

MICROFILMED 71

FOR: H.A. SPALDING, INC. CONSULTING ENGRS. 12-11-70
PLANS PREPARED BY: KROBOTH ENGRS. INC.

DATE DATE DATE

REVISED REVISED REVISED

DATE 11/69 DATE DATE

DESIGNED BY: DGM

CHECKED BY: DGM

TRACED BY: EAS

KENTUCKY DEPARTMENT OF HIGHWAYS

ADAIR COUNTY

BOWLING GREEN-SOMERSET PARKWAY

RELOC. OLD COLUMBIA ROAD NO. 1 OVER B.S.P.

REFERENCE & ESTIMATE OF QUANTITIES

Item Location	Sheet No.	Concrete Class "A" (Cu. Yds.)	Concrete Class "AA" (Cu. Yds.)	Steel Reinforce- ment (Lbs.)	Structural Steel (Lump Sum)	High Strength Handrail (Lin. Ft.)	Protective Coating			Structure Excavation		Piling 12 BP 53		Slope Prot. 12" Deep Crush. Agg. (Sq. Yds.)
							Styrene- Butadiene (Gal.)	Linseed Oil (Sq. Yds.)	End Bent Backfill (Cu. Yds.)	Common (Cu. Yds.)	Solid Rock (Cu. Yds.)	Furnish (Lin. Ft.)	Drive (Lin. Ft.)	
Title & Quantities	1													
Notes	2													
Layout	3													
Pile Record	5													
End Bent 1	4,5	31.3	12.7	3,813			1	5	30	95		161	161	180
Pier 1	6	27.0		6,067			2			5	25			
Pier 2	7	25.7		5,855			2			10	20			
Pier 3	6	29.3		6,430			2			55	10			
End Bent 2	4,5	31.3	12.7	3,813			1	5	30	95		234	234	180
Spans 1,2,3 & 4	8,9,10		373.8	120,826			10	640						
High Strength Handrail	3					482								
Construction Elevations	11													
Soundings	12													
Sub-total Substructure		144.6	25.4	25,978			8	10	60	260	55	395	395	360
Sub-total Superstructure			373.8	120,826	①	482	10	640						
Total		144.6	399.2	146,804	①	482	18	650	60	260	55	395	395	360

① Approximate Weight of Structural Steel = 14,185 Lbs.

SPECIAL PROVISIONS

- No. 8A for Linseed Oil Protective Coating
- No. 12 for Joint Sealing Compound
- No. 30B for Membrane Curing of Concrete Structures
- No. 35B for Class "AA" Concrete
- No. 77B for Styrene-Butadiene Protective Coating
- No. 79 for Concrete Bridge Deck Finishing Machine
- No. 80A for Blast Cleaning and Painting Structural Steel

REFERENCES

(Standard Drawings listed below are the Current Edition and are to be used with these plans.)

- AE1-D 6354 C P212A-A SS2B
- ED3C H116 C 1740A SF2B

BILL OF INCIDENTAL MATERIAL

Item	No.	Description	Location
Four Bolt Insert Assembly	4	See Note Sheet 3 & 5	End Bent Wings
Joint Sealing Compound	2	1" x 3 1/2" x 29'0"	Expansion Dams @ End Bents
Prem. Cork Expan. Jt. Material	4	1/4" x 6" x 1'-6"	Sides of keys @ End Bents
" " " " " "	2	1/4" x 1'-6" x 4'-0"	Top of keys @ End Bents

Sheet 1 of 12
Reloc. Old Columbia Road No. 1 over B.S.P.

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
ADAIR

BOWLING GREEN-SOMERSET PKWY.
ROAD BSP 4-1

STATION 4270+37.00 P. E. PROJECT NO. SP1-860-11

CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO.

18159

LETTING DATE

GENERAL NOTES

SPECIFICATIONS: THE KENTUCKY DEPARTMENT OF HIGHWAYS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION WITH REVISIONS, SHALL APPLY TO THIS PROJECT.

DESIGN LOAD: THIS BRIDGE IS DESIGNED FOR H 20-44 LIVE LOAD AS SPECIFIED IN 1969 AASHO SPECIFICATIONS, INCLUDING INTERIM SPECIFICATIONS. THIS BRIDGE IS DESIGNED FOR A WIND LOAD BASED ON A WIND VELOCITY OF 84 m.p.h.

DESIGN STRESSES: FOR REINFORCED CONCRETE USE THE FOLLOWING:

CLASS "A"	CLASS "AA"
fs - 20,000 PSI	fs - 20,000 PSI
fc - 1,200 PSI	fc - 1,600 PSI FOR OTHER THAN SLABS
f'c - 3,000 PSI	fc - 1,200 PSI FOR DECK SLABS
u (for embed.) - 200 PSI	f'c - 4,000 PSI
u (for ϵ_o) - 300 PSI	u (for embed.) - 200 PSI
n - 10	u (for ϵ_o) - 300 PSI
	n - 8

FOUNDATION PRESSURE: PIER FOOTINGS ARE DESIGNED FOR A MAXIMUM PRESSURE OF 11,565 PSF. END BENT PILES ARE DESIGNED FOR A MAXIMUM AXIAL LOAD OF 28.0 TONS PER PILE AND A MAXIMUM HORIZONTAL SHEAR OF 0.0 TONS PER PILE. THESE MAXIMUMS ARE FOR GROUP 1 LOADS WITH INCREASES ALLOWED FOR OTHER LOADING GROUPS.

CONCRETE: CLASS "AA" CONCRETE IS TO BE USED THROUGHOUT THE SUPERSTRUCTURE, AND IS TO BE USED IN PORTIONS OF THE SUBSTRUCTURE ABOVE BEARING SEATS. CLASS "A" CONCRETE IS TO BE USED IN THE SUBSTRUCTURE BELOW THE BEARING SEATS.

REINFORCEMENT: DIMENSIONS SHOWN FROM THE FACE OF CONCRETE TO BARS ARE CLEAR DISTANCES UNLESS OTHERWISE SHOWN. SPACING OF BARS IS FROM CENTER TO CENTER OF BARS.

BEVELED EDGES: ALL EXPOSED EDGES SHALL BE BEVELED 7/8" UNLESS OTHERWISE SHOWN.

BILL OF INCIDENTAL MATERIAL: THE QUANTITIES SHOWN IN THE BILL OF INCIDENTAL MATERIAL ARE APPROXIMATE ONLY AND THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING ENOUGH MATERIAL TO COMPLETE THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE COST OF THESE ITEMS IS TO BE INCLUDED IN THE UNIT PRICE BID FOR CLASS "AA" CONCRETE.

PAYMENT OF STRUCTURAL STEEL: THE LUMP SUM BID FOR STRUCTURAL STEEL SHALL BE FULL PAYMENT FOR ALL STRUCTURAL STEEL, BOLTS, WASHERS, STEEL PINS, LEAD PLATES, MOLTEN LEAD, WELDING AND WELDING MATERIALS, PAINT AND ALL LABOR AND MATERIALS NECESSARY TO ERECT THE STEEL IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE APPROXIMATE WEIGHT OF STRUCTURAL STEEL SHOWN IN THE ESTIMATE OF QUANTITIES DOES NOT INCLUDE OVERRUN OR WELD MATERIAL.

PILING: THE CONTRACTOR SHALL USE A STANDARD 12" STRUCTURAL STEEL BEARING PILE @ 53 LBS. SEE STANDARD DRAWING P212A, CURRENT EDITION. PILING SHALL BE DRIVEN TO REFUSAL OR TO SOLID ROCK. TEST PILES SHALL BE DRIVEN WHERE DESIGNATED ON THE PLANS TO DETERMINE THE LENGTH OF PILE REQUIRED. THE TEST PILES SHALL BE ACCURATELY LOCATED SO THAT THEY MAY BE USED IN THE FINISHED STRUCTURE.

PAINT: ALL STRUCTURAL STEEL SHALL BE CLEANED AND PAINTED IN ACCORDANCE WITH THE SPECIAL PROVISION FOR BLAST CLEANING AND PAINTING STRUCTURAL STEEL, CURRENT EDITION.

HIGH STRENGTH HANDRAIL: THE CONTRACTOR SHALL USE A HIGH STRENGTH ALUMINUM HANDRAIL ACCORDING TO STANDARD DRAWING H116, CURRENT EDITION.

CONSTRUCTION IDENTIFICATION: THE NAMES OF THE PRIME CONTRACTOR AND THE SUB-CONTRACTOR SHALL BE IMPRINTED IN THE CONCRETE WITH ONE INCH LETTERS AT A LOCATION DESIGNATED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ALL PLANS, EQUIPMENT AND LABOR NECESSARY TO DO THE WORK FOR WHICH NO DIRECT PAYMENT WILL BE MADE.

MATERIALS: AWS & ASTM SPECIFICATIONS, CURRENT EDITION, AS DESIGNATED BELOW, SHALL GOVERN THE MATERIALS FURNISHED:

ASTM A36-69 STRUCTURAL STEEL FOR ARMORED EDGES, EXPANSION DAMS, SHOES AND ROCKERS.
 ASTM A108-69 PINTLES (GRADES 1016 TO 1030 INCLUSIVE)
 AWS A5.1-69 MILD STEEL ELECTRODES FOR MANUAL SHIELDED METAL ARCH WELDING
 ASTM B 29-55 LEAD PLATES AND MOLTEN LEAD.
 (1966)

POURING SEQUENCE: POUR THE GIRDER STEM IN ONE CONTINUOUS OPERATION IN HORIZONTAL LAYERS FOR EACH GIRDER. POUR ENDWALLS AND DIAPHRAGMS WITH GIRDER STEM BY PROVIDING VERTICAL CONSTRUCTION JOINTS MIDWAY BETWEEN GIRDERS. POUR SLAB IN ONE CONTINUOUS POUR. THE POURING SEQUENCE OF THE SLAB MAY BE CHANGED WITH THE WRITTEN APPROVAL OF THE ENGINEER.

ANCHOR BOLT HOLES: HOLES OF DEPTH AND DIMENSIONS SHOWN SHALL BE DRILLED FOR ANCHOR BOLTS OR DOWELS BY THE SUPERSTRUCTURE CONTRACTOR, WHO SHALL BE RESPONSIBLE FOR KEEPING HOLES DRY IN FREEZING WEATHER. AFTER BASE PLATES ARE PROPERLY SET AND ANCHOR BOLTS ARE PLACED IN DRILLED HOLES, MOLTEN LEAD SHALL BE POURED IN HOLES AND PACKED UNTIL HOLES ARE COMPLETELY FILLED FLUSH TO TOP OF BASE PLATES. THE COST OF DRILLING ANCHOR BOLT HOLES, FURNISHING LEAD, AND FILLING HOLES WITH MOLTEN LEAD SHALL BE INCIDENTAL TO AND INCLUDED IN THE LUMP SUM BID FOR STRUCTURAL STEEL.

MEMBRANE CURING COMPOUND: WHITE PIGMENTED CURING COMPOUND SHALL BE APPLIED TO THE BRIDGE DECK IN ACCORDANCE WITH THE SPECIAL PROVISION, EXCEPT THAT THE MEMBRANE COMPOUND USED SHALL HAVE A RESINOUS BASE.

LINSEED OIL PROTECTIVE COATING: LINSEED OIL PROTECTIVE COATING SHALL BE APPLIED IN ACCORDANCE WITH THE SPECIAL PROVISION, EXCEPT THAT IT SHALL ONLY BE APPLIED TO THE BRIDGE DECK BETWEEN THE GUTTER LINES AND SHALL NOT BE APPLIED UNTIL AFTER THE STYRENE-BUTADIENE PROTECTIVE COATING HAS BEEN APPLIED TO THE CURBS AND PLINTHS.

STYRENE-BUTADIENE PROTECTIVE COATING: STYRENE-BUTADIENE PROTECTIVE COATING SHALL BE APPLIED TO THE TOP SURFACES AND INSIDE FACES OF CURBS, THE TOP AND INSIDE VERTICAL SURFACES OF PLINTHS, THE TOP AND INSIDE EXPOSED SURFACES OF END BENT SIDE WALLS, THE TOP, SIDES AND ENDS OF PIER CAPS, AND THE SEAT OF END BENTS.

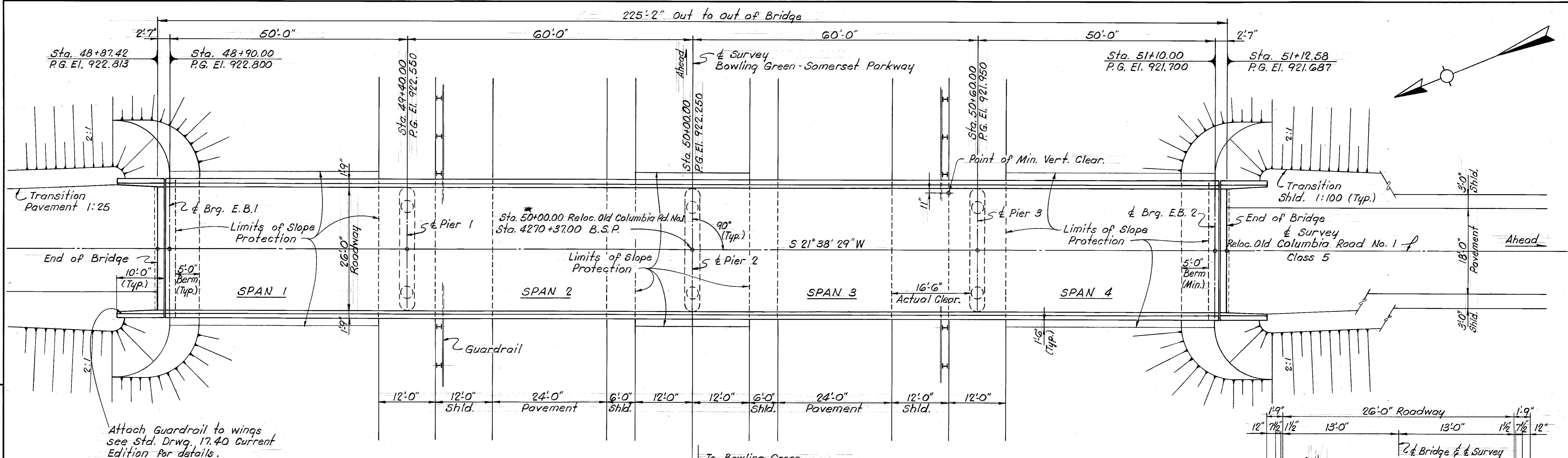
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Reloc. Old Columbia Rd. No.1 over B.S.P. Sheet 2

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
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 COUNTY OF
 ADAIR
 BOWLING GREEN-SOMERSET PKWY.
 ROAD
 P. E. PROJECT NO.
 STATION 4270+37.00
 CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO.
 18159

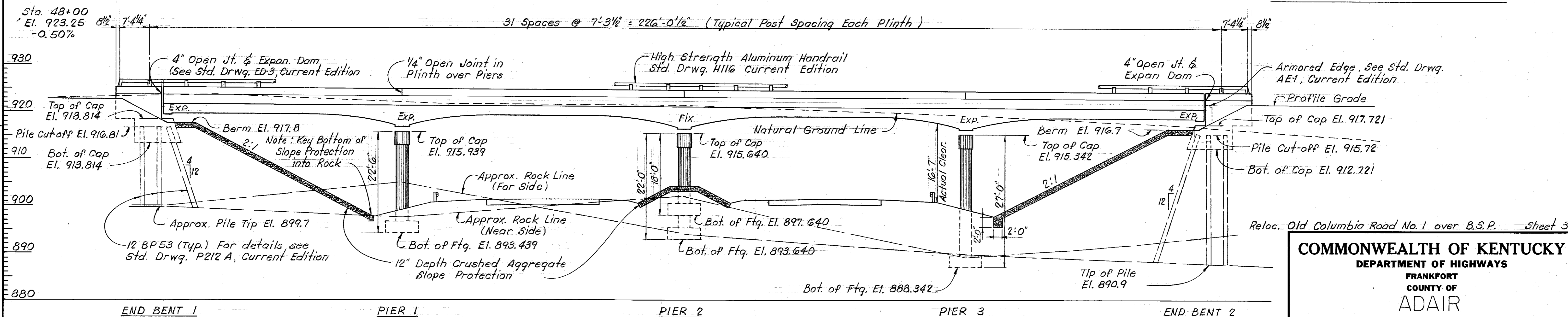
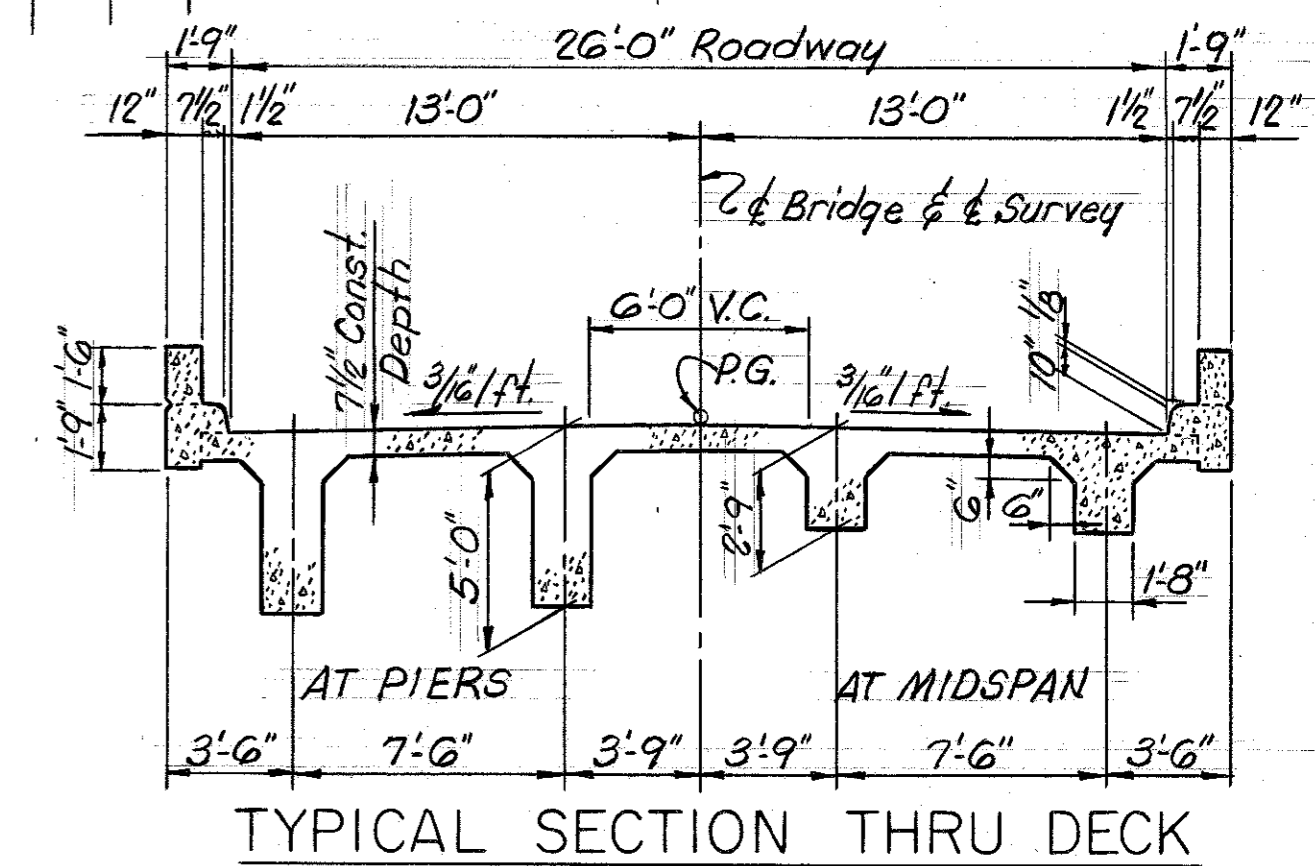
NOTES

LETTING DATE



PLAN

50'-60'-60'-50' Continuous R.C.D.G. H20-44 Loading
 26' Roadway 9" Curbs 0° Skew
 37'-6" Shoulders at Bridge 2:1 Slopes



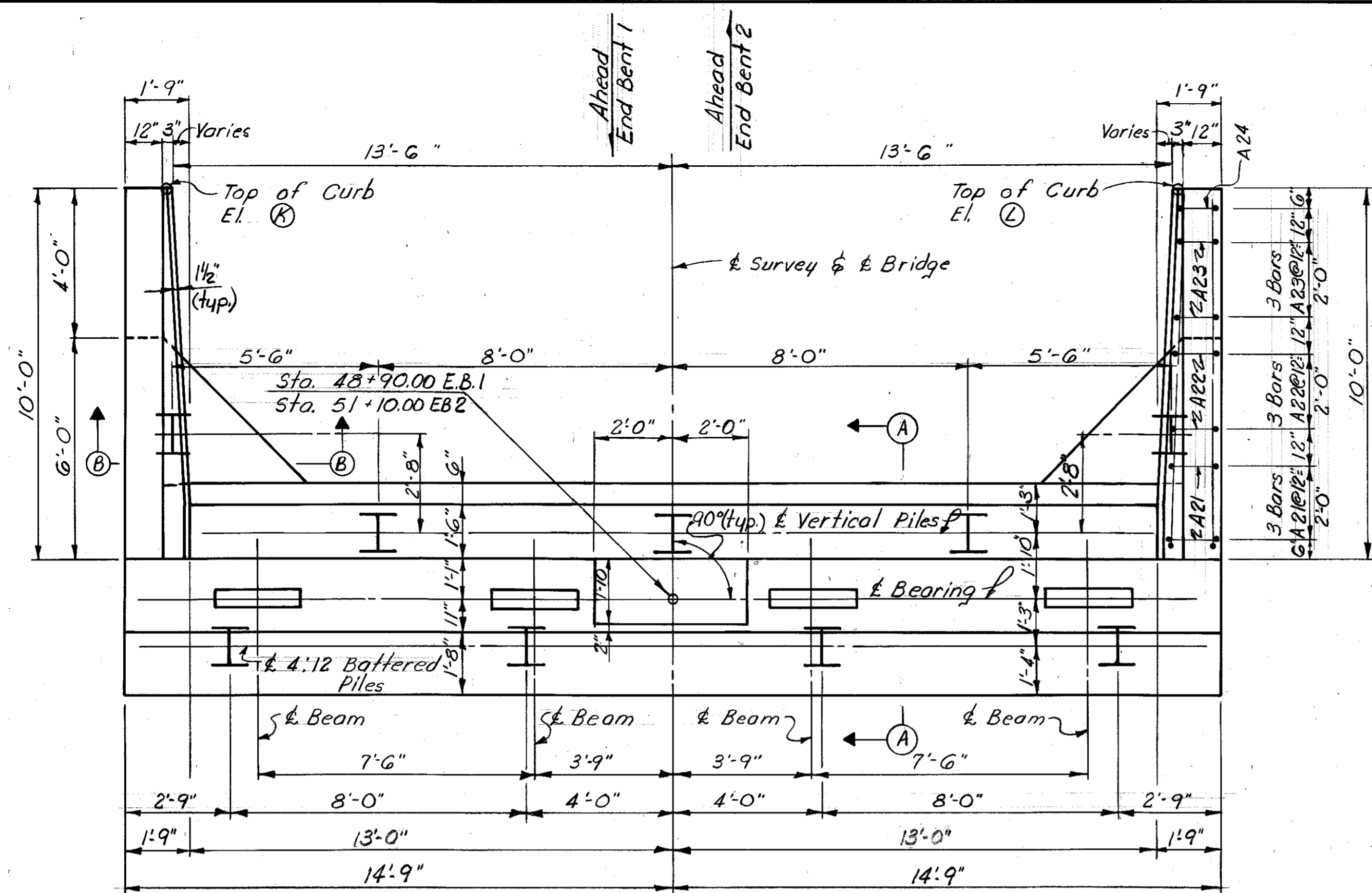
ELEVATION

LAYOUT

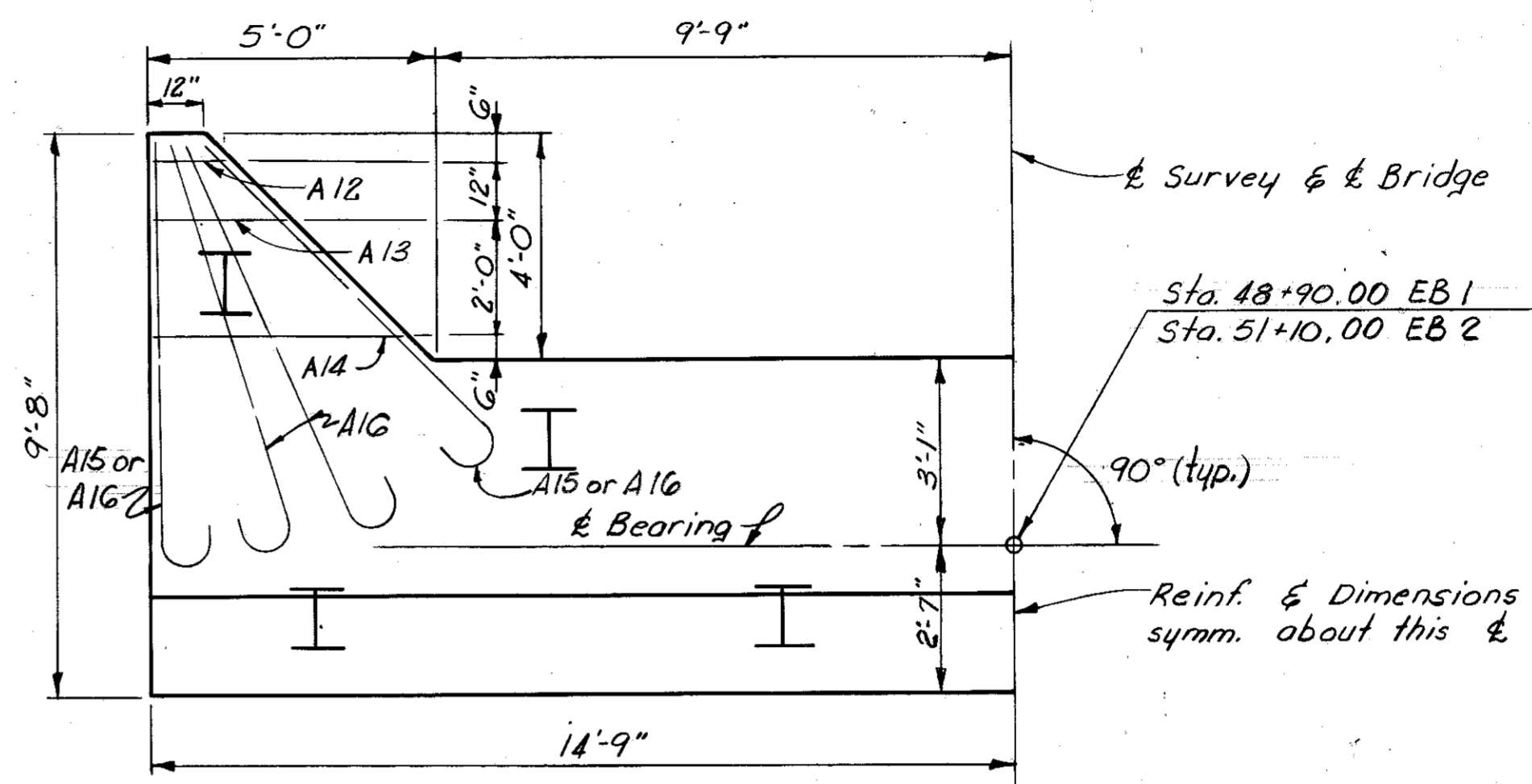
DESIGNED BY: WTB
 CHECKED BY: DGM
 DATE: 1/69
 REVISIONS:
 DATE: 1/69
 DATE: 1/69

COMMONWEALTH OF KENTUCKY
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LETTING DATE

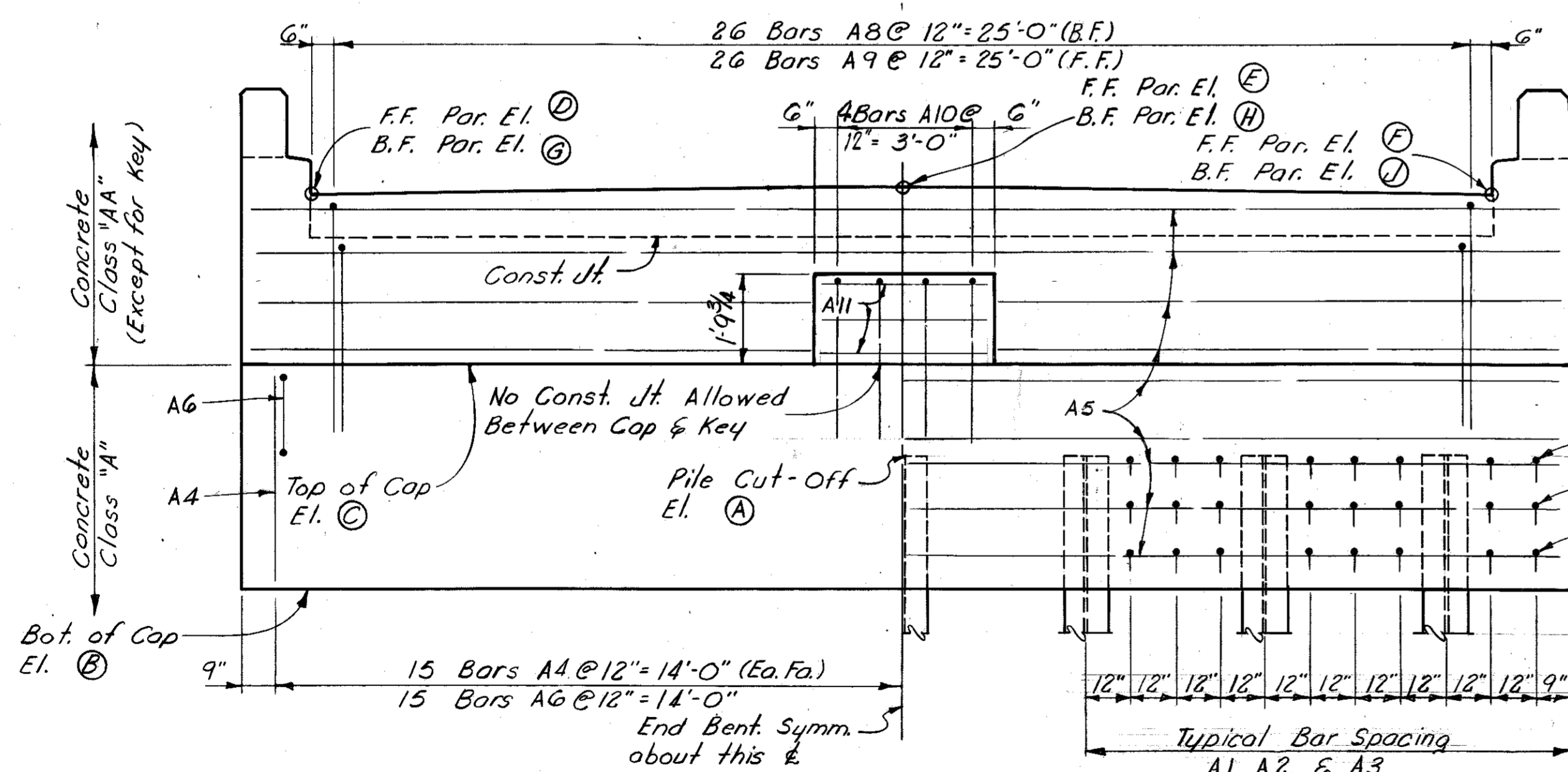


PLAN OF CAP

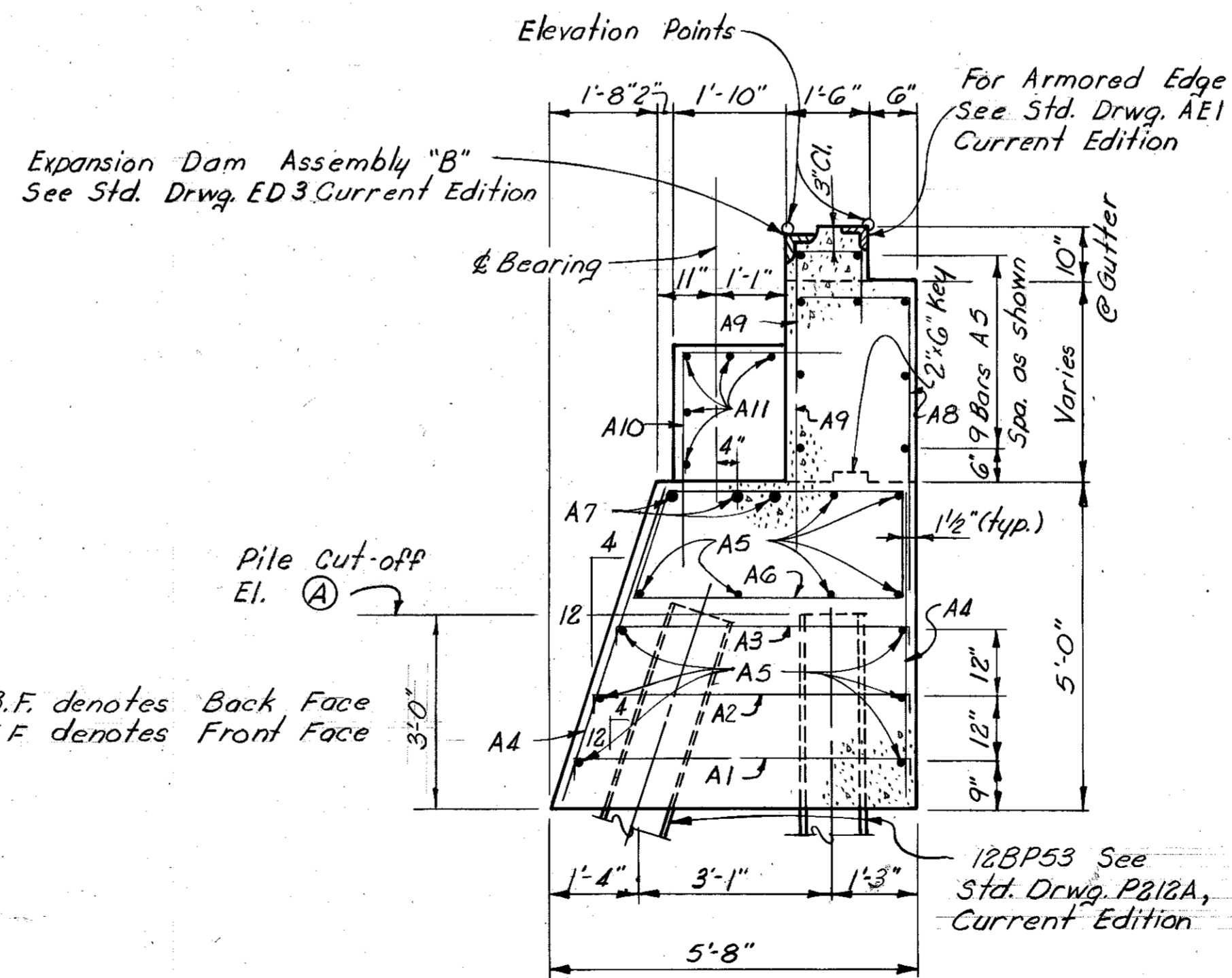


WING CAP PLAN

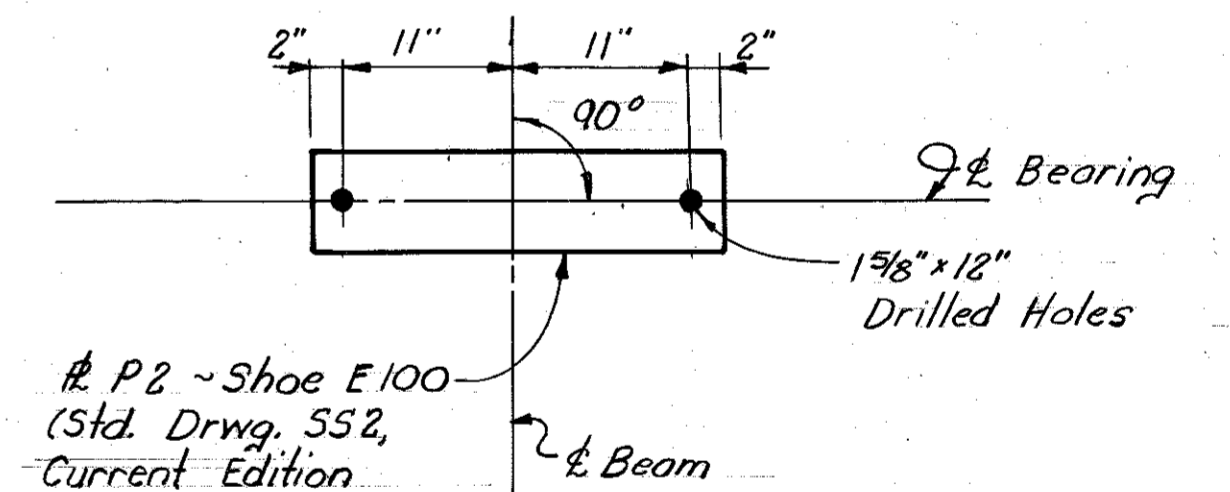
Note:
Top of cap bars are to be accurately located in accordance with the plan so they will not interfere with the drilling of Anchor Bolt Holes.



ELEVATION



SECTION A-A



ANCHOR BOLT LAYOUT

TABLE OF ELEVATIONS

LOCATION	A	B	C	D	E	F	G	H	J	K	L
END BENT 1	916.81	913.814	918.814	922.602	922.782	922.602	922.610	922.790	922.610	923.496	923.496
END BENT 2	915.72	912.721	917.721	921.492	921.671	921.492	921.484	921.664	921.484	922.286	922.286

END BENTS 1&2

DESIGNED BY: AF
 CHECKED BY: DGM
 DATE: 11/67
 REVISION: 11/69
 DATE: 11/69
 TRACED BY: JMP
 CHECKED BY: DGM
 DATE: 11/69

Reloc. Old Columbia Rd. No. 1 over B.S.P. Sheet 4

COMMONWEALTH OF KENTUCKY
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BOWLING GREEN-SOMERSET PKWY.
 ROAD

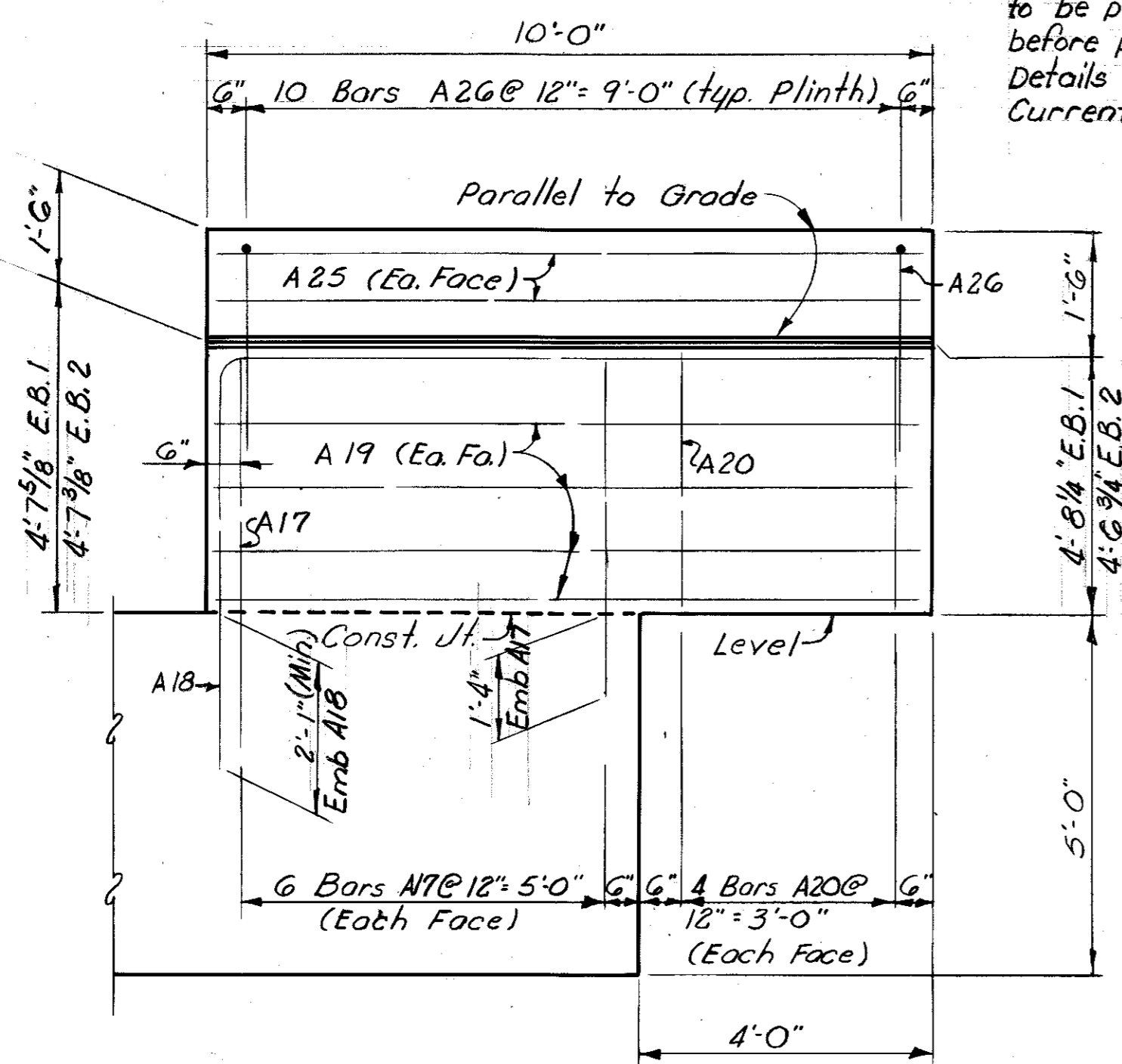
STATION 4270+37.00 P. E. PROJECT NO.

CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO.

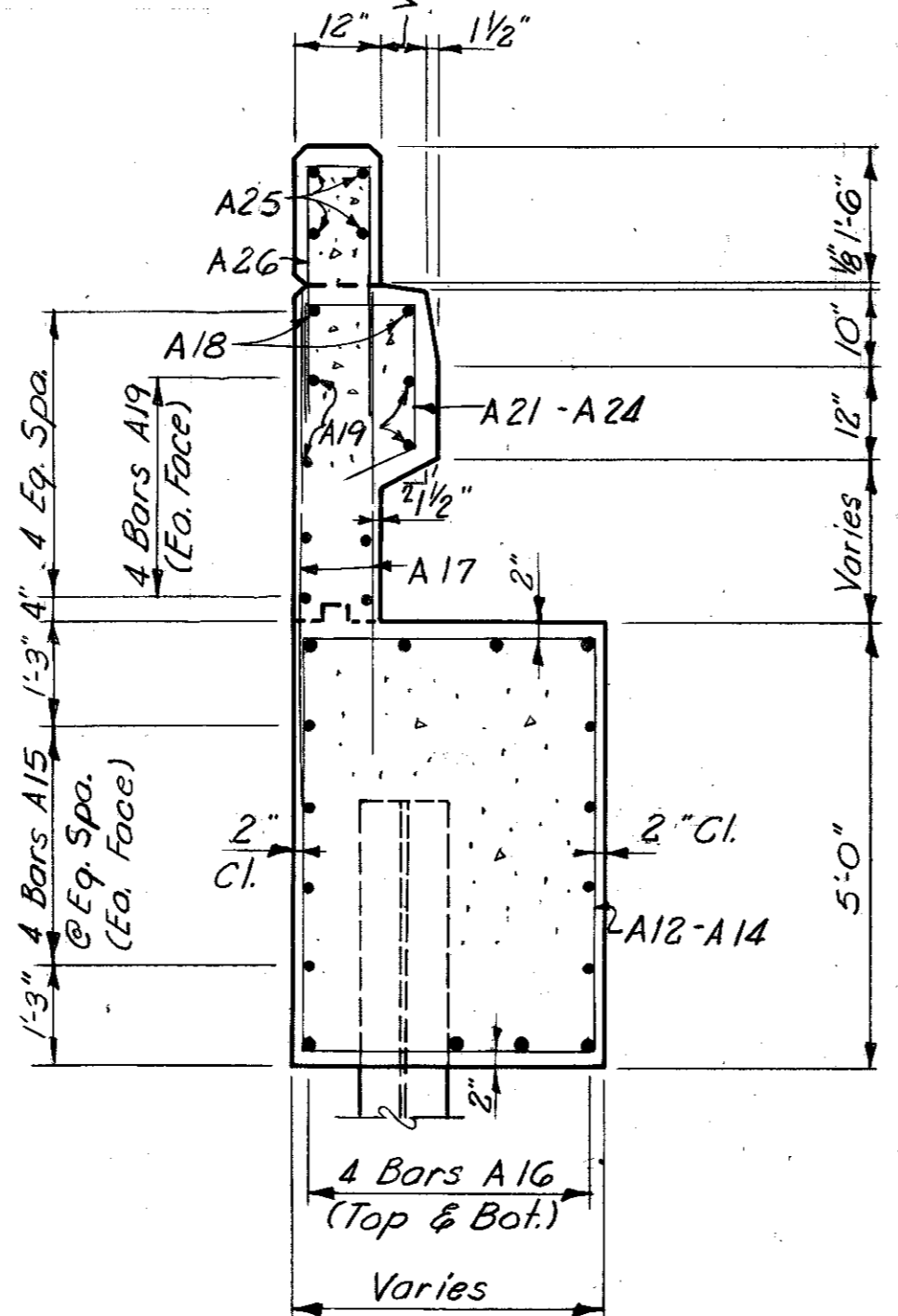
18159

LETTING DATE

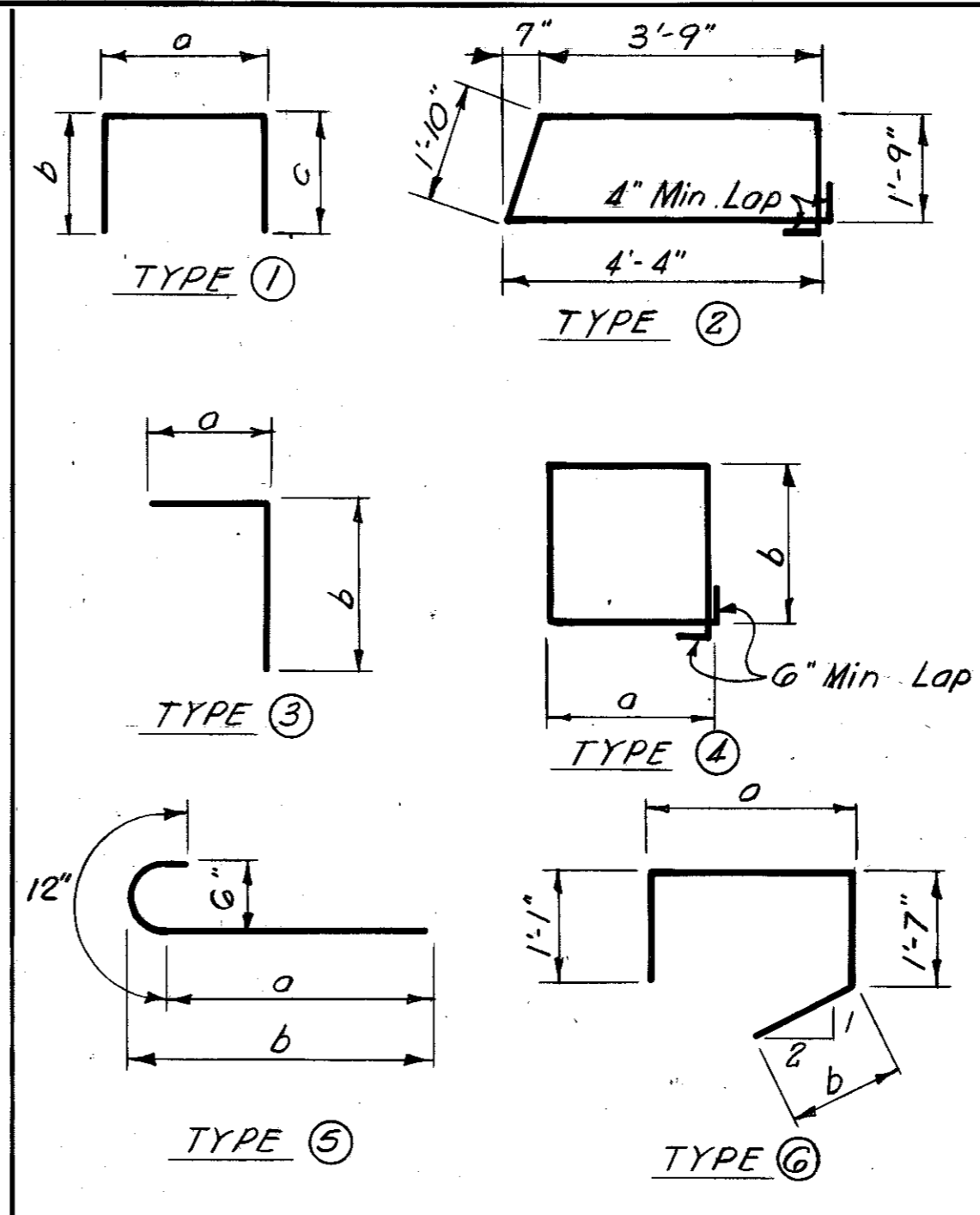
Note: Four Bolt Insert Assembly to be placed in End Bent Wings before pouring concrete. For Details see Std Drwg. 17.40, Current Edition.



ELEVATION C-C

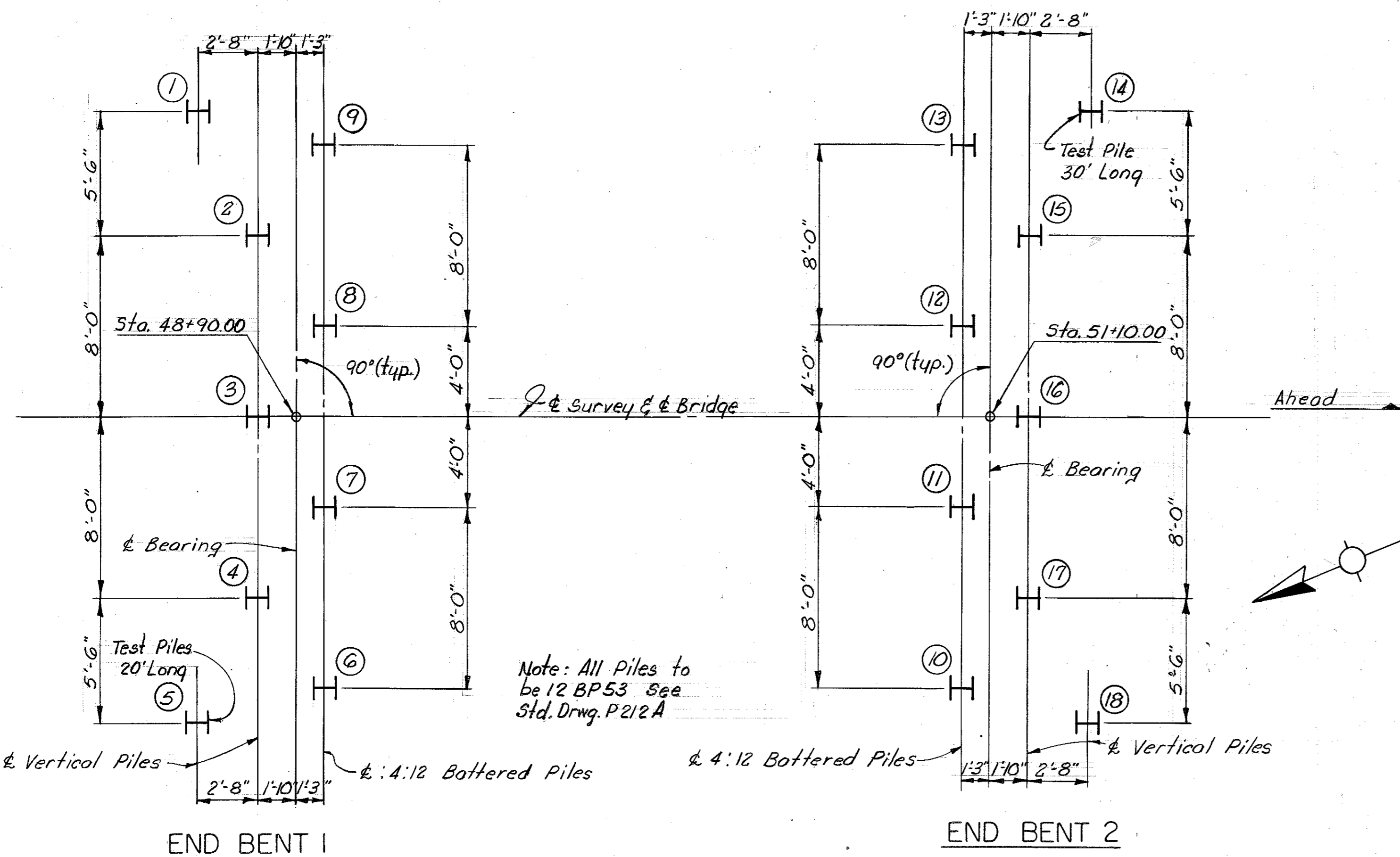


SECTION B-B



BILL OF REINFORCEMENT															
MARK	TYPE	NUMBER		SIZE	LENGTH	LOCATION	a			b			c		
		E.B.1	E.B.2				Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	
A1	(1)	22	22	#5	5 9	Cap	5	2	0	4	0	4			
A2	(1)	22	22	#5	5 5	"	4	10	0	4	0	4			
A3	(1)	22	22	#5	5 1	"	4	6	0	4	0	4			
A4	Str.	58	58	#5	4 9	"									
A5	Str.	21	21	#5	29 2	"									
A6	(2)	29	29	#5	12 1	"									
A7	Str.	3	3	#8	29 2	"									
A8	(3)	26	26	#6	6 1	Cap & Pedestal	1	9	4	5					
A9	(1)	26	26	#6	8 6	"	1	3	5	4	2	0			
A10	(3)	4	4	#5	5 9	Key	2	9	3	0					
A11	Str.	5	5	#4	3 8	"									
A12	(4)	2	2	#5	12 7	Wing Cap	1	3	4	8					
A13	(4)	2	2	#5	14 7	"	2	3	4	8					
A14	(4)	2	2	#5	18 7	"	4	3	4	8					
A15	(5)	16	16	#6	8 5	"	7	5	7	8					
A16	(5)	16	16	#6	8 7	"	7	7	7	10					
A17	Str.	24	24	#5	5 10	Wing									
A18	(3)	4	4	#8	16 2	"	6	7	9	8					
A19	Str.	16	16	#5	9 8	"									
A20	Str.	16	16	#4	4 4	"									
A21	(6)	6	6	#5	5 4	"	1	4 1/2	1	4 1/2					
A22	(6)	6	6	#5	5 2	"	1	3	1	4					
A23	(6)	6	6	#5	4 10	"	1	1	1	2					
A24	(6)	2	2	#5	4 6	"	0	11	1	0					
A25	Str.	8	8	#4	9 8	Plinth									
A26	(1)	20	20	#5	5 10	"	0	9	2	7	2	7			

NOTE: AFTER ALL PILES HAVE BEEN DRIVEN, THE RESIDENT ENGINEER SHALL RECORD FOR EACH PILE, THE TIP-OF-PILE ELEVATION AS DRIVEN, THE LENGTH OF PILE IN PLACE AND THE CALCULATED BEARING CAPACITY AND SHALL RETURN ONE BLUE PRINT COPY OF THIS SHEET WITH THIS DATA TO THE DIRECTOR OF THE DIVISION OF BRIDGES SO THAT THE DATA MAY BE RECORDED ON THE ORIGINAL PLANS. LENGTHS OF PILES IN PLACE SHOWN HEREON ARE THE ACTUAL LENGTHS OF PILES IN THE FINISHED STRUCTURE BELOW CUTOFF ELEVATION AND ARE NOT NECESSARILY PAY ITEMS. THIS PILE RECORD DOES NOT REPLACE OTHER RECORDS OF PILES REQUIRED TO BE KEPT AND SUBMITTED BY THE RESIDENT ENGINEER



PILE LAYOUT

Pile No.	Cut-off Elevation	Tip of Pile Elevation	Pile Length (Lin. Ft.)	Calc. Brg. Capacity (Tons)
End Bent 1				
1	916.81	897.46	19.35	179
2	"	899.49	17.32	179
3	"	909.89	6.92	199
4	"	908.87	7.94	210
5	"	899.41	17.40	199
6	"	899.02	18.75	188
7	"	900.76	16.92	179
8	"	898.95	18.83	179
9	"	899.26	18.50	179
End Bent 2				
10	915.72	886.90	30.38	205
11	"	886.98	30.29	199
12	"	887.26	30.00	199
13	"	887.47	29.78	199
14	"	886.17	29.55	210
15	"	886.40	29.32	199
16	"	886.45	29.27	188
17	"	884.99	30.73	179
18	"	876.18	39.54	199

PILE RECORD & END BENTS 1 & 2

ESTIMATE OF QUANTITIES			
Item	Location	E.B.1	E.B.2
Concrete, Class "A" (Cu. Yds.)		31.3	31.3
Concrete, Class "AA" (Cu. Yds.)		12.7	12.7
Steel Reinforcement (Lbs.)		3,813	3,813

Reloc. Old Columbia Rd. No.1 over B.S.P. Sheet 5

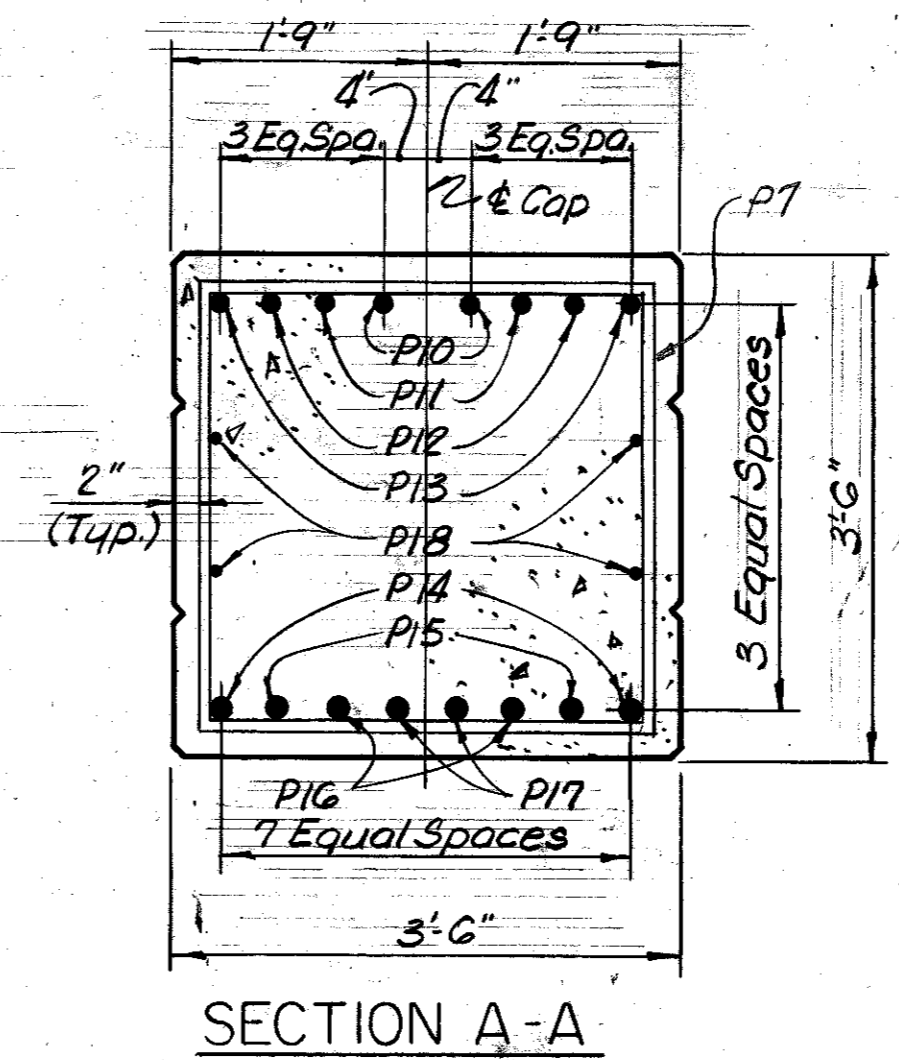
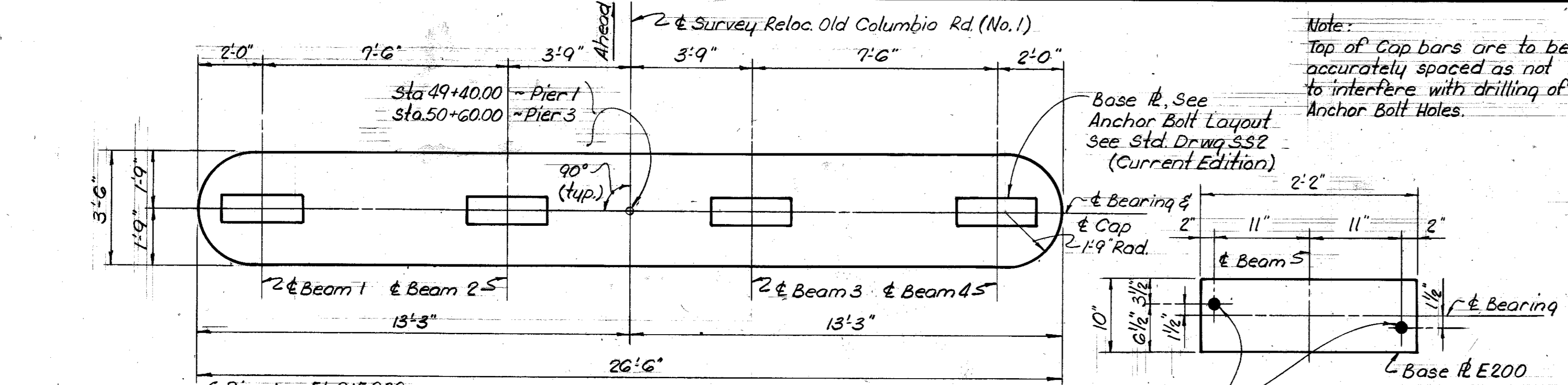
COMMONWEALTH OF KENTUCKY
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 DATE: 11/69

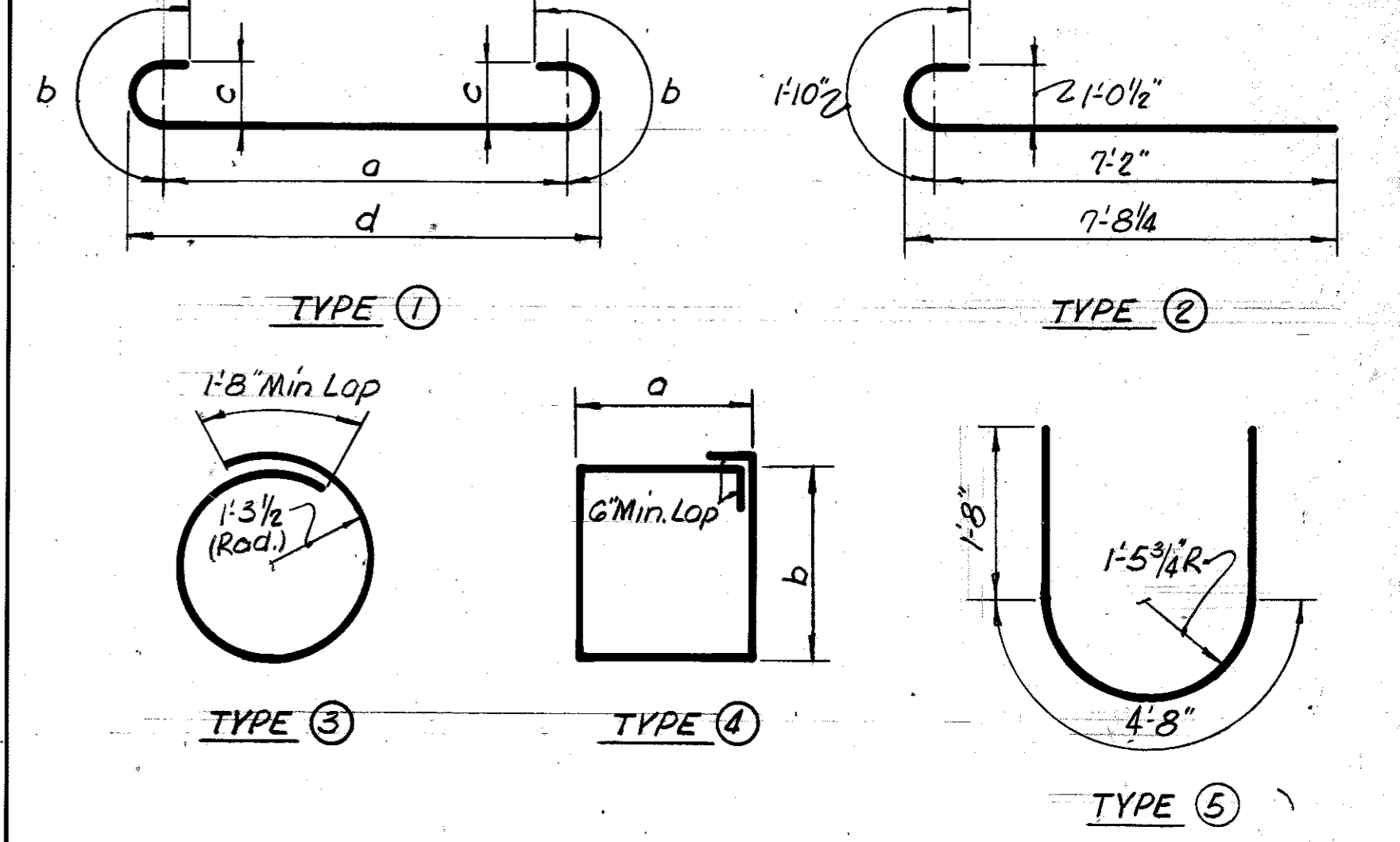
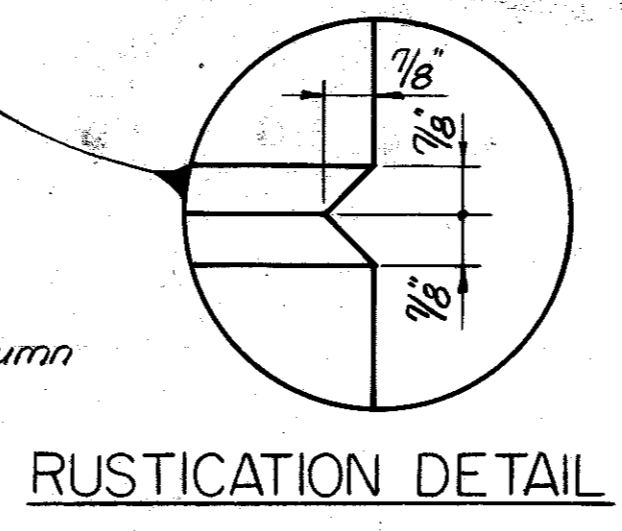
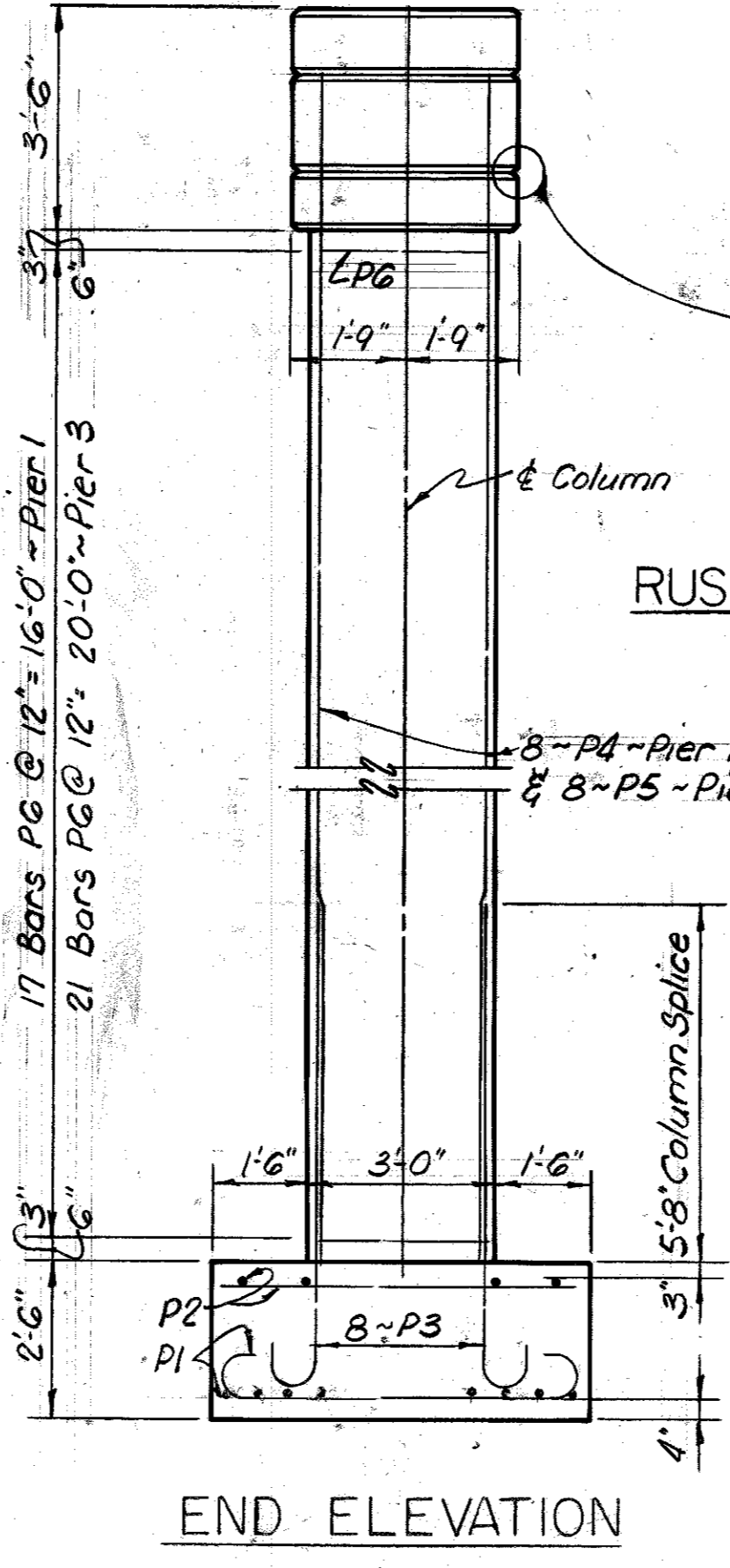
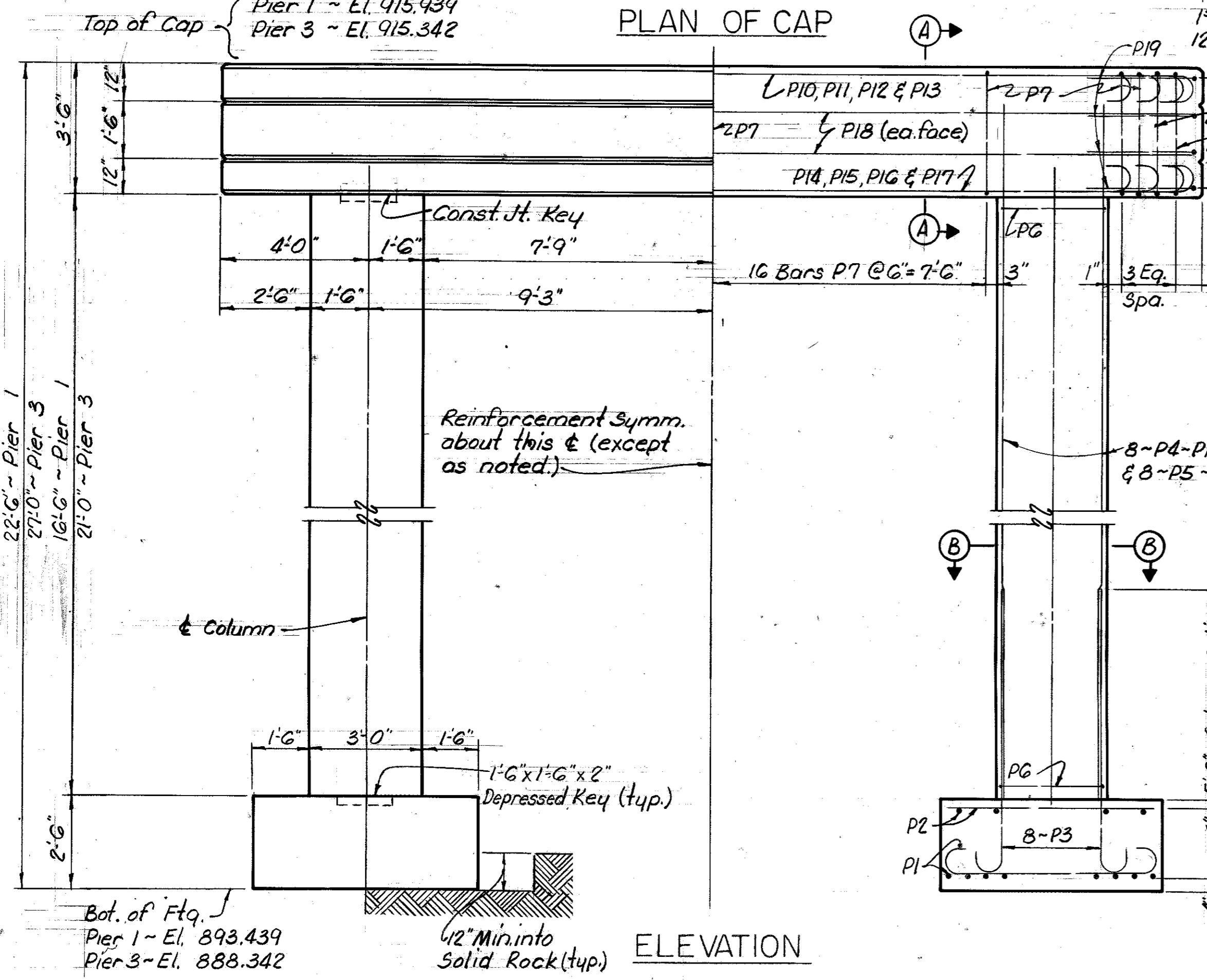
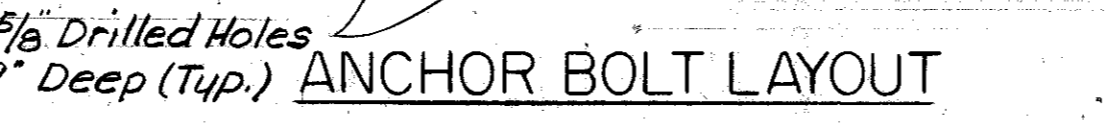
LETTING DATE

BILL OF REINFORCEMENT

MARK	TYPE	NUMBER	BAR SIZE	LENGTH	LOCATION	a		b		c		d	
						Feet	In.	Feet	In.	Feet	In.	Feet	In.
P1	(1)	48	#6	7 2	Footing	5	2	1	0	0	6	5	8
P2	Str.	24	#5	5 8									
P3	(2)	16	#10	9 0									
P4	Str.	16	#10	19 0	Column								
P5	Str.	16	#10	23 6									
P6	(3)	34	#4	9 11									
P7	(4)	35	#6	13 4	Cap	3	2	3	2				
P8	(2)	2	#6	11 11		2	5	3	2				
P9	(2)	2	#6	10 3		1	7	3	2				
P10	(1)	2	#11	28 11		24	11	2	0	1	13/4	26	0 3/4
P11	(1)	2	#11	28 7		24	7	2	0	1	13/4	25	8 3/4
P12	(1)	2	#11	28 1		24	1	2	0	1	13/4	25	2 3/4
P13	(1)	2	#11	26 7		22	7	2	0	1	13/4	23	8 3/4
P14	(1)	2	#11	26 7		22	7	2	0	1	13/4	23	8 3/4
P15	(1)	2	#11	28 1		24	1	2	0	1	13/4	25	2 3/4
P16	(1)	2	#11	28 7		24	7	2	0	1	13/4	25	8 3/4
P17	(1)	2	#11	28 11		24	11	2	0	1	13/4	26	0 3/4
P18	Str.	4	#4	23 0									
P19	(5)	8	#4	8 0									



Note: Top of Cap bars are to be accurately spaced as not to interfere with drilling of Anchor Bolt Holes.

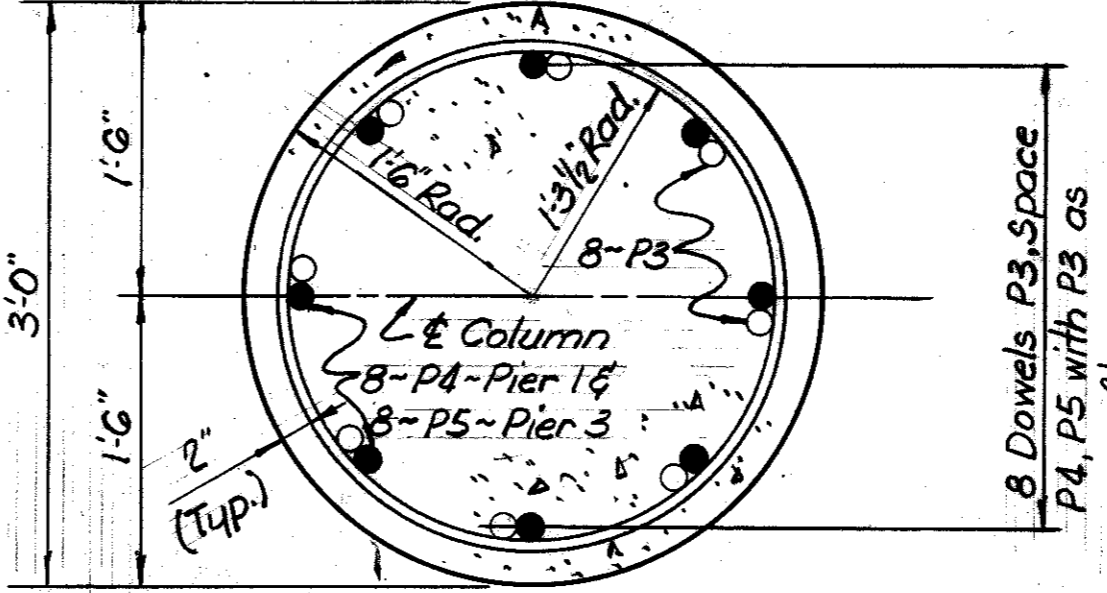


ESTIMATE OF QUANTITIES

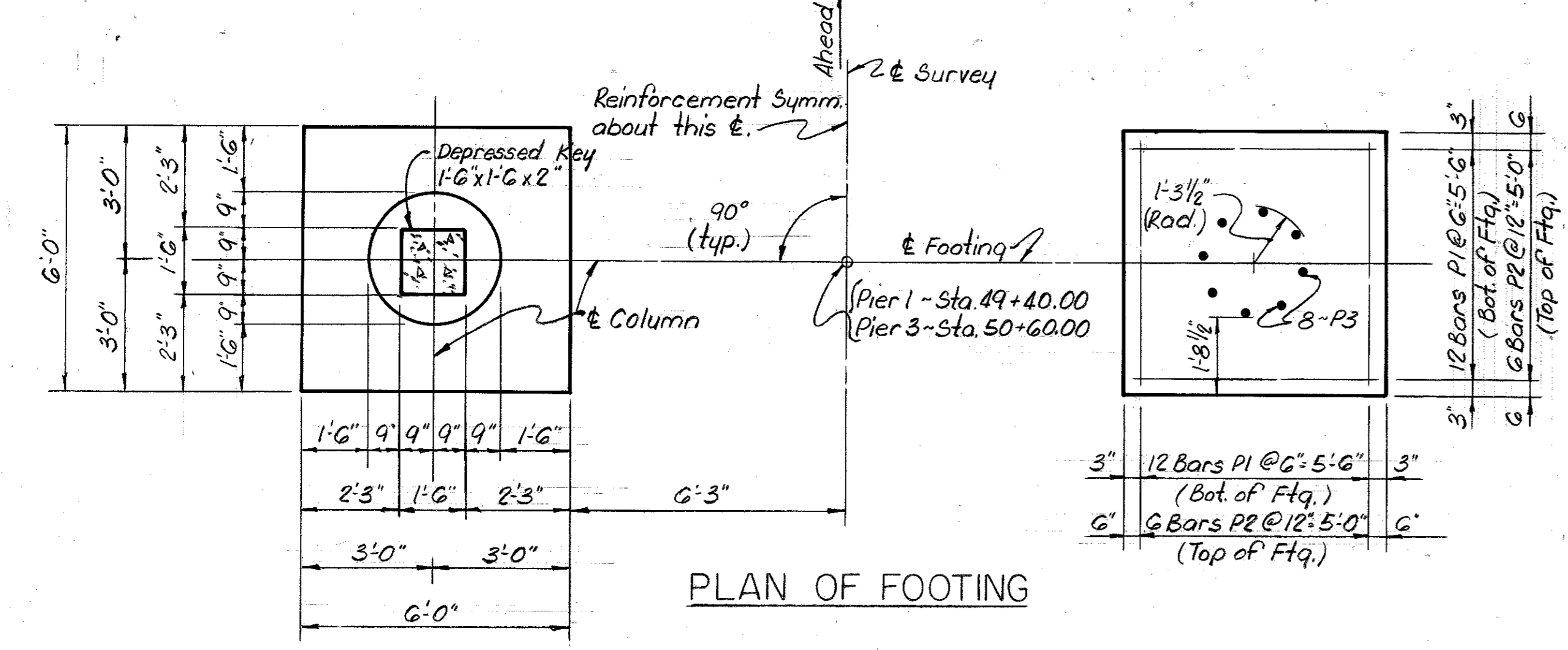
Item	Location	Pier 1	Pier 3
Concrete, Class "A"	(Cu. Yds.)	27.0	29.3
Steel Reinforcement, (Lbs)		6,067	6,430

Reloc. Old Columbia Rd. No.1 over B.S.P. sheet G

COMMONWEALTH OF KENTUCKY
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 COUNTY OF
ADAIR
 BOWLING GREEN - SOMERSET PKWY.
 ROAD
 STATION 4270+37.00 P.E. PROJECT NO.
 CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO.



SECTION B-B



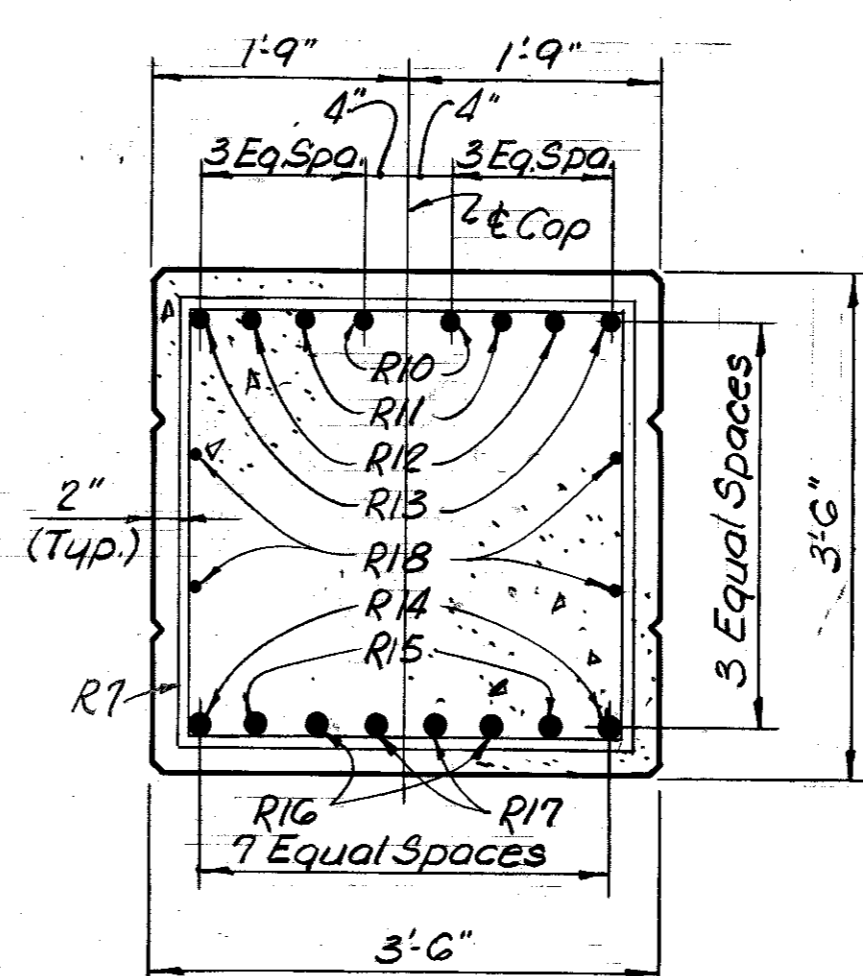
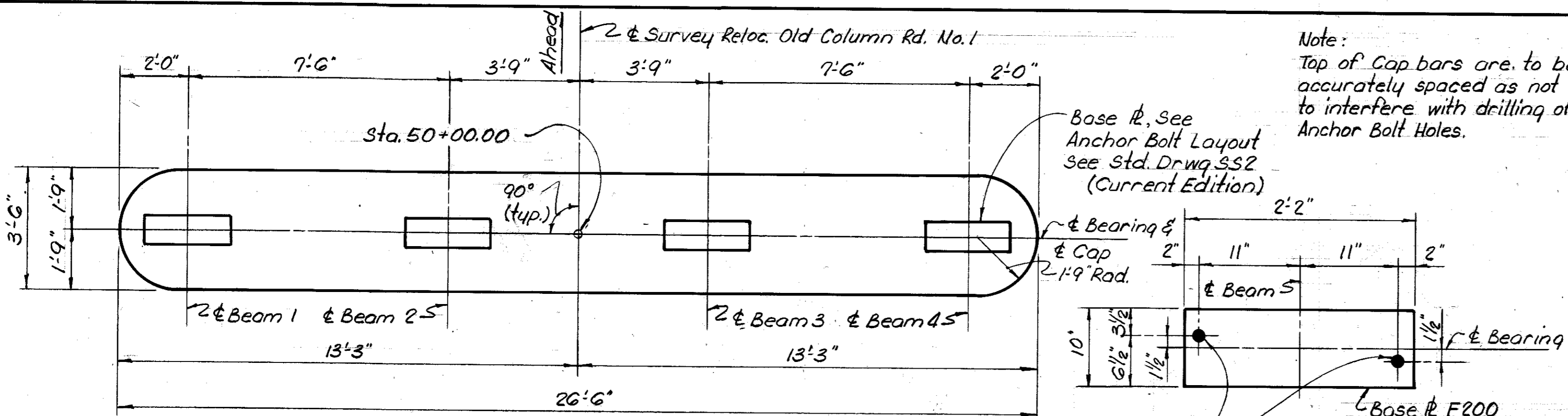
PLAN OF FOOTING

DESIGNED BY: AF
 CHECKED BY: RAS
 DATE: 11/69
 REVISIONS: 1
 DATE: 1/69

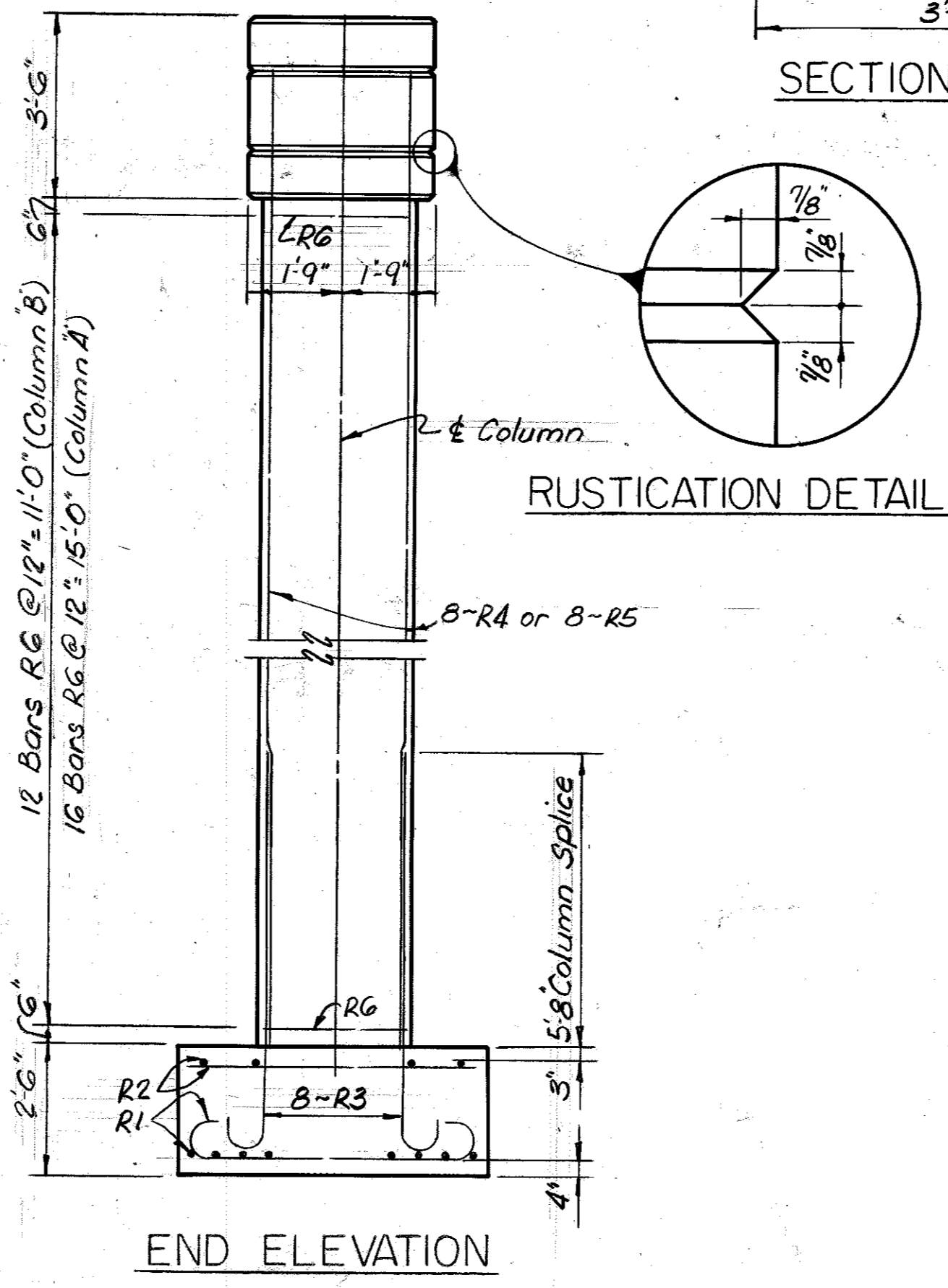
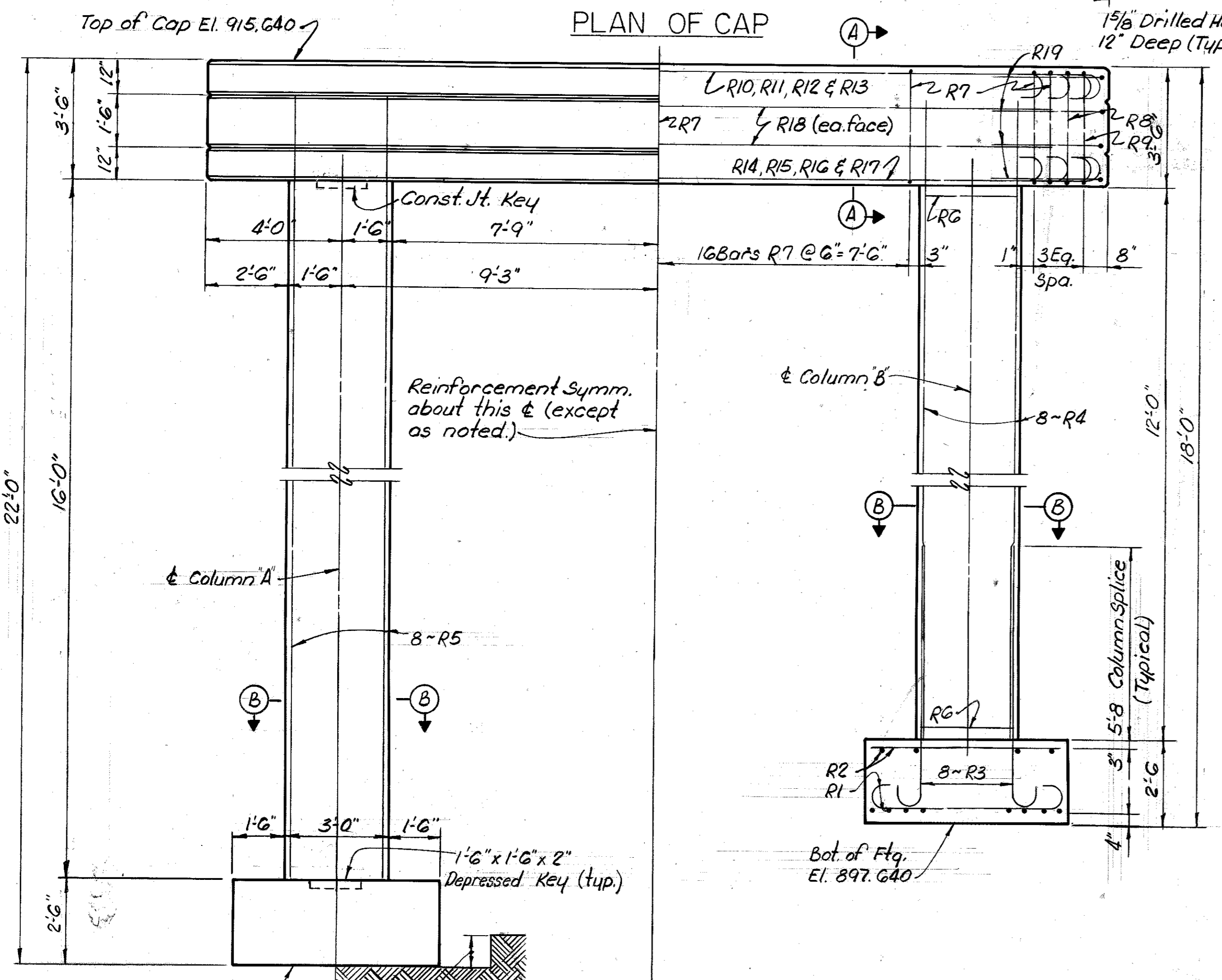
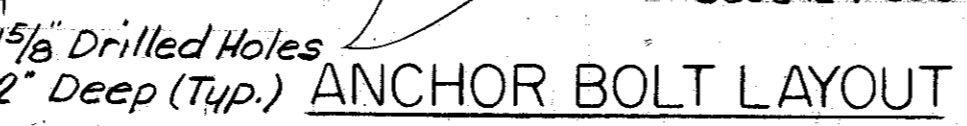
PIERS 1 & 3

18159

LETTING DATE

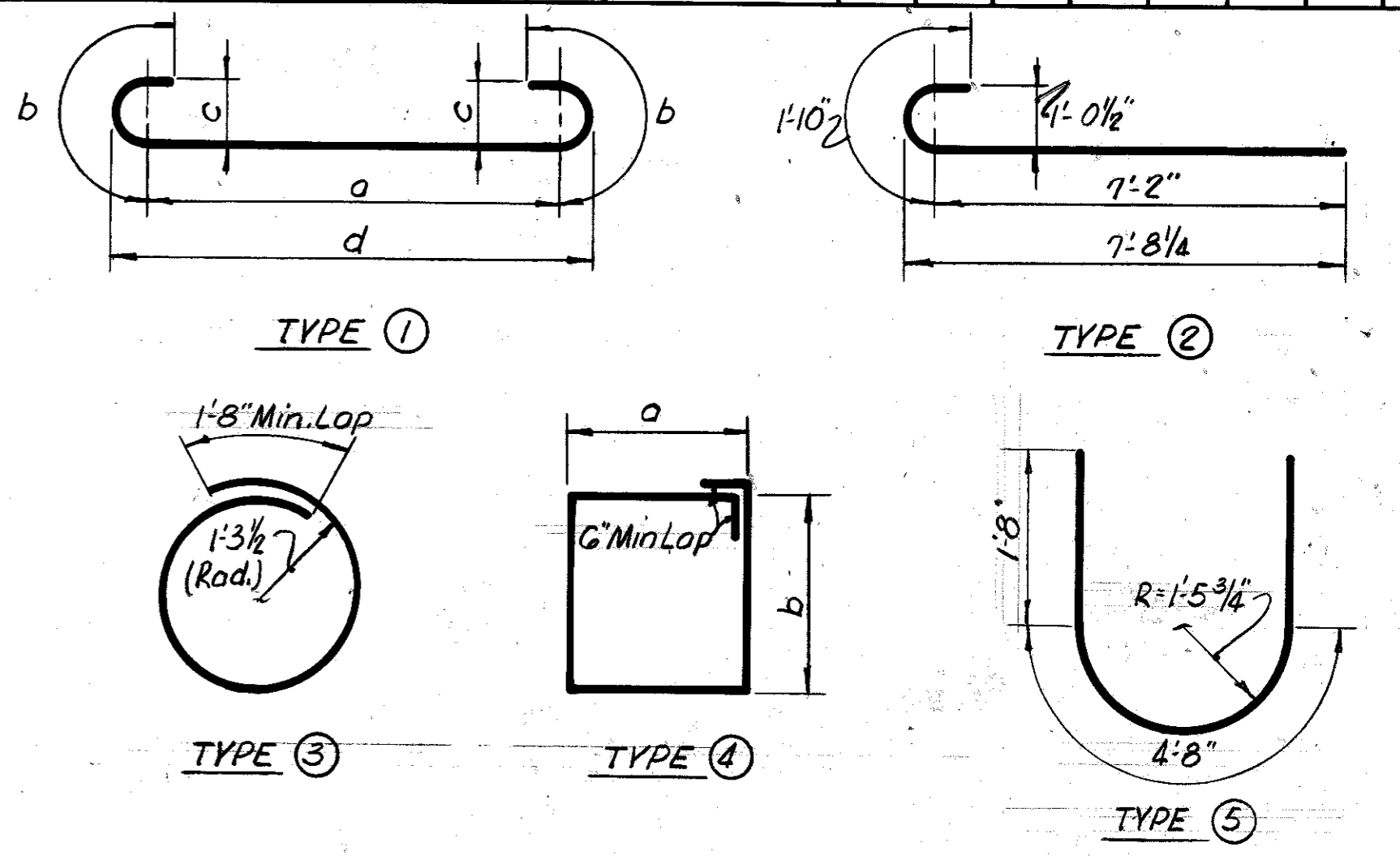


Note:
Top of Cap bars are to be accurately spaced as not to interfere with drilling of Anchor Bolt Holes.



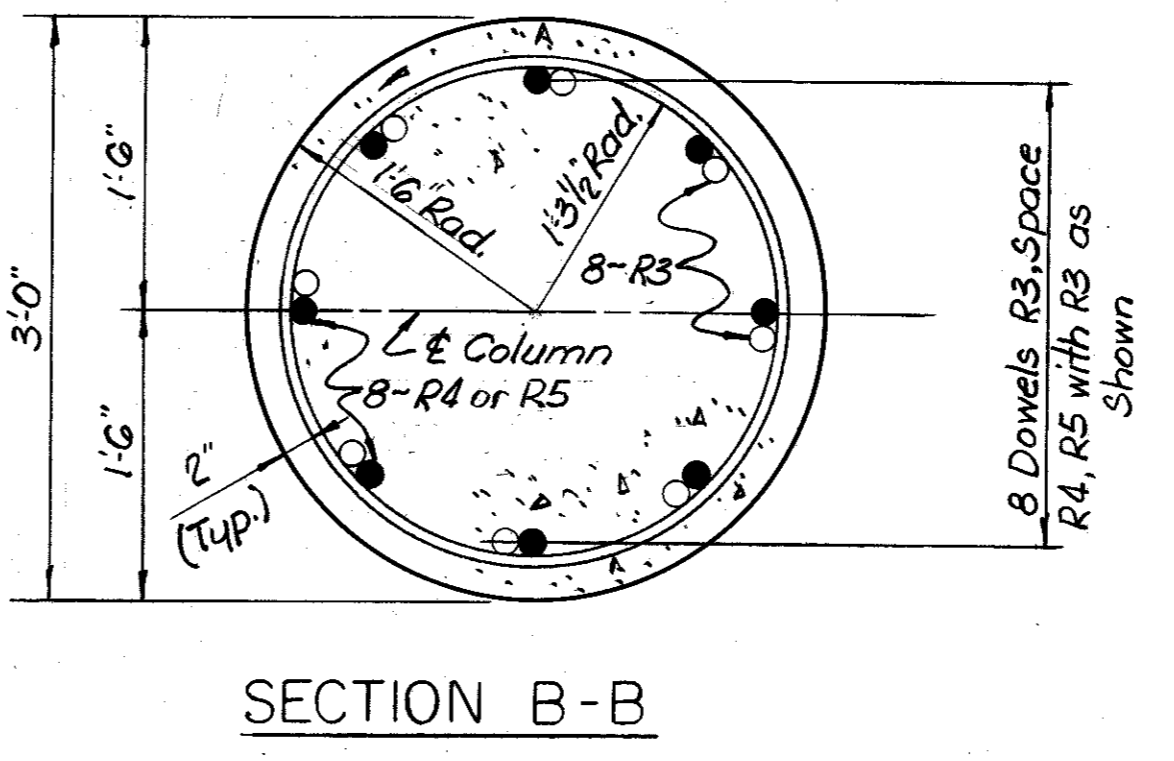
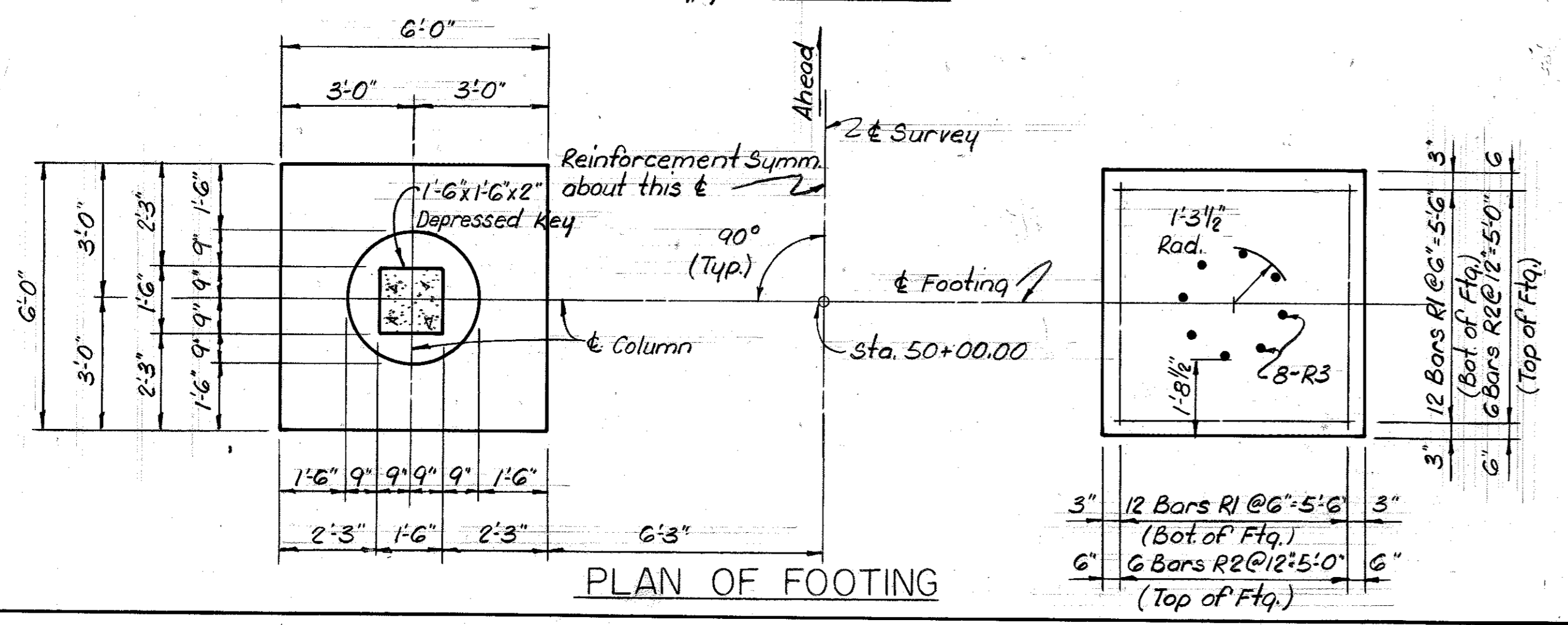
BILL OF REINFORCEMENT

MARK	TYPE	NUMBER	BAR SIZE	LENGTH	LOCATION	a		b		c		d	
						Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
R1	①	48	#6	7 2	Footing	5	2	1	0	0	6	5	8
R2	Str.	24	#5	5 8	"								
R3	②	16	#10	9 0	"								
R4	Str.	8	#10	14 6	Column "B"								
R5	Str.	8	#10	18 6	" "A"								
R6	③	28	#4	9 11	"								
R7	④	35	#6	13 4	Cap	3	2	3	2				
R8	④	2	#6	11 11	"	2	5	3	2				
R9	④	2	#6	10 3	"	1	7	3	2				
R10	①	2	#11	28 11	"	24	11	2	0	1	19/4	26	0 3/4
R11	①	2	#11	28 7	"	24	7	2	0	1	19/4	25	8 3/4
R12	①	2	#11	28 1	"	24	1	2	0	1	19/4	25	2 3/4
R13	①	2	#11	26 7	"	22	7	2	0	1	19/4	23	8 3/4
R14	①	2	#11	26 7	"	22	7	2	0	1	13/4	23	8 3/4
R15	①	2	#11	28 1	"	24	1	2	0	1	13/4	25	2 3/4
R16	①	2	#11	28 7	"	24	7	2	0	1	13/4	25	8 3/4
R17	①	2	#11	28 11	"	24	11	2	0	1	19/4	26	0 3/4
R18	Str.	4	#4	23 0	"								
R19	⑤	8	#4	8 0	"								



ESTIMATE OF QUANTITIES

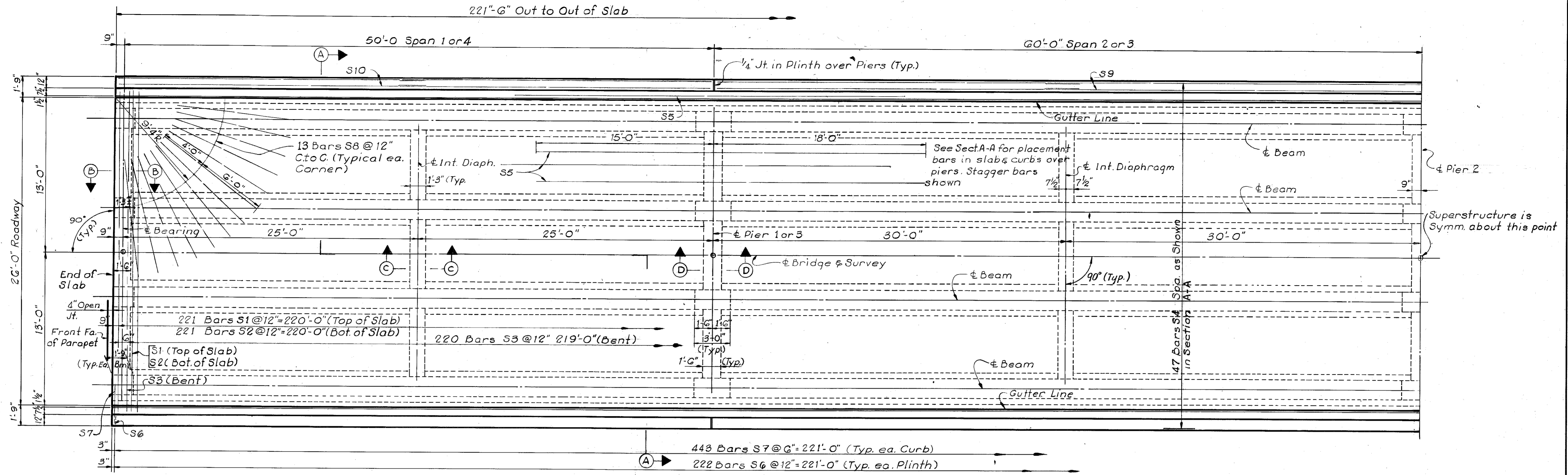
Item	Location	Pier 2
Concrete, Class "A" (Cu. Yds.)		25.7
Steel Reinforcement (Lbs.)		5,855



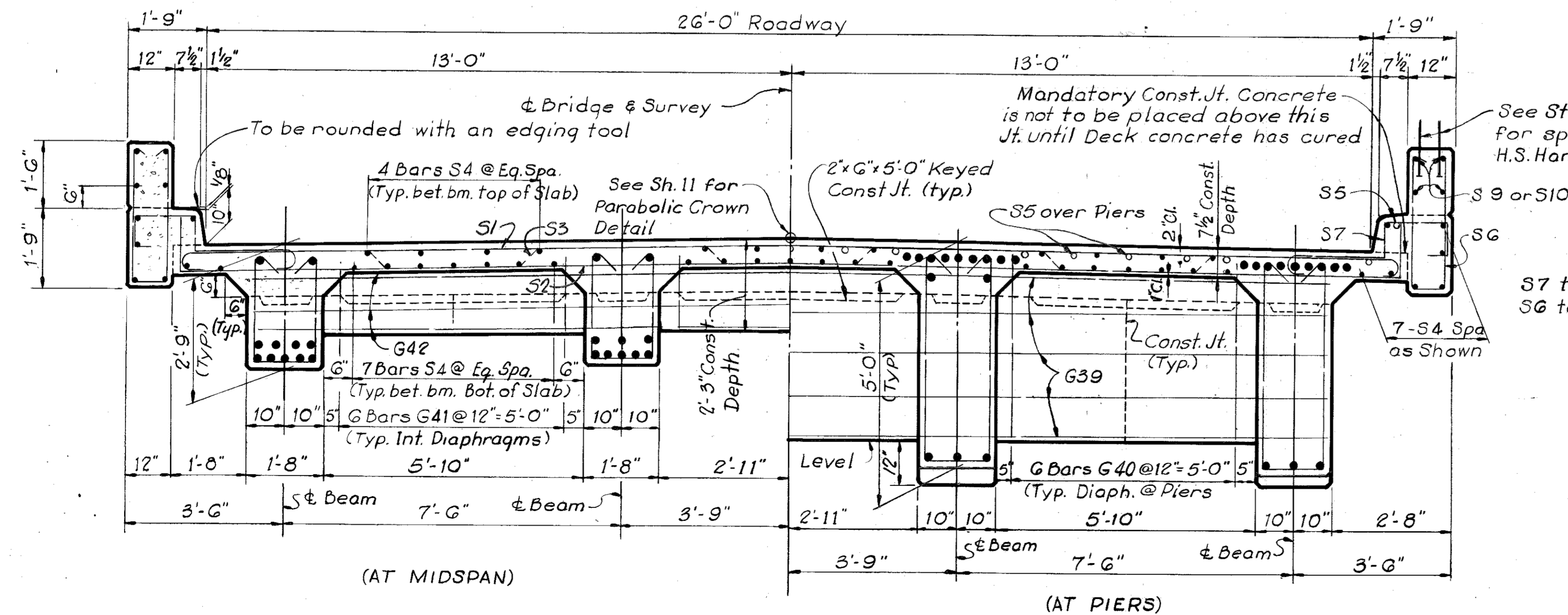
DESIGNED BY: AF
 CHECKED BY: RAS
 TRACED BY:
 DATE: 11/69
 DATE: 1/69
 DATE:
 DATE:
 DATE:
 DATE:
 DATE:
 DATE:

PIER 2

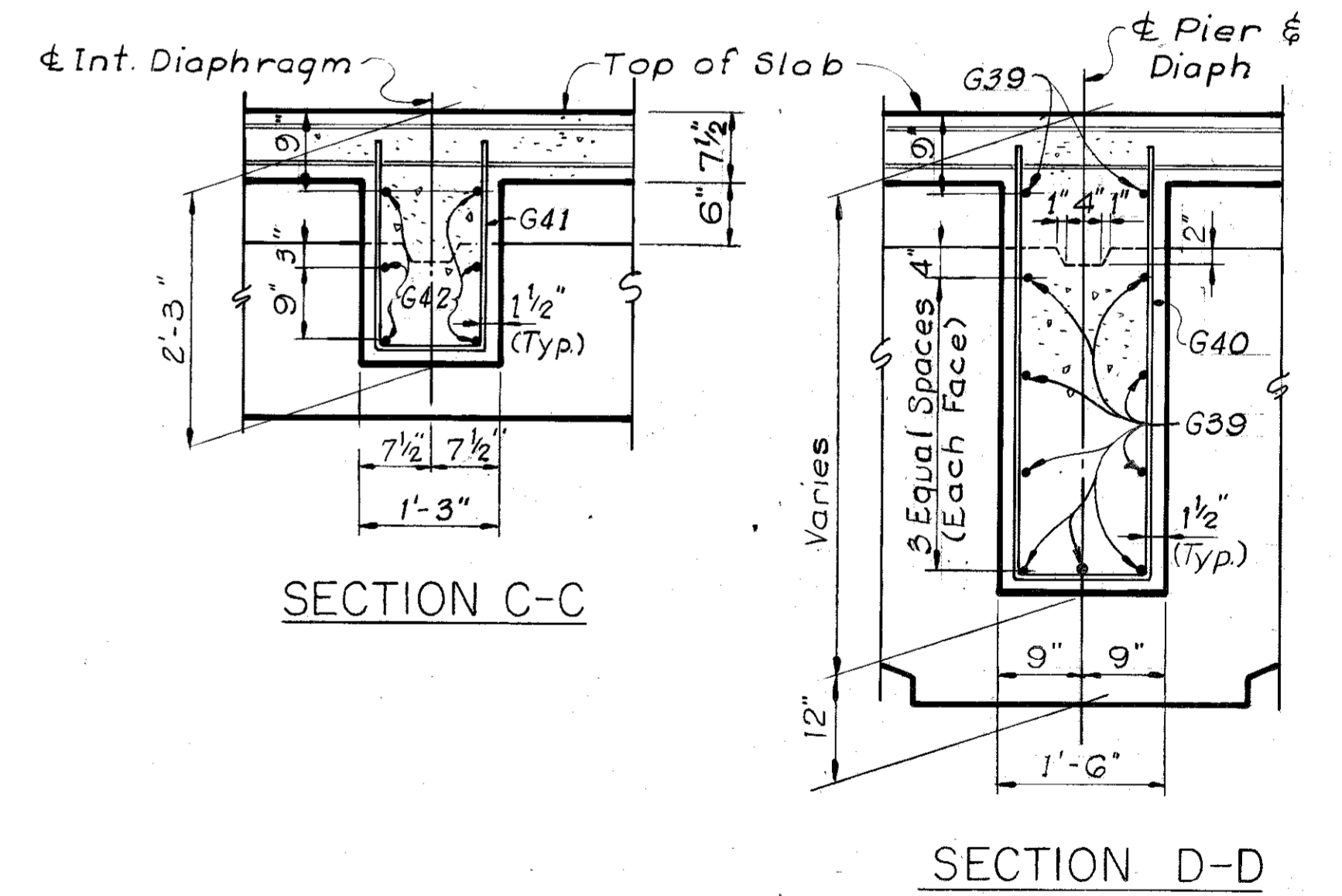
LETTING DATE



PART PLAN OF SLAB



SECTION A-A



SECTION C-C

SECTION D-D

See Std. Drwg. H116, Current Edition for spacing of Anchor Dowels for H.S. Handrail Post

S7 to be in place before Slab is poured
S6 to be in place before Curb is poured

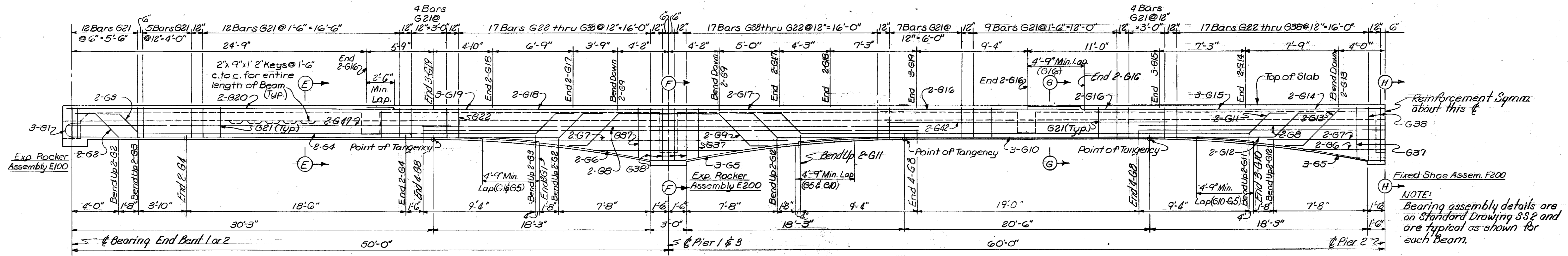
SUPERSTRUCTURE

DESIGNED BY	DATE	REVISION
AF	11/69	
CHECKED BY	DATE	REVISION
DGM	11/69	
DRAWN BY	DATE	REVISION
M.F.S.		

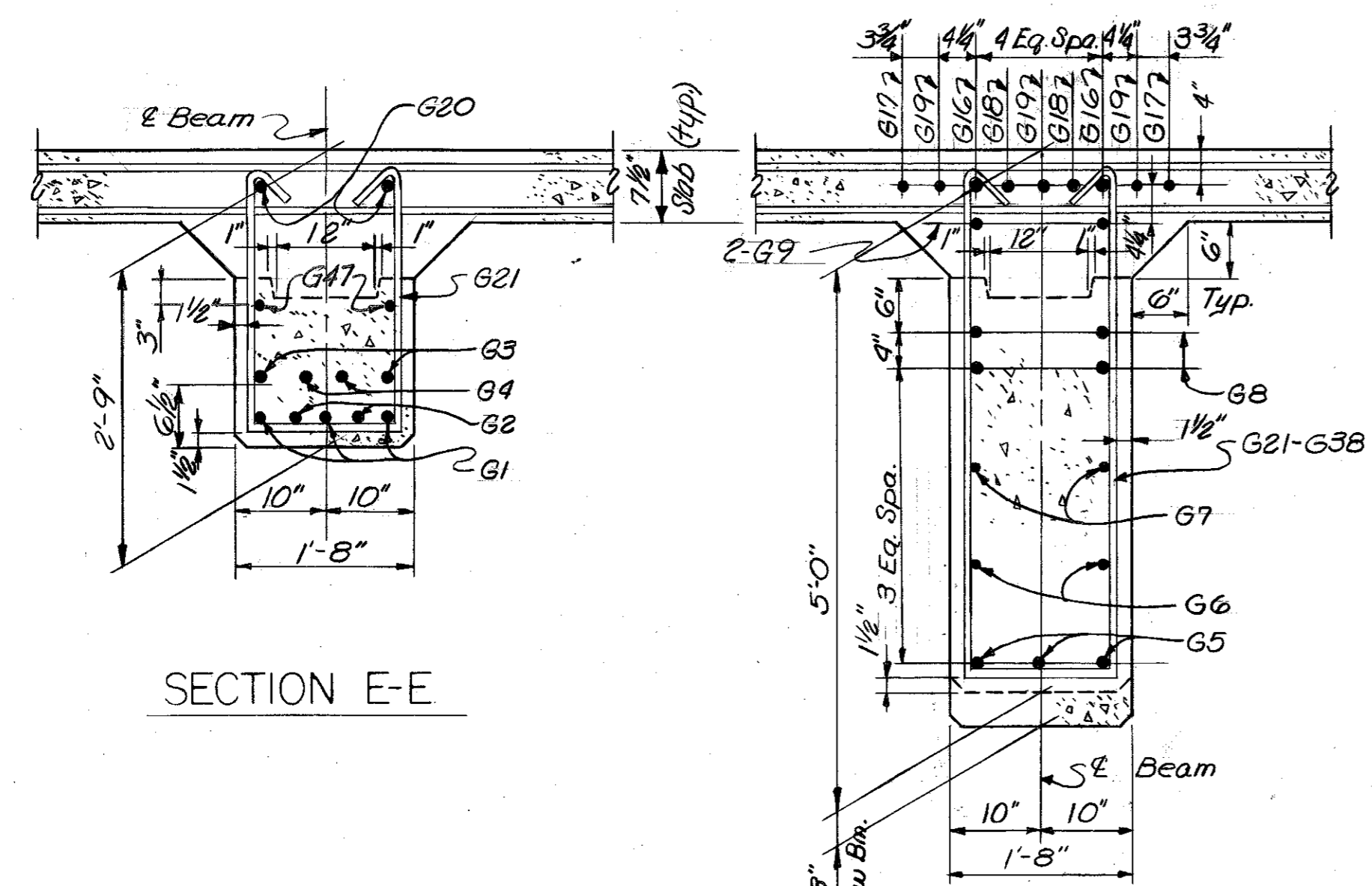
Reloc. Old Columbia Rd. No. 1 over B.S.P. Sheet 8

COMMONWEALTH OF KENTUCKY
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STATION 4270+37.00 P. E. PROJECT NO.
CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO.
18159

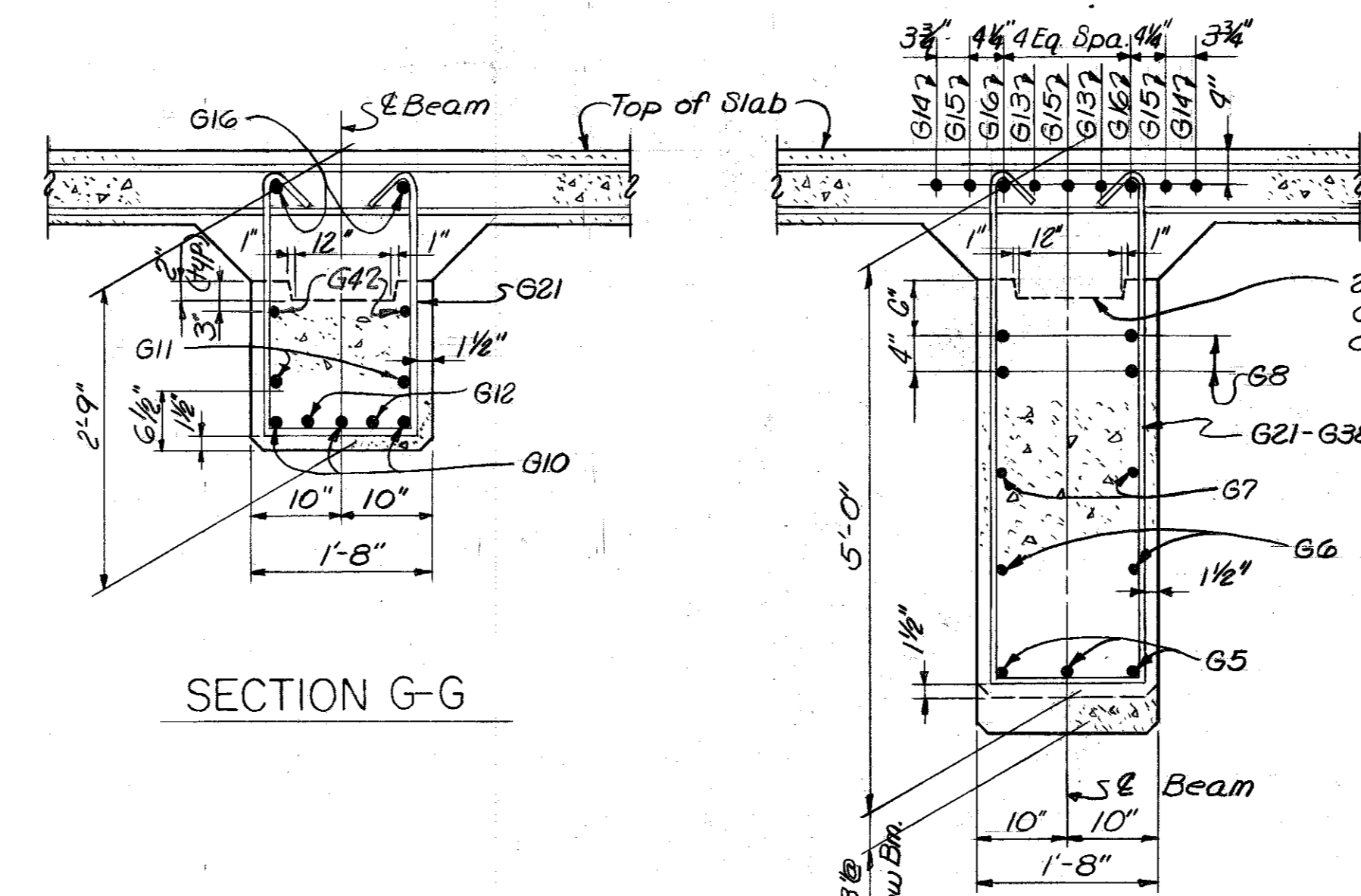
LETTING DATE



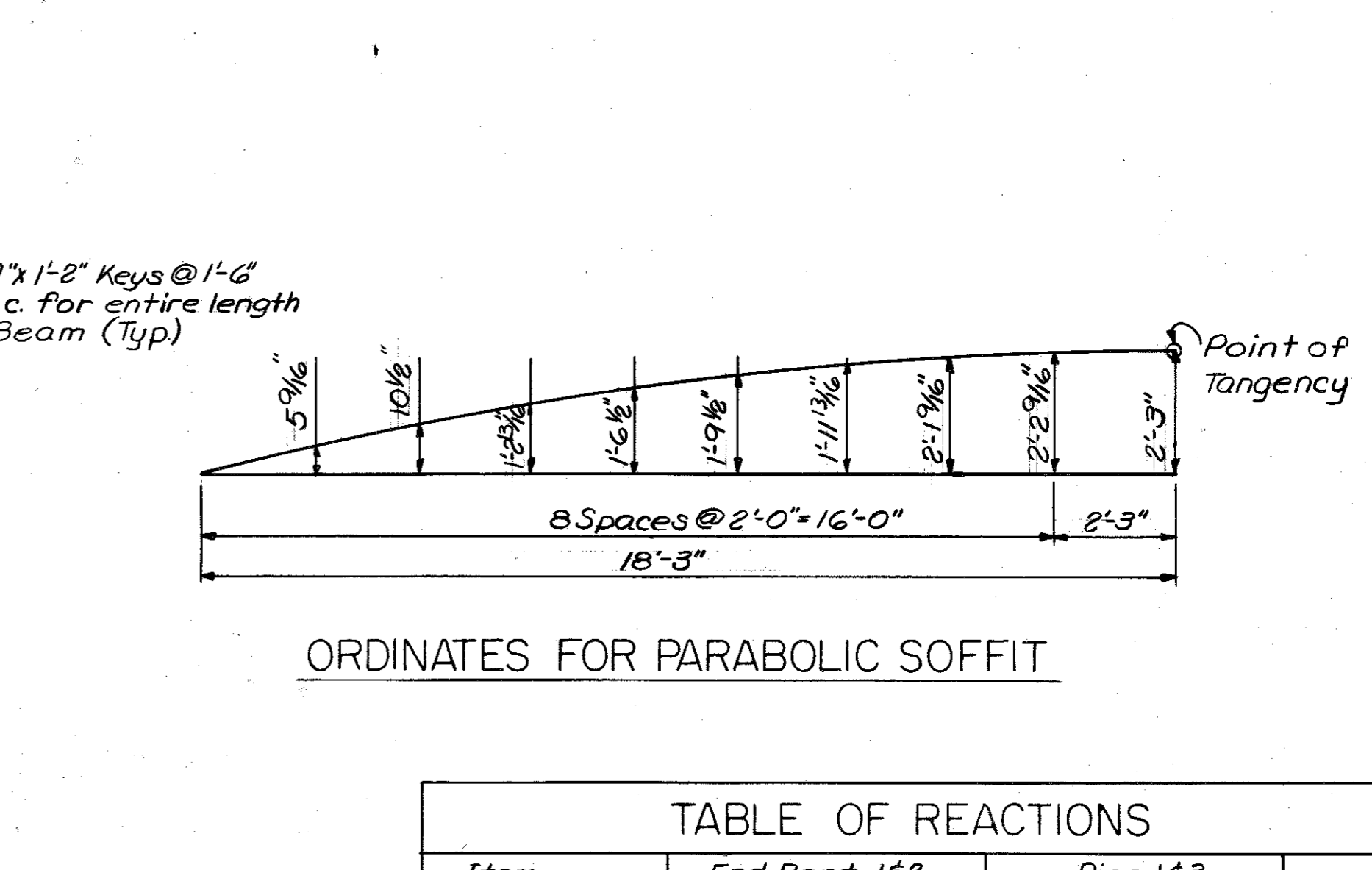
LONGITUDINAL SECTION ON BEAMS
(Typical Each Beam)



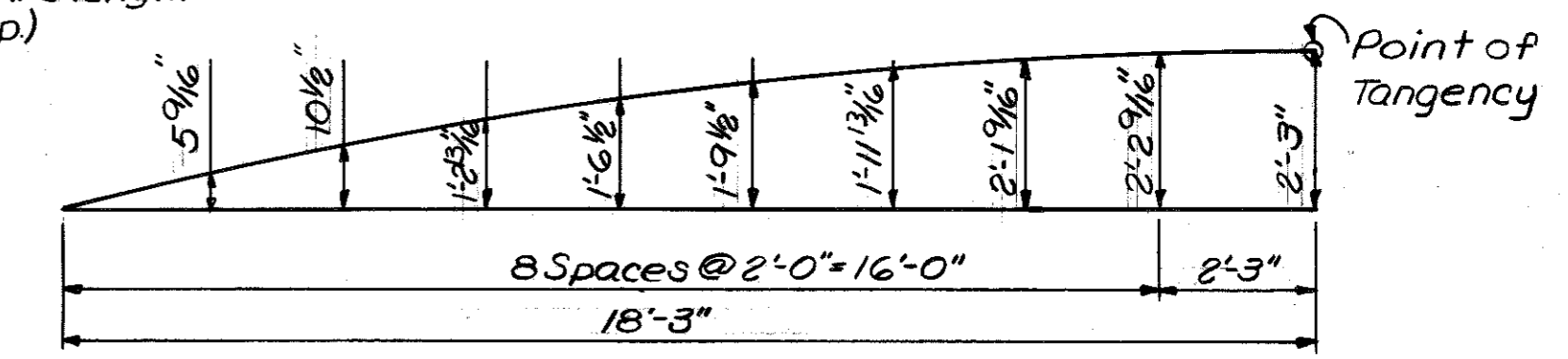
SECTION E-E



SECTION G-G



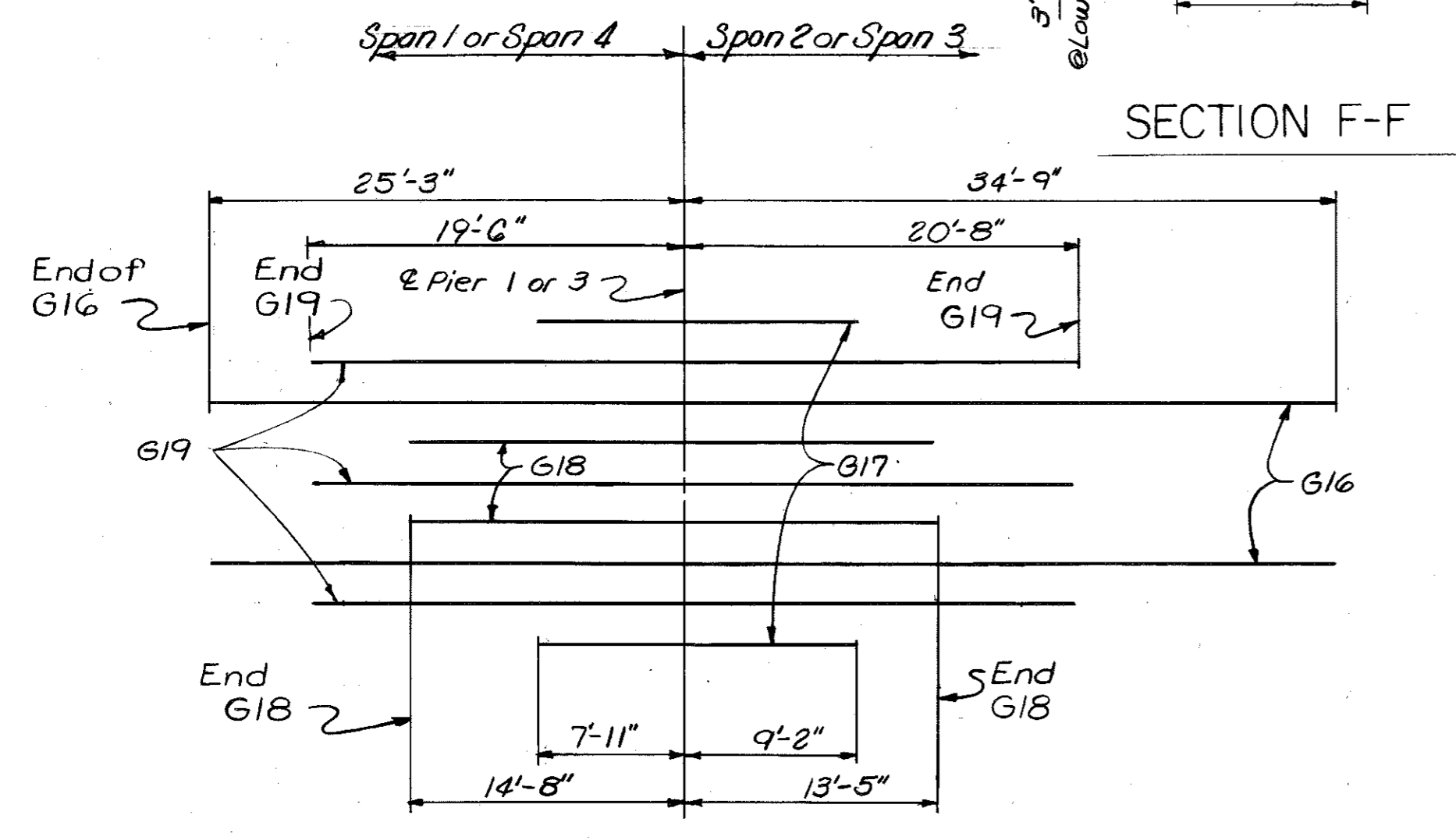
SECTION H-H



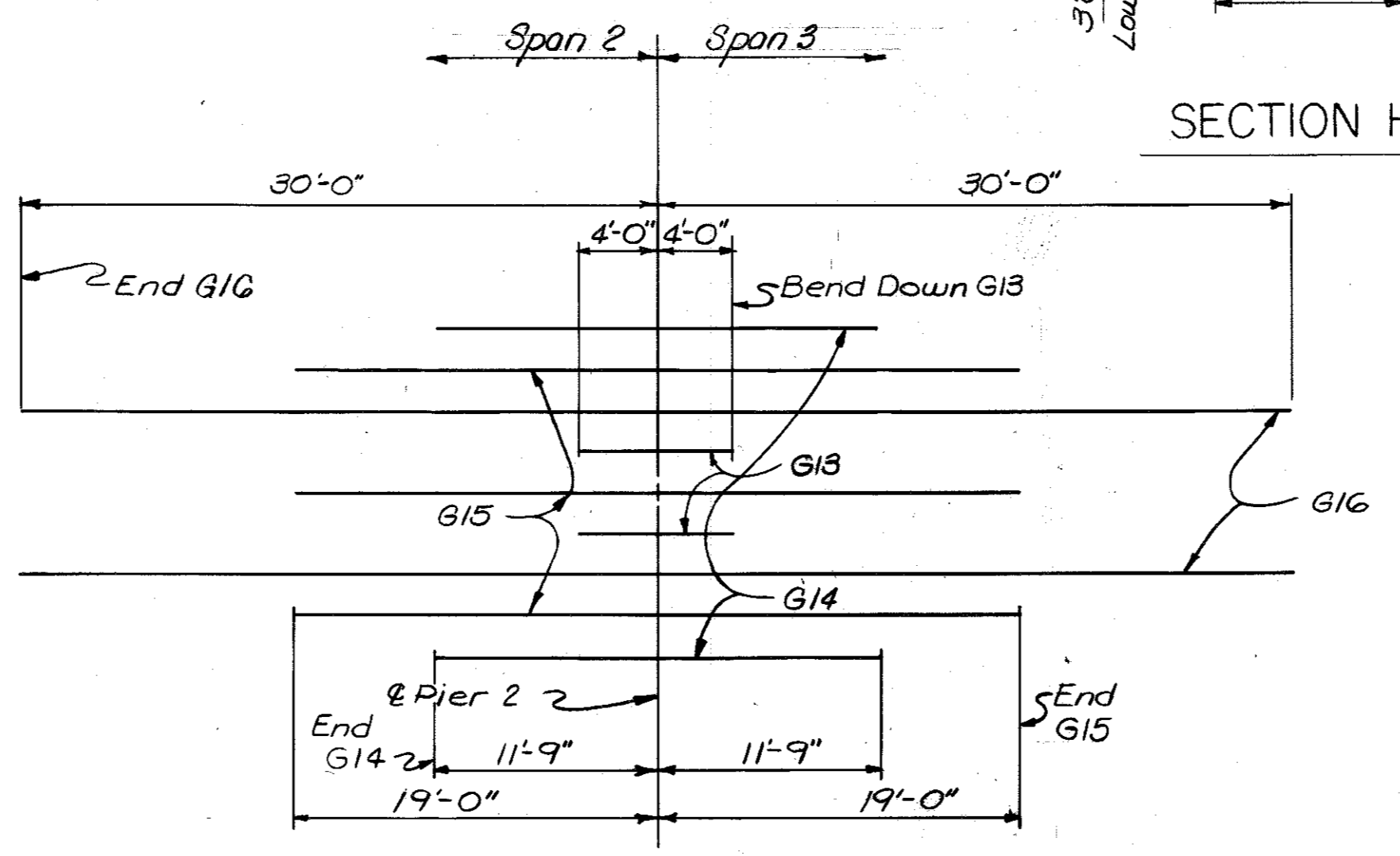
ORDINATES FOR PARABOLIC SOFFIT

Item	End Bent 1 & 2		Pier 1 & 3		Pier 2	
	Int. Bm.	Ext. Bm.	Int. Bm.	Ext. Bm.	Int. Bm.	Ext. Bm.
Dead Load	31.2	20.7	123.2	107.0	111.8	90.9
Live Load	30.8	27.9	50.6	45.9	50.7	46.0
Impact	8.8	8.0	14.1	12.8	13.7	12.4
Total	70.8	56.6	187.9	165.7	176.2	155.3

Note: Dead Load includes weight of shoes. Reactions are at E of bearing. Live Load and Impact are Maxima for one beam and are not substructure loads.



SECTION F-F



SECTION G-G

PLAN (Showing Reinforcement in Top Row @ Piers)

DESIGNED BY: AF
 CHECKED BY: JCF
 DATE: 11-82
 REVISIONS: 1
 DATE: 11-82

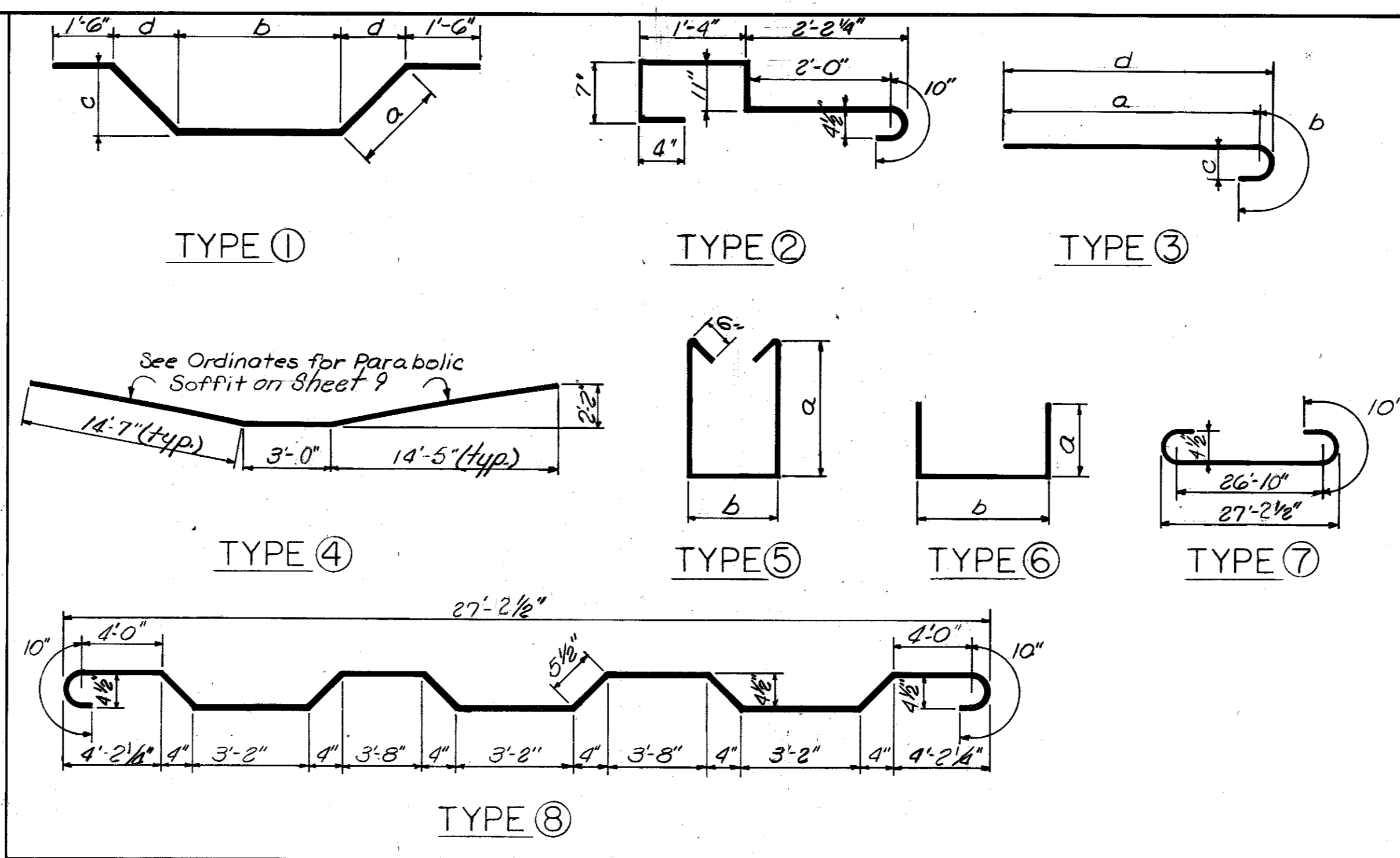
Reloc. Old Columbia Rd. No. 1 over B.S.P. Sheet 9

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT COUNTY OF
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 STATION 4270 +37.00 P. E. PROJECT NO.
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 18159

SUPERSTRUCTURE

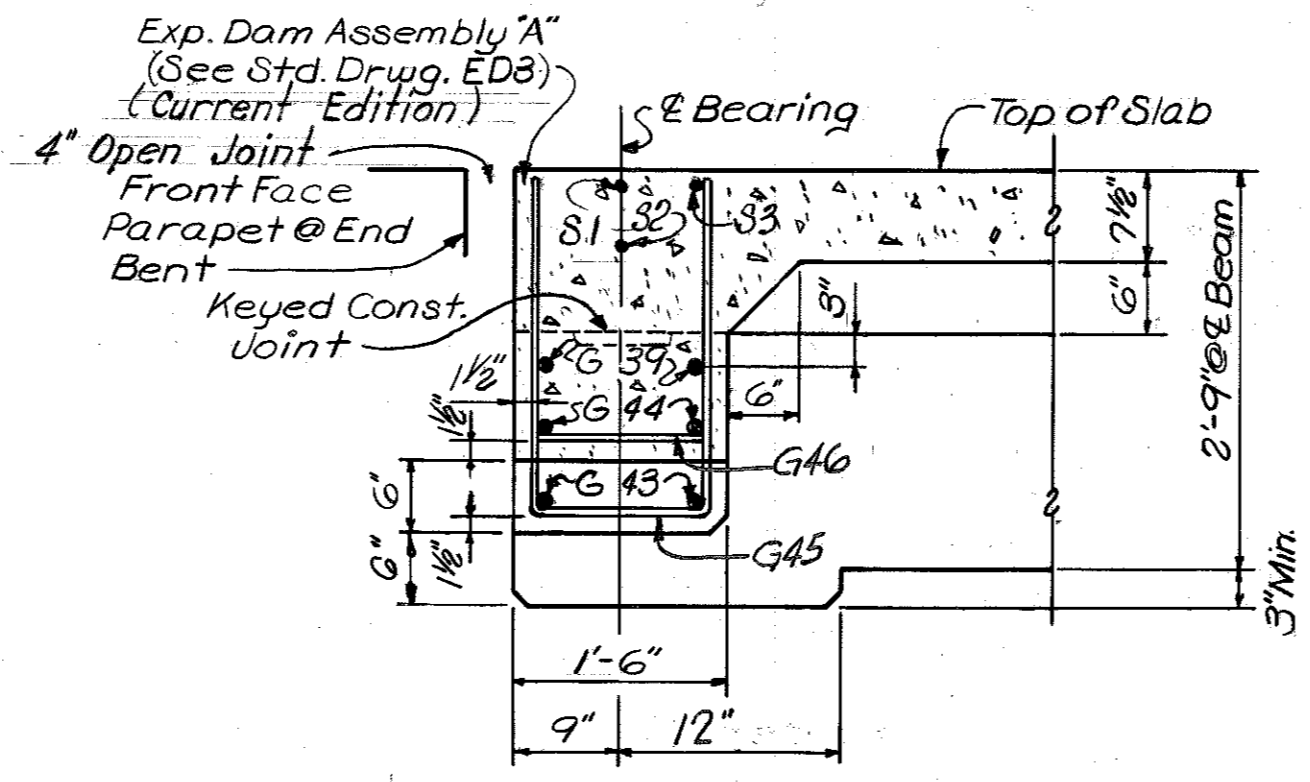
LETTING DATE

DESIGNED BY: AF
 CHECKED BY: JCF
 DATE: 11-69
 REVISIONS:
 DATE: 11-69
 DATE: 11-69
 DATE: 11-69

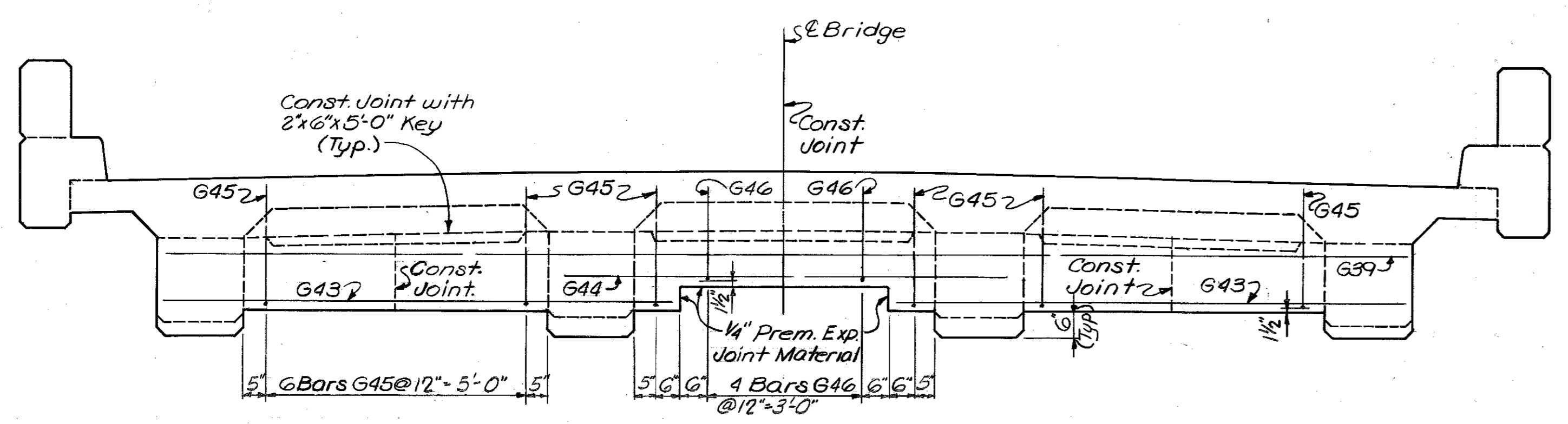


BILL OF REINFORCEMENT

MARK	TYPE	NO.	BAR SIZE	LENGTH		LOCATION	a		b		c		d	
				Ft.	In.		Ft.	In.	Ft.	In.	Ft.	In.		
G1	⊙	24	#11	41	0	Beams	39	0	2	0	1	3/4	39	6 3/8
G2	⊙	16	#11	45	10	"	3	0	36	10	2	3	2	1 3/8
G3	⊙	16	#11	41	2	"	2	6	33	2	1	11	1	9 3/8
G4	Str.	16	#11	18	0	"								
G5	⊙	36	#11	32	2	"								
G6	Str.	24	#5	12	6	"								
G7	Str.	24	#5	20	0	"								
G8	Str.	48	#8	41	0	"								
G9	⊙	16	#11	19	0	"	3	10	8	4	2	10	2	8 3/8
G10	Str.	24	#11	38	4	"								
G11	⊙	16	#11	45	8	"	2	6	37	8	1	11	1	9 3/8
G12	⊙	16	#11	50	8	"	3	0	41	8	2	3	2	1 3/8
G13	⊙	8	#11	13	8	"	3	10	8	0	2	10	2	8 3/8
G14	Str.	8	#11	23	6	Beams								
G15	Str.	12	#11	38	0	"								
G16	Str.	24	#11	60	0	"								
G17	Str.	16	#11	17	1	"								
G18	Str.	16	#11	28	1	"								
G19	Str.	24	#11	10	2	"								
G20	Str.	16	#6	27	9	"								
G21	⊙	424	#5	7	1	"	2	5	1	5				
G22	⊙	24	#5	7	2	"	2	5 1/2	1	5				
G23	⊙	24	#5	7	3	"	2	6	1	5				
G24	⊙	24	#5	7	4	"	2	6 1/2	1	5				
G25	⊙	24	#5	7	5	"	2	7	1	5				
G26	⊙	24	#5	7	7	"	2	8	1	5				
G27	⊙	24	#5	7	10	"	2	9 1/2	1	5				
G28	⊙	24	#5	8	0	"	2	10 1/2	1	5				
G29	⊙	24	#5	8	3	"	3	0	1	5				
G30	⊙	24	#5	8	6	Beams	3	1 1/2	1	5				
G31	⊙	24	#5	8	10	"	3	3 1/2	1	5				
G32	⊙	24	#5	9	1	"	3	5	1	5				
G33	⊙	24	#5	9	5	"	3	7	1	5				
G34	⊙	24	#5	9	10	"	3	9 1/2	1	5				
G35	⊙	24	#5	10	4	"	4	0 1/2	1	5				
G36	⊙	24	#5	10	8	"	4	2 1/2	1	5				
G37	⊙	24	#5	11	1	"	4	5	1	5				
G38	⊙	48	#5	11	7	Beams	4	8	1	5				
G39	Str.	37	#5	23	11	End Wall & Diaphragm @ Piers								
G40	⊙	54	#5	9	0	Diaphragm @ Pier	3	11	1	3				
G41	⊙	72	#5	4	7	Inter. Diaphragm	1	10	1	0				
G42	Str.	40	#5	23	6	Inter. Dia. & Beam								
G43	Str.	8	#5	9	10	End Wall								
G44	Str.	4	#5	8	7	End Wall								
G45	⊙	28	#5	5	6	End Wall	2	2	1	3				
G46	⊙	8	#5	4	6	End Wall	1	8	1	3				
G47	Str.	16	#5	32	4	Beam								
S1	⊙	221	#5	28	6	Slab								
S2	⊙	221	#5	29	5	Slab	1	2	27	2				
S3	⊙	220	#5	29	3	Slab								
S4	Str.	222	#5	38	8	Slab								
S5	Str.	57	#8	33	0	Slab								
S6	⊙	444	#5	7	7	Plinth	3	0	0	9				
S7	⊙	886	#5	5	11	Curb								
S8	Str.	52	#6	10	0	Slab								
S9	Str.	32	#4	30	9	Plinth								
S10	Str.	32	#4	26	1	Plinth								



SECTION B-B



END WALL ELEVATION

ESTIMATE OF QUANTITIES

Item	Quantity
Concrete, Class AA	373.8 (Cu. Yds.)
Steel Reinforcement	120,826 (Lbs.)

SUPERSTRUCTURE

Reloc. Old Columbia Rd. No. 1 over B.S.P. Sheet 10

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
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 ROAD
 STATION 4270 +37.00 P. E. PROJECT NO.
 CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO. 18159

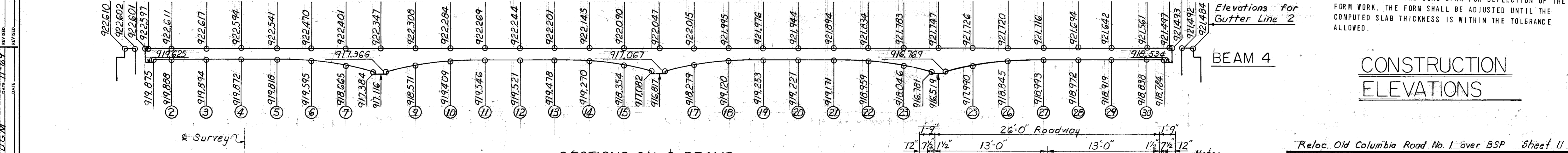
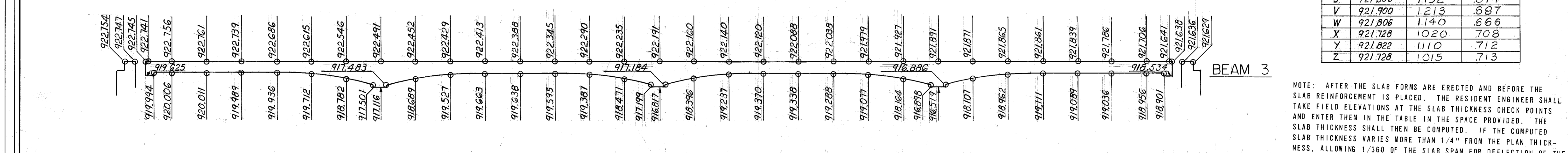
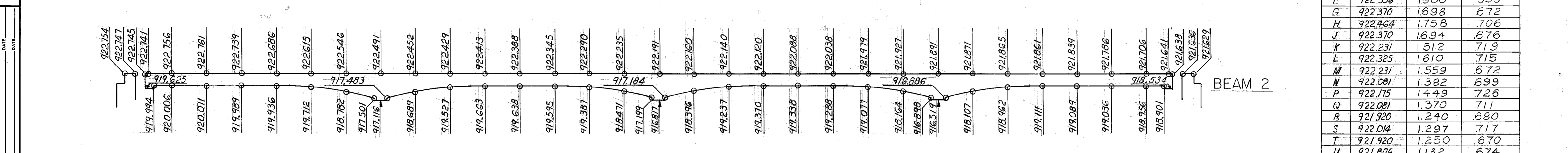
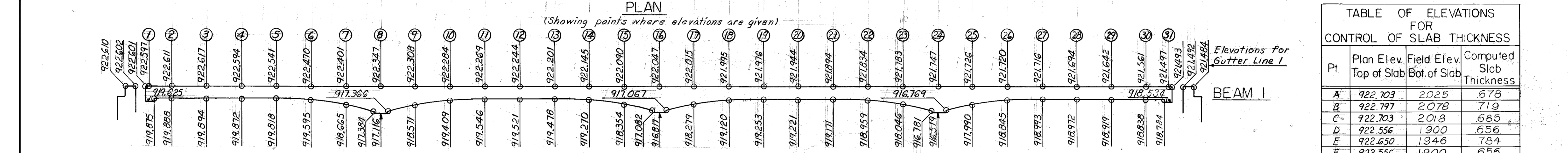
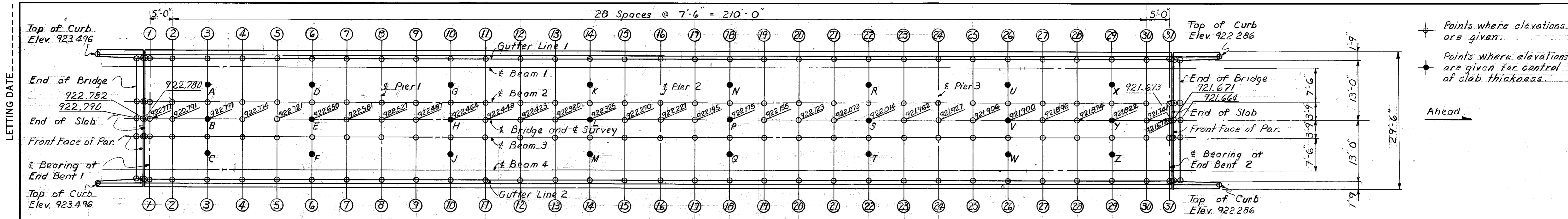


TABLE OF ELEVATIONS FOR CONTROL OF SLAB THICKNESS			
Pt	Plan Elev. Top of Slab	Field Elev. Bot. of Slab	Computed Slab Thickness
A	922.703	2.025	.678
B	922.797	2.078	.719
C	922.703	2.018	.685
D	922.556	1.900	.656
E	922.650	1.946	.784
F	922.556	1.900	.656
G	922.370	1.698	.672
H	922.464	1.758	.706
J	922.370	1.694	.676
K	922.231	1.512	.719
L	922.325	1.610	.715
M	922.231	1.559	.672
N	922.081	1.382	.699
P	922.175	1.449	.726
Q	922.081	1.370	.711
R	921.920	1.240	.680
S	922.044	1.297	.717
T	921.920	1.250	.670
U	921.806	1.132	.674
V	921.900	1.213	.687
W	921.806	1.140	.666
X	921.728	1.020	.708
Y	921.822	1.110	.712
Z	921.728	1.015	.713

NOTE: AFTER THE SLAB FORMS ARE ERECTED AND BEFORE THE SLAB REINFORCEMENT IS PLACED, THE RESIDENT ENGINEER SHALL TAKE FIELD ELEVATIONS AT THE SLAB THICKNESS CHECK POINTS AND ENTER THEM IN THE TABLE IN THE SPACE PROVIDED. THE SLAB THICKNESS SHALL THEN BE COMPUTED. IF THE COMPUTED SLAB THICKNESS VARIES MORE THAN 1/4" FROM THE PLAN THICKNESS, ALLOWING 1/360 OF THE SLAB SPAN FOR DEFLECTION OF THE FORM WORK, THE FORM SHALL BE ADJUSTED UNTIL THE COMPUTED SLAB THICKNESS IS WITHIN THE TOLERANCE ALLOWED.

CONSTRUCTION ELEVATIONS

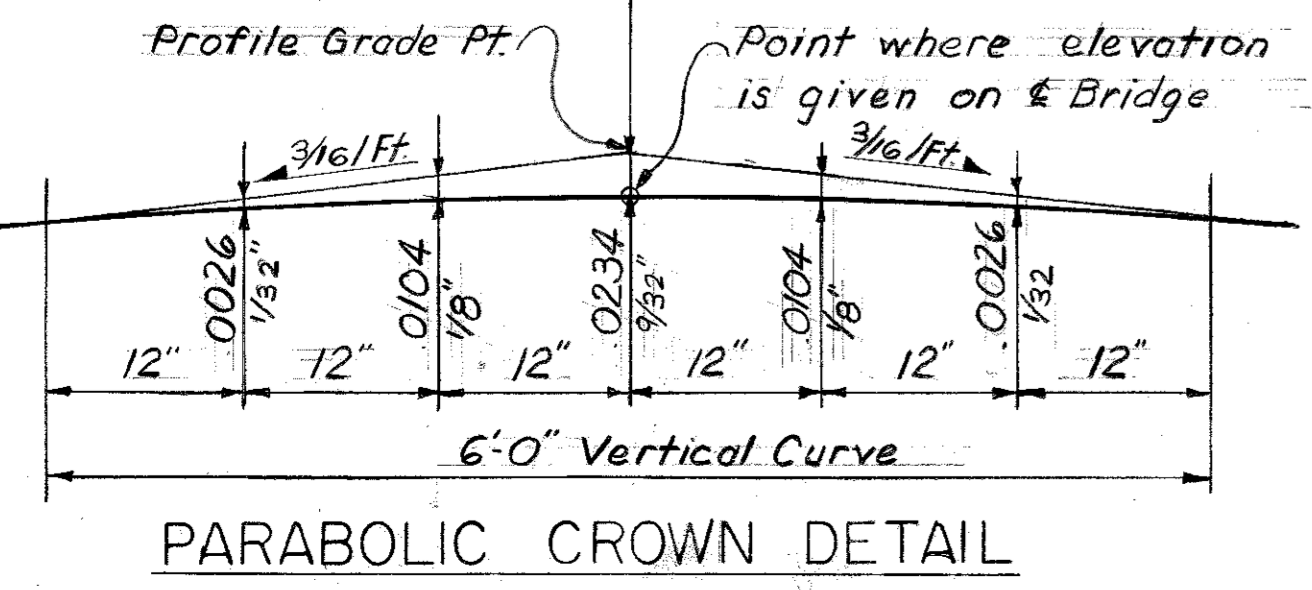
Reloc. Old Columbia Road No. 1 over BSP Sheet 11

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT COUNTY OF
 ADAIR

BOWLING GREEN - SOMERSET PKWY.
 ROAD

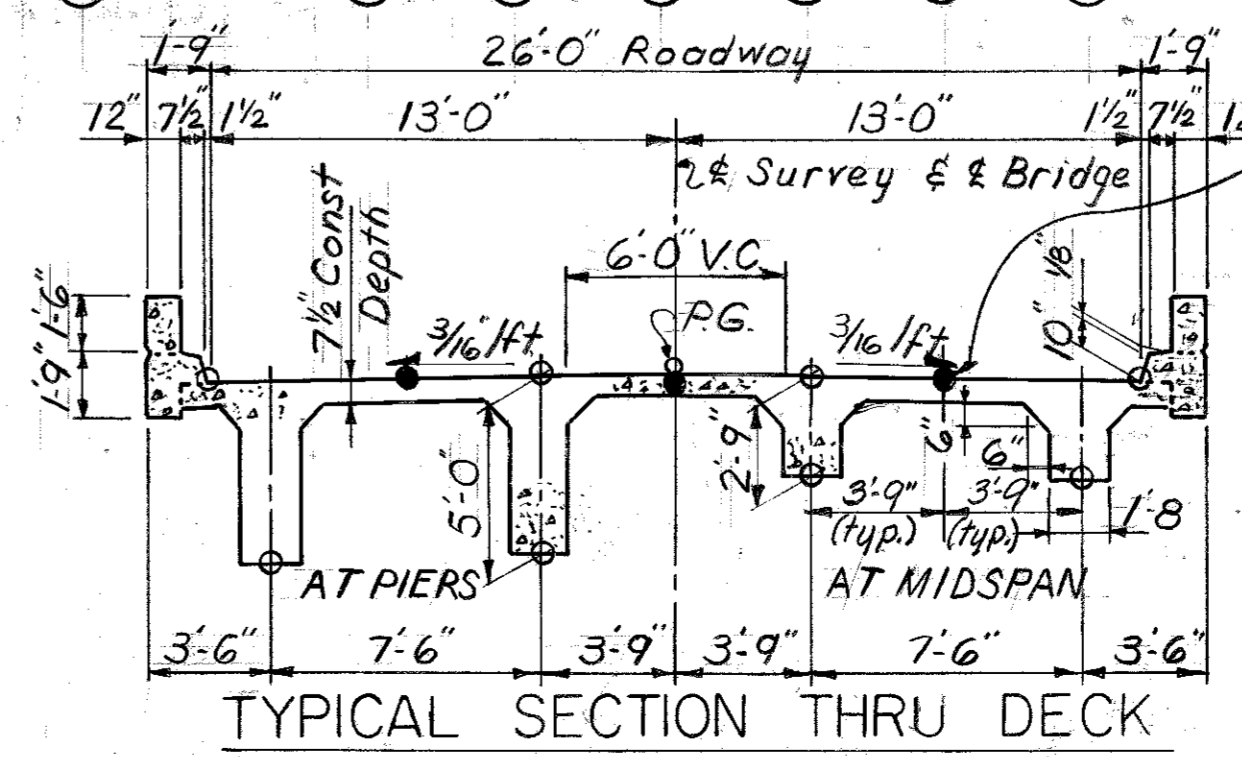
STATION 4270 + 37.00 P. E. PROJECT NO.
 CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO. 18159

DESIGNED BY: PAB
 CHECKED BY: NRB
 DATE: 11-69
 REVISION: 11-67



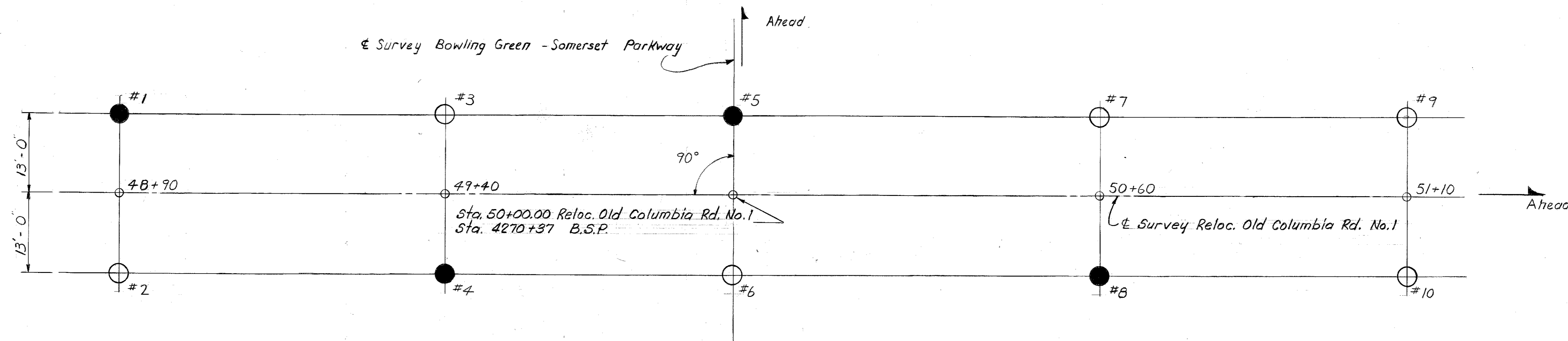
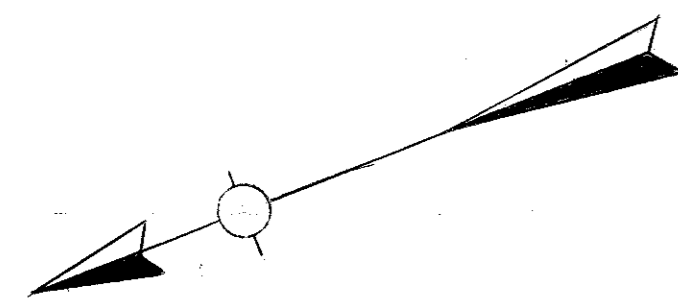
SECTIONS ON C BEAMS

Note: Elevations shown on this sheet include Dead Load Camber and are to be maintained with falsework in place.

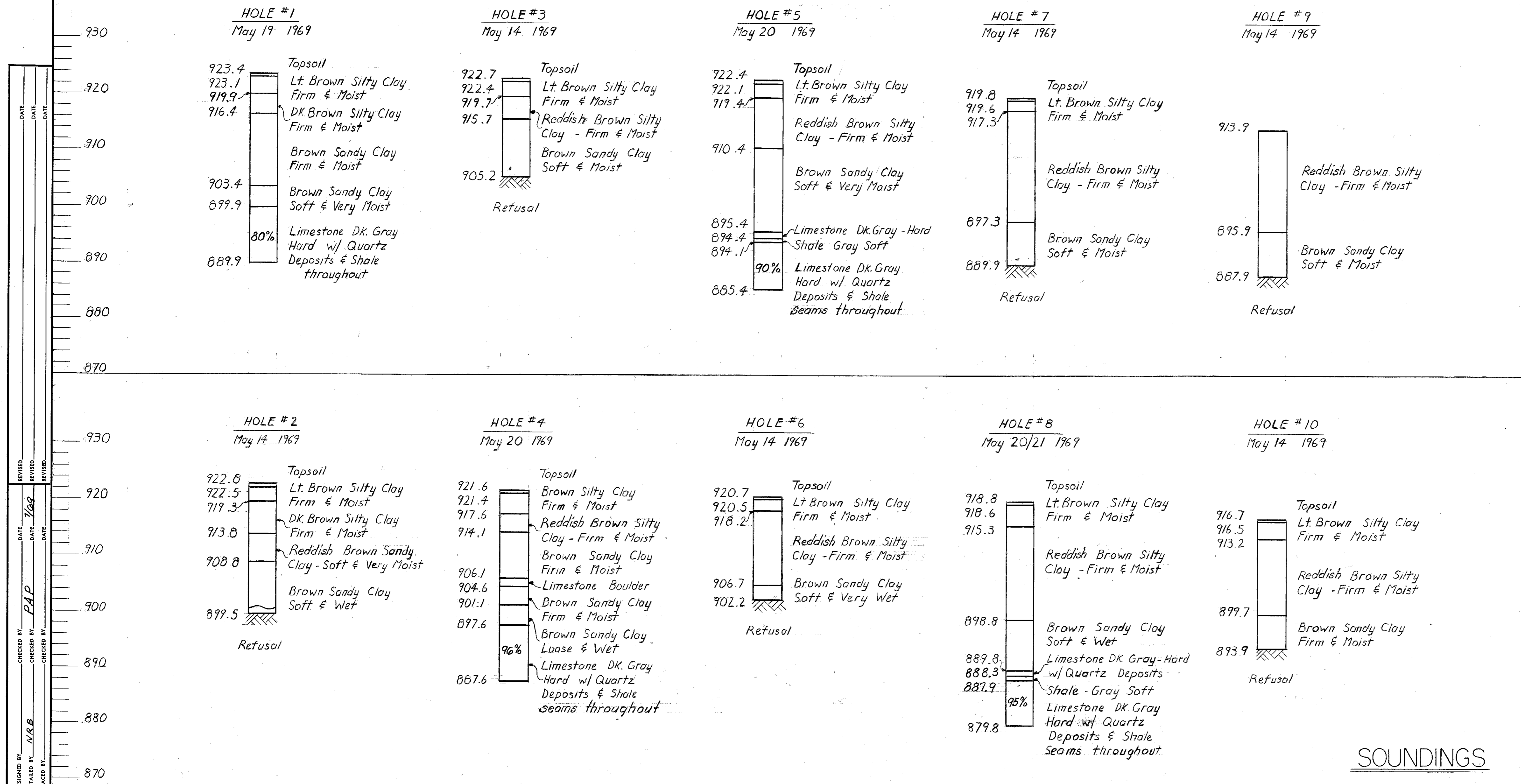


Note: Points where Elev. are given for control of slab thickness (typical).

LETTING DATE



LAYOUT



~ Indicates Ground Water Elev.
 ○ " Auger to Solid Rock
 ● " Core 10' into Solid Rock

DESIGNED BY: *MRB*
 CHECKED BY: *PAP*
 DATE: *1/69*
 REVISIONS: *1/69*

Reloc. Old Columbia Road No. 1 over B.S.P. Sheet 12

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
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SOUNDINGS