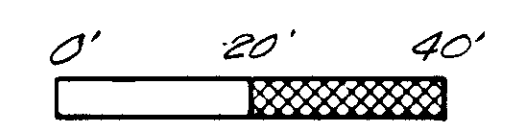
I-675
 STA 369+81.2

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

QUANTITY CALCULATIONS
 H.L.P. DATE 9-21-71
 R.W.P. DATE 11-17-71
 KING AND GAVARIS
 CONSULTING ENGINEERS
 Rev. I.E.H. - 1/79
 GRE. 475-5.37
 GREENE COUNTY

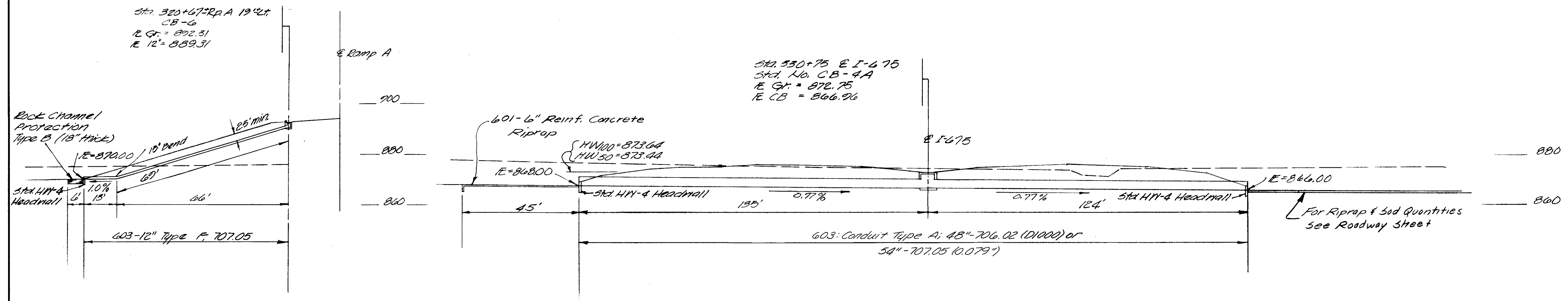


DRAINAGE AREA = 14 Ac.
 Q100 = 60 cfs. Q50 = 51 cfs.

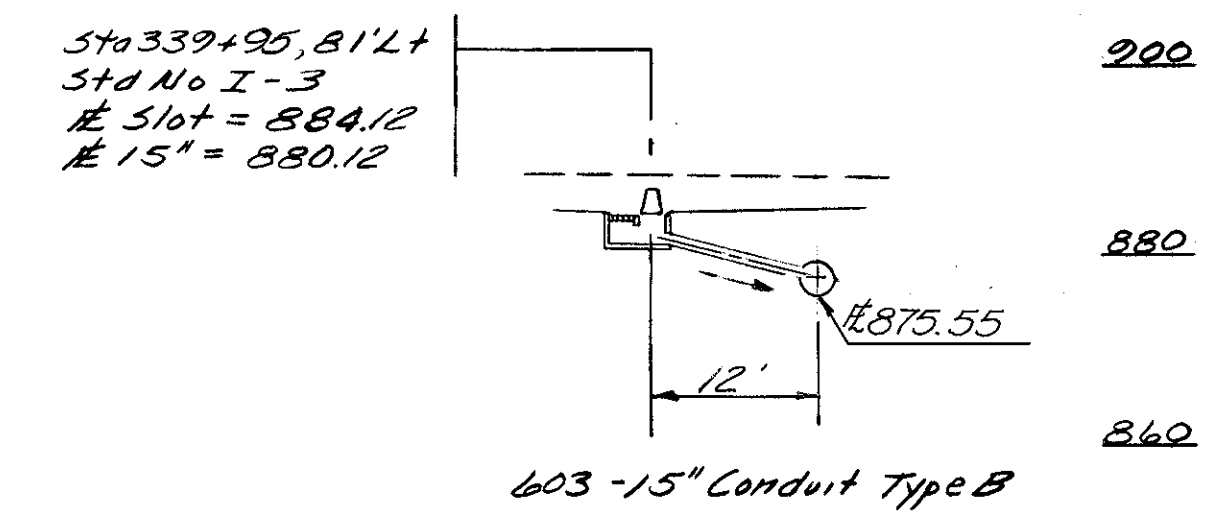
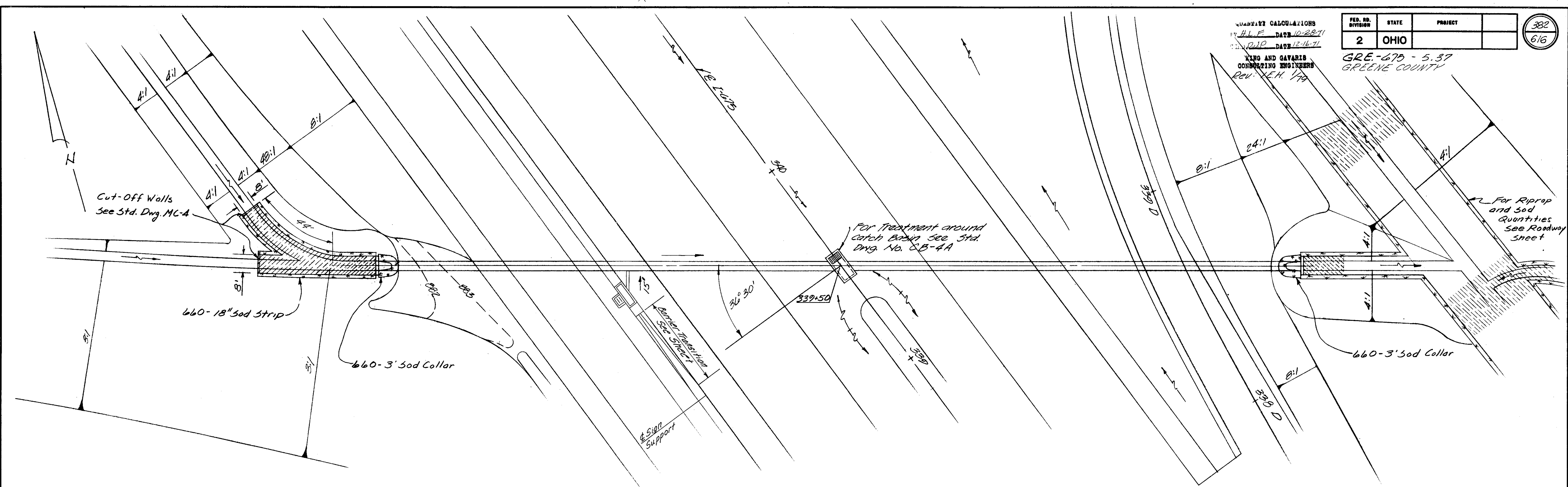


ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	6" Reinforced Concrete Riprap	47	S.Y.
601	Rock Channel Protection Type B, Bed	2	C.Y.
602	Masonry	2.87	C.Y.
603	12" Conduit Type F 707.5	82	L.F.
603	Conduit Type A; 48"-706.02 (D1000) or 54"-707.05 (D.079")	259	L.F.
604	Std. No. CB-4A	1	Ea.
604	Std. No. CB-6	1	Ea.
660	Sodding	137	S.Y.
203	Excavation	590	C.Y.



Sta 330+75 I-475

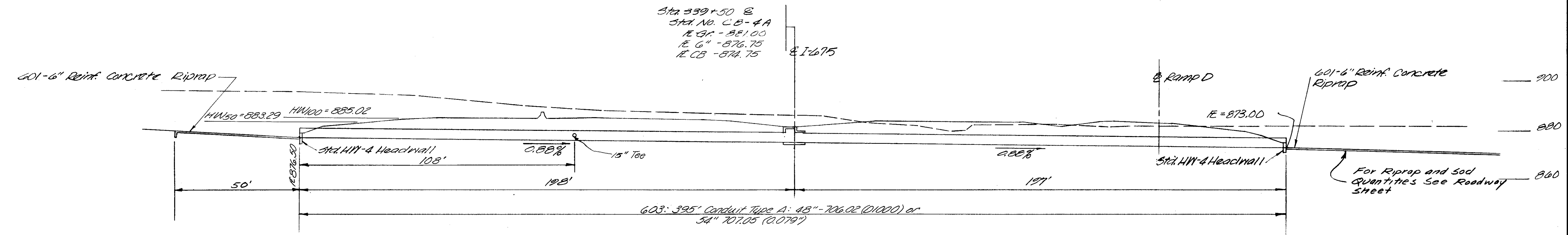


DRAINAGE AREA = 39 AC.
 Q₁₀₀ = 119 cfs Q₅₀ = 101 cfs



ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	6" Reinforced Concrete Riprap	71	S.Y.
602	Masonry	2.66	C.Y.
603	15" Conduit Type B	12	L.F.
603	Conduit Type A: 48" - 706.02 (D1000) or 54" - 707.05 (D1079)	395	L.F.
604	Std. No. CB-4A	1	Ea.
604	Std. No. I-3	1	Ea.
660	Sodding	331	S.Y.

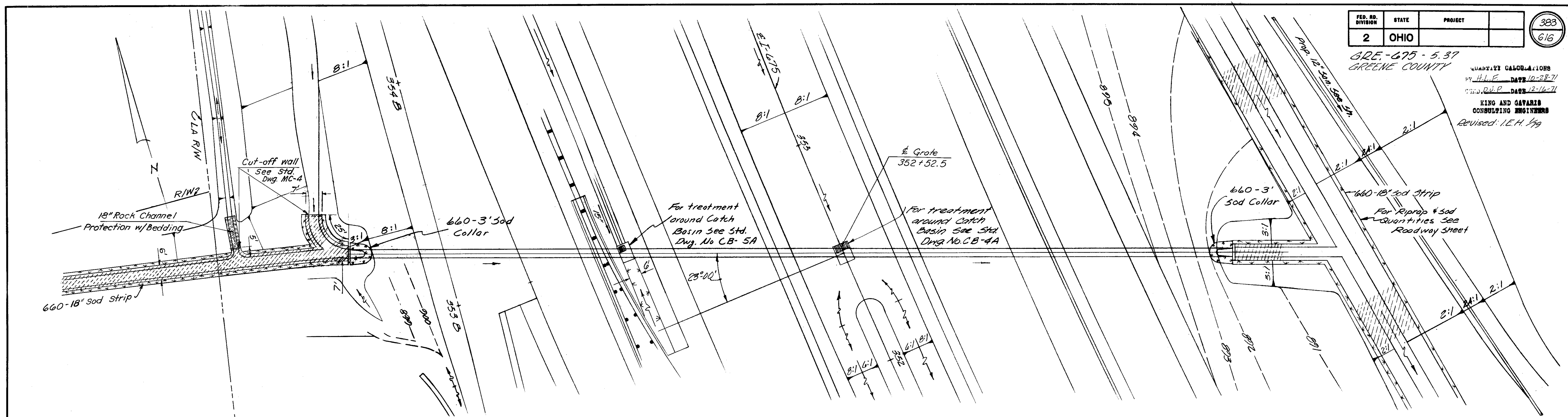


Sta. 339+50 I-675

GRE-675-5.37
GREENE COUNTY

QUANTITY CALCULATIONS
BY H.L.E. DATE 10-28-71
CHKD. BY P. DATE 12-16-71

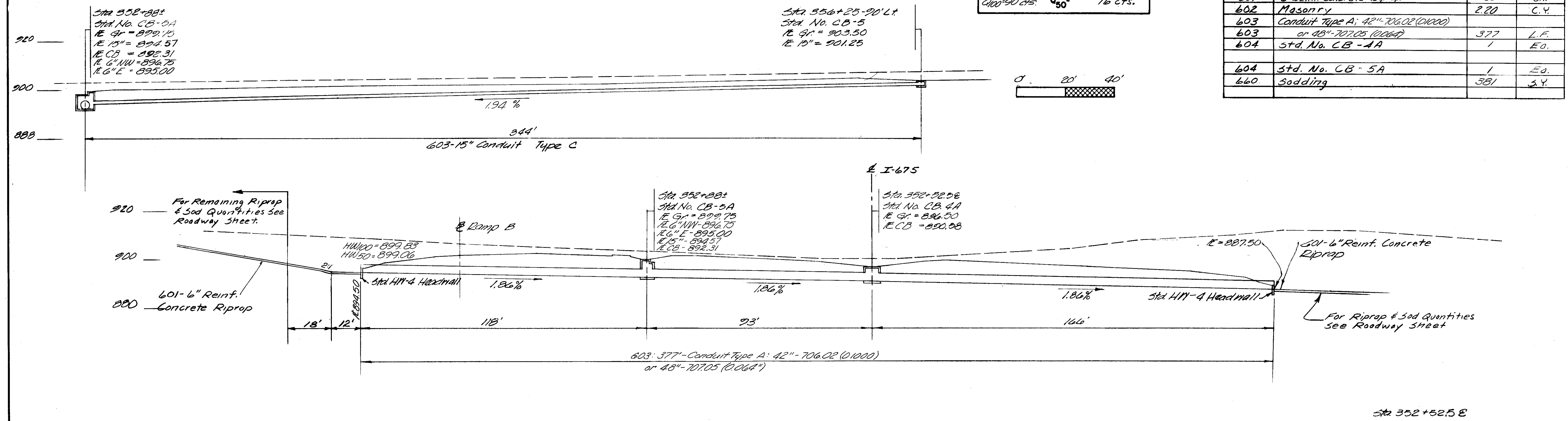
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: I.E.H. 4/79



Estimated Quantities
Sta. 352+88 to Sta. 352+125
603: 15\"/>

DRAINAGE AREA = 25 Ac.
Q₁₀₀ = 90 cfs. Q₅₀ = 76 cfs.

ITEM	DESCRIPTION	QUANTITY	UNIT
	Sta. 352+52.5		
601	6\"/>		



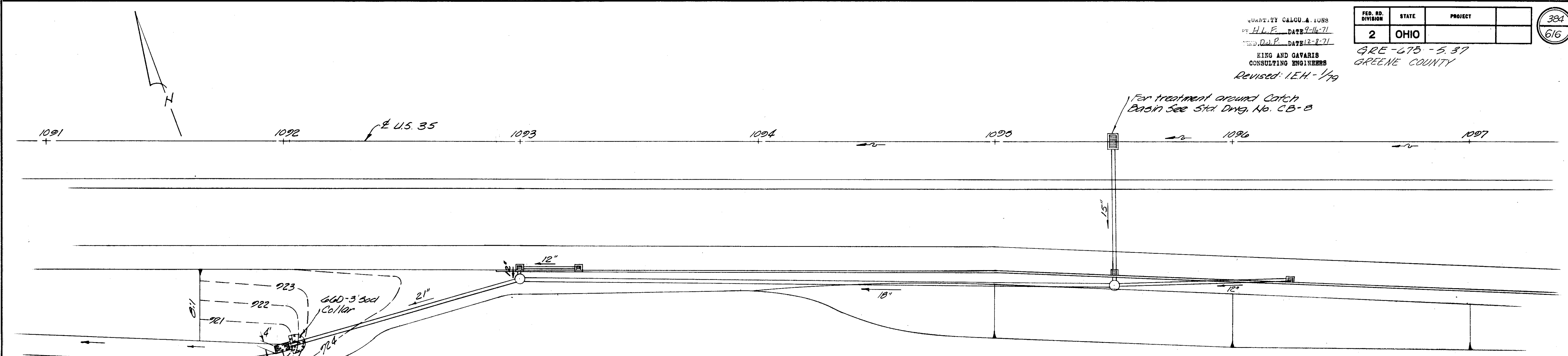
Sta. 352+52.5 E

QUANTITY CALCULATIONS
 BY H.L.F. DATE 9-16-71
 W.H.P. DATE 12-3-71
 KING AND GAVARIS
 CONSULTING ENGINEERS
 Revised: 1.E.H. - 1/79

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

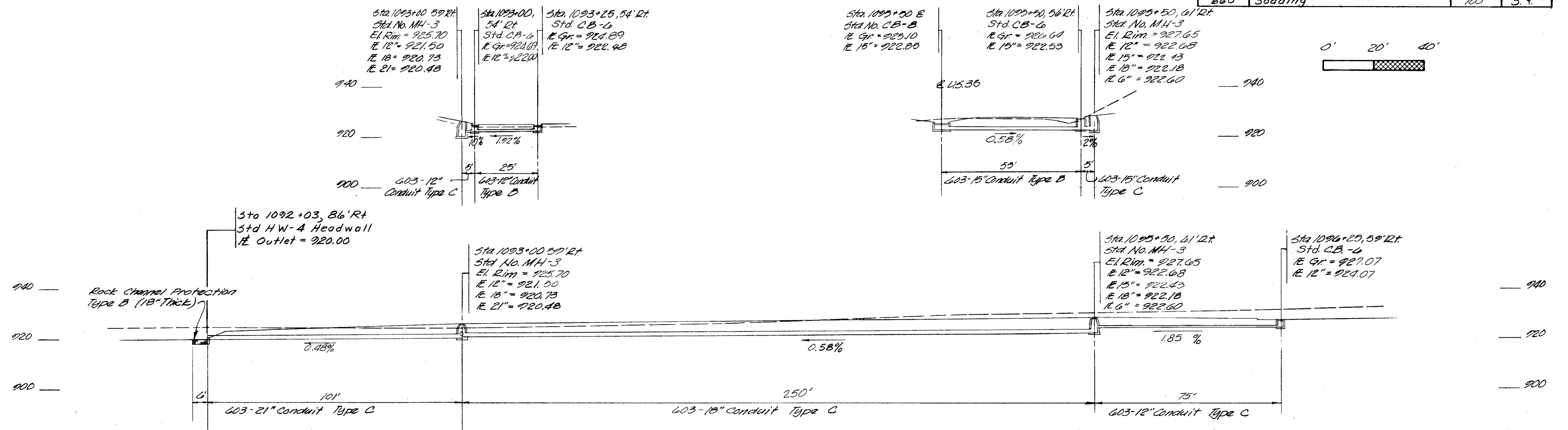
GRE-675-5.37
 GREENE COUNTY

384
 6/6



ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B, Red	2	C.Y.
602	Masonry	0.59	C.Y.
603	12" Conduit Type B	25	L.F.
603	12" Conduit Type C	80	L.F.
603	15" Conduit Type B	55	L.F.
603	15" Conduit Type C	5	L.F.
603	18" Conduit Type C	250	L.F.
603	21" Conduit Type C	101	L.F.
604	Std. No. CB-8	1	Ea.
604	Std. No. CB-6	4	Ea.
604	Std. No. MH-3	2	Ea.
660	Sodding	103	S.Y.

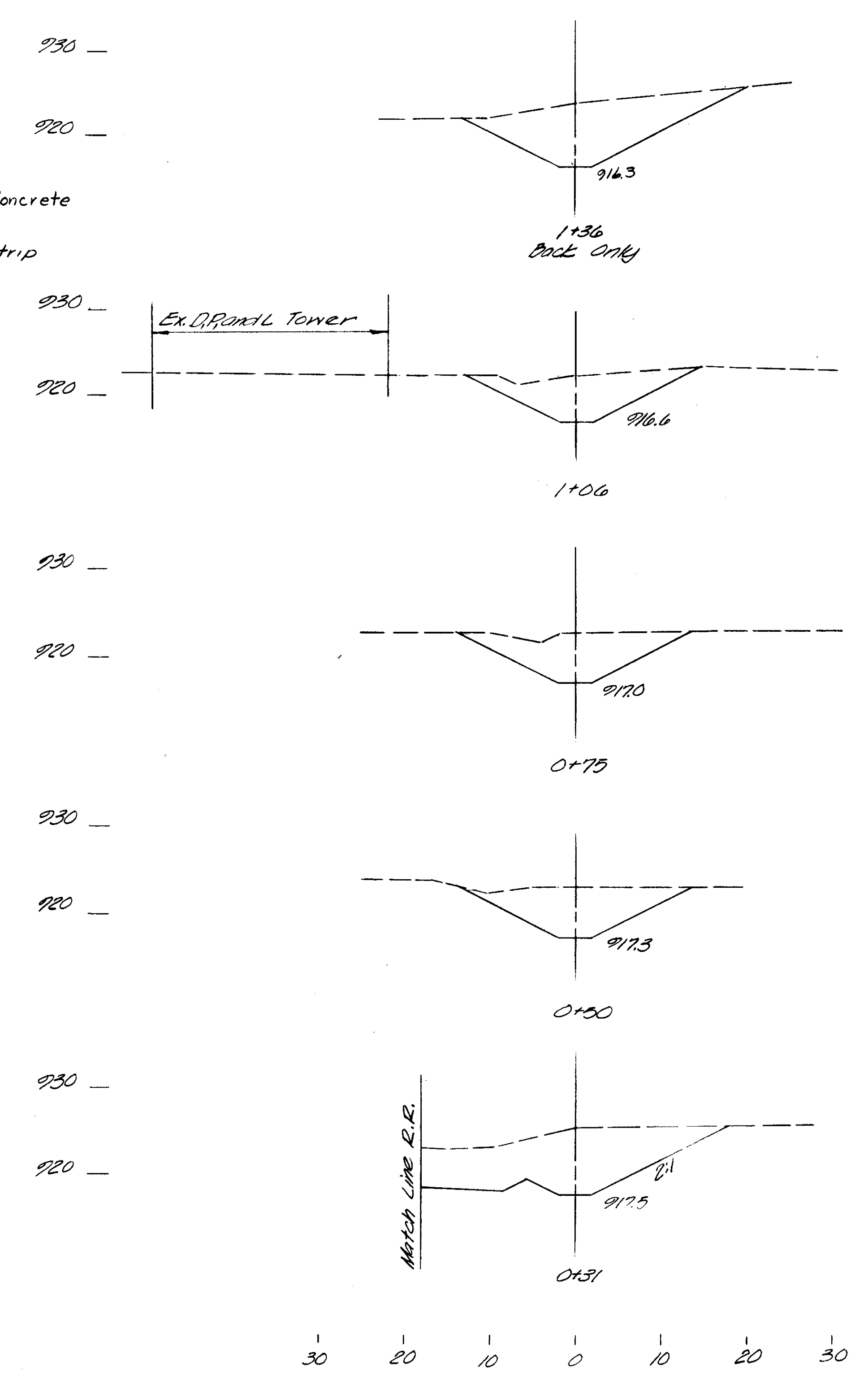
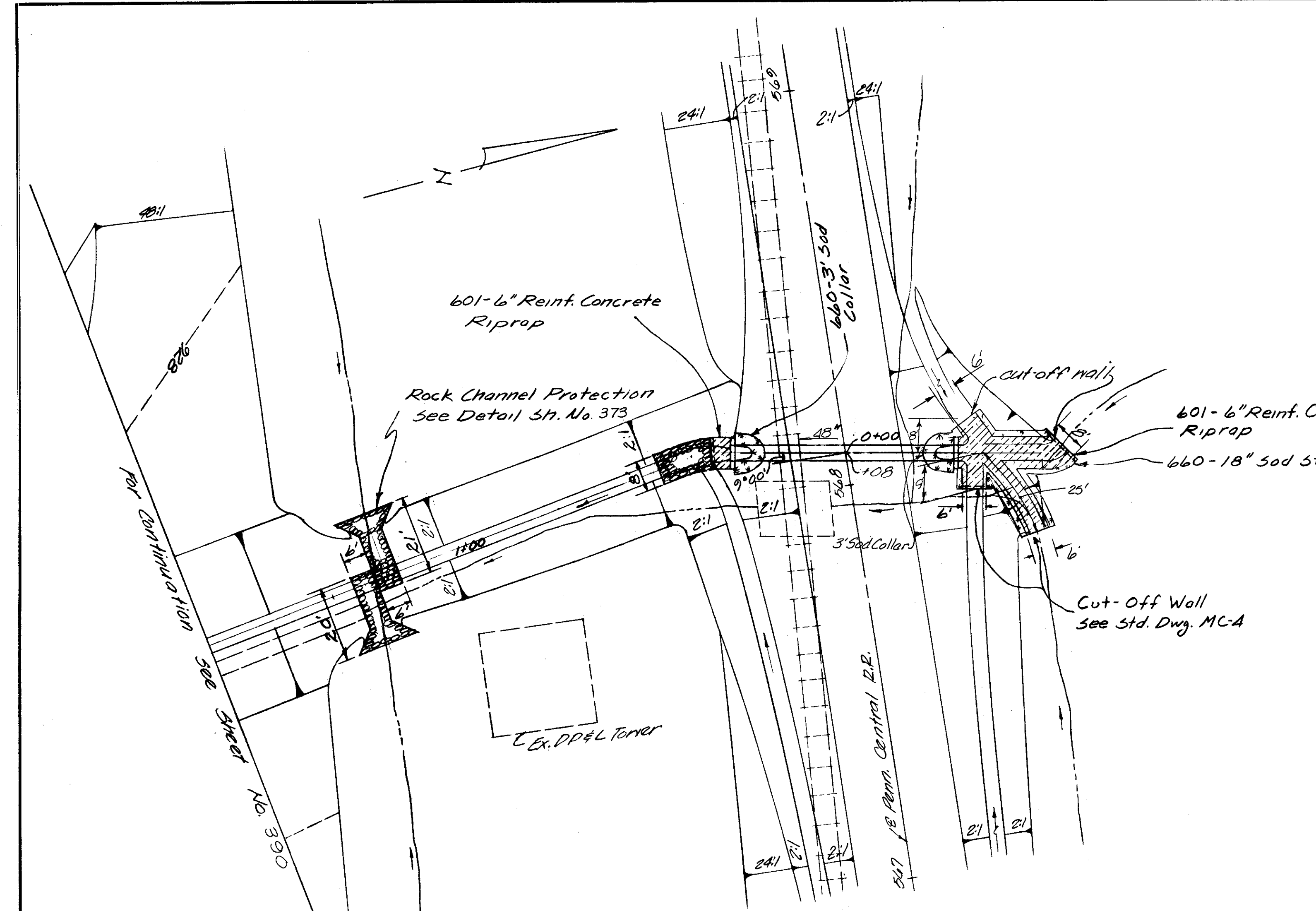


U.S. 35 Sta. 1092+03 to 1097+07

QUANTITY CALCULATIONS
 by R.H.P. DATE 9-16-71
 W.D.P. DATE 12-8-71
 KING AND GAVARIS
 CONSULTING ENGINEERS
 Revised: I.E.H. 1/79

GRE-675-5.37
 GREENE COUNTY

Area	Vol.
Cut	Cut.
S.F.	C.Y.
	138
	124
	85
	100
	89
	82
	88
	92
	174
Total	398



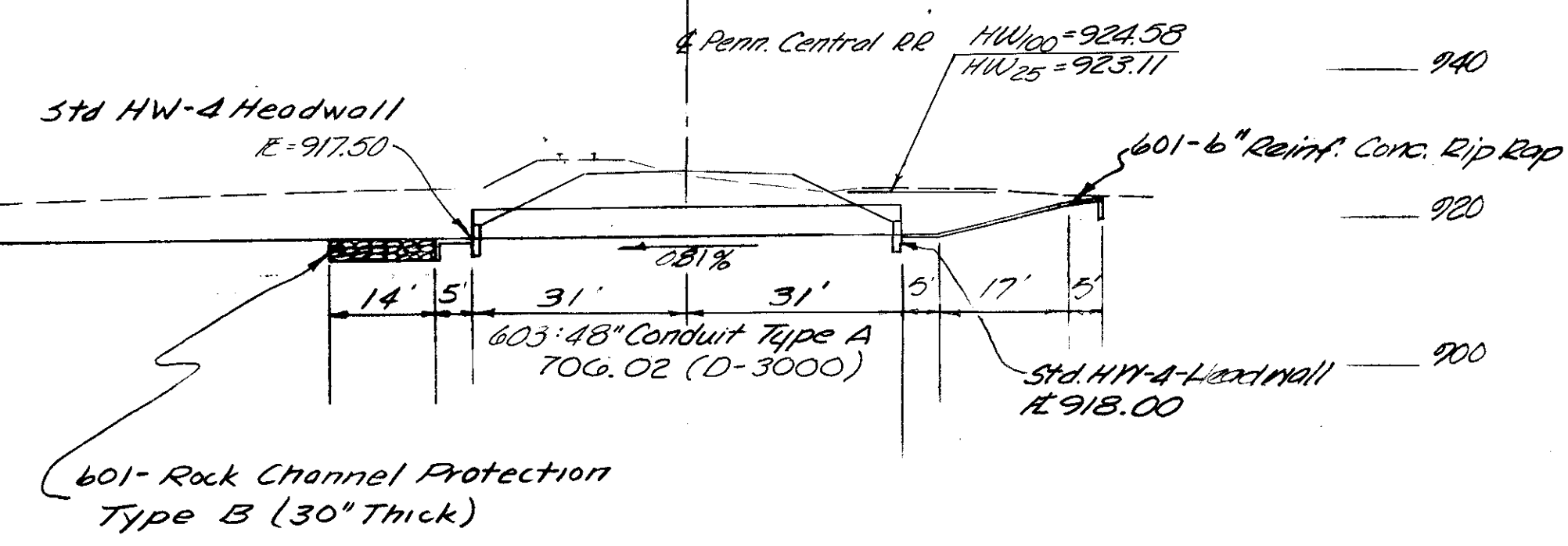
ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	6" Reinforced Concrete Riprap	47	S.Y.
601	Rock Channel Protection Type B Bed	34	C.Y.
602	Masonry	2.18	C.Y.
603	48" Conduit Type A 706.02 D3000	62	L.F.
660	Sodding	25	S.Y.
203	Excavation	398	C.Y.

DRAINAGE AREA = 39 Ac.
 $Q_{100} = 117 cfs.$ @ $0.25'$ BR cfs.



* under railroad as per plan

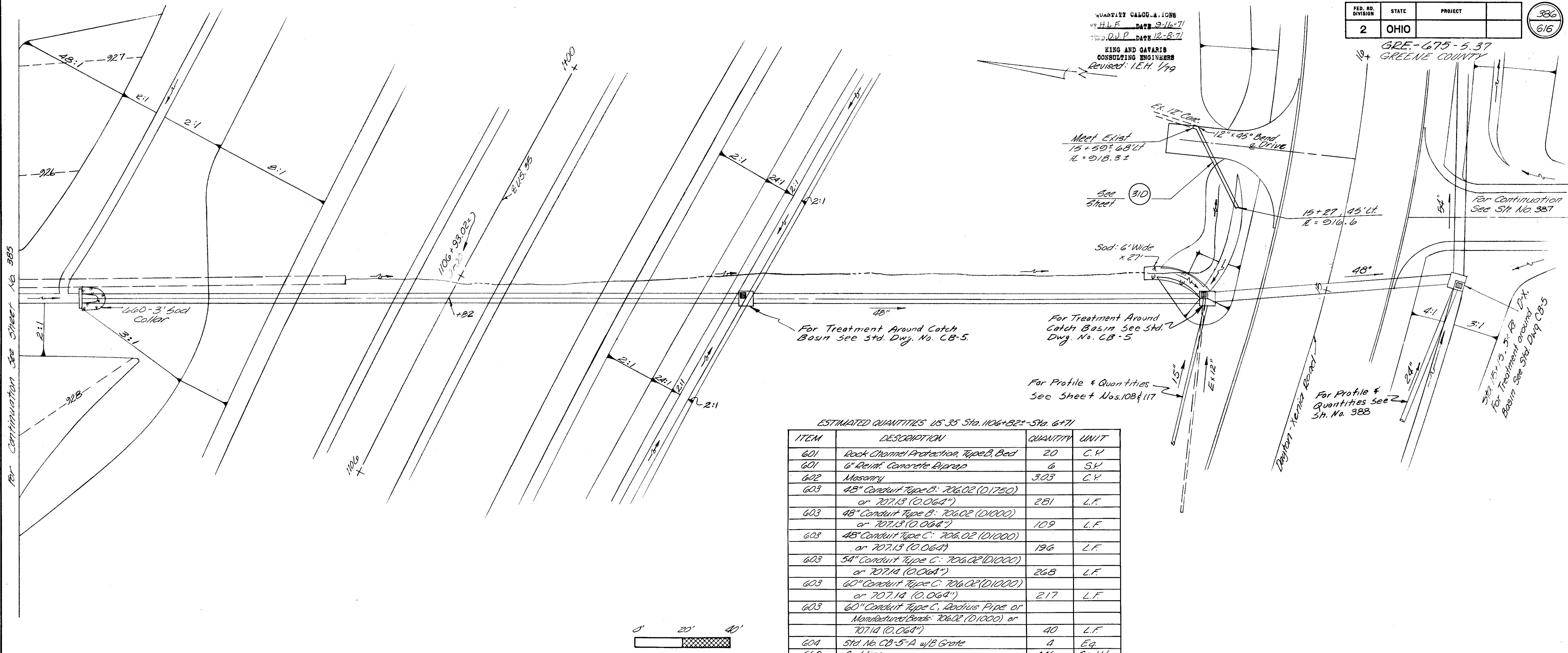


Outlet Channel Cross Sections

Penn Central R.R.
 Sta. 568+08

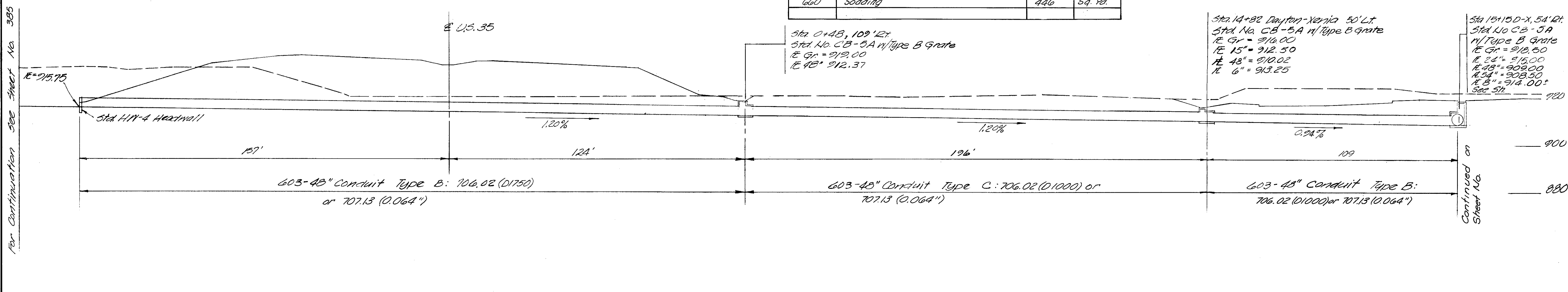
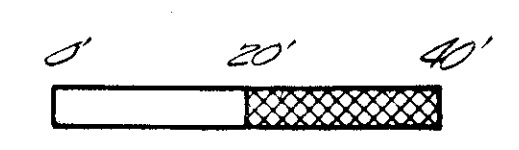
QUANTITY CALCULATIONS
 BY H.L.F. DATE 9-16-71
 CHECKED BY D.P. DATE 12-8-71
 KING AND GAWRIS
 CONSULTING ENGINEERS
 Revised: 1.E.H. 1/79

GRE-675-5.37
 GREENE COUNTY



ESTIMATED QUANTITIES US 35 Sta. 1106+82+ Sta. 6+71

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection, Type B, Bed	20	C.Y.
601	6" Reinf. Concrete Riprap	6	S.Y.
602	Masonry	3.03	C.Y.
603	48" Conduit Type B: 706.02 (D1750) or 707.13 (D.064")	281	L.F.
603	48" Conduit Type B: 706.02 (D1000) or 707.13 (D.064")	109	L.F.
603	48" Conduit Type C: 706.02 (D1000) or 707.13 (D.064")	196	L.F.
603	54" Conduit Type C: 706.02 (D1000) or 707.14 (D.064")	268	L.F.
603	60" Conduit Type C: 706.02 (D1000) or 707.14 (D.064")	217	L.F.
603	60" Conduit Type C, Radius Pipe or Manufactured Bents: 706.02 (D1000) or 707.14 (D.064")	40	L.F.
604	Std. No. CB-5-A w/B Grate	4	Eg.
660	Sodding	446	Sq. Yd.

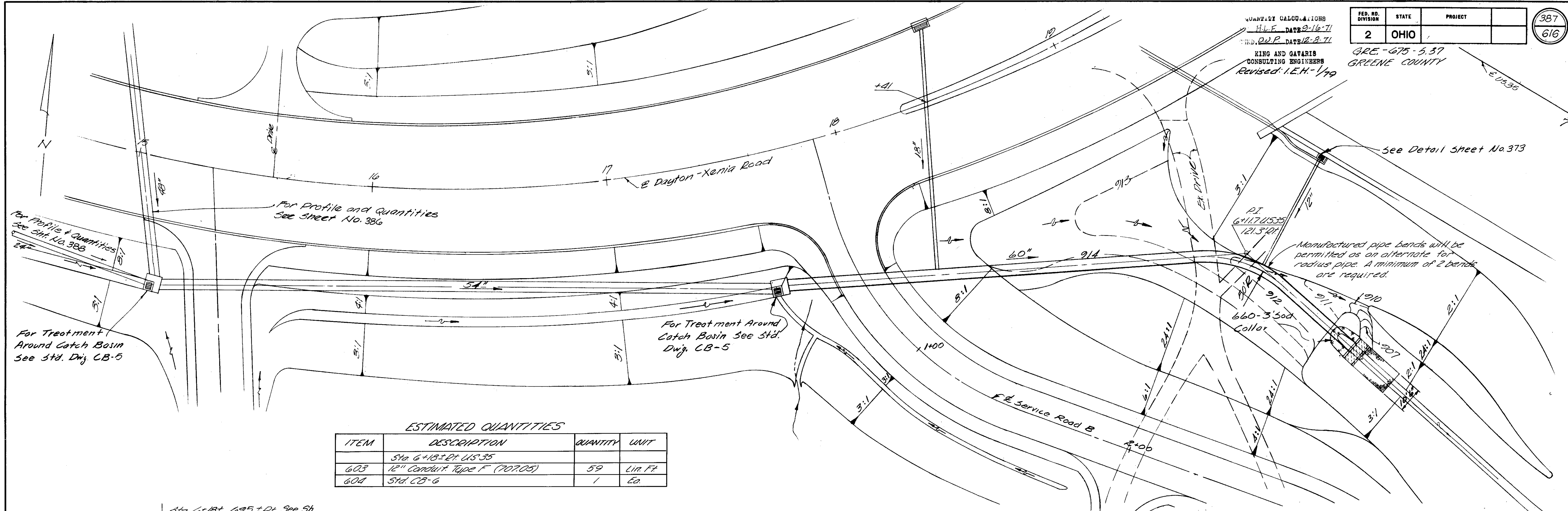


US-35 Sta. 1106+82

DRAINAGE DETAIL

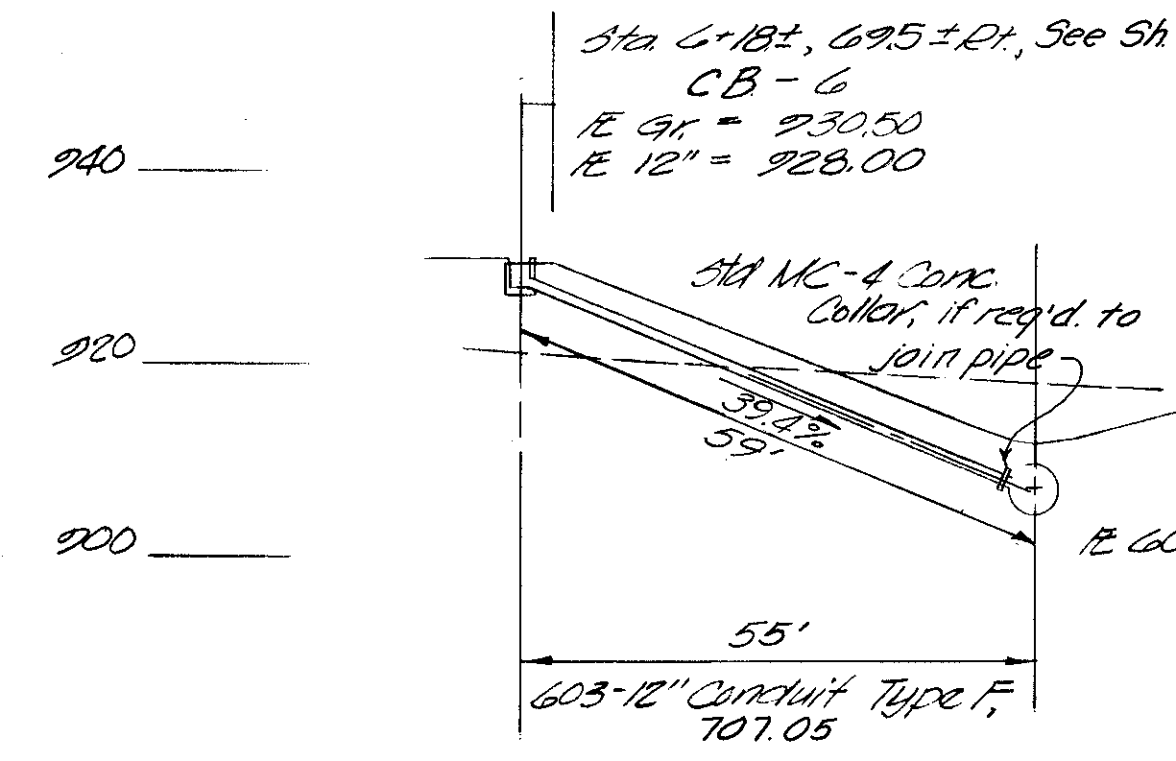
For Continuation see Sheet No. 385

Continued on Sheet No.



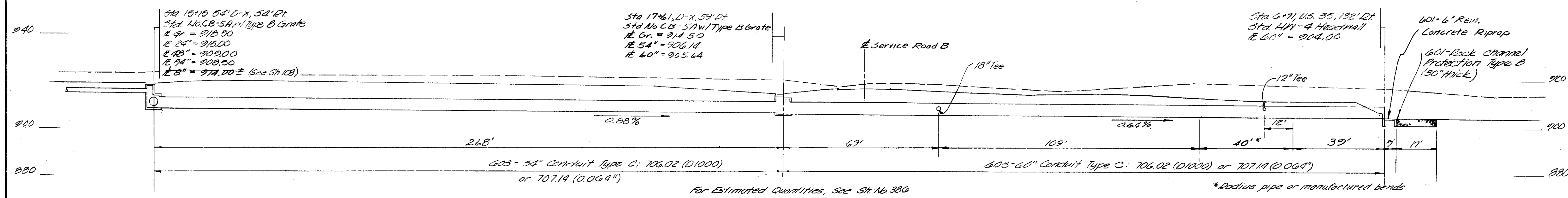
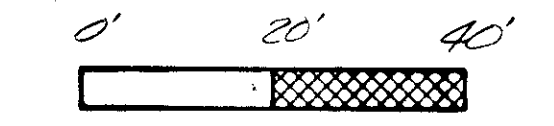
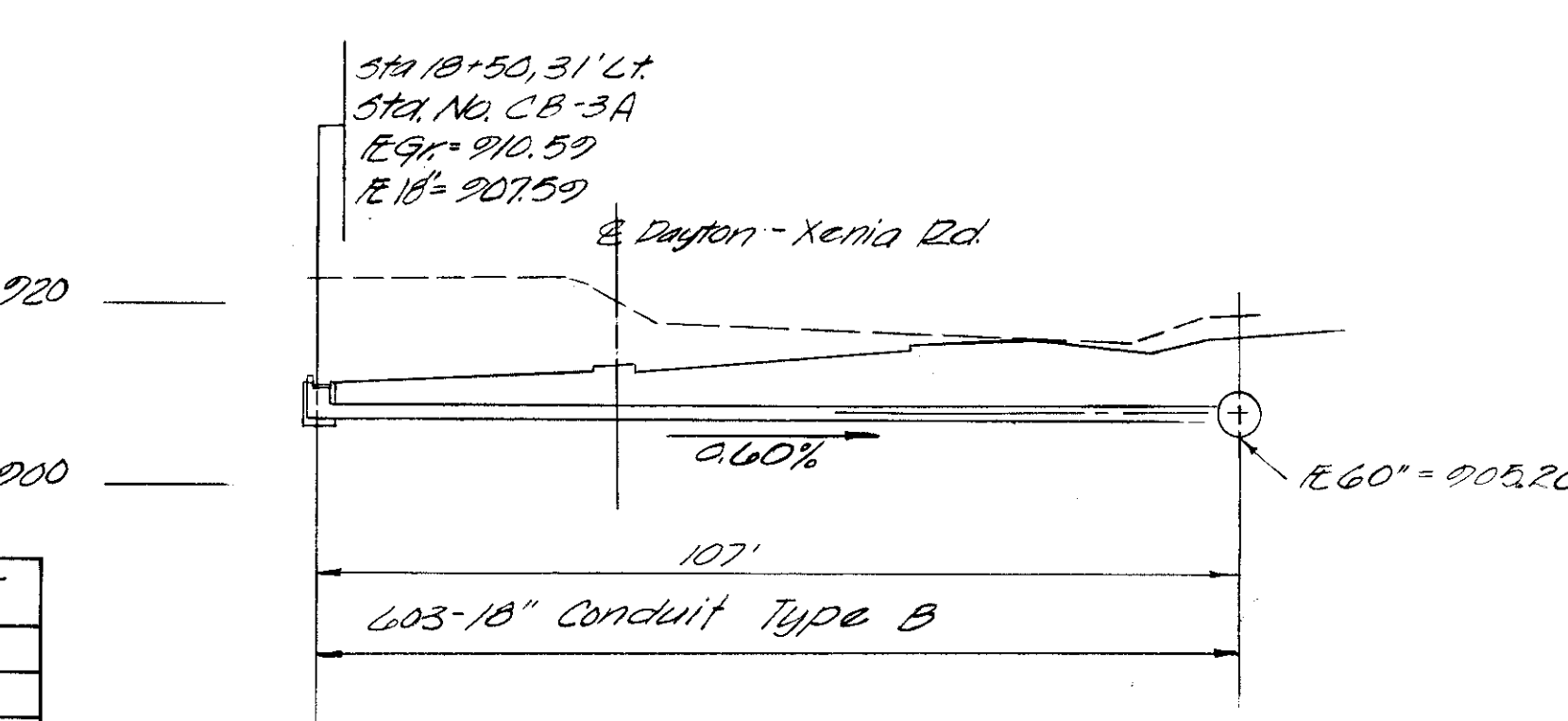
ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
	Sta 6+18± Pt. US 35		
603	12" Conduit Type F (707.05)	59	Lin. Ft.
604	Std. CB-6	1	Ed.



ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
	Sta 18+41 D-X Rd.		
603	18" Conduit Type B	107	Lin. Ft.
604	Std. No. CB-3A	1	Ed.



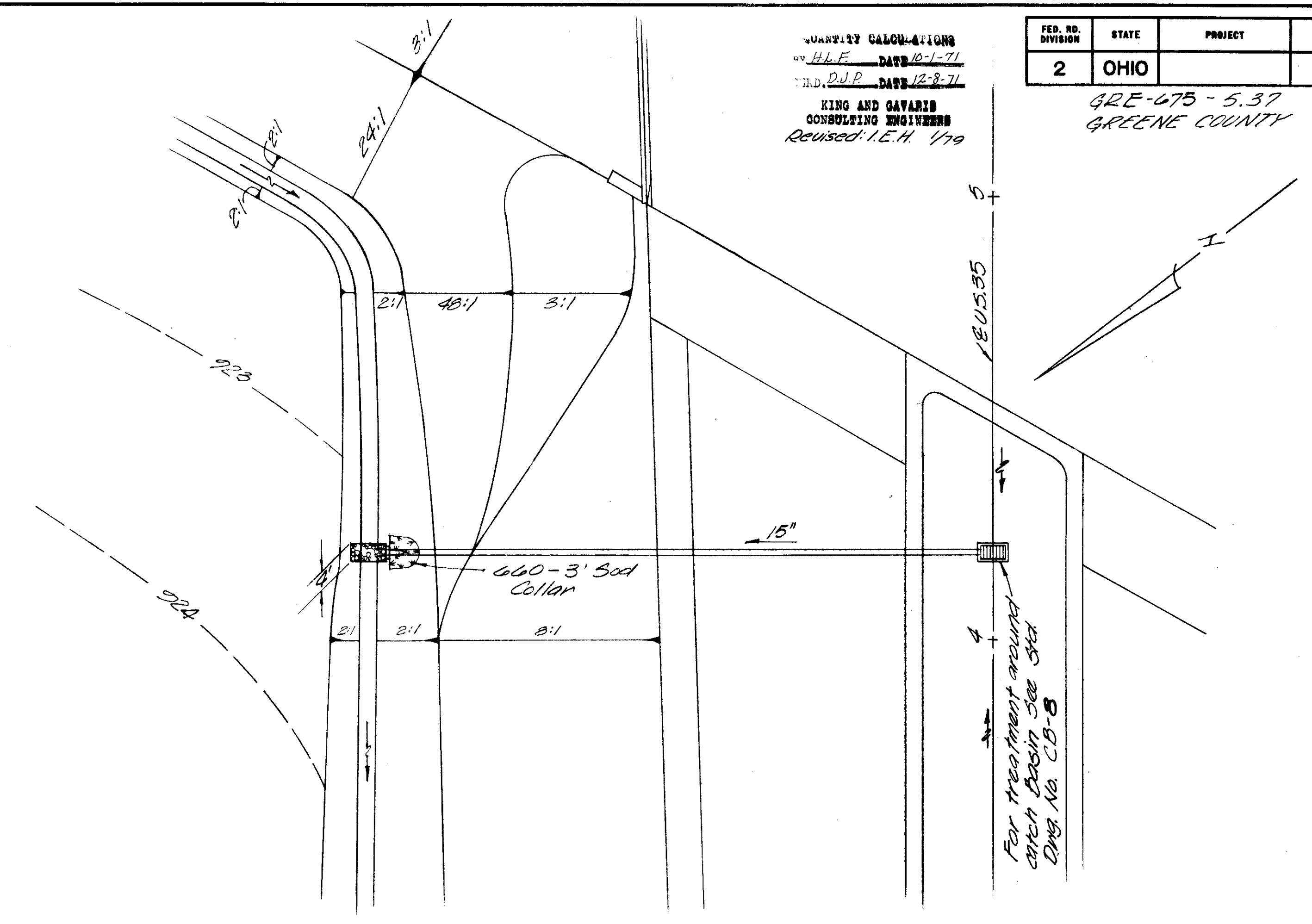
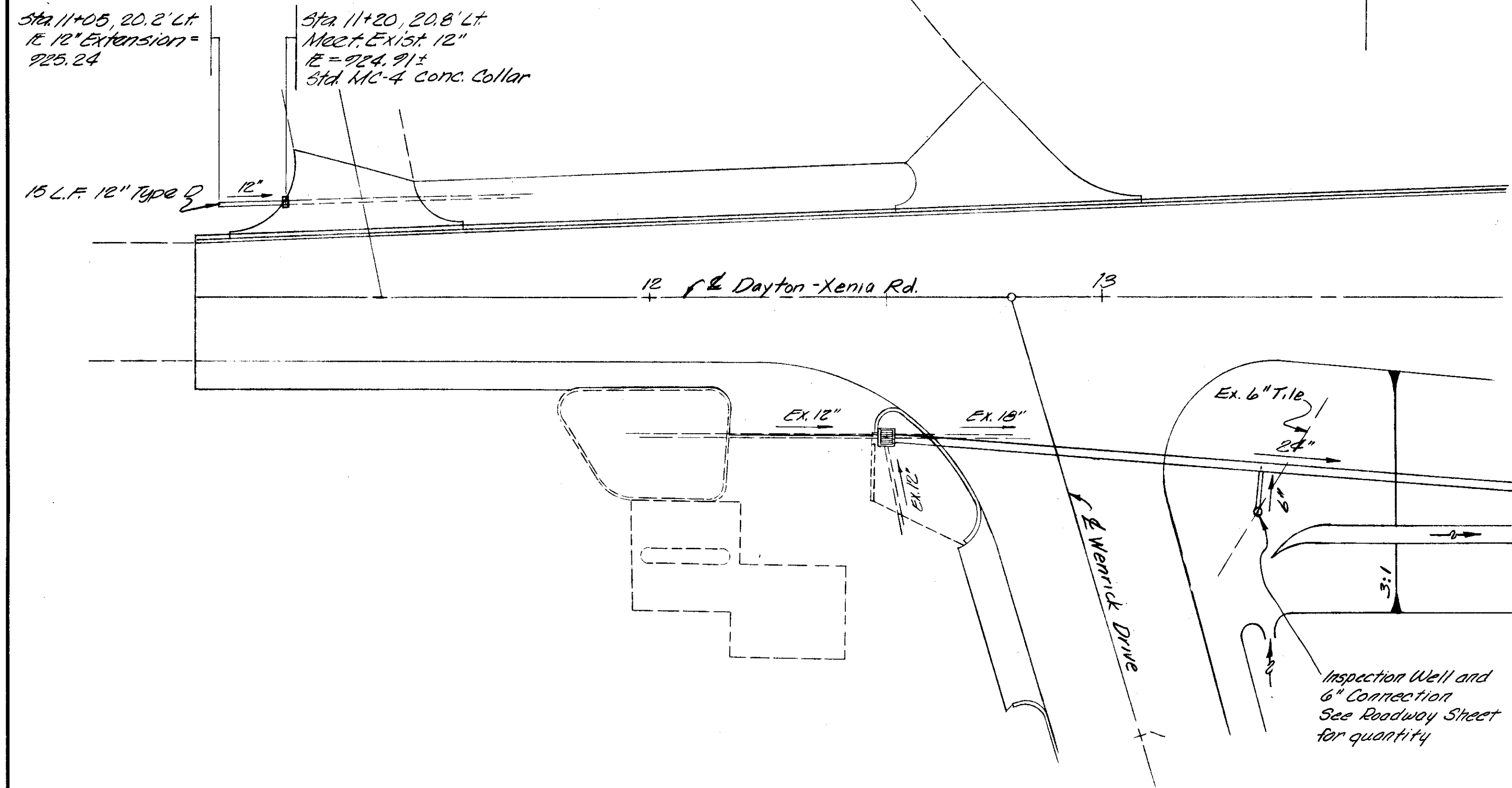
Dayton-Xenia Rd. Sta 15+15 to US 35 Sta. 6+71

QUANTITY CALCULATIONS
 H.L.F. DATE 10-1-71
 W.B.D.P. DATE 12-8-71
 KING AND GAVARIS
 CONSULTING ENGINEERS
 Revised I.E.H. 1/79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

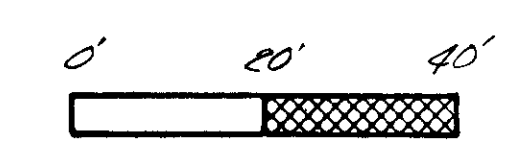
GRE-675-5.37
 GREENE COUNTY

388
 616



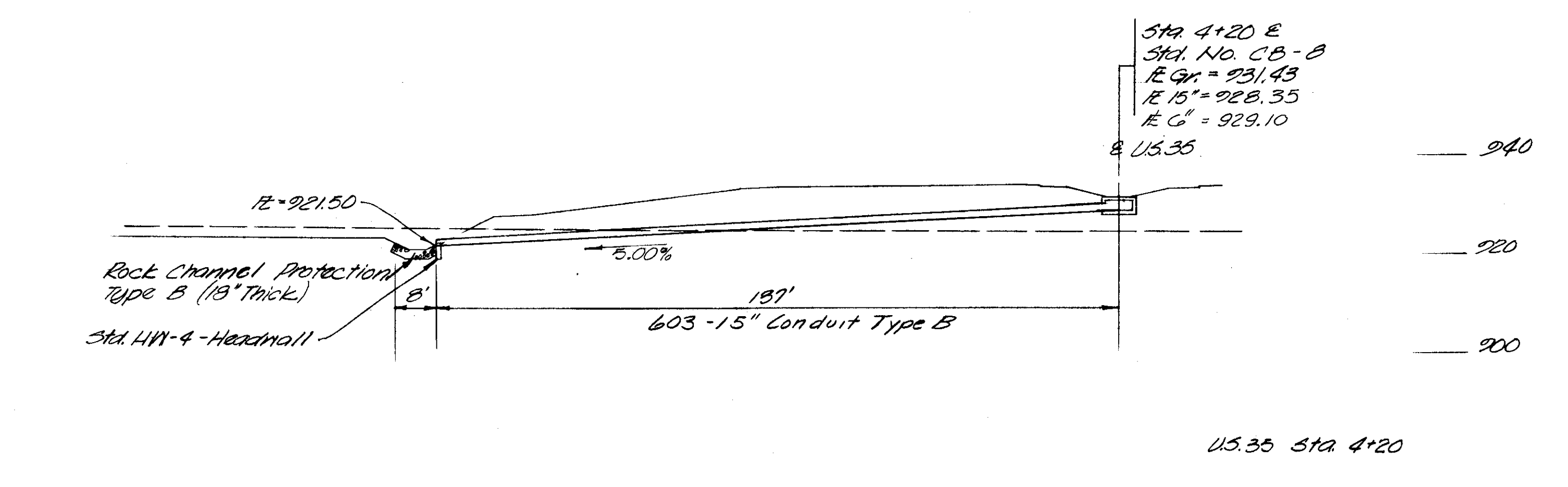
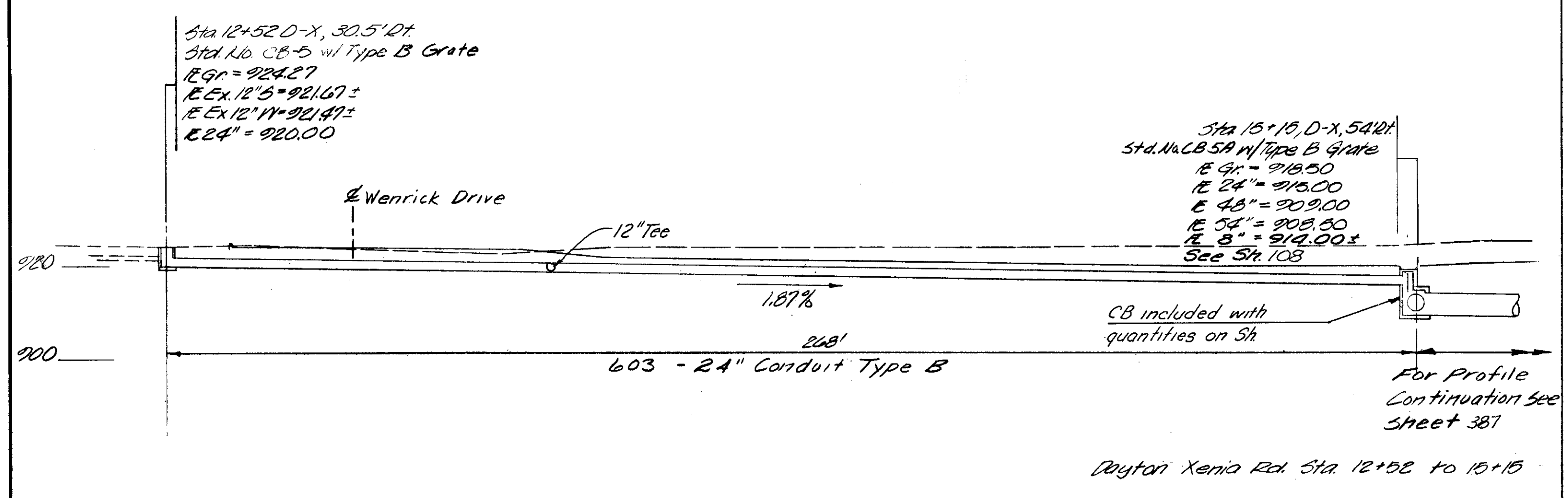
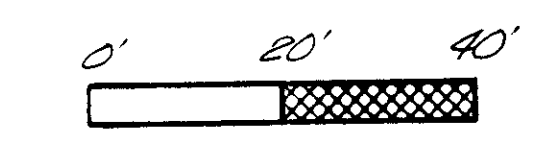
ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
603	12" Conduit Type D	15	L.F.
603	24" Conduit Type B	268	L.F.

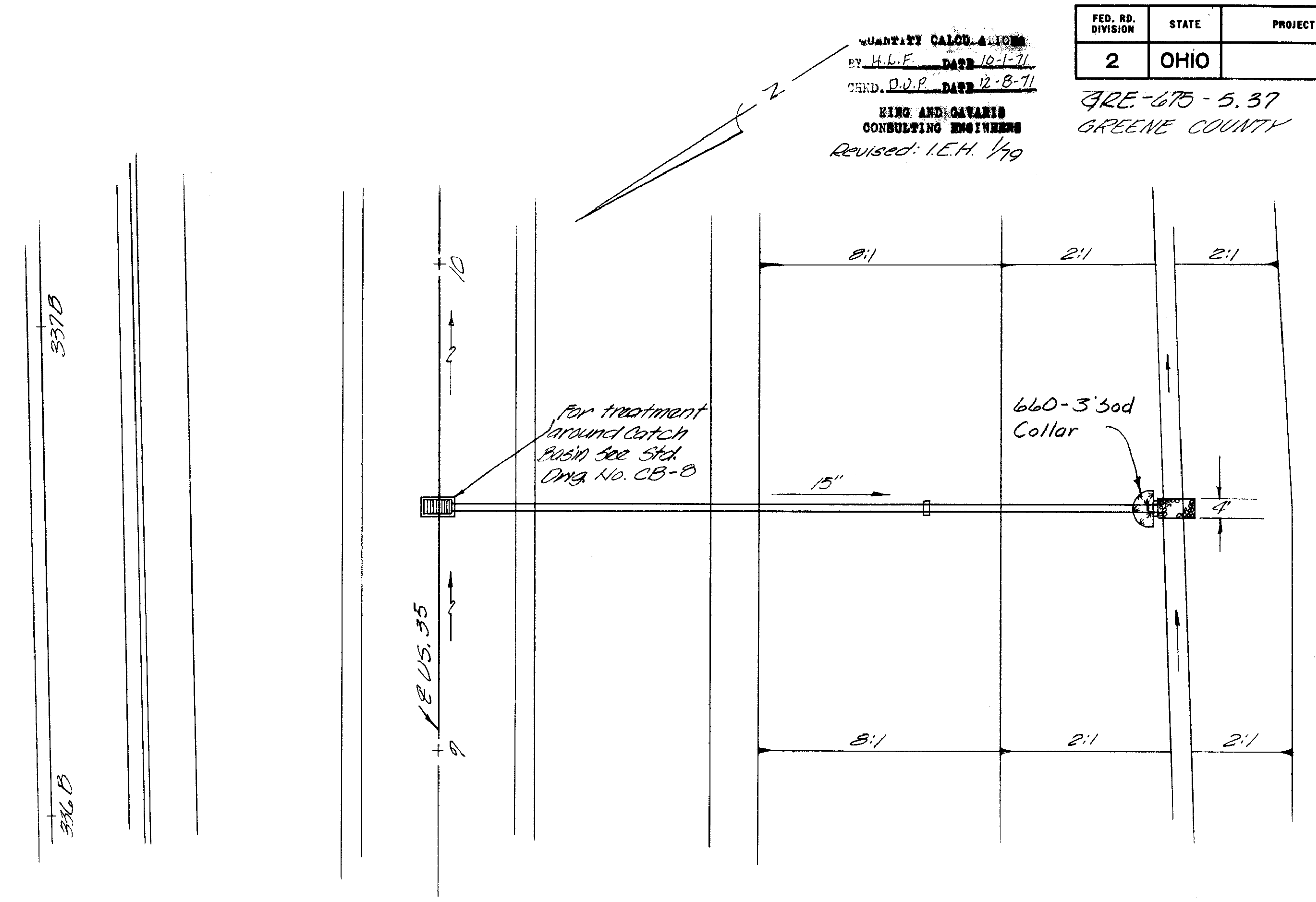
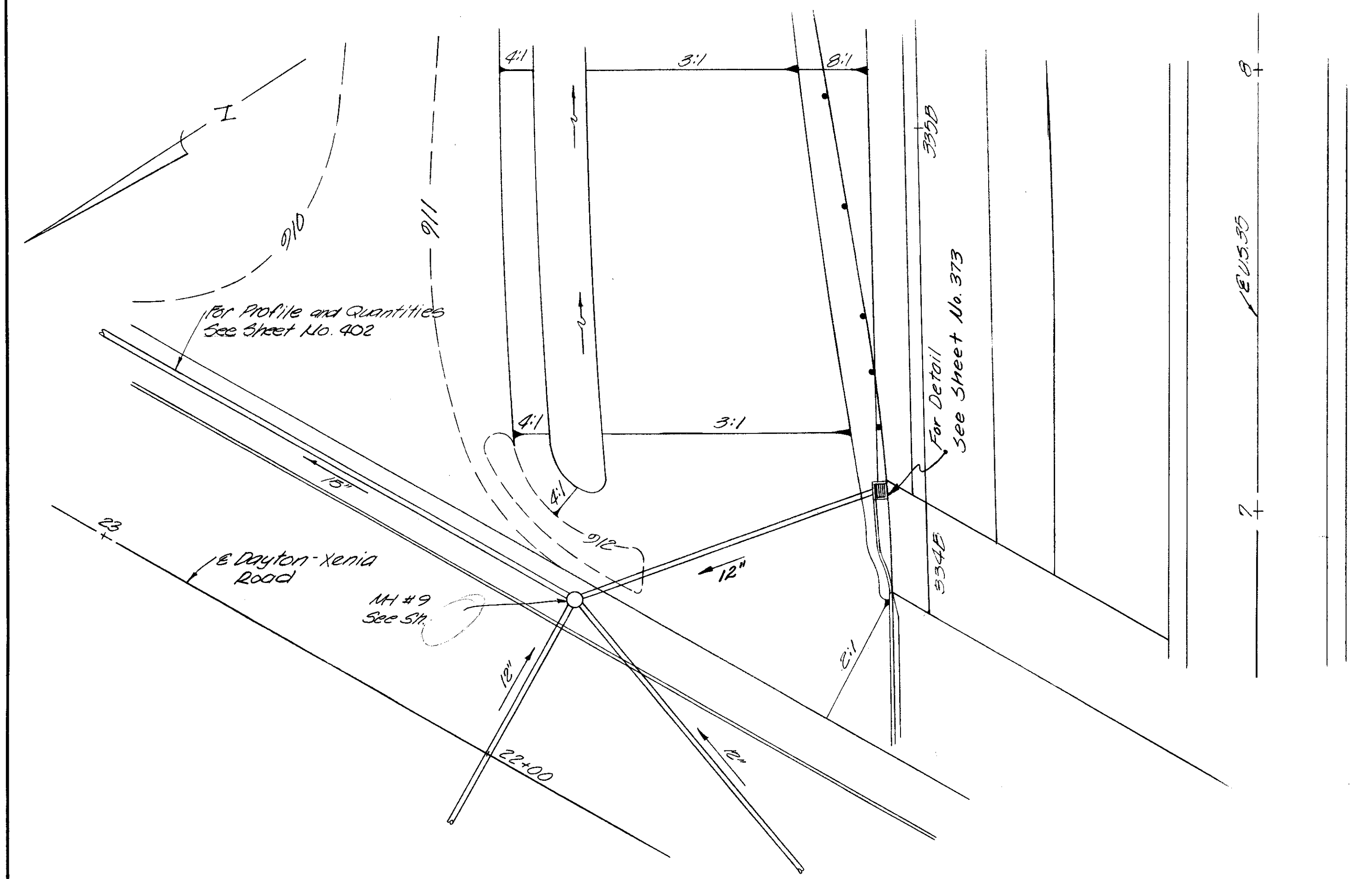


ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B, Bed	2	C.Y.
602	Masonry	0.27	C.Y.
603	15" Conduit Type B	137	L.F.
604	Std. No. CB-B	1	EO
660	Sodding	103	S.Y.

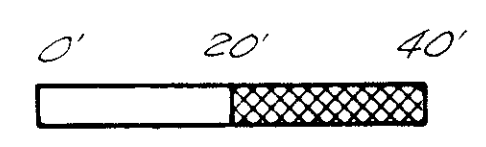


QUANTITY CALC. BY H.L.F. DATE 10-1-71
 CHD. D.W.P. DATE 12-8-71
 KING AND GAVRIS CONSULTING ENGINEERS
 Revised: I.E.H. 1/79
 GRE-675-5.37
 GREENE COUNTY



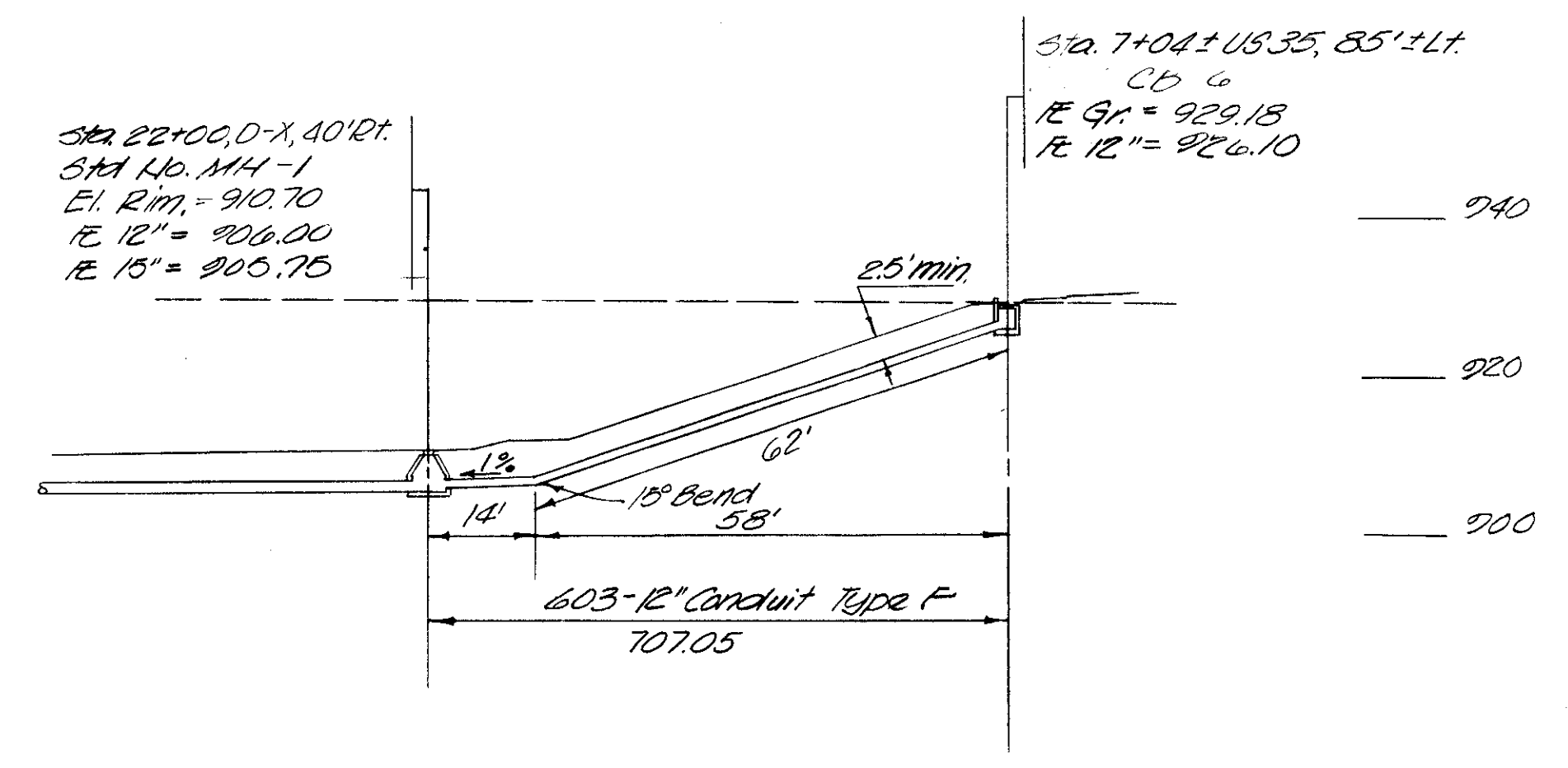
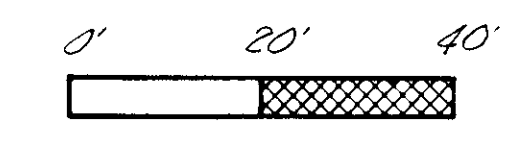
ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
b03	12" Conduit Type F 707.05	76	L.F.
b04	CB-b	1	Ea.

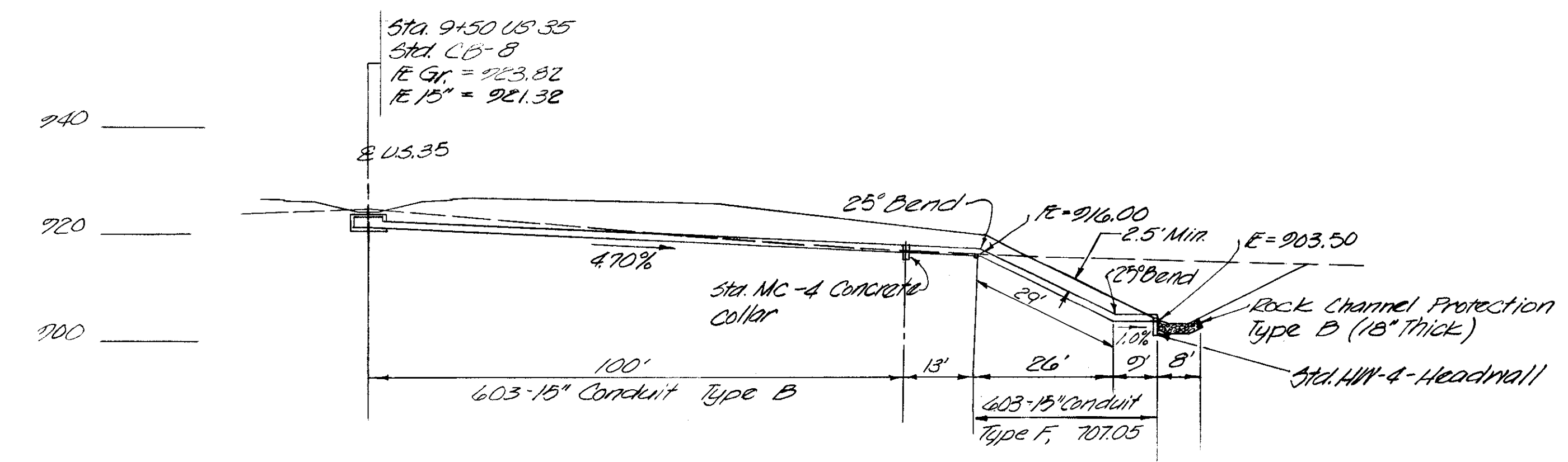


ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
b01	Rock Channel Protection Type B, Bed	2	C.Y.
b02	Masonry	0.27	C.Y.
b03	15" Conduit Type B	100	L.F.
b03	15" Conduit Type F 707.05	51	L.F.
b04	Std. No CB-B	1	Ea.
b60	Sodding	205	S.Y.



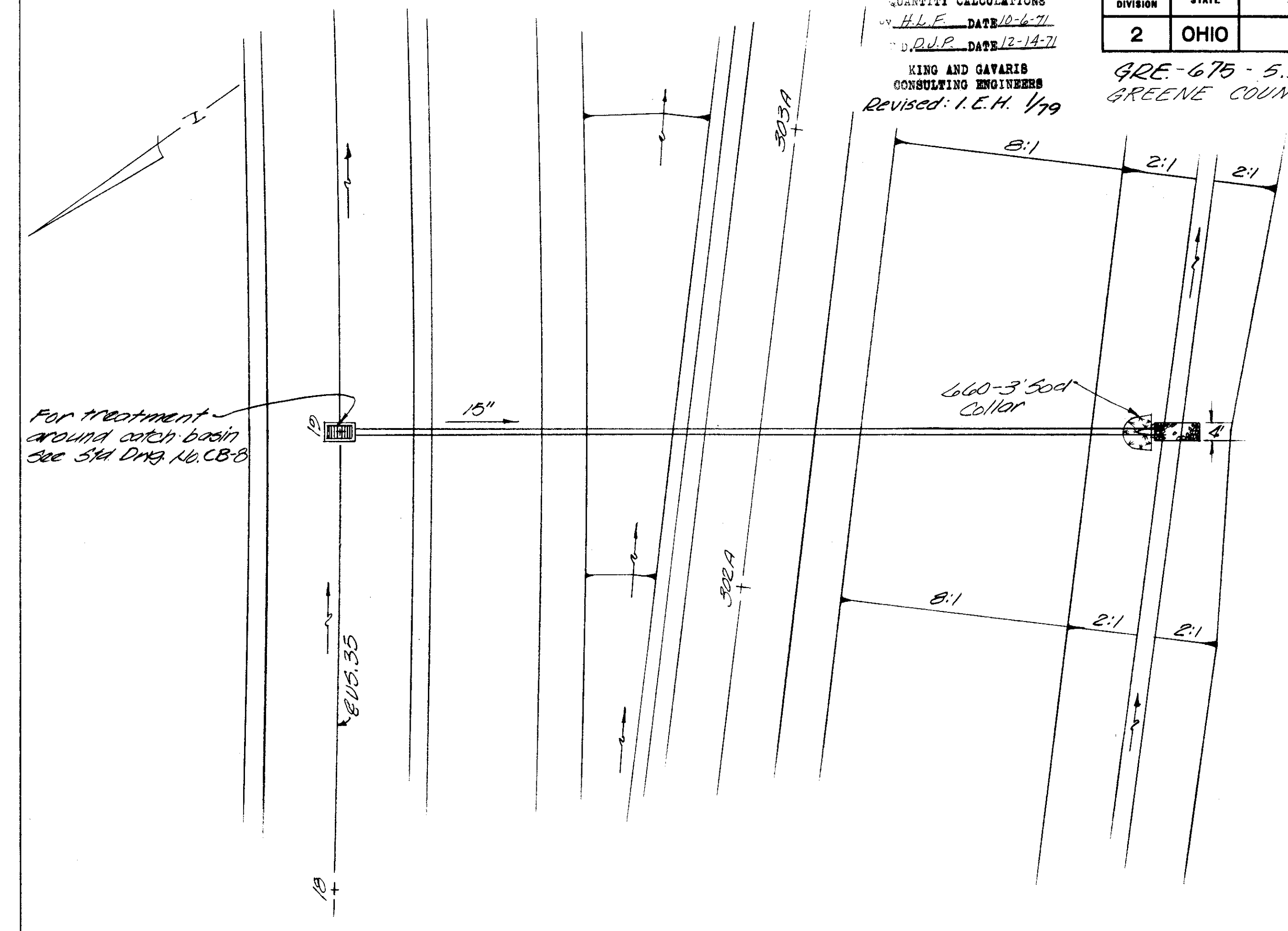
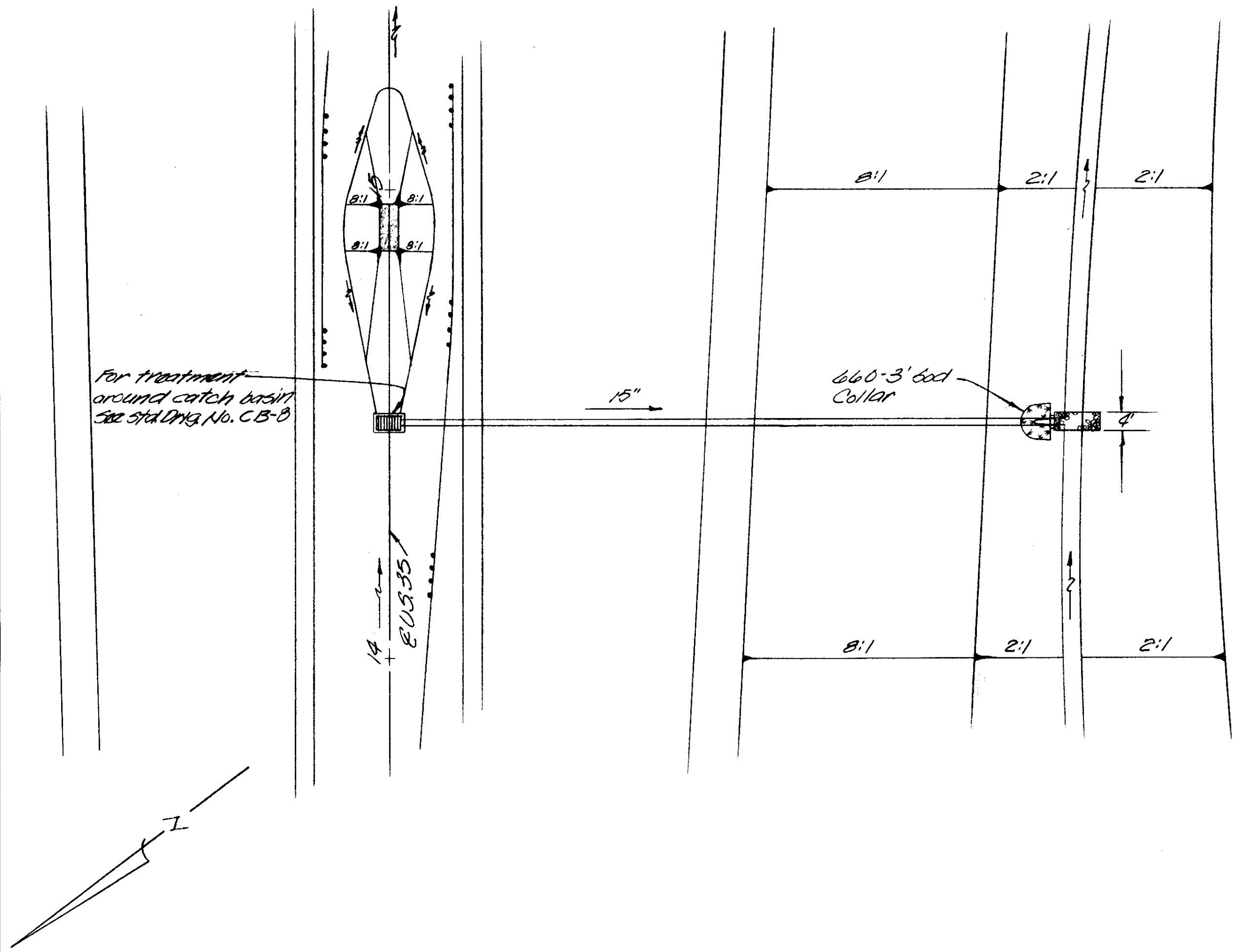
US-35 Sta. 7+05



US-35 Sta. 9+50

QUANTITY CALCULATIONS
 H.L.F. DATE 10-6-71
 D.P.P. DATE 12-14-71
 KING AND GAVARIS
 CONSULTING ENGINEERS
 Revised: I.E.H. 1/79

425-675-5.37
 GREENE COUNTY



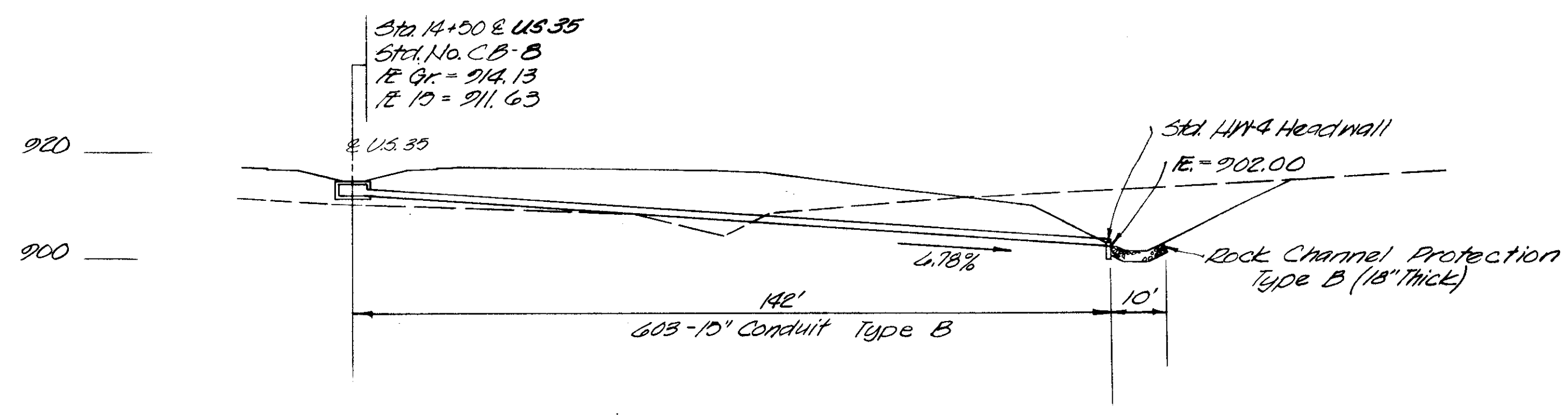
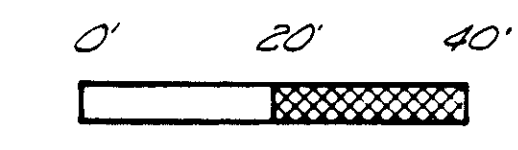
ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B, Bed	3	C.Y.
602	Masonry	0.27	C.Y.
603	15" Conduit Type B	142	L.F.
604	Std. No. CB-B	1	Ea.
660	Sodding	103	S.Y.

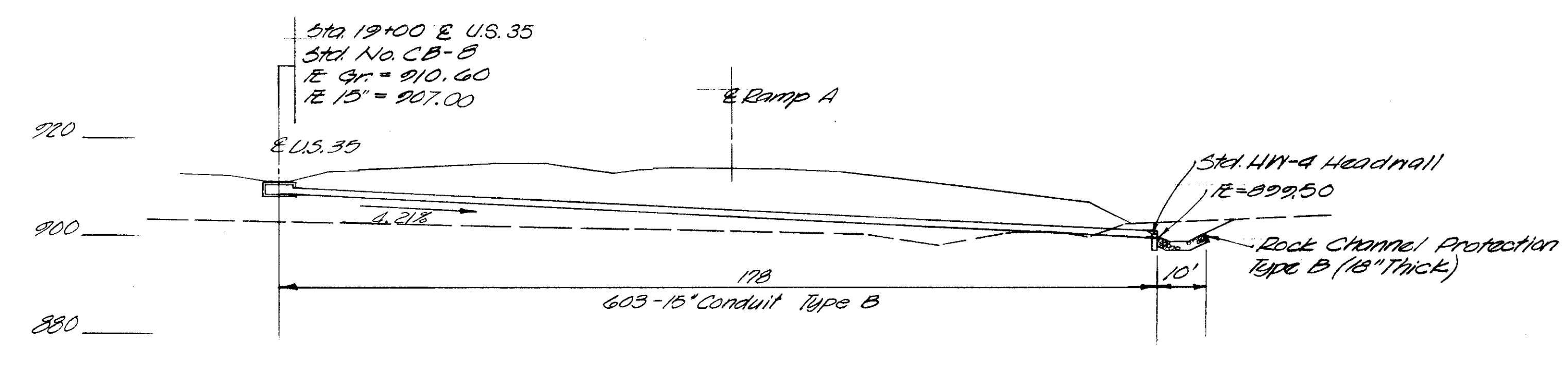


ESTIMATED QUANTITIES

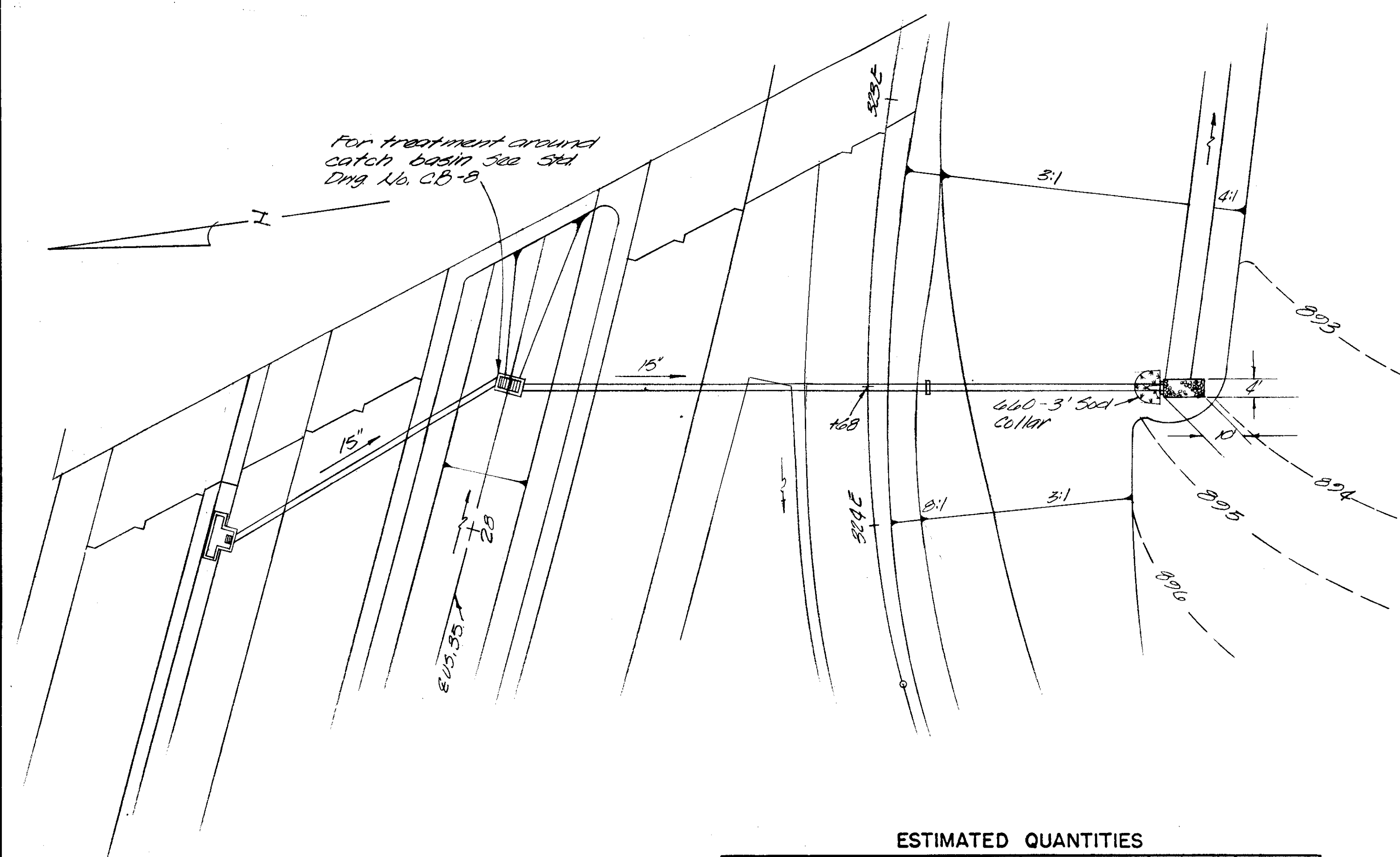
ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B, Bed	3	C.Y.
602	Masonry	0.27	C.Y.
603	15" Conduit Type B	178	L.F.
604	Std. No. CB-B	1	Ea.
660	Sodding	103	S.Y.



U.S. 35 Sta. 14+50

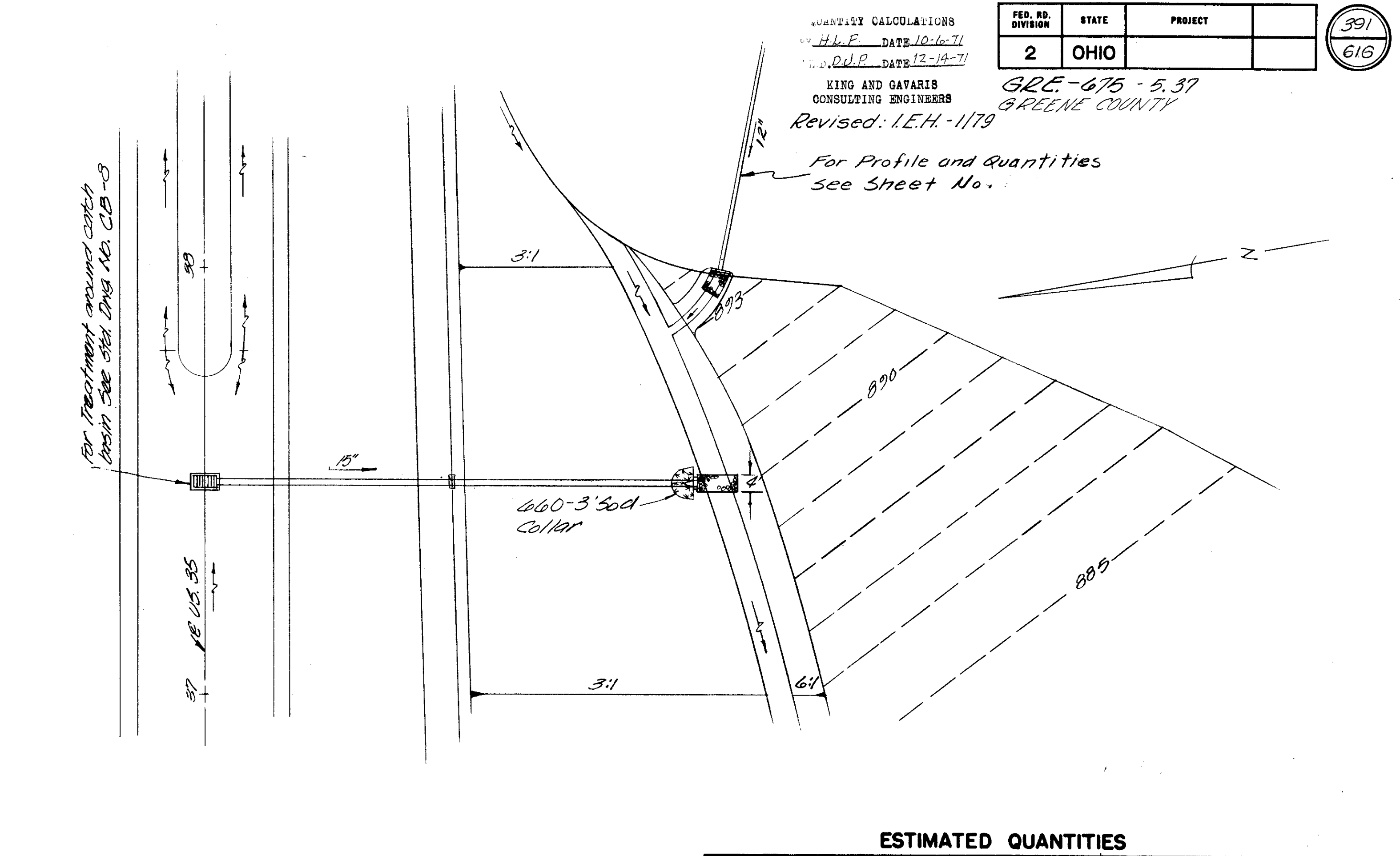


U.S. 35 Sta. 19+00



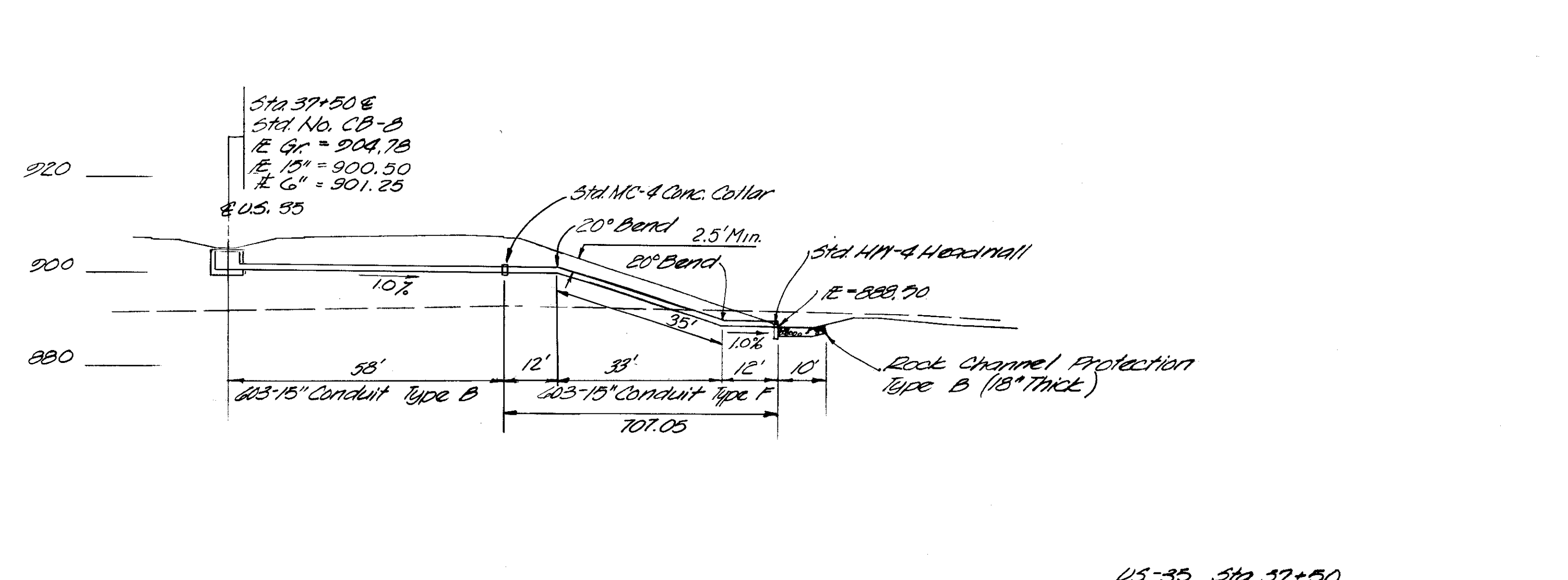
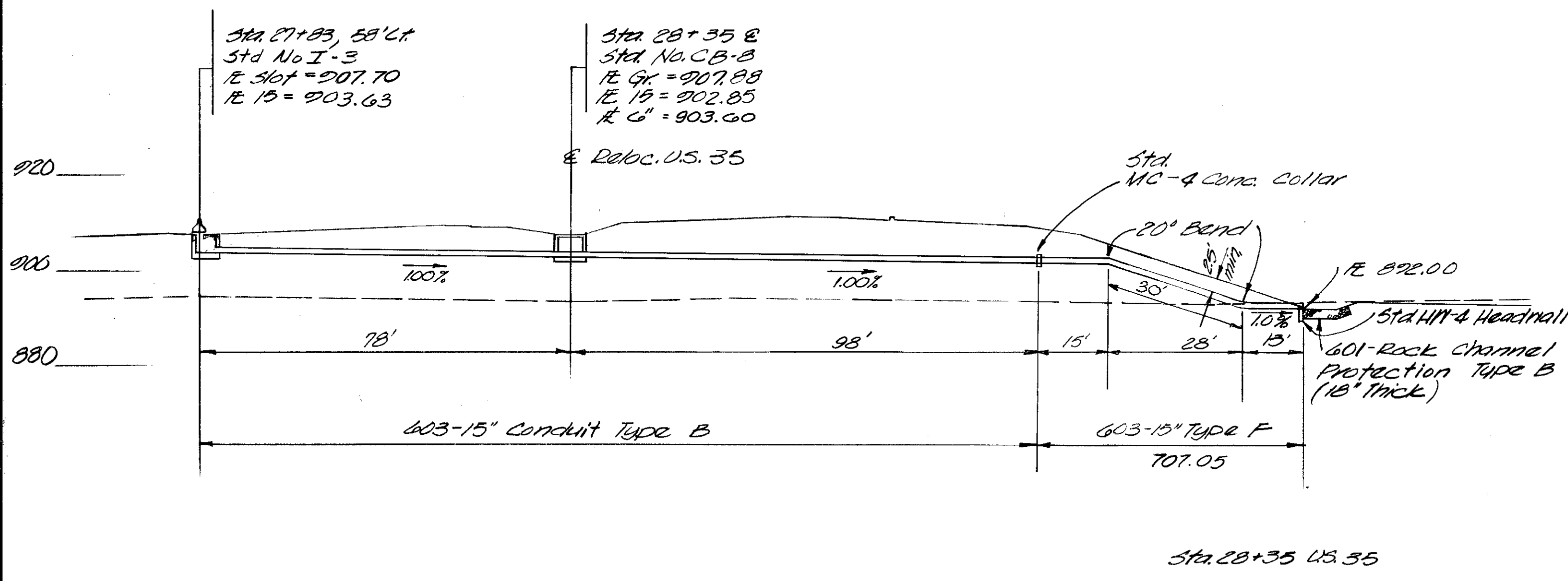
ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B, Bed	3	C.Y.
602	Masonry	0.27	C.Y.
603	15" Conduit Type B	170	L.F.
603	15" Conduit Type F, 707.05	58	L.F.
604	Std. No. CB-8	1	EO.
604	Std. No. I-3	1	EO.
660	Sodding	103	S.Y.



ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B, Bed	3	C.Y.
602	Masonry	0.27	C.Y.
603	15" Conduit Type B	58	L.F.
603	15" Conduit Type F, 707.05	59	L.F.
604	Std. No. CB-8	1	EO.
660	Sodding	103	S.Y.

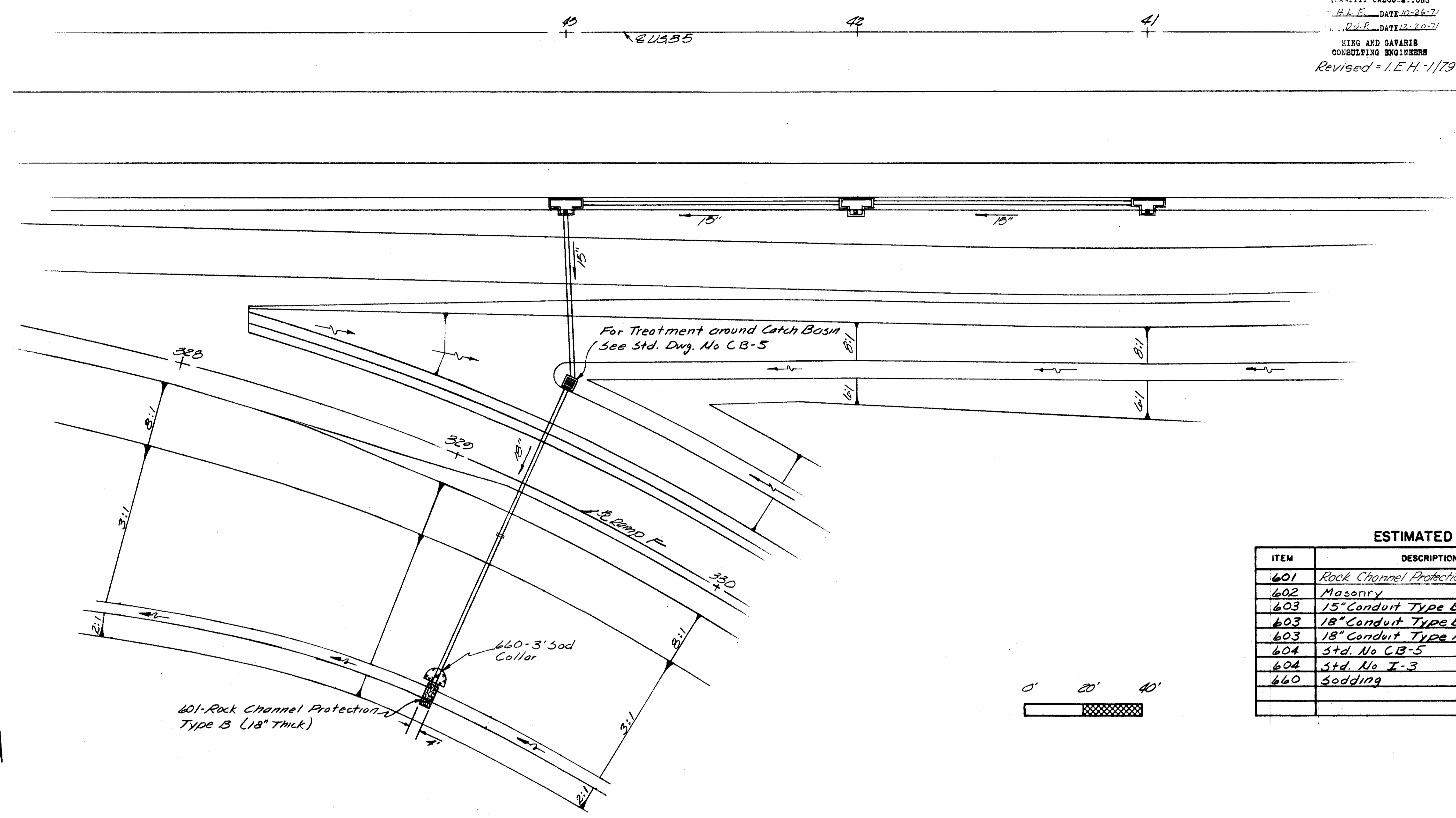


QUANTITY CALCULATIONS
 H.L.F. DATE 10-26-71
 R.V.P. DATE 12-20-71
 KING AND GAVARIS
 CONSULTING ENGINEERS
 Revised = I.E.H. - 1/79

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

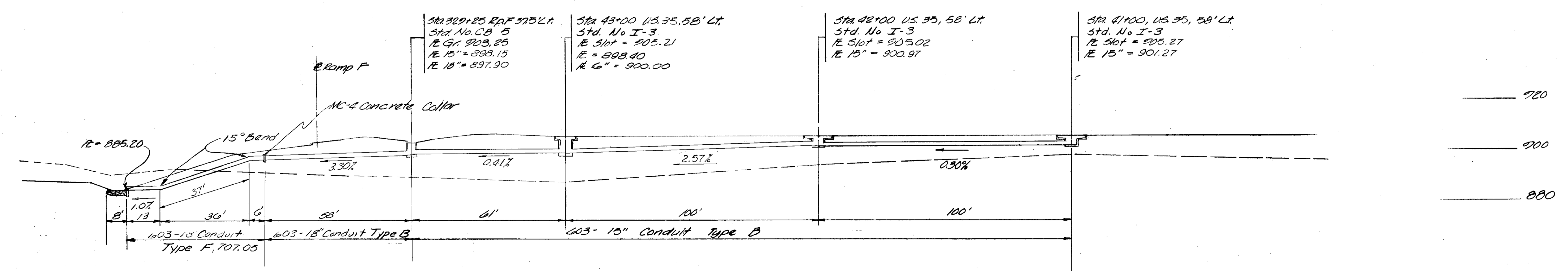
392
616

GRE-675-5.37
 GREENE COUNTY

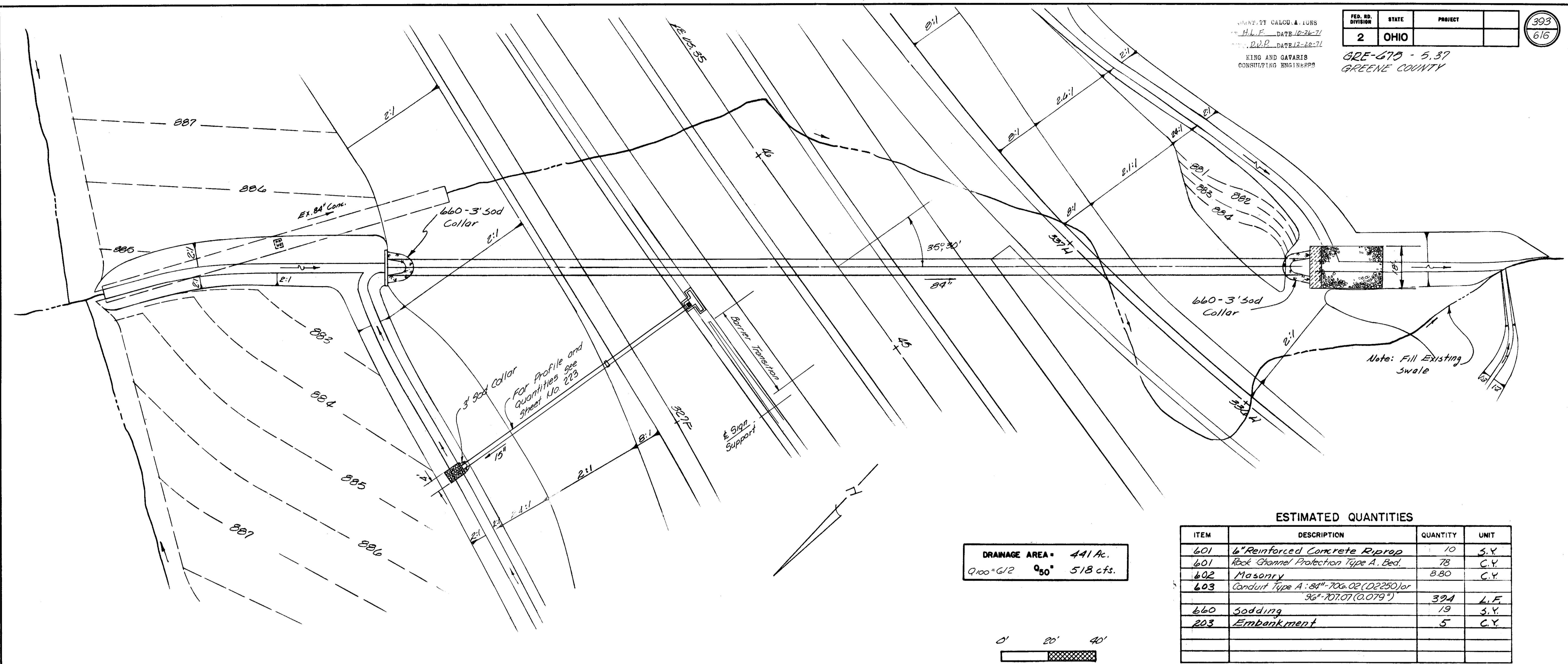


ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B, Bed	2	C.Y.
602	Masonry	0.33	C.Y.
603	15" Conduit Type B	261	L.F.
603	18" Conduit Type B	58	L.F.
603	18" Conduit Type F, 707.05	56	L.F.
604	Std. No CB-5	1	Ea
604	Std. No I-3	3	Ea
660	Sodding	274	S.Y.



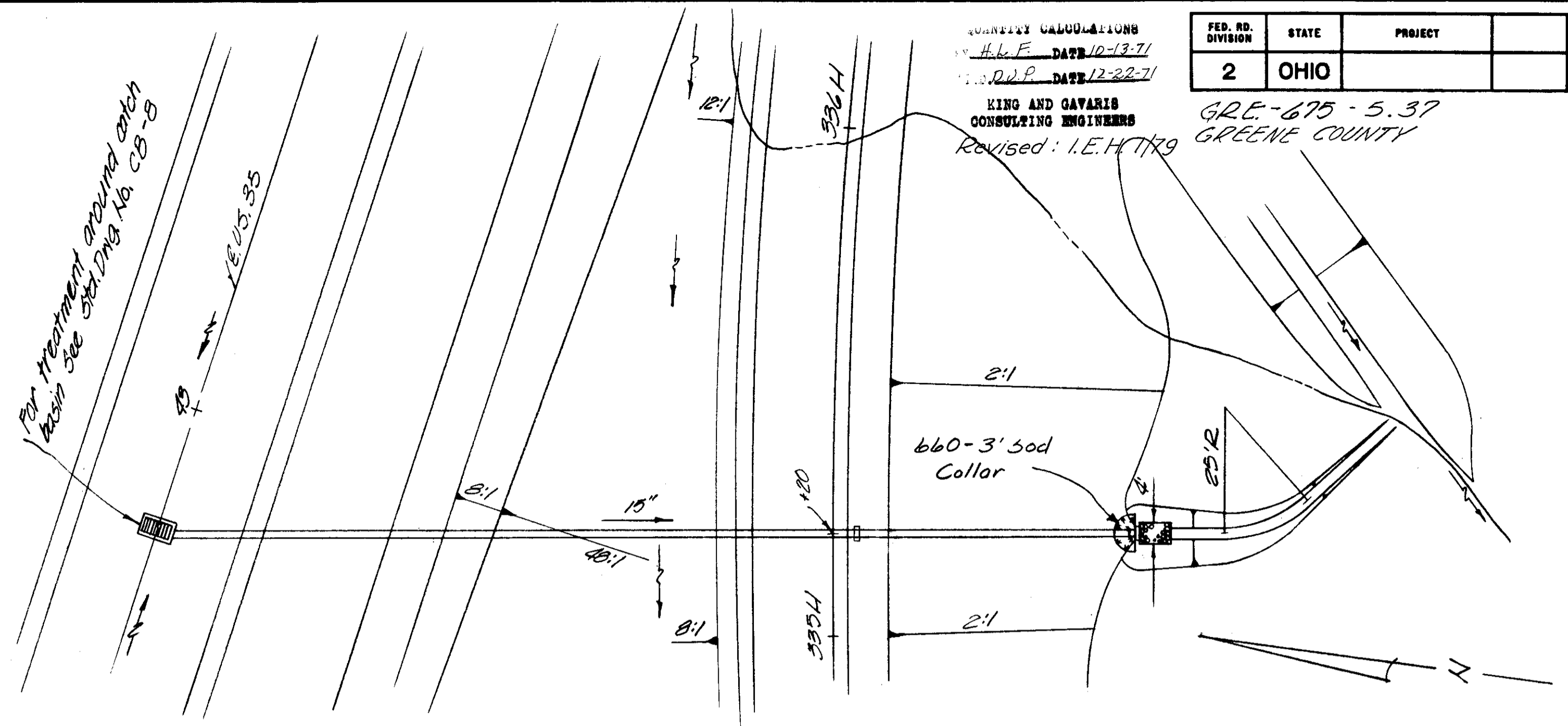
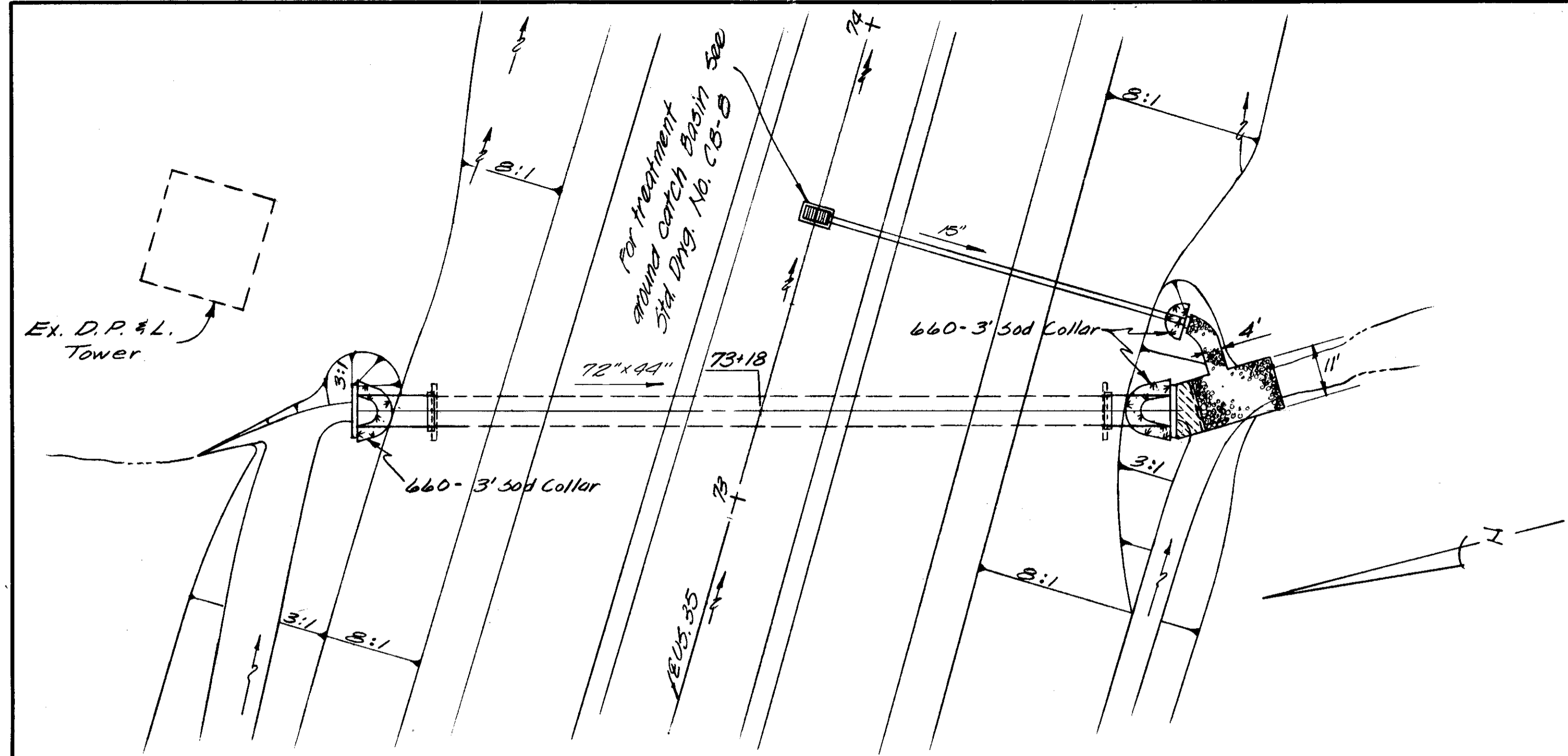
DRAINAGE DETAIL



FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

CONVEY CALCULATIONS
 H.L.F. DATE 10-13-71
 R.P.P. DATE 12-22-71
 KING AND GAVARIS
 CONSULTING ENGINEERS
 Revised: I.E.H.T.79

GRE-675-5.37
 GREENE COUNTY



DRAINAGE AREA = 92 Ac.
 $Q_{100} = 20708$, $Q_{25} = 145$ cfs.



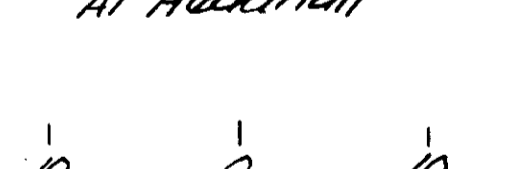
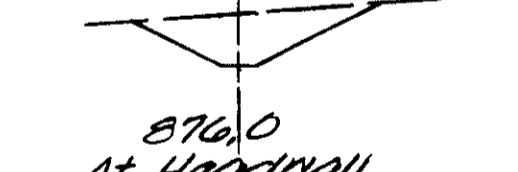
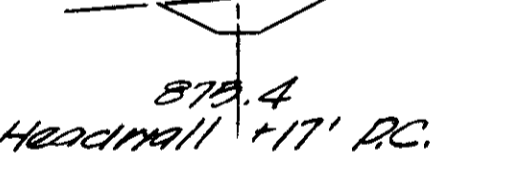
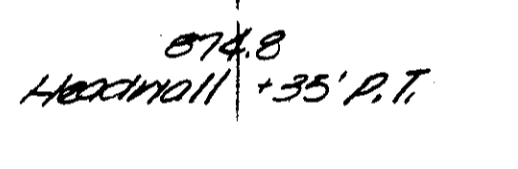
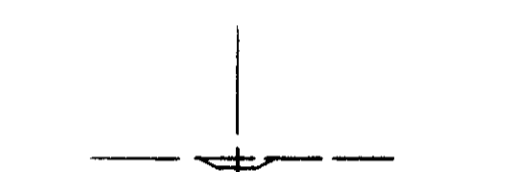
ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	6" Reinforced Concrete Riprap	6	S.Y.
601	Rock Channel Protection Type B, Bed	25	C.Y.
602	Masonry	3.13	C.Y.
603	15" Conduit Type B	80	L.F.
603	71" x 47" Conduit Type A 707.05 (0.138)	30	L.F.
604	Std No CB-B	1	EQ.
660	Sodding	358	S.Y.
202	Portions of Existing Structure Removed	Lump	Lump

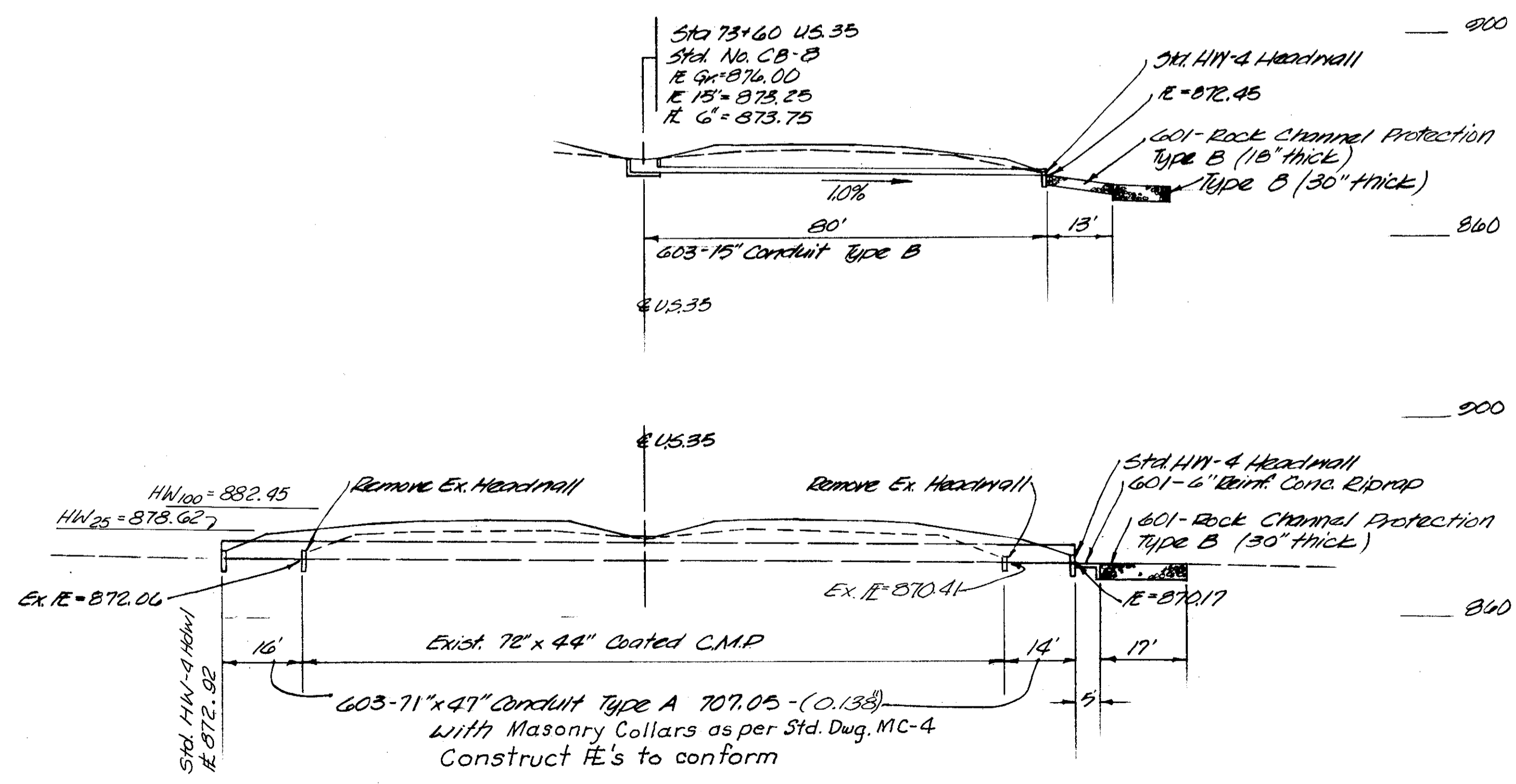
ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B, Bed	2	C.Y.
602	Masonry	0.27	C.Y.
603	15" Conduit Type B	138	L.F.
603	15" Conduit Type F 707.05	60	L.F.
604	Std No CB-B	1	EQ.
660	Sodding	203	S.Y.
203	Excavation	15	C.Y.

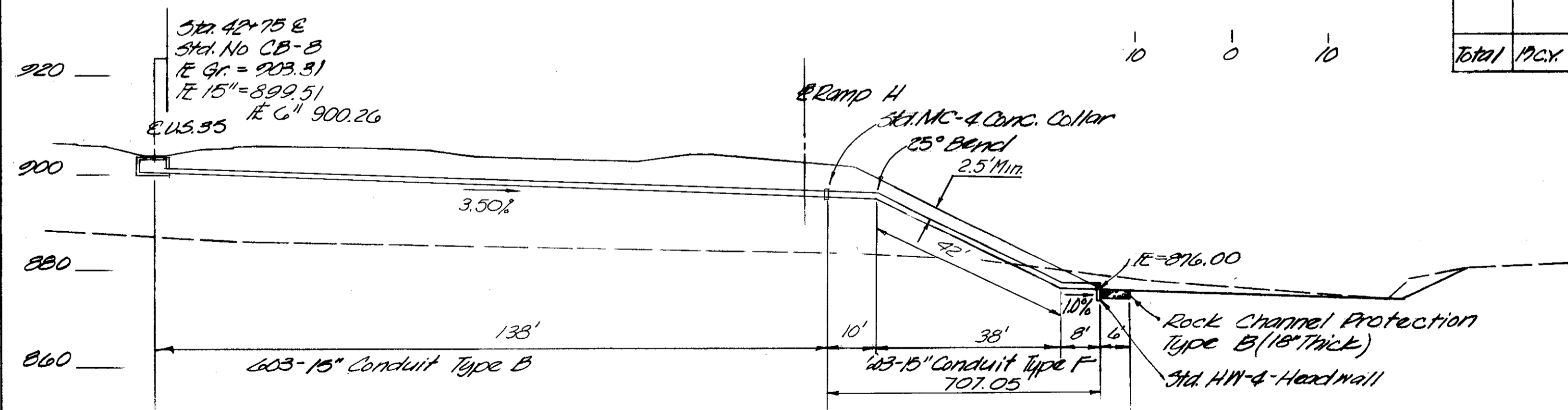
Zero Earthwork
 Headwall + 58'



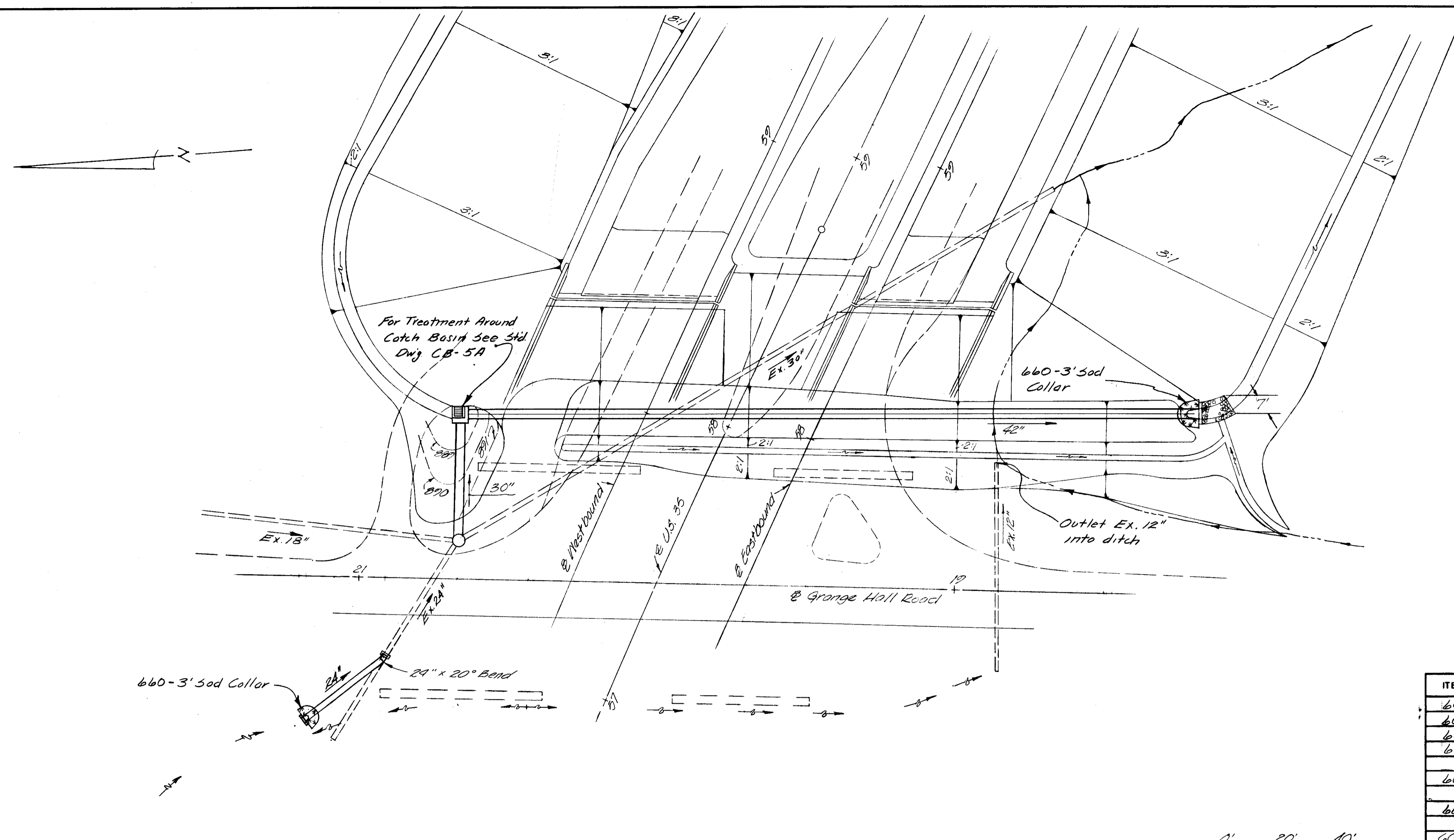
Area Cut	Vol Cut
S.F.	CY
0	0
1	1
4	4
11	11
10	10
20	20
10	10
0	0
10	10
Total	190 CY



U.S. 35 Sta. 73+18 and Sta. 73+60

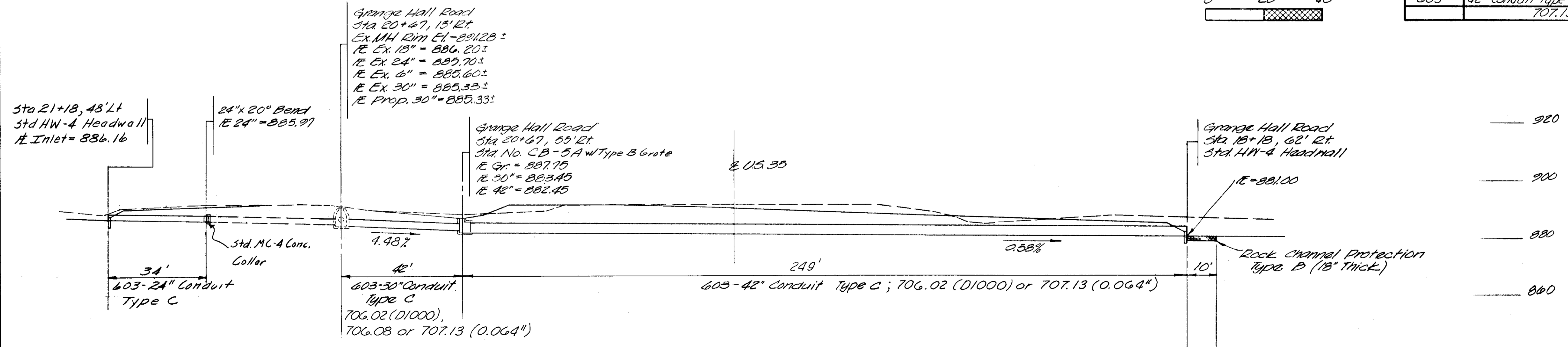
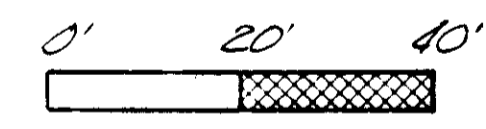


U.S. 35 Sta. 42+75



ESTIMATED QUANTITIES

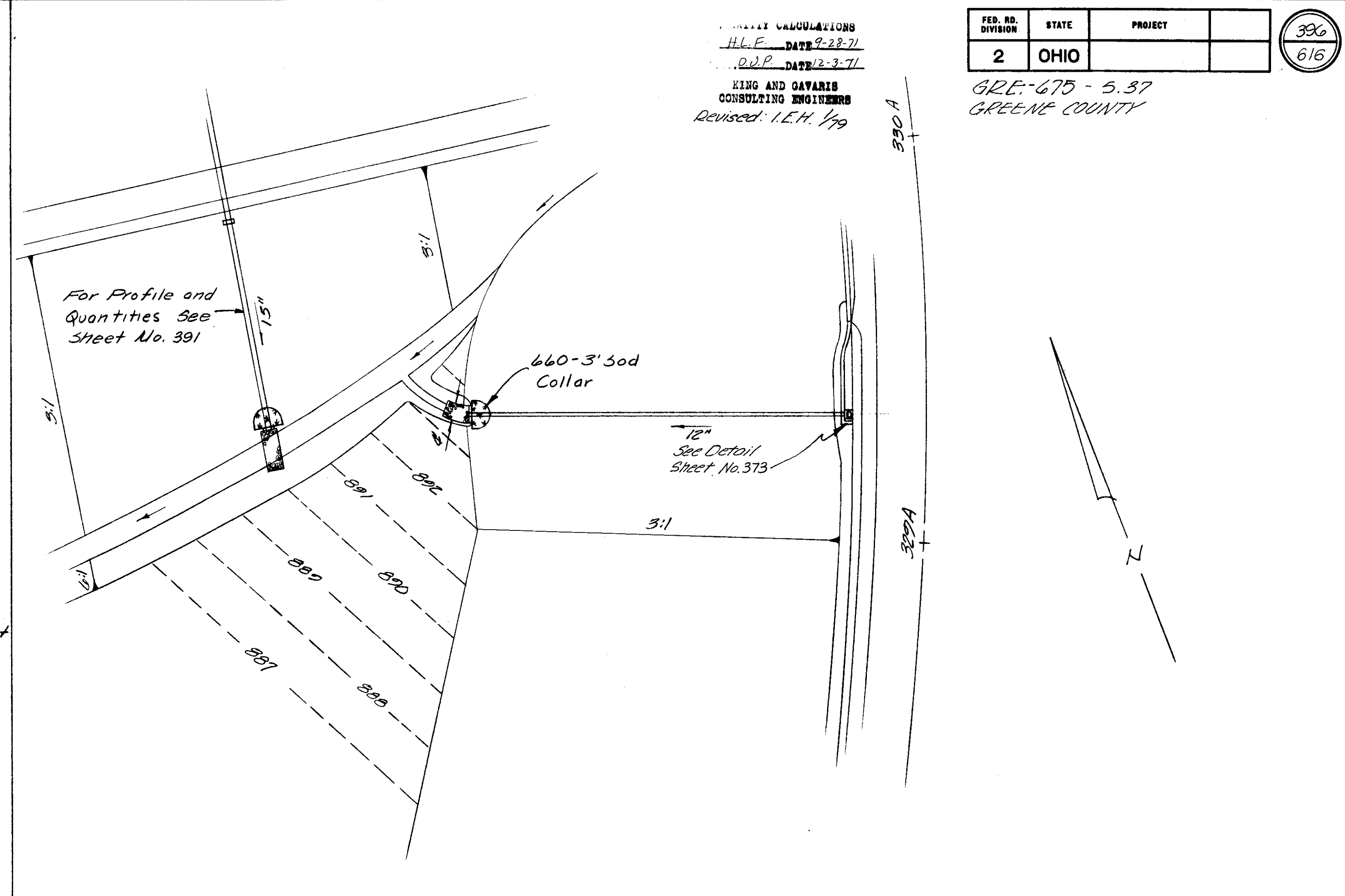
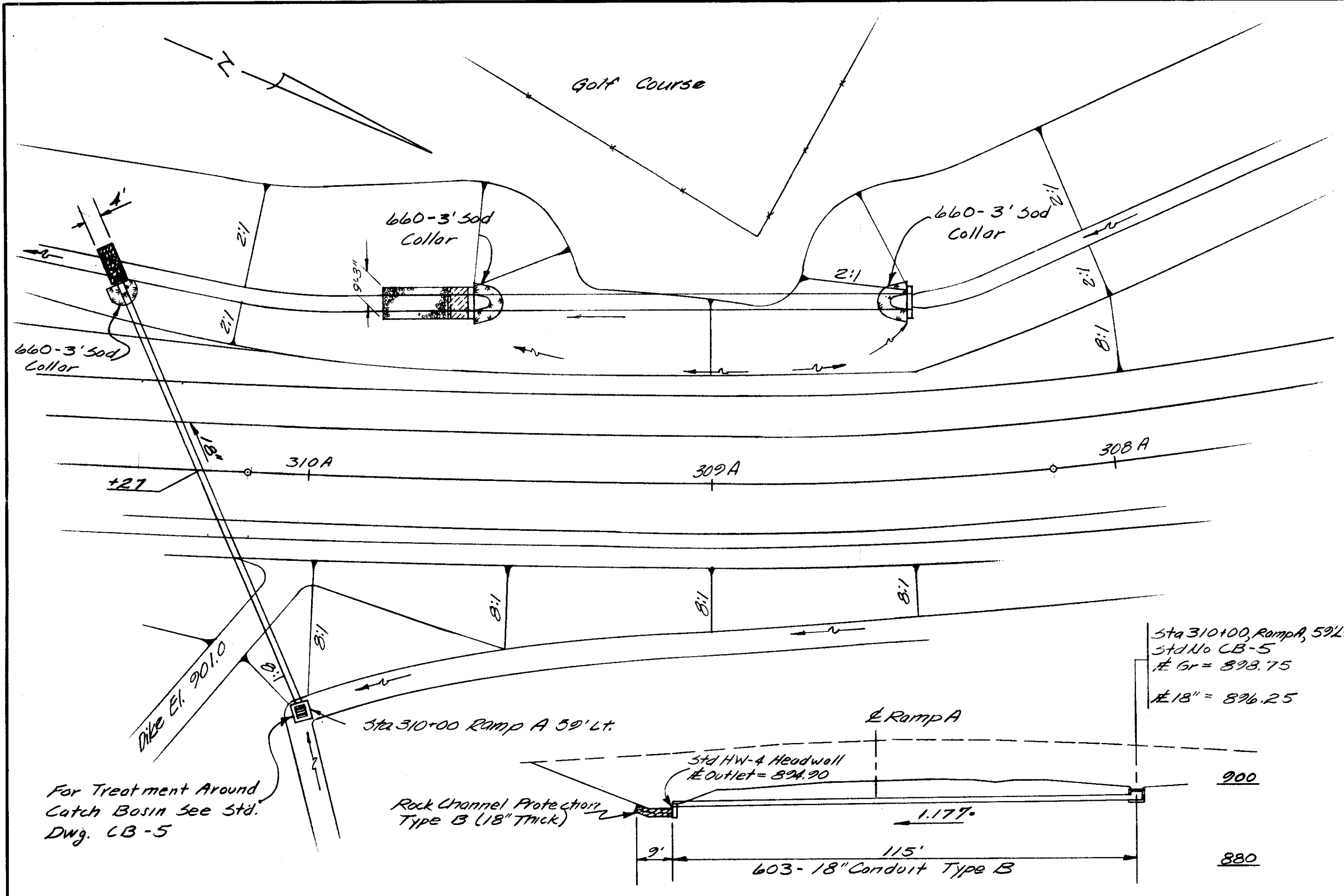
ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B Bed	5	CY
602	Masonry	1.38	CY
603	24" Conduit Type C	34	L.F.
603	30" Conduit Type C; 706.02 (0.1000) 706.08 or 707.13 (0.064")	42	L.F.
604	Std. No. C.B.-5A w/Type B Grate	1	Ea.
660	Sodding	111	S.Y.
603	42" Conduit Type C; 706.02 (0.1000) or 707.13 (0.064")	249	L.F.



US 35 Sta. 58+05

UTILITY CALCULATIONS
 H.L.F. DATE 2-28-71
 R.W.P. DATE 2-3-71
 KING AND GAVARIS
 CONSULTING ENGINEERS
 Revised: 1.E.H. 1/79

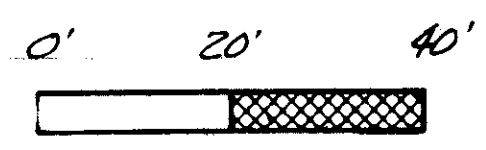
GRE-675-5.37
 GREENE COUNTY



Sta 310+00 Ramp A 59' Lt.
 Std. No. CB-5
 E Gr = 898.75
 E 18" = 896.25

For Treatment Around
 Catch Basin See Std.
 Dwg. CB-5

DRAINAGE AREA = 110 Ac.
 $Q_{100} = 235 \text{ cfs}$ $Q_{10} = 142 \text{ cfs}$

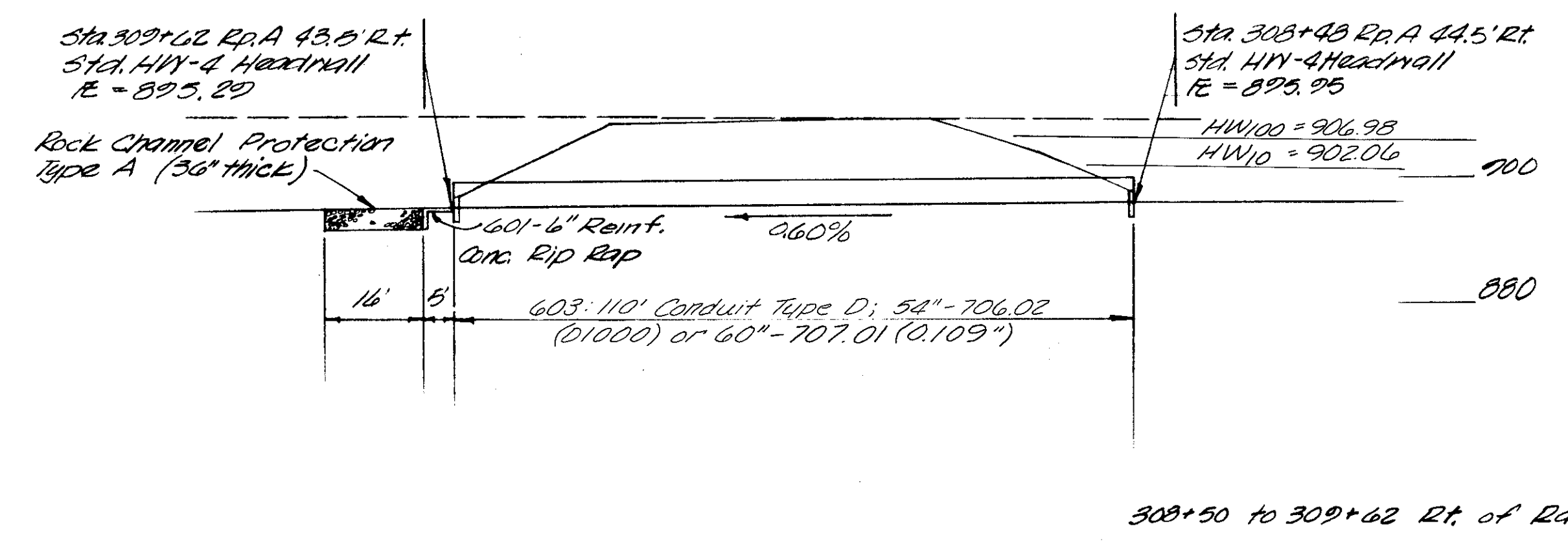


ESTIMATED QUANTITIES

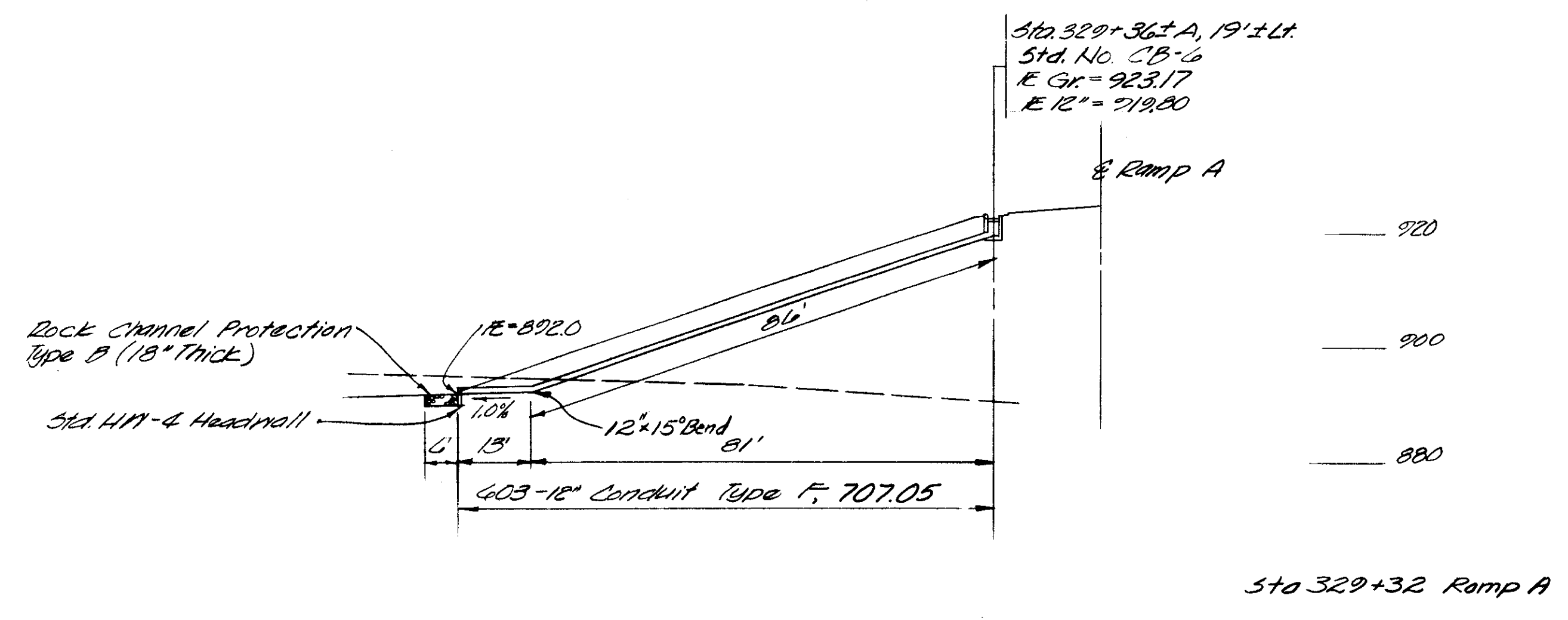
ITEM	DESCRIPTION	QUANTITY	UNIT
601	6" Reinforced Concrete Riprap	5	S.Y.
601	Rock Channel Protection Type A, Bed	19	C.Y.
602	Masonry	3.89	C.Y.
603	18" Conduit Type B	115	L.F.
604	Std. No. CB-5	1	Ea.
660	Sodding	217	S.Y.
601	Rock Channel Protection Type B, Bed	3	C.Y.
603	Conduit Type D; 54"-706.02 (D1000) or 60"-707.01 (D109")	110	L.F.

ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B, Bed	2	C.Y.
602	Masonry	0.21	C.Y.
603	12" Conduit Type F, 707.05	99	L.F.
604	CB-6	1	Ea.
660	Sodding	3	S.Y.



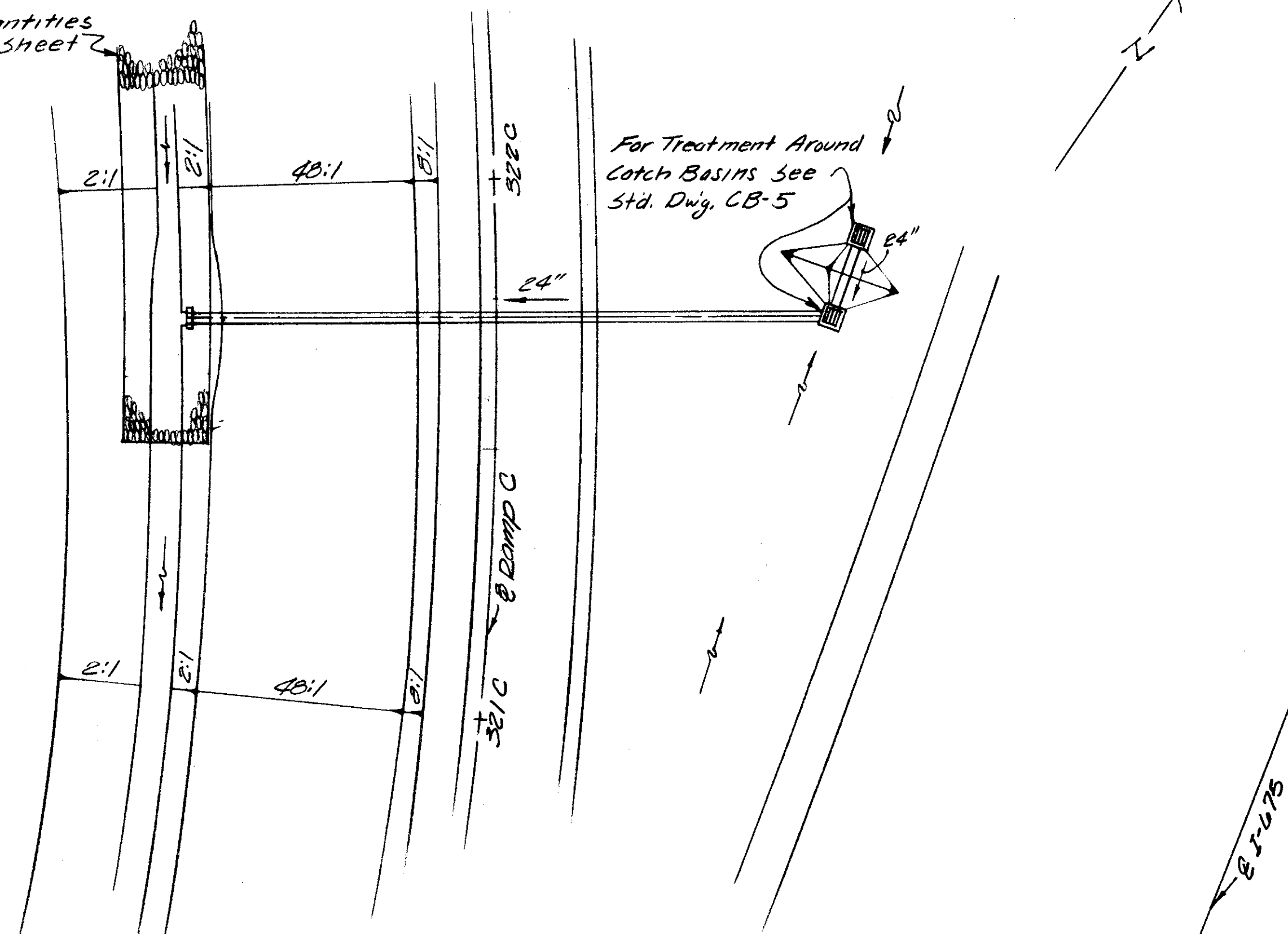
308+50 to 309+62 Rt. of Ramp A



Sta 329+32 Ramp A

H.L.E. DATE 9-28-71
 D.V.P. DATE 11-29-71
 KING AND GATARIS
 CONSULTING ENGINEERS
 Revised: I.E.H.-1/79
 GRE-675-5.37
 GREENE COUNTY

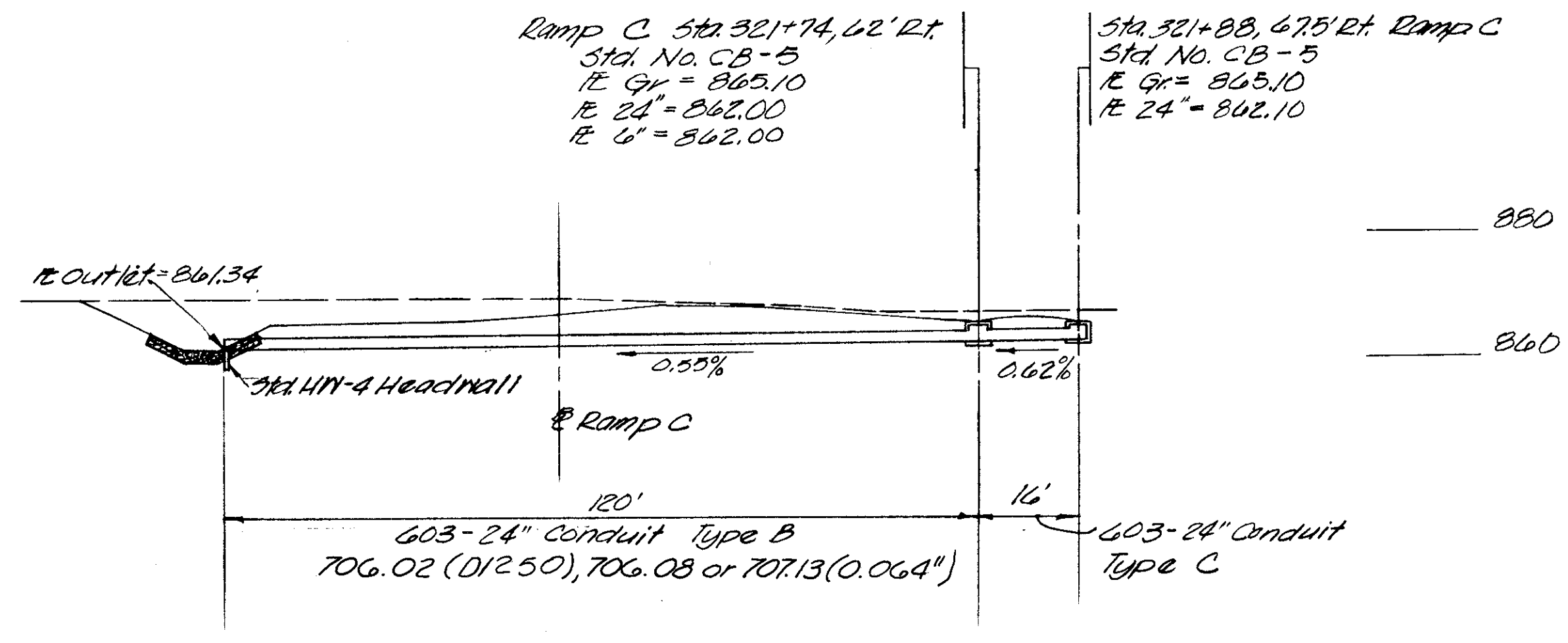
For Rock Quantities See Roadway Sheet



For Treatment Around Catch Basins See Std. Dwg. CB-5

ESTIMATED QUANTITIES

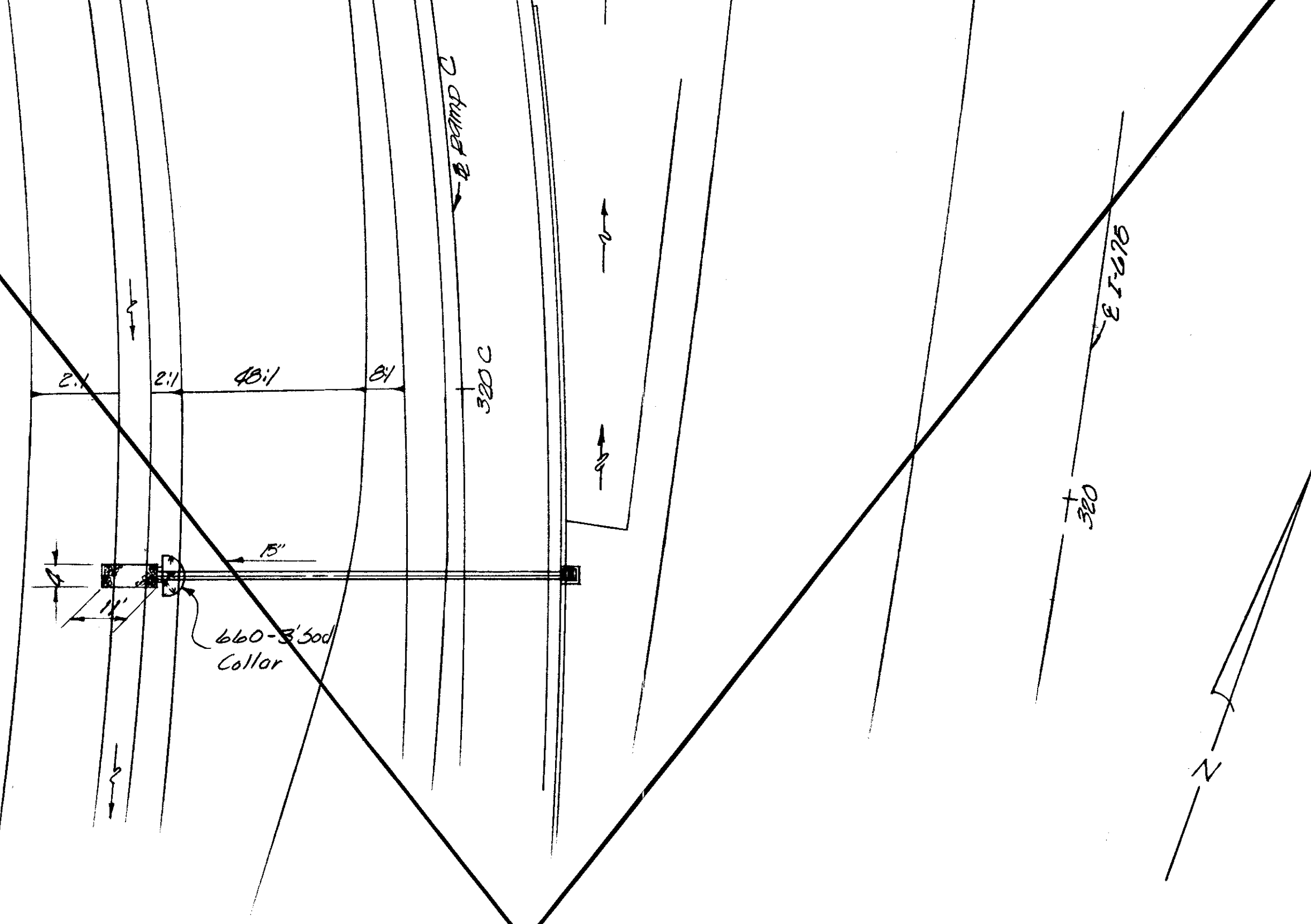
ITEM	DESCRIPTION	QUANTITY	UNIT
602	Masonry	0.46	C.Y.
603	24" Conduit Type C	16	L.F.
604	Std. No. CB-5	2	Ea.
660	Sodding	241	S.Y.
603	24" Conduit Type B, 706.02 (D1250), 706.08 or 707.13 (0.064")	120	L.F.



Ramp C Sta 321+74, 62' Rt.
 Std. No. CB-5
 E Gr. = 865.10
 E 24" = 862.00
 E 6" = 842.00

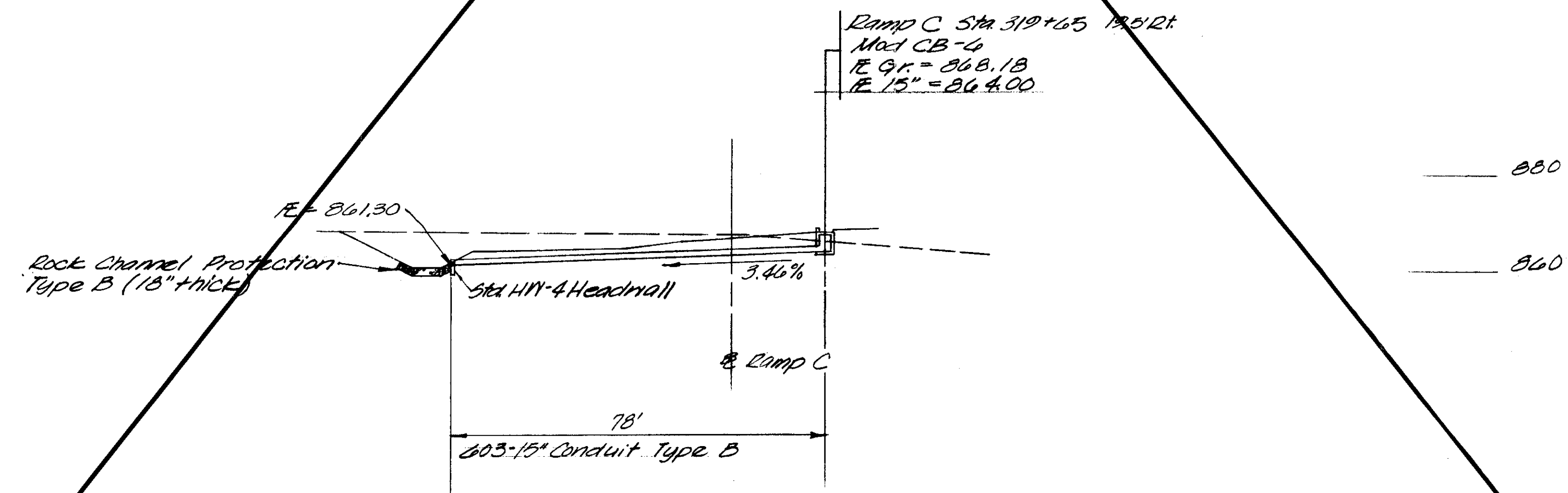
Sta 321+88, 675' Rt. Ramp C
 Std. No. CB-5
 E Gr. = 865.10
 E 24" = 862.10

Ramp C Sta 321+74



ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B	3	C.Y.
602	Masonry	0.25	C.Y.
603	15" Conduit Type B	78	L.F.
604	Mod. CB-6	1	Ea.
660	Sodding	4	S.Y.

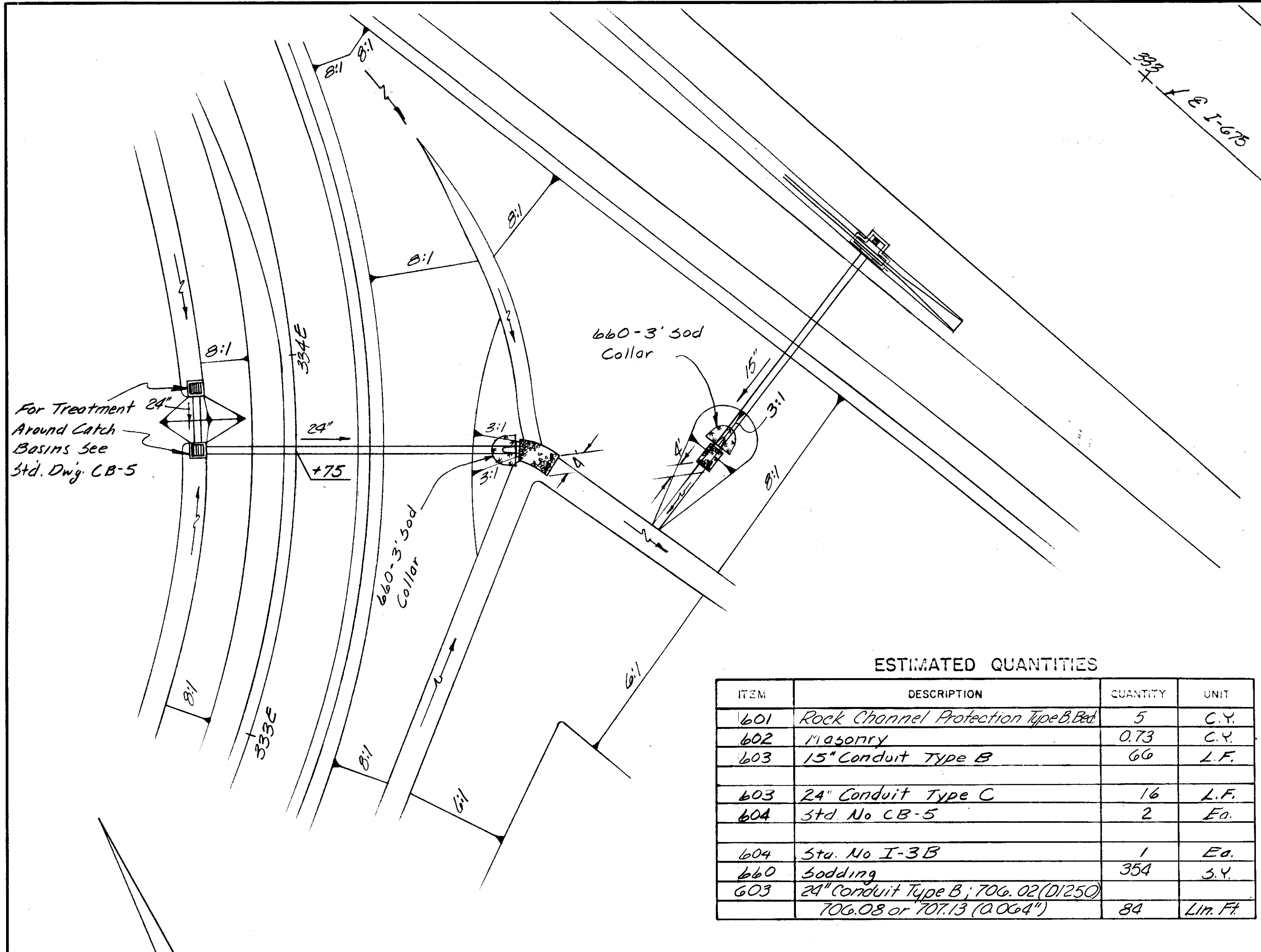


Ramp C Sta 319+65, 125' Rt.
 Mod. CB-6
 E Gr. = 868.18
 E 15" = 844.00

Ramp C Sta 319+65

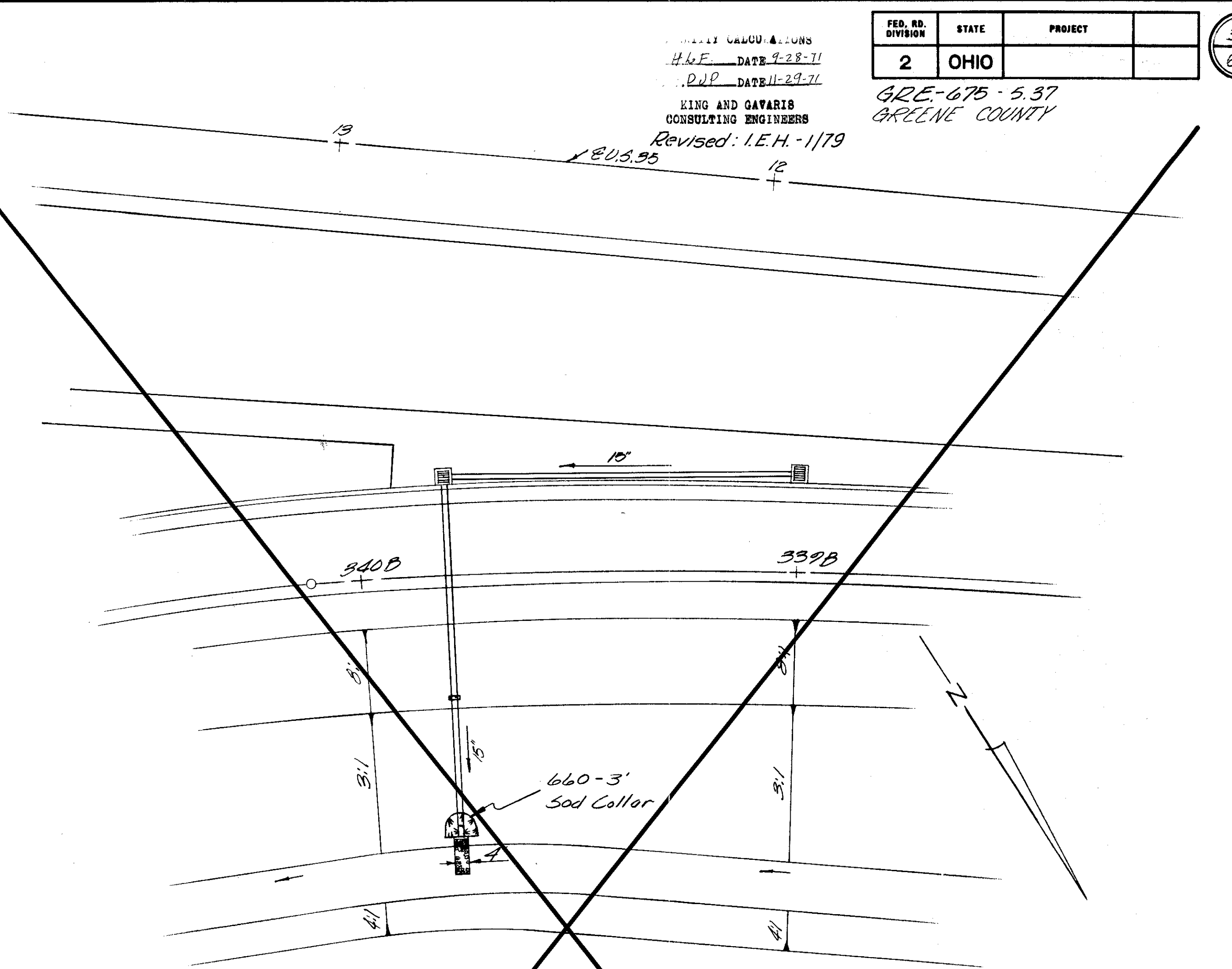
DATE 9-28-71
DATE 11-29-71
KING AND GAVARIS
CONSULTING ENGINEERS
Revised: I.E.H. - 1/79

GRE-675-5.37
GREENE COUNTY



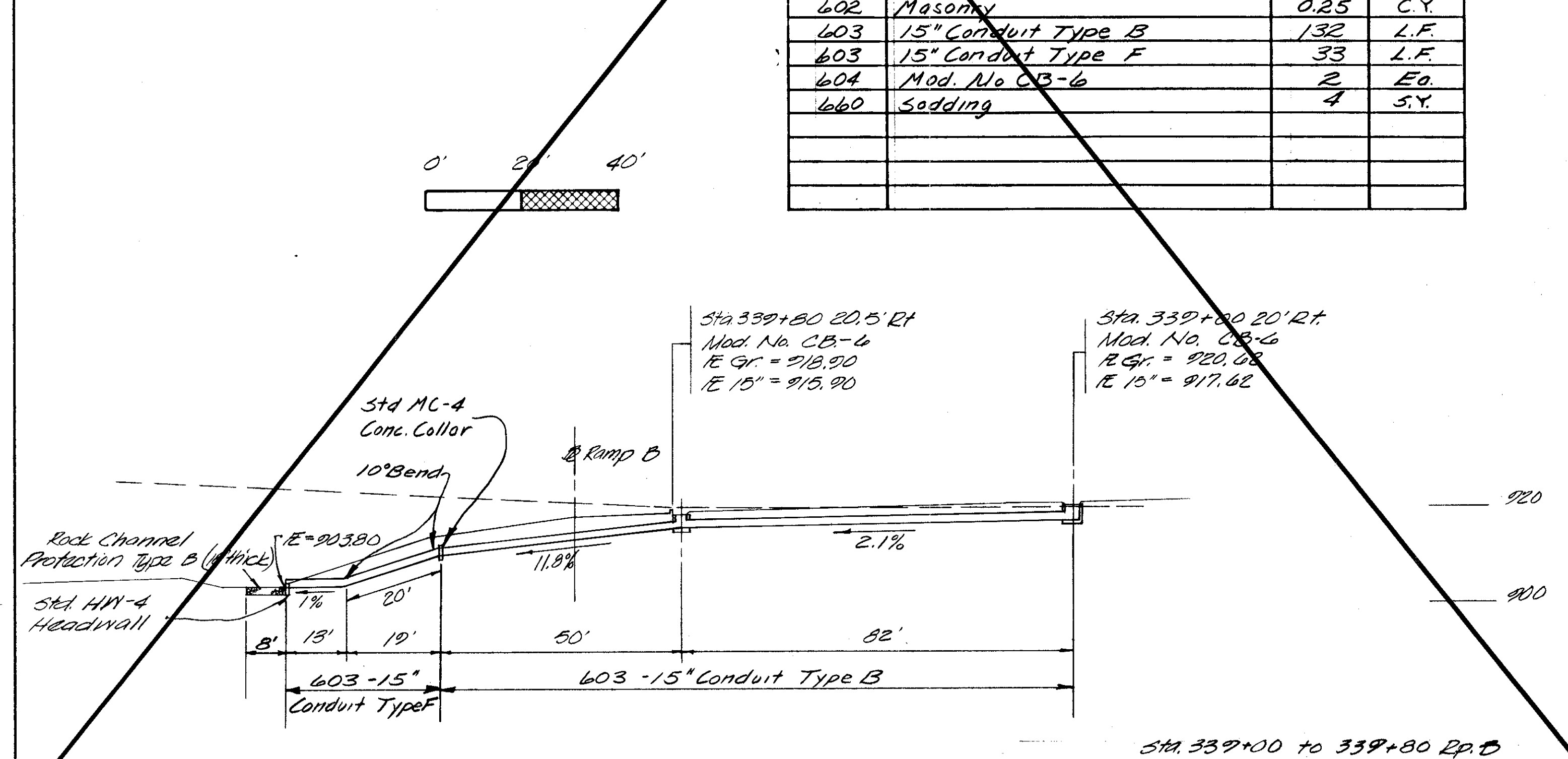
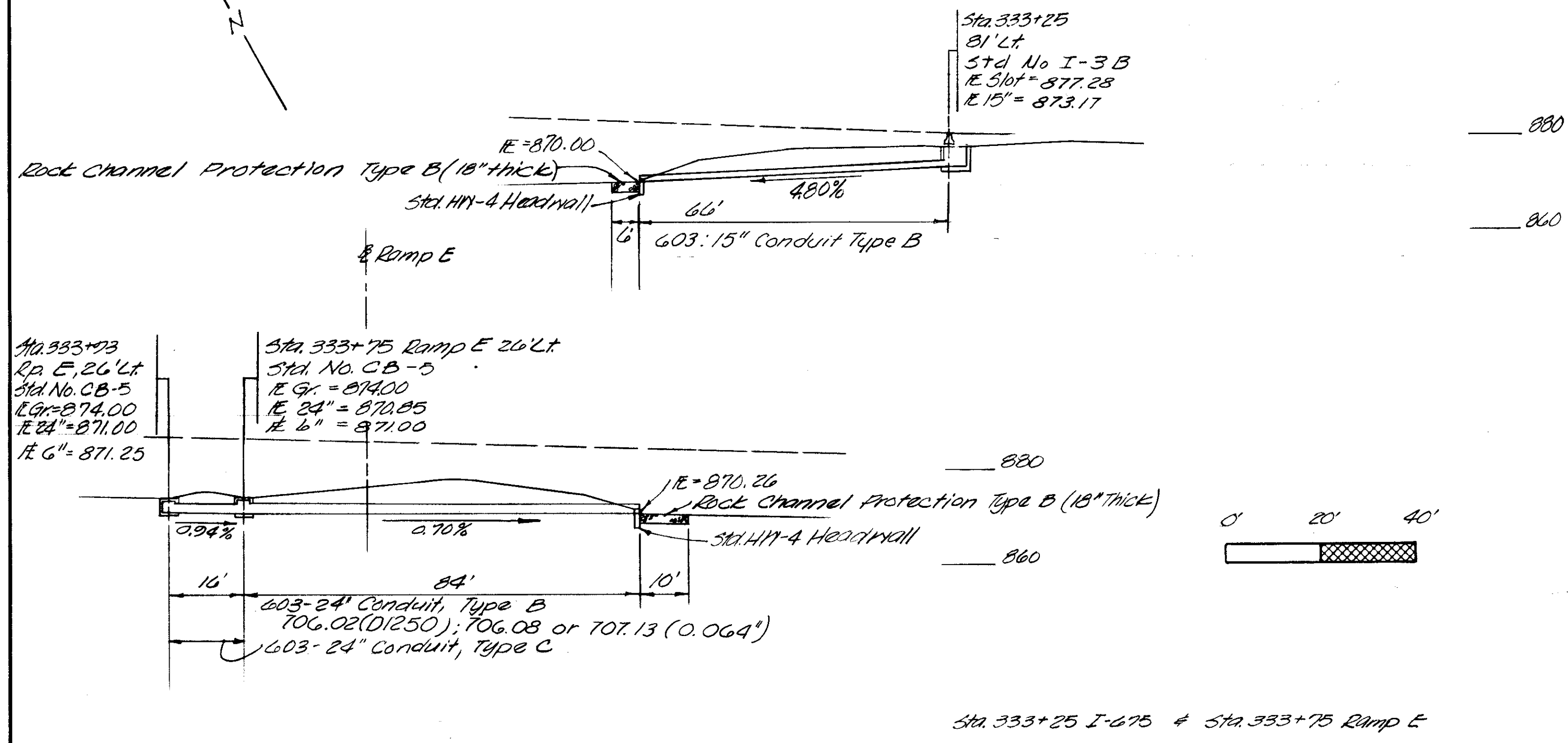
ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B Bed	5	C.Y.
602	Masonry	0.73	C.Y.
603	15" Conduit Type B	66	L.F.
603	24" Conduit Type C	16	L.F.
604	Std. No. CB-5	2	Ea.
604	Sta. No. I-3B	1	Ea.
660	Sodding	354	S.Y.
603	24" Conduit Type B; 706.02 (D1250) 706.08 or 707.13 (D.064")	84	Lim. Ft.



ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B	2	C.Y.
602	Masonry	0.25	C.Y.
603	15" Conduit Type B	132	L.F.
603	15" Conduit Type F	33	L.F.
604	Mod. No. CB-6	2	Ea.
660	Sodding	4	S.Y.

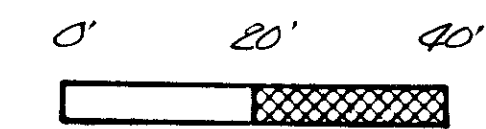
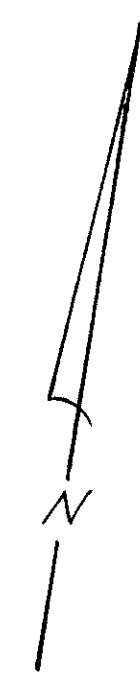
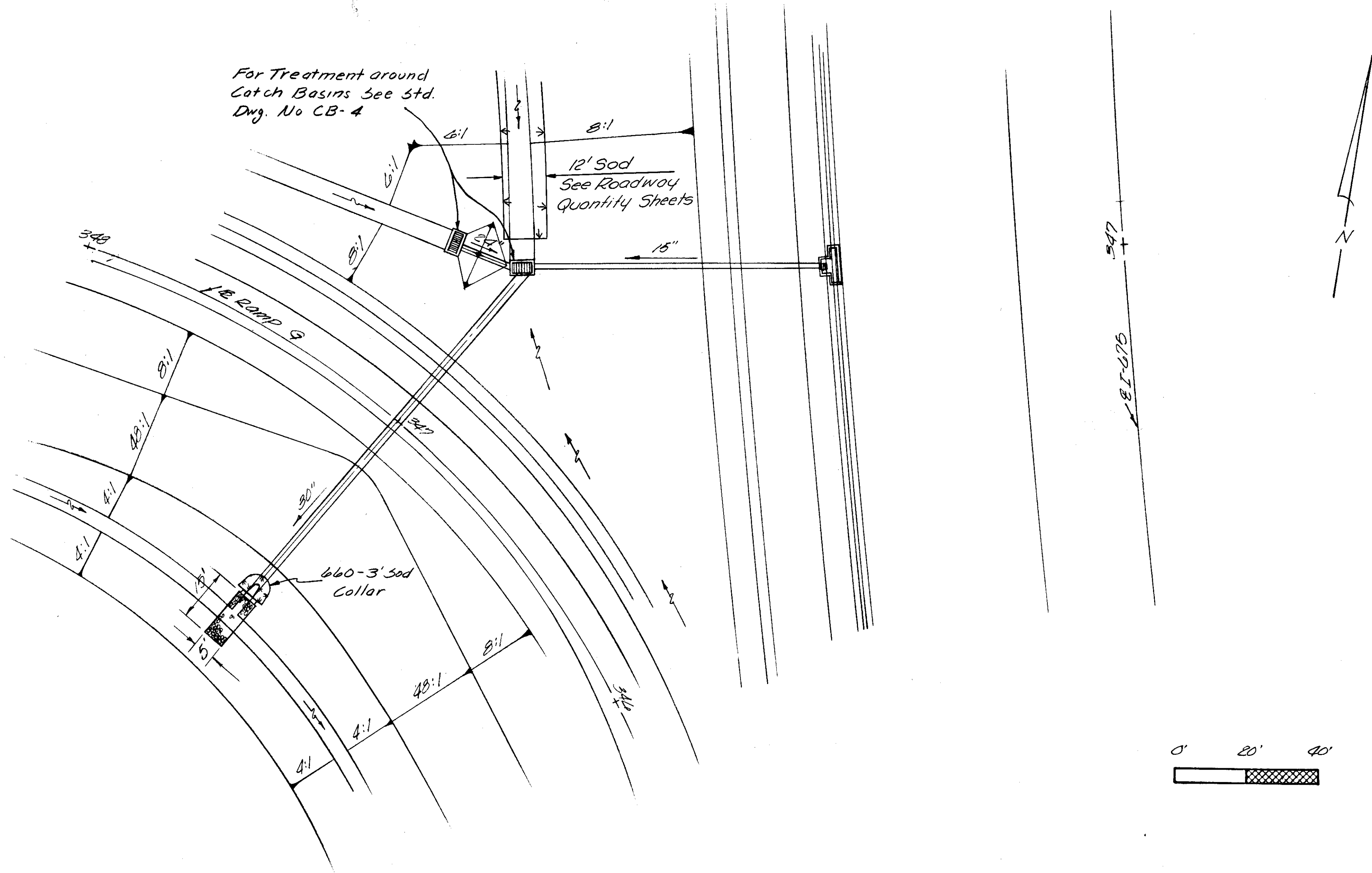


PRELIMINARY CALCULATIONS
 DATE 9-27-71
 DATE 11-22-71
 KING AND GAVARIS
 CONSULTING ENGINEERS
 Revised: I.E.H. - 1/79

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

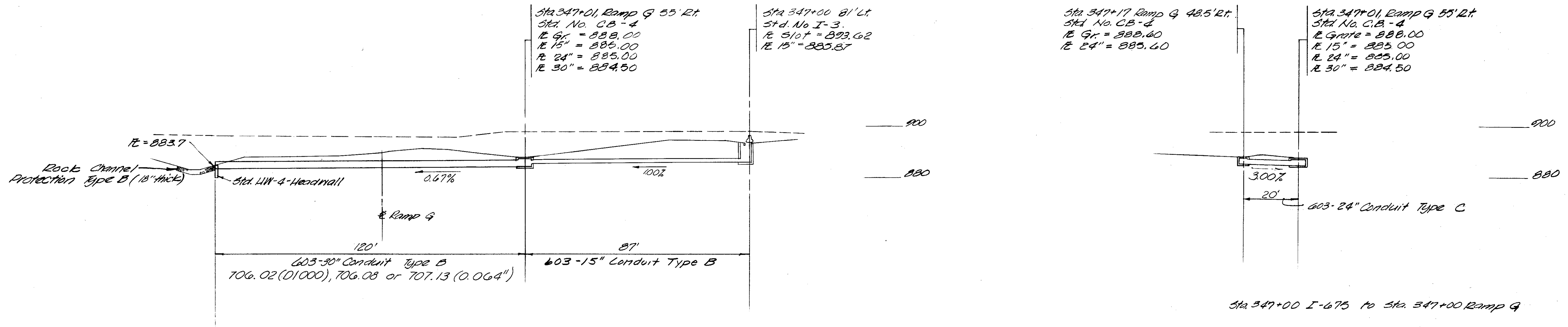
399
 616

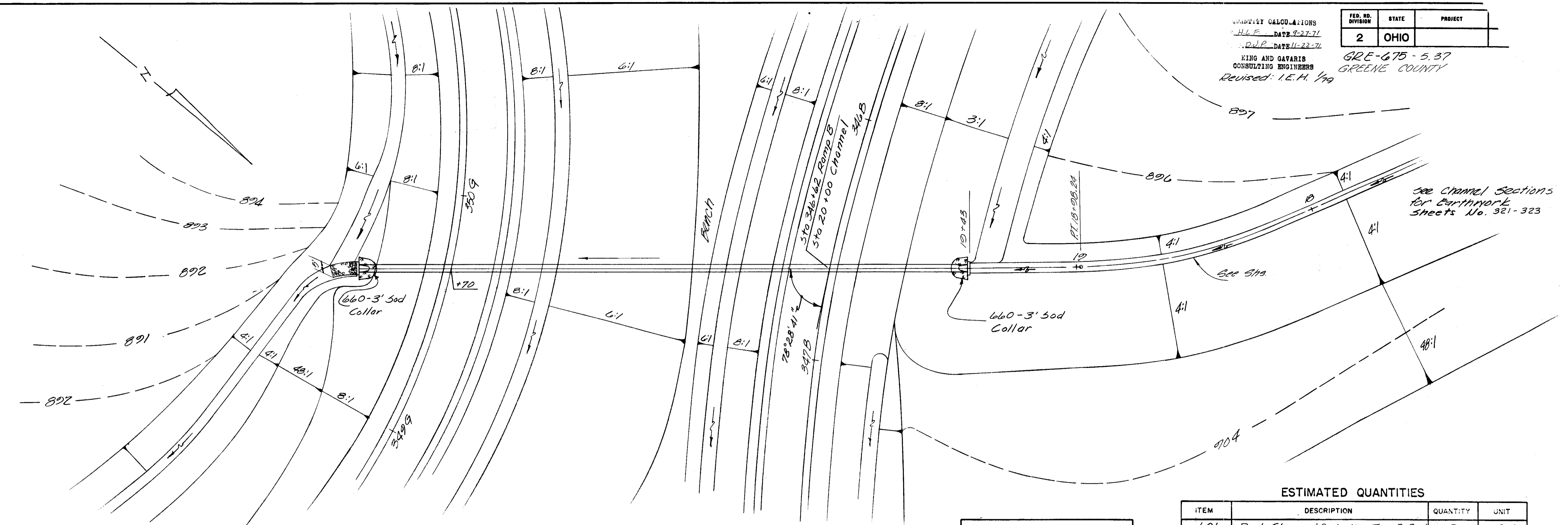
GRE-675-5.37
 GREENE COUNTY



ESTIMATED QUANTITIES

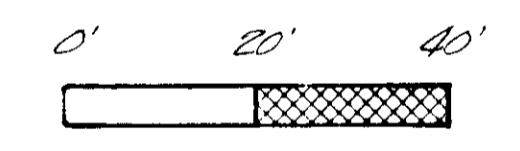
ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B, Bed	6	C.Y.
602	Masonry	0.60	C.Y.
603	15" Conduit Type B	87	L.F.
603	24" Conduit Type C	20	L.F.
603	30" Conduit Type B; 706.02 (D1000) 706.08 or 707.13 (0.064")	120	L.F.
604	Std. No. I-3	1	Ea.
660	Sodding	372	S.Y.
604	Std. No. CB-4	2	Ea.





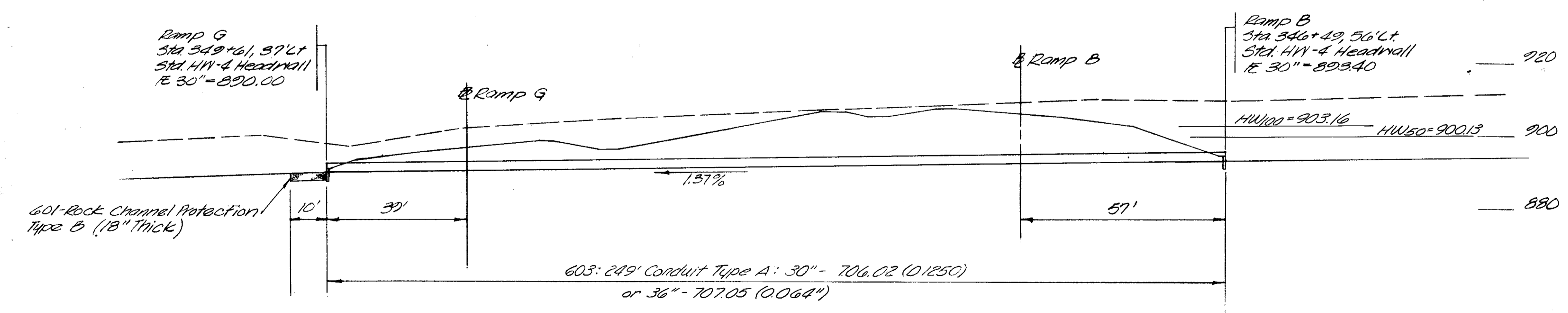
See Channel Sections for Earthwork Sheets No. 321-323

DRAINAGE AREA = 18 Ac.
 400' = 71 cts. 950' = 60 cts.



ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B, Bed	3	C.Y.
602	Masonry	152	C.Y.
603	Conduit Type A: 30" - 706.02' (0.1250) or 36" - 707.05' (0.064")	249	L.F.
660	Sodding	11	S.Y.



Ramp B Sta 346+62

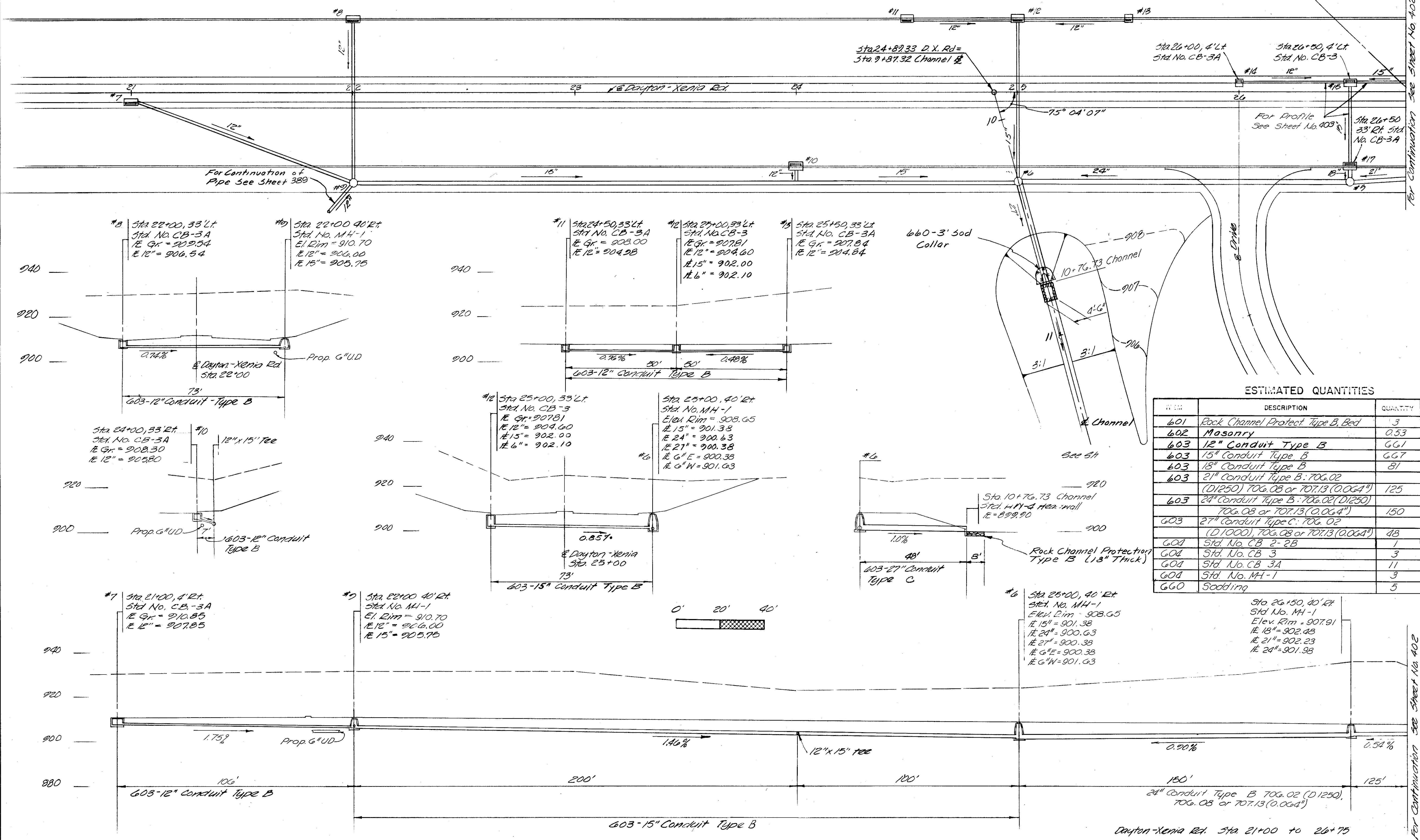
QUANTITY CALCULATION
 H.L.E. DATE 7-27-71
 P.D.P. DATE 11-22-71
 KING AND GAVARIS
 CONSULTING ENGINEERS
 Revised: I.E.H. 1/79

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

GRE-675-5.37
 GREENE COUNTY

401
 616

139
 Yellow



ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protect. Type B, Bed	3	C.Y.
602	Masonry	0.53	C.Y.
603	12" Conduit Type B	661	L.F.
603	15" Conduit Type B	667	L.F.
603	18" Conduit Type B	81	L.F.
603	21" Conduit Type B: 706.02 (D1250) 706.08 or 707.13 (0.064")	125	L.F.
603	24" Conduit Type B: 706.02 (D1250) 706.08 or 707.13 (0.064")	150	L.F.
603	27" Conduit Type C: 706.02 (D1000), 706.08 or 707.13 (0.064")	48	L.F.
604	Std. No. CB 2-2B	1	Ea.
604	Std. No. CB 3	3	Ea.
604	Std. No. CB 3A	11	Ea.
604	Std. No. MH-1	3	Ea.
600	Sodding	5	S.Y.

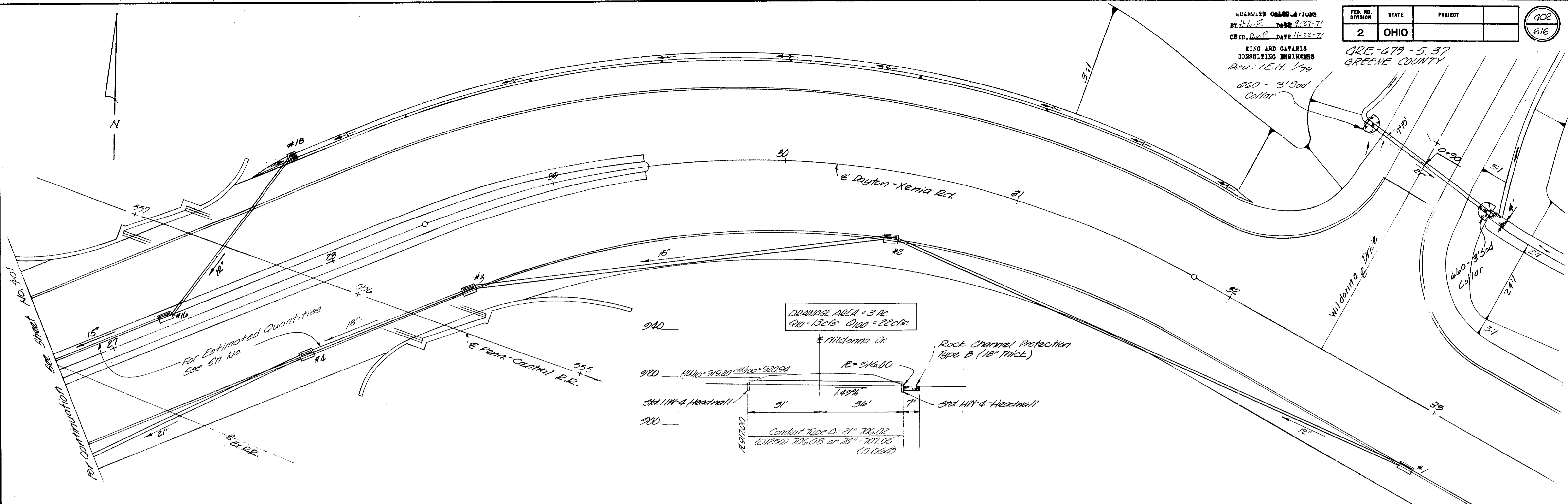
For Continuation See Sheet No. 402

QUANTITY CALCULATIONS
 BY H.W.F. DATE 9-27-71
 CHECKED BY P. DATE 11-22-71
 KING AND CATARIS
 CONSULTING ENGINEERS
 Rev. 1 E.H. 7/79

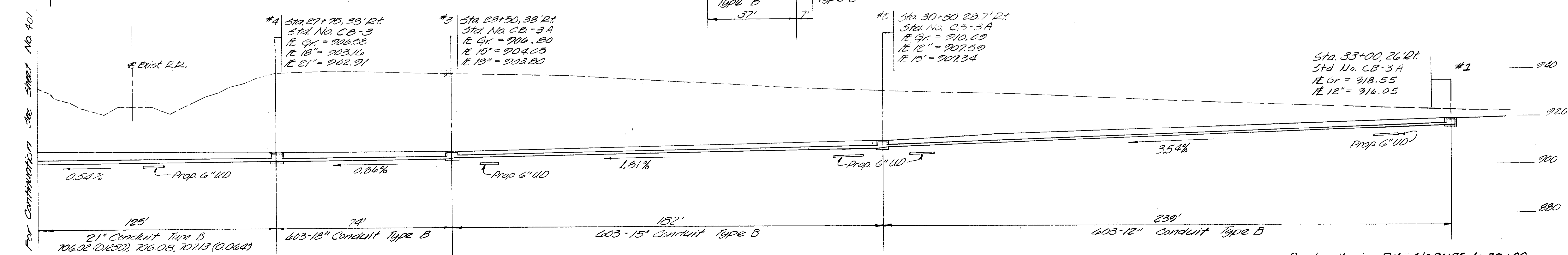
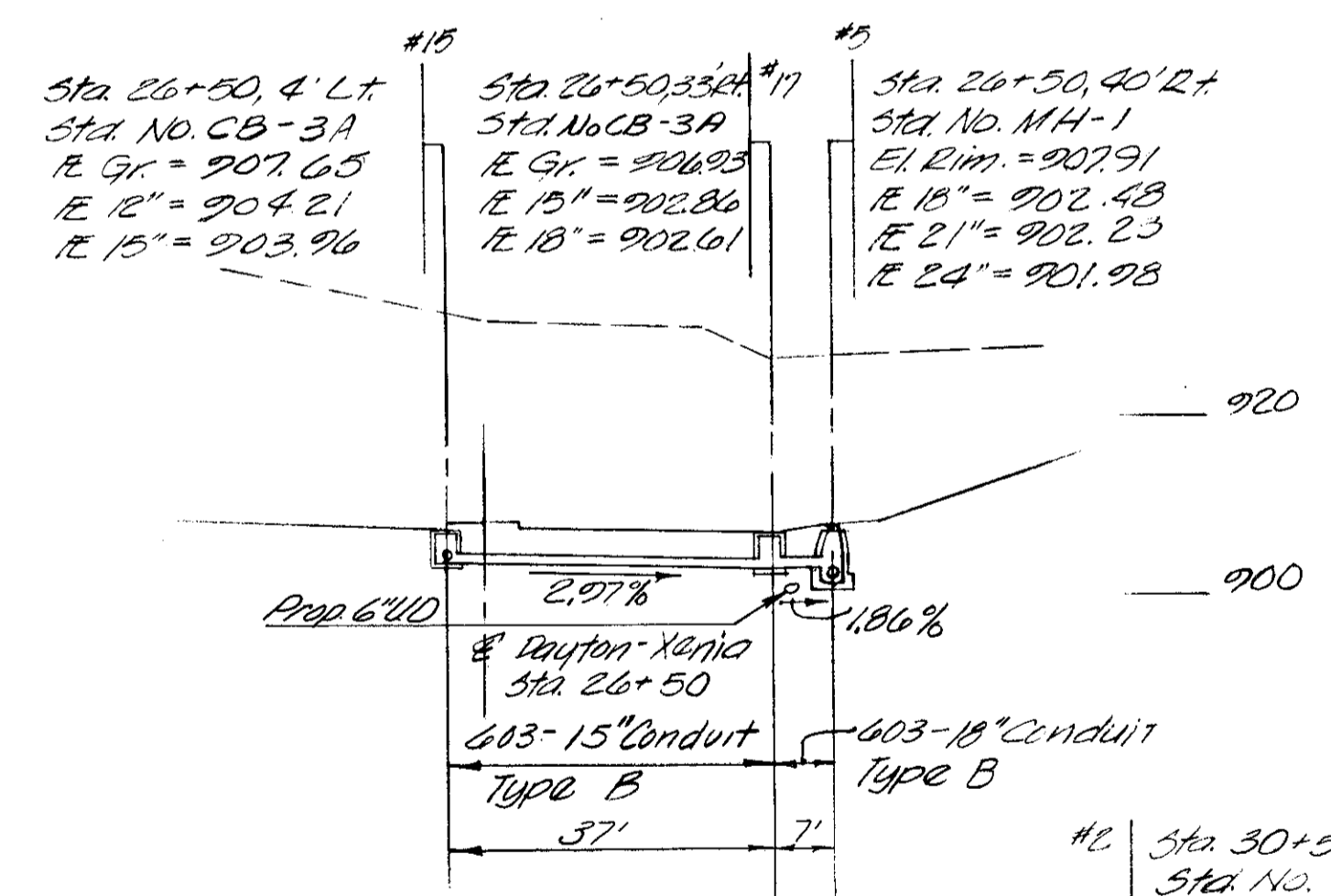
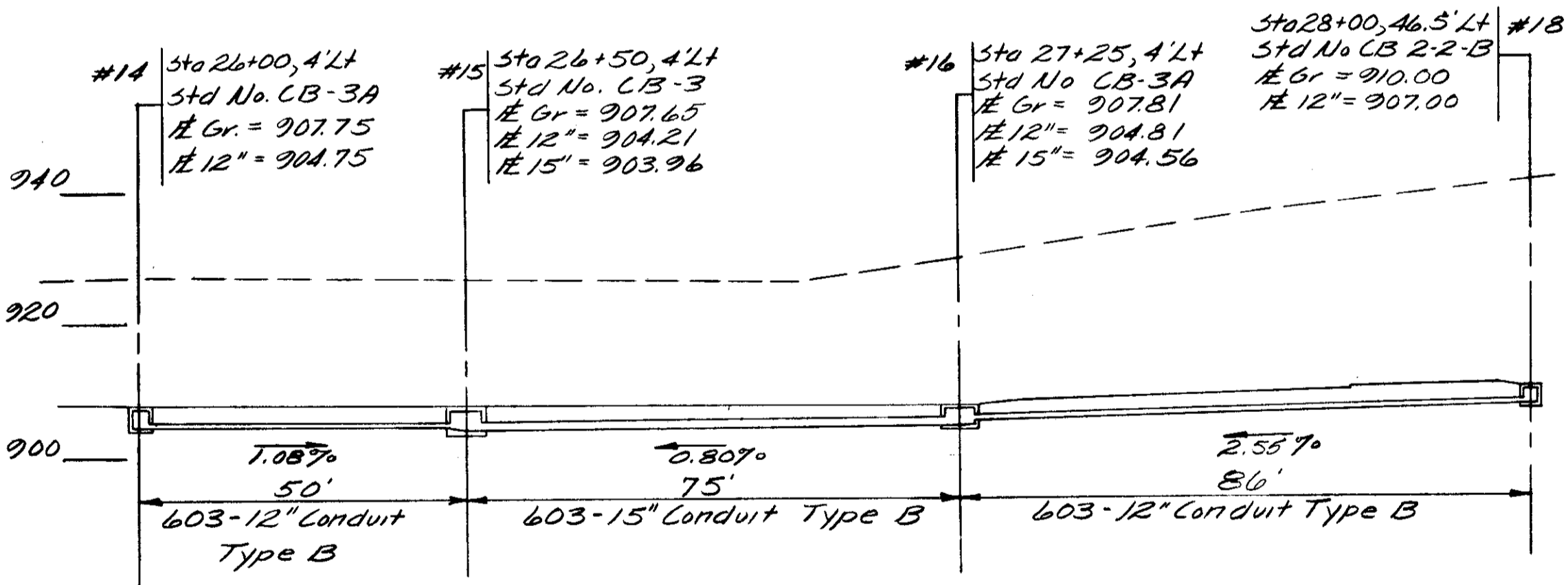
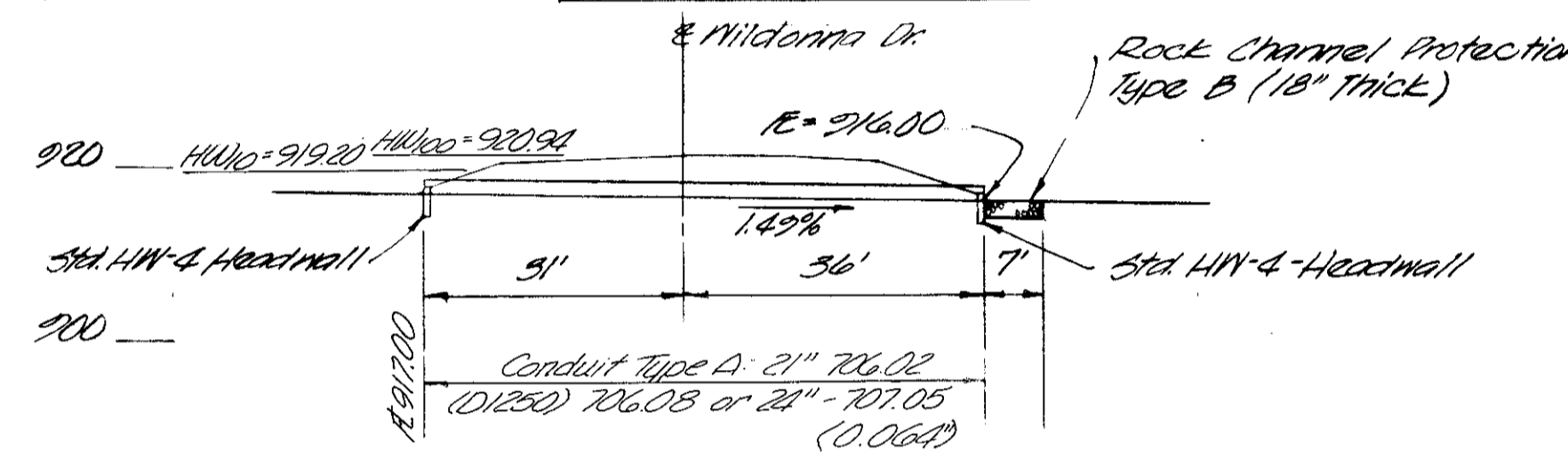
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

402
616

ARE-675-5.37
 GREENE COUNTY

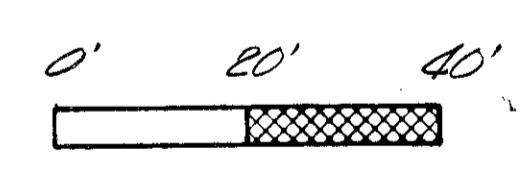


DRAINAGE AREA = 3 AC
 Q10 = 13 cfs Q100 = 22 cfs



ESTIMATED QUANTITIES (Sta. 0+90 Wildonno)

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B, Bed	2	C.Y.
602	Masonry	0.92	C.Y.
603	Conduit Type A: 21" - 706.02 (D1250)	67	L.F.
660	Sodding	9	S.Y.



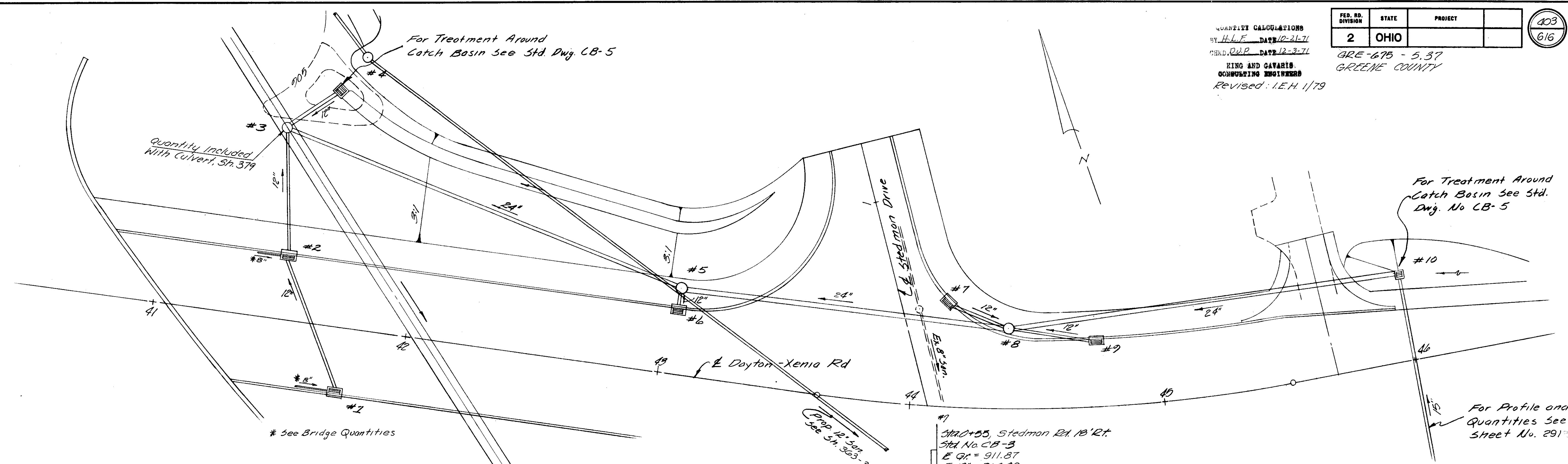
For Estimated Quantities See Sta. No.

Dayton-Xenia Rd - Sta 26+75 to 33+00

DRAINAGE DETAIL

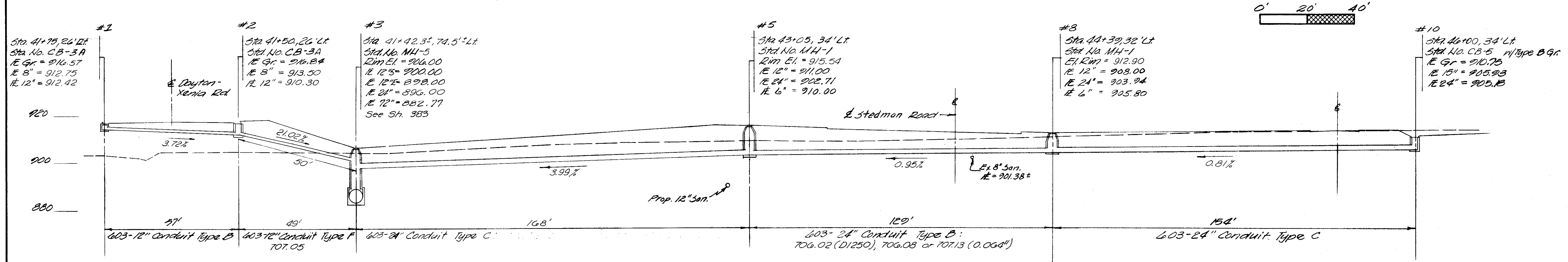
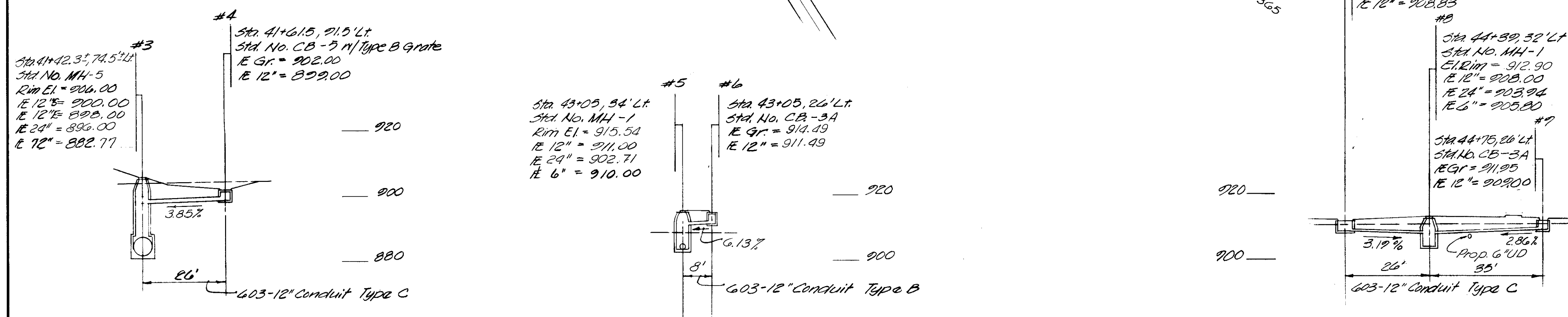
QUANTITY CALCULATIONS
 BY H.L.F. DATE 12-31-71
 CHKD. O.V.P. DATE 12-3-71
 KING AND GAVARIS
 CONSULTING ENGINEERS
 Revised: I.E.H. 1/79

GRE-675-5.37
 GREENE COUNTY



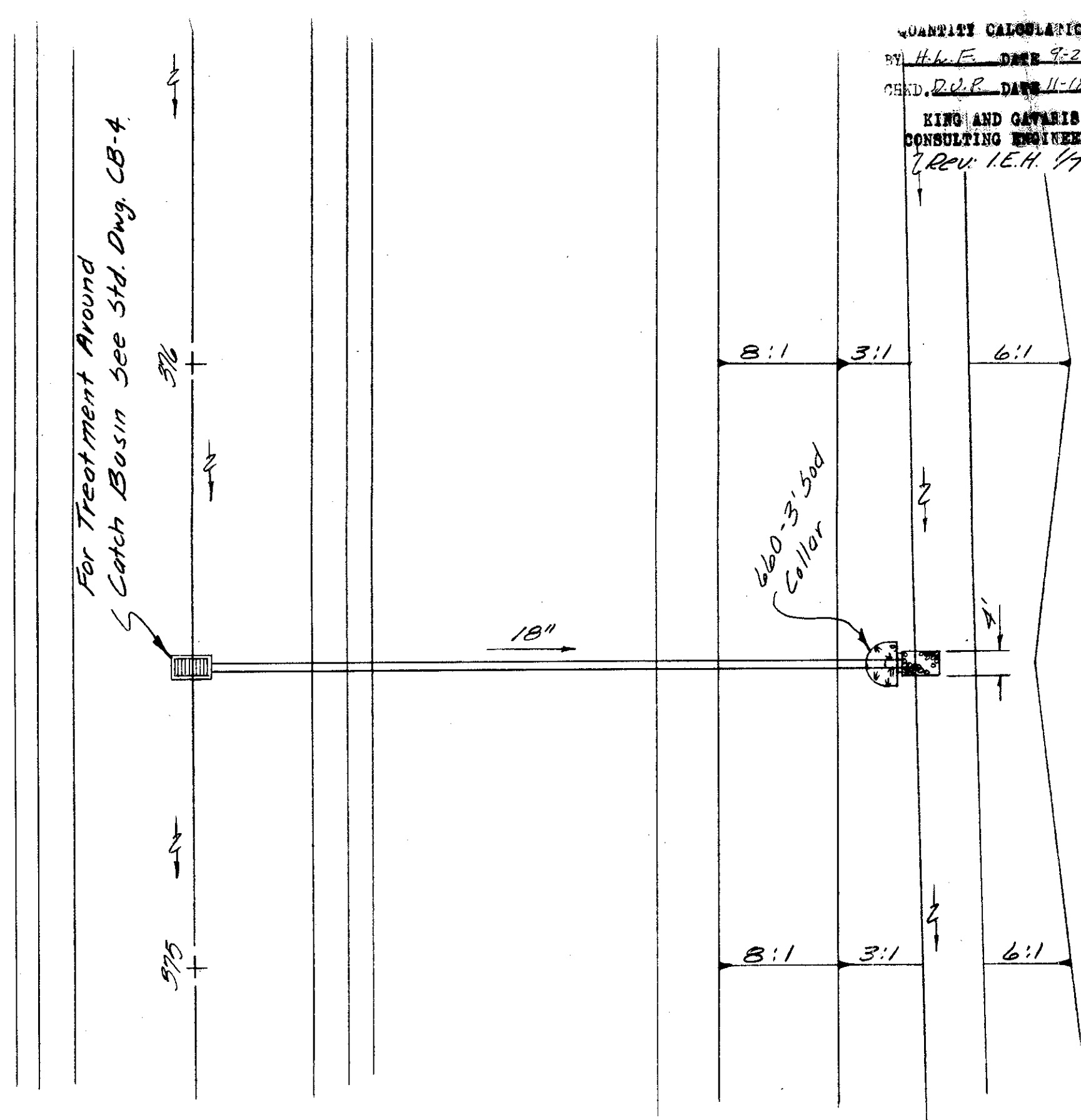
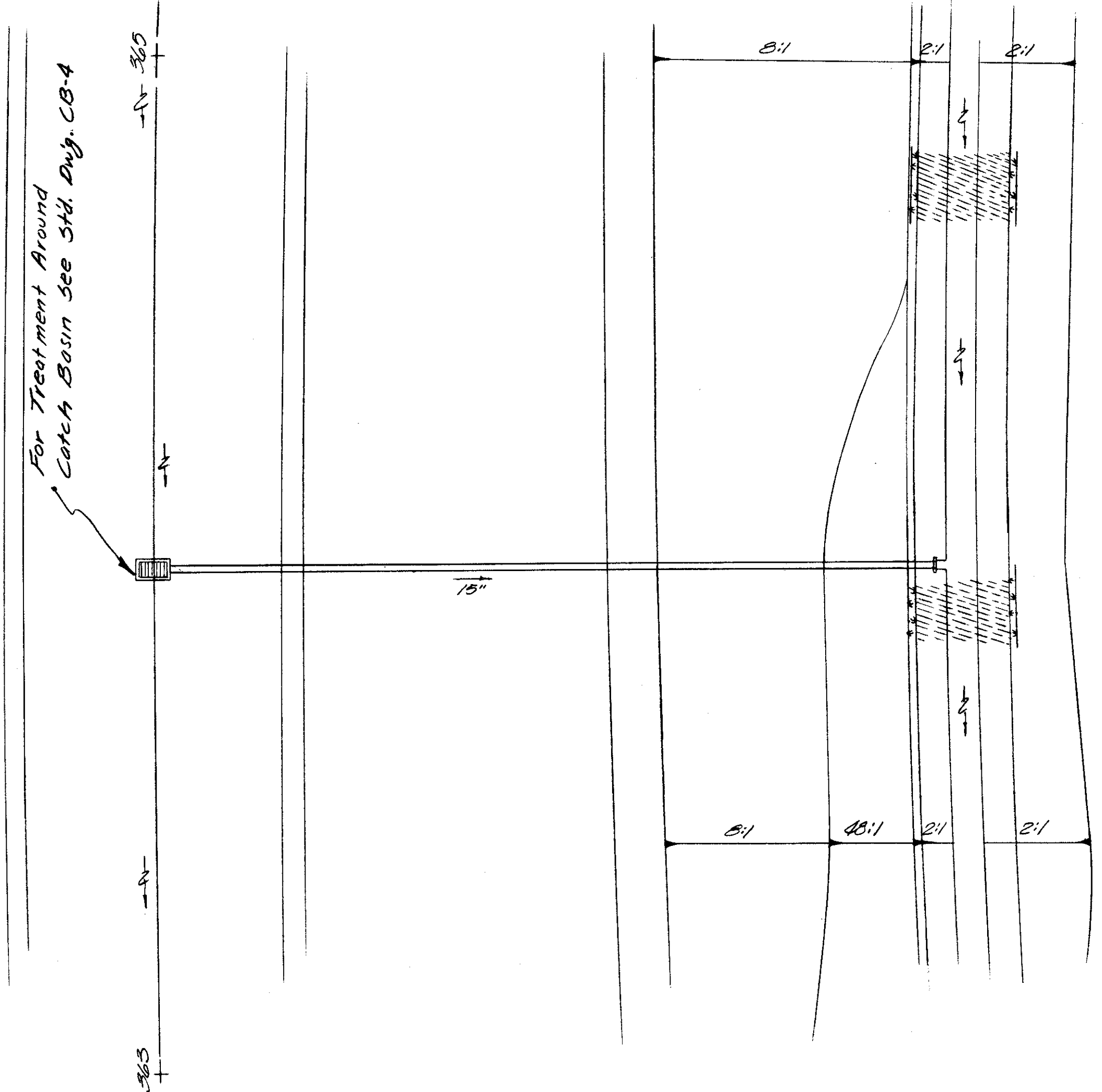
ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
603	12" Conduit Type B	65	L.F.
603	12" Conduit Type C	87	L.F.
603	12" Conduit Type F, 707.05	50	L.F.
603	24" Conduit Type B, 706.02		
	(D1250) 706.08 or 707.13 (0.064")	129	L.F.
604	Std No. CB-3	1	Ea.
604	Std No. CB-3A	4	Ea.
604	Std No. CB-5 w/Type B Grate	2	Ea.
603	24" Conduit Type C	322	L.F.
604	Std No. MH-1	2	Ea.



QUANTITY CALCULATIONS:
BY H.W.F. DATE 9-22-71
CHKD. D.W.B. DATE 11-18-71
KIRO AND GAPPAS
CONSULTING ENGINEERS
7 Rev. I.E.H. 1/79

GRE-675-5.37
GREENE COUNTY



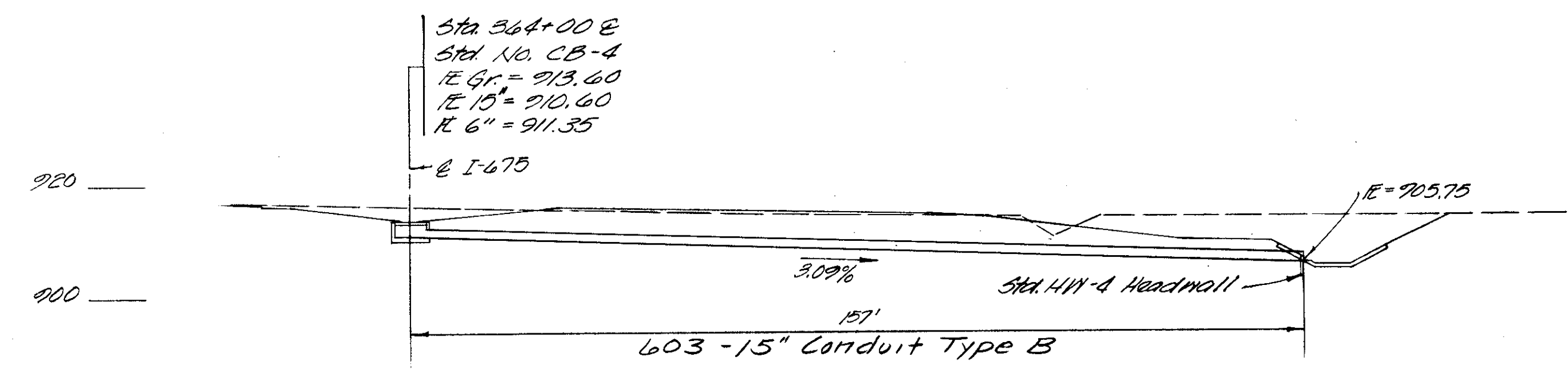
ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
602	Masonry	0.27	C.Y.
603	15" Conduit Type B	157	L.F.
604	Std. No CB-4	1	EO
660	Sodding	562	S.Y.

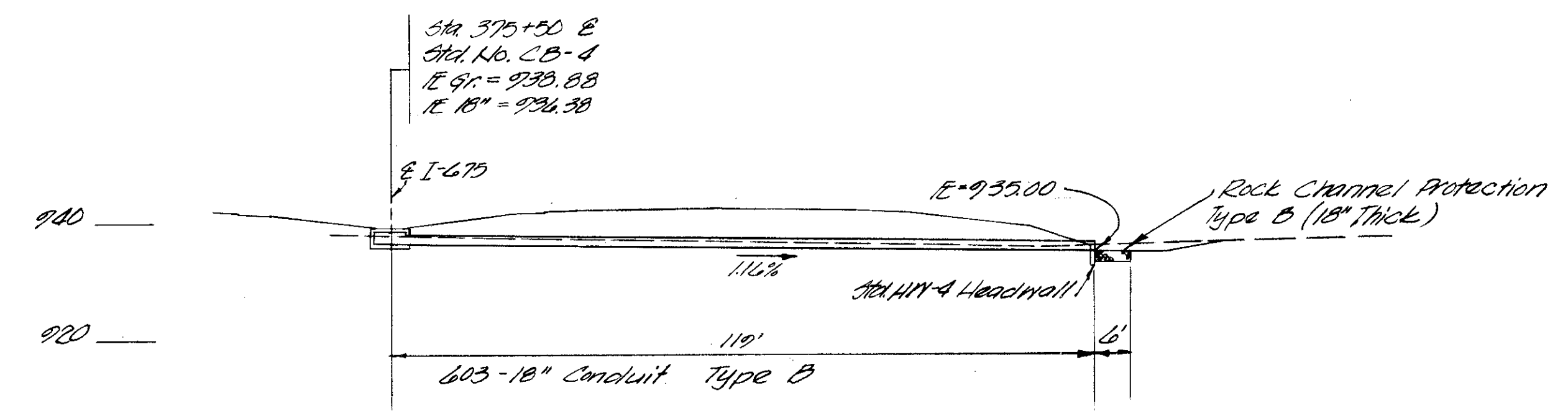


ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type B Bed	2	C.Y.
602	Masonry	0.33	C.Y.
603	18" Conduit Type B	119	L.F.
604	Std. No CB-4	1	EO
660	Sodding	316	S.Y.



Sta 364+00 I-675



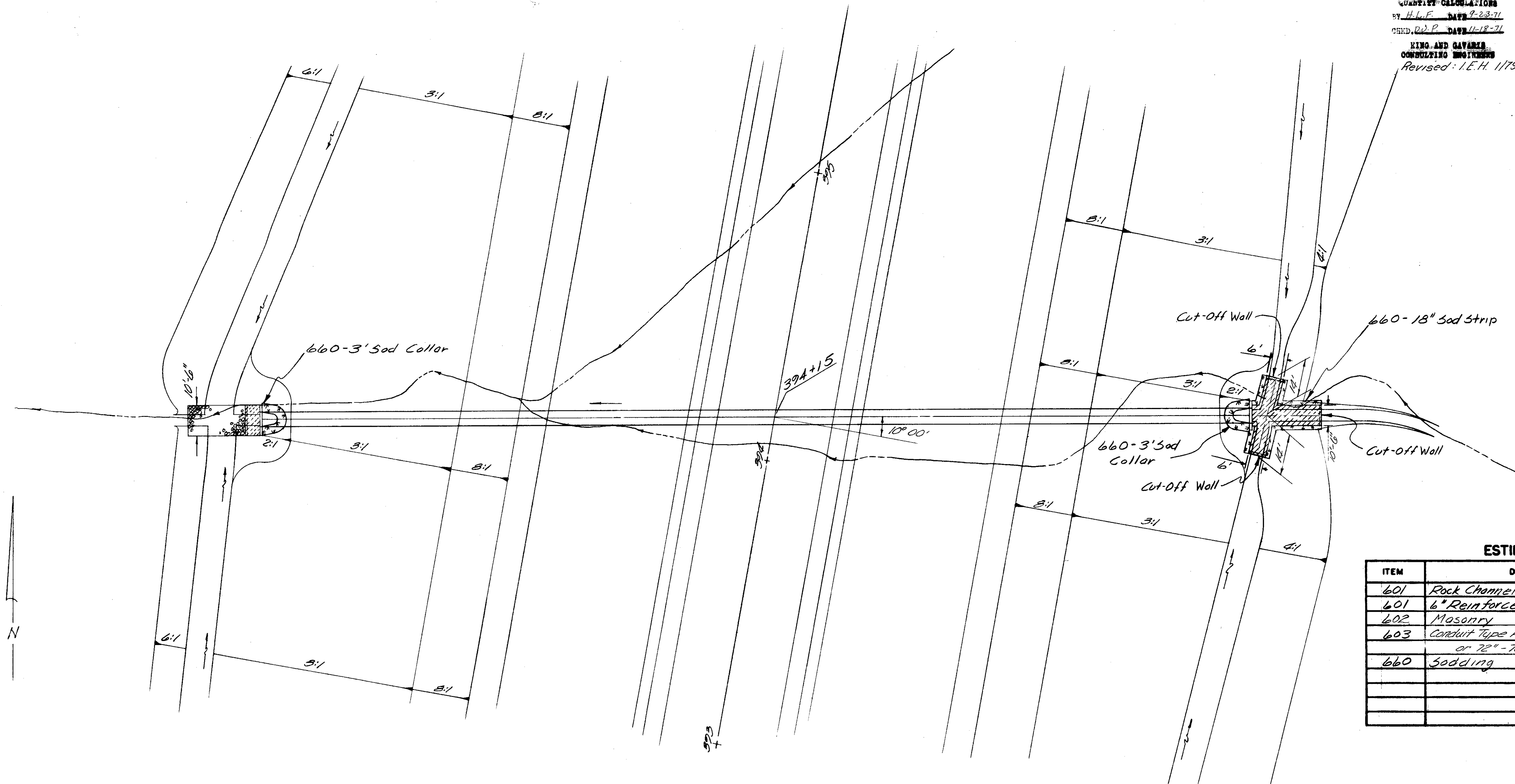
Sta 375+50 I-675

QUANTITY CALCULATIONS
 BY H.L.F. DATE 7-23-71
 CHED. R.D.P. DATE 11-18-71
 KING AND GAVARIS
 CONSULTING ENGINEERS
 Revised: I.E.H. 1179

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

405
616

GRE-675 - 5.37
 GREENE COUNTY

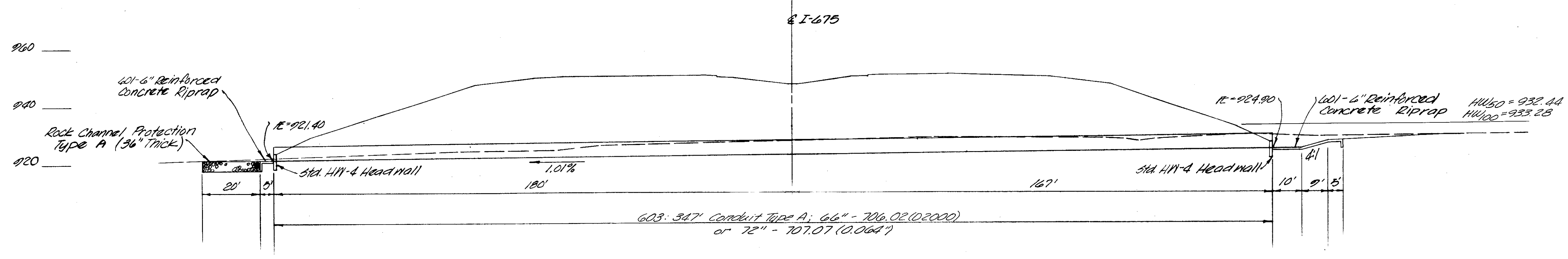


ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
601	Rock Channel Protection Type A, Bed	27	C.Y.
601	6" Reinforced Concrete Riprap	45	C.Y.
602	Masonry	4.84	C.Y.
603	Conduit Type A: 66" - 706.02 (0.2000) or 72" - 707.07 (0.064")	347	L.F.
660	Sodding	26	C.Y.

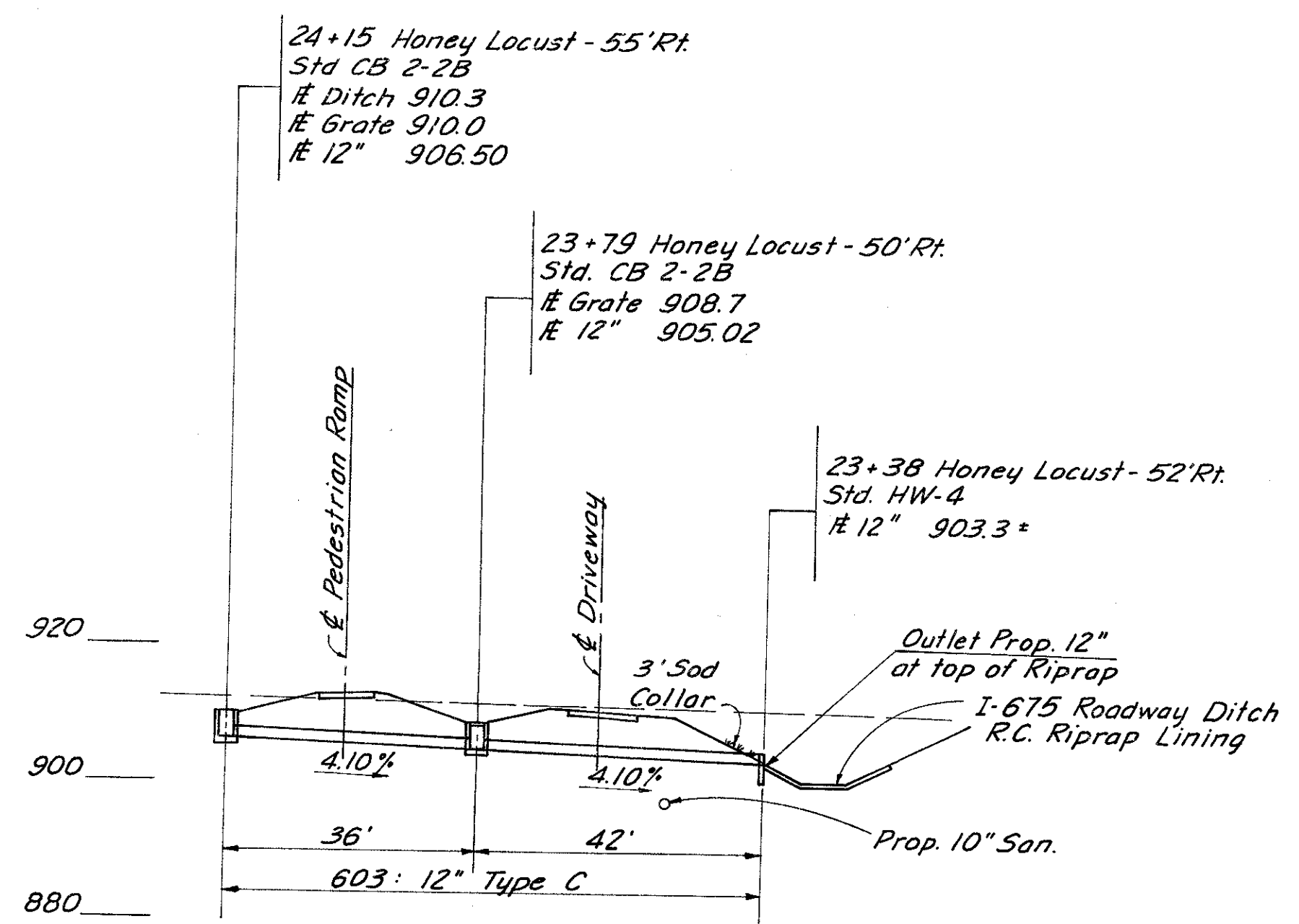


DRAINAGE AREA = 134 Ac.
 $Q_{100} = 270 cfs$ $Q_{50} = 228 cfs$



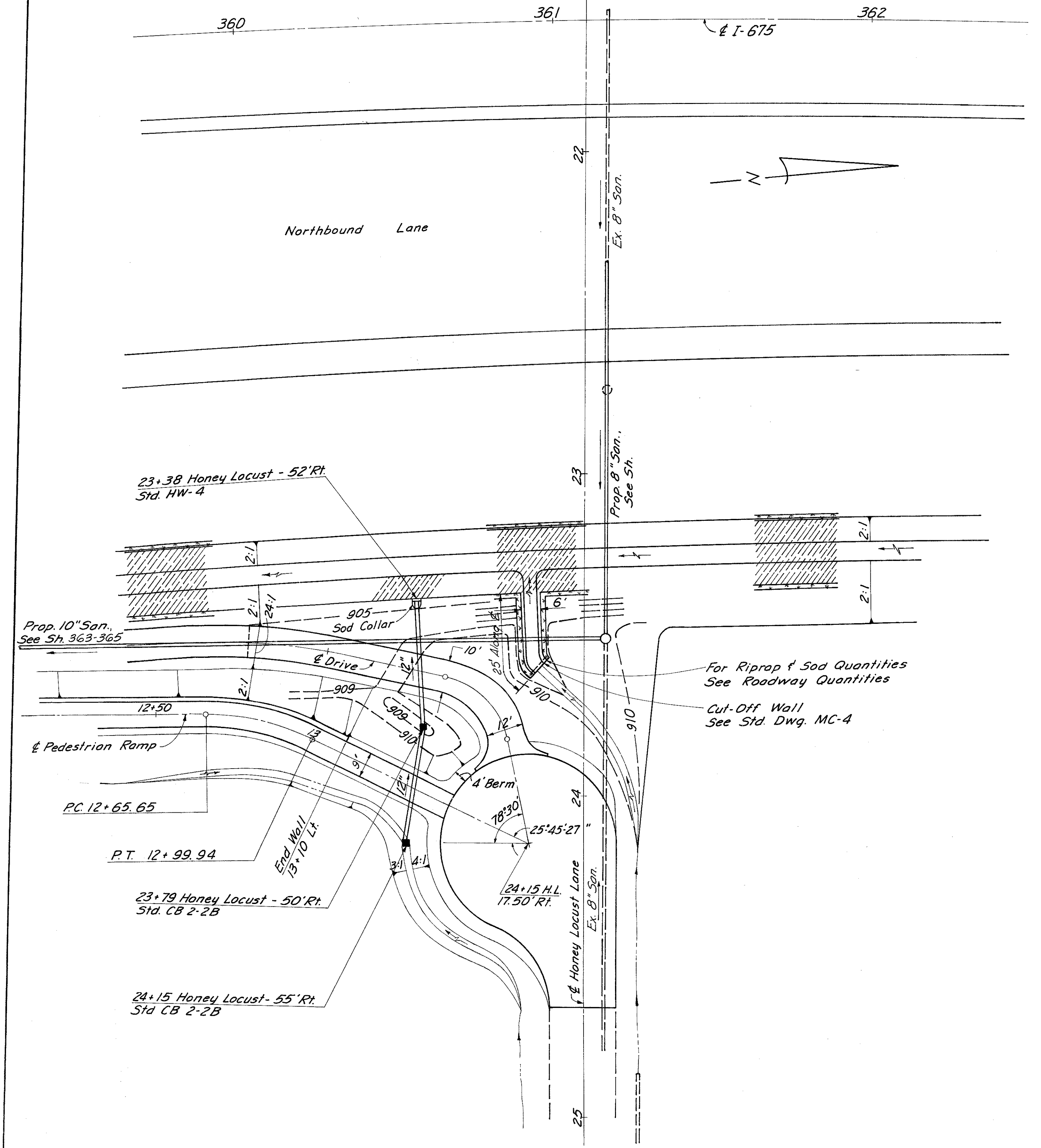
Sta. 394+15 I-675

DRAINAGE DETAIL



ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
602	Masonry	0.21	Cu. Yd.
603	12" Conduit Type C	78	Lin. Ft.
604	Std. CB 2-2B	2	Ea.
660	Sodding	3	Sq. Yd.

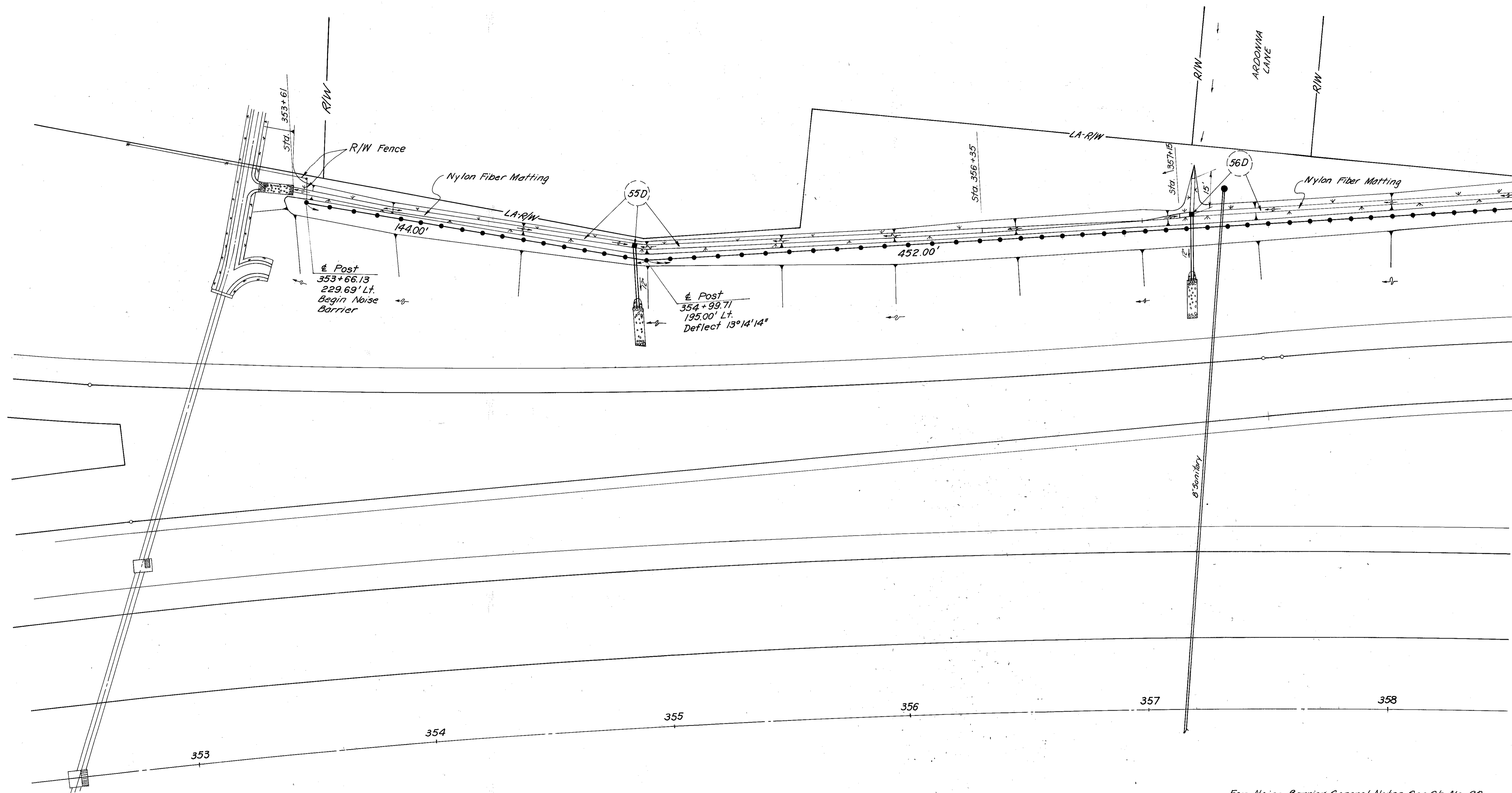
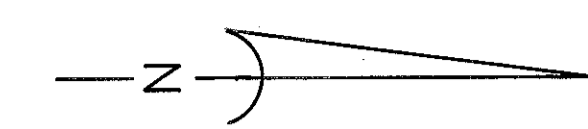


Grading Detail
Honey Locust Lane Cul-de-Sac & Pedestrian Ramp

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

406A
616

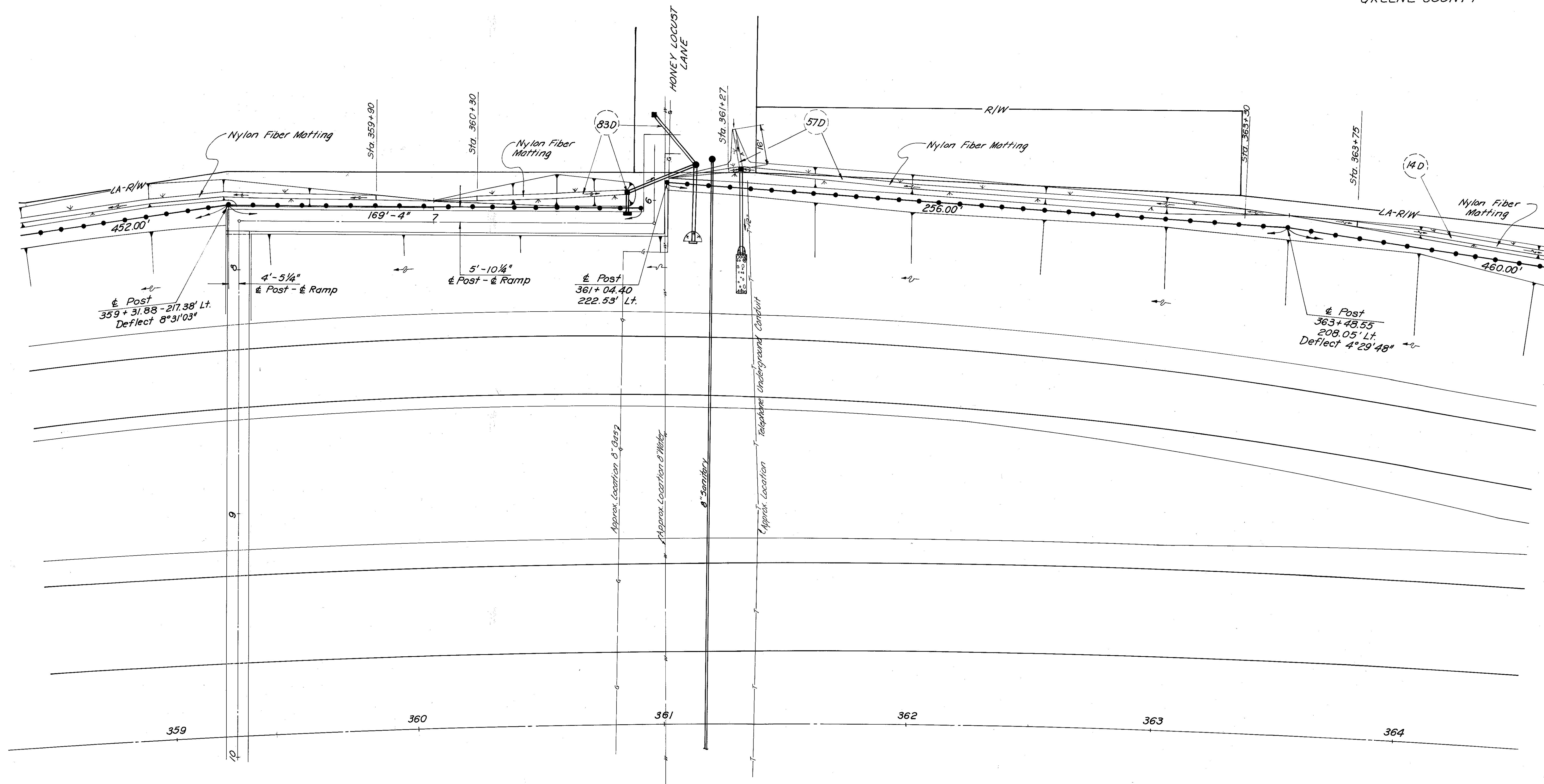
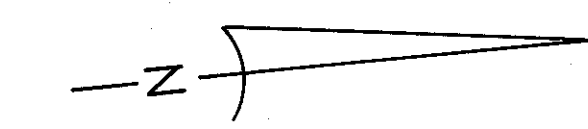
GRE-675-5.37
GREENE COUNTY



± Post
353+66.13
229.69' Lt.
Begin Noise
Barrier

± Post
354+99.71
195.00' Lt.
Deflect 13°14'14"

For Noise Barrier General Notes, See Sh. No. 29
For Noise Barrier Profile, See Sh. Nos. 406H-406K
For Noise Barrier Quantities, See Sh. No. 406K
For Barrier Drainage Details, See Sh. No. 406N
For Barrier Details, See Sh. Nos. 406L, 406M

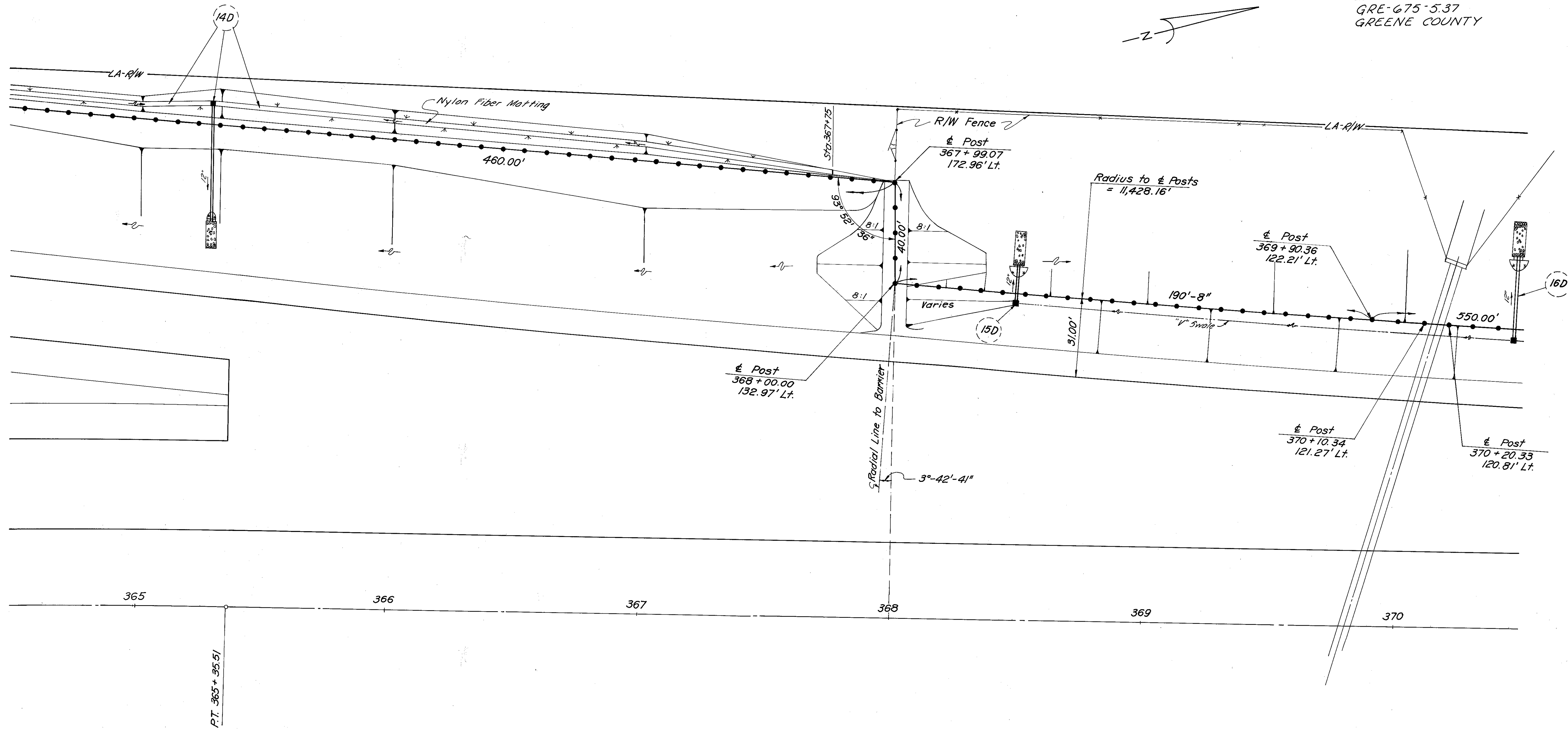
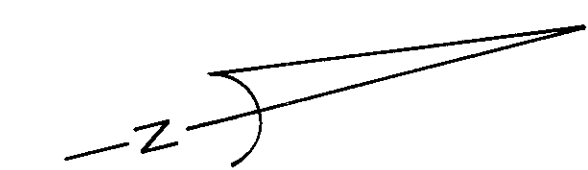


For Noise Barrier General Notes, See Sh. No. 29
 For Noise Barrier Profile, See Sh. Nos. 406H-406K
 For Noise Barrier Quantities, See Sh. No. 406K
 For Barrier Drainage Details, See Sh. No. 406N
 For Noise Barrier Details, See Sh. Nos. 406L, 406M

F.H.W.A. REGION	STATE	PROJECT
5	OHIO	

406C
6/6

GRE-675-5.37
GREENE COUNTY

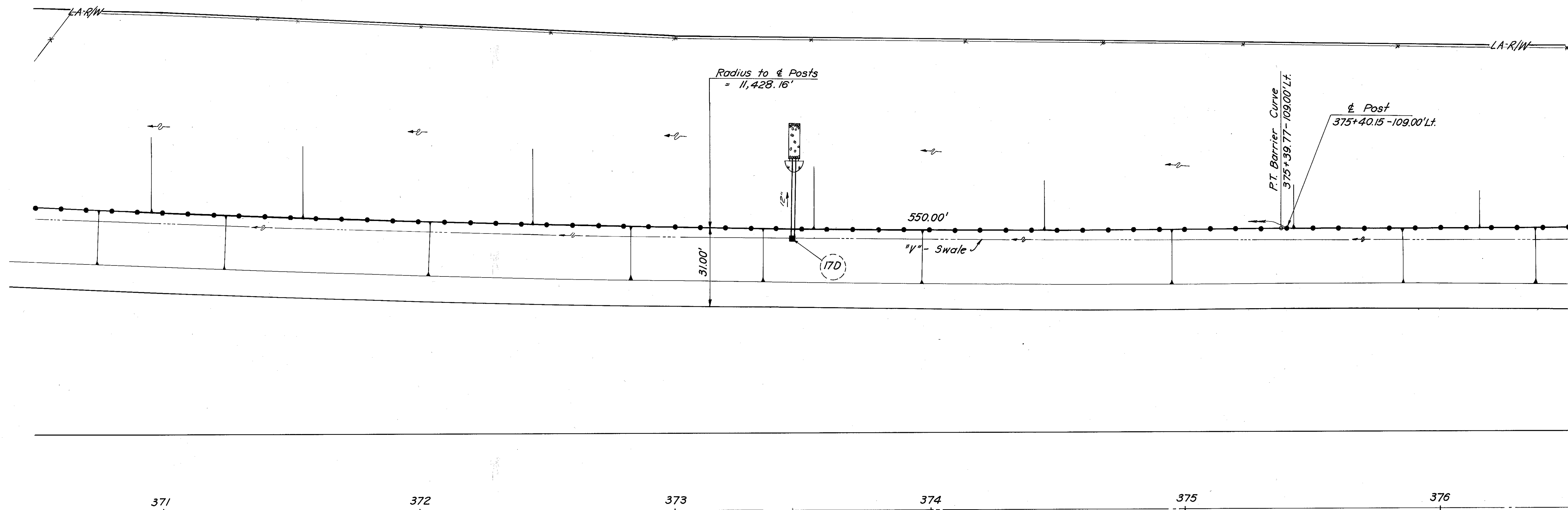


For Noise Barrier General Notes, See Sh. No. 29
 For Noise Barrier Profile, See Sh. Nos. 406H-406K
 For Noise Barrier Quantities, See Sh. No. 406K
 For Barrier Drainage Details, See Sh. No. 406N
 For Noise Barrier Details, See Sh. Nos. 406L, 406M

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

406L
6/6

GRE-675-5.37
GREENE COUNTY

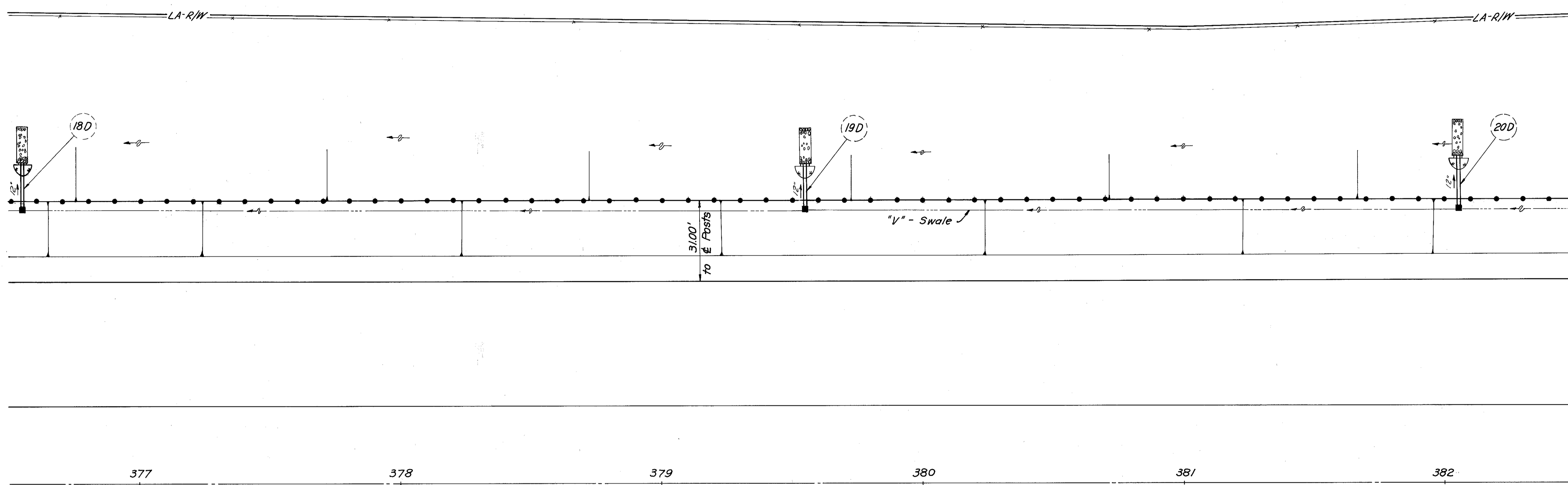


For Noise Barrier General Notes, See Sh. No. 29
 For Noise Barrier Profile, See Sh. Nos. 406H-406K
 For Noise Barrier Quantities, See Sh. No. 406K
 For Barrier Drainage Details, See Sh. No. 406N
 For Noise Barrier Details, See Sh. No. 406L, 406M

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

406C
6/6

GRE-075-5.37
GREENE COUNTY

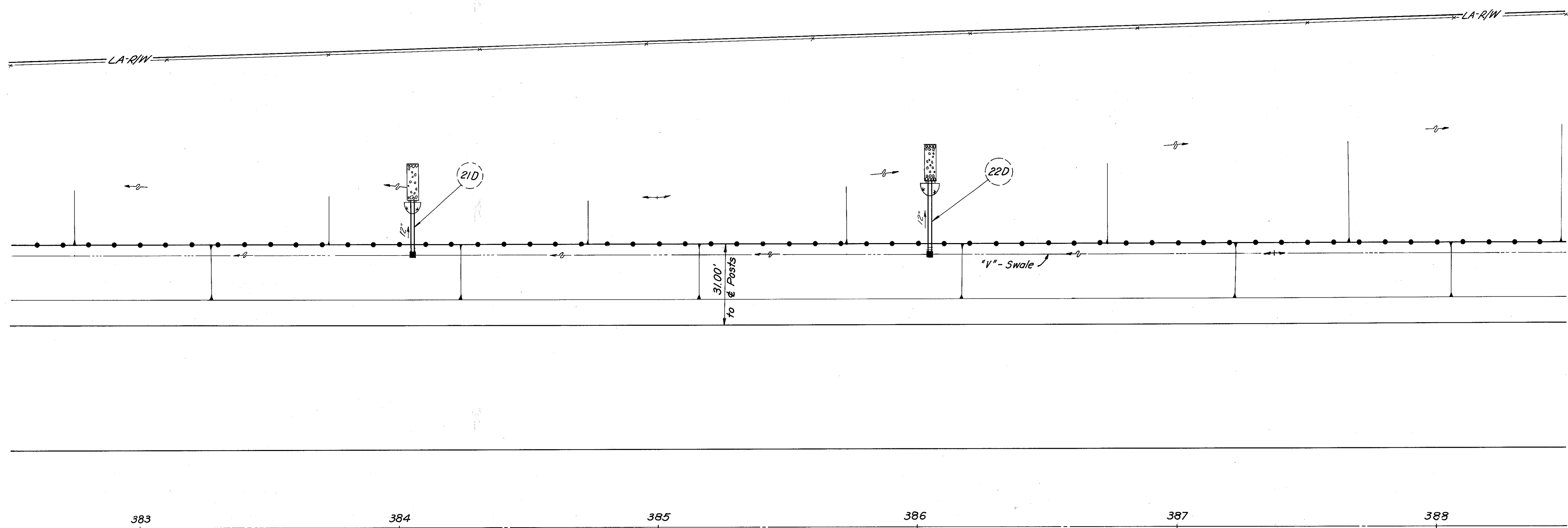


For Noise Barrier General Notes, See Sh. No. 29
 For Noise Barrier Profile, See Sh. Nos. 406H-406K
 For Noise Barrier Quantities, See Sh. No. 406K
 For Barrier Drainage Details, See Sh. No. 406N
 For Noise Barrier Details, See Sh. Nos. 406L, 406M

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

406f
616

GRE-675-5.37
GREENE COUNTY

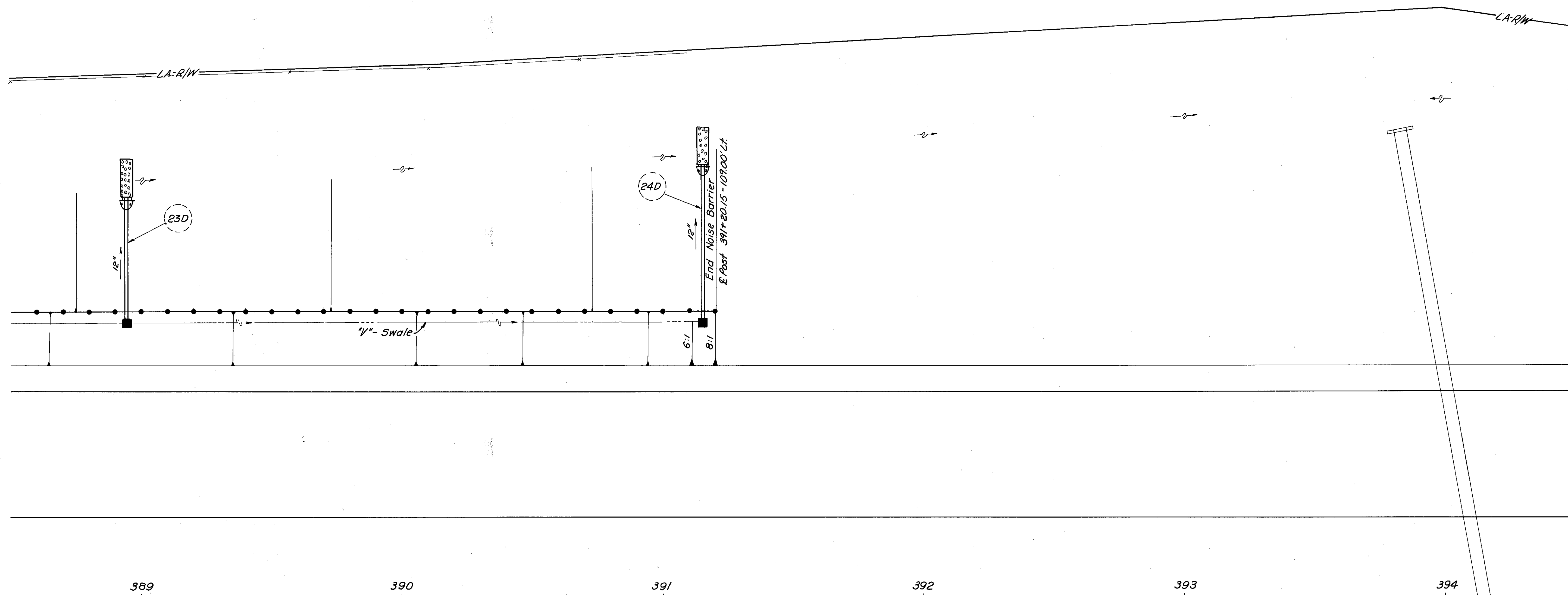
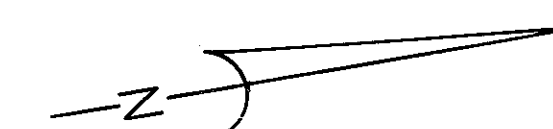


For Noise Barrier General Notes, See Sh. No. 29
 For Noise Barrier Profile, See Sh. Nos. 406H-406K
 For Noise Barrier Quantities, See Sh. No. 406K
 For Barrier Drainage Details, See Sh. No. 406N
 For Noise Barrier Details, See Sh. Nos. 406L, 406M

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

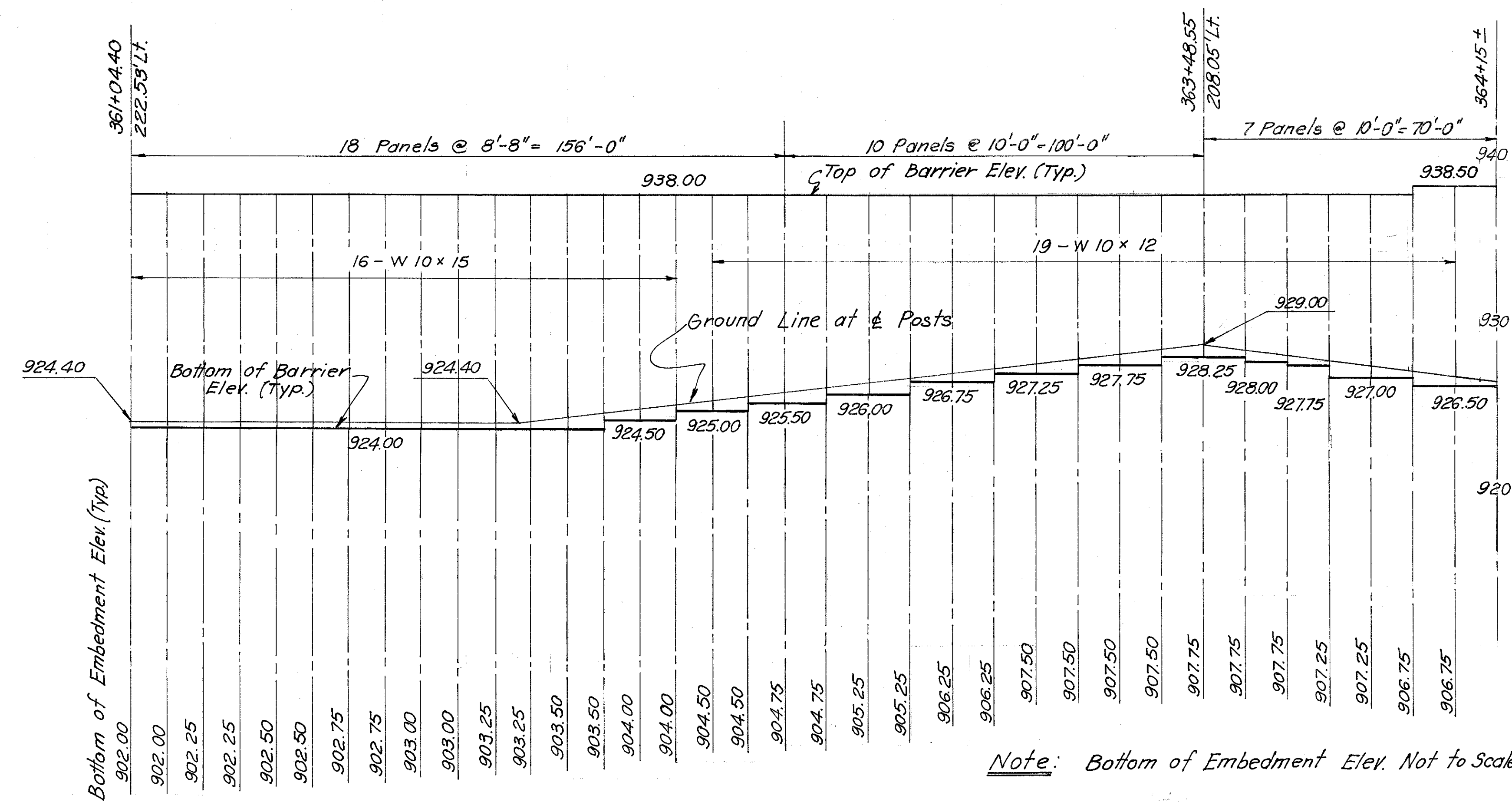
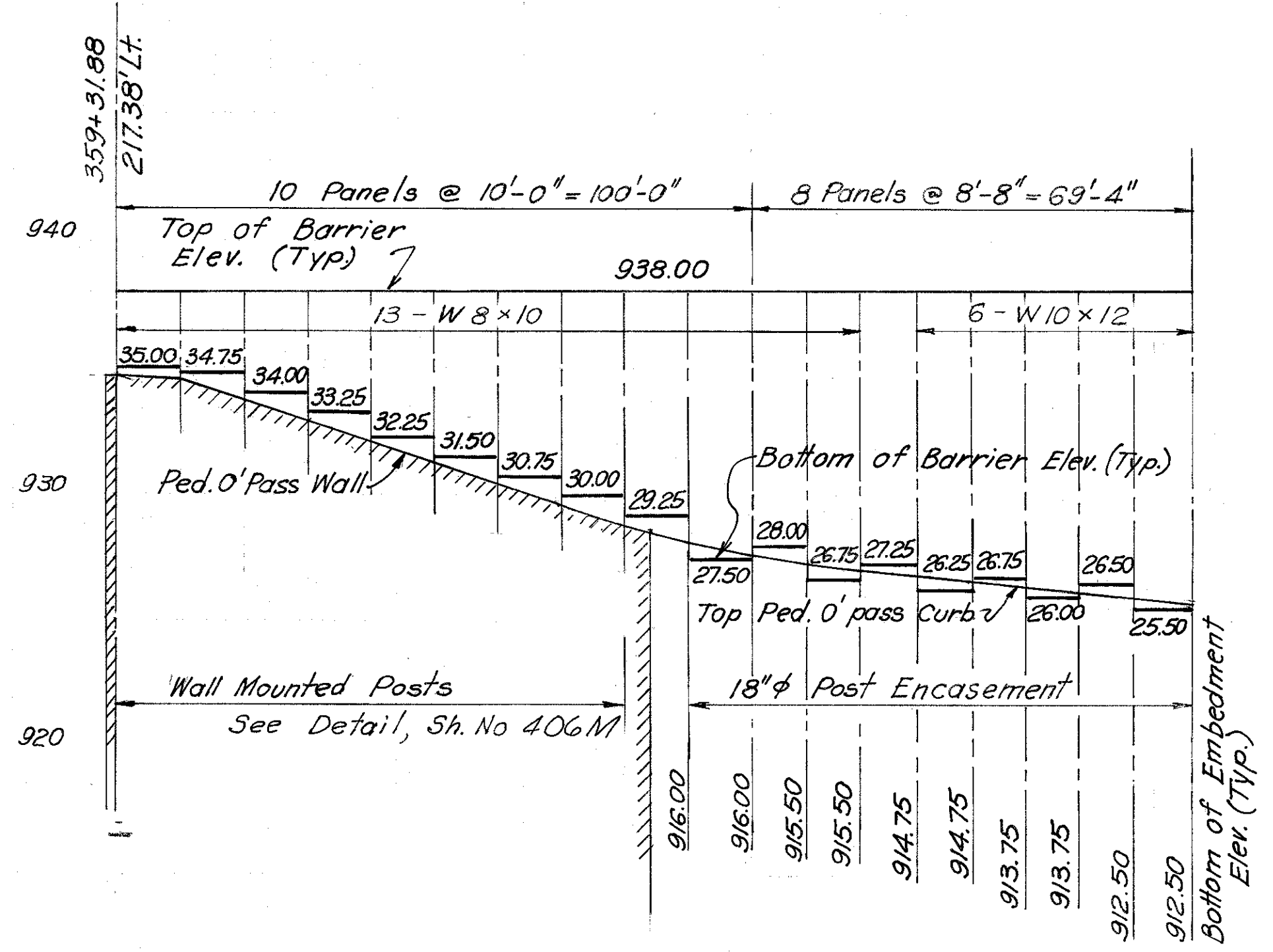
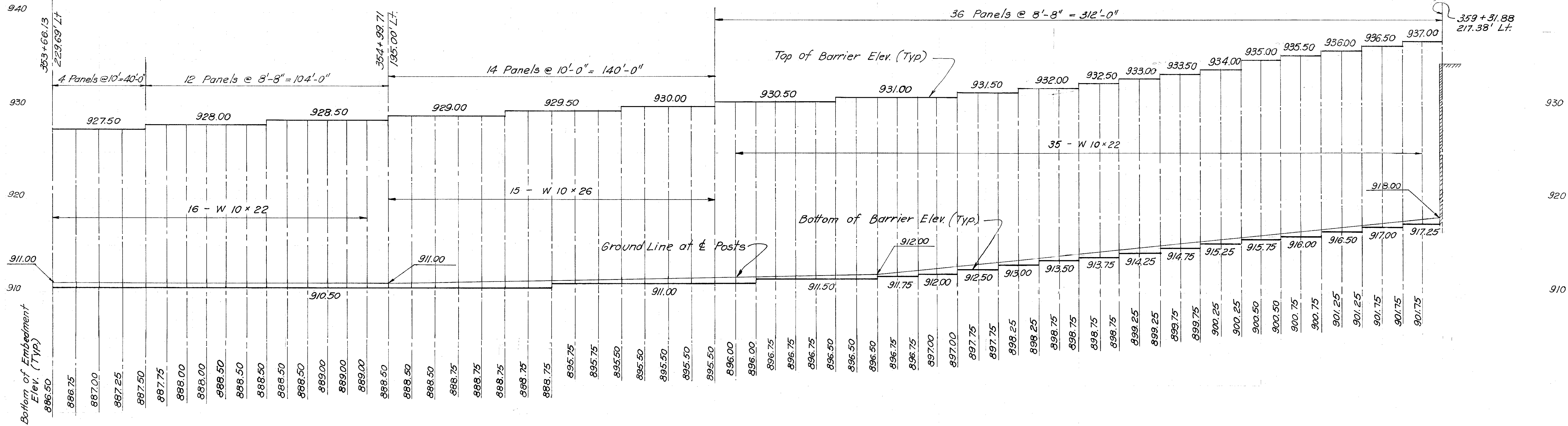
406G
6/6

GRE-675-5.37
GREENE COUNTY



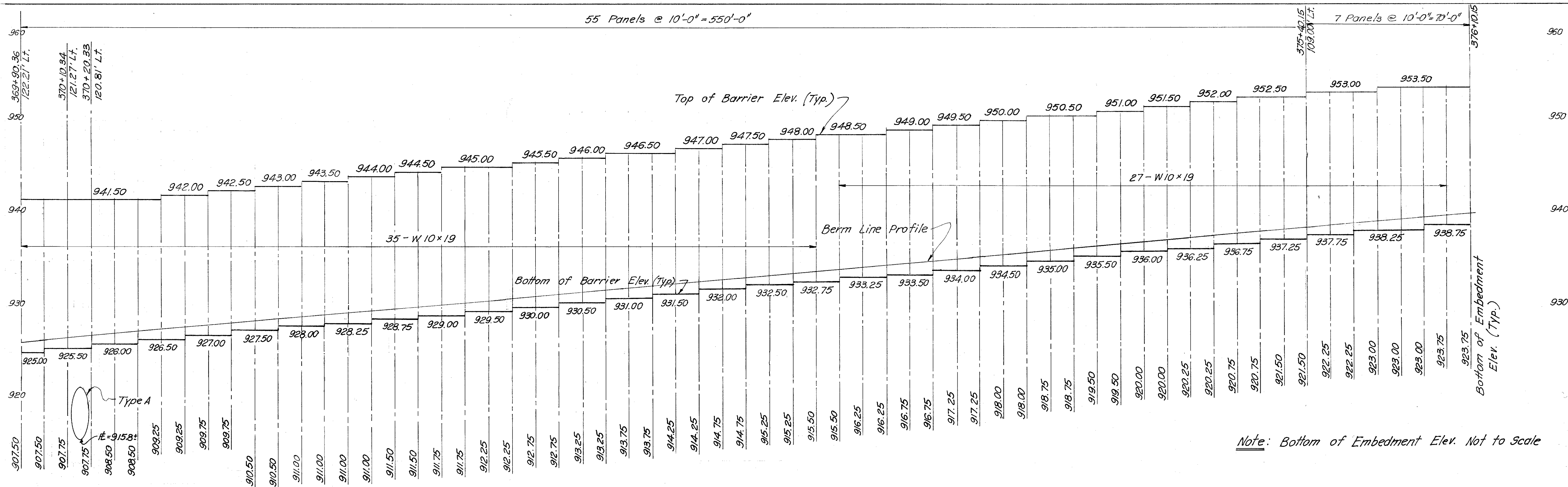
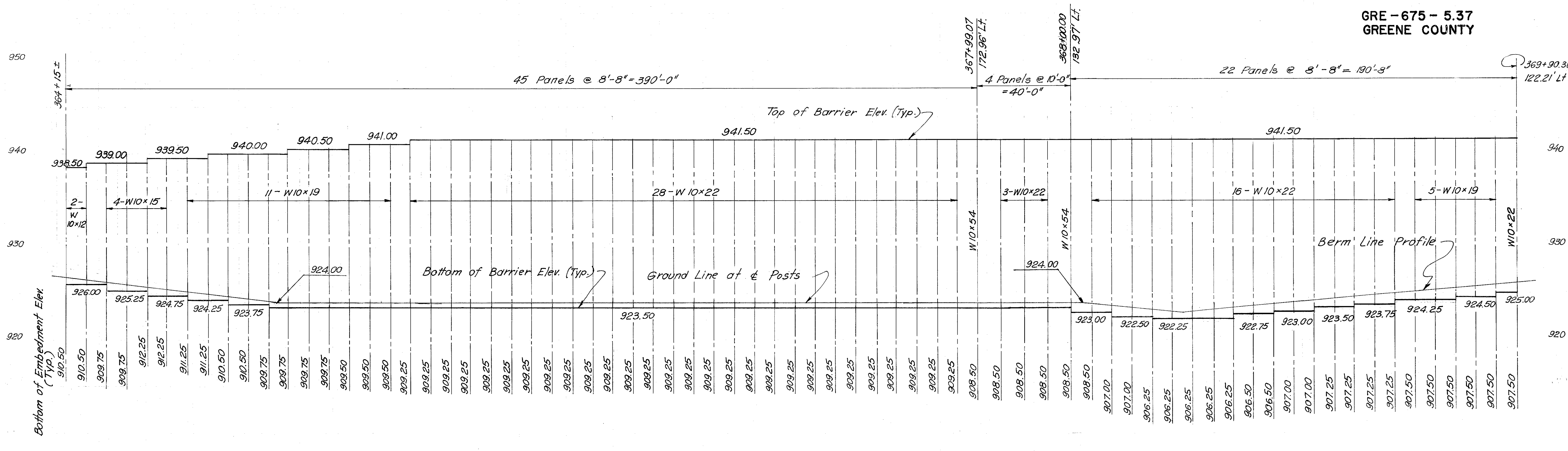
For Noise Barrier General Notes, See Sh. No. 29
 For Noise Barrier Profile, See Sh. Nos. 406H-406K
 For Noise Barrier Quantities, See Sh. No. 406K
 For Barrier Drainage Details, See Sh. No. 406N
 For Noise Barrier Details, See Sh. Nos. 406L, 406M

GRE-675-5.37
GREENE COUNTY



Note: Bottom of Embedment Elev. Not to Scale

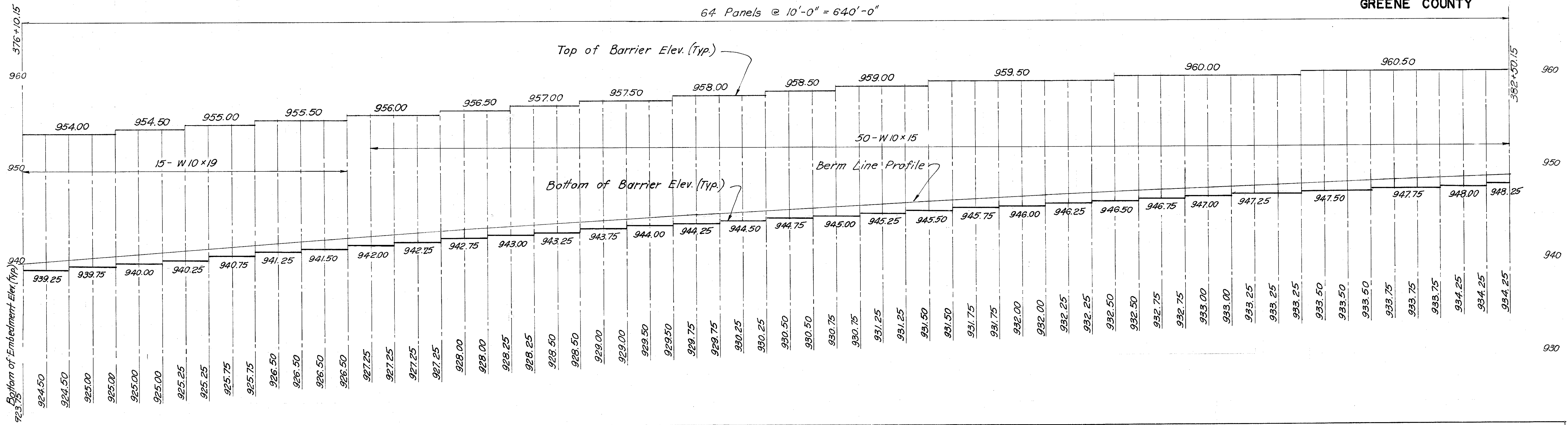
GRE-675-5.37
GREENE COUNTY



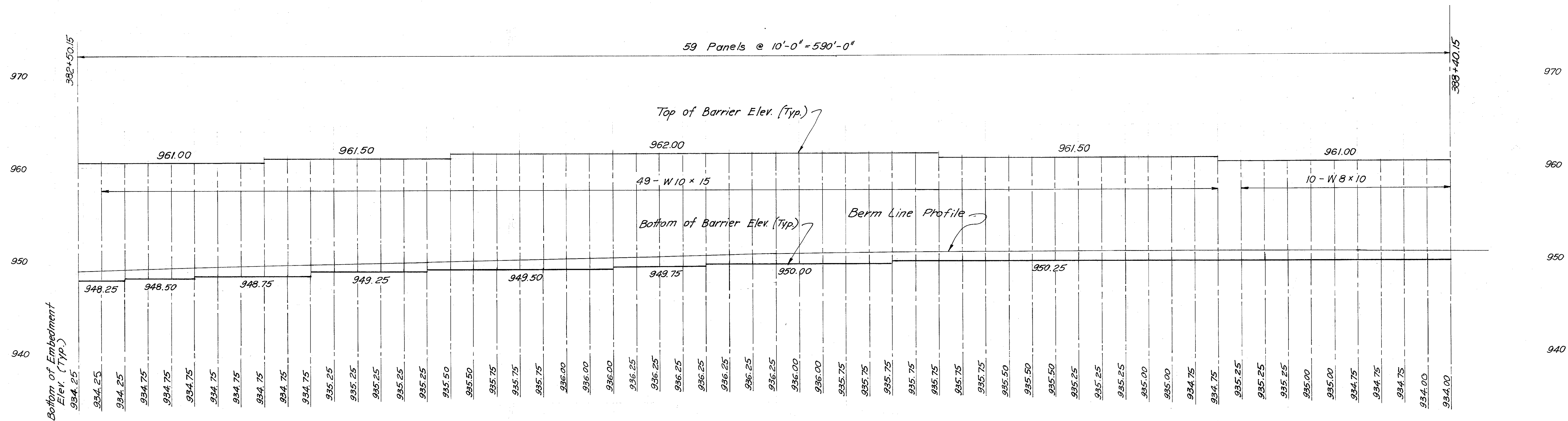
Note: Bottom of Embedment Elev. Not to Scale

GRE-675-537
GREENE COUNTY

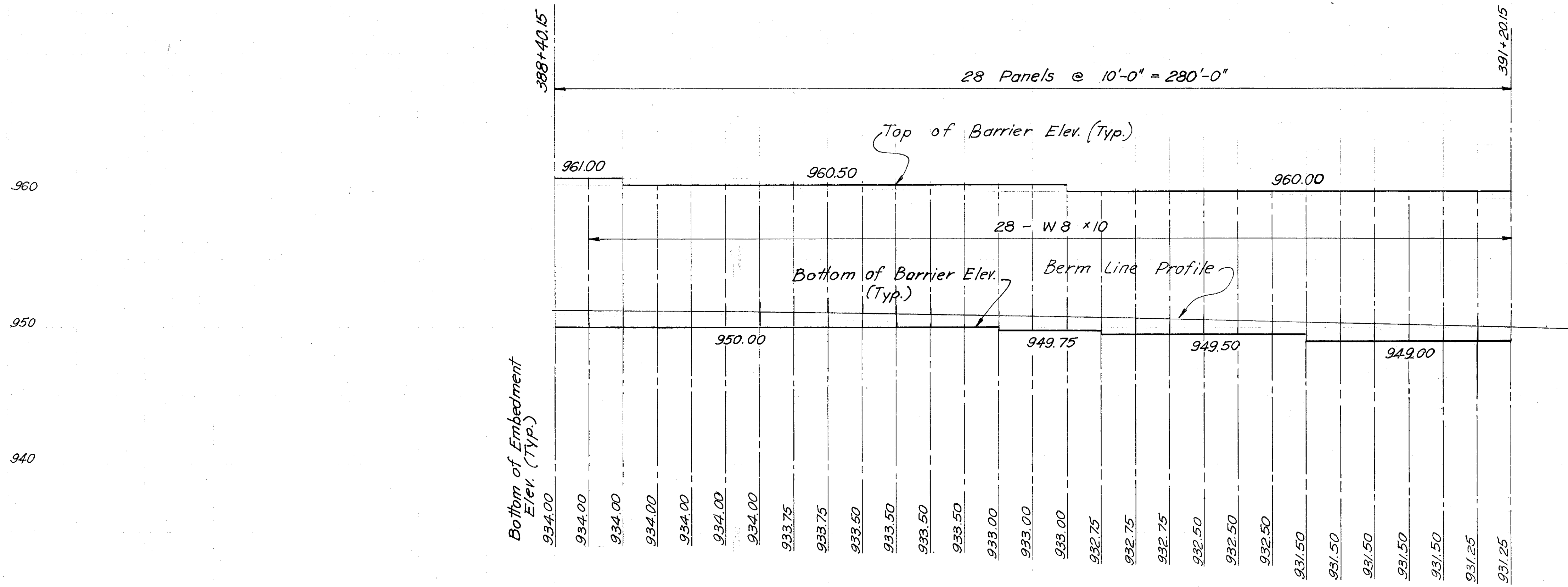
64 Panels @ 10'-0" = 640'-0"



59 Panels @ 10'-0" = 590'-0"



Note: Bottom of Embedment Elev. Not to Scale



Note: Bottom of Embedment Elev. Not to Scale

ESTIMATED QUANTITIES

Barrier Face:
 2409.75 Vertical Feet at 8'-8" Spacing = 20,884.5 Sq. Ft.
 3471.25 Vertical Feet at 10'-0" Spacing = 34,712.5 Sq. Ft.
 Total Barrier = 55,597 Sq. Ft. Carried to General Summary

Size	POSTS						
	W8x10	W10x12	W10x15	W10x19	W10x22	W10x26	W10x54
No. Each	51	27	119	93	98	15	2
Total Length (Ft)	1186.25	790.25	3286.50	2906.50	3349.75	557.25	65.00
Weight (Lb.)	11863	9483	49298	55,224	73,694	14,488	3510

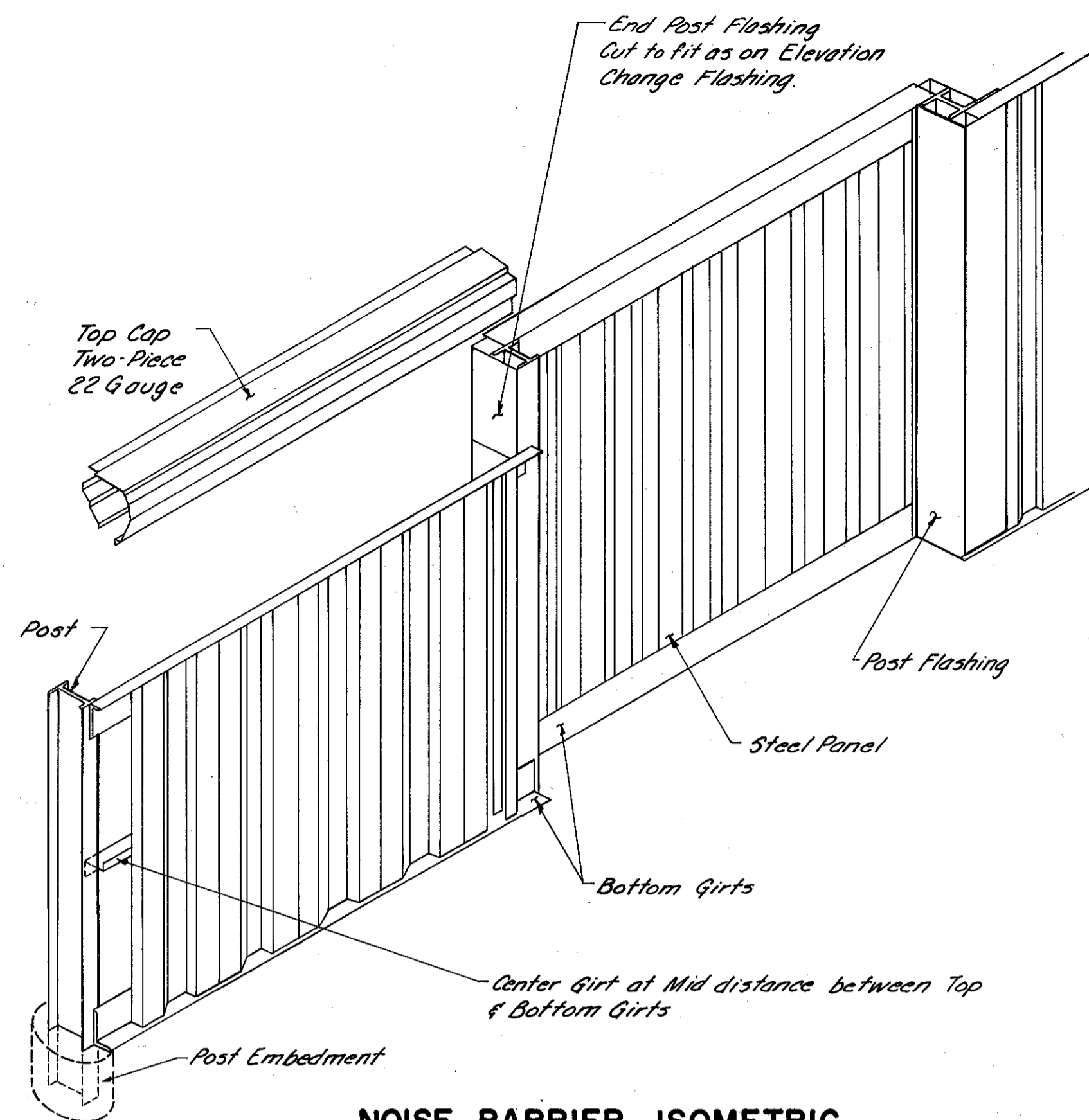
Concrete Embedment
 18" φ 119 Lin. Ft. @ 0.065 c.y./ft. = 8 C.Y.
 24" φ 6235 Lin. Ft. @ 0.116 c.y./ft. = 723 C.Y.

Quantity Calculations
 By DHS Date 11/81
 Ckd. IEH Date 11/81

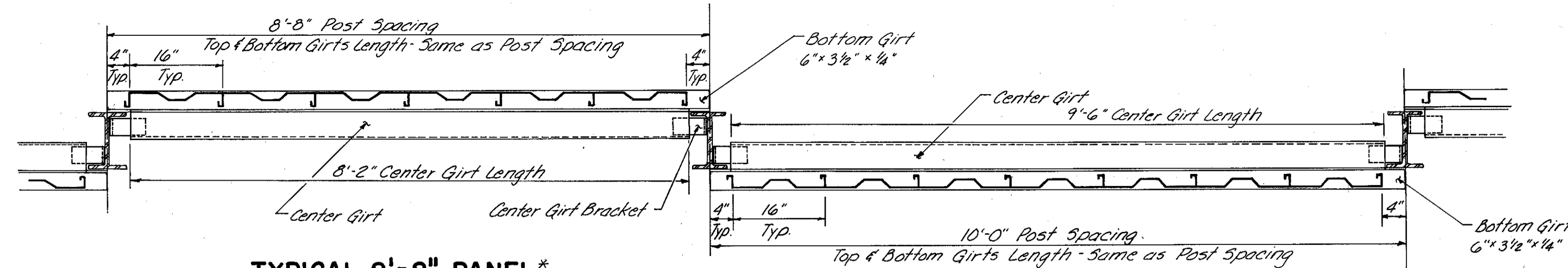
F.H.W.A. REGION	STATE	PROJECT
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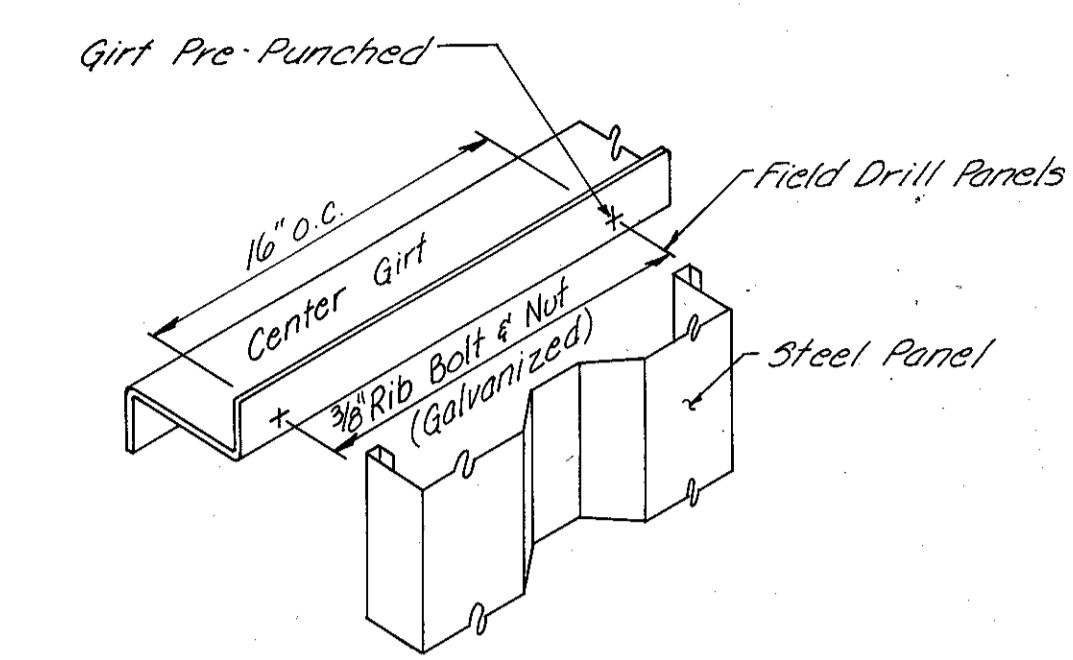
NOISE BARRIER ISOMETRIC



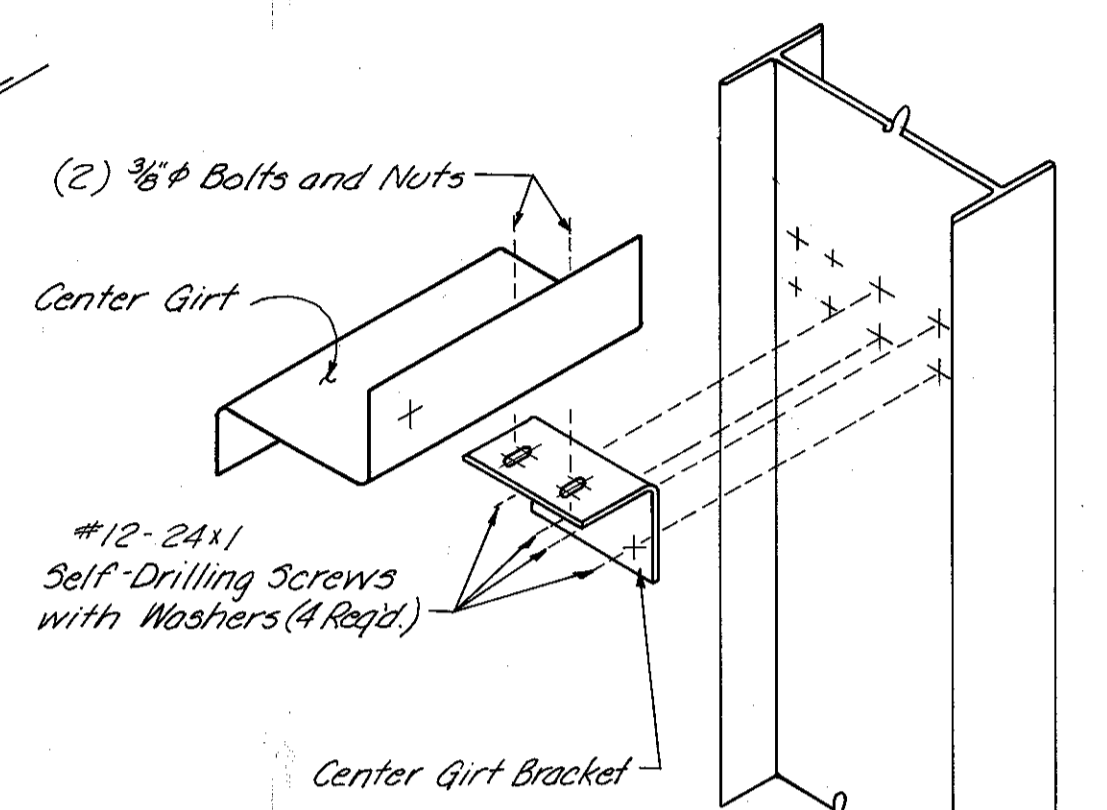
TYPICAL 8'-8" PANEL*

*Post Flashings not shown.

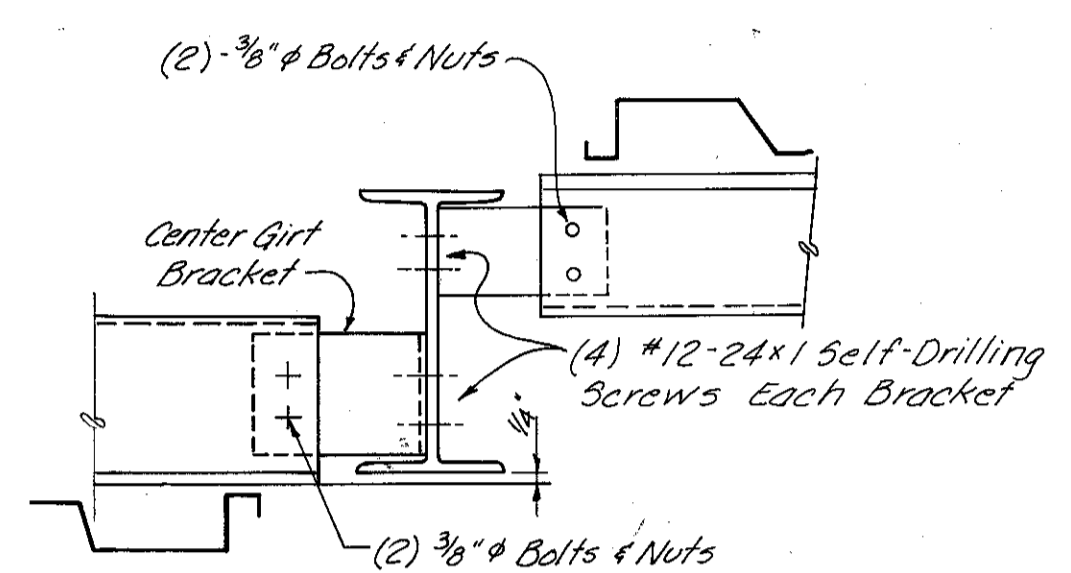
TYPICAL 10'-0" PANEL*



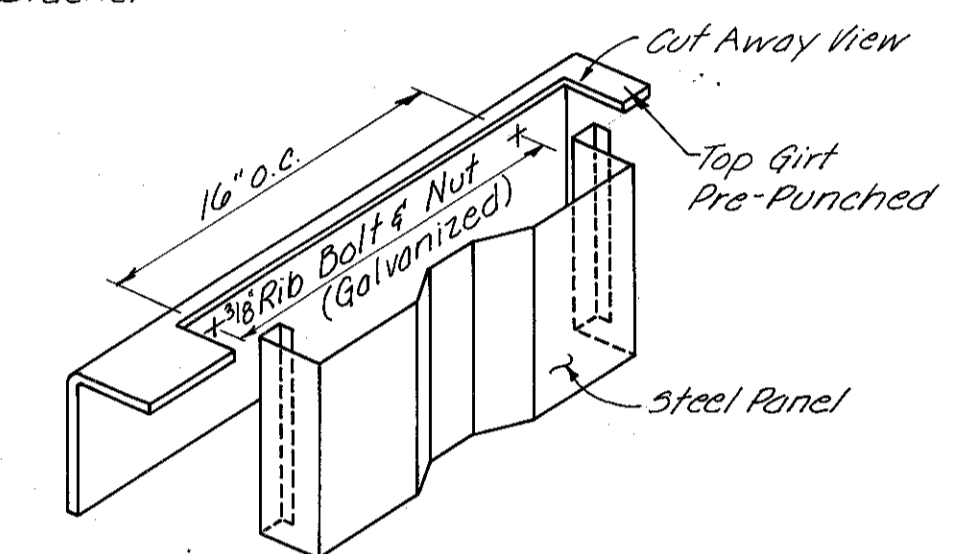
PANEL TO CENTER GIRT ATTACHMENT



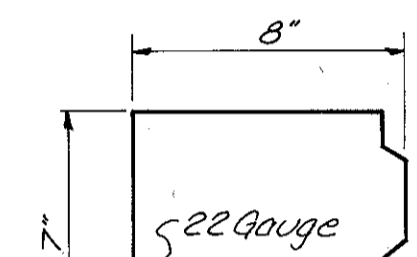
CENTER GIRT TO POST ATTACHMENT



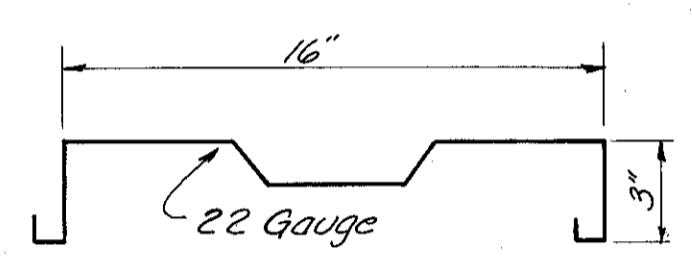
TOP VIEW



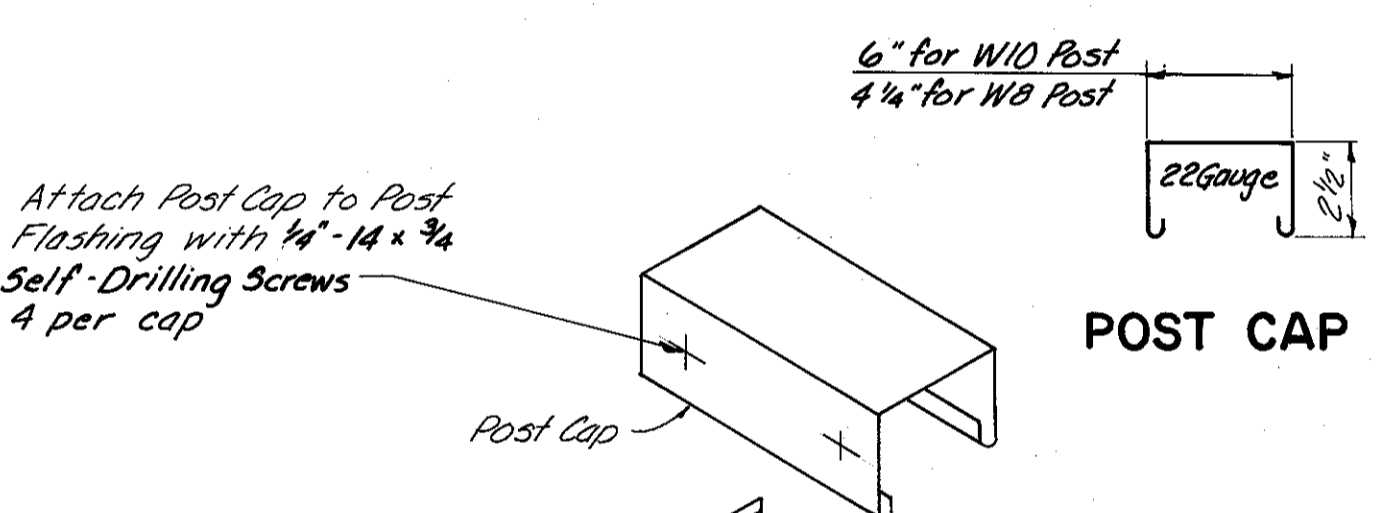
PANEL TO GIRT ATTACHMENT



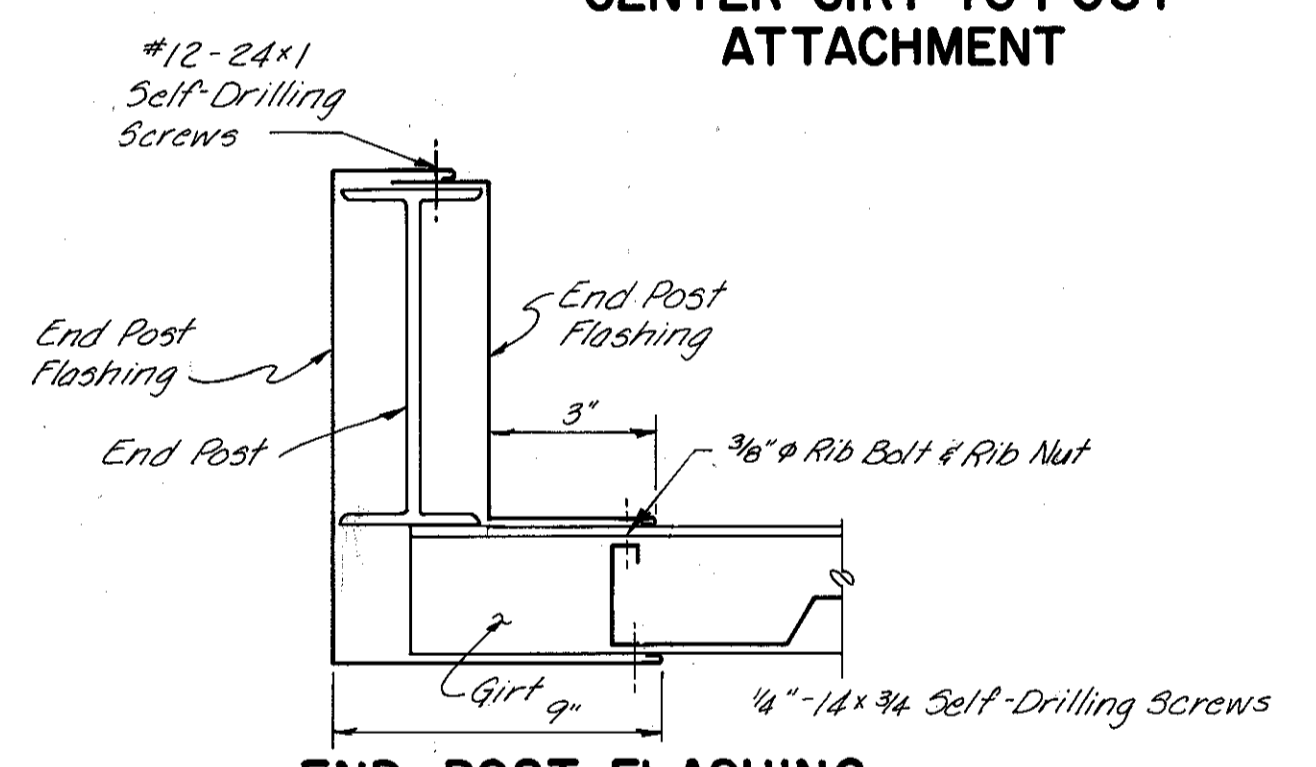
TOP CAP END CLOSURE



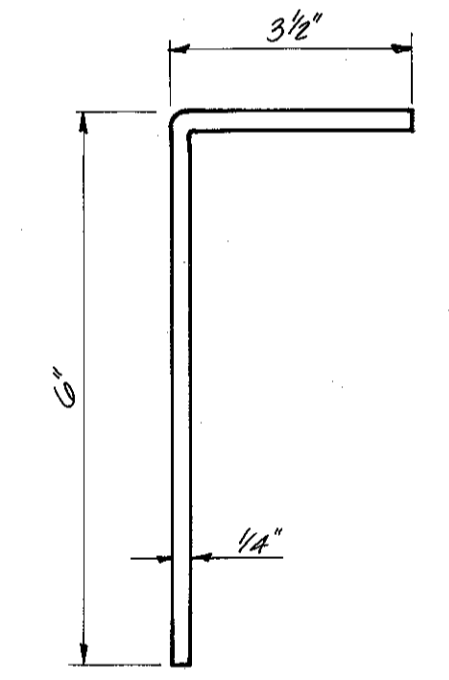
TYPICAL PANEL SECTION



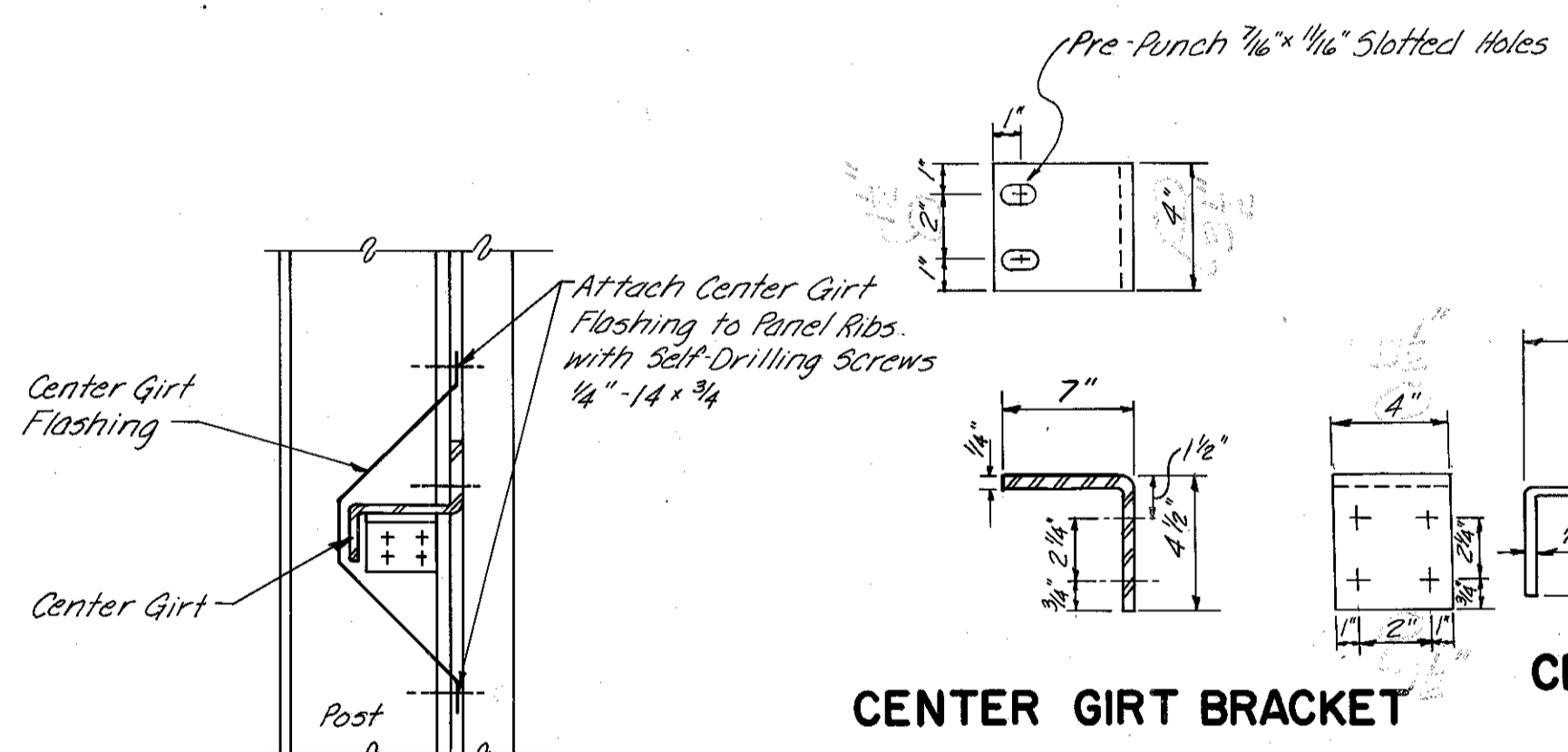
POST CAP



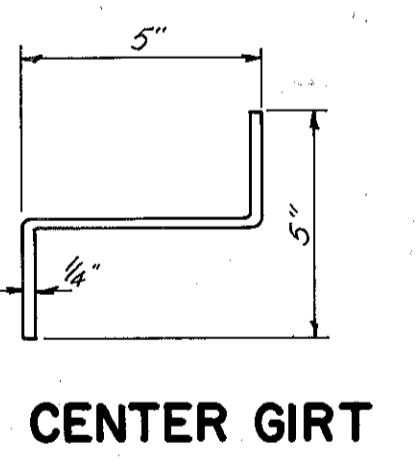
END POST FLASHING



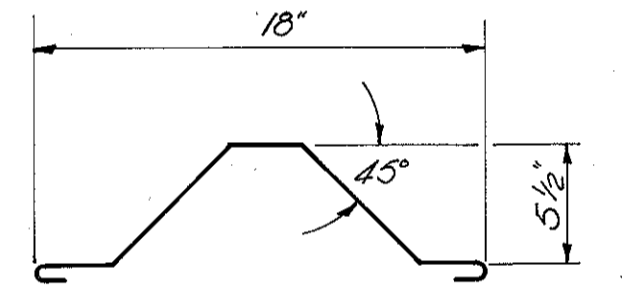
TOP & BOTTOM GIRT



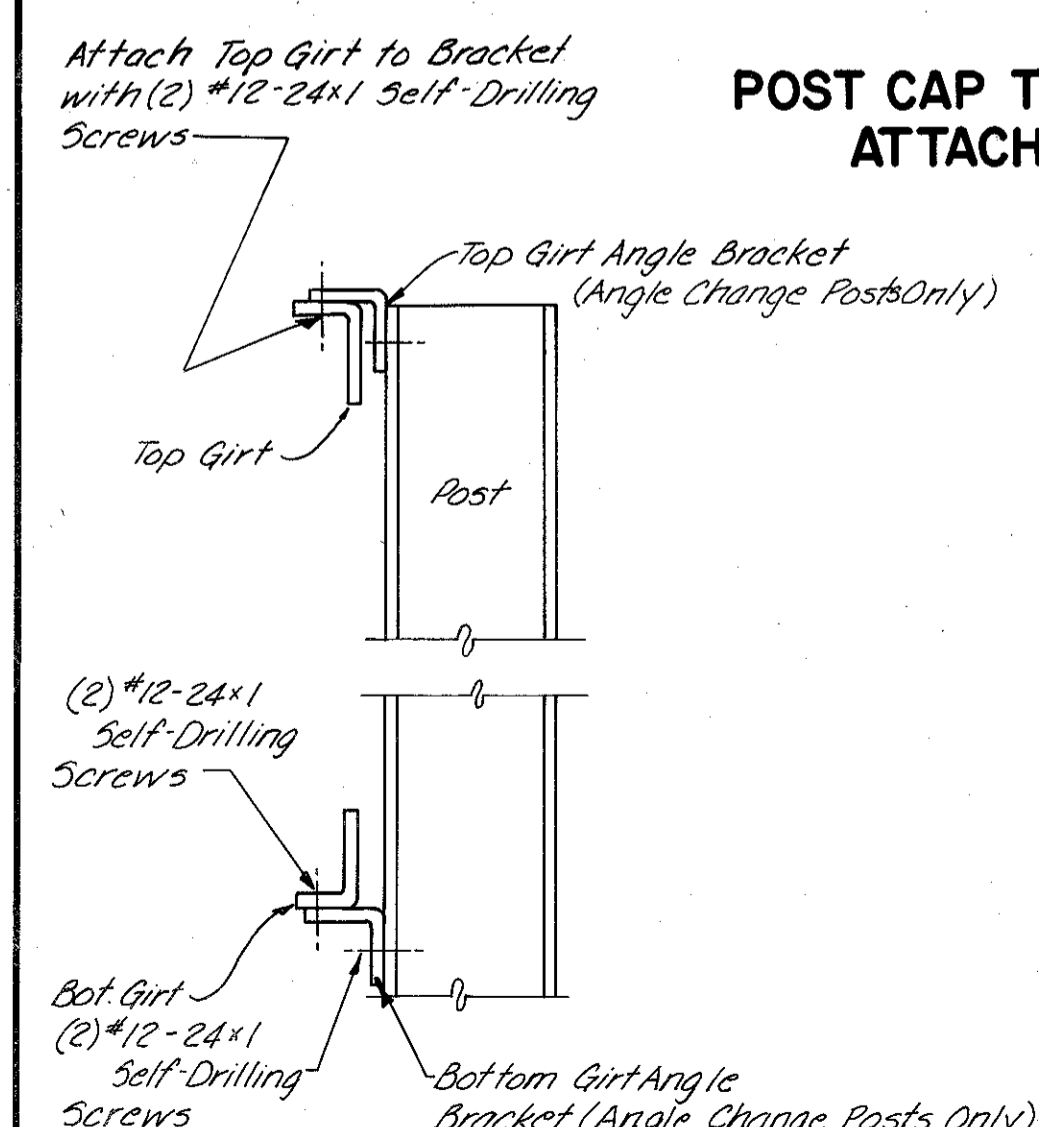
CENTER GIRT BRACKET



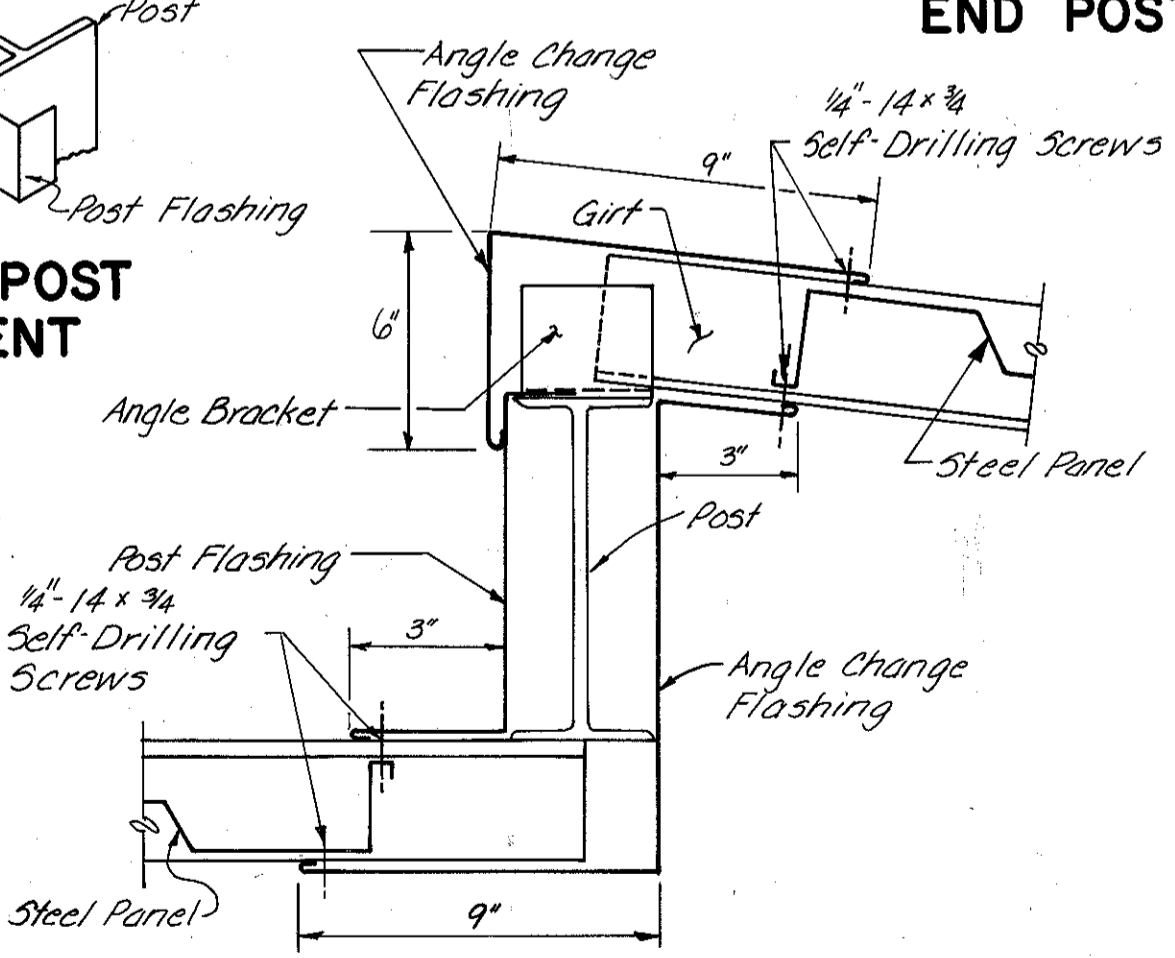
CENTER GIRT



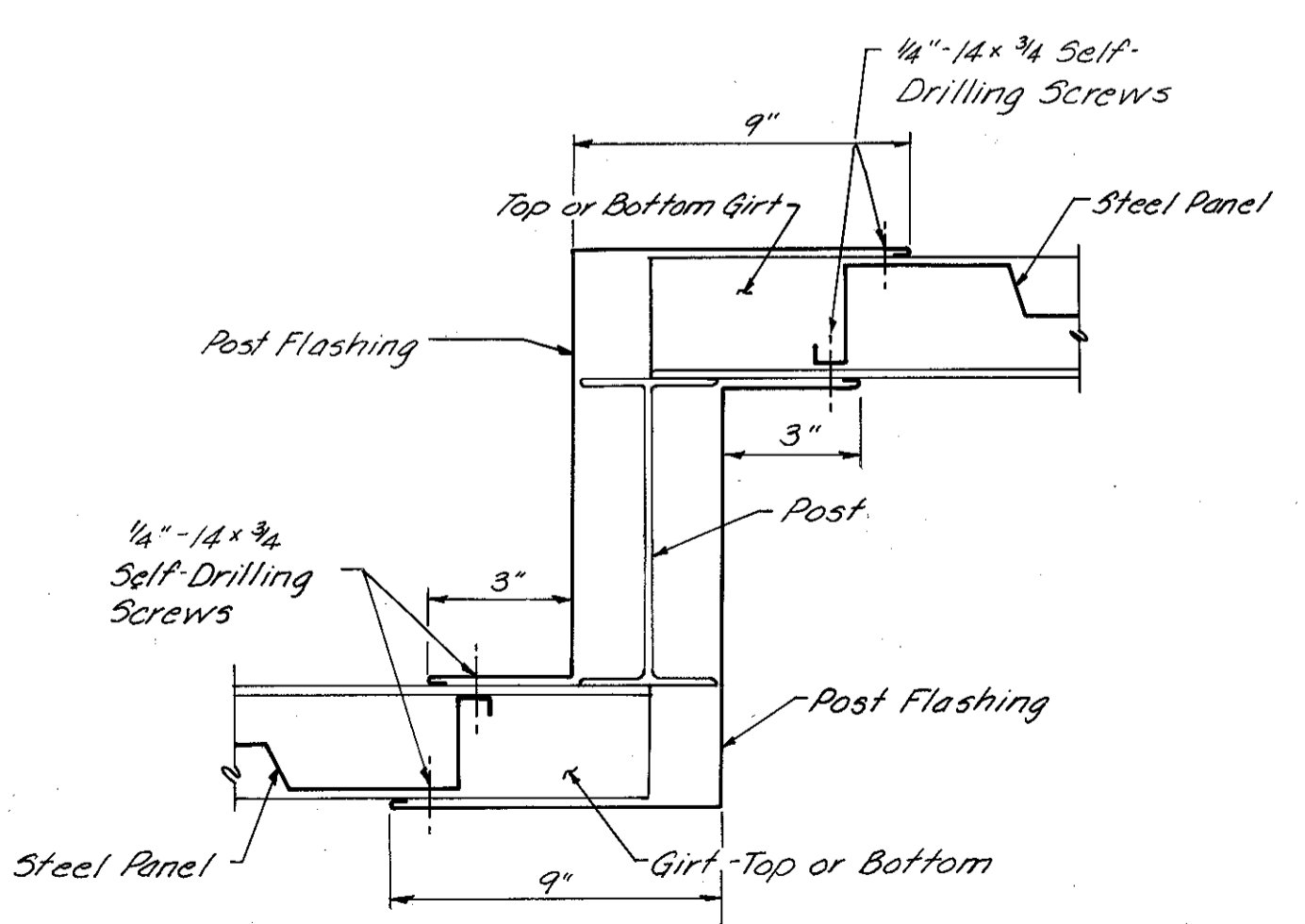
CENTER GIRT FLASHING



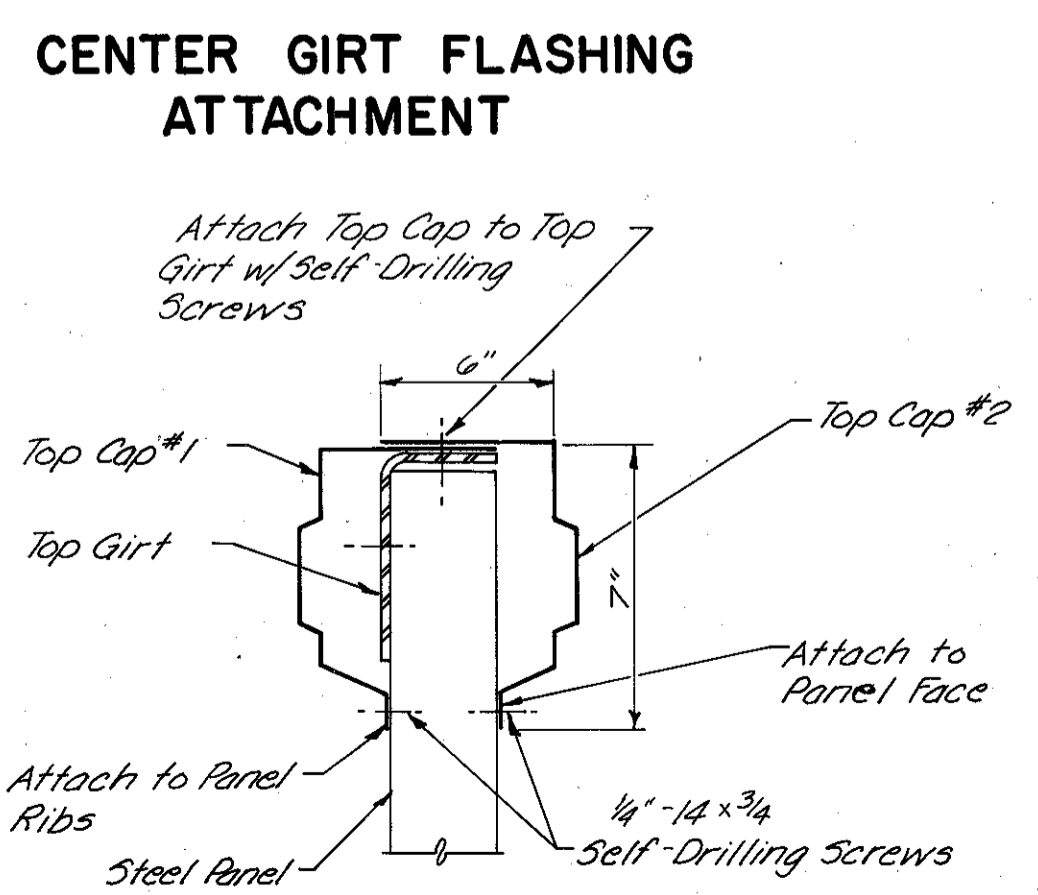
POST CAP TO POST ATTACHMENT



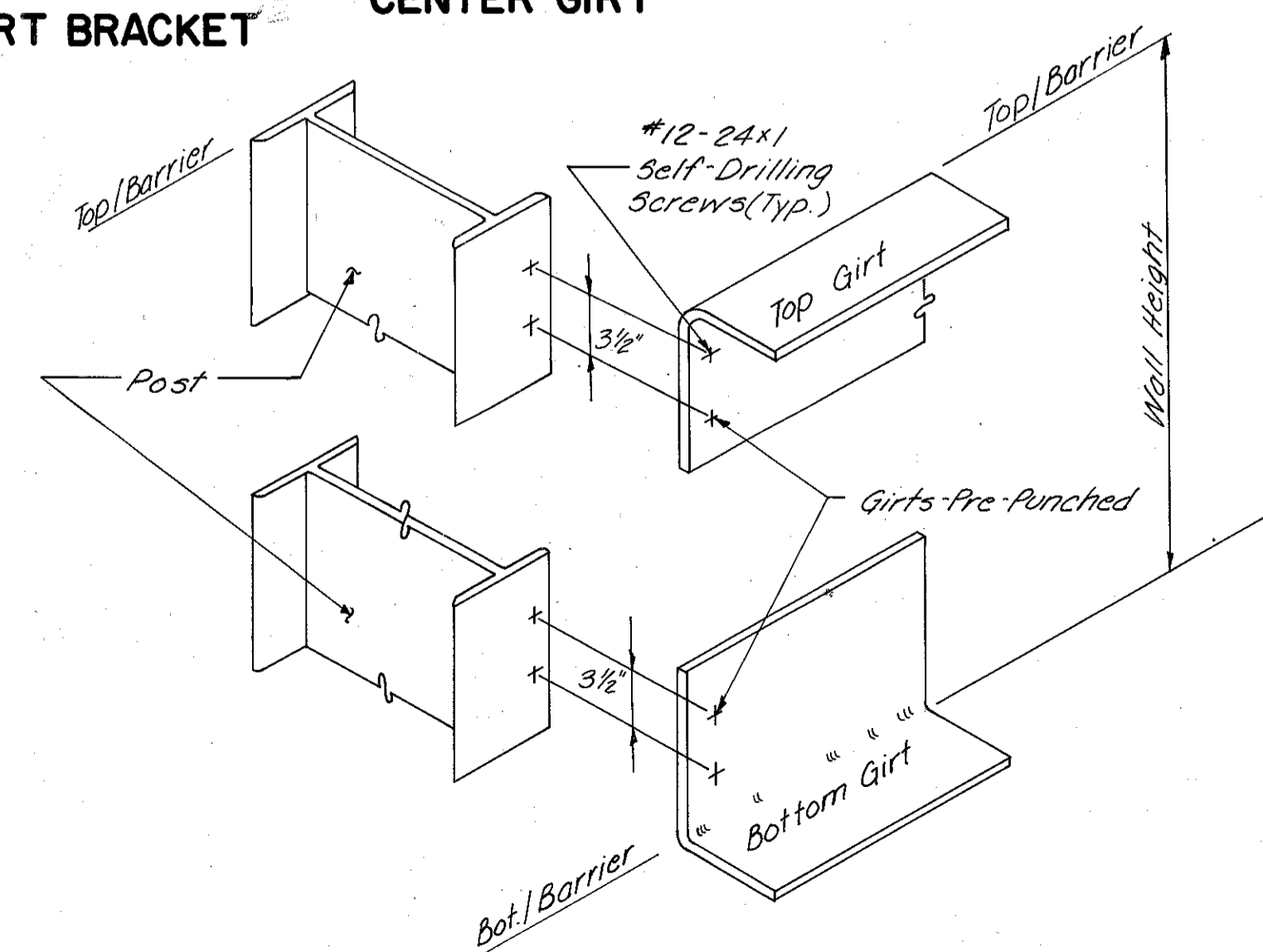
ANGLE CHANGE FLASHING



LINE POST FLASHING



TOP CAP ATTACHMENT



TYPICAL TOP & BOTTOM GIRT ATTACHMENT

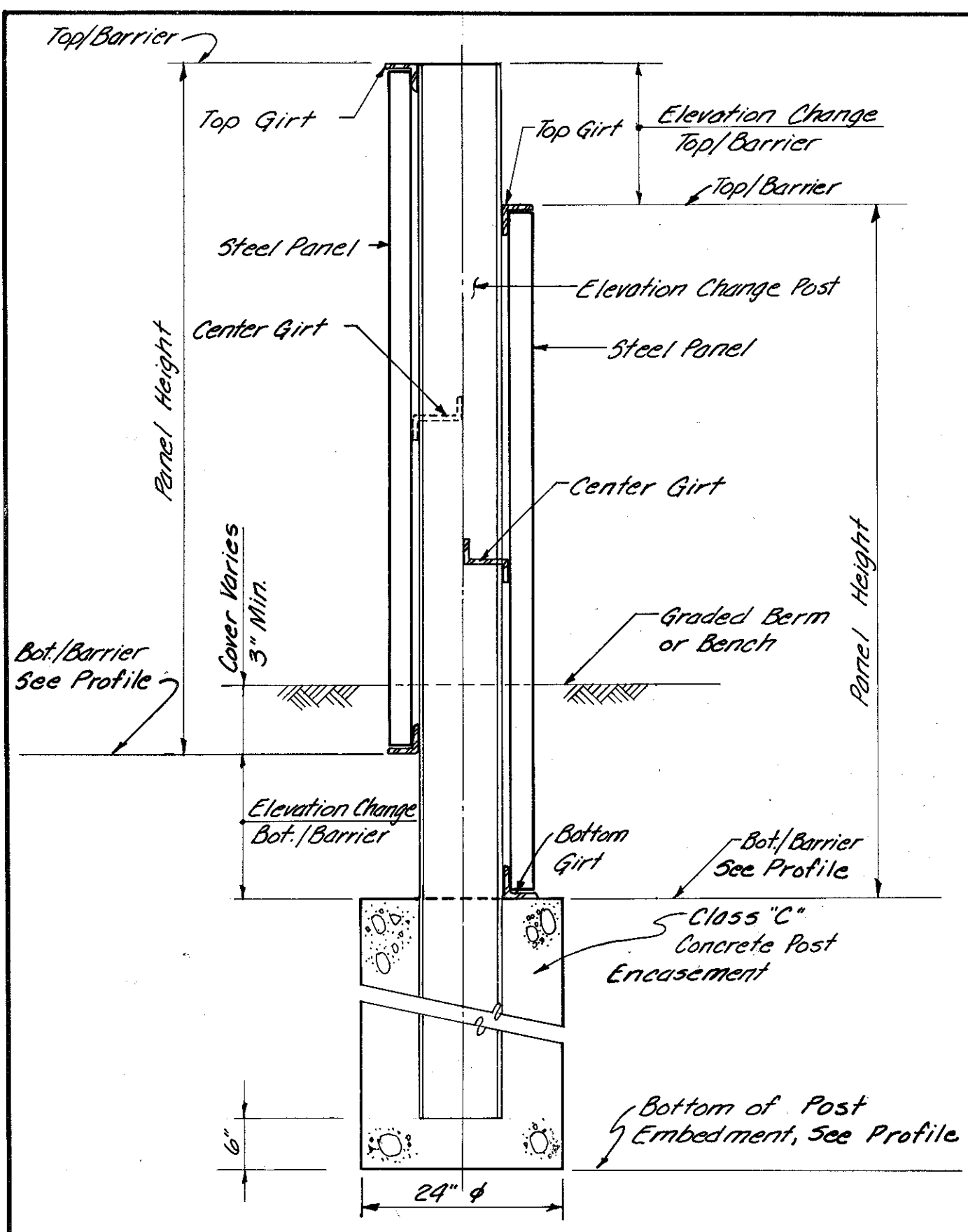
All Flashings - 22 Gauge

SIDE VIEW OF POST AT ANGLE CHANGE

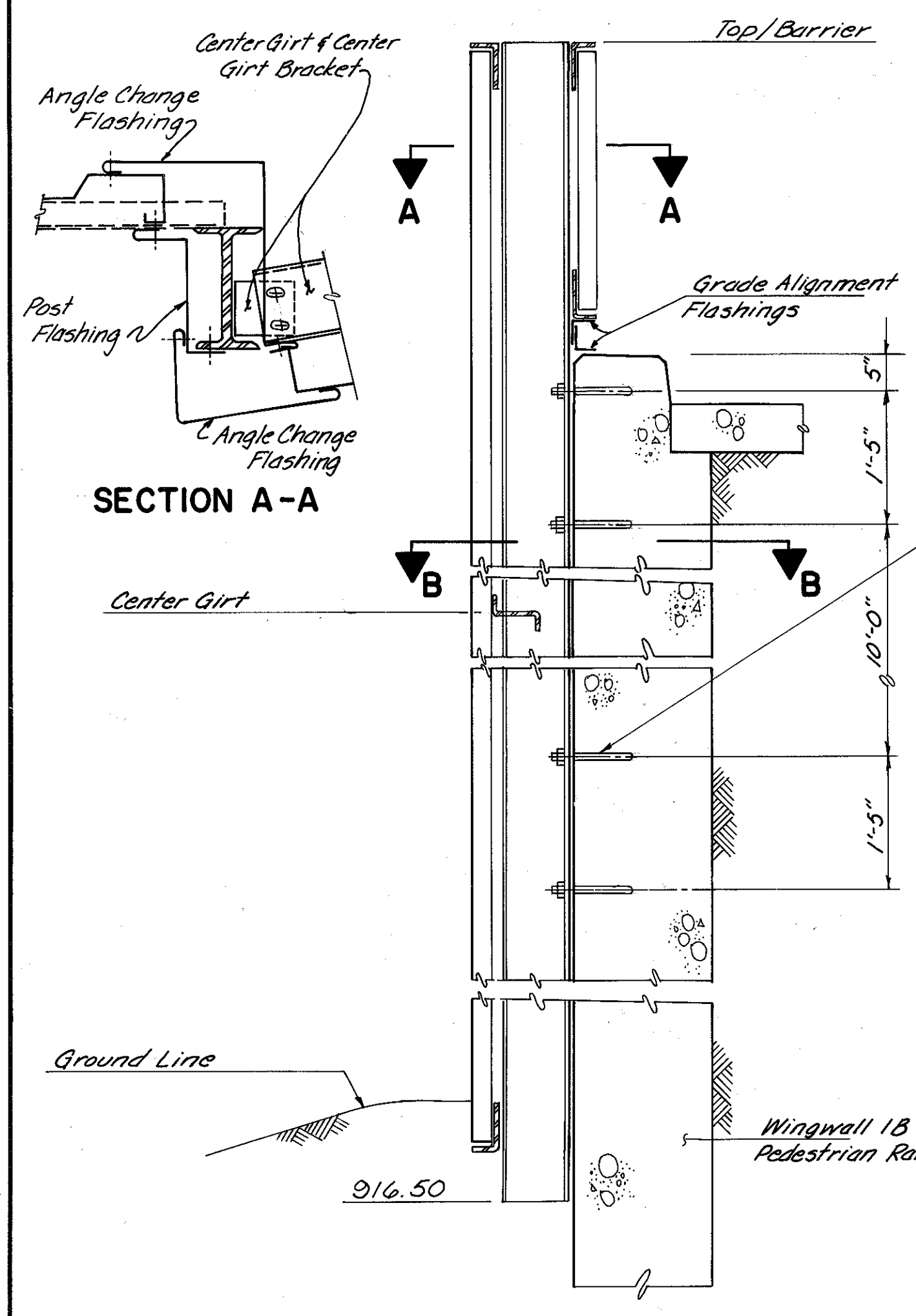
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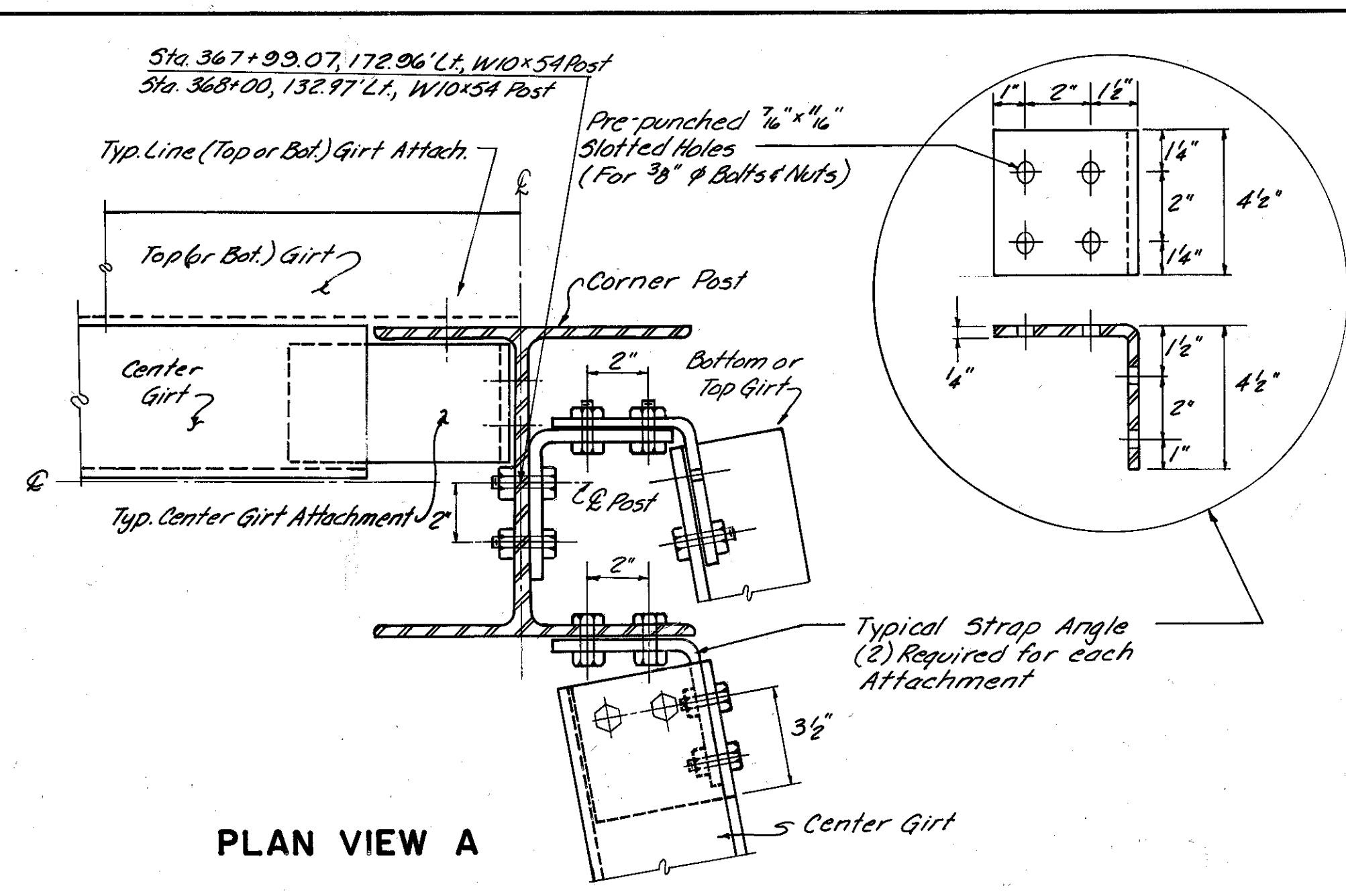


TYPICAL ELEVATION CHANGE POST DETAIL

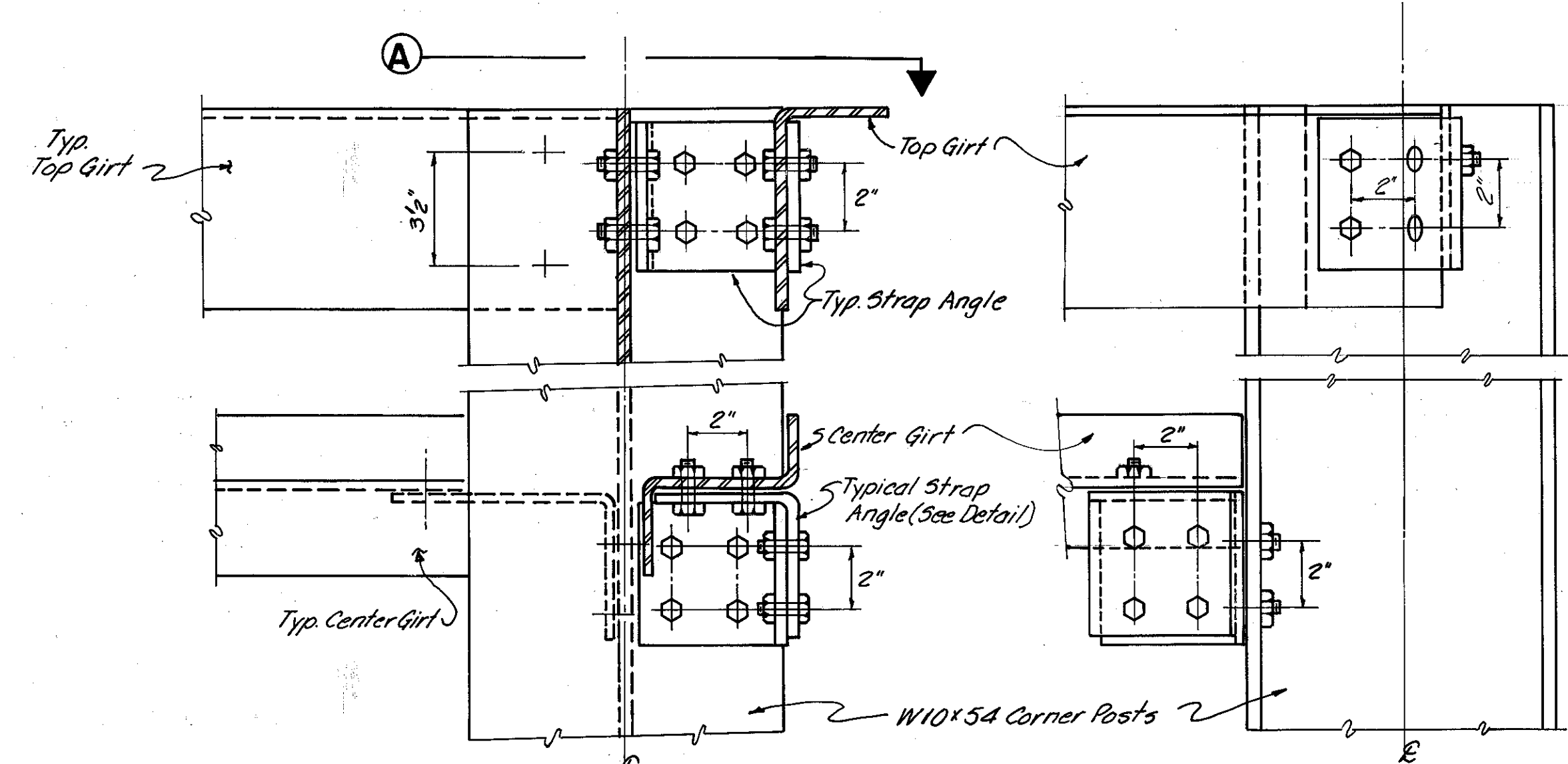


SECTION A-A

POST AT S.W. CORNER OF PEDESTRIAN RAMP
Sta. 359+31.88 - 217.38' Lt.



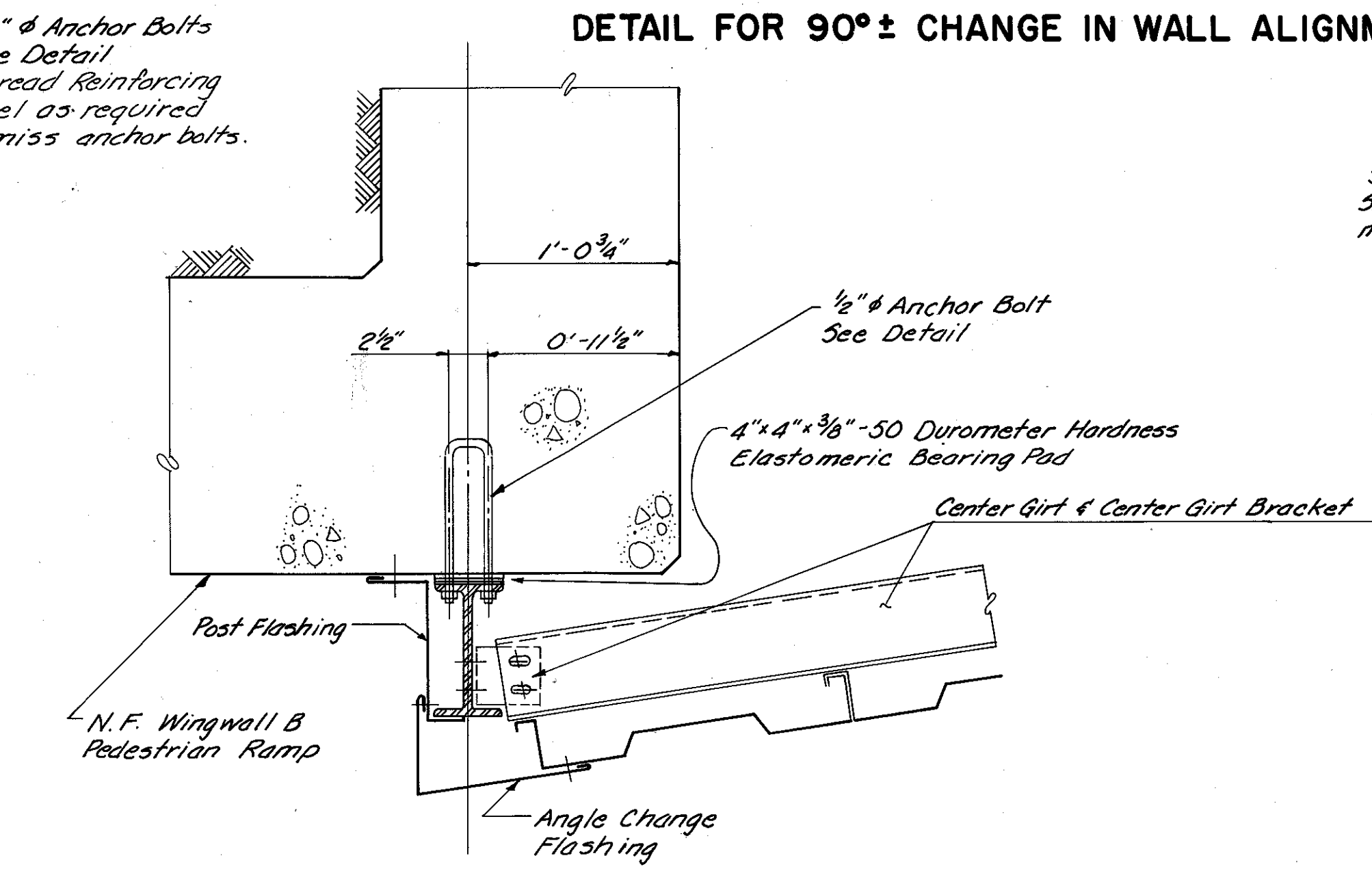
PLAN VIEW A



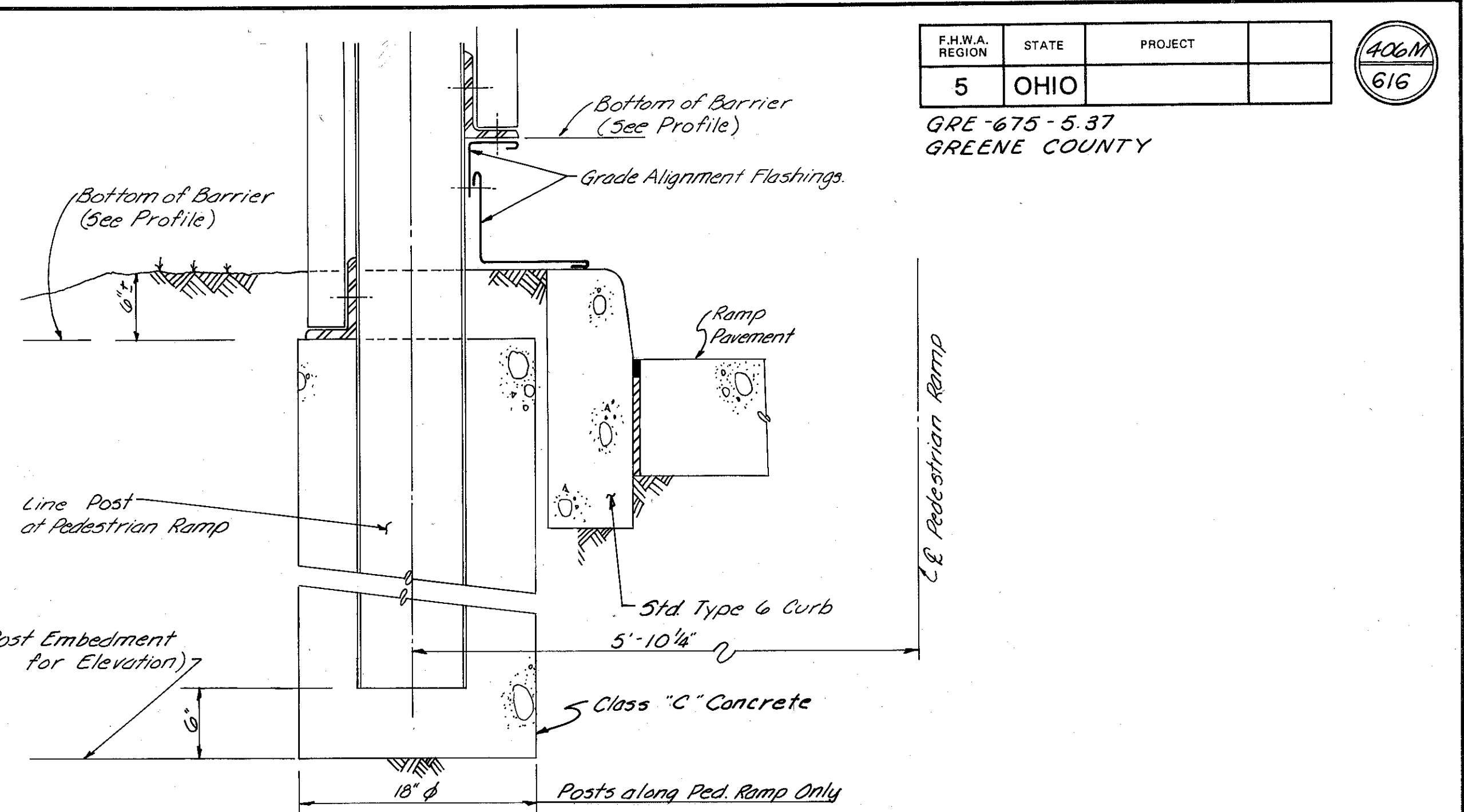
FRONT ELEVATION

SIDE ELEVATION

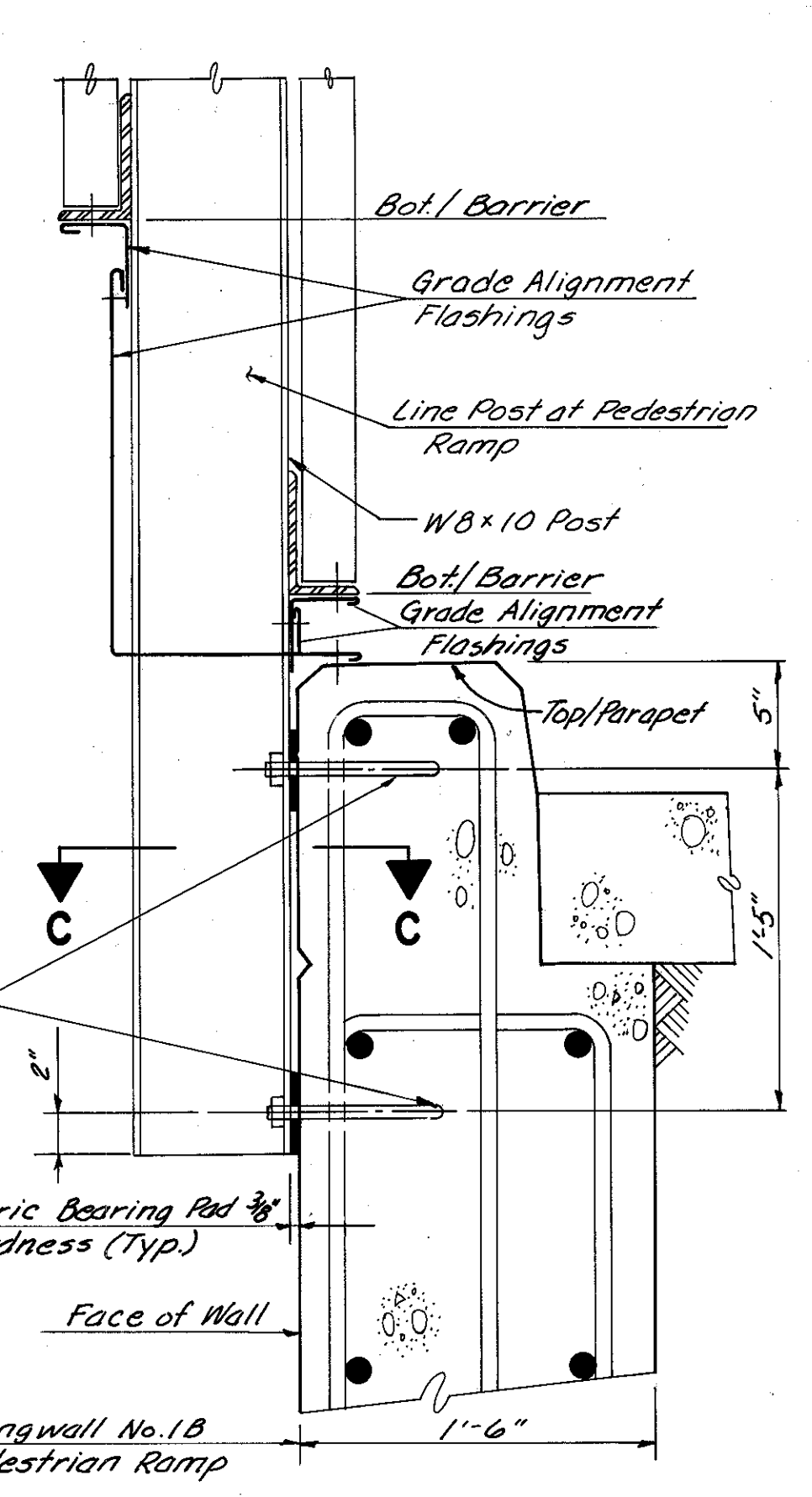
DETAIL FOR 90°± CHANGE IN WALL ALIGNMENT



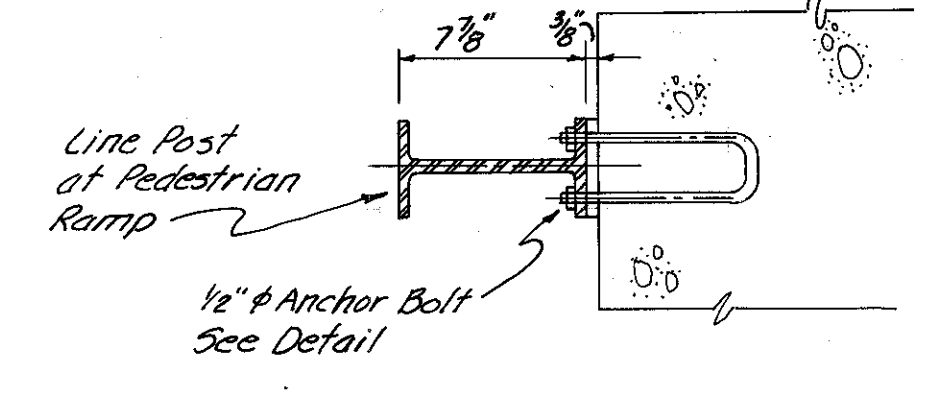
SECTION B-B



TYPICAL NOISE BARRIER DETAIL AT PEDESTRIAN RAMP

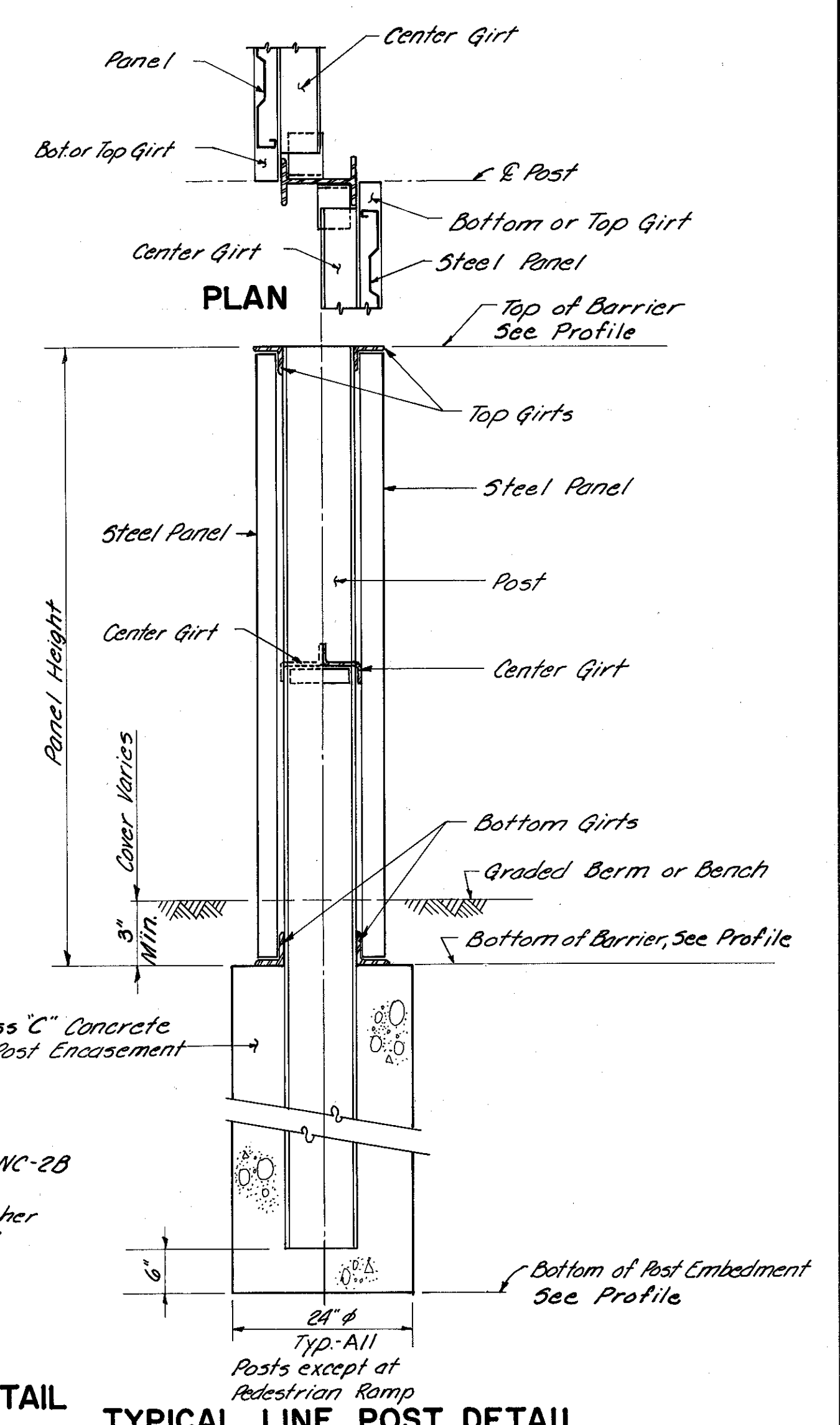


TYPICAL NOISE BARRIER DETAIL AT PEDESTRIAN RAMP



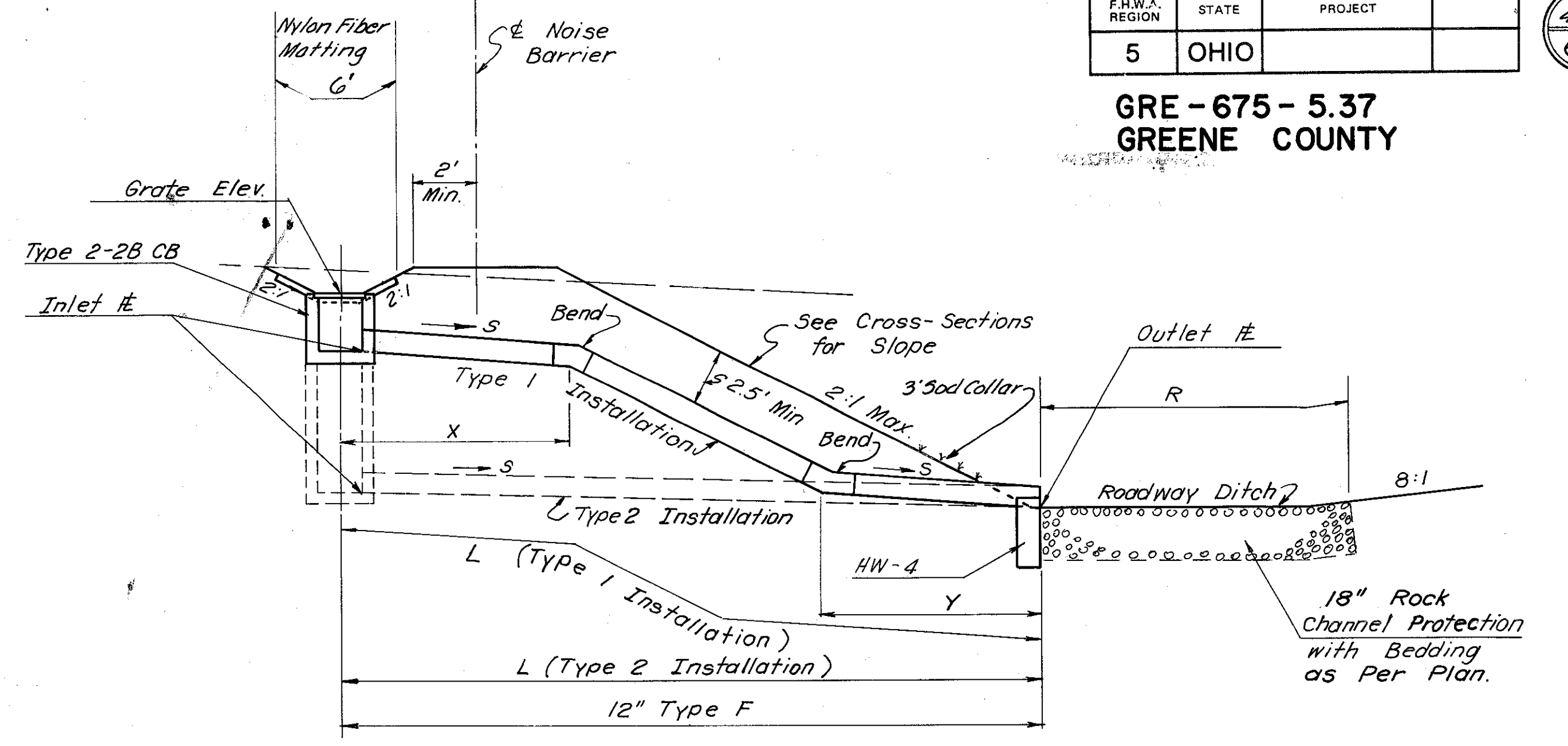
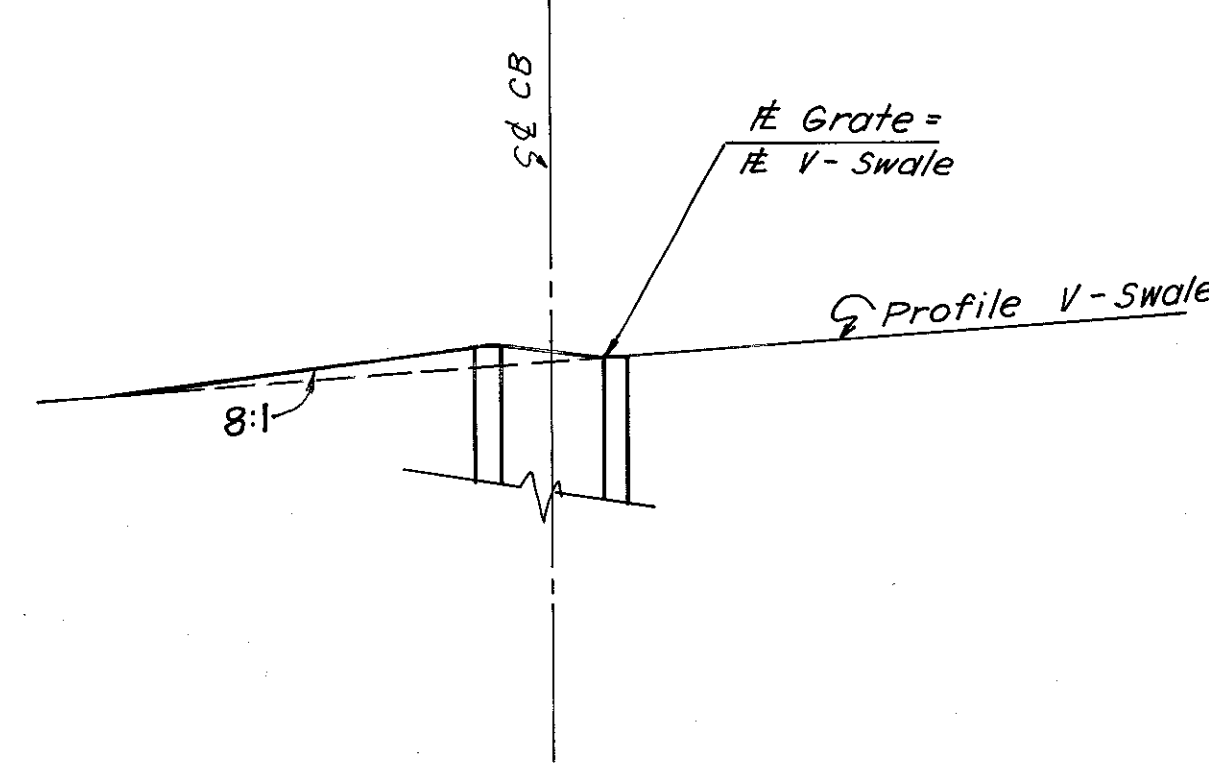
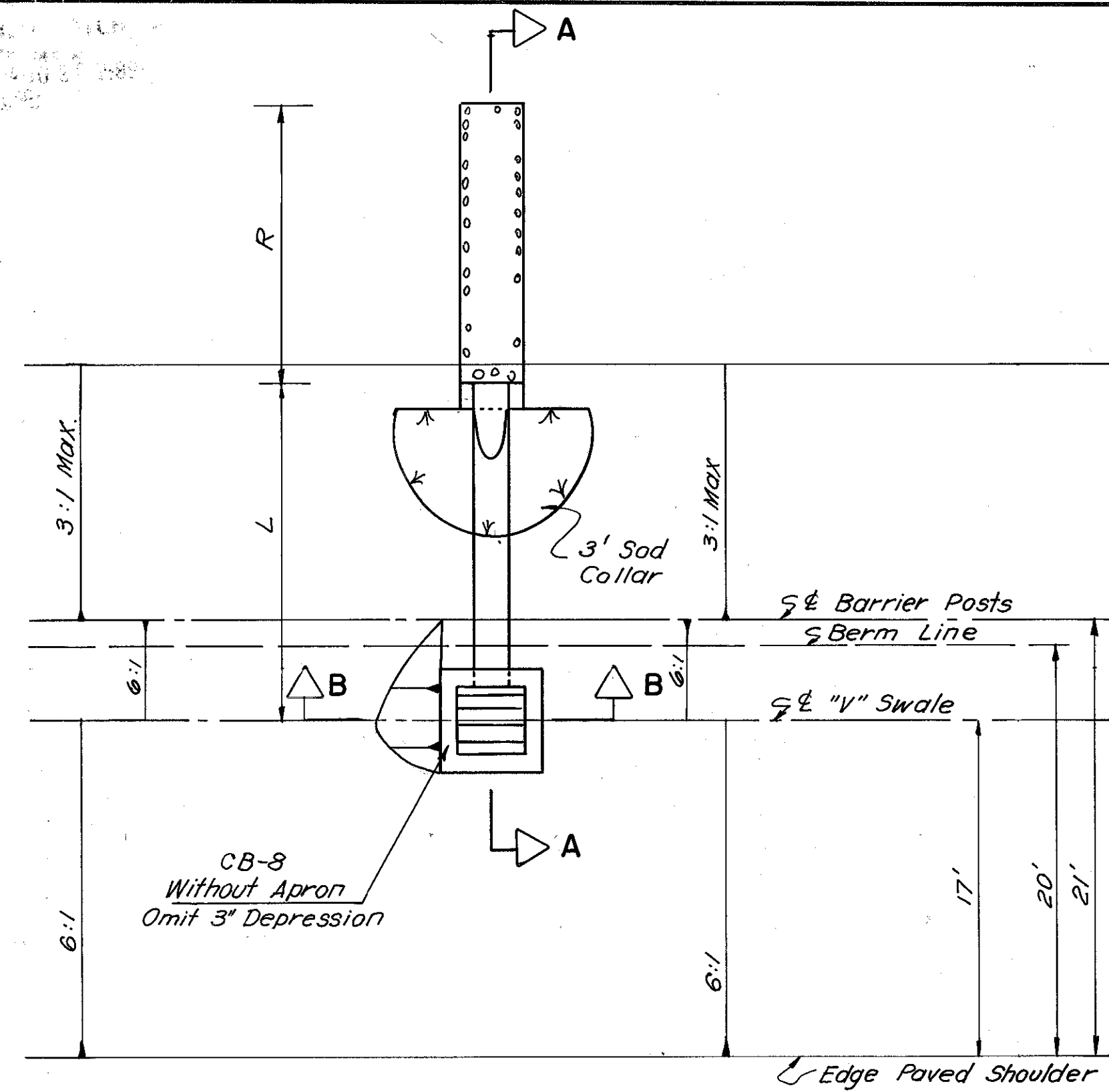
SECTION C-C

ANCHOR BOLT DETAIL
ASTM A-36



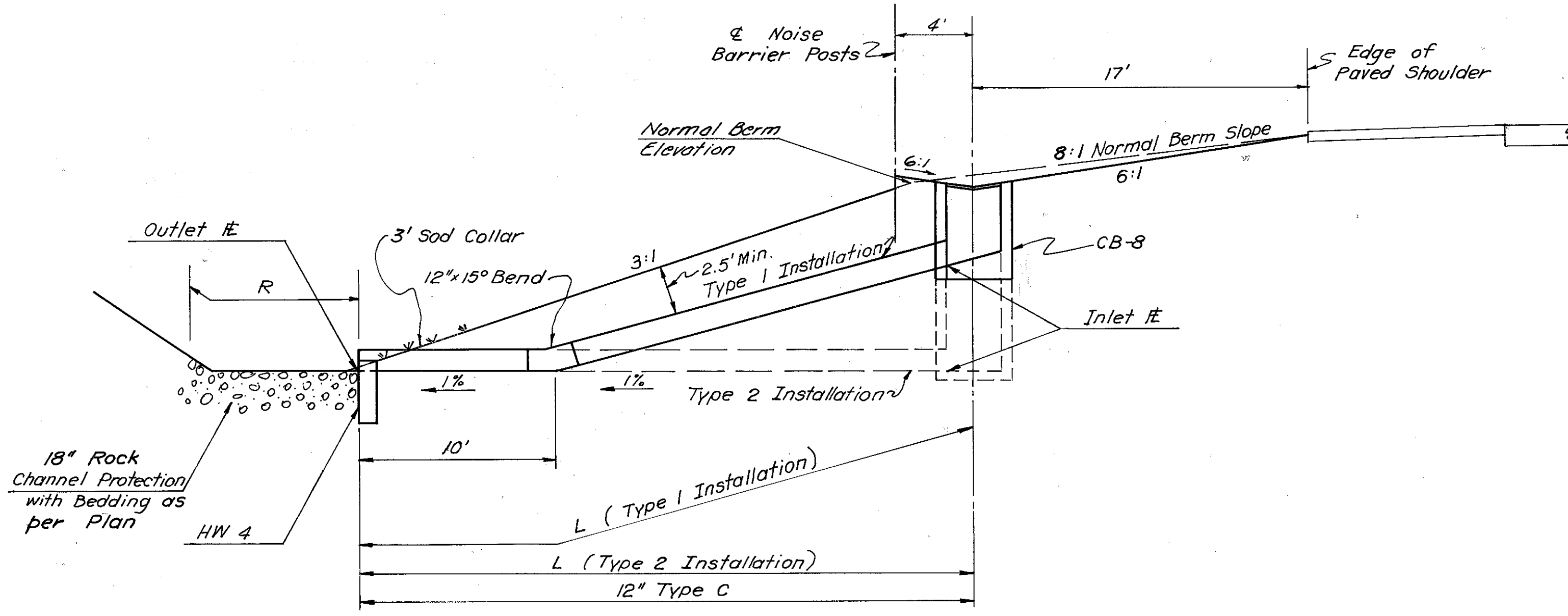
TYPICAL LINE POST DETAIL

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STATION	Type	# Grate	Inlet #	Outlet #	L 12" Type F	R	601 Rock C.P.	602 Concrete Masonry	660 Sodding	12"x20" Bend	12"x26" Bend	S	X	Y
		Elev.	Elev.	Elev.	Lin. Ft.	Lin. Ft.	C.Y.	C.Y.	S.Y.	Ed.	Ed.	%	Lin. Ft.	Lin. Ft.
55D 354+95	1	910.0	907.00	901.97	27	16	4.7	0.21	2.7	-	2	1.0	8	8
56D 357+20	2	911.0	908.28	905.34	28	16	4.7	0.21	2.7	-	-	10.5		
57D 361+32	1	922.0	919.49	912.11	37	16	4.7	0.21	2.7	2	-	8.0	15	10
14D 365+28	2	921.5	919.11	918.17	47	11	3.3	0.21	2.7	-	-	2.0		

NOISE BARRIER DRAINAGE AT TOP OF CUT AREAS



STATION	Type	# Grate	Inlet #	Outlet #	L 12" Type C	R	601 Rock C.P.	602 Concrete Masonry	660 Sodding	12"x15" Bend
		Elev.	Elev.	Elev.	Lin. Ft.	Lin. Ft.	C.Y.	C.Y.	S.Y.	Ed.
15D 368+48	2	922.64	919.51	919.36	15	14	4.1	0.21	3.0	-
16D 370+46	1	927.15	923.52	917.71	33	14	4.1	0.21	3.0	1
17D 373+46	1	933.97	930.40	925.01	31	14	4.1	0.21	3.0	1
18D 376+55	1	940.57	937.70	935.72	18	14	4.1	0.21	3.0	1
19D 379+55	2	945.55	941.22	941.05	17	14	4.1	0.21	3.0	-
20D 382+05	1	943.48	945.53	943.20	20	14	4.1	0.21	3.0	1
21D 384+05	1	950.01	946.99	944.27	21	14	4.1	0.21	3.0	1
22D 386+05	1	950.84	947.47	943.02	28	14	4.1	0.21	3.0	1
23D 388+95	1	950.79	946.30	936.27	48	14	4.1	0.21	3.0	1
24D 391+15	1	949.75	944.56	931.65	60	14	4.1	0.21	3.0	1

BERM DRAINAGE FOR NOISE BARRIER

GENERAL NOTES

(THESE NOTES APPLY TO ALL BRIDGES EXCEPT GRE-675-0615 AND 0626 SR. SEE SHEETS 495/216 AND 497/216 FOR GENERAL NOTES PERTAINING TO THESE BRIDGES)

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS AND TO SUPPLEMENTAL SPECIFICATIONS AS FOLLOWS:

STANDARD DRAWINGS	BRIDGE NO.						
	GRE-675-0576	GRE-675-0589	GRE-675-0616	GRE-675-0737	GRE-35-0009	GRE-35-0074	GRE-35-0107 R/L
AS-1-72 DATED 6-30-72	X	X	X	X	X	X	X
BR-1-67 REVISED 10-15-71	X	X		X	X	X	X
BR-2-67 REVISED 10-15-71			X				
RB-1-55 REVISED 2-02-59	X	X	X	X		X	X
SD-1-69 DATED 6-12-69	X	X	X	X		X	X
SUPPLEMENTAL SPECS.							
849-DATED 10-19-81				X			
836 DATED 3-12-75	X	X	X	X	X	X	X

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1977 (FOR STRUCTURE GRE-675-0737) AND BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, 1969, (FOR REMAINING STRUCTURES) INCLUDING THE OHIO "SUPPLEMENT" TO BOTH SPECIFICATIONS.

DESIGN DATA:

DESIGN LOADING - HS20-44 AND THE ALTERNATE MILITARY LOADING

CONCRETE CLASS S - Fc=4500 P.S.I. Fc=1800 P.S.I. FOR SUPERSTRUCTURE. FOR ADDITIONAL CLASS S CONCRETE NOTES, SEE SHEET NO. A1/A1

CONCRETE CLASS C - UNIT STRESS 1333 P.S.I. FOR SUBSTRUCTURE

STRUCTURAL STEEL - ASTM A588-UNIT STRESS 27,000 P.S.I. (BRIDGE NO. GRE-675-0737)

ASTM A36-UNIT STRESS 20,000 P.S.I. (ALL OTHER BRIDGES)

REINFORCING STEEL - ASTM A615, A616 OR A617 - UNIT STRESS 20,000 P.S.I. SPIRAL REINFORCEMENT MAY BE PLAIN BARS ASTM A82 OR A615

MAINTENANCE OF TRAFFIC: SEE SHEET 30/616 OF THE ROADWAY GENERAL NOTES.

LIGHTING QUANTITIES: ARE SHOWN ON SHEET 149/616

SCUPPERS: FOR BRIDGES, INCLUDING SUPPORT ANGLES SHALL BE GALVANIZED IN ACCORDANCE WITH 711.02, EXCEPT WHERE CONNECTED TO HORIZONTAL CONDUCTOR PIPES ALL SCUPPER PIPES SHALL EXTEND 3" BELOW THE BOTTOM OF FLANGE INSTEAD OF 2" AS SHOWN ON STANDARD DRAWING SD-1-69.

ELECTRICAL CONDUITS: SHALL HAVE A MINIMUM CLEARANCE OF 2" FROM ALL CONCRETE SURFACES AND SHALL BE PLACED 1" CLEAR ABOVE A HORIZONTAL CONSTRUCTION JOINT.

REINFORCING STEEL COVER: SHALL CONFORM TO ITEM 509 EXCEPT THAT IN FOOTINGS THE MINIMUM COVER SHALL BE 3" FROM ANY SURFACE.

END DAM: ANCHOR BARS SHALL BE LOCATED 3-3/8" CLEAR FROM THE TOP OF THE BRIDGE DECK.

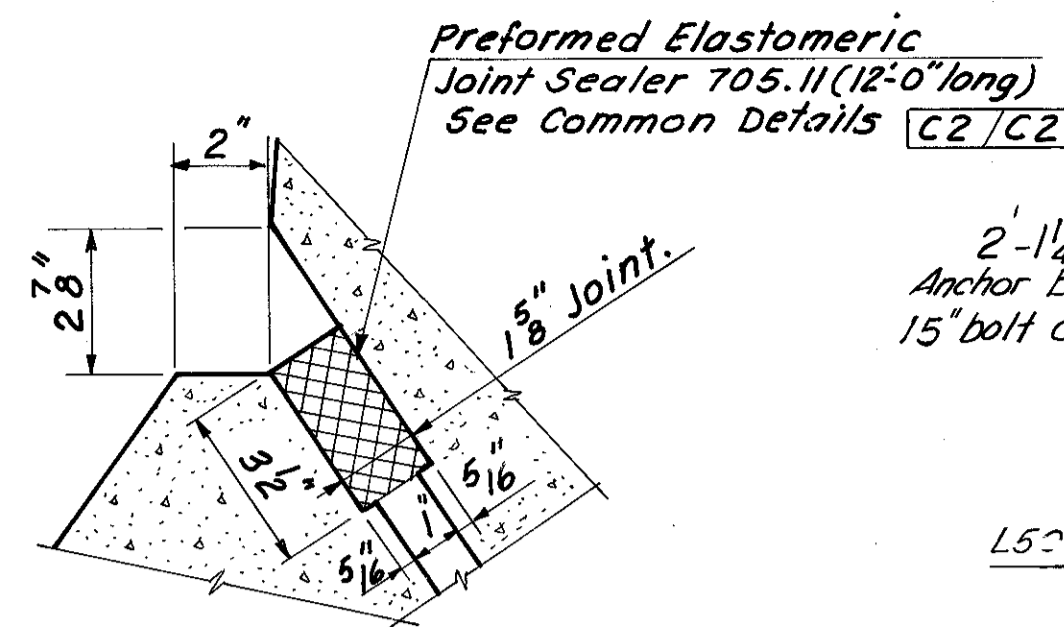
(STANDARD DRAWING SD-1-69, SHEET 1 OF 3, SECTION A-A)

MONOLITHIC WEARING SURFACE THICKNESS IS ASSUMED TO BE 1"

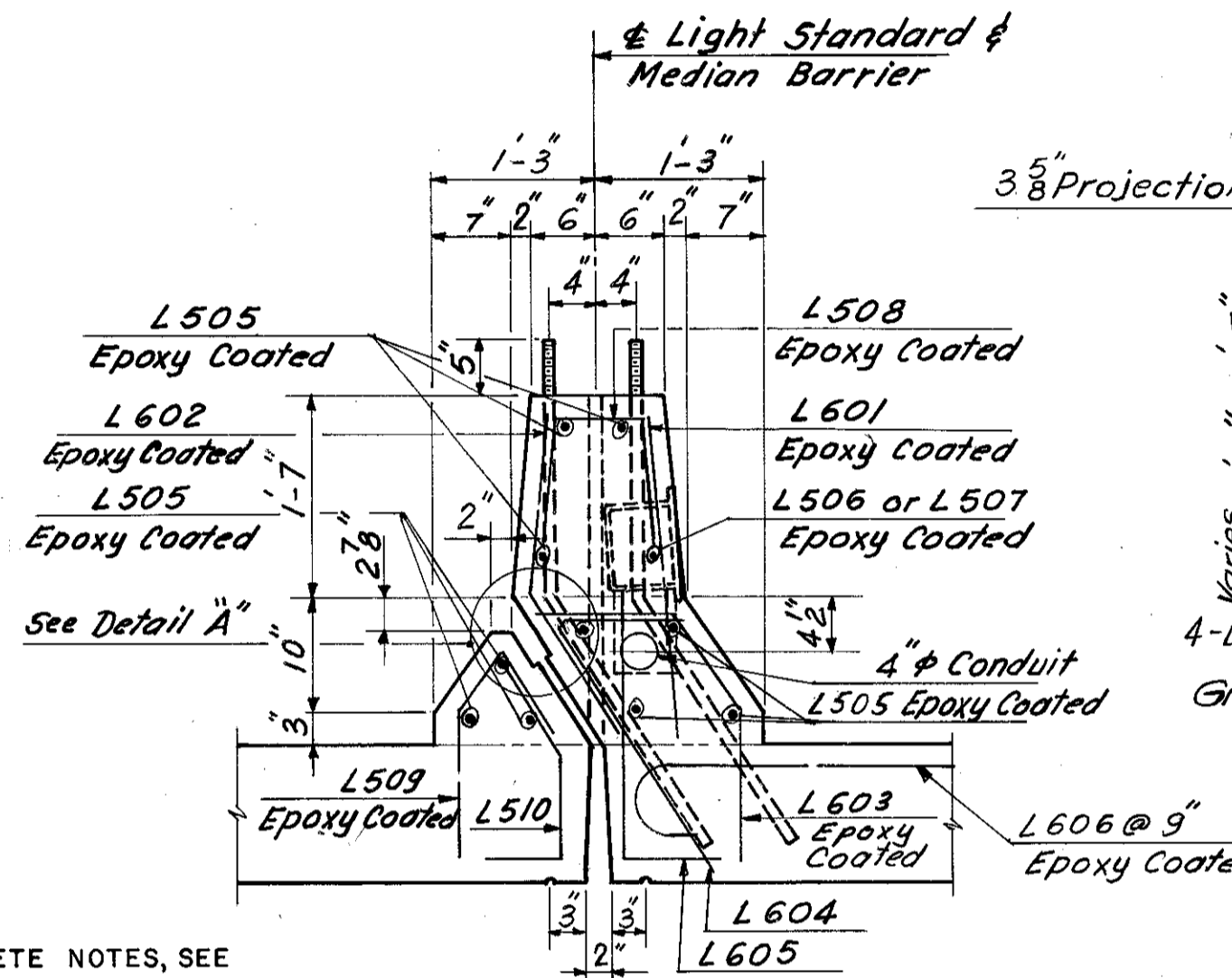
BACKWALL CONCRETE: IN ADDITION TO THE PROVISIONS OF 511.08, BACKWALL CONCRETE ABOVE THE BRIDGE SEAT OR BACKWALL CONCRETE ABOVE THE OPTIONAL CONSTRUCTION JOINT AT THE APPROACH SLAB SEAT SHALL NOT BE PLACED UNTIL AFTER THE DECK CONCRETE IN THE SPAN ADJACENT TO THE ABUTMENT HAS BEEN PLACED.

APPROACH SLAB: CLEARANCE TO TOP REINFORCING STEEL SHALL BE 3" AND JACKING HOLES MAY BY ELIMINATED.

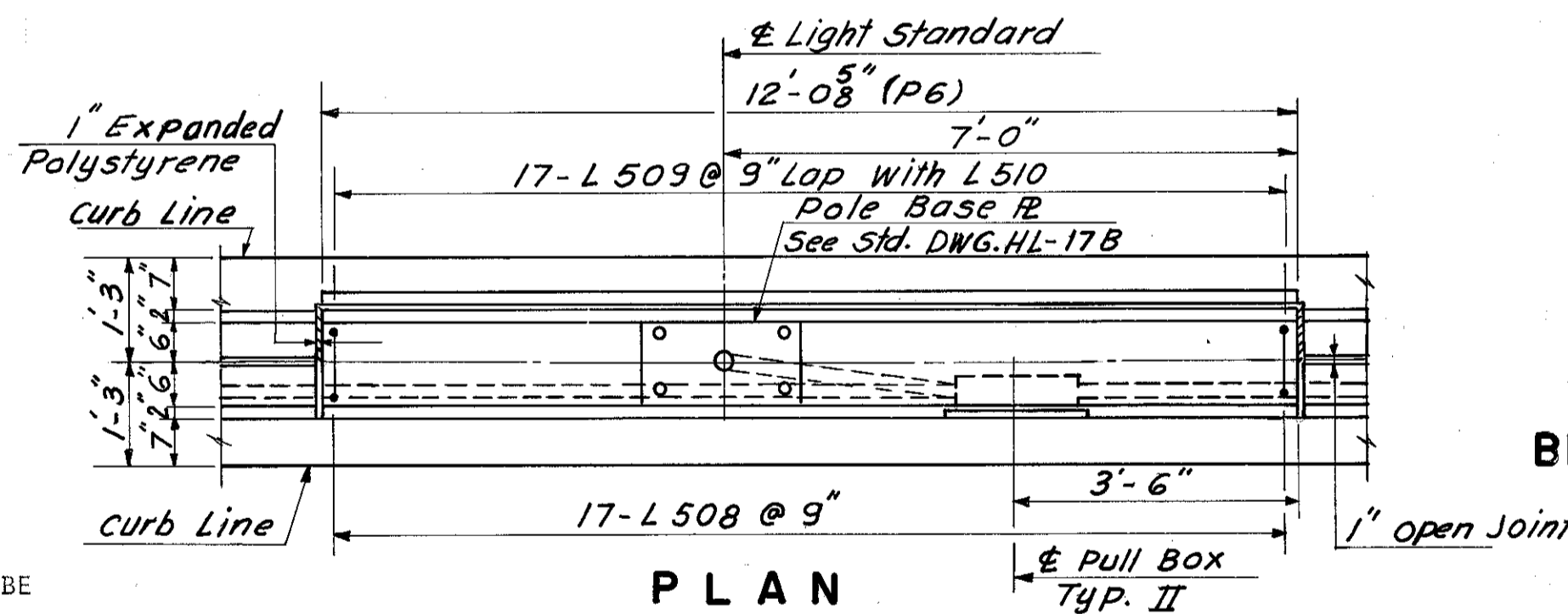
REINFORCING STEEL LAPS: SHALL BE MINIMUM 30 BAR DIAMETERS UNLESS OTHERWISE NOTED.



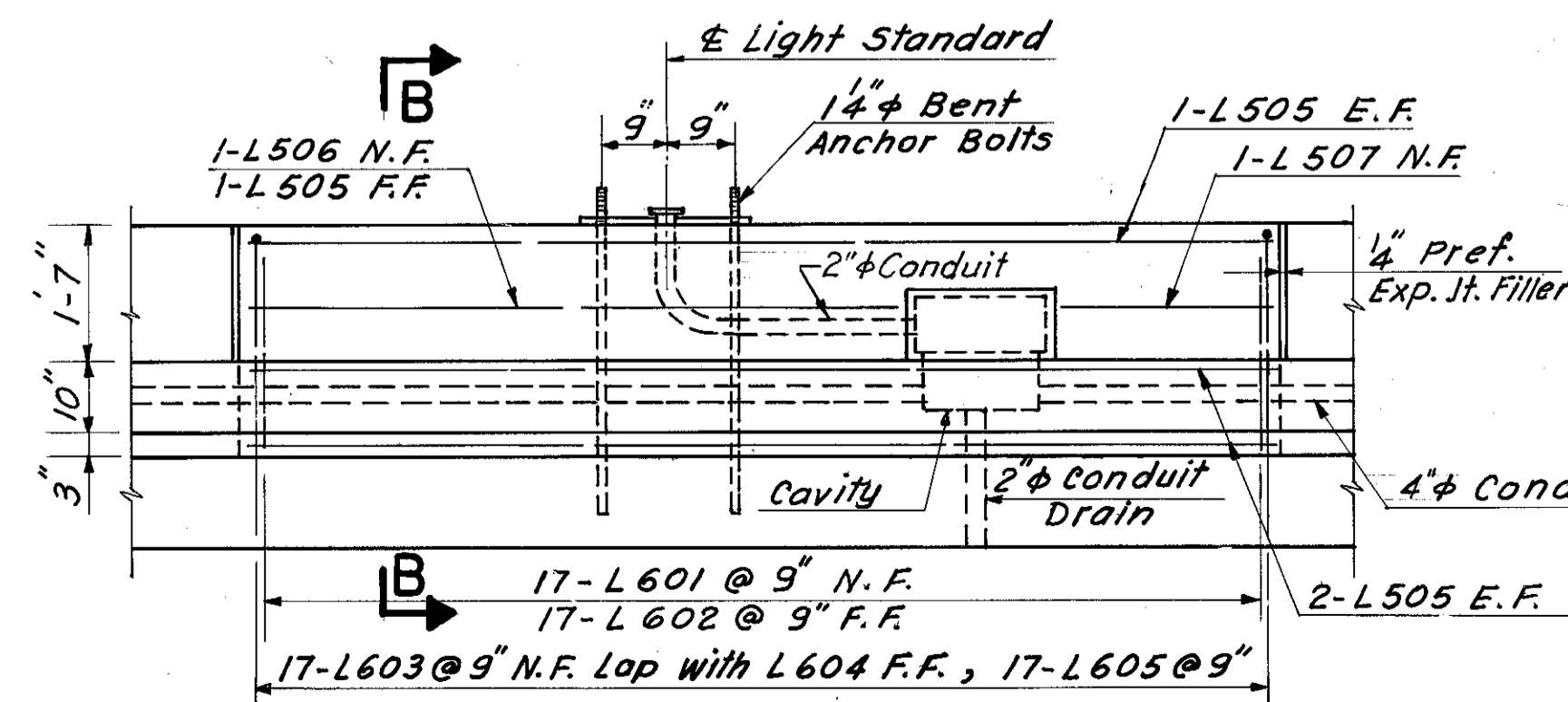
DETAIL "A"



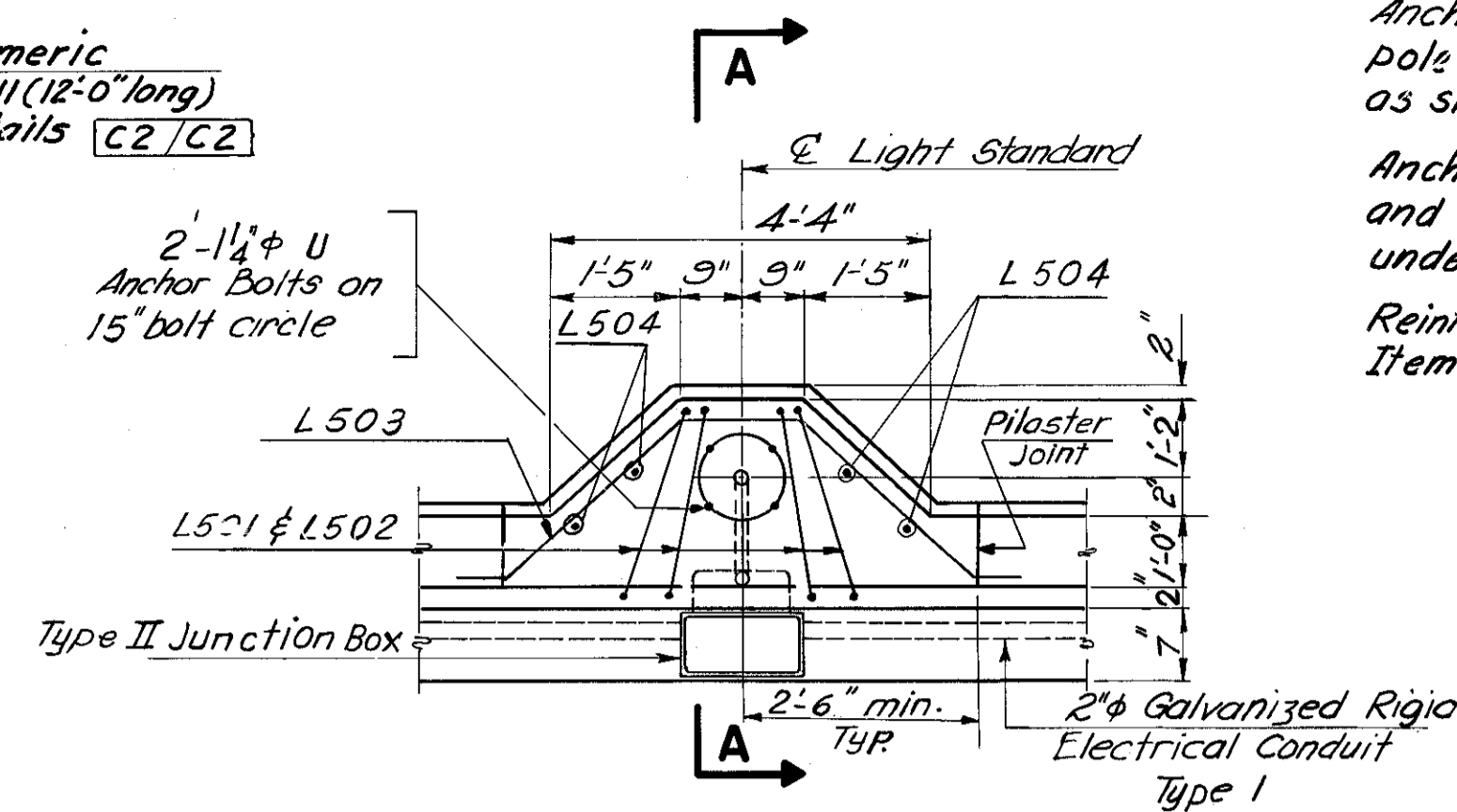
SECTION B-B



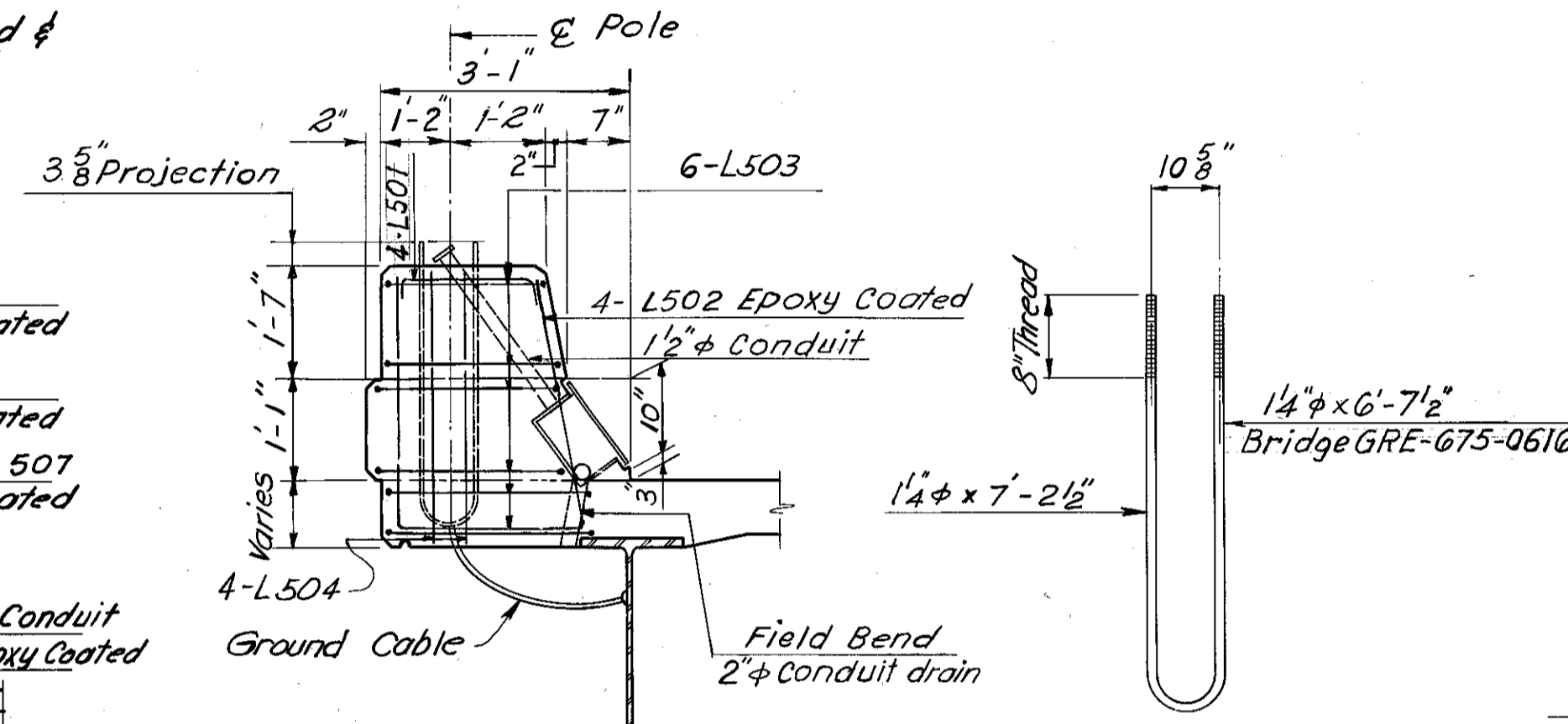
PLAN



**ELEVATION
LIGHT STANDARD AT MEDIAN BARRIER**

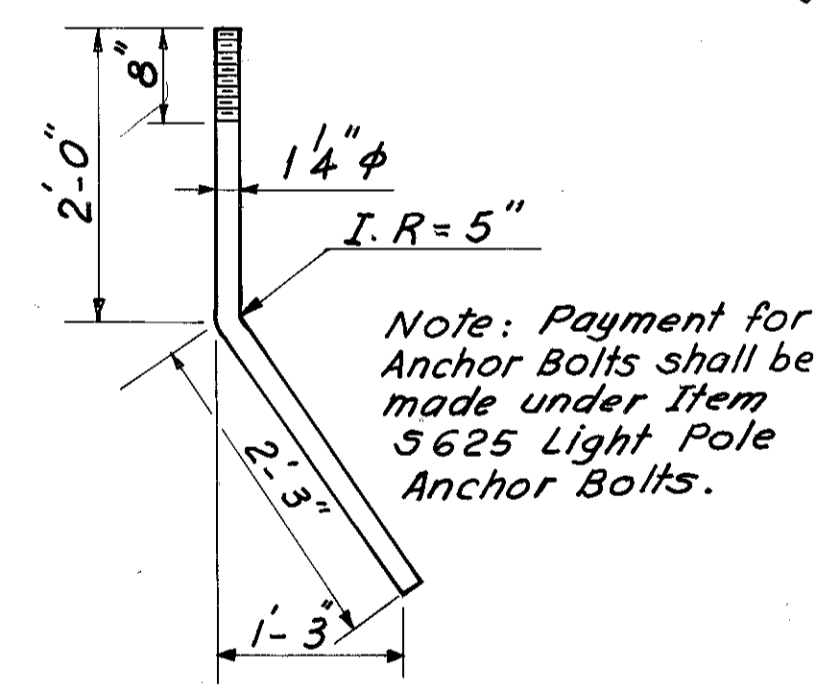


PEDESTAL PLAN



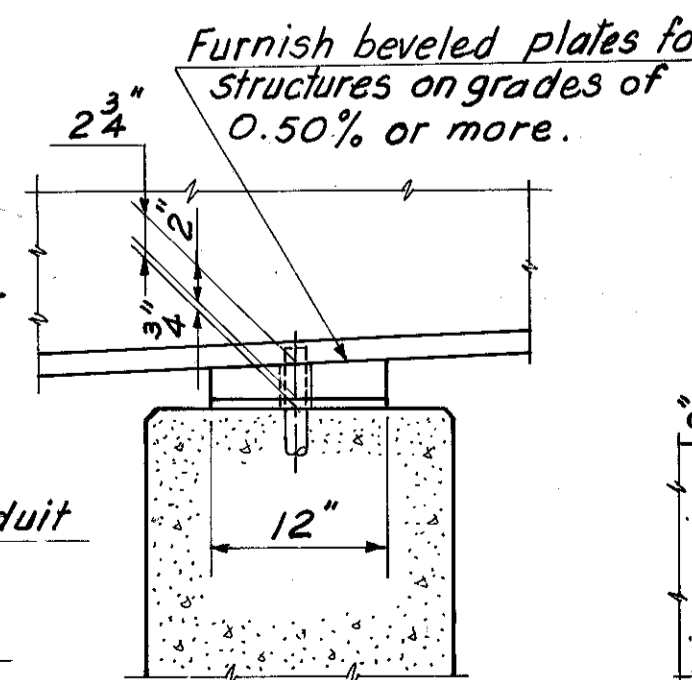
**SECTION A-A ANCHOR BOLT DETAIL
LIGHT STANDARD PEDESTAL**

(Bridge No. GRE-675-0616 Similar see Std. Dwg. HL-4)



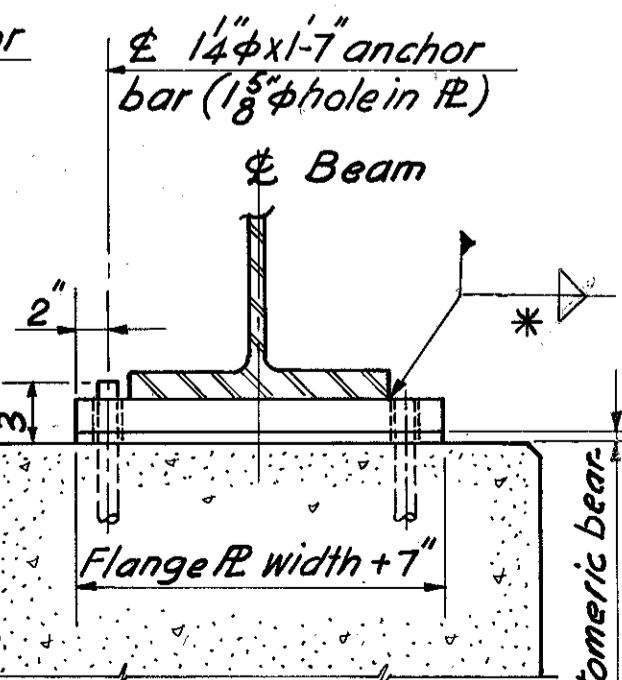
BENT ANCHOR BOLT DETAIL

Note: Payment for Anchor Bolts shall be made under Item 5625 Light Pole Anchor Bolts.



FIXED BEARING DETAIL F-150

* Fillet size same as flange thickness but not more than 2"



#50 Durometer Hardness

Furnish beveled plates for structures on grades of 0.50% or more.

Flange R. Width + 7"

SECTION THRU ROADWAY END DAM

Provide 3 (beveled) bar 1" Min. thickness. Welded to main angle, regardless of grade.

Thickness of 2" bar to be determined by Roadway gradient.

SPECIAL END CROSSFRAME DETAIL

Bridges No. GRE-675-0589 & 0616 only.

All End Crossframe Details, Welding Details and End of Girder Details not shown similar to SD-1-69.

TERMINATION OF 6" OR 8" C.S.P. ABUTMENT DRAINS

Crushed Aggregate Slope Protection

Ground Line

FRONT SLOPE

Slope 3/8" per ft.

Crushed Aggregate Slope Protection

SIDE SLOPE

6" φ or 8" φ C.S.P.

4'-0" x 4"

ANCHOR BOLT COVERS FOR FUTURE POLE INSTALLATION

Anchor Bolt Covers for future pole installation shall be installed as shown on Std. Dwg. HL-4.

Anchor Bolts, Pull Boxes, Conduits and Ground Cables paid for under Item 625

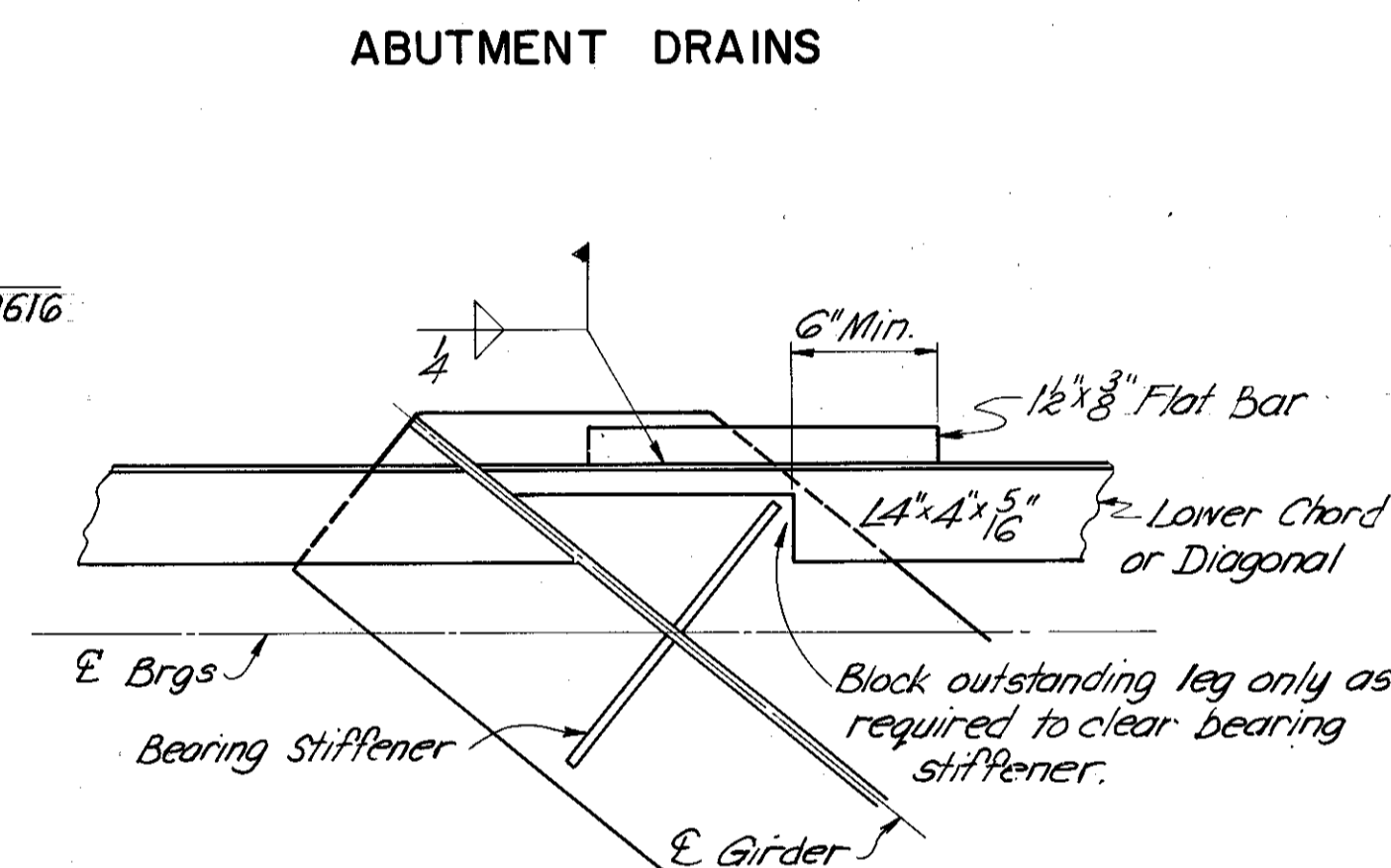
REINFORCING STEEL PAID FOR UNDER ITEM 509.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		407/616

GRE-675 - 5.37
GREENE COUNTY

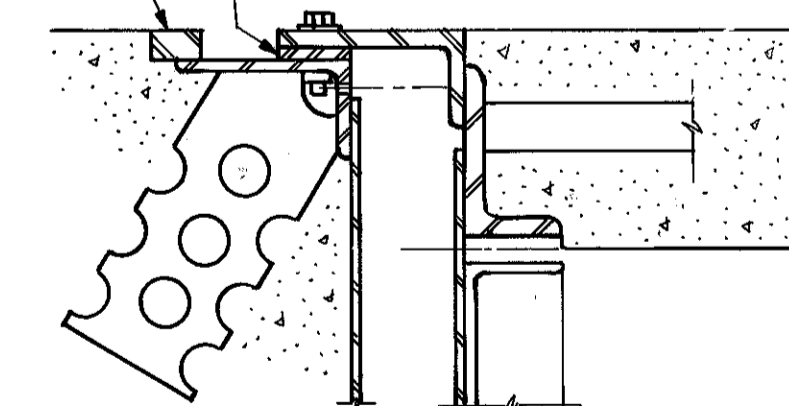
MICROFILMED
JUN 17 1985

TERMINATION OF 6" OR 8" C.S.P. ABUTMENT DRAINS



SPECIAL END CROSSFRAME DETAIL

Bridges No. GRE-675-0589 & 0616 only.
Thickness of 2" bar to be determined by Roadway gradient.
Provide 3 (beveled) bar 1" Min. thickness. Welded to main angle, regardless of grade.



SECTION THRU ROADWAY END DAM

For other details, see Section A-A SD-1-69, Page 1

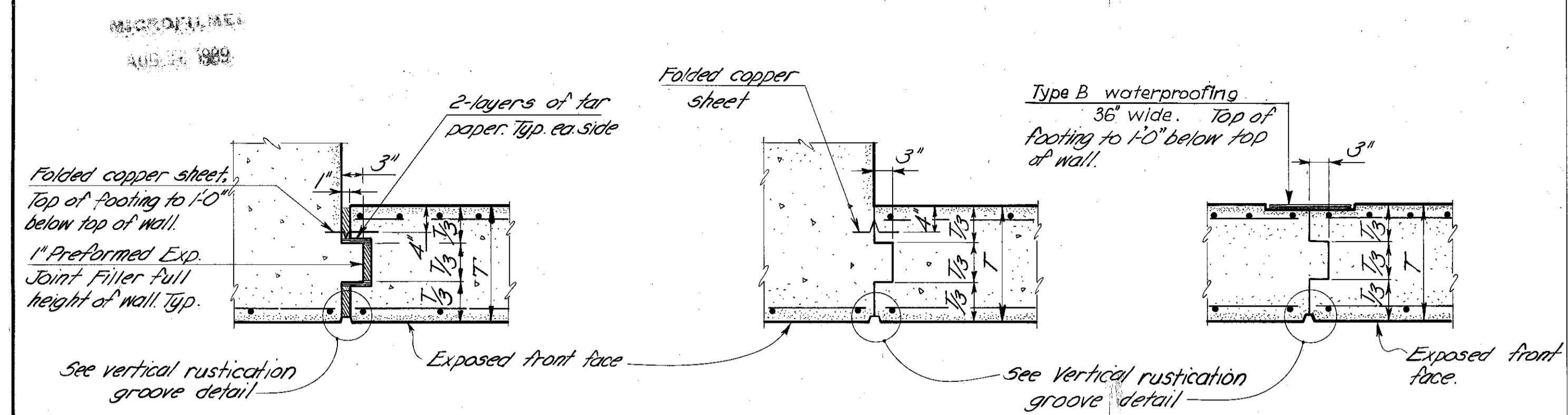
KING & GAVARIS CONSULTING ENGINEERS		OHIO	
CINCINNATI			C1/C2

GENERAL NOTES & COMMON DETAILS - I

GREENE 675 - 5.37

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.	S.A.	9/26/72	

MICROFILMED
JUN 17 1965



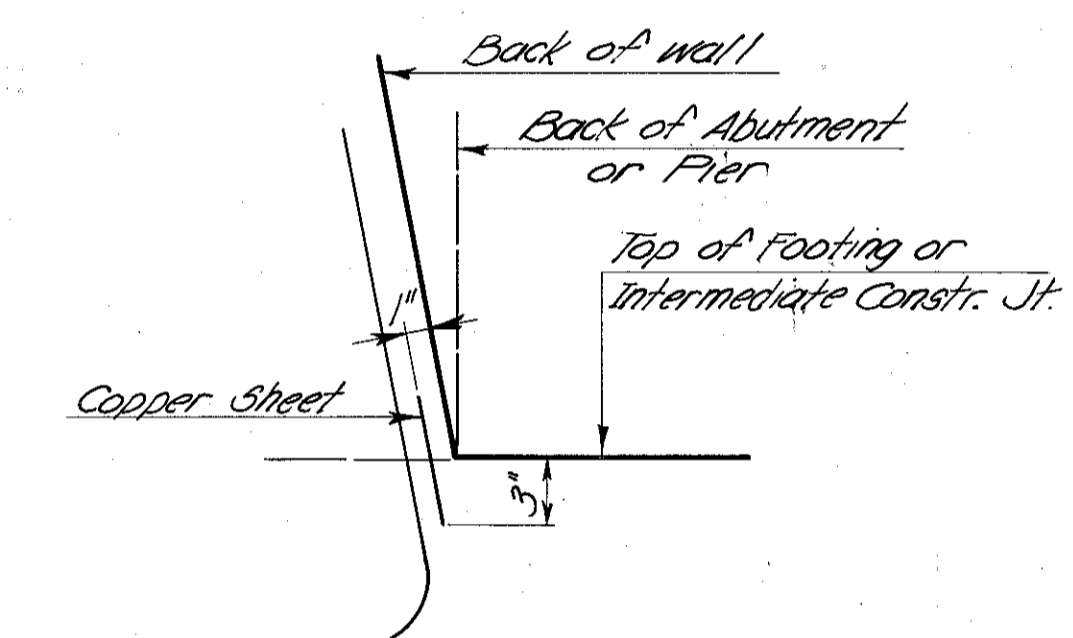
EXPANSION JOINT DETAIL

**TYPE 1 TYPE 2
CONTRACTION JOINT DETAILS**

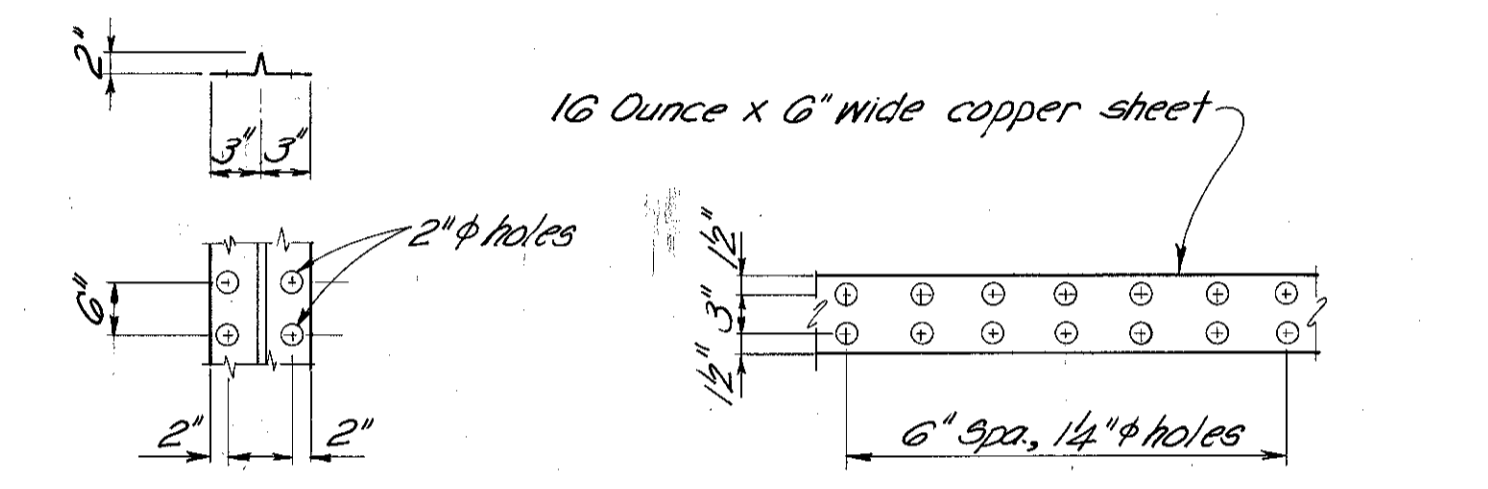
VERTICAL RUSTICATION GROOVE DETAIL

EXPANSION JOINT DETAILS

CONTRACTION JOINT DETAIL



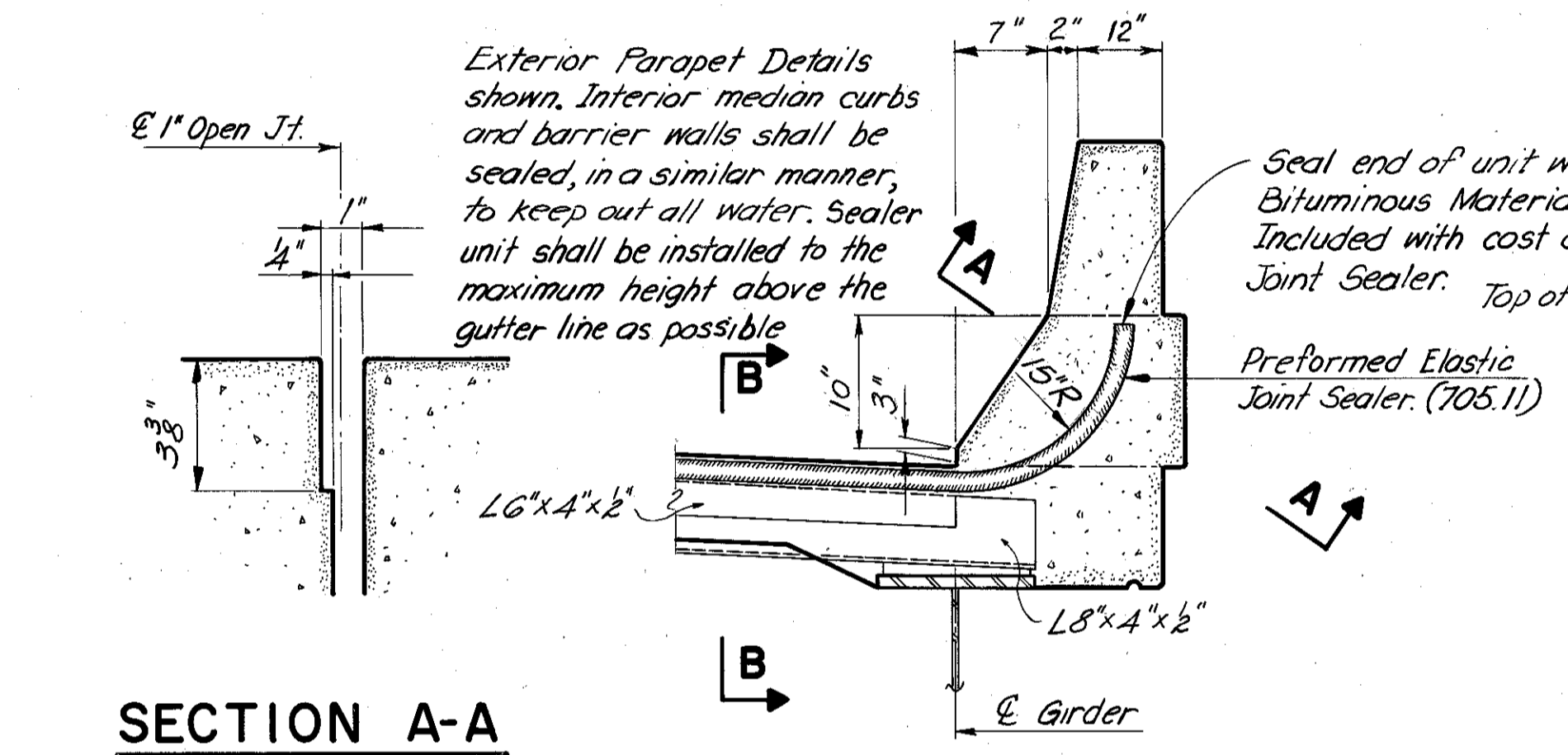
DETAIL SHOWING COPPER SHEET LOCATION



16-OZ. FOLDED COPPER SHEET DETAIL

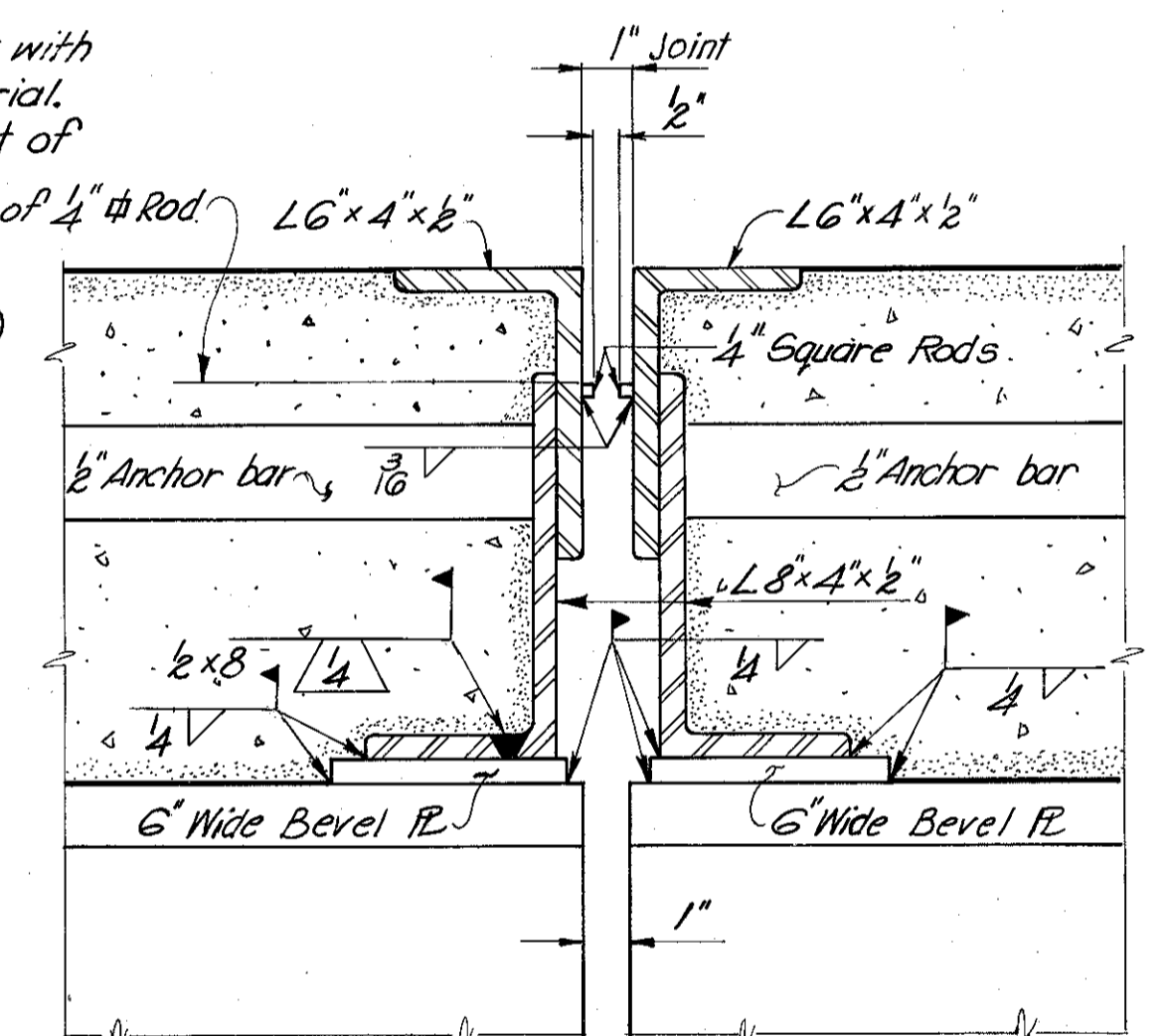
**COPPER SHEET DETAIL
Provide Copper dams in all construction joints**

TYPICAL DETAILS AT BRIDGES NO. 0615 & 0626 ONLY



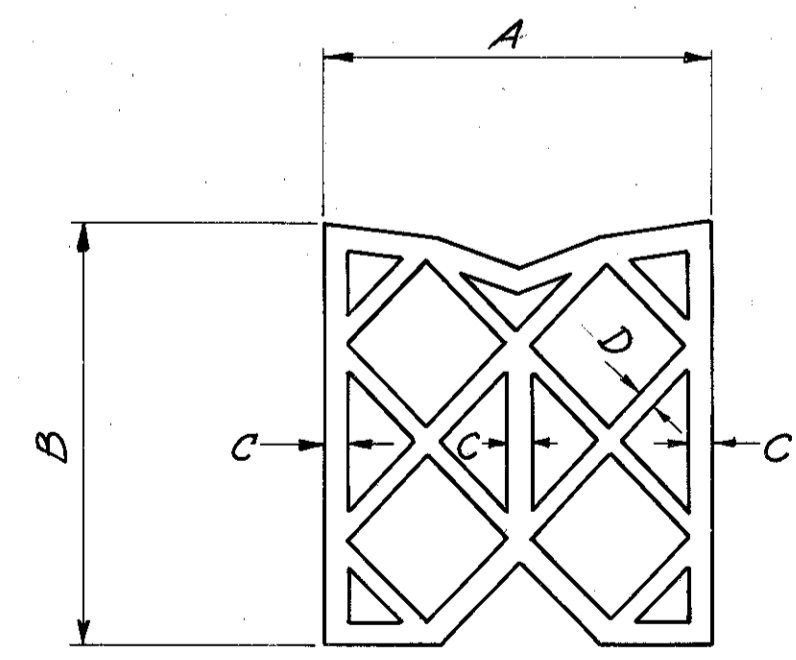
SECTION A-A

INTERMEDIATE SLAB JOINT DETAIL



SECTION B-B

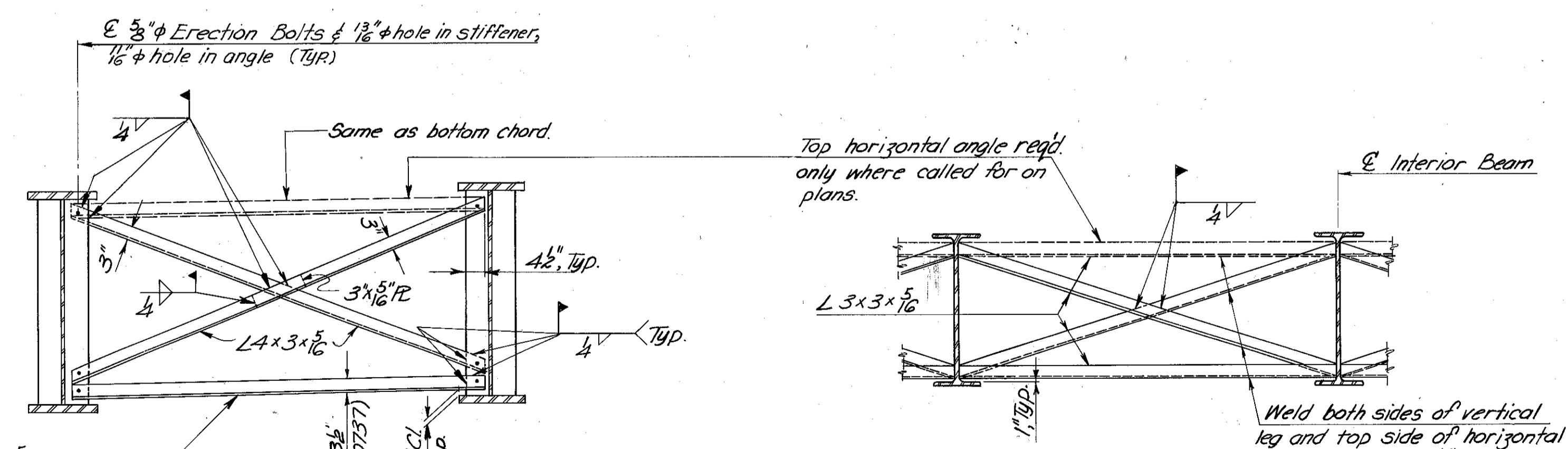
For Anchor Bars, beveled plates and angle welding similar to End Dams shown on Std. Dwg. SD-1-63.



SCHMATIC FOR PREFORMED JOINT SEALER

	1" Joint	1 1/2" Joint
A	1 3/4" ± 3/16"	2 1/2"
B	2" ± 1/8"	2 3/4"
C	1/2" ± 3/16"	—
D	3/2" ± 3/16"	—

If erection bolts are left in place they shall be tack welded.



STEEL GIRDER BRIDGE

STEEL BEAM BRIDGE

TYPICAL INTERMEDIATE CROSSFRAMES

For Special Frame Details see Bridge #0737

KING & GAVARIS CONSULTING ENGINEERS		C2/C2
COMMON DETAILS-2		
GREENE 675 - 5.37		
DESIGNED	DRAWN	TRACED
A.W.	S.A.	
CHECKED	REVIEWED	DATE
S.A.		9/25/72
REVISION		

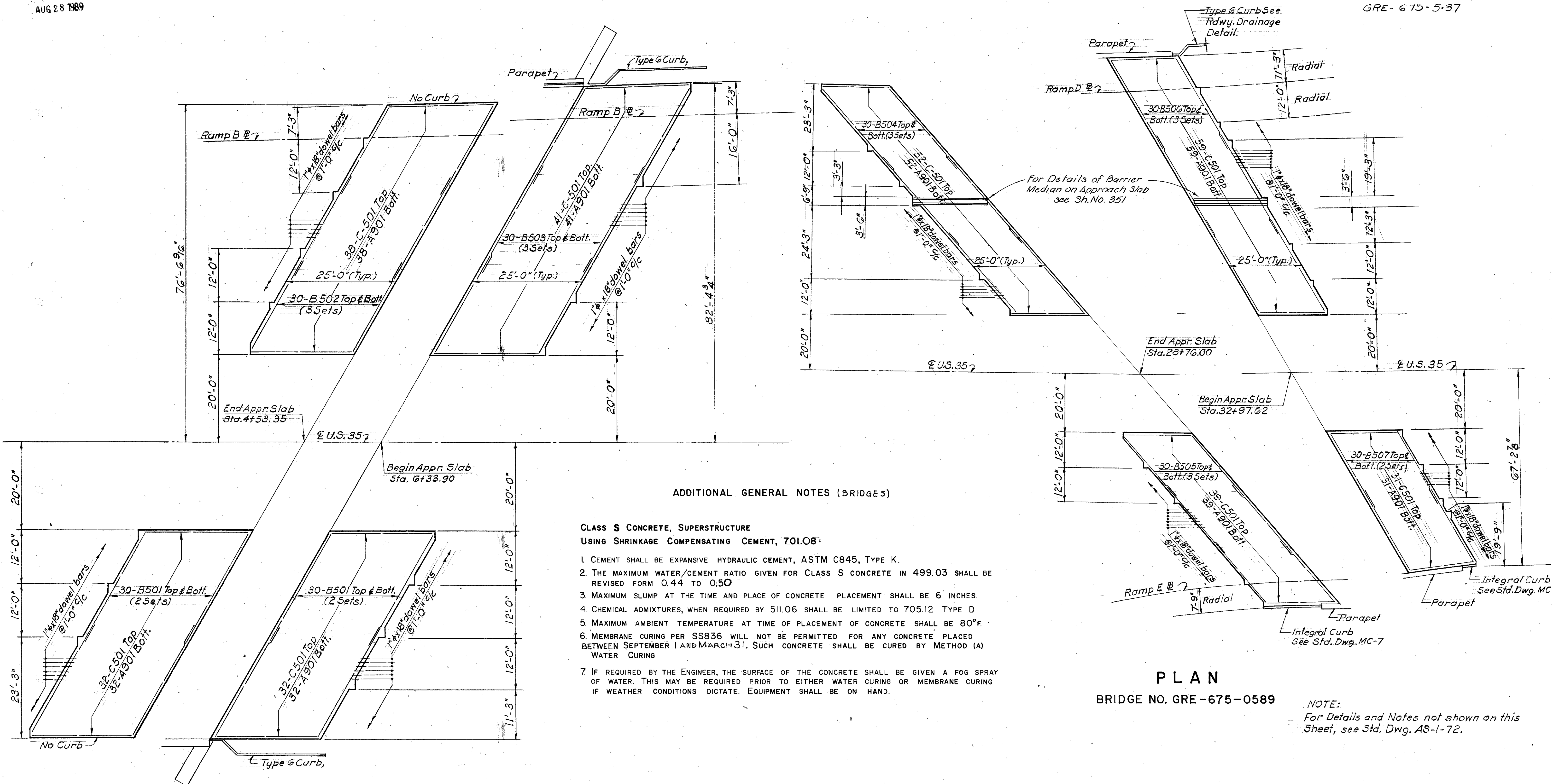
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MICROFILMED

JUN 17 1965

F.H.W.A. REGION	STATE	PROJECT
5	OHIO	GRE-675-537

409
616



ADDITIONAL GENERAL NOTES (BRIDGES)

CLASS S CONCRETE, SUPERSTRUCTURE

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 55836 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.

PLAN

BRIDGE NO. GRE - 35-0009

PLAN

BRIDGE NO. GRE - 675-0589

NOTE:
For Details and Notes not shown on this Sheet, see Std. Dwg. AS-1-72.

KING & GAVARIS CONSULTING ENGINEERS, INC.		AI / AI
CINCINNATI	OHIO	
APPROACH SLABS		
BRIDGE NO. GRE - 35-0009		
BRIDGE NO. GRE - 675-0589		
DESIGNED	DRAWN	TRACED
	N.H.	
CHECKED	REVIEWED	DATE
REVISION		

MICROFILMED
AUG 28 1989

For Reference Chord Layout
See Sh. 2 | 11

HORIZONTAL CURVE DATA
RAMP A

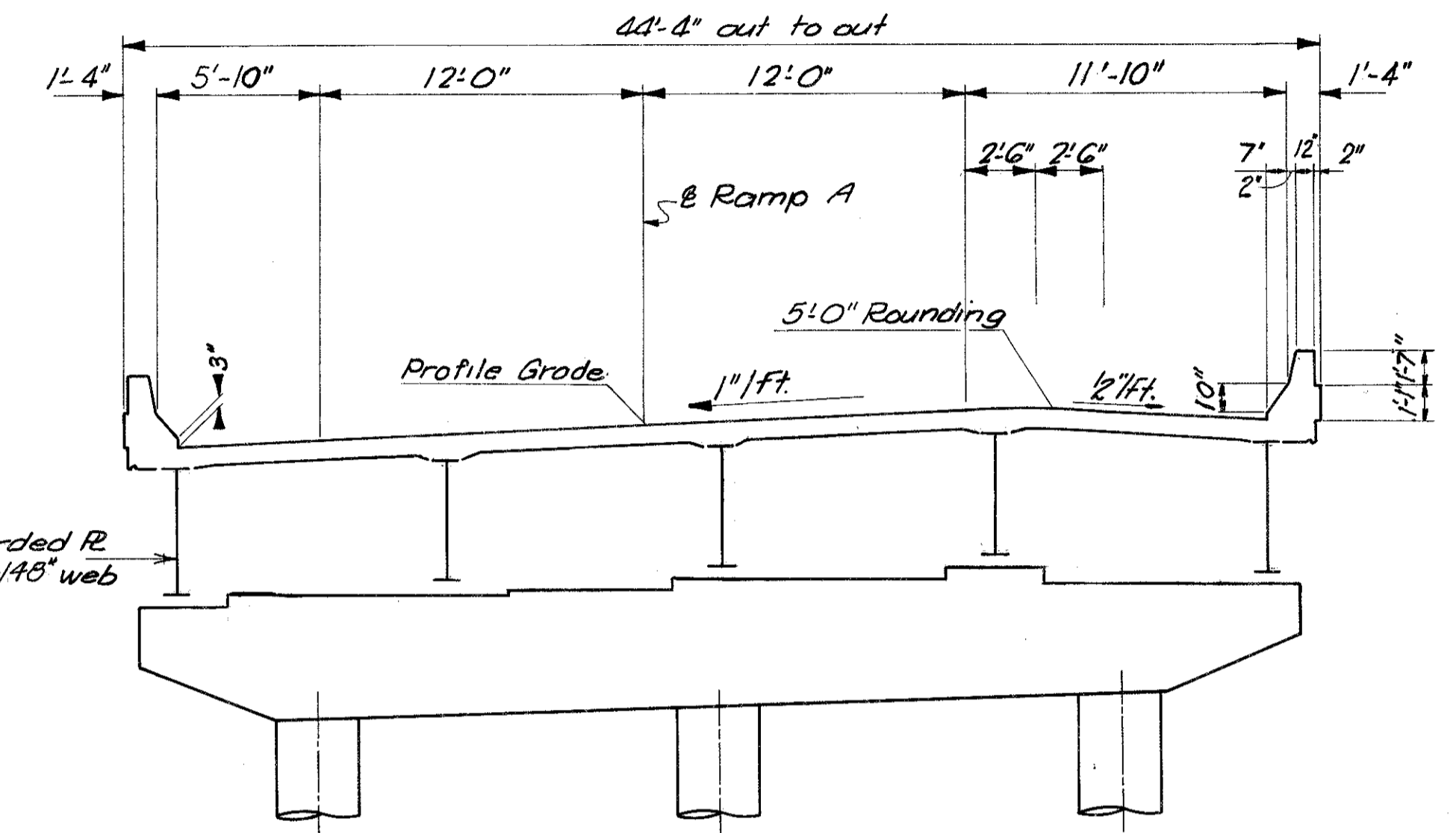
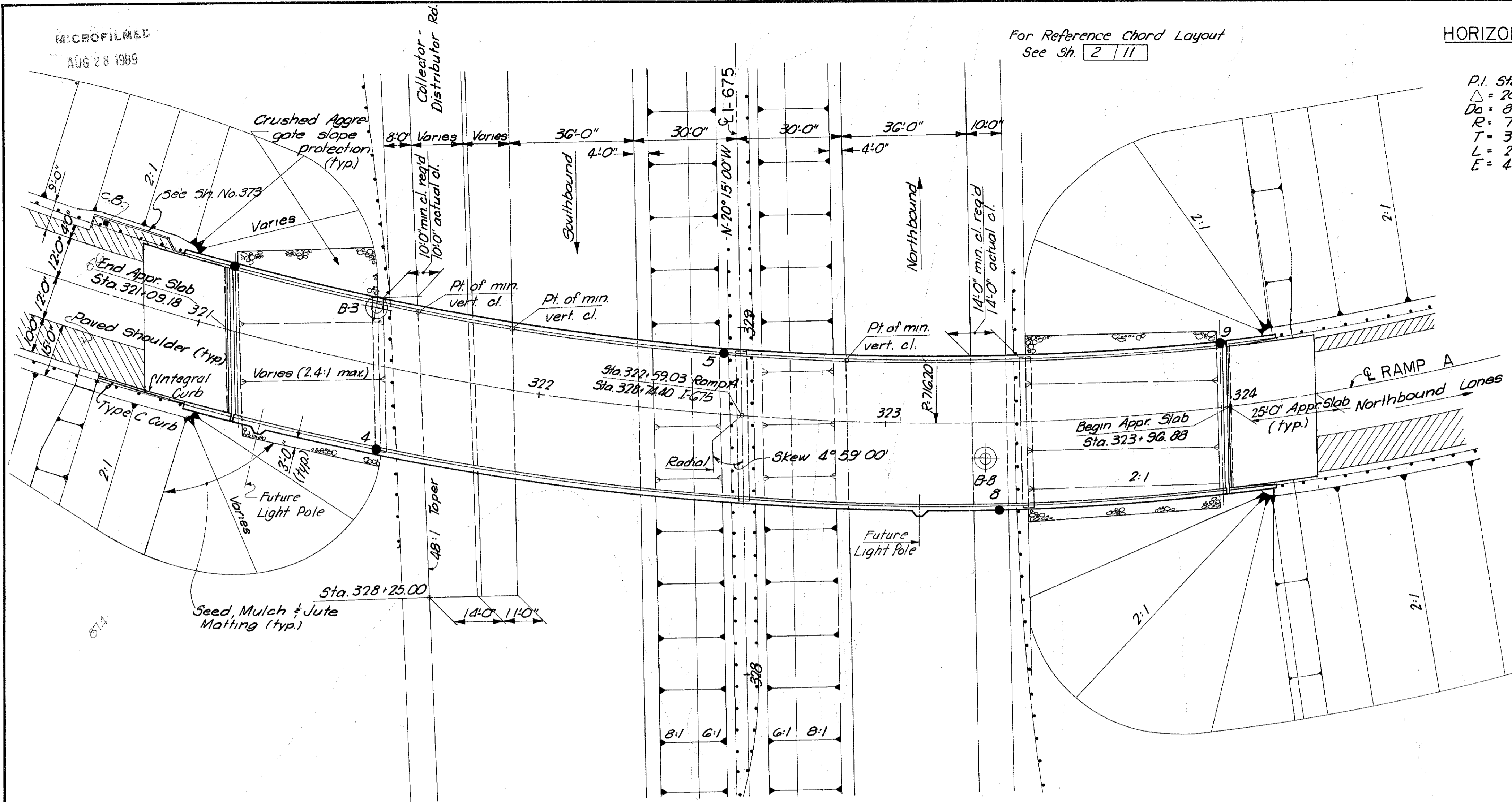
PI. Sta. 346+51.26
Δ = 204° 10' 17"
Dc = 8° 00' 00"
R = 716.20
T = 3344.83
L = 2552.14
E = 4136.85

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

410
616

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JUN 18 1985

GRE-675 - 5-37
GREENE COUNTY



SECTION THRU BRIDGE

LEGEND

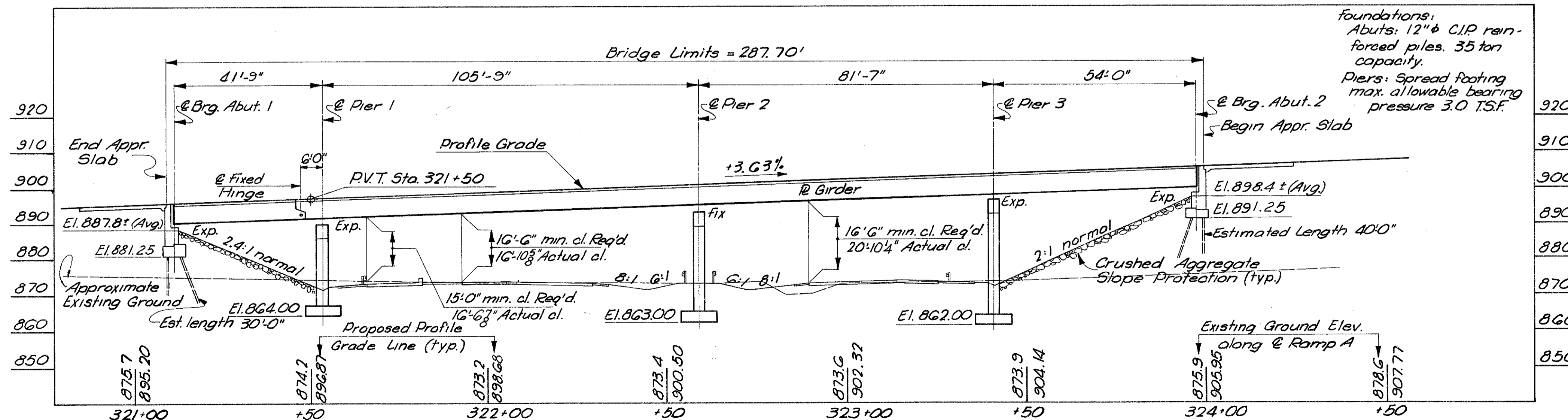
- Drive Sample Boring Location
- Drive Rod Penetration Resistance Sounding Location

PLAN

VERTICAL CURVE DATA
RAMP A

350' V.C.
P.V.I. Sta. 319+75
P.V.I. Elev. 890.51
G₁ = 0.48%
G₂ = +3.63%

DESIGN YEAR TRAFFIC
1989 ADT:
Ramp A 10,110
I-675 49,840
Collector-Dist. 5,040



PROFILE ON CENTER LINE RAMP A

Note:
Earthwork Limits shown are schematic. Actual slopes shall conform to Plan-Cross-Sections.

PROPOSED STRUCTURE
TYPE: Continuous Chorded Plate Girder with reinforced concrete deck and substructure
SPANS: 41'-9", 105'-9", 81'-7", 54'-0"
ROADWAY: 41'-8" face to face of parapet
LOADING: H-5 20-44, Alternate Military
SKEW: Varies, 4°-53'-00" Rt. Fwd. at @ I-675
WEARING SURFACE: Monolithic Concrete
APPROACH SLABS: 25'-0" long (Std AS 1-72)
ALIGNMENT: Left Curve - Dc = 8° 00' 00"

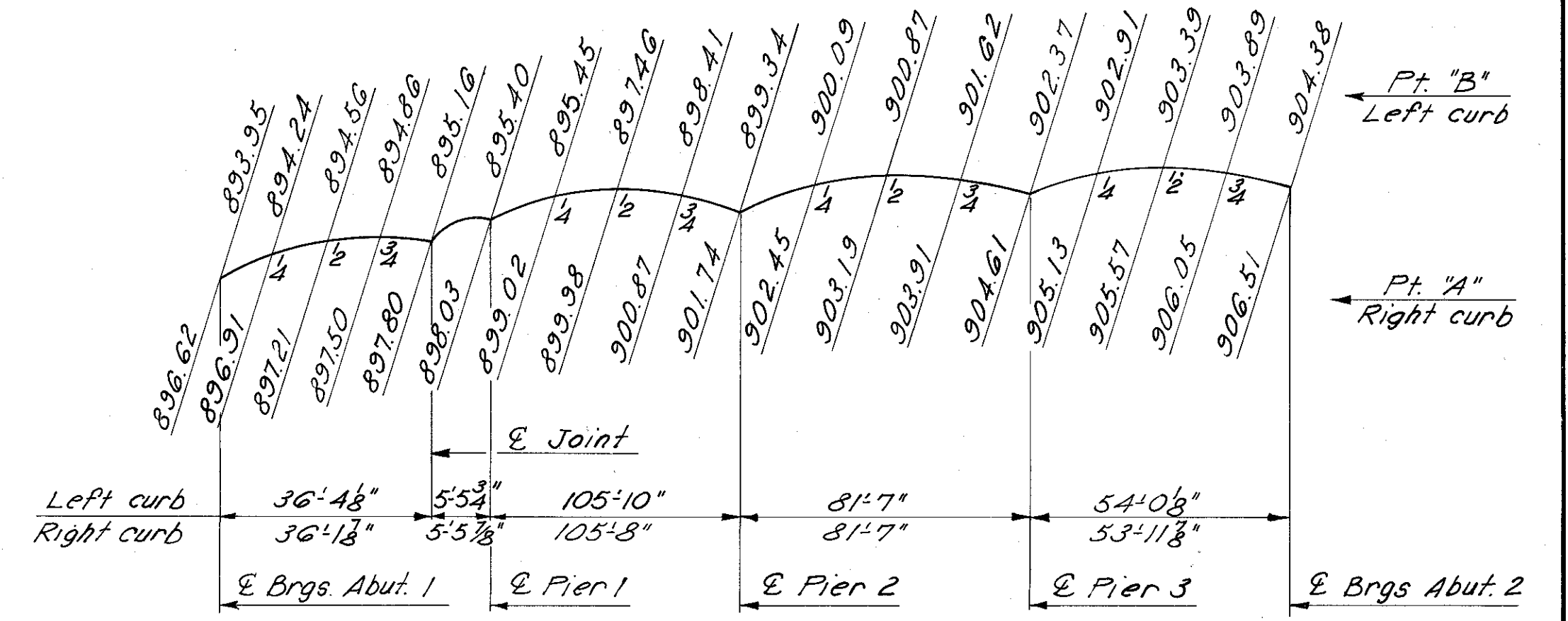
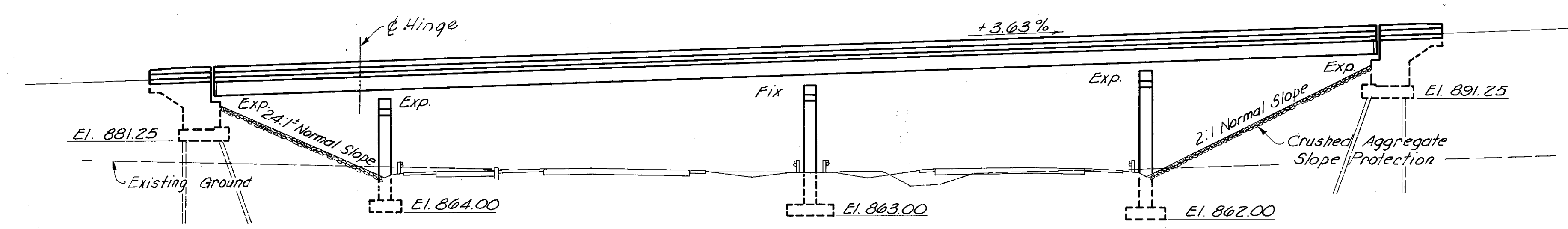
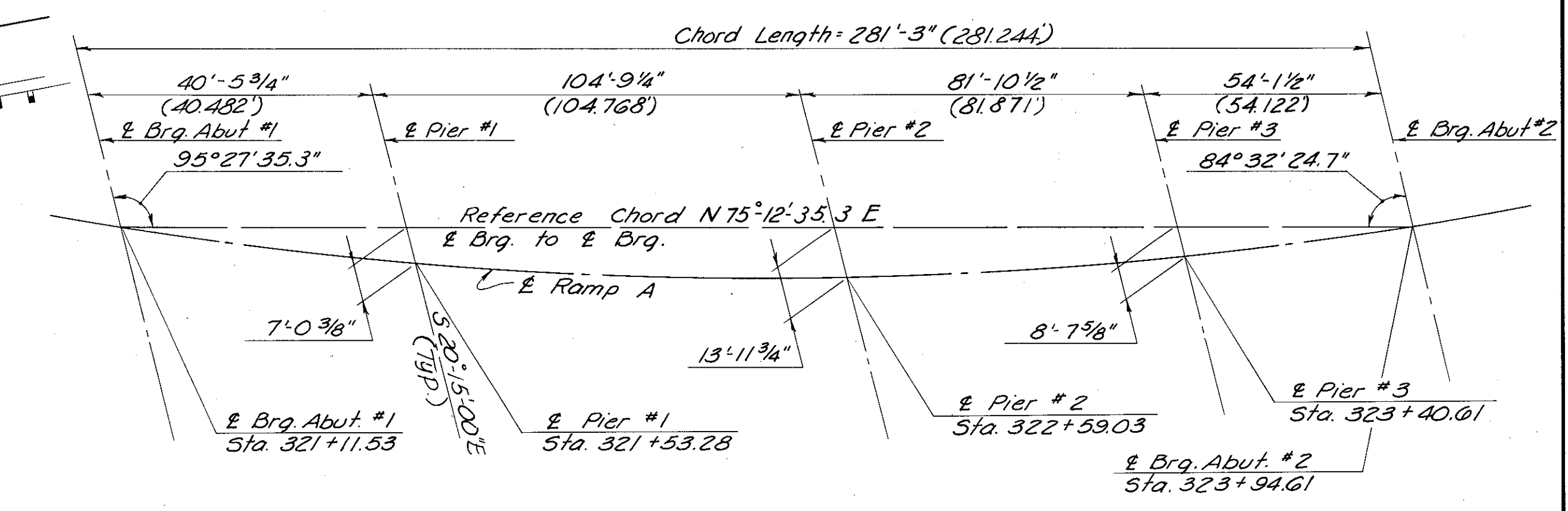
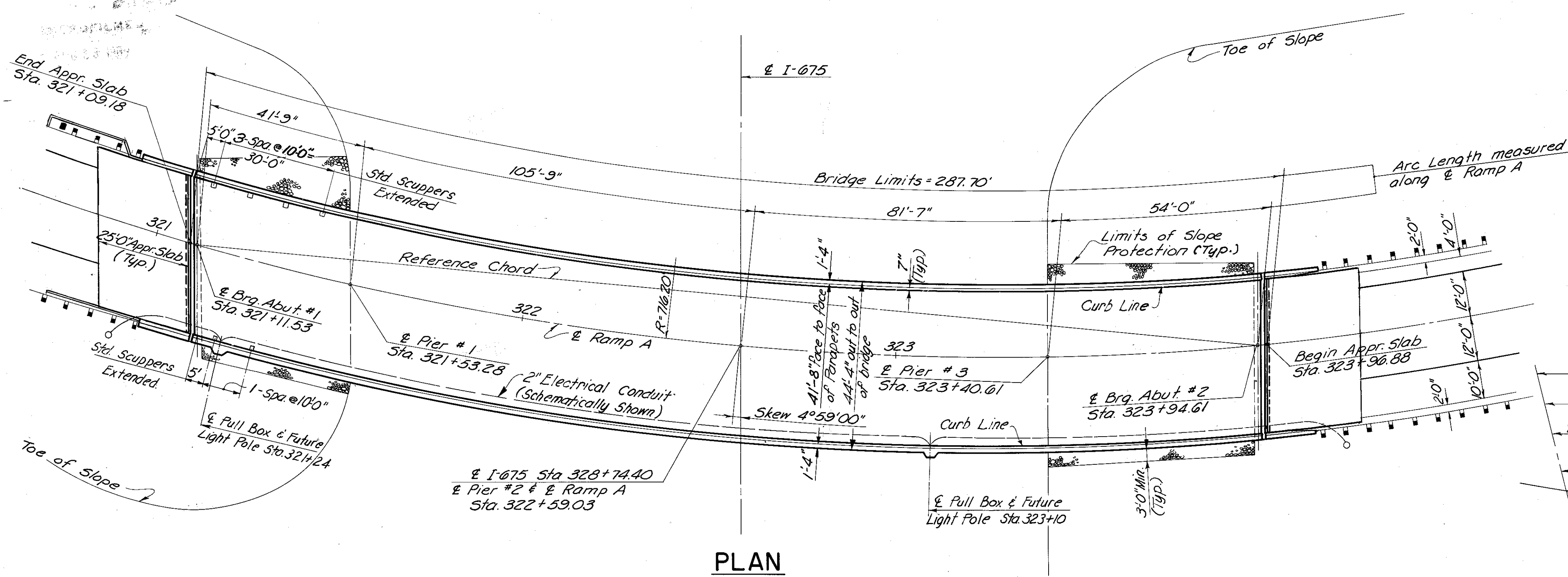
KING & GAYLOR
CONSULTING ENGINEERS
CINCINNATI OHIO

SITE PLAN

BRIDGE NO. GRE-675-0576
I-675 UNDER RAMP A

GREENE COUNTY STA: 321+09.18 TO
STA: 323+96.88

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISED
AERIAL SURVEY	AERIAL SURVEY	JCL	AW	S.A.	



ESTIMATED QUANTITIES				SUPER	ABUT.	PIERS	GEN.
503	Lump	Sum	Cofferdams, Cribs, and Sheeting				Lump
503	803	Cu Yd	Unclassified Excavation	268		535	
505	Lump	Sum	Test Pile				Lump
507	1,340	Lin Ft.	12" Cast-in-place reinforced concrete piles.	1340			
509	140,900	Lb.	Reinforcing steel	72,200	16,100	52,600	
511	132	Cu Yd.	Class "C" concrete, Abutments above footings.	132			
511	114	Cu Yd.	Class "C" concrete, Piers above footings			114	
511	448	Cu Yd.	Class "S" concrete, Superstructure using Shrinkage Compn. Cem. 70100	448			
511	206	Cu Yd.	Class "C" concrete, Footings	79		127	
513	377,300	Lb.	Structural steel (AISC Category III)	377,300			
514	377,300	Lb.	Field Painting of new Structural steel, System A	377,300			
516	45	Lin Ft.	Preformed Elastic Joint Sealer, 705.11	45			
518	70	Cu Yd.	Porous backfill		70		
518	75	Lin Ft.	6" Perforated helical C.S.P., 70701		75		
518	127	Lin Ft.	6" Non-perforated helical C.S.P., including specials, 70701		127		
518	6	Each	Scuppers including supports	6			
601	634	Sq Yd.	Crushed aggregate slope protection				634
625			See Sheet 119 for lighting summary.				
523	3	hour	Dynamic Pile Tests				3
Special	44,100	Lb	Epoxy Coated Reinforcing Steel. (See Proposal Note)	43,100	1000		

ESTIMATED QUANTITIES CHECKED BY & DATE J.G./S.A. 3/9/72 REVISED: S.A. 9/14/72

GENERAL NOTES

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 3.

PILES SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 35 TONS PER PILE FOR THE ABUTMENTS.

FOUNDATION BEARING PRESSURE: PIER FOOTINGS ARE DESIGNED FOR A MAXIMUM BEARING PRESSURE OF 3,0 TONS PER SQ. FT.

FOR ADDITIONAL NOTES SEE SHEET C1/C2

THE SCUPPER PIPES SHALL EXTEND 8 INCHES BELOW THE BOTTOM OF THE BOTTOM FLANGE INSTEAD OF 2 INCHES.

THE END DAM ANCHOR BARS SHALL BE LOCATED 3 3/8 INCHES CLEAR FROM THE TOP OF BRIDGE DECK.

NOTES:

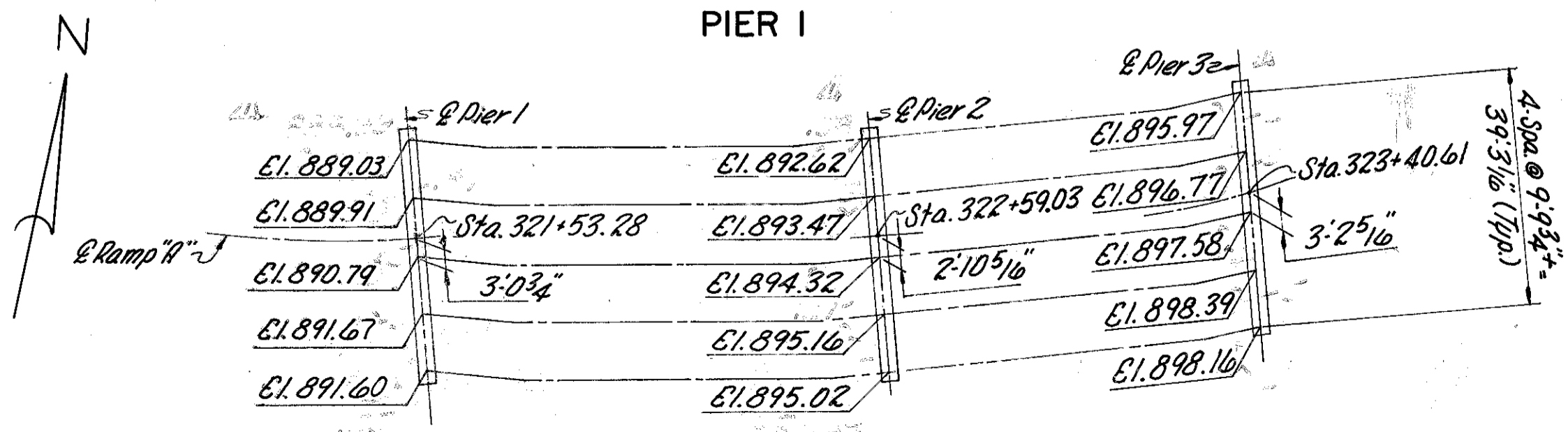
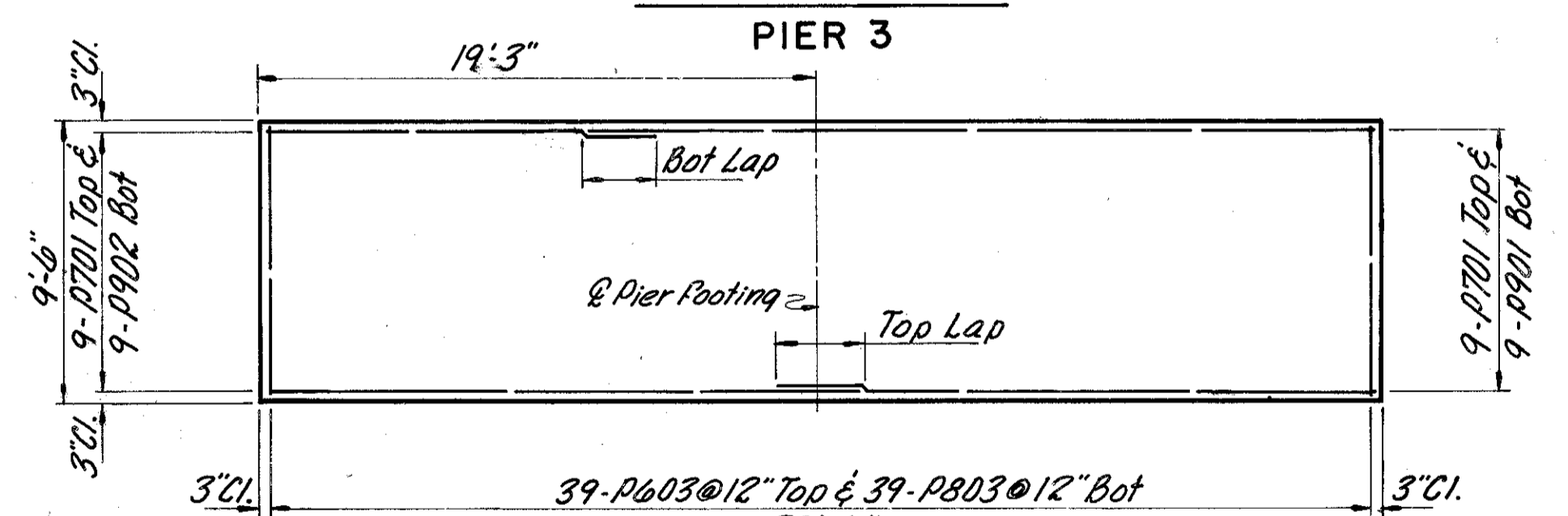
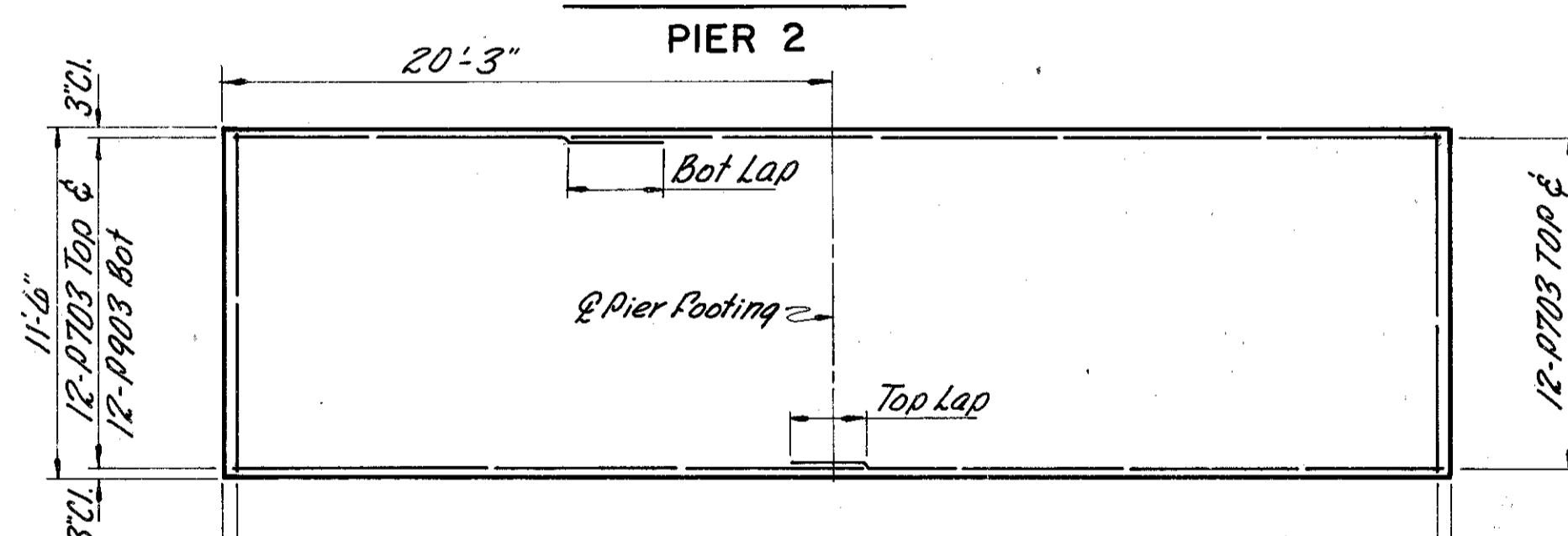
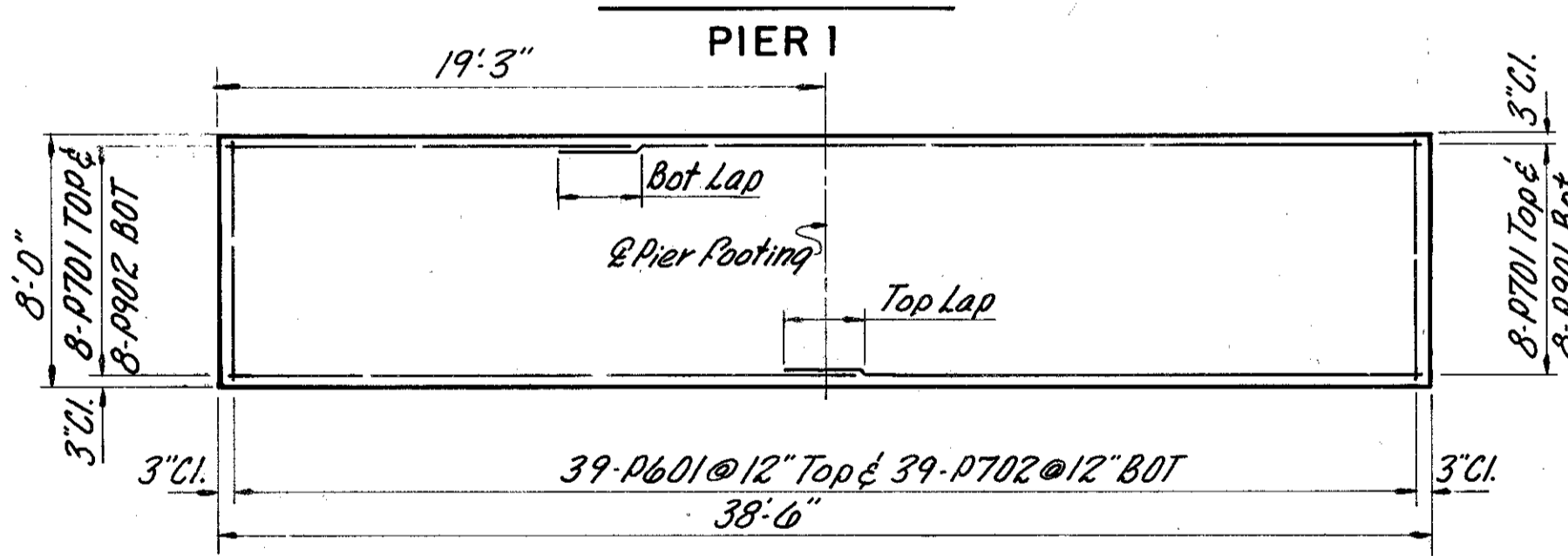
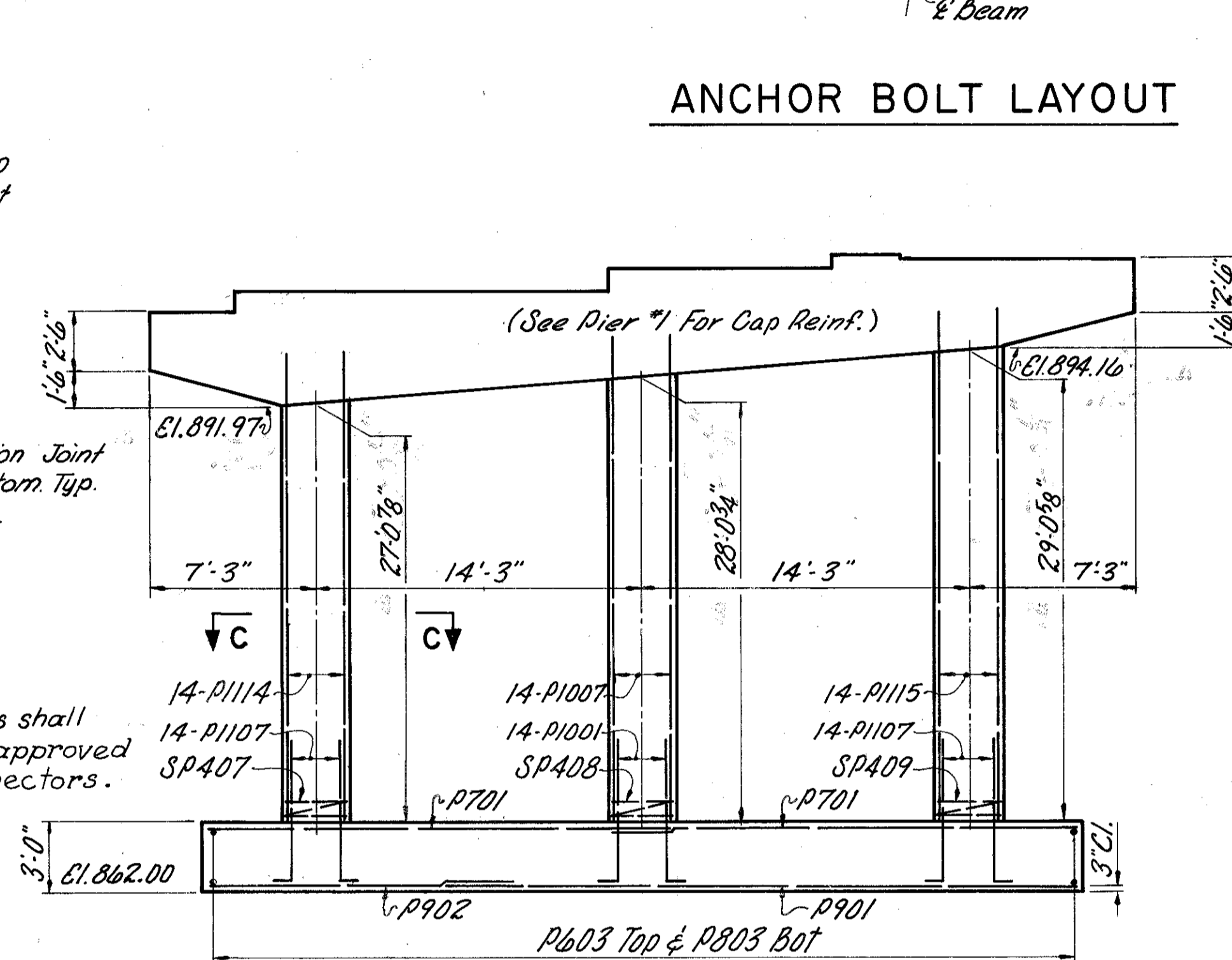
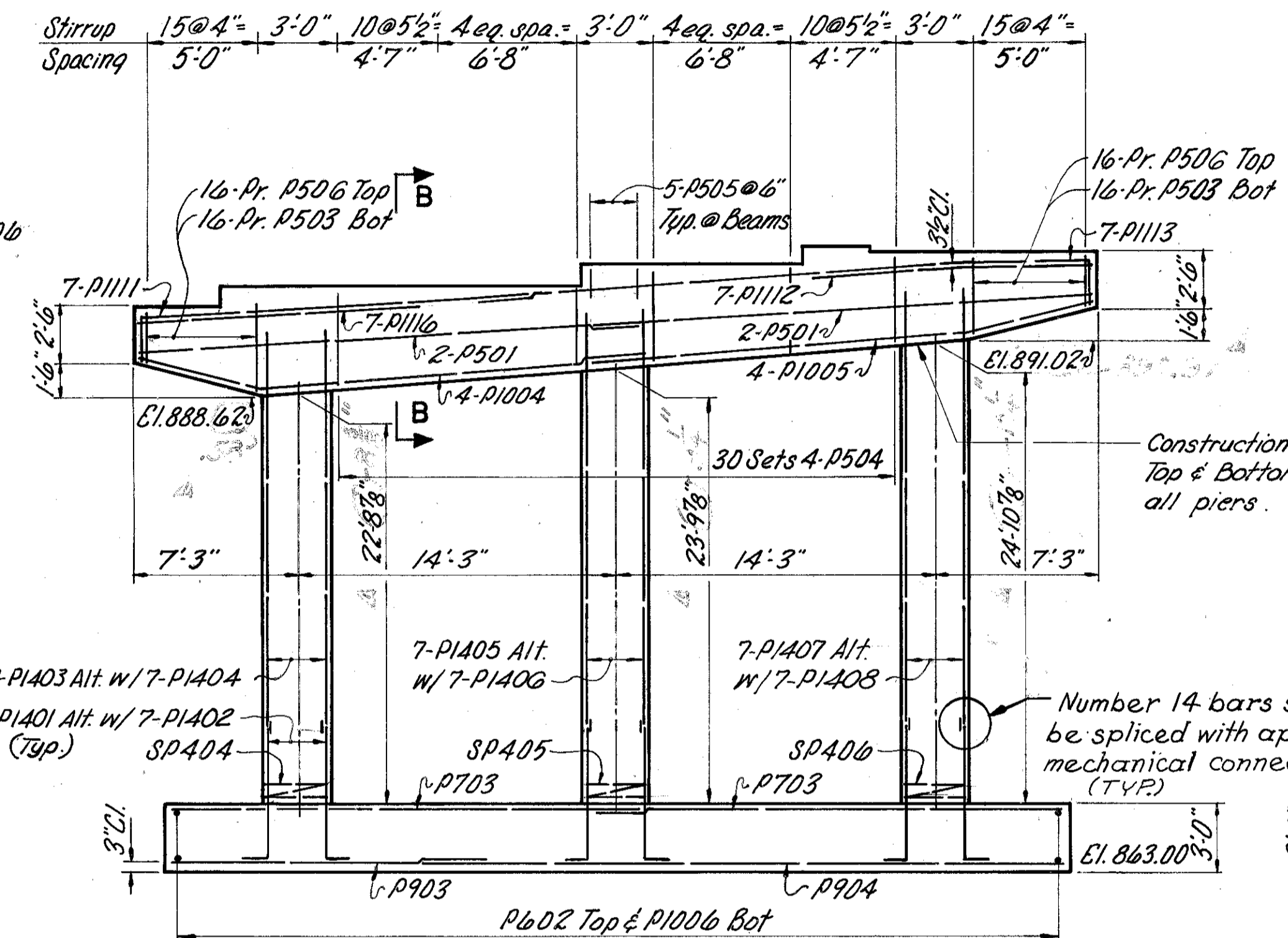
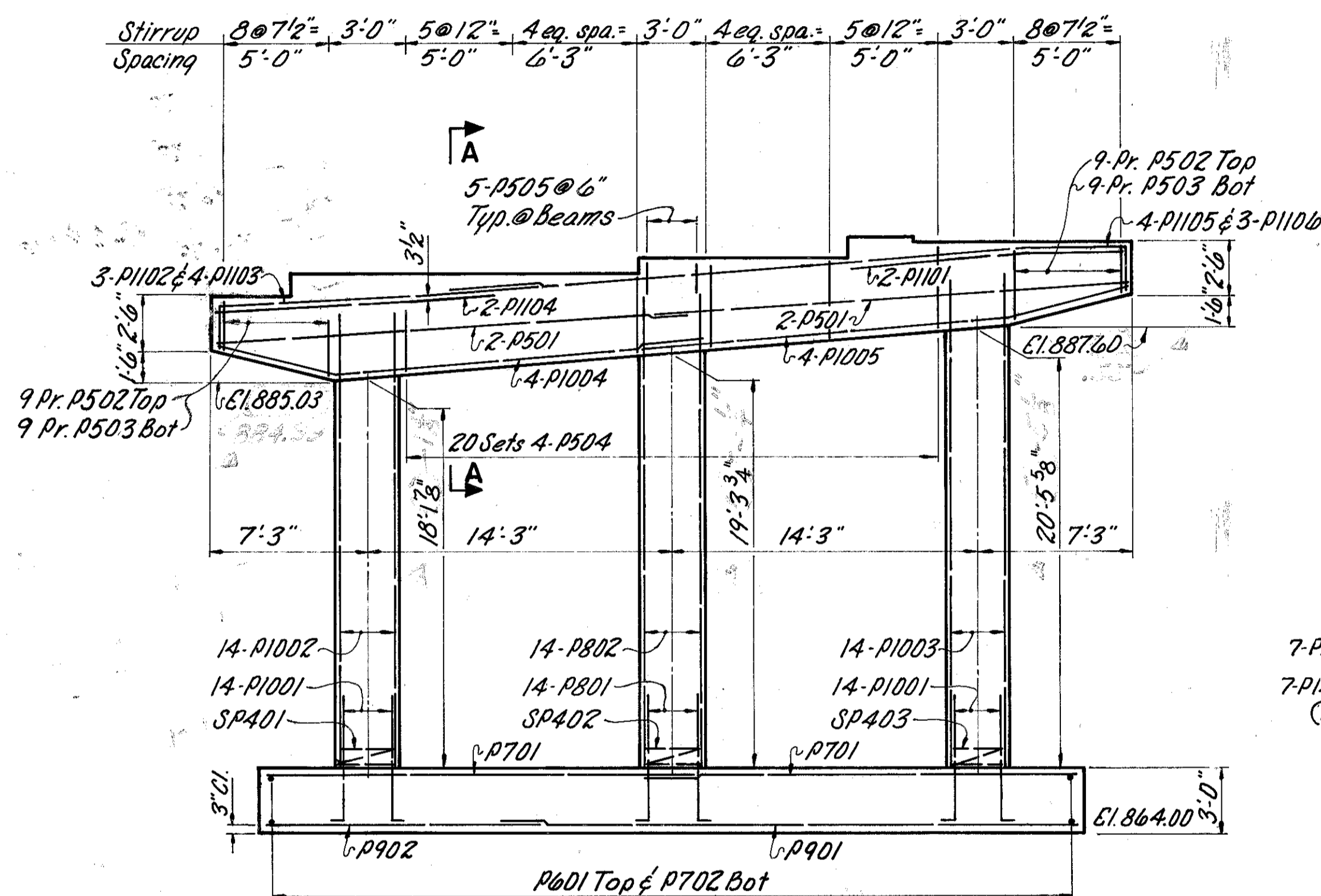
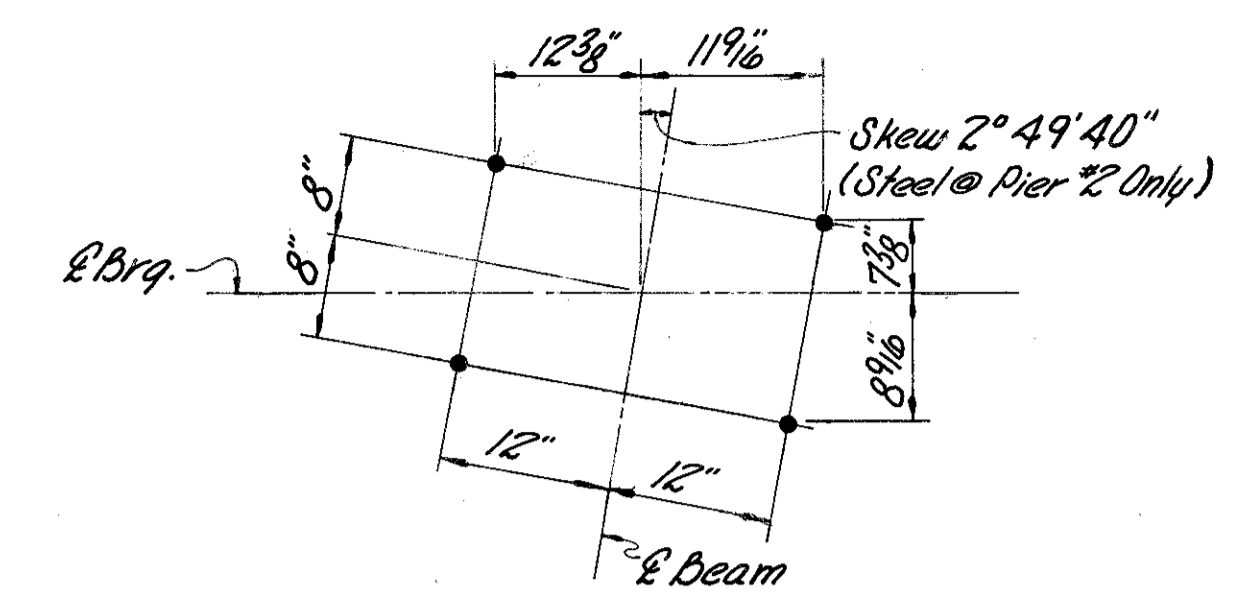
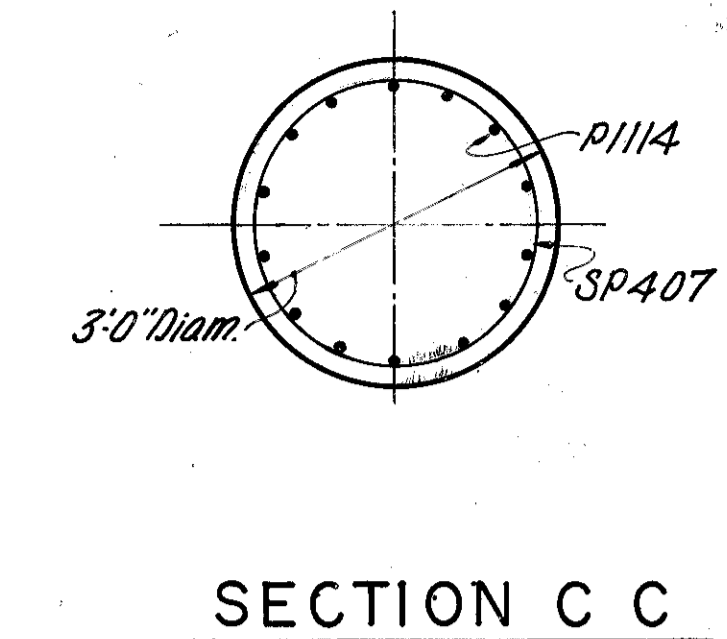
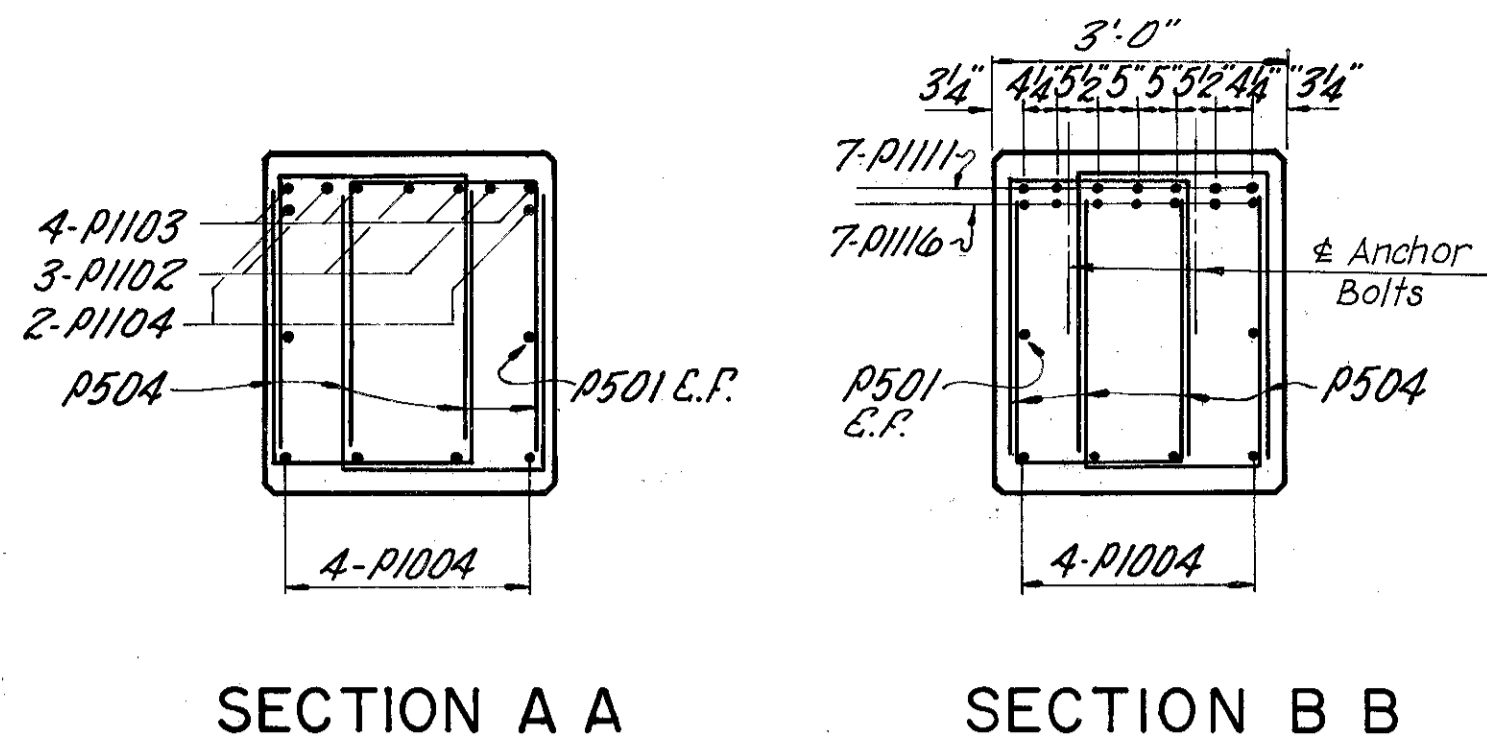
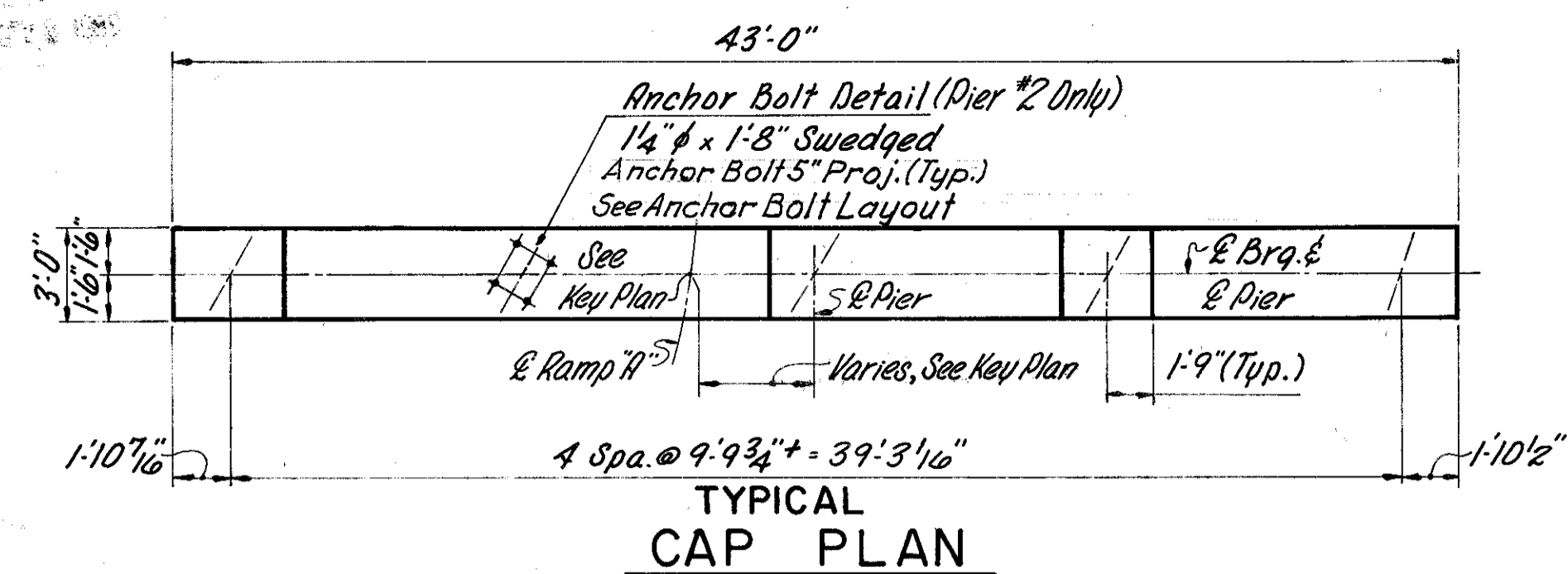
For scupper details see Std. Dwg. SD-1-69 Scuppers to be lengthened as required to clear Plunges.

All Abutment & Pier Center lines are parallel. Scupper spacing measured along face of parapet.

KING & GAVARIS		CONSULTING ENGINEERS		OHIO	
GENERAL PLAN, ELEVATION, GENERAL NOTES, AND ESTIMATED QUANTITIES					
BRIDGE NO. GRE-675-0576					
I-675 UNDER RAMP A					
GREENE COUNTY			STA 321+09.18 TO STA 323+96.88		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
J.C.L.	K.F.		S.A.	84	9/25/72

GRE-675 - 5-37

GREENE COUNTY



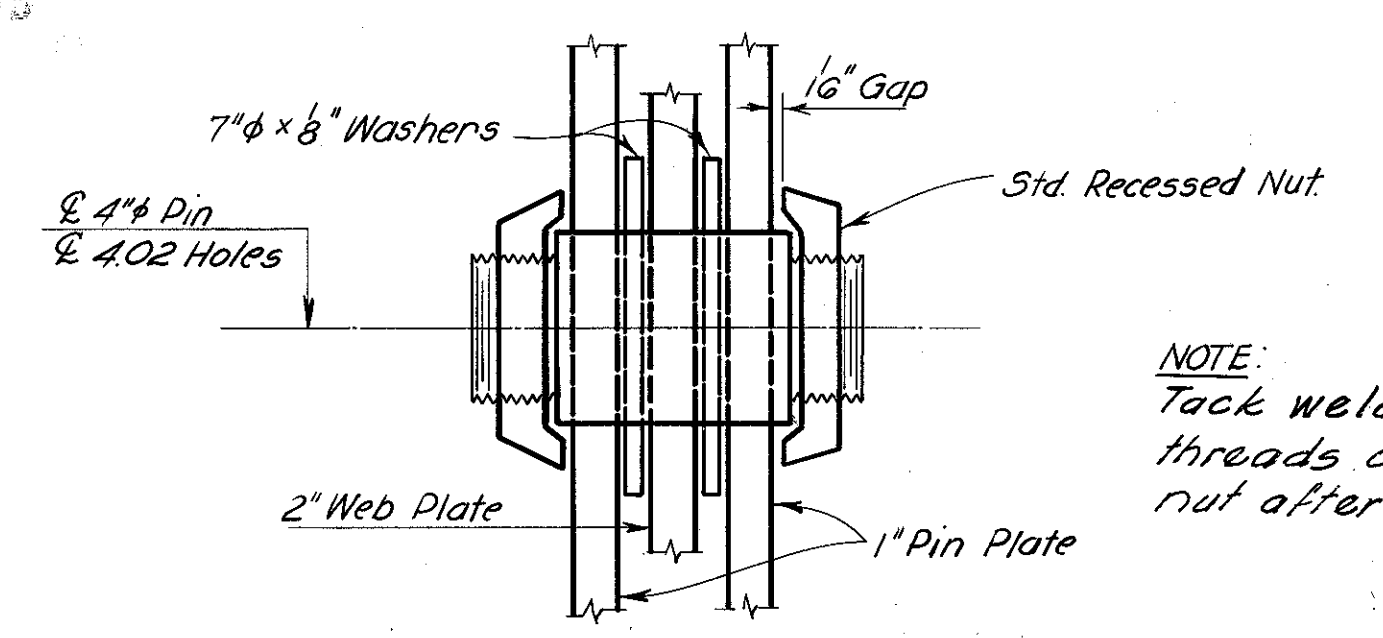
KEY PLAN
Showing Bearing Seat Elevations & Layout Dimensions

All splices and dowels will be lapped min. 30 bar Dia. unless otherwise shown.

NOTES:
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 bar (bolt) holes. For reinforcing steel list see Shs. 9, 10, 11, 11. For Reference Chord Layout & Pier Skew Angles See Sh. 2, 11.
Bearing Anchors: At the Option of the Contractor, bearing anchors (or formed holes), located and supported by templates, may be cast in place.

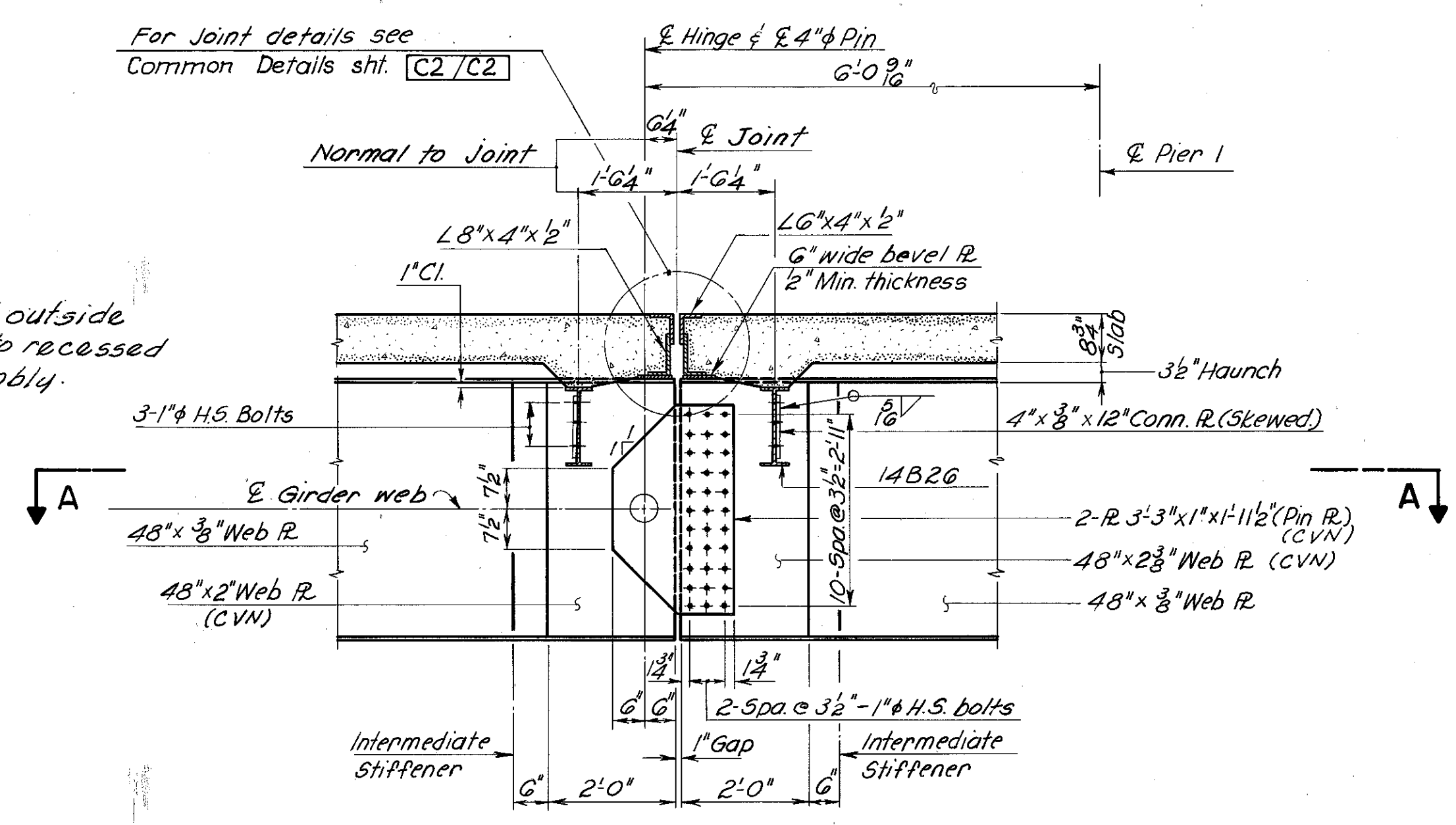
KING & GAVARIS CONSULTING ENGINEERS		5/11
OHIO		
PIERS 1, 2 & 3		
BRIDGE NO. GRE 675-0576		
I-675 UNDER RAMP A		
GREENE COUNTY		STA: 321+09.18 TO
		STA: 323+96.88
DESIGNED V.P.	DRAWN D.M.	TRACED S.R.
CHECKED S.R.	REVIEWED S.R.	DATE 9/25/72

GRE-675 - 5-37
GREENE COUNTY

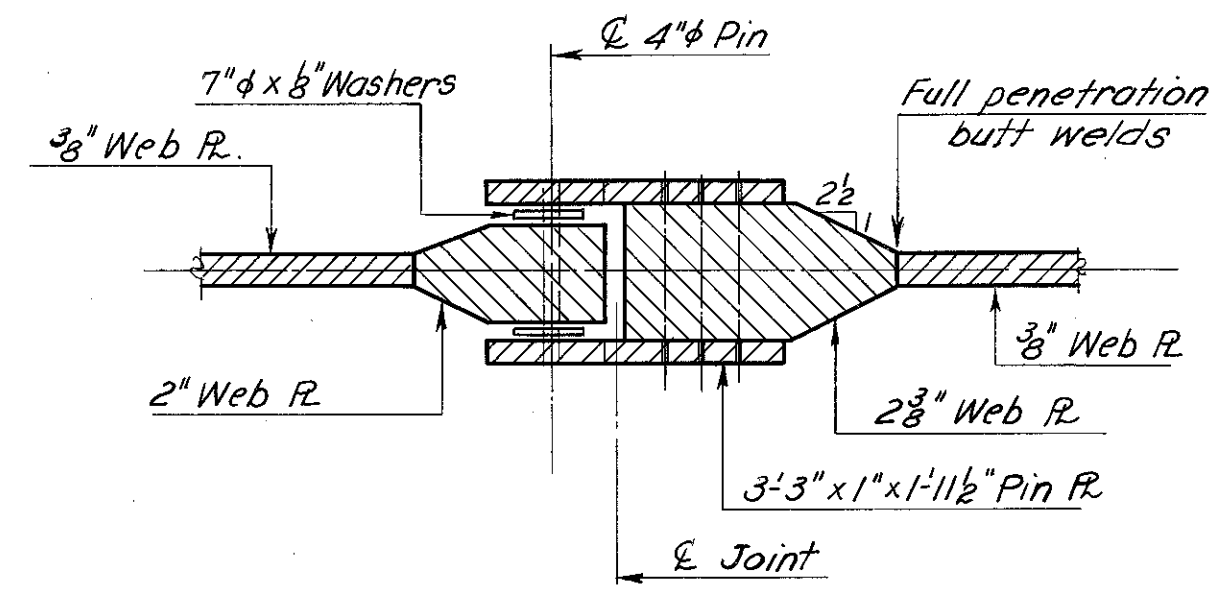


PIN-DETAIL
N.T.S.

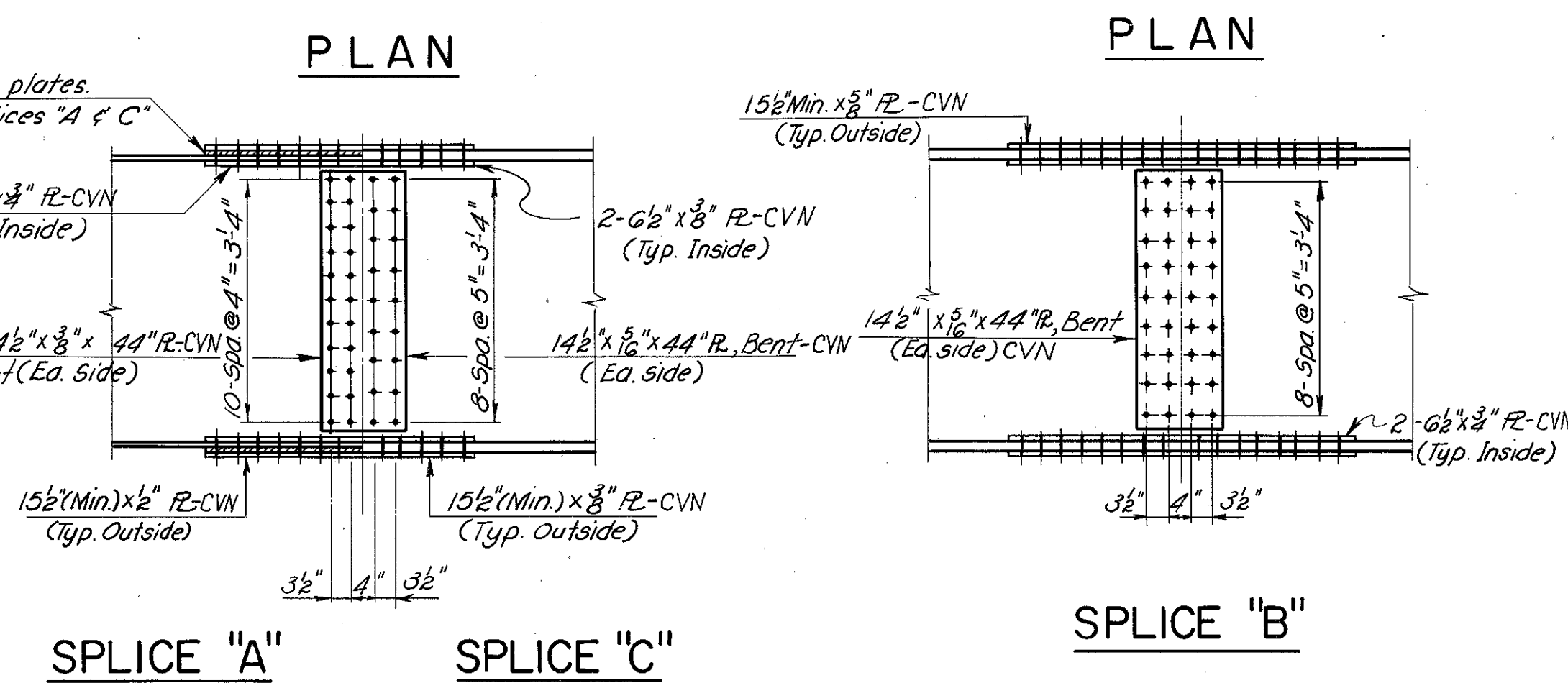
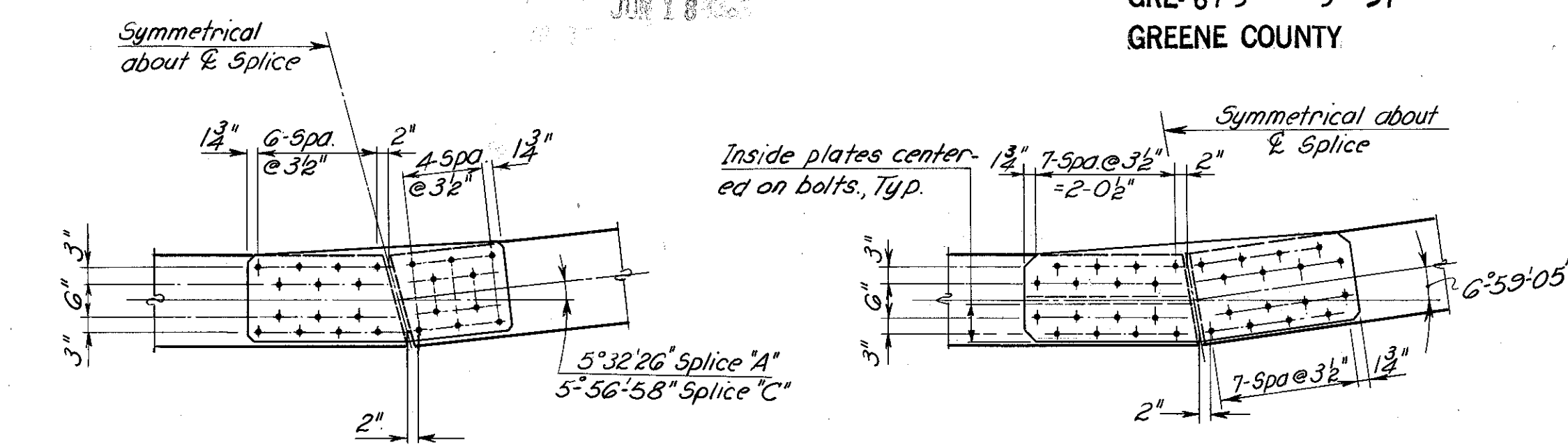
NOTE: Tack weld both outside threads of pin to recessed nut after assembly.



HINGE DETAILS

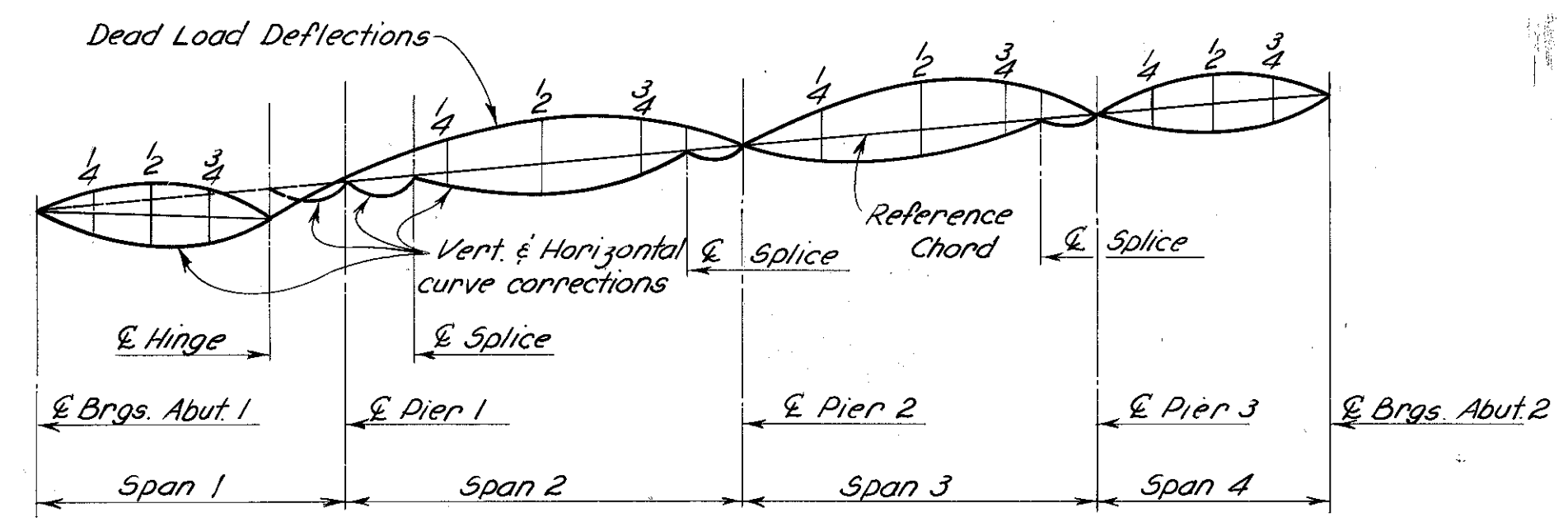


SECTION A-A
N.T.S.

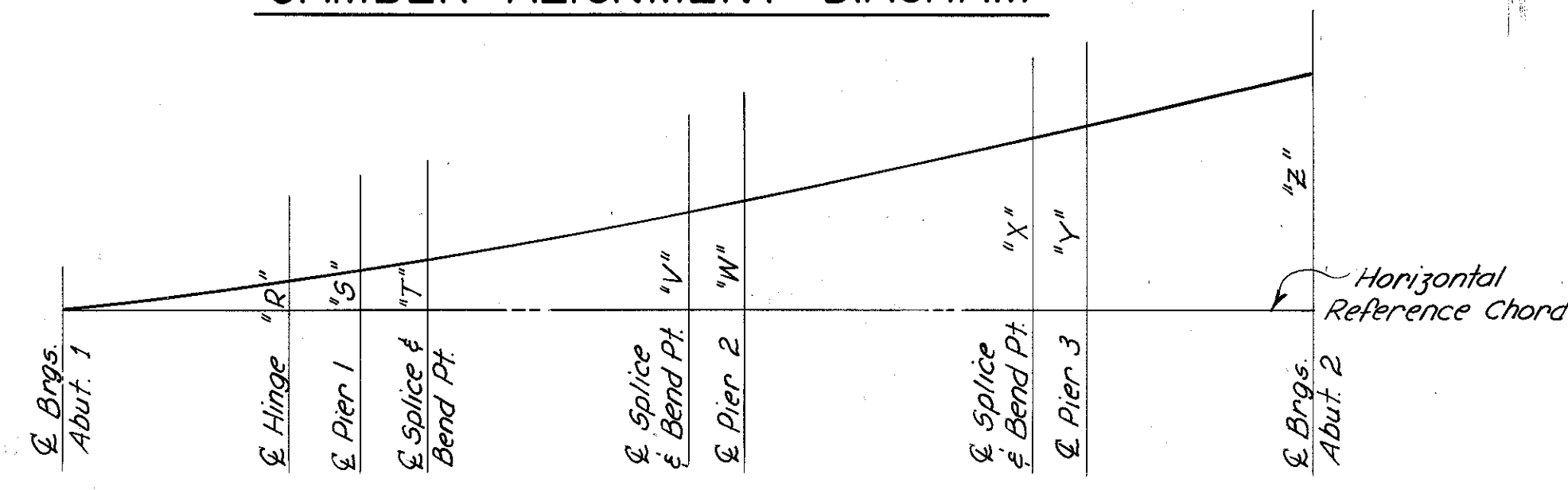


SPlice "A" SPlice "C" SPlice "B"

SPlice DETAILS
All bolts to be 1" H.S.



CAMBER ALIGNMENT DIAGRAM



BLOCKING ORDINATES

GIRDER	BLOCKING ORDINATES				
	A	B	C	D	E
€ HINGE - R	1-2 7/16"	1-2 1/2"	1-2 7/16"	1-2 3/8"	1-2 4"
€ PIER NO.1 - S	1-5 1/4"	1-5 1/8"	1-5 3/8"	1-5 1/8"	1-4 1/16"
€ SPLICE "A" - T	1-9 9/16"	1-9 3/8"	1-9 1/16"	1-9 1/16"	1-8 5/16"
€ SPLICE "B" - V	4-8 3/4"	4-8 1/2"	4-8 1/4"	4-8"	4-5 1/4"
€ PIER NO.2 - W	5-3 3/8"	5-3 1/2"	5-3 3/8"	5-2 1/8"	5-1 1/4"
€ SPLICE "C" - X	7-11 1/16"	7-10 1/8"	7-10 1/16"	7-9 7/16"	7-6 7/16"
€ PIER NO.3 - Y	8-4 1/2"	8-3 1/8"	8-2 7/8"	8-2 3/8"	7-1 1/2"
€ ABUT. NO.2 - Z	10-5 3/8"	10-4"	10-2 3/8"	10-1 1/16"	9-4 1/16"

DESCRIPTION	DEFLECTION AND CAMBER																			
	INTERIOR GIRDERS B,C & D										EXTERIOR GIRDERS A & E									
	SPAN 1		SPAN 2		SPAN 3		SPAN 4		SPAN 1		SPAN 2		SPAN 3		SPAN 4					
DEFLECTION DUE TO WEIGHT OF STEEL	0'	0'	0'	-1/16"	1/16"	3/16"	1/4"	3/16"	1/8"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"
DEFLECTION DUE TO REMAINING DEAD LOAD	1/16"	8"	1/16"	-7/16"	3/8"	1"	1 3/8"	1 3/8"	9/16"	-1/16"	3/16"	1/16"	1/16"	1/16"	8"	8"	0"	1/16"	0"	-4"
REQUIRED SHOP CAMBER	1/16"	8"	1/16"	-2"	7/16"	1 1/8"	1"	1 1/8"	-1/16"	3/16"	1/16"	1/16"	1/16"	8"	8"	0"	1/16"	0"	-1/16"	3/8"
ADJUSTMENT REQ'D FOR HORIZ. & VERT. CURVE GIRDERS A,B,C & D	-5/16"	-7/16"	-5/16"	0"	0"	-1/16"	-1"	-3/8"	0"	-1/16"	-1/16"	-3/8"	0"	-3/8"	-2"	-3/8"	-3/8"	-7/8"	-3/8"	0"
ADJUSTMENT REQ'D FOR HORIZ. & VERT. CURVE GIRDER "E"	-1/16"	-1/16"	-1/16"	0"	0"	7/16"	5/8"	4"	0"	5/16"	7/16"	3/16"	0"	1/16"	4"	3/16"	0"	1/16"	4"	3/16"

Vertical and Horizontal Curve Corrections shall be made by varying the Slab Haunch.
A negative deflection indicates downward camber required.
A negative curve correction indicates haunch reduction between end points.
A positive curve correction indicates a haunch increase between end points.
* 1/4, 1/2, 3/4 Points of span is between Hinge and Abutment Bearings.

Work this sheet with sheet **6/11**

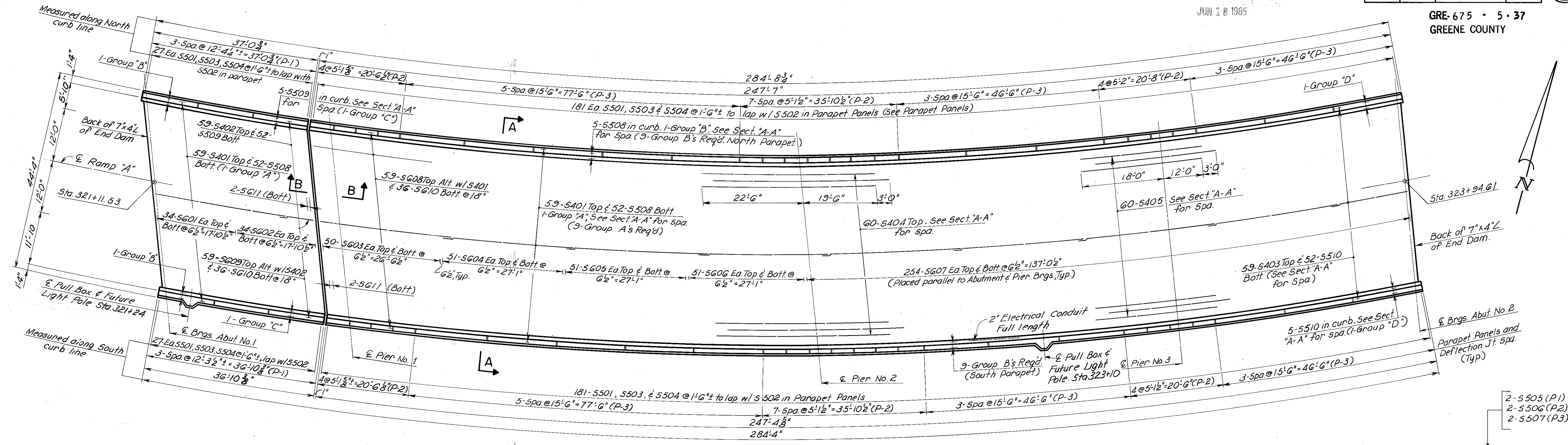
KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

SUPERSTRUCTURE DETAILS
BRIDGE NO. GRE.-675-0576
I-675 UNDER RAMP A
GREENE COUNTY STA:321+09.18 TO STA:323+96.88

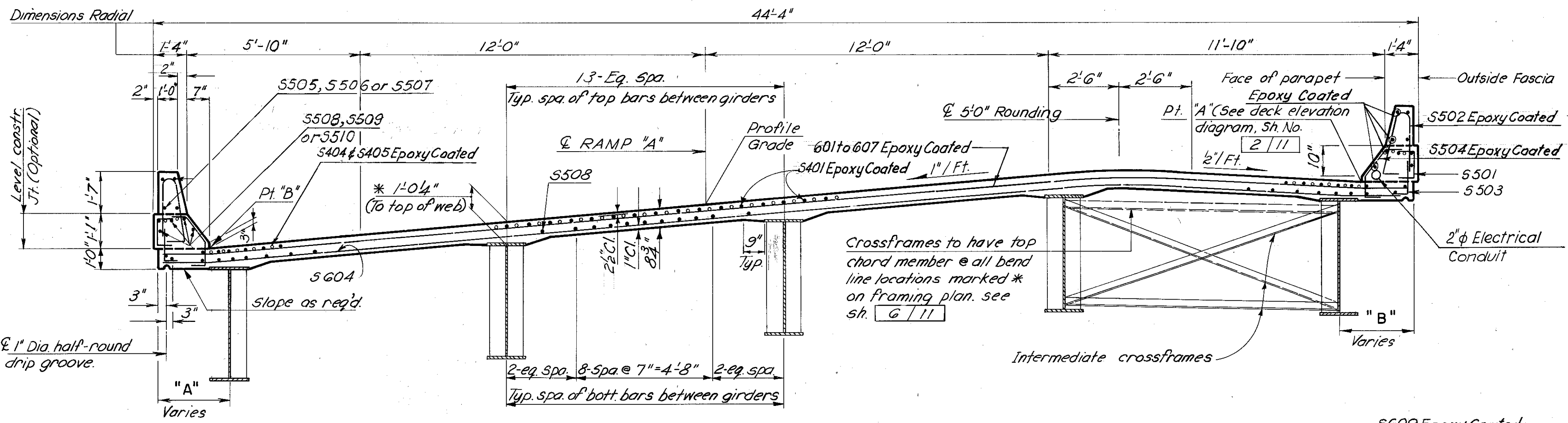
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.C.L.	A.W.		S.A.		9/24/72	4/27/82

JUN 18 1965

GRE-675 - 5-37
GREENE COUNTY



PLAN



SECTION A-A

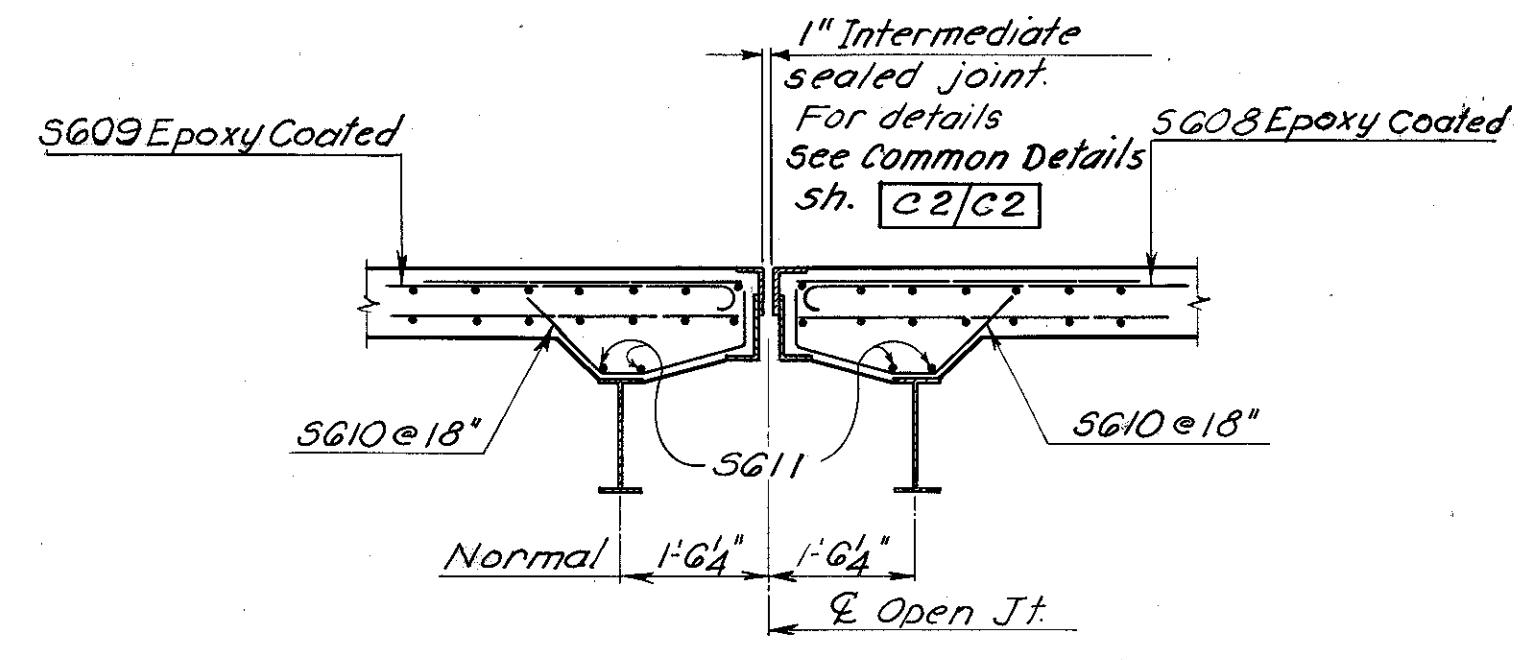
This is the nominal dimension. The quantity of deck concrete to be paid for shall be based upon this dimension, even though deviation from it may be necessary because the top flange of the girder may not have the exact camber or conformation required to place it parallel to the finished grade. Deduction shall be made for volume of encased steel plates as per Section 511.19 of the Construction and Material Specifications. Haunch will vary to accommodate negative horizontal curve requirements in all spans. The dimension shown applies at the \mathcal{E} of bearings only. For horizontal curve corrections see Sh. 7/11

PARAPET PANELS

NOTES:
For reinforcing steel list see shs. 9/10/11/12
For details of End Dams, included with Item 513 (Structure Steel) for payment, see Std. Dwg. 50-1-69 and Sheet 413
Slab thickness shown includes 1" for monolithic wearing surface. A haunch width of 9" shall be used for computing quantity of concrete. However, the 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.
All measurements are given in a horizontal plan.
For details of deflection joint see Std. Dwg. BR-1-G7
For Light Standard Pedestal, see Common Details Sh. C2/C2
All splices and dowels will be lapped min. 30 bar dia. unless otherwise shown.

LOCATION	SPAN NO. 1				SPAN NO. 2				SPAN NO. 3				SPAN NO. 4								
	\mathcal{E} Abut. 1	1/4 Pt	1/2 Pt	3/4 Pt	\mathcal{E} Hinge	\mathcal{E} Pier 1	\mathcal{E} SPl. A	1/4 Pt	1/2 Pt	3/4 Pt	\mathcal{E} SPl. B	\mathcal{E} Pier 2	1/4 Pt	1/2 Pt	3/4 Pt	\mathcal{E} SPl. C	\mathcal{E} Pier 3	1/4 Pt	1/2 Pt	3/4 Pt	\mathcal{E} Abut. 2
DIM. "A"	2'-11 3/4"	2'-9"	2'-7 3/4"	2'-7 3/4"	2'-9 8"	2'-10 3/4"	3'-2 1/2"	2'-5 3/8"	2'-1 5/8"	2'-9 3/8"	3'-2 3/8"	2'-3 3/8"	1'-9 3/8"	1'-10 3/8"	2'-6 1/2"	3'-0"	2'-6 3/8"	2'-4"	2'-4 3/8"	2'-7 3/8"	3'-2 3/8"
DIM. "B"	3'-5 1/2"	3'-6 1/2"	3'-6"	3'-4 3/8"	3'-1 1/2"	2'-11"	2'-5 3/8"	3'-0 3/8"	3'-1 3/8"	2'-2 3/4"	1'-9"	2'-7 3/8"	3'-0 1/4"	2'-10 3/4"	2'-2 3/8"	1'-9"	2'-2 1/4"	2'-5 3/8"	2'-5 1/2"	2'-2 3/4"	1'-9"

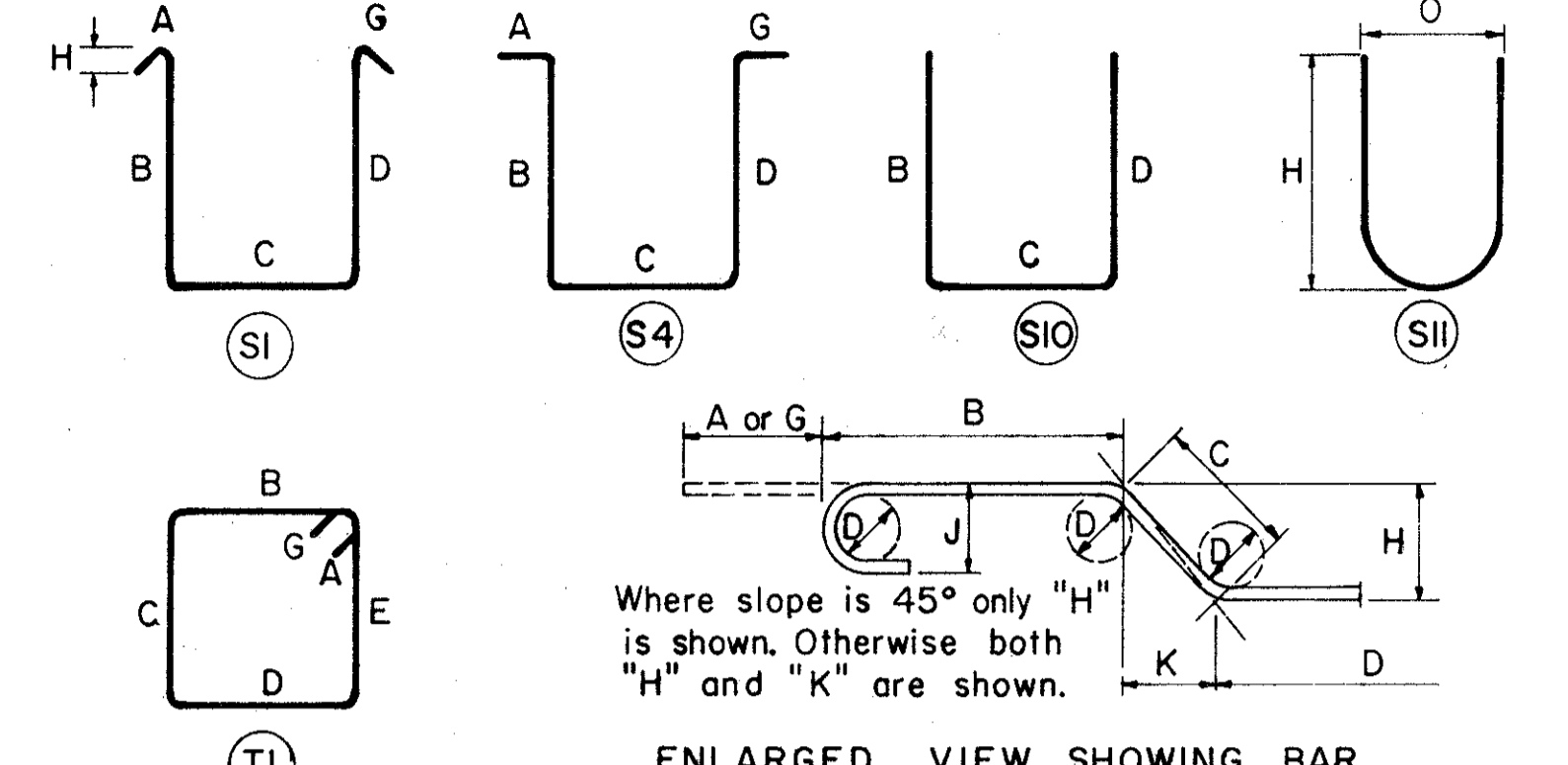
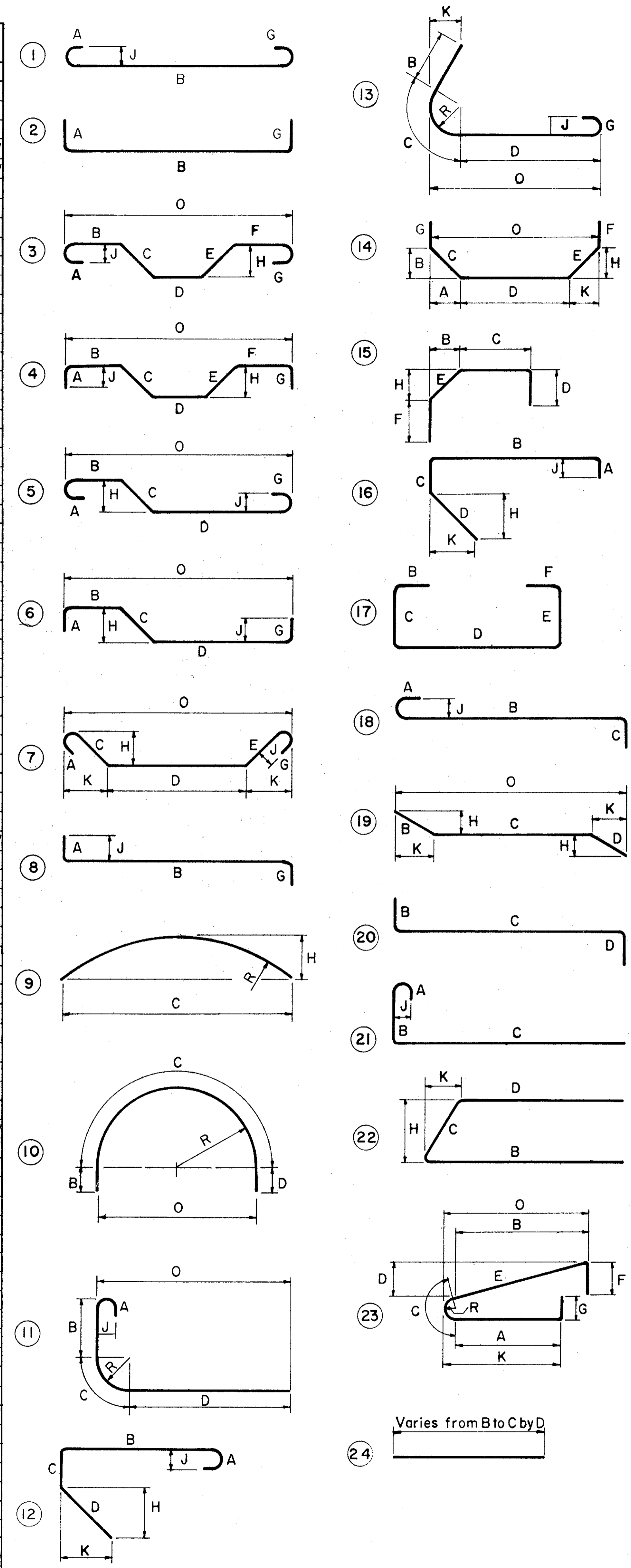
Dimensions measured radial from \mathcal{E} of web.



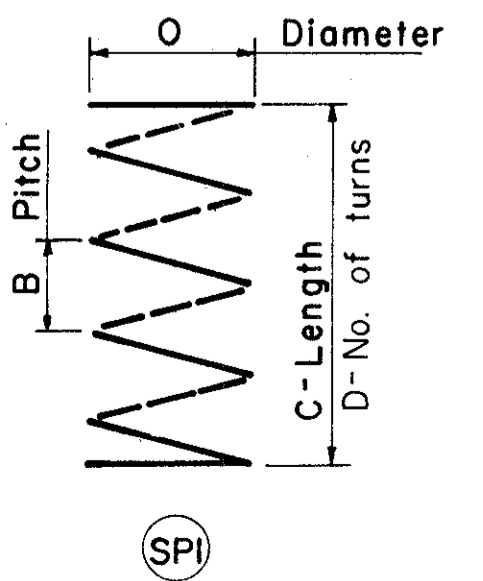
SECTION B-B

KING & GAVARIS CONSULTING ENGINEERS		8/11
CINCINNATI OHIO		
SUPERSTRUCTURE ROADWAY SLAB		
BRIDGE NO. GRE-675-0576 I-675 UNDER RAMP A		
GREENE COUNTY	STA: 321+09.18	TO STA: 323+96.88
DESIGNED J.C.L.	DRAWN A.W.	TRACED S.A.
CHECKED S.A.	REVIEWED S.A.	DATE 9/21/72

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES	
ABUTMENT NO. 1					Reinforcing steel in Abutment No. 1 shall have the suffix "A"													
A501	22	2'-4"	54	2	9"	10"												
A502	20	2'-10"	59	Str														10 Epoxy Coated
A503	12	6'-7"	82	23	2'-10 1/2"	2'-1 1/8"	1'-0"	3 1/2"	2'-1 3/8"		9"			3'-2"	2'-5"	3 1/8"		12 Epoxy Coated
A504	4	3'-8"	15	Str														
A505	2	3'-11"	8	Str														
A506	2	4'-7"	10	Str														
A507	2	5'-3"	11	Str														
A508	28	14'-8"	428	Str														8 Epoxy Coated
A509	8	8'-2"	68	Str														
A510	4	9'-5"	39	Str														
A511	4	7'-2"	30	Str														
A512	6	8'-4"	52	Str														
A513	9	6'-11"	55	2	9"	6'-2"												
A514	2	3'-9"	8	Str														
A515	8	9'-0"	75	Str														
A516	2	10'-8"	22	2	9"	9'-11"												
A517	21	10'-9"	235	71	5"	3'-0"	2'-2"	3'-0"	2'-2"		5"							
A518	47	6'-4"	310	510														
A519	32	8'-6"	284	510														
A520	8	7'-9"	65	2	9"	7'-0"												
A521	7	8'-8"	63	2	9"	7'-11"												
A522	10	9'-6"	99	2	9"	8'-9"												
A523	18	23'-6"	441	Str														
A524	8	23'-4"	195	19			22'-0"	1'-4"						4 1/2"	1'-3 1/4"	23'-3 1/4"		
A525	2	16'-8"	35	Str														
A526	2	30'-0"	63	Str														
A528	5	15'-3"	80	20		1'-7"	13'-10"											
A529	10	12'-8"	132	20		1'-7"	11'-3"											
A530	5	12'-3"	64	Str														
A531	2	10'-10"	23	Str														
A532	8	5'-0"	42	Str														
A533	2	8'-2"	17	Str														
A534	6	7'-0"	44	Str														
A535	12	6'-8"	83	Str														
A601	12	7'-7"	137	15		9"	5'-10"		11 1/2"	9"		7"						12 Epoxy Coated
A602	6	17'-6"	158	510		8'-4"	1'-2"	8'-4"										
A603	6	22'-8"	204	510		10'-11"	1'-2"	10'-11"										
A604	7	14'-3"	150	510		6'-3"	5'-7"	2'-9"										
A605	8	15'-1"	181	510		7'-1"	5'-7"	2'-9"										
A606	7	16'-0"	168	510		8'-0"	5'-7"	2'-9"										
A607	10	16'-10"	253	510		8'-10"	5'-7"	2'-9"										
A609	42	15'-1"	352	510		7'-0"	1'-5"	7'-0"										
A610	42	4'-11"	310	510		1'-11"	1'-5"	1'-11"										
A611	42	7'-1"	447	510		3'-3"	11"	3'-3"										
A701	2	4'-8"	19	1	10"	3'-10"							7"					2 Epoxy Coated
A702	2	4'-8"	19	15		9"	3'-2"		9 1/2"	9"		3"						2 Epoxy Coated
A703	2	5'-0"	20	15		9"	3'-5"		10"	9"		5"						2 Epoxy Coated
A704	2	5'-8"	23	15		9"	3'-11"		11 1/2"	9"		7"						2 Epoxy Coated
A705	2	6'-3"	26	15		9"	4'-7"		11 1/2"	9"		7"						2 Epoxy Coated
A801	6	12'-1"	194	Str														
A802	14	24'-2"	303	Str														
A803	6	11'-2"	179	Str														
A804	42	6'-2"	692	14		1'-3"	3'-8"	1'-3"				2'-7"		2'-7"				
Total			8,520															



- 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 numbers.
 - All dimensions are out to out of bar.
 - Radius dimension "R" is to outside of bar.
 - The length of bent bars is measured along the centerline.
 - For standard hook dimensions, see Sect. 509.05 of the specifications.
 - For bar type SPI, 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. 1/2 Closed coils shall be provided at the ends of each spiral unit.
 - Figures in circles show bar types.
 - "J" Dimension on hooks is shown only where necessary to restrict hook size. Otherwise standard hooks are to be used.
 - Where "J" is not shown, "J" will be kept equal to or less than "H". Where "J" can exceed "H" it will be shown.
 - "H" Dimension on stirrups will be shown where necessary to restrict hooks.
 - All bends shown are bent around a standard mandrel, except stirrups S11, ties T3, spirals SPI and where radius "R" is indicated.
 - Four steel channel, tee or angle spacers, weighing approximately 0.80 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.
 - For additional bars see sheet Q11/11
 - 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.



KING & GAVARIS CONSULTING ENGINEERS		9/11
CINCINNATI		OHIO
REINFORCING STEEL LIST		
BRIDGE NO. GRE - 675-0576		
I-675 UNDER RAMP A		
GREENE COUNTY		STA: 321+09.18 TO STA: 323+96.88
DESIGNED	DRAWN	TRACED
	A.W.	S.A.
CHECKED	REVIEWED	DATE
	S.A.	9/22/72
		REVISED

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
ABUTMENT NO. 2					Reinforcing steel in Abutment No. 2 shall have the suffix "B"												
A501	24	2'-4"	58	2	9"	10"											
A502	20	2'-10"	59	Str													10 Epoxy Coated
A503	14	6'-5"	94	23	2'-10 1/2"	2'-1 1/2"	1'-0"	3 3/8"	2'-1 3/8"					3'-2"	2'-5"	3 3/8"	14 Epoxy Coated
A504	4	3'-8"	15	Str													
A505	2	3'-11"	8	Str													
A506	2	4'-11"	10	Str													
A507	2	5'-11"	12	Str													
A508	28	16'-8"	487	Str													8 Epoxy Coated
A509	8	9'-2"	76	Str													
A510	4	11'-1"	46	Str													
A511	4	9'-0"	38	Str													
A512	6	10'-6"	66	Str													
A513	10	7'-4"	76	2	9"	6'-7"											
A514	2	3'-8"	8	Str													
A515	8	10'-9"	30	Str													
A516	2	10'-6"	22	2	9"	9'-9"											
A517	21	10'-9"	235	71	5"	3'-0"	2'-2"	3'-0"	2'-2"		5"						
A518	47	6'-4"	310	S10		1'-7"	3'-5"	1'-7"									
A519	32	8'-6"	284	S10		1'-7"	5'-7"	1'-7"									
A520	8	8'-1"	67	2	9"	7'-4"											
A521	7	8'-11"	65	2	9"	8'-2"											
A522	9	9'-4"	88	2	9"	8'-7"											
A523	18	22'-5"	421	Str													
A524	8	22'-6"	188	19			2'-2"	1'-4"				1 1/8"	1'-4"	22'-6"			
A525	2	16'-8"	35	Str													
A526	2	29'-0"	60	Str													
A528	5	13'-8"	71	20		1'-7"	12'-3"										
A529	10	13'-11"	145	20		1'-7"	12'-6"										
A530	5	13'-6"	70	Str													
A531	2	10'-10"	23	Str													
A532	8	6'-0"	50	Str													
A533	2	8'-8"	18	Str													
A534	6	6'-8"	42	Str													
A535	14	6'-10"	100	Str													
A601	14	8'-0"	168	15		9"	6'-3"		1'-0"	9"		7"					14 Epoxy Coated
A602	7	18'-6"	135	S10		8'-10"	1'-2"	8'-10"									
A603	7	22'-6"	237	S10		10'-10"	1'-2"	10'-10"									
A604	8	14'-8"	176	S10		6'-8"	5'-7"	2'-9"									
A605	8	15'-5"	185	S10		7'-5"	5'-7"	2'-9"									
A606	7	16'-3"	171	S10		8'-3"	5'-7"	2'-9"									
A607	9	16'-8"	225	S10		8'-8"	5'-7"	2'-9"									
A609	41	15'-1"	929	S10		7'-0"	1'-5"	7'-0"									
A610	41	4'-11"	303	S10		1'-11"	1'-5"	1'-11"									
A611	41	7'-1"	436	S10		3'-3"	11"	3'-3"									
A701	2	4'-8"	19	1	10"	3'-10"								7"			2 Epoxy Coated
A702	2	4'-8"	19	15		9"	3'-2"		9 1/2"	9"		3"					2 Epoxy Coated
A703	2	5'-0"	20	15		9"	3'-5"		10"	9"		5"					2 Epoxy Coated
A704	2	6'-2"	25	15		9"	4'-5"		11 1/2"	9"		7"					2 Epoxy Coated
A705	2	7'-1"	29	15		9"	5'-5"		11 1/2"	9"		7"					2 Epoxy Coated
A801	6	13'-6"	216	Str													
A802	14	23'-5"	875	Str													
A803	6	13'-10"	222	Str													
A804	41	6'-2"	676	14		1'-3"	3'-8"	1'-3"				2'-7"		2'-7"			
Total			8,566														
Total	Abutments		17,086														

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
PIER NO. 1																	
SP401	1	18'-0"	339	SPI		4 1/2"	18'-0"	51									2'-8"
SP402	1	19'-1 1/2"	359	SPI		4 1/2"	19'-1 1/2"	54									2'-8"
SP403	1	20'-3"	379	SPI		4 1/2"	20'-3"	57									2'-8"
P501	4	22'-2"	92	Str													
P502	36	Varies 5'-7" to 8'-11" by 5" 4-cc	272	S10		Varies 2'-0" to 3'-8" by 2 1/2"	1'-10 3/8"	Varies 2'-0" to 3'-8" by 2 1/2"									
P503	36	5'-1"	191	S10		1'-9"	1'-10 3/8"	1'-9"									
P504	80	8'-11"	744	S10		3'-8"	1'-10 3/8"	3'-8"									
P505	25	5'-7"	146	S10		1'-7"	2'-8"	1'-7"									
P601	39	7'-6"	439	Str													
P701	16	20'-4"	665	Str													
P702	39	7'-6"	598	Str													
P801	14	5'-11"	221	2	11"	5'-3"											
P802	14	21'-10"	816	Str													
P901	8	27'-7"	750	Str													
P902	8	13'-3"	360	Str													
P1001	28	6'-11"	833	11		3 1/2"	1'-10 1/2"	4'-9"									1'-3"
P1002	14	21'-5"	1,290	Str													
P1003	14	23'-9"	1,431	Str													
P1004	4	23'-2"	339	19		5'-9"	17'-5"					1'-11"	5'-7"	23'-0"			
P1005	4	23'-2"	339	19		5'-9"	17'-5"					1'-0"	5'-7"	23'-0"			
P1101	2	13'-1"	139	19		7'-6"	5'-7"					4"	7'-6"				
P1102	3	14'-9"	235	15		1"	13'-1"		2'-0"			2'-0"					
P1103	4	16'-9"	356	15		1"	15'-1"		2'-0"			2'-0"					
P1104	2	13'-1"	139	Str													
P1105	4	33'-7"	714	15		26'-1"	5'-7"	2'-2"	26'-2"			1'-4"					
P1106	3	14'-11"	238	15		7'-6"	5'-7"	2'-2"	7'-6"			4"					
Total			12,544														
PIER NO. 2																	
SP404	1	22'-6"	419	SPI		4 1/2"	22'-6"	63									2'-8"
SP405	1	23'-7 1/2"	440	SPI		4 1/2"	23'-7 1/2"	66									2'-8"
SP406	1	24'-9"	460	SPI		4 1/2"	24'-9"	69									2'-8"
P501	4	22'-2"	92	Str													
P503	64	5'-1"	339	S10		1'-9"	1'-10 3/8"	1'-9"									
P504	120	8'-11"	1,116	S10		3'-8"	1'-10 3/8"	3'-8"									
P505	25	5'-7"	146	S10		1'-7"	2'-8"	1'-7"									
P506	64	Varies 5'-7" to 8'-11" by 2 1/2" 4-cc	484	S10		Varies 2'-0" to 3'-8" by 2 1/2"	1'-10 3/8"	Varies 2'-0" to 3'-8" by 2 1/2"									
P602	41	11'-0"	677	Str													
P703	24	21'-4"	1,047	Str													

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 numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
 2. For bar types see sheet 9/11

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
PIER NO. 2 CONTINUED																	
P303	12	14'-4"	585	Str													
P904	12	28'-6"	1,163	Str													
P1004	4	23'-2"	399	19		5'-9"	17'-5"					1'-11"		5'-7"	23'-0"		
P1005	4	23'-2"	399	19		5'-9"	17'-5"					1'-0"		5'-7"	23'-0"		
P1006	41	11'-0"	1,941	Str													
P1111	7	19'-0"	707	15		1"	17'-4"		2'-0"			2'-0"					
P1112	7	12'-7"	468	19		7'-0"	5'-7"					4"		7'-0"			
P1113	7	31'-5"	1,168	15		23'-11"	5'-7"	2'-3"	23'-11"			1'-1"					
P1116	7	12'-7"	468	Str													
P1401	21	9'-11"	1,593	11		1'-2"	2'-8"	6'-1"						7'-9"	1'-8"		
P1402	21	11'-11"	1,914	11		1'-2"	2'-8"	8'-1"						9'-9"	1'-8"		
P1403	7	19'-3"	1,031	Str													
P1404	7	21'-3"	1,138	Str													
P1405	7	20'-4"	1,089	Str													
P1406	7	22'-4"	1,196	Str													
P1407	7	21'-5"	1,147	Str													
P1408	7	23'-5"	1,254	Str													
		Total	22,880														
PIER NO. 3																	
SP407	1	27'-0"	500	SPI		4 1/2"	27'-0"	75							2'-8"		
SP408	1	27'-9"	513	SPI		4 1/2"	27'-9"	77							2'-8"		
SP409	1	28'-10 1/2"	534	SPI		4 1/2"	28'-10 1/2"	80							2'-8"		
P501	4	22'-2"	92	Str													
P502	36	Varies 5'-7" to 8'-11" by 5'-4" @ 2'	272	SIO		Varies 2'-0" to 3'-8" by 2'	1'-10 3/8"	Varies 2'-0" to 3'-8" by 2'									
P503	36	5'-1"	191	SIO		1'-9"	1'-10 3/8"	1'-9"									
P504	80	8'-11"	744	SIO		3'-8"	1'-10 3/8"	3'-8"									
P505	25	5'-7"	146	SIO		1'-7"	2'-8"	1'-7"									
P603	39	9'-0"	527	Str													
P701	18	20'-4"	748	Str													
P803	39	9'-0"	937	Str													
P901	9	27'-7"	844	Str													
P902	9	13'-3"	405	Str													
P1001	14	6'-11"	417	11		3 1/2"	1'-10 1/2"	4'-9"									1'-3"
P1004	4	23'-2"	399	19		5'-9"	17'-5"					1'-11"		5'-7"	23'-0"		
P1005	4	23'-2"	399	19		5'-9"	17'-5"					1'-0"		5'-7"	23'-0"		
P1007	14	3'-4"	1,888	Str													
P1101	2	13'-1"	139	19		7'-6"	5'-7"					4"		7'-6"			
P1102	3	14'-9"	235	15		1"	13'-1"		2'-0"			2'-0"					
P1103	4	16'-9"	356	15		1"	15'-1"		2'-0"			2'-0"					
P1104	2	13'-1"	139	Str													
P1105	4	33'-7"	714	15		26'-1"	5'-7"	2'-2"	26'-2"			1'-4"					
P1106	3	14'-11"	238	15		7'-6"	5'-7"	2'-2"	7'-6"			4"					
P1107	28	7'-3"	1,079	11		3"	2'-1"	4'-11"									1'-5"
P1114	14	30'-8"	2,281	Str													
P1115	14	32'-8"	2,430	Str													
		Total	17,167														
		Total Piers	52,591														
SUPERSTRUCTURE																	
S401	531	30'-0"	10,641	Str													53 Epoxy Coated
S402	59	7'-10"	309	Str													59 Epoxy Coated
S403	59	17'-2"	677	Str													59 Epoxy Coated
S404	60	42'-0"	1,683	Str													60 Epoxy Coated
S405	60	30'-0"	1,202	Str													60 Epoxy Coated
S501	416	2'-4"	1,012	2	9"	10"						9"					
S502	416	5'-10"	2,531	23	2'-0 1/8"	2'-2 3/8"	1'-0"	3 1/2"	2'-2 3/8"	9"				2'-4"	2'-6"	3 3/8"	416 Epoxy Coated
S503	416	2'-5"	1,049	2	9"	1'-8"											
S504	416	3'-0"	1,302	15		9"	11"	9"	11 1/2"	5"				7"			416 Epoxy Coated

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
SUPERSTRUCTURE CONTINUED																	
S505	24	12'-0"	300	Str													12 Epoxy Coated
S506	120	4'-9"	595	Str													60 Epoxy Coated
S507	88	15'-2"	1,392	Str													44 Epoxy Coated
S508	558	30'-0"	17,460	Str													36 Epoxy Coated
S509	62	8'-4"	539	Str													4 Epoxy Coated
S510	62	13'-11"	1,288	Str													4 Epoxy Coated
S601	68	Varies 45'-1" to 45'-6" by 1/2" @ 2'-0"	4,626	Str													34 Epoxy Coated
S602	68	Varies 44'-9" to 45'-1" by 1/2" @ 2'-0"	4,588	Str													34 Epoxy Coated
S603	100	44'-6"	6,684	Str													50 Epoxy Coated
S604	102	44'-3"	6,779	Str													51 Epoxy Coated
S605	102	44'-0"	6,741	Str													51 Epoxy Coated
S606	102	43'-10"	6,715	Str													51 Epoxy Coated
S607	508	43'-8"	33,318	Str													254 Epoxy Coated
S608	59	28'-8"	2,540	1	8"	28'-0"										6"	59 Epoxy Coated
S609	59	6'-0"	532	1	8"	5'-4"										6"	59 Epoxy Coated
S610	72	2'-8"	288	1A	7 1/2"	7 1/2"	11"	6 1/2"	11 1/2"	54"		3"		11 1/2"	2'-1 1/2"		
S611	4	44'-11"	270	Str													
L501	8	3'-6"	24	2	9"	2'-0"										9"	
L502	8	8'-3"	69	2	3'-2"	2'-2"										3'-2"	8 Epoxy Coated
L503	12	7'-6"	94	1A	6"	2'-7"	1'-4"	2'-7"	6"			1'-10"		1'-10"			
L504	10	3'-2"	33	Str													
		Total Superstructure	115,281														

- 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 numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
 - For bar types see sheet 9/11
 - All dimensions are out to out of bar.
 - Radius dimension "R" is to outside of bar.
 - The length of bent bars is measured along the centerline.
 - For additional notes see sheet 9/11

KING & GAVARIS CONSULTING ENGINEERS		11/11
CINCINNATI		OHIO
REINFORCING STEEL LIST		
BRIDGE NO. GRE - 675 - 0576		
I-675 UNDER RAMP A		
GREENE COUNTY	STA: 321+09.18	TO
	STA: 323+96.88	
DESIGNED	DRAWN	TRACED
	A.W.	S.A.
CHECKED	DATE	REVIEWED
	9/25/72	

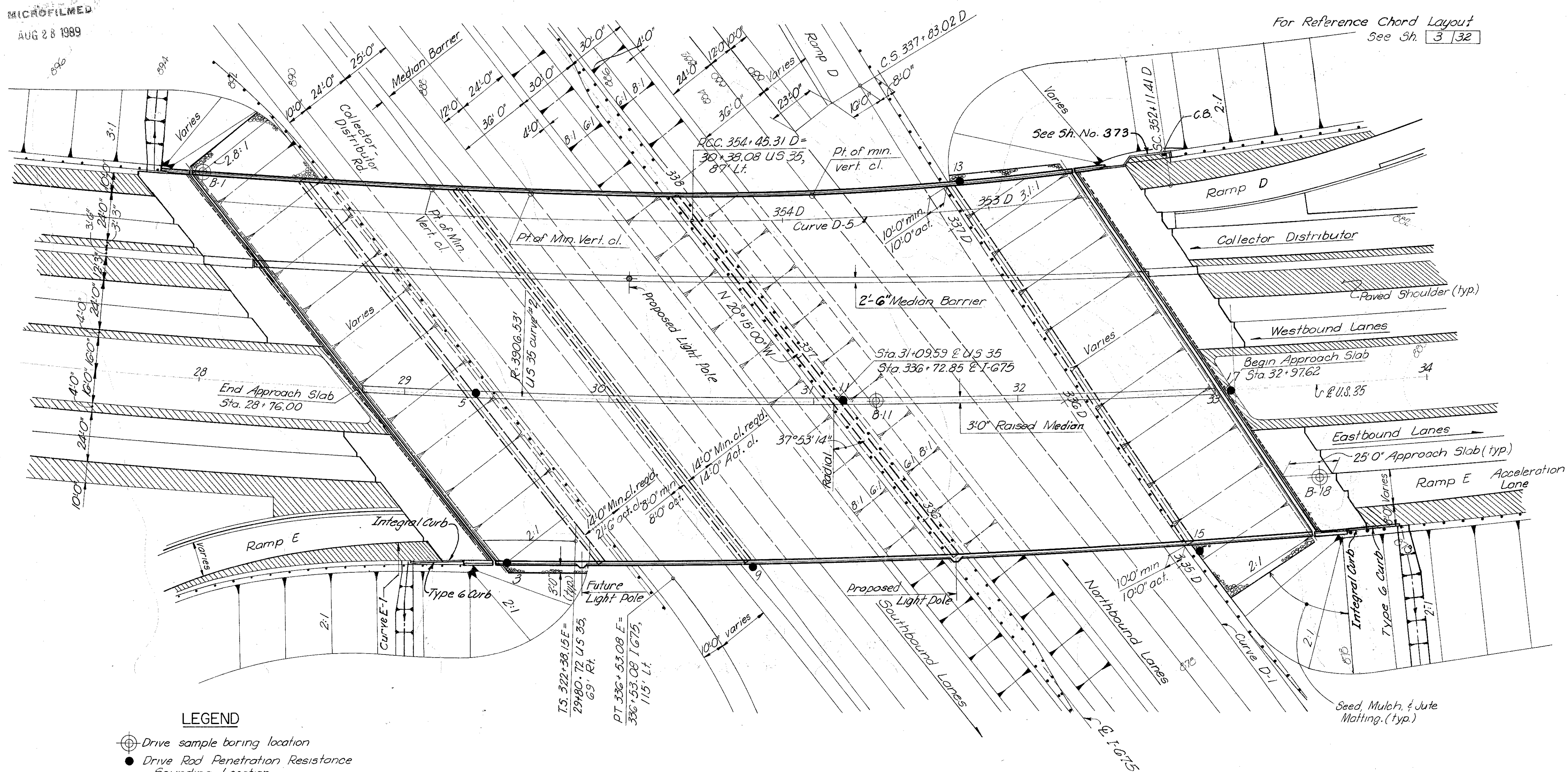
MICROFILMED
AUG 28 1989

MICROFILMED
JUN 19 1985

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

421
616

GRE-675-5-37
GREENE COUNTY



CURVE DATA & U.S. 35
CURVE NO. 2
PI=Sta. 27+30.82
Δ=27°10'00"
Dc=1°28'00"
R=3906.53'
T=943.89
L=1852.27
E=112.41

CURVE DATA RAMP D
CURVE D-5
PI=Sta. 353+28.62
Δ=9°21'22"
Dc=4°00'00"
R=1432.59'
T=117.21
L=233.90
E=4.79

CURVE DATA RAMP D
CURVE D-1
PI=Sta. 335+56.55
Δ=6°48'08"
Dc=1°30'00"
R=3819.72'
T=227.01
L=453.49
E=6.74

CURVE DATA RAMP E
CURVE E-1
PI=Sta. 323+72.84
Δ=25°00'00"
Dc=229.18
R=229.18
T=134.63
L=67.90
E=200.00

LEGEND

- ⊕ Drive sample boring location
- Drive Rod Penetration Resistance Sounding Location

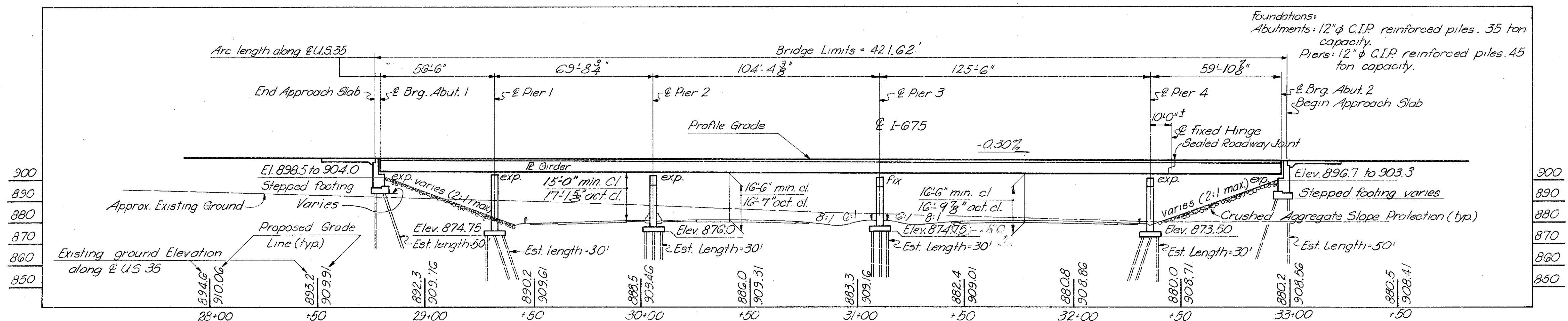
PLAN

Note:
Earthwork limits shown are schematic.
Actual slopes shall conform to Plan Cross-Sections.

DESIGN YEAR TRAFFIC

1989 ADT:

I-675	49,840
U.S. 35	65,420
Ramp E	4,960
I-675 Collector Dist.	10,000
U.S. 35 Collector Dist.	11,720



PROFILE ON CENTER LINE U.S. 35

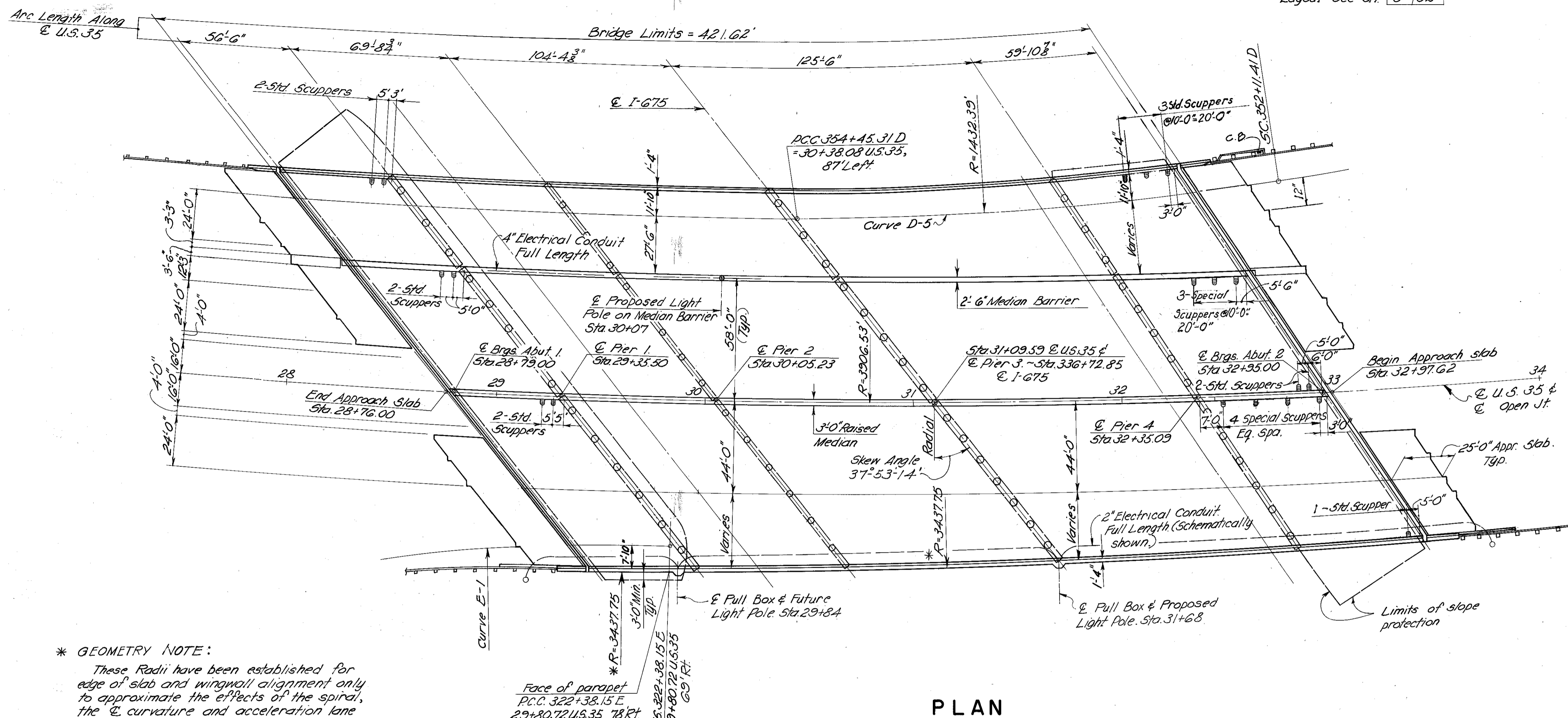
PROPOSED STRUCTURE
TYPE: Continuous steel Plate Girder with reinforced concrete deck & substructure
SPANS: 56'-6", 69'-8 3/4", 104'-4 3/8", 125'-6", 59'-10 3/8"
ROADWAY: Variable widths 180'-4" Avg.
LOADING: HS 20-44 and Alternate Military
SKEW: Varies, 37°53'14" Rt Fwd at I-675
WEARING SURFACE: monolithic Concrete
APPROACH SLABS: 25'-0" long (Std A-1-72)
ALIGNMENT: Left curve, Dc 1°28'00"

KING & GAVARIS
CINCINNATI CONSULTING ENGINEERS OHIO

SITE PLAN-I
BRIDGE NO. GRE-675-0589
I-675 UNDER RELOCATED U.S. 35
GREENE COUNTY STA 28+76.00 TO STA 32+97.62

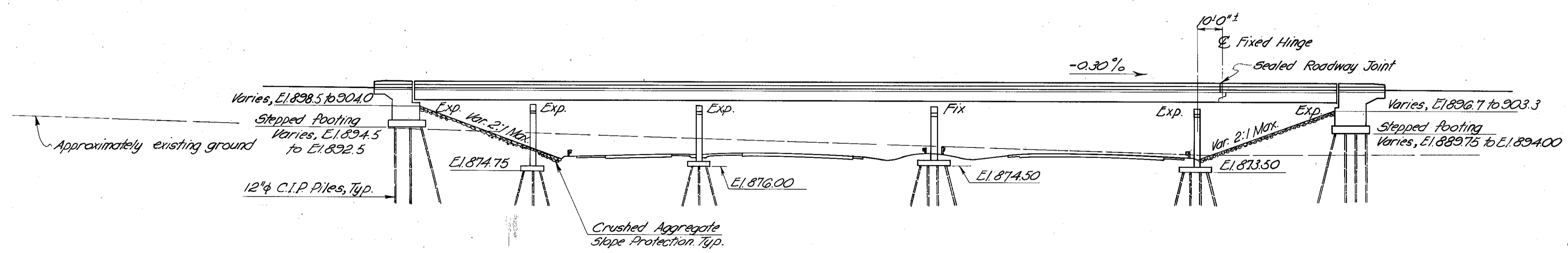
PRESENT TOPOGRAPHY SURVEYED	DESIGNED	PROPOSED WORK DRAWN	CHECKED	REVISED
AERIAL SURVEY	JCL	AW	S.A.	

For Reference Chord
Layout See Sh. 3/32



PLAN

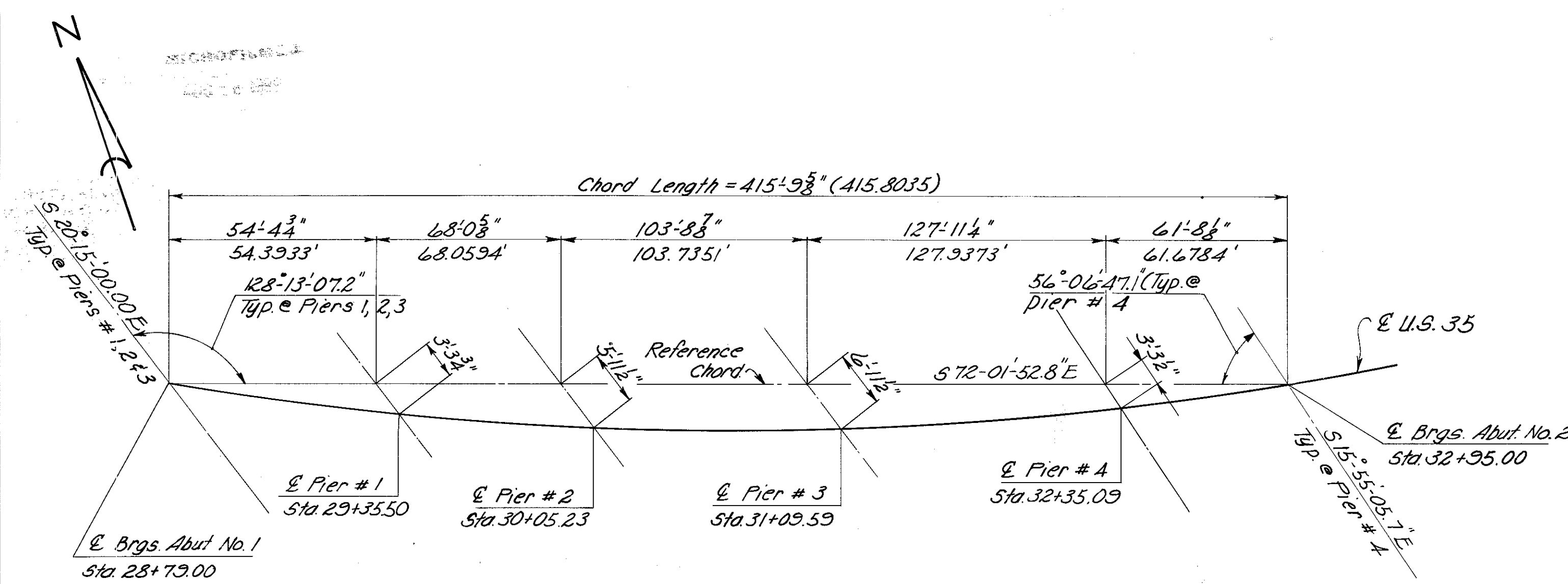
*** GEOMETRY NOTE:**
These Radii have been established for edge of slab and wingwall alignment only to approximate the effects of the spiral, the ϵ curvature and acceleration lane taper.



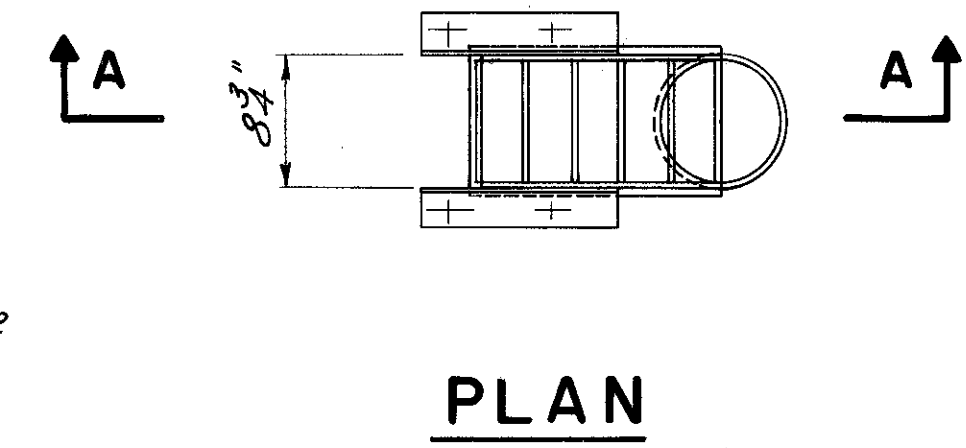
ELEVATION

NOTES:
For Standard Scupper Details see Std. Dwg. SD-1-69
For Special Scupper Details see Sh. 3/32
For Underbridge Light Locations see Sh. 162/201
For Sign Attachments on Face of Bridge and Electrical Connections see Shs. 162/201

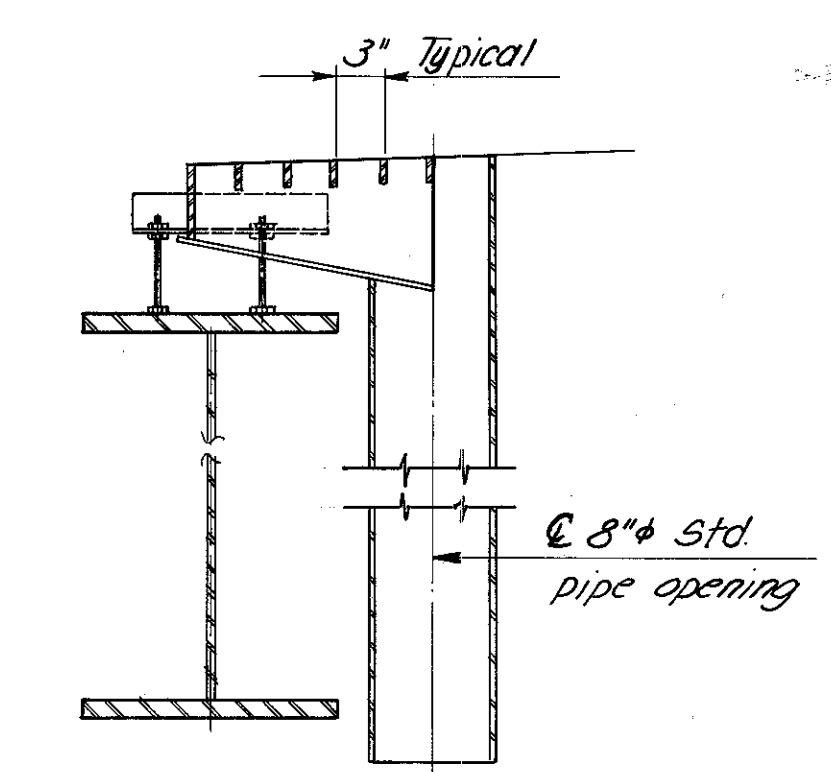
KING & GAVARIS CONSULTING ENGINEERS		2/32	
CINCINNATI OHIO			
GENERAL PLAN & ELEVATION			
BRIDGE NO. GRE-675-0589			
I-675 UNDER RELOCATED U.S. 35			
GREENE COUNTY		STA: 28+76.00 TO STA: 32+97.62	
DESIGNED V.P.	DRAWN A.W.	TRACED S.A.	CHECKED S.A.
DATE 9/25/72		REVISIONS	



REFERENCE CHORD LAYOUT
(Schematic)



PLAN



SECTION A-A

SPECIAL SCUPPER
For Typical Details and Notes not shown
see Std. Dwg. SD-1-69.

ESTIMATED QUANTITIES						
ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	ABUT	PIERS
503	2,834	Cu.Yd.	Unclassified Excavation		1,257	1,577
505	Lump	Sum	Test Pile			Lump
507	19,950	Lin.Ft.	12" Cast-in-place reinforced concrete piles		8,850	11,100
509	620,100	Lb.	Reinforcing Steel	318,700	71,200	230,200
503	Lump	Sum	Cofferdams, cribs & sheeting			Lump
511	2,392	Cu.Yd.	Class "S" concrete, Superstructure using Shrink. Comp. Cem. 701.08	2,392		
511	755	Cu.Yd.	Class "C" concrete, Piers above Footings			755
511	620	Cu.Yd.	Class "C" concrete, Abutments above Footings		620	
511	856	Cu.Yd.	Class "C" concrete, Footings		390	466
512	85	Lin.Ft.	Type B Waterproofing		85	
513	2,439,400	Lb.	Structural Steel (AISC Category III)	2,439,400		
514	2,439,400	Lb.	Field Painting of new Structural Steel, System A	2,439,400		
516	201	Lin.Ft.	Preformed Elastic Joint Sealer		201	
516	165	Sq.Ft.	1" Preformed Expansion Joint Filler			165
518	397	Cu.Yd.	Porous Backfill		397	
518	464	Lin.Ft.	6" Perforated Helical C.S.P. (70701)			464
518	143	Lin.Ft.	6" Non-Perforated Helical C.S.P., including specials, (70701)			143
518	12	Ea.	Standard Scuppers, including supports		12	
518	7	Ea.	Special Scuppers, including supports		7	
523	3	Hour	Dynamic Pile Tests			3
601	2,875	Sq.Yd.	Crushed Aggregate Slope Protection			2,875
625			See Sheet 616 for lighting summary			
Special	331,400	Lb.	Epoxy Coated Reinforcing Steel (See Proposal Note)	329,600	1,800	

ESTIMATED QUANTITIES CHECKED BY & DATE: J.G./SA 5-1-72 REVISED: S.A. 9/14/72

GENERAL NOTES

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 4.

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.

FOR ADDITIONAL GENERAL NOTES SEE COMMON DETAILS SHEET **CT 102**

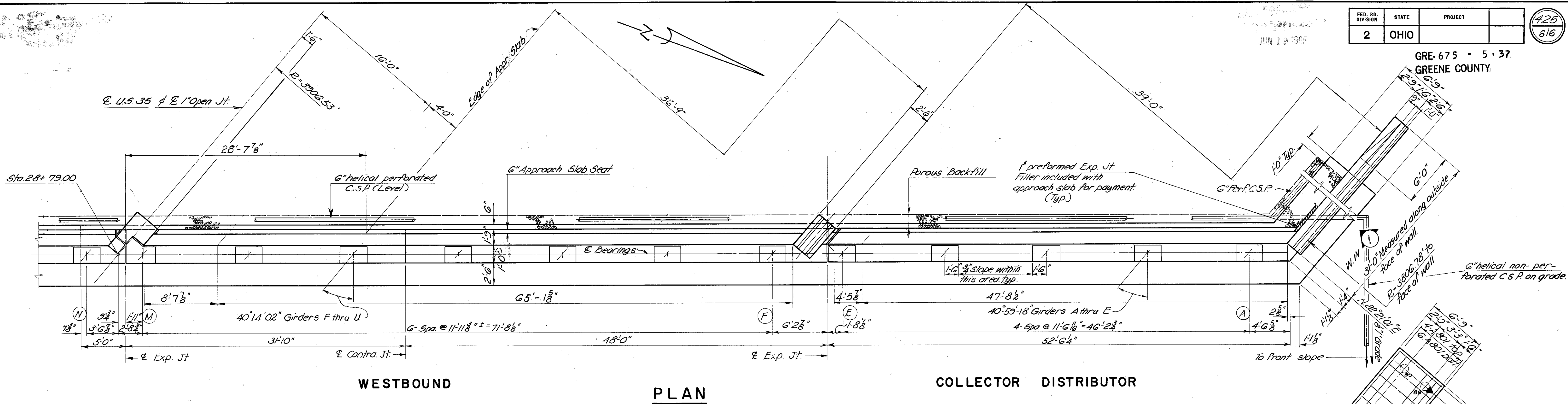
THE SCUPPER PIPES SHALL EXTEND 8 INCHES BELOW THE BOTTOM OF THE BOTTOM FLANGE INSTEAD OF 2 INCHES.

THE END DAM ANCHOR BARS SHALL BE LOCATED 3 3/8" CLEAR FROM THE TOP OF BRIDGE DECK.

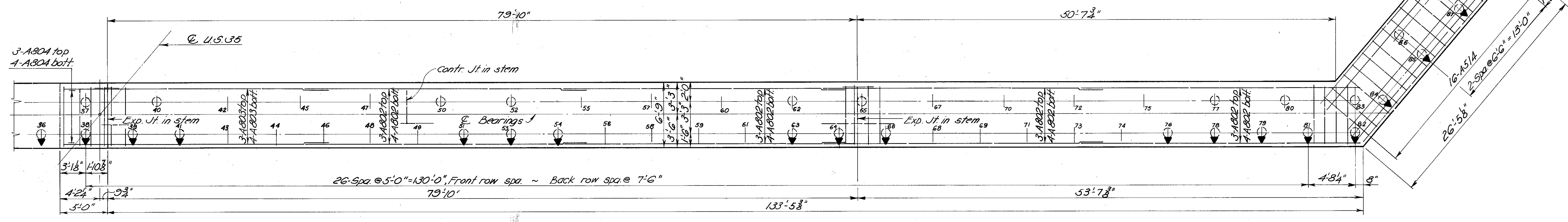
FOR SIGN ATTACHMENTS TO FACE OF BRIDGE SEE SH. 144

KING & GAVARIS CONSULTING ENGINEERS		3/32	
CINCINNATI	OHIO		
GENERAL NOTES, ESTIMATED QUANTITIES & MISCELLANEOUS DETAILS			
BRIDGE NO. GRE-675-0589			
I-675 UNDER RELOCATED U.S. 35			
GREENE COUNTY		STA: 28+76.00 TO STA: 32+97.62	
DESIGNED	DRAWN	TRACED	CHECKED
	A.W.		S.A.
REVIEWED	DATE	REVISION	
	9/21/72		

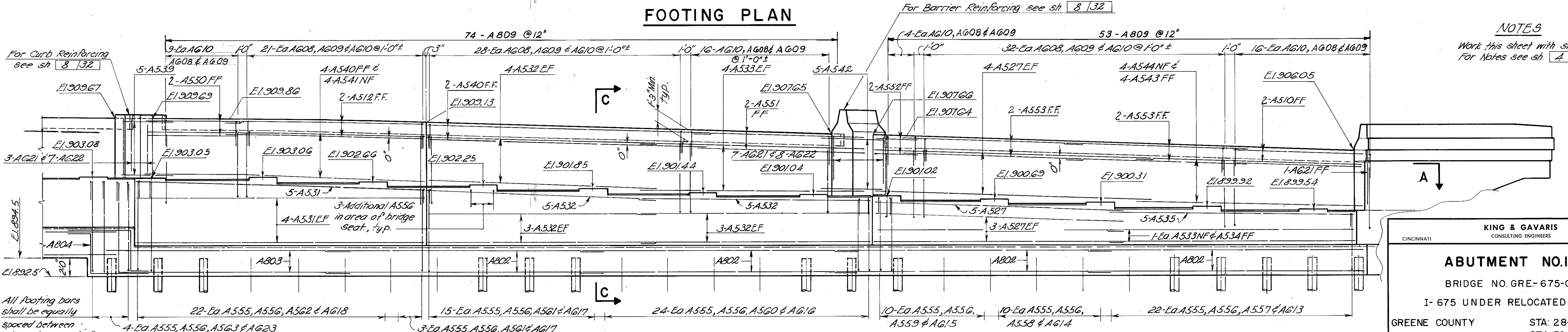
GRE-675 - 5-37
GREENE COUNTY



WESTBOUND PLAN COLLECTOR DISTRIBUTOR



FOOTING PLAN



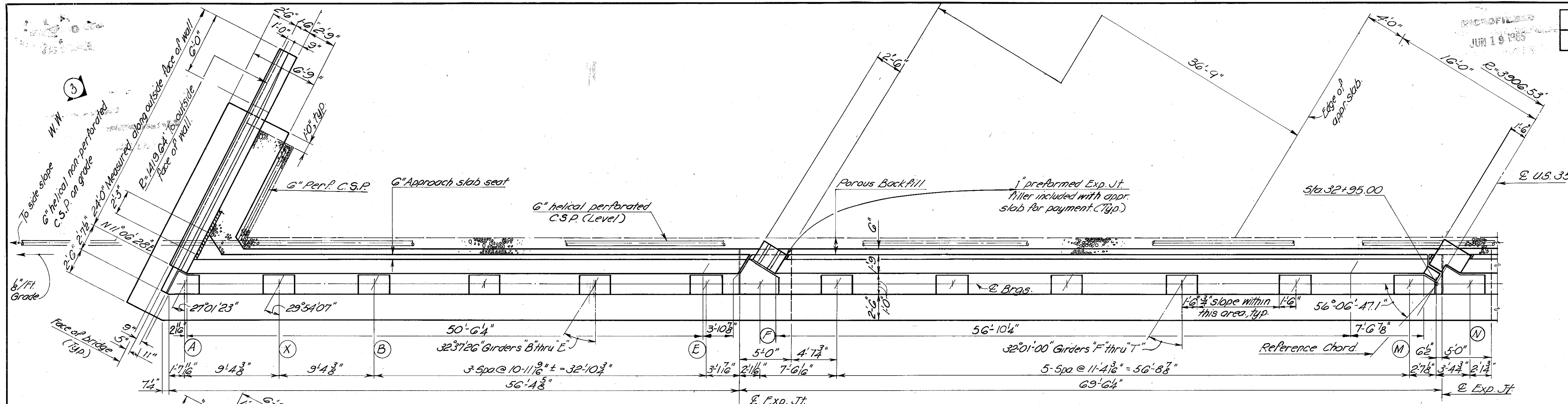
ELEVATION

NOTES
Work this sheet with sheets 4, 6, 7, 8, 9, 13, 22
For Notes see sheet 4

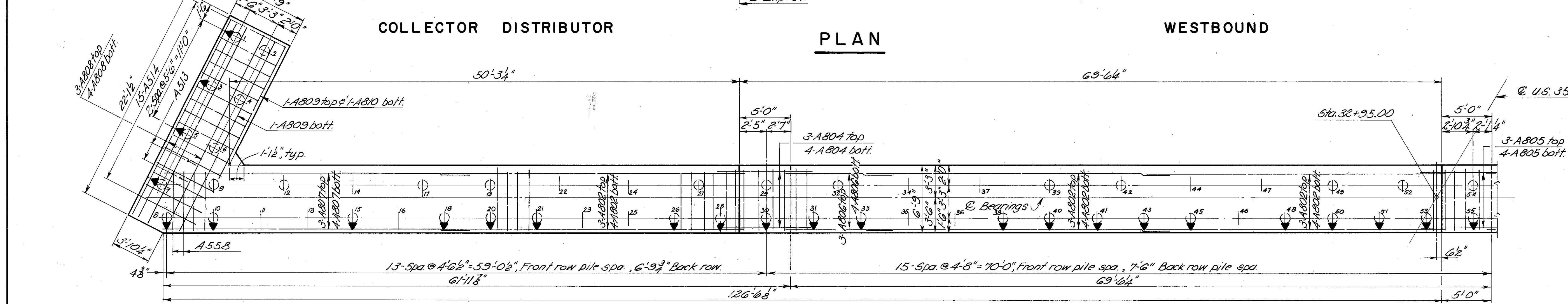
KING & GAVARIS CONSULTING ENGINEERS		5/32
OHIO		
ABUTMENT NO. 1-2		
BRIDGE NO. GRE-675-0589		
I-675 UNDER RELOCATED U.S. 35		
GREENE COUNTY		STA: 28+76.00 TO STA: 32+97.62
DESIGNED V.P.	DRAWN A.W.	TRACED S.A.
CHECKED S.A.	REVIEWED DATE 8/25/72	REVISIONS

All footing bars shall be equally spaced between piles at approx 1'-6" as shown on footing plan.

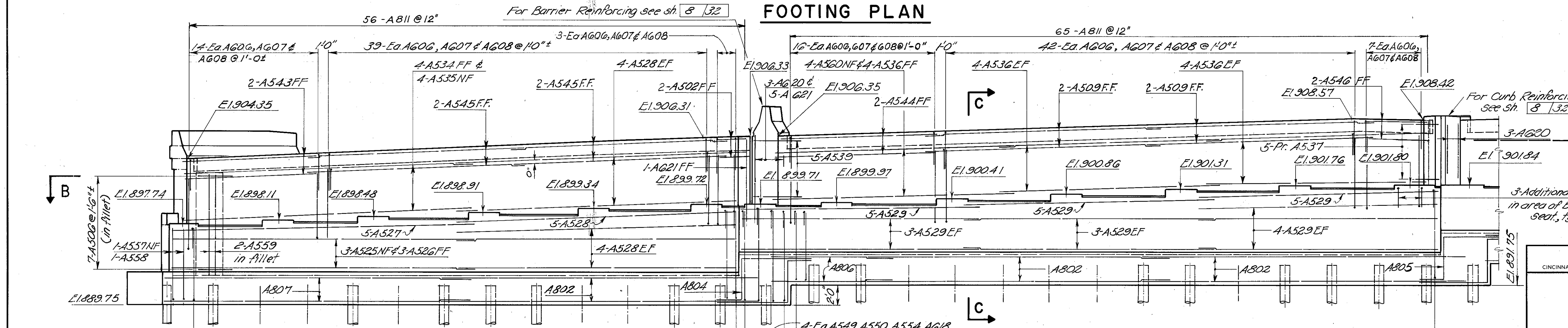
GRE-675 - 5-37
GREENE COUNTY



COLLECTOR DISTRIBUTOR PLAN WESTBOUND



FOOTING PLAN



ELEVATION

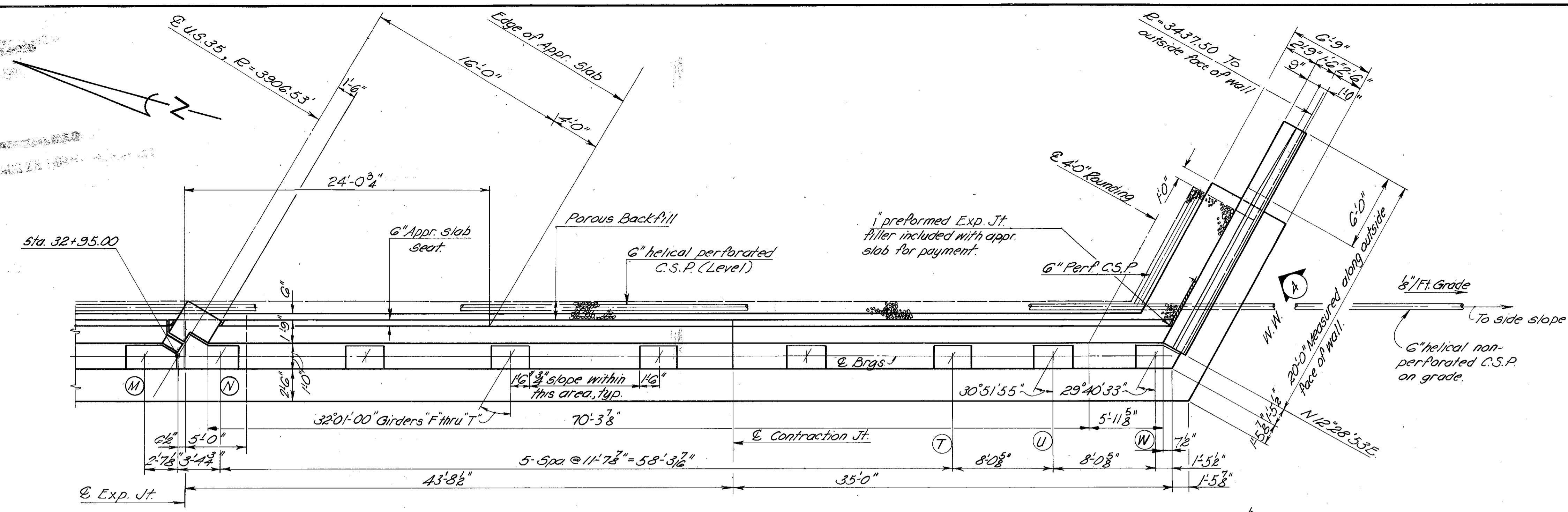
NOTES
Work this sheet with shs. 45, 78, 91, 32
For Notes see sh. 4, 32

All Footing bars shall be equally spaced between piles at approximately 1'-6" as shown on footing plan, typ.

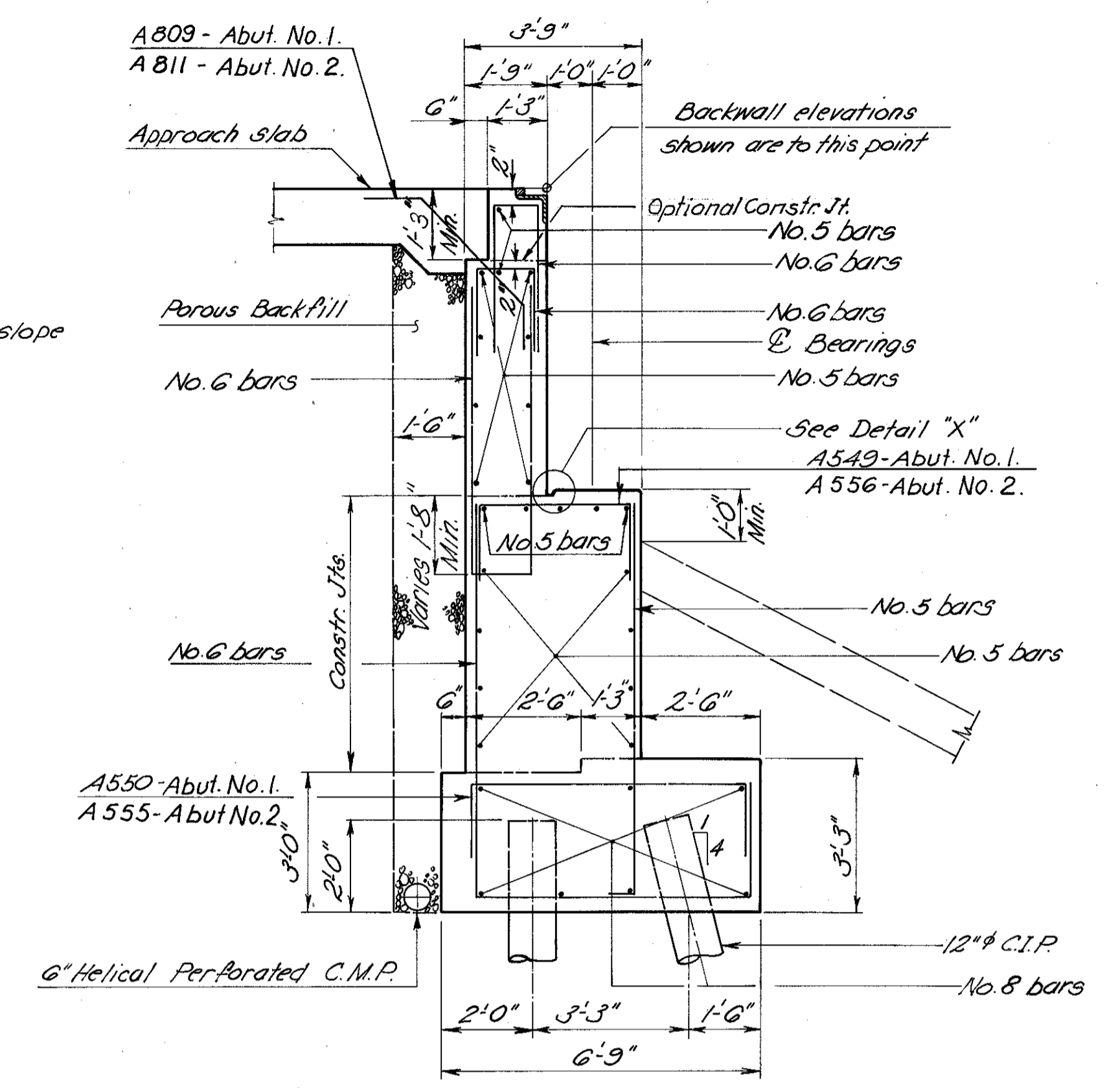
6-Ea. A549, A550, A557 & A619
8-Ea. A549, A550, A556 & A617
20-Ea. A549, A550, A552 & A612
14-Ea. A549, A550, A551 & A611
4-Ea. A549, A550, A554, A618
22-Ea. A549, A550, A556, A617
20-Ea. A549, A550, A555, A616
13-Ea. A549, A550, A554 & A615

KING & GAVARIS CONSULTING ENGINEERS		6/32
ABUTMENT NO.2-3		
BRIDGE NO. GRE-675-0589		
I-675 UNDER RELOCATED U.S.35		
GREENE COUNTY	STA: 28+76.00 TO	
	STA: 32+97.62	
DESIGNED V. P.	DRAWN A. W.	TRACED S. A.
CHECKED S. A.	REVIEWED DATE 9/25/72	REVISIONS

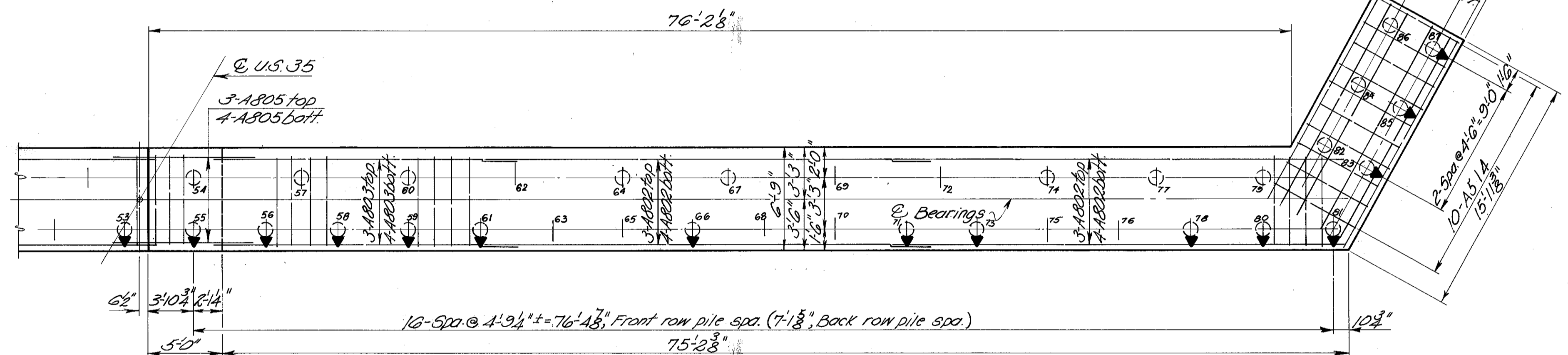
MICROFILMED
JUN 28 1965



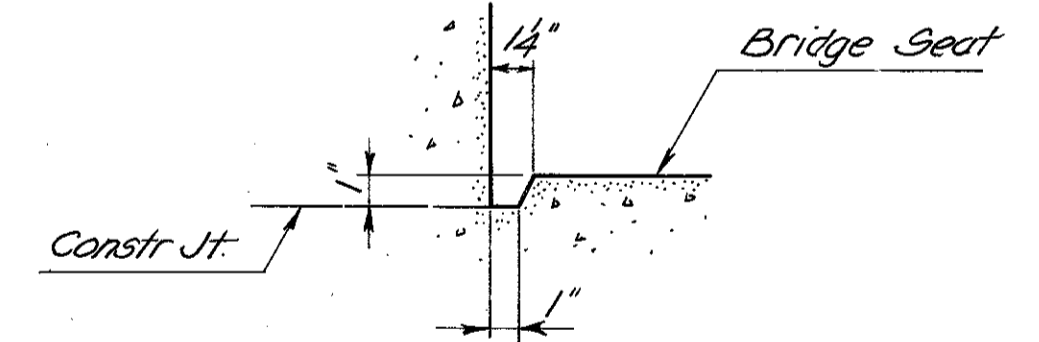
PLAN - EASTBOUND



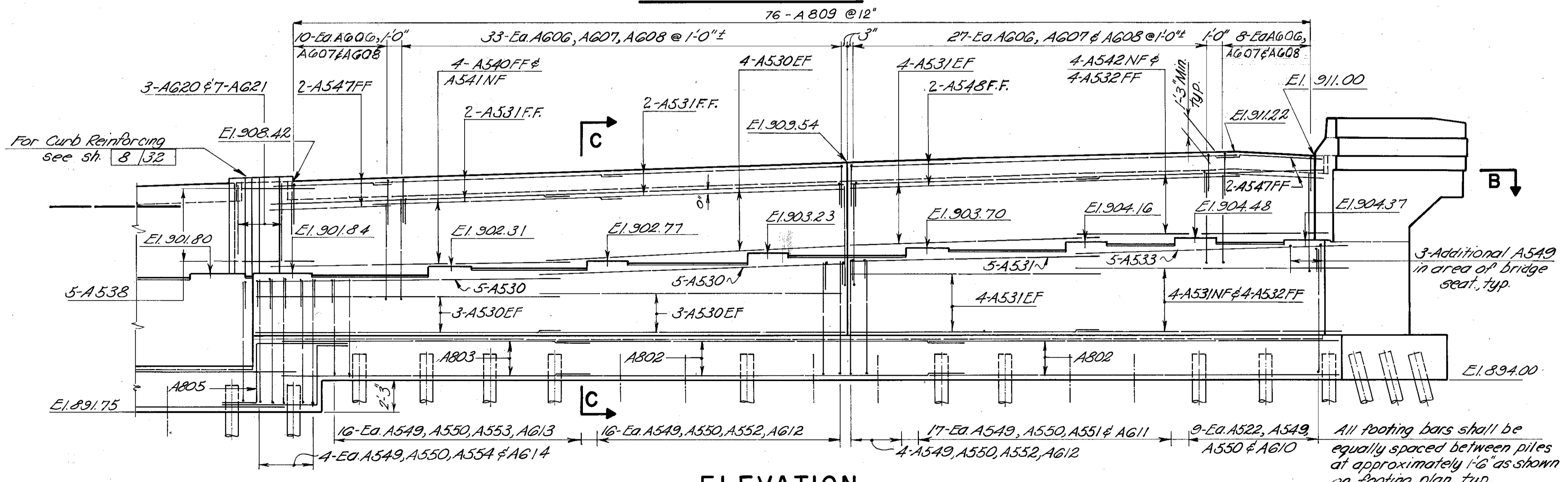
SECTION C-C



FOOTING PLAN



DETAIL "X"



ELEVATION

NOTES
Work this sheet with shs. 456, 8, 9, 132
For Notes see sh. 4, 132

KING & GAVARIS CONSULTING ENGINEERS		7/32
OHIO		
ABUTMENT NO.2-4		
BRIDGE NO. GRE-675-0589		
I-675 UNDER RELOCATED U.S. 35		
GREENE COUNTY	STA: 28+76.00	TO
	STA: 32+97.62	
DESIGNED V.P.	DRAWN A.W.	TRACED S.A.
CHECKED S.A.	REVIEWED 8/9/72	DATE 9/25/72
		REVISION

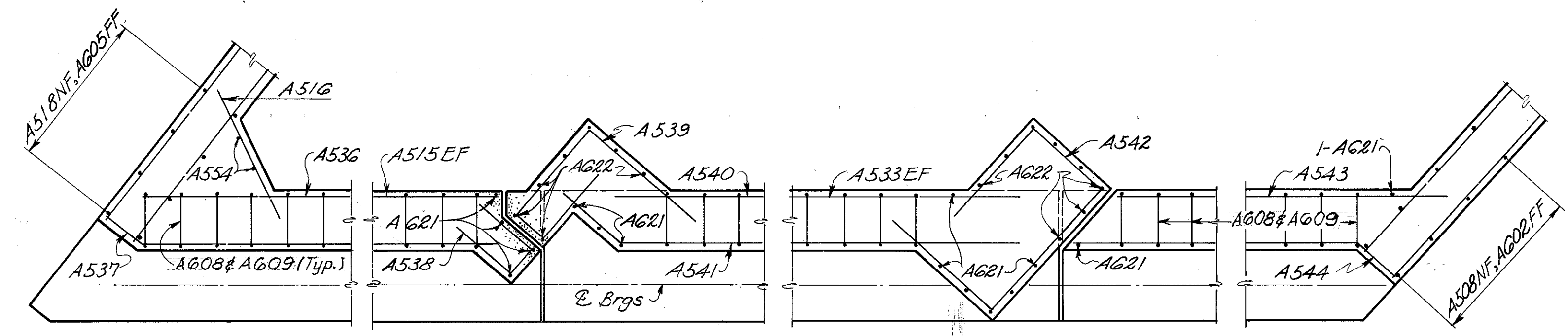
All footing bars shall be equally spaced between piles at approximately 1'-6" as shown on footing plan, typ.

UNOFFICIAL
JUN 15 1972

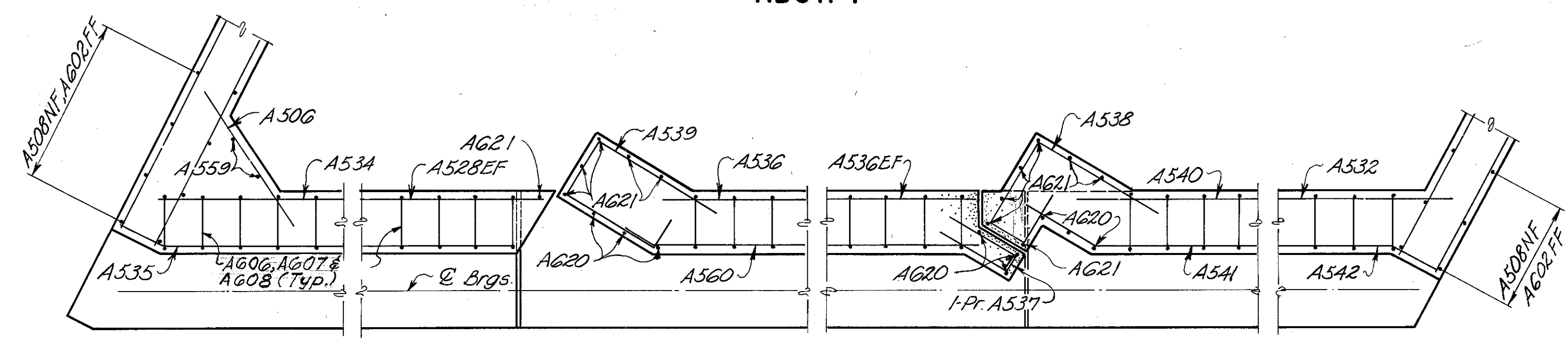
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

428
616

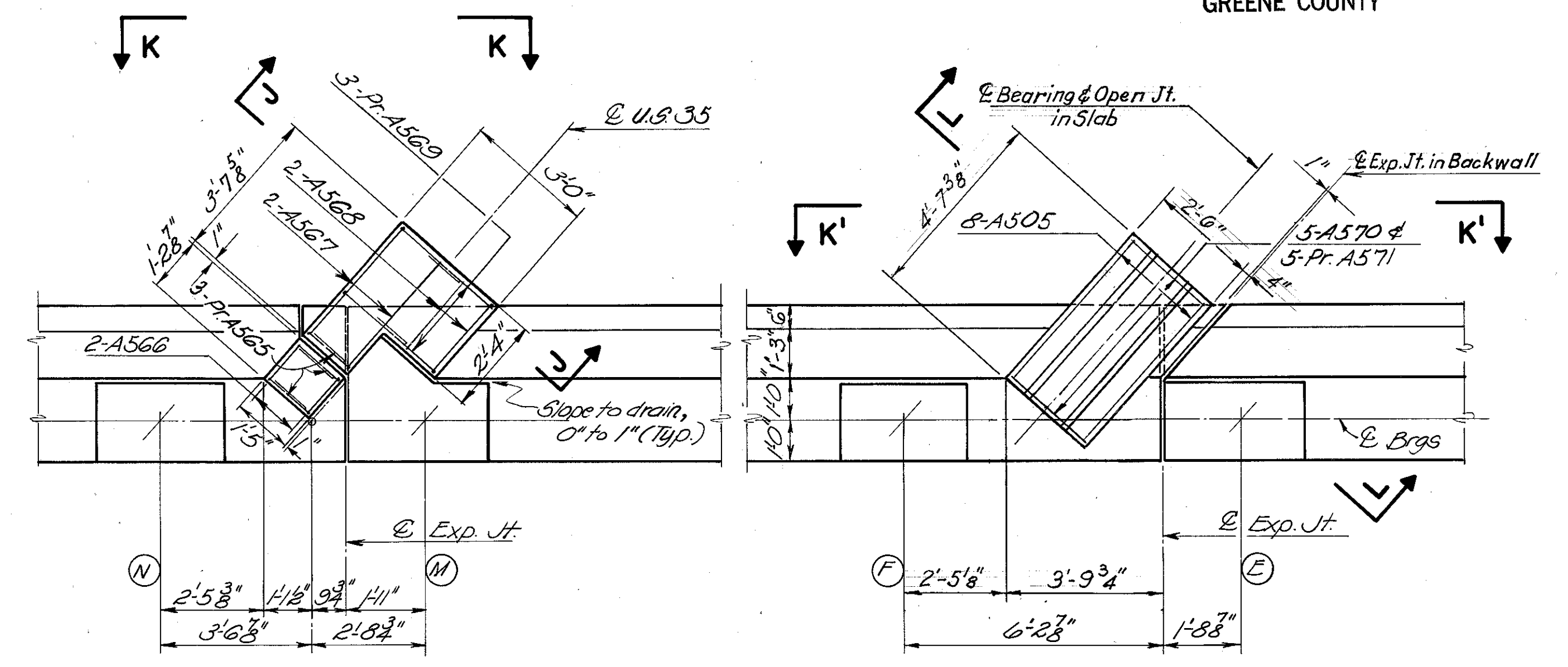
GRE-675 • 5-37
GREENE COUNTY



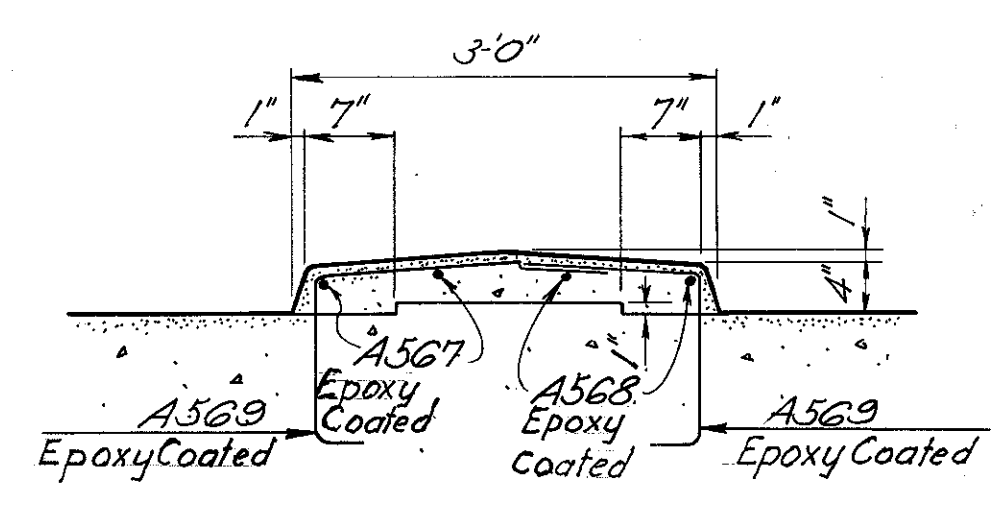
SECTION A-A
ABUT. 1



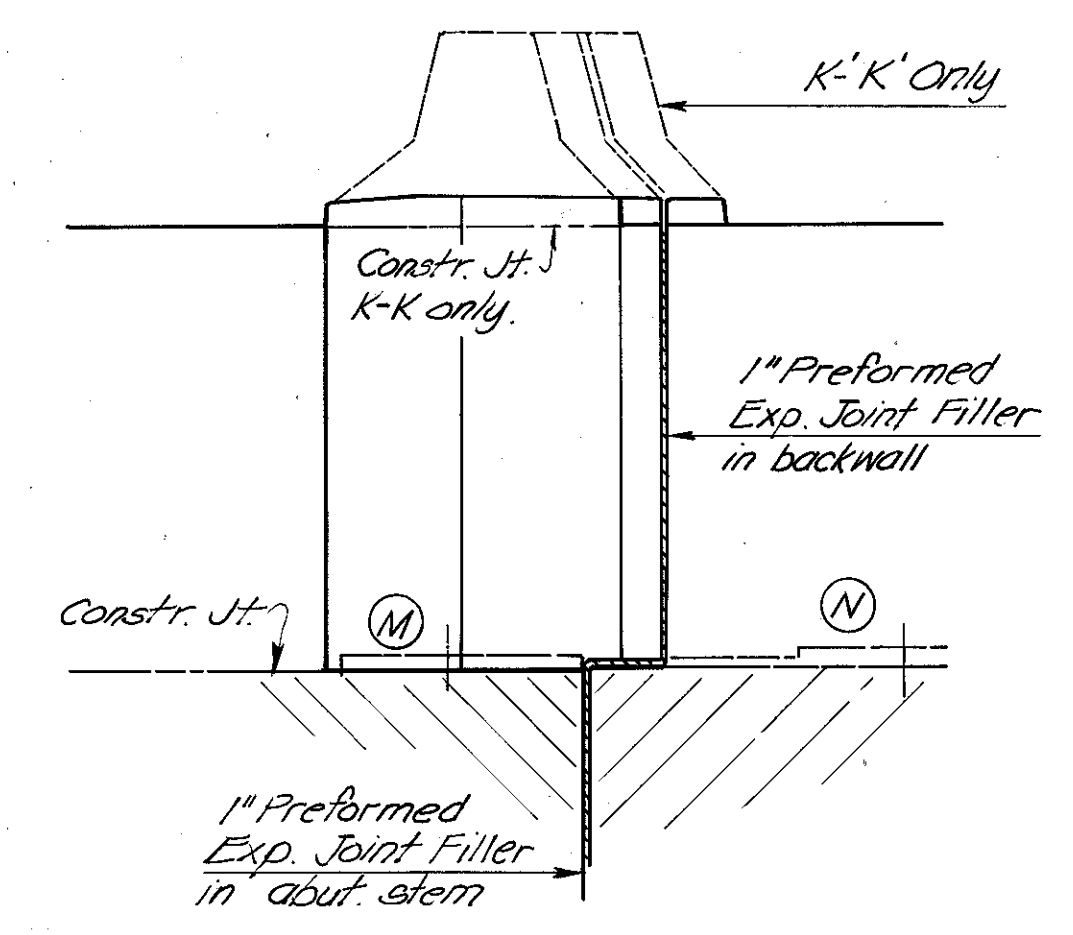
SECTION B-B
ABUT. 2



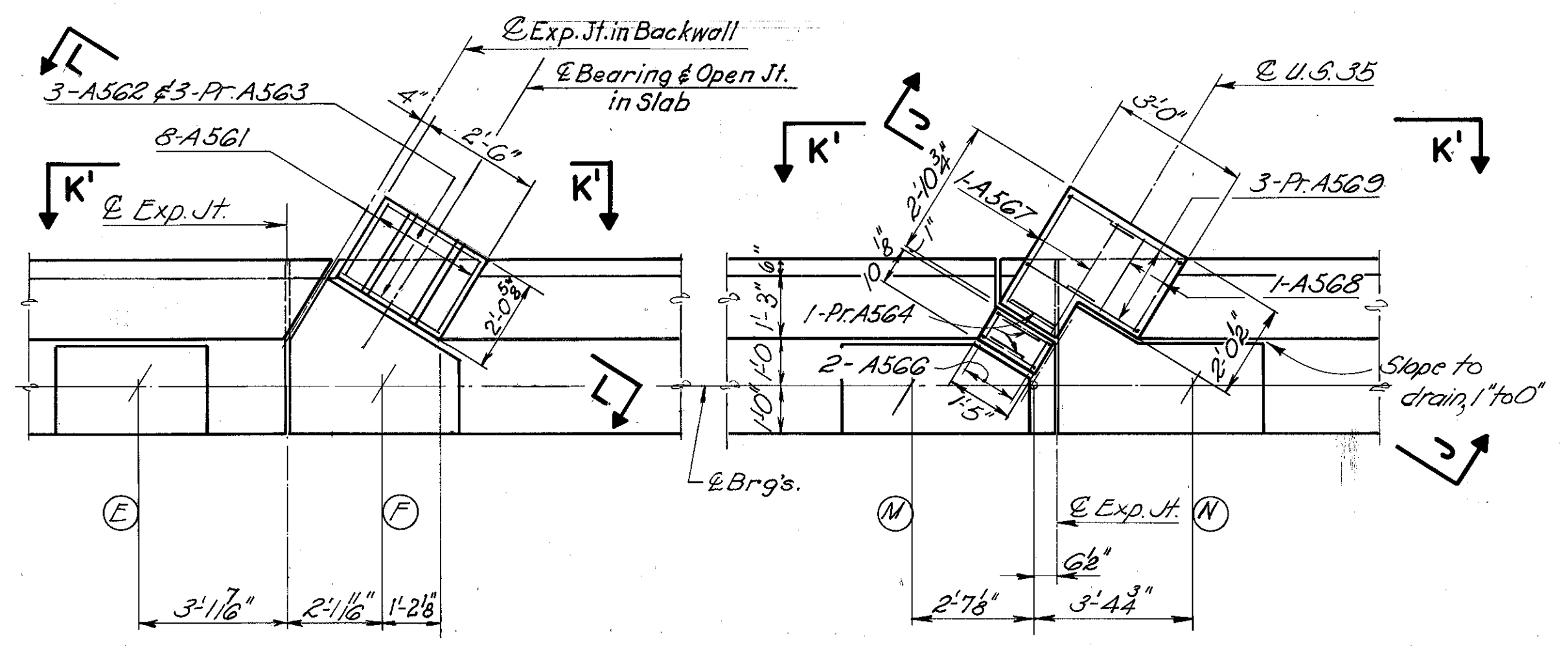
PLAN AT MEDIANS-ABUT. 1



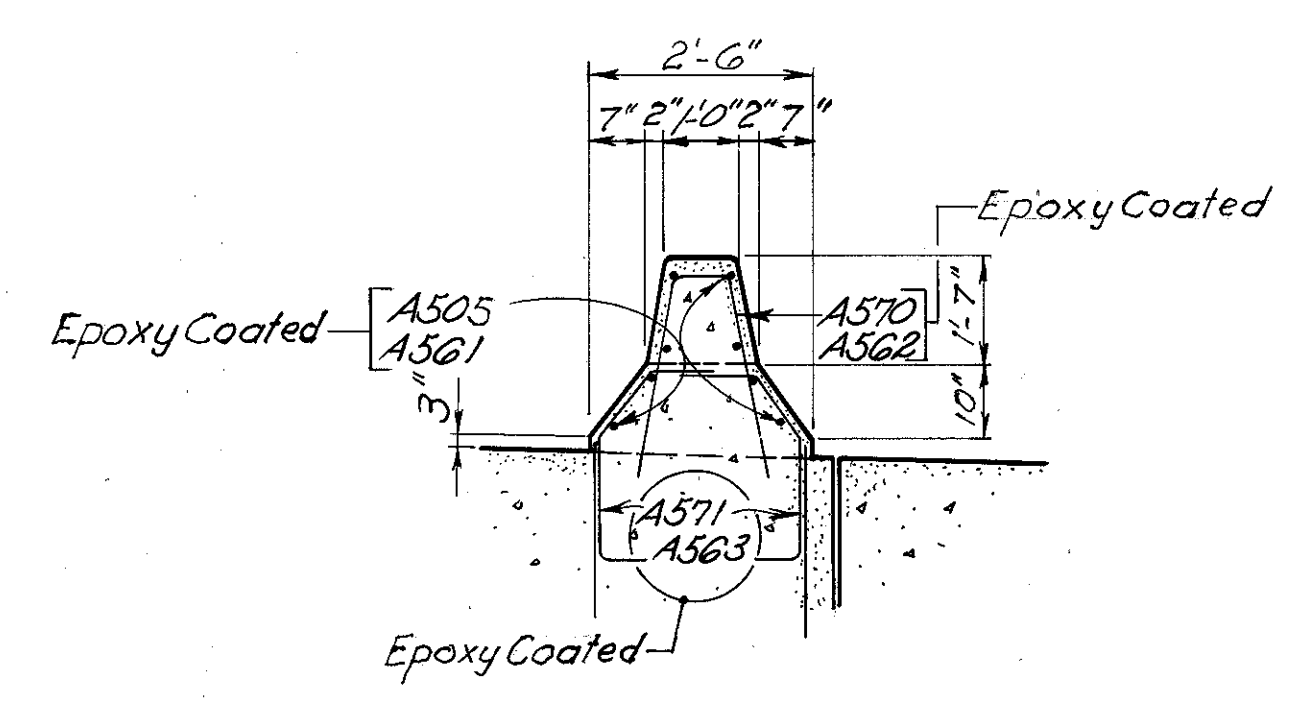
SECTION J-J



ELEVATION K-K
K'-K' SIMILAR



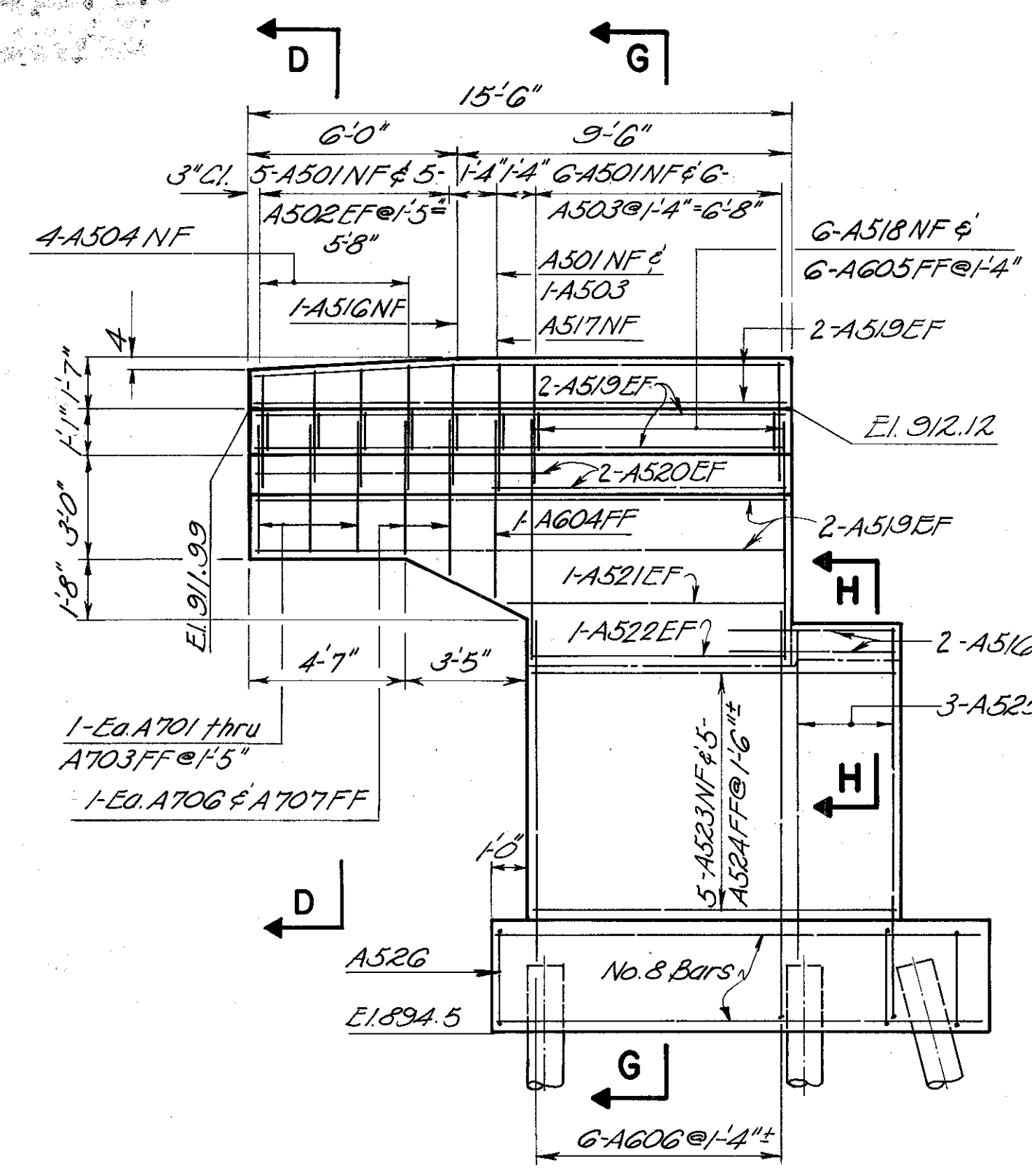
PLAN AT MEDIANS-ABUT. 2



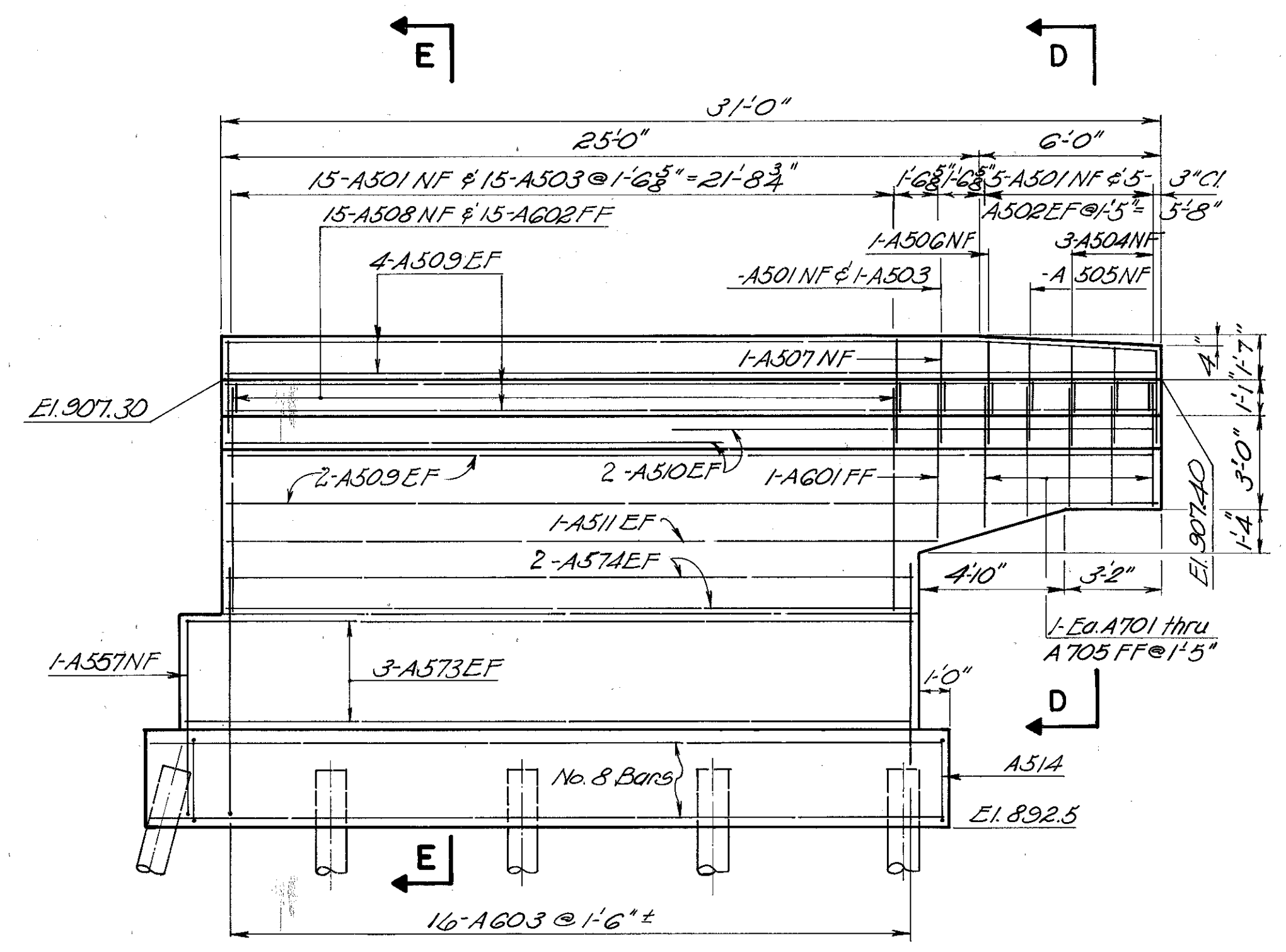
SECTION L-L

NOTES
Work this sheet with shs. 4, 5, 6, 7, 9 / 32
For Notes see sh. 4, 1, 32

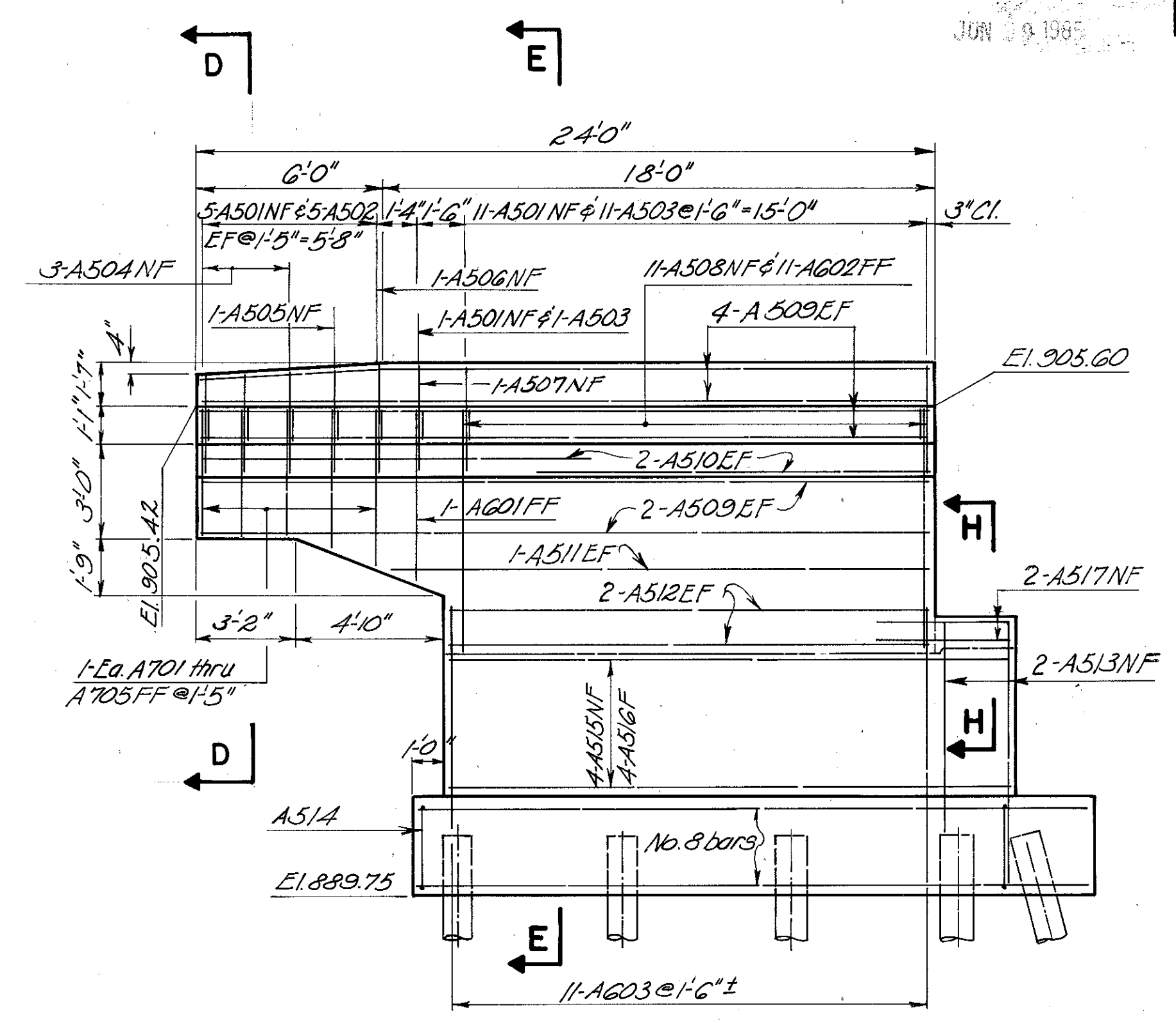
KING & GAVARIS CONSULTING ENGINEERS						8/32
ABUTMENT DETAILS - 6						
BRIDGE NO. GRE-675-0589						
I-675 UNDER RELOCATED U.S. 35						
GREENE COUNTY						
STA: 28+76.00 TO STA: 32+97.62						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.	8/8	9/28/72	



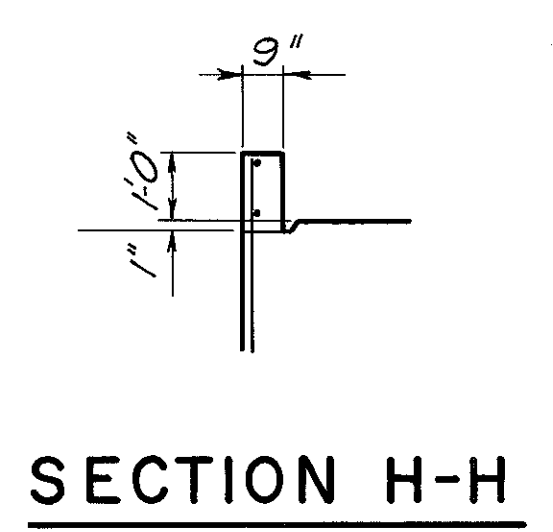
WINGWALL NO. 2



WINGWALL NO. 1

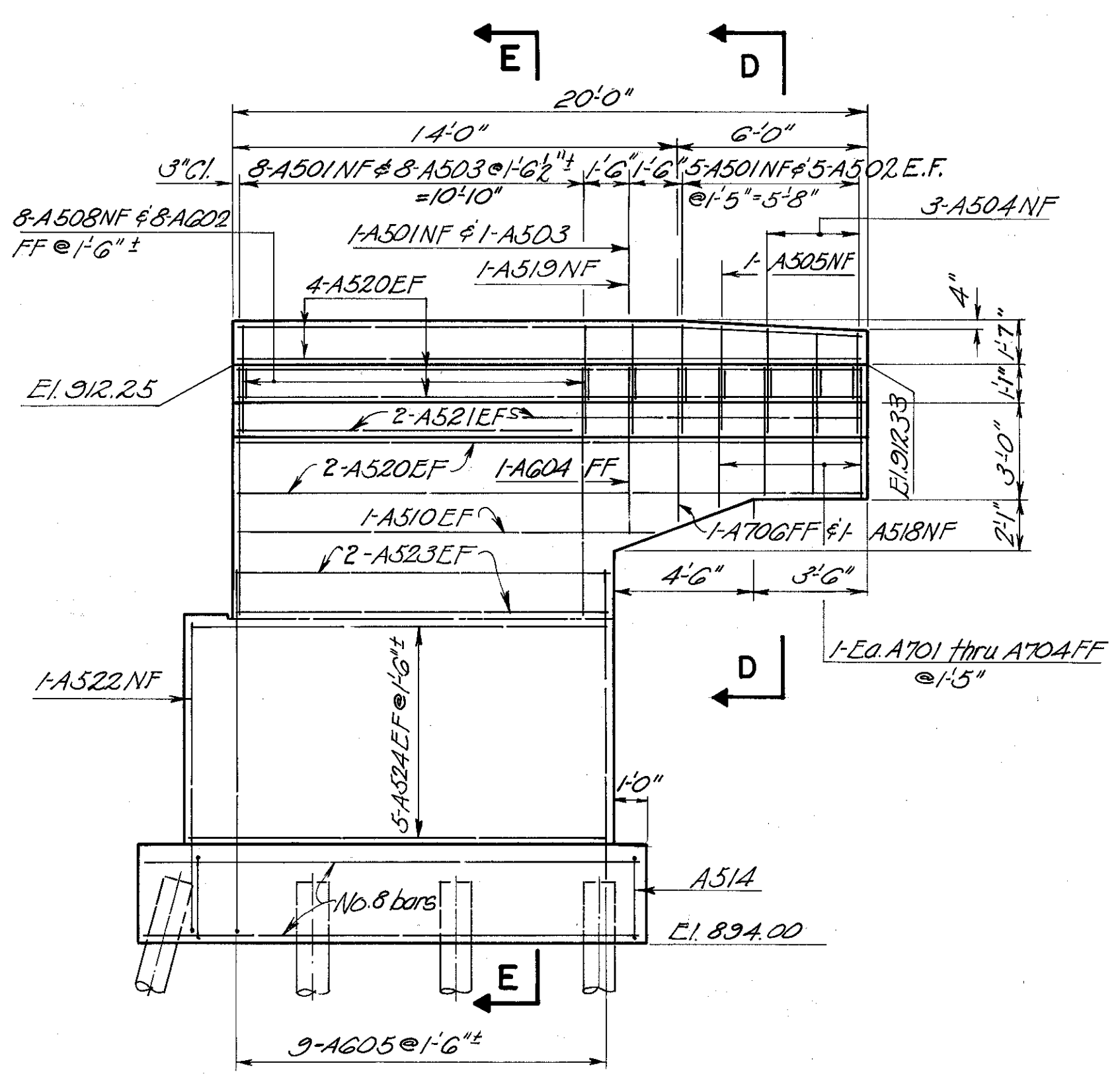


WINGWALL NO. 3

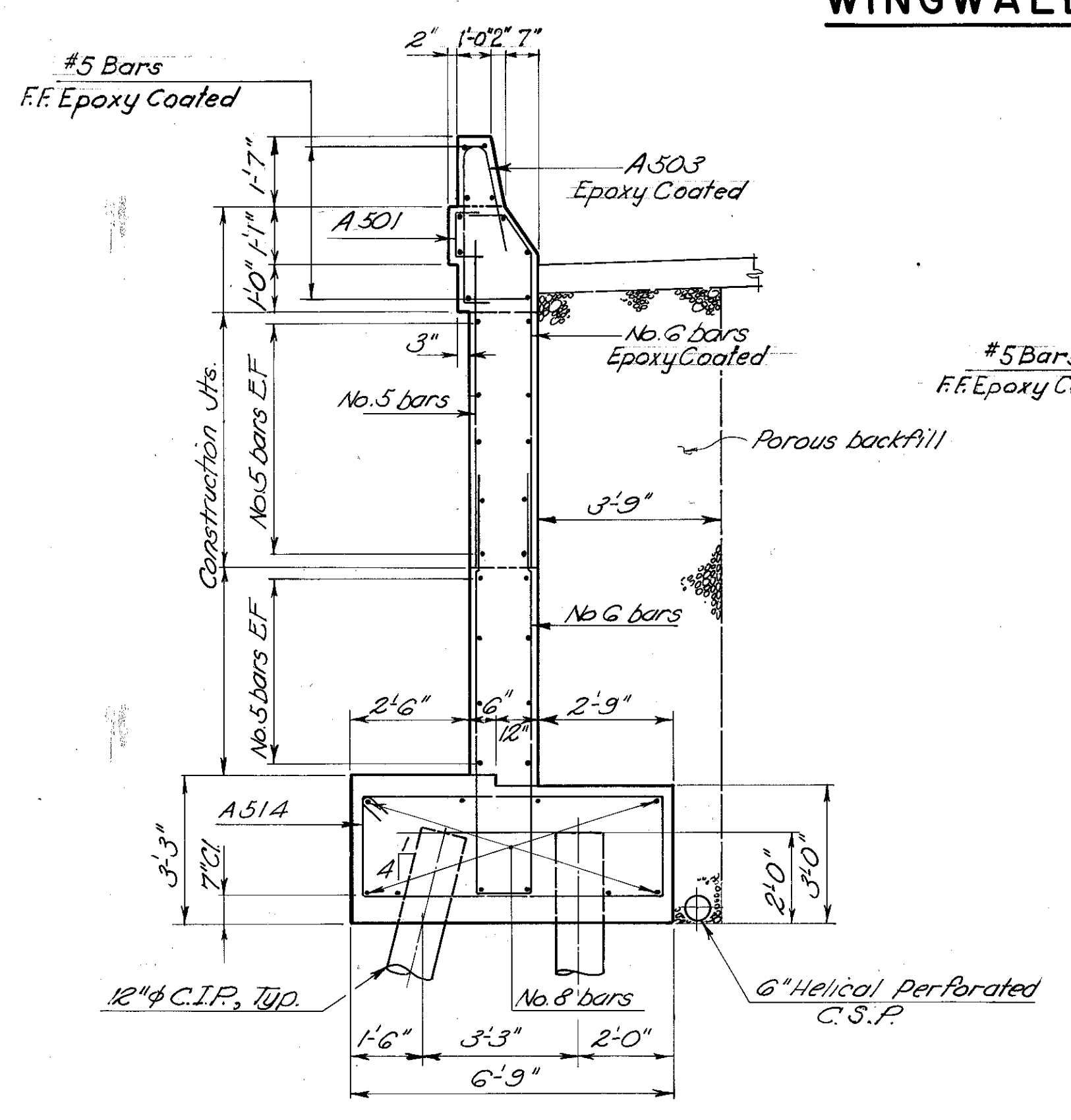


SECTION H-H

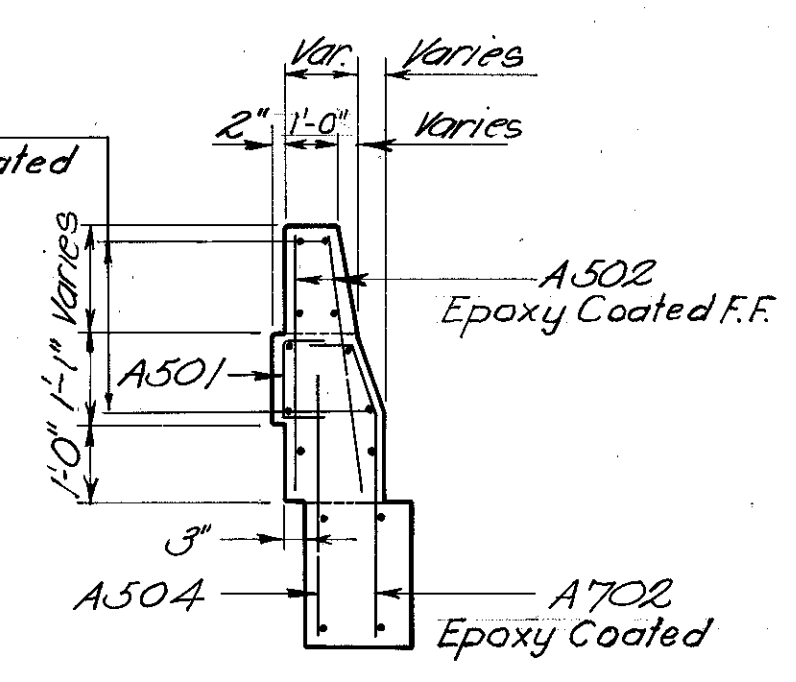
WINGWALL ELEVATIONS



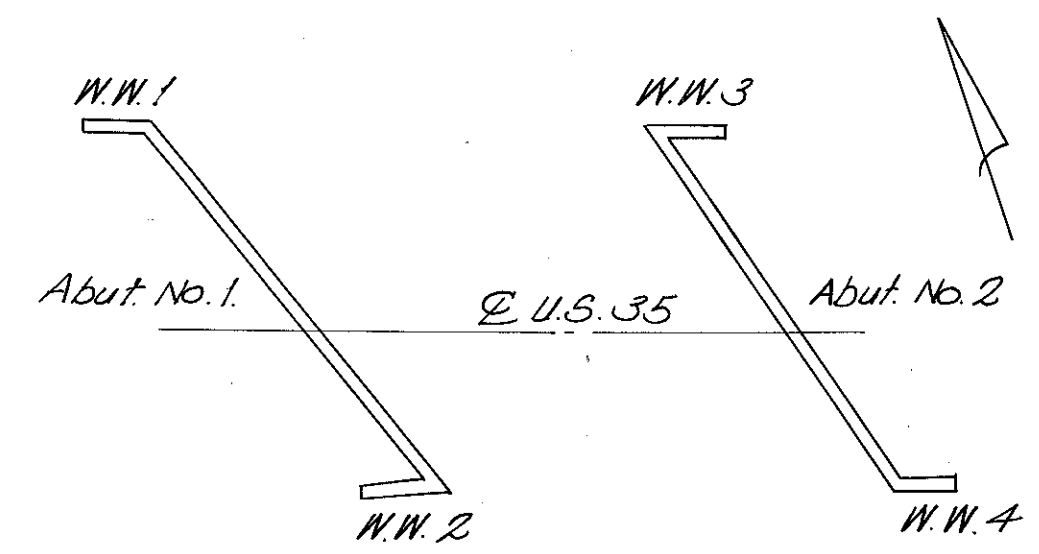
WINGWALL NO. 4



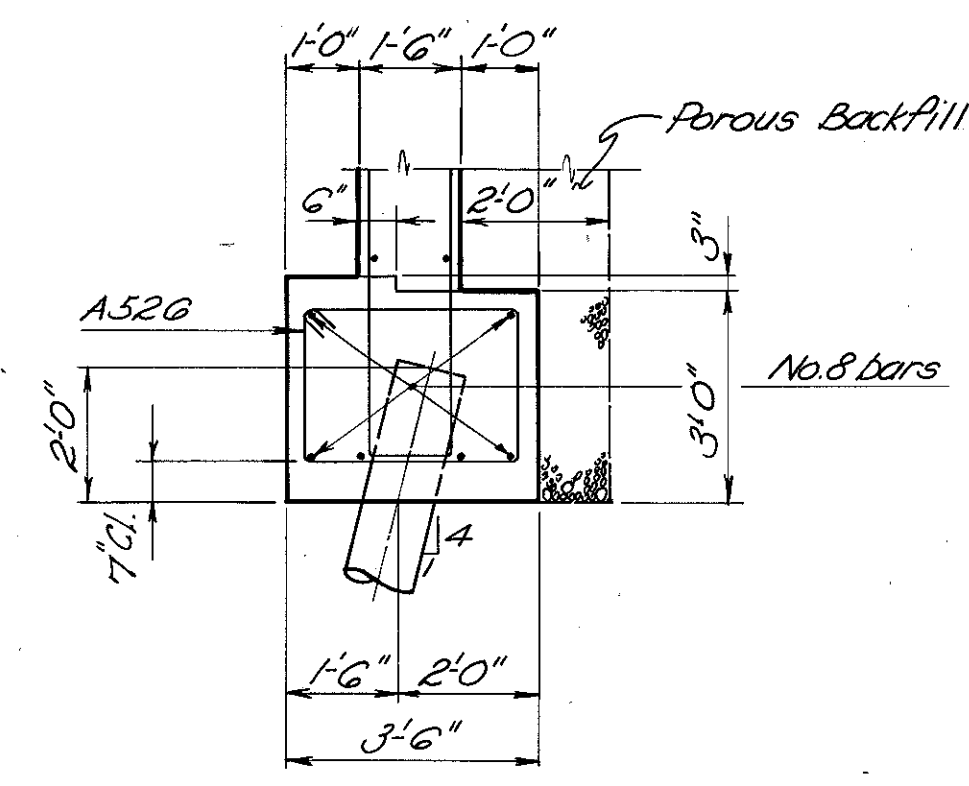
SECTION E-E



SECTION D-D



KEY PLAN

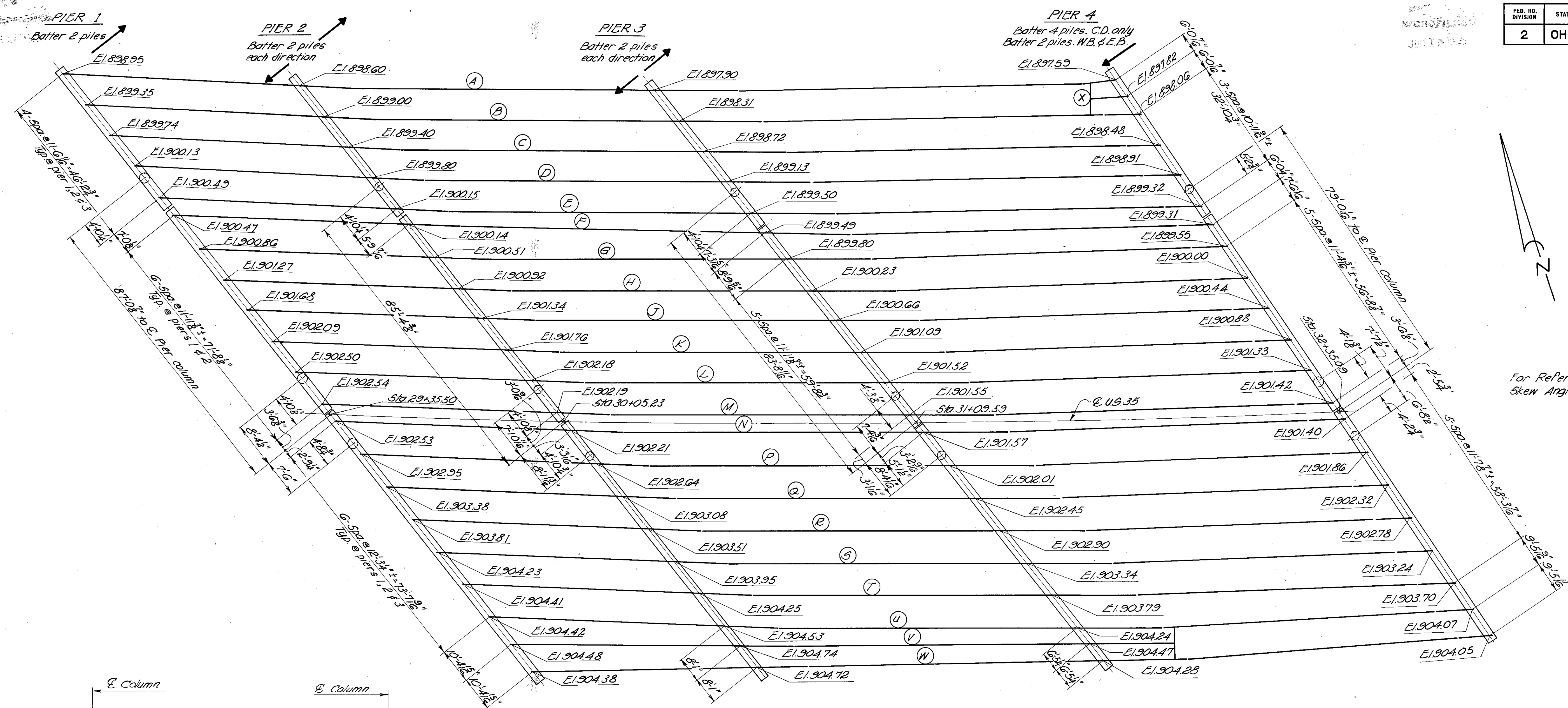


SECTION G-G

NOTES
Work this sheet with shs. 4, 5, 6, 7, 8, 32
For Notes see sh. 4, 32

KING & GAVARIS CONSULTING ENGINEERS		9/32
OHIO		
ABUTMENT DETAILS - 5		
BRIDGE NO. GRE-675-0589		
I-675 UNDER RELOCATED U.S. 35		
GREENE COUNTY		STA: 28+76.00 TO STA: 32+97.62
DESIGNED V.P.	DRAWN A.W.	TRACED S.A.
CHECKED S.A.	DATE 9/25/72	REVISIONS

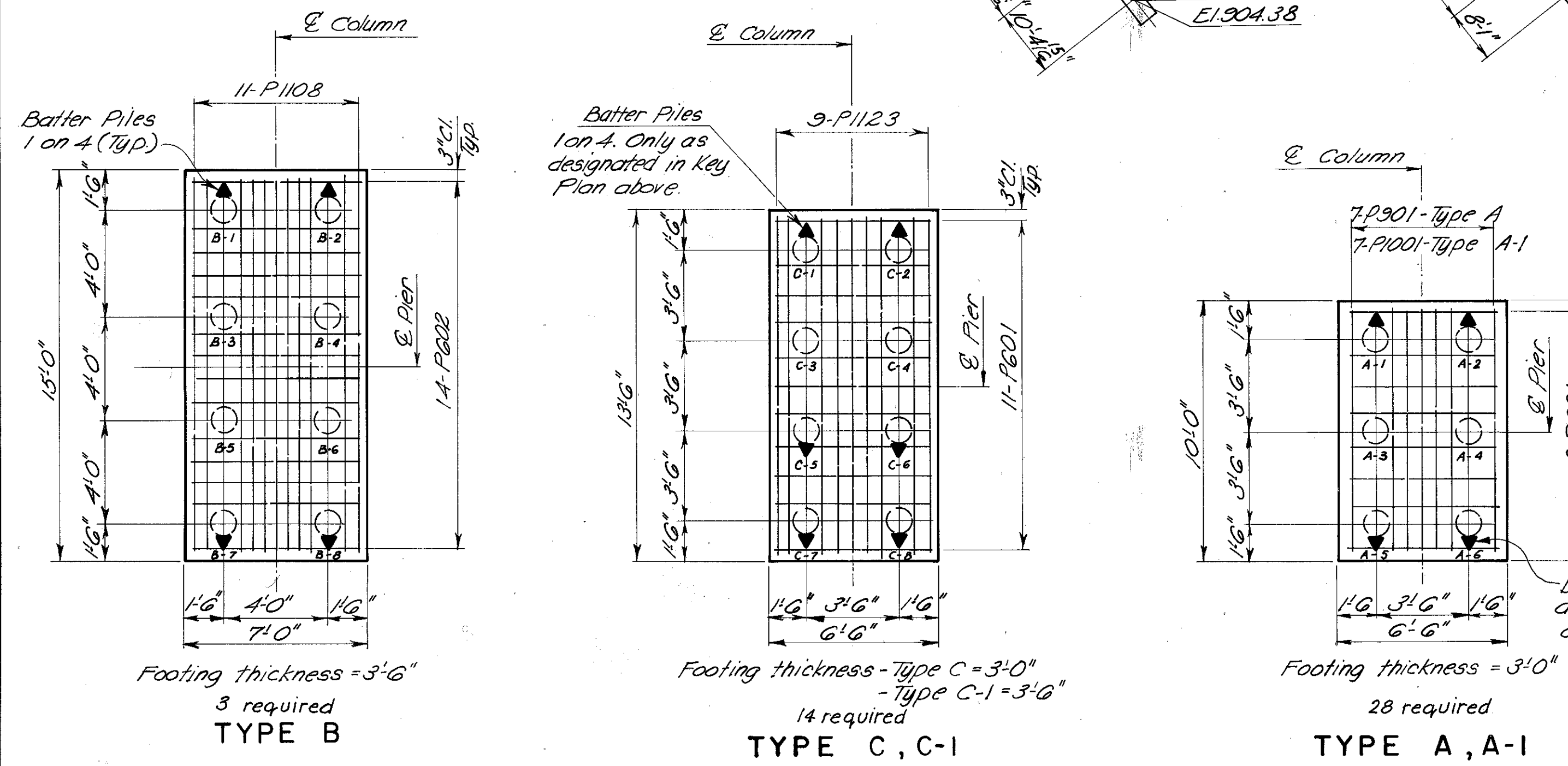
GRE-675 - 5-37
GREENE COUNTY



For Reference Chord Layout and Pier Skew Angles see sh. 3 | 32

KEY PLAN

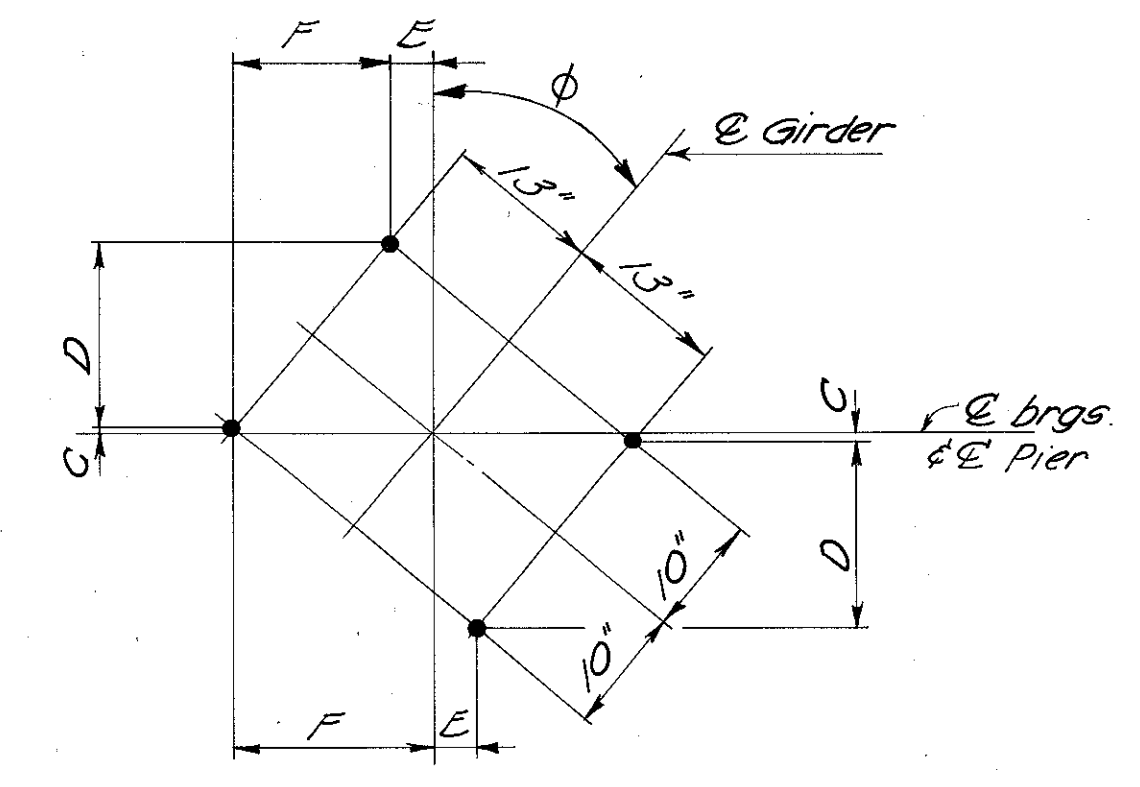
Showing Bearing Seat Elevations & Layout Dimensions



FOOTING PLANS

DIMENSIONS B-375

GIRDERS:	C	D	E	F	Φ
A thru E	1 1/2"	1-3 1/2"	3 1/2"	1-4 1/2"	39-04-07
F	1 1/2"	1-3 1/2"	3 1/2"	1-4 1/2"	39-55-29
G thru U	4"	1-3 1/2"	4"	1-4 1/2"	38-21-49
V	1 1/2"	1-3 1/2"	4 1/2"	1-4 1/2"	37-11-52
W	8"	1-3 1/2"	4 1/2"	1-4 1/2"	37-11-52

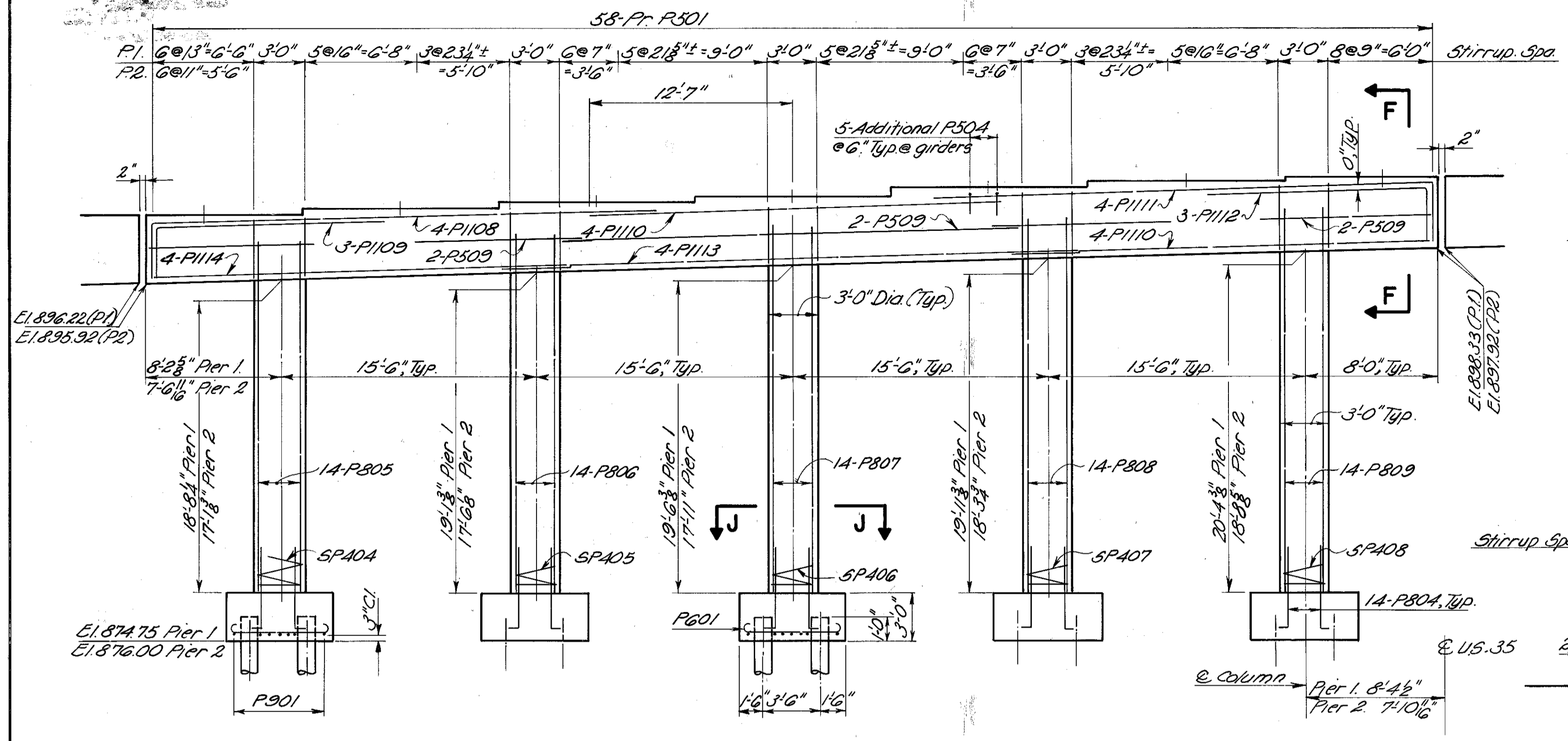


ANCHOR BOLT LAYOUT
FOR PIER 3 ONLY

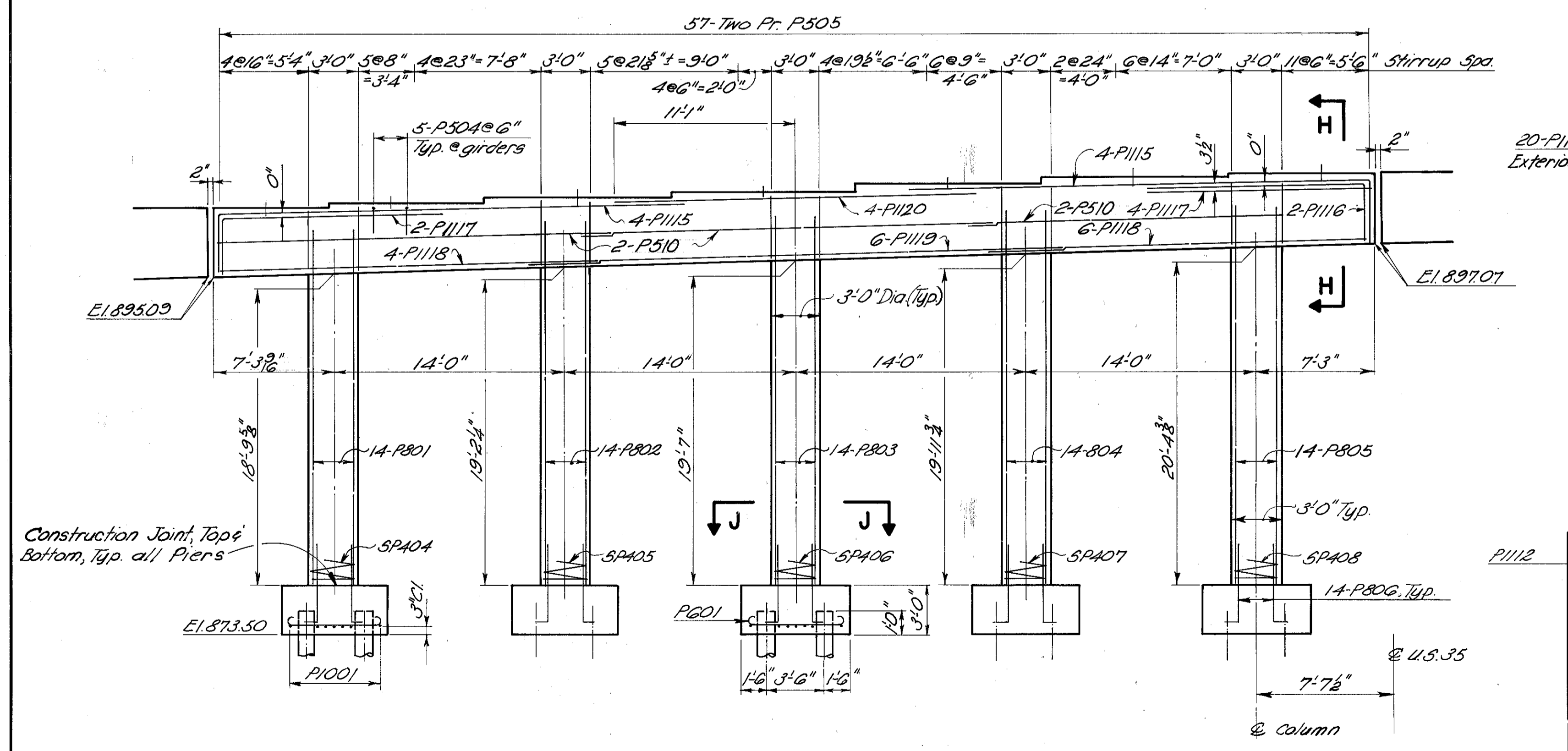
Work this sheet with shs. 11, 12, 13, 14 | 32

KING & GAVARIS CONSULTING ENGINEERS		10 32
PIER DETAILS - I		
BRIDGE NO. GRE-675-0589		
I-675 UNDER RELOCATED U.S. 35		
GREENE COUNTY	STA: 28+76.00	TO
		STA: 32+97.62
DESIGNED J.R.G.	DRAWN A.W.	CHECKED S.A.
TRACED	REVIEWED 9/25/72	DATE REVISION

GRE-675 - 5-37
GREENE COUNTY

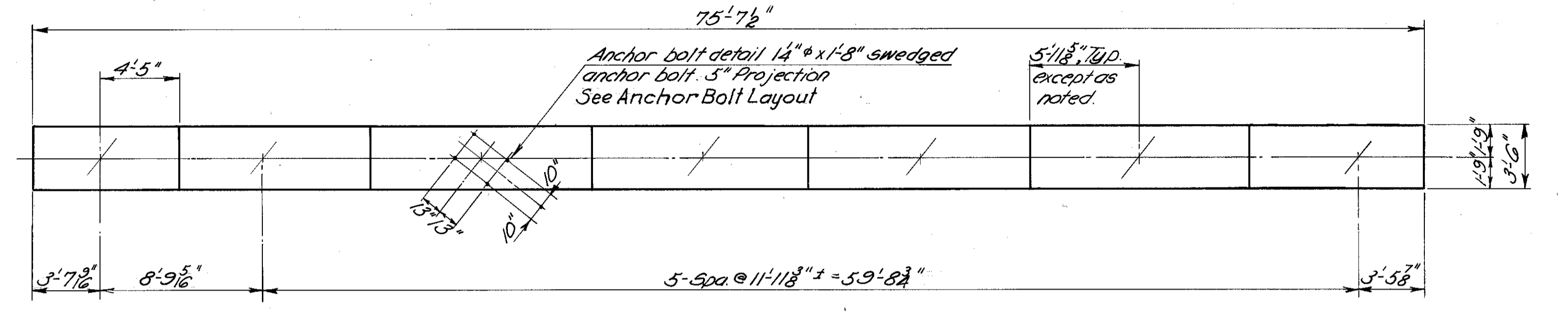


ELEVATION PIERS 1 & 2 (W.B.)
TYPE "A" FTG.

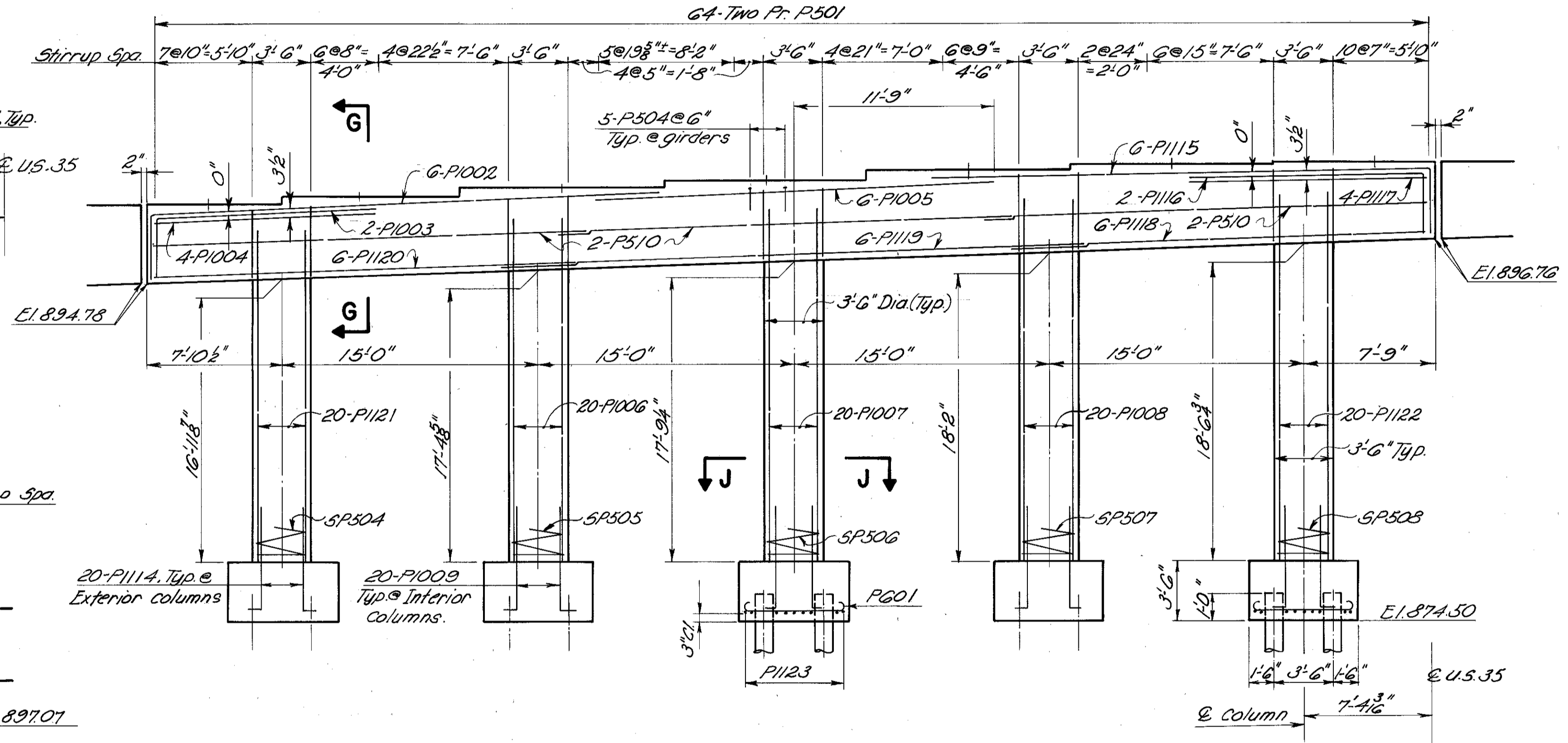


ELEVATION PIER 4 (W.B.)
TYPE "A-I" FTG.

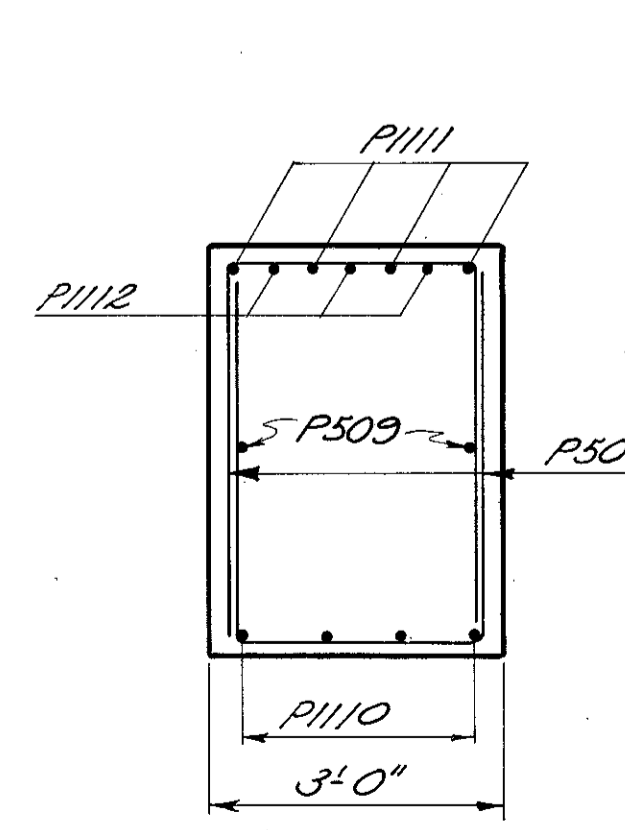
NOTE:
Work this sheet with shs. 10, 11, 13, 14, 32



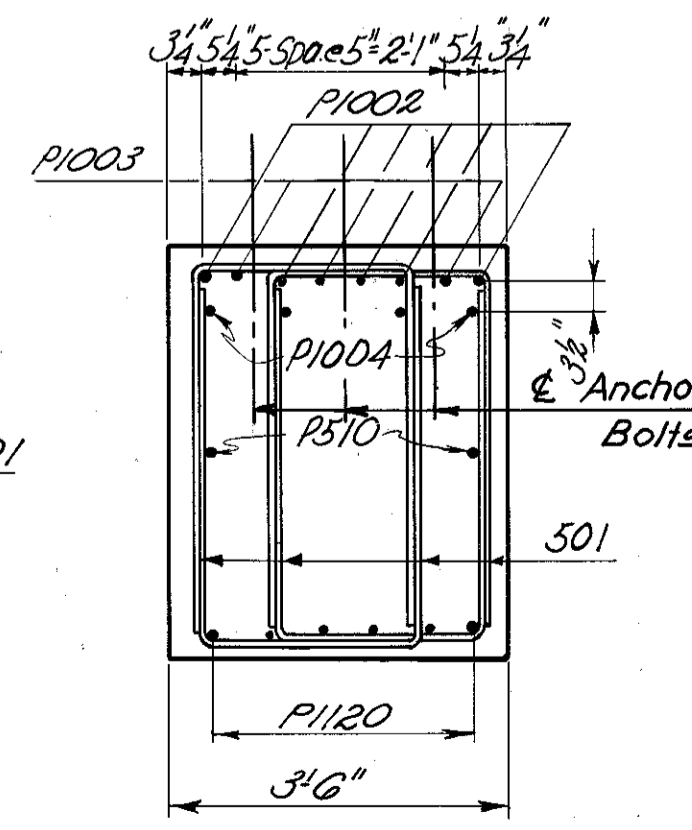
CAP PLAN
Pier No. 3 - W.B. only



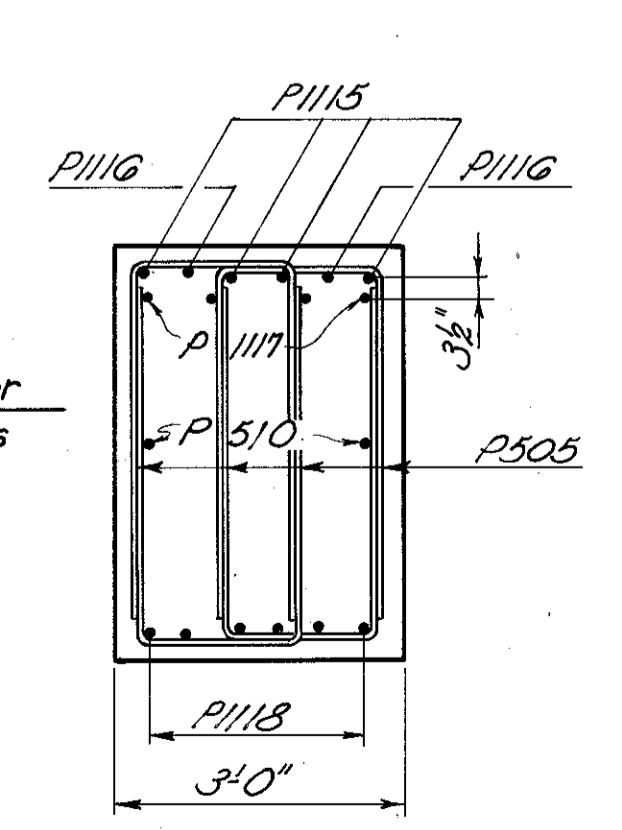
ELEVATION PIER 3 (W.B.)
TYPE "C-I" FTG.



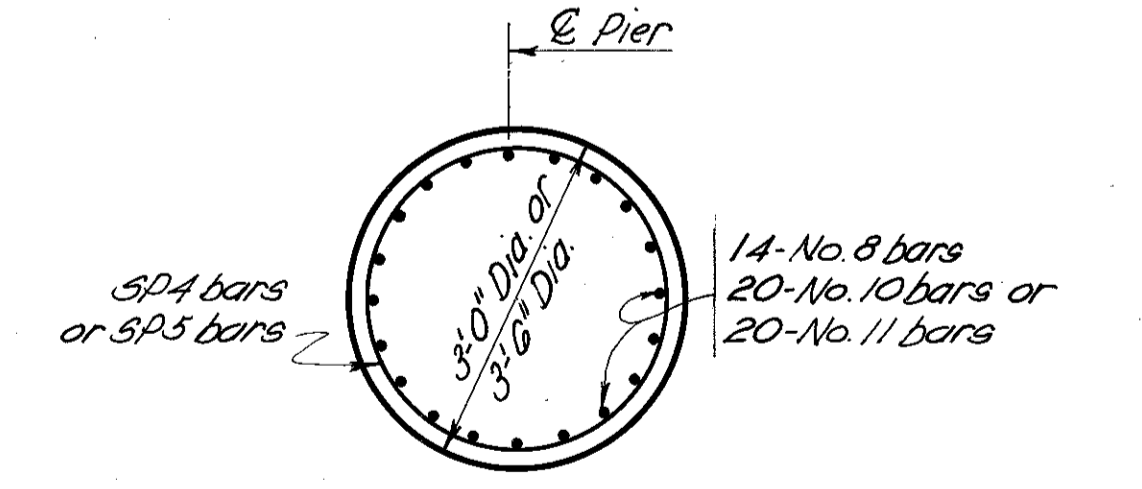
SECTION F-F



SECTION G-G



SECTION H-H



SECTION J-J

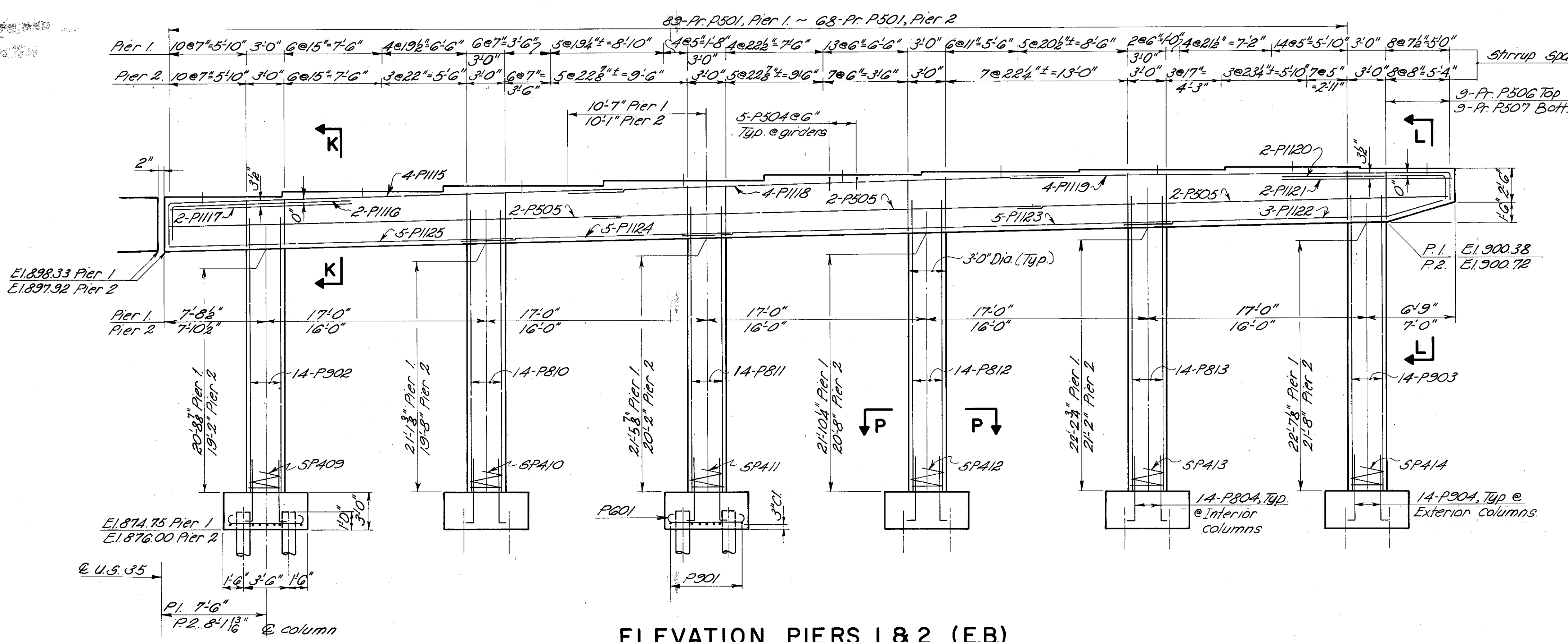
KING & GAVARIS CONSULTING ENGINEERS		12 132
PIERS 1, 2, 3 & 4 W.B.-3		
BRIDGE NO. GRE-675-0589		
I-675 UNDER RELOCATED U.S. 35		
GREENE COUNTY	STA: 28+76.00	TO STA: 32+97.62
DESIGNED J.R.G.	DRAWN A.W.	TRACED S.A.
CHECKED S.A.	REVIEWED Sf	DATE 9/25/72
		REVISION

MICROFILM
 JUN 19 1995

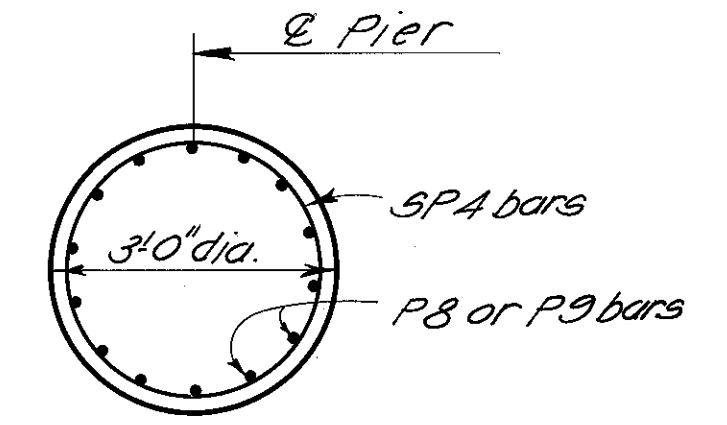
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

433
 616

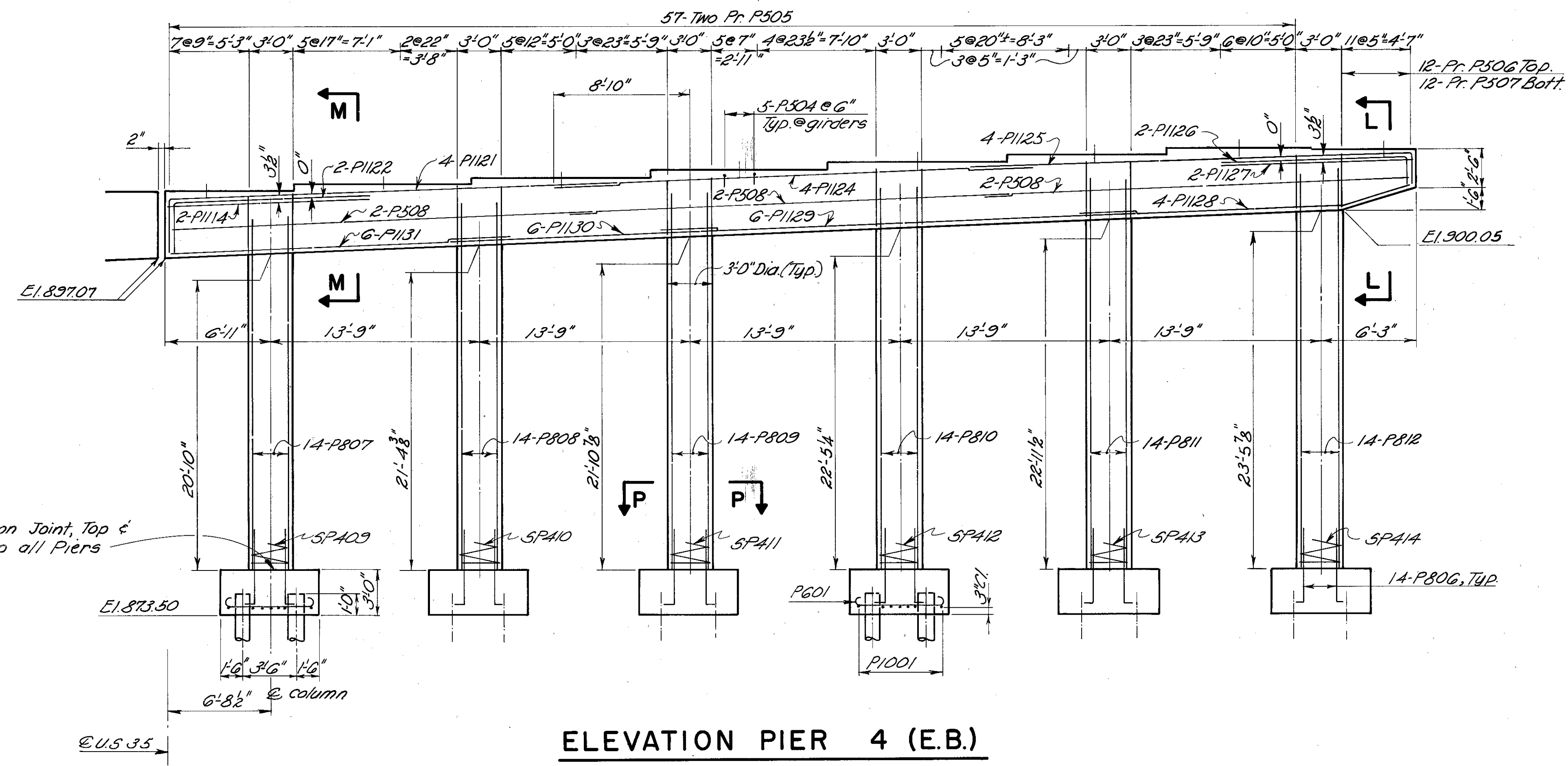
GRE-675 - 5-37
 GREENE COUNTY



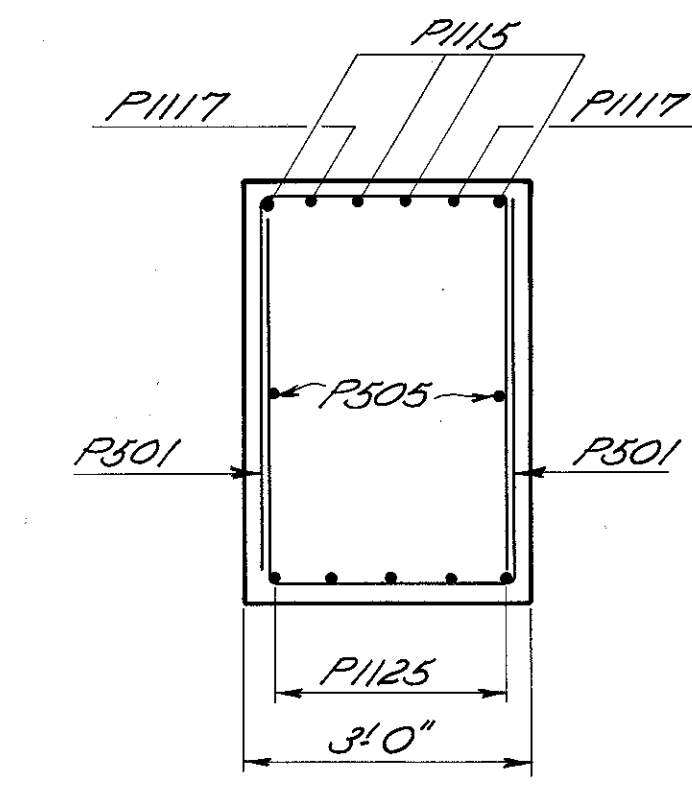
ELEVATION PIERS 1 & 2 (E.B.)
 TYPE "A" FTG.



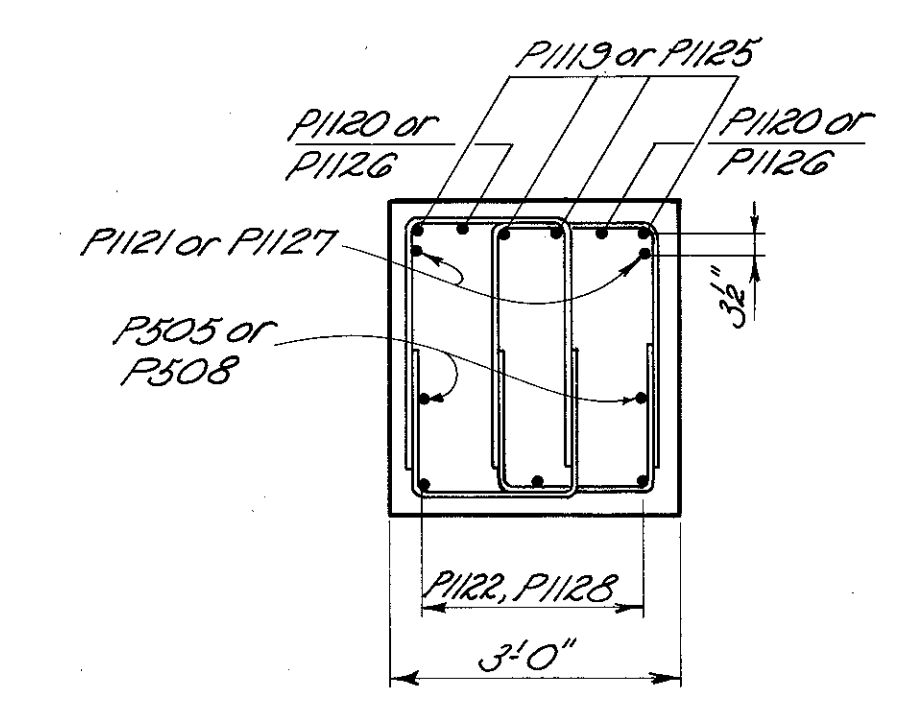
SECTION P-P



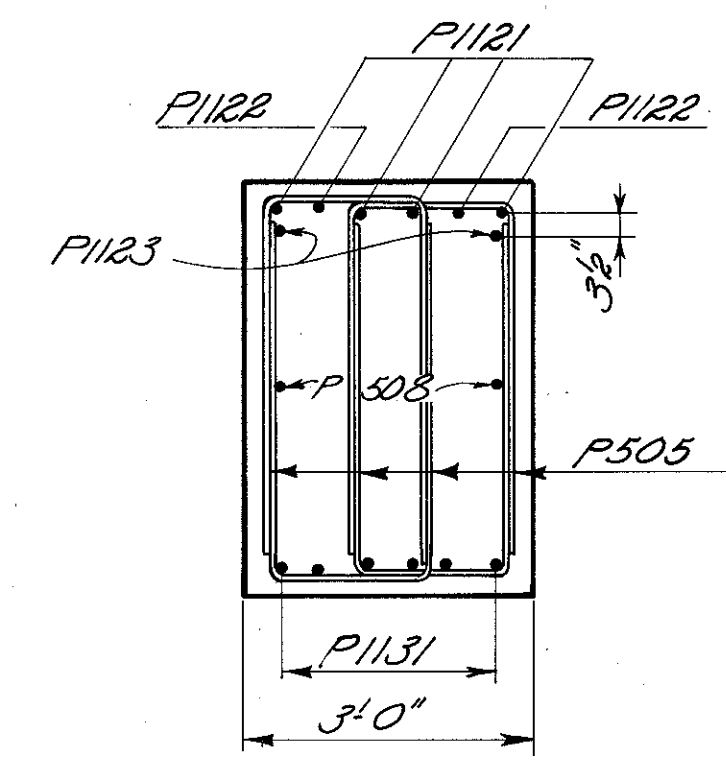
ELEVATION PIER 4 (E.B.)
 TYPE "A-I" FTG.



SECTION K-K



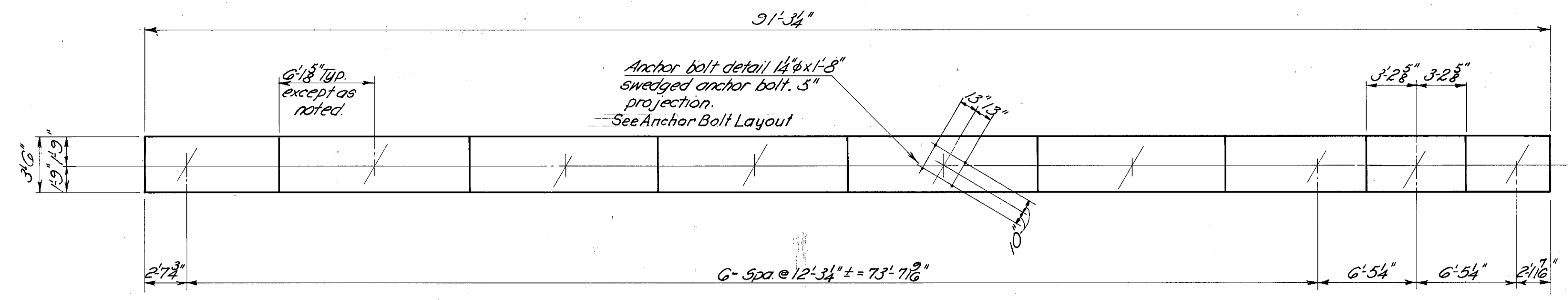
SECTION L-L



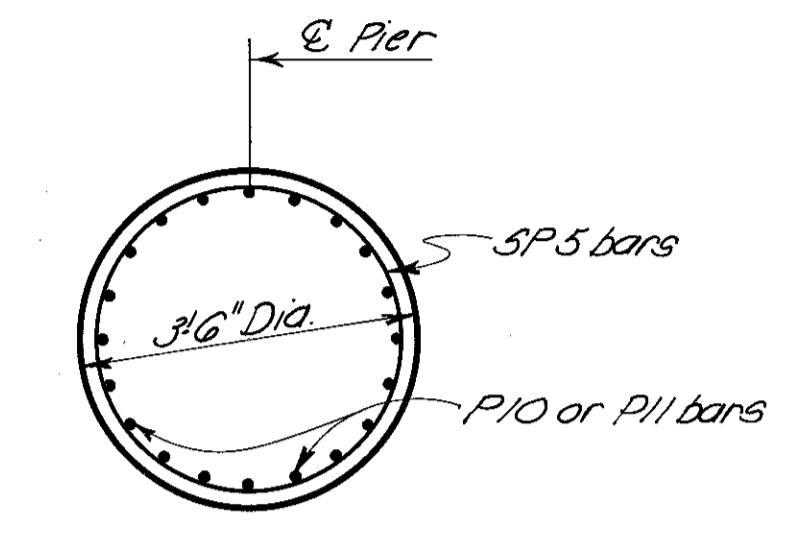
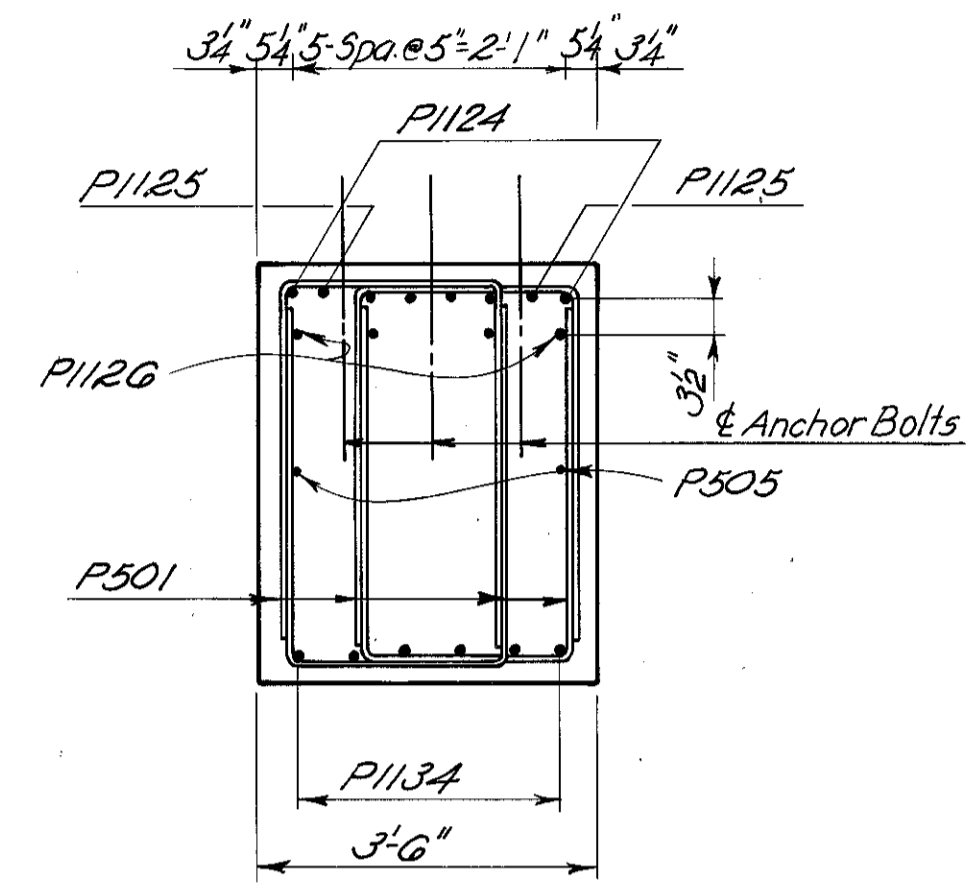
SECTION M-M

Work this sheet with shs. 10, 11, 12, 14, 32

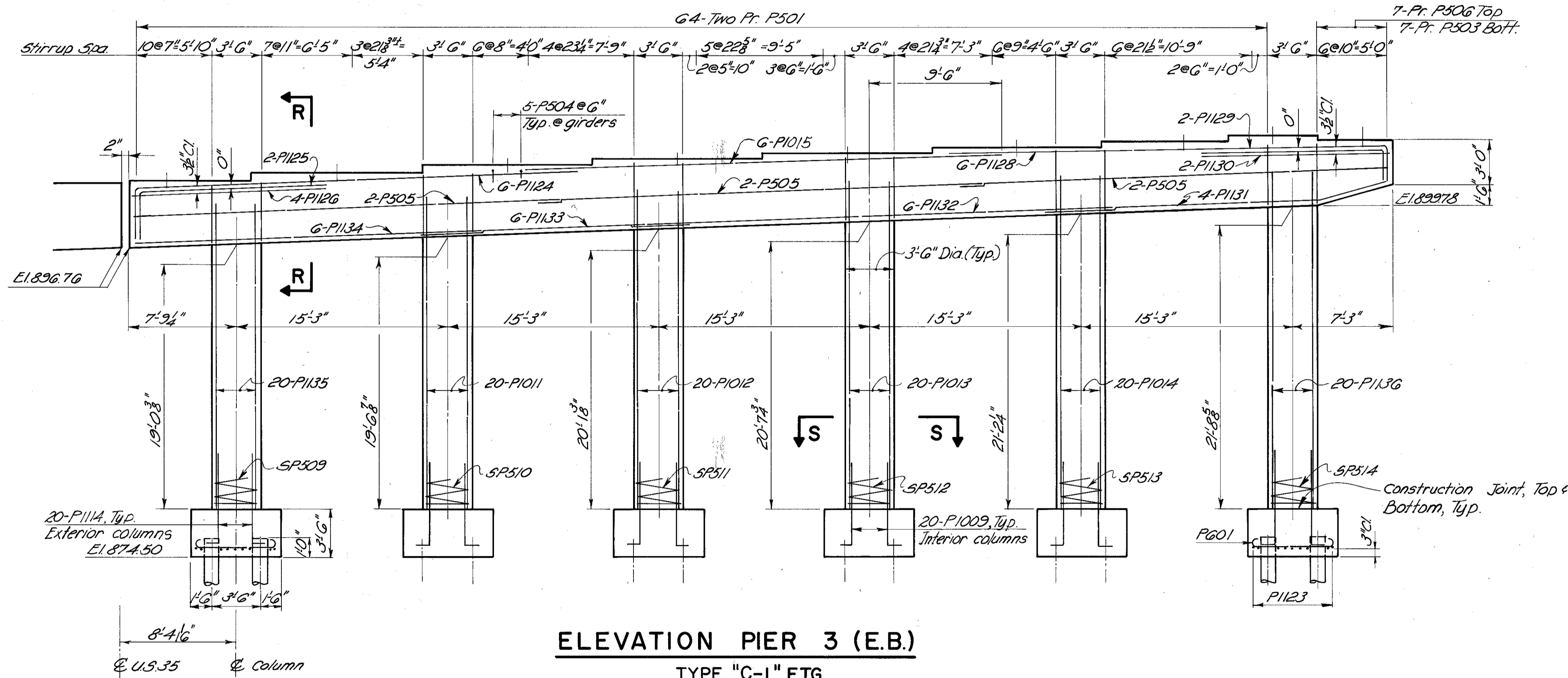
KING & GAVARIS CONSULTING ENGINEERS		13/32
CINCINNATI OHIO		
PIERS 1, 2 & 4 E.B.-4		
BRIDGE NO. GRE-675-0589		
I-675 UNDER RELOCATED U.S. 35		
GREENE COUNTY	STA: 28+76.00	TO
	STA: 32+97.62	
DESIGNED J.R.G.	DRAWN A.W.	TRACED S.A.
CHECKED S.A.	REVIEWED 9/25/72	DATE REVISION



CAP PLAN
Pier No. 3-E.B.



SECTION S-S

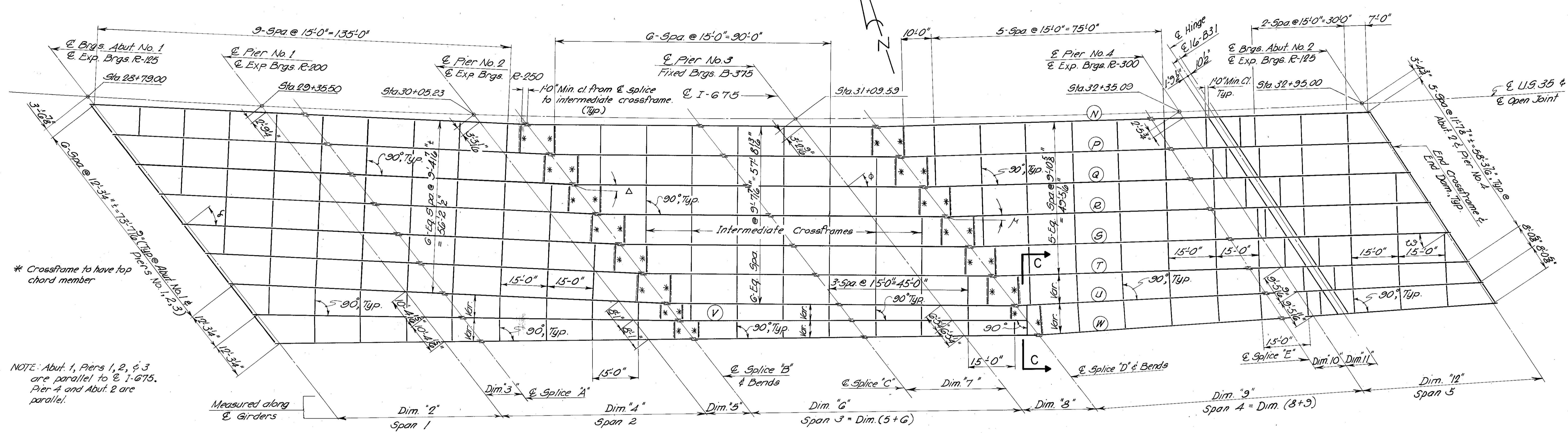


ELEVATION PIER 3 (E.B.)
TYPE "C-1" FTG.

SECTION R-R

NOTES:
For location and details of sign illumination conduit in pier 3 See Sh. 144/601
Work this sheet with shs. 10, 11, 12, 13/32

CINCINNATI		KING & GAVARIS CONSULTING ENGINEERS		OHIO		14/32
PIER 3 E.B.- 5						
BRIDGE NO. GRE.-675-0589						
I-675 UNDER RELOCATED U.S. 35						
GREENE COUNTY				STA: 28+76.00 TO STA: 32+97.62		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.R.G.	A.W.		S.A.		7/25/72	



* Crossframe to have top chord member

NOTE: Abut. 1, Piers 1, 2, & 3 are parallel to E-1-675. Pier 4 and Abut. 2 are parallel.

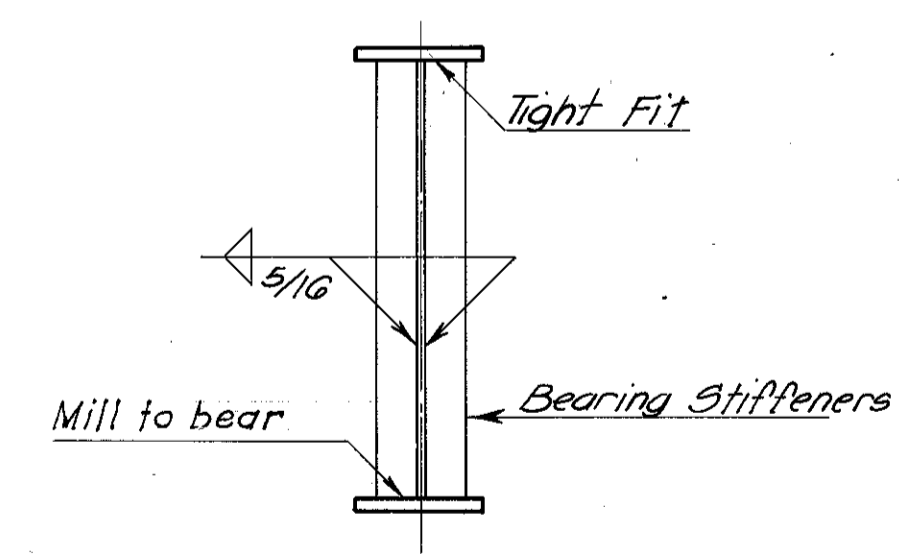
FRAMING PLAN EASTBOUND LANES

NOTES:
Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements.

Details of end dam and end crossframes (Included with structural steel for payment) similar to that shown on Std. Dwg. SD-1-69 & Sh. [C1][C2] except the outstanding leg of the 4" x 4" x 1/8" angle of the end dam shall be cut as necessary to clear the bearing stiffeners. See special End Crossframe Detail sh. [C1][C2]

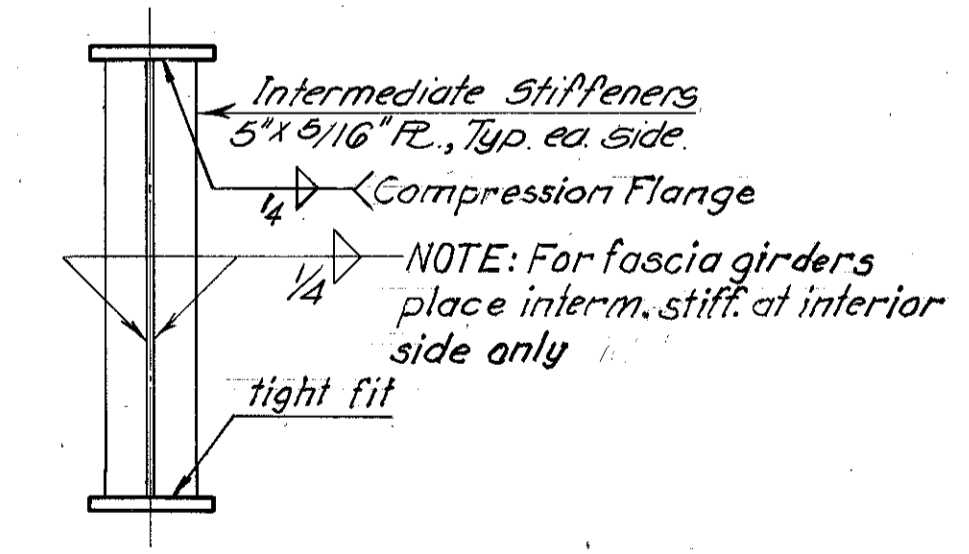
End of girder treatment similar to that shown on SD-1-69.
For camber tables and camber alignment diagram see sh. [B][D][32].
For details of Special Fixed Bearing B-375 see sh. [B][32].
For details of Expansion Bearings R-125, R-200, R-250 & R-300 see Std. Dwg. RB-1-55.
For typical intermediate crossframe see sh. [C2][C2].
For typical transverse section, see Section A-A sh. [23][32].
Work this sheet with shs. [16][17][18][19][32].
For details of intermediate slab joint (included with structural steel for payment) see sh. [C2][C2].
For Underbridge Luminaire Supporting Brackets see sh. [16][60] included with Item 513 for payment.

		GEOMETRY																	
		2	3	4	5	6	7	8	9	10	11	12	φ	Δ	φ	μ	ω		
C.D.	A	56'-7 3/8"	13'-7 1/8"	70'-10 1/2"	15'-4 1/4"	90'-0 1/8"	33'-3 1/2"	24'-10 3/8"	111'-10 3/8"	9'-6 9/16"	9'-6 9/16"	57'-5 3/4"	40'-5 9/18"	1'-55' 10"	39'-0 4/10"	2'-06' 48"	27'-0 1/23"		
	B	do	do	do	do	do	do	do	111'-4 1/8"	10'-1 1/8"	10'-1 1/8"	60'-9 1/2"	do	do	do	do	32'-3 1/26"		
	C	do	do	do	do	do	do	do	110'-3 3/8"	do	do	do	do	do	do	do	do		
	D	do	do	do	do	do	do	do	109'-3 3/8"	do	do	do	do	do	do	do	do	do	
Westbound	E	56'-7 3/8"	13'-7 1/8"	70'-10 1/2"	15'-4 1/4"	90'-0 1/8"	33'-3 1/2"	24'-10 3/8"	108'-3"	10'-1 1/8"	10'-1 1/8"	60'-9 1/2"	40'-5 9/18"	1'-55' 10"	39'-0 4/10"	2'-06' 48"	32'-3 1/26"		
	F	55'-11 3/4"	13'-5 1/2"	70'-0 1/2"	15'-2 1/8"	91'-1 1/8"	33'-8 3/8"	25'-2 1/8"	106'-10"	10'-0 3/8"	10'-0 3/8"	60'-4 1/8"	40'-4 1/2"	0'-18' 33"	39'-55' 29"	3'-34' 35"	32'-0 1/100"		
	G	do	do	do	do	89'-1 1/8"	33'-0"	24'-7 1/8"	106'-1 1/2"	do	do	do	do	1'-32' 13"	38'-2 1/49"	2'-00' 55"	do		
	H	do	do	do	do	do	do	do	105'-0 1/8"	do	do	do	do	do	do	do	do		
	J	do	do	do	do	do	do	do	104'-0 1/8"	do	do	do	do	do	do	do	do		
	K	do	do	do	do	do	do	do	102'-11 1/4"	do	do	do	do	do	do	do	do		
	L	do	do	do	do	do	do	do	101'-10 1/2"	do	do	do	do	do	do	do	do		
	M	do	do	do	do	do	do	do	100'-9 3/4"	do	do	do	do	do	do	do	do		
	N	do	do	do	do	do	do	do	100'-3"	do	do	do	do	do	do	do	do		
	P	do	do	do	do	do	do	do	99'-1 1/8"	do	do	do	do	do	do	do	do		
Eastbound	Q	do	do	do	do	do	do	do	98'-0 3/4"	do	do	do	do	do	do	do	do		
	R	do	do	do	do	do	do	do	96'-11 1/8"	do	do	do	do	do	do	do	do		
	S	do	do	do	do	do	do	do	95'-10 1/2"	do	do	do	do	do	do	do	do		
	T	do	do	do	do	do	do	do	94'-9 3/4"	10'-0 3/8"	10'-0 3/8"	60'-4 3/8"	do	do	do	2'-00' 55"	32'-0 1/100"		
	U	55'-11 3/4"	13'-5 1/2"	70'-0 1/2"	15'-2 1/8"	89'-1 1/8"	33'-0"	24'-7 1/8"	92'-6 1/2"	9'-10 1/8"	9'-10 1/8"	59'-7 1/2"	40'-4 1/2"	1'-52' 13"	38'-2 1/49"	3'-10' 00"	30'-5 1/55"		
	V	54'-9 1/8"	13'-2 1/8"	68'-6 3/4"	14'-10 1/8"	88'-5 1/8"	32'-8 3/8"	24'-5 3/8"	—	—	—	—	—	38'-44' 53"	0'-57' 46"	3'-21' 07"	—		
	W	53'-7 1/8"	12'-10 1/8"	67'-1 1/8"	14'-6 1/8"	87'-9 1/4"	32'-5 1/8"	24'-3 1/8"	90'-4 3/8"	9'-9 1/2"	9'-9 1/2"	58'-11 1/8"	37'-11' 52"	0"	37'-11' 52"	3'-11' 25"	29'-40' 33"		
	X	—	—	—	—	—	—	—	—	9'-9 3/4"	9'-9 3/4"	59'-0 3/4"	—	—	—	—	—	29'-54' 07"	



Bearing stiffeners to be vertical

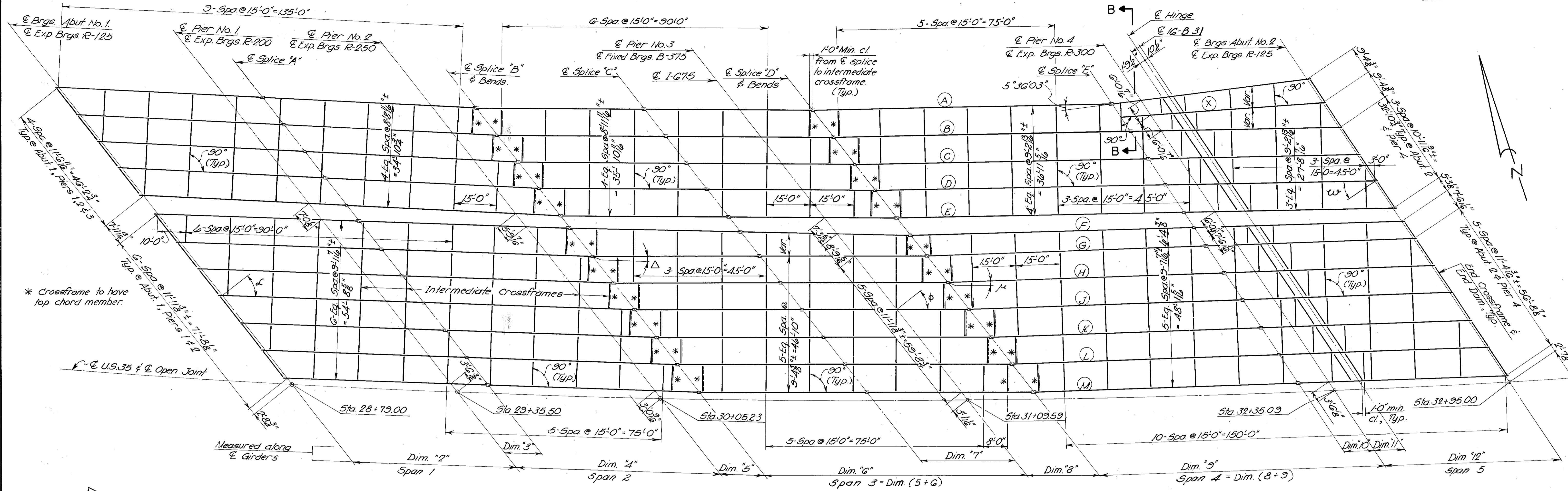
BEARING STIFFENERS



Intermediate stiffeners shall be welded to the compression flange. Stiffeners may be normal to flanges.

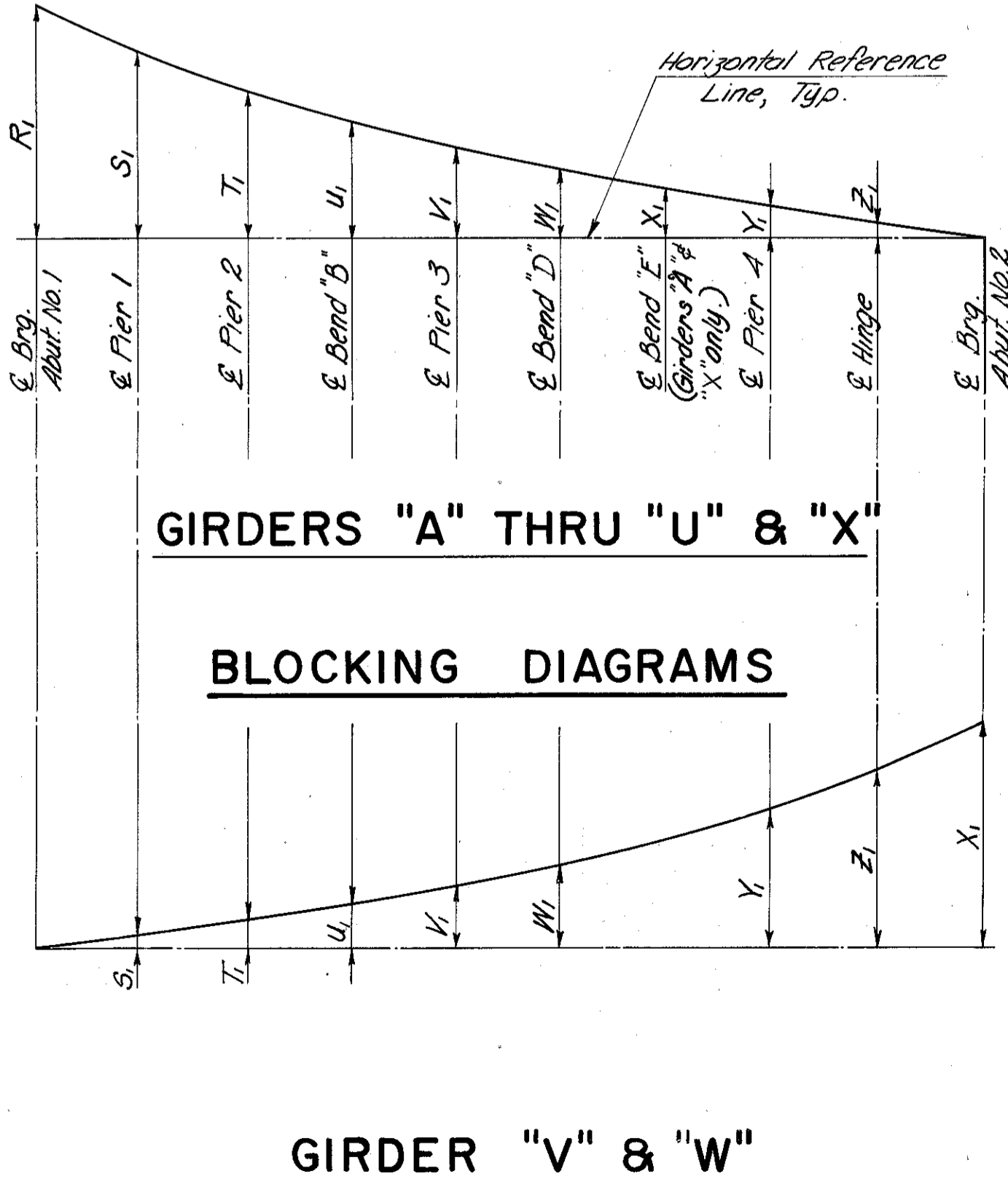
INTERMEDIATE STIFFENERS

KING & GAVARIS		CONSULTING ENGINEERS		15/32
STEEL FRAMING PLAN				
EASTBOUND LANES				
BRIDGE NO. GRE-675-0589				
I-675 UNDER RELOCATED U.S. 35				
GREENE COUNTY		STA: 28+76.00		TO
		STA: 32+97.62		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
V.P.	A.W.		S.A.	9/25/72



FRAMING PLAN
Westbound Lanes and C.D.

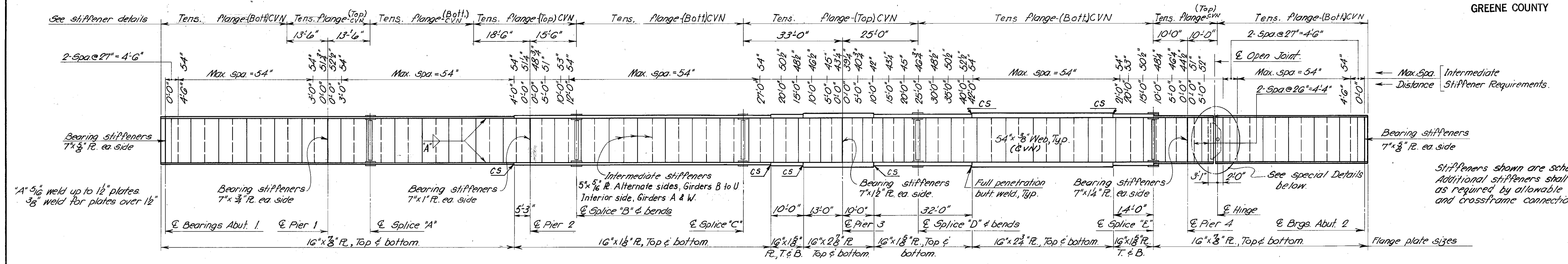
* Crossframe to have top chord member.



		BLOCKING TABLE																					
GIRDER DIMENSION	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	
																							R ₁
R ₁	1-9 1/2"	1-5 1/2"	1-4 3/4"	1-4 1/4"	1-3 3/8"	1-4 1/6"	1-5 3/4"	1-5 3/8"	1-4 1/6"	1-4 3/8"	1-3 5/8"	1-2 15/16"	1-2 13/16"	1-2 15/16"	1-1 13/16"	1-1 1/4"	1-0 3/4"	7 1/6"	1 5/8"				
S ₁	1-6 3/4"	1-2 3/8"	1-2 1/6"	1-1 3/4"	1-1 1/2"	1-1 1/2"	1-3"	1-2 1/2"	1-2 1/6"	1-1 3/8"	1-1 1/6"	1-1 1/8"	1-0 1/6"	1-0"	1-1 1/2"	1-1 1/8"	1-0 1/6"	7 1/4"	3 1/2"	4 1/6"	5 3/8"		
T ₁	1-4"	1-0"	1-1 3/8"	1-1 1/4"	1-1 1/8"	1-1 1/8"	1-0 3/4"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	
U ₁	1-3 1/2"	1-1 1/2"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	1-1 1/8"	
V ₁	1-1 3/8"	7 1/6"	7 1/6"	7 1/6"	7 1/6"	7 1/6"	7 1/6"	7 1/6"	7 1/6"	7 1/6"	7 1/6"	7 1/6"	7 1/6"	7 1/6"	7 1/6"	7 1/6"	7 1/6"	7 1/6"	7 1/6"	7 1/6"	7 1/6"	7 1/6"	
W ₁	1-0 3/4"	6 3/8"	6 1/6"	6 1/6"	6 1/6"	6 3/8"	6 1/6"	6 1/6"	6 1/6"	6 1/6"	6 1/6"	6 1/6"	6 1/6"	6 1/6"	6 1/6"	6 1/6"	6 1/6"	6 1/6"	6 1/6"	6 1/6"	6 1/6"	6 1/6"	
Y ₁	5 3/8"	1 1/2"	1 3/8"	1 1/6"	2 1/6"	2 1/6"	2"	1 1/2"	1 1/2"	1 3/8"	1 1/2"	2 3/8"	1 1/6"	1 3/8"	1 3/8"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2 1/6"	4 3/8"	3 1/2"	
Z ₁	4 1/4"	1 1/6"	1 3/8"	1 1/6"	1 3/8"	1 3/8"	1 1/6"	1 3/8"	1 1/6"	1 3/8"	1 1/6"	2"	1 3/8"	1 1/6"	1 1/6"	1 3/8"	1 1/6"	1 3/8"	1 1/6"	1 3/8"	4 3/8"	2 1/6"	
X ₁	6"																				1 1/2"	4 3/8"	

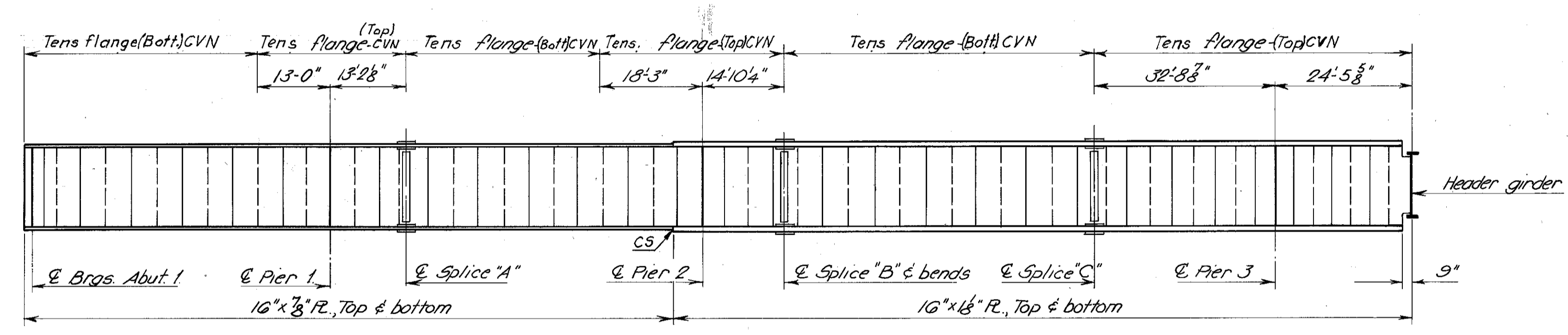
Mark this sheet with sheets 15, 17, 18, 19, 32

KING & GAVARIS CONSULTING ENGINEERS CINCINNATI		OHIO		16/32
STEEL FRAMING PLAN				
WESTBOUND LANES & C.D.				
BRIDGE NO. GRE-675-0589				
I-675 UNDER RELOCATED U.S. 35				
GREENE COUNTY				
		STA. 28+76.00		TO
		STA. 32+97.62		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
V.P.	A.W.		S.A.	DATE 9/25/72



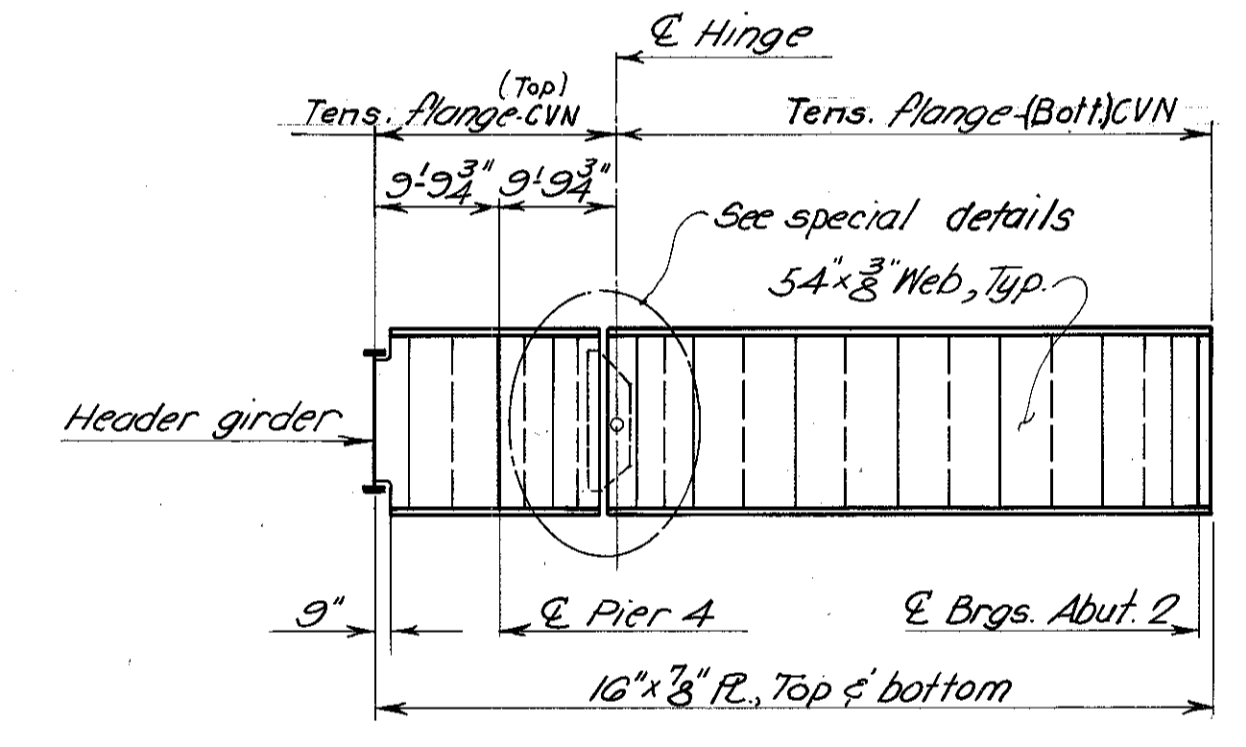
TYPICAL GIRDER ELEVATION

Welded forming attachments shall not be used in the tension areas of the top flange.



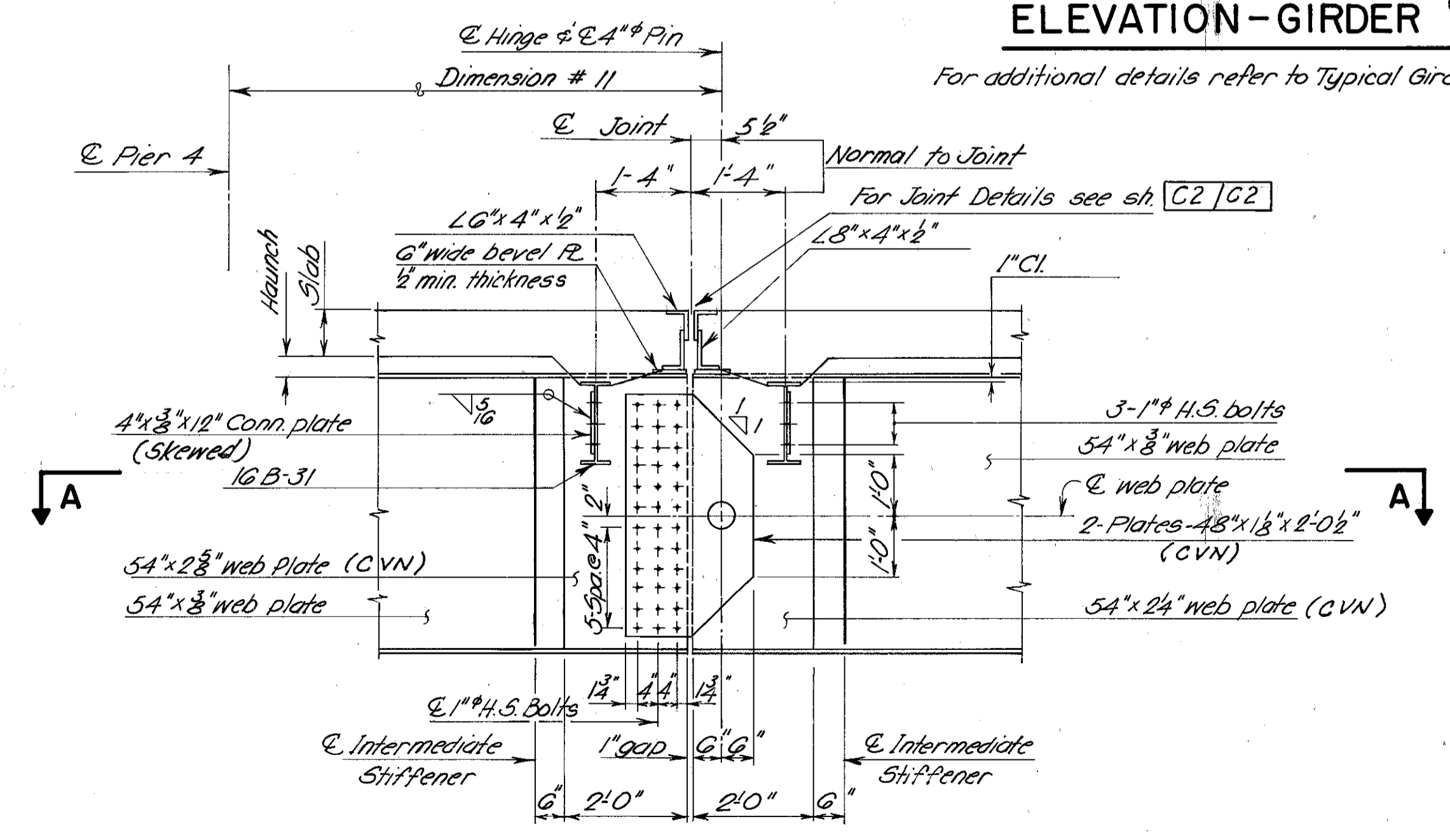
ELEVATION - GIRDER "V"

For additional details refer to Typical Girder Elevation

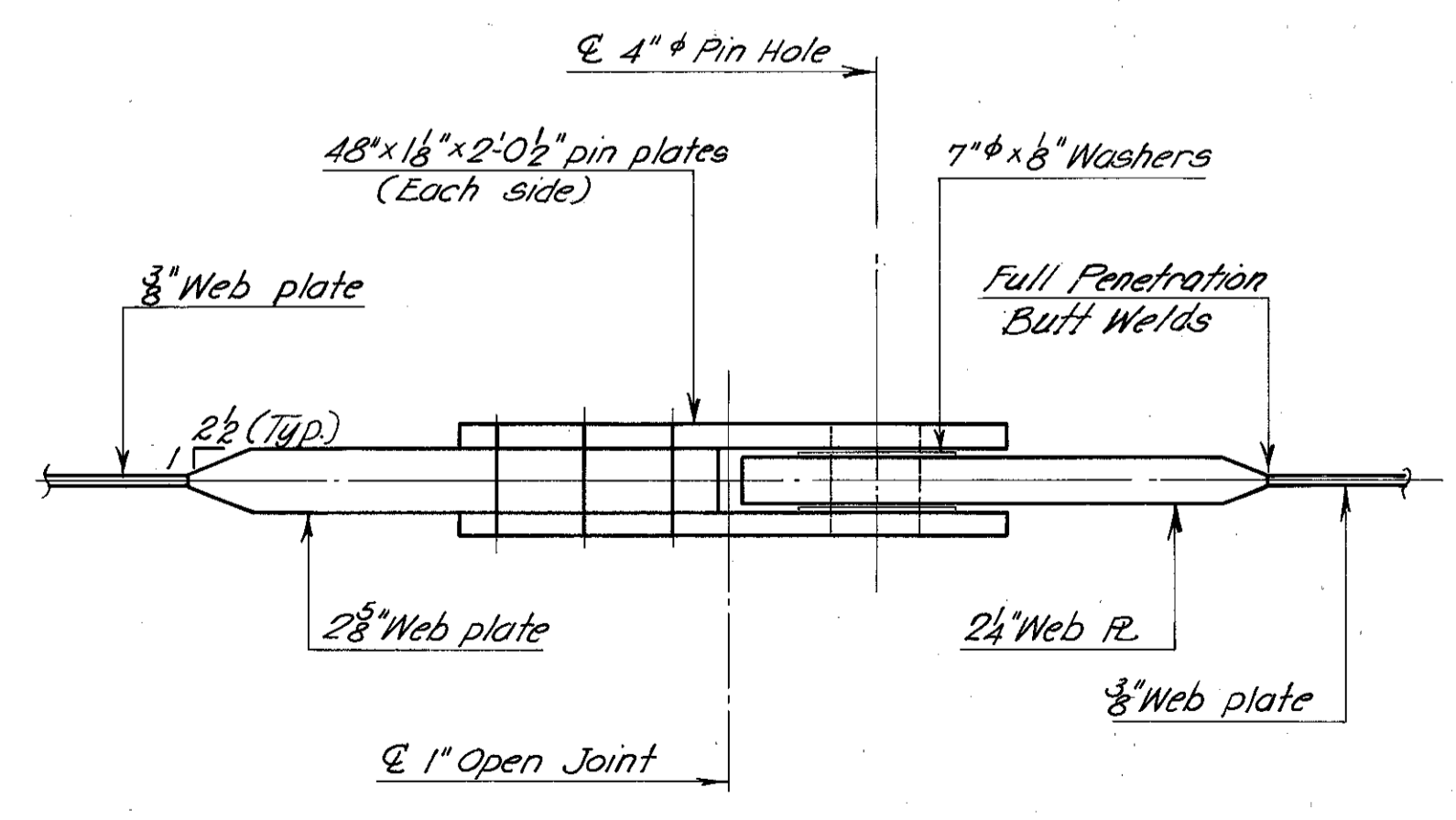


ELEVATION - GIRDER "X"

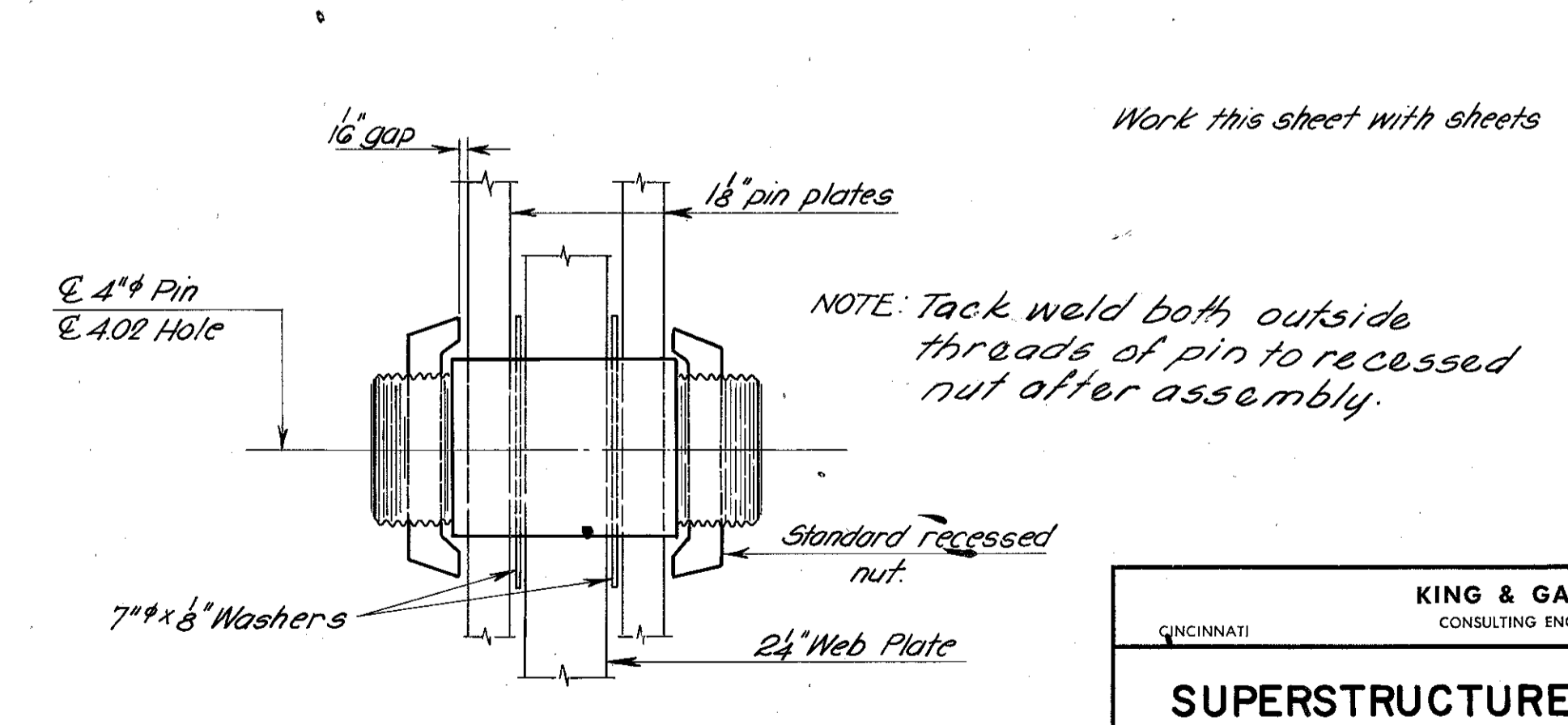
For additional details refer to Typical Girder Elevation



JOINT DETAIL AT HINGE



SECTION A-A



PIN - DETAIL

Work this sheet with sheets 15, 16, 18, 19, 32

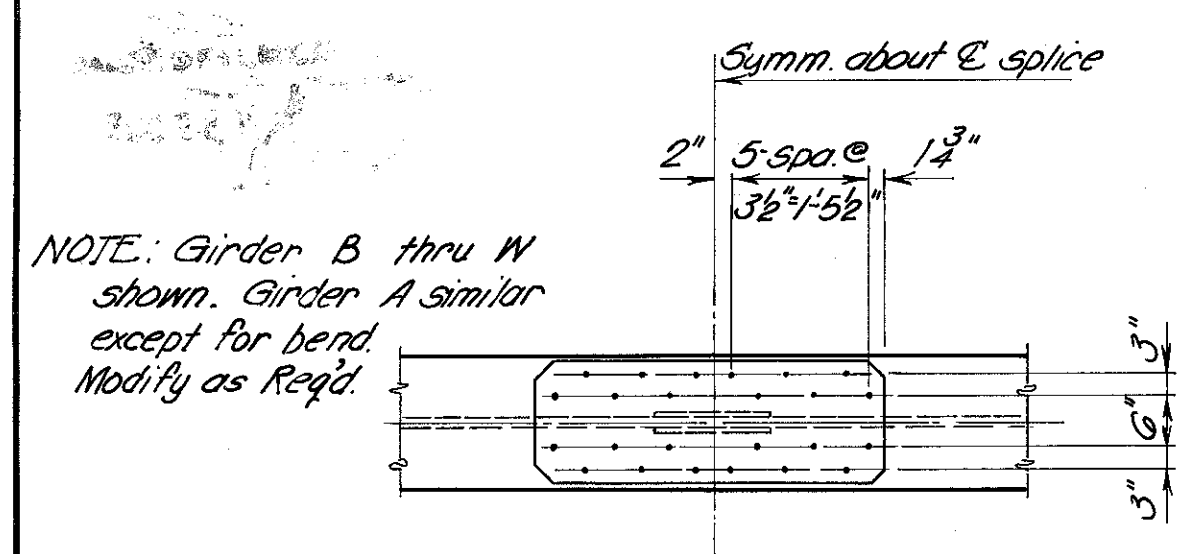
KING & GAVARIS CONSULTING ENGINEERS		17/32
SUPERSTRUCTURE DETAILS - I		
BRIDGE NO. GRE-675-0589		
I-675 UNDER RELOCATED U.S. 35		
GREENE COUNTY		STA: 28+76.00 TO STA: 32+97.62
DESIGNED V.P.	DRAWN A.W.	TRACED S.A.
CHECKED S.A.	REVIEWED S.A.	DATE 9/25/82
		REVISED 7/27/82

MICROFILM
JUN 1 1966

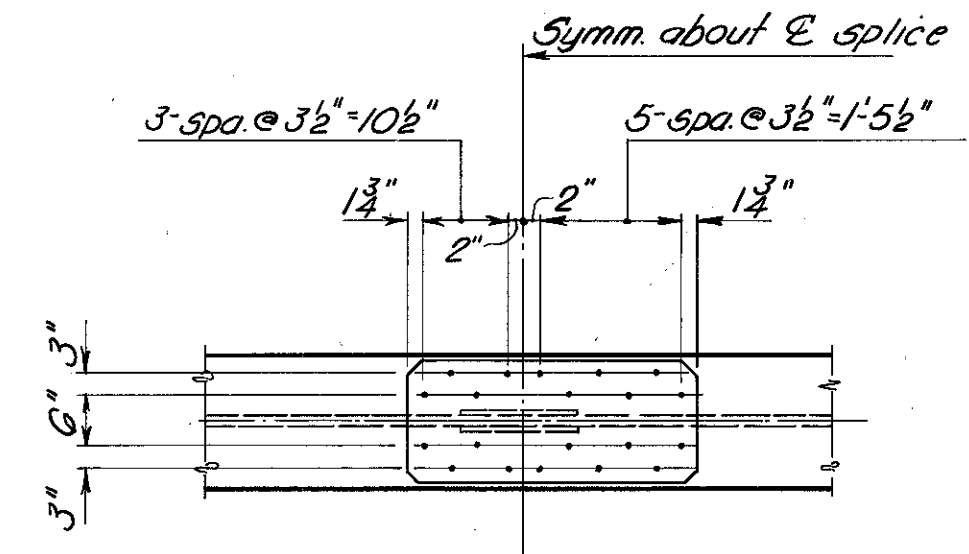
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

438
616

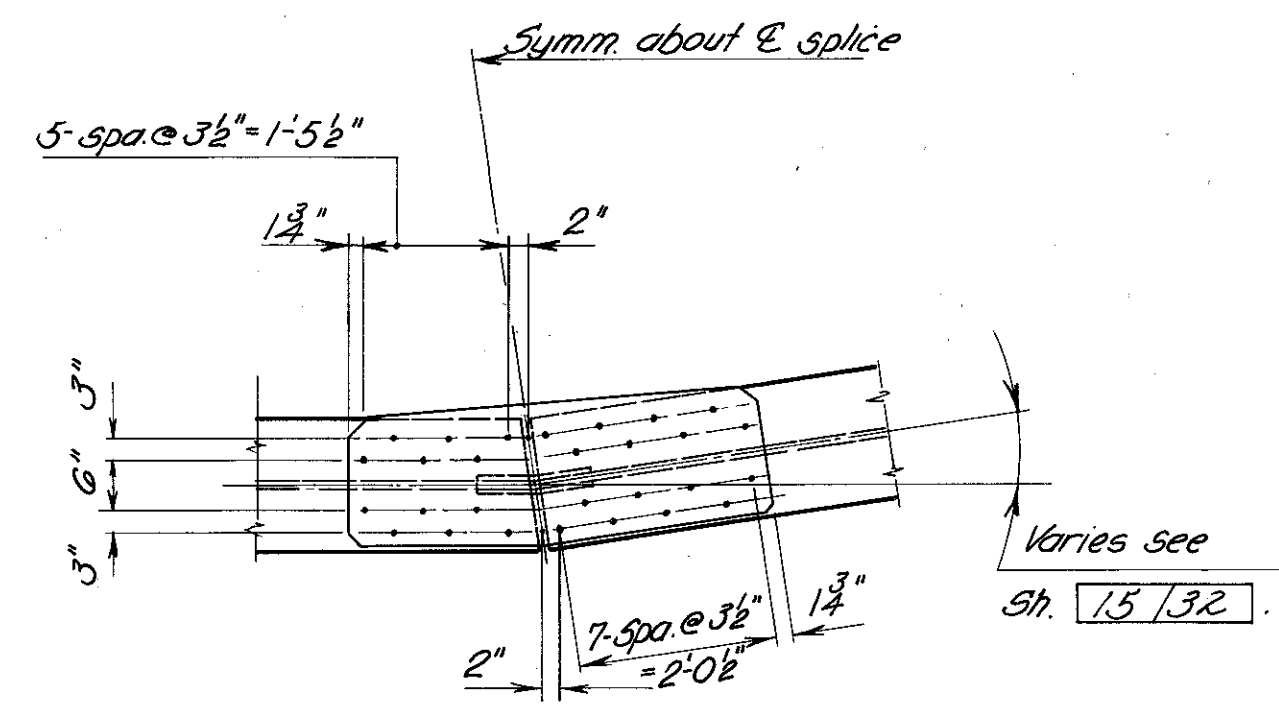
GRE-675 - 5-37
GREENE COUNTY



PLAN

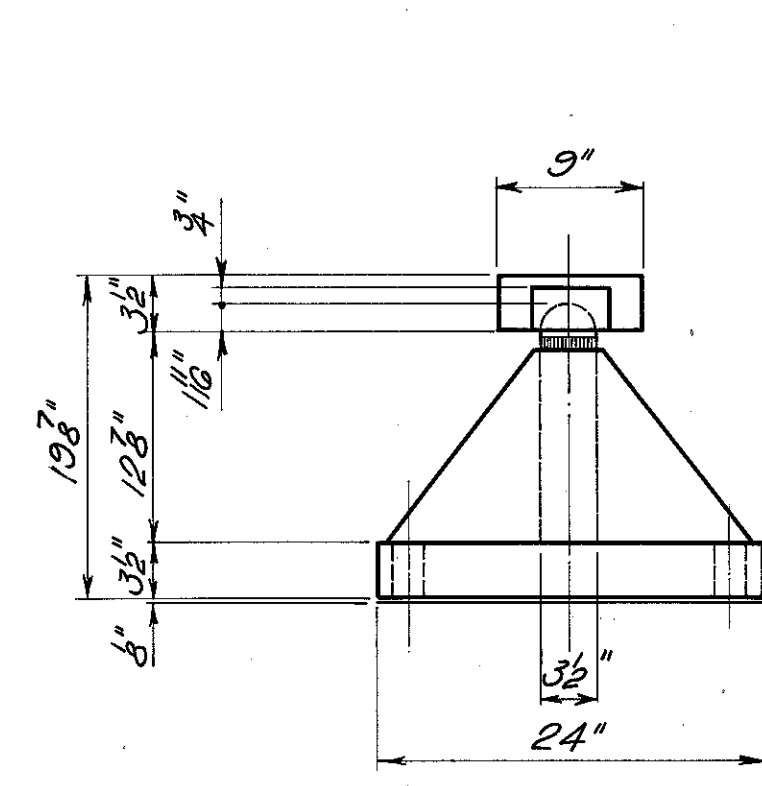


PLAN

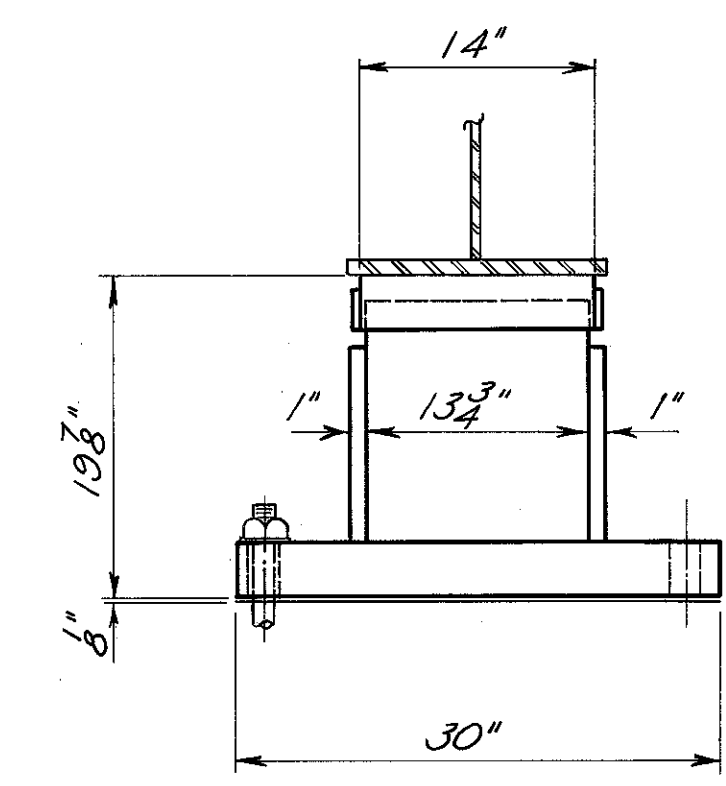


PLAN

NOTE: For additional details refer to Standard Bridge Drawings RB-1-55

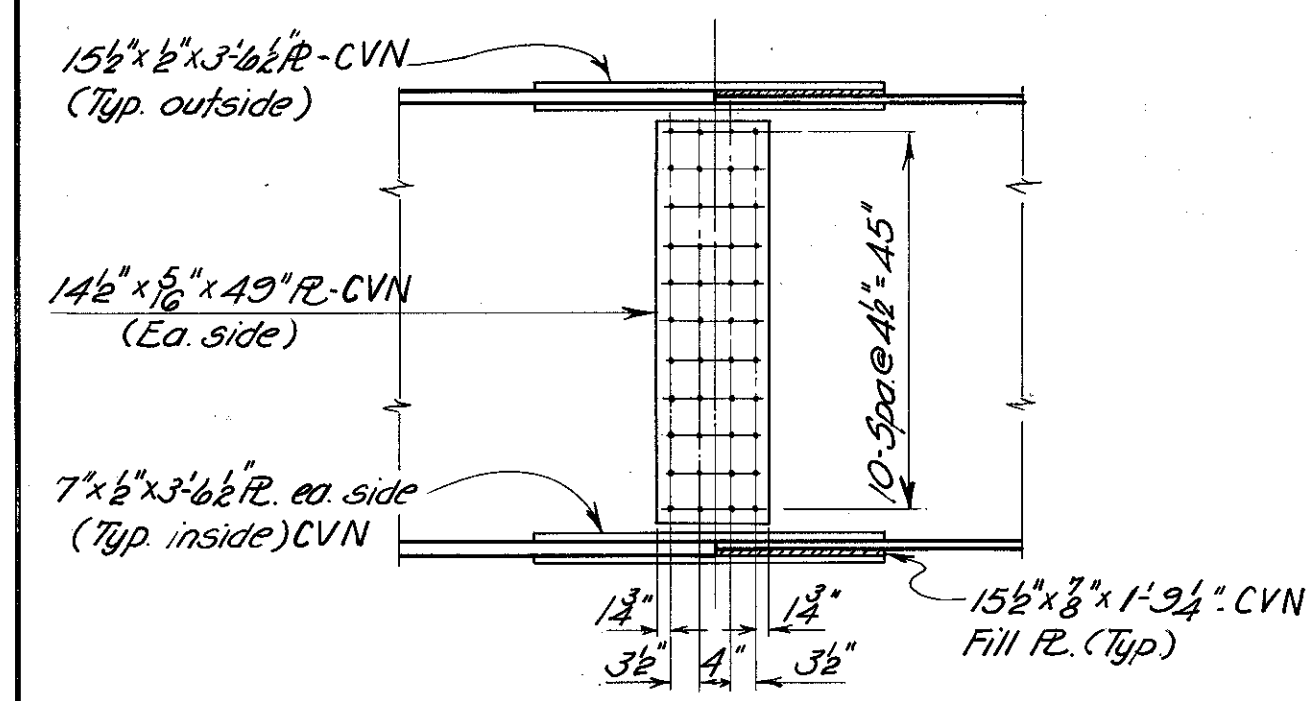


SIDE VIEW

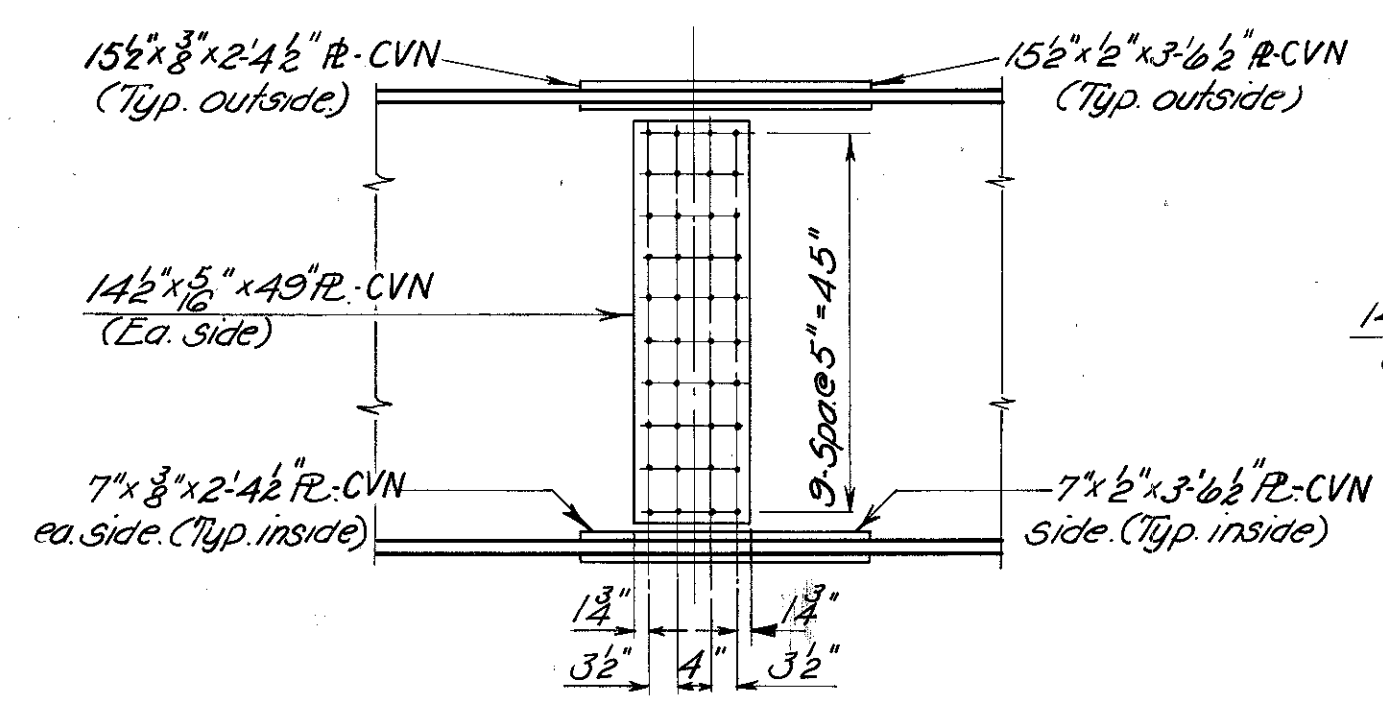


END ELEVATION

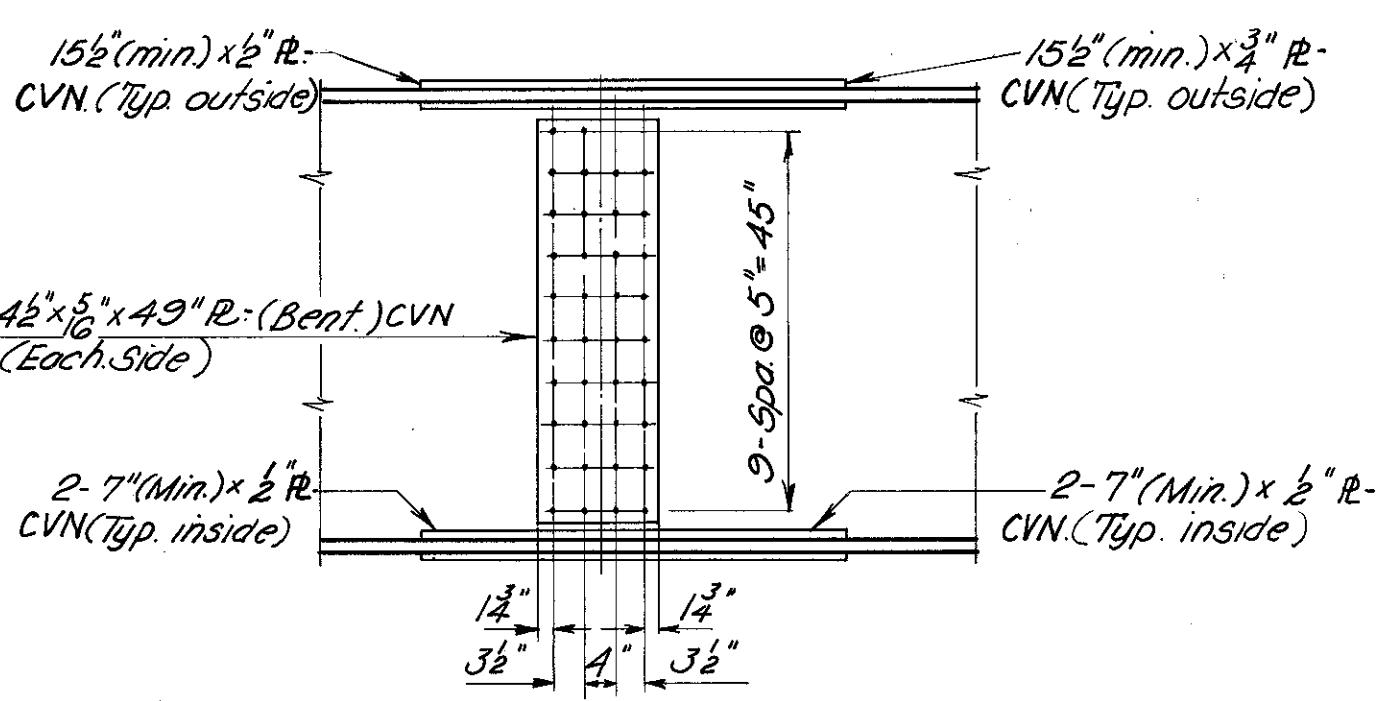
SPECIAL BLOSTER DETAIL B-375



SPLICE - E



SPLICE - A

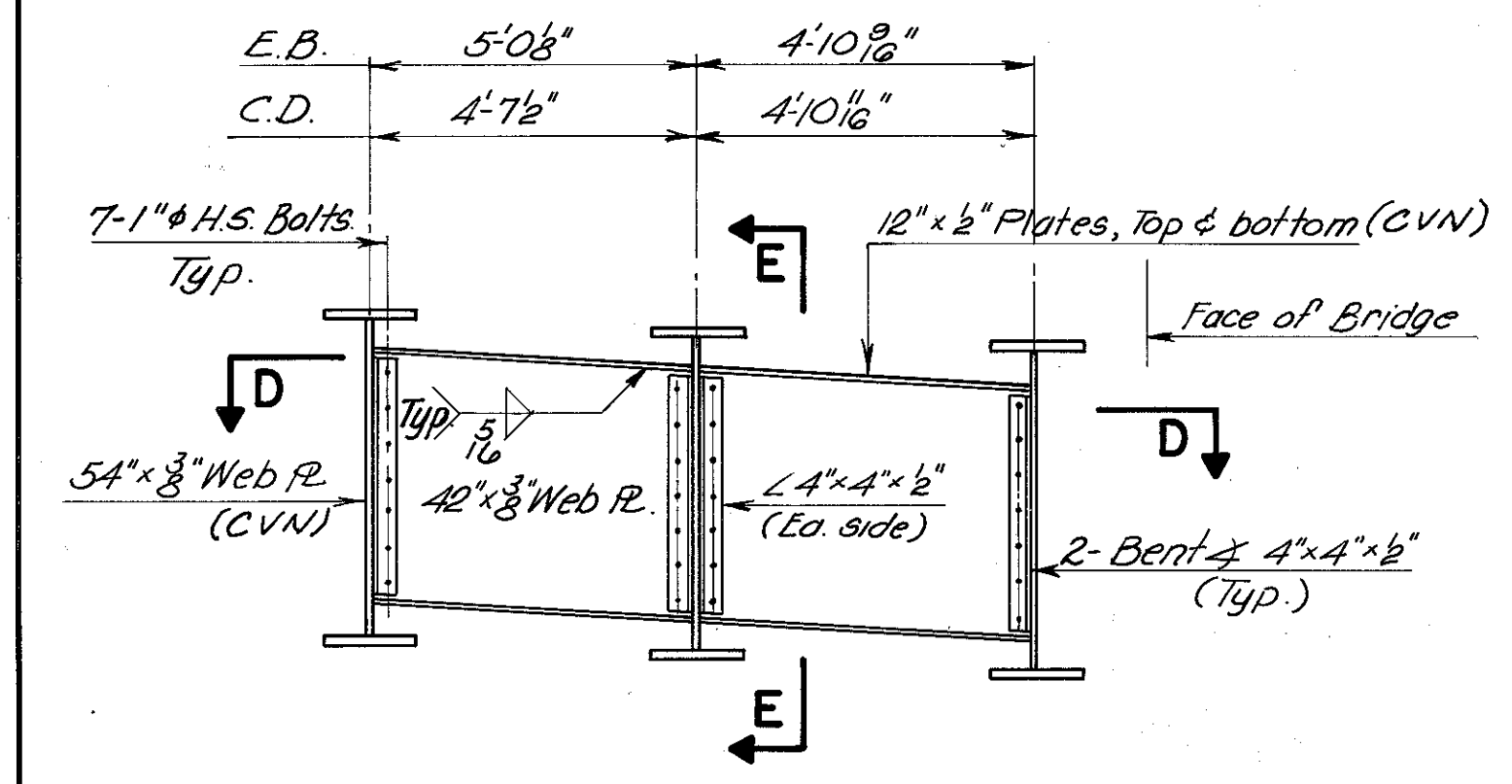


SPLICE - C

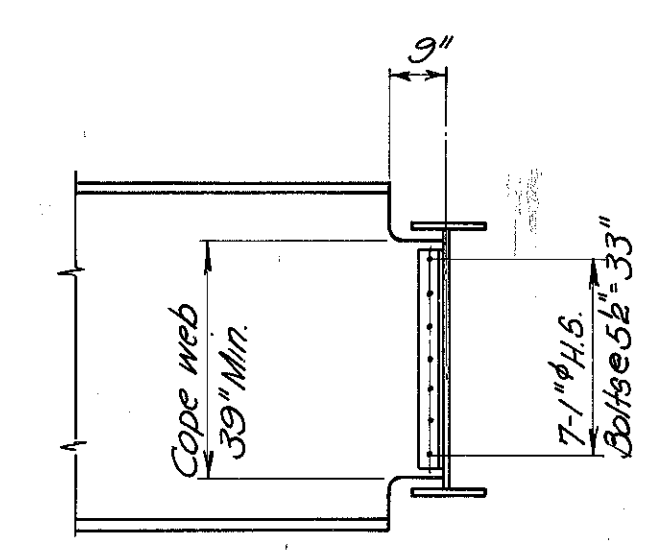
SPLICE - B

SPLICE - D

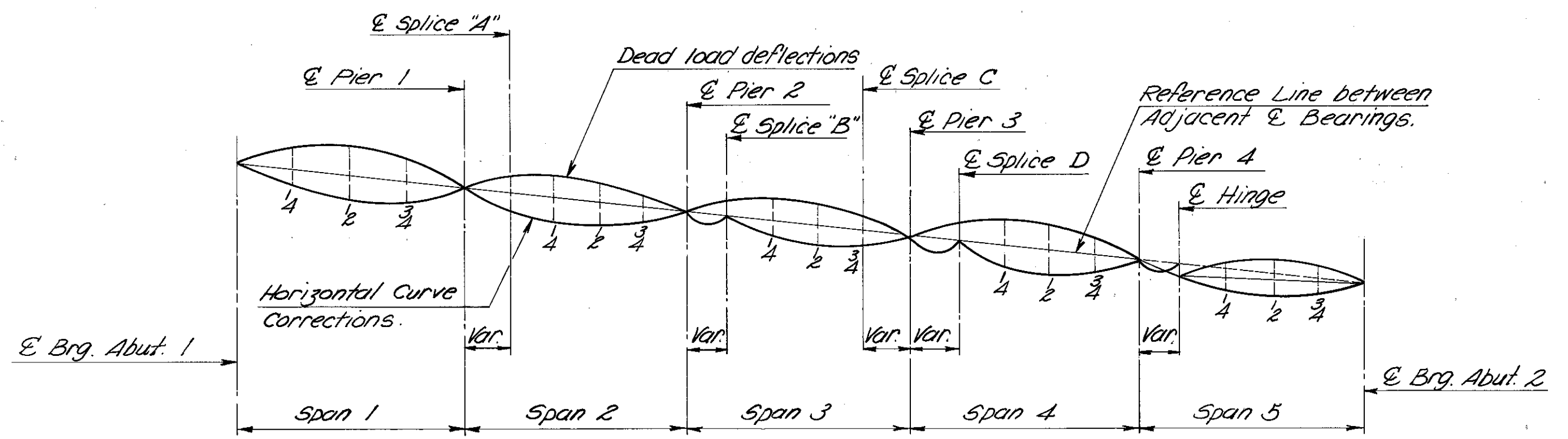
All Splice Bolts to be 1" H.S.
Inside Plates to be centered on gage line.



SECTIONS B-B & C-C
Girders V & X

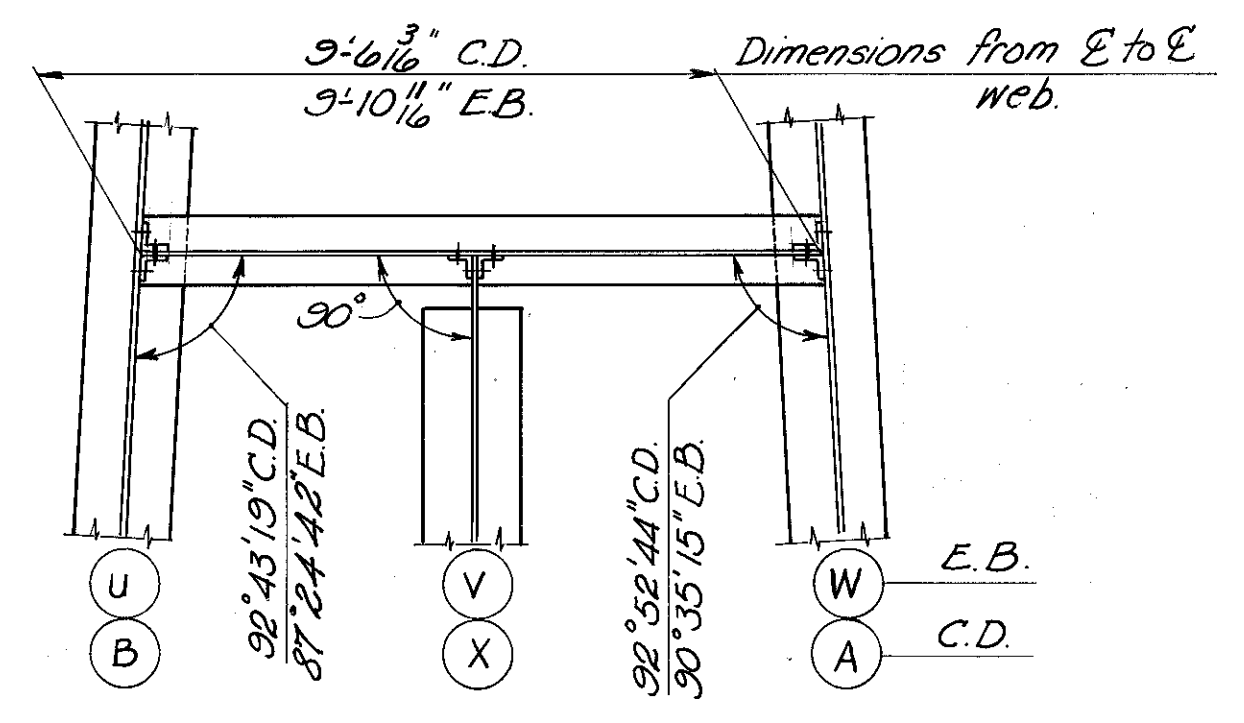


SECTION E-E



CAMBER ALIGNMENT DIAGRAM

For Deflection & Camber Tables see sh. 19/32
Work this sheet with sheets 15, 16, 17, 19/32



SECTION D-D

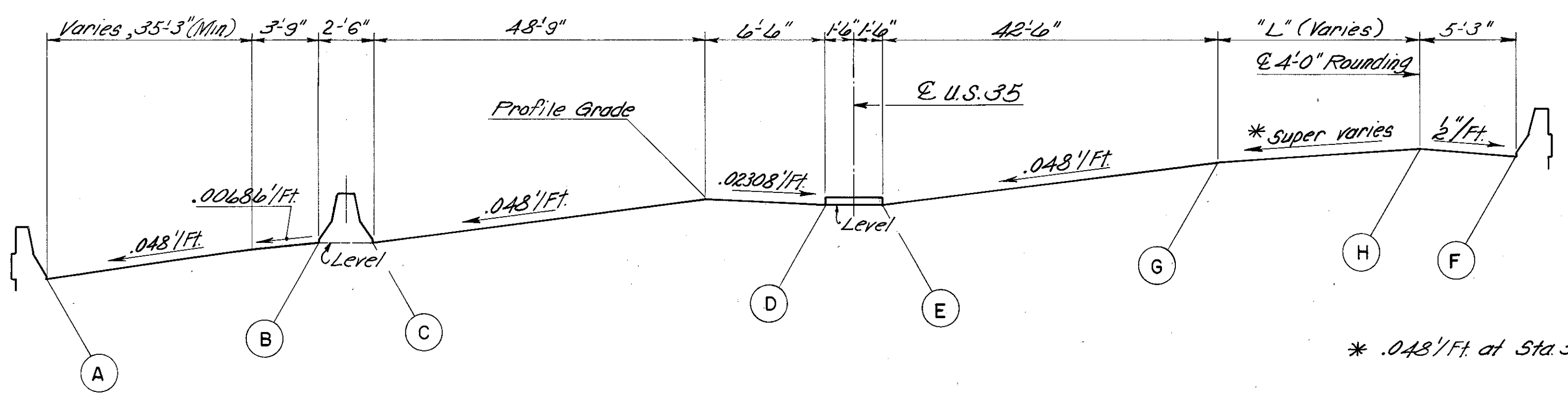
NOTE:
An uplift condition normally exists at these connections. The contractor shall review his erection procedure to insure that adequate stability and strength of connections exist at all times until all Dead Load is in place.

CINCINNATI		KING & GAVARIS CONSULTING ENGINEERS		OHIO	
SUPERSTRUCTURE DETAILS - 2					
BRIDGE NO. GRE-675-0589					
I-675 UNDER RELOCATED U.S. 35					
GREENE COUNTY			STA: 28+76.00 TO STA: 32+97.62		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
V.P.	A.W.		S.A.		9/25/72
					4-27-82

		DEFLECTION & CAMBER TABLE (INCHES)																					
		SPAN 1				SPAN 2				SPAN 3				SPAN 4				SPAN 5					
		1/4 Pt	1/2 Pt	3/4 Pt	Center	1/4 Pt	1/2 Pt	3/4 Pt	Center	1/4 Pt	1/2 Pt	3/4 Pt	Center	1/4 Pt	1/2 Pt	3/4 Pt	Center	1/4 Pt	1/2 Pt	3/4 Pt	Center		
C.D.	GIRDERS A & E	DEFLECTION DUE TO WEIGHT OF STEEL	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	
		DEFLECTION DUE TO REMAINING D.L.	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	
		ADJ. REQ'D FOR HORIZONTAL CURVE	G-"A"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"
		G-"E"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	
C.D.	GIRDERS B, C, D	DEFLECTION DUE TO WT. OF STEEL	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	
		DEFLECTION DUE TO REMAINING D.L.	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	
		ADJ. REQ'D FOR HORIZONTAL CURVE	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	
		REQ'D SHOP CAMBER	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	
C.D.	GIRDERS F	DEFLECTION DUE TO WT. OF STEEL	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	
		DEFLECTION DUE TO REMAINING D.L.	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	
		ADJ. REQ'D FOR HORIZONTAL CURVE	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	
		REQ'D SHOP CAMBER	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	
W.B.	GIRDERS G, H, J, K, L	DEFLECTION DUE TO WT. OF STEEL	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	
		DEFLECTION DUE TO REMAINING D.L.	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	
		ADJ. REQ'D FOR HORIZONTAL CURVE	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	
		REQ'D SHOP CAMBER	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	
W.B.	GIRDER M	DEFLECTION DUE TO WT. OF STEEL	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	
		DEFLECTION DUE TO REMAINING D.L.	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	
		ADJ. REQ'D FOR HORIZONTAL CURVE	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	
		REQ'D SHOP CAMBER	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	
W.B.	GIRDER N	DEFLECTION DUE TO WT. OF STEEL	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	
		DEFLECTION DUE TO REMAINING D.L.	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	
		ADJ. REQ'D FOR HORIZONTAL CURVE	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	
		REQ'D SHOP CAMBER	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	
W.B.	GIRDERS P, Q, R	DEFLECTION DUE TO WT. OF STEEL	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	
		DEFLECTION DUE TO REMAINING D.L.	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	
		ADJ. REQ'D FOR HORIZONTAL CURVE	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	
		REQ'D SHOP CAMBER	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	
W.B.	GIRDER S	DEFLECTION DUE TO WT. OF STEEL	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	
		DEFLECTION DUE TO REMAINING D.L.	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	
		ADJ. REQ'D FOR HORIZONTAL CURVE	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	
		REQ'D SHOP CAMBER	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	
W.B.	GIRDER T	DEFLECTION DUE TO WT. OF STEEL	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	
		DEFLECTION DUE TO REMAINING D.L.	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	
		ADJ. REQ'D FOR HORIZONTAL CURVE	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	
		REQ'D SHOP CAMBER	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	

		DEFLECTION & CAMBER TABLE CONTINUES																				
		SPAN 1				SPAN 2				SPAN 3				SPAN 4				SPAN 5				
		1/4 Pt	1/2 Pt	3/4 Pt	Center	1/4 Pt	1/2 Pt	3/4 Pt	Center	1/4 Pt	1/2 Pt	3/4 Pt	Center	1/4 Pt	1/2 Pt	3/4 Pt	Center	1/4 Pt	1/2 Pt	3/4 Pt	Center	
C.D.	GIRDER U	DEFLECTION DUE TO WT. OF STEEL	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"
		DEFLECTION DUE TO REMAINING D.L.	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"
		ADJ. REQ'D FOR HORIZONTAL CURVE	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"
		REQ'D SHOP CAMBER	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"
E.B.	GIRDER V	DEFLECTION DUE TO WT. OF STEEL	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"
		DEFLECTION DUE TO REMAINING D.L.	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"
		ADJ. REQ'D FOR HORIZONTAL CURVE	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"
		REQ'D SHOP CAMBER	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"
E.B.	GIRDER W	DEFLECTION DUE TO WT. OF STEEL	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"
		DEFLECTION DUE TO REMAINING D.L.	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"
		ADJ. REQ'D FOR HORIZONTAL CURVE	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"
		REQ'D SHOP CAMBER	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"
C.D.	GIRDER X	DEFLECTION DUE TO WT. OF STEEL	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"
		DEFLECTION DUE TO REMAINING D.L.	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"
		ADJ. REQ'D FOR HORIZONTAL CURVE	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"
		REQ'D SHOP CAMBER	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"	8"	8"	16"	16"

		TABLE "B"				
		SPAN 4				
		E Spl No. 4	1/4 Pt	1/2 Pt	3/4 Pt	E Spl No. 5
GIRDER G	DEFL. DUE TO STEEL	4"	5"	9"	16"	16"
	DEFL. DUE TO D.L.	1/16"	3/8"	1/2"	1/2"	1/2"
GIRDER I	DEFL. DUE TO STEEL	15"	16"	23"	17"	16"
	DEFL. DUE TO D.L.	1/16"	1/8"	2"	1/8"	3/8"
GIRDER J	DEFL. DUE TO STEEL	15"	14"	23"	17"	16"
	DEFL. DUE TO D.L.	1/16"	1/8"	1/8"	3/8"	3/8"
GIRDER K	DEFL. DUE TO STEEL	15"	14"	23"	17"	16"
	DEFL. DUE TO D.L.	1/16"	1/8"	1/8"	3/8"	3/8"
GIRDER L	DEFL. DUE TO STEEL	15"	14"	23"	17"	16"
	DEFL. DUE TO D.L.	1/16"	1/8"	1/8"	3/8"	3/8"
GIRDER O	DEFL. DUE TO STEEL	15"	14"	23"	17"	16"
	DEFL. DUE TO D.L.	1/16"	1/8"	1/8"	3/8"	3/8"
GIRDER P	DEFL. DUE TO STEEL	15"	14"	23"	17"	16"
	DEFL. DUE TO D.L.	1/16"	1/8"	1/8"	3/8"	3/8"
GIRDER Q	DEFL. DUE TO STEEL	15"	14"	23"	17"	16"
	DEFL. DUE TO D.L.	1/16"	1/8"	1/8"	3/8"	3/8"
GIRDER R	DEFL. DUE TO STEEL	15"	14"	23"	17"	16"
	DEFL. DUE TO D.L.	1/16"	1/8"	1/8"	3/8"	3/8"



TYPICAL SUPERELEVATED SECTION

NOTES:

Negative Horizontal curve corrections shall be made by varying the slab haunch. A negative curve correction indicates a haunch reduction between end points. A negative deflection indicates downward camber required. For Camber Alignment Diagram, see sh. 18 | 32

TRANSITION ELEVATIONS			
STATION	DIMENSION "L"	ELEV. "G"	ELEV. "H"
29+25	29.8450	911.58	910.91
29+50	27.7950	911.50	911.15
29+80.72	27.000	911.41	911.41
30+00	26.50	911.35	911.56
30+25	25.875	911.28	911.74
30+50	25.250	911.20	911.90
30+75	24.625	911.13	912.06
31+00	24.000	911.05	912.20

For Camber Alignment Diagram see sh. 18 | 32
 Work this sheet with shs. 15, 16, 17, 18 | 32

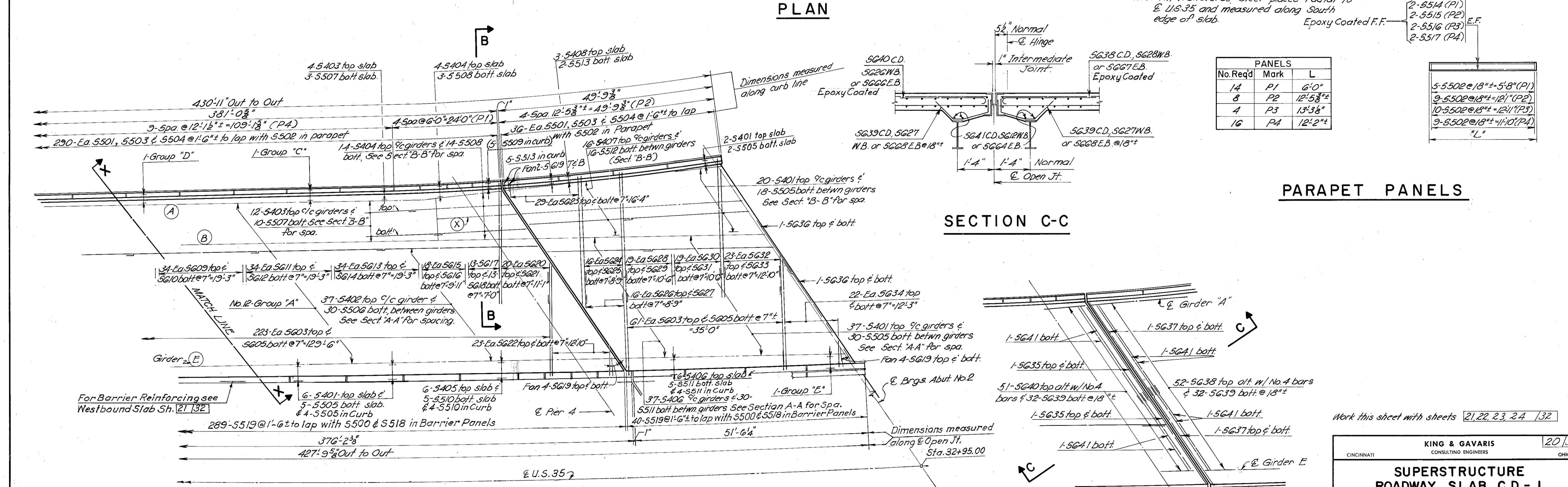
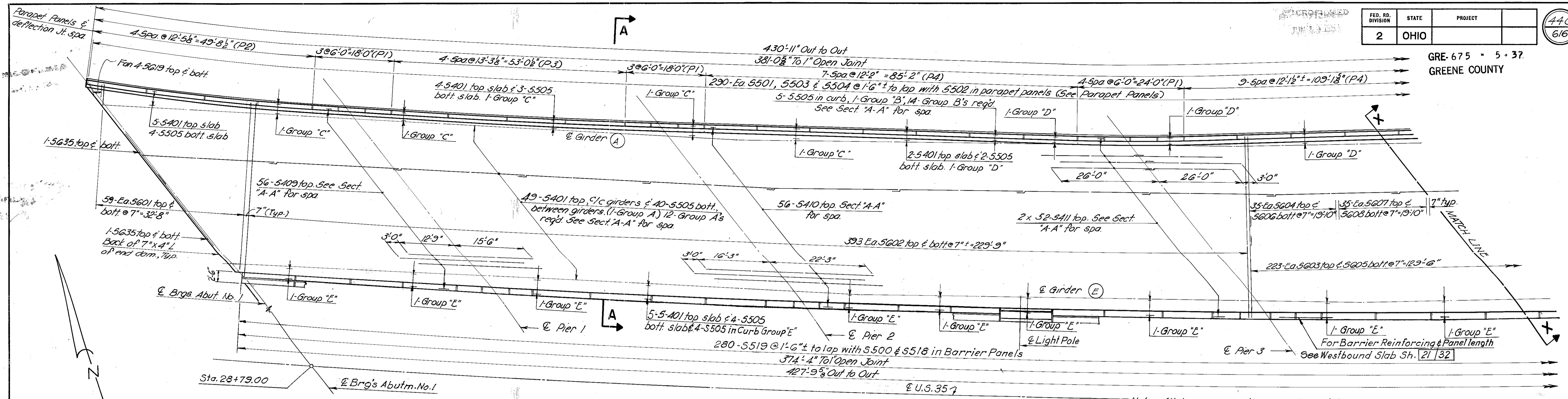
KING & GAVARIS
 CONSULTING ENGINEERS
 CINCINNATI OHIO

SUPERSTRUCTURE DETAILS - 3

BRIDGE NO. GRE-675-0589
 I-675 UNDER RELOCATED U.S. 35
 GREENE COUNTY STA: 28+76.00 TO STA: 32+97.62

DESIGNED: A.W. TR

GRE-675 - 5-37
GREENE COUNTY

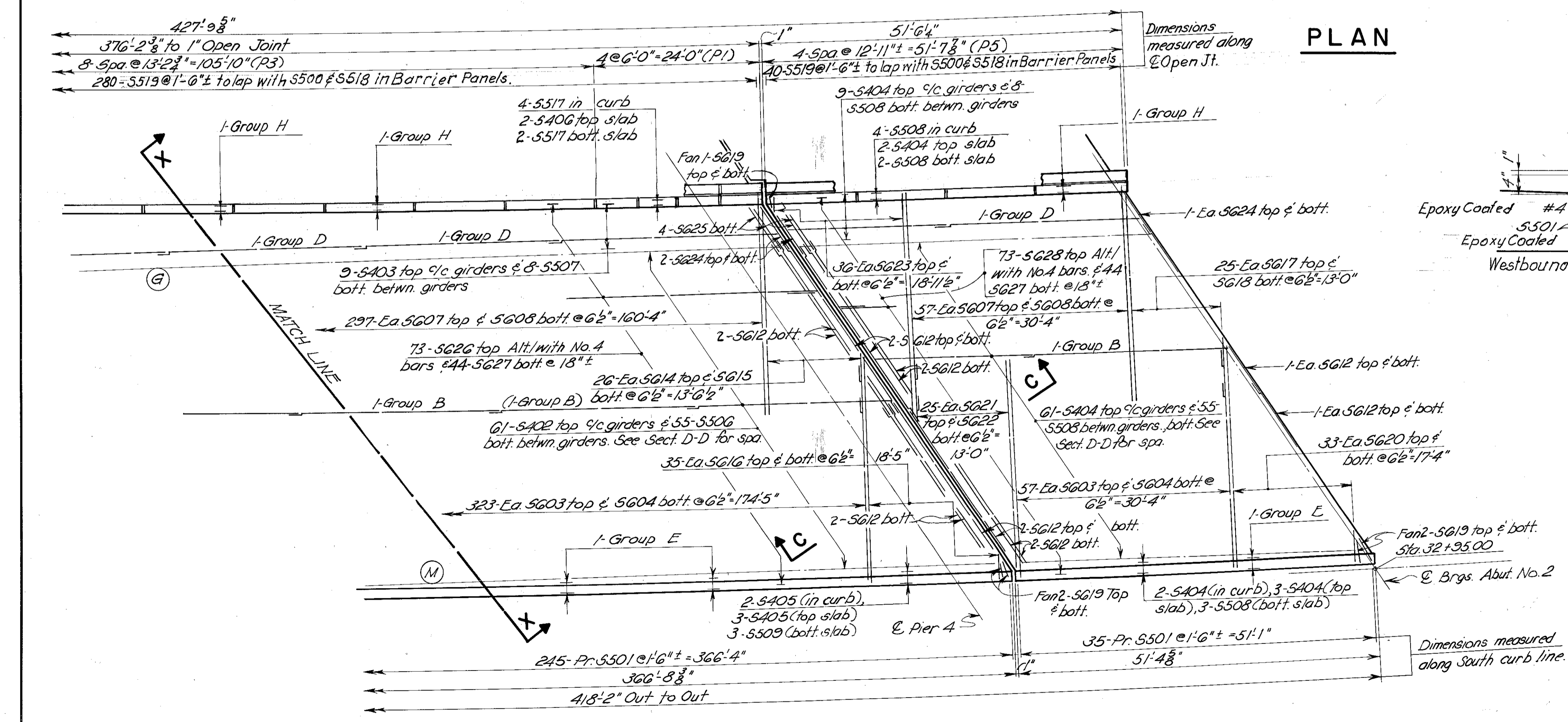
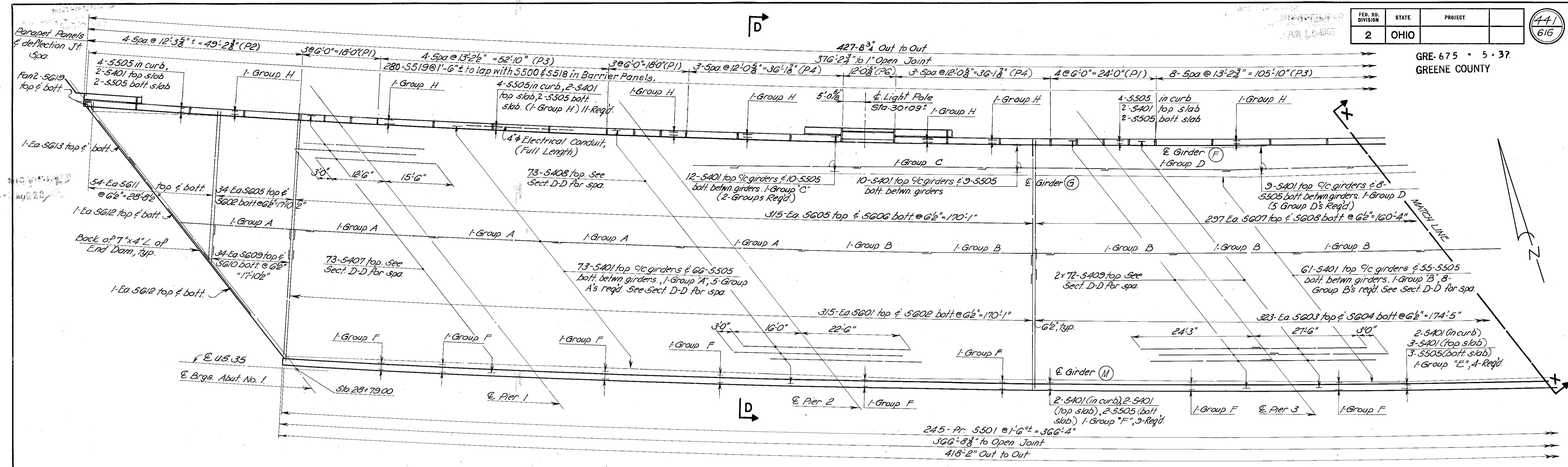


Work this sheet with sheets 21, 22, 23, 24, 32

KING & GAVARIS CONSULTING ENGINEERS		20/32
CINCINNATI	OHIO	
SUPERSTRUCTURE ROADWAY SLAB C.D. - I		
BRIDGE NO. GRE-675-0589		
I-675 UNDER RELOCATED U.S. 35		
GREENE COUNTY	STA: 28+76.00	TO
	STA: 32+97.62	
DESIGNED V.P.	DRAWN A.W.	TRACED S.A.
CHECKED S.A.	REVIEWED S.A.	DATE 9/25/12
		REVISED

PARTIAL PLAN AT INTERMEDIATE JT.

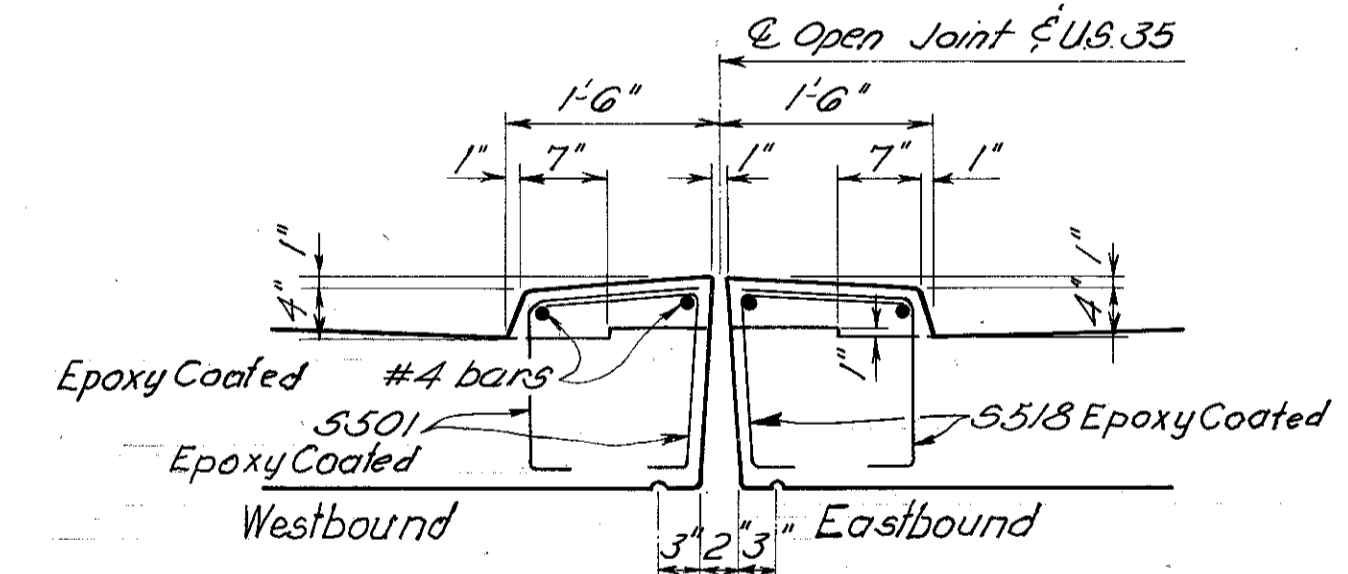
GRE-675-5-37
GREENE COUNTY



PLAN CONTINUES

Note: All transverse steel placed radial to and measured along E U.S. 35

PLAN



MEDIAN DETAIL
(TEMPORARY)

Epoxy Coated N.F.
E.F.

PANELS		
No. Req'd	Mark	L
14	P1	6'-0"
4	P2	12'-3 3/8"
12	P3	13'-2 1/2"
6	P4	12'-0 3/8"
4	P5	12'-11"
1	P6	12'-0 3/8"

5-5500 & 5518 @ 18" (P1)
3-5500 & 5518 @ 18" (P2)
10-5500 & 5518 @ 18" (P3)
9-5500 & 5518 @ 18" (P4)
10-5500 & 5518 @ 18" (P5)
(P6) See Common Details, Sht. C11C2

BARRIER PANELS

2 Sets Required

Notes:
For Reinforcing at Light Standard in Median Barrier (P6) see Common Details, Sht. C11C2.
Work this sheet with sheets 20, 22, 23, 24, 32.

KING & GAVARIS CONSULTING ENGINEERS		21/32
OHIO		
SUPERSTRUCTURE ROADWAY SLAB W.B. - 2		
BRIDGE NO. GRE-675-0589		
I-675 UNDER RELOCATED U.S. 35		
GREENE COUNTY		STA: 28+76.00 TO STA: 32+97.62
DESIGNED V. P.	DRAWN A. W.	TRACED S. A.
CHECKED S. A.	REVIEWED S. A.	DATE 9/27/72

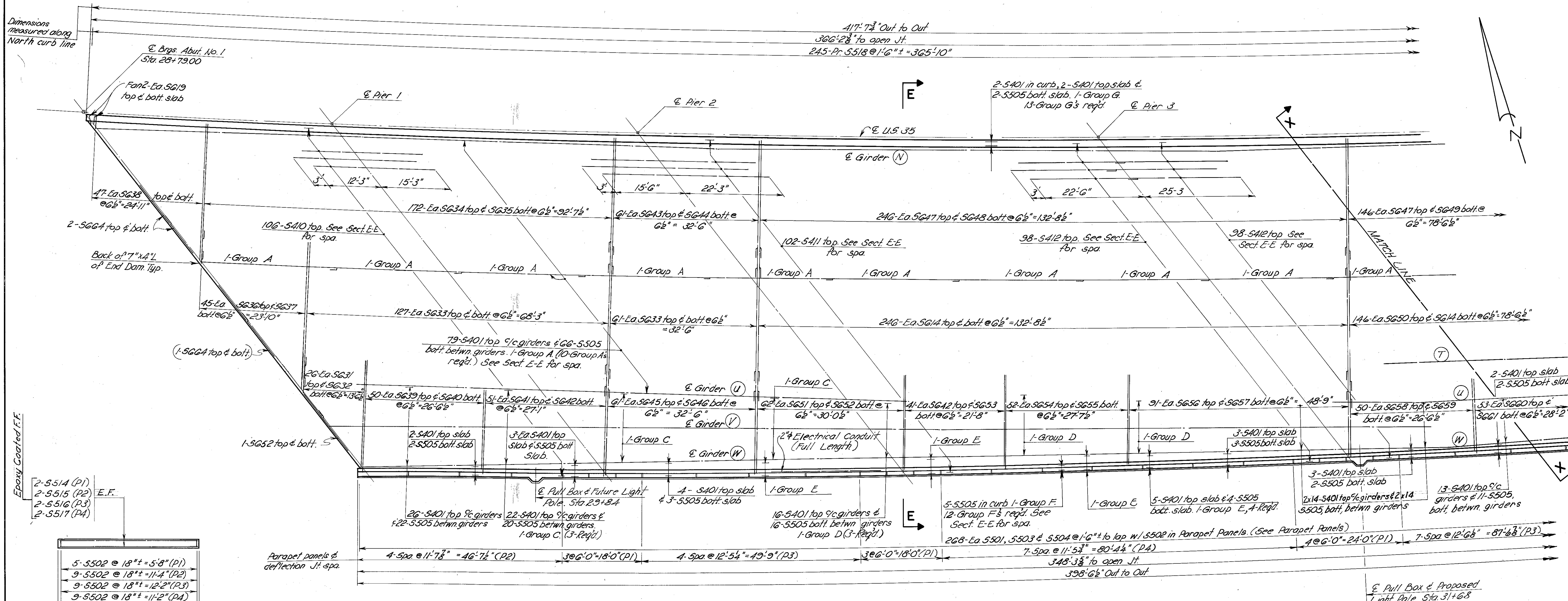
All transverse steel placed radial to and measured along @ U.S. 35

JUN 18 1968

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

442
616

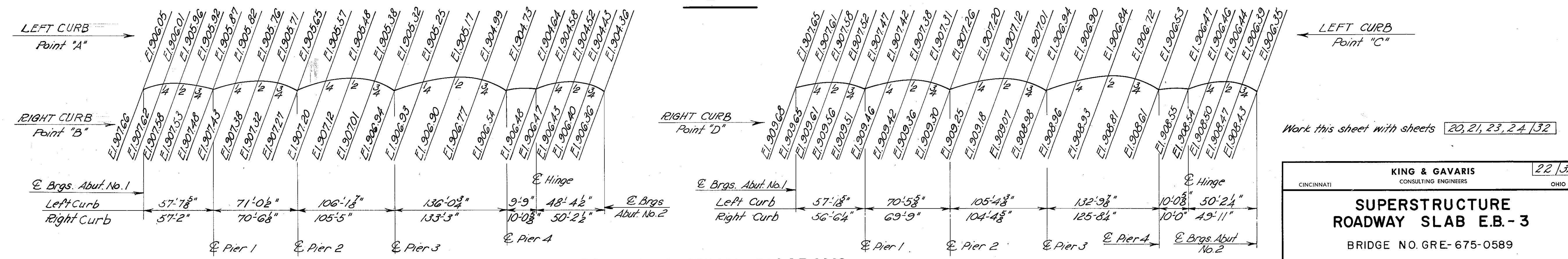
GRE-675 - 5-37
GREENE COUNTY



Epoxy Coated F.F.
2-S514 (P1)
2-S515 (P2) E.F.
2-S516 (P3)
2-S517 (P4)

5-S502 @ 18"± = 5'-8" (P1)
9-S502 @ 18"± = 11'-4" (P2)
9-S502 @ 18"± = 12'-2" (P3)
9-S502 @ 18"± = 11'-2" (P4)
"L"

PLAN



DECK ELEVATION DIAGRAMS

AT CURB PT'S A, B, C & D
BEFORE CONCRETE IS PLACED

PARAPET PANELS

No. Req'd	Mark	L
14	P1	6'-0"
4	P2	11'-7 1/2"
15	P3	12'-6"±
7	P4	11'-5 1/2"

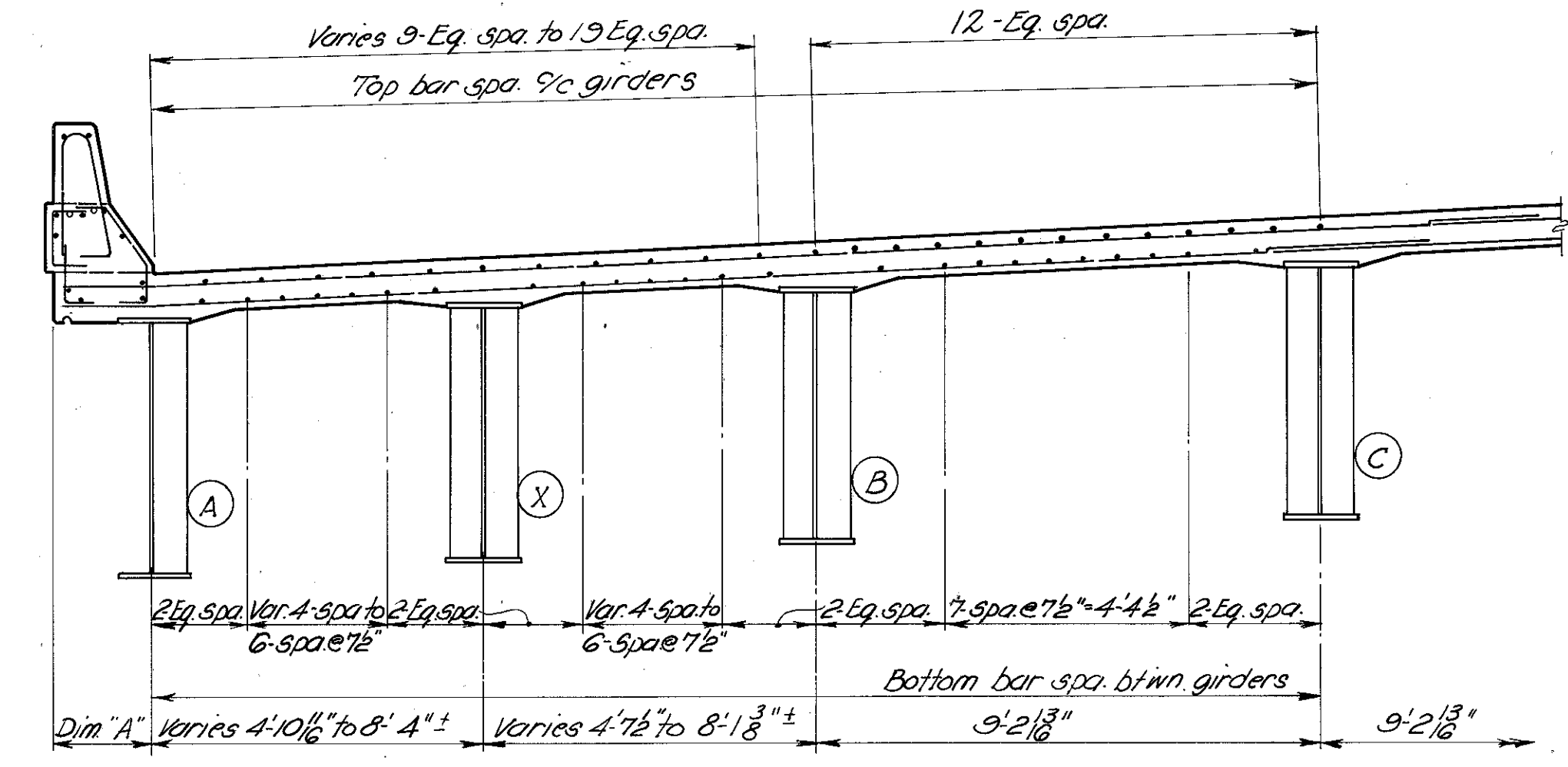
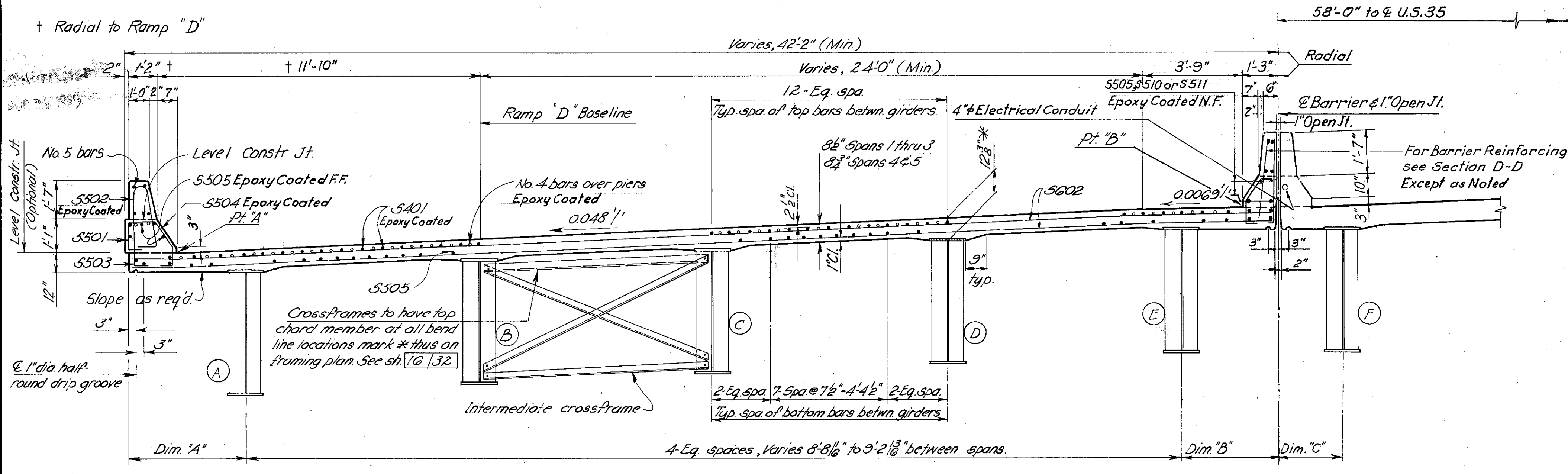
Work this sheet with sheets 20, 21, 23, 24, 32

KING & GAVARIS CONSULTING ENGINEERS CINCINNATI, OHIO		22/32
SUPERSTRUCTURE ROADWAY SLAB E.B. - 3		
BRIDGE NO. GRE-675-0589 I-675 UNDER RELOCATED U.S. 35 GREENE COUNTY		
STA: 28+76.00		TO STA: 32+97.62
DESIGNED V. P.	DRAWN A. W.	TRACED S. A.
CHECKED S. A.	REVIEWED S. A.	DATE 9/25/72

MICROFILM
JUN 18 1985

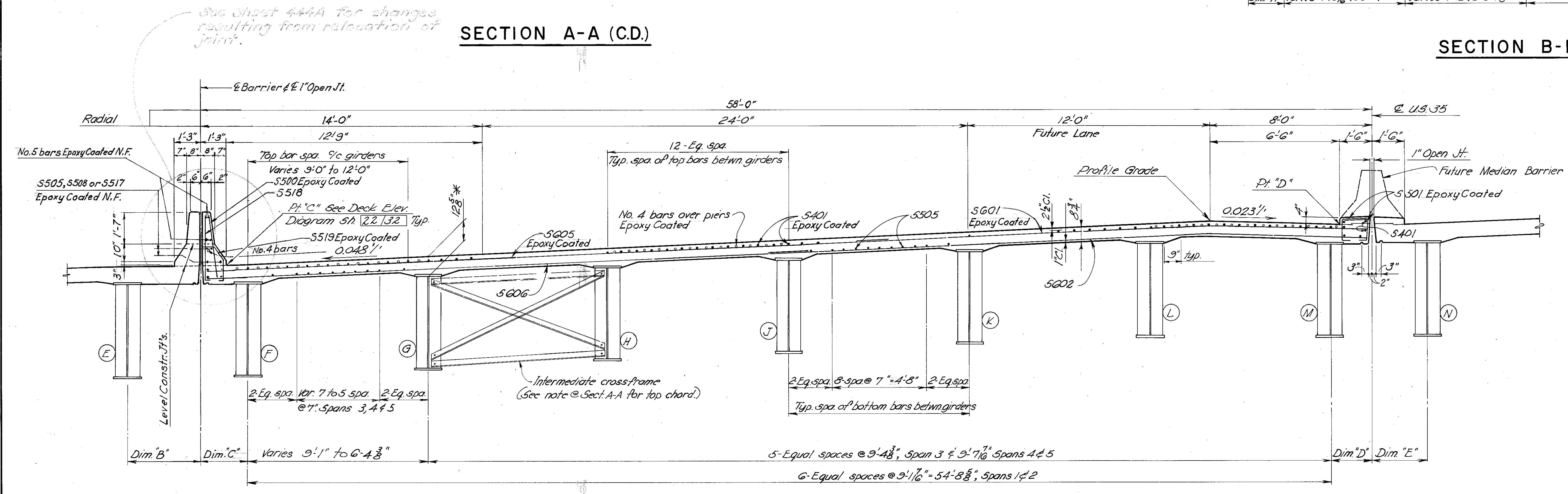
FED. RD. DIVISION	STATE	PROJECT	444 616
2	OHIO		

GRE-675 - 5-37
GREENE COUNTY



SECTION A-A (C.D.)

SECTION B-B (C.D.)



SECTION D-D (W.B.)

TABLE OF OFF-SETS

Location	Abut. 1	1/2 Pt.	Pier 1	1/2 Pt.	Pier 2	1/2 Pt.	Pier 3	1/2 Pt.	Pier 4	Hinge	1/2 Pt.	Abut. 2
Dim "A"	4'-3 1/2"	3'-7 1/2"	3'-1 3/8"	2'-10 3/8"	2'-11 1/2"	2'-1 1/2"	2'-0 1/2"	1'-10 7/8"	3'-2 1/2"	2'-10 1/8"	2'-3 3/8"	2'-0"
Dim "B"	3'-7 1/2"	4'-0 3/4"	4'-3 1/2"	4'-3 3/8"	3'-11 1/4"	4'-4 8"	4'-0 3/8"	4'-11"	4'-7 3/4"	4'-6 8"	4'-4 1/4"	3'-9 3/4"
Dim "C"	2'-3 5/8"	1'-6 1/2"	0'-11 7/8"	0'-6 5/8"	0'-5 5/8"	0'-8 1/2"	1'-8"	1'-3 1/4"	0'-5 3/8"	0'-5"	0'-5 3/8"	0'-8 5/8"
Dim "D"	2'-0 3/8"	2'-5 3/8"	2'-8 1/4"	2'-8"	2'-4 1/4"	2'-9"	2'-5 1/4"	3'-2 3/8"	2'-11 1/8"	2'-11 1/8"	2'-8 3/8"	2'-2 3/4"
Dim "E"	2'-8 1/4"	2'-3 3/8"	2'-1 1/4"	2'-1 3/8"	2'-6 1/4"	2'-2 1/4"	2'-6 1/2"	1'-9 3/8"	2'-1 1/8"	2'-2 8"	2'-4 3/8"	2'-11"
Dim "F"	1'-11 3/8"	2'-6 1/4"	3'-2 3/8"	3'-9 3/8"	4'-0 1/2"	3'-9 1/2"	2'-9 1/2"	3'-3 3/8"	2'-9 3/4"	2'-9"	2'-6 1/2"	2'-0 1/4"

Dimensions measured radial from C web.

NOTES

For reinforcing steel list see shs. 20, 31, 32, 33.
For details of End Dams, included with Item 513 (Structure Steel) for payment, see Std. Dwg. SD-1-69.
Slab thickness shown includes 1" for monolithic wearing surface. A haunch width of 3" shall be used for computing of concrete. However, the 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. For details of deflection joints see Std. Dwg. BR-1-67. Work this sheet with sheets. 20, 21, 22, 23, 32.
For details of light pole pedestals, see Common Detail Sh. CI 102.
All Splices and dowels will be lapped min. 30 bar dia. unless otherwise shown.

* 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. The haunch will vary to accommodate horizontal curve and transition requirements. The dimension shown applies at the C of bearings only.

For horizontal curve corrections see sh. 19, 32.
For additional Junction box and conduit locations for underbridge lighting, see sh. 162, 160.

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

24/32

SUPERSTRUCTURE ROADWAY SLAB - 5

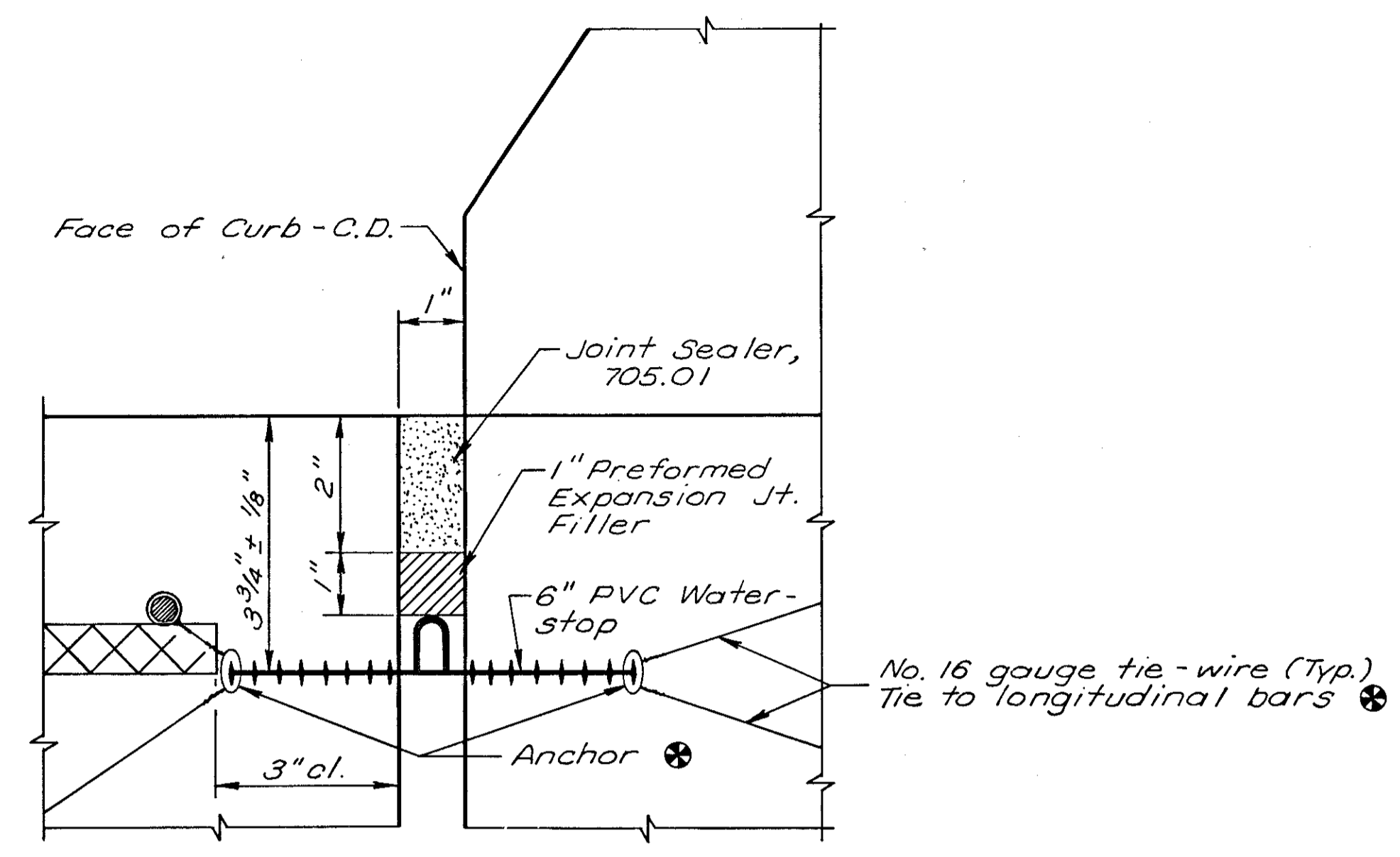
BRIDGE NO. GRE-675-0589
I-675 UNDER RELOCATED U.S. 35
GREENE COUNTY STA: 28+76.00 TO STA: 32+97.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.	SA	9/25/72	

Revised 8-15-83

GREENE COUNTY
GRE-675-5.37

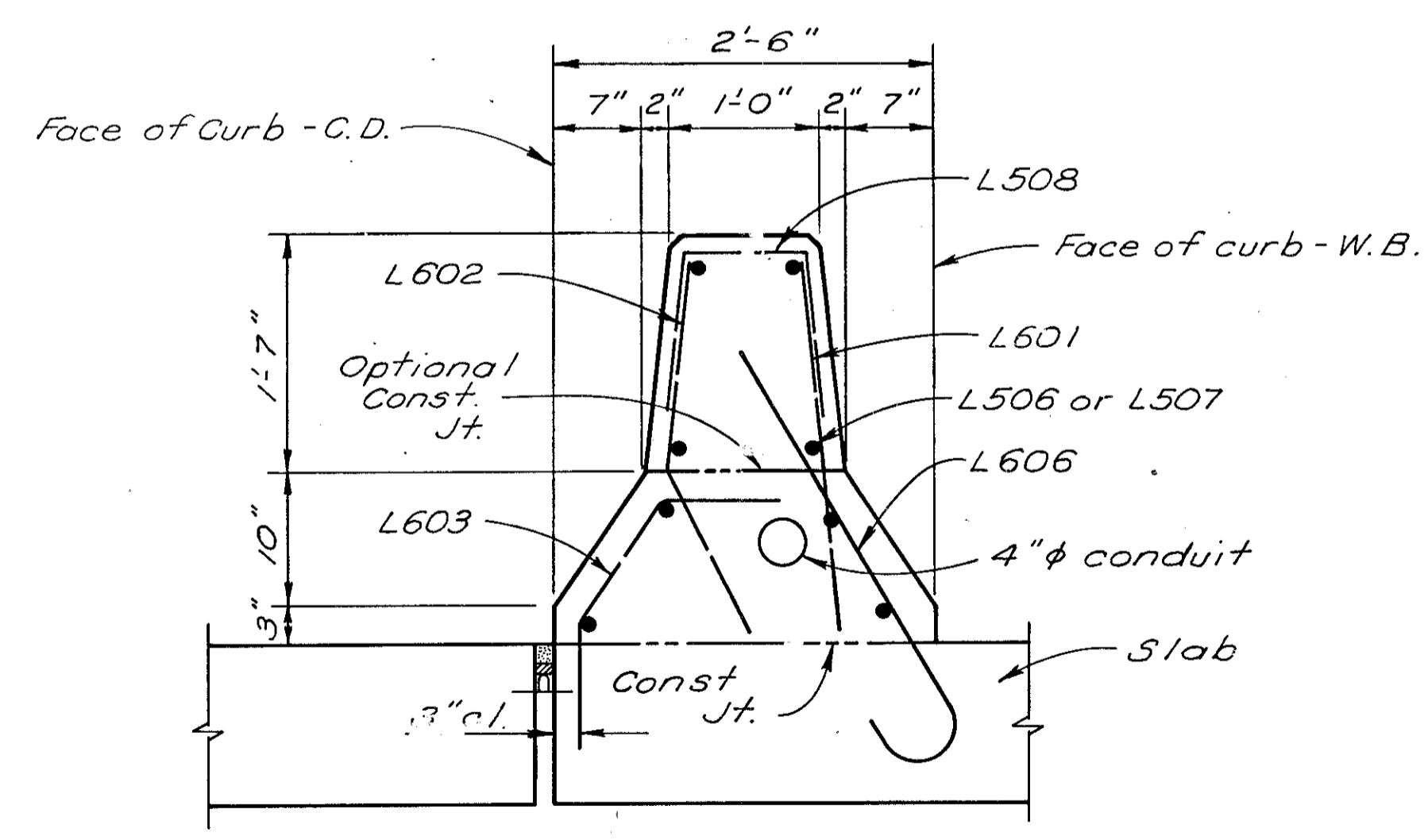
ESTIMATED ADDITIONAL QUANTITIES DUE TO PLAN REVISION				
ITEM	TOTAL	UNIT	DESCRIPTION	SUPERST.
516	430	Lin. Ft.	2"x1" Joint Sealer, 705.01	430
516	4	Sq. Ft.	Preformed Expansion Joint Filler	4
516	430	Lin. Ft.	6" PVC Waterstop; as per plan	430
511	4	Cu. Yd.	Class S Concrete, Superstructure	4
(See Proposal Note)				



DETAIL "A"

A 6" PVC Waterstop is centered on the joint. The waterstop shall be W.R. Meadows Sealright DUD-PVC No. 6180-ND or approved alternate. The Waterstop shall be capable of accommodating 1 1/2" of joint movement.

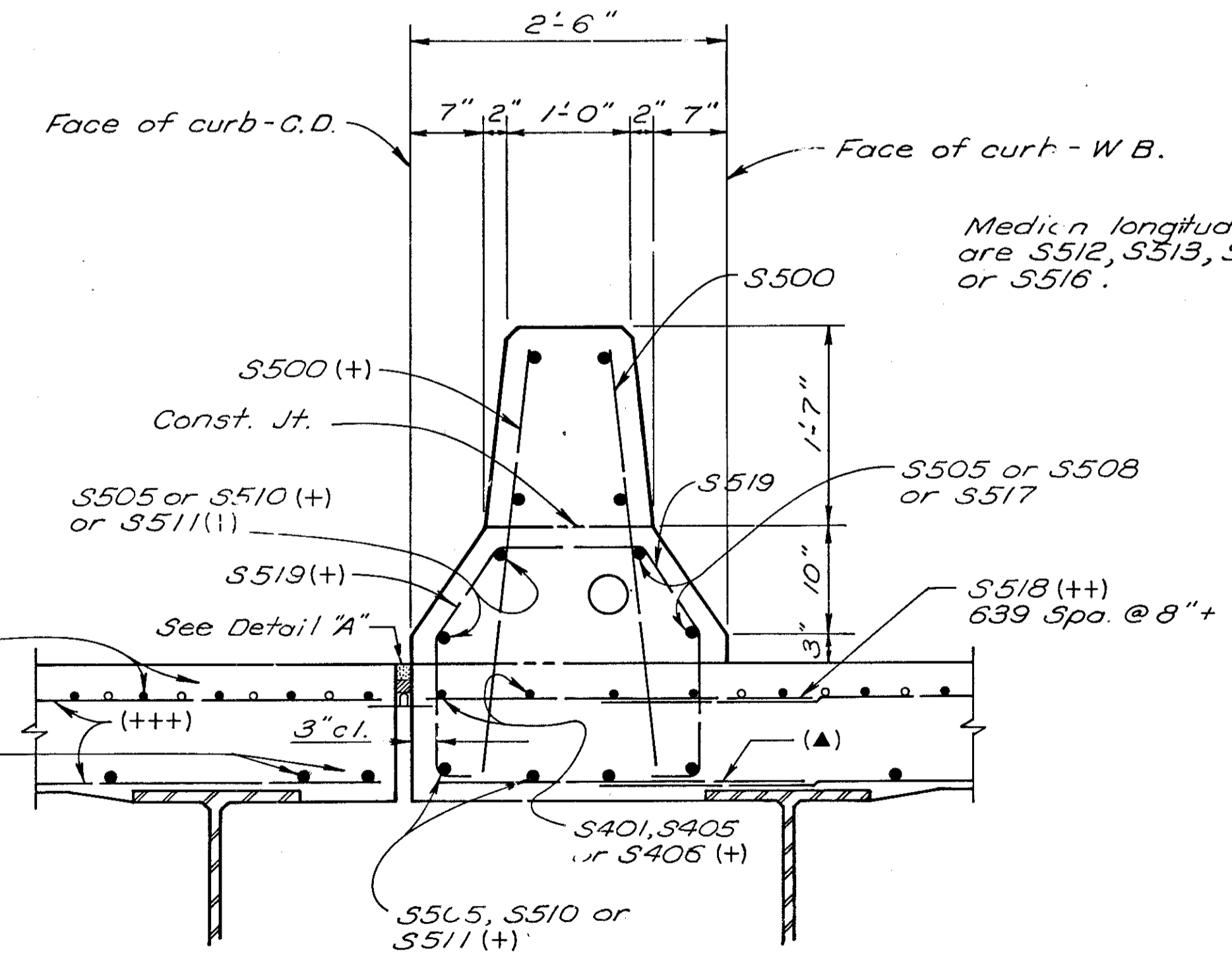
⊕ For the first pour, the Waterstop should be held securely in place by the use of split forms and tie-wires. For the second pour, secure the free end of waterstop in proper position with tie-wires. Alternate methods, as approved by the Engineer, may be used to ensure the correct positioning of the waterstop.



SECTION B-B **

(Not all details shown)

Longitudinal bars are L505 unless shown otherwise. Anchor Bolts & Pull Box are not shown.



SECTION A-A *

(Not all details shown)

SECTION D-D *

(Not all details shown)

* SECTION A-A AND SECTION D-D OF THIS SHEET SHOW THE REVISION TO THE MEDIAN BARRIER DETAILS OF SECTION A-A AND SECTION D-D OF SHT. 444/616. FACE OF CURB LOCATIONS ARE NOT AFFECTED WITH THIS CHANGE.

ALSO REFER TO SHT. 440/616 FOR ORIGINAL C.D. SLAB AND MEDIAN REINFORCEMENT DETAILS AND SHT. 441/616 FOR ORIGINAL W.B. SLAB AND MEDIAN REINFORCEMENT DETAILS.

** SECTION B-B OF THIS SHEET SHOWS THE REVISION TO THE MEDIAN BARRIER DETAILS OF SECTION B-B OF SHT. 407/616.

(+) BARS MARKED (+) THUS ARE LISTED UNDER THE REINFORCING BAR LIST TITLED C.D., SHT. 450/616.

(++) 320 OF S518 BARS ARE LISTED UNDER THE REINFORCING BAR LIST TITLED C.D., SHT. 450/616.

320 OF S518 BARS ARE LISTED UNDER THE REINFORCING BAR LIST TITLED WESTBOUND, SHT. 451/616.

(+++) S602, S622, S634 AND S619 BARS LISTED UNDER THE REINFORCING BAR LIST TITLED C.D., SHT. 450/616 AND SHOWN IN THE C.D. SLAB PLAN, SHT. 440/616 SHALL BE CUT AS NECESSARY TO FIT.

(▲) #5 BAR 3' LONG, S2 S505 CURB BARS NO LONGER NEEDED AS PER THIS REVISION SHALL BE CUT IN 3' LONG SECTIONS. THESE 520 PIECES SHALL BE PLACED @ 10" (-) SPACES.

EXTRA REINFORCING BARS:

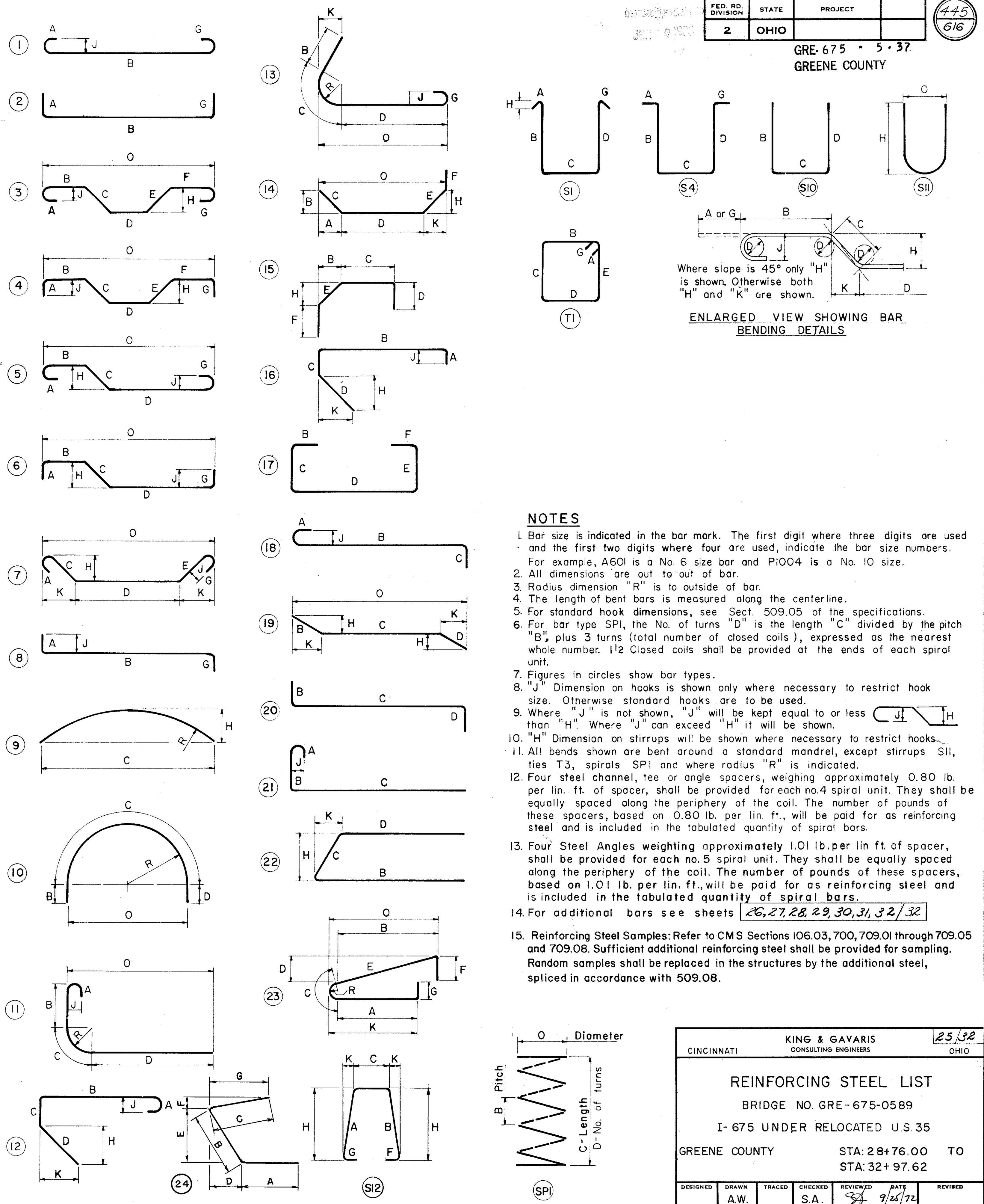
DUE TO THE REVISION OF THE MEDIAN DETAILS, THE FOLLOWING LISTED REINFORCING BARS SHALL NO LONGER BE REQUIRED.

BAR DESIGNATION	NUMBER	COMMENT
S510	2	THESE BARS ARE LISTED UNDER THE REINFORCING BAR LIST TITLED "C.D.", SHT. 450/616.
S511	2	
S508	2	THESE BARS ARE LISTED UNDER THE REINFORCING BAR LIST TITLED "WESTBOUND", SHT. 451/616.
S517	2	
S512	56	
S513	16	
S514	48	
S515	24	
S516	16	
L505	3	THESE BARS ARE LISTED UNDER NO TITLE ON SHT. 452/616
L509	17	
L510	17	
L604	17	
L605	17	

THESE BARS SHALL BE CONSIDERED AS THE PROPERTY OF THE STATE OF OHIO, AND SHALL BE STORED AS PER 202.02 FOR DISPOSAL BY THE STATE'S FORCES.

STATE OF OHIO		24A/32	
DEPARTMENT OF TRANSPORTATION			
BUREAU OF BRIDGES AND STRUCTURAL DESIGN			
REVISED SUPERSTRUCTURE DETAILS			
BRIDGE NO. GRE-675-0589			
I-675 UNDER RELOCATED US 35			
GREENE COUNTY		STA. 28+76.00 TO STA. 32+97.62	
DESIGNED	DRAWN	TRACED	CHECKED
GJB	TGC	—	—
REVIEWED	DATE	REVISION	
WJJ	4-18-83		

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
ABUTMENT NO. 1					Reinforcing steel in Abutment No. 1 shall have the suffix "A"												
A501	33	2'-4"	80	2	9"	10"					9"						
A502	20	3'-0"	63	STR													10Epoxy Coated
A503	23	6'-7"	158	23	2'-10 1/8"	2'-1 1/2"	1'-0"	3 1/2"	2'-13 8"		9"			3'-2"	2'-5"	3 3/8"	23Epoxy Coated
A504	7	3'-11"	29	STR													
A505	9	4'-3"	40	STR													8Epoxy Coated
A506	1	4'-8"	5	STR													
A507	1	3'-1"	5	STR													
A508	15	7'-7"	119	STR													
A509	12	30'-8"	384	STR													4Epoxy Coated
A510	6	16'-3"	102	STR													
A511	2	23'-10"	50	STR													
A512	2	22'-0"	46	STR													
A513	1	13'-5"	14	71	5"	4'-0"	2'-6"	4'-0"	2'-6"		5"						
A514	16	17'-3"	288	71	5"	6'-3"	2'-2"	6'-3"	2'-2"		5"						
A515	8	23'-0"	192	STR													
A516	12	4'-7"	57	STR													
A517	1	5'-3"	5	STR													
A518	6	6'-11"	43	STR													
A519	18	15'-2"	190	STR													4Epoxy Coated
A520	4	8'-5"	35	STR													
A521	2	8'-2"	17	STR													
A522	2	7'-2"	15	STR													
A523	5	10'-4"	54	STR													
A524	7	10'-6"	77	STR													
A525	3	11'-6"	36	2	9"	10'-9"											
A526	10	10'-9"	112	71	5"	3'-0"	2'-2"	3'-0"	2'-2"		5"						
A527	40	30'-0"	1252	STR													
A528	4	28'-10"	120	STR													
A529	5	29'-2"	152	STR													
A530	32	24'-2"	807	STR													
A531	13	31'-6"	427	STR													
A532	30	24'-8"	772	STR													
A533	10	23'-11"	249	STR													
A534	2	27'-4"	57	STR													
A535	5	16'-23-11/16" 27'-4" OY 10'-4-1/2" BO	134	STR													
A536	8	27'-0"	225	STR													
A537	4	28'-0"	117	19		1'-4"	26'-8"					10"		1'-0"	27'-8"		
A538	5	5'-2"	27	S10		2'-4"	9"	2'-4"									
A539	5	10'-5"	54	17		4'-3"	3'-2"	11"	2'-6"								
A540	6	29'-5"	184	STR													
A541	4	31'-11"	133	19		2'-6"	29'-5"					1'-8"		1'-11"	31'-4"		
A542	5	13'-4"	70	17		3'-9"	4'-3"	2'-2"	3'-6"								
A543	4	25'-10"	108	STR													
A544	4	25'-3"	105	19		1'-5"	23'-10"					11 1/2"		12 1/2"	24'-10 1/2"		
A545	2	22'-5"	47	STR													
A546	2	15'-4"	32	STR													
A547	2	11'-4"	24	STR													
A548	4	21'-0"	88	STR													
A549	2	7'-10"	16	STR													
A550	2	9'-5"	20	STR													
A551	2	19'-0"	40	STR													
A552	2	5'-6"	11	STR													
A553	4	18'-7"	78	STR													
A554	2	11'-3"	25	STR													
A555	190	8'-9"	1734	S10		1'-7"	5'-10"	1'-7"									
A556	253	7'-4"	1935	S10		2'-1"	3'-5"	2'-1"									
A557	23	7'-3"	174	2	9"	6'-6"											
A558	10	8'-0"	83	2	9"	7'-3"											
A559	10	8'-5"	88	2	9"	7'-8"											
A560	43	8'-8"	389	2	9"	7'-11"											
A561	18	9'-6"	178	2	9"	8'-9"											
A562	52	10'-4"	560	2	9"	9'-7"											
A563	15	10'-8"	167	2	9"	9'-11"											
A564	20	9'-7"	200	2	9"	8'-10"											
A565	6	2'-10"	18	S10		6"	1'-6"	1'-1"									6Epoxy Coated
A566	2	11"	2	STR													2Epoxy Coated
A567	2	3'-4"	7	STR													2Epoxy Coated
A568	2	2'-0"	4	STR													2Epoxy Coated
A569	6	3'-11"	25	S10		6"	1'-6"	2'-2"									6Epoxy Coated
A570	5	5'-5"	28	S12	2'-6"	2'-6"	8"					2'-5 1/2"		3 1/2"			5Epoxy Coated
A571	10	3'-10"	40	15		8"	1'-7"	9"	10 5/8"	9"		7"					10Epoxy Coated
A573	6	24'-0"	150	STR													
A574	4	22'-8"	95	STR													



CINCINNATI		KING & GAVARIS CONSULTING ENGINEERS		25/32
REINFORCING STEEL LIST				
BRIDGE NO. GRE-675-0589				
I-675 UNDER RELOCATED U.S. 35				
GREENE COUNTY			STA: 28+76.00	TO
			STA: 32+97.62	
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
	A.W.		S.A.	9/26/72

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
ABUTMENT NO. 1 CONTINUED																	
A601	1	5'-9"	9	15		9"	4'-2"		11 1/2"	9"		7"					1Epoxy Coated
A602	15	8'-1"	182	15		9"	6'-6"		11 1/2"	9"		7"					15Epoxy Coated
A603	16	17'-8"	425	S10		8'-5"	1'-2"	8'-5"									
A604	1	5'-11"	9	15		9"	4'-4"		11 1/2"	9"		7"					1Epoxy Coated
A605	6	7'-6"	68	15		9"	5'-11"		11 1/2"	9"		7"					6Epoxy Coated
A606	6	24'-11"	225	S10		12'-0"	1'-2"	12'-0"									
A607	30	13'-11"	627	S10		6'-5"	1'-5"	6'-5"									
A608	227	7'-1"	2415	S10		3'-3"	11"	3'-3"									
A609	227	4'-11"	1676	S10		1'-11"	1'-5"	1'-11"									
A610	159	14'-9"	3,523	S10		6'-10"	1'-5"	6'-10"									
A612	38	15'-5"	880	S10		7'-2"	1'-5"	7'-2"									
A613	22	14'-8"	485	S10		6'-7"	5'-10"	2'-7"									
A614	10	15'-5"	232	S10		7'-4"	5'-10"	2'-7"									
A615	10	15'-10"	238	S10		7'-9"	5'-10"	2'-7"									
A616	43	16'-1"	1039	S10		8'-0"	5'-10"	2'-7"									
A617	18	16'-11"	457	S10		8'-10"	5'-10"	2'-7"									
A618	52	17'-9"	1,386	S10		9'-8"	5'-10"	2'-7"									
A619	11	18'-1"	299	S10		10'-0"	5'-10"	2'-7"									
A620	20	17'-1"	513	S10		9'-0"	5'-10"	2'-7"									
A621	14	8'-5"	177	Str													
A622	15	6'-7"	148	Str													
A623	4	20'-1"	121	S10		10'-0"	5'-10"	4'-7"									
A701	2	4'-4"	18	1	10"	3'-6"							7				2 Epoxy Coated
A702	2	4'-5"	18	15		9"	3'-0"	9 1/2"	9"			3"					2 Epoxy Coated
A703	2	4'-6"	18	15		9"	3'-0"	10 1/2"	9"			5"					2 Epoxy Coated
A704	1	4'-11"	10	15		9"	3'-4"	11 1/2"	9"			7"					1Epoxy Coated
A705	1	5'-4"	11	15		9"	3'-9"	11 1/2"	9"			7"					1Epoxy Coated
A706	1	4'-7"	9	15		9"	3'-0"	11 1/2"	9"			7"					1Epoxy Coated
A707	1	5'-3"	11	15		9"	3'-8"	11 1/2"	9"			7"					1Epoxy Coated
A801	10	26'-0"	694	Str													
A802	49	30'-0"	3,925	Str													
A803	7	26'-0"	486	Str													
A804	7	13'-9"	257	20		7'-2"	4'-7"	2'-6"									
A805	7	20'-6"	383	Str													
A806	3	13'-8"	109	Str													
A807	2	11'-9"	63	Str													
A808	2	12'-9"	68	Str													
A809	228	6'-2"	3,754	14		1'-3"	3'-8"	1'-3"				2'-7"	2'-7"				
Total			38,435														
ABUTMENT NO. 2					Reinforcing steel in Abutment No.2 shall have the suffix "B"												
A501	31	2'-4"	75	2		9"	10"					9"					
A502	22	3'-0"	69	Str													
A503	21	6'-7"	144	23	2'10 1/2"	2'1 1/8"	1'-0"	3 1/2"	2'1 3/4"			9"		3'-2"	2'-5"	3 3/8"	21Epoxy Coated
A504	6	3'-11"	25	Str													
A505	2	4'-5"	9	Str													
A506	8	4'-11"	41	Str													
A507	1	5'-5"	6	Str													
A508	19	7'-8"	152	Str													
A509	16	23'-8"	395	Str													4Epoxy Coated
A510	6	12'-8"	79	Str													
A511	2	17'-10"	37	Str													
A512	4	15'-8"	65	Str													
A513	2	9'-5"	20	2		9"	8'-8"										
A514	25	17'-3"	450	T1		5"	6'-3"	2'-2"	6'-3"	2'-2"		5"					
A515	4	18'-4"	76	Str													
A516	4	17'-11"	75	Str													
A517	2	4'-1"	9	Str													
A518	1	5'-1"	5	Str													
A519	1	5'-9"	6	Str													
A520	12	19'-8"	246	Str													4Epoxy Coated
A521	4	10'-8"	45	Str													
A522	10	10'-6"	110	2		9"	9'-9"										
A523	4	11'-8"	49	Str													

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
ABUTMENT NO. 2 CONTINUED																	
A524	10	13'-2"	137	Str													
A525	3	27'-9"	87	Str													
A526	3	26'-8"	83	Str													
A527	5	16'-2 1/8"	142	Str													
A528	21	30'-0"	657	Str													
A529	35	24'-1"	879	Str													
A530	30	22'-6"	704	Str													
A531	29	18'-2"	549	Str													
A532	8	19'-7"	163	Str													
A533	5	18'-2 1/2"	98	Str													
A534	4	27'-5"	114	Str													
A535	4	27'-4"	114	19		1'-3"	26'-1"					7"		1'-1 1/2"	27'-2 1/2"		
A536	20	22'-7"	471	Str													
A537	10	2'-9"	29	2	9	2'-0"											
A538	5	9'-2"	48	17		3'-9"	3'-5"	11"	1'-6"								
A539	5	8'-2"	43	17		3'-9"	1'-7"	2'-2"	1'-0"								
A540	4	21'-1"	88	Str													
A541	4	23'-0"	96	19		2'-3"	20'-9"					1'-2"		1'-11"	22'-8"		
A542	4	19'-1"	80	19		1'-6"	17'-7"					8"		1'-4"	18'-11"		
A543	2	13'-9"	29	Str													
A544	2	16'-0"	33	Str													
A545	4	22'-0"	92	Str													
A546	2	7'-3"	15	Str													
A547	4	9'-6"	40	Str													
A548	2	28'-6"	59	Str													
A549	236	7'-4"	1,805	S10			2'-1"	3'-5"	2'-1"								
A550	173	8'-9"	1,579	S10			1'-7"	5'-10"	1'-7"								
A551	31	9'-9"	315	2	9"	9'-0"											
A552	40	8'-11"	372	2	9"	8'-2"											
A553	16	8'-0"	134	2	9"	7'-3"											
A554	21	10'-2"	223	2	9"	9'-5"											
A555	20	9'-4"	195	2	9"	8'-7"											
A556	30	8'-6"	260	2	9"	7'-9"				</							

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
PIER NO. 2					<i>Reinforcing steel in Pier No. 2 shall have the suffix "B"</i>												
SP401	1	15'-4 1/2"	292	SPI		4 1/2"	15'-4 1/2"	4 1/2"							2'-8"		
SP402	1	16'-1 1/2"	305	SPI		4 1/2"	16'-1 1/2"	4 1/2"							2'-8"		
SP403	1	16'-6"	312	SPI		4 1/2"	16'-6"	4 1/2"							2'-8"		
SP404	1	16'-10 1/2"	319	SPI		4 1/2"	16'-10 1/2"	4 1/2"							2'-8"		
SP405	1	17'-3"	325	SPI		4 1/2"	17'-3"	4 1/2"							2'-8"		
SP406	1	17'-7 1/2"	332	SPI		4 1/2"	17'-7 1/2"	4 1/2"							2'-8"		
SP407	1	18'-0"	339	SPI		4 1/2"	18'-0"	4 1/2"							2'-8"		
SP408	1	18'-4 1/2"	346	SPI		4 1/2"	18'-4 1/2"	4 1/2"							2'-8"		
SP409	1	19'-1 1/2"	359	SPI		4 1/2"	19'-1 1/2"	4 1/2"							2'-8"		
SP410	1	19'-6"	366	SPI		4 1/2"	19'-6"	4 1/2"							2'-8"		
SP411	1	19'-10 1/2"	372	SPI		4 1/2"	19'-10 1/2"	4 1/2"							2'-8"		
SP412	1	20'-7 1/2"	386	SPI		4 1/2"	20'-7 1/2"	4 1/2"							2'-8"		
SP413	1	21'-0"	393	SPI		4 1/2"	21'-0"	4 1/2"							2'-8"		
SP414	1	21'-4 1/2"	399	SPI		4 1/2"	21'-4 1/2"	4 1/2"							2'-8"		
Total 42,402																	
PIER NO. 3					<i>Reinforcing steel in Pier No. 3 shall have the suffix "C"</i>												
SP501	1	15'-3 1/2"	593	SPI		3 1/2"	15'-3 1/2"	52									3'-2"
SP502	1	15'-11 1/4"	616	SPI		3 1/2"	15'-11 1/4"	54									3'-2"
SP503	1	16'-3"	627	SPI		3 1/2"	16'-3"	55									3'-2"
SP504	1	16'-10 1/2"	650	SPI		3 1/2"	16'-10 1/2"	57									3'-2"
SP505	1	17'-2 1/4"	662	SPI		3 1/2"	17'-2 1/4"	58									3'-2"
SP506	1	17'-6"	673	SPI		3 1/2"	17'-6"	59									3'-2"
SP507	1	18'-1 1/2"	696	SPI		3 1/2"	18'-1 1/2"	61									3'-2"
SP508	1	18'-5 1/4"	708	SPI		3 1/2"	18'-5 1/4"	62									3'-2"
SP509	1	18'-9"	719	SPI		3 1/2"	18'-9"	63									3'-2"
SP510	1	19'-4 1/2"	742	SPI		3 1/2"	19'-4 1/2"	65									3'-2"
SP511	1	20'-0"	765	SPI		3 1/2"	20'-0"	67									3'-2"
SP512	1	20'-7 1/2"	788	SPI		3 1/2"	20'-7 1/2"	69									3'-2"
SP513	1	20'-11 1/4"	799	SPI		3 1/2"	20'-11 1/4"	70									3'-2"
SP514	1	21'-6 1/2"	822	SPI		3 1/2"	21'-6 1/2"	72									3'-2"
P501	314	9'-9"	3193	SIO		3'-8"	2'-8"	3'-8"									
P502	13	Var. 6'-5" to 9'-9" by 3'-1'-0"	112	SIO		Var. 2'-2" to 3'-8" by 1 1/2"	2'-8"	Var. 2'-2" to 3'-8" by 1 1/2"									
P503	13	5'-7"	76	SIO		1'-7"	2'-8"	1'-7"									
P504	105	4'-5"	484	SIO		1'-0"	2'-8"	1'-0"									
P505	6	32'-7"	204	STR													
P506	18	Var. 5'-9" to 8'-9" by 4'-2" to 2'-0"	136	SIO		Var. 2'-2" to 3'-8" by 2'-4"	1'-8"	Var. 2'-2" to 3'-8" by 2'-4"									
P507	18	4'-7"	86	SIO		1'-7"	1'-8"	1'-7"									
P508	4	26'-3"	110	STR													
P509	6	26'-11"	168	STR													
P601	112	7'-4"	1,234	1	8"	6'-0"					8"		6"				
P801	14	18'-1"	676	STR													
P802	14	18'-8"	698	STR													
P803	14	19'-2"	716	STR													
P804	168	6'-5"	2,878	2	1'-2"	5'-3"											
P805	14	19'-7"	732	STR													
P806	14	20'-0"	748	STR													
P807	14	20'-5"	763	STR													
P808	14	20'-10"	779	STR													
P809	14	21'-4"	797	STR													
P810	14	22'-2"	829	STR													
P811	14	22'-8"	847	STR													
P812	14	23'-2"	866	STR													
P813	14	23'-8"	885	STR													
P901	98	12'-0"	3,998	1	1'-3"	9'-6"					1'-3"		11'-4"				
P902	14	22'-0"	1,047	STR													
P903	14	24'-6"	1,166	STR													
P904	28	6'-11"	658	2	1'-4"	5'-7"											
P1101	3	19'-8"	313	20		2'-2"	17'-10"										
P1102	4	15'-5"	328	20		2'-2"	13'-7"										
P1103	3	22'-8"	361	STR													
P1104	3	22'-1"	352	20		3'-10"	18'-7"										
P1105	4	17'-10"	379	20		3'-10"	14'-4"										
P1106	4	27'-8"	588	STR													
P1107	4	27'-0"	574	19		5'-5 1/4"	21'-7"				1'-7"		5'-3"		26'-10"		
P1108	4	33'-4"	708	20		3'-9"	29'-11"										
P1109	3	16'-10"	268	20		3'-9"	13'-5"										
P1110	8	25'-2"	1,070	STR													
P1111	4	33'-9"	717	20		3'-9"	30'-4"										
P1112	3	17'-3"	275	20		3'-9"	13'-10"										
P1113	4	34'-7"	735	STR													
P1114	4	24'-9"	526	STR													
P1115	4	37'-2"	790	20		3'-10"	33'-8"										
P1116	2	17'-8"	188	20		3'-10"	14'-2"										
P1117	2	14'-2"	151	STR													
P1118	4	36'-2"	769	STR													
P1119	4	34'-8"	737	20		2'-2"	32'-10"										
P1120	2	15'-2"	161	20		2'-2"	13'-4"										

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
PIER NO. 2 CONTINUED																	
P1121	2	13'-4"	142	STR													
P1122	3	24'-9"	394	19		5'-5 1/2"	19'-4"					1'-3"		5'-4"	24'-8"		
P1123	5	35'-7"	945	STR													
P1124	5	19'-7"	520	STR													
P1125	5	25'-7"	680	STR													
Total 42,402																	
PIER NO. 3					<i>Reinforcing steel in Pier No. 3 shall have the suffix "C"</i>												
SP501	1	15'-3 1/2"	593	SPI		3 1/2"	15'-3 1/2"	52									3'-2"
SP502	1	15'-11 1/4"	616	SPI		3 1/2"	15'-11 1/4"	54									3'-2"
SP503	1	16'-3"	627	SPI		3 1/2"	16'-3"	55									3'-2"
SP504	1	16'-10 1/2"	650	SPI		3 1/2"	16'-10 1/2"	57									3'-2"
SP505	1	17'-2 1/4"	662	SPI		3 1/2"	17'-2 1/4"	58									3'-2"
SP506	1	17'-6"	673	SPI		3 1/2"	17'-6"	59									3'-2"
SP507	1	18'-1 1/2"	696	SPI		3 1/2"	18'-1 1/2"	61									3'-2"
SP508	1	18'-5 1/4"	708	SPI		3 1/2"	18'-5 1/4"	62									3'-2"
SP509	1	18'-9"	719														

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
SUPERSTRUCTURE - C.D.					<i>Reinforcing steel in Collector Distributor shall have the suffix "A"</i>												
S401	747	30'-0"	14,970	STR													74Epoxy Coated
S402	37	Var. 31'-6" to 35'-0" by 10'-0" x 1'-00"	822	STR													37Epoxy Coated
S403	16	13'-0"	139	STR													16Epoxy Coated
S404	18	23'-6"	283	STR													18Epoxy Coated
S405	6	3'-6"	126	STR													6Epoxy Coated
S406	43	22'-5"	644	STR													43Epoxy Coated
S407	16	Var. 20'-3" to 23'-0" by 21'-0" x 1'-00"	231	STR													16Epoxy Coated
S408	3	20'-8"	41	STR													3Epoxy Coated
S409	56	28'-6"	1,066	STR													56Epoxy Coated
S410	56	38'-6"	1,440	STR													56Epoxy Coated
S411	104	26'-8"	1,853	STR													104Epoxy Coated
S500	320	3'-2"	1,057	STR													320Epoxy Coated
S501	326	2'-4"	793	2	9"	10"											
S502	326	5'-10"	1,983	23	2'-0 1/2"	2'-2 1/8"	1'-0"	3 1/2"	2'-2 3/8"	9"				2'-4"	2'-6"	3 3/8"	326Epoxy Coated
S503	326	2'-7"	878	2	9"	1'-10"											
S504	326	3'-0"	1,020	15		8"	10"	9"	10 5/8"	8"		7"					326Epoxy Coated
S505	729	30'-0"	22,810	STR													729Epoxy Coated
S506	30	Var. 35'-6" to 38'-6" by 1 1/4" x 1'-00"	1,158	STR													
S507	13	18'-0"	244	STR													
S508	17	22'-0"	390	STR													
S509	5	11'-4"	59	STR													2-Epoxy Coated
S510	9	35'-6"	333	STR													
S511	39	22'-9"	925	STR													
S512	16	Var. 21'-0" to 23'-3" by 1 1/4" x 1'-00"	369	STR													
S513	7	21'-0"	153	STR													2Epoxy Coated
S514	56	5'-8"	331	STR													28Epoxy Coated
S515	32	12'-1"	403	STR													16Epoxy Coated
S516	16	12'-11"	216	STR													8Epoxy Coated
S517	64	11'-10"	790	STR													32Epoxy Coated
S518	320	3'-10"	1,270	20		9"	3'-2"										
S519	320	2'-5"	807	15		9"	8"	9"	10"	4"		5"					320Epoxy Coated
S601	118	Var. 4'-0" to 40'-0" by 7 1/2" x 2'-00"	3,899	STR													59Epoxy Coated
S602	786	41'-9"	49,289	STR													393Epoxy Coated
S603	284	19'-7"	8,354	STR													284Epoxy Coated
S604	35	24'-6"	1,288	STR													35Epoxy Coated
S605	284	24'-3"	10,344	STR													
S606	35	19'-10"	1,043	STR													
S607	35	25'-0"	1,314	STR													35Epoxy Coated
S608	35	20'-4"	1,069	STR													
S609	34	25'-7"	1,306	STR													34Epoxy Coated
S610	34	20'-11"	1,068	STR													
S611	34	26'-5"	1,349	STR													34Epoxy Coated
S612	34	21'-9"	1,111	STR													
S613	34	Var. 26'-5" to 27'-4" by 3 1/2" x 1'-00"	1,372	STR													34Epoxy Coated
S614	34	Var. 21'-9" to 22'-8" by 3 1/2" x 1'-00"	1,134	STR													
S615	18	Var. 27'-4" to 27'-11" by 3 1/2" x 1'-00"	747	STR													18Epoxy Coated
S616	18	Var. 22'-8" to 23'-3" by 3 1/2" x 1'-00"	621	STR													
S617	13	Var. 27'-11" to 28'-6" by 3 1/2" x 1'-00"	551	STR													13Epoxy Coated
S618	13	Var. 23'-3" to 23'-10" by 5 1/2" x 1'-00"	460	STR													
S619	28	5'-9"	242	STR													14Epoxy Coated
S620	20	Var. 9'-7" to 27'-0" by 11" x 1'-00"	549	STR													20Epoxy Coated
S621	20	Var. 5'-0" to 22'-4" by 10 1/2" x 1'-00"	411	STR													
S622	46	Var. 5'-9" to 26'-5" by 1 1/4" x 2'-00"	1,111	STR													23Epoxy Coated
S623	58	Var. 4'-0" to 31'-1" by 11 1/2" x 2'-00"	1,528	STR													29Epoxy Coated
S624	16	Var. 30'-0" to 30'-6" by 3 1/2" x 1'-00"	727	STR													16Epoxy Coated

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES	
C.D. CONTINUED																		
S625	16	Var. 25'-2" to 25'-9" by 12 1/2" x 1'-00"	612	STR														
S626	16	Var. 4'-0" to 3'-0" by 11 1/2" x 1'-00"	264	STR														16Epoxy Coated
S627	16	Var. 8'-0" to 22'-7" by 11" x 1'-00"	378	STR														
S628	19	Var. 30'-5" to 31'-2" by 12 1/2" x 1'-00"	879	STR														19Epoxy Coated
S629	19	Var. 25'-9" to 26'-6" by 12 1/2" x 1'-00"	746	STR														
S630	19	Var. 31'-2" to 32'-0" by 12 1/2" x 1'-00"	901	STR														19Epoxy Coated
S631	19	Var. 26'-6" to 27'-4" by 12 1/2" x 1'-00"	768	STR														
S632	23	Var. 9'-0" to 29'-0" by 11 1/2" x 1'-00"	671	STR														23Epoxy Coated
S633	23	Var. 4'-5" to 25'-3" by 11 1/2" x 1'-00"	512	STR														
S634	44	Var. 6'-0" to 25'-10" by 11 1/2" x 2'-00"	1,052	STR														22Epoxy Coated
S635	8	29'-0"	348	STR														4Epoxy Coated
S636	4	29'-0"	174	STR														2Epoxy Coated
S637	4	28'-3"	170	STR														2Epoxy Coated
S638	52	6'-0"	469	1	8"	5'-4"										6	11 1/2"	52Epoxy Coated
S639	64	2'-8"	257	14	7 3/4"	7 3/4"	11"	6 1/2"	11 1/2"	5"		3"				6	11 1/2"	61Epoxy Coated
S640	51	38'-7"	2,956	1	8"	37'-11"												
S641	8	25'-0"	300	STR														
Total			159,957															
SUPERSTRUCTURE - WESTBOUND					<i>Reinforcing steel in Westbound shall have the suffix "B"</i>													
S401	1014	30'-0"	20,320	STR														1014Epoxy Coated
S402	61	Var. 22'-0" to 31'-0" by 11 1/2" x 1'-00"	1,080	STR														61Epoxy Coated
S403	9	31'-3"	188	STR														9Epoxy Coated
S404	77	22'-11"	1,179	STR														77Epoxy Coated
S405	5	21'-11"	73	STR														5Epoxy Coated
S406	2	31'-3"	42	STR														2Epoxy Coated
S407	73	28'-0"	1,365	STR														73Epoxy Coated
S408	73	38'-6"	1,877	STR														73Epoxy Coated
S409	144	26'-6"	2,549	STR														144Epoxy Coated
S500	320	3'-2"	1,057	STR														320Epoxy Coated
S501	560	2'-5"	1,412	S10			1'-1"	1'-0"	7 5/8"									560Epoxy Coated
S505	347	30'-0"	29,632	STR														26Epoxy Coated
S506	55	Var. 27'-0" to 34'-0" by 13 1/2" x 1'-00"	1,750	STR														
S507	8	34'-9"	290	STR														
S508	72	23'-3"	1,746	STR														2Epoxy Coated

- 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 numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
 - For bar types see sheet 25/32.
 - All dimensions are out to out of bar.
 - Radius dimension "R" is to outside of bar.
 - The length of bent bars is measured along the centerline.
 - For additional notes see sheet 25/32.

KING & GAVARIS CONSULTING ENGINEERS		30/32 OHIO
REINFORCING STEEL LIST		
BRIDGE NO. GRE.-675-0589		
I- 675 UNDER RELOCATED U.S. 35		
GREENE COUNTY		STA: 28+76.0 TO STA: 32+97.62
DESIGNED	DRAWN	TRACED
AW	S.A.	S.A.
CHECKED	REVIEWED	DATE
		9/21/74

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
WESTBOUND CONTINUED																	
5509	3	27'-3"	85	STR													
5512	112	5'-8"	662	STR													56 Epoxy Coated
5513	32	12'-0"	400	STR													16 Epoxy Coated
5514	96	12'-11"	1,293	STR													48 Epoxy Coated
5515	48	11'-9"	588	STR													24 Epoxy Coated
5516	32	12'-7"	420	STR													16 Epoxy Coated
5517	6	35'-0"	219	STR													2 Epoxy Coated
5518	320	3'-10"	1,279	20		9"	3'-2"										
5519	320	2'-5"	807	15		9"	8"	9"	10"	4"		5"					
5601	315	26'-2"	12,380	STR													910 Epoxy Coated
5602	349	31'-0"	16,250	STR													919 Epoxy Coated
5603	380	27'-8"	15,506	STR													980 Epoxy Coated
5604	380	32'-0"	18,264	STR													
5605	349	33'-9"	17,692	STR													949 Epoxy Coated
5606	315	28'-11"	13,682	STR													
5607	354	32'-9"	17,413	STR													994 Epoxy Coated
5608	354	27'-11"	14,844	STR													
5609	34	Var. 4'-7" to 25'-0" by 738'-1-00.	755	STR													94 Epoxy Coated
5610	34	Var. 8'-9" to 29'-0" by 738'-1-00.	964	STR													
5611	108	Var. 2'-9" to 35'-9" by 738'-1-00.	3,123	STR													54 Epoxy Coated
5612	24	30'-0"	1081	STR													8 Epoxy Coated
5613	8	19'-4"	58	STR													1 Epoxy Coated
5614	26	Var. 9'-4" to 31'-3" by 1028'-1-00.	792	STR													26 Epoxy Coated
5615	26	Var. 4'-4" to 26'-3" by 1028'-1-00.	597	STR													
5616	70	Var. 4'-0" to 23'-4" by 518'-1-00.	1,963	STR													35 Epoxy Coated
5617	25	Var. 9'-6" to 31'-0" by 1028'-1-00.	760	STR													25 Epoxy Coated
5618	25	Var. 4'-7" to 31'-0" by 1028'-1-00.	574	STR													
5619	14	4'-0"	84	STR													7 Epoxy Coated
5620	66	Var. 4'-10" to 33'-5" by 1028'-1-00.	1,896	STR													33 Epoxy Coated
5621	25	Var. 4'-5" to 25'-6" by 1028'-1-00.	562	STR													25 Epoxy Coated
5622	25	Var. 9'-7" to 30'-6" by 1028'-1-00.	753	STR													
5623	78	Var. 3'-8" to 34'-4" by 1028'-1-00.	2,055	STR													36 Epoxy Coated
5624	6	11'-6"	104	STR													3 Epoxy Coated
5625	4	8'-0"	48	STR													
5626	73	37'-1"	4066	1	8"	36'-5"											73 Epoxy Coated
5627	88	2'-8"	352	14	7 1/2"	7 1/2"	11"	6 1/2"	11 1/8"	5"							
5628	73	6'-0"	658	1	8"	5'-4"											73 Epoxy Coated
Total			217,589														

SUPERSTRUCTURE - EASTBOUND																	
<i>Reinforcing steel in Eastbound shall have the suffix "C"</i>																	
5401	1333	30'-0"	26,713	STR													1320 Epoxy Coated
5402	66	Var. 15'-6" to 21'-0" by 11'-00.	805	STR													66 Epoxy Coated
5403	20	Var. 3'-0" to 15'-4" by 734'-1-00.	122	STR													20 Epoxy Coated
5404	20	Var. 21'-4" to 22'-8" by 781'-1-00.	294	STR													20 Epoxy Coated
5405	66	22'-8"	999	STR													66 Epoxy Coated
5406	3	31'-9"	64	STR													3 Epoxy Coated
5407	3	21'-1"	42	STR													3 Epoxy Coated
5408	4	20'-10"	56	STR													2 Epoxy Coated
5409	4	22'-8"	61	STR													2 Epoxy Coated
5410	106	27'-6"	1,947	STR													106 Epoxy Coated
5411	102	37'-9"	2,572	STR													102 Epoxy Coated

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
EASTBOUND CONTINUED																	
5412	196	24'-6"	3,208	STR													196 Epoxy Coated
5501	304	2'-4"	740	2	9"	10"											9"
5502	304	5'-10"	1,850	23	2'-0 1/8"	2'-2 1/2"	1'-0"	3 1/2"	2'-2 1/2"	9"				2'-4"	2'-6"	3 3/8"	904 Epoxy Coated
5503	304	2'-7"	819	2	9"	1'-0"											
5504	304	3'-0"	951	15		8"	10"	9"	10 5/8"	8"		7"					304 Epoxy Coated
5505	1178	30'-0"	36,860	STR													
5506	55	Var. 19'-6" to 25'-0" by 174'-1-00.	1,276	STR													
5507	18	Var. 7'-0" to 21'-4" by 878'-1-00.	247	STR													
5508	18	Var. 21'-8" to 23'-0" by 11'-00.	419	STR													
5509	55	23'-0"	1,319	STR													
5510	8	35'-5"	296	STR													2 Epoxy Coated
5511	8	21'-5"	179	STR													2 Epoxy Coated
5512	2	24'-10"	52	STR													
5513	2	23'-0"	48	STR													
5514	56	5'-8"	331	STR													28 Epoxy Coated
5515	16	11'-4"	189	STR													8 Epoxy Coated
5516	60	12'-2"	761	STR													30 Epoxy Coated
5517	28	11'-2"	326	STR													14 Epoxy Coated
5518	560	2'-5"	1,412	S10		1'-1"	1'-0"	6"									560 Epoxy Coated
5601	26	31'-1"	1,214	STR													26 Epoxy Coated
5602	26	30'-6"	1,191	STR													
5603	26	16'-10"	657	STR													26 Epoxy Coated
5604	26	12'-8"	495	STR													
5605	26	Var. 4'-5" to 26'-1" by 1028'-1-00.	596	STR													26 Epoxy Coated
5606	26	Var. 9'-7" to 31'-5" by 1028'-1-00.	801	STR													
5607	34	Var. 4'-0" to 32'-9" by 1028'-1-00.	938	STR													34 Epoxy Coated
5608	34	Var. 8'-2" to 36'-10" by 1028'-1-00.	1,150	STR													
5609	34	16'-3"	830	STR													34 Epoxy Coated
5610	34	12'-3"	626	STR													
5611	30	Var. 4'-0" to 16'-8" by 1028'-1-00.	466	STR													15 Epoxy Coated
5612	8	Var. 7'-4" to 13'-7" by 1028'-1-00.	126	STR													8 Epoxy Coated
5613	8	Var. 4'-0" to 10'-0" by 1028'-1-00.	84	STR													
5614	691	30'-10"	32,001	STR													299 Epoxy Coated
5615	53	29'-3"	2,328	STR													
5616	30	Var. 9'-0" to 34'-10" by 1028'-1-00.	988	STR													30 Epoxy Coated
5617	30	Var. 4'-2" to 30'-0" by 1028'-1-00.	770	STR													
5618	70	Var. 4'-0" to 34'-3" by 1028'-1-00.	2,020	STR													35 Epoxy Coated

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 numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
- For bar types see sheet 25/32
- All dimensions are out to out of bar.
- Radius dimension "R" is to outside of bar.
- The length of bent bars is measured along the centerline.
- For additional notes see sheet 25/32

CINCINNATI		KING & GAVARIS CONSULTING ENGINEERS		31/32
REINFORCING STEEL LIST				
BRIDGE NO. GRE-675-0589				
I-675 UNDER RELOCATED U.S. 35				
GREENE COUNTY		STA: 28+76.00 TO STA: 32+97.62		
DESIGNED	DRAWN			

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
EASTBOUND CONTINUED																	
S619	16	4'-0"	96	Str													8 Epoxy Coated
S620	57	28'-6"	2440	Str													57 Epoxy Coated
S621	57	33'-3"	2847	Str													26 Epoxy Coated
S622	26	Var 4'-7" to 27'-0" by 1034'-1-00	617	Str													26 Epoxy Coated
S623	26	Var 9'-7" to 32'-0" by 1034'-1-00	812	Str													32 Epoxy Coated
S624	32	Var 4'-0" to 34'-0" by 1034'-1-00	865	Str													49 Epoxy Coated
S625	32	Var 5'-7" to 35'-7" by 1034'-1-00	1037	Str													32 Epoxy Coated
S626	45	15'-3"	1031	Str													49 Epoxy Coated
S627	45	11'-7"	783	Str													32 Epoxy Coated
S628	32	14'-4"	689	Str													12 Epoxy Coated
S629	32	10'-7"	509	Str													26 Epoxy Coated
S630	24	Var 4'-0" to 44'-0" by 1034'-1-00	350	Str													26 Epoxy Coated
S631	26	Var 3'-0" to 24'-0" by 1034'-1-00	648	Str													46 Epoxy Coated
S632	26	Var 4'-1" to 19'-7" by 712'-1-00	462	Str													47 Epoxy Coated
S633	376	30'-1"	16,990	Str													178 Epoxy Coated
S634	172	26'-5"	6,825	Str													172 Epoxy Coated
S635	172	31'-1"	8030	Str													46 Epoxy Coated
S636	45	Var 9'-0" to 36'-2" by 712'-1-00	1,520	Str													45 Epoxy Coated
S637	45	Var 4'-1" to 31'-6" by 712'-1-00	1,203	Str													47 Epoxy Coated
S638	94	Var 3'-8" to 28'-7" by 712'-1-00	2,559	Str													50 Epoxy Coated
S639	50	26'-4"	1,978	Str													51 Epoxy Coated
S640	50	21'-8"	1,627	Str													41 Epoxy Coated
S641	51	25'-9"	1,973	Str													41 Epoxy Coated
S642	92	21'-1"	2,913	Str													61 Epoxy Coated
S643	61	27'-0"	2,474	Str													61 Epoxy Coated
S644	61	31'-8"	2,901	Str													61 Epoxy Coated
S645	61	24'-7"	2,252	Str													16 Epoxy Coated
S646	63	19'-11"	1,885	Str													392 Epoxy Coated
S647	392	27'-9"	16,339	Str													146 Epoxy Coated
S648	246	32'-6"	12,008	Str													62 Epoxy Coated
S649	146	32'-8"	7,164	Str													16 Epoxy Coated
S650	146	31'-7"	6,926	Str													52 Epoxy Coated
S651	64	22'-0"	2,115	Str													91 Epoxy Coated
S652	64	17'-6"	1,682	Str													50 Epoxy Coated
S653	41	16'-6"	1,016	Str													53 Epoxy Coated
S654	56	20'-10"	1,753	Str													43 Epoxy Coated
S655	52	16'-0"	1,250	Str													3 Epoxy Coated
S656	91	20'-3"	2,768	Str													2 Epoxy Coated
S657	91	15'-6"	2,119	Str													91 Epoxy Coated
S658	50	18'-2"	1,364	Str													50 Epoxy Coated
S659	50	14'-0"	1,051	Str													53 Epoxy Coated
S660	53	17'-4"	1,380	Str													43 Epoxy Coated
S661	53	13'-2"	1,048	Str													3 Epoxy Coated
S662	43	16'-10"	1,087	Str													2 Epoxy Coated
S663	43	12'-8"	818	Str													91 Epoxy Coated
S664	26	30'-0"	1,172	Str													91 Epoxy Coated
S665	4	24'-6"	147	Str													91 Epoxy Coated
S666	91	35'-2"	4,807	1	8"	34'-6"										6"	91 Epoxy Coated
S667	91	6'-0"	820	1	8"	5'-4"										6"	91 Epoxy Coated
S668	104	2'-8"	417	14	7 3/4"	7 3/4"	11"	6 1/2"	11 5/8"	5"		3"		1 1/2"	2'-1 3/4"		91 Epoxy Coated
		Total	269,812														

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
L501	8	3'-6"	30	2	9"	2'-0"					9"						
L502	8	8'-3"	68	17			3'-2"	2'-2"	3'-2"								8 Epoxy Coated
L503	12	7'-6"	94	4		6"	2'-7"	1'-4"	2'-7"	6"		1'-10"			6'-0"		
L504	8	3'-2"	26	Str.													
L505	10	11'-8"	122	Str.													10 Epoxy Coated
L506	1	7'-6"	8	Str.													16 Epoxy Coated
L507	1	2'-5"	3	Str.													16 Epoxy Coated
L508	17	2'-10"	50	5/12	1'-2"	1'-2"	8"					1'-2"		1"			17 Epoxy Coated
L509	17	2'-1"	37	24	1'-0"	7"	8"	6"	4"	5 1/2"	8"						17 Epoxy Coated
L510	17	2'-1"	37	15		7"	10"	8"	9"			5"					
L601	17	2'-6"	64	Str.													17 Epoxy Coated
L602	17	2'-8"	68	19		1'-3"	1'-5"					7"		1'-0"			17 Epoxy Coated
L603	17	2'-11"	75	15		6"	1'-0"		11"	1'-0"		9"					17 Epoxy Coated
L604	17	2'-11"	75	22		6"	1'-0"					10"		7"			17 Epoxy Coated
L605	17	2'-0"	64	2	9"	1'-11"											
L606	17	3'-8"	94	1	8"	3'-0"							6"				17 Epoxy Coated
		Total	915														
		Total Superstruc	648,273														

- 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 numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
 - For bar types see sheet 25/32
 - All dimensions are out to out of bar.
 - Radius dimension "R" is to outside of bar.
 - The length of bent bars is measured along the centerline.
 - For additional notes see sheet 25/32

CINCINNATI		KING & GAVARIS CONSULTING ENGINEERS		32/32
				OHIO
REINFORCING STEEL LIST				
BRIDGE NO. GRE-675-0589				
I-675 UNDER RELOCATED U.S. 35				
GREENE COUNTY		STA: 28+76.00 TO STA: 32+97.62		
DESIGNED	DRAWN	TRACED	CHECKED	DATE
	A.W.		S.A.	9/16/22

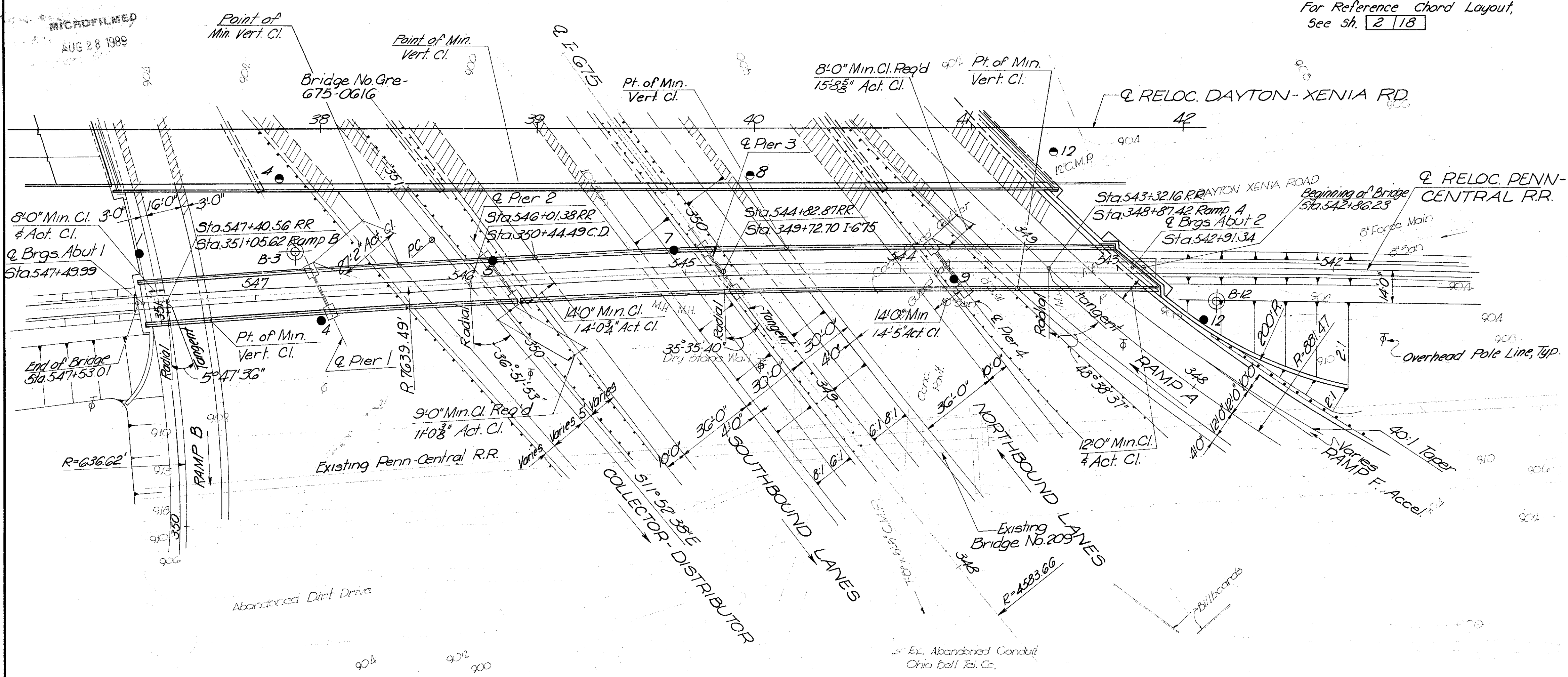
MICROFILMED
AUG 28 1989

For Reference Chord Layout,
See Sh. 218

MICROFILMED
JUN 13 1989

FED. RD. DIVISION	STATE	PROJECT	453 616
2	OHIO		

GRE-675 - 5-37
GREENE COUNTY



Note:
Earthwork Limits shown are schematic
Actual slopes shall conform to
Plan Cross-Sections.

BRIDGE TO BE REMOVED
Existing RR Bridge No. 209
Single span through girder
on masonry abutments
84'-2" c to c bearings

R R CURVE DATA
PI Sta. 547+87.80
Dc = 0° 45'
Δ = 11° 05' 44"
R = 7639.49'
T = 784.53'
Lc = 1394.41'
Ls = 85.00'
E = 35.99'

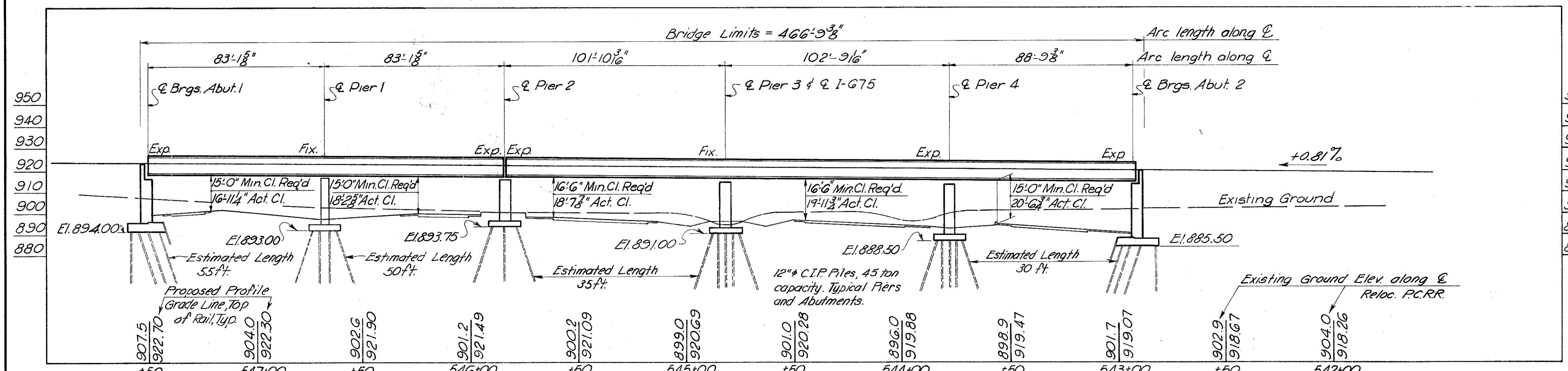
Dayton-Kenia Rd. traffic to be
maintained during construction.

For Typical Section thru bridge see sh. 1218

PLAN

LEGEND

- ⊕ Drive sample boring location.
- Drive Rod Penetration Resistance Sounding Location.
- Drive Rod Penetration Resistance Sounding Location Bridge No. GRE 675-0616



DESIGN YEAR TRAFFIC
1989 ADT:

Ramp B	10,110
Coll.-Dist.	4,960
I-675	43,160
Ramp A	15,070

PROPOSED STRUCTURE
TYPE: Superstructure Continuous welded through plate girder bridge with steel floor plate & reinforced concrete substructure
SPANS: 83'-18", 83'-18", 101'-10 1/2", 102'-9 1/2", 88'-9 3/8"
LOADING: Cooper E-80, Diesel Impact
SKEW: Varies 35°-35'-40" Rt. Fwd. @ I-675
WEARING SURFACE:
APPROACH SLABS:
ALIGNMENT: Left Curve

TRACK MOVEMENTS

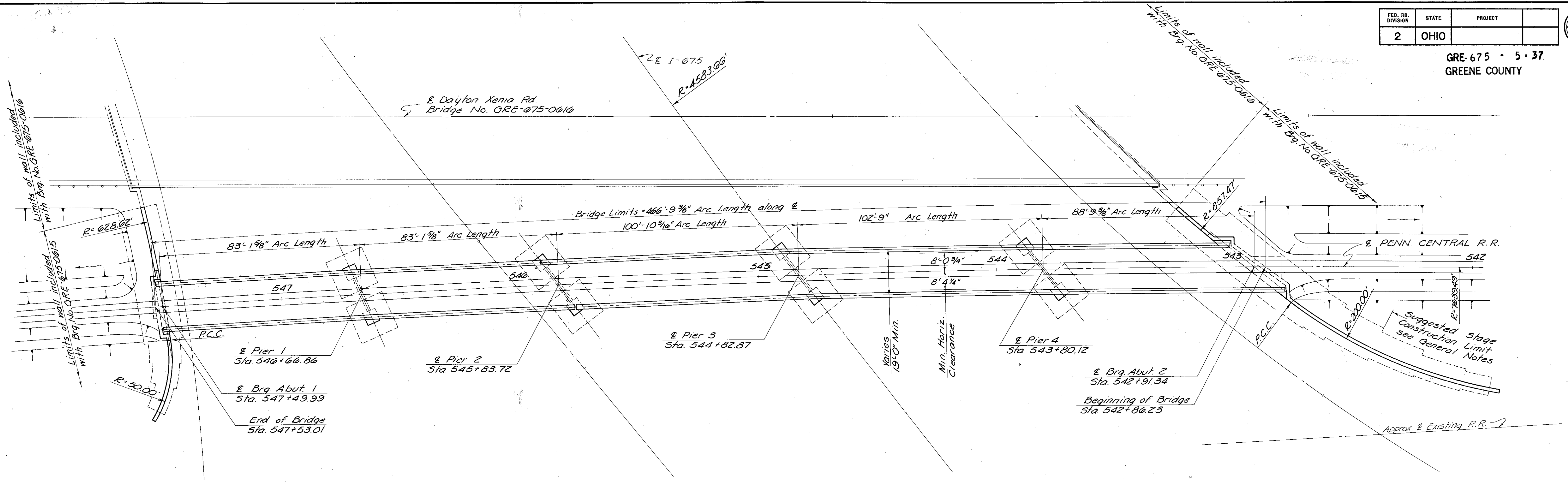
Freight: 10 @ 50 mph

**PROFILE ON CENTER LINE RELOCATED PENN-CENTRAL
RAILROAD OVER I-675**

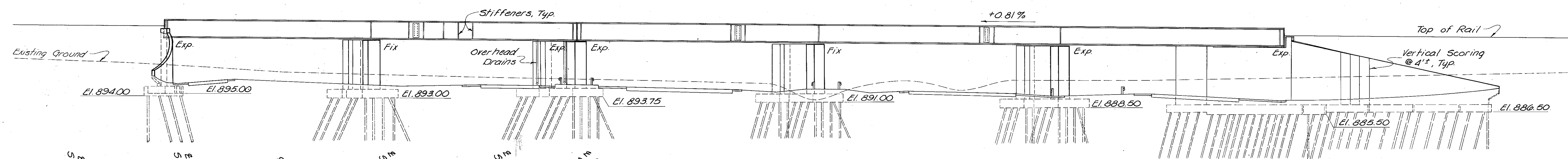
KING & GAVARIS CONSULTING ENGINEERS
CINCINNATI OHIO

SITE PLAN-I
BRIDGE NO. GRE-675-0615
I-675 UNDER RELOCATED PENN-CENTRAL RAILROAD
GREENE COUNTY STA: 542+86.23 TO STA: 547+53.01

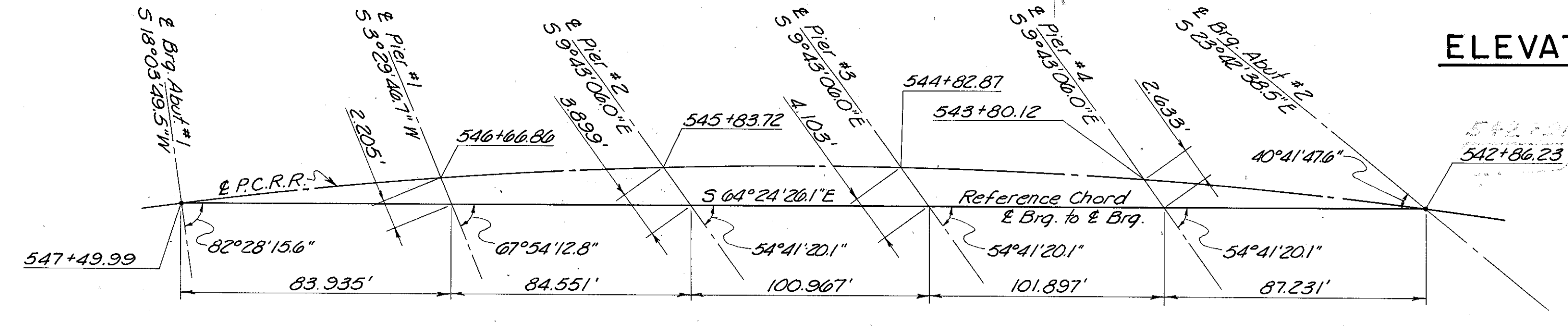
PRESENT TOPOGRAPHY	PROPOSED WORK				
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISED
AERIAL SURVEY	AERIAL SURVEY	J.C.L.	A.W.	S.A.	4-16-82



PLAN



ELEVATION



REFERENCE CHORD LAYOUT
(SCHEMATIC)

KING & GAVARIS CONSULTING ENGINEERS		2/18
GENERAL PLAN & ELEVATION		
BRIDGE NO. GRE-675-0615		
I-675 UNDER RELOCATED PENN-CENTRAL RAILROAD		
GREENE COUNTY		STA. 542+86.23 TO STA. 547+53.01
DESIGNED	DRAWN	TRACED
K.F.	S.A.	S.A.
CHECKED	REVIEWED	DATE
S.A.	S.A.	9/15/12

GENERAL NOTES

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		455 616

GRE-675 - 5-37
GREENE COUNTY

GENERAL

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE NECESSITY OF MAINTAINING RAILROAD TRAFFIC ON THE EXISTING TRACKS AT ALL TIMES DURING CONSTRUCTION OF THIS STRUCTURE, UNTIL SUCH TIME AS THE NEW RELOCATION IS ABLE TO RECEIVE THIS TRAFFIC. SIMILARLY, HIS ATTENTION IS DIRECTED TO THE MAINTENANCE OF TRAFFIC REQUIREMENTS REGARDING VEHICULAR TRAFFIC DURING THE CONSTRUCTION PERIOD.

IT IS PROBABLE THAT THE SOUTHERLY WINGWALL OF ABUTMENT #2 WILL NEED TO BE CONSTRUCTED IN STAGES. THE PLANS SHOW SUGGESTED LOCATIONS FOR FOOTING AND WALL STEM CONSTRUCTION JOINTS. THE SECTION OF WALL ADJACENT TO THE ABUTMENT SHALL BE CONSTRUCTED WITH THE ABUTMENT. THE REMAINING SEGMENT OF THE WALL MAY BE CONSTRUCTED ONLY AFTER RAILROAD TRAFFIC HAS BEEN PLACED ON THE NEW TRACK. THE USE OF SHEETING WILL BE REQUIRED DURING BOTH STAGES TO PROTECT BOTH THE TRACK AND THE EXCAVATION, AS IT MAY ALSO BE REQUIRED AT OTHER TIGHT CLEARANCE LOCATIONS.

TO REDUCE THE HEIGHTS OF SHEETING REQUIRED DURING THE VARIOUS STAGES OF CONSTRUCTION, THE EXISTING TRACK EMBANKMENT MAY BE TRIMMED WHERE REQUIRED TO A SLOPE NOT EXCEEDING 1-1/2 ON 1. NEW EMBANKMENTS MAY ALSO BE TEMPORARILY CONSTRUCTED TO SLOPES NOT STEEPER THAN 1-1/2 ON 1. THE TOPS OF THESE SLOPES SHALL NOT BE CLOSER THAN 14 FT. TO THE CENTERLINE OF EXISTING OR RELOCATED TRACK.

REFERENCE SHALL BE MADE TO SUPPLEMENTAL SPECIFICATIONS:

809 DATED JANUARY 1, 1971
810 DATED JANUARY 1, 1971

927 DATED JANUARY 1, 1971

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR STEEL RAILWAY BRIDGE" OF THE AMERICAN RAILWAY ENGINEERING ASSOCIATIONS, 1971 EDITION.

CONSTRUCTION AND MATERIAL SPECIFICATIONS: STATE OF OHIO, DEPARTMENT OF HIGHWAYS, DATED JANUARY 1, 1979.

DESIGN DATA:

DESIGN LOADING - COOPER E-80 WITH DIESEL IMPACT.

CLASS C CONCRETE - UNIT STRESS 1333 PSI FOR SUBSTRUCTURE.
METAL BRIDGE DECK - ASTM A 588. UNIT STRESS 27,000 PSI
STRUCTURAL STEEL - ASTM A 36 - UNIT STRESS 20,000 (SEE ADDITIONAL REQUIREMENTS) PSI
REINFORCING STEEL - ASTM A 615 - UNIT STRESS 20,000 PSI

REMOVAL OF EXISTING STRUCTURE: WHEN NO LONGER NEEDED TO MAINTAIN RAILROAD TRAFFIC THE EXISTING STRUCTURE SHALL BE REMOVED.

EMBANKMENT CONSTRUCTION: BEFORE THE BACKWALL IS CONSTRUCTED THE EMBANKMENT SHALL BE CONSTRUCTED UP TO THE LEVEL SUB-BALLAST WITH A 1:1 SLOPE FROM THE BRIDGE SEAT TO THE SUB-BALLAST LINE, FOR A MINIMUM DISTANCE OF 200 FEET BACK OF EACH ABUTMENT.

PILES SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 45 TONS PER PILE FOR ABUTMENTS AND PIERS.

UTILITY LINES: ALL EXPENSE INVOLVED IN RELOCATING AFFECTED UTILITY LINES, EXCEPT THOSE BEING INSTALLED OR RELOCATED AS PART OF THIS PROJECT, 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.

RAILROAD AERIAL LINES WILL BE RELOCATED BY THE RAILROAD. THE CONTRACTOR SHALL USE ALL PRECAUTIONS NECESSARY TO SEE THAT THE LINES ARE NOT DISTURBED DURING THE CONSTRUCTION STAGE AND SHALL COOPERATE WITH THE RAILROAD IN THE RELOCATION OF THESE LINES. THE COST OF THE RELOCATIONS SHALL BE INCLUDED IN THE RAILROAD FORCE ACCOUNT WORK.

STRUCTURAL STEEL:

- STEEL FOR FLANGES, WEB PLATES AND STIFFENERS SHALL BE FULLY KILLED FINE GRAIN PRACTICE.
- FLANGE PLATES WITH FLAME CUT EDGES SHALL BE FREE OF NICKS AND NOTCHES AND SHALL HAVE ALL EDGES GROUND TO A 1/16 INCH RADIUS.
- ALL WELDS CONNECTING FLANGE PLATE TO WEB PLATE MUST BE MADE BY AUTOMATIC SUBMERGED ARC WELDING.

STRUCTURAL STEEL: CONTINUED

- MILL SCALE TO BE GROUND OFF FLANGE PLATES AT WEB TO FLANGE WELD.
- ALL SPLICES IN FLANGE PLATES AND WEBS TO BE RADIOGRAPHED.
- 50% OF WEB TO FLANGE WELDS TO BE SUBJECT TO ULTRASONIC TESTING IN ACCORDANCE WITH AWS SPECIFICATIONS.
- BOTTOM FLANGE PLATE MUST BE PERPENDICULAR TO WEB PLATE AT BEARINGS. MAXIMUM TOLERANCE ±0.03 INCHES.
- PINS IN BEARINGS TO BE COLD FINISHED CARBON STEEL SHAFTING CONFORMING TO THE REQUIREMENTS FOR GRADE 1020 STEEL IN ASTM SPECIFICATION A 108.
- BRONZE PLATE SHALL BE AS PER ASTM SPECIFICATION B-22, CLASS B, WITH TREPANED GRAPHITE INSERTS.

DAMP-PROOFING: BACKS OF ALL ABUTMENTS AND WALLS WHICH SHALL BE IN PERMANENT CONTACT WITH EARTH SHALL BE DAMP-PROOFED WITH TYPE "A" WATERPROOFING FROM THE TOP OF THE FOOTING TO THE TOP OF THE POROUS BACKFILL.

ITEM SPECIAL - ASPHALT PORTLAND CEMENT CONCRETE

Use:

THIS CONCRETE IS TO BE USED AS A PROTECTION COURSE OVER METAL DECKS OF RAILROAD BRIDGES.

MATERIALS:

- EMULSIFIED ASPHALT SHALL BE IN ACCORDANCE WITH FEDERAL SPECIFICATIONS SS-A-674b.
- FINE AGGREGATE SHALL BE AS SPECIFIED FOR CONCRETE.
- COARSE AGGREGATE SHALL BE AS SPECIFIED FOR CONCRETE WITH THE FOLLOWING GRADATION:

SIEVE SIZE (INCHES)	PERCENT PASSING BY WEIGHT
3/4"	100
1/2"	90 - 100
3/8"	40 - 70
No. 4	0 - 15

Mix:

THE ASPHALT CONCRETE SHALL BE PROPORTIONED BY VOLUME, 1 PART PORTLAND CEMENT, 2 PARTS FINE AGGREGATE, 3 PARTS COARSE AGGREGATE, 1-1/2 PARTS EMULSIFIED ASPHALT TYPE SS-1 AND MINIMUM AMOUNT OF WATER REQUIRED TO MAKE A WORKABLE MIX. THE DRY MATERIALS SHALL FIRST BE THOROUGHLY MIXED THEN THE WATER ADDED TO PRODUCE A UNIFORM MIXTURE AFTER WHICH THE EMULSIFIED ASPHALT IS ADDED AND MIXING CONTINUED UNTIL OF UNIFORM COLOR.

APPLICATION:

WORK SHALL BE DONE ONLY WHEN THE TEMPERATURE WILL BE ABOVE 40° F. FOR A PERIOD OF AT LEAST 24 HOURS AFTER STARTING APPLICATION.

SURFACE TO BE COVERED SHALL BE THOROUGHLY CLEANED AND GIVEN A UNIFORM PRIMER OR BOND COATING OF EMULSIFIED ASPHALT TYPE RS-1, USING NOT LESS THAN 1 GALLON PER 80 SQ. FT.

THE ASPHALT CONCRETE SHALL THEN BE SCREEDED OVER THE PRIMED AREA TO THE THICKNESS INDICATED ON THE DRAWINGS. AFTER THE ASPHALT CONCRETE HAS SET SUFFICIENTLY TO ALLOW A MAN TO WALK UPON IT WITHOUT INDENTATION BUT PRIOR TO FINAL SET, IT SHALL BE GIVEN A UNIFORM COATING OF EMULSIFIED ASPHALT TYPE RS-2 APPLIED AT THE RATE OF ONE GALLON PER 50 SQ. FT. THIS FINAL COATING SHALL BE COVERED WITH CLEAN SAND.

METHOD OF MEASUREMENT:

THE YARDAGE TO BE PAID FOR SHALL BE THE NUMBER OF CUBIC YARDS AS DETERMINED BY CALCULATIONS FROM PLAN DIMENSION, IN PLACE, COMPLETED AND ACCEPTED.

BASIS OF PAYMENT:

THE YARDAGE MEASURED AS PROVIDED ABOVE SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD BID FOR "ITEM SPECIAL ASPHALT PORTLAND CEMENT CONCRETE" WHICH PRICE AND PAYMENT SHALL CONSTITUTE FULL COMPENSATION FOR FURNISHING, PLACING, FINISHING AND CURING, AND ALL LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE ITEM.

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	ABUT.	PIERS	GEN.
202	Lump	Sum	Existing Structure Removed				Lump
503	Lump	Sum	Cofferdams, Cribbs and Sheeting				Lump
503	2,280	Cu. Yd.	Unclassified Excavation		1,825	455	
504	2,450	Sq. Ft.	Steel Sheet Piling left in place (Minimum section modulus of 30.2 in ³ per foot of wall.)		2,450		
505	Lump	Sum	Test Pile				Lump
506	Lump	Sum	Pile test load				Lump
506	1	Ea.	Subsequent Pile test load.				1
507	11,405	Lin. Ft.	12" Cast-in-Place Reinforced Concrete Piles		6,625	4,780	
509	137,502	Lb.	Reinforcing Steel.		69,664	67,838	
511	235	Cu. Yd.	Class "C" Concrete, Piers above Footings.			235	
511	853	Cu. Yd.	Class "C" Concrete, Abutments and Walls above Footings.		853		
511	784	Cu. Yd.	Class "C" Concrete, Footings		532	252	
512	530	Sq. Yd.	Type "A" Waterproofing		530		
512	31	Lin. Ft.	Type "B" Waterproofing		31		
514	1,115,000	Lb.	Field Painting of new Structural Steel System A	1,115,000			
516	23	Lin. Ft.	Preformed Elastic Joint Sealer (705.11)	23			
516	23	Lin. Ft.	Joint sealer (705.01, 705.02)	23			
516	336	Sq. Ft.	1" Preformed Expansion Joint Filler		336		
516	487	Lin. Ft.	Sheet Copper* (16 Oz. 6" wide)		326	161	
516	152	Lin. Ft.	Folded Sheet Copper* (16 Oz. 10" wide)		152		
518	347	Cu. Yd.	Porous Backfill		347		
518	236	Lin. Ft.	8" Perforated C.S.P. (707.01)		236		
518	128	Lin. Ft.	8" Non-Perforated C.S.P. including specials (707.01)		128		
518	932	Lin. Ft.	8" Half-Round, Perforated C.S.P. Bituminous Coated including Specials (707.01, 707.04)	932			
518	38	Lin. Ft.	8" Standard Pipe Downspout including specials (707.11)			38	
523	3	Hours	Dynamic Pile Tests				3
809	151	Sq. Yds.	Asphalt Plank Protection Cover, 1/2" thick.	151			
810	916,500	Lb.	Fracture Critical Structural Steel (AISC Category III) for structures carrying railroad traffic. (A36 Steel) See Proposal Note.	916,500			
810	201,000		Structural Steel (AISC Category III) for structures carrying railroad traffic (A588 Steel)	201,000			
Special	43	Cu. Yds.	Asphalt Portland Cement Concrete	43			

* As an alternate to copper, neoprene water stops may be used.

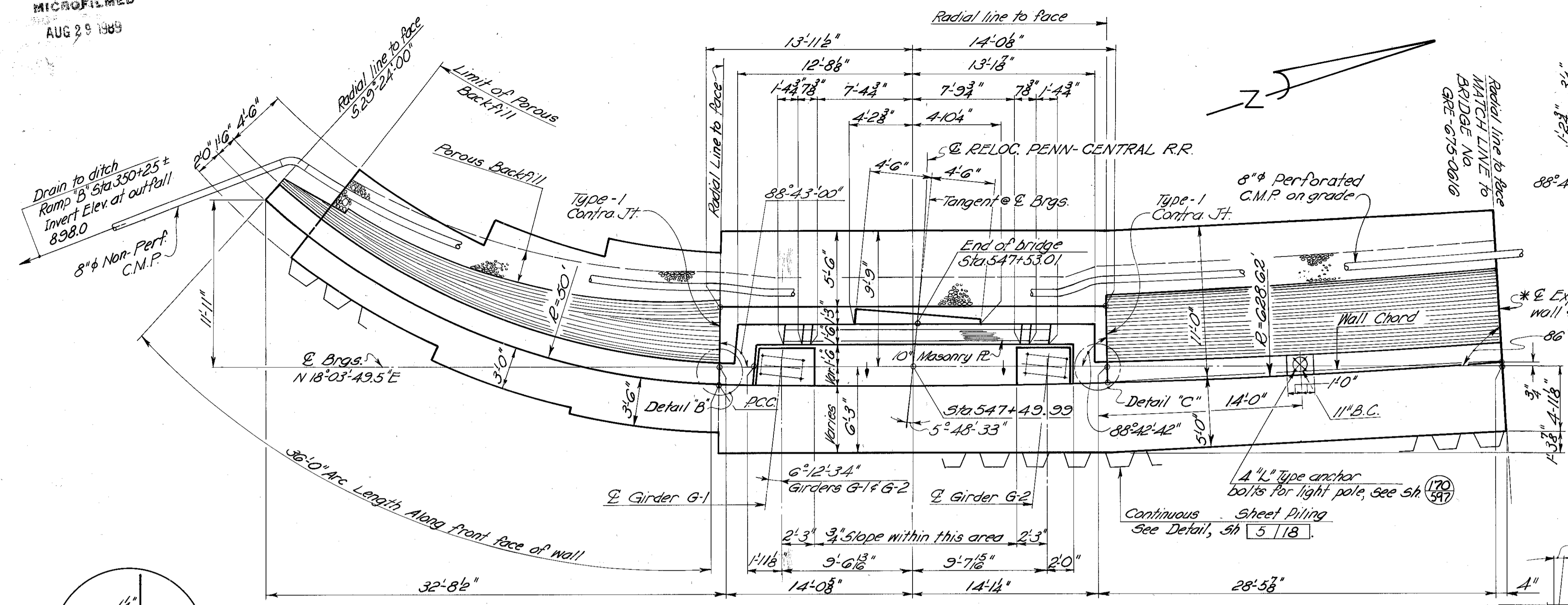
NOTE: Rails, Ties and Ballast on Bridge Structure included in "Item Special - Construction of Railroad Tracks." See Sheet 29/501

ESTIMATED QUANTITIES CHECKED BY B DATE: J.R.G./S.A. 2/10/72 REVISED S.A. 9/20/72

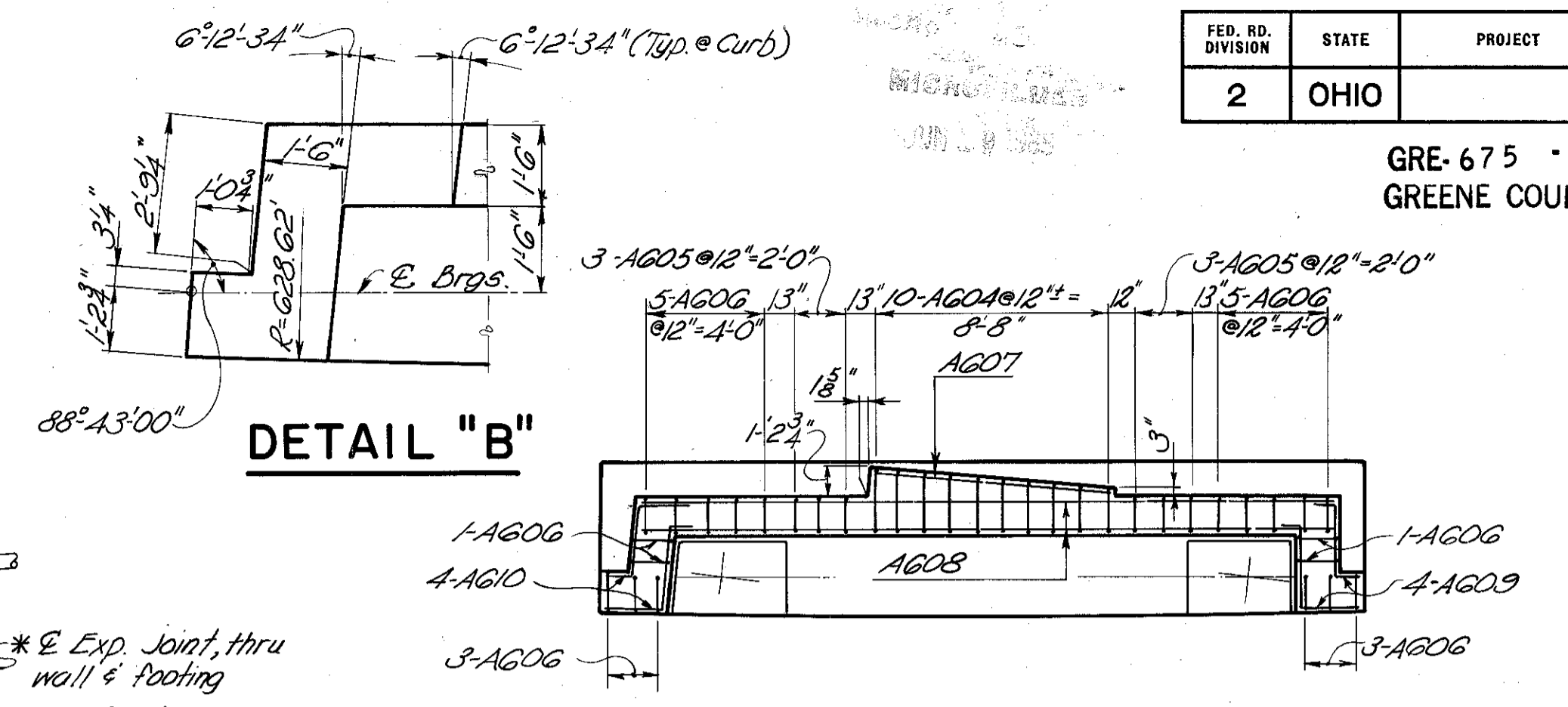
KING & GAVARIS CONSULTING ENGINEERS		3/18	
CINCINNATI		OHIO	
GENERAL NOTES & ESTIMATED QUANTITIES			
BRIDGE NO. GRE-675-0615			
I-675 UNDER RELOCATED PENN.-			
CENTRAL RAILROAD			
GREENE COUNTY		STA: 542+86.23	TO
		STA: 547+53.01	
DESIGNED	DRAWN	CHECKED	REVIEWED
S.A.	A.W.	S.A.	DATE 9/25/72
			REVISED 4-16-82

MICROFILMED
AUG 29 1989

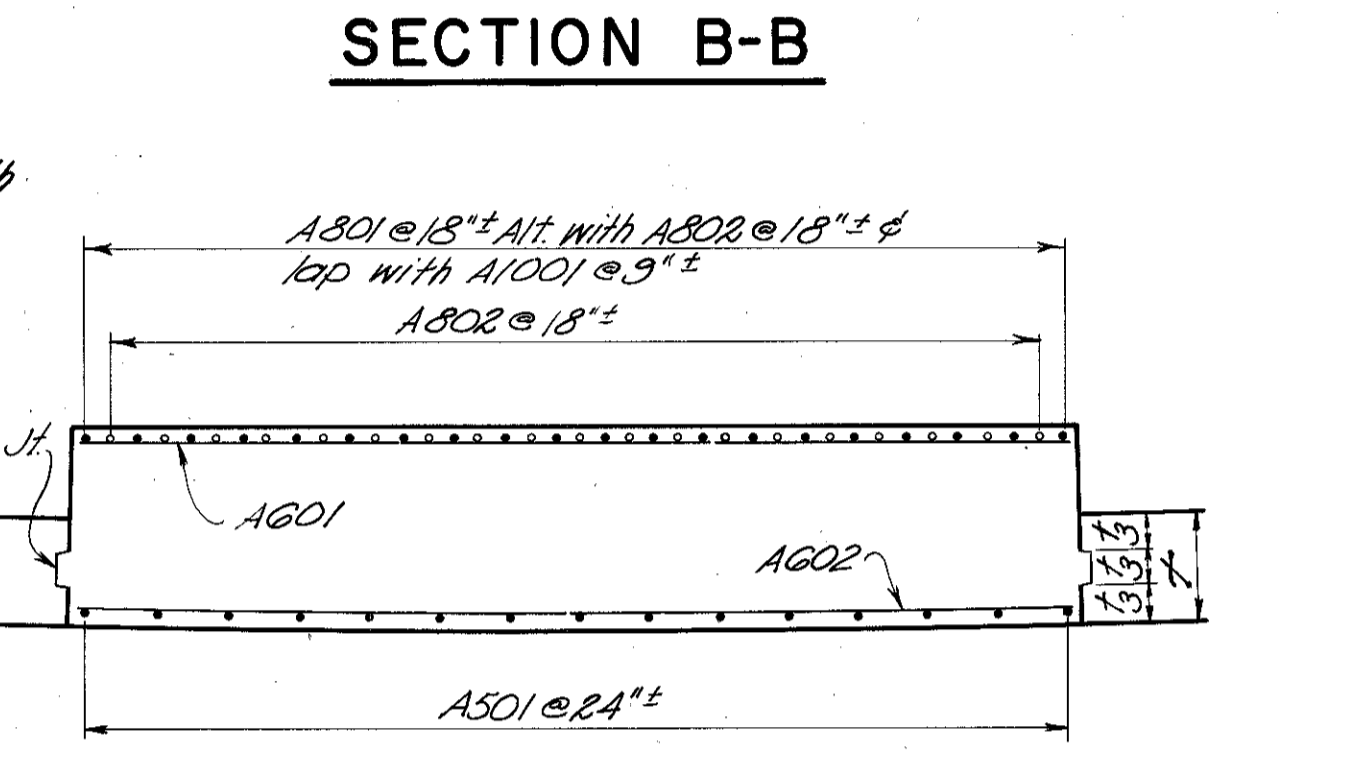
FED. RD. DIVISION	STATE	PROJECT	456 616
2	OHIO	GRE-675 - 5-37 GREENE COUNTY	



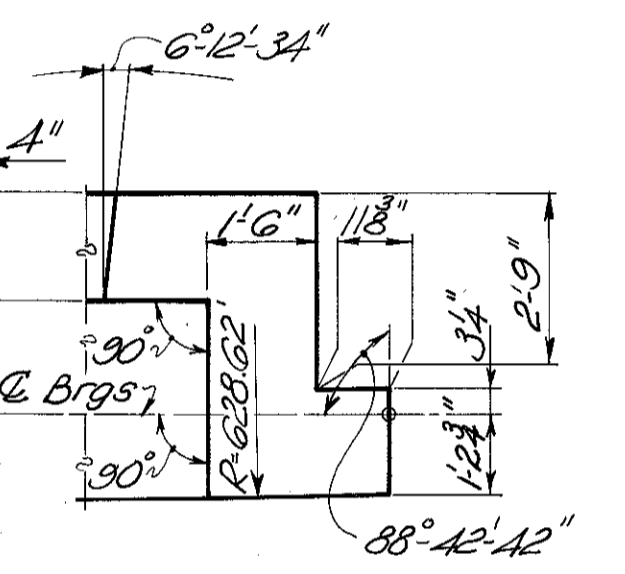
PLAN



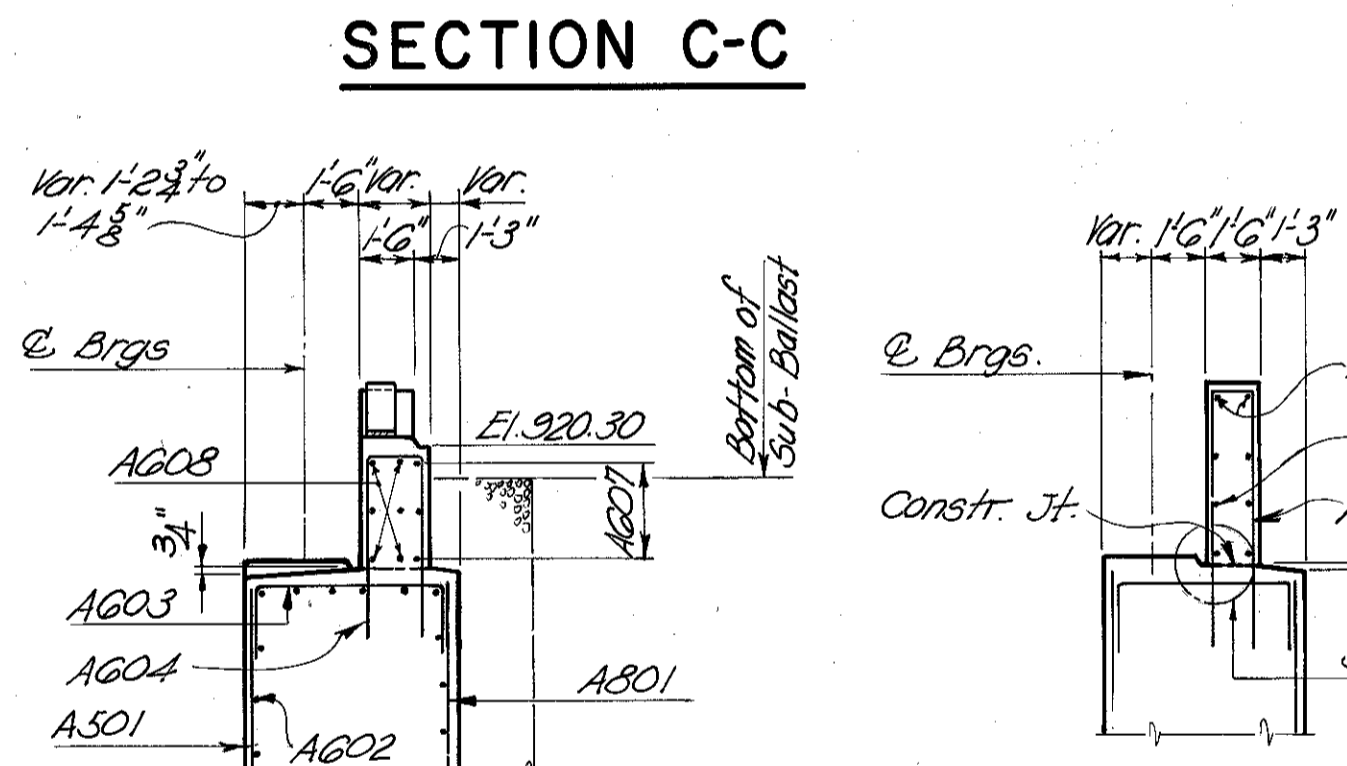
DETAIL "B"



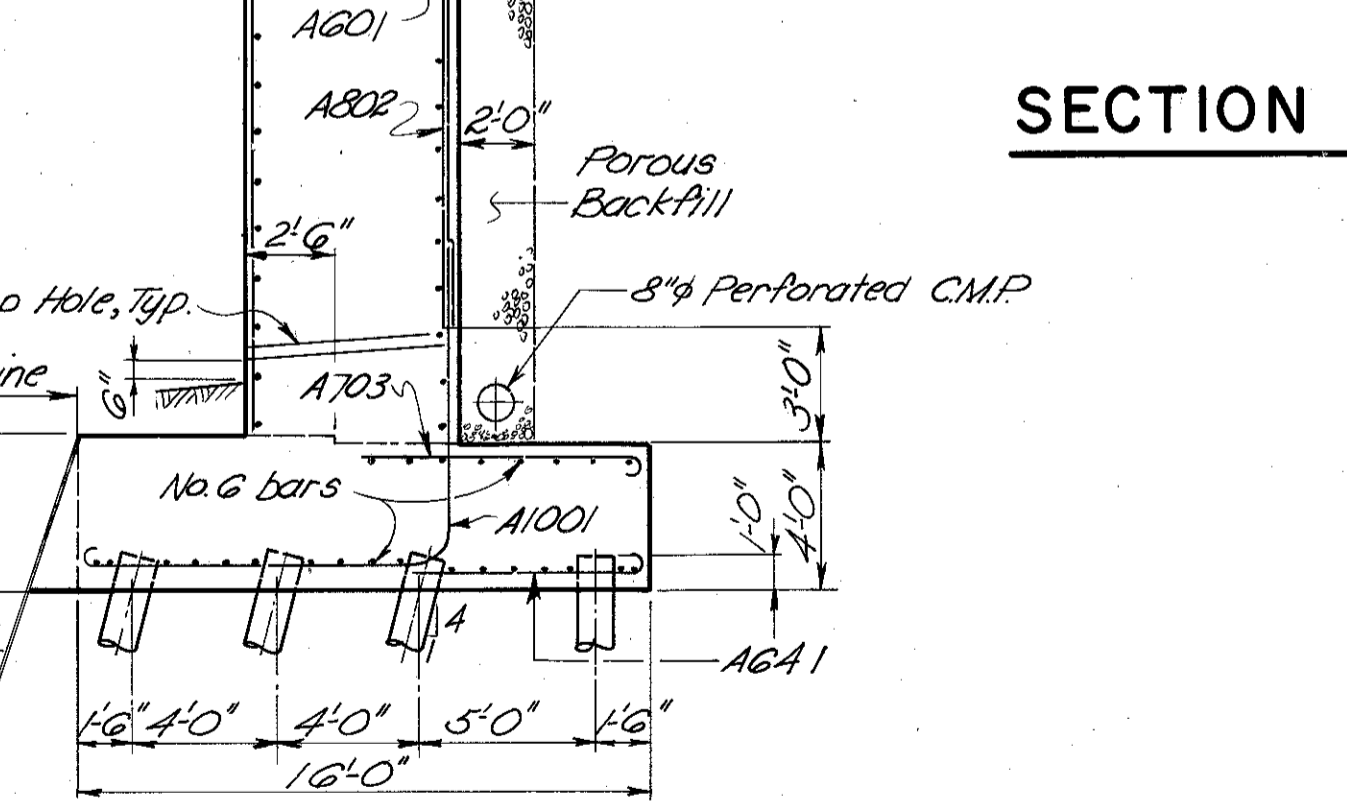
SECTION B-B



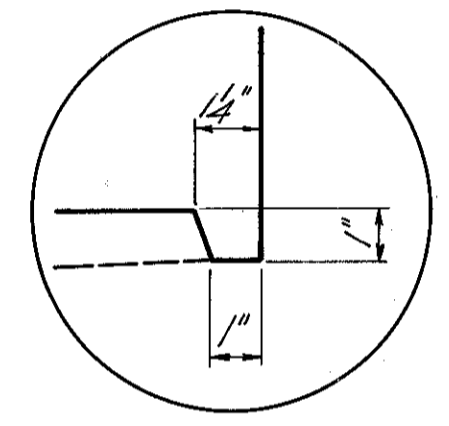
DETAIL "C"



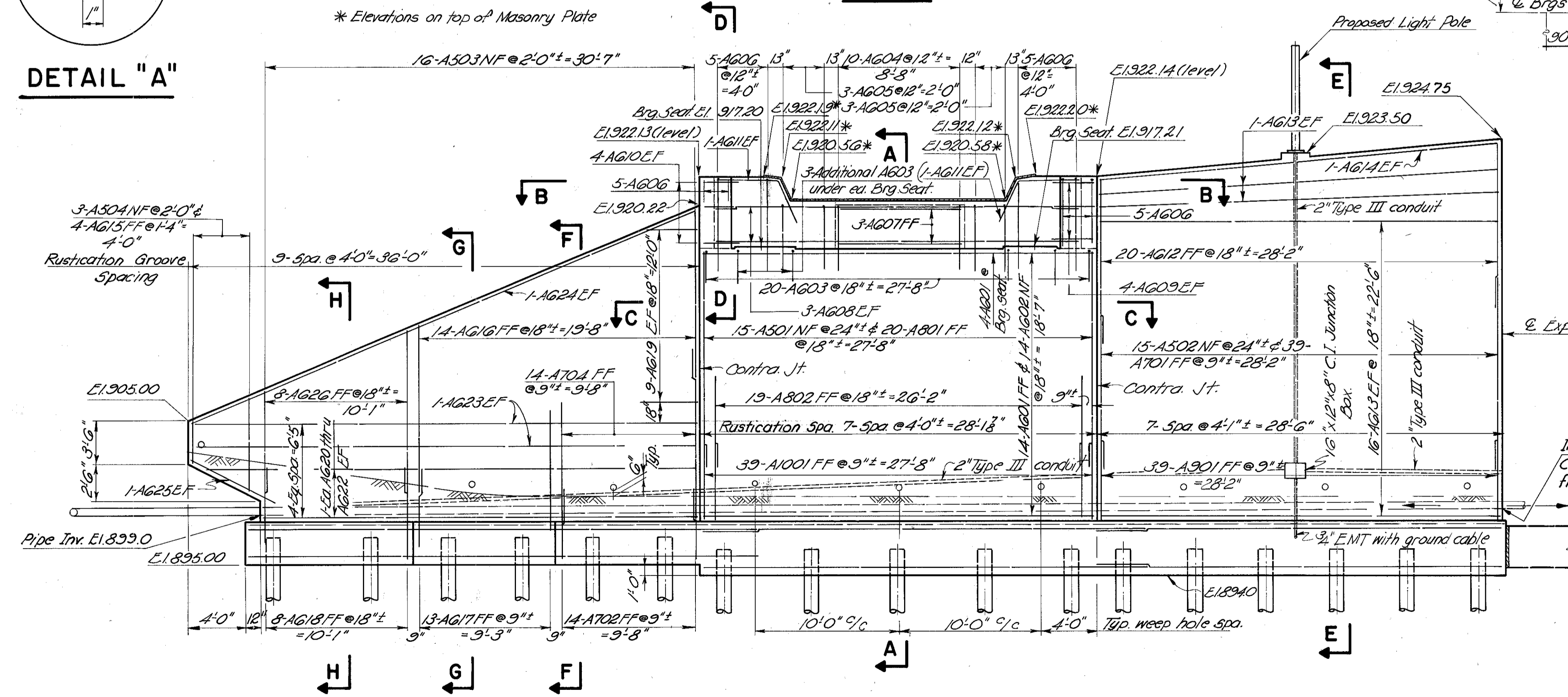
SECTION C-C



SECTION D-D



DETAIL "A"



DEVELOPED ELEVATION

SECTION A-A

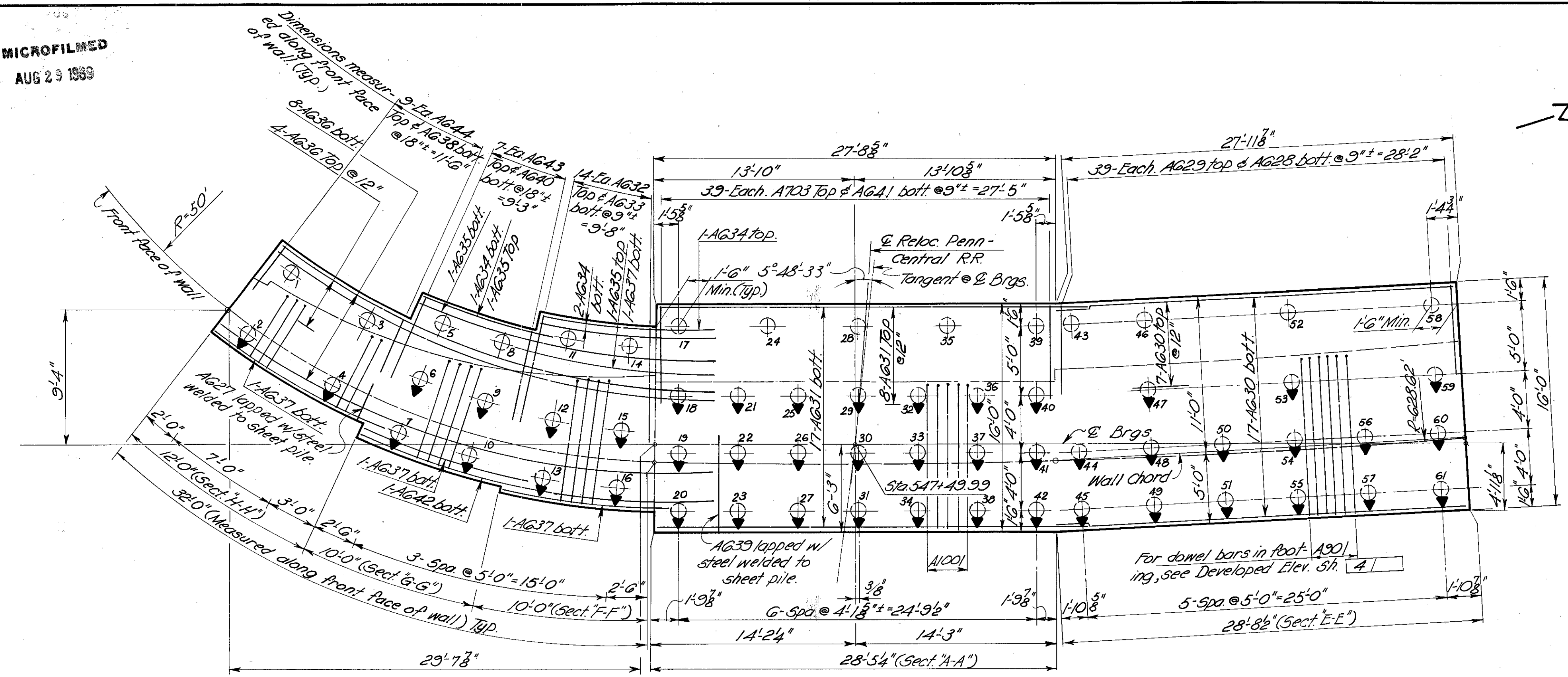
For Notes see Sh. 8/18.
Work this sheet with shs. 5, 6, 7 & 8/18

KING & GAVARIS CONSULTING ENGINEERS		4/18
ABUTMENT NO. 1 - 1		
BRIDGE NO. GRE-675-0615 I-675 UNDER RELOCATED PENN- CENTRAL RAILROAD		
GREENE COUNTY		STA: 542+86.23 TO STA: 547+53.01
DESIGNED V.P.	DRAWN A.W.	TRACED S.A.
CHECKED S.A.	REVIEWED DATE 9/25/72	REVISIONS

MICROFILMED
AUG 29 1989

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

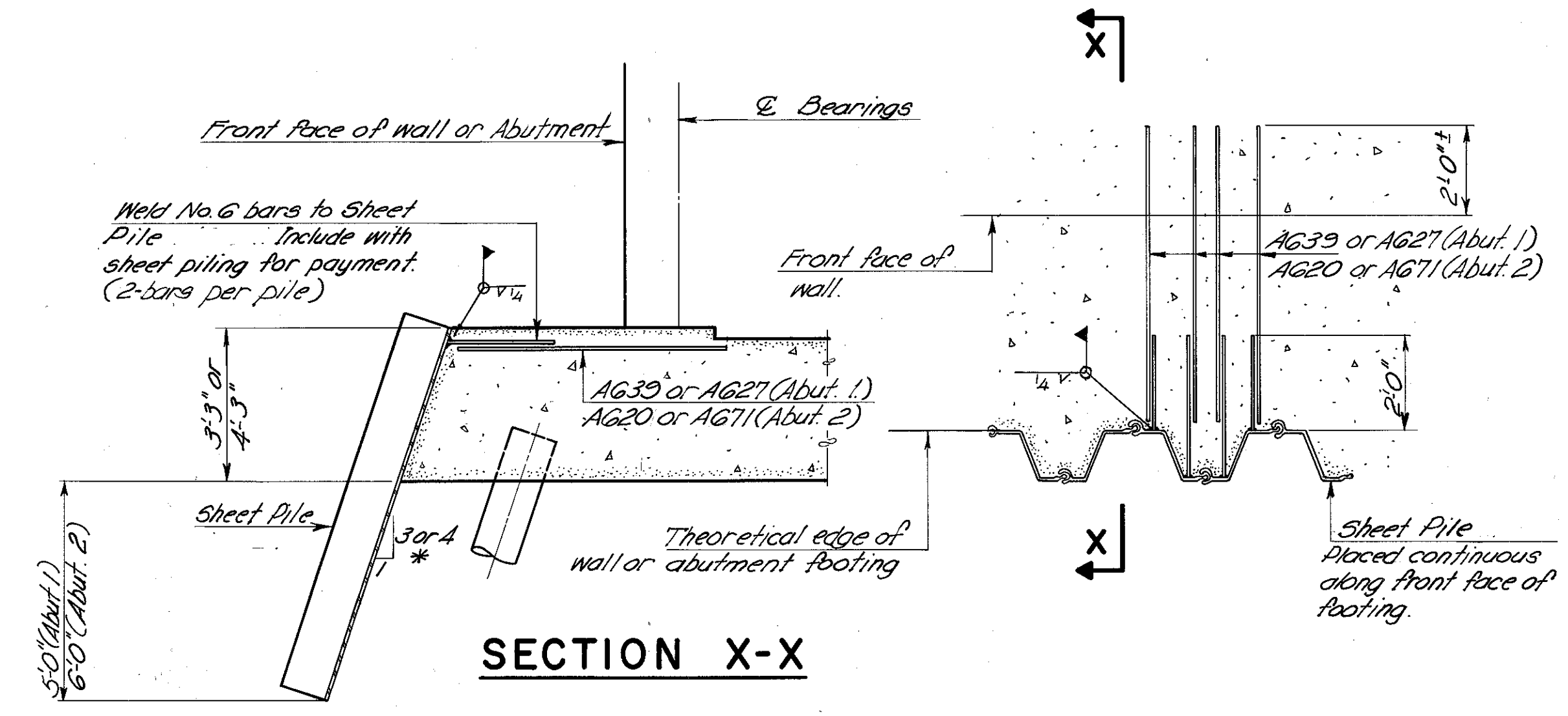
GRE-675 - 5-37
GREENE COUNTY.



FOOTING PLAN

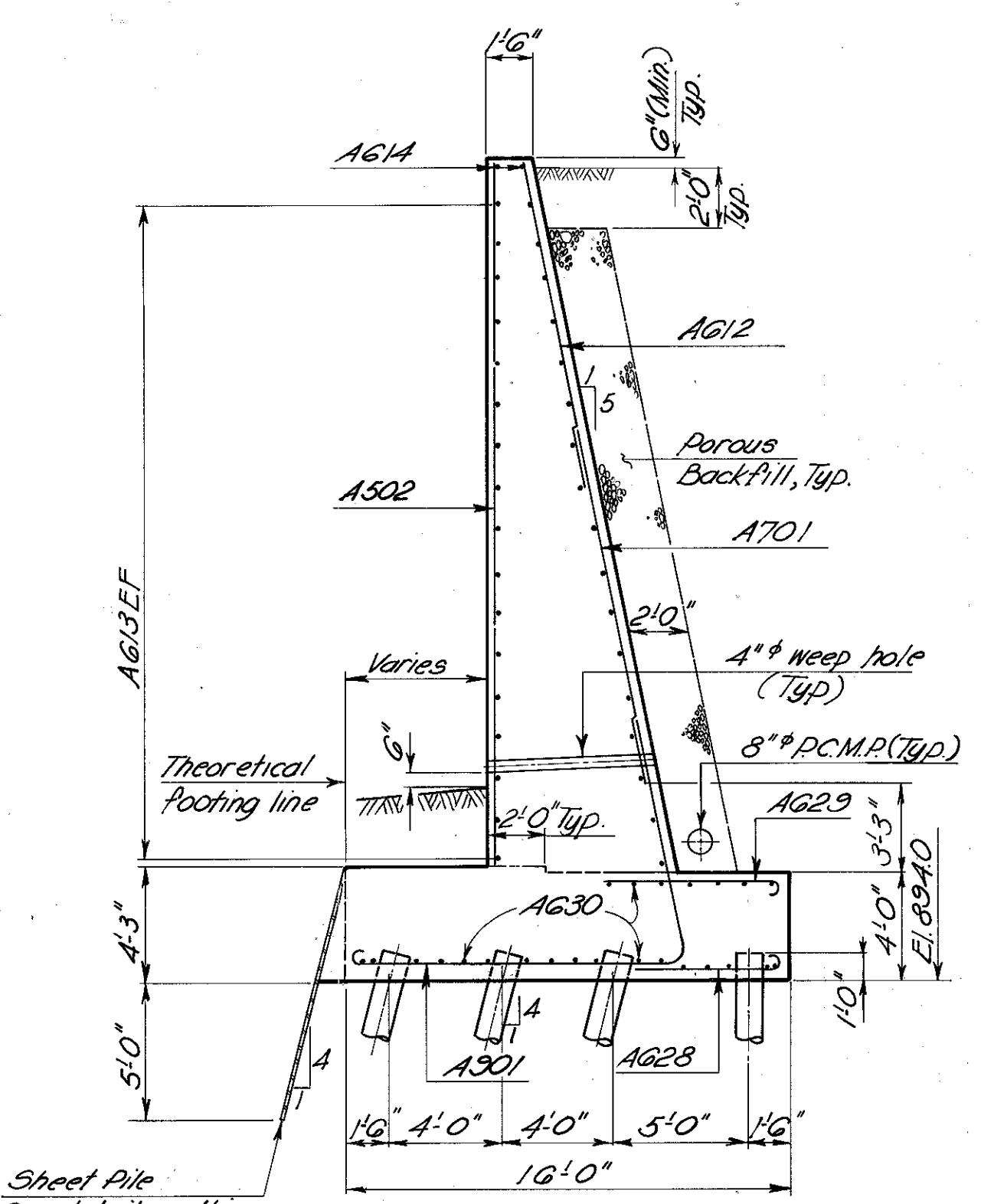
* Batter 1 on 4 (Abut. 1)
Batter 1 on 3 (Abut. 2)

Steel Sheet Piling left in place shall a minimum section Modulus of 30.2 in³ per foot of wall used piling in good condition may be used.

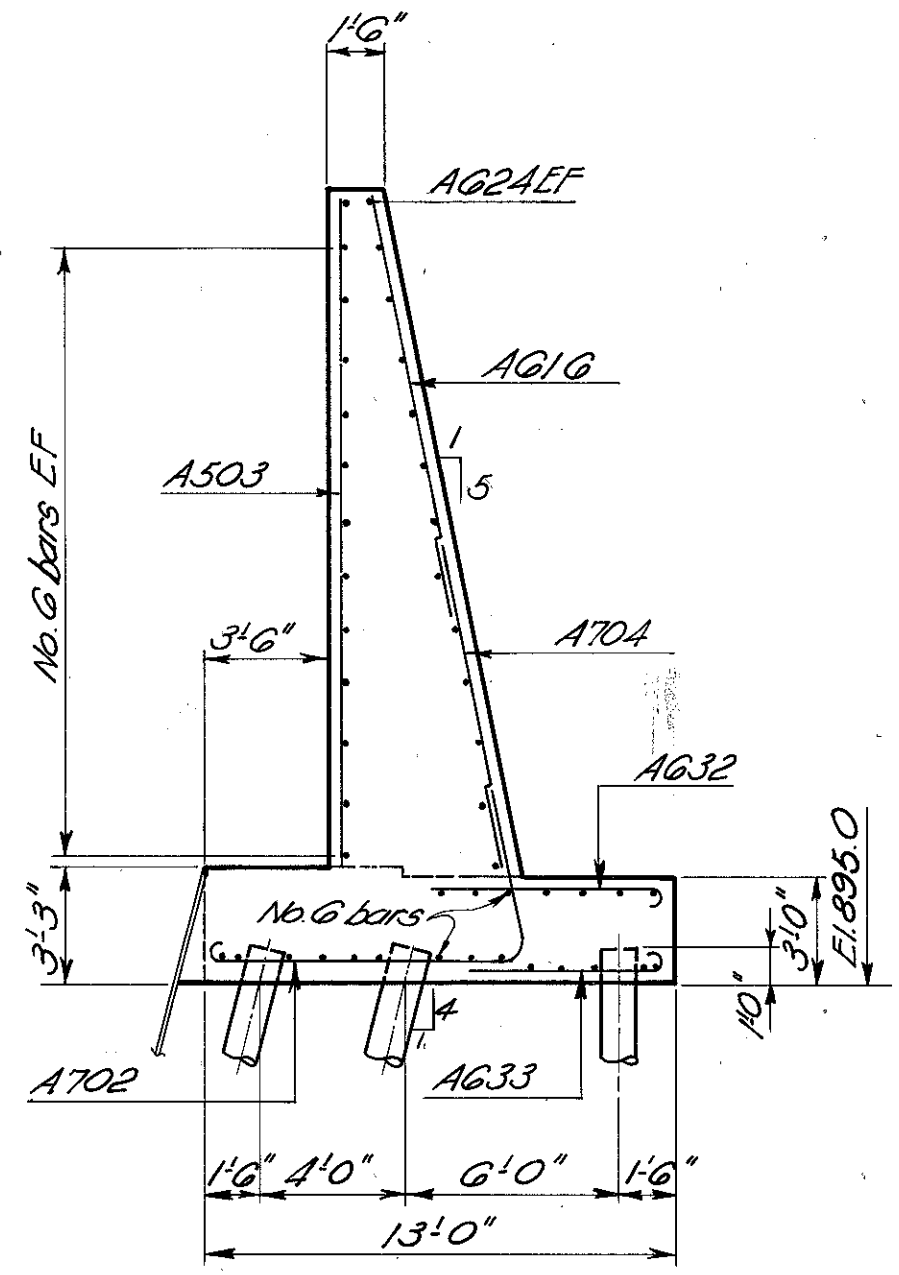


SECTION X-X

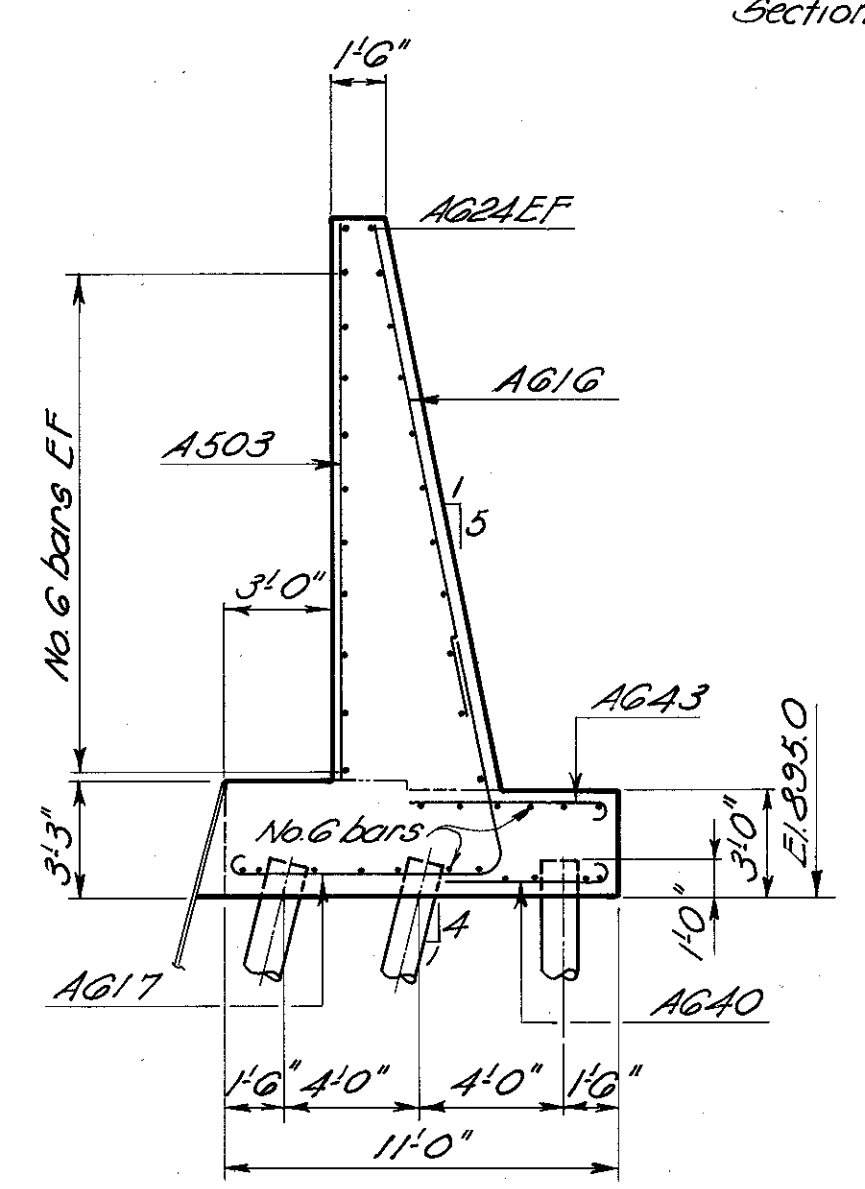
DETAIL - MZ-27



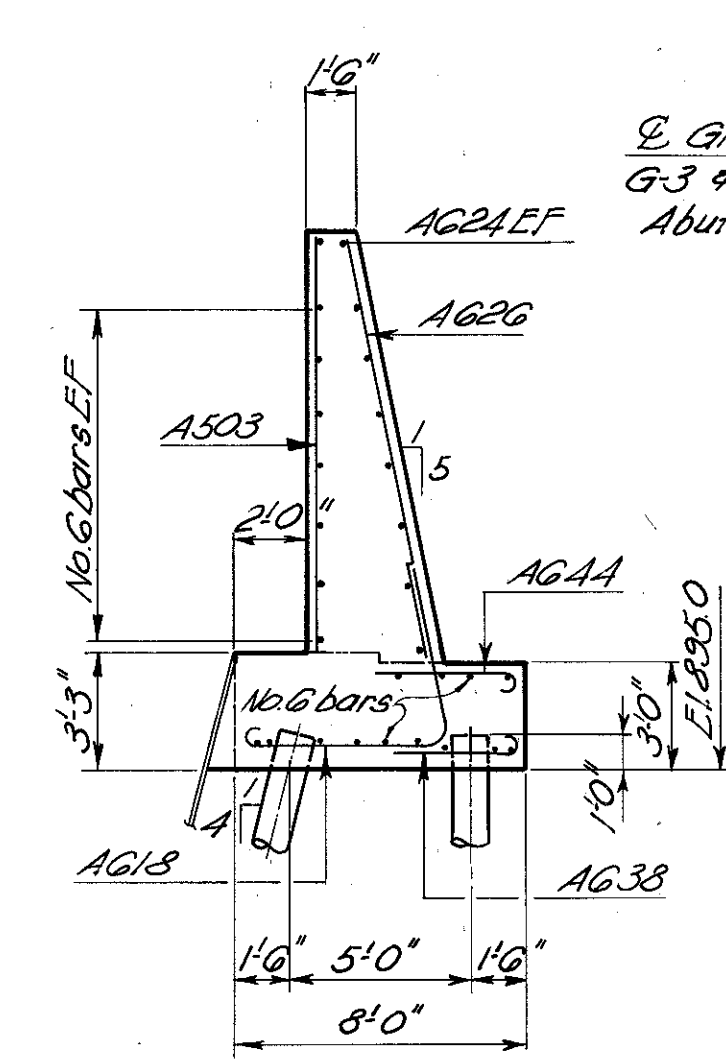
SECTION E-E



SECTION F-F

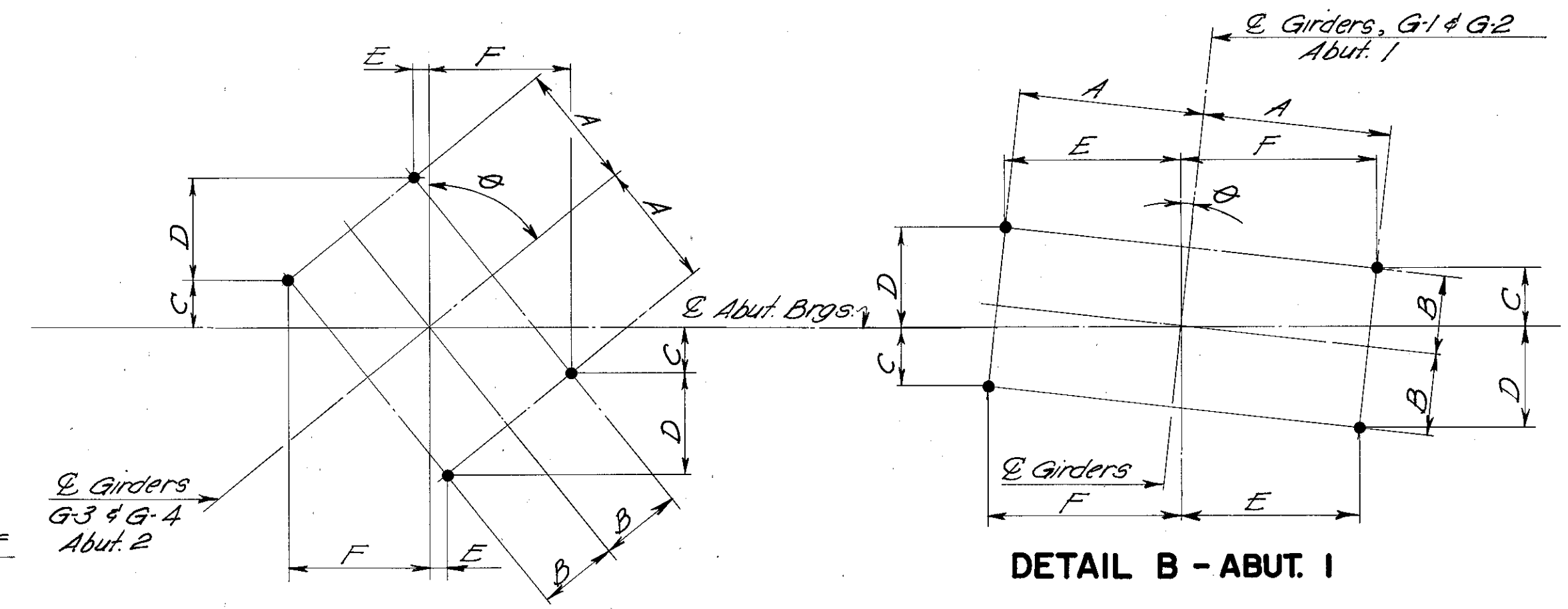


SECTION G-G



SECTION H-H

DETAILS not shown similar to section "E-E"



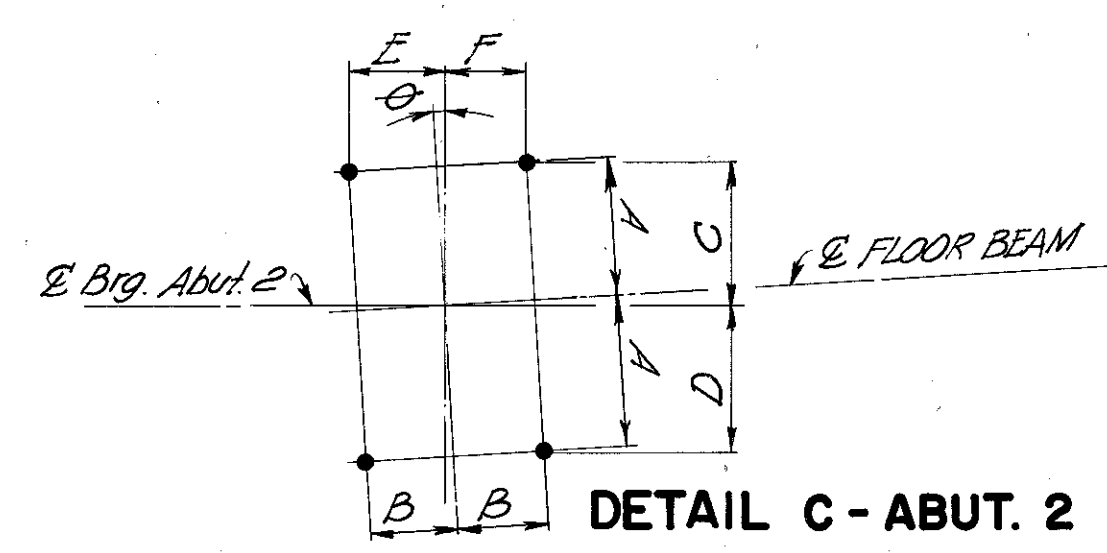
ANCHOR BOLT PLANS

		BEARING GEOMETRY							
		θ	BRG. TYPE	A	B	C	D	E	F
Detail "B"	Abut. 1, G1 & G2	6° 12' 34"	"A"	1' 5 1/2"	7 1/2"	5 1/2"	9 3/8"	1' 4 1/2"	1' 10 1/2"
Detail "A"	Abut. 2, G3 & G4	50° 38' 48"	"A"	1' 5 1/2"	7 1/2"	8 3/4"	9 3/8"	5 3/8"	1' 4 1/2"
Detail "C"	Abut. 2 @ Fl. Beam	3° 05' 05"	"F"	1 1/2"	7 1/2"	1 1/8"	1 1/8"	8 3/8"	6 3/8"

1 1/2" Anchor Bolts embedded 12"

For Notes see Sh 8/18

Work this sheet with Shs. AG78/18



DETAIL C-ABUT. 2

5/18

KING & GAVARIS
CONSULTING ENGINEERS
OHIO

ABUTMENT NO. 1 - 2

BRIDGE NO. GRE-675-0615
I-675 UNDER RELOCATED PENN-
CENTRAL RAILROAD
GREENE COUNTY STA: 542 + 86.23 TO
STA: 547 + 53.01

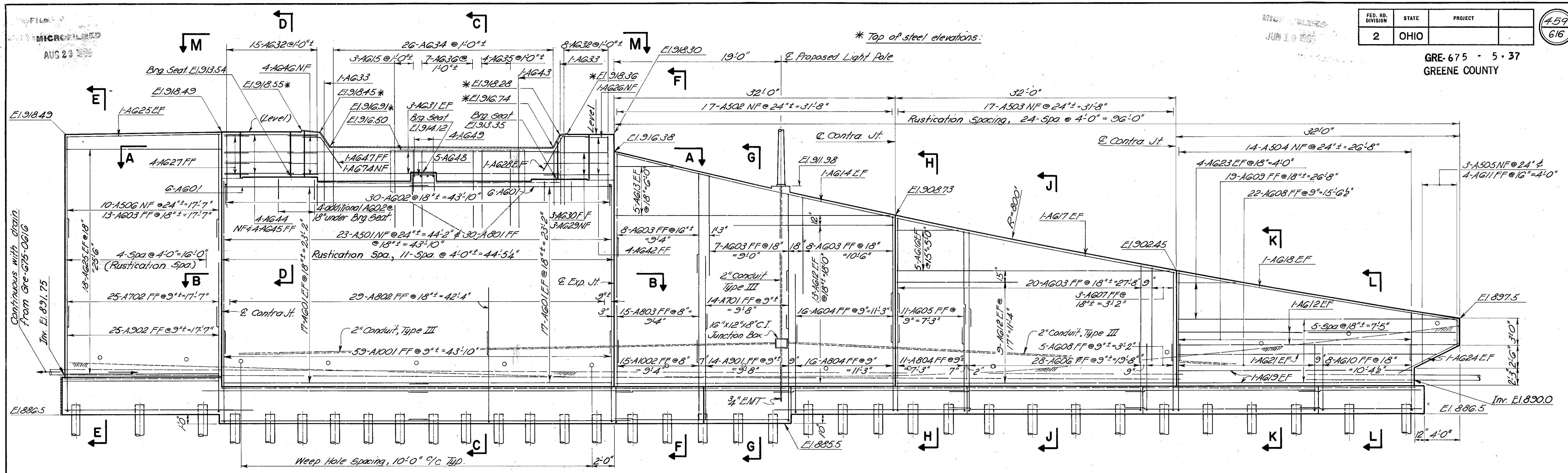
DESIGNED V.P.	DRAWN A.W.	TRACED	CHECKED S.A.	REVIEWED DATE 7/23/72	REVISED
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Sheet Pile
See detail on this
sheet. Typ.

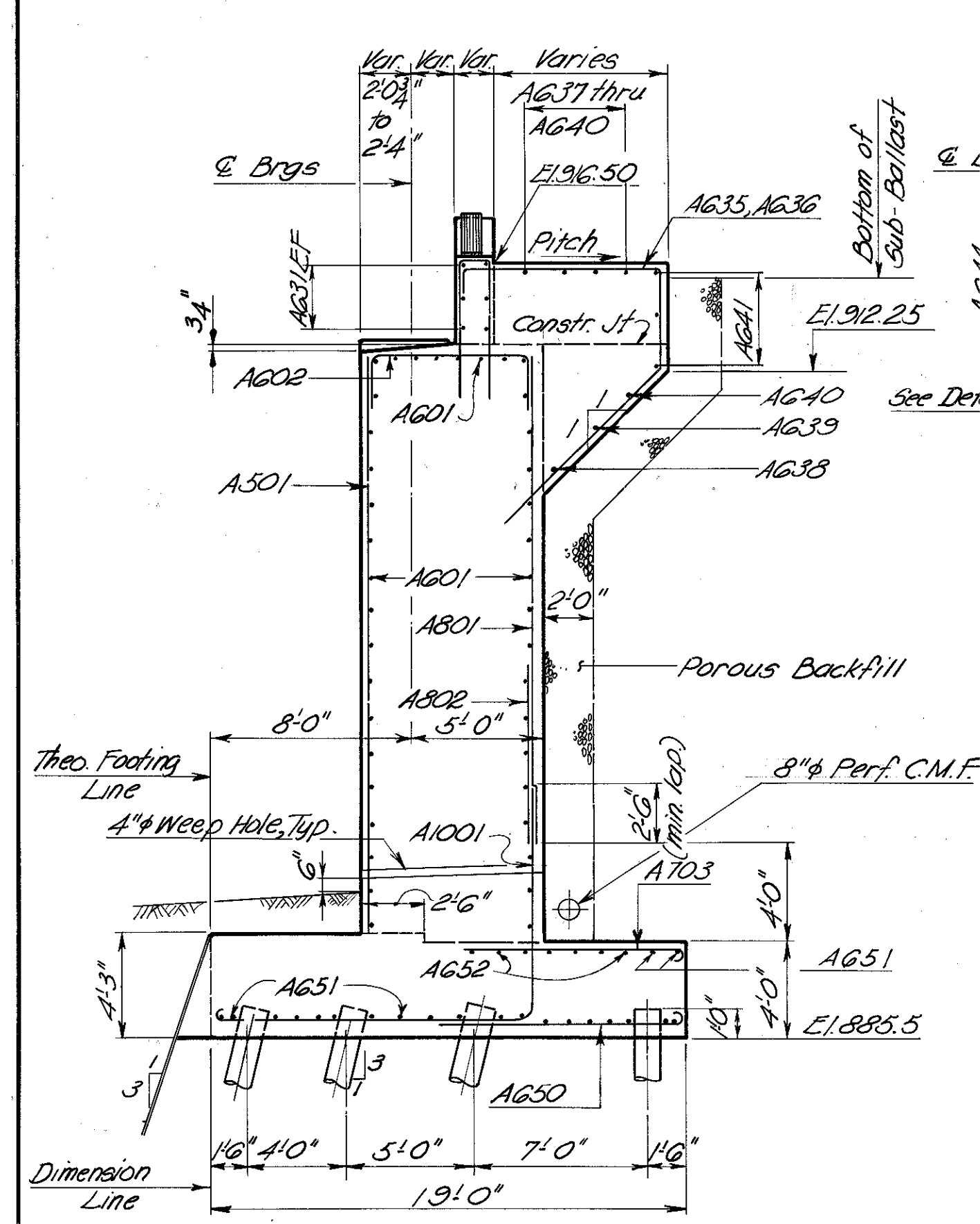
MICROFILMED
AUG 23 1988

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	GRE-675 - 5-37	GREENE COUNTY

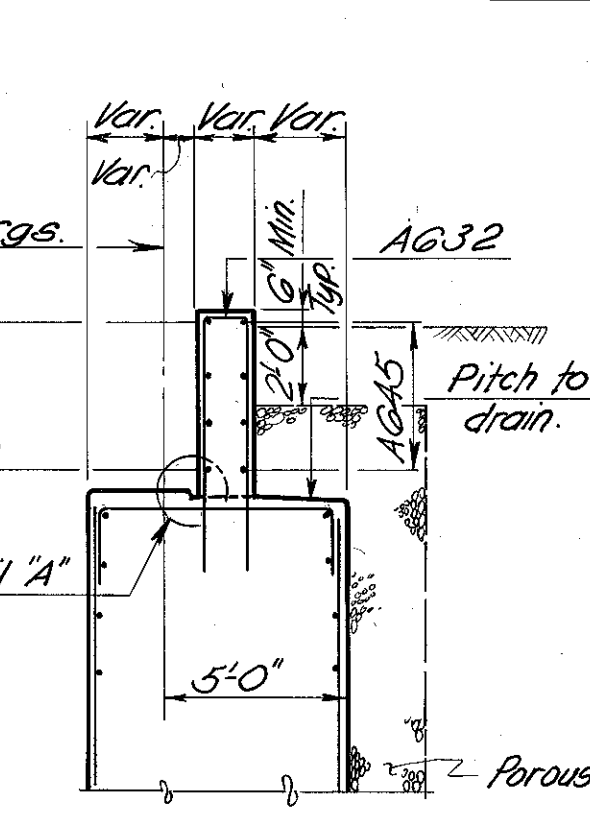
459
616



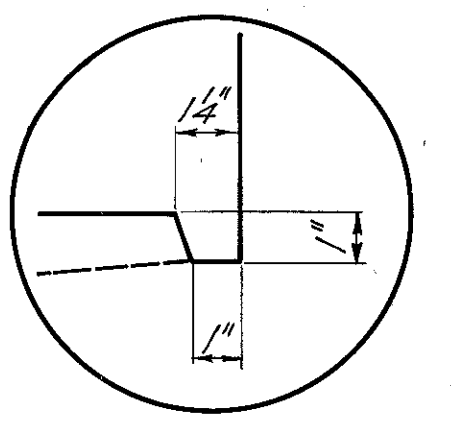
DEVELOPED ELEVATION



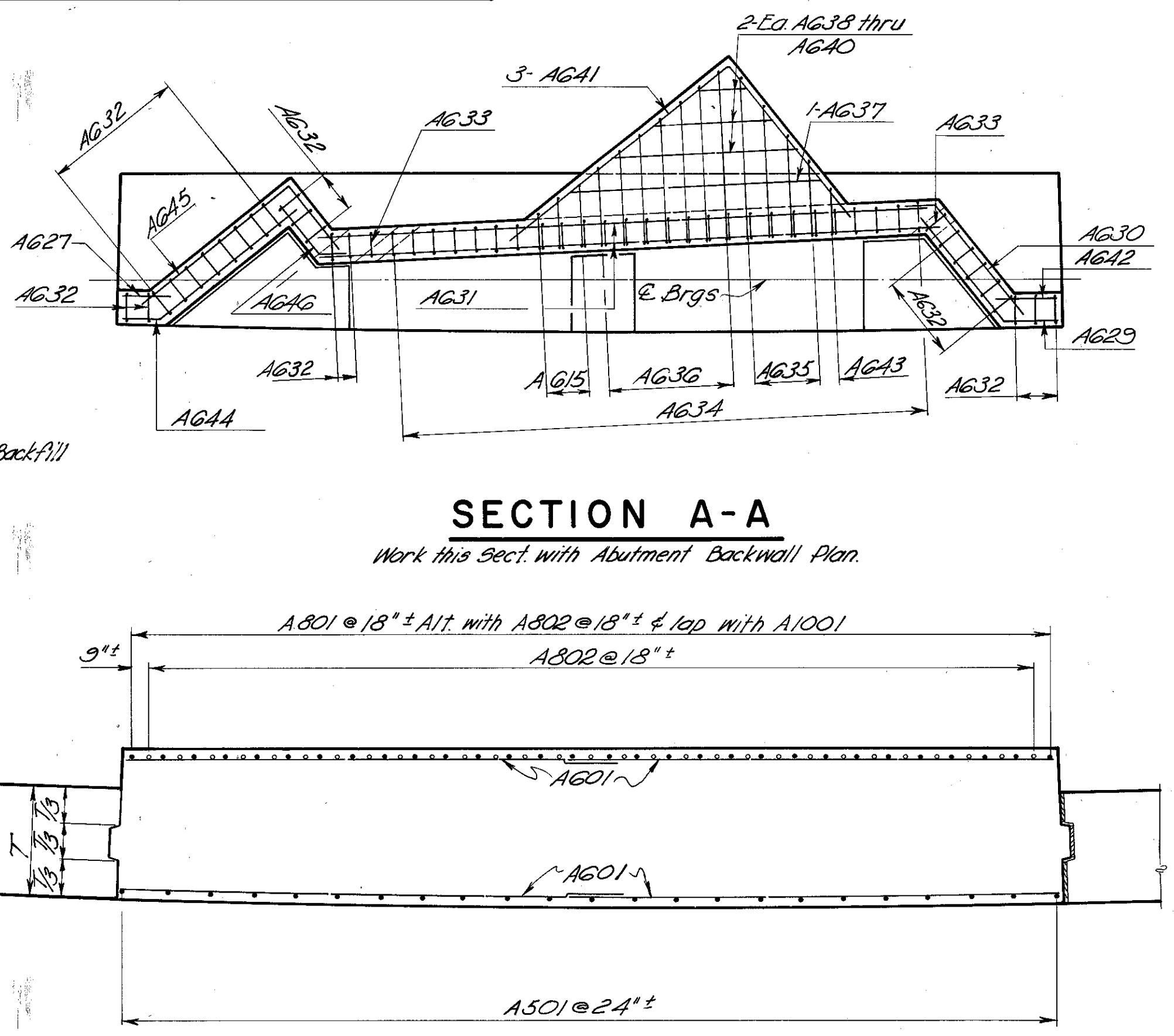
SECTION C-C



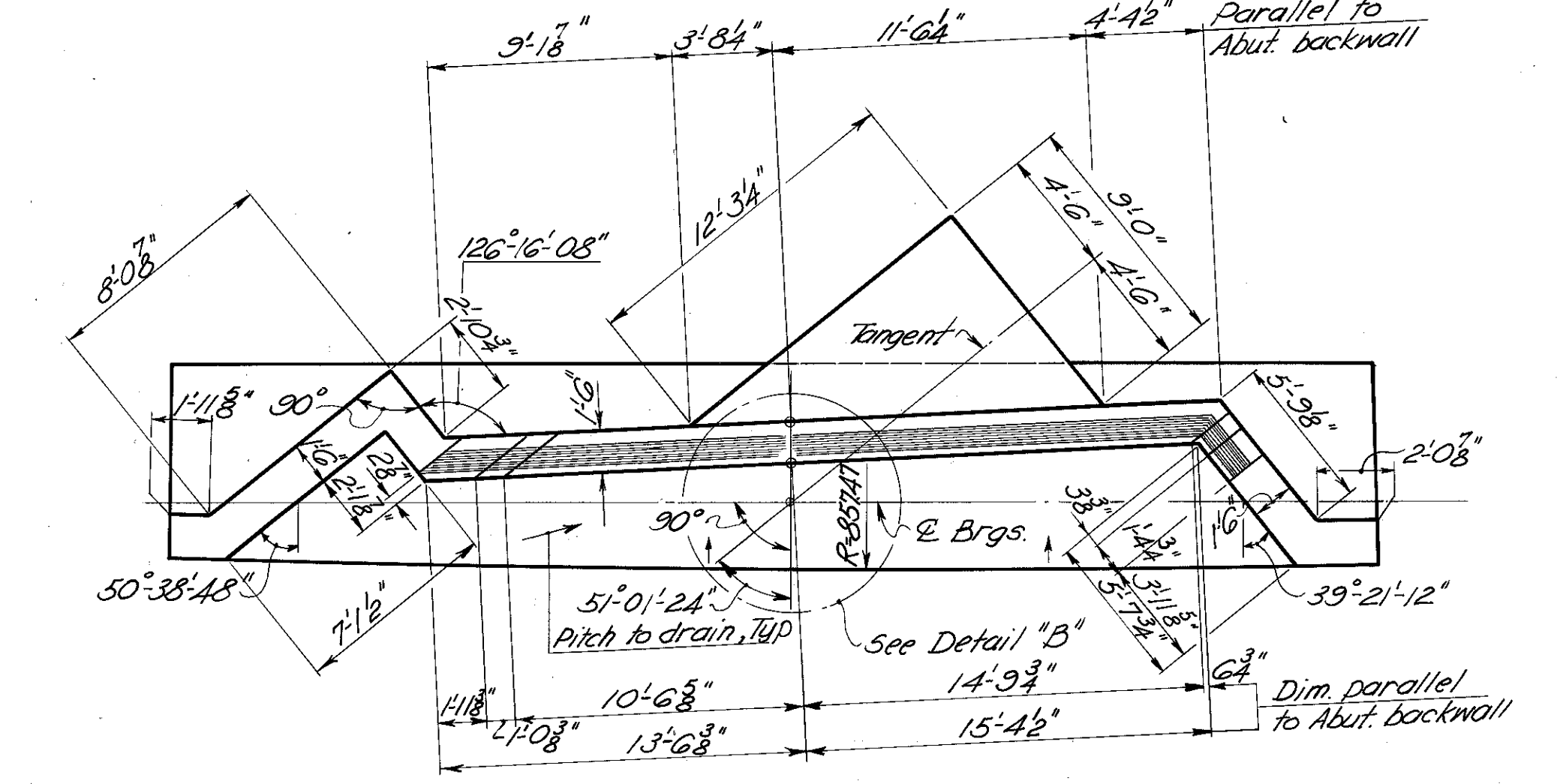
SECTION D-D



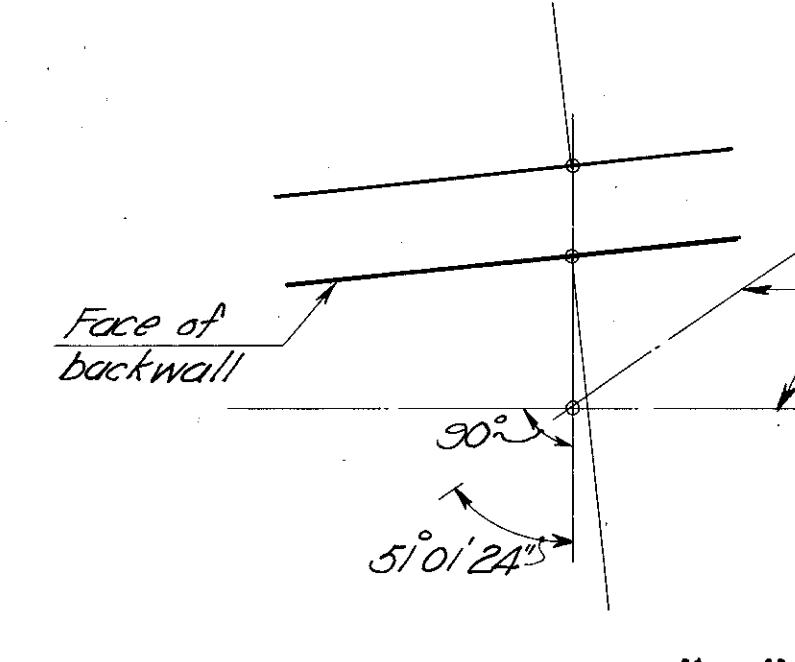
DETAIL "A"



SECTION B-B



PLAN M-M



DETAIL "B"

For Notes, See Sh. 8 / 18

DESIGNED		DRAWN		TRACED		CHECKED		REVIEWED		DATE		REVISED	
V.P.		A.W.		S.A.		S.A.		S.A.		9/25/72			

KING & GAVARIS
CONSULTING ENGINEERS
OHIO
ABUTMENT NO. 2 - 2
BRIDGE NO. GRE-675-0615
I-675 UNDER RELOCATED PENN.-
CENTRAL RAILROAD
GREENE COUNTY STA: 542+86.23 TO
STA: 547+53.01

MICROFILMED
AUG 29 1968

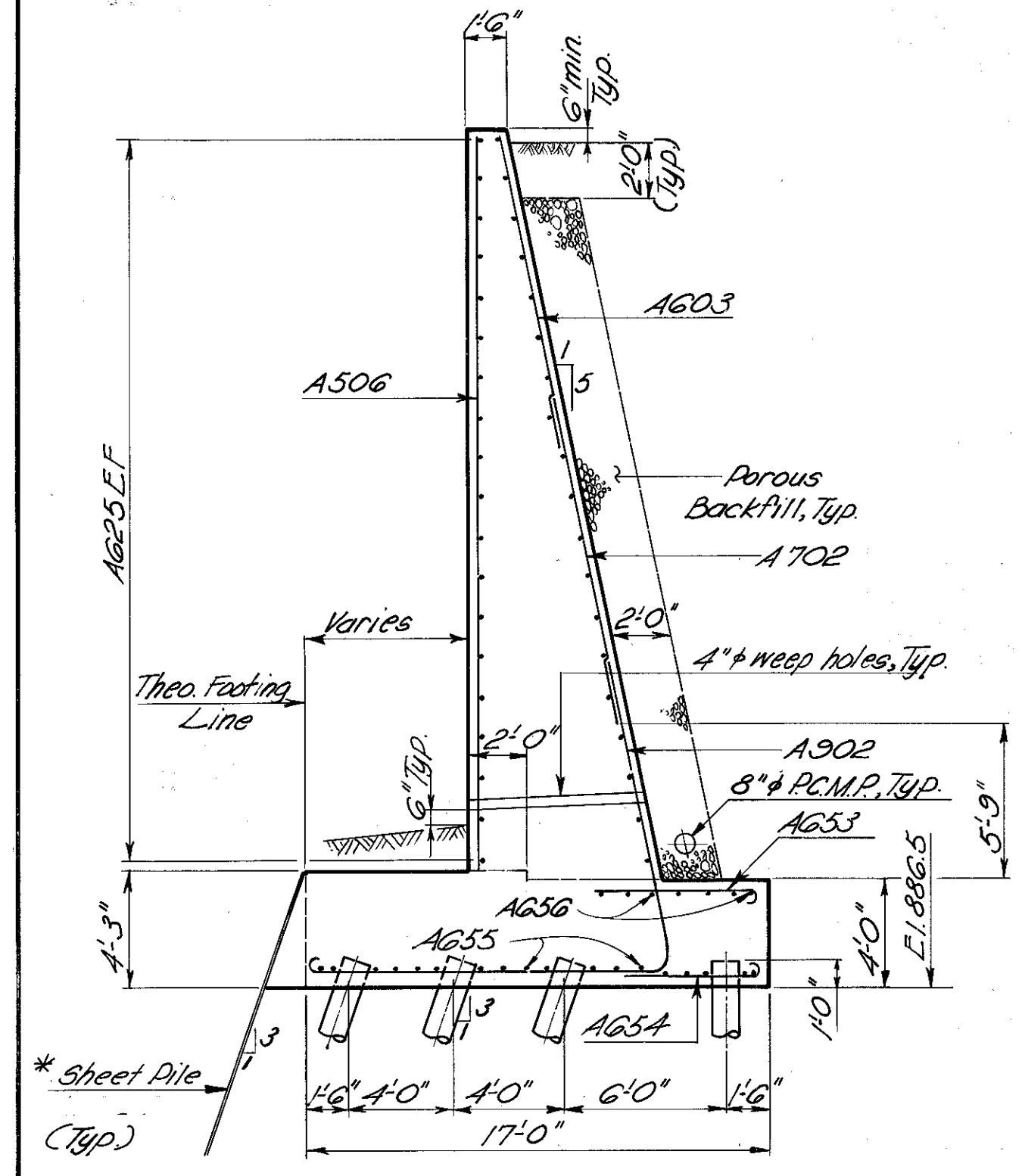
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

460
616

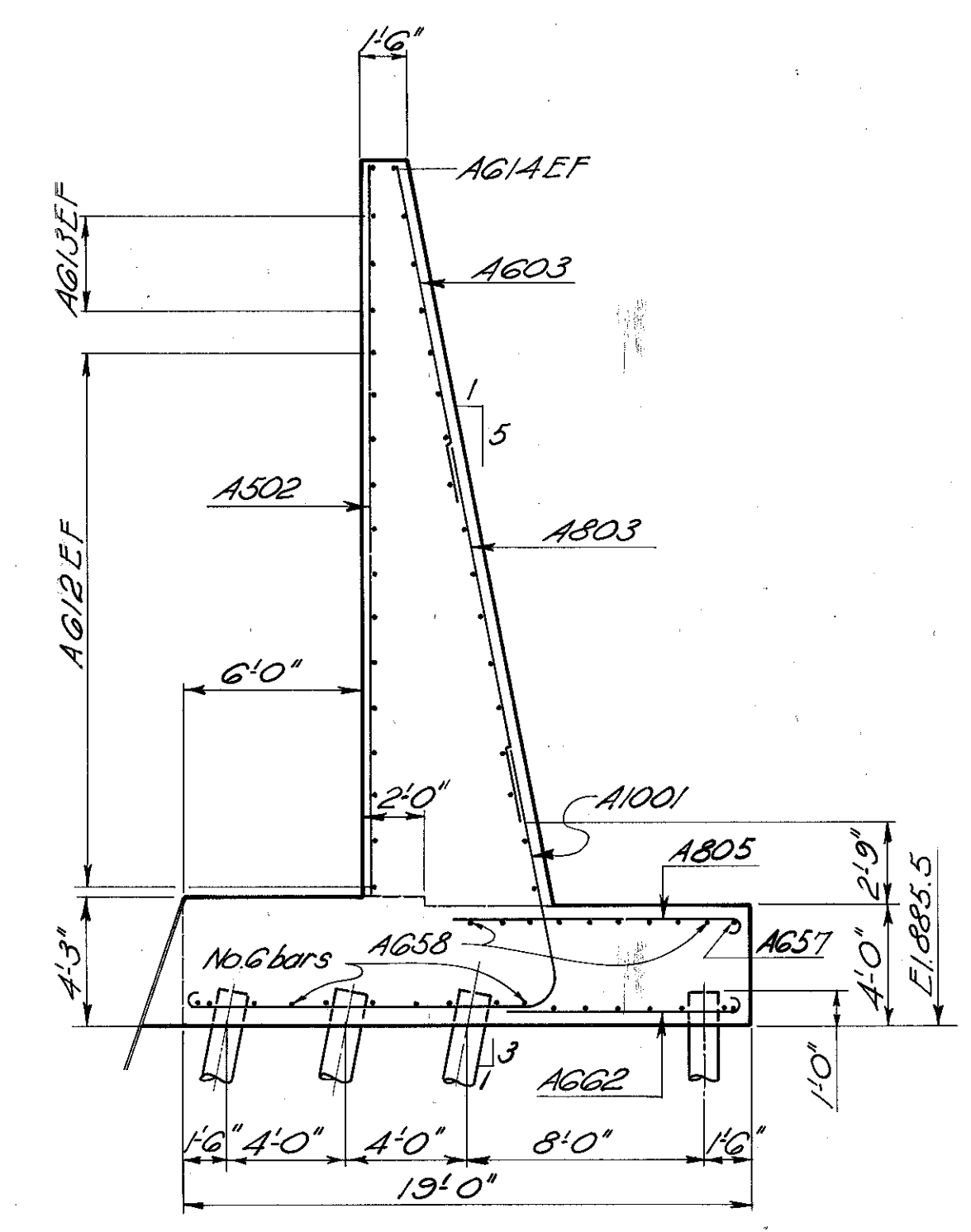
MICROFILMED
JUN 16 1968

GRE-675 • 5 • 37
GREENE COUNTY

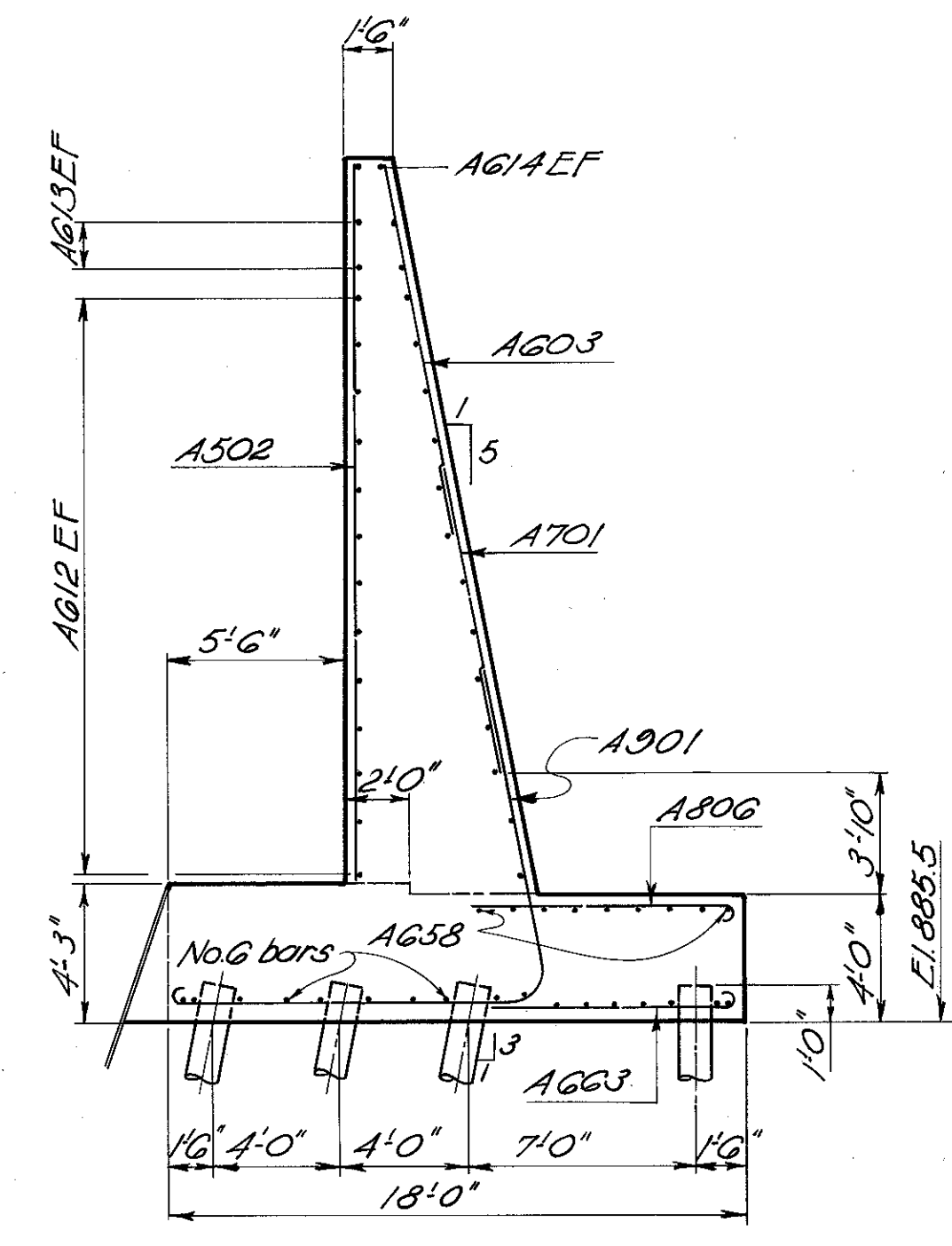
NOTE: Details not shown similar to Section "E-E"



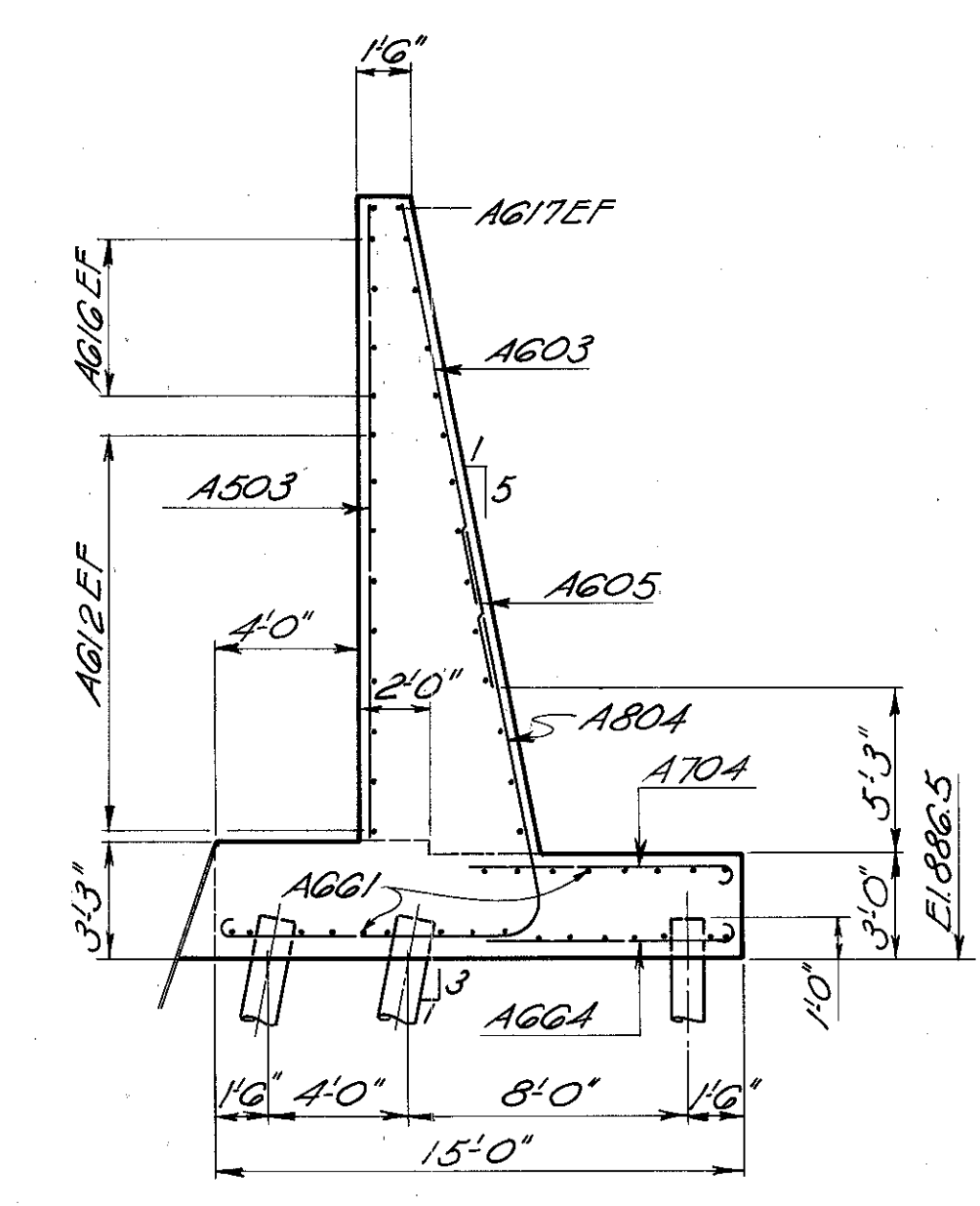
SECTION E-E



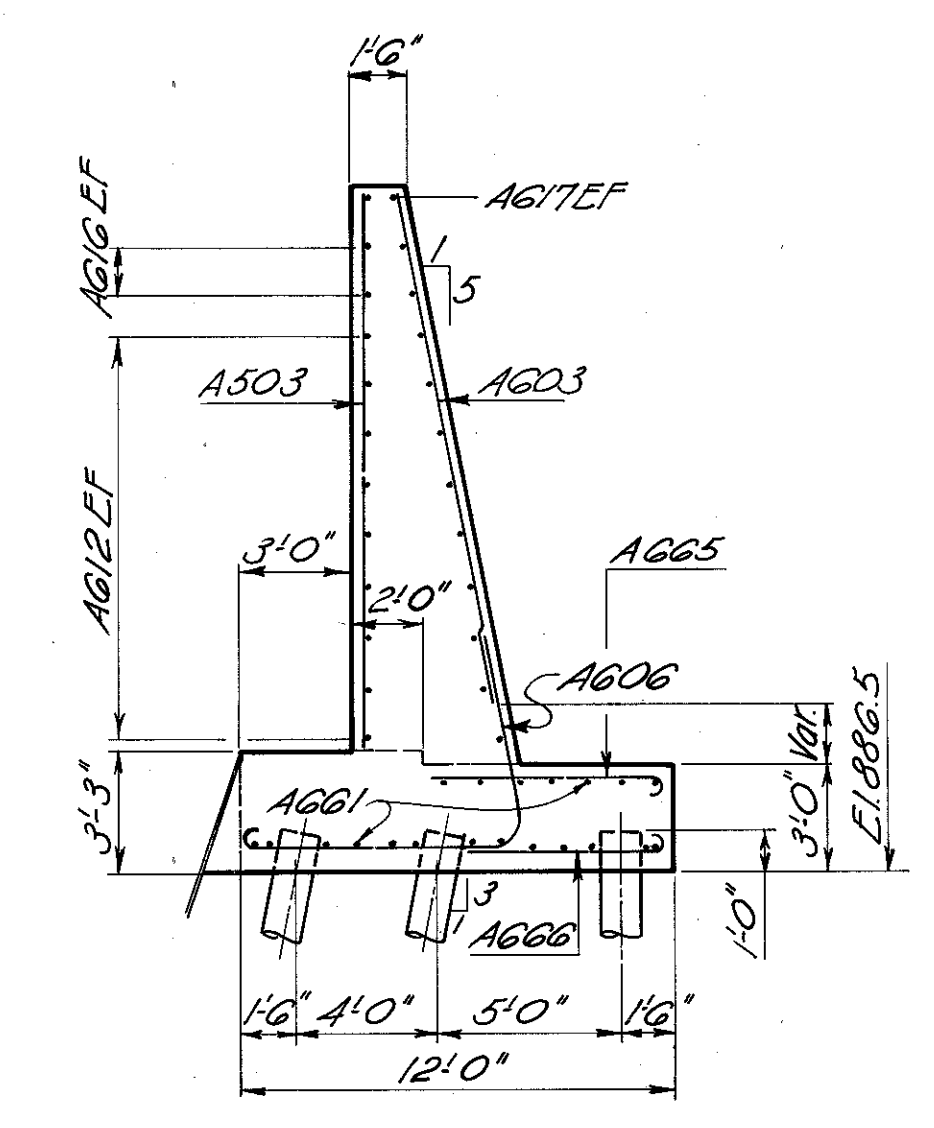
SECTION F-F



SECTION G-G



SECTION H-H

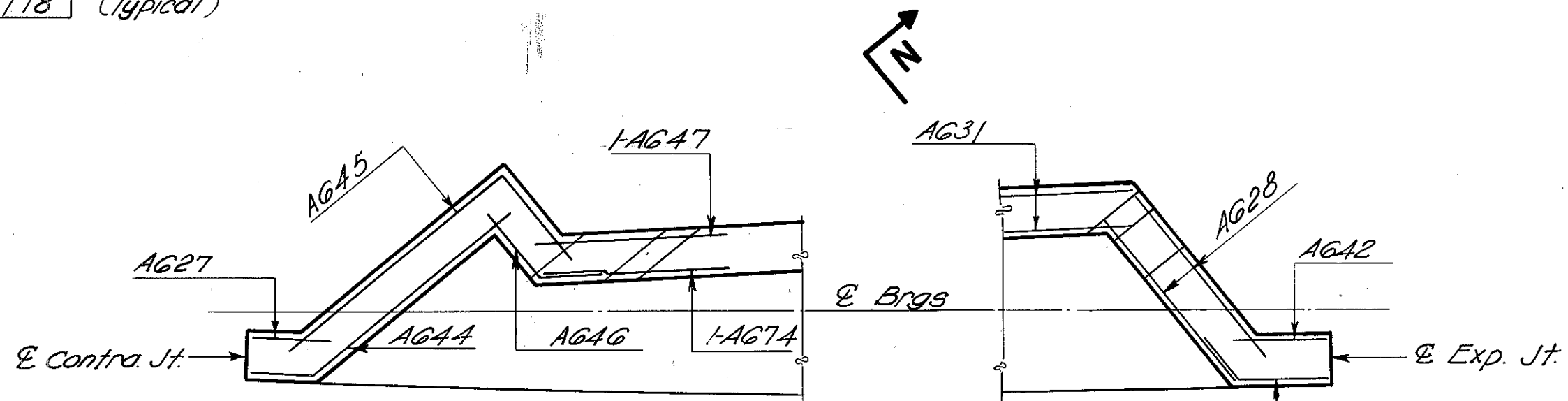


SECTION J-J

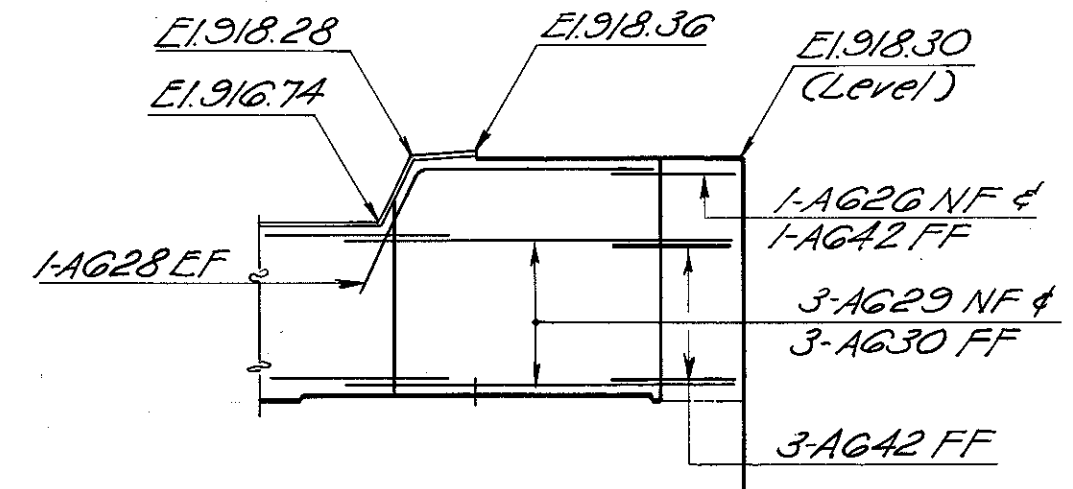
* Sheet Pile... Placed continuous along front face of footing. See detail on sh. 5/18 (Typical)

NOTES:

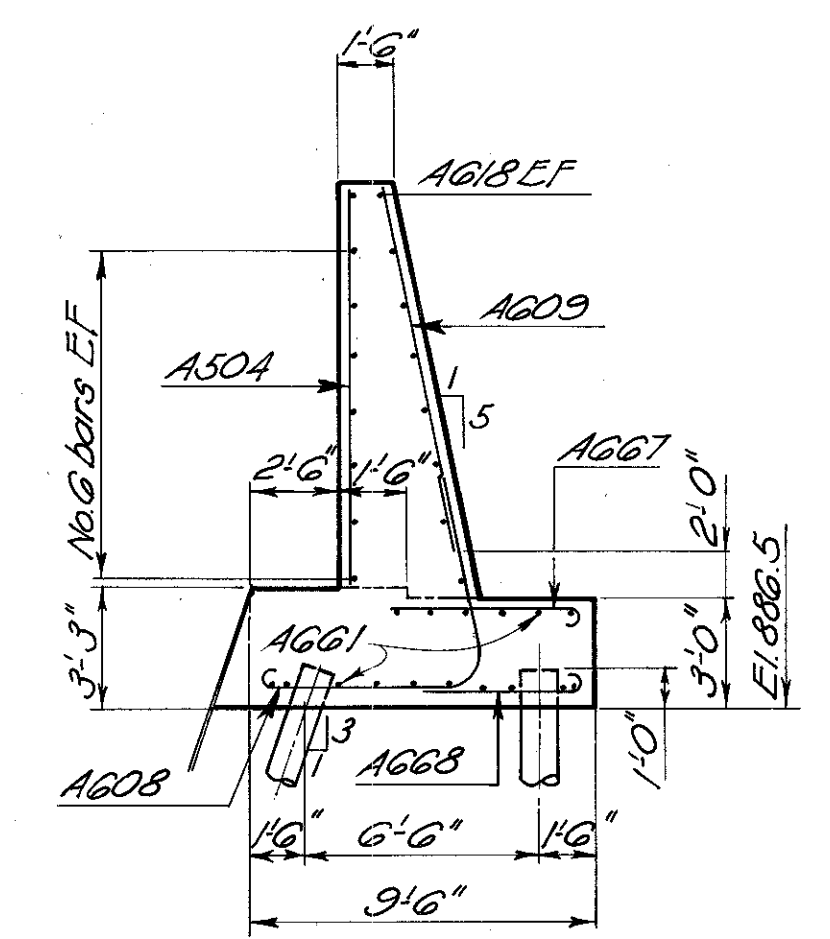
- For Reinforcing Steel List See Sh. 16/17/18
- Reinforcing Steel in Abutments 1 & 2 shall have the Suffix "A" & "B" respectively.
- Only that portion of the C.M.P. located in the Porous Backfill shall be perforated.
- For details of the backwall Masonry Plate, included with structural steel for payment, see sh. 14/18
- For termination of C.M.P. at slopes see sh. C1/C2
- Porous Backfill 2 feet thick shall extend up to the plane of the sub-ballast in the abutment proper and laterally to the heights and limits shown.
- 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 bar (bolt) holes.
- Sheet Copper Water Seals to be provided in all construction joints at top of footing and at bearing seat level.
- Work this sheet with shs. 4, 5, 6, 7, 18
- For details of Expansion Joints, Contraction Joints, Type I & Type 2, Vertical Rustication Groove and Copper Sheet, See Sh. C2/C2



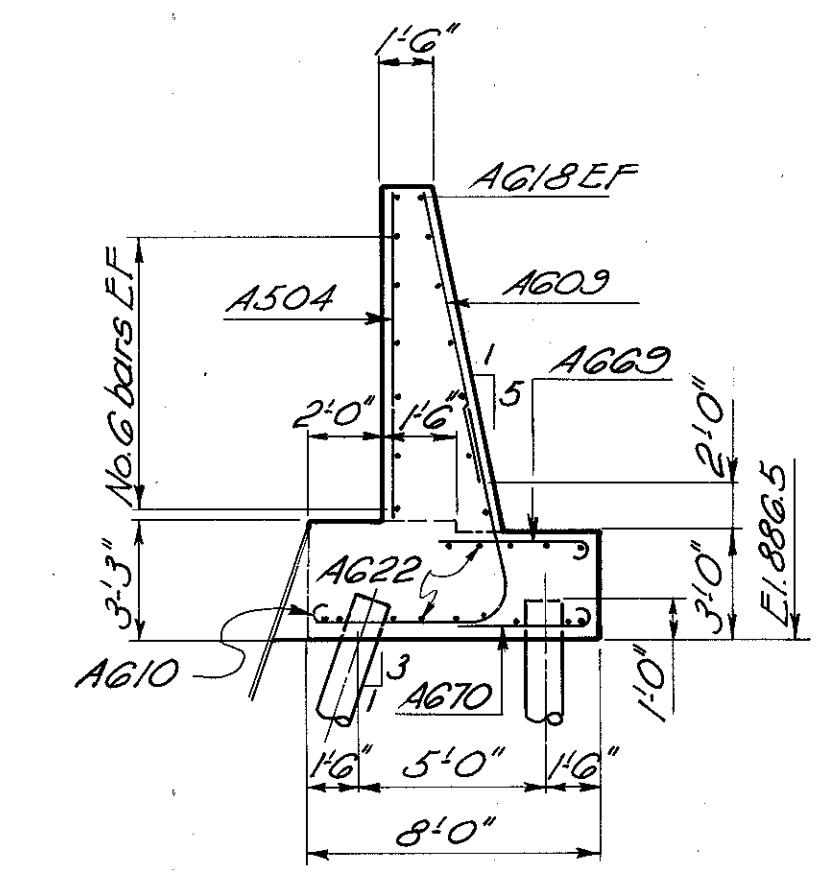
TOP PLAN - ABUT. BACKWALL



ELEVATION N-N



SECTION K-K



SECTION L-L

DESIGNED		DRAWN		TRACED		CHECKED		REVIEWED		DATE		REVISED	
V.P.	A.W.		S.A.							9/25/72			

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

ABUTMENT NO. 2 DETAILS- 3

BRIDGE NO. GRE- 675- 0615
I-675 UNDER RELOCATED PENN.-
CENTRAL RAILROAD
GREENE COUNTY STA: 542 + 86.23 TO
STA: 547 + 53.01

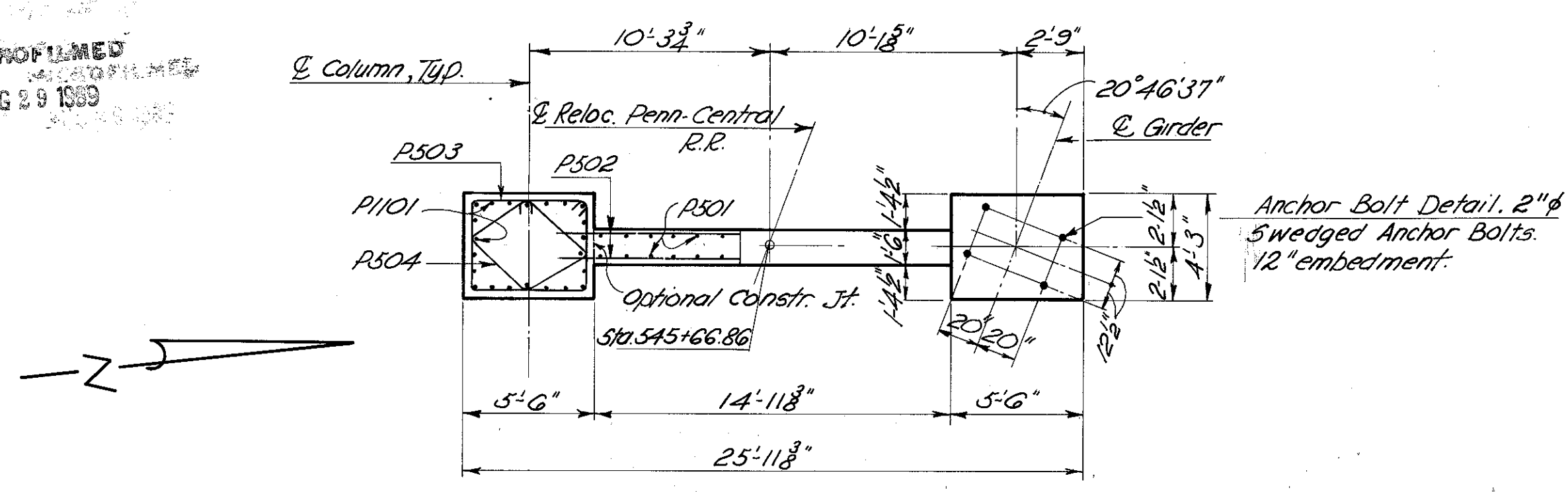
MICROFILMED
AUG 29 1989

MICROFILMED
JUN 19 1988

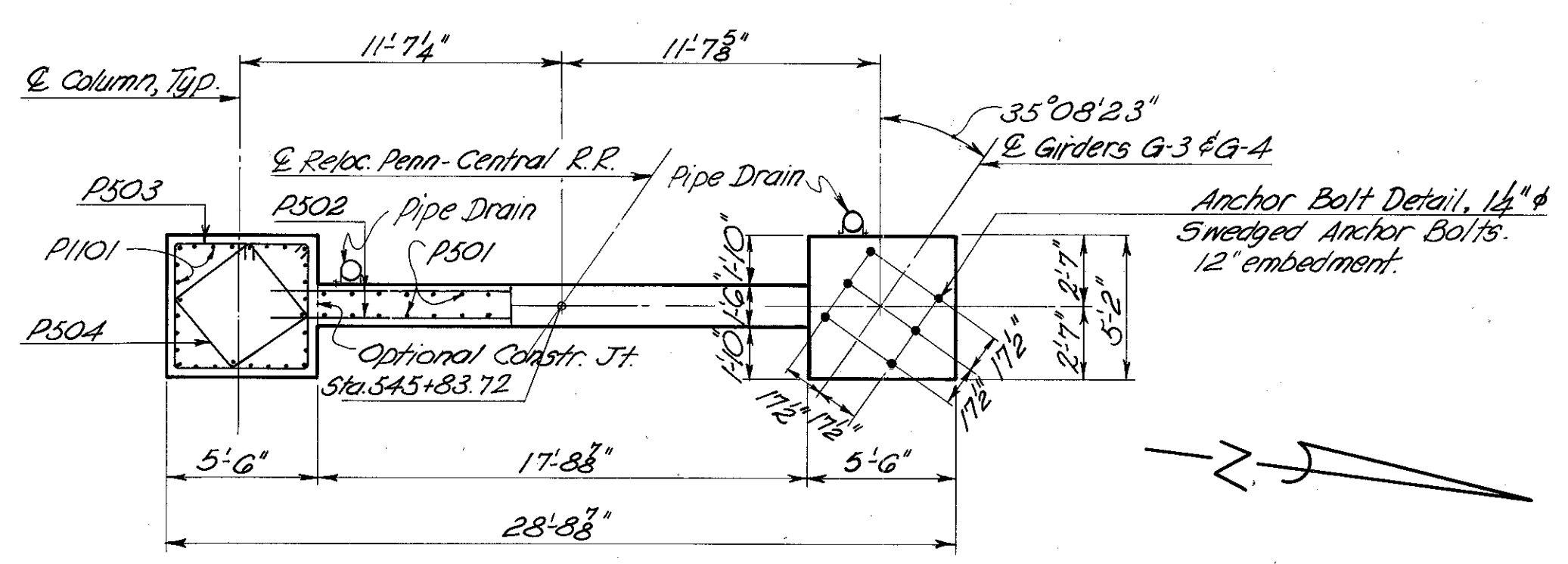
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

461
616

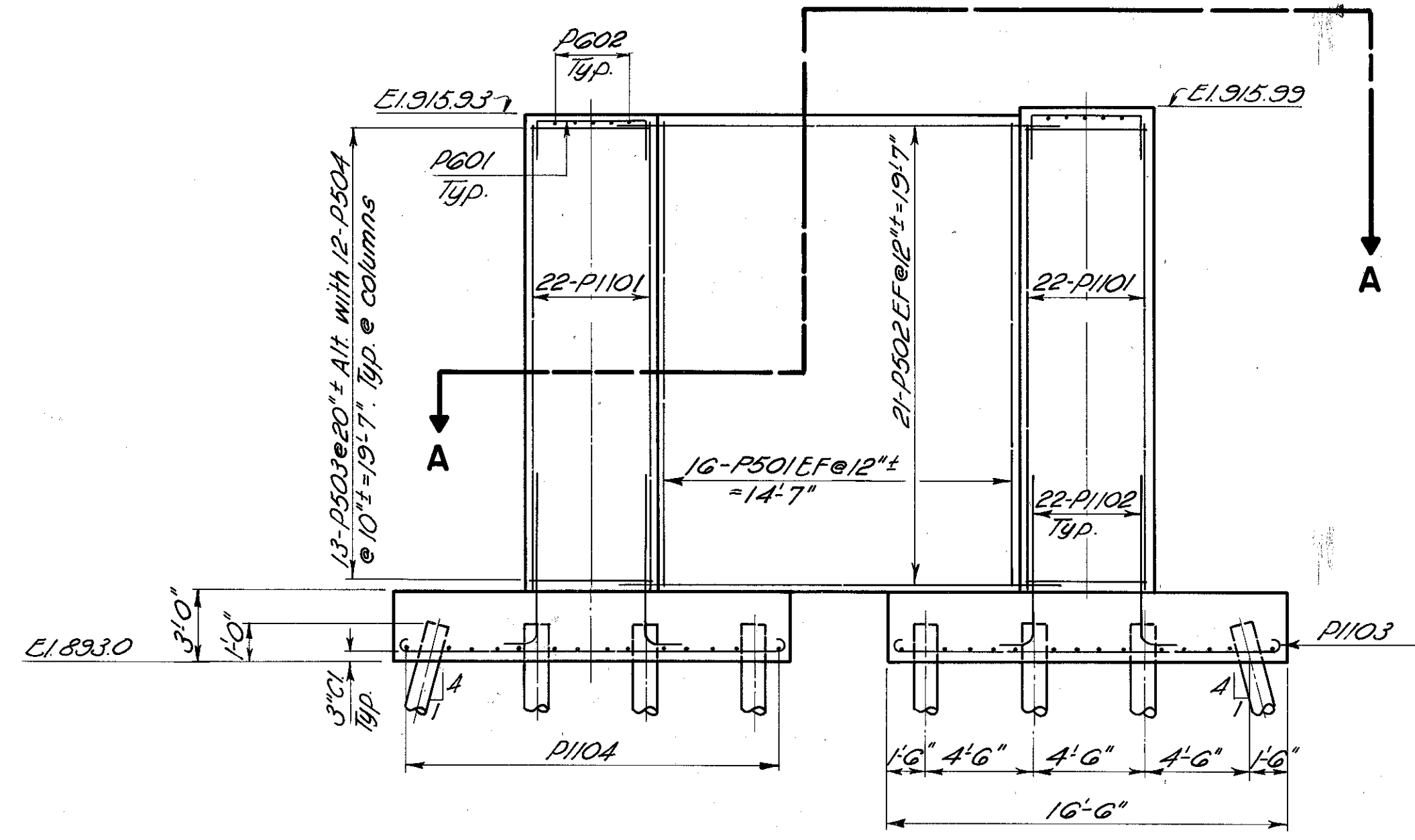
GRE-675-5-37
GREENE COUNTY



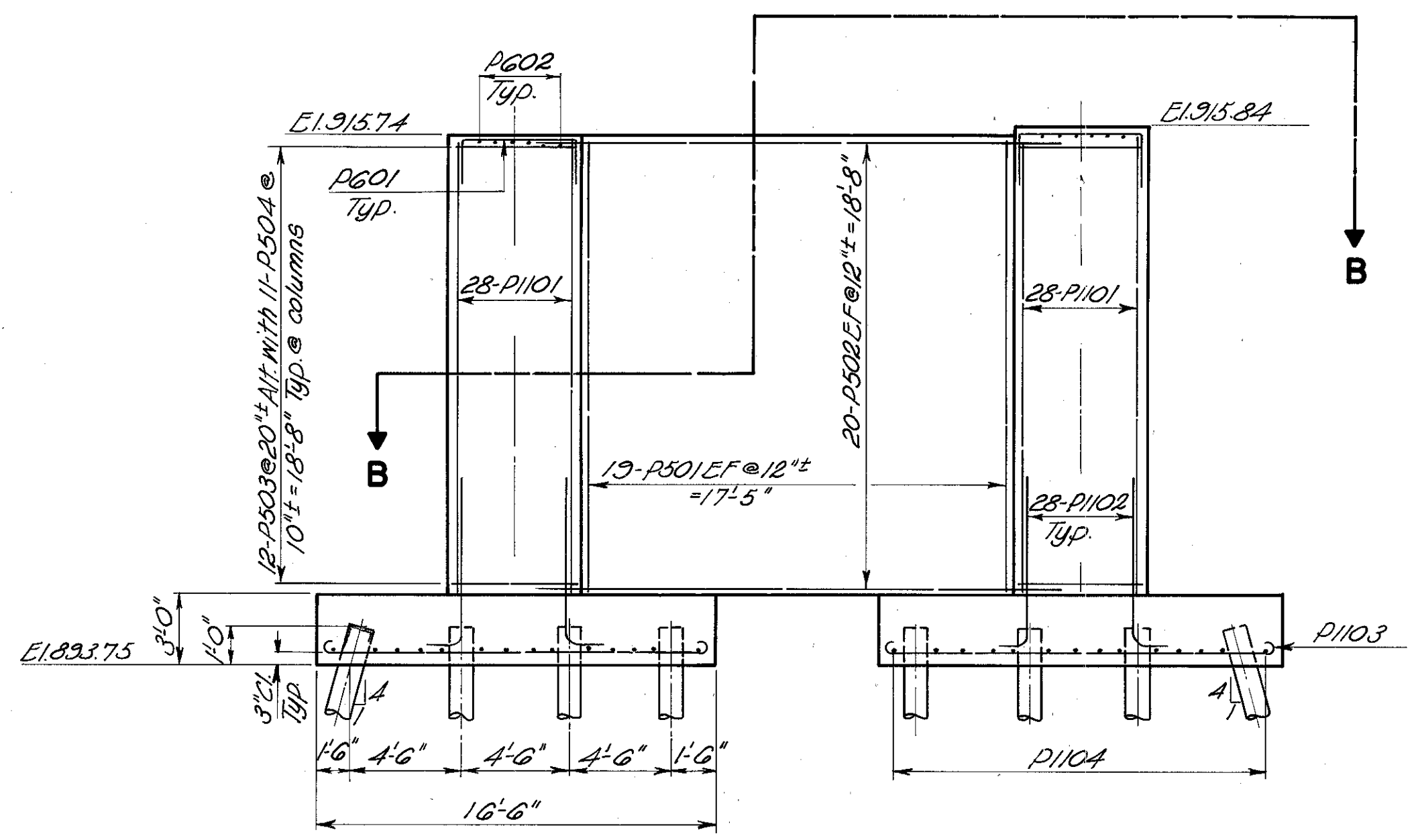
SECTION A-A



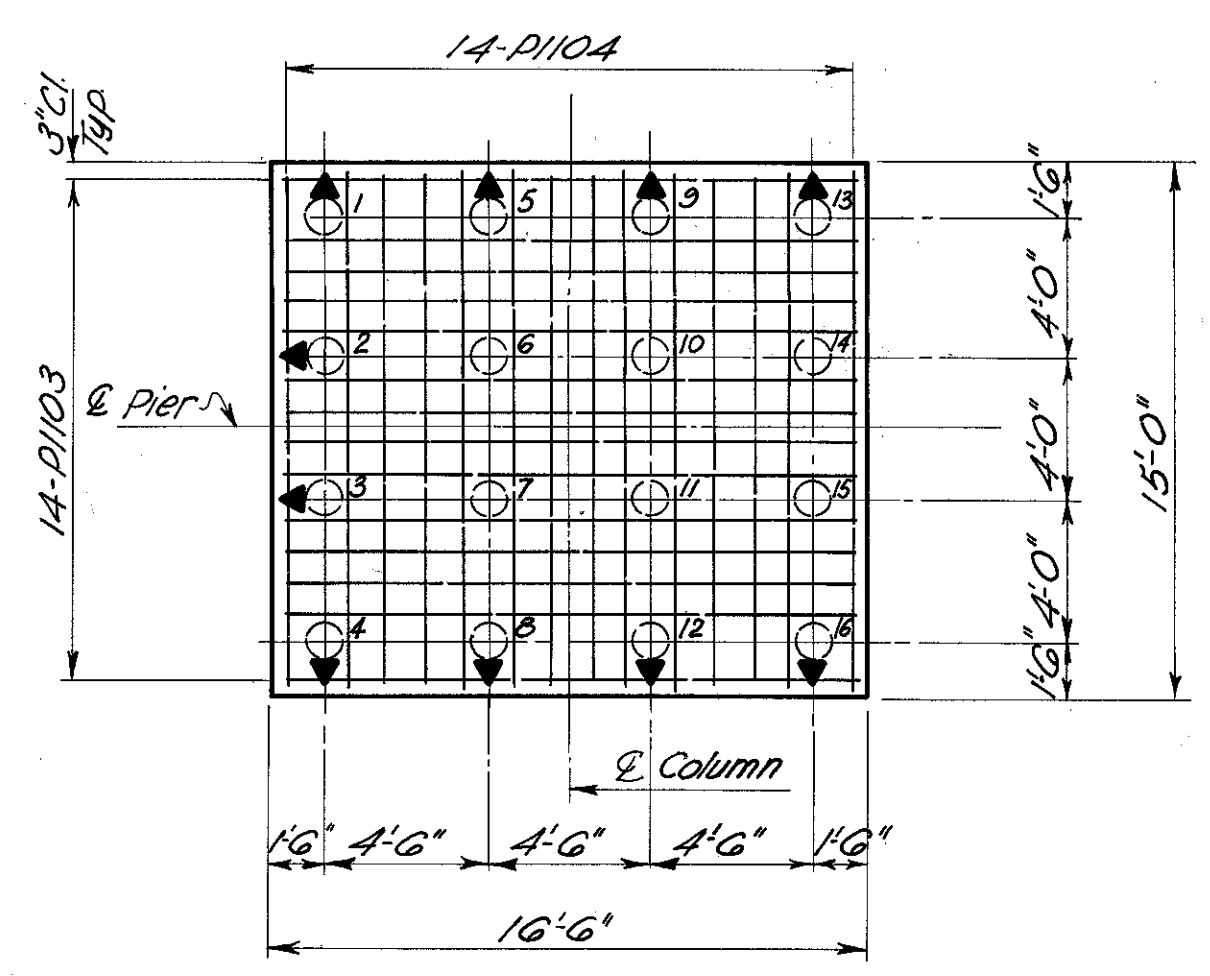
SECTION B-B



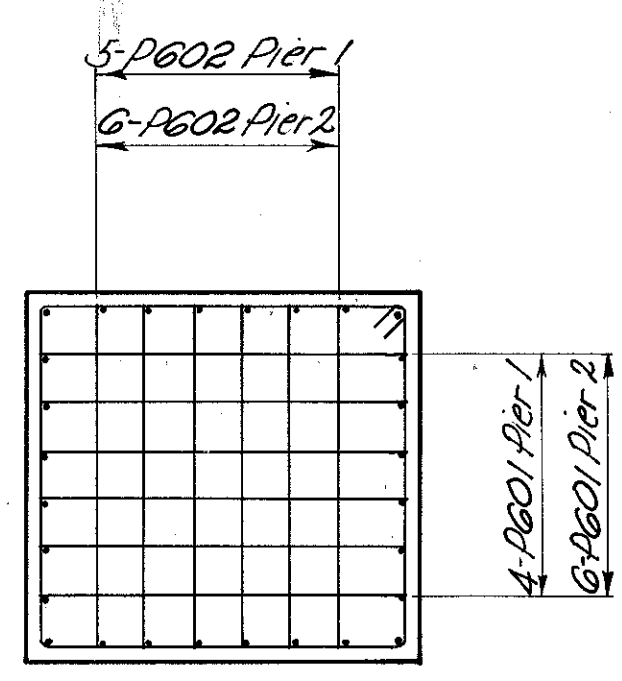
ELEVATION
PIER 1



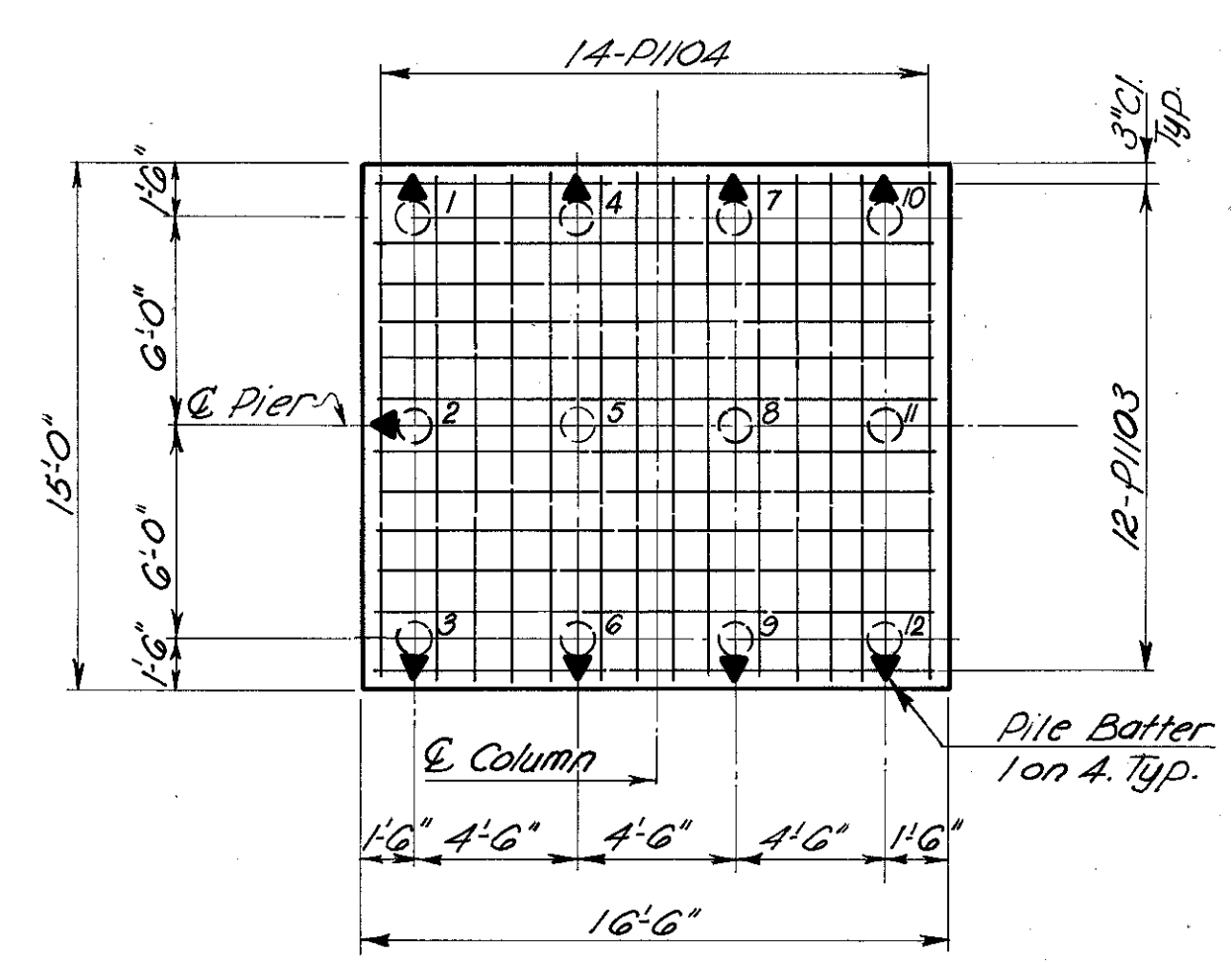
ELEVATION
PIER 2



FOOTING PLAN



PLAN-TOP OF PIER
COLUMNS, TYP.



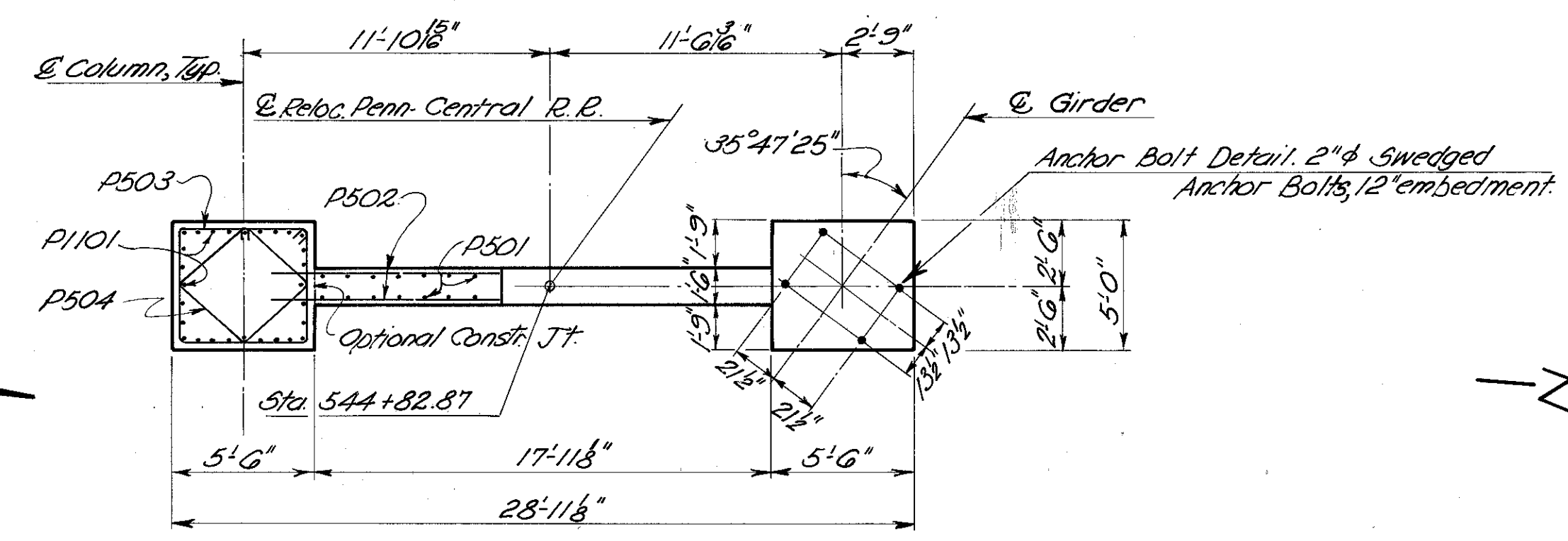
FOOTING PLAN

NOTES:
For drainage attachments, to Pier No. 2, see Sh. 10/18.
All reinforcing steel in piers No. 1 thru 4 shall have the suffixes 'A' thru 'D' respectively.
For reinforcing steel list see Sh. 13/18.
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 bar (bolt) holes.
Sheet Copper Water Seals to be provided in all construction joints at top of footings.
For Reference Chord Layout and Pier Skew angles, see Sh. 2/18.

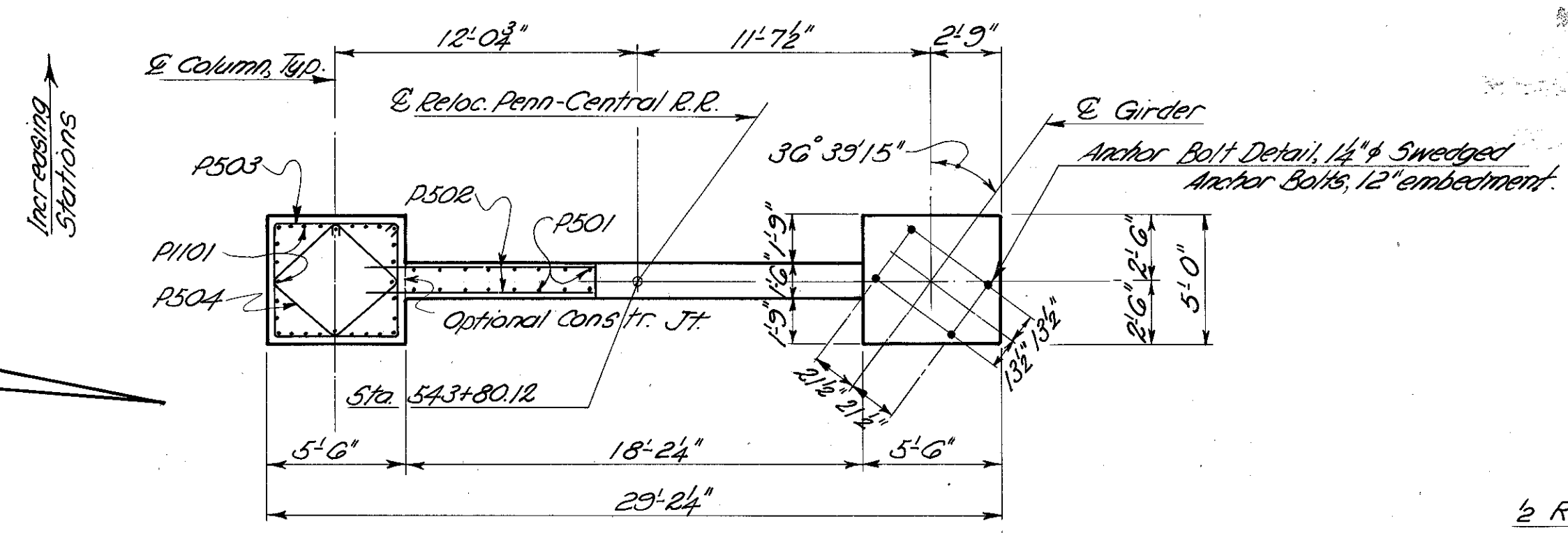
DESIGNED		DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISION
V.P.		A.W.		S.A.	SS	9/25/72	

KING & GAVARIS
CONSULTING ENGINEERS
OHIO
PIERS 1 AND 2
BRIDGE NO. GRE- 675-0615
I-675 UNDER RELOCATED PENN-
CENTRAL RAILROAD
GREENE COUNTY STA: 542+86.23 TO
STA: 547+53.01

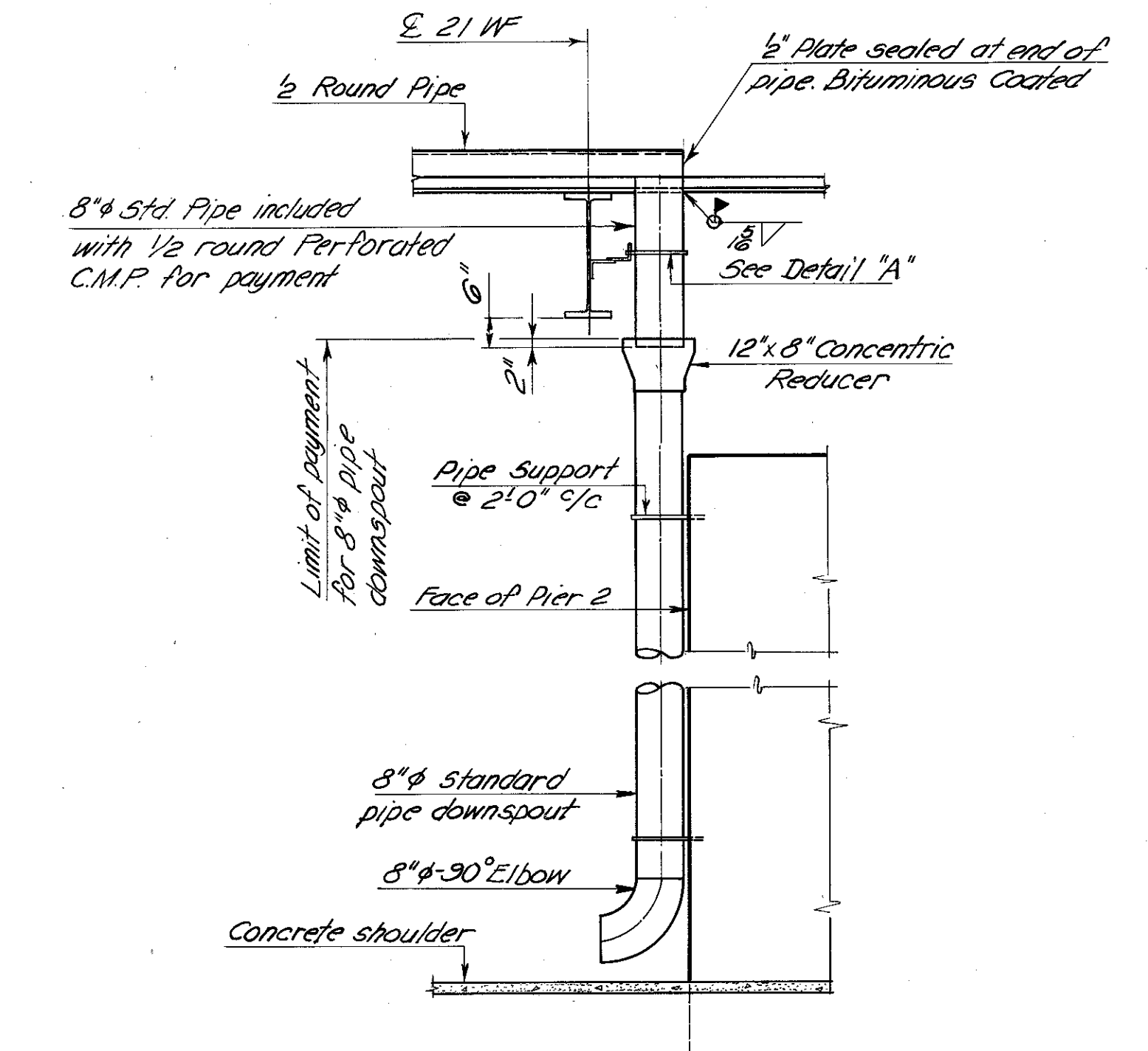
MICROFILMED
AUG 28 1989



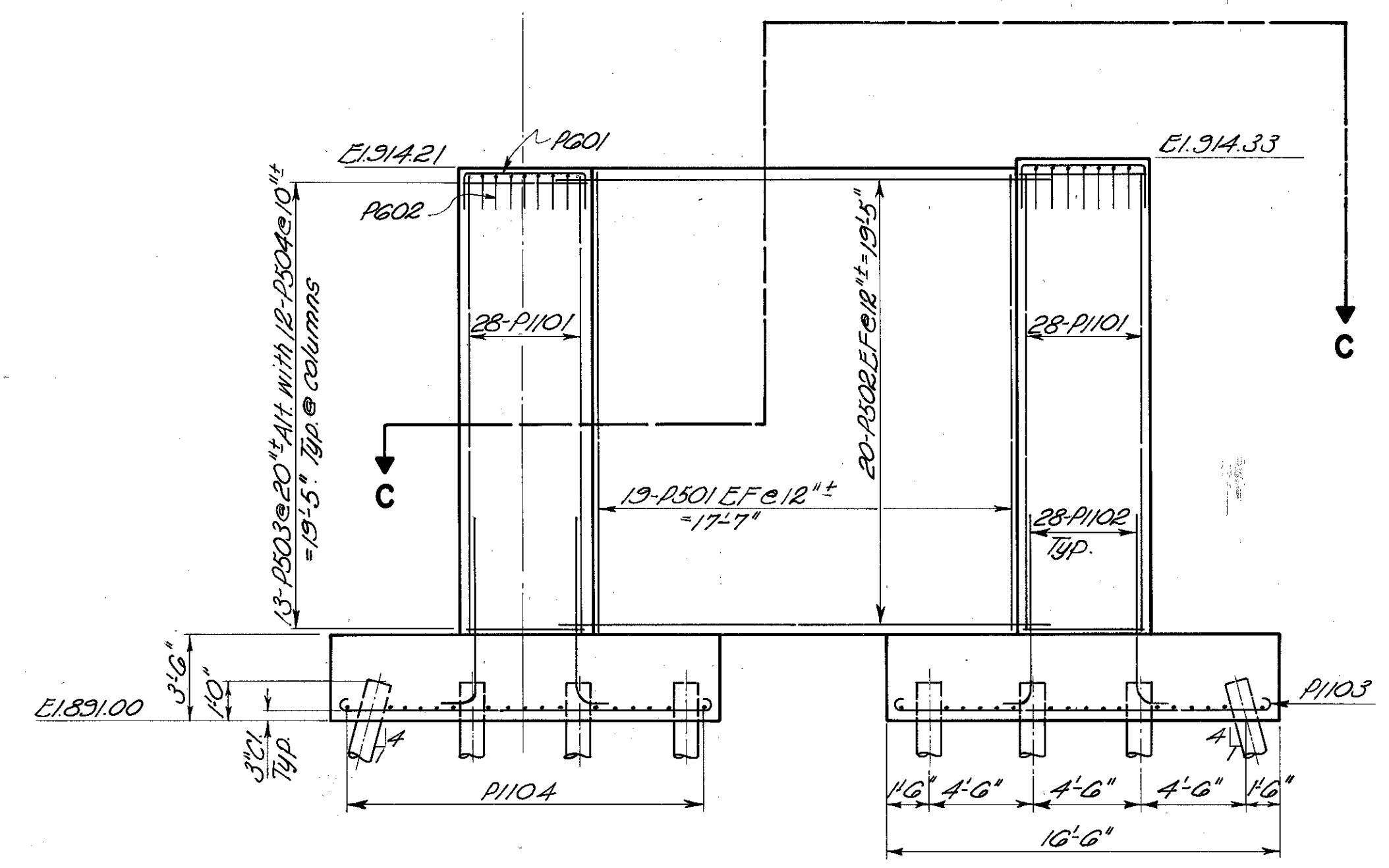
SECTION C-C



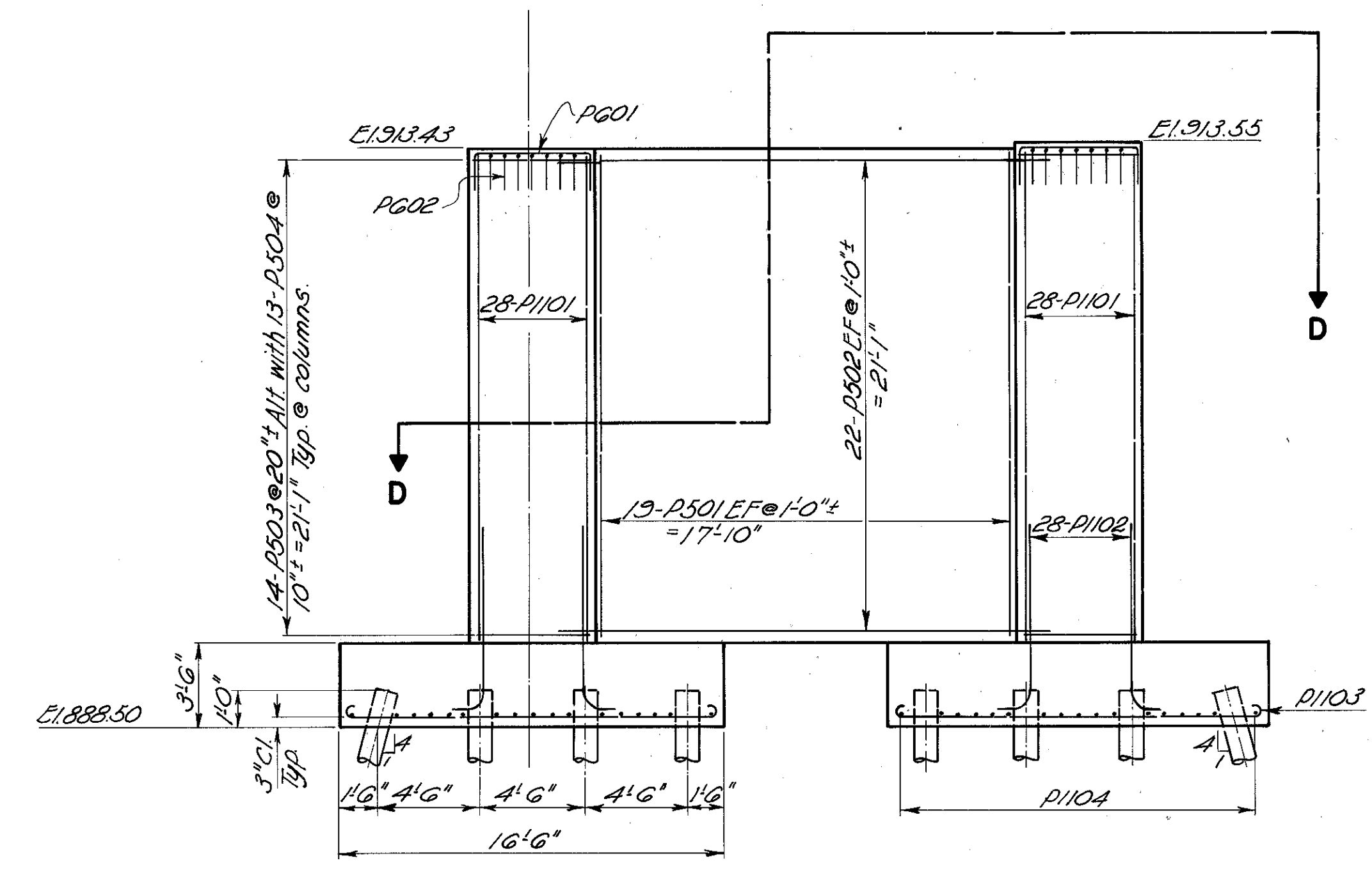
SECTION D-D



ELEVATION



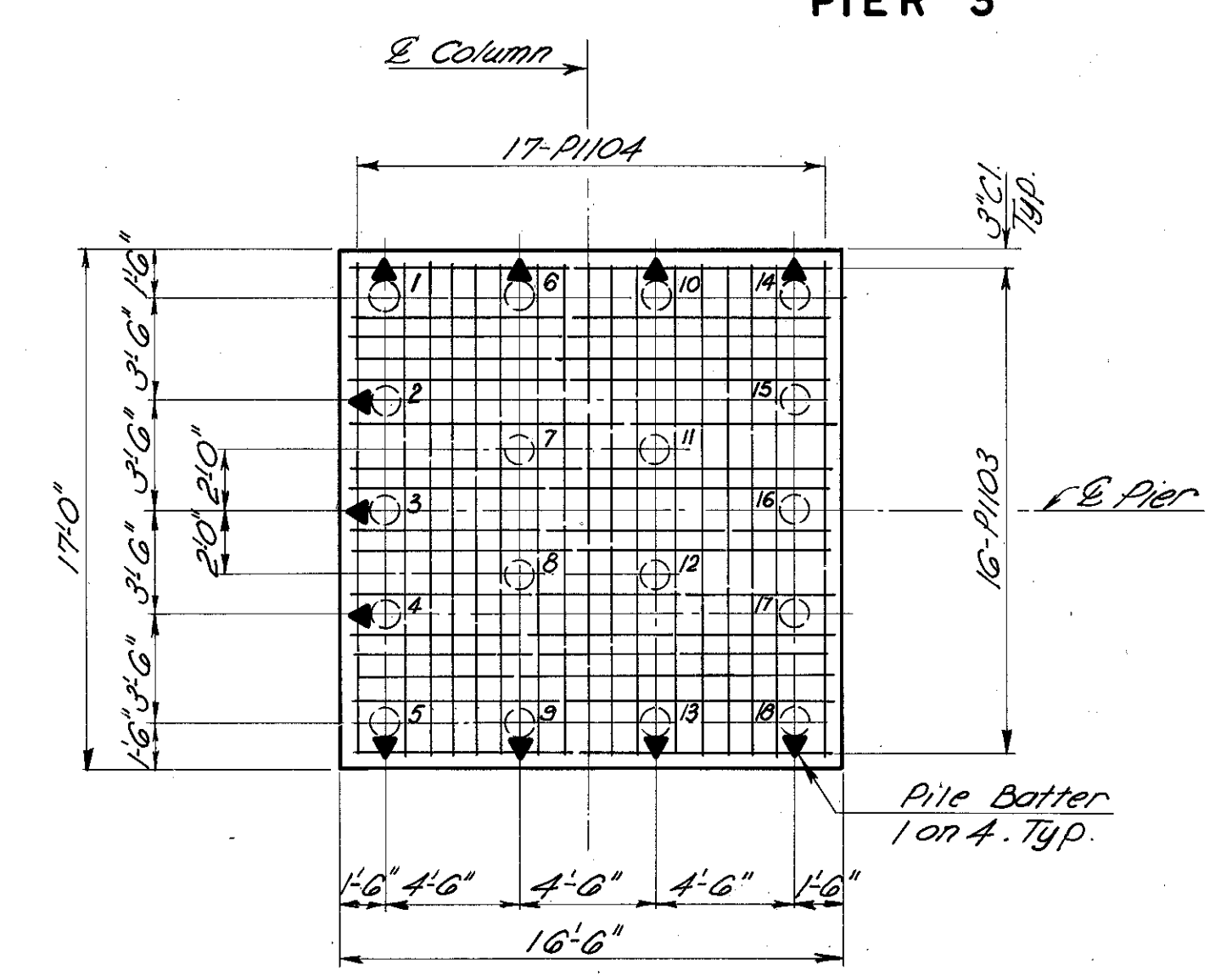
PIER 3



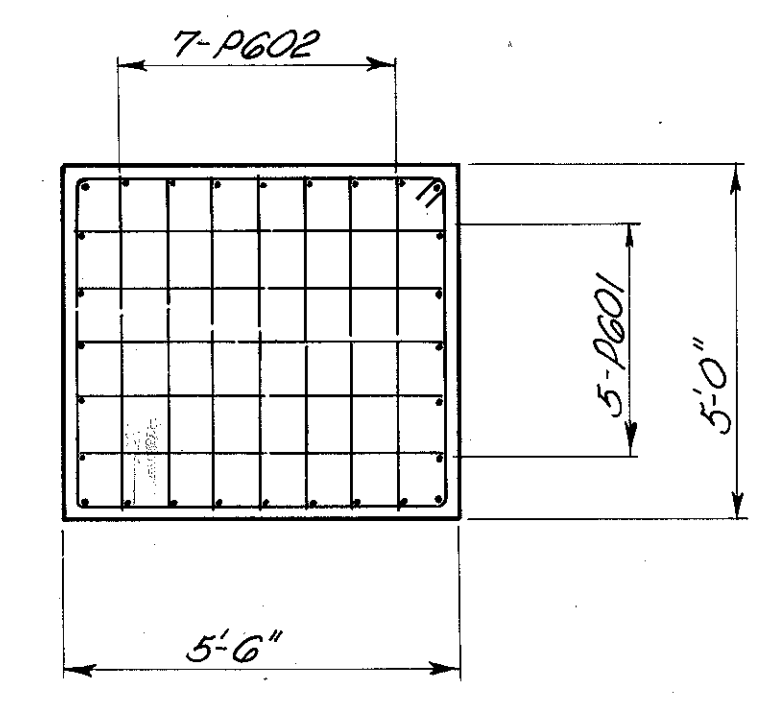
PIER 4

See sheet 462A for additional detail.

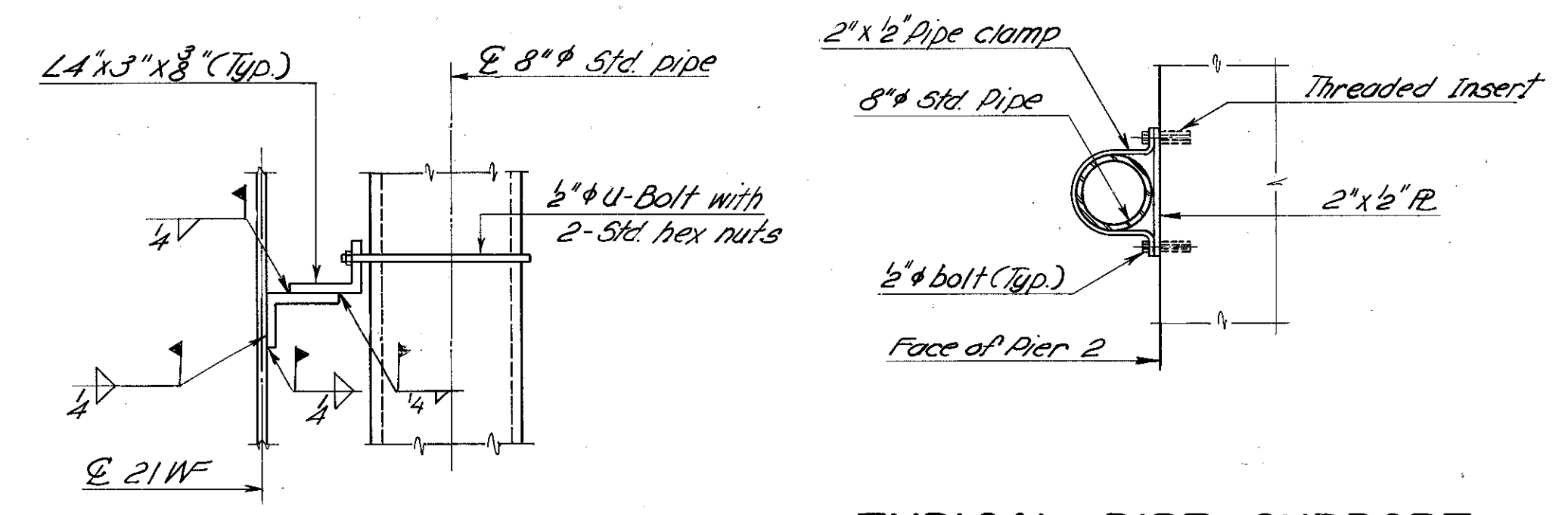
ELEVATIONS



TYPICAL FOOTING PLAN



PLAN-TOP OF PIER COLUMNS, TYP.



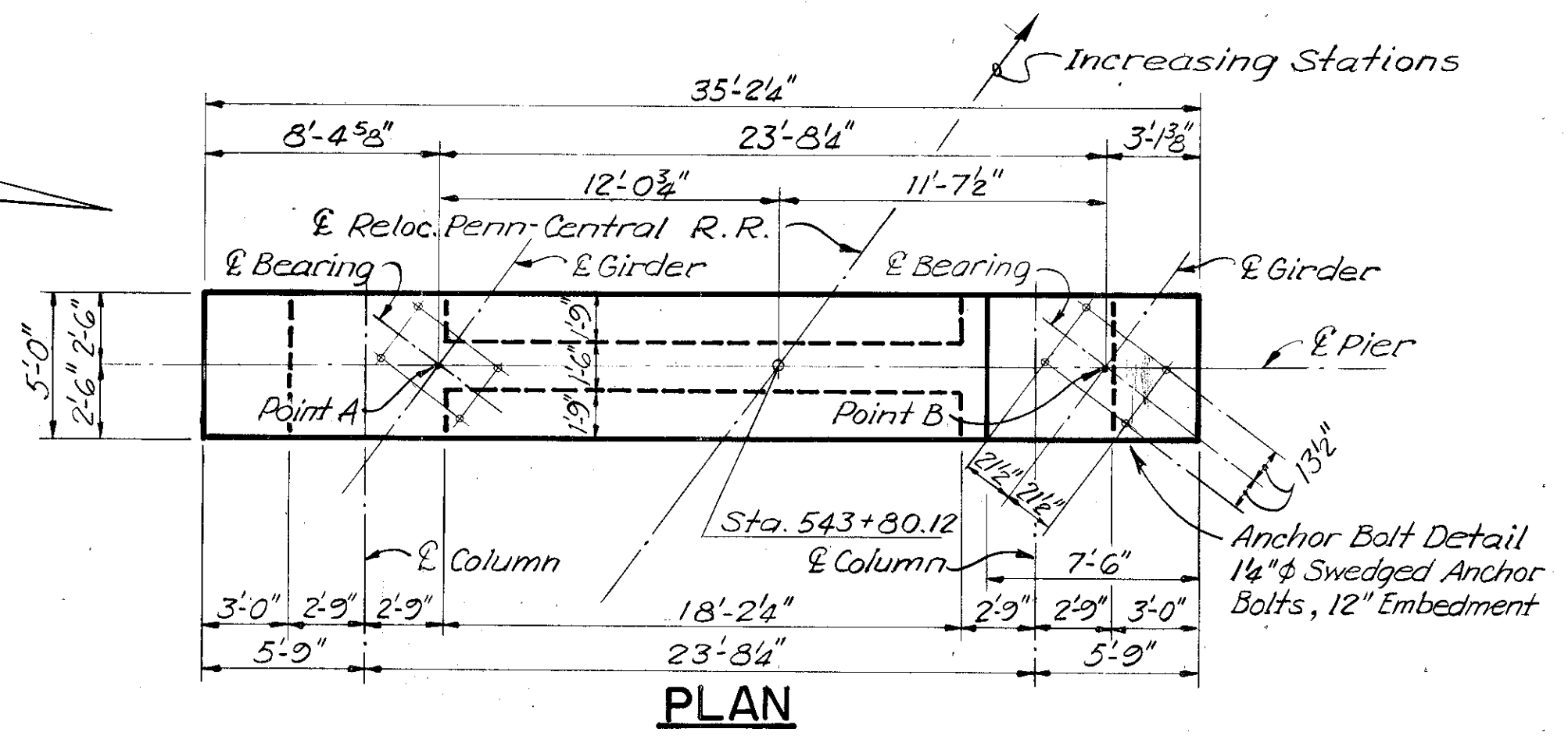
TYPICAL PIPE SUPPORT

DETAIL "A"

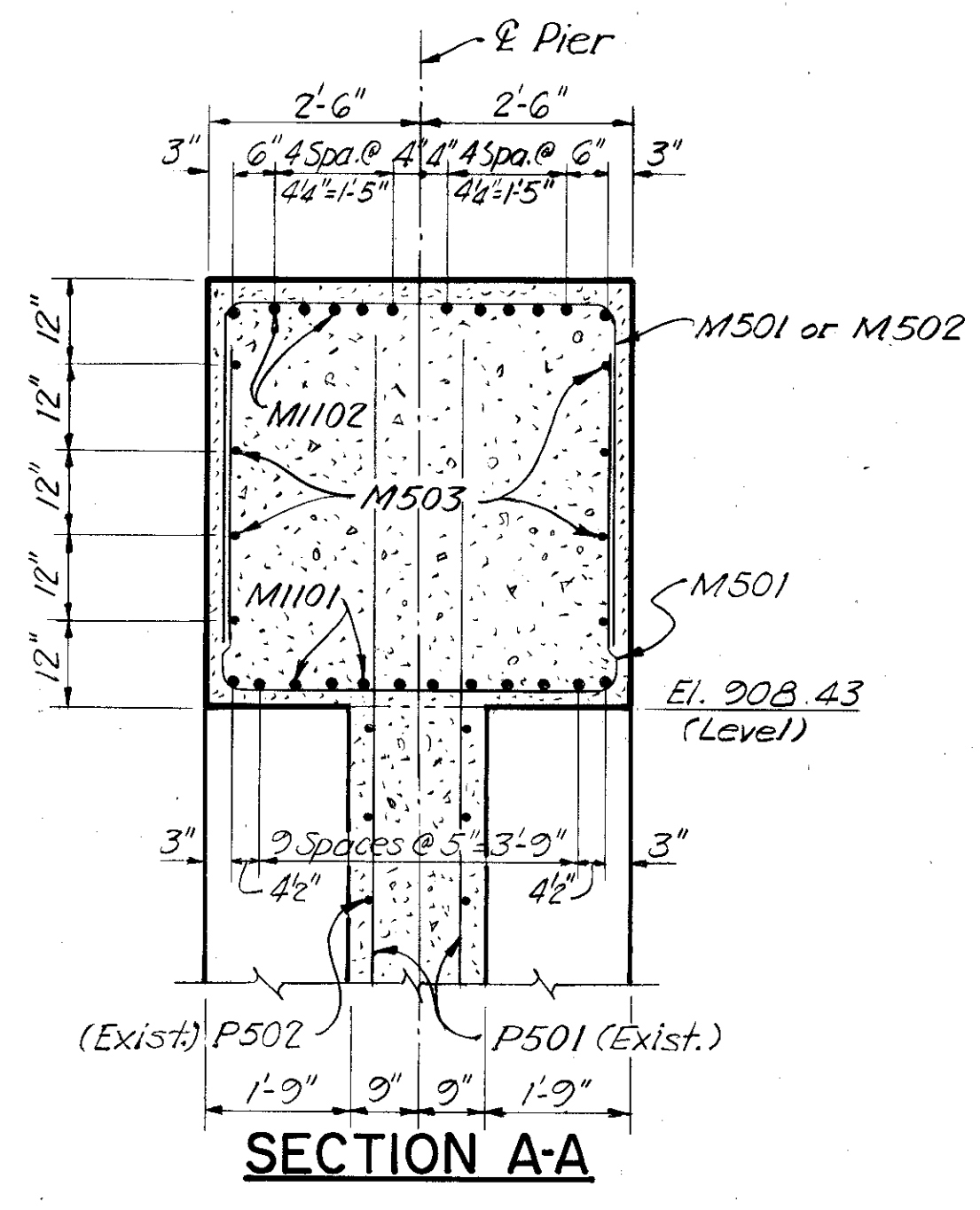
DRAINAGE DETAILS AT PIER 2

NOTES: For typical notes see sh. 9/18
For Reference Chord Layout and Pier Skew Angles, see sh. 2/18

KING & GAVARIS CONSULTING ENGINEERS		10/18
PIERS 3 AND 4		
BRIDGE NO. GRE- 675-0615		
I-675 UNDER RELOCATED PENN- CENTRAL RAILROAD		
GREENE COUNTY	STA. 542+86.23	TO STA. 547+53.01
DESIGNED V.P.	DRAWN A.W.	TRACED S.A.
CHECKED S.A.	REVIEWED S.A.	DATE 9/25/74
		REVISED 8-18-75



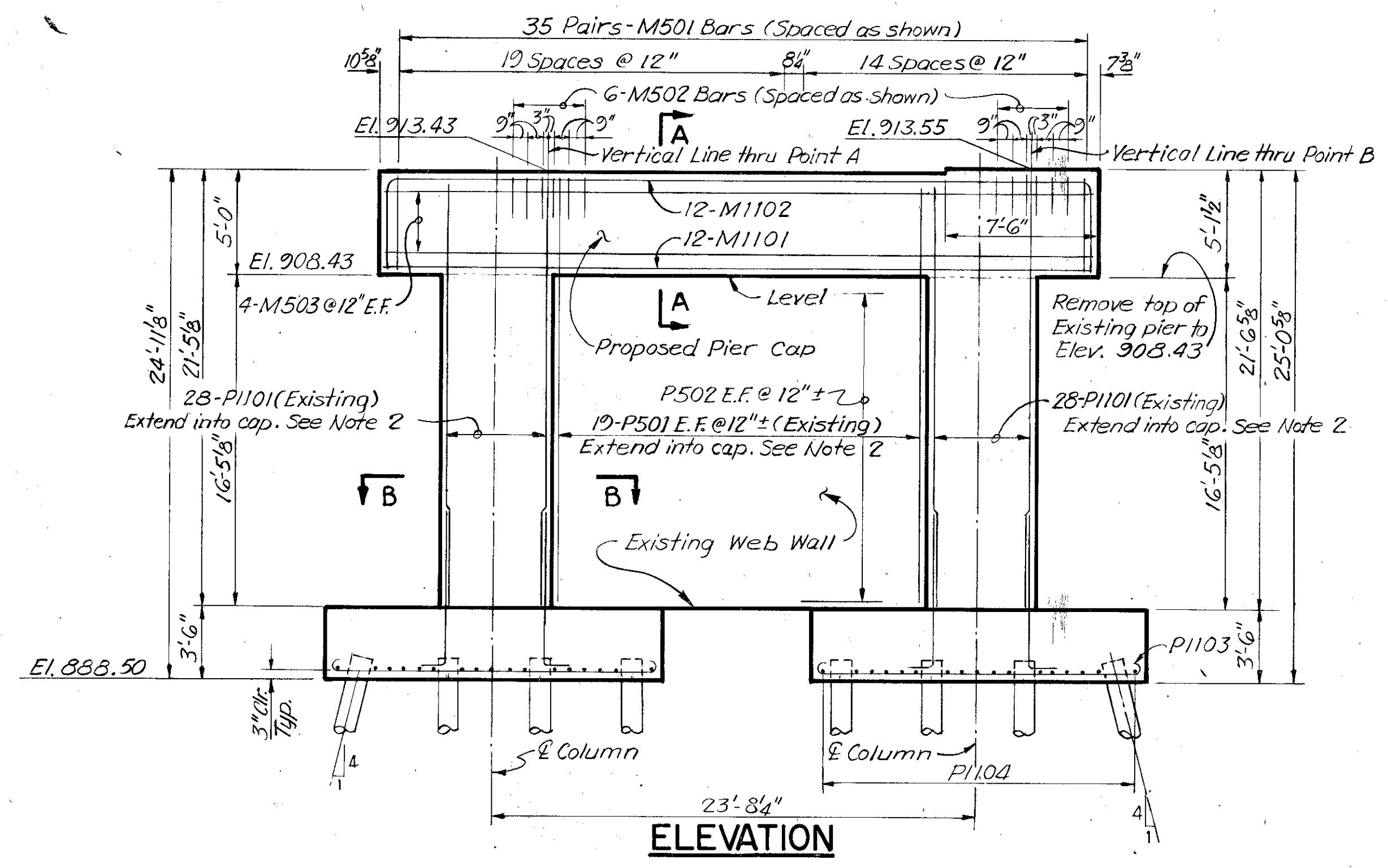
PLAN



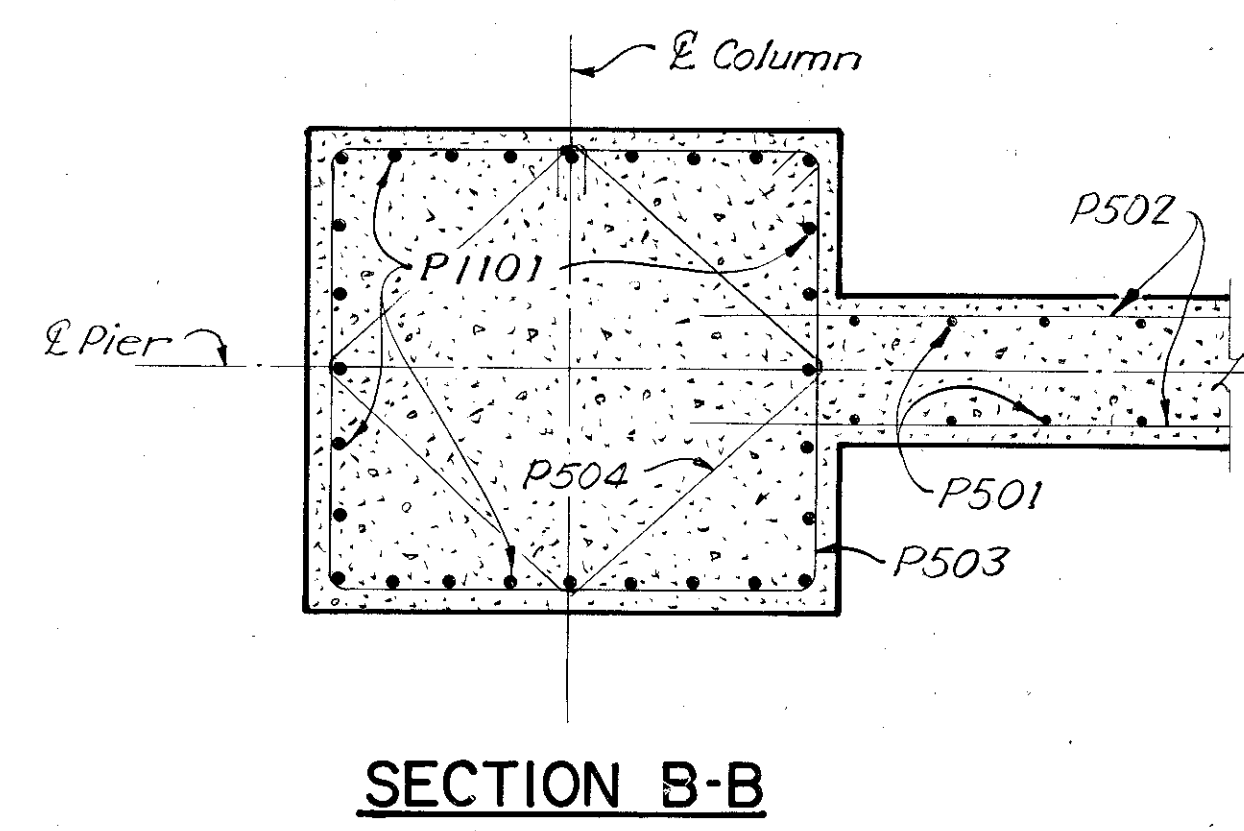
SECTION A-A

REINFORCING STEEL LIST					BENDING DIAGRAM	
MARK	NO REQ'D.	LENGTH	WEIGHT	TYPE		
M501	70	12'-5"	907	Bent		
M502	12	8'-5"	105	Bent		
M503	8	34'-10"	291	Str.		
M1101	12	34'-10"	2221	Str.		
M1102	12	43'-2"	2752	Bent		

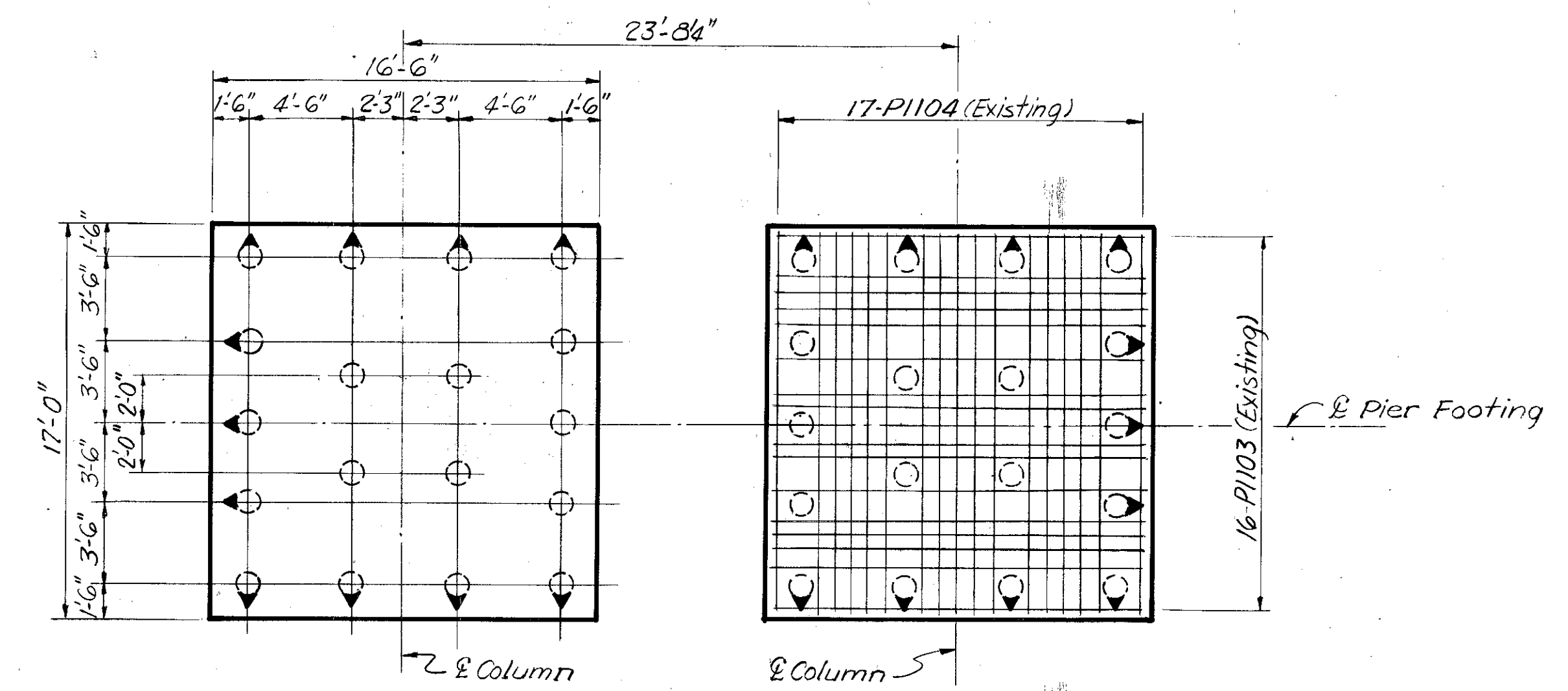
NOTES:
1. All dimensions are out to out of bar.



ELEVATION



SECTION B-B



FOOTING PLAN

- NOTES**
- For original details of Pier 4, see Sh. 10/18.
 - Top of existing pier columns and web wall shall be removed to Elev. 908.43. Special care shall be taken not to damage existing vertical steel in columns and web wall. The existing vertical steel shall extend into the proposed pier cap.

LOCKWOOD, JONES & BEALS CONSULTING ENGINEERS DAYTON, OHIO		10A/1B
PIER 4 (Modified)		
BRIDGE NO. GRE-675-0615 1-675 UNDER RELOCATED PENN- CENTRAL RAILROAD		
GREENE COUNTY		STA. 542 + 86.23 TO STA. 547 + 53.01
DESIGNED	CHECKED	DRAWN
HDJ	EPA	JCH
CHECKED	REVIEWED DATE	REVISION
HDJ	EPA 7/83	

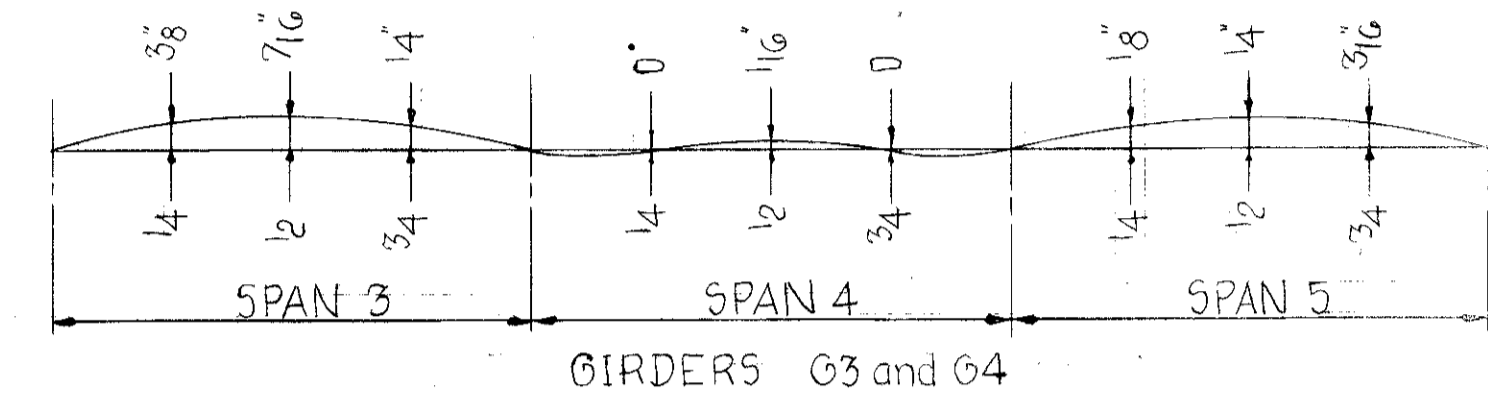
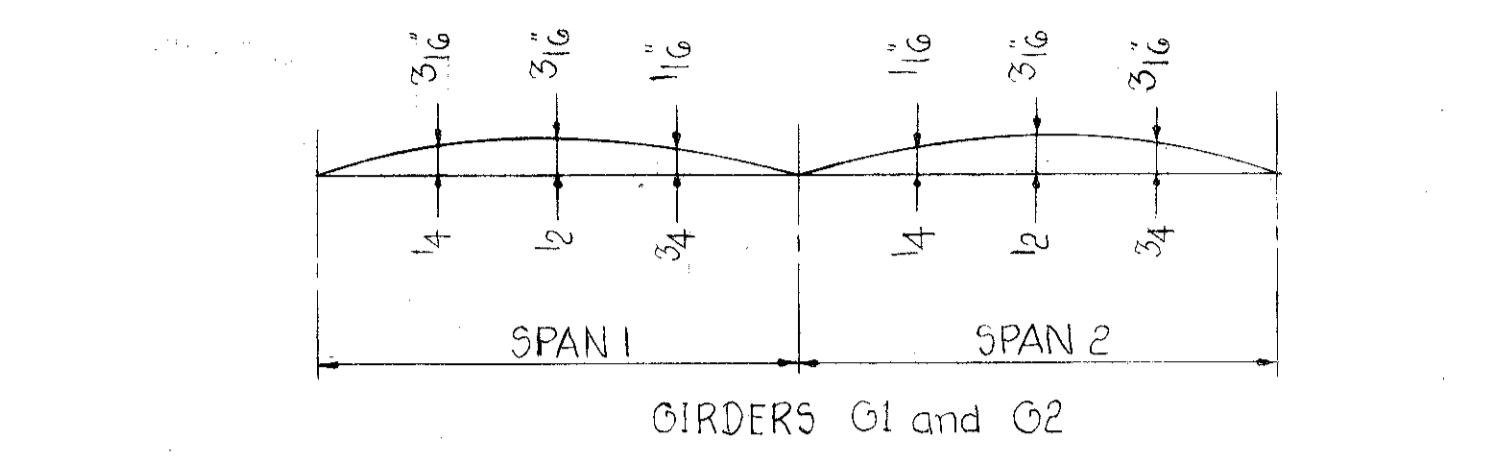
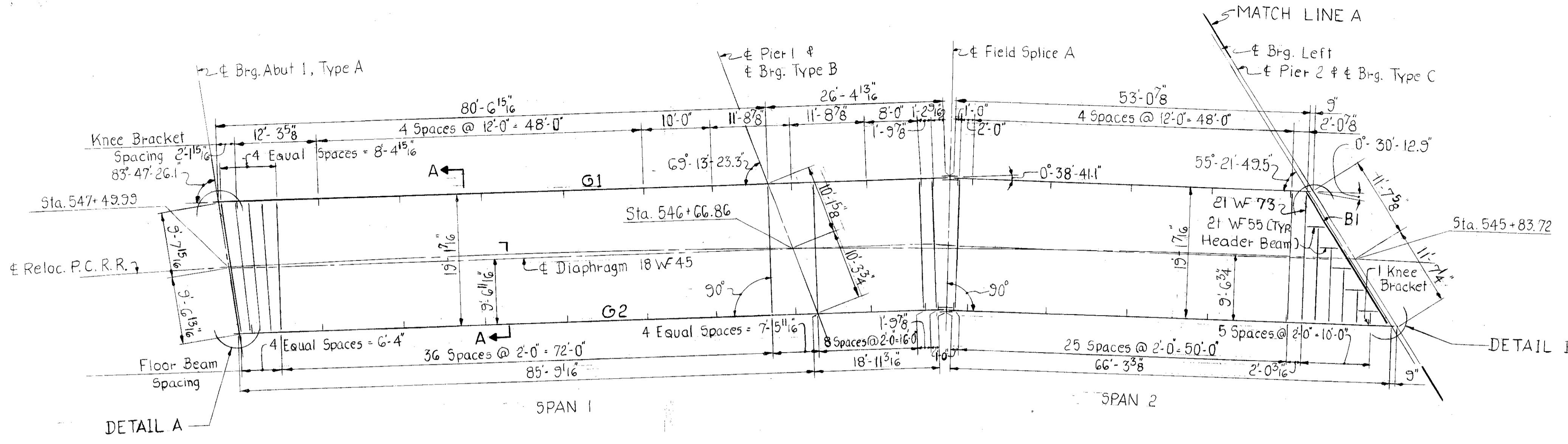
MICROFILMED
AUG 29 1983

MICROFILMED
JUN 10 1983

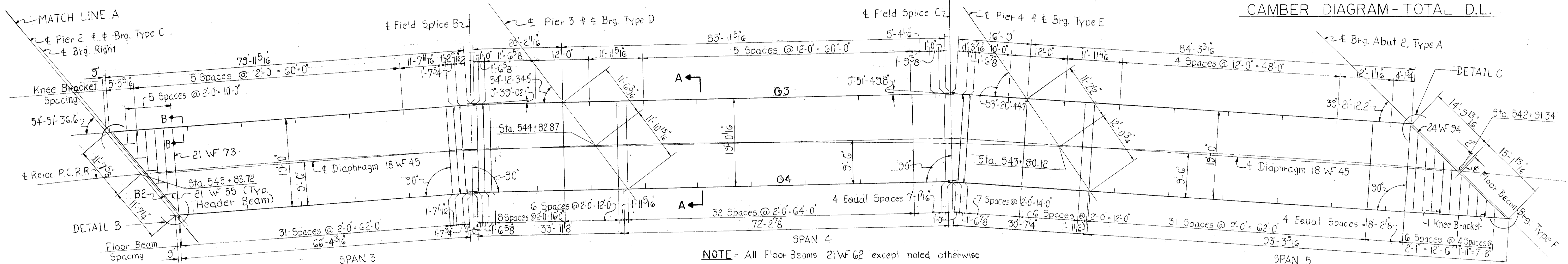
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

463
616

GRE-675 - 5-37
GREENE COUNTY

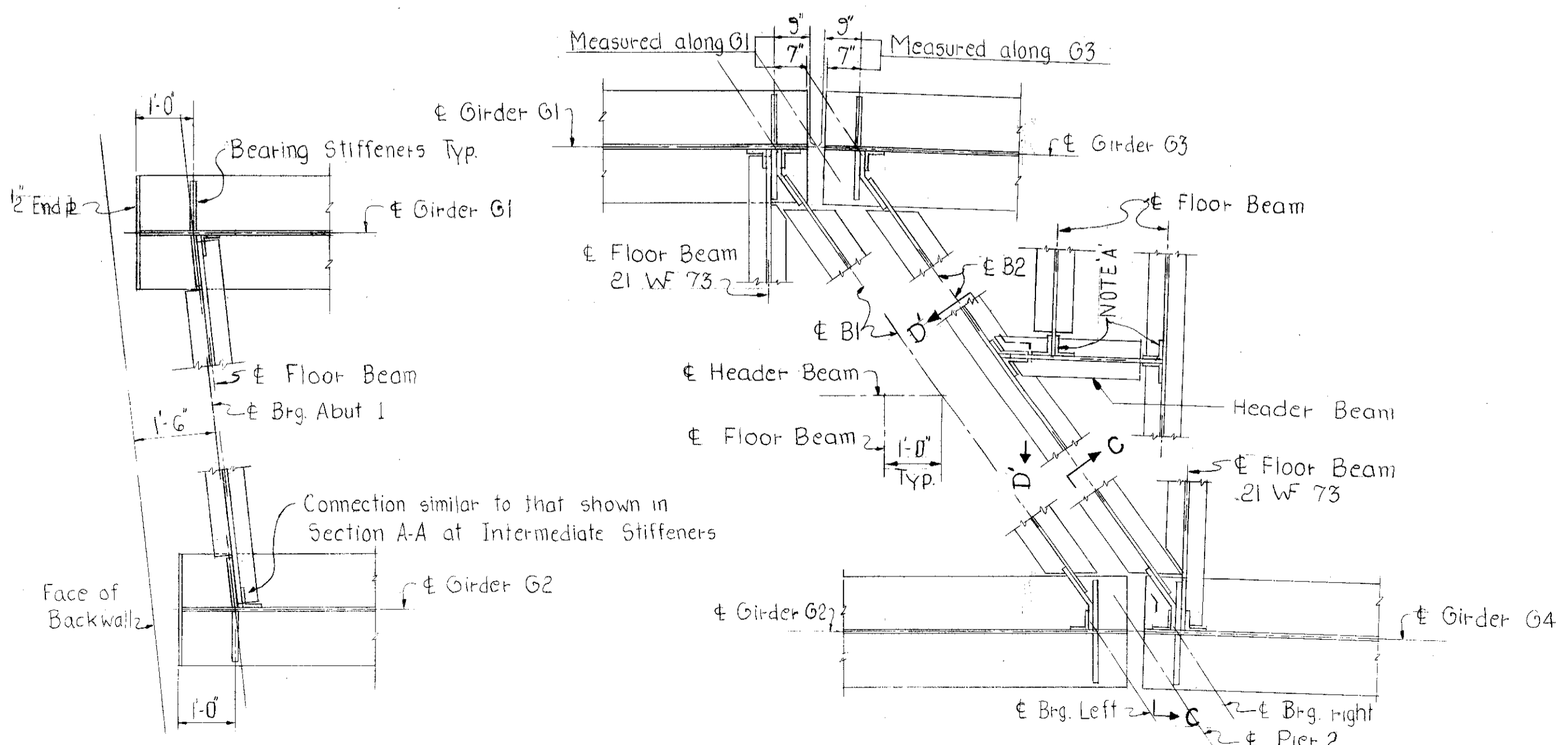


CAMBER DIAGRAM - TOTAL D.L.

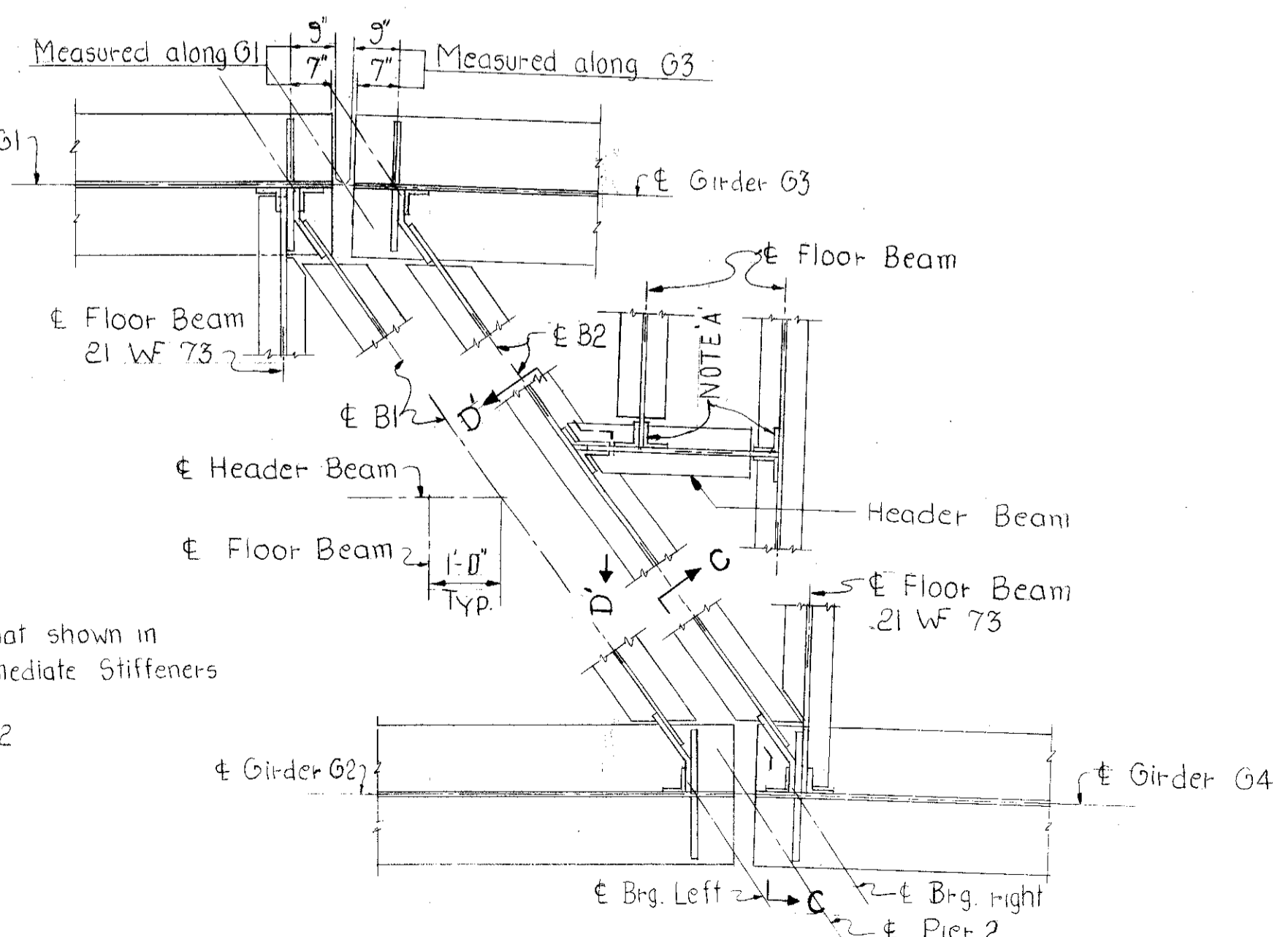


NOTE: All Floor Beams 21WF62 except noted otherwise

FRAMING PLAN

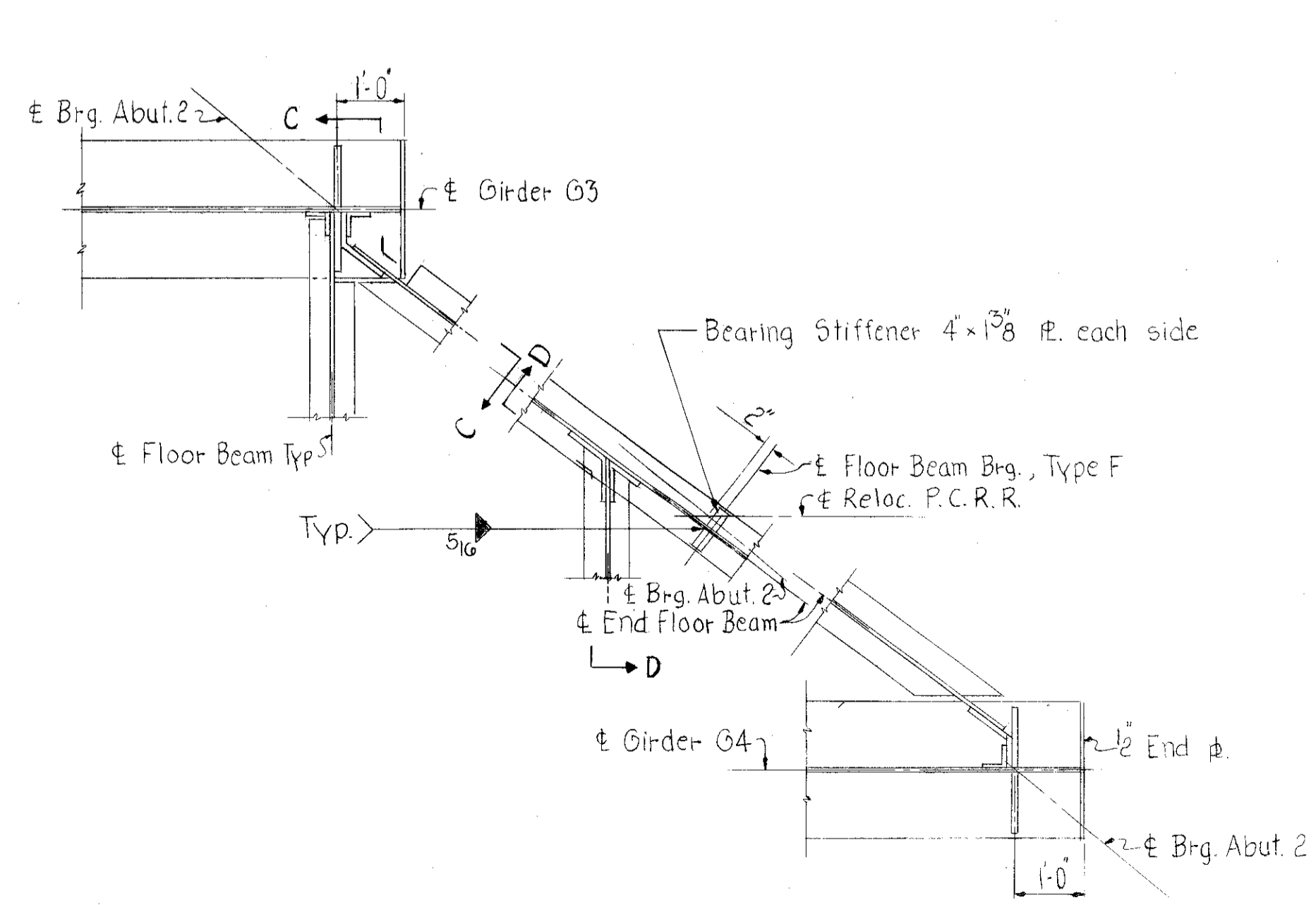


DETAIL A



DETAIL B

NOTE A: These connections similar to Typical Intermediate Floor Beam Connection (Section B-B)



DETAIL C

NOTES: Girder dimensions are given from ϵ Brg. to ϵ Brg. or ϵ Splice. Floor beam spacing is given from ϵ Floor beam web to ϵ Floor beam web. Knee bracket spacing is given from ϵ Floor beam web to ϵ Floor beam web to which they are attached. All dimensions are given in horizontal plane. For Sections A-A, B-B, C-C, D-D and D'-D' see sh. 12/18. For Bearings Type A, B, C, D, E and F see sh. 15/18. Work with Sheets 12, 13, 14, 15/18.

KING & GAVARIS CONSULTING ENGINEERS					
FRAMING PLAN					
BRIDGE NO. GRE-675-0615					
I-675 UNDER RELOCATED PENN.-					
CENTRAL RAILROAD					
GREENE COUNTY			STA: 542 + 86.23 TO		
			STA: 547 + 53.01		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
J.R.G.	J.R.G.		S.A.	84	9/25/72

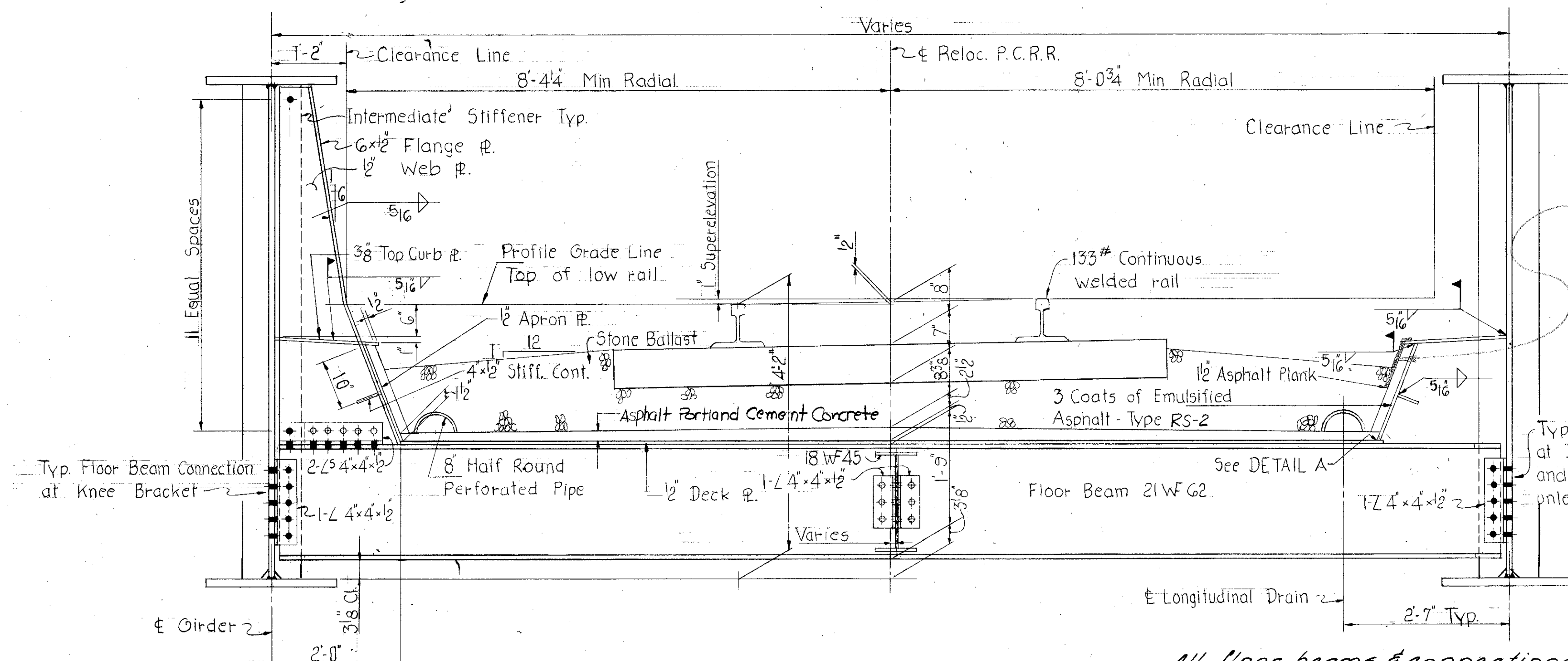
AUG 29 1989

MICROFILMED

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

467
616

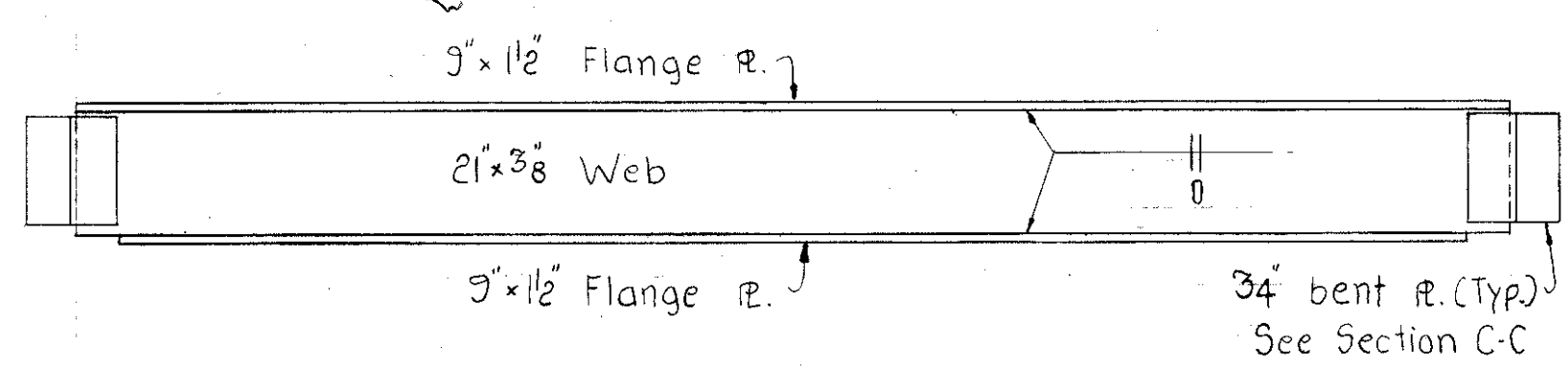
GRE-675 - 5-37
GREENE COUNTY



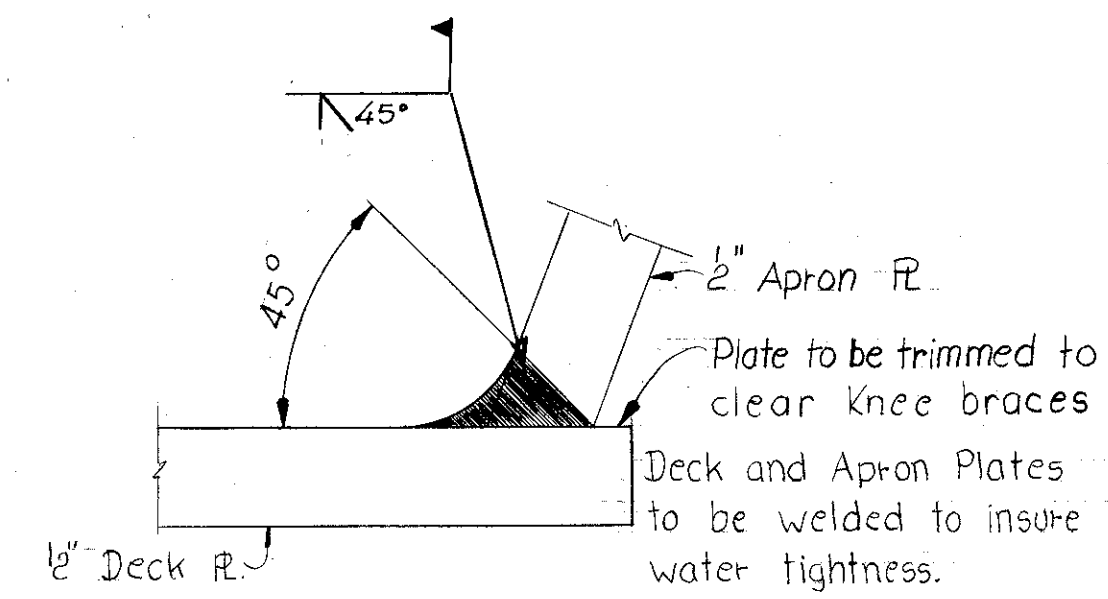
NOTE: All bolts 7/8" H.S. Bolts

SECTION A-A
TYPICAL SECTION

All floor beams & connections shall be C.V.N.

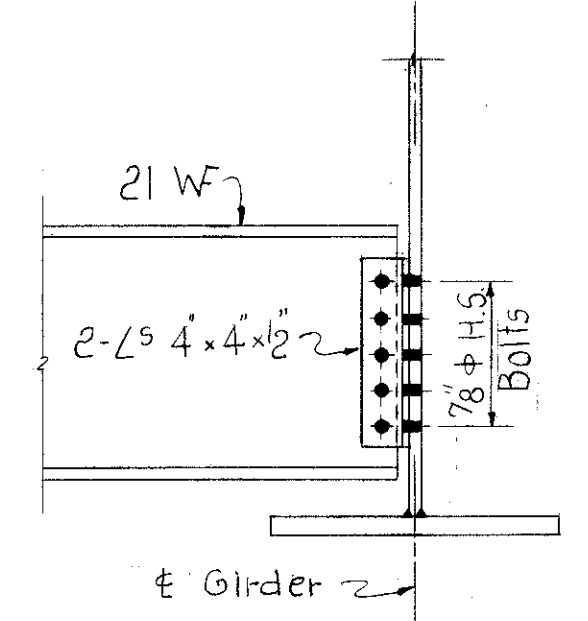
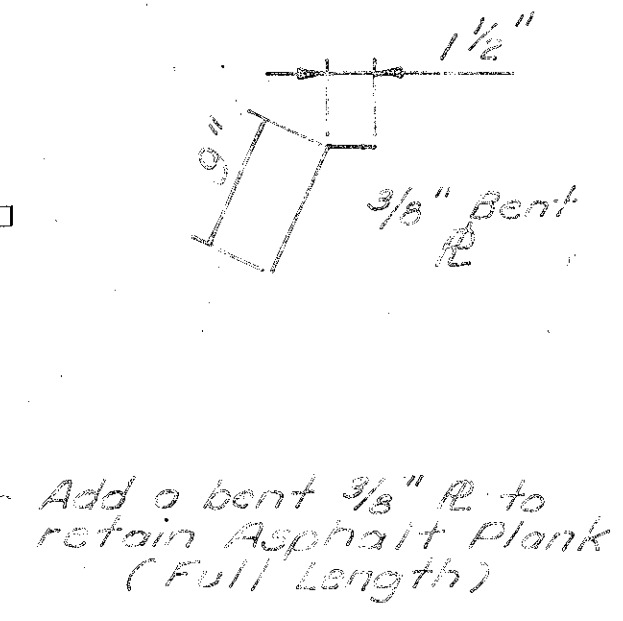


ELEVATION BI & B2

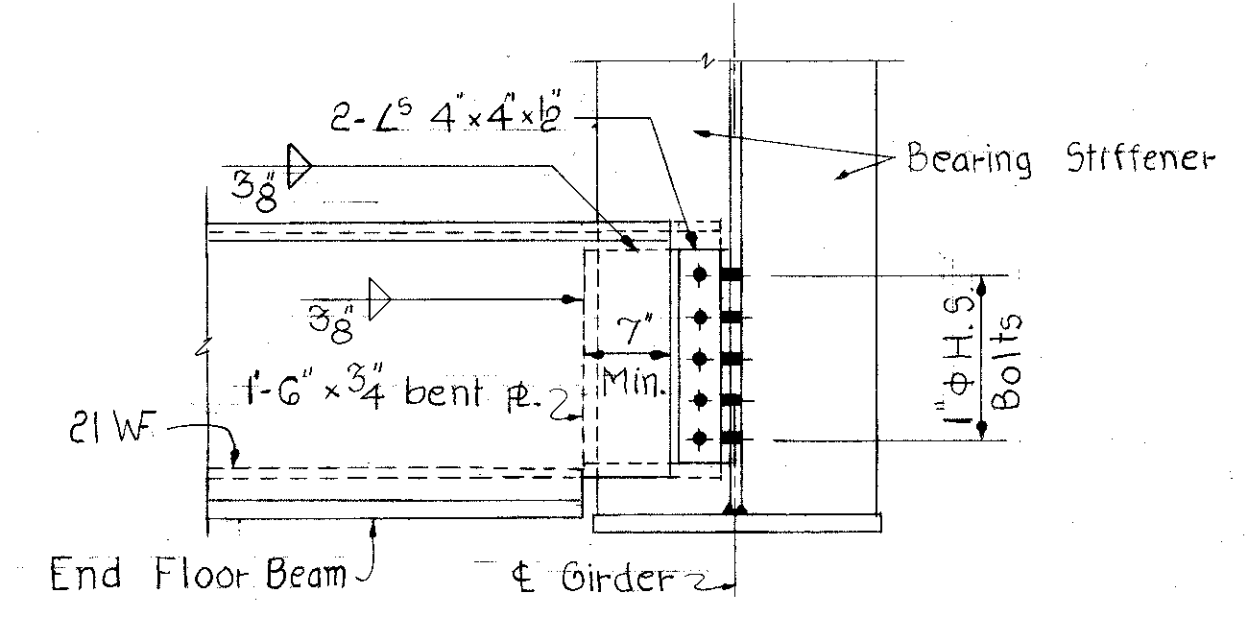


DETAIL A

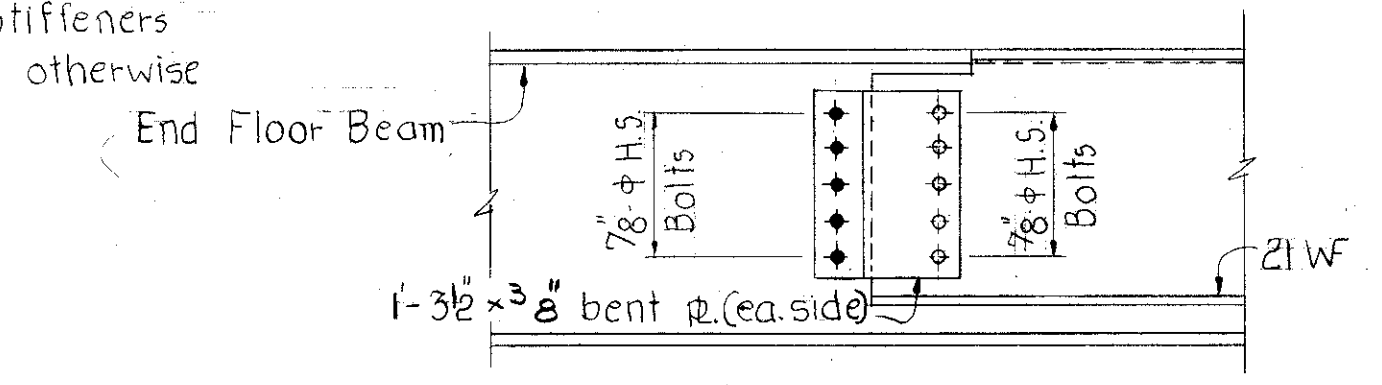
Weld at junction of Deck and Apron Plates



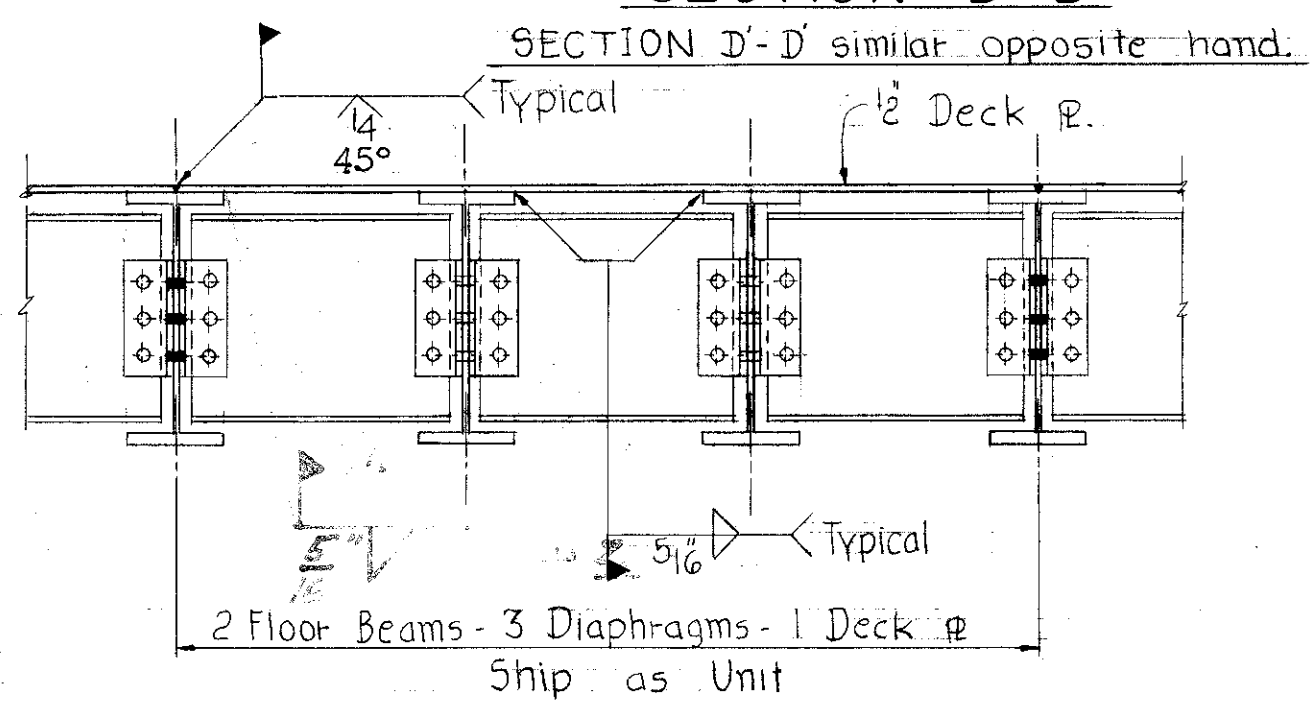
SECTION B-B
TYPICAL INTERMEDIATE
FLOOR BEAM CONNECTION



SECTION C-C

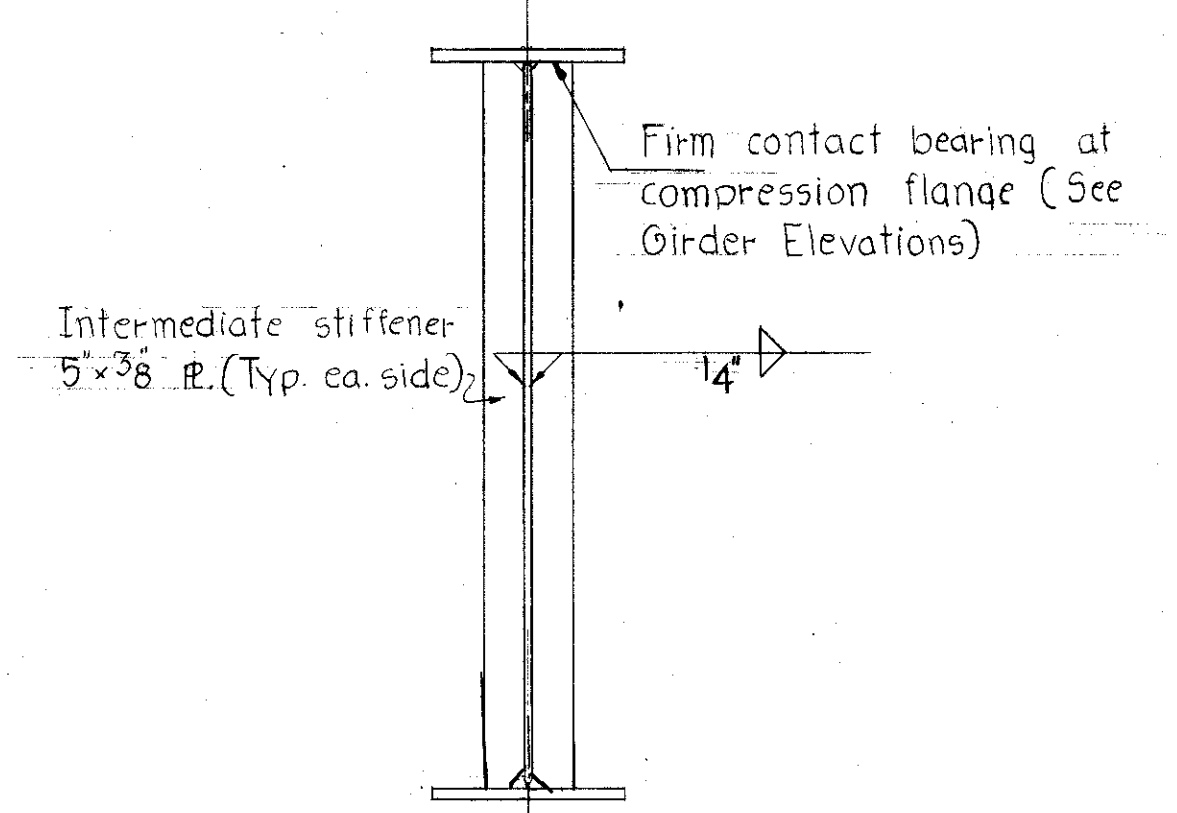


SECTION D-D



FLOOR BEAM UNITS DETAIL

Skewed End Panels and Special areas to be similarly assembled and welded.



INTERMEDIATE STIFFENER TYP.

Intermediate stiffeners may be normal to flanges and at 90° to web unless required otherwise for floor beam connections.

LOAD TABLE

LOADING	MOMENTS; kip-inches								SHEARS; kips								REACTIONS; kips								
	GIRDERS G1-G2				GIRDERS G3-G4				GIRDERS G1-G2				GIRDERS G3-G4				GIRDERS G1-G2				GIRDERS G3-G4				
	Span 1	Pier 1	Span 2	Span 3	Pier 3	Span 4	Pier 4	Span 5	Abut. 1	Pier 1 Left	Pier 1 Right	Pier 2	Pier 2	Pier 3 Left	Pier 3 Right	Pier 4 Left	Pier 4 Right	Abut. 2	Abut. 1	Pier 1	Pier 2	Pier 2	Pier 3	Pier 4	Abut. 2
DEAD LOAD	+14.095	-30.486	+14.095	+25.660	-38.840	+8.560	-29.880	+18.720	79	141	141	79	109	172	148	133	149	93	79	282	79	109	320	282	93
LIVE LOAD	+41.647	-57.125	+41.647	+60.217	-74.329	+39.956	-68.330	+52.554	227	312	312	227	263	356	331	327	331	252	227	498	227	263	562	529	252
IMPACT + CENT. FORCE	+13.293	-18.234	+13.293	+17.639	-21.773	+11.704	-20.016	+15.335	72	100	100	72	77	104	97	96	97	74	72	159	72	77	165	155	74

NOTES: Deck, Apron and Curb Plates to be ASTM A-588, Included with Item 810 for payment.
Longitudinal Deck Drain Pipes to be Bituminous coated, corrugated metal pipes.
Work with Sheets 11, 13, 14, 15/18

12/18

KING & GAVARIS
CONSULTING ENGINEERS

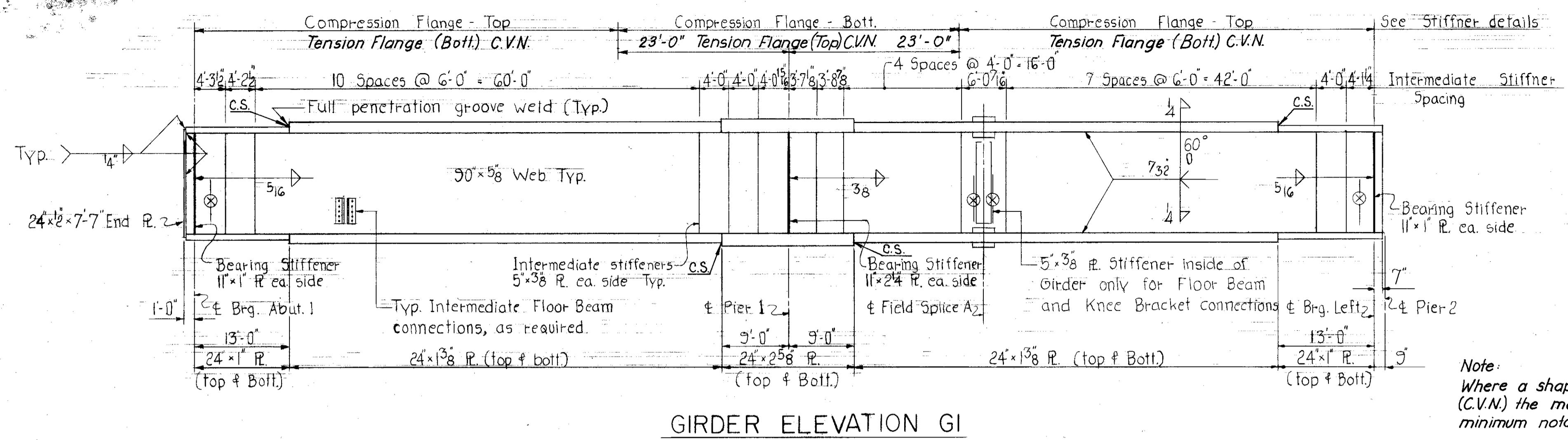
SUPERSTRUCTURE DETAILS-I

BRIDGE NO. GRE- 675- 0615
I-675 UNDER RELOCATED PENN.-
CENTRAL RAILROAD

GREENE COUNTY STA: 542+86.23 TO
STA: 547+53.01

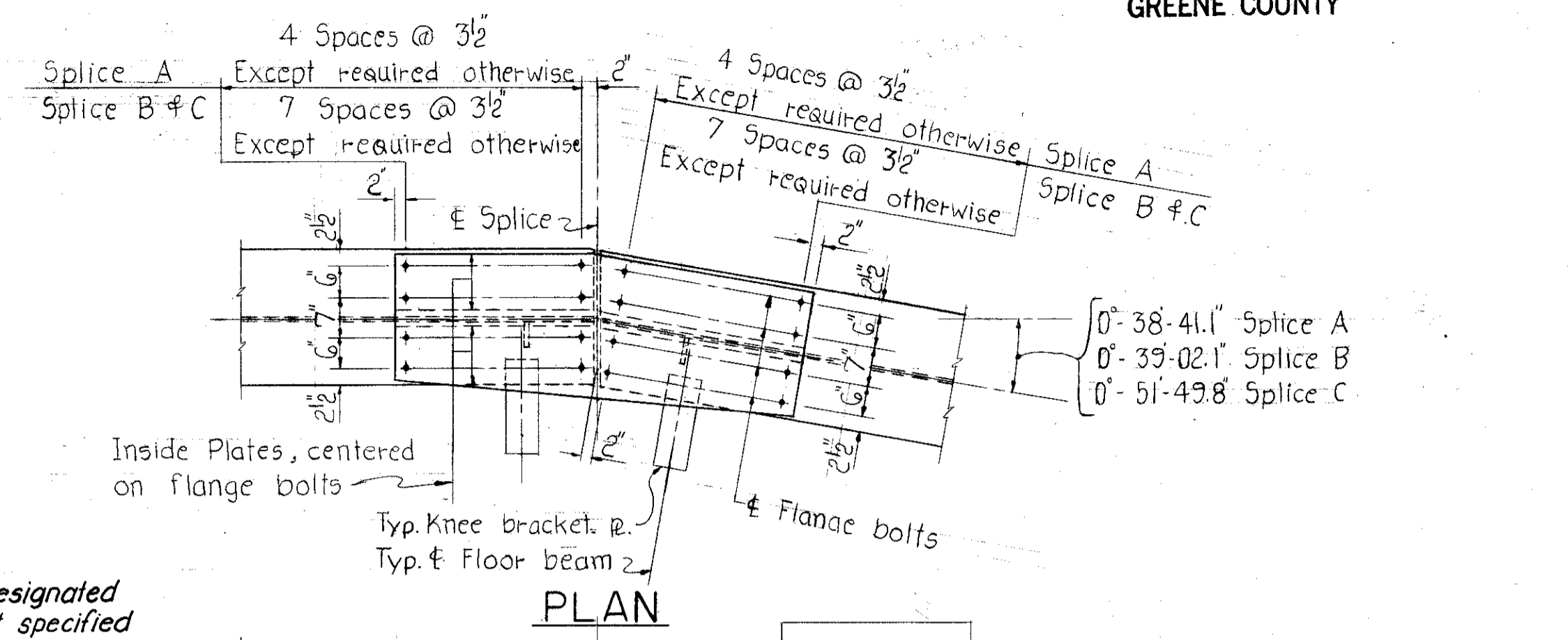
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISION
J.R.G.	J.R.G.		S.A.	J.R.G.	9/25/12	4/27/12

A. R. V. 1 5-1-82

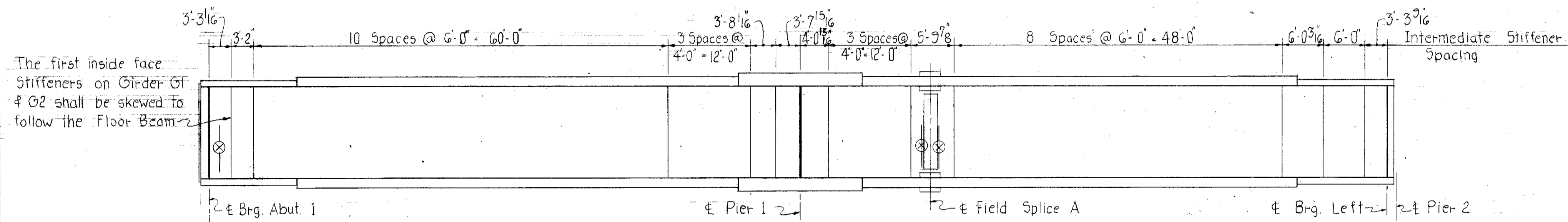


GIRDER ELEVATION G1

Note: Where a shape or plate is designated (C.V.N.) the material shall meet specified minimum notch toughness requirements.

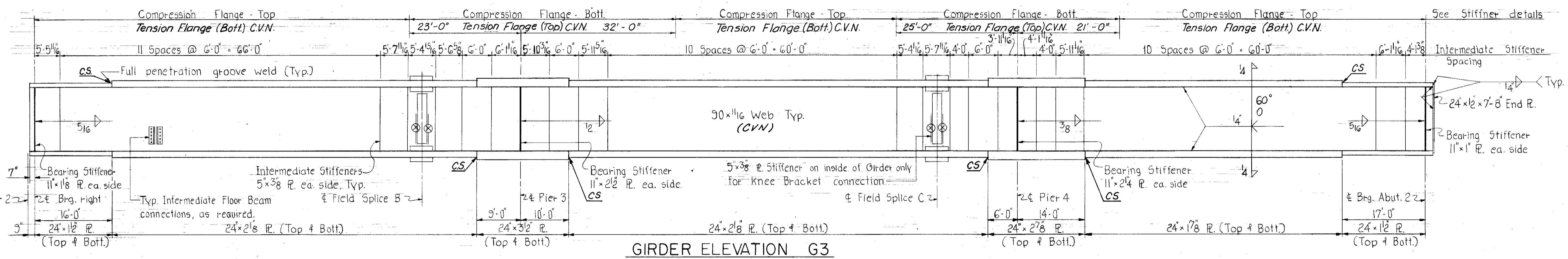


SPlice DETAILS

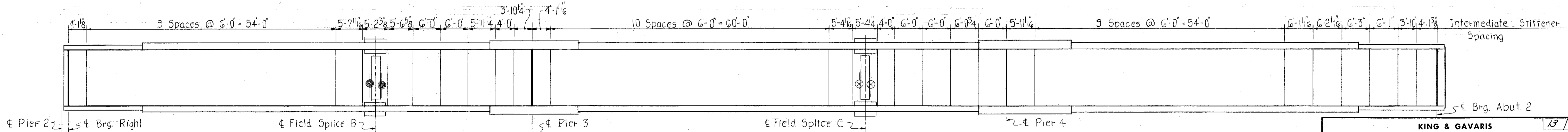


GIRDER ELEVATION G2

NOTE: Details not shown here similar to G1



GIRDER ELEVATION G3



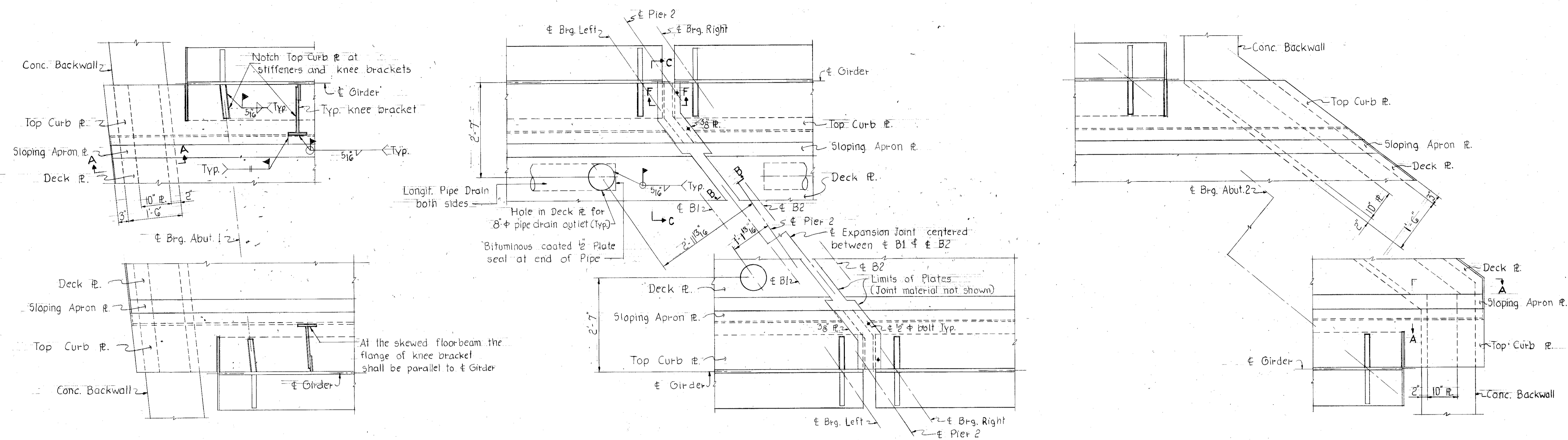
GIRDER ELEVATION G4

NOTE: Details not shown here similar to G3

NOTES: All Bearing Stiffeners shall be milled to bear at the bottom flanges & tight fit at the top flanges. Work with Sheets 11, 12, 14, 15, 18. Bearing Stiffeners and Ends of Girders to be vertical.

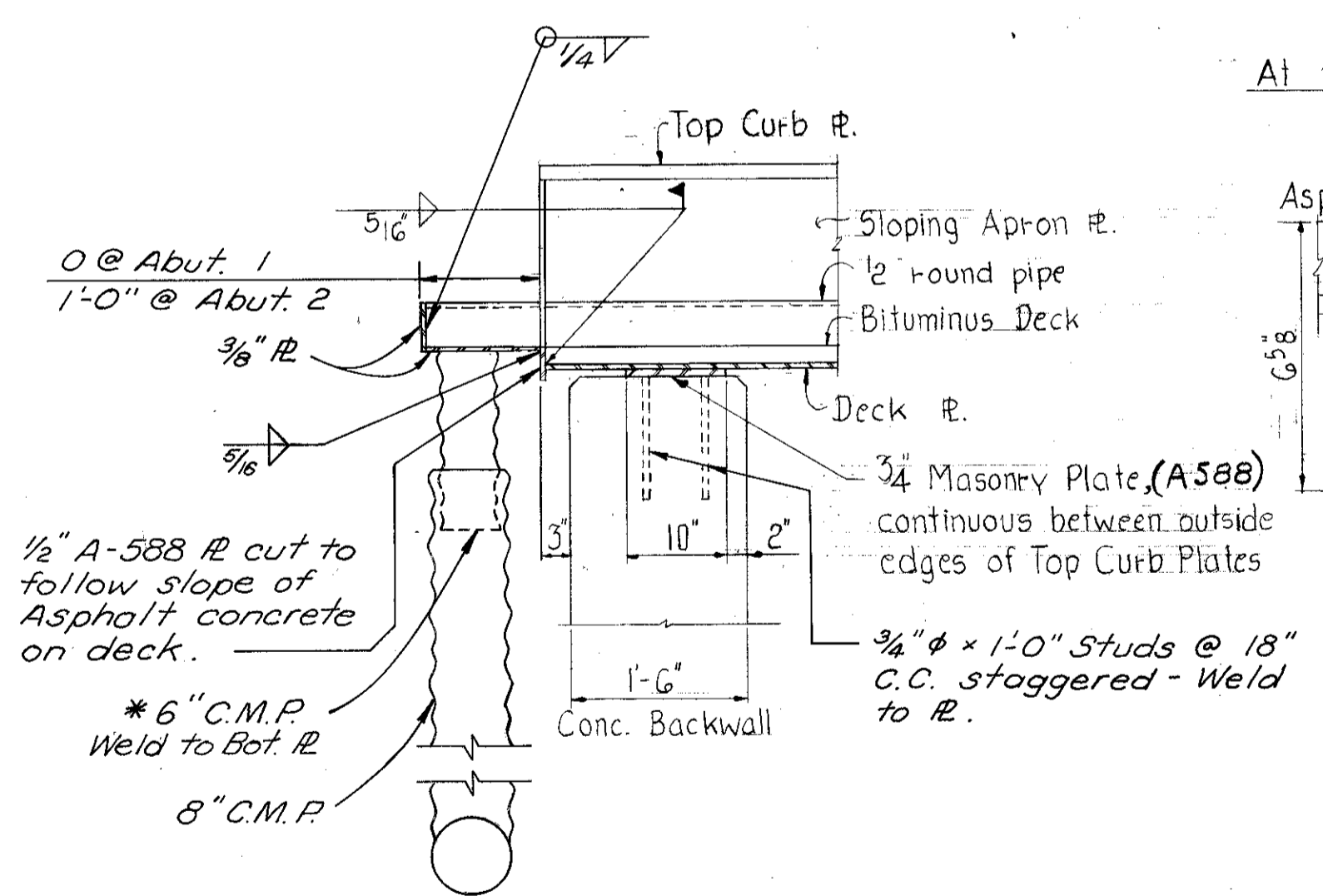
Note: Material shall be fabricated in accordance with the Fracture Control Plan. (See Proposal Note).

KING & GAVARIS CONSULTING ENGINEERS		13/18
OHIO		
SUPERSTRUCTURE DETAILS-2		
BRIDGE NO. GRE-675-0615		
I-675 UNDER RELOCATED PEN N.-		
CENTRAL RAILROAD		
GREENE COUNTY	STA: 542 + 86.23	TO
	STA: 547 + 53.01	
DESIGNED	DRAWN	TRACED
J.R.G.	J.R.G.	J.R.G.
CHECKED	REVIEWED	DATE
S.A.	S.A.	9/25/72
		4/27/82



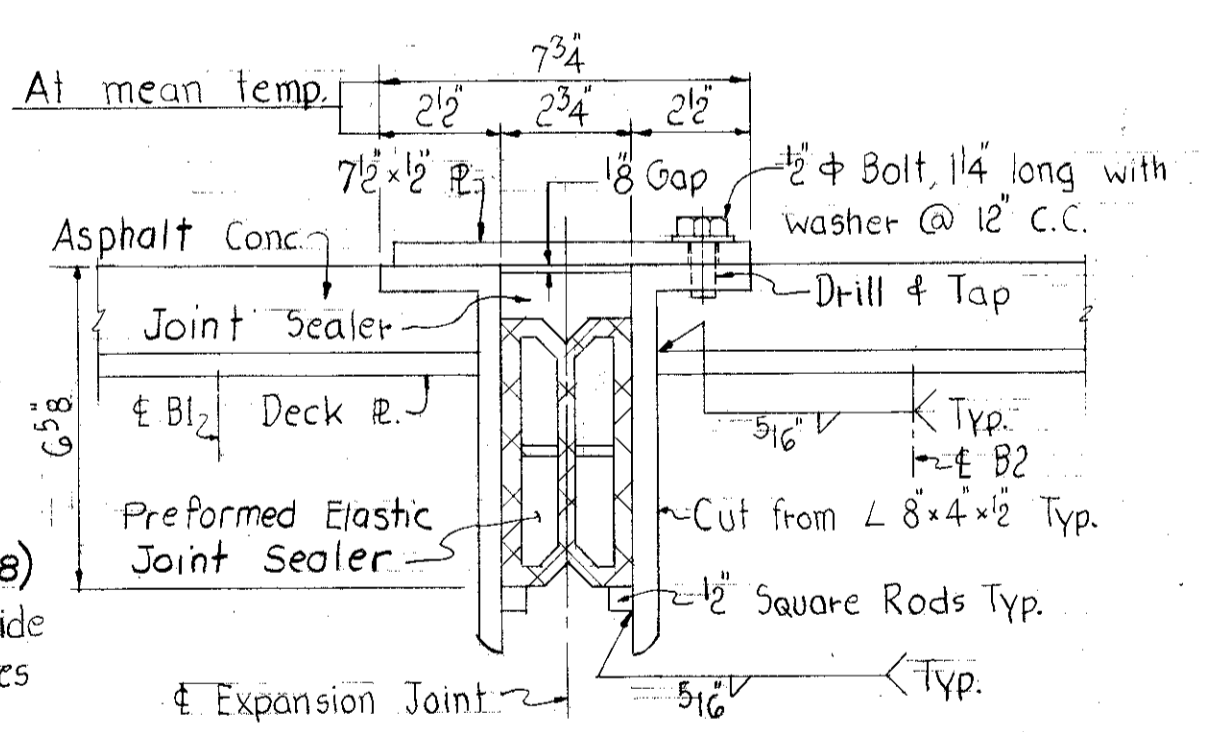
DETAILS OF DECK, APRON, CURB PLATES & EXPANSION JOINT

Deck, Apron, Curb plates and all Expansion Joint material to be ASTM A-588

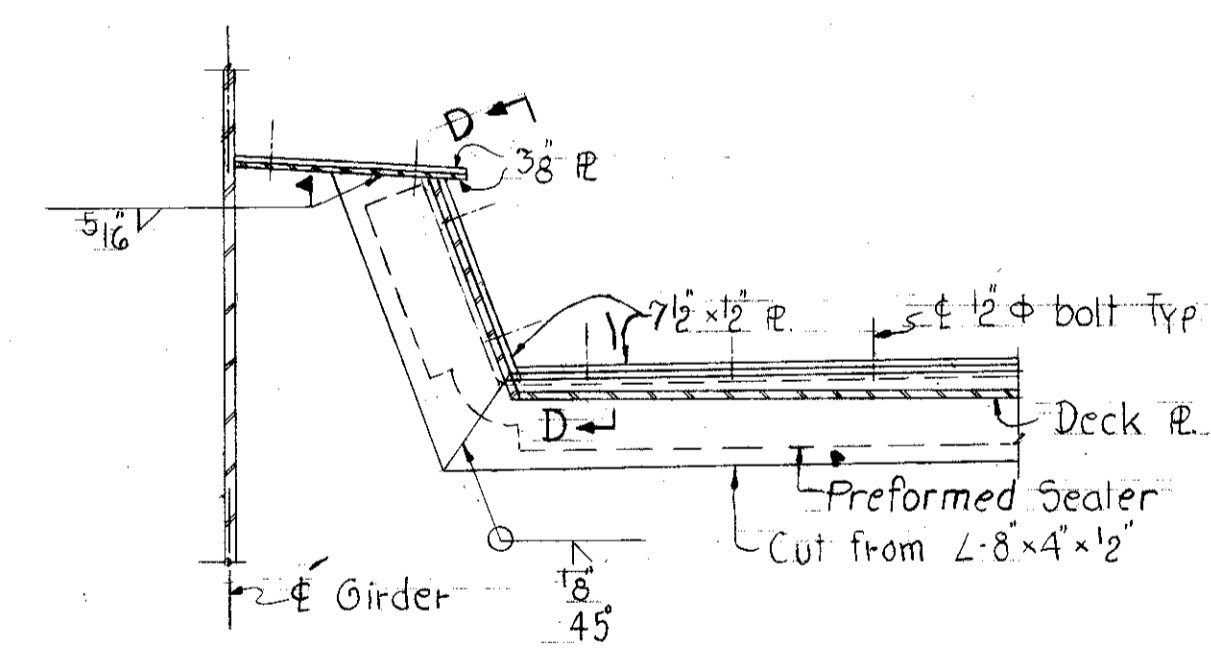


SECTION A-A

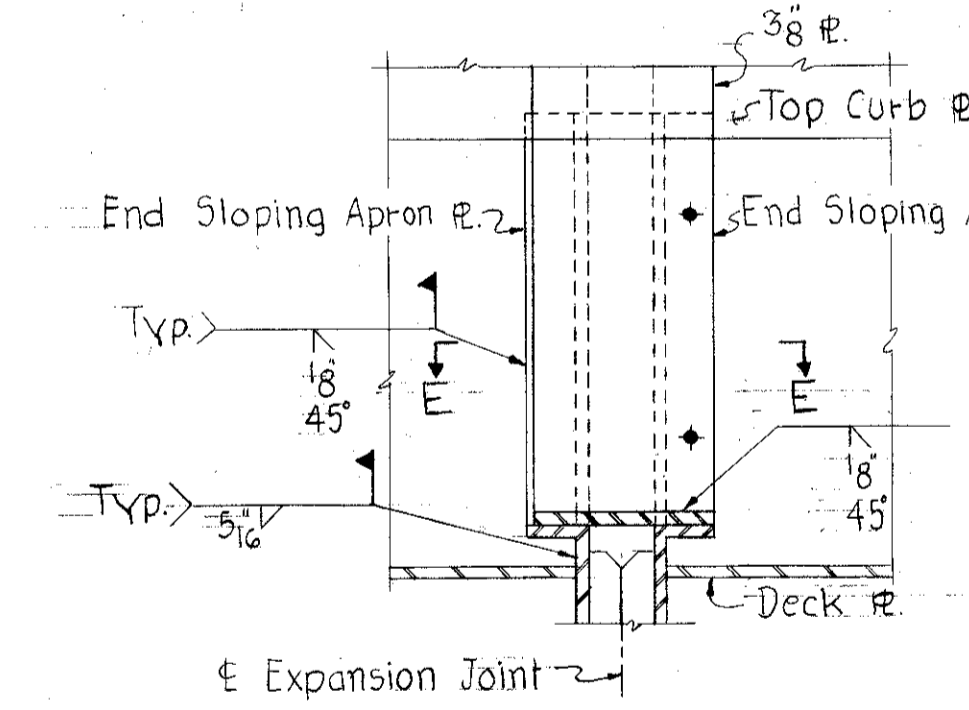
* Include with deck drain pipe for payment.



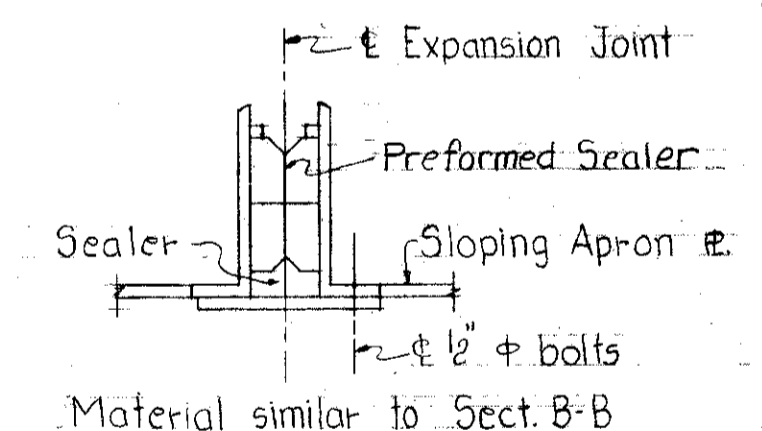
SECTION B-B
TYP. EXP. JOINT SECTION



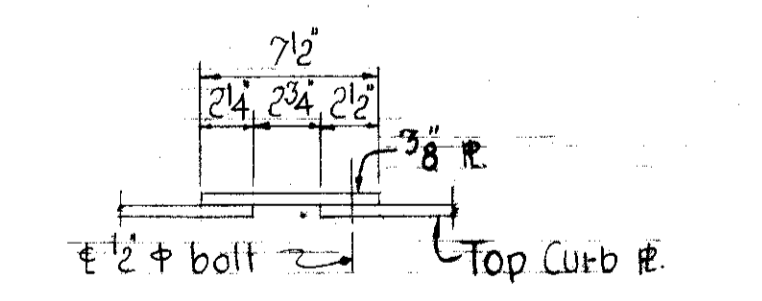
SECTION C-C



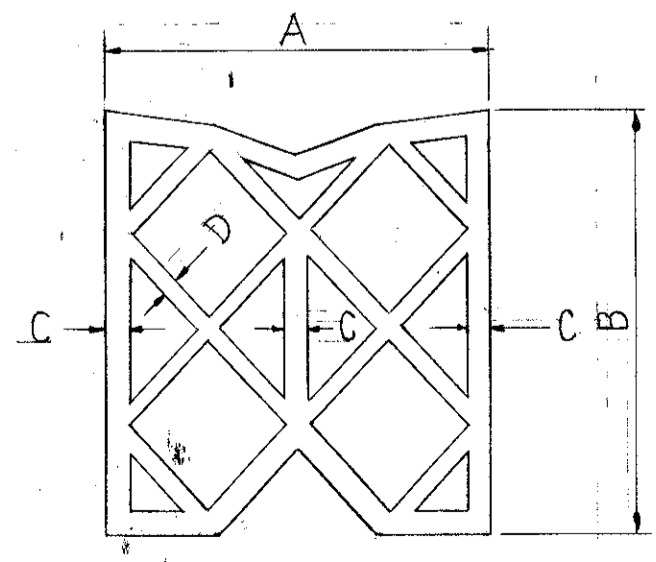
SECTION D-D



SECTION E-E



SECTION F-F

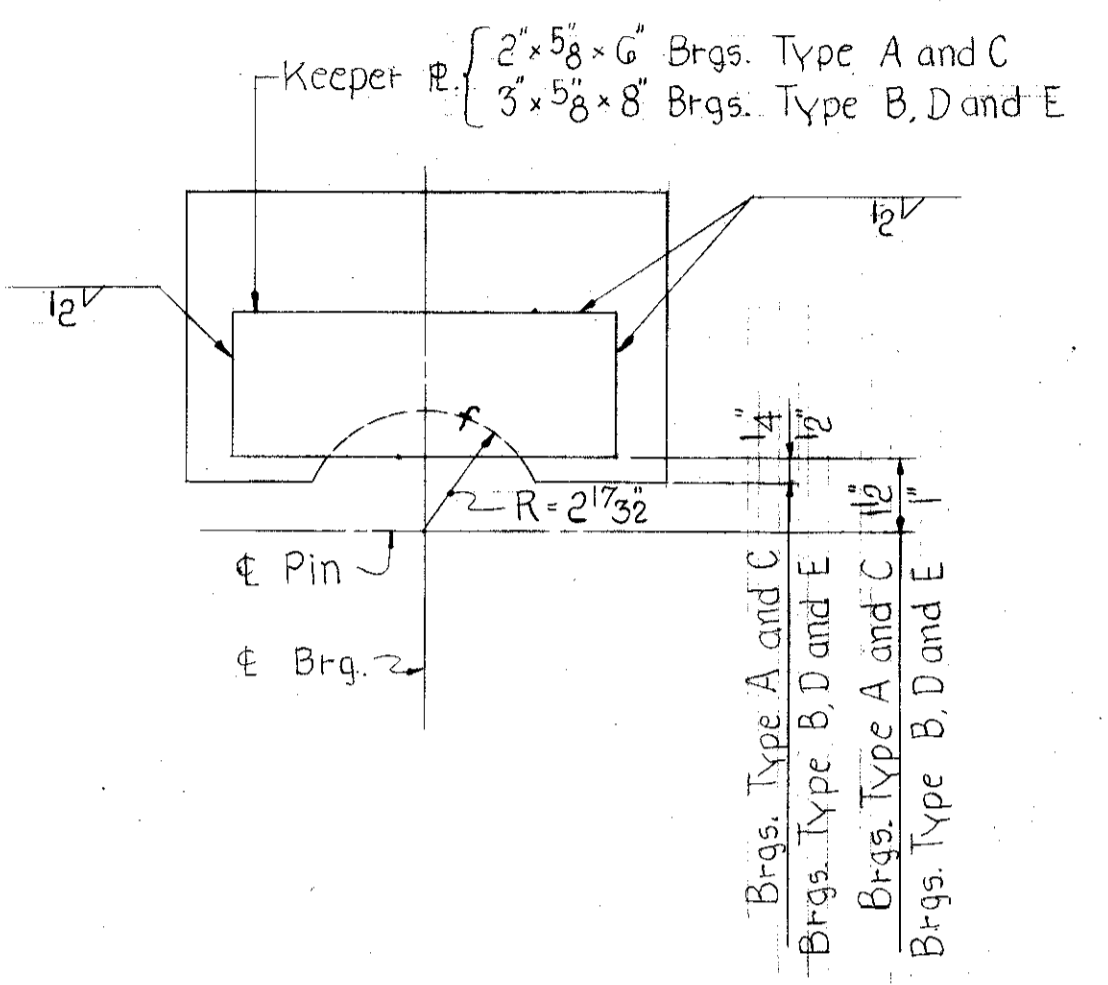
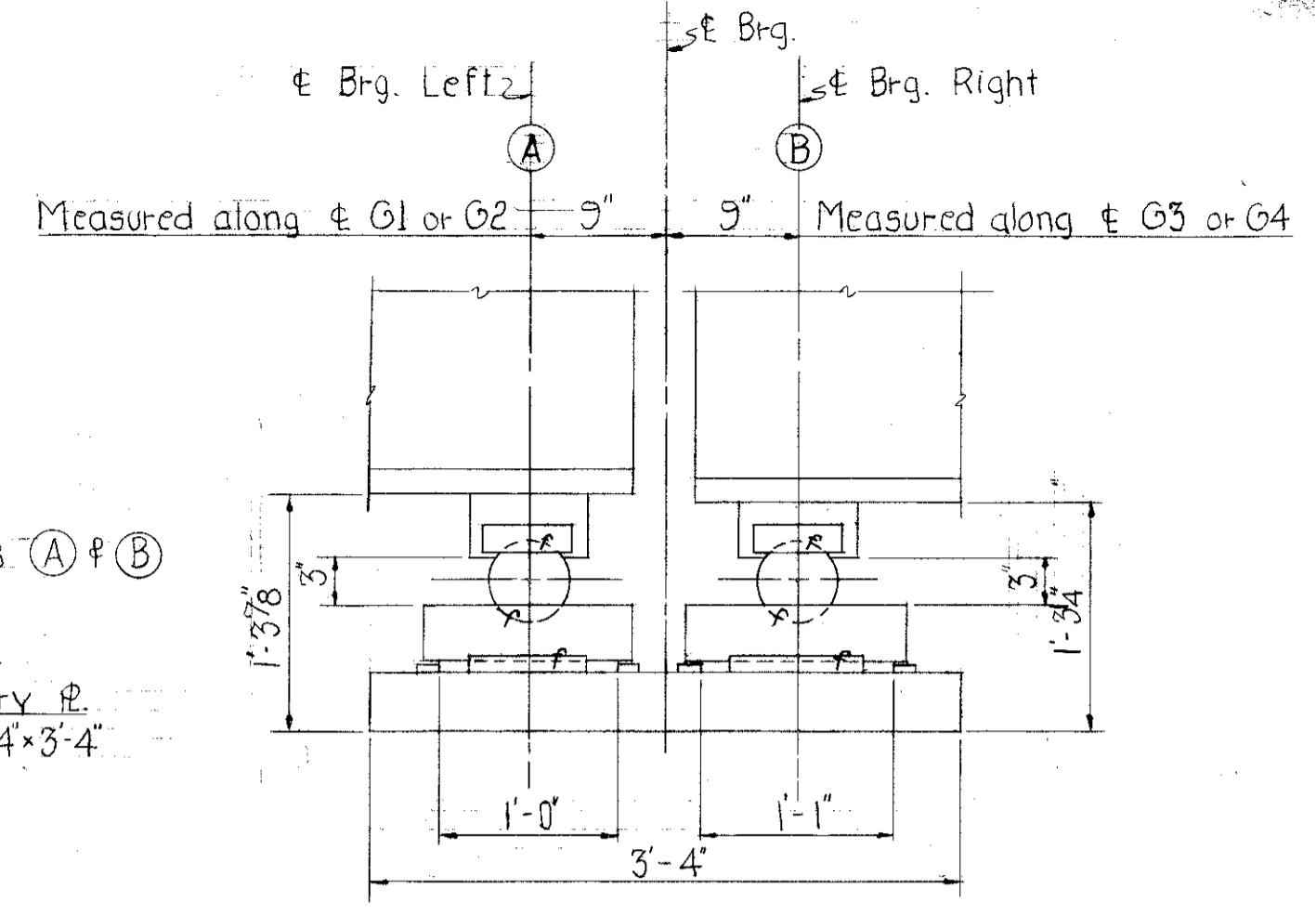
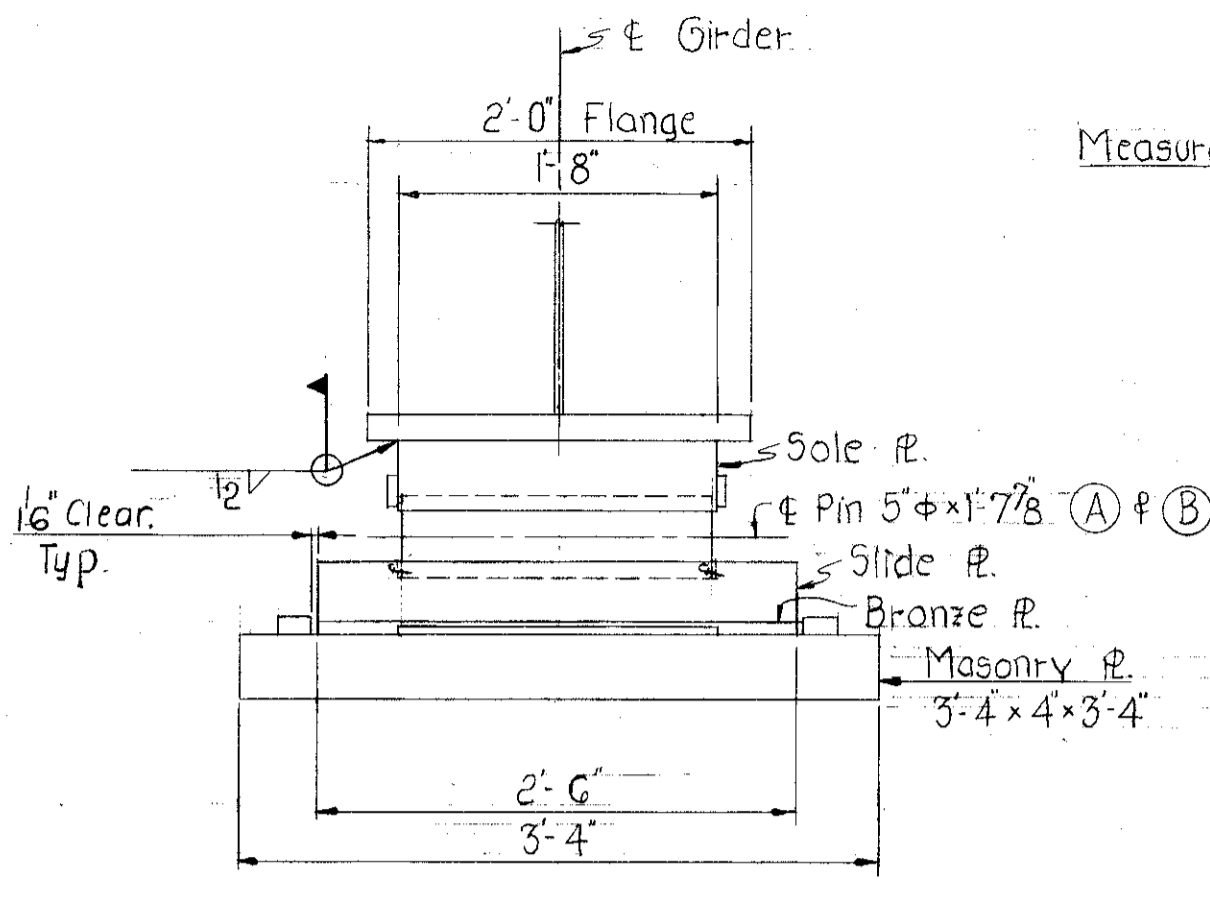
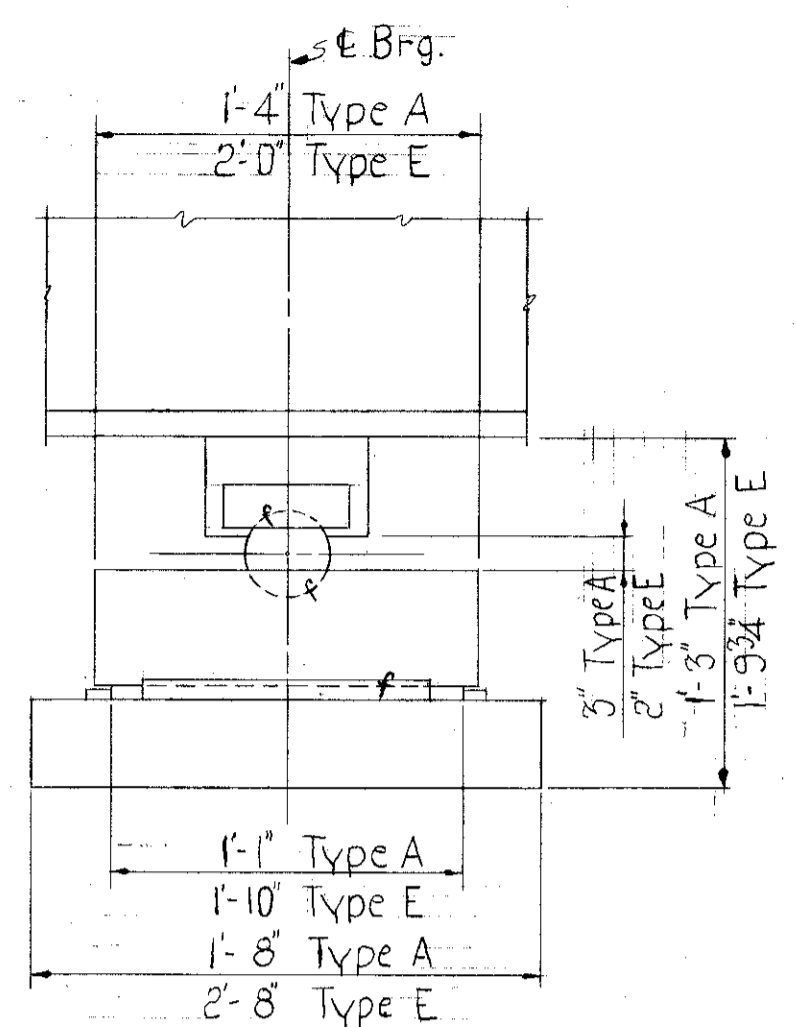
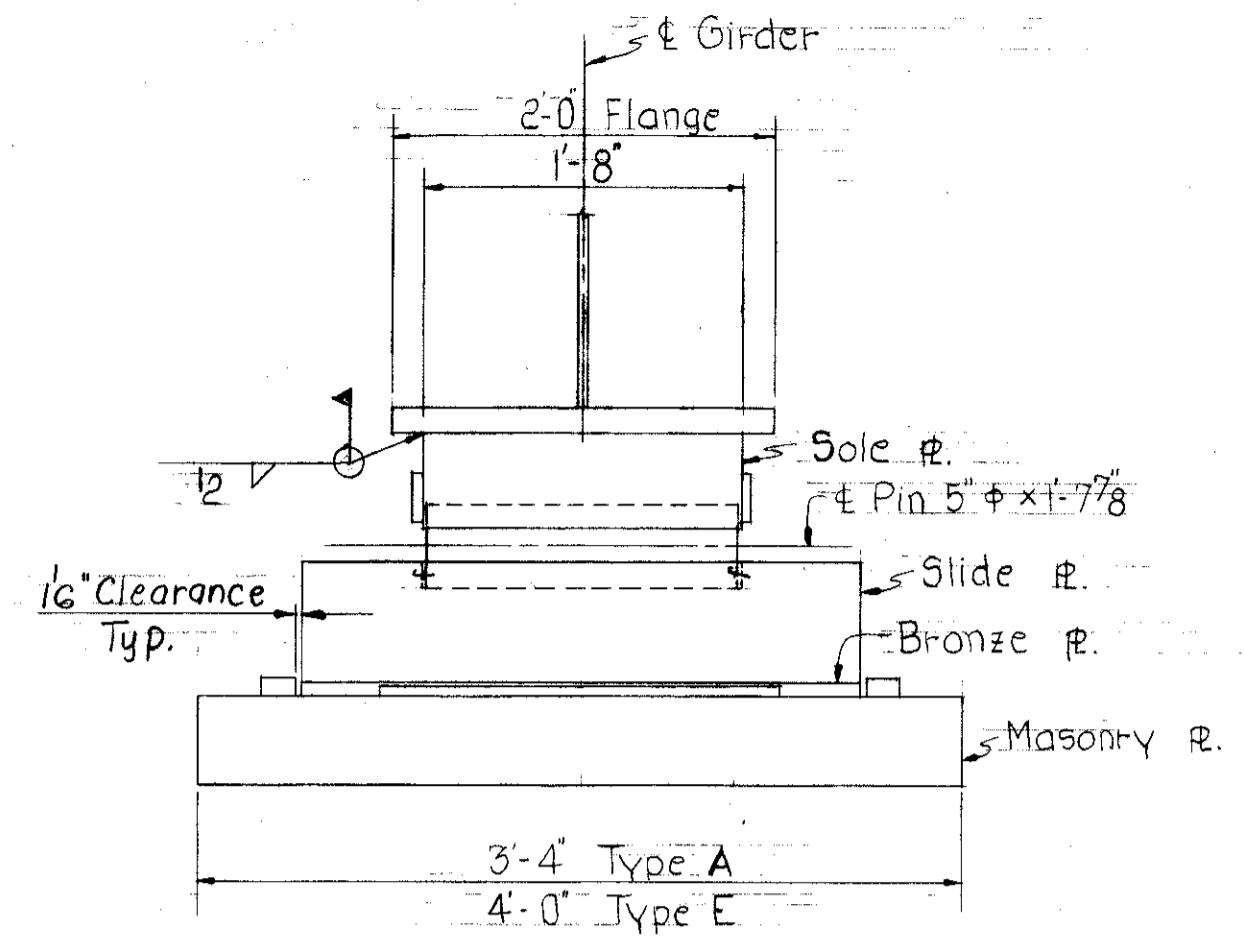


A	5' - 5 1/16" = 0
B	5 5/16" = 1/4"
C	1 1/4" + 3/64" = 1 3/32"
D	3 1/16" + 3/64" = 1 64"

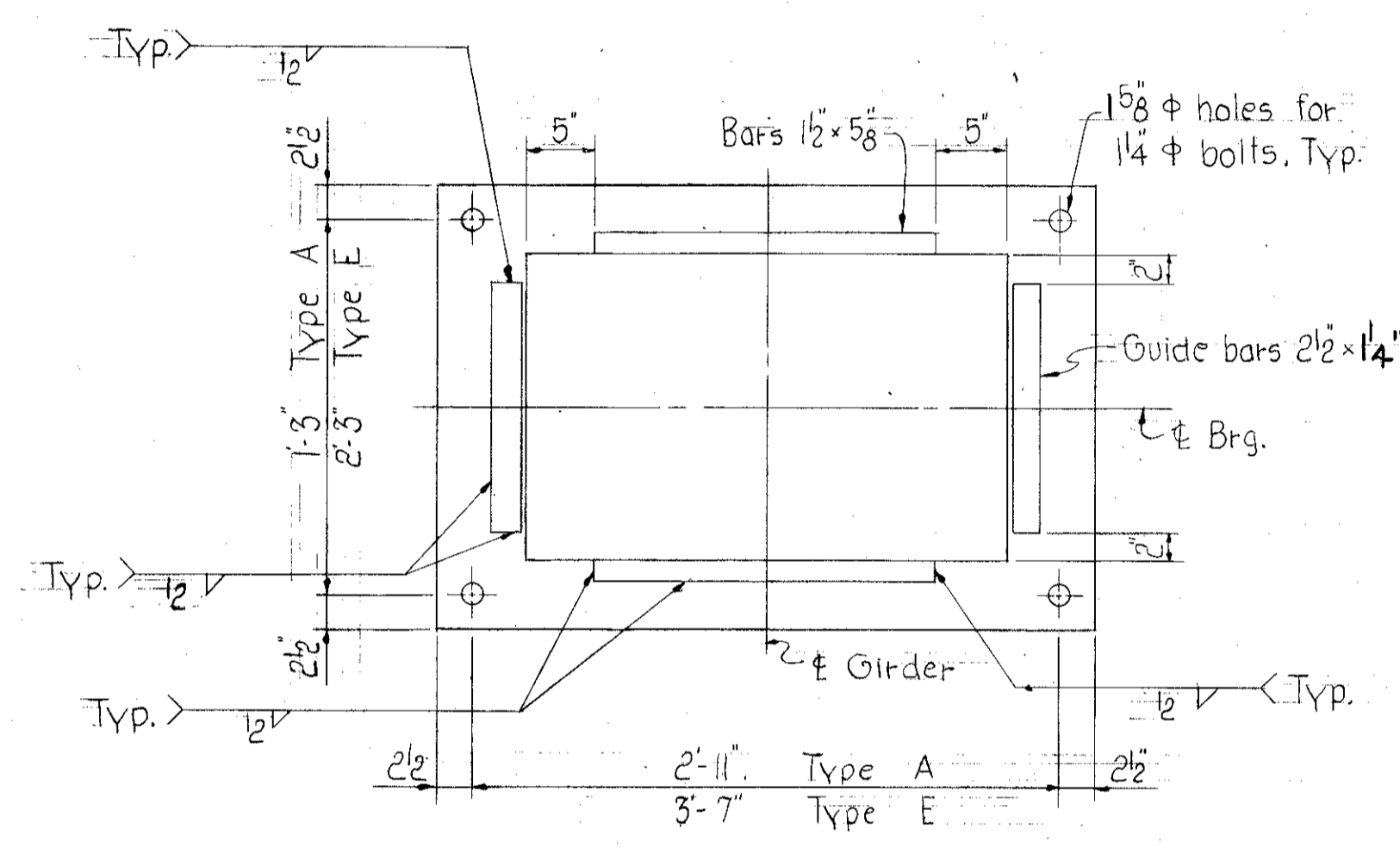
SCHEMATIC FOR PREFORMED JOINT SEALER

NOTES: Work with Sheets 11, 12, 13, 15/18
Abutment masonry plate and pier expansion joint material, except sealers, included with Item 310 for payment.

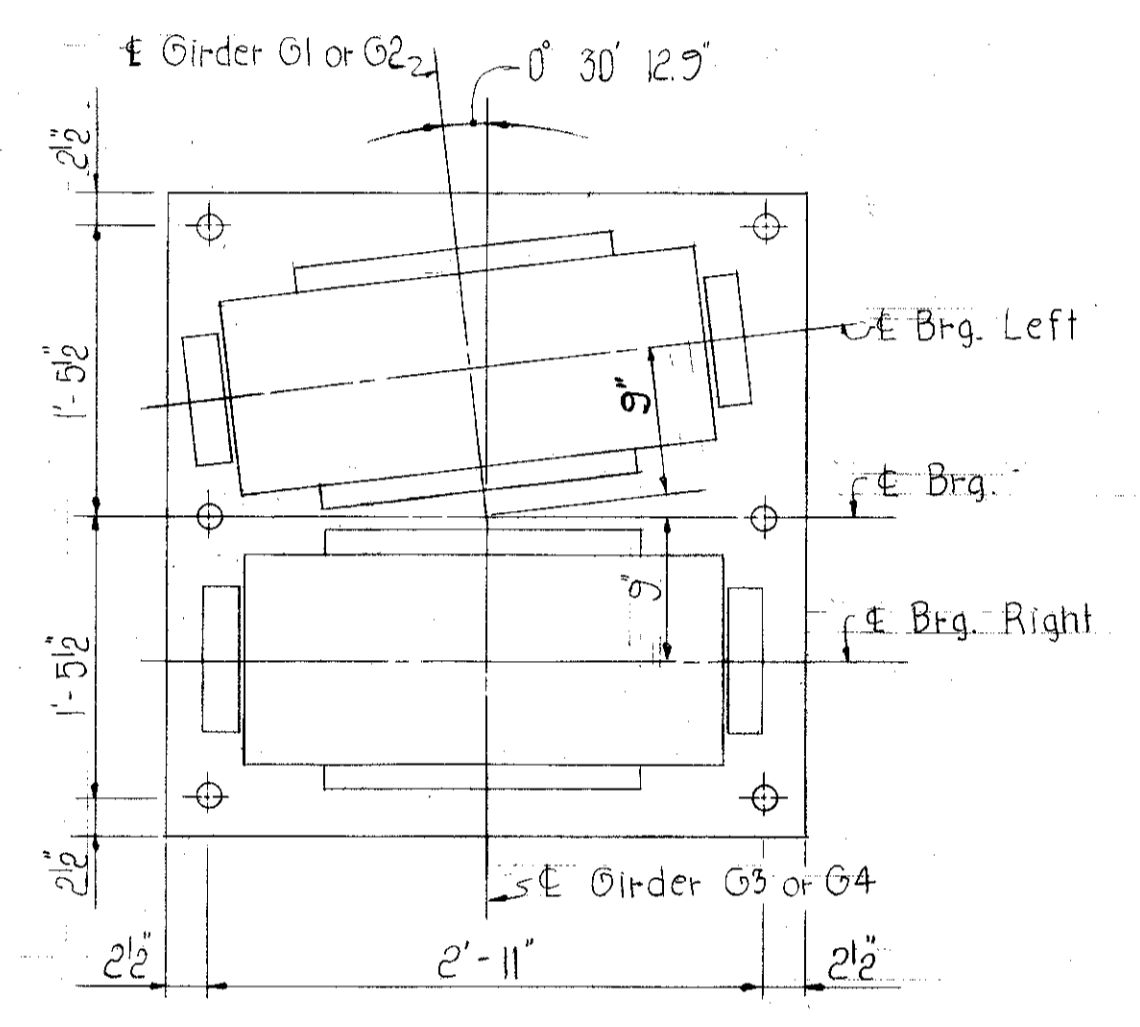
KING & GAVARIS CONSULTING ENGINEERS		14/18
OHIO		
SUPERSTRUCTURE DETAILS-3		
BRIDGE NO. GRE-675-0615		
I-675 UNDER RELOCATED PENN.-		
CENTRAL RAILROAD		
GREENE COUNTY	STA: 542 + 86.23	TO
	STA: 547 + 53.01	
DESIGNED J.R.G.	DRAWN J.R.G.	TRACED S.A.
CHECKED S.A.	REVIEWED S.A.	DATE 9/25/72
		REVISED 4-16-82



SOLE PLATE DETAIL



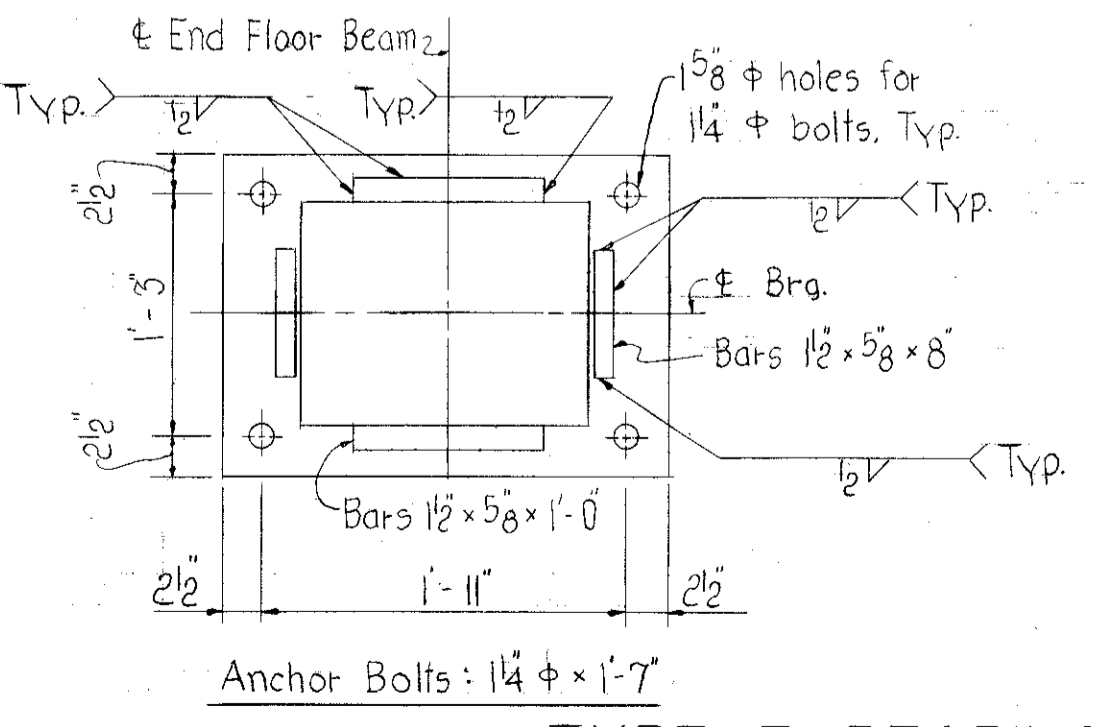
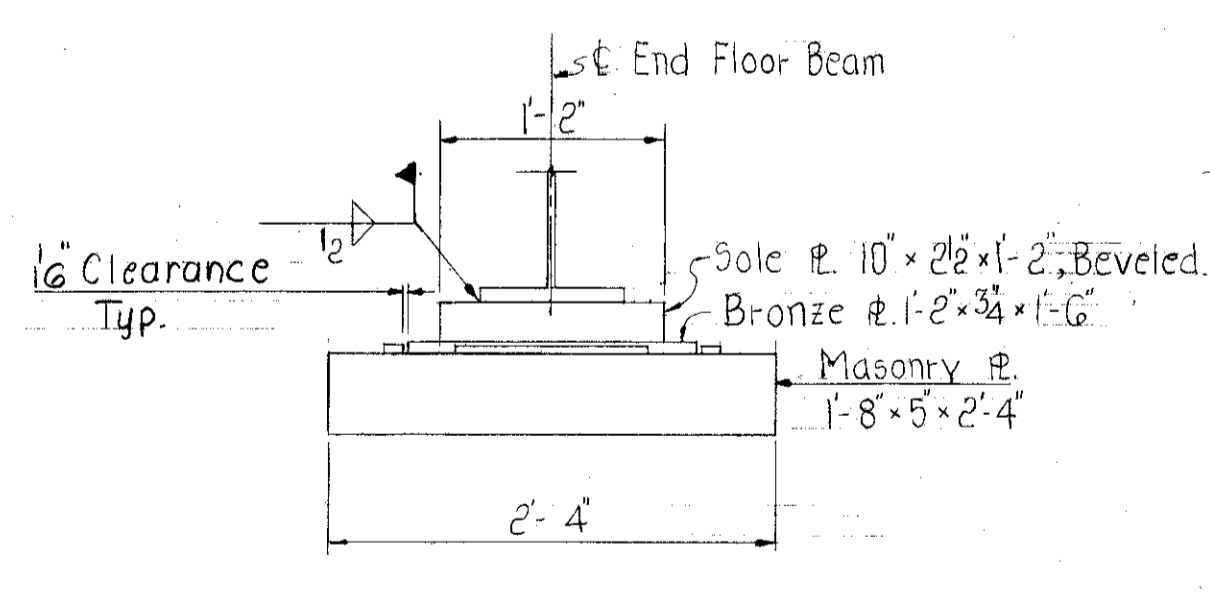
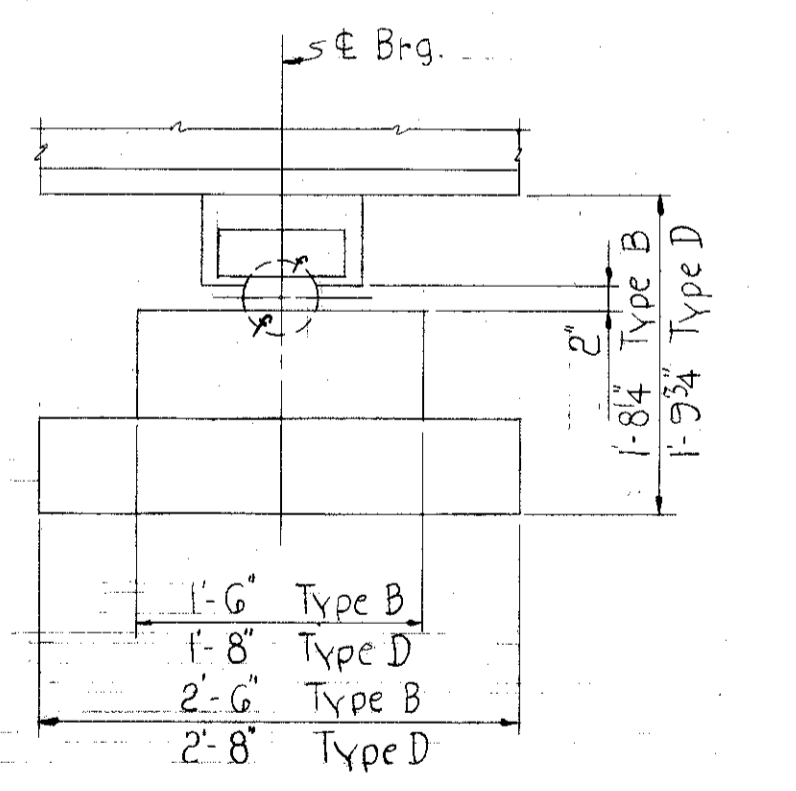
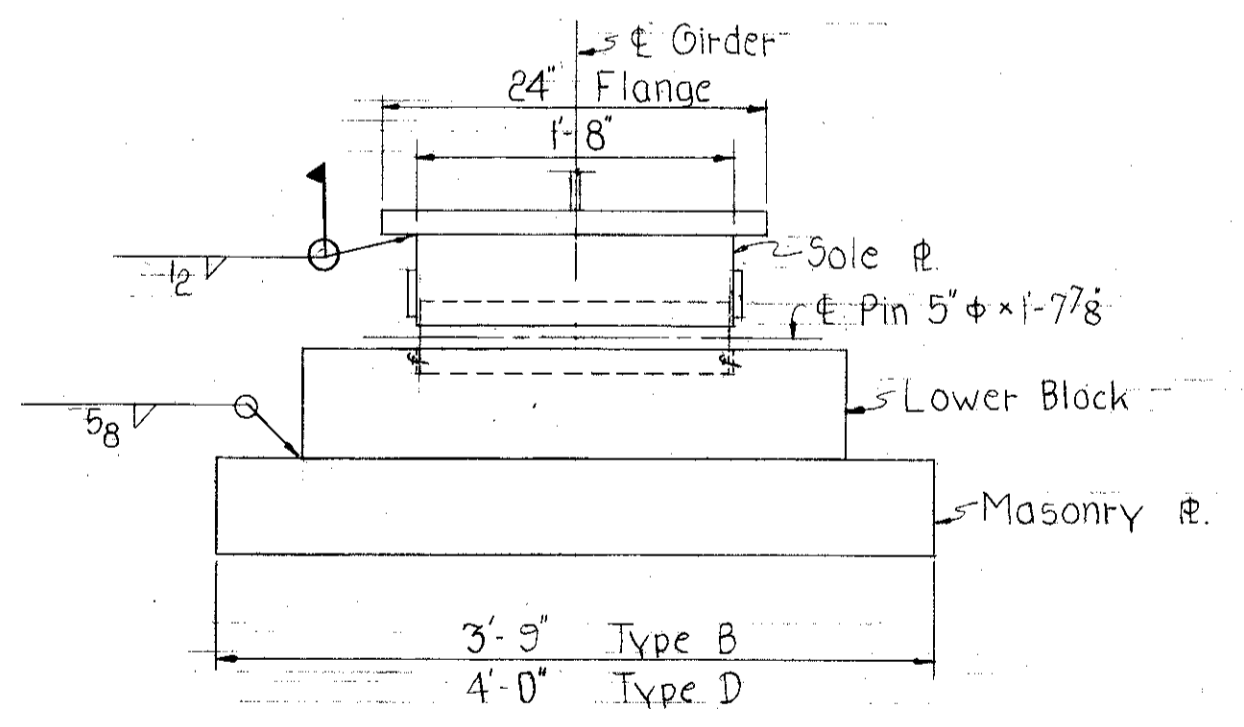
	Type A	Type E
Sole Pl.	8" x 3 1/2" x 1'-8"	10" x 6" x 1'-8"
Slide Pl.	1'-4" x 3 1/2" x 2'-6"	2'-0" x 7 1/2" x 2'-11"
Bronze Pl.	1'-1" x 3 1/4" x 2'-6"	1'-10" x 3 1/4" x 2'-11"
Masonry Pl.	1'-8" x 4 1/4" x 3'-4"	2'-8" x 5 1/2" x 4'-0"
Anchor Bolts	1 1/4" x 1'-6"	1 1/4" x 1'-7 1/2"



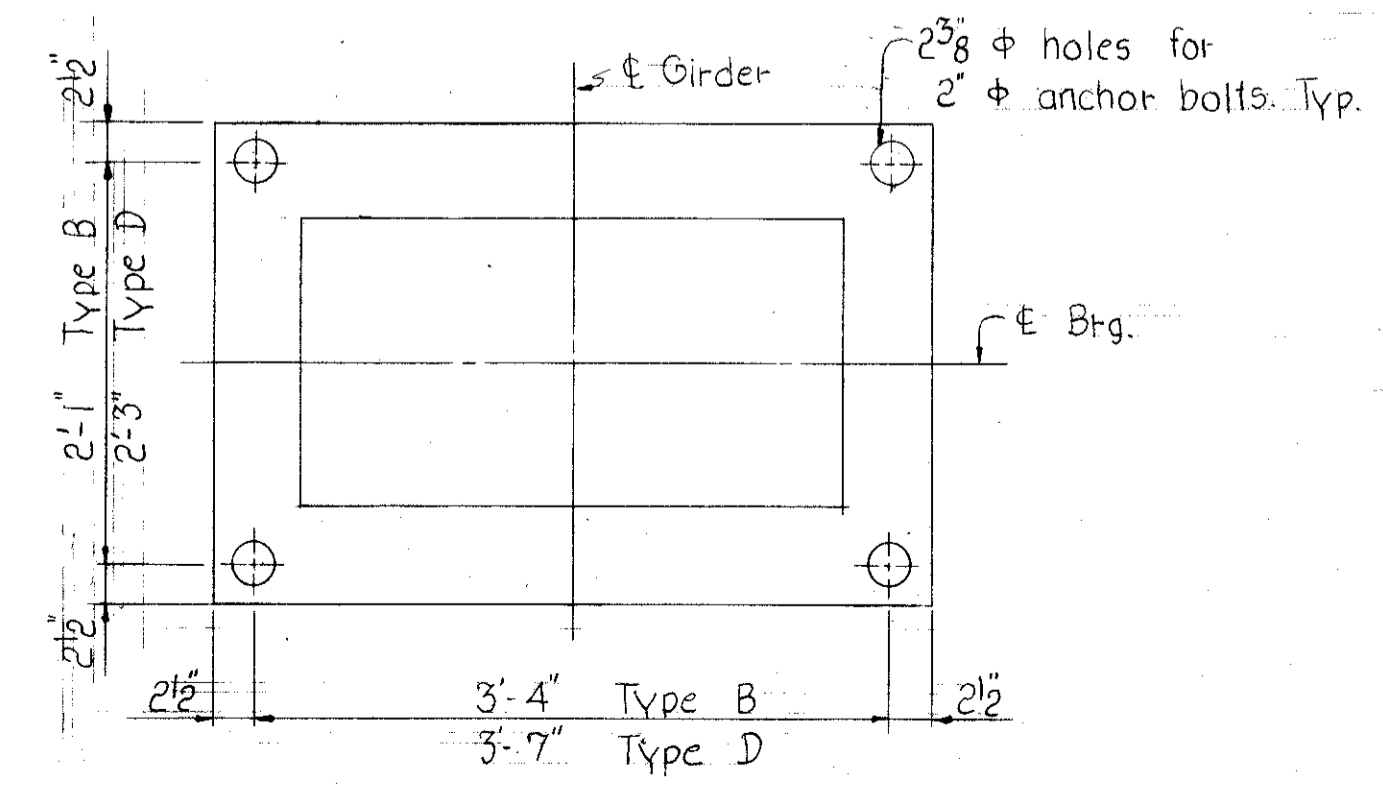
	Brg. Left (A)	Brg. Right (B)
Sole Pl.	8" x 4 3/8" x 1'-8"	8" x 3 3/4" x 1'-8"
Slide Pl.	1'-2" x 3 3/4" x 2'-6"	1'-3" x 3 3/4" x 2'-6"
Bronze Pl.	1'-0" x 3 3/4" x 2'-6"	1'-1" x 3 3/4" x 2'-6"
Anchor Bolts	1 1/4" x 1'-6"	1 1/4" x 1'-6"

Details not shown here similar to Brg. Type A

TYPE C BEARING

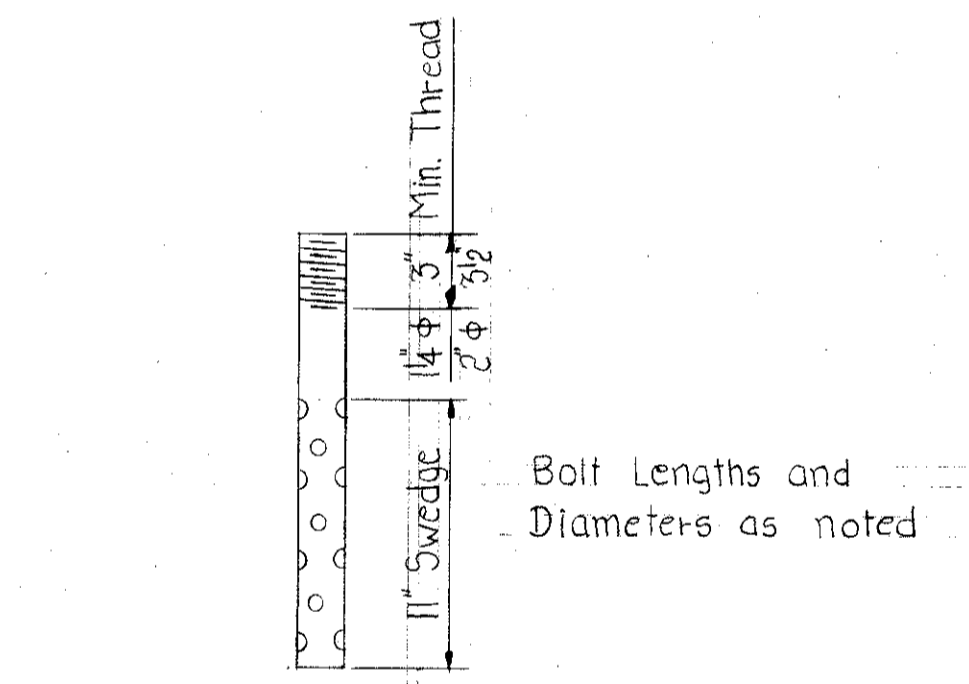


TYPE F BEARING



	Type B	Type D
Sole Pl.	10" x 5 1/2" x 1'-8"	10" x 6" x 1'-8"
Lower Block	1'-6" x 6 3/4" x 2'-10"	1'-8" x 7 3/4" x 3'-0"
Masonry Pl.	2'-6" x 6" x 3'-9"	2'-8" x 6" x 4'-0"
Anchor Bolts	2" x 1'-8 1/2"	2" x 1'-8 1/2"

TYPE B & TYPE D BEARING



Anchor Bolts to be furnished with standard hex nuts and 1/4" plate washers.

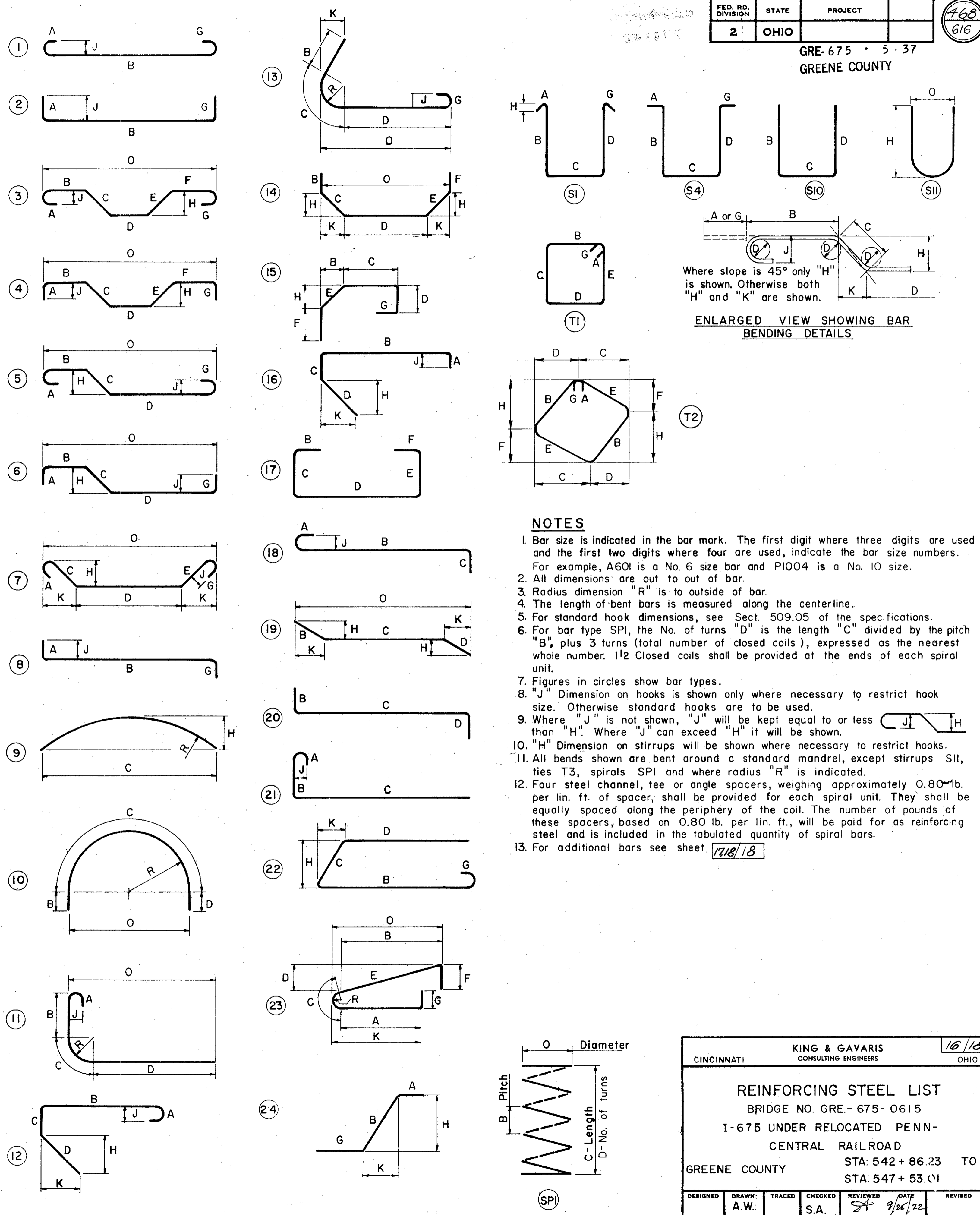
ANCHOR BOLT DETAILS

NOTES: End of Pins, contact surfaces on Guide Bars and Keeper Plates to be finished.
Masonry Plates to be set on three layers of Red-Lead and 20 ounce canvas.
Work with Sheets 11, 12, 13, 14, 18
All surfaces indicated to be finished shall be to ASA 125 Scale.

KING & GAVARIS CONSULTING ENGINEERS		15/18
SUPERSTRUCTURE DETAILS - 4		
BRIDGE NO. GRE-675-0615		
I-675 UNDER RELOCATED PENN.-		
CENTRAL RAILROAD		
GREENE COUNTY	STA: 542 + 86.23	TO
	STA: 547 + 53.01	
DESIGNED	DRAWN	TRACED
J.R.G.	J.R.G.	S.A.
CHECKED	REVIEWED	DATE
S.A.	8/23	9/25/72
REVISED		

GRE-675-5-37
GREENE COUNTY

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
ABUTMENT					Reinforcing steel in Abutment No. 1 shall have the suffix "A"												
A501	15	18'-8"	292	Str.													
A502	15	Varies 23'-9" to 26'-6" by 2'-8" L.C.D.	393	Str.													
A503	16	Varies 8'-3" to 21'-10" by 10'-2" L.C.D.	254	Str.													
A504	3	Varies 2'-9" to 6'-6" by 10'-2" L.C.D.	14	Str.													
A601	18	27'-8"	748	Str.													
A602	14	28'-0"	589	Str.													
A603	26	8'-8"	338	S10		1'-11"	5'-2"	1'-11"									
A604	10	Varies 11'-3" to 12'-3" by 1'-0" L.C.D.	176	S10		5'-1"	Varies 1'-5" to 2'-5" by 1'-0" L.C.D.	5'-1"									
A605	6	11'-0"	99	S10		5'-1"	1'-2"	5'-1"									
A606	20	14'-0"	421	S10		6'-7"	1'-2"	6'-7"									
A607	3	8'-8"	39	Str.													
A608	6	25'-6"	230	Str.													
A609	8	5'-5"	65	20		2'-2"	2'-9"	10"									
A610	8	5'-11"	71	24	11"	2'-9"		10"									
AG11	4	7'-0"	47	19		3'-6"	4'-6"							3'-3"	1'-3 1/4"	5'-9 1/4"	
AG12	20	11'-9"	353	Str.													
AG13	36	28'-2"	1523	Str.													
AG14	2	28'-4"	85	Str.													
AG15	4	Varies 21'-9" to 24'-9" by 1'-6" L.C.D.	28	Str.													
AG16	14	11'-9"	247	Str.													
AG17	13	Varies 14'-11" to 15'-2" by 3'-4" L.C.D.	343	22			Varies 7'-6" to 8'-2" by 3'-8" L.C.D.	Varies 6'-11" to 7'-1" by 4'-2" L.C.D.				8"	Varies 6'-9" to 7'-3" by 4'-2" L.C.D.	Varies 1'-4 1/2" to 2'-9" by 1'-8" L.C.D.			
AG18	8	Varies 8'-0" to 13'-0" by 1'-6" L.C.D.	161	22			Varies 5'-7" to 6'-3" by 1'-6" L.C.D.	6'-11"				8"					
AG19	18	Varies 4'-0" to 36'-4" by 3'-6" L.C.D.	491	Str.													
AG20	2	30'-8"	92	Str.													
AG21	2	31'-9"	95	Str.													
AG22	2	34'-11"	105	Str.													
AG23	4	35'-8"	214	Str.													
AG24	2	38'-9"	116	Str.													
AG25	2	8'-0"	24	Str.													
AG26	8	Varies 7'-1" to 11'-9" by 2'-1" L.C.D.	113	Str.													
AG27	44	5'-6"	363	Str.													
AG28	39	6'-8"	391	1	8"	6'-0"											
AG29	39	7'-8"	449	1	8"	7'-0"											
AG30	24	28'-6"	1027	Str.													
AG31	25	30'-1"	1130	Str.													
AG32	14	7'-2"	151	1	8"	6'-6"											
AG33	14	5'-8"	119	1	8"	5'-0"											
AG34	4	12'-0"	72	Str.													
AG35	3	21'-0"	95	Str.													
AG36	12	36'-6"	658	Str.													
AG37	4	14'-0"	84	Str.													
AG38	9	4'-9"	64	1	8"	4'-1"											
AG39	76	7'-3"	828	Str.													
AG40	7	5'-11"	62	1	8	5'-3"											
AG41	39	9'-5"	552	1	8	8'-9"											
AG42	1	24'-0"	36	Str.													
AG43	7	6'-8"	70	1	8"	6'-0"											
AG44	9	5'-6"	74	1	8	4'-0"											
A701	39	Varies 11'-6" to 14'-3" by 1'-8" L.C.D.	1026	Str.													
A702	14	15'-4"	439	22			9'-7"	5'-1"				10"	5'-0"	1'-0"			
A703	39	8'-10"	704	1	10"	8'-0"											
A704	14	Varies 8'-3" to 13'-2" by 4'-2" L.C.D.	303	Str.													
A801	20	15'-11"	850	Str.													
A802	19	7'-0"	355	Str.													
A901	39	Varies 22'-1" to 22'-8" by 3'-6" L.C.D.	2967	22			Varies 1'-8" to 1'-3" by 3'-6" L.C.D.	9'-5"				1'-3"	9'-3"	1'-0 1/4"			
A1001	39	20'-2"	3384	11	1'-5"	8'-10"	1'-11"	8'-0"							9'-3"	1'-3"	
		Total	24,019														



CINCINNATI		KING & GAVARIS CONSULTING ENGINEERS		16/18	OHIO
REINFORCING STEEL LIST					
BRIDGE NO. GRE-675-0615					
I-675 UNDER RELOCATED PENN- CENTRAL RAILROAD					
GREENE COUNTY			STA: 542 + 86.23	TO	
			STA: 547 + 53.01		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
	A.W.		S.A.		9/26/22

AUG 29 1937

469
6/6

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
ABUTMENT No. 2					Reinforcing steel in Abutment No. 2 shall have the suffix "B"												
A501	23	23' 4"	560	Str.													
A502	17	Varies 18' 10" to 26' 6" by 5' 3/4" I.C.D.	402	Str.													
A503	17	Varies 12' 7" to 18' 10" by 4' 3/8" I.C.D.	279	Str.													
A504	14	Varies 8' 6" to 12' 10" by 4' 1/4" I.C.D.	156	Str.													
A505	3	Varies 2' 10" to 3' 5" by 1' 3/4" I.C.D.	13	Str.													
A506	10	Varies 2' 5" to 2' 7" by 1' 1/4" I.C.D.	286	Str.													
A601	80	23' 1"	2774	Str.													
A602	38	10' 3"	585	Str.		1' 11"	6' 9"	1' 11"									
A603	56	11' 7"	974	Str.													
A604	16	Varies 4' 3" to 7' 2" by 2' 2" I.C.D.	137	Str.													
A605	11	Varies 2' 8" to 3' 1" by 1' 7/8" I.C.D.	57	Str.													
A606	28	Varies 15' 11" to 19' 11" by 1' 3/4" I.C.D.	754	22		8' 6"	Varies 6' 11" to 10' 11" by 1' 3/4" I.C.D.				8"	Varies 6' 9" to 10' 8" by 1' 3/4" I.C.D.	Varies 1' 4 1/4" to 2' 1 3/8" by 3/8" I.C.D.				
A607	3	Varies 11' 0" to 11' 9" by 4' 1/2" I.C.D.	51	Str.													
A608	27	14' 8"	595	22		7' 3"	6' 11"				8"	6' 9"	1' 4 1/4"				
A609	19	Varies 6' 8" to 11' 0" by 2' 2" I.C.D.	252	Str.													
A610	8	13' 5"	161	22		6' 0"	6' 11"				8"	6' 9"	1' 4 1/4"				
A611	4	Varies 2' 11" to 5' 6" by 1' 3/8" I.C.D.	25	Str.													
A612	48	31' 8"	2283	Str.													
A613	10	Varies 6' 7" to 31' 8" by 6' 3/4" I.C.D.	287	Str.													
A614	2	32' 7"	98	Str.													
A615	3	Varies 8' 5" to 9' 8" by 1' 2" I.C.D.	41	Str.		10"	Varies 1' 11" to 5' 2" by 1' 2" I.C.D.	6' 0"									
A616	10	Varies 6' 9" to 8' 1" by 6' 5" I.C.D.	283	Str.													
A617	2	32' 3"	97	Str.													
A618	2	32' 0"	96	Str.													
A619	4	26' 8"	160	Str.													
A620	110	8' 0"	1322	Str.													
A621	2	28' 8"	86	Str.													
A622	14	14' 0"	294	Str.													
A623	8	Varies 5' 10" to 8' 1" by 8' 1/4" I.C.D.	225	Str.													
A624	2	7' 4"	22	Str.													
A625	38	17' 7"	1004	Str.													
A626	1	4' 6"	7	Str.		2' 8"	1' 11"					2' 1"	1' 8"	3' 7"			
A627	4	2' 9"	17	Str.													
A628	2	8' 10"	27	Str.		3' 7"	5' 4"					3' 4"	1' 5"	6' 9"			
A629	3	9' 1"	41	Str.		2' 8"	6' 6"					2' 1"	1' 8"	8' 2"			
A630	3	8' 8"	39	Str.		1' 11"	6' 10"					1' 6"	1' 3"	8' 4"			
A631	6	30' 0"	270	Str.													
A632	23	14' 4"	495	Str.		6' 8"	1' 4"	6' 8"									
A633	2	13' 4"	40	Str.		6' 2"	1' 4"	6' 2"									
A634	26	11' 4"	443	Str.		5' 2"	1' 4"	5' 2"									
A635	4	Varies 17' 3" to 24' 4" by 1' 4" I.C.D.	116	Str.		6' 6"	3' 11"	Varies 3' 8" to 7' 9" by 1' 4 1/4" I.C.D.	9' 3"		10"	6' 6"					
A636	7	Varies 12' 7" to 22' 0" by 8' 2" I.C.D.	208	Str.		6' 6"	3' 11"	Varies 4' 0" to 8' 5" by 8' 2" I.C.D.	9' 3"		10"	6' 6"					
A637	1	12' 7"	19	Str.													
A638	2	9' 2"	28	Str.													
A639	2	6' 2"	19	Str.													
A640	2	3' 0"	9	Str.													
A641	3	23' 7"	106	Str.		10' 0"	13' 9"										
A642	4	3' 6"	21	Str.													
A643	1	8' 8"	13	Str.		10"	2' 2"	6' 0"									
A644	4	10' 0"	60	Str.		2' 4"	7' 9"					1' 5 3/4"	1' 10"	9' 7"			
A645	4	12' 10"	77	Str.		3' 6"	9' 6"										
A646	4	5' 3"	32	Str.		2' 0"	3' 4"					1' 7 1/2"	1' 2 1/2"	4' 6 1/2"			
A647	1	7' 5"	11	Str.		3' 9"	3' 9"					3' 1/2"	2' 1"	5' 10"			
A648	5	7' 10"	59	Str.		2' 9"	2' 8"	2' 9"									
A649	4	3' 0"	18	Str.													

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
A650	59	9' 11"	879	1	8"	9' 3"											
A651	42	24' 3"	1530	Str.													
A652	14	25' 2"	529	Str.													
A653	25	6' 2"	232	1	8"	5' 10"											
A654	25	5' 11"	222	1	8"	5' 3"											
A655	18	22' 0"	595	Str.													
A656	7	17' 3"	181	Str.													
A657	2	9' 2"	28	Str.													
A658	24	19' 6"	703	Str.													
A659	1	9' 10"	15	Str.													
A660	2	14' 0"	42	Str.													
A661	60	22' 6"	2028	Str.													
A662	15	9' 8"	218	1	8"	9' 0"											
A663	14	8' 5"	177	1	8"	7' 9"											
A664	27	7' 8"	311	1	8"	7' 0"											
A665	28	7' 1"	298	1	8"	6' 5"											
A666	28	6' 10"	287	1	8"	6' 2"											
A667	28	6' 1"	256	1	8"	5' 5"											
A668	28	5' 6"	231	1	8"	4' 10"											
A669	9	5' 7"	75	1	8"	4' 7"											
A670	9	4' 10"	65	1	8"	4' 2"											
A671	96	6' 0"	865	Str.													
A672	20	13' 0"	571	Str.													
A673	22	5' 0"	165	Str.													
A674	1	5' 3"	8	19		3' 9"	1' 7"					3' 1/2"	2' 1"	3' 8"			
A701	14	Varies 9' 10" to 11' 1" by 1' 3/8" I.C.D.	287	Str.													
A702	25	12' 9"	652	Str.													
A703	59	9' 4"	1126	1	10"	8' 6"											
A704	27	9' 1"	501	1	10"	8' 3"											
A801	30	19' 9"	1582	Str.													
A802	29	7' 3"	561	Str.													
A803	15	Varies 12' 0" to 14' 6" by 2' 8" I.C.D.	531	Str.													
A804	27	21' 3"	1532	22		10' 3"	10' 2"				1' 7"	10' 0"	2' 0"				
A805	15	10' 6"	421	1	1' 1"	9' 5"											
A806	14	10' 8"	399	1	1' 1"	9' 7"											
A901	14	24' 6"	1166	22		12' 6"	11' 0"				1' 3"	10' 9"	2' 1 1/2"				
A902	25	26' 6"	2253	22		13' 6"	12' 0"				1' 3"	11' 9"	2' 4				

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
PIER No. 1					<i>Reinforcing steel in Pier No. 1 shall have the suffix "A"</i>												
P501	32	19'-7"	654	5T													
P502	42	18'-1"	792	5T													
P503	26	18'-7"	504	T1	5"	3'-2"	3'-11"	5'-2"	3'-11"		5"						
P504	24	13'-5"	336	T2	5"	3'-0 3/4"	2'-7"	2'-7"	3'-5 3/4"	2'-4"	5"	1'-7"					
P601	8	8'-0"	106	S10		2'-0"	5'-2"	2'-0"									
P602	10	7'-7"	114	S10		2'-0"	3'-11"	2'-0"									
P1101	44	19'-9"	4817	5T													
P1102	44	8'-0"	2065	11		7"	2'-1"	6'-2"							7'-7"	1'-5"	
P1103	28	19'-2"	2851	1	1'-7"	16'-0"					1'-7"						
P1104	28	17'-8"	2628	1	1'-7"	14'-6"					1'-7"						
		Total = 14,667															
PIER No. 2					<i>Reinforcing steel in Pier No. 2 shall have the suffix "B"</i>												
P501	38	18'-8"	740	5T													
P502	40	20'-11"	873	5T													
P503	24	20'-5"	511	T1	5"	5'-2"	4'-10"	5'-2"	4'-10"		5"						
P504	22	14'-9"	338	T2	5"	3'-7 1/4"	2'-3"	2'-11"	3'-6 1/2"	2'-9"	5"	2'-1"					
P601	12	8'-0"	159	S10		2'-0"	5'-2"	2'-0"									
P602	12	8'-6"	153	S10		2'-0"	4'-10"	2'-0"									
P1101	56	18'-0"	5603	5T													
P1102	56	8'-0"	2628	11		7"	2'-1"	6'-2"							7'-7"	1'-5"	
P1103	24	19'-2"	2444	1	1'-7"	16'-0"					1'-7"						
P1104	28	17'-8"	2628	1	1'-7"	14'-6"					1'-7"						
		Total = 16,077															
PIER No. 3					<i>Reinforcing steel in Pier No. 3 shall have the suffix "C"</i>												
P501	38	19'-5"	770	5T													
P502	40	21'-1"	880	5T													
P503	26	20'-1"	545	T1	5"	5'-2"	4'-8"	5'-2"	4'-8"		5"						
P504	24	14'-5"	361	T2	5"	3'-5 3/4"	2'-7"	2'-7"	3'-5 3/4"	2'-4"	5"	2'-4"					
A601	10	8'-0"	133	S10		2'-0"	5'-2"	2'-0"									
A602	14	8'-4"	175	S10		2'-0"	4'-8"	2'-0"									
P1101	56	19'-7"	5827	5T													
P1102	56	9'-0"	2678	11		3"	2'-1"	6'-8"							8'-1"	1'-5"	
P1103	32	19'-2"	3259	1	1'-7"	16'-0"					1'-7"						
P1104	34	19'-8"	3553	1	1'-7"	16'-6"					1'-7"						
		Total = 18,181															

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
PIER No. 4					<i>Reinforcing steel in Pier No. 4 shall have the suffix "D"</i>												
P501	38	21'-1"	836	5T													
P502	44	21'-4"	979	5T													
P503	28	20'-1"	587	T1	5"	5'-2"	4'-8"	5'-2"	4'-8"		5"						
P504	26	14'-5"	391	T2	5"	3'-5 3/4"	2'-7"	2'-7"	3'-5 3/4"	2'-4"	5"	2'-4"					
P601	10	8'-0"	133	S10		2'-0"	5'-2"	2'-0"									
P602	14	8'-4"	175	S10		2'-0"	4'-8"	2'-0"									
P1101	56	21'-3"	6322	5T													
P1102	56	9'-0"	2678	11		3"	2'-1"	6'-8"							8'-1"	1'-5"	
P1103	32	19'-2"	3259	1	1'-7"	16'-0"					1'-7"						
P1104	34	19'-8"	3553	1	1'-7"	16'-6"					1'-7"						
		Total = 18,913															
		Total Substructure = 137,502															

- 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 numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
 - For bar types see sheet 16/18
 - All dimensions are out to out of bar.
 - Radius dimension "R" is to outside of bar.
 - The length of bent bars is measured along the centerline.
 - For additional notes see sheet 16/18

DESIGNED		DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
		AW		S.A.	ST	9/25/12	

KING & GAVARIS
CONSULTING ENGINEERS
OHIO

REINFORCING STEEL LIST
BRIDGE NO. GRE- 675- 0615
I-675 UNDER RELOCATED PENN -
CENTRAL RAILROAD
GREENE COUNTY STA: 542 + 86.23 TO
STA: 547 + 53.01

MICROFILMED
AUG 29 1989

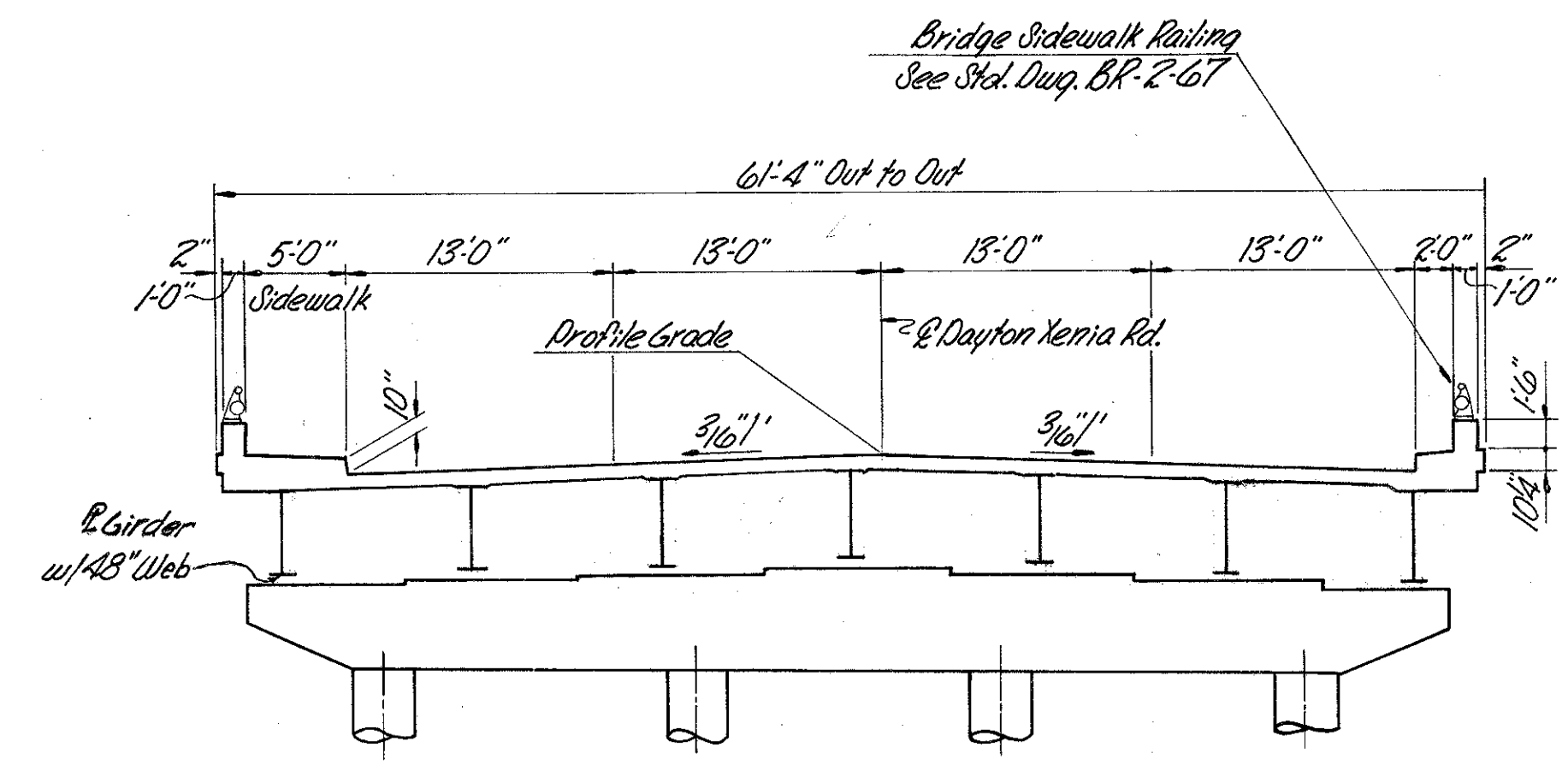
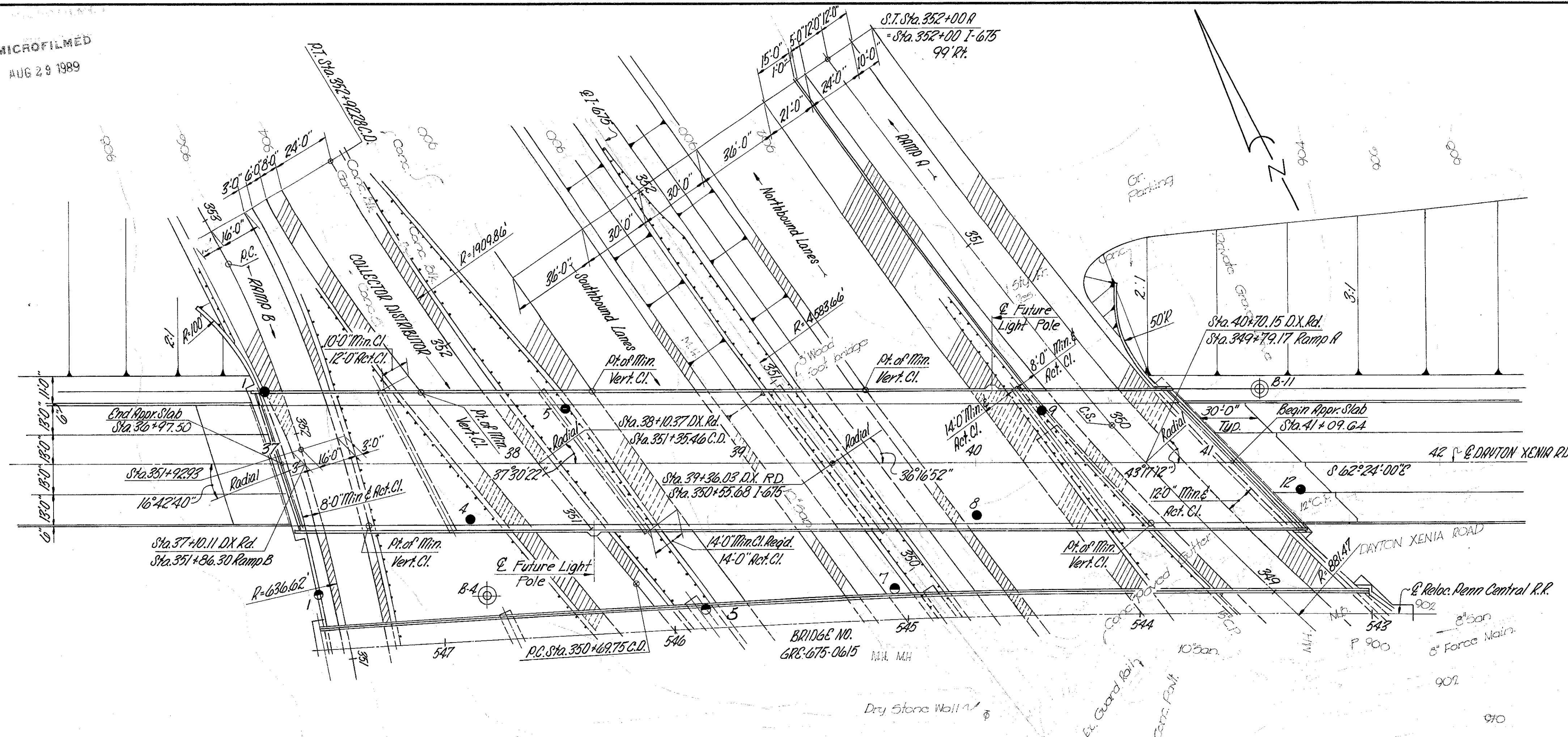
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

471
616

MICROFILMED
JUN 19 1980

GRE-675 * 5 * 37
GREENE COUNTY

471-564
140 Yellow



SECTION THRU BRIDGE

VERTICAL CURVE DATA

DAYTON XENIA RD.

Length = 500'
P.V.I. Sta. = 35+50
P.V.I. Elev. = 926.42
G₁ = +2.75%
G₂ = -1.50%

PLAN

LEGEND

- Drive Sample Boring Location
- Drive Rod Penetration Resistance Sounding Location
- Drive Rod Penetration Resistance Sounding Location for Bridge No. GRE-675-0615

DESIGN YEAR TRAFFIC
1989 ADT:

RAMP B:	10,110
COLLECTOR DIST:	4,960
I 675:	43,160
RAMP A:	15,070

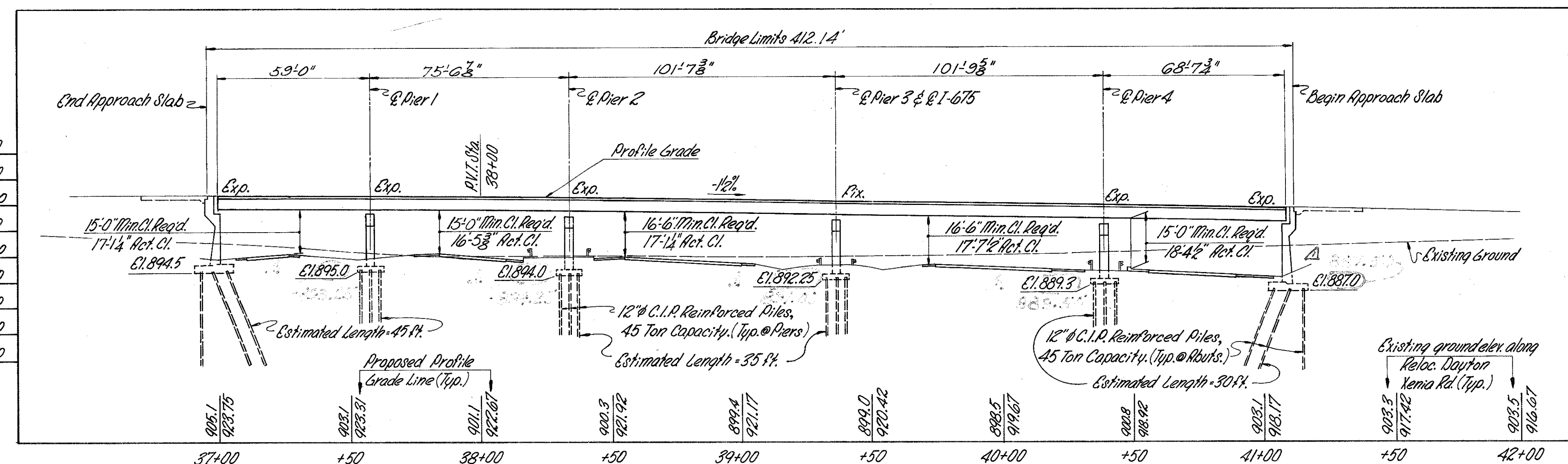
NOTE
Earthwork limits shown are schematic.
Actual slopes shall conform to Plan cross-sections.

PROPOSED STRUCTURE
TYPE: Continuous welded Plate Girder with reinforced concrete deck and substructure.
SPANS: 33'-0", 15'-6", 10'-1", 10'-9", 6'-7"
ROADWAY: 57'-0" face to face curbs
LOADING: HS 20-44 & Alternate Military
SKEW: Varies 36°15'52" Rt. Fwd. at I-675
WEARING SURFACE: Monolithic Concrete
APPROACH SLABS: 30'-0" long (18'-1-72)
ALIGNMENT: Tangent

KING & GAVARIS
CONSULTING ENGINEERS
OHIO

SITE PLAN
BRIDGE NO. GRE-675-0616
I-675 UNDER DAYTON XENIA RD.
GREENE COUNTY STA. 36+97.50
STA. 41+09.64

PRESENT TOPOGRAPHY SURVEYED	DRAWN	DESIGNED	PROPOSED WORK DRAWN	CHECKED	REVISED
AERIAL SURVEY	JCL	AW	S.A.		



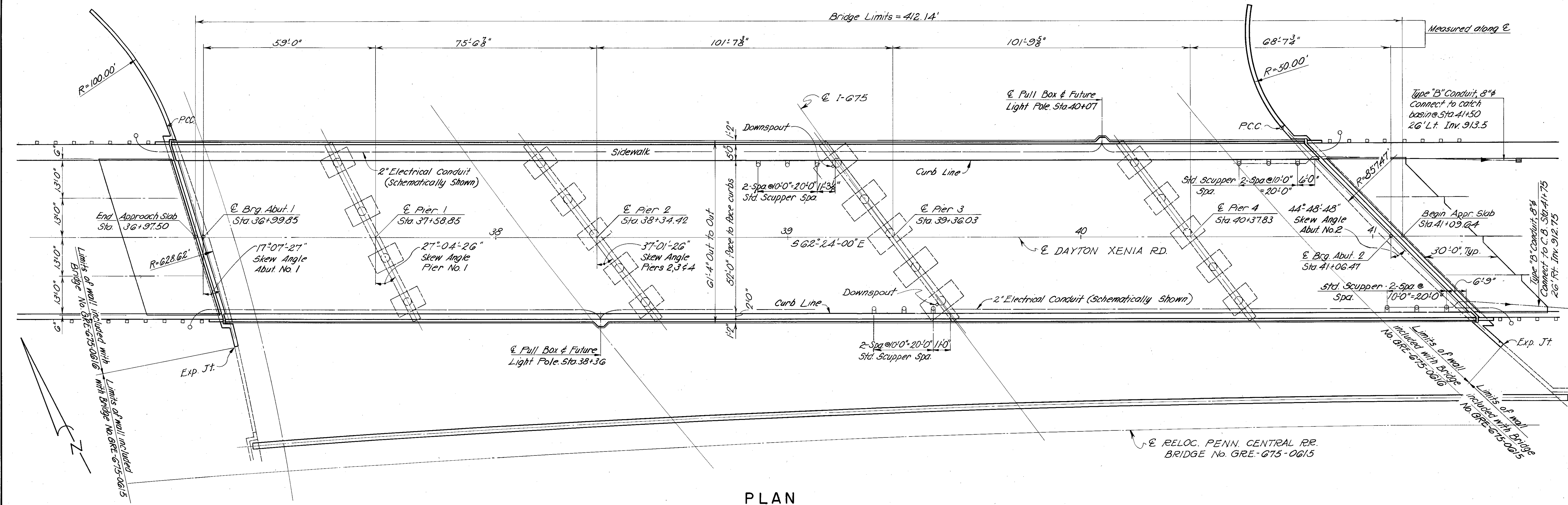
PROFILE ON CENTER LINE RELOCATED DAYTON XENIA RD

Revised 10-12-82

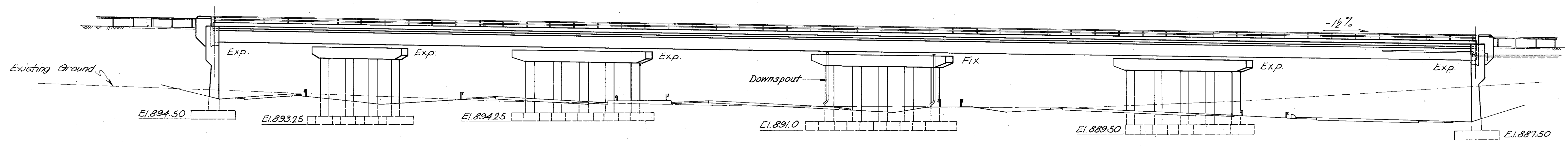
MICROFILMED
MAY 1989

FED. RD. DIVISION	STATE	PROJECT	472 616
2	OHIO		

GRE-675 - 5-37
GREENE COUNTY



PLAN



ELEVATION

GENERAL NOTES

EMBANKMENT CONSTRUCTION: BEFORE THE BACKWALL IS CONSTRUCTED THE EMBANKMENT SHALL BE CONSTRUCTED UP TO THE LEVEL OF THE SUBGRADE WITH A 1:1 SLOPE FROM THE BRIDGE SEAT TO THE SUBGRADE LINE, FOR A MINIMUM DISTANCE OF 200 FEET BACK OF EACH ABUTMENT.

PILES SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 45 TONS PER PILE FOR ABUTMENTS AND PIERS.

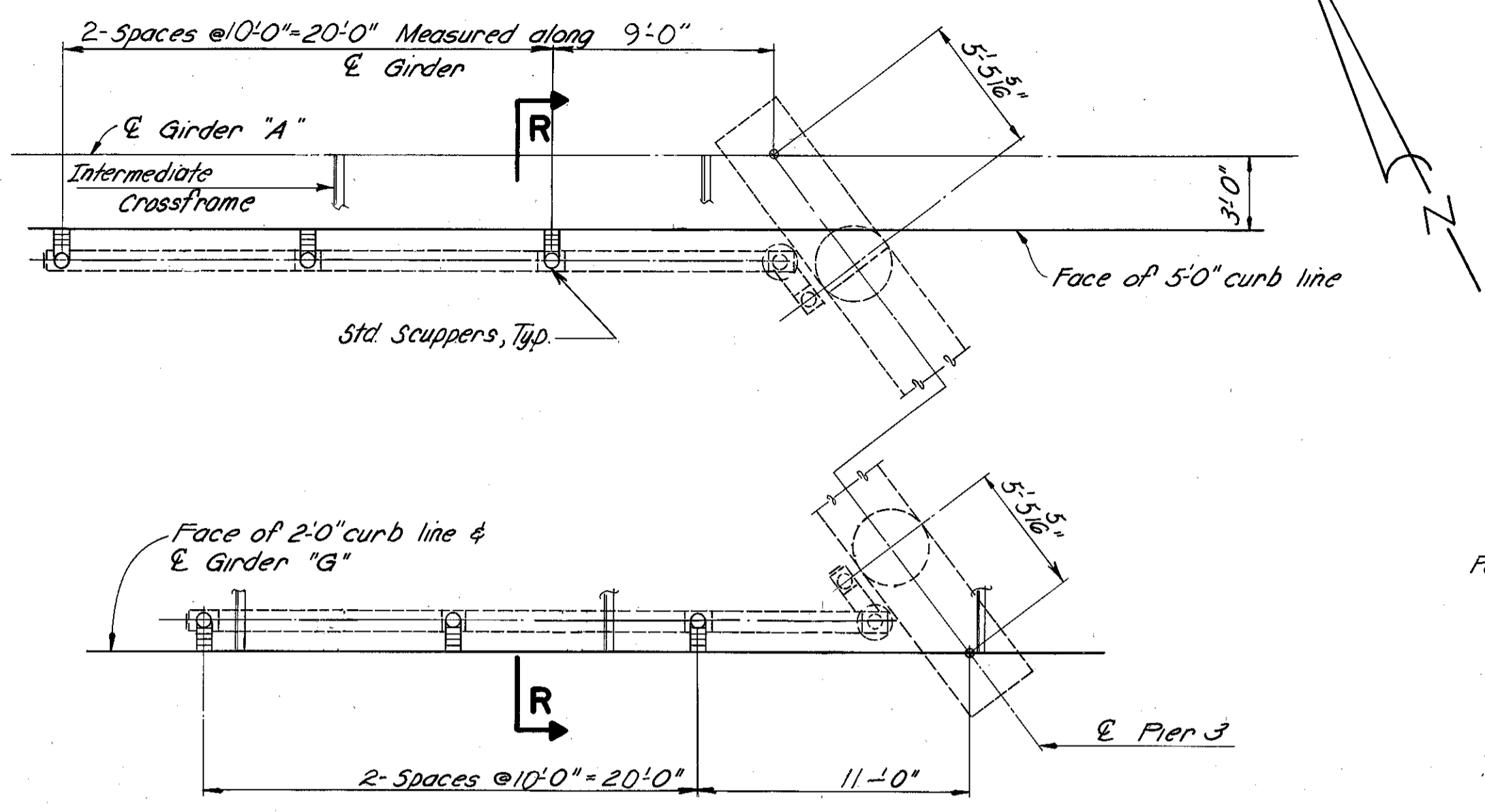
FOR ADDITIONAL NOTES SEE COMMON DETAILS, SHEET G1/C2.

THE SCUPPER PIPES SHALL EXTEND TO THE HORIZONTAL CONDUCTOR PIPES INSTEAD OF 2" BELOW THE BOTTOM FLANGE.

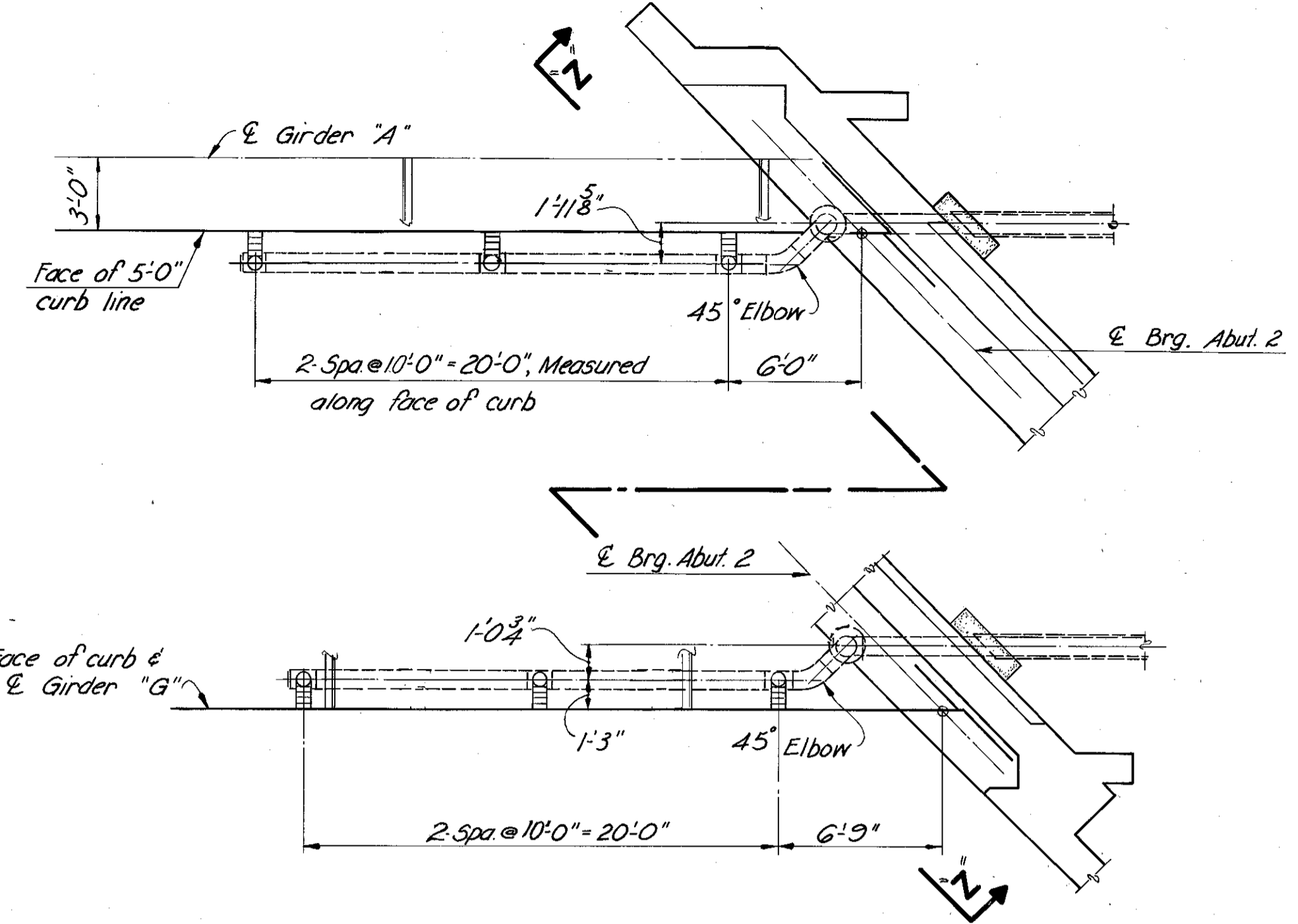
THE END DAM ANCHOR BARS SHALL BE LOCATED 3 3/8 INCHES CLEAR FROM THE TOP OF BRIDGE DECK.

Work this sheet with Sht. 3/18

KING & GAVARIS CONSULTING ENGINEERS		2/18
GENERAL NOTES, GENERAL PLAN AND ELEVATION		
BRIDGE NO. GRE-675-0616		
I-675 UNDER DAYTON XENIA RD.		
GREENE COUNTY		STA: 36+97.50 TO STA: 41+09.64
DESIGNED V.P.	DRAWN A.W.	CHECKED S.A.
REVIEWED S.A.	DATE 9/25/12	REVISION

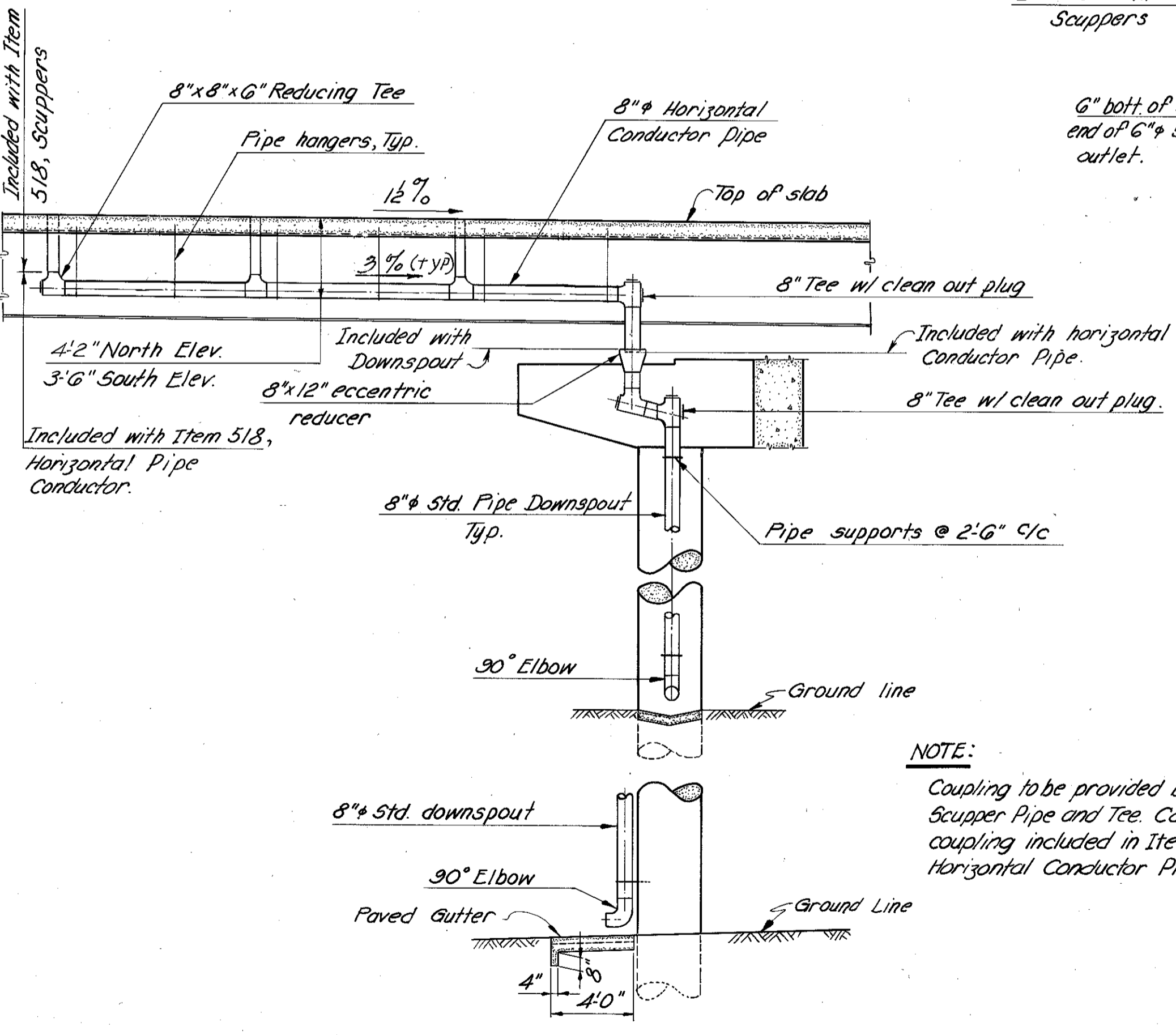


PIER NO. 3



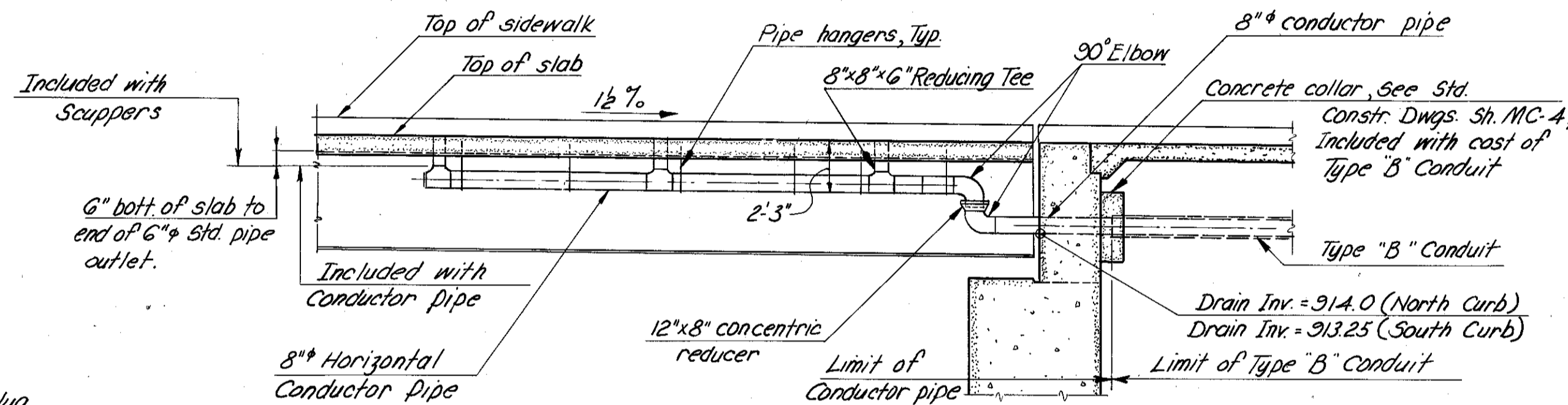
ABUT. NO. 2

PLANS



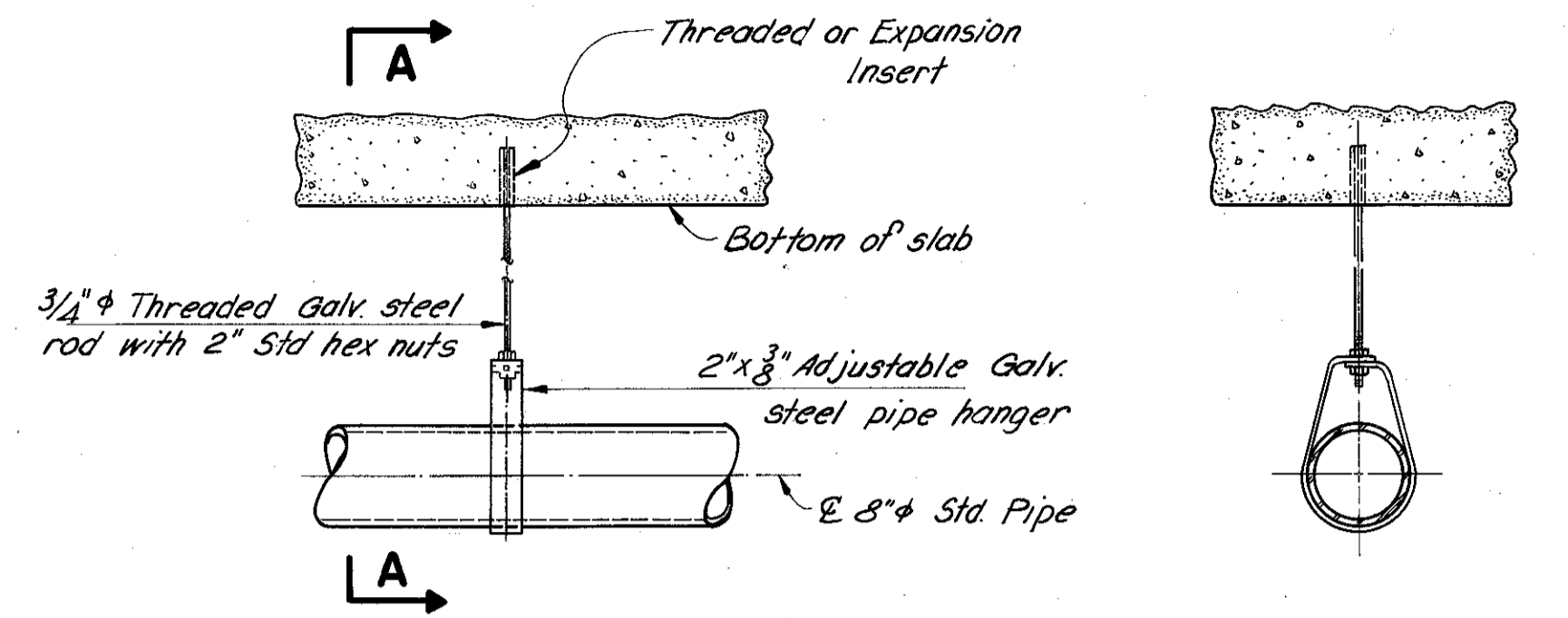
ELEVATION

North Elevation shown, South Elevation similar opposite hand



ELEVATION

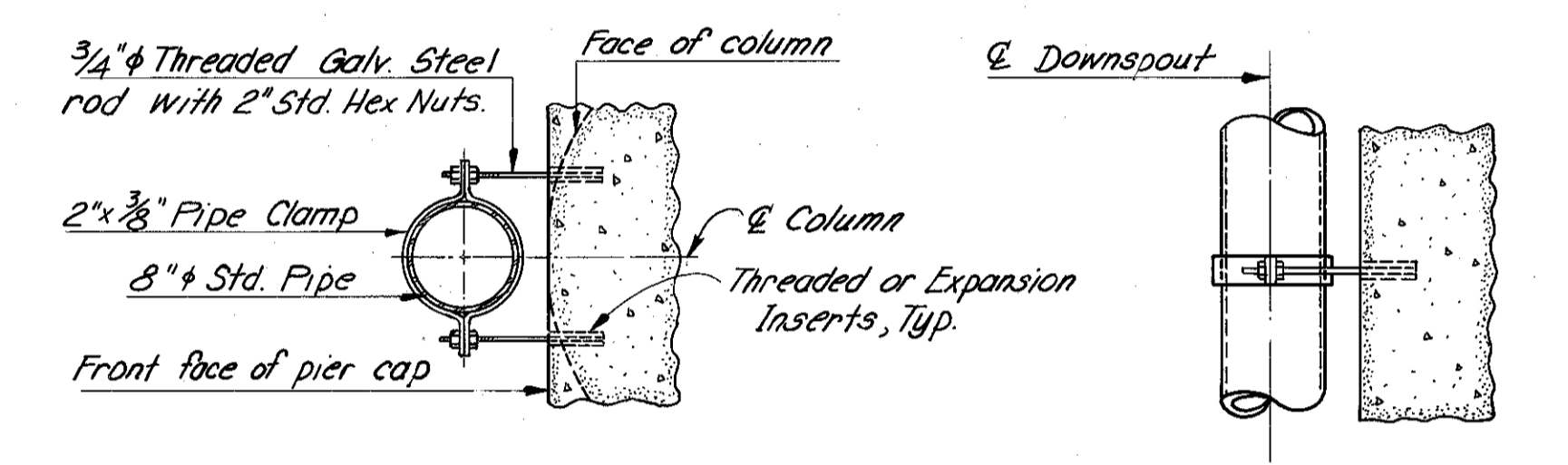
North Elevation shown, South Elevation similar



ELEVATION

SECTION A-A

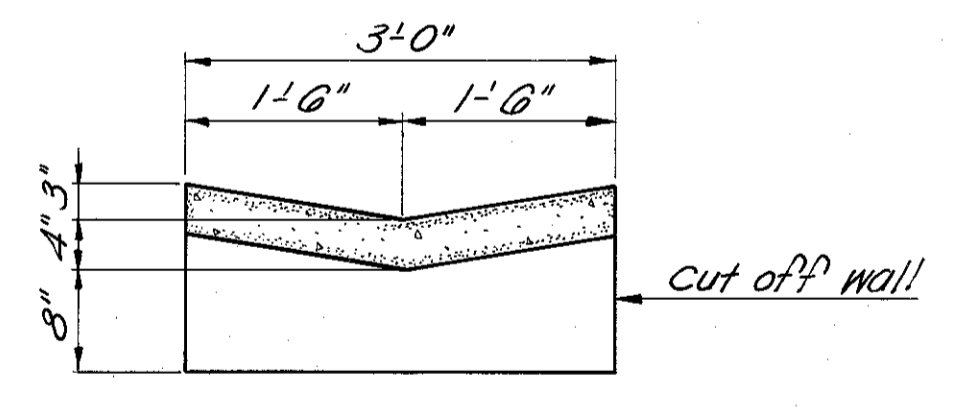
TYPICAL PIPE HANGER



PLAN

ELEVATION

TYPICAL PIPE SUPPORT



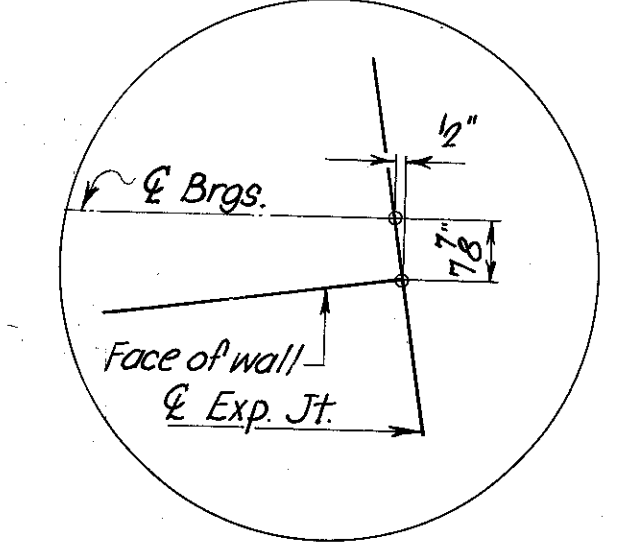
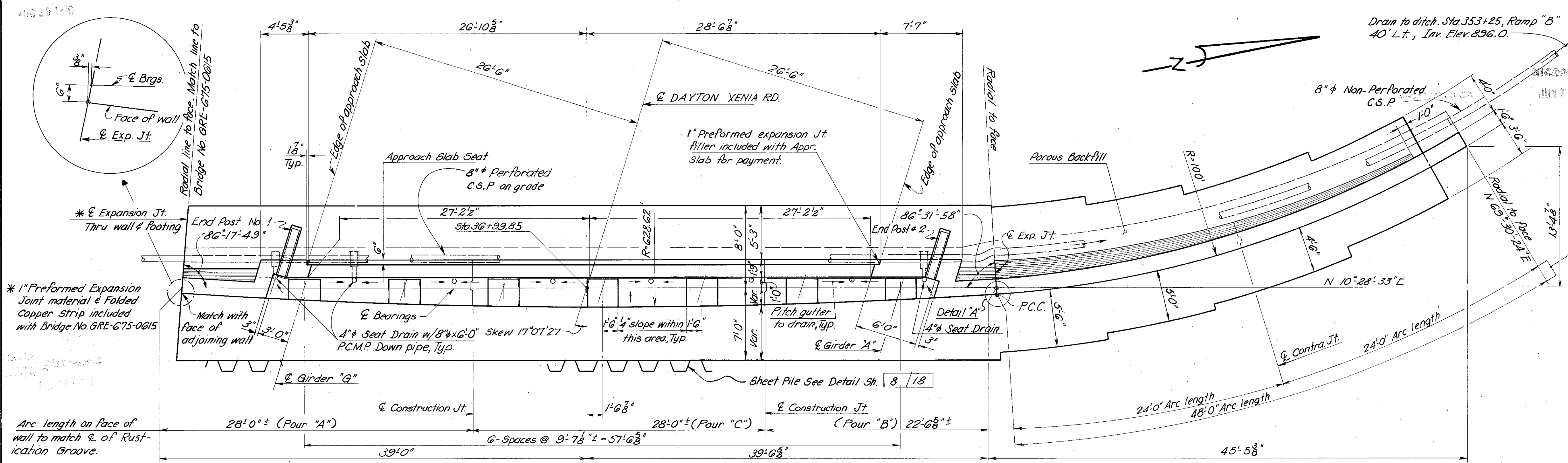
PAVED GUTTER DETAIL

NOTES:
For Scupper Details see Std. Dwg. SD-1-69.
Scupper outlet pipes shall be modified as required to fit these details.
Paved Gutter shall be included with the unit prices bid for Item 518, Pipe Downspout.
For Sections R-R & 2-2 See Sh. 8/18

ESTIMATED QUANTITIES							
ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	ABUT.	PIERS	GEN.
503	Lump	Sum	Cofferdams, Cribs and Sheeting				
503	2,055	Cu. Yd.	Unclassified Excavation		1,639	416	Lump
504	2,420	Sq. Ft.	Steel Sheet Piling left in place (Min. Sect. Modulus of 30.2 in ³ per Ft. of wall)		2,420		
505	Lump	Sum	Test Pile				Lump
507	10,100	Lin. Ft.	12" Cast-in-place reinforced concrete piles.		5,670	4,430	
509	291,600	Lbs.	Reinforcing Steel	100,900	124,900	65,800	
511	824	Cu. Yd.	Class "S" Concrete, Superstructure using Shrink. Comp. Cem. 701.08	824			
511	205	Cu. Yd.	Class "C" Concrete, Piers above footings			205	
511	627	Cu. Yd.	Class "C" Concrete, Abutments and Walls above footings.		627		
511	605	Cu. Yd.	Class "C" Concrete, Footings		459	146	
512	87	Lin. Ft.	Type B, Waterproofing			87	
513	680,900	Lbs.	Structural Steel (AISC Category III)	680,900			
514	680,900	Lbs.	Field Painting of new Structural Steel, System A	680,900			
516	105	Sq. Ft.	1" Preformed Expansion Joint Filler			105	
517	81464	Lin. Ft.	Railing (Concrete Parapet with Double Pipe Railing)	81464			
518	442	Cu. Yd.	Porous Backfill		442		
518	360	Lin. Ft.	8" Perforated C.S.P. (70701)			360	
518	105	Lin. Ft.	8" Non-Perforated C.S.P., including specials, (70701)			105	
518	12	Ea.	Scuppers including supports		12		
518	129	Lin. Ft.	8" Pipe Horizontal Conductor, Including Specials		129		
518	38	Lin. Ft.	8" Std Pipe downspout, hot-dip galv. steel, including specials				38
603	114	Lin. Ft.	8" Conduit, Type B				114
625			See Sheet 179 for Lighting Summary				
Special	106,300	Lb.	Epoxy Coated Reinforcing Steel (See Proposal Note)	105,400	900		
523	3	Hour	Dynamic Pile Tests				3

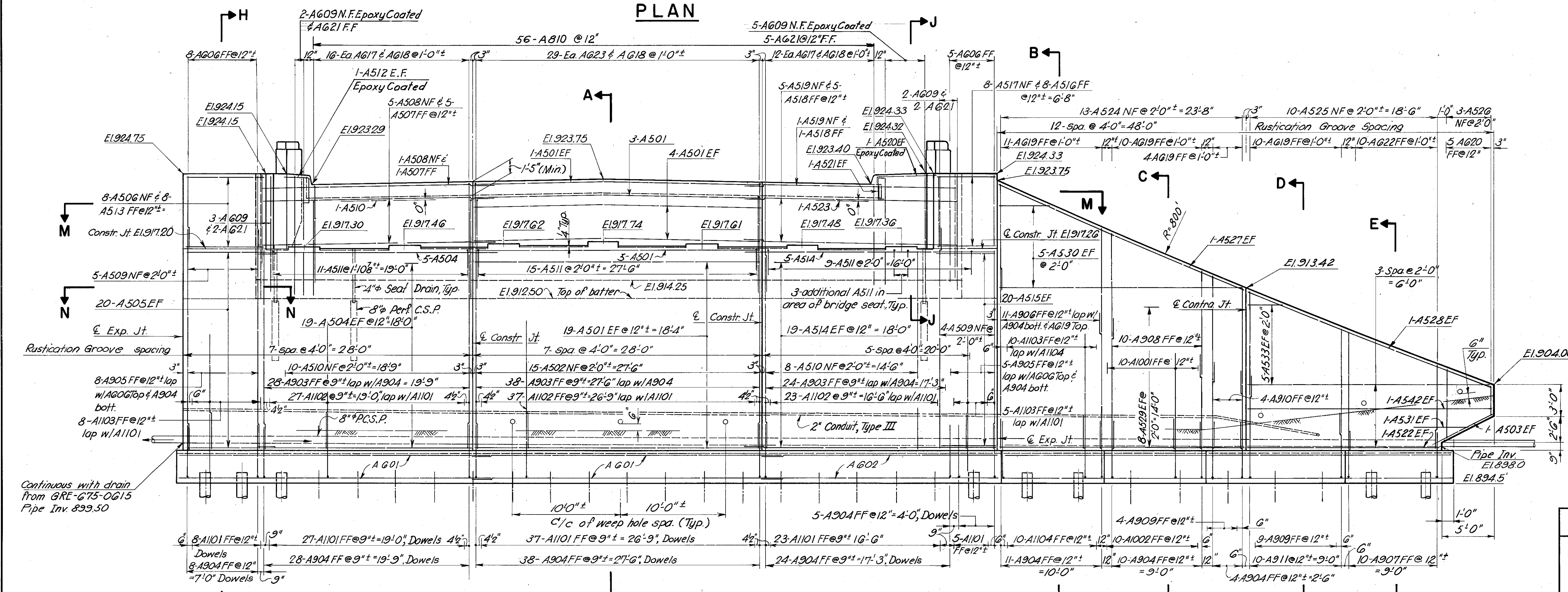
ESTIMATED QUANTITIES CHECKED BY & DATE S.A. 4/19/72 REVISED: S.A. 9/14/72

KING & GAVARIS CONSULTING ENGINEERS				3/18
DRAINAGE DETAILS & ESTIMATED QUANTITIES				
BRIDGE NO. GRE-675-0616				
I-675 UNDER DAYTON XENIA RD.				
GREENE COUNTY			STA: 36+97.50 TO STA: 41+09.64	
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
V.P.	A.W.		S.A.	7/21/72
				4/27/82



DETAIL "A"

PLAN

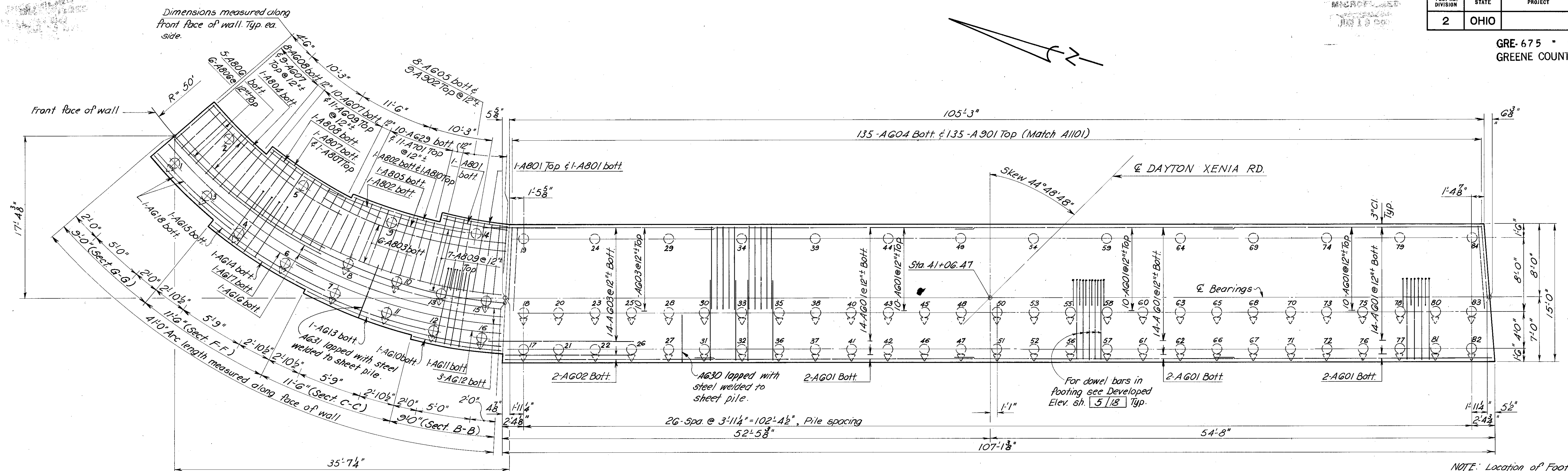


DEVELOPED ELEVATION

NOTES:

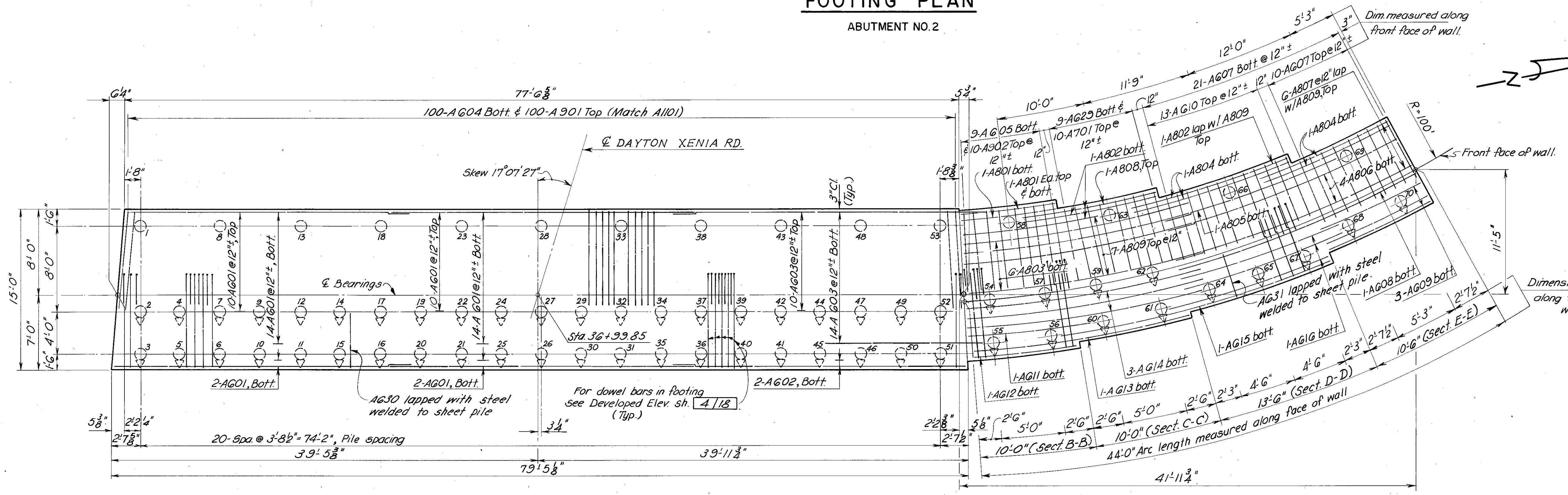
- For Reinforcing Steel List see shts. 15, 16, 17, 18, 19
- Work this sheet with shts. 5, 6, 7, 8, 18
- Porous Backfill, 2'-0\"
- For termination of C.S.P. at slopes, See Common Details Sht. C1/C2
- For additional details end posts 1, 2, 3 & 4, See Std. Dwg. BR-2-67
- For Contraction Joint, Expansion Joint and Rustication Groove Details, See Common Details Sht. C2/C2
- Reinforcing Steel in Abutments No. 1 & 2 shall have the suffix 'A' & 'B' respectively.
- All splices and dowels will be lapped min. 30 bar dia. unless otherwise shown.

KING & GAVARIS CONSULTING ENGINEERS		4/18
OHIO		
ABUTMENT NO. 1		
BRIDGE NO. GRE-675-0616		
I-675 UNDER DAYTON XENIA RD.		
GREENE COUNTY		STA: 36+97.50 TO STA: 41+09.64
DESIGNED	DRAWN	TRACED
V.P.	A.W.	S.A.
CHECKED	REVIEWED	DATE
S.A.	2/25/72	
REVISED		



FOOTING PLAN
ABUTMENT NO. 2

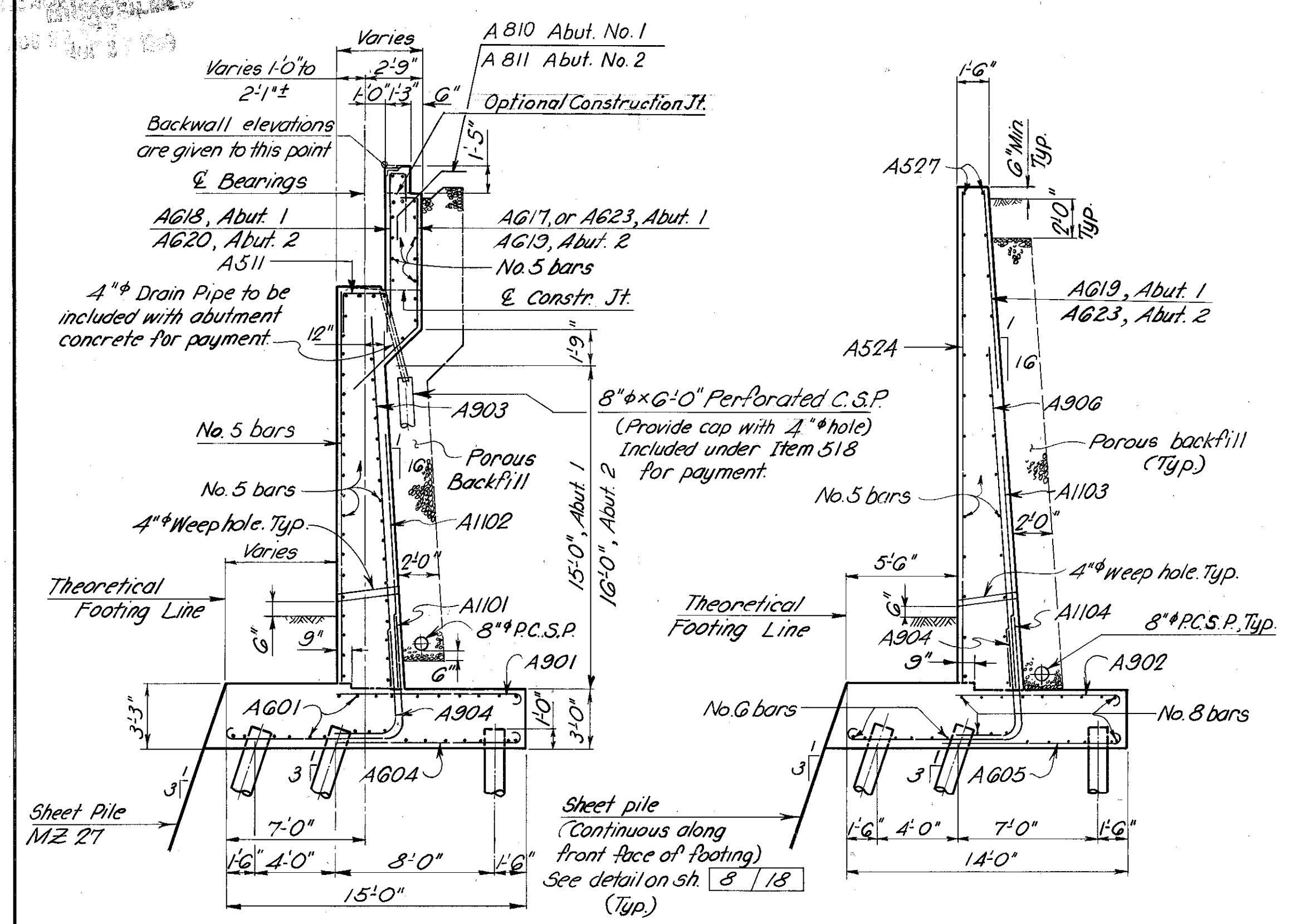
NOTE: Location of Footing bars interfering with pile locations may be adjusted, providing that in every 5' of wall length the correct number of bars is provided.



FOOTING PLAN
ABUTMENT NO. 1

NOTES:
Work this sheet with shs 4, 5, 7, 8, 18
For additional notes see sh 4, 18

KING & GAVARIS CONSULTING ENGINEERS						6/18
ABUTMENT FOOTING PLANS						
BRIDGE NO. GRE-675-0616						
I-675 UNDER DAYTON XENIA RD.						
GREENE COUNTY				STA: 36+97.50 TO STA: 41+09.64		
DESIGNED V. P.	DRAWN A. W.	TRACED	CHECKED S. A.	REVIEWED DATE 9/28/72	DATE	REVISION

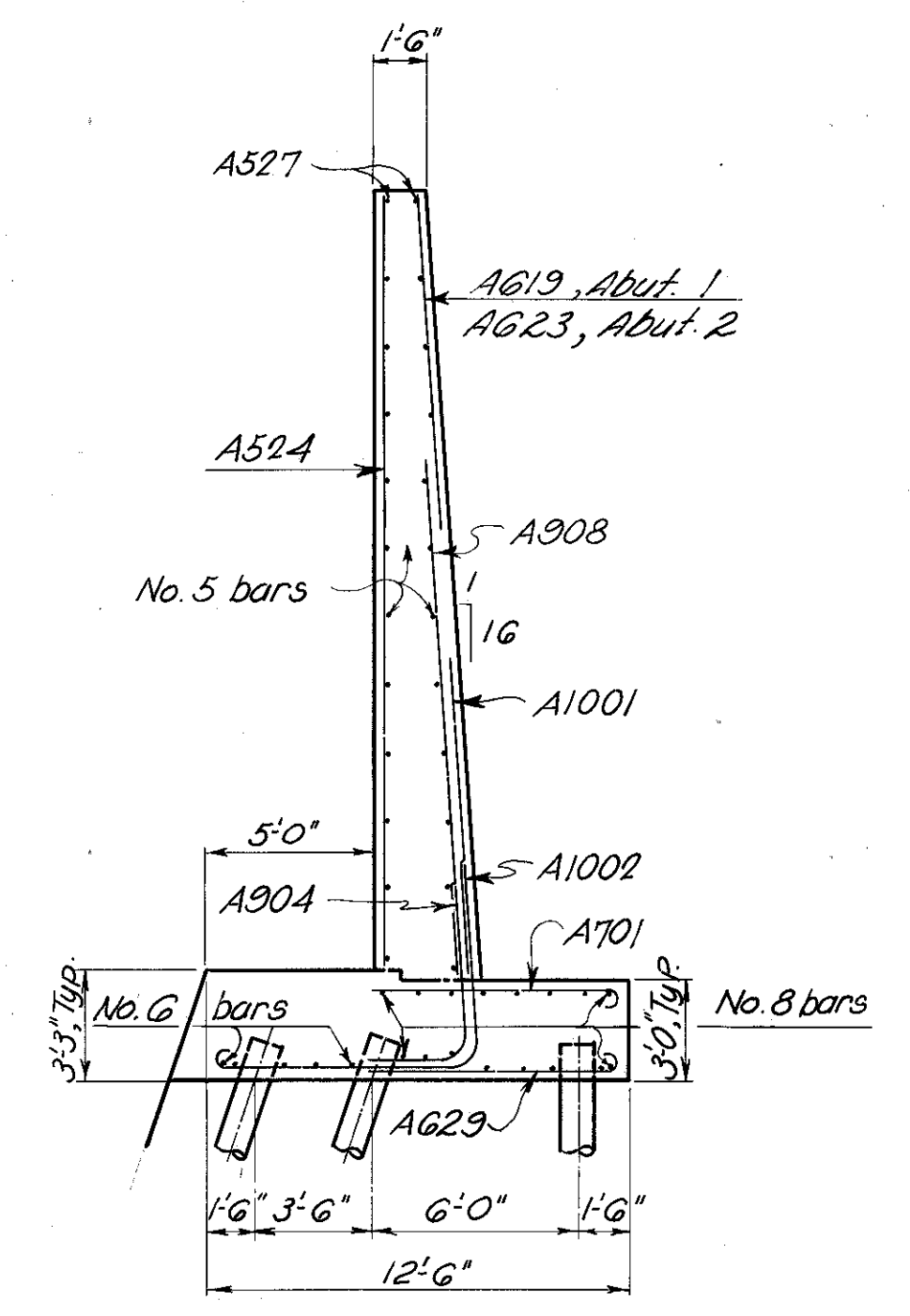


SECTION A-A

ABUT. 1 & 2

SECTION B-B

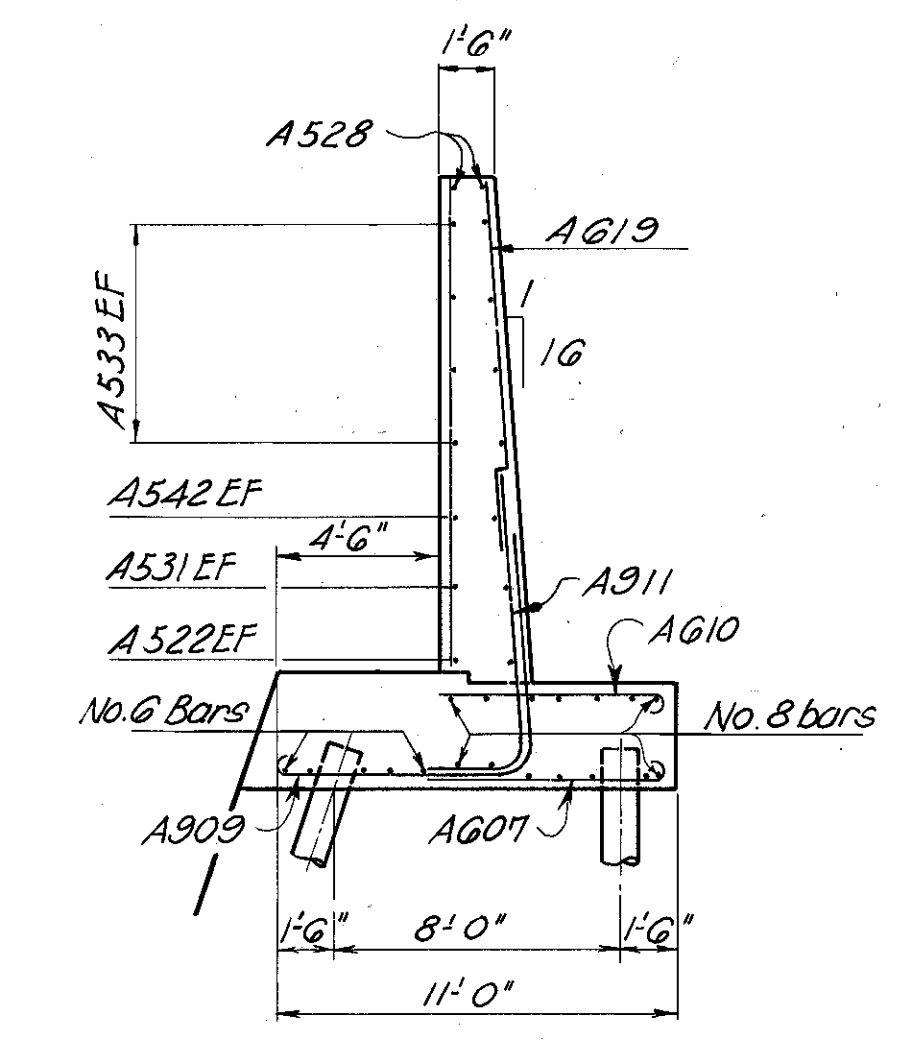
ABUT. 1 & 2



SECTION C-C

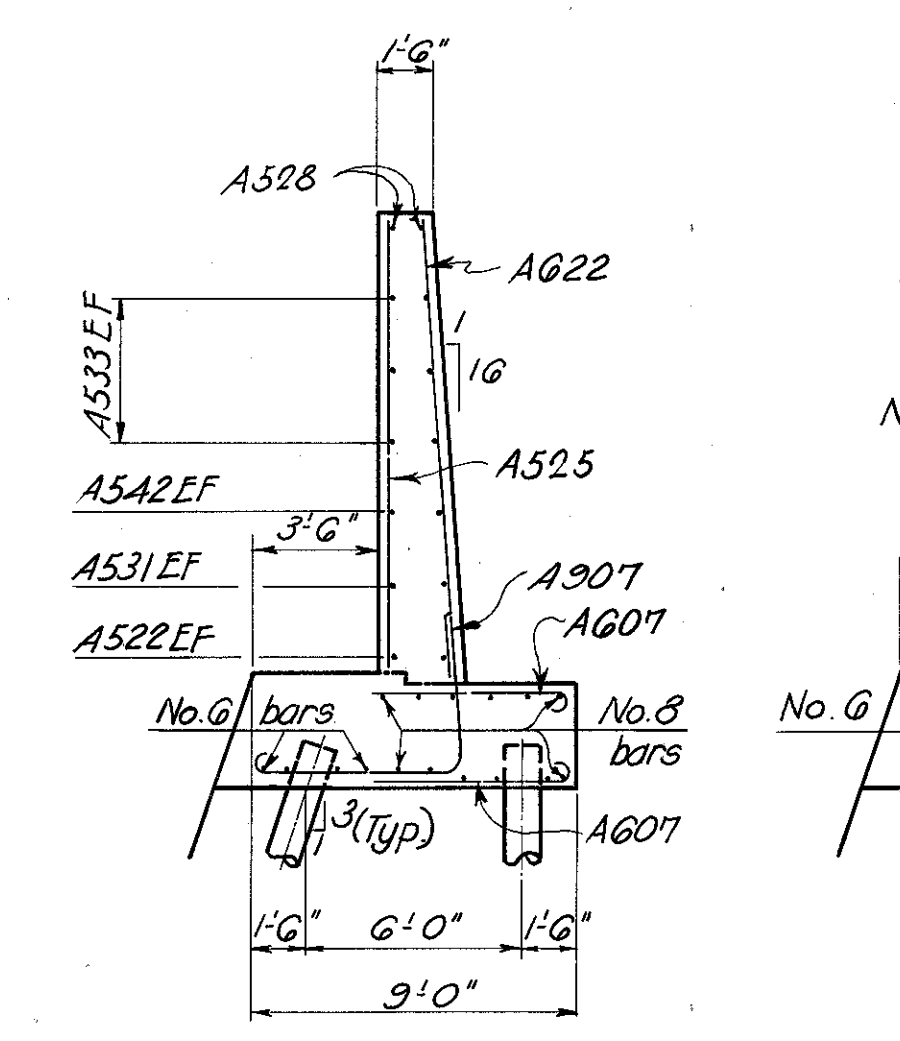
ABUT. 1 & 2

NOTE: Details not shown similar to Section "B-B"



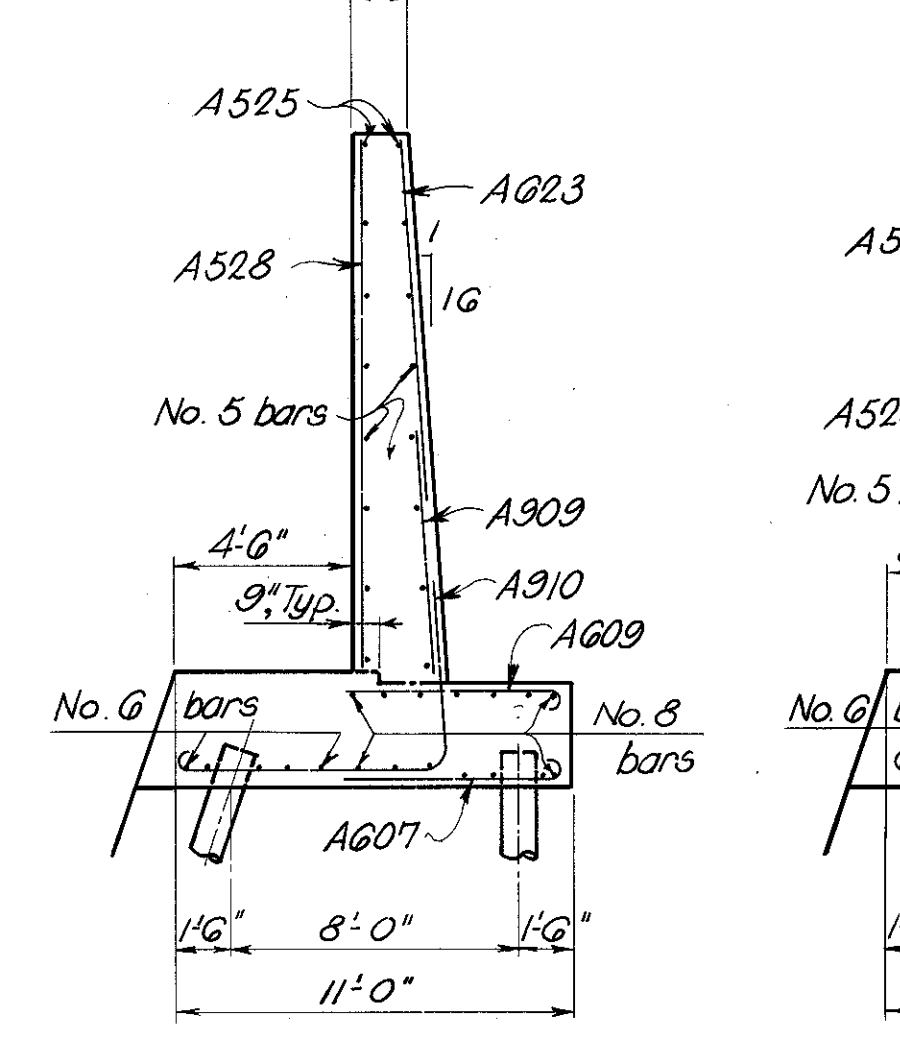
SECTION D-D

ABUT. 1



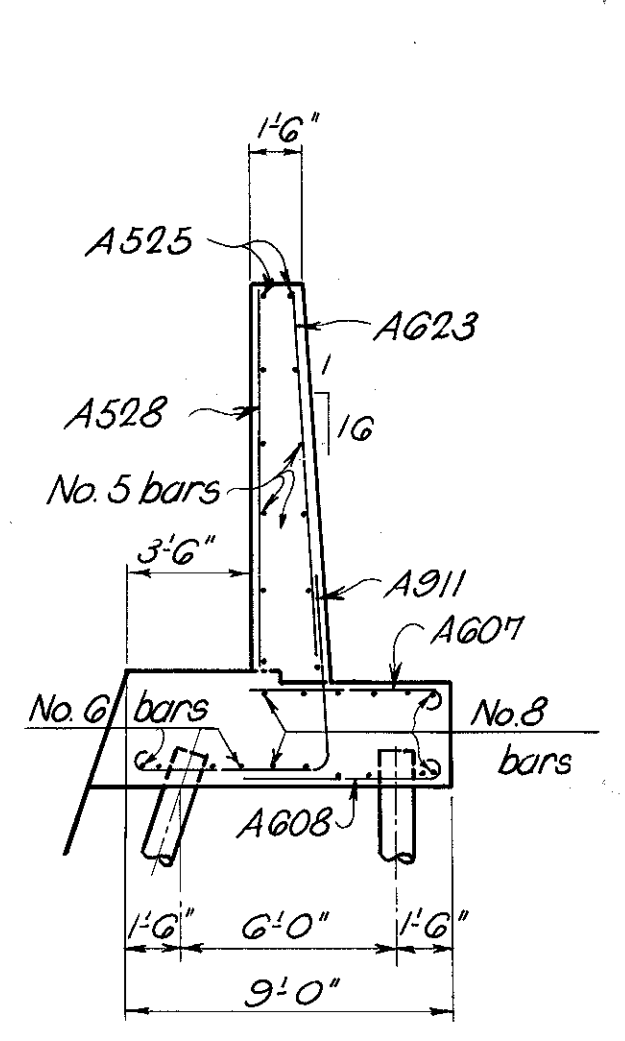
SECTION E-E

ABUT. 1



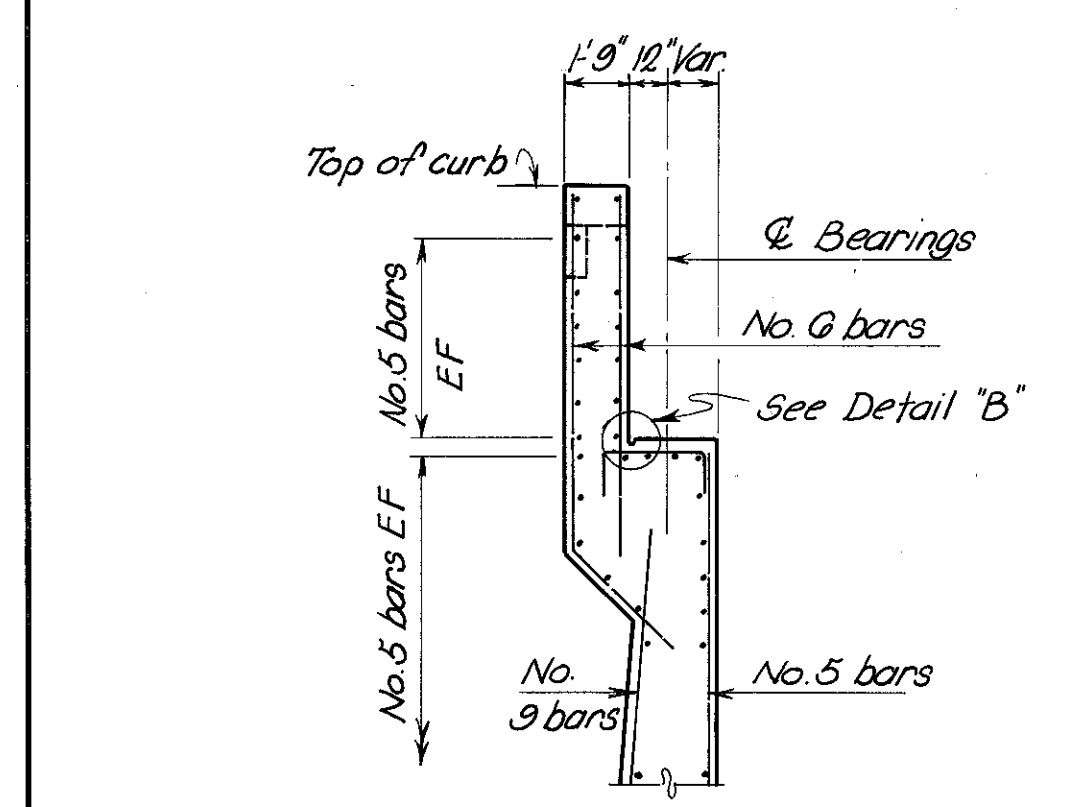
SECTION F-F

ABUT. 2



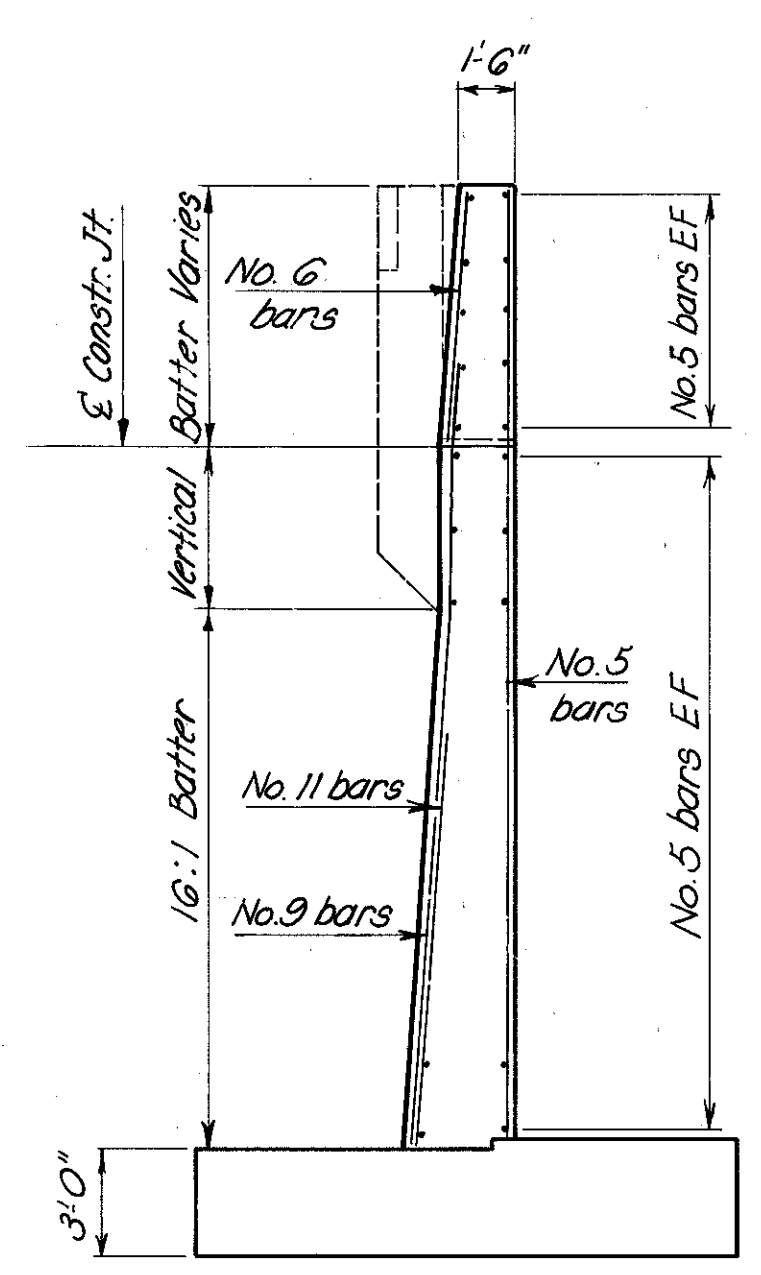
SECTION G-G

ABUT. 2



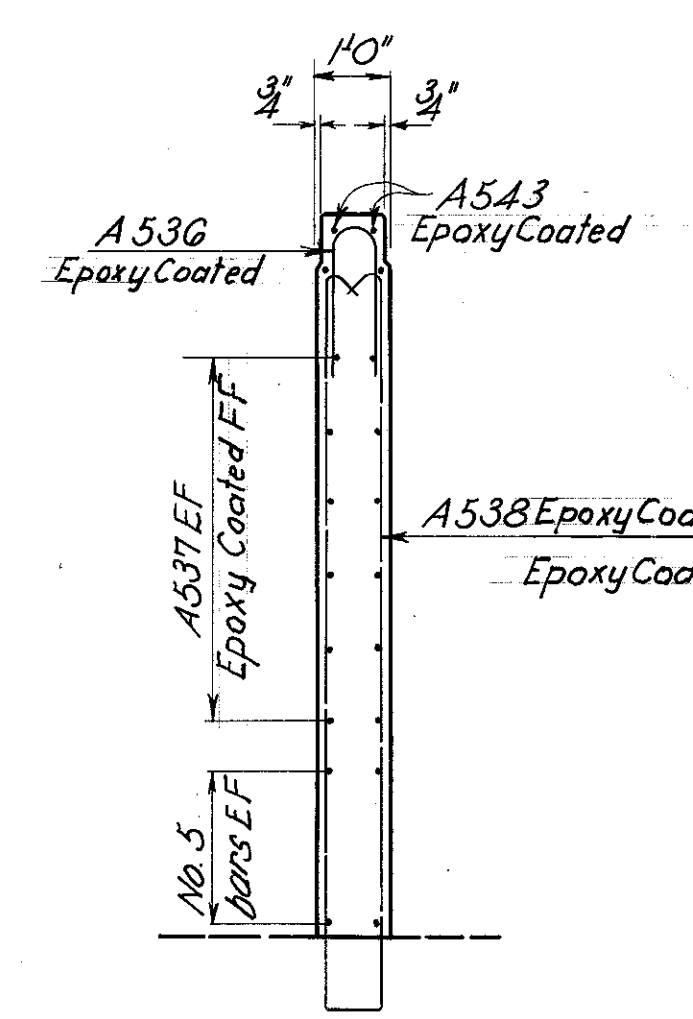
SECTION J-J

ABUT. 1 & 2

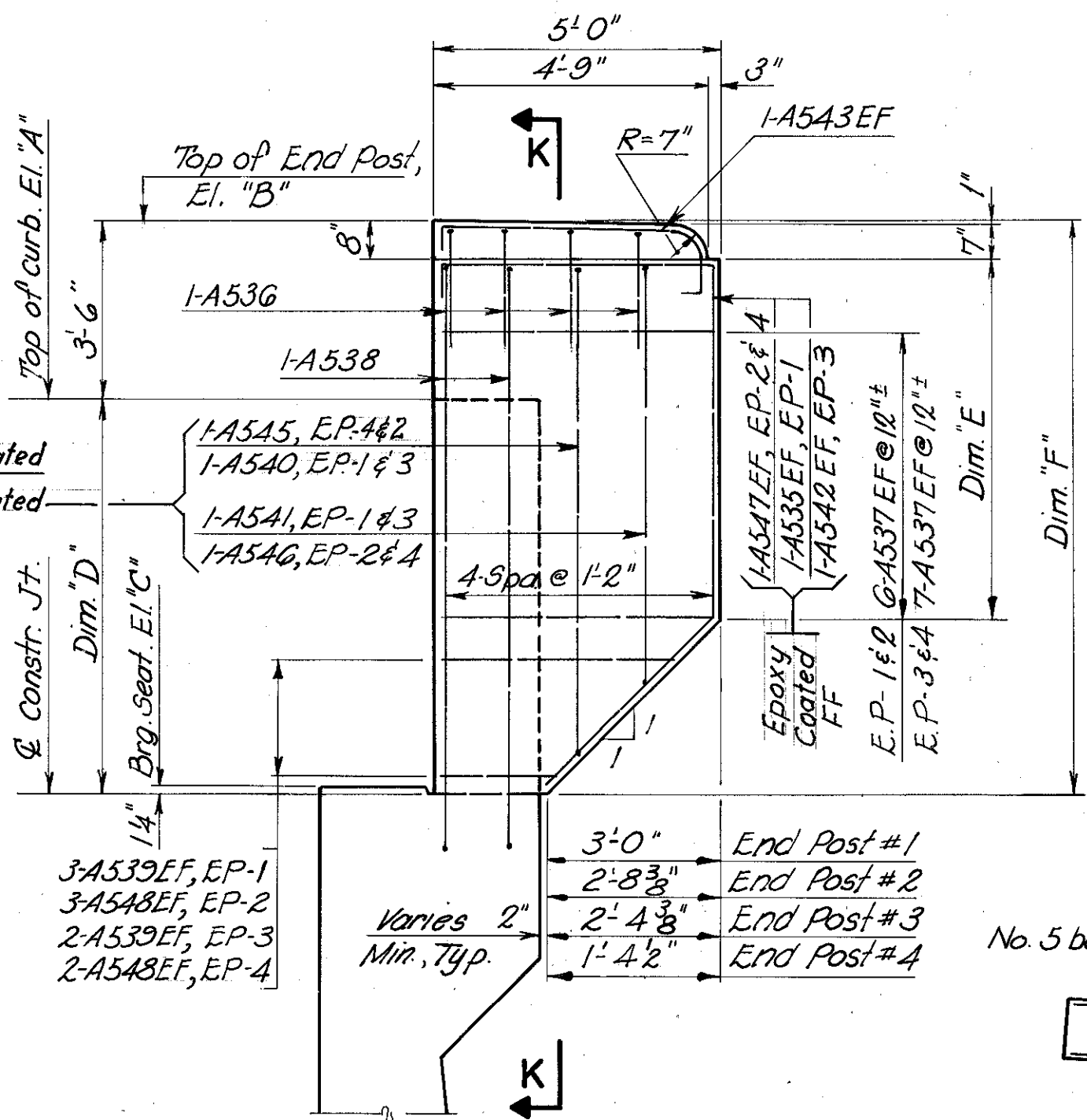


SECTION H-H

ABUT. 1 & 2



SECTION K-K



SECTION L-L

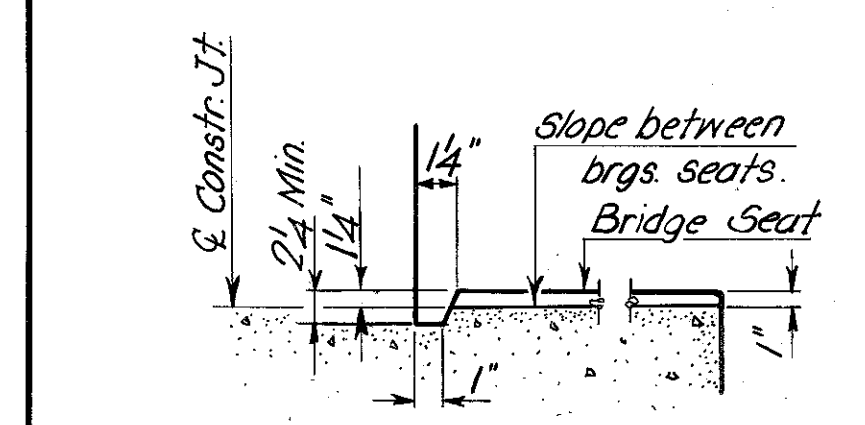
TYP AT END POSTS NO. 1, 2, 3 & 4

	EL. A	EL. B	EL. C	DIM. D	DIM. E	DIM. F
END POST NO. 1	924.15	927.32	917.30	6'-11 1/2"	6'-9 1/2"	10'-5 1/2"
END POST NO. 2	924.32	927.49	917.30	7'-0 3/4"	7'-2 3/8"	10'-6 3/4"
END POST NO. 3	919.02	922.19	912.05	7'-0 7/8"	7'-6 4"	10'-6 3/8"
END POST NO. 4	918.10	921.27	911.28	6'-11 1/8"	8'-4 3/8"	10'-5 8"

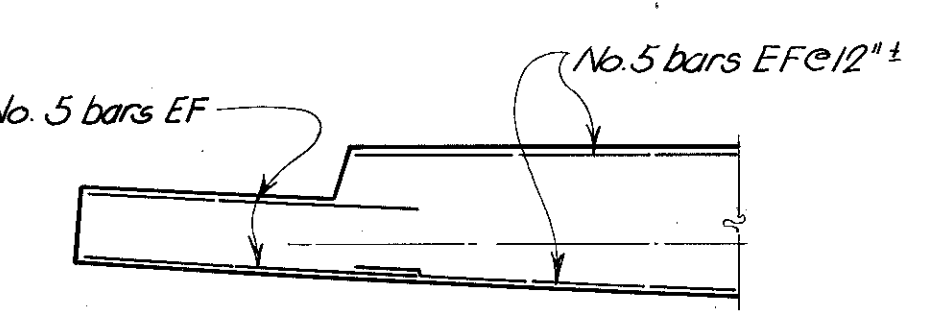
All Concrete included with Item 511
All Reinforcing Steel included with Item 509

NOTES:

Work this sheet with sheets 4, 5, 6, 8, 18
For additional notes see sh. 4, 18



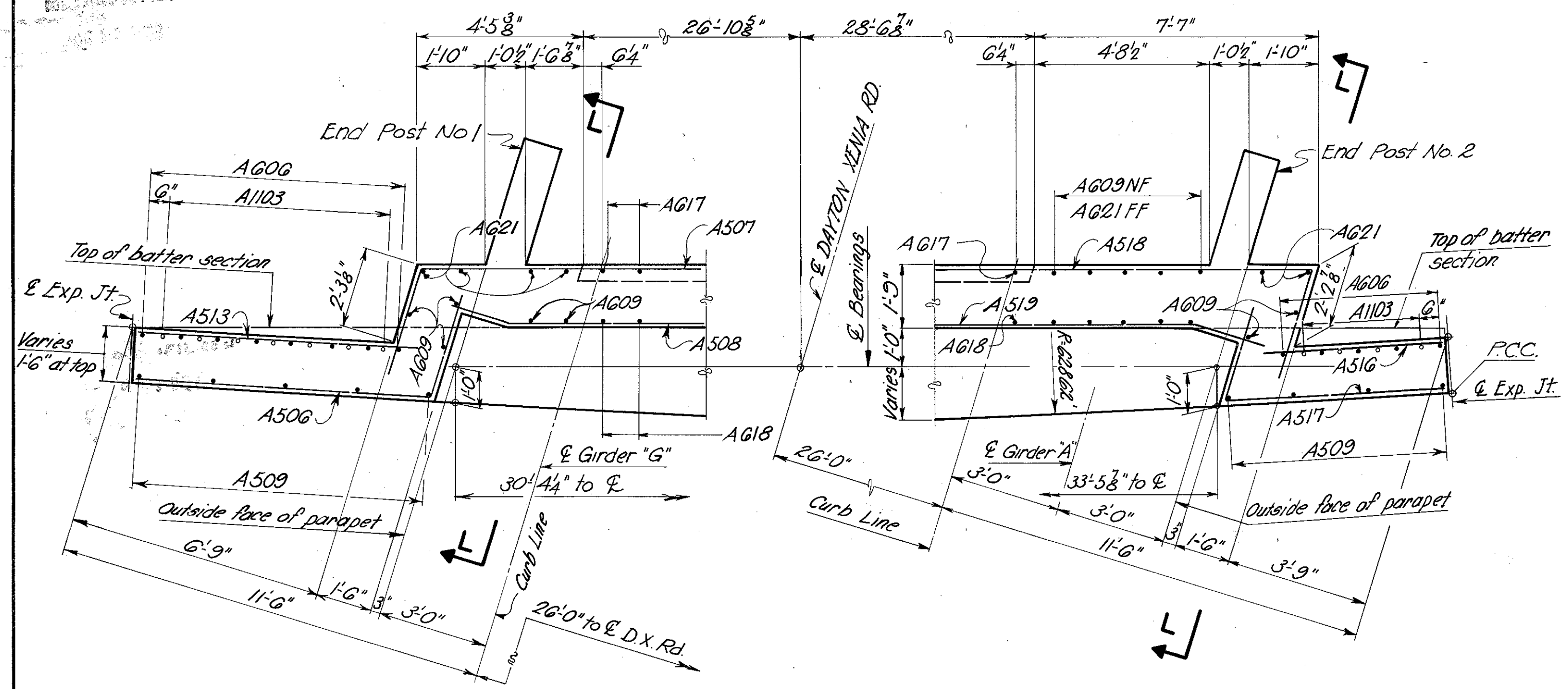
DETAIL "B"



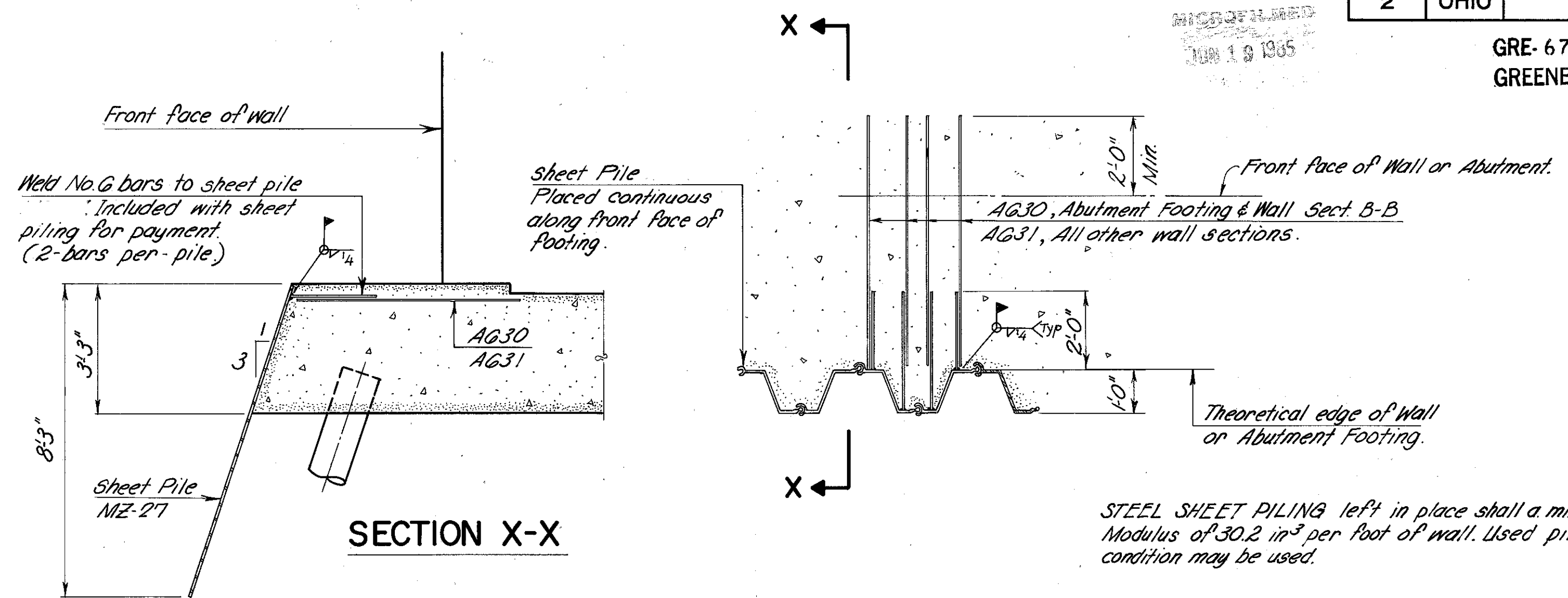
SECTION N-N

TYP ARRANGEMENT OF STEEL
ABUT. 1 & 2

KING & GAVARIS		7/18
CONSULTING ENGINEERS		OHIO
ABUTMENT DETAILS		
BRIDGE NO. GRE.-675-0616		
I-675 UNDER DAYTON XENIA RD.		
GREENE COUNTY		STA: 36+97.50 TO STA: 41+09.64
DESIGNED	DRAWN	TRACED
V.P.	A.W.	
CHECKED	REVIEWED	DATE
S.A.		9/25/72
		REVISED

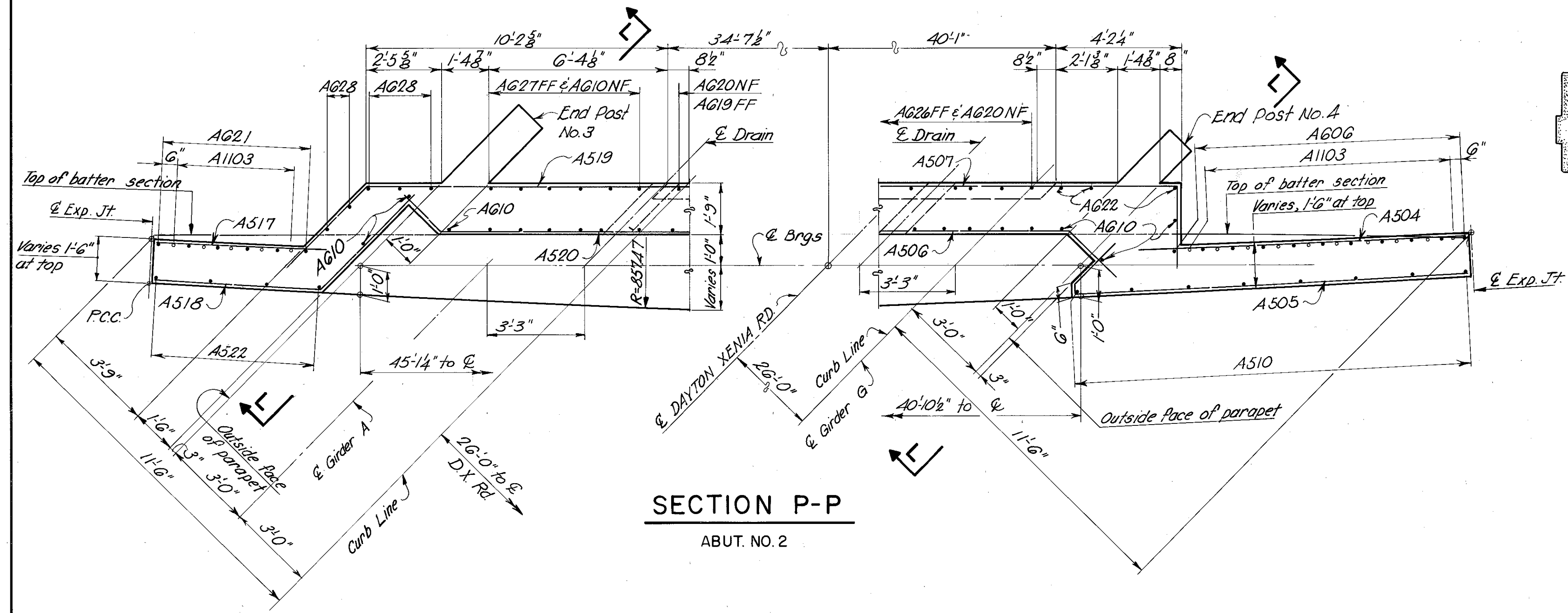


SECTION M-M
ABUT. NO. 1

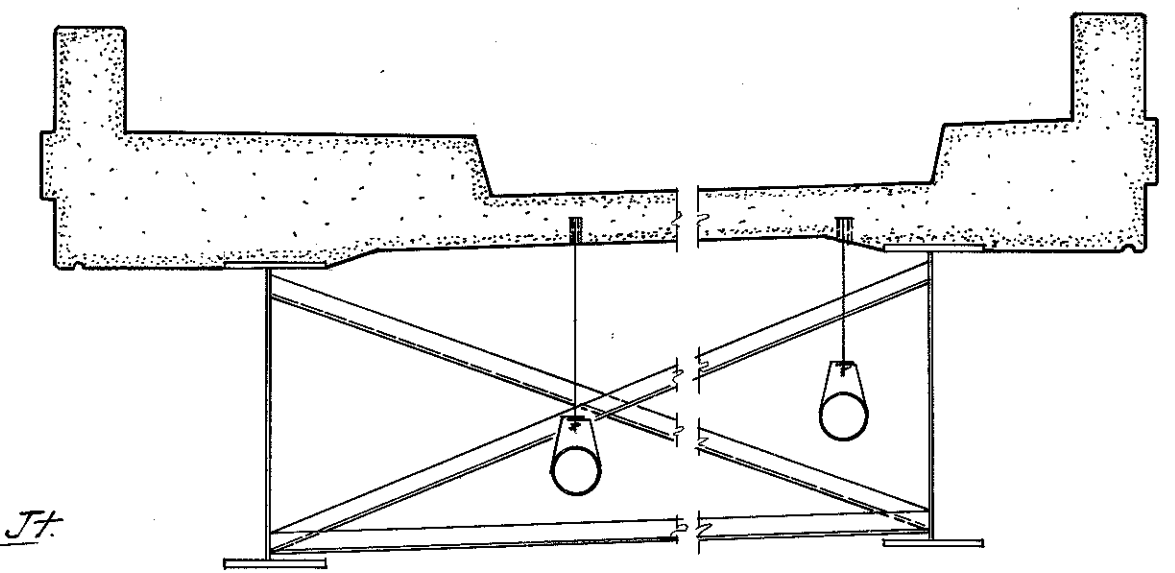


SECTION X-X

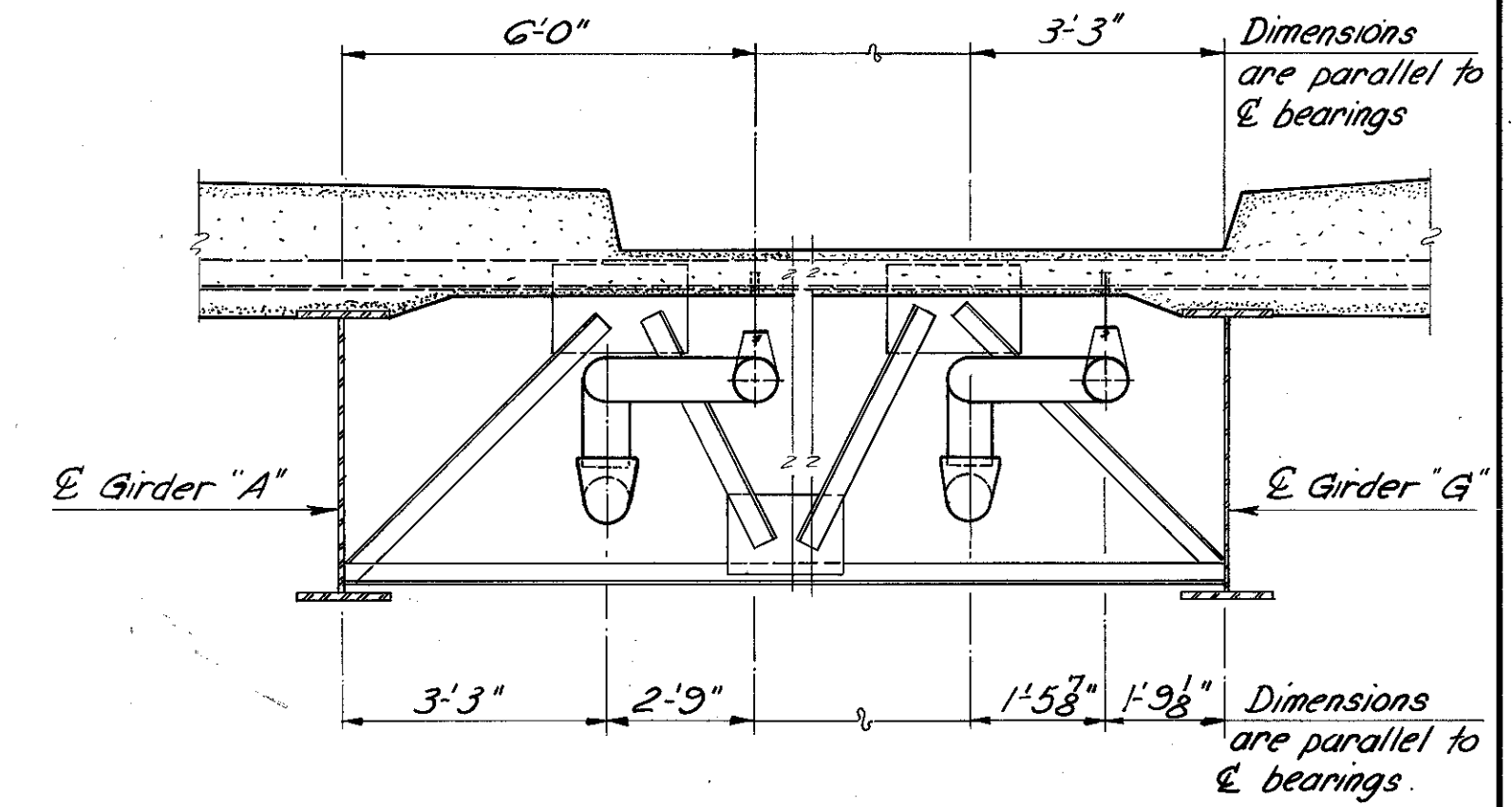
SHEET PILE DETAIL



SECTION P-P
ABUT. NO. 2



SECTION R-R
Normal to E girder



SECTION Z-Z
Along E Abut. bearings

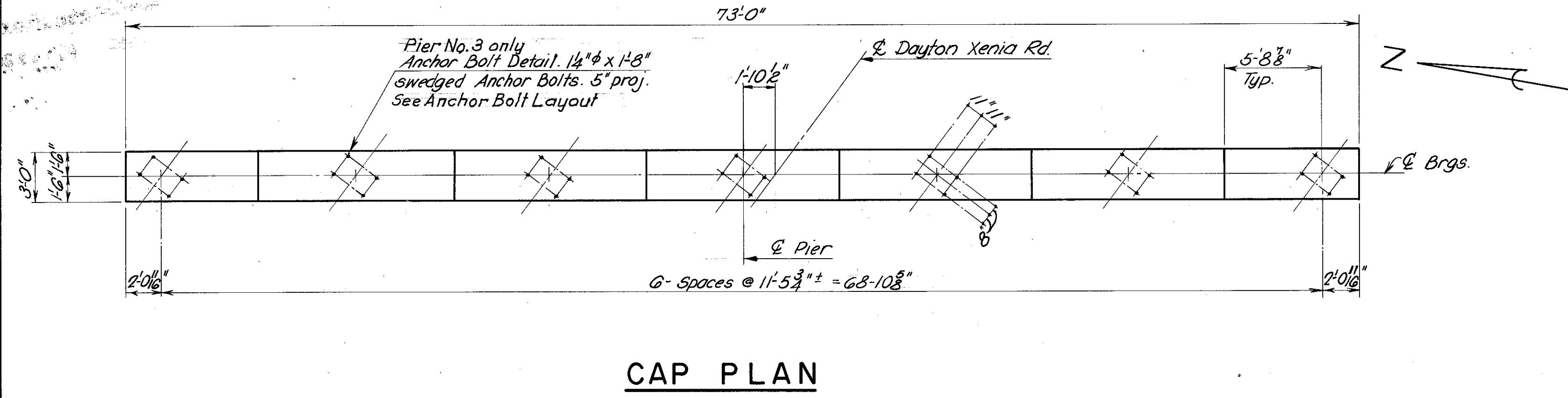
NOTES:
Work this sheet with sheets 4, 5, 6, 7, 18
For additional notes see sh. 4/18
For location of Sections R-R & Z-Z see sh. 3/18

KING & GAVARIS CONSULTING ENGINEERS		3/18	
ABUTMENT DETAILS			
BRIDGE NO. GRE-675-0616			
I-675 UNDER DAYTON XENIA RD.			
GREENE COUNTY		STA: 36+97.50 TO STA: 41+09.64	
DESIGNED V.P.	DRAWN A.W.	TRACED S.A.	CHECKED S.A.
REVIEWED DATE 7/25/12		REVISION	

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	GRE-675 • 5 • 37 GREENE COUNTY

480
616

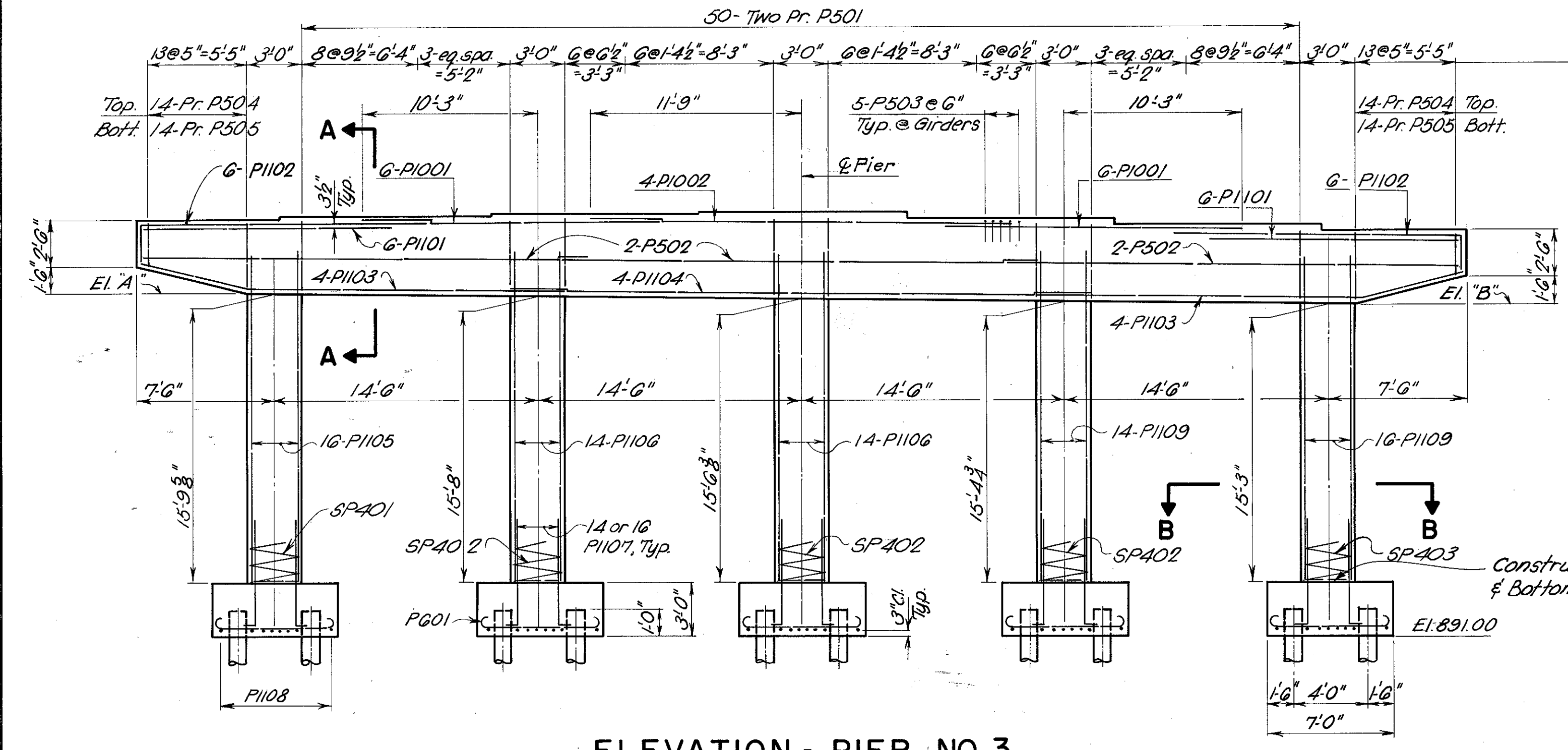
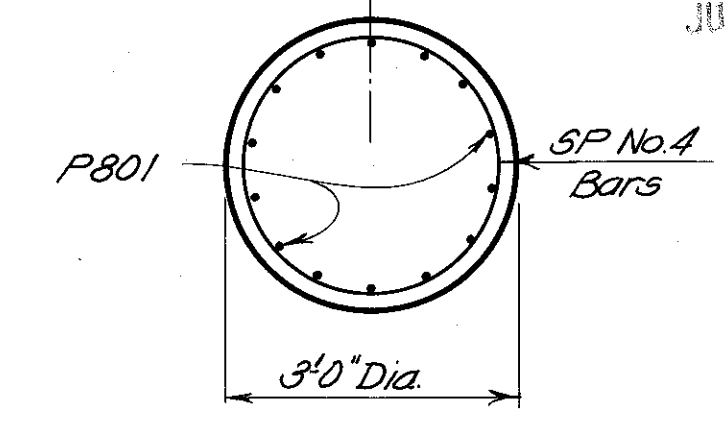
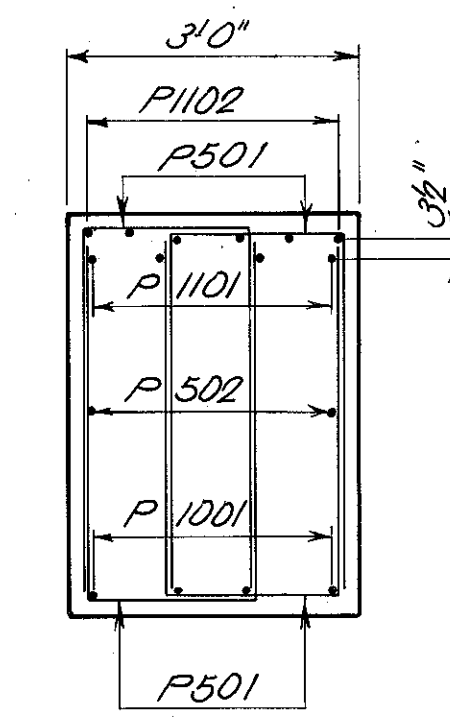
GRE-675 • 5 • 37
GREENE COUNTY



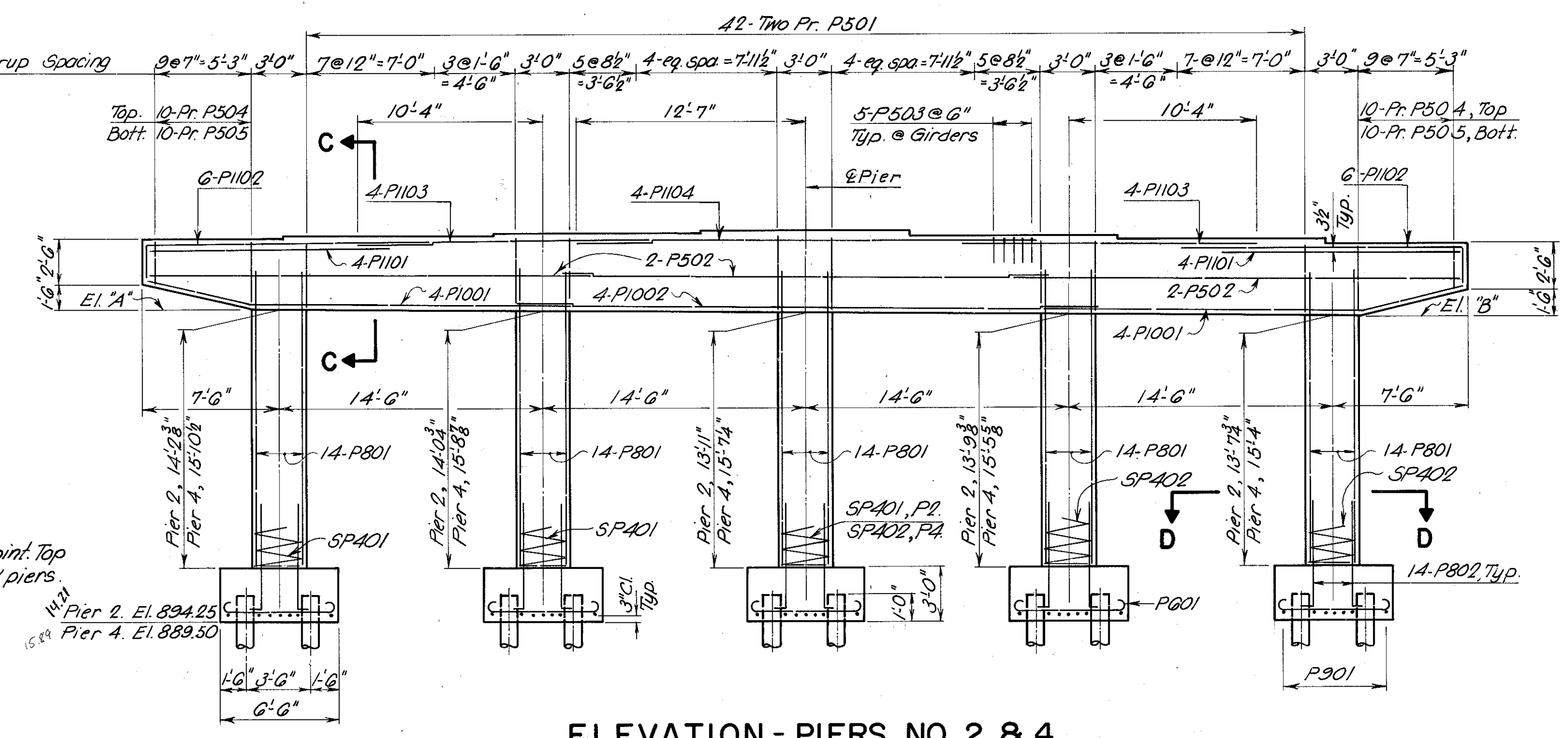
CAP PLAN

SECTION C-C

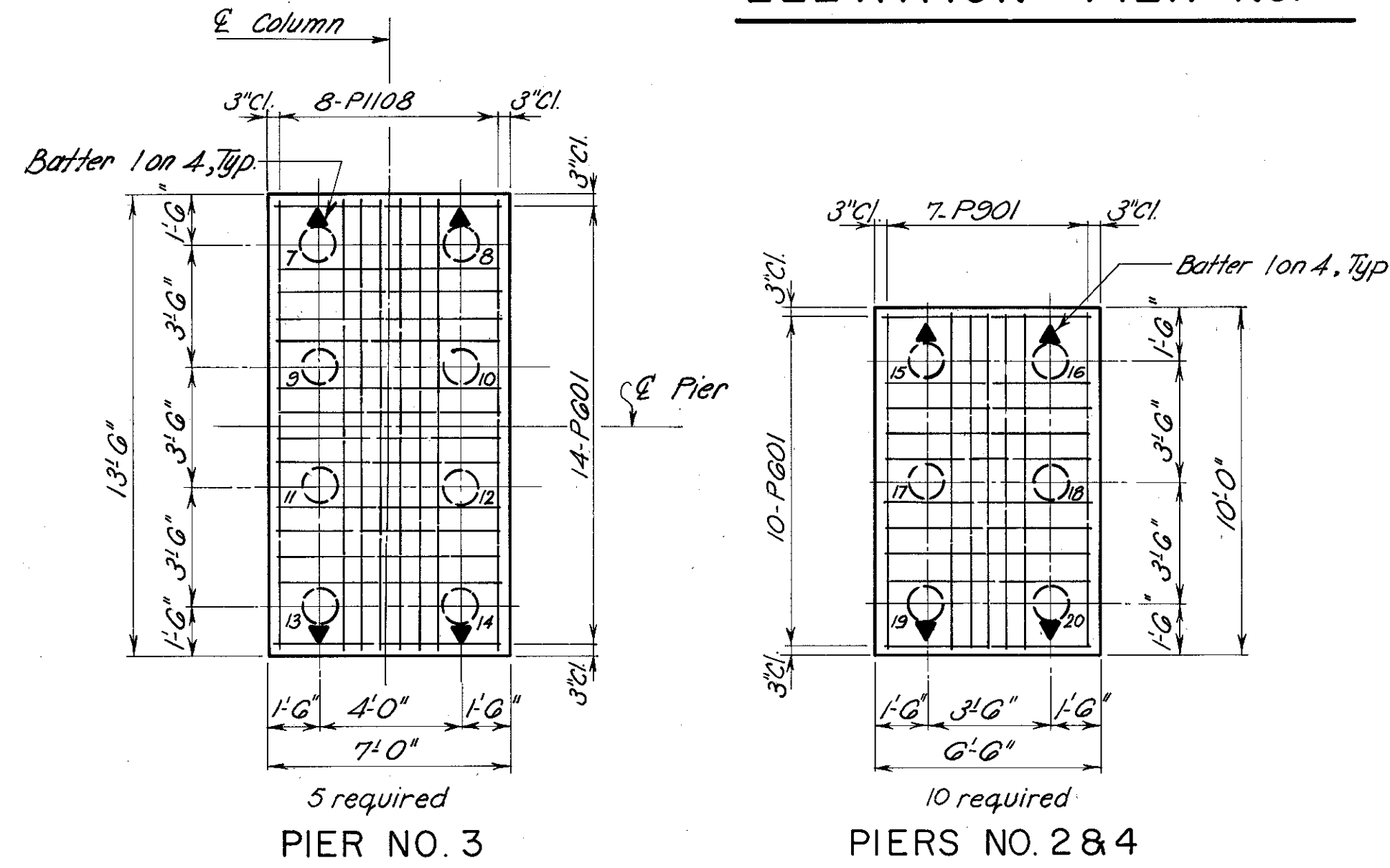
SECTION D-D



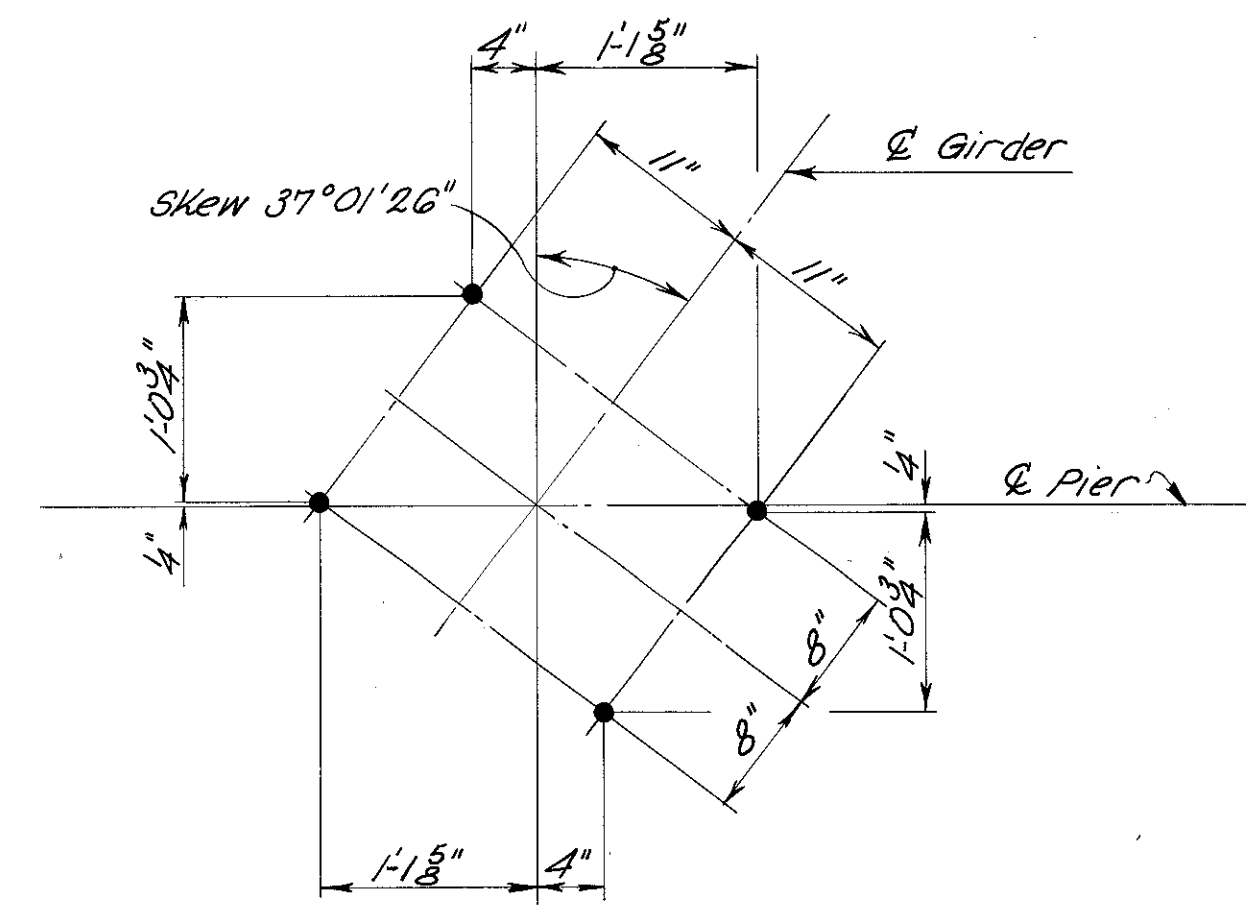
ELEVATION - PIER NO. 3



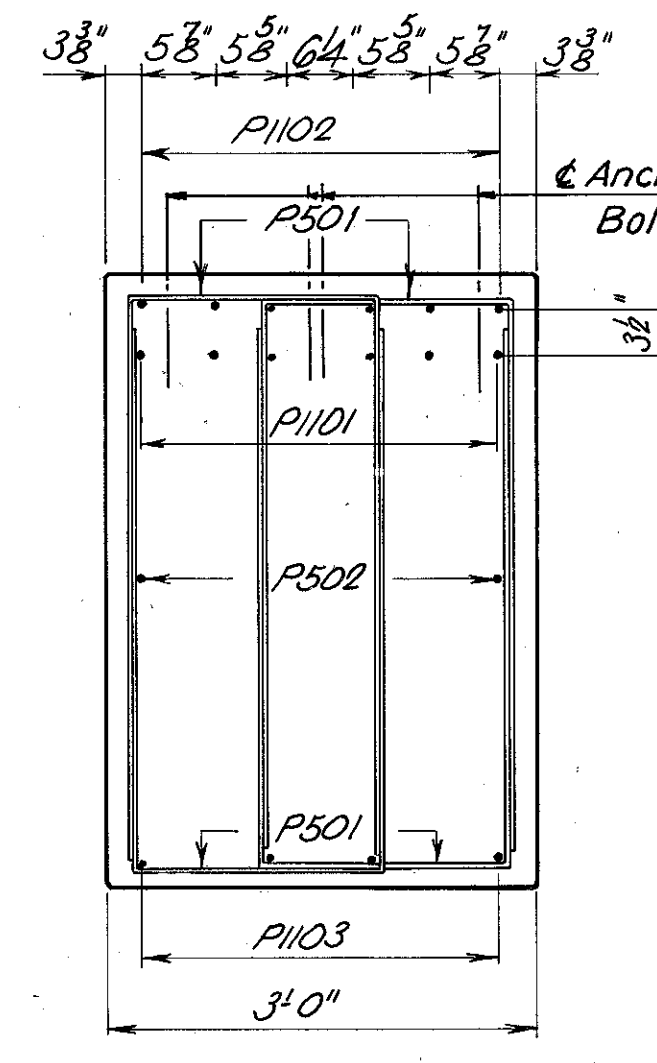
ELEVATION - PIERS NO. 2 & 4



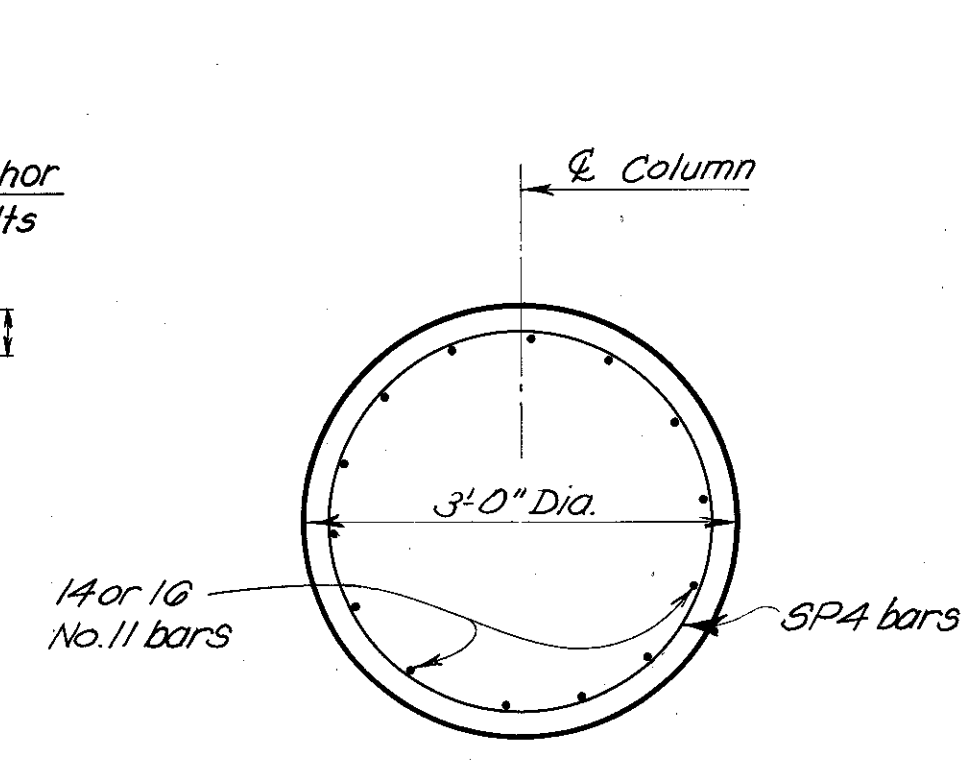
TYPICAL FOOTING PLANS



B-300 - MODIFIED - PIER NO. 3
ANCHOR BOLT LAYOUT



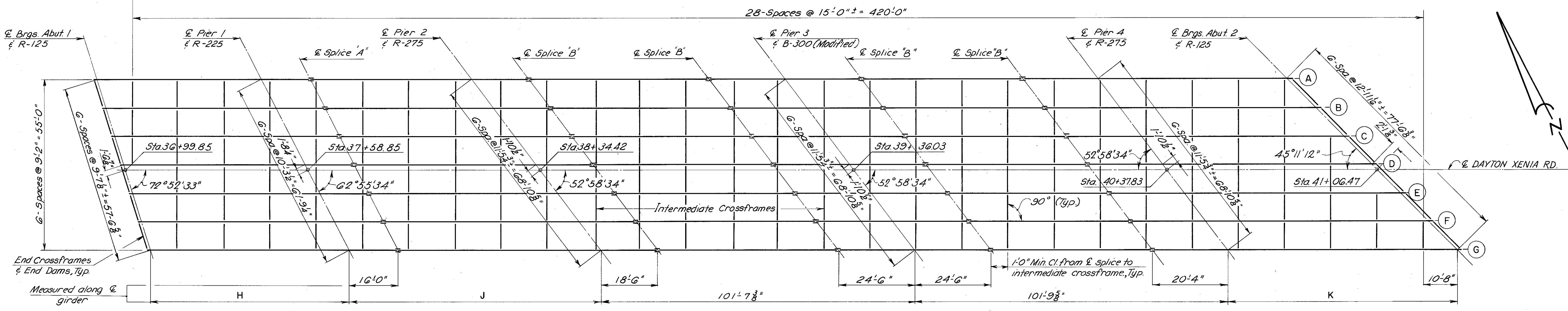
SECTION A-A



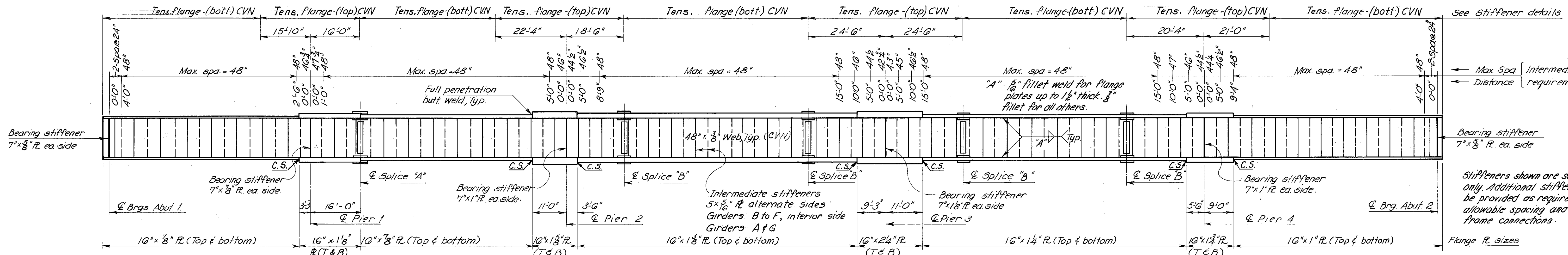
SECTION B-B

NOTE:
Work this sheet with sh. 9/18

KING & GAVARIS CONSULTING ENGINEERS CINCINNATI OHIO					10/18
PIERS NO. 2, 3 & 4					
BRIDGE NO. GRE-675-0616 I-675 UNDER DAYTON XENIA RD. GREENE COUNTY					
					STA: 36+97.50 TO STA: 41+09.64
DESIGNED V.P.	DRAWN A.W.	TRACED	CHECKED S.A.	REVIEWED SA	DATE 9/25/72



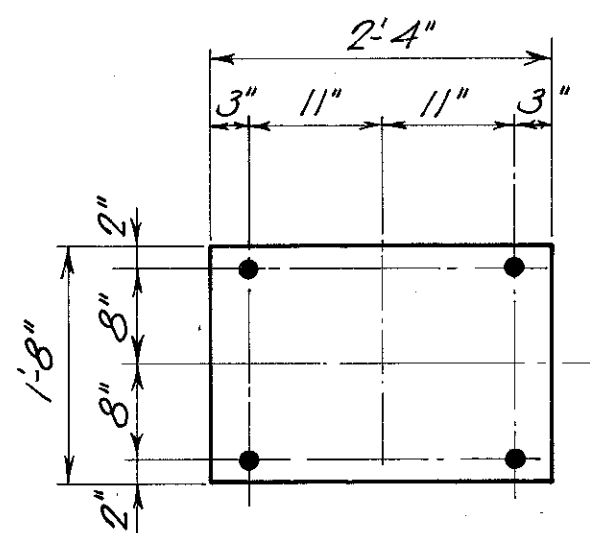
FRAMING PLAN



TYPICAL GIRDER ELEVATION

Welded forming attachments shall not be used in the tension areas of the top flange.

GEOMETRY			
GIRDER	H	J	K
A	53'-1 1/2"	68'-6 1/4"	61'-8 3/8"
B	54'-11 3/8"	70'-9 3/8"	63'-10 3/8"
C	56'-9 3/8"	72'-11 3/8"	66'-1"
D	58'-8 4"	75'-2 2"	68'-3 3/8"
E	60'-0 5/8"	77'-5 4"	70'-5 5/8"
F	62'-4 3/4"	79'-8"	72'-8"
G	64'-3 1/4"	81'-10 3/4"	74'-10 1/4"



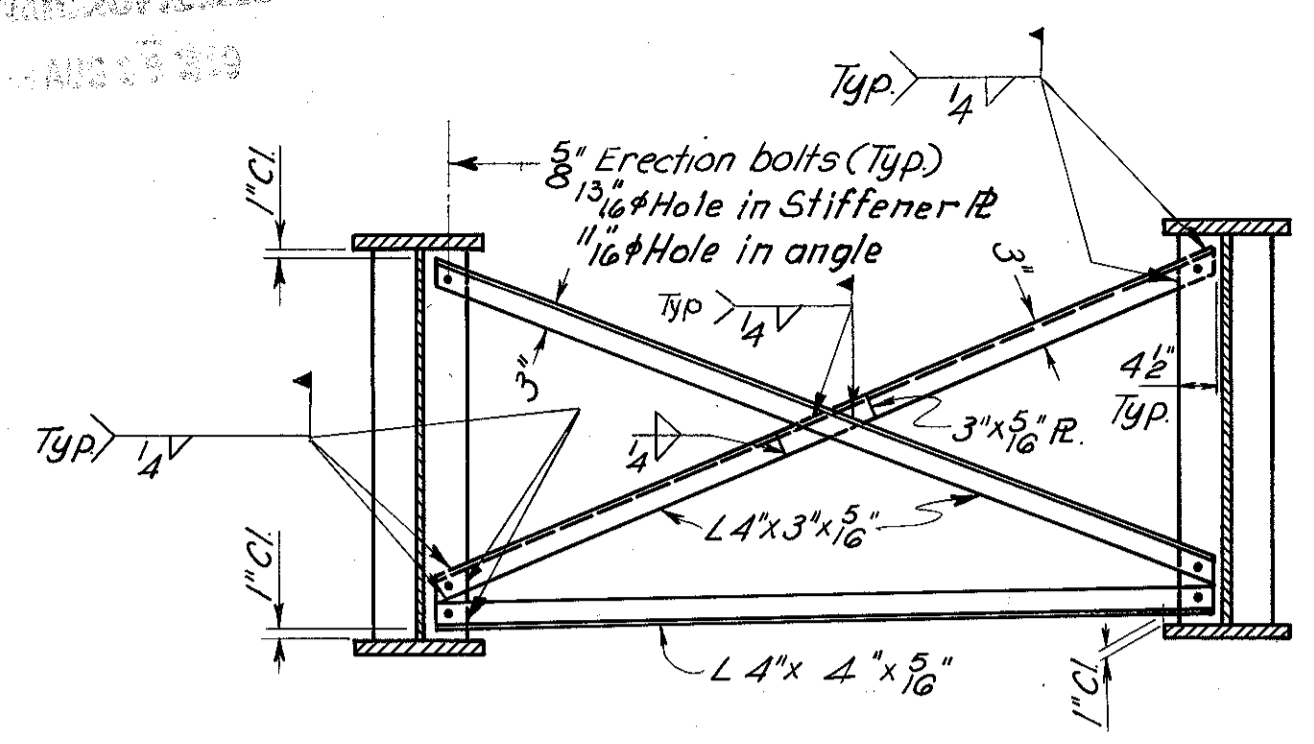
B-300-MODIFIED

Base plate as shown above. All other details same as Standard Bearing B-300

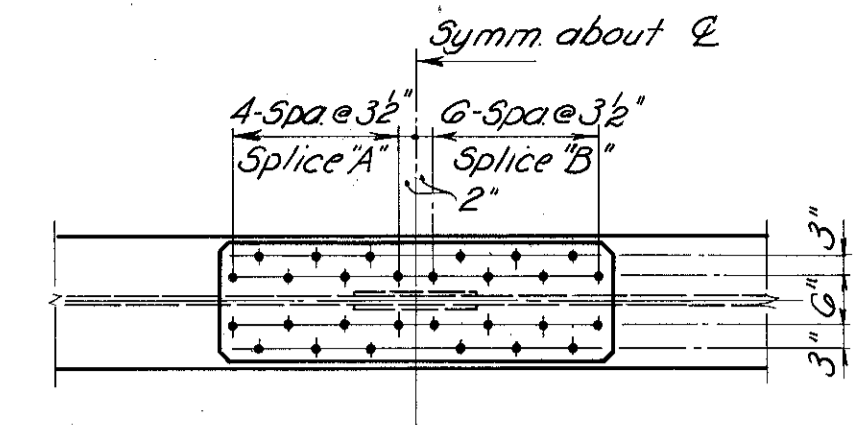
NOTES

- For intermediate crossframe details, see Common Details Sht. C2/C2
- For location of scuppers, see sh. 2/18
- For details of expansion bearings, R-125, R-225 & R-275, see Std. Dwg. RB-1-55.
- For typical transverse section, see Section "A-A" sh. 13/18.
- Work this sheet with sh. 12/18.
- Details of end dam and end crossframes (Included with Structural Steel for payment) similar to that shown on Std. Dwg. SD-1-69, except that outstanding leg of 4"x4"x1/2" angle of end dam shall be cut as necessary to clear the bearing stiffeners. See Special End Crossframe detail, Common Details Sht. C1/C2
- End of Girder treatments similar to that shown on SD-1-69.
- Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements.
- For details of fixed bearing B-300, see Std.-Dwg. RB-1-55 and adjacent detail B-300-Modified.

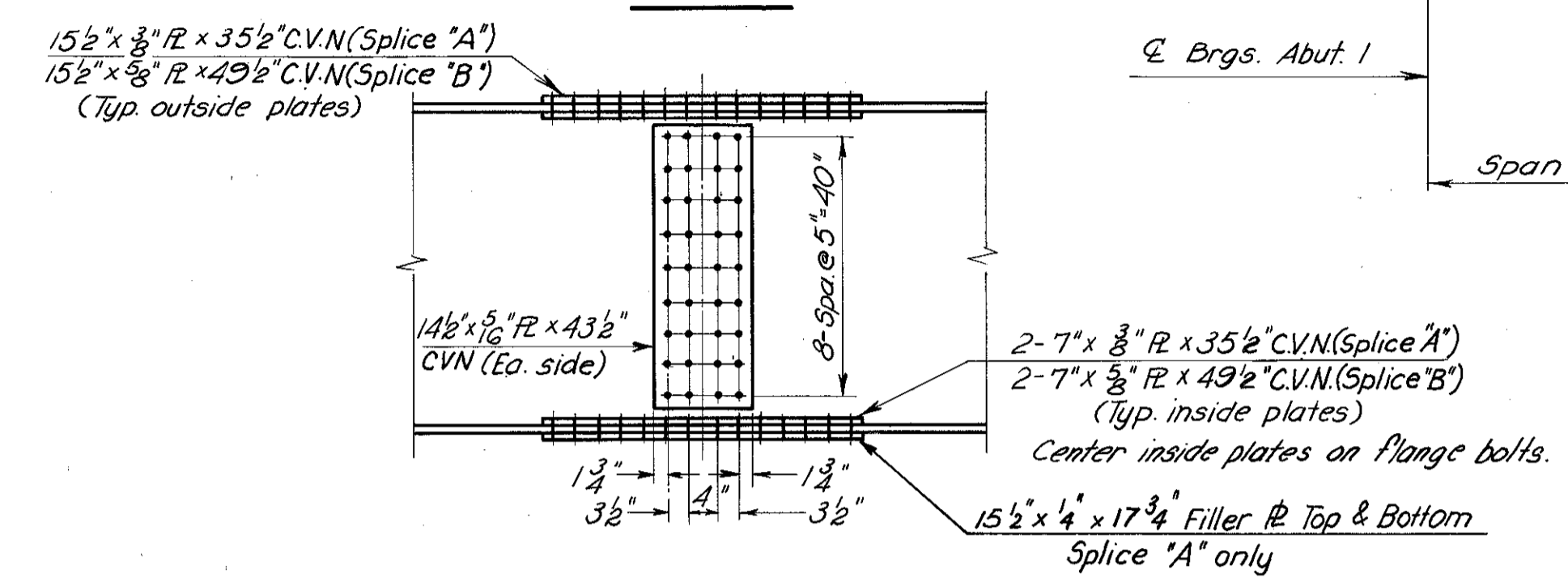
KING & GAVARIS CONSULTING ENGINEERS		11/18
STEEL FRAMING PLAN		
BRIDGE NO. GRE-675-0616		
I-675 UNDER DAYTON XENIA RD.		
GREENE COUNTY		STA: 36+97.50 TO STA: 41+09.64
DESIGNED V. P.	DRAWN A. W.	TRACED S. A.
CHECKED S. A.	REVIEWED S. A.	DATE 7/23/72
		REVISION 4/27/82



TYPICAL INTERMEDIATE CROSSFRAME

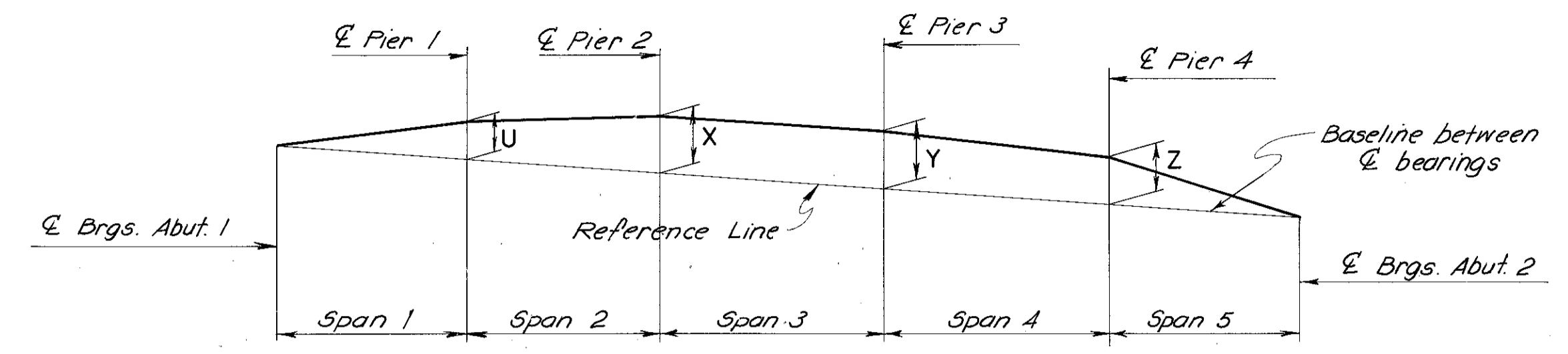


PLAN



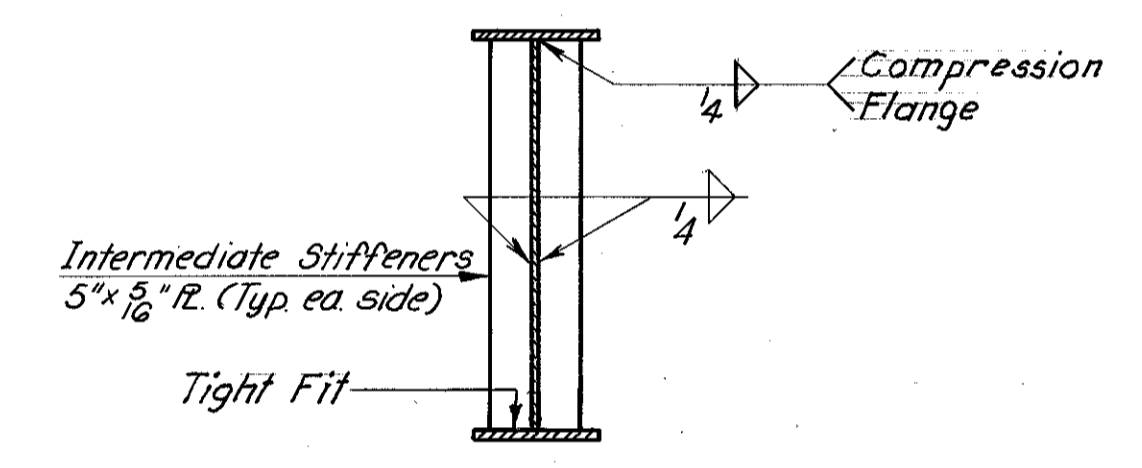
SPICE DETAILS

All bolts to be 1" # H.S.



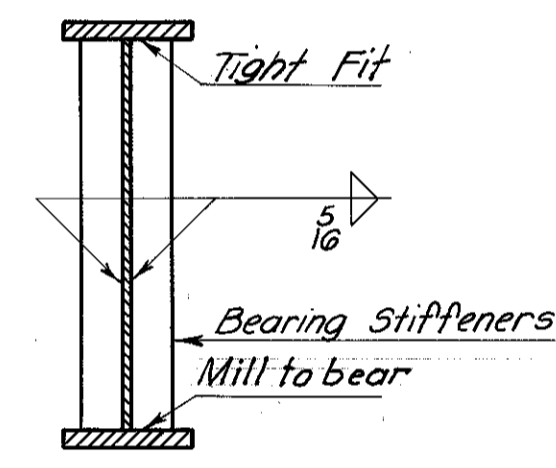
BLOCKING DIAGRAM

DIMENSION	BEAMS						
	A	B	C	D	E	F	G
U	3 3/8"	3 1/8"	3 1/8"	3 1/8"	3 1/8"	3 3/8"	3 1/4"
X	4 1/8"	3 1/8"	3 1/8"	3 1/8"	3 1/4"	3"	2 3/4"
Y	2 1/2"	2 3/8"	2 1/4"	2 1/8"	2"	1 5/8"	1 1/8"
Z	1"	1 5/16"	7/8"	1 5/16"	7/8"	1 3/16"	1 1/8"



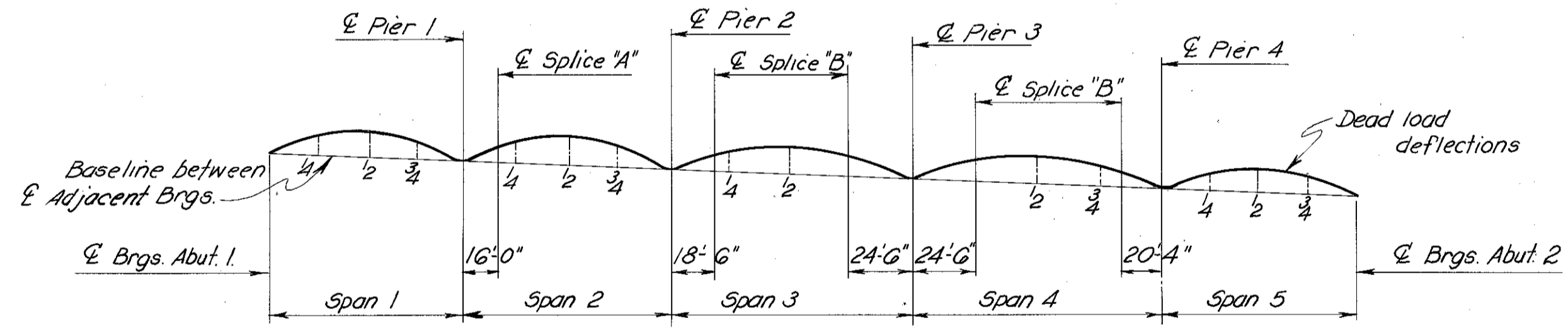
INTERMEDIATE STIFFENERS

Intermediate stiffeners shall be welded to the Compression Flange. Stiffeners may be normal to Flanges.



BEARING STIFFENERS

Bearing stiffeners to be vertical



CAMBER ALIGNMENT DIAGRAM

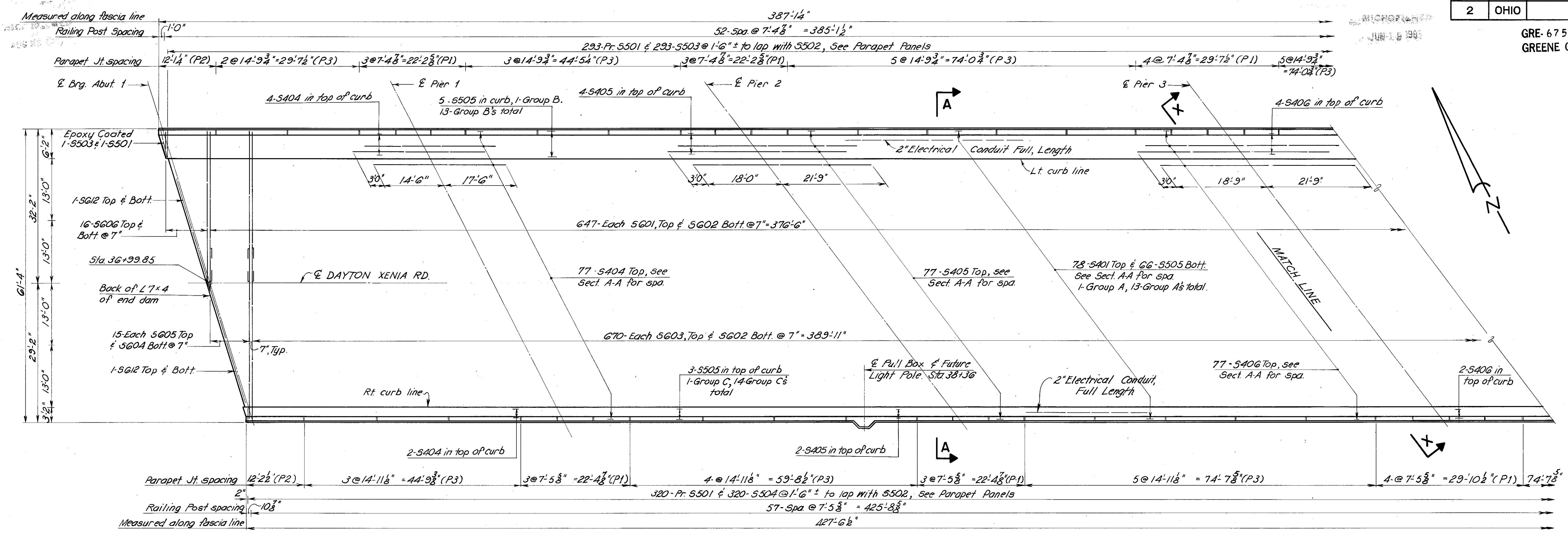
DESCRIPTION	DEFLECTION AND CAMBER															
	EXTERIOR GIRDER A					INTERIOR GIRDERS B THRU F					EXTERIOR GIRDER G					
	SPAN 1	SPAN 2	SPAN 3	SPAN 4	SPAN 5	SPAN 1	SPAN 2	SPAN 3	SPAN 4	SPAN 5	SPAN 1	SPAN 2	SPAN 3	SPAN 4	SPAN 5	
DEFLECTION DUE TO WEIGHT OF STEEL	0" 1/8" 0" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	
DEFLECTION DUE TO REMAINING DEAD LOAD	1/8" 1/8" 3/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 3/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 3/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 3/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 3/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 3/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 3/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 3/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 3/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 3/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 3/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 3/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 3/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 3/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 3/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"	1/8" 1/8" 3/8" 0" 0" 0" 0" 1/8" 3/8" 3/8" 1/8" 1/8" 0" 0" 0"
ADJUSTMENT REQ'D. FOR VERTICAL CURVE	4" 3" 4" 7/8" 7/8" 9/8" 3" 0" 0" 0" 0" 0" 0" 0" 0" 0"	4" 3" 4" 7/8" 7/8" 9/8" 3" 0" 0" 0" 0" 0" 0" 0" 0" 0"	4" 3" 4" 7/8" 7/8" 9/8" 3" 0" 0" 0" 0" 0" 0" 0" 0" 0"	4" 3" 4" 7/8" 7/8" 9/8" 3" 0" 0" 0" 0" 0" 0" 0" 0" 0"	4" 3" 4" 7/8" 7/8" 9/8" 3" 0" 0" 0" 0" 0" 0" 0" 0" 0"	4" 3" 4" 7/8" 7/8" 9/8" 3" 0" 0" 0" 0" 0" 0" 0" 0" 0"	4" 3" 4" 7/8" 7/8" 9/8" 3" 0" 0" 0" 0" 0" 0" 0" 0" 0"	4" 3" 4" 7/8" 7/8" 9/8" 3" 0" 0" 0" 0" 0" 0" 0" 0" 0"	4" 3" 4" 7/8" 7/8" 9/8" 3" 0" 0" 0" 0" 0" 0" 0" 0" 0"	4" 3" 4" 7/8" 7/8" 9/8" 3" 0" 0" 0" 0" 0" 0" 0" 0" 0"	4" 3" 4" 7/8" 7/8" 9/8" 3" 0" 0" 0" 0" 0" 0" 0" 0" 0"	4" 3" 4" 7/8" 7/8" 9/8" 3" 0" 0" 0" 0" 0" 0" 0" 0" 0"	4" 3" 4" 7/8" 7/8" 9/8" 3" 0" 0" 0" 0" 0" 0" 0" 0" 0"	4" 3" 4" 7/8" 7/8" 9/8" 3" 0" 0" 0" 0" 0" 0" 0" 0" 0"	4" 3" 4" 7/8" 7/8" 9/8" 3" 0" 0" 0" 0" 0" 0" 0" 0" 0"	4" 3" 4" 7/8" 7/8" 9/8" 3" 0" 0" 0" 0" 0" 0" 0" 0" 0"
REQ'D. SHOP CAMBER	7/16" 3/8" 3/8" 7/16" 7/16" 9/16" 7/16" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8"	7/16" 3/8" 3/8" 7/16" 7/16" 9/16" 7/16" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8"	7/16" 3/8" 3/8" 7/16" 7/16" 9/16" 7/16" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8"	7/16" 3/8" 3/8" 7/16" 7/16" 9/16" 7/16" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8"	7/16" 3/8" 3/8" 7/16" 7/16" 9/16" 7/16" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8"	7/16" 3/8" 3/8" 7/16" 7/16" 9/16" 7/16" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8"	7/16" 3/8" 3/8" 7/16" 7/16" 9/16" 7/16" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8"	7/16" 3/8" 3/8" 7/16" 7/16" 9/16" 7/16" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8"	7/16" 3/8" 3/8" 7/16" 7/16" 9/16" 7/16" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8"	7/16" 3/8" 3/8" 7/16" 7/16" 9/16" 7/16" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8"	7/16" 3/8" 3/8" 7/16" 7/16" 9/16" 7/16" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8"	7/16" 3/8" 3/8" 7/16" 7/16" 9/16" 7/16" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8"	7/16" 3/8" 3/8" 7/16" 7/16" 9/16" 7/16" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8"	7/16" 3/8" 3/8" 7/16" 7/16" 9/16" 7/16" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8"	7/16" 3/8" 3/8" 7/16" 7/16" 9/16" 7/16" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8"	

Work this sheet with sheet 11/18

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

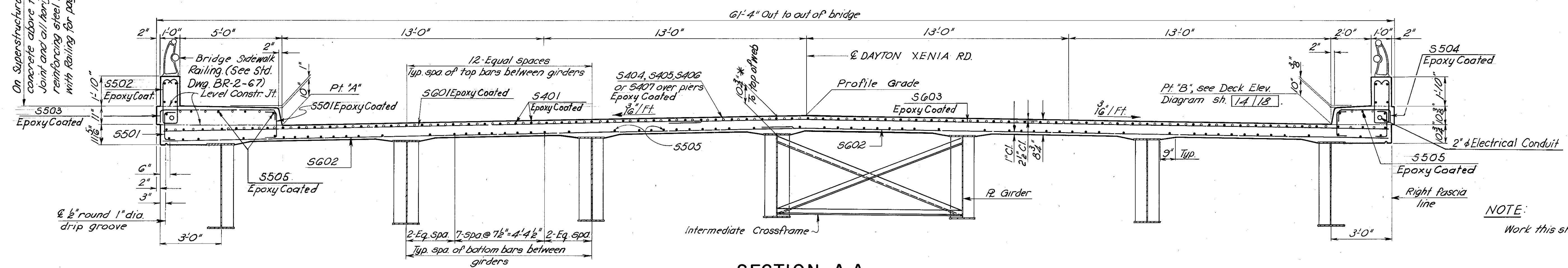
SUPERSTRUCTURE DETAILS
BRIDGE NO. GRE-675-0616
I-675 UNDER DAYTON XENIA RD.
GREENE COUNTY STA: 36+97.50 TO 41+09.64

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.	SA	9/25/12	



PLAN
SPANS 1, 2 & 3

On Superstructure, all concrete above this joint and all horizontal reinforcing steel included with Railing for payment. Typ.

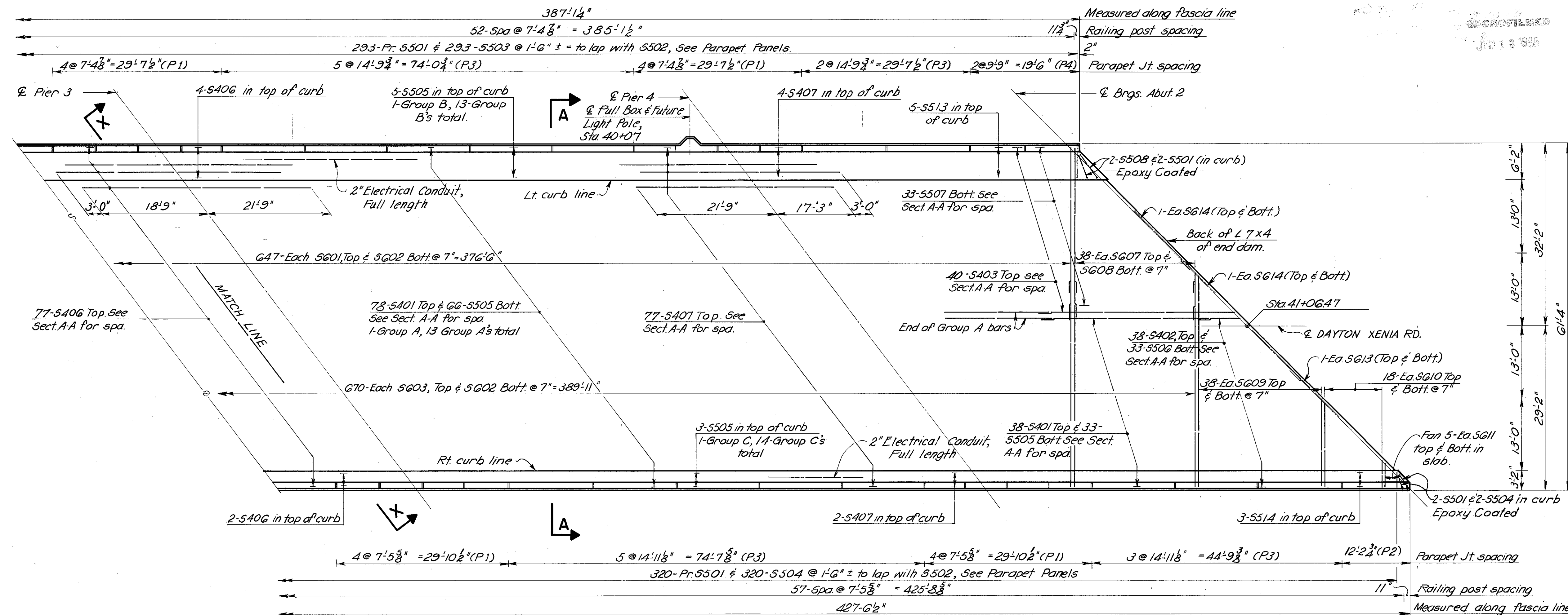


SECTION A-A

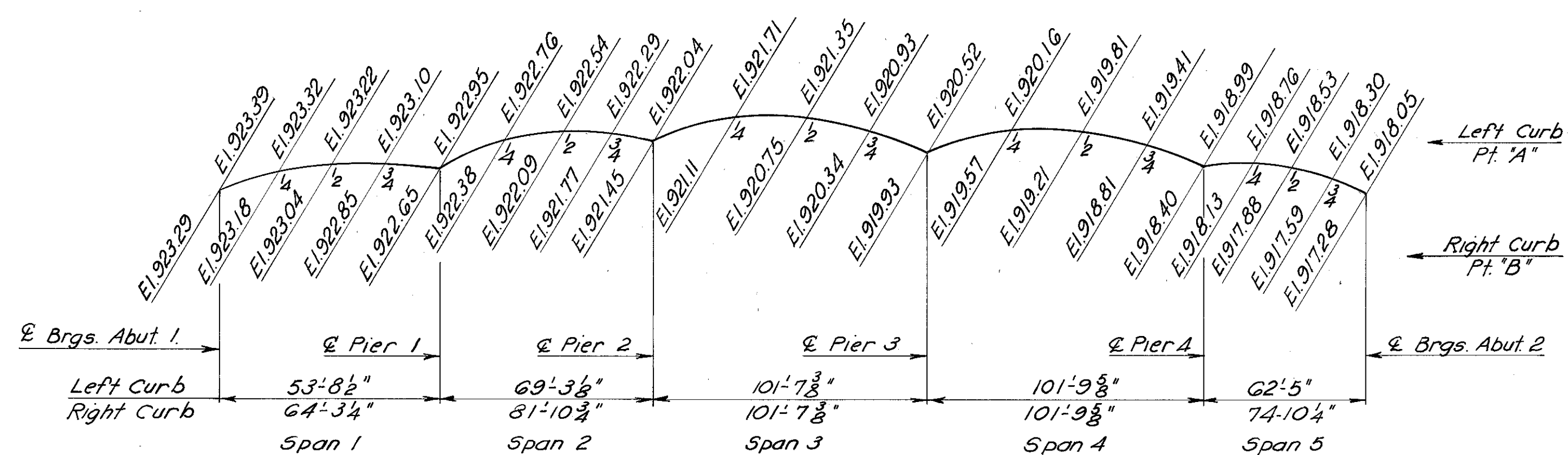
* This is the design dimension. The quantity of deck concrete to be paid for shall be based upon this dimension, even though deviation from it may be necessary because the top flange of the girder may not have the exact camber or conformation required to place it parallel to the finished grade. Deduction shall be made for volume of encased steel plates as per 511.18.

NOTE:
Work this sheet with sh. 1A/1B.

KING & GAVARIS CONSULTING ENGINEERS		13/18
SUPERSTRUCTURE ROADWAY SLAB - I		
BRIDGE NO. GRE-675-0616 1-675 UNDER DAYTON XENIA RD. GREENE COUNTY		
		STA. 36+97.50 TO STA. 41+09.64
DESIGNED V.P.	DRAWN A.W.	TRACED SA.
CHECKED SA.	REVIEWED SA	DATE 9/25/72
		REVISED



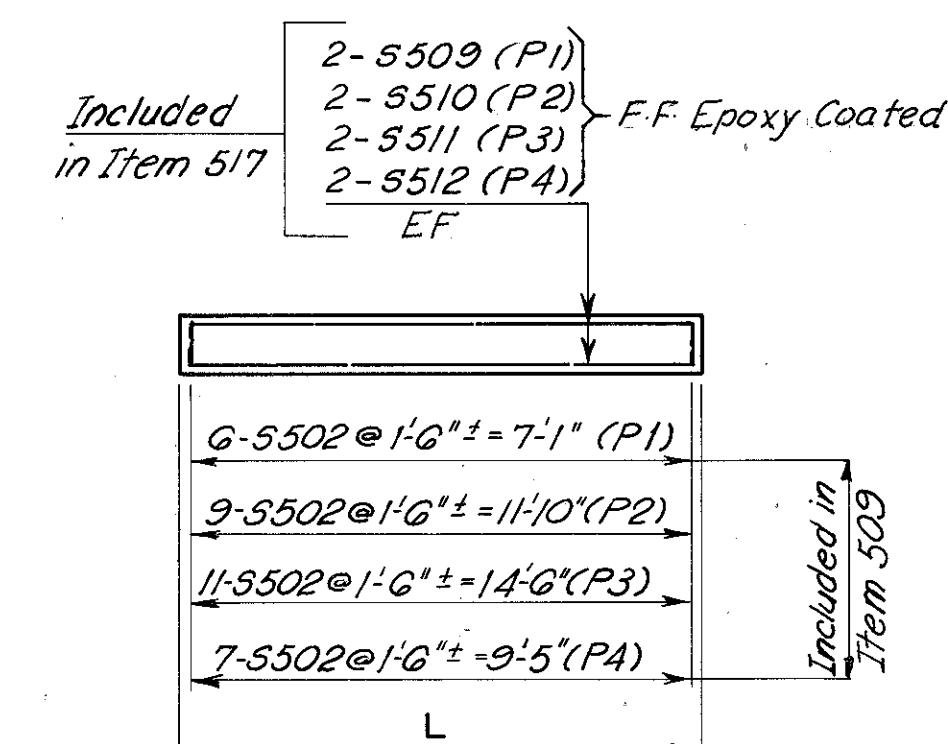
PLAN
SPANS 4 & 5



DECK ELEVATION DIAGRAM

AT CURB POINTS A & B
BEFORE CONCRETE IS PLACED

PANELS		
NO. REQ'D	MARK	L
28	P1	7'-4 3/8"
3	P2	12'-1 1/8"
37	P3	14'-9 3/4"
2	P4	9'-9"



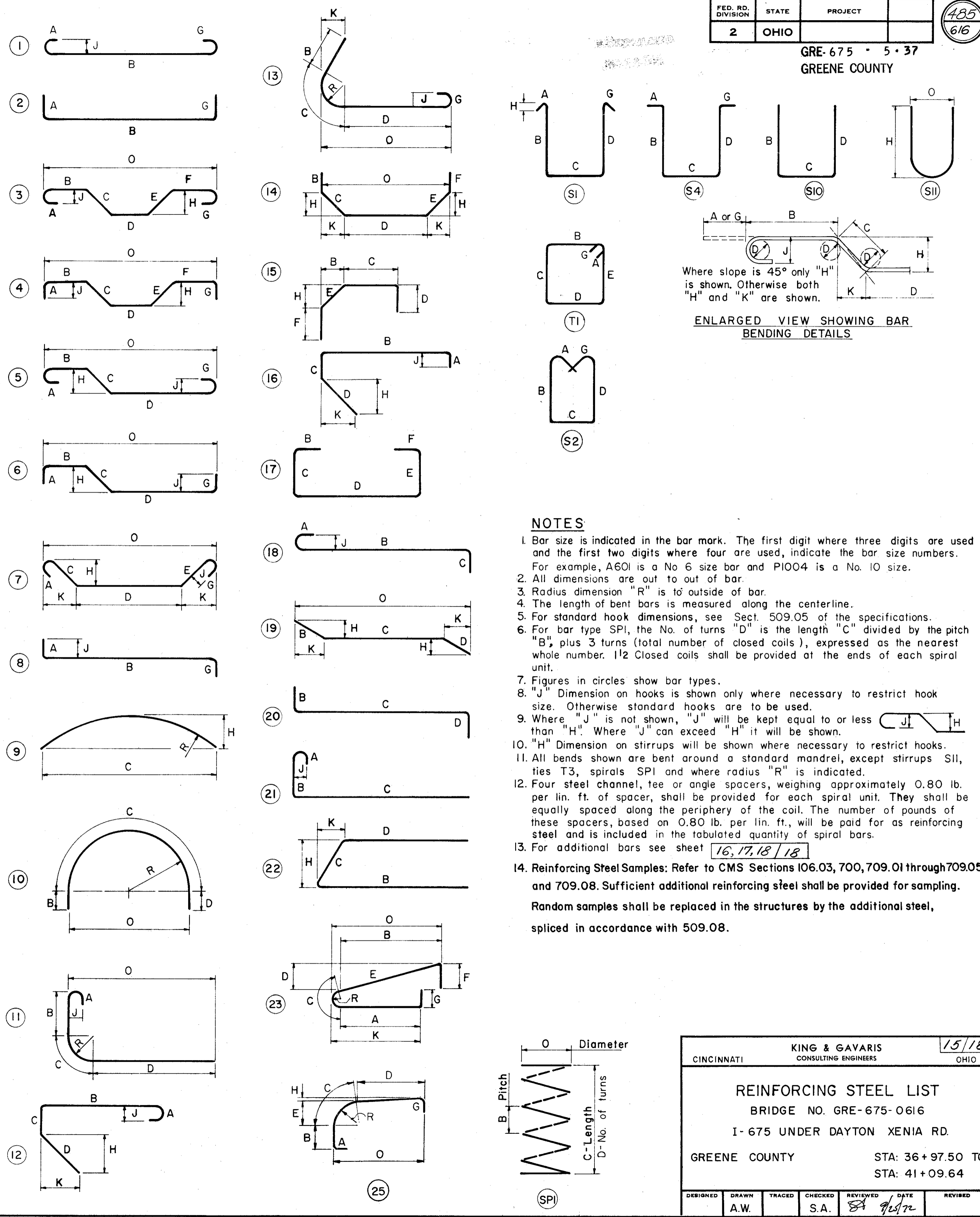
PARAPET PANELS

NOTES:

Slab thickness shown includes 1" for monolithic wearing surface.
Work this sheet with sh. 13/18.
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 1:4 for a haunch less than 9" in width.
For deflection joint details see Std. Dwg. BR-2-G7
For reinforcing steel list see sh. 13/18.
For End Dam details, included with Item 513 (Structure Steel) for payment, see Std. Dwg. SD-1-G9 & Sh. 11/12.
For scupper locations, not shown, see sh. 2/18.
For Light Pole Pedestal Details, see Std. Construction Dwg. HL-4.
All Splices and Dowels to be lapped min. 30 bar dia. unless otherwise shown.

KING & GAVARIS CONSULTING ENGINEERS		14/18
CINCINNATI OHIO		
SUPERSTRUCTURE ROADWAY SLAB-2		
BRIDGE NO. GRE-675-0616		
I-675 UNDER DAYTON XENIA RD.		
GREENE COUNTY		STA: 36+97.50 TO STA: 41+09.64
DESIGNED V.P.	DRAWN A.W.	TRACED S.A.
CHECKED S.A.	REVIEWED DATE 9/23/12	DATE VISED

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES	
ABUTMENT NO. 1					Reinforcing steel in Abutment No. 1 shall have the suffix "A"													
A501	54	27'-8"	1,558	Str														
A502	15	19'-6"	305	Str														
A503	2	6'-9"	14	Str														
A504	43	22'-0"	387	Str														
A505	40	9'-6"	396	Str														
A506	8	10'-10"	90	22			3'-0"	8'-10"										
A507	6	24'-10"	155	22			3'-0"	22'-0"				2'-10 3/8"		10 5/8"				
A508	6	21'-4"	134	19		2'-0"	19'-5"	22'-0"				7 7/8"		1'-10 3/8"	21'-3 3/8"			
A509	9	26'-3"	246	Str														
A510	19	19'-3"	381	Str														
A511	56	6'-7"	385	S10		2'-0"	2'-10"	2'-0"										
A512	2	3'-7"	7	S10		2'-0"	1'-3"	6"									2 Epoxy Coated	
A513	8	8'-0"	67	Str														
A514	43	21'-0"	342	Str														
A515	40	6'-0"	250	Str														
A516	8	4'-9"	40	Str														
A517	8	8'-7"	72	22		5'-9"	3'-0"											
A518	6	23'-3"	145	22		20'-5"	3'-0"					2'-10 3/8"		10 5/8"				
A519	6	19'-3"	120	19		2'-0"	17'-4"					7 7/8"		1'-10 3/8"	19'-2 3/8"			
A520	2	6'-3"	13	2	9"	5'-6"												2 Epoxy Coated
A521	2	2'-9"	6	2	9"	1'-3"												
A522	2	18'-8"	39	Str														
A523	1	15'-0"	16	Str														
A524	13	Varies 15'-5" to 25'-9" by 10 3/8" 1-00.	279	Str														
A525	10	Varies 8'-2" to 15'-5" by 9 3/8" 1-00.	123	Str														
A526	3	Varies 2'-10" to 6'-4" by 1 3/8" 1-00.	14	Str														
A527	2	25'-11"	54	Str														
A528	2	25'-2"	52	Str														
A529	16	23'-6"	392	Str														
A530	10	Varies 4'-10" to 23'-6" by 4-8 1/2 2-00.	148	Str														
A531	2	21'-6"	45	Str														
A533	10	Varies 3'-4" to 23'-8" by 5'-0" 2-00.	142	Str														
A535	2	15'-3"	32	16	6"	4'-8"	6'-3"	4'-2 3/8"						3'-0"	3'-0"		6 1/2"	1 Epoxy Coated 8 Epoxy Coated
A536	8	3'-3"	27	S11										1'-6"				2 Epoxy Coated
A537	24	4'-8"	117	Str														4 Epoxy Coated
A538	4	23'-3"	97	S-2	5"	11'-0"	8"	11'-0"					5"					
A539	6	Varies 14'-1" to 3'-11" by 1'-0" 2-00.	18	Str														
A540	1	18'-5"	19	S-2	5"	8'-7"	8"	8'-7"					5"					1 Epoxy Coated
A541	1	16'-1"	17	S-2	5"	7'-5"	8"	7'-5"					5"					1 Epoxy Coated
A542	2	23'-8"	49	Str														
A543	4	6'-10"	29	25	9"	1'-0"	7 3/8"	4'-0"	5"						4'-6"	5"		4 Epoxy Coated
A545	1	18'-11"	20	S-2	5"	8'-10"	8"	8'-10"					5"					1 Epoxy Coated
A546	1	16'-9"	17	S-2	5"	7'-9"	8"	7'-9"					5"					1 Epoxy Coated
A547	2	15'-7"	33	16	6"	4'-8"	6'-9"	3'-10 3/4"						2'-9"	2'-9"			1 Epoxy Coated
A548	6	Varies 2'-2" to 4'-2" by 1'-0" 2-00.	20	Str														
A601	52	30'-0"	2,343	Str														
A602	2	22'-9"	68	Str														
A603	24	24'-8"	889	Str														
A604	100	8'-10"	1,327	1	8"	8'-2"							6"					
A605	9	8'-5"	114	1	8"	7'-9"							6"					
A606	13	6'-9"	132	Str														
A607	31	7'-0"	326	1	8"	6'-4"							6"					
A608	1	23'-9"	36	Str														
A609	12	9'-6"	171	Str														7 Epoxy Coated
A610	13	6'-11"	135	1	8	6'-3"							6"					
A611	1	11'-8"	18	Str														
A612	1	10'-3"	15	Str														
A613	1	20'-9"	31	Str														
A614	3	22'-4"	101	Str														
A615	1	26'-1"	39	Str														
A616	3	15'-5"	69	Str														
A617	28	12'-3"	515	16		1'-3"	7'-5"	3'-9"						2'-7 3/4"	2'-7 3/4"			
A618	57	11'-10"	1,013	17		3'-3"	11"	8'-0"										
A619	35	10'-0"	526	Str														
A620	5	Varies 2'-10" to 6'-4" by 10 3/8" 1-00.	34	Str														
A621	11	13'-1"	216	16				9'-6"	3'-9"					2'-7 3/4"	2'-7 3/4"			



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 numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
- All dimensions are out to out of bar.
- Radius dimension "R" is to outside of bar.
- The length of bent bars is measured along the centerline.
- For standard hook dimensions, see Sect. 509.05 of the specifications.
- For bar type SPI, 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. 1/2 Closed coils shall be provided at the ends of each spiral unit.
- Figures in circles show bar types.
- "J" Dimension on hooks is shown only where necessary to restrict hook size. Otherwise standard hooks are to be used.
- Where "J" is not shown, "J" will be kept equal to or less than "H". Where "J" can exceed "H" it will be shown.
- "H" Dimension on stirrups will be shown where necessary to restrict hooks.
- All bends shown are bent around a standard mandrel, except stirrups S11, ties T3, spirals SPI and where radius "R" is indicated.
- Four steel channel, tee or angle spacers, weighing approximately 0.80 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.
- For additional bars see sheet 16, 17, 18 / 18
- Reinforcing Steel Samples: Refer to CMS Sections IO6.03, 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.

KING & GAVARIS
CONSULTING ENGINEERS

15/18
OHIO

REINFORCING STEEL LIST
BRIDGE NO. GRE-675-0616
I- 675 UNDER DAYTON XENIA RD.
GREENE COUNTY STA: 36+97.50 TO
STA: 41+09.64

DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE	REVISED
	A.W.		S.A.		9/2/22	

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
ABUTMENT NO. 2 CONTINUED																	
A622	3	13'-2"	59	16			9'-6"	3'-9"				2'-7 1/2"		2'-7 1/2"			
A623	42	10'-0"	631	STR													
A624	5	10'-6 1/2" by 10'-11" by 10'-4 1/2" by 10'-11" by	36	STR													
A625	25	12'-6"	469	16		1'-3"	7'-8"	3'-9"				2'-7 1/2"		2'-7 1/2"			
A626	10	12'-3"	184	16		1'-3"	7'-5"	3'-9"				2'-7 1/2"		2'-7 1/2"			
A627	6	14'-0"	126	16			10'-3"	3'-9"				2'-7 1/2"		2'-7 1/2"			
A628	5	14'-3"	107	16			10'-6"	3'-9"				2'-7 1/2"		2'-7 1/2"			
A629	10	8'-8"	130	1	8"	8'-0"							6"				
A630	156	8'-0"	1,874	STR													
A631	44	7'-0"	463	STR													
A701	11	8'-7"	182	1	10"	7'-3"							7"				
A801	3	7'-3"	58	STR													
A802	2	15'-6"	83	STR													
A803	6	22'-9"	364	STR													
A804	1	12'-0"	32	STR													
A805	1	14'-9"	39	STR													
A806	11	20'-0"	587	STR													
A807	2	9'-6"	51	STR													
A808	1	14'-0"	37	STR													
A809	7	23'-3"	435	STR													
A810	1	17'-6"	47	STR													
A811	75	6'-2"	1,235	14		1'-3"	3'-8"	1'-3"				2'-7"		2'-7"			
A901	135	10'-4"	4,743	1	1'-3"	9'-1"							11 1/2"				
A902	9	10'-0"	306	1	1'-3"	8'-9"							11 1/2"				
A903	122	18'-10"	7,812	STR													
A904	160	6'-7"	3,581	22		1'-3"	5'-7 1/2"					5'-7"		4 1/2"			
A905	11	22'-7"	845	STR													
A906	10	10'-16 1/2" by 10'-21 1/2" by 5'-12 1/2" by	643	STR													
A907	6	23'-4"	476	STR													
A908	11	10'-16 1/2" by 10'-11 1/2" by 5'-2 1/2" by	528	STR													
A909	13	10'-11 1/2" by 10'-11 1/2" by 5'-8 1/2" by	392	STR													
A910	13	13'-7"	600	12	1'-3"	7'-0"		5'-7 1/2"				5'-7"		4 1/2"			
A911	8	10'-5 1/2" by 10'-5 1/2" by 5'-8 1/2" by	387	12	1'-3"	5'-9"		10'-5 1/2" by 10'-5 1/2" by 5'-8 1/2" by				10'-5 1/2" by 10'-5 1/2" by 5'-8 1/2" by		10'-5 1/2" by 10'-5 1/2" by 5'-8 1/2" by			
A1001	11	9'-6"	450	STR													
A1002	11	14'-7"	690	13		4'-8"	2'-0"	6'-6"			1'-5"		3 1/2"	7'-9"	1'-3"		
A1101	135	16'-1"	11,536	13		4'-10"	2'-1"	7'-7"			1'-7"		3"	9'-0"	1'-5"		
A1102	118	12'-6"	7,837	STR													
A1103	26	11'-6"	1,589	STR													
A1104	9	15'-7"	745	13		4'-10"	2'-1"	7'-1"			1'-7"		3"	8'-6"	1'-5"		
Total			70,675														
Total Abutments			125,763														

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
PIER NO. 1 CONTINUED																	
P1001	4	13'-1"	225	STR													
P1002	8	25'-11"	892	19		5'-9"	20'-2"					1'-6"	5'-7"	25'-9"			
P1003	4	20'-3"	349	STR													
P1101	8	19'-5"	825	20		2'-2"	17'-7"										
P1102	6	14'-11"	476	20		2'-2"	13'-1"										
P1103	8	21'-2"	900	STR													
P1104	2	20'-7"	219	STR													
Total			12,993														
PIER NO. 2 Reinforcing steel in Pier No. 2 shall have the suffix "B"																	
SP401	3	13'-10 1/2"	795	SPI		4 1/2"	13'-10 1/2"	40							2'-8"		
SP402	2	13'-6"	516	SPI		4 1/2"	13'-6"	39							2'-8"		
P501	168	8'-10"	1,548	SIO		3'-8"	1'-9"	3'-8"									
P502	6	25'-4"	159	STR													
P503	35	5'-7"	204	SIO		1'-7"	2'-8"	1'-7"									
P504	40	10'-5 1/2" by 10'-8 1/2" by 4'-4 1/2" by	306	SIO		10'-5 1/2" by 10'-8 1/2" by 4'-4 1/2" by	1'-9"	10'-5 1/2" by 10'-8 1/2" by 4'-4 1/2" by									
P505	40	4'-8"	195	SIO		1'-7"	1'-9"	1'-7"									
P601	50	7'-4"	551	1	8"	6'-0"					8"		6"				
P801	70	16'-8"	3,115	STR													
P802	70	6'-2"	1,153	2	11"	5'-3"											
P901	35	12'-0"	1,428	1	1'-3"	9'-6"					1'-3"		11 1/4"				
P1001	8	24'-9"	852	19		6'-0"	18'-9"					1'-6"	5'-10"	24'-7"			
P1002	4	30'-0"	516	STR													
P1101	8	13'-4"	567	STR													
P1102	12	17'-5"	1,110	20		2'-2"	15'-7"										
P1103	8	16'-4"	694	STR													
P1104	4	25'-2"	535	STR													
Total			14,244														
PIER NO. 3 Reinforcing steel in Pier No. 3 shall have the suffix "C"																	
SP401	1	15'-9"	299	SPI		4 1/2"	15'-9"	45							2'-8"		
SP402	3	15'-4 1/2"	875	SPI		4 1/2"	15'-4 1/2"	44							2'-8"		
SP403	1	15'-0"	285	SPI		4 1/2"	15'-0"	43							2'-8"		
P501	200	8'-9"	1,825	SIO		3'-8"	1'-8"	3'-8"									
P502	6	25'-4"	159	STR													
P503	35	5'-7"	204	SIO		1'-7"	2'-8"	1'-7"									
P504	56	10'-5 1/2" by 10'-8 1/2" by 4'-4 1/2" by	423	SIO		10'-5 1/2" by 10'-8 1/2" by 4'-4 1/2" by	1'-8"	10'-5 1/2" by 10'-8 1/2" by 4'-4 1/2" by									
P505	56	4'-7"	268	SIO		1'-7"	1'-8"	1'-7"									

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 numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 15/18
3. All dimensions are out to out of bar.
4. Radius dimension "R" is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 15/18

17/18

KING & GAVARIS
CONSULTING ENGINEERS
OHIO

REINFORCING STEEL LIST
BRIDGE NO. GRE-675-0616
I-675 UNDER DAYTON XENIA RD.
GREENE COUNTY STA: 36+97.50 TO
STA: 41+09.64

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	A.W.		S.A.		9/25/72	

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
PIER NO. 3 CONTINUED																	
P601	70	7'-10"	824	1	8"	6'-6"						8"		6"			
P1001	12	16'-9"	865	STR													
P1002	4	23'-6"	404	STR													
P1101	12	13'-4"	850	STR													
P1102	12	17'-2"	1,094	20		2'-2"	15'-4"										
P1103	8	25'-1"	1,066	19		6'-0"	19'-1"					1'-6"		5'-9"	24'-10"		
P1104	4	30'-0"	638	STR													
P1105	16	19'-4"	1,643	STR													
P1106	28	19'-2"	2,851	STR													
P1107	74	7'-3"	2,850	11		3"	2'-1"	4'-11"							6'-4"	1'-5"	
P1108	40	16'-2"	3,436	1	1'-7"	13'-0"						1'-7"		1'-5"			
P1109	30	18'-11"	3,015	STR													
Total			23,874														
PIER NO. 4 Reinforcing steel in Pier No. 4 shall have the suffix "D"																	
SP401	2	15'-9"	597	SPI		4 1/2"	15'-9"	45							2'-8"		
SP402	3	15'-4 1/2"	875	SPI		4 1/2"	15'-4 1/2"	44							2'-8"		
P501	168	8'-10"	1,548	S10		3'-8"	1'-9"	3'-8"									
P502	6	25'-4"	159	STR													
P503	35	5'-7"	204	S10		1'-7"	2'-8"	1'-7"									
P504	40	Var. 5'-10" to 8'-10" by 4'-4" L-EG.	306	S10		Var. 2'-2" to 3'-8" by 2"	1'-9"	Var. 2'-2" to 3'-8" by 2"									
P505	40	4'-8"	195	S10		1'-7"	1'-9"	1'-7"									
P601	50	7'-4"	551	1	8"	6'-0"						8"		6"			
P801	70	18'-4"	3,426	STR													
P802	70	6'-2"	1,153	2	11"	5'-3"											
P901	35	12'-0"	1,428	1	1'-3"	9'-6"						1'-3"		11 1/2"			
P1001	8	24'-9"	852	19		6'-0"	18'-9"					1'-6"		5'-10"	24'-7"		
P1002	4	30'-0"	516	STR													
P1101	8	13'-4"	567	STR													
P1102	12	17'-5"	1,110	20		2'-2"	15'-7"										
P1103	8	16'-4"	694	STR													
P1104	4	25'-2"	535	STR													
Total			14,716														
Total Piers			65,827														
SUPERSTRUCTURE																	
S401	1032	30'-0"	21,082	STR													919 Epoxy Coated
S402	38	Var. 5'-3" to 24'-9" by 6'-4" L-EG.	381	STR													38 Epoxy Coated
S403	40	Var. 13'-0" to 33'-3" by 16'-4" L-EG.	618	STR													40 Epoxy Coated
S404	83	3'-2'-0"	1774	STR													74 Epoxy Coated
S405	83	3'-9'-9"	2,204	STR													74 Epoxy Coated
S406	83	4'-6"	2,245	STR													74 Epoxy Coated
S407	83	3'-9'-0"	2,162	STR													74 Epoxy Coated
S501	1,231	2'-9"	3531	2	9"	1'-3"										9"	615 Epoxy Coated
S502	616	6'-5"	3,694	5-2	5"	2'-7"	8"	2'-7"								5"	616 Epoxy Coated
S503	294	7'-2"	2,198	2	9"	5'-8"										9"	294 Epoxy Coated
S504	322	4'-2"	1,400	2	9"	2'-8"										9"	322 Epoxy Coated
S505	998	30'-0"	31,227	STR													107 Epoxy Coated
S506	33	Var. 9'-6" to 29'-0" by 7'-8" L-EG.	663	STR													
S507	33	Var. 17'-2" to 36'-9" by 14'-1" L-EG.	931	STR													
S508	2	5'-11"	12	2	9"	4'-5"										9"	2 Epoxy Coated
S509	112	7'-1"	*	STR													56 Epoxy Coated
S510	12	11'-0"	*	STR													6 Epoxy Coated

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
SUPERSTRUCTURE CONTINUED																	
S511	148	14'-6"	*	STR													74 Epoxy Coated
S512	8	9'-5"	*	STR													4 Epoxy Coated
S513	5	17'-4"	90	STR													5 Epoxy Coated
S514	3	29'-5"	92	STR													3 Epoxy Coated
S601	647	26'-9"	25,995	STR													647 Epoxy Coated
S602	1,317	31'-4"	61,982	STR													
S603	670	35'-11"	36,144	STR													670 Epoxy Coated
S604	15	Var. 4'-0" to 30'-0" by 14'-0" L-EG.	383	STR													
S605	15	Var. 8'-6" to 34'-6" by 14'-0" L-EG.	484	STR													15 Epoxy Coated
S606	32	Var. 3'-0" to 31'-0" by 10'-2" L-EG.	817	STR													16 Epoxy Coated
S607	38	Var. 4'-0" to 25'-9" by 7'-1" L-EG.	849	STR													38 Epoxy Coated
S608	38	Var. 8'-7" to 30'-0" by 7'-1" L-EG.	1101	STR													
S609	76	Var. 15'-6" to 37'-0" by 7'-2" L-EG.	2,996	STR													38 Epoxy Coated
S610	36	Var. 5'-0" to 14'-11" by 7'-2" L-EG.	538	STR													18 Epoxy Coated
S611	10	4'-0"	60	STR													5 Epoxy Coated
S612	4	32'-4"	194	STR													2 Epoxy Coated
S613	2	28'-1"	84	STR													1 Epoxy Coated
S614	4	30'-0"	180	STR													2 Epoxy Coated
L501	8	3'-1"	26	17			7"	2'-1"	7"								
L502	8	7'-8"	62	17			2'-1"	2'-1"	2'-11"								8 Epoxy Coated
L503	12	8'-0"	100	14			6"	2'-1 1/2"	1'-4"	2'-11 1/2"	6"	2'-1"		2'-1"			
L504	8	2'-11"	24	STR													
Total			206,323														

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 numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
 2. For bar types see sheet 15/18
 3. All dimensions are out to out of bar.
 4. Radius dimension "R" is to outside of bar.
 5. The length of bent bars is measured along the centerline.
 6. For additional notes see sheet 15/18

* Bars included with Item 517

DESIGNED		DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
A.W.				S.A.	ST	9/25/72	

18/18
OHIO

KING & GAVARIS
CONSULTING ENGINEERS

REINFORCING STEEL LIST
BRIDGE NO. GRE-675-0616
I-675 UNDER DAYTON XENIA RD.
GREENE COUNTY STA: 36 + 97.50 TO
STA: 41 + 09.64

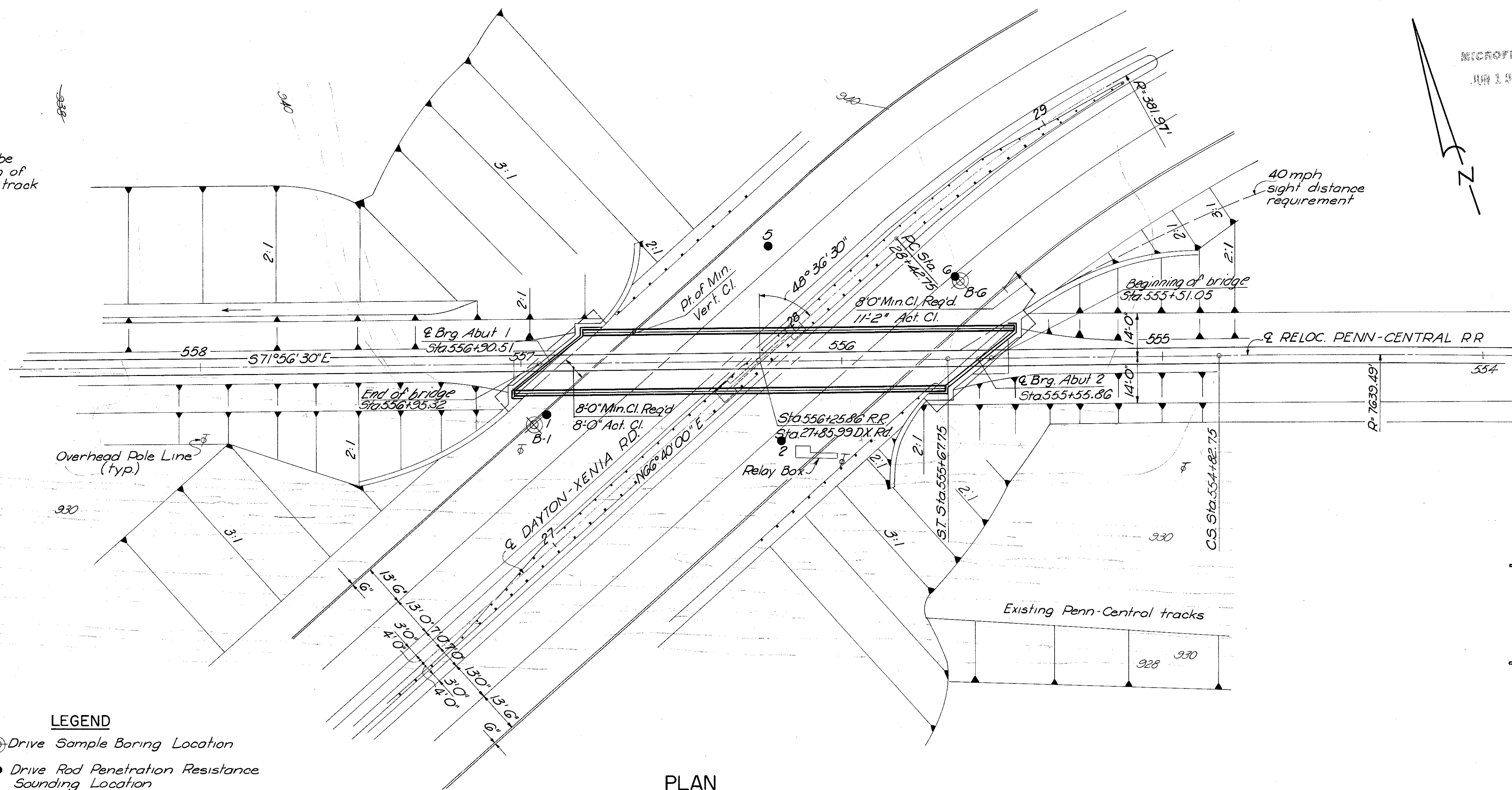
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

489
616

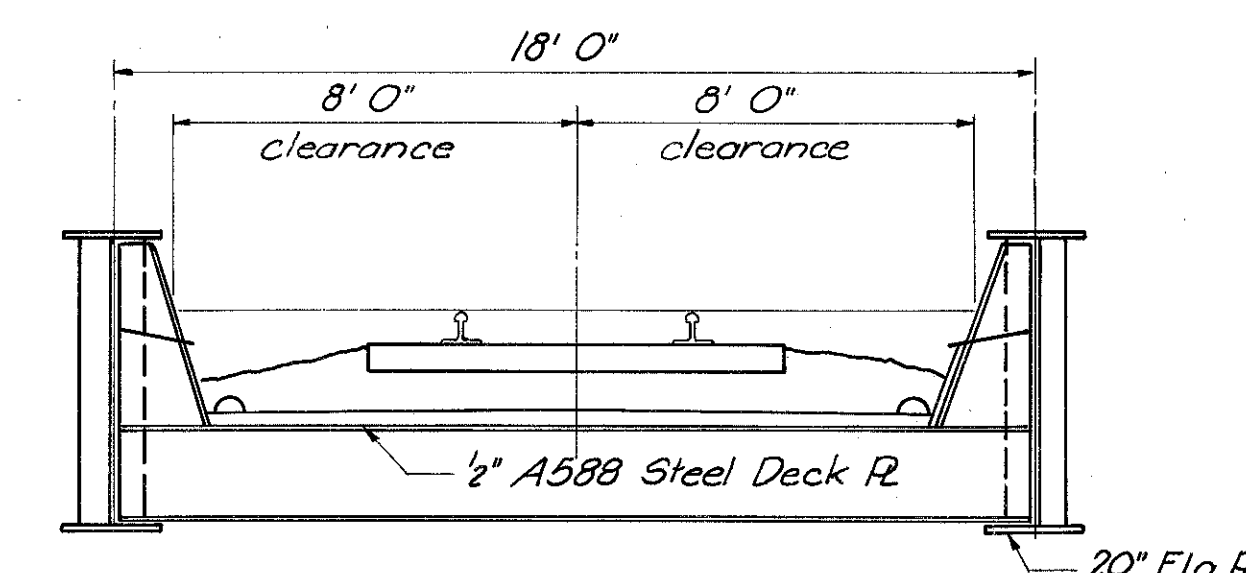
GRE-675 - 5-37
GREENE COUNTY

MICROFILMED
JUN 14 1955

Temporary sheeting will be required for construction of wingwalls near existing track



For Bridge Layout see Alignment Note, Sh. 2/13

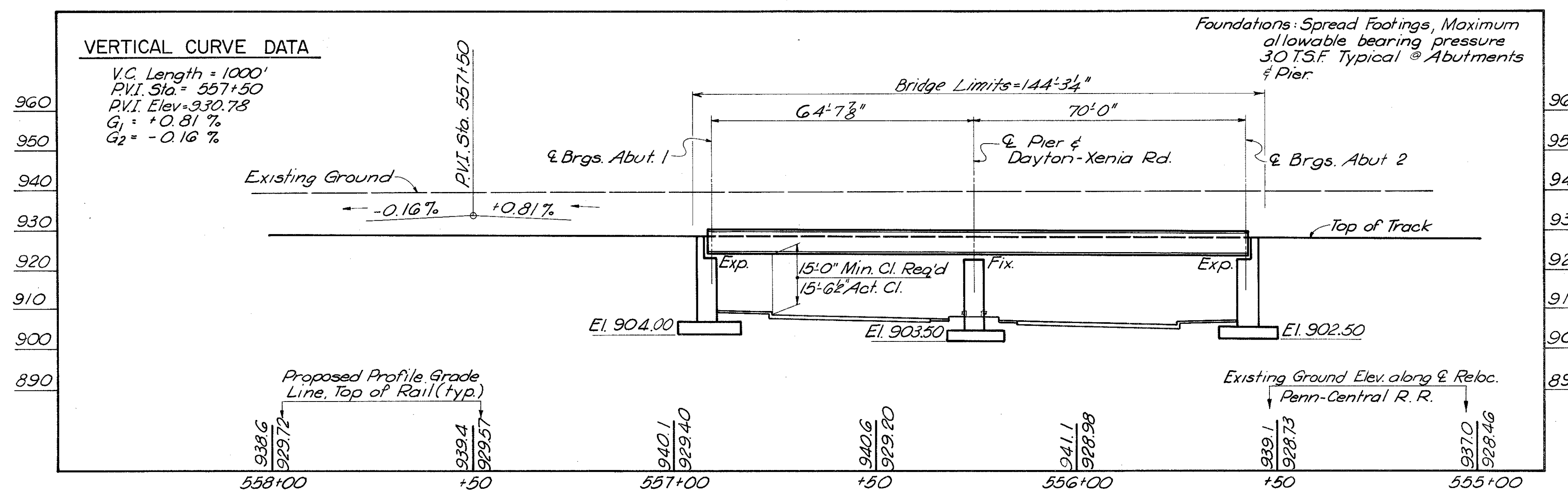


SECTION THRU BRIDGE

LEGEND

- ⊕ Drive Sample Boring Location
- Drive Rod Penetration Resistance Sounding Location

PLAN



Note: Earthwork limits shown are schematic. Actual slopes shall conform to Plan Cross-Sections.

TRACK MOVEMENTS

FREIGHT — 10 @ 50 mph

PROFILE ON CENTER LINE RELOCATED PENN-CENTRAL R.R.

PROPOSED STRUCTURE
 TYPE: Superstructure - Continuous welded through plate girder bridge with steel floor plate & reinforced concrete substructure.
 SPANS: 64'-7 3/8", 70'-0"
 LOADING: Cooper E-80 Diesel Impact
 SKEW: 48° 36' 30" Lt. Fwd.
 WEARING SURFACE:
 APPROACH SLABS:
 ALIGNMENT: Tangent

KING & GAVARIS CONSULTING ENGINEERS
 CINCINNATI OHIO

SITE PLAN
 BRIDGE NO. GRE-675- 0626 S.R.
 PENN-CENTRAL RR OVER
 DAYTON XENIA RD.

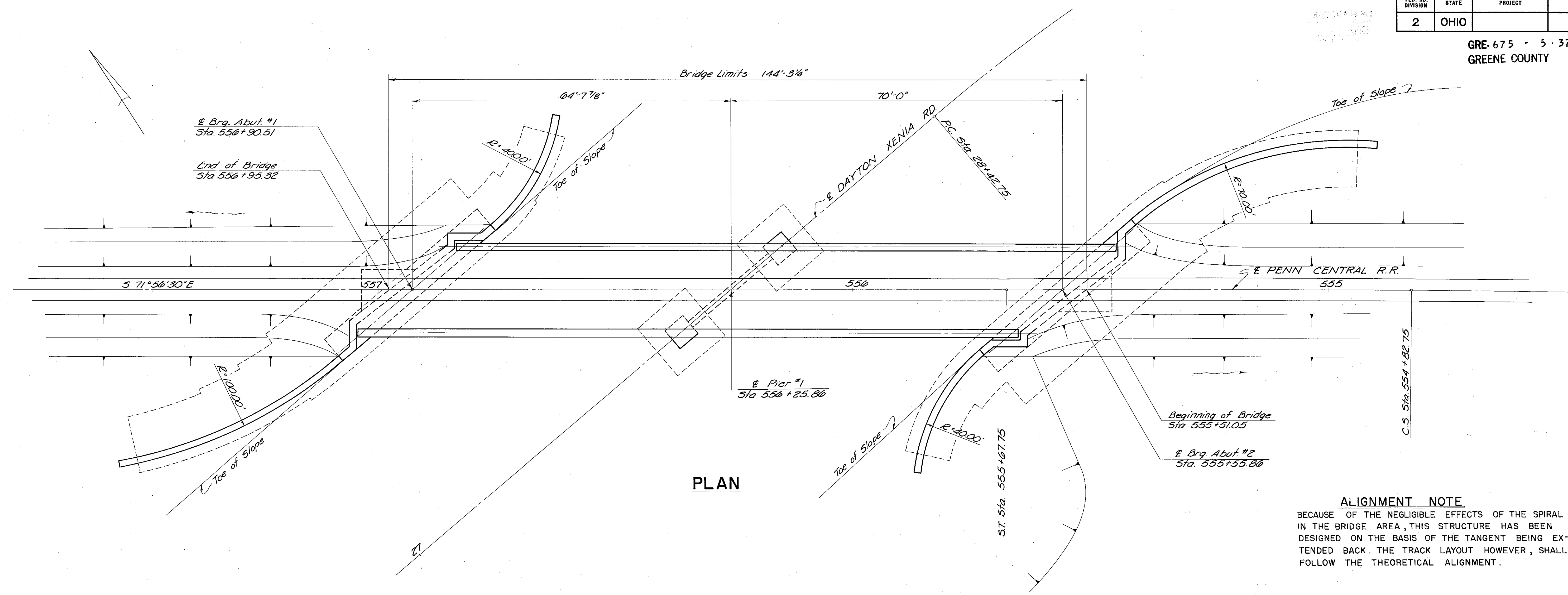
GREENE COUNTY STA: 555+51.05 TO STA: 556+95.32

PRESENT TOPOGRAPHY SURVEYED	DRAWN	DESIGNED	PROPOSED WORK DRAWN	CHECKED	REVISED
AERIAL SURVEY	J.C.L.	A.W.	S.A.		4-16-82

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

490
616

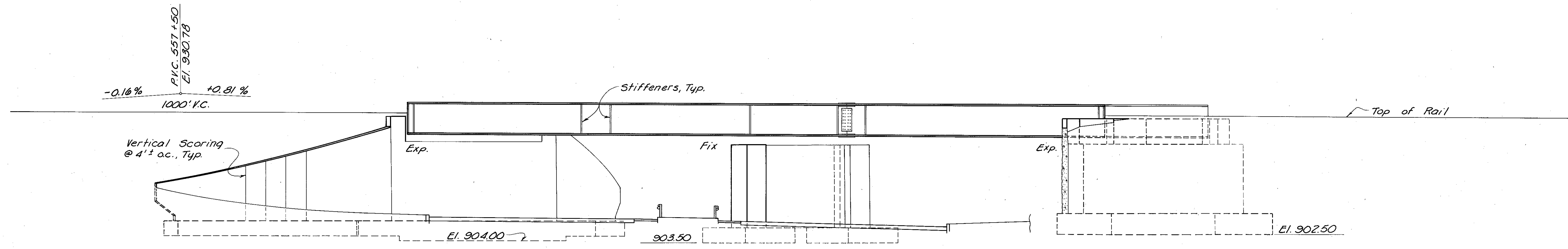
GRE-675 - 5-37
GREENE COUNTY



PLAN

ALIGNMENT NOTE

BECAUSE OF THE NEGLIGIBLE EFFECTS OF THE SPIRAL IN THE BRIDGE AREA, THIS STRUCTURE HAS BEEN DESIGNED ON THE BASIS OF THE TANGENT BEING EXTENDED BACK. THE TRACK LAYOUT HOWEVER, SHALL FOLLOW THE THEORETICAL ALIGNMENT.



ELEVATION

KING & GAVARIS CONSULTING ENGINEERS						2/13
GENERAL PLAN & ELEVATION						
BRIDGE NO. GRE - 675-0626 SR.						
PENN-CENTRAL R.R. OVER DAYTON XENIA RD.						
GREENE COUNTY						
					STA. 555+51.05 TO	
					STA. 556+95.32	
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	K.F.		S.A.		9/25/72	

GENERAL NOTES

MICROFILMED
JUN 1 1988

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

491
616

GRE-675 - 5-37
GREENE COUNTY.

ITEM SPECIAL - ASPHALT PORTLAND CEMENT CONCRETE

USE:
THIS CONCRETE IS TO BE USED AS A PROTECTION COURSE OVER METAL DECKS OF RAILROAD BRIDGES.

- MATERIALS:
- EMULSIFIED ASPHALT SHALL BE IN ACCORDANCE WITH FEDERAL SPECIFICATIONS SS-A-674B.
 - FINE AGGREGATE SHALL BE AS SPECIFIED FOR CONCRETE.
 - COARSE AGGREGATE SHALL BE AS SPECIFIED FOR CONCRETE WITH THE FOLLOWING GRADATION:

SIEVE SIZE (INCHES)	PERCENT PASSING BY WEIGHT
3/4"	100
1/2"	90 - 100
3/8"	40 - 70
No. 4	0 - 15

Mix:
THE ASPHALT CONCRETE SHALL BE PROPORTIONED BY VOLUME, 1 PART PORTLAND CEMENT, 2 PARTS FINE AGGREGATE, 3 PARTS COARSE AGGREGATE, 1-1/2 PARTS EMULSIFIED ASPHALT TYPE SS-1 AND MINIMUM AMOUNT OF WATER REQUIRED TO MAKE A WORKABLE MIX. THE DRY MATERIALS SHALL FIRST BE THOROUGHLY MIXED THEN THE WATER ADDED TO PRODUCE A UNIFORM MIXTURE AFTER WHICH THE EMULSIFIED ASPHALT IS ADDED AND MIXING CONTINUED UNTIL OF UNIFORM COLOR.

APPLICATION:
WORK SHALL BE DONE ONLY WHEN THE TEMPERATURE WILL BE ABOVE 40° F. FOR A PERIOD OF AT LEAST 24 HOURS AFTER STARTING APPLICATION.

SURFACE TO BE COVERED SHALL BE THOROUGHLY CLEANED AND GIVEN A UNIFORM PRIMER OR BOND COATING OF EMULSIFIED ASPHALT TYPE RS-1, USING NOT LESS THAN 1 GALLON PER 80 SQ. FT.

THE ASPHALT CONCRETE SHALL THEN BE SCREEDED OVER THE PRIMED AREA TO THE THICKNESS INDICATED ON THE DRAWINGS. AFTER THE ASPHALT CONCRETE HAS SET SUFFICIENTLY TO ALLOW A MAN TO WALK UPON IT WITHOUT INDENTATION BUT PRIOR TO FINAL SET, IT SHALL BE GIVEN A UNIFORM COATING OF EMULSIFIED ASPHALT TYPE RS-2 APPLIED AT THE RATE OF ONE GALLON PER 50 SQ. FT. THIS FINAL COATING SHALL BE COVERED WITH CLEAN SAND.

METHOD OF MEASUREMENT:
THE YARDAGE TO BE PAID FOR SHALL BE THE NUMBER OF CUBIC YARDS AS DETERMINED BY CALCULATIONS FROM PLAN DIMENSION, IN PLACE, COMPLETED AND ACCEPTED.

BASIS OF PAYMENT:
THE YARDAGE MEASURED AS PROVIDED ABOVE SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD BID FOR "ITEM SPECIAL ASPHALT PORTLAND CEMENT CONCRETE" WHICH PRICE AND PAYMENT SHALL CONSTITUTE FULL COMPENSATION FOR FURNISHING, PLACING, FINISHING AND CURING, AND ALL LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE ITEM.

REFERENCE SHALL BE MADE TO SUPPLEMENTAL SPECIFICATIONS:

- 809 DATED JANUARY 1, 1971
- 810 DATED JANUARY 1, 1971

927 DATED JANUARY 1, 1971

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR STEEL RAILWAY BRIDGE" OF THE AMERICAN RAILWAY ENGINEERING ASSOCIATIONS, 1971 EDITION.

CONSTRUCTION AND MATERIAL SPECIFICATIONS: STATE OF OHIO, DEPARTMENT OF HIGHWAYS, DATED JANUARY 1, 1979.

DESIGN DATA:

DESIGN LOADING - COOPER E-80 WITH DIESEL IMPACT.

CLASS C CONCRETE - UNIT STRESS 1333 PSI FOR SUBSTRUCTURE.
METAL BRIDGE DECK - ASTM A 588, UNIT STRESS 27,000 PSI
STRUCTURAL STEEL - ASTM A 36 - UNIT STRESS 20,000 (SEE ADDITIONAL REQUIREMENTS) PSI
REINFORCING STEEL - ASTM A 615 - UNIT STRESS 20,000 PSI

FOUNDATION BEARING PRESSURE: ABUTMENT AND PIER FOOTINGS ARE DESIGNED FOR A MAXIMUM BEARING PRESSURE OF 3 TONS PER SQ. FT.

UTILITY LINES: ALL EXPENSE INVOLVED IN RELOCATING AFFECTED UTILITY LINES, EXCEPT THOSE BEING INSTALLED OR RELOCATED AS PART OF THIS PROJECT, 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.

RAILROAD AERIAL LINES WILL BE RELOCATED BY THE RAILROAD. THE CONTRACTOR SHALL USE ALL PRECAUTIONS NECESSARY TO SEE THAT THE LINES ARE NOT DISTURBED DURING THE CONSTRUCTION STAGE AND SHALL COOPERATE WITH THE RAILROAD IN THE RELOCATION OF THESE LINES. THE COST OF THE RELOCATIONS SHALL BE INCLUDED IN THE RAILROAD FORCE ACCOUNT WORK.

STRUCTURAL STEEL:

- STEEL FOR FLANGES, WEB PLATES AND STIFFENERS SHALL BE FULLY KILLED FINE GRAIN PRACTICE.
- FLANGE PLATES WITH FLAME CUT EDGES SHALL BE FREE OF NICKS AND NOTCHES AND SHALL HAVE ALL EDGES GROUND TO A 1/16 INCH RADIUS.
- ALL WELDS CONNECTING FLANGE PLATE TO WEB PLATE MUST BE MADE BY AUTOMATIC SUBMERGED ARC WELDING.
- MILL SCALE TO BE GROUND OFF FLANGE PLATES AT WEB TO FLANGE WELD.
- ALL SPLICES IN FLANGE PLATES AND WEBS TO BE RADIOGRAPHED.
- 50% OF WEB TO FLANGE WELDS TO BE SUBJECT TO ULTRASONIC TESTING IN ACCORDANCE WITH AWS SPECIFICATIONS.
- BOTTOM FLANGE PLATE MUST BE PERPENDICULAR TO WEB PLATE AT BEARINGS. MAXIMUM TOLERANCE ±0.03 INCHES.
- PINS IN BEARINGS TO BE COLD FINISHED CARBON STEEL SHAFTING CONFORMING TO THE REQUIREMENTS FOR GRADE 1020 STEEL IN ASTM SPECIFICATION A 108.
- BRONZE PLATE SHALL BE AS PER ASTM SPECIFICATION B-22, CLASS B, WITH TREPANNED GRAPHITE INSERTS.

DAMPPOOFING: BACKS OF ALL ABUTMENTS AND WALLS WHICH SHALL BE IN PERMANENT CONTACT WITH EARTH SHALL BE DAMPPOOFED WITH TYPE "A" WATERPROOFING FROM THE TOP OF THE FOOTING TO THE TOP OF THE POROUS BACKFILL.

ESTIMATED QUANTITIES

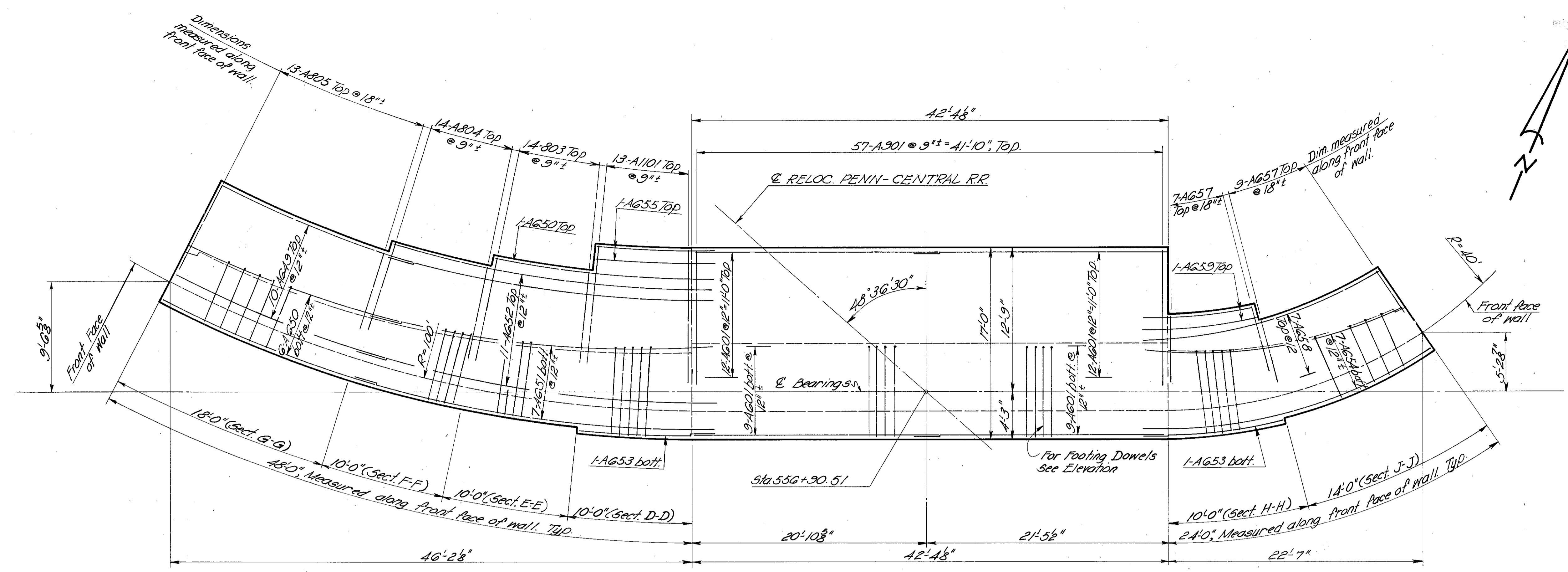
ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	ABUT.	PIERS	GEN.
503	Lump	Sum	Cofferdams, Crib and sheeting				Lump
503	2,360	Cu.Yd.	Unclassified Excavation		2,300	60	
509	56,300	Lb.	Reinforcing Steel		46,064	10,236	
511	48	Cu.Yd.	Class "C" Concrete, Piers above footings			48	
511	560	Cu.Yd.	Class "C" Concrete, Abutments and Walls above footings		560		
511	470	Cu.Yd.	Class "C" Concrete, Footings		435	35	
512	360	Sq.Yd.	Type "A" Waterproofing		360		
512	26	Lin.Ft.	Type "B" Waterproofing		26		
514	277,500	Lb.	Field Painting of new Structural Steel System A	277,500			
516	132	Sq.Ft.	1" Preformed Expansion Joint Filler		132		
516	363	Lin.Ft.	Sheet Copper* (16 OZ, 6" Wide)		326	37	
516	75	Lin.Ft.	Folded Sheet Copper* (16 OZ, 10" Wide)		75		
518	241	Cu.Yd.	Porous Backfill		241		
518	223	Lin.Ft.	8" Perforated C.S.P. (70701)		223		
518	92	Lin.Ft.	8" Non-Perforated C.S.P. including specials (70701)		92		
518	291	Lin.Ft.	8" Half-Round Perforated C.S.P., Bituminous coated including Specials (70701, 70704)	291			
809	50	Sq.Yd.	Asphalt Plank Protective Cover, 1 1/2" thick	50			
810	218,000	Lb.	Fracture Critical Structural Steel (AISC Category III) for structures carrying railroad traffic (A36 Steel)		218,000		
			See proposal note.				
810	60,000	Lb.	Structural steel (AISC Category III) for structures carrying railroad traffic (A588 Steel)		60,000		
Special	16	Cu.Yds.	Asphalt Portland Cement Concrete	16			

ESTIMATED QUANTITIES CHECKED BY & DATE: J.R.G./S.A. 2/10/72 REVISED: S.A. 9/20/72

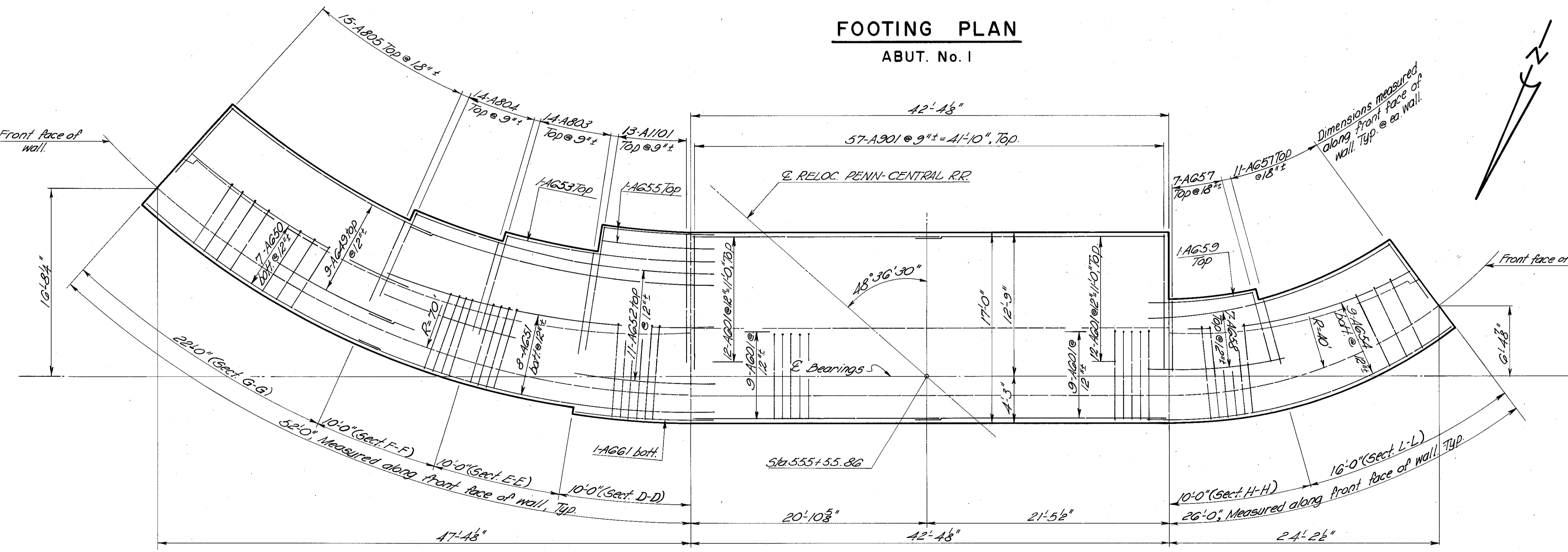
NOTE:
Rails, Ties and Ballast on Bridge Structure included in "Item Special - Construction of Railroad Tracks." See sheet 29/601

* As an alternate to copper, neoprene water stops may be used.

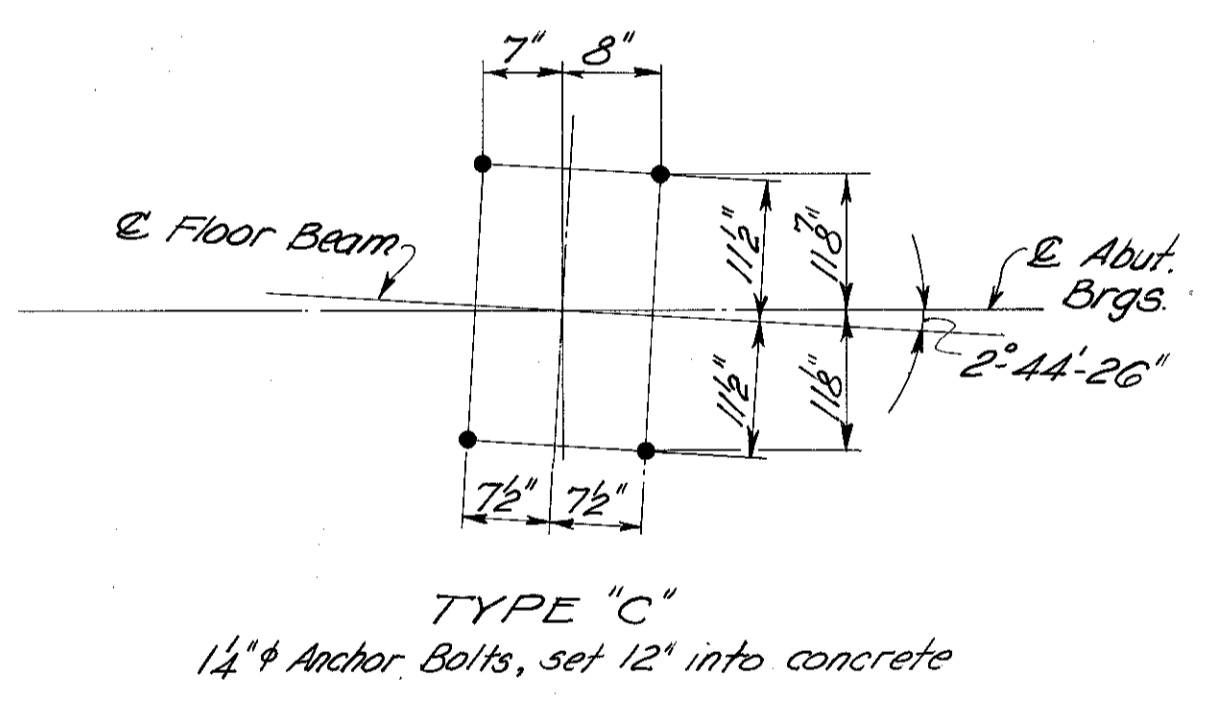
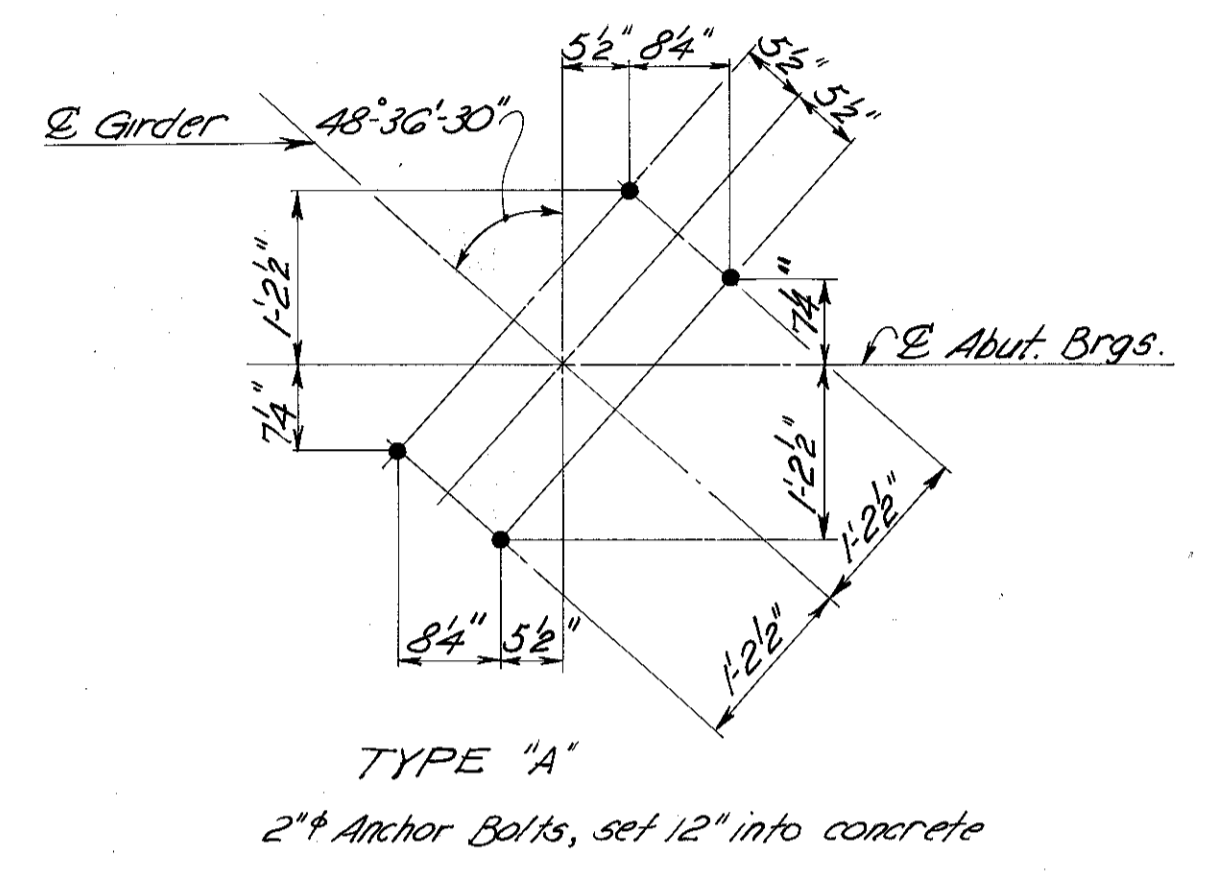
KING & GAVARIS CONSULTING ENGINEERS		3/13
CINCINNATI OHIO		
GENERAL NOTES & ESTIMATED QUANTITIES		
BRIDGE NO. GRE-675-0626 S.R.		
PENN-CENTRAL R.R. OVER DAYTON XENIA RD.		
GREENE COUNTY		STA: 555+51.05 TO STA: 556+95.32
DESIGNED S.A.	DRAWN A.W.	TRACED S.A.
CHECKED S.A.	REVIEWED S.A.	DATE 9/21/72
		REVISED 4-16-82



FOOTING PLAN
ABUT. No. 1



FOOTING PLAN
ABUT. No. 2



ANCHOR BOLT PLANS

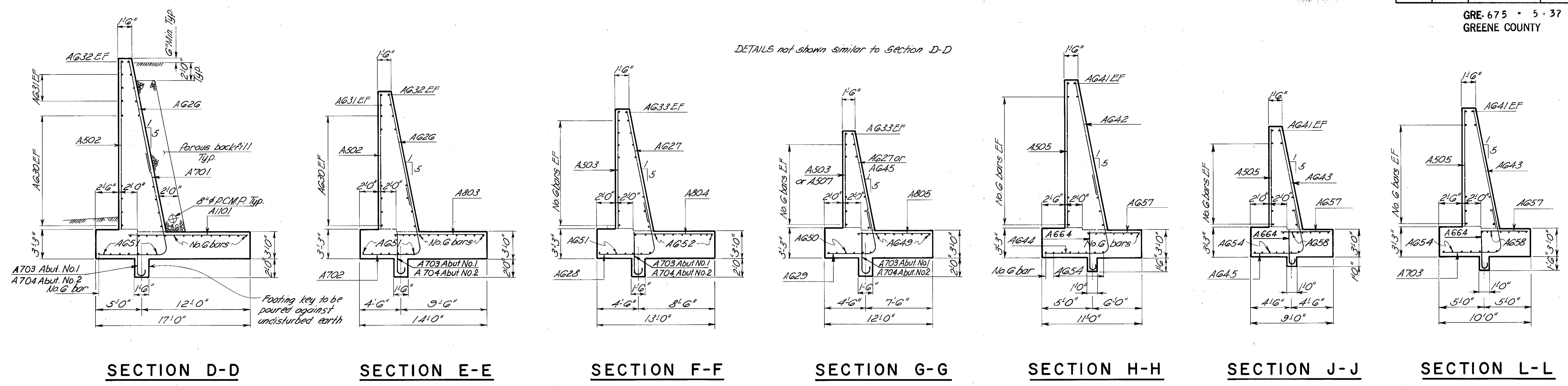
For notes see Sh. A-13
Work this sheet with Shs. A-5, 7, 13

KING & GAVARIS CONSULTING ENGINEERS CINCINNATI OHIO						6/13
ABUTMENT FOOTING PLANS-3						
BRIDGE NO. GRE-675-0626 S.R.						
PENN-CENTRAL R.R. OVER						
DAYTON XENIA RD.						
GREENE COUNTY					STA: 555+51.05	TO
					STA: 556+95.32	
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	A.W.		S.A.		9/25/72	

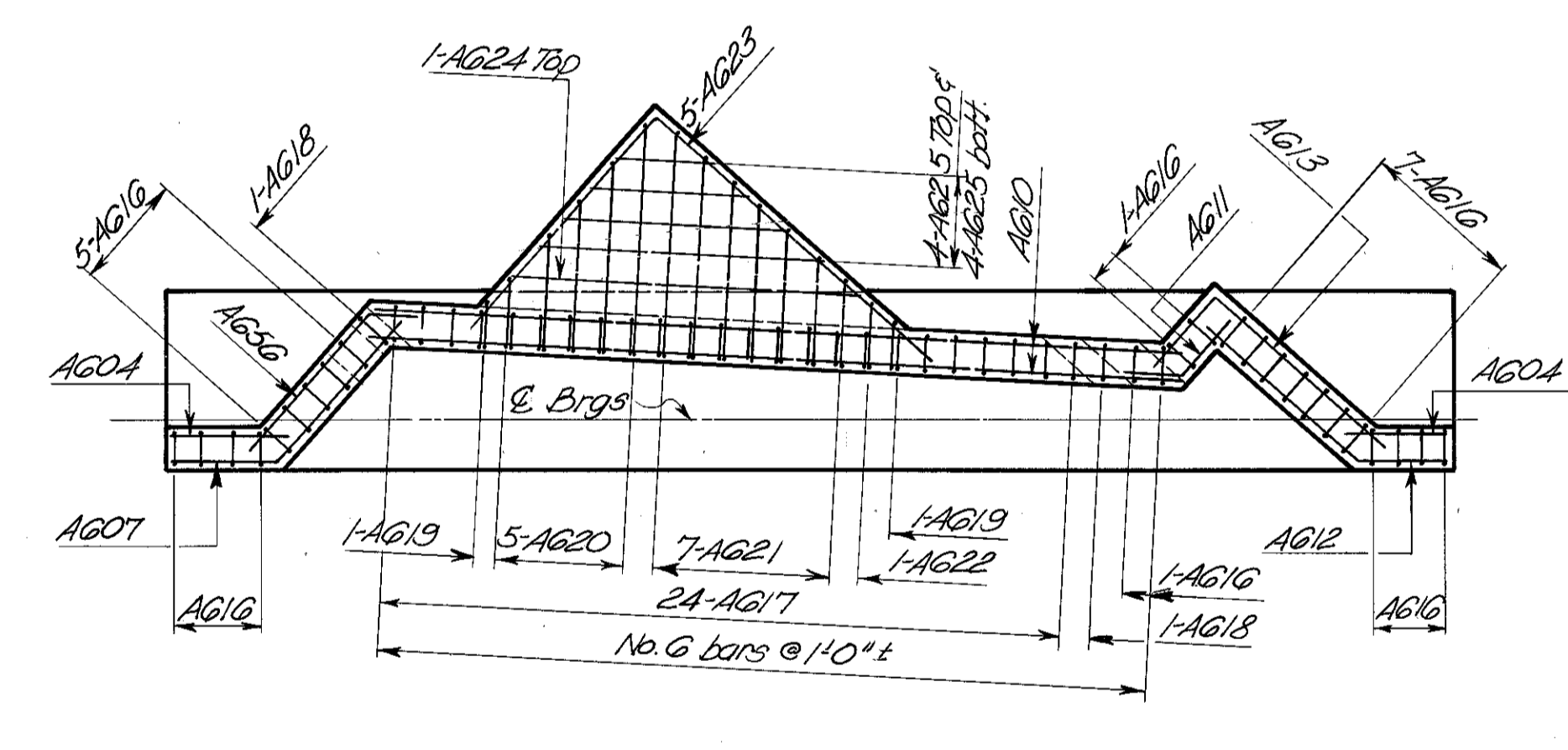
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

495
616

GRE-675 - 5-37
GREENE COUNTY

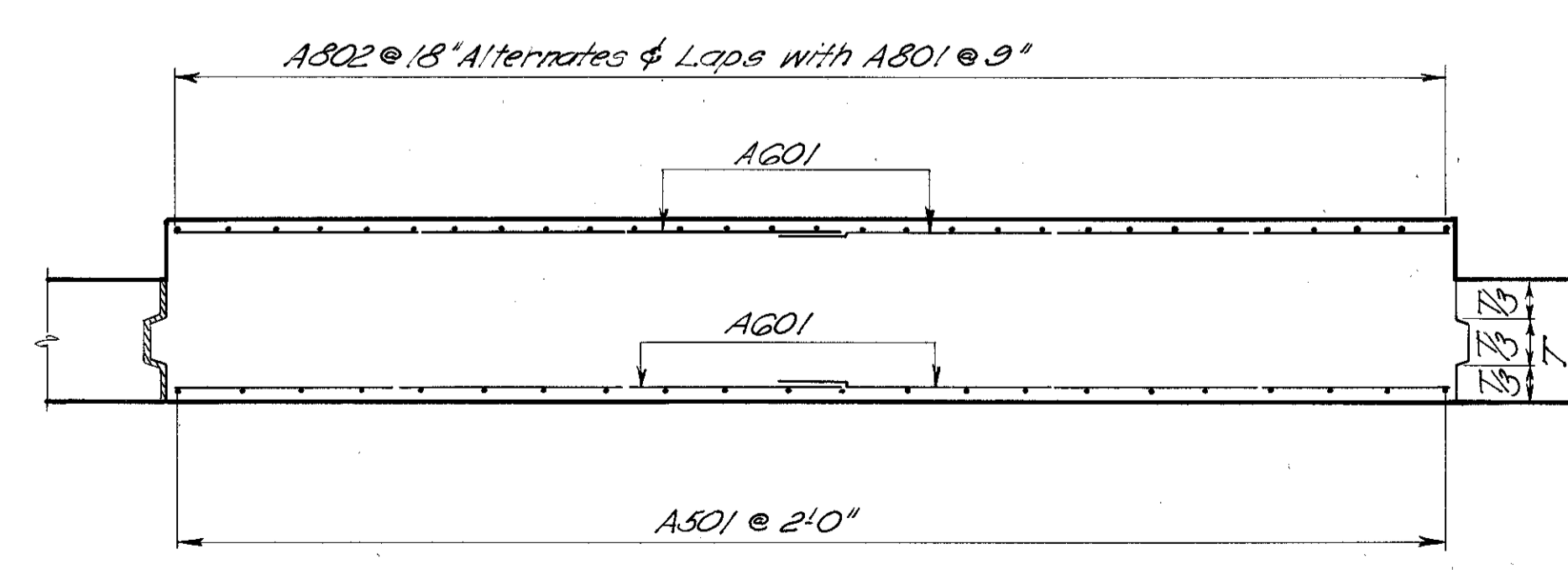


DETAILS not shown similar to Section D-D

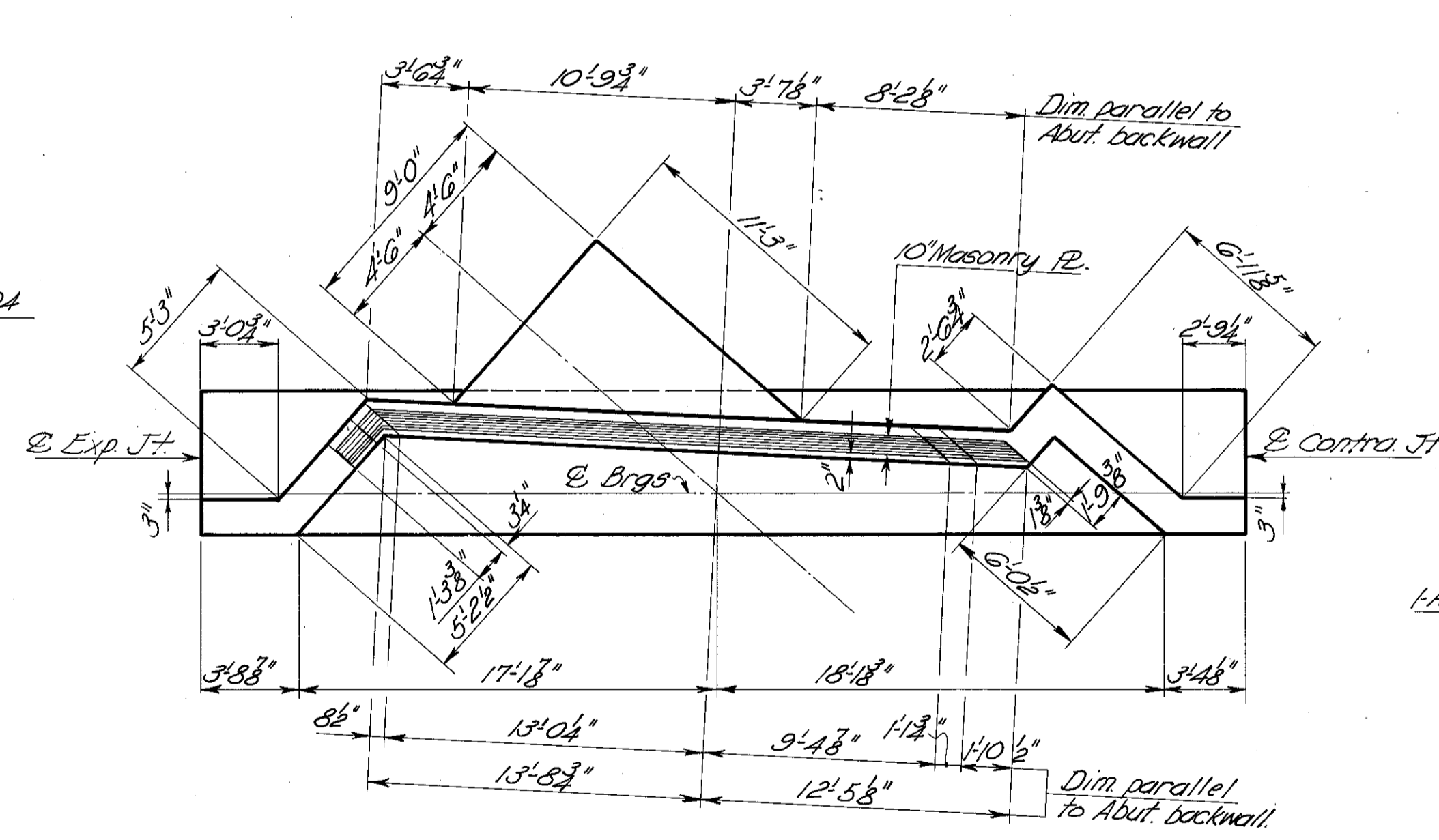


SECTION A-A

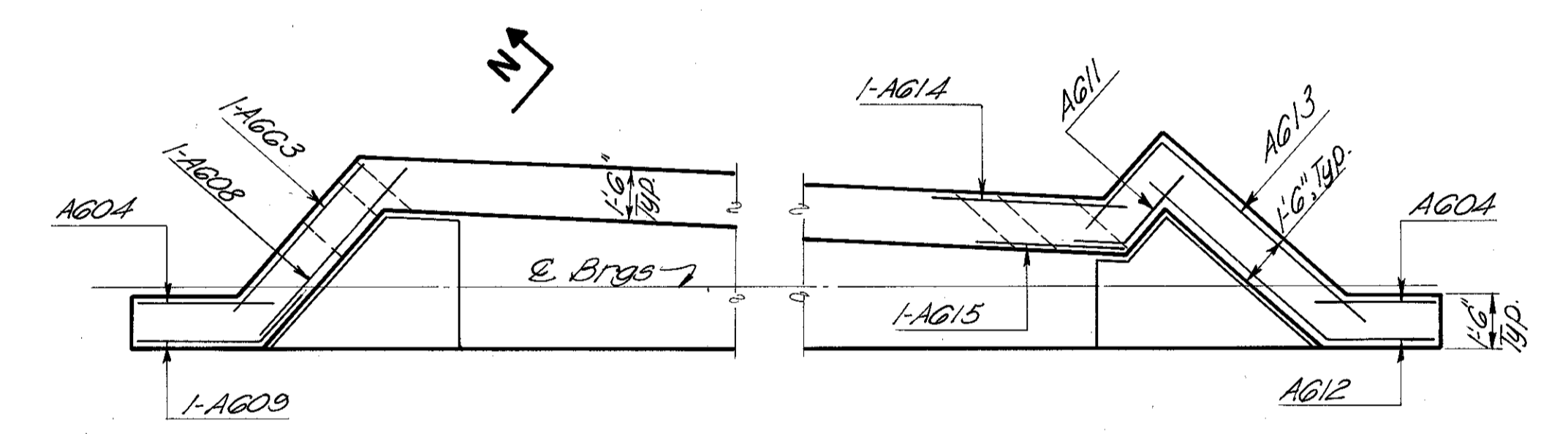
Work this section with PLAN-ABUT. BACKWALL DETAIL on this sheet.



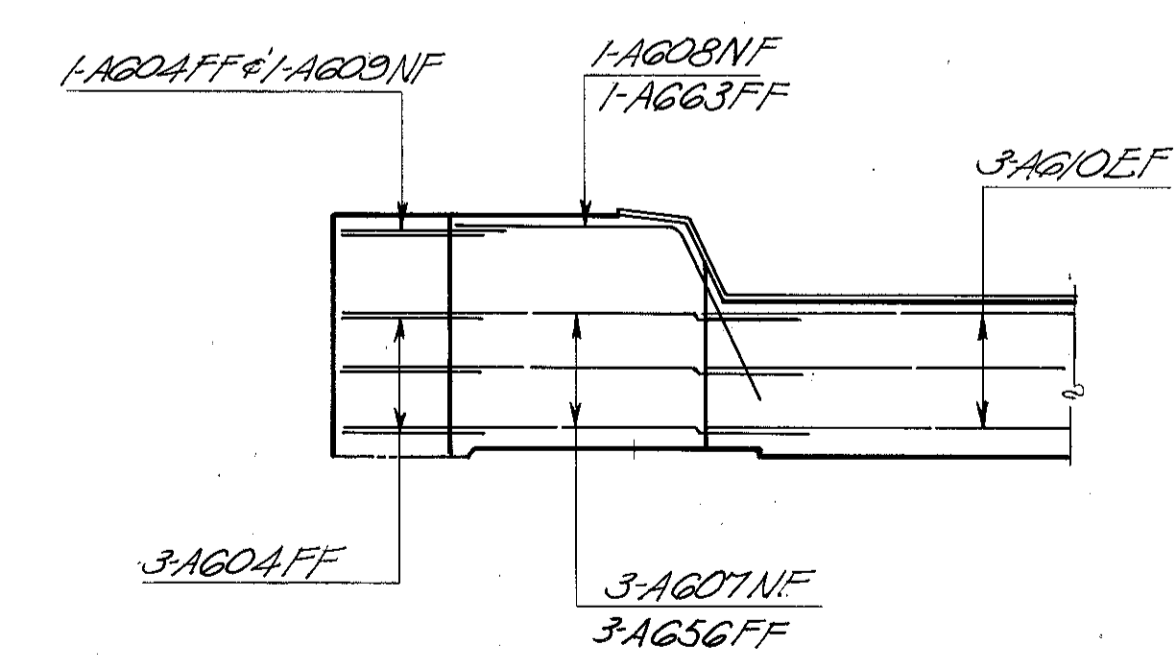
SECTION M-M



PLAN K-K



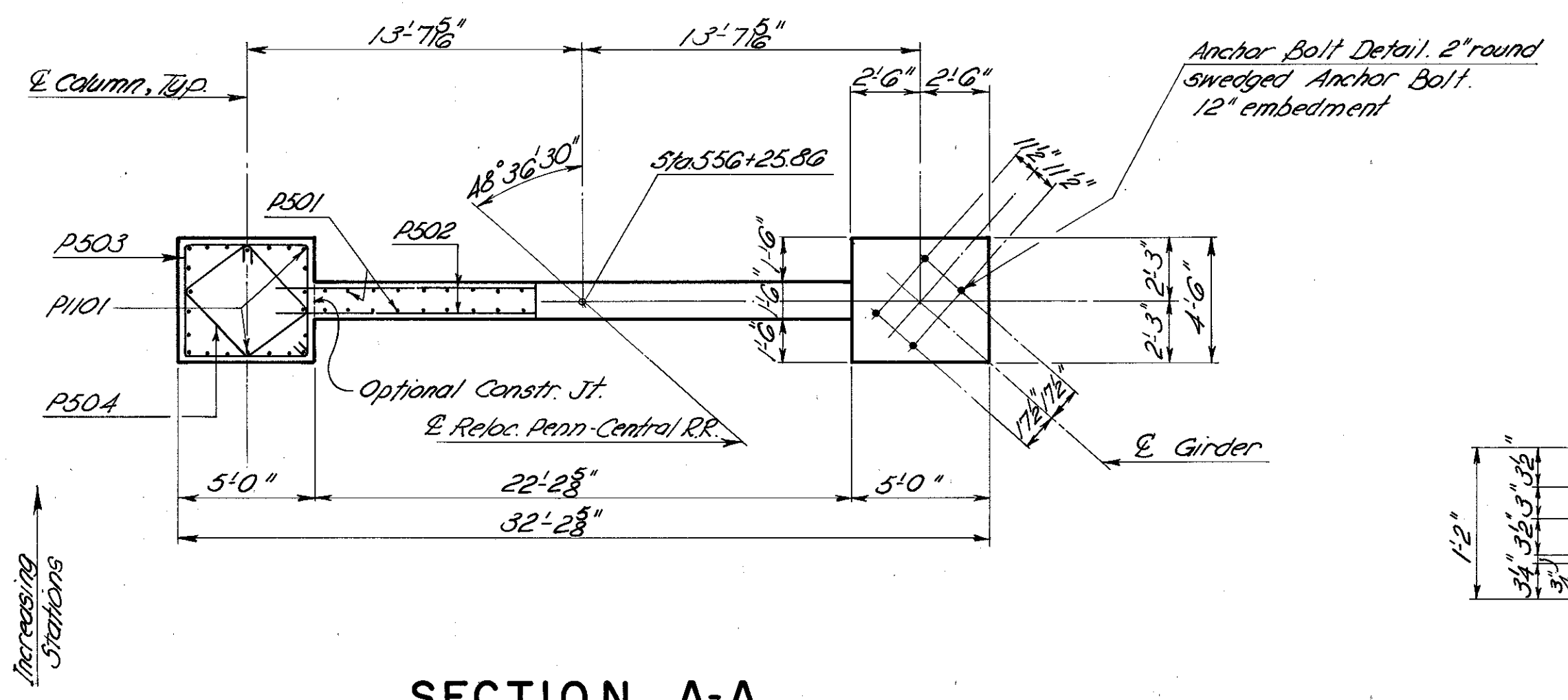
PLAN-ABUT. BACKWALL DETAIL



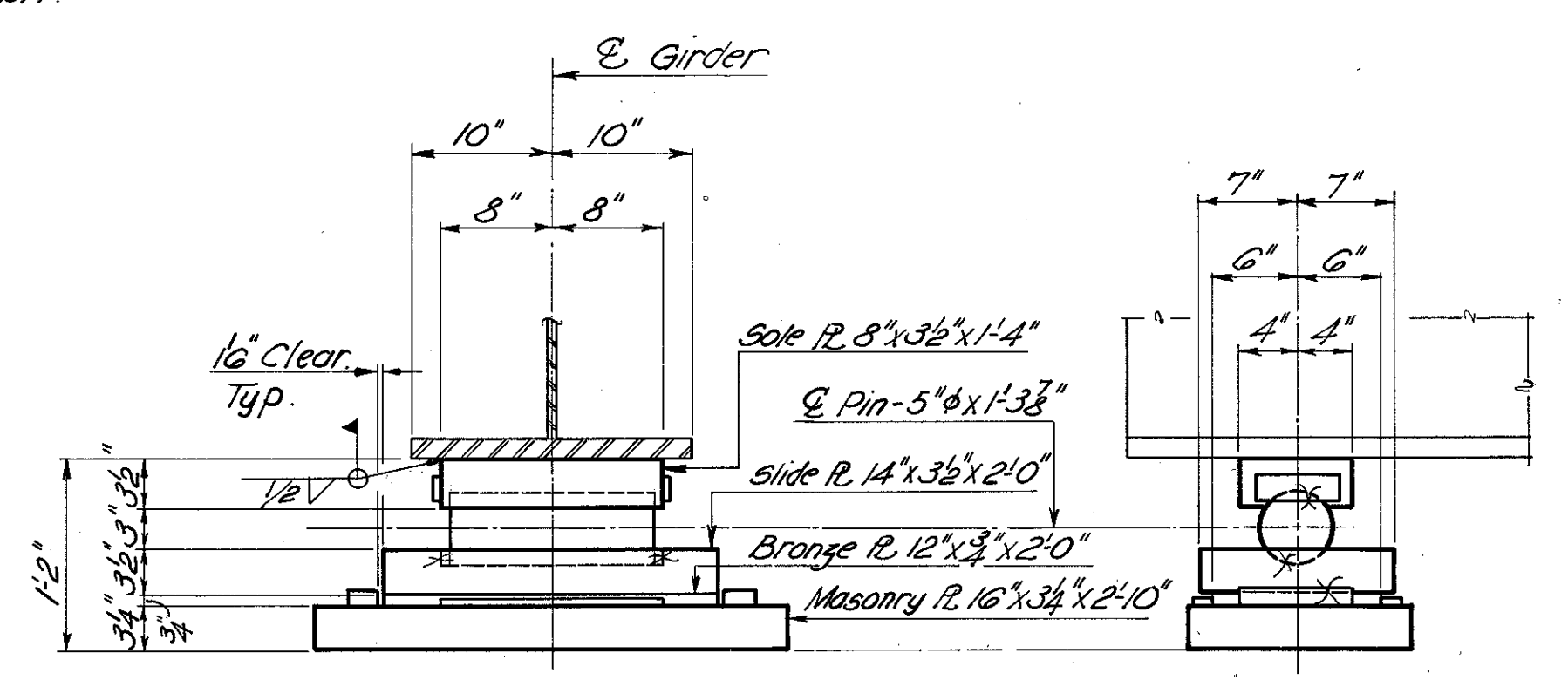
ELEVATION N-N

For notes see sh 4/13
Work this sheet with shs. 4, 5, 6/13

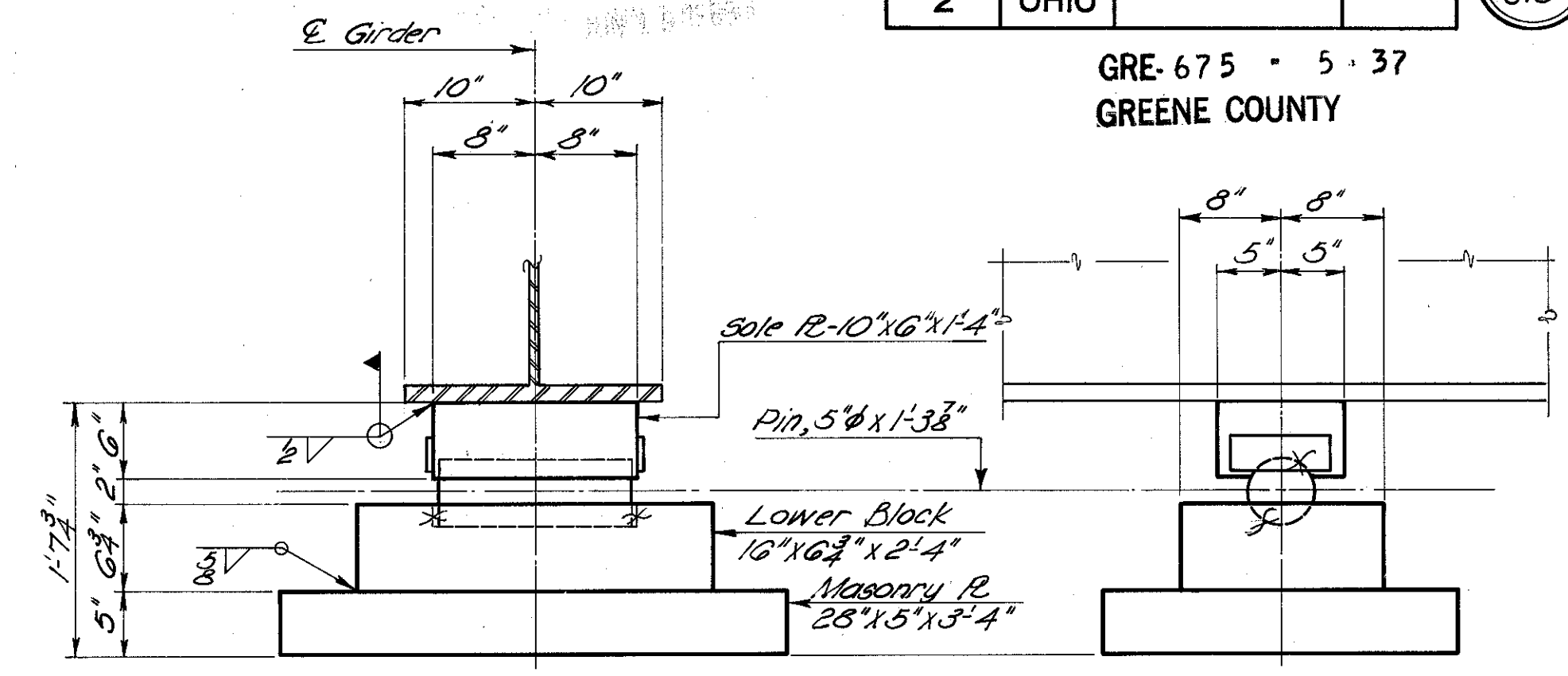
KING & GAVARIS CONSULTING ENGINEERS		7/13
OHIO		
ABUTMENT DETAILS - 4		
BRIDGE NO. GRE-675-0626 S.R.		
PENN-CENTRAL R.R. OVER		
DAYTON XENIA RD.		
GREENE COUNTY		STA:555+51.05 TO STA:556+95.32
DESIGNED V.P.	DRAWN A.W.	TRACED S.A.
CHECKED S.A.	REVIEWED S.A.	DATE 7/21/72
REVISED		



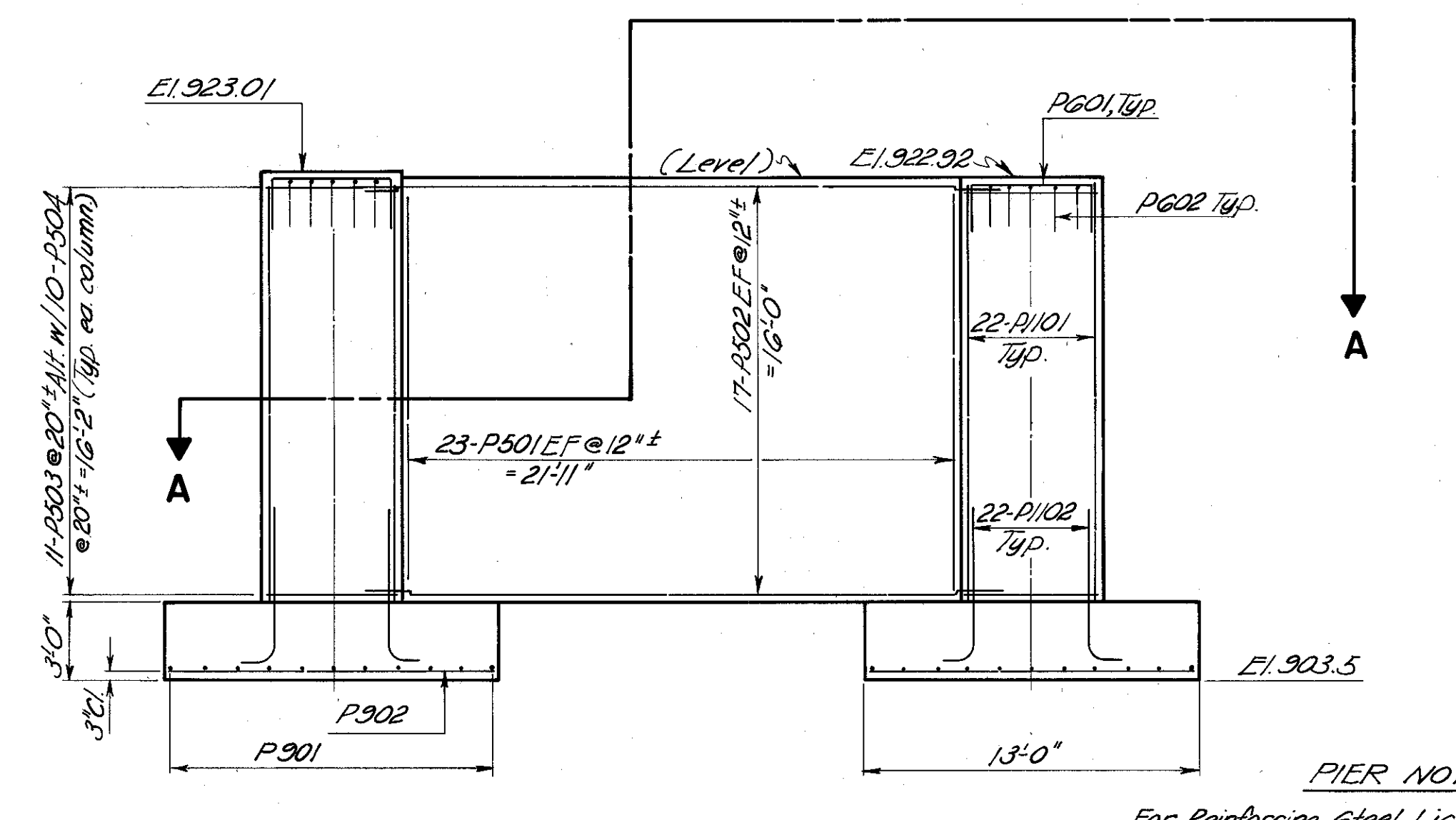
SECTION A-A



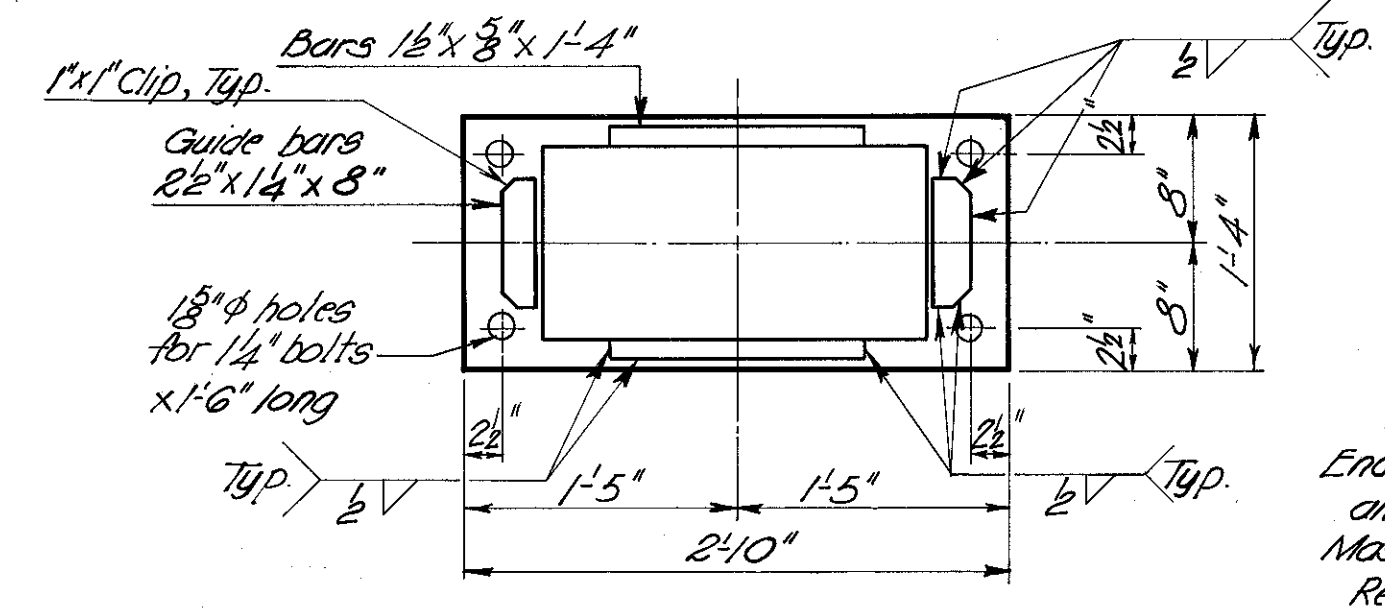
END ELEVATION SIDE VIEW



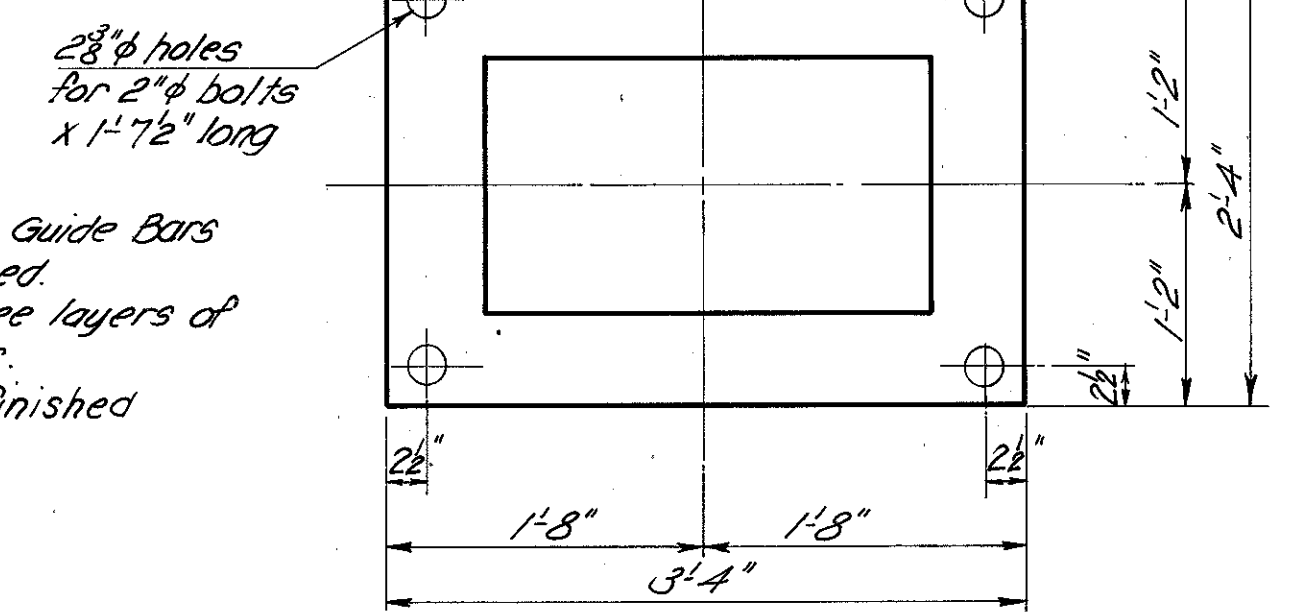
END ELEVATION SIDE VIEW



ELEVATION PIER NO. 1

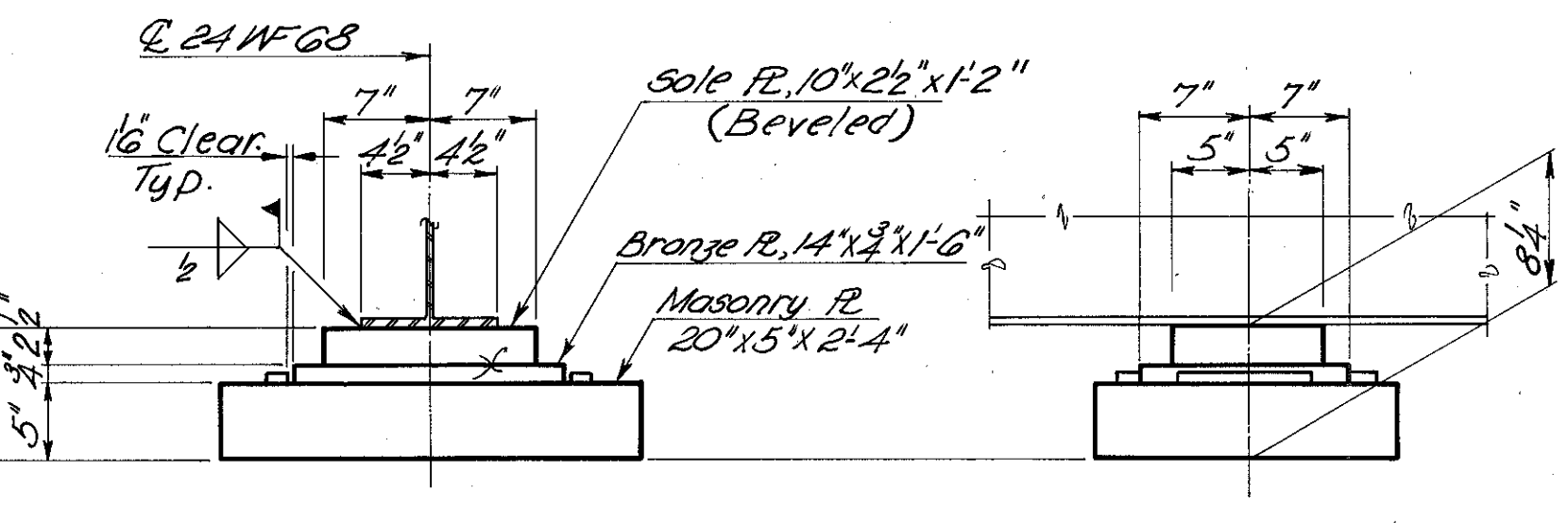


BASE PLATE DETAIL TYPE "A" BEARING

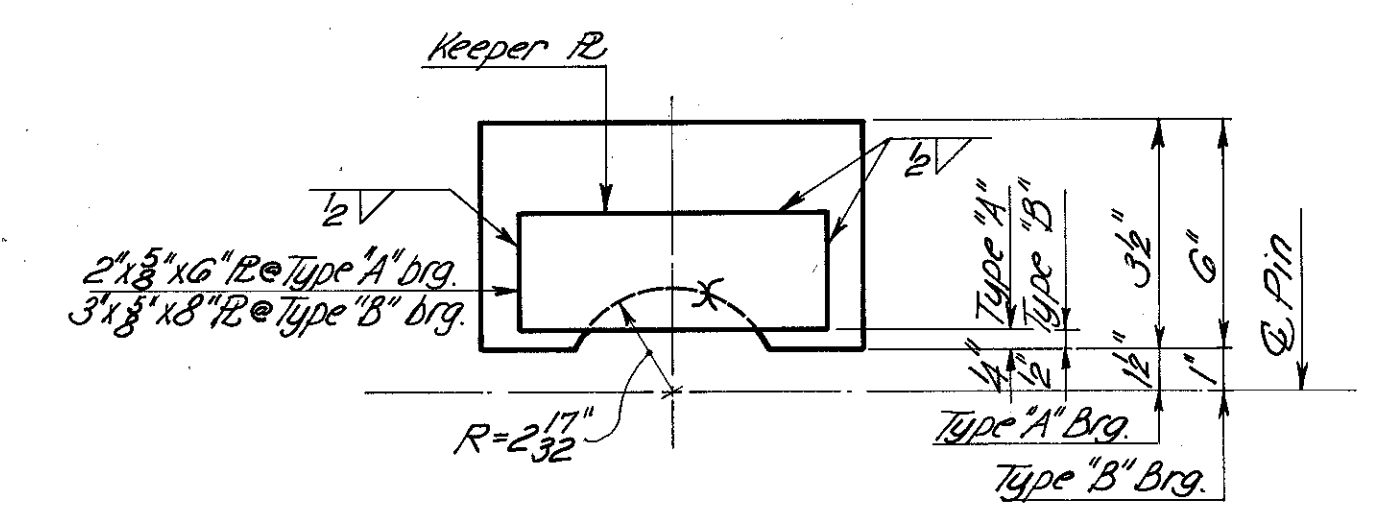


BASE PLATE DETAIL TYPE "B" BEARING

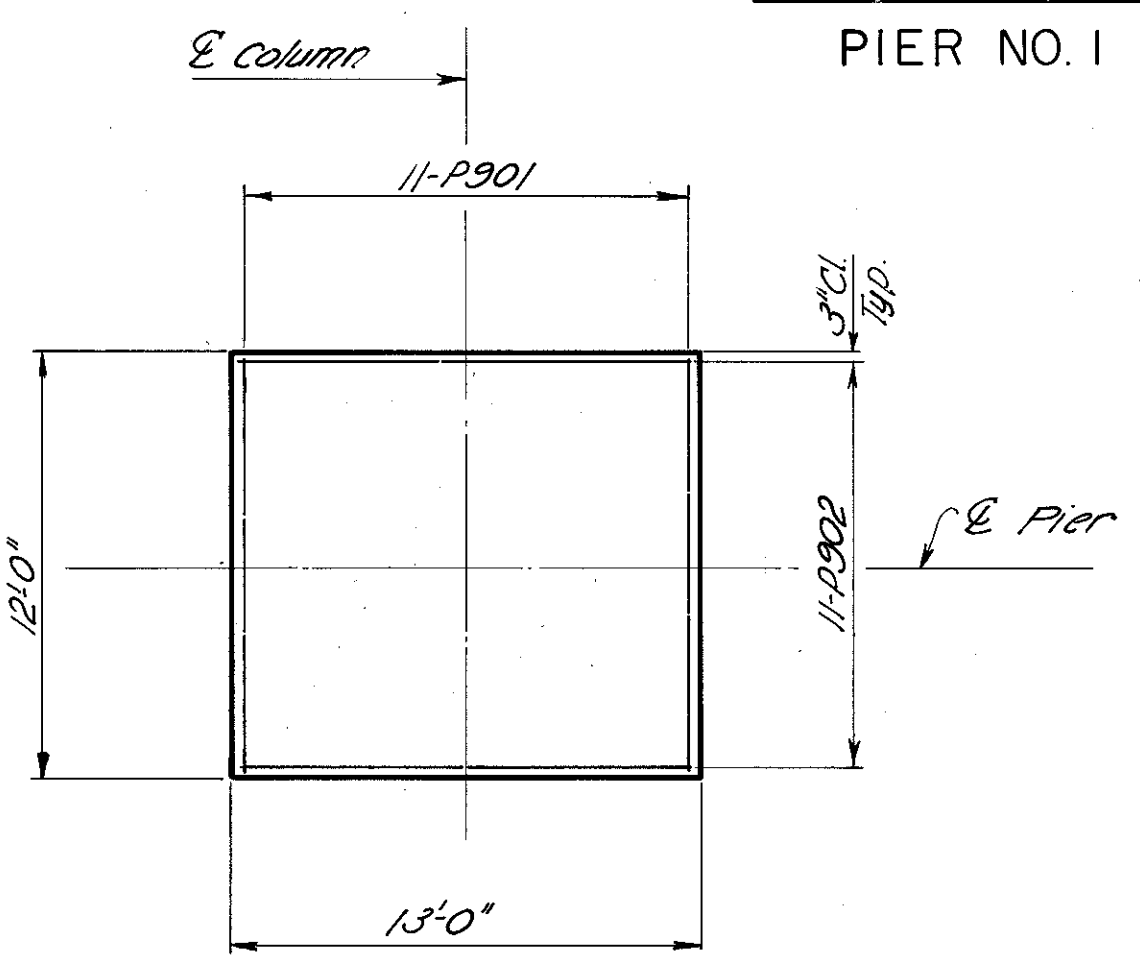
PIER NOTES:
For Reinforcing Steel List See Sh 13/13
BRIDGE SEAT REINFORCING: Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor bar (bolt) holes. Sheet Copper Water Seals to be provided in all construction joints at top of footing.



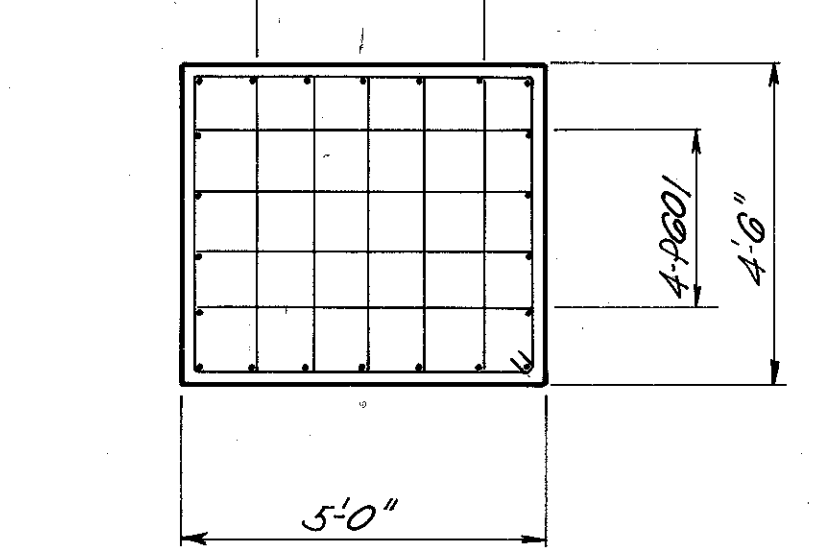
END ELEVATION SIDE VIEW



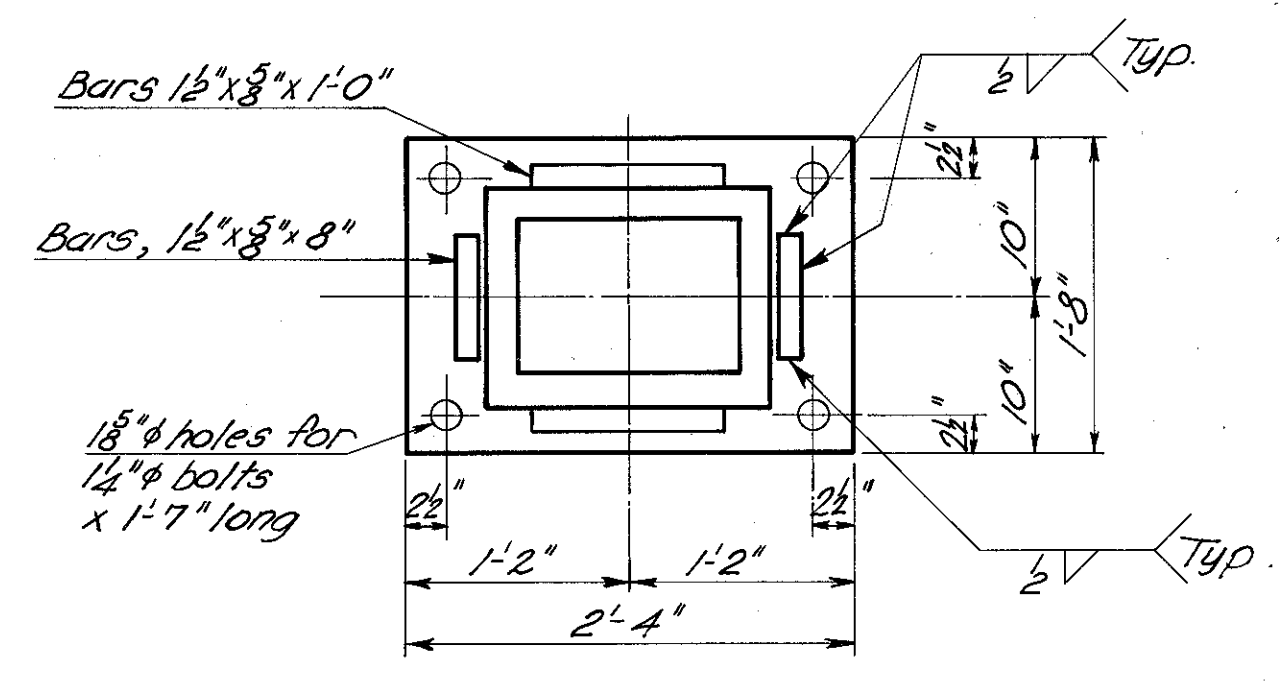
SOLE PLATE DETAIL



TYPICAL FOOTING PLAN

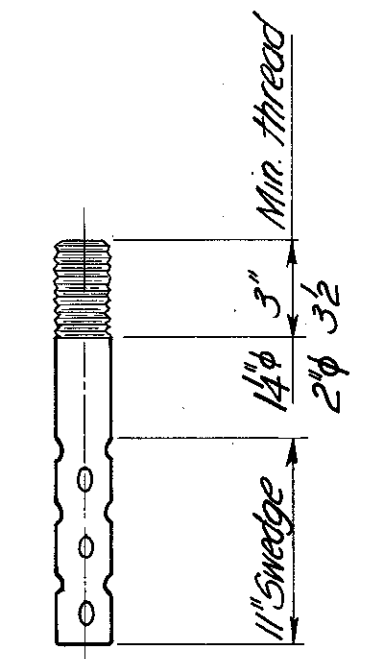


PLAN-TOP OF PIER COLUMNS, TYP.



BASE PLATE DETAIL TYPE "C" BEARING

Anchor bolts to be furnished with standard hex nuts and 1/2" plate washers.



ANCHOR BOLT DETAIL

Bolt lengths and diameter as noted.

DESIGNED		DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.		A.W.		SA.		9/25/74	

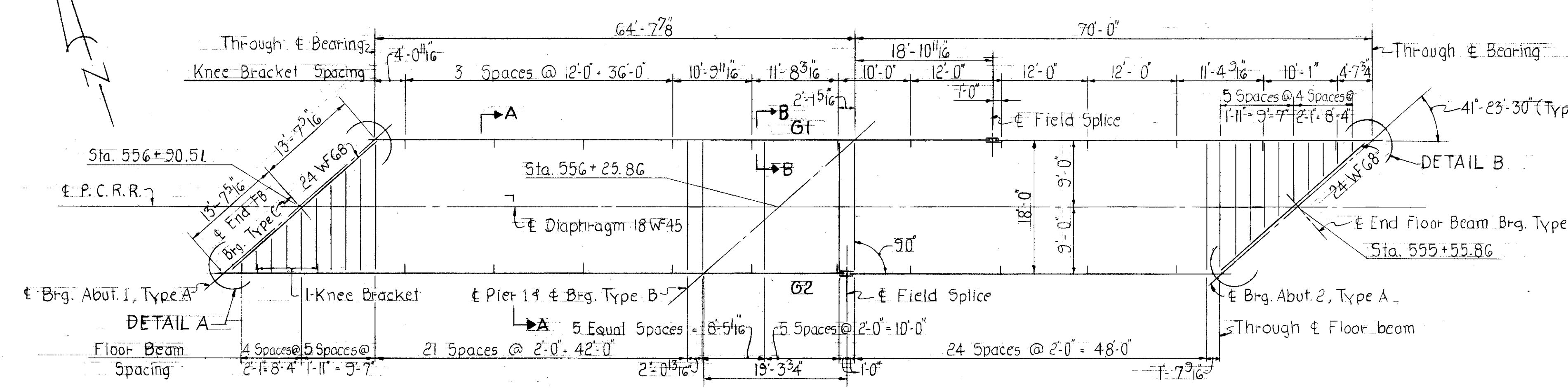
8/13

KING & GAVARIS
CONSULTING ENGINEERS

PIER No. 1 & BEARING DETAILS

BRIDGE NO. GRE-675-0626 S.R.
PENN-CENTRAL R.R. OVER
DAYTON XENIA RD.
GREENE COUNTY

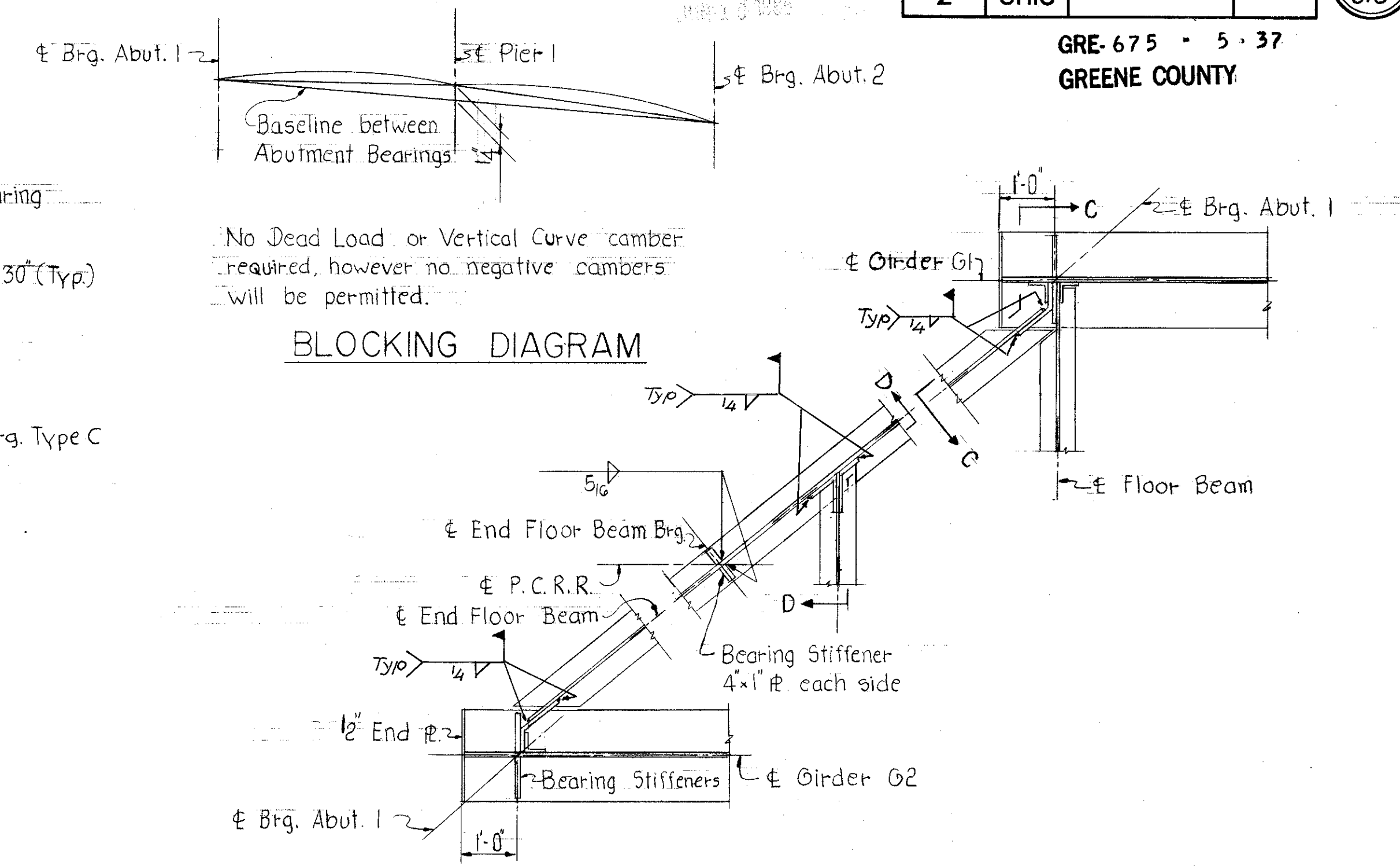
STA: 555+51.05 TO
STA: 556+95.32



NOTE: All Floor Beams 21WF62 except noted otherwise

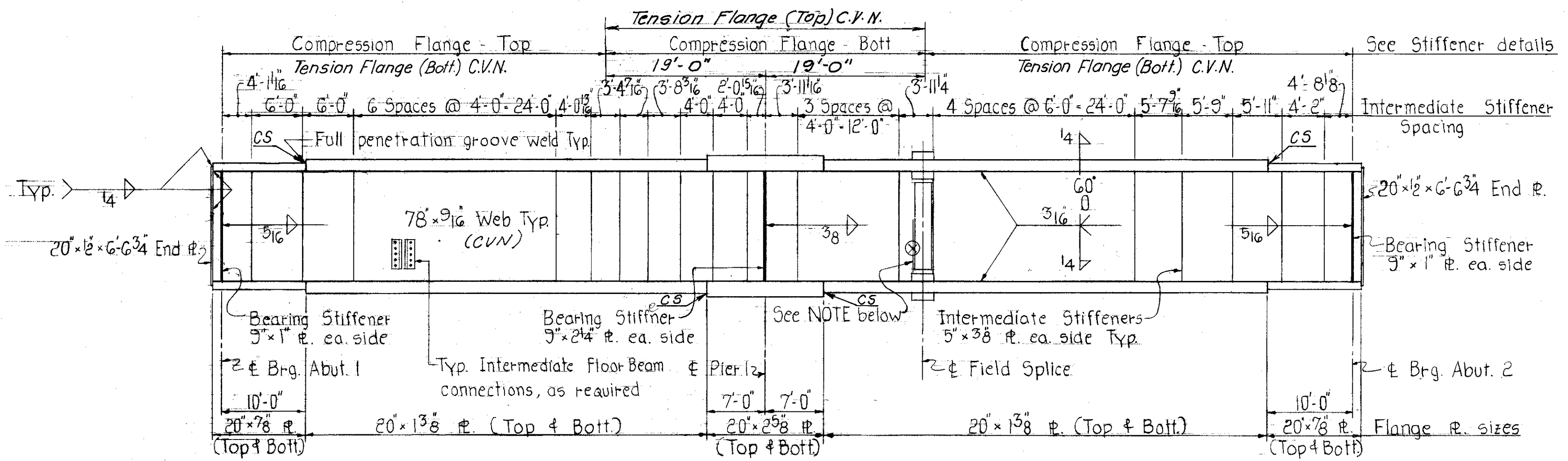
FRAMING PLAN

Note: Where a shape or plate is designated (C.V.N) the material shall meet specified minimum notch toughness requirements.



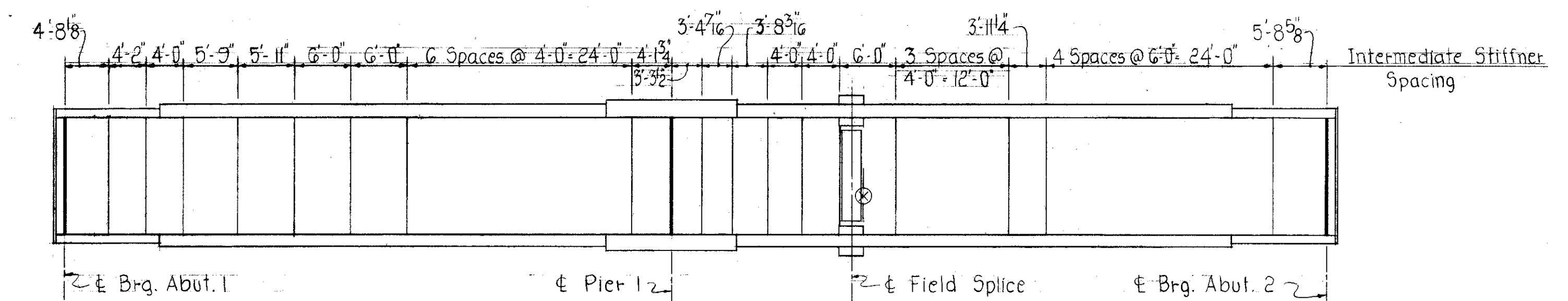
No Dead Load or Vertical Curve camber required, however no negative cambers will be permitted.

DETAIL A shown DETAIL B similar opposite hand



GIRDER ELEVATION G1

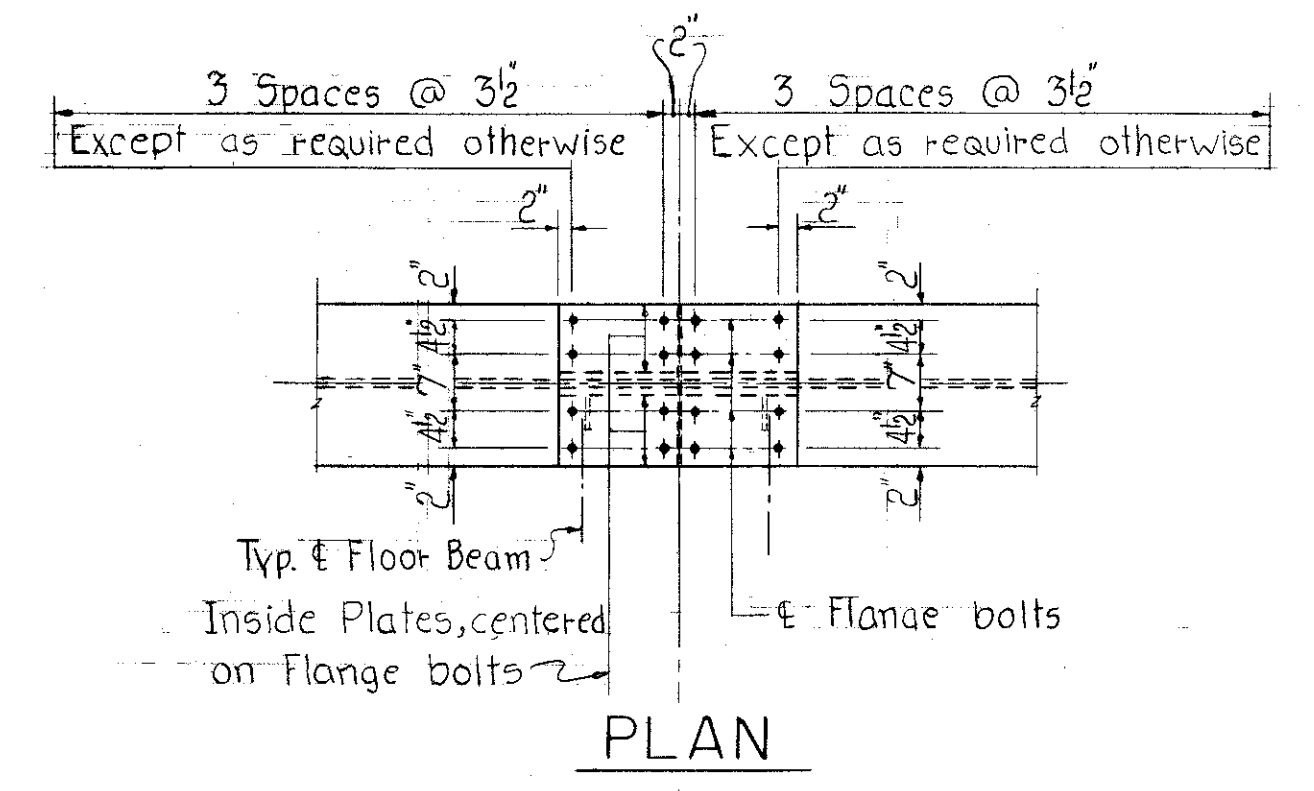
NOTE: 5" x 3/8" R. Stiffener on inside of Girder only for Floor Beam Connection



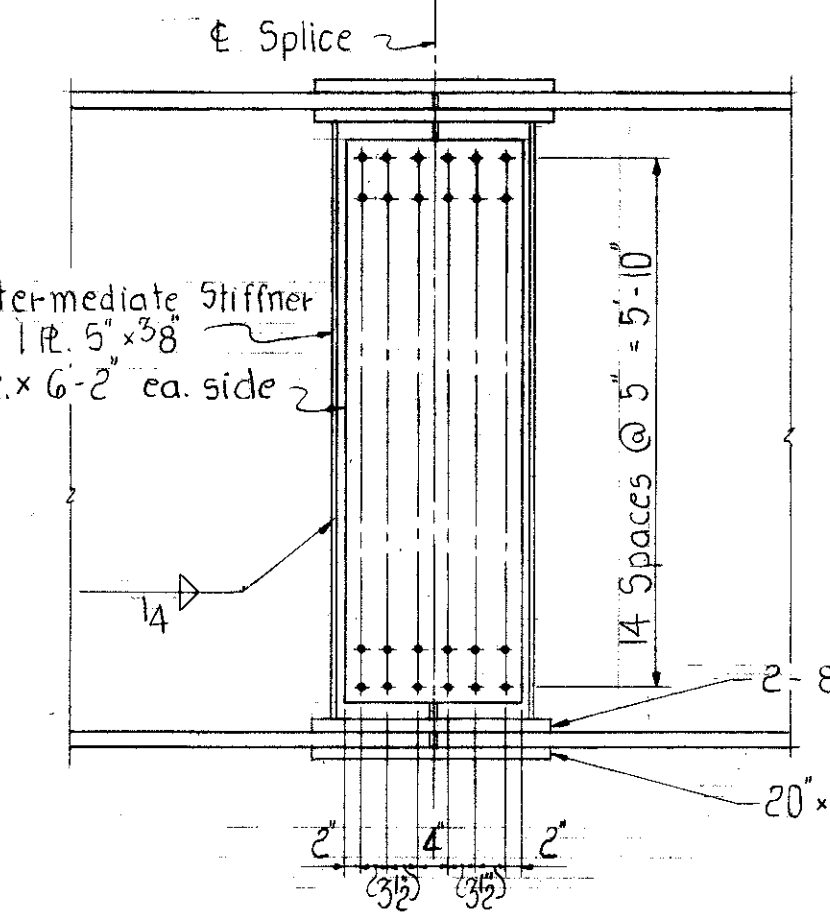
GIRDER ELEVATION G2

NOTE: Details not shown here similar to G1

NOTE: Material shall be fabricated in accordance with the Fracture Control Plan (See Proposal Note)



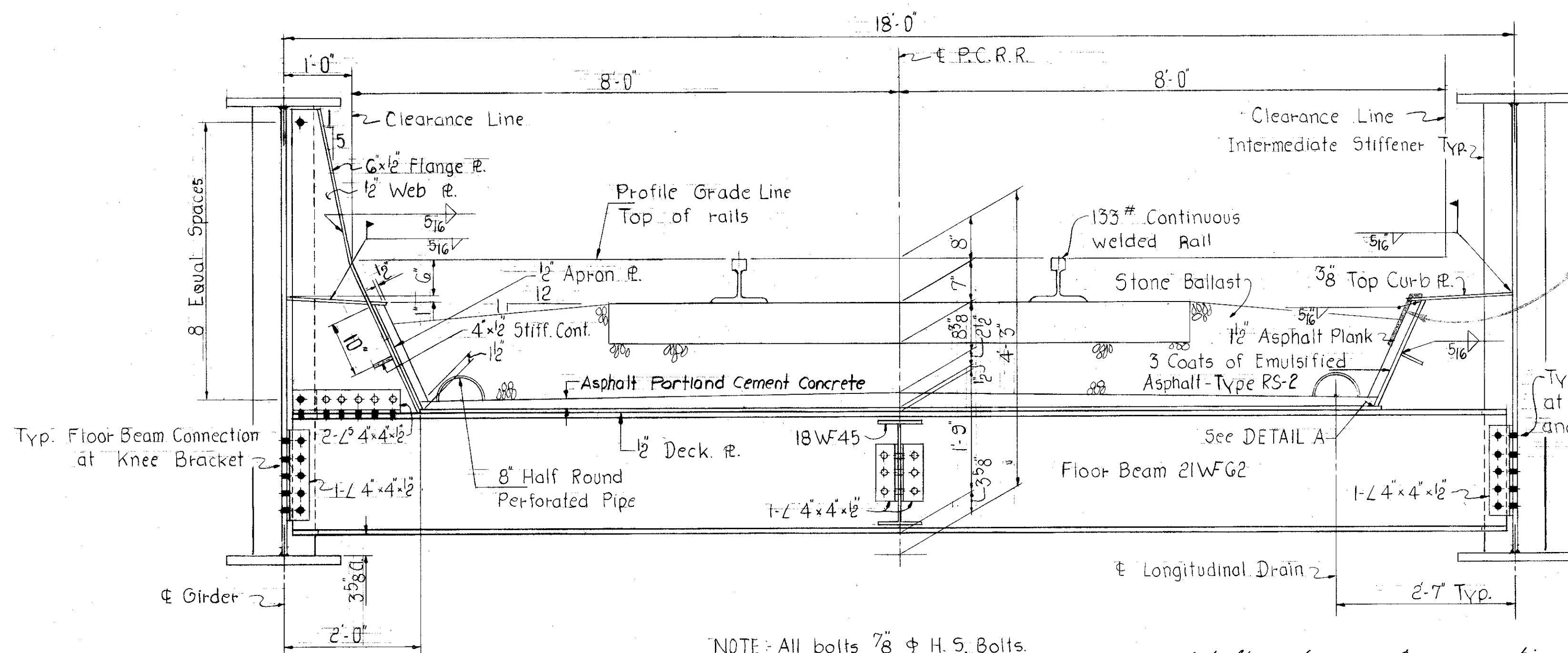
PLAN



INTERMEDIATE STIFFENER TYP.

NOTES: For Details of Bearings Type A, B and C see Sh. 8/13
GIRDER dimensions are given from ϵ Brg. to ϵ Brg.
Floor beam spacing is given from ϵ Floor beam web to ϵ Floor beam web.
Knee bracket spacing is given from ϵ Floor beam web to ϵ Floor beam web to which they are attached.
All dimensions are given in horizontal plane.
For Sections A-A, B-B, C-C and D-D see sh. 10/13
All Bearing Stiffeners shall be milled to bear at the bottom flgs. & tight fit at the top flgs. Bearing stiff. ends of girders to be vertical
Work with Sheets 8, 10, 13

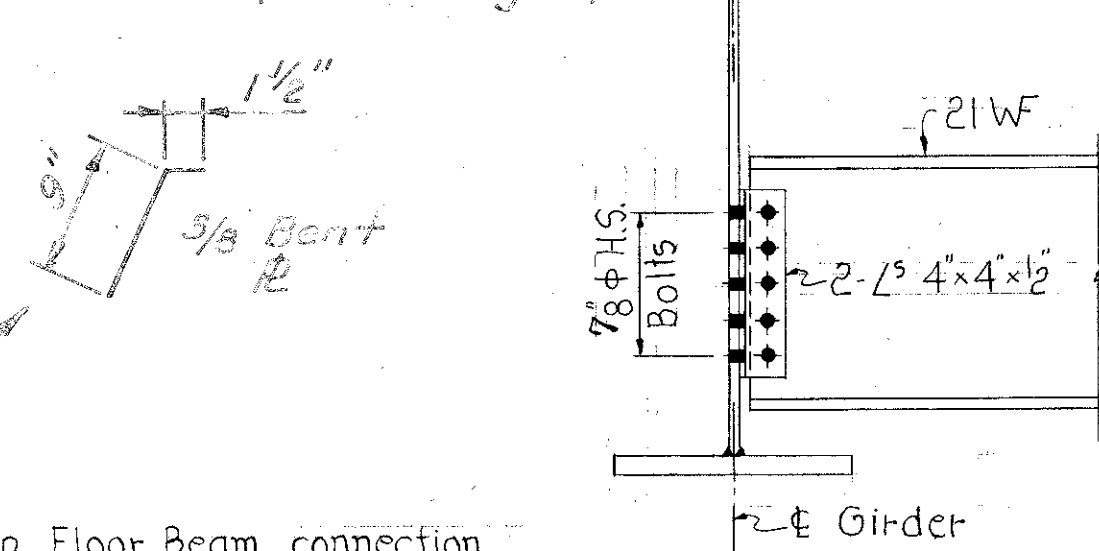
KING & GAVARIS CONSULTING ENGINEERS				9/13
CINCINNATI				OHIO
FRAMING PLAN & SUPERSTRUCTURE DETAILS - I				
BRIDGE NO. GRE-675-0626 S.R.				
PENN-CENTRAL R.R. OVER DAYTON XENIA RD.				
GREENE COUNTY		STA: 555+51.05 TO STA: 556+95.32		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
J.R.G.	J.R.G.		S.A.	J.R.G.
				9/25/72
				4/27/82



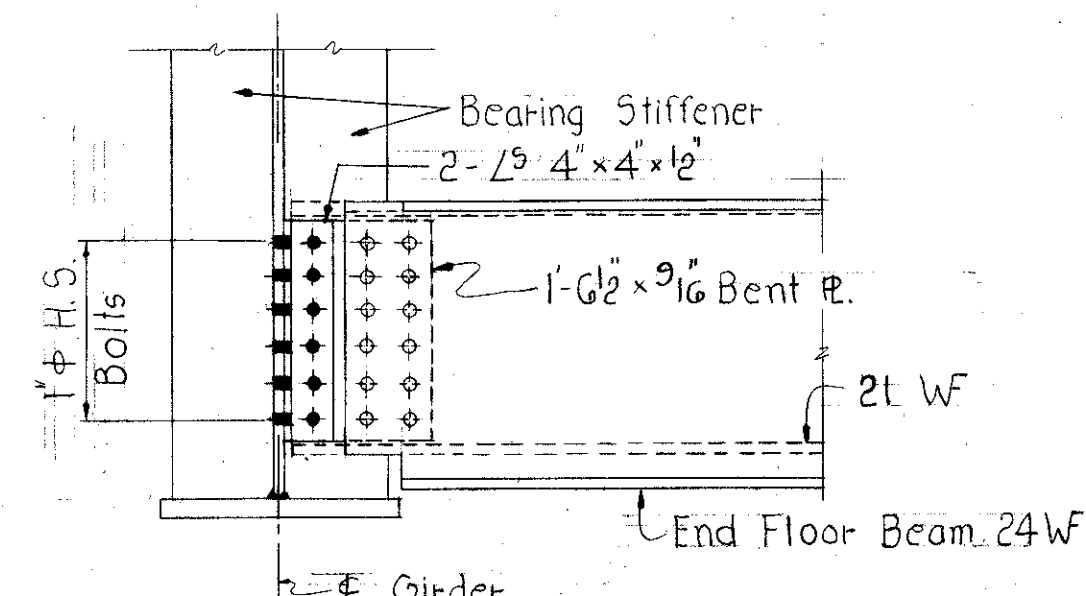
NOTE: All bolts 7/8\"/>

SECTION A-A
TYPICAL SECTION

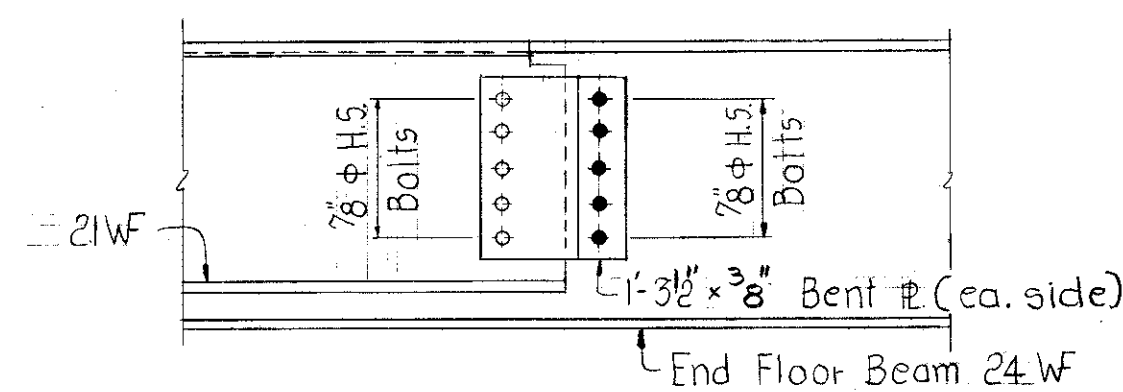
Add a bent 3/8\"/>



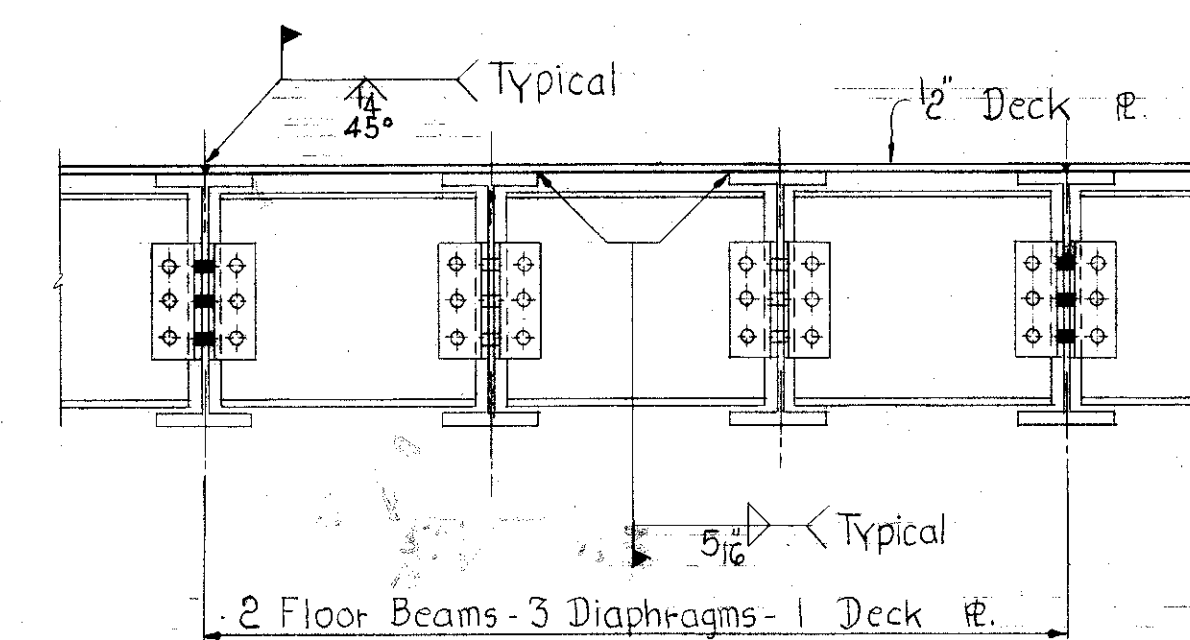
SECTION B-B
TYPICAL INTERMEDIATE
FLOOR BEAM CONNECTION



SECTION C-C

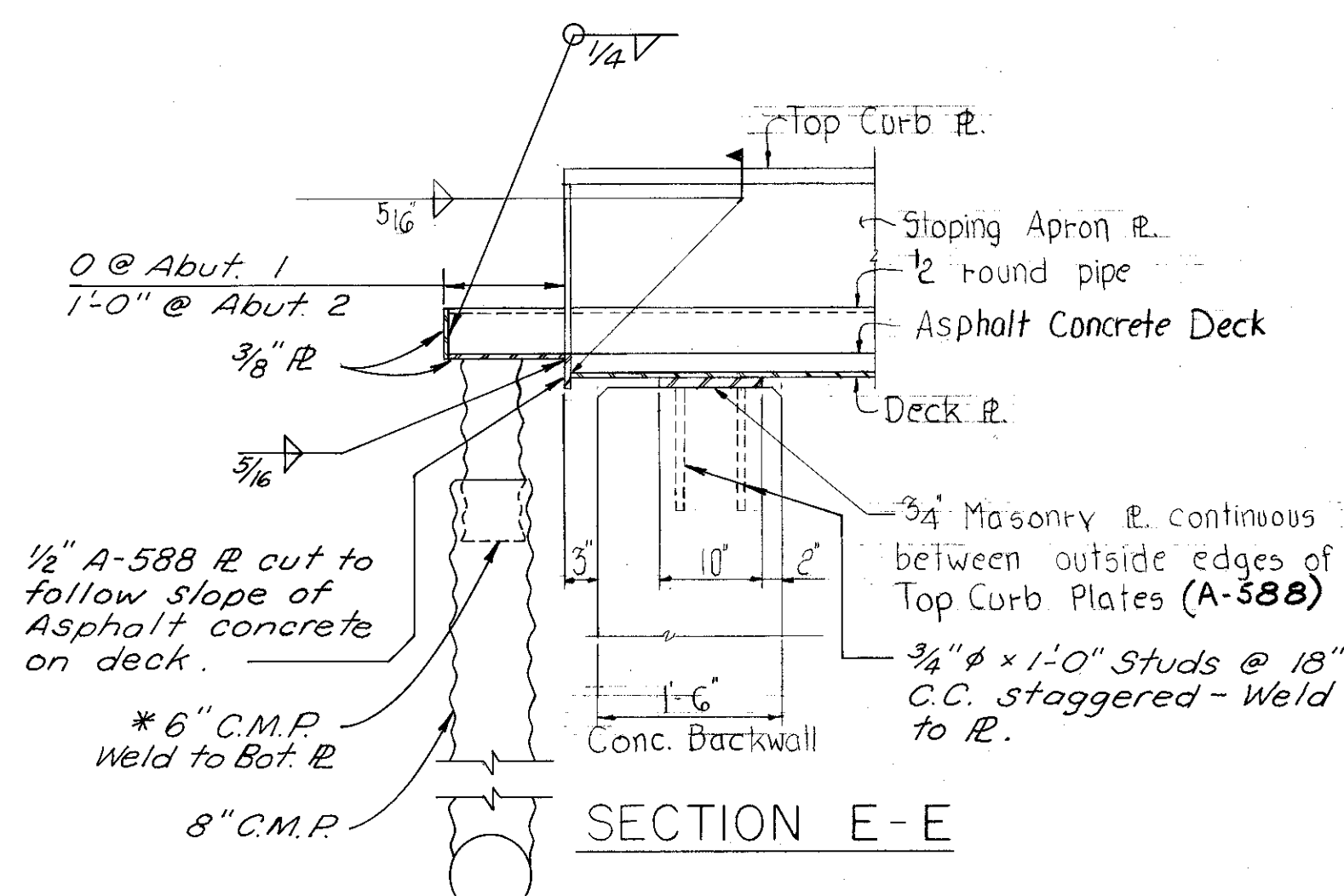
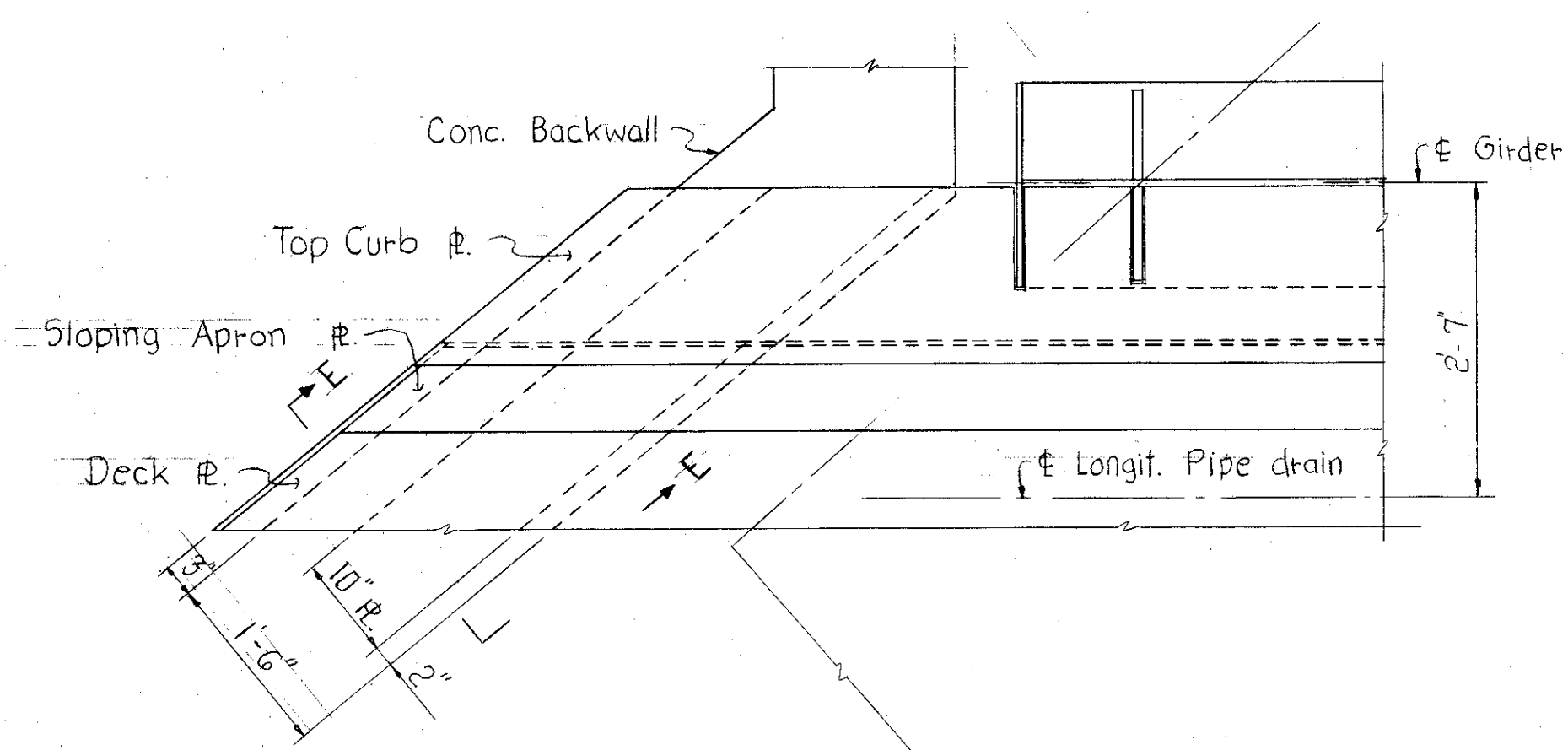


SECTION D-D



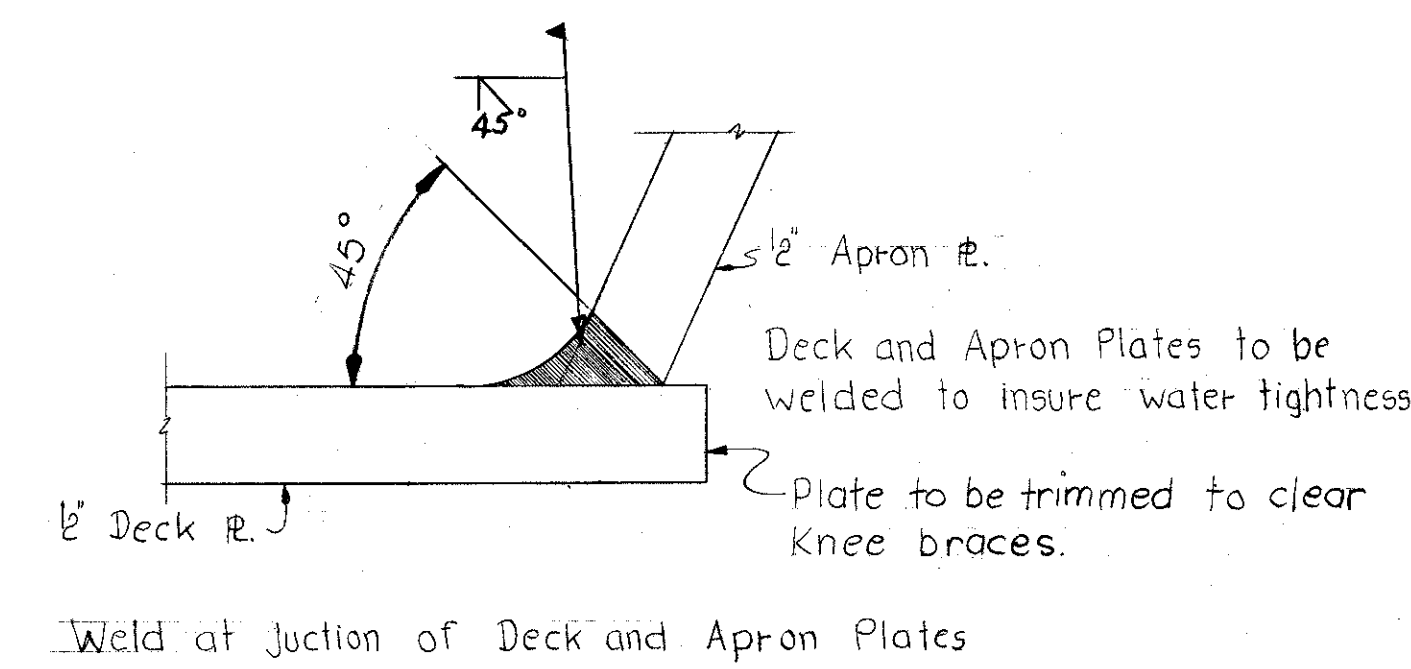
FLOOR BEAM UNITS DETAIL

Skewed End Panels and Special areas to be similarly assembled and welded



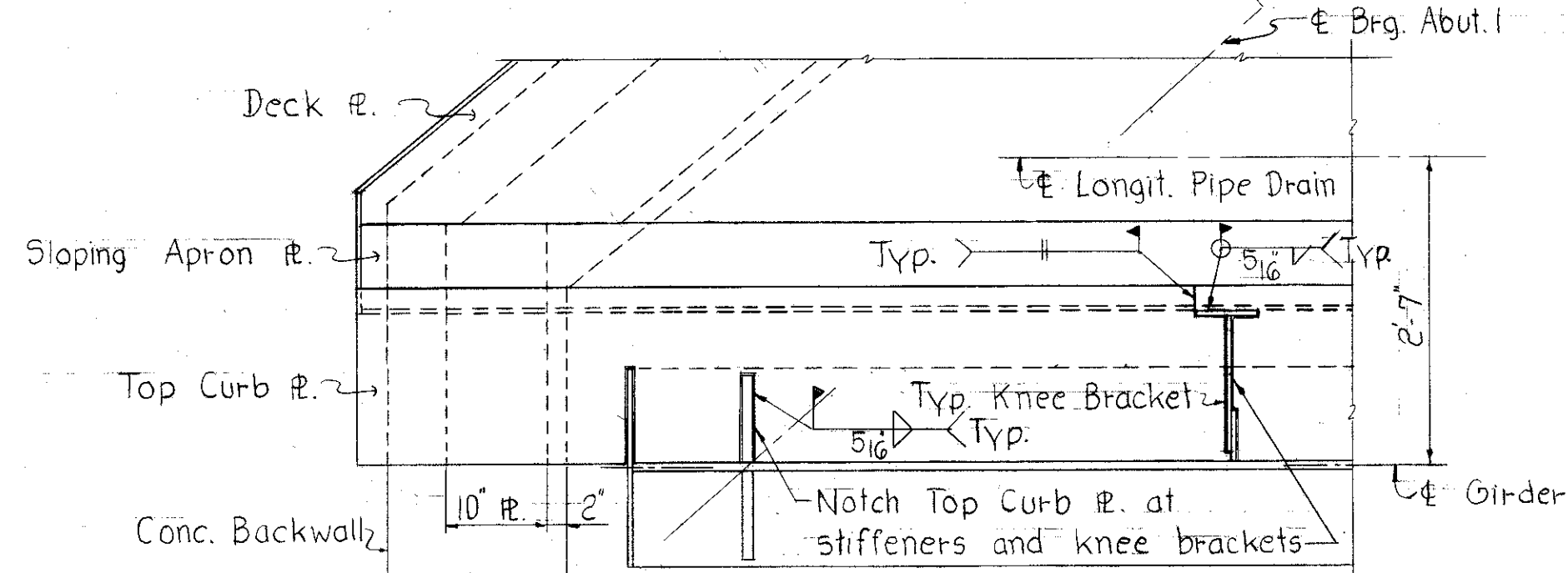
SECTION E-E

* Include with deck drain pipe for payment



DETAIL A

NOTES: Deck, Apron and Curb Plates to be ASTM A-588, included with Item 810 for payment
Longitudinal Deck Drain pipes to be bituminous coated corrugated metal pipes
Work this sheet with Shs. 8, 9, 13
Abutment Masonry Plate included with Item 810 for payment.



DETAILS OF DECK, APRON AND CURB PLATES

LOADING	LOAD TABLE										
	MOMENTS; kip-inches					SHEARS; kips			REACTIONS; kips		
	GIRDERS G1-G2		GIRDERS G1-G2			GIRDERS G1-G2			GIRDERS G1-G2		
	Span 1	Pier 1	Span 2	Abut. 1	Pier 1	Left Pier	Right Pier	Abut. 2	Abut. 1	Pier 1	Abut. 2
DEAD LOAD	+8,290	-18,050	+8,290	58	103	103	58	58	58	206	58
LIVE LOAD	+29,318	-41,739	+29,318	196	265	265	196	196	196	415	196
IMPACT	+9,792	-13,941	+9,792	66	88	88	66	66	66	138	66

KING & GAVARIS
CONSULTING ENGINEERS
OHIO

10/13

SUPERSTRUCTURE DETAILS-2

BRIDGE NO. GRE-675-0626 S.R.
PENN-CENTRAL R.R. OVER
DAYTON XENIA RD.

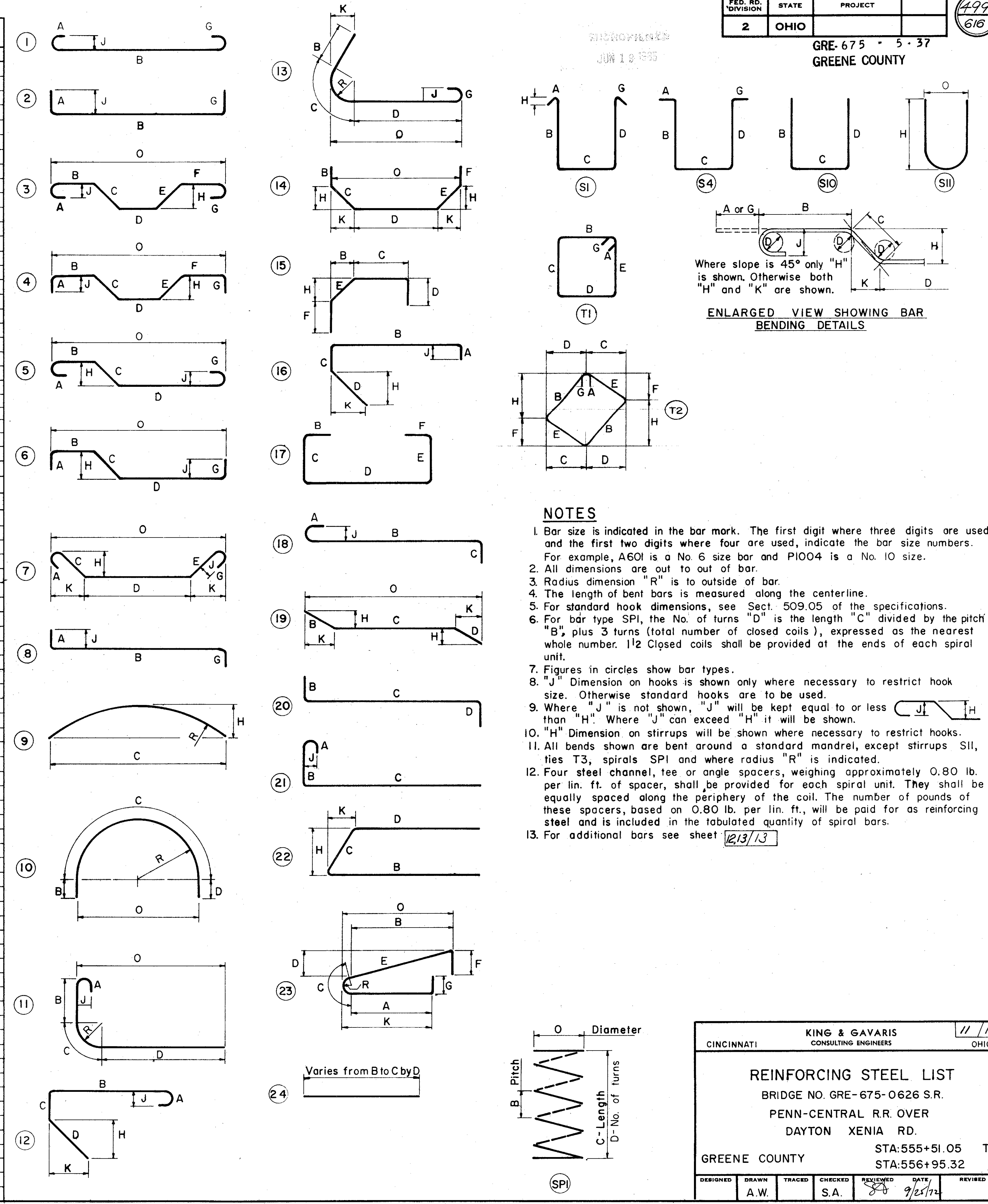
GREENE COUNTY
STA:555+51.05 TO
STA:556+95.32

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.R.G.	J.R.G.		S.A.	SD	9/28/72	4-16-82

REPRODUCTION
JUN 13 1985

GRE-675 - 5-37
GREENE COUNTY

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES	
		ABUTMENT No. 1			Reinforcing steel in Abutment No. 1 shall the suffix "A"													
A501	22	15'4"	352	STR														
A502	11	Varies 12'10" to 13'6" by 6'24" L. Ed.	180	STR														
A503	14	Varies 7'6" to 12'4" by 4'2" L. Ed.	145	STR														
A504	3	Varies 3'2" to 6'1" by 1'52" L. Ed.	14	STR														
A505	13	Varies 3'3" to 13'5" by 10'24" L. Ed.	181	STR														
A506	3	Varies 2'8" to 6'8" by 2'0" L. Ed.	15	STR														
A601	94	22'0"	3106	STR														
A602	34	9'4"	477	S10		2'0"	5'8"	2'0"										
A603	8	7'6"	90	S10		2'7"	2'8"	2'7"										
A604	8	4'3"	51	STR														
A605	4	Varies 2'9" to 6'9" by 1'4" L. Ed.	29	STR														
A606	2	22'8"	68	STR														
A607	3	10'0"	45	19		3'7"	6'6"					2'7 1/2"	2'4"	8'10"				
A608	1	8'4"	13	19		3'8"	4'9"					3'4 1/2"	1'4 1/2"	6'1 1/2"				
A609	1	5'3"	8	19		1'11"	3'5"					1'5 1/2"	1'3 1/4"	4'8 1/4"				
A610	6	27'6"	248	STR														
A611	4	4'5"	27	19		1'9"	2'9"					1'4 3/8"	1'1 1/2"	3'10 3/8"				
A612	4	9'10"	59	19		3'10"	6'11"					2'10"	2'3"	9'2"				
A613	4	11'1"	67	20		3'5"	7'10"											
A614	1	6'11"	10	19		3'11"	3'1"					3'2"	2'4"	5'5"				
A615	1	5'5"	8	19		3'11"	1'7"					3'2"	2'4"	3'11"				
A616	24	14'4"	517	S10		6'9"	1'2"	6'9"										
A617	24	11'0"	397	S10		5'1"	1'2"	5'1"										
A618	2	12'10"	39	S10		6'10"	1'2"	6'10"										
A619	2	7'9"	23	S10		8"	1'8"	5'9"										
A620	5	Varies 3'7" to 21'7" by 3'0" L. Ed.	117	16	6"	Varies 2'7" to 7'8" by 1'3 1/4"	3'10"	Varies 2'11" to 7'10" by 1'2 3/4"				Varies 2'11" to 7'10" by 1'2 3/4"						
A621	7	Varies 9'10" to 21'10" by 11'0" L. Ed.	162	16		Varies 2'11" to 7'5" by 9/2"	3'10"	Varies 2'10" to 9'16" by 1'1 1/4"				Varies 2'10" to 9'16" by 1'1 1/4"						
A622	1	8'3"	12	S10		8"	2'2"	5'9"										
A623	5	21'9"	163	S10		9'10"	12'1"											
A624	1	11'8"	18	STR														
A625	8	Varies 3'5" to 9'3" by 2'0" L. Ed.	77	STR														
A626	14	12'7"	265	STR														
A627	19	Varies 7'11" to 12'10" by 3'4" L. Ed.	296	STR														
A628	14	Varies 11'0" to 15'1" by 3'2" L. Ed.	236	22		Varies 5'11" to 6'4" by 1'2"	5'3"					5'2"	1'0 3/8"					
A629	12	Varies 10'5" to 11'0" by 5'8" L. Ed.	193	22		Varies 5'4" to 5'11" by 5/2"	5'3"					5'2"	1'0 3/8"					
A630	18	19'8"	532	STR														
A631	8	Varies 4'7" to 13'6" by 5'0" L. Ed.	146	STR														
A632	2	20'7"	62	STR														
A633	2	32'4"	97	STR														
A634	8	Varies 5'1" to 31'5" by 8'10" L. Ed.	221	STR														
A635	4	31'8"	190	STR														
A636	2	30'0"	90	STR														
A637	4	26'8"	160	STR														
A638	4	Varies 3'3" to 8'3" by 2'0" L. Ed.	29	STR														
A639	2	7'0"	21	STR														
A640	16	Varies 4'1" to 27'8" by 3'2" L. Ed.	382	STR														
A641	2	30'5"	91	STR														
A642	7	Varies 11'2" to 15'8" by 3'1" L. Ed.	141	STR														
A643	9	Varies 8'6" to 24'3" by 8'2" L. Ed.	154	STR														
A644	14	Varies 10'11" to 15'10" by 3'2" L. Ed.	323	22		Varies 7'0" to 7'11" by 1/2"	8'1"					7'11 1/2"	1'7"					
A645	9	Varies 9'11" to 11'1" by 1'2" L. Ed.	142	22		Varies 5'4" to 6'6" by 1'2"	4'9"					4'8"	11 1/4"					
A646	4	27'8"	166	STR														
A647	2	24'5"	73	STR														
A648	2	6'8"	20	STR														
A649	10	Varies 7'11" to 20'0" by 2'2" L. Ed.	285	STR														



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 numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
- All dimensions are out to out of bar.
- Radius dimension "R" is to outside of bar.
- The length of bent bars is measured along the centerline.
- For standard hook dimensions, see Sect. 509.05 of the specifications.
- For bar type SPI, 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. 1/2 Closed coils shall be provided at the ends of each spiral unit.
- Figures in circles show bar types.
- "J" Dimension on hooks is shown only where necessary to restrict hook size. Otherwise standard hooks are to be used.
- Where "J" is not shown, "J" will be kept equal to or less than "H". Where "J" can exceed "H" it will be shown.
- "H" Dimension on stirrups will be shown where necessary to restrict hooks.
- All bends shown are bent around a standard mandrel, except stirrups S11, ties T3, spirals S1 and where radius "R" is indicated.
- Four steel channel, tee or angle spacers, weighing approximately 0.80 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.
- For additional bars see sheet 1213/13

CINCINNATI		KING & GAVARIS CONSULTING ENGINEERS		11/13 OHIO	
REINFORCING STEEL LIST					
BRIDGE NO. GRE-675-0626 S.R.					
PENN-CENTRAL R.R. OVER DAYTON XENIA RD.					
GREENE COUNTY				STA: 555+51.05	TO
				STA: 556+95.32	
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
	A.W.		S.A.		9/25/72

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
ABUTMENT No. 1 CONTINUED																	
A650	7	20'-0"	210	5T													
A651	7	32'-6"	342	5T													
A652	11	Varies 28'-4" to 32'-6" by 4'-2" L-20	507	5T													
A653	2	12'-6"	38	5T													
A654	7	Varies 23'-6" to 26'-11" by 6'-2" L-20	265	5T													
A655	2	1'-0"	33	5T													
A656	3	8'-8"	39	19		2'-6"	6'-3"										
A657	16	6'-3"	150	5T													
A658	7	Varies 21'-6" to 25'-11" by 3'-2" L-20	249	5T													
A659	2	10'-0"	30	5T													
A663	1	6'-5"	10	19													
A664	16	4'-5"	106	1	8"												
A701	13	Varies 13'-7" to 19'-0" by 3'-2" L-20	459	22		Varies 7'-4" to 7'-11" by 3'-2"	Varies 8'-5" to 11'-3" by 2'-4"					Varies 8'-3" to 10'-3" by 2'-4"	6"	Varies 7'-8" to 2'-26" by 1'-2"			
A702	14	Varies 17'-8" to 15'-1" by 3'-2" L-20	383	22		Varies 6'-4" to 6'-10" by 1'-2"	Varies 5'-6" to 8'-5" by 2'-4"					Varies 5'-7" to 8'-3" by 2'-4"	7"	Varies 1'-1" to 1'-17" by 1'-2"			
A703	59	5'-5"	654	1	10"	4'-7"	8'-1"										
A801	57	16'-40"	2562	20		3'-0"	8'-1"										
A802	29	12'-40"	394	5T													
A803	14	10'-9"	402	5T													
A804	14	10'-2"	380	5T													
A805	13	9'-9"	338	5T													
A901	57	11'-8"	2261	5T													
A101	13	13'-9"	350	5T													
Total =			22,395														
ABUTMENT No. 2					Reinforcing steel in Abutment No. 2 shall have the suffix "B"												
A501	22	16'-3"	373	5T													
A502	11	Varies 13'-9" to 18'-11" by 6'-2" L-20	187	5T													
A503	8	Varies 11'-8" to 14'-4" by 4'-2" L-20	107	5T													
A504	3	Varies 3'-2" to 5'-5" by 1'-12" L-20	13	5T													
A505	14	Varies 9'-7" to 9'-5" by 9'-2" L-20	212	5T													
A506	3	Varies 5'-2" to 6'-11" by 4'-0" L-20	16	5T													
A507	8	Varies 10'-4" to 11'-4" by 1'-2" L-20	90	5T													
A601	38	22'-0"	3238	5T													
A602	34	9'-4"	477	5T		2'-0"	5'-8"	2'-0"									
A603	8	7'-6"	90	5T		2'-7"	2'-8"	2'-7"									
A604	8	4'-3"	51	5T													
A605	4	Varies 3'-2" to 7'-1" by 1'-3'-2" L-20	31	5T													
A606	4	24'-8"	148	5T													
A607	3	10'-0"	45	19		3'-7"	6'-6"					2'-7 1/2"	2'-4"	8'-0"			
A608	1	8'-4"	13	19		3'-8"	4'-9"					3'-4 1/2"	1'-4 1/2"	6'-1 1/2"			
A609	1	5'-3"	8	19		1'-11"	3'-5"					1'-5 1/4"	1'-3 1/4"	4'-8 1/4"			
A610	6	27'-6"	248	5T													
A611	4	4'-5"	27	19		1'-9"	2'-9"					1'-4 3/8"	1'-1 1/8"	3'-10 3/8"			
A612	4	9'-0"	59	19		3'-0"	6'-11"					2'-0"	2'-3"	9'-2"			
A613	4	11'-1"	67	20		3'-5"	7'-0"										
A614	1	6'-11"	10	19		3'-11"	3'-1"					3'-2"	2'-4"	5'-5"			
A615	1	5'-5"	8	19		3'-11"	1'-7"					3'-2"	2'-4"	3'-11"			
A616	24	14'-4"	577	5T		6'-9"	1'-2"	6'-9"									
A617	24	11'-0"	397	5T		5'-1"	1'-2"	5'-1"									
A618	2	12'-10"	39	5T		6'-0"	1'-2"	6'-0"									
A619	2	7'-9"	23	5T		8"	1'-8"	5'-9"									
A620	5	Varies 9'-7" to 21'-7" by 3'-0" L-20	117	16	6"	Varies 2'-7" to 9'-10" by 1'-3 1/4"	3'-10"	Varies 2'-11" to 9'-10" by 1'-3 1/4"				Varies 2'-1" to 7'-0" by 1'-3 1/4"	Varies 2'-1" to 7'-0" by 1'-3 1/4"				

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
ABUTMENT No. 2 CONTINUED																	
A621	7	Varies 9'-4" to 21'-0" by 1'-0" L-20	162	16	6"	Varies 2'-11" to 7'-5" by 9"	3'-4"	Varies 2'-10" to 9'-6" by 1'-1 1/4"				Varies 2'-0" to 6'-9" by 9 1/2"	Varies 2'-0" to 6'-9" by 9 1/2"				
A622	1	8'-3"	12	5T		8"	2'-2"	5'-9"									
A623	5	21'-9"	163	5T		9'-10"	12'-1"										
A624	7	11'-8"	18	5T													
A625	8	Varies 3'-5" to 9'-5" by 2'-0" L-20	77	5T													
A626	21	12'-7"	397	5T													
A628	14	Varies 10'-0" to 13'-1" by 2'-8" L-20	251	22		Varies 6'-3" to 6'-6" by 1'-2"	Varies 4'-9" to 6'-9" by 1'-2"					Varies 4'-8" to 6'-7" by 1'-2"	Varies 1'-6" to 1'-3 3/8" by 3/8"				
A629	14	Varies 10'-11" to 11'-4" by 3'-8" L-20	234	22		Varies 3'-0" to 6'-3" by 3/8"	5'-3"					5'-1 3/4"	1'-0 3/8"				
A630	20	19'-8"	591	5T													
A631	6	Varies 7'-0" to 19'-8" by 6'-4" L-20	120	5T													
A632	2	20'-4"	61	5T													
A633	2	35'-11"	108	5T													
A634	2	5'-4"	16	5T													
A635	6	35'-8"	321	5T													
A636	2	33'-10"	102	5T													
A637	8	30'-8"	368	5T													
A638	4	Varies 3'-2" to 5'-8" by 10" L-20	27	5T													
A639	2	7'-5"	22	5T													
A640	14	Varies 6'-8" to 29'-9" by 3'-10" L-20	382	5T													
A641	2	31'-11"	96	5T													
A642	7	Varies 11'-7" to 15'-8" by 3'-6" L-20	143	5T													
A643	11	Varies 10'-0" to 16'-4" by 7'-2" L-20	215	5T													
A644	14	Varies 16'-4" to 17'-1" by 3'-4" L-20	351	22								Varies 7'-4" to 8'-4" by 3/4"	9'-2"	8'-11 3/8"	1'-9 3/8"		
A645	14	Varies 10'-0" to 12'-2" by 2'-1" L-20	233	5T													
A646	4	29'-8"	178	5T													
A647	2	27'-4"	82	5T													
A648	2	7'-6"	23	5T													
A649	9	Varies 20'-6" to 23'-2" by 1'-2" L-20	295	5T													
A650	7	Varies 22'-9" to 34'-9" by 3'-2" L-20	248	5T													
A651	8	Varies 30'-7" to 32'-9" by 4'-2" L-20	377	5T													
A652	11	Varies 27'-8" to 31'-6" by 4'-2" L-20	489	5T													
A653	1	18'-10"	28	5T													
A654	9	Varies 25'-0" to 29'-6" by 6'-4" L-20	368	5T													
A655	2	10'-0"	30	5T													
A656	3	8'-8"	39	19								2'-6"	6'-3"				
A657	18	6'-0"	162	5T								1'-11"	1'-7"	7'-40"			
A658	7	Varies 23'-0" to 27'-0" by 8'-1" L-20	263	5T													
A659	1	9'-9"	15	5T													
A660	2	14'-6"	44	5T													

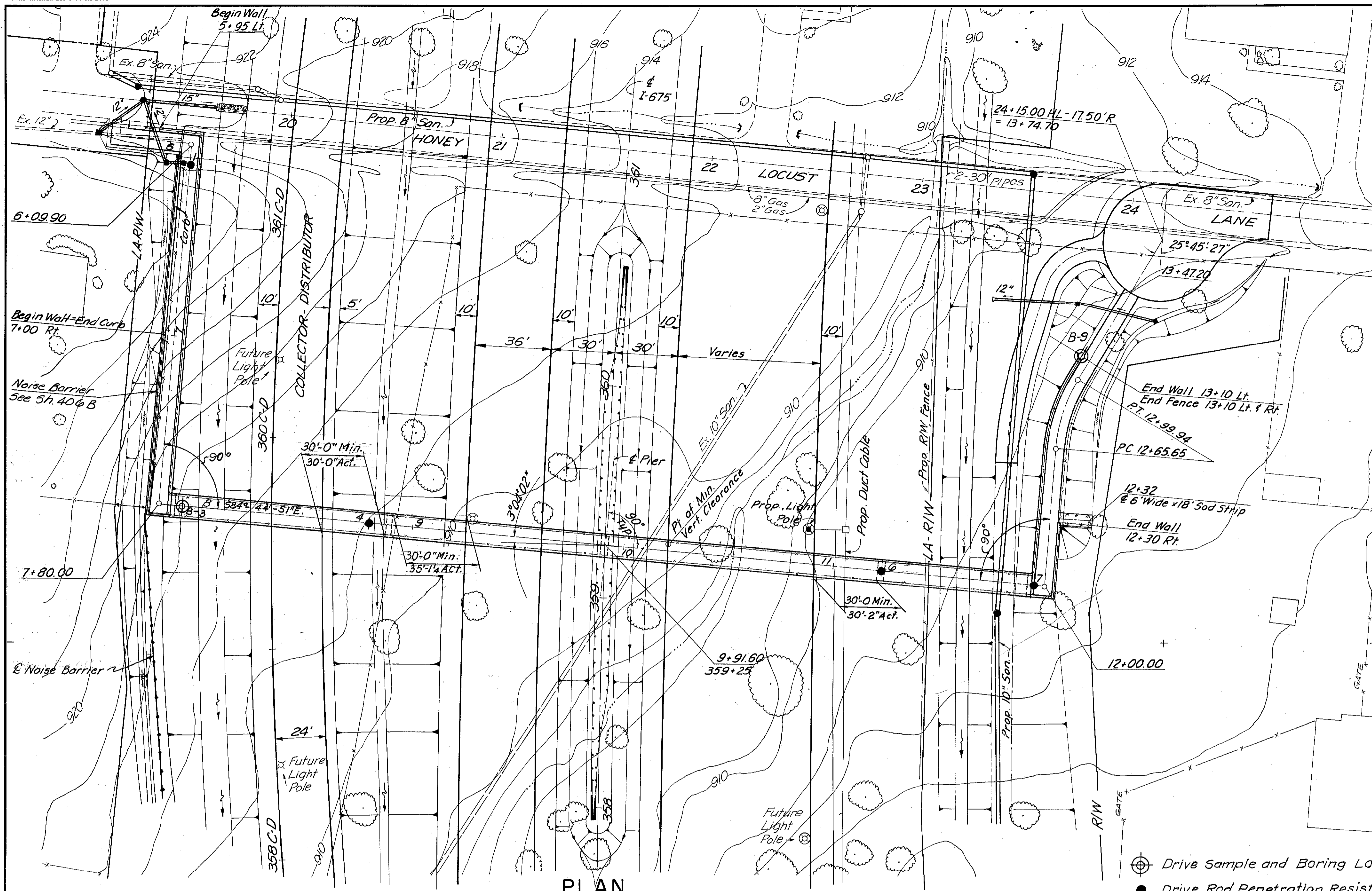
RECORDED
JUN 18 1989

FERO WAGNER 200 5-74 MC 2470

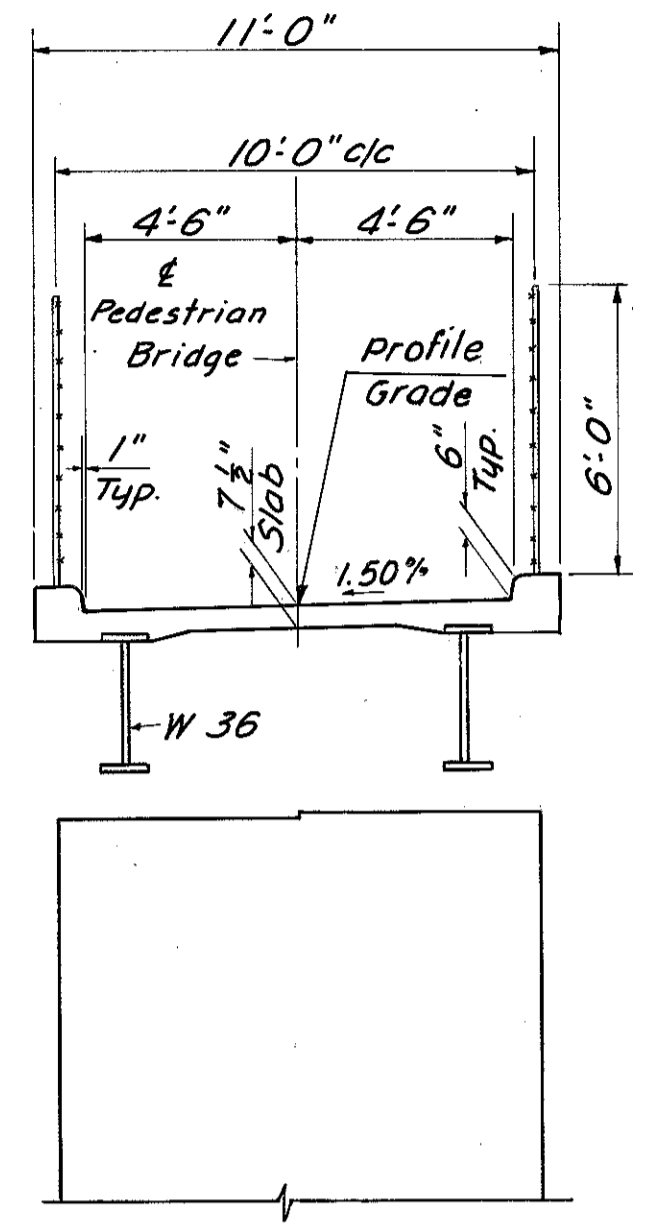
F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

502
616

GRE-675-537
GREENE COUNTY



PEDESTRIAN RAMP
CURVE DATA
P.I. Sta. 12+83.10
 $\Delta = 26^{\circ}11'32''$
 $R = 75.00'$
 $L = 34.29'$
 $T = 17.45'$
 $E = 2.00'$

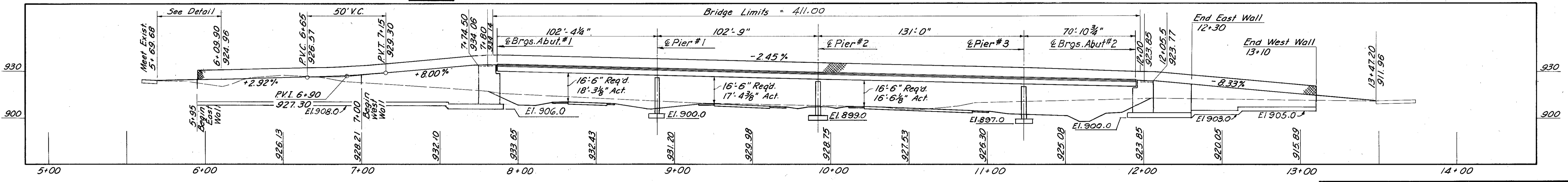


PROPOSED STRUCTURE

TYPE: 4 Span steel beam with reinforced concrete deck & substructure.
 SPANS: 102'-4 1/4", 102'-9", 131'-0", 70'-10 3/4"
 ROADWAY: 11'-0" out to out
 LOADING: AASHTO Pedestrian Loading (60 psf)
 SKEW: 0°
 WEARING SURFACE: Monolithic Concrete
 APPROACH SLABS: None
 ALIGNMENT: Tangent

Note: Earth limits shown are schematic. Actual slopes shall conform to Plan-Cross Sections. See Sheet 25 & 406 for grading & drainage details.

- ⊕ Drive Sample and Boring Location.
- Drive Rod Penetration Resistance Sounding Location.



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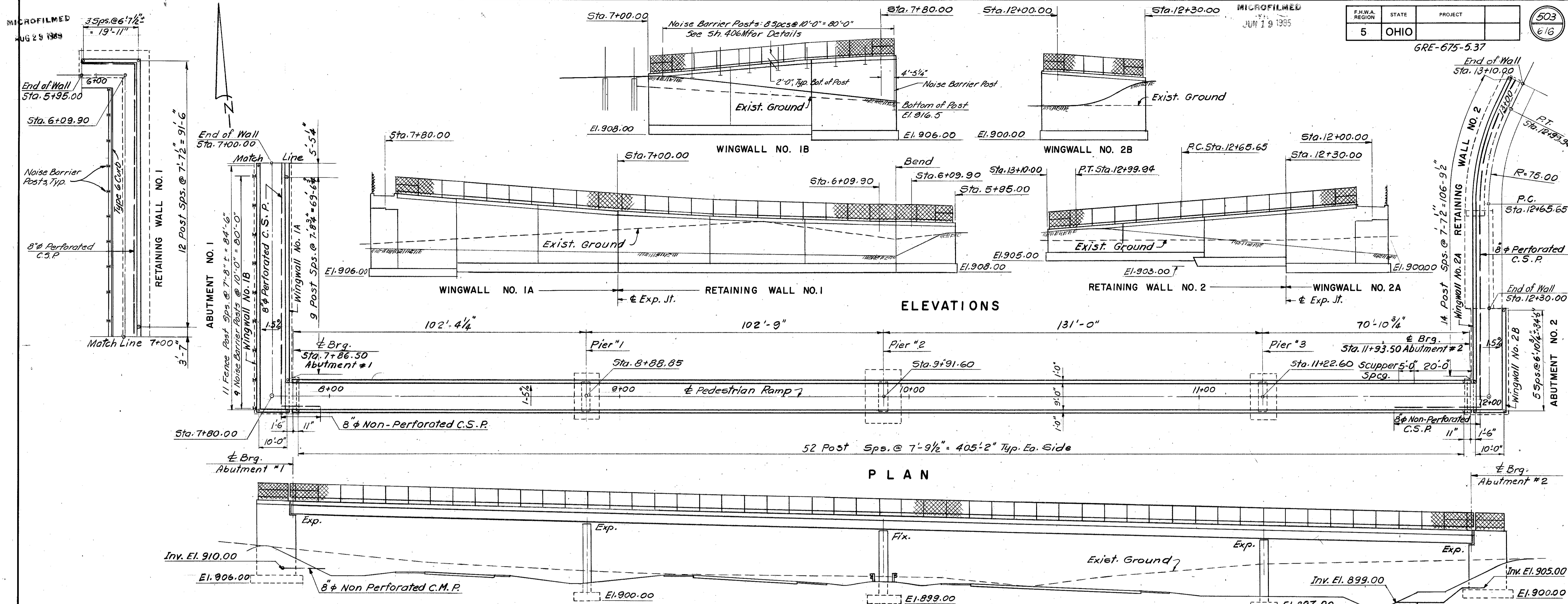
SITE PLAN
BRIDGE NO. GRE - 675 - 0632
1-675 UNDER PEDESTRIAN RAMP
GREENE COUNTY

PRESENT SURVEY	TOPOGRAPHY DRAWN	DESIGNED	PROPOSED DRAWN	WORK CHECKED	REVIS
AERIAL SURVEY	AERIAL SURVEY	IEH	JAG	M. D.	

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JUN 19 1995

F.H.W.A. REGION	STATE	PROJECT	503
5	OHIO	GRE-675-5.37	616



ESTIMATED QUANTITIES								
ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	ABUT.	RET. WALL	PIERS	GEN.
503	1,594	Cu. Yd.	Unclassified Excavation					
503	Lump	Sum	Cofferdams, cribs & sheeting		704	724	166	Lump
509	98,900	Lb.	Reinforcing Steel	9,600	54,300	23,700	11,300	
				132				
511	350	Cu. Yd.	Class "C" Concrete, Abutments above Footing		350			
511	66	Cu. Yd.	Class "C" Concrete, Piers above Footing				66	
511	175	Cu. Yd.	Class "C" Concrete, Retaining Walls above Footing			175		
511	408	Cu. Yd.	Class "C" Concrete, Footings		143	208	57	
512	174	Lin. Ft.	Type B, Waterproofing		121	53		
513	150,800	Lb.	Structural Steel (AISC Category I) ASTM A588	150,800				
513	1088	Each	Welded Stud Shear Connectors (see Proposal Note)	1088				
518	907	Cu. Yd.	Porous Backfill		715	192		
518	306	Lin. Ft.	8# Perforated Corrugated Steel Pipe, 707.01		116	190		
518	35	Lin. Ft.	8# Non-Perforated Corrugated Steel Pipe, inc. Spes. 707.01			35		
518	2	each	Scuppers, including Supports		2			
511	132	Cu. Yd.	Class S Concrete, Superstructure using Shrinkage Compensating Cement 701.08	132				
607	1,253	Lin. Ft.	Type CL Fence 6' High (Modified)	814	240	197		
Special	7,345	Lb.	Epoxy Coated Reinforcing Steel (See Proposal Note)	7,345				

ELEVATION

GENERAL NOTES:
 DESIGN SPECIFICATIONS: This Structure conforms to "Standard Specifications for Highway Bridges" adopted by the American Association of State Highway Officials, 1973 including the 1974, 1975, 1976 and 1977 interim specifications and the Ohio Supplement to these specifications.
 DESIGN DATA: Design Loading - Live Load 60 P.S.F.
 Concrete class S - $E_c = 4,500$ psi, $E_s = 29,000$ psi for Superstructure. For additional Class S Concrete Concrete class C - Unit Stress 1333 P.S.I. for Substructure Notes, see Sht. A1/A1
 Structural Steel - ASTM A588, Unit Stress 27,000 P.S.I.
 Reinforcing Steel - ASTM A615, A616 or A617 Unit Stress 20,000 P.S.I.
 MONOLITHIC WEARING SURFACE: Thickness is Assumed to be 1".
 REINFORCING STEEL COVER: Shall conform to Item 509 except that in footings the minimum cover shall be 3" from any surface.
 EMBANKMENT CONSTRUCTION: Before the Backfill is Constructed the embankment shall be placed up to the level of the subgrade with 1:1 slope from the bridge seat. Payment for backfill and new embankment, 503.10, required in excess of 503, 518 and 203 quantities shall be included in the price bid for Item 203 Embankment.
 FOUNDATION BEARING Pressure: Abutment, wingwall & pier footings are designed for a maximum bearing pressure of 2 1/2 tons per sq. ft. Retaining wall footings are designed for a maximum bearing pressure of 1 1/2 tons per sq. ft.

Reference shall be made to Standard Drawing(s):
 RB-1-55 (revised) 2-02-59
 SD-1-69 Dated 6-12-69
 and to supplemental specification(s):

836 Dated 3-12-75

For Noise Barrier Details, See Shts. 406B, 406L, 406M

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 CONSULTING ENGINEERS, INC.
 CINCINNATI OHIO

GENERAL PLAN, ELEVATIONS AND ESTIMATED QUANTITIES

BRIDGE NO. GRE-675-0632
 I-675 UNDER PEDESTRIAN RAMP

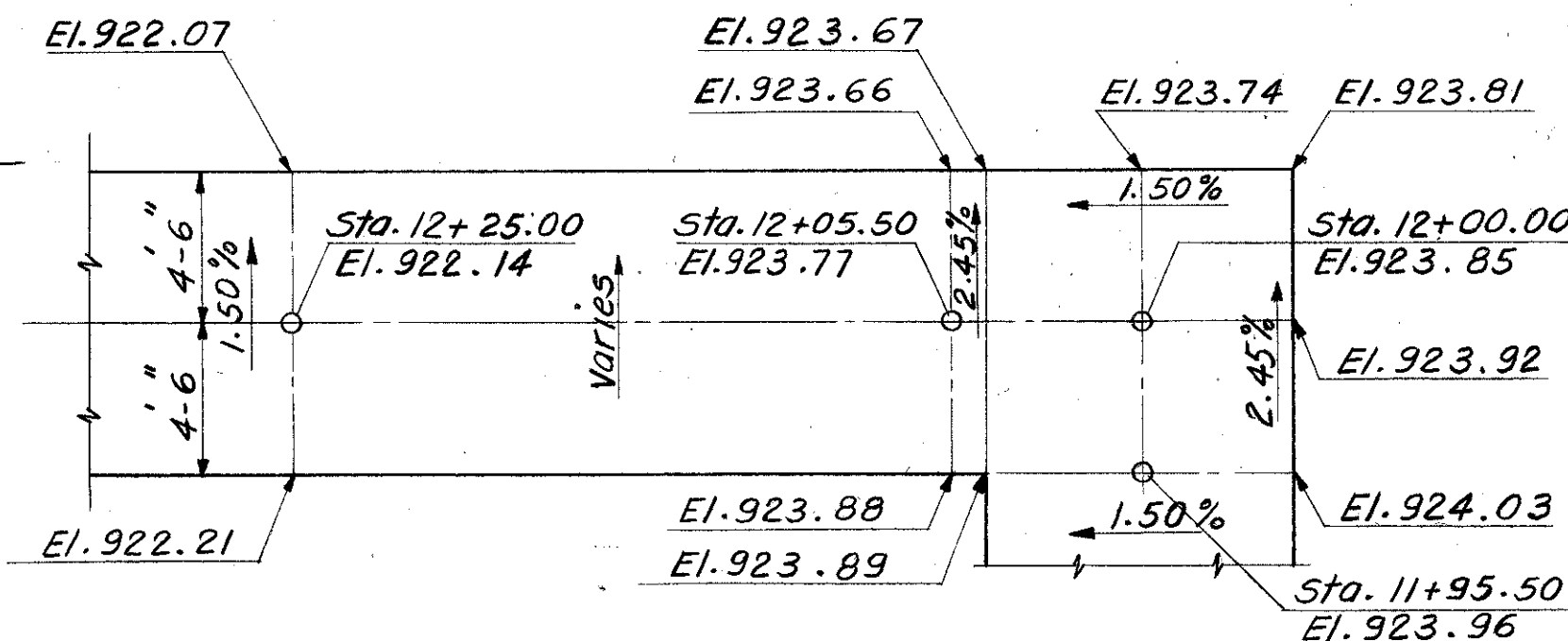
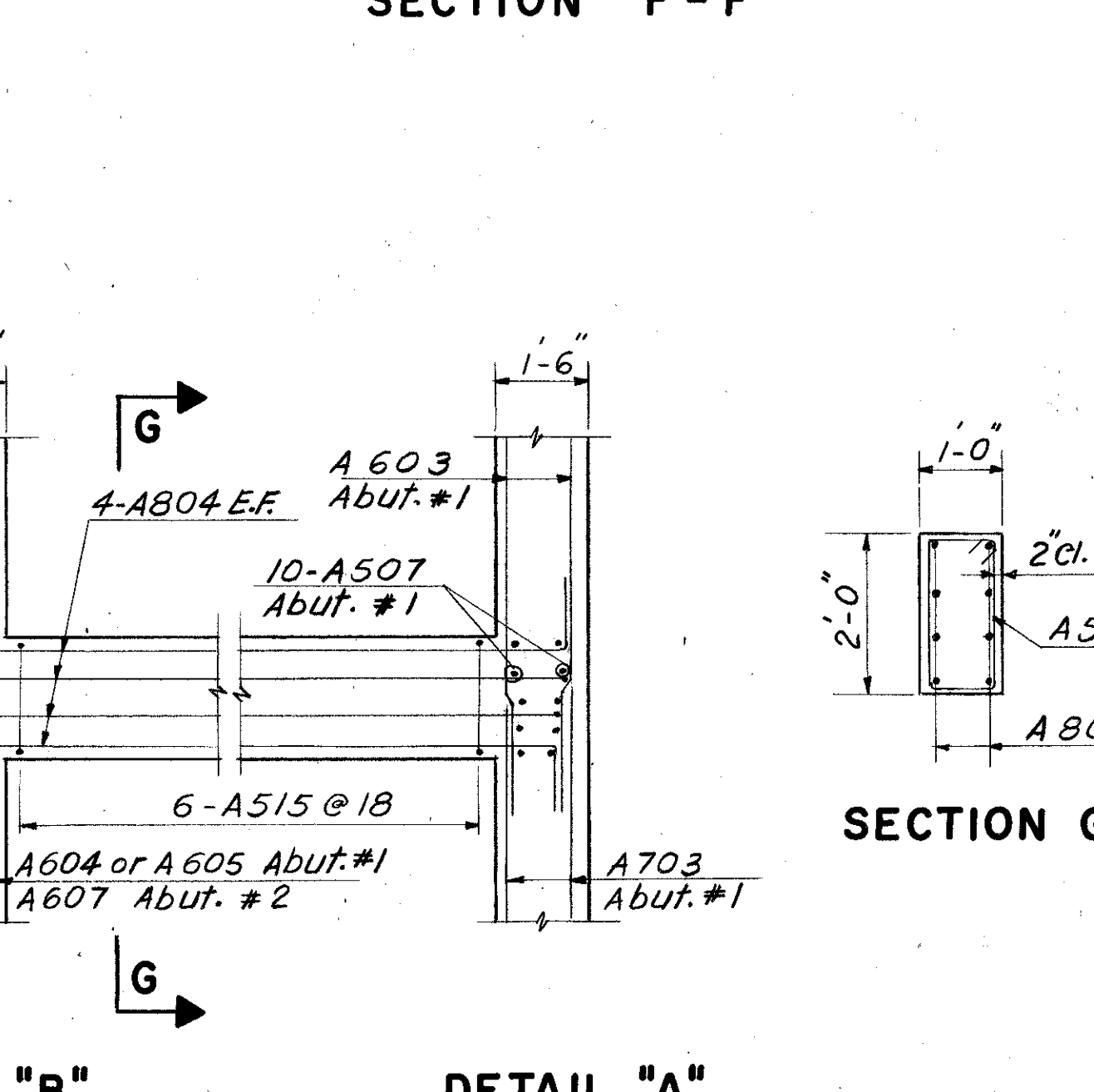
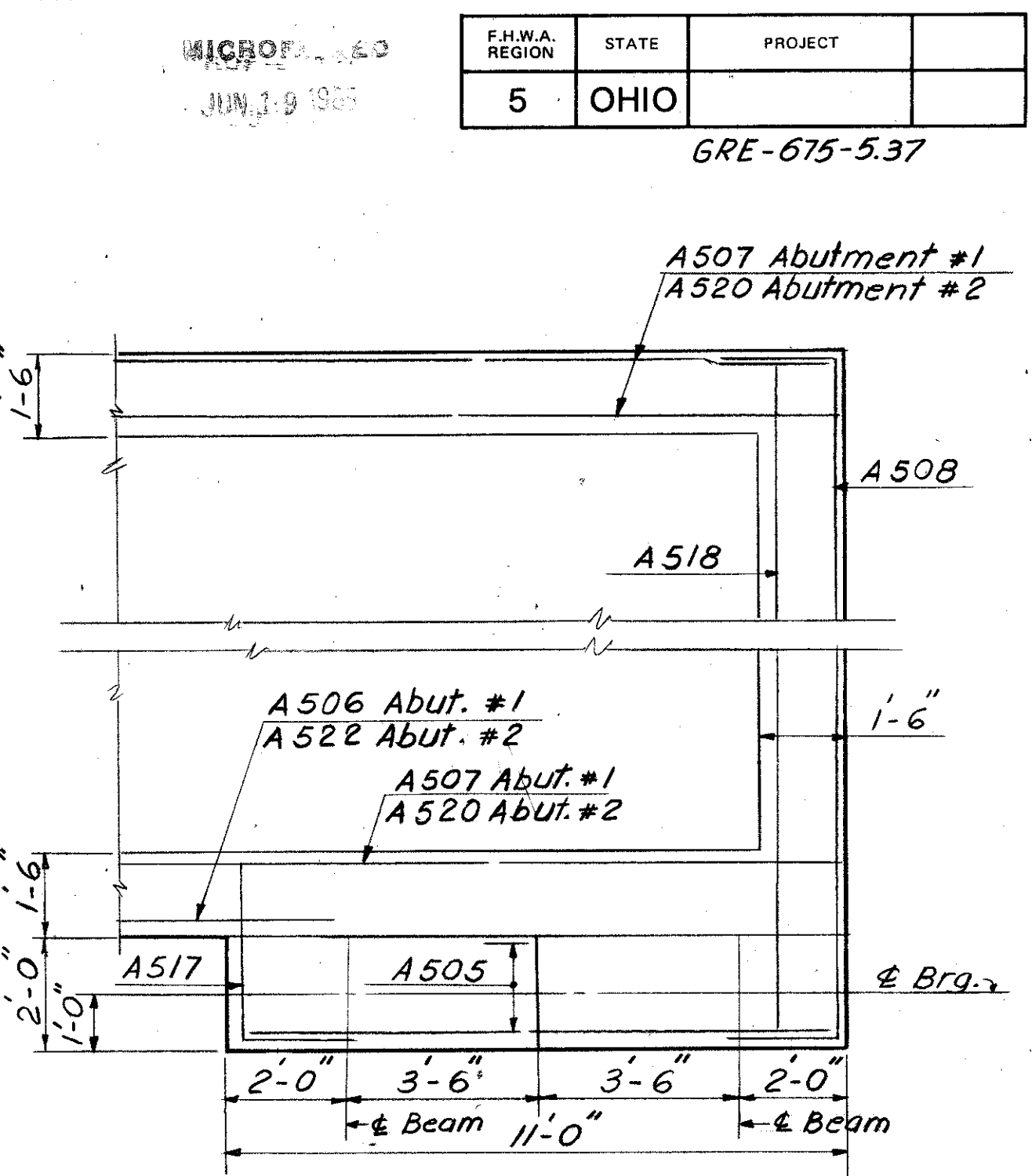
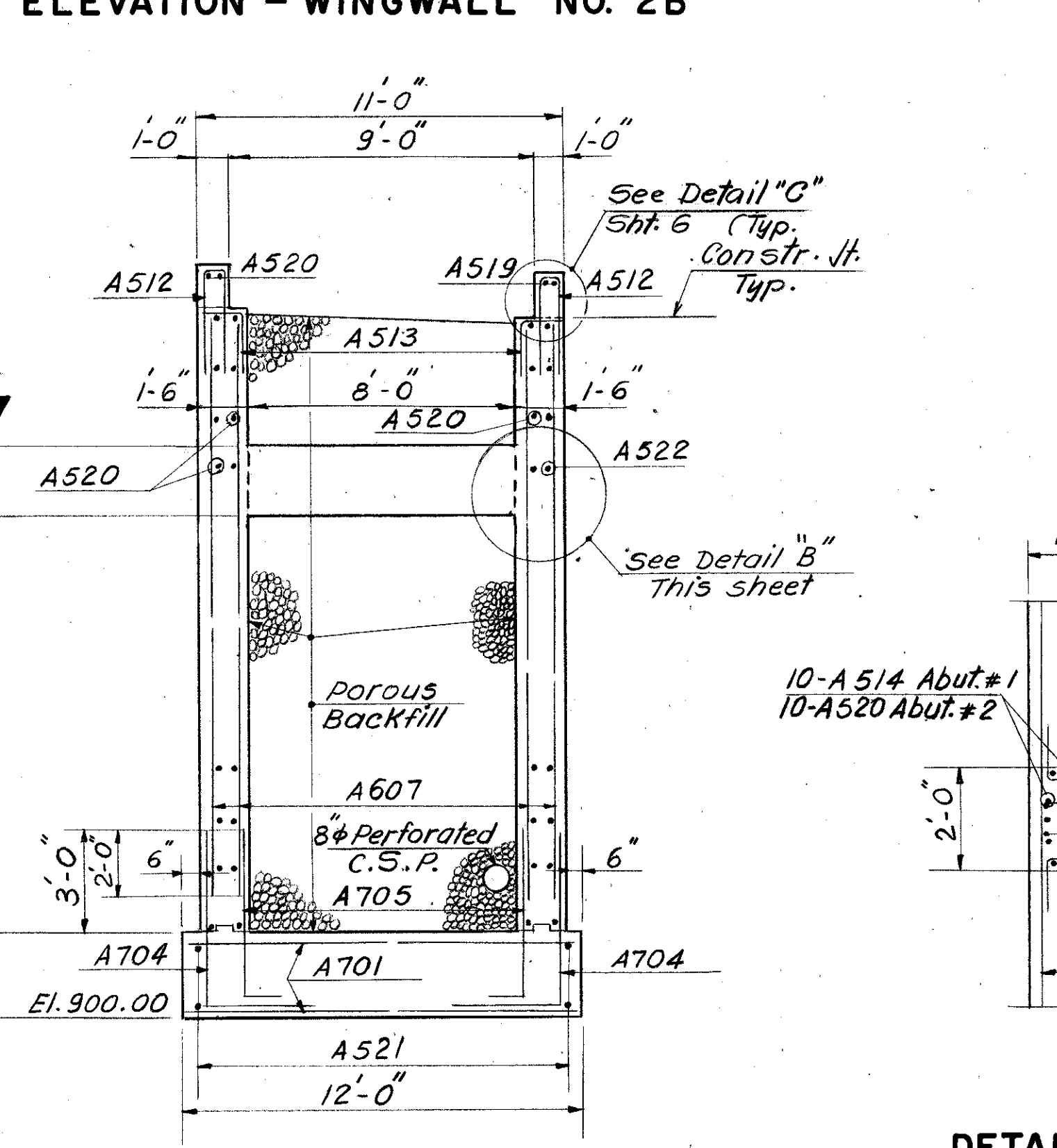
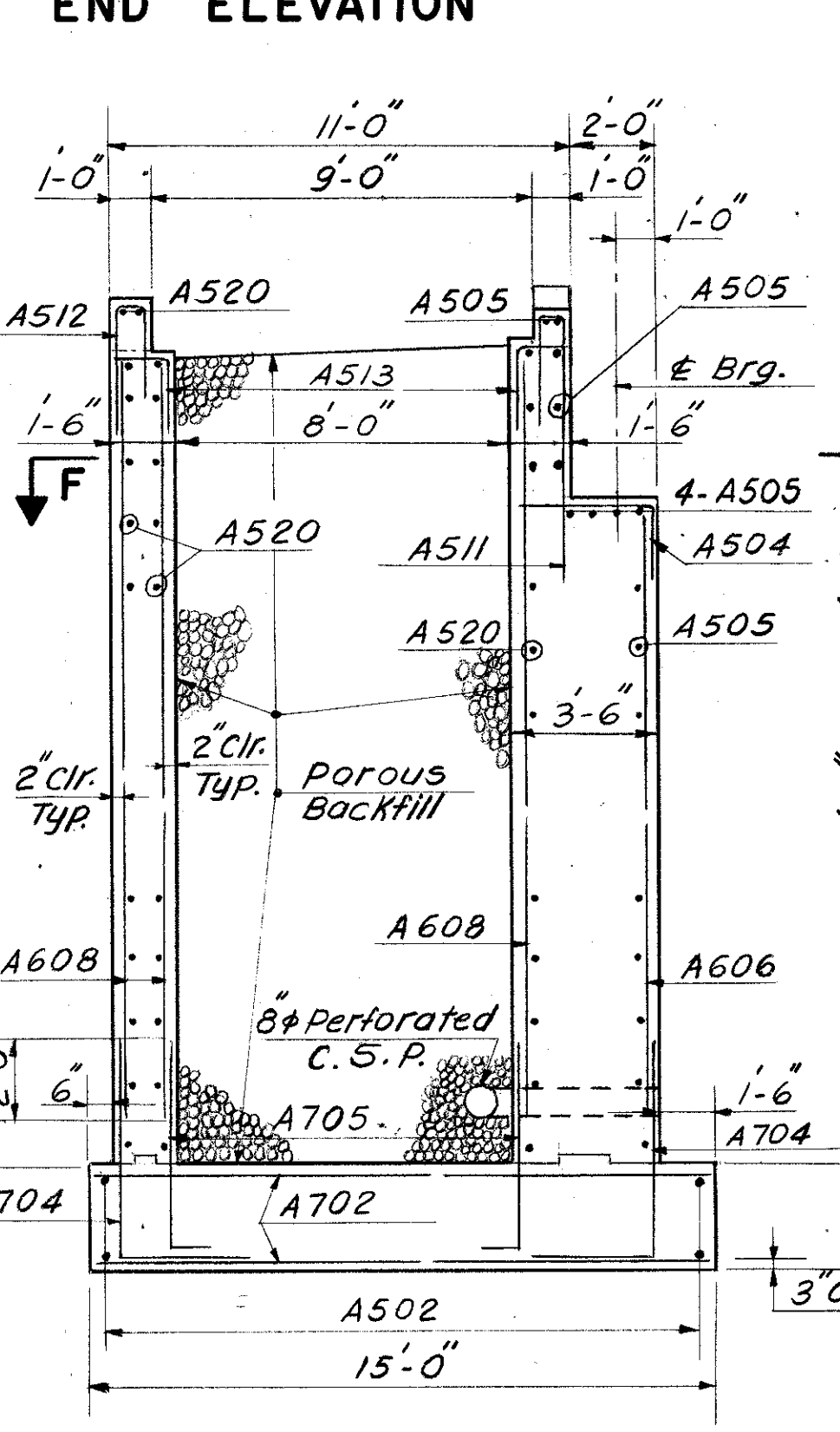
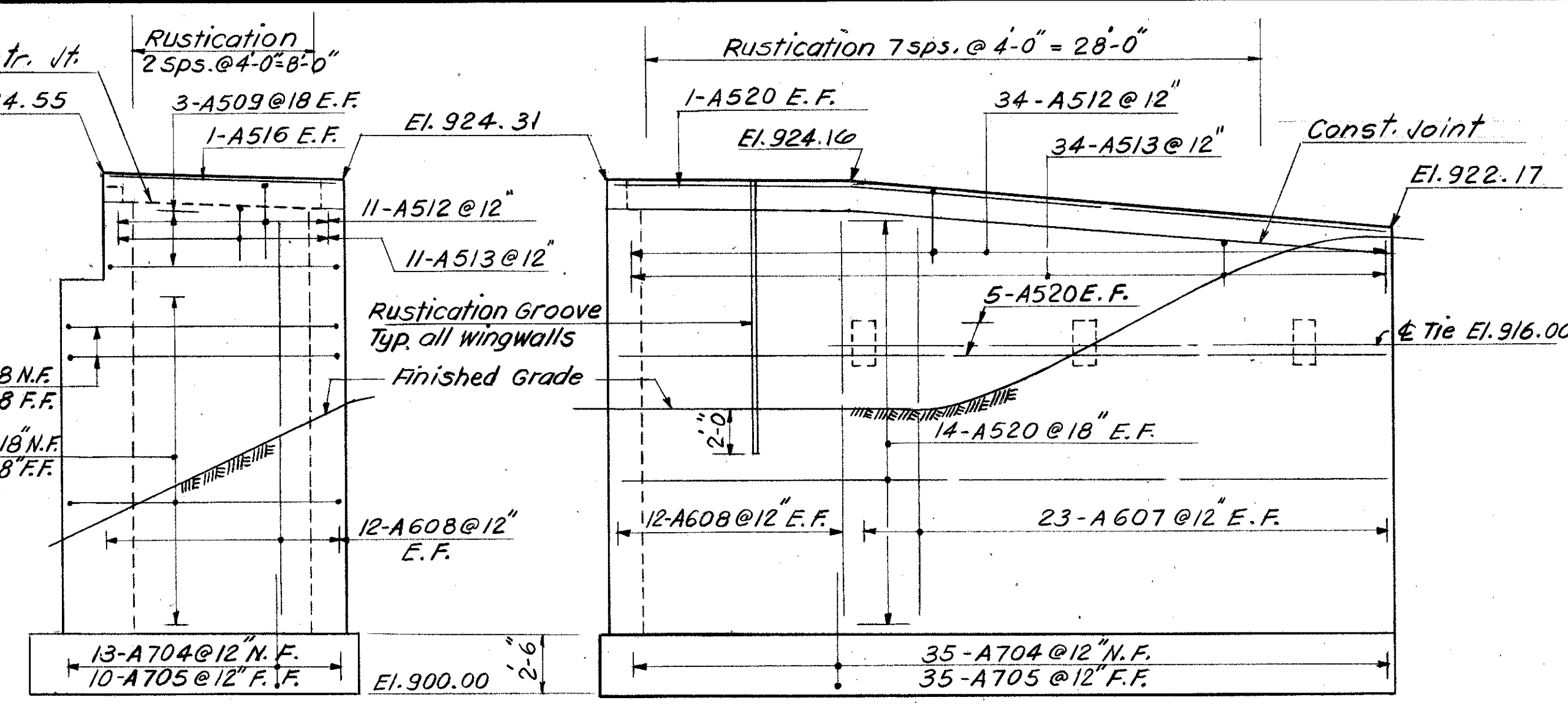
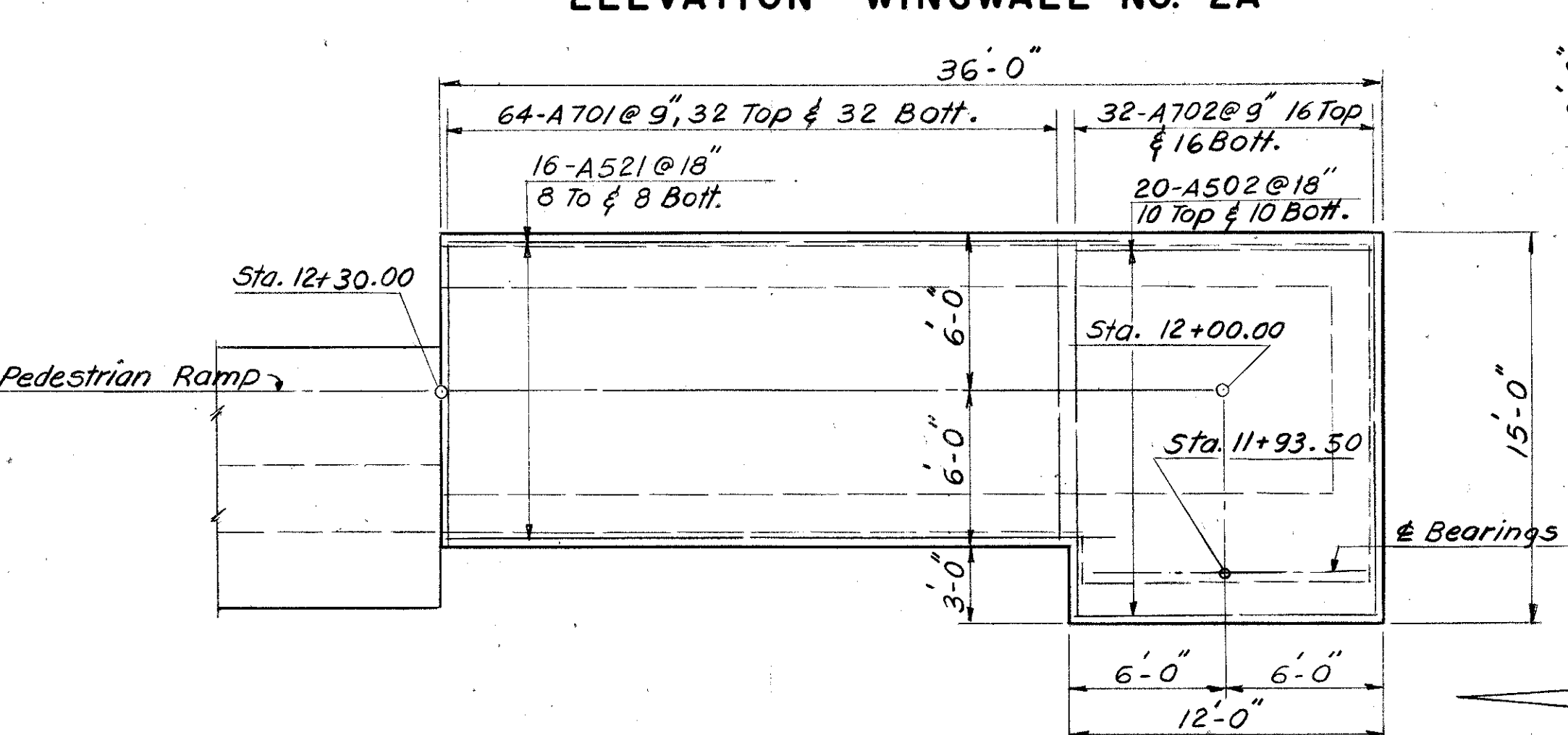
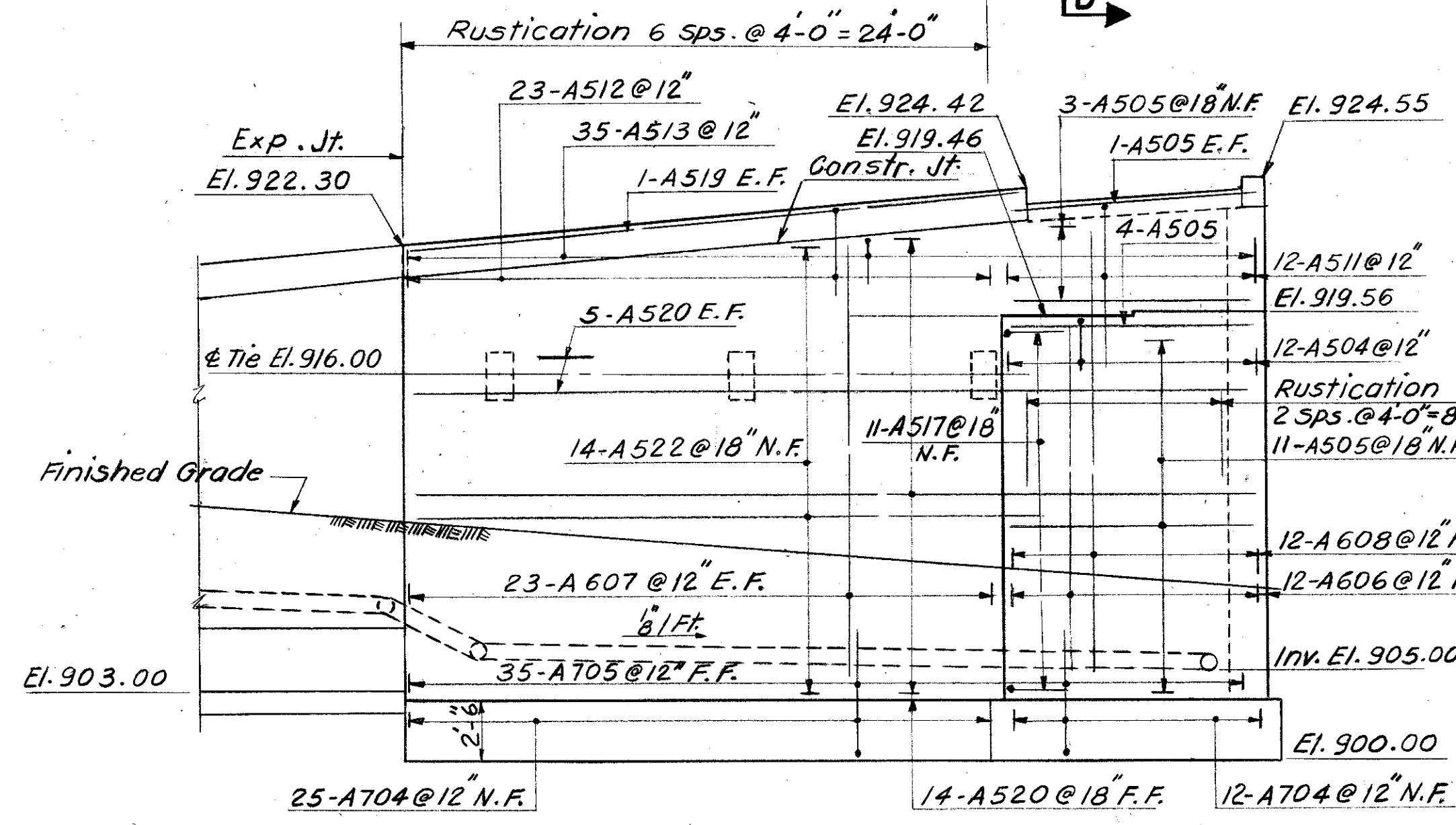
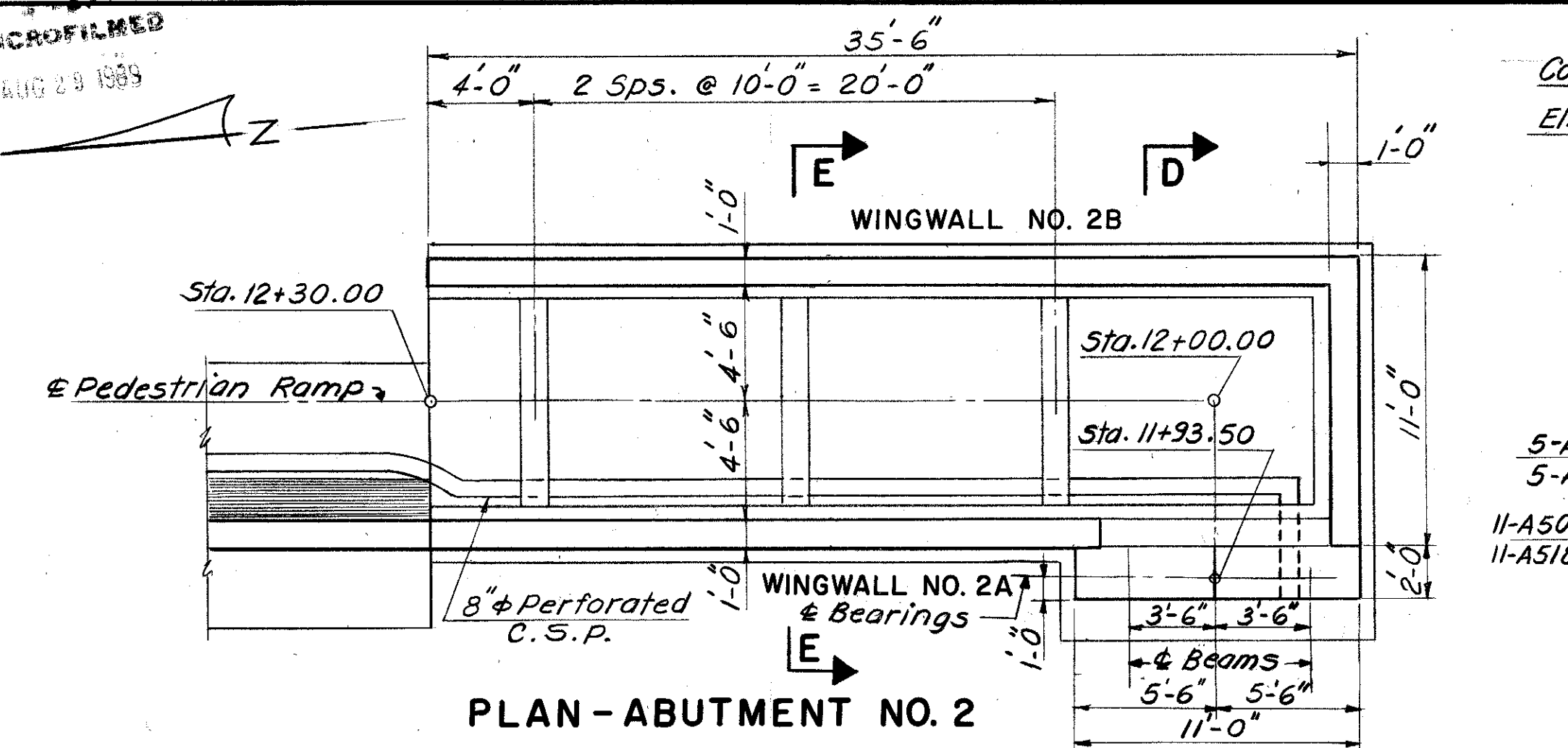
GREENE COUNTY

DESIGNED: M.D. DRAWN: N.V. TRACED: L.T.W. CHECKED: L.T.W. REVIEWED: DATE: REVISION:

MICROFILMED
AUG 29 1989

F.H.W.A. REGION	STATE	PROJECT
5	OHIO	GRE-675-5.37

505
616



Note:
Work this Sheet with Sh. 3/11
For Reinforcing Steel List, see Sh. 10/11.

KING & GAVARIS
CONSULTING ENGINEERS, INC.

ABUTMENT NO. 2

BRIDGE NO. GRE-675-0632
I-675 UNDER PEDESTRIAN RAMP

GREENE COUNTY

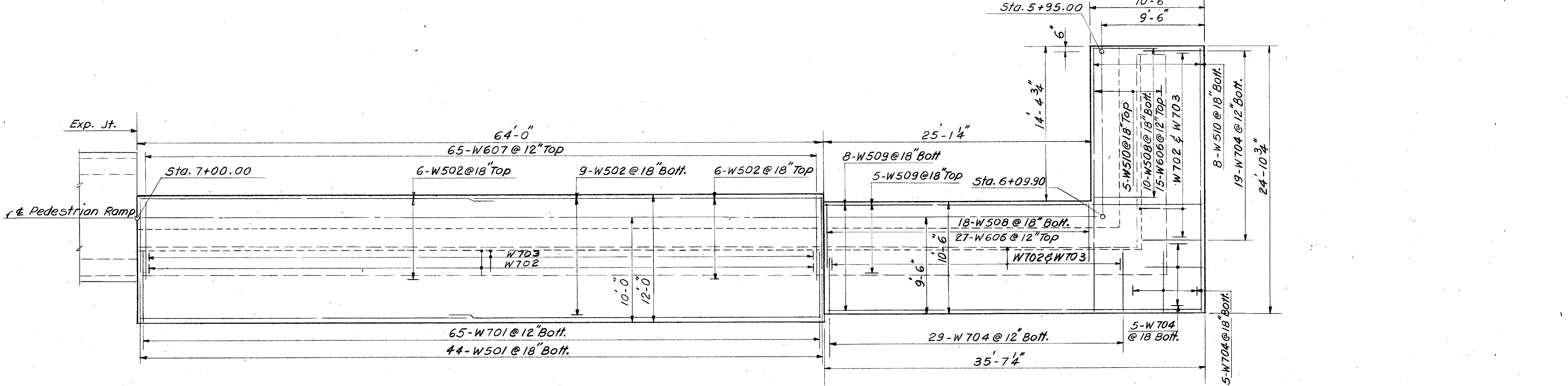
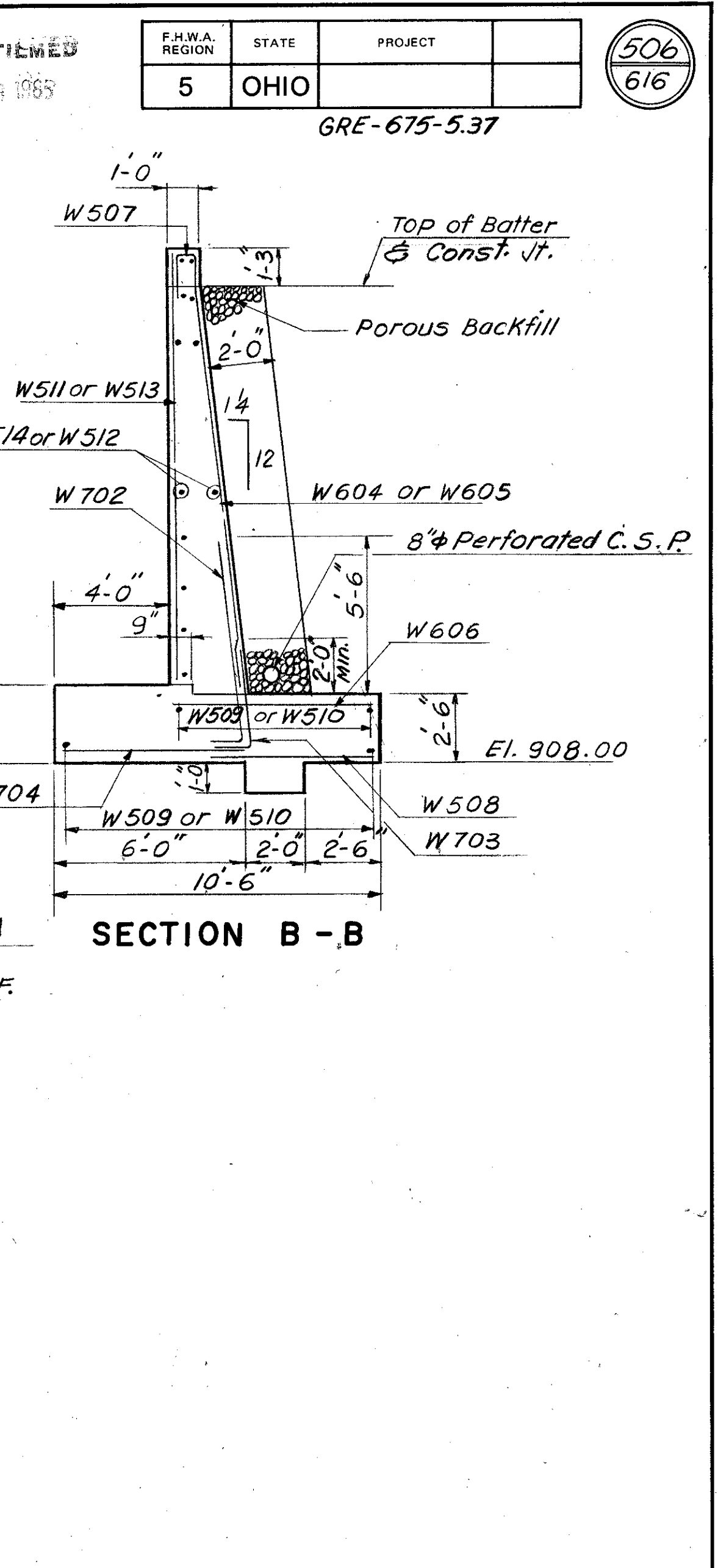
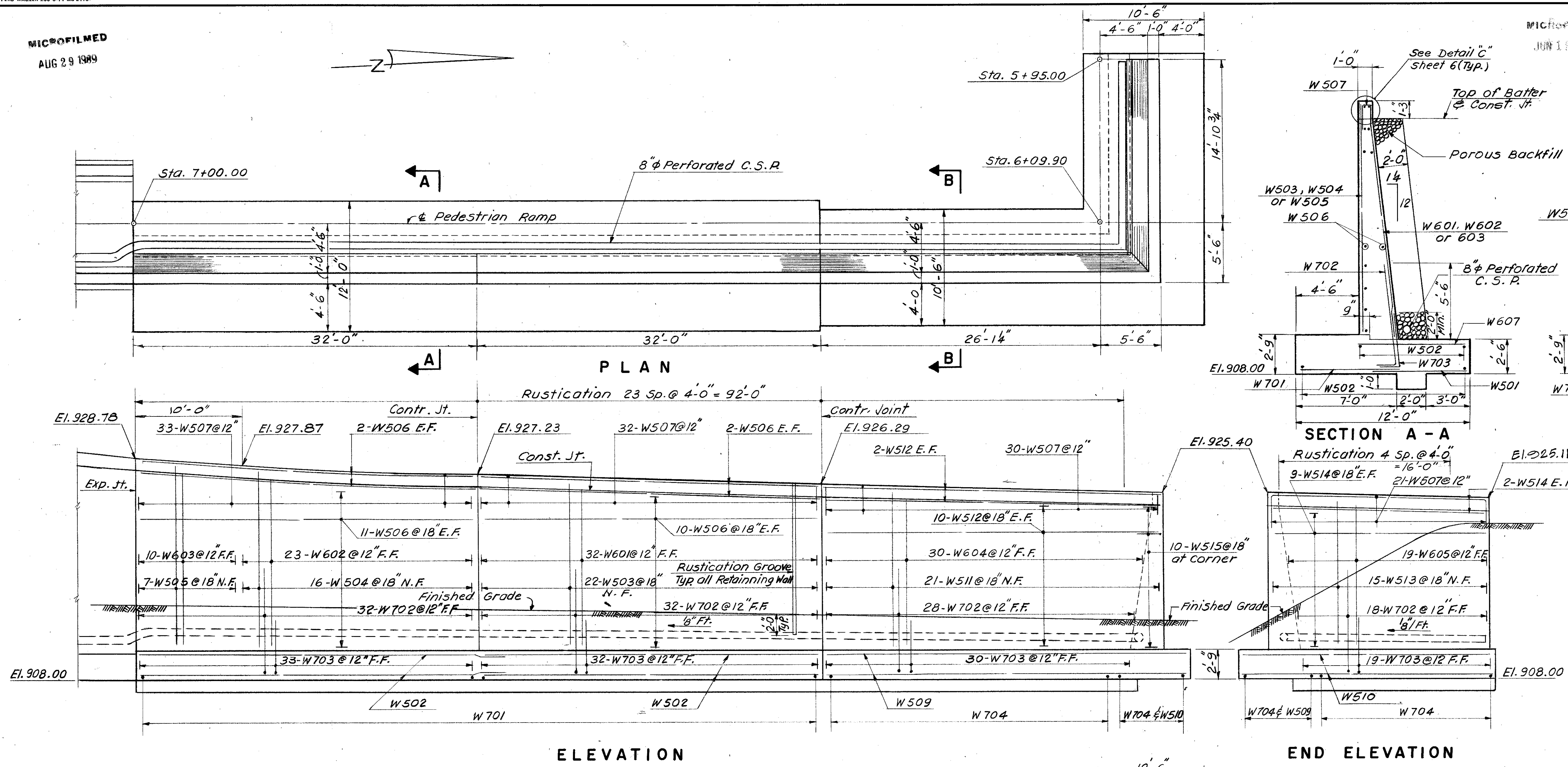
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
M.D.	A.A.		L.T.W.			

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AUG 29 1989

MICROFILMED
JUN 18 1985

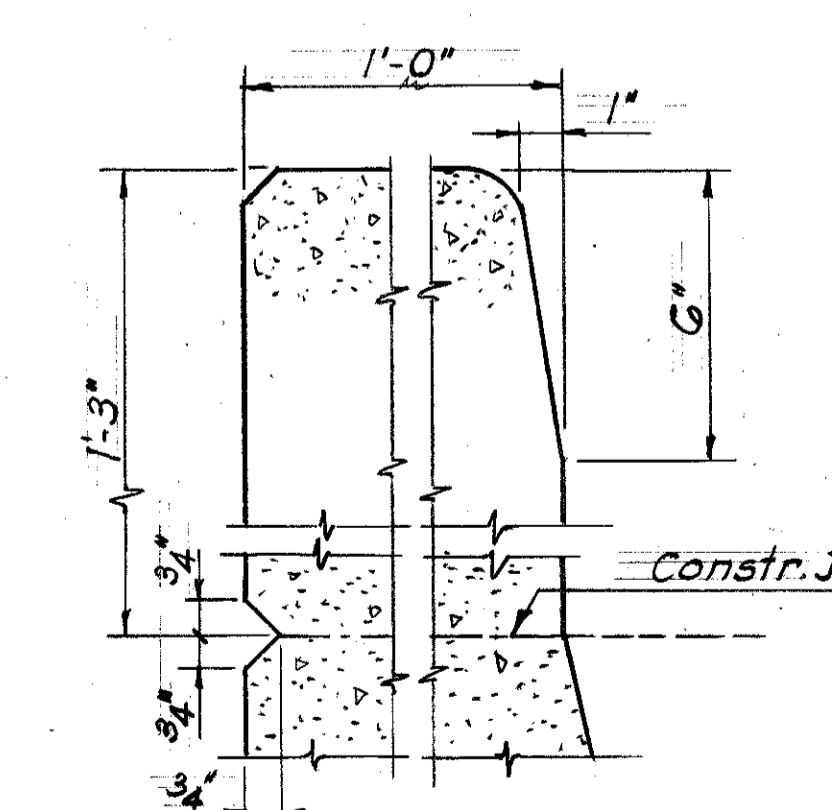
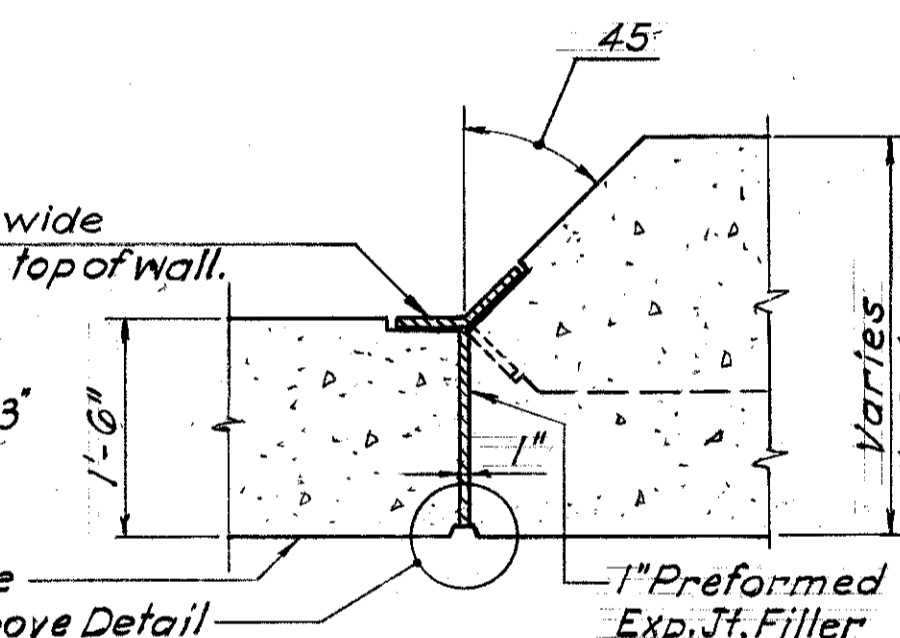
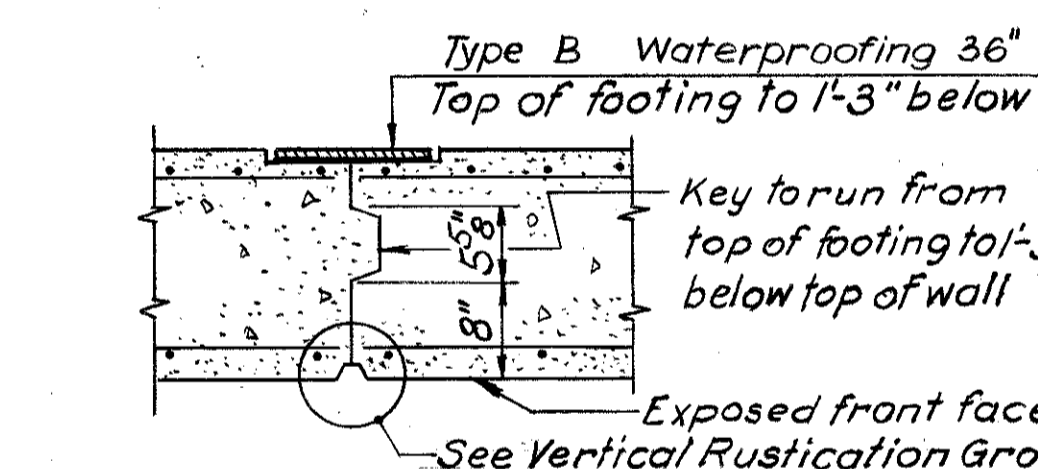
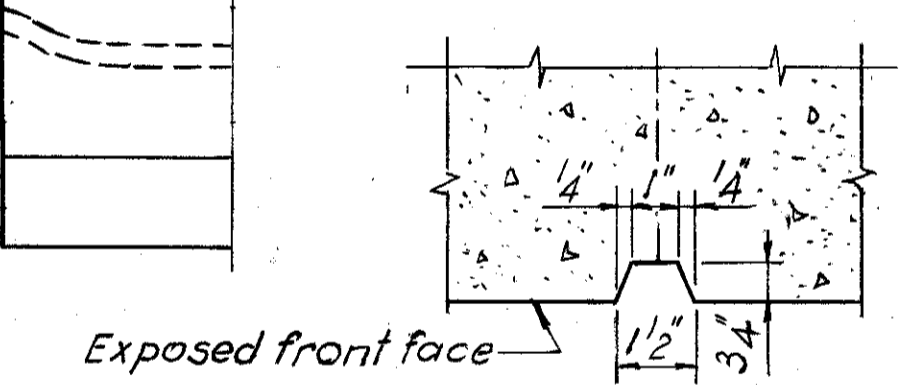
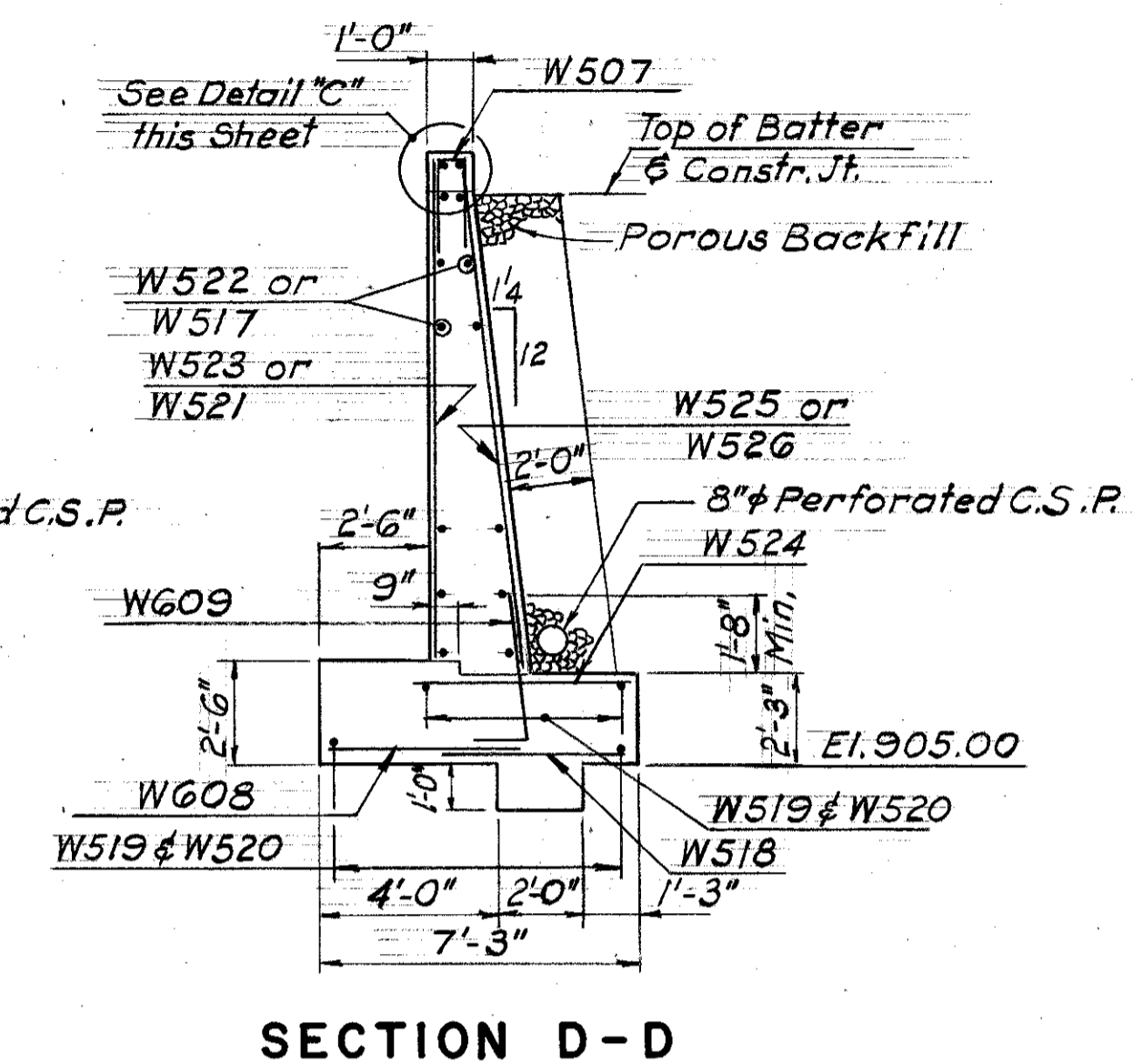
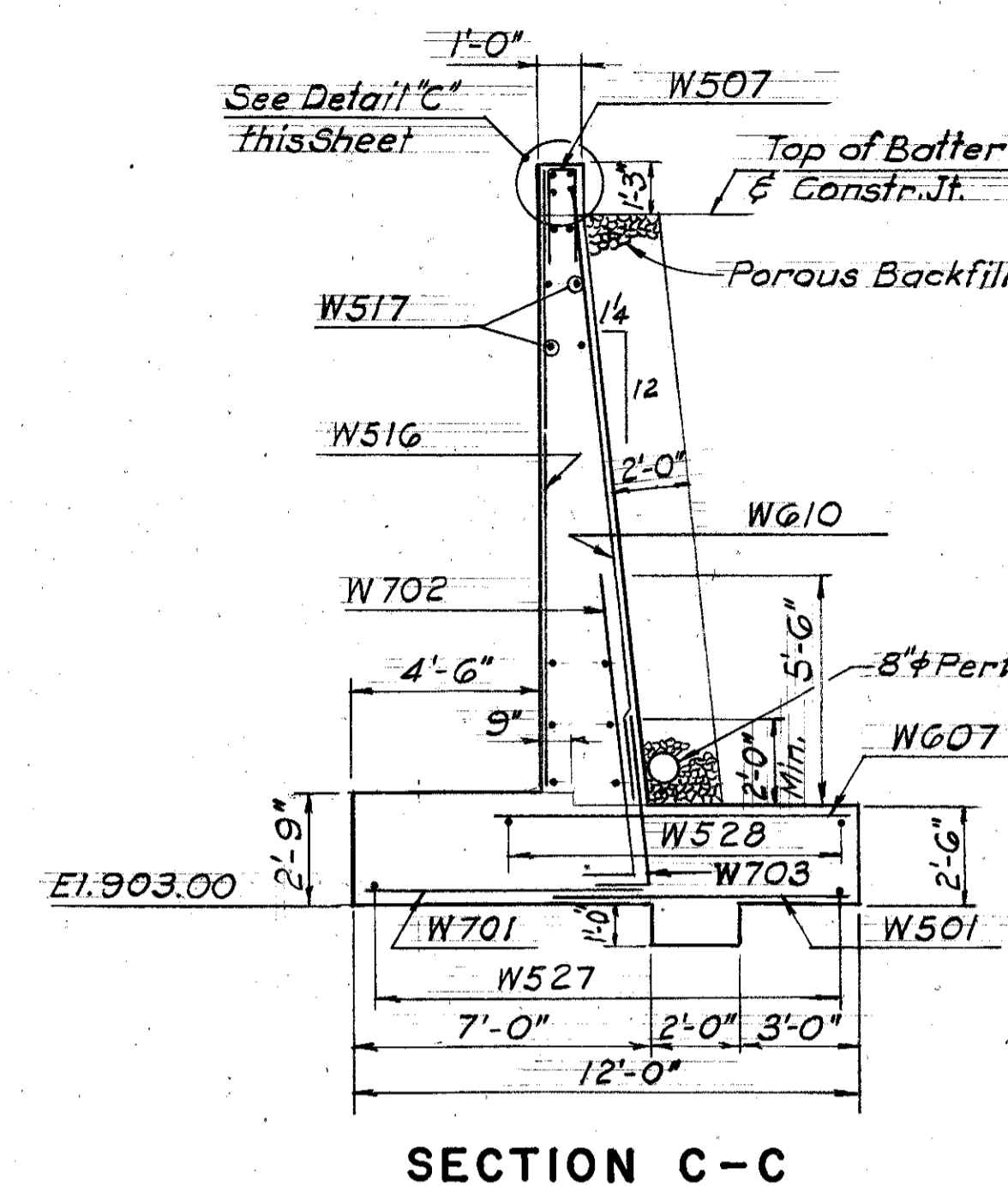
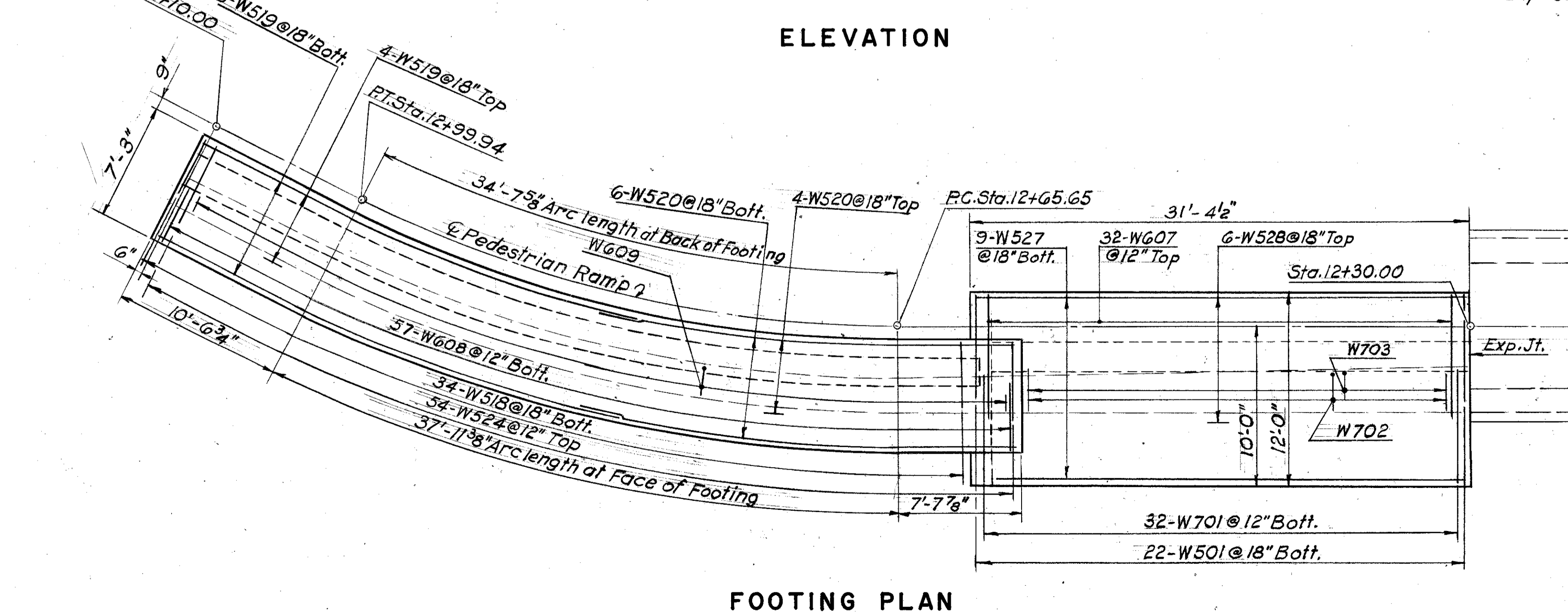
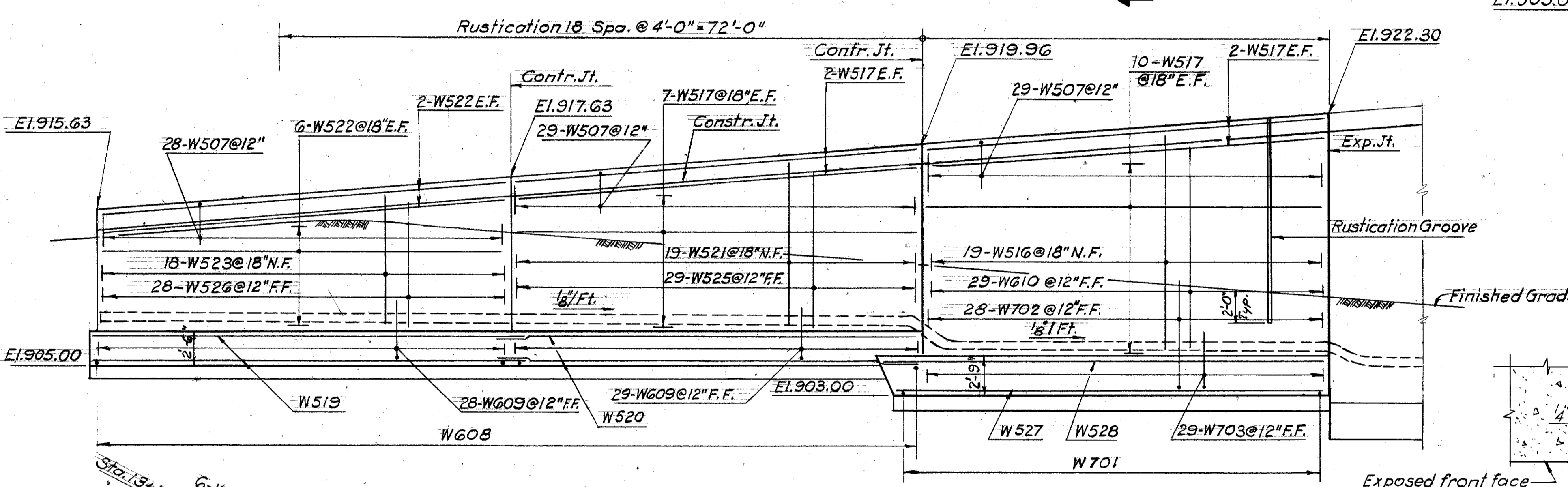
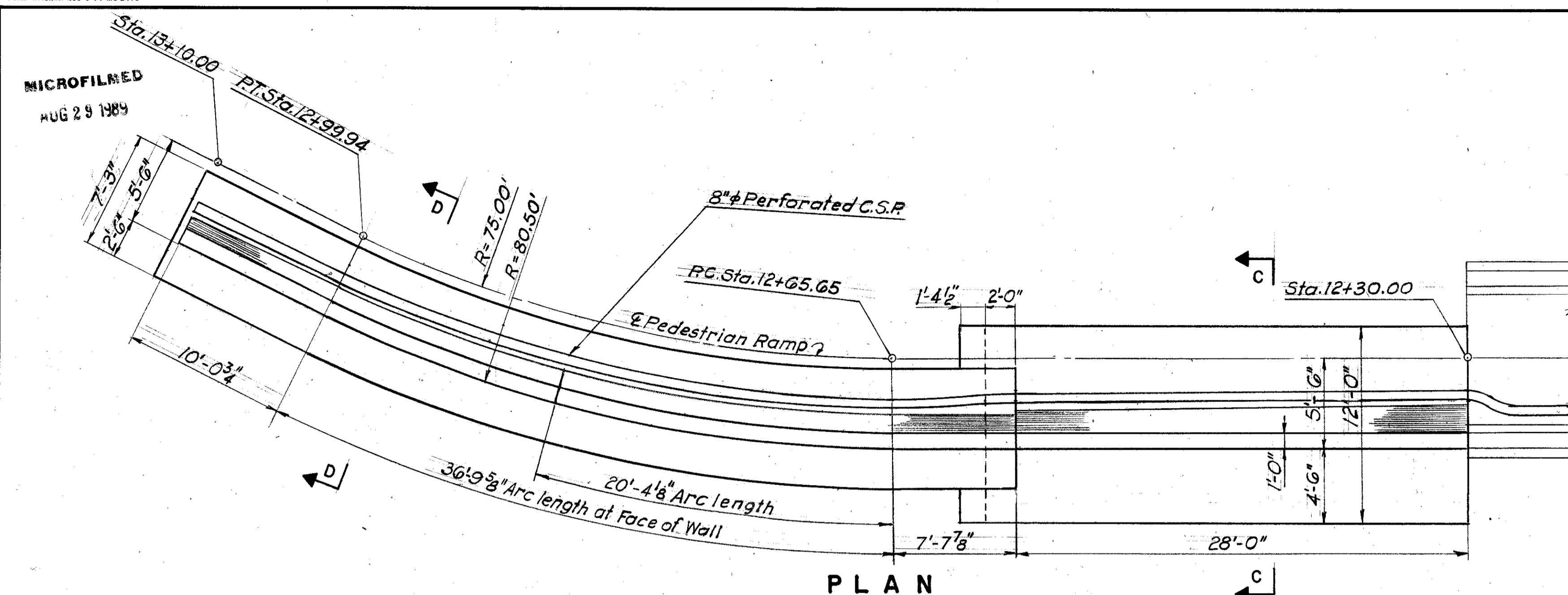
F.H.W.A. REGION	STATE	PROJECT
5	OHIO	GRE-675-537

506
616



NOTES:
 Work this sheet with 6/11
 For Reinforcing Steel list, see sh. 11/11
 For additional Notes, see sh. 3/11

KING & GAVARIS CONSULTING ENGINEERS, INC.		5/11
CINCINNATI	OHIO	
RETAINING WALL NO. 1		
BRIDGE NO. GRE-675-0632 1-675 UNDER PEDESTRIAN RAMP		
GREENE COUNTY		
DESIGNED M.D.	DRAWN A.A.	TRACED L.T.W.
CHECKED	REVIEWED	DATE



NOTES:
Work this Sheet with 5/11
For Reinforcing Steel List, see Sh. 11/11

KING & GAVARIS
CONSULTING ENGINEERS, INC.
CINCINNATI OHIO

RETAINING WALL No. 2
BRIDGE NO. GRE-675-0632
I-675 UNDER PEDESTRIAN RAMP
GREENE COUNTY

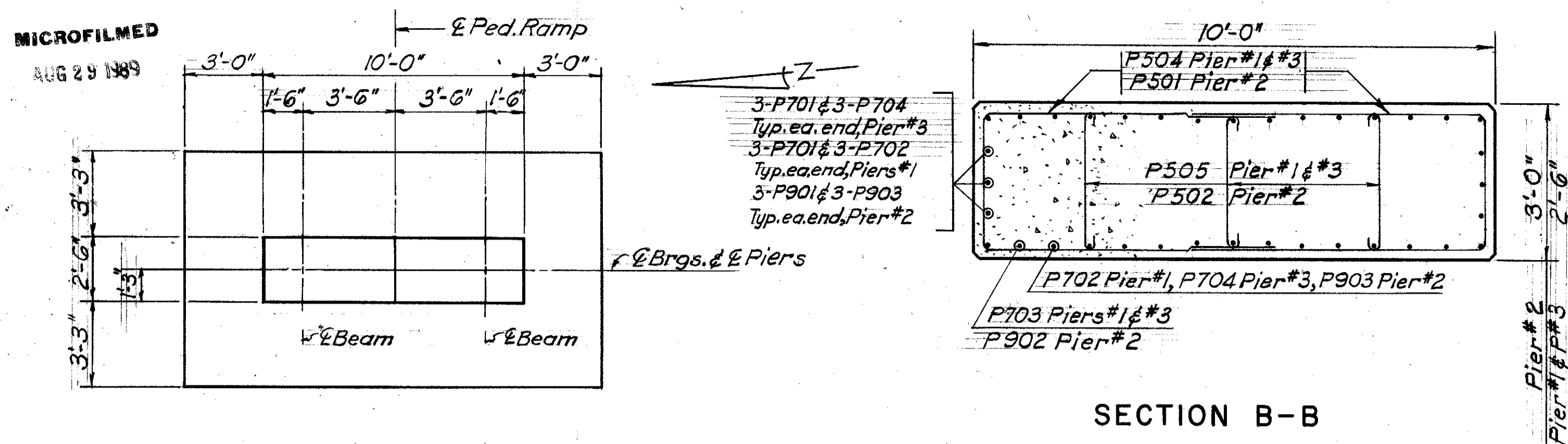
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
M.D.	N.H.	L.T.W.				

MICROFILMED
AUG 29 1989

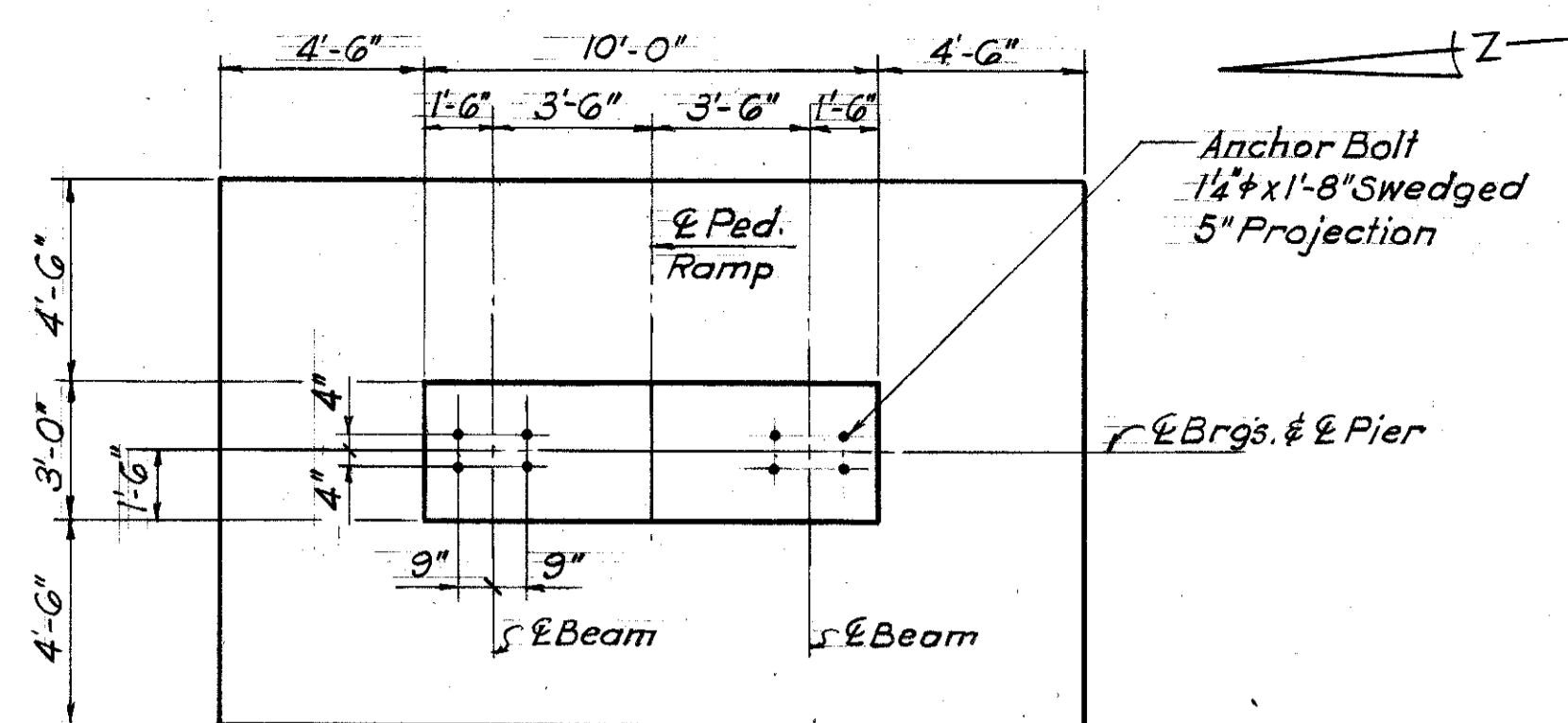
MICROFILMED
JUN 1 1988

F.H.W.A. REGION	STATE	PROJECT
5	OHIO	GRE-675-5.37

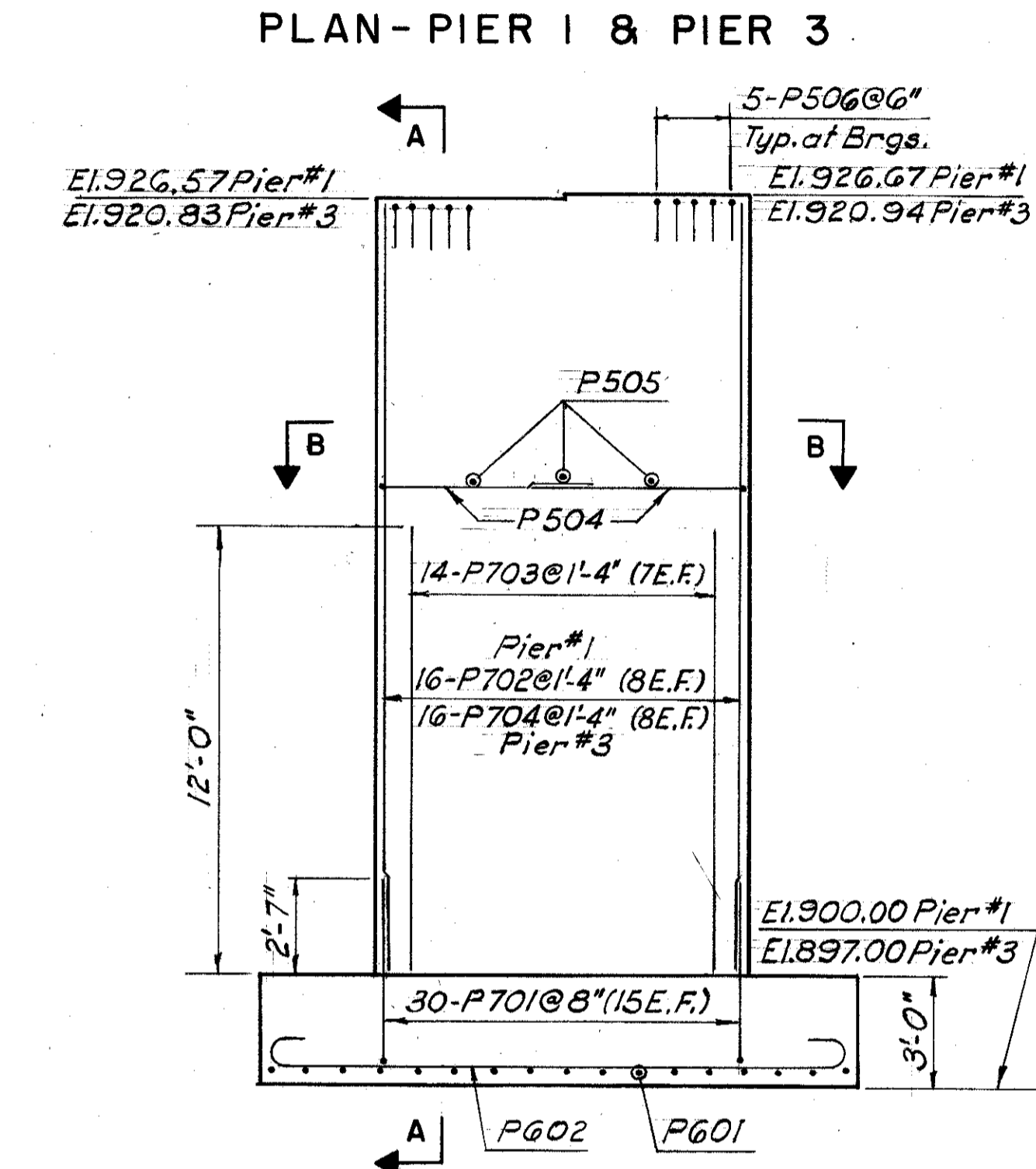
508
616



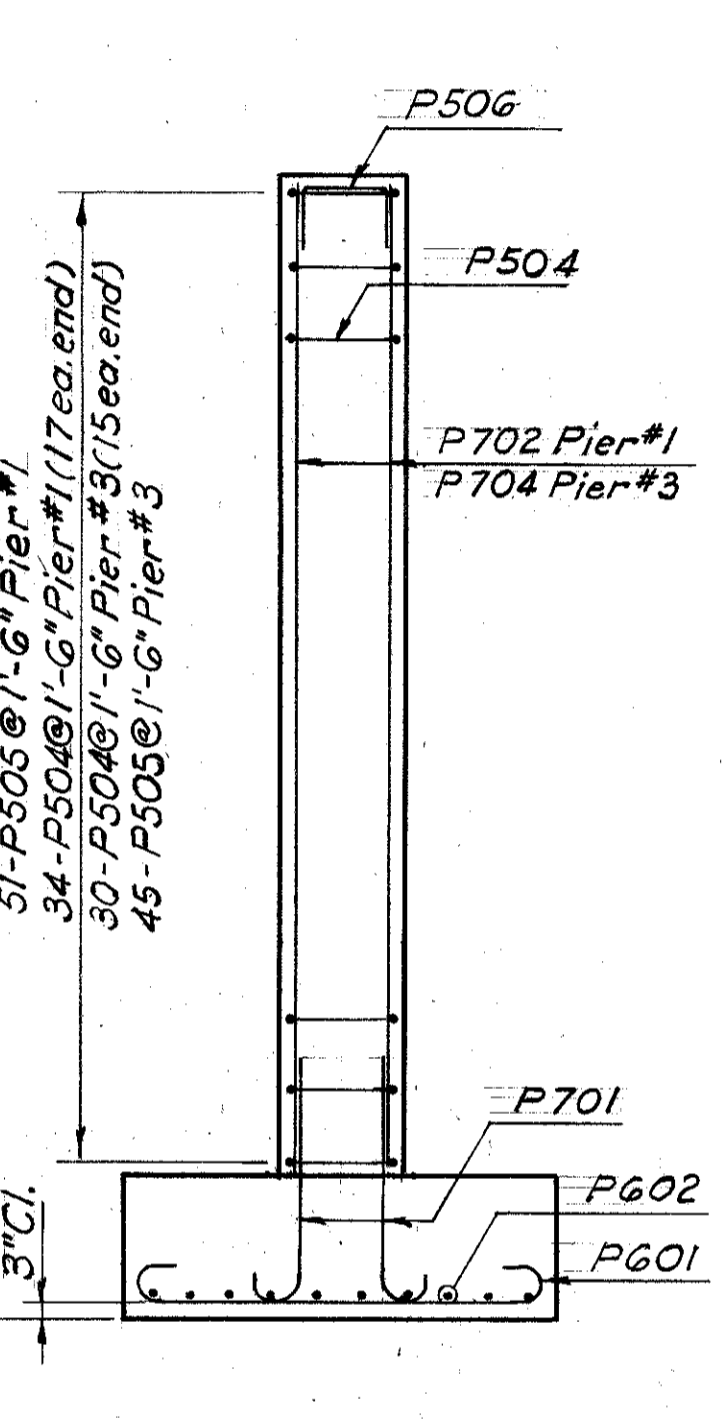
SECTION B-B



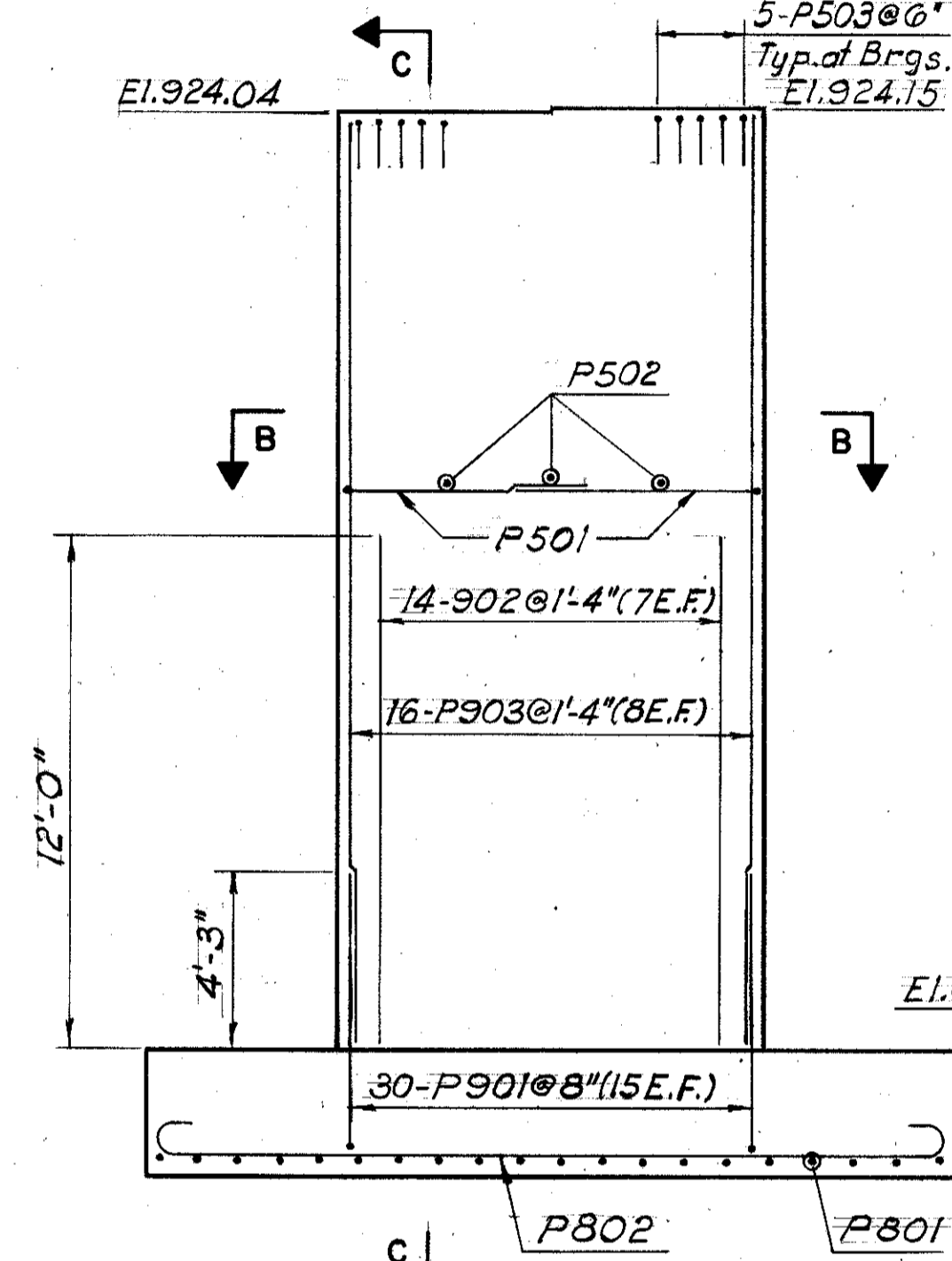
PLAN-PIER 2



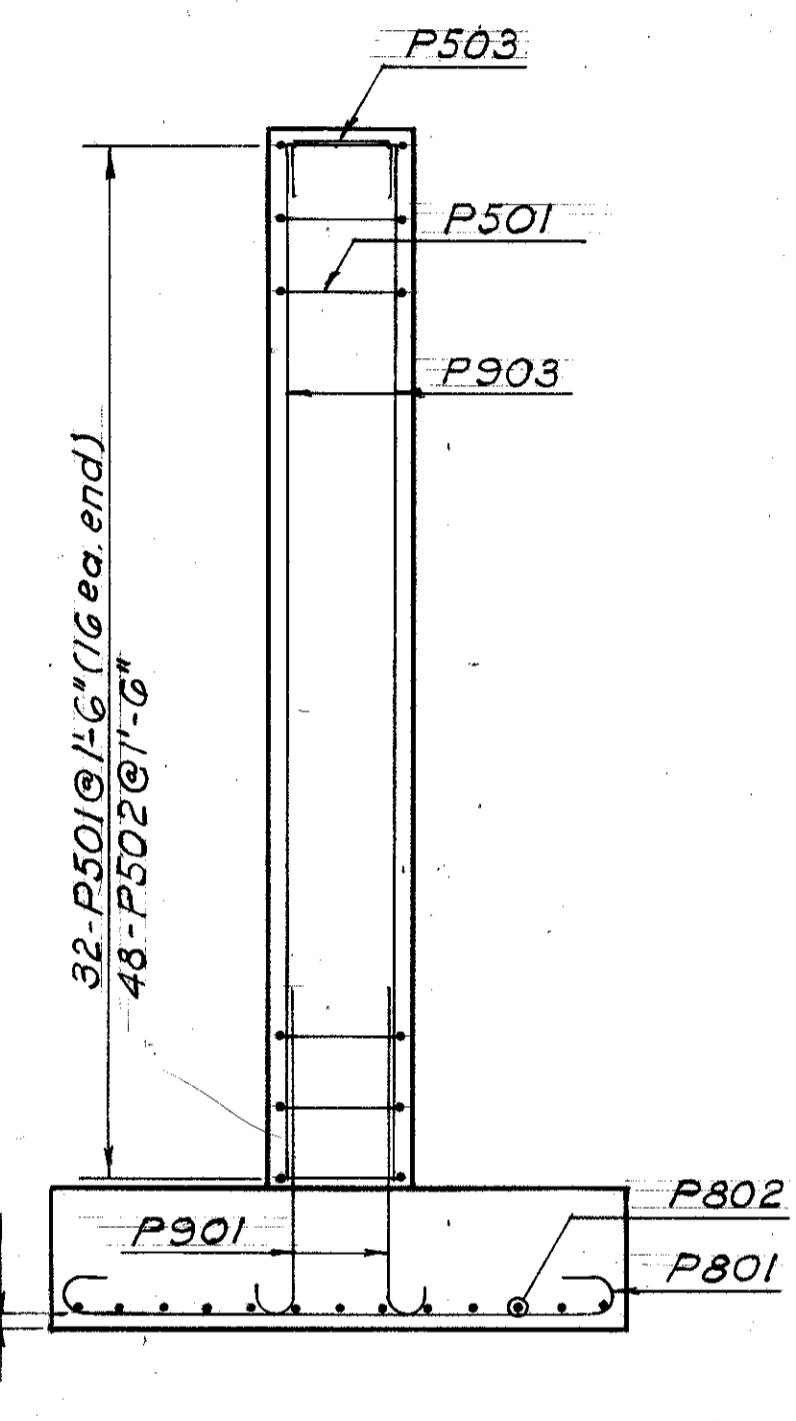
ELEVATION-PIER 1 & PIER 3



SECTION A-A

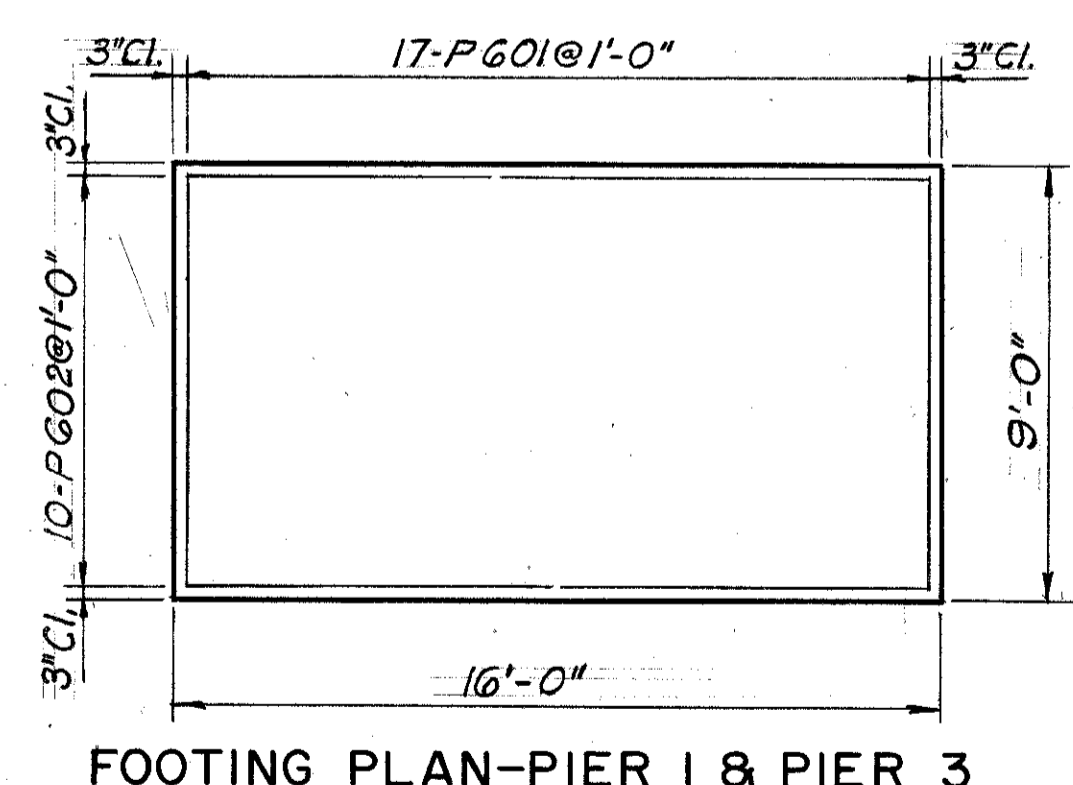


ELEVATION-PIER 2

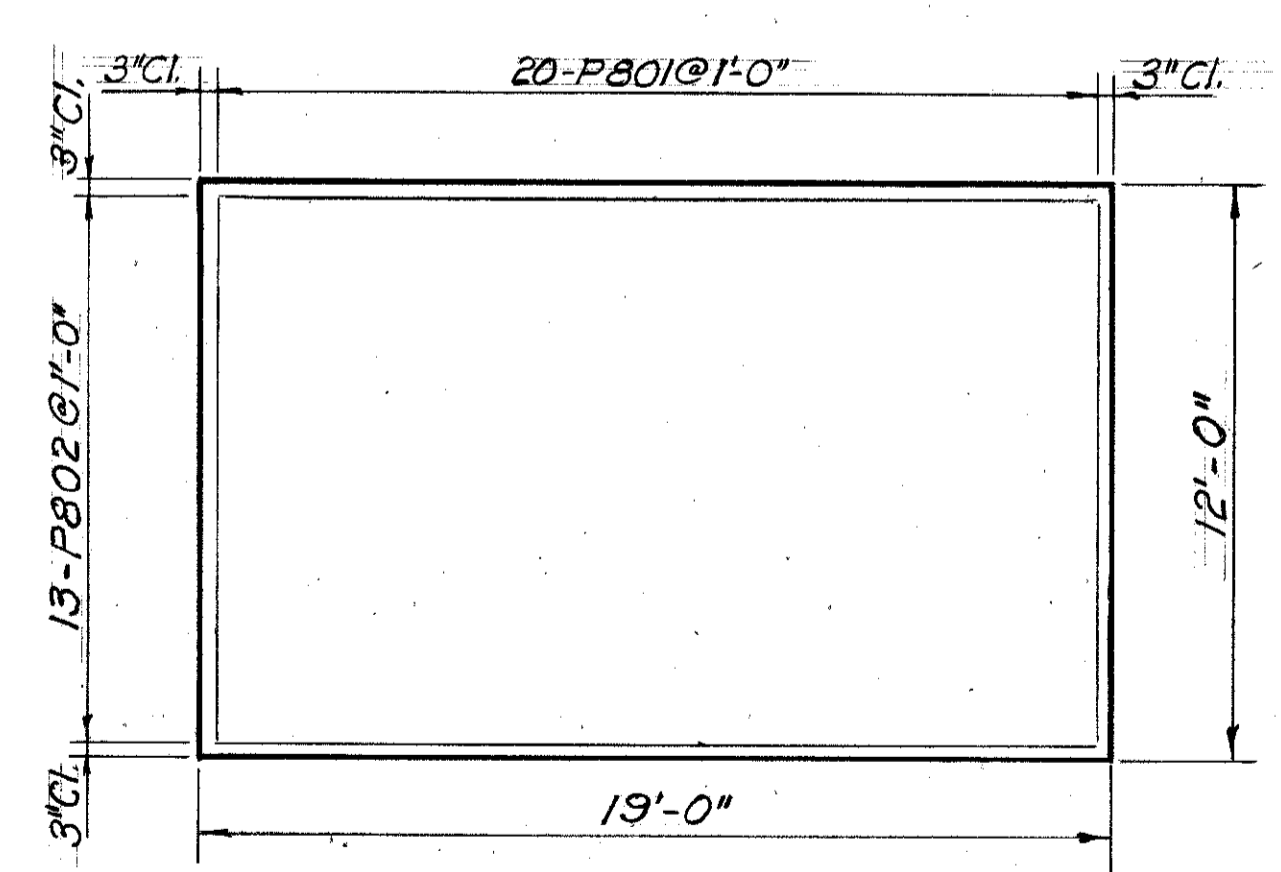


SECTION C-C

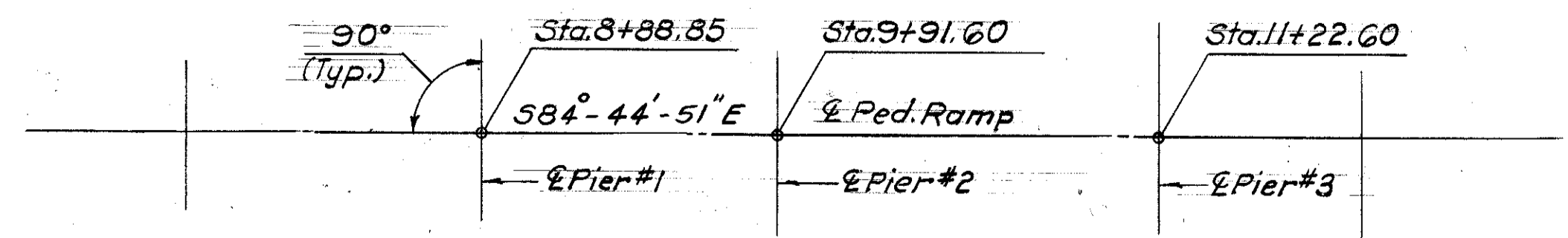
- NOTES:
1. Bridge Seat Reinforcing: Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor bolt holes.
 2. For Reinforcing Steel List, see Sh. II/II
 3. All splices and dowels will be lapped minimum 30 bar dia. unless otherwise shown.



FOOTING PLAN-PIER 1 & PIER 3

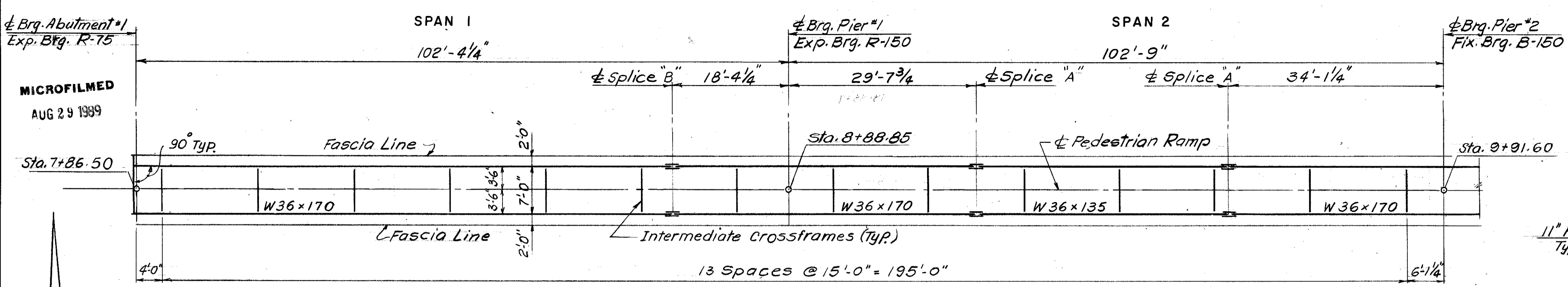


FOOTING PLAN-PIER 2

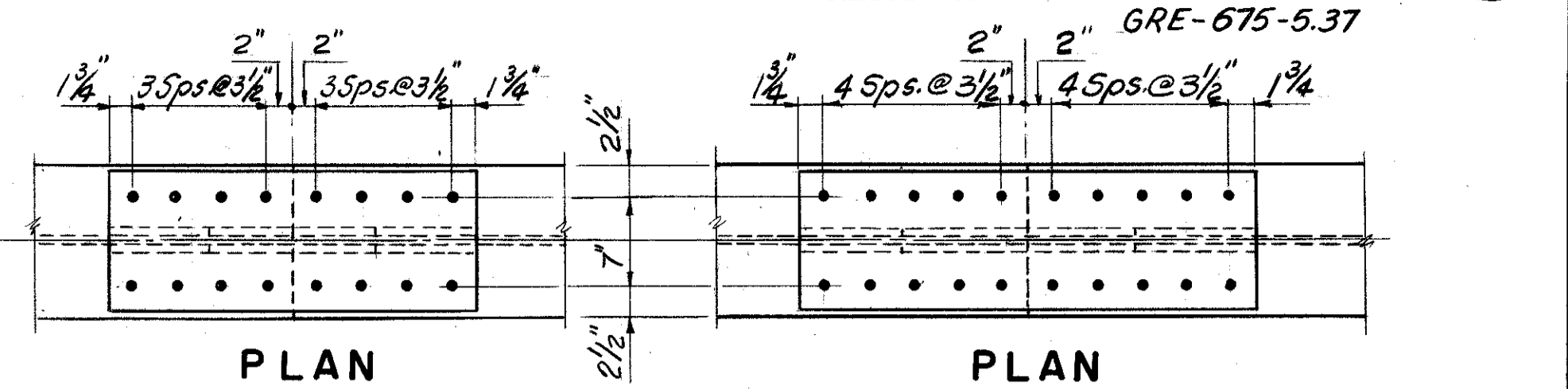


KEY PLAN

KING & GAVARIS CONSULTING ENGINEERS, INC.		7/11
CINCINNATI	OHIO	
PIERS		
BRIDGE NO. GRE-675-0632 I-675 UNDER PEDESTRIAN RAMP		
GREENE COUNTY		STA. 7+84.50 to STA. 11+95.50
DESIGNED M. D.	DRAWN N. H.	TRACED L. T. W.
CHECKED	REVIEWED	DATE

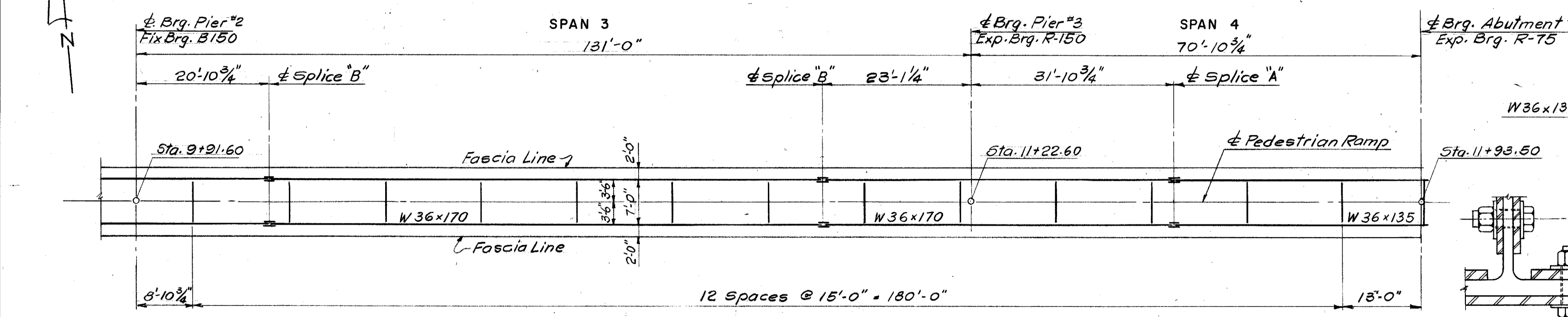


FRAMING PLAN - SPAN 1 & 2

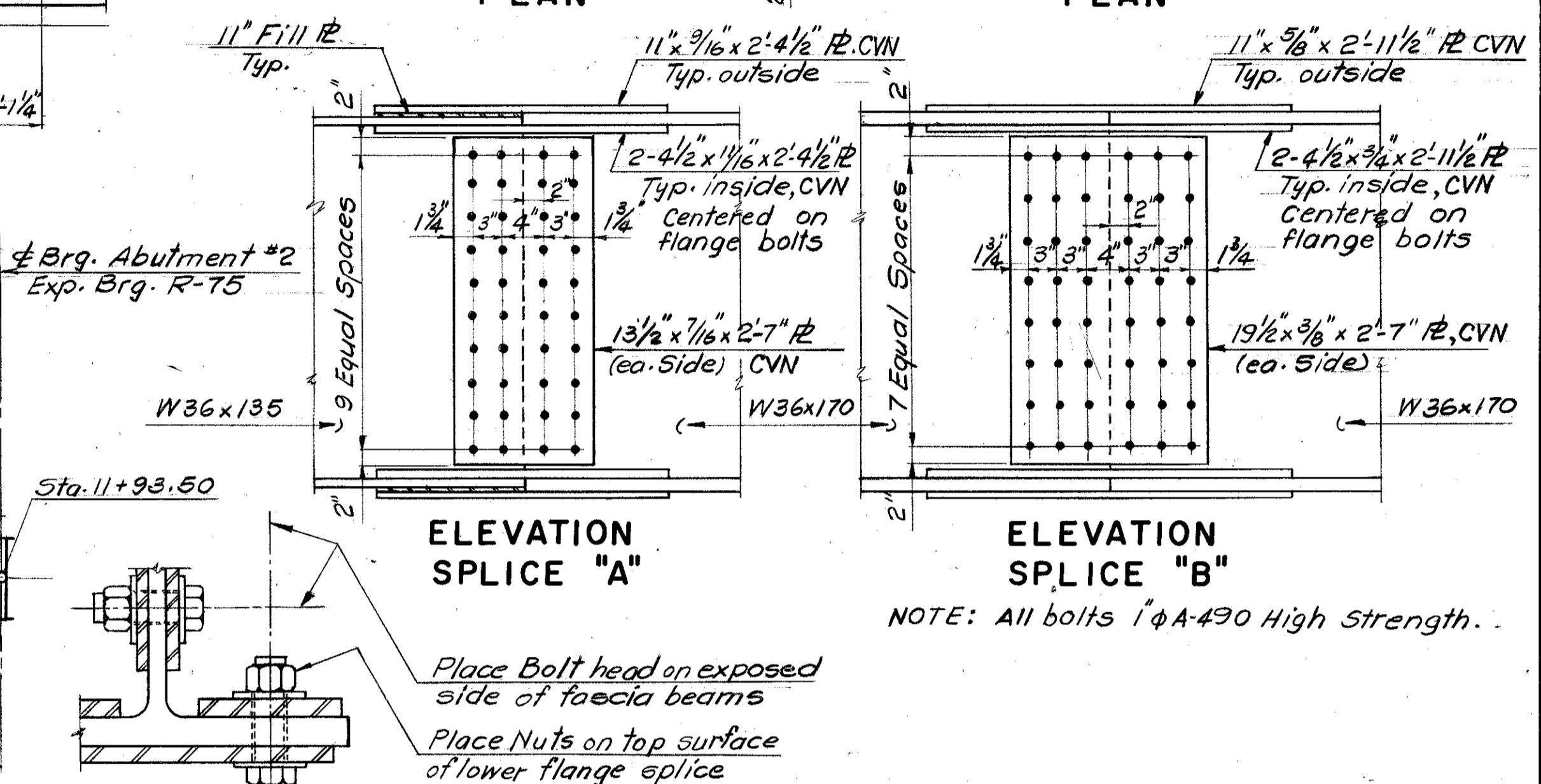


PLAN

PLAN



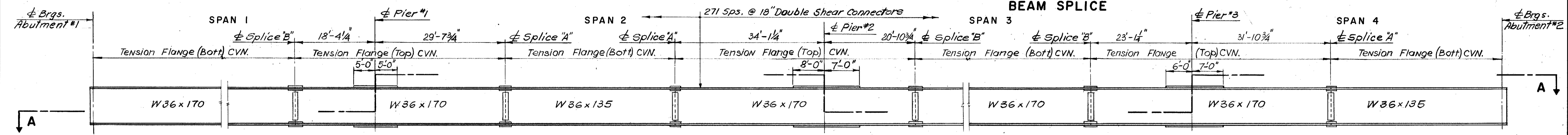
FRAMING PLAN - SPAN 3 & 4



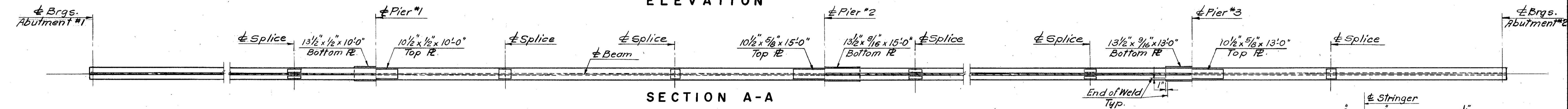
ELEVATION SPLICE "A"

ELEVATION SPLICE "B"

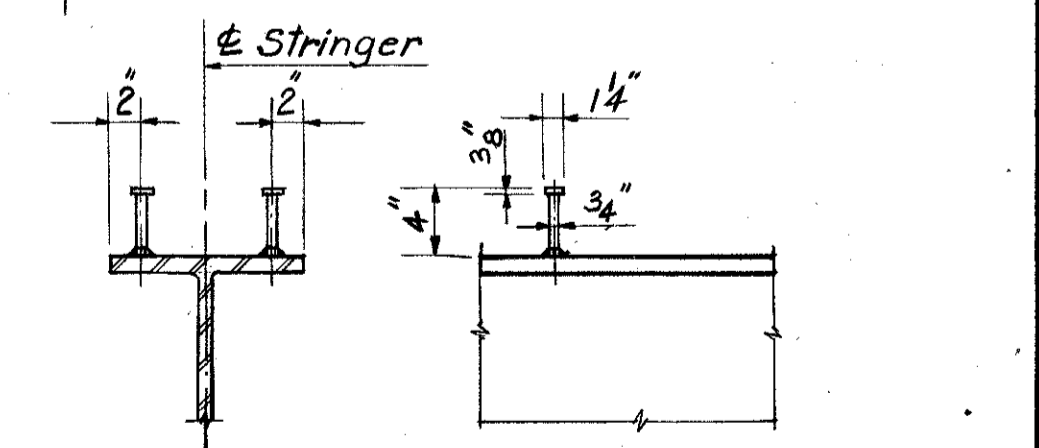
PARTIAL SECTION OF BEAM SPLICE



ELEVATION



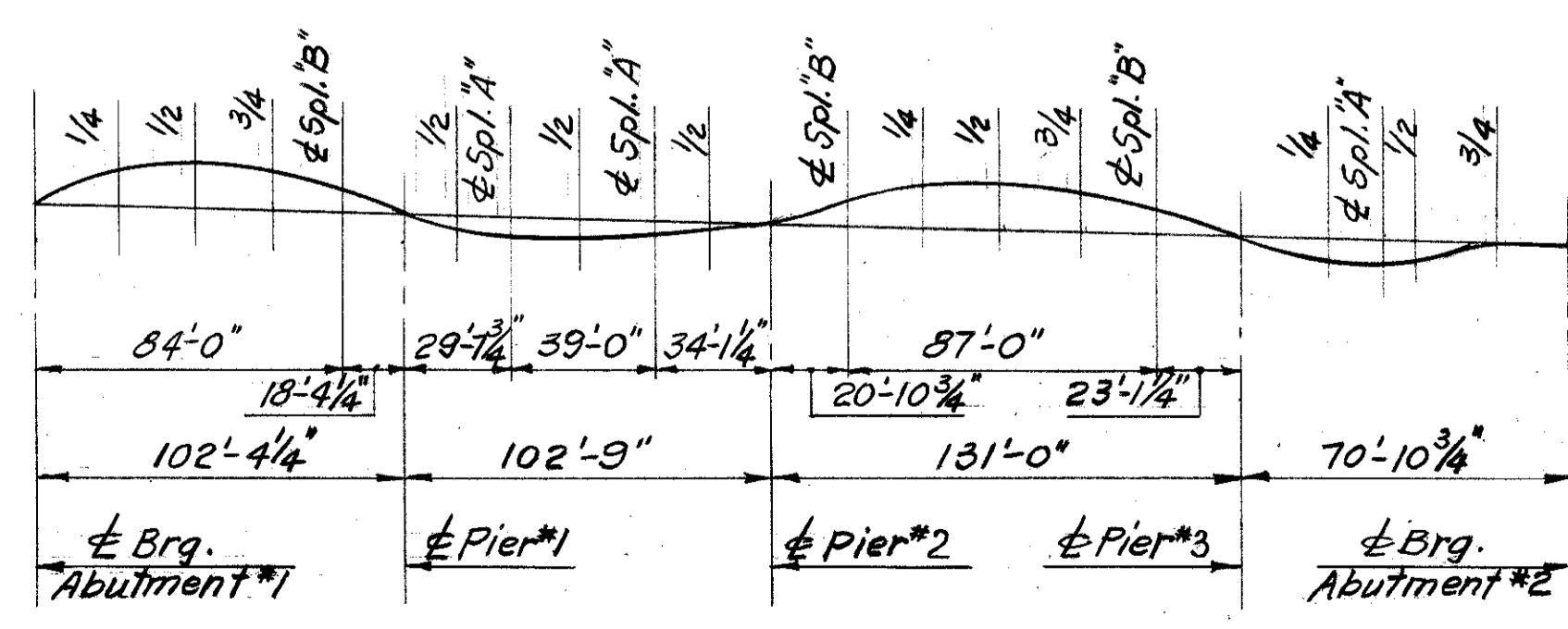
SECTION A-A



STUD SHEAR CONNECTOR DETAIL

NOTES:
 For details of Fixed & Expansion Bearings See Std. Dwg. RB-1-55
 Details of End Crossframes & End Dams (included with Structural Steel for payment) similar to that shown on Std. Dwg. SD-1-69
 End Dams and Bearings: In lieu of A588 Steel, A-36 Steel galvanized, shall be furnished for bearings, except for upper plate element of bearings.
 This A-36 Steel shall be included with A-588 Steel quantity for payment.
 Work this sheet with sh. 9/11
 Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements.
 All beams and top moment plates shall be CVN.

DESCRIPTION	SPAN 1				SPAN 2				SPAN 3				SPAN 4				
	1/4 Pt.	1/2 Pt.	3/4 Pt.	Splice	1/2 Pt.	Splice	1/2 Pt.	Splice	1/2 Pt.	Splice	1/4 Pt.	1/2 Pt.	3/4 Pt.	Splice	1/4 Pt.	1/2 Pt.	3/4 Pt.
Deflection due to weight of Beam	9/16"	13/16"	1 1/16"	5/16"	-1/16"	-1/16"	-1/16"	-1/8"	1/2"	1"	1 1/4"	1 1/16"	1/2"	-1/16"	-1/16"	-1/16"	0
Deflection due to remaining Dead Load	1 3/4"	2 5/8"	2 1/4"	1"	-1 1/4"	-3/16"	-1/8"	-1/4"	3/8"	1 1/2"	3 1/4"	4"	3 5/16"	1 1/16"	-1/4"	-1/4"	-3/16"
Required Shop Camber	2 5/16"	3 7/16"	2 7/16"	1 5/16"	-5/16"	-1/4"	-3/16"	-3/8"	2"	4 1/4"	5 1/4"	4 3/8"	2 3/16"	3 1/16"	-5/16"	-1/4"	0



CAMBER ALIGNMENT DIAGRAM

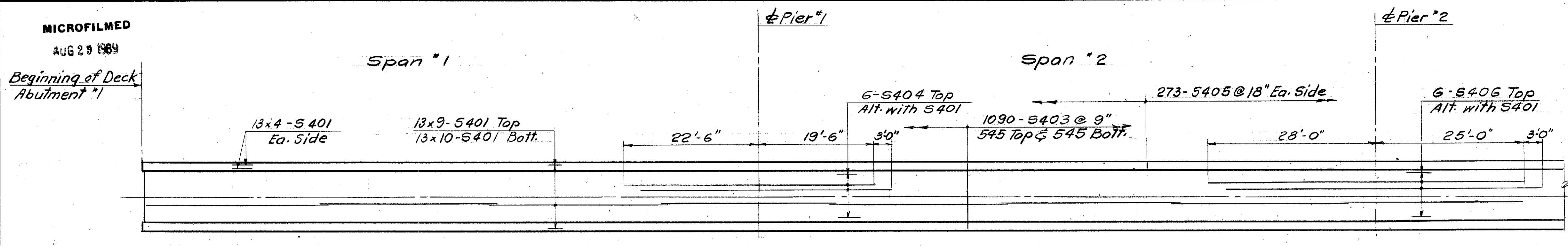
KING & GAVARIS CONSULTING ENGINEERS, INC. 8/11
 CINCINNATI OHIO
STEEL FRAMING PLAN
 BRIDGE NO. GRE-675-0632
 1-675 UNDER PEDESTRIAN RAMP
 GREENE COUNTY
 DESIGNED M.D. DRAWN N.V. TRACKED L.T.W. CHECKED L.T.W. REVIEWED DATE 4-27-82

MICROFILMED
AUG 29 1989

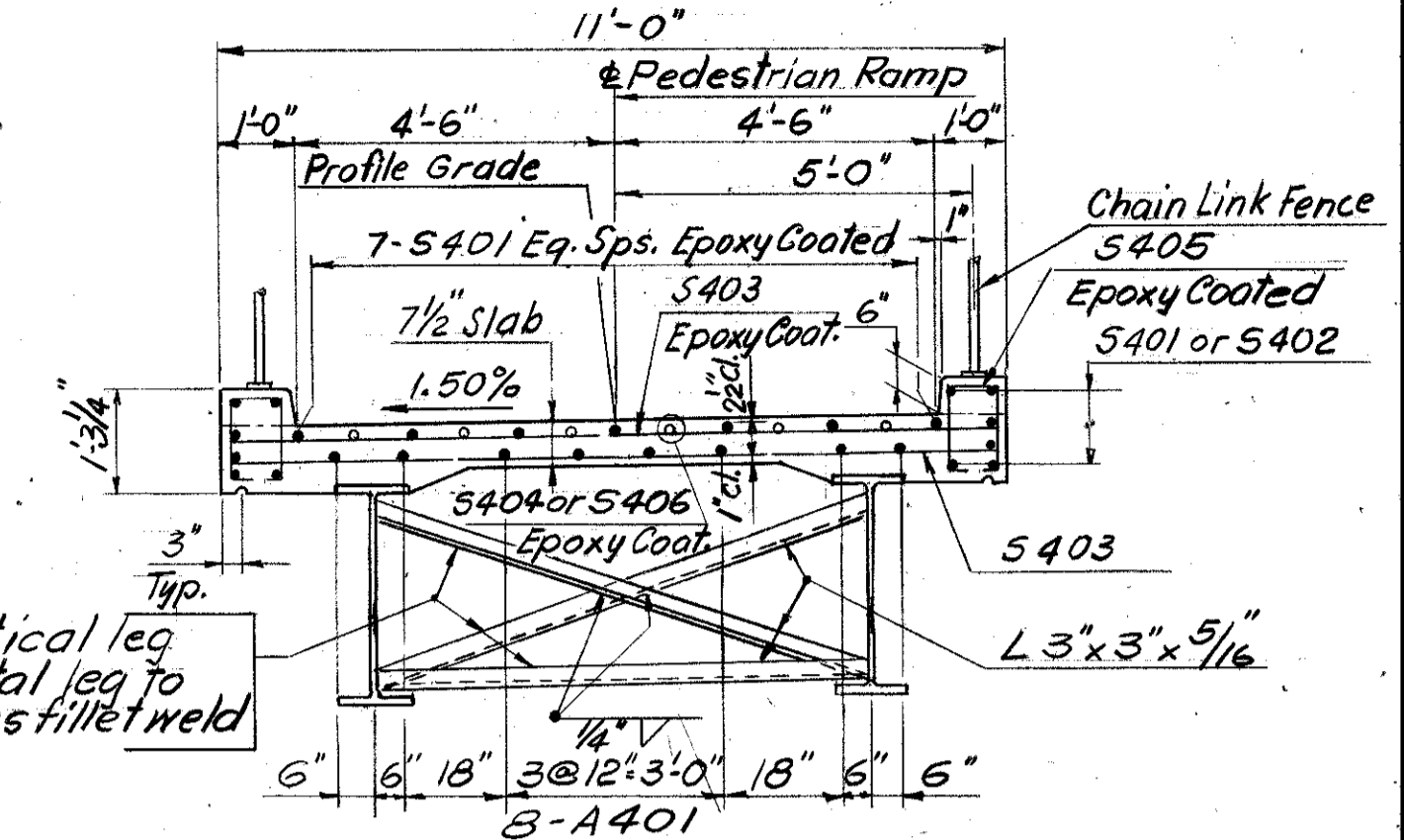
MICROFILMED
JUN 19 1985

F.H.W.A. REGION	STATE	PROJECT
5	OHIO	GRE-675-537

510
616

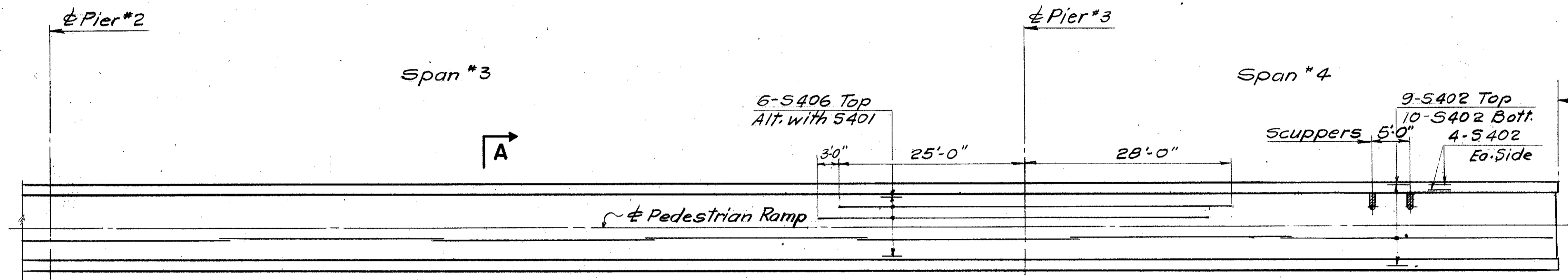


PLAN
SPAN I & 2

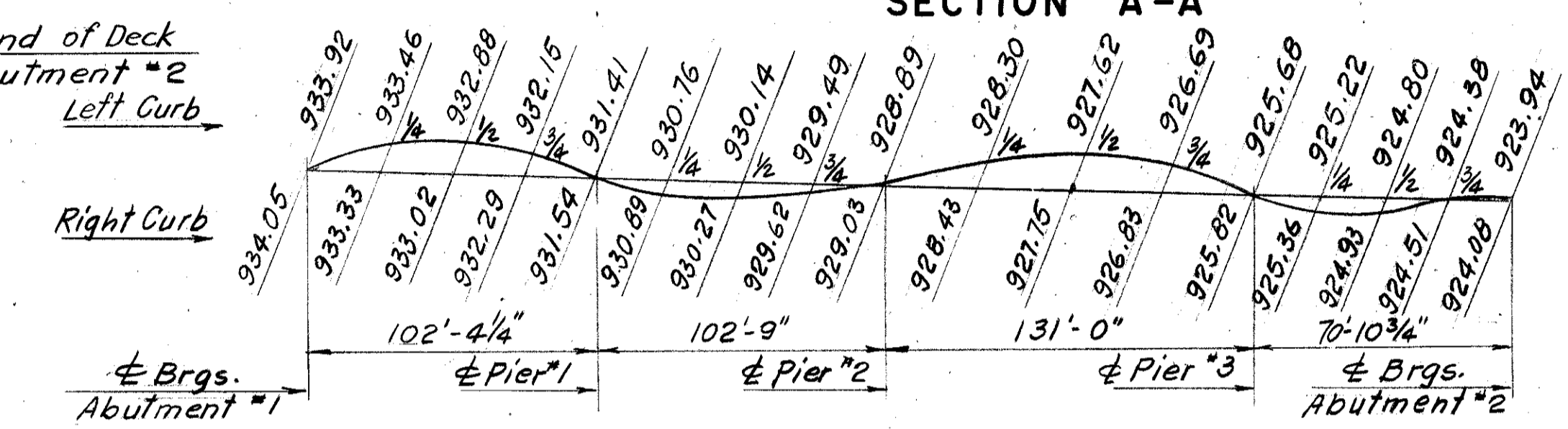


SECTION A-A

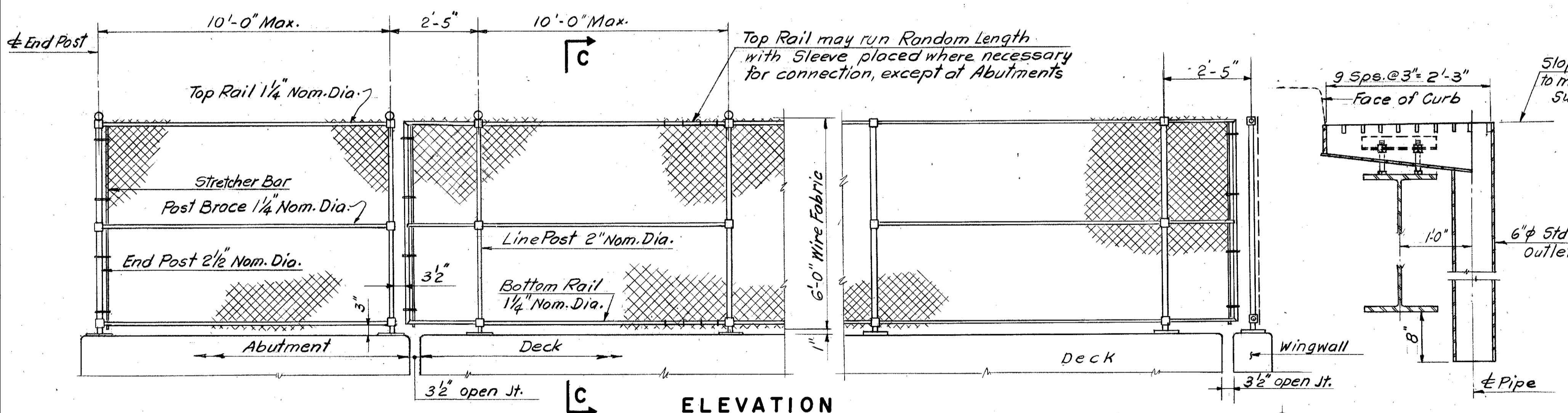
Weld both side of vertical leg and top side of horizontal leg to beam with 1/4 continuous fillet weld



PLAN
SPAN I & 2

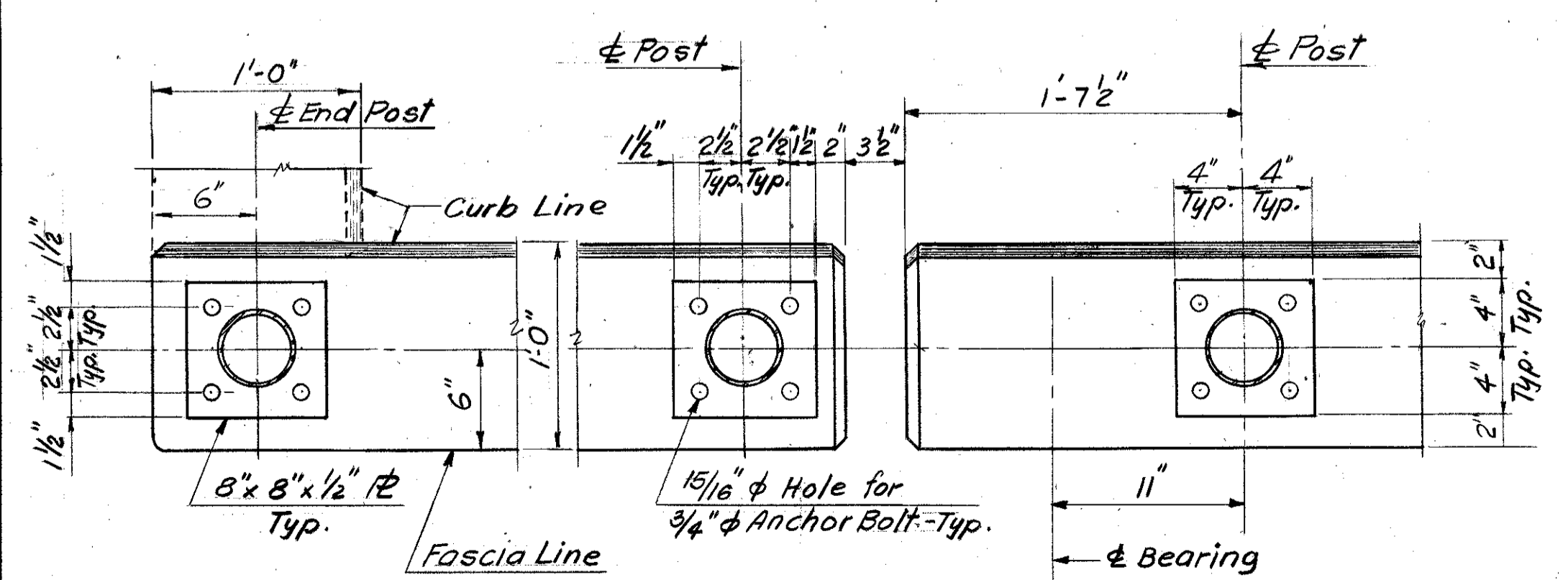


DECK ELEVATION DIAGRAM
(AT CURB POINTS BEFORE CONCRETE) IS POURED.

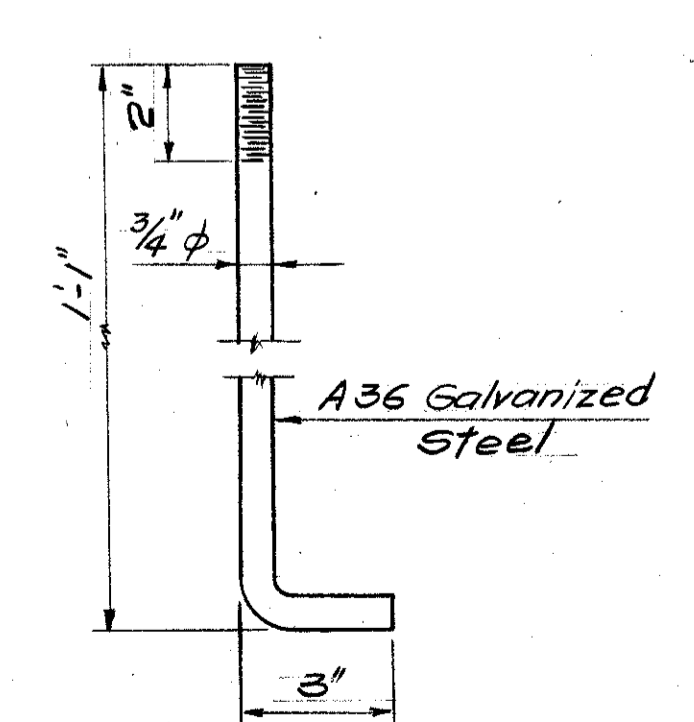


ELEVATION

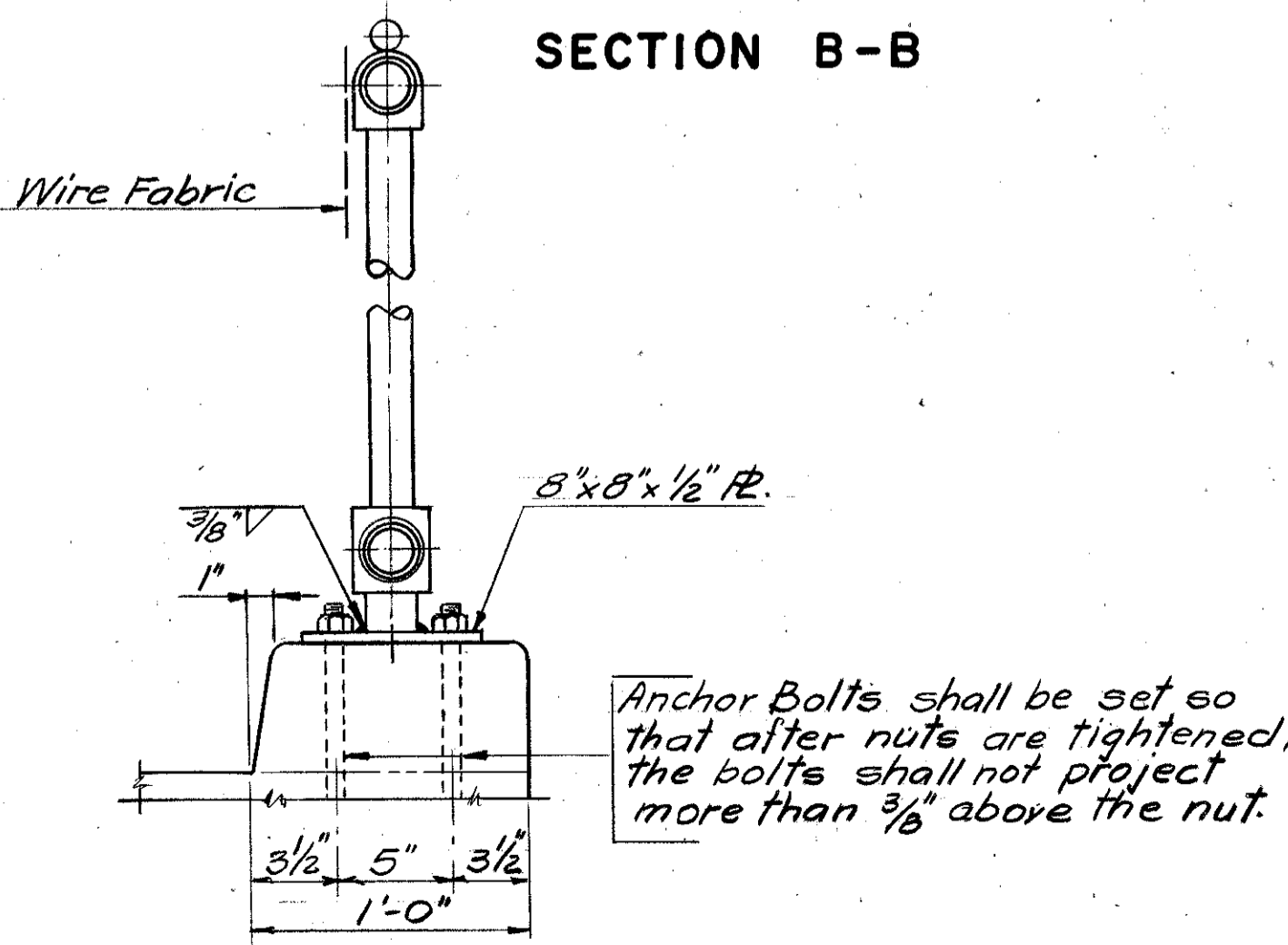
SECTION B-B



PARTIAL PLAN



ANCHOR BOLT DETAIL



SECTION C-C

Notes:
For Reinforcing Steel List, see Sheet U111
All splices and dowels to be lapped min. 30 bar dia. unless otherwise shown.

KING & GAVARIS CONSULTING ENGINEERS, INC.		9/11
SUPERSTRUCTURE SLAB PLAN AND DETAILS		
BRIDGE NO. GRE - 675 - 0632 1-675 UNDER PEDESTRIAN RAMP		
GREENE COUNTY		
DESIGNED M.D.	DRAWN N.V.	TRACED L.T.W.
CHECKED L.T.W.	REVIEWED	DATE

MICROFILMED

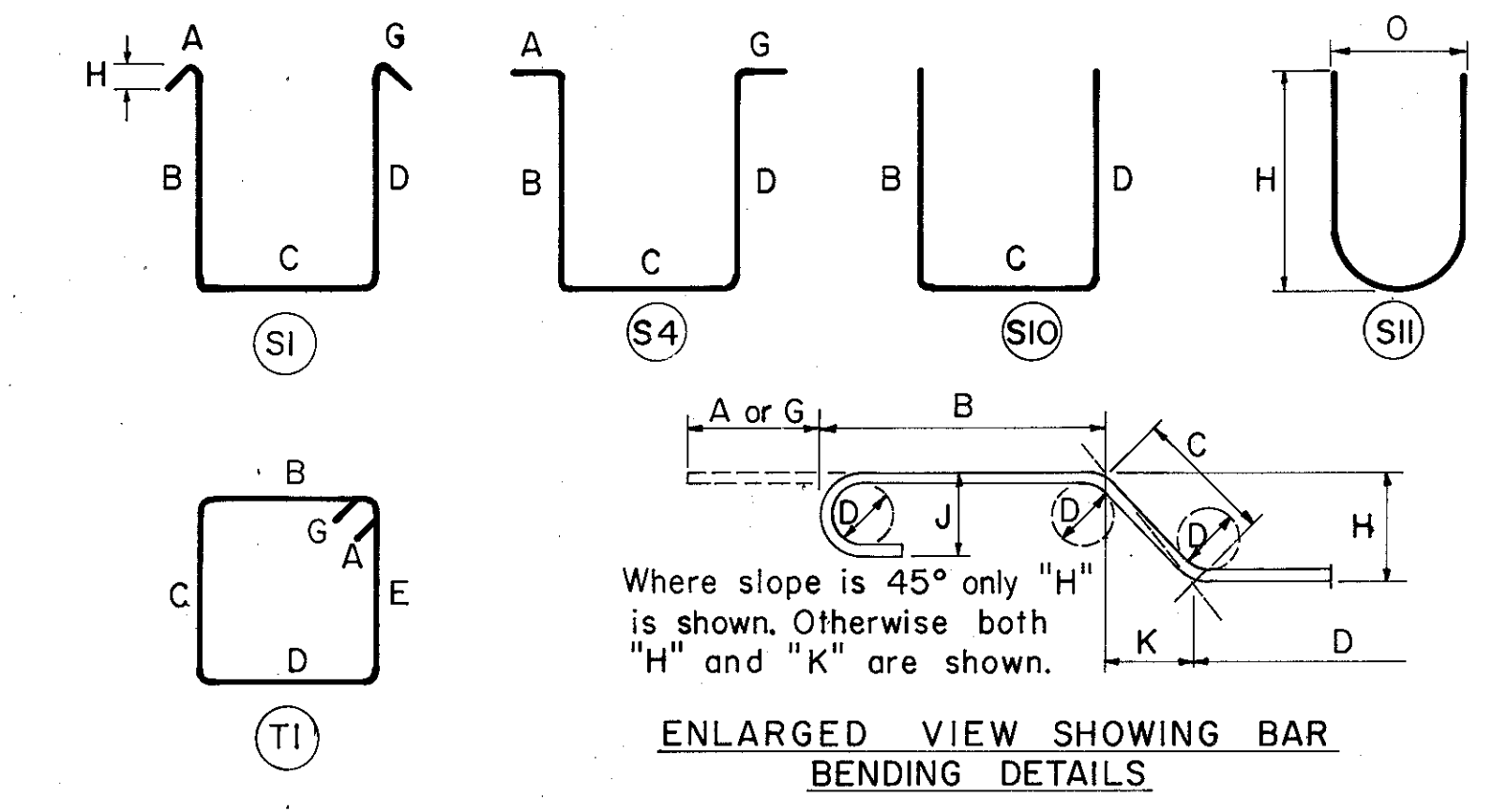
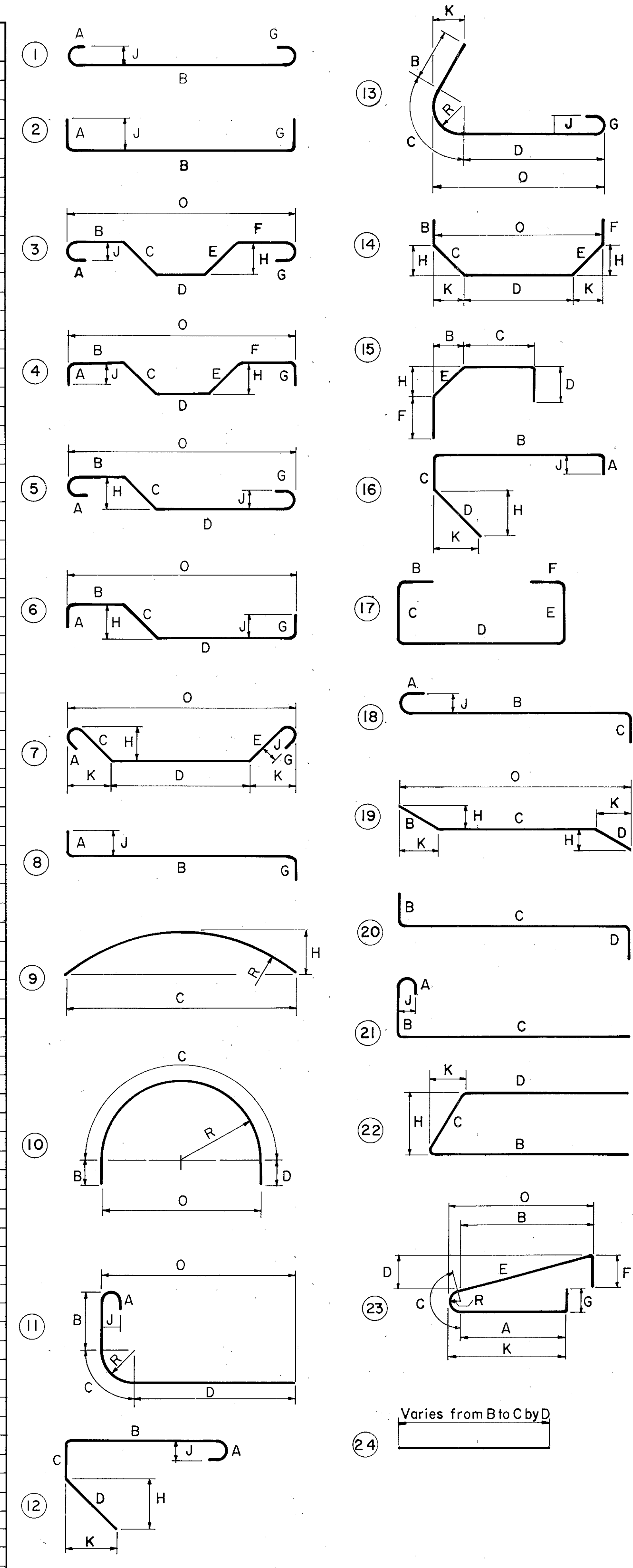
AUG 25 1983

MICROFILMED
JUN 19 1985

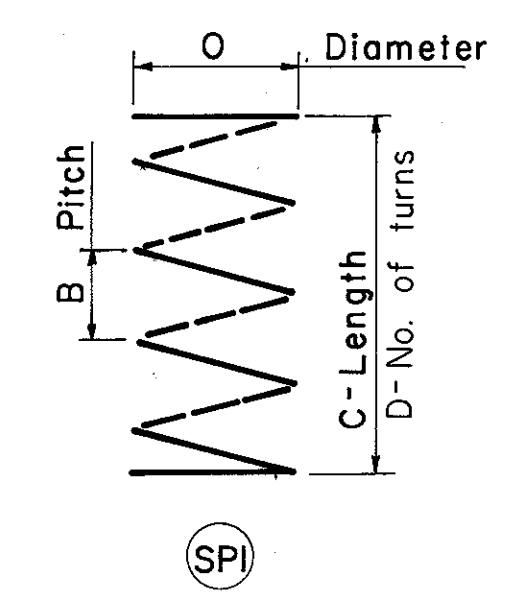
FED. RD. DIVISION	STATE	PROJECT
5	OHIO	GRE-675-5.37

511
6/16

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
ABUTMENT NO. 1																	
A501	16	29'-6"	492	Str.													
A502	6	11'-6"	72	Str.													
A503	32	28'-7"	954	Str.													
A504	12	5'-1"	64	20			3'-2"	2'-0"									
A505	23	11'-8"	280	Str.													
A506	17	19'-8"	349	Str.													
A507	76	29'-2"	2,312	Str.													
A508	19	18'-5"	365	2	2'-0"	14'-8"					2'-0"						
A509	6	14'-5"	90	2	2'-0"	10'-8"					2'-0"						
A510	2	19'-4"	40	Str.													
A511	9	9'-11"	93	17		3'-0"	8"	6'-6"									
A512	172	6'-5"	1,151	17		3'-0"	8"	3'-0"									
A513	180	3'-1"	579	20		1'-2"	2'-0"										
A514	164	27'-8"	4,732	Str.													
A515	54	5'-0"	282	71	5"	8"	1'-8"	8"	1'-8"		5"						
A516	2	10'-8"	22	Str.													
A517	14	5'-0"	73	2	2'-0"	3'-2"											
A518	19	14'-8"	291	Str.													
A601	12	6'-6"	117	Str.													
A602	60	11'-4"	1,021	Str.													
A603	74	11'-0"	1,223	Str.													
A604	112	varies 17'-10" to 20'-4" by 18" ea. l.	3,210	Str.													
A605	112	varies 15'-10" to 17'-9" by 24" ea. l.	2,832	Str.													
A701	100	11'-6"	2,351	Str.													
A702	16	14'-6"	474	Str.													
A703	152	12'-6"	3,884	Str.													
A704	112	8'-1"	1,851	2	3'-0"	5'-3"											
A705	112	6'-1"	1,393	2	1'-0"	5'-3"											
A801	24	11'-6"	737	Str.													
A802	16	14'-6"	619	Str.													
A803	74	10'-8"	2,108	2	3'-0"	7'-10"											
A804	72	12'-8"	2,435	2	1'-2"	10'-8"						1'-2"					
A901	70	8'-11"	2,122	2	1'-4"	7'-10"											
		Total: 38,618															
ABUTMENT NO. 2																	
A502	20	11'-6"	240	Str.			3'-2"	2'-0"									
A504	12	5'-1"	64	20													
A505	20	11'-8"	243	Str.													
A508	16	18'-5"	307	2	2'-0"	14'-8"	2'-0"										
A509	6	14'-5"	90	2	2'-0"	10'-8"	2'-0"										
A511	12	9'-11"	124	17		3'-0"	8"	6'-6"									
A512	68	6'-5"	455	17		3'-0"	8"	3'-0"									
A513	80	3'-1"	257	20		1'-2"	2'-0"										
A515	18	5'-0"	94	71	5"	8"	1'-8"	8"	1'-8"		5"						
A516	2	10'-8"	22	Str.													
A517	11	5'-0"	57	2	2'-0"	3'-2"											
A518	16	14'-8"	245	Str.													
A519	2	25'-2"	52	Str.													
A520	64	35'-2"	2,347	Str.													
A521	16	25'-7"	427	Str.													
A522	14	26'-0"	380	Str.													
A606	12	16'-1"	290	Str.													
A607	92	varies 17'-6" to 19'-7" by 18" ea. l.	2,562	Str.													
A608	60	19'-8"	1,772	Str.													
A701	64	11'-6"	1,504	Str.													
A702	32	14'-6"	948	Str.													
A704	85	8'-1"	1,404	2	3'-0"	5'-3"											
A705	80	6'-1"	995	2	1'-0"	5'-3"											
A804	24	12'-8"	812	2	1'-2"	10'-8"						1'-2"					



- 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 numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
 - All dimensions are out to out of bar.
 - Radius dimension "R" is to outside of bar.
 - The length of bent bars is measured along the centerline.
 - For standard hook dimensions, see Sect. 509.05 of the specifications.
 - For bar type SPI, 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. 1/2 Closed coils shall be provided at the ends of each spiral unit.
 - Figures in circles show bar types.
 - "J" Dimension on hooks is shown only where necessary to restrict hook size. Otherwise standard hooks are to be used.
 - Where "J" is not shown, "J" will be kept equal to or less than "H". Where "J" can exceed "H" it will be shown.
 - "H" Dimension on stirrups will be shown where necessary to restrict hooks.
 - All bends shown are bent around a standard mandrel, except stirrups S11, ties T3, spirals SPI and where radius "R" is indicated.
 - Four steel channel, tee or angle spacers, weighing approximately 0.80 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.
 - For additional bars see sheet 11/11
 - 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.



KING & GAVARIS CONSULTING ENGINEERS, INC.		10/11 OHIO	
REINFORCING STEEL LIST			
BRIDGE NO. GRE-675-0632 1-675 UNDER PEDESTRIAN RAMP			
GREENE COUNTY		STA. 7 +84.50 TO STA. 11 +95.50	
DESIGNED N.V.	DRAWN A.A.	TRACED L.T.W.	CHECKED DATE

MICROFILMED
JUN 19 1965

MICROFILMED
JUN 19 1965

FED. RD. DIVISION	STATE	PROJECT
5	OHIO	GRE-675-5.37

512
616

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
		Total:	15,691														
		Total Abutments	54,309														
RETAINING WALL NO. 1																	
W501	44	7'-2"	329	Str.													
W502	30	32'-7"	1,020	Str.													
W503	22	15'-4"	352	Str.													
W504	16	Var. 16'-3" to 16'-7" by 1/2" lead.	277	Str.													
W505	7	Var. 15'-10" to 17'-10" by 2" lead.	127	Str.													
W506	50	31'-6"	1,643	Str.													
W507	116	4'-11"	594	S10		2'-3"	8"	2'-3"									
W508	28	6'-0"	175	Str.													
W509	13	35'-1"	476	Str.													
W510	13	24'-4"	330	Str.													
W511	21	14'-5"	316	Str.													
W512	24	31'-3"	782	Str.													
W513	15	14'-0"	219	Str.													
W514	22	20'-0"	460	Str.													
W515	10	3'-11"	41	20		2'-0"	2'-0"										
W601	32	15'-0"	721	Str.													
W602	23	Var. 15'-9" to 16'-4" by 1/2" lead.	556	Str.													
W603	10	Varies 16'-2" to 17'-4" by 1/2" lead.	254	Str.													
W604	30	14'-3"	642	Str.													
W605	19	13'-6"	385	Str.													
W606	42	6'-6"	410	Str.													
W607	65	7'-6"	732	Str.													
W701	65	7'-0"	930	Str.													
W702	112	8'-7"	1,965	22		7'-9"	1'-0"										
W703	114	5'-1"	1,184	22		4'-3"	1'-0"										
W704	58	6'-6"	771	Str.													
		Total:	15,691														
RETAINING WALL NO. 2																	
W501	22	7'-2"	164	Str.													
W507	86	4'-11"	441	S10		2'-3"	8"	2'-3"									
W516	19	Varies 14'-0" to 16'-3" by 1/2" lead.	300	Str.													
W517	42	27'-8"	1,212	Str.													
W518	34	4'-8"	166	Str.													
W519	10	30'-0"	313	Str.													
W520	10	27'-3"	284	Str.													
W521	19	Varies 9'-11" to 12'-8" by 1/2" lead.	219	Str.													
W522	16	26'-2"	437	Str.													
W523	18	Varies 7'-11" to 9'-11" by 1/2" lead.	167	Str.													
W524	54	4'-9"	268	Str.													
W525	29	Varies 9'-3" to 11'-7" by 1" lead.	315	Str.													
W526	28	Varies 7'-3" to 9'-3" by 1/2" lead.	241	Str.													
W527	9	29'-6"	277	Str.													
W528	6	30'-10"	193	Str.													
W607	32	7'-6"	360	Str.													
W608	57	4'-6"	385	Str.													
W609	57	4'-6"	385	22		1'-0"	3'-8"										
W610	29	Varies 13'-0" to 15'-4" by 1" lead.	617	Str.													
W701	32	7'-0"	458	Str.													
W702	28	8'-7"	491	22		7'-9"	1'-0"										
W703	29	5'-1"	301	22		4'-3"	1'-0"										
		Total:	7,994														
		Total Retaining Walls:	23,685														

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
PIER NO. 1																	
P504	34	13'-3"	470	S10		5'-8"	2'-2"	5'-8"									
P505	51	3'-4"	177	1	7"	2'-2"					7"		4"				
P506	10	3'-11"	41	S10		1'-0"	2'-2"	1'-0"									
P601	17	9'-10"	251	1	8"	8'-6"					8"		4 1/2"				
P602	10	16'-10"	253	1	8"	15'-6"					8"		4 1/2"				
P701	36	6'-2"	454	1	10"	5'-4"								5"			
P702	22	23'-5"	1,053	Str.													
P703	14	12'-0"	343	Str.													
		Total:	3,042														
PIER NO. 2																	
P501	32	13'-9"	459	S10		5'-8"	2'-8"	5'-8"									
P502	48	3'-10"	192	1	7"	2'-8"					7"		4"				
P503	10	4'-5"	46	S10		1'-0"	2'-8"	1'-0"									
P801	20	13'-4"	712	1	11"	11'-6"					11"		6"				
P802	13	20'-4"	706	1	11"	18'-6"					11"		6"				
P901	36	8'-3"	1,010	1	1'-3"	7'-0"								9"			
P902	14	12'-0"	571	Str.													
P903	22	21'-10"	1,633	Str.													
		Total:	5,329														
PIER NO. 3																	
P504	30	13'-3"	415	S10		5'-8"	2'-2"	5'-8"									
P505	45	3'-4"	156	1	7"	2'-2"					7"		4"				
P506	10	3'-11"	41	S10		1'-0"	2'-2"	1'-0"									
P601	17	9'-10"	251	1	8"	8'-6"					8"		4 1/2"				
P602	10	16'-10"	253	1	8"	15'-6"					8"		4 1/2"				
P701	36	6'-2"	454	1	10"	5'-4"								5"			
P703	14	12'-0"	343	Str.													
P704	22	20'-7"	926	Str.													
		Total:	2,839														
		Total Piers:	11,210														
SUPERSTRUCTURE																	
S401	351	30'-0"	7,034	Str.													
S402	27	34'-9"	627	Str.													
S403	1090	10'-8"	7,767	Str.													
S404	6	42'-0"	168	Str.													
S405	546	2'-5"	881	17		3"	11"	7"	11"	3"							
S406	12	53'-0"	425	Str.													
		Total:	16,902														

91 Epoxy Coated
7 Epoxy Coated
545 Epoxy Coated
6 Epoxy Coated
546 Epoxy Coated
12 Epoxy Coated

- 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 numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
 - For bar types see sheet 10/11
 - All dimensions are out to out of bar.
 - Radius dimension "R" is to outside of bar.
 - The length of bent bars is measured along the centerline.
 - For additional notes see sheet 10/11

KING & GAVARIS
CONSULTING ENGINEERS, INC. 11/11
OHIO

REINFORCING STEEL LIST

BRIDGE NO. GRE-675-0632
1-675 UNDER PEDESTRIAN RAMP

GREENE COUNTY STA. 7 +84.50 TO STA. 11 +95.50

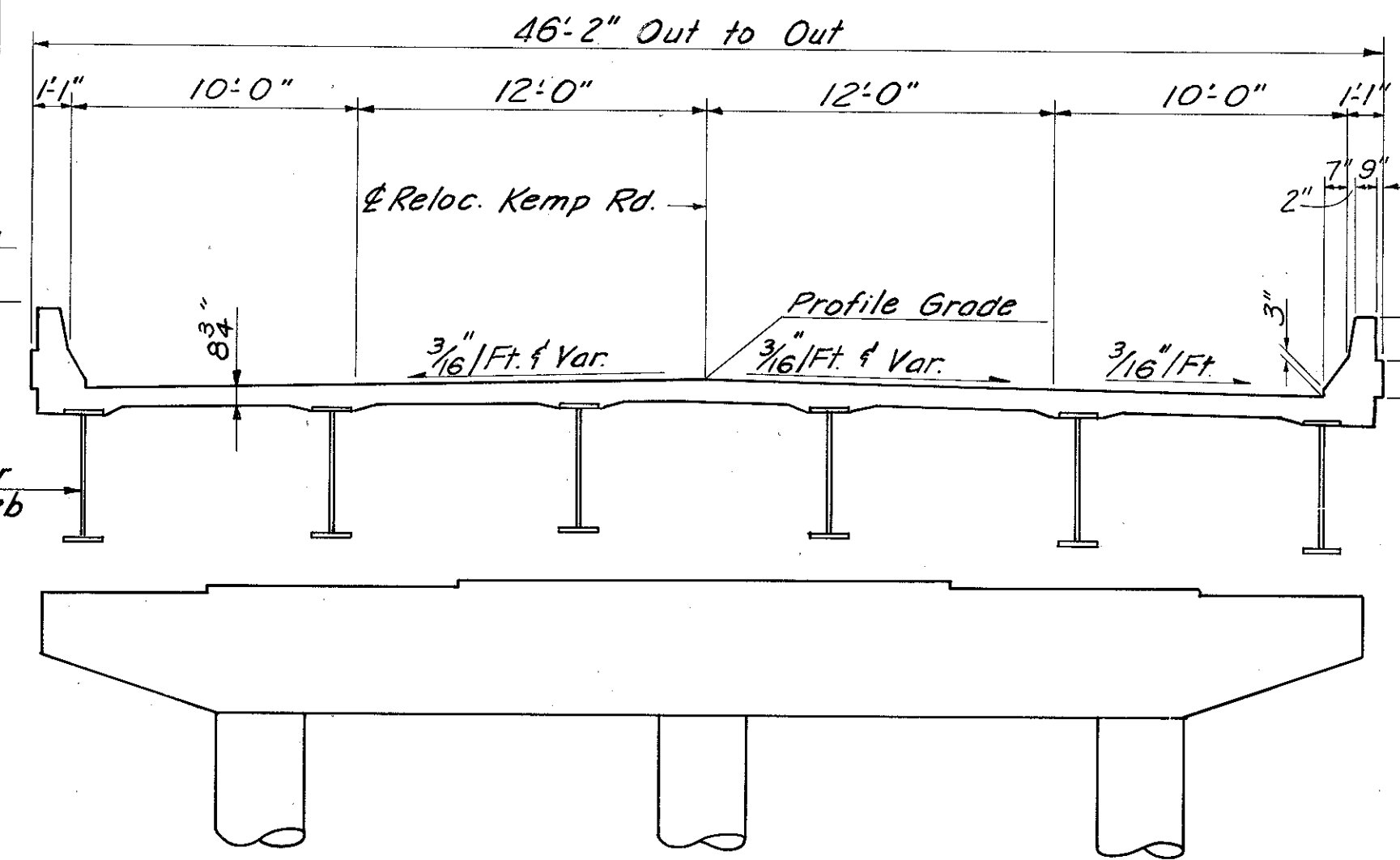
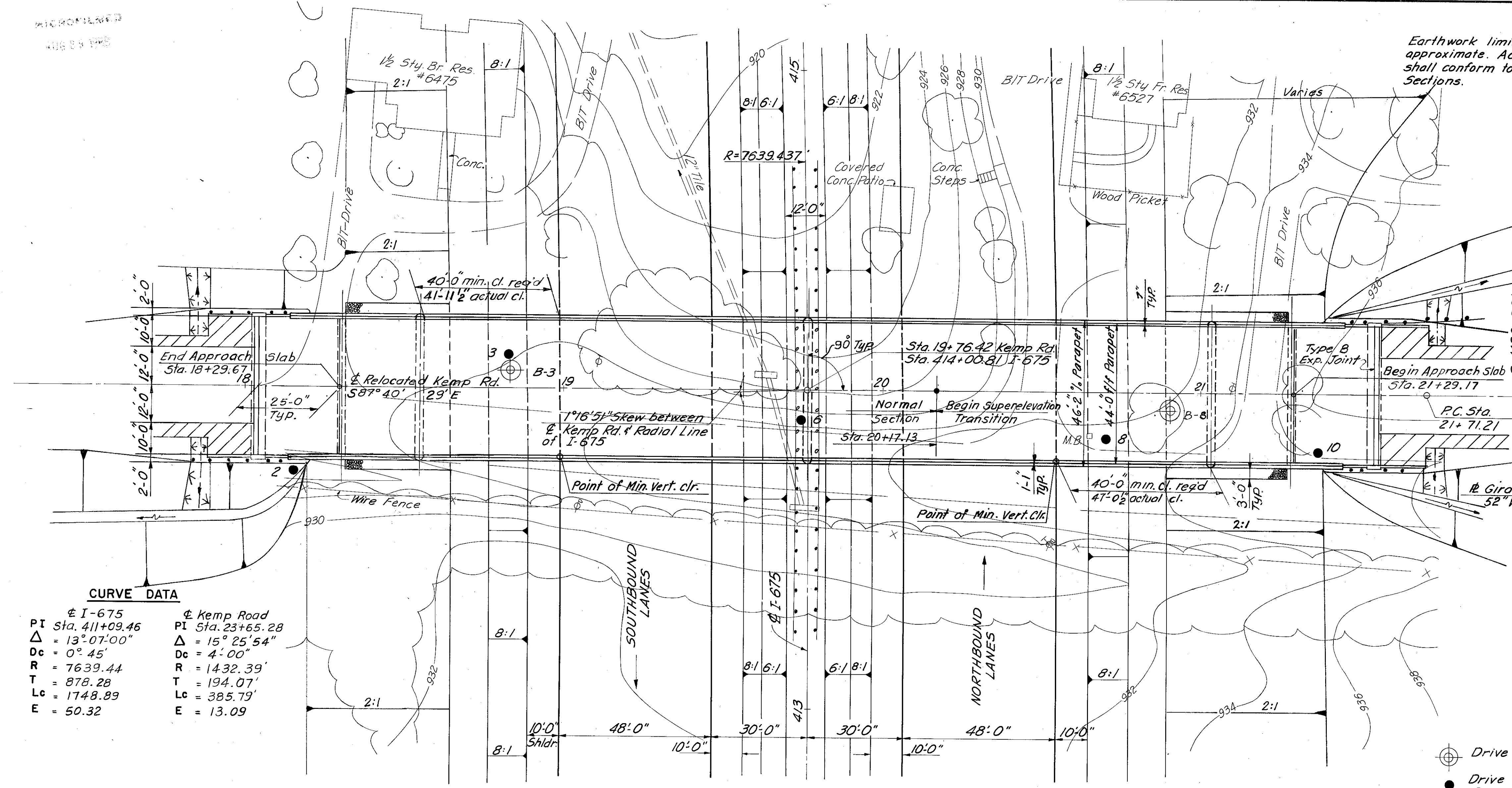
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
M.V.	A.A.		L.T.W.			

F.H.W.A. REGION	STATE	PROJECT
5	OHIO	

513
616

GRE 675 - 5.37
GREENE COUNTY

Earthwork limits shown are approximate. Actual slopes shall conform to Plan Cross-Sections.



SECTION THRU BRIDGE

CURVE DATA

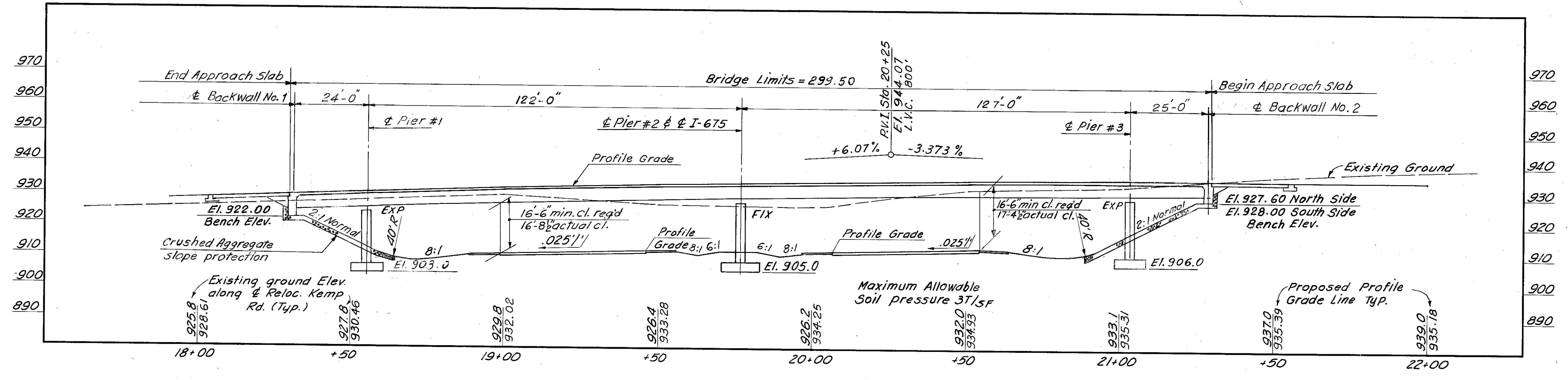
PI Sta. 411+09.46	Δ = 13° 07' 00"	Dc = 0° 45'	R = 7639.44	T = 878.28	Lc = 1748.89	E = 50.32
PI Sta. 23+65.28	Δ = 15° 25' 54"	Dc = 4° 00'	R = 1432.39'	T = 194.07'	Lc = 385.79'	E = 13.09

LEGEND

- ⊙ Drive Sample Boring Location
- Drive Rod Penetration Resistance Sounding Location

PLAN

DESIGN YEAR TRAFFIC
1989 ADT:
I-675 = 73,300
Kemp Rd. = 9,200



PROFILE ON CENTER LINE RELOCATED KEMP ROAD

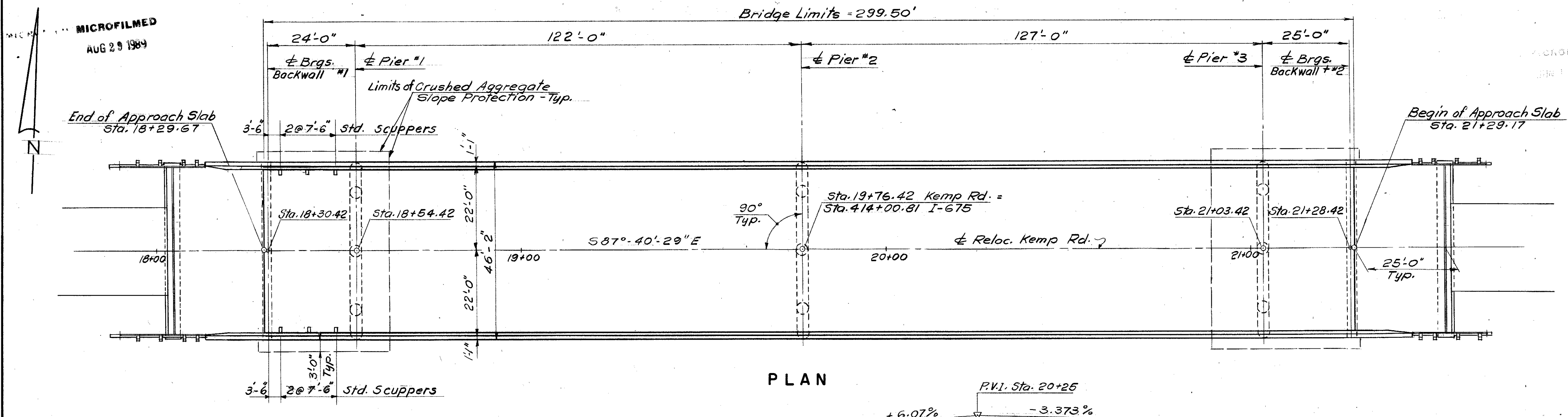
PROPOSED STRUCTURE
TYPE: Continuous plate girder with cantilevered ends & reinforced concrete deck and substructure
SPANS: 24'-0", 122'-0", 127'-0", 25'-0"
ROADWAY: 44'-0" face to face of parapet
LOADING: HS 20-44 Case II & Alternate Military
SKEW: None
WEARING SURFACE: Monolithic concrete
APPROACH SLABS: 25'-0" Long (std. A5-1-72)
ALIGNMENT: Tangent

KING & GAVARIS
CONSULTING ENGINEERS, INC.
CINCINNATI OHIO

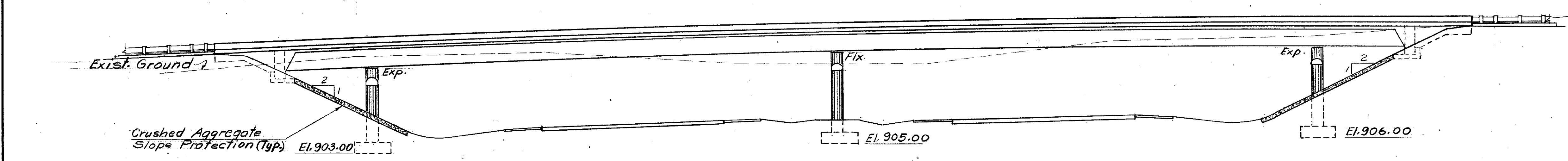
SITE PLAN
BRIDGE NO. GRE - 675 - 0737
I - 675 UNDER KEMP RD.
GREENE COUNTY STA. 18 + 29.67 TO STA. 21 + 29.17

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISED
AERIAL SURVEY	AERIAL SURVEY	M.D.	A.A.	V.J.L.	

MICROFILMED
JUN 19 1965



PLAN



ELEVATION

ESTIMATED QUANTITIES							
ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	BACK-WALL	PIERS	GEN.
503	570	CU. Yd.	Unclassified Excavation		80	490	
508	Lump	Sum	Cofferdams, cribs & sheeting				Lump
509	125,000	Lb.	Reinforcing steel	57,700	9,500	57,800	
511	100	CU. Yd.	Class "C" concrete Piers above footing			100	
511	142	CU. Yd.	Class "C" concrete Pier footings			142	
511	80	CU. Yd.	Class "C" concrete Integral Backwall		80		
512	58	Sq. Yd.	Type A Waterproofing			58	
513	487,000	Lb.	Structural steel (AISC Category III) ASTM A508	487,000			
518	6	Each	Scuppers, including supports	6			
601	610	Sq. Yd.	Crushed Aggregate slope protection				610
511	445	CU. Yd.	Class S Concrete, Superstructure using Shrinkage Compensating Cement, 701.08	445			
Special	61,500	Lb.	Epoxy Coated Reinforcing Steel (See Proposal Note)	60,000			1,500
Special	92	Lin. Ft.	Approach Slab Expansion Joint				92

ESTIMATED QUANTITIES CHECKED BY & DATE: N.W./LIU 12/19/78 REVISED

GENERAL NOTES

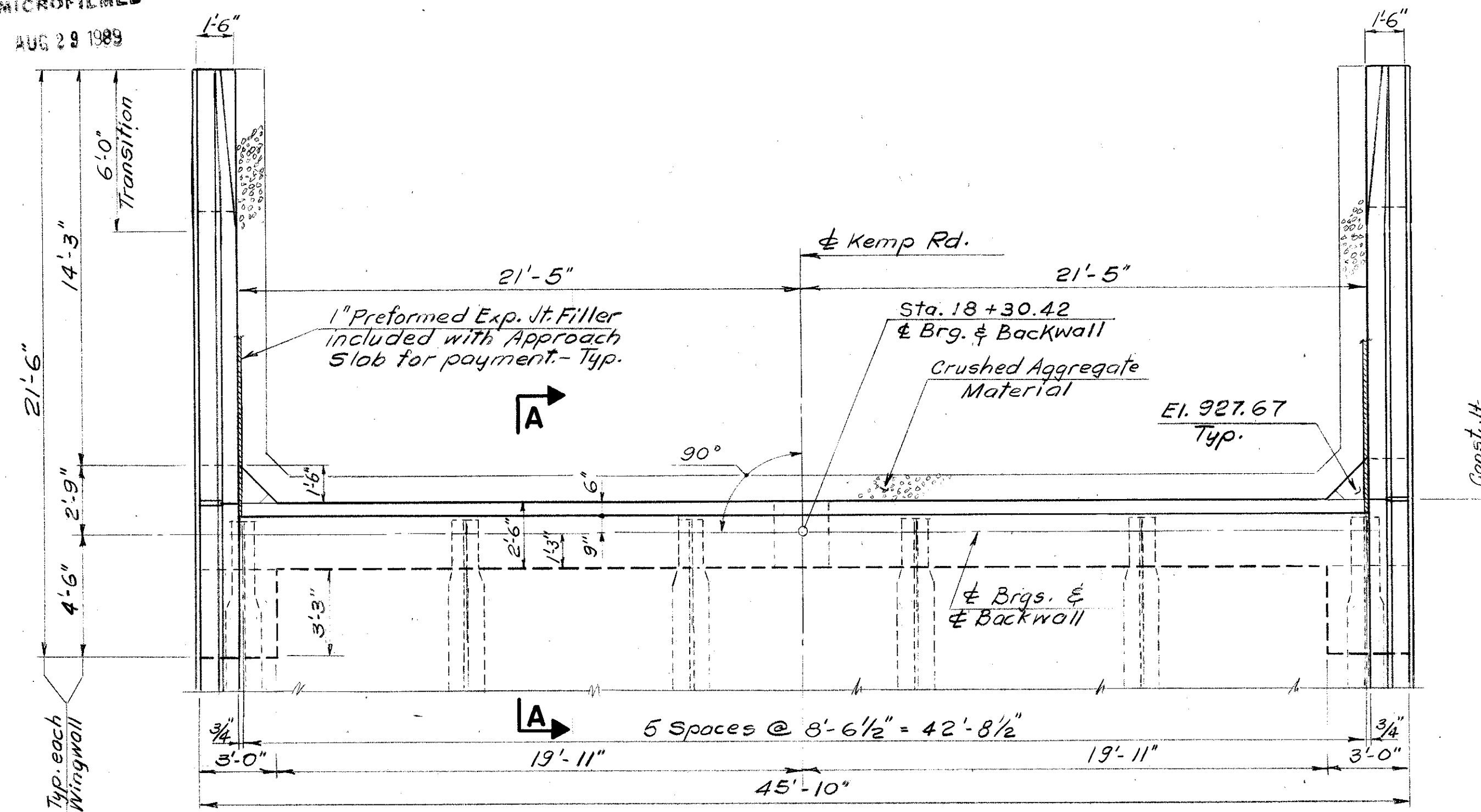
FOUNDATION BEARING PRESSURE: Pier footings are designed for a maximum bearing pressure of 3.0 tons per sq. ft.
For additional GENERAL NOTES See Sh. C1/C2
For SIGN ATTACHMENT to face of Bridge, see Sh. ⊕

NOTES:
Scupper spacing measured along face of curb.
All Backwall and Pier Centerlines are parallel.
For Scupper details, See Std. Dwg. SD-1-69.

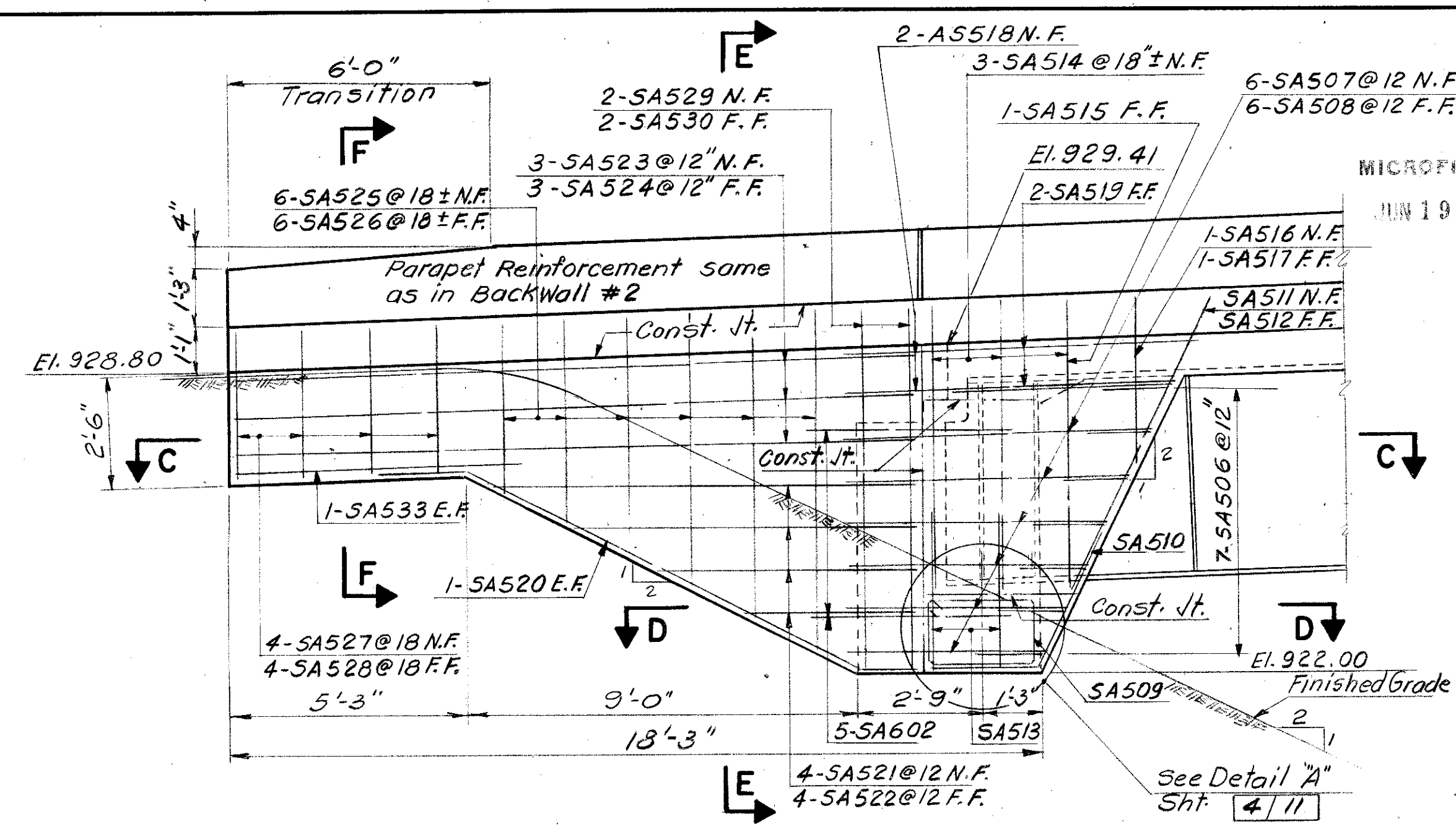
KING & GAVARIS CONSULTING ENGINEERS, INC.		2 / 11
GENERAL PLAN, GENERAL NOTES, ELEVATION AND ESTIMATED QUANTITIES		
BRIDGE NO. GRE-675-0737 I-675 UNDER KEMP ROAD		
GREENE COUNTY	STA. 18+29.67	TO STA. 21+29.17
DESIGNED M.D.	DRAWN N.V.	TRACED M.D.
CHECKED M.D.	REVIEWED	DATE

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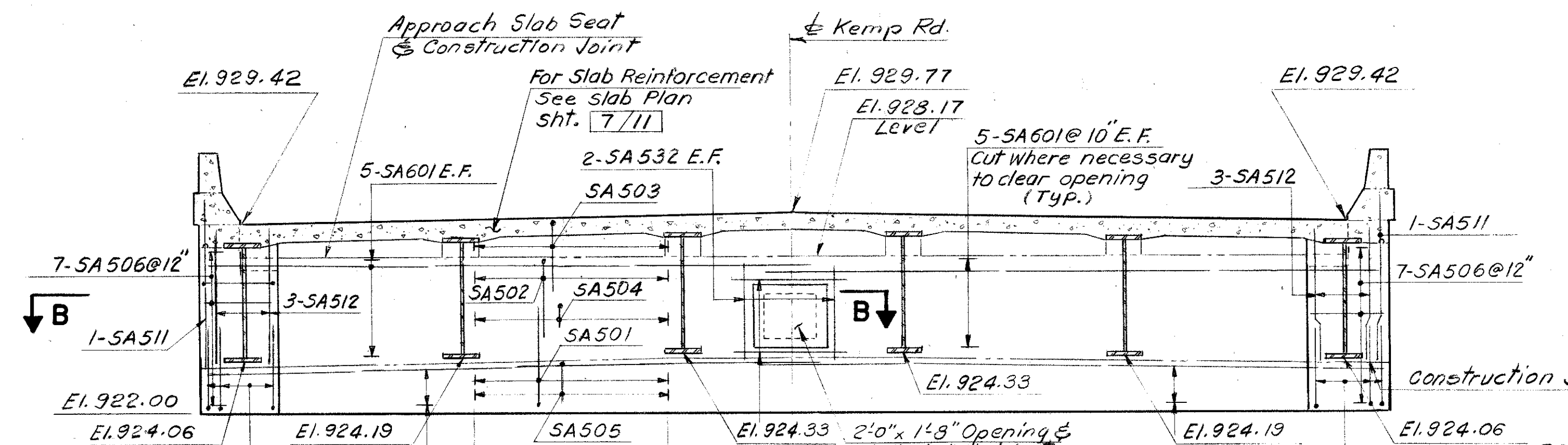


PLAN



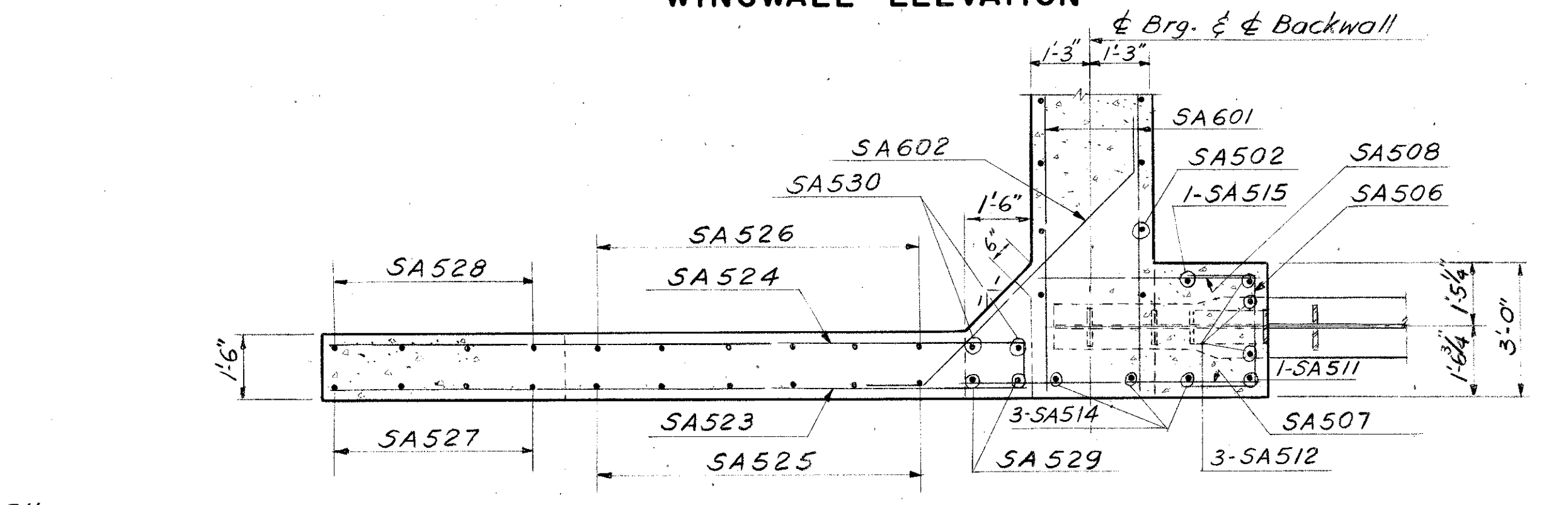
WINGWALL ELEVATION

- NOTES:
- INTEGRAL BACKWALL CONSTRUCTION:**
- Erect deck stringers.
 - Set stringer anchor bolts:
 - Place bolts in center of flange holes.
 - Set nuts finger tight immediately prior to placement of initial backwall concrete.
 - Place backwall concrete up to the anchor-bolt construction joint.
 - When concrete begins to set, loosen nuts.
 - After concrete has been in place for at least twelve hours and during moderate ambient temperatures (about 60°F) tighten nuts.
 - Fill space under flange with non-shrinking epoxy mortar.
 - Resume placement of backwall concrete.
- WING WALLS:** Place wing wall concrete during stable or rising ambient temperatures. Conclude placement at least four hours prior to the days peak ambient temperature.
- CONSTRUCTION JOINTS:** Construction joint surfaces shall be scrubbed with cement grout (equal volumes of sand and cement with only enough water to make a thin paste) immediately prior to concrete placement.
- WATERPROOFING:** The designated surfaces of the backwall shall be waterproofed with Type A Waterproofing (702.11 or AASHTO M115 Type A).
- NON-SHRINKING EPOXY MORTAR:** shall be a pourable mortar equal to Fel-Pro F.P. No. 132 or an approved equal. The mortar is included with superstructure concrete for payment.

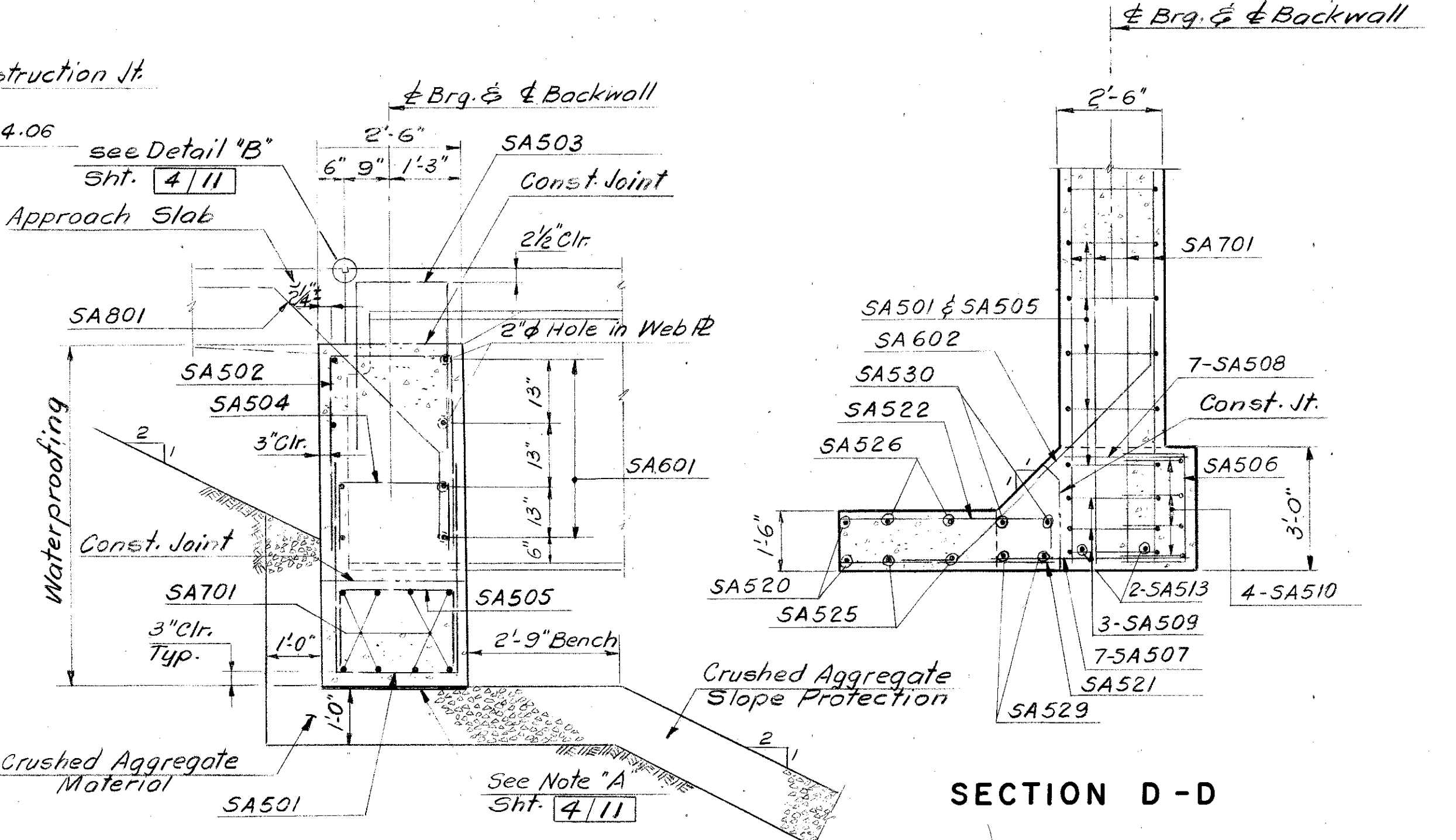


ELEVATION

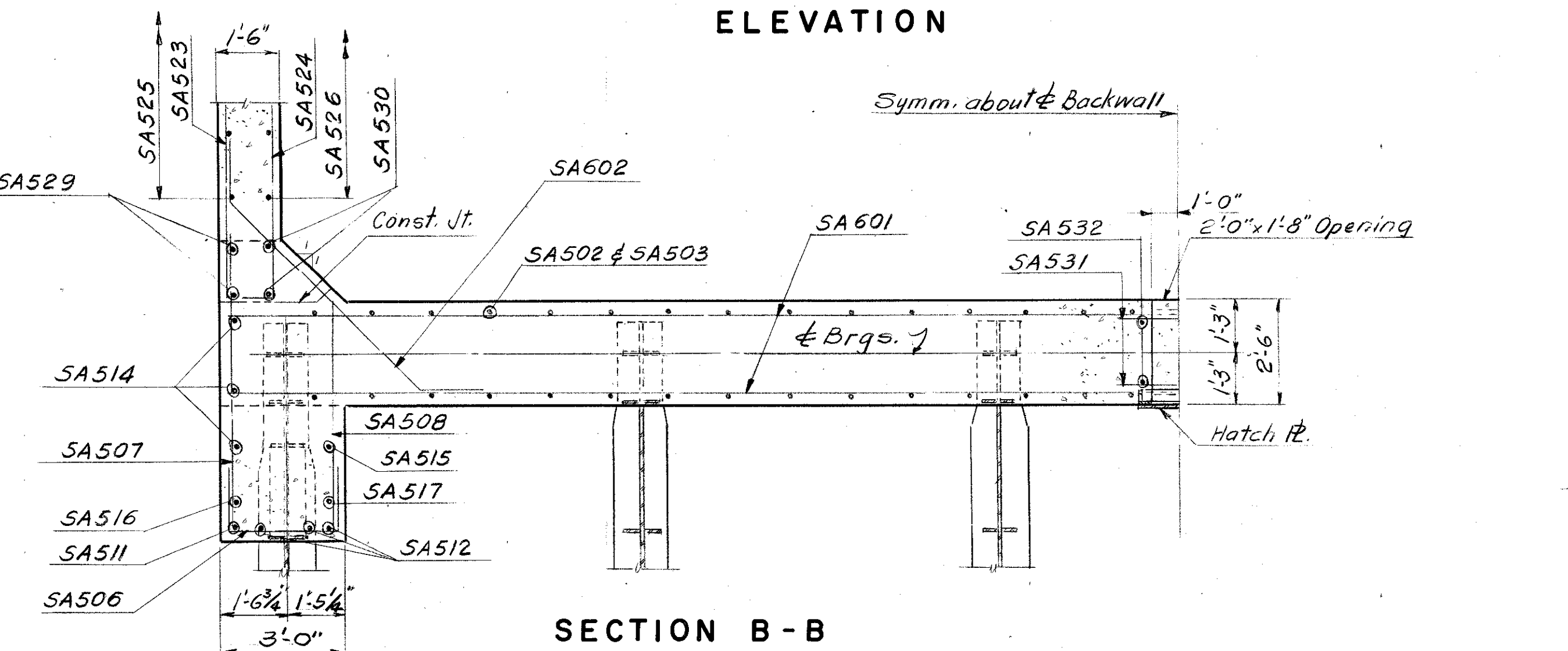
Note: Elevations shown on Section A-A are on ∇ Backwall.



SECTION C-C



SECTION A-A



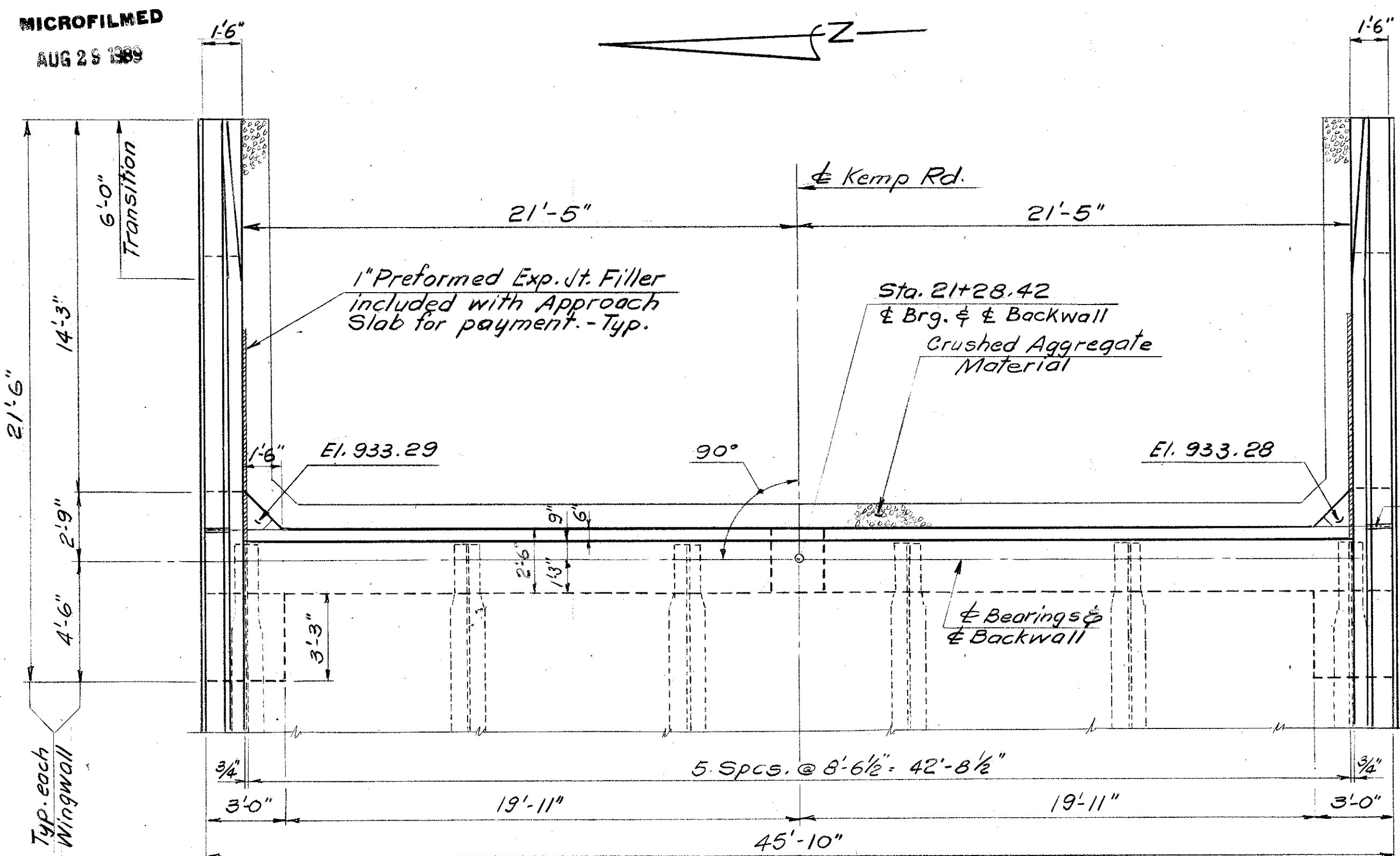
SECTION B-B

Note: Work this Sheet with Sh. 4/11

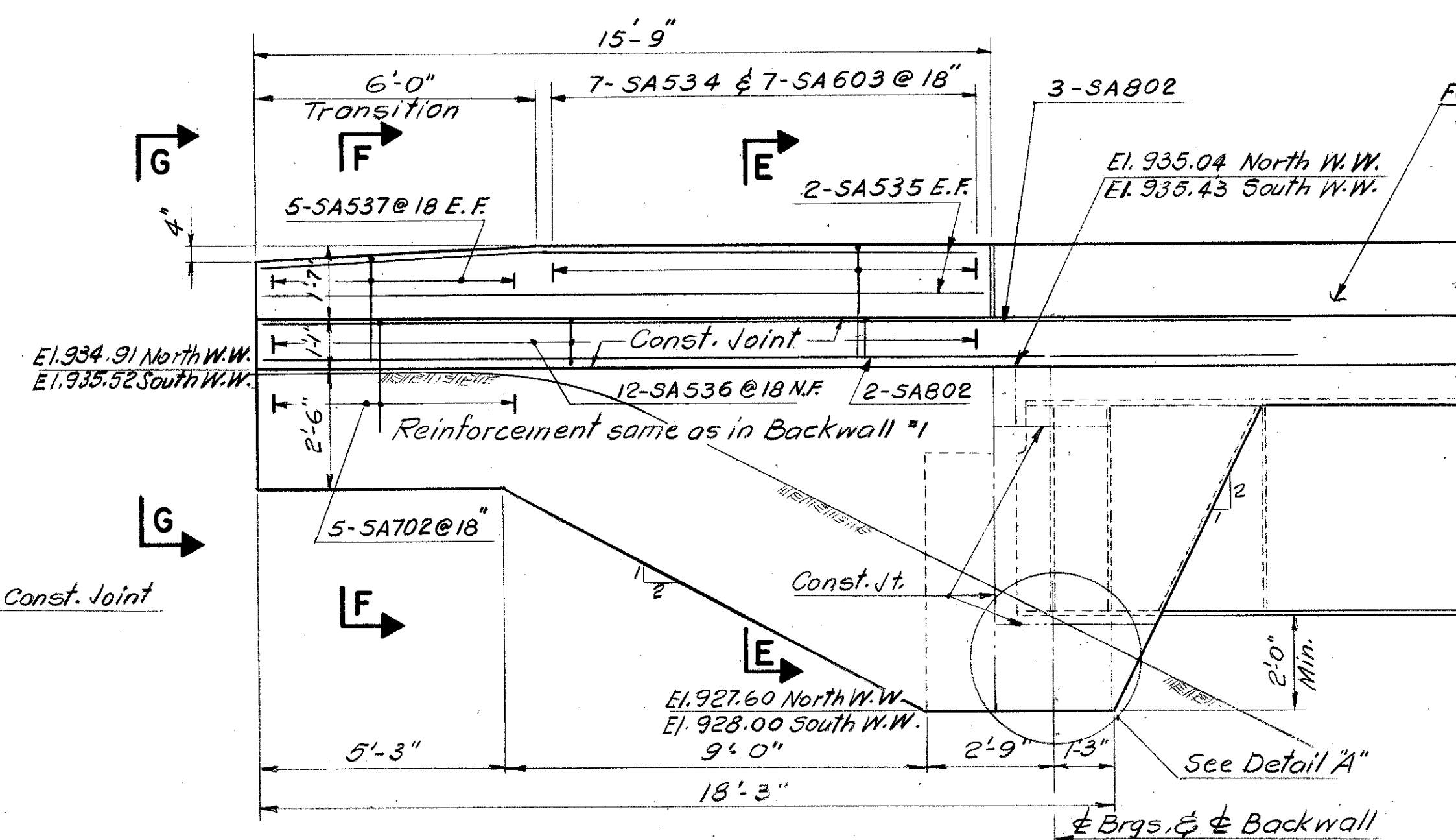
KING & GAVARIS		3/11
CONSULTING ENGINEERS, INC.		OHIO
INTEGRAL BACKWALL NO. I		
BRIDGE NO. GRE-675-0737		
1-675 UNDER KEMP RD.		
GREENE COUNTY	STA. 18+29.67 TO	
	STA. 21+29.17	
DESIGNED	DRAWN	TRACED
M.D.	N.V.	M.D.
CHECKED	REVIEWED	DATE

F.H.W.A. REGION	STATE	PROJECT
5	OHIO	

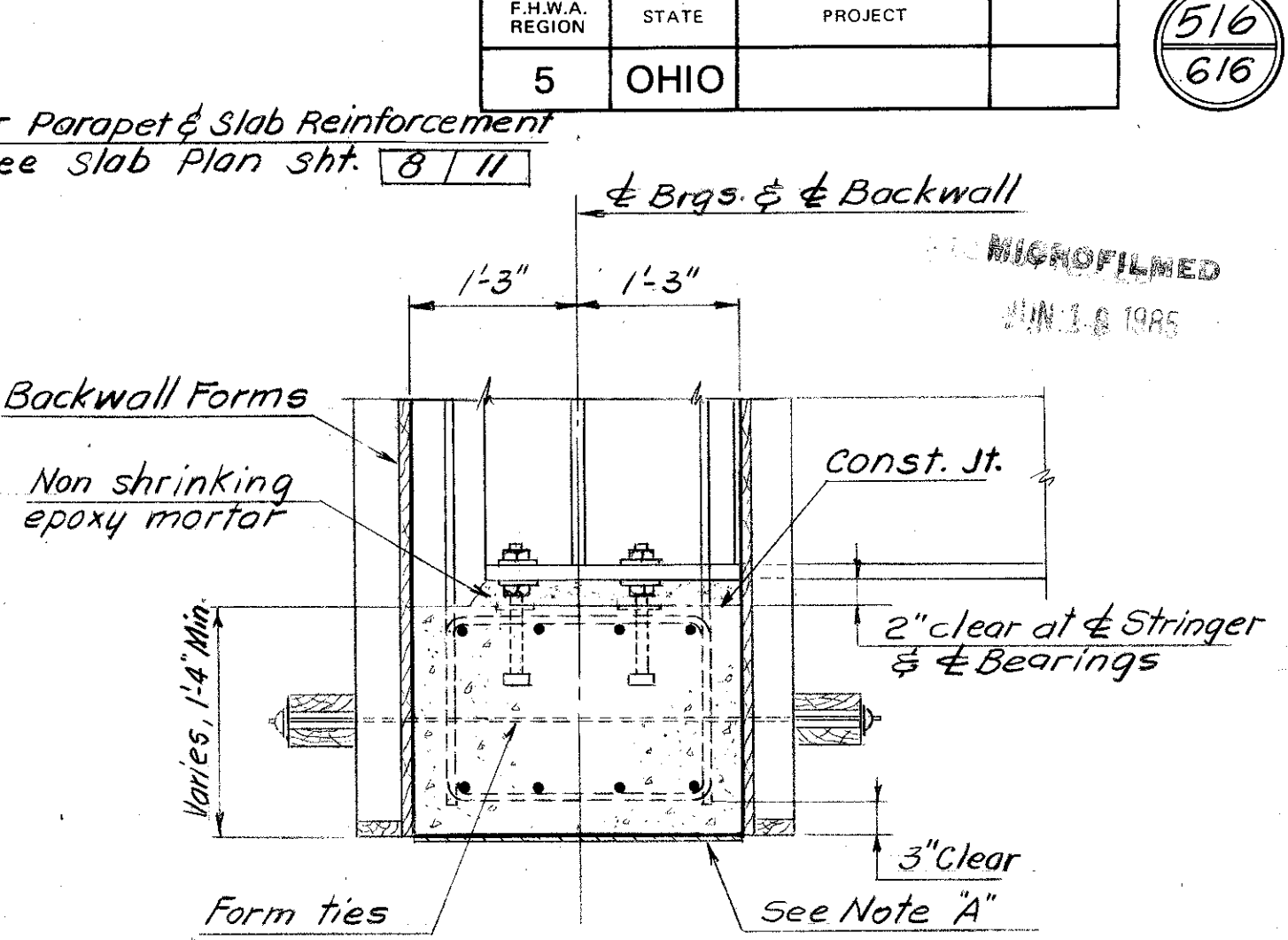
516
616



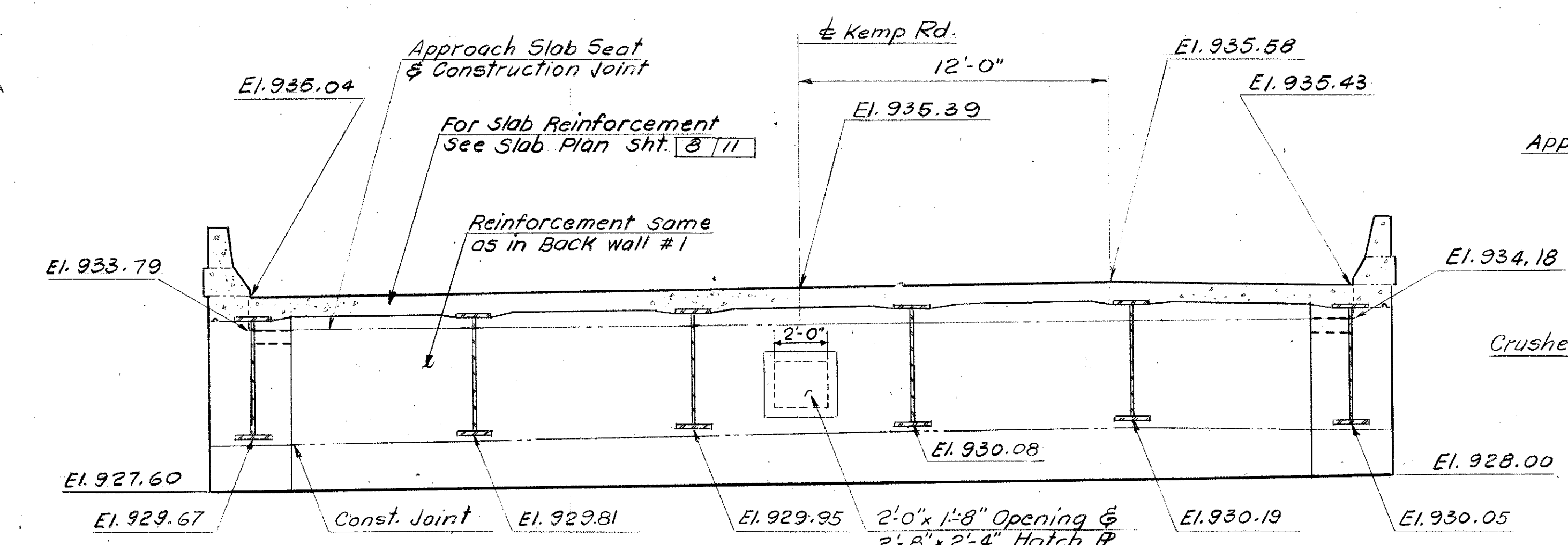
PLAN



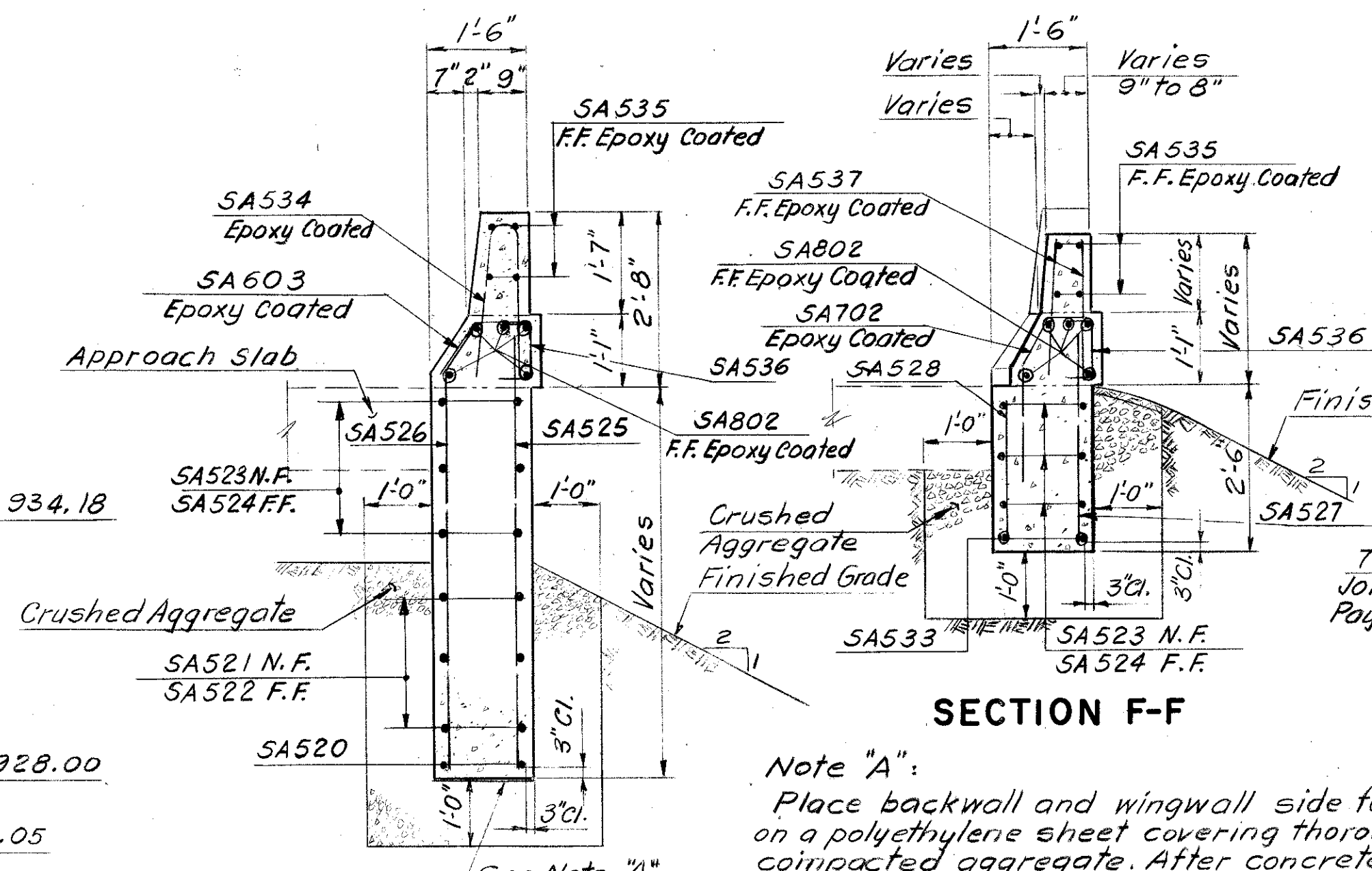
WINGWALL ELEVATION



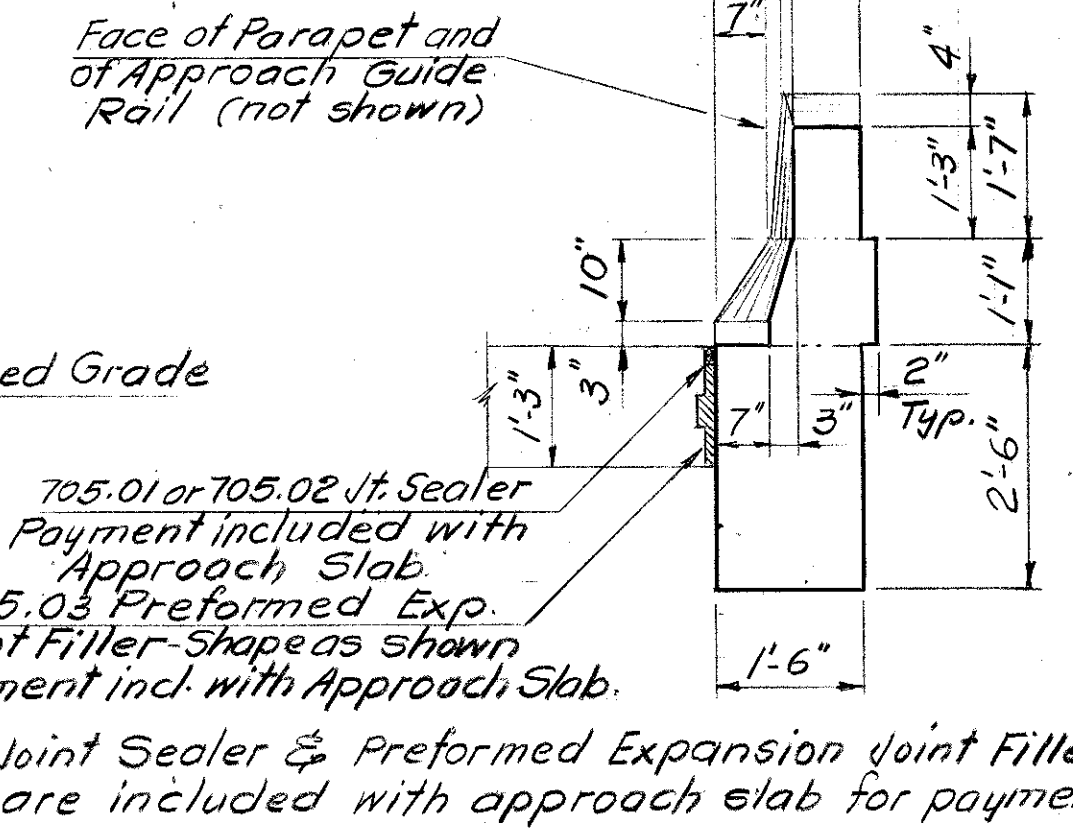
DETAIL "A" Note: For Anchor Bolts details see Sh. No. 7/11



ELEVATION



SECTION F-F

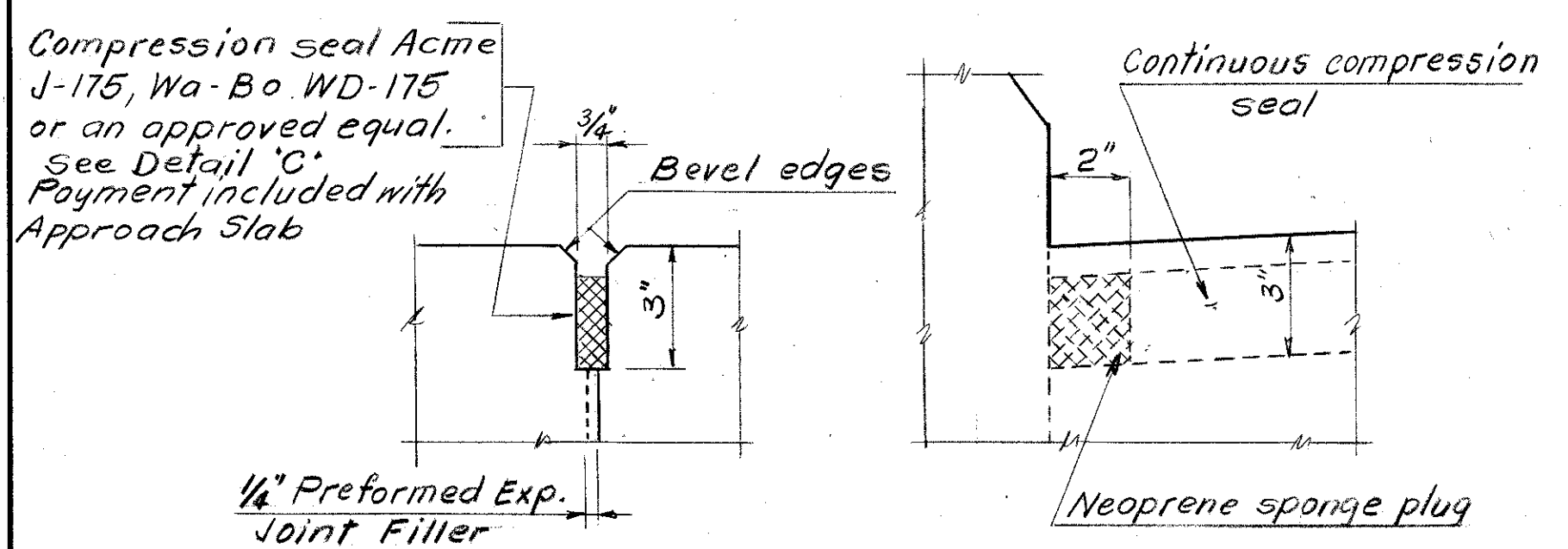


END VIEW G-G

Note: Elevations shown on Section are on \pm Backwall.

Note "A": Place backwall and wingwall side forms on a polyethylene sheet covering thoroughly compacted aggregate. After concrete placement and form removal, trim and remove exposed sheet and place the remainder of the aggregate to the proposed surface.

Note: Work this Sheet with Sht. 3/11



DETAIL "B" DETAIL "C" APPROACH SLAB CONSTRUCTION JOINT

Furnish $\frac{1}{4}$ " Preformed Expansion Joint Filler for backwalls without abutment support.

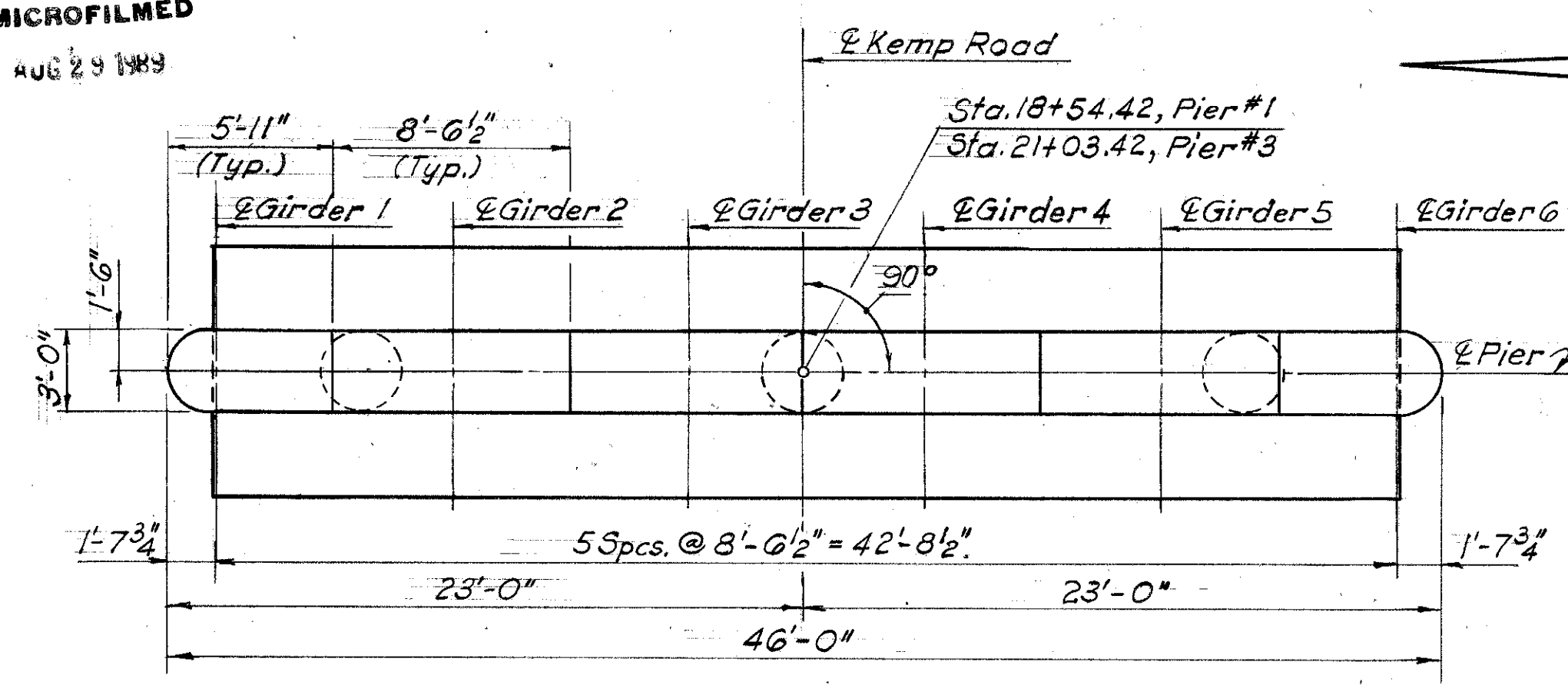
KING & GAVARIS		4/11	
CINCINNATI	CONSULTING ENGINEERS, INC.	OHIO	
INTEGRAL BACKWALL NO. 2			
BRIDGE NO. GRE-675-0737 1-675 UNDER KEMP RD.			
GREENE COUNTY		STA. 18+29.67 TO STA. 21+29.17	
DESIGNED	DRAWN	TRACKED	CHECKED
M.D.	N.V.	M.D.	M.D.
REVIEWED	DATE	REVIS	

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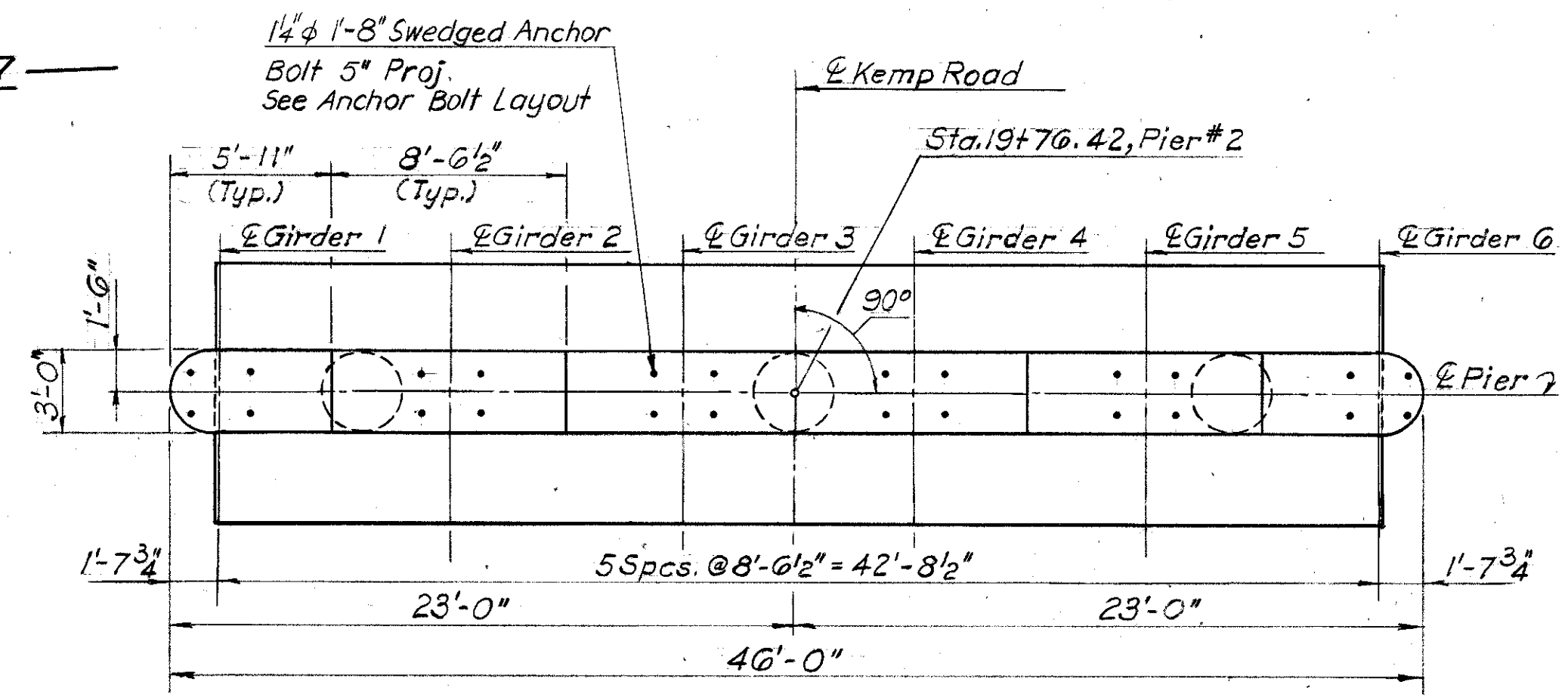
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5	OHIO	

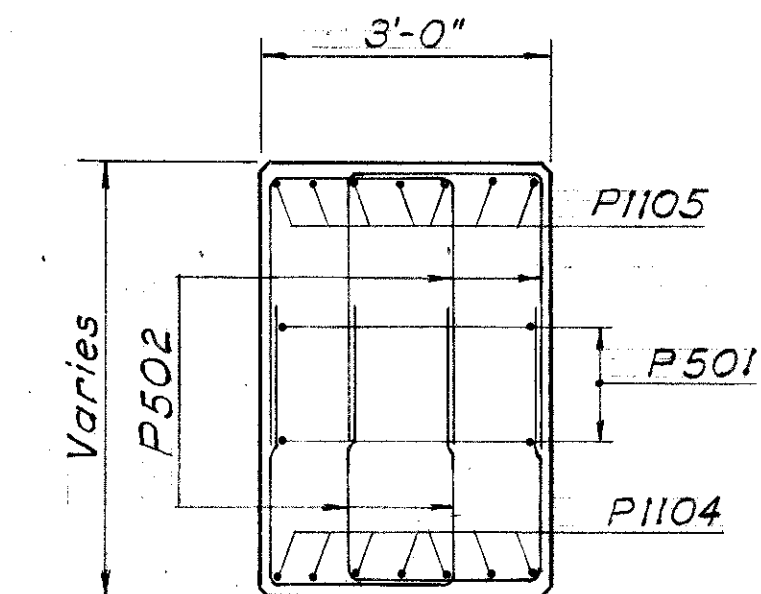
517
616



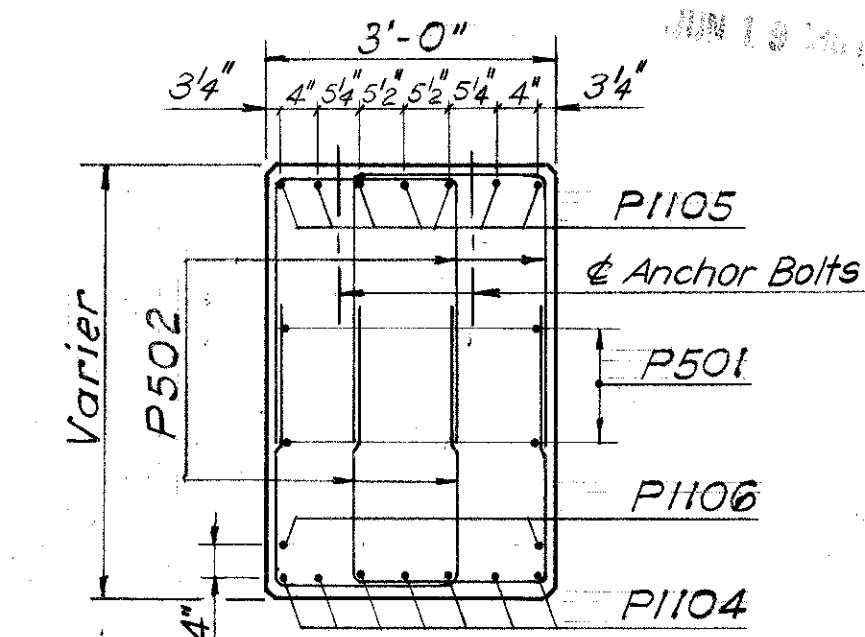
PLAN NO. 1 & NO. 3



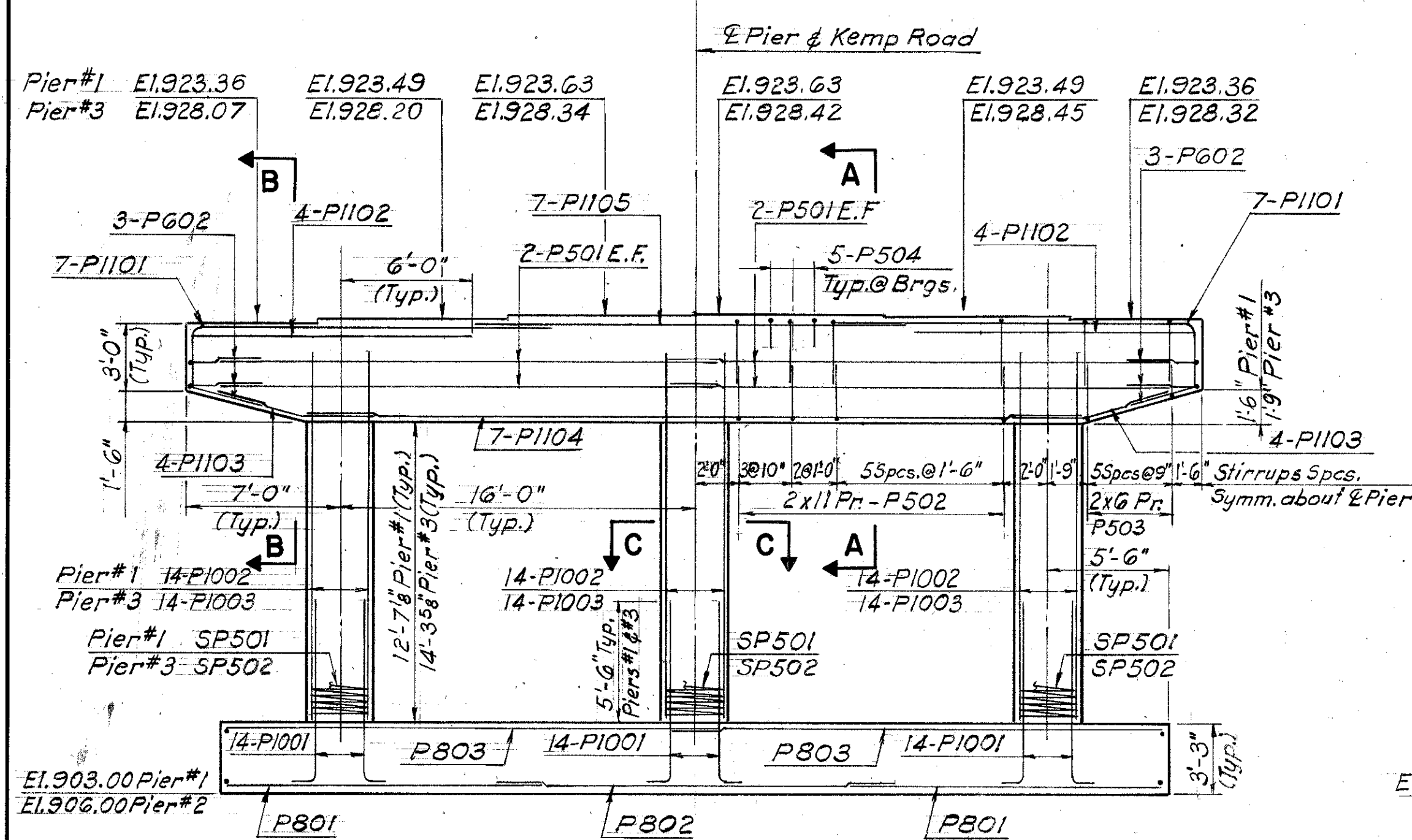
PLAN NO. 2



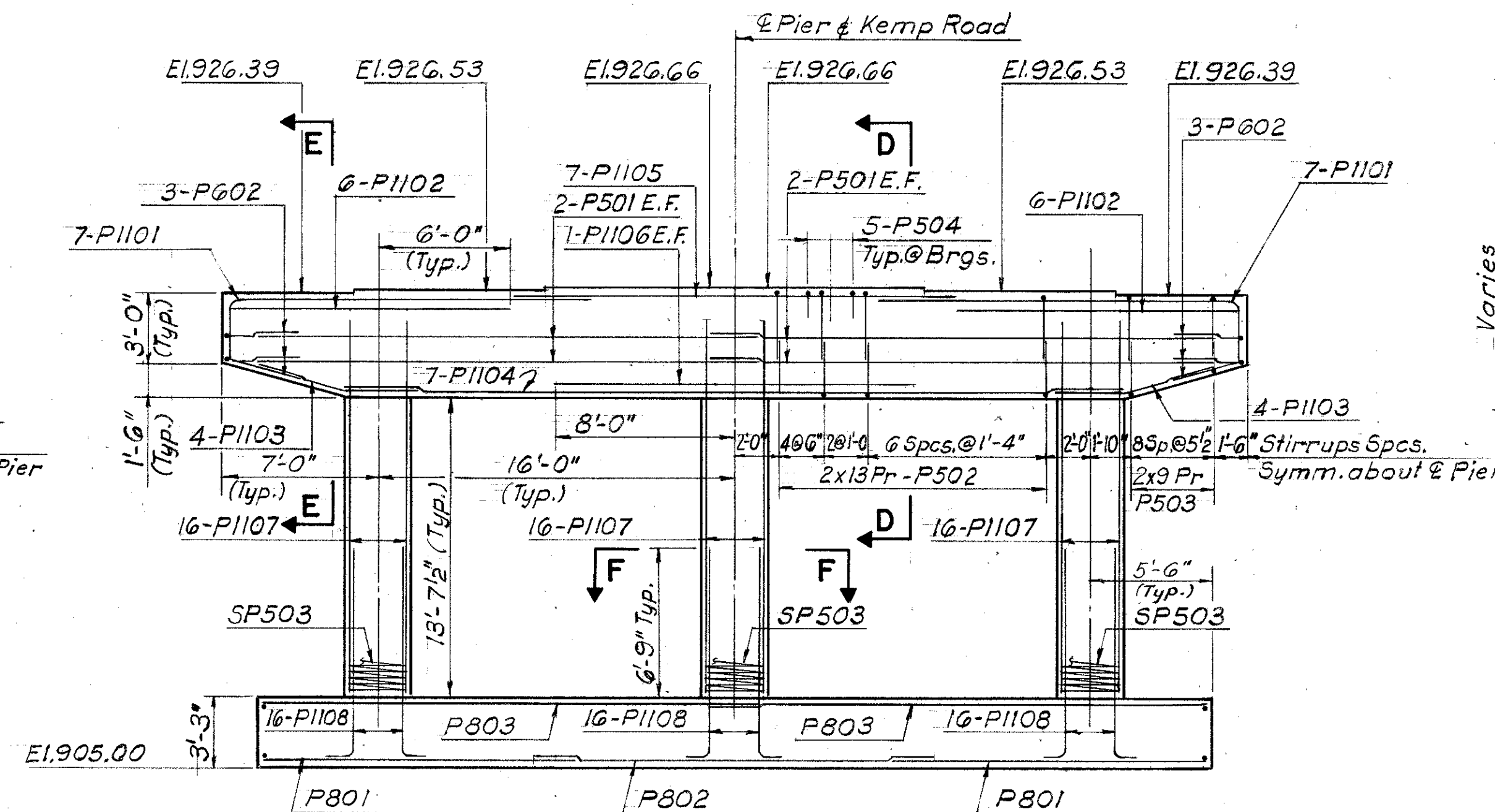
SECTION A-A



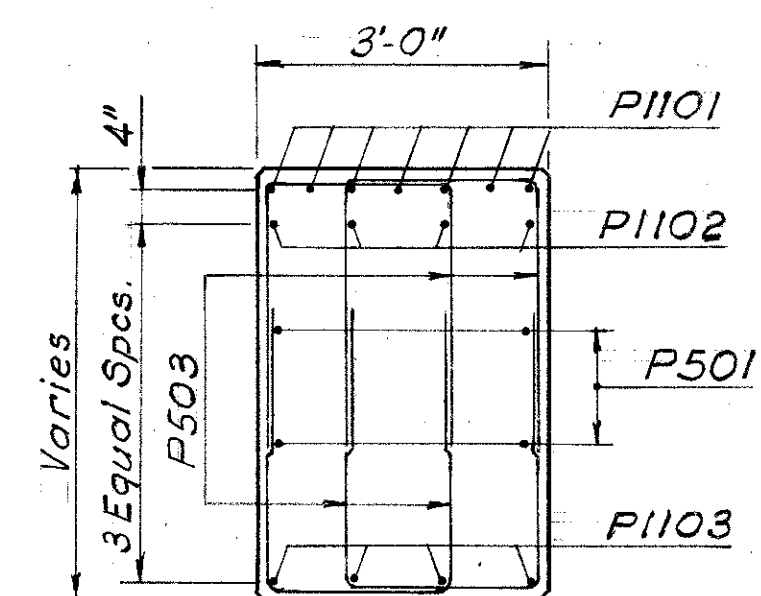
SECTION D-D



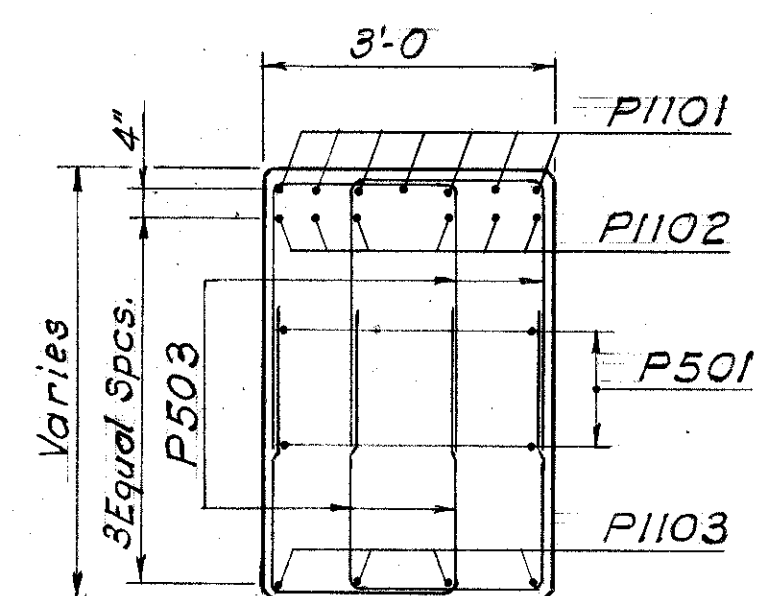
ELEVATION NO. 1 & NO. 3



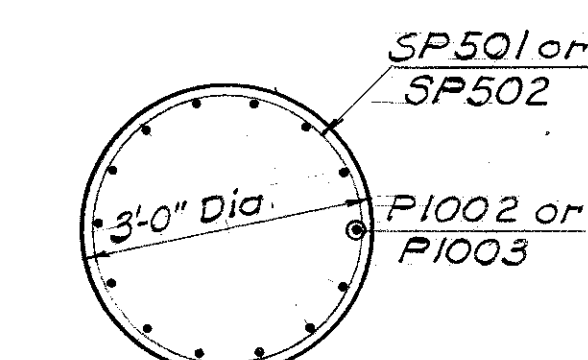
ELEVATION NO. 2



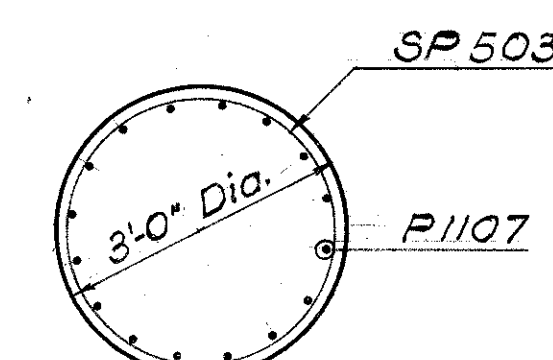
SECTION B-B



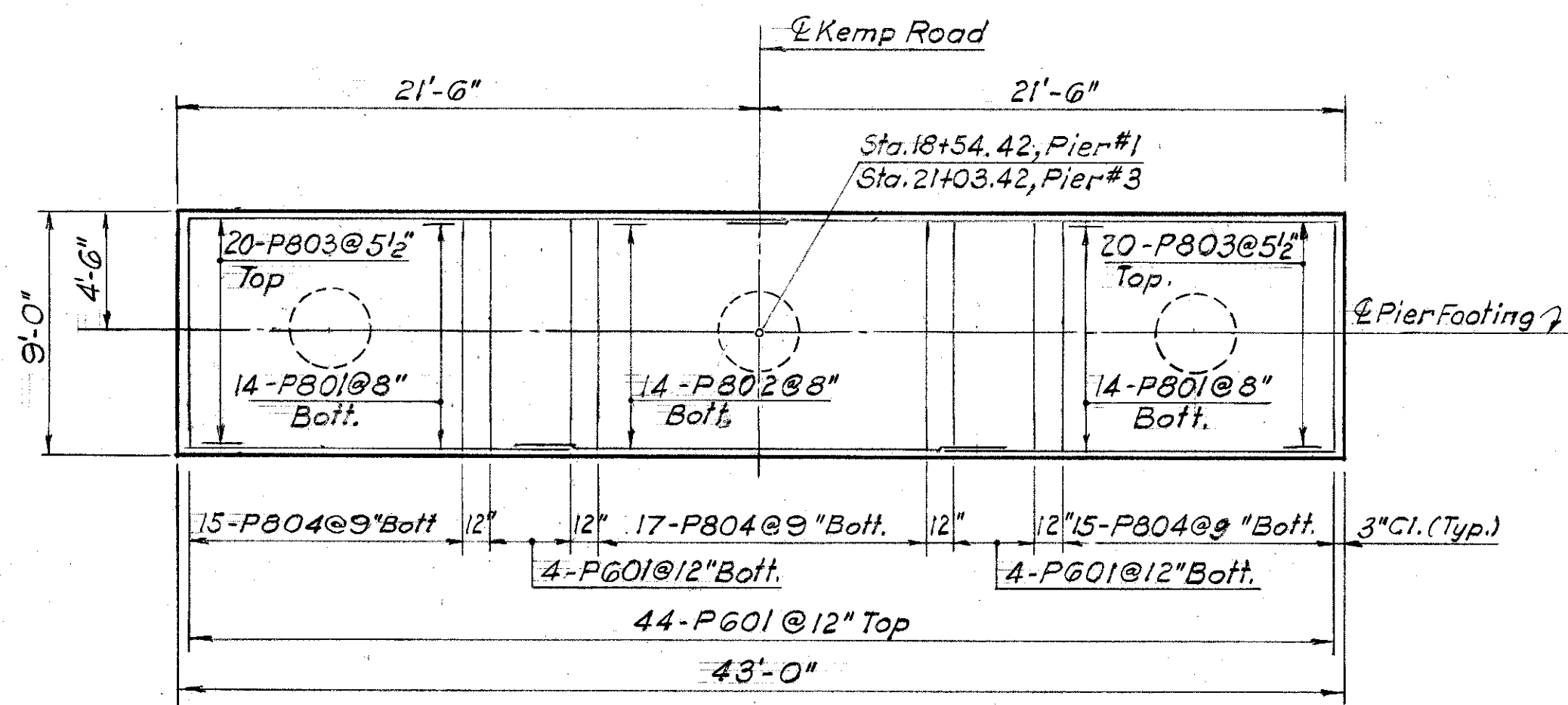
SECTION E-E



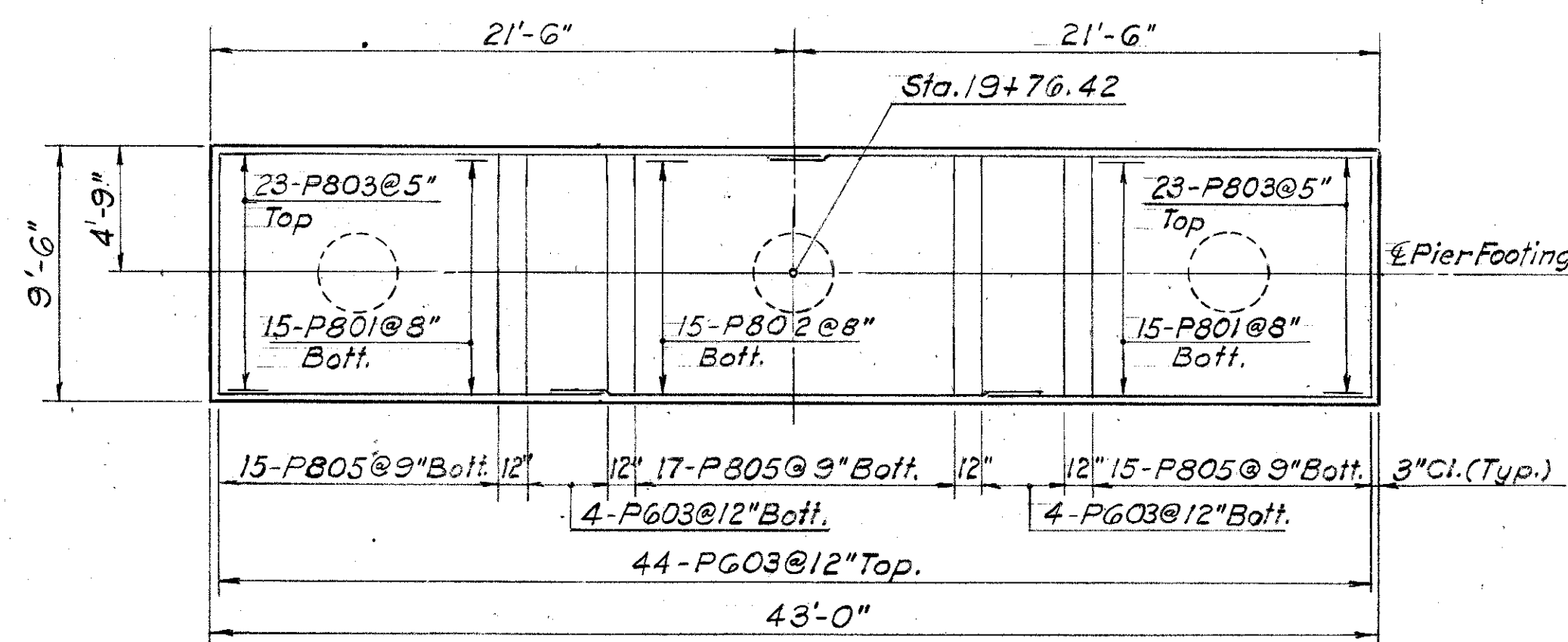
SECTION C-C



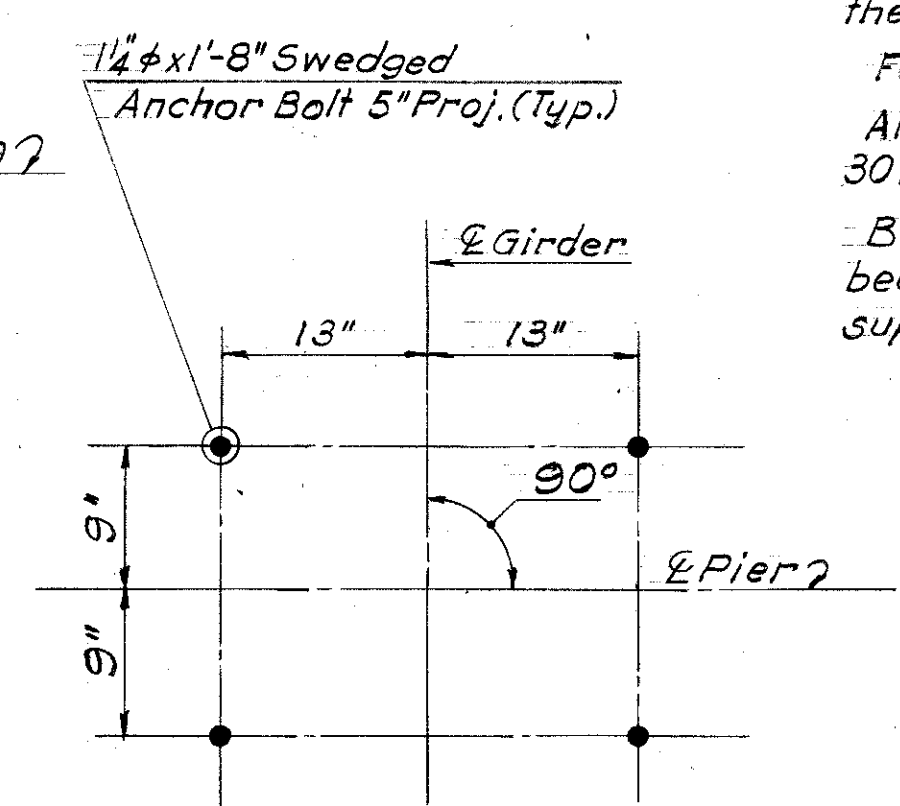
SECTION F-F



FOOTING PLAN NO. 1 & NO. 3



FOOTING PLAN NO. 2



ANCHOR BOLT LAYOUT

NOTES:

- 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.
- For Reinforcing Steel List see Sh. // 11
- All Splices and Dowels to be lapped min. 30 bar dia. unless otherwise shown.
- Bearing Anchors: At the option of the Contractor, bearing anchors (or formed holes) located and supported by templates, may be cast in place.

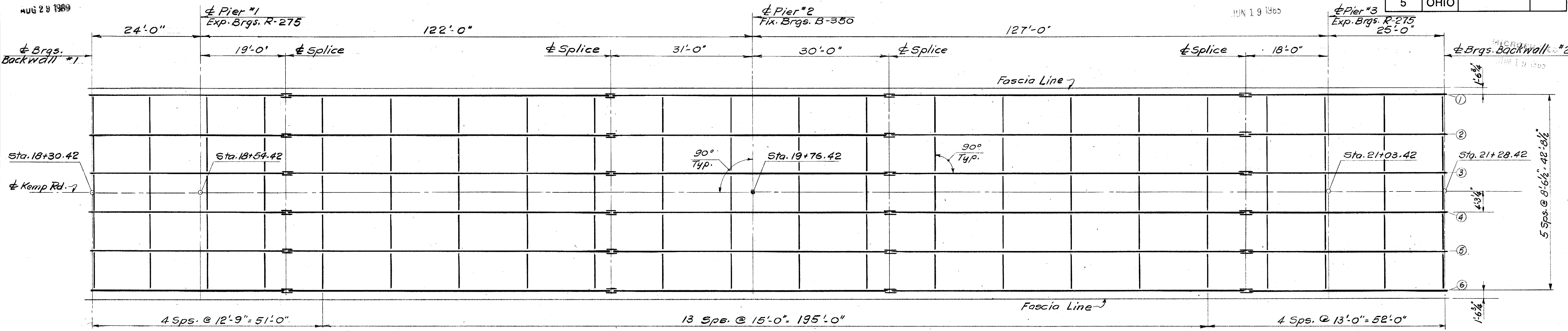
KING & GAVARIS CONSULTING ENGINEERS, INC.		5/11
CINCINNATI	OHIO	
PIERS		
BRIDGE NO. GRE-675-0737 I-675 UNDER KEMP RD.		
GREENE COUNTY	STA. 18+29.67 TO	
	STA. 21+29.17	
DESIGNED M.D.	DRAWN N.H.	TRACED M.D.
CHECKED M.D.	REVIEWED	DATE
		REVISED

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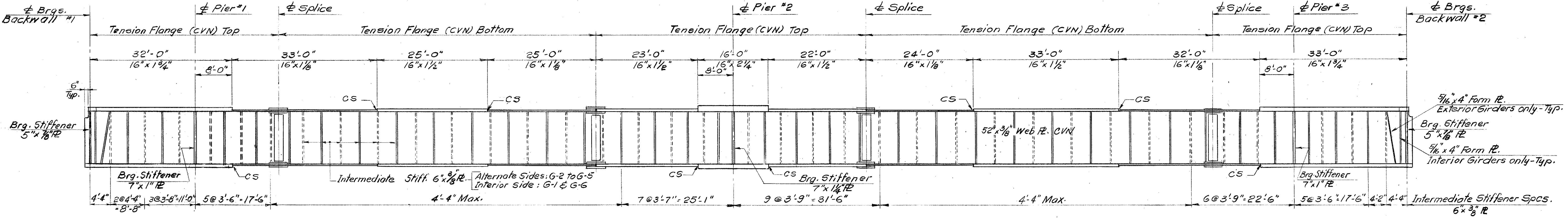
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JUN 19 1965

F.H.W.A. REGION	STATE	PROJECT
5	OHIO	

518
616



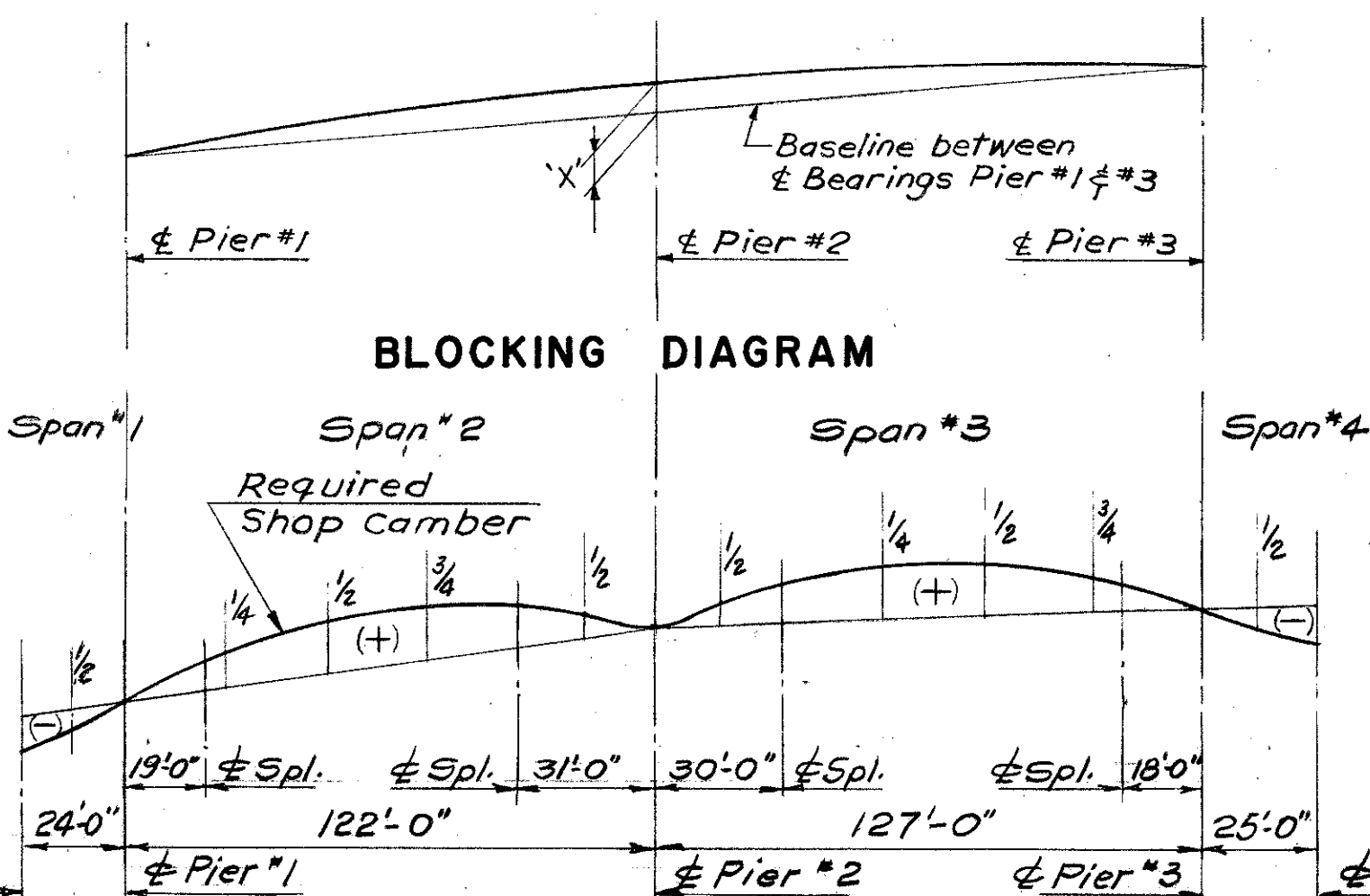
FRAMING PLAN



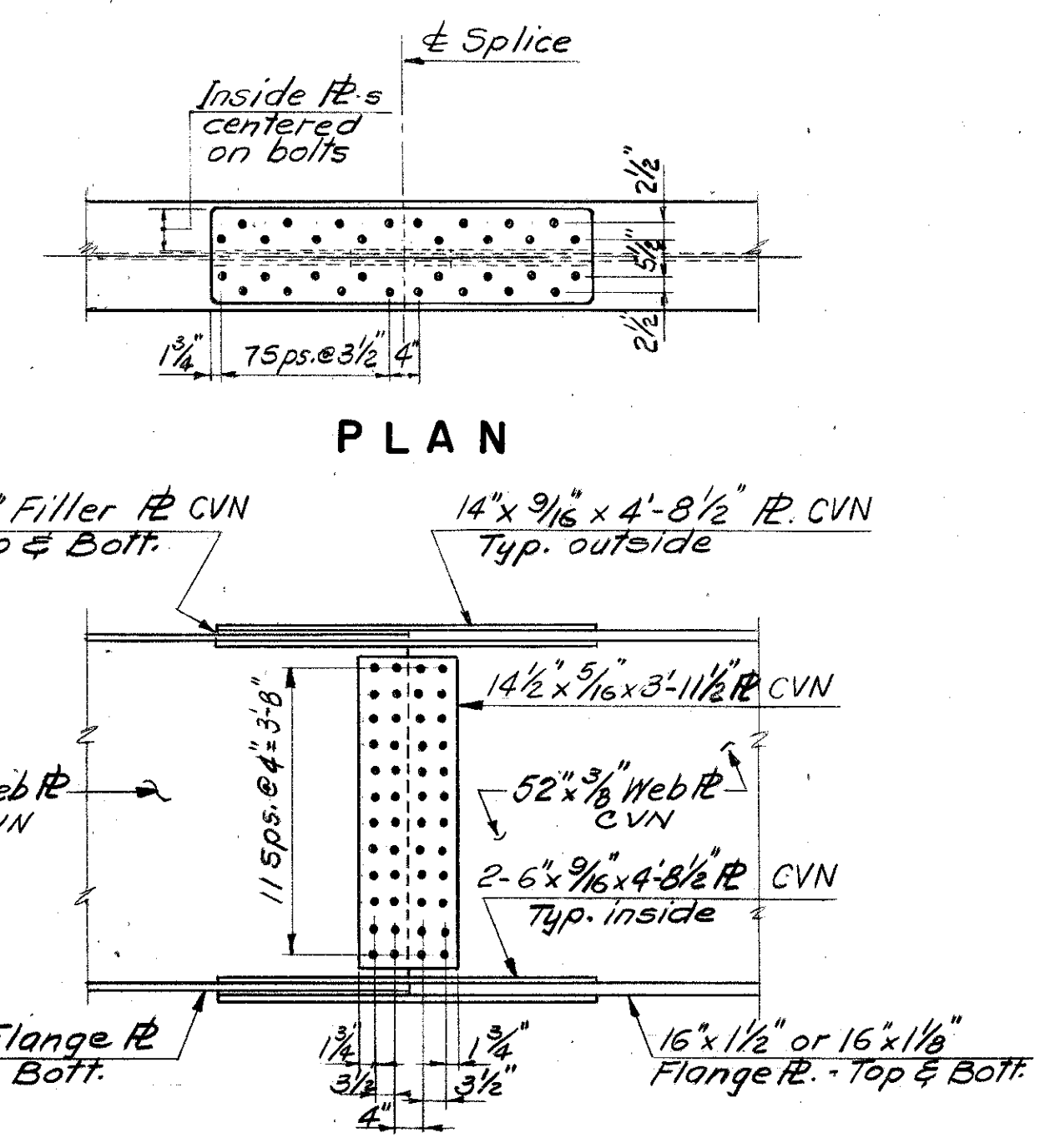
ELEVATION

Description	DEFLECTION AND CAMBER														Girder No.	
	Span 1		Span 2				Span 3				Span 4		End			
Deflection Weight of Steel	-1/16	0	1/8	1/8	5/16	5/16	1/8	1/16	3/16	3/8	3/8	1/4		3/16	-1/16	-1/16
Deflection Remaining Dead Load	-1/16	-1/8	3/8	1/2	7/8	7/8	1/16	1/16	1/4	1/16	1/16	1/16	1/2	-3/16	-1/4	1,6
Vertical Curve & Transition Adjustment	-2 1/2	-1 1/8	1 3/8	1 5/8	2 1/16	2 5/8	2	1 7/16	1 1/16	1 1/16	2 1/16	1 3/4	1 3/8	-1 1/4	-2 3/8	1,2,3
Required Shop Camber	-2 5/8	-1 1/4	2 1/16	2 1/2	4	4 3/16	2 3/16	1 7/16	1 7/16	2 1/16	4 1/8	2 1/16	2 1/16	-1 3/8	-2 3/8	2,3
	-2 5/8	-1 1/4	1 7/8	2 1/4	3 5/8	3 3/16	2 3/16	1 5/16	1 1/2	1 1/2	4 1/8	2 1/16	2 1/16	-1	-2 1/8	4
	-2 5/8	-1 1/4	1 7/8	2 1/4	3 5/8	3 3/16	2 3/16	1 5/16	1 1/2	1 1/2	4 1/8	2 1/16	2 1/16	-1	-2 1/8	5
	-2 5/8	-1 1/4	1 7/8	2 1/4	3 5/8	3 3/16	2 3/16	1 5/16	1 1/2	1 1/2	4 1/8	2 1/16	2 1/16	-1	-2 1/8	6

Dimension	BLOCKING ORDINATES		
	Girders 1,2,3	Girder 4	Girder 5,6
± Pier #2 Dim. 'X'	+11"	+10 7/16"	+9 1/2"



CAMBER ALIGNMENT DIAGRAM



SPlice DETAIL

All bolts - 1" A325 F High Strength

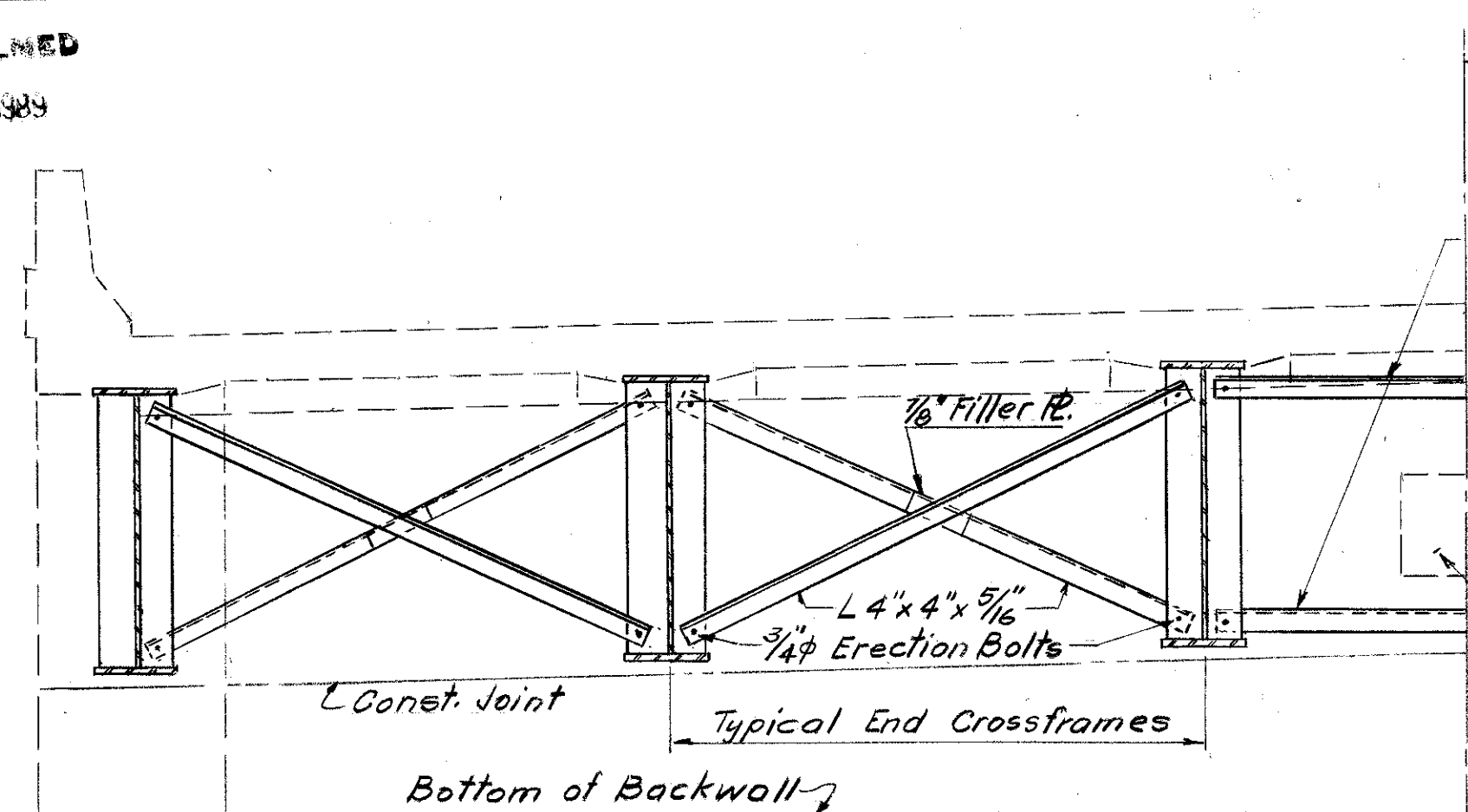
NOTES:
For details of Expansion Bearing R-275, see Std. Dwg. RB-1-55.
For Typical Transverse Section, see Sht. 3/11.
Work this Sheet with Sht. 7/11
Structural steel-ASTM A588-Unit stress 27,000 Psi.
Where a Shape or Plate is designated (CVN) the material shall meet specified minimum notch toughness requirements.

KING & GAVARIS CONSULTING ENGINEERS, INC.		6/11
OHIO		
STEEL FRAMING PLAN		
BRIDGE NO. GRE-675-0737 1-675 UNDER KEMP ROAD		
GREENE COUNTY	STA. 18+29.67 TO STA. 21+29.17	
DESIGNED M.D.	DRAWN N.V.	TRACED M.D.
CHECKED M.D.	REVIEWED	DATE

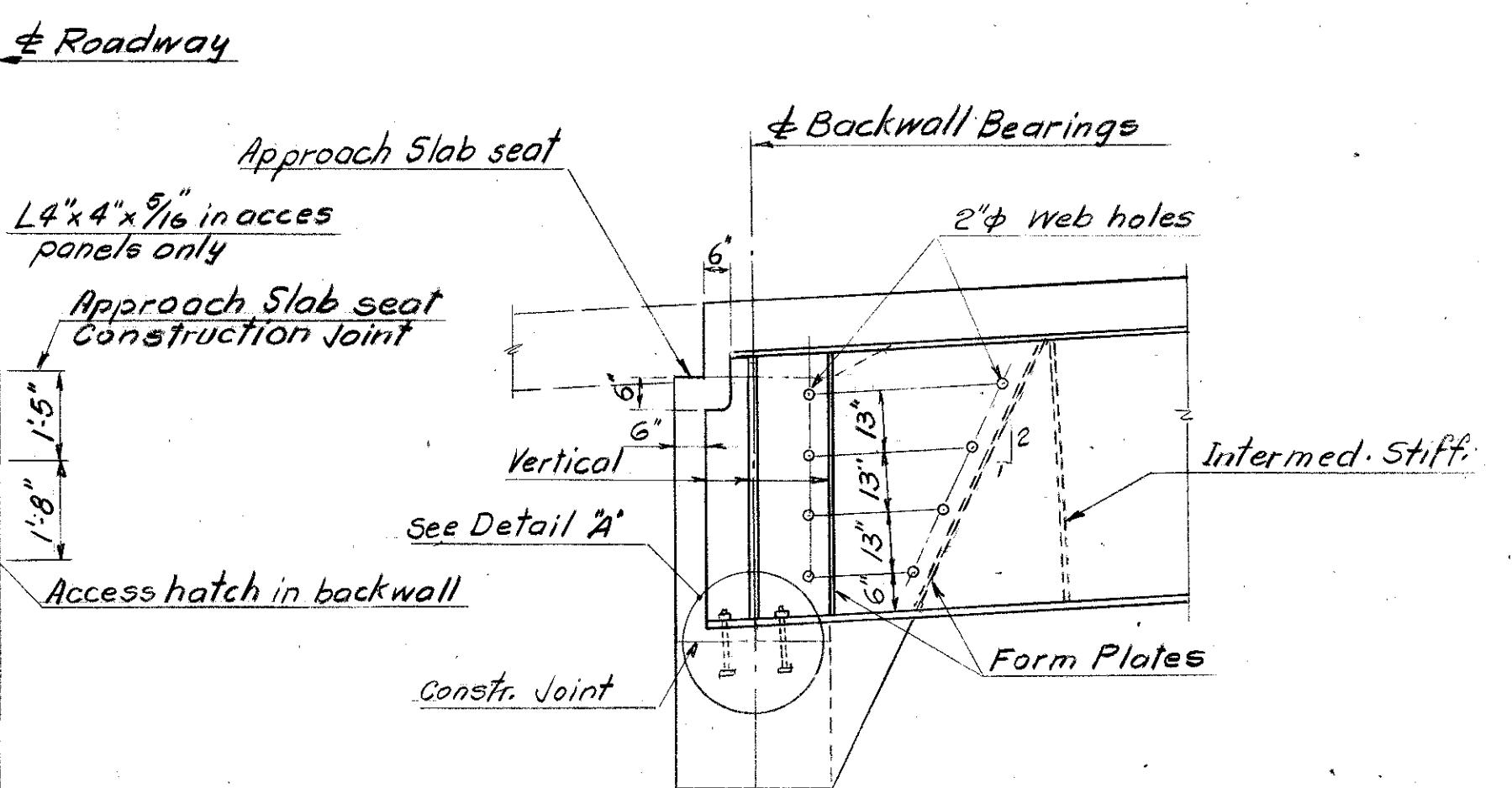
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F.H.W.A. REGION	STATE	PROJECT
5	OHIO	

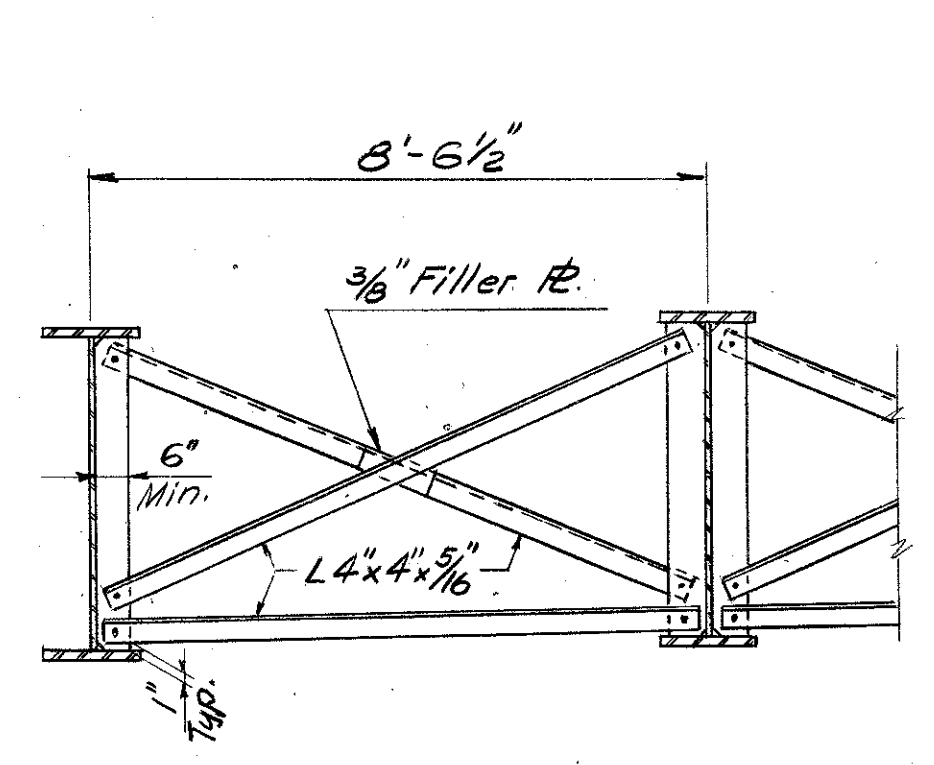
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616



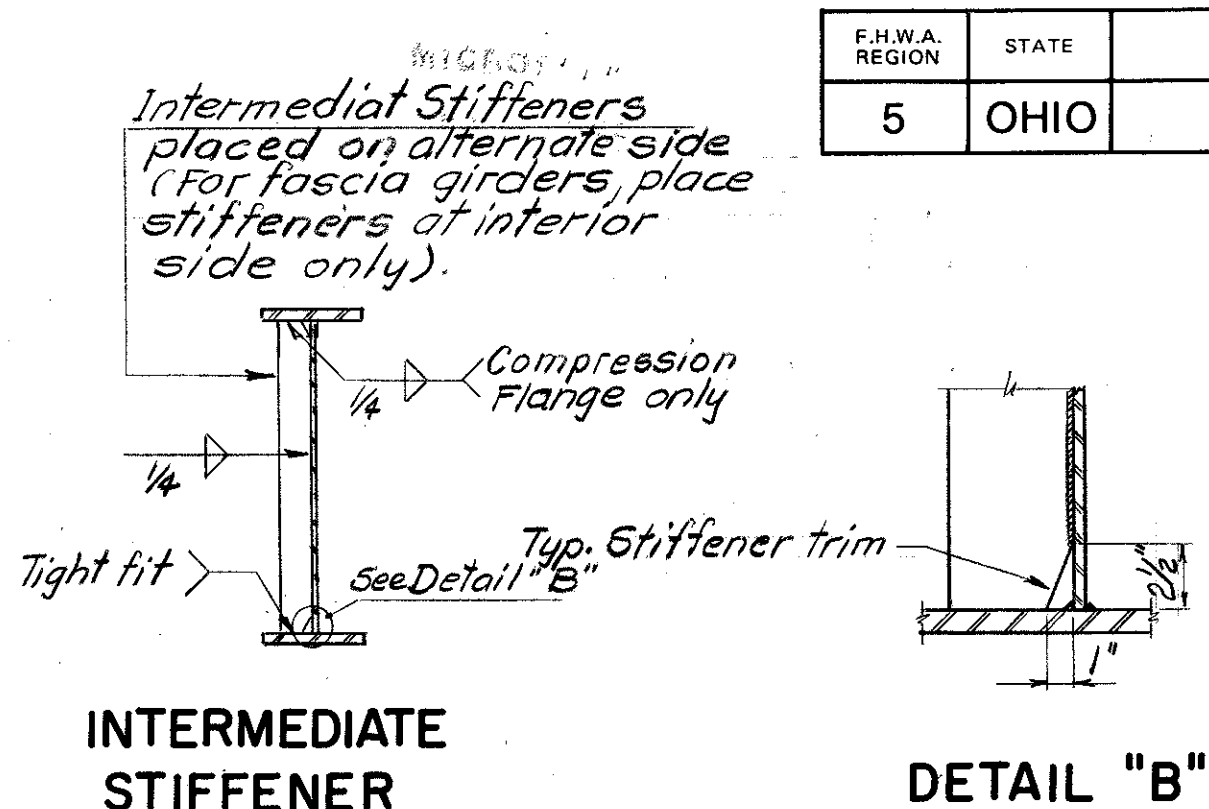
TYPICAL END CROSSFRAMES



PART ELEVATION
SUPERSTRUCTURES AT INTEGRAL BACKWALL

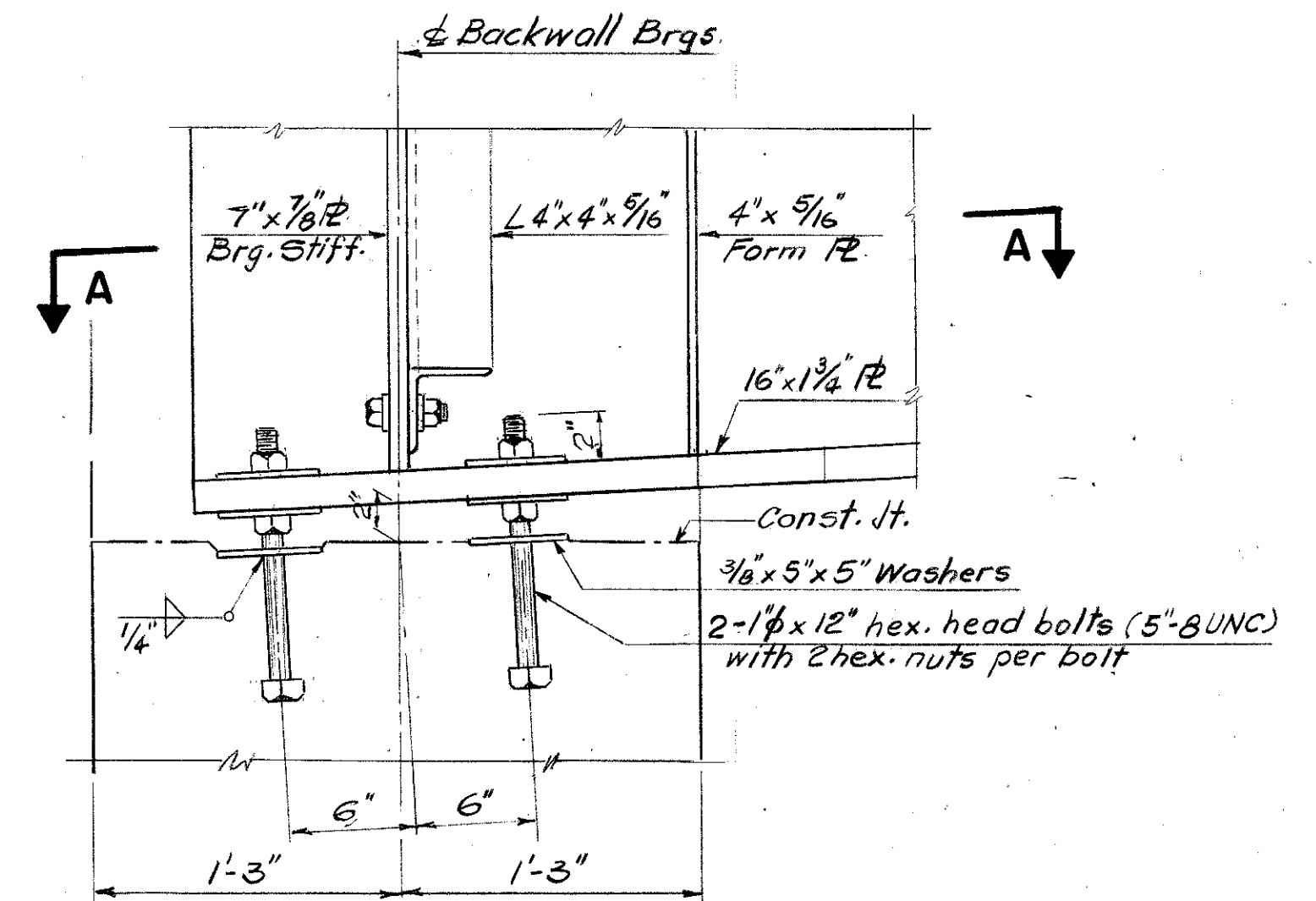


INTERMEDIATE CROSSFRAME

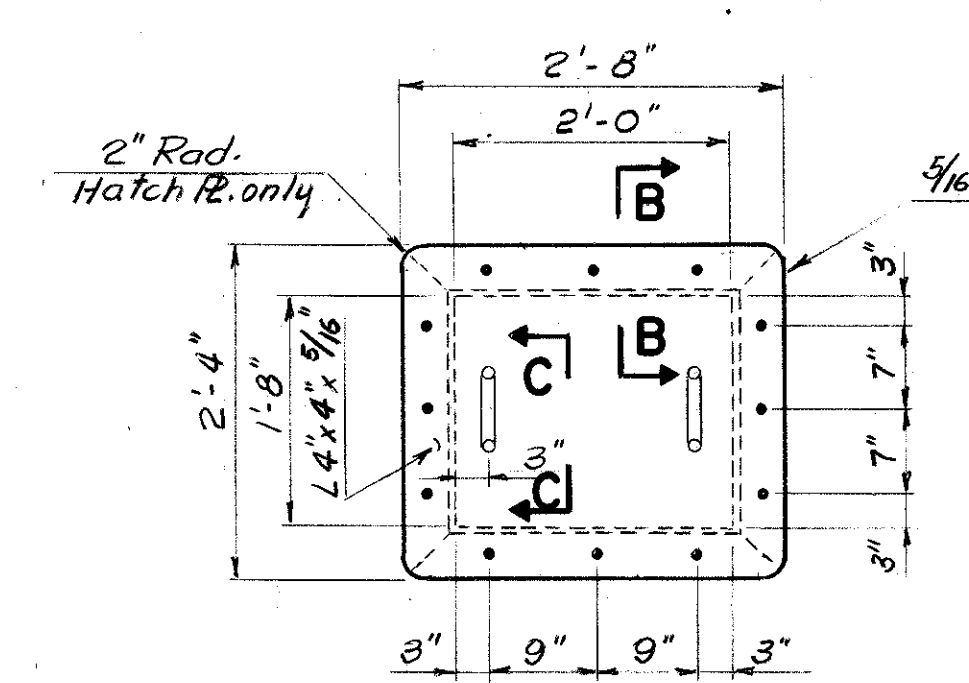


INTERMEDIATE STIFFENER

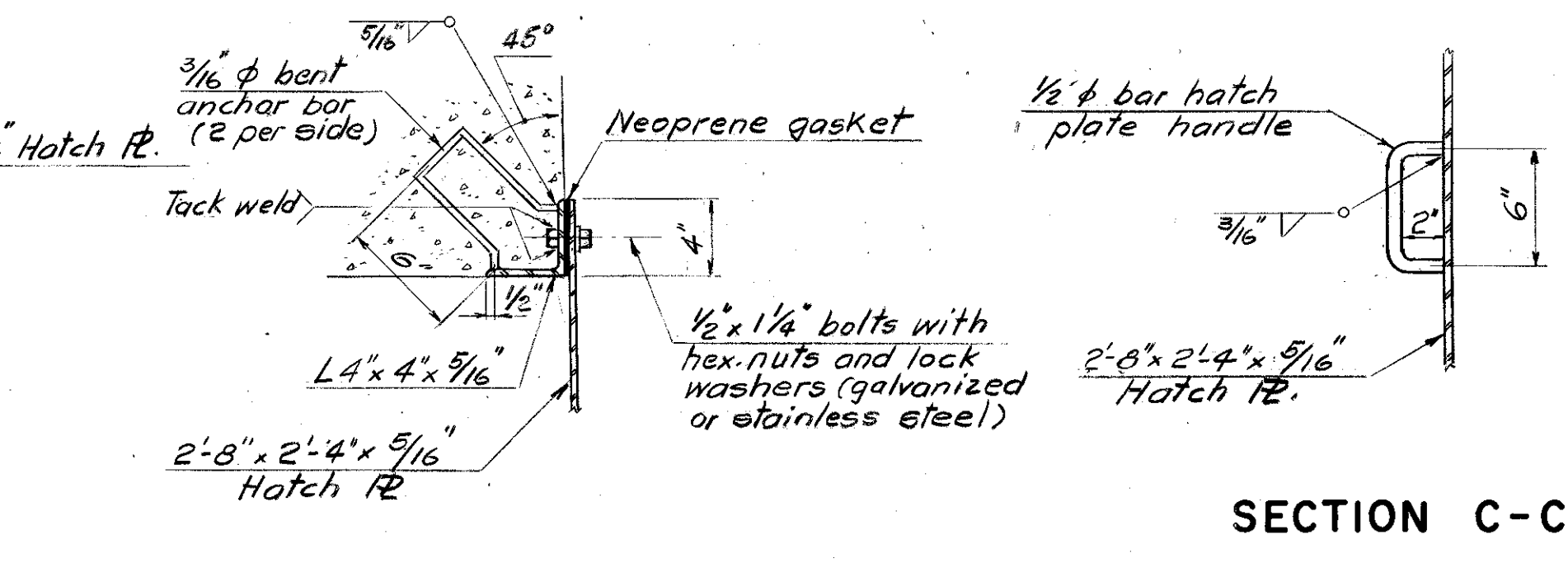
DETAIL "B"



DETAIL "A"

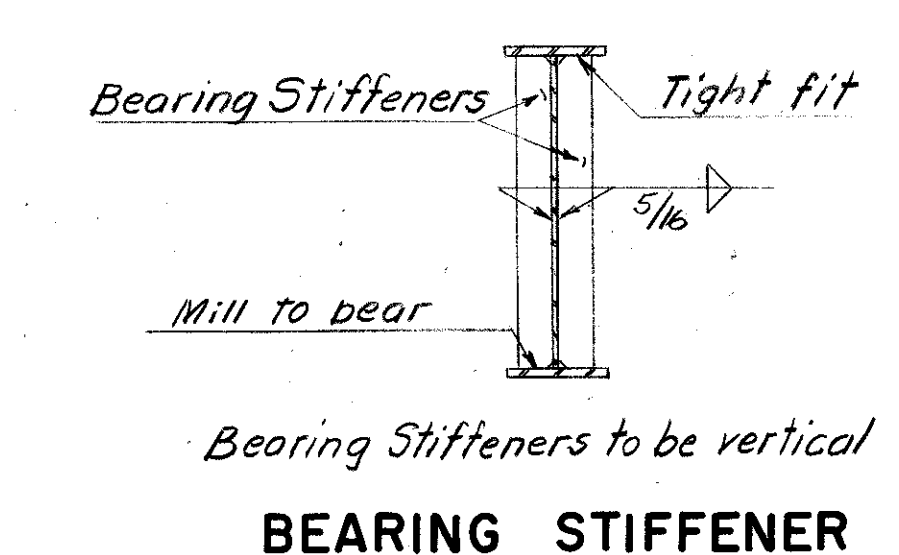


ACCESS HATCH

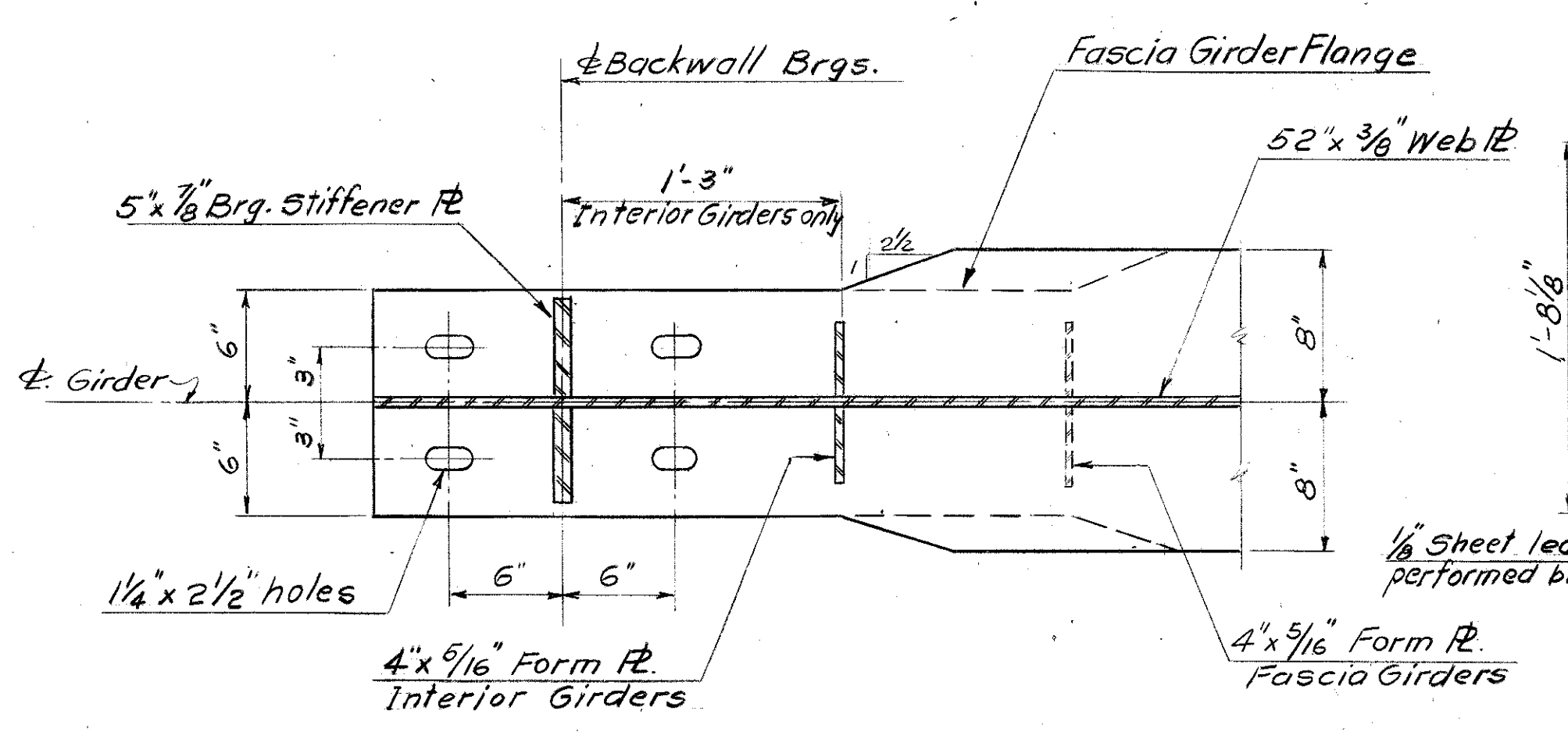


SECTION B-B

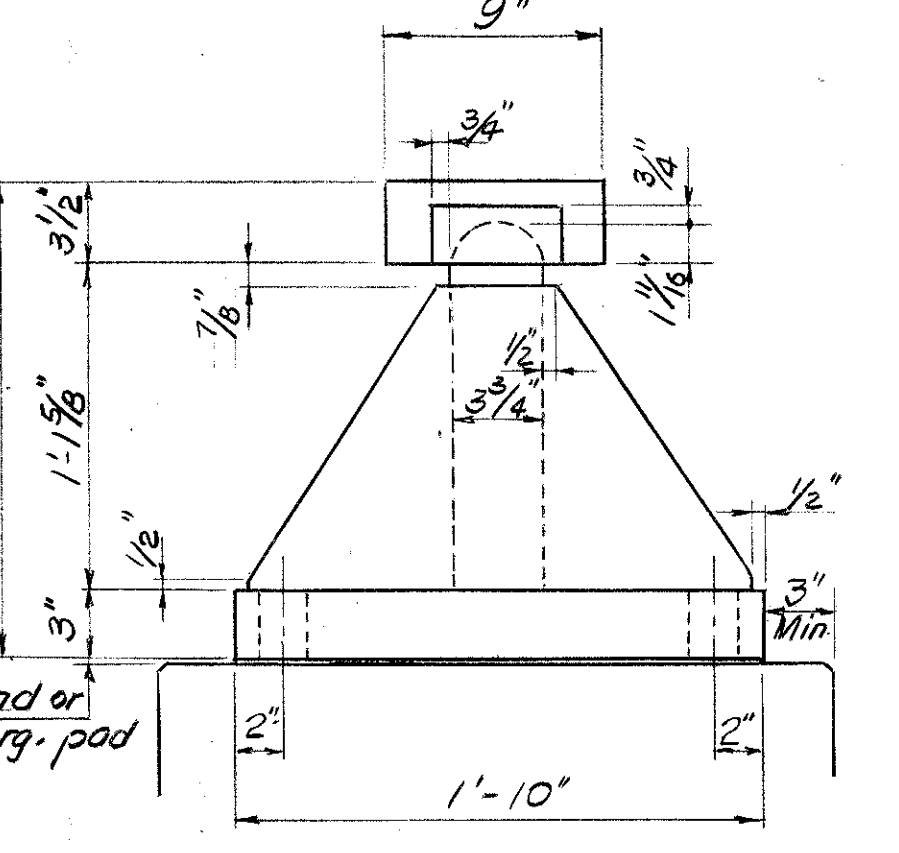
SECTION C-C



BEARING STIFFENER

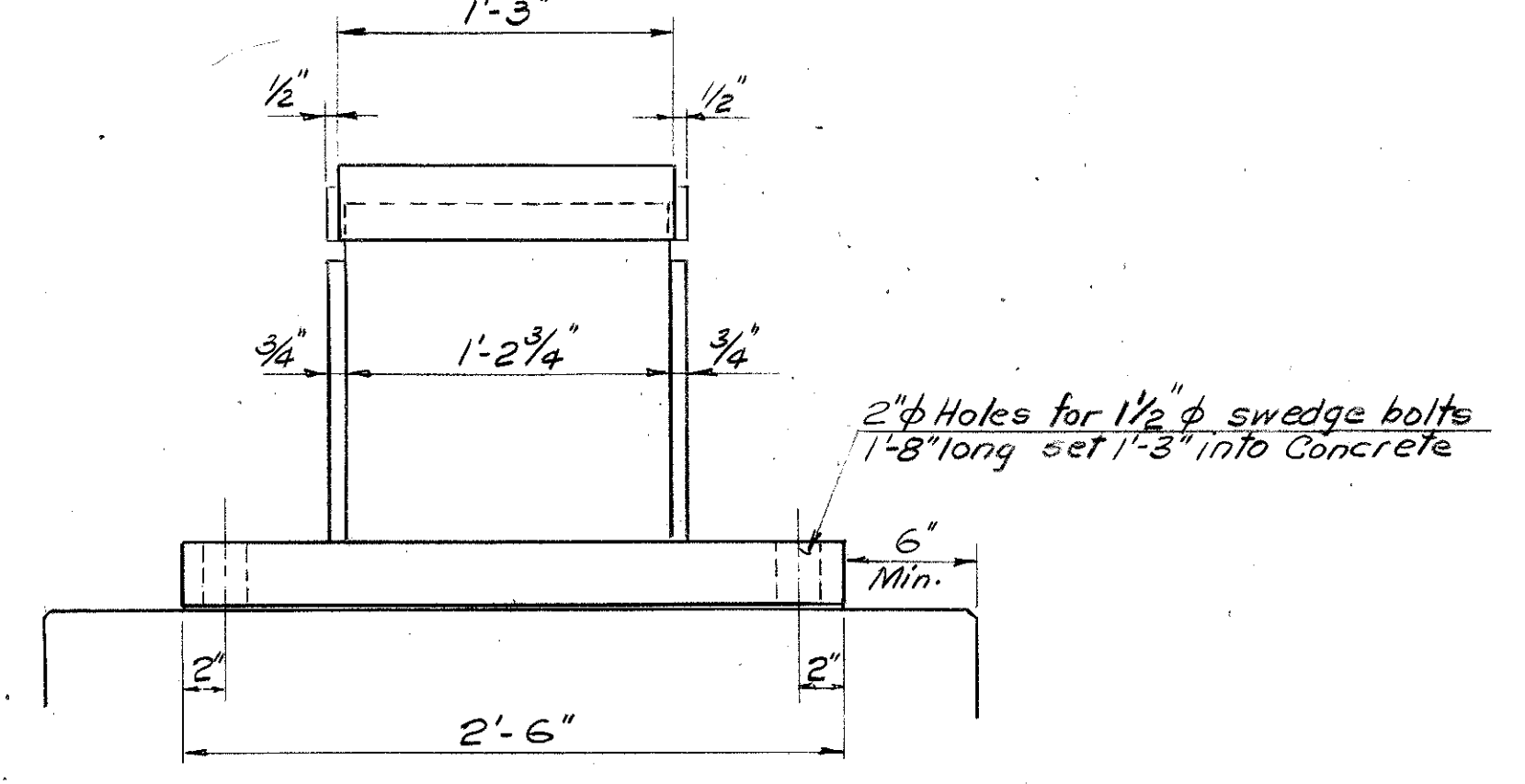


SECTION A-A



Note: For additional details, see Std. Dwg. RB-1-55

SPECIAL BOLSTER DETAIL B-350



Note:
Work this Sheet with Sht. 611

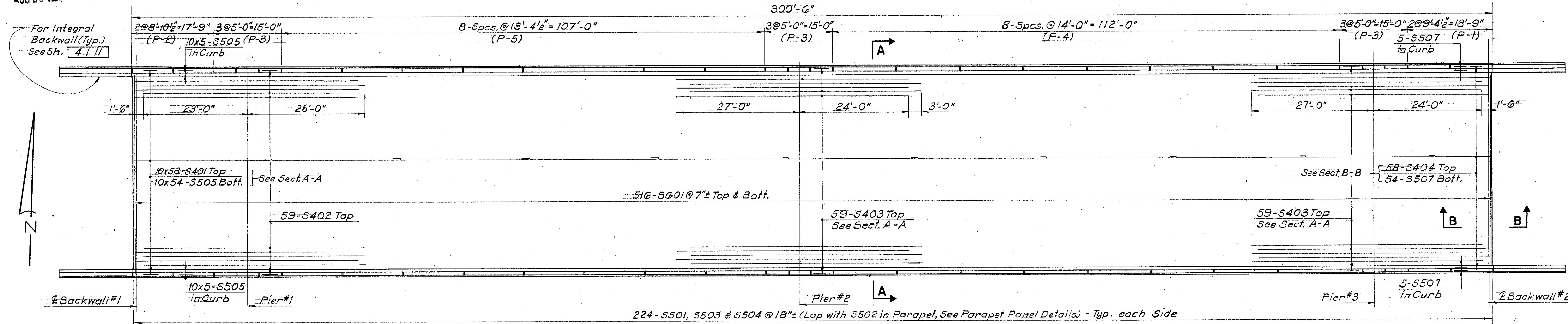
KING & GAVARIS CONSULTING ENGINEERS, INC. CINCINNATI OHIO		7/11
SUPERSTRUCTURE DETAILS		
BRIDGE NO. GRE-675-0737 1-675 UNDER KEMP ROAD		
GREENE COUNTY	STA. 18+29.67 TO STA. 21+29.17	
DESIGNED M.D.	DRAWN N.V.	TRACED M.D.
CHECKED M.D.	REVIEWED	DATE

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AUG 29 1989

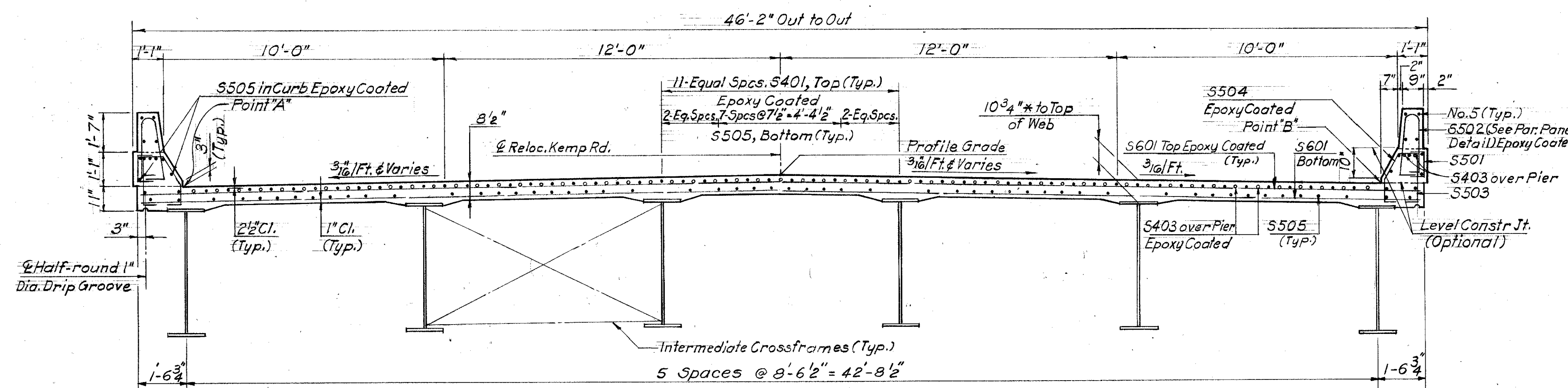
MICROFILMED
JUN 19 1985

F.H.W.A. REGION	STATE	PROJECT
5	OHIO	

520
616

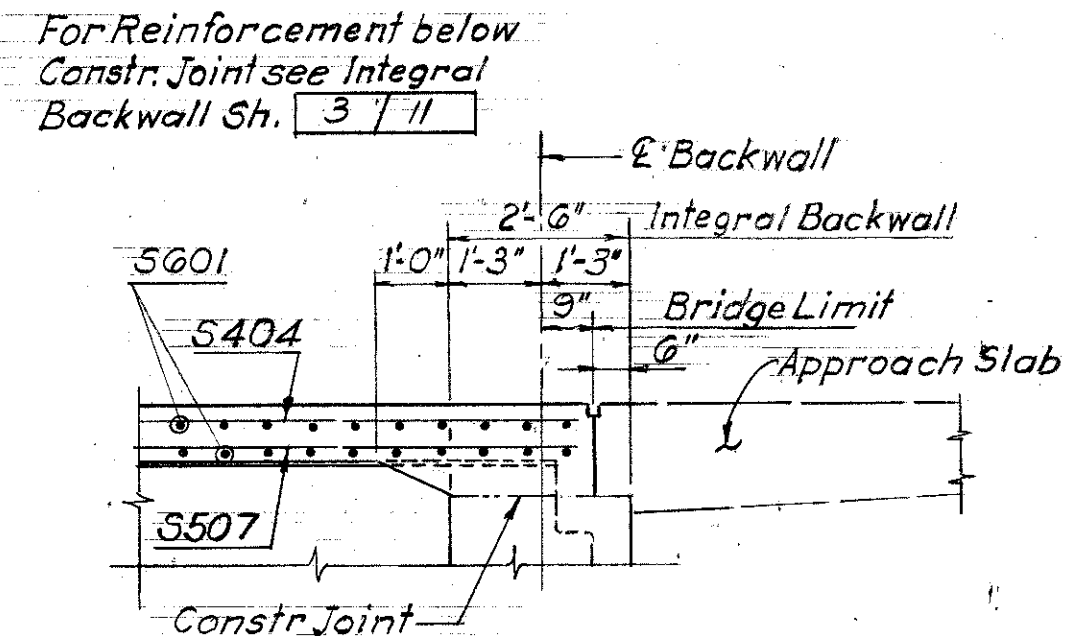


PLAN

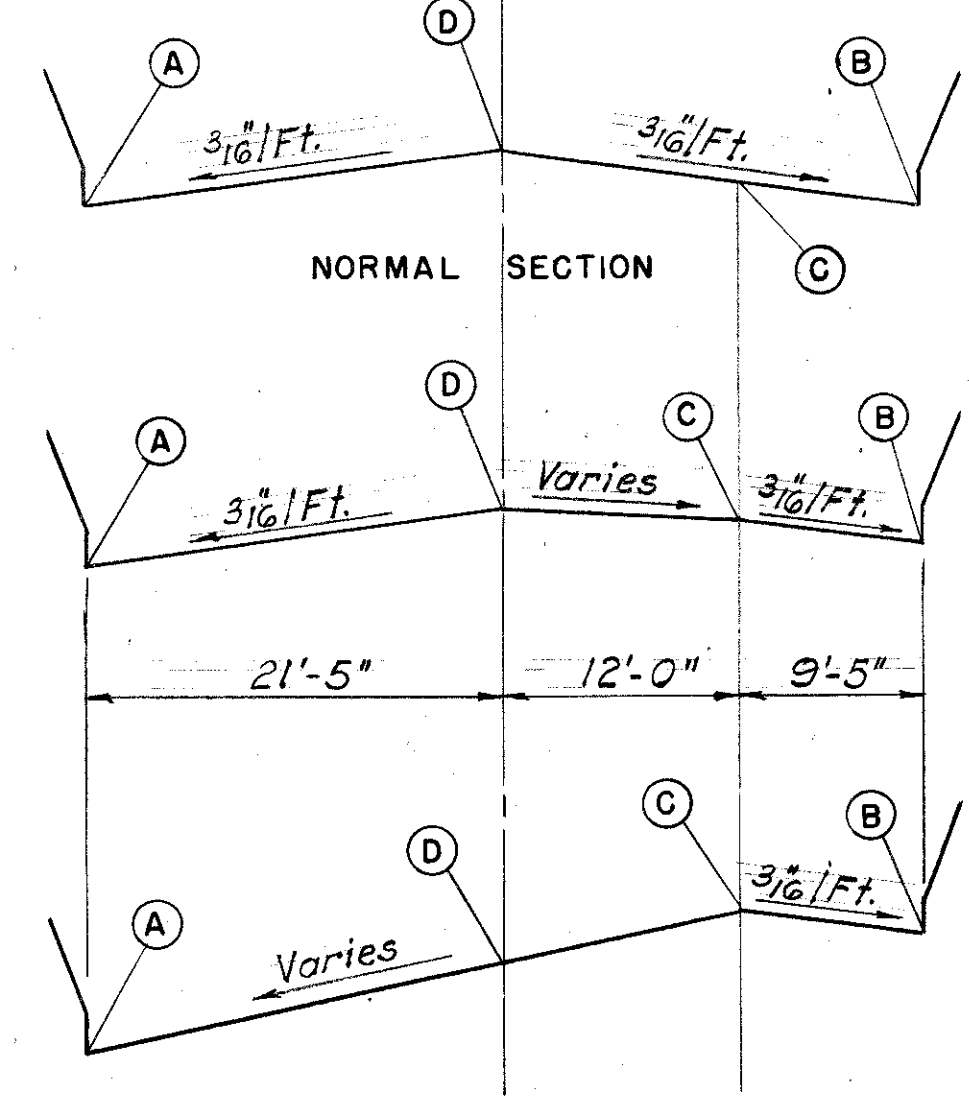


SECTION A-A

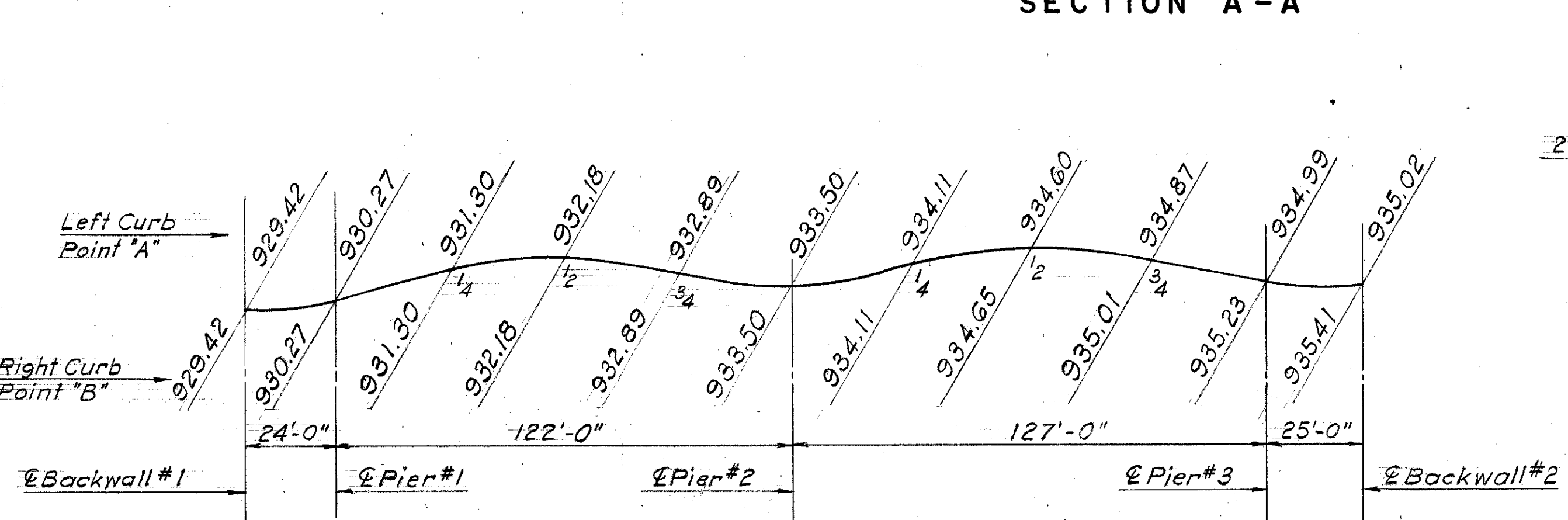
STATION	PT. D	PT. A	PT. C	PT. B
20+17.13	934.52	934.19	934.33	934.18
20+25.00	934.63	934.29	934.46	934.31
20+50.00	934.93	934.60	934.83	934.68
20+75.00	935.15	934.82	935.11	934.96
21+00.00	935.31	934.97	935.35	935.20
21+25.00	935.39	935.06	935.56	935.41
21+29.17	935.39	935.04	935.58	935.43
21+50.00	935.39	934.86	935.68	935.53



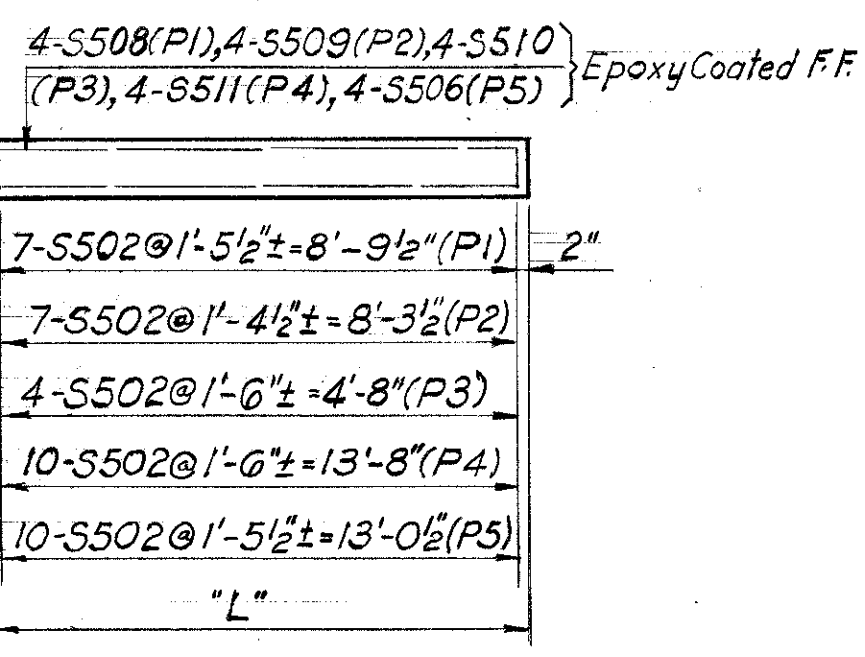
SECTION B-B



NOTES:
Slab thickness shown includes 1" for monolithic wearing surface.
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 not be more than 1:4 for a haunch less than 9" in width.
For deflection joint details see Std. Dwg. BR-1-67.
For reinforcing steel list see Sh. 11/11
Scuppers not shown. For scupper location see Sh. 12/11
All Splices and Dowels will be lapped min. 30 bar dia. unless otherwise shown.



DECK ELEVATION DIAGRAM
AT CURB POINTS BEFORE
CONCRETE IS POURED



NO.	REQD.	MARR.	L
4	P1	9'-4 $\frac{1}{2}$ "	
4	P2	8'-10 $\frac{1}{2}$ "	
18	P3	5'-0"	
16	P4	14'-0"	
16	P5	13'-4 $\frac{1}{2}$ "	

PARAPET PANELS

* This is the nominal 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 Sec. 511.19 of the Construction and Material Specifications.

KING & GAVARIS CONSULTING ENGINEERS, INC. 8/11

CINCINNATI OHIO

SUPERSTRUCTURE ROADWAY SLAB

BRIDGE NO. GRE-675-0737
1-675 UNDER KEMP RD.

GREENE COUNTY STA. 18+29.67 TO STA. 21+29.17

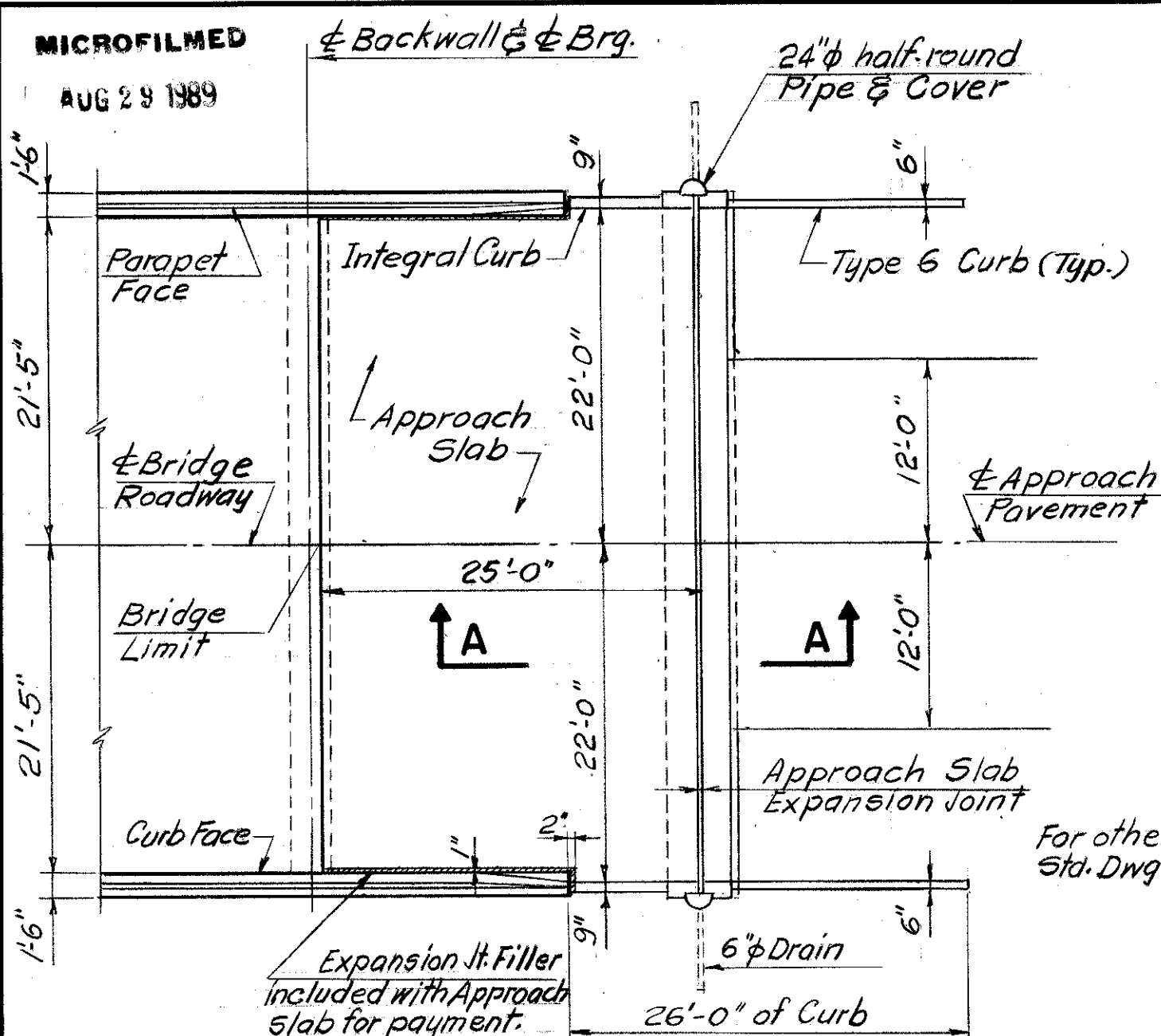
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
M.D.	N.H.		L.I.U.			

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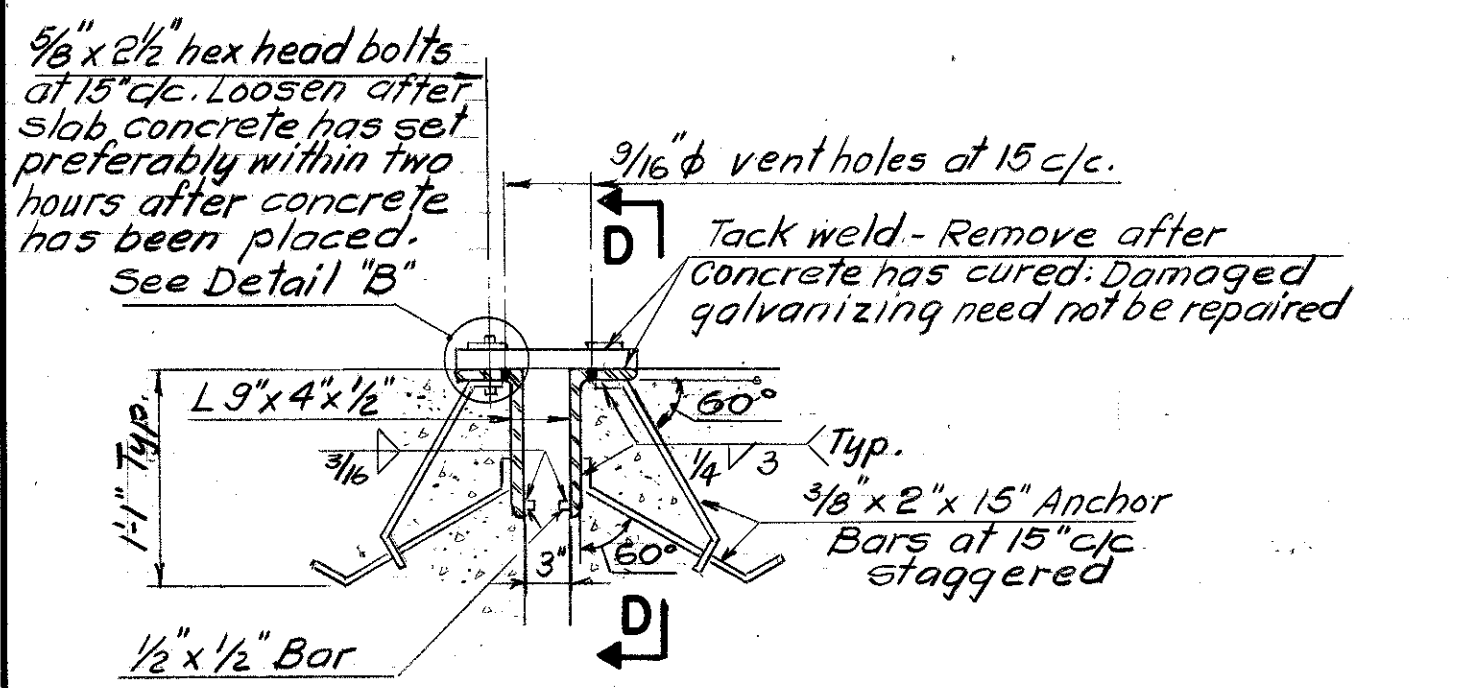
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F.H.W.A. REGION	STATE	PROJECT
5	OHIO	

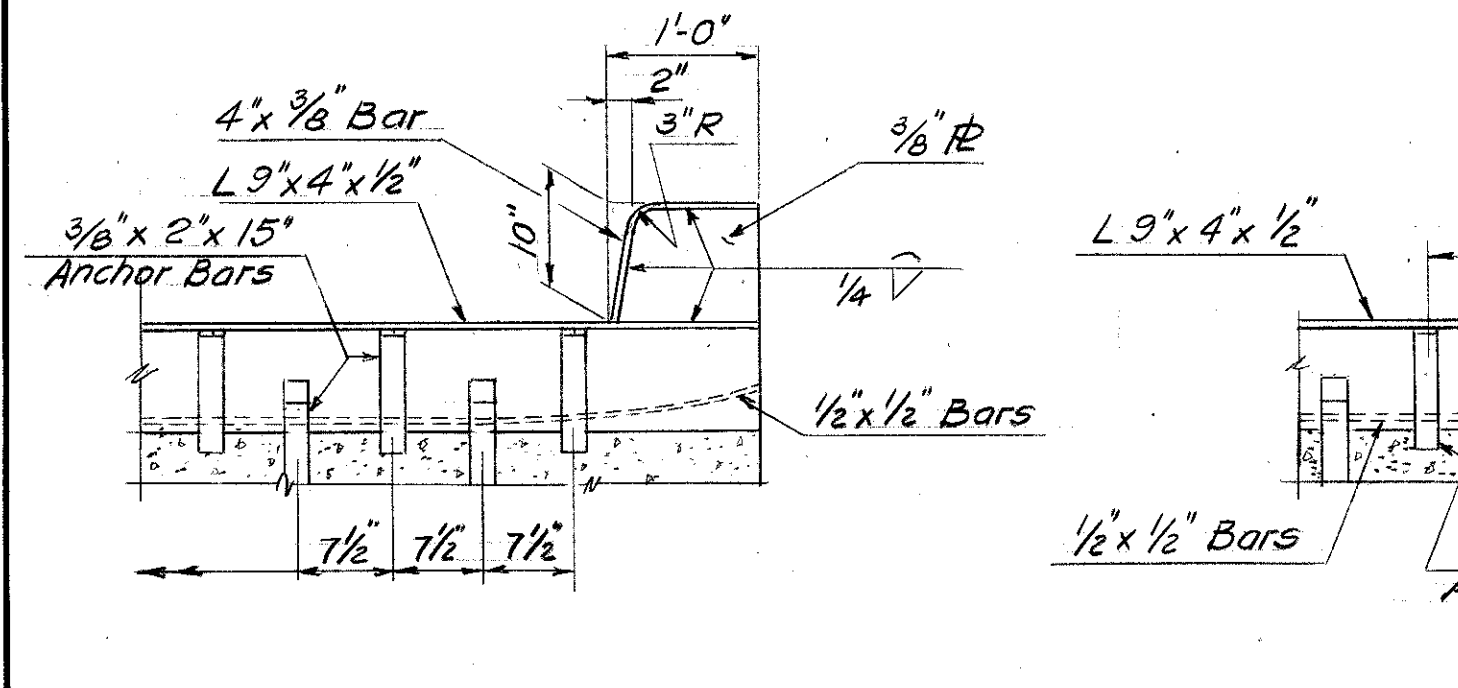
521
616



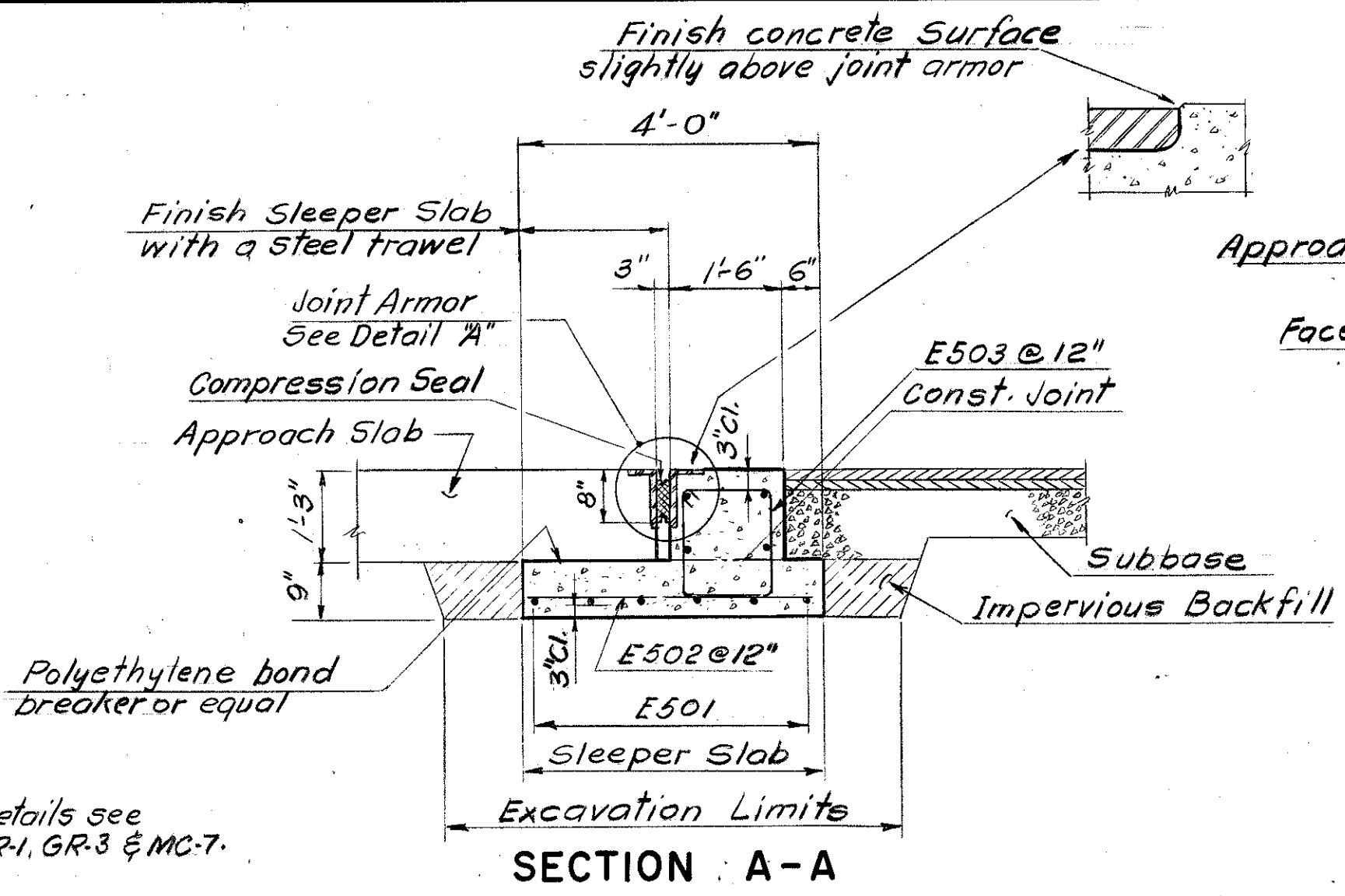
PART PLAN-APPROACH SLAB EXPANSION JOINT



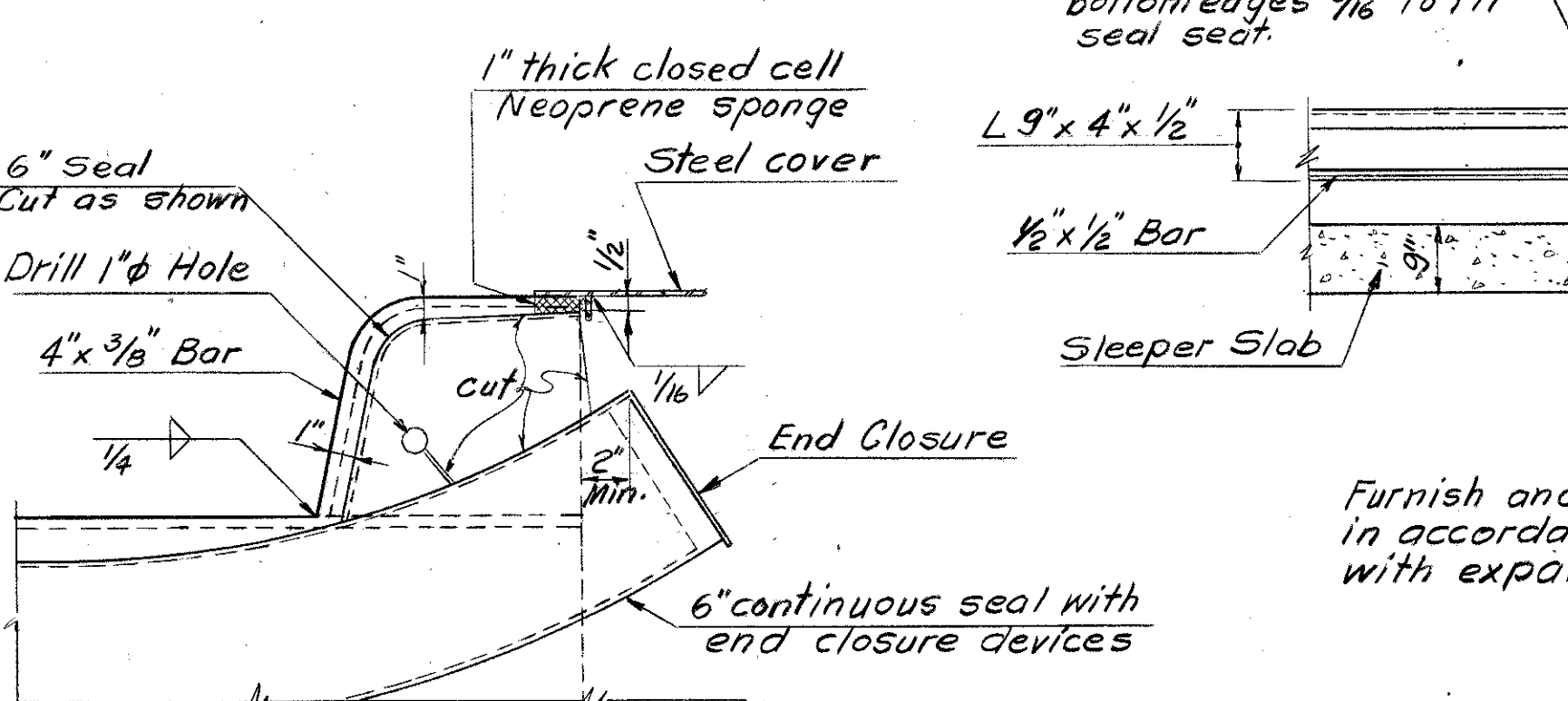
DETAIL "A"



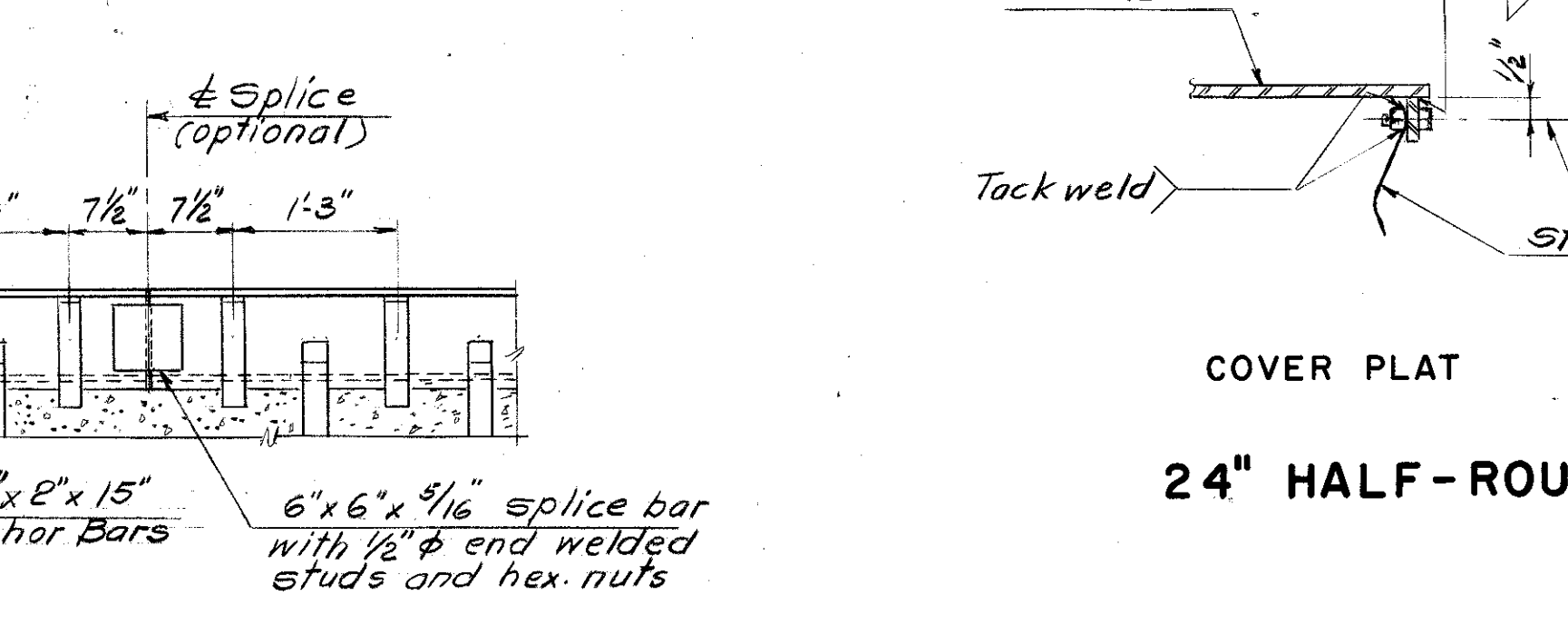
SECTION D-D AT CURB



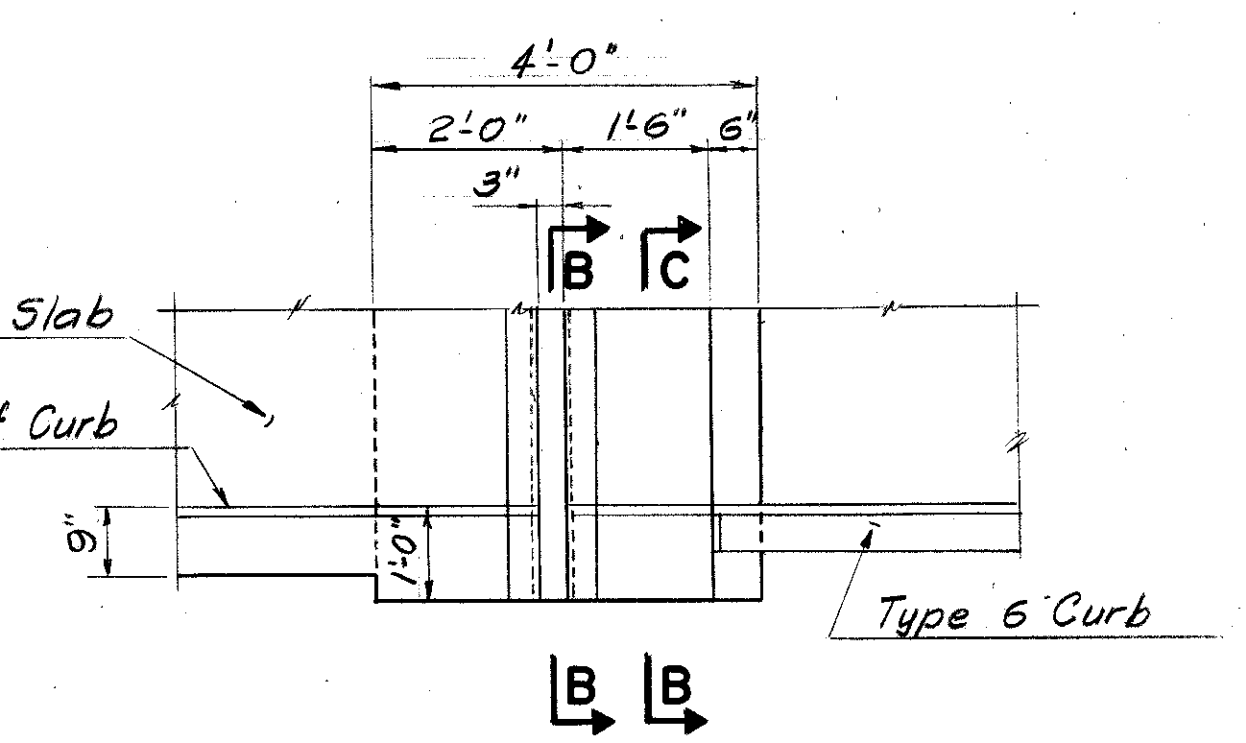
SECTION A-A



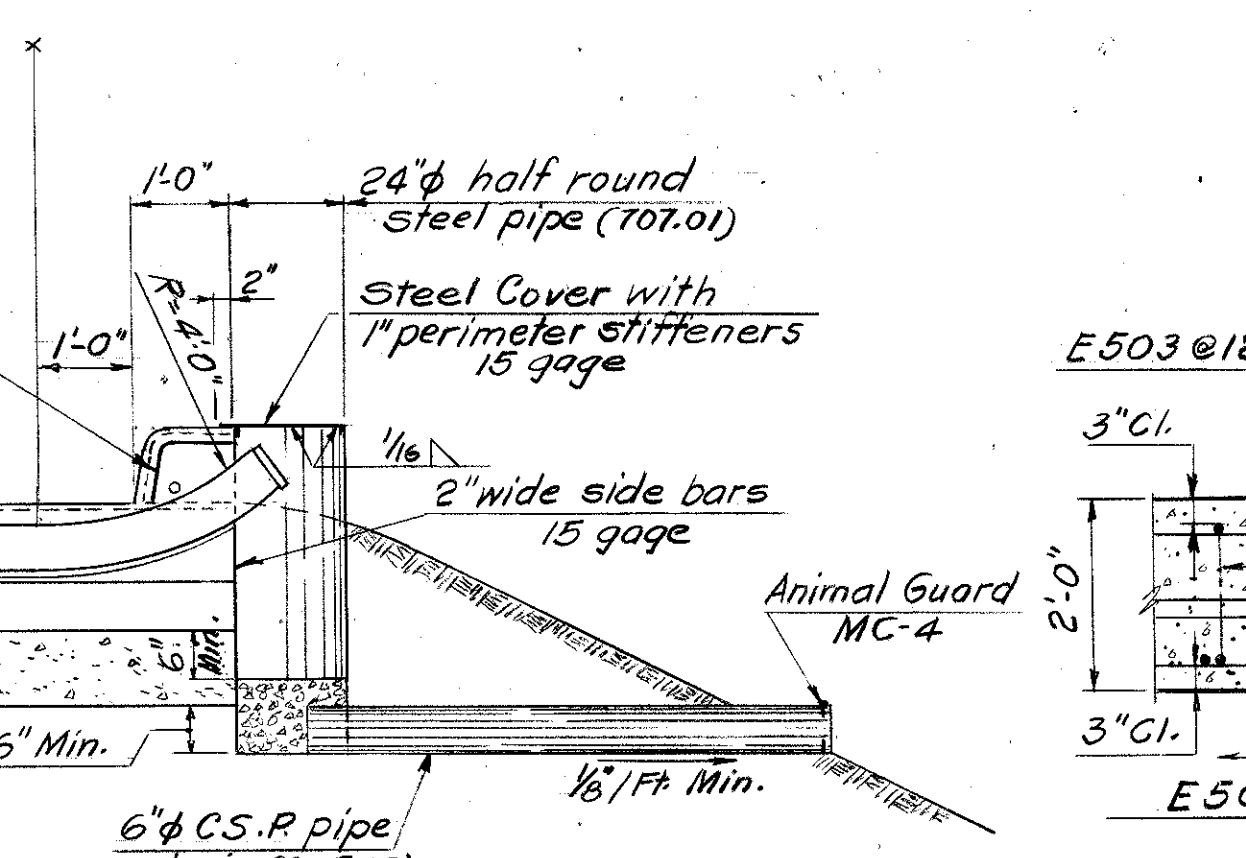
SEAL DETAILS



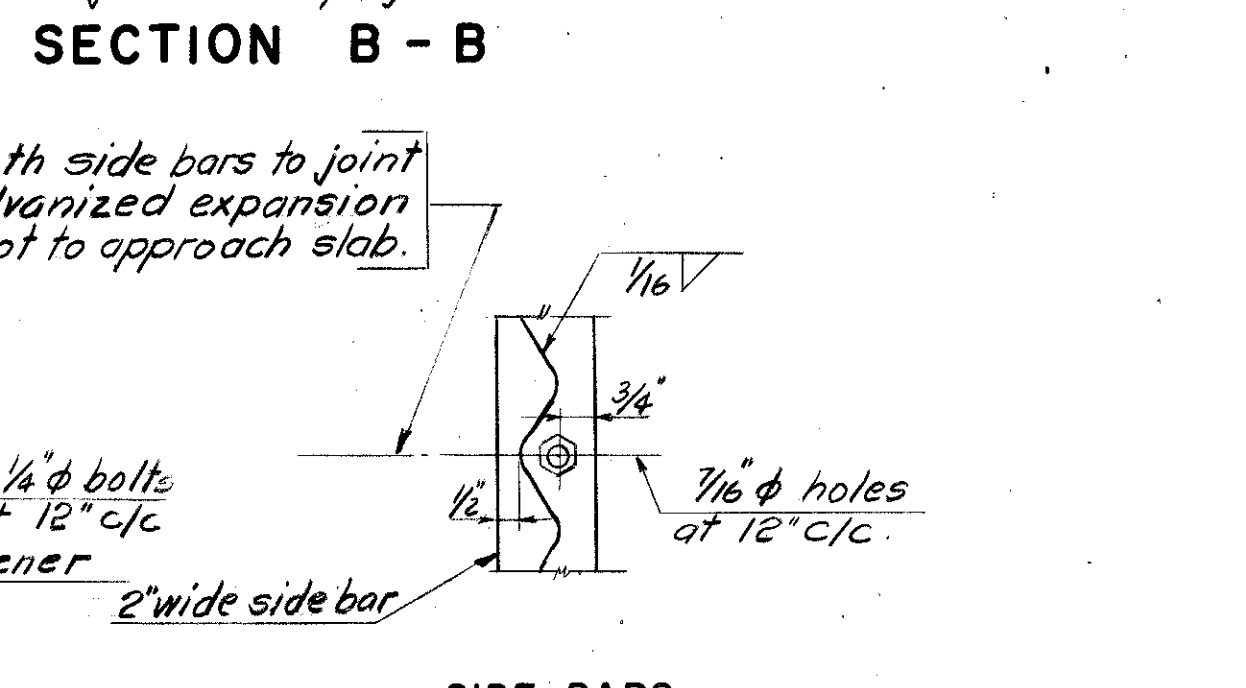
SECTION D-D AT ARMOR SPLICES



PART PLAN AT CURB

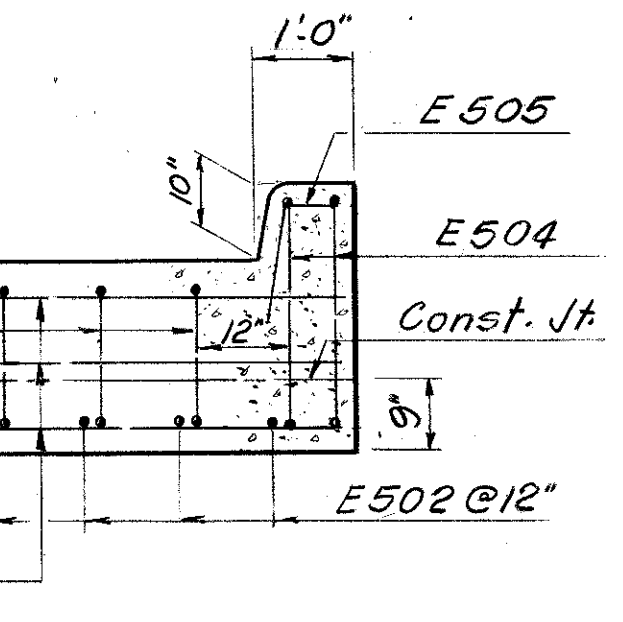


SECTION B-B



COVER PLAT SIDE BARS

24" HALF-ROUND PIPE AND COVER DETAILS



SECTION C-C

GENERAL NOTES:

MEASUREMENT of joint for pay purposes shall be along the centerline of the joint back to back of curbs. Payment per linear foot for Item Special, Approach Slab Expansion Joint, includes all labor, materials and equipment necessary to complete the joint as shown hereon including but not limited to excavation backfill, concrete, reinforcement etc. Except for joint armor it does not include portions of the approach slab.

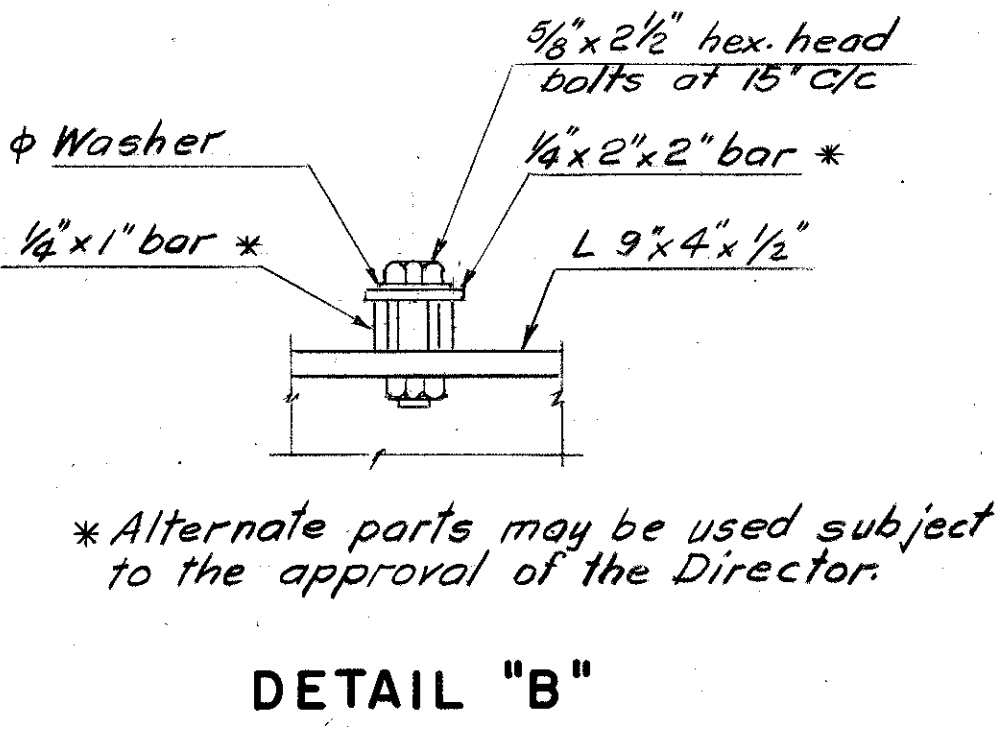
BACKFILL: Thoroughly compact backfill. Under the Approach Slab finish it flush with or slightly above the adjacent concrete surface.

STEEL: Joint end covers and cover drains shall be galvanized steel. Joint armor angles and 1/2" x 1/2" support bars shall be ASTM A588 or the entire armor assembly may be galvanized steel. Covers and cover drains shall be bituminous coated (AASHTO M 190) inside and outside. Exposed joint armor shall be painted (514).

APPROACH SLABS shall conform to Std. AS-1-72 Modified except that they shall be furnished with 10" x 9" integral curbs between the wingwalls and the expansion joint.

PROCEDURE: The approach slab side of expansion joint shall be placed last. Set joint width at 3". Use the ambient temperature that is anticipated four hours after completion of approach slab placement.

REINFORCING STEEL LIST (FOR ONE EXPANSION JOINT)			
MARK	NO.	LENGTH SHAPE	BENDING DIAGRAMS
E501	10	45'-8" St	
E502	45	8'-8" St	
E503	43	5'-6" Bt	
E504	4	6'-6" Bt	
E505	4	1'-3" Bt	



DETAIL "B"

KING & GAVARIS CONSULTING ENGINEERS, INC.		9 / / /
CINCINNATI	OHIO	
APPROACH SLAB EXPANSION JOINT		
BRIDGE NO. GRE-675-0737 1-675 UNDER KEMP ROAD		
GREENE COUNTY	STA. 18+29.67 TO	
	STA. 21+29.17	
DESIGNED	DRAWN	TRACED
N.V.	M.D.	
CHECKED	REVIEWED	DATE

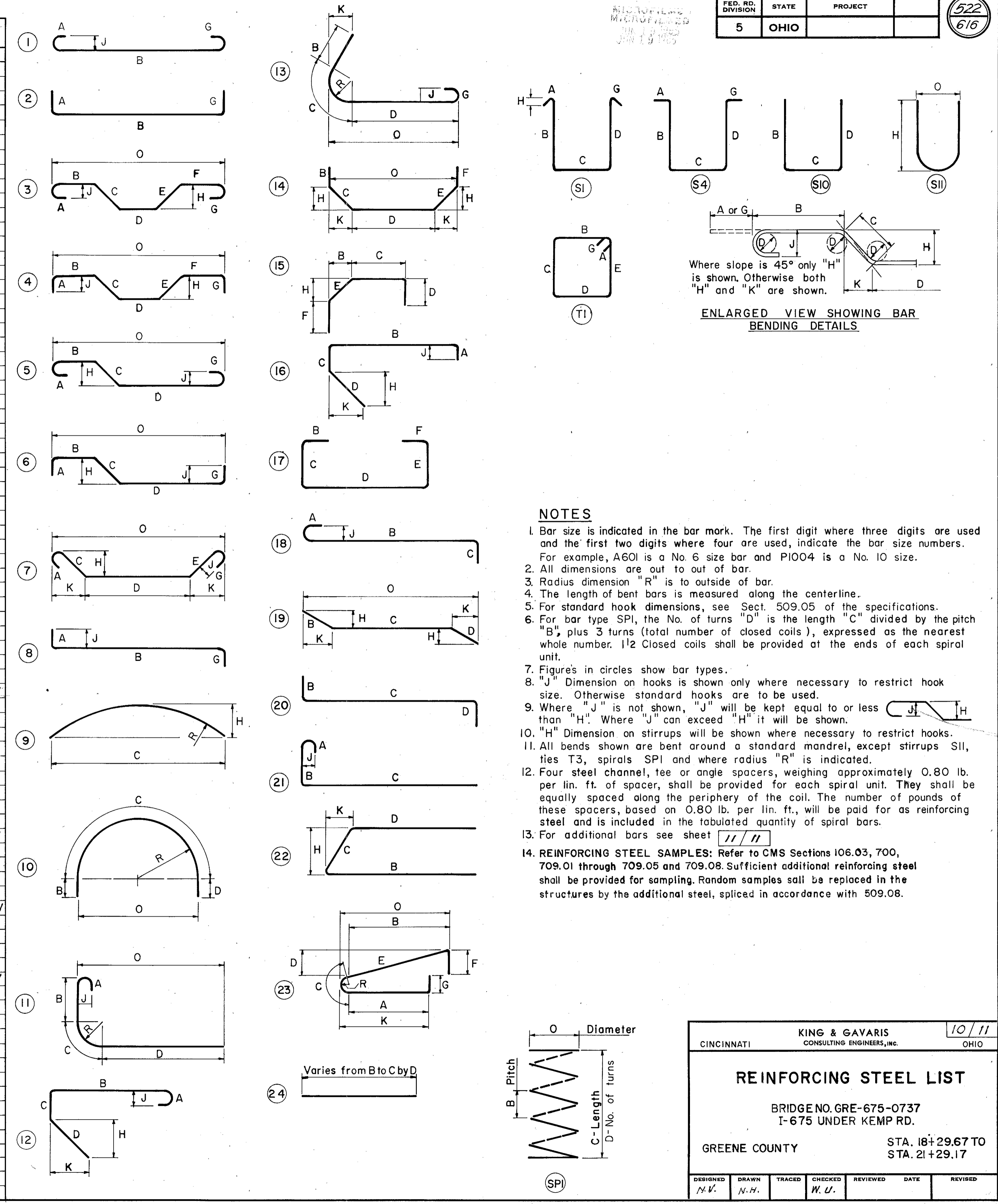
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AUG 29 1989

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

522
616

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES	
INTEGRAL BACKWALL NO. 1																		
SA 501	30	9'-5"	295	17			3'-10"	2'-0"	3'-10"									
SA 502	30	8'-9"	274	17			3'-6"	2'-0"	3'-6"									
SA 503	30	7'-5"	232	17			3'-0"	1'-8"	3'-0"									
SA 504	30	4'-11"	154	17			2'-11"	2'-0"	1'-7"									
SA 505	30	4'-7"	143	17			1'-5"	2'-0"	1'-5"									
SA 506	14	5'-5"	79	17			1'-7"	2'-6"	1'-7"									
SA 507	12	Varies 4'-2" to 5'-8" by 6" 2 ea.	68	Str.														
SA 508	12	Varies 2'-8" to 5'-2" by 6" 2 ea.	49	Str.														
SA 509	6	7'-4"	46	T1	5"	2'-0"	1'-5"	2'-0"	1'-5"			5"						
SA 510	8	5'-3"	44	19		3'-8"	1'-7"											
SA 511	2	7'-3"	15	Str.														
SA 512	6	6'-0"	38	Str.														
SA 513	4	3'-6"	15	Str.														
SA 514	6	6'-2"	39	Str.														
SA 515	2	6'-3"	13	19		1'-0"	5'-3"											
SA 516	2	3'-3"	7	Str.														
SA 517	2	3'-4"	7	19		1'-0"	2'-4"											
SA 518	4	Varies 7'-2" to 7'-8" by 6" 2 ea.	31	Str.														
SA 519	4	Varies 5'-8" to 6'-2" by 6" 2 ea.	25	Str.														
SA 520	4	13'-0"	54	19		1'-7"	10'-1"	1'-4"										
SA 521	8	Varies 3'-9" to 9'-9" by 2'-0" 2 ea.	56	Str.														
SA 522	8	Varies 4'-7" to 10'-7" by 2'-0" 2 ea.	63	20		1'-0"	Varies 3'-9" to 9'-9" by 2'-0" 2 ea.											
SA 523	6	15'-4"	96	Str.														
SA 524	6	16'-2"	101	20		1'-0"	15'-4"											
SA 525	12	Varies 3'-8" to 7'-5" by 9" 2 ea.	69	Str.														
SA 526	12	Varies 3'-9" to 8'-0" by 10" 2 ea.	74	19		1'-0"	Varies 2'-9" to 7'-0" by 10"											
SA 527	8	3'-3"	27	Str.														
SA 528	8	2'-2"	18	Str.														
SA 529	4	8'-0"	33	Str.														
SA 530	4	9'-2"	38	19		1'-0"	8'-2"											
SA 531	4	5'-0"	21	Str.														
SA 532	4	4'-8"	20	Str.														
SA 533	2	6'-0"	13	Str.														
SA 534	14	5'-3"	80	23	2'-3"	2'-3"	9"	2"	2'-3"				2'-6"	2'-6"	2'		4-Epoxy Coated	
SA 535	8	15'-5"	129	Str.														4-Epoxy Coated
SA 536	24	1'-6"	38	17		6"	9"	6"										10-Epoxy Coated
SA 537	20	Varies 2'-0" to 2'-4" by 1" 4 ea.	45	Str.														10-Epoxy Coated
SA 601	20	23'-8"	711	Str.														
SA 602	10	9'-3"	139	14			1'-3"	6'-9"	1'-3"			10"	10"	10"				14-Epoxy Coated
SA 603	14	1'-8"	35	16			9"	11"	1'-3"			7"	10"	10"				14-Epoxy Coated
SA 701	16	23'-9"	777	Str.														
SA 702	10	4'-1"	83	14		8	1'-0"	2'-3"				6"	10"	10"				10-Epoxy Coated
SA 801	30	7'-3"	581	14			1'-6"	4'-3"	1'-6"			3'-0"	3'-0"	3'-0"				4-Epoxy Coated
SA 802	10	23'-0"	614	Str.														
TOTAL:		5,489																
INTEGRAL BACKWALL NO. 2																		
SAME REINFORCING AS FOR INTEGRAL BACKWALL NO. 1																		
TOTAL:		5,489																
Total Integral Backwalls:		10,978																



NOTES

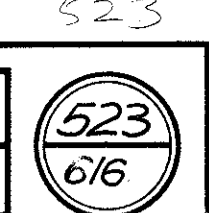
- Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
- All dimensions are out to out of bar.
- Radius dimension "R" is to outside of bar.
- The length of bent bars is measured along the centerline.
- For standard hook dimensions, see Sect. 509.05 of the specifications.
- For bar type SPI, 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. 1/2 Closed coils shall be provided at the ends of each spiral unit.
- Figure's in circles show bar types.
- "J" Dimension on hooks is shown only where necessary to restrict hook size. Otherwise standard hooks are to be used.
- Where "J" is not shown, "J" will be kept equal to or less than "H". Where "J" can exceed "H" it will be shown.
- "H" Dimension on stirrups will be shown where necessary to restrict hooks.
- All bends shown are bent around a standard mandrel, except stirrups S11, ties T3, spirals SPI and where radius "R" is indicated.
- Four steel channel, tee or angle spacers, weighing approximately 0.80 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.
- For additional bars see sheet 11/11
- 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.

KING & GAVARIS CONSULTING ENGINEERS, INC.		10/11
CINCINNATI	OHIO	
REINFORCING STEEL LIST		
BRIDGE NO. GRE-675-0737 I-675 UNDER KEMP RD.		
GREENE COUNTY		STA. 18+29.67 TO STA. 21+29.17
DESIGNED N.V.	DRAWN N.H.	TRACED M.U.
CHECKED M.U.	REVIEWED	DATE
REVISED		

MICROFILMED
AUG 29 1989

MICROFILMED
JUN 19 1983

FED. RD. DIVISION	STATE	PROJECT
5	OHIO	



MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
PIER NO. 1																	
P 501	8	22'-4"	186	Str.													
P 502	88	7'-2"	658	S10													
P 503	48	Varies 5'-10" 7'-2" by 3" lead	325	S10		2'-10"	1'-9"	2'-10"									
P 504	30	5'-5"	170	S10		2'-10" by 1 1/2"	1'-9"	2'-10" by 1 1/2"									
P 601	52	8'-6"	604	Str.													
P 602	6	9'-5"	85	10		2'-7"	4'-3"	2'-7"							2'-8"	1'-4"	
P 801	28	14'-3"	1065	Str.													
P 802	14	19'-0"	710	Str.													
P 803	40	22'-6"	2403	Str.													
P 804	47	8'-6"	1067	Str.													
P 1001	42	10'-3"	1,852	2	2'-0"	8'-6"							2'-0"				
P 1002	42	16'-1"	2,906	Str.													
P 1101	14	18'-5"	1,370	20				16'-0"	2'-8"								
P 1102	8	12'-10"	545	Str.													
P 1103	8	8'-6"	361	19		5'-0"	3'-6"					11"		4'-11"			
P 1104	7	35'-0"	1,302	Str.													
P 1105	7	20'-6"	762	Str.													
SP 501	3	12'-7"	1,301	SP1		3 5/8"	12'-7"	45							2'-8"		
		TOTAL:	17,732														
PIER NO. 2																	
P 501	8	22'-4"	186	Str.													
P 502	104	7'-2"	778	S10													
P 503	72	Varies 5'-10" 7'-2" by 2" lead	488	S10		2'-10"	1'-9"	2'-10"									
P 504	30	5'-5"	170	S10		2'-10" by 1"	1'-9"	2'-10" by 1"									
P 602	6	9'-5"	85	10		2'-7"	4'-3"	2'-7"							2'-8"	1'-4"	
P 603	52	9'-0"	703	Str.													
P 801	30	14'-3"	1,141	Str.													
P 802	15	19'-0"	761	Str.													
P 803	46	22'-6"	2,763	Str.													
P 805	47	9'-0"	1,129	Str.													
P 1101	14	18'-5"	1,370	20				16'-0"	2'-8"								
P 1102	12	12'-10"	818	Str.													
P 1103	8	8'-6"	361	19		5'-0"	3'-6"					11"		4'-11"			
P 1104	7	35'-0"	1,302	Str.													
P 1105	7	20'-6"	762	Str.													
P 1106	2	16'-0"	170	Str.													
P 1107	48	17'-2"	4,379	Str.													
P 1108	48	12'-0"	3,060	2	2'-6"	9'-9"							2'-6"				
SP 503	3	13'-8"	1,390	SP1		3 5/8"	13'-8"	48							2'-8"		
		TOTAL:	21,816														
PIER NO. 3																	
P 501	8	22'-4"	186	Str.													
P 502	88	7'-2"	658	S10													
P 503	48	Varies 5'-10" 7'-2" by 3" lead	325	S10		2'-10"	1'-9"	2'-10"									
P 504	30	5'-5"	170	S10		2'-10" by 1 1/2"	1'-9"	2'-10" by 1 1/2"									
P 601	52	8'-6"	604	Str.													
P 602	6	9'-5"	85	10		2'-7"	4'-3"	2'-7"							2'-8"	1'-4"	

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
PIER NO. 3 CONT.																	
P 801	28	14'-3"	1,065	Str.													
P 802	14	19'-0"	710	Str.													
P 803	40	22'-6"	2,403	Str.													
P 804	47	8'-6"	1,067	Str.													
P 1001	42	10'-3"	1,852	2	2'-0"	8'-6"							2'-0"				
P 1003	42	17'-9"	3,208	Str.													
P 1101	14	18'-5"	1,370	20				16'-0"	2'-8"								
P 1102	8	12'-10"	545	Str.													
P 1103	8	8'-6"	361	19		5'-0"	3'-6"					1'-6"		4'-9"			
P 1104	7	35'-0"	1,302	Str.													
P 1105	7	20'-6"	762	Str.													
SP 502	3	14'-3"	1,449	SP1		3 5/8"	14'-3"	50							2'-8"		
		TOTAL:	18,182														
		TOTAL PIERS:	57,730														
SUPERSTRUCTURE																	
S 401	580	30'-0"	11,623	Str.													580 Epoxy Coated
S 402	59	49'-0"	1,931	Str.													59 Epoxy Coated
S 403	118	51'-0"	4,020	Str.													118 Epoxy Coated
S 404	58	11'-9"	455	Str.													58 Epoxy Coated
S 501	448	1'-6"	701	2	6"	9"											
S 502	448	6'-3"	2,920	23	2'-1 1/8"	2'-4 1/8"	9"	3"	2'-4 1/2"	7 1/2"	7 1/2"			2'-4"	2'-7"	2' 7/8"	448 Epoxy Coated
S 503	448	1'-11"	890	2	6"	1'-6"											
S 504	448	3'-0"	1,402	15		7"	10"	8"	11"	8"		8"					448 Epoxy Coated
S 505	640	30'-0"	20,026	Str.													40 Epoxy Coated
S 506	64	13'-0"	868	Str.													32 Epoxy Coated
S 507	64	15'-2"	1013	Str.													4 Epoxy Coated
S 508	16	9'-0"	150	Str.													8 Epoxy Coated
S 509	16	8'-6"	142	Str.													8 Epoxy Coated
S 510	72	4'-8"	350	Str.													36 Epoxy Coated
S 511	64	13'-8"	912	Str.													32 Epoxy Coated
S 601	1032	45'-4"	70,264	Str.													516 Epoxy Coated
		TOTAL:	117,675														

- 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 numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
 - For bar types see sheet 10/11
 - All dimensions are out to out of bar.
 - Radius dimension "R" is to outside of bar.
 - The length of bent bars is measured along the centerline.
 - For additional notes see sheet 10/11

KING & GAYARIS CONSULTING ENGINEERS, INC.					11/11 OHIO
REINFORCING STEEL LIST					
BRIDGE NO. GRE-675-0737 1-675 UNDER KEMP RD.					
GREENE COUNTY			STA. 18+29.67 TO STA. 21+29.17		
DESIGNED N.V.	DRAWN N.H.	TRACED L.I.U.	CHECKED L.I.U.	REVIEWED DATE	REVISION

MICROFILMED
AUG 29 1989

MICROFILMED
JUN 19 1989

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

524
616

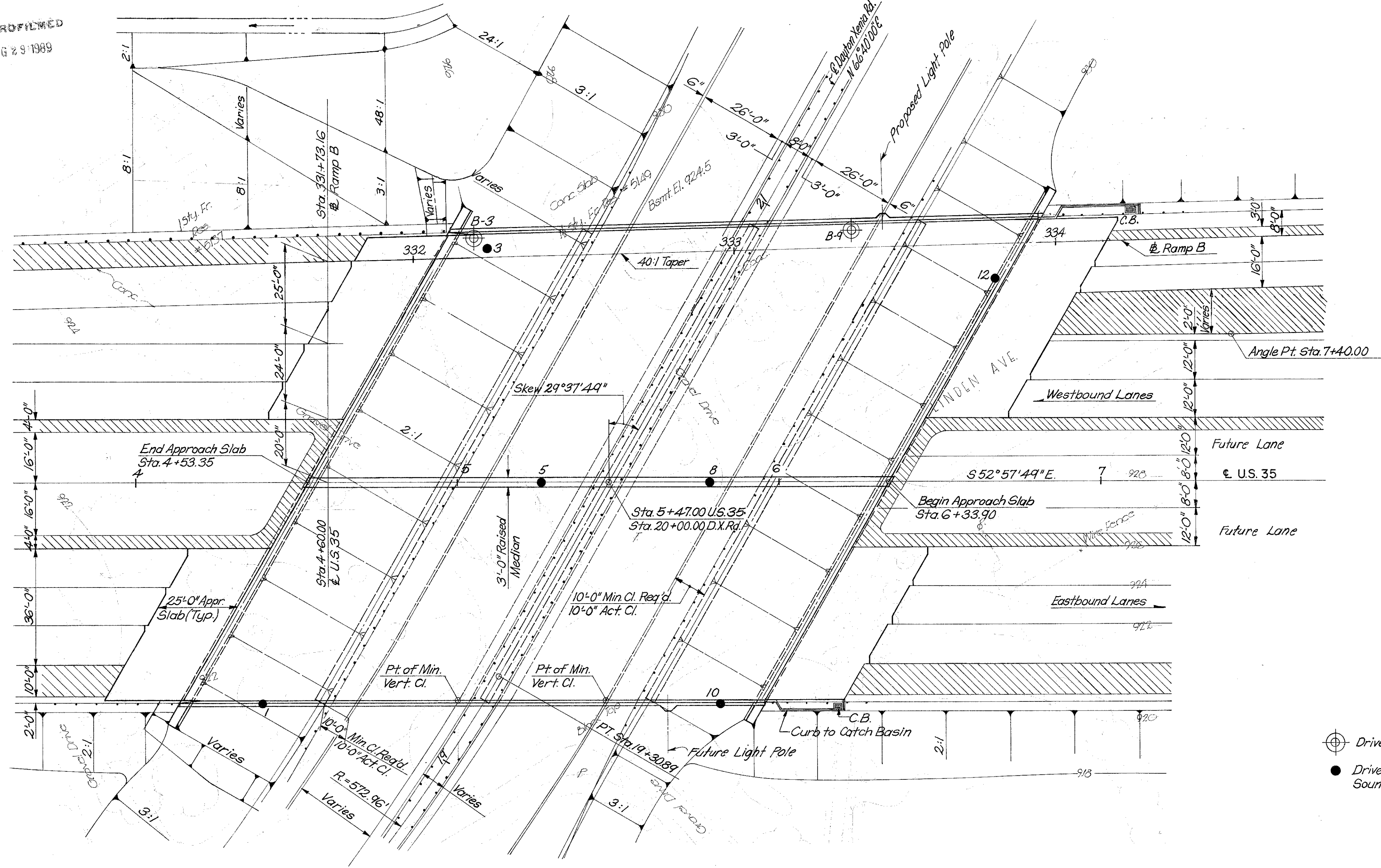
GRE-675 - 5-37
GREENE COUNTY

HORIZONTAL CURVE DATA
CURVE NO. 1 DAYTON XENIA RD.

PI Sta. 17+15.58
Δ = 45° 38' 20"
Dc = 10° 00' 00"
R = 572.96'
T = 241.08'
L = 456.39'
E = 48.65'

VERTICAL CURVE DATA
U.S. 35

PVI Sta. 3+00.00
PVI Elev. 939.09
L = 1300'
G₁ = +0.80 %
G₂ = -1.96 %



PLAN

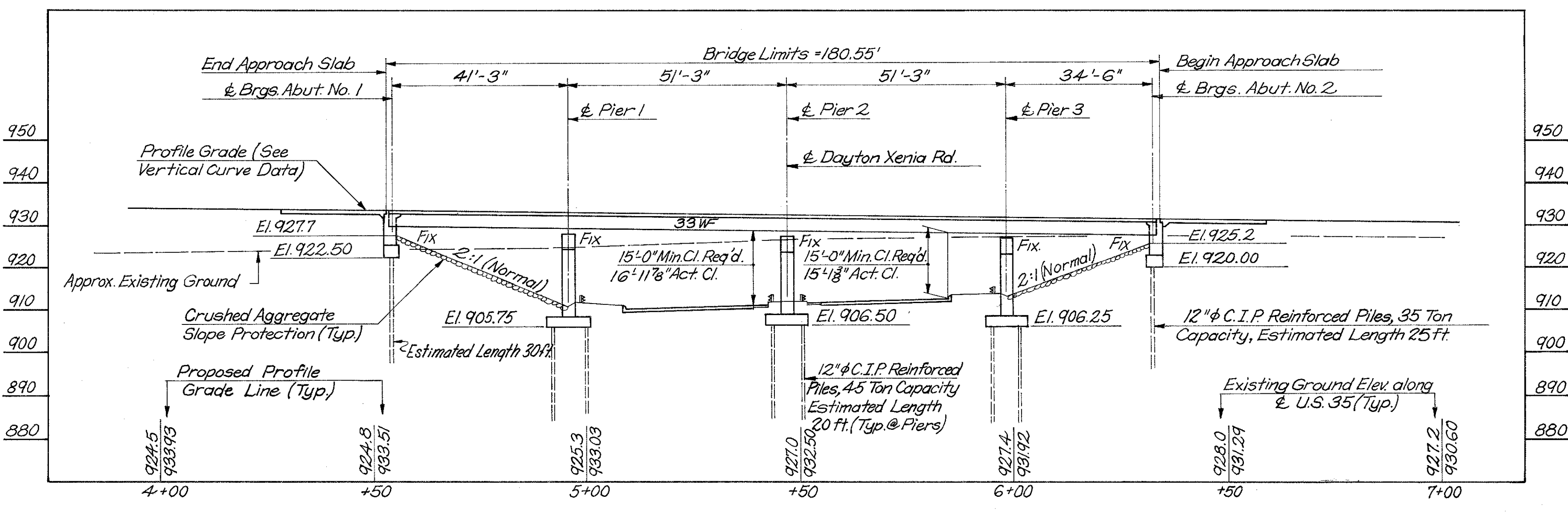
LEGEND

- ⊕ Drive Sample Boring Location
- Drive Rod Penetration Resistance Sounding Location

DESIGN YEAR TRAFFIC
1989 ADT:
U.S. 35 - 87,890
Ramp B - 10,110

NOTES

Earthwork limits shown are schematic. Actual slopes shall conform to Plan Cross-Sections.
For typical sections through bridge see sheet. 3, 10, 14



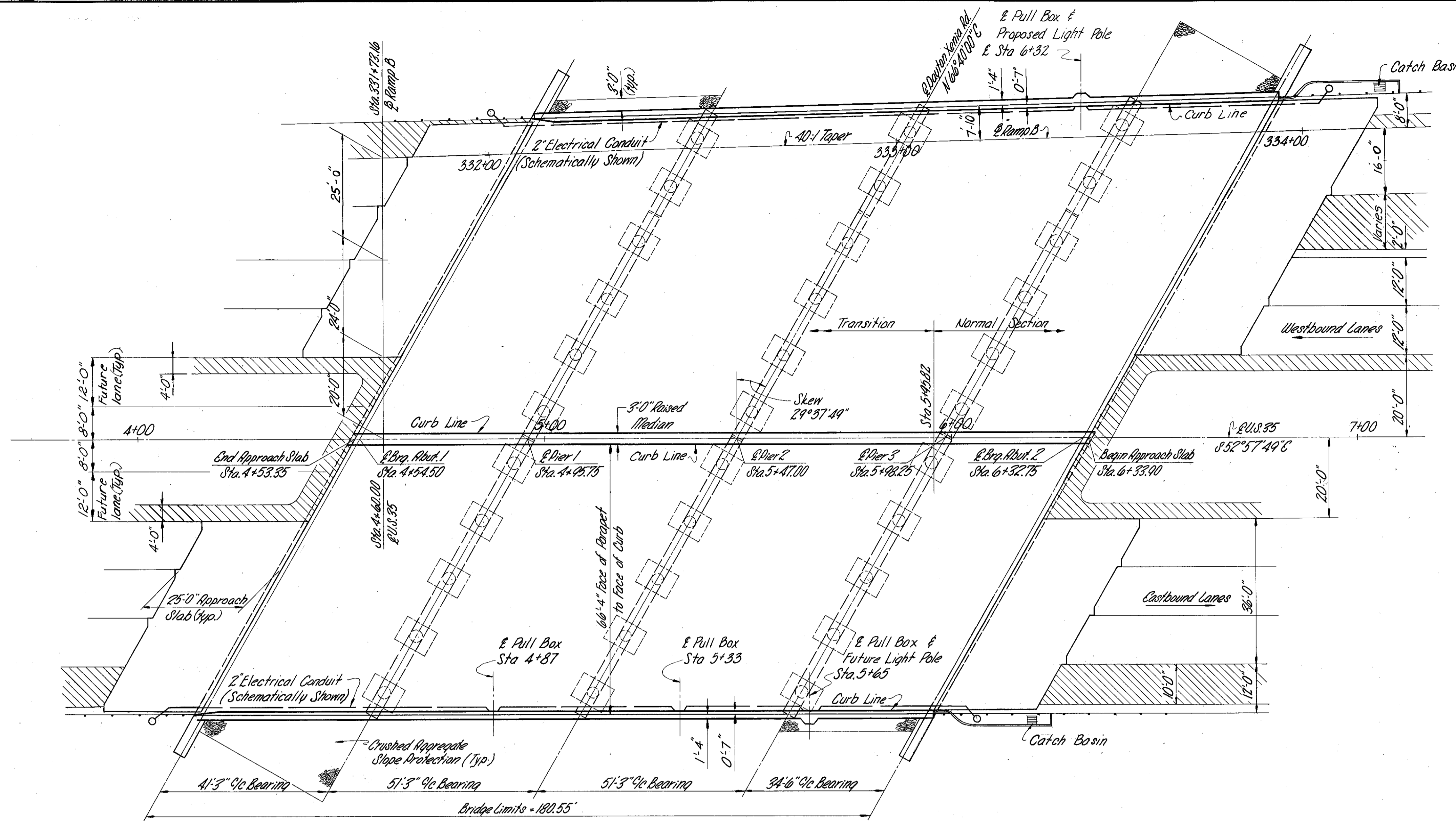
PROFILE ON CENTER LINE RELOCATED U.S. 35

PROPOSED STRUCTURE
TYPE: Continuous steel beam with reinforced concrete deck and substructure
SPANS: 41'-3", 51'-3", 51'-3", 34'-6"
ROADWAY: Varies 144'-8" to 148'-8" face to face of parapet
LOADING: HS-20-44 & Alternate Military
SKEW: 29° 37' 44" Lt. Fwd.
WEARING SURFACE: Monolithic Concrete
APPROACH SLABS: 25'-0" long (Std. AS-1-72)
ALIGNMENT: Tangent

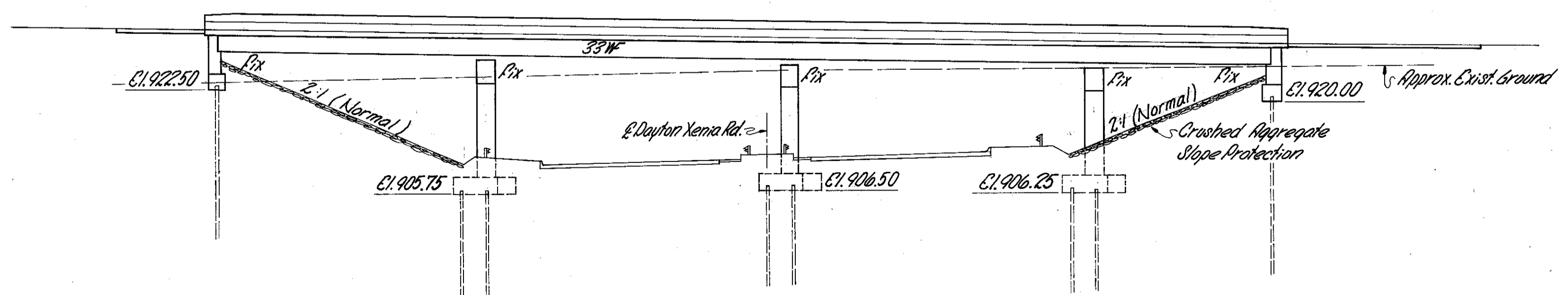
KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

SITE PLAN
BRIDGE NO. GRE-35-0009
U.S. 35 OVER DAYTON XENIA RD.
GREENE COUNTY STA. 4+53.35 TO STA. 6+33.90

PRESENT TOPOGRAPHY		PROPOSED WORK		
SURVEYED	DRAWN	DESIGNED	CHECKED	REVISED
AERIAL SURVEY	AERIAL SURVEY	JCL	AW	SA

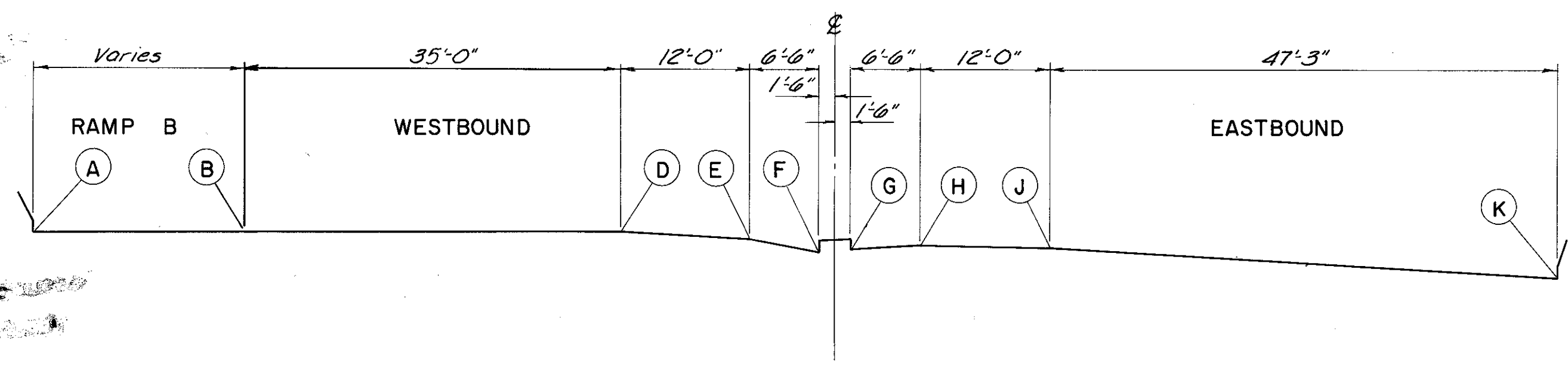


PLAN



ELEVATION

KING & GAVARIS CONSULTING ENGINEERS		2 / 14				
GENERAL PLAN AND ELEVATION BRIDGE NO. GRE-35-0009 U.S. 35 OVER DAYTON XENIA RD. GREENE COUNTY STA. 4+53.35 TO STA. 6+33.90						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.C.L.	D.M.		S.A.	S.A.	9/2/72	



TRANSITION ELEVATIONS

STATION	A	B	C	D	E	F	G	H	J	K
4+00	934.21	934.22	934.22	934.25	934.06	933.79	933.83	933.93	933.89	933.15
4+25	933.86	933.92	933.93	934.04	933.85	933.58	933.62	933.72	933.72	932.98
4+50	933.50	933.62	933.63	933.83	933.64	933.37	933.41	933.51	933.55	932.81
4+75	933.12	933.30	933.31	933.60	933.41	933.14	933.18	933.28	933.36	932.62
5+00	932.71	932.96	932.97	933.35	933.16	932.89	932.93	933.03	933.15	932.41
5+25	932.30	932.61	932.62	933.09	932.90	932.63	932.67	932.77	932.93	932.19
5+50	931.89	932.26	932.27	932.80	932.61	932.34	932.38	932.50	932.69	931.95
5+75	931.54	931.91	931.93	932.46	932.27	932.00	932.02	932.22	932.41	931.67
5+95.82	931.22	931.60	931.62	932.15	931.96	931.69	931.69	931.96	932.15	931.41
		Normal	Section	Beyond						

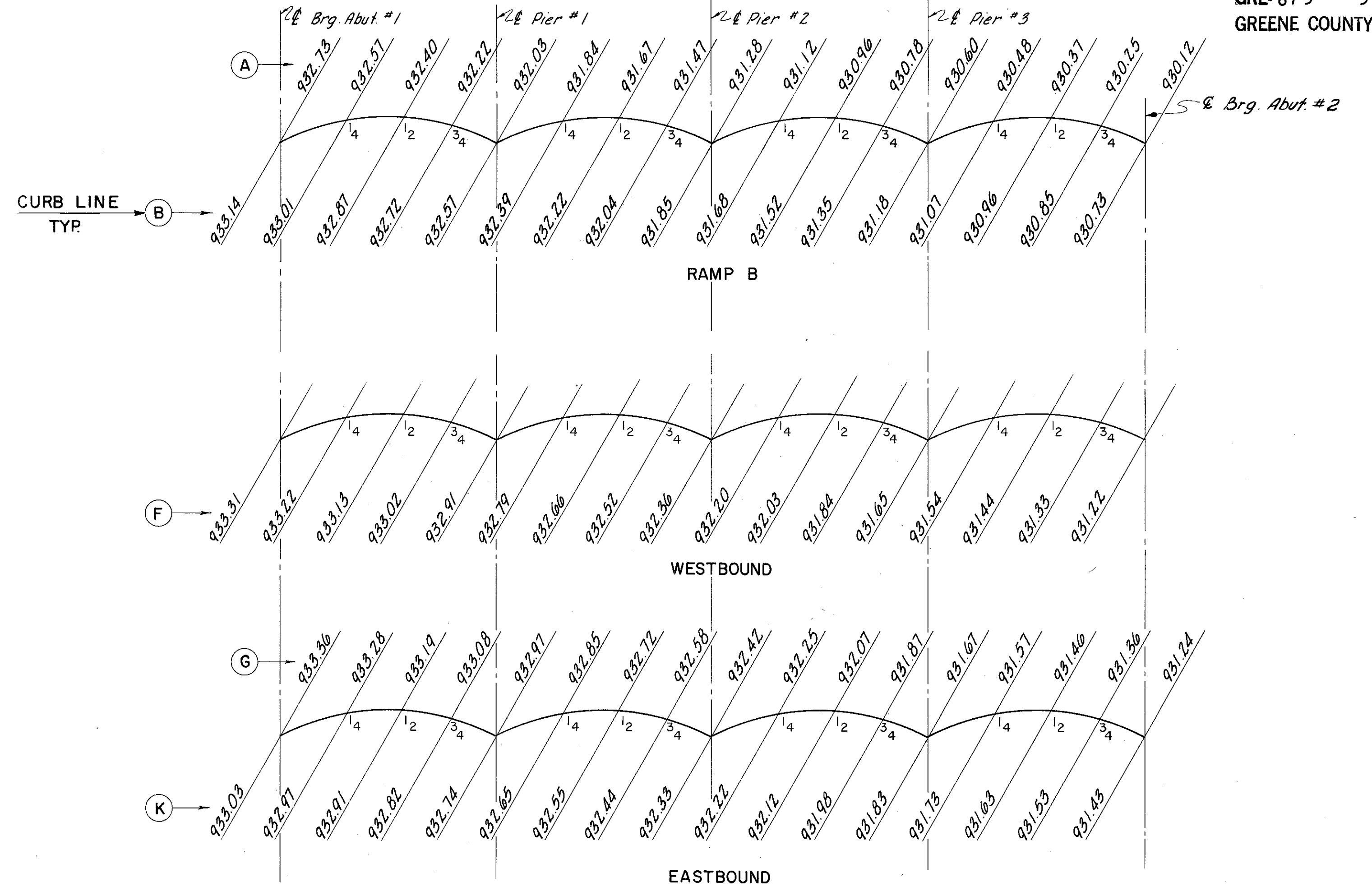
ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	ABUT	PIERS	GEN
503	Lump	Sum	Cofferdams, cribs and sheeting				Lump
503	946	Cu. Yd.	Unclassified Excavation		376	570	
505	Lump	Sum	Test Pile				Lump
507	4390	Lin. Ft.	12" Cast-in-place reinforced concrete piles		1750	2640	
509	227,800	Lbs.	Reinforcing steel	123,300	26,700	77,800	
511	363	Cu. Yd.	Class C concrete, piers above footings			363	
511	163	Cu. Yd.	Class C concrete, abutments above footings		163		
511	894	Cu. Yd.	Class C concrete, superstructure using shrink comp. cem. 10108 894				
511	325	Cu. Yd.	Class C concrete, footings		126	199	
512	370	Lin. Ft.	Type B Waterproofing		370		
513	491,170	Lb.	Structural steel (AISC Category 1)	491,170			
514	491,170	Lb.	Field painting of new Structural Steel, System A	491,170			
516	791	Sq. Ft.	1" Preformed expansion joint filler	83	708		
516	237	Sq. Ft.	1/4" Preformed expansion joint filler		237		
518	209	Cu. Yd.	Porous backfill		209		
518	390	Cu. Yd.	6" Perforated helical C.S.P. (70701)		390		
518	54	Cu. Yd.	6" Non-perforated helical C.S.P. including specials (70701)		54		
601	1515	Sq. Yd.	Crushed aggregate slope protection				1515
625			See sheet (149) for lighting summary				
523	3	Hour	Dynamic Pile Tests				3
516	88	Sq. Ft.	3/4" elastomeric bearing pad	88			
Special	123,200	Lb.	Epoxy Coated Reinforcing Steel (See Proposal)	123,200			

ESTIMATED QUANTITIES BY: J.R.G. CHECKED BY: S.A. 2/24/72 REVISED: S.A. 9/14/72

TEST PILES: Payment will be made for only one test pile.

GRE-675 - 5-37
 GREENE COUNTY



DECK ELEVATION DIAGRAM
 AT CURB POINTS BEFORE CONCRETE IS PLACED

GENERAL NOTES

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.

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.

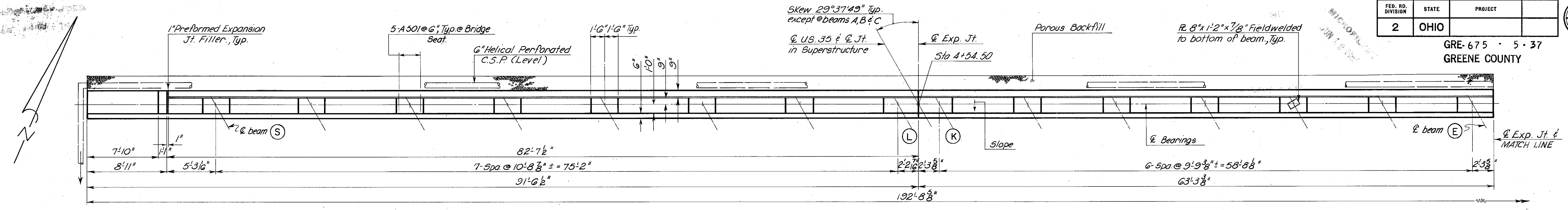
FOR ADDITIONAL GENERAL NOTES SEE COMMON DETAILS, SHEET C1/C2

In lieu of the Premolded Sealing Strip and the 13"x3/4" recess shown on the plan, use Type B Waterproofing centered on the joint.

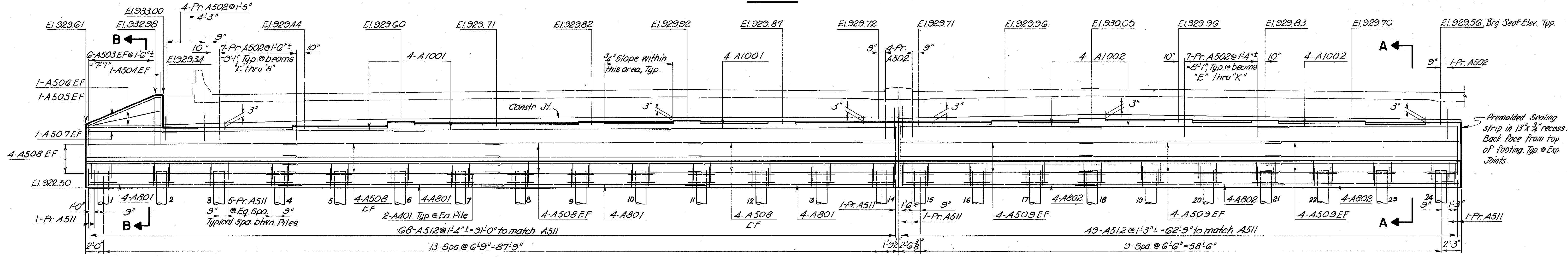
KING & GAVARIS CONSULTING ENGINEERS OHIO 3/14

GENERAL NOTES, ESTIMATED QUANTITIES & MISCELLANEOUS DETAILS
 BRIDGE NO. GRE-35-0009
 U.S. 35 OVER DAYTON XENIA RD.
 GREENE COUNTY STA. 4+53.35 TO STA. 6+33.90

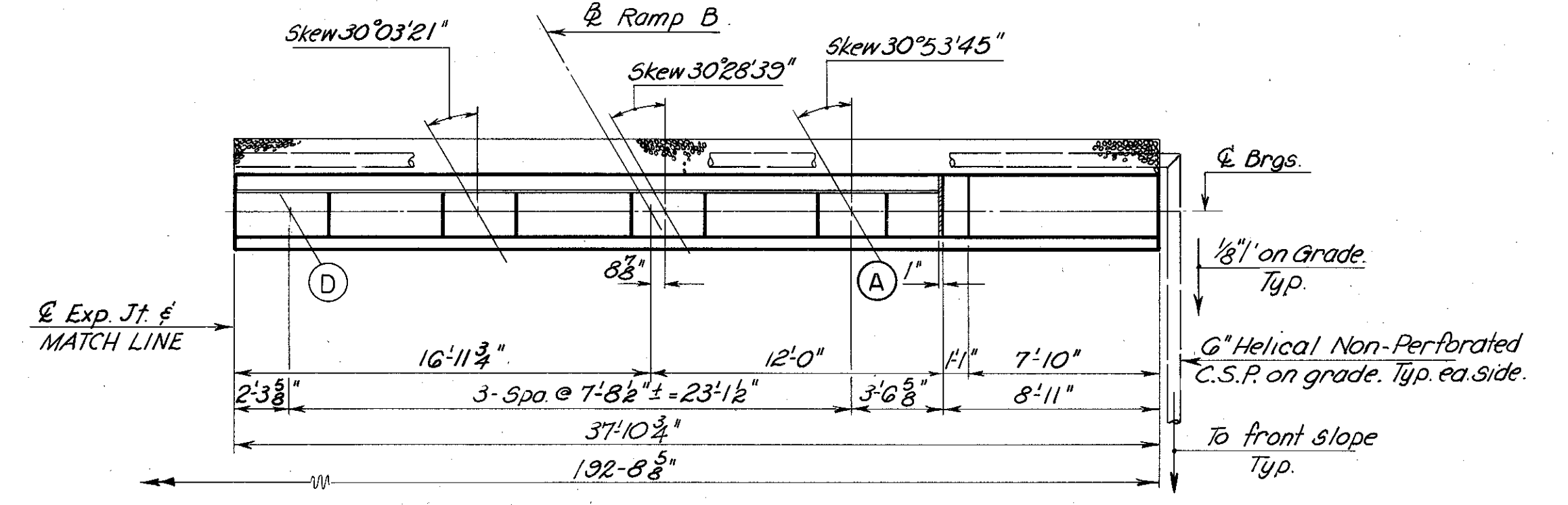
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.	K.F.		S.A.		9/25/72	



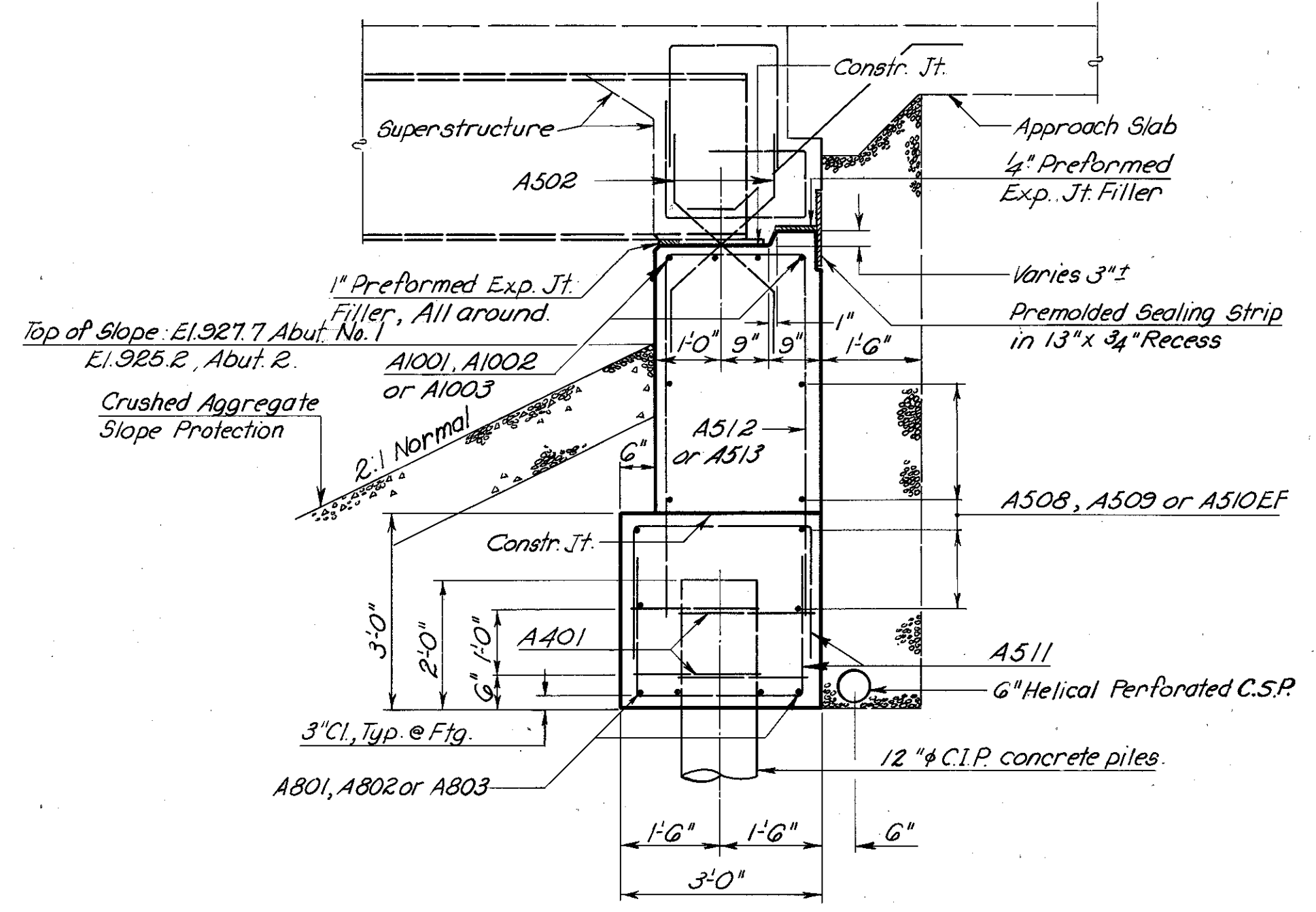
PLAN



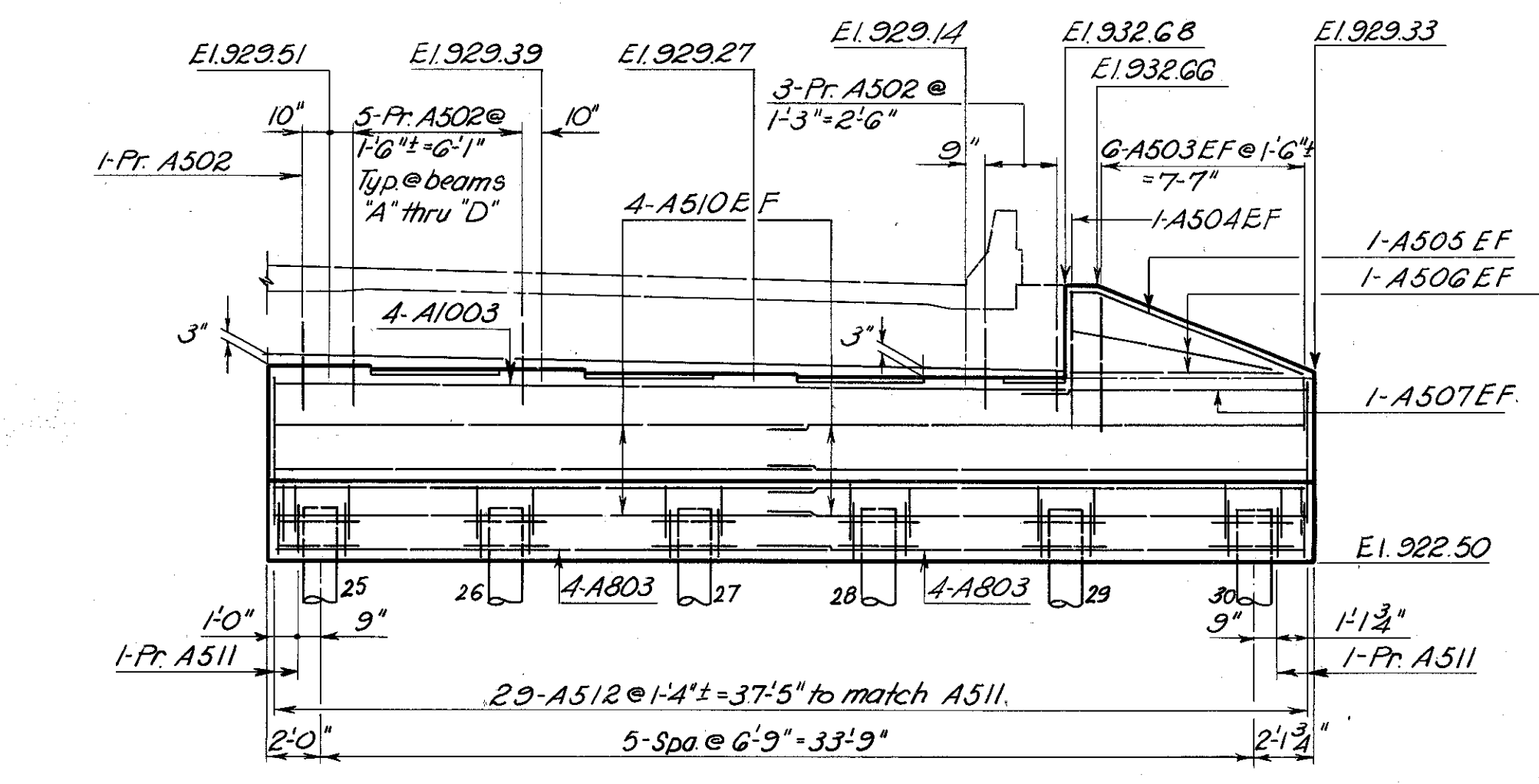
ELEVATION



PLAN CONTINUES



SECTION A-A



ELEVATION CONTINUES

NOTES:

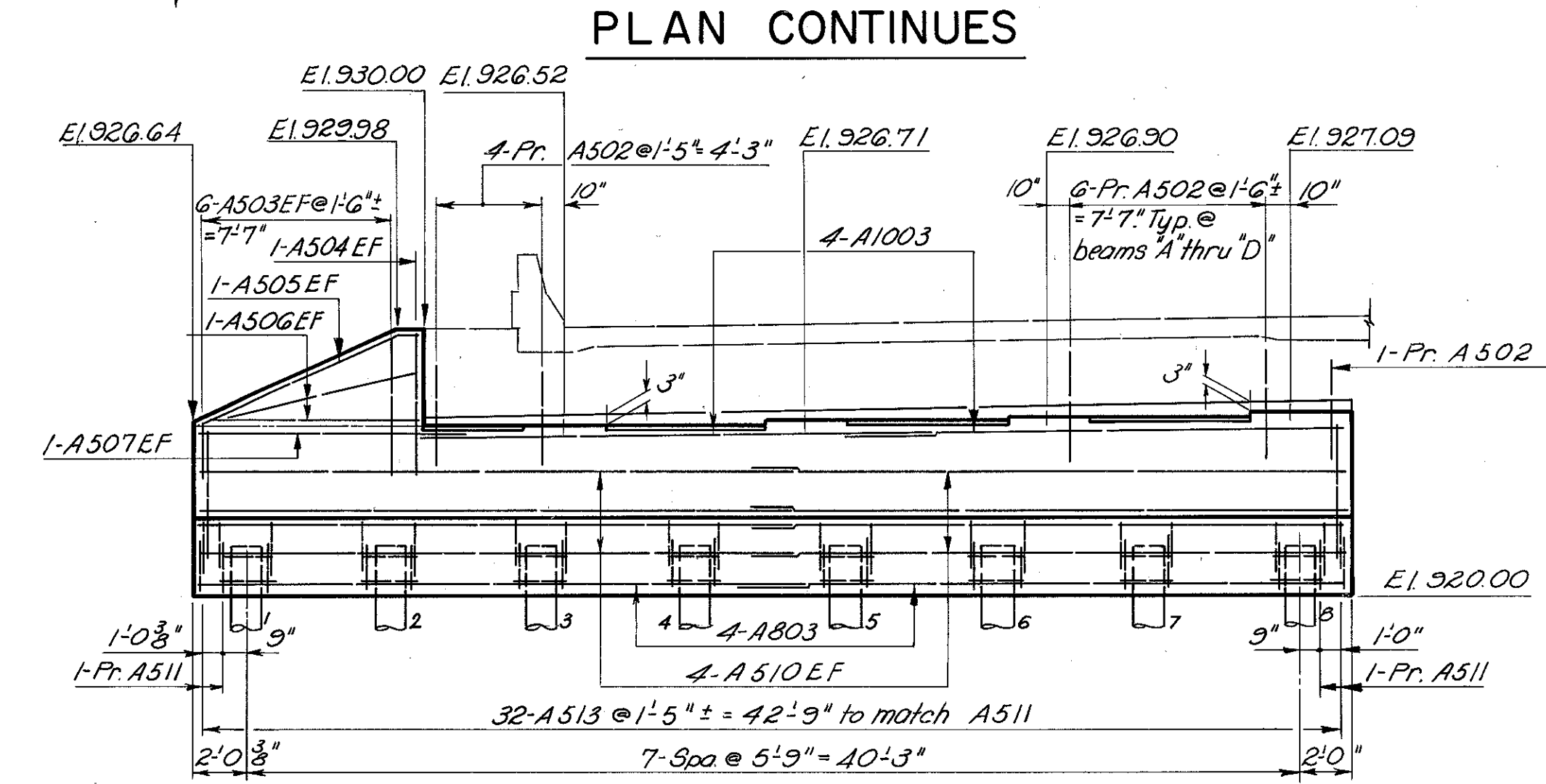
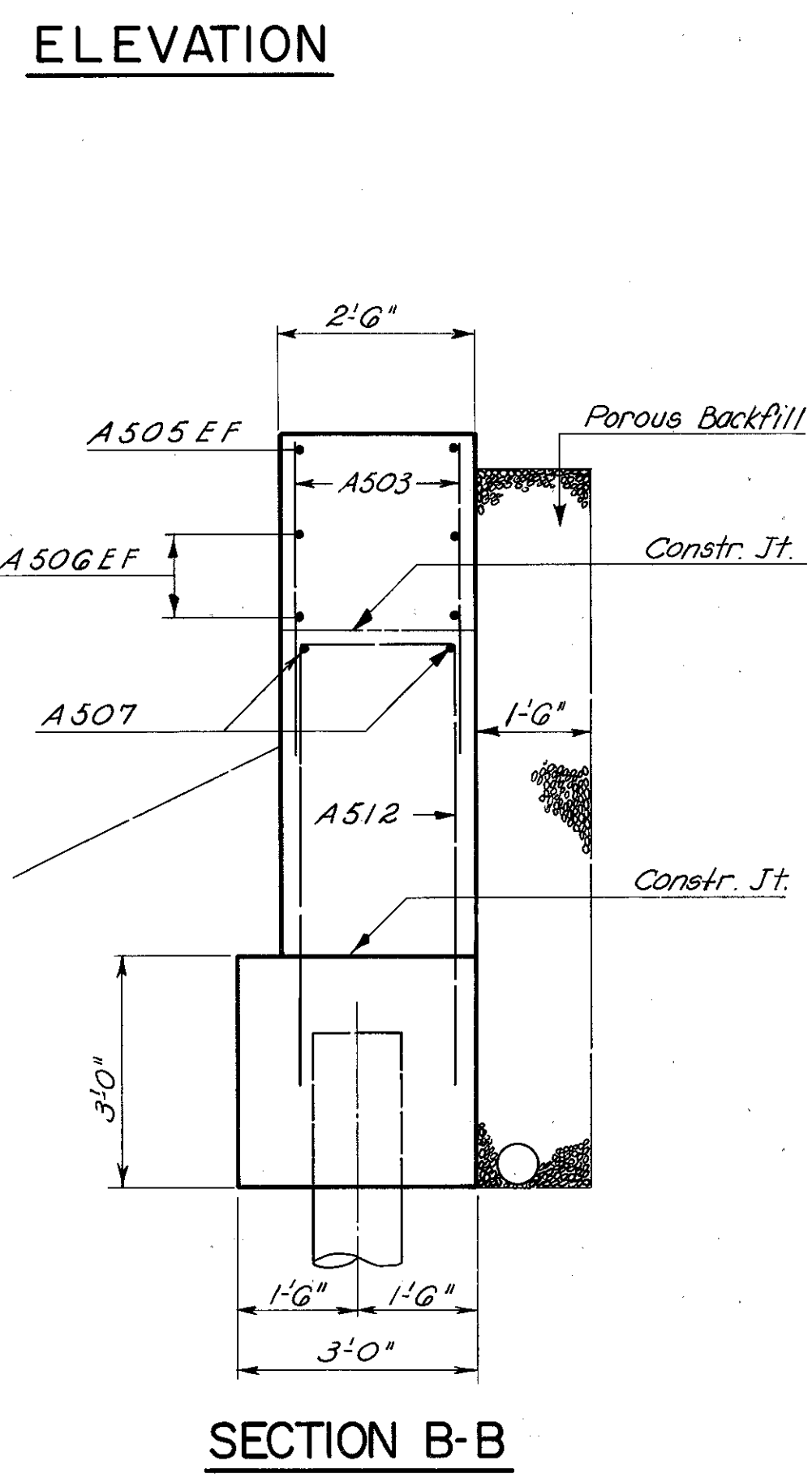
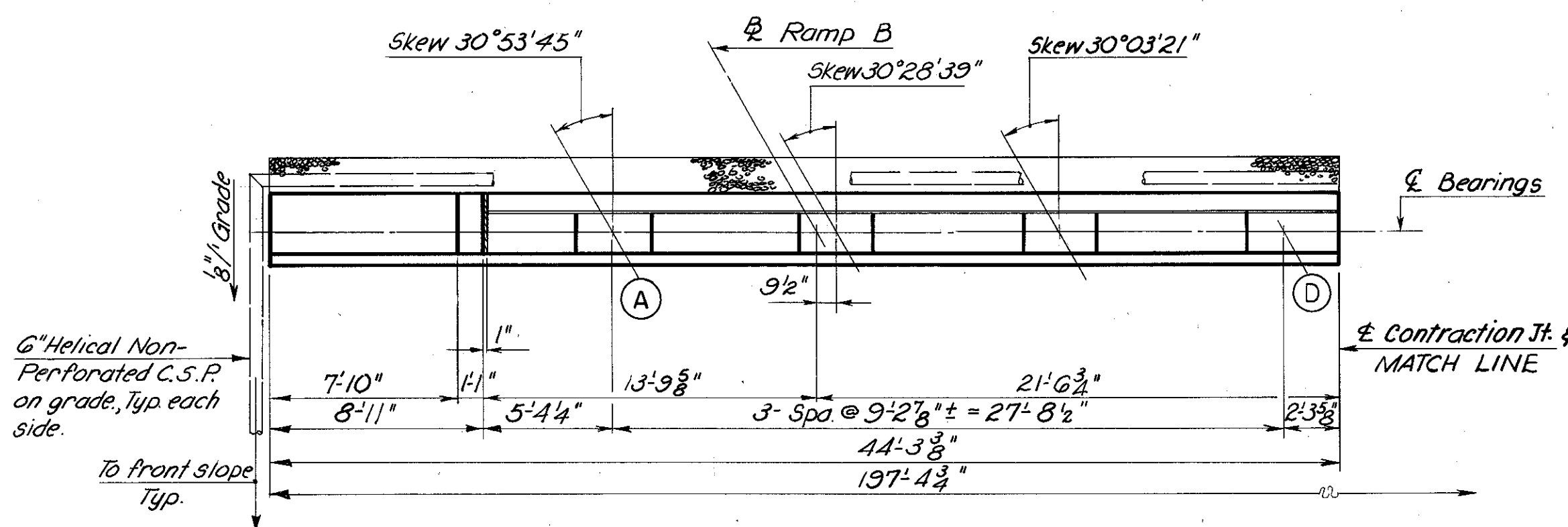
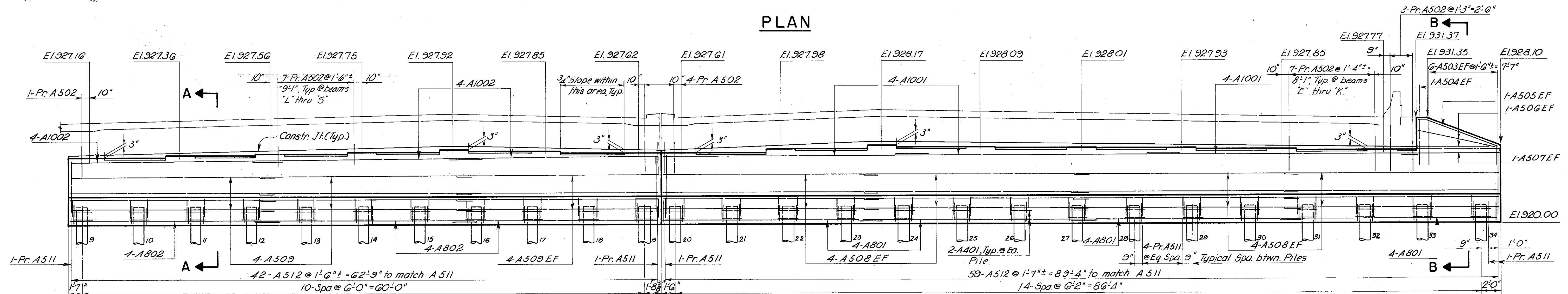
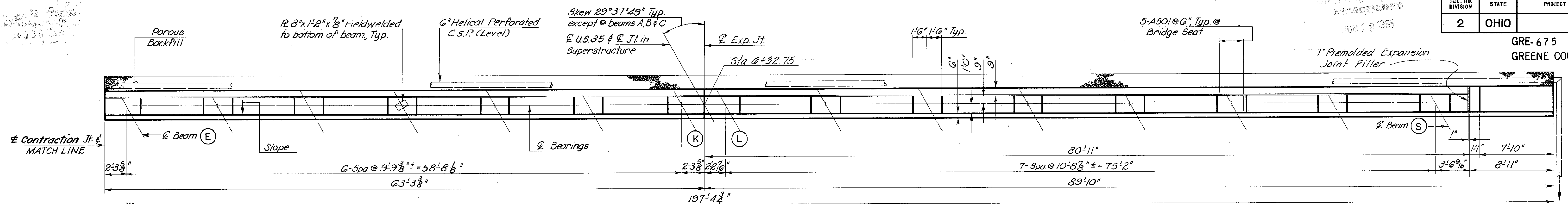
- Work this sheet with Sh. 5/14
- For Reinforcing Steel List see Sh. 11/14
- Porous Backfill, within the limits shown, shall extend upward to the plane of the subgrade within the roadway area and outward to the earth slopes.
- Only that portion of the C.S.P. located in the Porous Backfill shall be perforated.
- For termination of C.S.P. at slopes see Common Details, Sh. C1/C2.
- EF denotes Each Face.
- Reinforcing Steel in Abutments 1 & 2 shall have the suffix A & B respectively.
- All splices and dowels will be lapped min. 30 bar dia. unless otherwise shown.
- For Expansion Joint Detail, see Common Details, Sh. C2/C2.

KING & GAVARIS		CONSULTING ENGINEERS		OHIO	
ABUTMENT NO. 1					
BRIDGE NO. GRE-35-0009					
U.S. 35 OVER DAYTON XENIA RD.					
GREENE COUNTY			STA. 4+53.35 TO STA. 6+33.90		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
V.P.	A.W.		S.A.	84	9/25/72

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

528
616

GRE-675 - 5-37
GREENE COUNTY

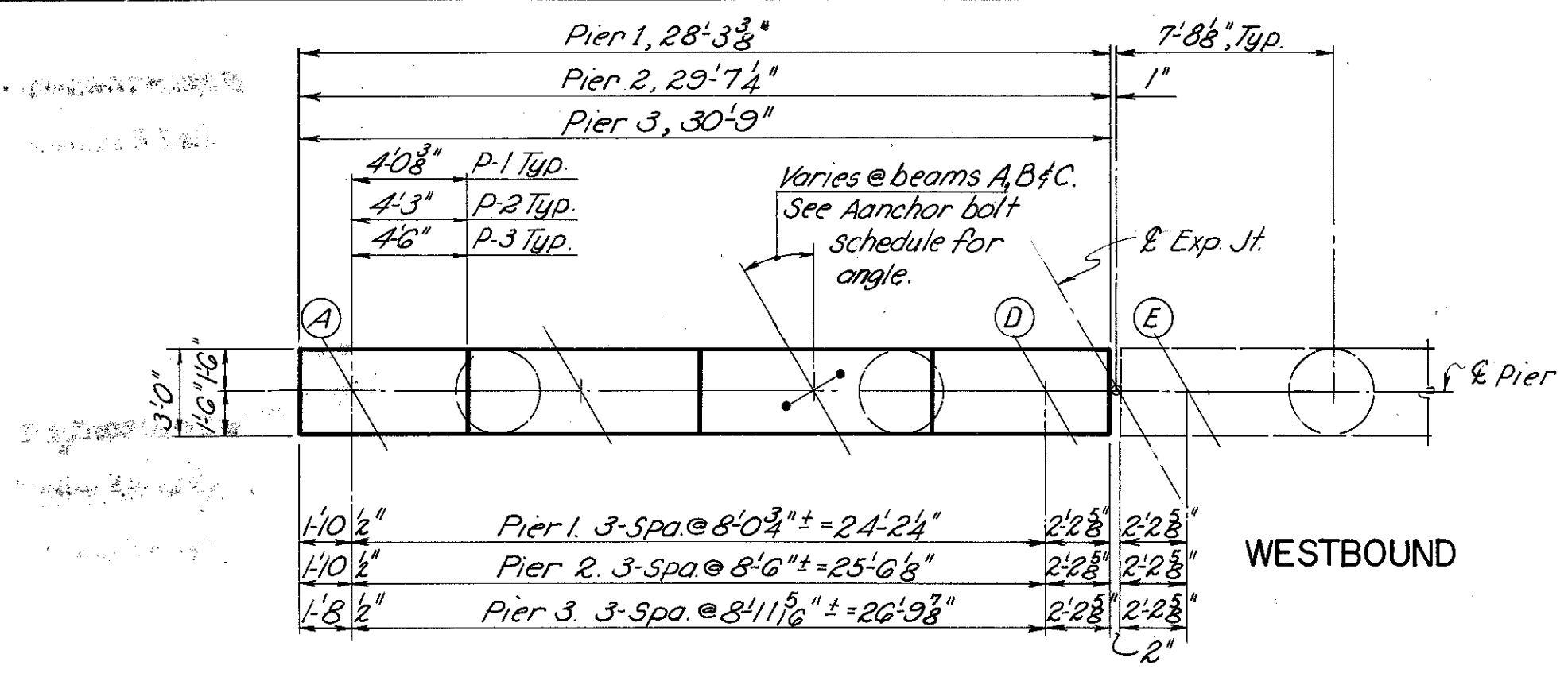


NOTES:

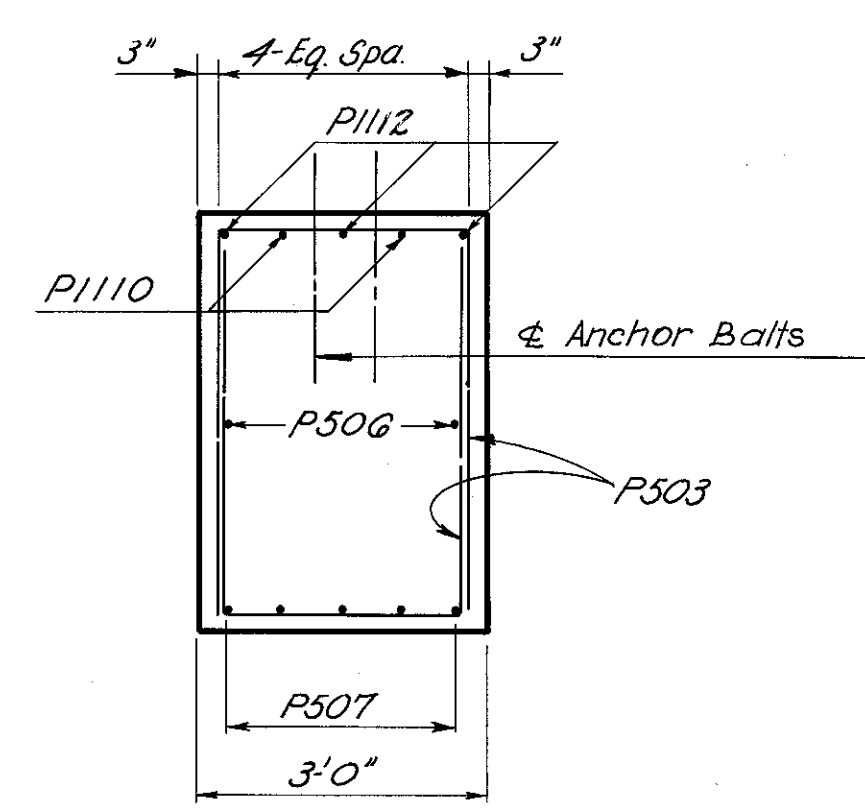
Work this sheet with sh. A/14

For Detail Notes see sh. A/14

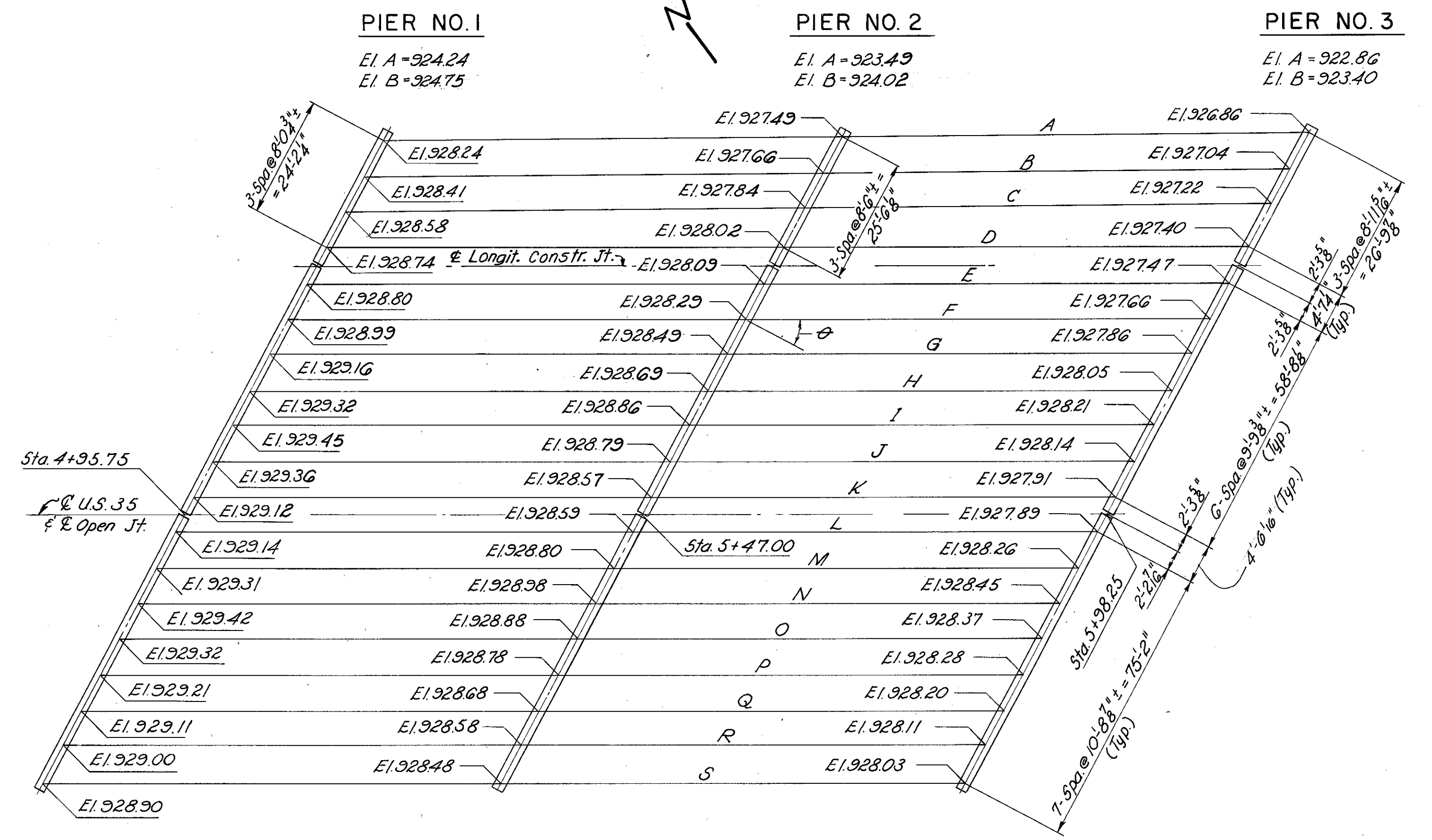
KING & GAVARIS CONSULTING ENGINEERS						5/14
ABUTMENT NO. 2						
BRIDGE NO. GRE-35-0009						
U.S. 35 OVER DAYTON XENIA RD.						
GREENE COUNTY						
				STA: 4+53.35 TO STA: 6+33.90		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V. P.	A. W.		S. A.		9/25/72	



PLAN
RAMP B



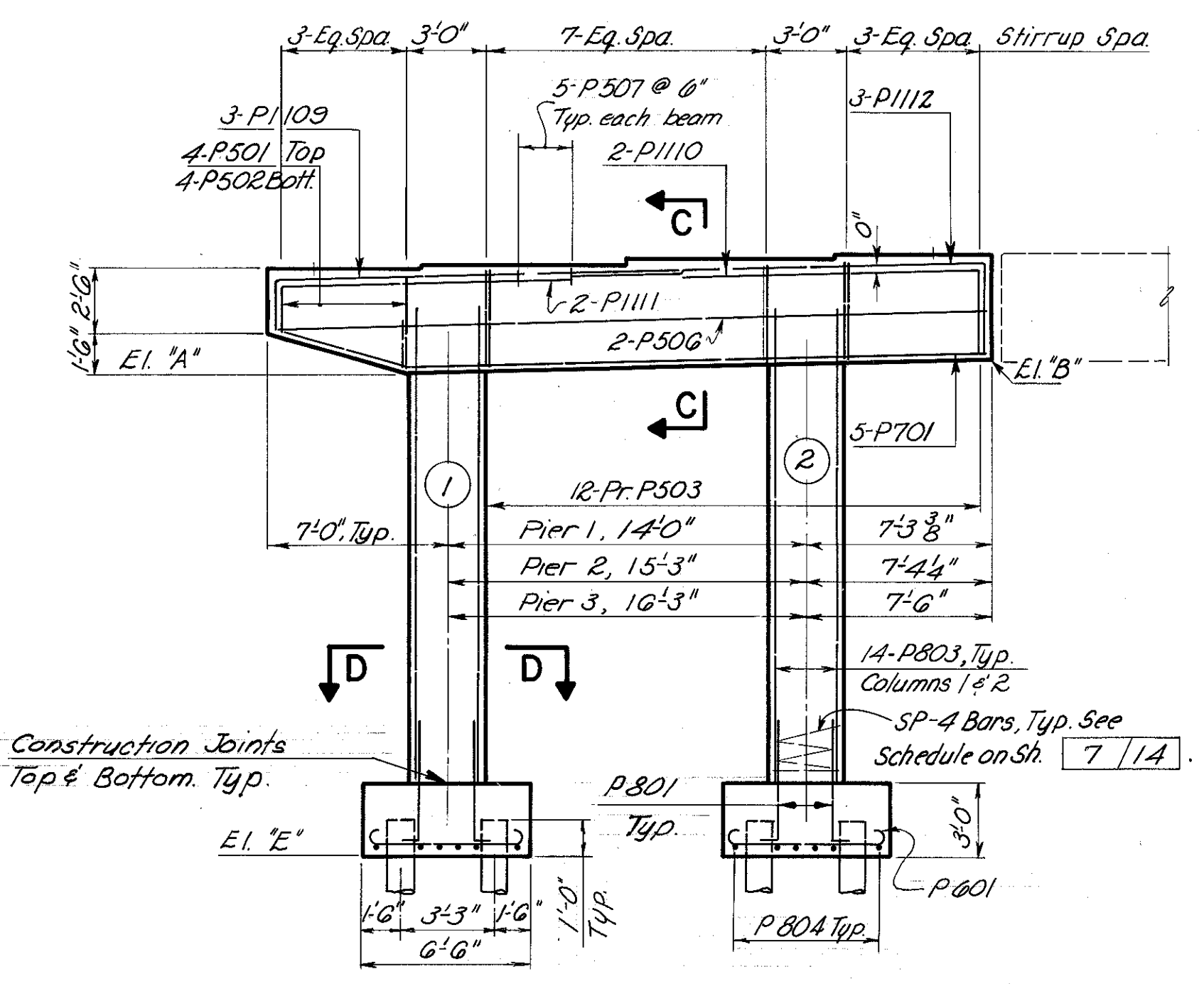
SECTION C-C



KEY PLAN

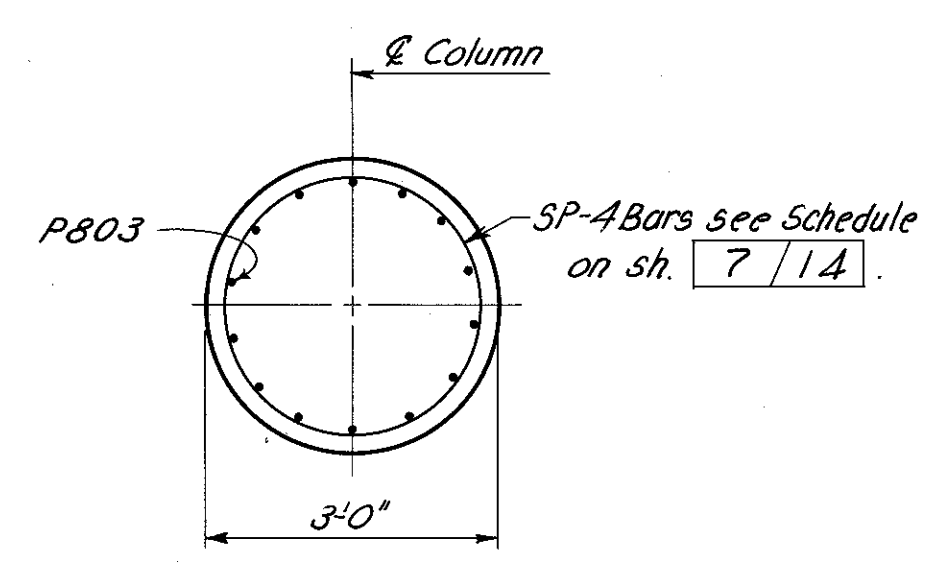
Showing Bearing Seat Elevations & Layout Dimensions

EI. C = 925.16	EI. C = 924.59	EI. C = 923.88
EI. D = 924.90	EI. D = 924.48	EI. D = 924.03
EI. E = 905.75	EI. E = 906.50	EI. E = 906.25

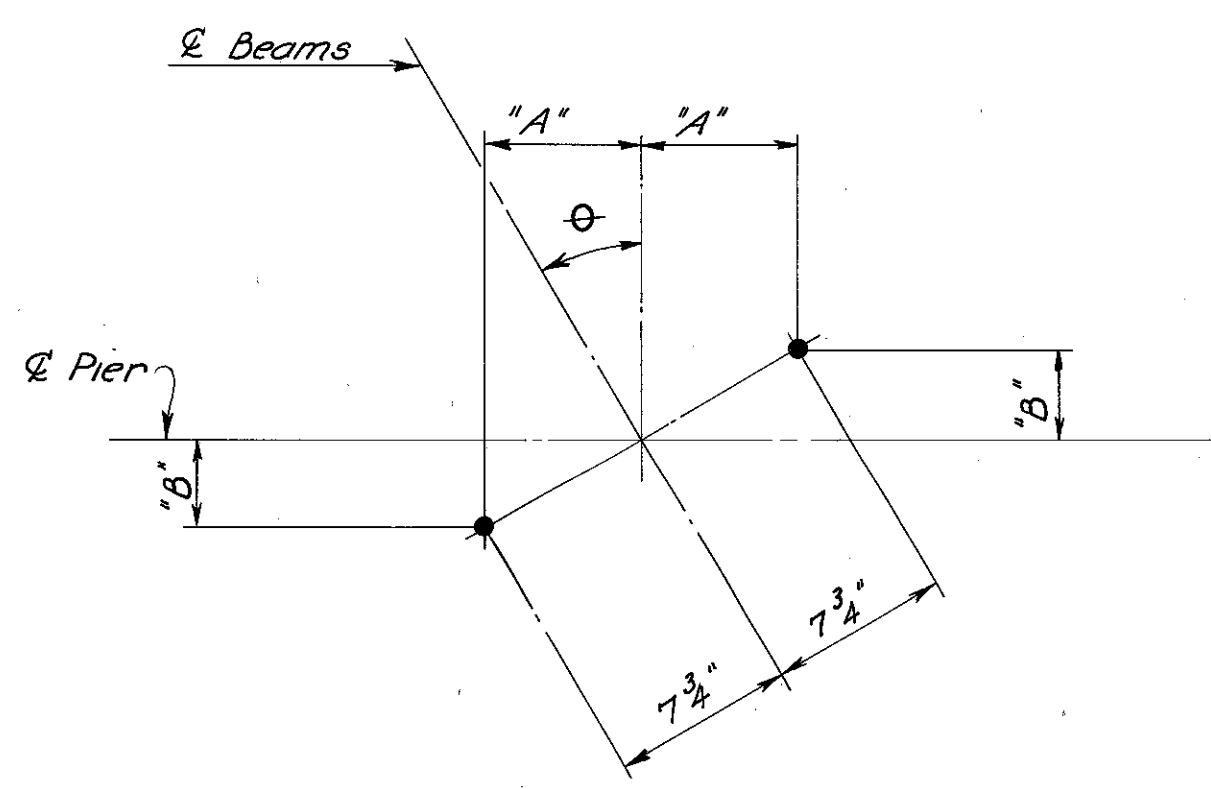


ELEVATION

PIERS 1, 2, & 3



SECTION D-D



ANCHOR BOLT LAYOUT

TYPICAL ALL PIERS

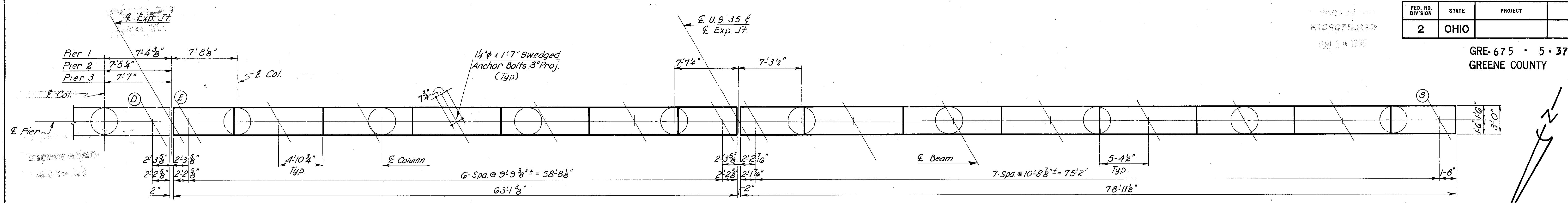
BEAMS	BRGS.	DIM. "A"	DIM. "B"	θ
A	F-150	6 3/8"	4"	30° 53' 45"
B	F-150	6 3/8"	3 7/8"	30° 28' 39"
C	F-150	6 3/4"	3 7/8"	30° 03' 21"
D thru S	F-150	6 3/4"	3 7/8"	29° 37' 49"

NOTE: Work this sheet with Sh. 7/1A.

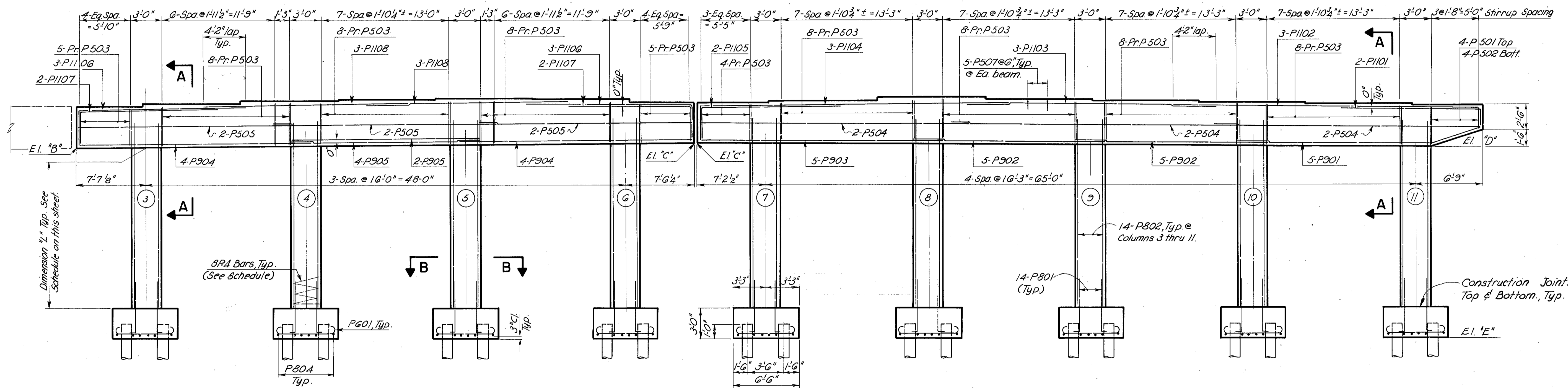
DESIGNED		DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V.P.		A.W.		S.A.		9/25/72	

KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

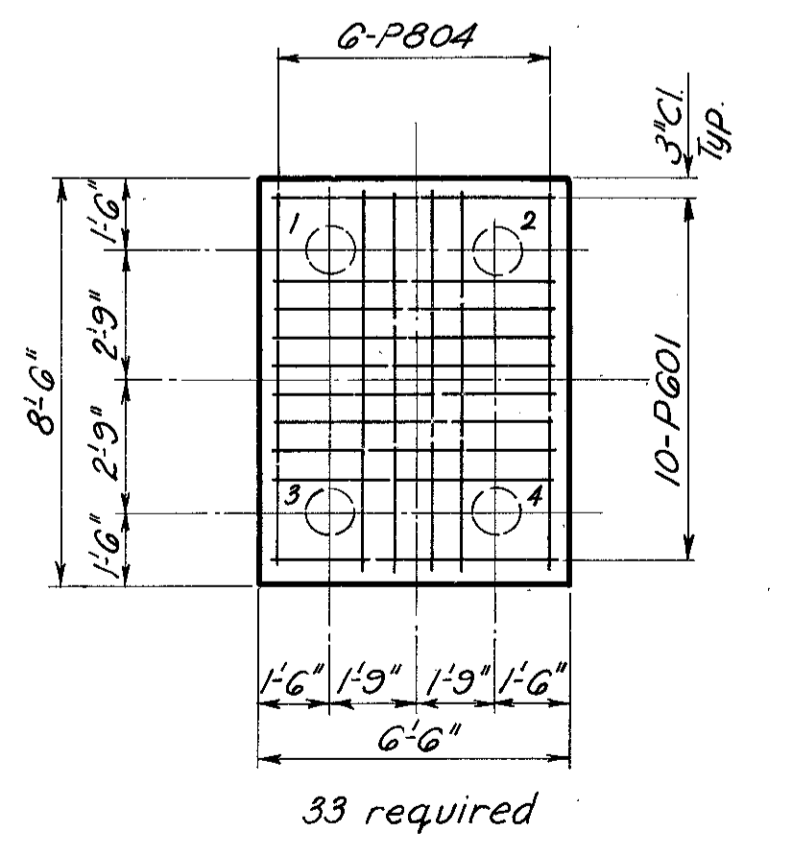
PIERS-1
BRIDGE NO. GRE.-35-0009
U.S. 35 OVER DAYTON XENIA RD.
GREENE COUNTY STA: 4+53.35 TO
STA: 6+33.90



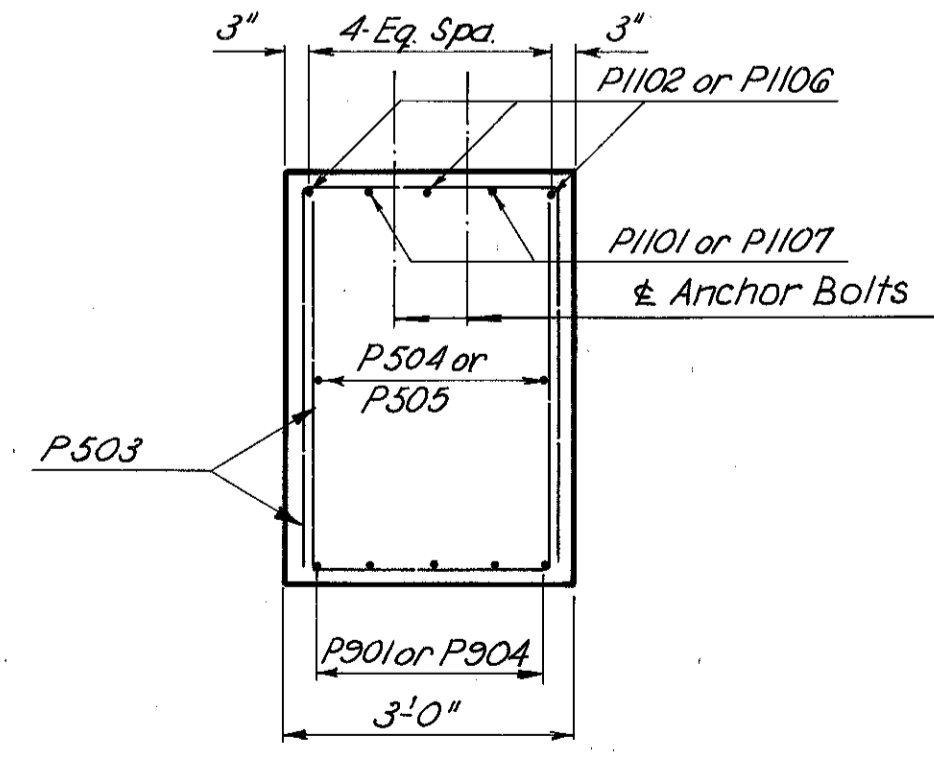
RAMP B WESTBOUND EASTBOUND PLAN



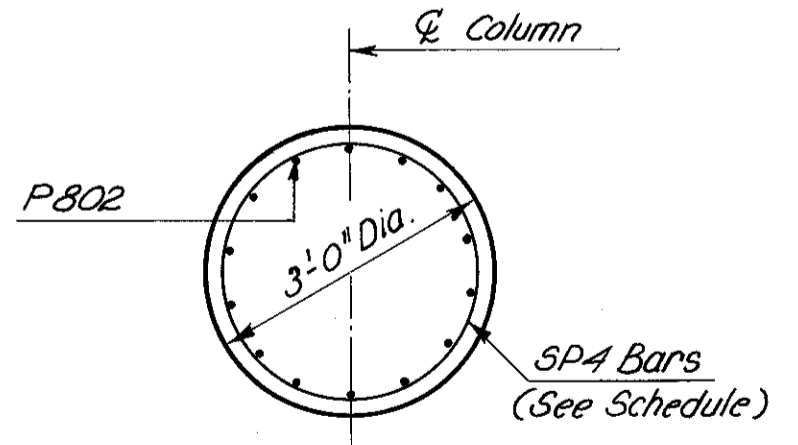
ELEVATION
PIERS 1, 2, & 3



TYPICAL FOOTING PLAN



SECTION A-A



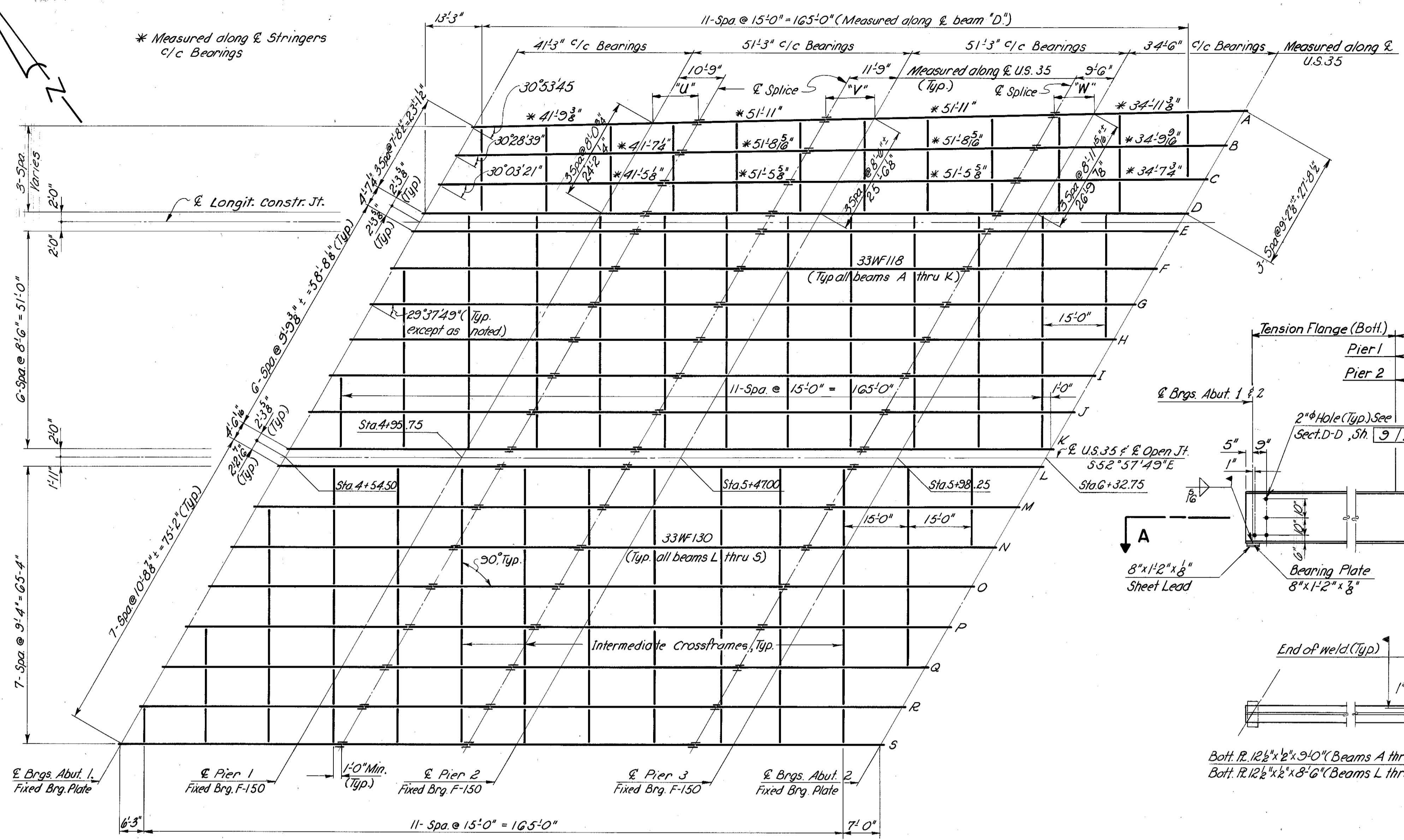
SECTION B-B

COLUMN NO.	COLUMN HEIGHTS										
	DIMENSION "L"										
PIER NO. 1	15'-6 1/4"	15'-10"	16'-0 5/8"	16'-1 7/8"	16'-3 1/8"	16'-4 3/8"	16'-4 5/8"	16'-3 3/8"	16'-3 1/4"	16'-2 3/8"	16'-1 7/8"
PIER NO. 2	14'-0 1/4"	14'-4 1/4"	14'-7"	14'-8 3/4"	14'-10 1/8"	15'-0 1/4"	15'-0 7/8"	15'-0 3/8"	15'-0 3/8"	15'-0 1/8"	14'-11 3/8"
PIER NO. 3	13'-7 3/4"	13'-11 1/4"	14'-2 1/2"	14'-4"	14'-5 1/8"	14'-6 3/8"	14'-7 1/4"	14'-8 1/8"	14'-8 1/8"	14'-8 3/8"	14'-9 1/4"

COLUMN NO.	SPIRAL BARS										
	DIMENSION "L"										
PIER NO. 1	SP401	SP402	SP402	SP403	SP403	SP403	SP403	SP403	SP403	SP403	SP403
PIER NO. 2	SP408	SP404	SP405	SP405	SP406	SP406	SP406	SP406	SP406	SP406	SP406
PIER NO. 3	SP407	SP408	SP408	SP404	SP404	SP404	SP405	SP405	SP405	SP405	SP405

NOTES:
 For Reinforcing Steel List See Shs. 11, 12, 14
 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 bar (bolts) holes.
 Work this sheet with sh. 6, 14
 Reinforcing Steel in Piers 1, 2 & 3 shall have the suffix A, B & C respectively
 Bearing Anchors: At the option of the Contractor, bearing anchors (or formed holes) located and supported by templates, may be cast-in place. All splices and dowels will be lapped min. 30 bar dia. unless otherwise shown.

KING & GAVARIS CONSULTING ENGINEERS		7/14
PIERS-2		
BRIDGE NO. GRE-35-0009 U.S. 35 OVER DAYTON XENIA RD. GREENE COUNTY		
		STA: 4+53.35 TO STA: 6+33.90
DESIGNED V. P.	DRAWN A. W.	TRACED S. A.
CHECKED S. A.	REVIEWED DATE 9/25/72	REVISIONS

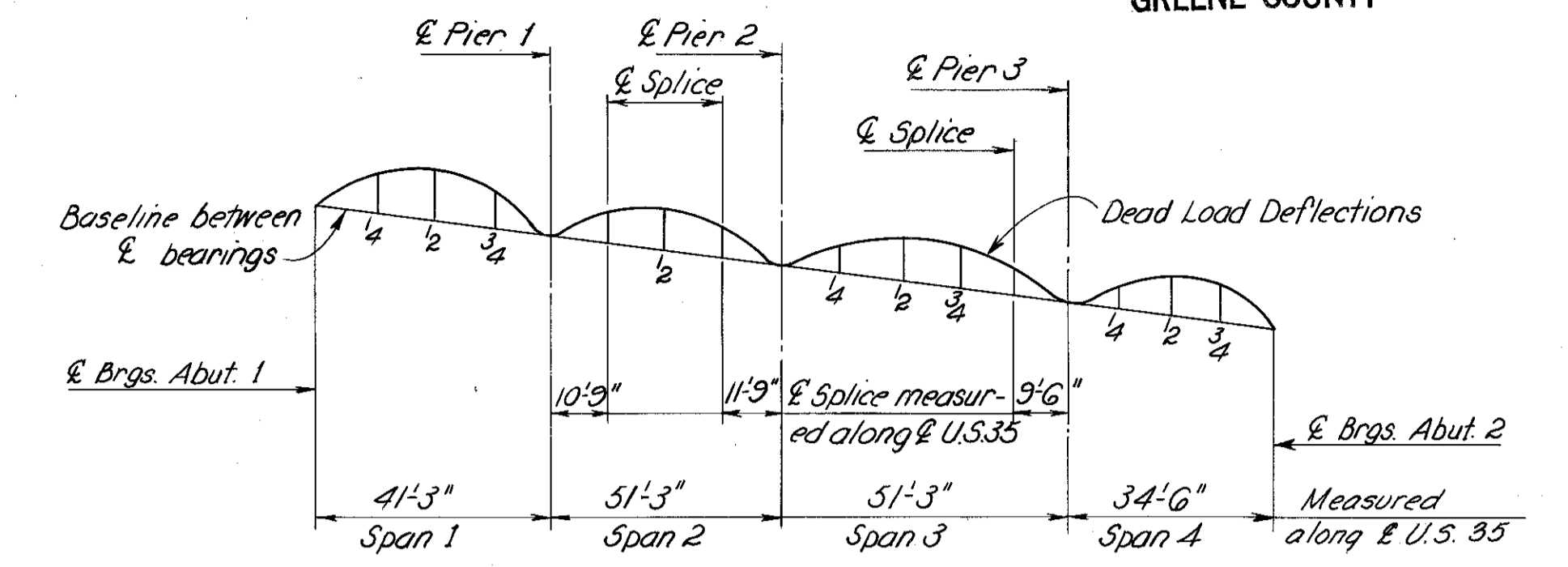


BEAM	DIMENSION		
	U	V	W
A	10'-10 3/8"	11'-10 3/8"	9'-7 1/2"
B	10'-10 8/8"	11'-10 1/4"	9'-7"
C	10'-9 1/2"	11'-9 5/8"	9'-6 1/2"

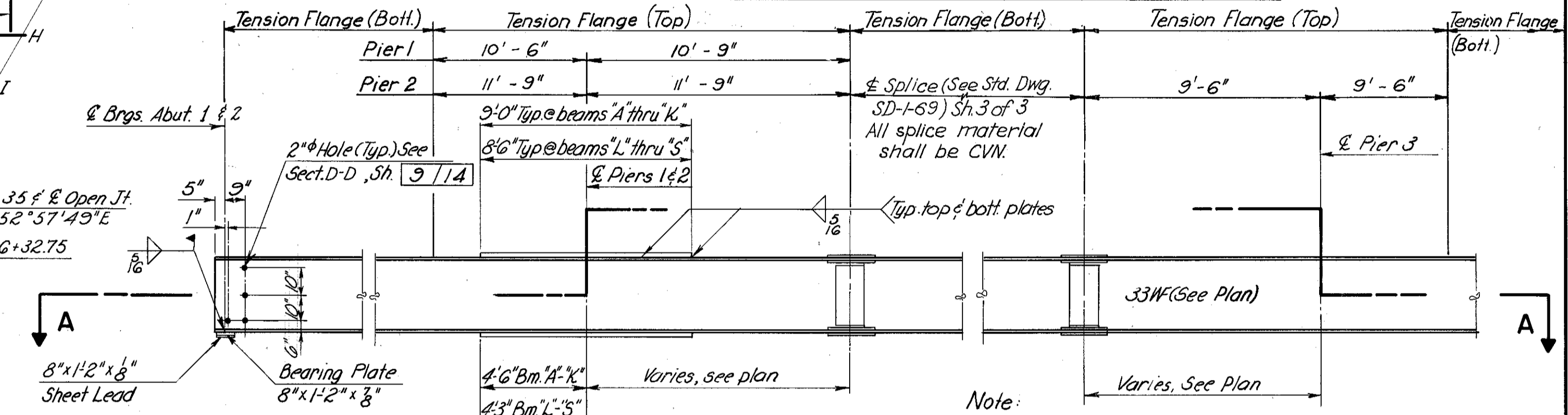
FRAMING PLAN

	BEAMS A THRU D																BEAMS E THRU K																BEAMS L THRU S															
	SPAN 1				SPAN 2				SPAN 3				SPAN 4				SPAN 1				SPAN 2				SPAN 3				SPAN 4																			
	1/4 Pt.	1/2 Pt.	3/4 Pt.	End	1/4 Pt.	1/2 Pt.	3/4 Pt.	End	1/4 Pt.	1/2 Pt.	3/4 Pt.	End	1/4 Pt.	1/2 Pt.	3/4 Pt.	End	1/4 Pt.	1/2 Pt.	3/4 Pt.	End	1/4 Pt.	1/2 Pt.	3/4 Pt.	End	1/4 Pt.	1/2 Pt.	3/4 Pt.	End	1/4 Pt.	1/2 Pt.	3/4 Pt.	End	1/4 Pt.	1/2 Pt.	3/4 Pt.	End												
Deflection due to weight of steel	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"												
Deflection due to remaining dead load	8"	8"	16"	16"	8"	16"	8"	16"	8"	16"	16"	8"	8"	16"	16"	8"	4"	8"	8"	0"	16"	16"	8"	16"	8"	16"	16"	8"	4"	16"	8"	0"	16"	16"														
Required shop camber	8"	8"	16"	16"	8"	16"	8"	16"	8"	16"	16"	8"	4"	8"	8"	0"	16"	16"	8"	16"	8"	16"	16"	8"	4"	16"	8"	0"	16"	16"																		

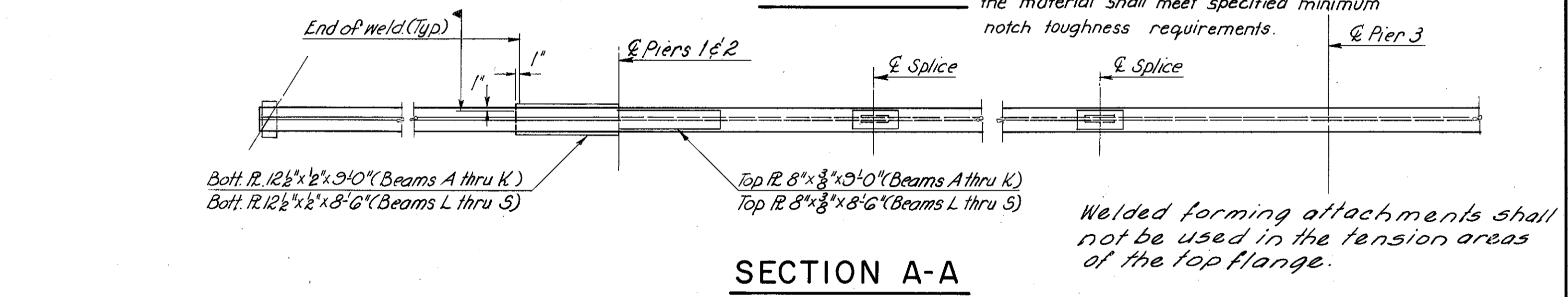
NOTE: Vertical Curve and Transition Corrections will be made by varying the slab haunch.



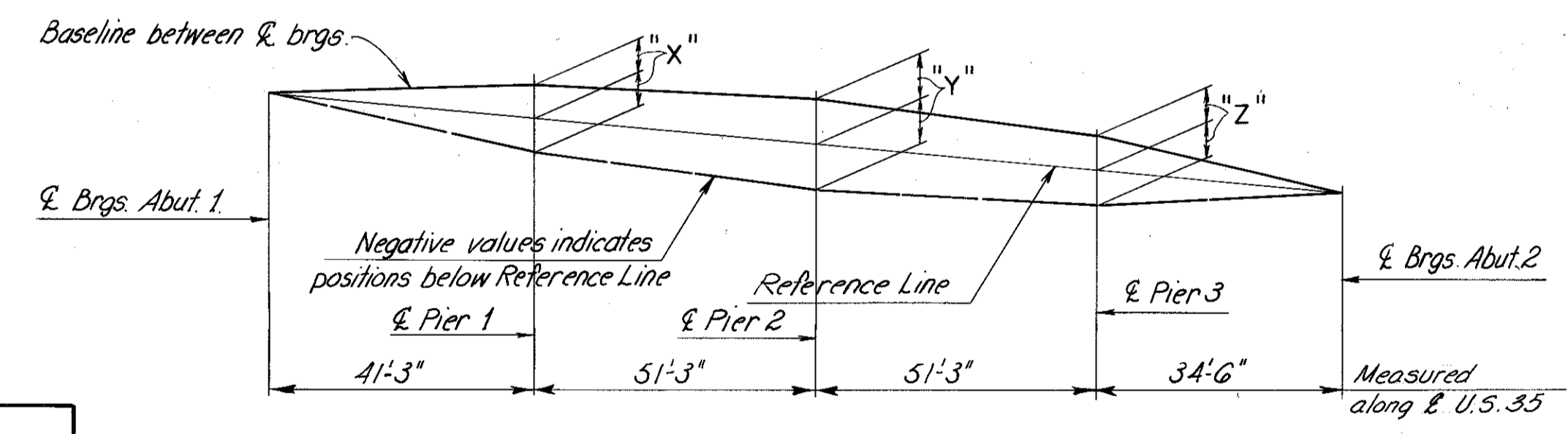
CAMBER ALIGNMENT DIAGRAM



ELEVATION



SECTION A-A



BLOCKING DIAGRAM

DIMENSION	BEAMS																		
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
X	-1/8"	-1/8"	-1/8"	-1/4"	0"	4"	1/8"	3/8"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
Y	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"	-1/16"
Z	-4"	-4"	-1/8"	-1/8"	-8"	-1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"

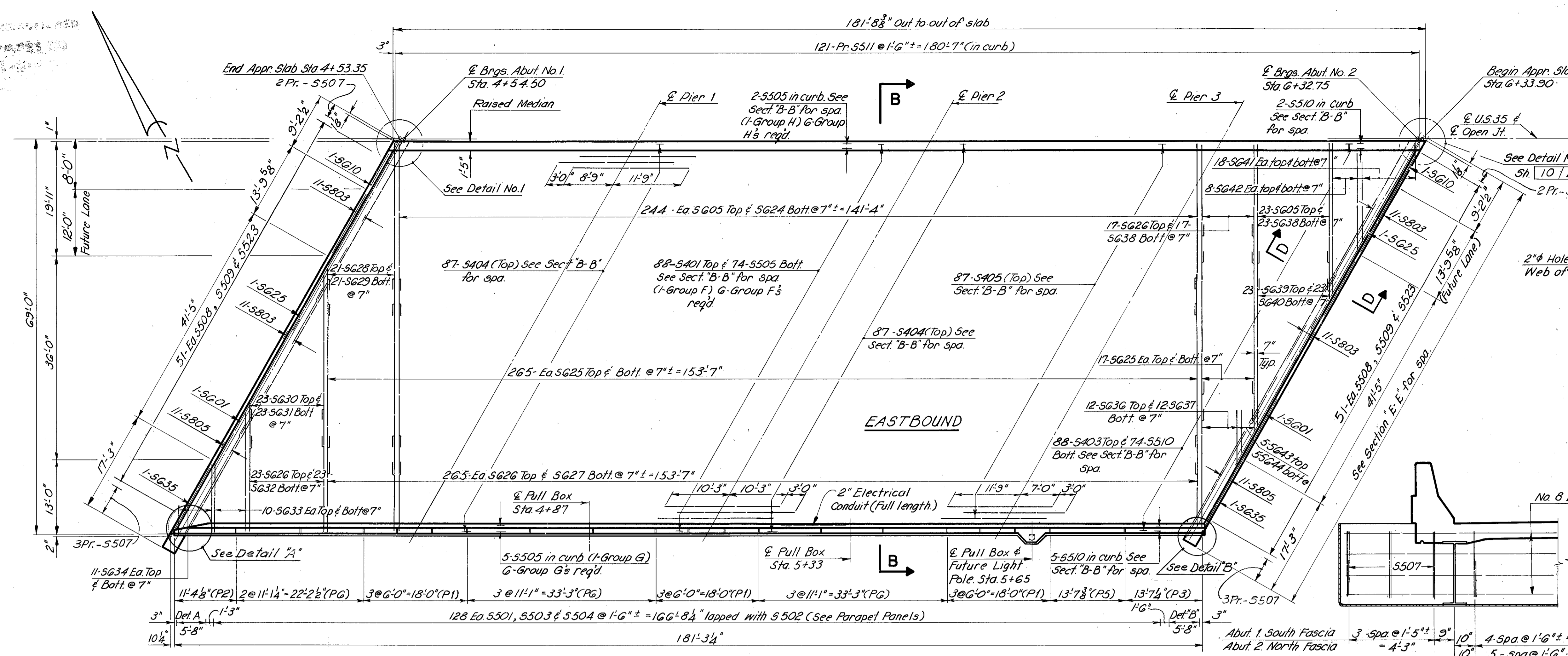
NOTES:
For Intermediate Crossframe Details, see Common Detail sh. [C2][C2].
For Typical Transverse Section, see sh. [9/10][14].
For Fixed Bearings F-150 Details, see Common Detail sh. [C1][C2].
For Underbridge Luminaire Supporting brackets, see sh. [160], included with Item 513 for payment.

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OHIO

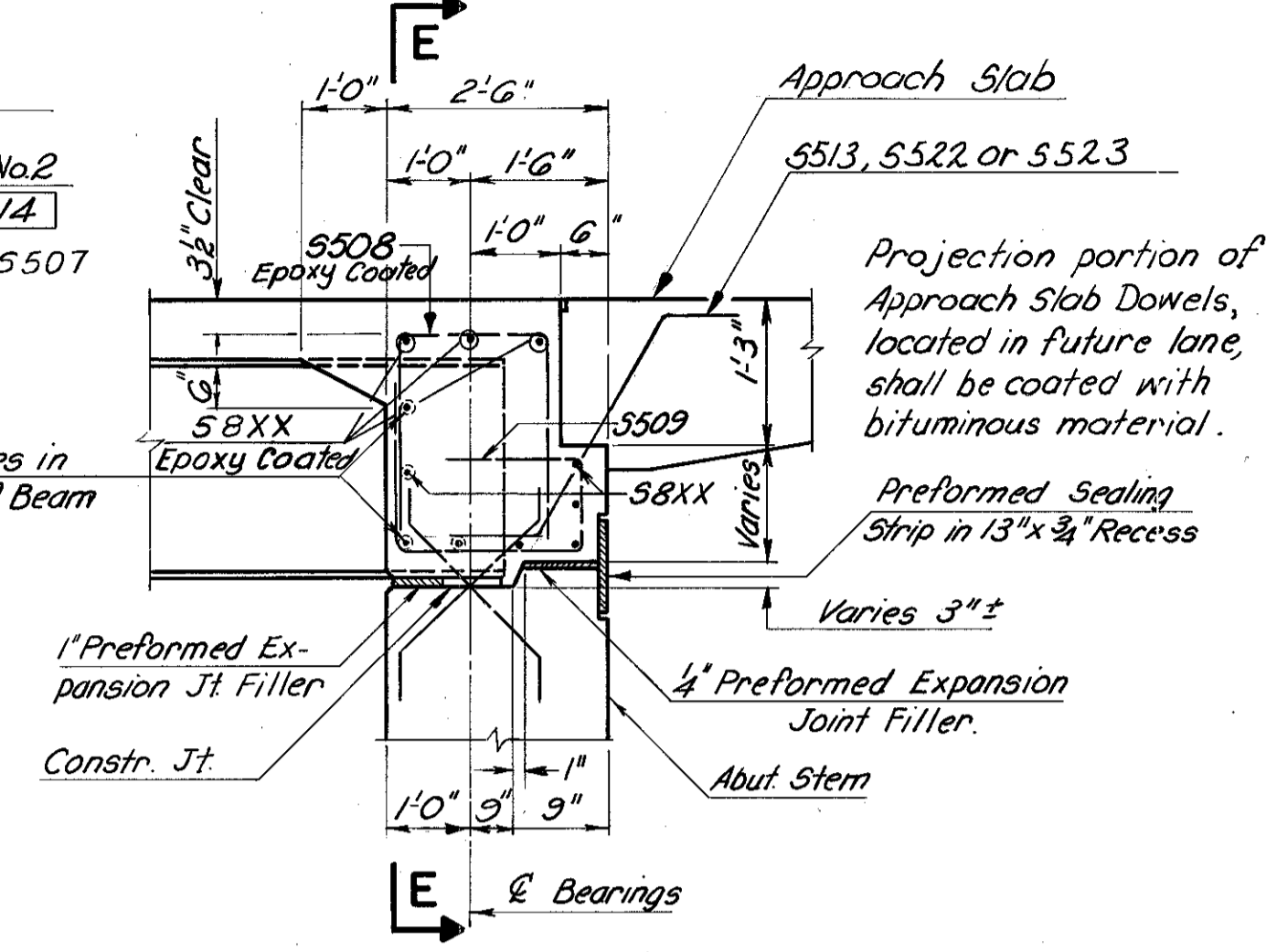
STEEL FRAMING PLAN
BRIDGE NO. GRE.-35-0009
U.S. 35 OVER DAYTON XENIA RD.
GREENE COUNTY STA: 4+53.35 TO 6+33.90

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
V. P.	A. W.		S. A.	ST	9/25/72	4-27-82

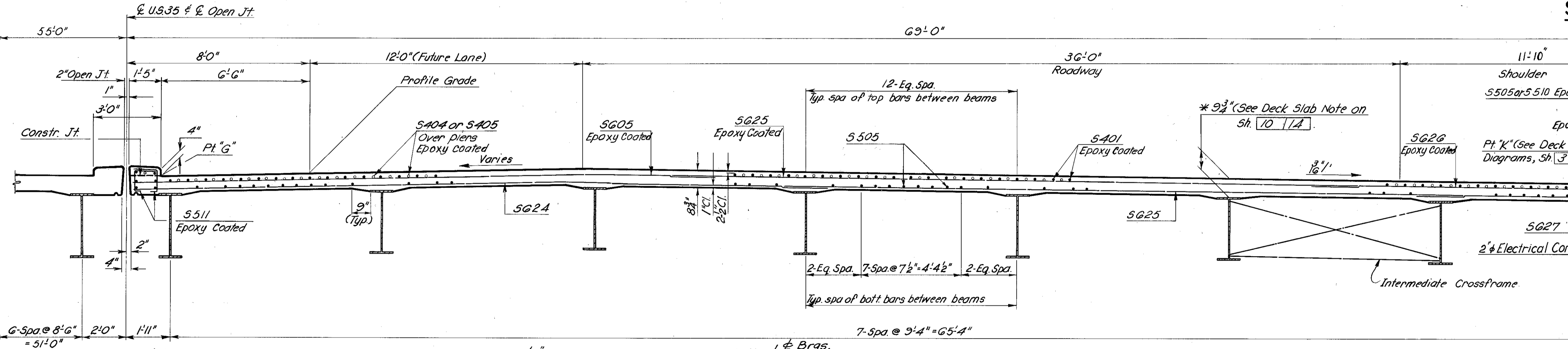
GRE-675 - 5-37
GREENE COUNTY



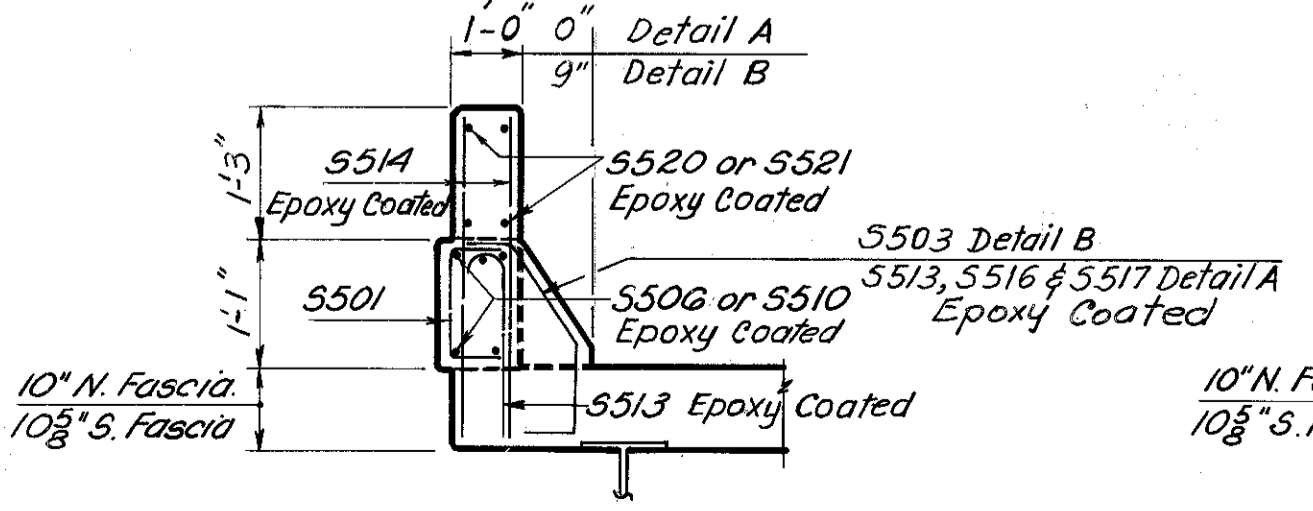
PLAN



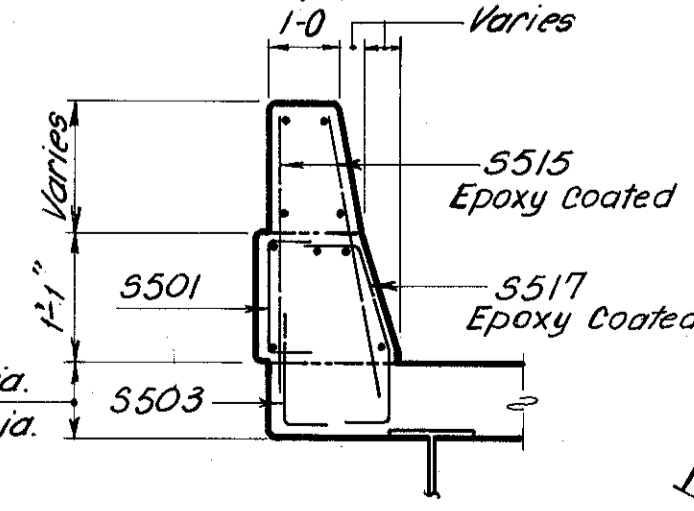
SECTION D-D



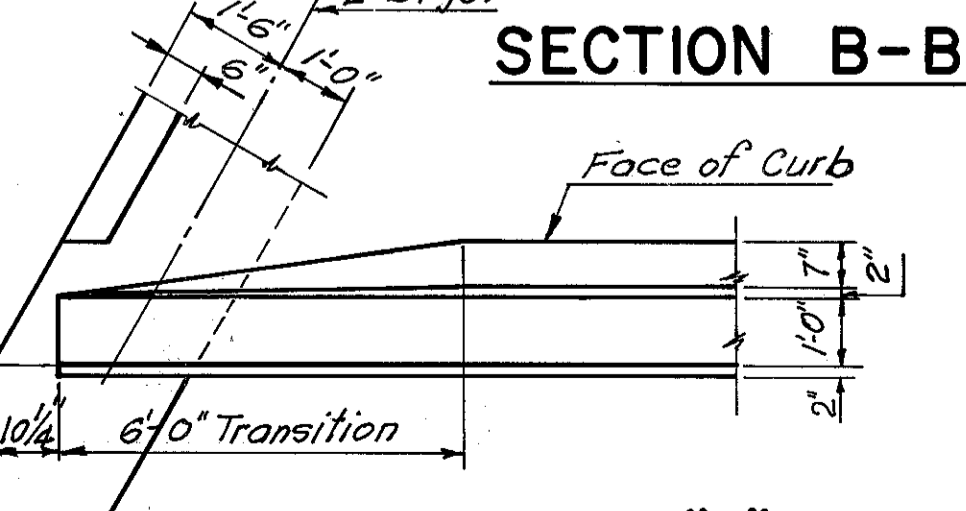
SECTION E-E



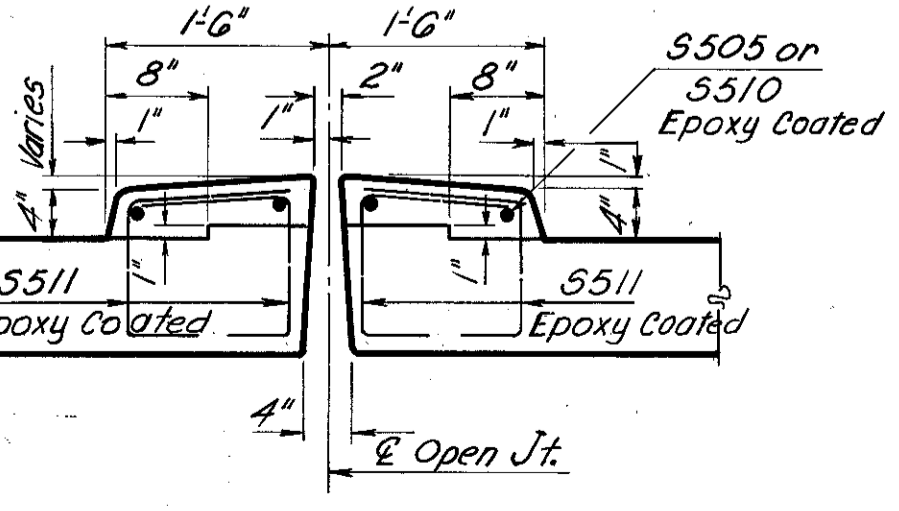
END VIEW



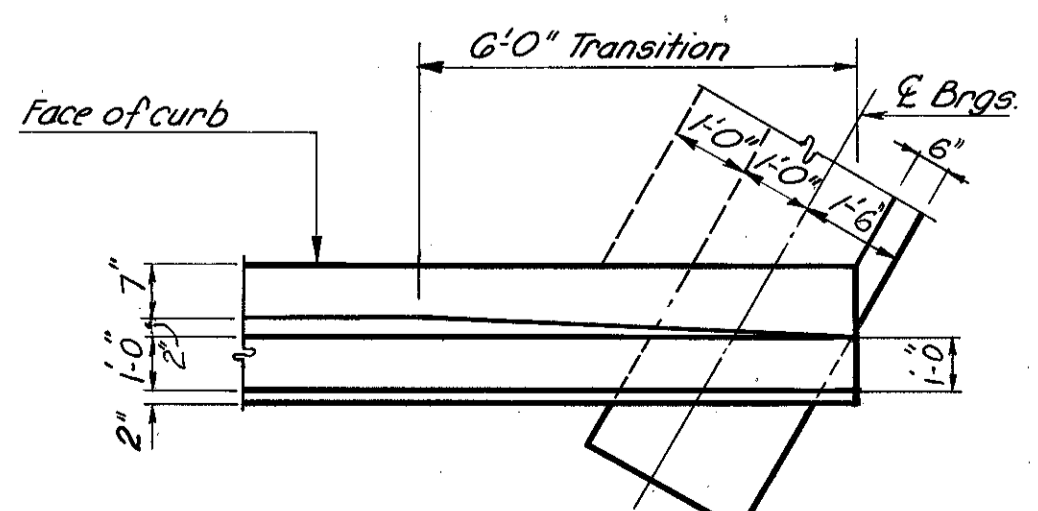
SECTION C-C



PLAN-DETAIL A



MEDIAN DETAIL



PLAN-DETAIL B

DETAIL NO. 1

DESIGNED		DRAWN		TRACED		CHECKED		REVIEWED		DATE		REVISED	
V.P.		A.W.				S.A.		S.A.		9/25/72			

KING & GAVARIS
CONSULTING ENGINEERS
OHIO

**SUPERSTRUCTURE
ROADWAY SLAB - I**

BRIDGE NO. GRE.-35-0009
U.S. 35 OVER DAYTON XENIA RD.
GREENE COUNTY

STA: 4+53.35 TO
STA: 6+33.90

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
ABUTMENT NO. 1					Reinforcing Steel in Abutment No. 1 shall have the suffix "A"												
A401	120	5'-5"	434	5-10		1'-11"	1'-9"	1'-11"									
A501	95	3'-8"	363	2	9"	2'-2"	2'-2"	1'-0"			9"						
A502	238	4'-2"	1035	19		1'-0"	2'-2"	1'-0"				8'-2"	8'-2"	3'-7"			
A503	24	Varies 2'-0" to 5'-2" by 7/8", 4'-0"	89	str													
A504	4	5'-1"	21	str													
A505	4	9'-3"	39	19		8'-4"	11"					3'-3"	7'-8"	8'-7"			
A506	8	8'-6"	71	str													
A507	4	10'-4"	43	str													
A508	32	24'-0"	801	str													
A509	24	22'-1"	553	str													
A510	16	19'-7"	327	str													
A511	292	6'-5"	1954	510		2'-1"	2'-6"	2'-1"									
A512	146	14'-1"	2145	510		6'-1"	2'-2"	6'-1"									
A801	16	24'-8"	1054	str													
A802	12	22'-7"	724	str													
A803	8	20'-0"	427	str													
A1001	12	30'-0"	1549	str													
A1002	12	23'-6"	1213	str													
A1003	4	29'-1"	501	str													
		Total	13,343														
ABUTMENT NO. 2					Reinforcing Steel in Abutment No. 2 shall have the suffix "B"												
A401	136	5'-5"	492	510		1'-11"	1'-9"	1'-11"									
A501	95	3'-8"	363	2	9"	2'-2"	2'-2"	1'-0"			9"						
A502	244	4'-2"	1060	19		1'-0"	2'-2"	1'-0"				8'-2"	8'-2"	3'-7"			
A503	24	Varies 2'-0" to 5'-2" by 7/8", 4'-0"	90	str													
A504	4	5'-2"	22	str													
A505	4	9'-3"	39	19		8'-4"	11"					3'-3"	7'-8"	8'-7"			
A506	8	8'-6"	71	str													
A507	4	10'-4"	43	str													
A508	32	23'-7"	787	str													
A509	24	22'-0"	551	str													
A510	16	22'-9"	380	str													
A511	266	6'-5"	1780	510		2'-1"	2'-6"	2'-1"									
A512	101	14'-11"	1571	510		6'-6"	2'-2"	6'-6"									
A513	32	12'-11"	431	510		5'-6"	2'-2"	5'-6"									
A801	16	24'-3"	1036	str													
A802	12	22'-8"	726	str													
A803	8	23'-2"	495	str													
A1001	12	29'-6"	1523	str													
A1002	12	23'-6"	1213	str													
A1003	8	19'-6"	671	str													
		Total	13,344														
		Total Abutments	26,687														
PIER NO. 1					Reinforcing Steel in Pier No. 1 shall have the suffix "A"												
SP401	1	15'-4 1/2"	292	SPI		4'-8"	15'-4 1/2"	4'-4"							2'-8"		
SP402	2	15'-9"	597	SPI		4'-8"	15'-9"	4'-5"							2'-8"		
SP403	8	16'-1 1/2"	2442	SPI		4'-8"	16'-1 1/2"	4'-6"							2'-8"		
P501	8	Varies 6'-9" to 9'-3" by 10", 2'-0"	69	510		Varies 2'-2" to 3'-8" by 6", 2'-0"	2'-8"	Varies 2'-2" to 3'-8" by 6", 2'-0"									
P502	8	5'-7"	47	510		1'-7"	2'-8"	1'-7"									
P503	164	9'-3"	1668	510		3'-8"	2'-8"	3'-8"									
P504	6	27'-3"	171	str													
P505	6	22'-0"	138	str													
P506	2	27'-11"	38	str													
P507	95	4'-5"	438	510		1'-0"	2'-8"	1'-0"									
P601	110	7'-4"	1212	1	8"	6'-0"					8"						
P701	5	28'-1"	287	19		5'-6"	22'-7"					1'-4"	5'-4"	27'-11"			

REC'D: 5/18/65
JUN 19 1965

534
616

FED. RD. DIVISION 2
STATE OHIO
PROJECT GRE-675-5-37
GREENE COUNTY

ENLARGED VIEW SHOWING BAR BENDING DETAILS

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 numbers.
- All dimensions are out to out of bar.
- Radius dimension "R" is to outside of bar.
- The length of bent bars is measured along the centerline.
- For standard hook dimensions, see Sect. 509.05 of the specifications.
- For bar type SPI, 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. 1/2 Closed coils shall be provided at the ends of each spiral unit.
- Figures in circles show bar types.
- "J" Dimension on hooks is shown only where necessary to restrict hook size. Otherwise standard hooks are to be used.
- Where "J" is not shown, "J" will be kept equal to or less than "H". Where "J" can exceed "H" it will be shown.
- "H" Dimension on stirrups will be shown where necessary to restrict hooks.
- All bends shown are bent around a standard mandrel, except stirrups S11, ties T3, spirals SPI and where radius "R" is indicated.
- Four steel channel, tee or angle spacers, weighing approximately 0.80 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.
- For additional bars see sheet 12, 13, 14 / 14
- REINFORCING STEEL SAMPLES: Refer to C.M.S. 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.

DESIGNED A.W. DRAWN A.W. TRACED S.A. CHECKED S.A. REVIEWED S.A. DATE 9/2/72 REVISIONS

KING & GAVARIS CONSULTING ENGINEERS
CINCINNATI OHIO
REINFORCING STEEL LIST
BRIDGE NO. GRE-35-0009
U.S. 35 OVER DAYTON XENIA RD.
GREENE COUNTY STA: 4+53.35 TO 6+33.90

1000000000
AUG 28 1989

535
6/6

GREENE COUNTY

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
PIER NO. 1 CONTINUED																	
P801	154	6'-5"	2,639	2	1'-2"	5'-3"											
P802	126	18'-11"	6,364	STR													
P803	28	18'-4"	1,371	STR													
P804	66	9'-10"	1,733	1	11"	8'-0"						11"	10"				
P901	5	24'-5"	415	19		5'-3 1/2"	19'-2"					1'-6"	5'-1"	24'-3"			
P902	10	19'-1"	649	STR													
P903	5	24'-9"	421	STR													
P904	8	24'-10"	675	STR													
P905	6	18'-10"	384	STR													
P1101	2	15'-11"	169	20		2'-2"	14'-1"										
P1102	3	32'-8"	521	20		2'-2"	30'-10"										
P1103	3	24'-10"	396	STR													
P1104	3	34'-8"	553	20		3'-8"	31'-4"										
P1105	2	17'-10"	189	20		3'-8"	14'-6"										
P1106	6	20'-9"	661	20		3'-8"	17'-5"										
P1107	4	18'-0"	383	20		3'-8"	14'-8"										
P1108	6	20'-3"	646	STR													
P1109	3	17'-9"	283	20		2'-2"	15'-11"										
P1110	2	16'-11"	180	20		3'-8"	13'-7"										
P1111	2	15'-2"	161	20		2'-2"	13'-4"										
P1112	3	19'-6"	311	20		3'-8"	16'-2"										
Total			26,523														
PIER NO. 2					Reinforcing steel in Pier No. 2 shall have the suffix "B"												
SP404	1	14'-3"	272	SPI		4'-2"	14'-3"	41								2'-8"	
SP405	3	14'-7 1/2"	835	SPI		4'-2"	14'-7 1/2"	42								2'-8"	
SP406	6	15'-0"	1,711	SPI		4'-2"	15'-0"	43								2'-8"	
SP408	1	13'-10 1/2"	265	SPI		4'-2"	13'-10 1/2"	40								2'-8"	
P501	8	Varies 6'-3" to 9'-9" by 1'-0" 2'-0"	69	SIO		Varies 2'-2" to 3'-8" by 1'-7" 2'-0"	2'-8"	Varies 2'-2" to 3'-8" by 1'-7" 2'-0"									
P502	8	5'-7"	47	SIO		1'-7"	2'-8"	1'-7"									
P503	164	9'-9"	1,668	SIO		3'-8"	2'-8"	3'-8"									
P504	6	27'-3"	171	STR													
P505	6	22'-0"	138	STR													
P506	2	29'-3"	61	STR													
P507	35	4'-5"	438	SIO			1'-0"	2'-8"	1'-0"								
P601	110	7'-4"	1,212	1	8"	6'-0"						8"				6"	
P701	5	29'-6"	301	19		5'-7"	23'-11"					1'-4"	5'-4"	29'-3"			
P801	154	6'-5"	2,639	2	1'-2"	5'-3"											
P802	126	17'-7"	5,915	STR													
P803	28	16'-10"	1,258	STR													
P804	66	9'-10"	1,733	1	11"	8'-0"						11"	10"				
P901	5	24'-5"	415	19	5'-3 1/2"	19'-2"						1'-6"	5'-1"	24'-3"			
P902	10	19'-1"	649	STR													
P903	5	24'-9"	421	STR													
P904	8	24'-10"	675	STR													
P905	6	18'-10"	384	STR													
P1101	2	15'-11"	169	20		2'-2"	14'-1"										
P1102	3	32'-8"	521	20		2'-2"	30'-10"										
P1103	3	24'-10"	396	STR													
P1104	3	34'-8"	553	20		3'-8"	31'-4"										
P1105	2	17'-10"	189	20		3'-8"	14'-6"										
P1106	6	20'-9"	661	20		3'-8"	17'-5"										
P1107	4	18'-0"	383	20		3'-8"	14'-8"										
P1108	6	20'-3"	646	STR													
P1109	3	18'-5"	294	20		2'-2"	16'-7"										
P1110	2	16'-11"	180	20		3'-8"	13'-7"										
P1111	2	15'-2"	161	20		2'-2"	13'-4"										
P1112	3	20'-3"	323	20		3'-8"	16'-11"										
Total			25,753														

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
PIER NO. 3					Reinforcing steel in Pier No. 3 shall have the suffix "C"												
SP404	3	14'-3"	815	SPI		4'-2"	14'-3"	41								2'-8"	
SP405	5	14'-7 1/2"	1,392	SPI		4'-2"	14'-7 1/2"	42								2'-8"	
SP407	1	13'-6"	258	SPI		4'-2"	13'-6"	39								2'-8"	
SP408	2	13'-10 1/2"	530	SPI		4'-2"	13'-10 1/2"	40								2'-8"	
P501	8	Varies 6'-3" to 9'-9" by 1'-0" 2'-0"	69	SIO		Varies 2'-2" to 3'-8" by 1'-7" 2'-0"	2'-8"	Varies 2'-2" to 3'-8" by 1'-7" 2'-0"									
P502	8	5'-7"	47	SIO		1'-7"	2'-8"	1'-7"									
P503	164	9'-9"	1,668	SIO		3'-8"	2'-8"	3'-8"									
P504	6	27'-3"	171	STR													
P505	6	22'-0"	138	STR													
P506	2	29'-3"	63	STR													
P507	35	4'-5"	438	SIO			1'-0"	2'-8"	1'-0"								
P601	110	7'-4"	1,212	1	8"	6'-0"						8"				6"	
P701	5	30'-8"	313	19		5'-7"	25'-1"					1'-7 1/2"	5'-4"	30'-5"			
P801	154	6'-5"	2,639	2	1'-2"	5'-3"											
P802	126	17'-3"	5,803	STR													
P803	28	16'-6"	1,234	STR													
P804	66	9'-10"	1,733	1	11"	8'-0"						11"	10"				
P901	5	24'-5"	415	19		5'-3 1/2"	19'-2"					1'-6"	5'-1"	24'-3"			
P902	10	19'-1"	649	STR													
P903	5	24'-9"	421	STR													
P904	8	24'-10"	675	STR													
P905	6	18'-10"	384	STR													
P1101	2	15'-11"	169	20		2'-2"	14'-1"										
P1102	3	32'-8"	521	20		2'-2"	30'-10"										
P1103	3	24'-10"	396	STR													
P1104	3	34'-8"	553	20		3'-8"	31'-4"										
P1105	2	17'-10"	189	20		3'-8"	14'-6"										
P1106	6	20'-9"	661	20		3'-8"	17'-5"										
P1107	4	18'-0"	383	20		3'-8"	14'-8"										
P1108	6	20'-3"	646	STR													
P1109	3	18'-11"	302	20		2'-2"	17'-1"										
P1110	2	16'-11"	180	20		3'-8"	13'-7"										
P1111	2	15'-2"	161	20		2'-2"	13'-4"										
P1112	3	20'-11"	333	20		3'-8"	17'-7"										
Total			25,527														
Total Piers			77,803														

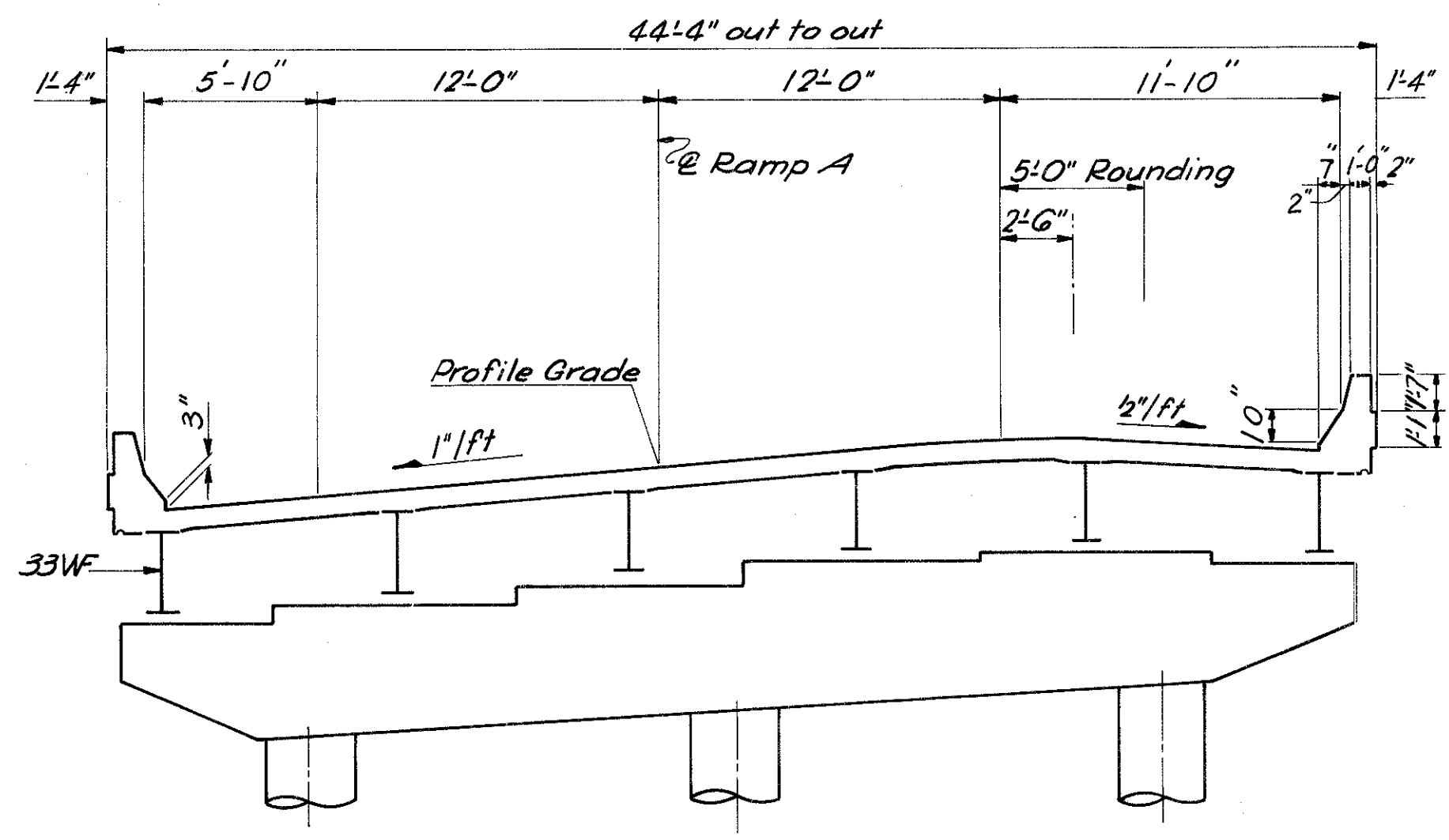
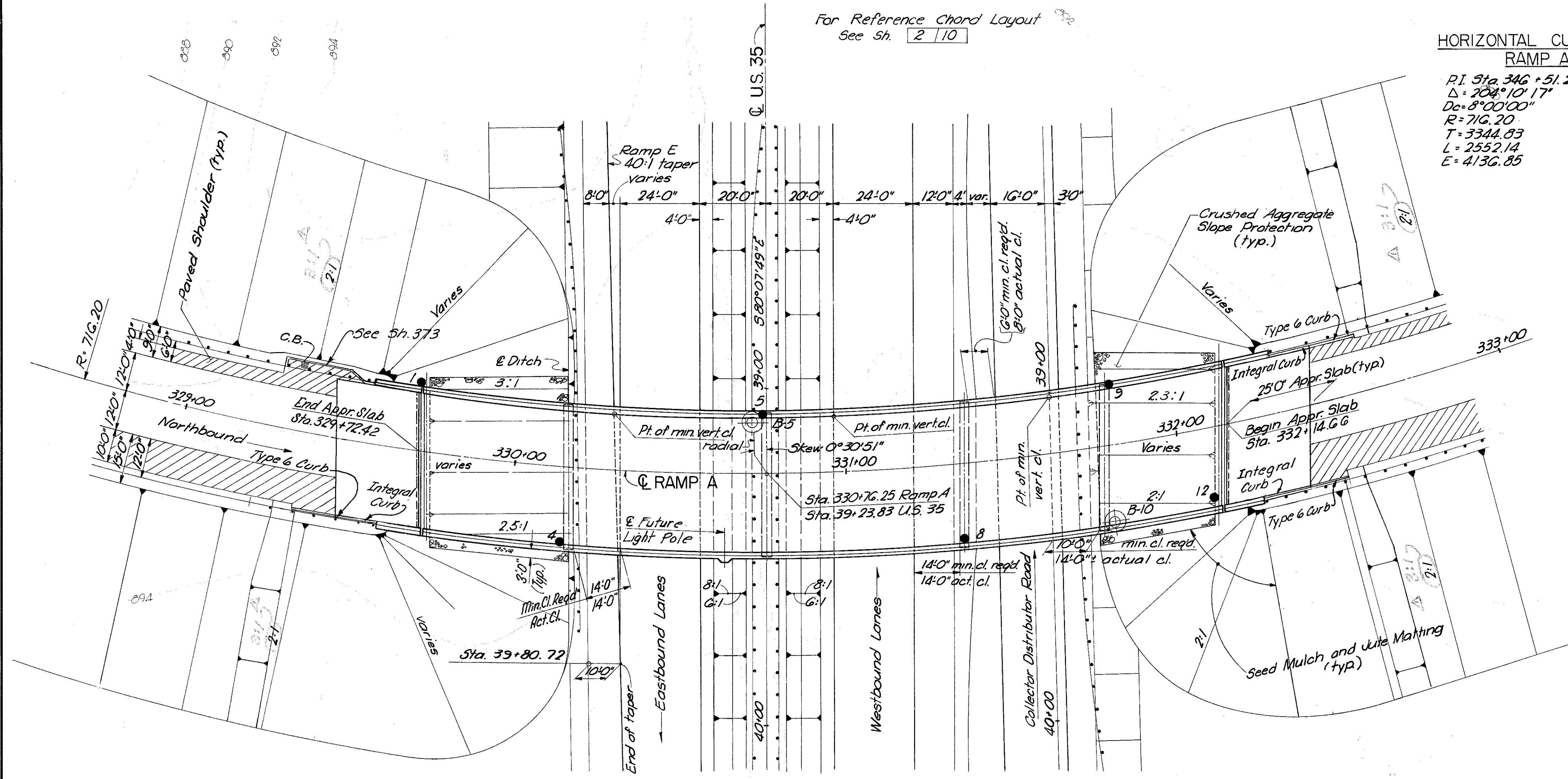
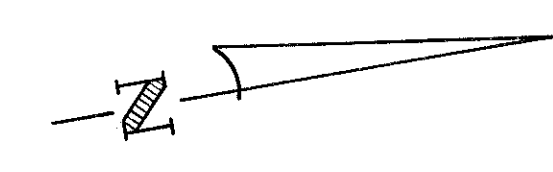
NOTES:
 1. Bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
 2. For bar types see sheet 11/14
 3. All dimensions are out to out of bar.
 4. Radius dimension "R" is to outside of bar.
 5. The length of bent bars is measured along the centerline.
 6. For additional notes see sheet 11/14

CINCINNATI		KING & GAVARIS CONSULTING ENGINEERS		12/14	OHIO
REINFORCING STEEL LIST					
BRIDGE NO. GRE-35-0009					
U.S. 35 OVER DAYTON XENIA RD.					
GREENE COUNTY			STA: 4+53.35 TO STA: 6+33.90		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
	A.W.		S.A.		9/25/77

MICROFILMED
JUN 19 1965

HORIZONTAL CURVE DATA

RAMP A
 P.I. Sta. 346 + 51.26
 $\Delta = 20^{\circ} 10' 17''$
 $D_c = 8^{\circ} 00' 00''$
 $R = 716.20$
 $T = 3344.93$
 $L = 2552.14$
 $E = 4136.85$



SECTION THRU BRIDGE

LEGEND

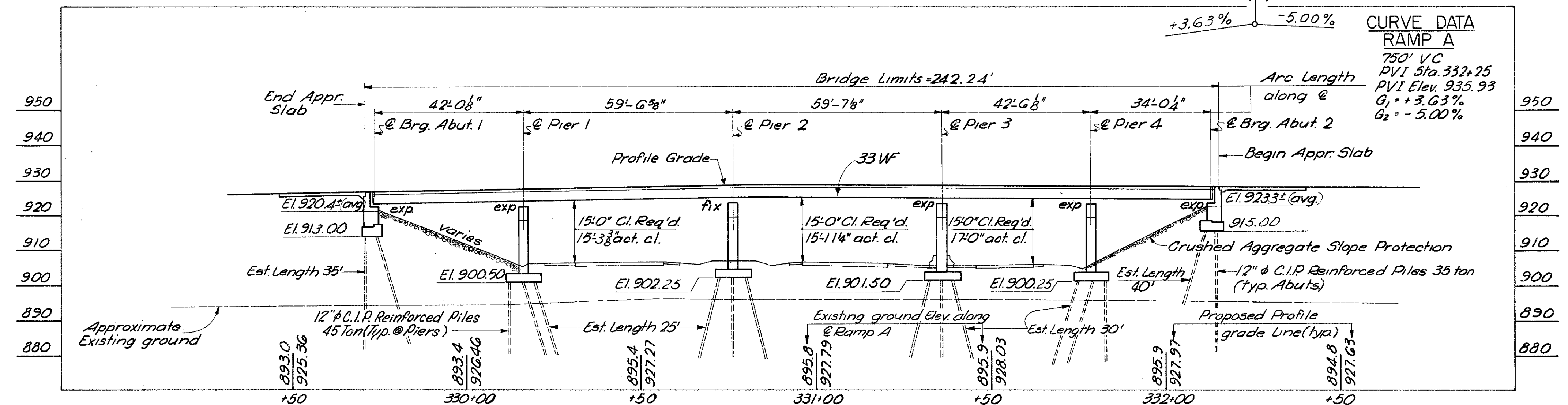
- Drive sample Boring Location
- Drive Rod Penetration Resistance Sounding Location

PLAN

DESIGN YEAR TRAFFIC

1989 ADT:	
U.S. 35	69,380
Ramp A	10,110
Coll.-Dist.	5,040

Note:
 Earthwork limits shown are schematic
 Actual slopes shall conform to Plan
 Cross-Sections.



PROFILE ON CENTER LINE RAMP A

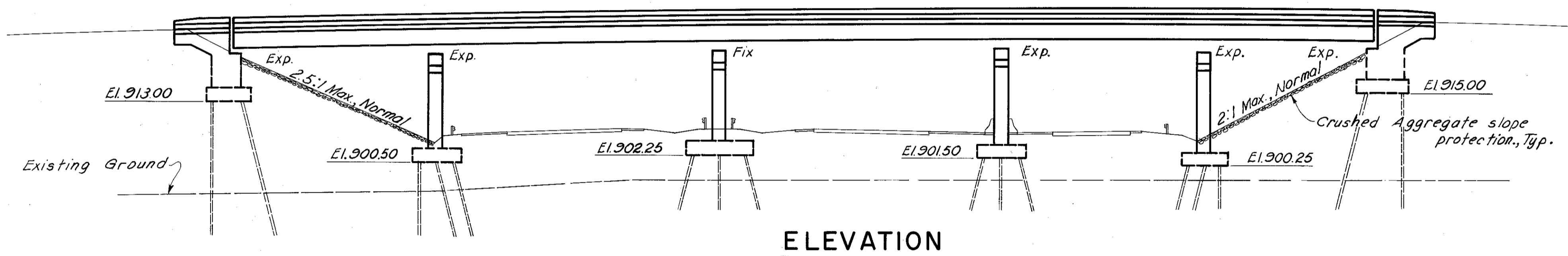
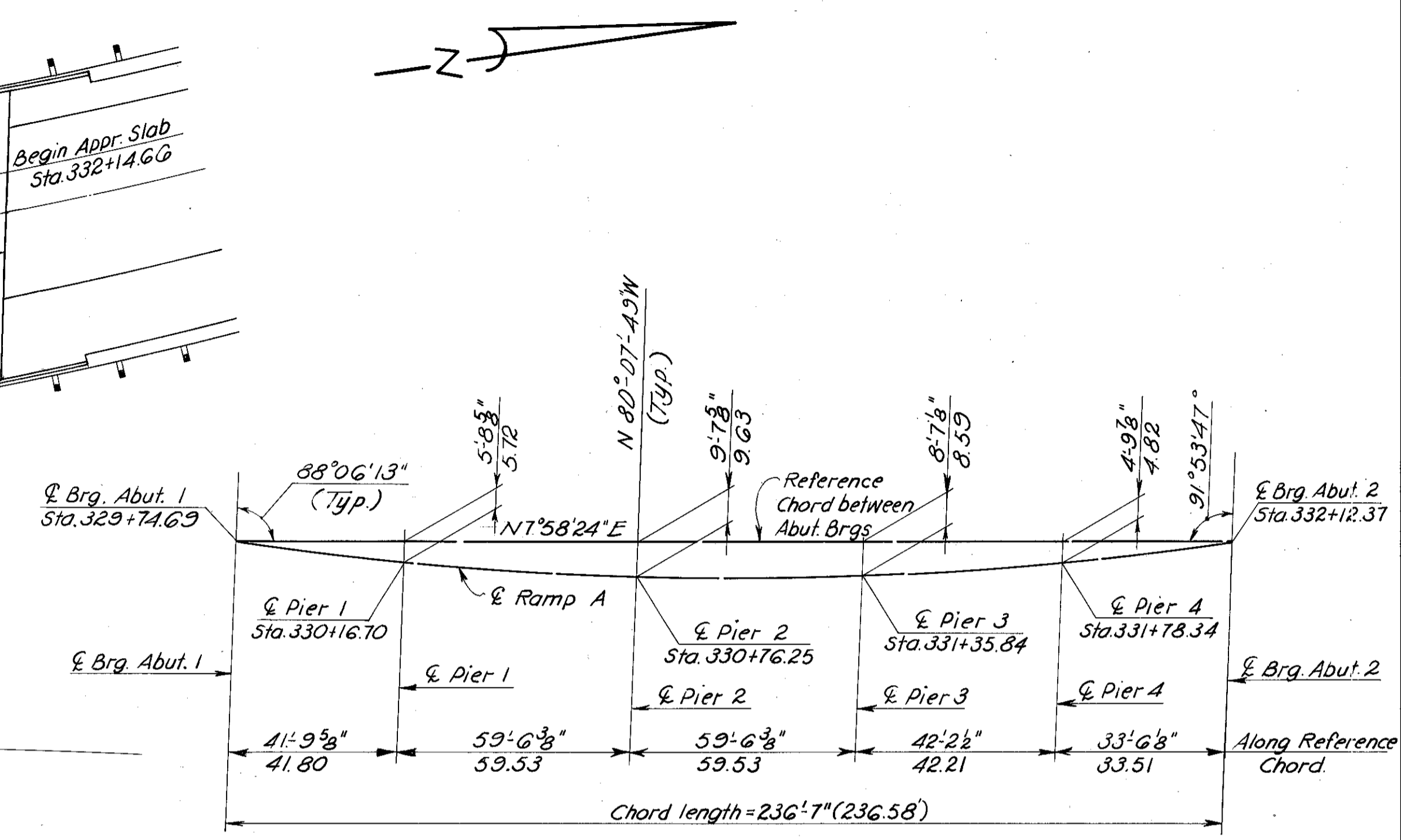
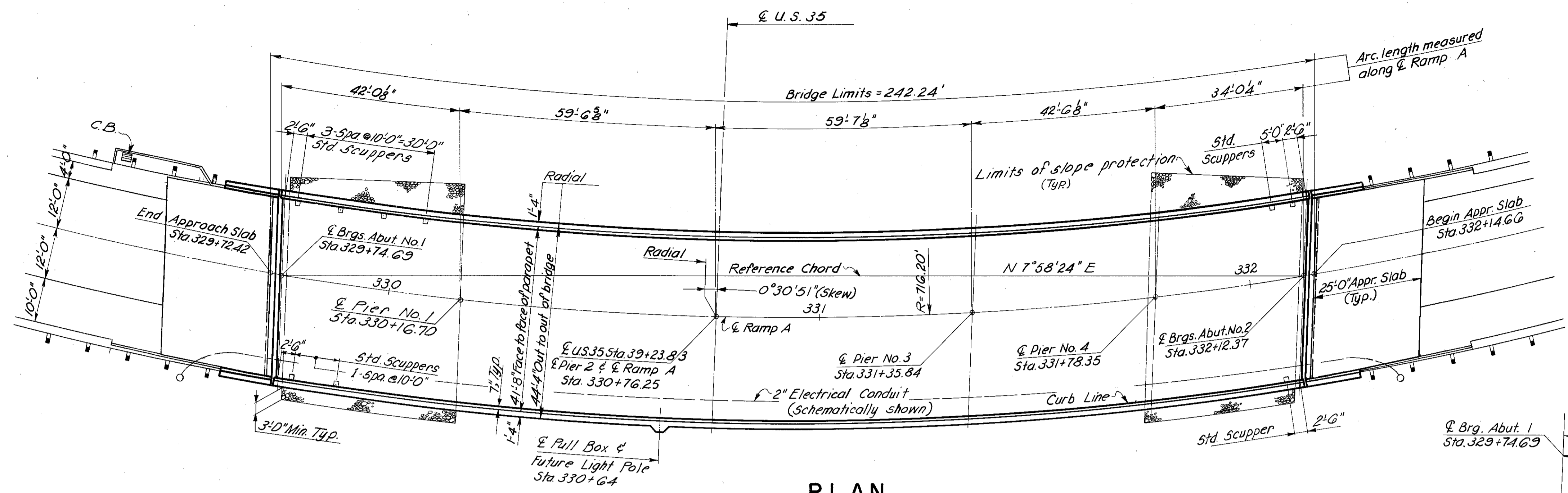
PROPOSED STRUCTURE
 TYPE: Continuous steel beam with reinforced concrete deck and substructure.
 SPANS: 42'-0 1/8", 59'-6 5/8", 59'-7 7/8", 42'-6 1/8", 34'-0 1/4"
 ROADWAY: 41'-8" Face to Face of parapet
 LOADING: HS 20-44 & Alternate Military
 SKEW: Varies 0° 30' - 51' Lt. Fwd. at & U.S. 35
 WEARING SURFACE: monolithic concrete
 APPROACH SLABS: 250' Long (Sta. 329+72.42)
 ALIGNMENT: Left Curve, D_c = 8° 00' 00"

KING & GAVARIS
 CINCINNATI CONSULTING ENGINEERS OHIO

SITE PLAN
 BRIDGE NO. GRE-35-0074
 RELOCATED U.S. 35 UNDER RAMP A
 GREENE COUNTY STA. 329+72.42 TO STA. 332+14.66

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISED
AERIAL SURVEY	AERIAL SURVEY	JCL	AW	S.A.	

Revised 10-12-82



ESTIMATED QUANTITIES					
ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	ABUT. PIERS GEN.
503	429	Cu Yd	Unclassified Excavation	258	171
505	Lump	Sum	Test Pile		Lump
507	3,180	Lin Ft	12" Cast-in-place reinforced concrete piles.	1200	1,980
509	91,500	Lb	Reinforcing steel	45,900	31,500
511	116	Cu Yd	Class "C" Concrete, Abutments above Footings	116	
511	123	Cu Yd	Class "C" Concrete, Piers above Footings		123
511	345	Cu Yd	Class "S" Concrete, Superstructure using shrink, comp. cem. 701.08	345	
511	167	Cu Yd	Class "C" Concrete, Footings	74	93
513	229,500	Lb	Structural steel (AISC Category I)	229,500	
514	229,500	Lb	Field Painting of new Structural Steel, System A	229,500	
503	Lump	Sum	Cofferdams, Cribbs and sheeting		Lump
518	57	Cu Yd	Porous Backfill	57	
518	82	Lin Ft	6" Perforated Helical C.S.P. (707.D1)	82	
518	104	Lin Ft	6" Non-Perforated Helical C.S.P., including specials (707.D1)	104	
518	9	Each	Scuppers including supports	9	
523	3	Hour	Dynamic Pile Tests		3
601	500	Sq Yd	Crushed Aggregate slope protection		500
625			See sheet 616 for Lighting Summary		
Special	44,200	Lb.	Epoxy coated Reinforcing Steel (See Proposal Note)	43,400	800

ESTIMATED QUANTITIES CHECKED BY & DATE JRG./S.A. 3/10/72 REVISED: S.A. 9/14/72

GENERAL NOTES

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 4.

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.

FOR ADDITIONAL NOTES SEE COMMON DETAILS SHEET C1/C2

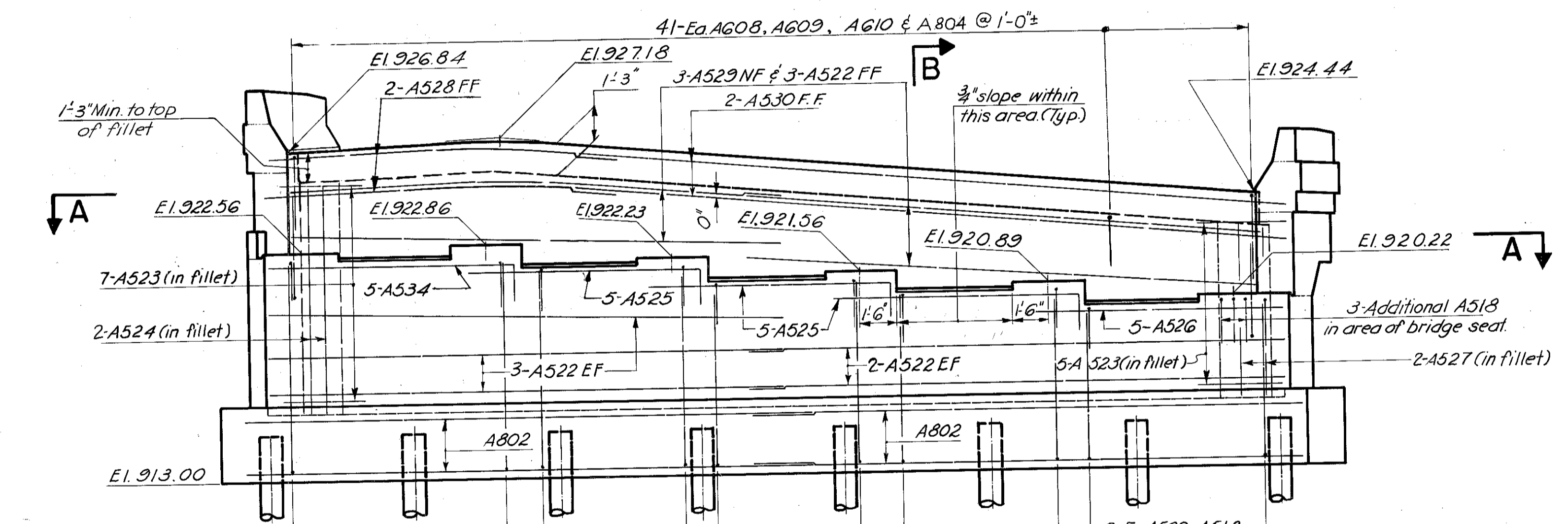
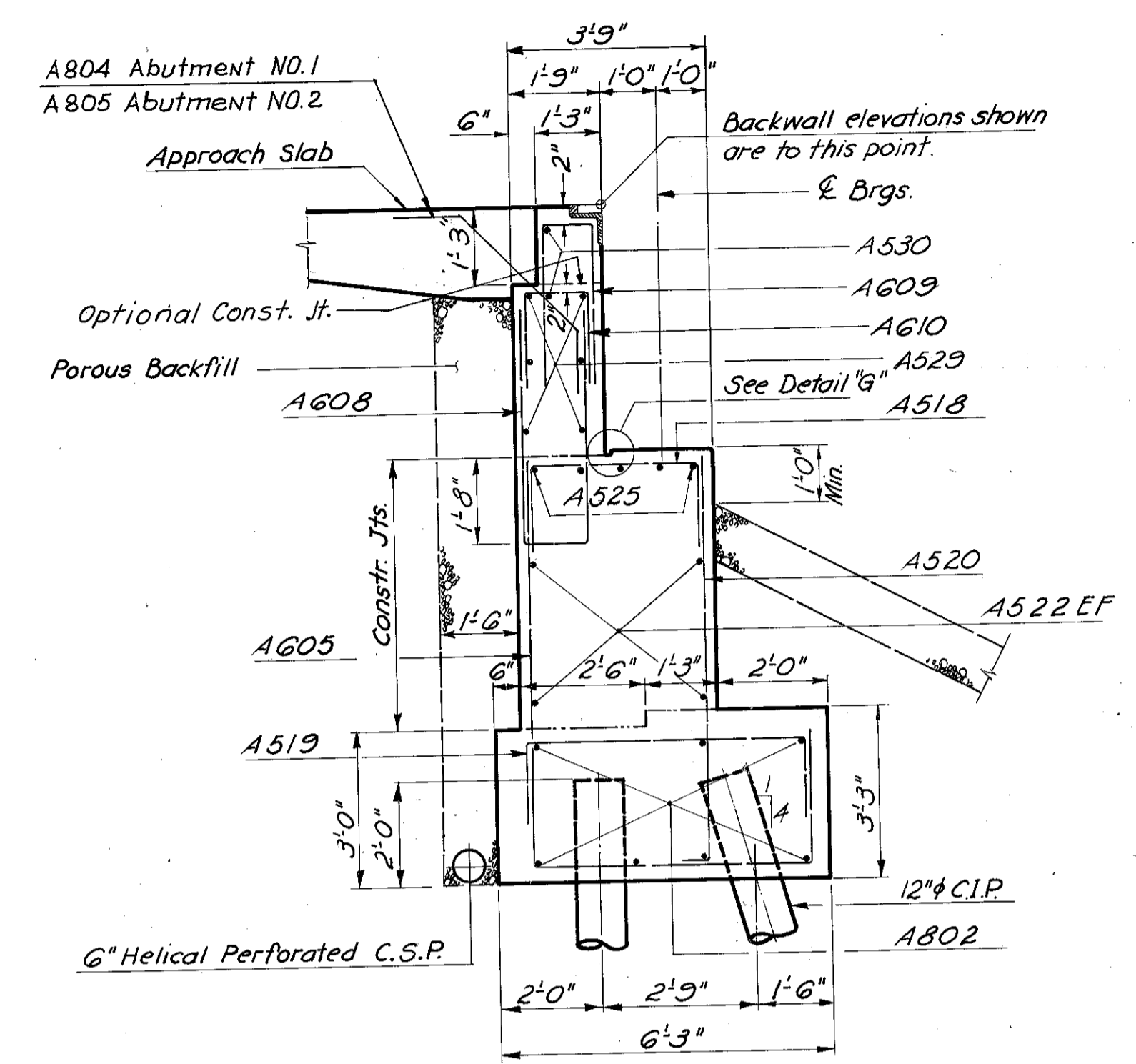
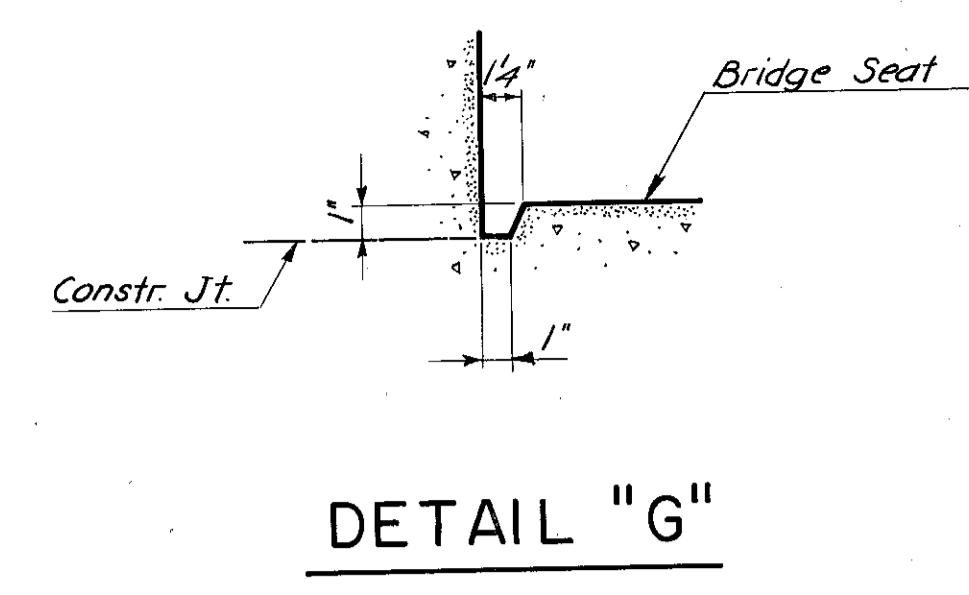
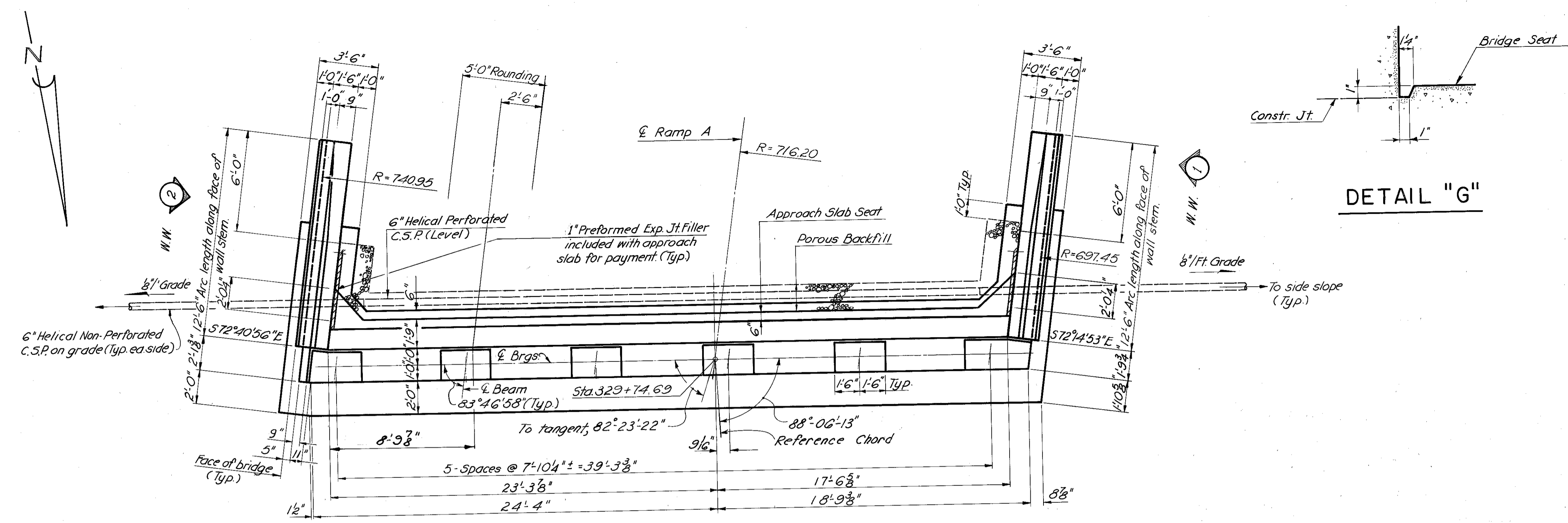
THE SCUPPER PIPES SHALL EXTEND 8 INCHES BELOW THE BOTTOM OF THE BOTTOM FLANGE INSTEAD OF 2 INCHES.

THE END DAM ANCHOR BARS SHALL BE LOCATED 3 3/8 INCHES CLEAR FROM THE TOP OF BRIDGE DECK.

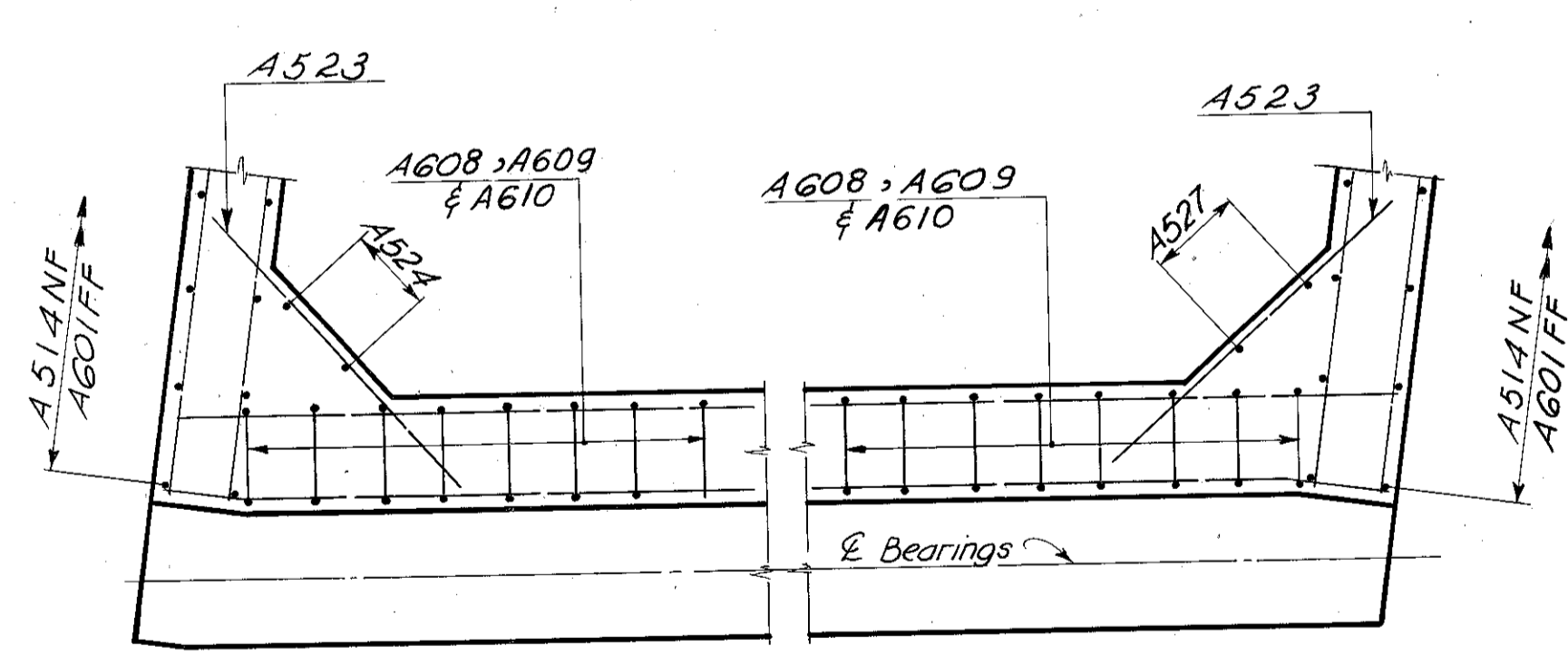
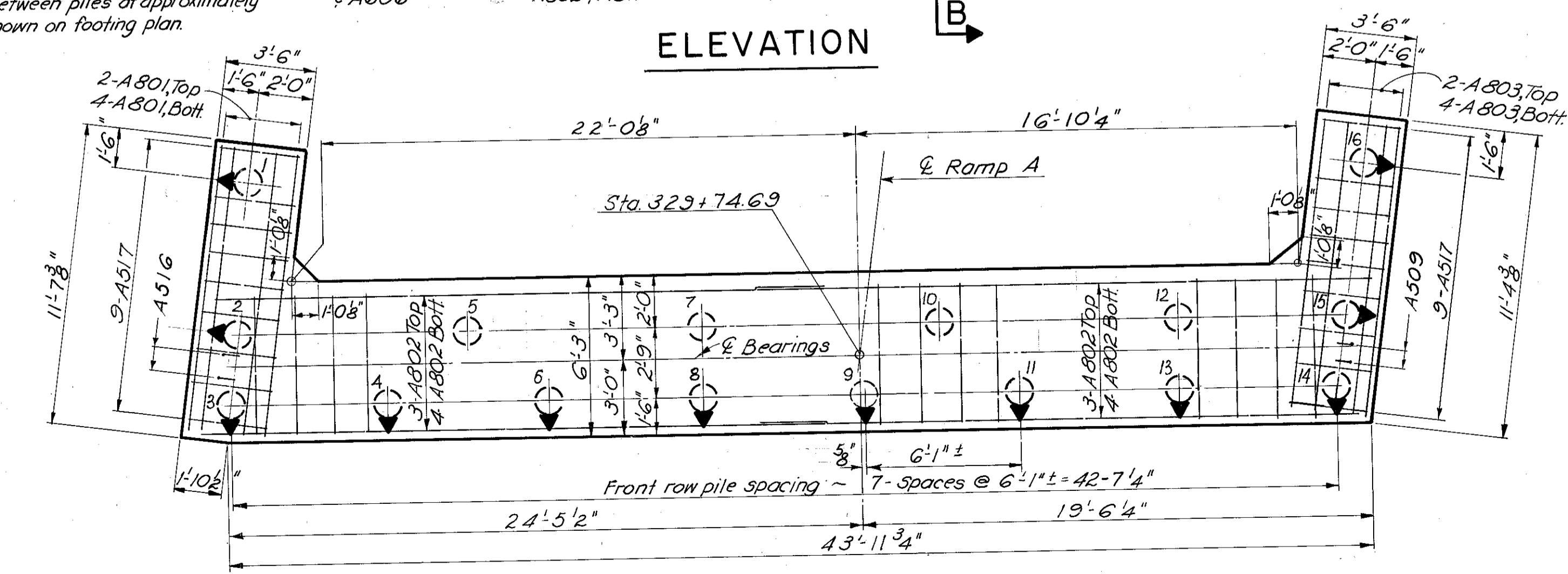
NOTE:

For Scupper Details, see Std. Dwg. SD-1-69. Scuppers shall be lengthened as required to clear beam flanges. All centerline bearings are parallel. Scupper spacing measured along face of parapet.

KING & GAVARIS CONSULTING ENGINEERS		2/10
CINCINNATI OHIO		
GENERAL PLAN, ELEVATION, GENERAL NOTES, AND ESTIMATED QUANTITIES		
BRIDGE NO. GRE-35-0074		
RELOCATED U.S. 35 UNDER RAMP A		
GREENE COUNTY STA. 329+72.42 TO STA. 332+14.66		
DESIGNED	DRAWN	TRACED
V.P.	A.W.	S.A.
CHECKED	REVIEWED	DATE
S.A.	JTG	9/15/72
REVISED		



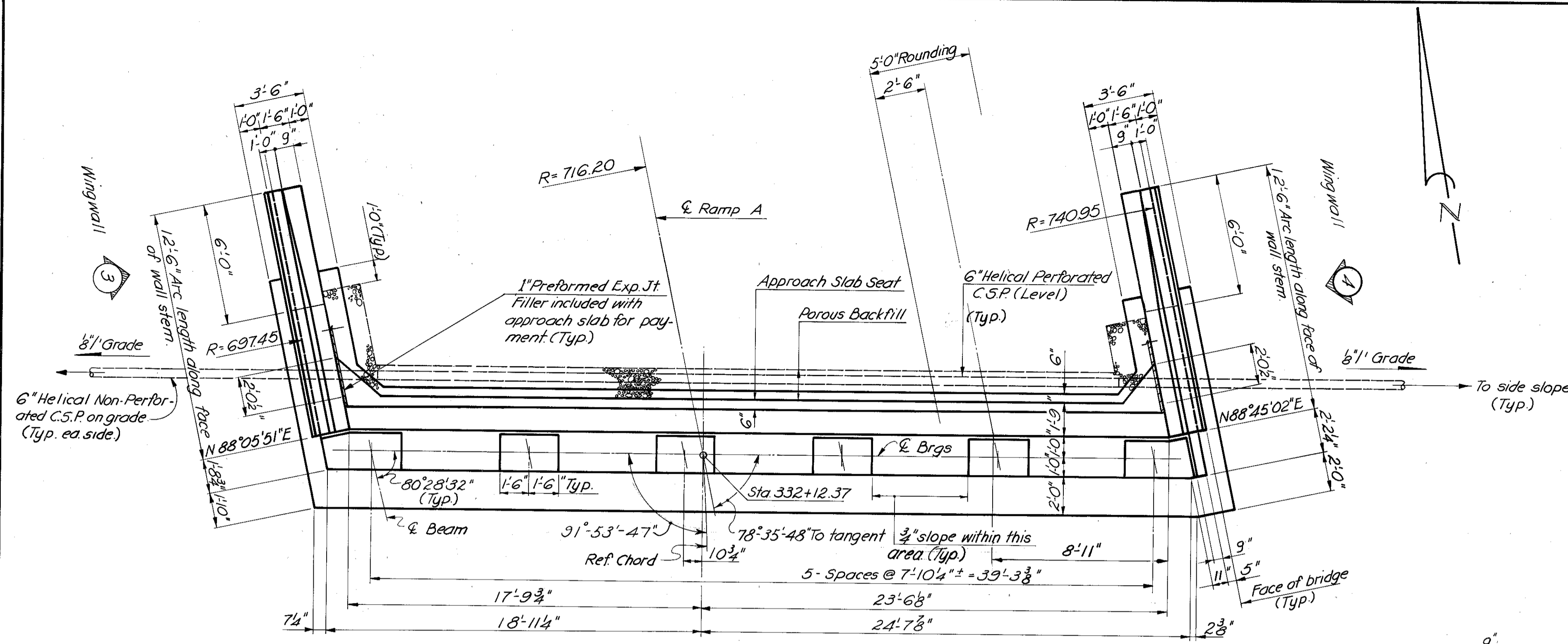
All footing bars shall be equally spaced between piles at approximately 1'-6" as shown on footing plan.



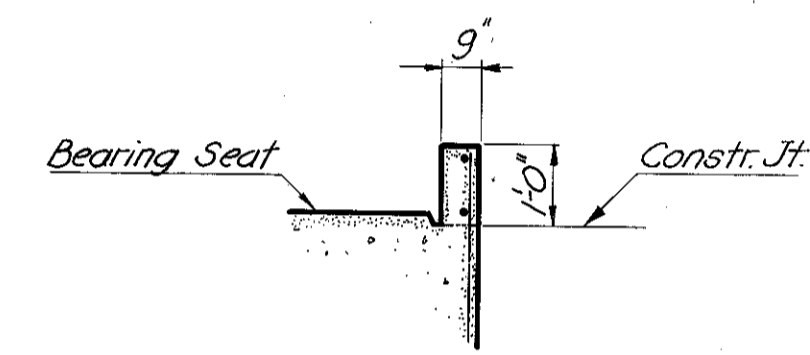
NOTES

For reinforcing steel list see sh. 8, 9 / 10
 Work this sheet with sh. 4 / 10
 Porous Backfill, within the limits shown shall extend upward to the plane of the subgrade within the roadway area and laterally to the wingwalls. Only that portion of the C.S.P. located in the Porous Backfill shall be perforated.
 For termination of C.S.P. at slopes, see Common Details Sh. C1/C2
 Reinforcing steel in Abutments No. 1 & 2 shall have the suffix A & B respectively.
 All splices and dowels will be lapped min. 30 bar dia. unless otherwise shown.

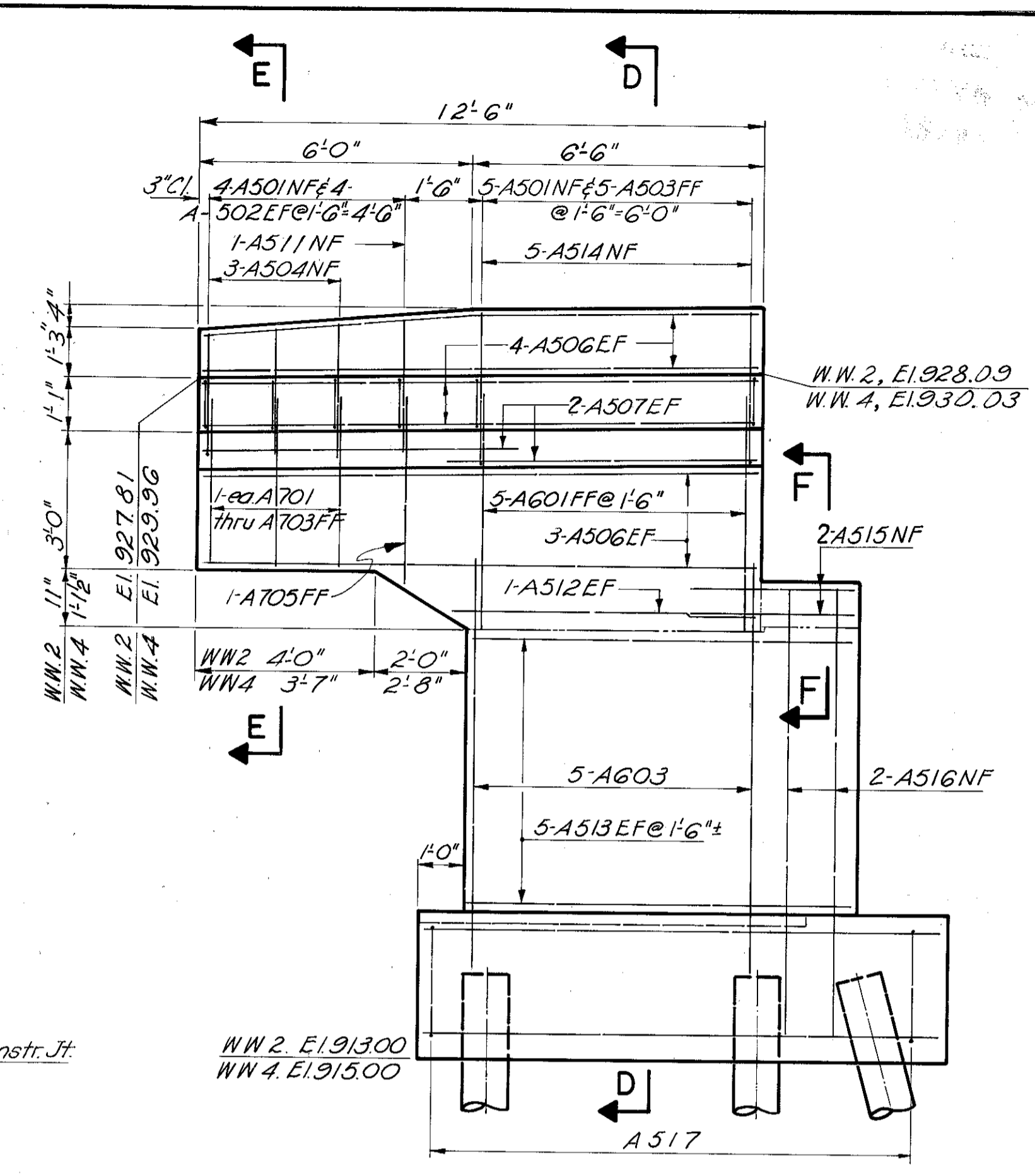
KING & GAVARIS		CONSULTING ENGINEERS		OHIO	
ABUTMENT NO. 1					
BRIDGE NO. GRE. - 35-0074					
RELOCATED U.S. 35 UNDER RAMP A					
GREENE COUNTY			STA. 329+72.42 TO STA. 332+14.66		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
J.C.L.	A.W.		S.A.	S.B.	7/25/72



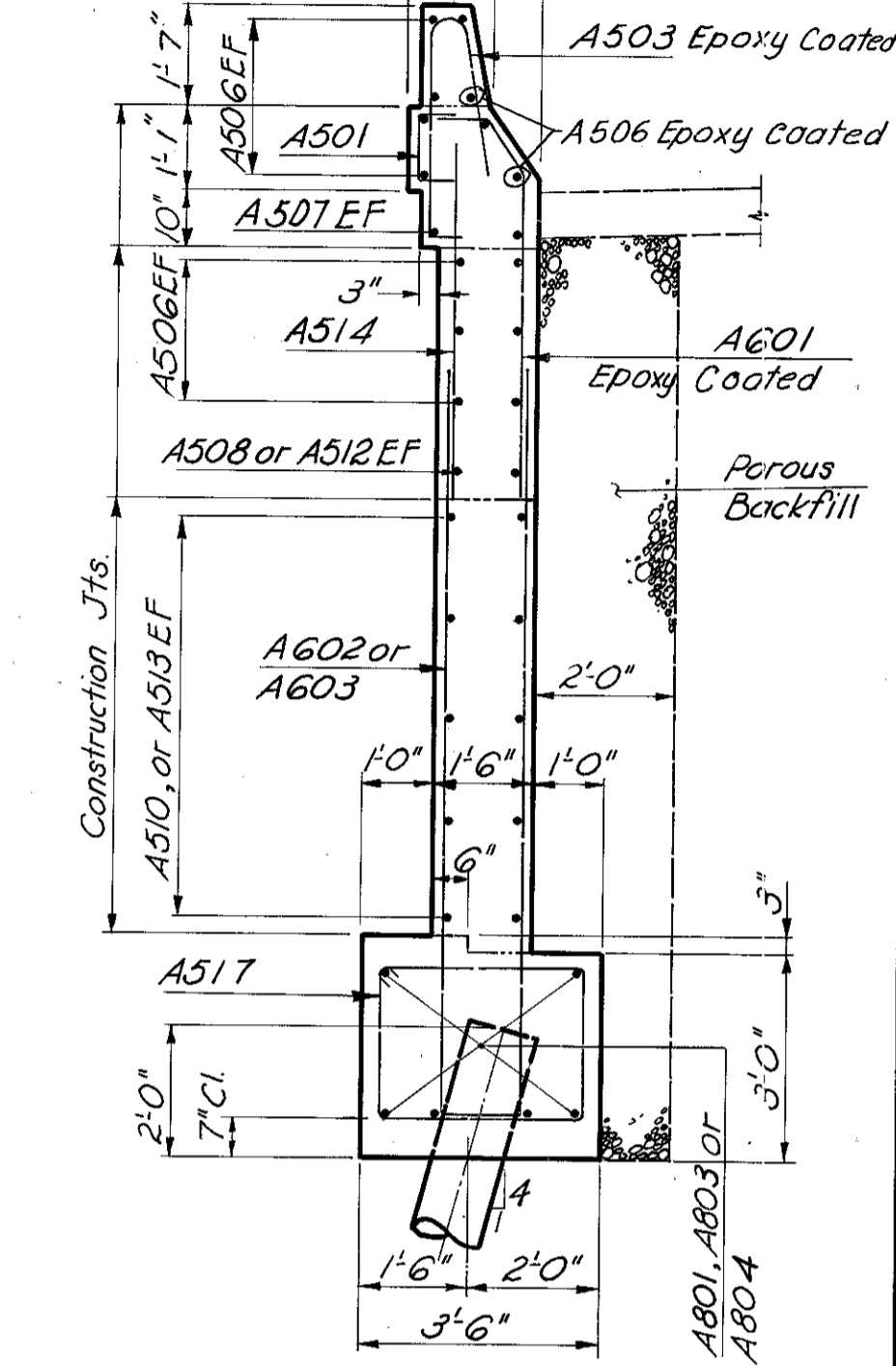
PLAN



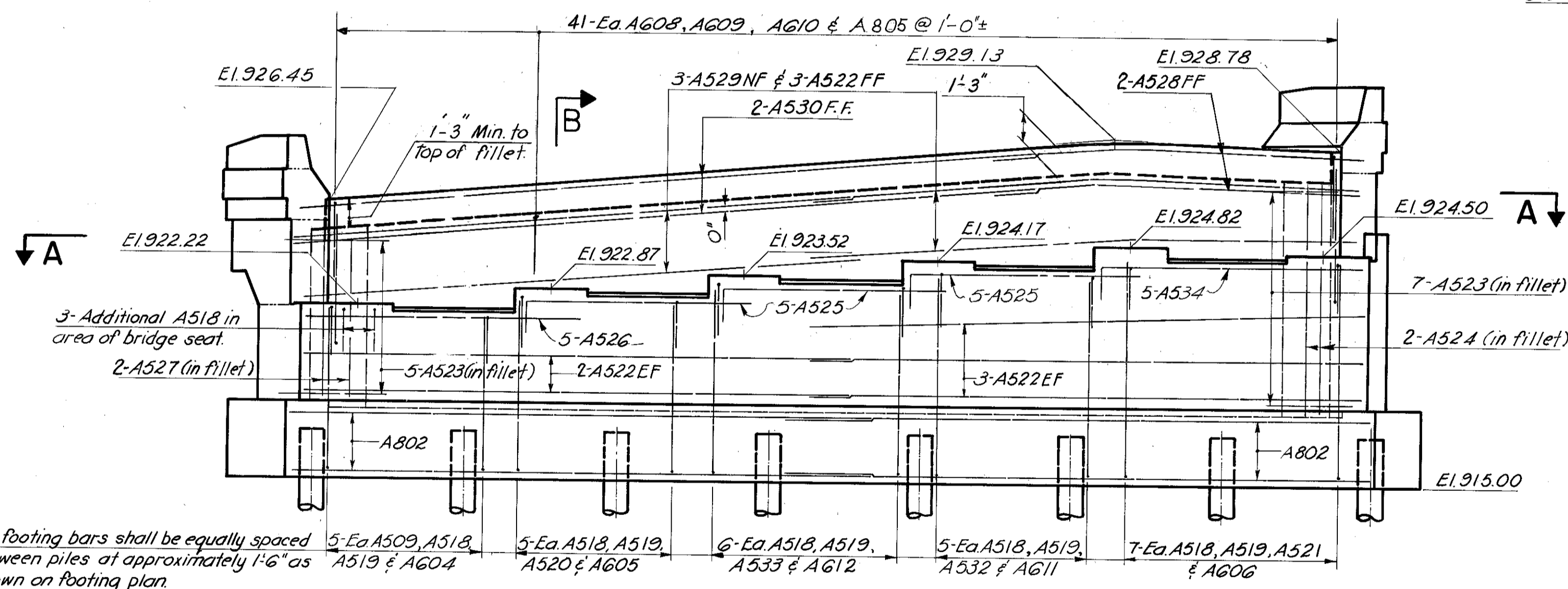
SECTION F-F



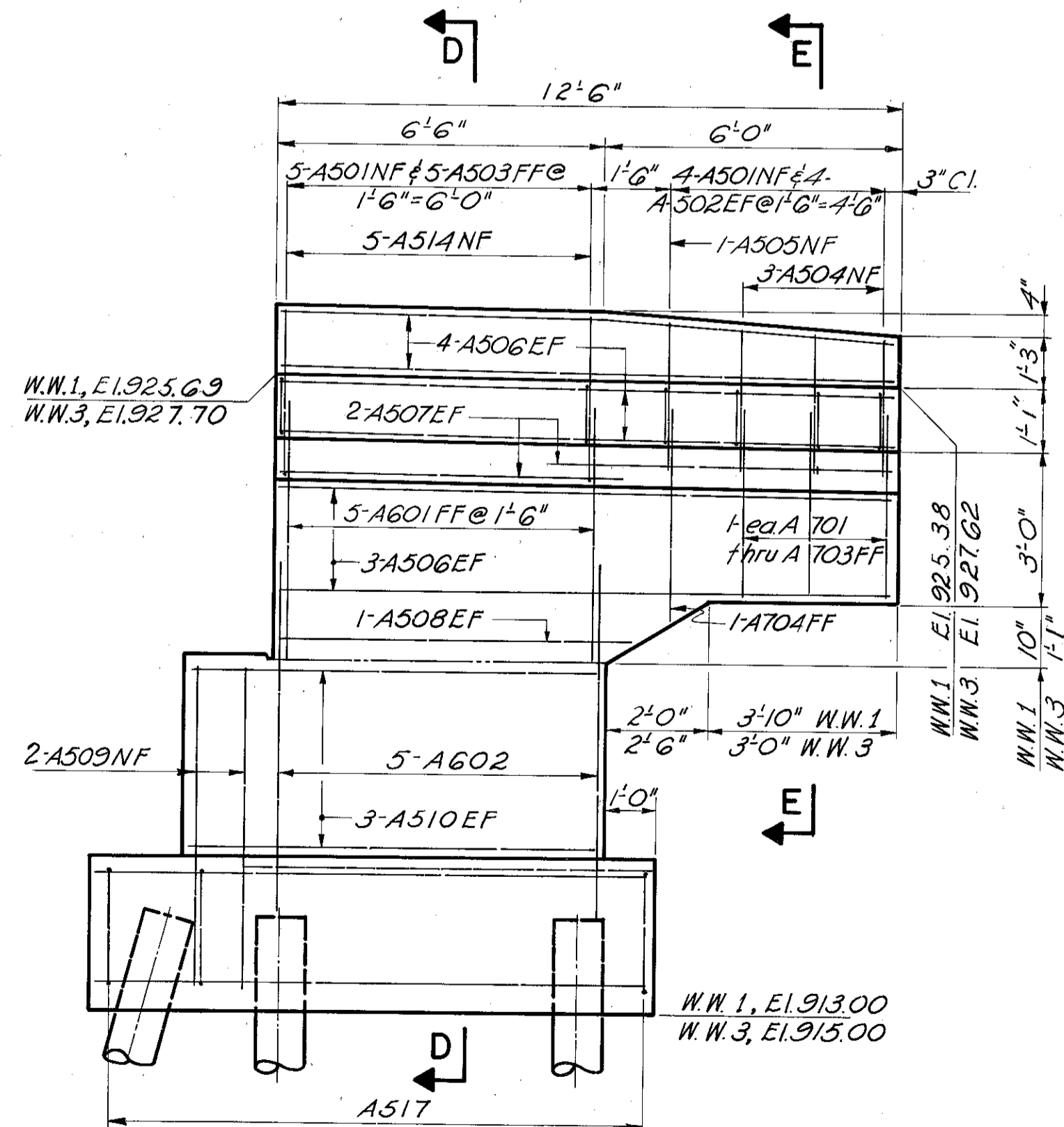
WINGWALL NO. 2 SHOWN
WINGWALL NO. 4 OPPOSITE HAND



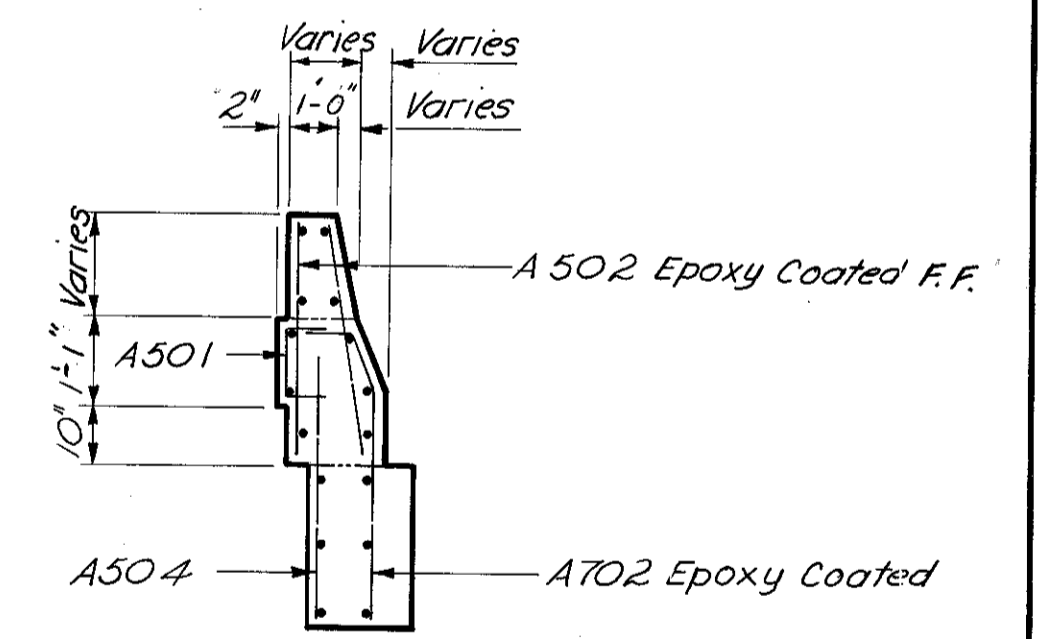
SECTION D-D



ELEVATION

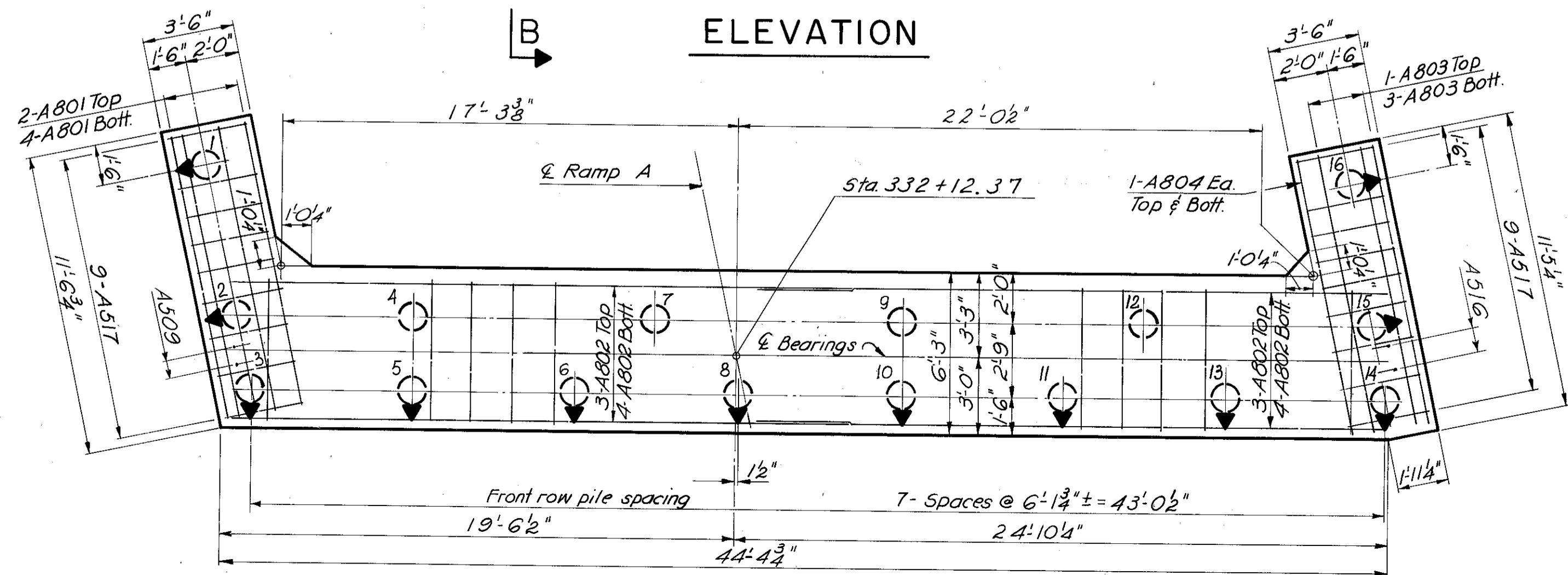


WINGWALL NO. 1 SHOWN
WINGWALL NO. 3 OPPOSITE HAND
WINGWALL ELEVATIONS



SECTION E-E

All footing bars shall be equally spaced between piles at approximately 1'-6" as shown on footing plan.

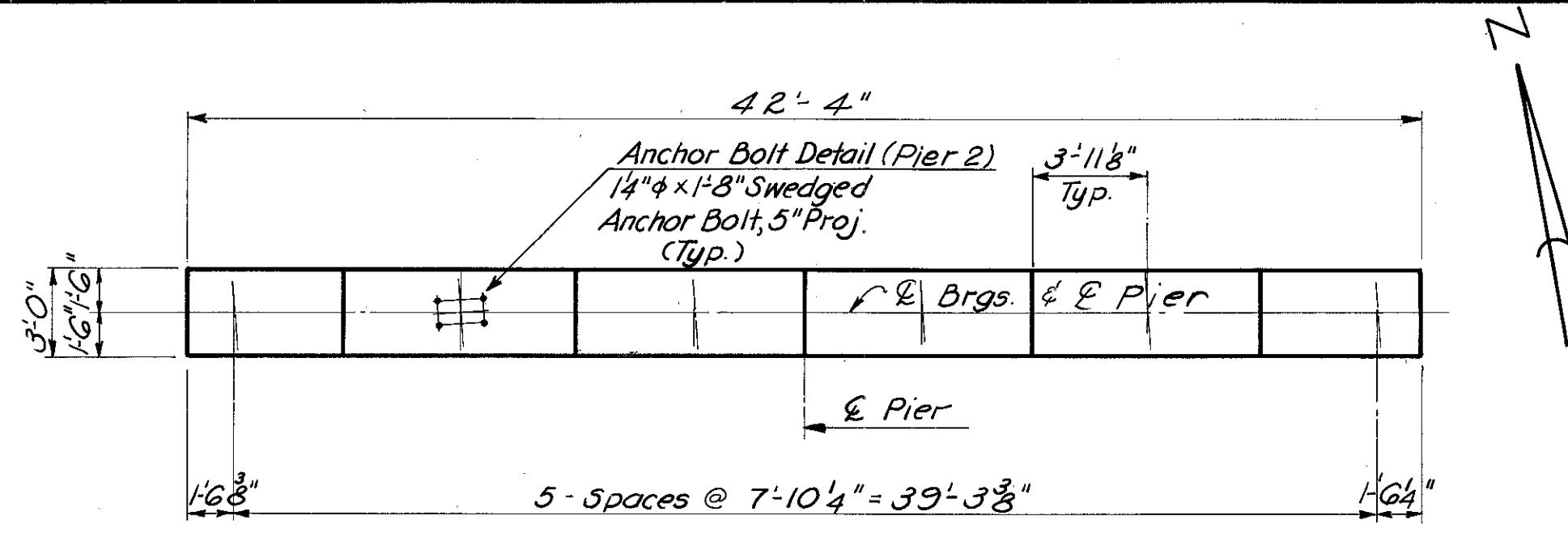


FOOTING PLAN

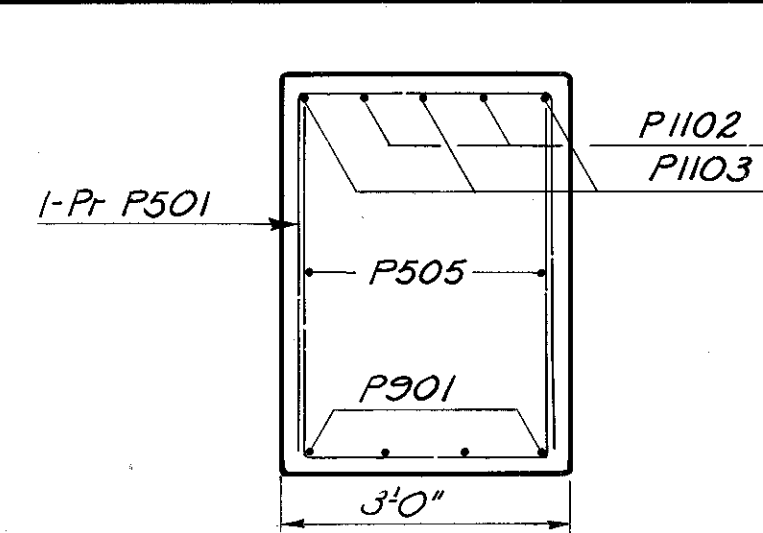
NOTES:

Work this sheet with sh. 3/10
For Notes see sh. 3/10

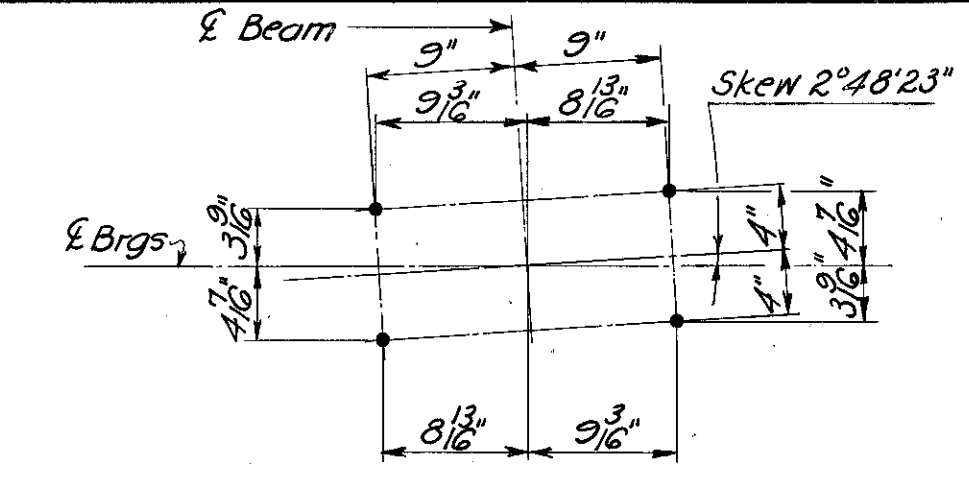
KING & GAVARIS CONSULTING ENGINEERS CINCINNATI		4/10 OHIO	
ABUTMENT NO. 2			
BRIDGE NO. GRE. - 35-0074			
RELOCATED U.S. 35 UNDER RAMP A			
GREENE COUNTY		STA. 329+72.42 TO STA. 332+14.66	
DESIGNED J.C.L.	DRAWN A.W.	CHECKED S.A.	REVIEWED DATE 9/25/72



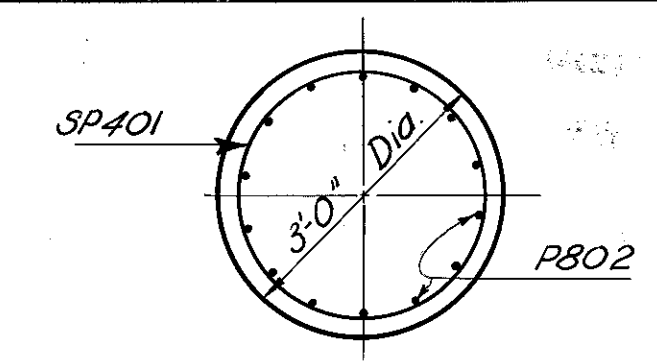
CAP PLAN



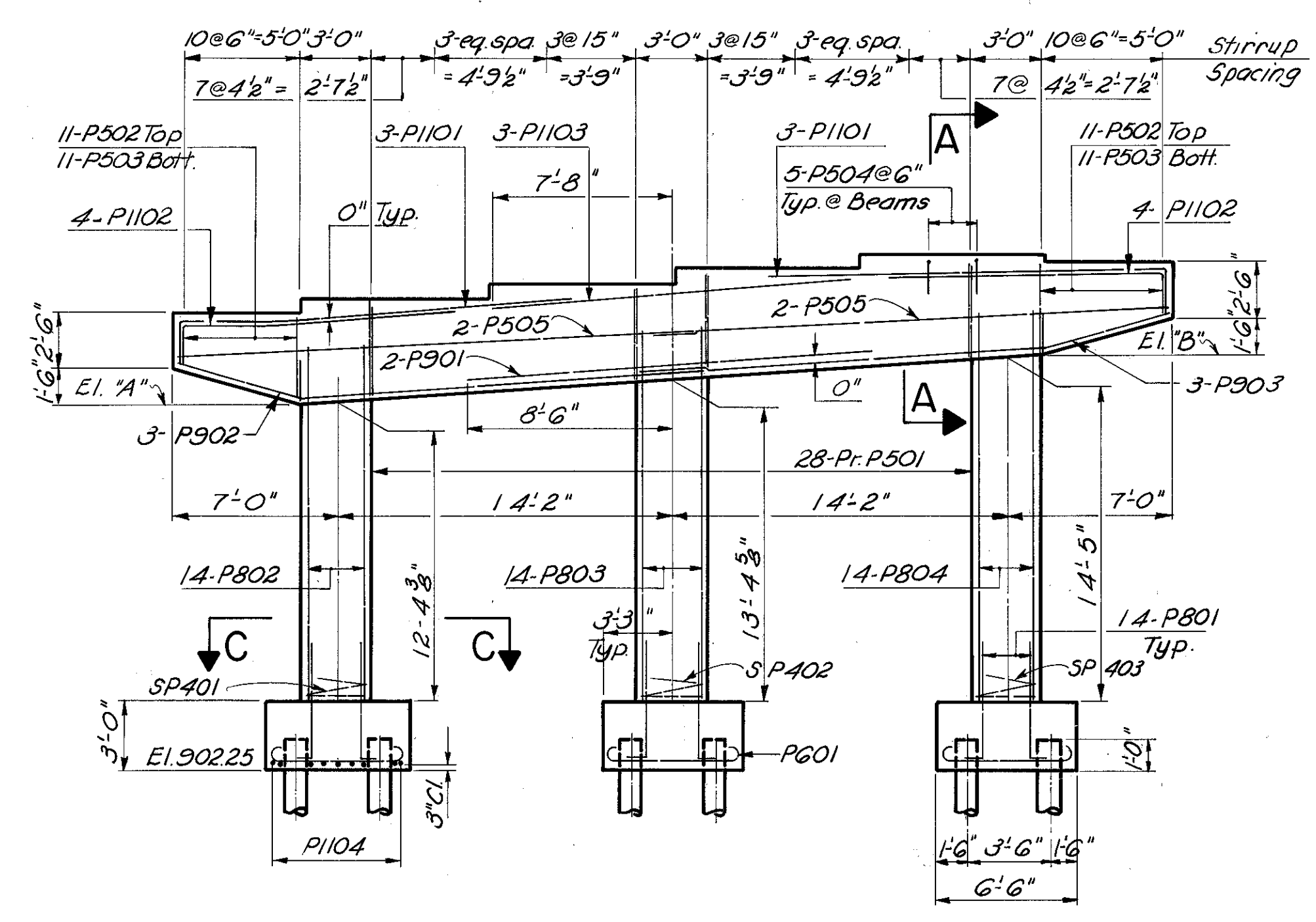
SECTION B-B



ANCHOR BOLT LAYOUT

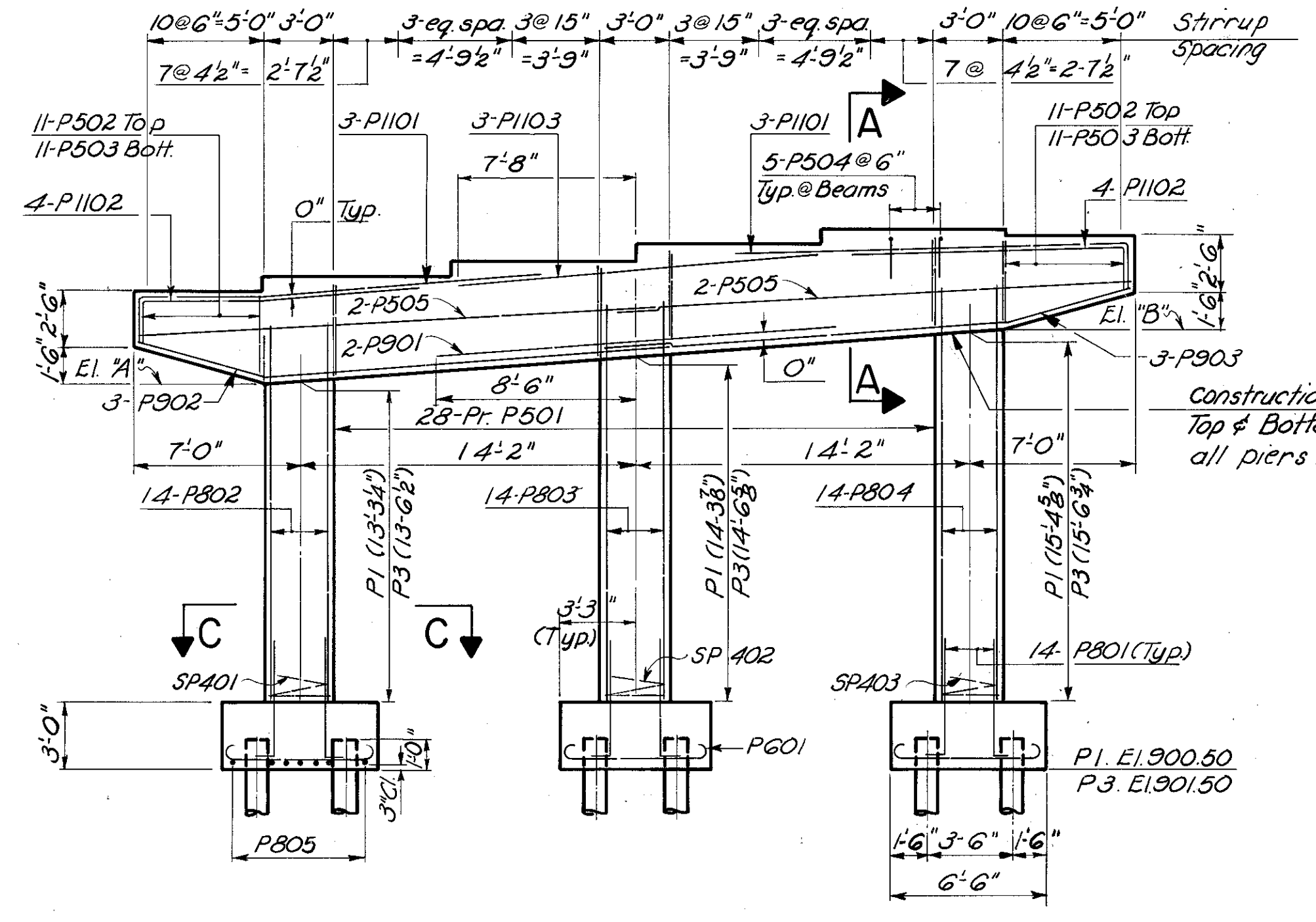


SECTION C-C



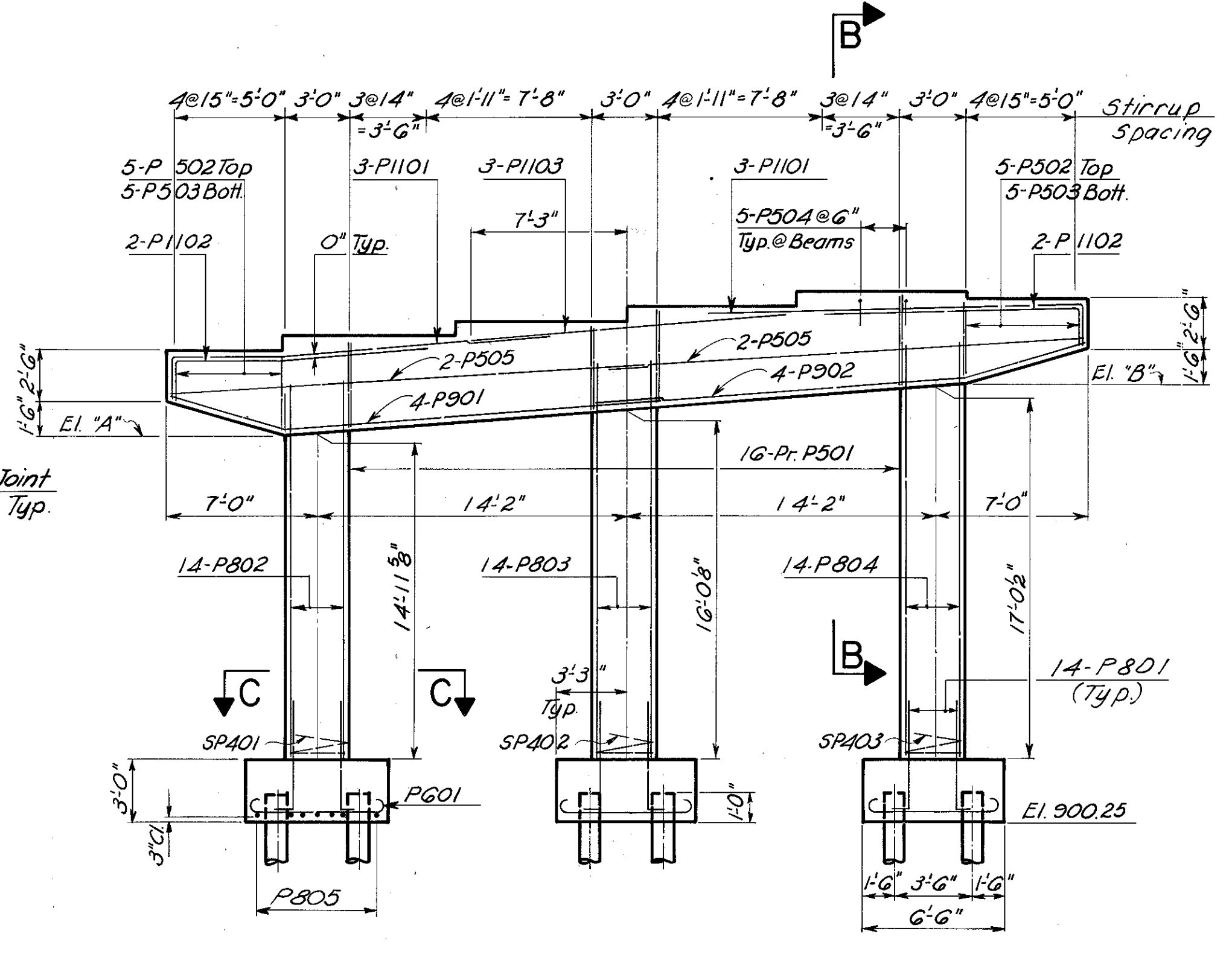
ELEVATION

PIER 2



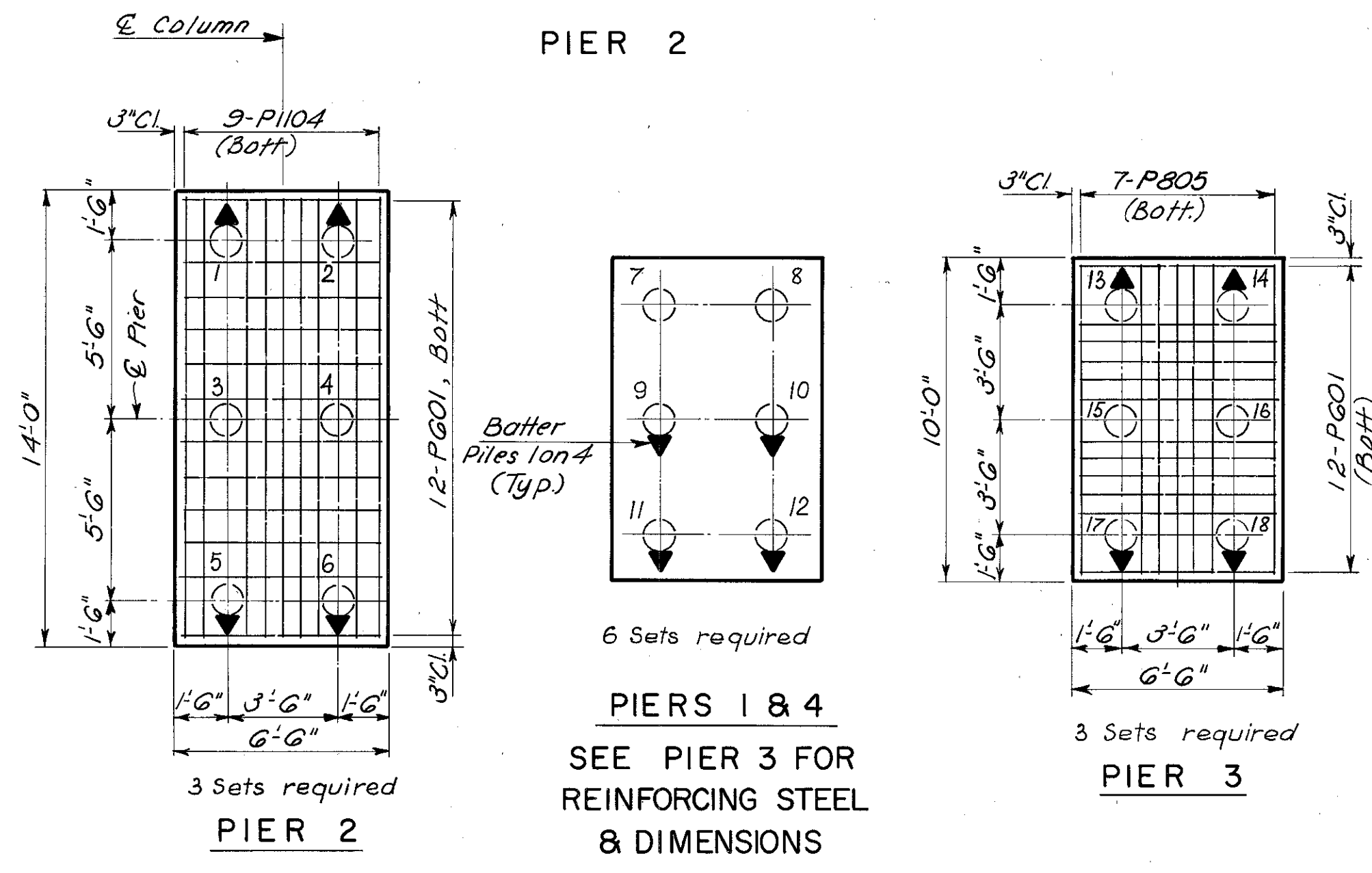
ELEVATION

PIERS 1 & 3

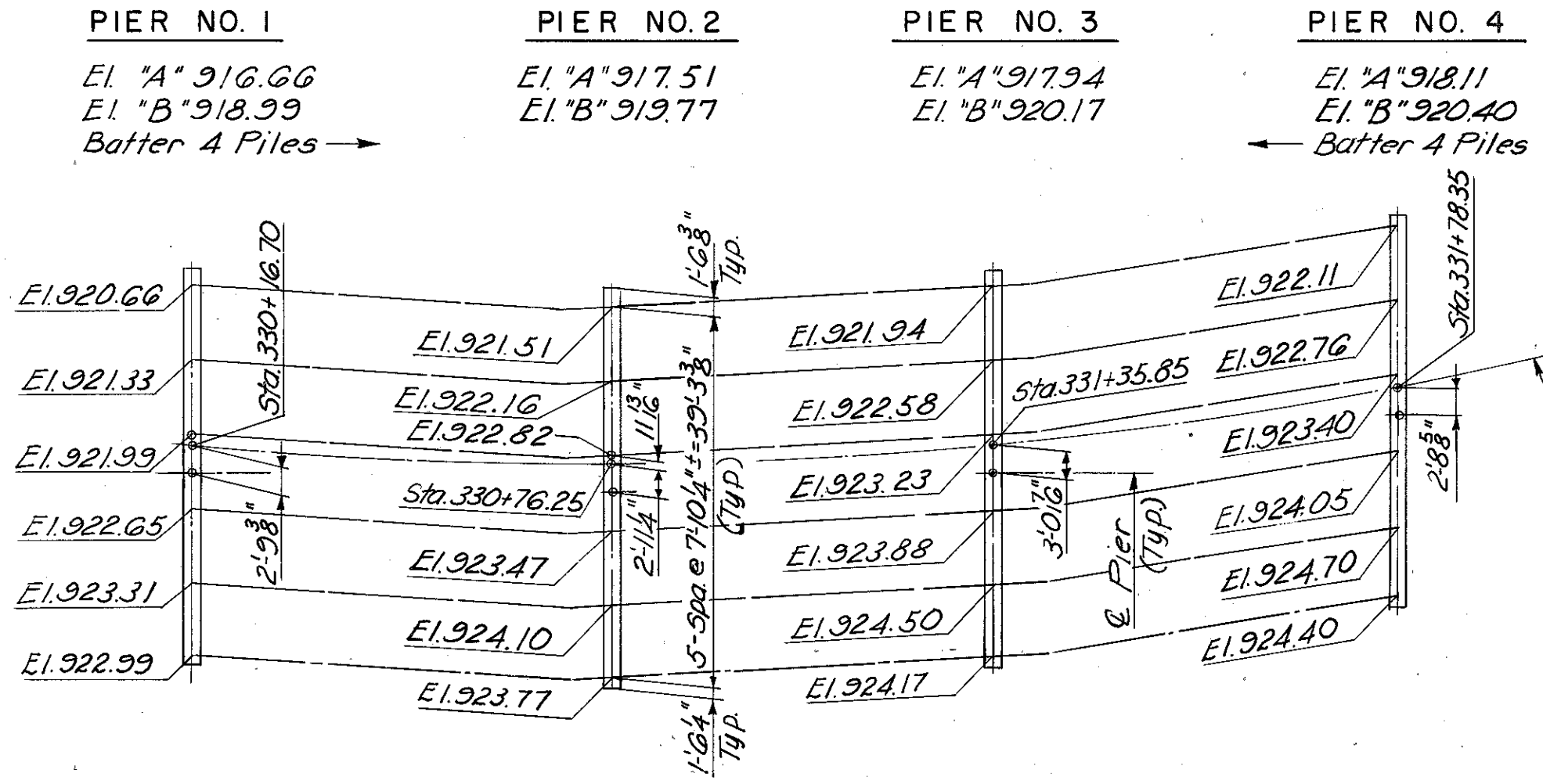


ELEVATION

PIER 4

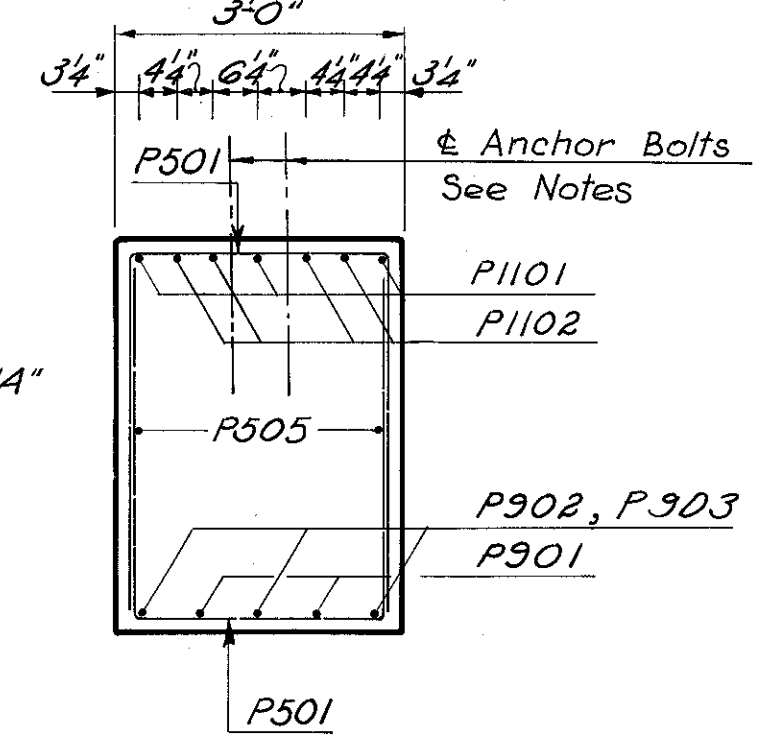


FOOTING PLANS



KEY PLAN

Showing Bearing Seat Elevations & Layout Dimensions

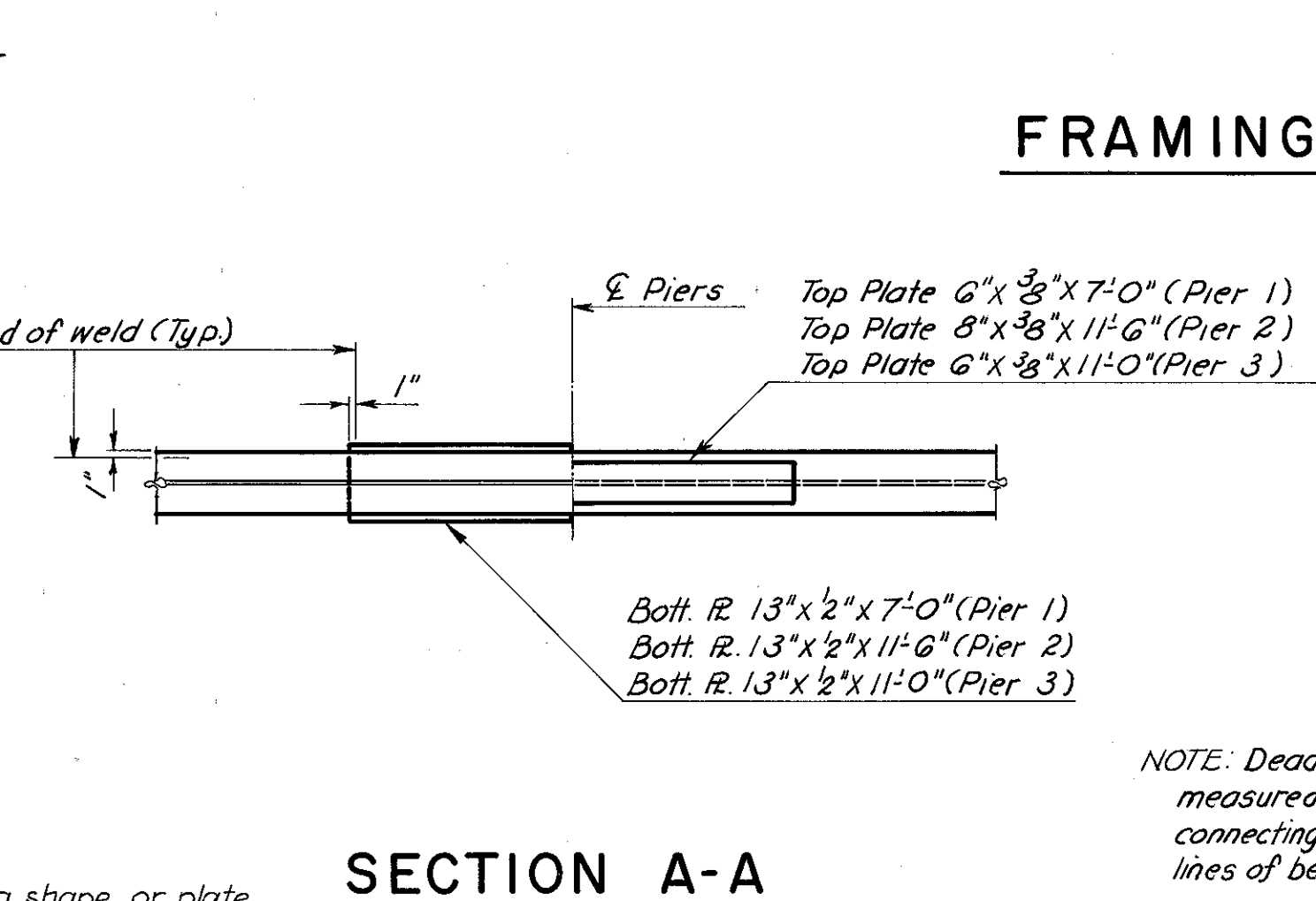
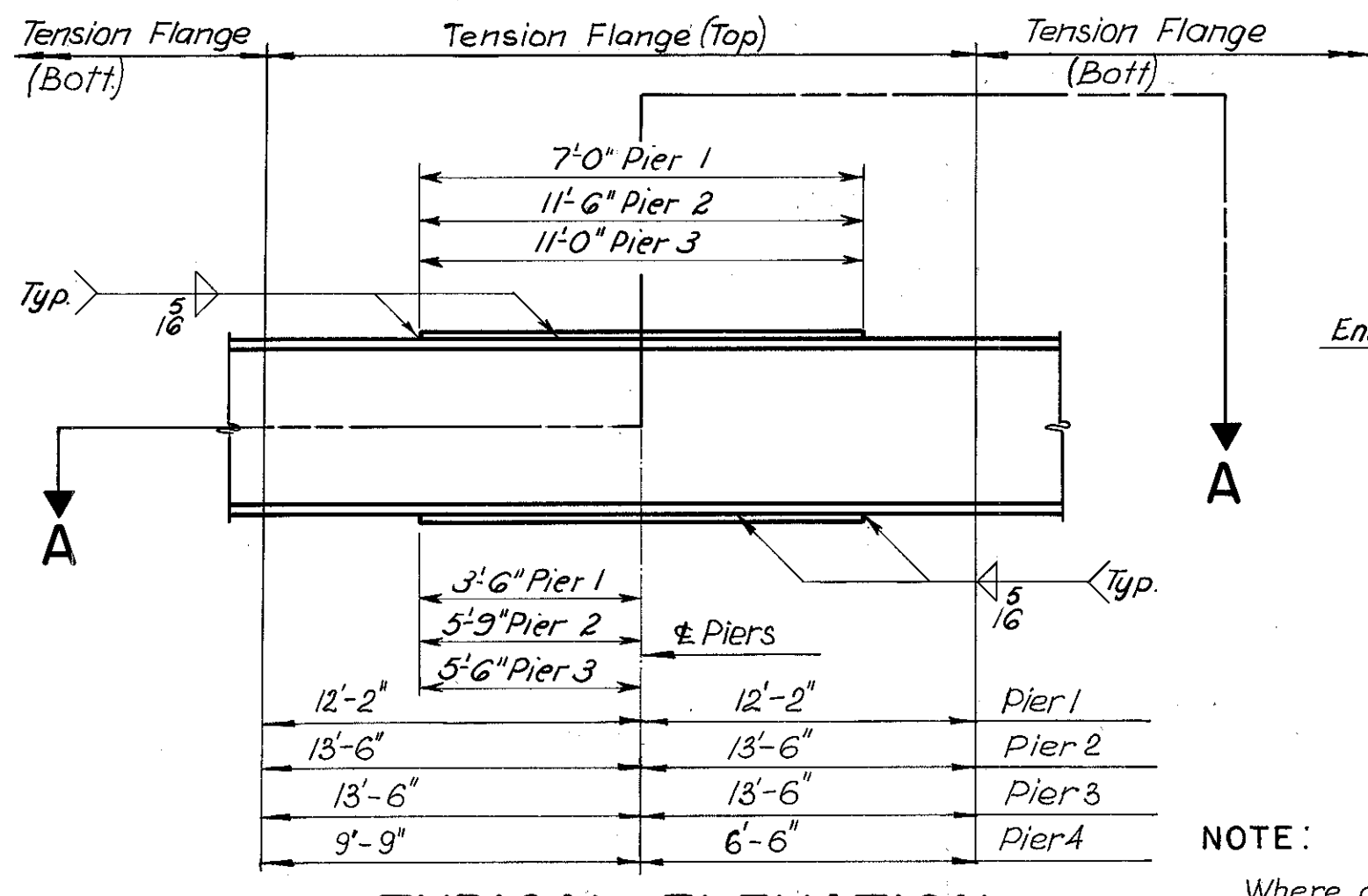
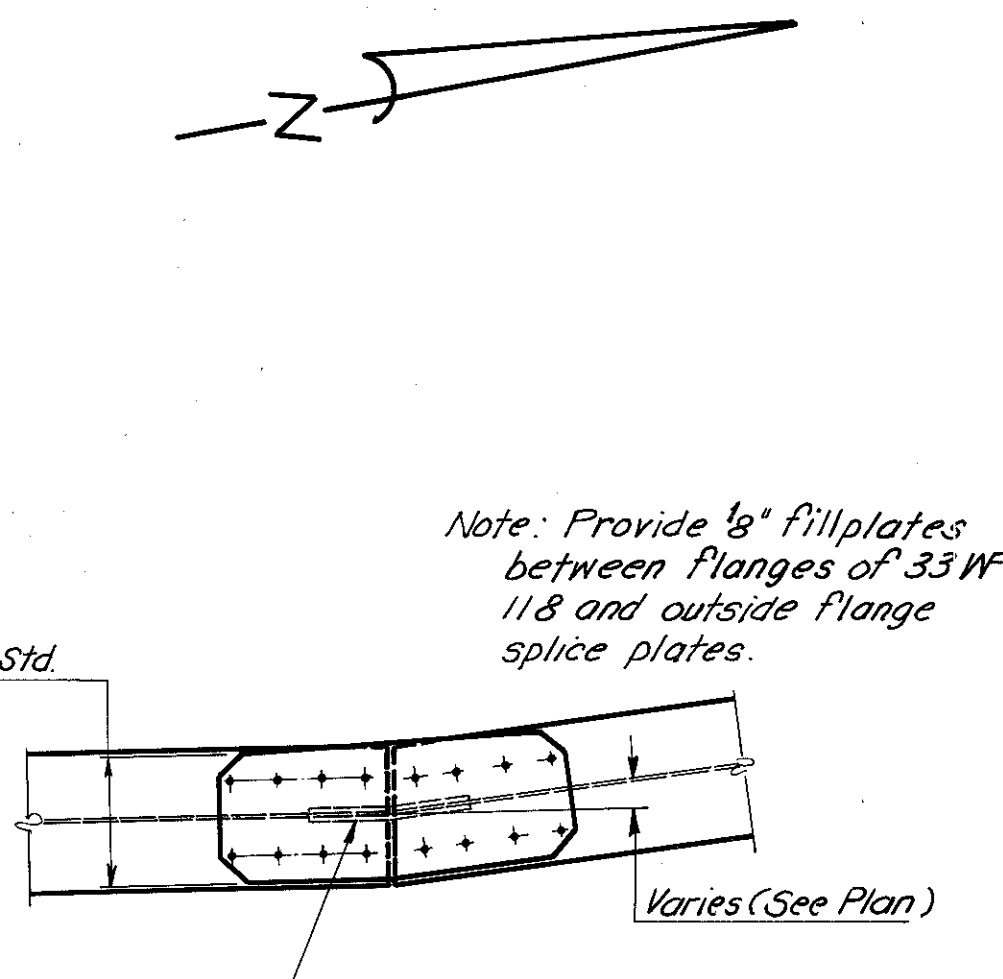
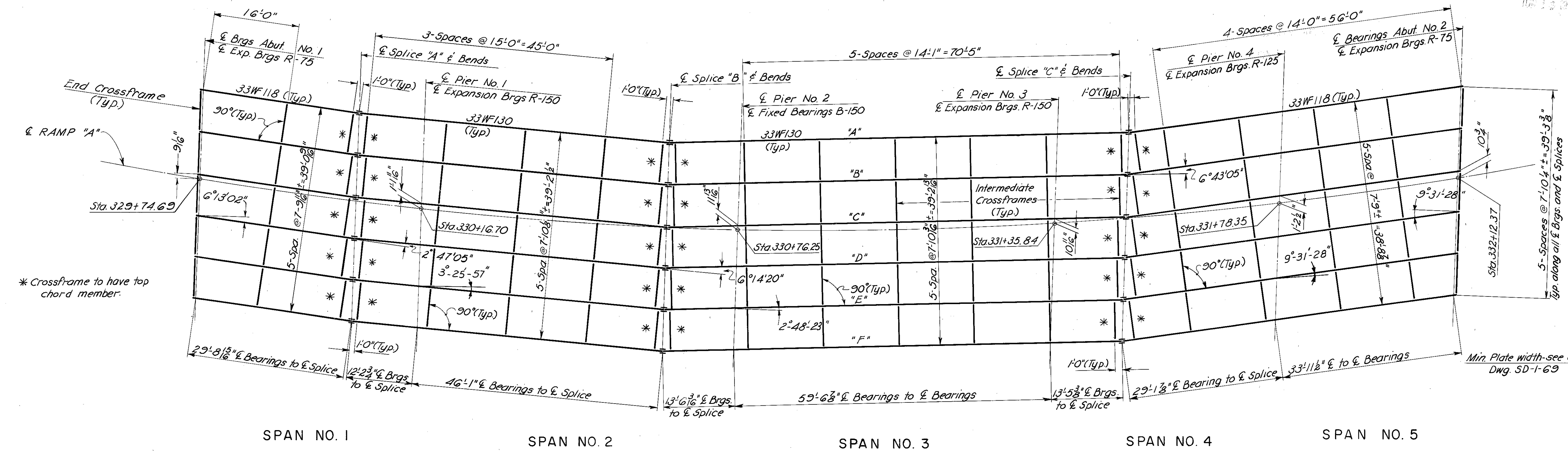


SECTION A-A

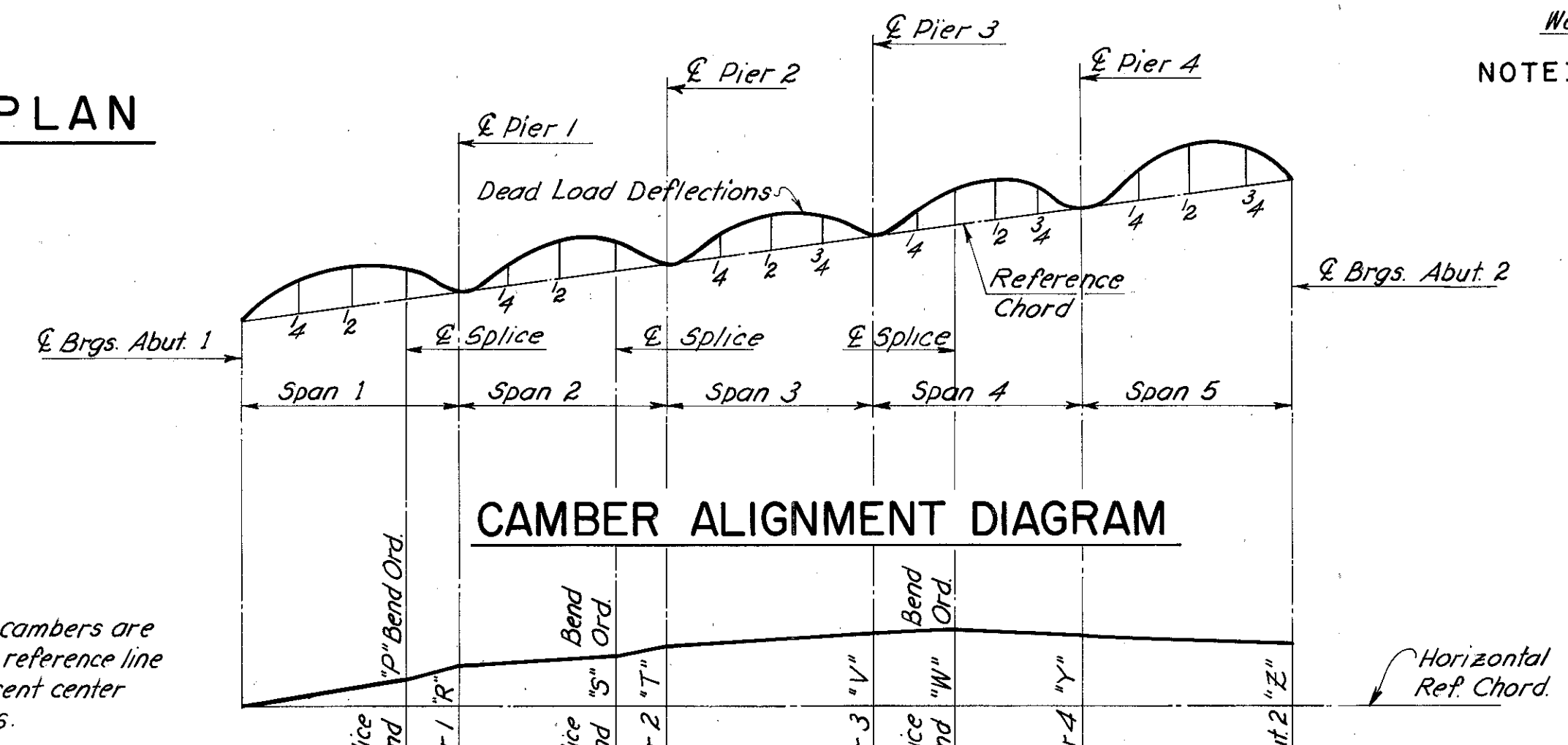
NOTES:

- 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 bar (bolt) holes.
- For reinforcing steel list see shs 9 10.
- Bott denotes bottom face.
- For Reference Chord Layout & Pier Skew Angles see Sh. 2 10.
- Bearing Anchors: At the option of the Contractor, bearing anchors (or formed holes) located and supported by templates, may be cast in place.
- All splices and dowels will be lapped min. 30 bar dia. Unless otherwise shown.

KING & GAVARIS CONSULTING ENGINEERS		5/10
PIERS 1,2,3 & 4		
BRIDGE NO. GRE-35-0074		
RELOCATED U.S. 35 UNDER RAMP A		
GREENE COUNTY	STA. 329+72.42 TO	
	STA. 332+14.66	
DESIGNED J.C.L.	DRAWN A.W.	TRACED S.A.
CHECKED S.A.	REVIEWED S.A.	DATE 9/25/72



FRAMING PLAN



BLOCKING ORDINATES

BEAMS	BLOCKING ORDINATES					
	A	B	C	D	E	F
SPLICE "A" - P	7 5/8"	7 1/4"	7 1/8"	7 3/8"	7 1/2"	6 15/16"
PIER NO.1 - R	9 1/8"	9 1/8"	9 1/8"	9 3/8"	9 1/8"	9 1/8"
SPLICE B - S	1'-6 1/8"	1'-6 1/2"	1'-6 1/4"	1'-6"	1'-5 1/2"	1'-4 13/16"
PIER NO.2 - T	1'-7 3/8"	1'-7 3/8"	1'-7 1/8"	1'-7 1/8"	1'-7 1/8"	1'-6 3/8"
PIER NO.3 - V	2'-1"	2'-0 1/8"	2'-0 1/8"	2'-0 3/8"	2'-0"	1'-11 1/8"
SPLICE C - W	2'-2 3/8"	2'-1 3/8"	2'-1 3/8"	2'-1 3/8"	2'-0 3/8"	1'-11 13/16"
PIER NO.4 - Y	2'-1 1/8"	2'-0 3/8"	2'-0 3/8"	2'-0 3/8"	2'-0 3/8"	2'-0 3/8"
ABUT. NO.2 - Z	2'-0"	1'-11 3/4"	1'-11 1/2"	1'-11 1/4"	1'-11 1/8"	1'-11 1/8"

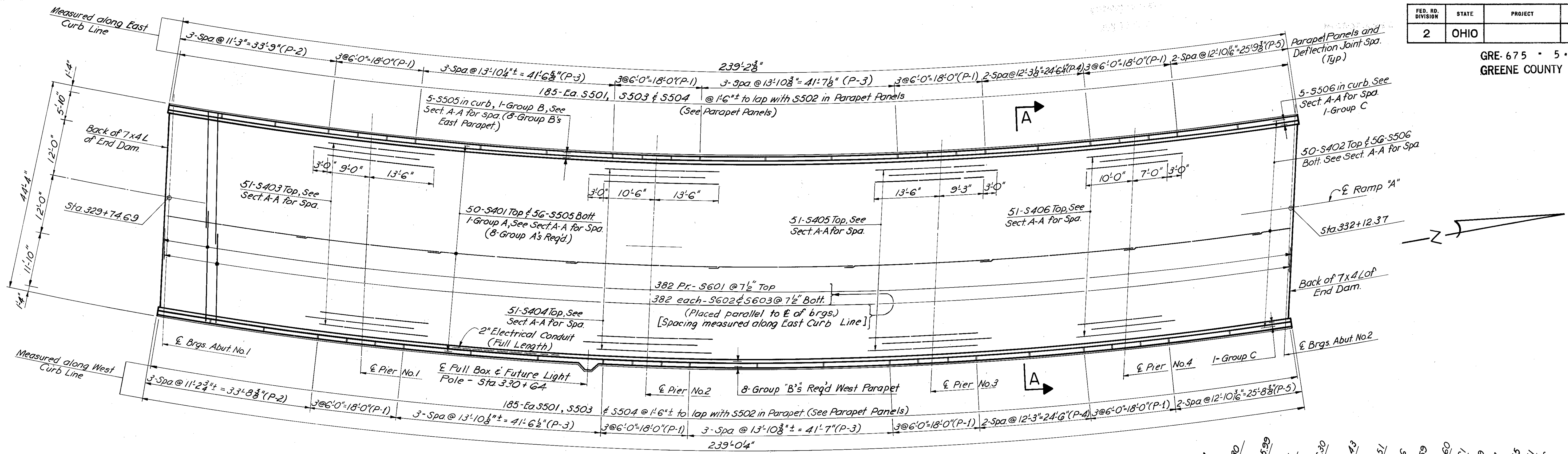
DESCRIPTION	DEFLECTION AND CAMBER (INCHES)									
	INTERIOR BEAMS B THRU E					EXTERIOR BEAMS A & F				
	SPAN 1	SPAN 2	SPAN 3	SPAN 4	SPAN 5	SPAN 1	SPAN 2	SPAN 3	SPAN 4	SPAN 5
DEFLECTION DUE TO WEIGHT OF STEEL	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"
DEFLECTION DUE TO REMAINING DEAD LOAD	8"	8"	16"	16"	16"	16"	16"	16"	16"	16"
ADJUSTMENT REQD FOR HORIZ. & VERT. CURVE BEAMS "E" & "F" ONLY	16"	16"	0"	7 1/2"	2"	0"	5"	3"	0"	0"
REQUIRED SHOP CAMBER BEAMS "A", "B", "C" & "D"	8"	8"	16"	16"	16"	16"	16"	16"	16"	16"
REQUIRED SHOP CAMBER BEAMS "E" & "F"	16"	16"	16"	8"	8"	8"	8"	8"	8"	8"

NOTES:
 For intermediate crossframe details see Common Details Sheet 2122
 For location of scuppers see shs. 2/10
 End dams to be included with Item 513, Structural Steel, for payment.
 For details of fixed bearing B-150 and expansion bearings R-75, R-125 and R-150, see Std. Dwg. RB-1-55.
 For Typical Transverse Section, see Section A-A, Sh. 7/10
 For End Crossframe details see Std. Dwg. SD-1-69

KING & GAVARIS
CONSULTING ENGINEERS

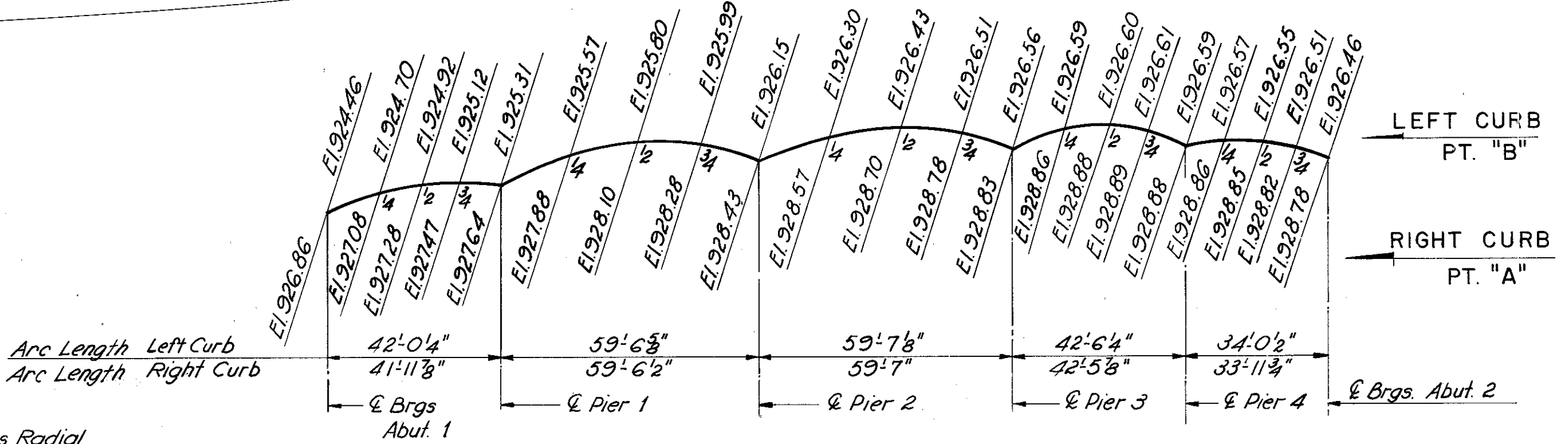
STEEL FRAMING PLAN
BRIDGE NO. GRE. - 35-0074
RELOCATED U.S. 35 UNDER RAMP A
GREENE COUNTY STA. 329+72.42 TO STA. 332+14.66

DESIGNED: VP. DRAWN: A.W. TRACED: SA. CHECKED: SA. REVIEWED: SA. DATE: 9/25/82 REVISION: 4-27-82



* 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 upon 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. Deduction shall be made for volume of encased steel plates as per Sect. 511.19 of the Construction and Material Specifications. This dimension will vary to accommodate horizontal & vertical curve requirements. The dimensions shown apply at the E of bearings only.

PLAN

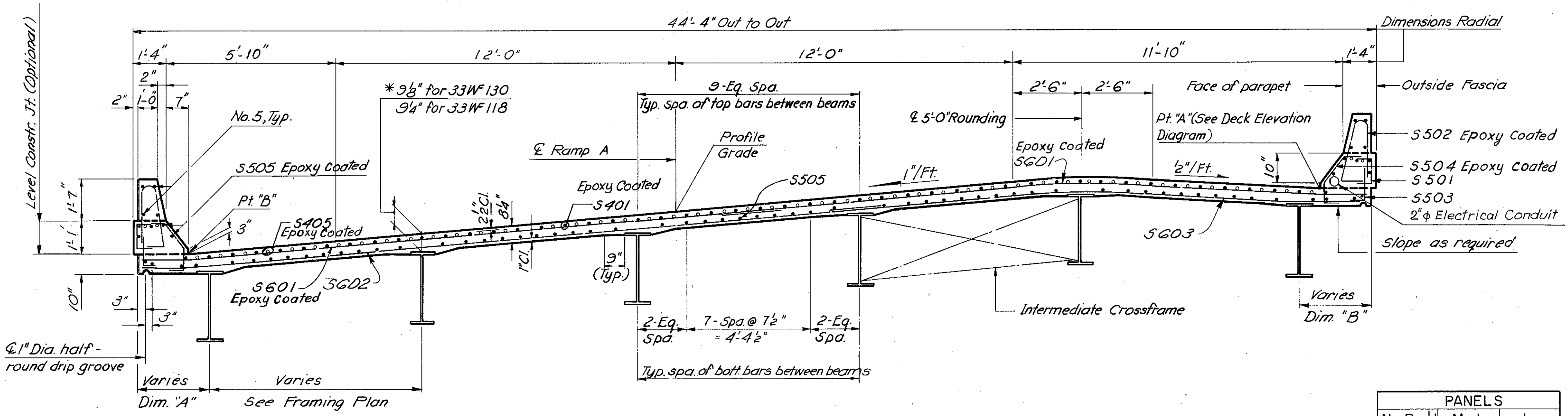


DECK ELEVATION DIAGRAM

AT CURB PT'S A & B
BEFORE CONCRETE IS PLACED

NOTES:

For reinforcing steel list see sh. 10 / 10
For details of end dams, included with Item 513 (Structure Steel) for payment, see Std. Dwg. SD-1-69, § Sh. 4.13.
Slab thickness shown includes 1" for monolithic wearing surface. A haunch width of 9" shall be used for computing quantity of concrete. However, the haunch width may vary between 5" and 12" provided that the slope shall not be more than 1:4 for a haunch less than 9" in width.
For details of deflection joint, see Std. Dwg. BR-1-67.
For Light Standard Pedestal, see common details sh. C1 / C2.
All splices and dowels will be lapped min. 30 bar dia. unless otherwise shown.



SECTION A-A

† SLAB OVERHANG DIMENSIONS											
	Abut. No. 1	Span No. 1	Pier No. 1	Span No. 2	Pier No. 2	Span No. 3	Pier No. 3	Span No. 4	Pier No. 4	Span No. 5	Abut. No. 2
Dimension "A"	2'-8 3/8"	2'-5 1/8"	2'-2 7/8"	2'-4 1/4"	2'-3 3/8"	1'-9 1/8"	2'-5 3/8"	2'-10 3/8"	2'-3 3/8"	2'-3 3/8"	2'-8 3/8"
Dimension "B"	2'-4 7/8"	2'-6 3/8"	2'-7 3/8"	2'-4 1/8"	2'-5"	3'-0 1/8"	2'-5"	2'-2"	2'-10 3/8"	3'-0 1/4"	2'-9 3/8"

† Dimensions measured radially from E stringer web to edge of slab

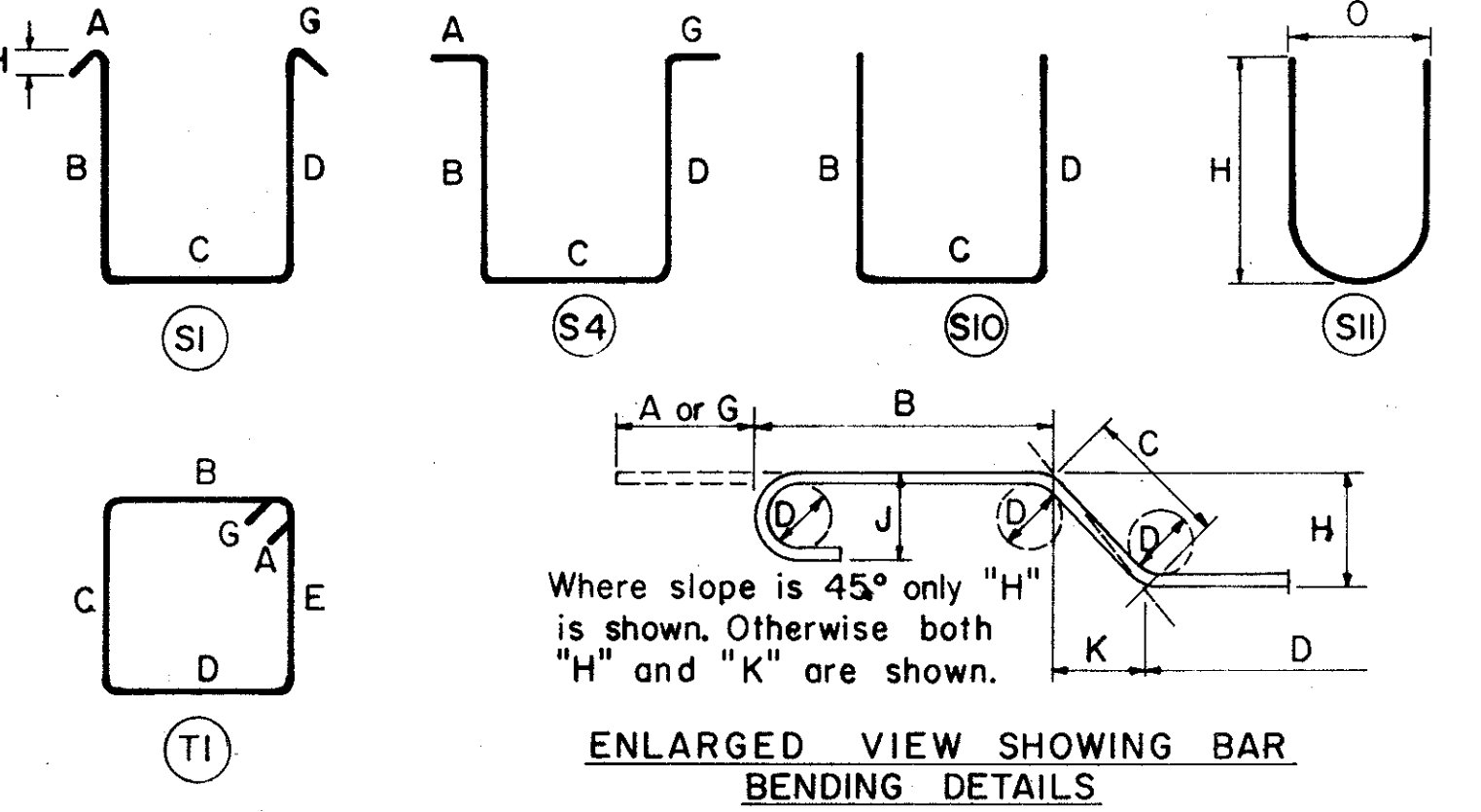
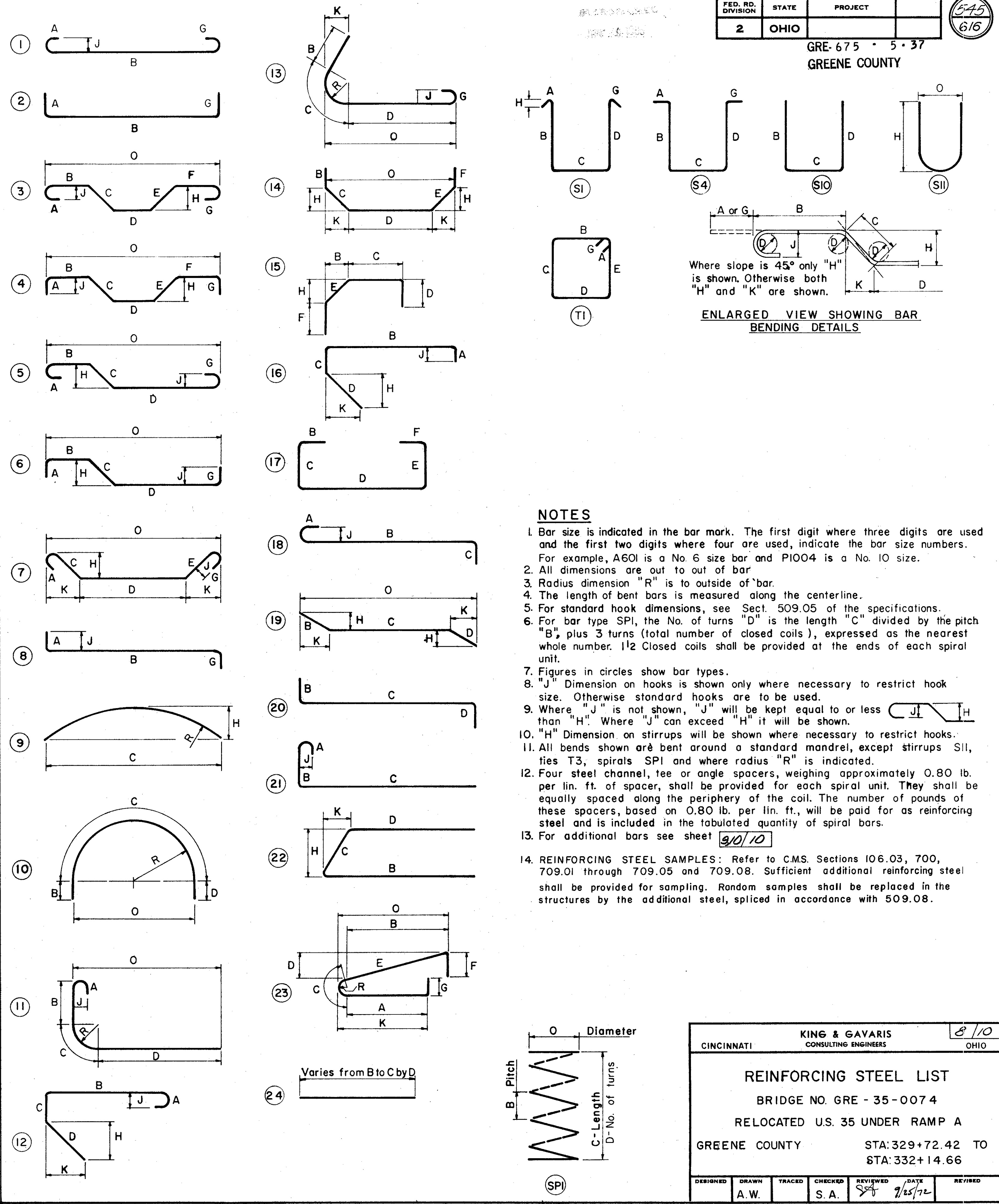
PANELS		
No. Reqd	Mark	L
24	P1	6'-0"
6	P2	11'-3 1/2"
12	P3	13'-10 3/8"
4	P4	12'-3"
4	P5	12'-10 3/8"

5-S502 @ 18" ± = 5'-8" (P1)
9-S502 @ 18" ± = 10'-11" (P2)
10-S502 @ 18" ± = 13'-6" (P3)
9-S502 @ 18" ± = 11'-11" (P4)
10-S502 @ 18" ± = 12'-6" (P5)

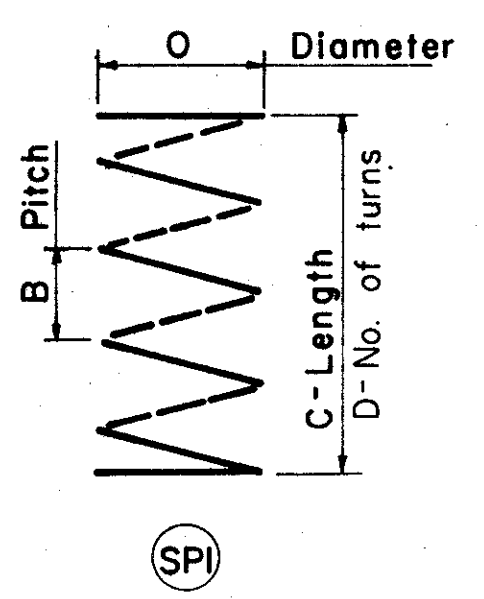
PARAPET PANELS

KING & GAVARIS CONSULTING ENGINEERS		7 / 10
SUPERSTRUCTURE ROADWAY SLAB		
BRIDGE NO. GRE-35-0074		
RELOCATED U.S. 35 UNDER RAMP A		
GREENE COUNTY	STA. 329+72.42 TO	
	STA. 332+14.66	
DESIGNED J.C.L.	DRAWN A.W.	REVISIONS DATE 9/25/72

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
					Reinforcing steel in Abutment No. 1 shall have the suffix "A"												
A501	18	2'-4"	44	2	9"	10"					9"						
A502	16	2'-10"	47	Str													8 Epoxy Coated
A503	10	6'-7"	69	23	2'-10 1/8"	2'-1 1/8"	1'-0"	3 1/2"	2'-1 1/8"		9"			3'-2"	2'-5"	3 7/8"	10 Epoxy Coated
A504	6	3'-8"	23	Str													
A505	1	4'-0"	4	Str													
A506	28	12'-2"	355	Str													8 Epoxy Coated
A507	8	6'-11"	58	Str													
A508	2	6'-10"	14	Str													
A509	8	7'-5"	62	2	9"	6'-8"											
A510	6	8'-2"	51	Str													
A511	1	3'-11"	4	Str													
A512	2	6'-8"	14	Str													
A513	10	8'-3"	86	Str													
A514	10	5'-1"	53	Str													
A515	2	3'-6"	7	Str													
A516	2	10'-10"	23	2	9"	10'-1"											
A517	18	10'-9"	202	TI	5"	3'-0"	2'-2"	3'-0"	2'-2"		5"						
A518	46	6'-4"	304	SIO		1'-7"	3'-5"	1'-7"									
A519	28	8'-3"	241	SIO		1'-7"	5'-4"	1'-7"									
A520	5	8'-1"	42	2	9"	7'-4"											
A521	7	9'-9"	71	2	9"	9'-0"											
A522	16	22'-6"	375	Str													
A523	12	6'-0"	75	Str													
A524	2	9'-4"	19	Str													
A525	15	10'-7"	166	20		1'-7"	9'-3"										
A526	5	10'-2"	53	Str													
A527	2	6'-11"	14	Str													
A528	2	14'-10"	31	Str													
A529	6	22'-7"	141	19		1'-4"	21'-3"					2"	1'-4"	22'-7"			
A530	2	30'-0"	63	Str													
A532	5	9'-5"	49	2	9"	8'-8"											
A533	5	8'-9"	46	2	9"	8'-0"											
A534	5	12'-2"	63	20		1'-7"	10'-9"										
A601	10	5'-11"	89	15		9"	4'-4"		11 1/2"	9"		7"					10 Epoxy Coated
A602	5	17'-10"	134	SIO		8'-6"	1'-2"	8'-6"									
A603	5	22'-6"	169	SIO		10'-10"	1'-2"	10'-10"									
A604	6	14'-6"	131	SIO		6'-9"	5'-4"	2'-9"									
A605	5	15'-2"	114	SIO		7'-5"	5'-4"	2'-9"									
A606	7	16'-10"	177	SIO		9'-1"	5'-4"	2'-9"									
A608	41	10'-1"	621	SIO		4'-6"	1'-5"	4'-6"									
A609	41	8'-1"	498	SIO		3'-9"	11"	3'-9"									
A610	41	6'-7"	405	SIO		2'-9"	1'-5"	2'-9"									
A611	5	16'-6"	124	SIO		8'-9"	5'-4"	2'-9"									
A612	5	15'-10"	119	SIO		8'-1"	5'-4"	2'-9"									
A701	2	4'-9"	19	1	10"	3'-11"			9 1/2"	9"		3"	7"				2 Epoxy Coated
A702	2	4'-6"	18	15		9"	3'-1"		10 1/2"	9"		5"					2 Epoxy Coated
A703	2	4'-8"	19	15		9"	3'-2"		11 1/2"	9"		7"					1 Epoxy Coated
A704	1	5'-2"	11	15		9"	3'-7"		11 1/2"	9"		7"					1 Epoxy Coated
A705	1	5'-1"	10	15		9"	3'-6"		11 1/2"	9"		7"					1 Epoxy Coated
A801	6	11'-1"	178	Str													
A802	14	23'-6"	878	Str													
A803	6	10'-10"	174	Str													
A804	41	6'-2"	675	14		1'-3"	3'-8"	1'-3"				2'-7"	2'-7"				
Total			7,432														



- 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 numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
 - All dimensions are out to out of bar.
 - Radius dimension "R" is to outside of bar.
 - The length of bent bars is measured along the centerline.
 - For standard hook dimensions, see Sect. 509.05 of the specifications.
 - For bar type SPI, 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. 1/2 Closed coils shall be provided at the ends of each spiral unit.
 - Figures in circles show bar types.
 - "J" Dimension on hooks is shown only where necessary to restrict hook size. Otherwise standard hooks are to be used.
 - Where "J" is not shown, "J" will be kept equal to or less than "H". Where "J" can exceed "H" it will be shown.
 - "H" Dimension on stirrups will be shown where necessary to restrict hooks.
 - All bends shown are bent around a standard mandrel, except stirrups S11, ties T3, spirals SPI and where radius "R" is indicated.
 - Four steel channel, tee or angle spacers, weighing approximately 0.80 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.
 - For additional bars see sheet 9/10/10
 - REINFORCING STEEL SAMPLES: Refer to C.M.S. 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.



KING & GAVARIS CONSULTING ENGINEERS		8/10
CINCINNATI	OHIO	
REINFORCING STEEL LIST		
BRIDGE NO. GRE - 35 - 0074		
RELOCATED U.S. 35 UNDER RAMP A		
GREENE COUNTY		STA: 329+72.42 TO STA: 332+14.66
DESIGNED	DRAWN	TRACED
A.W.	S.A.	S.A.
CHECKED	REVIEWED	DATE
		9/25/72

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
					Reinforcing steel in Abutment No. 2 shall have the suffix "B"												
A501	18	2'-4"	44	2	9"	10"											
A502	16	2'-10"	47	Str													
A503	10	6'-7"	69	23	2'-10 1/8"	2'-1 1/8"	1'-0"	3 1/2"	2'-1 3/8"					3'-2"	2'-5"	3 1/8"	8 Epoxy Coated
A504	6	3'-8"	23	Str													
A505	1	4'-5"	5	Str													
A506	28	12'-2"	355	Str													8 Epoxy Coated
A507	8	6'-11"	58	Str													
A508	2	7'-2"	15	Str													
A509	7	7'-5"	54	2	9"	6'-8"											
A510	6	8'-5"	53	Str													
A511	1	4'-2"	4	Str													
A512	2	6'-5"	13	Str													
A513	10	8'-1"	84	Str													
A514	10	5'-1"	53	Str													
A515	2	3'-7"	7	Str													
A516	2	10'-9"	23	2	9"	10'-0"											
A517	18	10'-9"	202	71	5"	3'-0"	2'-2"	3'-0"	2'-2"							5"	
A518	46	6'-4"	304	S10		1'-7"	3'-5"	1'-7"									
A519	28	8'-3"	241	S10		1'-7"	5'-4"	1'-7"									
A520	5	8'-0"	42	2	9"	7'-3"											
A521	7	9'-9"	71	2	9"	9'-0"											
A522	16	22'-10"	381	Str													
A523	12	5'-6"	69	Str													
A524	2	9'-3"	19	Str													
A525	15	10'-7"	166	20		1'-7"	9'-3"										
A526	5	10'-1"	53	Str													
A527	2	6'-11"	14	Str													
A528	2	14'-10"	31	Str													
A529	6	22'-10"	143	19		1'-4"	21'-6"							34"	1'-3 1/2"	22'-9 1/2"	
A530	2	30'-0"	63	Str													
A532	5	9'-5"	49	2	9"	8'-8"											
A533	6	8'-8"	54	2	9"	7'-11"											
A534	5	11'-1"	58	20		1'-7"	9'-8"										
A601	10	5'-11"	89	15		9"	4'-4"			11 1/2"	9"			7"			10 Epoxy Coated
A602	5	17'-10"	134	S10		8'-6"	1'-2"	8'-6"									
A603	5	22'-4"	168	S10		10'-9"	1'-2"	10'-9"									
A604	5	14'-6"	109	S10		6'-9"	5'-4"	2'-9"									
A605	5	15'-1"	113	S10		7'-4"	5'-4"	2'-9"									
A606	7	16'-9"	176	S10		9'-0"	5'-4"	2'-9"									
A608	41	10'-1"	621	S10		4'-6"	1'-5"	4'-6"									
A609	41	8'-1"	498	S10		3'-9"	11"	3'-9"									
A610	41	6'-7"	405	S10		2'-9"	1'-5"	2'-9"									
A611	5	16'-5"	123	S10		8'-9"	5'-4"	2'-9"									
A612	6	15'-9"	142	S10		8'-0"	5'-4"	2'-9"									
A701	2	4'-9"	19	1	10"	3'-11"											2 Epoxy Coated
A702	2	4'-7"	18	15		9"	3'-1"	9 1/2"	9"					3"			2 Epoxy Coated
A703	2	4'-9"	19	15		9"	3'-2"	10 1/2"	9"					5"			2 Epoxy Coated
A704	1	5'-8"	11	15		9"	4'-0"	11 1/2"	9"					7"			1 Epoxy Coated
A705	1	5'-5"	11	15		9"	3'-9"	11 1/2"	9"					7"			1 Epoxy Coated
A801	6	11'-1"	178	Str													
A802	14	24'-0"	897	Str													
A803	4	10'-11"	117	Str													
A804	2	10'-7"	57	Str													
A805	41	6'-2"	675	14		1'-3"	3'-8"	1'-3"						2'-7"	2'-7"		
Total			7,447														
Total Abutments			14,879														

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
					Reinforcing steel in Pier No. 1 shall have the suffix "A"												
SP401	1	13'-1 1/2"	252	SPI		4 1/2"	13'-1 1/2"	38									2'-8"
SP402	1	14'-3"	272	SPI		4 1/2"	14'-3"	41									2'-8"
SP403	1	15'-0"	285	SPI		4 1/2"	15'-0"	43									2'-8"
P501	56	9'-9"	569	S10		3'-8"	2'-8"	3'-8"									
P502	22	Varies 6'-9" to 9'-9" by 33 1/2" x 2'-0"	189	S10		Varies 2'-2" to 3'-8" by 134"	2'-8"	Varies 2'-2" to 3'-8" by 134"									
P503	22	5'-7"	128	S10		1'-7"	2'-8"	1'-7"									
P504	30	4'-5"	138	S10		1'-0"	2'-8"	1'-0"									
P505	4	21'-10"	91	Str													
P601	36	7'-4"	397	1	8"	6'-0"						8"				6"	
P801	42	6'-2"	692	2	11"	5'-3"											
P802	14	15'-11"	595	Str													
P803	14	16'-11"	632	Str													
P804	14	18'-0"	673	Str													
P805	21	11'-4"	654	1	11"	9'-6"						11"				10"	
P901	2	17'-0"	116	Str													
P902	3	22'-7"	230	19		5'-6"	17'-1 1/2"					1'-10"		5'-2"		22'-3 1/2"	
P903	3	22'-7"	230	19		5'-6"	17'-1 1/2"					1'-0 1/2"		5'-5"		22'-6 1/2"	
P1101	6	18'-8"	595	20		2'-2"	16'-10"										
P1102	8	13'-8"	581	20		2'-2"	11'-10"										
P1103	3	15'-4"	244	Str													
Total			7,563														
					Reinforcing steel in Pier No. 2 shall have the suffix "B"												
SP401	1	12'-4 1/2"	238	SPI		4 1/2"	12'-4 1/2"	36									2'-8"
SP402	1	13'-1 1/2"	252	SPI		4 1/2"	13'-1 1/2"	38									2'-8"
SP403	1	14'-3"	272	SPI		4 1/2"	14'-3"	41									2'-8"
P501	56	9'-9"	569	S10		3'-8"	2'-8"	3'-8"									
P502	22	Varies 6'-9" to 9'-9" by 33 1/2" x 2'-0"	189	S10		Varies 2'-2" to 3'-8" by 134"	2'-8"	Varies 2'-2" to 3'-8" by 134"									
P503	22	5'-7"	128	S10		1'-7"	2'-8"	1'-7"									
P504	30	4'-5"	138	S10		1'-0"	2'-8"	1'-0"									
P505	4	21'-10"	91	Str													
P601	36	7'-4"	397	1	8"	6'-0"						8"				6"	
P801	42	6'-2"	692	2	11"	5'-3"											
P802	14	15'-10"	561	Str													
P803	14	16'-0"	598	Str													
P804	14	17'-0"	635	Str													
P901	2	17'-0"	116	Str													
P902	3	22'-7"	230	19		5'-6"	17'-1 1/2"					1'-10"		5'-2"		22'-3 1/2"	
P903	3	22'-7"	230	19		5'-6"	17'-1 1/2"					1'-0 1/2"		5'-5"		22'-6 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 numbers. For example, A601 is a No. 6 size bar and P1004

UNRECORDED
JUN 19 1966

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	



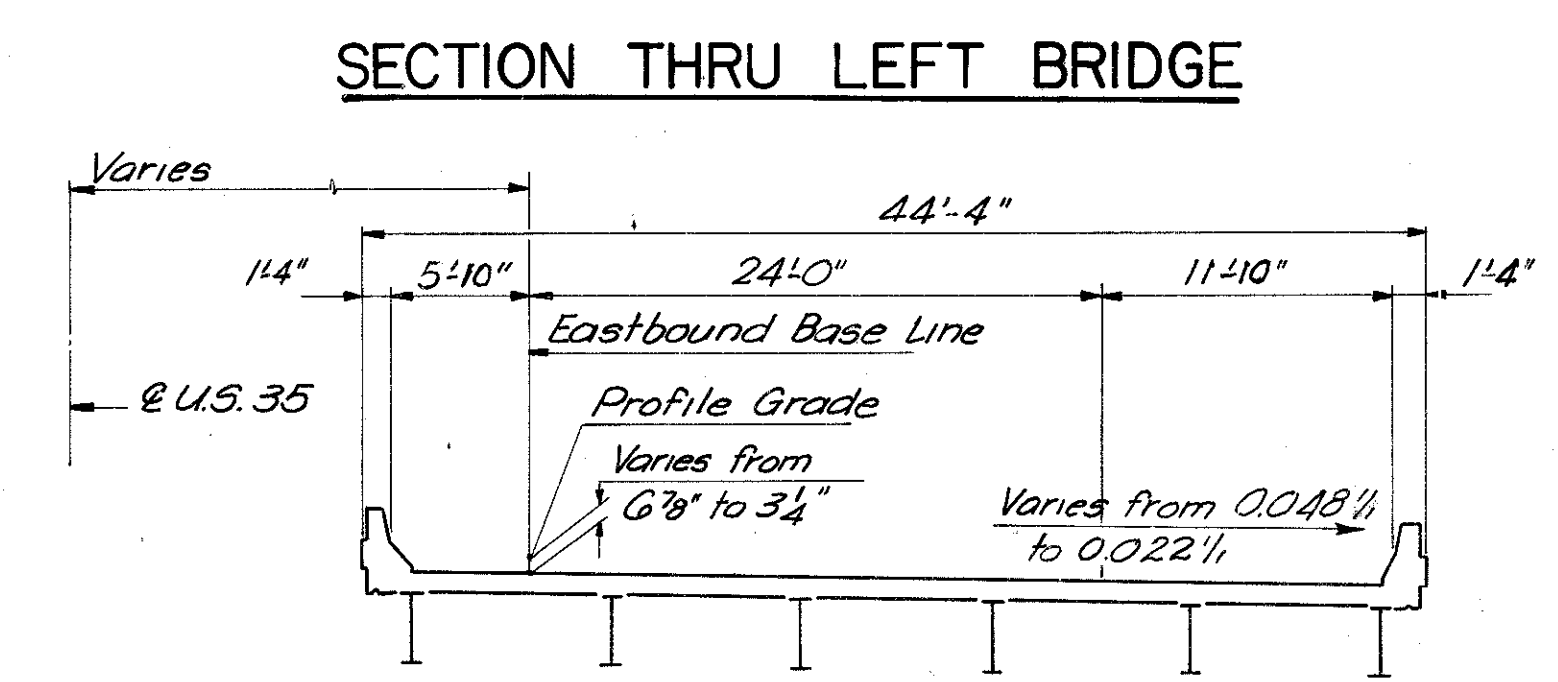
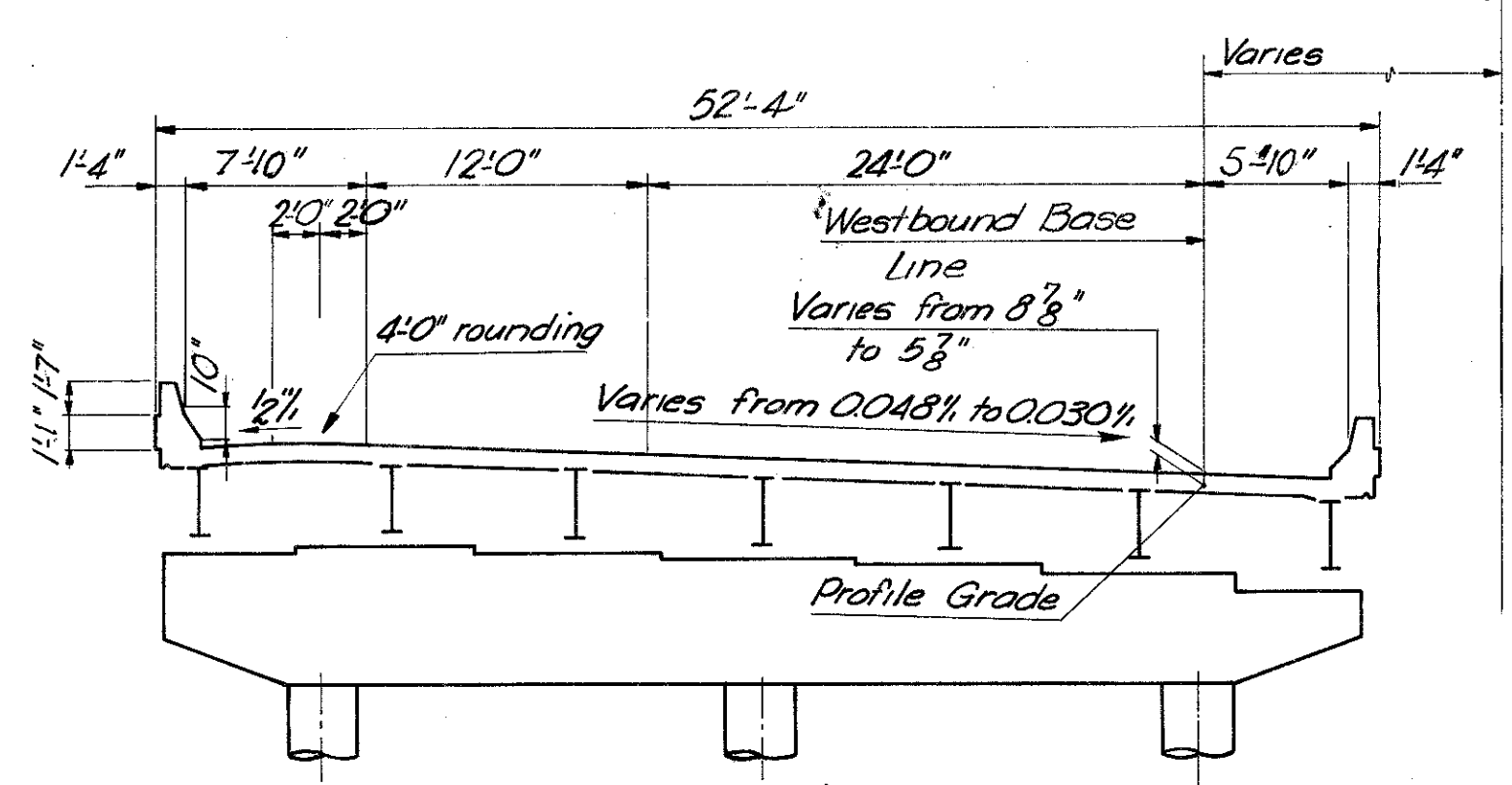
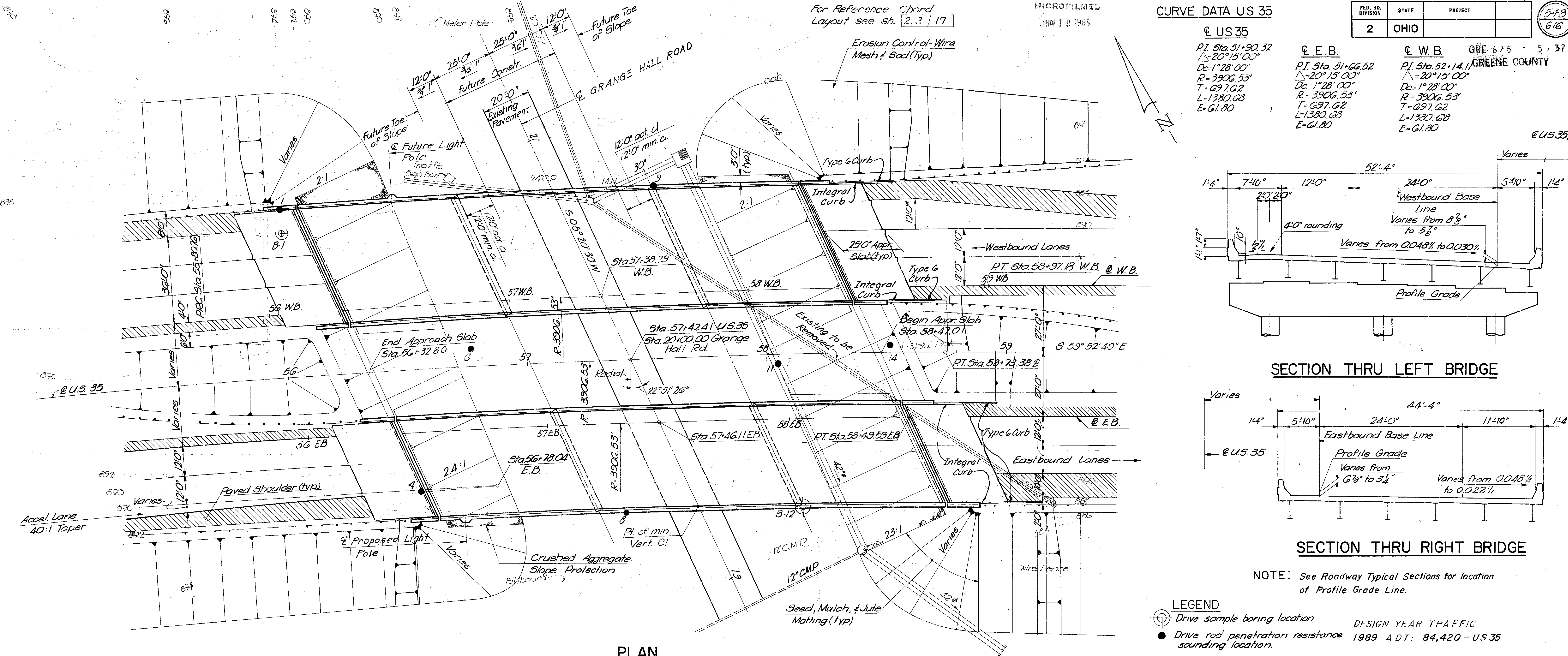
GRE-675 - 5-37
GREENE COUNTY

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
PIER NO. 2 CONTINUED																	
P1101	6	18'-8"	595	20		2'-2"	16'-10"										
P1102	8	13'-8"	581	20		2'-2"	11'-10"										
P1103	3	15'-4"	244	STR													
P1104	27	16'-8"	2,391	1	1'-7"	13'-6"					1'-7"		1'-5"				
		Total	9,147														
PIER NO. 3																	
Reinforcing steel in Pier No. 3 shall have the suffix "C"																	
SP401	1	13'-6"	258	SPI		4'-2"	13'-6"	39							2'-8"		
SP402	1	14'-3"	272	SPI		4'-2"	14'-3"	41							2'-8"		
SP403	1	15'-4 1/2"	292	SPI		4'-2"	15'-4 1/2"	44							2'-8"		
P501	56	9'-9"	569	S10		3'-8"	2'-8"	3'-8"									
P502	22	Varies 6'-9" to 9'-9" by 3'-2" @ 2'-00"	189	S10		Varies 2'-2" to 3'-8" by 1'-4"	2'-8"	Varies 2'-2" to 3'-8" by 1'-4"									
P503	22	5'-7"	128	S10		1'-7"	2'-8"	1'-7"									
P504	30	4'-5"	138	S10		1'-0"	2'-8"	1'-0"									
P505	4	21'-10"	91	STR													
P601	36	7'-4"	397	1	8"	6'-0"					8"		6"				
P801	42	6'-5"	692	2	1'-2"	5'-3"											
P802	14	16'-2"	604	STR													
P803	14	17'-2"	642	STR													
P804	14	18'-2"	679	STR													
P805	21	11'-4"	654	7	11"	9'-6"					11"		10"				
P901	2	17'-0"	116	STR													
P902	3	22'-7"	230	19		5'-6"	17'-1 1/2"				1'-10"		5'-2"	22'-3 1/2"			
P903	3	22'-7"	230	19		5'-6"	17'-1 1/2"				1'-0 1/2"		5'-5"	22'-6 1/2"			
P1101	6	18'-8"	595	20		2'-2"	16'-10"										
P1102	8	13'-8"	581	20		2'-2"	11'-10"										
P1103	3	15'-4"	244	STR													
		Total	7,601														
PIER NO. 4																	
Reinforcing steel in Pier No. 4 shall have the suffix "D"																	
SP401	1	14'-7 1/2"	278	SPI		4'-2"	14'-7 1/2"	42							2'-8"		
SP402	1	15'-9"	299	SPI		4'-2"	15'-9"	45							2'-8"		
SP403	1	16'-10 1/2"	319	SPI		4'-2"	16'-10 1/2"	48							2'-8"		
P501	32	9'-9"	325	S10		3'-8"	2'-8"	3'-8"									
P502	10	Varies 6'-9" to 9'-9" by 3"-2" @ 2'-00"	86	S10		Varies 2'-2" to 3'-8" by 1'-4"	2'-8"	Varies 2'-2" to 3'-8" by 1'-4"									
P503	10	5'-7"	58	S10		1'-7"	2'-8"	1'-7"									
P504	30	4'-5"	138	S10		1'-0"	2'-8"	1'-0"									
P505	4	21'-10"	91	STR													
P601	36	7'-4"	397	1	8"	6'-0"					8"		6"				
P801	42	6'-2"	692	2	11"	5'-3"											
P802	14	17'-7"	657	STR													
P803	14	18'-8"	698	STR													
P804	14	19'-8"	735	STR													
P805	21	11'-4"	654	1	11"	9'-6"					11"		10"				
P901	4	22'-7"	307	19		5'-6"	17'-1 1/2"				1'-10"		5'-2"	22'-3 1/2"			
P902	4	22'-7"	307	19		5'-6"	17'-1 1/2"				1'-0 1/2"		5'-5"	22'-6 1/2"			
P1101	6	19'-1"	608	20		2'-2"	17'-3"										
P1102	4	13'-8"	290	20		2'-2"	11'-10"										
P1103	3	14'-6"	231	STR													
		Total	7,170														
		Total Piers	31,481														

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
SUPERSTRUCTURE																	
S401	400	30'-0"	8,016	STR													400 Epoxy Coated
S402	50	8'-6"	284	STR													50 Epoxy Coated
S403	51	22'-6"	767	STR													51 Epoxy Coated
S404	51	24'-0"	818	STR													51 Epoxy Coated
S405	51	22'-9"	775	STR													51 Epoxy Coated
S406	51	17'-0"	579	STR													51 Epoxy Coated
S501	370	2'-4"	903	2	9"	10"					9"						
S502	370	5'-10"	2,251	23	2'-0 1/2"	2'-2 1/2"	1'-0"	3 1/2"	2'-2 3/8"	9"				2'-4"	2'-6"	3 3/8"	370 Epoxy Coated
S503	370	2'-5"	933	2	9"	1'-8"											
S504	370	3'-0"	1,158	15		9"	9"	9"	11 1/2"	9"		7"					370 Epoxy Coated
S505	528	30'-0"	16,521	STR													32 Epoxy Coated
S506	66	11'-6"	792	STR													4 Epoxy Coated
S507	96	5'-8"	567	STR													48 Epoxy Coated
S508	24	10'-11"	273	STR													12 Epoxy Coated
S509	48	13'-6"	676	STR													24 Epoxy Coated
S510	16	11'-11"	199	STR													8 Epoxy Coated
S511	16	12'-6"	209	STR													8 Epoxy Coated
S601	764	23'-3"	26,680	STR													764 Epoxy Coated
S602	382	27'-4"	15,683	STR													
S603	382	19'-2"	10,997	STR													
L501	4	3'-6"	15	2	9"	2'-0"					9"						
L502	4	8'-3"	35	S10		3'-2"	2'-2"	3'-2"									4 Epoxy Coated
L503	6	7'-6"	47	4		6"	2'-7"	1'-4"	2'-7"	6"		1'-10"		6'-0"			
L504	4	3'-2"	13	STR													
		Total:	89,191														

- 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 numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
 - For bar types see sheet 8/10
 - All dimensions are out to out of bar.
 - Radius dimension "R" is to outside of bar.
 - The length of bent bars is measured along the centerline.
 - For additional notes see sheet 8/10

KING & GAVARIS CONSULTING ENGINEERS		10/10 OHIO
REINFORCING STEEL LIST		
BRIDGE NO. GRE - 35-0074		
RELOCATED U.S. 35 UNDER RAMP A		
GREENE COUNTY		STA: 329+72.42 TO STA: 332+14.66
DESIGNED	DRAWN	TRACED
A.W.	S.A.	9/22/12



NOTE: See Roadway Typical Sections for location of Profile Grade Line.

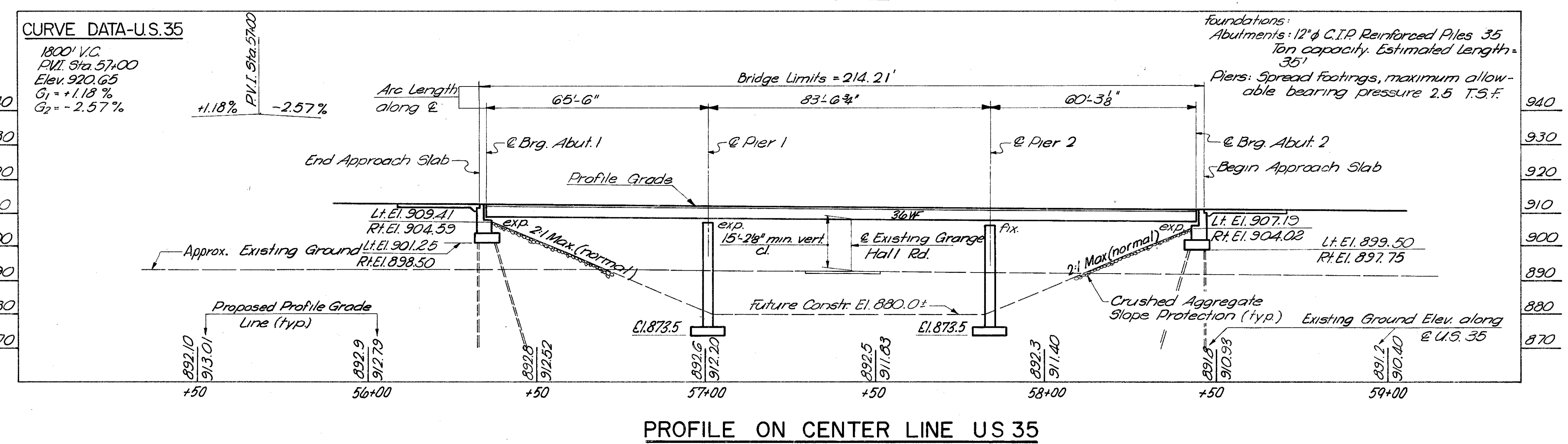
- LEGEND**
- ⊕ Drive sample boring location
 - Drive rod penetration resistance sounding location.
- DESIGN YEAR TRAFFIC
 1989 A.D.T. 84,420 - US 35

NOTE
 Earthwork Limits shown are schematic. Actual slopes shall conform to Plan Cross-Sections

PROPOSED STRUCTURE

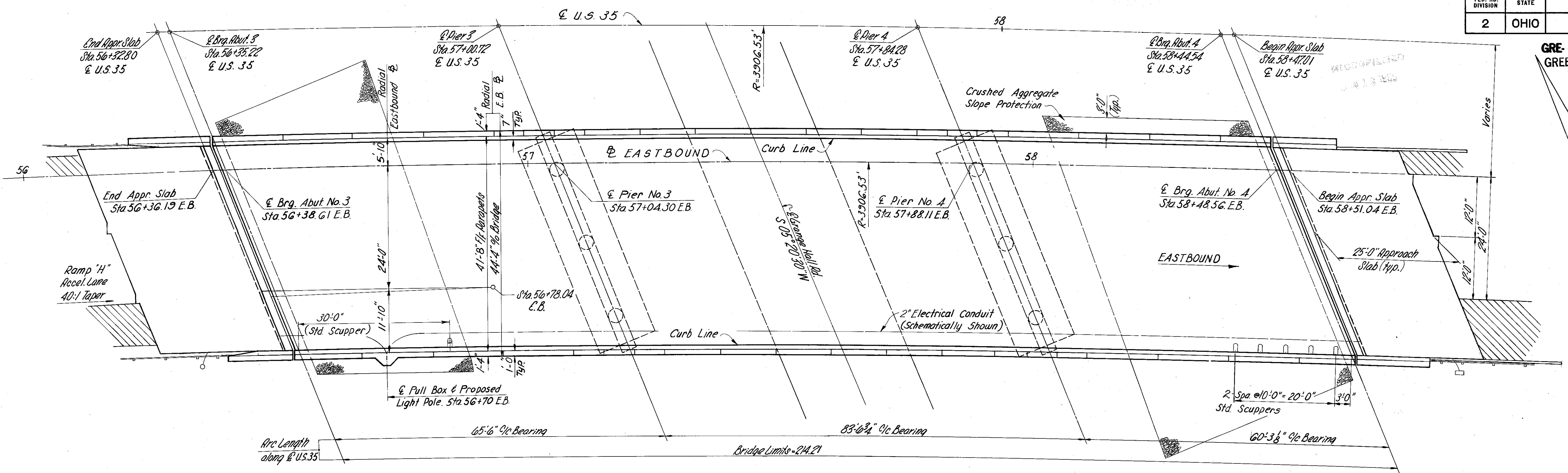
TYPE: Continuous steel beam with reinforced concrete deck and substructure
 SPANS: 65'-6", 83'-6", 60'-3 1/2"
 ROADWAY: Lt. 4'-8" Rt. 4'-8" f. of parapet
 LOADING: HS-20-44 Alternate Military
 SKEW: Varies, 22°51'26" Rt. Fwd. of E. Grange Hall Rd.
 WEARING SURFACE: Monolithic Concrete
 APPROACH SLABS: 25'-0" long (Std. AS-1-72)
 ALIGNMENT: Right Curve - $D_c=1^{\circ}28'00''$

PRESENT TOPOGRAPHY		PROPOSED WORK	
SURVEYED	DRAWN	DESIGNED	DRAWN
AERIAL SURVEY	AERIAL SURVEY	JCL	AW
		CHECKED	REVISED
		S.A.	



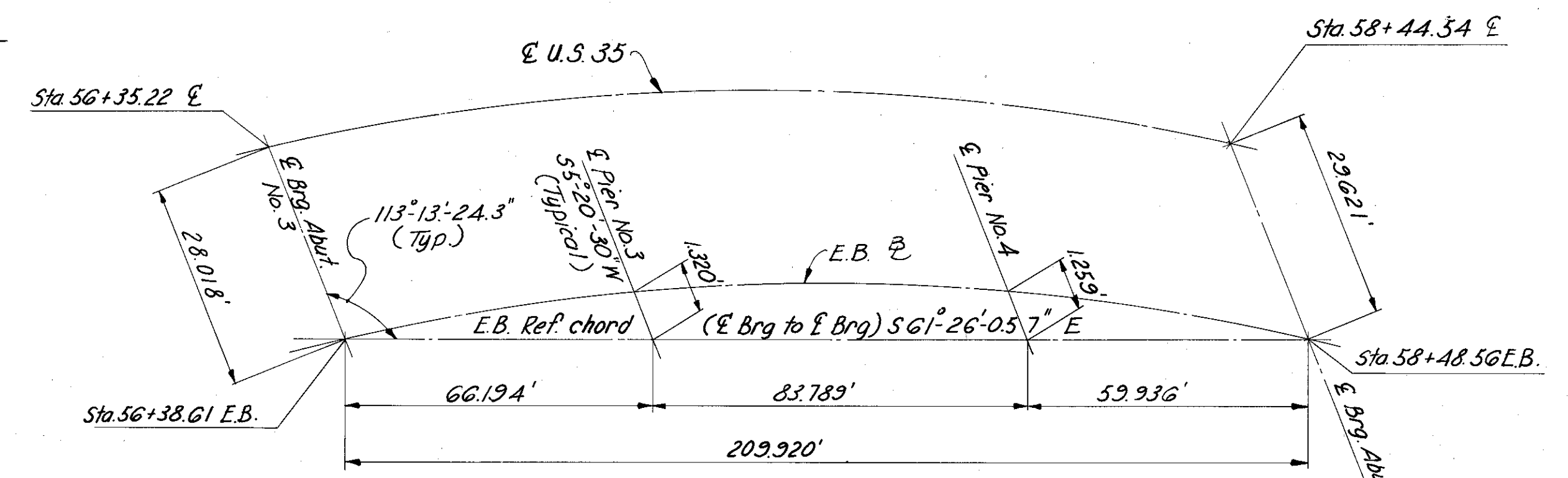
SITE PLAN

BRIDGE NO. GRE - 35-0107 R/L
 US 35 OVER GRANGE HALL RD.
 GREENE COUNTY STA. 56+32.80 TO STA. 58+47.01



NOTE: Work this sheet with Sht 3/17

PLAN - RIGHT BRIDGE



EASTBOUND REFERENCE CHORD LAYOUT

ESTIMATED QUANTITIES			LEFT BRIDGE				RIGHT BRIDGE				
ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	ABUT	PIERS	GEN	SUPER	ABUT	PIERS	GEN
503	Lump	Sum	Cut berms, cribs and sheeting				Lump				Lump
503	2,366	Cu. Yd.	Unclassified Excavation		291	971			255	849	
505	Lump	Sum	Test Pile				Lump				Lump
507	2,765	Lin. Ft.	12" Cast-in-place reinforced concrete piles		1,470				1,295		
509	208,500	Lb.	Reinforcing steel	45,900	17,200	13,100		39,000	14,900	42,400	
511	654	Cu. Yd.	Class S concrete superstructure using shrink comp. cem. 701.08	348				306			
511	183	Cu. Yd.	Class C concrete piers above footings			104				79	
511	254	Cu. Yd.	Class C concrete abutments above footings		137				117		
511	419	Cu. Yd.	Class C concrete footings		91	133			79	116	
513	618,000	Lb.	Structural Steel (AISC Category 1)	332,000				286,000			
514	618,000	Lb.	Field painting of new structural steel, System A	332,000				286,000			
518	130	Cu. Yd.	Rorous backfill		70				60		
518	177	Lin. Ft.	6" Perforated helical C.S.R. 707.01		97				80		
518	231	Lin. Ft.	6" non perforated helical C.S.R. including specials, 707.01		111				120		
518	9	Each	Scuppers including supports	5				4			
523	6	Hour	Dynamic Pile Tests			3				3	
601	1135	Sq. Yd.	Crushed aggregate slope protection			600				535	
625			See st. no. (149) for lighting summary								
Special	84,200	Lb.	Epoxy Coated Reinforcing Steel (See Proposal Note)	44,500	800			38,000	900		

ESTIMATED QUANTITIES BY: J.G. CHECKED BY: S.A. 4/17/72 REVISED: S.A. 9/14/27

TEST PILE: Payment will be made for only one test pile. It may be driven for either the Right or Left bridge.

GENERAL NOTES

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 THE PIERS.

PILES SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 35 TONS PER PILE FOR THE ABUTMENTS.

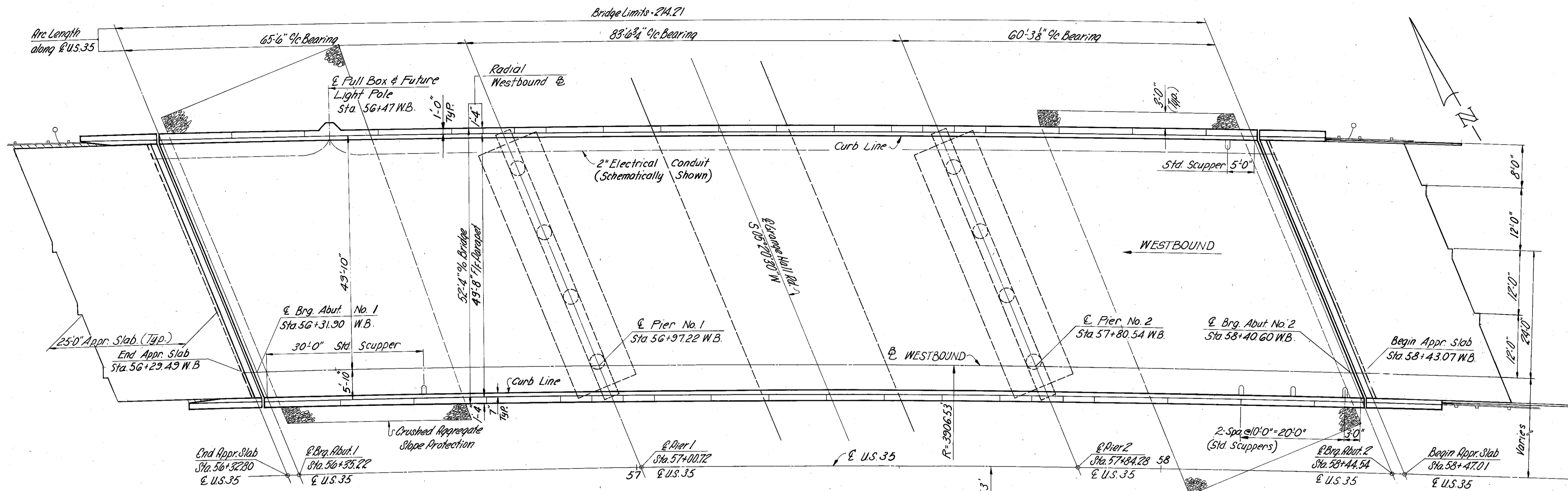
FOUNDATION BEARING PRESSURE: PIER FOOTINGS ARE DESIGNED FOR A MAXIMUM BEARING PRESSURE OF 2.5 TONS PER SQ. FT.

FOR ADDITIONAL NOTES SEE COMMON DETAILS, SHEET C1/C2.

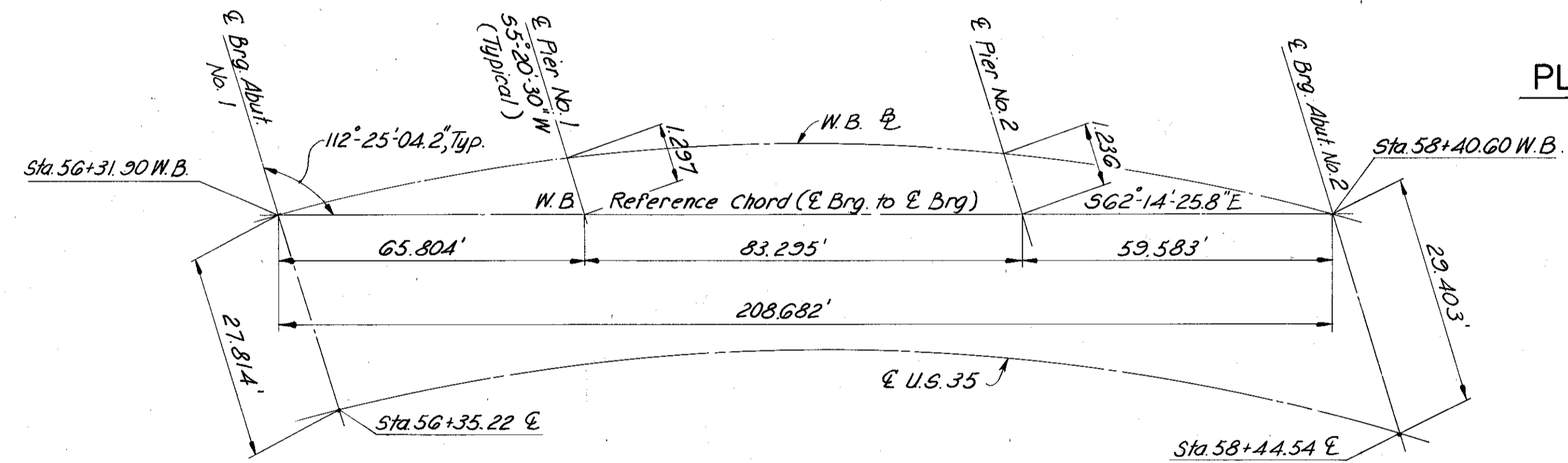
THE SCUPPER PIPES SHALL EXTEND 8 INCHES BELOW THE BOTTOM OF THE BOTTOM FLANGE INSTEAD OF 2 INCHES.

THE END DAM ANCHOR BARS SHALL BE LOCATED 3 3/8 INCHES CLEAR FROM THE TOP OF BRIDGE DECK.

KING & GAVARIS CONSULTING ENGINEERS		2 / 17
GENERAL PLAN-R, GENERAL NOTES AND ESTIMATED QUANTITIES		
BRIDGE NO. GRE-35-0107 R/L		
US 35 OVER GRANGE HALL RD.		
GREENE COUNTY		STA. 56+32.80 TO STA. 58+47.01
DESIGNED J.C.L.	DRAWN D.M.	TRACED S.A.
CHECKED S.A.	REVIEWED 9/25/72	DATE 9/25/72



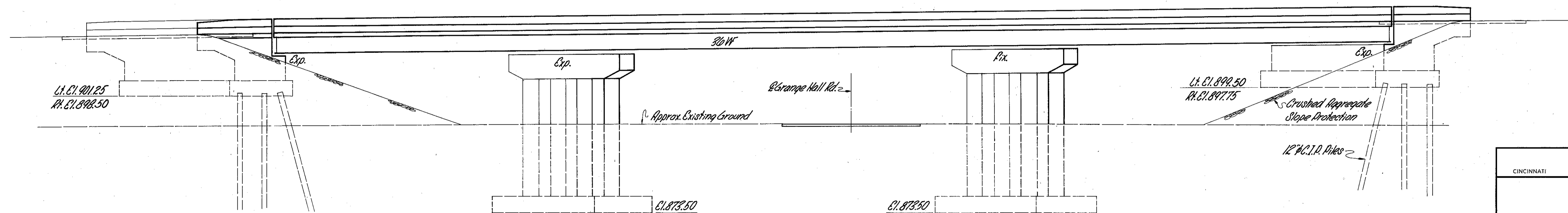
PLAN - LEFT BRIDGE



WESTBOUND REFERENCE CHORD LAYOUT

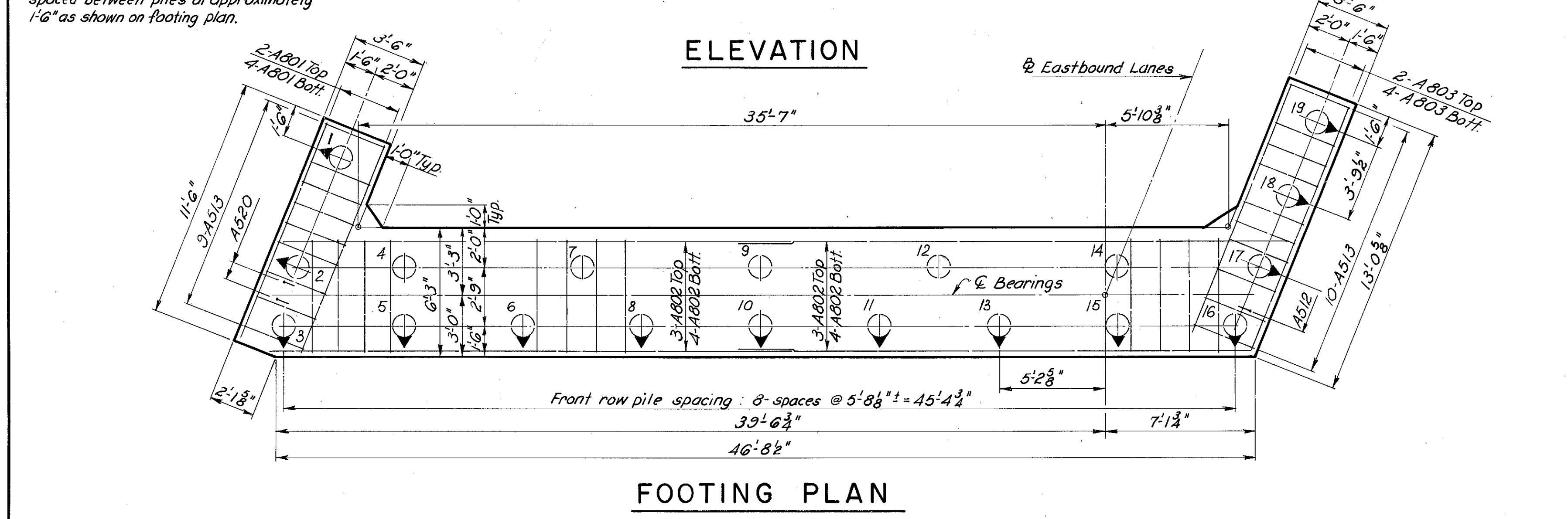
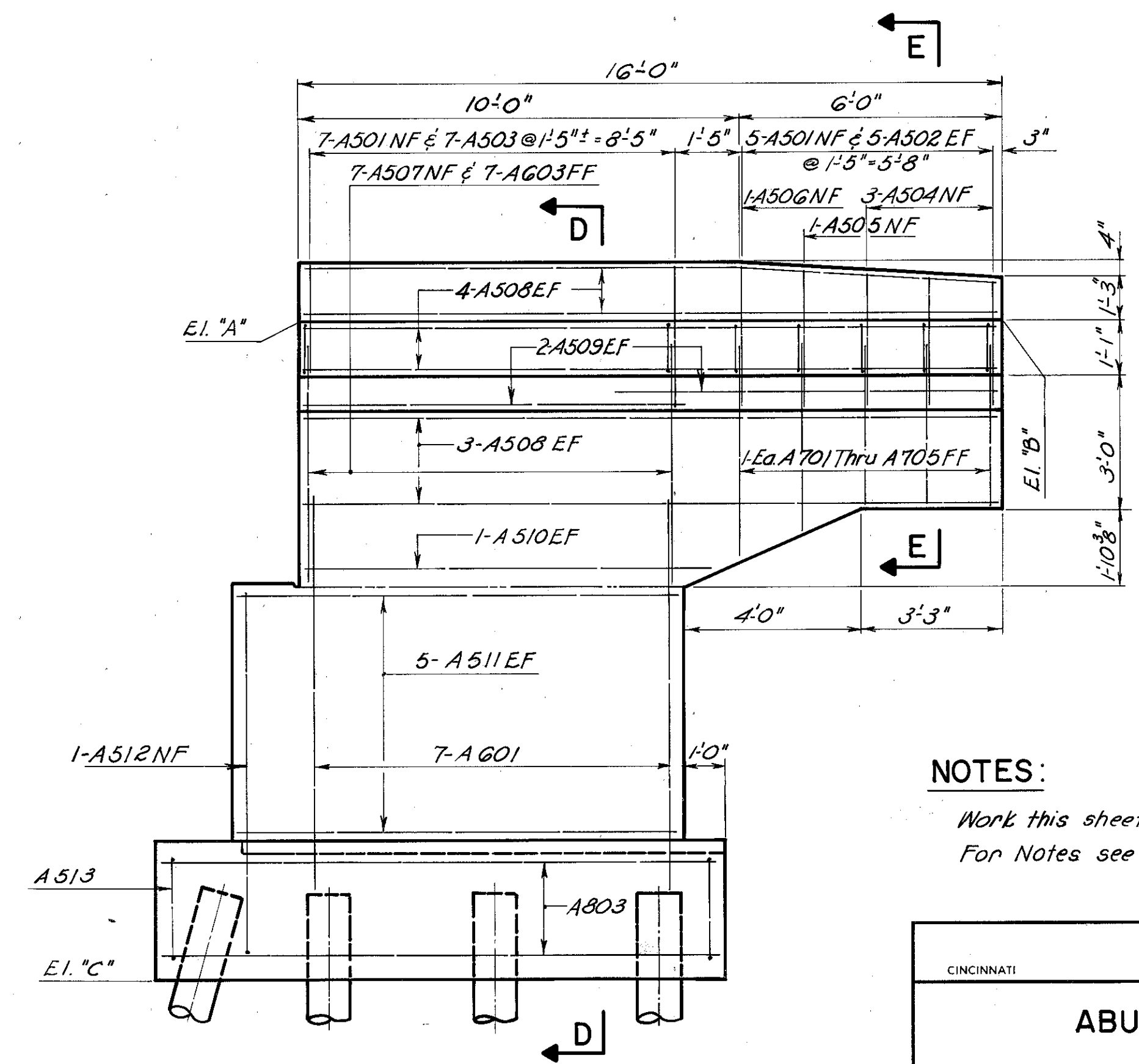
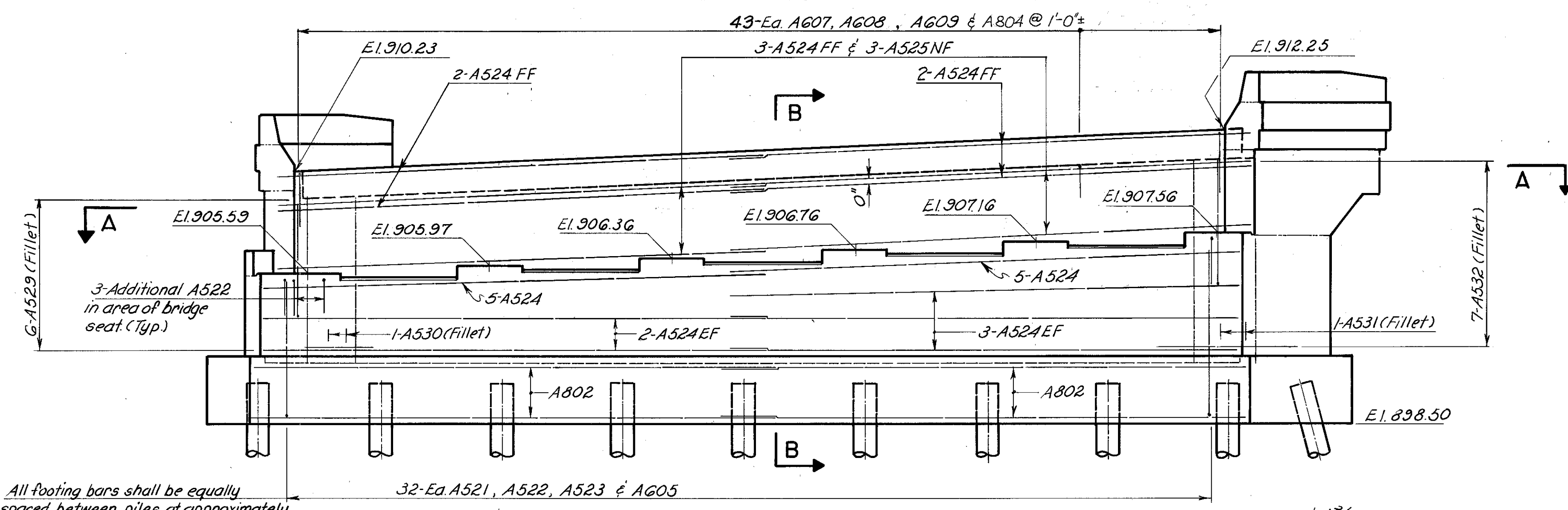
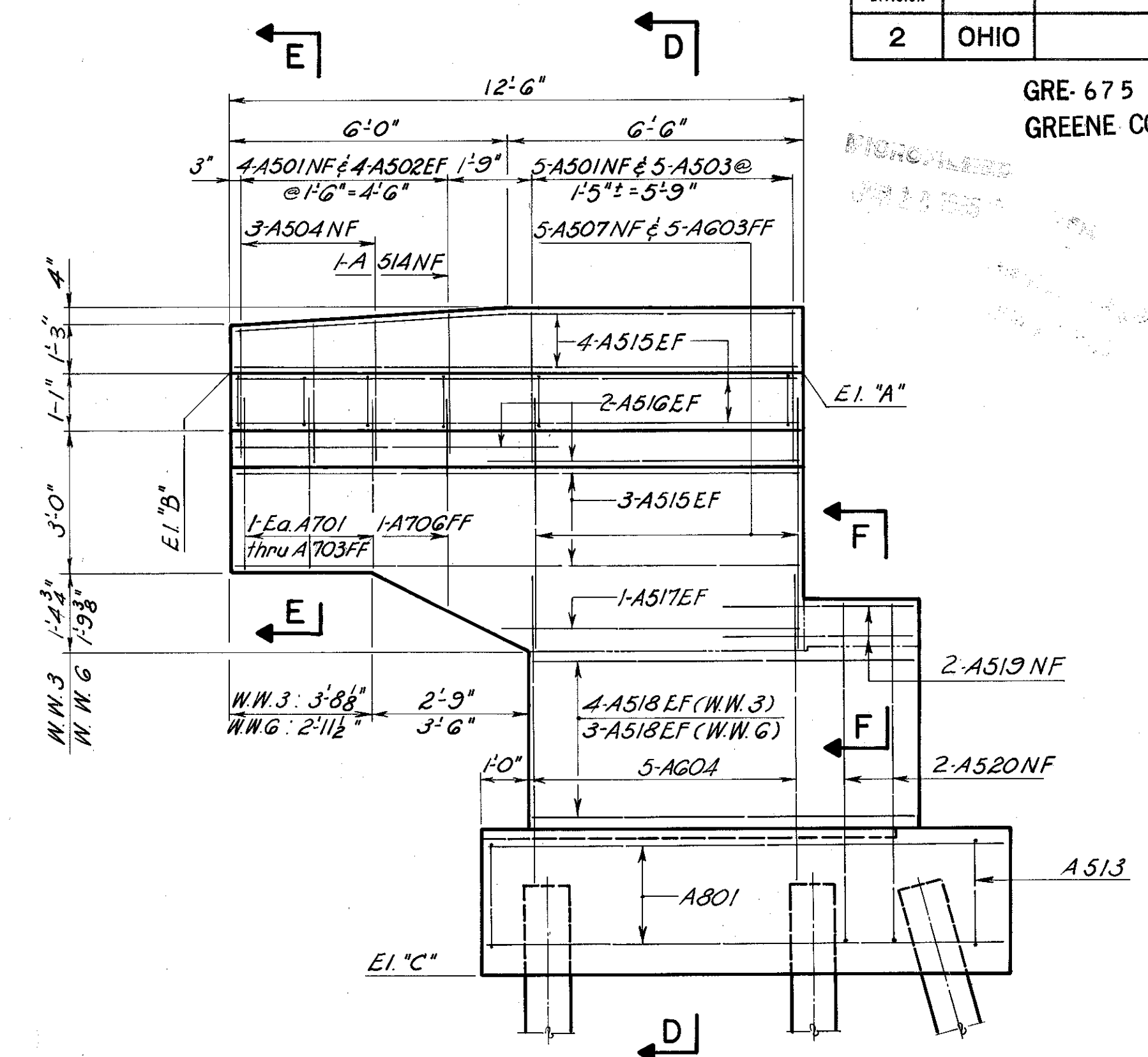
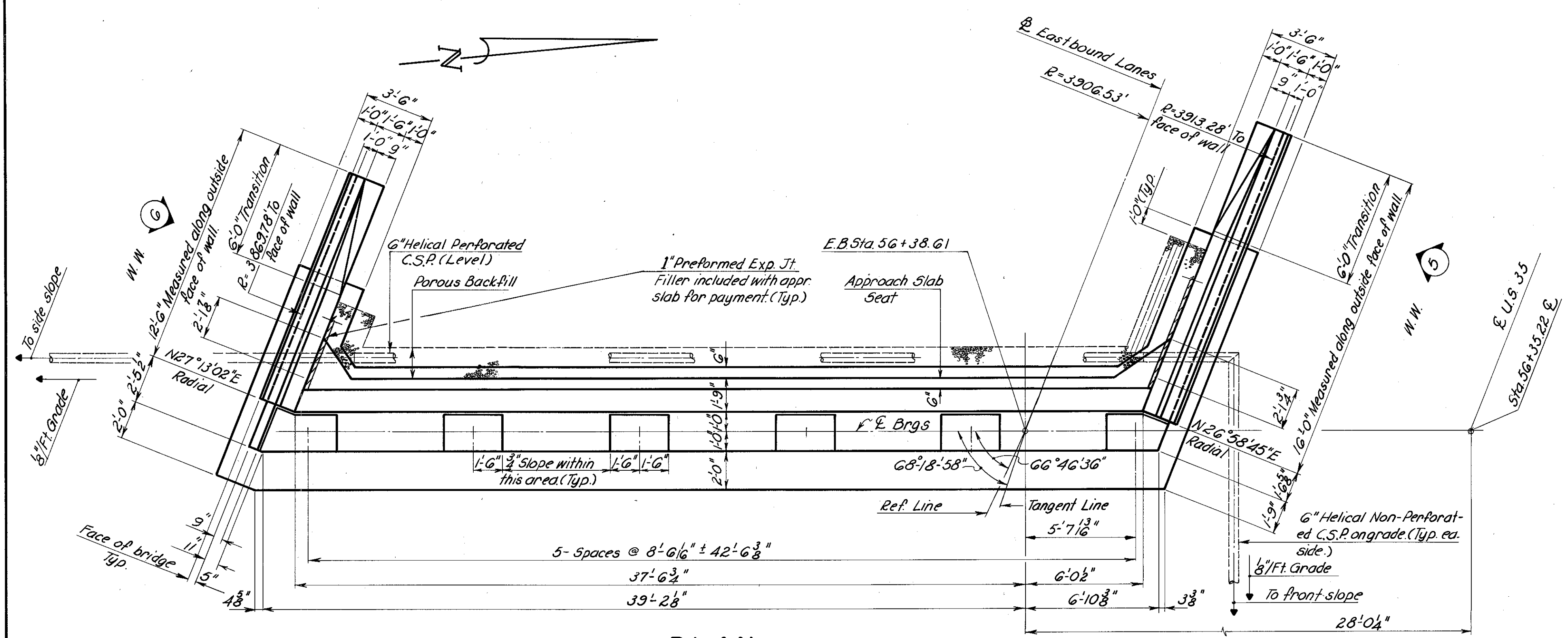
NOTES:

For Standard Scuppers see Std Dwg. 5D-1-63
Scuppers to be lengthened as required.
For General Notes & Estimated Quantities see Sh. 2/17
Scupper spacing measured along face of parapet
All Abutment & Pier centerlines are parallel



ELEVATION

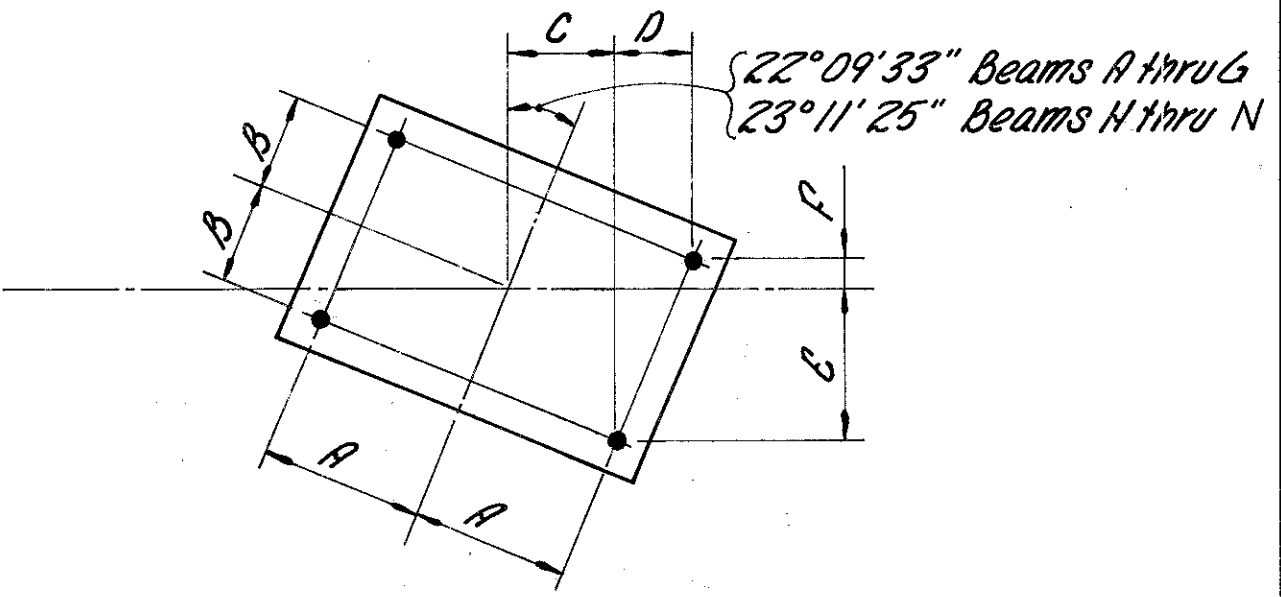
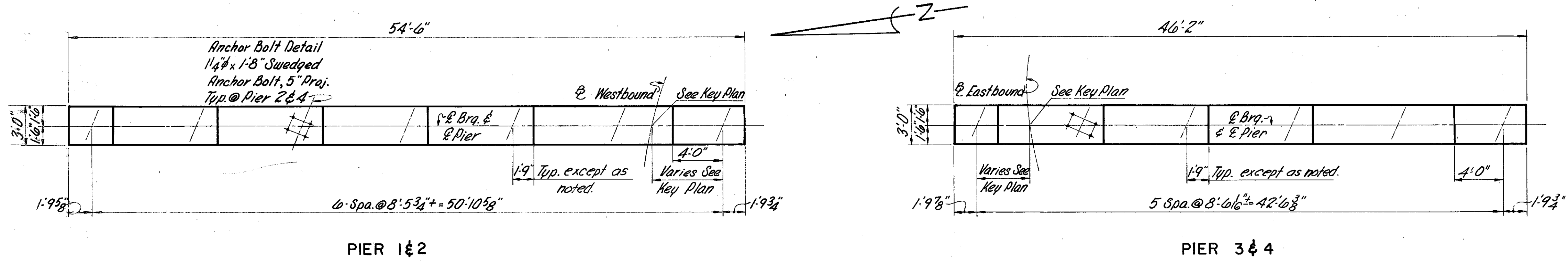
KING & GAVARIS CONSULTING ENGINEERS		3/17	
CINCINNATI		OHIO	
GENERAL PLAN-L AND ELEVATION			
BRIDGE NO. GRE-35-0107 R/L			
US 35 OVER GRANGE HALL RD.			
STA. 56+32.80 TO STA. 58+47.01			
GREENE COUNTY			
DESIGNED	DRAWN	TRACED	CHECKED
J.C.L.	D.M.	S.A.	S.A.
			REVIEWED
			DATE
			7/23/12
			REVISED



NOTES:
Work this sheet with sheets 4.5.7/17
For Notes see sheet A/17

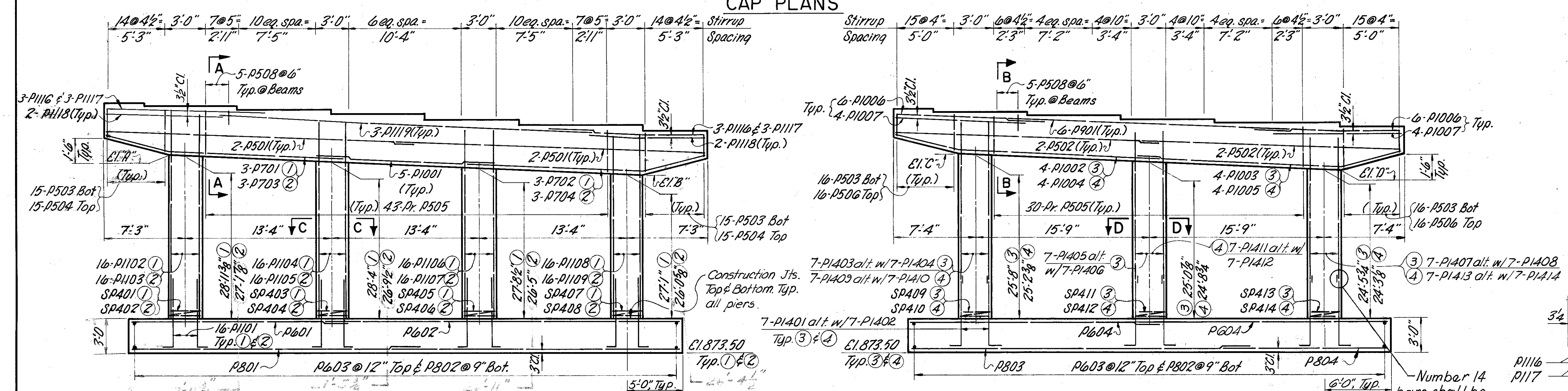
KING & GAVARIS CONSULTING ENGINEERS		6/17
OHIO		
ABUTMENT NO. 3		
BRIDGE NO. GRE-35-0107 R/L		
US 35 OVER GRANGE HALL RD.		
GREENE COUNTY		
STA. 56+32.80 TO		
STA. 58+47.01		
DESIGNED	DRAWN	TRACED
JCL	A.W.	S.A.
CHECKED	REVIEWED	DATE
S.A.	8/25/72	

WINGWALL ELEVATIONS

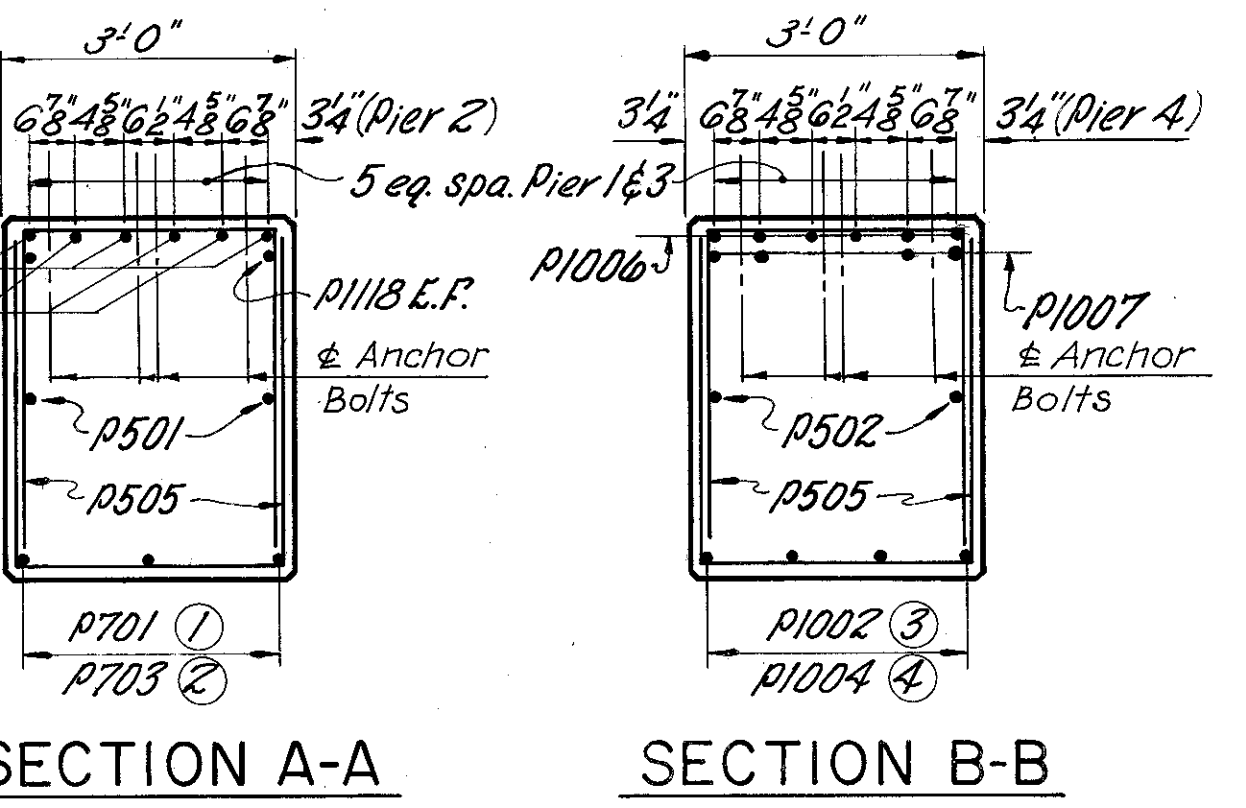


ANCHOR BOLT LAYOUT
FOR PIER 2&4 ONLY

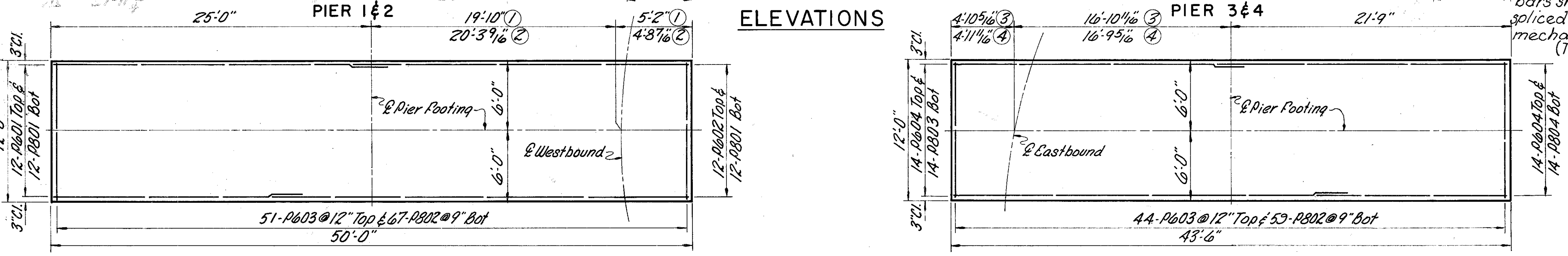
DIMENSIONS						
BEAMS	A	B	C	D	E	F
A Thru G	10"	6"	7"	4 1/2"	9 5/8"	1 3/8"
H Thru N	10"	6"	6 1/2"	4 3/8"	9 7/8"	1 3/8"



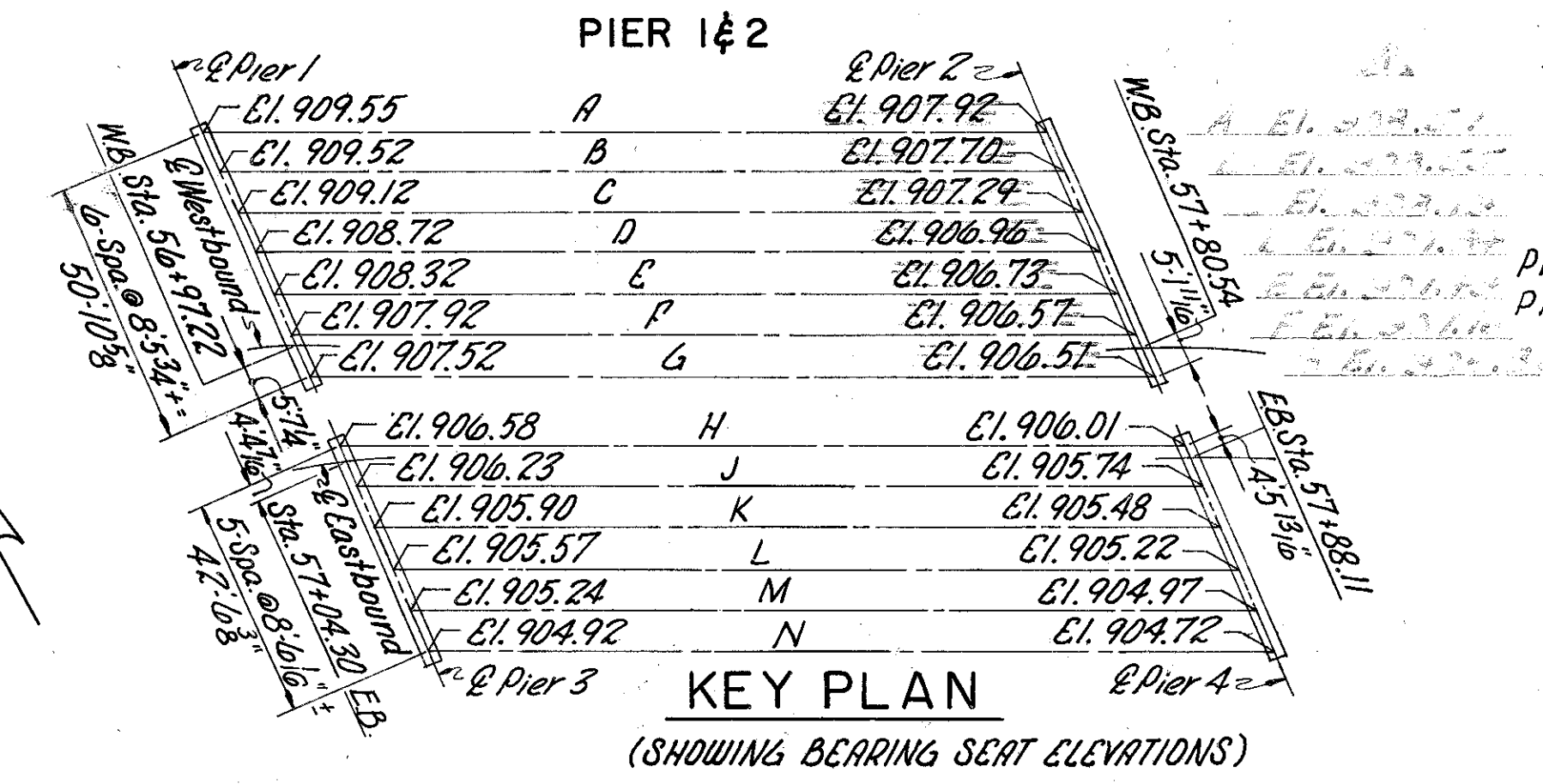
ELEVATIONS



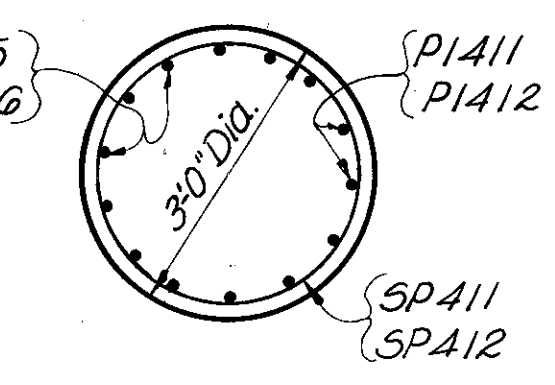
SECTION A-A SECTION B-B



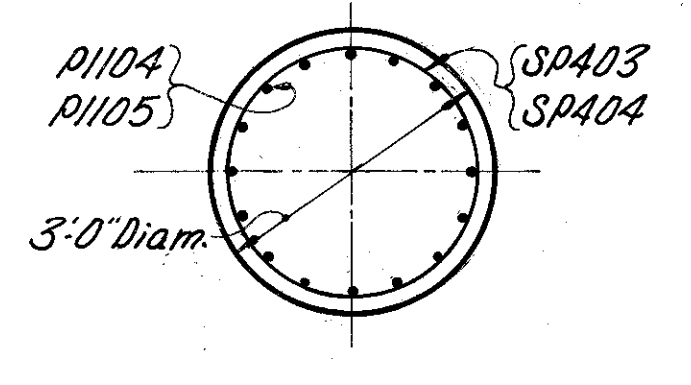
FOOTING PLANS



KEY PLAN
(SHOWING BEARING SEAT ELEVATIONS)



SECTION D-D



SECTION C-C

LEGEND

① = Pier 1	E1.78"	E1.78"	Pier
② = Pier 2	905.52	- 903.52	- ①
③ = Pier 3	903.70	- 902.51	- ②
④ = Pier 4	E1.78"	E1.78"	- ③
	902.23	- 900.92	- ④
	901.74	- 900.72	- ④

NOTES:
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 bar (bolt) holes.
For reinforcing steel list see Shs 15.16/17
For Reference Chord Layout see Shs 2.3/17
Bearing Anchors: At the option of the contractor bearing anchors (or formed holes) located & supported by templates, may be cast in place.
All splices and dowels will be lapped min 30 bar dia unless otherwise shown.

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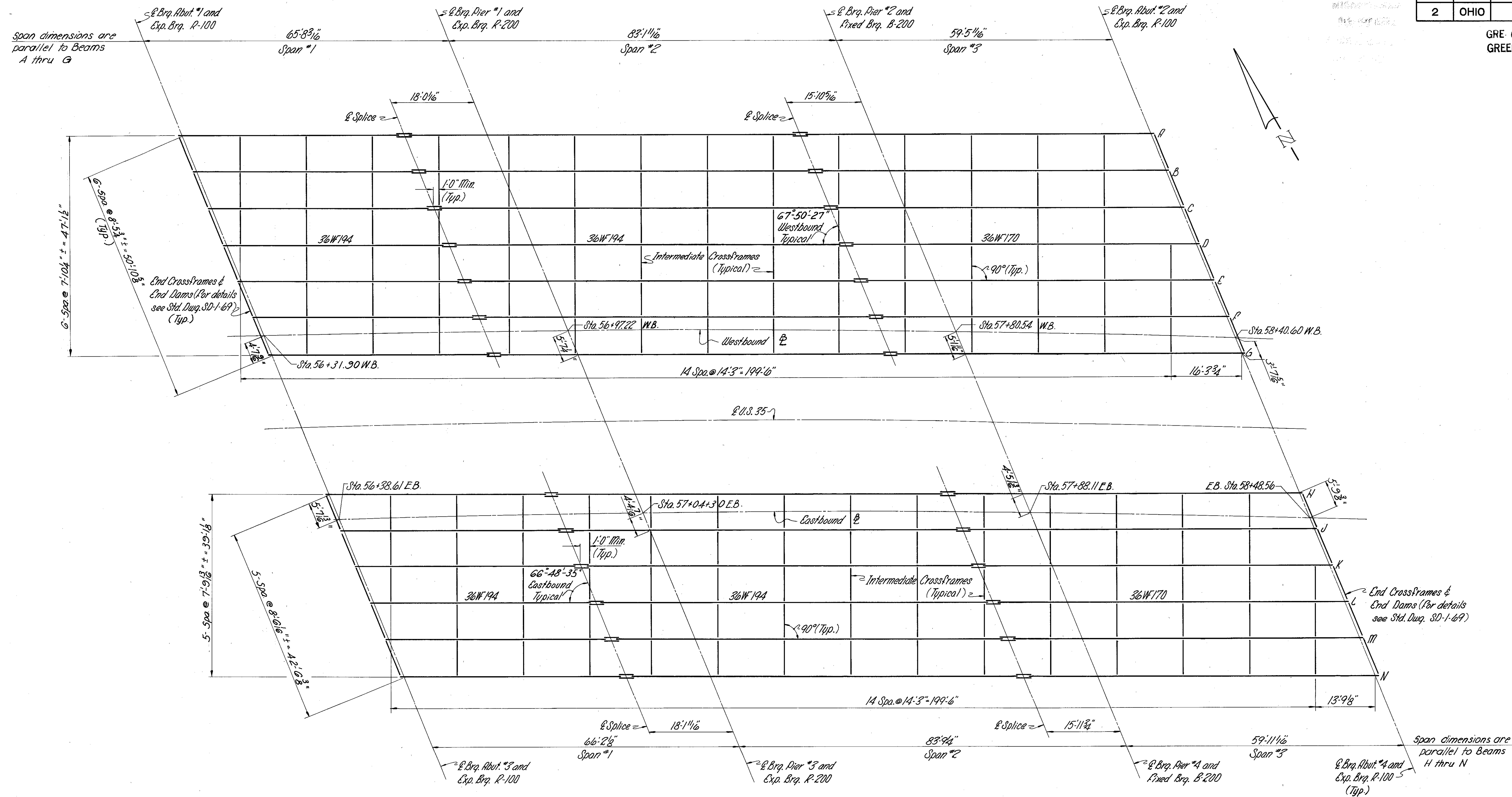
KING & GAVARIS
CONSULTING ENGINEERS
OHIO

PIERS 1,2,3&4

BRIDGE NO GRE -35-0107 R/L
US 35 OVER GRANGE HALL RD.
GREENE COUNTY

STA. 56+32.80 TO
STA. 58+47.01

DESIGNED	DRAWN	TRACKED	CHECKED	REVIEWED	DATE	REVISED
J.C.L.	D.M.		S.A.	J.S.	9/25/72	



FRAMING PLAN

NOTES

For intermediate crossframe details, see common detail sht. C2 | C2

For location of scuppers, see shts. 2, 3 | 17

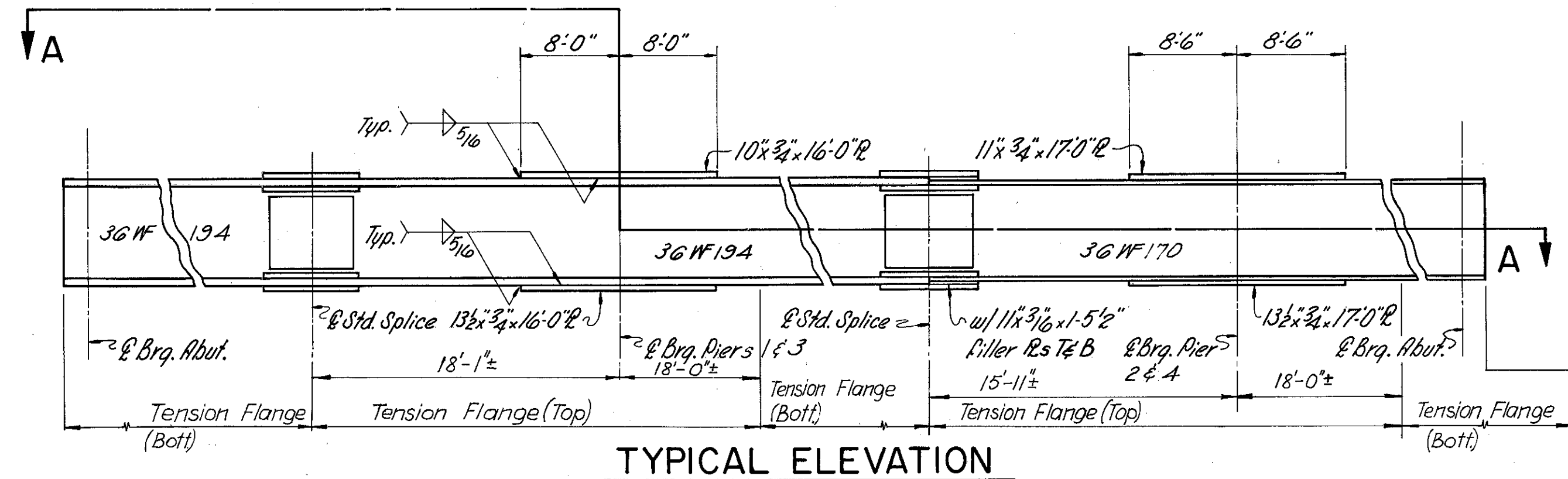
End dams to be included with Item 513, Structural Steel, for payment.

For fixed bearings B-200, and expansion bearings R-100 & R-200 see Std. Dwg. R8-1-55

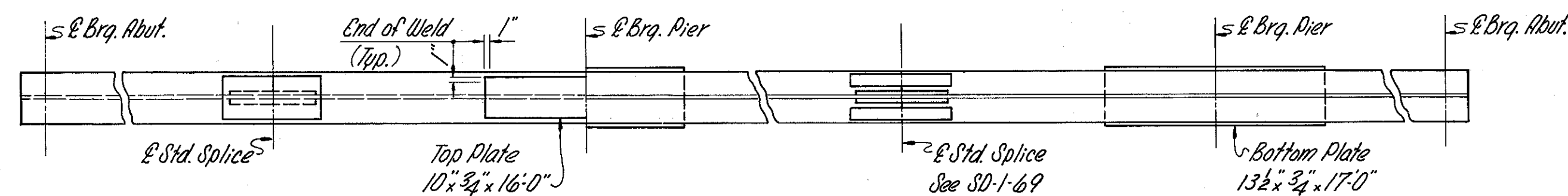
For typical transverse section see sht. 11, 12 | 17

Work with sheet 10 | 17

KING & GAVARIS CONSULTING ENGINEERS		9 / 17
STEEL FRAMING PLAN		
BRIDGE NO. GRE - 35 - 0107 R/L		
US 35 OVER GRANGE HALL RD.		
GREENE COUNTY		STA. 56+32.80 TO STA. 58+47.01
DESIGNED J.C.L.	DRAWN D.M.	TRACED S.A.
CHECKED S.A.	REVIEWED S.A.	DATE 9/25/72
REVISIONS		



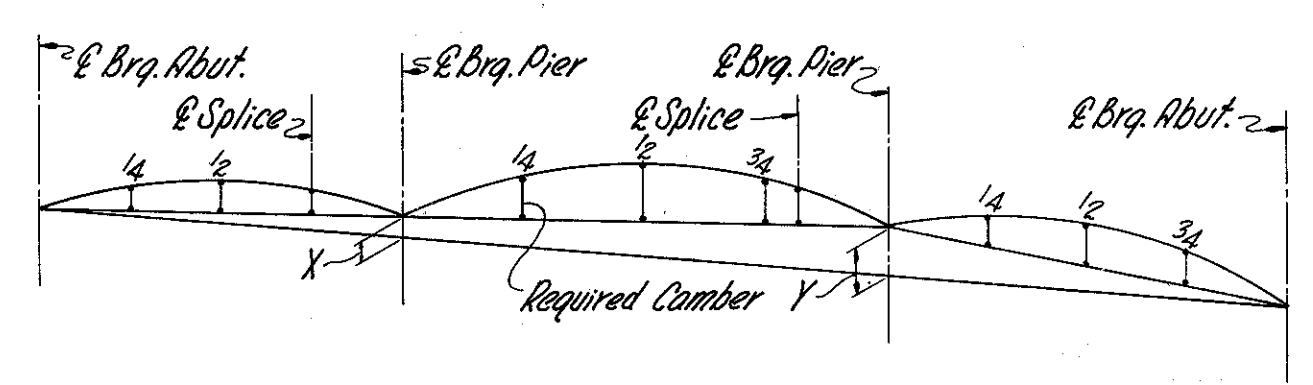
TYPICAL ELEVATION



SECTION A-A

NOTE:
Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements.

Welded forming attachments shall not be used in the tension areas of the top flange.
All beams, top moment plates & splice plates shall be CVN.



CAMBER AND BLOCKING DIAGRAMS

Stringer	X	Y
A	4 9/16"	3 5/16"
B	3 3/16"	2 1/16"
C	2 13/16"	1 3/4"
D	2 7/16"	1 7/16"
E	2"	1 3/16"
F	1 9/16"	1 5/16"
G	1 1/16"	1 1/16"
H	1/2"	5/8"
J	7/16"	5/8"
K	1/2"	1 1/16"
L	9/16"	1 1/16"
M	1 1/16"	3/4"
N	1 1/16"	3/4"

Description	DEFLECTION & CAMBER TABLE A																			
	STRINGERS R, G, H, N									STRINGERS B thru F, J thru M										
	SPAN 1			SPAN 2			SPAN 3			SPAN 1			SPAN 2			SPAN 3				
	1/4 PT.	1/2 PT.	SPL.	1/4 PT.	1/2 PT.	3/4 PT.	SPL.	1/4 PT.	1/2 PT.	3/4 PT.	1/4 PT.	1/2 PT.	SPL.	1/4 PT.	1/2 PT.	3/4 PT.	SPL.	1/4 PT.	1/2 PT.	3/4 PT.
Deflection due to weight of steel	1/16"	1/16"	1/16"	1/16"	1/8"	1/16"	1/16"	0"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/8"	1/16"	1/16"	0"	1/16"	1/16"
Deflection due to remaining dead load	1/4"	5/16"	1/8"	1/4"	1/2"	5/16"	3/16"	1/16"	3/16"	3/16"	3/8"	3/8"	3/16"	3/8"	1/16"	3/8"	1/4"	1/16"	5/16"	1/4"
Adjustment for Vertical Curve Beams H thru N only	0"	0"	0"	1/8"	1/8"	1/8"	1/16"	1/16"	1/8"	1/8"	0"	0"	0"	1/8"	1/8"	1/8"	1/16"	1/16"	1/8"	1/8"
Required Shop Camber Beams H thru N only	5/16"	3/8"	3/16"	7/16"	3/4"	1/2"	5/16"	1/8"	3/8"	3/8"	7/16"	7/16"	1/4"	9/16"	15/16"	9/16"	3/8"	1/8"	1/2"	7/16"
Adjustment for Vertical Curve Beams A and B thru F only	1/8"	3/16"	1/8"	1/16"	7/8"	1/2"	7/16"	1/8"	3/16"	1/8"	1/16"	1/16"	1/16"	See Table B				1/16"	1/16"	1/16"
Required Shop Camber Beams A and B thru F only	7/16"	9/16"	5/16"	1 3/8"	1 1/2"	7/8"	1 1/16"	3/16"	7/16"	3/8"	1 1/2"	1 1/2"	5/16"	See Table B				1/8"	7/16"	3/8"
Adjustment for Vertical Curve Beam G only	1/16"	1/16"	1/16"	1/16"	1/16"	0"	0"	1/16"	1/16"	1/16"										
Required Shop Camber Beam G only	3/8"	7/16"	1/4"	3/8"	1 1/16"	3/8"	1/4"	1/8"	5/16"	5/16"										

W. BD. STATION	TRANSITION ELEVATIONS					
	ELEV. A	ELEV. B	ELEV. C	E. BD. STATION	ELEV. D	ELEV. E
56+00	915.17	915.38	913.31	56+25	912.31	910.36
56+25	915.05	915.26	913.19	56+50	912.16	910.22
56+50	914.91	915.12	913.05	56+75	912.02	910.20
56+75	914.76	914.97	912.90	57+00	911.87	910.17
57+00	914.57	914.79	912.73	57+25	911.71	910.14
57+25	914.25	914.47	912.53	57+50	911.53	910.07
57+50	913.91	914.13	912.31	57+75	911.34	910.01
57+75	913.56	913.78	912.08	58+00	911.13	909.92
58+00	913.18	913.40	911.84	58+25	910.91	909.82
58+25	912.81	913.03	911.60	58+50	910.68	909.71
58+50	912.41	912.63	911.34	58+75	910.44	909.59

Description	Stringer	SPAN #2			
		1/4 PT.	1/2 PT.	3/4 PT.	SPL.
Deflection due to total dead load from table A	B thru F	7/16"	13/16"	7/16"	5/16"
Adjustments for Vertical Curve	B	1 1/16"	1/2"	5/16"	3/16"
	C	7/16"	3/8"	3/16"	1/8"
	D	1/4"	1/4"	1/8"	1/8"
	E	1/8"	1/8"	1/16"	1/16"
	F	1/16"	1/16"	0"	0"
	Total Shop Camber	B	1 1/8"	1 5/16"	3/4"
	C	7/8"	1 3/16"	5/8"	7/16"
	D	1 1/16"	1 1/16"	9/16"	7/16"
	E	9/16"	15/16"	1/2"	3/8"
	F	1/2"	1/8"	7/16"	5/16"

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KING & GAVARIS
CONSULTING ENGINEERS
CINCINNATI OHIO

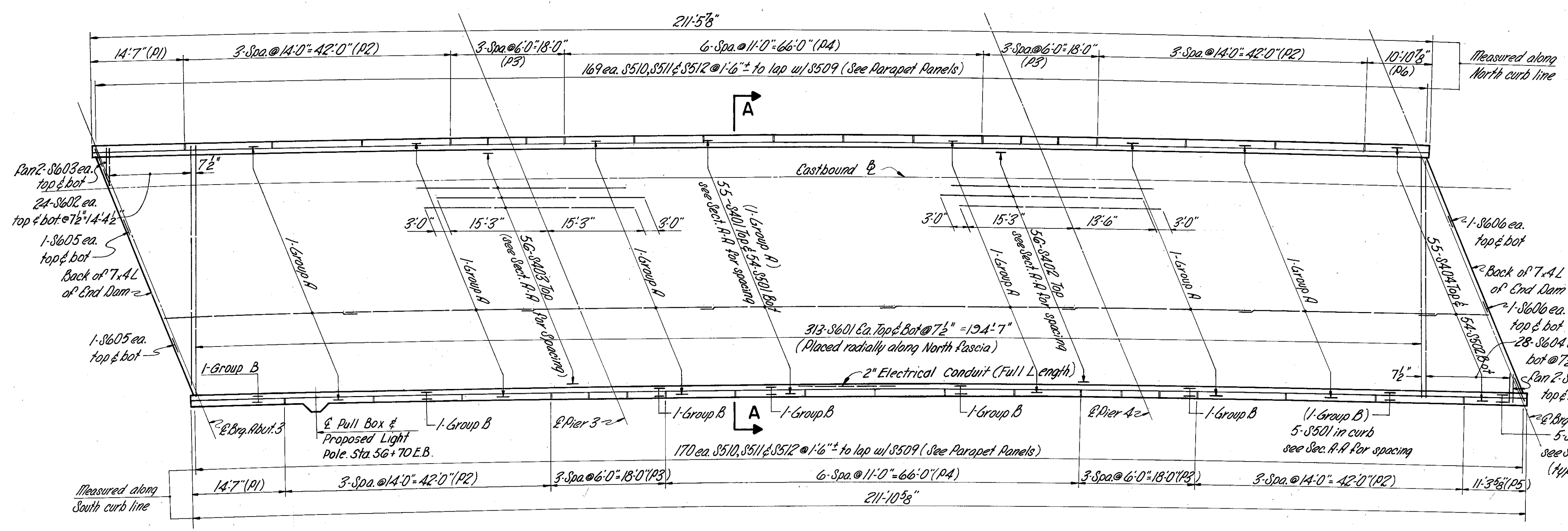
STEEL FRAMING DETAILS

BRIDGE NO. GRE-35-0107 R/L
US 35 OVER GRANGE HALL RD.
GREENE COUNTY

STA. 56+32.80 TO
STA. 58+47.01

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.C.L.	D.M.		S.A.	SA	9/25/72	4-27-82

GRE 675 - 5-37
GREENE COUNTY



PLAN - RIGHT BRIDGE
EASTBOUND

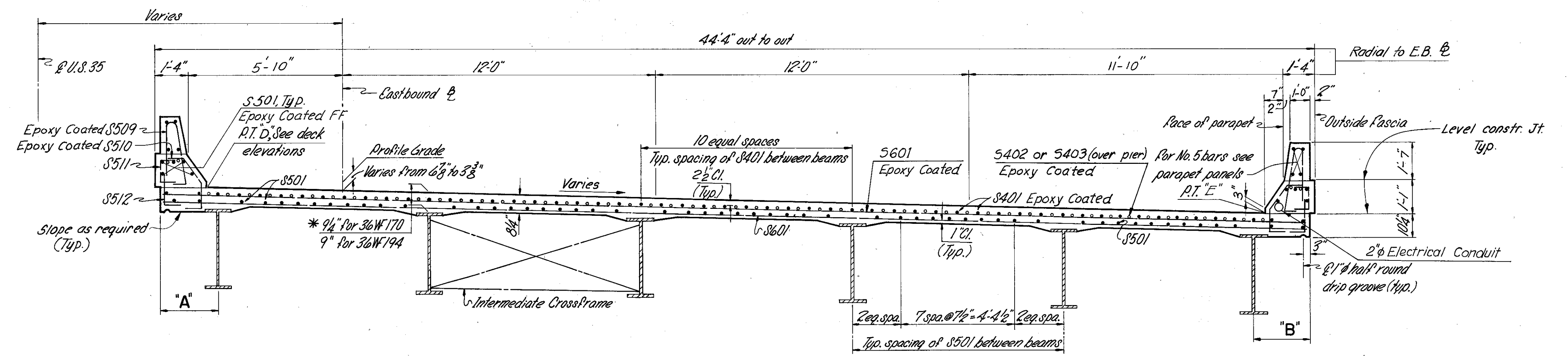
* Deck Slab Depth: The distance shown from top of deck slab to top of steel beam is the design dimension. The quantity of deck concrete to be paid for shall be based on this dimension, even though deviation from it may be necessary because the top flange of the beam may not have the exact camber or conformation required to place it parallel to the finished grade. This dimension will vary to accommodate horizontal and vertical curve requirements and transitions. The dimensions shown apply at the center line of bearings only.

PANELS		
Mark	No Req'd	L
P1	2	14'-7"
P2	12	14'-0"
P3	12	6'-0"
P4	12	11'-0"
P5	1	11'-3 3/8"
P6	1	10'-10 3/8"

Epoxy Coated FF P1 2-S503 P4 2-S506
P2 2-S504 P5 2-S507
P3 2-S505 P6 2-S508

11-S509 @ 1.5'± = 14.3'(P1)
11-S509 @ 1.4'± = 13.8'(P2)
5-S509 @ 1.5'± = 5.3'(P3)
9-S509 @ 1.4'± = 10.8'(P4)
9-S509 @ 1.4'± = 10.1'(P5)
8-S509 @ 1.6'± = 10.6'(P6)

PARAPET PANELS

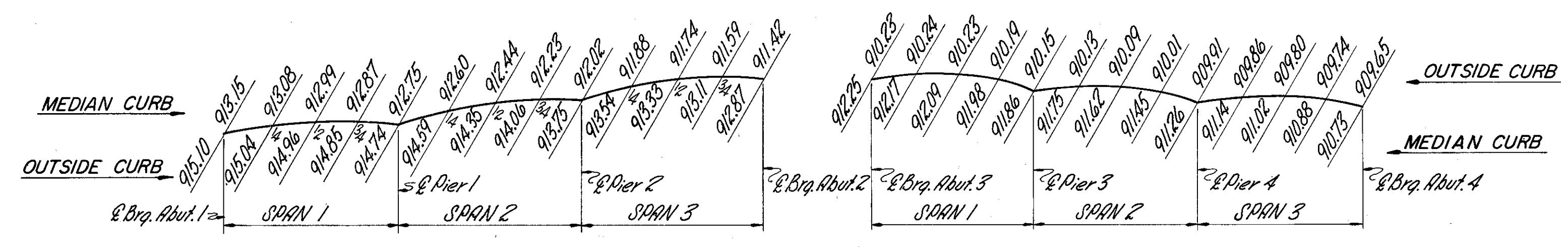


SECTION A-A

LOCATION	SPAN 1		SPAN 2		SPAN 3		
	Abut. 3	1/2 P1	1/2 P1	1/2 P1	1/2 P1	Abut. 4	
DIM "A"	1'-9"	2'-6"	2'-11 3/8"	3'-1 3/8"	2'-10 3/8"	2'-5 3/8"	1'-9"
DIM "B"	2'-9"	2'-1 3/8"	1'-9 3/8"	1'-9 3/8"	2'-3"	2'-10"	2'-7 3/8"

Dimensions radial to @ Web

NOTES:
For reinforcing steel list see Sht. 16, 17, 17
For details of end dams, included with Item 513 Structural Steel for payment, see Std. Dwg. SD-1-69 & Sheet 4-13.
Slab thickness shown includes 1" for monolithic wearing surface.
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 not be more than 1:4 for a haunch less than 9" in width.
For transition elevations see sh. 10, 17
All reinforcing bars in Right and Left Slabs to have the suffix 'A' & 'B' respectively.
All splices and dowels will be lapped min. 30 bar dia. unless otherwise shown.

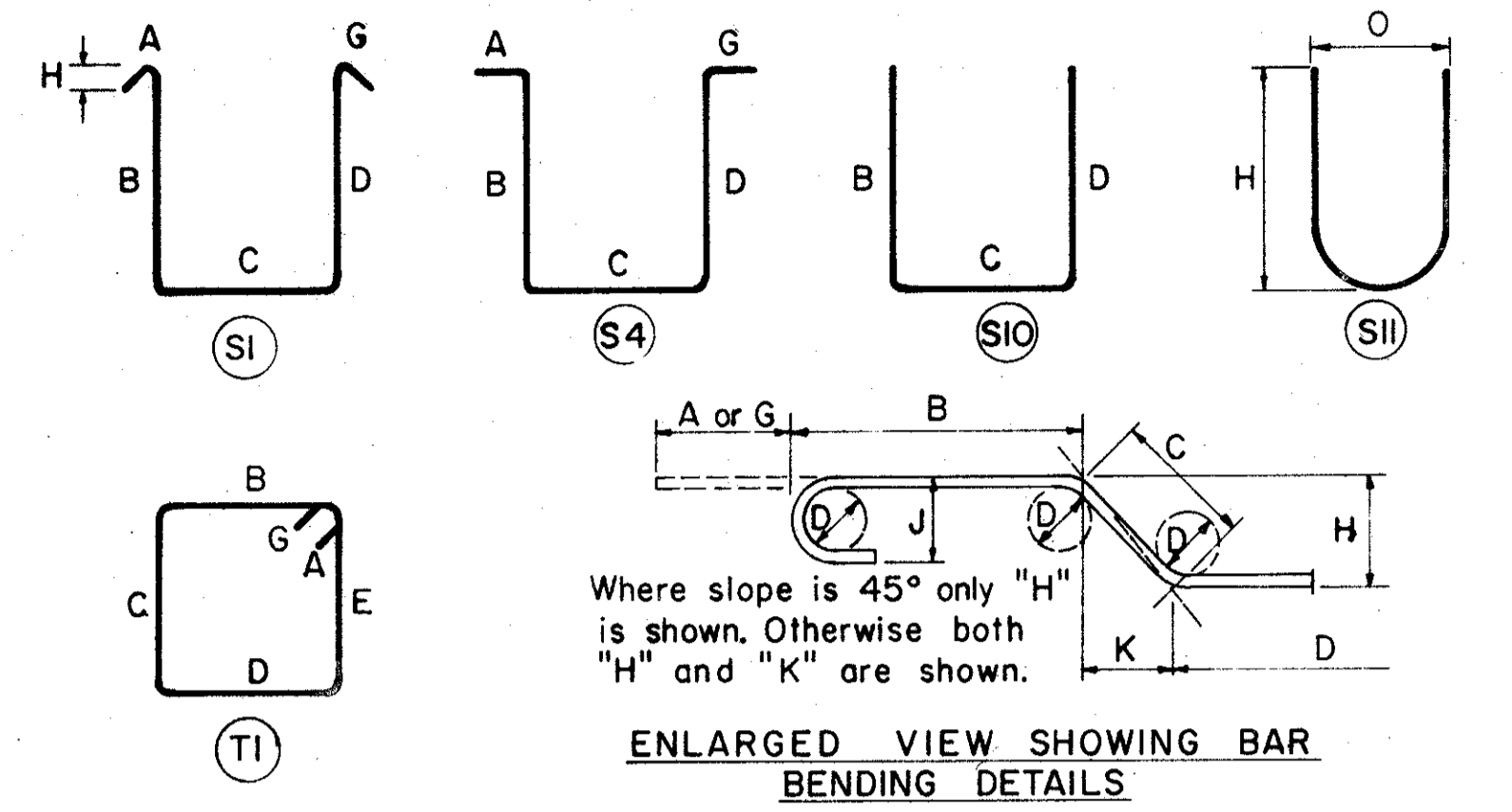
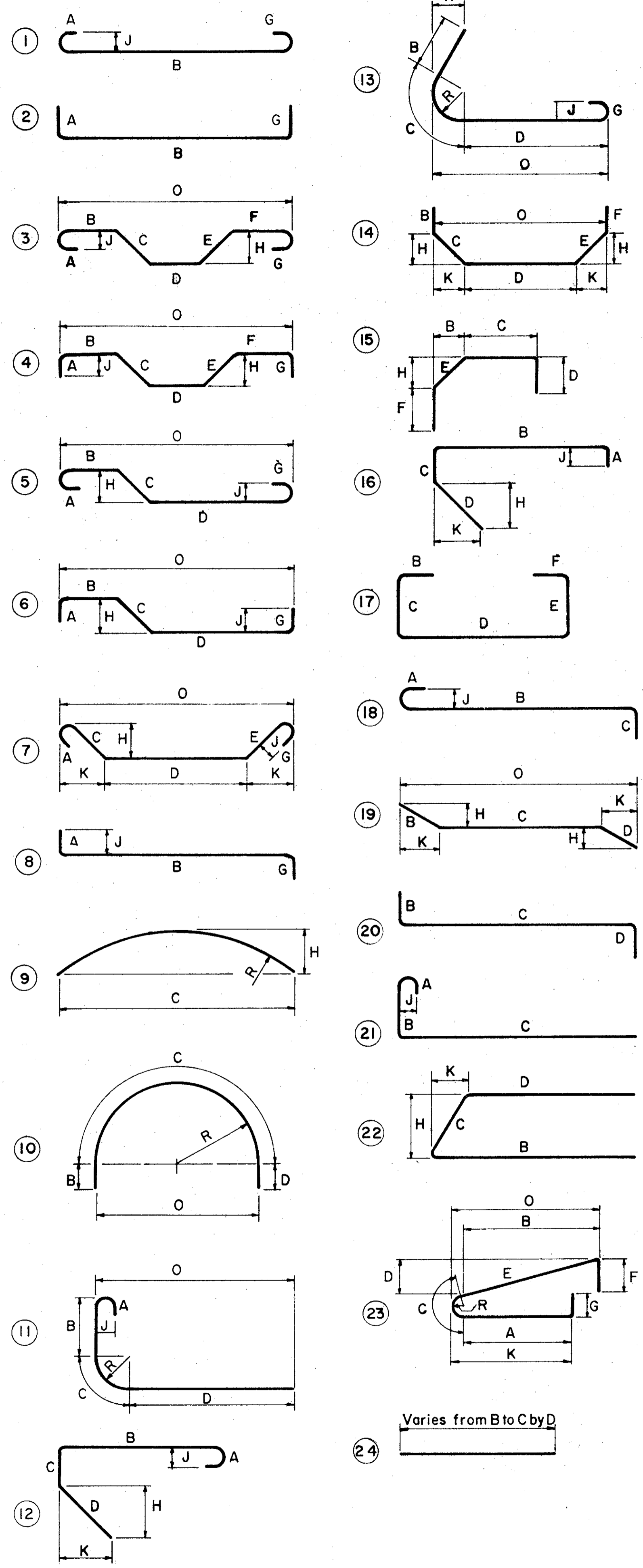


DECK ELEVATION DIAGRAM
AT CURB/PTS BEFORE CONCRETE IS PLACED

For details of deflection joints, see Std. Dwg. BR-1-67
For details of light pole pedestal see Common Details Sht. C1/C2

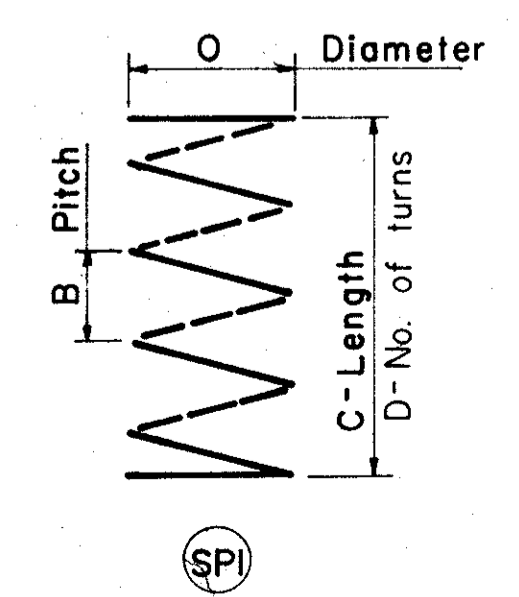
KING & GAVARIS CONSULTING ENGINEERS		11/17
SUPERSTRUCTURE ROADWAY SLAB-R		
BRIDGE NO. GRE-35-0107 R/L US 35 OVER GRANGE HALL RD.		
GREENE COUNTY		STA 56+32.80 TO STA 58+47.01
DESIGNED	DRAWN	TRACED
J.C.L.	DM.	S.A.
CHECKED	REVIEWED	DATE
S.A.	S.S.	9/25/17
REVISIONS	DATE	REVISIONS

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
ABUTMENT NO. 1					Reinforcing steel in Abutment No.1 shall have the suffix "A"												
A501	21	2'-4"	51	2	9"	10"											
A502	20	2'-10"	59	Str													10 Epoxy Coated
A503	11	6'-7"	76	23	2'-10 1/2"	2'-1 1/2"	1'-0"	3'-2"	2'-1 3/8"					3'-2"	2'-5"	3'-3"	11 Epoxy Coated
A504	6	3'-8"	23	Str													
A505	1	4'-4"	5	Str													
A506	1	5'-0"	5	Str													
A507	11	5'-8"	65	Str													
A508	14	14'-2"	207	Str													4 Epoxy Coated
A509	4	7'-11"	33	Str													
A510	2	8'-3"	17	Str													
A511	18	8'-9"	164	Str													
A512	1	9'-2"	10	2	9"	8'-5"											
A513	20	10'-9"	224	TI	5"	3'-10"	2'-2"	3'-0"	2'-2"							5"	
A514	1	4'-3"	4	Str													
A515	1	4'-11"	5	Str													
A516	14	13'-5"	196	Str													4 Epoxy Coated
A517	4	7'-6"	31	Str													
A518	2	7'-4"	15	Str													
A520	2	3'-10"	8	Str													
A521	40	8'-3"	344	S10		1'-7"	5'-4"	1'-7"									
A522	61	7'-8"	488	S10		2'-3"	3'-5"	2'-3"									
A523	40	Varies 6'-10" to 9'-5" by 3/4" L-20	339	2	9"	Varies 6'-4" to 8'-8" by 3/4"											
A524	30	28'-4"	887	Str													
A525	6	28'-4"	177	19			27'-0"	1'-4"				5'-8"	1'-3"	28'-3"			
A529	6	5'-0"	31	Str													
A530	2	7'-10"	16	Str													
A531	2	9'-10"	21	Str													
A532	8	7'-9"	65	Str													
A533	2	8'-3"	17	2	9"	7'-6"											
A601	11	6'-5"	107	15		9"	4'-10"		11'-2"	9"		7"					11 Epoxy Coated
A602	6	21'-6"	194	S10		10'-4"	1'-2"	10'-4"									
A603	5	17'-8"	133	S10		8'-5"	1'-2"	8'-5"									
A605	40	Varies 13'-11" to 16'-6" by 3/4" L-20	914	S10		Varies 6'-2" to 8'-9" by 3/4"	5'-4"	2'-9"									
A607	51	10'-11"	836	S10		4'-11"	1'-5"	4'-11"									
A608	51	4'-11"	377	S10		1'-11"	1'-5"	1'-11"									
A609	51	6'-11"	530	S10		3'-2"	11"	3'-2"									
A701	2	4'-8"	19	1	10"	3'-10"			9'-6"	9"			3"	7"			2 Epoxy Coated
A702	2	4'-5"	18	15		9"	3'-0"		10'-2"	9"			5"				2 Epoxy Coated
A703	2	4'-6"	18	15		9"	3'-0"		11'-2"	9"			7"				2 Epoxy Coated
A704	2	5'-3"	22	15		9"	3'-7 1/2"		11'-2"	9"			7"				2 Epoxy Coated
A705	2	5'-11"	25	15		9"	4'-3 1/2"		11'-2"	9"			7"				2 Epoxy Coated
A801	6	11'-6"	184	Str													
A802	14	29'-6"	1,103	Str													
A803	6	11'-4"	182	Str													
A804	51	6'-2"	745	14		1'-3"	3'-8"	1'-3"					2'-7"	2'-7"			
Total			8,990														
ABUTMENT NO. 2					Reinforcing steel in Abutment No.2 shall have the suffix "B"												
A501	20	2'-4"	49	2	9"	10"											
A502	18	2'-10"	53	Str													
A503	11	6'-7"	76	23	2'-10 1/2"	2'-1 1/2"	1'-0"	3'-2"	2'-1 3/8"					3'-2"	2'-5"	3'-3"	9 Epoxy Coated
A504	6	3'-8"	23	Str													
A505	1	4'-2"	4	Str													
A506	1	4'-10"	5	Str													
A507	11	5'-4"	61	Str													
A508	14	14'-2"	207	Str													4 Epoxy Coated
A509	4	7'-11"	33	Str													
A510	2	7'-9"	16	Str													
A511	8	8'-11"	74	Str													
A512	1	7'-4"	8	2	9"	6'-7"											
A513	19	10'-9"	213	TI	5"	3'-10"	2'-2"	3'-0"	2'-2"							5"	
A514	1	4'-1"	4	Str													
A515	14	12'-2"	178	Str													4 Epoxy Coated
A516	4	6'-11"	29	Str													
A517	2	6'-3"	13	Str													



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 numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
- All dimensions are out to out of bar.
- Radius dimension "R" is to outside of bar.
- The length of bent bars is measured along the centerline.
- For standard hook dimensions, see Sect. 509.05 of the specifications.
- For bar type SPI, 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. 1/2 Closed coils shall be provided at the ends of each spiral unit.
- Figures in circles show bar types.
- "J" Dimension on hooks is shown only where necessary to restrict hook size. Otherwise standard hooks are to be used.
- Where "J" is not shown, "J" will be kept equal to or less than "H". Where "J" can exceed "H" it will be shown.
- "H" Dimension on stirrups will be shown where necessary to restrict hooks.
- All bends shown are bent around a standard mandrel, except stirrups S11, ties T3, spirals SPI and where radius "R" is indicated.
- Four steel channel, tee or angle spacers, weighing approximately 0.80 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.
- For additional bars see sheet 14, 15, 16, 17, 17.
- REINFORCING STEEL SAMPLES: Refer to C.M.S. 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.



KING & GAVARIS CONSULTING ENGINEERS		13/17
CINCINNATI	OHIO	
REINFORCING STEEL LIST		
BRIDGE NO. GRE-35-0107 R/L		
U.S. 35 OVER GRANGE HALL RD.		
GREENE COUNTY		STA: 56+32.80 TO STA: 58+47.01
DESIGNED	DRAWN	TRACED
A.W.	S.A.	S.A.
CHECKED	REVIEWED	DATE
S.A.	5/25/72	

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
ABUTMENT NO. 2 CONTINUED																	
A518	8	8'-3"	69	Str													
A519	2	2'-11"	6	Str													
A520	2	9'-8"	20	2	9"												
A521	40	8'-3"	344	S10		1'-7"	5'-4"	1'-7"									
A522	61	7'-8"	488	S10		2'-3"	3'-5"	2'-3"									
A523	40	Varies 7'-0" to 8'-11" by 3/4" L-60	332	2	9"	Varies 6'-3" to 8'-2" by 3/4"											
A524	30	28'-11"	905	Str													
A525	6	28'-10"	180	19			27'-6"	1'-4"				6'-2"		1'-2"	28'-8"		
A529	7	5'-0"	37	Str													
A530	2	9'-4"	19	Str													
A531	2	7'-10"	16	Str													
A532	6	7'-0"	44	Str													
A601	6	6'-3"	56	15		9"	4'-8"		11 1/2"	9"		7"					6 Epoxy Coated
A602	6	18'-0"	162	S10		8'-7"	1'-2"	8'-7"									
A603	5	6'-3"	47	15		9"	4'-5"		11 1/2"	9"		7"					6 Epoxy Coated
A604	5	20'-10"	156	S10		10'-0"	1'-2"	10'-0"									
A605	40	Varies 14'-1" to 16'-0" by 3/4" L-60	304	S10		Varies 6'-4" to 8'-3" by 3/4"	5'-4"	2'-9"									
A607	53	10'-11"	869	S10		4'-11"	1'-5"	4'-11"									
A608	53	4'-11"	391	S10		1'-11"	1'-5"	1'-11"									
A609	53	7'-1"	564	S10		3'-3"	11"	3'-3"									
A701	2	4'-8"	19	1	10"	3'-10"								7"			2 Epoxy Coated
A702	2	4'-5"	18	15		9"	3'-0"		9 1/2"	9"		3"					2 Epoxy Coated
A703	2	4'-6"	18	15		9"	3'-0"		10 1/2"	9"		5"					2 Epoxy Coated
A704	1	5'-1"	10	15		9"	3'-6"		11 1/2"	9"		7"					1 Epoxy Coated
A705	1	5'-9"	12	15		9"	4'-2"		11 1/2"	9"		7"					1 Epoxy Coated
A706	1	6'-0"	10	15		9"	3'-5"		11 1/2"	9"		7"					1 Epoxy Coated
A801	6	11'-0"	176	Str													
A802	14	30'-5"	1,131	Str													
A803	6	11'-6"	184	Str													
A804	53	6'-2"	775	14		1'-3"	3'-8"	1'-3"				2'-7"		2'-7"			
Total			8,998														
ABUTMENT NO. 3 Reinforcing steel in Abutment No. 3 shall have the suffix "C"																	
A501	21	2'-4"	51	2	9"	10"						9"					
A502	18	2'-10"	53	Str													9 Epoxy Coated
A503	12	6'-7"	82	23	2'-10 1/8"	2'-1 1/8"	1'-0"	3 1/2"	2'-1 3/8"		9"		3'-2"	2'-5"	3 1/8"		10 Epoxy Coated
A504	6	3'-8"	23	Str													11 Epoxy Coated
A505	1	4'-3"	4	Str													
A506	1	4'-11"	5	Str													
A507	12	5'-8"	71	Str													
A508	14	15'-8"	229	Str													4 Epoxy Coated
A509	4	8'-8"	36	Str													
A510	2	9'-7"	20	Str													
A511	10	10'-0"	104	Str													
A512	1	9'-1"	10	2	9"	8'-4"											
A513	19	10'-9"	213	71	5"	3'-0"	2'-2"	3'-0"	2'-2"			5"					
A514	1	4'-4"	5	Str													
A515	14	12'-2"	178	Str													4 Epoxy Coated
A516	4	7'-0"	29	Str													
A517	2	6'-5"	13	Str													
A518	6	8'-2"	51	Str													
A519	2	3'-11"	8	Str													
A520	2	8'-1"	17	2	9"	7'-4"											
A521	32	8'-3"	275	S10		1'-7"	5'-4"	1'-7"									
A522	50	7'-2"	374	S10		2'-0"	3'-5"	2'-0"									
A523	32	Varies 7'-0" to 8'-9" by 3/4" L-60	263	2	9"	Varies 6'-3" to 8'-2" by 3/4"											
A524	30	24'-1"	754	Str													
A525	6	23'-11"	150	19			22'-7"	1'-4"				5 1/2"		1'-2 1/2"	23'-10"		

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
ABUTMENT NO. 3 CONTINUED																	
A529	6	5'-3"	33	Str													
A530	2	7'-8"	16	Str													
A531	2	9'-9"	20	Str													
A532	7	7'-0"	51	Str													
A601	7	21'-6"	226	S10		10'-4"	1'-2"	10'-4"									
A603	12	6'-6"	117	15		9"	4'-11"		11 1/2"	9"		7"					12 Epoxy Coated
A604	5	17'-8"	133	S10		8'-5"	1'-2"	8'-5"									
A605	32	Varies 14'-1" to 15'-0" by 3/4" L-60	719	S10		Varies 6'-4" to 8'-1" by 3/4"	5'-4"	2'-9"									
A607	43	12'-1"	780	S10		5'-6"	1'-5"	5'-6"									
A608	43	4'-11"	318	S10		1'-11"	1'-5"	1'-11"									
A609	43	7'-1"	458	S10		3'-3"	11"	3'-3"									
A701	2	4'-8"	19	1	10"	3'-10"								7"			2 Epoxy Coated
A702	2	4'-5"	18	15		9"	3'-0"		9 1/2"	9"		3"					2 Epoxy Coated
A703	2	4'-6"	18	15		9"	3'-0"		10 1/2"	9"		5"					2 Epoxy Coated
A704	1	5'-2"	11	15		9"	3'-7"		11 1/2"	9"		7"					1 Epoxy Coated
A705	1	5'-10"	12	15		9"	4'-3"		11 1/2"	9"		7"					1 Epoxy Coated
A706	1	5'-3"	11	15		9"	3'-8"		11 1/2"	9"		7"					1 Epoxy Coated
A801	6	11'-1"	178	Str													
A802	14	25'-9"	963	Str													
A803	6	12'-7"	202	Str													
A804	43	6'-2"	629	14		1'-3"	3'-8"	1'-3"				2'-7"		2'-7"			
Total			7,950														
ABUTMENT NO. 4 Reinforcing steel in Abutment No. 4 shall have the suffix "D"																	
A501	21	2'-4"	51	2	9"	10"						9"					
A502	18	2'-10"	53	Str													
A503	11	6'-7"	76	23	2'-10 1/8"	2'-1 1/8"	1'-0"	3 1/2"	2'-1 3/8"		9"		3'-2"	2'-5"	3 1/8"		10 Epoxy Coated
A504	6	3'-8"	23	Str													11 Epoxy Coated
A505	1	4'-3"	4	Str													
A506	1	4'-11"	5	Str													
A507	11	5'-0"	63	Str													
A508	14	14'-2"	207	Str													4 Epoxy Coated
A509	4	7'-11"	33	Str													
A510	2	8'-2"	17	Str													
A511	8	8'-11"	74	Str													
A512	1	7'-4"	8	2	9"	6'-7"											
A513	20	10'-9"	224	71	5"	3'-0"	2'-2"	3'-0"	2'-2"			5"					
A514	1	4'-4"	5	Str													
A515	1	5'-0"	5	Str													
A516	14	13'-5"	196	Str													4 Epoxy Coated
A517	4	7'-6															

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
ABUTMENT NO. 4 CONTINUED																	
A524	30	24'-10"	777	Str													
A525	6	24'-6"	153	19			23'-2"	1'-4"				6 3/4"		1'-2 1/2"	24'-5"		
A529	7	5'-0"	37	Str													
A530	2	8'-11"	19	Str													
A531	2	7'-10"	16	Str													
A532	6	7'-6"	47	Str													
A533	2	9'-4"	19	2	9"	8'-7"											
A601	11	6'-4"	105	15		9"	4'-9"		11 1/2"	9"		7"					11 Epoxy Coated
A602	6	17'-10"	161	S10		8'-6"	1'-2"	8'-6"									
A603	5	19'-10"	149	S10		9'-6"	1'-2"	9'-6"									
A605	31	Varies 14'-4" to 15'-4" by 3/8" 1-20.	691	S10		Varies 6'-7" to 7'-7" by 3/8"	5'-4"	2'-9"									
A607	45	11'-1"	749	S10		5'-0"	1'-5"	5'-0"									
A608	45	4'-11"	332	S10		4'-11"	1'-5"	1'-11"									
A609	45	7'-1"	479	S10		3'-3"	11"	3'-3"									
A701	2	4'-8"	19	1	10"	3'-10"								7"			2 Epoxy Coated
A702	2	4'-5"	18	15		9"	3'-0"		9 1/2"	9"		3"					2 Epoxy Coated
A703	2	4'-6"	18	15		9"	3'-0"		10 1/2"	9"		5"					2 Epoxy Coated
A704	2	5'-3"	22	15		9"	3'-8"		11 1/2"	9"		7"					2 Epoxy Coated
A705	2	6'-1"	25	15		9"	4'-4"		11 1/2"	9"		7"					2 Epoxy Coated
A801	6	12'-3"	196	Str													
A802	14	26'-2"	978	Str													
A803	6	11'-7"	186	Str													
A804	45	6'-2"	658	14		1'-3"	3'-8"	1'-3"				2'-7"		2'-7"			
Total			7806														
Total Abutments			33,744														
PIER NO. 1																	
SP401	1	28'-10 1/2"	534	SPI		4 1/2"	28'-10 1/2"	80							2'-8"		
SP403	1	28'-1 1/2"	520	SPI		4 1/2"	28'-1 1/2"	78							2'-8"		
SP405	1	27'-4 1/2"	507	SPI		4 1/2"	27'-4 1/2"	76							2'-8"		
SP407	1	27'-0"	500	SPI		4 1/2"	27'-0"	75							2'-8"		
P501	4	28'-0"	117	Str													
P503	30	5'-11"	185	S10		1'-9"	2'-8"	1'-9"									
P504	30	Varies 6'-9" to 9'-8" by 2'-2-20.	257	S10		Varies 2'-2" to 3'-7 1/2" by 1 1/4"	2'-8"	Varies 2'-2" to 3'-7 1/2" by 1 1/4"									
P505	86	9'-9"	875	S10		3'-8"	2'-8"	3'-8"									
P508	35	5'-7"	204	S10		1'-7"	2'-8"	1'-7"									
P601	12	19'-1"	344	Str													
P602	12	32'-5"	584	Str													
P603	51	11'-6"	881	Str													
P701	3	22'-2"	136	19		5'-9"	16'-5"					1'-9"		5'-7"	22'-0"		
P702	3	22'-2"	136	19		5'-9"	16'-5"					1'-8 3/8"		5'-5 3/8"	21'-10 3/8"		
P801	24	26'-0"	1,666	Str													
P802	67	11'-6"	2,057	Str													
P1001	5	16'-6"	355	Str													
P1101	64	7'-3"	2,465	11		3"	2'-1"	4'-11"							6'-4"	1'-5"	
P1102	16	32'-7"	2,770	Str													
P1104	16	31'-11"	2,713	Str													
P1106	16	31'-4"	2,664	Str													
P1108	16	30'-8"	2,607	Str													
P1116	6	16'-8"	531	20		2'-2"	14'-10"										
P1117	6	14'-5"	460	20		2'-2"	12'-7"										
P1118	4	12'-7"	267	Str													
P1119	3	32'-9"	522	Str													
Total			24,857														

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
PIER NO. 2																	
SP402	1	27'-0"	500	SPI		4 1/2"	27'-0"	75							2'-8"		
SP404	1	26'-7 1/2"	493	SPI		4 1/2"	26'-7 1/2"	74							2'-8"		
SP406	1	26'-3"	487	SPI		4 1/2"	26'-3"	73							2'-8"		
SP408	1	25'-10 1/2"	480	SPI		4 1/2"	25'-10 1/2"	72							2'-8"		
P501	4	28'-0"	117	Str													
P503	30	5'-11"	185	S10		1'-9"	2'-8"	1'-9"									
P504	30	Varies 6'-9" to 9'-8" by 2'-2-20.	257	S10		Varies 2'-2" to 3'-7 1/2" by 1 1/4"	2'-8"	Varies 2'-2" to 3'-7 1/2" by 1 1/4"									
P505	86	9'-9"	875	S10		3'-8"	2'-8"	3'-8"									
P508	35	5'-7"	204	S10		1'-7"	2'-8"	1'-7"									
P601	12	19'-1"	344	Str													
P602	12	32'-5"	584	Str													
P603	51	11'-6"	881	Str													
P703	3	22'-2"	136	19		5'-9"	16'-5"					1'-4 1/2"		5'-7"	22'-0"		
P704	3	22'-2"	136	19		5'-9"	16'-5"					1'-7 1/4"		5'-6 1/4"	21'-11 1/4"		
P801	24	26'-0"	1,666	Str													
P802	67	11'-6"	2,057	Str													
P1001	5	16'-6"	355	Str													
P1101	64	7'-3"	2,465	11		3"	2'-1"	4'-11"							6'-4"	1'-5"	
P1103	16	30'-9"	2,614	Str													
P1105	16	30'-5"	2,586	Str													
P1107	16	30'-0"	2,550	Str													
P1109	16	29'-8"	2,522	Str													
P1116	6	16'-8"	531	20		2'-2"	14'-10"										
P1117	6	14'-5"	460	20		2'-2"	12'-7"										
P1118	4	12'-7"	267	Str													
P1119	3	32'-9"	522	Str													
Total			24,274														
PIER NO. 3																	
SP409	1	25'-6"	473	SPI		4 1/2"	25'-6"	71							2'-8"		
SP411	1	24'-9"	460	SPI		4 1/2"	24'-9"	69							2'-8"		
SP413	1	24'-4 1/2"	453	SPI		4 1/2"	24'-4 1/2"	68							2'-8"		
P502	4	23'-10"	99	Str													
P503	32	5'-11"	197	S10		1'-9"	2'-8"	1'-9"									
P505	60	9'-9"	610	S10		3'-8"	2'-8"	3'-8"									
P506	32	Varies 6'-9" to 9'-8" by 2'-2-20.	275	S10		Varies 2'-2" to 3'-7 1/2" by 1 1/4"	2'-8"	Varies 2'-2" to 3'-7 1/2" by 1 1/4"									
P508	30	5'-7"	175	S10		1'-7"	2'-8"	1'-7"									
P603	44	11'-6"	760	Str													
P604	28	22'-6"	346	Str													
P802	59	11'-6"	1,812	Str													

NOTES:
 1. Bar size is indicated in the bar mark. The first digit where three digits are used

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
PIER NO 3 CONTINUED																	
P803	14	30'-9"	1,149	Str													
P804	14	15'-0"	561	Str													
P901	6	25'-6"	520	Str													
P1002	4	24'-8"	425	19		5'-10"	18'-10"					1'-3 1/2"		5'-8"	24'-6"		
P1003	4	24'-8"	425	19		5'-10"	18'-10"					1'-8 1/2"		5'-7"	24'-5"		
P1006	12	15'-3"	787	20		2'-2"	13'-5"										
P1007	8	11'-8"	402	Str													
P1401	21	9'-11"	1,593	11		1'-2"	2'-8"	6'-1"							7'-9"	1'-8"	
P1402	21	11'-11"	1,914	11		1'-2"	2'-8"	8'-1"							9'-9"	1'-8"	
P1403	7	24'-2"	1,294	Str													
P1404	7	22'-2"	1,187	Str													
P1405	7	23'-7"	1,263	Str													
P1406	7	21'-7"	1,156	Str													
P1407	7	23'-0"	1,232	Str													
P1408	7	21'-0"	1,125	Str													
		Total	21,293														
PIER NO. 4																	
SP410	1	25'-1 1/2"	466	SPI		4 1/2"	25'-1 1/2"	70							2'-8"		
SP412	1	24'-4 1/2"	453	SPI		4 1/2"	24'-4 1/2"	68							2'-8"		
SP414	1	24'-0"	446	SPI		4 1/2"	24'-0"	67							2'-8"		
P502	4	23'-10"	99	Str													
P503	32	5'-11"	197	S10		1'-9"	2'-8"	1'-9"									
P505	60	9'-9"	670	S10		3'-8"	2'-8"	3'-8"									
P506	32	Varies 6'-9" to 9'-9" by 2" - 2'-0"	275	S10		Varies 2'-2" to 3'-8" by 1"	2'-8"	Varies 2'-2" to 3'-8" by 1"									
P508	30	5'-7"	175	S10		1'-7"	2'-8"	1'-7"									
P603	44	11'-6"	760	Str													
P604	28	22'-6"	946	Str													
P802	59	11'-6"	1,812	Str													
P803	14	30'-9"	1,149	Str													
P804	14	15'-0"	561	Str													
P901	6	25'-6"	520	Str													
P1004	4	24'-8"	425	19		5'-10"	18'-10"					1'-4"		5'-8"	24'-6"		
P1005	4	24'-8"	425	19		5'-10"	18'-10"					1'-8"		5'-7"	24'-5"		
P1006	12	15'-3"	787	20		2'-2"	13'-5"										
P1007	8	11'-8"	402	Str													
P1401	21	9'-11"	1,593	11		1'-2"	2'-8"	6'-1"							7'-9"	1'-8"	
P1402	21	11'-11"	1,914	11		1'-2"	2'-8"	8'-1"							9'-9"	1'-8"	
P1403	7	23'-8"	1,267	Str													
P1410	7	21'-8"	1,160	Str													
P1411	7	23'-3"	1,245	Str													
P1412	7	21'-3"	1,138	Str													
P1413	7	22'-9"	1,218	Str													
P1414	7	20'-9"	1,111	Str													
		Total	21,154														
		Total Piers	91,578														

MARK	NO.	LENGTH	WT.	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	NOTES
EASTBOUND SLAB Reinforcing steel in Eastbound Slab shall have the suffix "A"																	
S401	385	30'-0"	7,715	Str													385 Epoxy Coated
S402	56	31'-9"	1,188	Str													56 Epoxy Coated
S403	56	33'-6"	1,253	Str													56 Epoxy Coated
S404	55	10'-0"	367	Str													55 Epoxy Coated
S501	448	30'-0"	14,018	Str													28 Epoxy Coated
S502	64	12'-4"	823	Str													4 Epoxy Coated
S503	8	14'-3"	119	Str													4 Epoxy Coated
S504	48	13'-8"	684	Str													24 Epoxy Coated
S505	48	5'-8"	284	Str													24 Epoxy Coated
S506	48	10'-8"	534	Str													24 Epoxy Coated
S507	4	10'-11"	46	Str													2 Epoxy Coated
S508	4	10'-7"	44	Str													2 Epoxy Coated
S509	339	5'-10"	2,063	23	2'-0 1/8"	2'-2 1/2"	1'-0"	3 1/2"	2'-2 3/8"	9"				2'-4"	2'-6"	3 1/8"	339 Epoxy Coated
S510	339	3'-1"	1,090	15		9"	9"	9"	11 1/2"	9"		7"					339 Epoxy Coated
S511	339	2'-4"	825	2		9"	10"			9"							
S512	339	2'-5"	855	2		9"	1'-8"										
S601	626	43'-8"	41,058	Str													313 Epoxy Coated
S602	48	Varies 4'-6" to 40'-3" by 4'-6" & 2'-0"	1,613	Str													24 Epoxy Coated
S603	8	4'-0"	48	Str													4 Epoxy Coated
S604	56	Varies 4'-9" to 40'-6" by 4'-8" & 2'-0"	1,882	Str													28 Epoxy Coated
S605	4	24'-6"	147	Str													2 Epoxy Coated
S606	4	25'-0"	150	Str													2 Epoxy Coated
L501	4	3'-6"	15	2	9"	2'-0"					9"						
L502	4	8'-3"	34	S10			3'-2"	2'-2"	3'-2"								4 Epoxy Coated
L503	6	7'-6"	47	4		6"	2'-7"	1'-4"	2'-7"	6"		1'-10"			6'-0"		
L504	4	3'-2"	13	Str													
		Total	76,915														

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 numbers. For example, A601 is a No. 6 size bar and P1004 is a No. 10 size.
2. For bar types see sheet 13/17
3. All dimensions are out to out of bar.
4. Radius dimension "R" is to outside of bar.
5. The length of bent bars is measured along the centerline.
6. For additional notes see sheet 13/17

CINCINNATI		KING & GAVARIS CONSULTING ENGINEERS		16/17
REINFORCING STEEL LIST				
BRIDGE NO. GRE-35-0107 R/L				
U.S. 35 OVER GRANGE HALL RD.				
GREENE COUNTY			STA: 56+32.80 TO STA: 58+47.01	
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE
	A.W.		S.A.	9/28/22

I HEREBY CERTIFY THAT THIS PLAT IS A TRUE DELINEATION OF A SURVEY MADE FOR THE OHIO DEPARTMENT OF HIGHWAYS IN 1967 BY *C.W. Miller* DATE *Jan. 31, 1972*

THIS IMPROVEMENT HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY FROM STATION 308+09.01 TO STATION 417+00.00 BY ACTION OF THE DIRECTOR OF HIGHWAYS ON APRIL 19, 1965 AS RECORDED IN VOL. 50, P. 317 OF THE DIRECTOR'S JOURNAL PURSUANT TO LAW.

CENTER LINE SURVEY PLAT

INTERSTATE ROUTE - 675

GRE-675-5.37

MONTGOMERY COUNTY

MAD RIVER TOWNSHIP - SECTION 15

GREENE COUNTY

BEAVERCREEK TOWNSHIP - SECTIONS 2,3,8 & 9

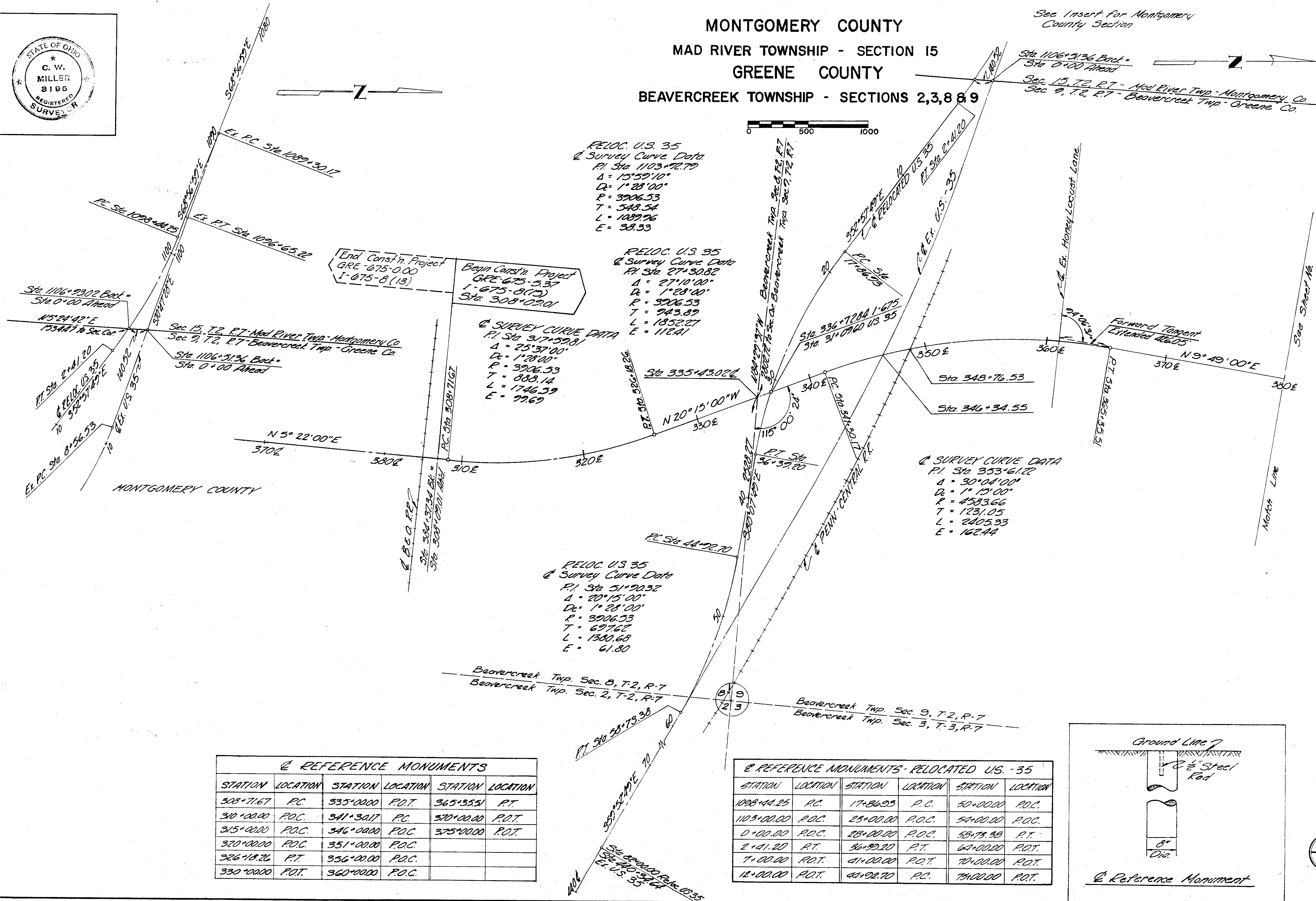
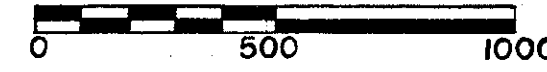
FED. RD DIVISION	STATE	PROJECT
2	OHIO	1-675-8(15)54

GRE-675-5.37
GREENE COUNTY
LIMITED ACCESS

565
616
141 Yellow
565-610
Plus Soil Profile

See Insert for Montgomery County Section

Sta 1106+93.02 Back - Sta 0+00 Ahead
Sec. 15, T2, R7 - Mad River Twp - Montgomery Co.
Sec. 9, T2, R7 - Beaver Creek Twp - Greene Co.



RELOC. U.S. 35
& Survey Curve Data
P.I. Sta 1103+92.79
Δ = 15°59'10"
D = 1'28'00"
R = 3906.53
T = 348.54
L = 1099.76
E = 39.33

RELOC. U.S. 35
& Survey Curve Data
P.I. Sta 27+30.82
Δ = 27°10'00"
D = 1'28'00"
R = 3906.53
T = 743.89
L = 1852.27
E = 112.41

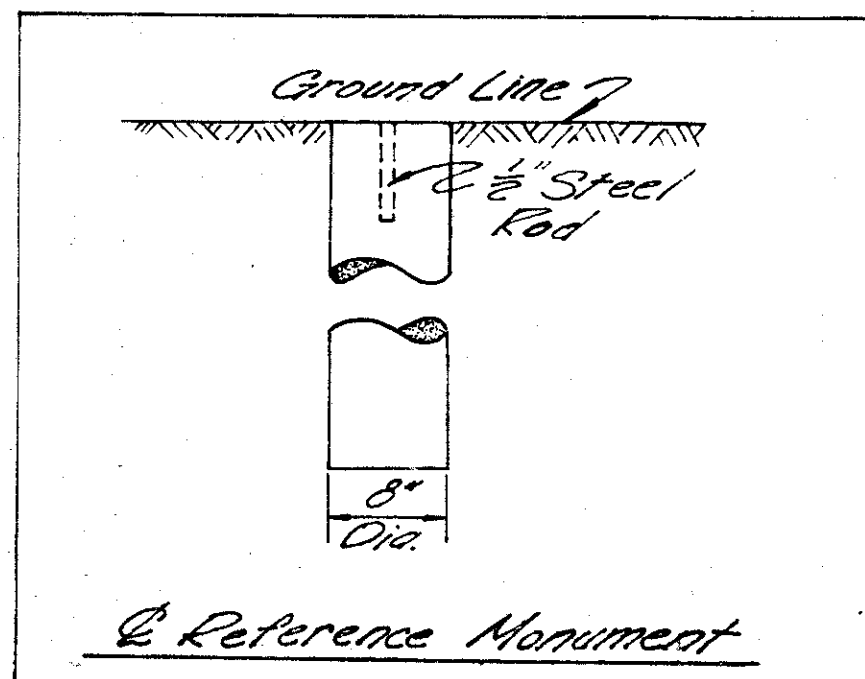
SURVEY CURVE DATA
P.I. Sta 317+59.81
Δ = 25°37'00"
D = 1'28'00"
R = 3906.53
T = 888.14
L = 1746.39
E = 77.69

SURVEY CURVE DATA
P.I. Sta 353+61.22
Δ = 30°04'00"
D = 1'15'00"
R = 4583.66
T = 1231.05
L = 2405.33
E = 162.44

RELOC. U.S. 35
& Survey Curve Data
P.I. Sta 51+20.32
Δ = 20°15'00"
D = 1'28'00"
R = 3906.53
T = 697.62
L = 1300.68
E = 61.80

REFERENCE MONUMENTS					
STATION	LOCATION	STATION	LOCATION	STATION	LOCATION
308+71.67	P.C.	335+00.00	P.O.T.	365+35.51	P.T.
310+00.00	P.O.C.	341+30.17	P.C.	370+00.00	P.O.T.
315+00.00	P.O.C.	346+00.00	P.O.C.	375+00.00	P.O.T.
320+00.00	P.O.C.	351+00.00	P.O.C.		
326+18.26	P.T.	356+00.00	P.O.C.		
330+00.00	P.O.T.	360+00.00	P.O.C.		

REFERENCE MONUMENTS - RELOCATED U.S. - 35					
STATION	LOCATION	STATION	LOCATION	STATION	LOCATION
1003+44.25	P.C.	17+86.03	P.C.	50+00.00	P.O.C.
1103+00.00	P.O.C.	25+00.00	P.O.C.	54+00.00	P.O.C.
0+00.00	P.O.C.	28+00.00	P.O.C.	58+75.38	P.T.
2+41.20	P.T.	36+39.20	P.T.	62+00.00	P.O.T.
7+00.00	P.O.T.	41+00.00	P.O.T.	70+00.00	P.O.T.
12+00.00	P.O.T.	44+00.70	P.C.	74+00.00	P.O.T.

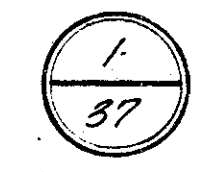


SIGNED R. F. Berris
DATE 12/18/72 DIVISION DEPUTY DIRECTOR

SHEET NO. 1 OF 3

RECEIVED _____ AT _____
RECORDED _____
PLAT BOOK _____ PAGE _____
SIGNED _____ MONTGOMERY CO., OHIO

FILE NO. 721
RECEIVED JAN. 24, 1973 AT 1:41 P.M.
RECORDED JANUARY 24, 1973
PLAT BOOK 14 PAGE 48, 49, 50
SIGNED Albert L. Moore RECORDER
GREENE CO., OHIO
JAN 16 1973



CENTER LINE SURVEY PLAT

INTERSTATE ROUTE - 675

GRE-675-5.37

BEAVERCREEK TOWNSHIP

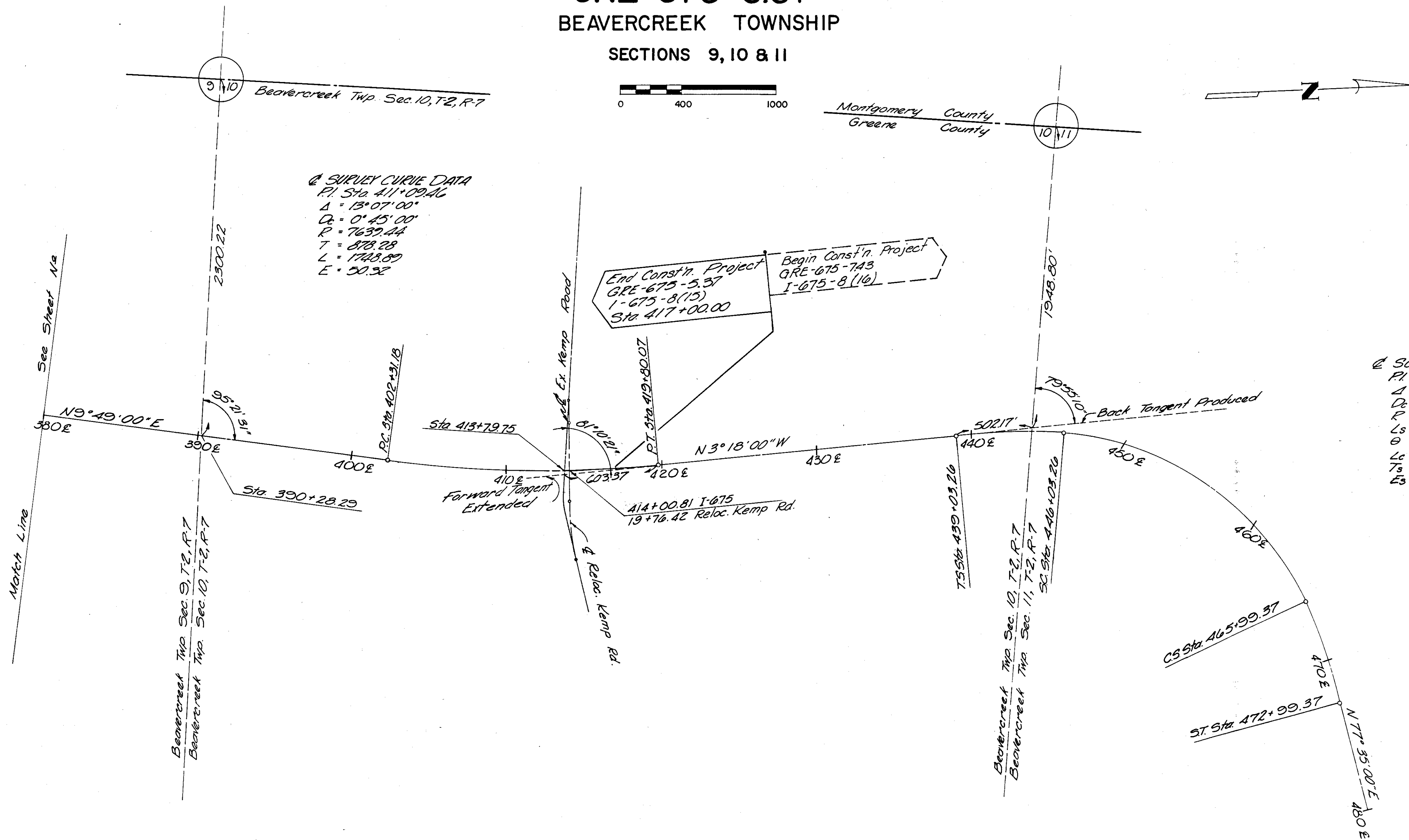
SECTIONS 9, 10 & 11

FED. NO. DIVISION	STATE	PROJECT
2	OHIO	I-675-8(15)54

566
616

2
37

GRE-675-5.37
GREENE COUNTY
LIMITED ACCESS



③ REFERENCE MONUMENTS

STATION	LOCATION	STATION	LOCATION
380+00.00	P.O.T.	406+00.00	P.O.C.
385+00.00	P.O.T.	411+00.00	P.O.C.
390+00.00	P.O.T.	415+00.00	P.O.C.
395+00.00	P.O.T.		
399+00.00	P.O.T.		
402+31.18	P.C.		

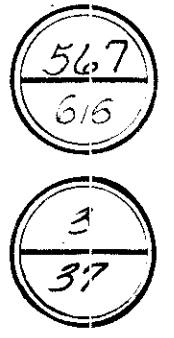
2
37

CURVE DATA

Co-ordinates based on Ohio State Co-ordinate System, South Zone.

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

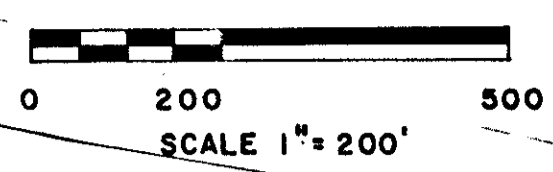
GRE-675-5.37



U.S. 35 INTERCHANGE

CURVE NO.	Δ	Dc	R	Ls	Θs	T or Ts	L	E or Es	PI. Station	PI. Co-ordinates		PC or TS Station	PC or TS Co-ordinates		S.C. Station	S.C. Co-ordinates		C.S. Station	C.S. Co-ordinates		PT or ST Station	PT or ST Co-ordinates		Remarks	
										North	East		North	East		North	East		North	East		North	East		North
1 E	25°37'00"	1°20'00"	3906.53			888.14	1746.59	29.60	317+59.81	634333.38	1552746.47	308+71.67	633449.13	1552663.40							326+18.26	635166.62	1552439.07		
2 E	30°04'00"	1°15'00"	4583.66			1231.05	2405.33	162.44	353+61.22	637740.04	1551489.69	341+30.17	636555.09	1551915.77							365+35.51	635953.07	1551639.57		
3 E	13°07'00"	0°45'00"	7639.44			878.28	1748.80	50.32	411+09.46	643460.05	1552479.42	402+31.18	642594.63	1552329.67							419+80.07	644336.88	1552428.86		
35-1 E	15°59'10"	1°28'00"	3906.53			548.54	1089.96	30.33	1103+92.79	636021.96	1549232.95	1095+44.25	635218.99	1549721.01							2+41.20	637691.56	1549670.82		
35-2 E	27°10'00"	1°28'00"	3906.53			943.89	1852.27	112.41	27+30.82	636192.00	1551658.17	17+84.93	636740.53	1550904.71							36+39.20	636030.21	1552583.09		
35-3 E	20°15'00"	1°28'00"	3906.53			697.62	1380.68	61.80	51+90.32	635764.34	1554116.25	44+92.70	635883.92	1553428.95							58+73.38	635414.27	1554719.67		
35-3 E.B	20°15'00"	1°28'00"	3906.53			697.62	1380.68	61.80	51+90.32	635764.34	1554116.25	44+92.70	635883.92	1553428.95							58+73.38	635414.27	1554719.67		
35-3 W.B	20°15'00"	1°28'00"	3906.53			697.62	1380.68	61.80	52+14.11	635779.96	1554143.12	45+16.49	635899.54	1553455.82							58+73.38	635414.27	1554719.67		
A-1	5°14'19"	0°40'00"	8524.37			393.18	785.81	8.99	297+24.51	636252.28	1550556.69	293+31.33	637189.80	1550242.83							301+17.15	636688.49	1550847.61		
A-2	26°39'59"	8°00'00"	716.20	200.00	8°00'00"	270.23	133.33	22.23	307+52.13	636270.21	1551325.52	304+81.91	636451.99	1551255.58	306+81.91	636310.84	1551267.02	308+15.24	636200.98	1551342.22	310+15.24	636018.04	1551422.62		
A-3	8°00'00"			200.00	8°00'00"							31+06.43	635932.04	1551455.39	313+06.43	635749.89	1551535.79								
A-4	20°15'17"	8°00'00"	716.20			334.48	2552.14	4136.05		638673.79	1549911.20	313+06.43	635749.89	1551535.79							338+58.57	636671.56	1552590.55		
A-5	8°00'00"			200.00	8°00'00"																338+58.57	636671.56	1552590.55		
A-6	53°23'52"	6°30'00"	881.47	200.00	6°30'00"	544.22	621.50	107.31	347+22.72	637095.43	1551837.89	341+78.50	636833.50	1552314.93	343+78.50	636936.26	1552113.48	350+00.00	637457.72	1551794.43	352+00.00	637634.57	1551763.73		
B-1	9°00'00"			200.00	9°00'00"							338+11.69	637243.10	1550406.21	340+11.69	637135.45	1550574.50								
B-2	14°04'22"	9°00'00"	636.62			281.68	1267.48	533.41	349+93.36	636605.83	1551462.24	340+11.69	637135.45	1550574.50							352+79.16	637676.55	1551495.60		
B-3	7°30'17"	1°30'00"	3819.72			250.52	500.32	8.21	355+29.68	637926.02	1551506.66	352+79.16	637676.55	1551495.60							357+79.48	638176.39	1551484.94		
C-1	32°15'24"	7°00'00"	818.51			236.69	460.81	33.54	320+61.69	634618.38	1552499.97	318+25.00	634385.15	1552540.29							322+85.81	634794.09	1552341.39		
D-1	6°48'08"	1°30'00"	3819.72			227.01	453.49	6.74	335+56.55	636073.01	1552187.49	333+20.54	635860.94	1552266.06							337+93.02	636294.70	1552134.70		
D-2	24°30'00"			200.00	24°30'00"										339+83.02	636492.41	1552118.12	337+93.02	636294.70	1552134.70					
D-3	24°30'41"	23°00'00"	249.11			369.13	1078.38	694.44		636130.13	1552047.36	339+83.02	636492.41	1552118.12							350+61.41	636200.05	1552409.80		
D-4	20°15'00"			150.00	20°15'00"										352+11.41	636204.18	1552260.67	350+61.41	636200.05	1552409.80					
D-5	9°21'22"	4°00'00"	1432.39			117.21	233.90	4.79	353+28.62	636223.18	1552145.01	352+11.41	636204.18	1552260.67							354+45.31	636260.73	1552033.98		
E-1	25°00'00"			200.00	25°00'00"							322+38.15	636132.06	1551928.85	324+38.15	636165.73	1551733.41								
E-2	24°05'56"	25°00'00"	229.18			345.61	988.40	643.83		636207.28	1552076.52	324+38.15	636165.73	1551733.41							334+26.54	636875.06	1551981.27		
E-3	36°14'47"	16°00'00"	358.10			117.21	226.54	18.69	335+43.75	635987.72	1552013.57	334+26.54	636875.06	1551981.27							336+83.08	636007.68	1551973.01		
F-1	34°22'16"	8°00'00"	716.20			221.50	420.64	33.47	328+91.07	636015.67	1553295.98	326+70.47	635962.12	1553510.91							331+00.11	636891.20	1553448.81		
F-2	21°01'19"	8°00'00"	716.20			132.88	262.77	12.22	337+28.68	636650.95	1552731.16	335+95.80	636551.65	1552819.45							338+58.57	636711.98	1552613.12		
G-1	37°29'17"	16°00'00"	358.10			121.52	234.30	20.06	354+48.17	636630.60	1551244.76	353+26.66	636742.83	1551198.16							358+60.89	636569.91	1551390.03		
G-2	16°01'49"	23°00'00"	249.11			1578.51	704.48	1345.98	361+97.63	638197.90	1550994.01	346+22.18	637000.20	1551617.61							353+26.66	636742.83	1551198.16		
G-3	13°22'30"			150.00	13°22'30"										346+22.18	637000.20	1551617.61	344+72.18	636890.13	1551689.13					
G-4	3°21'52"	1°30'00"	3819.72			112.18	224.30	1.65	343+60.06	636765.22	1551731.46	342+47.88	636820.01	1551767.57							344+72.18	636890.13	1551689.13		
H-1	4°33'25"	1°00'00"	5729.96			227.97	486.70	4.53	321+93.38	634776.56	1552647.38	319+06.37	634852.84	1552689.58							324+21.06	636003.23	1552623.06		
H-2	86°43'10"	8°00'00"	716.20			676.35	1084.03	268.80	330+97.41	635675.73	1552950.99	324+21.06	635003.23	1552623.06							335+05.09	635786.15	1553213.26		
H-3	20°34'00"	5°30'00"	1041.74			192.14	380.00	17.57	336+97.22	635817.51	1553407.82	335+05.09	635786.15	1553213.26							338+85.09	635719.19	1553606.10		
W-1	6°40'33"	3°00'00"	1909.86			111.39	222.53	3.25	354+81.14	637582.44	1551563.10	350+69.75	637473.44	1551586.02							352+92.27	637603.97	1551583.00		
W-2	20°22'27"	3°00'00"	1009.86			337.37	667.84	29.57	361+09.24	638504.80	1551465.03	357+71.87	638168.82	1551485.62							364+39.72	638830.92	1551541.41		
W-3	5°01'02"	0°30'00"	1459.16			502.04	1003.45	10.99	370+91.76	639461.23	1551708.34	368+89.72	638978.02	1551579.81							378+93.16	639955.92	1551793.94		
X-1	3°12'52"	0°46'25"	7405.58			207.79	415.46	2.91	18+89.95	636788.10	1551031.91	16+82.16	636879.16	1550822.97							20+97.62	636646.88	1551207.37		
X-2	1°40'53"	1°29'49"	3827.53			56.17	112.33	0.41	36+95.37	636098.42	1552656.07	36+39.20	636108.04	1552601.63							37+51.53	636090.42	1552712.86		
X-3	3°03'10"	1°28'00"	3906.53			104.10	208.18	1.39	40+85.69	636242.82	1553043.31	39+81.69	636057.65	1552940.27							41+89.73	636022.53	1553446.41		
X-4	10°26'00"	4°00'00"	1432.39			130.80	260.88	5.96	53+15.92	635740.77	1554244.58	51+85.12	635784.81	1554121.42							54+48.99	635675.15	1554367.78		
X-5	4°43'00"	3°30'00"	1637.02			67.42	134.76	1.39	55+13.41	635641.33	1554416.08	54+45.99	635675.15	1554357.78							58+80.76	635612.42	1554476.06		
PC-1	11°05'34"	0°45'00"	7639.44	85.00	0°19'07"	784.53	1394.41	36.99	547+87.88	637557.47	1551437.78	54													

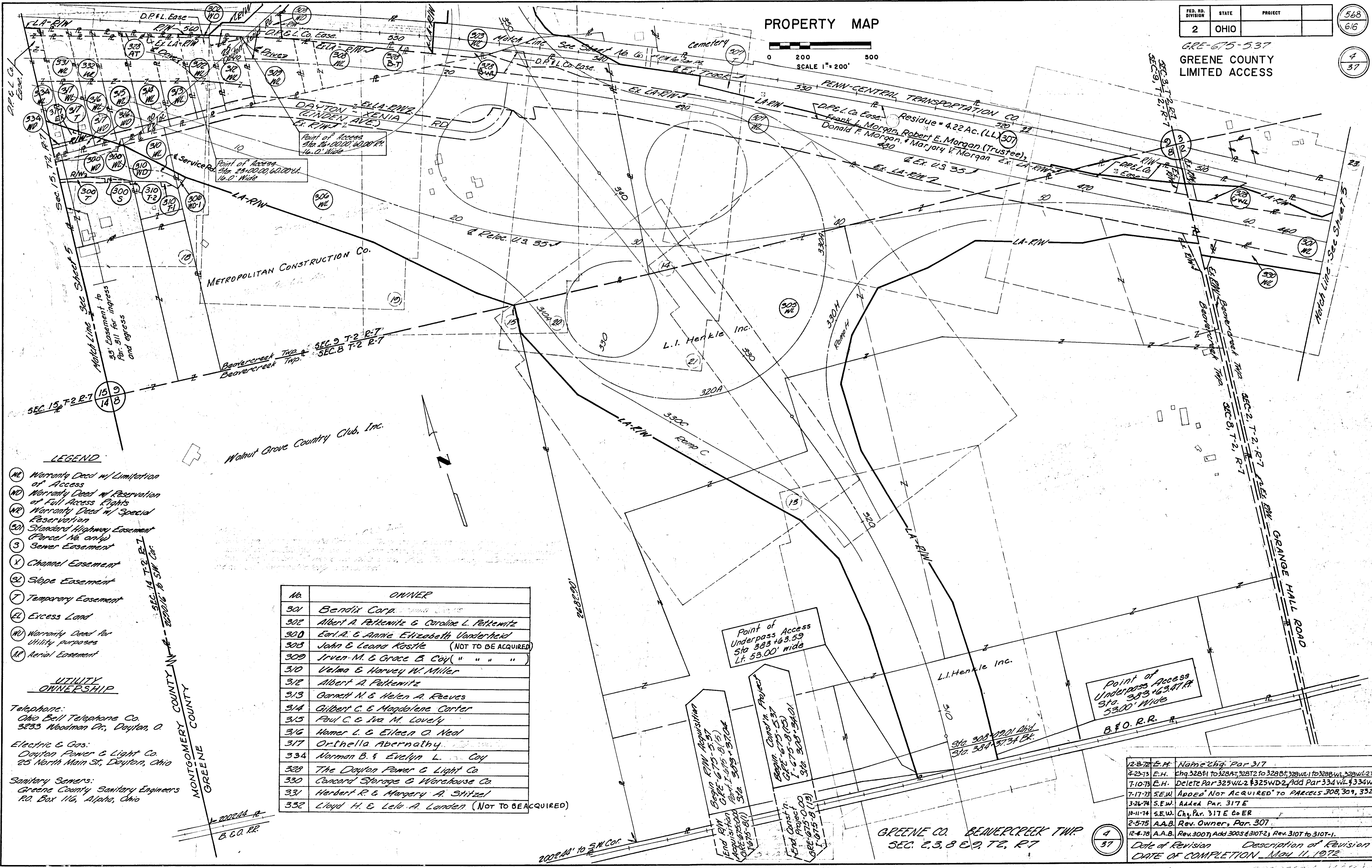
PROPERTY MAP



FED. RD. DIVISION	STATE	PROJECT	568
2	OHIO		616

GRE-675-537
GREENE COUNTY LIMITED ACCESS

4
37



LEGEND

- WL Warranty Deed w/ Limitation of Access
- WD Warranty Deed w/ Reservation of Full Access Rights
- WR Warranty Deed w/ Special Reservation
- SD Standard Highway Easement (Parcel No. only)
- S S Sewer Easement
- Y Channel Easement
- SE Slope Easement
- T Temporary Easement
- EL Excess Land
- WD Warranty Deed for Utility purposes
- AR Aerial Easement

UTILITY OWNERSHIP

Telephone:
Ohio Bell Telephone Co.
3233 Woodman Dr., Dayton, O

Electric & Gas:
Dayton Power & Light Co.
25 North Main St., Dayton, Ohio

Sanitary Sewers:
Greene County Sanitary Engineers
R.D. Box 116, Alpha, Ohio

No.	OWNER
301	Bendix Corp.
302	Albert A. Petkenitz & Caroline L. Petkenitz
300	Earl A. & Annie Elizabeth Vanderheid
308	John & Leona Kastle (NOT TO BE ACQUIRED)
309	Irven M. & Grace B. Coy (" " " ")
310	Velma & Harvey W. Miller
312	Albert A. Petkenitz
313	Garnett N. & Helen A. Reeves
314	Gilbert C. & Magdalene Carter
315	Paul C. & Iva M. Lovely
316	Homer L. & Eileen O. Neal
317	Orithella Abernathy
334	Norman B. & Evelyn L. Coy
328	The Dayton Power & Light Co.
330	Concord Storage & Warehouse Co.
331	Herbert R. & Margery A. Shitzel
332	Lloyd H. & Lela A. Larden (NOT TO BE ACQUIRED)

Point of Access
Sta. 383+63.59
Lt. 53.00' wide

Point of Access
Sta. 383+63.47 R.
Lt. 53.00' wide

Date	By	Name	Chg.	Par	317
2-8-72	E.H.	Chg	328F1	to 328F2	to 328F1
4-23-73	E.H.	Chg	328F1	to 328F2	to 328F1
7-10-73	E.H.	Delete	Par 325WL2	#325WD2	Add Par 334WL #334WD
7-17-73	SEW	Added	Not Acquired	to	PARCELS 308, 309, 332
3-24-74	SEW	Added	Par. 317E		
10-11-74	SEW	Chg	Par. 317E	to ER	
2-5-75	A.A.B.	Rev. Owner	Par. 307		
12-4-78	A.A.B.	Rev. 300T	Add 300S	#310T2	Rev. 310T to 310T-1

Date of Revision Description of Revision
DATE OF COMPLETION May 11, 1972

GREENE CO. BEAVERCREEK TWP.
SEC. 2, 3, 8 E, 2, T2, R7

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37

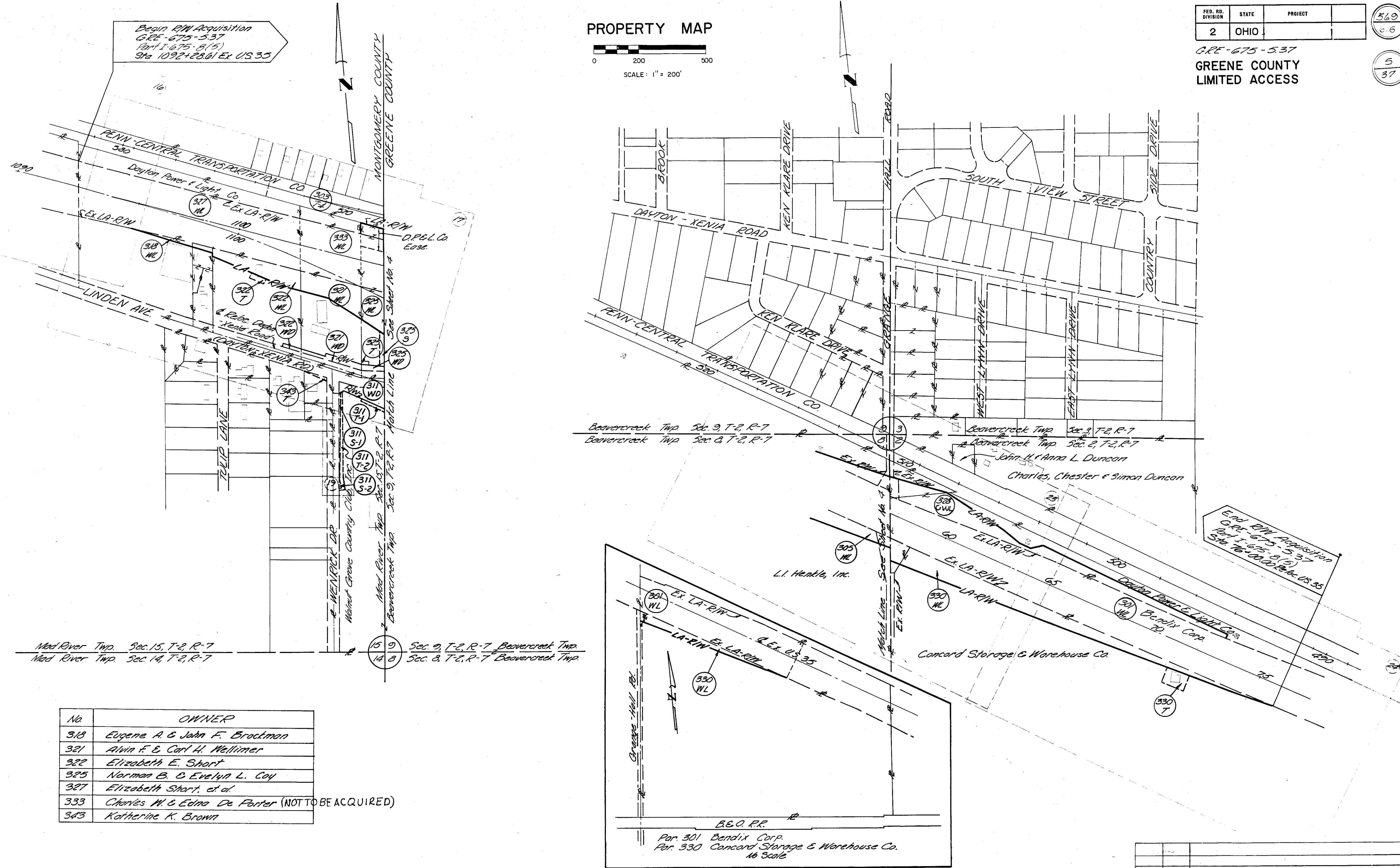
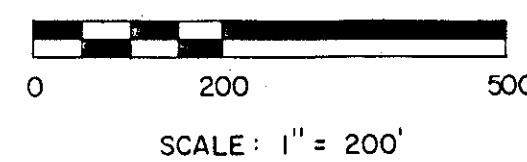
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

569
66

GRE-675-537
GREENE COUNTY
LIMITED ACCESS

5
37

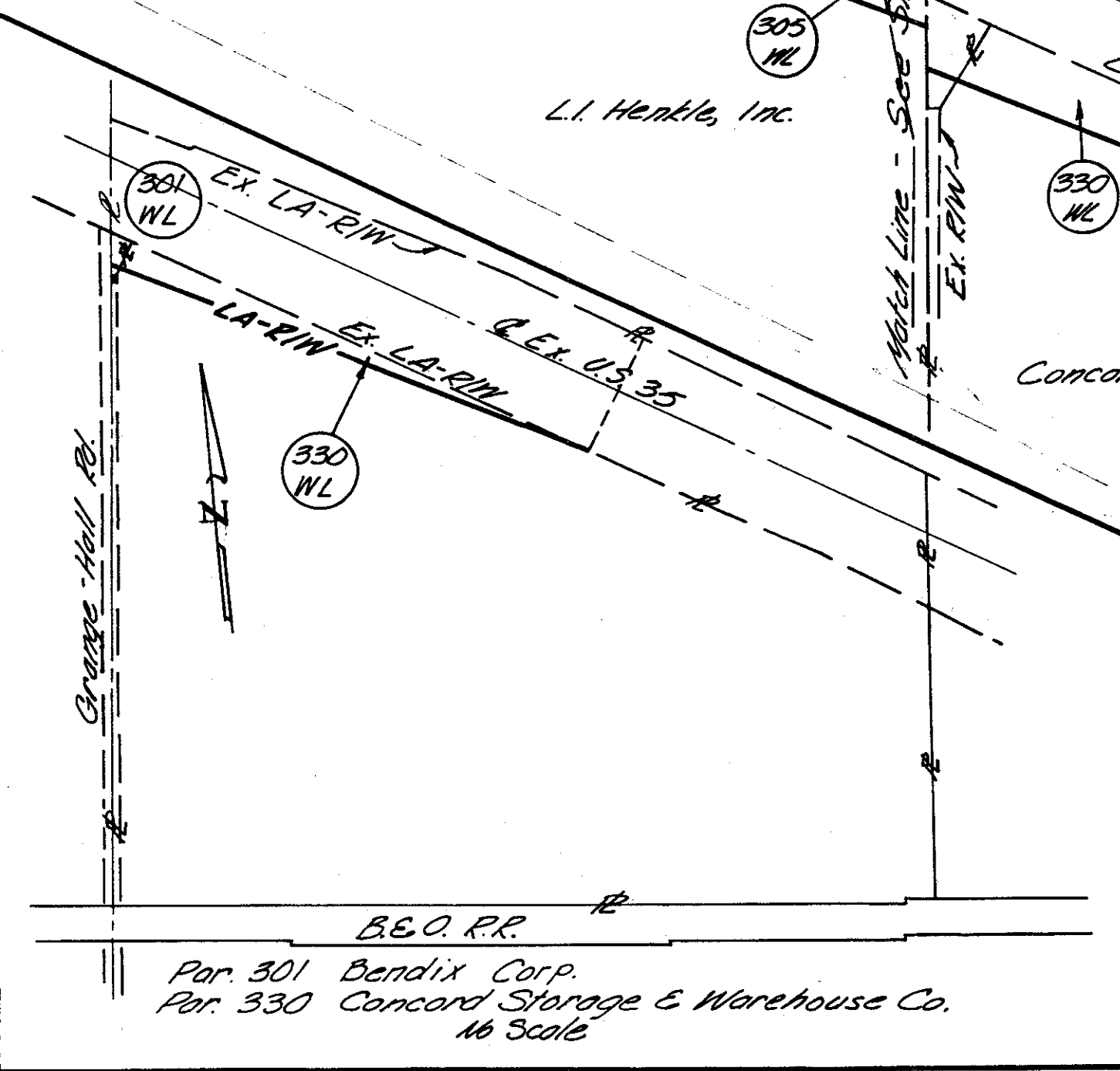
PROPERTY MAP



Med River Twp. Sec. 15, T-2, R-7
Med River Twp. Sec. 14, T-2, R-7

Sec. 9, T-2, R-7 Beaver Creek Twp.
Sec. 8, T-2, R-7 Beaver Creek Twp.

No.	OWNER
318	Eugene A. & John F. Brockman
321	Alvin F. & Carl H. Wellimer
322	Elizabeth E. Short
325	Norman B. & Evelyn L. Coy
327	Elizabeth Short, et al
333	Charles W. & Edna De Porter (NOT TO BE ACQUIRED)
343	Katherine K. Brown

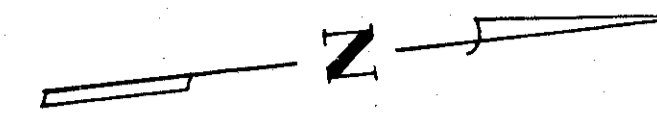
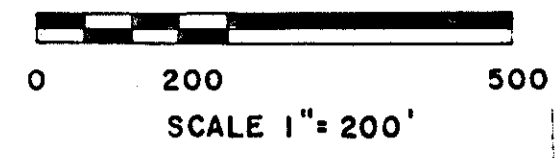


MONTGOMERY CO. MAD RIVER TWP.
SEC. 15, T-2, R-7
GREENE CO. BEAVERCREEK TWP.
SEC. 2, 3, 8 & 9, T-2, R-7

A.A.B. 12-4-78	Add Pars. 311S-1, 311S-2, 311T-1 & 311T-2.
N.M. 12/16/78	Rev Par 325 x to 325 3
P.W.F. 12-12-78	PARCEL 301 WL - Not to be acquired
S.E.H. 7-17-78	ADDED "NOT ACQUIRED" TO PAR. 333
E.H. 7-10-78	chg. Par 325WL1 to 325WL# & 325WD-1 to 325WD
Date of Revision	Description of Revision
DATE OF COMPLETION	May 11, 1972

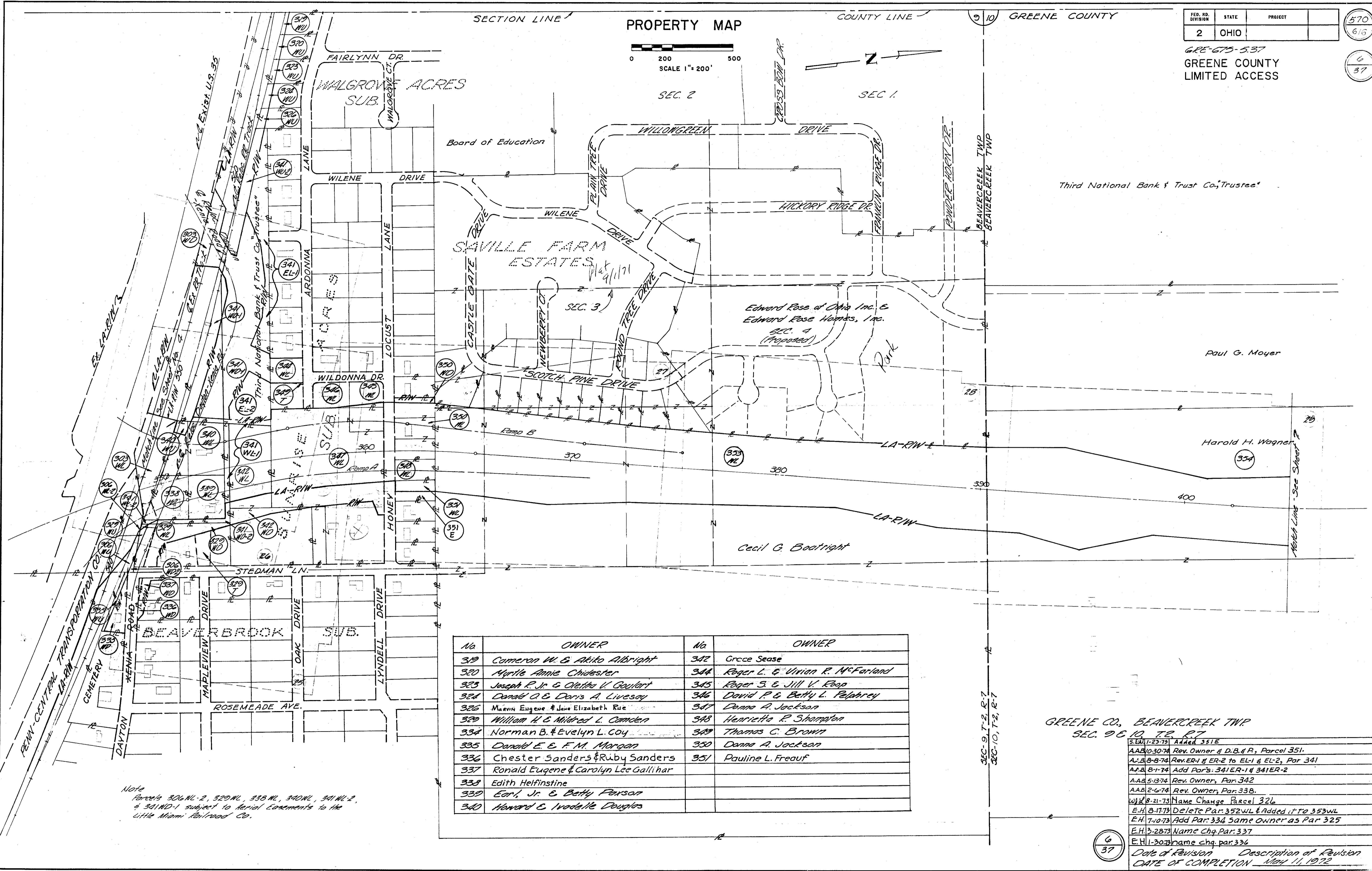
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PROPERTY MAP



FED. RD. DIVISION	STATE	PROJECT	570 616
2	OHIO		6 37

GRE-675-537
GREENE COUNTY
LIMITED ACCESS



No	OWNER	No	OWNER
319	Cameron W. & Aiko Albright	342	Grace Sease
320	Myrtle Annie Chidester	344	Roger L. & Vivian R. McFarland
323	Joseph R. Jr. & Cletha V. Coultart	345	Roger S. & Jill V. Kooop
324	Daniel O. & Doris A. Livesey	346	David P. & Betty L. Palphrey
326	Maevyn Eugene & Jane Elizabeth Rue	347	Danna A. Jackson
329	William H. & Mildred L. Comden	348	Henrietta R. Shampson
334	Norman B. & Evelyn L. Coy	349	Thomas C. Brown
335	Daniel E. & F.M. Morgan	350	Danna A. Jackson
336	Chester Sanders & Ruby Sanders	351	Pauline L. Freauf
337	Ronald Eugene & Carolyn Lee Gallihar		
338	Edith Helfinstine		
339	Earl, Jr. & Betty Pearson		
340	Howard E. & Ivodelle Douglas		

Note
Parcels 326 WL-2, 329 WL, 338 WL, 340 WL, 341 WL-2,
& 341 ND-1 subject to Aerial Easements to the
Little Miami Railroad Co.

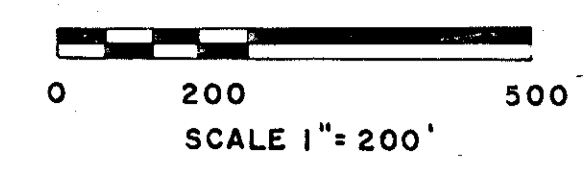
GREENE CO., BEAVERCREEK TWP
SEC. 9 & 10, T. 2, R. 7

S.E.W. 1-23-75	Added 351E
AA 10-30-74	Rev. Owner & D.B. & P., Parcel 351.
A.A. 8-8-74	Rev. ER-1 & ER-2 to EL-1 & EL-2, Par 341
A.A. 8-1-74	Add Par's: 341ER-1 & 341ER-2
AA 5-13-74	Rev. Owner, Par. 342
AA 2-6-74	Rev. Owner, Par. 338.
WJ 8-21-73	Name Change Parcel 326
E.H. 8-17-73	Delete Par. 352 WL & Added it to 353 WL
E.H. 7-10-73	Add Par. 334 Same Owner as Par 325
E.H. 3-28-73	Name Chg. Par. 337
E.H. 1-30-73	Name chg. par. 326
Date of Revision	Description of Revision
DATE OF COMPLETION	MAY 11, 1972

COUNTY LINE

GREENE COUNTY

PROPERTY MAP

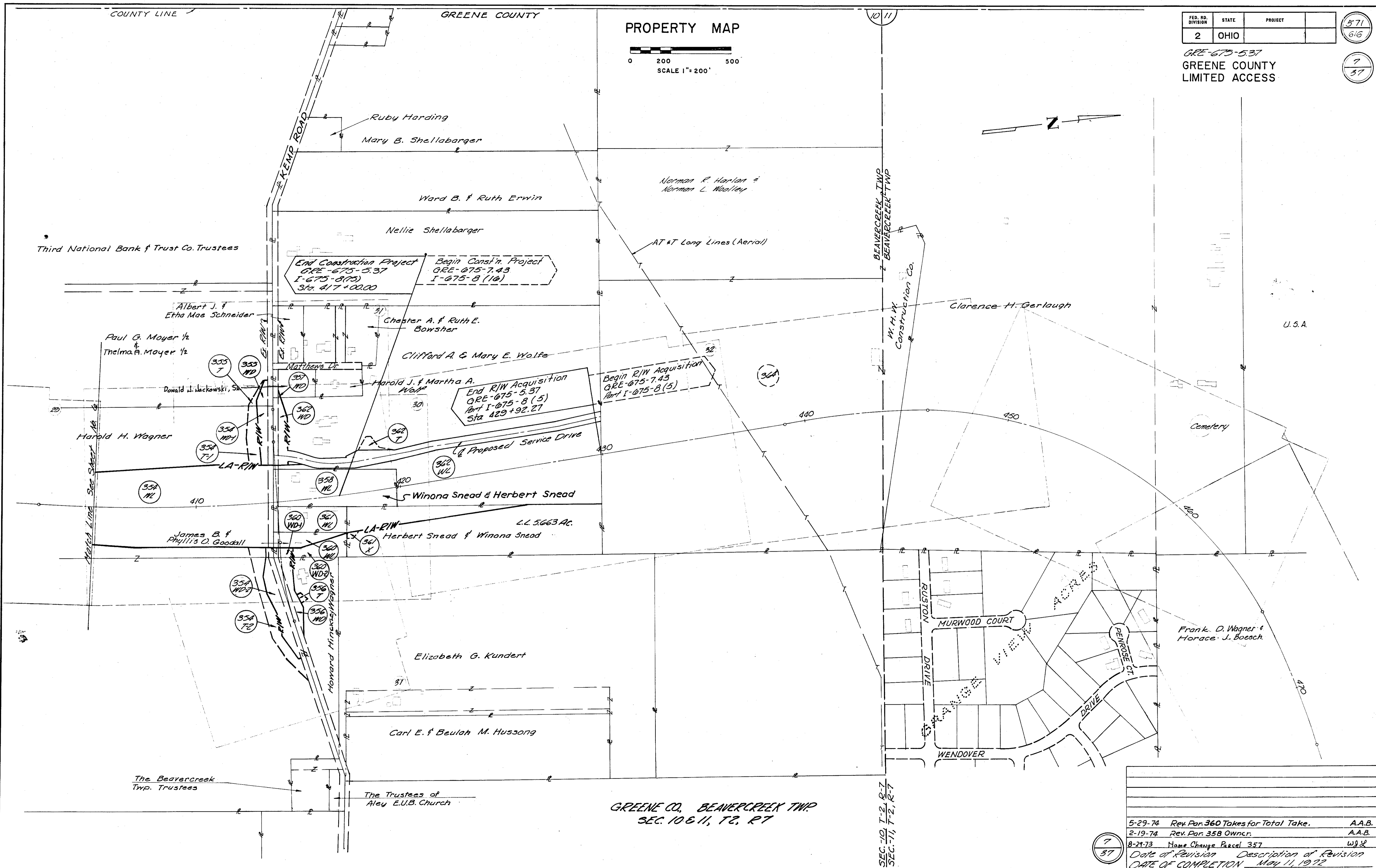
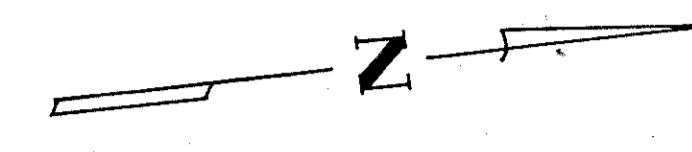


FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

571
616

GRE-675-537
GREENE COUNTY
LIMITED ACCESS

7
37



End Construction Project
GRE-675-537
I-675-8(7D)
Sta. 417+00.00

Begin Const'n. Project
GRE-675-7.43
I-675-8 (16)

End R/W Acquisition
GRE-675-5.37
Part I-675-8 (5)
Sta. 429+92.27

Begin R/W Acquisition
GRE-675-7.43
Part I-675-8 (5)

GREENE CO. BEAVERCREEK TWP.
SEC. 10 & 11, T2, R7

SEC. 10, T-2, R-7
SEC. 11, T-2, R-7

5-29-74	Rev. Par. 360 Takes for Total Take.	A.A.B.
2-19-74	Rev. Par. 358 Owner.	A.A.B.
8-21-73	Home Change Parcel 357	WJL
Date of Revision Description of Revision		
DATE OF COMPLETION May 11, 1972		

7
37

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

572
6/6

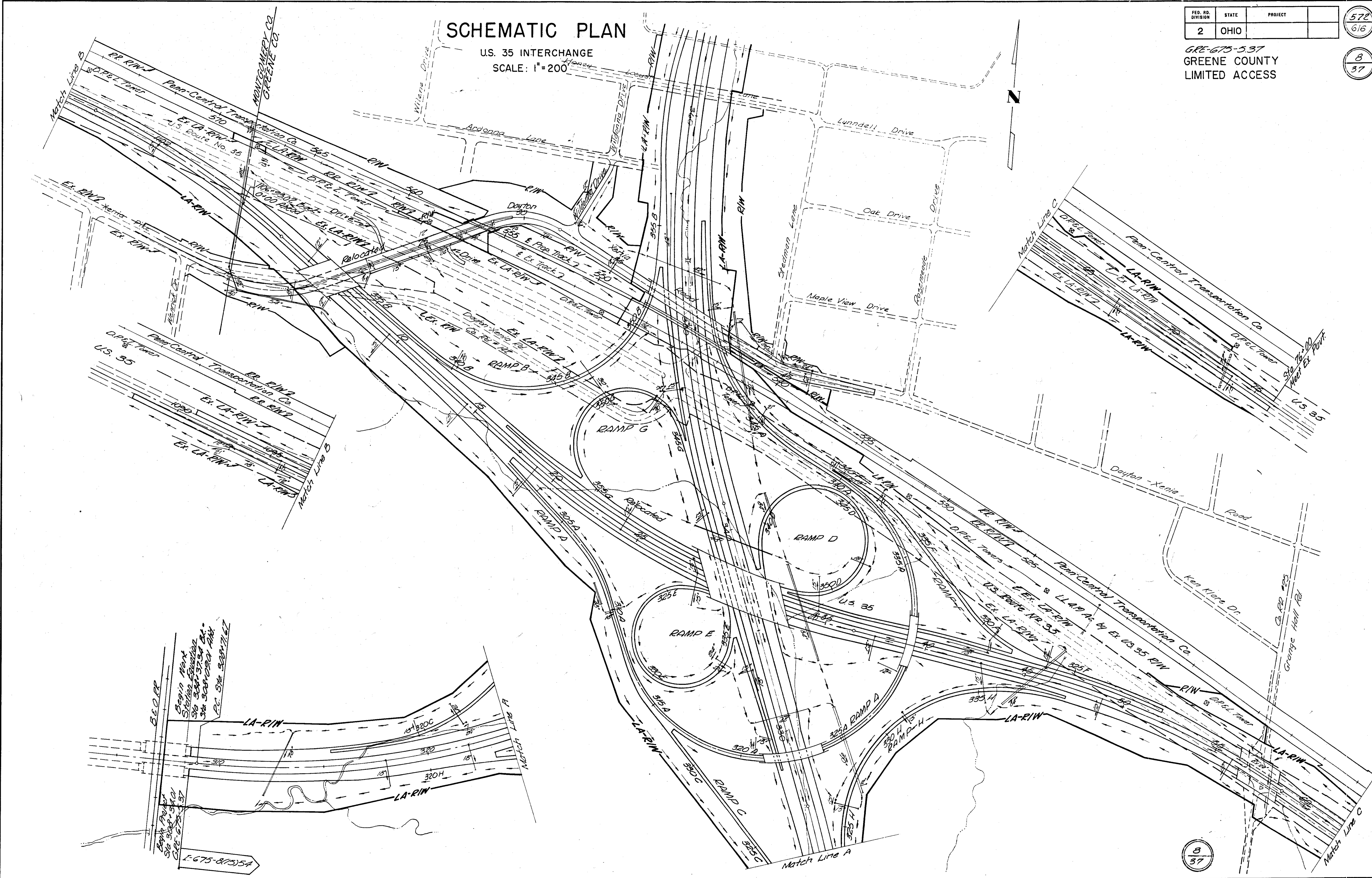
GRE-675-537
GREENE COUNTY
LIMITED ACCESS

8
37

SCHEMATIC PLAN

U.S. 35 INTERCHANGE

SCALE: 1" = 200'



B.E.O. RR
Begin Max
Stationing
Sta 300+00 to Sta 300+200
P.C. Sta 300+167

1-675-815154

8
37

SUMMARY OF ADDITIONAL R/W

STATE JOB NO.	FED. RD. DIVISION	STATE	PROJECT
(08604 (2))	2	OHIO	

573
616

CRF-675-5.37

9
37

TOTAL NUMBER OF ---
57 OWNERS
17 TOTAL TAKES 2 OWNERS WITH PERSONALTY ITEMS INVOLVED
19 OWNERS WITH STRUCTURES INVOLVED

PARCEL NO.	OWNER	CALCULATED AREA	RECORDED		RECORD AREA	TOTAL PRO.	GROSS TAKE	PRO. IN TAKE	NET TAKE		NET RESIDUE		SHEET NO.	TYPE FUND	REMARKS
			BOOK	PAGE					LAND	BLDGS	LEFT	RIGHT			
301 WL	Bendix Corporation		291 427	49 219	11.395	11.395	8.111	8.111	0		0	3.284	23	I	Ex. U.S. 35 R/W Not to be Acquired
302 WL 302 WD	Albert A. & Caroline L. Petkewitz	1.23	210	557	1.20	0.79	1.19 0.04	0.79 0.00	0.40 0.04	Yes	0	0	19 18		Total Take R/W & Ease. to D.P.&L. Co. (D.B. 387, P. 39)
303 WL 303 WD	Little Miami Railroad Co. (Owner) Penn-Central Transportation Co. (Lessee)					0.029	1.053 0.603	0.029 0	1.024 0.603				35 36		
300 WL 300 WD 300 T 300 S	Earl A. & Annie Elizabeth Vanderheid		252	90	3.634	0.241	0.017 1.176	0.017 0.224	0 0.952 0.183 0.036		2.441	0	18 18 18		To Const. Drive, Temp. Rd. & San. Service Line. Includes all of Par. 300S. To Construct Sanitary Sewer.
305 WL	L. I. Henkle	233.517	311 331 350 353 359 363 400 400 424	549 257 491 604 163 348 128 268 79	233.552	4.841	75.379	3.732	71.647		59.742	97.287	13 14 15 21		Acquired by State of Ohio (D.B. 426, P. 485) R/W & Ease. to D.P.&L. Co. (D.B. 257, P. 347)
306 WL-1 306 WL-2 306 WD-1 306 WD-2 306 WU 306 AR	Metropolitan Construction Co.	58.600	480	580	59.35	12.108	41.002 0.002 0.058 0.027 0.128 0.001	11.985 0.002 0 0.027 0.094 0.001	29.017 0 0.058 0 0.034 0	Yes	16.783	0	19 25 19 25 25 25	18 20 21	R/W & Ease. to D.P.&L. Co. (D.B. 395, P. 596) To be Acquired in the name of the Little Miami Railroad Co. To Little Miami Railroad Co.
307 WL 307 T	Frank L. Morgan, Donald F. Morgan, Marjory V. Morgan and Robert E. Morgan, Trustee of the Estate of Mary E. Morgan, deceased	15.02	216 500	4.30 585		9.28	10.80	9.28	1.52 0.17	P	0	4.22	21 22 23		R/W & Ease. to D.P.&L. Co. (D.B. 257, P. 600) 5.74 Ac. L.L. by Ex. U.S. 35 R/W Par. 307 T - To grade slopes
308 WL	John & Leona Kerstle		233	609	2.41	2.41	2.41	2.41	0		0	0	19 20		Total Take NOT TO BE ACQUIRED
309 WL	Irven M. & Grace B. Coy		156	339	1.66	1.66	1.66	1.66	0		0	0	19		Total Take NOT TO BE ACQUIRED R/W & Ease. to D.P.&L. Co. (D.B. 230, P. 285)
310 WL 310 WD 310 T-1 310 T-2	Velma & Harvey W. Miller		184 446	649 468	2.10	0.14	0.58 0.57	0.14 0	0.44 0.57 0.006 0.004		0.95	0	18 18 18 18		To construct Drive To Const. San. Service Line, Grade & Seed.
311 WD 311 S-1 311 S-2 311 T-1 311 T-2	Walnut Grove Country Club, Inc.		237 1550 1803	37 47 88	139.307	0.847	0.500	0.268	0.232 0.012 0.003 0.026 0.112		138.228	0	18 19 19 18 19		Deed Ref. Greene Co. Deed Ref. Montgomery Co. To Construct Sanitary Sewer. Deed Ref. Montgomery Co. To Construct Sanitary Sewer. To Restore Parking Area. Deed Ref. Montgomery Co. To Restore Parking Area. Includes All of Parcels 311S-1 & 311S-2.
312 WL	Albert A. Petkewitz		319	183	1.00	0.75	1.00	0.75	0.25		0	0	19		Total Take
313 WL	Garnett M. & Helen A. Reeves	1.32	220 282	216 100	1.33	0.80	1.32	0.80	0.52	Yes	0	0	18		Total Take
314 WL	Gilbert C. & Magdalene Carter		288	189	1.434	0.806	1.434	0.806	0.628	Yes	0	0	18		Total Take Acquired by State of Ohio (D.B. 405, P. 246)
315 WL	Paul C. & Iva Lovely	1.569	405	37	1.549	0.816	1.549	0.816	0.733	Yes	0	0	18		Total Take Acquired by State of Ohio (D.B. 444, P. 145)
316 WL 316 WD	Homer L. & Eileen O. Neal	0.830	374	282	0.828	0.082	0.767 0.063	0.019 0.063	0.748 0.0	Yes	0	0	18 18		Total Take
317 WL 317 WD 317 T 317 ER	Orthella L. Abernathy	0.948	468	661	0.924	0.085	0.627 0.128	0 0.085	0.627 0.043	Yes	0.193	0	18 18 18		To remove Building
318 WL	Eugene A. & John F. Brockman		1987 2009 2519	112 609 241	4.502	0.427	0.070	0	0.070		4.005	0	17		
319 WU	Cameron W. & Akiko Albright		407	505	21399s.f.	0	3407s.f.	0	3407s.f.		17992s.f.	0	18	I	Lot 17 To be Acquired in the name of the Little Miami Railroad Co.

Note:
Under no circumstances are the Temporary Easements for purposes of removal of buildings to be used for storage of material and equipment. Upon completion of work in this area, the Temporary Easements shall be immediately vacated.

A.A.B. 12-4-78 Rev. & Add'l T's & S's, Pars. 300, 310 & 311.
 N.M. 10 Feb 76 Rev. Remarks Par 307
 A.A.B. 2-10-78 Rev. Owners & Add'l C.T. Vol. & P., Par. 307
 S.E.W. 10/11/74 Chg. Par. 317E to ER
 P.R.D. 9/6/74 Added Col. A & Rev. E' Par. - Par. 317
 A.A.B. 6-11-74 Rev. Total No. of Owners---"Tally"
 E.H. 8/1/72 Par. 317 Name Chg.
 E.H. 12/6/72 Par. 306 WD-1 sheet ref. from 25 to 19
 W.D. 12/19/72 Added note on all WL parcels
 E.H. 1-26-73 Name Chg. Par. 301
 W.D. 2-21-73 Added Par. 305 PR and note to summary
 P.W.K. 5/3/73 Deleted Parcel 305 PR and note to summary
 E.H. 6-29-73 Name Chg. Par. 306, D.B. & P
 S.E.W. 7-17-73 ADDED "NOT ACQUIRED" TO PARCELS 308 & 309
 P.W.K. 12-2-74 Added "Not to be Acquired" to PAR 301 WL
 S.E.W. 3-24-74 Added Par 317 E

9
37

REV. DATE	DESCRIPTION
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SUMMARY OF ADDITIONAL R/W

STATE JOB NO.	FED. RD. DIVISION	STATE	PROJECT
108624(2)	2	OHIO	

G.P.F. 675-5.37

574
616
10
37

TOTAL NUMBER OF _____
 OWNERS _____
 TOTAL TAKES _____
 OWNERS WITH STRUCTURES INVOLVED _____

PARCEL NO.	OWNER	CALCULATED AREA	RECORDED		RECORD AREA	TOTAL PRO.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE		NET RESIDUE		SHEET NO.	TYPE FUND	REMARKS
			BOOK	PAGE					LAND	BLDGS.	LEFT	RIGHT			
320 WU	Myrtle Annie Chidester		390	542	21,399 s.f.	0	3554 s.f.	0	3554 s.f.		17,845 s.f.	0	18	I	Lot 16 To be Acquired in the name of the Little Miami Railroad Co.
321 WL 321 WD	Alvin F. & Carl H. Wellmeier		1918	102	2,368	0.191	0.640 0.273	0 0.191	0.640 0.082	P	1,455	0	17 17 18		Montgomery Co.
322 WL 322 WD 322 T	Elizabeth E. Short		1973 1096	574 403	3,349	0.279	0.624 0.026	0 0.023	0.624 0.003 0.032	Yes	2,443	0	17 17 17		Montgomery Co. To remove Fr. Barn
323 WU	Joseph R., Jr. & Oletta V. Goulart		361	548	21,355 s.f.	0	3965 s.f.	0	3965 s.f.		17,490 s.f.	0	18		Lot 15 To be Acquired in the name of the Little Miami Railroad Co.
324 WU	Donald O. & Doris A. Livesay		414	286	22,809 s.f.	0	3959 s.f.	0	3959 s.f.		18,850 s.f.	0	18		Lot 14 To be Acquired in the name of the Little Miami Railroad Co.
325 WL 325 WD 325 S 325 T	Norman B. & Evelyn M. Coy AKA Evelyn L. Coy		1547 944 158	519 578 604	1.51	0.59	0.98 0.11	0.52 0.07	0.46 0.04 0.09 0.01		0.420	0	17 18 18 18		Mont. Co. (Ease. to D.P. & L. Co. (D.B. 387, P. 39) included in take Total residue 0.559 Ac. To construct Drive
326 WU	Marvin Eugene & Jane Elizabeth Rue		483	822	23,837 s.f.	0	3951 s.f.	0	3951 s.f.		19,886 s.f.	0	18		Lot 13 To be Acquired in the name of the Little Miami Railroad Co.
327 WL	Elizabeth & Leroy Short, Febera & Harry R. Stedman, William S. & Edith Mae Engle, Paul M. & Myrtle A. Angle	4.98	1096	403	5.01	4.98	4.98	4.98	0		0	0	17 16		Total Take - Ex. U.S. 35 R/W
328B-WL 328C-WL 328 AT 328 B-T	The Dayton Power & Light Co.	0.336 0.378	278 386 311 311 316 326 316	70 146 253 254 368 695 78 353	0.346 4.735 0.378	0 0.076 0	0.137 1.699 0.378	0 0.052 0	0.137 1.647 0.378		0.199 0 0.378	0 3.012	20 23 24 18 19		To grade slopes To grade slope
329 WL 329 WD 329 WU 329 T 329 AR	William H & Mildred L. Camden		414	464	2,30	0.39	0.013 0.21 0.06	0.013 0.31 0.06	0.0 0.60 0.0 0.24 0.012		0	1.31	25 25 25 25 25		To be Acquired in the name of the Little Miami Railroad Co. To construct temporary road To Little Miami Railroad Co.
330 WL 330 T	Concord Storage & Warehouse Co.		427 442	221 268	121,195	0.723	1,948	0	1,948 0.083		0	118,524	23 24		To remove building foundation
331 WL	Herbert R. & Margery A. Stitzel		162	297	0.64	0.64	0.64	0.64	0.0		0	0	18		Total Take
332 WL	Lloyd H. & Lela A. Landen		207	247	0.62	0.62	0.62	0.62	0.0		0	0	18		Total Take (NOT TO BE ACQUIRED)
333 WL	Charles W. & Edna DePorter		1712	292	1.36	1.36	1.36	1.36	0		0	0	17	I	Mont. Co. - Total Take - Ex. U.S. 35 R/W (NOT TO BE ACQUIRED)

N.M. 5-10-76 Rev Record Area & Residue Par 330 WL
 P.M. 7-10-75 Revised Par 321 WL
 N.M. 2-10-75 Rev Par 325X to 325S
 W.J. 8-21-73 Name Change Parcel 326
 S.E.W. 7-17-73 ADDED "NOT ACQUIRED" TO PARCELS 332 & 333
 E.H. 7-10-73 Deleted 325WL & 325WD-2 - See Par 334WL & 334WD
 E.H. 4-23-73 Rev. 328WL-1 TO B.W. 328WL-2 TO G.W. 328T-1 TO AT & 328T-2 TO BT
 W.J. 12-19-72 Added note to all WLU parcels
 REV. DATE DESCRIPTION

SUMMARY OF ADDITIONAL R/W

STATE JOB NO.	FED. RD. DIVISION	STATE	PROJECT
28694(2)	2	OHIO	

GRE - 675 - 5.37

575
616
11
37

TOTAL NUMBER OF _____
 OWNERS _____
 TOTAL TAKES _____
 OWNERS WITH STRUCTURES INVOLVED _____

PARCEL NO.	OWNER	CALCULATED AREA	RECORDED		RECORD AREA	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE		NET RESIDUE		SHEET NO.	TYPE FUND	REMARKS
			BOOK	PAGE					LAND	BLDGs	LEFT	RIGHT			
334 WL 334 WD	Norman B & Evelyn M. Coy A.K.A. Evelyn L. Coy		233 158 156	451 604 294	0.82 AC	0.35 AC	0.62 AC 0.062	0.310 0.041	0.31 AC 0.021		0.139 AC	0	18	I	Green Co (Easement to D.P. & L. Co. (D.B. 387 P.39) included in take
335 WD 335 WU	Donald E. & F.M. Morgan William F. & Ada May Crawford		445	617	15240 s.f.	0	12815 s.f. 2431	0	12815 s.f. 2431	Yes	0	0	25 25		Total Take ; Pt. Lot 33 Pt. Lot 33 To be Acquired in the name of the Little Miami Railroad Co.
336 WD	Chester Sanders & Ruby Sanders		463	625	20048 s.f.	0	2248 s.f.	0	2248 s.f.		0	17800 s.f.	25		Pt. Lot 35
337 WD	Ronald Eugene & Carolyn Lee Gallihar		481	346	20603 s.f.	580 s.f.	4588 s.f.	580 s.f.	4008 s.f.		0	16015 s.f.	25		Pt. Lot 34
338 WL 338 AR	Edith Helfinstine, Executrix of the Estate of Kenneth M. Helfinstine, and Edith Helfinstine		172	358	1.0	0.16	1.00	0.16	0.84 2179.10	Yes	0	0	25		Total Take ; Lot 1 To Little Miami Railroad Co. R/W & Easement to Greene Co. Comm. (D.B. 379, P.115)
339 WL	Earl, Jr. & Betty J. Paxson		174	565	0.848	0	0.848	0	0.848	Yes	0	0	25		Total Take ; Lot 2 - Acquired by State of Ohio (D.B. 447, P.695)
340 WL 340 WU 340 AR	Howard & Ivadelle Douglas	1.796	208	191	1.77	0	1.674 0.122	0	1.674 0.122 0.163	Yes	0	0	25		Total Take ; Lot 3 & 5 To be Acquired in the name of the Little Miami Railroad Co. To Little Miami Railroad Co. R/W & Easement to Greene Co. Comm. D.B. 379 P.119
341 WL-1 341 WL-2 341 WD-1 341 WD-2 341 WU-1 341 WU-2 341 AR-1 341 AR-2 341 EL-1	The Third National Bank & Trust Co "Trustee"	9.680	333	356	9.45	0.056	0.38 0.042 4.122 0.243 1.314 0.83	0 0.042 0 0.014 0 0	0.38 0.0 4.122 0.229 1.314 0.83 0.020 0.086 1.865		0	0	25 26 25 25 25 19,25,35,36 19 25 19 18,19,26		Pt. Lot 4 Pt. Lot 4 To be Acquired in the name of the Little Miami Railroad Co. To be Acquired in the name of the Little Miami Railroad Co. To Little Miami Railroad Co. To Little Miami Railroad Co.
* 342 WL 342 WD	Grace Sease		377 468	310 215	4.44	0	1.67 0.48	0	1.67 0.48	Yes	0	2.29	25 25		R/W & Easement to Greene Co. Comm. D.B. 471, P.656
343 T	Katherine K. Brown		1914	441	0.484	0.196	0.011	0	0.011				17		Mont. Co. - To construct Temporary Rd.
344 WD	Roger L. & Vivian R. McFarland		408	162	20038 s.f.	0	20038 s.f.	0	20038 s.f.	Yes	0	0	26		Total Take ; Lot 54
345 WL	Roger S. & Jill V. Roop		453	316	19992 s.f.	0	2488 s.f.	0	2488 s.f.		17504 s.f.	0	27		Pt. Lot 24
346 WL	David P. Pelphrey & Betty L. Pelphrey		420	692	20612 s.f.	0	567 s.f.	0	567 s.f.		20045 s.f.	0	25 27		Pt. Lot 57
347 WL 347 WD	Donna A. Jackson		399 447 447	548 503 653	8.402	0	4.842 1.068	0	4.842 1.068		0	2.492	25 27		Incl. Lot 25 - Cont. 20040 s.f. (0.460 Ac.) R/W & Easement to Greene Co. Comm. D.B. 471, P.656
348 WL	Henrietta R. Shampton		454	452	20000 s.f.	0	20000 s.f.	0	20000 s.f.	Yes	0	0	27		Total Take ; Lot 10 - Acquired by State of Ohio (D.B. 458, P.49)
349 T	Thomas C. Brown		448	455	20026 s.f.	0	0	0	325 s.f.		0	0	26		Pt. Lot 55 - To grade slope
350 WL 350 WD	Donna A. Jackson		447	503	60000 s.f.	0	53834 s.f. 6166 s.f.	0	53834 s.f. 6166 s.f.	Yes	0	0	27 27		Total Take ; Lots 11, 12 & Pt. 13 Total Take ; Pt. Lot 13
351 WL 351 E	Pauline L. Freauf		493	113	20000 s.f.	0	10262 s.f. 9738 s.f.	0	10262 s.f. 9738 s.f.		0	9738 s.f.	27		Pt. Lot 9
352 WL	Edward Rose of Ohio, Inc. & Edward Rose Homes, Inc.		397 401 464 477	656 318 55 345	0.050	0	0.050	0	0.050		0	0	27		TOTAL TAKE Not Required
353 WL	Cecil G. Boatright		379 421 490 397	640 528 784 592	117.634	0	23.010	0	23.010		0	94.624	27 28	I	
* 341 EL-2							0.884	0	0.884				25, 26	I	

A.A.B.	6-13-75	Rev. WU-1 Take & Calc. Area, Par. 341.
S.E.W.	1-23-75	Added 351 E
A.A.B.	10-30-74	Rev. Par. 351 per Update
A.A.B.	8-8-74	Rev. ER-1 & ER-2 to EL-1 & EL-2, Par. 341
A.A.B.	8-1-74	Add Par. 341 ER-1 & Par. 341 ER-2
A.A.B.	5-13-74	Rev. Owner, Par. 342.
A.A.B.	2-6-74	Rev. Owner, Par. 338.
E.H.	10/23/73	Deleted Structure - Par. 341-WU-1
E.H.	8-17-73	Delete Par. 352 WL, add Par. 352 WL to 353 WL, chg record area & take on Par. 353 WL, add D.B. # P to 353 WL
E.H.	7-10-73	Add Par. 334 (was 325 WU-2 & 325 WD-2) in different CO.
E.H.	3-28-73	Name Chg. Par. 337
E.H.	1-30-73	Name chg. Par. 336
WJL	12-19-72	Added note to all WU parcels
REV.	DATE	DESCRIPTION

SUMMARY OF ADDITIONAL R/W

STATE JOB NO. <i>(08694(21))</i>	FED. RD. DIVISION 2	STATE OHIO	PROJECT
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GRE - 675 - 5.37

TOTAL NUMBER OF _____
 OWNERS _____
 TOTAL TAKES _____
 OWNERS WITH STRUCTURES INVOLVED _____

576
616

12
37

PARCEL NO.	OWNER	CALCULATED AREA	RECORDED		RECORD AREA	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE		NET RESIDUE		SHEET NO.	TYPE FUND	REMARKS
			BOOK	PAGE					LAND	BLDGS.	LEFT	RIGHT			
354 WL 354 WD-1 354 WD-2 354 T-1 354 T-2	<i>Harold H. Wagner</i>		169	602	110.62	0.81	20.27 0.48 0.80	0.18 0.14 0.26	20.09 0.34 0.54 0.51 0.55		14.60	74.24	29 30 30 30 30 31	I	<i>To construct Temporary Rd. To construct Temporary Rd.</i>
355 WD 355 T	<i>Paul G. Moyer 1/2 & Thelma M. Moyer 1/2</i>		333 420	167 516	32.0	0.27	0.16	0.06	0.10 0.02		31.63	0	31 31		<i>To construct Temporary Rd.</i>
356 WD 356 T	<i>Howard Hinckley Wagner</i>		329	689	3.58	0.45	0.60	0.23	0.37 0.02		0	2.76	30 30 31		<i>To construct Drive</i>
357 WD	<i>Donald J. Jackowski, Sr.</i>		491	369	0.65	0.07	0.03	0.02	0.01		0.57	0	31		
358 WL	<i>Winona Matthews Snead and Herbert Snead</i>	2.556	495	324	2.561	0.085	2.556	0.085	2.471	Yes	0	0	30		<i>Total Take</i>
359															<i>Not Used</i>
360 WL 360 WD-1 360 WD-2	<i>James B. & Phyllis O. Goodall</i>		238	17	1.0	0.055	0.426 0.102 0.472	0.033 0.022 -	0.393 0.080 0.472	Yes	0	0	30 30 30		<i>Total Take</i>
361 WL 361 X	<i>Herbert Snead & Winona Snead</i>	7.907	157 189	465 151	7.80	0.057	2.244	0.057	2.187 0.027	Yes	0	5.663	30 30 32		<i>L.L. area = 5.663 Ac.</i>
362 WL 362 WD 362 T	<i>Clifford A. & Mary E. Wolfe</i>		326 190	361 138	28.20	0.16	7.30 2.36	0 0.16	7.30 2.20 0.11		18.54	0	30 30 30 31 32	I	<i>To regrade channel</i>

8

12
37

A.A.B. 5-29-74 Rev. Par. 360 Takes & Res. for Total Take.
 A.A.B. 2-20-74 Rev. Owner and D.B. & P., Par. 358
 W) & 8-27-73 Name Change Parcel 357.

REV. DATE DESCRIPTION

GRE-675-537
GREENE COUNTY
LIMITED ACCESS

FENCE DATA
FOR FENCE QUANTITIES SEE SHEET No. 42

LEGEND FOR R/W FENCE SYMBOLS
C.P.A. - Corner Post Assembly
E.P.A. - End Post Assembly
I.A.P.A. - Intermediate Anchor Post Assembly
L.P.E.C. - Line Post Encased in Concrete

End R/W Acquisition
GRE-675-0.00
I-675-8(1)

Begin R/W Acquisition
GRE-675-5.37
Part I-675-8(5)
Sta 383+37.04

End Project
GRE-675-0.00
I-675-8(13)

Begin Const'n Project
GRE-675-5.37
I-675-8(15)
Sta 308+34.01

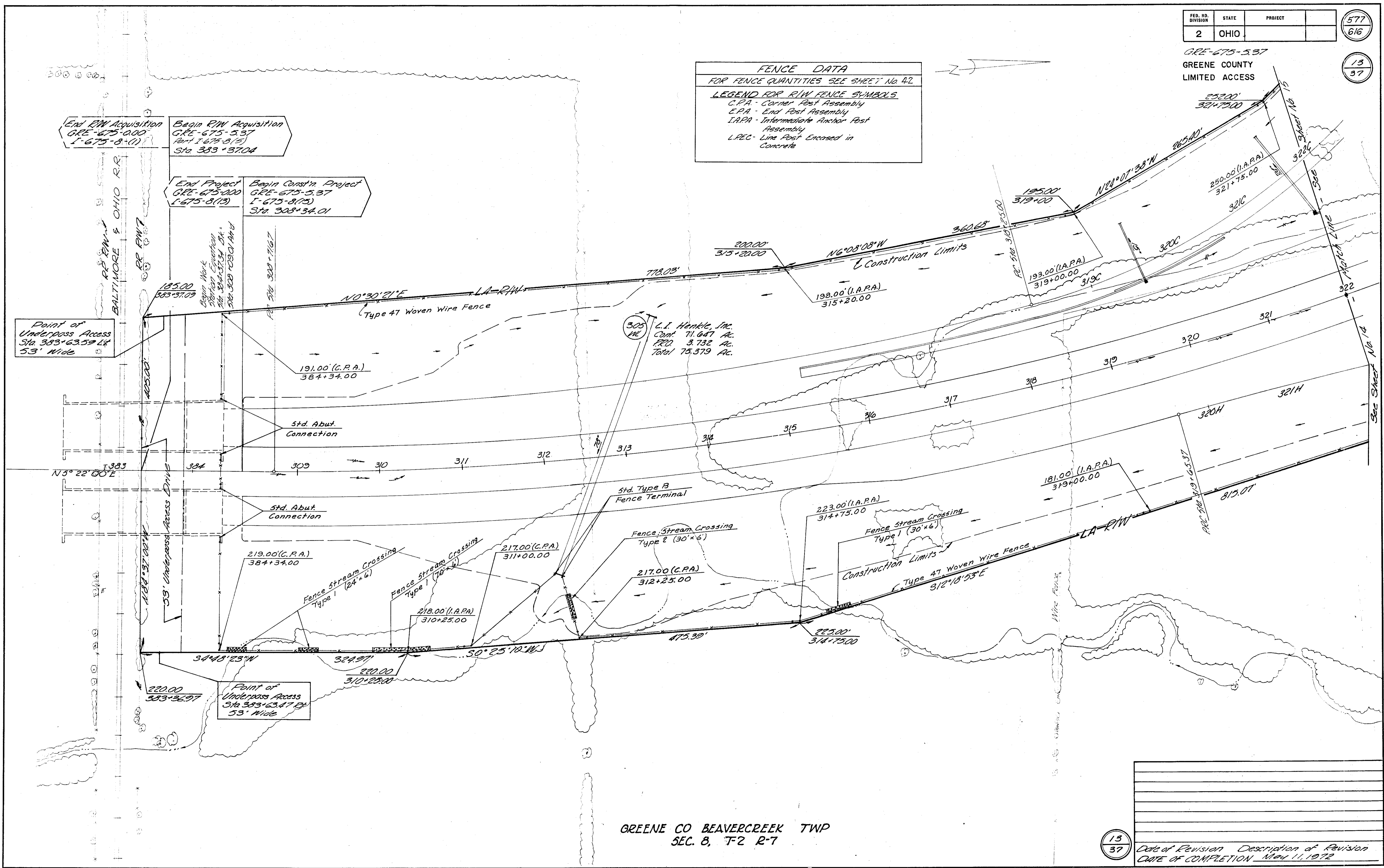
Point of Underpass Access
Sta 383+63.59 L&A
53' Wide

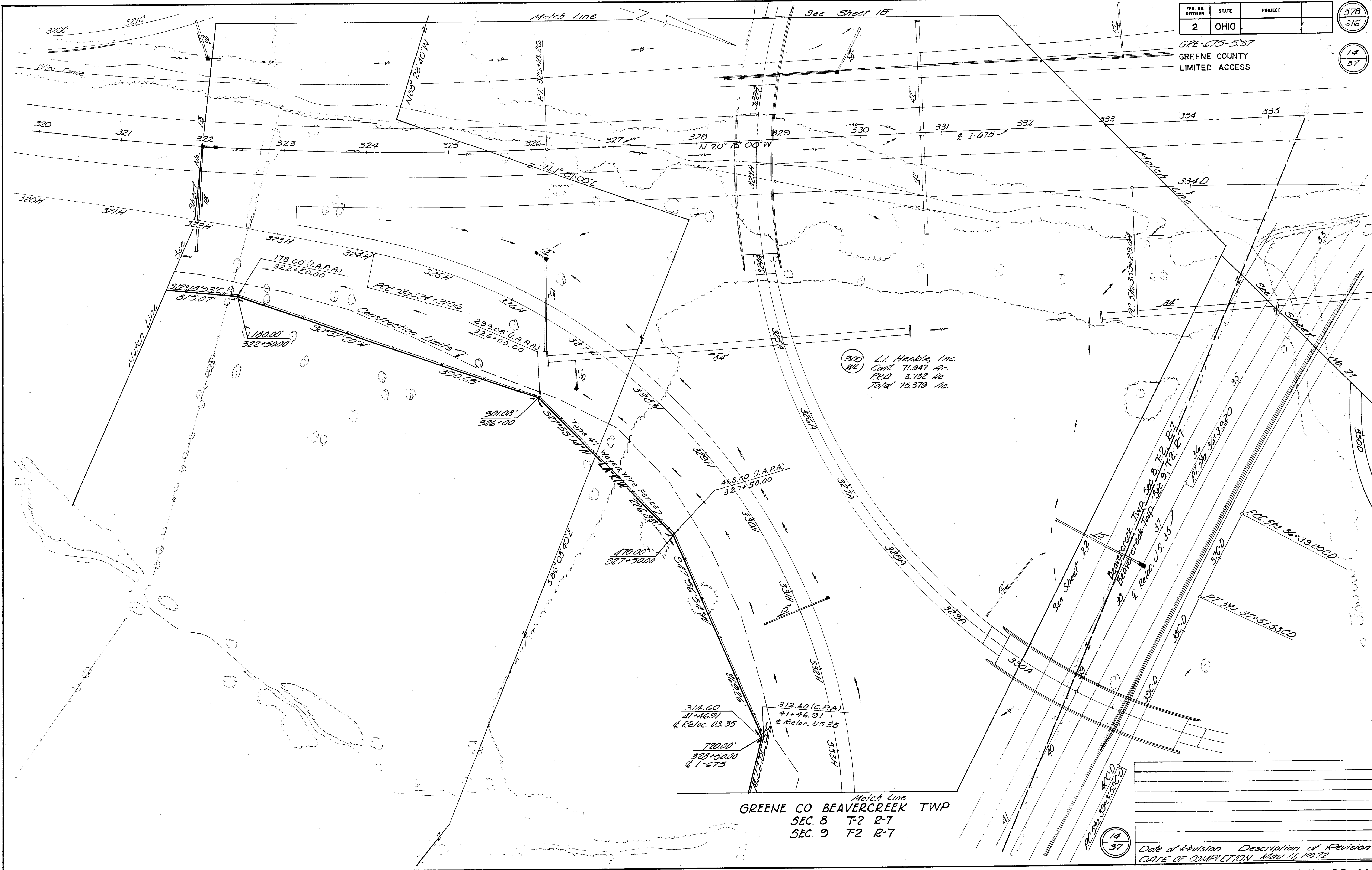
Point of Underpass Access
Sta 383+63.47 R&A
53' Wide

L.I. Henkle, Inc.
Cont. 71.647 Ac.
PRD. 3.732 Ac.
Total 75.379 Ac.

GREENE CO BEAVERCREEK TWP
SEC. 8, T-2 R-7

15	37	Date of Revision	Description of Revision
		DATE OF COMPLETION	May 11, 1972





305
W.L.
L.I. Henkle, Inc.
Cont. 71.047 Ac.
P.R.O. 3.732 Ac.
Total 75.379 Ac.

Match Line
GREENE CO BEAVERCREEK TWP
SEC. 8 T-2 R-7
SEC. 9 T-2 R-7

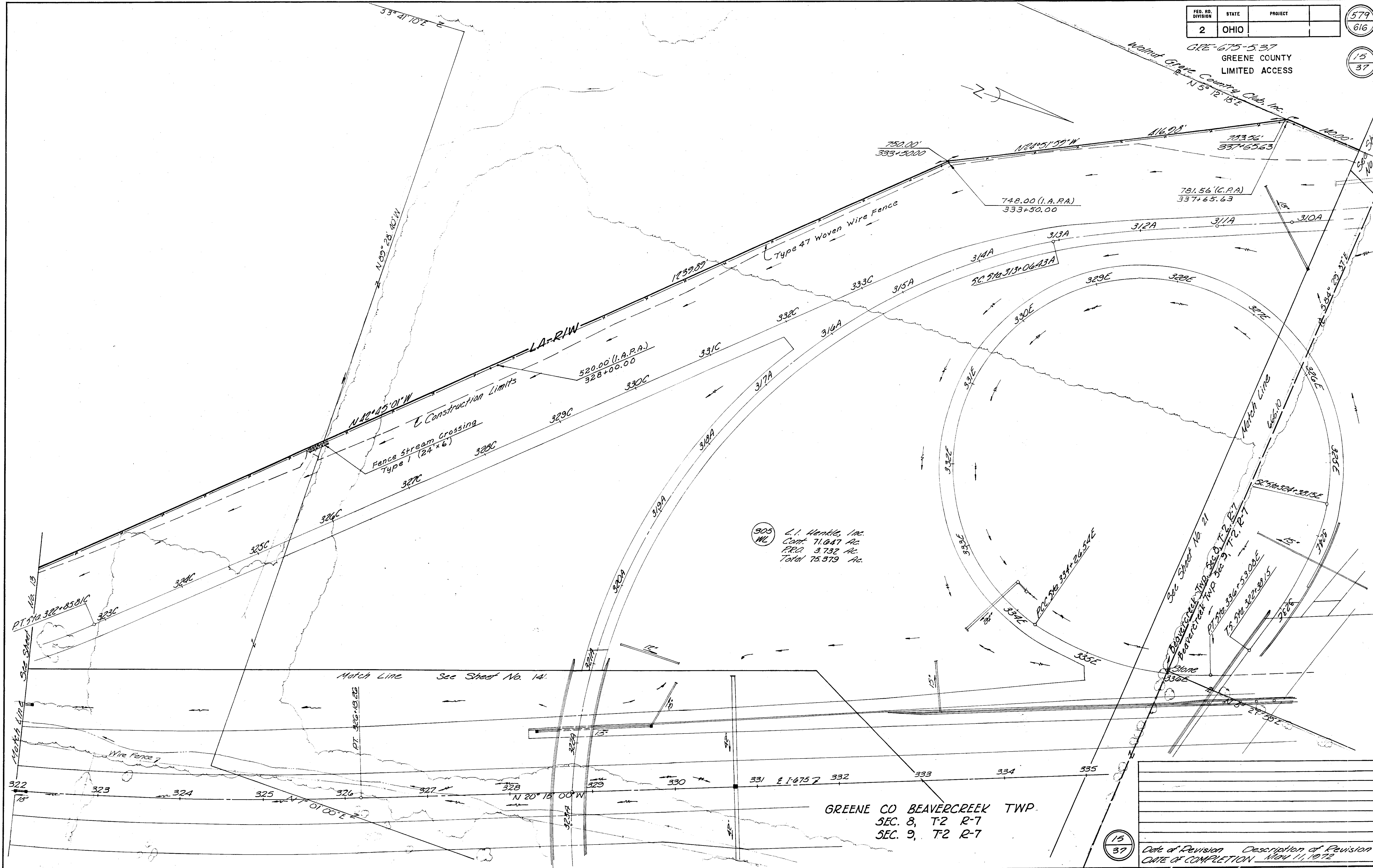
DATE OF REVISION	DESCRIPTION OF REVISION

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

579
616

GRE-675-537
GREENE COUNTY
LIMITED ACCESS

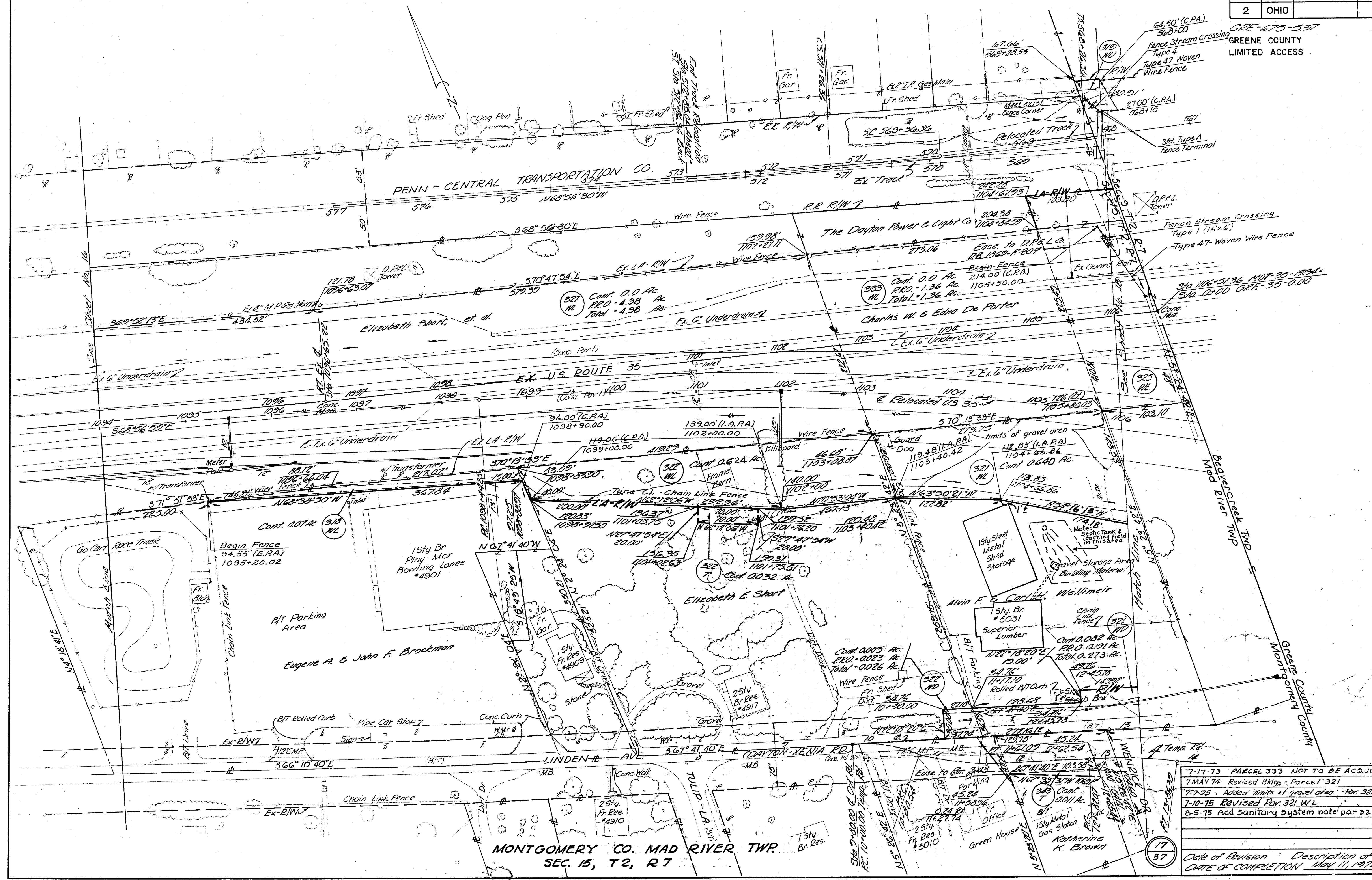
15
37



Date of Revision	Description of Revision
May 11, 1972	DATE OF COMPLETION

U.S. 35 INTERCHANGE R/W PLAN STA. 322+00 TO 314 335+00

GREENE COUNTY LIMITED ACCESS



7-17-73	PARCEL 333 NOT TO BE ACQUIRED	S.E.W.
7 MAY 74	Revised Blags - Parcel 321	P.R.D.
7-7-75	Added limits of gravel area - Par 321	P.R.D.
7-10-75	Revised Par. 321 W.L.	P.W.F.
8-5-75	Add sanitary system note par 321	E.H.

Date of Revision: _____ Description of Revision: _____
 DATE OF COMPLETION: May 11, 1972

MONTGOMERY CO. MAD RIVER TWP.
SEC. 15, T2, R7

US 35 INTERCHANGE R/W PLAN US 35 STA. 1094+00 TO STA. 1106+00



- 302 Albert A. Perkenitz & Caroline L. Perkenitz Cont.
- 313 Garnett M. E. Helen A. Reeves
- 314 Gilbert C. & Madeline Carter
- 315 Paul C. & Iva Lovely
- 316 Homer L. & Ellen Q. Neal
- 317 Orthella L. Abernathy
- 323 Norman B. & Evelyn M. Coy
- 328 The Dayton Power & Light Co.
- 331 Herbert R. & Margery A. Stitzel
- 332 Lloyd H. & Lela A. Lander

MONTGOMERY CO MAD RIVER TWP
SEC. 15. T-2. R-7

GREENE CO. BEAVERCREEK TWP
SEC 9 T-2, R-7

A.A.B./8-7-79 - Add Picnic Canopy Pars. 317 & 334
A.A.B./6-16-80 - Add Exist. Sign, Par. 328 AT
A.A.B./11-21-78 - Add Easemts per Lift Sta. Sewer Lines
S.E.W. Chg Par 317E to ER 10/1/78
PRD/12-74 - Rev. A. Par. 317E
PRD/18-26-74 - Added Gas Line, Par. 310
A.A.B./8-74 - Rev. ER-1 to EL-1, Par. 341

NO.	DATE	DESCRIPTION OF REVISION
A.A.B.	7-30-74	Add Par. 341 ER-1
RWA	7/17/74	Added Do not Disturb Note Par. 310
NM	10/1/78	add 4 Drain Par. 310
H.A.	8-15-74	Added Septic Tank & Leaching Field to Par. 300.
S.E.W.	4-23-74	Added Fish Tank, Sewer Tank, Buried to Par. 310
S.E.W.	3-23-74	ADDED 317
NM	12-1-77	Add Leaching Bed & Septic Tank Par. 334
WJR	8/21/73	Name Change Parcel 326
E.H.	12/6/72	Par. 325 Chg. Slope offset front & side distances
E.H.	12/6/72	Par. 310 add dist. to E. Line-99.20
E.H.	12/6/72	Par. 310 add correct bearing on E. line
E.H.	12/18/72	Par. 310T correct bearings on E & W Lines
E.H.	6-29-73	Name Chg. Par. 306
E.H.	7-10-73	Chg. 325WD-2 to 334WD, 325WD-1 to 325WD, 325WD-1 to 325WD
S.E.W.	7-17-73	325WD-2 to 334WD
E.H.	4-23-73	Chg. Par. 328 T1 to 328-AT

NOTE: Wenrick Drive Continued on Sheet 19.

US 35 INTERCHANGE R/W PLAN US 35 STA. 1106+00 TO STA. 1106+93.00
STA. 0+00 TO STA. 7+50

GRE-675-337
GREENE COUNTY
LIMITED ACCESS



Note:
Parcel 341 WD-1 subject to
Aerial Easement to the
Little Miami Railroad Co.
(See Sh. 36 for detail)

- 308 Albert A. Perkenitz & Caroline L. Perkenitz
- 312 Albert A. Perkenitz
- 313 Gannett M. & Helen A. Reeves
- 328 The Dayton Power & Light Co.

J.V.	3-7-79	Add notes, lights, trees, etc., on Wenrick Dr. Detail
A.A.B.	6-13-75	Rev. Par. 341 WU-1 Take.
E.H.	2/4/72	Par. 306 WD-1 added bearings on N. & V. Lines
E.H.	4/23/70	Chg. Par. 328 T2 to 328 BT
E.H.	6-29-73	Name Chg. Par. 306
S.E.W.	7-17-73	PARCELS 308, 309 NOT TO BE ACQUIRED
P.W.F.	10/25/70	Delayed Structure - Par. 341-WD-1
A.A.B.	7-31-74	Add Par. 341 ER-1
A.A.B.	8-8-74	Rev. ER-1 to EL-1, Par. 341
A.A.B.	12-1-78	Add Wenrick Dr. Detail

Date of Revision Description of Revision
DATE OF COMPLETION - May 11, 1972

GREENE CO BEAVERCREEK TWP
SEC. 9. T-2, R-7

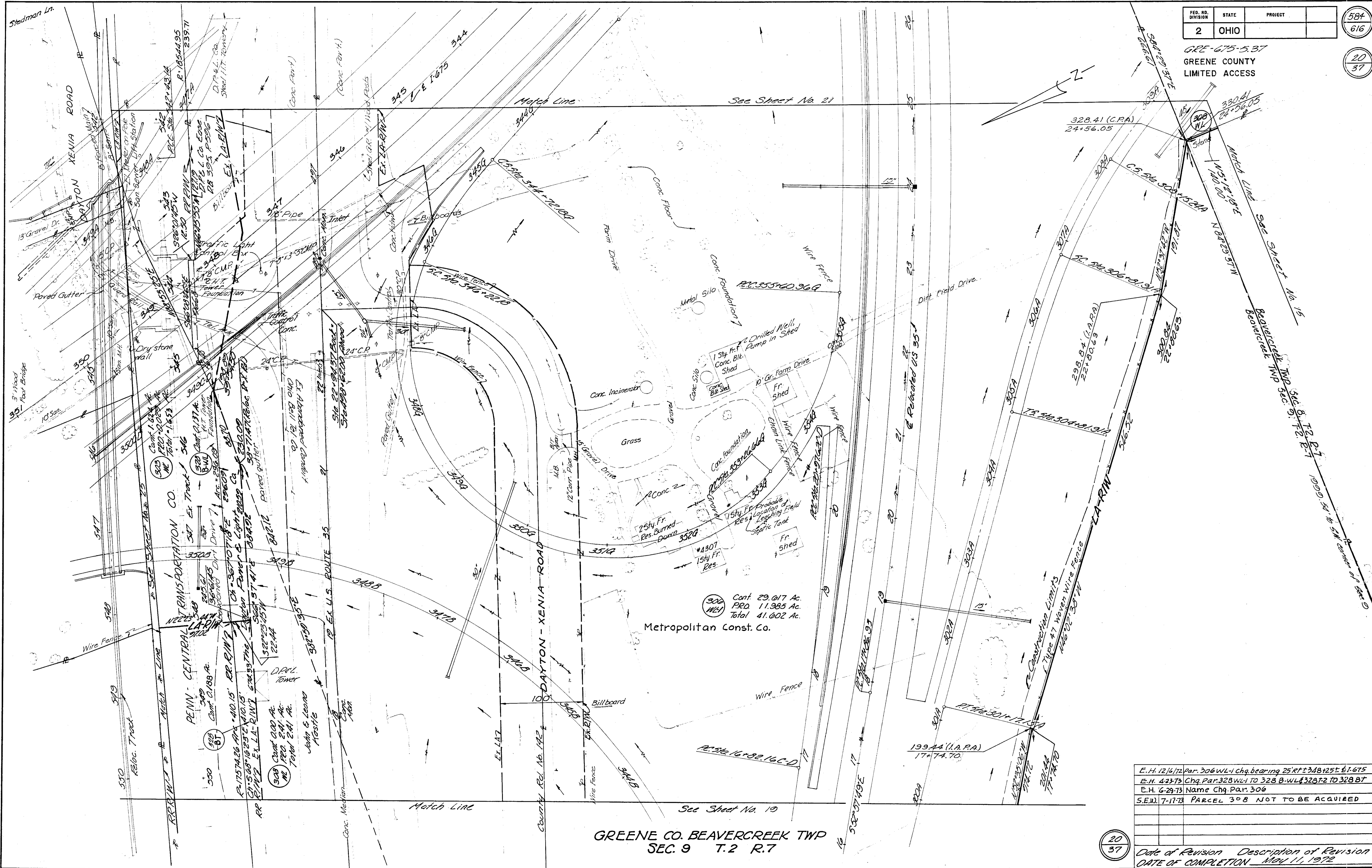
R/W PLAN U.S. 35, STA. 7+50 TO STA. 16+50

FED. NO. DIVISION	STATE	PROJECT
2	OHIO	

584
616

GRE-675-5.37
GREENE COUNTY
LIMITED ACCESS

20
37



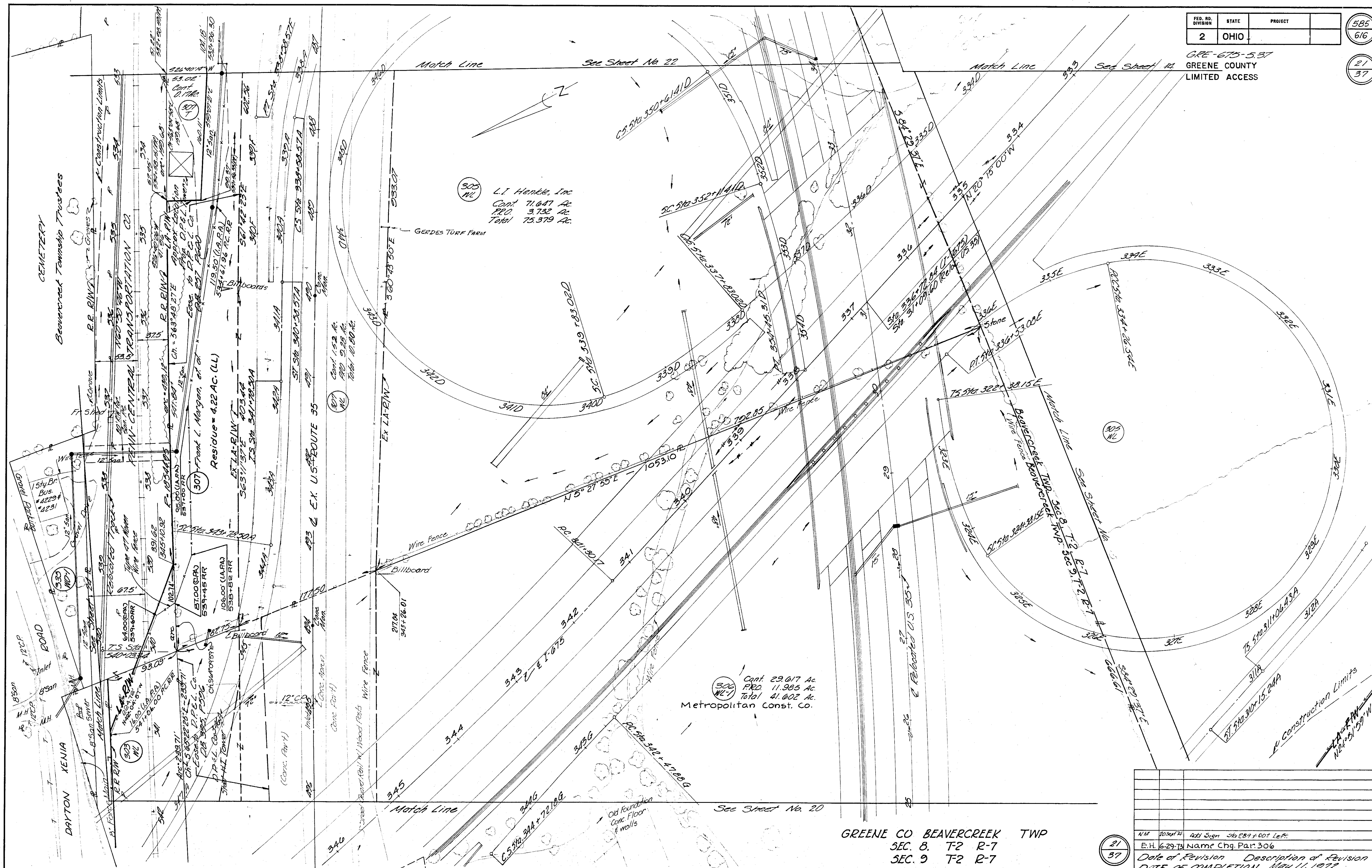
GREENE CO. BEAVERCREEK TWP
SEC. 9 T.2 R.7

E.H. 12-16-72	Par. 306 WL-1 Chq. bearing 25°RT 348±25± E 1675
E.H. 4-23-73	Chq. Par. 328 WL-1 TO 328 B-WL 328±2 TO 328±87
E.H. 6-29-73	Name Chq. Par. 306
S.E.W. 7-17-73	PARCEL 308 NOT TO BE ACQUIRED

Date of Revision	Description of Revision
DATE OF COMPLETION	May 11, 1972

US 35 INTERCHANGE
RWY PLAN - STA 345+00 TO STA 349+25
US 35 STA 16+50 TO STA 25+00

GRE-675-537
GREENE COUNTY
LIMITED ACCESS



300 NL
L.I. Henkle, Inc
Cont. 71.647 Ac.
PRD. 3.752 Ac.
Total 75.399 Ac.

300 NL
Cont. 29.617 Ac.
PRD. 11.985 Ac.
Total 41.602 Ac.
Metropolitan Const. Co.

GREENE CO BEAVERCREEK TWP
SEC. 8. T-2 R-7
SEC. 9 T-2 R-7

DATE OF COMPLETION	DESCRIPTION OF REVISION
May 11, 1972	Name Chg. Par. 306

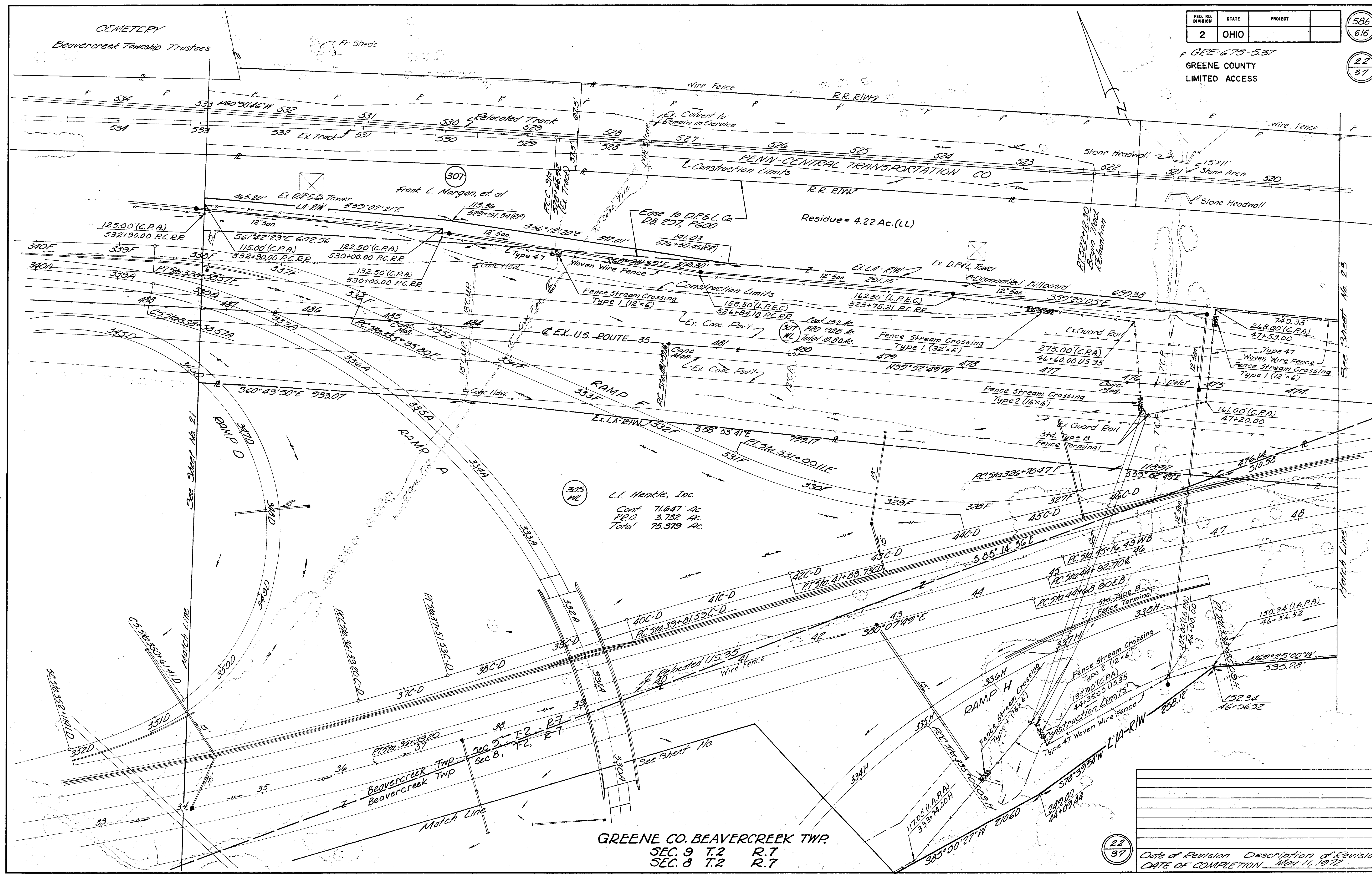
U.S. 35 INTERCHANGE R/W - STA. 333+00 TO STA. 345+00
U.S. 35 STA. 25+00 TO STA. 34+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

586
616

GRE-675-537
GREENE COUNTY
LIMITED ACCESS

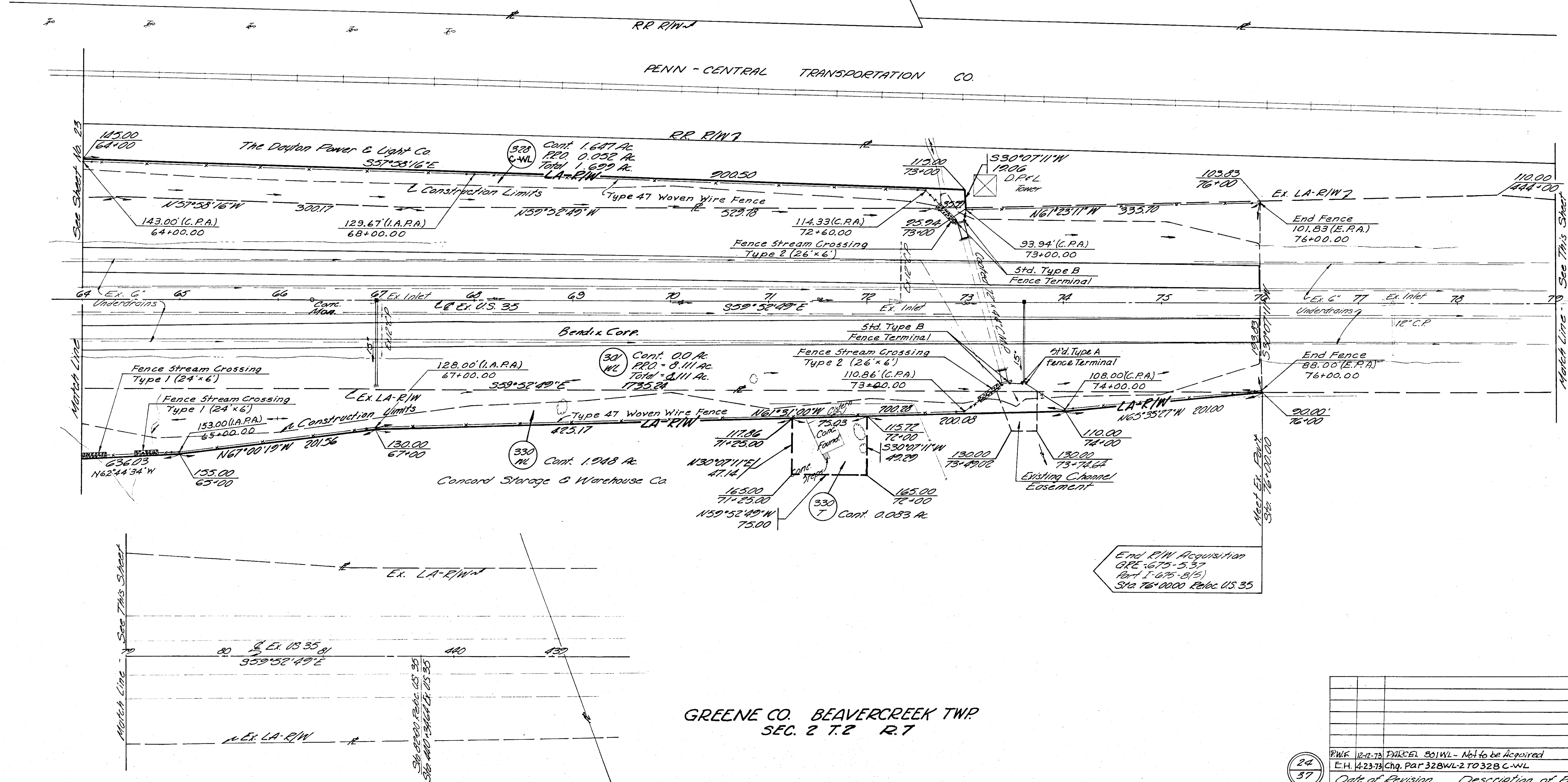
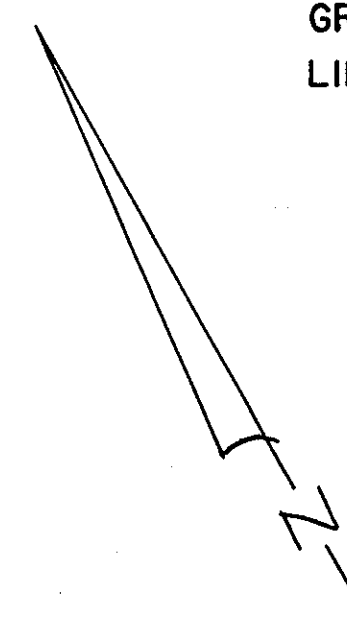
22
37



GREENE CO. BEAVERCREEK TWP.
SEC. 9 T.2 R.7
SEC. 8 T.2 R.7

22
37
Date of Revision Description of Revision
DATE OF COMPLETION May 11, 1972

U.S. 35 INTERCHANGE R/W PLAN US 35 STA. 34+00 TO STA. 48+50



GREENE CO. BEAVERCREEK TWP.
 SEC. 2 T.2 R.7

NO.	DATE	DESCRIPTION

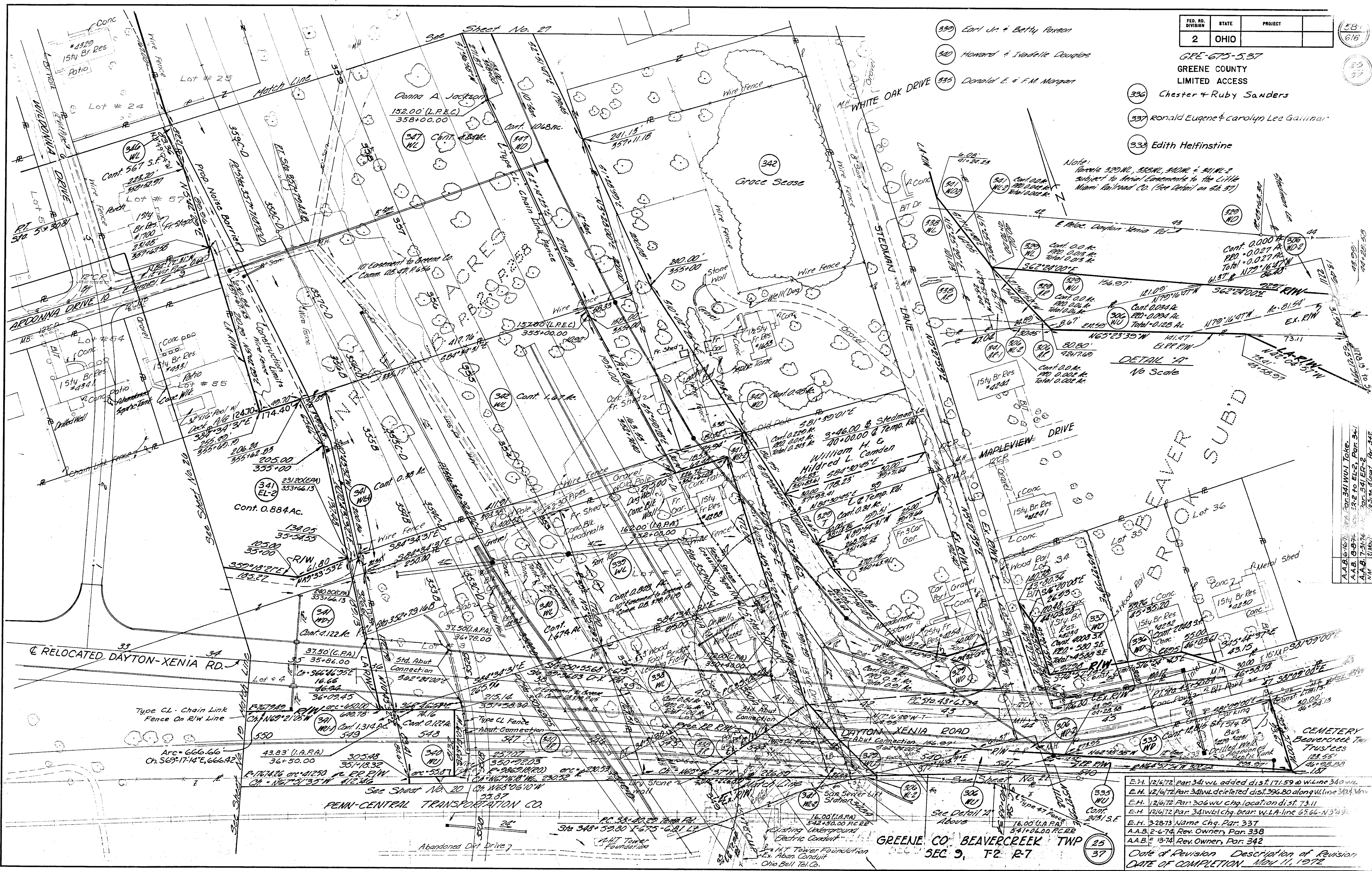
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

GRE-675-537
 GREENE COUNTY
 LIMITED ACCESS

- 330 Carl Jr. & Betty Paxson
- 340 Howard & Madelle Douglas
- 335 Donald E. & F.M. Morgan
- 336 Chester & Ruby Sanders
- 337 Ronald Eugene & Carolyn Lee Gallinar
- 338 Edith Helfinstine

Note:
 Areas 320 WL, 335 WL, 340 WL & 341 WL
 subject to Aerial Easements to the Little
 Miami Railroad Co. (See Detail on Sta. 31)

DETAIL "A"
 No Scale



DATE	REVISION	DESCRIPTION
12/16/72	Par. 341 WL added dist. 171.59 @ W. Line 340 WL	
12/16/72	Par. 341 WL deleted dist. 396.80 along W. Line 340 WL	
12/16/72	Par. 306 WL chg. location dist. 73.11	
12/16/72	Par. 341 WL chg. bear. W. LA. line 6566-N349	
3-28-73	Name Chg. Par. 337	
A.A.B. 2-6-74	Rev. Owner, Par. 338	
A.A.B. 13-74	Rev. Owner, Par. 342	

Date of Revision Description of Revision
 DATE OF COMPLETION MAY 11, 1972

GREENE CO. BEAVERCREEK TWP
 SEC. 9, T2 R7

25
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A.A.B. 6-16-74 Par. 341 WL Take
 A.A.B. 8-8-74 Par. 341 WL Take
 A.A.B. 7-31-74 Par. 341 WL Take
 A.A.B. 8-1-74 Par. 341 WL Take

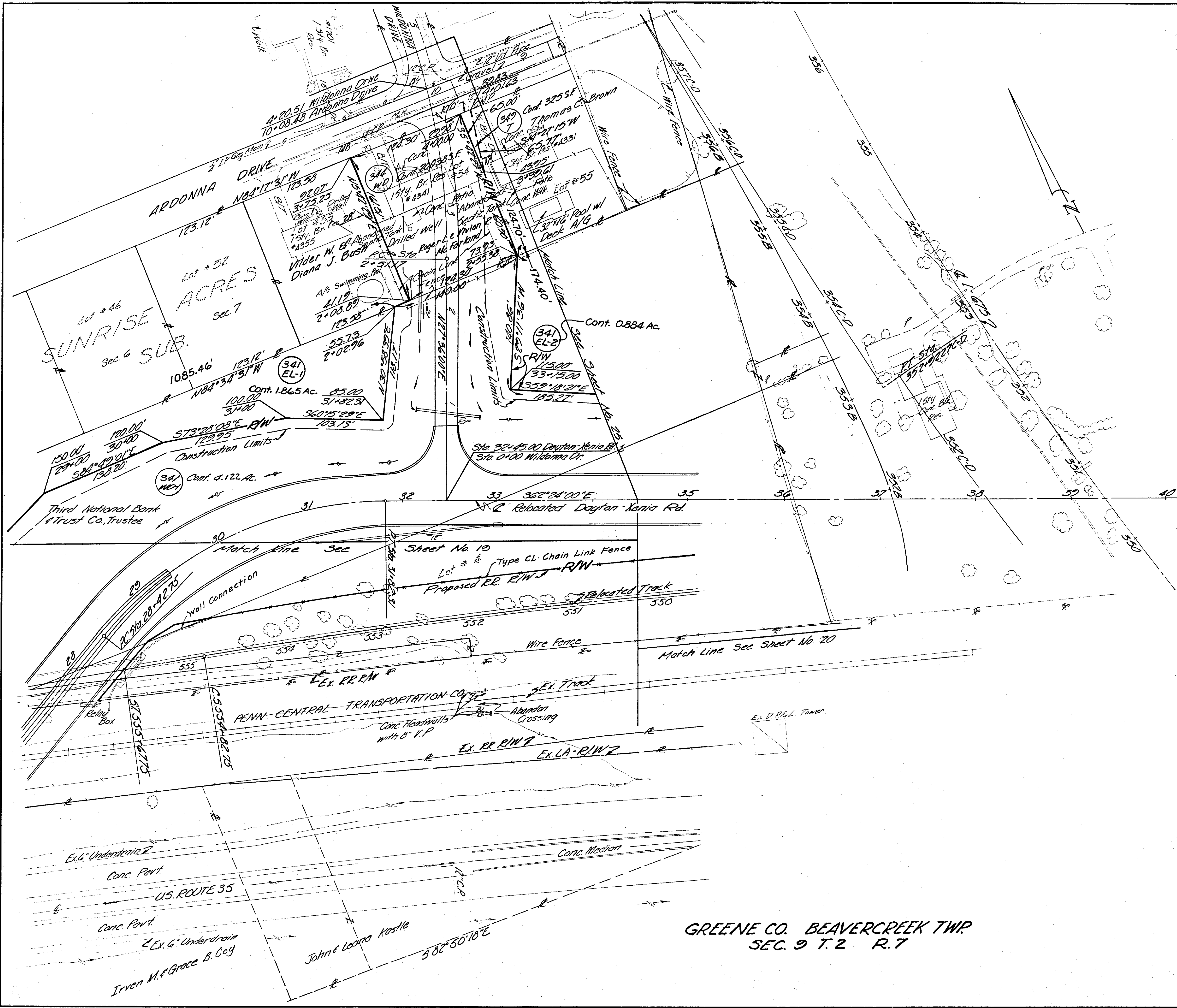
317 341 R/W PLAN STA. 349+25 TO STA. 359+00

FED. RD. DIVISION	STATE	PROJECT	590
2	OHIO		616

GRE 675-537

GREENE COUNTY
LIMITED ACCESS

26
37



GREENE CO. BEAVERCREEK TWP.
SEC. 9 T. 2 R. 7

10-23-73	Deleted Structure - 341-WU-1	
8-1-74	Add Par. 341 ER-1 & Par. 341 ER-2	A.A.B.
8-8-74	Rev. ER-1 & ER-2 to EL-1 & EL-2, Par. 341.	A.A.B.

26
37

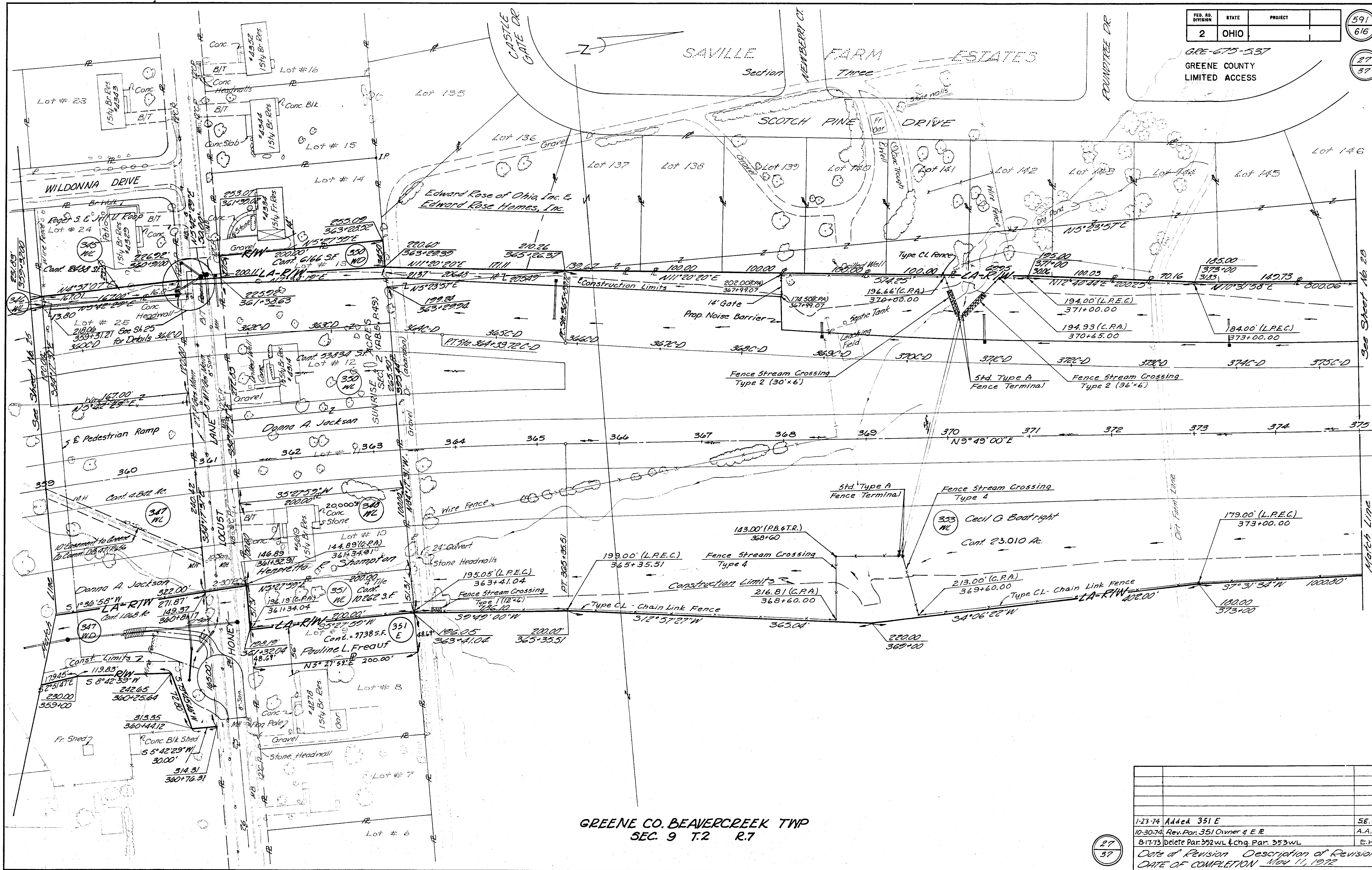
Date of Revision Description of Revision
DATE OF COMPLETION May 11, 1972
RIW PLAN DAYTON-XENIA RD
WILDONNA DRIVE

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

591
616

GRE-675-537
GREENE COUNTY
LIMITED ACCESS

27
37



GREENE CO. BEAVERCREEK TWP
SEC. 9 T.2 R.7

1-23-74	Added 351 E	SE.W.
10-30-74	Rev. Par. 351 Owner & E.R.	A.A.B.
8-17-73	Delete Par. 352 WL & chg. Par. 353 WL	E.H.
Date of Revision Description of Revision		
DATE OF COMPLETION Nov 11, 1972		

27
37

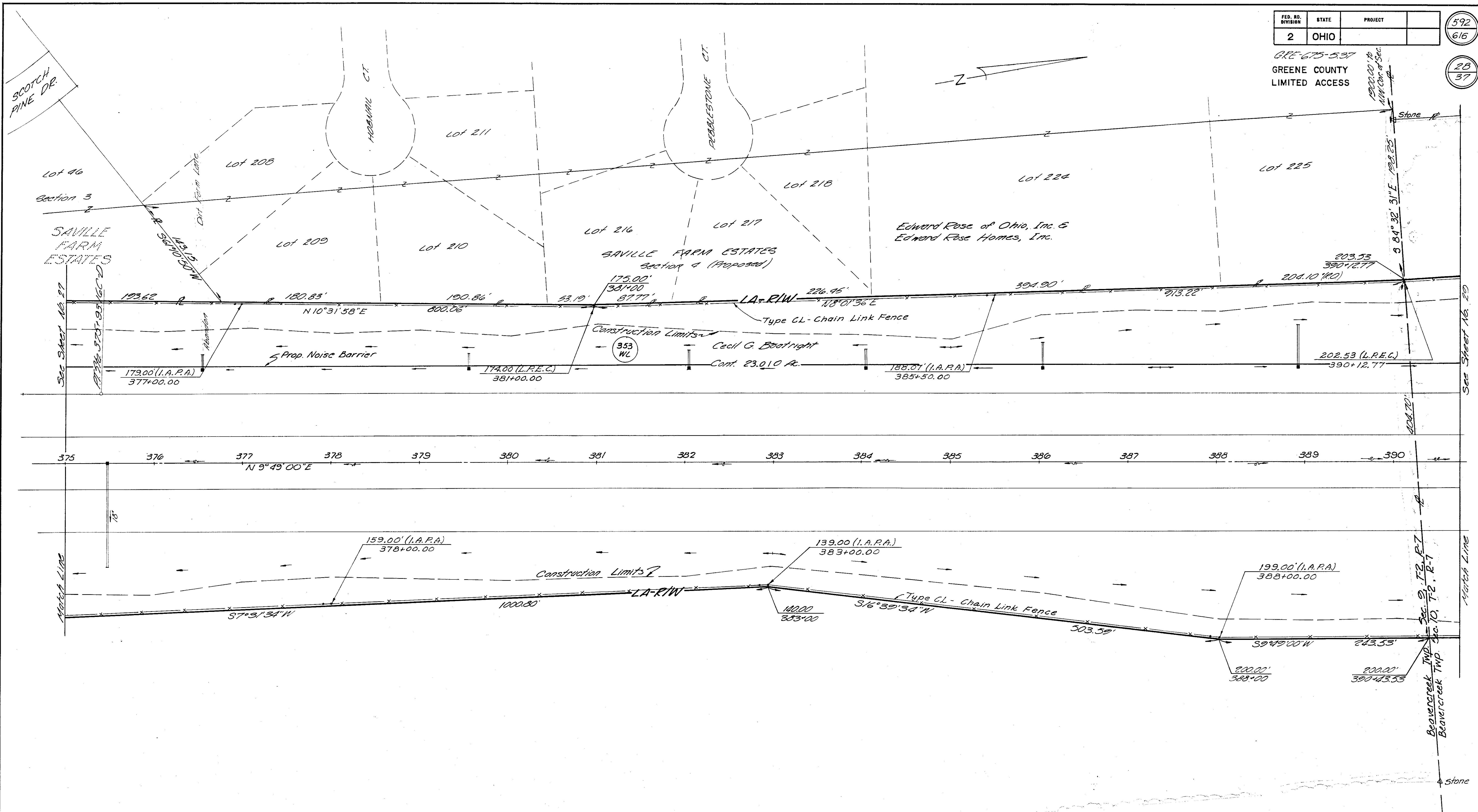
R/W PLAN STA. 359+00 TO STA. 375+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

592
616

GRE-675-537
GREENE COUNTY
LIMITED ACCESS

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37

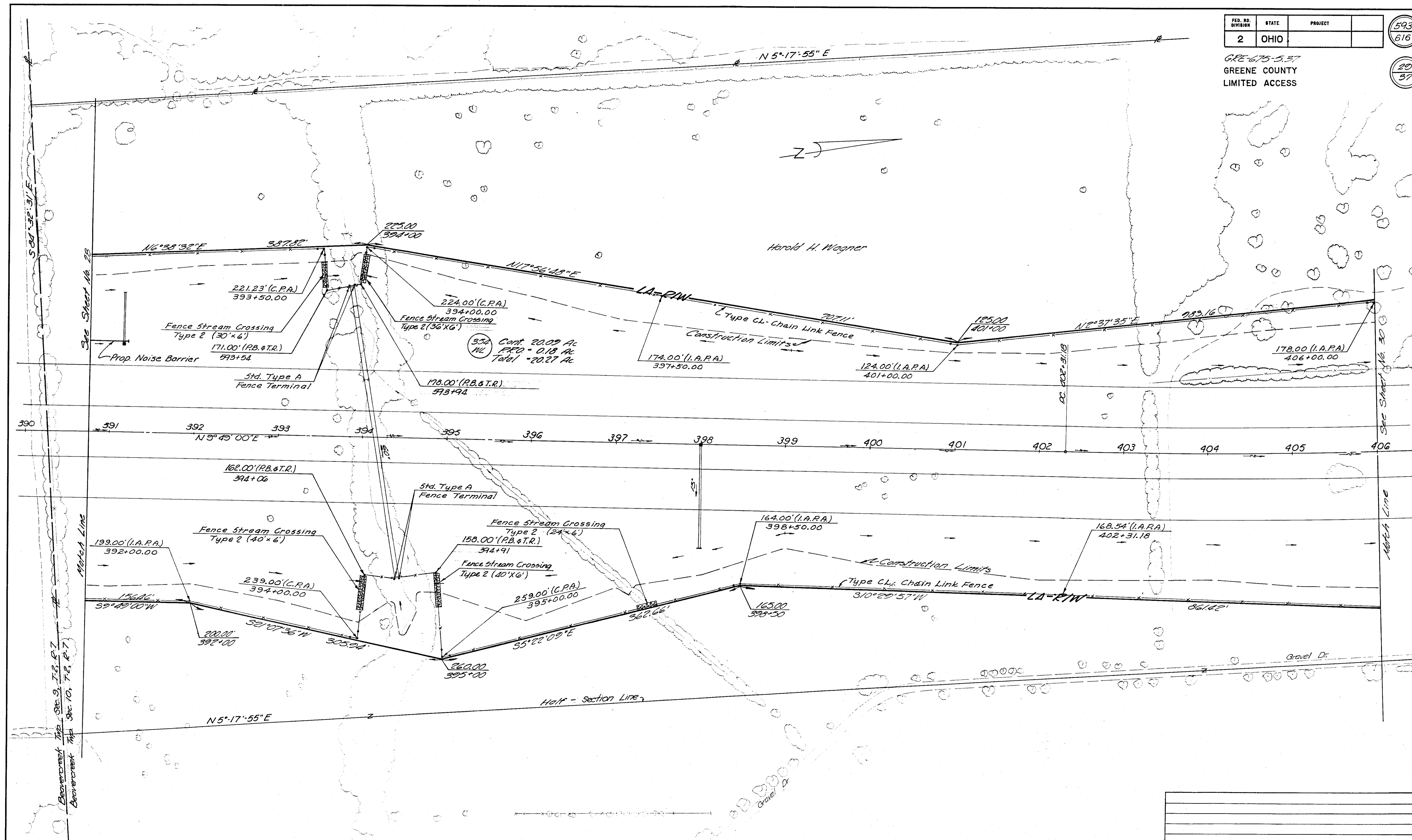


GREENE CO BEAVERCREEK TWP
SEC. 10 T.2 R.7
SEC. 9 T.2 R.7

Date of Revision	Description of Revision
DATE OF COMPLETION	May 11, 1972

28
37

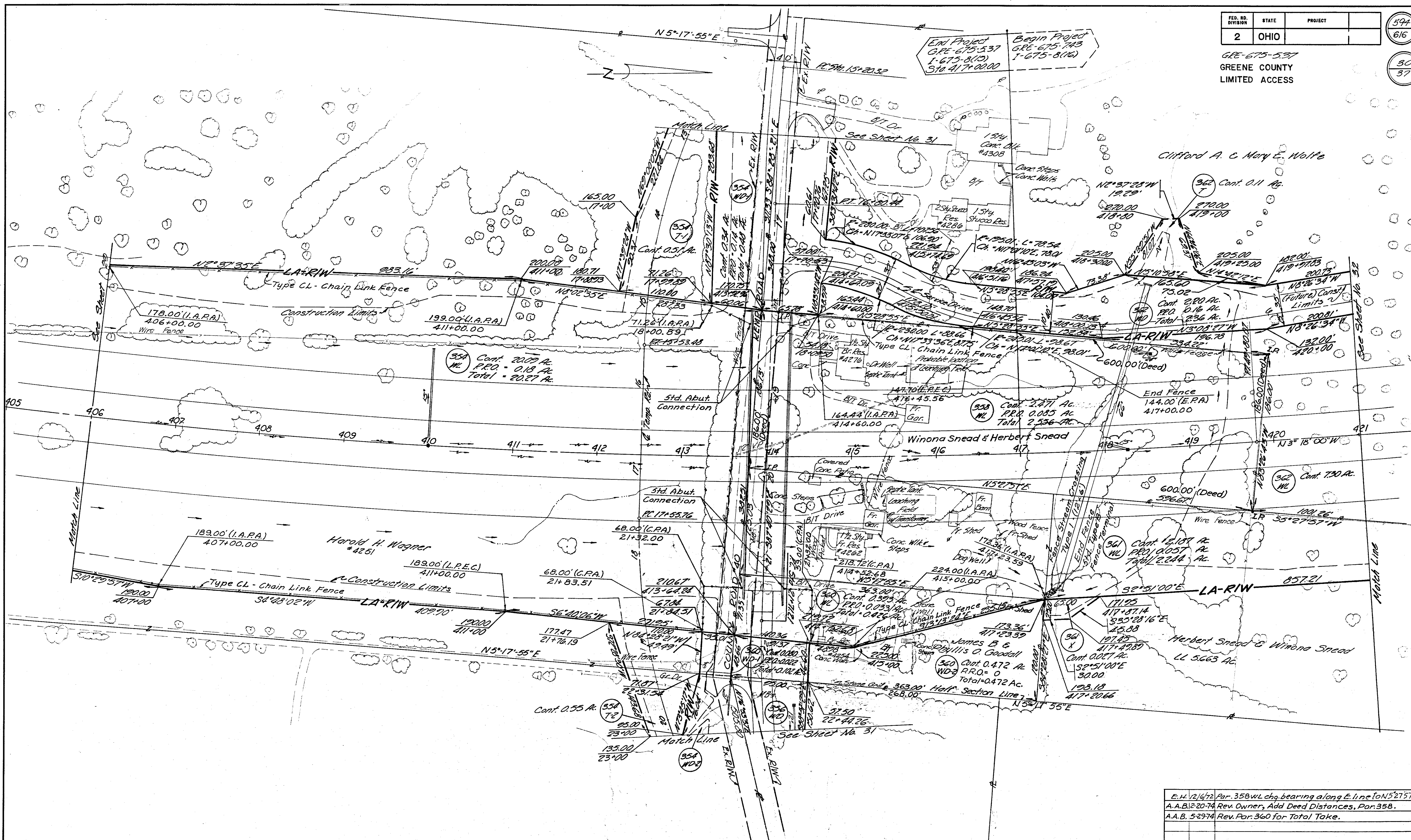
R/W PLAN STA 375+00 TO STA 390+75



GREENE CO. BEAVERCREEK TWP
SEC. 10 T.2 R.7
SEC. 9 T.2 R.7

Date of Revision	Description of Revision
DATE OF COMPLETION	MAY 11, 1972

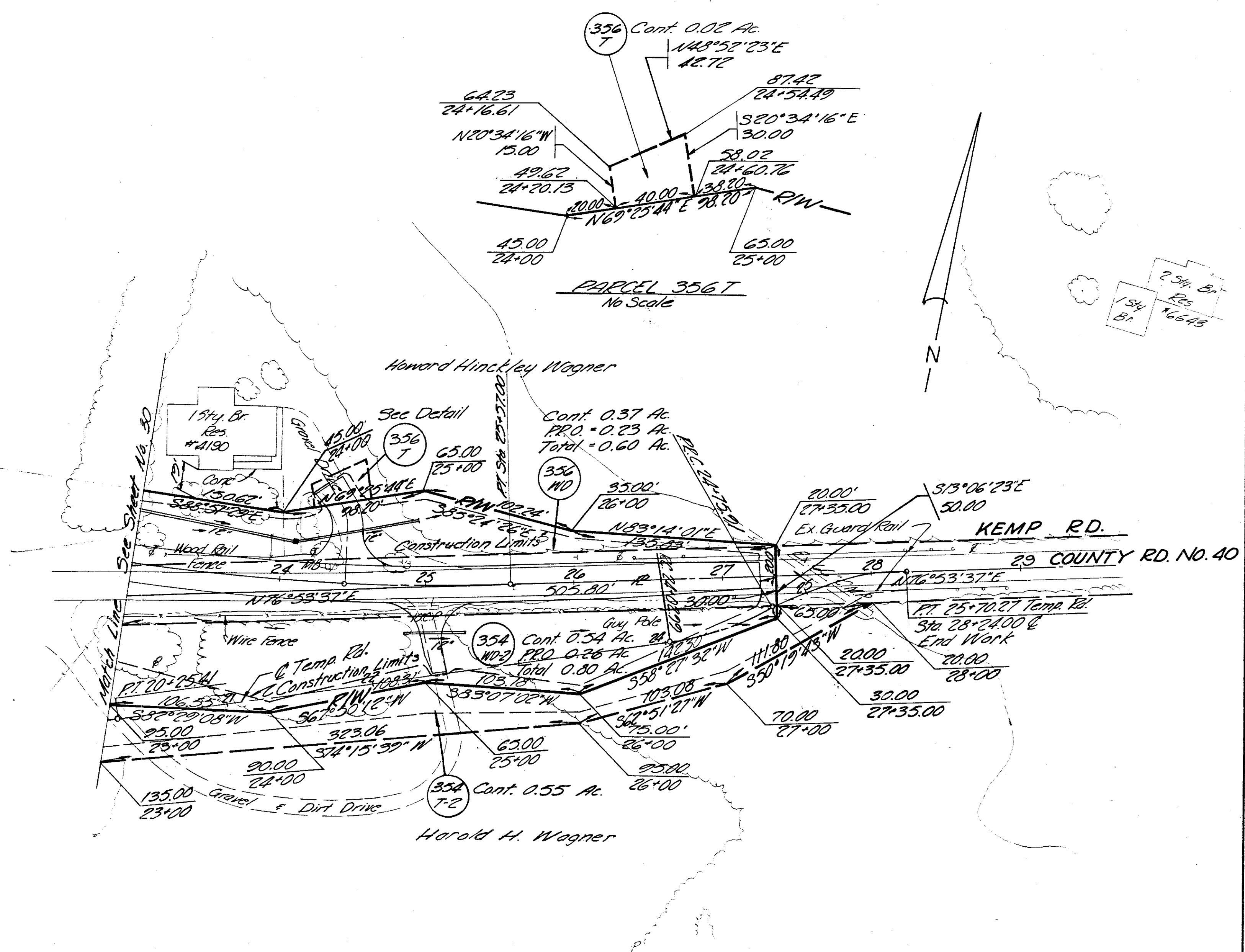
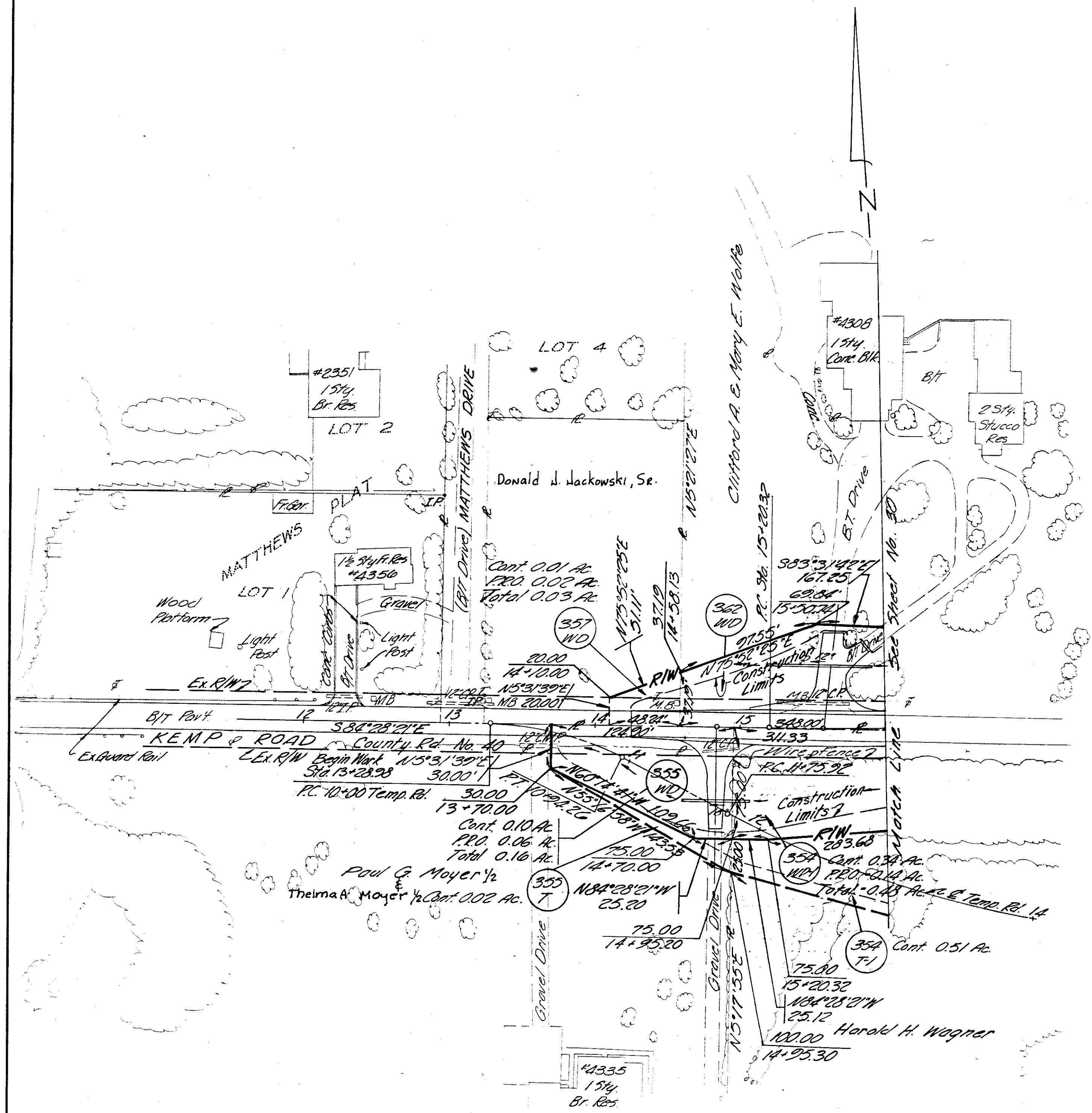
GRE-675-537
GREENE COUNTY
LIMITED ACCESS



GREENE CO. BEAVERCREEK TWP
SEC. 10 T. 2 R. 7

E.H. 12/6/72 Par. 358 WL chg. bearing along E. line to N52°51'00"E
A.A.B. 2-20-74 Rev. Owner, Add Deed Distances, Par. 358.
A.A.B. 5-29-74 Rev. Par. 360 for Total Take.

Date of Revision Description of Revision
DATE OF COMPLETION May 11, 1972



GREENE CO. BEAVERCREEK TWP
SEC. 10 T.2 R.7

31
37

DATE OF REVISION	DESCRIPTION OF REVISION
8-29-73	Name Change Parcel 357
	DATE OF COMPLETION: May 11, 1972

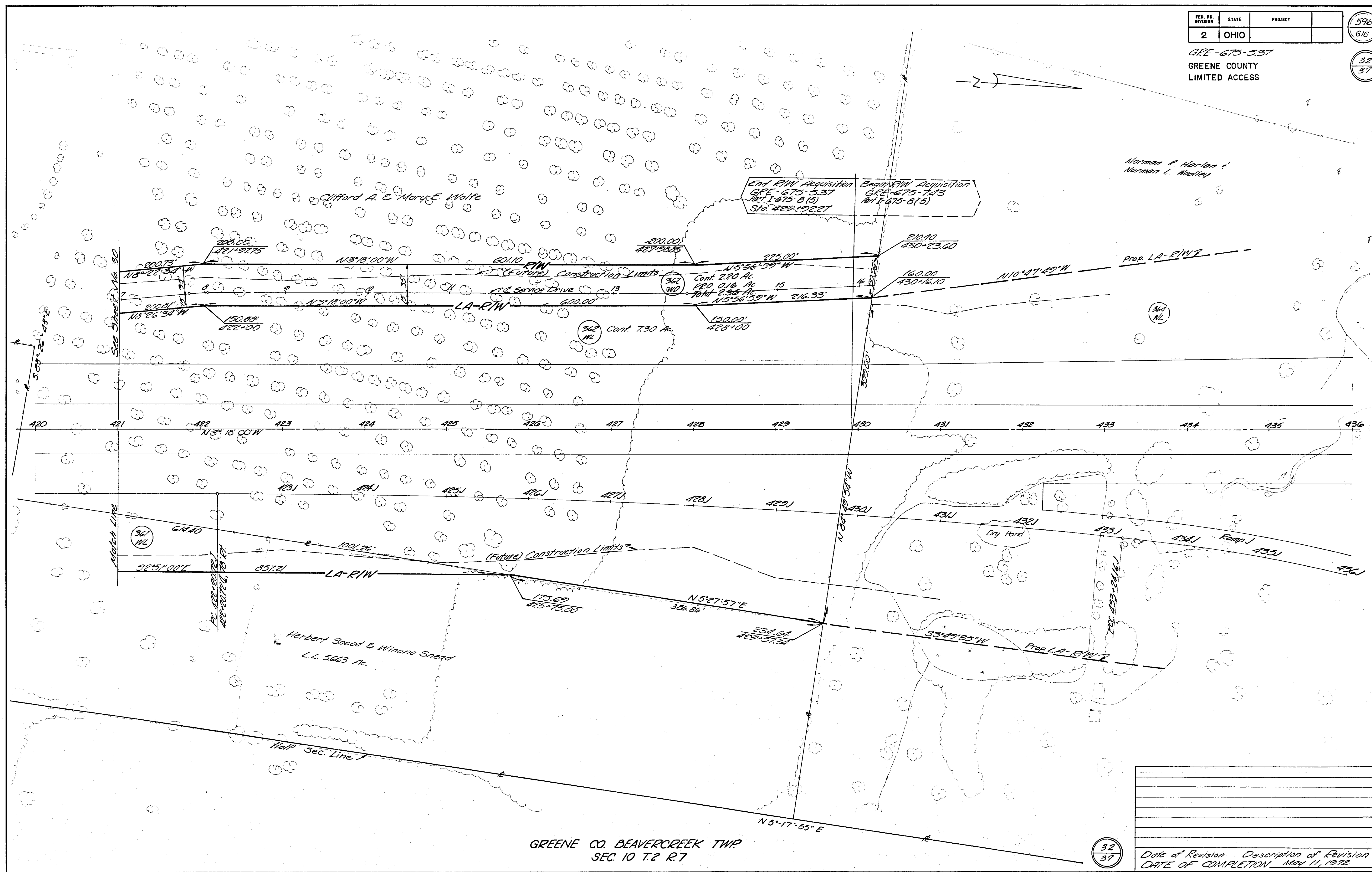
KEMP ROAD R/W PLAN STA. 12+00 TO STA. 16+00
STA. 23+00 TO STA. 29+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

596
616

GRE-675-537
GREENE COUNTY
LIMITED ACCESS

32
37



Norman R. Harlan &
Norman L. Hedley

Clifford A. & Mary E. Wolfe

Herbert Sneed & Winona Sneed
L.L. 5663 Ac.

GREENE CO. BEAVERCREEK TWP.
SEC. 10 T.2 R.7

Date of Revision	Description of Revision
DATE OF COMPLETION	MAY 11, 1972

R/W PLAN STA 421+00 TO STA 436+00

THE LITTLE MIAMI RAILROAD CO. (FEE OWNER)
 THE PENN CENTRAL TRANSPORTATION CO. (LESSEE)
 AERIAL AND HIGHWAY EASEMENTS

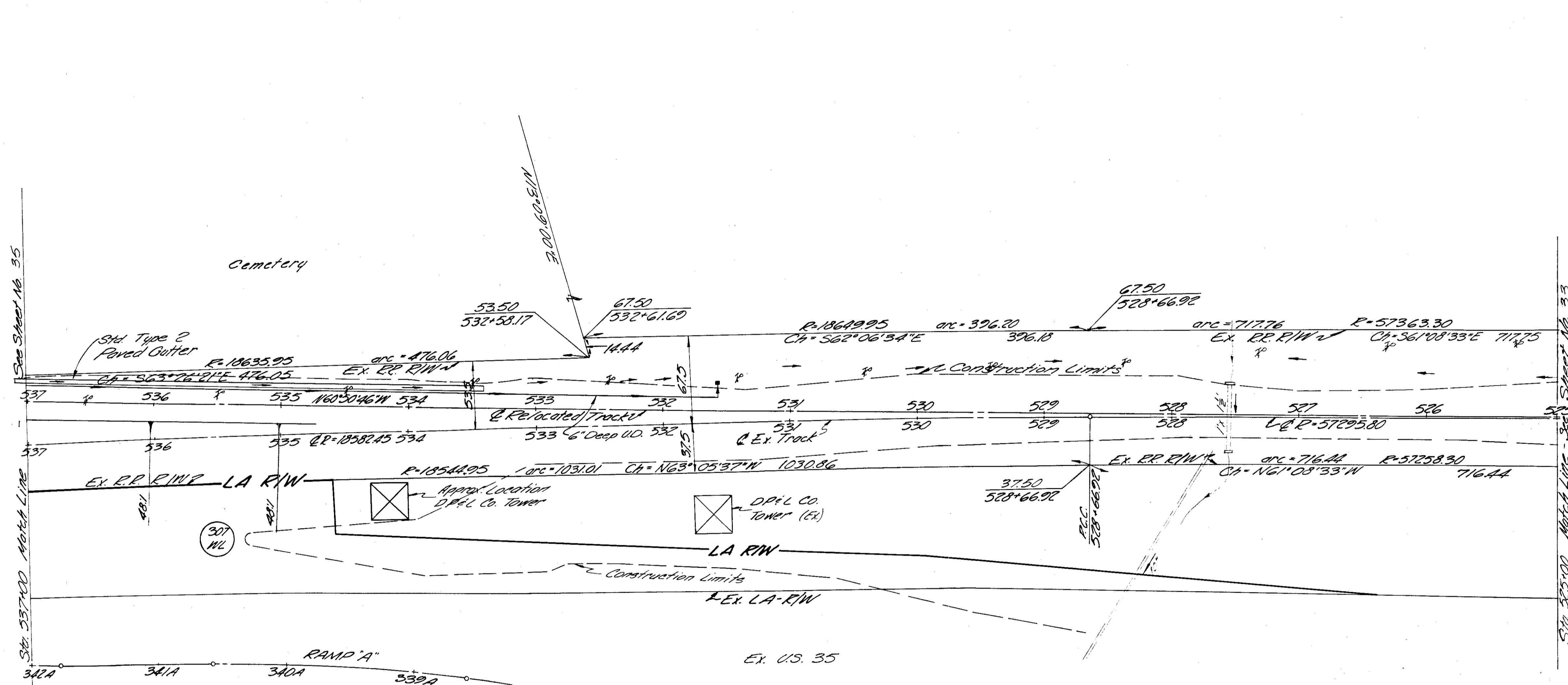
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

598
616

GRE-675-537

R/W PLAN
 LIMITED ACCESS
 SCALE: 1" = 50'

34
37



GREENE CO. BEAVERCREEK TWP
 SEC. 9, T. 2, R. 7

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37

Date of Revision	Description of Revision

R/W PLAN - PENN CENTRAL R.R. Sta. 525+00 to Sta. 537+00

PARCEL EASEMENT No.	GRANTOR	GRANTEE	TOTAL AREA	AREA OF OVERLAP	
				HIGHWAY	AERIAL UTILITY
328 WL	Little Miami Railroad Co.	State of Ohio	71,541.51	—	—
326 NU	Southard Production Co.	State of Ohio	5577.51	26	5577.51
325 NU	William H. & Mildred L. Camden	State of Ohio	2760	—	2760
323 AR	Aerial State of Ohio	Little Miami Railroad Co.	523.51	523.51	523.51
333 NU	Donald E. & F.M. Morgan	State of Ohio	2431.51	—	2431.51
333 AR	Aerial State of Ohio	Little Miami Railroad Co.	7861.51	7861.51	7861.51
340 NU	Howard & Verdelle Couplers	State of Ohio	5394.51	—	5394.51
340 AR	Aerial State of Ohio	Little Miami Railroad Co.	7100.51	7100.51	7100.51
341 NU-1	Third National Bank & Trust Co. TR	State of Ohio	57248.51	—	57248.51
341 AR-1	Aerial State of Ohio	Little Miami Railroad Co.	854.51	854.51	854.51
340 AR	Aerial State of Ohio	Little Miami Railroad Co.	26.51	26.51	26.51

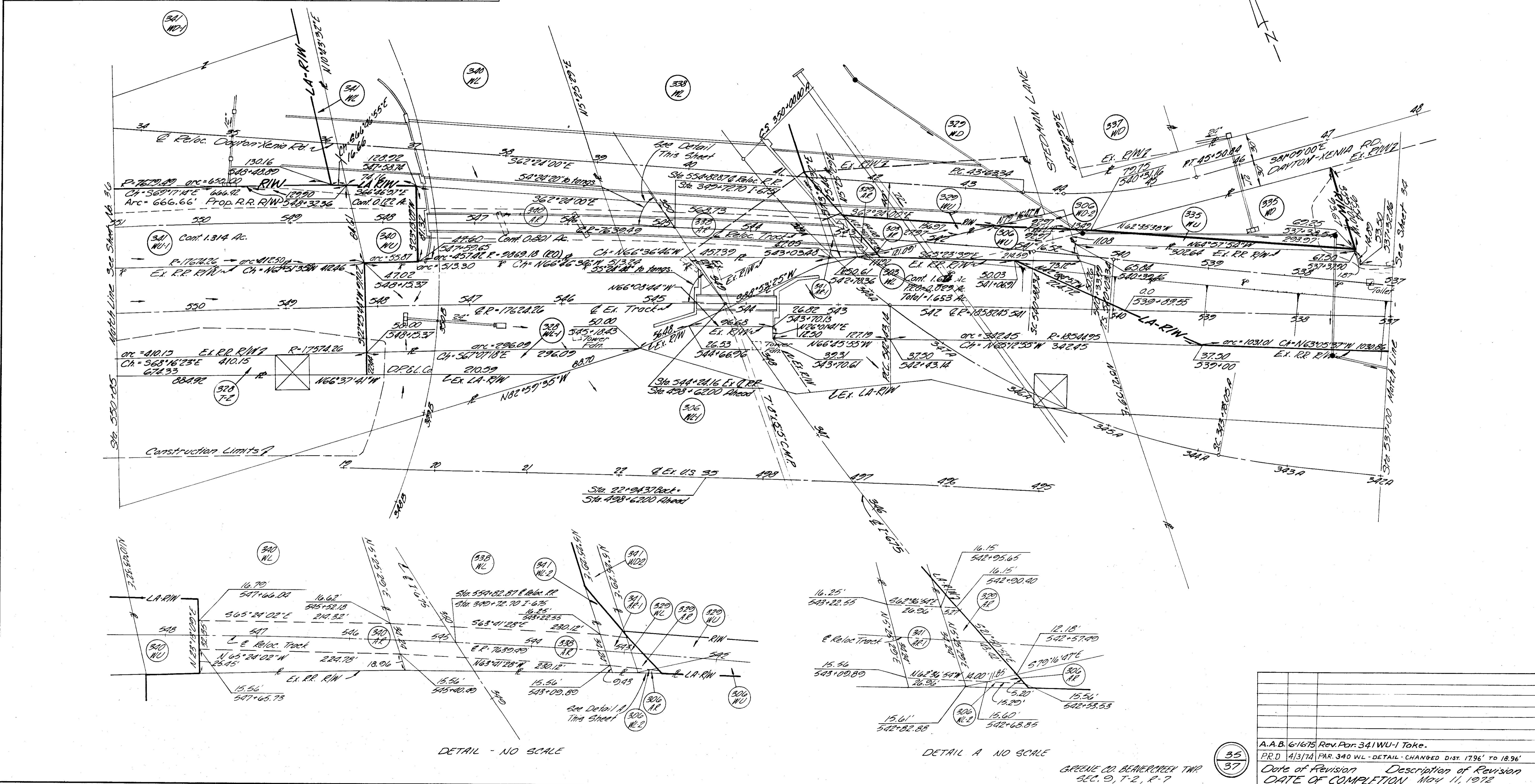
**THE LITTLE MIAMI RAILROAD CO. (FEE OWNER)
THE PENN CENTRAL TRANSPORTATION CO. (LESSEE)
AERIAL AND HIGHWAY EASEMENTS**

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

539
616

GRE-675-537
R/W PLAN
LIMITED ACCESS
SCALE: 1" = 50'

35
37



A.A.B. 6/1675 Rev. Par. 341 NU-1 Take.	
PRD 4/13/74 PAR. 340 WL - DETAIL - CHANGED DIST. 1796' TO 18.96'	
Date of Revision	Description of Revision
DATE OF COMPLETION	May 11, 1972

R/W PLAN - PENN CENTRAL R.R. Sta. 537+00 to Sta. 550+85.5

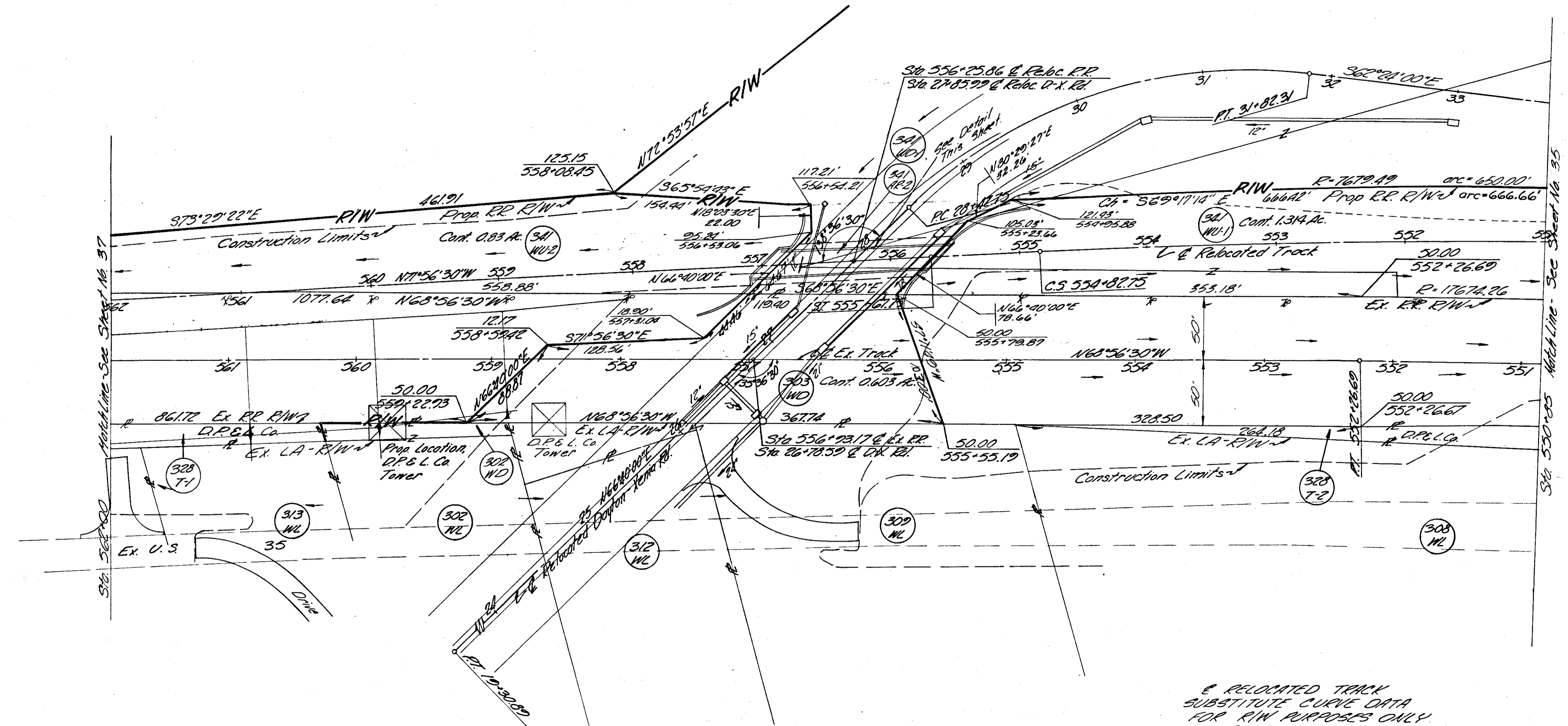
PARCEL NO.	EASEMENT REQUIRED	GRANTOR	GRANTEE	TOTAL AREA	AREA OF OVERLAP		
					HIGHWAY	AERIAL	UTILITY
305AD		Little Miami Railroad Co.	State of Ohio	24,248 S.F.	24,248 S.F.	—	—
341WU1		Third National Bank & Trust Co. TR	State of Ohio	572,485 S.F.	—	—	572,485 S.F.
341WU2		Third National Bank & Trust Co. TR	State of Ohio	359,263 S.F.	—	—	359,263 S.F.
341AR2	Aerial	State of Ohio	Little Miami Railroad Co.	3,747 S.F.	3,747 S.F.	3,747 S.F.	—

THE LITTLE MIAMI RAILROAD CO. (FEE OWNER) THE PENN CENTRAL TRANSPORTATION CO. (LESSEE) AERIAL AND HIGHWAY EASEMENTS

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

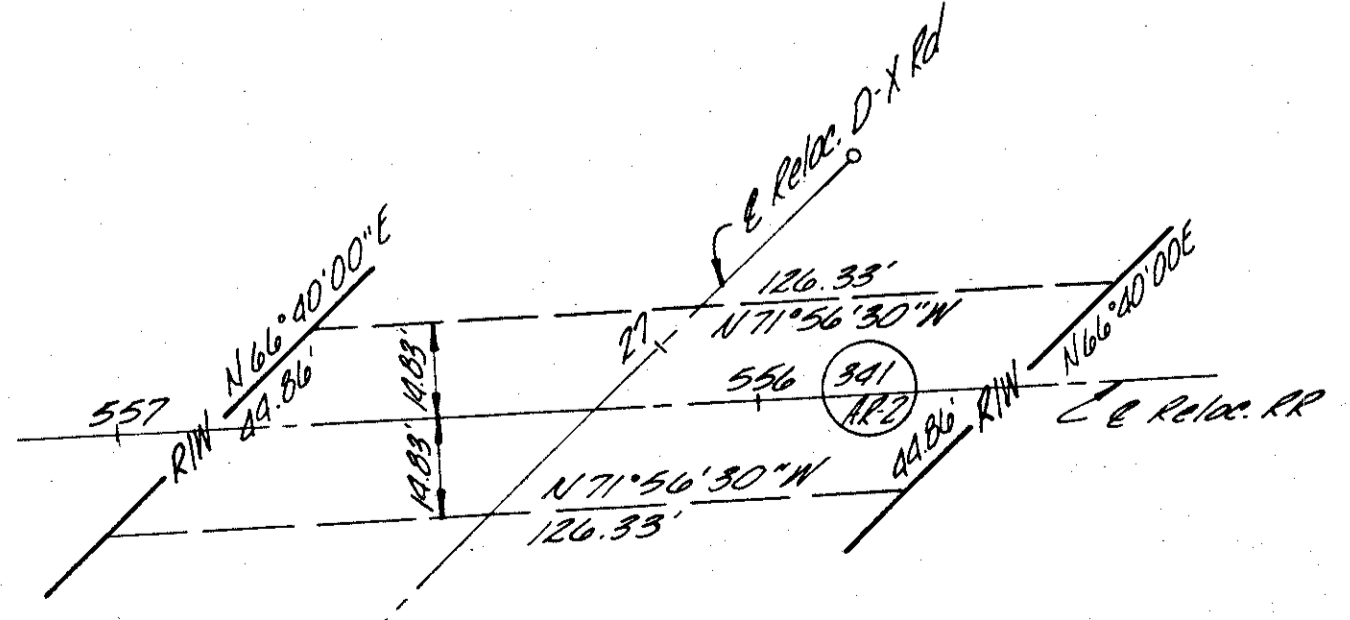
GRE-675-5.37

R/W PLAN
LIMITED ACCESS
SCALE: 1" = 50'



**RELOCATED TRACK
SUBSTITUTE CURVE DATA
FOR R/W PURPOSES ONLY**

PI Sta 554+11.08
 $\Delta = 0^{\circ}10'07''$
 $DC = 0^{\circ}33'44''$
 $R = 10100.22'$
 $L = 50.67'$
 $T = 28.33'$
 $PC = 554+82.75$
 $PT = 555+39.42$



DETAIL PAR. 341 AR.2
No Scale

GREENE CO. BEAVERCREEK TWP
SEC. 9, T-2, R-7

6-13-75	A.A.B.	Rev. Plan 341WU-1 Take
Date	Rev.	Description of Revision
DATE OF COMPLETION		MAY 11, 1972

PARCEL NO.	EASEMENT REQUIRED	GRANTOR	GRANTEE	TOTAL AREA	AREA OF OVERLAP		
					HIGHWAY	AERIAL	UTILITY
510 NU	Water Utility	Cameron W. & Ariko Albright	State of Ohio	3407.51	—	—	3407.51
520 NU	Water Utility	Muriel Annie Chidester	State of Ohio	3554.51	—	—	3554.51
523 NU	Water Utility	Joseph R. Jr. & Dierke K. Coulart	State of Ohio	3265.51	—	—	3265.51
524 NU	Water Utility	Donald D. & Doris R. Livesey	State of Ohio	3050.51	—	—	3050.51
526 NU	Water Utility	Neurence C. & Norma L. Williams	State of Ohio	3051.51	—	—	3051.51
541 NU-2	Water Utility	Third National Bank & Trust Co. TN	State of Ohio	35,963.51	—	—	35,963.51

**THE LITTLE MIAMI RAILROAD CO. (FEE OWNER)
THE PENN CENTRAL TRANSPORTATION CO. (LESSEE)
AERIAL AND HIGHWAY EASEMENTS**

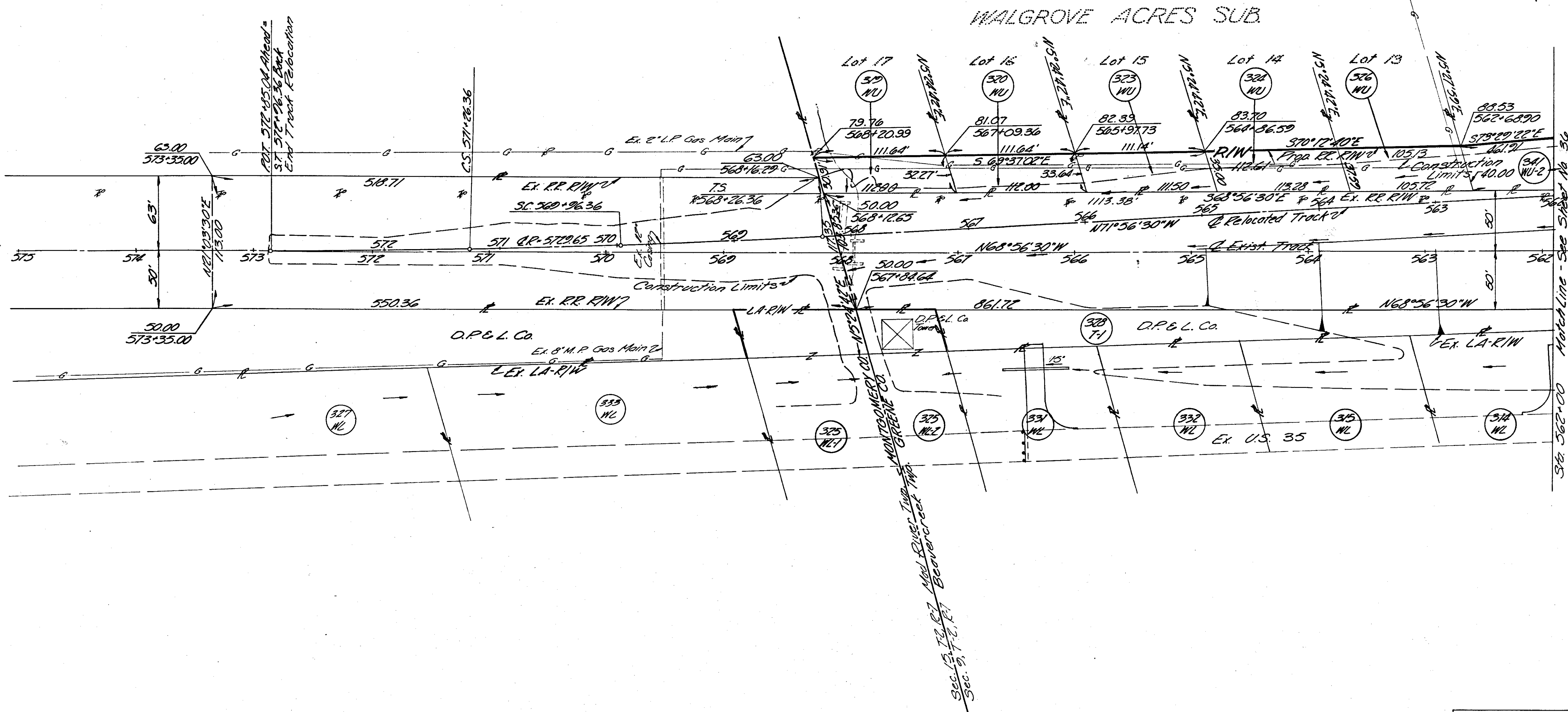
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

601
616

GRE-675-537

R/W PLAN
LIMITED ACCESS
SCALE: 1" = 50'

37
37



GREENE CO. BEAVERCREEK TWP
SEC. 9, T-2, R-7
MONTGOMERY CO. MAD RIVER TWP
SEC. 15, T-2, R-7

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Date of Revision Description of Revision
DATE OF COMPLETION May 11, 1972

R/W PLAN - PENN CENTRAL RR Sta 562+00 to Sta 575+00

RECORDED
AUG 29 1968

GENERAL INFORMATION

INTRODUCTION

THE PROJECT CONSISTS OF THE CONSTRUCTION OF APPROXIMATELY 2.0 MILES OF IR 675, BEGINNING APPROXIMATELY 0.6 MILES SOUTH OF USR 35 AND 0.36 MILE WEST OF GRANGE HALL ROAD, EXTENDING NORTHWARD AND TERMINATING 300 FEET NORTH OF EXISTING KEMP ROAD. INCLUDED IN THIS REPORT ARE SOIL PROFILES OF RELOCATED USR 35, RELOCATED USR 35 INTERCHANGE RAMP A, B, C, D, E, F, G, AND H, RELOCATED DAYTON-XENIA ROAD, RELOCATED WILDONNA DRIVE, RELOCATED KEMP ROAD AND RELOCATED GRANGE HALL ROAD.

FOR MAXIMUM PROPOSED CUTS AND FILL EMBANKMENTS, SEE THE PROJECT INDEX ON THIS SHEET.

GEOLOGY AND OBSERVATIONS OF THE PROJECT

THE PROJECT IS LOCATED ON THE GLACIATED LEXINGTON PENEPLAIN, WITH THE ALIGNMENT TRAVERSING THE DISSECTED UPLANDS AND OUTWASH PLAINS EAST OF THE BROAD FLOODPLAIN OF THE MAD RIVER. IN AN AREA WHERE MODERATELY DEEP TO DEEP GLACIAL DRIFT AND OUTWASH DEPOSITS OVERLIE SHALE AND LIMESTONE BEDROCK, OF ORDOVICIAN AGE. A LOW WET AREA IS LOCATED BETWEEN IR 675 STATIONS 364+00 AND 373+00. A WATER SATURATED ZONE IS LOCATED IN THE VICINITY OF IR 675 STATION 476+00. A MAN-MADE FARM POND IS LOCATED BETWEEN IR 675 STATIONS 528+00 AND 531+00.

EXPLORATION

EXPLORATORY BORINGS WERE MADE BY MEANS OF TRUCK-MOUNTED MECHANICAL SOIL AUGER AND HAND AUGER (IN DIFFICULT ACCESS AREAS), BETWEEN FEBRUARY 19 AND MARCH 1, 1968 AND APRIL 25 AND MAY 7, 1968. INCLUDED WITH THIS REPORT ARE LOGS OF BORINGS MADE FOR THE STRUCTURE FOUNDATION INVESTIGATIONS FOR THE PROJECT.

INVESTIGATIONAL FINDINGS

MATERIALS ENCOUNTERED ON THE PROJECT WERE PREDOMINANTLY COMPRISED OF SANDY SILTS (A-4g), WITH SOME GRAVELS (A-1-a), SANDY GRAVELS (A-1-b AND A-2-4), SANDS (A-3c), SILT CLAYS (A-6c) AND CLAYS (A-7-6), GENERALLY HAVING LOW MOISTURE CONTENTS AND MOISTURE CONTENTS IN THE LOWER PORTION OF THE PLASTIC RANGE.

FROST SUSCEPTIBLE SILTS WERE ENCOUNTERED WITHIN THREE FEET BELOW PROPOSED GRADE AT RELOCATED DAYTON-XENIA ROAD STATION 23+60.

WET AND/OR ORGANIC OR PEAT MATERIALS WERE ENCOUNTERED AT IR 675 STATIONS 312+75, 322+00, 328+50, 335+50, 358+15, 364+00, 366+00, 371+00, 373+00 AND 395+00; RELOCATED USR 35 STATIONS 21+00, 25+00, 39+50 AND 44+20; RELOCATED USR 35 INTERCHANGE RAMP A STATIONS 334+50 AND RAMP D STATION 349+50; RELOCATED DAYTON-XENIA ROAD STATION 15+00, AND RELOCATED GRANGE HALL ROAD STATION 17+00.

AN ARTESIAN CONDITION WAS ENCOUNTERED AT IR 675 STATION 325+00.

LEGEND FOR PROJECT AVERAGE RESULTS OF TESTS— 467 SAMPLES TESTED

DESCRIPTION	H.R.B. CLASS	OHIO CLASS	% AGG.	% C. SAND	% F. SAND	% SILT	% CLAY	LIQUID LIMIT NP	PLASTICITY INDEX NP	WATER CONTENT 12	SAMPLES TESTED 16
GRAVEL	A-1-a(0)	A-1-a	62	17	12	5	4	NP	NP	12	19
GRAVEL WITH SAND	A-1-b(0)	A-1-b	44	23	19	8	6	NP	NP	12	19
FINE SAND	A-3(0)	A-3	22	25	44	5	4	NP	NP	18	2
COARSE AND FINE SAND	----	A-3c	12	21	47	11	9	NP	NP	10	10
GRAVEL OR STONE FRAGMENTS WITH SAND AND SILT	A-2-4(0)	A-2-4	31	20	18	14	17	21	4	13	9
GRAVEL WITH SAND, SILT AND CLAY	A-2-6(0)	A-2-6	46	9	12	14	19	33	14	18	2
STONE FRAGMENTS WITH SAND, SILT, AND CLAY	A-2-7(1)	A-2-7	35	22	12	6	25	46	21	23	1
SANDY SILT	A-4(4)	A-4c	16	10	18	30	26	21	5	13	153
SILT	A-4(8)	A-4b	3	2	5	61	23	24	2	20	11
SILT AND CLAY	A-6(7)	A-6c	11	7	13	34	35	29	11	21	17
SILTY CLAY	A-6(9)	A-6d	18	6	10	27	39	39	18	29	4
ELASTIC CLAY	A-7-5(20)	A-7-5	0	2	6	43	49	71	35	38	4
CLAY	A-7-6(16)	A-7-6	7	5	12	31	45	48	25	26	18
FIBROUS PEAT											1
COBBLY ZONE											
TOPSOIL=X'=APPROXIMATE DEPTH.											
AUGER BORING-PLAN VIEW.											
AUGER BORING PLOTTED TO VERTICAL SCALE ONLY.											
FIGURES BESIDE BORINGS INDICATE WATER CONTENT IN PERCENT. E.G. 15											

- WATER CONTENT NEARLY EQUAL TO OR GREATER THAN LIQUID LIMIT.
- ⊖ INDICATES A NON-PLASTIC MATERIAL WITH A HIGH WATER CONTENT.
- W FREE WATER.

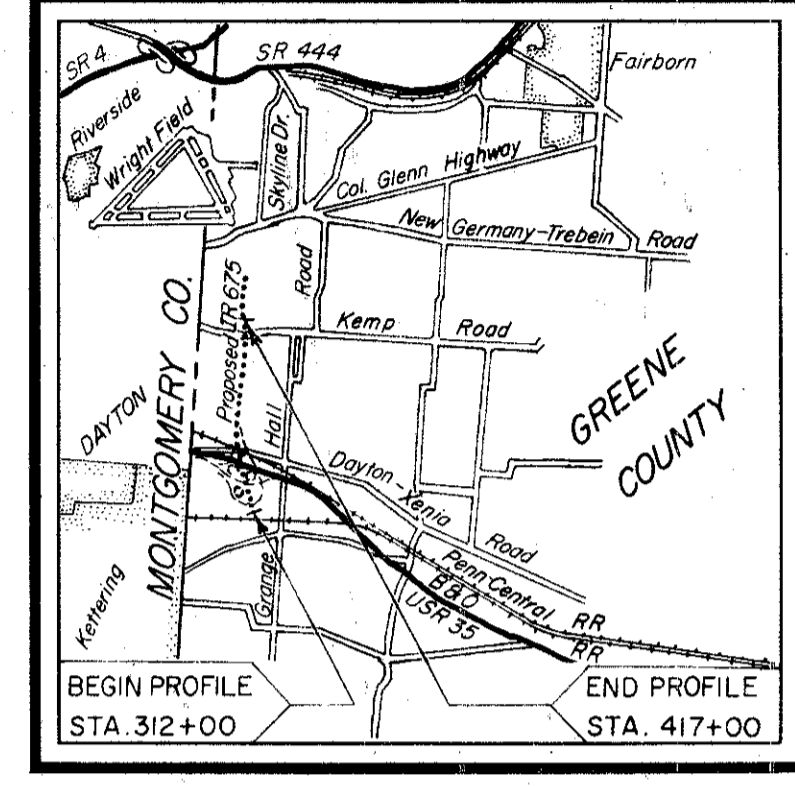
ADDITIONAL SOILS INFORMATION ~ All available soil and bedrock information which can be conveniently shown on the soils profile and structure foundation investigation sheets has been so reported. Additional subsurface investigations may have been made to study some special aspect of the project. Copies of this data, if any, may be inspected in the District Deputy Director's Office, the Bureau of Tests at 1600 West Broad Street, Col.O., the Pavement and Soils Section of the Bureau of Location and Design or in the Bridge Bureau at 25 South Front Street, Col.O.

REVISED 2/10/71

SOIL PROFILE
GRENE COUNTY
GRÉ-675-5.37
OHIO STATE HIGHWAY TESTING LABORATORY
1620 W. BROAD ST. COLUMBUS, OHIO 43223

NOTE: INFORMATION SHOWN BY THIS SUBGRADE PROFILE WAS OBTAINED SOLELY FOR USE IN ESTABLISHING DESIGN CONTROLS FOR THE PROJECT. THE STATE OF OHIO DOES NOT GUARANTEE THE ACCURACY OF THIS DATA AND IT IS NOT TO BE CONSTRUED AS A PART OF THE PLANS GOVERNING CONSTRUCTION OF THE PROJECT.

FED. NO. I-675-8(15)54



LOCATION MAP
Recon-J.S.M.-1/12/68
Drilling-W.S.B., J.W.P., T.R.S.-2/19/68 to 3/1/68, 4/25/68 to 5/7/68
Drafting-C.L.I.-10/22/68
REVISION
Drafting-RAW, D.E.N., C.L.I.-2/10/71

PROJECT INDEX		FROM	STATIONS	TO	PLAN VIEW SHEET	PROFILE SHEET	CUT MAX.	FILL EMB. MAX.
IR 675								
	312+00	-	344+00		4	5	5'	1'
	344+00	-	376+00		4	5	9'	13'
	376+00	-	408+00		6	6	21'	22'
	408+00	-	440+00		7	7	23'	23'
USR 35 INTERCHANGE								
USR 35								
	0+00	-	61+00		4	8	2'	32'
	1100+00	-	1106+93.02		4	8	0'	15'
GRANGE HALL ROAD								
	10+00	-	29+00		4	10	-	-
RAMP A								
		-			4	9	28'	35'
RAMP C								
		-			4	10	-	14'
RAMP E								
		-			4	10	13'	24'
RAMP H								
		-			4	11	-	29'
RAMP B								
		-			4	11	25'	-
RAMP D								
		-			4	11	6'	10'
RAMP F								
		-			4	12	5'	29'
RELOCATED DAYTON-XENIA ROAD								
	11+00	-	47+00		4	12	38'	23'
RELOCATED WILDONNA DRIVE								
	0+00	-	7+00		4	12	8'	2'
RELOCATED KEMP ROAD								
	12+00	-	26+00		13	13	5'	7'

SUMMARY OF SOIL TEST DATA

NOTE: NP SHOWN IN LIQUID LIMIT AND PLASTICITY INDEX COLUMNS INDICATES THAT THE MATERIAL IS NON-PLASTIC.
* DENOTES SAMPLE TAKEN AT OR NEAR GRADE.

STATION & OFFSET	DEPTH										SHTL CLASS.	STATION & OFFSET	DEPTH										SHTL CLASS.	STATION & OFFSET	DEPTH										SHTL CLASS.								
	FROM	TO	AGG.	C.S.	F.S.	SILT	CLAY	L.L.	P.I.	W.C.			FROM	TO	AGG.	C.S.	F.S.	SILT	CLAY	L.L.	P.I.	W.C.			FROM	TO	AGG.	C.S.	F.S.	SILT	CLAY	L.L.	P.I.	W.C.									
312+75 50' Rt	0.0-4.0	0	4	21	36	39	51	26	21	A-7-6	371+00 75' Lt	0.0-6.0	14	2	15	32	26	20	9	19	A-4a	34+00 CL	1.0-7.0	20	10	18	28	24	20	5	11	A-4a	325+00 BL	1.0-4.0	6	2	5	36	46	47	26	29	A-7-6
	4.0-10.0	15	12	17	26	30	28	11	13	A-6a		6.0-12.0	48	13	22	26	16	12	NP	12	A-1-a		7.0-12.0	57	22	13	4	4	NP	NP	11	A-1-a		4.0-8.0	14	8	20	39	19	31	11	27	A-7-6
	10.0-15.0	64	14	13	5	4	NP	NP	11	A-1-a		12.0-15.0	10	6	27	23	19	7	13	A-4a		12.0-14.0	52	22	12	7	7	NP	NP	12	A-1-a		8.0-14.0	16	11	17	27	21	5	NP	NP	11	A-4a
	15.0-20.0	62	20	11	4	3	NP	NP	11	A-1-a		3.0-6.0	15	9	17	29	20	9	15	A-4a		14.0-16.0	18	13	18	29	22	18	4	11	A-4a		10.0-14.0	17	9	15	32	27	19	5	11	A-4a	
318+50 CL	0.0-3.0	8	11	13	35	33	44	22	27	A-7-6	372+00 CL	1.0-3.0	0	1	5	55	39	23	24	A-7-6	39+50 CL	0.0-6.0	14	8	18	28	32	28	11	18	A-6a	330+00 BL	0.0-6.0	16	8	15	30	31	28	7	12	A-4a	
	3.0-5.0	49	7	11	15	18	36	17	25	A-2-6		3.0-6.0	15	9	17	29	20	9	15	A-4a		6.0-12.0	11	10	19	35	25	19	5	11	A-4a		6.0-10.0	25	8	21	26	19	23	7	17	A-4a	
	5.0-11.0	16	11	17	27	29	21	5	15	A-4a	373+00 CL	1.0-4.0	0	1	5	63	31	22	11	20	A-6a		12.0-17.0	15	13	22	33	17	16	3	11	A-4a		10.0-14.0	17	9	15	32	27	19	5	11	A-4a
	11.0-16.0	70	15	5	5	5	NP	NP	11	A-1-a		4.0-10.0	49	20	22	5	4	NP	NP	15	A-2		17.0-20.0	20	14	21	27	18	17	3	12	A-4a		6.0-10.0	16	8	15	30	31	28	7	12	A-4a
	16.0-20.0	64	20	9	4	3	NP	NP	11	A-1-a		10.0-15.0	24	24	22	5	4	NP	NP	15	A-2		20.0-27.0	19	27	45	5	4	NP	NP	20	A-3		6.0-10.0	25	8	21	26	19	23	7	17	A-4a
322+00 CL	0.0-2.5	7	4	11	31	47	60	38	31	A-7-6	373+00 75' Rt	0.0-6.0	14	10	17	29	30	23	7	14	A-4a	44+20 30' Lt	1.0-4.0	0	1	4	40	55	85	52	36	A-7-5	345+50 50' Pt	0.0-5.0	10	9	16	37	29	23	5	11	A-4a
	2.5-7.0	15	10	19	29	27	22	7	14	A-4a		6.0-11.0	22	9	15	29	19	6	17	A-4a		4.0-9.0	48	16	16	11	9	NP	NP	15	A-1-b		5.0-9.0	11	8	17	32	31	26	4	12	A-4a	
	7.0-12.0	15	10	18	29	28	20	4	10	A-4a	373+00 75' Rt	0.0-6.0	14	10	17	29	30	23	7	14	A-4a		9.0-15.0	60	18	13	5	4	NP	NP	6	A-1-a		10.0-14.0	21	12	22	35	20	NP	NP	12	A-4a
	12.0-15.0	40	22	14	13	11	18	5	13	A-1-b		6.0-11.0	39	6	10	26	19	NP	NP	11	A-4a		0.0-6.0	13	8	14	34	31	23	6	12	A-4a		12.0-15.0	7	5	11	46	23	NP	NP	15	A-4a
325+00 CL	0.0-4.0	43	6	10	22	19	27	10	23	A-4a	374+00 CL	0.0-5.0	14	27	33	5	21	25	8	14	A-2-4	49+50 50' Rt	0.0-6.0	13	8	14	34	31	23	6	12	A-4a	352+00 BL	1.0-5.0	14	4	17	31	28	28	4	11	A-4a
	4.0-8.0	17	10	18	29	26	21	6	12	A-4a		5.0-8.0	13	9	17	28	33	25	9	13	A-4a		6.0-12.0	17	9	13	32	30	22	7	13	A-4a		5.0-9.0	11	8	17	32	31	26	4	12	A-4a
	8.0-14.0	59	21	10	5	5	NP	NP	11	A-1-a		8.0-11.0	39	21	27	8	5	NP	NP	5	A-1-b		12.0-18.0	18	7	13	36	26	19	5	13	A-4a		10.0-14.0	21	12	22	35	20	NP	NP	12	A-4a
	14.0-19.0	24	12	17	32	15	21	10	11	A-4a	350+00 CL	0.0-5.0	9	5	17	21	48	42	17	23	A-7-6*		18.0-22.0	14	9	17	36	25	19	5	10	A-4a		15.0-18.0	21	12	22	35	20	NP	NP	10	A-4a
	19.0-25.0	8	5	11	41	35	24	7	14	A-4a		5.0-10.0	15	8	15	29	33	26	11	17	A-6a		19.0-22.0	14	9	17	36	25	19	5	10	A-4a		12.0-15.0	7	5	11	46	23	NP	NP	15	A-4a
328+50 CL	0.0-2.5	0	2	8	44	73	33	50	A-7-5	385+00 CL	0.0-5.0	13	9	19	30	29	23	7	12	A-4a	54+00 15' Rt	0.0-6.0	12	10	18	30	30	25	6	12	A-4a	352+00 BL	1.0-5.0	14	4	17	31	28	28	4	11	A-4a	
	2.5-7.0	27	13	16	22	22	17	3	12	A-4a		5.0-10.0	20	12	17	27	24	20	6	13	A-4a		6.0-12.0	17	9	13	32	30	22	7	13	A-4a		5.0-9.0	11	8	17	32	31	26	4	12	A-4a
	7.0-10.0	22	11	19	25	27	26	5	11	A-4a	390+00 CL	0.0-5.0	9	5	17	36	33	26	11	19	A-6a		12.0-18.0	18	7	13	36	26	19	5	10	A-4a		10.0-14.0	21	12	22	35	20	NP	NP	10	A-4a
	10.0-15.0	52	15	12	11	10	13	3	12	A-1-b		5.0-10.0	15	8	15	29	33	26	11	17	A-6a		19.0-22.0	14	9	17	36	25	19	5	10	A-4a		15.0-17.0	6	4	17	47	31	17	4	12	A-4a
	15.0-20.0	42	38	15	5	5	NP	NP	11	A-3a	390+00 CL	0.0-5.0	9	5	17	36	33	26	11	19	A-6a		0.0-5.0	9	5	17	36	33	26	11	19	A-6a	340+00 BL	0.0-6.0	26	8	19	27	23	22	8	11	A-4a
332+00 CL	1.0-5.0	11	3	5	38	43	51	26	34	A-7-6		5.0-9.0	16	9	17	28	30	25	9	12	A-4a		5.0-10.0	14	11	17	30	36	23	6	13	A-4a	340+00 10' Rt	0.0-5.0	11	12	18	29	30	22	7	12	A-4a
	5.0-9.0	15	10	18	29	28	20	5	13	A-4a	395+00 CL	0.0-5.0	11	4	17	24	44	50	25	21	A-7-6		11.0-16.0	16	5	14	46	25	21	7	13	A-4a		5.0-11.0	13	12	17	28	26	NP	NP	12	A-4a
	9.0-10.0	64	18	13	3	2	NP	NP	12	A-1-a		5.0-11.0	18	9	17	34	22	19	5	9	A-4a		11.0-14.0	10	12	17	31	30	23	5	12	A-4a	340+00 10' Rt	0.0-5.0	11	12	18	29	30	22	7	12	A-4a
335+50 CL	1.0-7.0	12	9	18	30	31	22	7	14	A-4a*		11.0-16.0	16	5	14	46	25	21	7	13	A-4a		14.0-16.0	26	19	20	17	18	NP	NP	12	A-4a	340+50 BL	0.0-5.0	20	10	18	28	24	NP	NP	13	A-4a
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	12.0-16.0	36	22	35	4	3	NP	NP	12	A-1-b		6.0-8.0	35	19	33	8	5	NP	NP	10	A-4a		0.0-6.0	11	11	20	25	30	20	5	12	A-4a	340+50 BL	0.0-5.0	20	10	18	28	24	NP	NP	13	A-4a
	16.0-19.0	15	4	4	63	14	NP	NP	20	A-4b		8.0-13.0	19	11	19	25	26	17	2	11	A-4a		12.0-17.0	35	20	17	8	8	NP	NP	10	A-1-b		5.0-11.0	23	9	18	26	24	10	6	13	A-4a
	18.0-23.0	18	9	19	29	25	19	6	15	A-4a	405+00 CL	0.0-5.0	13	4	15	21	47	45	25	19	A-7-6		17.0-21.0	17	9	25	24	26	19	3	13	A-4a	340+50 BL	0.0-5.0	20	10	18	28	24	NP	NP	13	A-4a
	23.0-27.0	12	9	19	35	25	20	7	11	A-4a		10.0-14.0	3	2	54	25	15	NP	NP	13	A-4a		21.0-25.0	8	7	23	23	23	20	4	13	A-4a		11.0-15.0	5	16	15	7	7	10	6	13	A-4a
340+00 CL	0.0-3.0	13	6	14	31	36	48	22	28	A-7-6*	410+00 CL	0.0-5.0	21	11	16	22	30	30	12	12	A-6a		0.0-6.0	11	11	20	25	30	20	5	12	A-4a	326+40 BL	0.0-2.0	5	5	17	30	43	51	23	23	A-7-6
	3.0-4.0	18	11	20	26	25	27	10	14	A-4a		5.0-10.0	23	13	20	20	24	26	10	13	A-4a		6.0-8.0	35	19	33	8	5	NP	NP	10	A-4a	340+00 10' Rt	0.0-5.0	11	12	18	29	30	22	7	12	A-4a
	4.0-10.0	14	11	21	29	25	21	7	9	A-4a		10.0-15.0	19	9	15	25	32	30	9	17	A-4a		8.0-13.0	19	11	19	25	26	17	2													

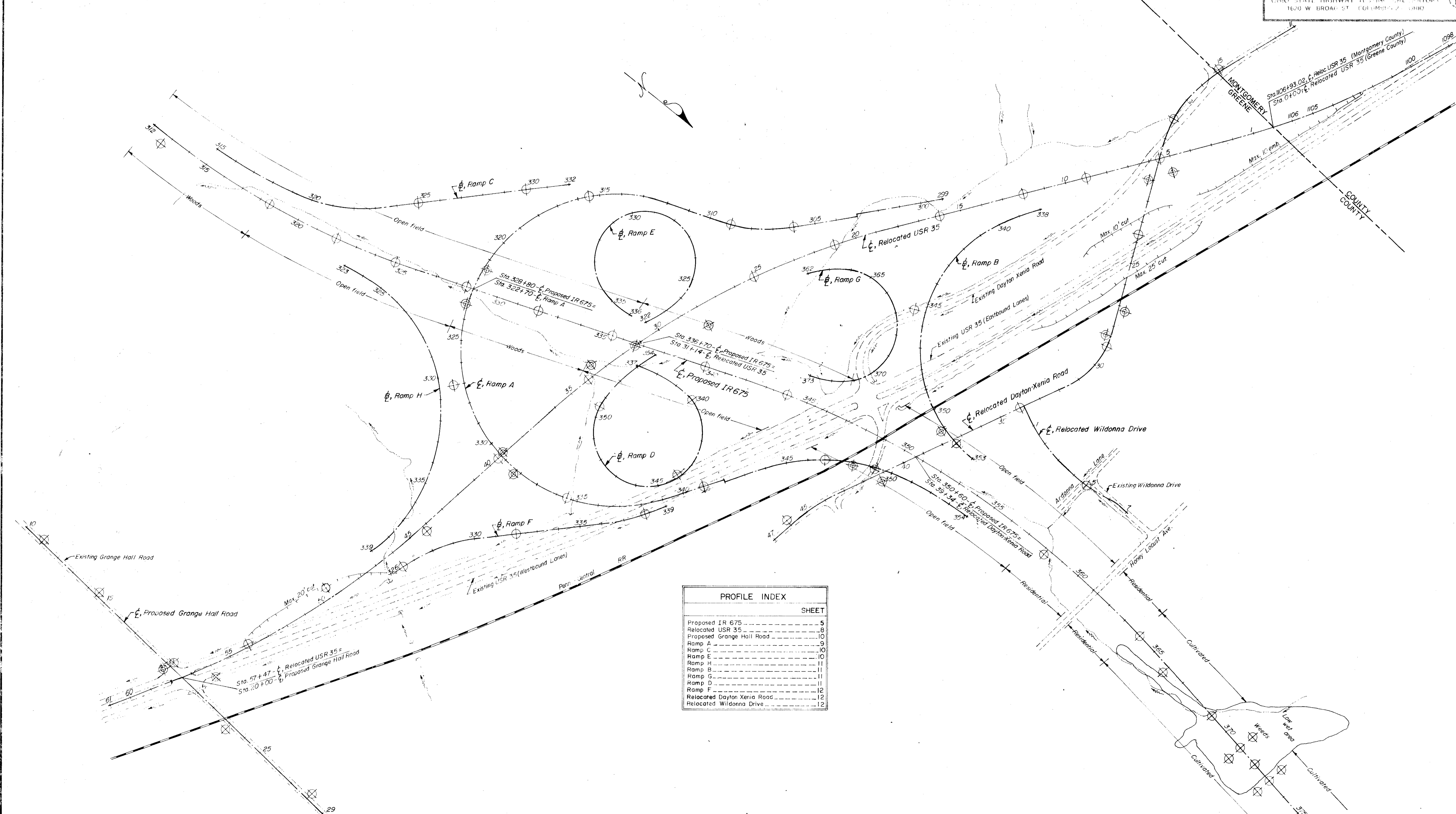
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SOIL PROFILE

GREENE COUNTY
GRE-675-5.37

OHIO STATE HIGHWAY TESTING LABORATORY
 1620 W. BROAD ST. COLUMBUS, OHIO

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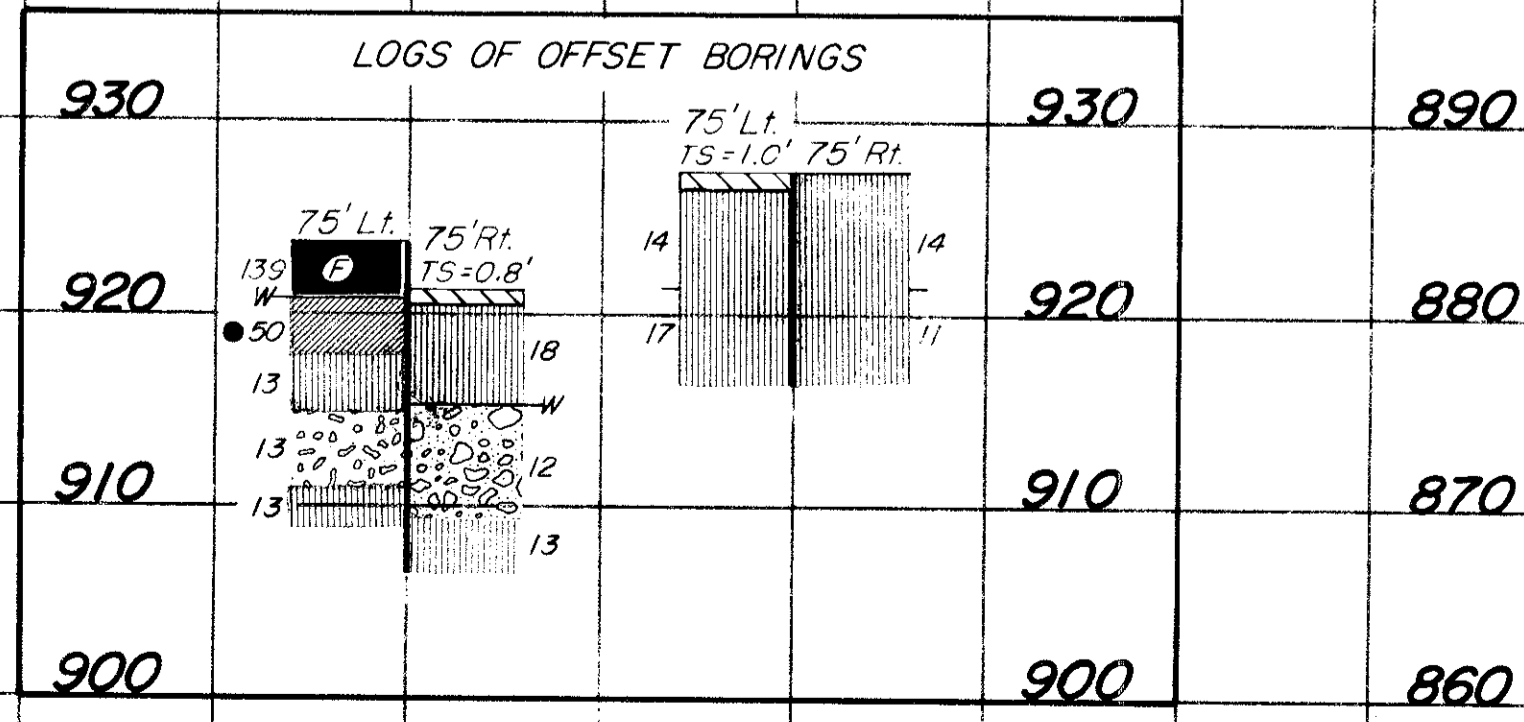
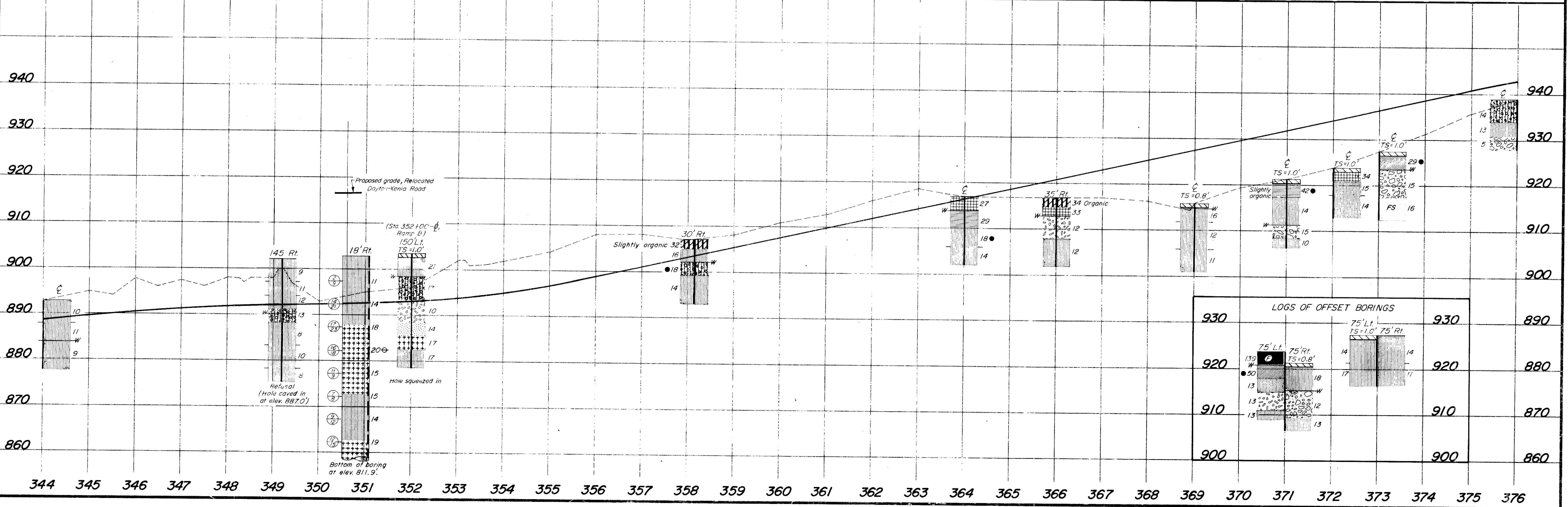
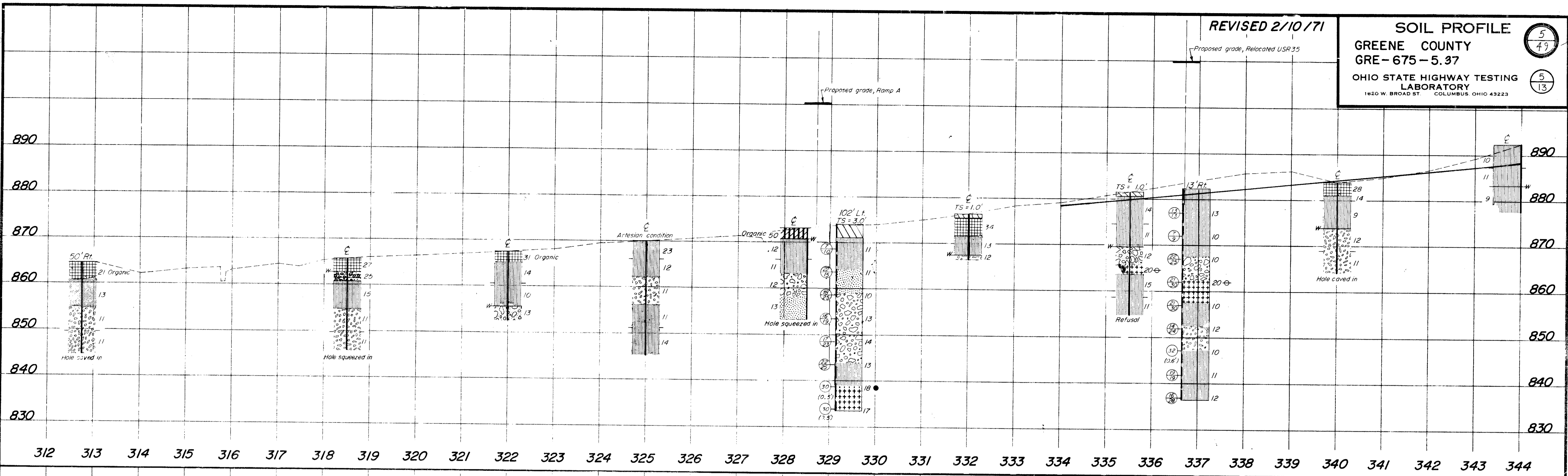


PROFILE INDEX	
	SHEET
Proposed IR 675	5
Relocated USR 35	8
Proposed Grange Hall Road	10
Ramp A	9
Ramp C	10
Ramp E	10
Ramp H	11
Ramp B	11
Ramp G	11
Ramp D	11
Ramp F	12
Relocated Dayton-Xenia Road	12
Relocated Wildonna Drive	12

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GREENE COUNTY
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OHIO STATE HIGHWAY TESTING
LABORATORY
1620 W. BROAD ST. COLUMBUS, OHIO 43223

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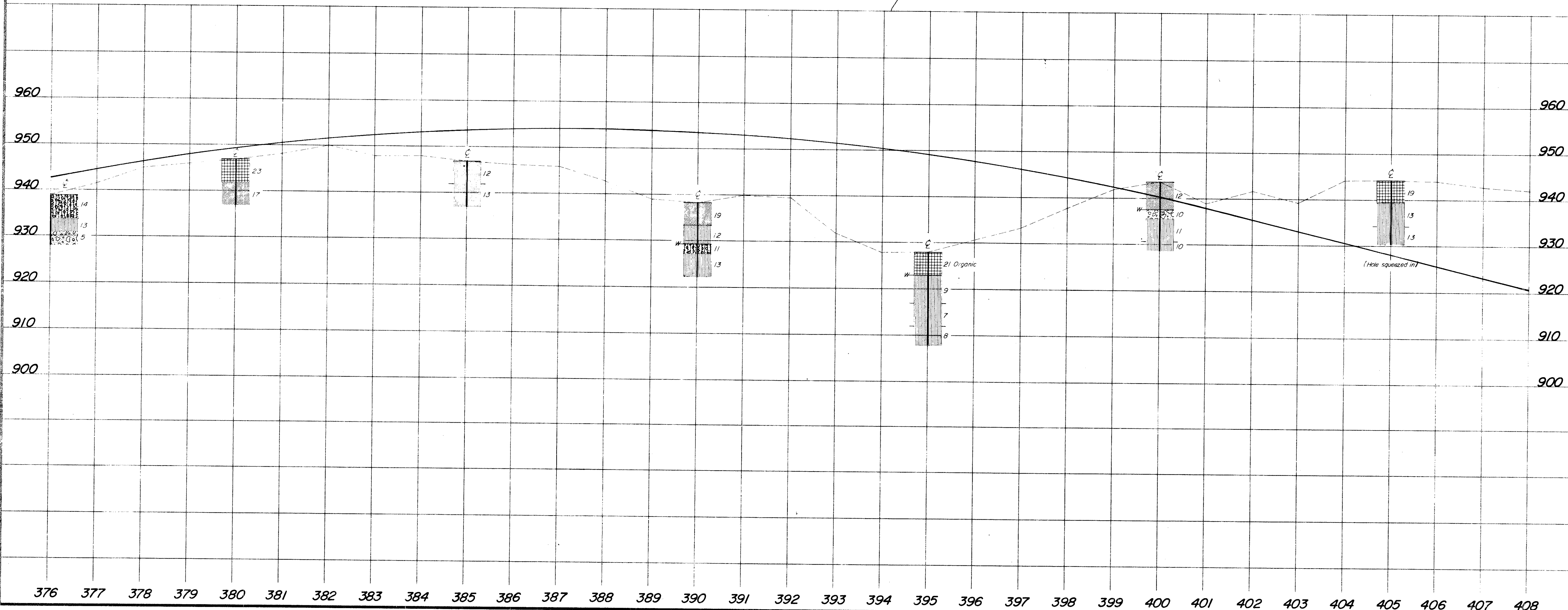
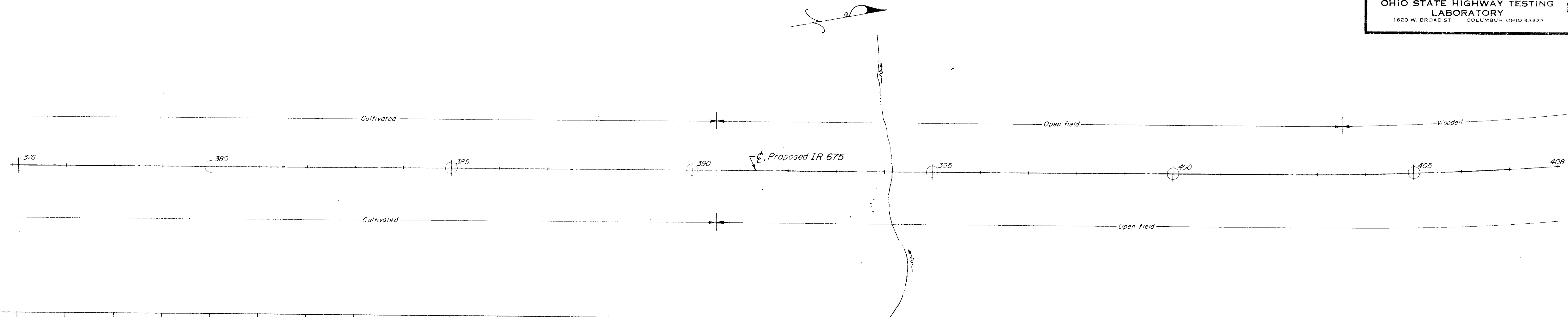


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SOIL PROFILE
GREENE COUNTY
GRE - 675 - 5.37

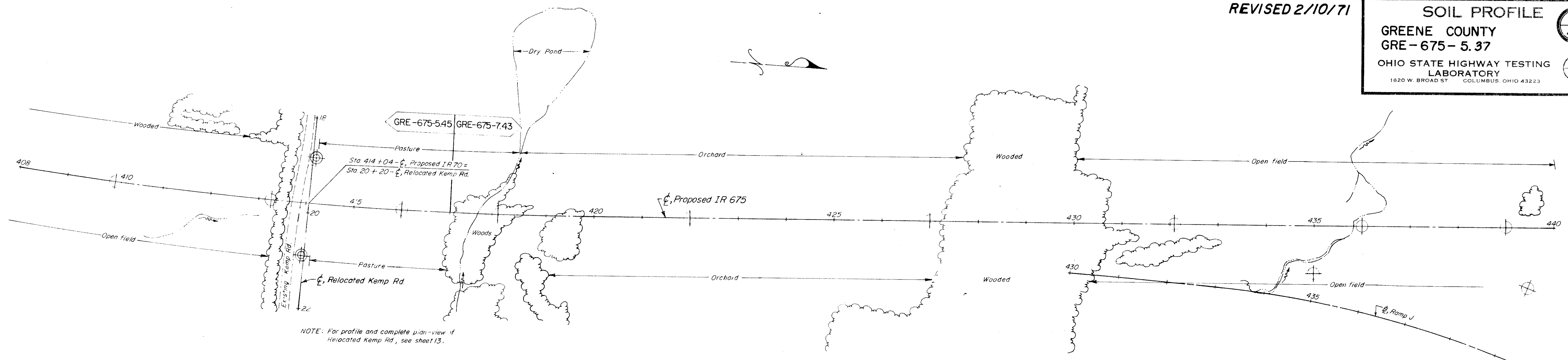
OHIO STATE HIGHWAY TESTING
 LABORATORY
 1620 W. BROAD ST. COLUMBUS, OHIO 43223

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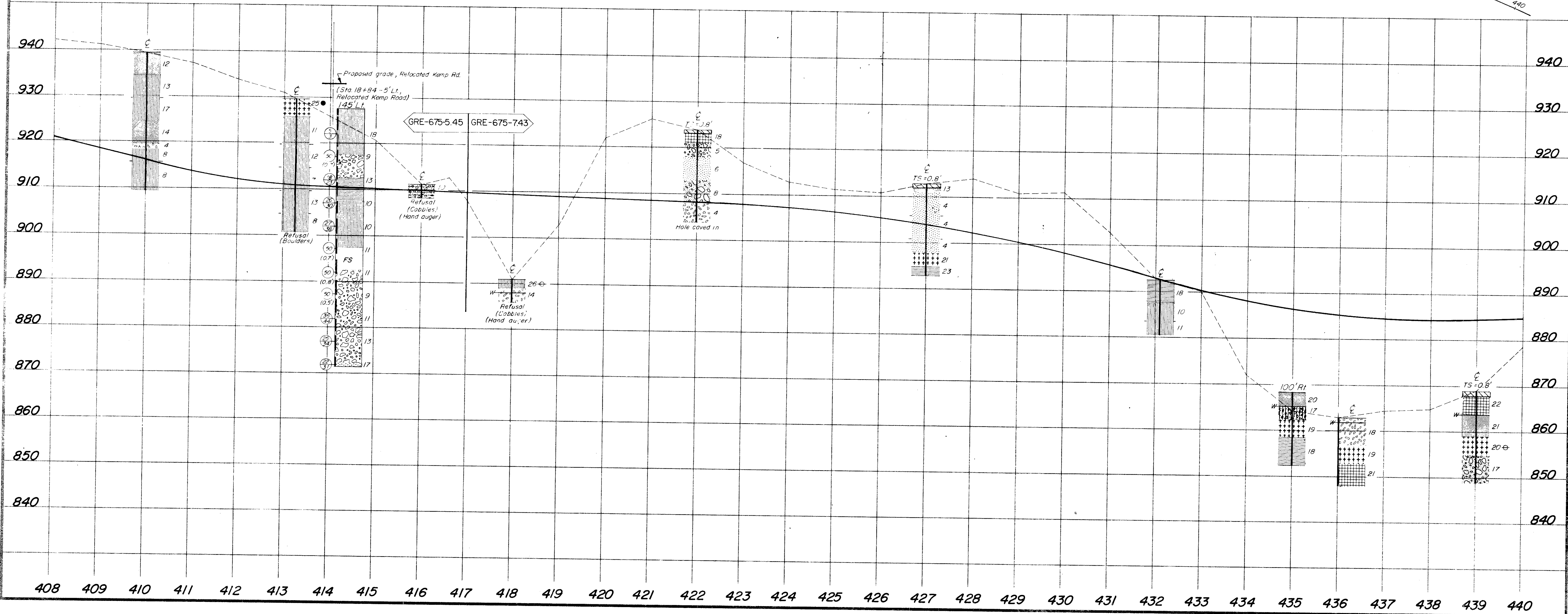


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SOIL PROFILE
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1620 W. BROAD ST. COLUMBUS OHIO 43223



NOTE: For profile and complete plan-view of Relocated Kemp Rd, see sheet 13.



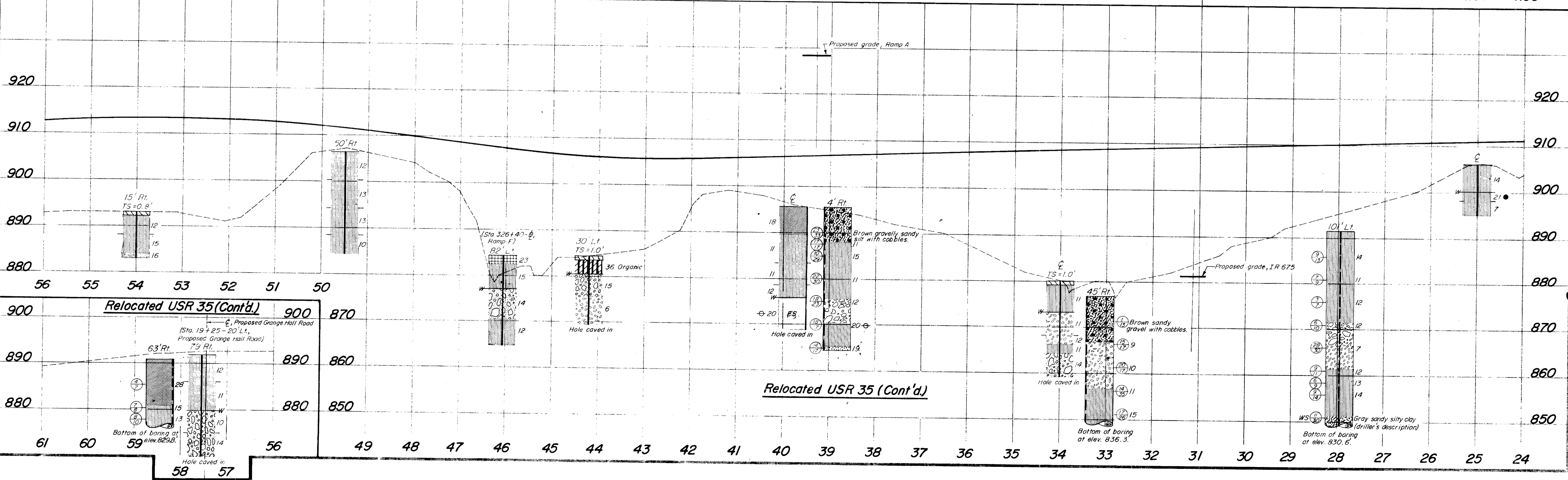
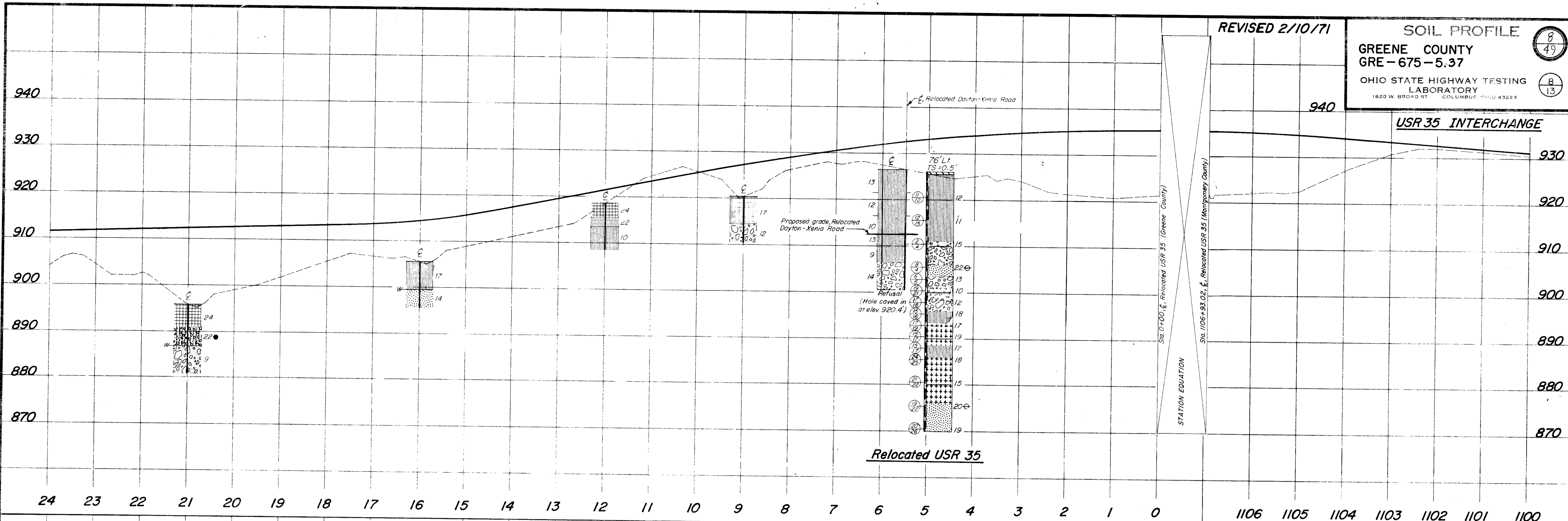
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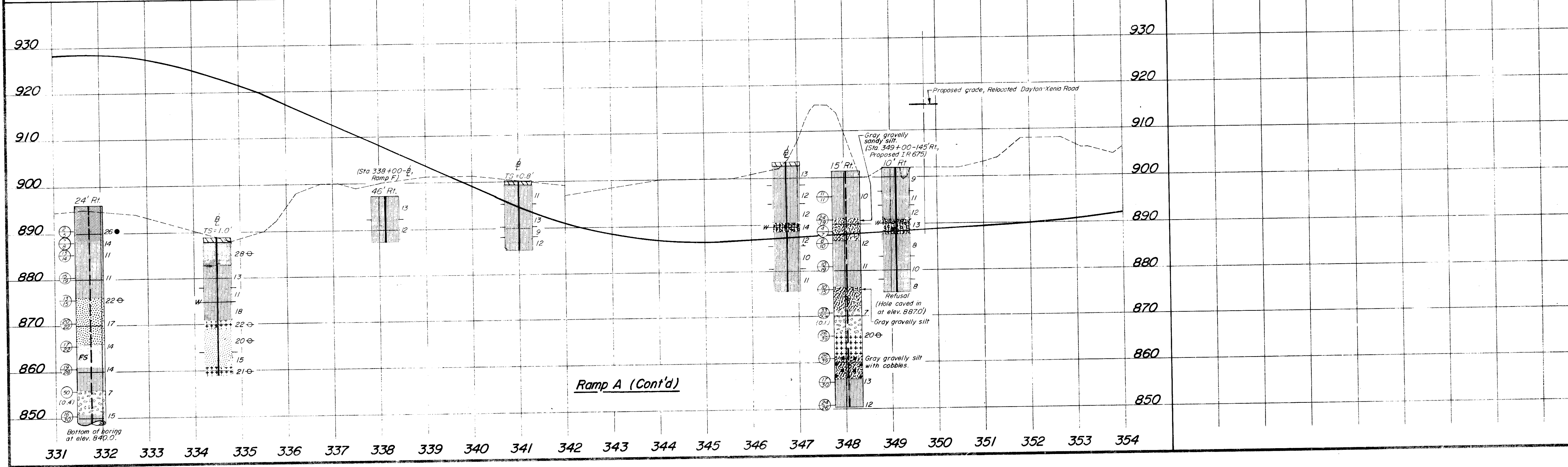
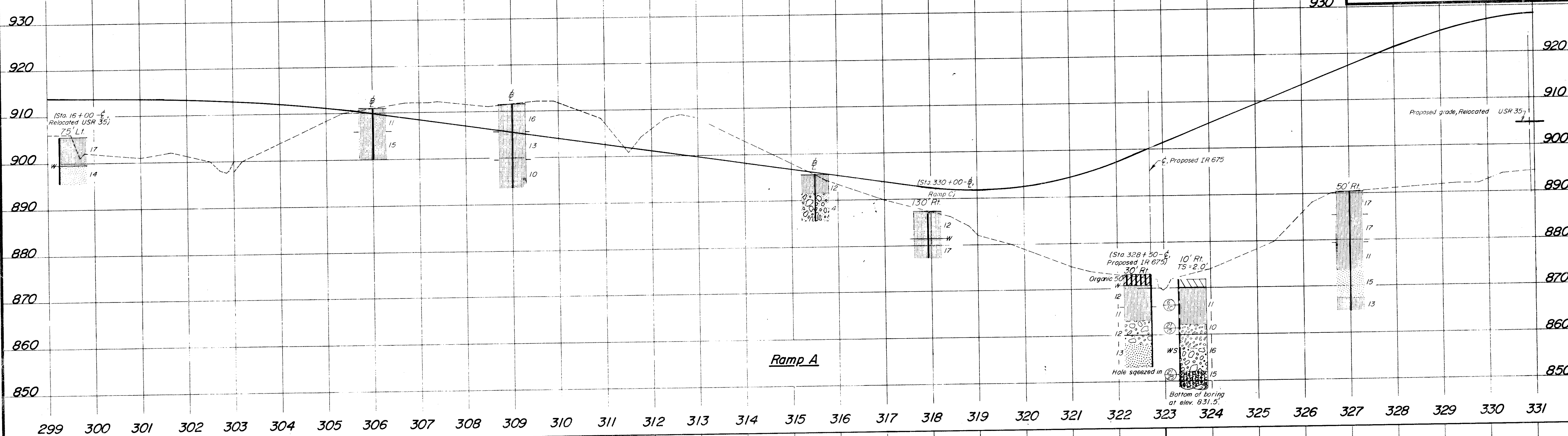
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LABORATORY
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USR 35 INTERCHANGE

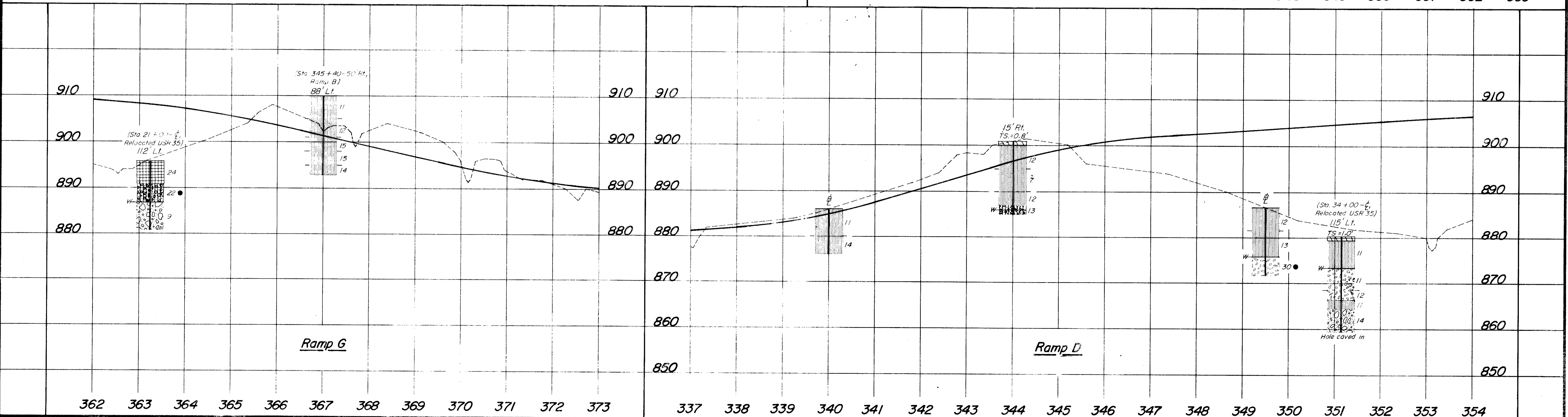
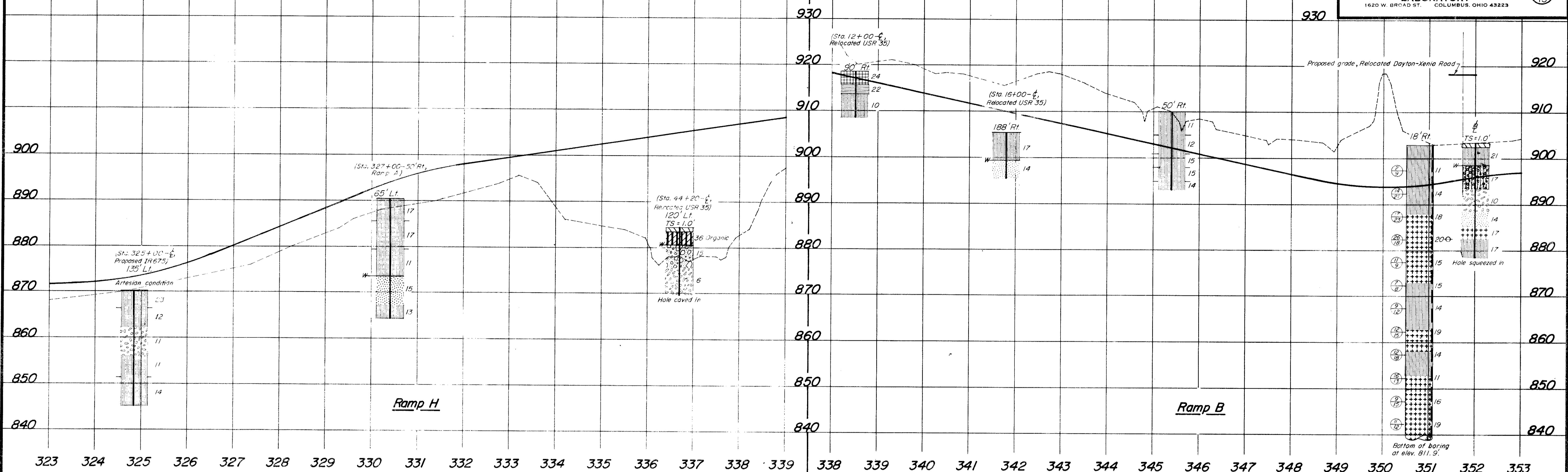




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 GREENE COUNTY
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 OHIO STATE HIGHWAY TESTING
 LABORATORY
 1620 W. BROAD ST. COLUMBUS, OHIO 43223

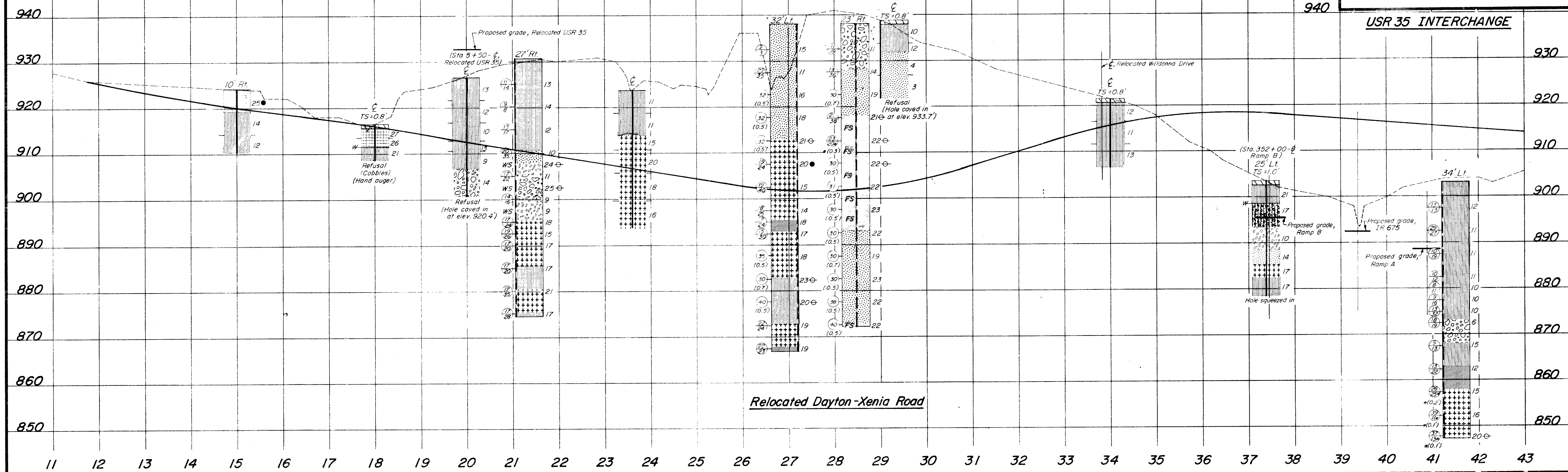
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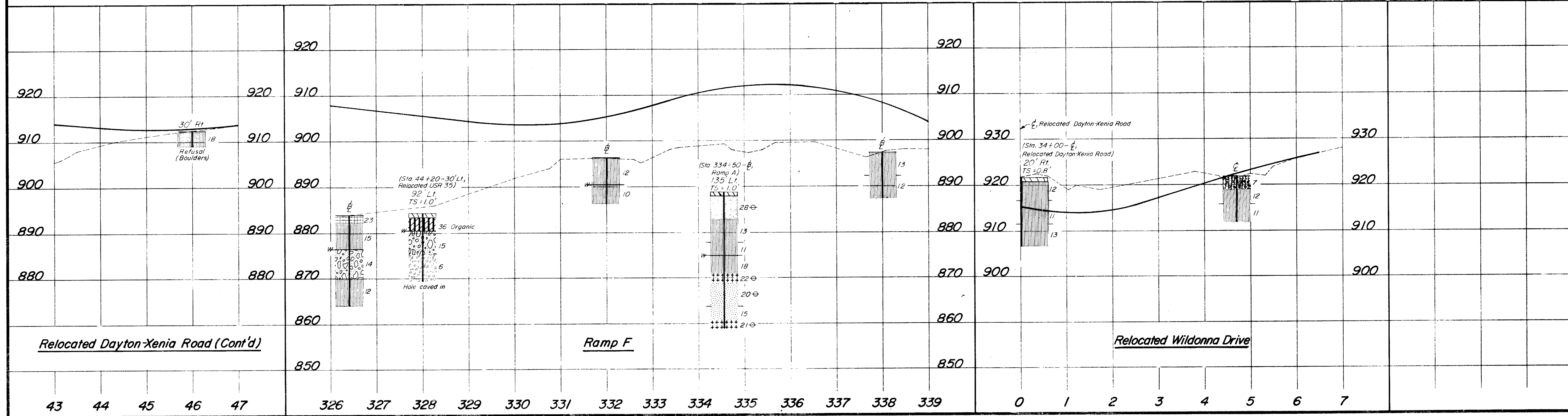
REVISED 2/10/71

SOIL PROFILE
GREENE COUNTY
GRE-675-5.37
OHIO STATE HIGHWAY TESTING
LABORATORY
1620 W. BROAD ST. COLUMBUS, OHIO 43223

12
49
12
13



Relocated Dayton-Xenia Road



Relocated Dayton-Xenia Road (Cont'd)

Ramp F

Relocated Wildonna Drive

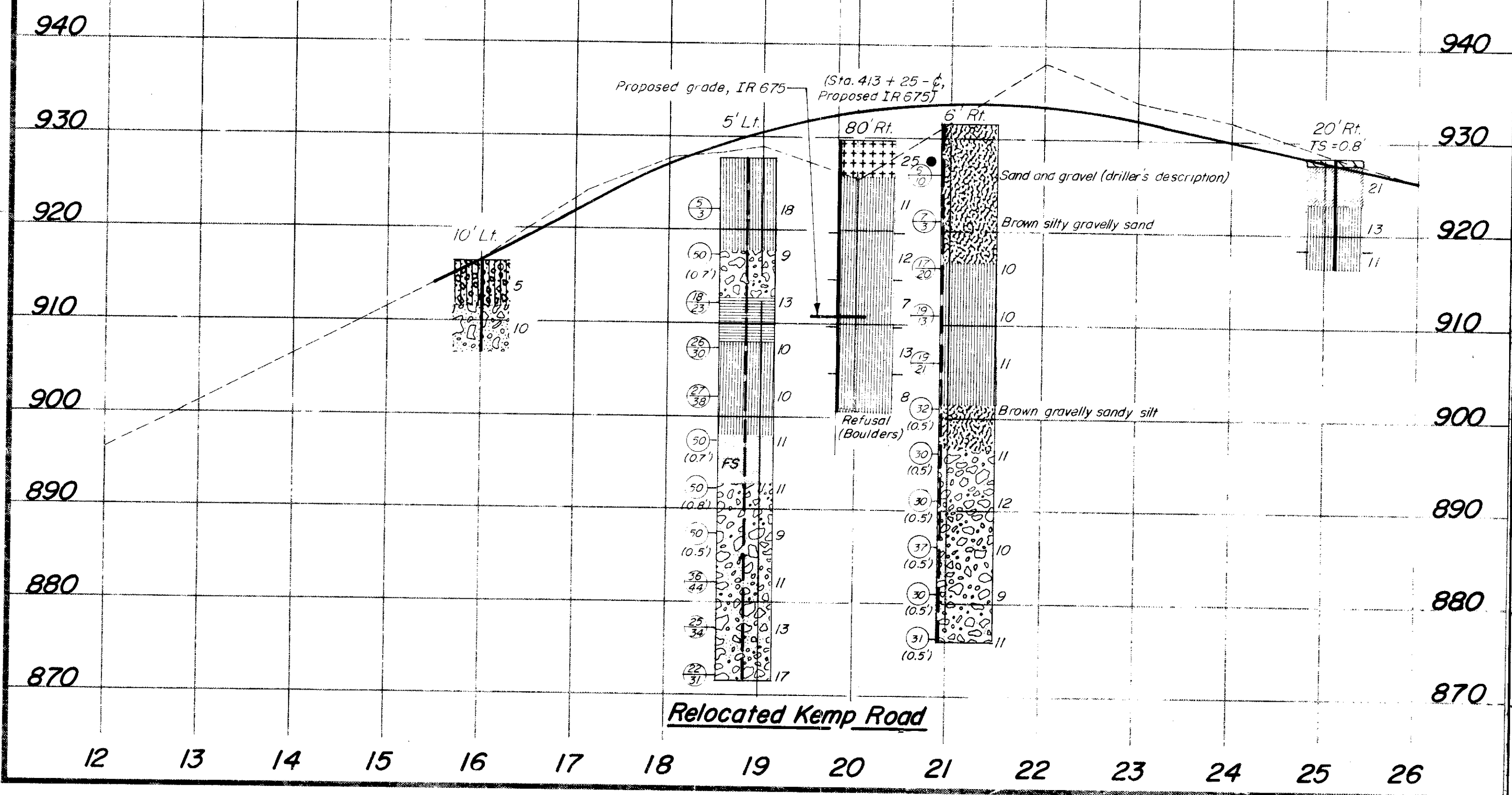
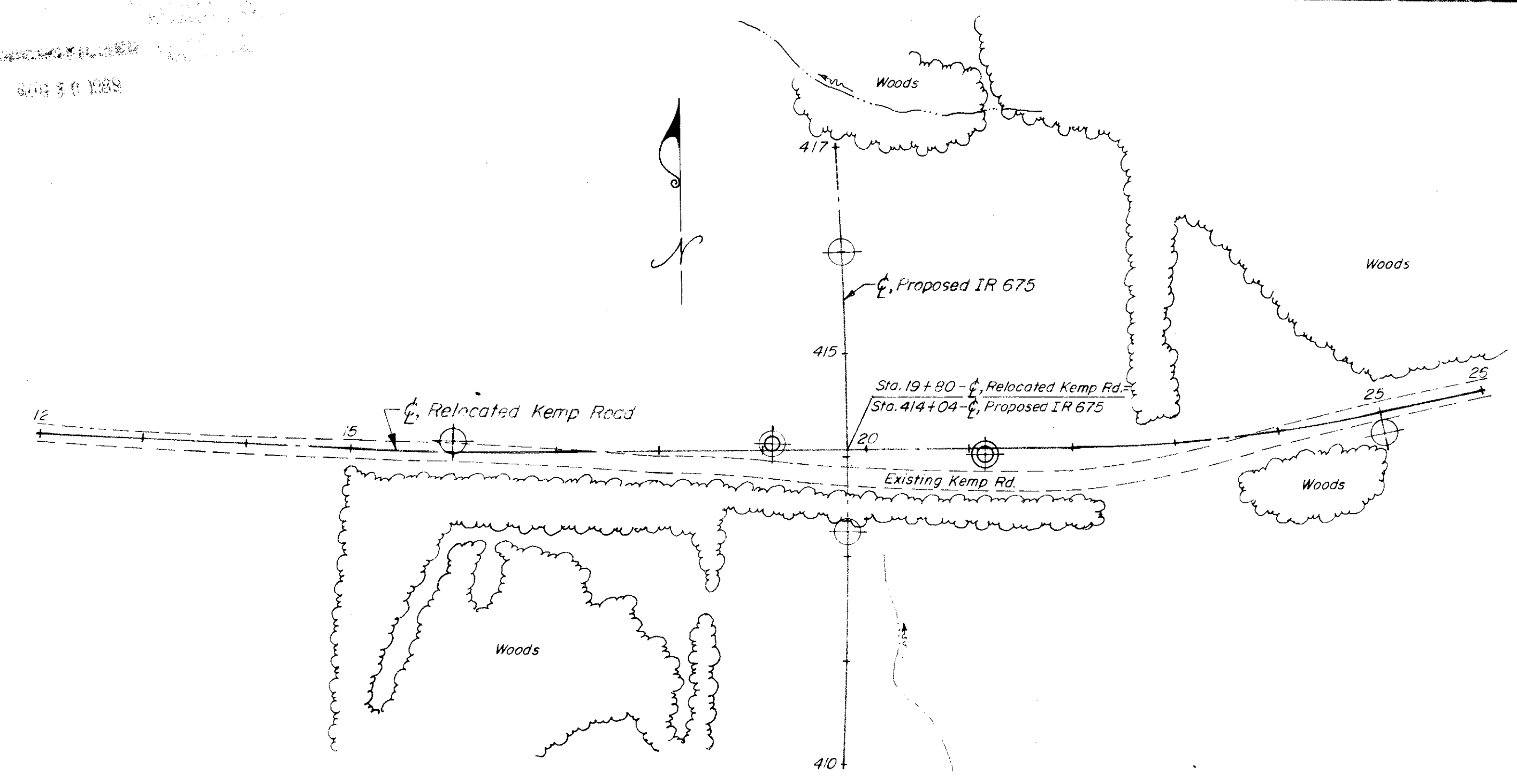
DATE: 3 0 1969

REVISED 2/10/71

SOIL PROFILE
 GREENE COUNTY
 GRE - 675-5.37
 OHIO STATE HIGHWAY TESTING
 LABORATORY
 1620 W. BROAD ST. COLUMBUS, OHIO 43223

13
49

13
13



GEOLOGY OF THE SITE

THE STRUCTURE SITE IS LOCATED IN THE GLACIATED LEXINGTON PENEPLAIN, IN AN AREA WHERE MODERATELY DEEP GLACIAL-DERIVED SOILS OVERLIE INTERBEDDED LIMESTONE AND SHALE BEDROCK, OF ORDOVICIAN AGE.

EXPLORATION

THE EXPLORATION CONSISTED OF TWO DRIVE SAMPLE BORINGS AND FIVE DRIVE ROD PENETRATION TESTS, MADE BETWEEN JULY 23 AND 28, 1969.

INVESTIGATIONAL FINDINGS

BORINGS DISCLOSED MEDIUM-DENSE TO VERY DENSE SANDS, SILTS, AND GRAVELS AND AN INTERVAL OF HARD CLAY TO 41-FOOT DEPTHS, ELEVATIONS 834 AND 832 FEET, WHERE THE BORINGS WERE TERMINATED AFTER PENETRATING 30 FEET OF MATERIAL REQUIRING IN EXCESS OF 30 BLOWS PER FOOT IN THE STANDARD PENETRATION TEST.

ROD SOUNDINGS ENCOUNTERED GRADUALLY INCREASING RESISTANCE TO PENETRATION WITH INCREASING DEPTH AND WERE TERMINATED DUE TO NEAR-REFUSAL TO PENETRATION AT 36 TO 42-FOOT DEPTHS, ELEVATIONS 838 TO 830 FEET, CONSIDERED TO BE IN DENSE SANDS, SILTS, AND GRAVELS, AS REVEALED BY THE BORINGS.

FREE WATER WAS NOT OBSERVED IN ANY OF THE ROD SOUNDING HOLES.

NO TEST PENETRATED TO BEDROCK SURFACE.

LEGEND

- Auger Boring Location - Plan View.
- Press and/or Drive Sample and/or Core Boring Location - Plan View.
- Drive Rod Penetration Resistance Sounding Location - Plan View.
- Capped Pile
- Footing
- Footing on Pile
- Top of Rock

- Horizontal Bar on Boring Log Indicates the Depth the Sample Was Taken.
- Figures Beside the Boring Log in Profile Indicate the Number of Blows for Standard Penetration Test.
X = Number of Blows for First 6 inches.
Y = Number of Blows for Second 6 inches.
- Drive Rod Penetration Resistance Sounding Log - Profile
- Casing
- Resistance "R" < 10,000 lbs.
- Resistance "R" > 10,000 lbs.
- Indicates Final Measurement of Penetration, in Inches.
- Indicates Free Water Elevation.
- Indicates Static Water Elevation.

SYMBOLS OF ROCK TYPES

- Coal
- Weathered Siltstone, Mudstone, or Claystone
- Siltstone, Mudstone, or Claystone
- Weathered Shale
- Shale
- Boulders or Cobbles
- Weathered Sandstone
- Sandstone
- Leached Dolomite
- Dolomite
- Leached Limestone
- Limestone

GENERAL INFORMATION

Drive Rod Penetration Sounding Tests

Drive rod penetration resistance tests constitute driving a 1.315-inch diameter steel rod, with a 45° cone point, into the ground, using a 122-pound drop-hammer with a free fall of five feet. At one or two-foot depth intervals, a measurement is taken to determine the amount of penetration achieved in three hammer drops. This reading is converted to an empirical value for capacity "R", in thousands of pounds (which is a measure of both the point resistance and frictional resistance on the rod), by using charts prepared by the Ohio Department of Highways, Bureau of Bridges, on the basis of correlation study of rod penetration with past performance of pile driving. For interpretation, a graph is prepared by plotting the value "R" against the depth at which the reading was taken, and connecting the plotted points. The curve so obtained reflects the density of subsurface materials in a manner that can be readily compared with data from similar tests at other locations on the structure site. From this comparison, the overall uniformity of subsurface condition may be evaluated.

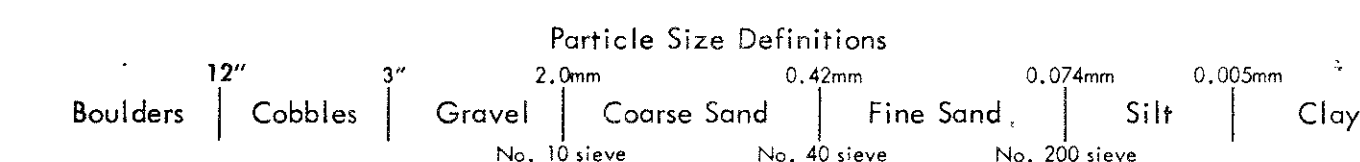
Drive Sample Borings - Drive-Press Sample Borings

Drive sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. sampler, at 2-1/2 and/or 5-foot depth intervals, driven by means of a 140-pound drop-hammer with a free fall of 30 inches. The number of blows required to drive the sampler 12 inches is considered the standard penetration test.

Drive-press sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. drive sampler, and 3" O.D. thin-wall press sampler. The press sampler is advanced by continuous uniform pressure, applied by the drill rig.

The boring log sheets show a graphic plot of the information obtained, including depth and elevation of the sample, number of blows for the standard penetration tests in two 6-inch increments, depth of press samples, field sample number, sample description - based on laboratory tests and the Casagrande AC classification system - and gradation, plasticity, and moisture content determinations. Results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler can not be driven, a wash sample is procured for visual classification, in order to determine the general character of the material. These samples are not considered sufficiently representative to warrant laboratory testing.



LOG OF BORING
 Date Started: 7-25-69
 Date Completed: 7-28-69
 Boring No.: B-3
 Station & Offset: 321+45, 16' Lt. (Rear Pier)
 Sample Type: SS
 Dia: 1 3/8"
 Casing Length: 28'
 Dia: 3 1/2"
 Surface Elev: 874.0'
 Artesian Condition encountered at elev. 861.5'

Elev	Depth	SPT Pen (bl)	Rac	Loss	Description	Sample No.	Physical Characteristics										SMTL Class.		
							% Agg	% S	% FS	% Sil	% Clay	LL	PI	W.C.	U.C.	U.C.		U.C.	
874.0	0				Topsoil														
871.0	3																		
869.0	5	7/10			Brown Silty Sandy Gravel	1	46	7	11	16	20	20	6	11					A-4a
864.0	10	22/15			Brown Silty Sandy Gravel	2	44	11	14	14	17	17	5	11					A-3a
859.0	14	18/25			Brown Silty Sandy Gravel	3	48	27	12	7	6	21	6	10					A-1-b
854.0	20	16/19			Brown Silty Gravelly Sand	4	24	27	37	-12	-	NP	NP	13					A-1-b
849.0	25	17/23			Brown Gravelly Sand	5	42	40	11	-	-	NP	NP	14					A-1-b
844.0	30	22/25			Brown Gravelly Silt	6	41	5	8	22	24	20	3	13					A-4a
839.0	34	30/*			Gray Silt	7	11	2	3	40	44	21	4	18					A-4a
834.0	40	30/*			Gray Silt	8	5	3	2	50	40	21	5	17					A-4b

Refusal

LOG OF BORING
 Date Started: 7-23-69
 Date Completed: 7-28-69
 Boring No.: B-6
 Station & Offset: 323+29, 10' Rt. (Forward Pier)
 Sample Type: SS
 Dia: 1 3/8"
 Casing Length: 30'
 Dia: 3 1/2"
 Surface Elev: 872.0'
 Artesian Condition encountered at elev. 857.0'

Elev	Depth	SPT Pen (bl)	Rac	Loss	Description	Sample No.	Physical Characteristics										SMTL Class.		
							% Agg	% S	% FS	% Sil	% Clay	LL	PI	W.C.	U.C.	U.C.		U.C.	
872.0	0				Topsoil														
870.0	2																		
867.0	5	6/10			Brown Sandy Gravelly Silt	1	24	7	12	31	26	18	5	11					A-4a
862.0	10	21/15			Gray Silty Sandy Gravel	2	59	19	12	-10	-	NP	NP	10					A-1-a
857.0	16				Gray Gravelly Sand (Wash Sample)	3	42	45	11	-2	-	NP	NP	16					A-1-b
852.0	20	21/25			Gray Silty Gravelly Sand	4	25	10	33	17	15	NP	NP	15					A-2-4
847.0	25	18/21			Gray Silty Gravelly Sand	5	27	16	45	3	9	NP	NP	14					A-3a
842.0	30	15/25			Gray Sandy Silt	6	0	0	46	42	12	NP	NP	23					A-4a
837.0	35	15/22			Gray Silt and Clay	7	0	2	2	37	59	26	11	19					A-6a
832.0	40	30/*			Gray Clayey Silt	8	0	1	5	45	49	24	9	13					A-4a

Refusal

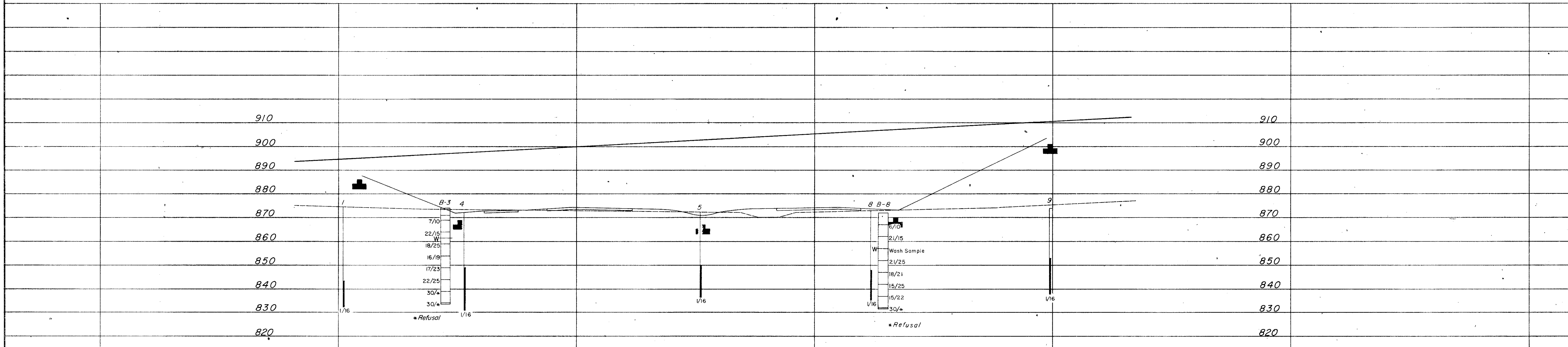
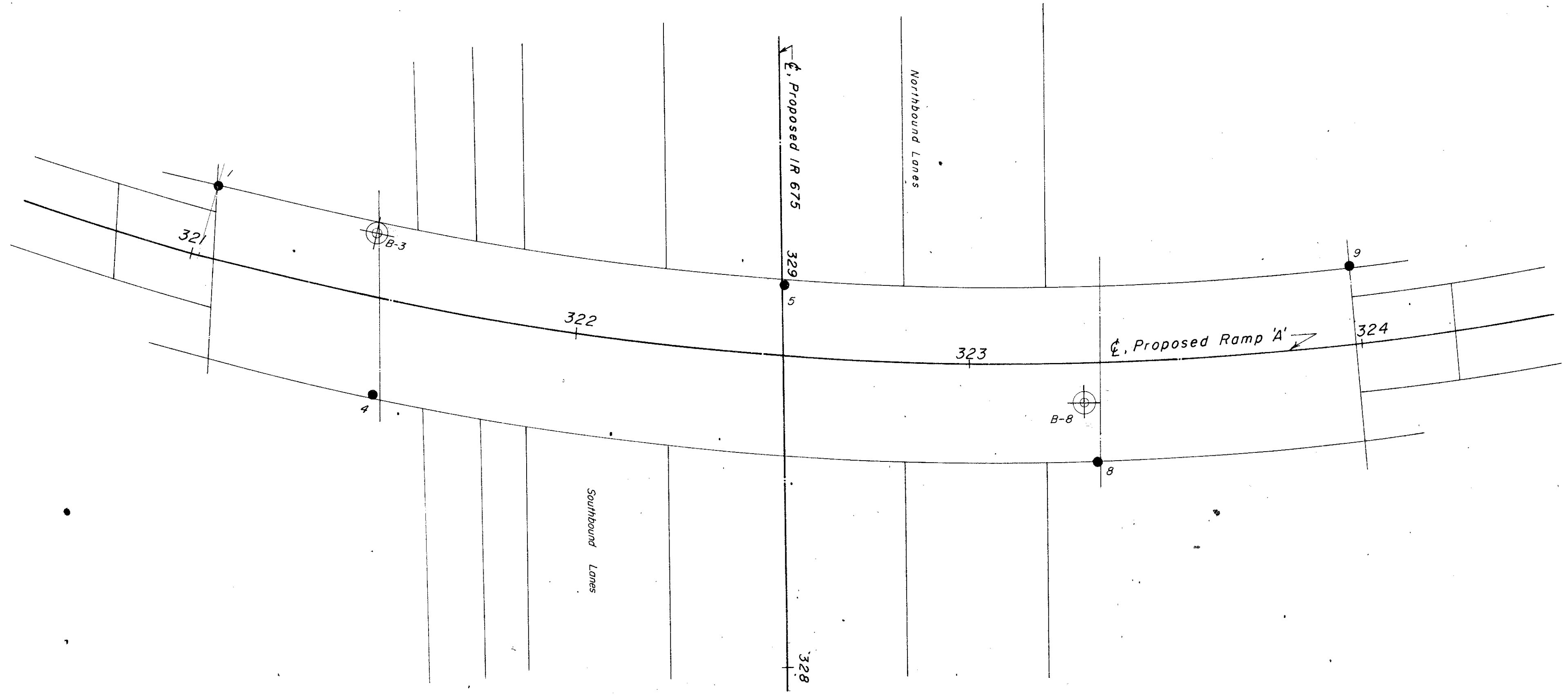
NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

OHIO DEPARTMENT OF HIGHWAYS
 TESTING LABORATORY
 1620 WEST BROAD STREET, COLUMBUS, OHIO 43223

STRUCTURE FOUNDATION INVESTIGATION
 BRIDGE NO. GRE-675-0576
 UNDER RAMP 'A'
 SEC. GRE-675-5.37

CHECKED BY L.N.L. REVIEWED BY R.D.R. DATE 8/27/69

UNPROCESSED
PHOTOS



OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS 23, OHIO

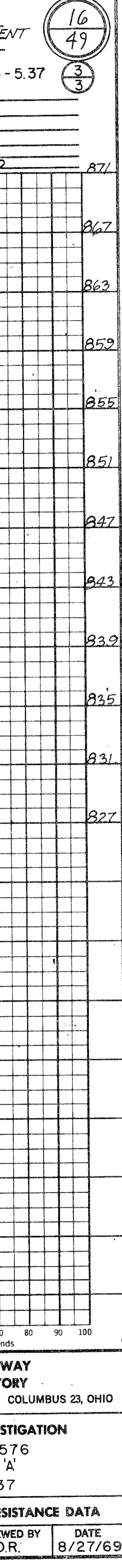
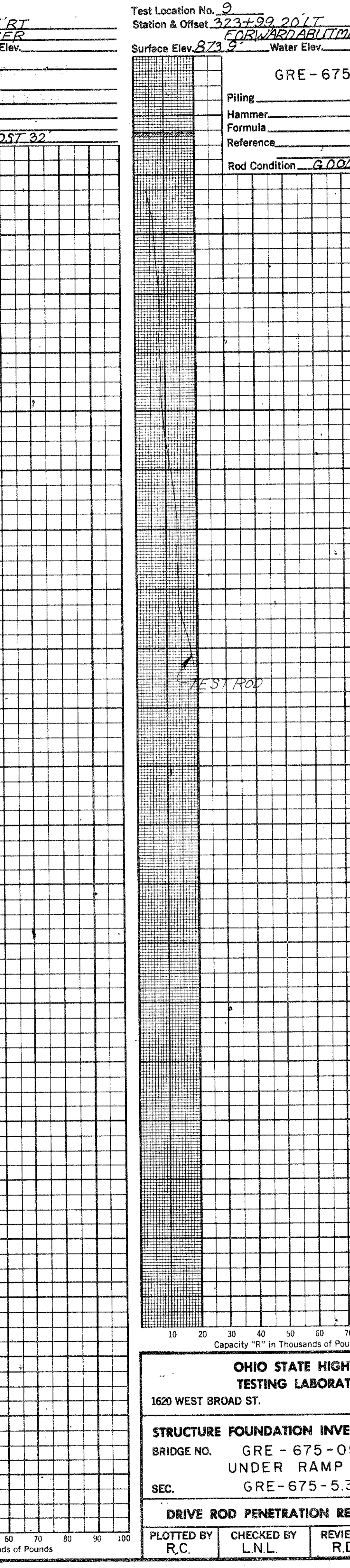
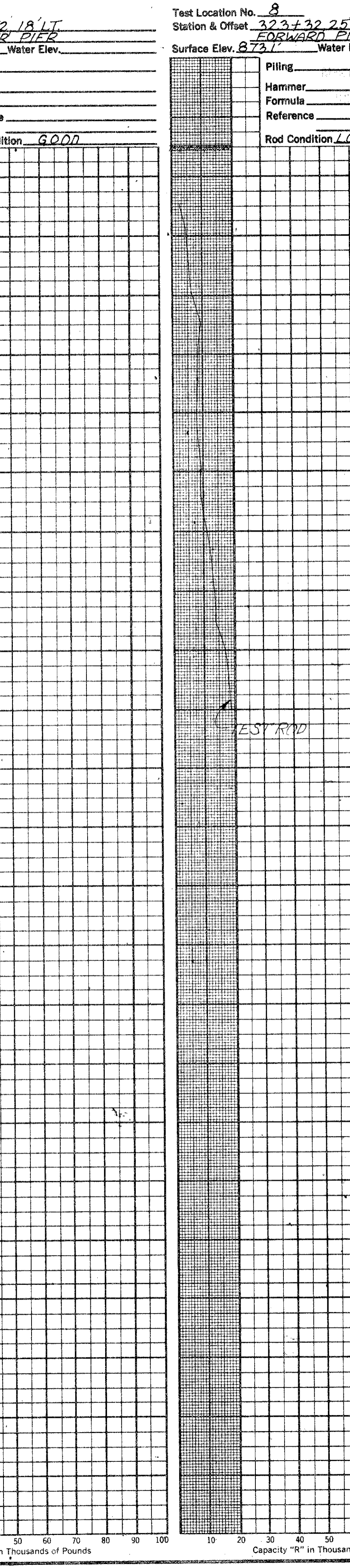
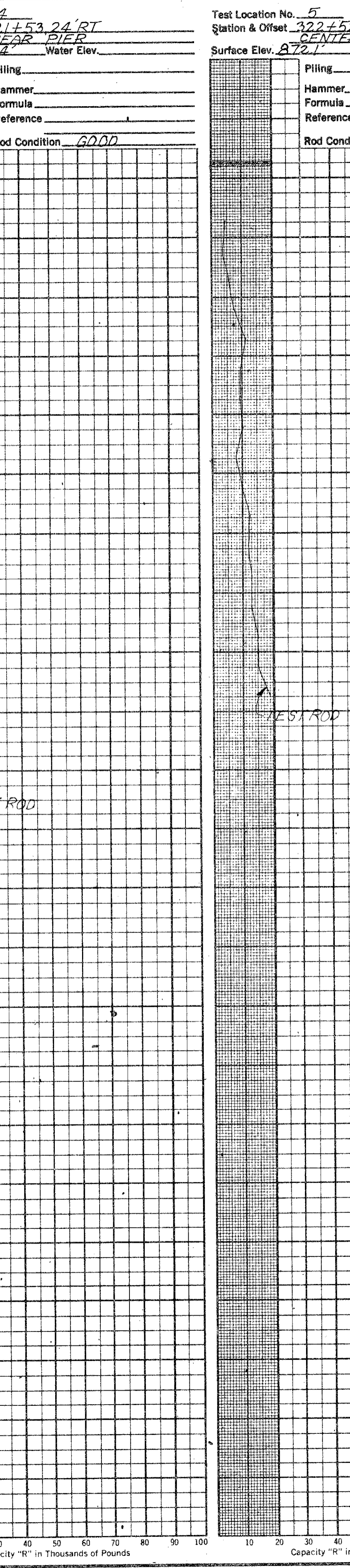
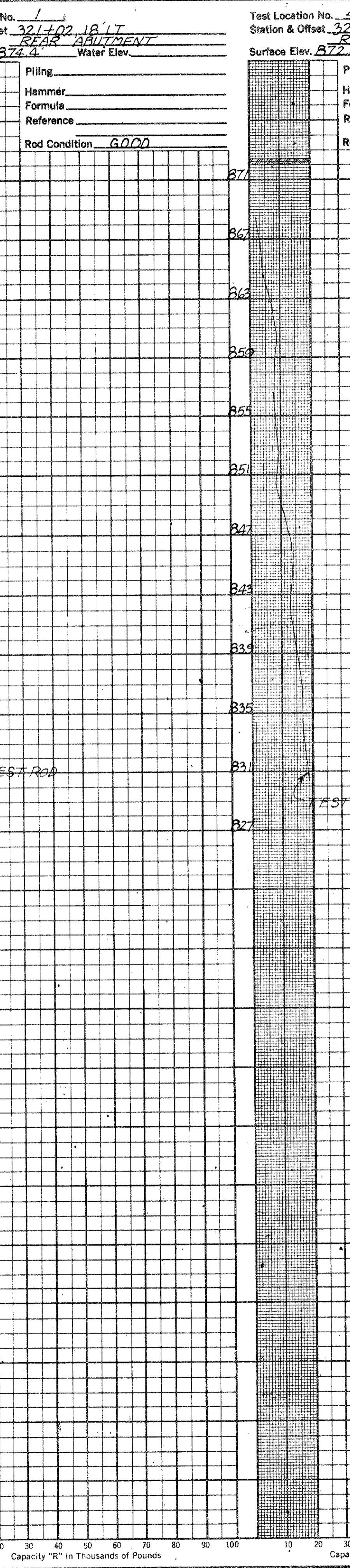
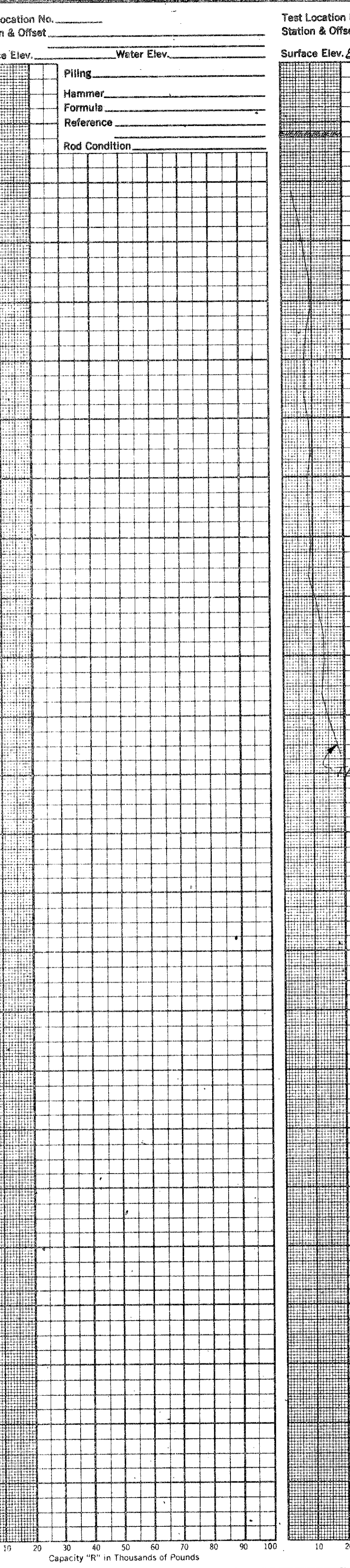
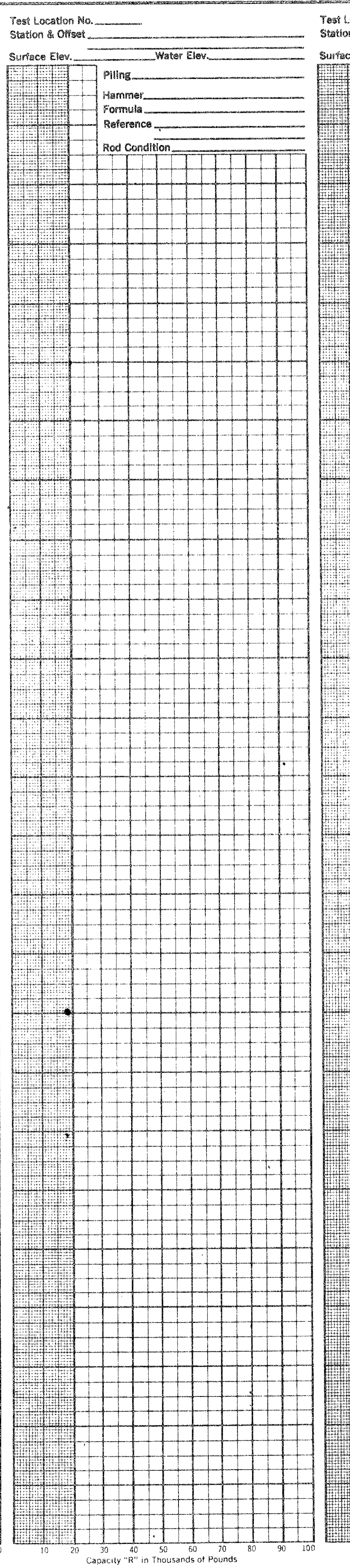
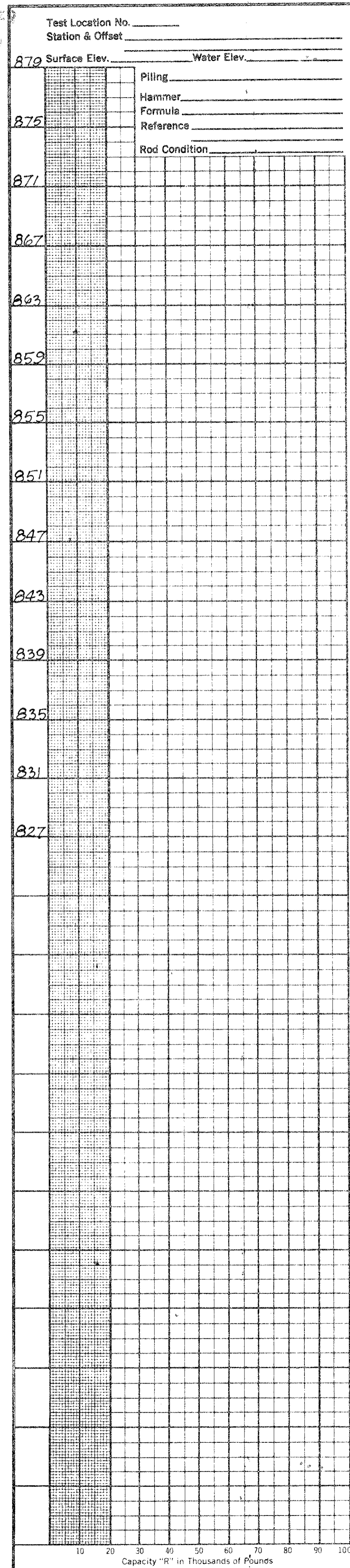
STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0576
UNDER RAMP 'A'
SEC. GRE-675-5.37

PLAN AND PROFILE

DRAWN BY J.E.C.	CHECKED BY L.N.L.	REVIEWED BY R.D.R.	DATE 8/27/69
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SCALE: 1" = 20'

11-114
1000-9-57
REV. 11-1959



16
49
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3

GRE-675-5.37

OHIO STATE HIGHWAY TESTING LABORATORY
1620 WEST BROAD ST. COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0576
UNDER RAMP 'A'
SEC. GRE-675-5.37

DRIVE ROD PENETRATION RESISTANCE DATA

PLOTTED BY R.C.	CHECKED BY L.N.L.	REVIEWED BY R.D.R.	DATE 8/27/69
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GEOLOGY OF THE SITE

THE STRUCTURE SITE IS LOCATED IN THE GLACIATED LEXINGTON PENEPLAIN, IN AN AREA WHERE DEEP TO MODERATELY DEEP GLACIAL-DERIVED SOILS OVERLIE INTERBEDDED SHALE AND LIMESTONE BEDROCK, OF ORDOVICIAN AGE.

EXPLORATION

THE EXPLORATION CONSISTED OF THREE DRIVE SAMPLE BORINGS AND SEVEN DRIVE ROD PENETRATION TESTS, MADE BETWEEN JUNE 18 AND JULY 17, 1969.








INVESTIGATIONAL FINDINGS

THE BORINGS ENCOUNTERED LOOSE TO VERY DENSE SANDY SILTS AND GRAVELS WITH SOME SANDS AND STIFF CLAYS. THE BORINGS WERE TERMINATED AT 41 AND 61-FOOT DEPTHS, ELEVATIONS 836 AND 831 FEET, AFTER PENETRATING IN EXCESS OF 20 FEET OF MATERIAL REQUIRING IN EXCESS OF 30 BLOWS PER FOOT IN THE STANDARD PENETRATION TEST.










ROD SOUNDINGS ENCOUNTERED GRADUAL INCREASE IN PENETRATION RESISTANCE WITH INCREASE IN DEPTH AND WERE TERMINATED UPON ENCOUNTER WITH HIGH RESISTANCE TO PENETRATION AT 35 TO 53-FOOT DEPTHS, ELEVATIONS 847 TO 827 FEET, CONSIDERED TO BE IN VERY DENSE SANDY SILTS, AS REVEALED BY THE BORINGS.

NO FREE WATER WAS OBSERVED IN ANY OF THE ROD SOUNDING HOLES.













NO TEST PENETRATED TO BEDROCK SURFACE.

-  Auger Boring Location - Plan View.
-  Press and / or Drive Sample and / or Core Boring Location - Plan View.
-  Drive Rod Penetration Resistance Sounding Location - Plan View.
-  Capped Pile
-  Footing
-  Footing on Pile
-  TR Top of Rock

LEGEND

-  Horizontal Bar on Boring Log Indicates the Depth the Sample Was Taken.
-  Figures Beside the Boring Log in Profile Indicate the Number of Blows for Standard Penetration Test.
X = Number of Blows for First 6 inches.
Y = Number of Blows for Second 6 inches.
-  Drive Rod Penetration Resistance Sounding Log - Profile
-  Casing
-  Resistance "R" < 10,000 lbs.
-  Resistance "R" > 10,000 lbs.
-  Z Indicates Final Measurement of Penetration, in Inches.
-  W Indicates Free Water Elevation.
-  Indicates Static Water Elevation.

SYMBOLS OF ROCK TYPES

- | | | | |
|---|---|---|---------------------|
|  | Coal |  | Weathered Sandstone |
|  | Weathered Siltstone, Mudstone, or Claystone |  | Sandstone |
|  | Siltstone, Mudstone, or Claystone |  | Leached Dolomite |
|  | Weathered Shale |  | Dolomite |
|  | Shale |  | Leached Limestone |
|  | Boulders or Cobbles |  | Limestone |

GENERAL INFORMATION

Drive Rod Penetration Sounding Tests

Drive rod penetration resistance tests constitute driving a 1.315-inch diameter steel rod, with a 45° cone point, into the ground, using a 122-pound drop-hammer with a free fall of five feet. At one or two-foot depth intervals, a measurement is taken to determine the amount of penetration achieved in three hammer drops. This reading is converted to an empirical value for capacity "R", in thousands of pounds (which is a measure of both the point resistance and frictional resistance on the rod), by using charts prepared by the Ohio Department of Highways, Bureau of Bridges, on the basis of correlation study of rod penetration with past performance of pile driving. For interpretation, a graph is prepared by plotting the value "R" against the depth at which the reading was taken, and connecting the plotted points. The curve so obtained reflects the density of subsurface materials in a manner that can be readily compared with data from similar tests at other locations on the structure site. From this comparison, the overall uniformity of subsurface condition may be evaluated.

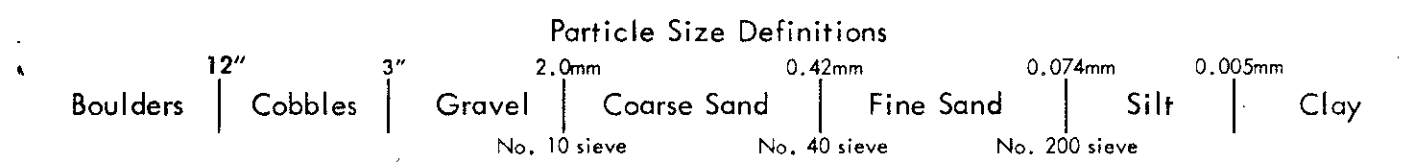
Drive Sample Borings - Drive-Press Sample Borings

Drive sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. sampler, at 2-1/2 and / or 5-foot depth intervals, driven by means of a 140 - pound drop-hammer with a free fall of 30 inches. The number of blows required to drive the sampler 12 inches is considered the standard penetration test.

Drive-press sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. drive sampler, and 3" O.D. thin-wall press sampler. The press sampler is advanced by continuous uniform pressure, applied by the drill rig.

The boring log sheets show a graphic plot of the information obtained, including depth and elevation of the sample, number of blows for the standard penetration tests in two 6-inch increments, depth of press samples, field sample number, sample description - based on laboratory tests and the Casagrande AC classification system - and gradation, plasticity, and moisture content determinations. Results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler can not be driven, a wash sample is procured for visual classification, in order to determine the general character of the material. These samples are not considered sufficiently representative to warrant laboratory testing.

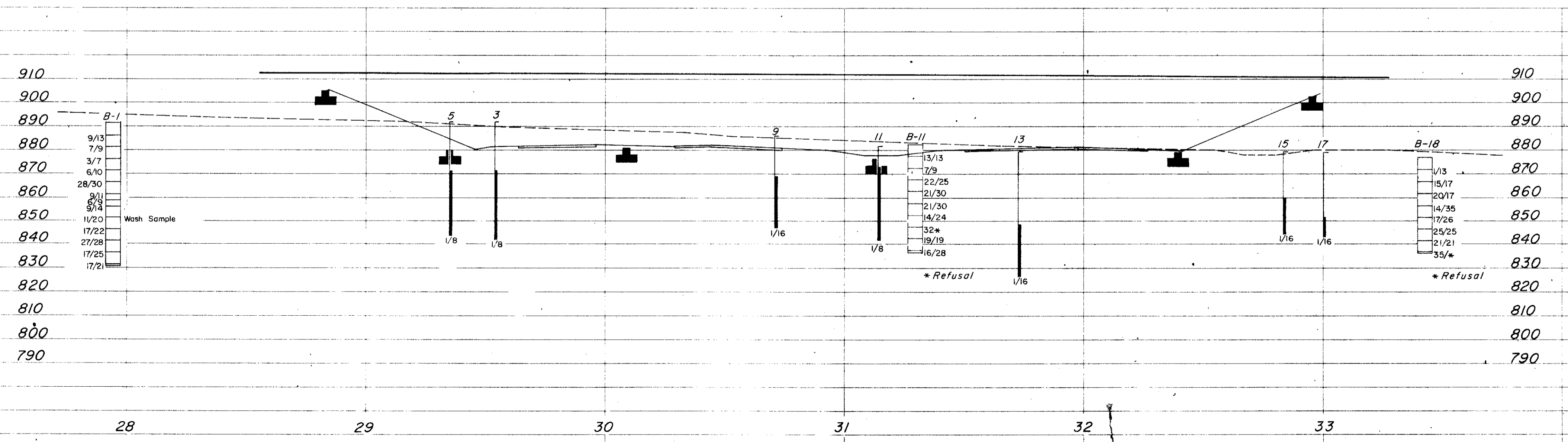
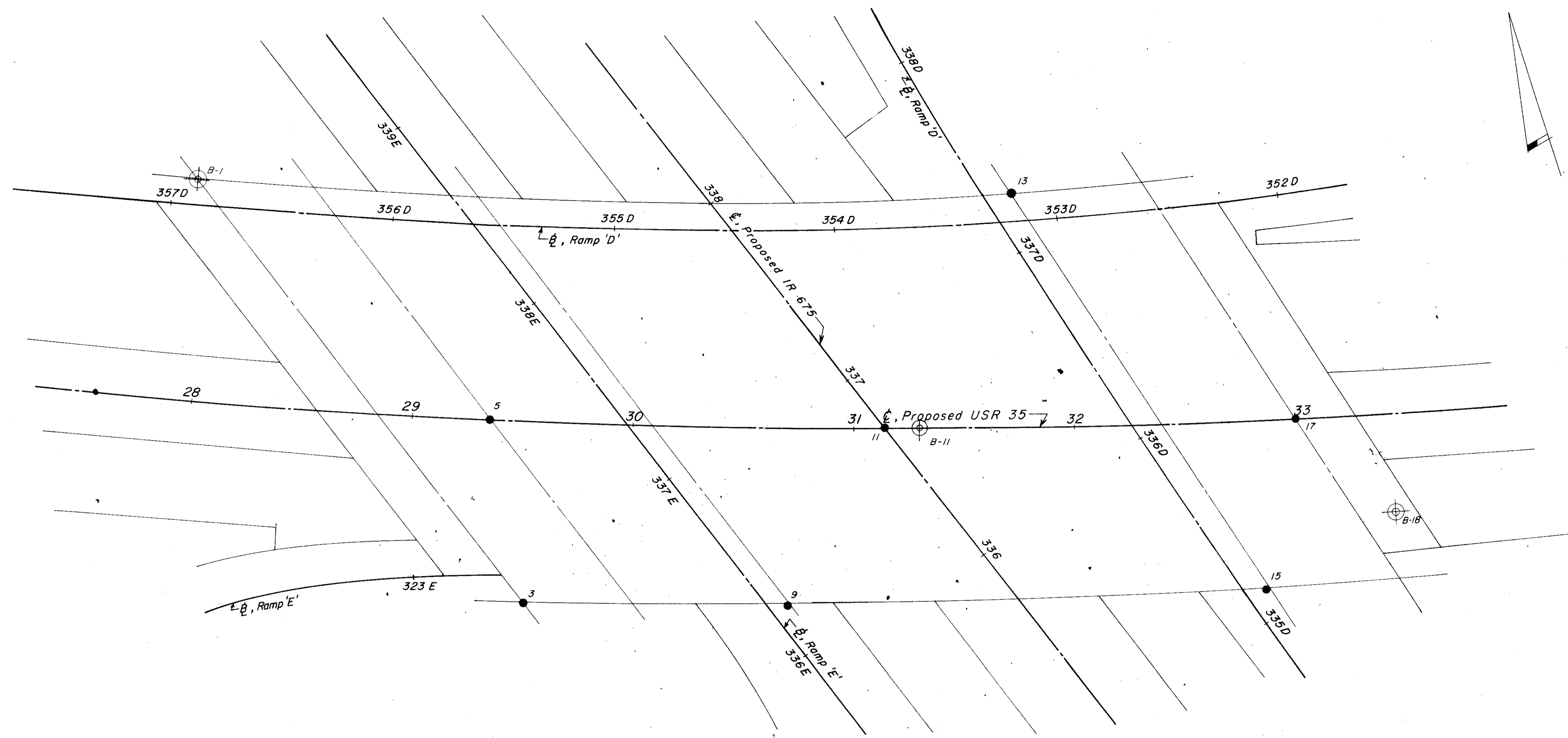


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OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS, OHIO 43223

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE - 675 - 0589
UNDER USR 35
SEC. GRE - 675 - 5.37

CHECKED BY R.D.R.	REVIEWED BY G.P.H.	DATE 7/31/69
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OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0589
UNDER USR 35
SEC. GRE-675-5.37

PLAN AND PROFILE

DRAWN BY J.E.C.	CHECKED BY R.D.R.	REVIEWED BY G.P.H.	DATE 7/31/69
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SCALE: 1" = 30'

LOG OF BORING

Date Started 6-18-69 Sampler Type SS Dia 1 3/8" Water Elev. _____
 Date Completed 6-20-69 Casing Length 30' Dia 3 1/2" Surface Elev. 891.6'
 Boring No. B-1 Station & Offset 27+94, 101' Lt. (Rear Abutment)

Elev.	Depth	Std. Pen (N)	Rec. Loss (ft)	Description	Sample No.	Physical Characteristics										SHTL Class.				
						% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.							
891.6	0																			
886.6	5	9/13		Brown Gravelly Sandy Silt	1	22	9	15	28	26	20	5	14	A-4a						
881.6	10	7/9		Gray Gravelly Sandy Silt	2	21	9	16	30	24	18	5	11	A-4a						
876.6	14	3/7		Gray Gravelly Sandy Silt	3	23	9	22	27	19	18	6	12	A-4a						
871.6	20	6/10		Gray Silty Gravelly Sand	4	30	48	12	5	5	NP	NP	12	A-1-b						
866.6	24	28/30		Gray Silty Sandy Gravel	5	67	14	6	4	9	NP	NP	7	A-1-a						
861.6	30	9/11		Gray Sandy Gravelly Silt	6	19	4	11	44	22	18	2	12	A-4a						
859.1	32	6/9		Gray Gravelly Sandy Silt	7	17	7	14	35	27	19	4	13	A-4a						
856.6	34	9/14		Gray Silt	8	0	6	16	46	32	18	2	14	A-4a						
851.6	40	11/20		No Sample Recovered - Gray Sandy Silty Clay (Wash Sample) (Driller's Description)	V															
846.6	44	17/22		Gray Silt and Clay	9	0	2	4	46	48	27	12	16	A-6a						
841.6	50	27/28		Gray Silt	10	0	0	1	53	46	24	7	16	A-4b						
836.6	54	17/25		Gray Silt and Clay	11	0	1	1	38	60	29	13	17	A-6a						
831.6	58																			
830.6	60	17/21		Gray Silt and Clay	12	0	7	3	44	46	27	12	23	A-6a						

BOTTOM OF BORING

LOG OF BORING

Date Started 7-16-69 Sampler Type SS Dia 1 3/8" Water Elev. _____
 Date Completed 7-16-69 Casing Length 33.5' Dia 3 1/2" Surface Elev. 882.5'
 Boring No. B-11 Station & Offset 31+30, CL. (Third Pier)

Elev.	Depth	Std. Pen (N)	Rec. Loss (ft)	Description	Sample No.	Physical Characteristics										SHTL Class.				
						% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.							
882.5	0																			
877.5	5	13/13		Brown Gravelly Sandy Silt	1	23	10	17	27	23	19	7	13	A-4a						
872.5	10	7/9		Brown Gravelly Sandy Silt	2	18	11	20	29	22	17	6	10	A-4a						
867.5	14	22/25		Gray Silty Sandy Gravel	3	63	10	7	12	8	NP	NP	10	A-1-b						
862.5	18	21/30		Gray Silt	4	0	0	1	72	27	NP	NP	20	A-4b						
857.5	22	21/30		Gray Sandy Silt	5	12	11	21	34	22	17	4	10	A-4a						
852.5	26	14/24		Brown Sandy Gravel	6	69	14	10	-7		NP	NP	12	A-1-a						
847.5	30	32* (0.6')		Gray Gravelly Sandy Silt	7	15	11	16	34	24	18	4	10	A-4a						
842.5	34	19/19		Gray Sandy Gravelly Silt	8	37	7	10	25	18	NP	NP	11	A-4a						
837.5	42																			
836.5	46	16/28		Gray Gravelly Sandy Silt	9	16	5	13	41	25	NP	NP	12	A-4a						

*Refusal
BOTTOM OF BORING

LOG OF BORING

Date Started 7-17-69 Sampler Type SS Dia 1 3/8" Water Elev. _____
 Date Completed 7-17-69 Casing Length 26' Dia 3 1/2" Surface Elev. 876.8'
 Boring No. B-18 Station & Offset 33+43, 45' Rt. (Forward Abutment)

Elev.	Depth	Std. Pen (N)	Rec. Loss (ft)	Description	Sample No.	Physical Characteristics										SHTL Class.				
						% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.							
876.8	0																			
871.8	5	1/13		Brown Sandy Gravel with Cobbles	1	-	-	-	-	-	-	-	25	Visual						
866.8	10	15/17		Gray Sandy Gravel	2	51	23	16	-10		NP	NP	9	A-1-a						
861.8	14	20/17		Gray Sandy Gravel	3	60	18	13	-9		NP	NP	10	A-1-a						
856.8	18	14/35		Gray Gravelly Sandy Silt	4	22	7	17	24	30	18	8	11	A-4a						
851.8	22	17/26		Gray Sandy Gravelly Silt	5	30	6	19	30	15	NP	NP	15	A-4a						
846.8	26	25/25		Gray Sandy Silt	6	0	1	37	49	13	NP	NP	17	A-4a						
841.8	30	21/21		Gray Silt	7	0	2	3	73	22	NP	NP	20	A-4b						
836.8	34																			
836.3	40	35/*		Gray Silty Sandy Gravel	8	49	17	11	12	11	16	4	10	A-4b						

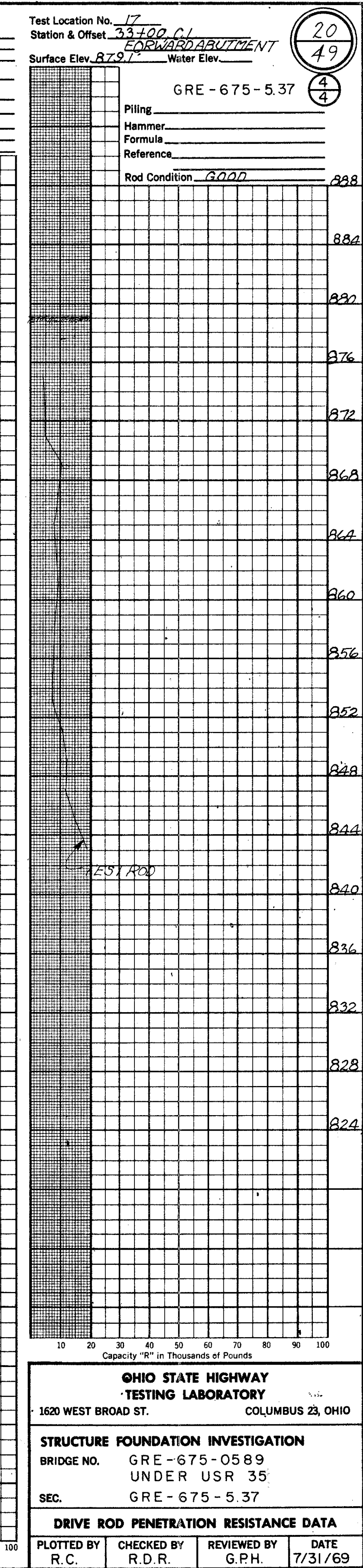
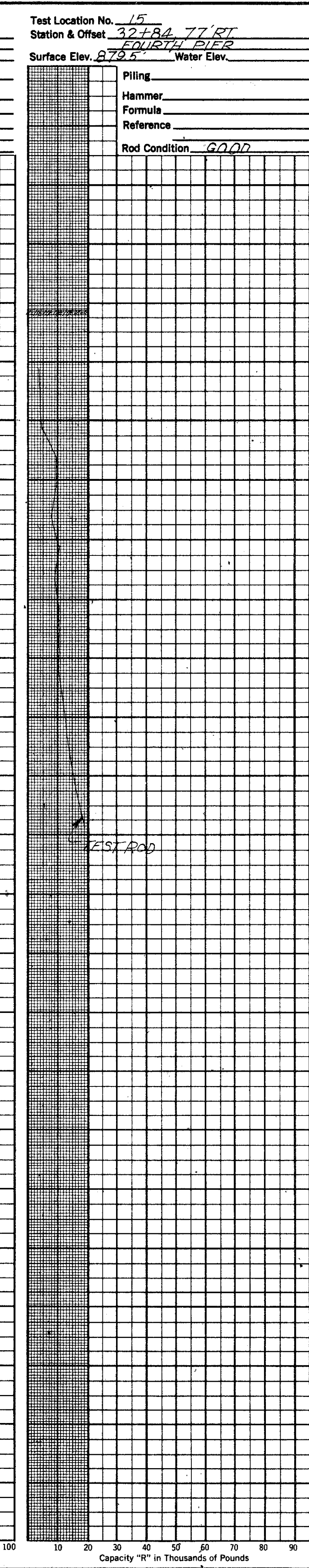
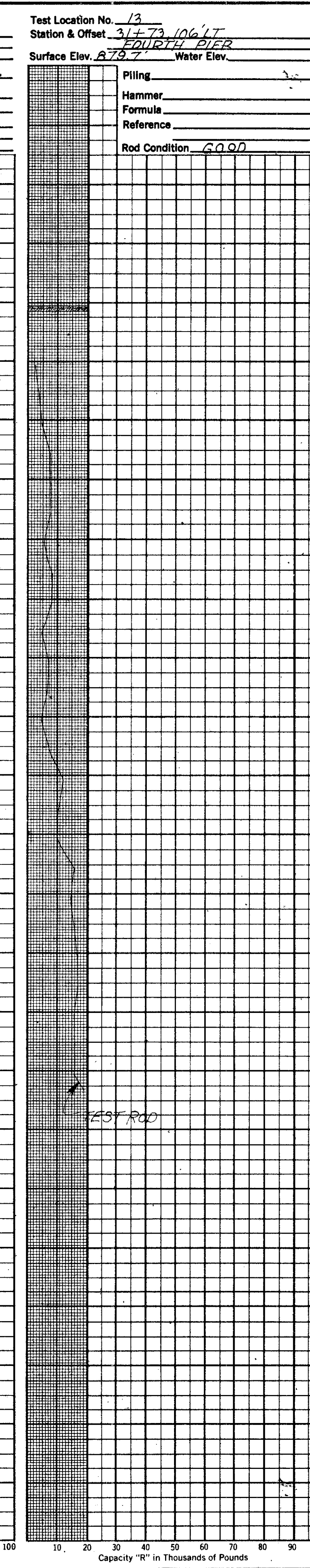
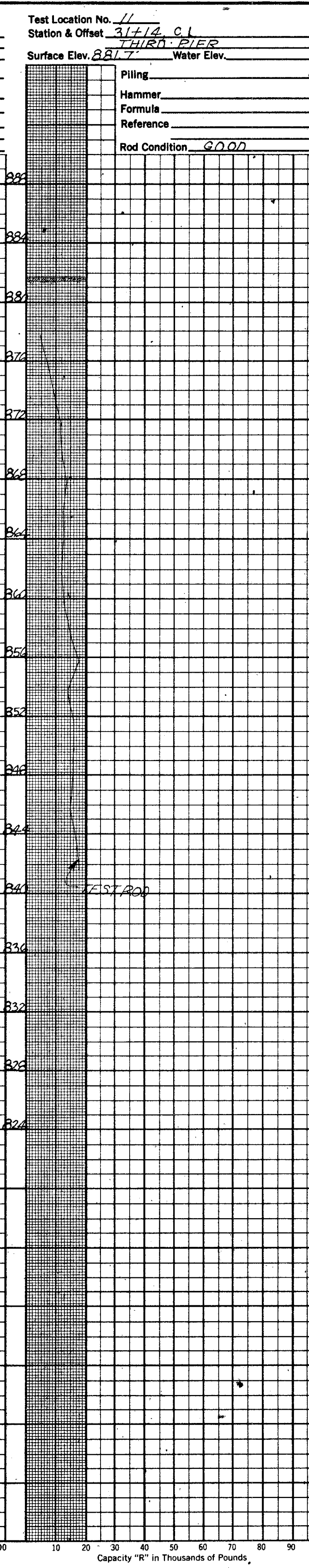
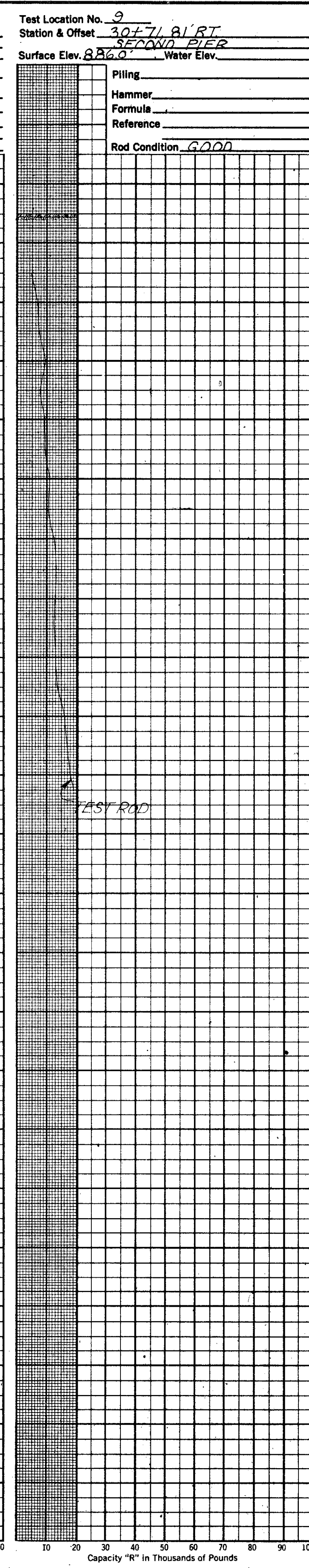
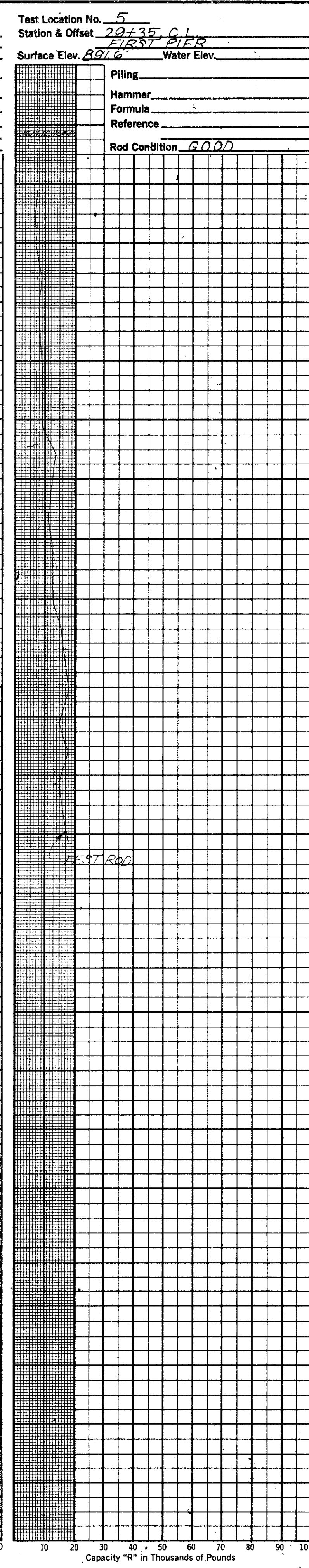
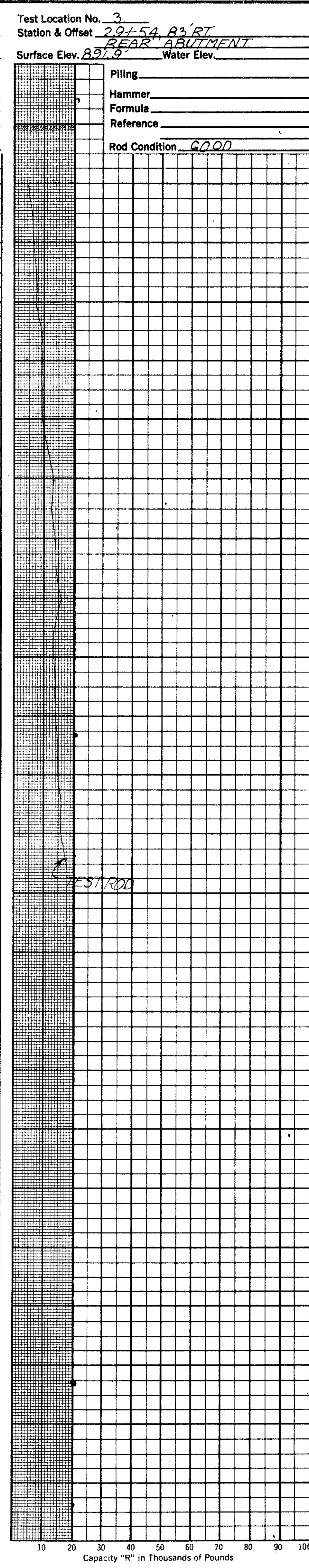
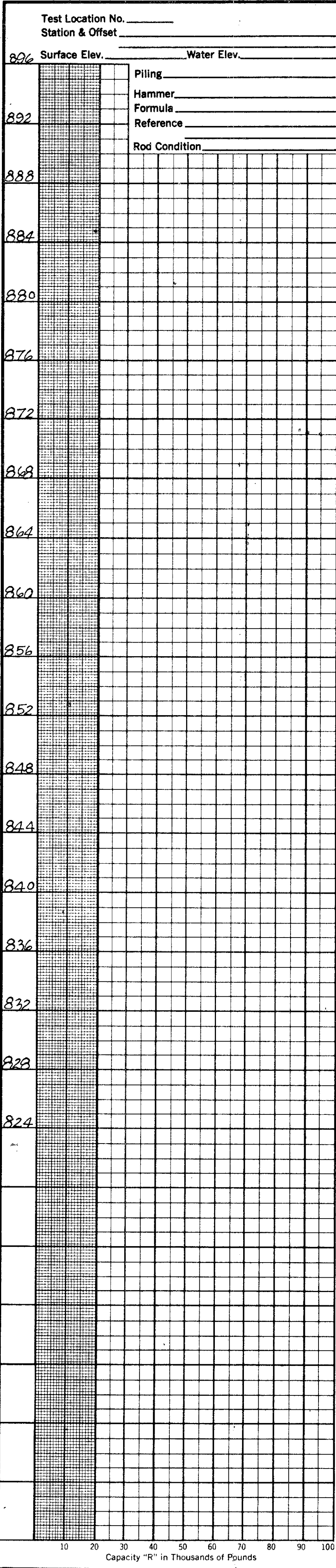
*Refusal
BOTTOM OF BORING

OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0589
UNDER USR 35
SEC. GRE-675-5.37

BORING DATA

TYPED BY S.A.J.	CHECKED BY R.D.R.	REVIEWED BY G.P.H.	DATE 7/31/69
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20
49
4

OHIO STATE HIGHWAY TESTING LABORATORY
 1620 WEST BROAD ST. COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
 BRIDGE NO. GRE-675-0589
 UNDER USR 35
 SEC. GRE-675-5.37

DRIVE ROD PENETRATION RESISTANCE DATA

PLOTTED BY R.C. CHECKED BY R.D.R. REVIEWED BY G.P.H. DATE 7/31/69

GEOLOGY OF THE SITE

THE STRUCTURE SITE IS LOCATED IN THE GLACIATED LEXINGTON PENEPLAIN, IN AN AREA WHERE MODERATELY DEEP GLACIAL-DERIVED SOILS OVERLIE INTERBEDDED LIMESTONE AND SHALE BEDROCK, OF ORDOVICIAN AGE.

EXPLORATION

THE EXPLORATION CONSISTED OF ONE DRIVE SAMPLE BORING AND SIX DRIVE ROD PENETRATION TESTS, MADE BETWEEN JULY 23 AND AUGUST 12, 1969. INCLUDED WITH THIS REPORT IS THE LOG OF A BORING MADE FOR THE FOUNDATION INVESTIGATION FOR THE ADJACENT STRUCTURE.

INVESTIGATIONAL FINDINGS








BORINGS DISCLOSED MEDIUM-DENSE TO VERY DENSE SILTS AND VERY STIFF TO HARD CLAYS TO 51 AND 91-FOOT DEPTHS, WHERE THE BORINGS WERE TERMINATED AFTER PENETRATING AT LEAST 20 FEET OF MATERIAL REQUIRING IN EXCESS OF 30 BLOWS PER FOOT IN THE STANDARD PENETRATION TEST.










ROD SOUNDINGS ENCOUNTERED GRADUALLY INCREASING AND UNIFORMLY MEDIUM-HIGH RESISTANCE TO PENETRATION WITH INCREASING DEPTH AND WERE TERMINATED DUE TO NEAR-REFUSAL TO PENETRATION AT 37 TO 68-FOOT DEPTHS, ELEVATIONS 863 TO 818 FEET, CONSIDERED TO BE IN DENSE SILTS OR HARD CLAYS, AS REVEALED BY THE BORINGS.

FREE WATER WAS NOT OBSERVED IN THE ROD SOUNDING HOLES.













NO TEST PENETRATED TO BEDROCK SURFACE.

LEGEND

-  Auger Boring Location - Plan View.
-  Press and / or Drive Sample and / or Core Boring Location - Plan View.
-  Drive Rod Penetration Resistance Sounding Location - Plan View.
-  Capped Pile
-  Footing
-  Footing on Pile
-  TR Top of Rock

-  Horizontal Bar on Boring Log Indicates the Depth the Sample Was Taken.
-  Figures Beside the Boring Log in Profile Indicate the Number of Blows for Standard Penetration Test.
X = Number of Blows for First 6 inches.
Y = Number of Blows for Second 6 inches.
-  Drive Rod Penetration Resistance Sounding Log - Profile
-  Casing
-  Resistance "R" < 10,000 lbs.
-  Resistance "R" > 10,000 lbs.
-  Z Indicates Final Measurement of Penetration, in Inches.
-  W Indicates Free Water Elevation.
-  Indicates Static Water Elevation.

SYMBOLS OF ROCK TYPES

-  Coal
-  Weathered Siltstone, Mudstone, or Claystone
-  Siltstone, Mudstone, or Claystone
-  Weathered Shale
-  Shale
-  Boulders or Cobbles
-  Weathered Sandstone
-  Sandstone
-  Leached Dolomite
-  Dolomite
-  Leached Limestone
-  Limestone

GENERAL INFORMATION

Drive Rod Penetration Sounding Tests

Drive rod penetration resistance tests constitute driving a 1.315-inch diameter steel rod, with a 45° cone point, into the ground, using a 122-pound drop-hammer with a free fall of five feet. At one or two-foot depth intervals, a measurement is taken to determine the amount of penetration achieved in three hammer drops. This reading is converted to an empirical value for capacity "R", in thousands of pounds (which is a measure of both the point resistance and frictional resistance on the rod), by using charts prepared by the Ohio Department of Highways, Bureau of Bridges, on the basis of correlation study of rod penetration with past performance of pile driving. For interpretation, a graph is prepared by plotting the value "R" against the depth at which the reading was taken, and connecting the plotted points. The curve so obtained reflects the density of subsurface materials in a manner that can be readily compared with data from similar tests at other locations on the structure site. From this comparison, the overall uniformity of subsurface condition may be evaluated.

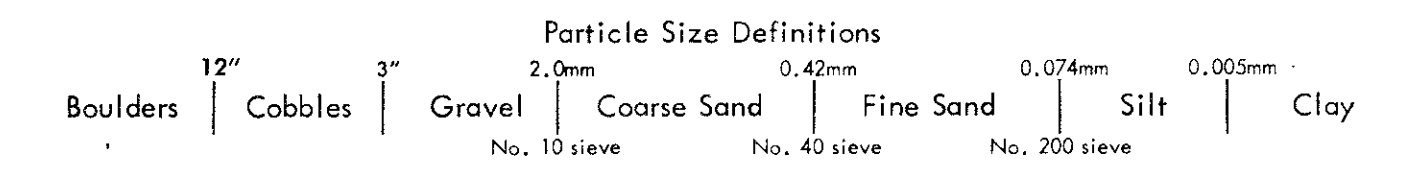
Drive Sample Borings - Drive-Press Sample Borings

Drive sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. sampler, at 2-1/2 and / or 5-foot depth intervals, driven by means of a 140 - pound drop-hammer with a free fall of 30 inches. The number of blows required to drive the sampler 12 inches is considered the standard penetration test.

Drive-press sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. drive sampler, and 3" O.D. thin-wall press sampler. The press sampler is advanced by continuous uniform pressure, applied by the drill rig.

The boring log sheets show a graphic plot of the information obtained, including depth and elevation of the sample, number of blows for the standard penetration tests in two 6-inch increments, depth of press samples, field sample number, sample description - based on laboratory tests and the Casagrande AC classification system - and gradation, plasticity, and moisture content determinations. Results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler can not be driven, a wash sample is procured for visual classification, in order to determine the general character of the material. These samples are not considered sufficiently representative to warrant laboratory testing.



NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

**OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY**
1620 WEST BROAD STREET, COLUMBUS, OHIO 43223

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0615
UNDER PENN-CENTRAL RR.
SEC. GRE-675-5.37

CHECKED BY L.N.L.	REVIEWED BY R.D.R.	DATE 8/27/69
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LOG OF BORING
 Date Started 7-29-69 Sampler Type SS Dia 1 3/8"
 Date Completed 7-31-69 Casing Length 45' Dia 3 1/2"
 Boring No. B-3 Station & Offset 351+04, 158' Lt. (First Pier) Surface Elev 902.9'

Elev	Depth	Snd Pen (IN)	Rec. It.	Loss It.	Description	Sample No.	Physical Characteristics										SHTL Class.		
							% Agg	% C.S.	% F.S.	% Silt	% Clay	LL	PI	WC	NP	NP		NP	NP
902.9	0																		
897.9	5	2/9			Brown Gravelly Sandy Silt	1	19	11	23	26	21	NP	NP	11					A-4a
892.9	10	14/21			Gray Sandy Silt	2	0	16	35	30	19	NP	NP	14					A-4a
887.9	16	17/23			Gray Sandy Silt	3	0	3	18	58	21	NP	NP	18					A-4b
882.9	20	16/18			Gray Silt	4	0	0	5	78	17	NP	NP	20					A-4b
877.9	28	11/9			Gray Silt	5	0	0	15	52	33	NP	NP	15					A-4b
872.9	30	7/8			Gray Sandy Silt	6	14	7	18	38	23	NP	NP	15					A-4a
867.9	36	9/12			Gray Sandy Silt	7	0	8	15	46	31	NP	NP	14					A-4a
862.9	40	12/15			Gray Silt	8	0	1	2	51	46	NP	NP	19					A-4b
857.9	46	12/18			Gray Gravelly Silt	9	12	2	7	46	33	NP	NP	14					A-4a
852.9	50	16/13			Gray Silt	10	0	3	13	53	31	NP	NP	11					A-4b
847.9	56	9/15			Gray Silt and Clay	11	0	1	5	52	42	28	14	16					A-4b
842.9	60	11/12			Gray Silt	12	0	0	3	64	33	NP	NP	19					A-4b
837.9	66	11/12			Gray Clayey Silt	13	0	2	9	57	32	22	8	16					A-4b
832.9	70	10/16			Gray Silt	14	0	0	2	61	37	22	6	19					A-4b
827.9	76	13/18			Gray Clay	15	0	0	1	62	37	45	24	32					A-7-6
822.9	80	15/28			Gray Clay	16	0	2	14	31	53	42	21	22					A-7-6
817.9	86	22/36			Brown Gravelly Sandy Silt	17	19	9	19	28	25	20	7	11					A-4a
812.9	90																		
811.9	90	30/42			Gray Sandy Gravelly Silt	18	34	7	14	22	23	21	8	12					A-4a

BOTTOM OF BORING

LOG OF BORING
 Date Started 7-23-69 Sampler Type SS Dia 1 3/8"
 Date Completed 7-24-69 Casing Length 40' Dia 3 1/2"
 Boring No. B-12 Station & Offset 348+18, 171' Rt. (Forward Abutment) Surface Elev 901.4'

Elev	Depth	Snd Pen (IN)	Rec. It.	Loss It.	Description	Sample No.	Physical Characteristics										SHTL Class.		
							% Agg	% C.S.	% F.S.	% Silt	% Clay	LL	PI	WC	NP	NP		NP	NP
901.4	0																		
896.4	5	11/11			Brown Sandy Silt	1	11	17	23	27	22	19	7	10					A-4a
891.4	10	24/19			Gray Gravelly Sandy Silt	2	-	-	-	-	-	-	-	-					Visual
888.9	14	4/7			No Sample Recovered - Hole caved in														
886.4	16	8/10			Gray Silty Sand	3	13	26	22	25	14	20	7	12					A-4a
883.9	18				No Sample Recovered - Hole caved in														
881.4	20	10/19			Gray Sandy Silt	4	8	9	18	38	27	20	9	11					A-4a
876.4	28	10/15			Gray Gravelly Silt	5	-	-	-	-	-	-	20	8	12				Visual
871.4	30	33/50 (6.1')			Gray Silty Sandy Gravel Heaved 2' in casing	6	59	21	9	-	-	-	NP	NP	7				A-1-a
866.4	36	26/39			Gray Sandy Silt	7	5	6	11	58	20	NP	NP	11					A-4b
861.4	40	26/39			Gray Gravelly Silt with Cobbles	8	-	-	-	-	-	-	21	8	11				Visual
856.4	46	17/30			Gray Sandy Silt	9	9	7	18	42	24	19	5	13					A-4a
851.4	50	24/26			Gray Sandy Silt	10	13	7	17	41	22	22	7	12					A-4a

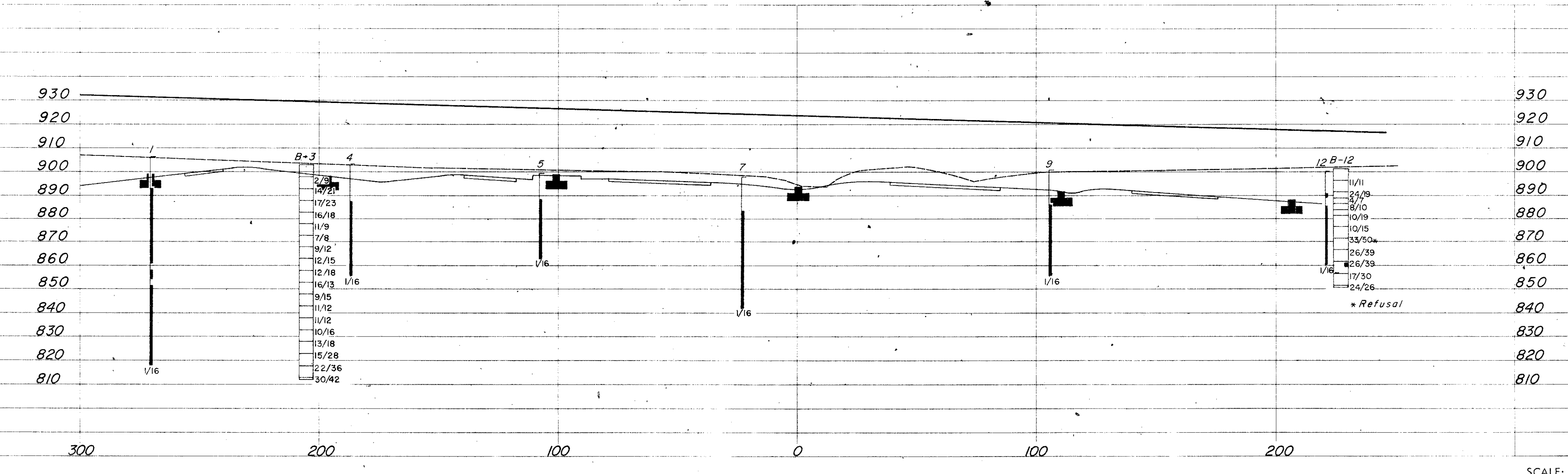
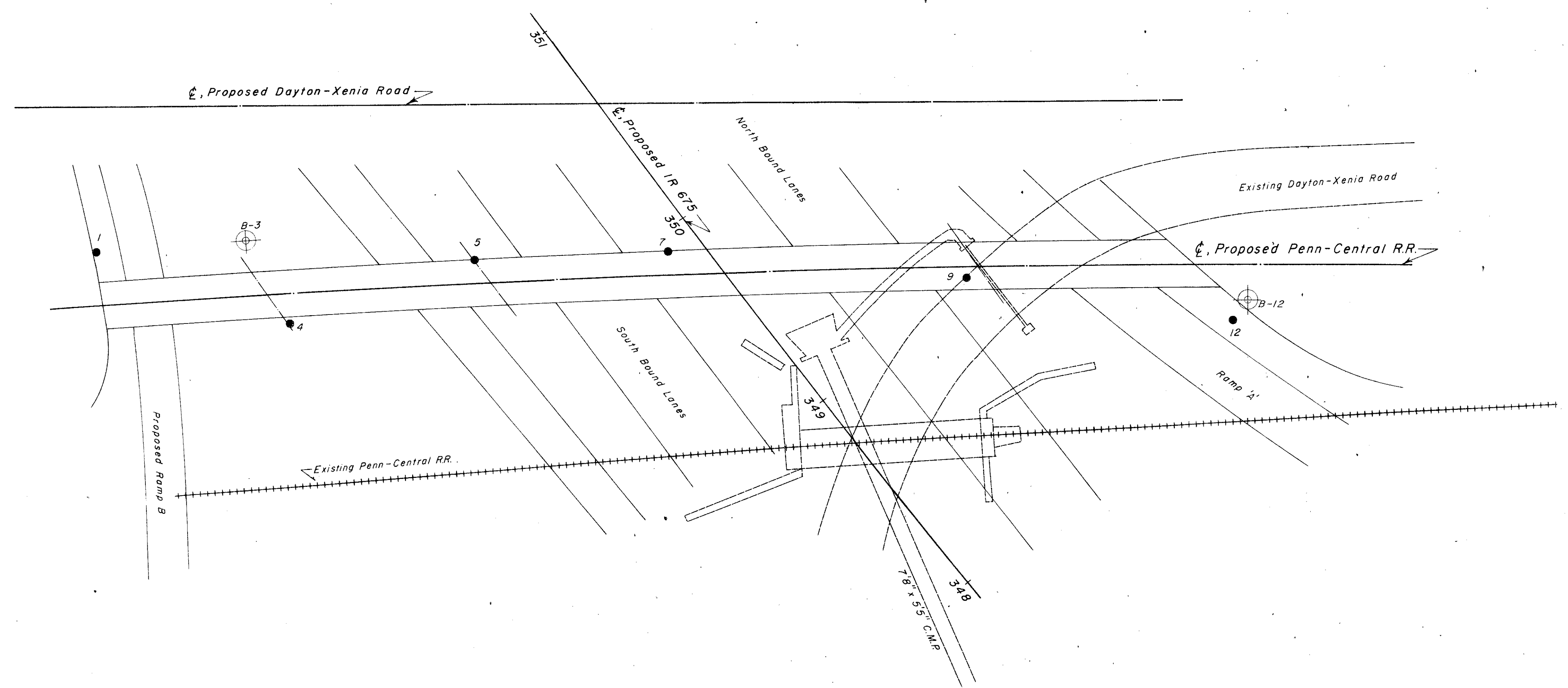
*Refusal BOTTOM OF BORING

OHIO DEPARTMENT OF HIGHWAYS
 TESTING LABORATORY
 1620 WEST BROAD STREET, COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
 BRIDGE NO. GRE-675-0615
 UNDER PENN-CENTRAL RR.
 SEC. GRE-675-5.37

BORING DATA

TYPED BY S.A.J.	CHECKED BY L.N.L.	REVIEWED BY R.D.R.	DATE 8/27/69
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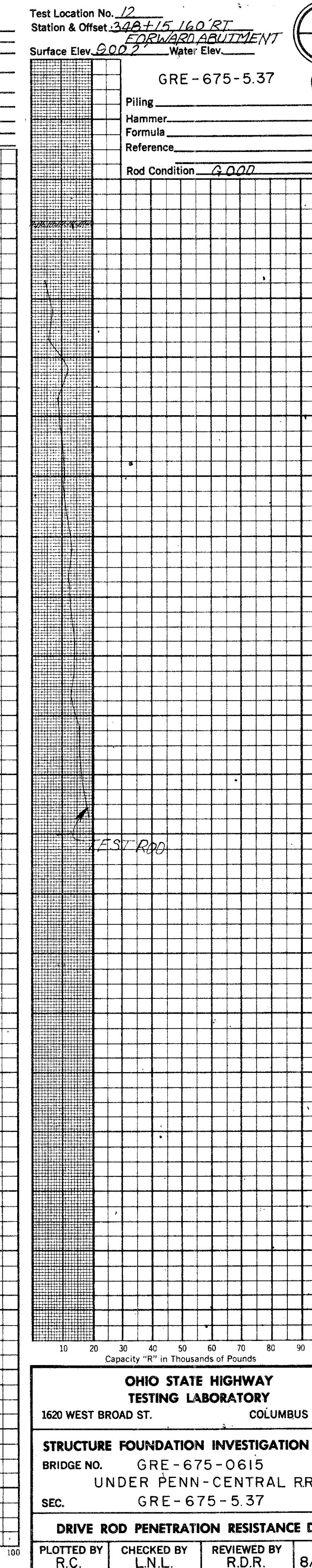
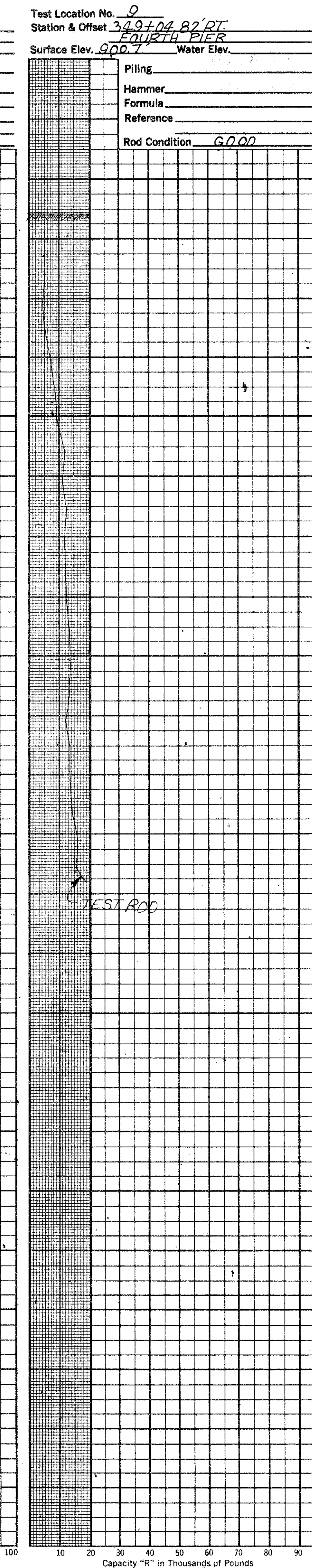
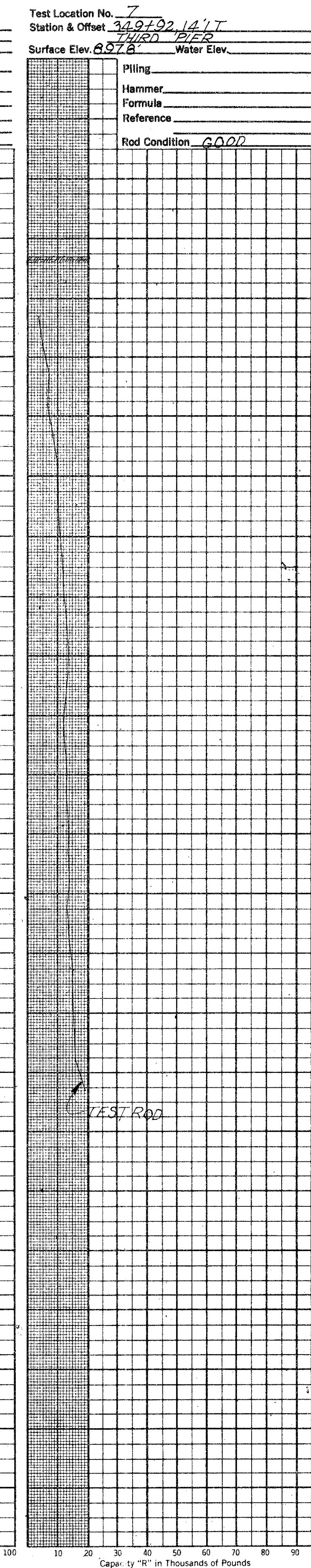
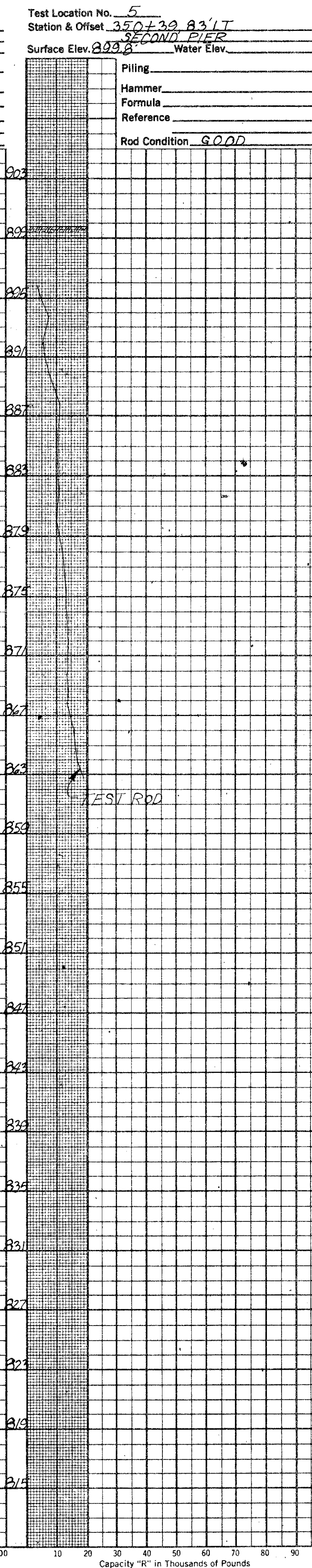
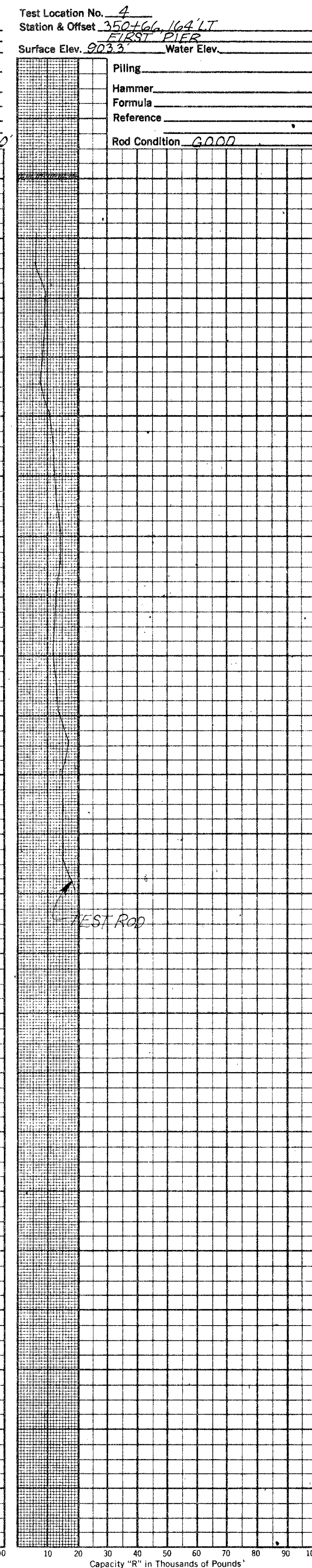
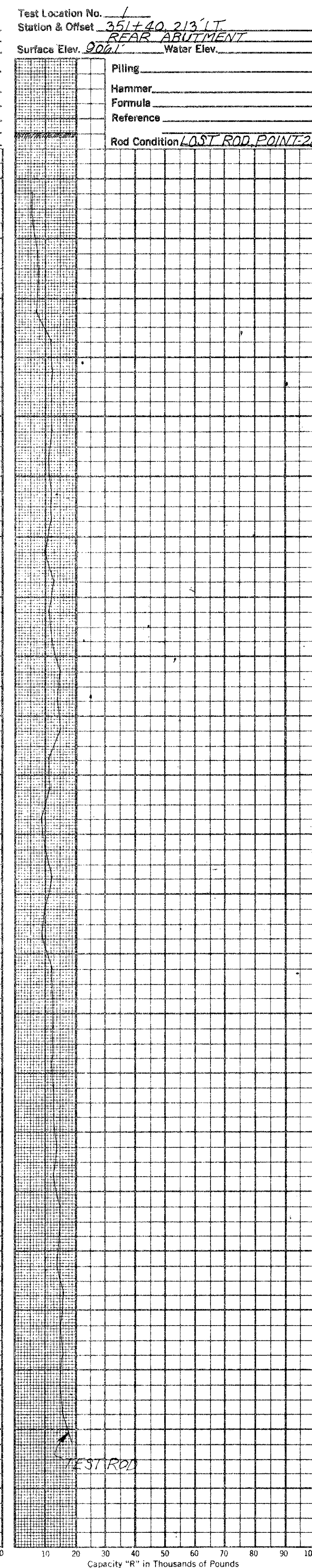
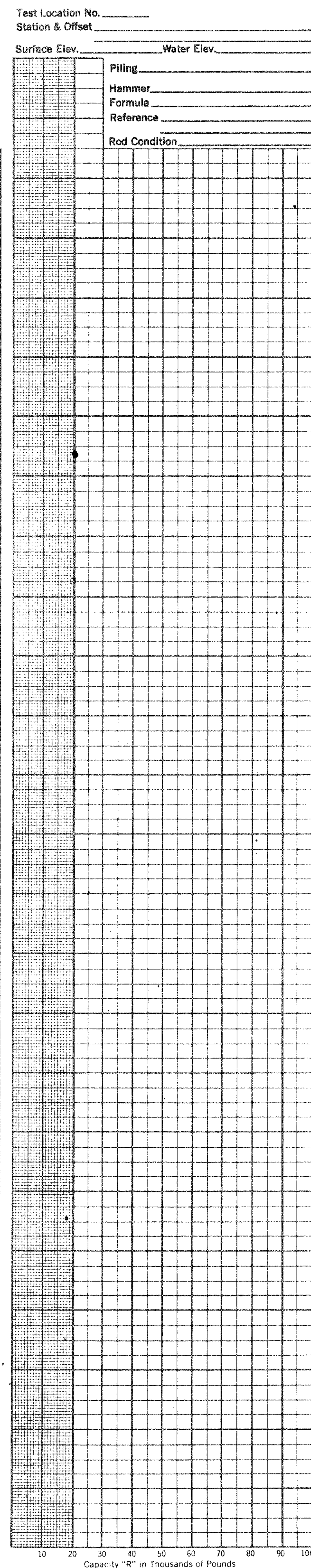
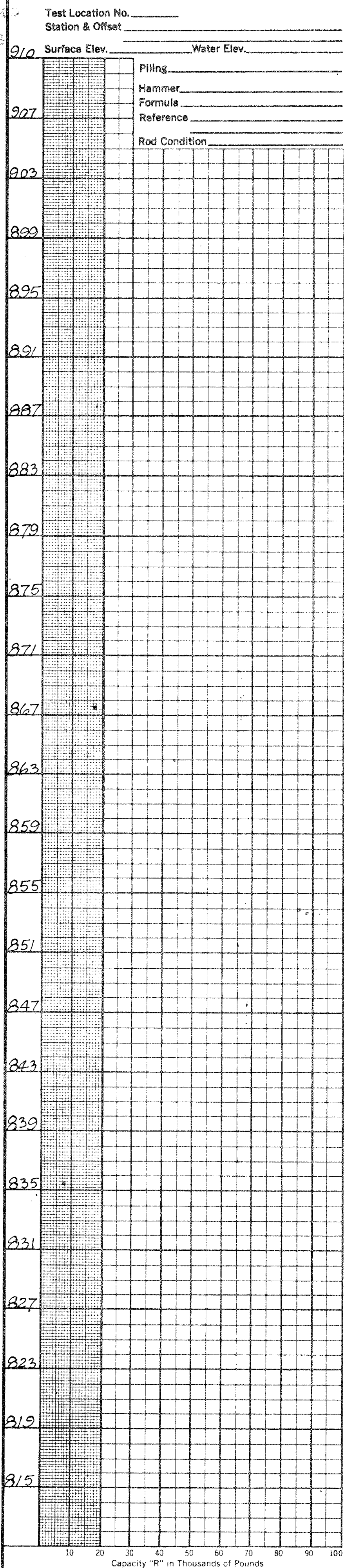
OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0615
UNDER PENN-CENTRAL RR.
SEC. GRE-675-5.37

PLAN AND PROFILE

DRAWN BY EDW.	CHECKED BY LNL.	REVIEWED BY R.D.R.	DATE 8/27/69
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SCALE: 1" = 30'



24
49
4

OHIO STATE HIGHWAY TESTING LABORATORY
1620 WEST BROAD ST. COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0615
UNDER PENN-CENTRAL RR.
SEC. GRE-675-5.37

DRIVE ROD PENETRATION RESISTANCE DATA

PLOTTED BY R.C.	CHECKED BY L.N.L.	REVIEWED BY R.D.R.	DATE 8/27/69
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GEOLOGY OF THE SITE

THE STRUCTURE SITE IS LOCATED IN THE GLACIATED LEXINGTON PENEPLAIN, IN AN AREA WHERE MODERATELY DEEP GLACIAL-DERIVED SOILS OVERLIE INTERBEDDED LIMESTONE AND SHALE BEDROCK, OF ORDOVICIAN AGE.

EXPLORATION

THE EXPLORATION CONSISTED OF TWO DRIVE SAMPLE BORINGS AND SIX DRIVE ROD PENETRATION TESTS, MADE BETWEEN JULY 24 AND AUGUST 12, 1969.

INVESTIGATIONAL FINDINGS

















BORINGS DISCLOSED UNSTRATIFIED INTERVALS OF MEDIUM-DENSE TO VERY DENSE SILTS AND VERY STIFF CLAYS TO 56 AND 91-FOOT DEPTHS, ELEVATIONS 848 AND 812 FEET, WHERE THE BORINGS WERE TERMINATED AFTER PENETRATING AT LEAST 15 FEET OF MATERIAL REQUIRING IN EXCESS OF 30 BLOWS PER FOOT IN THE STANDARD PENETRATION TEST.

ROD SOUNDINGS ENCOUNTERED GRADUALLY INCREASING AND UNIFORMLY MEDIUM-HIGH RESISTANCE TO PENETRATION WITH INCREASING DEPTH AND WERE TERMINATED DUE TO NEAR-REFUSAL TO PENETRATION AT 38 TO 60-FOOT DEPTHS, ELEVATIONS 862 TO 841 FEET, CONSIDERED TO BE IN DENSE SILTS OR STIFF CLAYS, AS REVEALED BY THE BORINGS.













FREE WATER WAS NOT OBSERVED IN ANY OF THE ROD SOUNDING HOLES.

NO TEST PENETRATED TO BEDROCK SURFACE.

LEGEND

-  Auger Boring Location - Plan View.
-  Press and/or Drive Sample and/or Core Boring Location - Plan View.
-  Drive Rod Penetration Resistance Sounding Location - Plan View.
-  Capped Pile
-  Footing
-  Footing on Pile
-  TR Top of Rock
-  Horizontal Bar on Boring Log Indicates the Depth the Sample Was Taken.
-  Figures Beside the Boring Log in Profile Indicate the Number of Blows for Standard Penetration Test.
X = Number of Blows for First 6 inches.
Y = Number of Blows for Second 6 inches.
-  Drive Rod Penetration Resistance Sounding Log - Profile
-  Casing
-  Resistance "R" < 10,000 lbs.
-  Resistance "R" > 10,000 lbs.
-  Z Indicates Final Measurement of Penetration, in Inches.
-  W Indicates Free Water Elevation.
-  Indicates Static Water Elevation.

SYMBOLS OF ROCK TYPES

-  Coal
-  Weathered Siltstone, Mudstone, or Claystone
-  Siltstone, Mudstone, or Claystone
-  Weathered Shale
-  Shale
-  Boulders or Cobbles
-  Weathered Sandstone
-  Sandstone
-  Leached Dolomite
-  Dolomite
-  Leached Limestone
-  Limestone

GENERAL INFORMATION

Drive Rod Penetration Sounding Tests

Drive rod penetration resistance tests constitute driving a 1.315-inch diameter steel rod, with a 45° cone point, into the ground, using a 122-pound drop-hammer with a free fall of five feet. At one or two-foot depth intervals, a measurement is taken to determine the amount of penetration achieved in three hammer drops. This reading is converted to an empirical value for capacity, "R", in thousands of pounds (which is a measure of both the point resistance and frictional resistance on the rod), by using charts prepared by the Ohio Department of Highways, Bureau of Bridges, on the basis of correlation study of rod penetration with past performance of pile driving. For interpretation, a graph is prepared by plotting the value "R" against the depth at which the reading was taken, and connecting the plotted points. The curve so obtained reflects the density of subsurface materials in a manner that can be readily compared with data from similar tests at other locations on the structure site. From this comparison, the overall uniformity of subsurface condition may be evaluated.

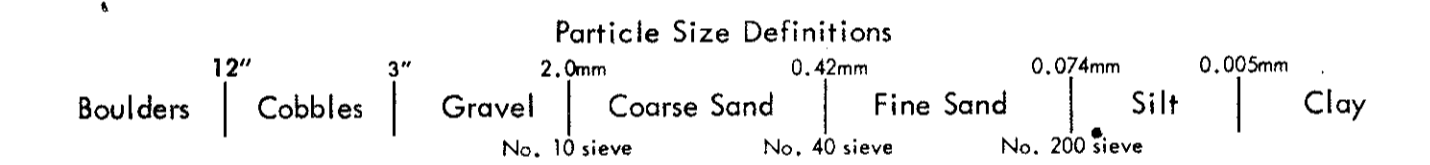
Drive Sample Borings - Drive-Press Sample Borings

Drive sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. sampler, at 2-1/2 and/or 5-foot depth intervals, driven by means of a 140-pound drop-hammer with a free fall of 30 inches. The number of blows required to drive the sampler 12 inches is considered the standard penetration test.

Drive-press sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. drive sampler, and 3" O.D. thin-wall press sampler. The press sampler is advanced by continuous uniform pressure, applied by the drill rig.

The boring log sheets show a graphic plot of the information obtained, including depth and elevation of the sample, number of blows for the standard penetration tests in two 6-inch increments, depth of press samples, field sample number, sample description - based on laboratory tests and the Casagrande AC classification system - and gradation, plasticity, and moisture content determinations. Results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler can not be driven, a wash sample is procured for visual classification, in order to determine the general character of the material. These samples are not considered sufficiently representative to warrant laboratory testing.



NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

**OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY**
1620 WEST BROAD STREET, COLUMBUS, OHIO 43223

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0616
UNDER DAYTON-XENIA RD.
SEC. GRE-675-5.37

CHECKED BY LNL.	REVIEWED BY R.D.R.	DATE 8/27/69
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LOG OF BORING
 Date Started 7-29-69 Sampler Type SS Dia 1 3/8"
 Date Completed 7-31-69 Casing Length 45' Dia 2 1/2"
 Boring No. B-4 Station & Offset 37+87.57' Rt. (First Pile) Surface Elev. 902.9'
 Water Elev. _____

LOG OF BORING
 Date Started 7-24-69 Sampler Type SS Dia 1 3/8"
 Date Completed 7-27-69 Casing Length 40' Dia 2 1/2"
 Boring No. B-11 Station & Offset 41+20.34' Lt. (Forward Abutment) Surface Elev. 902.2'
 Water Elev. _____

Elev.	Depth	Std. Pen. (N)	Rec. (ft.)	Loss (ft.)	Description	Sample No.	Physical Characteristics							SMTL Class.					
							% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.		W.C.				
902.9	0																		
897.9	5		2/9		Brown Gravelly Sandy Silt	1	19	11	23	26	21	NP	NP	11	A-4a				
892.9	10		14/21		Gray Sandy Silt	2	0	16	35	30	19	NP	NP	14	A-4a				
887.9	15		17/23		Gray Sandy Silt	3	0	3	18	58	21	NP	NP	18	A-4b				
882.9	20		16/18		Gray Silt	4	0	0	5	78	17	NP	NP	20	A-4b				
877.9	25		11/9		Gray Silt	5	0	0	15	52	33	NP	NP	15	A-4b				
872.9	30		7/8		Gray Sandy Silt	6	14	7	18	38	23	NP	NP	15	A-4a				
867.9	35		9/12		Gray Sandy Silt	7	0	8	15	46	31	NP	NP	14	A-4a				
862.9	40		12/15		Gray Silt	8	0	1	2	51	46	NP	NP	19	A-4b				
857.9	45		12/18		Gray Gravelly Silt	9	12	2	7	46	33	NP	NP	14	A-4a				
852.9	50		16/13		Gray Silt	10	0	3	13	53	31	NP	NP	11	A-4b				
847.9	55		9/15		Gray Silt and Clay	11	0	1	5	52	42	28	14	16	A-4b				
842.9	60		11/12		Gray Silt	12	0	0	3	64	33	NP	NP	19	A-4b				
837.9	65		11/12		Gray Clayey Silt	13	0	2	9	57	32	22	8	16	A-4b				
832.9	70		10/16		Gray Silt	14	0	0	2	61	37	22	6	19	A-4b				
827.9	75		13/18		Gray Clay	15	0	0	1	62	37	45	24	32	A-7-6				
822.9	80		15/28		Gray Silt and Clay	16	0	2	14	31	53	42	21	22	A-7-6				
817.9	85		22/36		Brown Gravelly Sandy Silt	17	19	9	19	28	25	20	7	11	A-4a				
812.9	90		30/42		Gray Sandy Gravelly Silt	18	34	7	14	22	23	21	8	12	A-4a				
811.9					BOTTOM OF BORING														

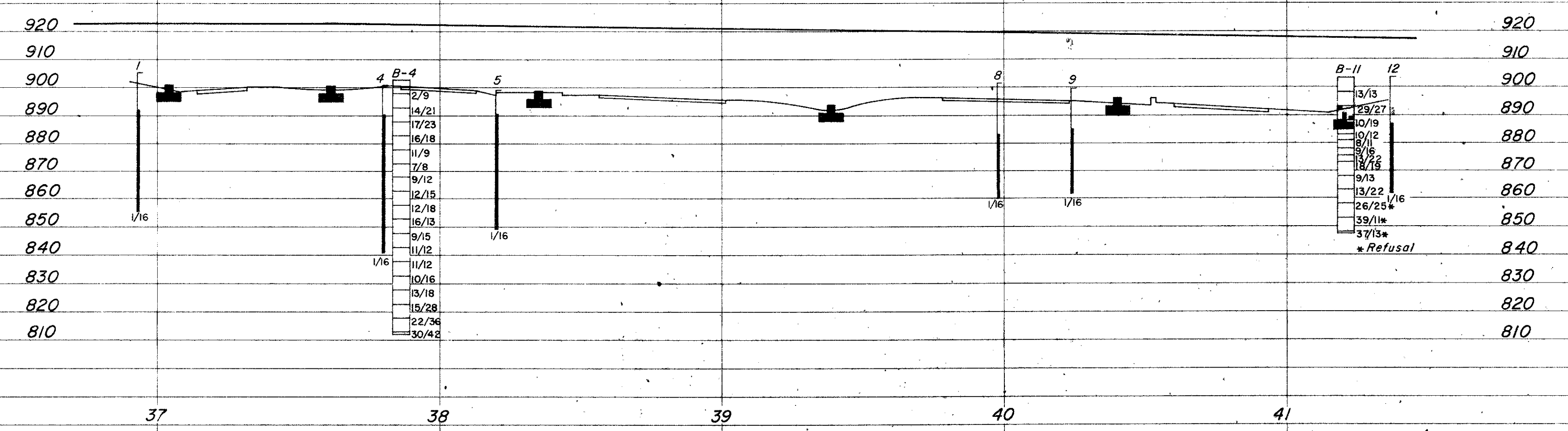
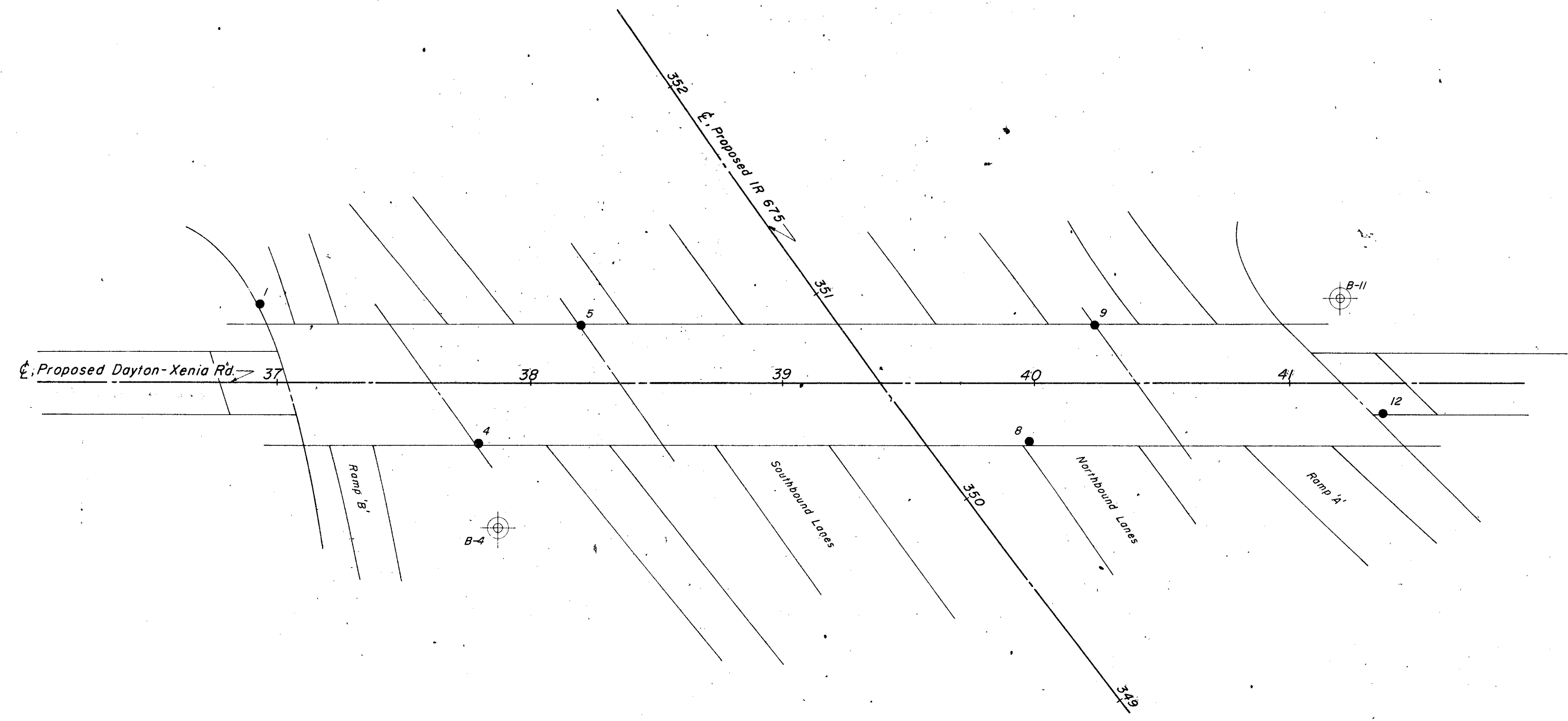
Elev.	Depth	Std. Pen. (N)	Rec. (ft.)	Loss (ft.)	Description	Sample No.	Physical Characteristics							SMTL Class.					
							% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.		W.C.				
903.2	0																		
898.2	5		13/13		Brown Sandy Silt	1	12	14	21	26	27	19	7	12	A-4a				
893.2	10		29/27		Brown Gravelly Sandy Silt with Cobbles	2	17	12	22	28	21	NP	NP	11	A-4a				
888.2	15		10/19		Gray Gravelly Sandy Silt	3	20	9	16	28	27	18	8	11	A-4a				
883.2	20		10/12		Gray Sandy Silt	4	7	11	18	34	30	18	6	11	A-4a				
880.7	25		8/11		Gray Sandy Silt	5	7	10	18	35	30	16	6	10	A-4a				
878.2	28		9/16		Gray Sandy Silt	6	11	10	19	31	29	18	7	10	A-4a				
875.7	30		13/22		Gray Sandy Silt	7	7	12	20	33	28	18	8	10	A-4a				
873.2	32		18/19		Gray Silty Sandy Gravel	8	52	16	16	-16	-	17	4	6	A-1-b				
868.2	36		9/13		Gray Sandy Silt	9	7	5	15	45	28	15	5	15	A-4a				
863.2	40		13/22		Gray Gravelly Sandy Clay	10	16	4	12	43	25	23	11	12	A-6a				
858.2	46		26/25* (0.2')		Gray Silt	11	0	1	2	53	44	NP	NP	15	A-4b				
853.2	50		39/11* (0.1')		Gray Sandy Silt	12	7	4	14	57	18	NP	NP	16	A-4b				
848.2	54		37/13* (0.1')		Gray Silt	13	0	5	14	62	19	NP	NP	20	A-4b				
847.6					*Refusal														
					BOTTOM OF BORING														

OHIO DEPARTMENT OF HIGHWAYS
 TESTING LABORATORY
 1620 WEST BROAD STREET, COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
 BRIDGE NO. GRE - 675 - 0616
 UNDER DAYTON - XENIA RD.
 SEC. GRE - 675 - 5.37

BORING DATA

TYPED BY S.A.J.	CHECKED BY L.N.L.	REVIEWED BY R.D.R.	DATE 8/27/69
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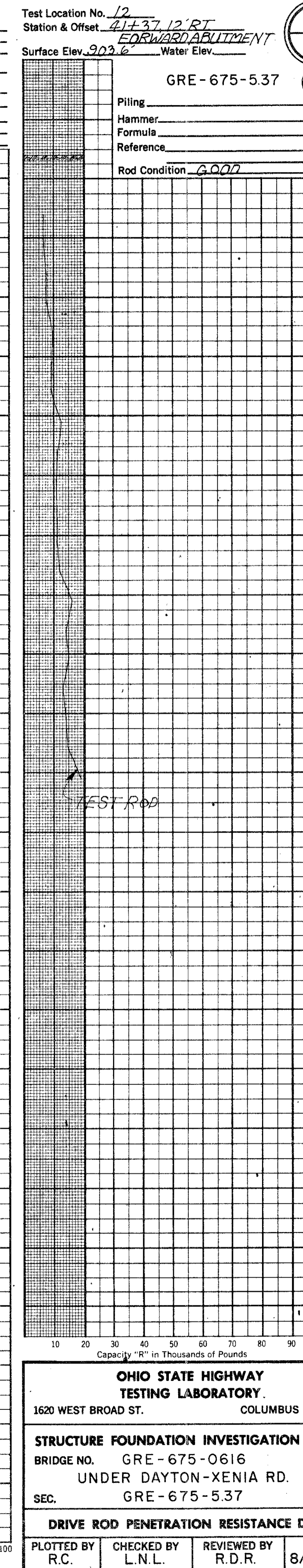
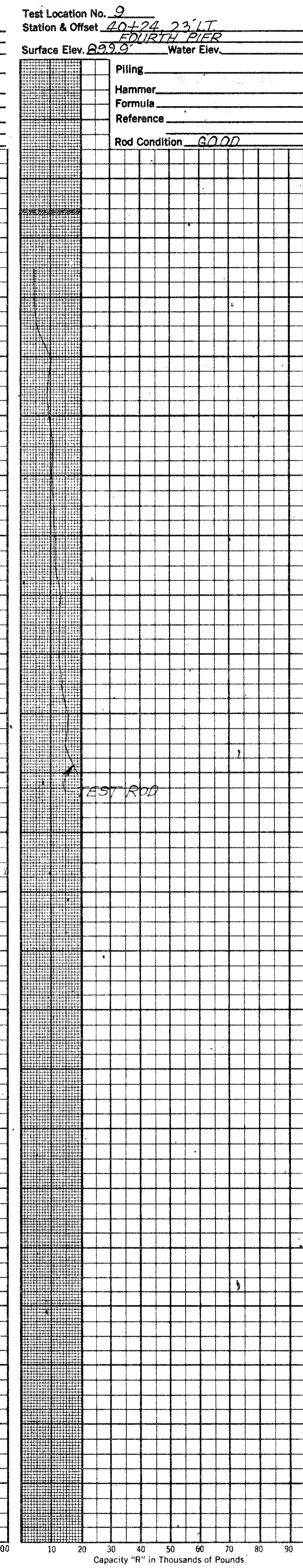
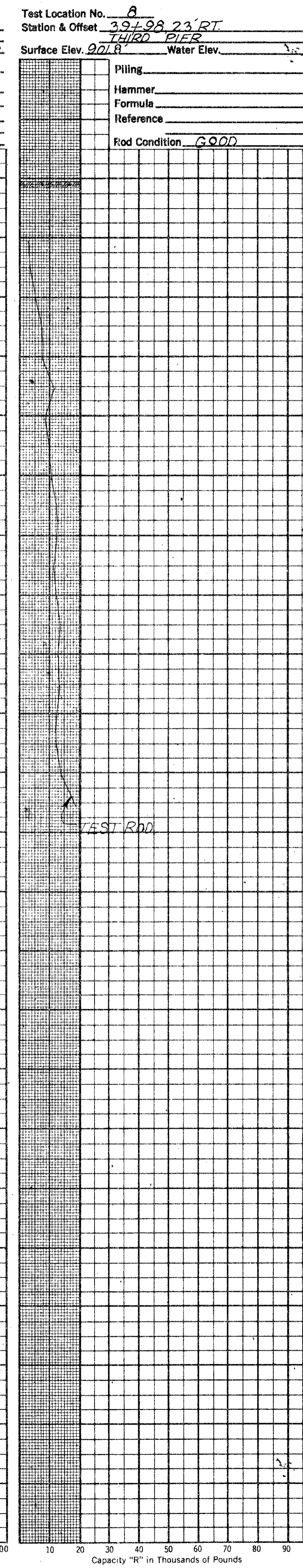
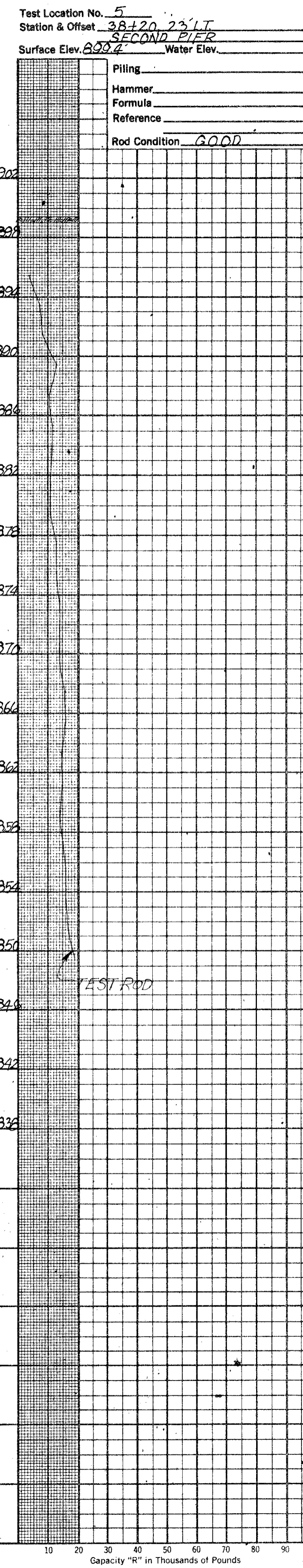
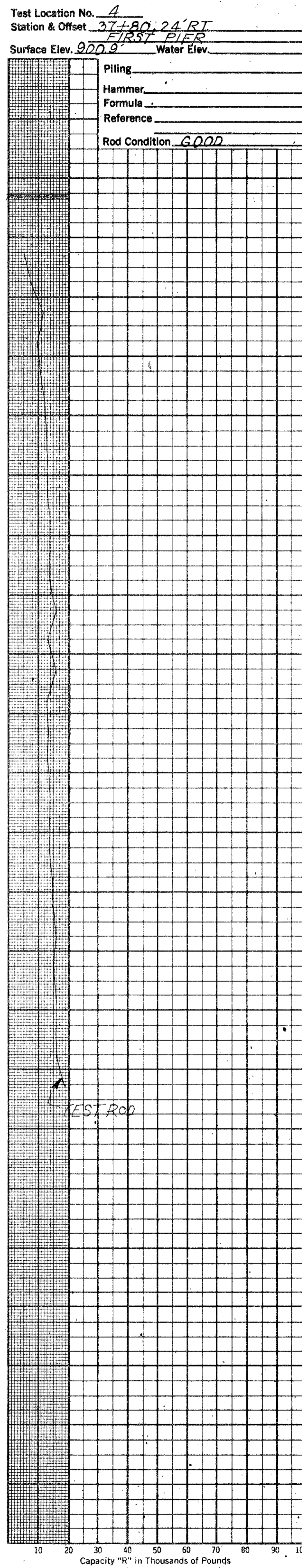
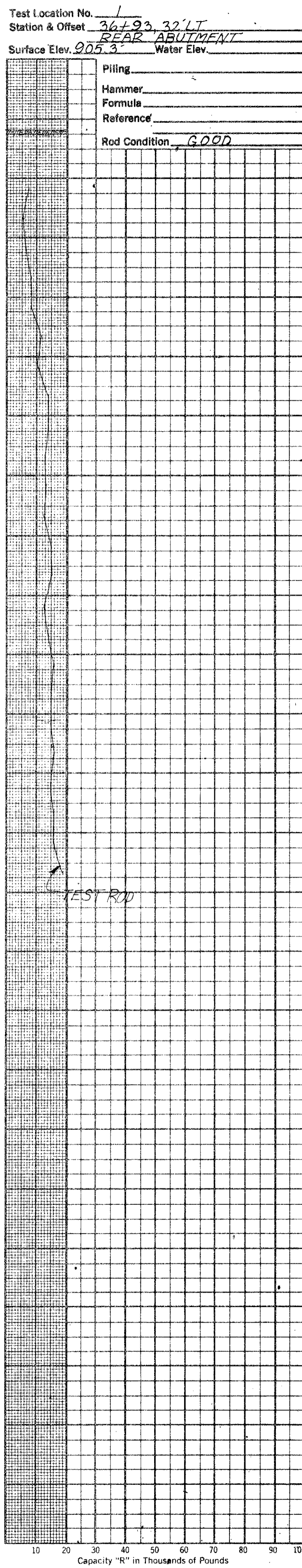
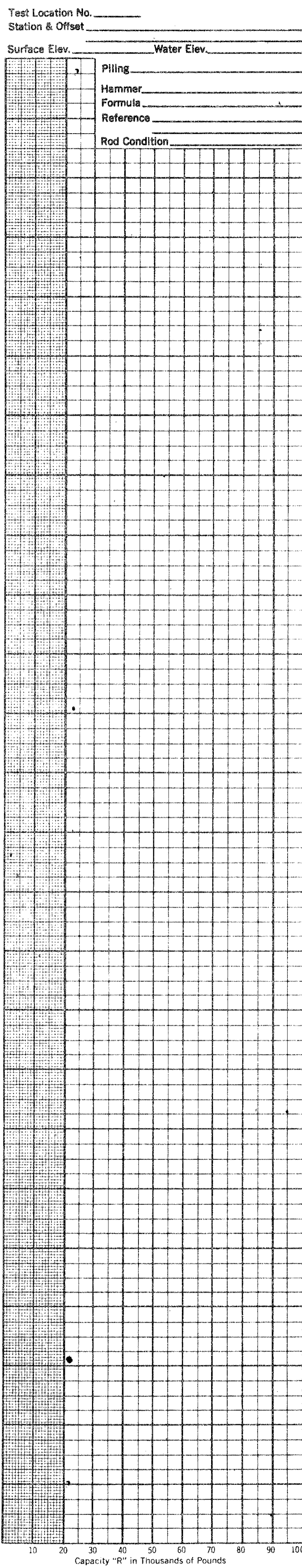
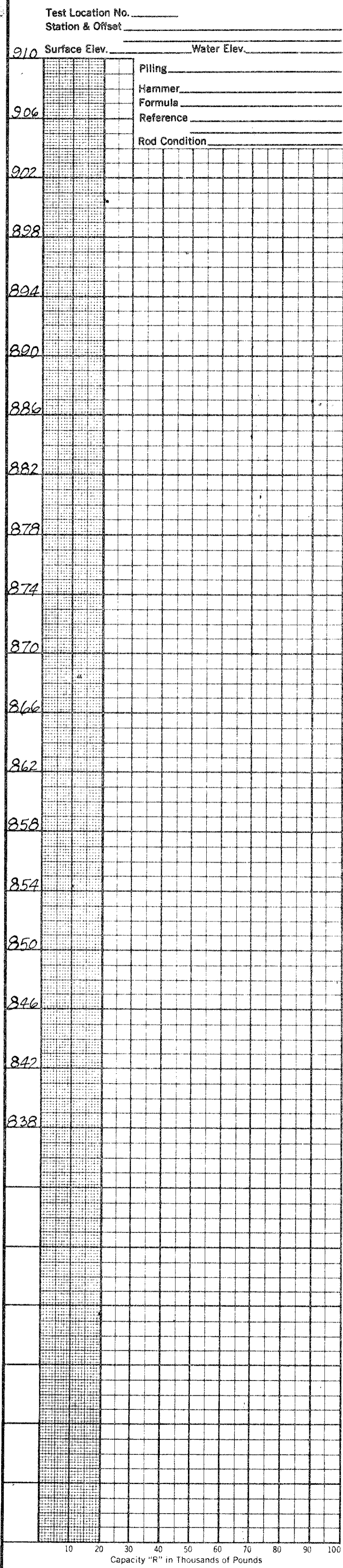
OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0616
UNDER DAYTON-XENIA RD.
SEC. GRE-675-5.37

PLAN AND PROFILE

DRAWN BY J.E.C.	CHECKED BY L.N.L.	REVIEWED BY R.D.R.	DATE 8/27/69
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SCALE: 1" = 30'



28
49
4

OHIO STATE HIGHWAY
 TESTING LABORATORY
 1620 WEST BROAD ST. COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
 BRIDGE NO. GRE-675-0616
 UNDER DAYTON-XENIA RD.
 SEC. GRE-675-537

DRIVE ROD PENETRATION RESISTANCE DATA

PLOTTED BY R.C. CHECKED BY L.N.L. REVIEWED BY R.D.R. DATE 8/27/69

GEOLOGY OF THE SITE

THE STRUCTURE SITE IS LOCATED ON THE GLACIATED LEXINGTON PENEPLAIN, IN AN AREA WHERE MODERATELY DEEP GLACIAL DERIVED SOILS OVERLIE INTERBEDDED LIMESTONE AND SHALE BEDROCK, OF ORDOVICIAN AGE.

EXPLORATION

THE EXPLORATION CONSISTED OF TWO DRIVE SAMPLE BORINGS AND FOUR DRIVE ROD PENETRATION TESTS, MADE BETWEEN AUGUST 1 AND 13, 1969.

INVESTIGATIONAL FINDINGS








BORINGS DISCLOSED LOOSE TO VERY DENSE SANDS AND SILTS TO 66 AND 71-FOOT DEPTHS, ELEVATIONS 875 AND 867 FEET, WHERE THE BORINGS WERE TERMINATED AFTER PENETRATING 50 FEET OF MATERIAL REQUIRING IN EXCESS OF 30 BLOWS PER FOOT IN THE STANDARD PENETRATION TEST.










ROD SOUNDINGS ENCOUNTERED INCREASING RESISTANCE TO PENETRATION WITH INCREASING DEPTH, AND WERE TERMINATED DUE TO NEAR-REFUSAL TO PENETRATION AT 16 TO 27-FOOT DEPTHS, ELEVATIONS 924 TO 913 FEET, CONSIDERED TO BE IN DENSE SANDS, AS REVEALED BY THE BORINGS.

NO FREE WATER OBSERVATIONS WERE MADE IN ANY OF THE ROD SOUNDING HOLES.













NO TEST PENETRATED TO BEDROCK.

LEGEND

-  Auger Boring Location - Plan View.
-  Press and/or Drive Sample and/or Core Boring Location - Plan View.
-  Drive Rod Penetration Resistance Sounding Location - Plan View.
-  Capped Pile
-  Footing
-  Footing on Pile
-  TR Top of Rock

-  Horizontal Bar on Boring Log Indicates the Depth the Sample Was Taken.
-  Figures Beside the Boring Log in Profile Indicate the Number of Blows for Standard Penetration Test.
X = Number of Blows for First 6 inches.
Y = Number of Blows for Second 6 inches.
-  Drive Rod Penetration Resistance Sounding Log - Profile
-  Casing
-  Resistance "R" < 10,000 lbs.
-  Resistance "R" > 10,000 lbs.
-  Z Indicates Final Measurement of Penetration, in Inches.
-  W Indicates Free Water Elevation.
-  Indicates Static Water Elevation.

SYMBOLS OF ROCK TYPES

-  Coal
-  Weathered Siltstone, Mudstone, or Claystone
-  Siltstone, Mudstone, or Claystone
-  Weathered Shale
-  Shale
-  Boulders or Cobbles
-  Weathered Sandstone
-  Sandstone
-  Leached Dolomite
-  Dolomite
-  Leached Limestone
-  Limestone

GENERAL INFORMATION

Drive Rod Penetration Sounding Tests

Drive rod penetration resistance tests constitute driving a 1.315-inch diameter steel rod, with a 45° cone point, into the ground, using a 122-pound drop-hammer with a free fall of five feet. At one or two-foot depth intervals, a measurement is taken to determine the amount of penetration achieved in three hammer drops. This reading is converted to an empirical value for capacity "R", in thousands of pounds (which is a measure of both the point resistance and frictional resistance on the rod), by using charts prepared by the Ohio Department of Highways, Bureau of Bridges, on the basis of correlation study of rod penetration with past performance of pile driving. For interpretation, a graph is prepared by plotting the value "R" against the depth at which the reading was taken, and connecting the plotted points. The curve so obtained reflects the density of subsurface materials in a manner that can be readily compared with data from similar tests at other locations on the structure site. From this comparison, the overall uniformity of subsurface condition may be evaluated.

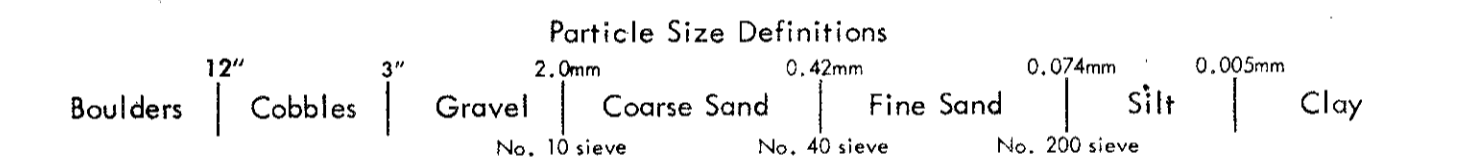
Drive Sample Borings - Drive-Press Sample Borings

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Drive-press sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. drive sampler, and 3" O.D. thin-wall press sampler. The press sampler is advanced by continuous uniform pressure, applied by the drill rig.

The boring log sheets show a graphic plot of the information obtained, including depth and elevation of the sample, number of blows for the standard penetration tests in two 6-inch increments, depth of press samples, field sample number, sample description - based on laboratory tests and the Casagrande AC classification system - and gradation, plasticity, and moisture content determinations. Results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler can not be driven, a wash sample is procured for visual classification, in order to determine the general character of the material. These samples are not considered sufficiently representative to warrant laboratory testing.

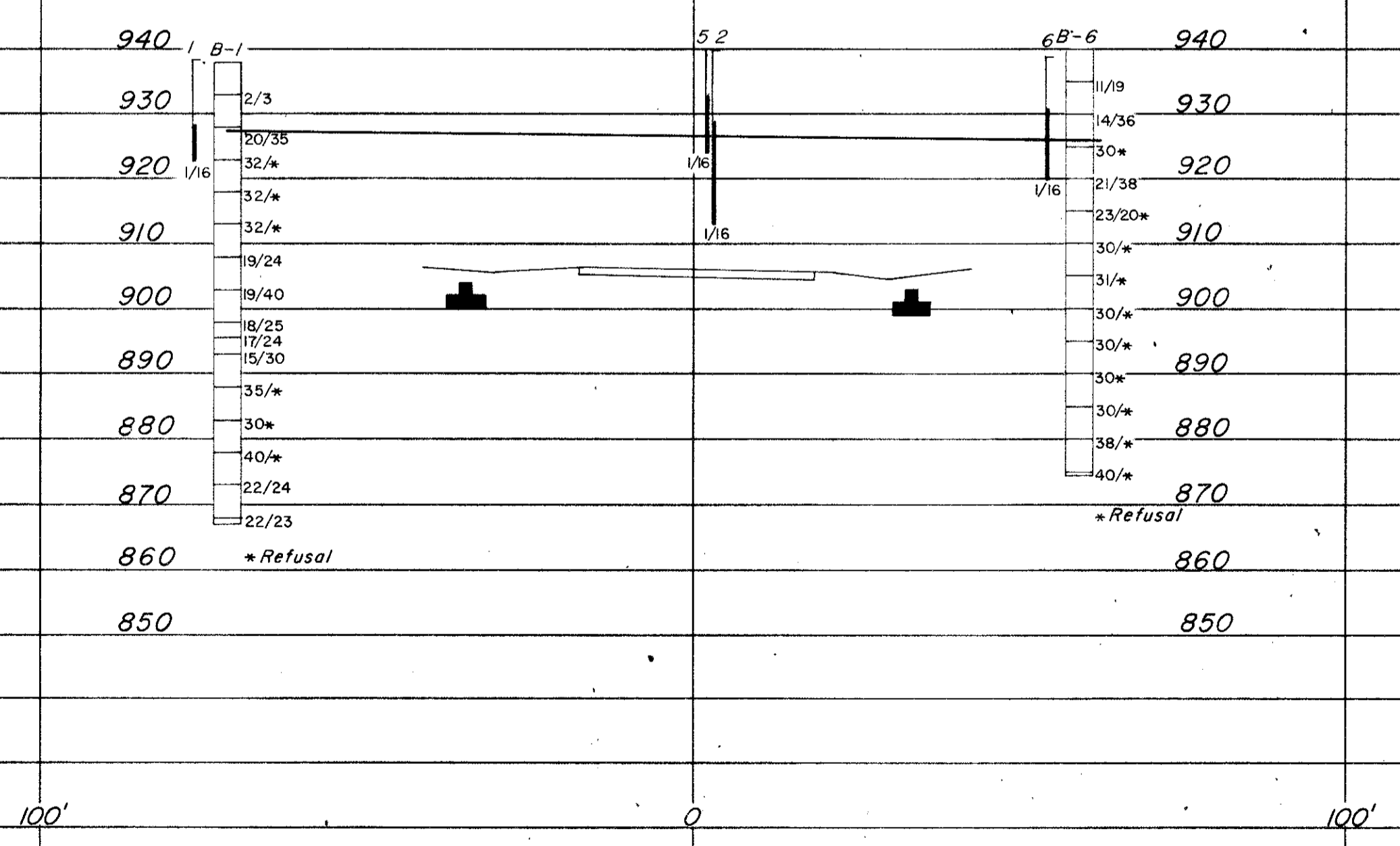
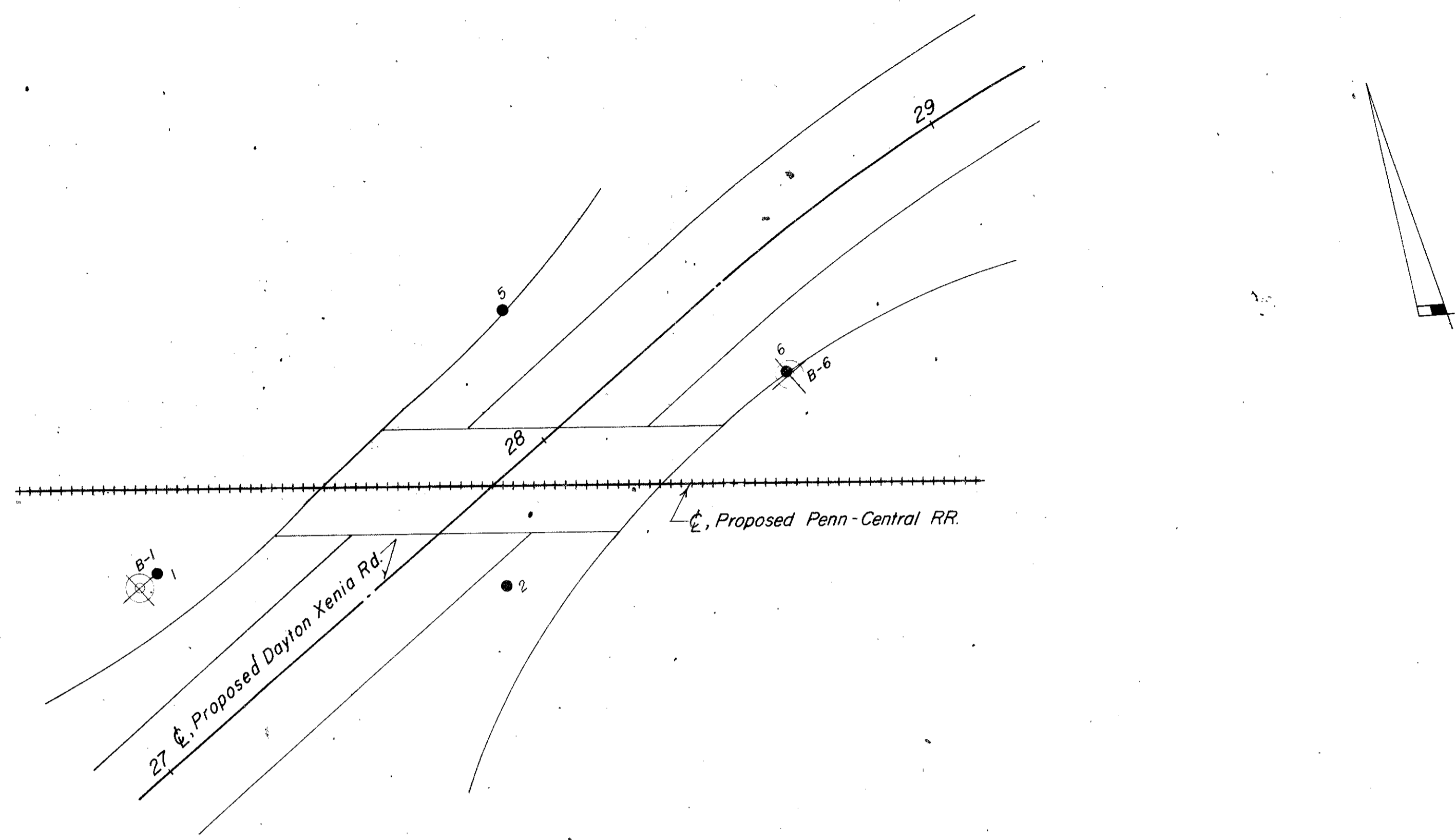


NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS, OHIO 43223

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0626
PENN-CENTRAL RR. OVER DAYTON XENIA RD.
SEC. GRE-675-5.37

CHECKED BY L. N. L.	REVIEWED BY R. D. R.	DATE 9/2/69
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OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE - 675-0626
PENN-CENTRAL RR. OVER DAYTON XENIA RD.
SEC. GRE - 675-5.37

PLAN AND PROFILE

DRAWN BY J.E.C.	CHECKED BY L.N.L.	REVIEWED BY R.D.R.	DATE 9/2/69
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SCALE: 1" = 20'

LOG OF BORING

Date Started: 8-1-69 Sampler Type: SS Dia: 1 3/8" Water Elev: _____
 Date Completed: 8-5-69 Casing Length: 25' Dia: 3 1/2" Surface Elev: 938.0'
 Boring No.: B-1 Station & Offset: 27+20, 32' Lt. (Rear Abutment)

Elev	Depth	Sgd Pch (ft)	Rec Ft	Loss Ft	Description	Sample No	Physical Characteristics										SHTL Class.	
							% Agg	% C.S.	% F.S.	% Silt (Clay)	LL	PI	WC					
938.0	0																	
933.0	5	2/3			Brown Silty Sand	1	0	0	86	-14	-	NP	NP	15				A-3a
928.0	10	20/35			Brown Silty Sand	2	0	1	71	-28	-	NP	NP	11				A-3a
923.0	16	32/*			Brown Silty Sand	3	0	1	66	-33	-	NP	NP	16				A-3a
918.0	20	32/*			Brown Silty Sand	4	0	0	74	-26	-	NP	NP	18				A-3a
913.0	26	32/*			Brown Silt	5	0	0	15	73	12	NP	NP	21				A-4b
908.0	30	19/24			Gray Silt	6	0	0	7	62	31	20	4	20				A-4b
903.0	36	19/40			Gray Clayey Silt	7	0	0	1	58	41	24	7	15				A-4b
898.0	40	18/25			Gray Clayey Silt	8	0	0	1	50	49	25	7	14				A-4b
895.5	44	17/24			Gray Silt and Clay	9	0	1	1	45	53	30	11	18				A-6a
893.0	46	15/30			Gray Clayey Silt	10	0	0	0	51	49	26	7	17				A-4b
888.0	50	35/*			Gray Silt	11	0	0	2	73	25	NP	NP	18				A-4b
883.0	56	30* (0.7')			Gray Sandy Silt	12	0	0	54	23	23	NP	NP	23				A-4a
878.0	62	40/*			Gray Sandy Silt	13	0	0	59	29	12	NP	NP	20				A-4a
873.0	68	22/24			Gray Silt	14	0	0	6	74	20	NP	NP	19				A-4b
868.0 867.0	70	22/23			Gray Silt and Clay	15	0	0	1	42	57	31	12	19				A-6a

BOTTOM OF BORING
*Refusal

LOG OF BORING

Date Started: 8-5-69 Sampler Type: SS Dia: 1 3/8" Water Elev: _____
 Date Completed: 8-6-69 Casing Length: 60' Dia: 3 1/2" Surface Elev: 940.0'
 Boring No.: B-6 Station & Offset: 28+46, 23' Rt. (Forward Abutment)

Elev	Depth	Sgd Pch (ft)	Rec Ft	Loss Ft	Description	Sample No	Physical Characteristics										SHTL Class.	
							% Agg	% C.S.	% F.S.	% Silt (Clay)	LL	PI	WC					
940.0	0																	
935.0	5	11/19			Brown Silty Sand	1	4	46	34	-16	-	NP	NP	11				A-1-b
930.0	10	14/36			Brown Silty Sand	2	0	1	73	-26	-	NP	NP	14				A-3a
925.0	16	30* (0.7')			Brown Silty Sand	3	6	2	72	-20	-	NP	NP	19				A-3a
920.0	20	21/38			Brown Silty Sand	4	3	6	81	-10	-	NP	NP	21				A-3
915.0	26	23/20* (0.3')			Brown Sand	5	1	12	80	-7	-	NP	NP	22				A-3
910.0	30	30/*			Brown Sand	6	0	4	90	-6	-	NP	NP	22				A-3
905.0	36	31/*			Brown Sand	7	0	2	88	-10	-	NP	NP	22				A-3
900.0	40	30/*			Brown Sand	8	0	4	87	-9	-	NP	NP	23				A-3
895.0	46	30/*			Brown Silty Sand	9	0	38	38	-24	-	NP	NP	22				A-3a
890.0	50	30* (0.7')			Brown Silty Sand	10	0	43	25	-32	-	NP	NP	19				A-3a
885.0	56	30/*			Brown Silty Sand	11	0	0	81	-19	-	NP	NP	23				A-3a
880.0	60	38/*			Brown Silty Sand	12	0	7	69	-24	-	NP	NP	22				A-3a
875.0 874.5	66	40/*			Gray Sand	13	0	2	94	-4	-	NP	NP	22				A-3

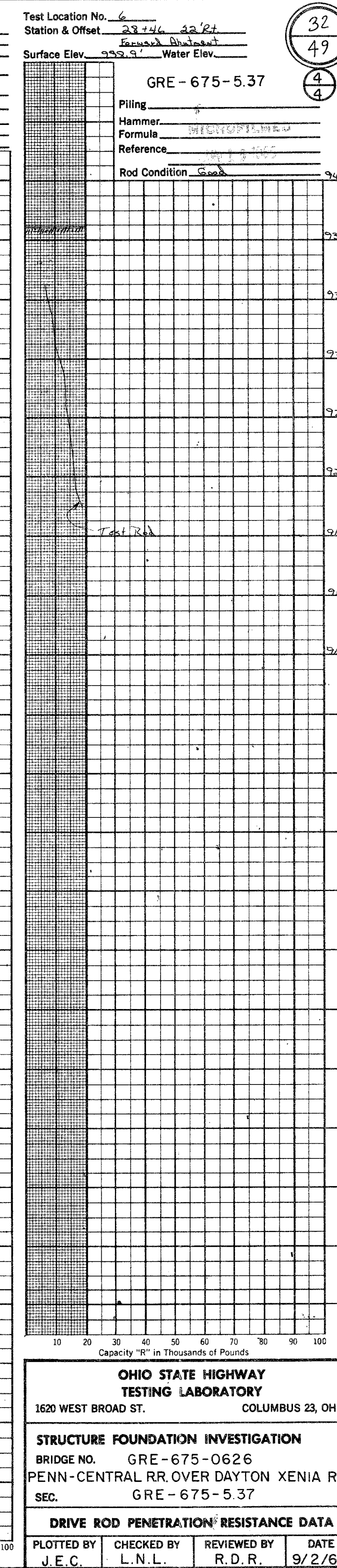
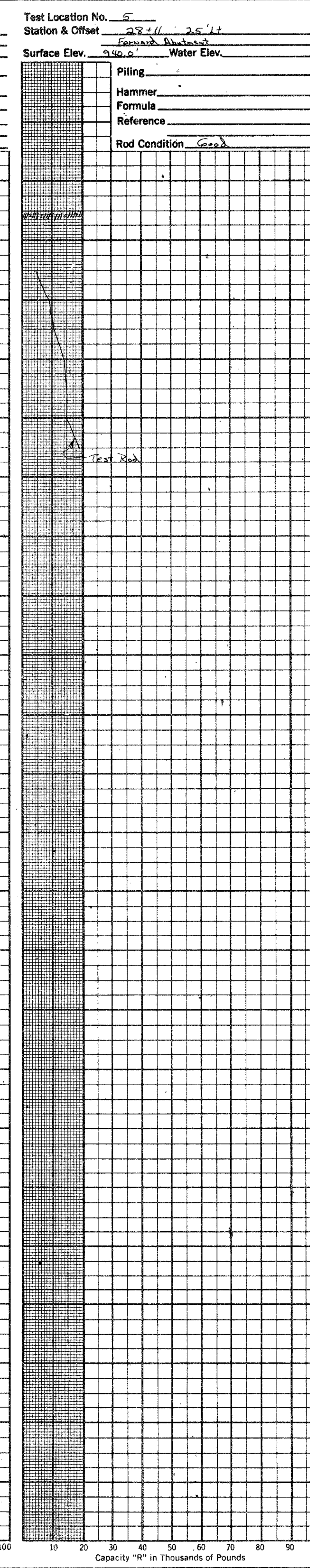
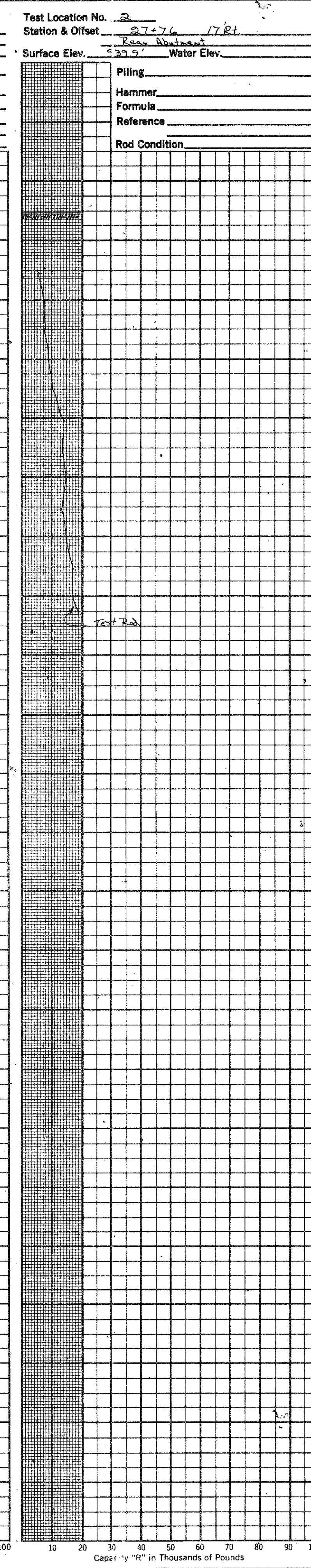
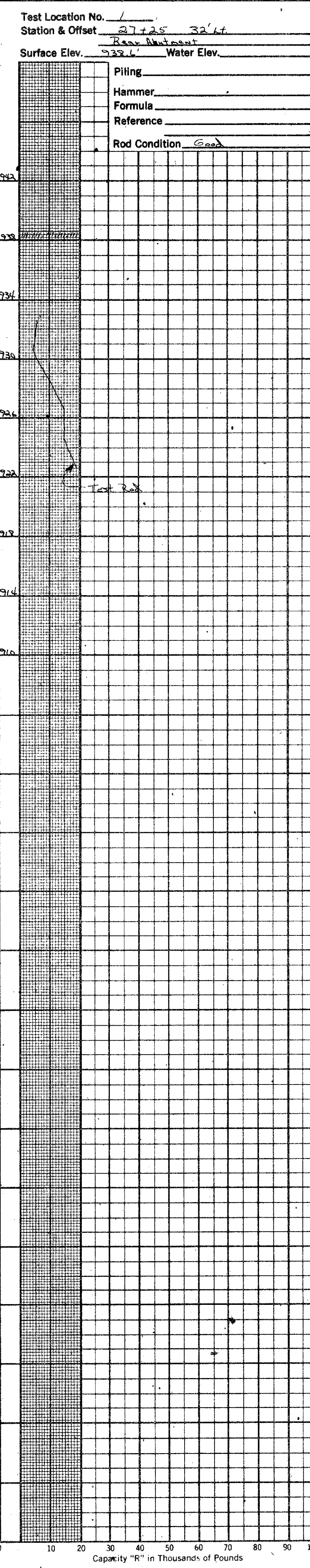
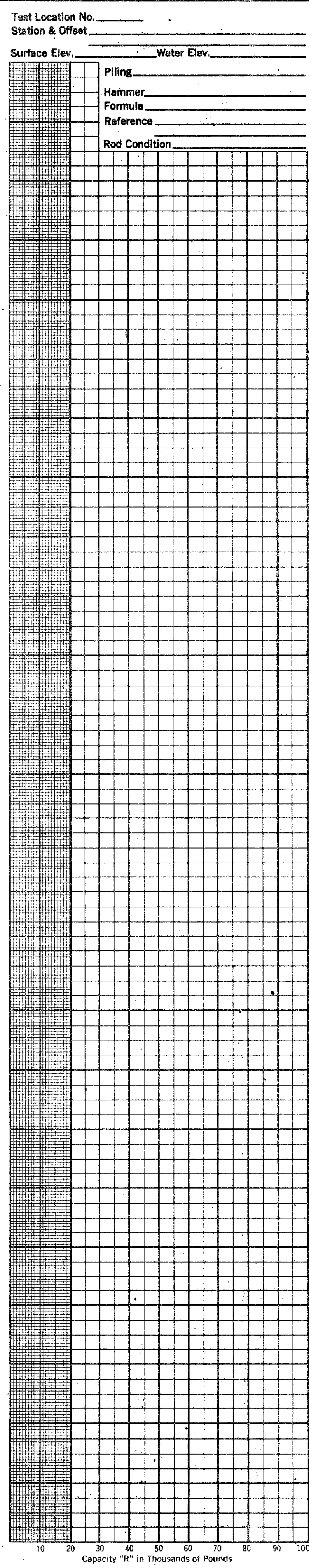
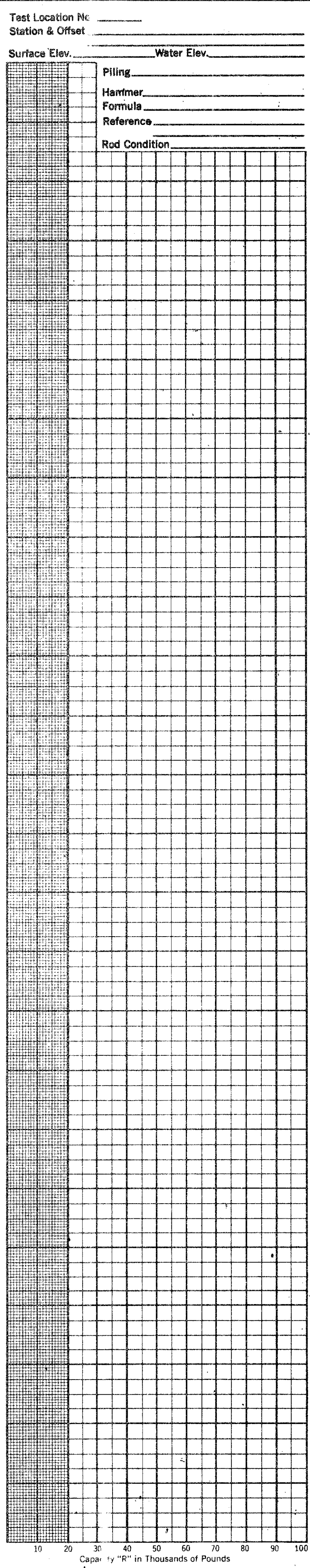
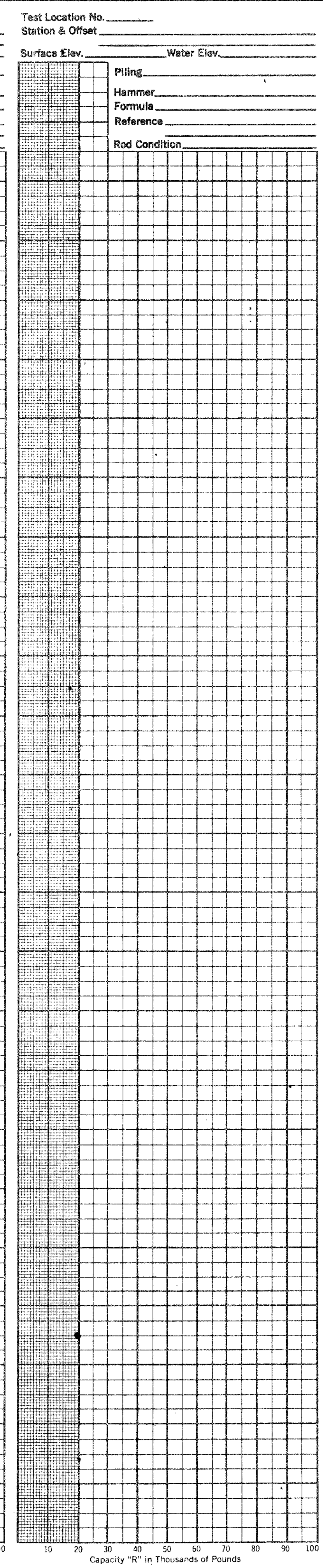
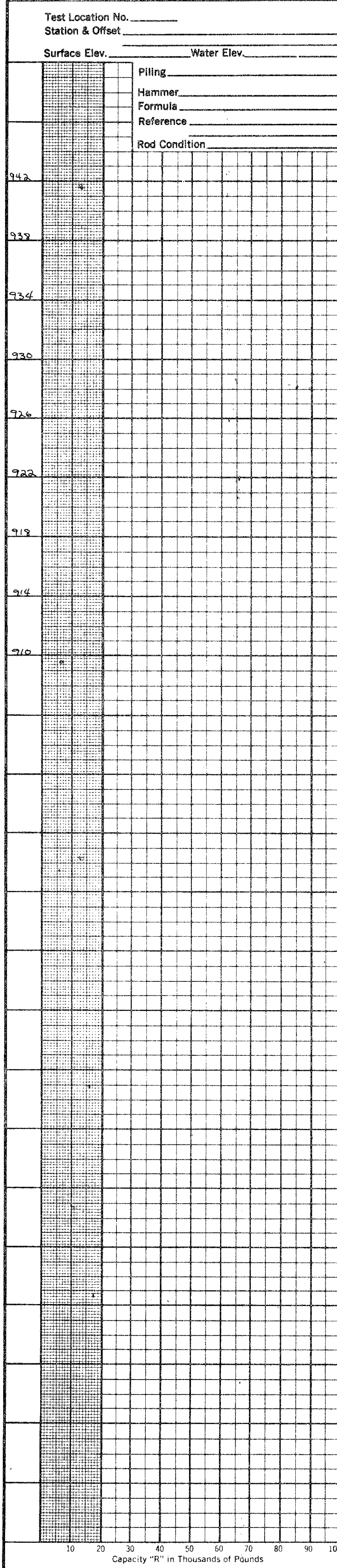
BOTTOM OF BORING
*Refusal

**OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY**
1620 WEST BROAD STREET, COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0626
PENN-CENTRAL RR. OVER DAYTON XENIA RD.
SEC. GRE-675-5.37

BORING DATA

TYPED BY S. A. J.	CHECKED BY L. N. L.	REVIEWED BY R. D. R.	DATE 9/2/69
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32
49
4
4

OHIO STATE HIGHWAY TESTING LABORATORY
1620 WEST BROAD ST. COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0626
PENN-CENTRAL RR. OVER DAYTON XENIA RD.
SEC. GRE-675-537

DRIVE ROD PENETRATION RESISTANCE DATA

PLOTTED BY J.E.C. CHECKED BY L.N.L. REVIEWED BY R.D.R. DATE 9/2/69

GEOLOGY OF THE SITE

THE STRUCTURE SITE IS LOCATED IN THE GENTLY ROLLING, GLACIATED PORTION OF THE MISSISSIPPI VALLEY PLAIN REGION, IN AN AREA WHERE DEEP GLACIAL-DERIVED MATERIAL overlies BEDROCK, OF ORDOVICIAN AGE.

EXPLORATION

THE EXPLORATION CONSISTED OF TWO DRIVE SAMPLE BORINGS MADE BY MEANS OF A MECHANICALLY-POWERED HOLLOW STEM AUGER, MOUNTED ON A MOBILE PLATFORM AND FOUR MECHANICALLY-DRIVEN ROD PENETRATION TESTS PERFORMED BETWEEN MARCH 29 AND APRIL 7, 1978.

INVESTIGATIONAL FINDINGS AND OBSERVATIONS

THE BORINGS ENCOUNTERED INTERVALS OF LOOSE TO EXTREMELY DENSE STRATIFIED SILTS, SAND AND GRAVEL MODIFIED WITH CLAY THAT INCREASE IN DENSITY WITH INCREASE IN DEPTH AND ALSO ALTERNATE. THE BORINGS WERE TERMINATED AT 41-FOOT DEPTH, ELEVATION 874 TO 872 FEET, AFTER PENETRATING IN EXCESS OF 19 FEET OF MATERIAL, REQUIRING IN EXCESS OF 30 BLOWS PER FOOT IN THE STANDARD PENETRATION TEST.

THE ROD SOUNDINGS ENCOUNTERED GRADUAL, OCCASIONALLY ERRATIC INCREASE IN RESISTANCE TO PENETRATION WITH INCREASE IN DEPTH AND WERE TERMINATED UPON ENCOUNTER WITH NEAR-REFUSAL TO PENETRATION BETWEEN 30 AND 42-FOOT DEPTH, ELEVATION 893 TO 871 FEET, CONSIDERED TO BE IN EXTREMELY DENSE MATERIAL AS REVEALED BY THE BORINGS.

BEDROCK SURFACE WAS NOT ENCOUNTERED IN ANY OF THE TESTS PERFORMED.

FREE WATER WAS OBSERVED AND MEASURED IN BORING B-3 AT 2- FOOT DEPTH, ELEVATION 913 FEET AND IN BORING B-9 AT 5-FOOT DEPTH, ELEVATION 908 FEET.

- Auger Boring Location - Plan View.
- Press and/or Drive Sample and/or Core Boring Location - Plan View.
- Drive Rod Penetration Resistance Sounding Location - Plan View.
- Capped Pile
- Footing
- Footing on Pile
- Top of Rock

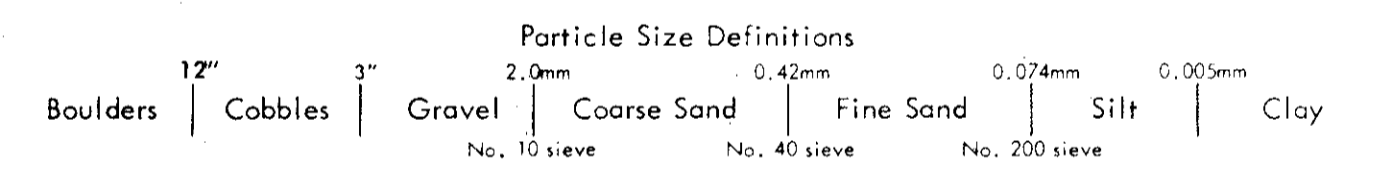
- Coal
- Weathered Mudstone or Claystone
- Mudstone or Claystone
- Weathered Shale
- Shale
- Weathered Siltstone
- Siltstone

LEGEND

- Horizontal Bar on Boring Log Indicates the Depth the Sample Was Taken.
- Figures Beside the Boring Log in Profile Indicate the Number of Blows for Standard Penetration Test.
X = Number of Blows for First 6 inches.
Y = Number of Blows for Second 6 inches.
Z = Number of Blows for Third 6 inches.
- Drive Rod Penetration Resistance Sounding Log - Profile
- Casing
- Resistance "R" < 10,000 lbs.
- Resistance "R" > 10,000 lbs.
- Z Indicates Final Measurement of Penetration, in Inches.
- W Indicates Free Water Elevation.
- Indicates Static Water Elevation.

SYMBOLS OF ROCK TYPES

- Weathered Sandstone
- Sandstone
- Leached Dolomite
- Dolomite
- Leached Limestone
- Limestone
- Boulders or Cobbles



HOLLOW STEM LOG OF BORING
 Date Started 3/29/78 Sampler Type AUGER Dia _____ Water Elev 913.4'
 Date Completed 3/29/78 Casing Length _____ Dia _____
 Boring No. B-3 Station & Offset 7+90, CL (REAR ABUTMENT) Surface Elev 915.4'

Elev.	Depth	Std. Pen. (N)	Rec. ft.	Loss ft.	Description	Sample No.	Physical Characteristics										SHTL Class.	
							% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	PI	W.C.				
915.4	0																	
910.4	2																	
907.9	6	6/7/9			BROWN SANDY GRAVELLY SILT	1	25	10	8	27	30	23	8	11			A-4a	
905.4	8	5/5/6			BROWN-GRAY SANDY GRAVELLY SILT	2	21	5	14	36	24	18	4	11			A-4a	
902.9	12	8/14/16			BROWN SANDY SILT	3	0	14	43	19	24	NP	NP	15			A-4a	
900.4	14	10/10/13			BROWN SILTY SANDY GRAVEL	4	50	13	13	15	9	NP	NP	10			A-1-b	
897.9	16	9/18/31			BROWN-GRAY SANDY GRAVELLY SILT	5	23	5	12	50	10	NP	NP	16			A-4b	
895.4	18	14/24/24			BROWN GRAVELLY SANDY SILT	6	15	5	12	57	11	16	2	14			A-4b	
892.9	20	17/28/27			BROWN GRAVELLY SANDY SILT	7	18	6	22	31	23	NP	NP	14			A-4a	
890.4	22	20/27/41			BROWN-GRAY SILT	8	0	8	8	62	22	NP	NP	22			A-4b	
885.4	24	9/24/39			BROWN-GRAY SILT	9	0	1	1	84	14	NP	NP	21			A-4b	
880.4	26	10/18/21			BROWN-GRAY SILT	10	0	0	1	68	31	NP	NP	19			A-4b	
875.4	28	12/15/20			BROWN-GRAY SILT	11	0	0	0	61	29	NP	NP	18			A-4b	
873.9	30	8/24/40			BROWN-GRAY SANDY SILT	12	0	1	25	64	10	NP	NP	20			A-4b	

HOLLOW STEM LOG OF BORING
 Date Started 3/29/78 Sampler Type AUGER Dia _____ Water Elev 908.0'
 Date Completed 4/7/78 Casing Length _____ Dia _____
 Boring No. B-9 Station & Offset 13+10, 5' LT. Surface Elev 913.0'

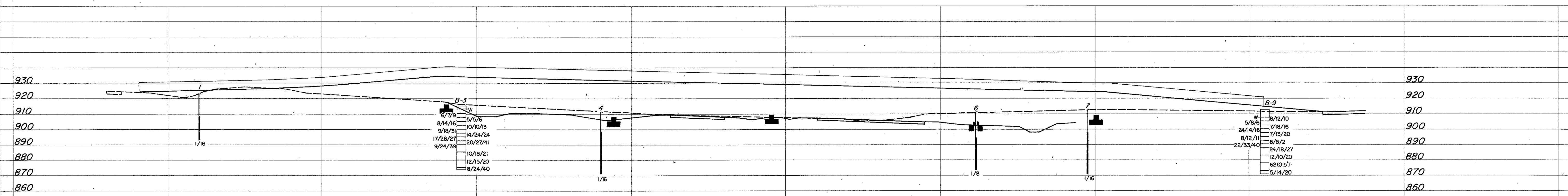
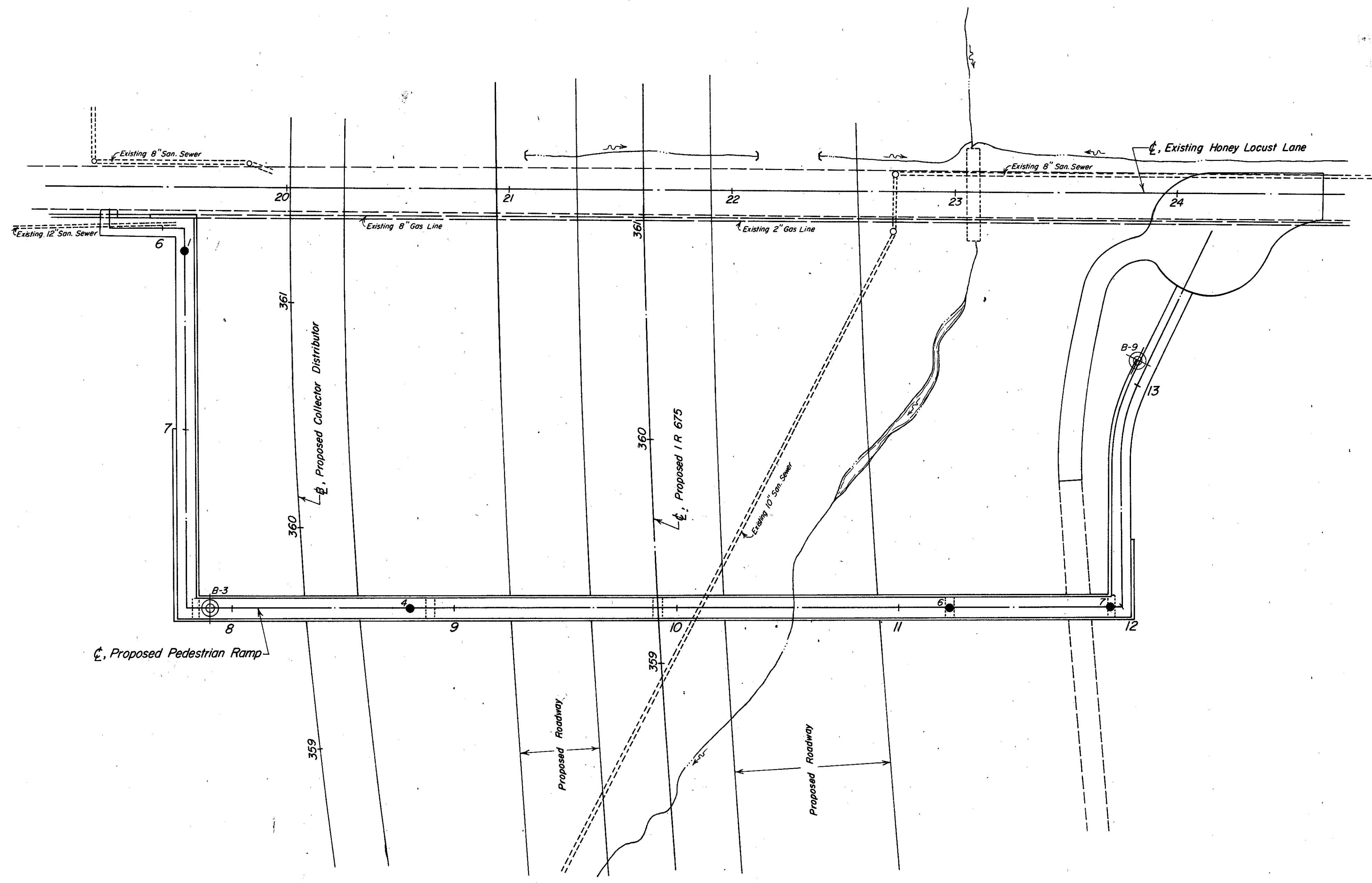
Elev.	Depth	Std. Pen. (N)	Rec. ft.	Loss ft.	Description	Sample No.	Physical Characteristics										SHTL Class.	
							% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	PI	W.C.				
913.0	0																	
908.0	2																	
905.5	4	8/12/10			BROWN SILTY SANDY GRAVEL	1	64	12	8	11	5	NP	NP	11			A-1-B	
903.0	6	5/8/6			BROWN-GRAY SILTY SANDY GRAVEL	2	46	13	11	19	11	19	6	10			A-2-4	
900.5	8	7/18/16			BROWN SANDY GRAVEL	3	65	17	8	7	3	15	1	11			A-1-A	
898.0	10	24/14/16			BROWN-GRAY SILTY SANDY GRAVEL	4	52	22	12	9	5	15	4	9			A-1-A	
895.5	12	7/13/20			BROWN-GRAY GRAVELLY SANDY SILT	5	19	9	15	33	24	21	8	10			A-4B	
893.0	14	8/12/11			NO SAMPLE RECOVERED - BROWN SAND (DRILLER'S DESCRIPTION)													
890.5	16	8/8/2			BROWN-GRAY GRAVELLY SAND	6	41	36	11	8	4	NP	NP	10			A-1-B	
888.0	18	22/33/40			BROWN-GRAY SILTY SANDY GRAVEL	7	40	23	14	13	10	15	1	6			A-1-B	
883.0	20	24/18/27			BROWN-GRAY SILTY SANDY GRAVEL	8	38	16	14	19	13	16	3	7			A-2-4	
878.0	22	12/10/20			BROWN-GRAY SILTY SANDY GRAVEL	9	51	8	10	18	13	18	5	8			A-2-4	
873.0	24	62(0.5')			BROWN-GRAY SILTY SANDY GRAVEL	10	32	16	14	27	11	NP	NP	9			A-4a	
871.5	26	5/14/20			BROWN-GRAY SILT	11	13	1	1	56	29	20	3	20			A=4B	

NOTE - ALL AVAILABLE SOIL AND BEDROCK INFORMATION WHICH CAN BE CONVENIENTLY SHOWN ON THE STRUCTURE FOUNDATION INVESTIGATION SHEETS HAS BEEN SO REPORTED. ADDITIONAL SUBSURFACE INVESTIGATIONS MAY HAVE BEEN MADE TO STUDY SOME SPECIAL ASPECT OF THE PROJECT. COPIES OF THIS DATA, IF ANY, MAY BE INSPECTED IN THE DISTRICT DEPUTY DIRECTOR'S OFFICE, THE BUREAU OF TESTS AT 1600 WEST BROAD STREET, THE PAVEMENT AND SOILS SECTION OF THE BUREAU OF LOCATION AND DESIGN OR IN THE BRIDGE BUREAU AT 25 SOUTH FRONT STREET.

OHIO DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS - TESTING LABORATORY
 1600 WEST BROAD STREET, COLUMBUS, OHIO 43223

STRUCTURE FOUNDATION INVESTIGATION
 BRIDGE NO. GRE-675-0632
 UNDER PEDESTRIAN RAMP
 SEC. GRE-675-5.37

CHECKED BY L. N. L. REVIEWED BY R. D. R. DATE 5/1/78



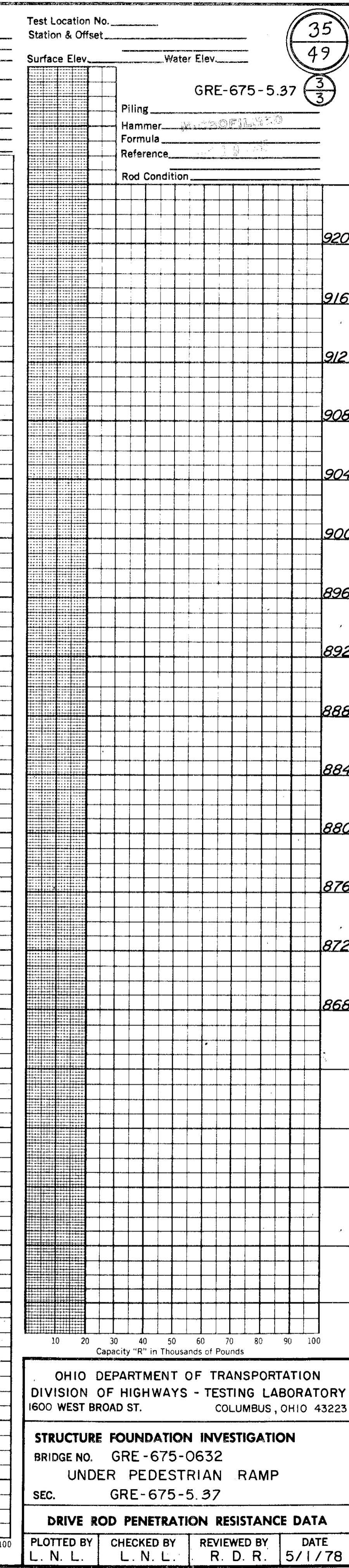
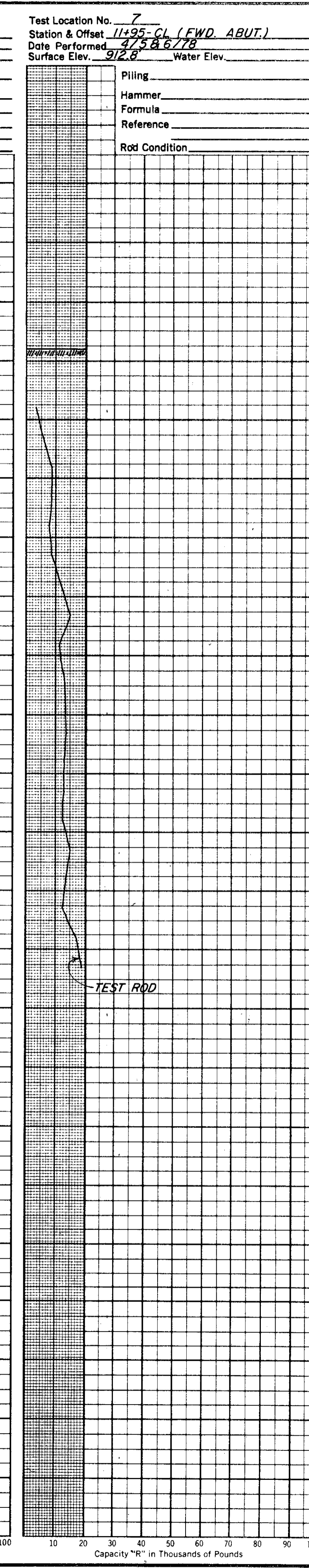
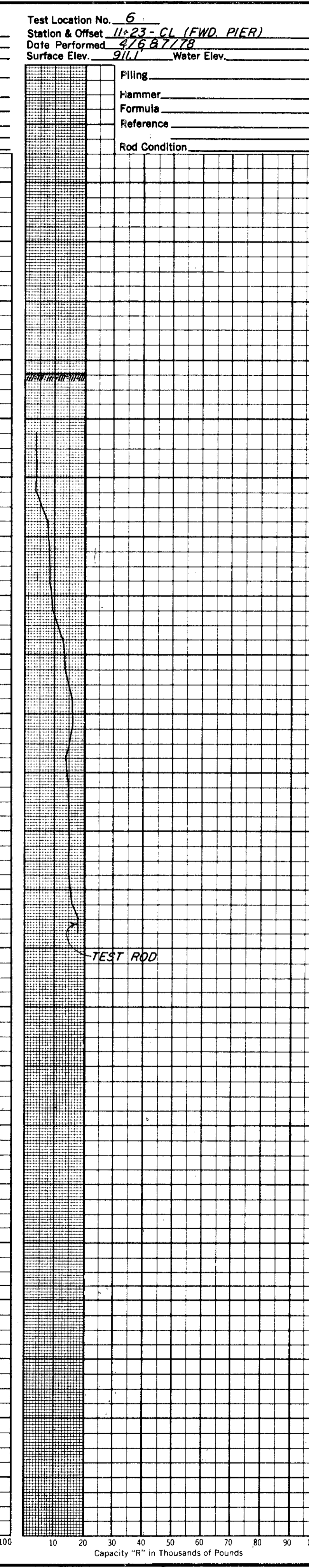
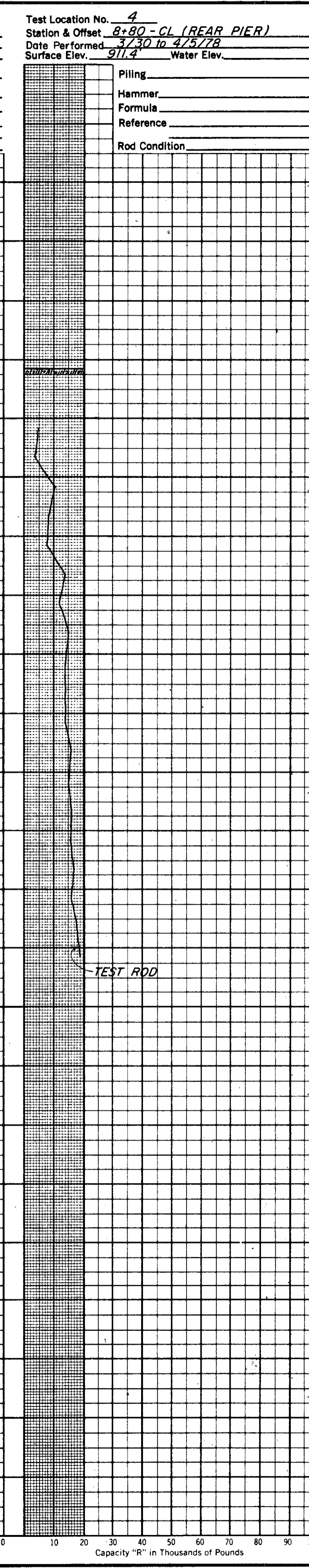
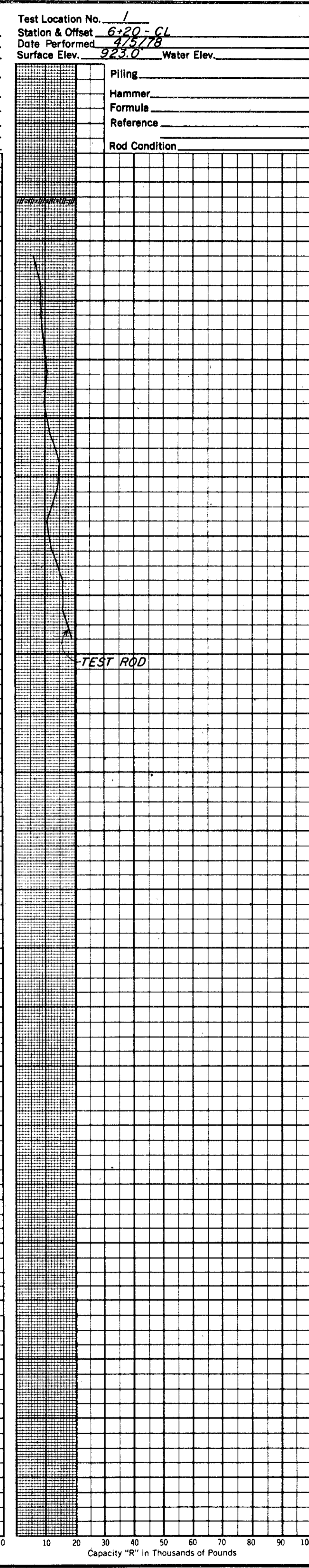
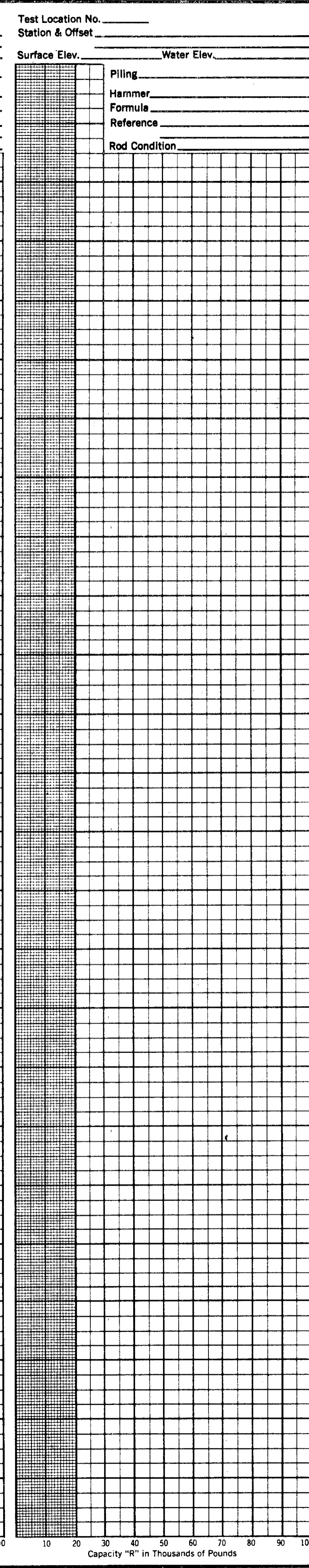
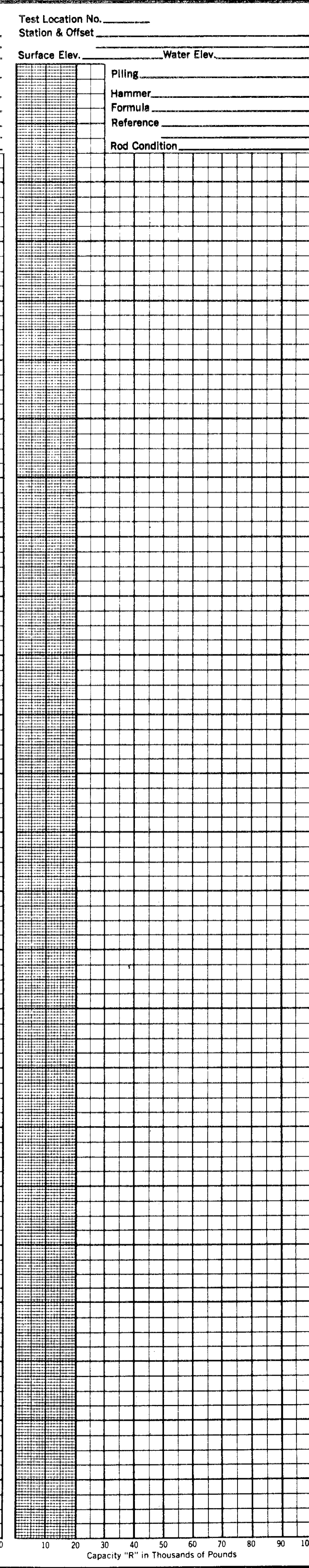
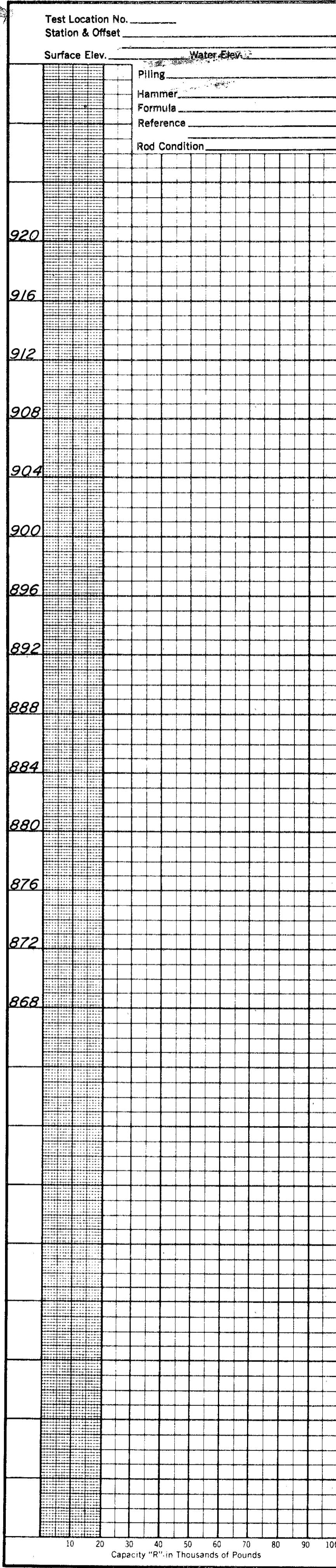
OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS - TESTING LABORATORY
1600 WEST BROAD STREET COLUMBUS, OHIO 43223

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0632
UNDER PEDESTRIAN RAMP
SEC. GRE-675-5.37

PLAN AND PROFILE

DRAWN BY	CHECKED BY	REVIEWED BY	DATE
L. N. L.	L. N. L.	R. D. R.	5/1/78

SCALE: 1" = 30'



35
49

GRE-675-5.37

OHIO DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS - TESTING LABORATORY
 1600 WEST BROAD ST. COLUMBUS, OHIO 43223

STRUCTURE FOUNDATION INVESTIGATION
 BRIDGE NO. GRE-675-0632
 UNDER PEDESTRIAN RAMP
 SEC. GRE-675-5.37

DRIVE ROD PENETRATION RESISTANCE DATA

PLOTTED BY L. N. L. CHECKED BY L. N. L. REVIEWED BY R. D. R. DATE 5/1/78

GEOLOGY OF THE SITE

THE STRUCTURE SITE IS LOCATED ON THE GLACIATED LEXINGTON PENEPLAIN, IN AN AREA WHERE MODERATELY DEEP GLACIAL-DERIVED SOILS OVERLIE INTERBEDDED SHALE AND LIMESTONE BEDROCK, OF ORDOVICIAN AGE.

EXPLORATION

THE EXPLORATION CONSISTED OF TWO DRIVE SAMPLE BORINGS, MADE BETWEEN JULY 10 AND 15, 1969, AND FIVE DRIVE ROD PENETRATION TESTS, MADE ON SEPTEMBER 9 AND 10, 1969.

INVESTIGATIONAL FINDINGS

THE BORINGS ENCOUNTERED UNSTRATIFIED INTERVALS OF VERY DENSE GRAVELS, SANDS AND SILTS. THE BORINGS WERE TERMINATED AT 51 AND 56-FOOT DEPTHS, ELEVATIONS 876 AND 872 FEET, AFTER PENETRATING IN EXCESS OF 30 FEET OF MATERIAL REQUIRING IN EXCESS OF 30 BLOWS PER FOOT IN THE STANDARD PENETRATION TEST.

ROD SOUNDINGS GENERALLY ENCOUNTERED GRADUAL INCREASE IN PENETRATION RESISTANCE WITH INCREASE IN DEPTH AND WERE TERMINATED UPON ENCOUNTER WITH HIGH RESISTANCE TO PENETRATION AT 22 TO 30-FOOT DEPTHS, ELEVATIONS 904 TO 890 FEET, CONSIDERED TO BE IN VERY DENSE GRAVELS, SANDS AND SILTS, AS REVEALED BY THE BORINGS.

NO FREE WATER OBSERVATIONS WERE MADE IN ANY OF THE ROD SOUNDING HOLES.

LEGEND

- Auger Boring Location - Plan View.
- Press and/or Drive Sample and/or Core Boring Location - Plan View.
- Drive Rod Penetration Resistance Sounding Location - Plan View.
- Capped Pile
- Footing
- Footing on Pile
- Top of Rock
- Horizontal Bar on Boring Log Indicates the Depth the Sample Was Taken.
- Figures Beside the Boring Log in Profile Indicate the Number of Blows for Standard Penetration Test.
X = Number of Blows for First 6 inches.
Y = Number of Blows for Second 6 inches.
- Drive Rod Penetration Resistance Sounding Log - Profile
- Casing
- Resistance "R" < 10,000 lbs.
- Resistance "R" > 10,000 lbs.
- Indicates Final Measurement of Penetration, in Inches.
- Indicates Free Water Elevation.
- Indicates Static Water Elevation.

SYMBOLS OF ROCK TYPES

- Coal
- Weathered Siltstone, M.
- Siltstone, Mudstone, or
- Weathered Shale
- Shale
- Boulders or Cobbles
- Weathered Sandstone

GENERAL INFORMATION

Drive Rod Penetration Sounding Tests

Drive rod penetration resistance tests constitute driving a 1.315-inch diameter steel rod, with a 45° cone point, into the ground, using a 122-pound drop-hammer with a free fall of five feet. At one or two-foot depth intervals, a measurement is taken to determine the amount of penetration achieved in three hammer drops. This reading is converted to an empirical value for capacity "R", in thousands of pounds (which is a measure of both the point resistance and frictional resistance on the rod), by using charts prepared by the Ohio Department of Highways, Bureau of Bridges, on the basis of correlation study of rod penetration with post performance of pile driving. For interpretation, a graph is prepared by plotting the value "R" against the depth at which the reading was taken, and connecting the plotted points. The curve so obtained reflects the density of subsurface materials in a manner that can be readily compared with data from similar tests at other locations on the structure site. From this comparison, the overall uniformity of subsurface condition may be evaluated.

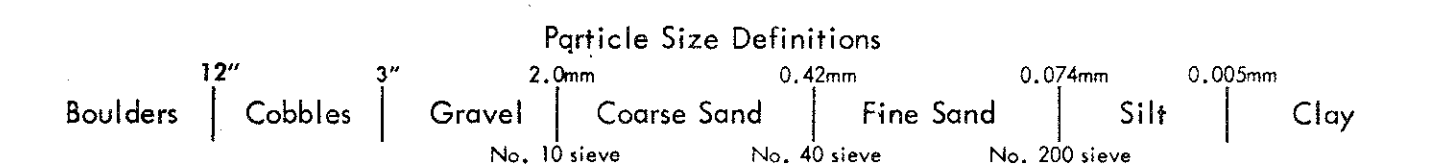
Drive Sample Borings - Drive-Press Sample Borings

Drive sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. sampler, at 2-1/2 and/or 5-foot depth intervals, driven by means of a 140-pound drop-hammer with a free fall of 30 inches. The number of blows required to drive the sampler 12 inches is considered the standard penetration test.

Drive-press sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. drive sampler, and 3" O.D. thin-wall press sampler. The press sampler is advanced by continuous uniform pressure, applied by the drill rig.

The boring log sheets show a graphic plot of the information obtained, including depth and elevation of the sample, number of blows for the standard penetration tests in two 6-inch increments, depth of press samples, field sample number, sample description - based on laboratory tests and the Casagrande AC classification system - and gradation, plasticity, and moisture content determinations. Results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler can not be driven, a wash sample is procured for visual classification, in order to determine the general character of the material. These samples are not considered sufficiently representative to warrant laboratory testing.



NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS, OHIO 43223

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0737
UNDER KEMP ROAD
SEC. GRE-675-5.37

CHECKED BY R.C. REVIEWED BY R.D.R. DATE 9/18/69

LOG OF BORING

Date Started 7-10-69 Sampler Type SS Dia 1 3/8" Water Elev _____
 Date Completed 7-15-69 Casing Length 55' Dia 3 1/2"
 Boring No. B-2 Station & Offset 18+84, 5' Lt. (Rear Pier) Surface Elev 927.8'

Elev	Depth	Std Pen (N)	Loss	Description	Sample No	Physical Characteristics								SHTL Class.	
						% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.		
927.8	0														
922.8	5	5/3		Brown Gravelly Sandy Silt	1	17	7	11	28	37	22	7	18	A-4a	
917.8	10	50* (0.7')		Brown Silty Gravelly Sand	2	38	36	13	-13	NP	NP	9	A-1-b		
912.8	14	18/23		Brownish-Gray Gravelly Sandy Clay	3	16	7	20	20	37	30	16	13	A-6b	
907.8	20	26/30		Gray Gravelly Sandy Silt	4	21	9	15	23	32	22	8	10	A-4a	
902.8	24	27/38		Gray Gravelly Sandy Silt with Boulders	5	18	12	18	28	24	17	6	10	A-4a	
897.8	30	50* (0.7')		Brown Gravelly Sand	6	22	16	59	-3	NP	NP	11	A-3		
892.8	34	50* (0.8')		Brown Silty Gravelly Sand	7	29	24	31	-16	NP	NP	11	A-1-b		
887.8	40	50*		Brown Silty Gravelly Sand	8	28	35	24	-13	NP	NP	9	A-1-b		
882.8	46	36/44		Brown Silty Gravelly Sand	9	25	43	21	-11	NP	NP	11	A-1-b		
877.8	50	25/34		Brown Silty Sand	10	8	50	23	-19	NP	NP	13	A-1-b		
872.8	54														
871.8	56	22/31		Brown Silty Sand	11	6	25	49	-20	NP	NP	17	A-3a		

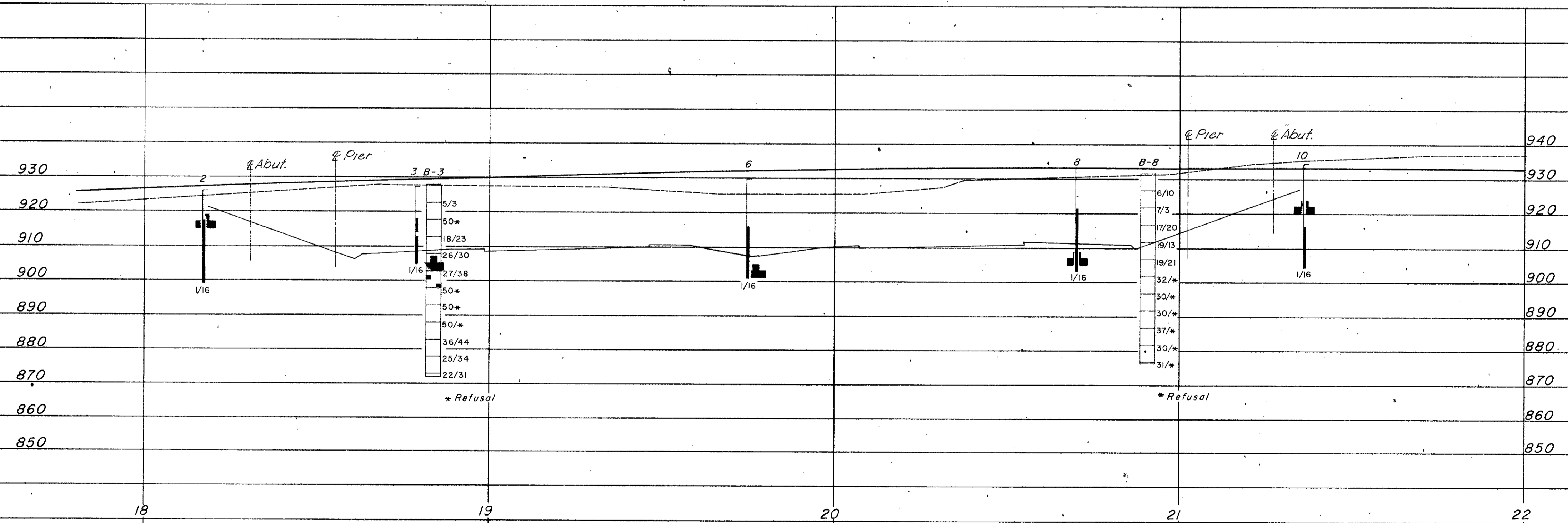
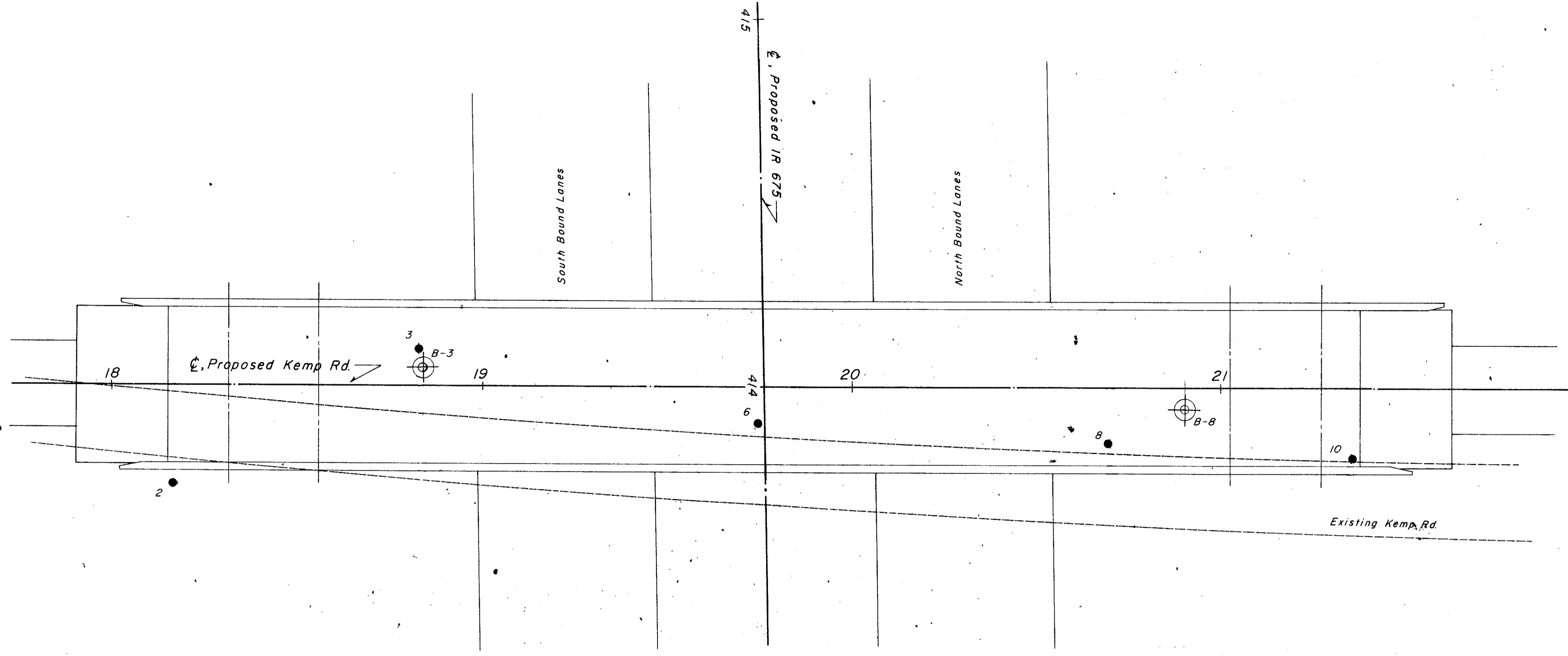
*Refusal
BOTTOM OF BORING

LOG OF BORING

Date Started 7-10-69 Sampler Type SS Dia 1 3/8" Water Elev _____
 Date Completed 7-15-69 Casing Length 55' Dia 3 1/2"
 Boring No. B-2 Station & Offset 20+91, 6' Rt. (Forward Pier) Surface Elev 931.7'

Elev	Depth	Std. Pen (N)	Loss	Description	Sample No	Physical Characteristics								SHTL Class.
						% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	
931.7	0													
926.7	5	6/10		No Sample Recovered-Sand and Gravel (Driller's Description)										
921.7	10	7/3		Brown Silty Gravelly Sand	1	33	29	15	13	10	NP	NP	10	Visual
916.7	16	17/20		Gray Sandy Silt	2	12	12	20	31	25	16	4	10	A-4a
911.7	20	19/13		Gray Gravelly Sandy Silt	3	16	13	18	31	22	17	5	10	A-4a
906.7	26	19/21		Gray Sandy Gravelly Silt	4	27	10	15	26	22	18	6	11	A-4a
901.7	30	32/*		Brown Gravelly Sandy Silt	5	17	14	20	31	18	NP	NP	11	Visual
896.7	36	30/*		Brown Silty Sandy Gravel	6	48	22	8	-22	NP	NP	11	A-1-b	
891.7	40	30/*		Brown Silty Gravelly Sand	7	33	45	9	-13	NP	NP	12	A-1-b	
886.7	46	37/*		Brown Gravelly Silt	8	44	32	18	-6	NP	NP	10	A-1-b	
881.7	50	30/*		Brown Silty Gravelly Sand	9	20	41	19	-20	NP	NP	9	A-1-b	
876.7	56	31/*		Brown Silty Sand	10	13	49	23	-15	NP	NP	11	A-1-b	

*Refusal
BOTTOM OF BORING



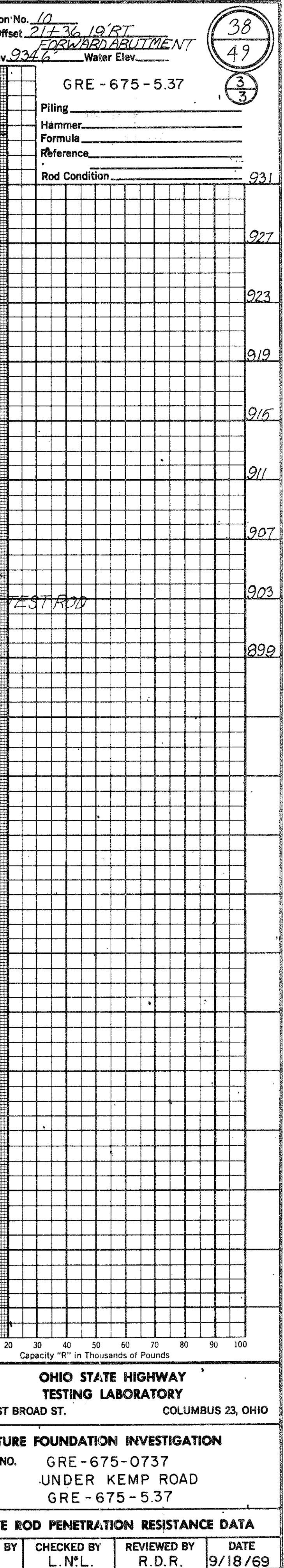
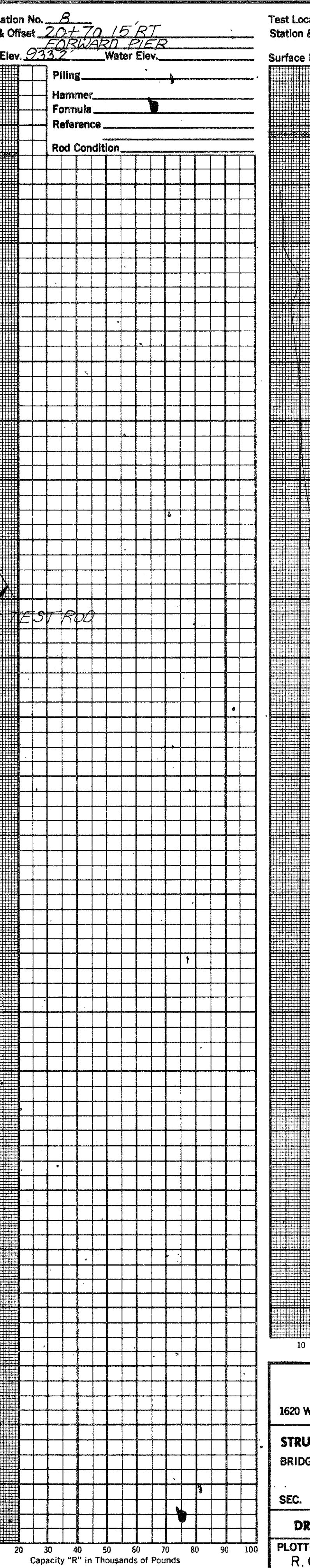
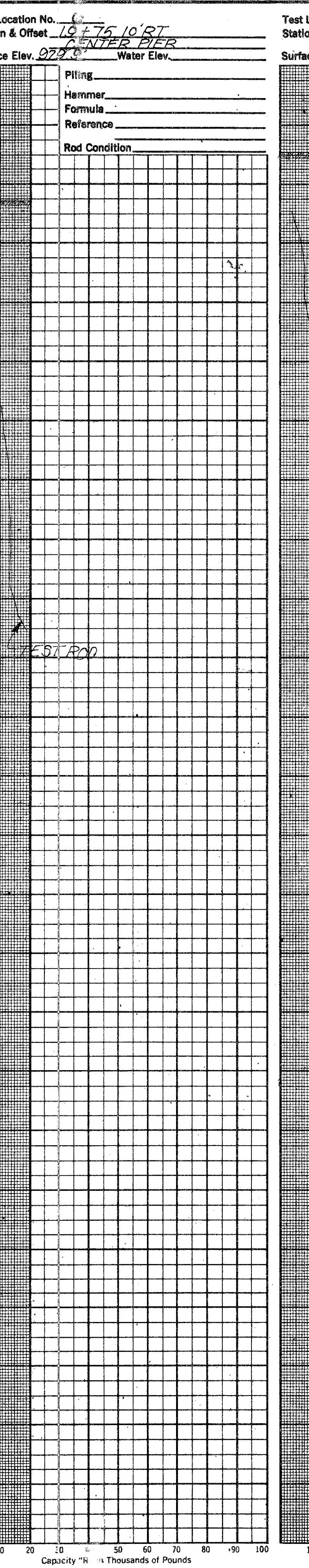
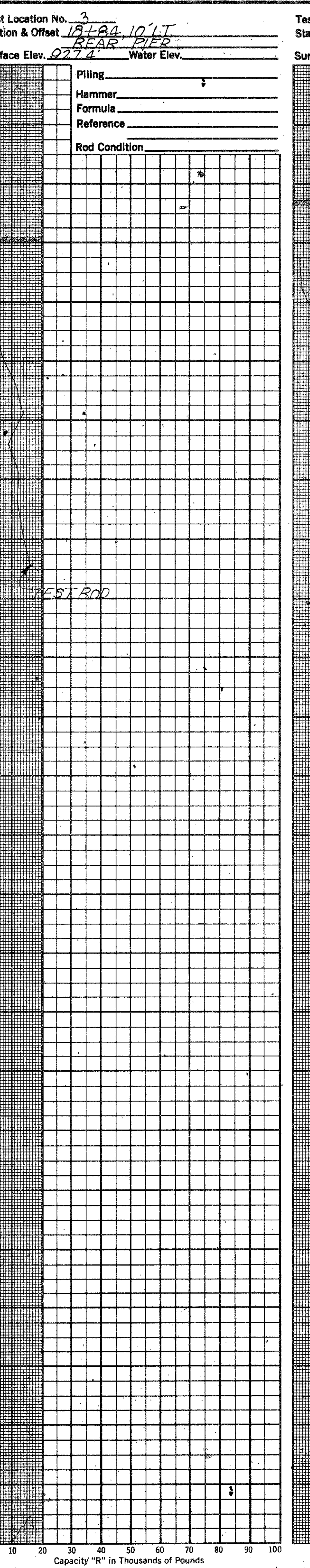
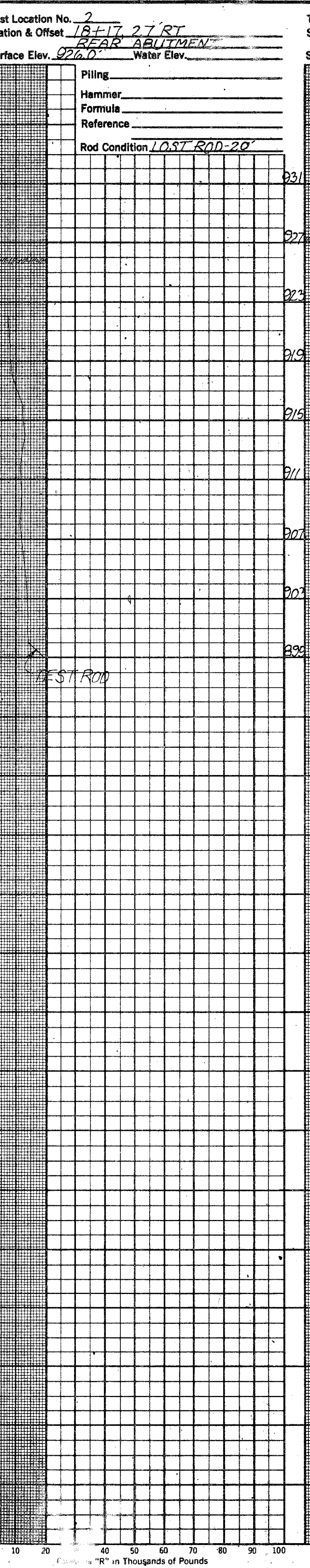
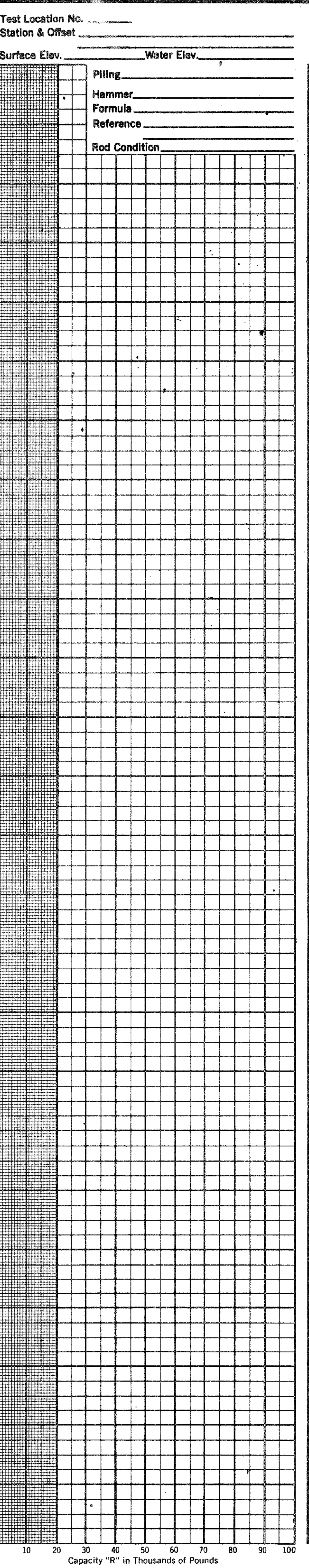
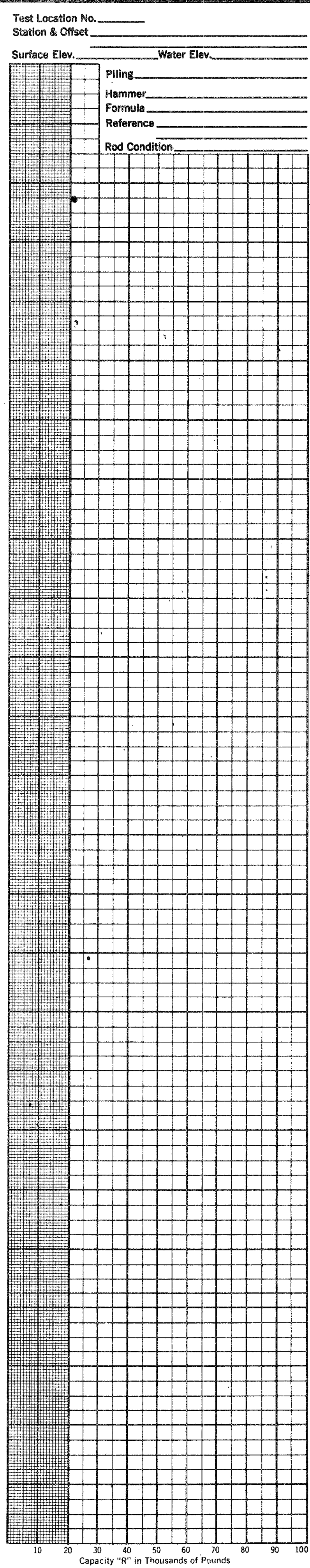
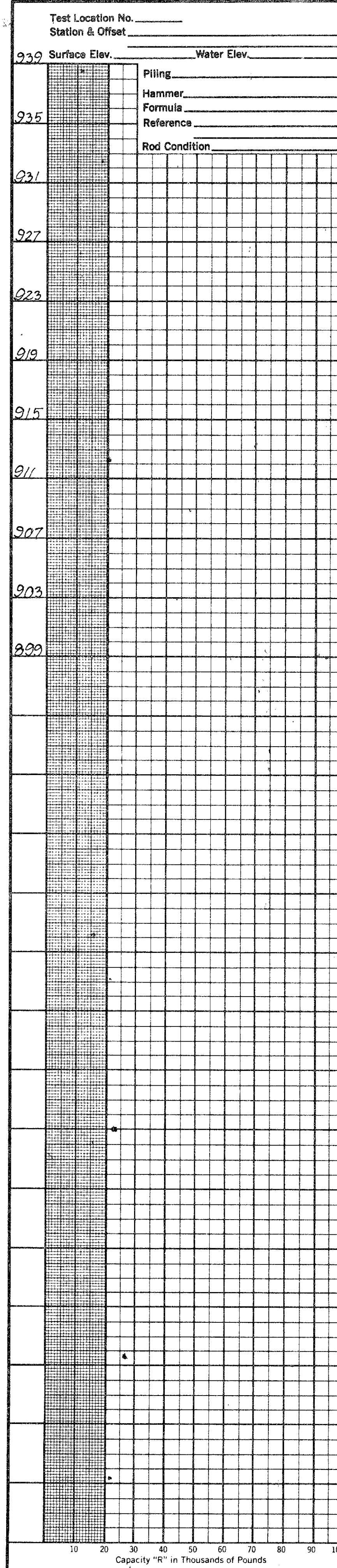
OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0737
UNDER KEMP ROAD
SEC. GRE-675-5.37

PLAN AND PROFILE

DRAWN BY L.L.L.	CHECKED BY L.N.L.	REVIEWED BY R.D.R.	DATE 9/18/69
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SCALE: 1" = 20'



38
49
3
3

OHIO STATE HIGHWAY TESTING LABORATORY
1620 WEST BROAD ST. COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-675-0737
UNDER KEMP ROAD
SEC. GRE-675-537

DRIVE ROD PENETRATION RESISTANCE DATA

PLOTTED BY R.C.
 CHECKED BY L.N.L.
 REVIEWED BY R.D.R.
 DATE 9/18/69

GEOLOGY OF THE SITE

THE STRUCTURE SITE IS LOCATED IN THE GLACIATED LEXINGTON PENEPLAIN, IN AN AREA WHERE MODERATELY DEEP GLACIAL-DERIVED SOILS OVERLIE INTERBEDDED LIMESTONE AND SHALE BEDROCK, OF ORDOVICIAN AGE.

EXPLORATION

THE EXPLORATION CONSISTED OF TWO DRIVE SAMPLE BORINGS AND SIX DRIVE ROD PENETRATION TESTS, MADE BETWEEN JULY 24 AND AUGUST 5, 1969.

INVESTIGATIONAL FINDINGS

















BORINGS DISCLOSED LOOSE TO VERY DENSE SILTS, SANDS AND GRAVELS TO 56-FOOT DEPTHS, ELEVATIONS 875 AND 870 FEET, WHERE THE BORING WAS TERMINATED AFTER PENETRATING AT LEAST 30 FEET OF MATERIAL REQUIRING IN EXCESS OF 30 BLOWS PER FOOT IN THE STANDARD PENETRATION TEST.

ROD SOUNDINGS ENCOUNTERED GRADUALLY INCREASING (OCCASIONALLY ERRATIC) RESISTANCE WITH INCREASING DEPTH, AND WERE TERMINATED DUE TO NEAR-REFUSAL TO PENETRATION AT 32 TO 45-FOOT DEPTHS, ELEVATIONS 897 TO 877 FEET, CONSIDERED TO BE IN DENSE SANDS, SILTS AND GRAVELS, AS REVEALED BY THE BORINGS.













FREE WATER WAS NOT OBSERVED IN ANY OF THE ROD SOUNDING HOLES.

NO TEST PENETRATED TO BEDROCK SURFACE.

LEGEND

-  Auger Boring Location - Plan View.
-  Press and/or Drive Sample and/or Core Boring Location - Plan View.
-  Drive Rod Penetration Resistance Sounding Location - Plan View.
-  Capped Pile
-  Footing
-  Footing on Pile
-  TR Top of Rock
-  Horizontal Boring Log Indicates the Depth the Sample Was Taken.
-  Figures Beside the Boring Log in Profile Indicate the Number of Blows for Standard Penetration Test.
X = Number of Blows for First 6 inches.
Y = Number of Blows for Second 6 inches.
-  Drive Rod Penetration Resistance Sounding Log - Profile
-  Casing
-  Resistance "R" < 10,000 lbs.
-  Resistance "R" > 10,000 lbs.
-  Z Indicates Final Measurement of Penetration, in Inches.
-  Indicates Free Water Elevation.
-  Indicates Static Water Elevation.

SYMBOLS OF ROCK TYPES

-  Coal
-  Weathered Siltstone, Mudstone, or Claystone
-  Siltstone, Mudstone, or Claystone
-  Weathered Shale
-  Shale
-  Boulders or Cobbles
-  Weathered Sandstone
-  Sandstone
-  Leached Dolomite
-  Dolomite
-  Leached Limestone
-  Limestone

GENERAL INFORMATION

Drive Rod Penetration Sounding Tests

Drive rod penetration resistance tests constitute driving a 1.315-inch diameter steel rod, with a 45° cone point, into the ground, using a 122-pound drop-hammer with a free fall of five feet. At one or two-foot depth intervals, a measurement is taken to determine the amount of penetration achieved in three hammer drops. This reading is converted to an empirical value for capacity "R", in thousands of pounds (which is a measure of both the point resistance and frictional resistance on the rod), by using charts prepared by the Ohio Department of Highways, Bureau of Bridges, on the basis of correlation study of rod penetration with past performance of pile driving. For interpretation, a graph is prepared by plotting the value "R" against the depth at which the reading was taken, and connecting the plotted points. The curve so obtained reflects the density of subsurface materials in a manner that can be readily compared with data from similar tests at other locations on the structure site. From this comparison, the overall uniformity of subsurface condition may be evaluated.

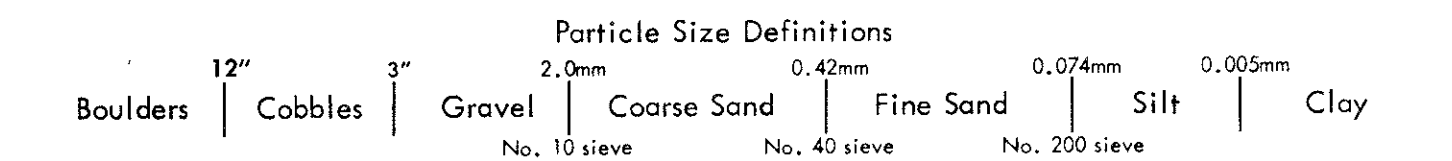
Drive Sample Borings - Drive-Press Sample Borings

Drive sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. sampler, at 2-1/2 and/or 5-foot depth intervals, driven by means of a 140-pound drop-hammer with a free fall of 30 inches. The number of blows required to drive the sampler 12 inches is considered the standard penetration test.

Drive-press sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. drive sampler, and 3" O.D. thin-wall press sampler. The press sampler is advanced by continuous uniform pressure, applied by the drill rig.

The boring log sheets show a graphic plot of the information obtained, including depth and elevation of the sample, number of blows for the standard penetration tests in two 6-inch increments, depth of press samples; field sample number, sample description - based on laboratory tests and the Casagrande AC classification system - and gradation, plasticity, and moisture content determinations. Results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler can not be driven, a wash sample is procured for visual classification, in order to determine the general character of the material. These samples are not considered sufficiently representative to warrant laboratory testing.



NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

**OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY**
1620 WEST BROAD STREET, COLUMBUS, OHIO 43223

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE - 35-0009
OVER DAYTON-XENIA ROAD
SEC. GRE - 675-5.37

CHECKED BY L.N.L.	REVIEWED BY R.D.R.	DATE 8/27/69
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LOG OF BORING

Date Started 7-24-69 Sampler Type SS Dia 1 3/8" Water Elev _____
 Date Completed 7-28-69 Casing Length 35' Dia 3 1/2" _____
 Boring No B-9 Station & Offset 6+22, 78' Lt. (Forward Pier) Surface Elev 930.7'

Elev	Depth	S.M. Pk. (IN)	Rec. Loc. (ft)	Description	Sample No	Physical Characteristics										SHTL Class.			
						% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	PI	WC						
930.7	0			Topsoil															
930.2	0.5																		
	1																		
925.7	4.5	11/14		Brown Gravelly Sandy Silt	1	23	9	16	26	26	19	7	13					A-4a	
	5																		
	6																		
920.7	10	9/8		Brown Gravelly Sandy Silt	2	15	7	16	32	30	18	5	14					A-4a	
	11																		
	12																		
915.7	14			Gray Gravelly Sandy Silt	3	20	8	15	31	26	18	6	12					A-4a	
	15																		
	16																		
910.7	20			Brown Silty Gravelly Sand	4	33	19	18	20	10	NP	NP	10					A-3a	
	21																		
908.2	22	20/35		Brown Silty Sand, Wash Sample (Heaved in Casing 2')	5	0	74	13	-13	-	NP	NP	24					A-1-a	
	23																		
905.7	24			Brown Silty Sandy Gravel	6	44	22	17	-17	-	NP	NP	11					A-1-b	
	25																		
903.2	28	17/22		Brown Silty Sand, Wash Sample (Heaved in Casing 2')	7	0	52	35	-13	-	NP	NP	25					A-1-b	
	29																		
900.7	30			Gray Gravel	8	86	13	1	0	0	NP	NP	9					A-1-a	
	31																		
898.2	32	14/16		Brown Gravelly Sand, Wash Sample (Heaved in Casing 2')	9	22	70	7	-1	-	NP	NP	9					A-1-a	
	33																		
895.7	34			Gray Silt	10	0	1	3	60	36	NP	NP	18					A-4b	
	35																		
893.2	38	17/24		Gray Silt	11	0	2	3	70	25	NP	NP	15					A-4b	
	39																		
890.7	40			Gray Clayey Silt	12	0	1	2	62	35	22	8	17					A-4b	
	41																		
	42																		
885.7	44			Gray Silt	13	0	0	1	59	40	21	6	17					A-4a	
	45																		
	46																		
880.7	48			Gray Clayey Silt	14	0	0	3	47	50	26	10	21					A-4b	
	49																		
	50																		
875.7	52			Gray Silt	15	10	0	3	62	25	NP	NP	17					A-4a	
874.7	56	17/28																	

↑ BOTTOM OF BORING

LOG OF BORING

Date Started 7-29-69 Sampler Type SS Dia 1 3/8" Water Elev _____
 Date Completed 7-30-69 Casing Length 30' Dia 3 1/2" _____
 Boring No B-3 Station & Offset 5+05, 76' Lt. (Rear Abutment) Surface Elev 926.0'

Elev	Depth	S.M. Pk. (IN)	Rec. Loc. (ft)	Description	Sample No	Physical Characteristics										SHTL Class.			
						% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	PI	WC						
926.0	0			Topsoil															
925.5	0.5																		
	1																		
	2																		
	3																		
921.0	4			Brown Sandy Gravelly Silt	1	25	8	16	29	22	22	6	12					A-4a	
	5																		
	6																		
916.0	10			Brown Sandy Gravelly Silt	2	40	8	12	19	21	19	7	11					A-4a	
	11																		
	12																		
911.0	14			Brown Silty Sandy Gravel	3	47	11	23	10	9	NP	NP	15					A-1-b	
	15																		
	16																		
	17																		
906.0	20			Brown Silty Gravelly Sand	4	26	11	46	6	11	NP	NP	22					A-3a	
	21																		
903.5	22			Brown Silty Sandy Gravel	5	41	20	19	8	12	NP	NP	13					A-1-b	
	23																		
901.0	24			Brown Sandy Gravel	6	59	23	12	-6	-	NP	NP	10					A-1-a	
	25																		
898.5	28			Brown Gravelly Sand	7	42	48	8	-2	-	NP	NP	12					A-1-b	
	29																		
896.0	30			Gray Gravelly Silt	8	18	2	3	49	28	22	6	18					A-4a	
	31																		
893.5	32			Gray Gravelly Silt	9	15	3	4	50	28	22	6	17					A-4b	
	33																		
891.0	34			Gray Silt	10	6	1	1	68	24	NP	NP	19					A-4b	
	35																		
888.5	38			Gray Gravelly Silt	11	22	2	0	49	27	23	6	17					A-4a	
	39																		
886.0	40			Gray Silt	12	0	0	0	62	38	23	5	18					A-4b	
	41																		
	42																		
	43																		
881.0	44			Gray Silt	13	0	0	0	64	36	23	6	15					A-4b	
	45																		
	46																		
	47																		
876.0	50			Gray Silty Sand	14	8	7	70	13	2	NP	NP	20					A-3a	
	51																		
	52																		
871.0	54			Gray Silty Sand	15	5	2	70	12	11	NP	NP	19					A-3a	
870.0	56																		

↑ BOTTOM OF BORING

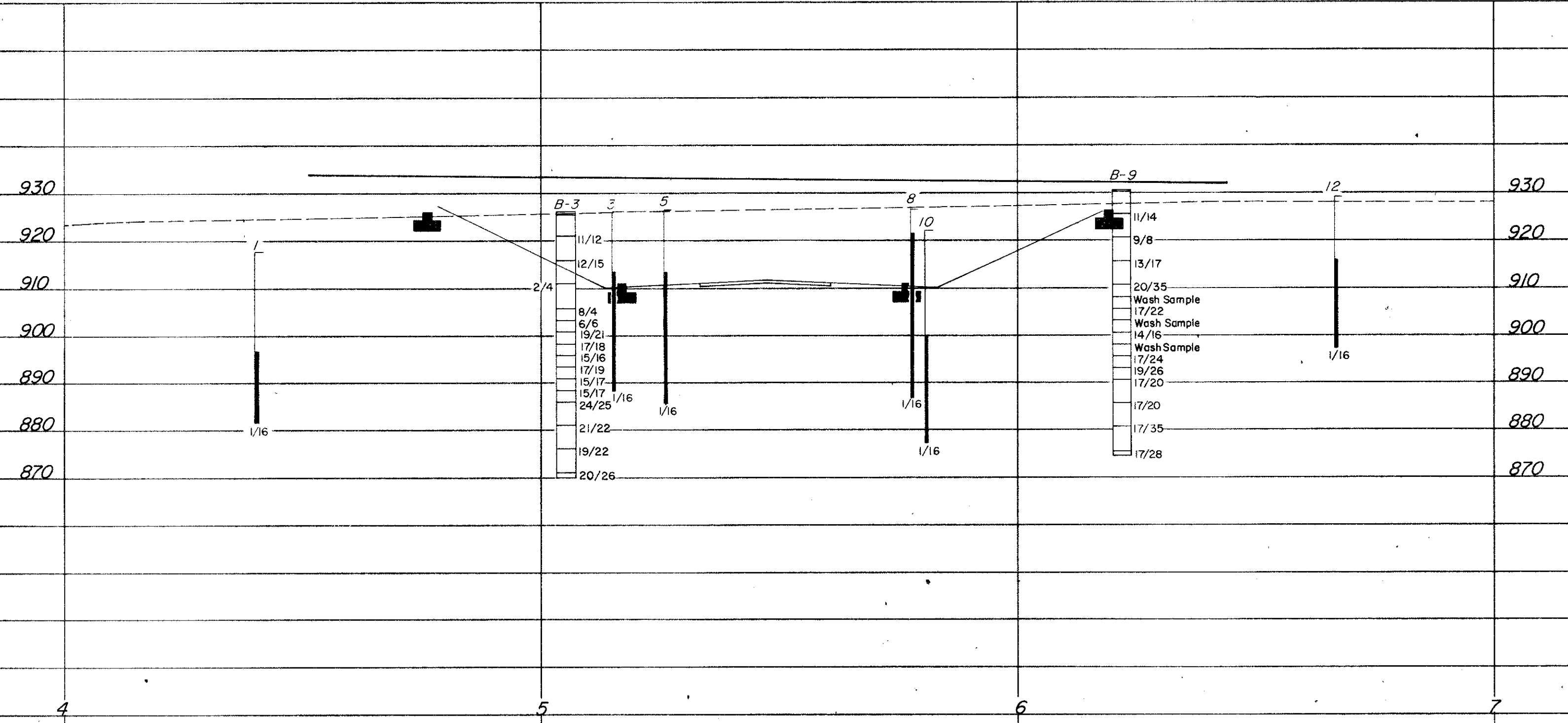
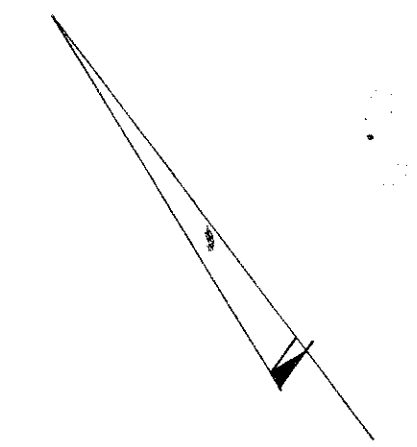
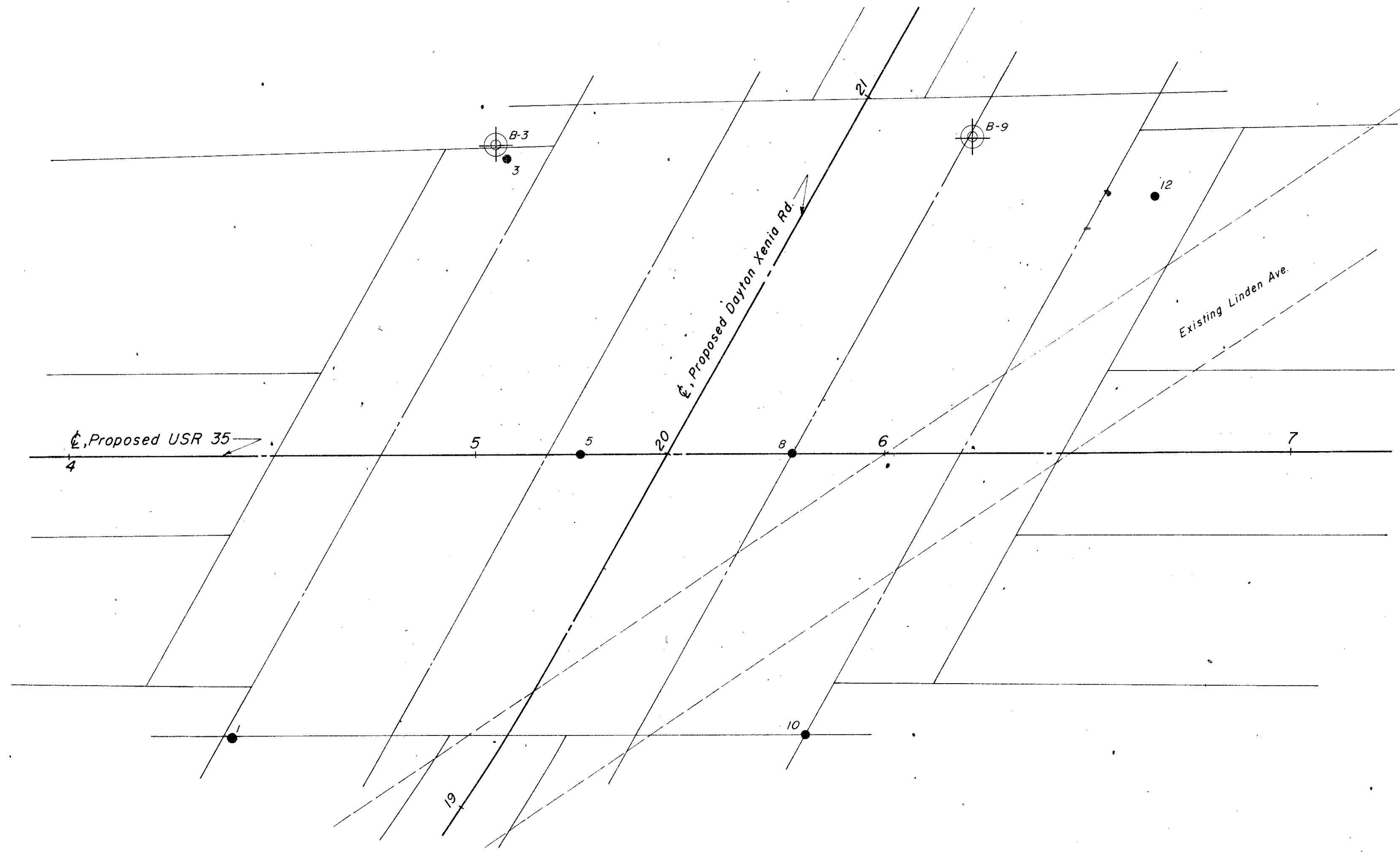
OHIO DEPARTMENT OF HIGHWAYS
 TESTING LABORATORY
 1620 WEST BROAD STREET, COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
 BRIDGE NO. GRE-35-0009
 OVER DAYTON-XENIA RD.
 SEC. GRE-675-5.37

BORING DATA

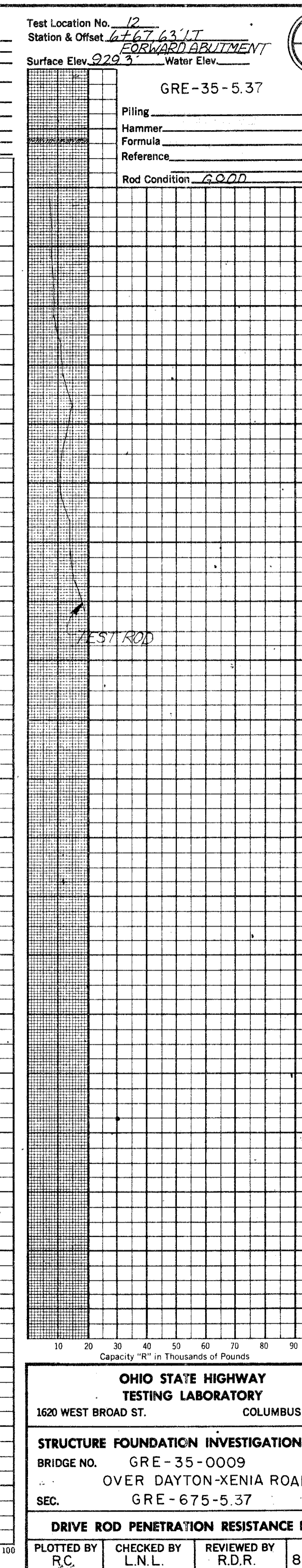
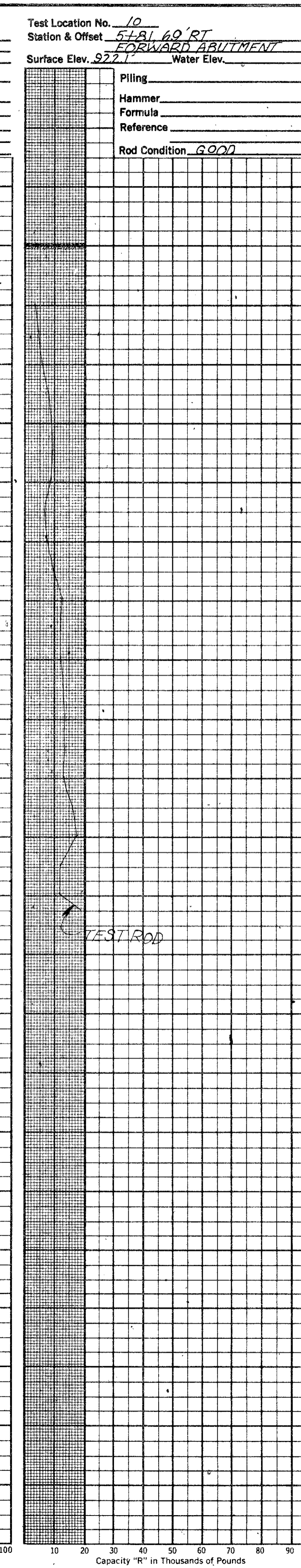
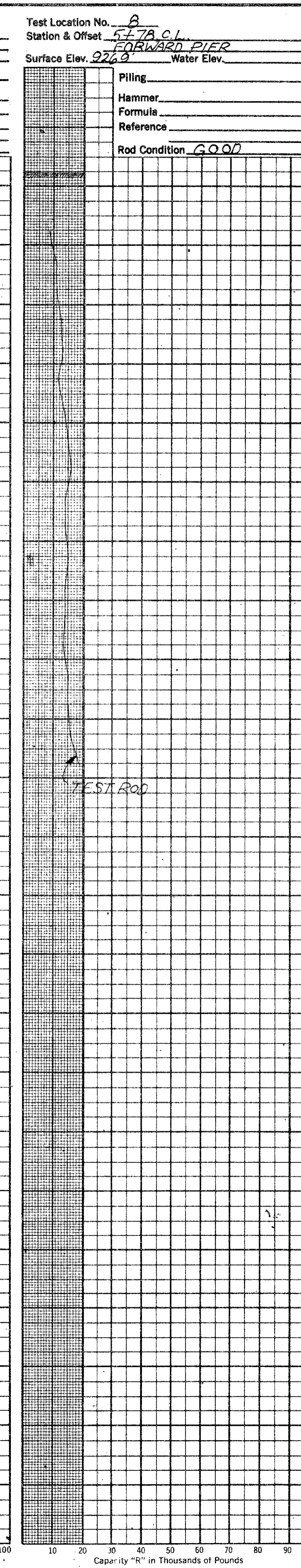
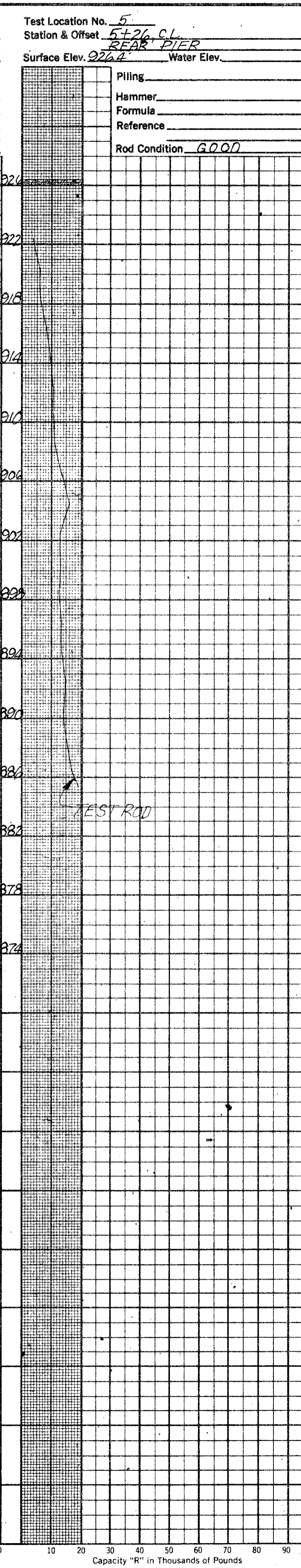
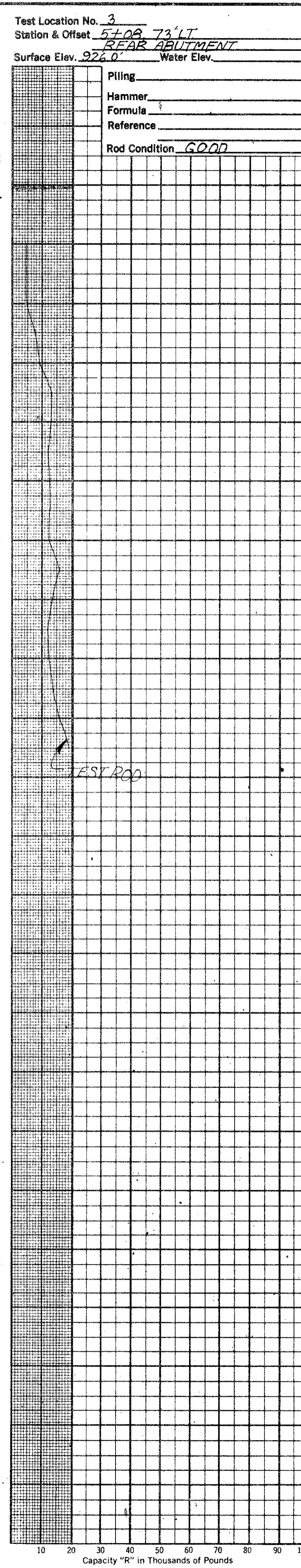
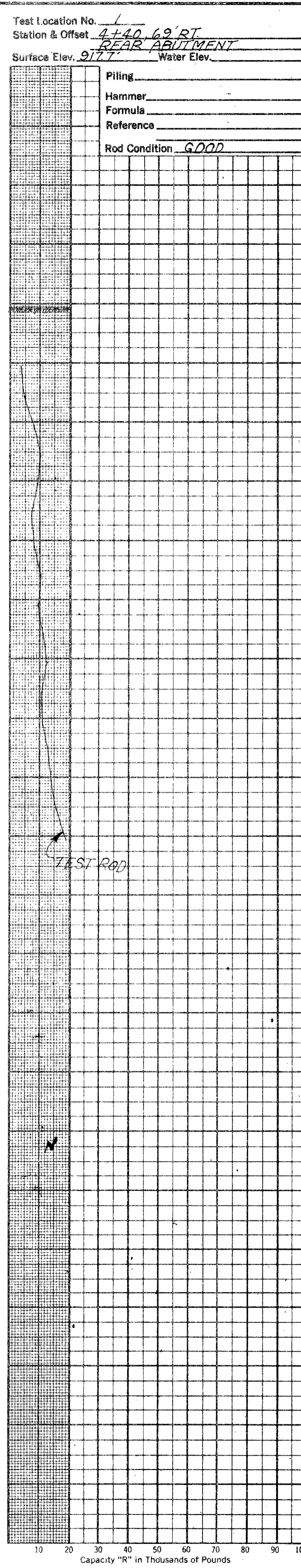
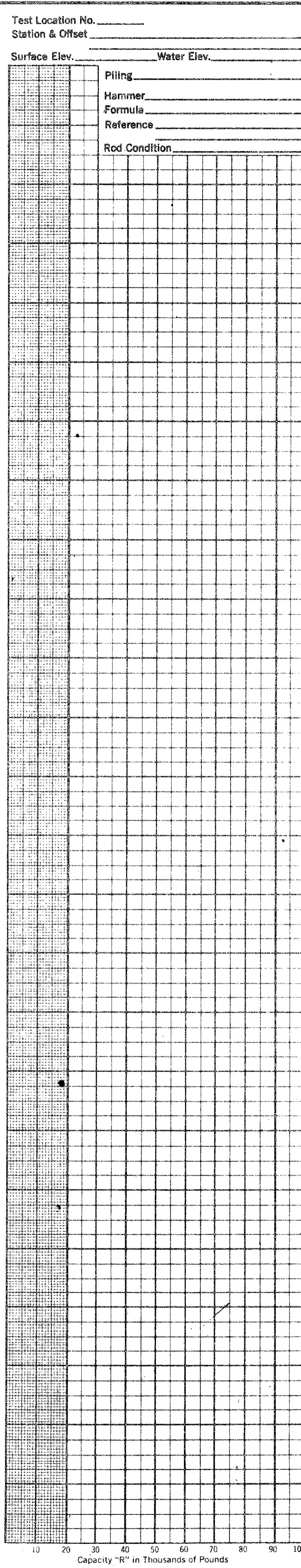
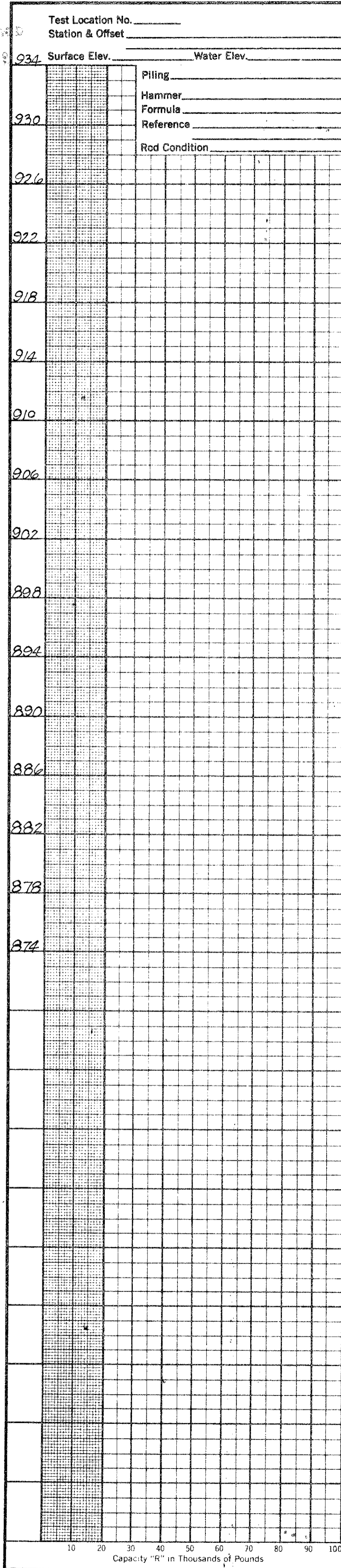
TYPED BY SAJ.	CHECKED BY L.N.L.	REVIEWED BY R.D.R.	DATE 8/27/69
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WORK SHOWN
DATE 1-2-69



OHIO DEPARTMENT OF HIGHWAYS TESTING LABORATORY 1620 WEST BROAD STREET, COLUMBUS 23, OHIO			
STRUCTURE FOUNDATION INVESTIGATION BRIDGE NO. GRE-35-0009 OVER DAYTON-XENIA ROAD SEC. GRE-675-537			
PLAN AND PROFILE			
DRAWN BY J.E.C.	CHECKED BY L.N.L.	REVIEWED BY R.D.R.	DATE 8/27/69

SCALE: 1" = 20'



42
49
4
4

GRE-35-5.37

OHIO STATE HIGHWAY TESTING LABORATORY
1620 WEST BROAD ST. COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-35-0009
OVER DAYTON-XENIA ROAD
SEC. GRE-675-5.37

DRIVE ROD PENETRATION RESISTANCE DATA

PLOTTED BY R.C.	CHECKED BY L.N.L.	REVIEWED BY R.D.R.	DATE 8/27/69
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GEOLOGY OF THE SITE

THE STRUCTURE SITE IS LOCATED ON THE GLACIATED LEXINGTON PENEPLAIN, IN AN AREA WHERE MODERATELY DEEP GLACIAL-DERIVED SOILS OVERLIE INTERBEDDED SHALE AND LIMESTONE BEDROCK, OF ORDOVICIAN AGE.

EXPLORATION

THE EXPLORATION CONSISTED OF TWO DRIVE SAMPLE BORINGS, MADE BETWEEN JULY 15 AND 17, 1969, AND SIX DRIVE ROD PENETRATION TESTS, MADE BETWEEN SEPTEMBER 3 AND 9, 1969.

INVESTIGATIONAL FINDINGS

THE BORINGS ENCOUNTERED UNSTRATIFIED INTERVALS OF VERY DENSE GRAVELS, SANDS AND SILTS WITH SOME COBBLES. THE BORINGS WERE TERMINATED AT 31 AND 56-FOOT DEPTHS, ELEVATIONS 864 AND 840 FEET, AFTER PENETRATING IN EXCESS OF 30 FEET OF MATERIAL REQUIRING IN EXCESS OF 30 BLOWS PER FOOT IN THE STANDARD PENETRATION TEST.

ROD SOUNDINGS ENCOUNTERED GRADUAL INCREASE IN PENETRATION RESISTANCE WITH INCREASE IN DEPTH AND WERE TERMINATED UPON ENCOUNTER WITH HIGH RESISTANCE TO PENETRATION AT 45 TO 53-FOOT DEPTHS, ELEVATIONS 849 TO 841 FEET, CONSIDERED TO BE IN VERY DENSE GRAVELS, SANDS AND SILTS, AS REVEALED BY BORING B-10.

NO FREE WATER OBSERVATIONS WERE MADE IN ANY OF THE ROD SOUNDING HOLES.

LEGEND

- ⊕ Auger Boring Location - Plan View.
- ⊕ Press and / or Drive Sample and / or Core Boring Location - Plan View.
- Drive Rod Penetration Resistance Sounding Location - Plan View.
- ▬ Capped Pile
- ⊕ Footing
- ⊕ Footing on Pile
- TR Top of Rock
- H Horizontal Bar on Boring Log Indicates the Depth the Sample Was Taken.
- X/Y Figures Beside the Boring Log in Profile Indicate the Number of Blows for Standard Penetration Test.
X = Number of Blows for First 6 inches.
Y = Number of Blows for Second 6 inches.
- Drive Rod Penetration Resistance Sounding Log - Profile
- Casing
- Resistance "R" < 10,000 lbs.
- Resistance "R" > 10,000 lbs.
- Z Indicates Final Measurement of Penetration, in Inches.
- W— Indicates Free Water Elevation.
- ▼ Indicates Static Water Elevation.

SYMBOLS OF ROCK TYPES

- Coal
- ▨ Weathered Siltstone, Mudstone, or Claystone
- ▨ Siltstone, Mudstone, or
- ▨ Weathered Shale
- ▨ Shale
- Boulders or Cobbles
- ▨ Weathered Sandstone
- ▨ Sandstone

LOG OF BORING

Date Started 7-17-69 Sampler Type SS Dia 1 3/8" Water Elev _____
 Date Completed 7-17-69 Casing Length 30' Dia 3 1/2"
 Boring No. B-5 Station & Offset 330+70, 15' Lt. (2nd Pier) Surface Elev 895.5'

Elev.	Depth	Std. Pen (N)	Rec. ft.	Loss ft.	Description	Sample No.	Physical Characteristics							SMTL Class.			
							% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	PI		W.C.		
895.5	0																
890.5	6	23/33			Brown Gravelly Sandy Silt with Cobbles	1	-	-	-	-	24	11	22	Visual			
888.0	9	17/17			Brown Gravelly Sandy Silt	2	15	9	18	34	24	18	6	11	A-4a		
885.5	10	10/29			Brown Gravelly Sandy Silt	3	21	15	17	22	25	17	5	15	A-4a		
880.5	16	22/30			Brown Gravelly Sandy Silt	4	16	14	22	26	22	NP	NP	11	A-4a		
875.5	20	18/23			Brown Silty Sandy Gravel	5	45	20	19	-15	NP	NP	12	A-1-b			
870.5	24	18/17			Gray Sandy Silt	6	0	2	42	34	22	NP	NP	20	A-4a		
865.5	30																
864.5	31	14/17			Gray Silty Sand	7	9	33	24	-34	NP	NP	19	A-3a			

BOTTOM OF BORING

LOG OF BORING
 Date Started 7-15-69 Sampler Type SS Dia 1 3/8" Water Elev _____
 Date Completed 7-17-69 Casing Length 50' Dia 3 1/2"
 Boring No. B-10 Station & Offset 331+75, 24' Rt. (Fourth Pier) Surface Elev 896.0'

Elev.	Depth	Std. Pen (N)	Rec. ft.	Loss ft.	Description	Sample No.	Physical Characteristics							SMTL Class.			
							% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	PI		W.C.		
896.0	0																
891.0	6	2/5			Gray Gravelly Sandy Clay	1	19	11	20	22	28	25	11	26	A-6a		
888.5	8	7/8			Brown Sandy Silt	2	11	12	16	24	37	21	7	14	A-4a		
886.0	10	13/14			Brown Sandy Silt	3	9	20	23	21	18	NP	NP	11	A-4a		
881.0	16	15/19			Brown Gravelly Sandy Silt	4	18	13	21	28	20	NP	NP	11	A-4a		
876.0	20	13/15			Brown Silty Sand	5	0	44	36	-20	NP	NP	22	A-3a			
871.0	24	20/22			Gray Silty Sand	6	7	27	49	-17	NP	NP	17	A-3a			
866.0	30	17/22			Gray Silty Sand	7	0	17	73	-10	NP	NP	14	A-3			
861.0	36	19/28			Gray Gravelly Sandy Silt	8	17	9	19	23	32	18	5	14	A-4a		
856.0	40																
851.0	46	16/30			Gray Clayey Silt	10	0	3	7	45	45	21	7	15	A-4a		
846.0	50	50* (0.7')			Gray Gravelly Silt	11	14	2	6	40	38	21	7	20	A-4a		
841.0	54																
840.0	56	17/19			Gray Clayey Silt	12	0	2	7	45	46	23	9	15	A-4a		

*Refusal

BOTTOM OF BORING

GENERAL INFORMATION

Drive Rod Penetration Sounding Tests

Drive rod penetration resistance tests constitute driving a 1.315-inch diameter steel rod, with a 45° cone point, into the ground, using a 122-pound drop-hammer with a free fall of five feet. At one or two-foot depth intervals, a measurement is taken to determine the amount of penetration achieved in three hammer drops. This reading is converted to an empirical value for capacity "R", in thousands of pounds (which is a measure of both the point resistance and frictional resistance on the rod), by using charts prepared by the Ohio Department of Highways, Bureau of Bridges, on the basis of correlation study of rod penetration with past performance of pile driving. For interpretation, a graph is prepared by plotting the value "R" against the depth at which the reading was taken, and connecting the plotted points. The curve so obtained reflects the density of subsurface materials in a manner that can be readily compared with data from similar tests at other locations on the structure site. From this comparison, the overall uniformity of subsurface condition may be evaluated.

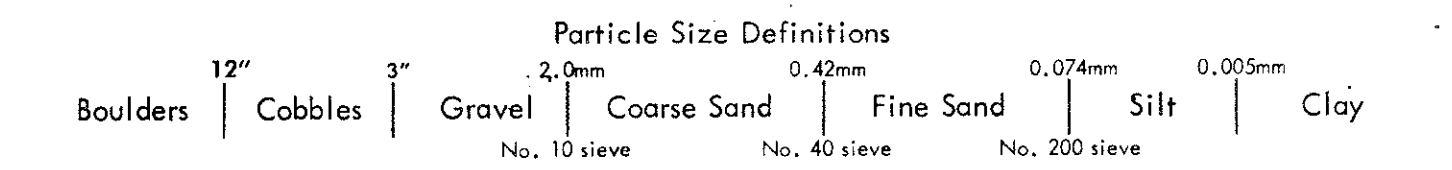
Drive Sample Borings - Drive-Press Sample Borings

Drive sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. sampler; at 2-1/2 and / or 5-foot depth intervals, driven by means of a 140 - pound drop-hammer with a free fall of 30 inches. The number of blows required to drive the sampler 12 inches is considered the standard penetration test.

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At depths where materials are bouldery or gravelly to the extent that the sampler can not be driven, a wash sample is procured for visual classification, in order to determine the general character of the material. These samples are not considered sufficiently representative to warrant laboratory testing.

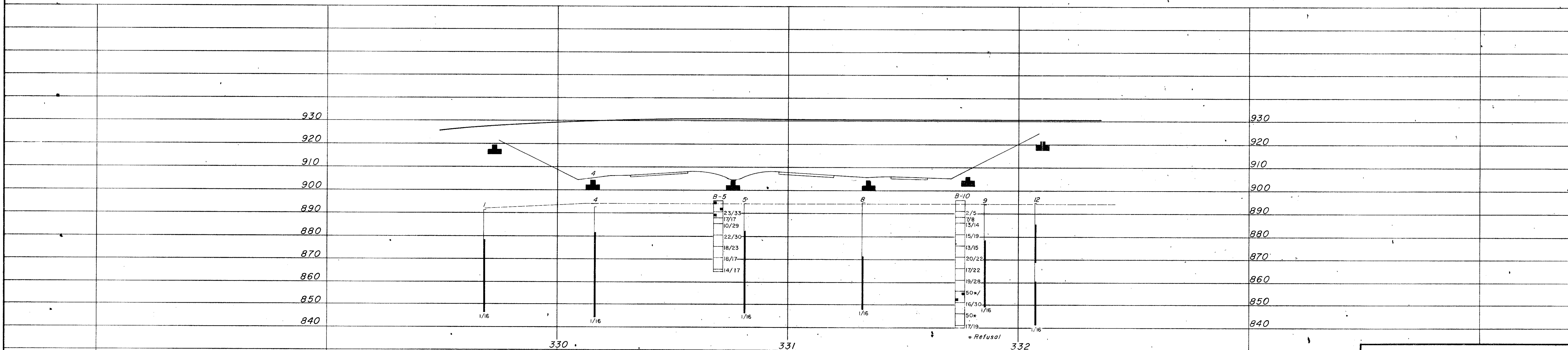
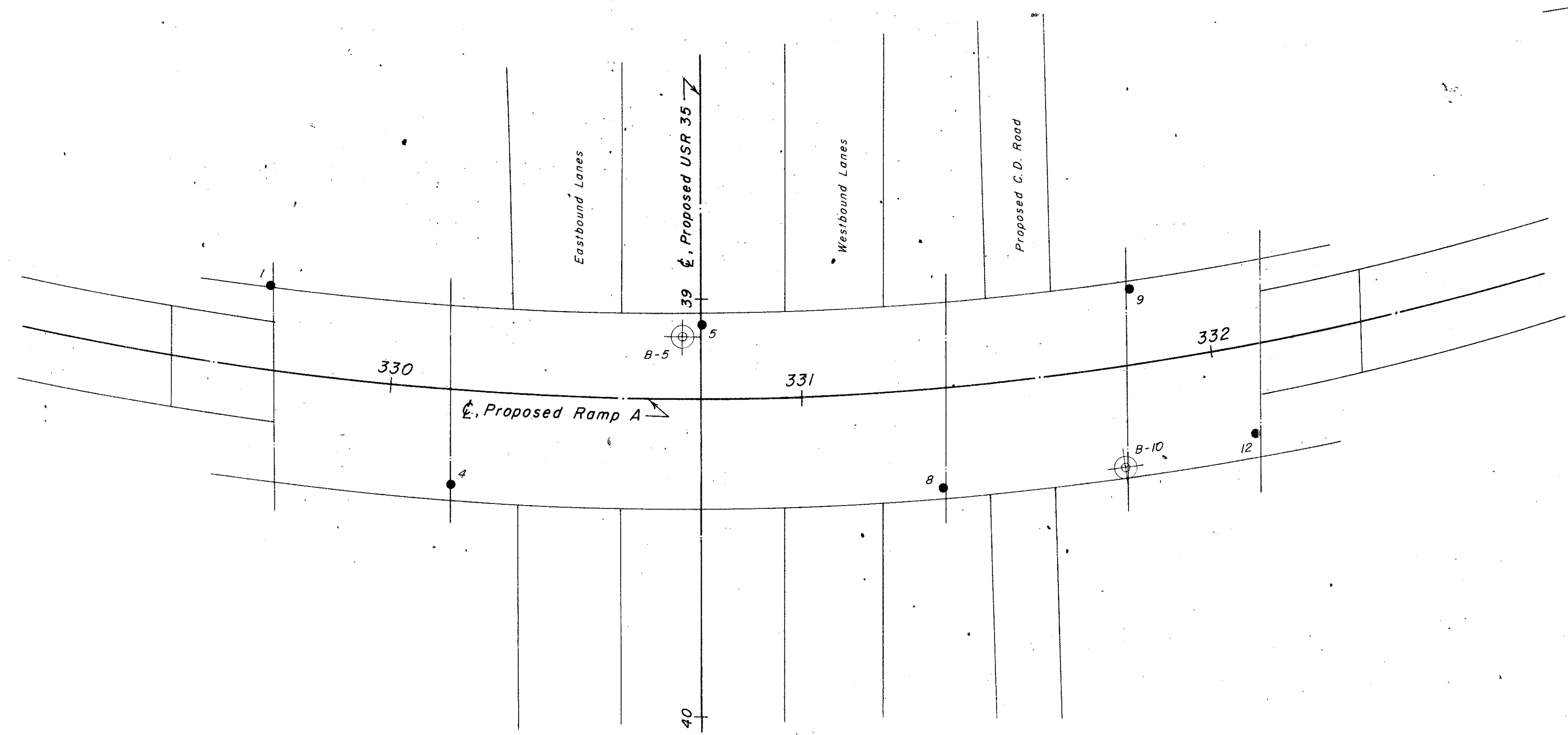


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OHIO DEPARTMENT OF HIGHWAYS TESTING LABORATORY
 1620 WEST BROAD STREET, COLUMBUS, OHIO 43223

STRUCTURE FOUNDATION INVESTIGATION
 BRIDGE NO. GRE-35-0074
 UNDER RAMP 'A'
 SEC. GRE-675- 5.37

CHECKED BY R. C. REVIEWED BY R. D. R. DATE 9/18/69



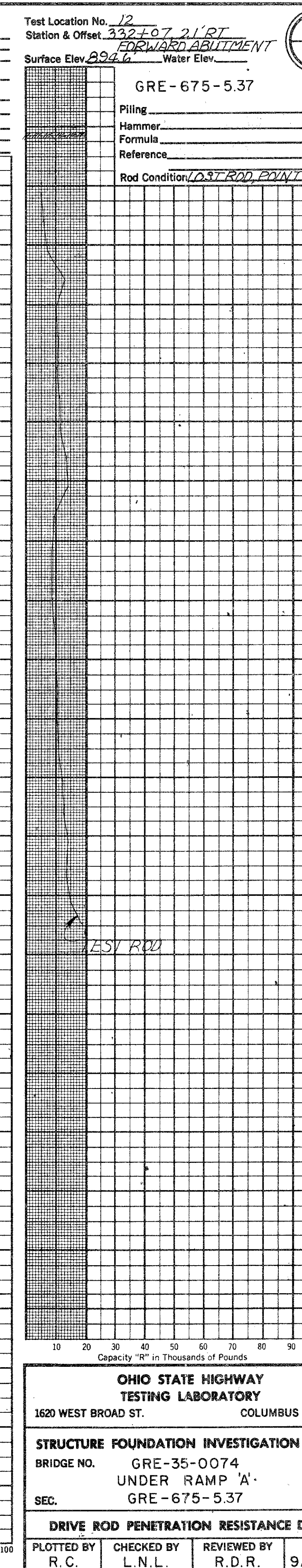
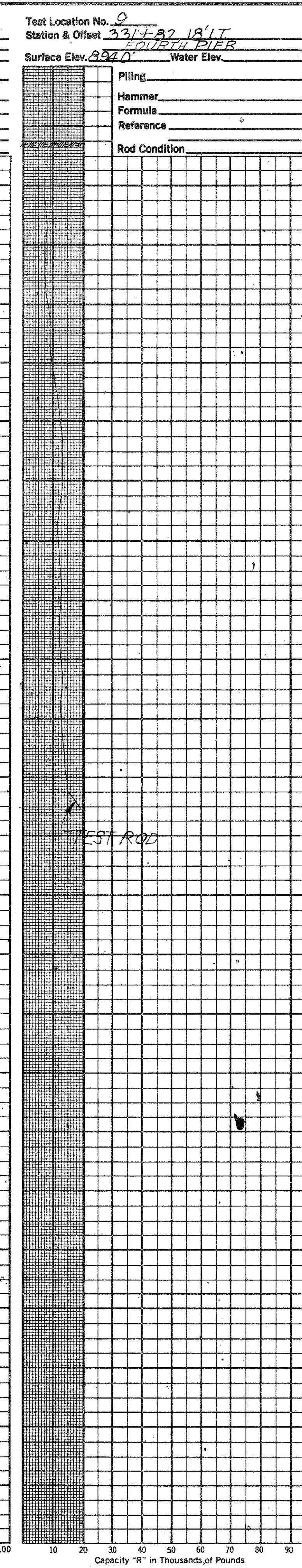
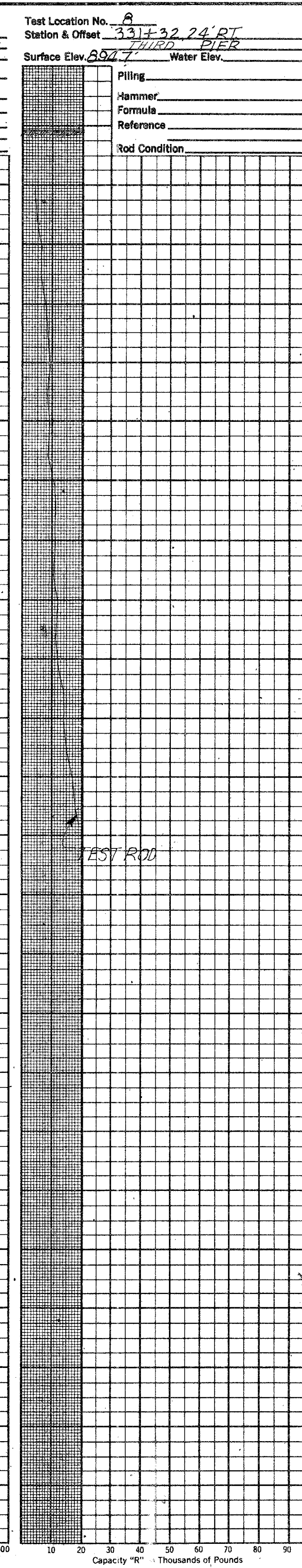
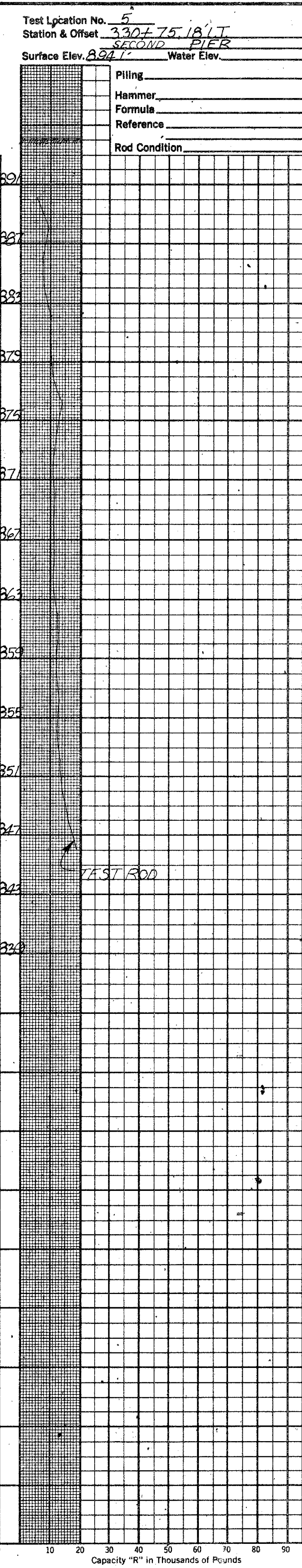
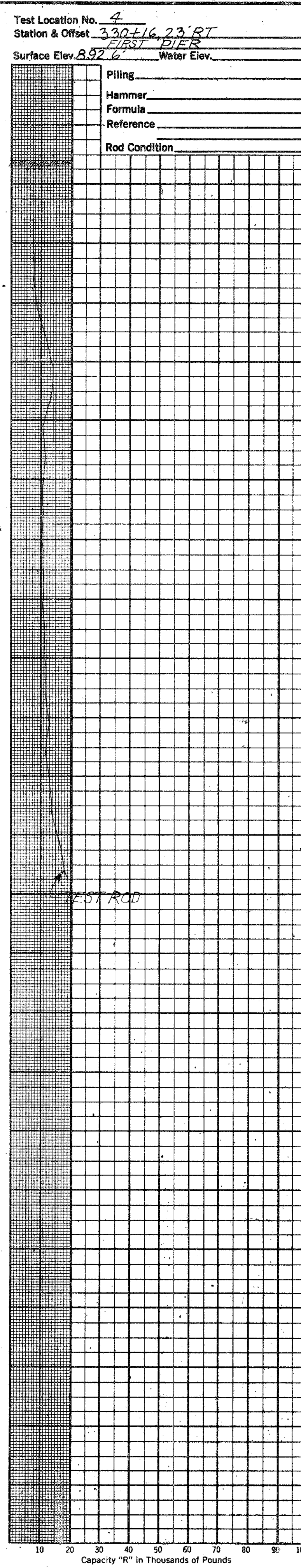
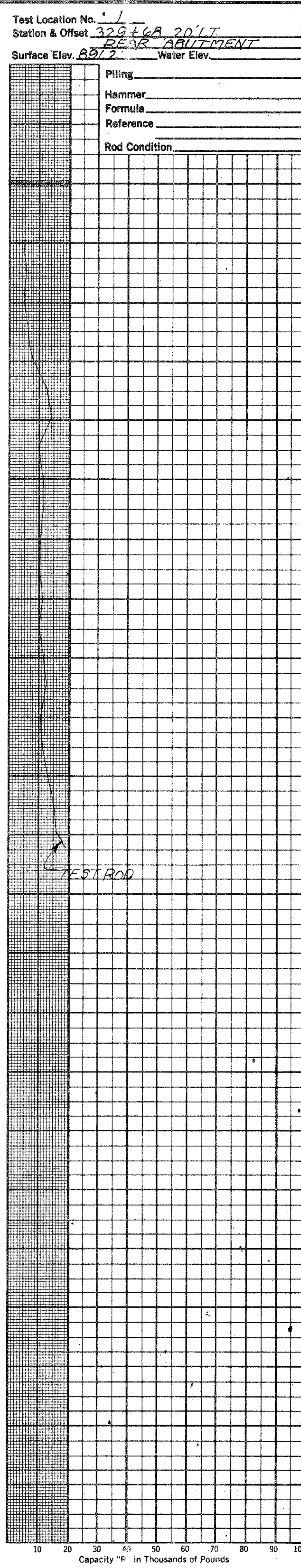
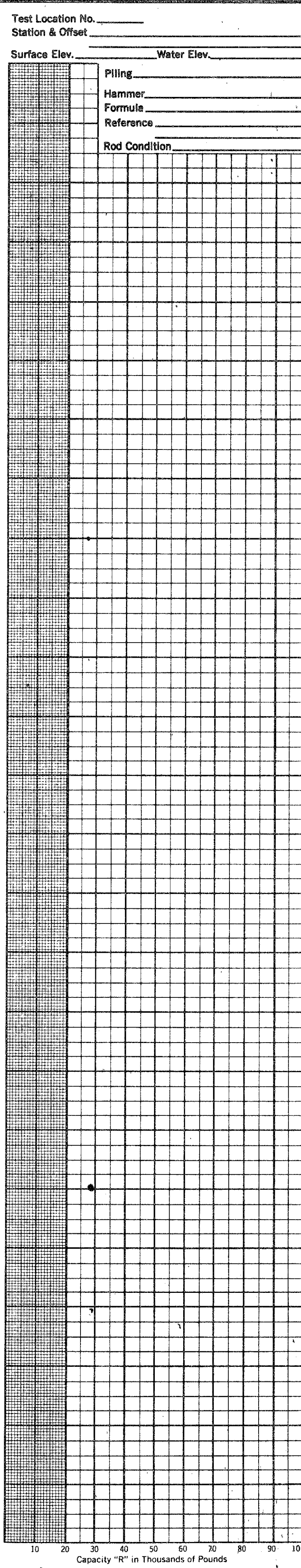
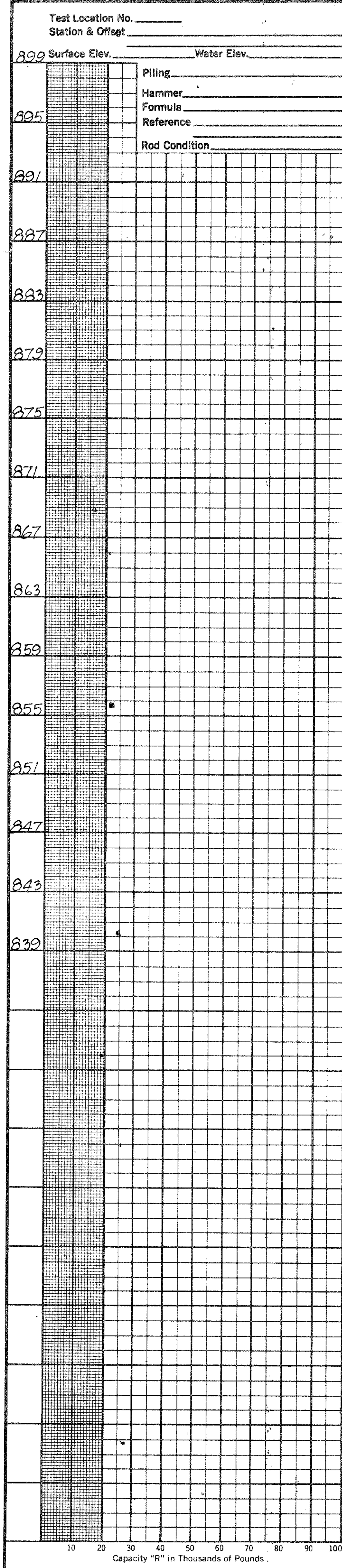
OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-35-0074
UNDER RAMP 'A'
SEC. GRE-675-5.37

PLAN AND PROFILE

DRAWN BY L.L.L.	CHECKED BY L.N.L.	REVIEWED BY R.D.R.	DATE 9/18/69
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SCALE: 1" = 20'



45
49
3
3

OHIO STATE HIGHWAY TESTING LABORATORY
1620 WEST BROAD ST. COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-35-0074
SEC. UNDER RAMP 'A'
GRE-675-537

DRIVE ROD PENETRATION RESISTANCE DATA

PLOTTED BY R.C.	CHECKED BY L.N.L.	REVIEWED BY R.D.R.	DATE 9/18/69
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GEOLOGY OF THE SITE

THE STRUCTURE SITE IS LOCATED ON THE DISSECTED WISCONSIN TILL PLAINS, IN AN AREA WHERE MODERATELY DEEP GLACIAL-DERIVED SOILS OVERLIE INTERBEDDED SHALE AND LIMESTONE BEDROCK, OF ORDOVICIAN AGE.

EXPLORATION

THE EXPLORATION CONSISTED OF TWO DRIVE SAMPLE BORINGS AND SEVEN DRIVE ROD PENETRATION TESTS, MADE BETWEEN MAY 8 AND 23, 1969.

INVESTIGATIONAL FINDINGS

















BORINGS ENCOUNTERED UNSTRATIFIED INTERVALS OF DENSE AND VERY DENSE SANDY SILTS AND GRAVELS WITH SOME COBBLES TO APPROXIMATELY 26-FOOT DEPTH, ELEVATION 867 FEET; BELOW THIS, VERY DENSE SILTS AND STIFF CLAYS. THE BORINGS WERE TERMINATED AT 61 AND 71-FOOT DEPTHS, ELEVATIONS 830 AND 821 FEET, AFTER PENETRATING IN EXCESS OF 30 FEET OF MATERIAL REQUIRING IN EXCESS OF 30 BLOWS PER FOOT IN THE STANDARD PENETRATION TEST.

ROD SOUNDINGS ENCOUNTERED GRADUAL INCREASE IN PENETRATION RESISTANCE WITH INCREASE IN DEPTH, AND WERE TERMINATED UPON ENCOUNTER WITH HIGH RESISTANCE AND REFUSAL TO PENETRATION AT 29 TO 52-FOOT DEPTHS, ELEVATIONS 860 TO 838 FEET, CONSIDERED TO BE IN VERY DENSE SILTS OR STIFF CLAYS, AS REVEALED BY THE BORINGS.













NO FREE WATER WAS OBSERVED IN ANY OF THE ROD SOUNDING HOLES.

NO TEST PENETRATED TO BEDROCK SURFACE.

LEGEND

-  Auger Boring Location - Plan View.
-  Press and/or Drive Sample and/or Core Boring Location - Plan View.
-  Drive Rod Penetration Resistance Sounding Location - Plan View.
-  Capped Pile
-  Footing
-  Footing on Pile
-  TR Top of Rock
-  Horizontal Bar on Boring Log Indicates the Depth the Sample Was Taken.
-  X/Y
X = Number of Blows for First 6 inches.
Y = Number of Blows for Second 6 inches.
-  Drive Rod Penetration Resistance Sounding Log - Profile
-  Casing
-  Resistance "R" < 10,000 lbs.
-  Resistance "R" > 10,000 lbs.
-  Z Indicates Final Measurement of Penetration, in Inches.
-  W Indicates Free Water Elevation.
-  Indicates Static Water Elevation.

SYMBOLS OF ROCK TYPES

-  Coal
-  Weathered Siltstone, Mudstone, or Claystone
-  Siltstone, Mudstone, or Claystone
-  Weathered Shale
-  Shale
-  Boulders or Cobbles
-  Weathered Sandstone
-  Sandstone
-  Leached Dolomite
-  Dolomite
-  Leached Limestone
-  Limestone

GENERAL INFORMATION

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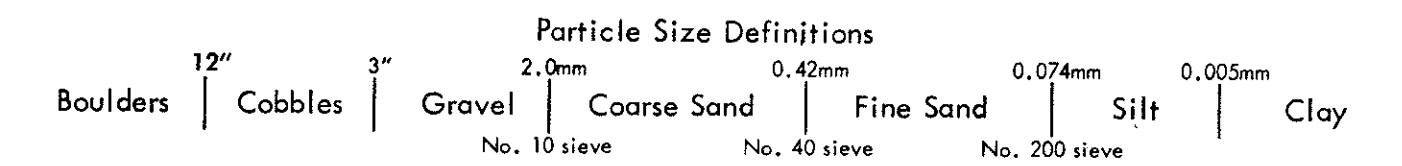
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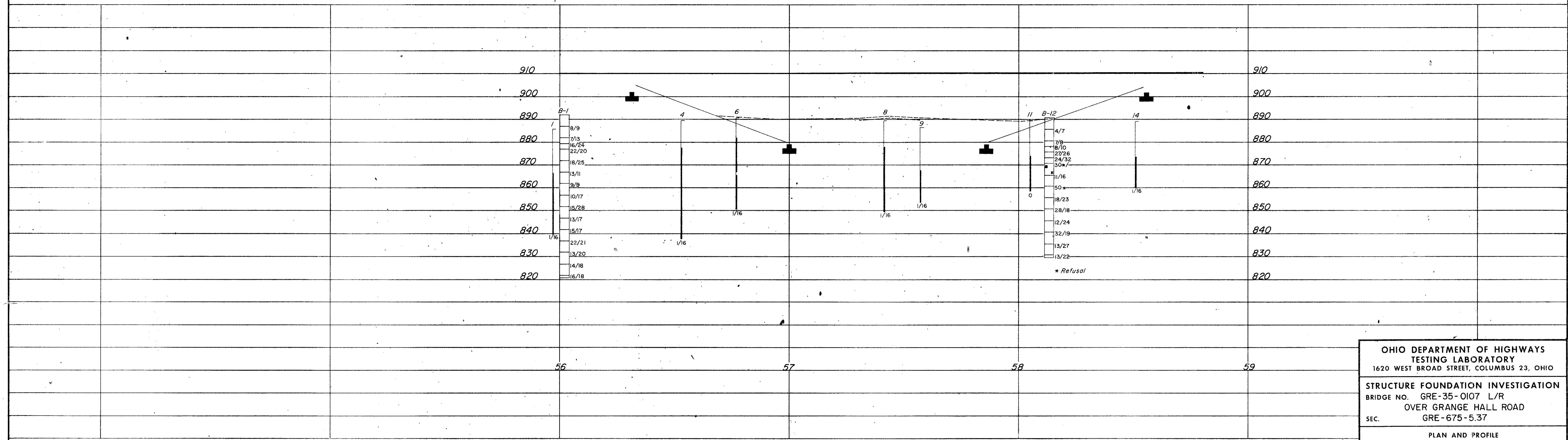
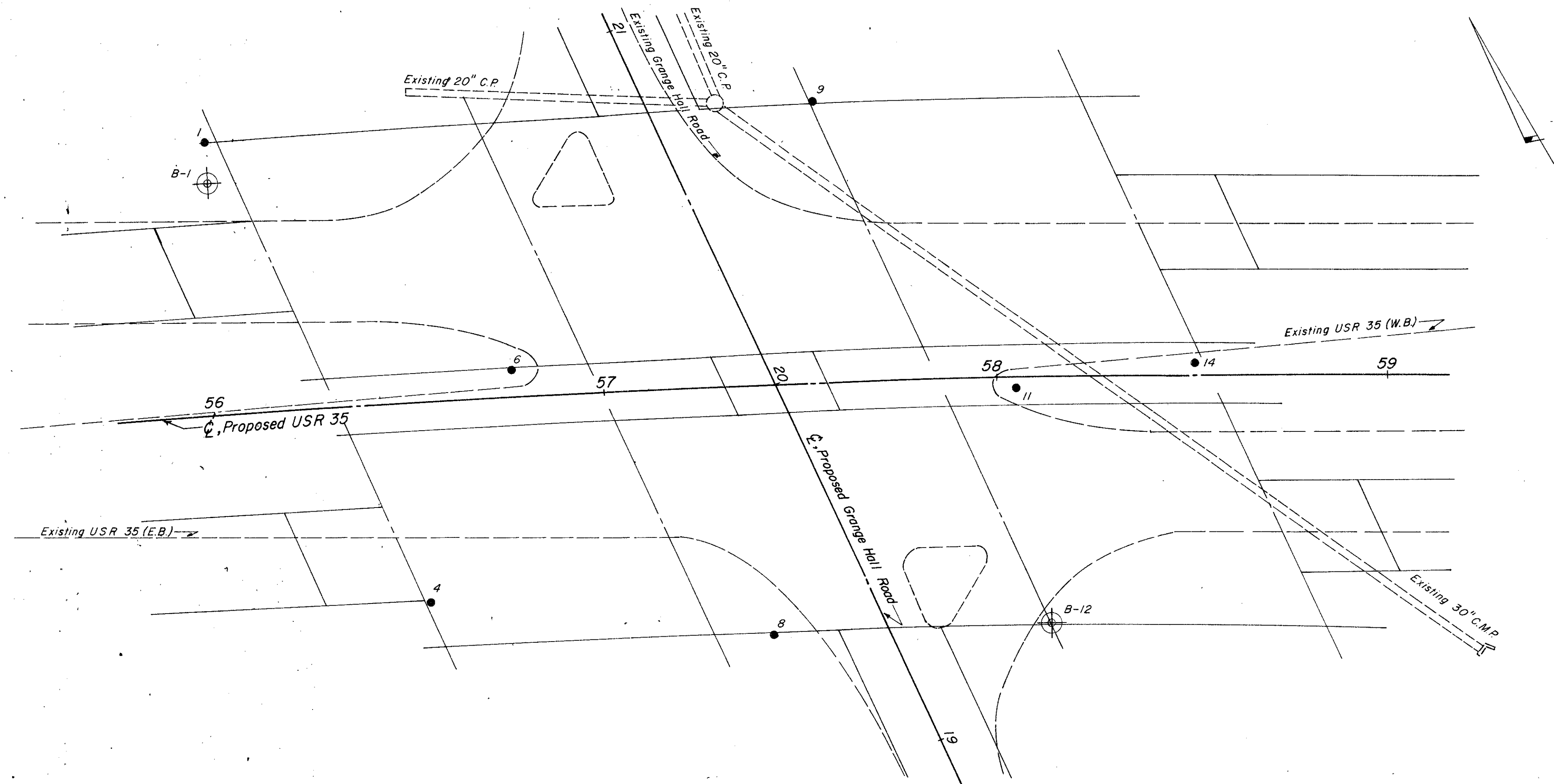


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TESTING LABORATORY**
1620 WEST BROAD STREET, COLUMBUS, OHIO 43223

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-35-0107 L/R
OVER GRANGE HALL ROAD
SEC. GRE-675-5.37

CHECKED BY R.D.R.	REVIEWED BY G.P.H.	DATE 6/5/69
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STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. GRE-35-0107 L/R
OVER GRANGE HALL ROAD
SEC. GRE-675-5.37

PLAN AND PROFILE

DRAWN BY J.E.C.	CHECKED BY R.D.R.	REVIEWED BY G.P.H.	DATE 6/5/69
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SCALE: 1" = 20'

LOG OF BORING

Date Started 5-13-69 Sampler Type SS Dia 1 3/8" Water Elev _____
 Date Completed 5-14-69 Casing Length _____ Dia _____
 Boring No B-1 Station & Offset 56+02, 60' Lt. (Rear Abutment) Surface Elev 892.0'

Elev	Depth	Std Pen (N)	Rec ft	Loss ft	Description	Sample No	Physical Characteristics										SHTL Class.			
							% Agg	% C.S.	% F.S.	% Silt	% Clay	LL	PI	W.C.						
892.0	0																			
887.0	5	8/9			Brown Gravelly Sandy Silt	1	20	8	17	25	30	23	9	16						A-4a
882.0	10	7/13			Brown Sandy Gravelly Silt	2	33	9	18	20	20	26	7	10						A-4a
879.5	12	16/24			Brown Silty Gravelly Sand	3	28	19	22	14	17	NP	NP	11						A-2-4
877.0	14	22/20			Brown Silty Sandy Gravel	4	54	20	9	-17	-	NP	NP	8						A-1-b
872.0	20	18/25			Brown Silty Sandy Gravel	5	50	24	11	-15	-	NP	NP	8						A-1-a
867.0	28	13/11			Gray Silty Sandy Gravel	6	38	8	16	18	20	18	4	13						A-4a
862.0	30	9/9			Gray Sandy Silt	7	6	5	12	35	42	21	6	16						A-4a
857.0	36	10/17			Gray Clayey Silt	8	0	1	3	37	59	23	7	17						A-4a
852.0	40	15/28			Gray Sandy Silt	9	8	6	9	33	44	21	7	19						A-4a
847.0	46	13/17			Gray Silt and Clay	10	0	0	1	26	73	30	12	25						A-6a
842.0	50	15/17			Gray Silt and Clay	11	0	1	1	19	79	33	13	24						A-6a
837.0	56	22/21			Gray Silt	12	0	0	0	60	40	NP	NP	22						A-4b
832.0	60	13/20			Gray Silt	13	0	0	1	43	56	NP	NP	19						A-4a
827.0	66	14/18			Gray Clayey Silt	14	0	1	2	41	56	23	7	20						A-4a
822.0 821.0	70	16/18			Gray Clayey Silt	15	0	0	1	50	49	23	9	19						A-4b

BOTTOM OF BORING

LOG OF BORING

Date Started 5-8-69 Sampler Type SS Dia 1 3/8" Water Elev _____
 Date Completed 5-13-69 Casing Length 35' Dia 3 1/2"
 Boring No B-12 Station & Offset 58+13, 63' Rt. (Forward Pier) Surface Elev 890.8'

Elev	Depth	Std Pen (N)	Rec ft	Loss ft	Description	Sample No	Physical Characteristics										SHTL Class.			
							% Agg	% C.S.	% F.S.	% Silt	% Clay	LL	PI	W.C.						
890.8	0																			
885.8	5	4/7			Brown Gravelly Silt	1	14	2	4	43	37	34	14	28						A-6a
880.8	10	7/8			Brown Sandy Gravelly Silt	2	35	9	14	17	25	22	9	15						A-4a
878.3	12	8/10			Brown Gravelly Sandy Silt	3	19	11	19	29	22	19	7	13						A-4a
875.8	14	27/26			Brown Silty Gravel	4	53	4	8	21	14	-	-	11						-
873.3	16	24/32			Brown Silty Sandy Gravel	5	53	27	9	-11	-	NP	NP	9						A-1-a
870.8	20	30* (0.4')			Brown Silty Gravelly Sand with Cobbles	6	37	36	13	-14	-	NP	NP	13						A-1-b
865.8	28	11/16			Gray Silty Gravelly Sand	7	24	38	16	8	14	21	8	12						A-2-4
860.8	30	50* (0.6')			Gray Sandy Silt	8	12	2	46	31	9	NP	NP	16						A-4a
855.8	36	18/23			Gray Sandy Silt	9	14	7	15	37	27	21	7	13						A-4a
850.8	40	28/18			Gray Silt and Clay	10	0	2	5	42	51	25	11	16						A-6a
845.8	46	12/24			Gray Silt and Clay	11	5	3	2	42	48	28	11	17						A-6a
840.8	50	32/19			Gray Gravelly Clay	12	28	0	0	30	42	30	11	27						A-6a
835.8	56	13/27			Gray Silt and Clay	13	0	1	8	21	70	38	14	24						A-6a
830.8 829.8	60	13/22			Brownish-Gray Gravelly Sandy Silt	14	19	8	16	34	23	20	5	18						A-4a

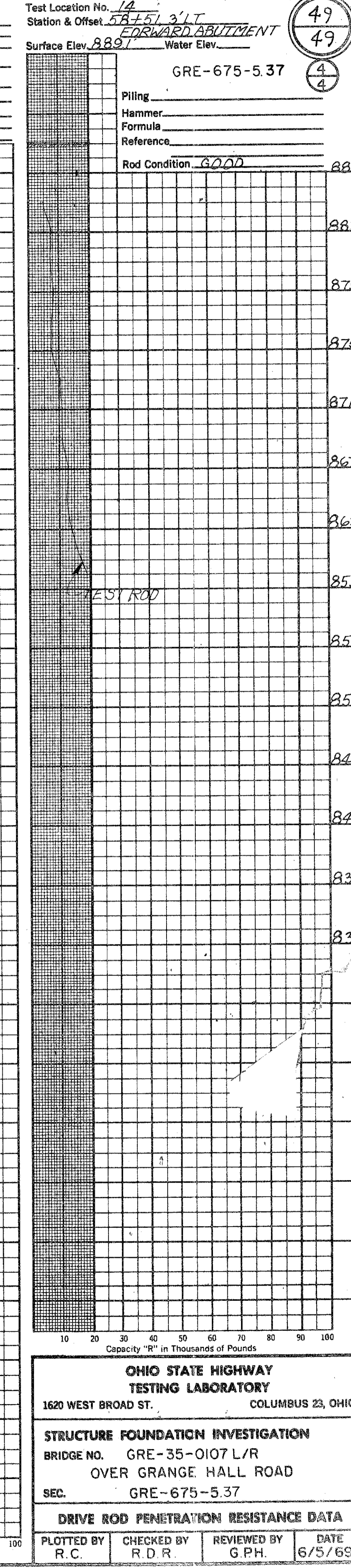
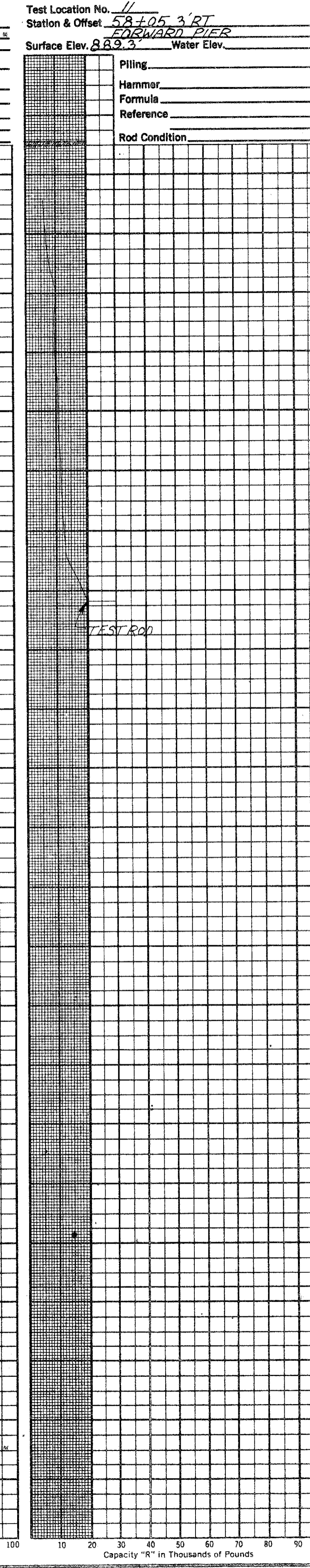
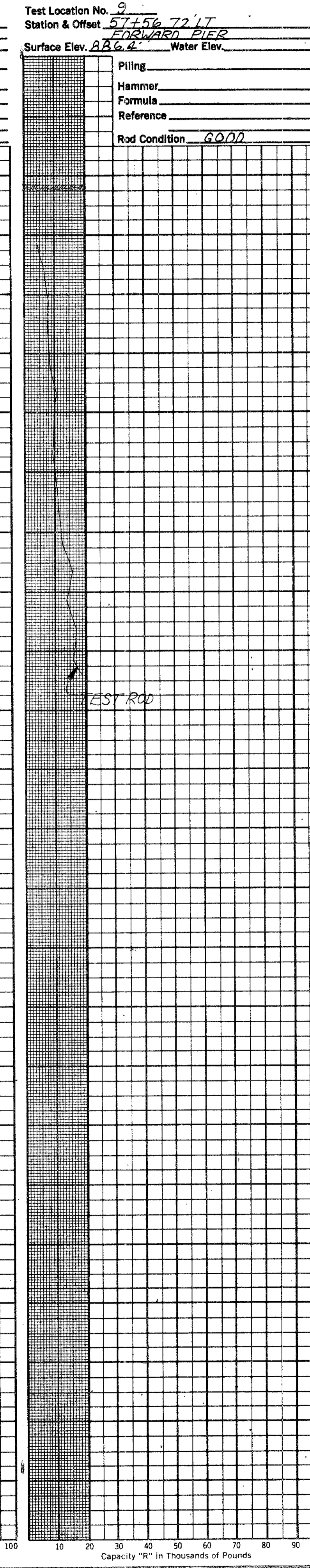
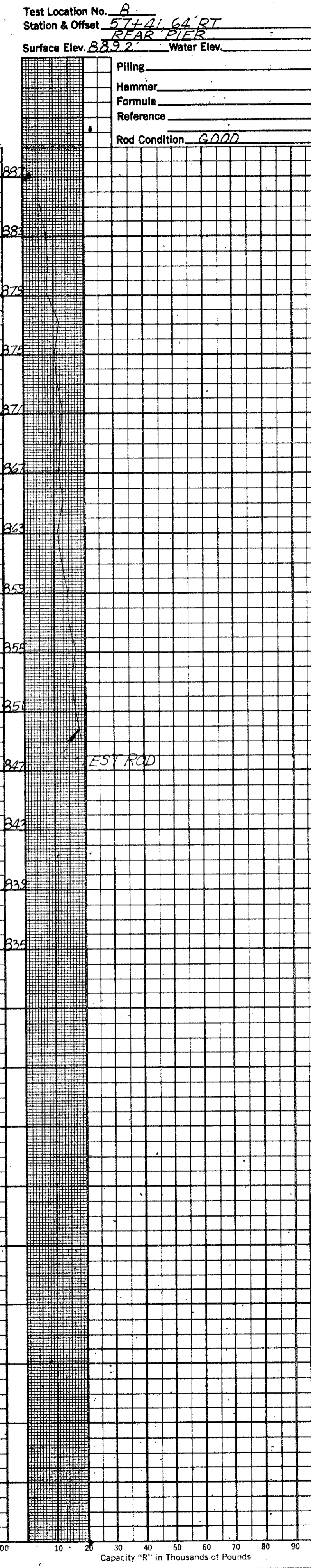
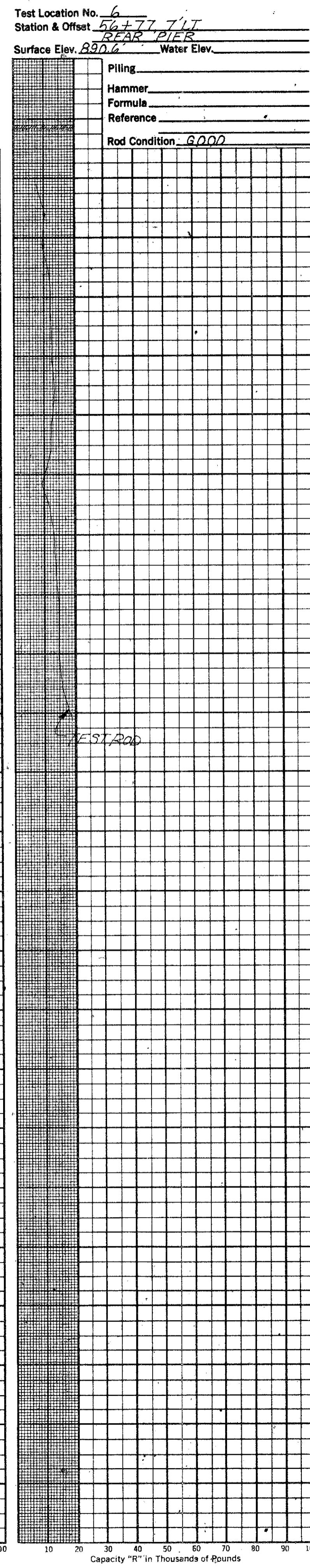
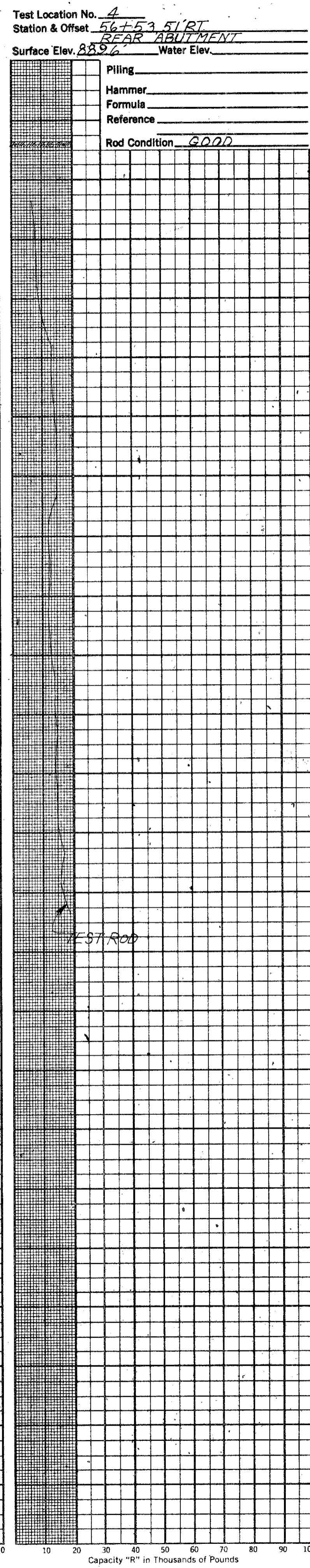
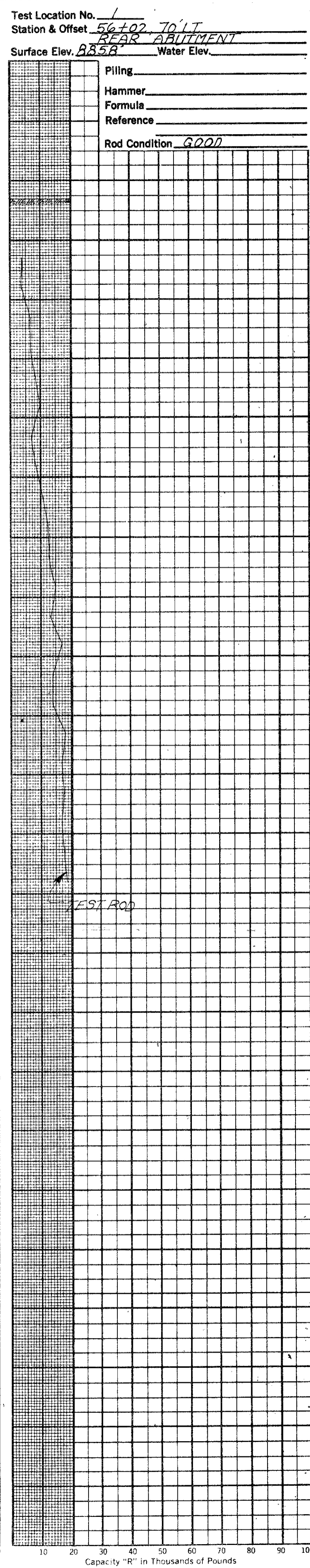
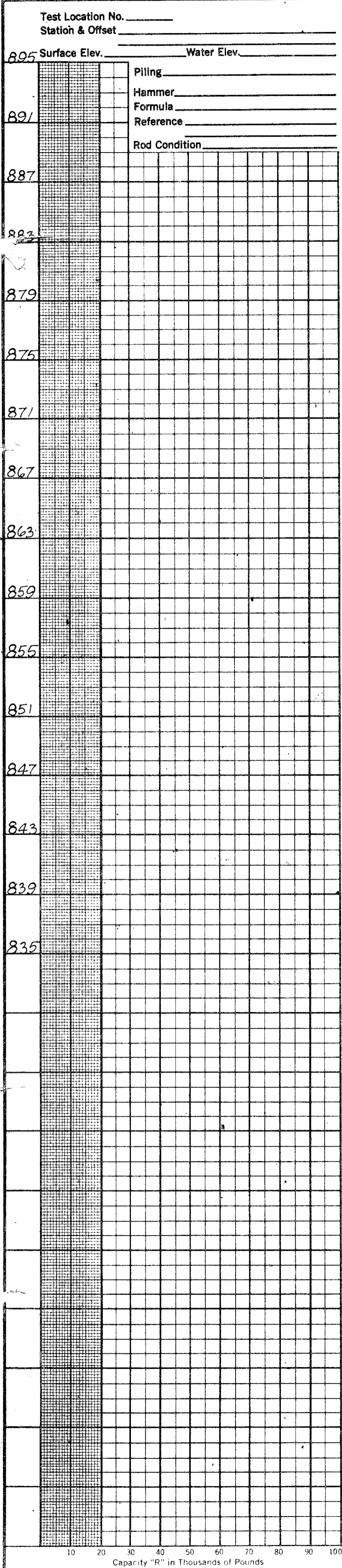
*Refusal
 BOTTOM OF BORING

OHIO DEPARTMENT OF HIGHWAYS
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 1620 WEST BROAD STREET, COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
 BRIDGE NO. GRE-35-0107 L/R
 OVER GRANGE HALL ROAD
 SEC. GRE-675-5.37

BORING DATA

TYPED BY S.A.J.	CHECKED BY R.D.R.	REVIEWED BY G.P.H.	DATE 6/5/67
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49
49

GRE-675-5.37

OHIO STATE HIGHWAY TESTING LABORATORY
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STRUCTURE FOUNDATION INVESTIGATION
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DRIVE ROD PENETRATION RESISTANCE DATA

PLOTTED BY R.C.	CHECKED BY R.D.R.	REVIEWED BY G.P.H.	DATE 6/5/69
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