

KENTUCKY DEPARTMENT OF HIGHWAYS

JEFFERSON COUNTY

LOUISVILLE - COVINGTON

INTERSTATE 71 OVER EDITH STREET

HAZLET & ERDAL
CONSULTING ENGINEERS
FILE NO. 871-E

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ESTIMATED QUANTITIES																												
SHEET DESIGNATION	SHEET NUMBER	CONCRETE CLASS "A" (CU. YDS.)	STEEL REINFORCEMENT (LBS.)	① STRUCTURAL STEEL (LUMP SUM)	STRUCTURE EXCAVATION COMMON (CU. YDS.)	END BENT BACKFILL (CU. YDS.)	METAL HANDRAIL		PILE LOADING TESTS (EACH)	PROTECTIVE COATING (SQ. YDS.)	SLOPE PROTECTION (SQ. YDS.)						CONCRETE PILING (LIN. FT.) (See General Notes For Description of Alternates)											
							ALTERNATE A RATE & (LIN. FT.)	ALTERNATE B RATE & (LIN. FT.)									ALTERNATE A		ALTERNATE B		ALTERNATE C		ALTERNATE D		ALTERNATE E		ALTERNATE F	
																	FURNISHING	DRIVING	FURNISHING	DRIVING	FURNISHING	DRIVING	FURNISHING	DRIVING	FURNISHING	DRIVING	FURNISHING	DRIVING
TITLE SHEET	1																											
GENERAL NOTES	2																											
LAYOUT SHEETS	3-4																											
LOG OF SOUNDINGS	5																											
WESTBOUND BRIDGE																												
BENT 1W	6-7	78.6	4809		145	145											750*	750*	750	750								
PIER 1W	8	45.5	5853														764	764	764	764								
PIER 2W	8	45.5	5853														764	764	764	764								
BENT 2W	6-7	77.8	4809		145	145											750*	750*	750	750								
SUPERSTRUCTURE	9-11	354.3	57930				277.5	277.5		720																		
ELEVATION SHEET	12																											
ANCHOR BOLT PLAN	13																											
PILE RECORD	14																											
END BENT BACKFILL	15																											
STANDARD ARMORED EDGE	AE-1																											
EXPANSION DAM	ED-2																											
PREFORMED JOINT SEAL	G-353																											
PREMOLDED CORK EXP. JT. MATL	G-354																											
ALUMINUM HANDRAIL	H-112																											
GALV. STEEL HANDRAIL	H-113																											
4" REINF. CONC. SLOP WALL	SP-1																											
STEEL BEARING SHOES	SS-2																											
STANDARD PILE DRAWINGS	0																											
TOTALS		582.0	111,254	①	290	290	277.5	277.5		720							2,908	2,908	2,908	2,908								
EASTBOUND BRIDGE																												
BENT 1E	6-7	78.6	4809		145	145											750*	750*	750	750								
PIER 1E	8	45.5	5853						1								764	764	764	764								
PIER 2E	8	45.5	5853														764	764	764	764								
BENT 2E	6-7	77.9	4809		145	145											750*	750*	750	750								
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ELEVATION SHEET	12																											
ANCHOR BOLT PLAN	13																											
PILE RECORD	14																											
END BENT BACKFILL	15																											
For Standard Plans see Westbound Bridge																												
TOTALS		582.2	111,254	①	290	290	277.5	277.5	1	720	1,030*						2,919	2,919	2,919	2,919								

* Total for Westbound & Eastbound Bridges

① See Sheet No. 2 for Standard Pile Drawing References

② NOTE: Approximately 1" x 1" Lbs. of structural steel included in lump sum bid for structural steel - each bridge

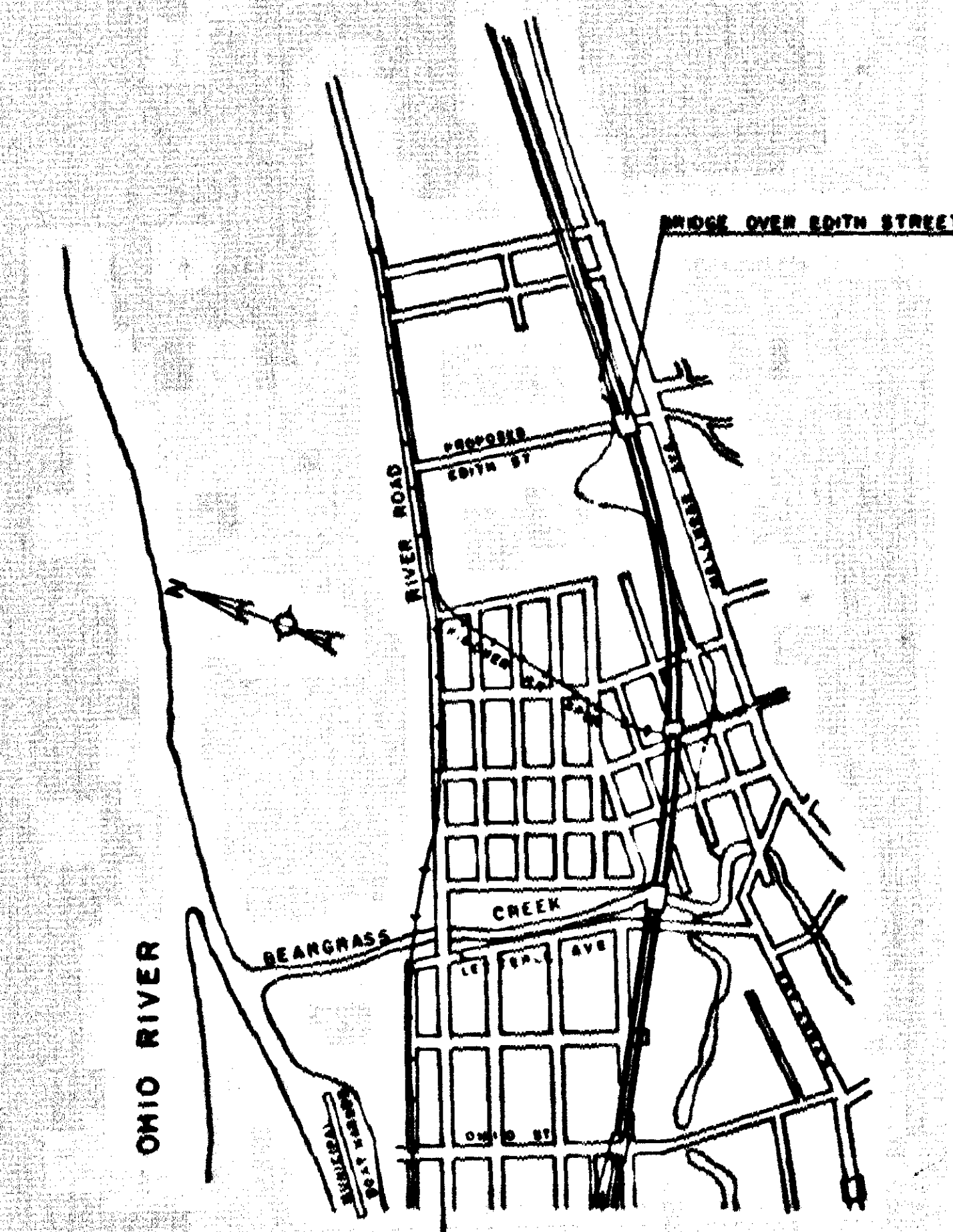
METAL HANDRAIL: The Contractor shall bid on both alternate types and use Alternate designated in the Contract throughout;

Alternate G - Aluminum Handrail

Alternate H - Galvanized Steel Handrail

* Use Alternates B, C, E in End Piers and payment will be at unit prices bid for Furnishing and Driving, respectively, for Alternates B, C, E

TITLE SHEET



NOTE: For "Bill of Incidental Material" References for Standard Plans and General Notes See Sheet 2

BRIDGE OVER EDITH STREET SHEET 1 OF 15

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
171 - OHIO STREET TO ZORN AVENUE
LOUISVILLE - COVINGTON

ROAD SP56-313-L2
PROJECT NO. 1-71-11010
STATION 373+70
BRIDGE NUMBER 15937

BRIDGE

NO.	DATE	BY	CHKD.	REVISION	REMARKS
7	KY.				

GENERAL NOTES

SPECIFICATIONS:	KENTUCKY DEPARTMENT OF HIGHWAYS, CURRENT STANDARD WITH AMENDMENTS.
DESIGN LOAD:	BRIDGE DESIGNED FOR HS20-S16-44 LOADING AS SPECIFIED IN 1961 ASDHD SPECIFICATIONS OR ALTERNATE LOADING OF TWO 24 KIP AXLES SPACED 4 FEET APART, WHICHEVER PRODUCES THE GREATER STRESS.
DESIGN STRESSES:	FOR REINFORCED CONCRETE: $f'_c = 3,000 \text{ PSI.}$ $f_y = 300 \text{ PSI. FOR S.}$ $f'_c = 1,200 \text{ PSI.}$ $f_y = 3,000 \text{ PSI.}$ $f_y = 300 \text{ PSI. FOR}$ $f_y = 10$ EMBEDMENT
PILE ALLOWABLE LOAD:	PILES ARE DESIGNED FOR A MAXIMUM LOAD OF 60 TONS PER PILE. THESE MAXIMUMS ARE FOR GROUP A LOADS WITH INCREASES ALLOWED FOR OTHER LOADING GROUPS.
PILING:	PILING SHALL BE DRIVEN TO REFUSAL OR TO SUSTAIN A MINIMUM LOAD OF 75 TONS PER PILE IN ACCORDANCE WITH THE SPECIFICATIONS. TEST PILES SHALL BE DRIVEN WHERE DESIGNATED ON THE PLANS TO DETERMINE THE LENGTH REQUIRED. ALL TEST PILES SHALL BE ACCURATELY LOCATED SO THAT THEY MAY BE USED IN THE FINISHED STRUCTURE.
ALTERNATE TYPES OF PILES:	THE CONTRACTOR SHALL USE ONE OF THE FOLLOWING TYPES THROUGHOUT, EXCEPT THAT ALTERNATE A, D & F WILL NOT BE PERMITTED FOR THE END BENTS: ALTERNATE A - 14" REINFORCED CONCRETE PRECAST PILES, STANDARD DRAWING P-2. ALTERNATE B - 14" CAST-IN-PLACE CONCRETE PIPE PILES, STANDARD DRAWING P-20. ALTERNATE C - 14" CAST-IN-PLACE CONCRETE PILE, FLUTED STEEL SHELL, STANDARD DRAWING P-21. ALTERNATE D - 14" CAST-IN-PLACE PILE, CORRUGATED STEEL STEP-TAPER SHELL, STANDARD DRAWING P-22. ALTERNATE E - 14" PRESTRESSED PRECAST PILE, STANDARD DRAWING P-23. ALTERNATE F - 14" CAST-IN-PLACE CONCRETE PILE, CORRUGATED STEEL STEP-UNIFORM SHELL, STANDARD DRAWING P-24. CORRUGATED STEEL SHELL CAST-IN-PLACE PILES, ALTERNATES D AND F, SHALL NOT BE USED FOR SUPPORTING BRIDGE END-STRUCTURES WHICH REQUIRE THE PILE TO RESIST HORIZONTAL EARTH PRESSURES IN BENDING. OTHER ACCEPTABLE PILE TYPES SHALL BE REQUIRED TO SUBSTITUTE FOR THE CORRUGATED STEEL SHELL PILES, ALTERNATES D AND F, IN THIS DISTANCE IN THE END BENTS. ALTERNATE A SHALL NOT BE PERMITTED IN THE END BENTS BECAUSE OF EXCESSIVE LENGTH. FOR REINFORCED CONCRETE PRECAST (OR PRESTRESSED) PILES, CORED PILOT HOLES THROUGH THE EMBANKMENT WILL BE REQUIRED FOR STARTING PILES. THE COST OF THIS WORK IS TO BE INCLUDED IN THE UNIT PRICE BID PER LINEAR FOOT FOR DRIVING PILES. SEE SPECIAL PROVISIONS FOR PILING LOAD TESTS. TEST LOAD SHALL BE 120 TONS FOR A SAFE ALLOWABLE DESIGN LOAD OF 60 TONS. THE TEST SHALL CONSIST OF THE APPLICATION OF A TEST LOAD TO THE PILE TOGETHER WITH SUITABLE APPARATUS FOR ACCURATELY DETERMINING THE SUPERIMPOSED WEIGHT AND THE SETTLEMENT OF THE PILE UNDER EACH INCREMENT OF LOAD. THE PERMANENT NET SETTLEMENT, MEASURED AT THE TOP OF THE PILE, SHALL NOT EXCEED 1/4" AFTER 48 HOURS CONTINUOUS APPLICATION OF THE 120 TON TEST LOAD. THIS PERMANENT SETTLEMENT SHALL NOT BE INCREASED BY A CONTINUOUS APPLICATION OF THE TEST LOAD FOR A PERIOD OF 48 HOURS OR THEREAFTER. THE CONTRACTOR SHALL OUTLINE THE METHOD OF TEST LOADING, THE METHOD OF INSTRUMENTATION FOR MEASURING THE TEST LOADS AND FOR MEASURING THE TEST-PILE DEFLECTIONS UNDER LOAD. THE CONTRACTOR SHALL SPECIFY LOADING INCREMENTS, PERIODS OF TIME FOR SUSTAINING EACH INCREMENT, AND THE APPROPRIATE TIMES FOR MEASURING THE DEFLECTIONS. THE LOAD TEST OUTLINE SHALL BE SUBMITTED TO THE DEPARTMENT FOR APPROVAL PRIOR TO TESTING. THE RESULTS OF THE PILE LOAD TEST SHALL BE TABULATED AND GRAPED ON A LOAD-DEFLECTION GRID. THE TEST RESULTS, TABULATED AND GRAPED, SHALL BE SUBMITTED TO THE DEPARTMENT FOR DETERMINATION OF THE SAFE ALLOWABLE PILE LOAD. EVIDENCE OF FAILURE EITHER IN THE APPLICATION OF THE LOAD OR IN THE INSTRUMENTATION WHEN EITHER IS INDICATED IN THE TEST RESULTS OR REPORTED BY THE ENGINEER, SHALL RENDER A PILE LOAD TEST INCOMPLETE AND UNACCEPTABLE. FAILURE OF THE PILE UNDER LOAD OR EXCESSIVE SETTLEMENT OF THE PILE UNDER LOAD SHALL NOT BE CONSIDERED AN UNACCEPTABLE TEST. IF THE TEST RESULTS INDICATE THE STRUCTURE FOUNDATION REQUIRED REDUCTION TO ACCOMMODATE REDUCED SAFE ALLOWABLE PILE LOADS, THE COST OF CONSTRUCTION DELAYS TO PERMIT REDUCTION SHALL BE INCLUDED IN THE UNIT PRICE BID FOR EACH PILE LOAD TEST.
DRIVING PILES:	
PILING LOAD TESTS:	

CONCRETE:	CLASS "A" CONCRETE IS TO BE USED THROUGHOUT, EXCEPT IN PILES. CLASS "B" CONCRETE IS TO BE USED IN PILES.
BEVELED EDGES:	ALL EXPOSED EDGES SHALL BE BEVELED 7/8" UNLESS OTHERWISE SHOWN.
CONCRETE FINISH:	THE EXTERIOR FACE OF EXTERIOR GIRDETS, PLINTHS, SOFFIT OVERMANS, WIND-WALLS AND PIERS SHALL RECEIVE A RUBBED SURFACE FINISH.
CONSTRUCTION JOINTS:	ALL CONSTRUCTION JOINTS SHALL BE CAREFULLY FORMED. THE CONTRACTOR SHALL FURNISH SUFFICIENT MIXER CAPACITY TO PLACE THE CONCRETE BETWEEN CONSTRUCTION JOINTS AS NOTED ON THE PLANS IN A PERIOD NOT EXCEEDING TEN HOURS CONTINUOUS RUN. AFTER ONE SECTION OF THE CONCRETE HAS BEEN PLACED, THE CONSTRUCTION JOINT SHALL BE THOROUGHLY CLEANED OF ALL LAITANCE, LOOSE OR FOREIGN MATERIAL JUST BEFORE THE CONCRETE TAKES ITS FINAL SET, WHICH IS ABOUT SIX HOURS. THE JOINT SHALL THEN BE COVERED WITH BURLAP AND LEFT COMPLETELY SATURATED WITH WATER. FLUSH THE JOINTS WITH A 1:2 PORTLAND CEMENT MORTAR JUST BEFORE PLACING THE ADJOINING SECTION.
FALSEWORK:	THE FALSEWORK SUPPORTING THE GIRDETS IN ANY SPAN OF A CONTINUOUS REINFORCED CONCRETE UNIT SHALL NOT BE REMOVED UNTIL ALL GIRDETS AND SLABS IN ALL SPANS OF THE CONTINUOUS UNIT HAVE BEEN POURED FOR AT LEAST TWENTY-ONE DAYS.
REINFORCEMENT:	INTERMEDIATE OR HARD GRADE REINFORCEMENT SHALL BE USED IN ACCORDANCE WITH ASTM A19-BOT FOR BILLET STEEL OR A19-BOT FOR RAIL STEEL CONFORMING TO BENDING REQUIREMENTS OF ASDHD SPECIFICATION 1002.
CORK EXPANSION JOINT MATERIAL AND PREFORMED JOINT SEAL:	DIMENSIONS SHOWN FROM FACE OF CONCRETE TO BARS ARE CLEAR DISTANCES. SPACING OF BARS IS FROM CENTER TO CENTER OF BARS. THE COST OF THESE ITEMS IS TO BE INCLUDED IN THE UNIT PRICE BID FOR CLASS "A" CONCRETE.
STRUCTURAL STEEL:	"LUMP SUM BID" FOR STRUCTURAL STEEL SHALL BE FULL PAYMENT FOR ALL STRUCTURAL STEEL, BOLTS, WASHERS, LEAD PLATES, MOLDED LEAD, WELDING AND WELDING MATERIALS, PAINT, AND ALL LABOR AND MATERIALS NECESSARY TO ERECT THE STEEL IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
PAINT:	ALL STRUCTURAL STEEL, EXCEPT TOP BEARING SURFACES OF SHEDS, SHALL BE GIVEN ONE SHOP COAT OF TYPE 1 RED LEAD PAINT AND TWO FIELD COATS OF ALUMINUM PAINT. EXPOSED SURFACES OF EXPANSION BARS, NOT ACCESSIBLE AFTER ERECTION, SHALL BE GIVEN TWO FIELD COATS OF ALUMINUM PAINT BEFORE ERECTION. TOP BEARING SURFACES OF SHEDS SHALL BE COATED IN THE SHOP WITH A HOT MIXTURE OF WHITE LEAD AND TALLOW IN ACCORDANCE WITH THE SPECIFICATIONS. SHOP PAINT SHALL NOT BE APPLIED TO STEEL SURFACES IN CONTACT WITH CONCRETE.
PLACING FILLS:	EMBANKMENT SHALL BE PLACED IN ACCORDANCE WITH DETAILS SHOWN ON SHEET 15 OF THE PLANS.
SLOPE PROTECTION:	SLOPE PROTECTION SHALL BE 6" CONCRETE SLOPEMALL IN ACCORDANCE WITH STANDARD DRAWING SP1. SLOPEMALL SHALL BE SCORED ON 5"-6" GRID.

BILL OF INCIDENTAL MATERIAL

ITEM	NO	DESCRIPTION	LOCATION
1x3 Joint Sealing Compound	2	42'3" Lin. Ft.	Bents BW & BE
1x6x1 1/4" Preformed Joint Seal	2	50'0" Lin. Ft.	Bents AW & AE
Premolded Cork Expansion Joint Material	4	1'x1'2"x2'6"	Bents AW & AE
Premolded Cork Expansion Joint Material	2	1'x3'1"x36'6"	Bents WYE & AE

REFERENCES

AE-1 Standard Armored Edge for Concrete
ED-2 Standard Expansion Dam for Concrete Spans
G-353 Preformed Joint Seal Details for Concrete Floors
G-354 Premolded Cork Expansion Joint Material
H-112 Standard Aluminum Handrail
H-113 Galvanized Steel Handrail
P-2 14" Reinforced Concrete Precast Piles
P-20 14" Cast-in-Place Concrete Pipe Pile
P-21 14" Cast-in-Place Concrete Pile, Fluted Steel Shell
P-22 14" Cast-in-Place Corrugated Steel Step-Taper Shell
P-23 14" Prestressed Precast Concrete Pile
P-24 14" Cast-in-Place Concrete Pile, Corrugated Steel Step-Uniform Shell
SP-1 Standard Concrete Slope-mall
SS-2 Standard Steel Bearing Shoes for Concrete Spans

SPECIAL PROVISIONS

Gold applied elastomeric type joint sealing compound (6-27-62)
Preformed joint seal (2-11-64)
Linseed oil protective coating (4-14-64)
Piling Load Tests (10-27-64)

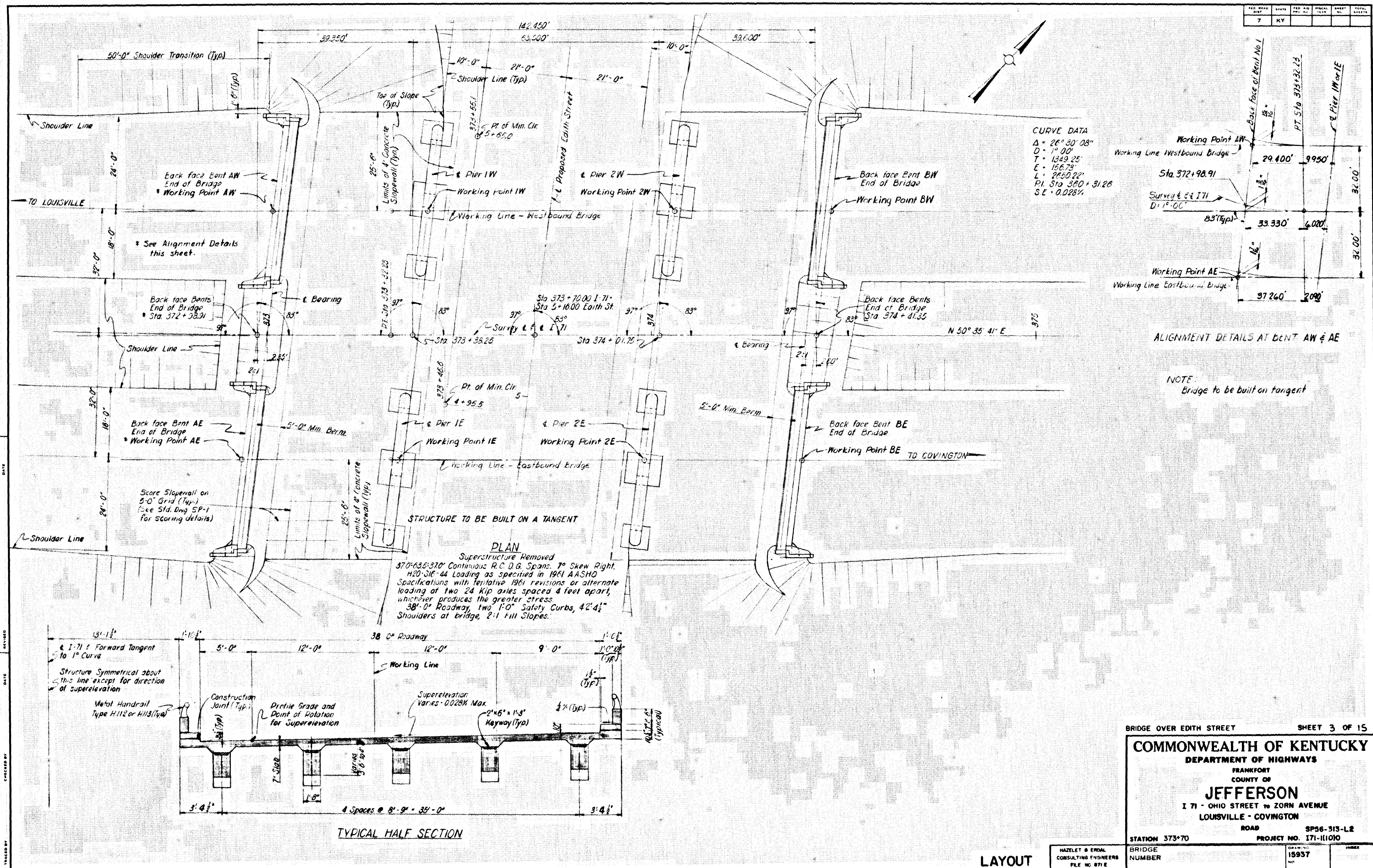
BRIDGE OVER EDITH STREET SHEET 2 OF 15

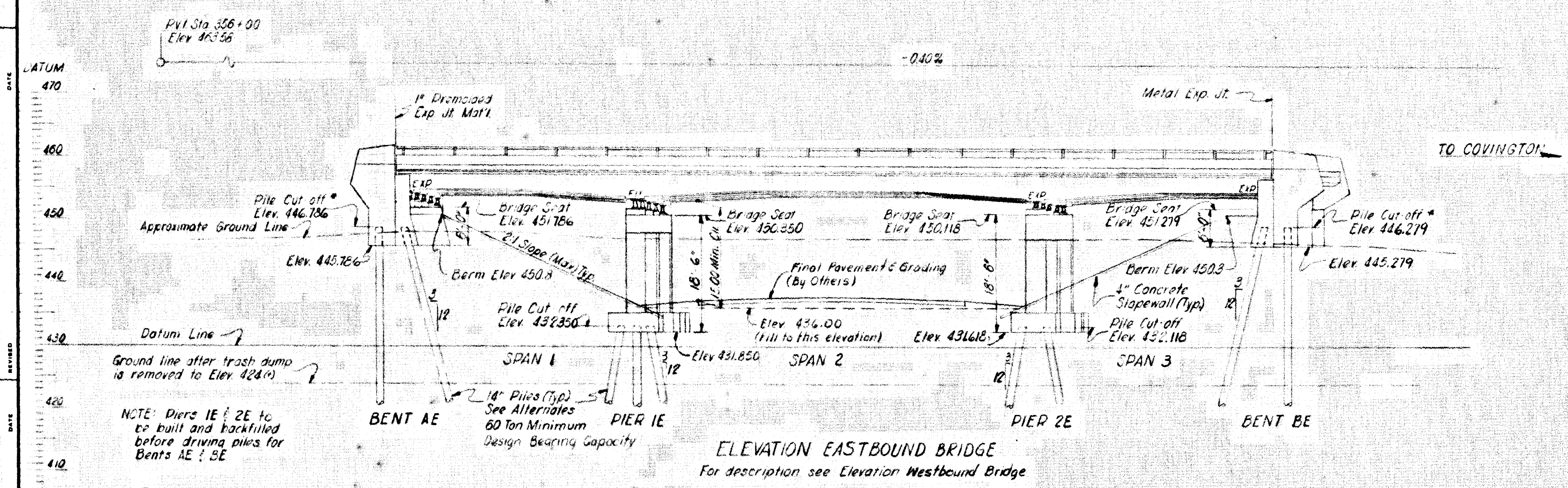
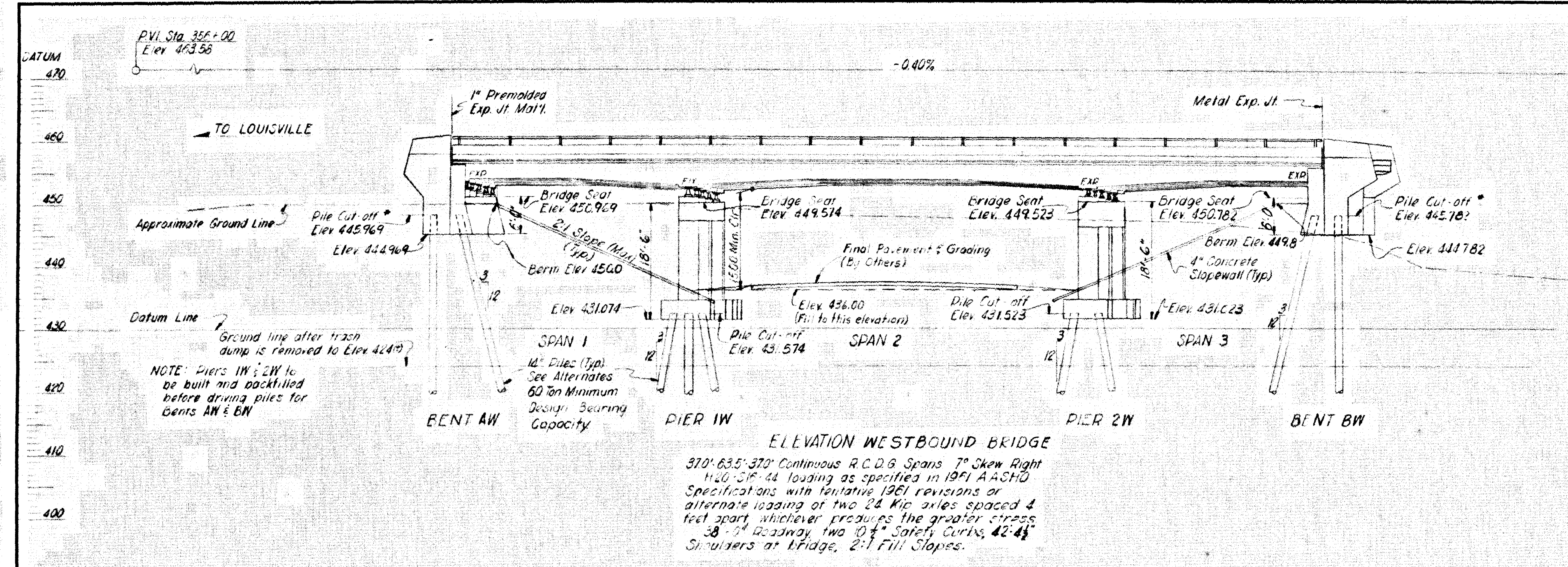
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
171 - OHIO STREET TO ZORN AVENUE
LOUISVILLE - COVINGTON
ROAD
STATION 373+70 PROJECT NO. 171-K1010
SP56-313-L2

GENERAL NOTES &
BILL OF INCIDENTAL MATERIAL

WHEELLEY & SPOON CONSULTING ENGINEERS FILE NO. 871-E	BRIDGE NUMBER 15537	DATE 1953
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BRIDGE





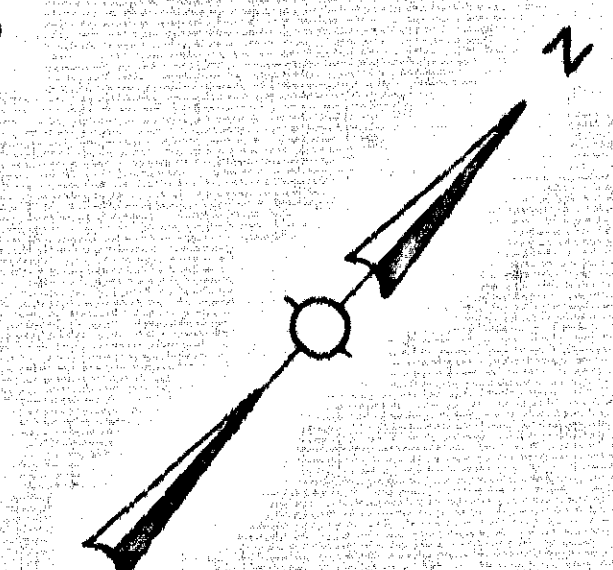
* Pile Cutoff Shown is for Alternate E.
 For Cutoff Elev. of Alternates B or C add
 2.000' to Elevation shown.

DATE	BY	DATE	BY
DESIGNED BY	CHIEF ENGINEER	DATE	BY
CHECKED BY	DATE	BY	DATE
APPROVED BY	DATE	BY	DATE

BRIDGE OVER EDITH STREET		SHEET 4 OF 15	
COMMONWEALTH OF KENTUCKY			
DEPARTMENT OF HIGHWAYS			
FRANKFORT			
COUNTY OF			
JEFFERSON			
I 71 - OHIO STREET TO ZORN AVENUE			
LOUISVILLE - COVINGTON			
ROAD		SP56-513-L2	
STATION 373+70		PROJECT NO. 171-1110	
HAZLET & ERICK CONSULTING ENGINEERS FILE NO. 871 E		BRIDGE NUMBER 15937	

LAYOUT

BRIDGE

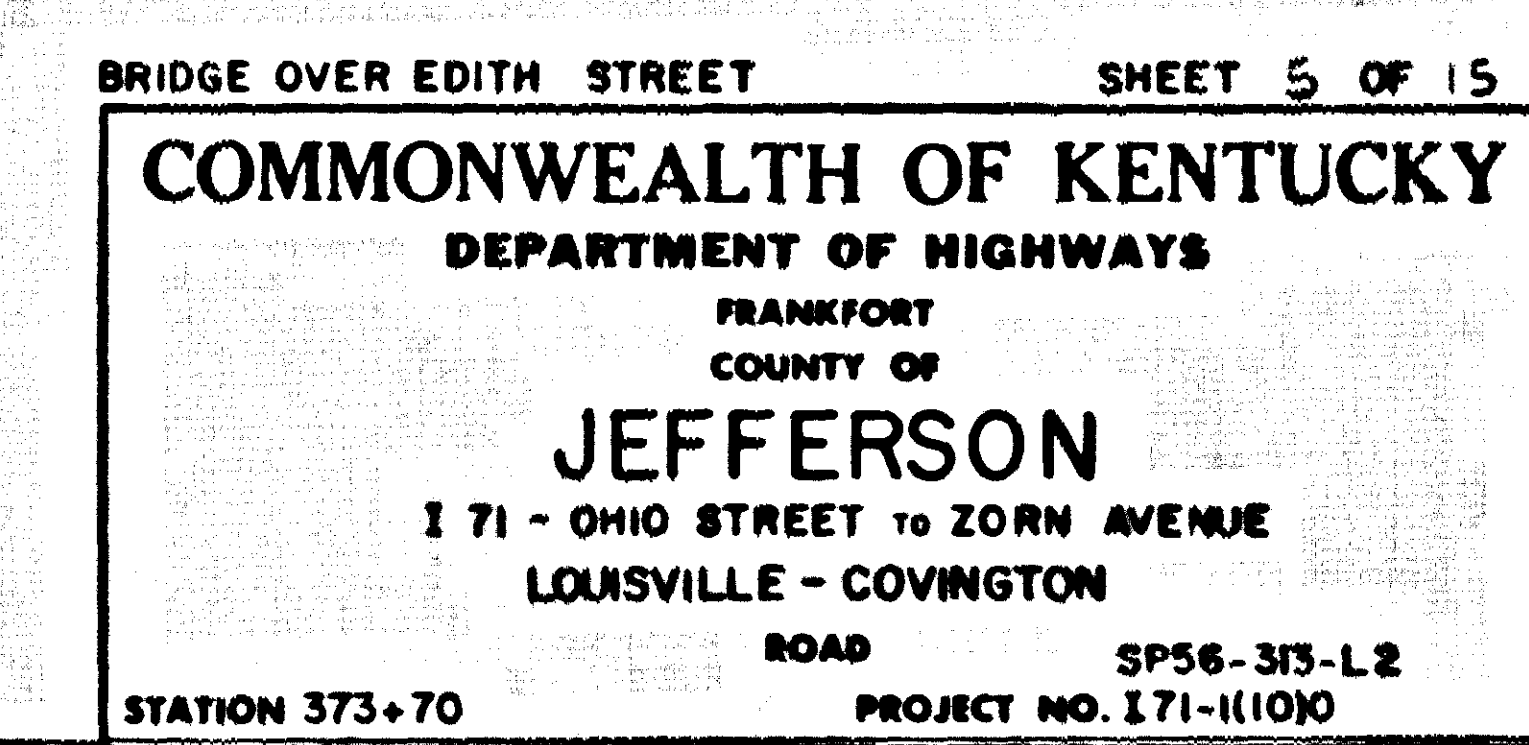


NOTES

✉ Indicates Split Spoon Sample taken with 2" Diameter Spoon using a 140 pound weight dropping 30".

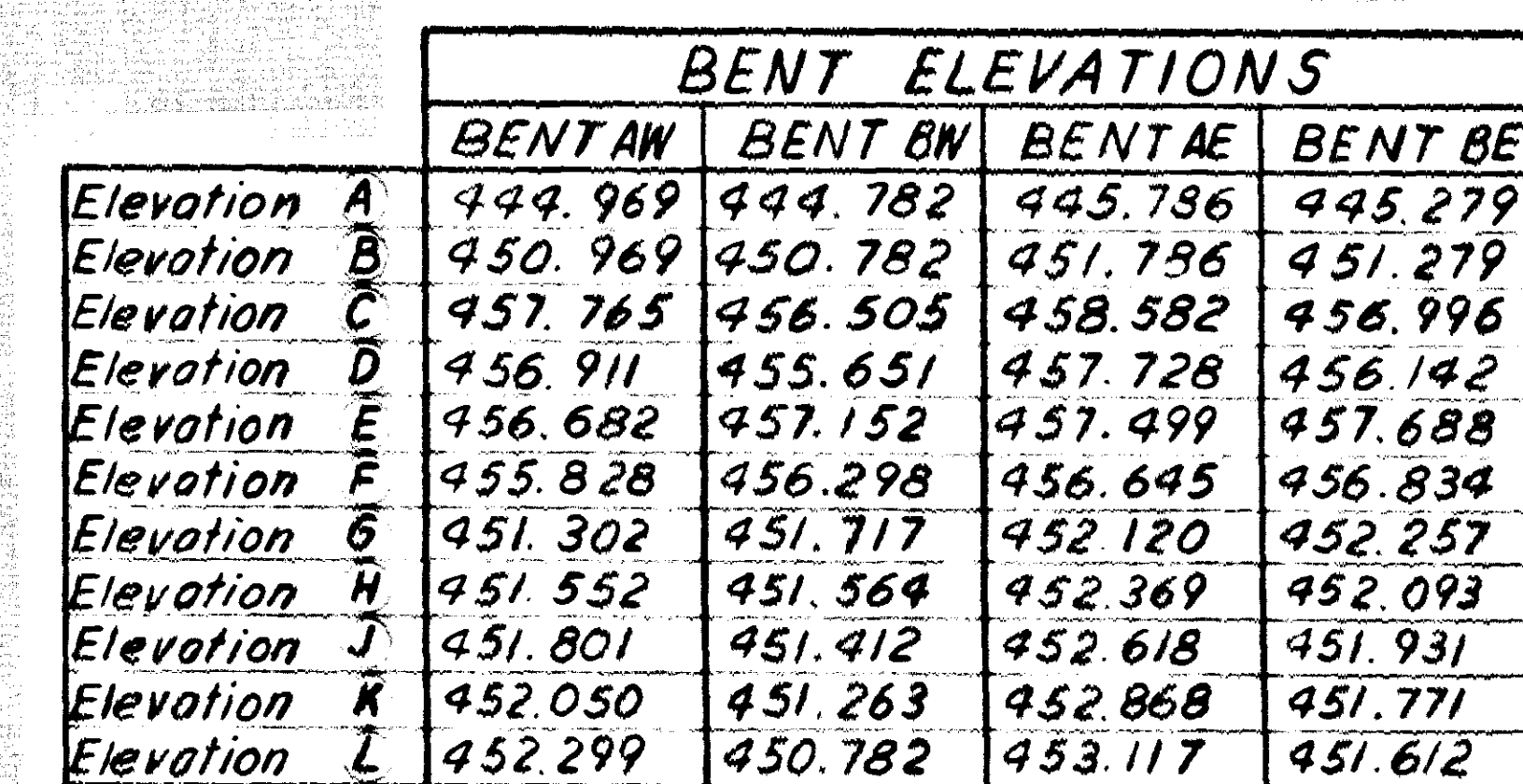
Number in Circle indicates number of blows required to drive sampler 1 foot.

Elevations at left of Borings indicate change in strata.

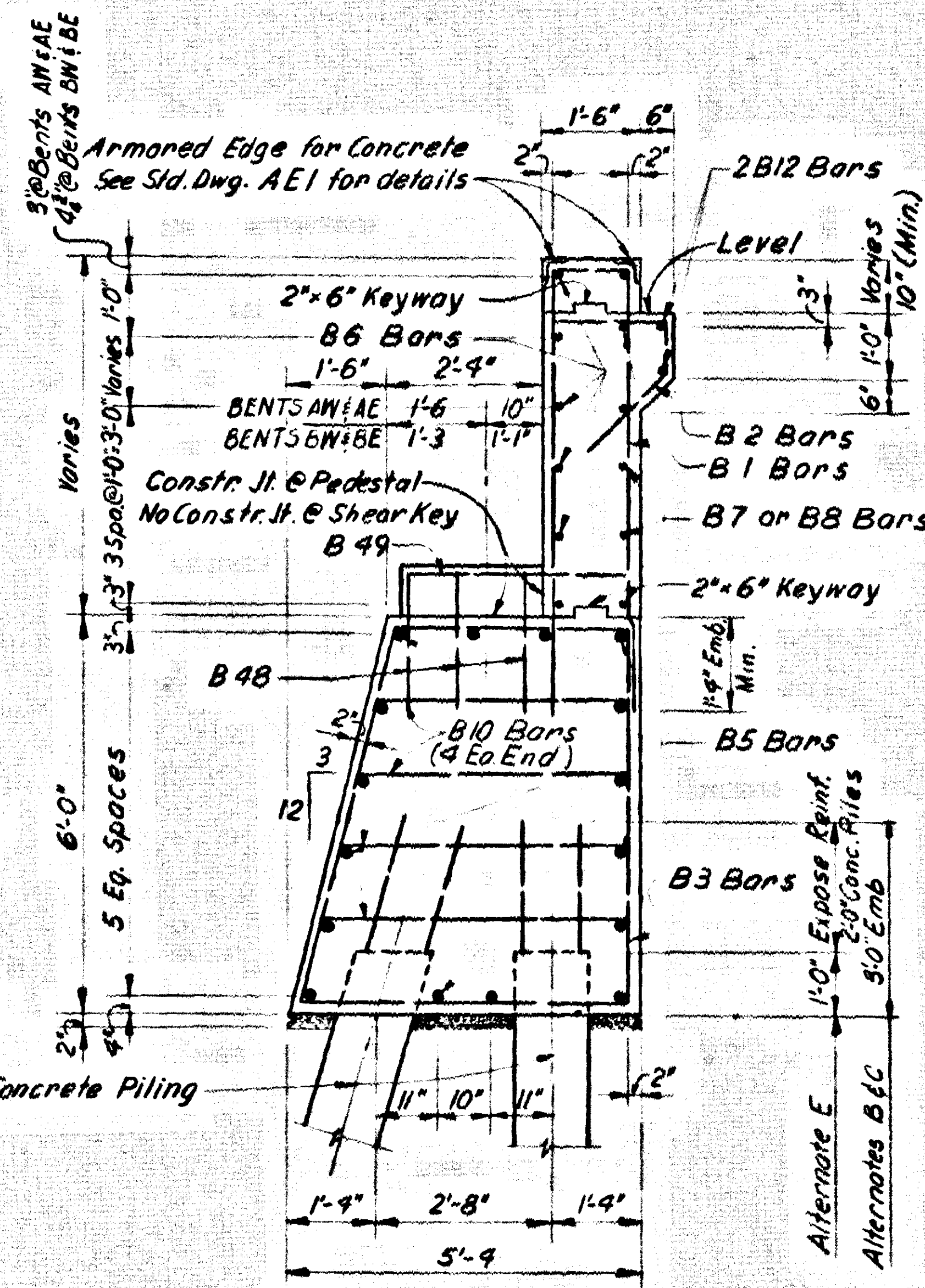


MAZELEY & ERDAL CONSULTING ENGINEERS FILE NO. 871E	BRIDGE NUMBER	DATE: 10-1-70 15937 140	PROJECT NO. 21-1100
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BRIDGE



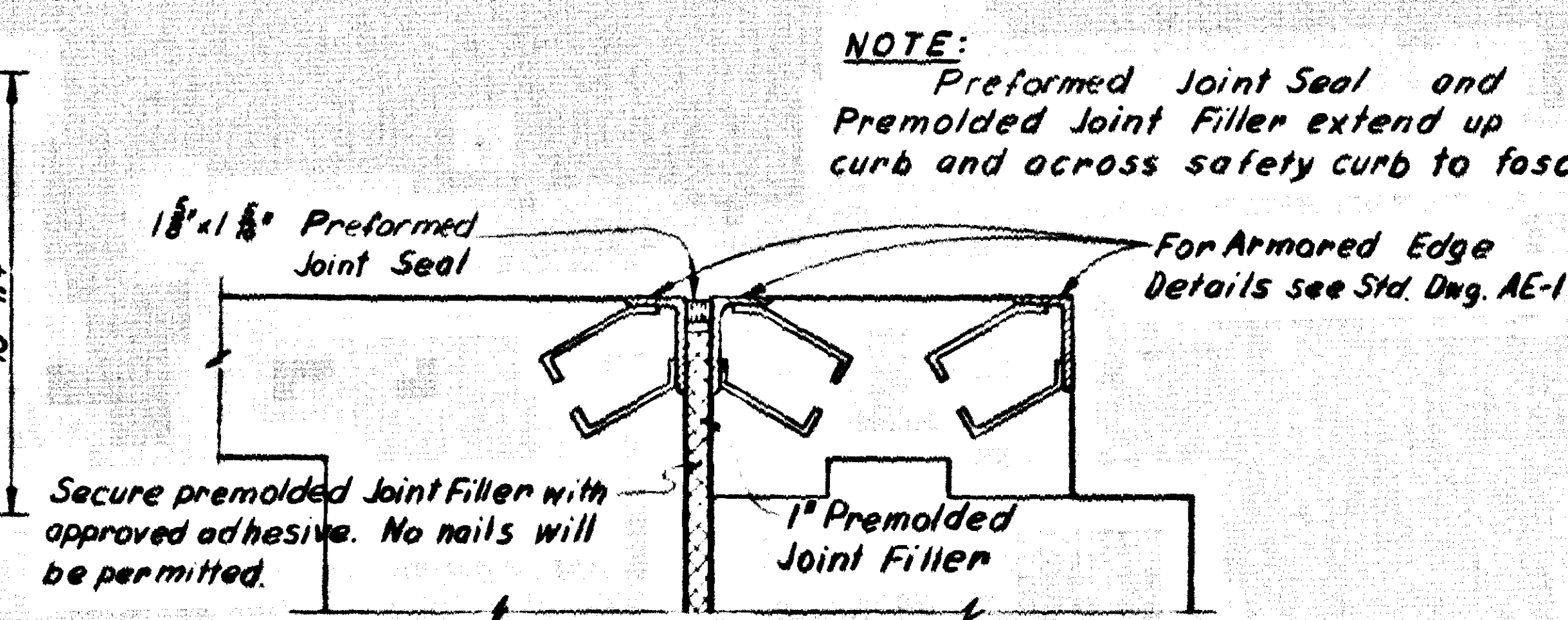
NOTES:
Dress subgrade to 2" below plan elevation for bottom of cap. Add a 2" layer of #6 crushed stone or gravel and tamp this layer into the subgrade. Place 1-2 cement mortar up to bottom of cap elevation. Side forms for cap may be placed as soon as mortar has set a sufficient time to support men and forms without being disturbed.
This method is to be used instead of bottom-of-cap forms and the cost of materials and work shall be incidental to and shall be included in the unit price bid for Class "A" Concrete.
Top of cap bars are to be located so as not to interfere with drilling of anchor bolt holes.
For cored pilot hole thru embankment see General Notes.
Do not backfill above bridge seat until Superstructure is in place.
See screed sheet for elevations along backwall.
☒ Indicates Test Pile
NF denotes Near Face, FF denotes Far Face



For Expansion Dam Details
& Dimensions See Std. Dwg. ED-2

For Armored Edge
Details See Std. Dwg. AE-1

SECTION B-B @ BENTS BN + BE



SECTION A-A

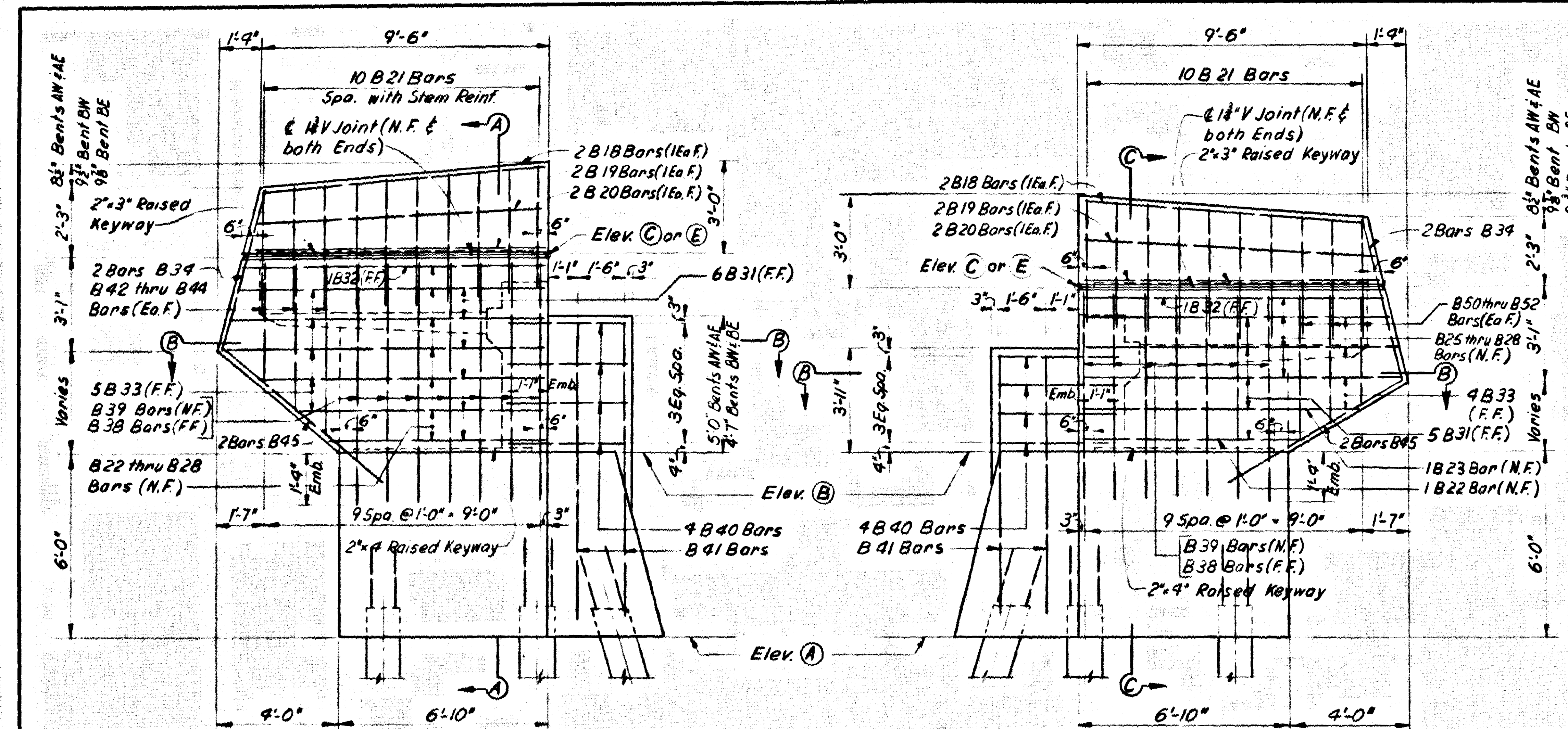
NOTE:
Preformed Joint
Premolded Joint Filler
curb and across safe

For All
Details

1" Premolded
Joint Filler

SECTION B-B @ BENTS AW & AE

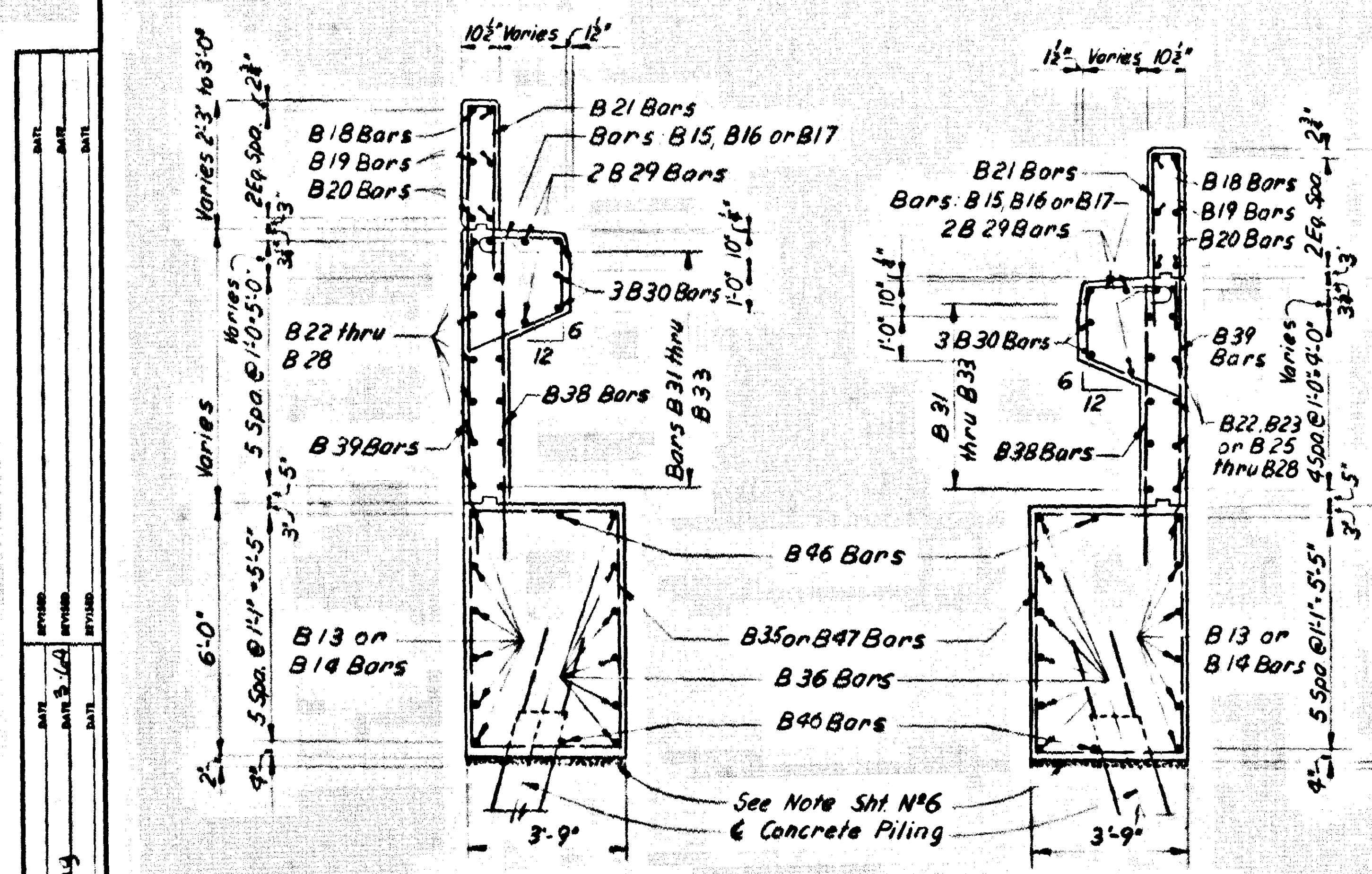
BENTS AW, AE, BW, BE



WINGWALL ELEVATION

For South Walls Bents AW&AE; South Walls Bents BW&BE For North Walls Bents AW&AE; North Walls Bents BW&BE

WINGWALL ELEVATION

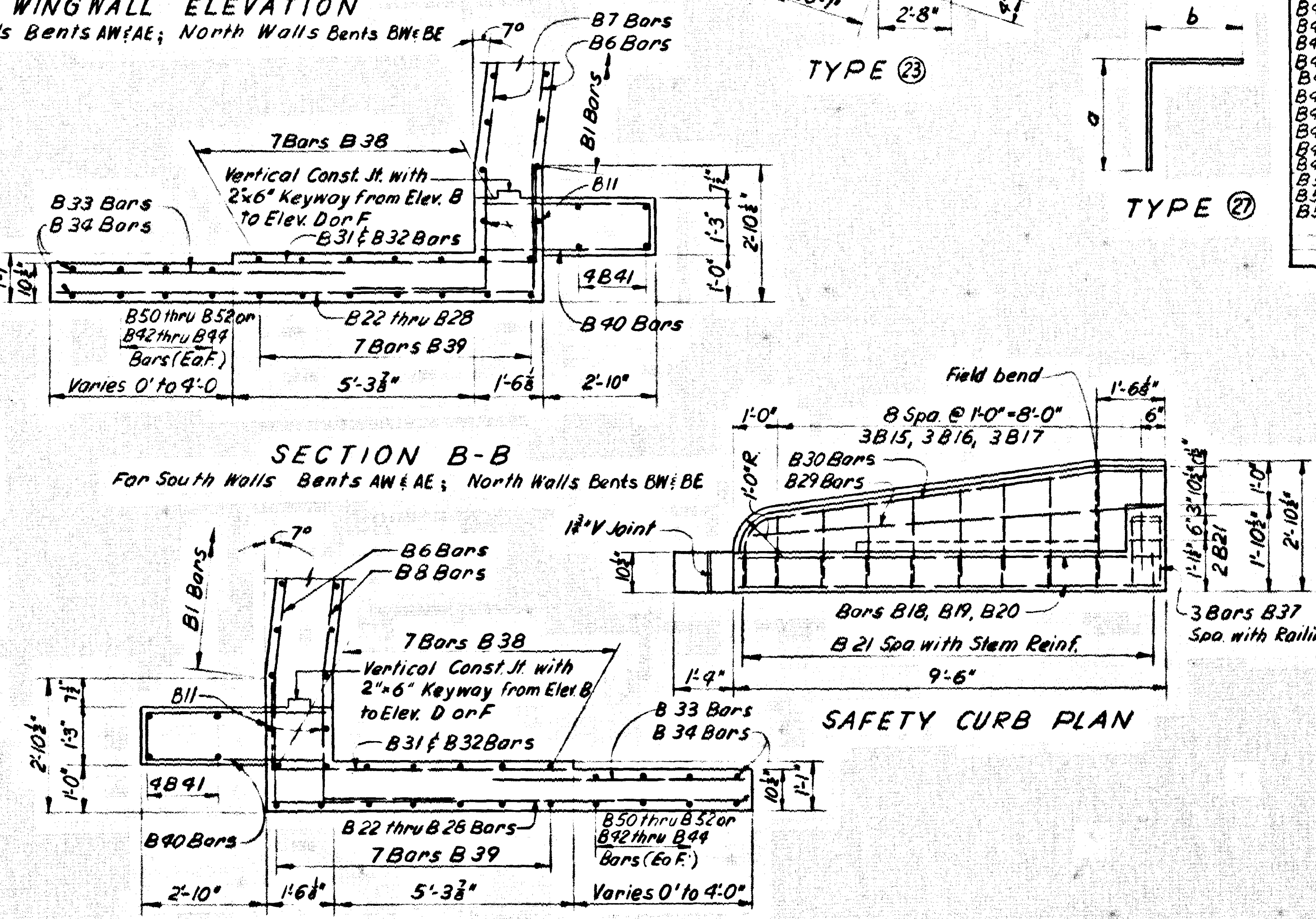


SECTION A-A

SECTION C-C

ITEM	Bent AW		Bent BW		Bent AE		Bent BE	
	Units	Amount	Units	Amount	Units	Amount	Units	Amount
Concrete Class A	Cu Yds.	78.6	Cu Yds.	77.6	Cu Yds.	78.6	Cu Yds.	77.9
Steel Reinforcement	Lbs.	4809	Lbs.	4809	Lbs.	4809	Lbs.	4809
Structure Exc. Common	Cu Yds.	145	Cu Yds.	145	Cu Yds.	145	Cu Yds.	145
End Bent Backfill	Cu Yds.	145	Cu Yds.	145	Cu Yds.	145	Cu Yds.	145
Conc. Piling (Forming)	Lin. Ft.	750	Lin. Ft.	750	Lin. Ft.	761	Lin. Ft.	750
Conc. Piling (Driving)	Lin. Ft.	750	Lin. Ft.	750	Lin. Ft.	761	Lin. Ft.	750
Struct. Steel (Armored Edge)	Lbs.	880	Lbs.	940	Lbs.	880	Lbs.	940

*Included in Lump Sum Bid for Structural Steel.



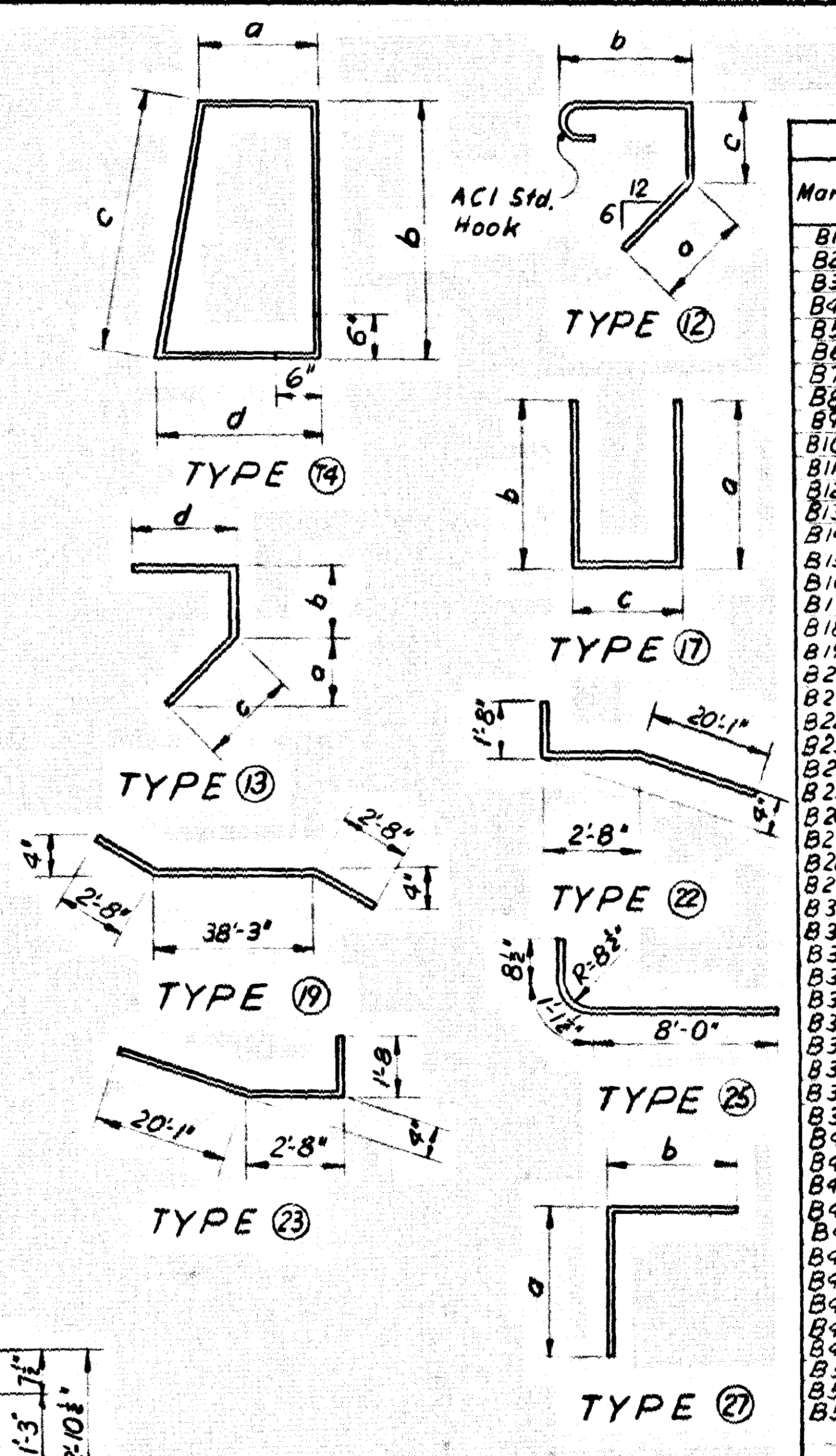
SECTION B-B

For South Walls Bents AW&AE; North Walls Bents BW&BE

SECTION B-B

For North Walls Bents AW&AE South Walls Bents BW&BE

SAFETY CURB PLAN



BILL OF REINFORCEMENT														
Mark	Size	Type	No	Length		Location	a		b		c		d	
				Ft	In		Ft	In	Ft	In	Ft	In	Ft	In
B1	5	17	39	16	10	Backwall	7	10	7	10	1	2		
B2	5	17	39	4	0	Slab Seat	1	2	0	7			1	8
B3	5	17	39	5	20	Footing	3	6	5	4			5	11
B4	5	17	16	9	1	Shear Key	2	9	4	0				
B5	5	17	16	41	8	Footing								
B6	5	17	6	43	7	Backwall								
B7	5	17	6	24	5	Backwall								
B8	5	17	6	24	5	Backwall								
B9	5	17	8	6	8	Shear Key								
B10	5	17	5	0	0	Footing								
B11	5	17	2	18	2	Backwall	8	6	8	6	1	2		
B12	5	17	4	19	0	Slab Seat	2	4	4	0	3	0		
B13	5	17	6	7	10	Footing	2	6	4	8	3	1	6	
B14	5	17	6	6	10	Footing	2	6	2	4	3	0		
B15	5	17	6	6	10	Curb	2	6	2	4	1	6		
B16	5	17	6	5	12	Curb	2	6	1	11	1	6		
B17	5	17	6	5	12	Curb	2	6	1	11	1	6		
B18	5	17	4	9	9	Railing								
B19	5	17	4	9	9									
B20	5	17	4	9	9									
B21	5	17	24	9	11	Railing	4	8	4	8	0	6 1/2		
B22	5	17	9	9	10	Wing wall								
B23	5	17	6	18	9									
B24	5	17	2	10	3									
B25	5	17	2	10	3									
B26	5	17	2	10	3									
B27	5	17	2	10	3	Wing wall								
B28	5	17	4	9	9	Curb								
B29	5	17	4	9	9	Curb								
B30	5	17	11	10	3	Wing wall								
B31	7	17	11	10	3									
B32	7	17	2	9	1									
B33	7	17	2	9	1									
B34	7	17	0	0	0	Wing wall								
B35	7	17	10	19	9	Footing	3	5	5	7	3	5		
B36	7	17	12	8	3	Footing	6	6	2	3	0	5 1/2		
B37	7	17	3	6	9	Railing	1	6	1	6	0	5 1/2		
B38	7	17	14	8	9	Wing wall								
B39	7	17	7	7	9	Wing wall								
B40	7	17	8	11	6	Stub wall	4	0	4	0	11			
B41	7	17	8	7	4	Stub wall								
B42	7	17	2	5	6	Wing wall								
B43	7	17	2	5	6									
B44	7	17	2	5	6									
B45	7	17	4	6	5	Footing								
B46	7	17	4	6	5	Footing								
B47	7	17	6	12	7	Footing	3	5	3	5	2	7		
B48	7	17	15	5	8	Pedestal	2	5	6	6	2	6		
B49	7	17	12	3	3	Pedestal	2	2	2	2				
B50	7	17	2	3	4	Wing wall								
B51	7	17	2	3	4	Wing wall								
B52	7	17	3	7	10	Wing wall								

NOTES:
FF denotes For Face, N.F. denotes Near Face
Ea.F denotes Each Face.
For Elevation A, B and C see Table Sheet N°6
For End Bent Backfill Limits see Sheet N°15
Work this Sheet with Sheet N°6

BRIDGE OVER EDITH STREET SHEET 7 OF 15

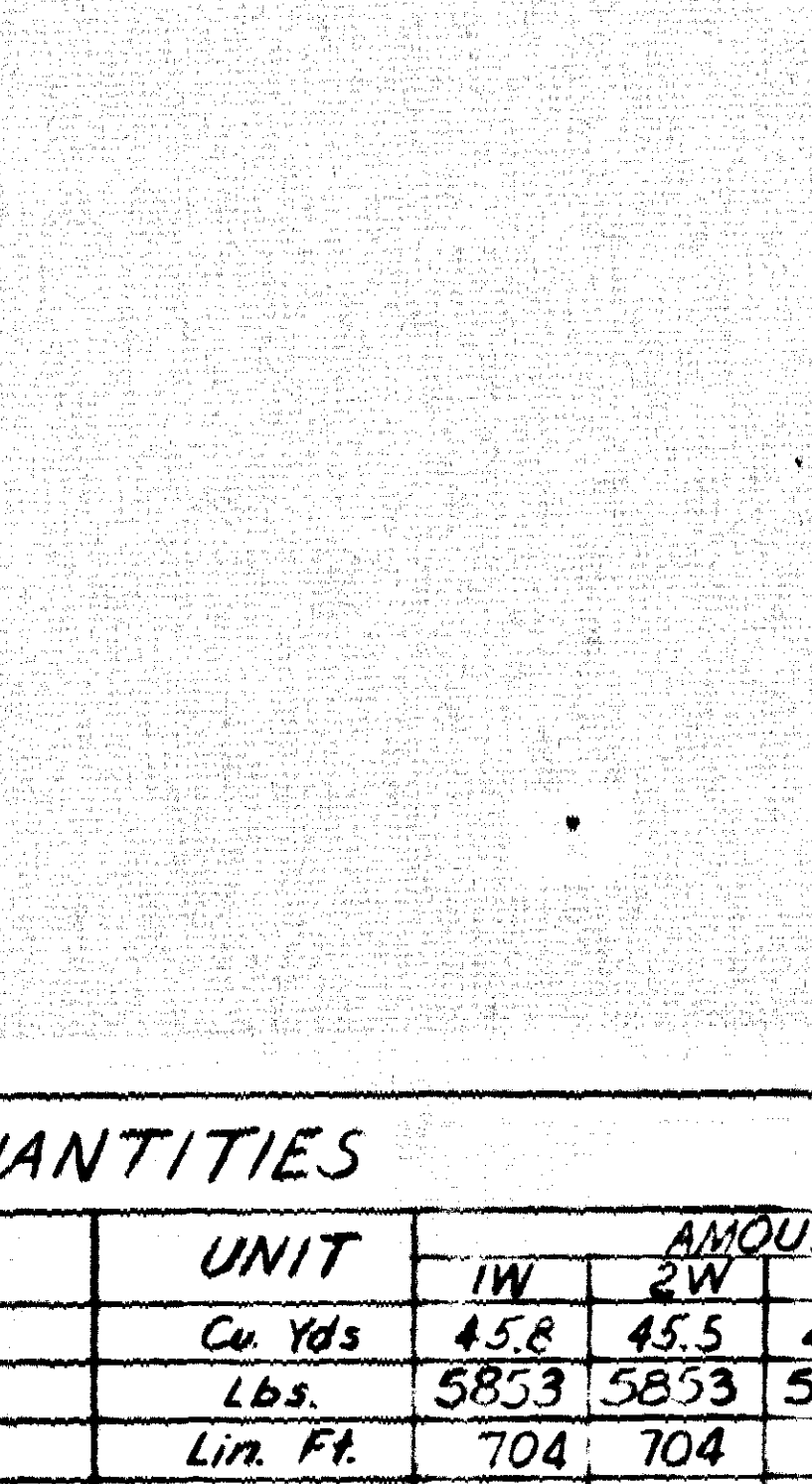
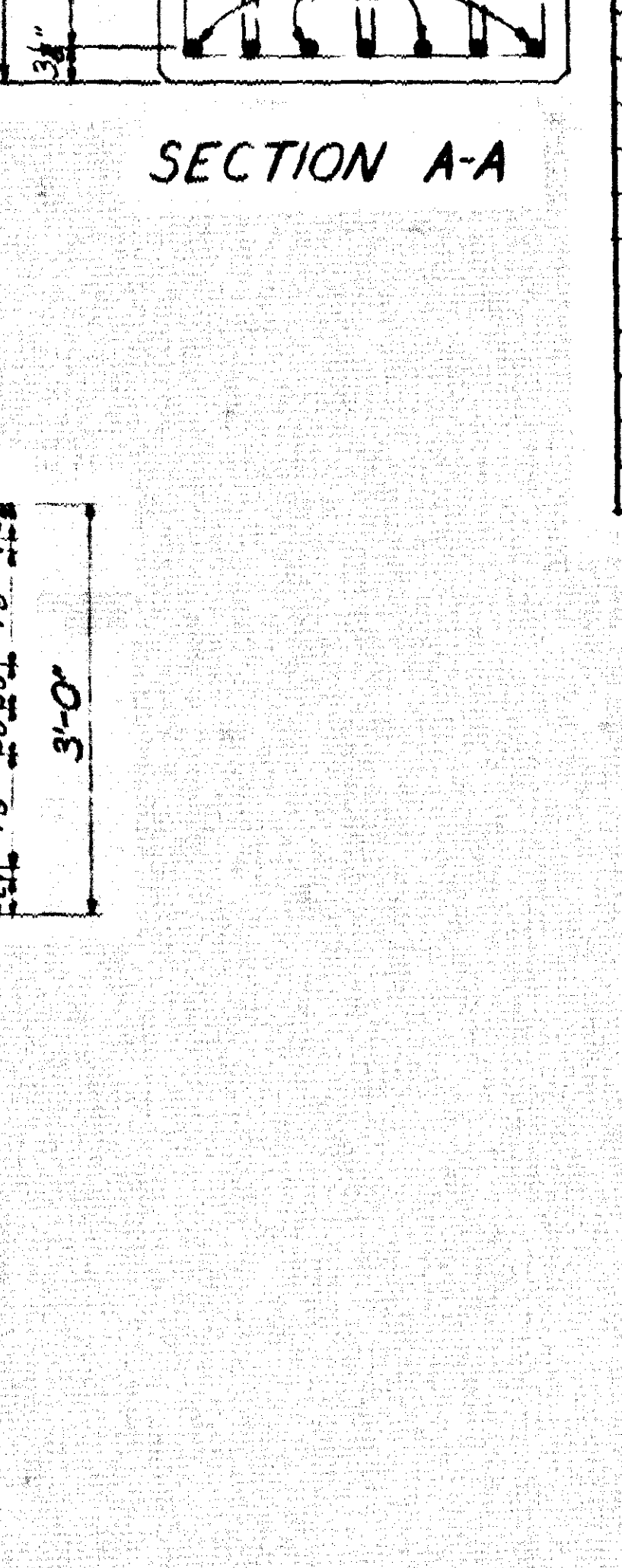
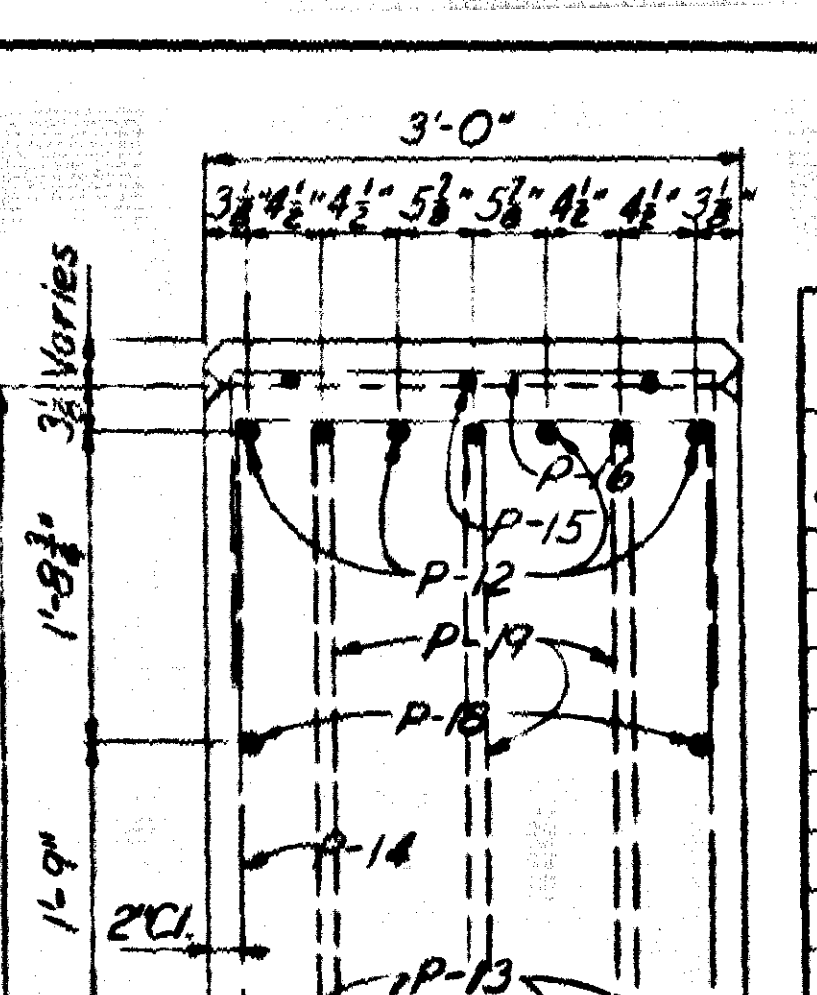
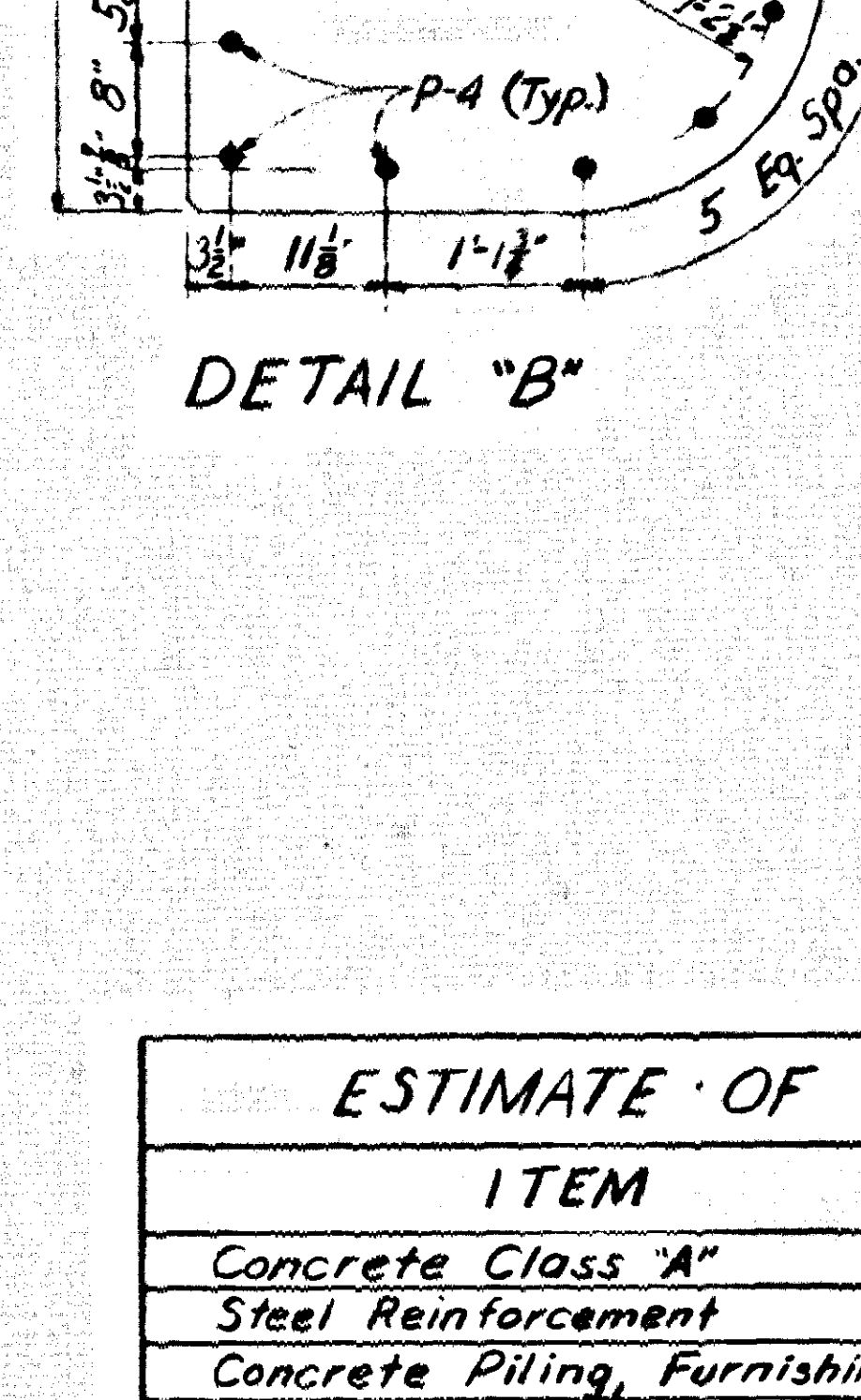
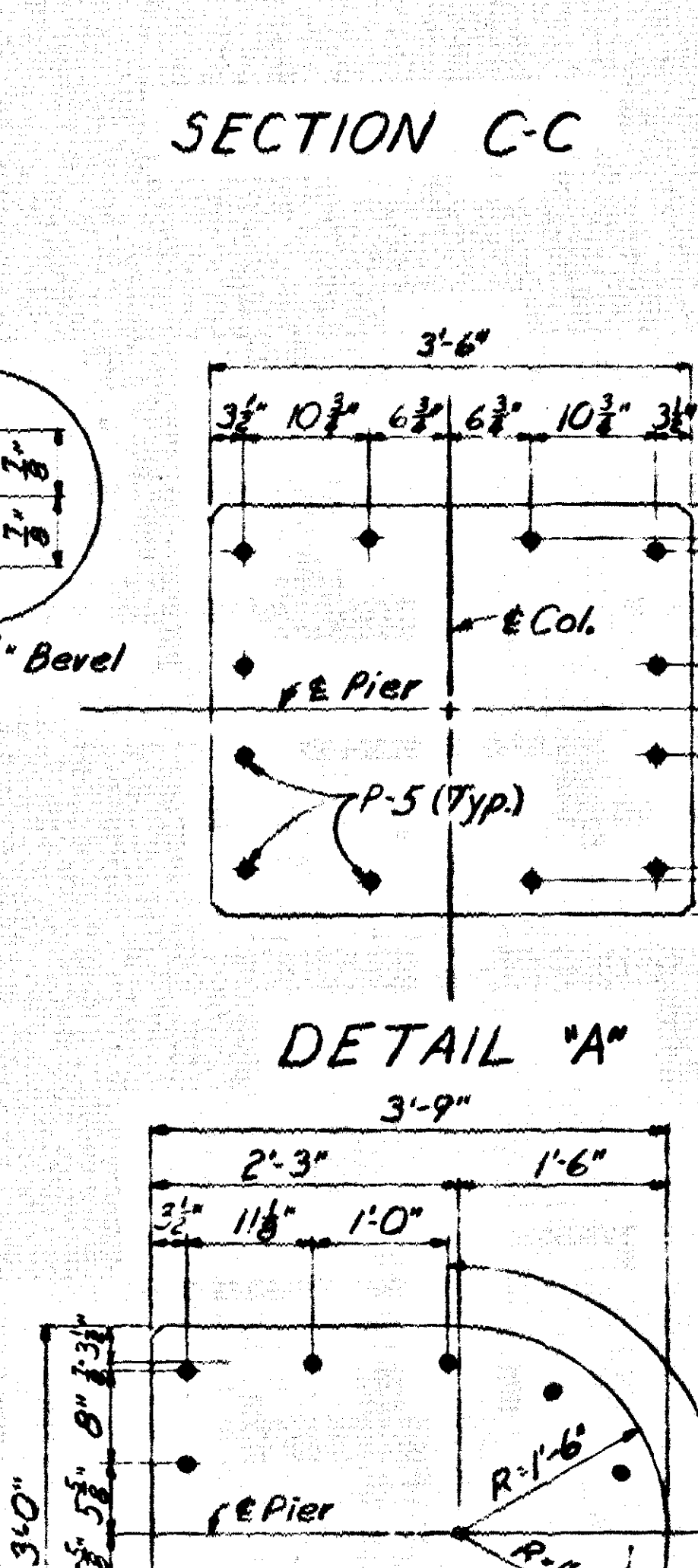
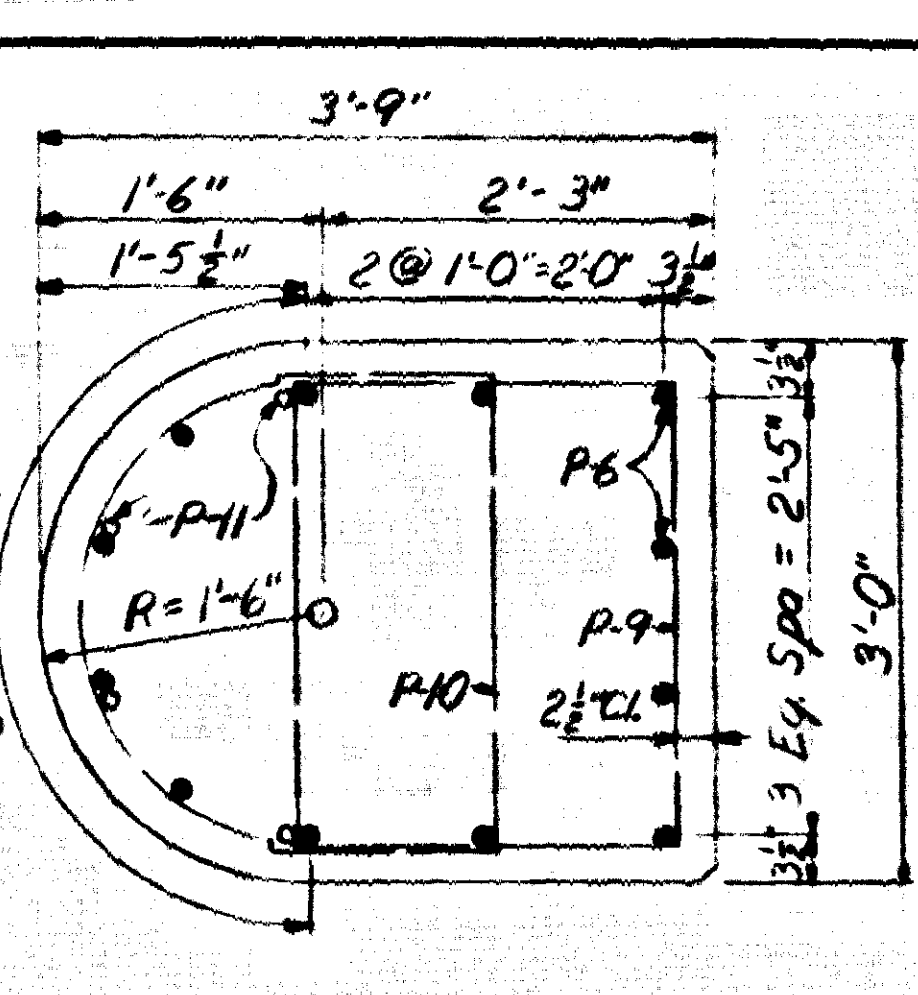
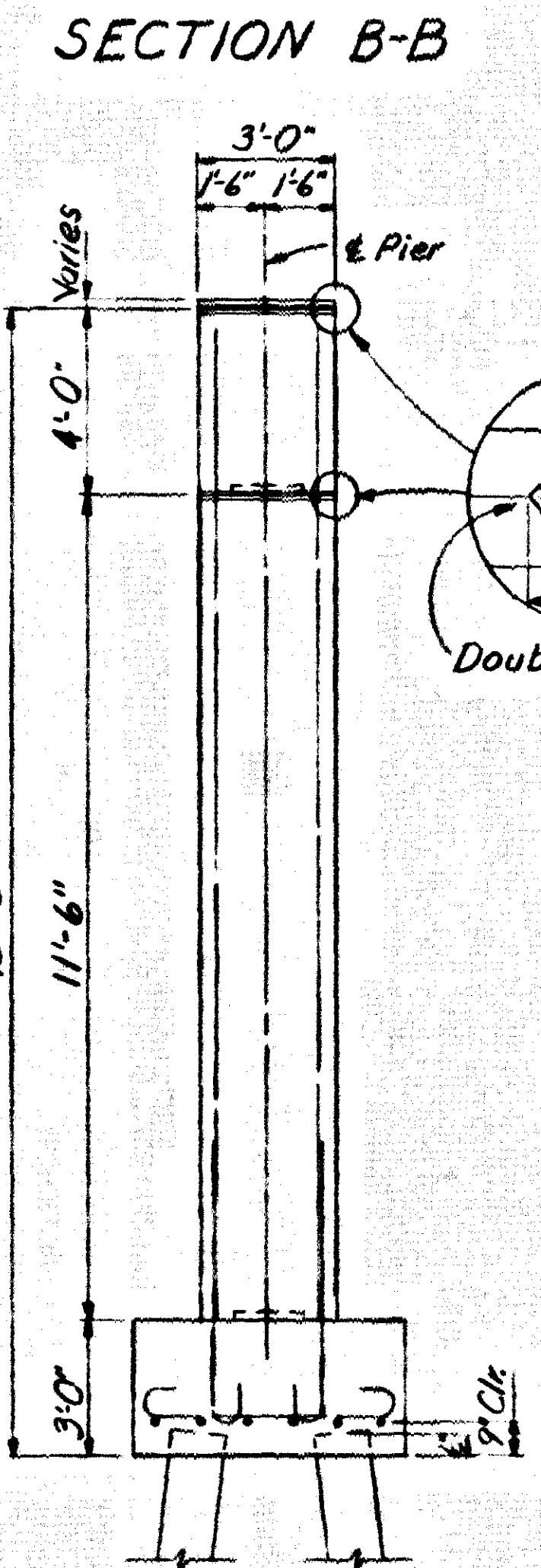
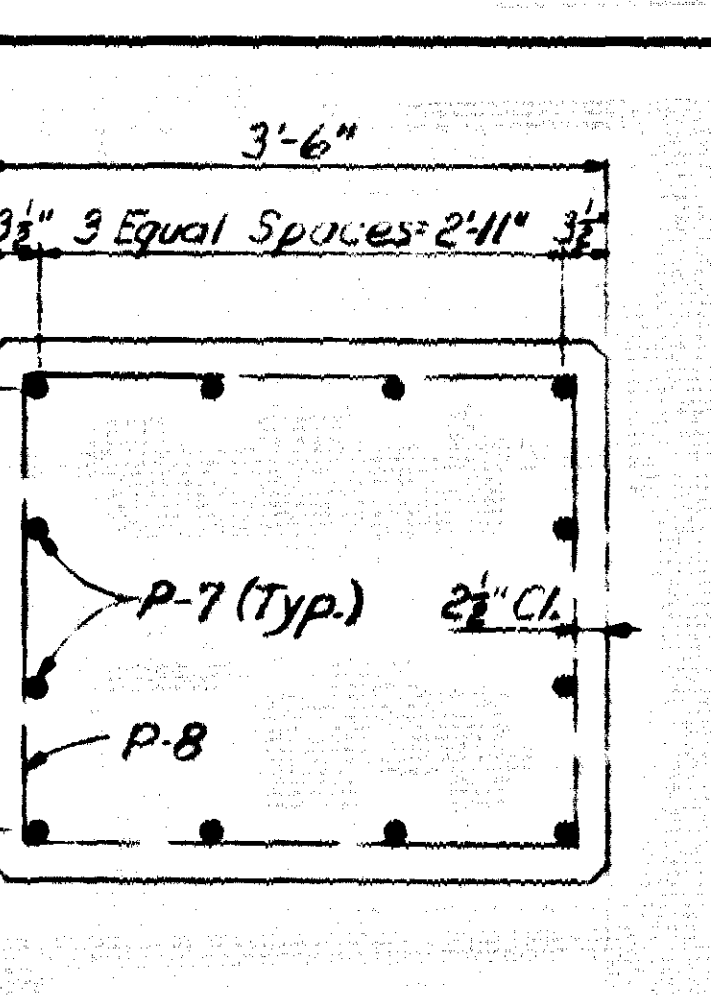
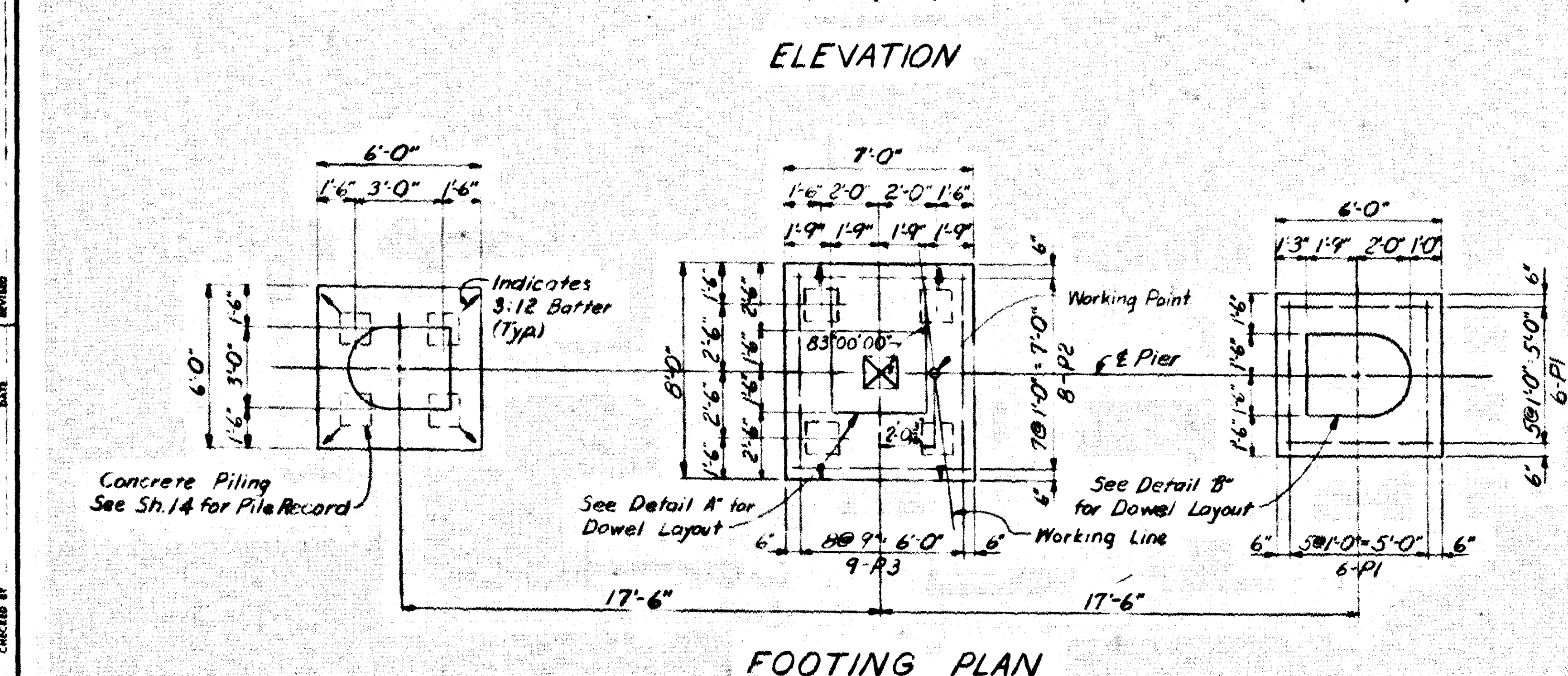
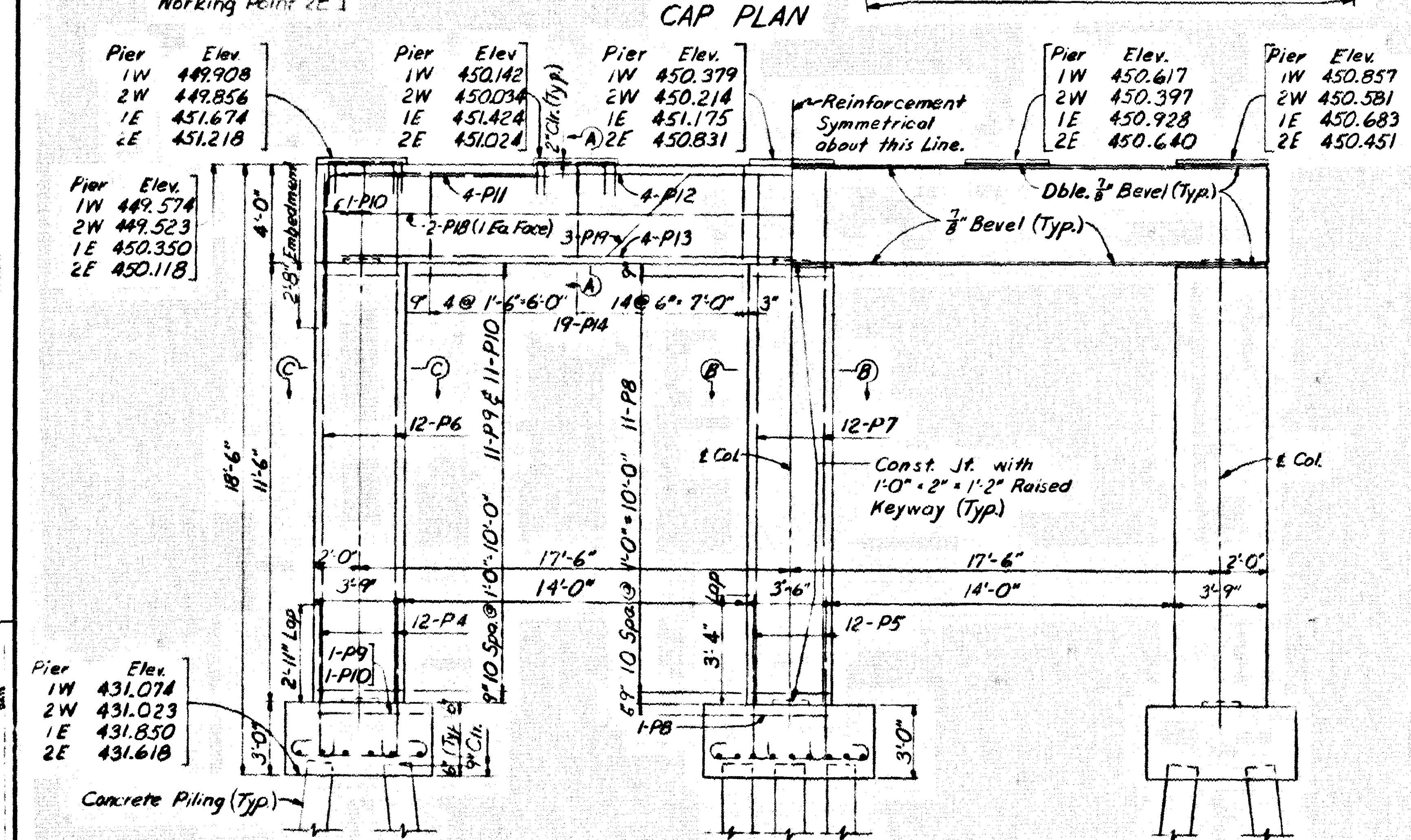
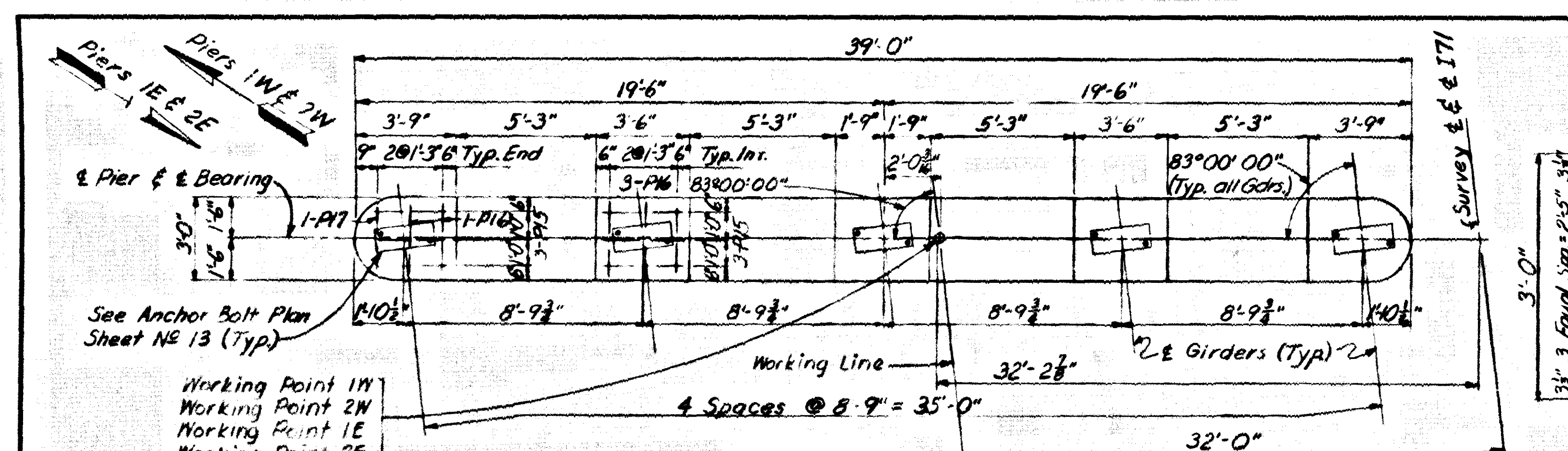
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
171 - OHIO STREET TO ZORN AVENUE
LOUISVILLE - COVINGTON

ROAD SP56-313-L2
STATION 373+70 PROJECT NO. 171-11100

BRIDGE NUMBER DRAWING 15937

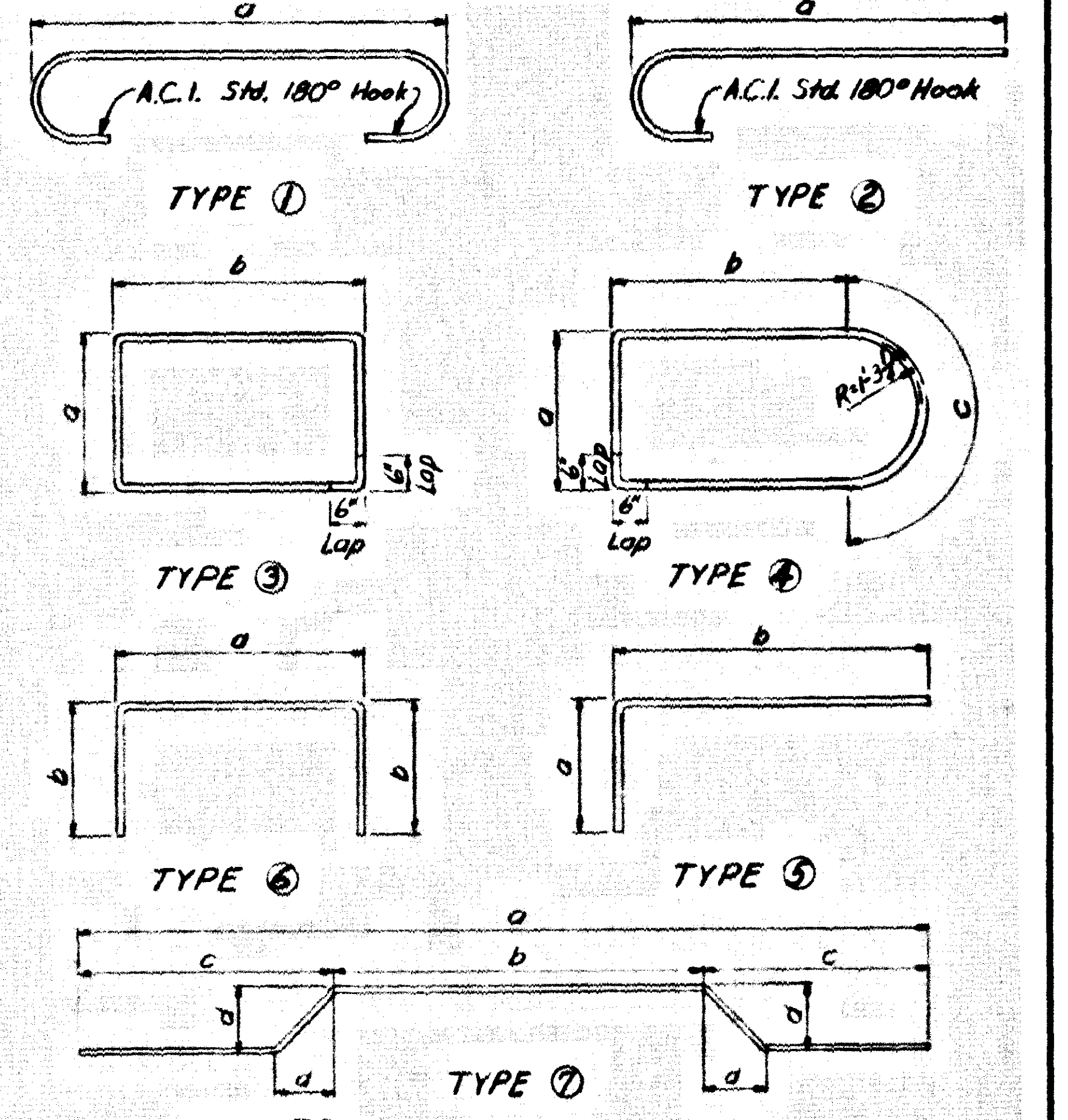
BENTS AW,AE,BW & BE





Mark	Type	Size	No.	Length Ft. In.	Location	a Ft. In.	b Ft. In.	c Ft. In.	d Ft. In.
P1	①	6	24	6 10	Footings	5 6			
P2	①	6	8	7 10	"	6 6			
P3	①	8	9	9 8	"	7 6			
P4	②	7	24	6 0	"	5 2			
P5	②	8	12	6 8	"	5 7			
P6	Str.	7	24	15 3	Column				
P7	Str.	8	12	15 3	"				
P8	③	4	12	12 4	"	2 7	3 1		
P9	③	4	24	10 6	"	2 2	2 7		
P10	④	4	26	9 8	"	2 7	1 0 1/2	4 0	
P11	⑤	11	8	13 0	Cap	6 6	6 6		
P12	Str.	11	4	36 0	"				
P13	Str.	9	4	36 6	"				
P14	③	4	38	13 4	"	3 7	2 7		
P15	⑥	5	15	8 0	Riser	3 0	2 6		
P16	⑥	5	13	7 6	"	2 6	2 6		
P17	⑥	5	3	7 0	"	2 0	2 6		
P18	Str.	5	2	36 6	Cap				
P19	⑦	11	3	39 6	"	36 6	9 6	14 0	3 7

BILL OF REINFORCEMENT									
Mark	Type	Size	No.	Length Ft. In.	Location	a Ft. In.	b Ft. In.	c Ft. In.	d Ft. In.
P1	①	6	24	6 10	Footings	5 6			
P2	①	6	8	7 10	"	6 6			
P3	①	8	9	9 8	"	7 6			
P4	②	7	24	6 0	"	5 2			
P5	②	8	12	6 8	"	5 7			
P6	Str.	7	24	15 3	Column				
P7	Str.	8	12	15 3	"				
P8	③	4	12	12 4	"	2 7	3 1		
P9	③	4	24	10 6	"	2 2	2 7		
P10	④	4	26	9 8	"	2 7	1 0 1/2	4 0	
P11	⑤	11	8	13 0	Cap	6 6	6 6		
P12	Str.	11	4	36 0	"				
P13	Str.	9	4	36 6	"				
P14	③	4	38	13 4	"	3 7	2 7		
P15	⑥	5	15	8 0	Riser	3 0	2 6		
P16	⑥	5	13	7 6	"	2 6	2 6		
P17	⑥	5	3	7 0	"	2 0	2 6		
P18	Str.	5	2	36 6	Cap				
P19	⑦	11	3	39 6	"	36 6	9 6	14 0	3 7



NOTES:
Concrete Piles are to be driven to elevation and bearing capacity shown in General Notes, Sheet No. 2. For Anchor Bolt Details, see Sheet No. 13. Bars in top or cap are to be accurately located in accordance with the plans so that they do not interfere with drilling of anchor bolt holes. Piers to be built & backfilled before driving piles for End Bents.
Ⓜ Indicates Test Pile. (Load Test Pile, Pier 1E)

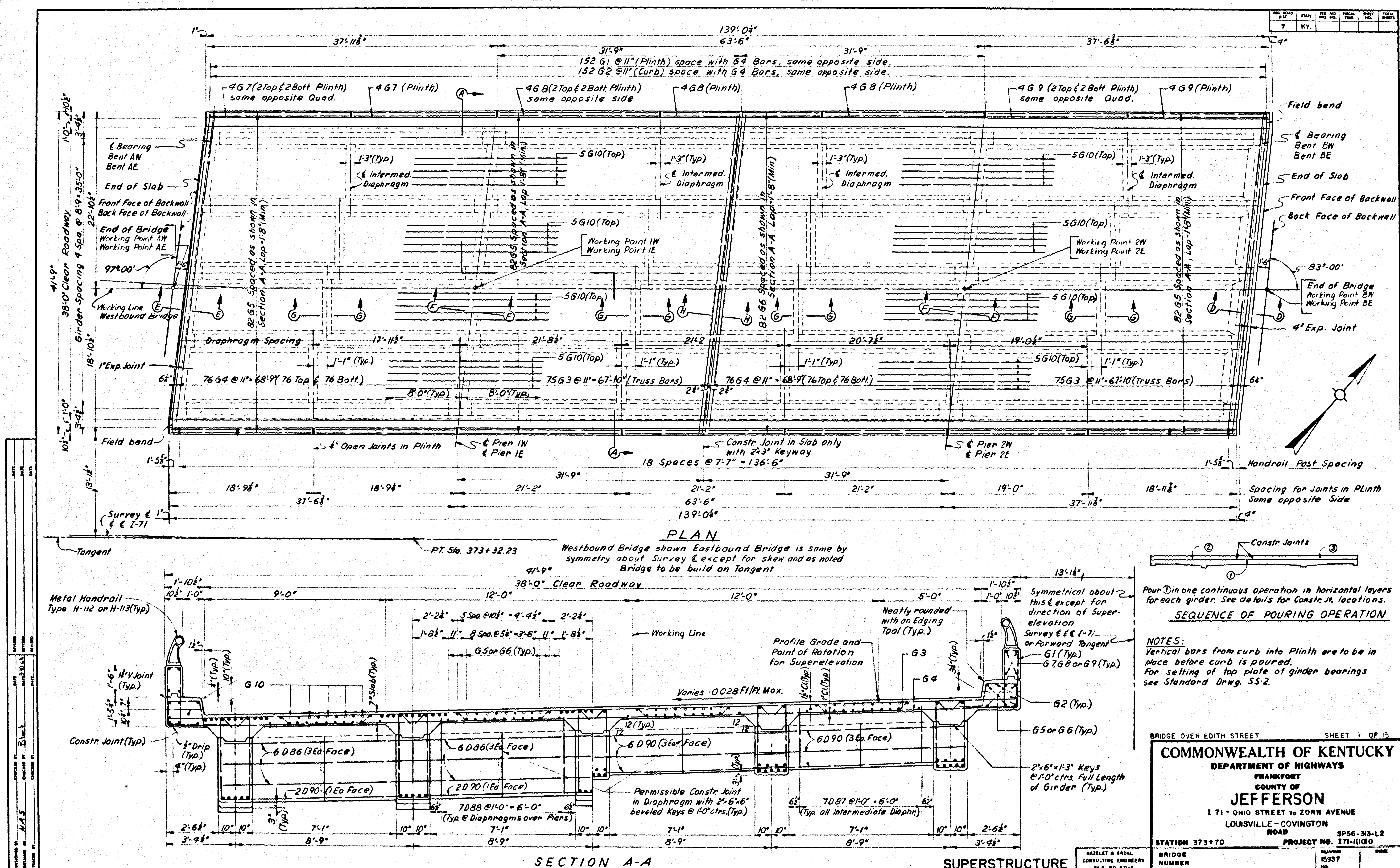
ESTIMATE OF QUANTITIES				
ITEM	UNIT	1W	2W	1E 2E
Concrete Class "A"	Cu Yds	45.8	45.5	45.8 45.6
Steel Reinforcement	Lbs.	5853	5853	5853 5853
Concrete Piling, Furnishing	Lin. Ft.	704	704	704 704
Concrete Piling, Driving	Lin. Ft.	704	704	704 704

BRIDGE OVER EDITH STREET SHEET 8 OF 15
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
171 OHIO STREET TO ZORN AVENUE
LOUISVILLE - COVINGTON
ROAD
STATION 373+70 PROJECT NO. 171-K1010
SP56-313-L2
BRIDGE NUMBER 15937

PIERS 1W, 1E, 2W & 2E

HAZLET & ERAL
CONSULTING ENGINEERS
FILE NO. 871E

BRIDGE

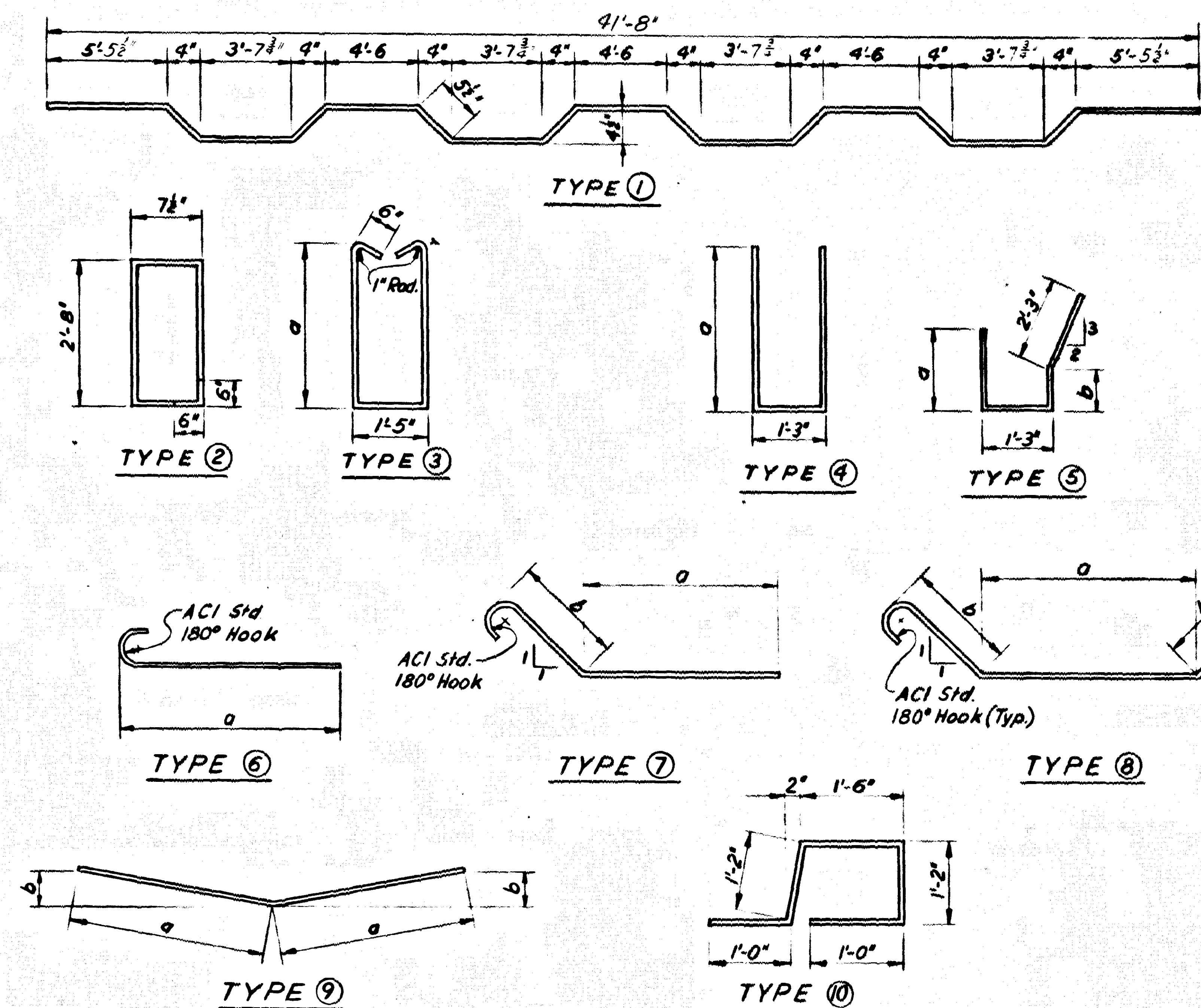


BRIDGE

BILL OF REINFORCEMENT FOR SUPERSTRUCTURE

Mark	Type	No.	Size	Length Ft. In.	Location	a		b		c		d	
						Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
D 1	③	10	11	23 6	Girder	10	0	5	2				
D 2	Str	20	11	10 0									
D 3	③	20	11	32 0		19	0	4	11				
D 4	Str	20	11	26 0									
D 5	Str	20	11	34 0									
D 6	Str	20	11	40 0									
D 7	Str	20	11	22 4									
D 8	Str	10	11	31 0									
D 9	③	20	11	13 0		6	6	0	4				
D 10	③	30	11	39 0		19	6	1	0				
D 11	③	20	11	24 3		12	6	4	2				
D 12	③	30	11	24 4		22	9						
D 13	Str	10	11	40 6									
D 14	③	10	11	44 6		32	6	4	5				
D 15	③	10	11	37 6		25	6	4	5				
D 16	Str	15	11	34 0	Girder								
D 17	③	2 1/2	4	8 11	Girder Stirrups	3	3						
D 18	③	10	4	9 0		3	3 1/2						
D 19	③	10	4	9 2		3	4 1/2						
D 20	③	10	4	9 4		3	5 1/2						
D 21	③	10	4	9 5		3	6						
D 22	③	10	4	9 6		3	6 1/2						
D 23	③	10	4	9 7		3	7						
D 24	③	10	4	9 8		3	7 1/2						
D 25	③	10	4	9 9		3	8						
D 26	③	10	4	9 10		3	8 1/2						
D 27	③	10	4	9 11		3	8 3/4						
D 28	③	10	4	10 0		3	9 1/4						
D 29	③	10	4	10 1		3	9 1/2						
D 30	③	10	4	10 2		3	10 1/4						
D 31	③	10	4	10 3		3	10 1/2						
D 32	③	10	4	10 3		3	11						
D 33	③	10	4	10 4		3	11 1/4						
D 34	③	10	4	10 5		3	11 1/2						
D 35	③	10	4	10 5		4	0						
D 36	③	10	4	10 6		4	0 1/4						
D 37	③	10	4	10 6		4	0 1/2						
D 38	③	10	4	10 7		4	1						
D 39	③	10	4	10 8		4	1 1/4						
D 40	③	10	4	10 8		4	1 1/2						
D 41	③	10	4	10 9		4	1 3/4						
D 42	③	10	4	10 9		4	2						
D 43	③	10	4	10 10		4	2 1/4						
D 44	③	10	4	10 10		4	2 1/2						
D 45	③	10	4	10 10		4	2 3/4						
D 46	③	10	4	10 9		4	2						
D 47	③	10	4	10 9		4	1 3/4						
D 48	③	10	4	10 8		4	1 1/2						
D 49	③	10	4	10 8		4	1 1/4						
D 50	③	10	4	10 7		4	1						
D 51	③	10	4	10 7		4	0 3/4						
D 52	③	10	4	10 6		4	0 1/2						
D 53	③	10	4	10 6		4	0 1/4						
D 54	③	10	4	10 5		4	0						
D 55	③	10	4	10 5		3	11 1/2						
D 56	③	10	4	10 4		3	11						
D 57	③	10	4	10 4		3	10 3/4						
D 58	③	10	4	10 3		3	10 1/2						
D 59	③	10	4	10 3		3	10						
D 60	③	10	4	10 2		3	10 1/4						
D 61	③	10	4	10 2		3	10 1/2						
D 62	③	10	4	10 1		3	10 1/4						
D 63	③	10	4	10 0		3	9 3/4						
D 64	③	10	4	10 0		3	9 1/2						
D 65	③	10	4	9 11		3	9						
D 66	③	10	4	9 11	Girder Stirrups	3	8 1/2						

Mark	Type	No.	Size	Length Ft. In.	Location	a		b		c		d	
						Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
D 67	③	10	4	9 10	Girder Stirrups	3	8 1/2						
D 68	③	10	4	9 9		3	8						
D 69	③	10	4	9 9		3	7 1/2						
D 70	③	10	4	9 8		3	7 1/2						
D 71	③	10	4	9 8		3	7 1/2						
D 72	③	10	4	9 7		3	6 1/2						
D 73	③	10	4	9 6		3	6 1/2						
D 74	③	10	4	9 6		3	6 1/2						
D 75	③	10	4	9 5		3	6						
D 76	③	10	4	9 4		3	5 1/2						
D 77	③	10	4	9 3		3	5						
D 78	③	10	4	9 2		3	4 1/2						
D 79	③	10	4	9 1		3	4						
D 80	③	10	4	9 0		3	3 1/2						
D 81	③	10	4	9 0	Girder Stirrups	3	3 1/2						
D 82	④	14	4	6 11	Endwalls	2	10						
D 83	④	14	4	6 5		2	7						
D 84	④	14	4	6 1		1	6	1	1				
D 85	④	14	4	5 7	Endwalls	1	3	0	10				
D 86	Str	25	5	36 7	Endwalls & Diaphragm								
D 87	④	112	4	6 6	Diaphragm	2	9	1	0				
D 88	④	56	4	8 9	Diaphragm - Piers	3	9	1	3				
D 89	Str	6	6	36 7	Constr. Joint								
D 90	Str	112	5	10 0	Diaphragms								
D 91	Str	28	4	1 3	Constr. Joint								
D 92	Str	40	4	30 0	Girder								
D 93	Str	30	8	35 6	Girder								
D 94	Str	20	4	30 0	Girder								
G 1	②	304	4	7 7	Plinth								
G 2	②	304	5	5 10	Curb								
G 3	①	150	5	42 8	Slab trans.								
G 4	Str	304	5	41 8	Slab trans.								
G 5	Str	246	4	36 6	Slab long.								
G 6	Str	82	4	34 2	Slab long.								
G 7	Str	16	4	18 4	Plinth								
G 8	Str	24	4	21 0	Plinth								
G 9	Str	16	4	18 8	Plinth								
G 10	Str	40	6	16 0	Slab long.								



SCHEDULE OF REACTIONS (kips)			
	FASCIA GIRDERS	INTERIOR GIRDERS	
	At Bents	At Piers	At Bents At Piers
DL	19.4	124.0	19.5 124.8
LL	30.9	42.0	37.0 51.1
I	9.1	12.0	11.1 14.6
Total	59.4	178.0	67.6 190.5

ESTIMATE OF QUANTITIES	
Concrete Class A	334.3 Cu Yds
Steel Reinforcement	89,930 Lbs.
Metal Handrail	277.5 Lin. Ft.
Protective Coating	720 Sq. Yds.
Structural Steel	
Steel Bearing Shoes	7340 Lbs.
Metal Expansion Dam	4020 Lbs.
Armored Edge	440 Lbs.
Total Structural Steel	11,800 Lbs.

NOTES:
 *Included in Lump Sum Bid for Structural Steel
 Quantities shown are for Westbound Bridge
 Eastbound Bridge Quantities are identical.

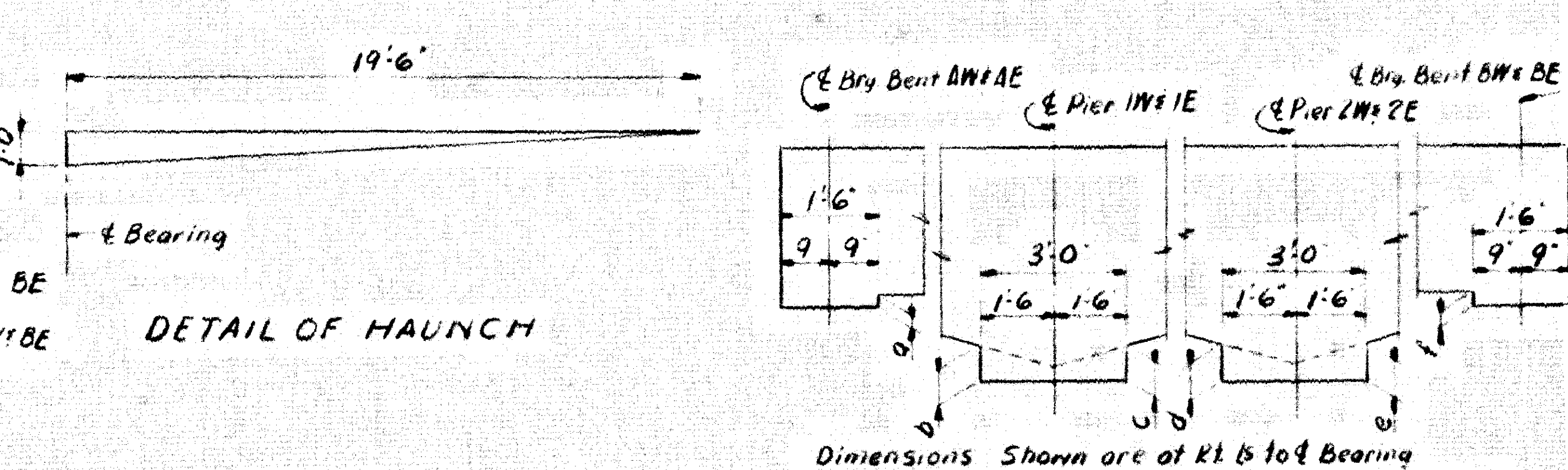
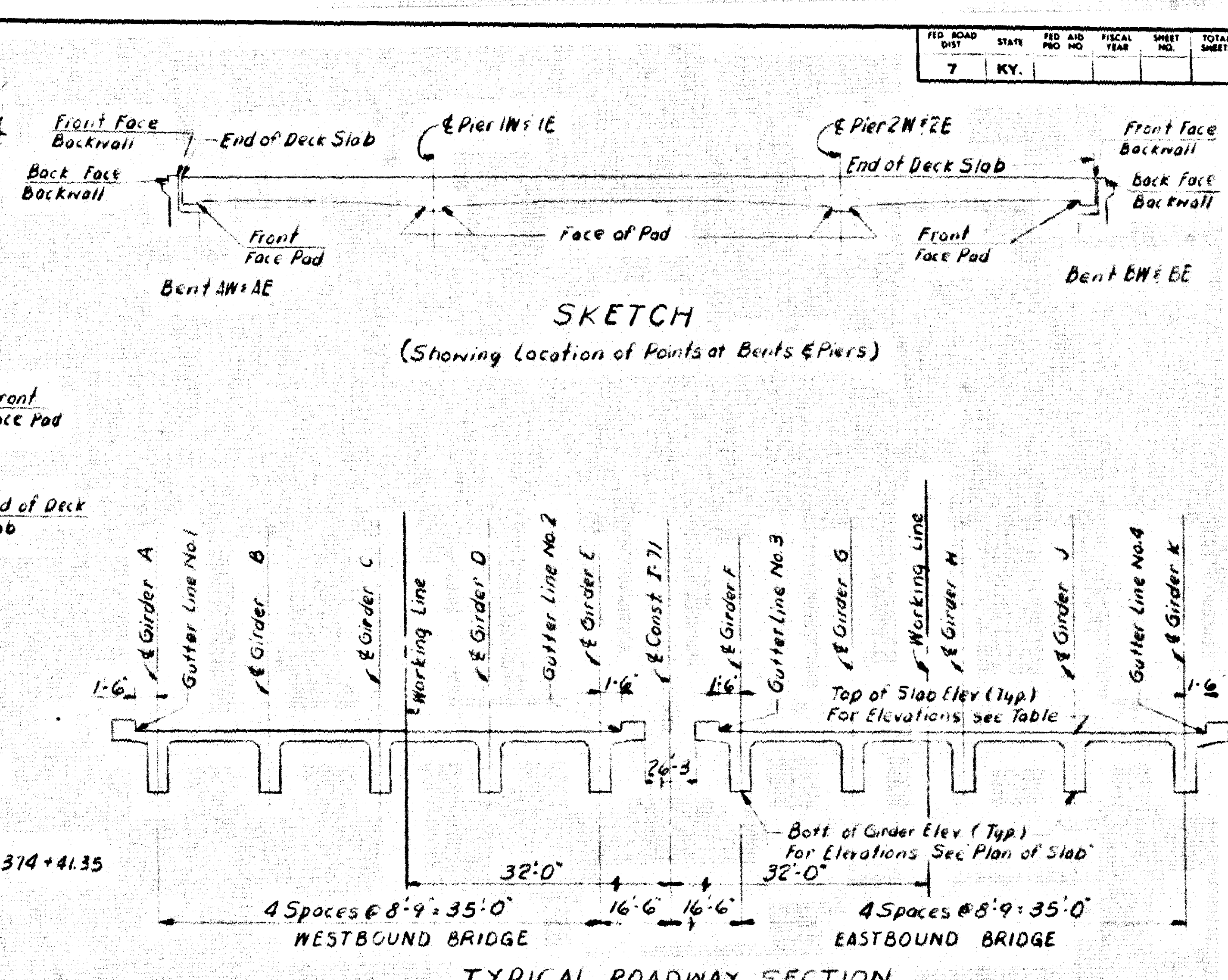
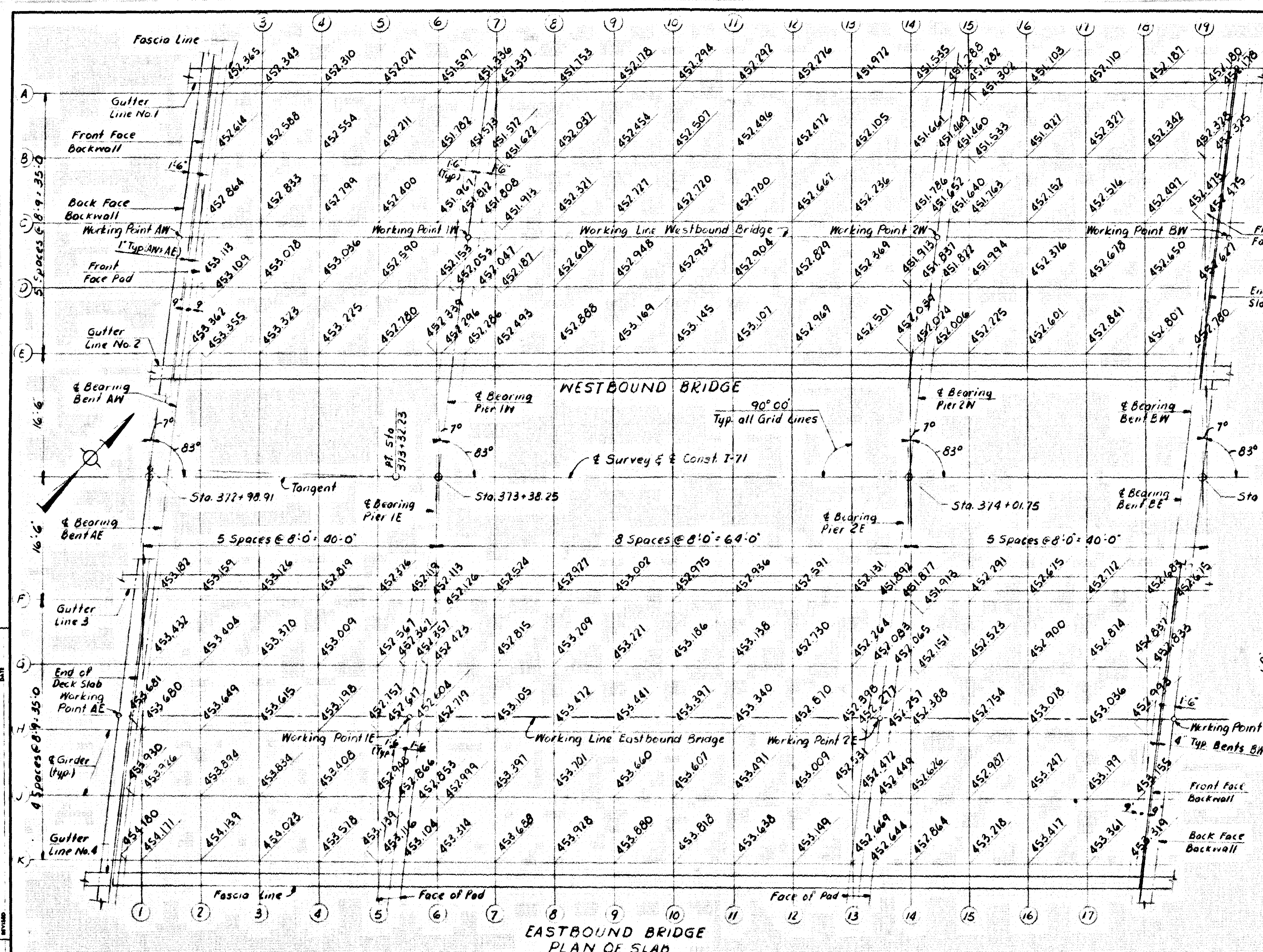
SUPERSTRUCTURE

BRIDGE OVER EDITH STREET SHEET 11 OF 15

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
JEFFERSON
 171 - OHIO STREET TO ZORN AVENUE
 LOUISVILLE - COVINGTON
 ROAD

STATION 373+70 PROJECT NO. 171-11010
 BRIDGE NUMBER 15937

BRIDGE



GIRDER PAD DIMENSIONS

Girder	a	b	c	d	e	f
A	3	3	3	3	3	3
B	3	3	3	3	3	3
C	3	3	3	3	3	3
D	3	3	3	3	3	3
E	3	3	3	3	3	3
F	3	3	3	3	3	3
G	3	3	3	3	3	3
H	3	3	3	3	3	3
J	3	3	3	3	3	3
K	3	3	3	3	3	3

(Showing Bottom of Girder Elevations)

TOP OF SLAB ELEVATIONS

Line	Bent AN+AE	End of Deck & Pier	Pier	End of Deck & Pier	Bent BN+BE	1-1	2-2	3-3	4-4	5-5	6-6	7-7	8-8	9-9	10-10	11-11	12-12	13-13	14-14	15-15	16-16	17-17	18-18	19-19							
	B' B'wall	F' F' B'wall	Span (ft)	IN + 1E	CH: 2E	Subl/Spn (ft)	F' B'wall	F' B'wall																							
Gutter Line No.1	455.834	455.828	455.828	455.719	455.676	455.651	455.651	455.649						455.801	455.768	455.732	455.716	455.720	455.730	455.746	455.757	455.757	455.744	455.719	455.693	455.673	455.665	455.662	455.660	455.654	
Girder A	455.877	455.871	455.871	455.759	455.707	455.676	455.676	455.675						455.843	455.810	455.774	455.759	455.760	455.770	455.785	455.794	455.792	455.776	455.750	455.723	455.703	455.694	455.690	455.687	455.680	
Girder B	456.126	456.120	456.120	455.995	455.887	455.823	455.822	455.819						456.088	456.054	456.019	456.000	455.994	455.998	456.005	456.007	455.996	455.972	455.935	455.905	455.879	455.863	455.853	455.847	455.828	
Girder C	456.316	456.310	456.310	456.233	456.069	455.971	455.970	455.966						456.333	456.299	456.263	456.240	456.230	456.227	456.221	456.220	456.200	456.167	456.124	456.085	456.054	456.032	456.016	455.996	455.975	
Girder D	456.625	456.619	456.619	456.413	456.252	456.121	456.120	456.114						456.609	456.570	456.543	456.508	456.481	456.449	456.456	456.445	456.432	456.404	456.363	456.313	456.267	456.230	456.202	456.178	456.150	
Girder E	456.874	456.868	456.868	456.714	456.457	456.273	456.272	456.265						456.855	456.823	456.788	456.753	456.722	456.699	456.685	456.669	456.645	456.607	456.557	456.500	456.448	456.405	456.372	456.341	456.307	
Gutter Line No.2	456.917	456.911	456.911	456.756	456.470	456.300	456.298	456.291						456.897	456.865	456.830	456.795	456.763	456.740	456.724	456.707	456.681	456.642	456.590	456.532	456.479	456.436	456.401	456.369	456.334	
Gutter Line No.3	456.652	456.645	456.645	456.497	456.275	456.143	456.142	456.136						456.617	456.584	456.548	456.515	456.493	456.482	456.471	456.464	456.440	456.401	456.354	456.306	456.265	456.234	456.209	456.184	456.156	
Girder F	456.944	456.938	456.938	456.785	456.497	456.326	456.324	456.317						456.659	456.626	456.590	456.557	456.535	456.523	456.516	456.502	456.475	456.436	456.387	456.338	456.297	456.264	456.238	456.212	456.183	
Girder G	457.193	457.187	457.187	457.033	456.689	456.485	456.483	456.475	457.180	457.149	457.115	457.079	457.048	457.018	456.994	456.972	456.941	456.897	456.840	456.777	456.715	456.661	456.617	456.578	456.536	456.494	456.451	456.408	456.374	456.337	
Girder H	457.442	457.436	457.436	457.283	456.883	456.646	456.643	456.634	457.426	457.394	457.359	457.344	457.314	457.284	457.261	457.231	457.201	457.160	457.107	457.042	456.971	456.903	456.844	456.794	456.747	456.699	456.656	456.613	456.570	456.536	
Girder J	457.692	457.686	457.686	457.534	457.079	456.808	456.806	456.795	457.671	457.629	457.589	457.540	457.503	457.466	457.428	457.380	457.338	457.294	457.244	457.186	457.124	457.059	456.991	456.921	456.851	456.781	456.711	456.641	456.571	456.501	
Girder K	457.734	457.728	457.728	457.571	457.113	456.836	456.834	456.823	457.712	457.671	457.631	457.582	457.545	457.507	457.468	457.411	457.353	457.278	457.199	457.124	457.059	456.991	456.921	456.851	456.781	456.711	456.641	456.571	456.501	456.431	
Gutter Line No.4																															

HAZLET & CONSULTANTS

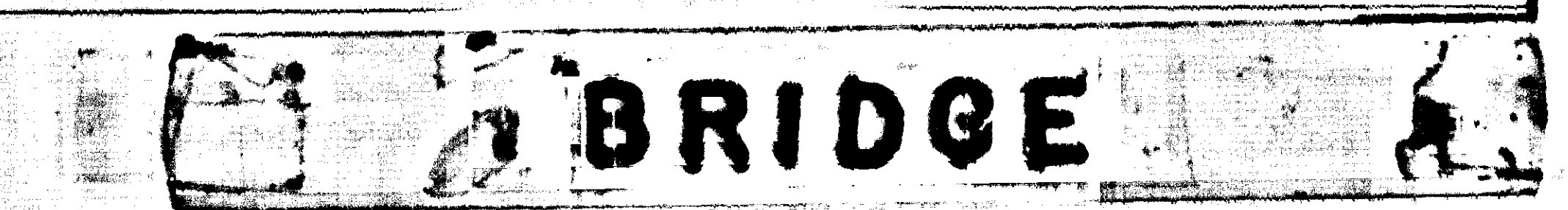
ELEVATION SHEET

BRIDGE OVER EDITH STREET SHEET 12 OF 15

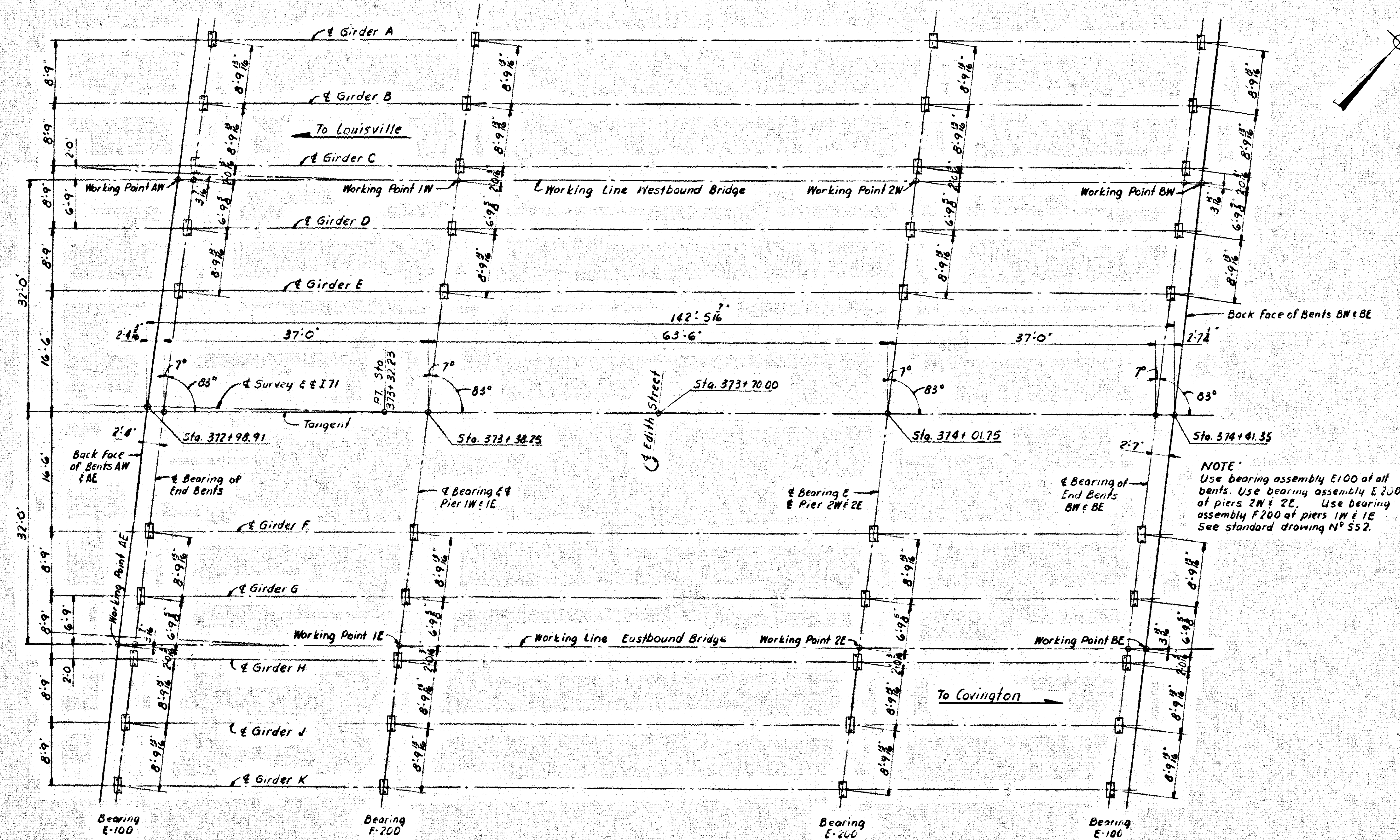
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
JEFFERSON
171 - OHIO STREET TO ZORN AVENUE
LOUISVILLE - COVINGTON
ROAD

STATION 373+70 PROJECT NO. 171-H100

DATE: 12/1/71
BY: [Signature]
CHECKED BY: [Signature]
APPROVED BY: [Signature]

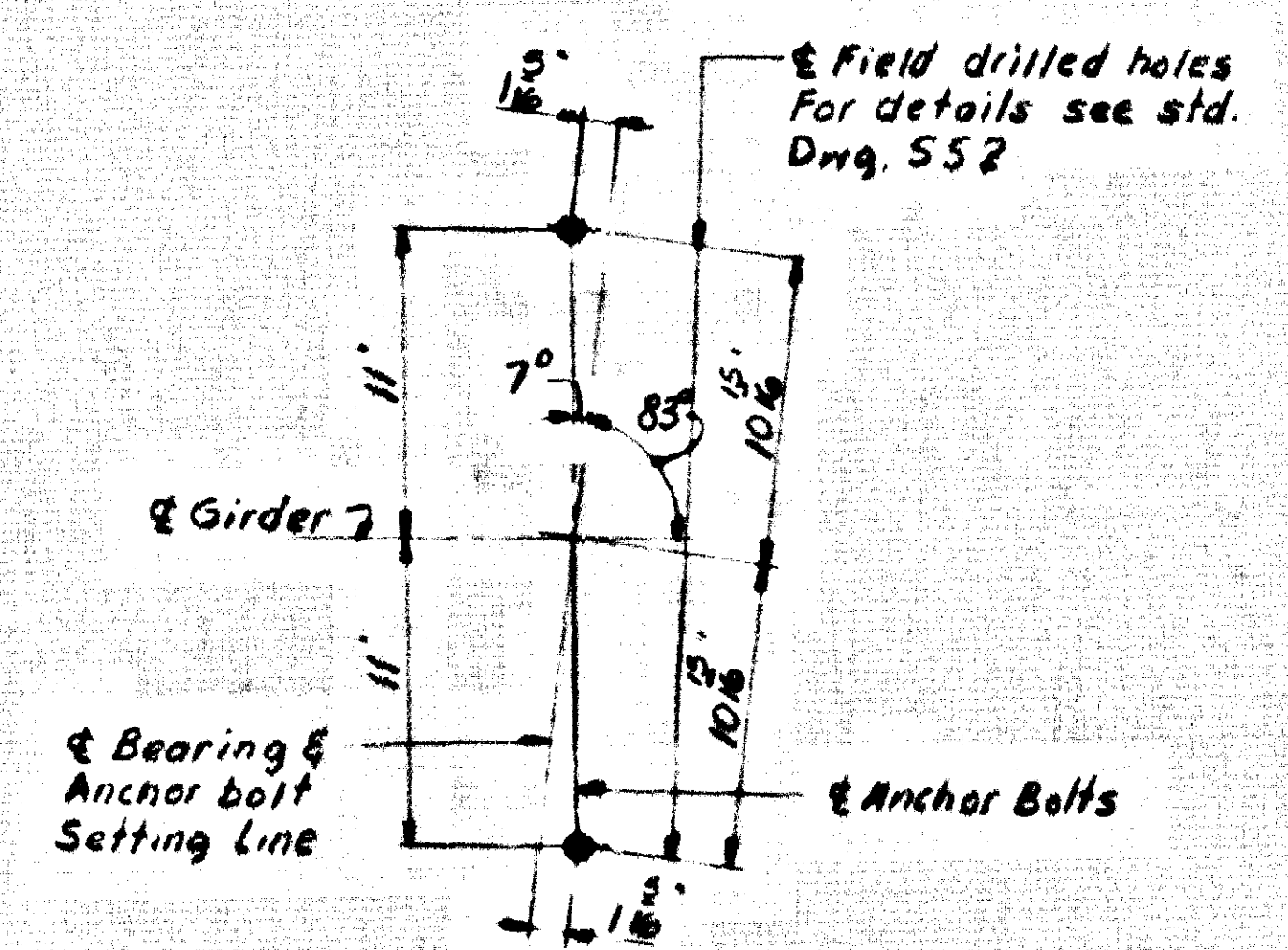


DESIGNED BY	DATE	CHECKED BY	DATE
DRAWN BY	DATE	APPROVED BY	DATE
IN CHARGE	DATE		

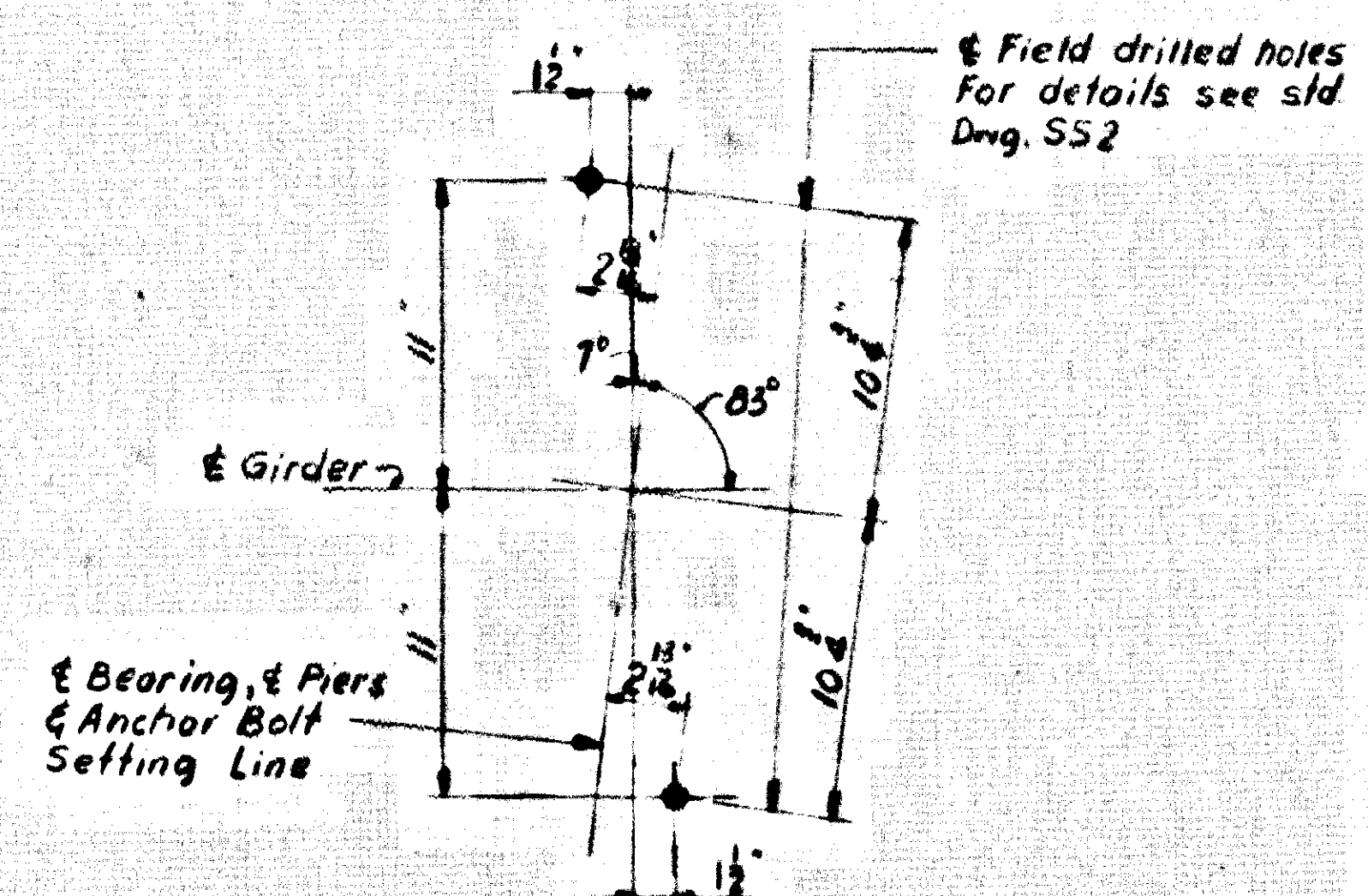


ANCHOR BOLT PLAN

ANCHOR BOLT PLAN



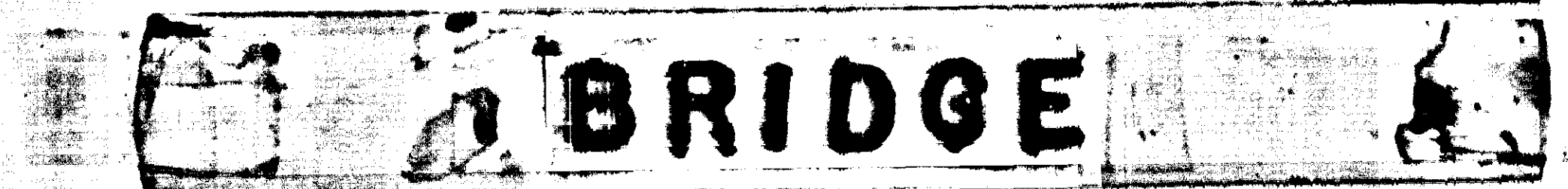
ANCHOR BOLT DETAILS FOR BENTS

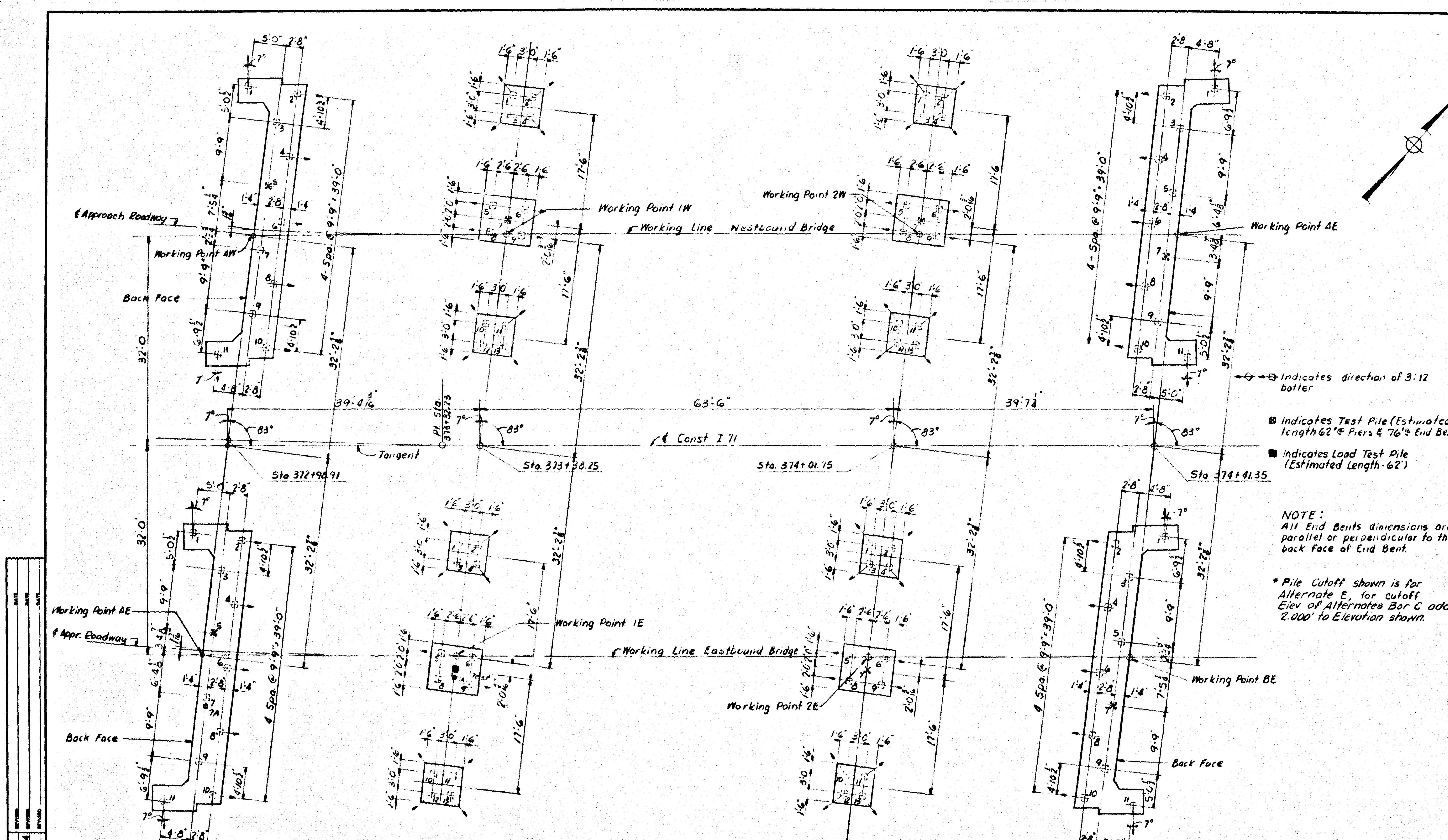


ANCHOR BOLT DETAILS FOR PIERS

NOTES:
 Holes of depth and dimensions shown shall be drilled for anchor bolts 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.

BRIDGE OVER EDITH STREET		SHEET 13 OF 15	
COMMONWEALTH OF KENTUCKY			
DEPARTMENT OF HIGHWAYS			
FRANKFORT			
COUNTY OF			
JEFFERSON			
171 - OHIO STREET to ZORN AVENUE			
LOUISVILLE - COVINGTON			
ROAD		SP56-315-L2	
STATION 373+70		PROJECT NO. 171-11100	
HAZELT & ERD	BRIDGE	DRAWING	DATE
CONSULTING ENGINEERS	NUMBER	15937	
FILE NO. 871-E			





Pile No.	Cutoff Elevation	Tip of pile Elevation as Driven	Length of Piles in Place	Calculated Bearing Capacity-Tons
18	447.969	386.91	63.96	90
28		378.12	72.00	87
38		375.97	72.50	94
48		377.11	73.04	94
58		376.77	71.20	87
68		377.21	52.32	103
78		377.77	50.20	90
88		376.99	53.12	112
98		374.17	49.80	90
108		375.32	51.18	112
118	447.969	378.65	50.89	119

Pile No.	Cutoff Elevation	Tip of pile Elevation as Driven	Length of Piles in Place	Calculated Bearing Capacity-Tons
18	447.782	397.33	52.00	92
28		398.10	51.27	100
38		397.70	49.88	87
48		398.19	50.50	94
58		397.86	49.92	100
68		398.14	51.11	94
78		397.78	50.00	92
88		398.42	50.88	94
98		398.74	49.09	94
108		398.38	50.92	105
118	447.782	398.82	50.97	120

Pile No.	Cutoff Elevation	Tip of pile Elevation as Driven	Length of Piles in Place	Calculated Bearing Capacity-Tons
18	448.786	398.83	51.50	112
28		400.28	50.00	97
38		399.54	49.25	94
48		400.28	50.00	90
58		400.29	48.50	92
68		402.35	41.87	97
78		Bottom Out No Pay		
88		402.36	47.96	112
98		399.96	59.33	90
108		393.01	57.50	96
118	448.786	395.32	55.72	109
128	448.786	399.14	49.65	120

Pile No.	Cutoff Elevation	Tip of pile Elevation as Driven	Length of Piles in Place	Calculated Bearing Capacity-Tons
18	446.279	398.88	50.92	98
28	448.279	400.78	48.76	92
38		400.40	47.88	90
48		401.43	48.29	92
58		400.86	47.92	112
68		401.03	48.71	90
78		401.95	46.33	98
88		402.76	46.72	105
98		403.40	45.88	105
108		402.52	47.17	94
118	446.279	404.42	45.21	112

Pile No.	Cutoff Elevation	Tip of pile Elevation as Driven	Length of Piles in Place	Calculated Bearing Capacity-Tons
18	431.574	393.29	49.83	85
28		396.00	36.67	85
38		392.77	40.00	85
48		395.92	36.75	85
58		397.69	39.72	85
68		397.69	34.92	85
78		398.87	32.70	112
88		397.62	35.00	85
98		398.10	34.50	85
108		398.51	34.08	95
118		397.37	35.75	85
128		399.31	33.25	85
138	431.574	398.89	33.75	85

Pile No.	Cutoff Elevation	Tip of pile Elevation as Driven	Length of Piles in Place	Calculated Bearing Capacity-Tons
18	431.573	396.35	36.25	85
28		394.07	38.67	85
38		397.57	35.00	85
48		397.77	34.58	85
58		397.90	35.17	85
68		397.89	34.67	85
78		397.75	33.77	92
88		397.64	34.12	85
98		397.57	35.00	85
108		398.13	34.42	85
118		397.57	36.00	85
128		398.47	34.17	85
138	431.573	398.05	34.50	112

Pile No.	Cutoff Elevation	Tip of pile Elevation as Driven	Length of Piles in Place	Calculated Bearing Capacity-Tons
18	432.350	399.12	34.25	85
28		399.37	34.00	85
38		400.50	32.83	85
48		399.85	33.50	85
58		398.39	45.31	100
68		399.17	44.51	100
78		398.25	36.10	107
88		399.63	44.04	100
98		398.98	44.71	107
108		397.36	42.25	85
118		401.29	32.08	85
128		398.95	39.58	85
138	432.350	399.72	38.58	85

Pile No.	Cutoff Elevation	Tip of pile Elevation as Driven	Length of Piles in Place	Calculated Bearing Capacity-Tons
18	432.118	400.03	33.08	85
28		399.14	34.70	85
38		400.03	33.08	85
48		401.31	31.76	85
58		400.64	32.95	85
68		400.88	32.20	100
78		401.82	30.30	100
88		401.10	31.98	100
98		402.11	30.93	95
108		401.80	31.25	85
118		402.28	30.76	85
128		399.71	39.18	85
138	432.118	402.85	30.77	85

NOTE: This pile record does not replace other records of piles required to be kept and submitted by the Resident Engineer. After all piles have been driven the Resident Engineer shall record the tip of pile elevation as driven the length of pile in place and the calculated bearing capacity of each pile, and shall return one blue print copy of this sheet with this data to the Director 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 cut-off elevation and are not necessarily pay items.

BRIDGE OVER EDITH STREET SHEET 14 OF 15

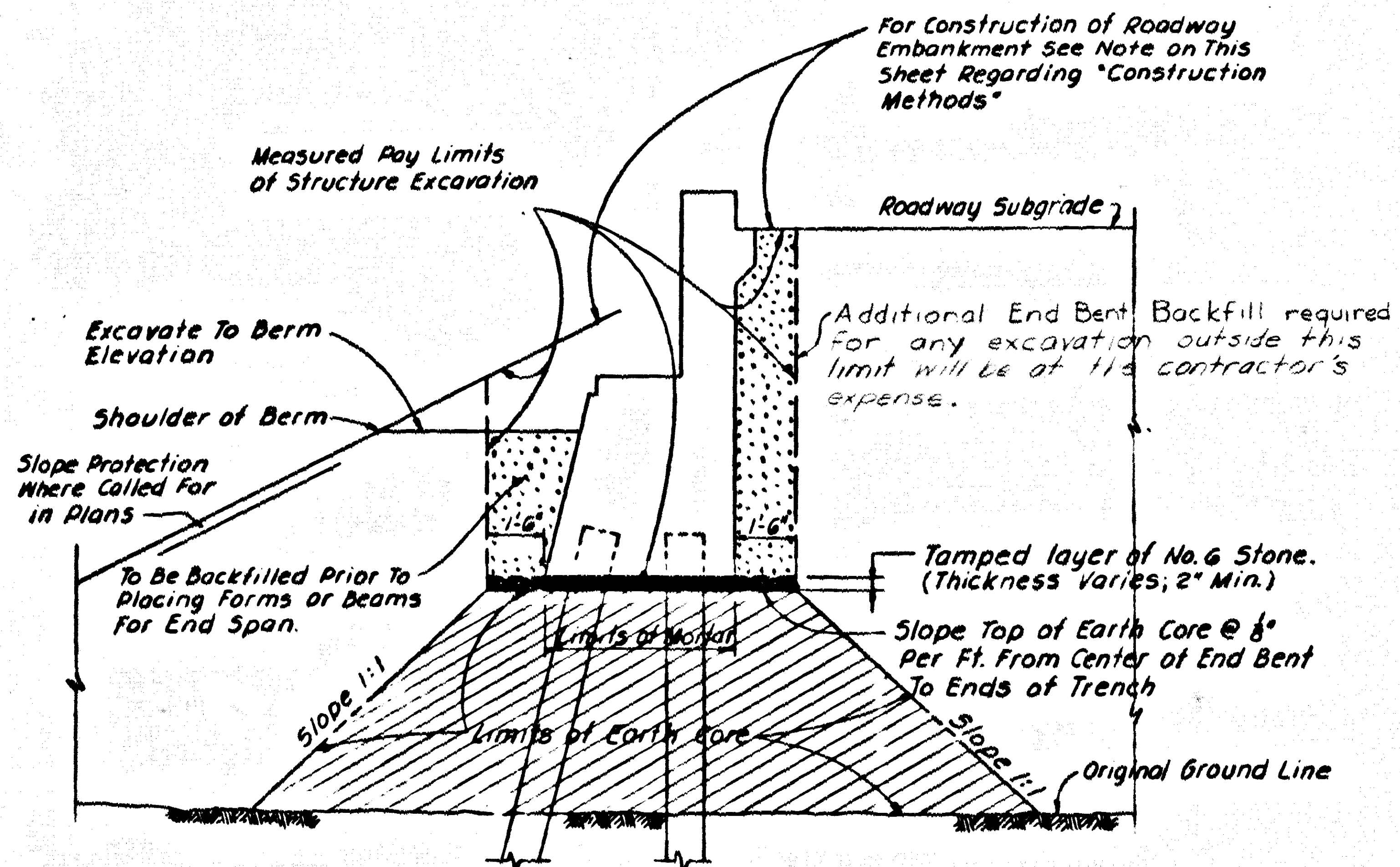
COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
JEFFERSON
 171 - OHIO STREET TO ZORN AVENUE
 LOUISVILLE - COVINGTON
 ROAD

STATION 373+70 PROJECT NO. SP56-315-L2
 BRIDGE NUMBER 15937

PILE RECORD

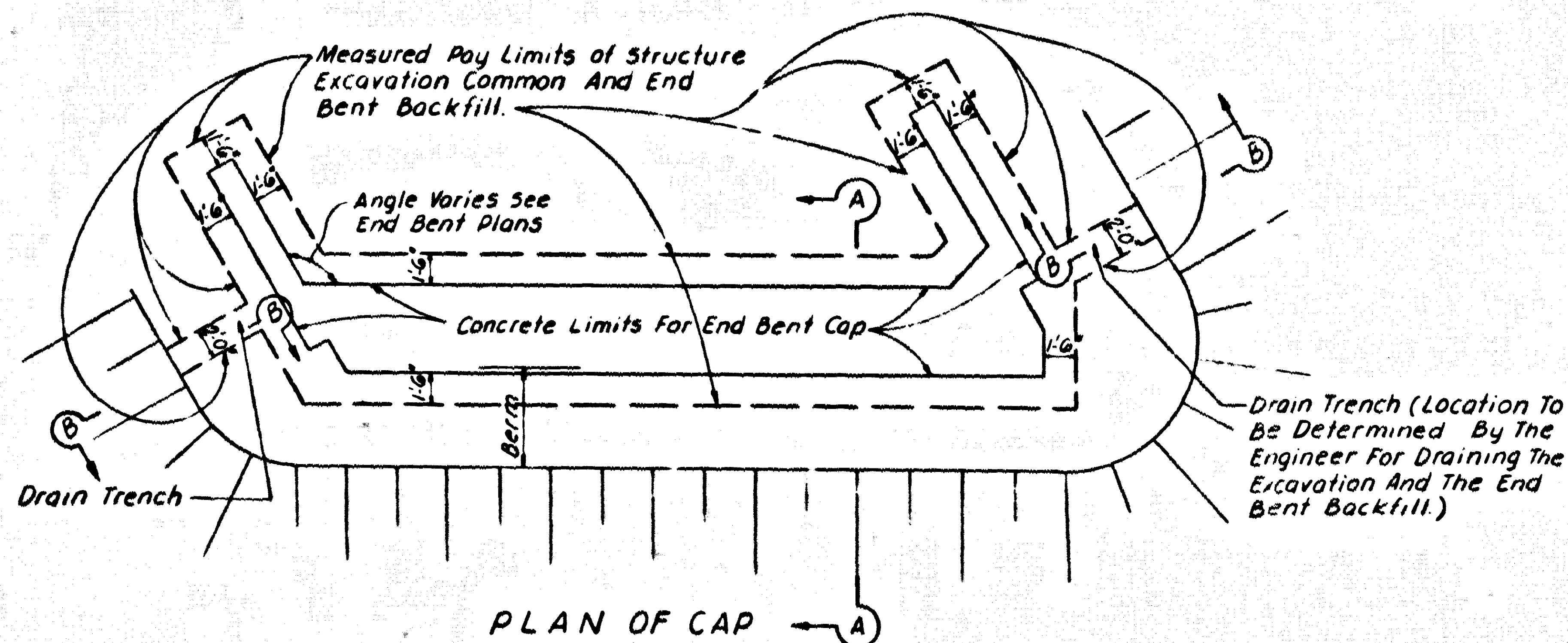
HAZLET & ENGL
 CONSULTING ENGINEERS
 FILE NO. 8712

BRIDGE

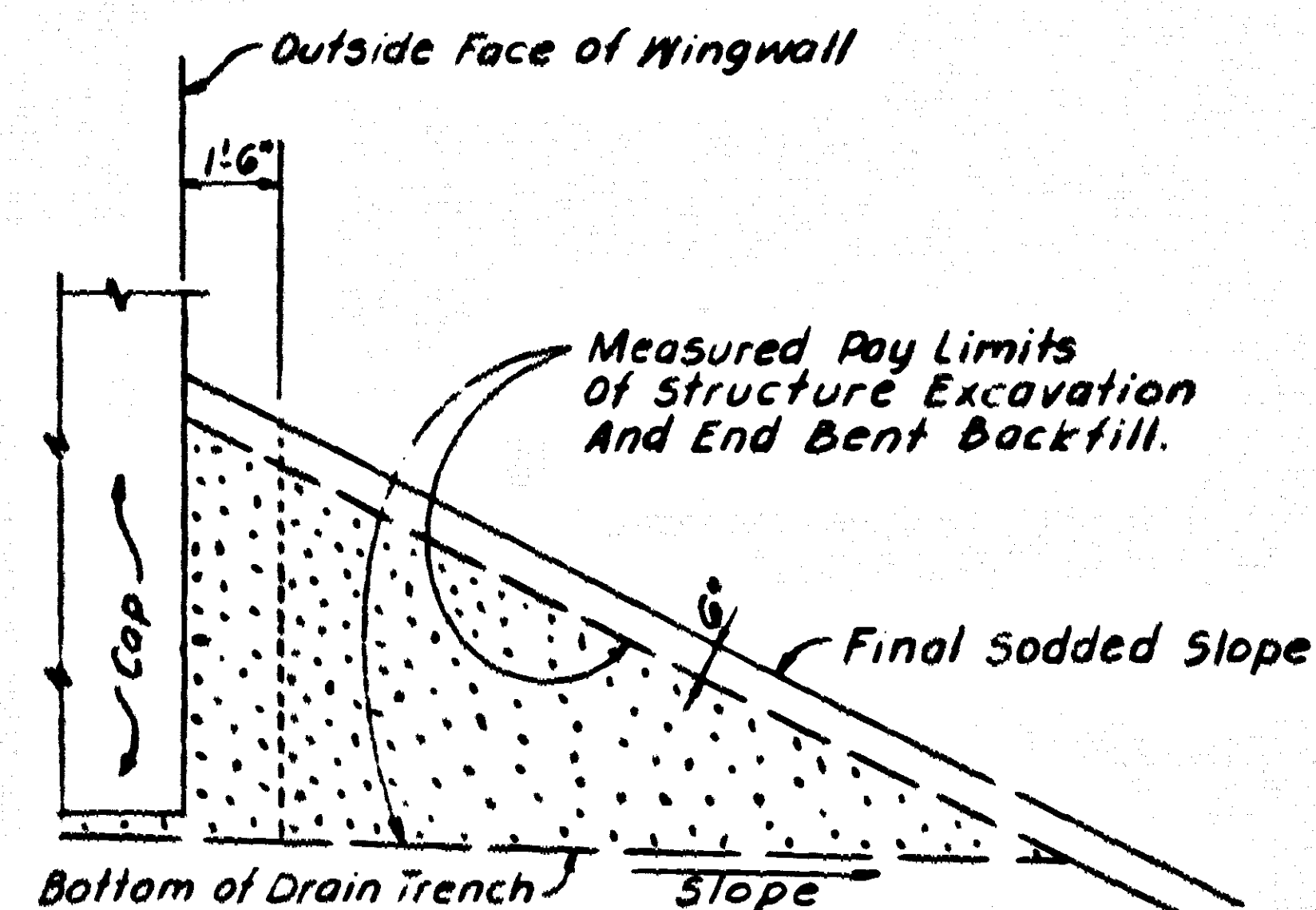


SECTION A-A

LEGEND Pay limits for End Bent Backfill.



PLAN OF CAP



SECTION B-B
(Thru Trench)

MATERIALS:

NOTES

EARTH CORE- In Addition To Meeting Requirements For Embankment Materials in Accordance With The Specifications, The Earth Core Shall Be Free of Boulders or Any Other Obstructions Which Would Interfere With The Driving of Piles.

END BENT BACKFILL- End Bent Backfill Material Shall Consist of Natural Sand or Concrete Sand or Dense Graded Aggregate Meeting Requirements of The Specifications; or Sand, Crushed or Uncrushed Gravel, Crushed Limestone, Crushed Sandstone, Crushed Slag or a Combination Thereof, Meeting The Following Requirements:

GRADATION	SIEVE SIZE	Percent Passing
	3/4 Inch	100
	1/2 Inch	50-90
	3/8 Inch	20-40

SOUNDNESS	Percentage Loss After Subjection To Five Alternations of The Sodium Sulfate Soundness Test, not More Than 20
WEAR	Percent, Not More Than 50
SHALE	Percent, Not More Than 5
DIRT	Percent, Not More Than 5

CONSTRUCTION METHODS:

Prior To Driving Piles, The Roadway Embankment At The Location For a Pile End Bent Shall Be Constructed To The Roadway Subgrade Elevation At Full Embankment Section For Front And Side Slopes in Accordance With The Specifications For "Extra Compaction".

After The Embankment Has Been Constructed, Excavate To The Bottom of Bent Cap Elevation Within The Limits Indicated Before Driving Piles. After Piles Are Driven (See General Notes) Slope Bottom of Excavation Toward Ends of Trench As Noted For Drainage. Place # 6 Crushed Stone in Trench To Bottom of End Bent Elevation, Tamped Well.

Place 1:2 Cement Mortar To Bottom of Cap Elevation. Side Forms For End Bent May Be Placed As Soon As Mortar Has Set Sufficiently To Support Workmen And Forms Without Being Disturbed.

After Concrete Cap Has Been Placed The Excavation Shall Be Filled With "End Bent Backfill" Material Noted Above To Level of The Berm Prior To Placing Beams For The Bridge. After Concrete Backwall Has Been Placed The "End Bent Backfill" Shall Be Placed Up To Subgrade Elevation. If The Original Excavation Has Been Enlarged Beyond The Limits Shown, The Entire Excavation, Regardless of The Limits Shall Be Backfilled With The End Bent Backfill Material.

End Bent Backfill Shall Be Placed in Drainage Trenches At Ends of The Excavation To Embankment Side Slopes, As Shown in Section B-B. The Backfill Shall Be Tamped By Hand Tampers, Pneumatic Tampers or Other Means Approved By The Engineer. Care Shall Be Exercised To Thoroughly Compact The Backfill Under The Haunches of The Structure To Insure That The Backfill is in Intimate Contact With The Sides of The Structure. The Density of The Backfill Shall Be At Least Equal To That Required For The Adjacent Embankment.

MEASUREMENT AND PAYMENT:

Excavation For The Pile End Bent Shall Be Measured As Shown in "Plan" And "Section" And Will Be Paid For As "Structure Excavation Common" in Accordance With The Specifications. Pay Limits For Structure Excavation Shall Serve As Limits For Determining Quantity For Payment For "End Bent Backfill" Which Quantity Shall Be Paid For At The Unit Price Per Cubic Yard Bid For "End Bent Backfill", except that the volume of concrete and bent cap and void directly above the berm shall be deducted from the measurement for "Structure Excavation Common".

Crushed stone and mortar placed under the end bent will not be paid for separately and shall be incidental to and included in the Unit Price Bid for Class "A" Concrete.

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171- OHIO STREET - ZORN AVENUE

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ROAD

SP56-33-L2

STATION 373+70

PROJECT NO. 171-11000

BRIDGE NUMBER

15937

END BENT BACKFILL

BRIDGE