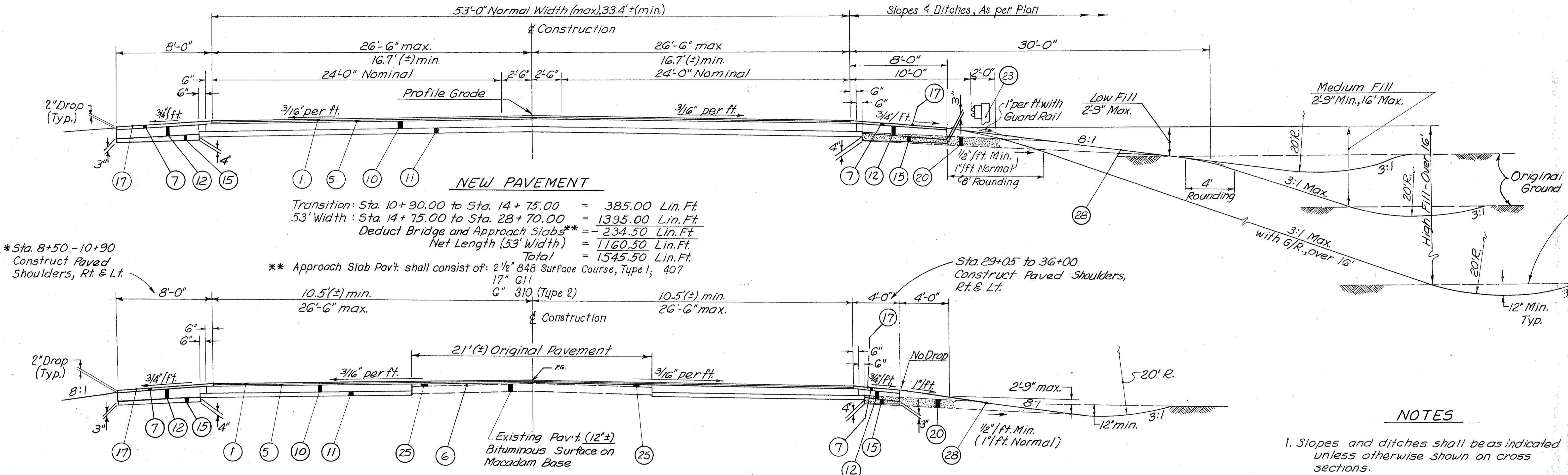


TYPICAL SECTIONS - WALBRIDGE ROAD

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

WOO-280-0.00
WOOD COUNTY

TYPE 848



SALVAGE CONSTRUCTION

* Transition : Sta. 8+50 to Sta. 10+90 = 240.00 Lin. F
 53' Width : Sta. 28+70 to Sta. 29+14.18 = 44.18 Lin. F
 Transition : Sta. 29+14.18 to Sta. 36+00.00 = 685.82 Lin. F
 Total = 970.00 Lin. F

LEGEND

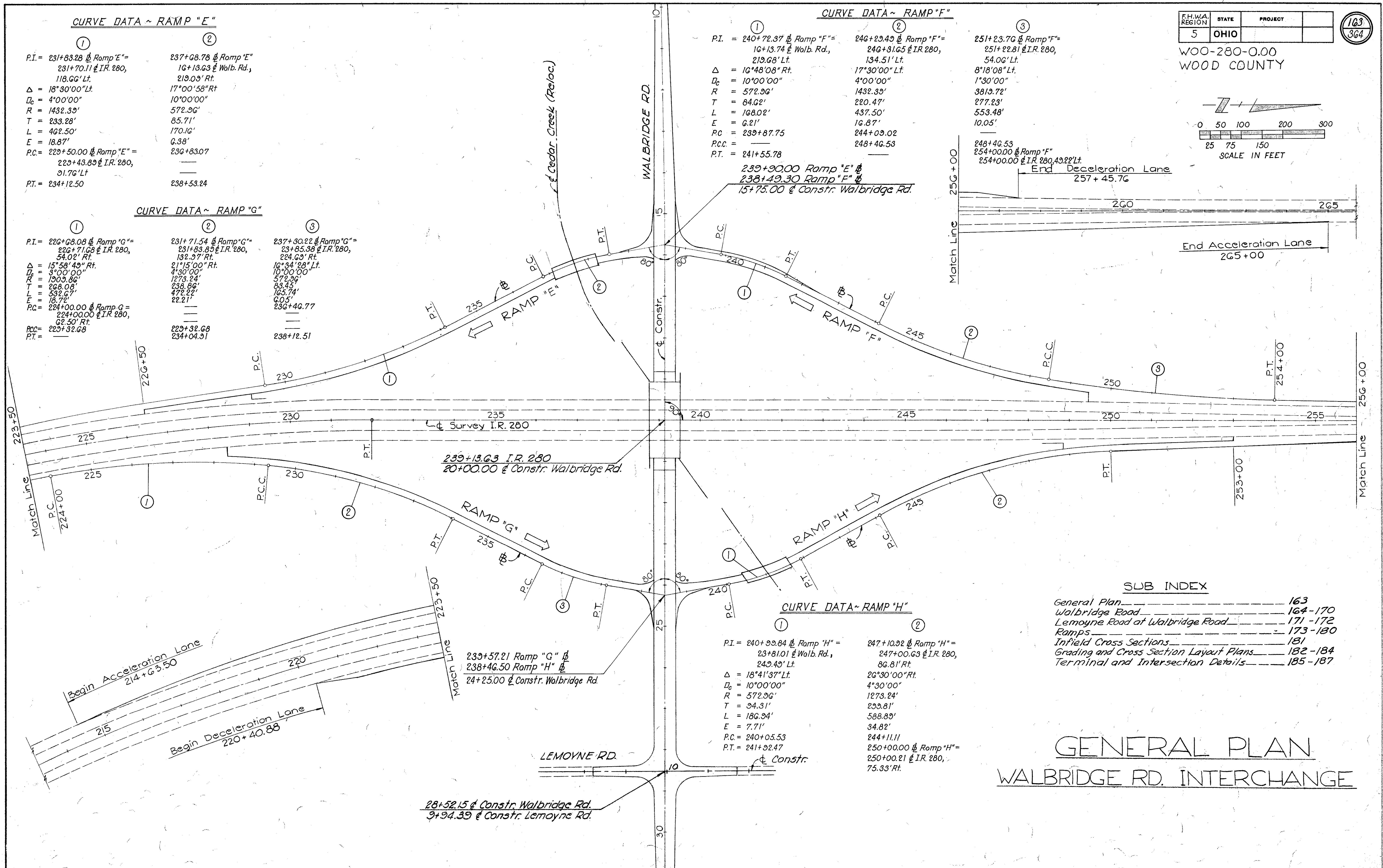
- | | |
|---------------|---|
| (1) Item 848 | 1/4" Asphalt Concrete Surface Course, Type I, AC-20 |
| (5) Item 848 | 1 3/4" Asphalt Concrete Intermediate Course, Type 2, AC-20 |
| (25) Item 848 | 0" Min. Asphalt Concrete Intermediate Course, Type 2, AC-20 |
| (10) Item 301 | 7" Bituminous Aggregate Base (Two 3 1/2" Courses):
AC-20, RT-11 or RT-12 |
| (11) Item 304 | 4" Aggregate Base |
| (12) Item 304 | 9" Aggregate Base |
| (6) Item 407 | Tack Coat: Bituminous Material applied at 0.1 Gal. per Sq. Yd.
WITH COVER AGGREGATE. |
| (17) Item 409 | Seal Coat: Using 0.008 Cu. Yd. No. 8 Cover Aggregate
and 0.3 Gallon Bituminous Material per Sq. Yd.
^{RS-1, RS-2, CRS-1, CRS-2, RT-9, OR RT-10} |
| (20) Item 605 | Aggregate Drains |
| (23) Item 606 | Guardrail, Type 5 |
| (28) Item 659 | Seeding and Mulching (See General Note) |
| (7) Item 301 | 3" Bituminous Aggregate Base: AC-20, RT-11 or RT-12 |
| (15) Item 310 | Subbase, Type I, Grading A, thickness as shown |

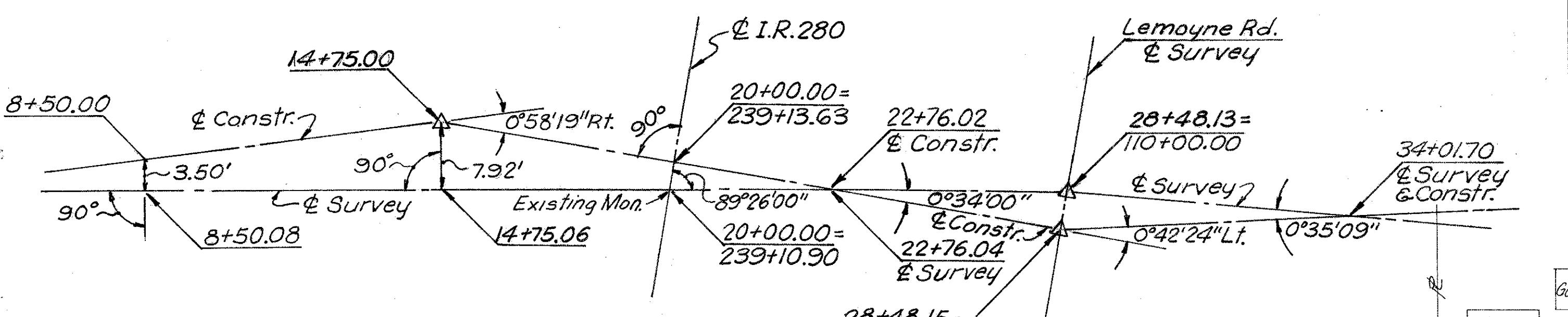
1. Slopes and ditches shall be as indicated unless otherwise shown on cross sections.

2. See Grading Plan and/or Cross Sections for grading adjacent to interchange interior areas.

3. Aggregate Drains shall be placed prior to the construction of the 304 shoulders. See Gen. Notes Sht. No. 15 for drain locations.

4. Earth berms adjacent to Surface treated aggregate shoulders only shall be dropped 2" below the Surface.





Calculated By: A.D.P. 12/71, G.L.K. 4/
Checked By: R.J.V. 10/72, S.C.R. 10/7

(No Scale)

CONSTRUCTION LAYOUT DETAIL

OTE:
or Typical Section of Adjoining
Movement See Sht. No. 166

STATION		203	Subgrade Compaction	3" Bitum. Aggregate Base	301	304	848	409	310	407	611	609
FROM	TO	Sq Yd		Cu. Yd.			Cu. Yd	Gal.	Cu. Yd.	Gal.	Sq. Yd.	Lin. Ft.
8+50	36+00	13908	277	2092	1196	757	623	434	34	26	966	80
TOTALS		13908		2369		1053	623	468		26	966	80

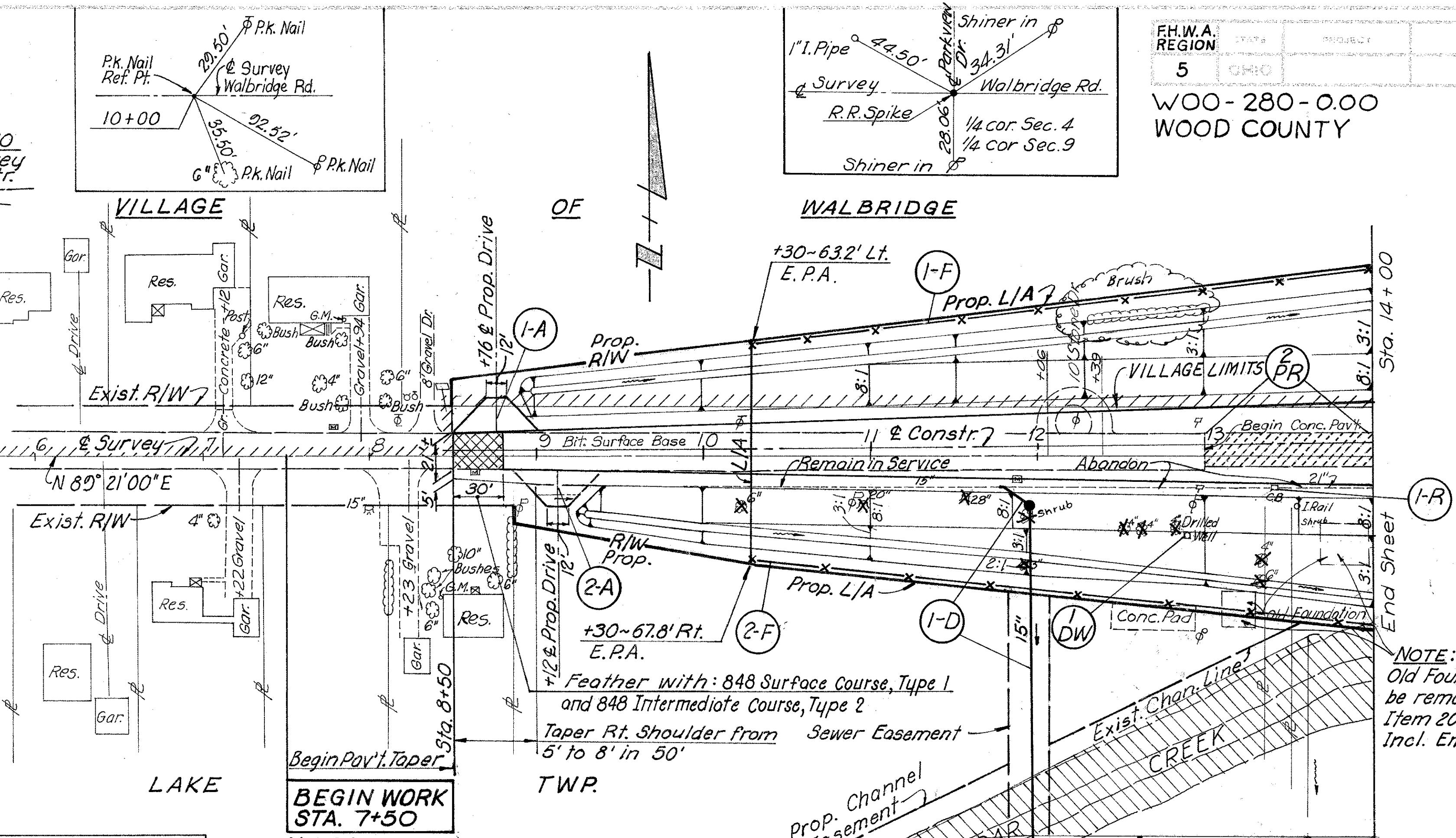
Calculated By: G.L.K.5/72 Checked By: R.J.V. 11/72
S GUARD RAIL, 606 DE Guard Anchor Bridge Bridge
Guard rail, Assy., Term. Term. Calculated By: A.D.P. 1/72
Checked By: R.J.V. 10/72, G.L.K. 6/73

REF. NO.	GUARD RAIL, 606		SIDE	Guard rail,	Anchor Assy.,	Bridge Term.	Bridge Term.	SHT. NO	Calculated By: A.D.P. 1/72 Checked By: R.J.V. 10/72, G.L.K.					
	STATION			Type 5	Type A	Assy., Type A	Assy., Type B							
	FROM	TO		Lin.Ft.	Each				REF. NO.	LOCATION	SIDE	304	—	
1-G	15+07±	*238+21.35	Rt.	143.75	1	1	1	165				SEE	SHT.	
2-G	*238+24.04	19+01.06	Rt.	410.00±	—	1	1	↑				6"	Aggregate Base	NO.
3-G	16+16.00	18+91.00	Lt.	250.00	1	1						CU.Yd.	—	
4-G	20+98.94	*240+37.36	Lt.	440.00±	—	1	1					5.3	164	
5-G	21+09.00	23+84.00	Rt.	250.00	1	1		↑	1-A	8+76	Lt.	5.3	164	
6-G	*240+48.59	24+93 ±	Lt.	175.00	1		1	165	2-A	9+12	Rt.	5.3	164	
TOTALS				1668.75	4	4	4			TOTAL		11		

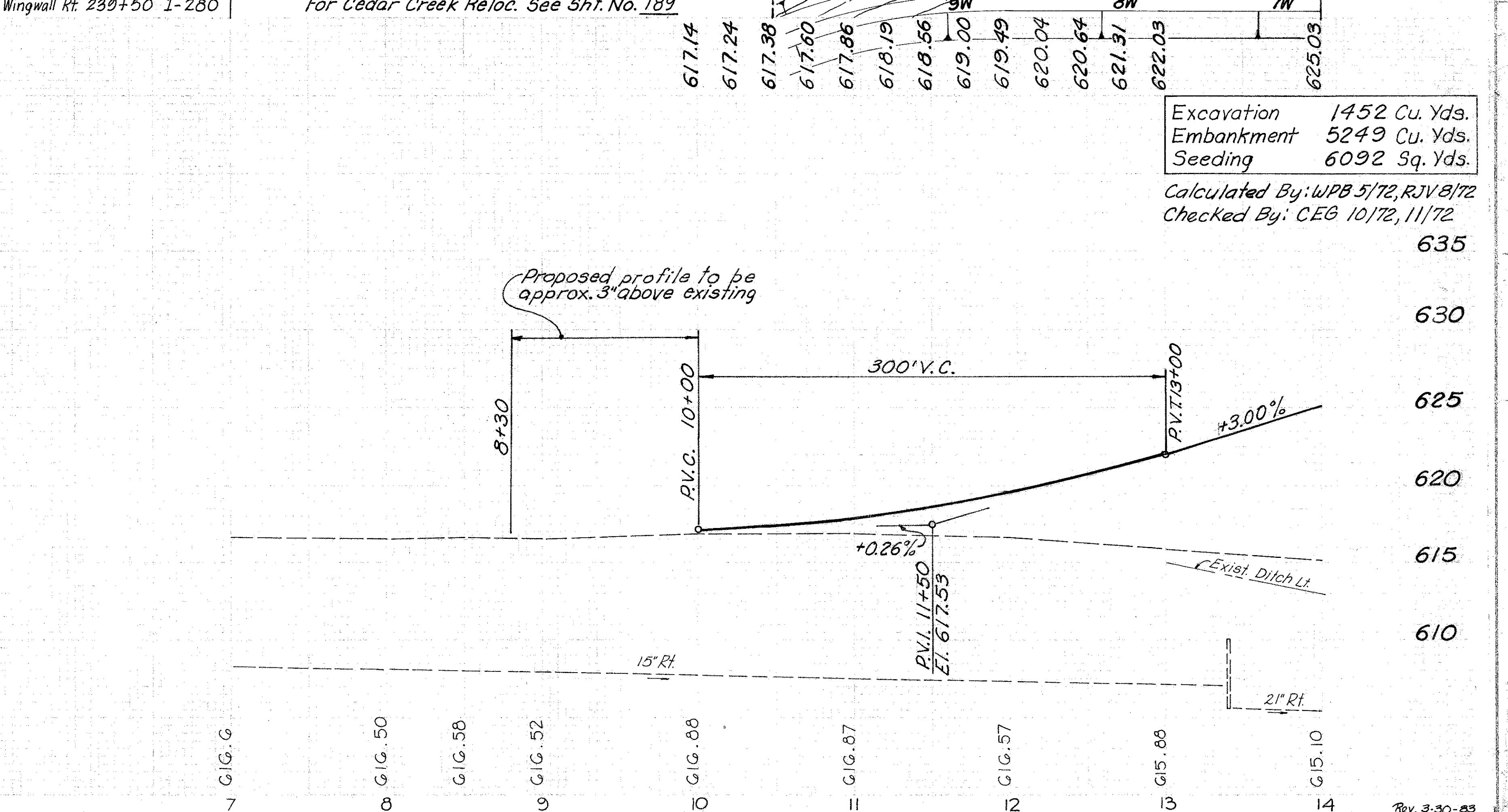
*Indicates B Ramp Stationing

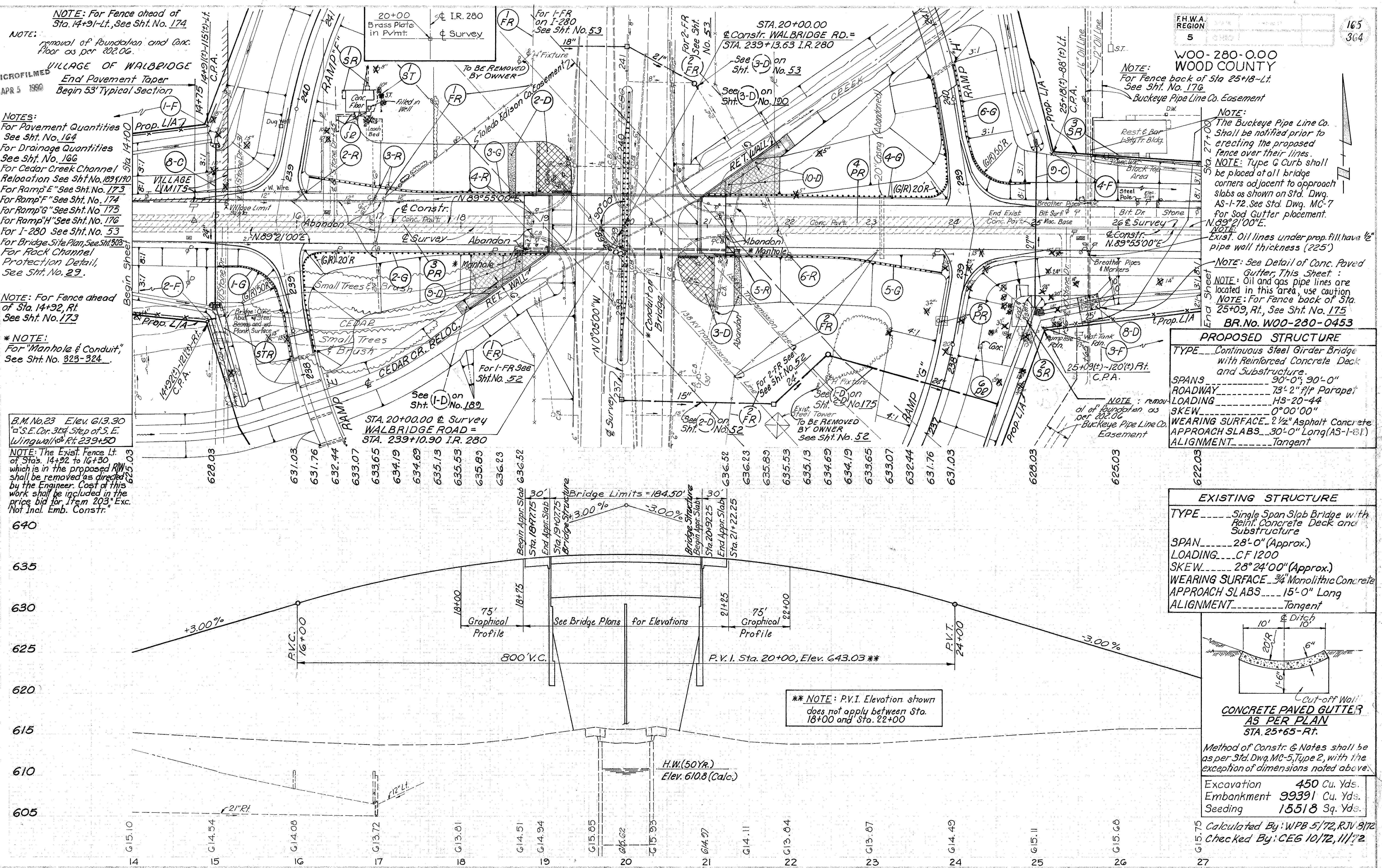
Calculated By: G.L.K. 5/72, R.J.V. 3/73, A.D.P. 5/72
Checked By: R.J.V. 11/72, G.L.K. 10/77

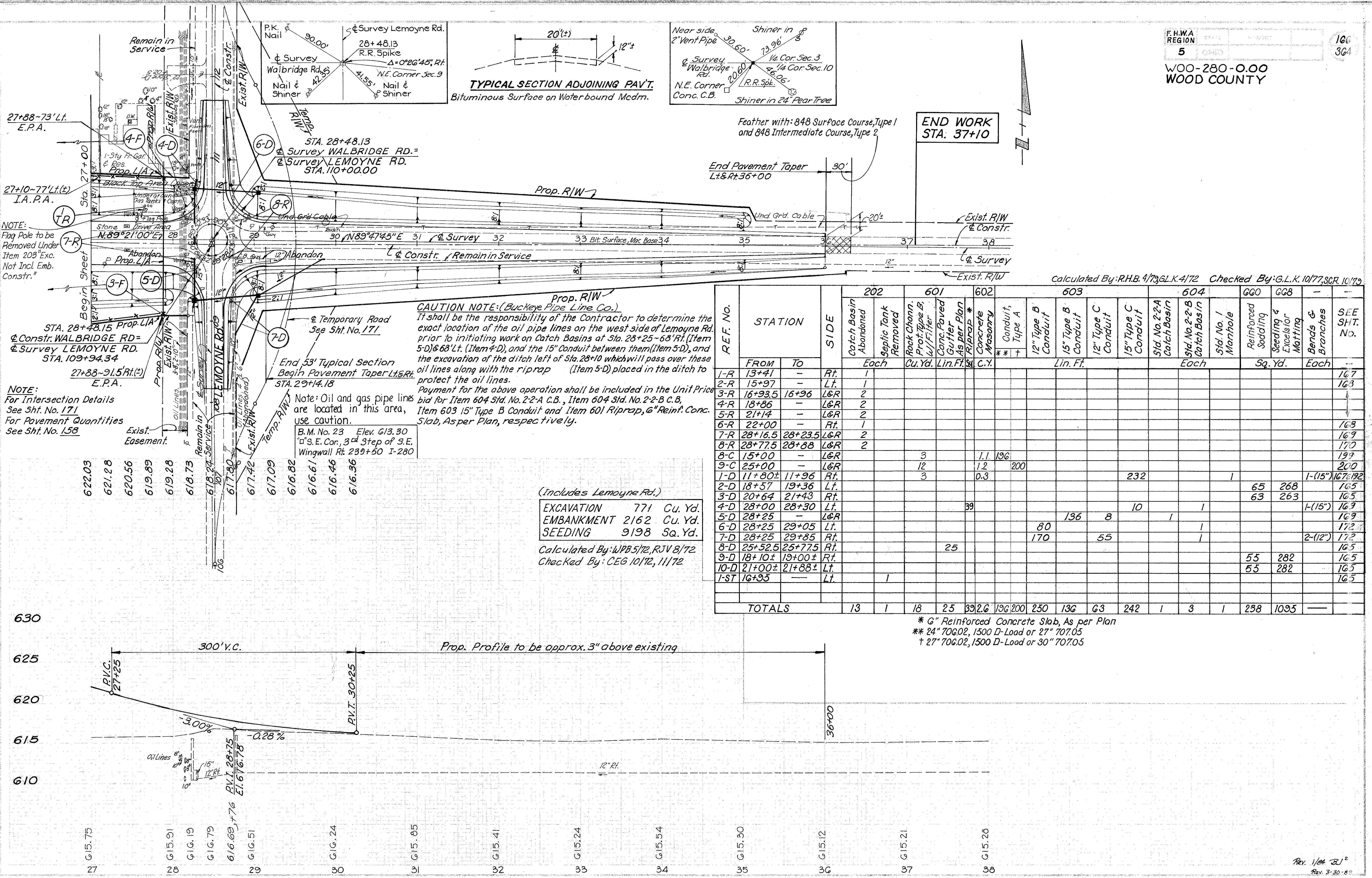
REF. NO.	STATION		SIDE	202		Lump	Each	Lin.Ft.	SEE SHT. NO.
	FROM	TO		Sq.Yd.	Sq.Ft.				
1-DW	12+90	-	RT.						1 164
1-F	10+30	14+91	LT.						▲ 465 164 165
2-F	10+30	14+92	RT.						▲ 465 164 165
3-F	25+09	27+88	RT.						▲ 283 165 166
4-F	25+18	27+88	LT.						▲ 270 165 166
1-FR	17+05	18+85	LT.		230				165
2-FR	21+35	23+05	RT.		230				165
2-PR	13+00	14+00	£	223					164
3-PR	14+00	18+40	£	978					165
4-PR	21+62	25+00	£	751					165
5-PR	24+50	-	RT.	10					165
1-SR	16+55	17+10	LT.		471				↑
2-SR	24+80	25+05	RT.		153				↓
3-SR	25+83	26+26	LT.		129				165
1-STR	15+09	-	RT.			Lump			165
1-TR	27+75±	-	LT.					1	166
6-PR	24+35	-	PT.	2					
SUBTOTALS		19	1954	—	—	—	—	—	—
TOTALS		1973	753	460		Lump		1	1



TES:
- Pinage Quantities Carried to Sht. No. 166
- Cedar Creek Reloc. See Sht. No. 189

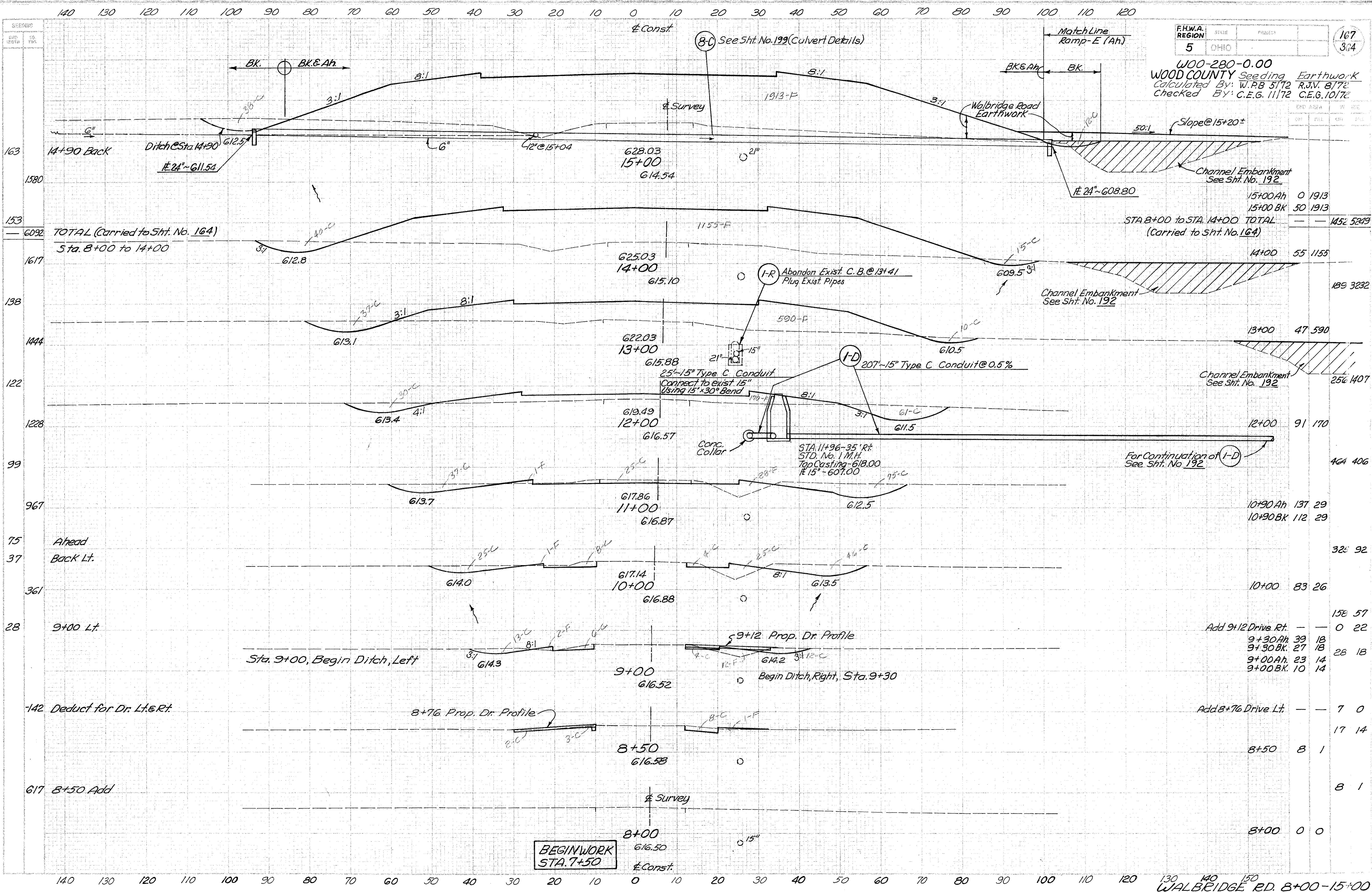


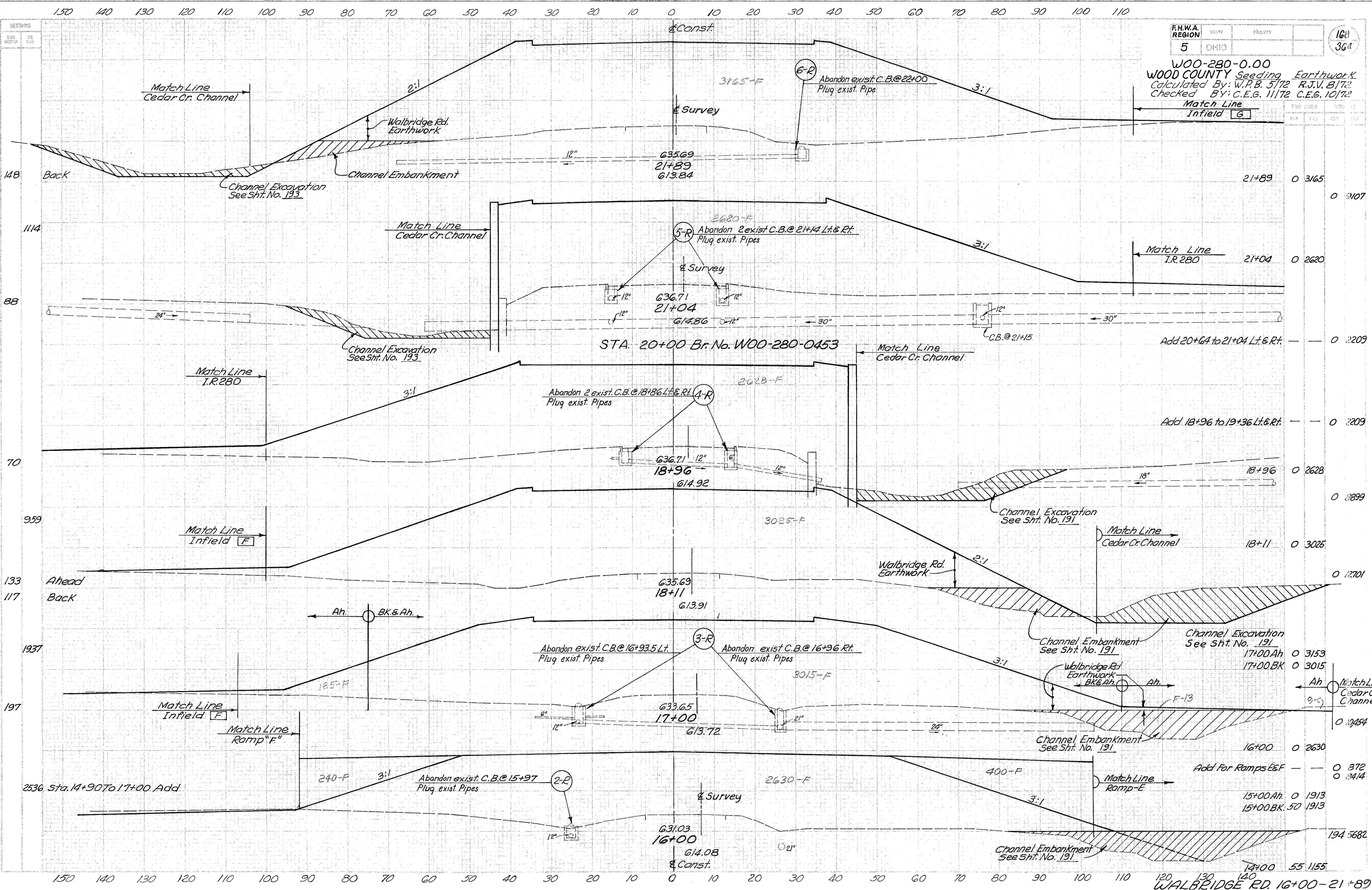


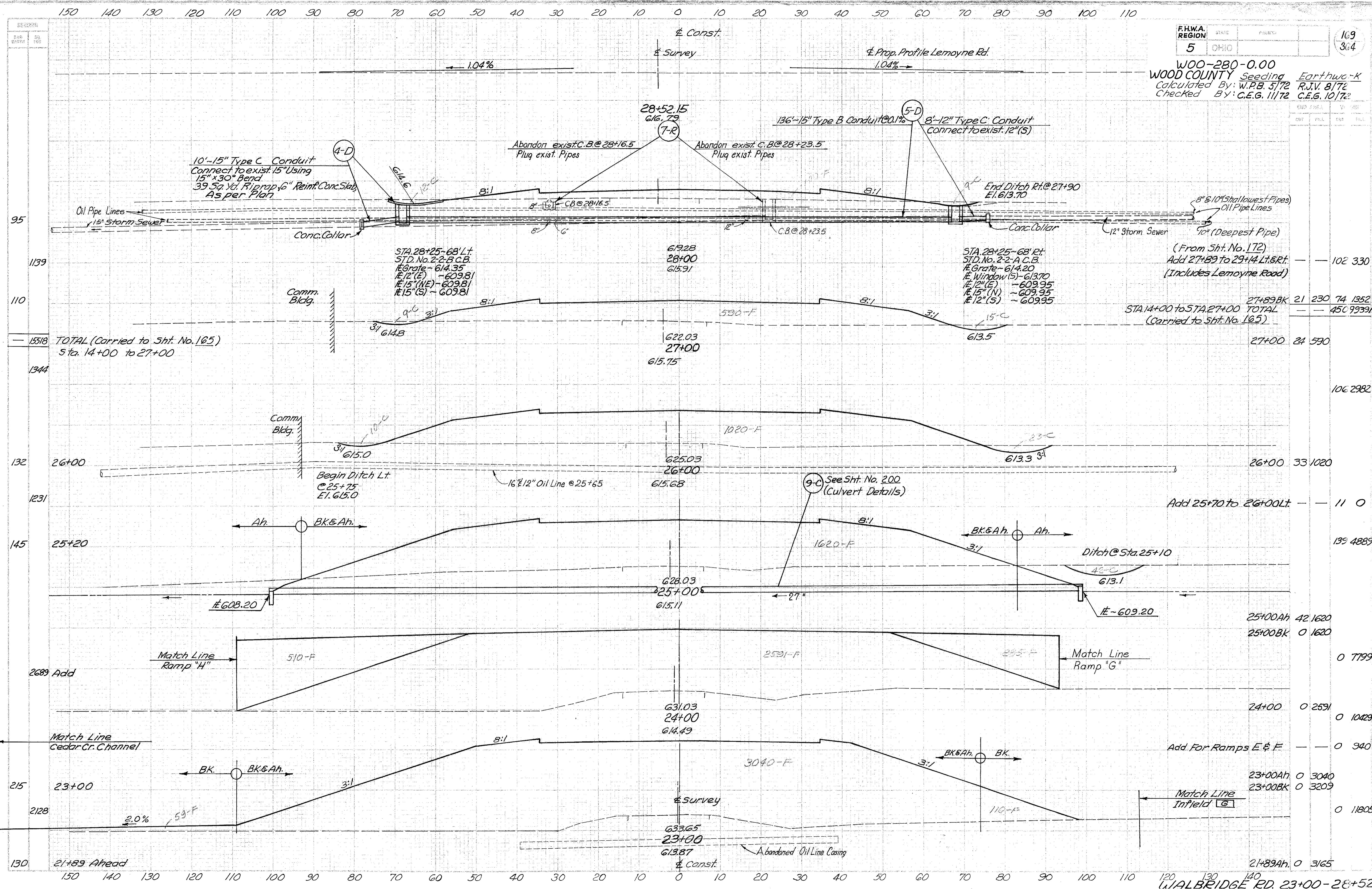


Rev. 1/84 BJ

30-83







SEEDING
800
600 YDS.

9198 TOTAL (Carried to Sht. No. 166)
Sta. 27+00 to 36+00

& Const.

END WORK
STA. 37+10

152 Add

57

695

68

778

72

833

78

922

88

1011

94

1078

1139

105

1451

Add 28+00 + 29+00
(Lemoyne Rd.)

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110

WALBRIDGE RD. 29+00-37+00

F.H.W.A.
REGION 5 STATE OHIO PROJECT 170-364

WOOD COUNTY Seeding Earthwork
Calculated By: W.P.B. 5/72 R.J.V. 8/72
Checked By: C.E.G. 11/72 C.E.G. 10/72

END AREA VBL. HSC
CIV. FILL DRI. FLL.

STA. 27+00 to STA 36+00 TOTAL
(carried to Sht No. 166) - 771 3162

6 0

30 20

Ahead Back 10 11
13 11

46 52

12 17

37 65

8 18

48 59

18 14

113 43

43 9

165 80

46 34

156 161

29+14 52 67

Rev 1/24 3012

616.51

617.42

29+00

616.24

30+00

616.46

31+00

615.85

32+00

615.41

33+00

615.24

34+00

615.54

35+00

615.30

36+00

615.12

37+00

615.21

38+00

615.31

39+00

615.41

40+00

615.51

41+00

615.61

42+00

615.71

43+00

615.81

44+00

615.91

45+00

616.01

46+00

616.11

47+00

616.21

48+00

616.31

49+00

616.41

50+00

616.51

51+00

616.61

52+00

616.71

53+00

616.81

54+00

616.91

55+00

617.01

56+00

617.11

57+00

617.21

58+00

617.31

59+00

617.41

60+00

617.51

61+00

617.61

62+00

617.71

63+00

617.81

64+00

617.91

65+00

618.01

66+00

618.11

67+00

618.21

68+00

618.31

69+00

618.41

70+00

618.51

71+00

618.61

72+00

618.71

73+00

618.81

74+00

618.91

75+00

619.01

76+00

619.11

77+00

619.21

78+00

619.31

79+00

619.41

80+00

619.51

81+00

619.61

82+00

619.71

83+00

619.81

84+00

619.91

85+00

620.01

86+00

620.11

87+00

620.21

88+00

620.31

89+00

620.41

90+00

620.51

91+00

620.61

92+00

620.71

93+00

620.81

94+00

620.91

95+00

621.01

96+00

621.11

97+00

621.21

98+00

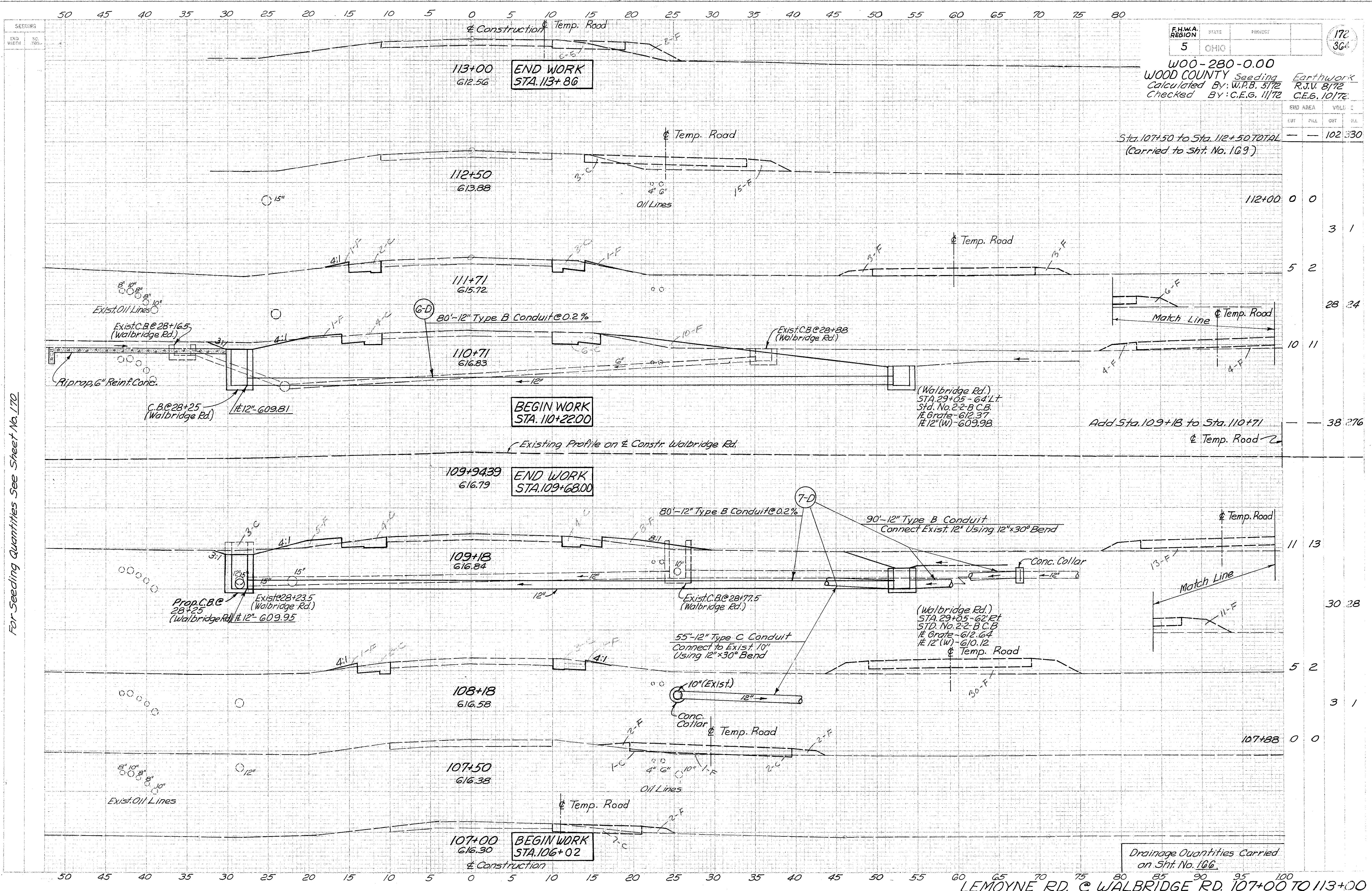
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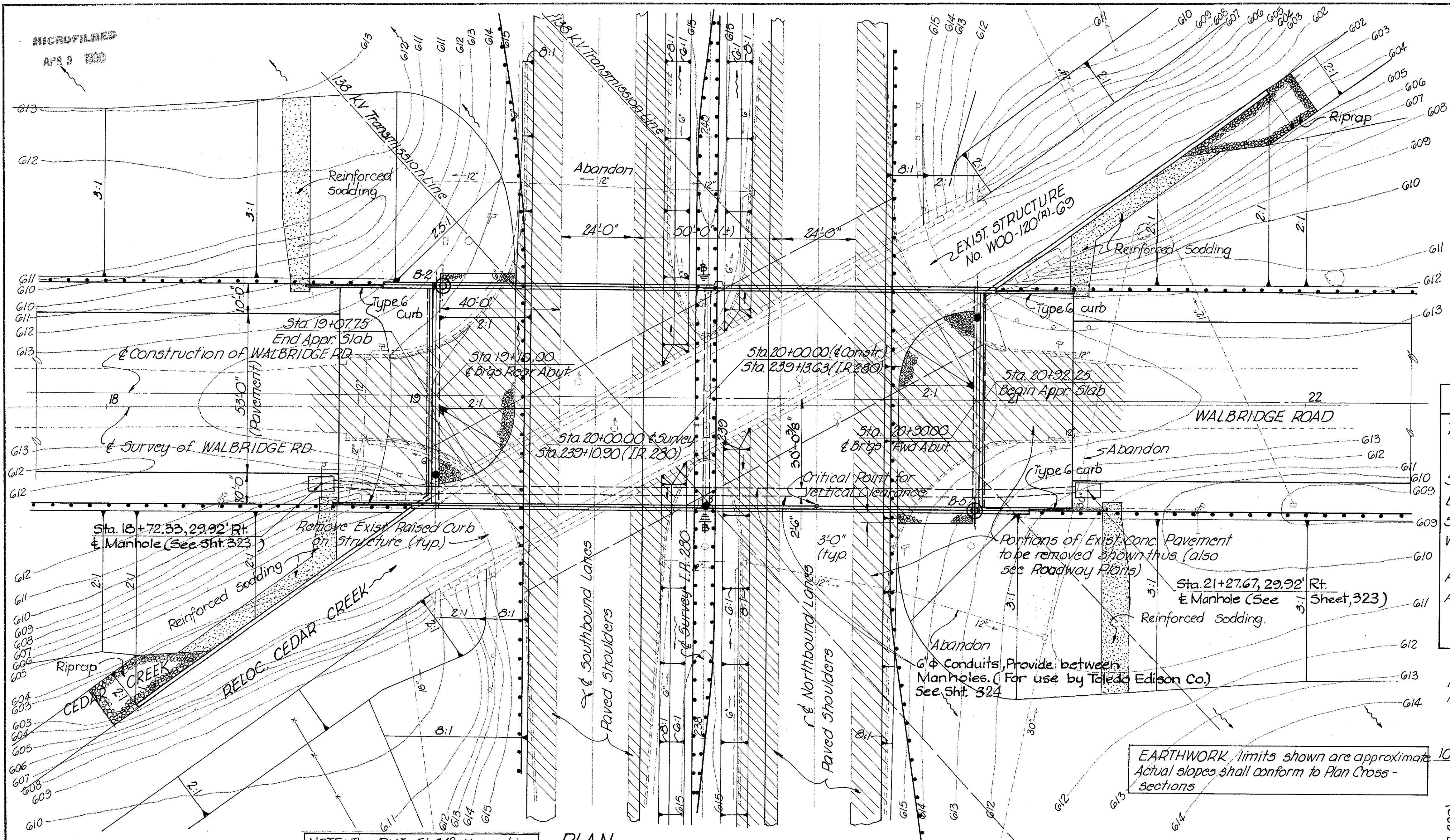
99+00

621.41

100+00

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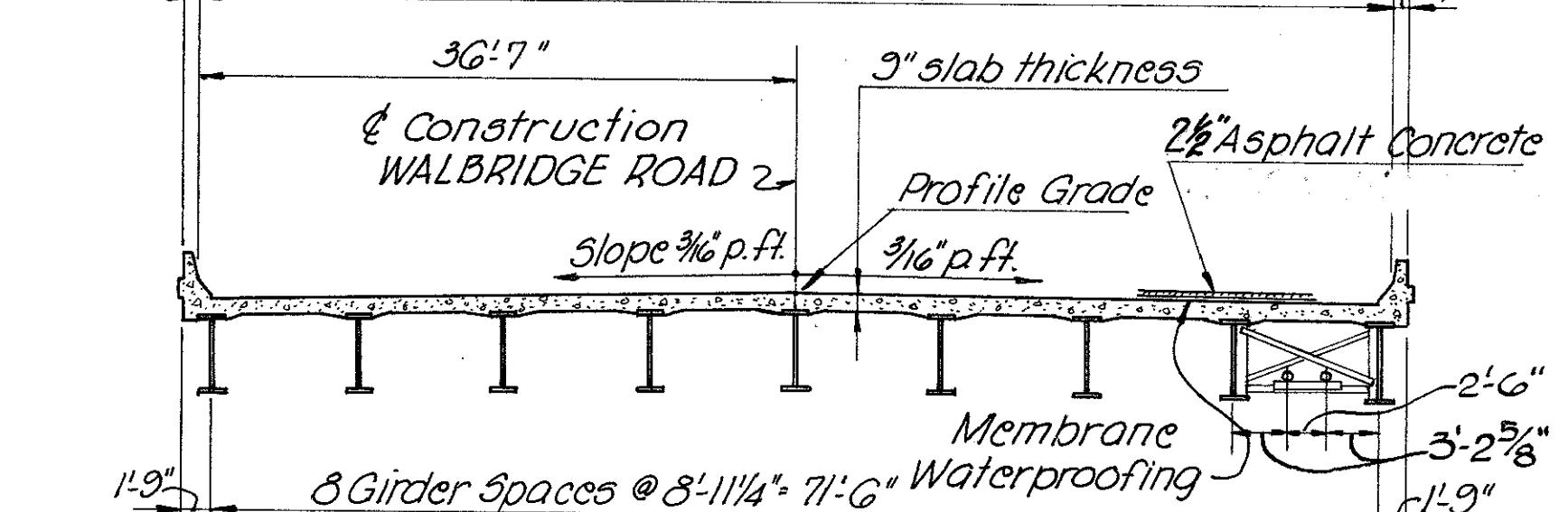
LONGITUDINAL SECTION ALONG & CONSTRUCTION WALBRIDGE ROAD

F.H.W.A. REGION	STATE	PROJECT
5	OHIO	WOO - 280-0.00

303
364

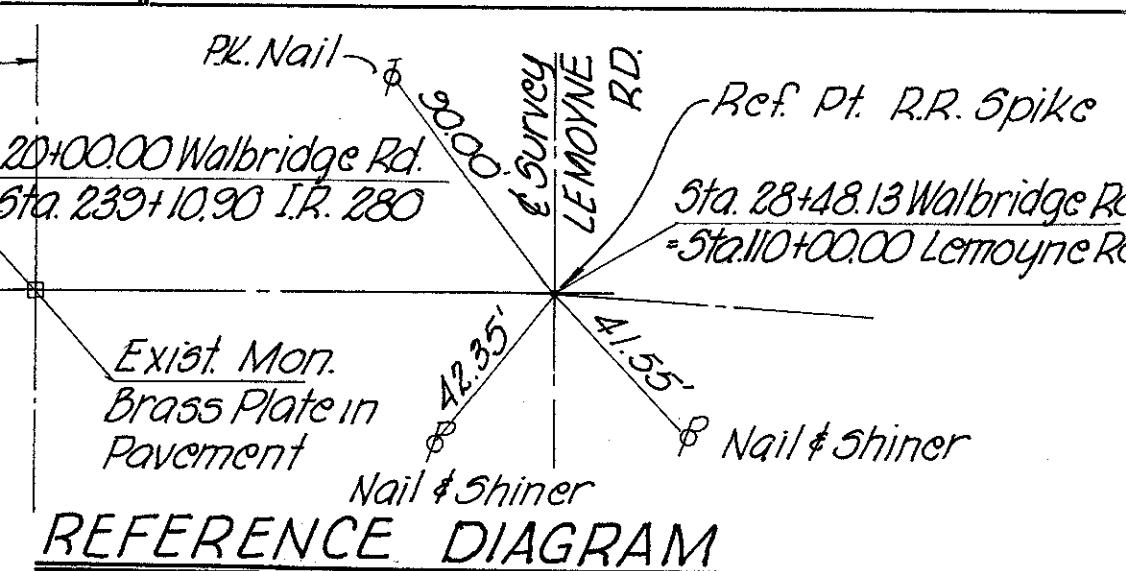
WOOD COUNTY

73' 2" f/f Parapet



EXISTING STRUCTURE	
TYPE	Single Span Slab Bridge with Reinforced Concrete Deck and Substructure
SPAN	28' 0" (approx.)
LOADING	CF 1200
SKEW	28° 24' 00" (approx.)
WEARING SURFACE	3/4" Monolithic Concrete
APPROACH SLABS	15' 0" Long
ALIGNMENT	Tangent

PROPOSED STRUCTURE	
TYPE	Continuous Steel Girder Bridge with Reinforced Concrete Deck and Substructure
SPANS	90' 0"; 90' 0"
ROADWAY	73' 2" f/f Parapet
LOADING	H-20-44 Case II & The Alternate Military Loading
SKEW	0° 0' 0"
WEARING SURFACE	2 1/2" Asphalt Concrete
APPROACH SLABS	30' 0" Long (A5-81)
ALIGNMENT	Tangent



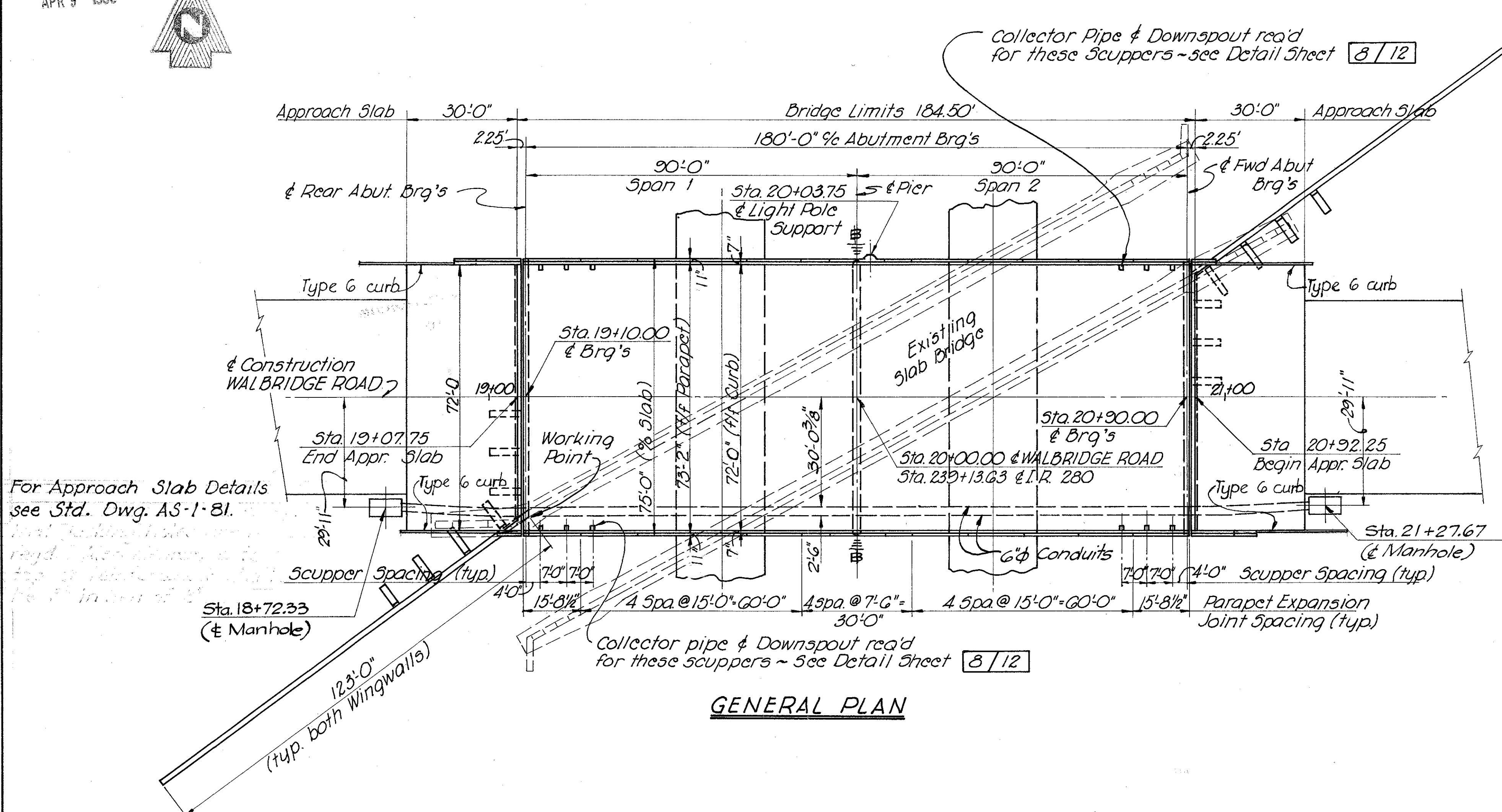
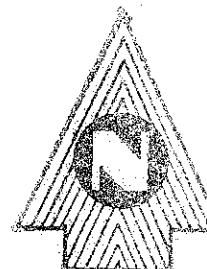
TRAFFIC ON WALBRIDGE ROAD
1990 ADT = 7490
1990 ADTT = 749

CHARLES L. BARBER & ASSOCIATES INC.
ENGINEERS
TOLEDO, OHIO

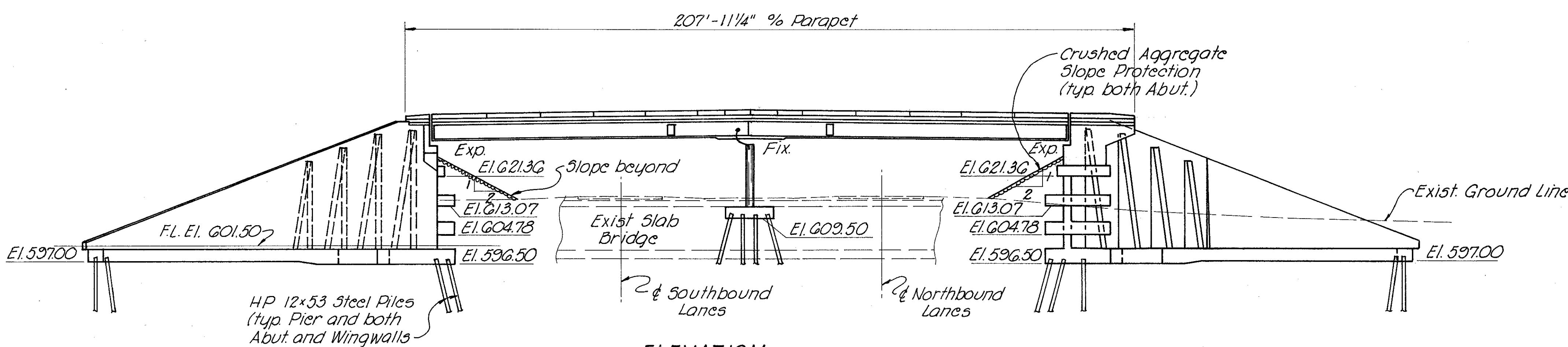
SITE PLAN

BRIDGE NO. WOO - 280-0453
I.R. 280 UNDER WALBRIDGE ROAD
WOOD COUNTY STA. 19+07.75 - 20+92.25

PRESENT TOPOGRAPHY		PROPOSED WORK	
SURVEYED	DRAWN	DESIGNED	DRAWN
L.J.S.	G.K.J.	E.W.L.	E.W.L. K.R.R. J.C.P.



GENERAL PLAN



ELEVATION

CHARLES L. BARBER & ASSOCIATES INC.
ENGINEERS • ARCHITECTS
TOLEDO, OHIO

2/12

GENERAL PLAN

BRIDGE NO. WOO-280-0453

I.R. 280 UNDER WALBRIDGE ROAD

WOOD COUNTY STA. 19+07.75 - 20+92.25

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
----------	-------	--------	---------	----------	------	---------

J.R.C.S. J.R.C.S. G.D.S. K.R.R. J.C.P. 87-72

ESTIMATED QUANTITIES									
ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	ABUT.	PIER	SLAB BR.	GEN'L	AS BUILT
202	Lump	...	Portions of Structure removed				Lump		
503	Lump	...	Cofferdams, cribs and sheeting				Lump		
503	1814	Cu.Yd.	Unclassified Excavation	1716	98				
504	1415	Sq.Ft.	Steel Sheet Piling left in place (min. section modulus of 14.1 in ³ /ft. of wall)	1415					
505	Lump	...	Pile Driving Equipment Mobilization						
507	11,470	Lin.Ft.	Steel Piles HP12 x 53	10,000	1470				
507	408	Lin.Ft.	Prebored holes (Pier piles only)		408				
509	230,623	lb.	Reinforcing Steel	61,769	146,008	22,846			
511	425	Cu.Yd.	Class S concrete - Superstructure (See Proposal Note)	425					
511	682	Cu.Yd.	Class C concrete - Abutments above footing		682				
511	84	Cu.Yd.	Class C concrete - Pier above footing		84				
511	679	Cu.Yd.	Class C concrete - Footings	627	48	4			
511	15	Cu.Yd.	Class C concrete - Slab Bridge - Abutments above footing			15			
511	63	Cu.Yd.	Class C concrete - Slab Bridge - Deck Slab			63			
516	161	Lin.Ft.	PVC Waterstop, as per Plan		161				
* 513	459,800	lb.	Structural Steel (RISC Category III)	459,800					
* 514	459,800	lb.	Field painting of Structural Steel, System A	459,800					
* 516	89	Sq.Ft.	1" Preformed expansion joint filler		89				
518	52	Lin.Ft.	8" Perforated Corrugated Steel Pipe, incl. specials, 707.01		52				
518	39	Lin.Ft.	8" Non-Perforated Corrugated Steel Pipe, incl. specials, 707.01		39				
518	46	Lin.Ft.	8" Std. Collector pipe, galvanized steel, 707.08, including specials and supports	46					
518	50	Lin.Ft.	8" Std. pipe downspout, galvanized steel, 707.08, including specials and supports		50				
518	88	Lin.Ft.	6" Perforated, Helical Corrugated Steel Pipe, 707.01		88				
518	11	Lin.Ft.	6" Non-Perforated, Helical C.S.P. incl. specials, 707.01		11				
518	488	Cu.Yd.	Porous Backfill		488				
518	12	Each	Scuppers, including supports		12				
518	362	Lin.Ft.	Subdrainage for Wearing Course, as per plan	362					
601	399	Sq.Yd.	Crushed aggregate slope protection		399				
824	60,943	lb.	Epoxy Coated Reinforcing Steel	60,943					
Special	1476	Sq.Yd.	Membrane Waterproofing, (See Proposal Note)	1476					
848	62	Cu.Yd.	Asphalt Concrete Surface Course, Type I, AC-20	62					

* Includes 354 lbs. to be paid for by the "Toledo Edison Co."

calc. by : RKG ckd. by : ADP

ITEMS INCIDENTAL TO TOLEDO EDISON CONDUITS (●)			
Item	Total	Unit	Description
G25	2	Each	Manhole, as per plan
G25	70	Lin.Ft.	Trench 48'min depth, as per plan
G25	511	Lin.Ft.	6" Conduits, 713.04, as per plan

● These items are to be paid for by the Toledo Edison Co. The items are carried to Lighting General Summary, Sheet No. 245.

For Notes pertaining to Manholes, Trench and Conduits, See Sheet 323 & 324.

GENERAL NOTES

REFERENCE shall be made to Standard Drawings BR-1 dated 5-29-79, SD-1-G9 sheets 1,2 & 3 of 4 dated G-12-G9, RB-1-55 revised 2-2-59, A5-1-81 dated 11-27-81 and to Supplemental Specification 836 dated 3-12-75, 848 dated 2-17-83, 824 dated 10-8-82

DESIGN DATA: Design Loading - H-5 20-44 Case II and the Alternate Military Loading. Concrete class S - unit stress 1500 p.s.i. for Superstructure Concrete class C - unit stress 1333 p.s.i. for Substructure Structural Steel - ASTM A36 - unit stress 20,000 p.s.i. Reinforcing Steel - ASTM A315, A316 or A-317 Grade 60 - unit stress 24,000 p.s.i.; Grade 40 - unit stress 20,000 p.s.i. Deck Protection - Membrane Waterproofing and Asphalt Concrete Overlay.

UTILITY LINES: All expense involved in relocating the affected utility lines shall be borne by the owners. The contractor and owners are requested to cooperate by arranging their work in such a manner that inconvenience to either will be held to a minimum.

MAINTENANCE OF TRAFFIC: See "Maintenance of Traffic" note in General Notes - Roadway Plans.

EMBANKMENT CONSTRUCTION: All abutment piles shall be driven only after the respective heights of embankments are constructed.

CONSTRUCTION PROCEDURE: The contractor shall submit to the Director for review and approval three copies of the construction procedure for the abutments.

DESIGN SPECIFICATIONS: This structure conforms to "Standard Specifications for Highway Bridges" adopted by the American Association of State Highway and Transportation Officials, 1977, including the 1978, 1979, 1980, 1981, and 1982 Interim Specifications and the Ohio "Supplement" to these specs.

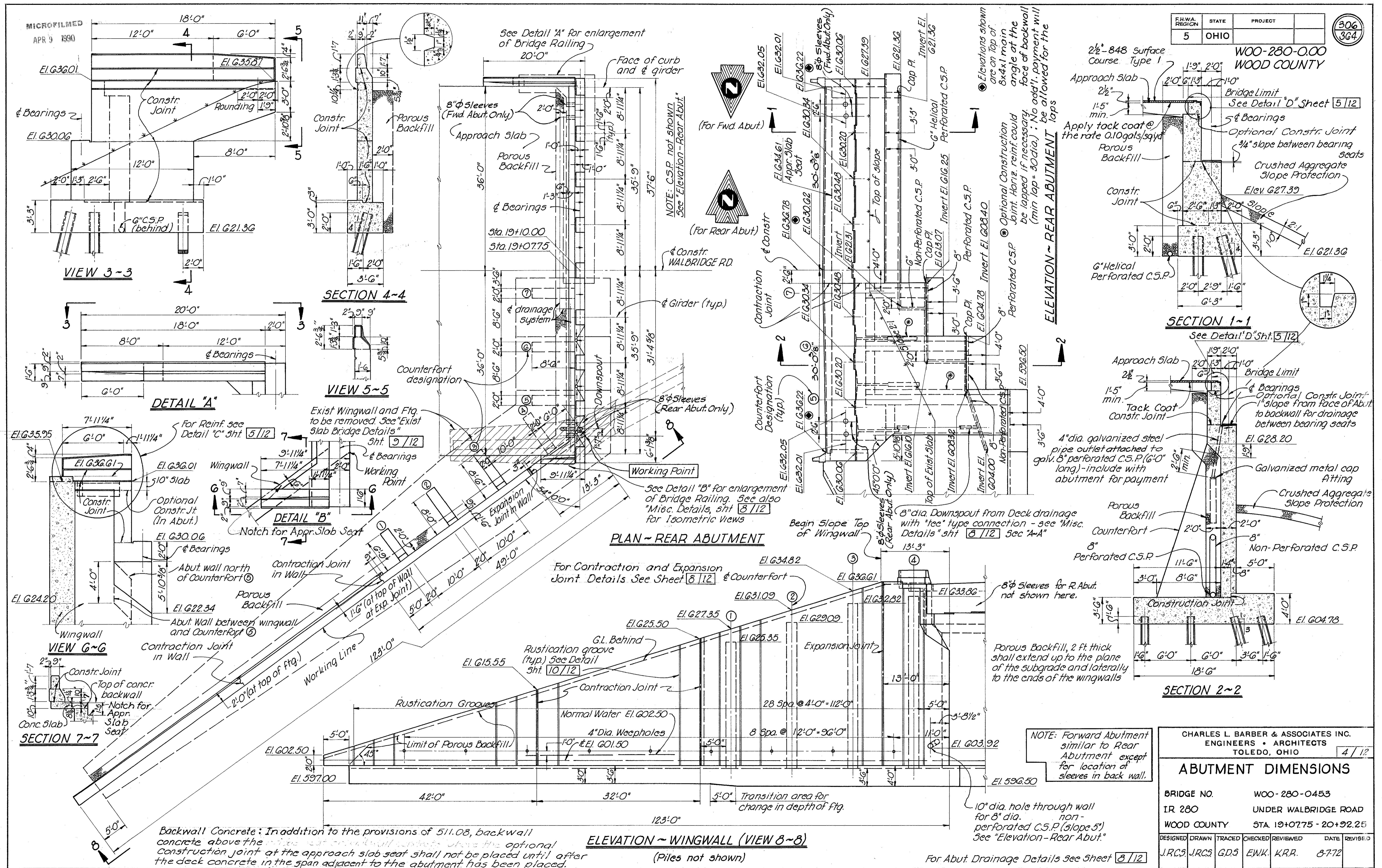
REINFORCING BAR LAPPED SPLICES All splices shall be lapped 30 bar diameters except bars near the top of members having more than 12 inches of concrete under the bars shall be lapped 35 bar diameters.

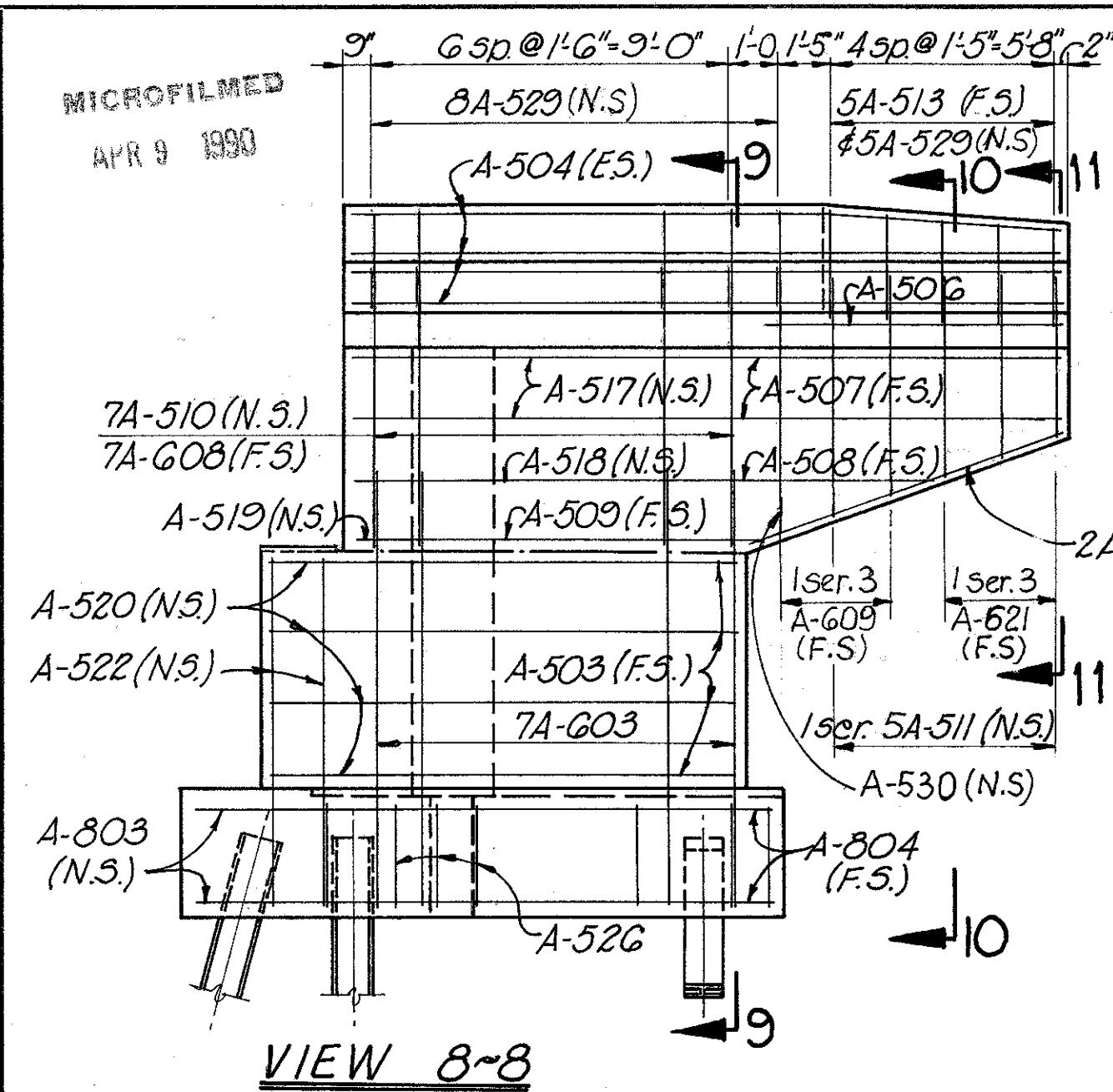
ATTACHMENT OF GUARDRAIL TO CONCRETE PARAPETS Concrete insert anchor assemblies per Std. Construction Drwgs. GR-3 and GR-1 shall be placed during parapet construction.

CHARLES L. BARBER & ASSOCIATES INC.
ENGINEERS • ARCHITECTS
TOLEDO, OHIO 3/12

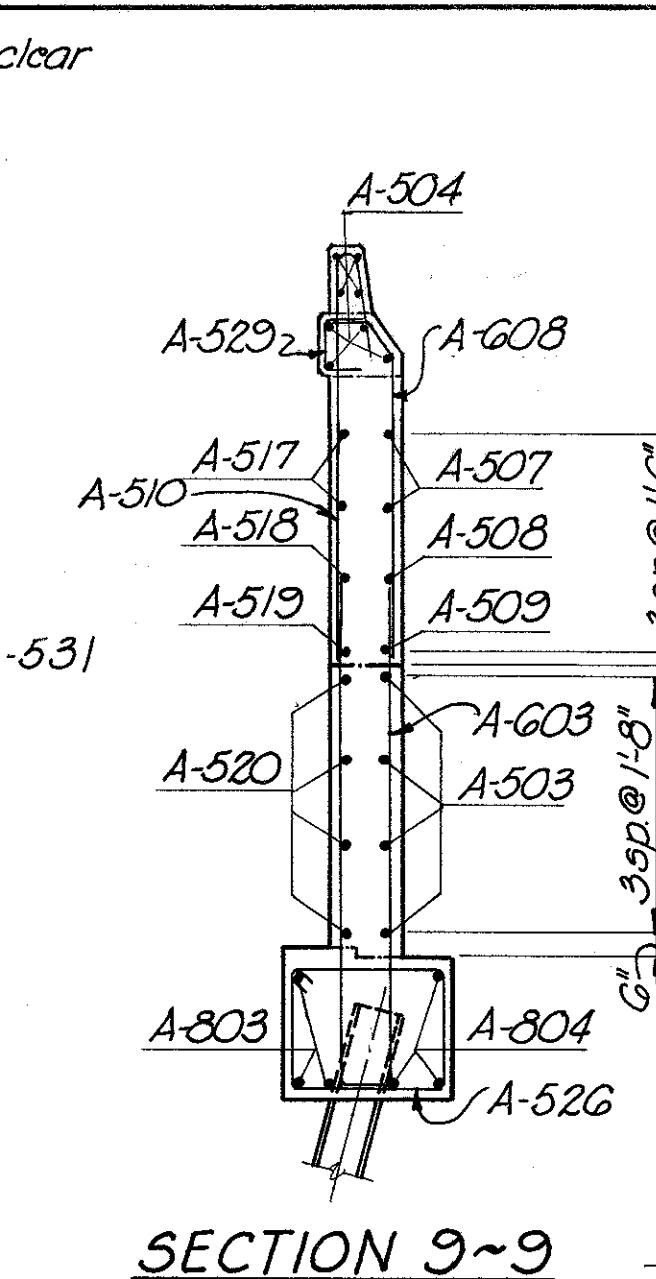
ESTIMATED QUANTITIES & GENERAL NOTES

BRIDGE NO.	WOOD COUNTY	STA. 19+07.75 - 20+02.25
I.R. 280	UNDER WALBRIDGE ROAD	
WOO-280-0453		
DESIGNED J.R.C.S.	DRAWN E.W.K.	TRACED G.D.S.
CHECKED K.P.R. 8-4-72	REVIEWED J.C.P. 8-7-72	DATE REVISED

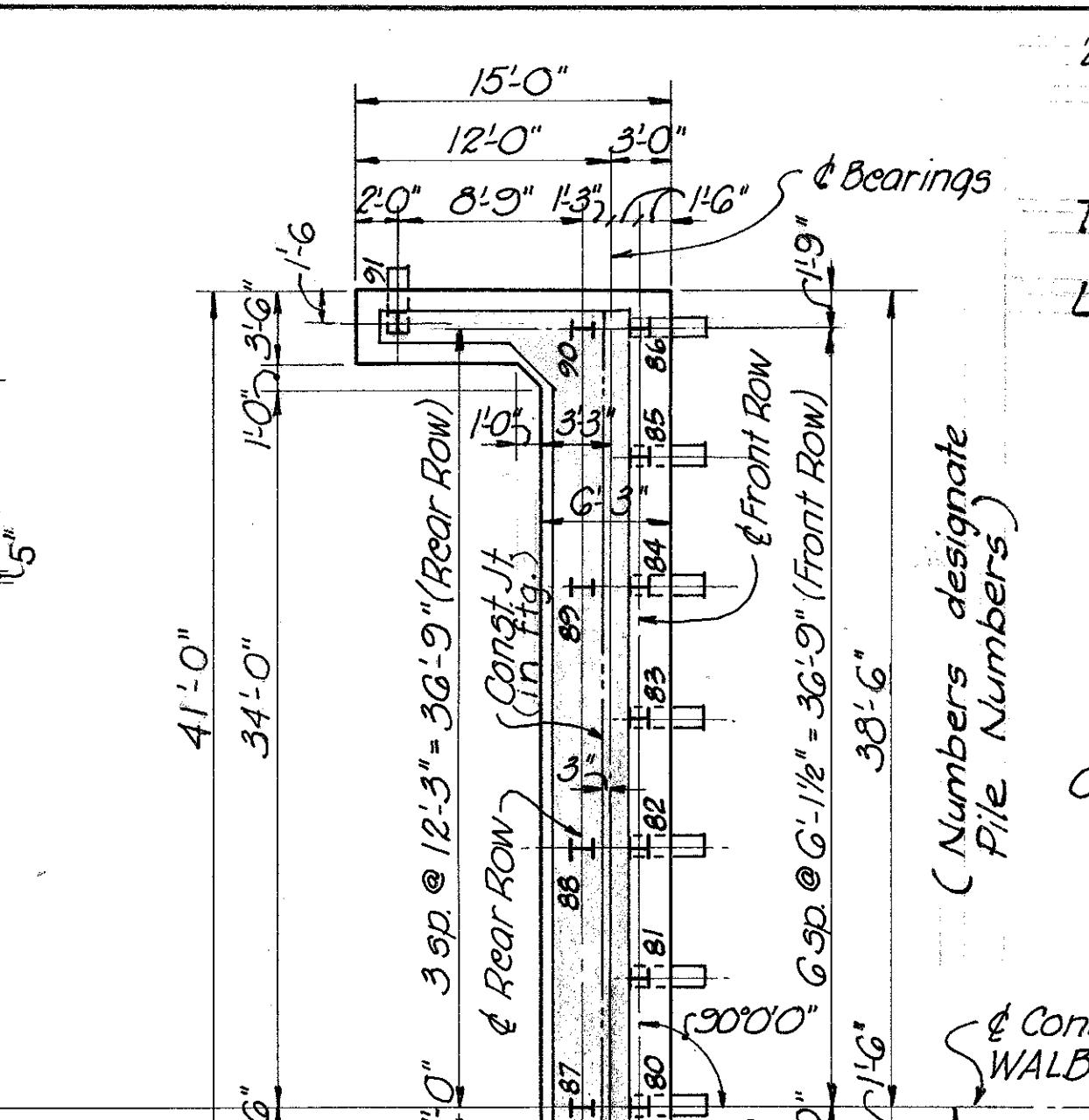




VIEW 8~8



SECTION 9



[View Details](#)

DETAIL "D" See Section 1-1 & 2-2

10"

3 1/2"

10 1/2"

2 1/2" Asphalt Conc.

2 1/2" Asphalt Conc.

Tack Coat

Girder

1/4 x 2"

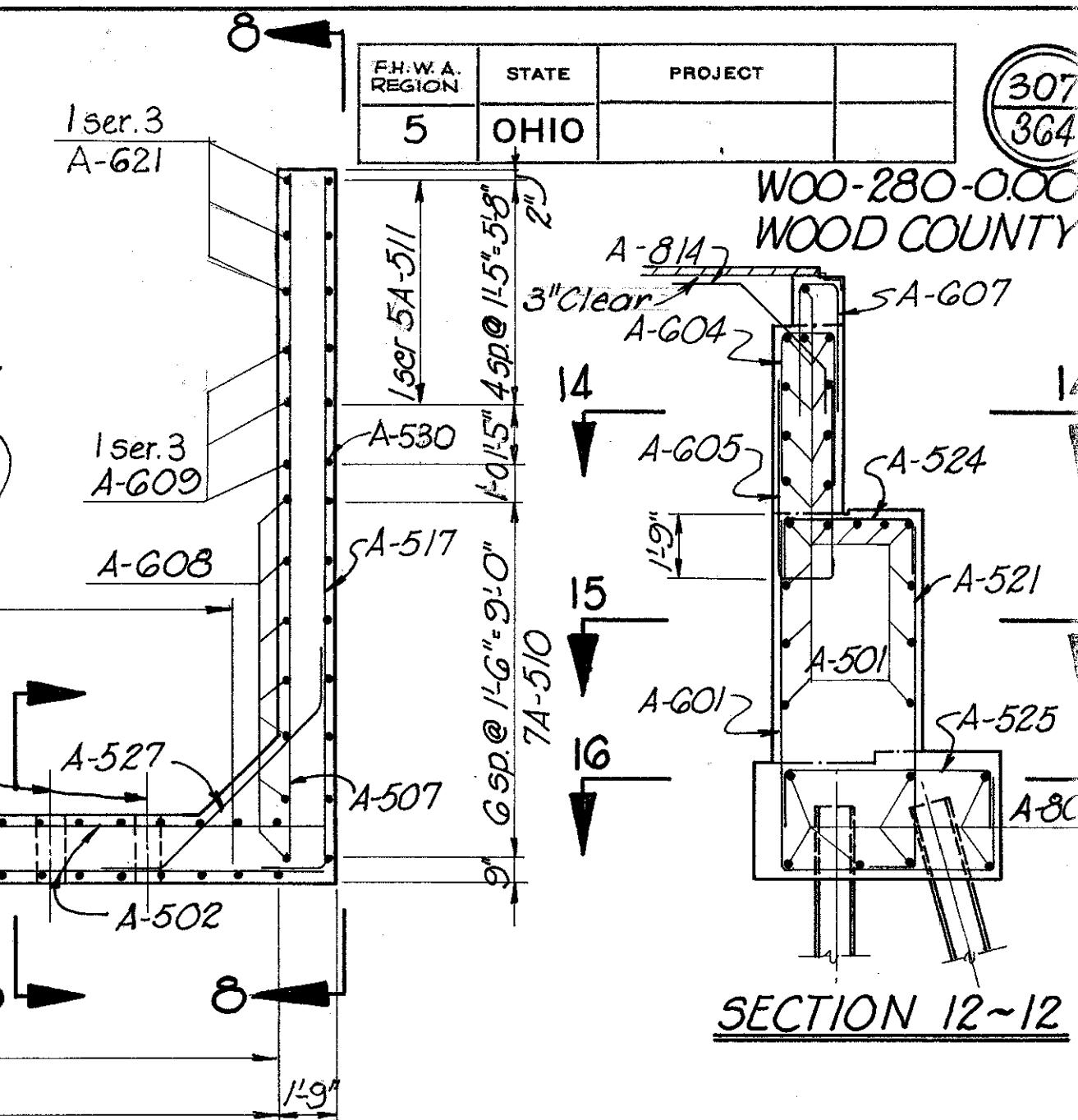
1/4x3" bori*

L8x4x1

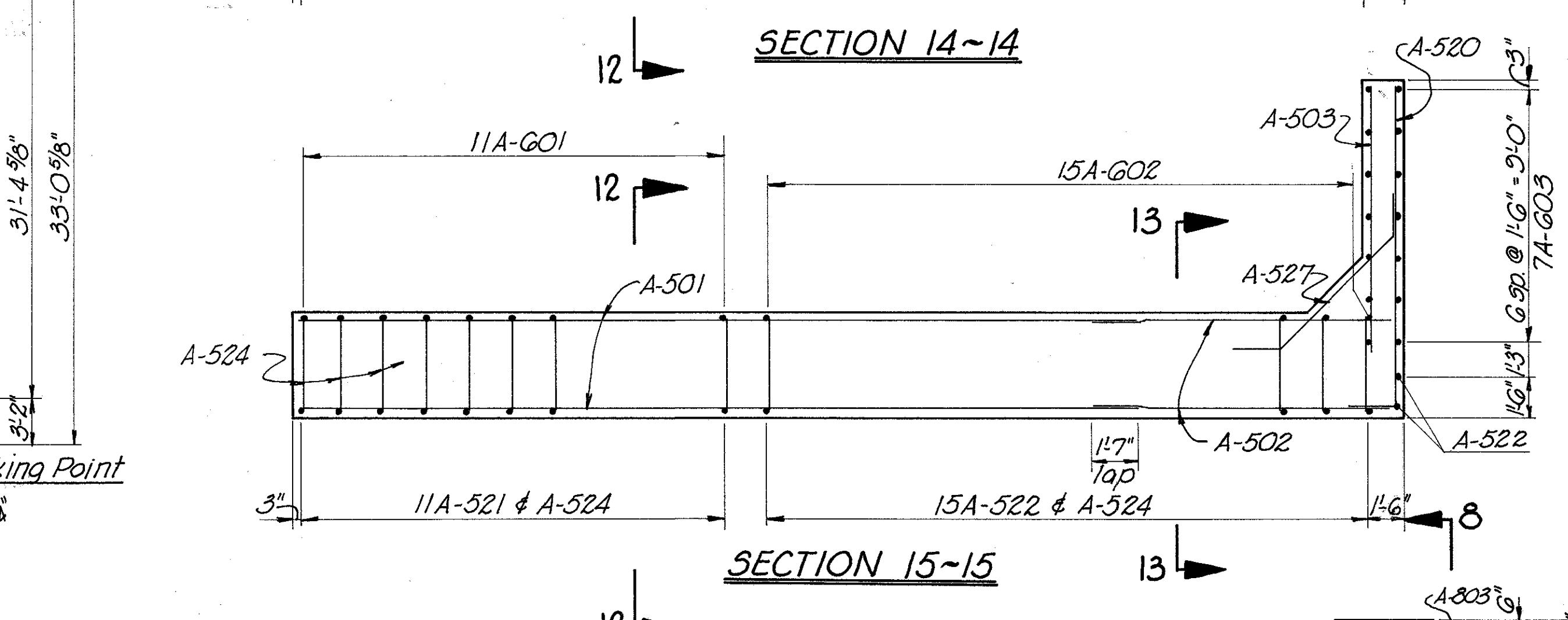
L8x4x3/4

1/2" Bevel fill Plate

* Provide a $\frac{1}{4}$ " x 3" bar welded to the main angle as shown on SD-1-69.



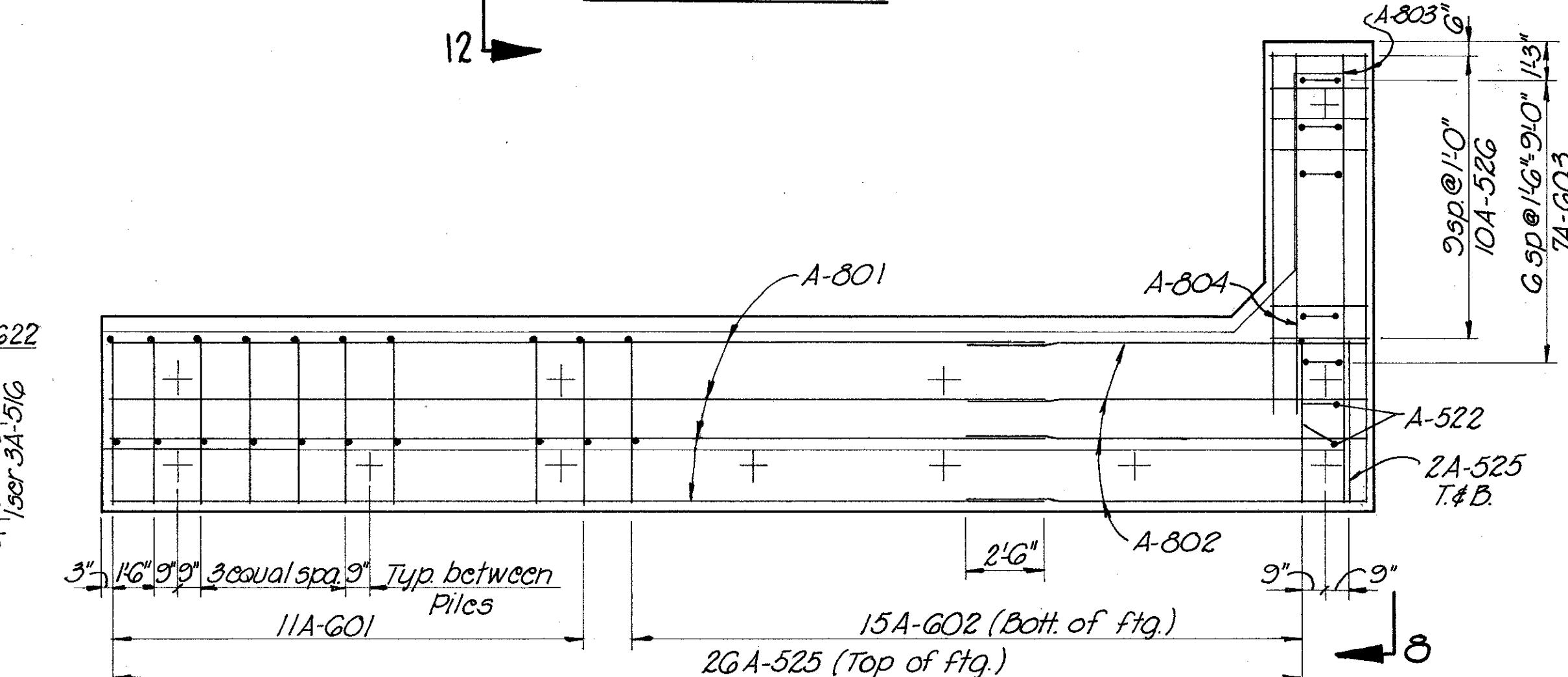
SECTION 12~



SECTION 14~14

A hand-drawn diagram of a bridge deck. The top part shows a horizontal line with vertical supports and a curved arrow indicating a transition. The bottom part shows a horizontal line with vertical supports and two vertical lines extending downwards from the ends, labeled "3" and "15". The text "11A-521 & A-524" is written between the two vertical lines.

SECTION 15~



SECTION 16~1

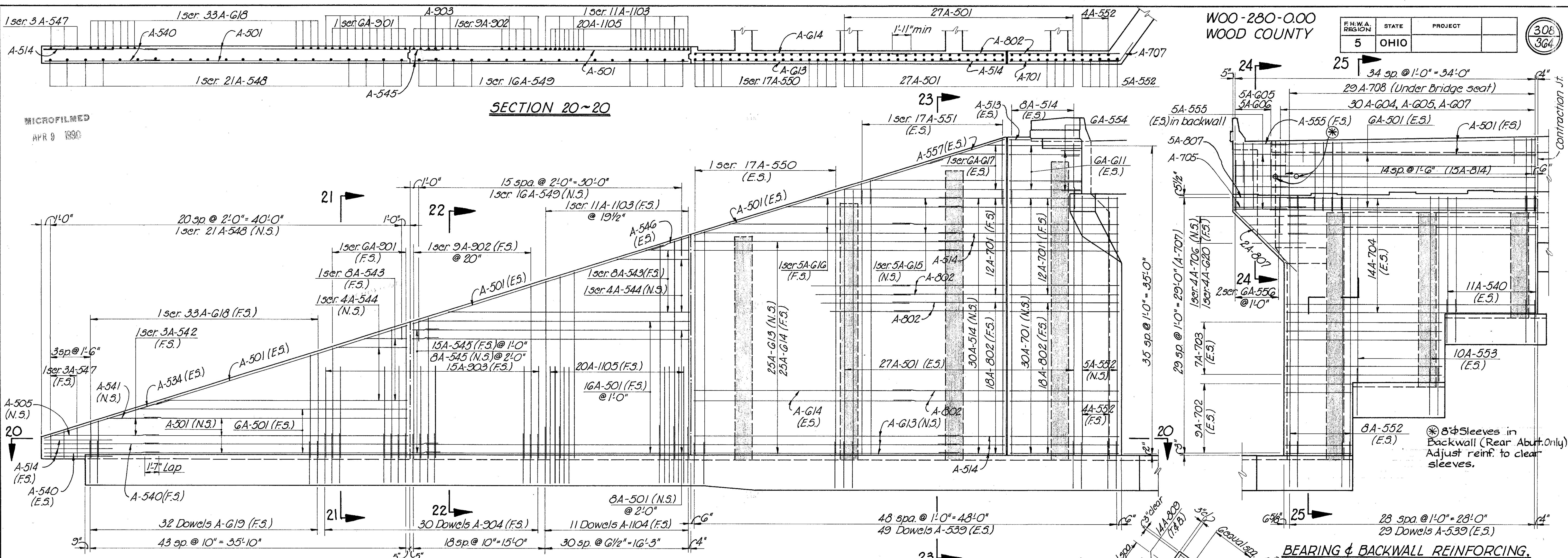
Steel sheet piling left in place shall have a minimum section modulus of 14.1 in³ per foot of wall. Used piling in good condition may be used.

Estimated tip elev. for sheet piles : 588.5

Reinf. is shown for
right half of abut.
only.

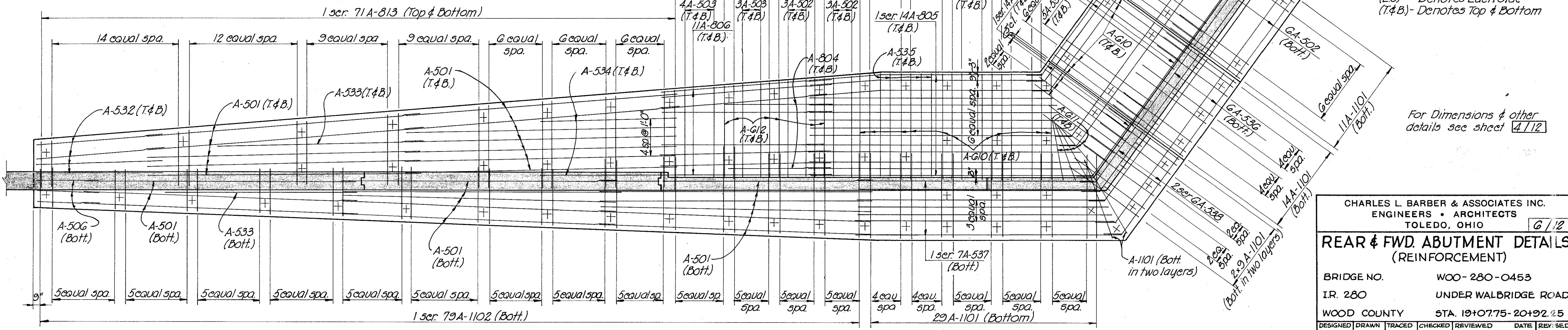
CHARLES L. BARBER & ASSOCIATES INC.
ENGINEERS • ARCHITECTS
TOLEDO, OHIO

5 / 12



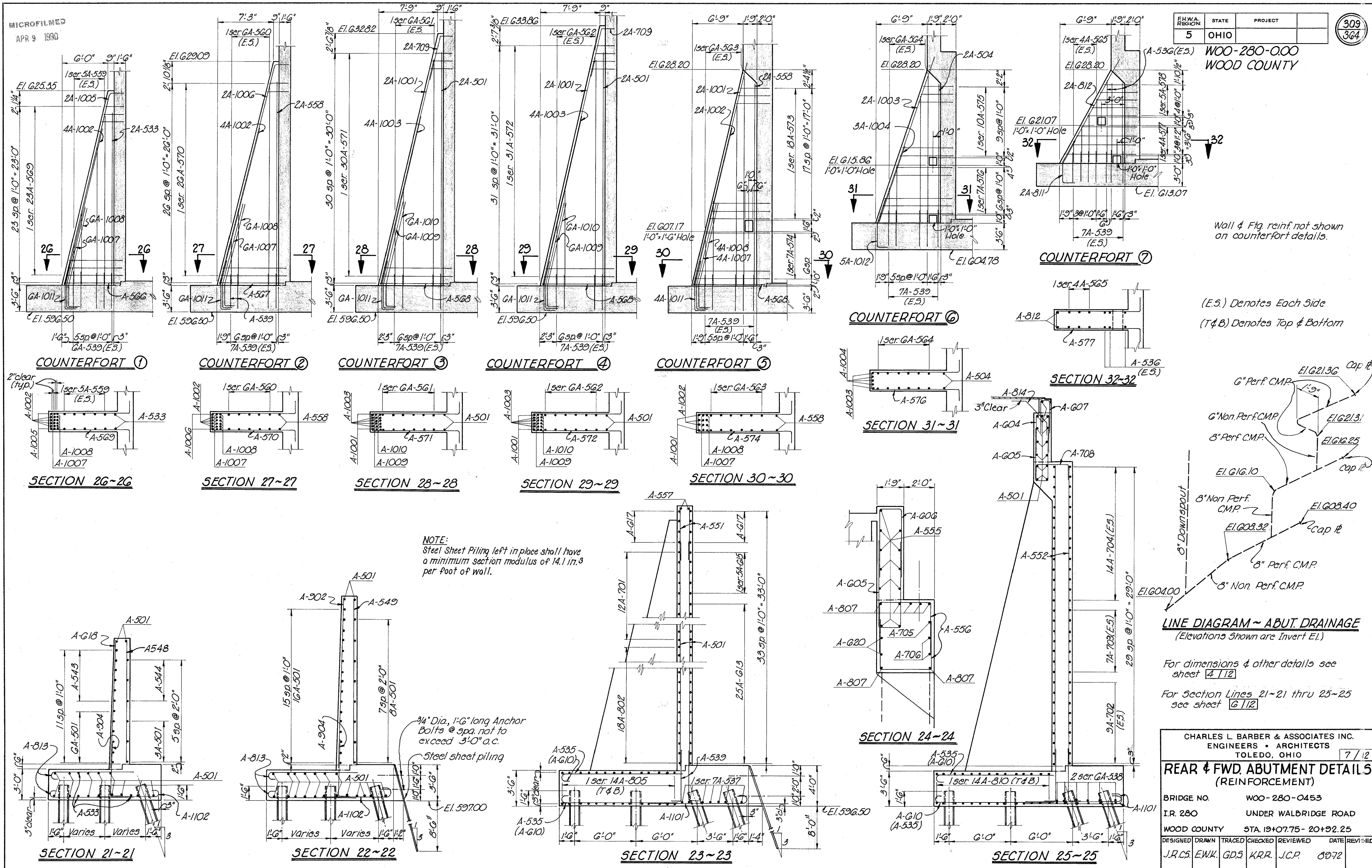
WINGWALL REINFORCEMENT, (ELEVATION)

(Footing reinf. not shown
(Piles not shown)



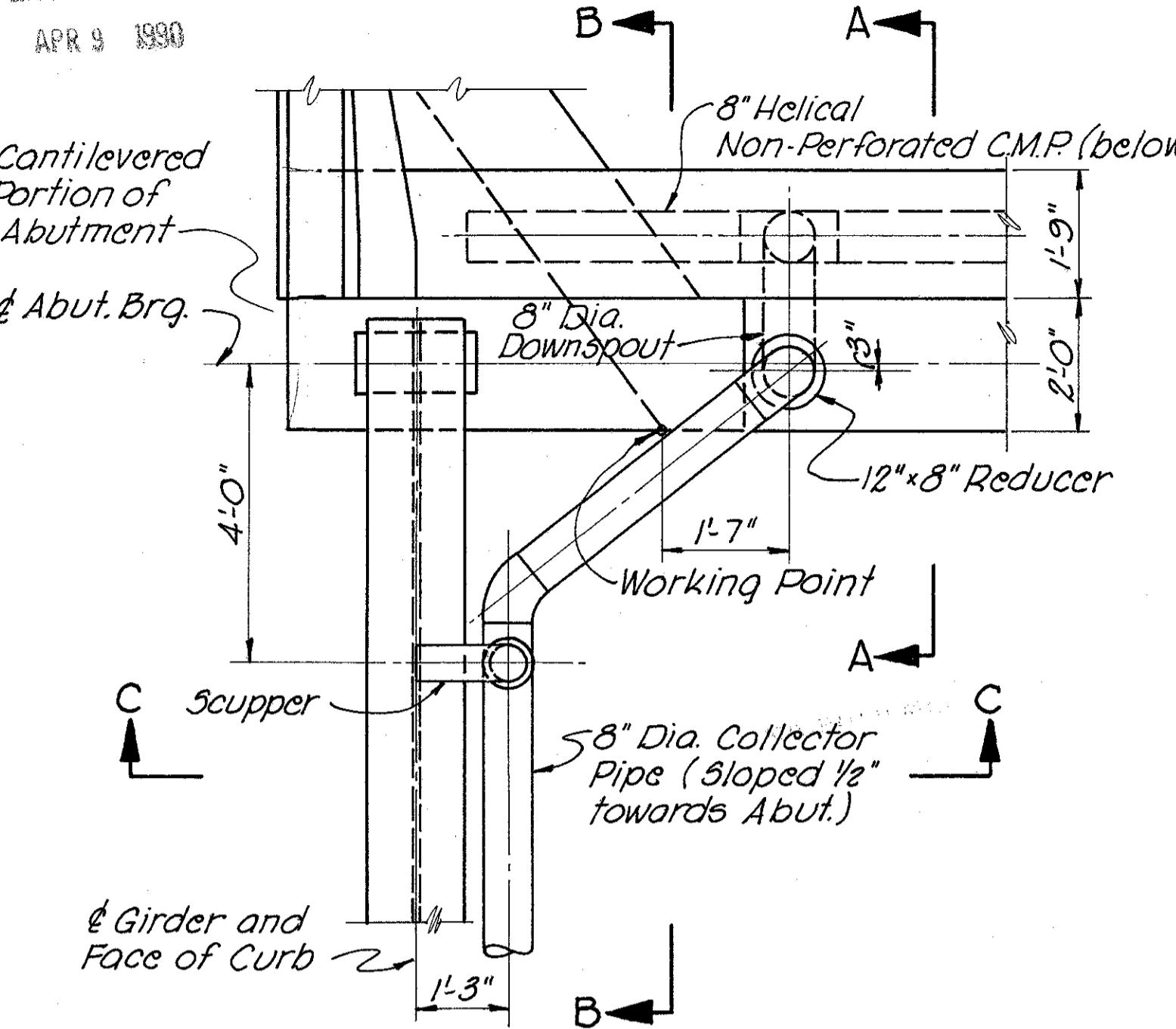
FOOTING REINFORCEMENT. (Vertical dowels not shown)

CHARLES L. BARBER & ASSOCIATES INC. ENGINEERS • ARCHITECTS TOLEDO, OHIO					6/12	
EAR & FWD. ABUTMENT DETAILS (REINFORCEMENT)						
BRIDGE NO.		WOO-280-0453				
R. 280		UNDER WALBRIDGE ROAD				
WOOD COUNTY		STA. 19+07.75-20+92.25				
GNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.S.	E.W.K.	G.D.S.	K.R.R.	J.C.P.	8-9-72	



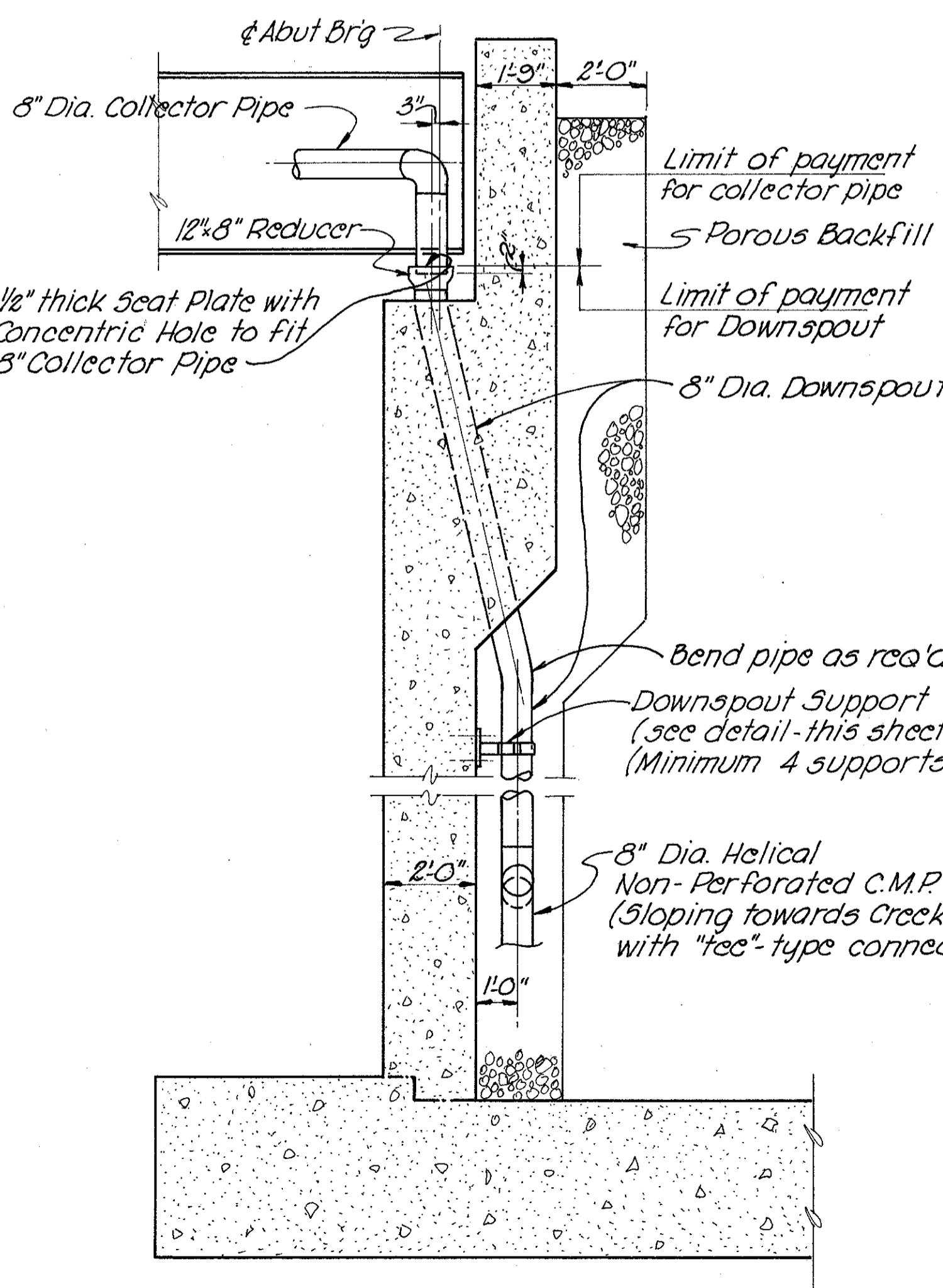
MICROFILMED
APR 9 1990

— 1 —

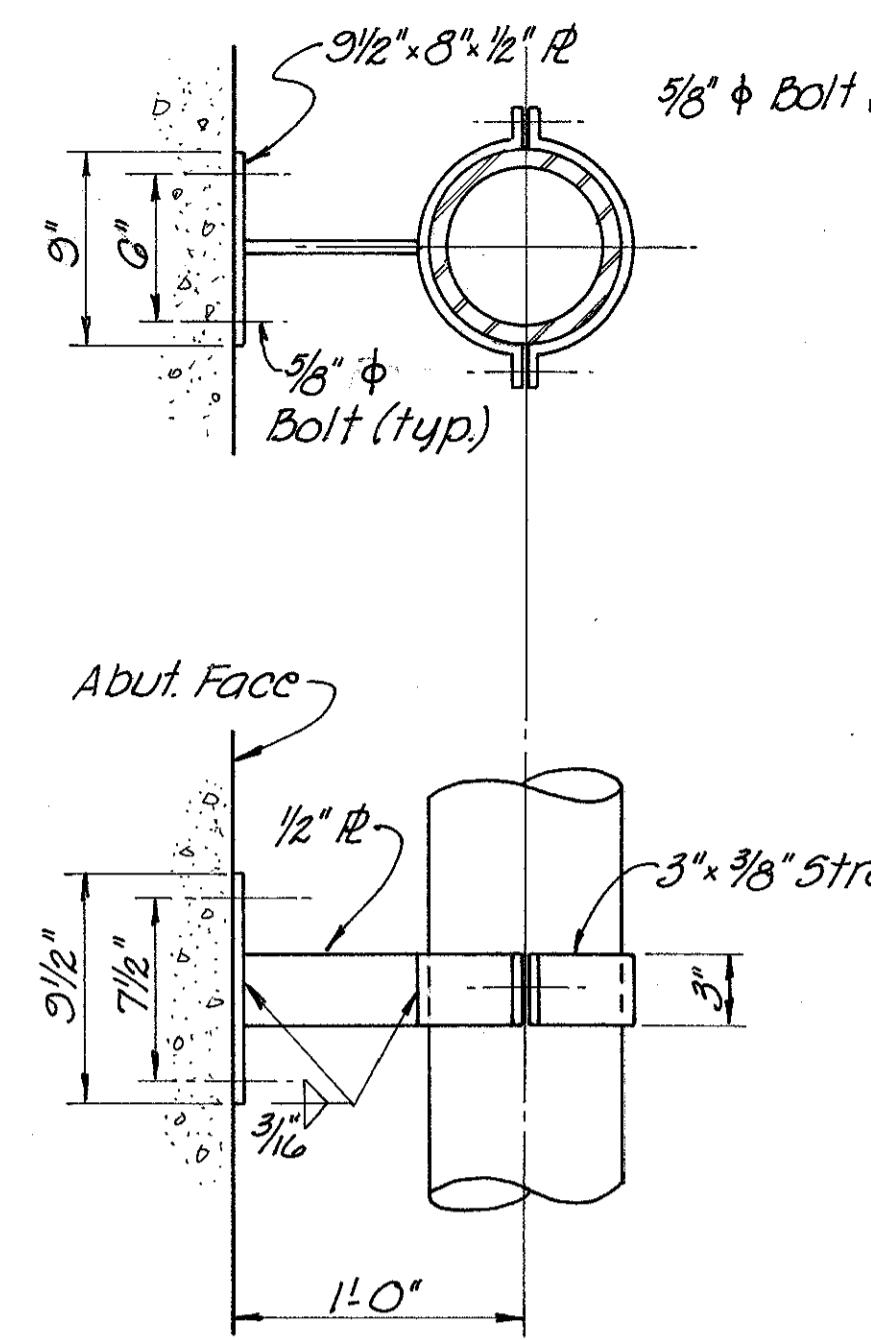


PLAN ~ COLLECTOR PIPE

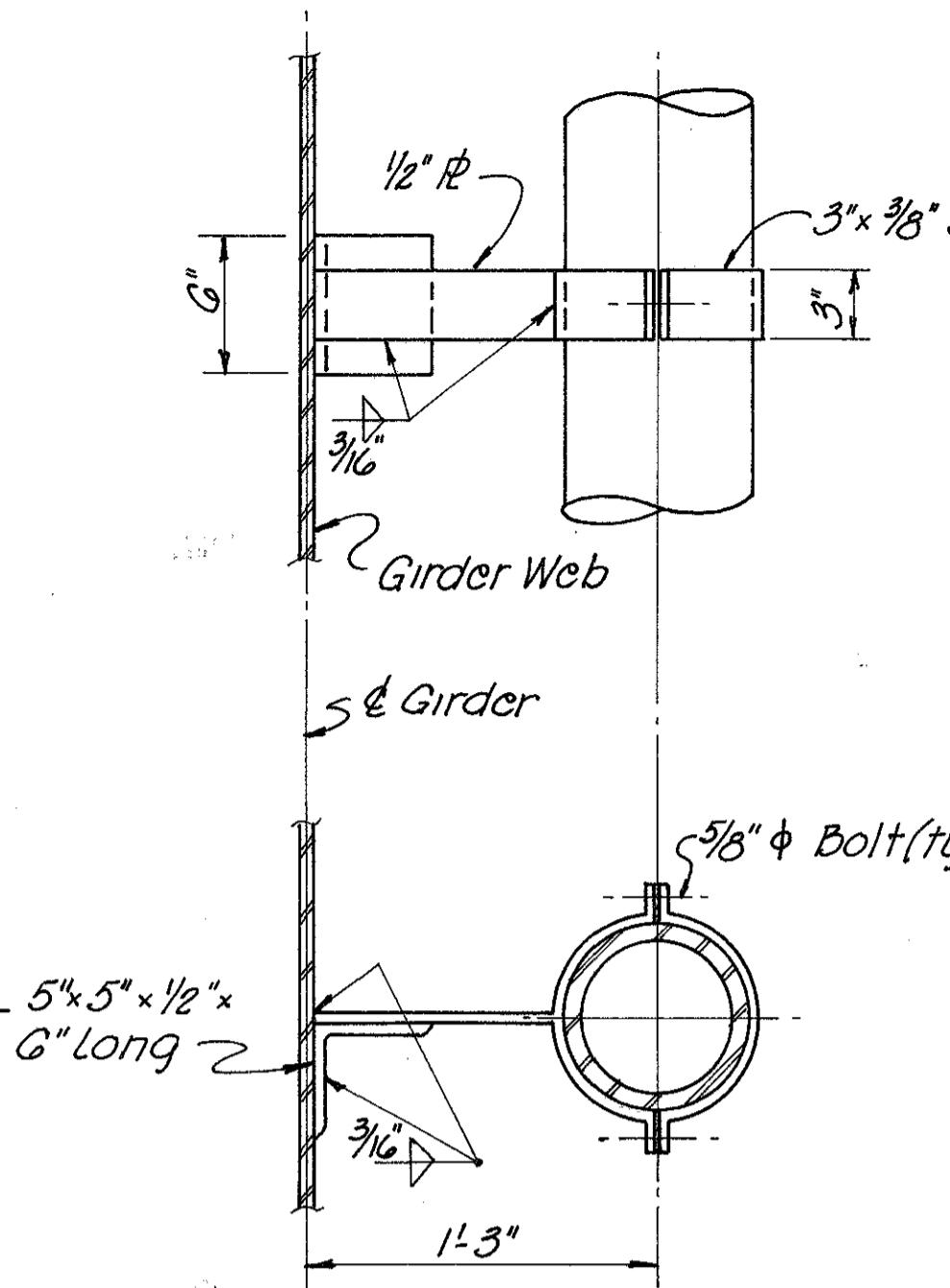
(Used only for Right Scuppers - Span 1
and Left Scuppers - Span 2)



SECTION A~A (Piles not shown)



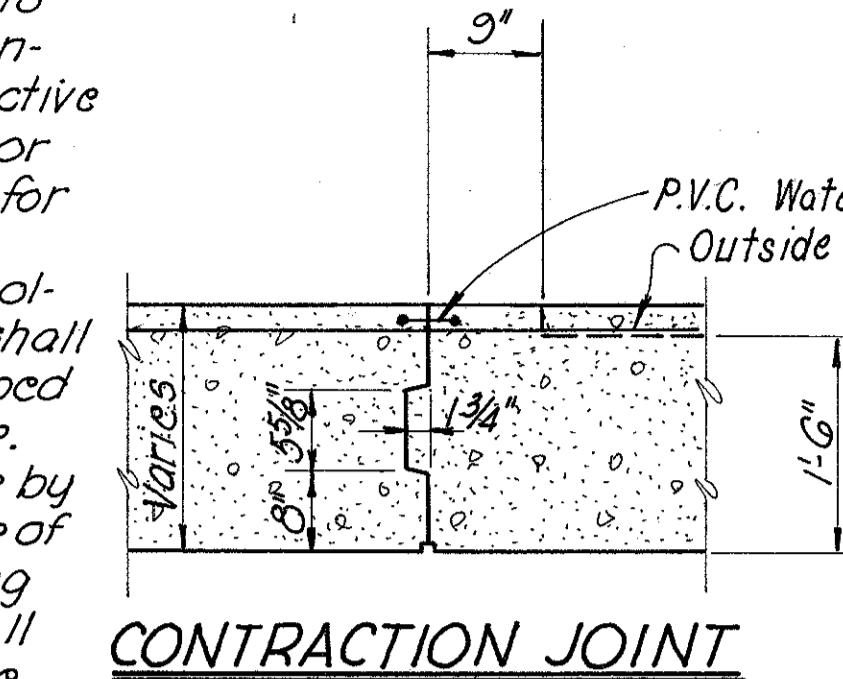
DOWNSPOUT SUPPORT



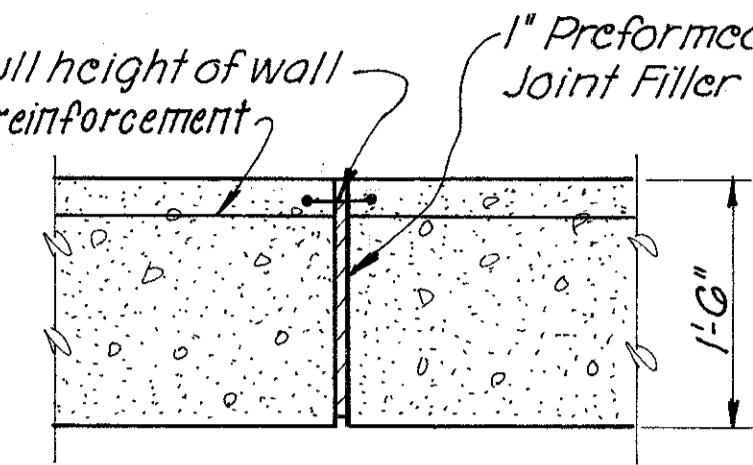
COLLECTOR PI SUPPORT

- strap
p.)

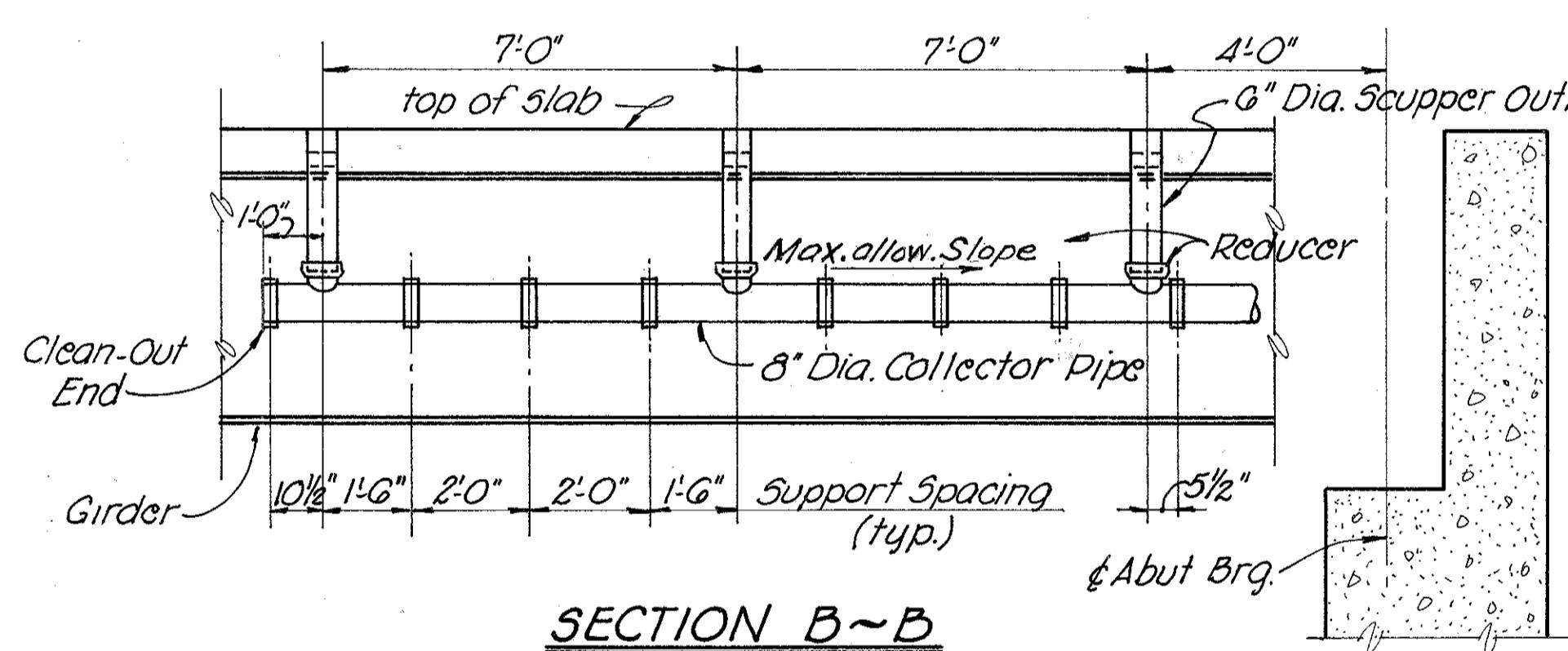
 1. Clean-out ends, bend specials, reducers, supports and work incidental to their installation is included with the respective item, Collector Pipe or Collector Downspout for payment.
 2. Collector pipes and collector downspouts shall be standard hot-dipped galvanized steel pipe. Joints shall be made by welding or by the use of a clamp-type coupling with a ring gasket. All welding shall be done before galvanizing. Straps or clamps for attaching pipes shall be hot-dipped galvanized steel. Bolts also shall be galvanized.



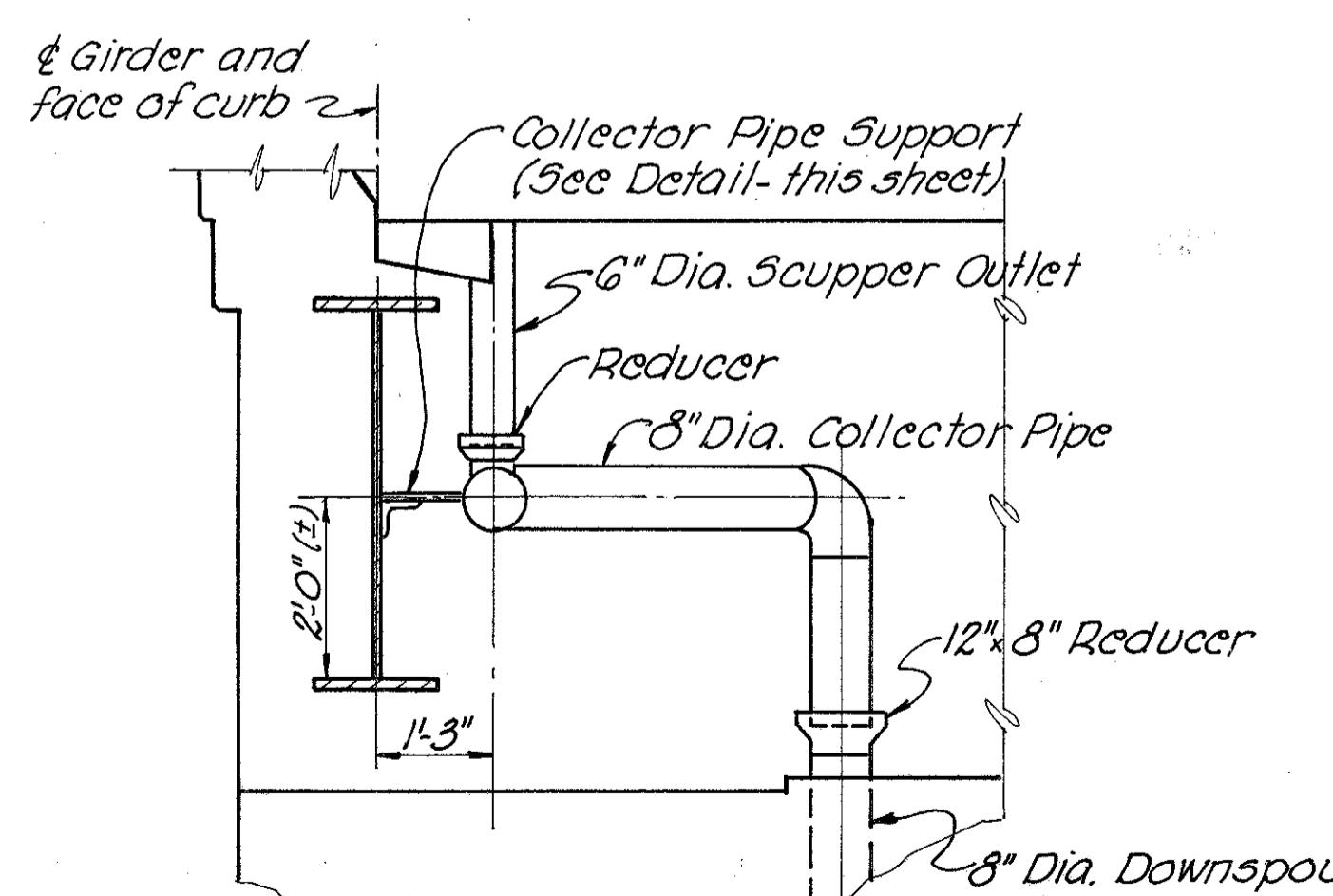
CONTRACTION JOINT



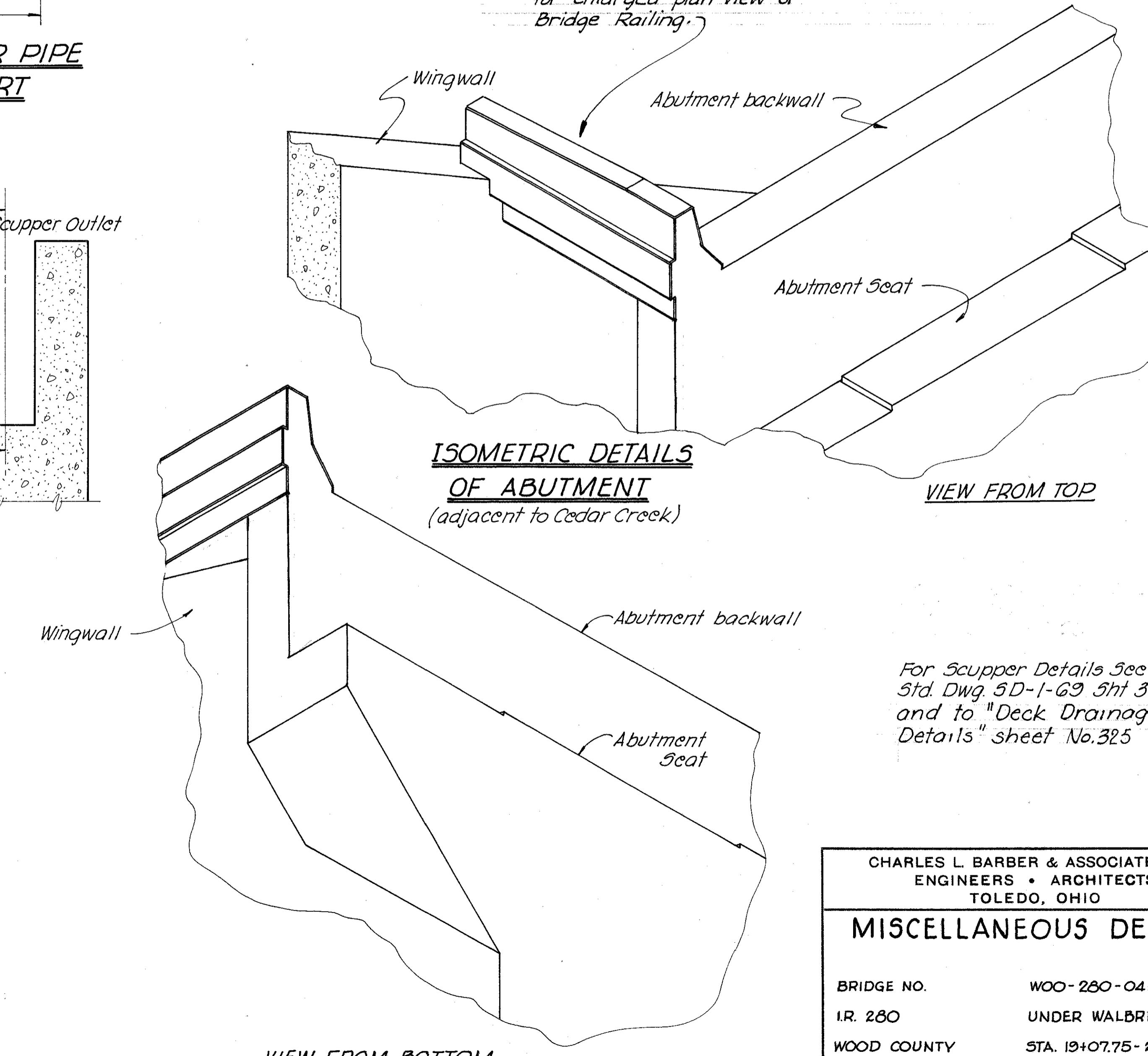
EXPANSION JOINT



SECTION B~



SECTION C~C



For Scupper Details See
Std. Dwg. SD-1-69 Sht 3 of 3.
and to "Deck Drainage
Details" sheet No 325

CHARLES L. BARBER & ASSOCIATES INC.
 ENGINEERS • ARCHITECTS
 TOLEDO, OHIO

8 / 12

MISCELLANEOUS DETAILS

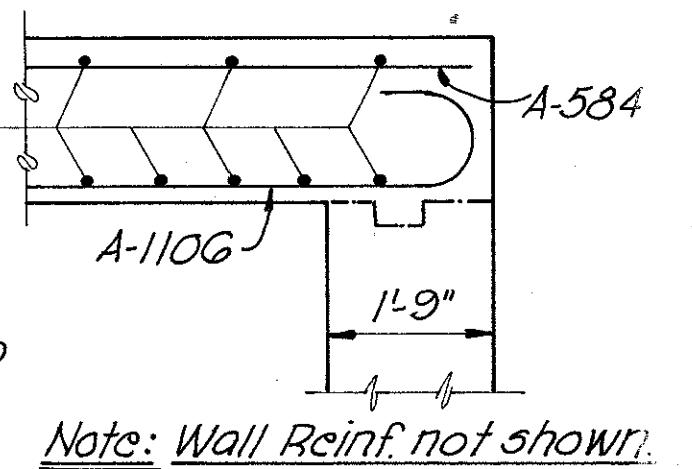
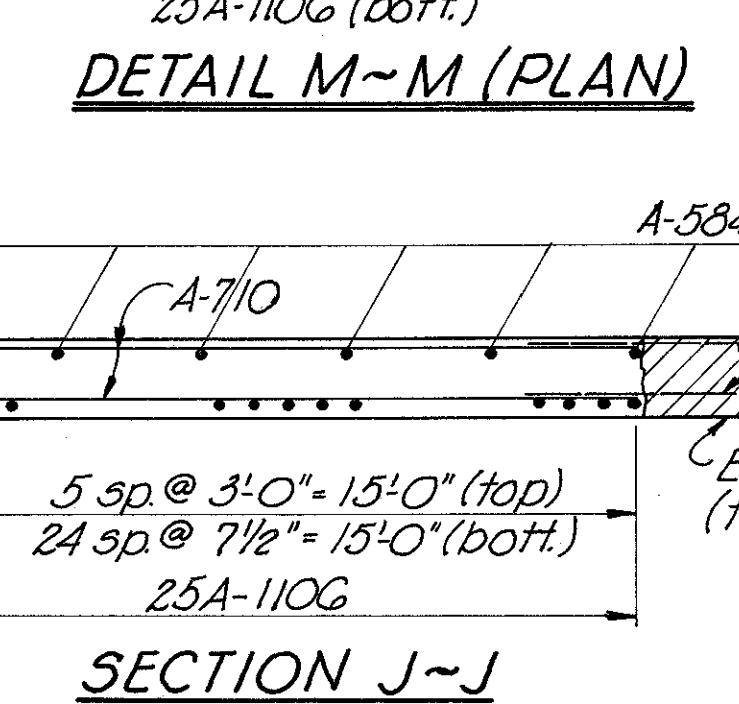
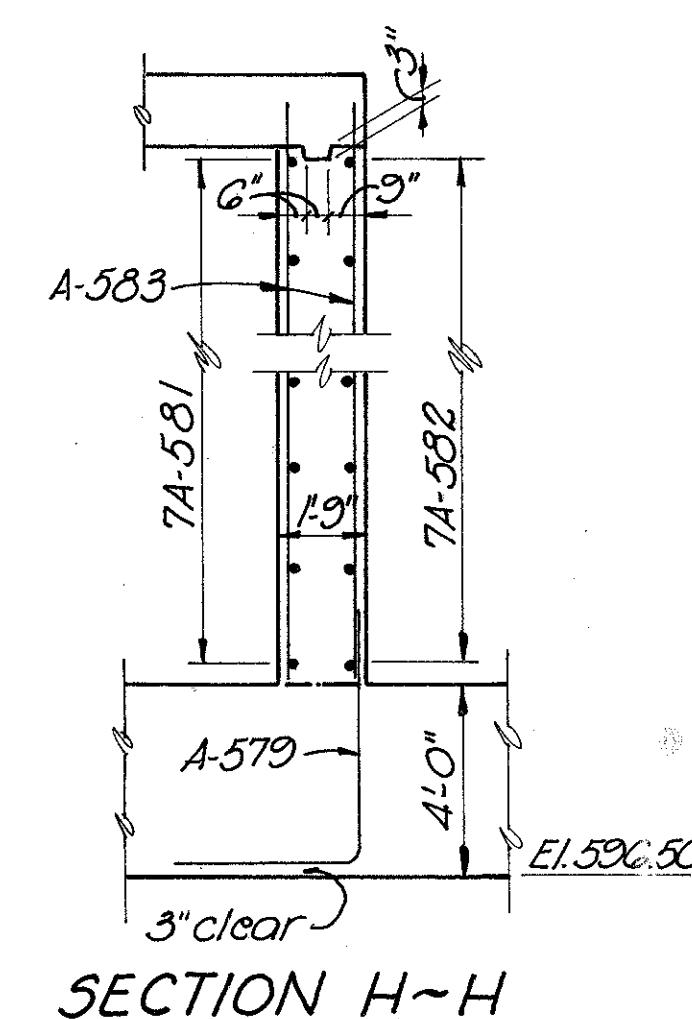
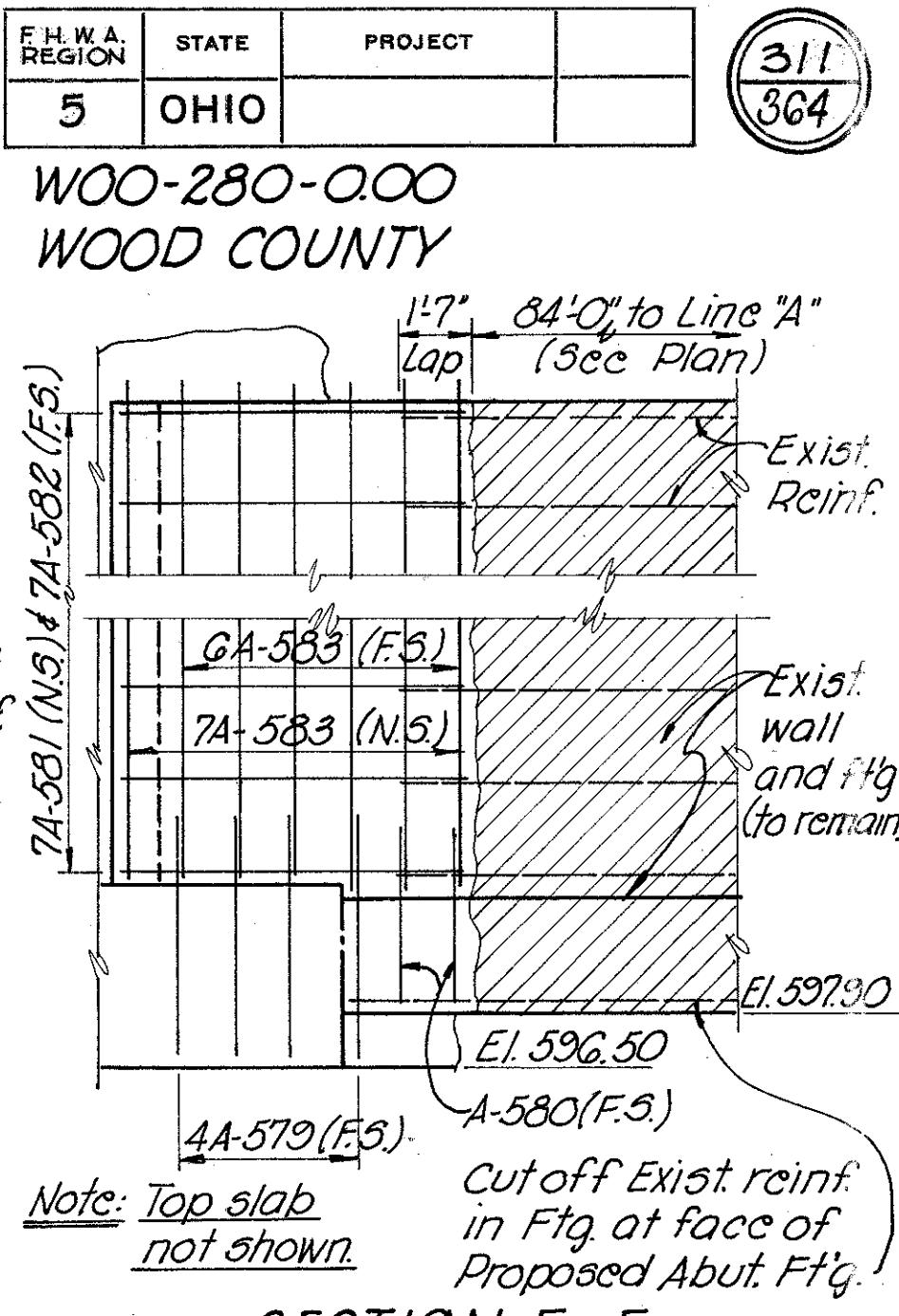
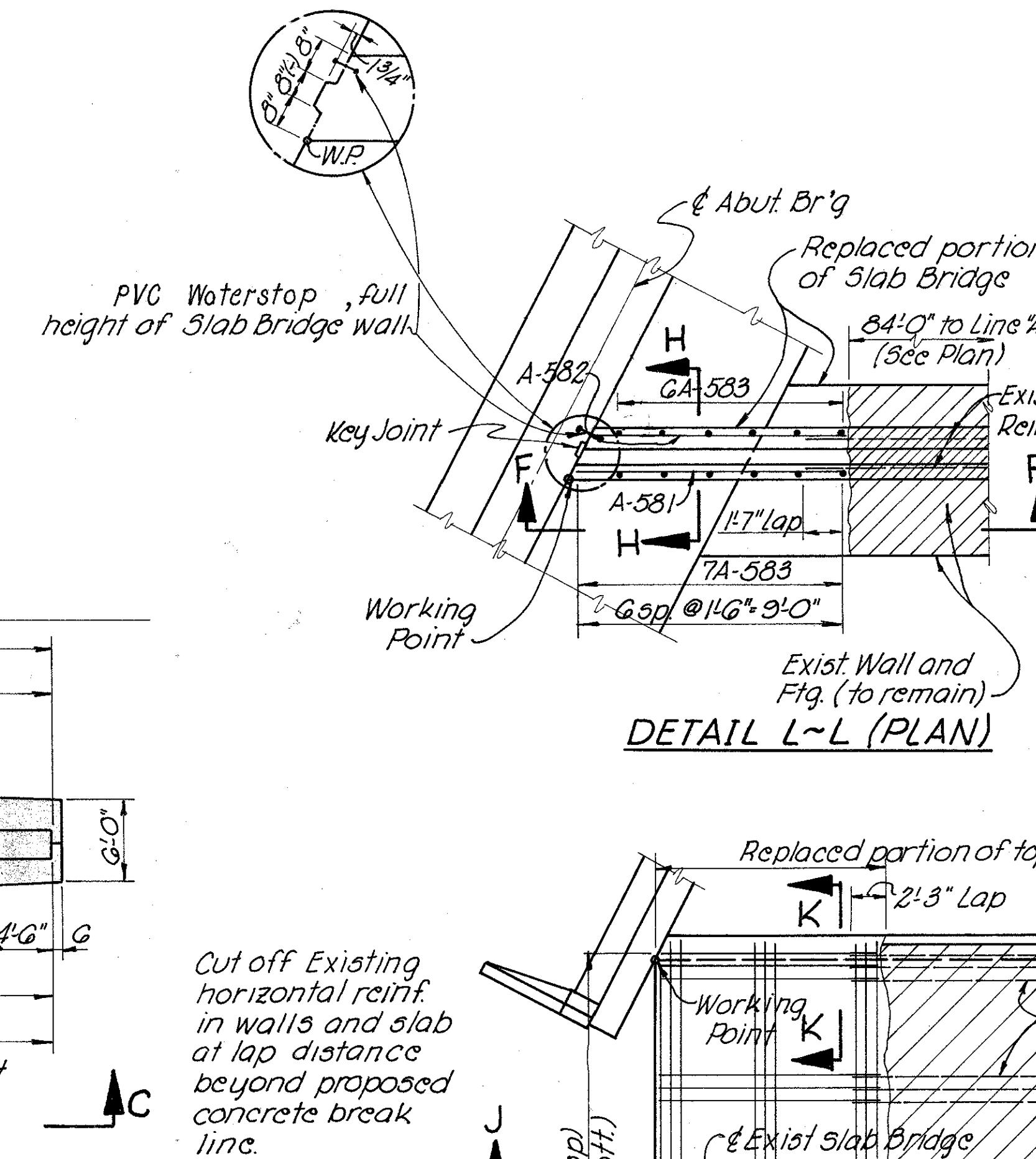
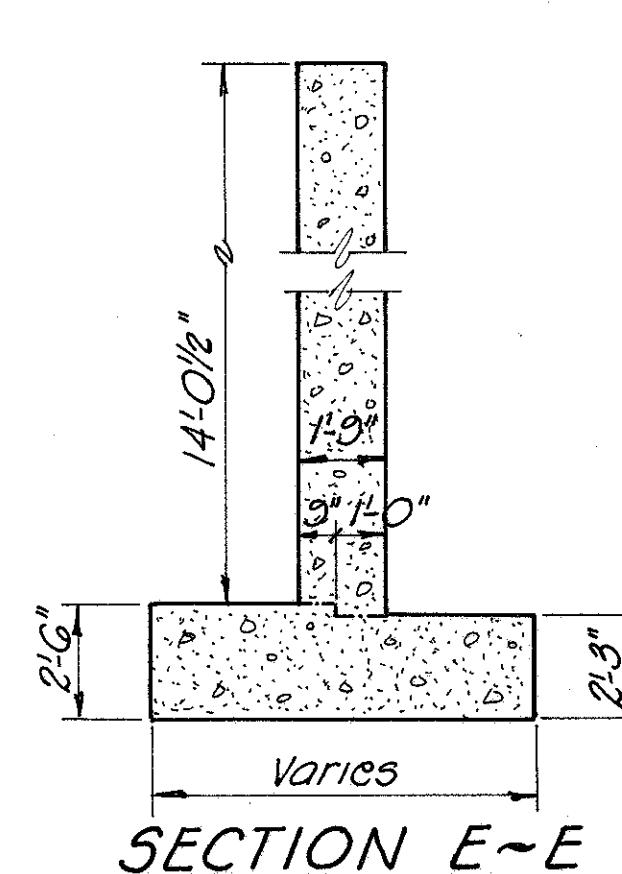
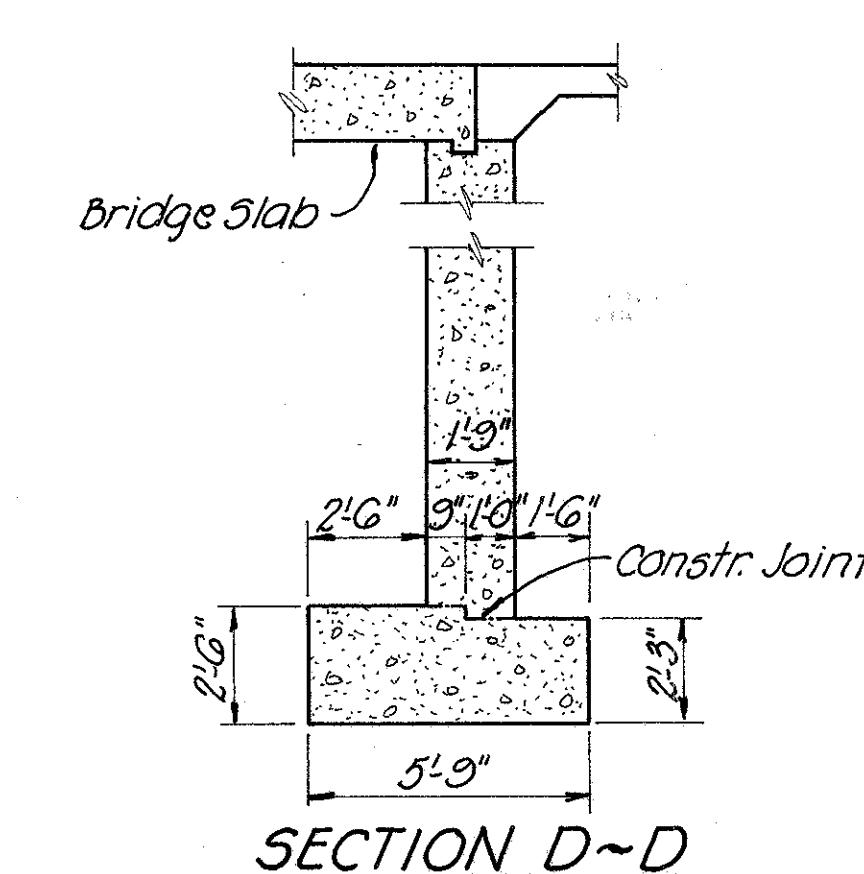
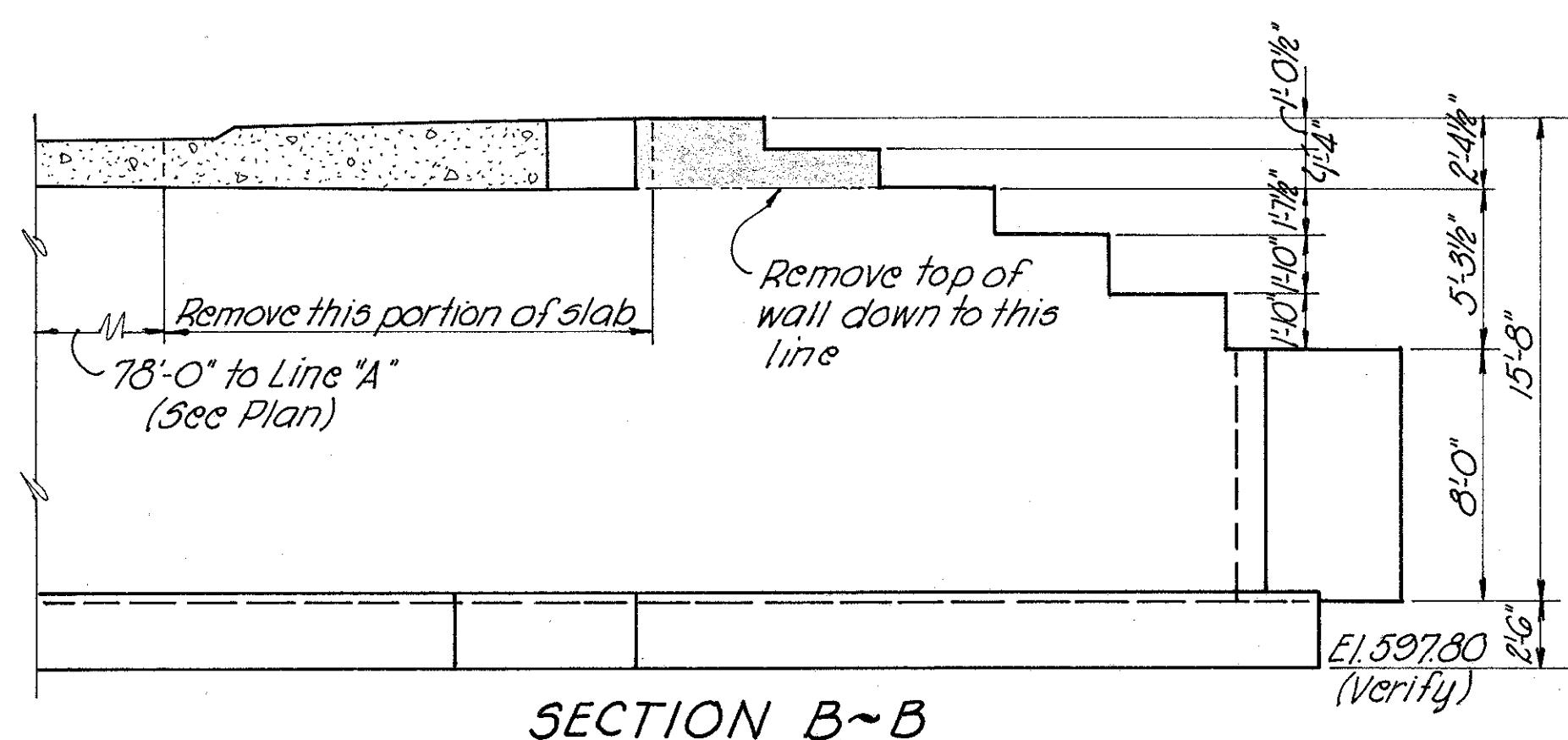
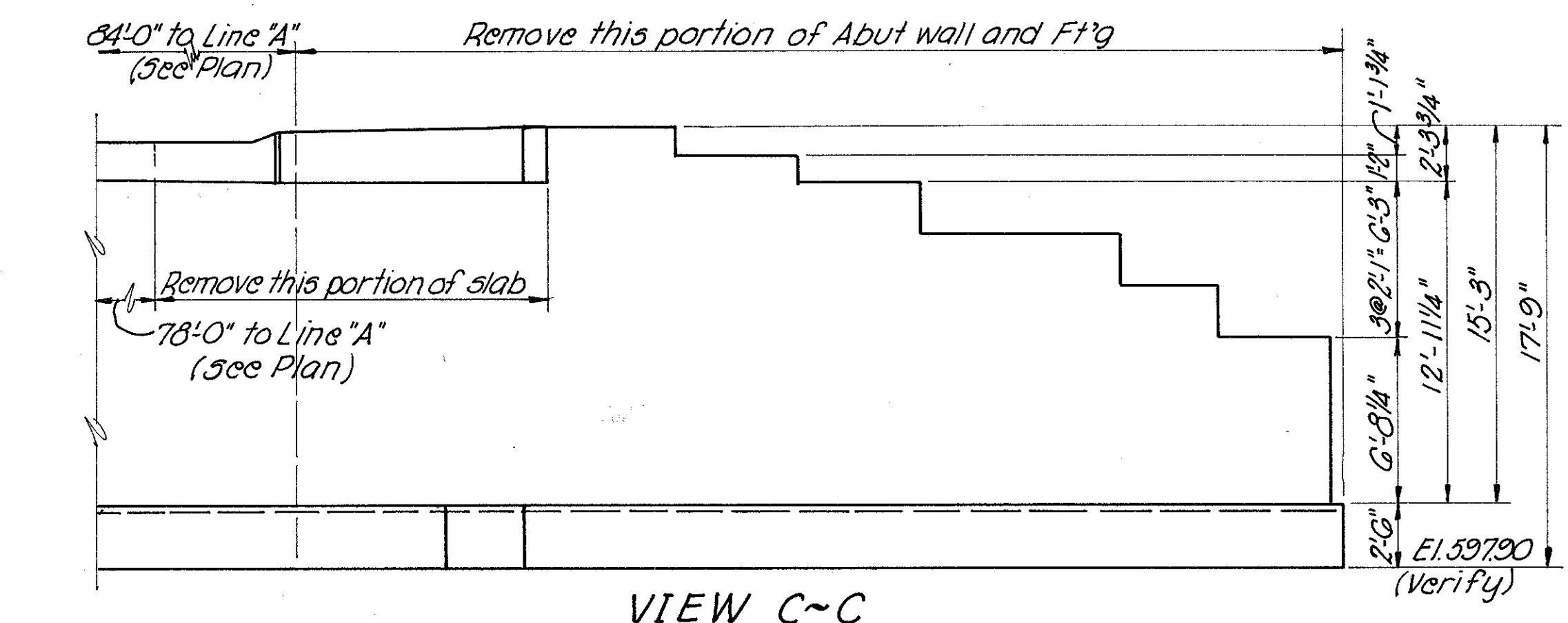
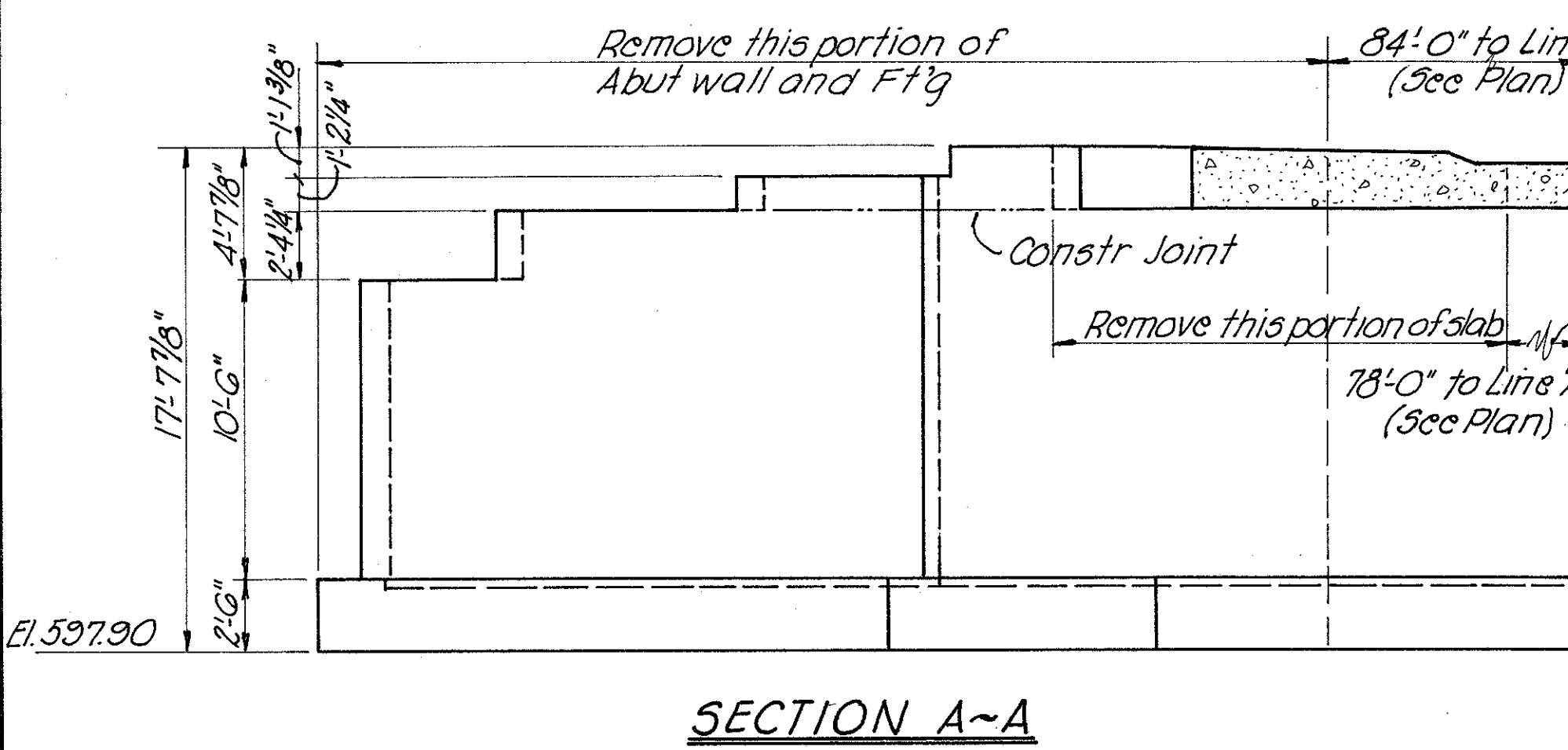
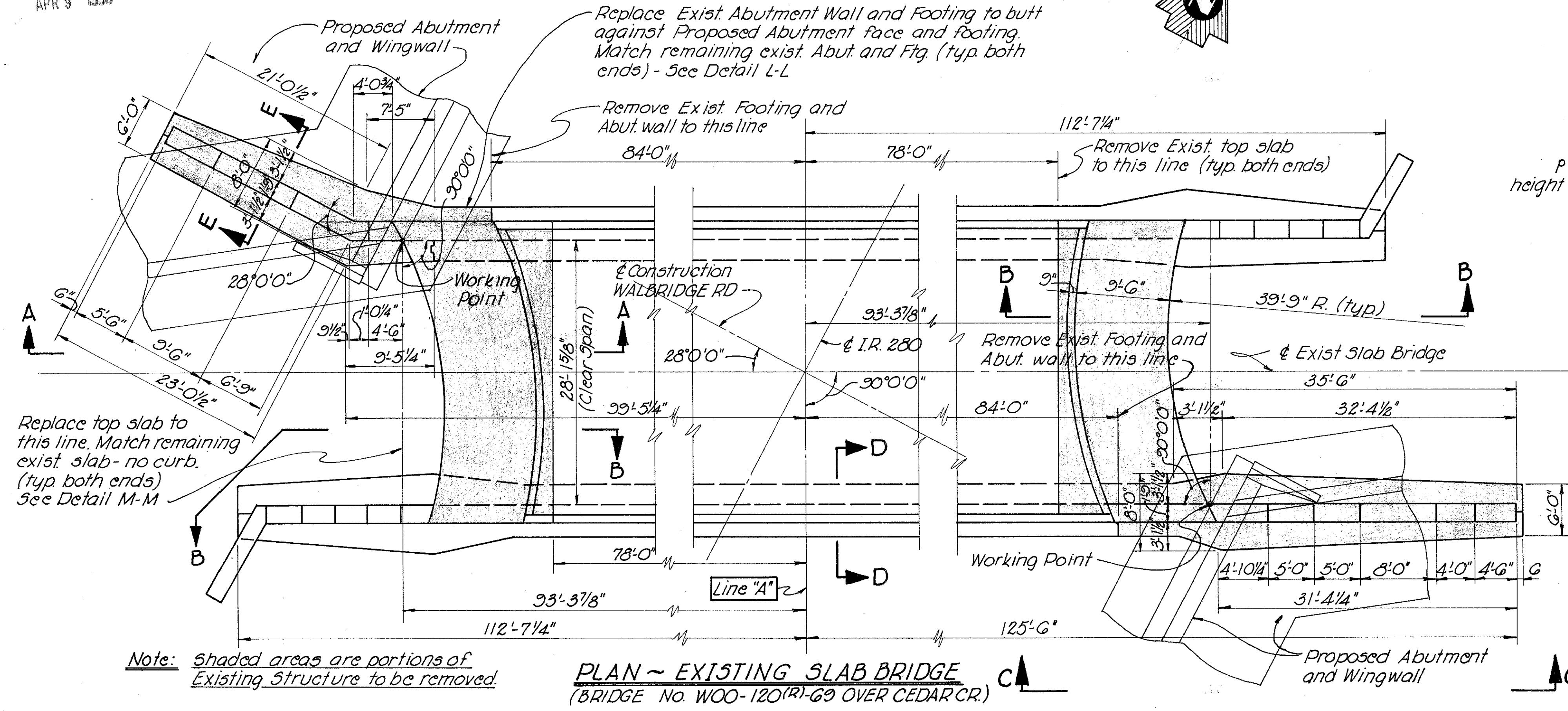
BRIDGE NO. WOO-280-0453

I.R. 280 UNDER WALBRIDGE ROAD

WOOD COUNTY STA. 19+07.75-20+92.25

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.R.C.S.	J.R.C.S.	G.D.S.	E.W.K.	K.R.R.	8-9-72	6-24-83

MICROFILMED
APR 9 1990



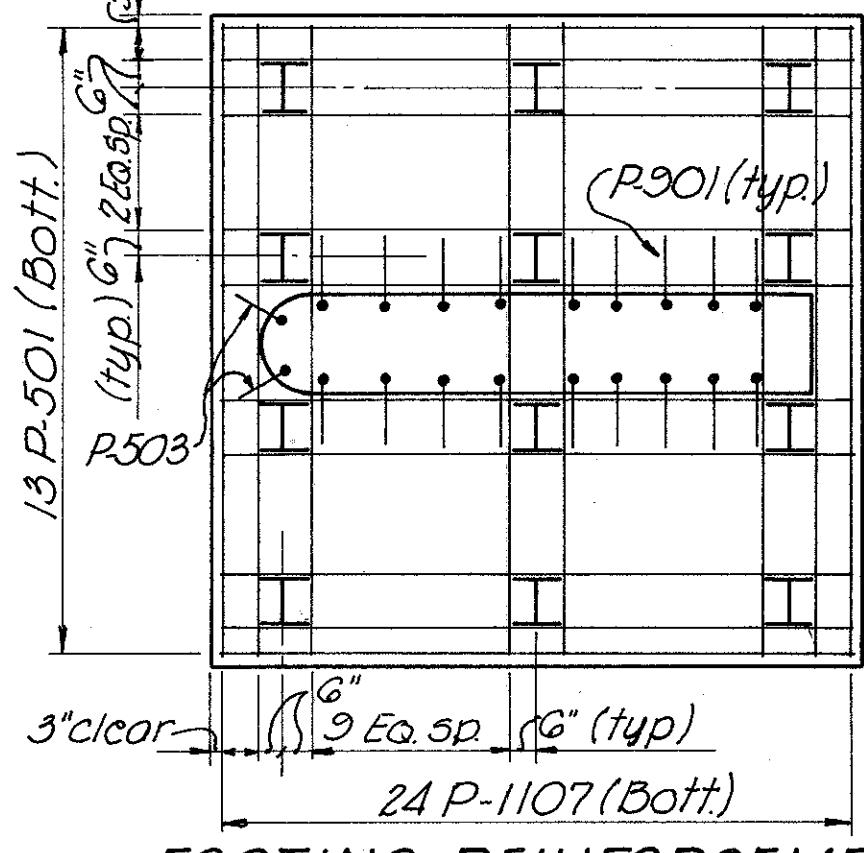
Note: Guard Rail Post where required on top of slab bridge (see Site Plan) shall be mounted similar to that shown for Inlet-mounted post, Std. Dwg. GR-1

Note: Verify all dimensions shown for existing structure, prior to commencement of construction

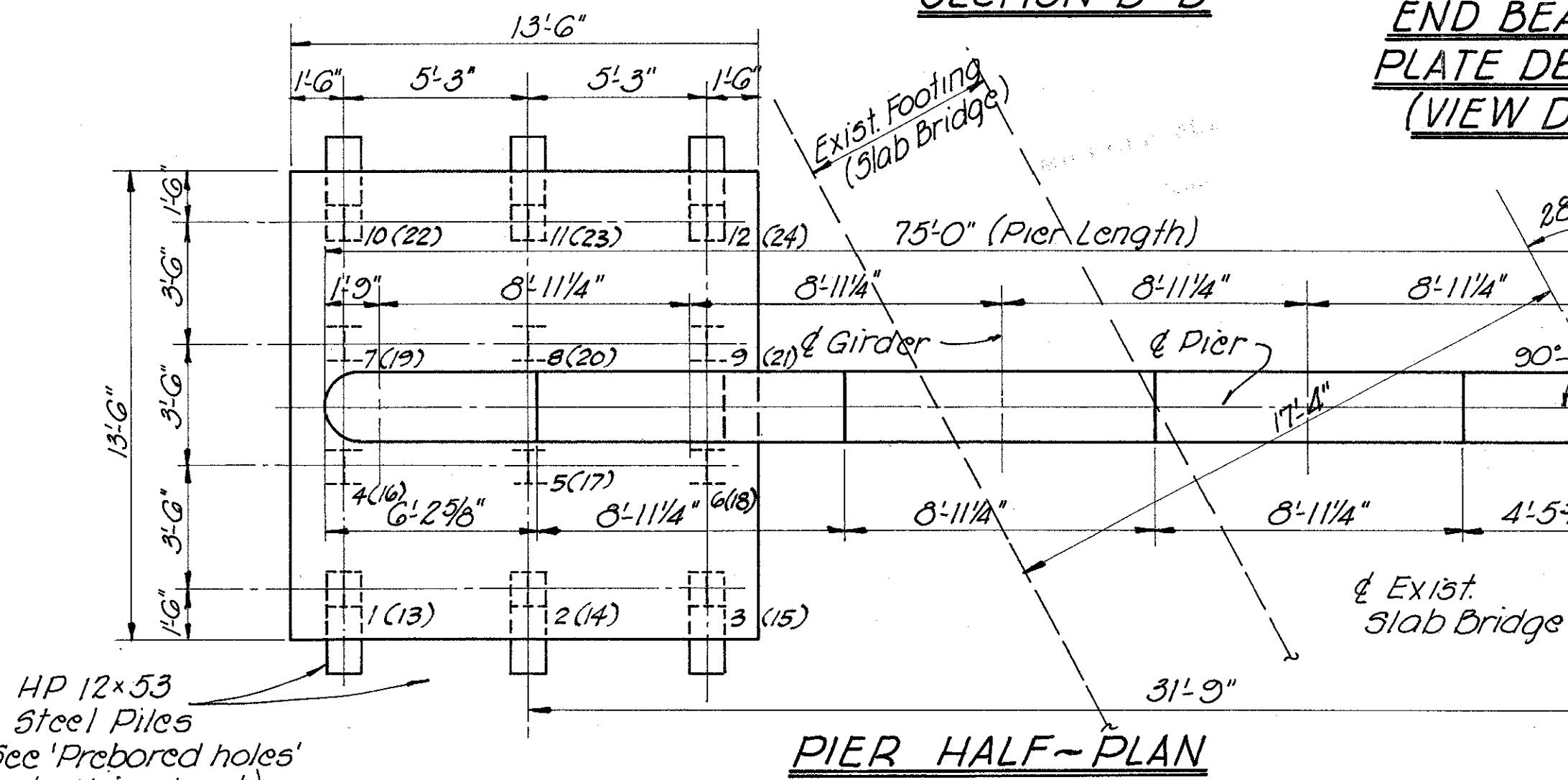
CHARLES L. BARBER & ASSOCIATES INC. ENGINEERS • ARCHITECTS TOLEDO, OHIO					
EXISTING SLAB BRIDGE DETAILS					
BRIDGE NO.		WOO-280-0453		UNDER WALBRIDGE ROAD	
I.R. 280		STA. 19+07.75-20+92.25		WOOD COUNTY	
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE REVISED
JRC5	JRC5	GDS	EWK	K.R.R.	8-12-72

APR 9 19

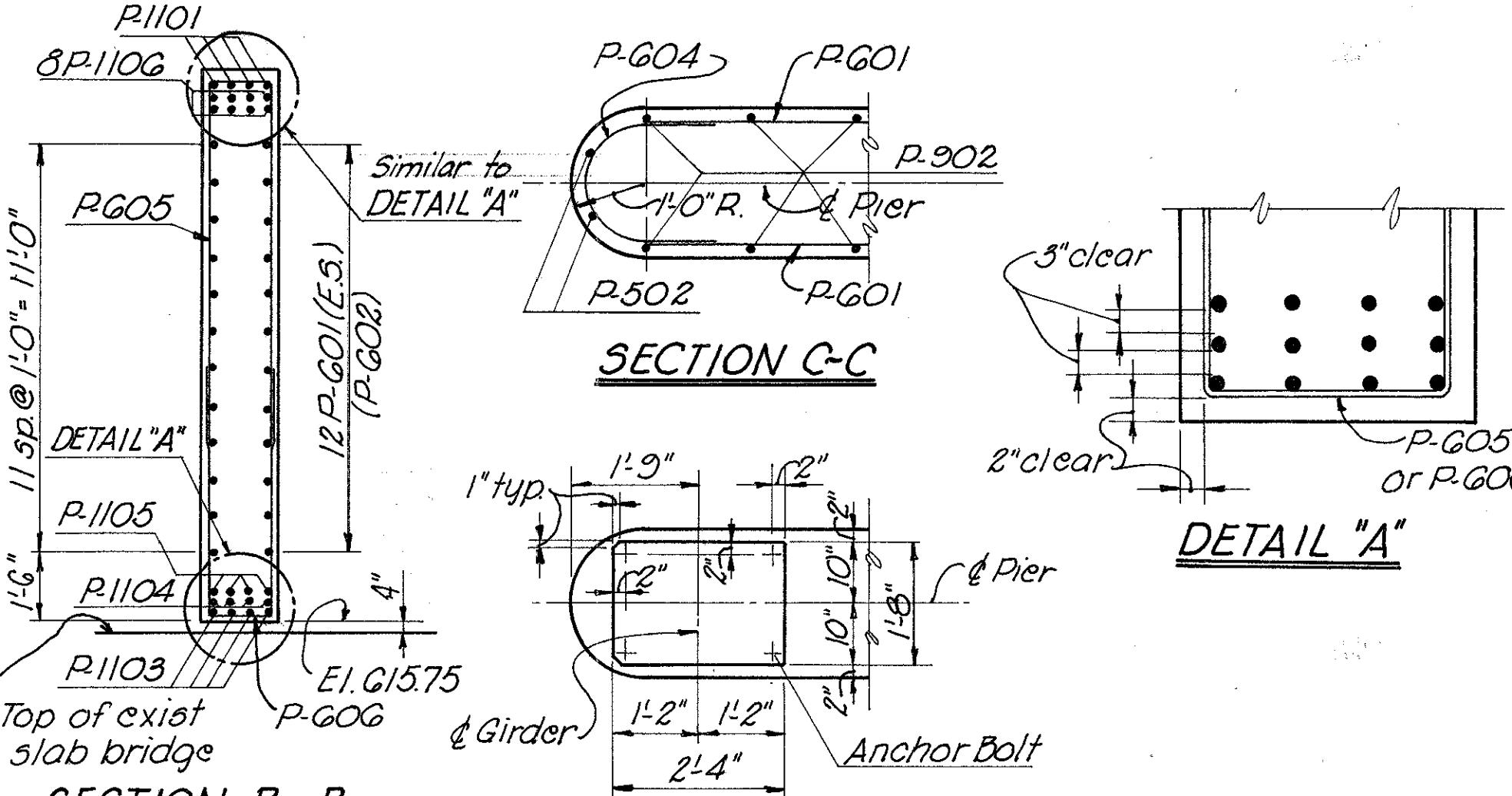
APR 9 19



FOOTING REINFORCEMENT (PLAN)

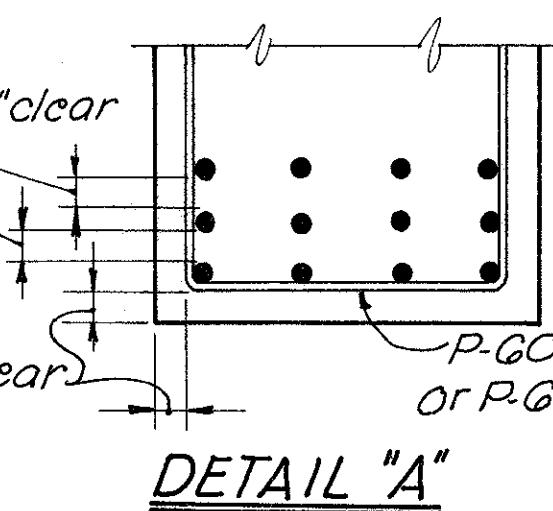


IFB HALF-PLATE



END BEARING
PLATE DETAIL
(VIEW D~D)

Numbers designate pile numbers
1 thru 12 - North Fig.
13 thru 24 - South Fig.



STRUCTURAL

NOTES

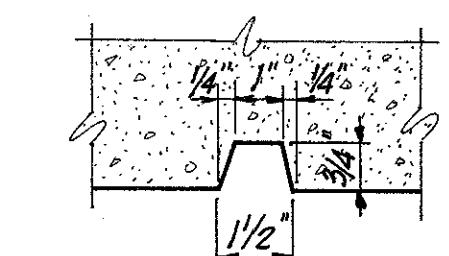
1. Intermediate Web Stiffeners
Use single stiffeners on alternate sides of interior girders, on the interior side of fascia girder and as required for cross-frame attachment.
 5. Where a shape or plate is designated (CVN), the material shall meet specified minimum notch toughness requirements as specified in 711.01 of CMS.
 6. Welded Attachment of supports for concrete deck finishing

15. *Leucosia* *lutea* *lutea* (L.) *lutea*

3. Shop Web Splices may be located as required per available plate length and should be controlled in the same manner as the Shop Flange Splices. If additional shop splices are necessary, their location and detail shall be submitted to the Director for approval prior to ordering the material.

4. High Strength Bolts shall be 1" dia, A325 unless otherwise noted. The web bolts of field splices for outside girders shall be placed with heads on the outside face. The flange bolts for bottom flanges of field splices of all girders shall be placed with heads on the bottom face. Threads should be excluded from shearing planes.

Scuppers shall be in accordance with Deck Drainage Details.



VERTICAL RUSTICATION GROOVE

Provide temporary shoring as required, for the deck slab of the existing slab bridge prior to pouring the pier concrete

Provide prebored holes for all pier piles.
Holes shall extend a minimum of 5'-0" below
the elev. of the bottom of the existing slab
bridge footing.

BRIDGE SEAT REINFORCING: Reinforcing Steel in the vicinity of the bridge seat shall be accurately placed and to avoid interference with the drilling of anchor bolt holes.

Vertical Rustication groove on pier wall (both faces) shall be for the full height of the wall.

BEARING ANCHORS: At the option of the Contractor, bearing anchors (or formed holes), located and supported by templates, may be cast in place

$1\frac{1}{4}$ " ϕ conduit for structure grounding shall be embedded at each end of the Pier. See Std. Dwg. "Structure Grounding" for details. Included with lighting for payment

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

WOO-280-0.00
WOOD COUNTY

312
364

f supports for concrete deck finishing
to areas of the fascia stringer flanges
on". Attachments shall not be made
"Tension". Fillet welds to compression
closer than 1" from edge of flange,
long, and be not smaller than the
ired by AASHTO.

In accordance with Deck Drainage

**CHARLES L. BARBER & ASSOCIATES INC.
ENGINEERS • ARCHITECTS
TOLEDO, OHIO**

PIER DETAILS

BRIDGE NO. WOO-280-0453
R. 280 UNDER WALBRIDGE ROAD
WOOD COUNTY STA. 19+07.75 - 20+92.25
SIGNED DRAWN TRACED CHECKED REVIEWED DATE REVISED
J.R.C.S. J.R.C.S. G.D.S. E.W.K. K.R.R. 8-10-72 6-24-85

APR 9 1990

REINFORCEMENT SCHEDULE

MARK	NUMBER	LENGTH	SHAPE	SER.	WEIGHT	
	REAR FWD. TOTAL			INCR.	LBS.	
SUPERSTRUCTURE:						
E5-401		686	30'-0	STR.	13,747	
E5-402		99	8'-6	STR.	562	
E5-403		92	7'-3	STR.	446	
E5-501		16	15'-5	STR.	257	
E5-502		64	14'-8	STR.	979	
E5-503		32	7'-2	STR.	239	
E5-504		244	5'-7	BENT	1,421	
E5-505		244	3'-1	BENT	785	
E5-506		244	2'-0	BENT	509	
E5-507		244	2'-3	BENT	573	
L-505		4	2'-10	BENT	12	
L-506		4	8'-5	BENT	34	
L-507		6	7'-3	BENT	45	
L-508		4	3'-5"	STR.	14	
S-601		420	30'-0	STR.	18,925	
S-602		70	12'-6	STR.	1,314	
S-701		512	29'-6	STR.	30,873	
S-702		256	20'-2	STR.	10,552	
E5-703		512	25'-1	STR.	26,250	
E5-704		256	29'-0	STR.	15,175	
ITEM 824 SUPERSTRUCTURE TOTAL						
ITEM 509 SUPERSTRUCTURE TOTAL:						
(E5 denotes epoxy coated)						
ABUTMENTS:						
A-401	3G	36	72	2'-3	STR.	108
A-402	45	45	90	1'-9	STR.	105
A-501	170	170	340	30'-0	STR.	10,639
A-502	39	39	78	11'-2	STR.	908
A-503	19	19	38	10'-4	STR.	410
A-504	10	10	20	17'-8	STR.	369
A-505	2	2	4	12'-0	STR.	50
A-506	4	4	8	7'-0	STR.	58
A-507	2	2	4	17'-3	STR.	72
A-508	1	1	2	13'-10	STR.	29
A-509	1	1	2	9'-8	STR.	20
A-510	7	7	14	11'-1	BENT	162
A-511	1ser.5	1ser.5	2ser.5	From 5'-2 to 7'-7	STR.	7 1/4"
A-512	NOT USED					
A-513	17	17	34	2'-10	STR.	100
A-514	57	57	114	7'-7	STR.	902
A-515	1ser.3	1ser.3	2ser.3	From 2'-0 to 4'-0	STR.	1'-0"
A-516	1ser.3	1ser.3	2ser.3	From 4'-8 to 7'-6	STR.	1'-5"
A-517	2	2	4	18'-11	BENT	79
A-518	1	1	2	15'-7	BENT	33
A-519	1	1	2	11'-5	BENT	24
A-520	4	4	8	12'-11	BENT	103
A-521	11	11	22	9'-7	BENT	220
A-522	17	17	34	9'-2	BENT	325
A-523	1ser.5	1ser.5	2ser.5	From 3'-10 to 4'-2	BENT	1"
A-524	2G	2G	52	6'-2	BENT	335
A-525	28	28	56	8'-1	BENT	472
A-526	10	10	20	11'-9	BENT	245
A-527	8	8	16	7'-8	BENT	128
A-528	8	8	16	2'-6	BENT	42
A-529	19	19	38	2'-0	BENT	79
A-530	2	2	4	10'-8	BENT	45
A-531	2	2	4	8'-4	STR.	35
A-532	8	8	16	14'-0	STR.	234
A-533	5	5	10	22'-0	STR.	229
A-534	6	6	12	15'-0	STR.	188
A-535	42	42	84	11'-6	STR.	1,008
A-536	12	12	24	10'-2	STR.	255
A-537	1ser.7	1ser.7	2ser.7	From 26'-3 to 29'-0	STR.	5 1/2"
A-538	2ser.6	2ser.6	4ser.6	From 9'-1 to 12'-0	BENT	7"
A-539	252	252	504	6'-3	BENT	3,285
A-540	25	25	50	13'-3	STR.	691
A-541	1	1	2	5'-8	STR.	12
A-542	1ser.3	1ser.3	2ser.3	From 5'-8 to 12'-2	STR.	3'-3"
A-543	2ser.8	2ser.8	4ser.8	From 5'-0 to 27'-9	STR.	3'-3"
A-544	2ser.4	2ser.4	4ser.4	From 8'-3 to 27'-9	STR.	6'-6"
A-545	23	23	46	3'-3	STR.	156
A-546	2	2	4	4'-8	STR.	19
A-547	1ser.3	1ser.3	2ser.3	From 2'-8 to 3'-7	STR.	5 1/2"
A-548	1ser.21	1ser.21	2ser.21	From 2'-2 to 14'-8	STR.	7 1/2"
A-549	1ser.10	1ser.10	2ser.10	From 15'-2 to 24'-6	STR.	7 1/2"
						662

MARK	NUMBER	LENGTH	SHAPE	SER.	WEIGHT	
	REAR FWD. TOTAL			INCR.	LBS.	
ABUTMENTS CONT:						
A-550	1ser.17	1ser.17	2ser.17	From 24'-11 to 29'-11	STR.	3 3/4"
A-551	1ser.17	1ser.17	2ser.17	From 2'-5 to 7'-5	STR.	3 3/4"
A-552	25	25	50	29'-4	STR.	1,530
A-553	20	20	40	21'-3	STR.	887
A-554	6	6	12	3'-1	BENT	39
A-555	11	11	22	6'-0	STR.	138
A-556	2ser.6	2ser.6	4ser.6	From 6'-0 to 11'-6	BENT	12"
A-557	2	2	4	8'-10	STR.	37
A-558	4	4	8	26'-3	STR.	219
A-559	2ser.5	2ser.5	4ser.5	From 5'-0 to 22'-0	STR.	4'-3"
A-560	2ser.6	2ser.6	4ser.6	From 5'-6 to 25'-6	STR.	4'-0"
A-561	2ser.1	2ser.1	4ser.1	From 6'-0 to 29'-0	STR.	4'-6"
A-562	2ser.6	2ser.6	4ser.6	From 7'-0 to 20'-6	STR.	4'-5"
A-563	2ser.6	2ser.6	4ser.6	From 6'-0 to 26'-10	STR.	4'-2"
A-564	2ser.9	2ser.9	4ser.9	From 4'-0 to 19'-0	STR.	3'-0"
A-565	2ser.4	2ser.4	4ser.4	From 2'-6 to 8'-0	STR.	1'-10"
A-566	1	1	2	17'-8	BENT	37
A-567	1	1	2	20'-2	BENT	42
A-568	3	3	6	21'-0	BENT	131
A-569	1ser.23	1ser.23	2ser.23	From 7'-11 to 18'-0	BENT	5 1/2"
A-570	1ser.20	1ser.20	2ser.20	From 8'-0 to 20'-0	BENT	6"
A-571	1ser.30	1ser.30	2ser.30	From 7'-8 to 21'-6	BENT	5 3/4"
A-572	1ser.31	1ser.31	2ser.31	From 7'-10 to 21'-7	BENT	5 1/2"
A-573	1ser.18	1ser.18	2ser.18	From 10'-10 to 19'-0	BENT	5 3/4"
A-574	1ser.7	1ser.7	2ser.7	From 19'-10 to 22'-8	BENT	5 3/4"
A-575	1ser.10	1ser.10	2ser.10	From 11'-2 to 17'-2	BENT	8"
A-576	1ser.5	1ser.5	2ser.5	From 11'-10 to 16'-2	BENT	1'-1"
A-577	4	4	8	9'-2	BENT	77
A-578	2	2	4	7'-8	BENT	32
A-579	7	7	14	9'-0	STR.	131
A-580	7	7	14	8'-0	STR.	117
A-581	13	13	26	13'-11	STR.	377
A-582	6	6	12	31'-0	STR.	383
A-583	13	13	26	16'-4	BENT	540
A-584	6	6	12	21'-10	BENT	717
A-601	11	11	22	16'-4	BENT	540
A-602	15	15	30	15'-11	BENT	717
A-603	7	7	14	21'-10	BENT	459
A-604	69	69	138	8'-7	BENT	1,779
A-605	74	74				