KENTUCKY DEPARTMENT OF HIGHWAYS
BARREN COUNTY
BOWLING GREEN - SOMERSET PARKWAY
B.S.P. OVER I-65

PLANS PREPARED BY: KROBOTH ENGRS. INC. CONSULTING ENGRS.
FOR: PRESTON & ASSOCIATES CONSULTING ENGRS.
LETTING DATE

DESIGNED BY AF DATE 5-70 REVISED DATE REVISED DATE
DETAILED BY LCI DATE 5-70 REVISED DATE REVISED DATE
CHECKED BY DGM DATE REVISED DATE REVISED DATE
CHECKED BY DGM DATE REVISED DATE REVISED DATE

REFERENCE & ESTIMATE OF QUANTITIES — NORTH BRIDGE

Location \ Item	Sheet No.	Concrete Class "A" (Cu. Yds.)	Concrete Class "AA" (Cu. Yds.)	Steel Reinforcement (Lbs.)	Structural Steel (Lump Sum)	High Strength Handrail (Lin. Ft.)	Protective Coating Styrene-Butadiene (Gal.)	Protective Coating Linseed Oil (Sq. Yds.)	End Bent Backfill (Cu. Yds.)	Structure Excavation Common (Cu. Yds.)	Piling 12 BP 53 Furnish (Lin. Ft.)	Piling 12 BP 53 Drive (Lin. Ft.)	Slope Prot. 12" Deep Crushed Aggregate (Sq. Yds.)	Electrical Conduit (Lump Sum)	Shear Connectors (Lump Sum)
Title & Quantities	1														
Notes	2														
Layout	3														
Substructure Layout	4														
Pile Record	5														
Abutment 1-N	6-10	102.6	89.1	30,676			5	80	95	240	555	555	140		
Pier 1-N	14	60.8	—	13,003			4	—	—	70	210	210	—		
Abutment 2-N	16-20	88.2	80.9	85,840			3	65	95	270	625	625	145		
Spans 1 & 2	24-28		290.9	84,420			11	930							
High Strength Handrail	3					638									
Construction Elevations	34														
Electrical Conduit	36														
Soundings	37														
Sub-total Substructure		251.6	170.0	69,513		—	10	145	190	580	1390	1390	285	—	—
Sub-total Superstructure		—	290.9	94,420	①	638	11	930	—	—	—	—	—	②	③
Total		251.6	460.9	153,933	①	638	21	1075	190	580	1390	1390	285	②	③

REFERENCE & ESTIMATE OF QUANTITIES — SOUTH BRIDGE

Location \ Item	Sheet No.	Concrete Class "A" (Cu. Yds.)	Concrete Class "AA" (Cu. Yds.)	Steel Reinforcement (Lbs.)	Structural Steel (Lump Sum)	High Strength Handrail (Lin. Ft.)	Protective Coating Styrene-Butadiene (Gal.)	Protective Coating Linseed Oil (Sq. Yds.)	End Bent Backfill (Cu. Yds.)	Structure Excavation Common (Cu. Yds.)	Piling 12 BP 53 Furnish (Lin. Ft.)	Piling 12 BP 53 Drive (Lin. Ft.)	Slope Prot. 12" Deep Crushed Aggregate (Sq. Yds.)	Electrical Conduit (Lump Sum)	Shear Connectors (Lump Sum)
Title & Quantities	1														
Notes	2														
Layout	3														
Substructure Layout	4														
Pile Record	5														
Abutment 1-S	11-13	82.3	73.2	23,364			3	60	80	180	675	675	115		
Pier 1-S	15	41.9	—	10,520			3	—	—	55	185	185	—		
Abutment 2-S	21-23	68.6	66.2	21,635			3	50	75	205	580	580	120		
Spans 1 & 2	29-33		237.2	67,329			11	690							
High Strength Handrail	3					638									
Construction Elevations	35														
Electrical Conduit	36														
Soundings	37														
Sub-total Substructure		192.8	139.4	55,519		—	9	110	155	440	1440	1440	235	—	—
Sub-total Superstructure		—	237.2	67,329	④	638	11	690	—	—	—	—	—	⑤	⑥
Total		192.8	376.6	122,848	④	638	20	800	155	440	1440	1440	235	⑤	⑥

BILL OF INCIDENTAL MATERIAL

Item	No.	Description	Location
Four Bolt Insert Assembly	6	See Note Sheet 8	Abutment Wings
Joint Sealing Compound	2	1" x 3½" x 42'-8"	Expansion Dams @ North Abut.'s
" " "	2	1" x 3½" x 32'-5"	" " @ South Abut.'s

① Approximate Weight of Structural Steel = 341,050 Lbs.
② Approximate Length of Electrical Conduit = 349 Lin. Ft.
③ Approximate Weight of Shear Connectors = 1665.0 Lbs.

SPECIAL PROVISIONS

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

REFERENCES

(Standard Drawings listed below are the Current Edition and are to be used with these plans)
AE I-D , P212AA, 3F3, AW32A, H116C, 17.40 a

④ Approximate Weight of Structural Steel = 261,300 Lbs.
⑤ Approximate Length of Electrical Conduit = 349 Lin. Ft.
⑥ Approximate Weight of Shear Connectors = 1332.0 Lbs.

B.S.P. over I-65 Sheet 1 of 37

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN - SOMERSET PKWY.
ROAD B.S.P. I-1
STATION 106+59.75 P. E. PROJECT NO. SP5-187-14

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
BSP 1-1		18224

BRIDGE

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 HS 20 LIVE LOAD AS SPECIFIED IN 1969 AASHO SPECIFICATIONS (INCLUDING INTERIM SPECIFICATIONS), OR ALTERNATE LOADING OF TWO 24-KIP AXLES SPACED FOUR FEET APART WHICHEVER PRODUCES THE GREATER STRESS. 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
f - 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 Σ_o) - 300 PSI	u (for embed.) - 200 PSI
n - 10	u (for Σ_o) - 300 PSI
	n - 8

FOR STRUCTURAL STEEL.

fs - 20,000 PSI FOR A36 STEEL

FOUNDATION PRESSURE. PILES AT ABUTMENTS ARE DESIGNED FOR A MAXIMUM AXIAL LOAD OF 50.0 TONS PER PILE AND A MAXIMUM HORIZONTAL SHEAR OF 0 TON PER PILE. PILES @ PIERS ARE DESIGNED FOR A MAXIMUM AXIAL LOAD OF 67.6 TONS PER PILE. THESE MAXIMUMS ARE FOR GROUP I LOADS WITH INCREASES ALLOWED FOR OTHER LOADING GROUPS.

CONCRETE. CLASS "AA" CONCRETE IS TO BE USED THROUGHOUT THE SUPERSTRUCTURE AND IN THE PORTIONS OF THE SUBSTRUCTURE ABOVE THE 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 FOR STRUCTURAL STEEL. THE LUMP SUM BID FOR STRUCTURAL STEEL SHALL BE FULL PAYMENT FOR ALL STRUCTURAL STEEL, RIVETS, 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. ALL TESTS 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.

HANDRAIL TYPE. THE CONTRACTOR SHALL PROVIDE 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 AND ASTM SPECIFICATIONS, CURRENT EDITION, AS DESIGNATED BELOW, SHALL GOVERN THE MATERIALS FURNISHED.

- ASTM A 36-69 STRUCTURAL STEEL FOR WEB PLATES, FLANGES PLATES, DIAPHRAGMS, STIFFENERS, SPLICES, EXPANSION DAMS AND BEARING ASSEMBLIES.
- ASTM A325-68 HIGH STRENGTH BOLTS, NUTS, AND WASHERS.
- ASTM A108-69 PINS. (GRADE 1016 TO 1030 INCLUSIVE).
- AWS A5.1-69 MILD STEEL COVERED ARC-WELDING ELECTRODES.
- ASTM B 29-55 (1966) LEAD PLATES AND MOLTEN LEAD.

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.

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 ABUTMENT SIDE WALLS, THE TOP, SIDES AND ENDS OF PIER CAPS, AND THE SEAT OF ABUTMENTS.

POURING SEQUENCE. THE SLAB TO BE POURED IN ONE CONTINUOUS POUR. THE POURING SEQUENCE OF THE SLAB MAY BE CHANGED WITH THE WRITTEN APPROVAL OF THE ENGINEER.

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.

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.

PAYMENT FOR SHEAR CONNECTORS. THE "LUMP SUM BID" FOR SHEAR CONNECTORS SHALL BE FULL PAYMENT FOR ALL SHEAR CONNECTORS, WELDING AND WELDING MATERIAL, AND MATERIALS NECESSARY TO FIELD WELD OR SHOP WELD THE SHEAR CONNECTORS IN PLACE ACCORDING TO THE PLANS AND SPECIFICATIONS.

OPTIONAL TYPES OF SHEAR CONNECTORS. THE CONTRACTOR SHALL USE ONE OF THE FOLLOWING OPTIONS THROUGHOUT THIS STRUCTURE.

- OPTION 1 - 3/4" x 5" STUDS
- OPTION 2 - 3/4" x 5" ø SPIRALS
- OPTION 3 - 5" CHANNEL @ 6.7#

IF THE CONTRACTOR WISHES TO USE OTHER THAN 3/4" x 5" STUD SHEAR CONNECTORS SHOWN ON THE PLANS, THE PROPOSED ARRANGEMENT SHALL BE SUBMITTED FOR APPROVAL WITH THE SHOP PLANS.

TEMPORARY SUPPORTS. TEMPORARY SUPPORTS OR SHORING WILL NOT BE PERMITTED UNDER THE GIRDERS WHEN POURING THE CONCRETE FLOOR SLAB OR WHEN TAKING "TOP OF STEEL" ELEVATIONS.

STUD WELDING. STUDS SHALL BE WELDED WITH APPROVED WELDING EQUIPMENT.

CONNECTIONS. UNLESS OTHERWISE PROVIDED ON THE PLANS, ALL CONNECTIONS SHALL BE 7/8" DIAMETER HIGH STRENGTH BOLTS. OPEN HOLES SHALL BE 15/16" DIAMETER. ALL JOINTS ARE DESIGNED AS FRICTION TYPE CONNECTIONS. TIGHTENING SHALL BE DONE WITH PROPERLY CALIBRATED WRENCHES OR BY THE TURN-OF-NUT METHOD.

DIMENSIONS. DIMENSIONS ARE FOR A NORMAL TEMPERATURE OF 60 DEGREES FAHRENHEIT. LAYOUT DIMENSIONS ARE HORIZONTAL MEASUREMENTS.

PROHIBITED FIELD WELDING. EXCEPT AS SHOWN ON THE PLANS, NO WELDING OF ANY NATURE SHALL BE PERFORMED ON THE LOAD CARRYING MEMBERS OF THE BRIDGE WITHOUT THE WRITTEN CONSENT OF THE DIRECTOR, DIVISION OF BRIDGES, OR HIS AUTHORIZED REPRESENTATIVE, AND THEN ONLY IN THE MANNER AND AT THE LOCATIONS DESIGNATED IN THE AUTHORIZATION.

CAMBER. WEB PLATES SHALL BE CUT TO PROVIDE FOR PARABOLIC CAMBER OF THE GIRDER. PROVIDE FOR POSSIBLE WARPAGE DUE TO EXTRA HEAT IN TOP FLANGE BY VIRTUE OF SHEAR CONNECTORS. GIRDERS WHICH DO NOT CONFORM TO PLAN CAMBER AND GRADE IN THE ERECTED POSITION SHALL BE CONSIDERED AS REQUIRING, AT NO ADDITIONAL COST TO THE STATE, EITHER AN ADJUSTMENT IN DEPTH OF THE CONCRETE SLAB HAUNCH OVER THE STEEL SUPPORTING MEMBERS OR A REWORKING OF THE GIRDER CAMBER TO MEET THE PLAN GRADE AND SLAB THICKNESS.

SHOP ASSEMBLY. GENERAL REAMING OF HOLES FOR EACH BOLTED SPLICE AND CONNECTION OF THE CONTINUOUS GIRDERS SHALL BE REQUIRED. EACH CONTINUOUS GIRDER UNIT SHALL BE COMPLETELY SHOP ASSEMBLED WITH PARTS ADJUSTED TO LINE, ELEVATIONS, AND CAMBER, FIT FOR DRILLING OR REAMING. OTHER BOLTED CONNECTIONS TO THE GIRDERS SHALL BE DRILLED OR REAMED IN THE SHOP WITH CONNECTING PARTS ASSEMBLED OR SHALL BE DRILLED OR REAMED TO A METAL TEMPLATE WITHOUT ASSEMBLY. GIRDERS SHALL REMAIN ASSEMBLED FOR INSPECTION BY THE DEPARTMENT OF HIGHWAYS INSPECTOR AND ARE TO BE MATCHMARKED WHILE ASSEMBLED. CONNECTIONS FOR THE DIAPHRAGMS, EXPANSION JOINTS AND OTHER MINOR MEMBERS MAY BE PUNCHED OR DRILLED FULL SIZE WITHOUT ASSEMBLY, SUBJECT TO THE REQUIREMENTS IN THE SPECIFICATIONS FOR GENERAL REAMING.

WELDING PROCEDURE. QUALIFICATION TESTS OF ALL WELDING SHALL BE COMPLETED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO THE FINAL APPROVAL OF THE SHOP DRAWINGS AND WELDING PROCEDURE AND THE START OF THE FABRICATION.

ELECTRICAL CONDUIT. THE LUMP SUM FOR THIS ITEM SHALL INCLUDE FURNISHING ALL JUNCTION BOXES, CONDUIT AND OTHER MATERIALS AND LABOR NECESSARY FOR PLACING THESE MATERIALS IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.

CONSTRUCTION PROCEDURE FOR ABUTMENTS.

1. PLACE FILL AT ABUTMENT TO APPROXIMATE LIMITS OF FINISHED GRADE AS SHOWN ON ROADWAY PLANS.
2. EXCAVATE FOR FOOTINGS AND DRIVE PILES.
3. DRESS SUBGRADE AT FOOTINGS AND PLACE STONE OR MORTAR BASE. POUR BOTH FOOTINGS.
4. AFTER BACKFILLING AT THE FRONT FOOTING EXCAVATE FOR SIDEWALLS, PLACE STONE OR MORTAR BASE, PLACE FORMS FOR SIDEWALLS AND POUR FRONTWALL AND SIDEWALLS TO BRIDGE SEAT.
5. BACKFILL SIDEWALLS AND MAKE FINAL GRADING INSIDE OF ABUTMENT BEFORE PLACING FORMS AND SHORING FOR DECK GIRDERS. SPECIAL CARE SHALL BE EXERCISED TO AVOID DAMAGE TO FRONTWALL, BACKWALL, AND SIDEWALLS.
6. COMPLETE POURING OF GIRDERS AND SLAB.
7. PLACE THE CURBS AND WINGS.
8. PLACE PLINTH AND RAILING CONTINUOUSLY OVER ABUTMENTS AND SUPERSTRUCTURE.

NOTE: ALL EXCAVATION AND FILL AT THE ABUTMENT TO BE PLACED IN ACCORDANCE WITH STD. DWG. SF-3.

DESIGNED BY ___ DETAILED BY WG CHECKED BY DGM DATE 4-10

NOTES

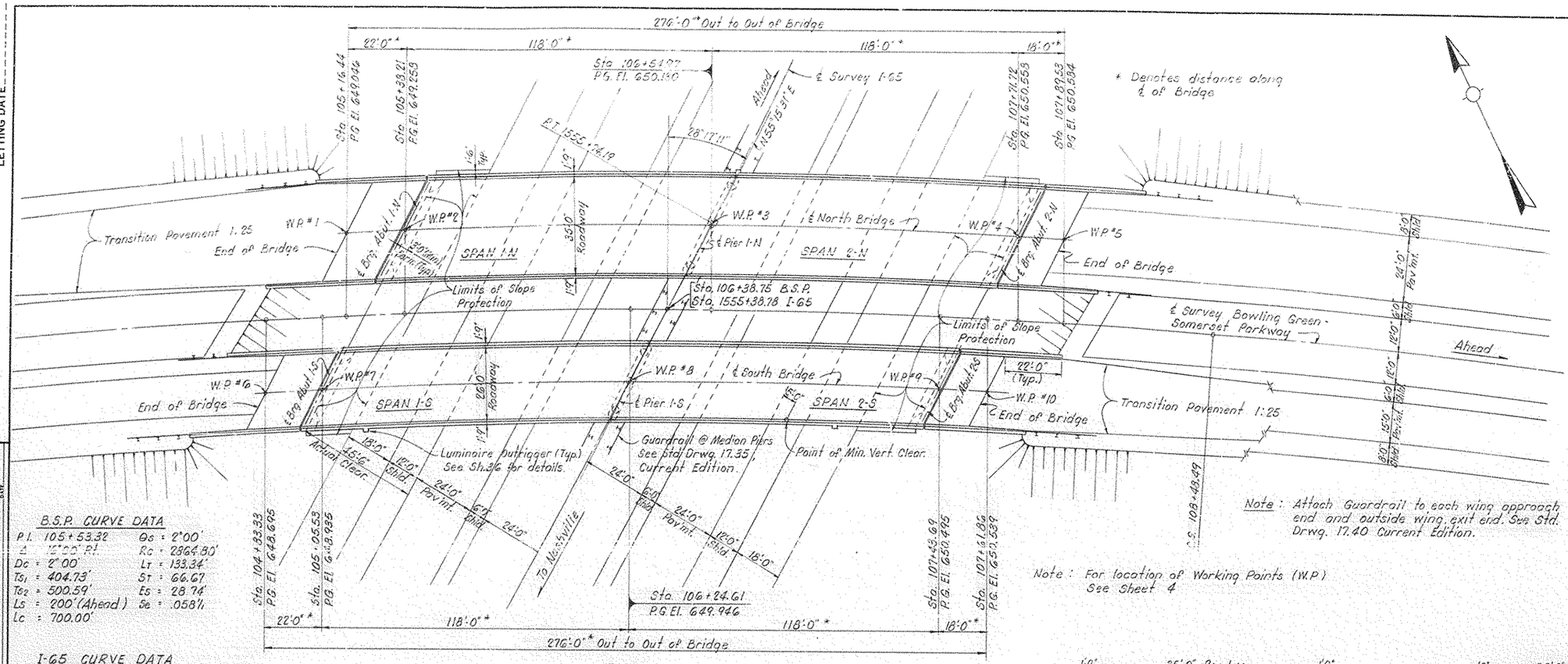
B.S.P. over I-65 — Sheet 2

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN - SOMERSET PKWY.
ROAD
STATION 106+38.75 — P.E. PROJECT NO.

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18224

BRIDGE

LETTING DATE



PLAN

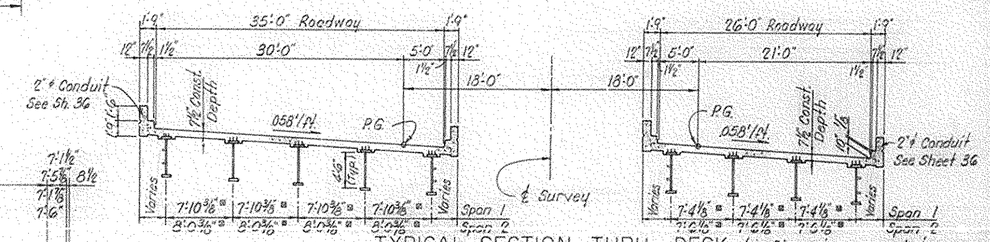
118'-118' Continuous Composite ℄ Girder Spans HS20-44 Loading
35' & 26' Roadways 9" Curbs 28°17'11" Skew Rt.
98'-6" Shoulders of Bridge 2:1 Slopes

B.S.P. CURVE DATA

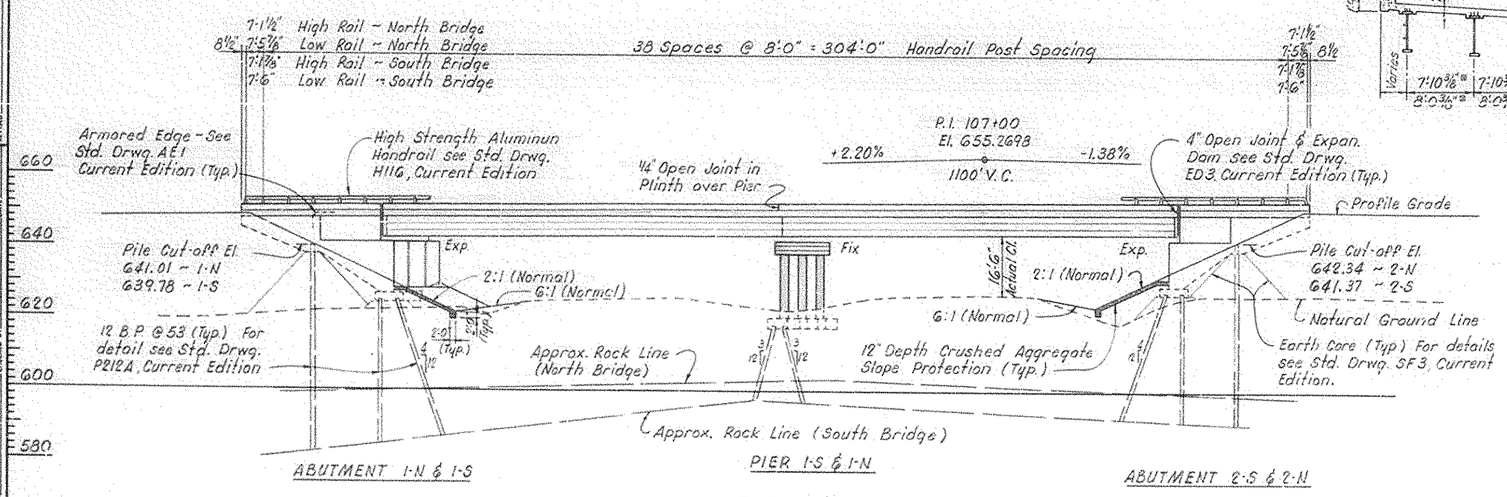
P.I. 105+53.32	Qc = 2°00'
Δ = 15°00' Rt.	Rc = 2864.80'
Dc = 2°00'	LT = 133.34'
Ts_1 = 404.73'	ST = 66.67'
Ts_2 = 500.59'	Es = 28.74'
Ls = 200' (Ahead)	Se = .058'/'
Lc = 700.00'	

I-65 CURVE DATA

P.I. 1544+05.50	R = 4583.66'
Δ = 29°55' Lt.	E = 160.78'
Dc = 1°15'	Se = .035'/'
T = 1224.64	Runoff = 200'
L = 2393.33'	



TYPICAL SECTION THRU DECK (* Dimension normal to Girder in each Span)



ELEVATION

LAYOUT

TABLE OF ELEVATIONS

	ABUTMENT 1-N	ABUTMENT 1-S	PIER 1-N	PIER 1-S	ABUTMENT 2-N	ABUTMENT 2-S
Top of Cap	641.674	640.451	642.146	641.076	643.005	642.033
Berm	628.7	628.7	—	—	632.1	632.1
Pile Cut-off	625.17	623.95	616.65	615.58	628.51	627.53
Bot. of Ftg.	624.674	623.451	616.146	615.076	628.005	627.033
Height	17'-0"	17'-0"	26'-0"	26'-0"	15'-0"	15'-0"

B.S.P. over I-65

Sheet 3

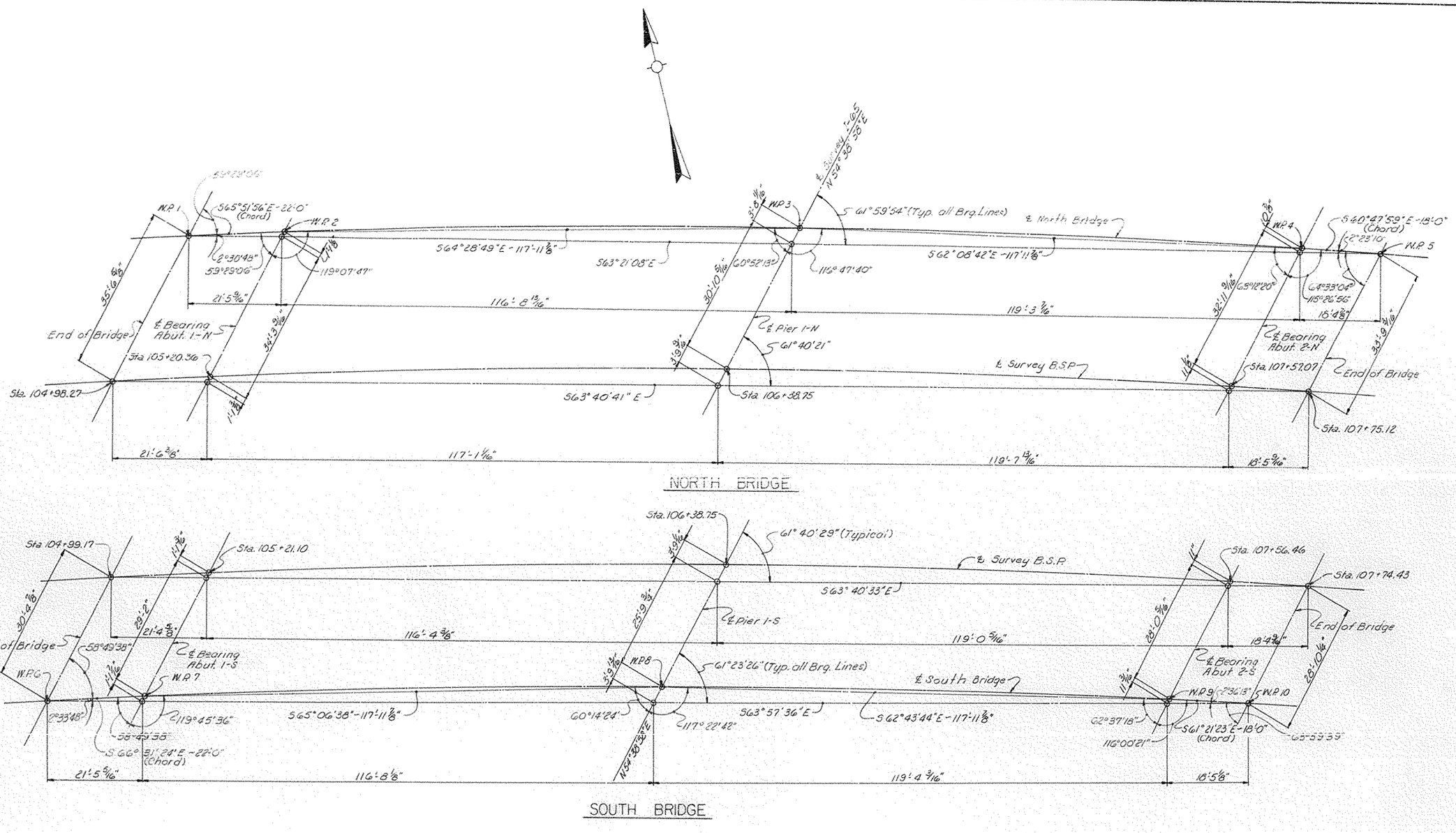
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN - SOMERSET PKWY.
ROAD
STATION 106+38.75 **P.E. PROJECT NO.**

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18224

DESIGNED BY WTA CHECKED BY DGM DATE 4-70
DETAILED BY HET CHECKED BY DGM DATE 4-70
TRACED BY DATE
REVISED REVISED REVISED

BRIDGE

LETTING DATE



NORTH BRIDGE

SOUTH BRIDGE

SUBSTRUCTURE LAYOUT

B.S.P. over I-65

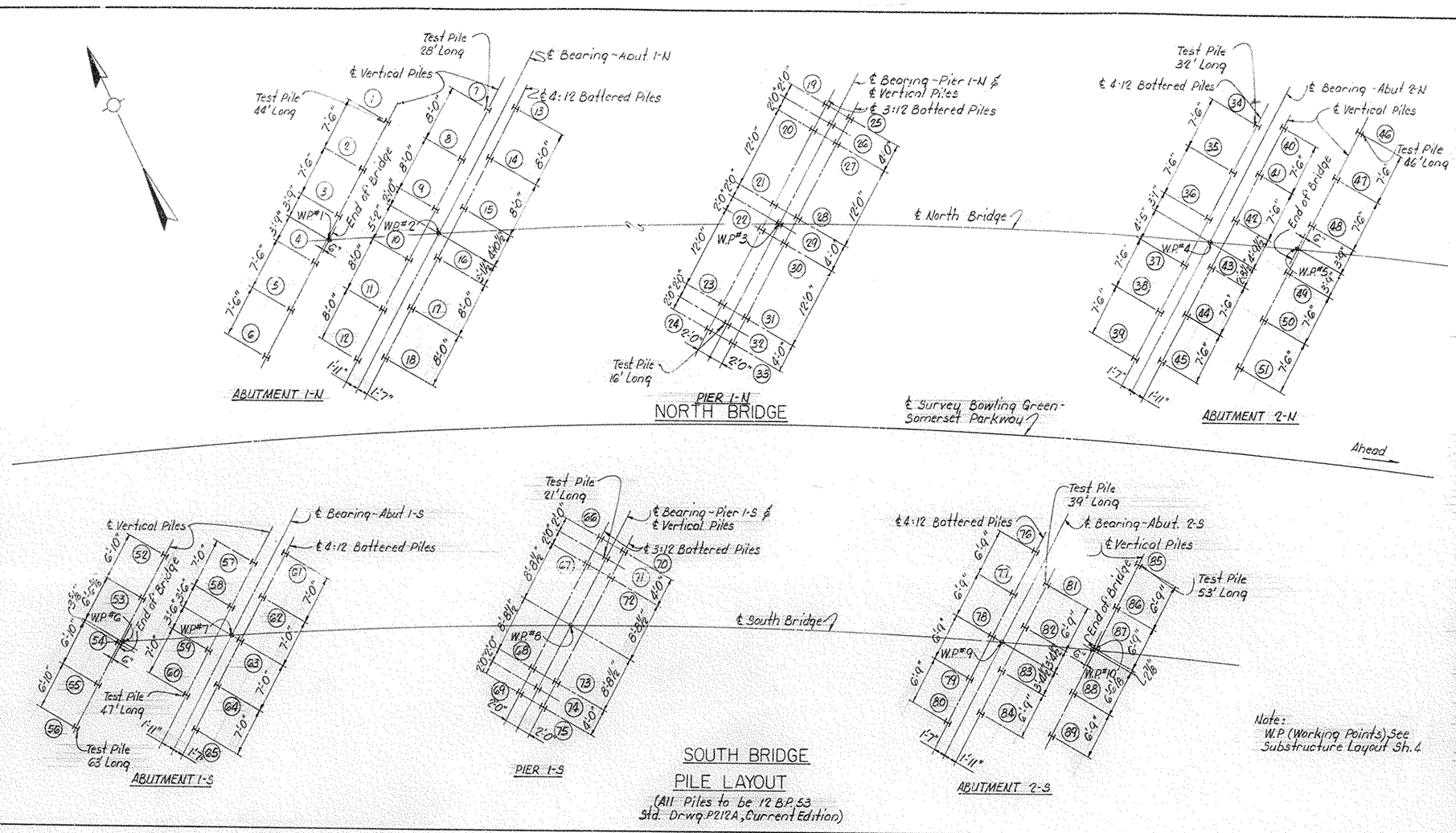
Sheet 4

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN—SOMERSET PKWY.
ROAD
STATION 106+38.75 **P. E. PROJECT NO.**

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18224

DESIGNED BY R.A.P. CHECKED BY DATE 4-70
DETAILED BY D.W.G. CHECKED BY DATE 4-70
TRACED BY CHECKED BY DATE
REVISED DATE REVISED DATE REVISED DATE

BRIDGE



SOUTH BRIDGE

PILE LAYOUT

(All Piles to be 12 B.P. 53
Std. Drwg. P212A, Current Edition)

Note:
W.P. (Working Points) See Substructure Layout Sh. 4

PILE RECORD

PILE NUMBER	CUTOFF ELEVATION	TIP OF PILE ELEVATION	PILE LENGTH (LIN. FT.)	CALC. BRG CAPACITY (TONS)
ABUTMENT 1-S				
52	639.78			
53	"			
54	"			
55	"			
56	"			
57	623.95			
58	"			
59	"			
60	"			
61	"			
62	"			
63	"			
64	"			
65	"			
PIER 1-S				
66	615.58			
67	"			
68	"			
69	"			
70	"			
71	"			
72	"			
73	"			
74	"			
75	"			
ABUTMENT 2-S				
76	627.53			
77	"			
78	"			
79	"			
80	"			
81	"			
82	"			
83	"			
84	"			
85	641.37			
86	"			
87	"			
88	"			
89	"			

PILE NUMBER	CUTOFF ELEVATION	TIP OF PILE ELEVATION	PILE LENGTH (LIN. FT.)	CALC. BRG CAPACITY (TONS)
ABUTMENT 1-N				
1	641.01			
2	"			
3	"			
4	"			
5	"			
6	"			
7	625.17			
8	"			
9	"			
10	"			
11	"			
12	"			
13	"			
14	"			
15	"			
16	"			
17	"			
18	"			
PIER 1-N				
19	616.65			
20	"			
21	"			
22	"			
23	"			
24	"			
25	"			
26	"			
27	"			
28	"			
29	"			
30	"			
31	"			
32	"			
33	"			
ABUTMENT 2-N				
34	628.51			
35	"			
36	"			
37	"			
38	"			
39	"			
40	"			
41	"			
42	"			
43	"			
44	"			
45	"			
46	642.34			
47	"			
48	"			
49	"			
50	"			
51	"			

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 RECORD

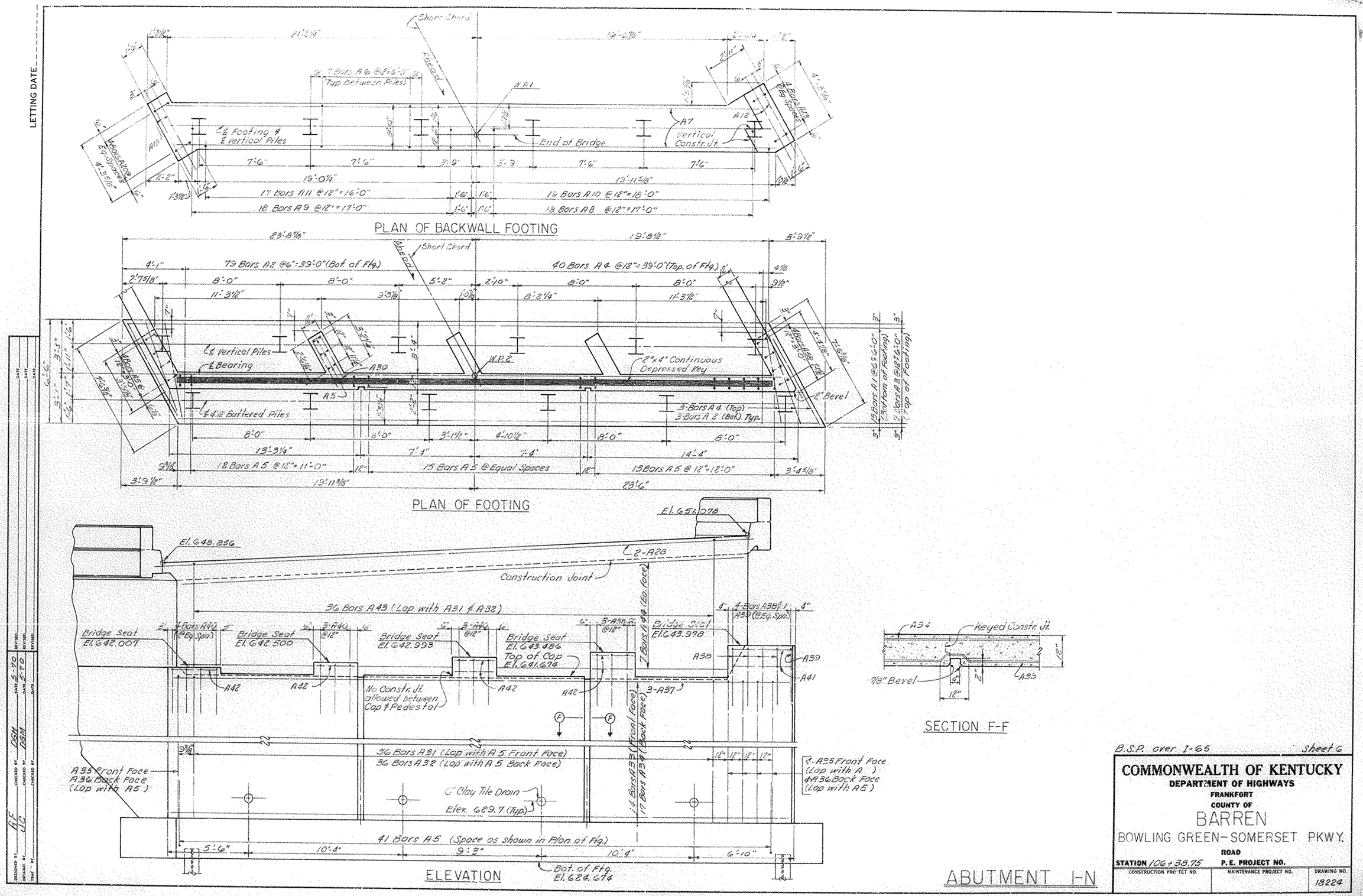
B.S.P. over I-65 — Sheet 5

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN-SOMERSET PKWY.
ROAD
STATION 106+38.75
P. E. PROJECT NO.
CONSTRUCTION PROJECT NO. | MAINTENANCE PROJECT NO. | DRAWING NO. 18224

LETTING DATE

DESIGNED BY AF — CHECKED BY DGM — DATE 5-70 — REVISE
DETAILED BY RAS — CHECKED BY DGM — DATE 5-70 — REVISE
TRACED BY — CHECKED BY — DATE — REVISE

BRIDGE



ABUTMENT I-N

B.S.P. over I-65 Sheet 6

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN-SOMERSET PKWY.
ROAD
STATION 106+38.75 **P. E. PROJECT NO.**

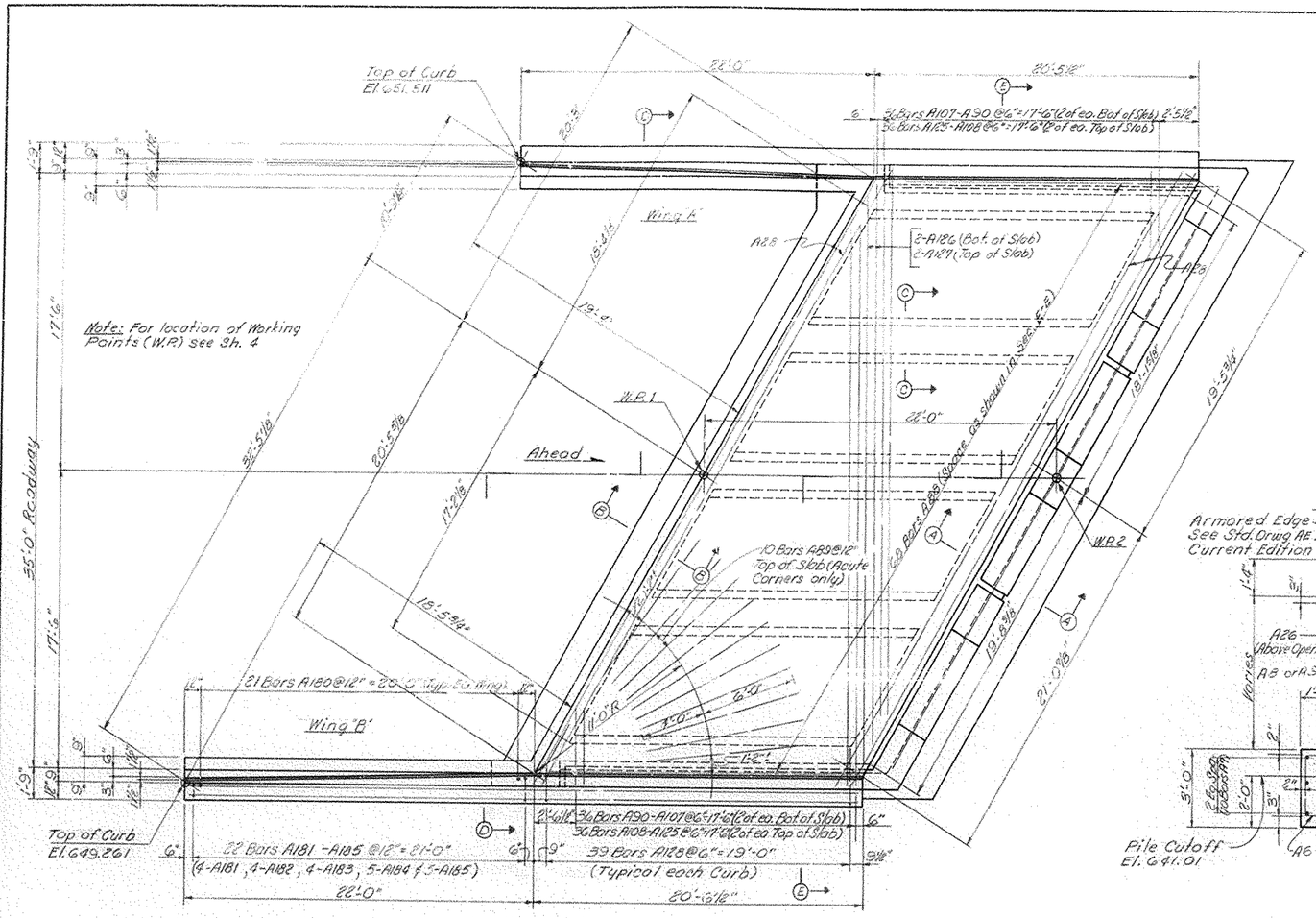
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18224

LETTING DATE

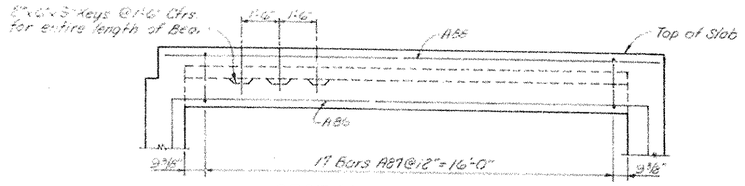
DESIGNED BY AF CHECKED BY DGM DATE 5-70
DETAILED BY JC CHECKED BY DGM DATE 5-70
TRACED BY DATE
REVISED
REVISED
REVISED

BRIDGE

LETTING DATE



PLAN



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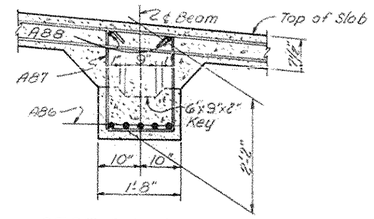

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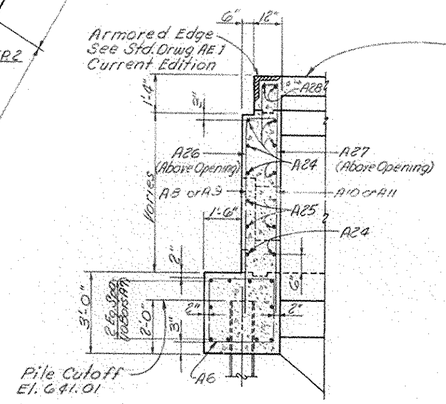
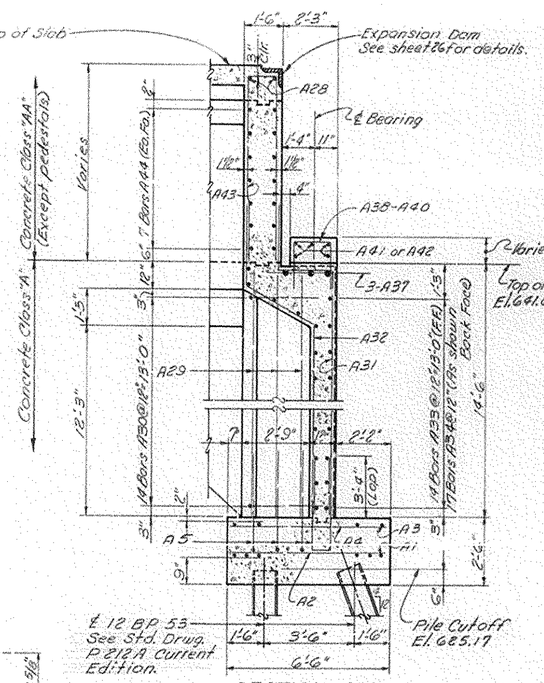


SECTION B-B



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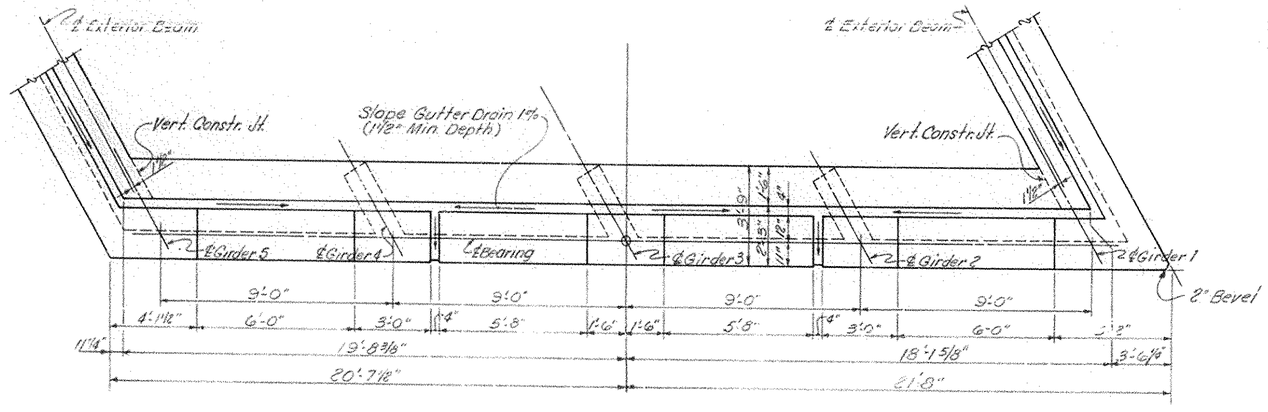
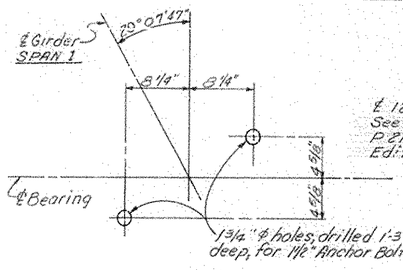


PLAN OF CAP



ANCHOR BOLT LAYOUT

ABUTMENT I-N

B.S.P. over I-65

Sheet 7

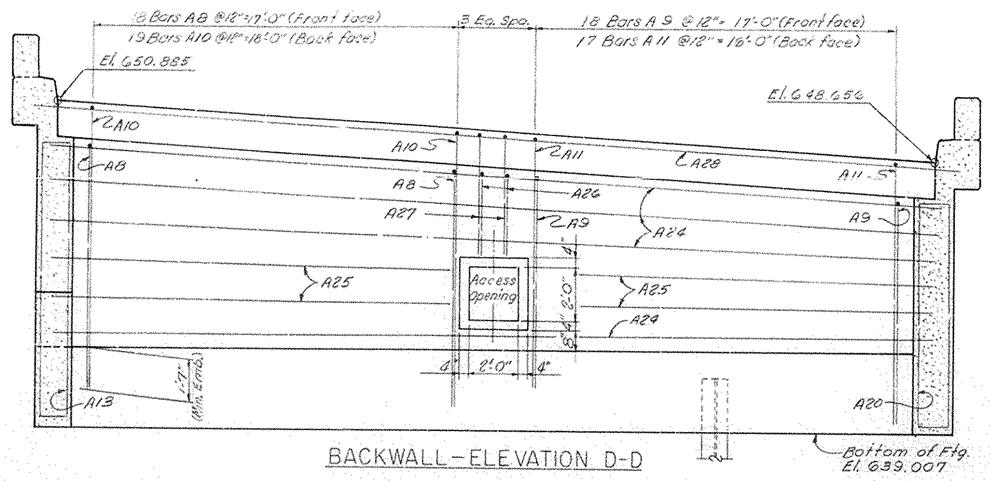
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN – SOMERSET PKWY.
ROAD

STATION 106+38.75	P. E. PROJECT NO.	
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO. 18224

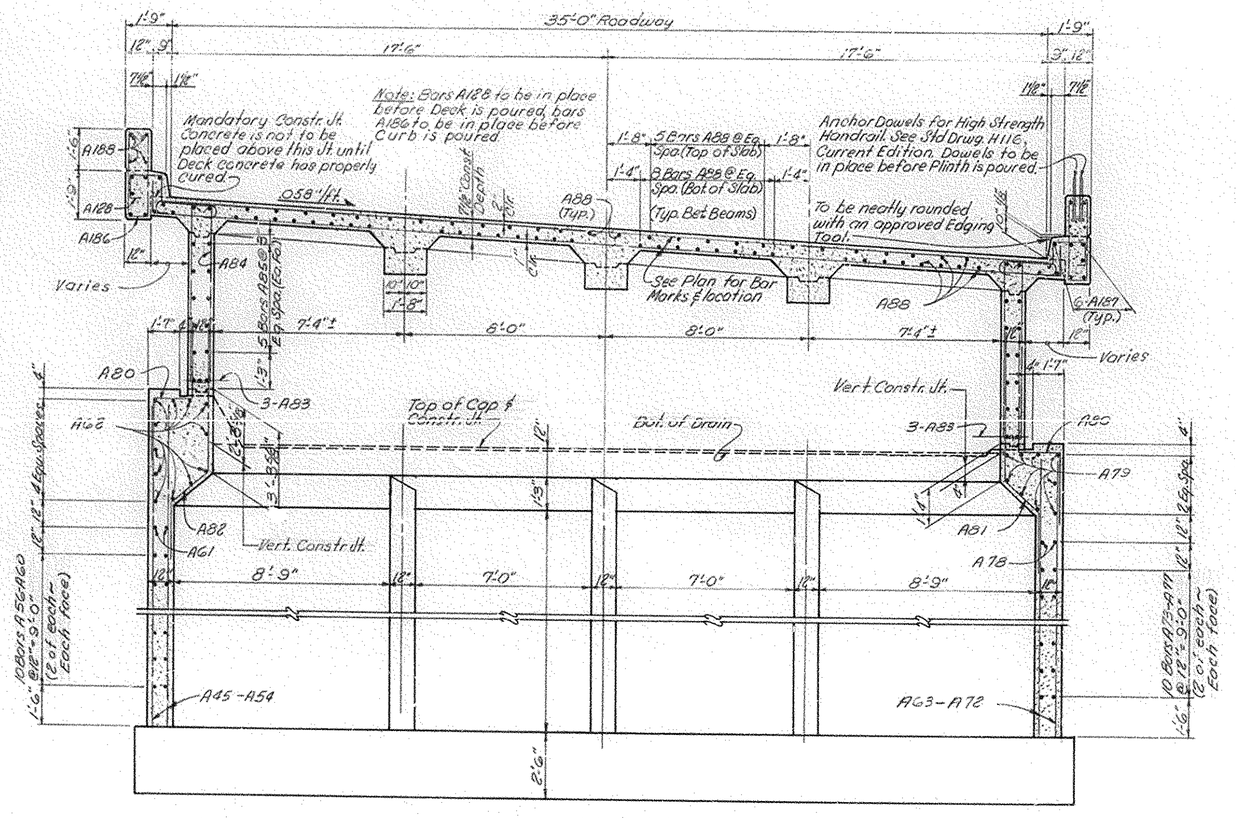
DESIGNED BY: RF	CHECKED BY: DGM	DATE: 5-70	REVISE
DETAILED BY: LLC	CHECKED BY: DGM	DATE: 5-70	REVISE
TRACED BY:	CHECKED BY:	DATE:	REVISE

BRIDGE

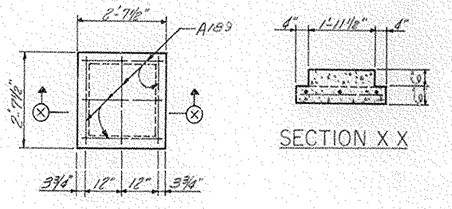
LETTING DATE



BACKWALL – ELEVATION D-D



SECTION E-E



PLAN

SECTION X X

PRECAST CONCRETE ACCESS COVER

ABUTMENT I-N

B.S.P. over I-65 Sheet 8

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN – SOMERSET PKWY.
ROAD

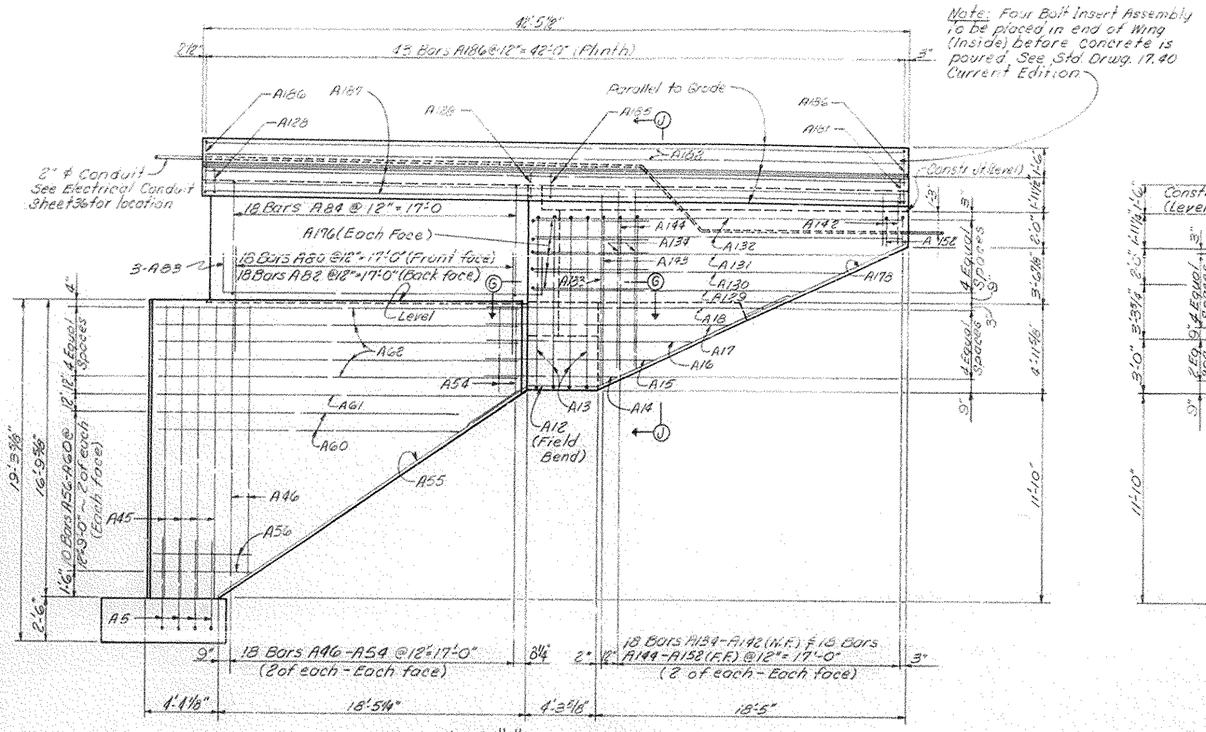
STATION 106+38.75	P. E. PROJECT NO.	
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO. 18224

DESIGNED BY AF	CHECKED BY DGM	DATE 5-70	REVISED
DETAILED BY HC	CHECKED BY DGM	DATE 5-70	REVISED
TRACED BY	CHECKED BY	DATE	REVISED

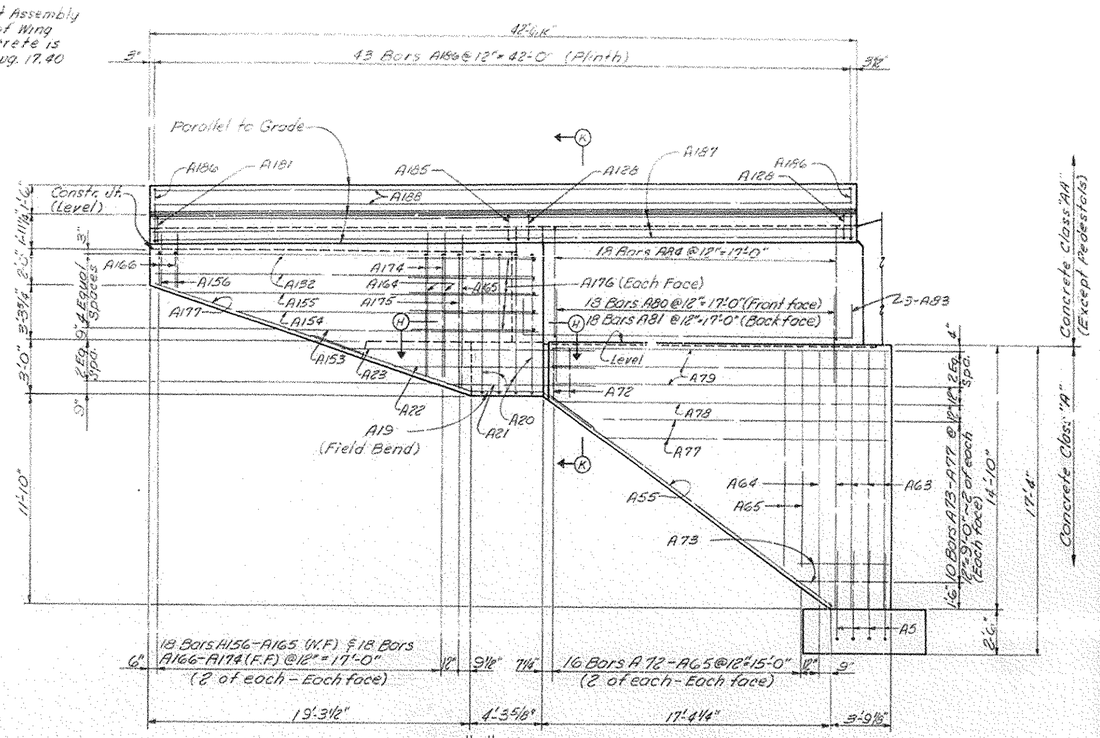
DATE DATE DATE

BRIDGE

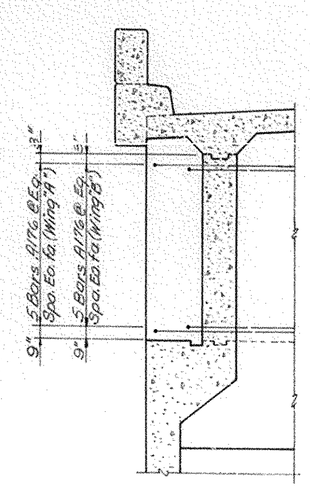
LETTING DATE



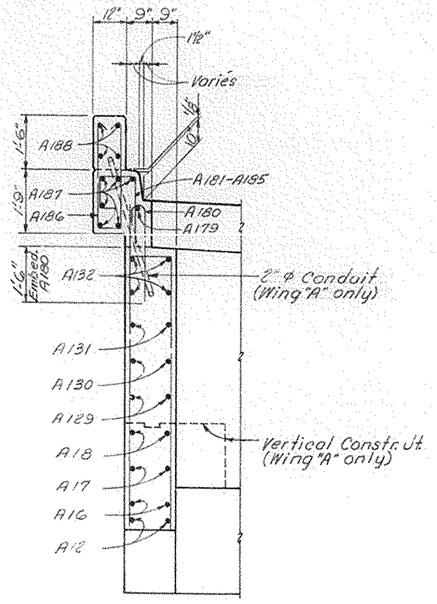
WING "A" ELEVATION



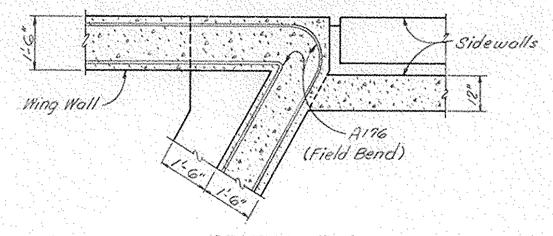
WING "B" ELEVATION



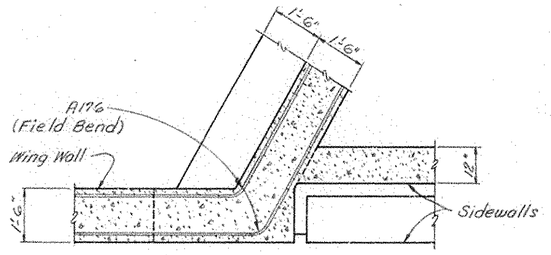
SECTION K-K



SECTION J-J



SECTION G-G



SECTION H-H

ABUTMENT I-N

B.S.P. over I-65 Sheet 9

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN-SOMERSET PKWY.
ROAD

STATION 106+38.75	P.E. PROJECT NO.	
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO. 18224

DESIGNED BY AF DATE 5-70 REVISED
DETAILED BY JC CHECKED BY PGM DATE 5-70 REVISED
TRACED BY CHECKED BY DATE REVISED

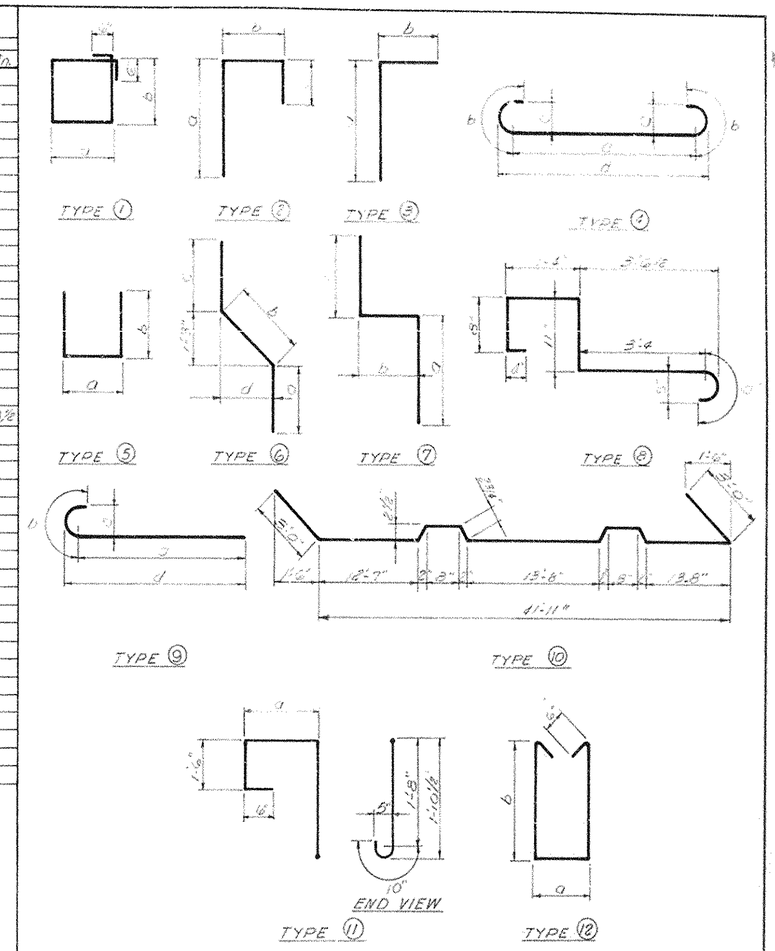
BRIDGE

BILL OF REINFORCEMENT

MARK	TYPE	No.	BAR SIZE	LENGTH Ft.	LENGTH In.	LOCATION	a Ft.	a In.	b Ft.	b In.	c Ft.	c In.	d Ft.	d In.
A1	Str.	15	#6	43	1	Front Footing								
A2	"	55	#6	6	2	" "								
A3	"	7	#5	12	1	" "								
A4	"	46	#5	6	2	" "								
A5	3	57	#6	10	10	" "	0	9	5	1				
A6	1	35	#5	11	3	Back Footing	2	5	2	7				
A7	Str.	10	#6	41	3	" "								
A8	3	16	#6	10	2	" "	5	0	1	3				
A9	3	18	#6	9	0	" "	7	10	1	3				
A10	1	19	#6	3	0	" "	10	4	0	9	2	0		
A11	2	19	#6	11	10	" "	13	2	0	3	2	0		
A12	Str.	6	#6	20	9	" "								
A13	1	4	#6	23	3	" "	10	0	1	3				
A14	Str.	2	#6	8	3	"								
A15	"	2	#6	10	3	" "								
A16	"	2	#6	12	6	" "								
A17	"	2	#6	14	6	" "								
A18	"	2	#6	17	0	" "								
A19	"	2	#6	17	9	" "								
A20	1	4	#6	18	11	" "	7	10	1	3				
A21	Str.	2	#6	8	6	" "								
A22	"	2	#6	11	6	" "								
A23	"	2	#6	14	6	" "								
A24	"	8	#5	41	3	Back Wall								
A25	"	8	#5	19	0	" "								
A26	3	2	#6	4	1	" "	2	10	1	3				
A27	2	2	#6	6	9	" "	4	1	0	9	2	0		
A28	Str.	4	#6	41	3	Ends of Slab								
A29	"	18	#6	14	2	Counterforts								
A30	5	42	#5	7	2	"	0	9	3	3				
A31	7	36	#6	21	6	Front Wall	14	2	2	4	5	1		
A32	6	36	#6	20	10	" "	12	3	3	1	5	6	2	10
A33	10	14	#5	48	2	" "								
A34	Str.	17	#5	42	0	" "								
A35	3	5	#6	16	4	" "	14	2	2	3				
A36	6	5	#6	16	1	" "	12	3	3	1	0	9	2	10
A37	Str.	3	#8	41	9	Cap								
A38	5	7	#5	8	11	Pedestals	1	8	3	8				
A39	5	1	#5	9	8	"	1	11	3	8				
A40	5	10	#5	6	7	"	1	8	2	6				
A41	Str.	5	#4	4	0	"								
A42	"	10	#4	2	9	"								
A43	5	36	#6	14	10	Parapet	1	3	6	10				
A44	Str.	14	#5	37	6	"								
A45	"	8	#6	16	7	Sidewall								
A46	"	4	#5	15	0	"								
A47	"	4	#5	13	9	"								
A48	"	4	#5	12	6	"								
A49	"	4	#5	11	3	"								
A50	"	4	#5	10	0	"								
A51	"	4	#5	8	9	"								
A52	"	4	#5	7	6	"								
A53	"	4	#5	6	3	"								
A54	"	4	#5	5	0	"								
A55	"	4	#5	21	0	"								
A56	"	4	#5	6	0	"								
A57	"	4	#5	9	1	"								
A58	"	4	#5	12	2	"								
A59	"	4	#5	15	3	"								
A60	"	4	#5	18	4	"								
A61	"	2	#5	21	5	"								
A62	"	12	#5	22	0	"								
A63	"	8	#6	14	6	"								
A64	"	2	#5	14	0	"								
A65	"	4	#5	12	6	"								
A66	"	4	#5	11	3	"								
A67	"	4	#5	9	9	"								
A68	"	4	#5	8	6	"								
A69	"	4	#5	7	0	"								
A70	"	4	#5	5	9	"								
A71	"	4	#5	4	3	"								
A72	"	4	#5	3	0	"								
A73	"	4	#5	5	6	"								
A74	"	4	#5	8	6	"								
A75	"	4	#5	11	6	"								
A76	"	4	#5	14	6	"								
A77	"	4	#5	17	6	"								
A78	"	2	#5	20	0	"								
A79	"	9	#5	20	6	"								
A80	7	36	#5	4	11	"	1	4	2	0	1	8		

MARK	TYPE	No.	BAR SIZE	LENGTH Ft.	LENGTH In.	LOCATION	a Ft.	a In.	b Ft.	b In.	c Ft.	c In.	d Ft.	d In.
A81	6	15	#5	2	6	Sidewall		4	2	4	2	4	2	0
A82	6	18	#5	3	9	"	1	4	2	4	1	8	2	0
A83	6	6	#11	26	4	Exterior Beam	20	6	3	0				
A84	12	36	#5	14	1	" "	0	9	6	3				
A85	Str.	20	#5	20	6	" "								
A86	6	15	#11	26	4	Interior Beam	20	6	2	0				
A87	12	51	#5	5	11	" "		5	1	0				
A88	Str.	65	#6	20	1	Slab								
A89	"	80	#6	10	0	"								
A90	3	4	#6	3	1	"	4	7	1	1				
A91	3	4	#6	7	3	"	6	3	1	1				
A92	3	4	#6	8	11	"	7	11	1	1				
A93	3	4	#6	10	7	"	9	7	1	1				
A94	3	4	#6	12	3	"	11	3	1	1				
A95	3	4	#6	13	11	"	12	11	1	1				
A96	3	4	#6	15	7	"	14	7	1	1				
A97	3	4	#6	17	3	"	16	3	1	1				
A98	3	4	#6	18	11	"	17	11	1	1				
A99	3	4	#6	20	7	"	19	7	1	1				
A100	3	4	#6	22	3	"	21	3	1	1				
A101	3	4	#6	23	11	"	22	11	1	1				
A102	3	4	#6	25	7	"	24	7	1	1				
A103	3	4	#6	27	3	"	26	3	1	1				
A104	3	4	#6	28	11	"	27	11	1	1				
A105	3	4	#6	30	7	"	29	7	1	1				
A106	3	4	#6	32	3	"	31	3	1	1				
A107	3	4	#6	33	11	"	32	11	1	1				
A108	9	4	#6	5	4	"	4	4	1	0	0	6	4	7
A109	9	4	#6	7	0	"	6	0	1	0	0	6	6	3
A110	9	4	#6	8	8	"	7	8	1	0	0	6	7	11
A111	9	4	#6	10	4	"	9	4	1	0	0	6	9	7
A112	9	4	#6	12	0	"	11	0	1	0	0	6	11	3
A113	9	4	#6	13	8	"	12	8	1	0	0	6	12	11
A114	9	4	#6	15	4	"	14	4	1	0	0	6	14	7
A115	9	4	#6	17	0	"	16	0	1	0	0	6	16	3
A116	9	4	#6	18	8	"	17	8	1	0	0	6	17	11
A117	9	4	#6	20	4	"	19	4	1	0	0	6	19	7
A118	9	4	#6	22	0	"	21	0	1	0	0	6	21	3
A119	9	4	#6	23	8	"	22	8	1	0	0	6	22	11
A120	9	4	#6	25	4	"	24	4	1	0	0	6	24	7
A121	9	4	#6	27	0	"	26	0	1	0	0	6	26	3
A122	9	4	#6	28	8	"	27	8	1	0	0	6	27	11
A123	9	4	#6	30	4	"	29	4	1	0	0	6	29	7
A124	9	4	#6	32	0	"	31	0	1	0	0	6	31	3
A125	9	4	#6	33	8	"	32	8	1	0	0	6	32	11
A126	Str.	2	#6	33	9	"								
A127	4	2	#6	35	3	"	33	3	1	0	0	6	33	9
A128	8	78	#5	7	2	Curb								
A129	Str.	2	#6	16	0	Wing Wall								
A130	"	2	#6	18	6	" "								
A131	"	2	#6	20	6	" "								
A132	"	8	#6	23	0	" "								
A133	"	1	#4	10	7	" "								
A134	"	2	#4	9	9	" "								
A135	"	2	#4	8	11	" "								
A136	"	2	#4	8	1	" "								
A137	"	2	#4	7	3	" "								
A138	"	2	#4	6	5	" "								
A139	"	2	#4	5	7	" "								
A140	"	2	#4	4	9	" "								
A141	"	2	#4	3	11	" "								
A142	"	2	#4	3	1	" "								
A143	3	1	#4	10	6	" "	9	3	1	3				
A144	3	2	#4	9	8	" "	8	5	1	3				
A145	3	2	#4	8	10	" "	7	7	1	3				
A146	3	2	#4	8	0	" "	6	9	1	3				
A147	3	2	#4	7	2	" "	5	11	1	3				
A148	3	2	#4	6	4	" "	5	1	1	3				
A149	3	2	#4	5	6	" "	4	3	1	3				
A150	3	2	#4	4	8	" "	3	5	1	3				
A151	3	2	#4	3	10	" "	2	7	1	3				
A152	3	2	#4	3	0	" "	1	9	1	3				
A153	Str.	2	#6	14	6	" "								
A154	"	2	#6	17	6	" "								
A155	"	2	#6	21	0	" "								
A156	"	2	#4	3	1	" "								
A157	"	2	#4	3	8	" "								
A158	"	2	#4	4	3	" "								
A159	"	2	#4	4	10	" "								
A160	"	2	#4	5	5	" "								

MARK	TYPE	No.	BAR SIZE	LENGTH Ft.	LENGTH In.	LOCATION	a Ft.	a In.	b Ft.	b In.	c Ft.	c In.	d Ft.	d In.
A161	Str.	2	#4	6	0	Wing Wall								
A162	"	2	#4	6	7	" "								
A163	"	2	#4	7	8	" "								
A164	"	2	#4	8	0	" "								
A165	"	1	#4	8	8	" "								
A166	3	2	#4	3	0	" "	1	3	1	3				
A167	3	6	#4	3	7	" "	6	4	1	3				
A168	3	2	#4	4	2	" "	2	11	1	3				
A169	3	2	#4	4	9	" "	2	3	1	3				
A170	3	2	#6	5	4	" "	3	7	1	3				
A171	3	2	#4	5	11	" "	4	8	1	3				
A172	3	2	#4	6	6	" "	5	3	1	3				
A173	3	2	#4	7	1	" "	5	10	1	3				
A174	3	2	#4	7	11	" "	6	8	1	3				
A175	3	1	#4	8	5	" "	7	5	1	3				
A176	3	20	#6	12	0	" "	6	0	6	1				
A177	Str.	2	#6	12	6	" "								
A178	"	2	#6	10	0	" "								
A179	"	2	#5	21	0	Wing Curb								
A180	9	42	#5	3	4	" "	2	6	0	10	0	5	2	8½
A181	11	8	#5	5	4	" "	0	11						
A182	11	8	#5	5	5	" "	1	0						
A183	11	8	#5	5	6	" "	1	1						
A184	11	10	#5	5	7	" "	1	2						
A185	11	10	#5	5	9	" "	1	4						
A186	2	86	#5	7	7	" "	0	9	3	0				
A187	Str.	12	#5	42	2	" "								
A188	"	8	#4	42	2	Plinth								
A189	"	6	#5	2	4	Access Cover								



ESTIMATE OF QUANTITIES	
Concrete, Class "A" (Cu. Yds.)	102.6
Concrete, Class "AA" (Cu. Yds.)	89.1
Steel Reinforcement (Lbs.)	30670

B.S.P. over I-65 Sheet 10

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN-SOMERSET PKWY.
ROAD
STATION 106+38.75 **P. E. PROJECT NO.**

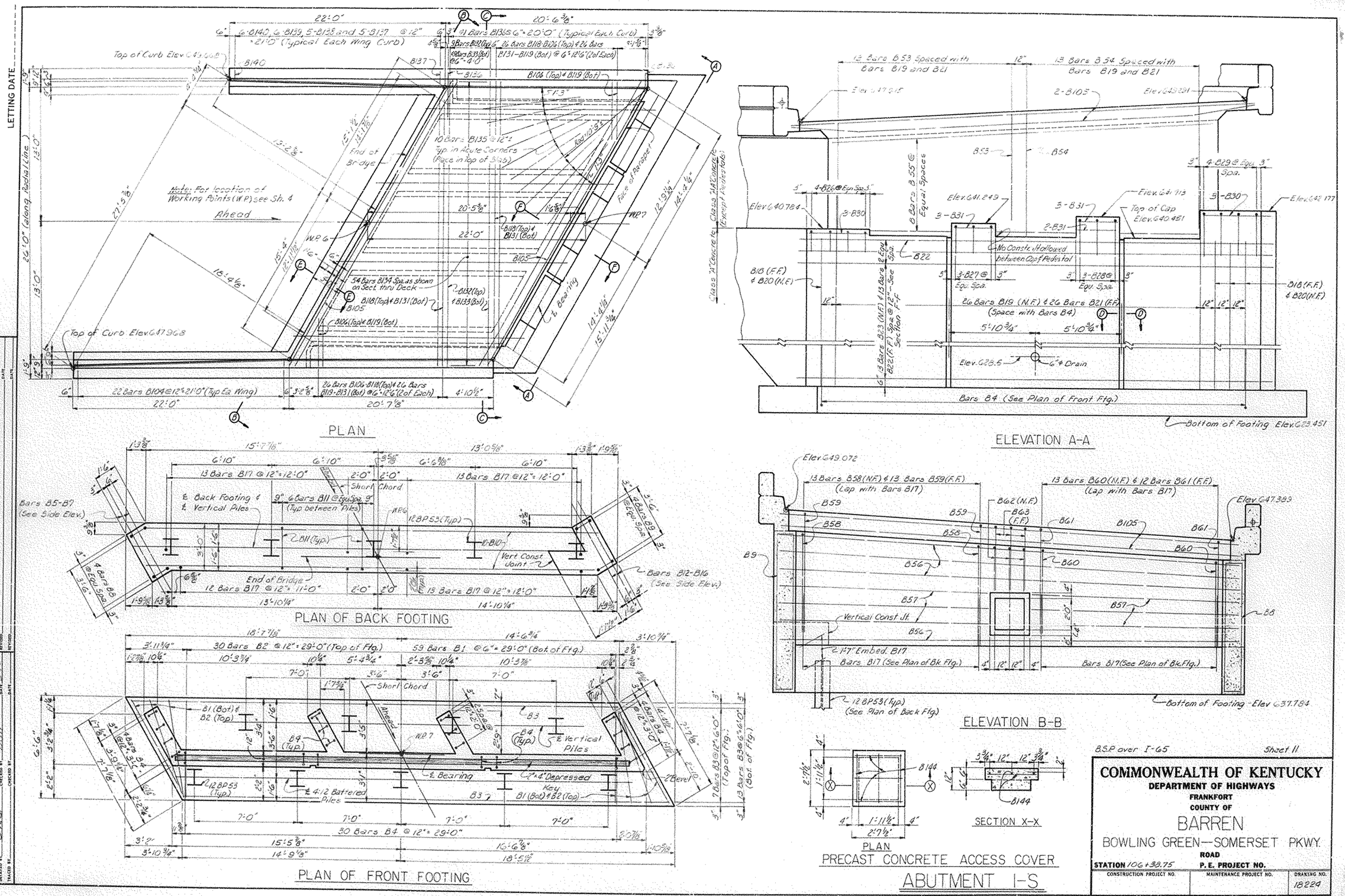
CONSTRUCTION PROJECT NO	MAINTENANCE PROJECT NO	DRAWING NO.
		18224

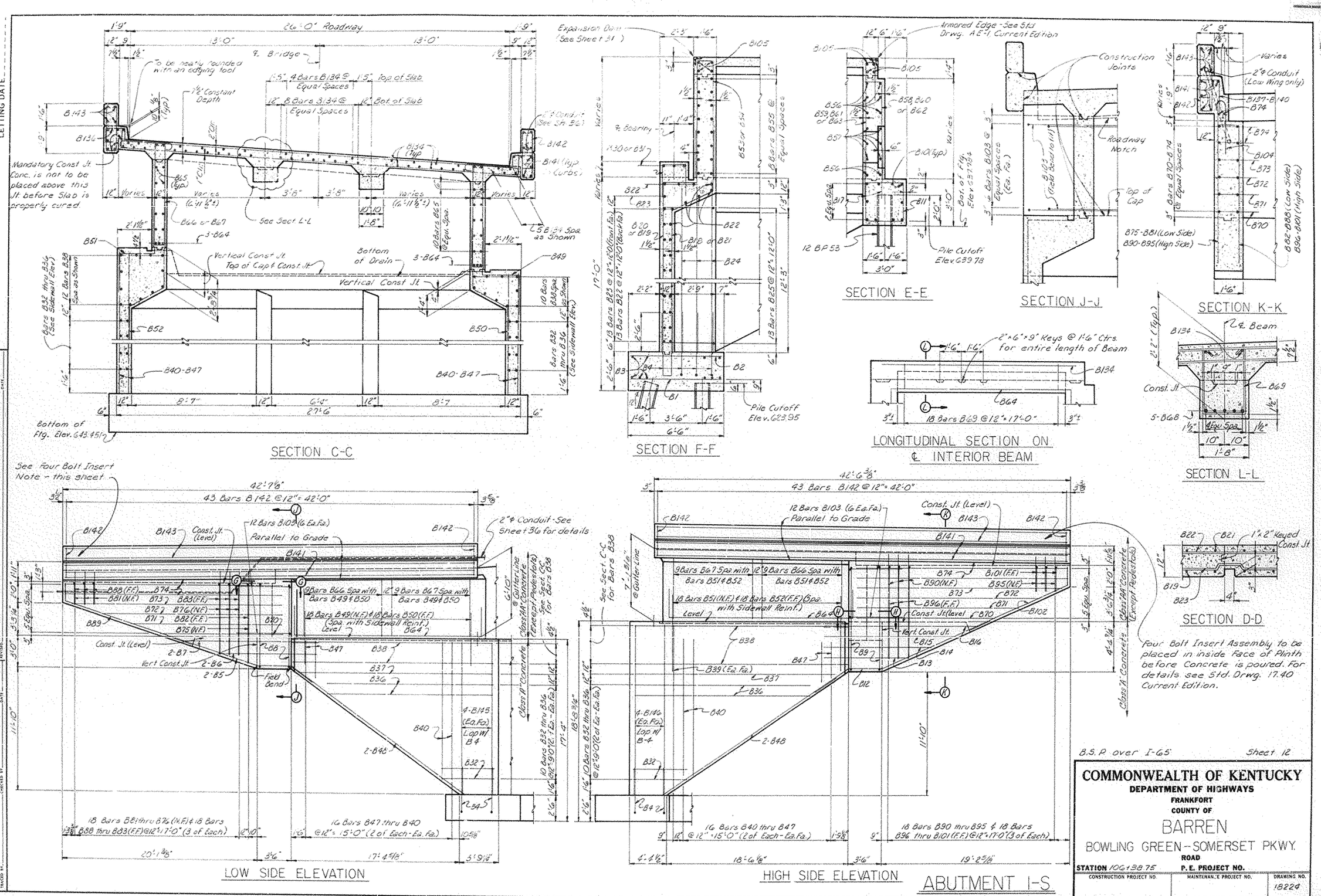
ABUTMENT 1-N

LETTING DATE

DESIGNED BY DGM CHECKED BY
DETAILED BY DGM CHECKED BY
TRACED BY CHECKED BY
REVISED DATE 5-70
REVISED DATE 5-70
REVISED DATE
REVISED DATE

BRIDGE


PLAN
ELEVATION A-A
PLAN OF BACK FOOTING
ELEVATION B-B
PLAN OF FRONT FOOTING
PLAN
SECTION X-X
PRECAST CONCRETE ACCESS COVER
ABUTMENT I-S
LETTING DATE
Note: For location of Working Points (W.P.) see Sh. 4
Ahead
Top of Curb Elev. 647.968
Bars B4 (See Plan of Front Ftg.)
Bottom of Footing Elev. 623.451
Bars B5-B7 (See Side Elev.)
Bars B12-B16 (See Side Elev.)
Bars B17 (See Plan of Bk. Ftg.)
Bottom of Footing - Elev. 637.784
Vertical Const. Jt.
Vert. Const. Joint
End of Bridge
Short Chord
Face of Parapet
Class "A" Concrete
Class "A" Concrete (Except Pedestals)
No Constr. Jt. allowed between Cap & Pedestal
Top of Cap Elev. 640.451
Elev. 640.784
Elev. 641.249
Elev. 642.177
Elev. 649.072
Elev. 647.389
Elev. 628.5
6" ϕ Drain
Bars B17 (See Plan of Bk. Ftg.)
12 BP53 (Typ.) (See Plan of Back Ftg.)
30 Bars B4 @ 12" = 29'-0"
30 Bars B2 @ 12" = 29'-0" (Top of Ftg.)
59 Bars B1 @ 6" = 29'-0" (Bot. of Ftg.)
2"x4" Depressed Key
℄ Bearing
℄ Vertical Piles
℄ 4:12 Battered Piles
℄ Back Footing & ℄ Vertical Piles
Bars B5-B7 (See Side Elev.)
Bars B12-B16 (See Side Elev.)
Bars B8 (See Plan of Front Ftg.)
Bars B19 (N.F.) & 26 Bars B21 (F.F.) (Space with Bars B4)
Bars B18 (F.F.) & B20 (N.F.)
Bars B8 (See Plan of Front Ftg.)
Bars B17 (See Plan of Bk. Ftg.)
Bars B17 (See Plan of Bk. Ftg.)
Bars B12-B16 (See Side Elev.)
Bars B5-B7 (See Side Elev.)
Bars B4 (See Plan of Front Ftg.)
Bottom of Footing Elev. 623.451
Bottom of Footing - Elev. 637.784
B.S.P. over I-65
Sheet 11
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN—SOMERSET PKWY.
ROAD
STATION 106+38.75
P.E. PROJECT NO.
CONSTRUCTION PROJECT NO.
MAINTENANCE PROJECT NO.
DRAWING NO. 18224
BRIDGE



B.S.P. over I-65 Sheet 12

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN-SOMERSET PKWY.
ROAD
STATION 106+38.75 **P.E. PROJECT NO.**

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18224

LETTING DATE

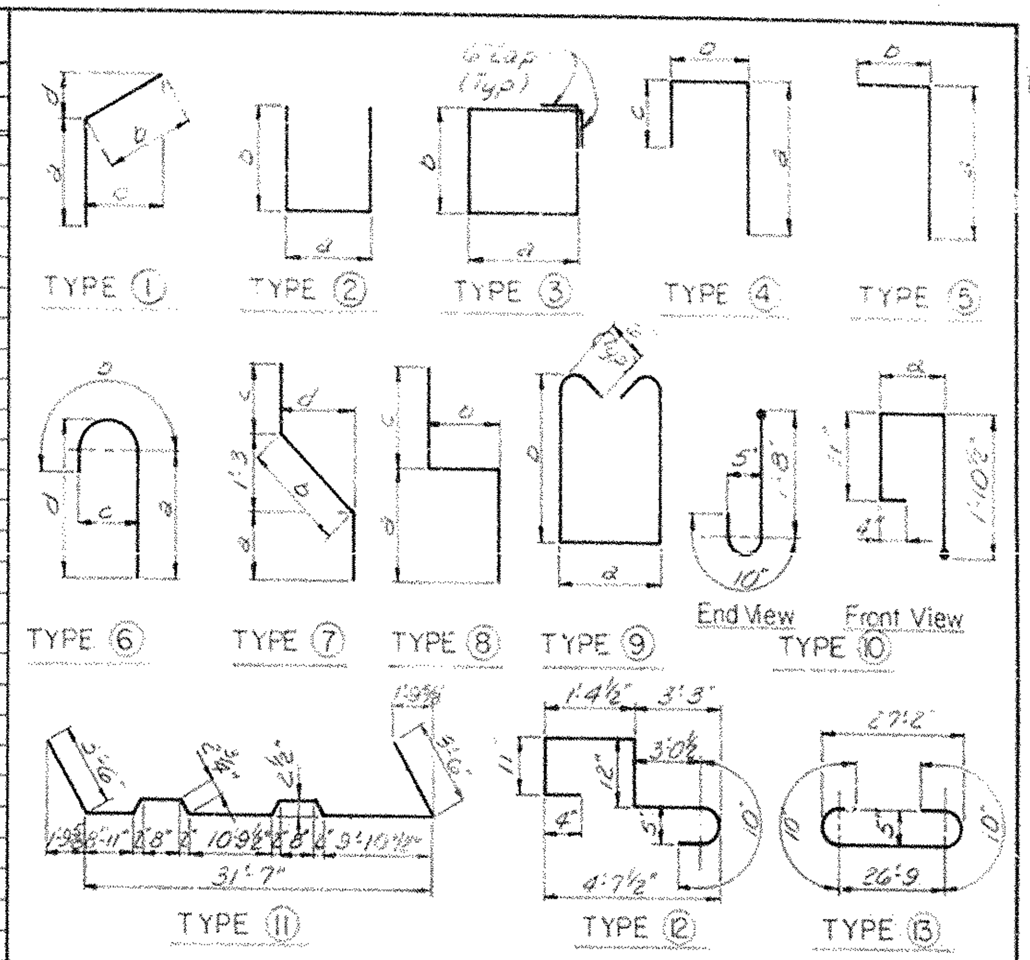
DESIGNED BY A.F. CHECKED BY DGM DATE 5-70
DETAILED BY D.W.G. CHECKED BY DGM DATE 5-70
TRACED BY CHECKED BY DATE
REVISED REVISED REVISED

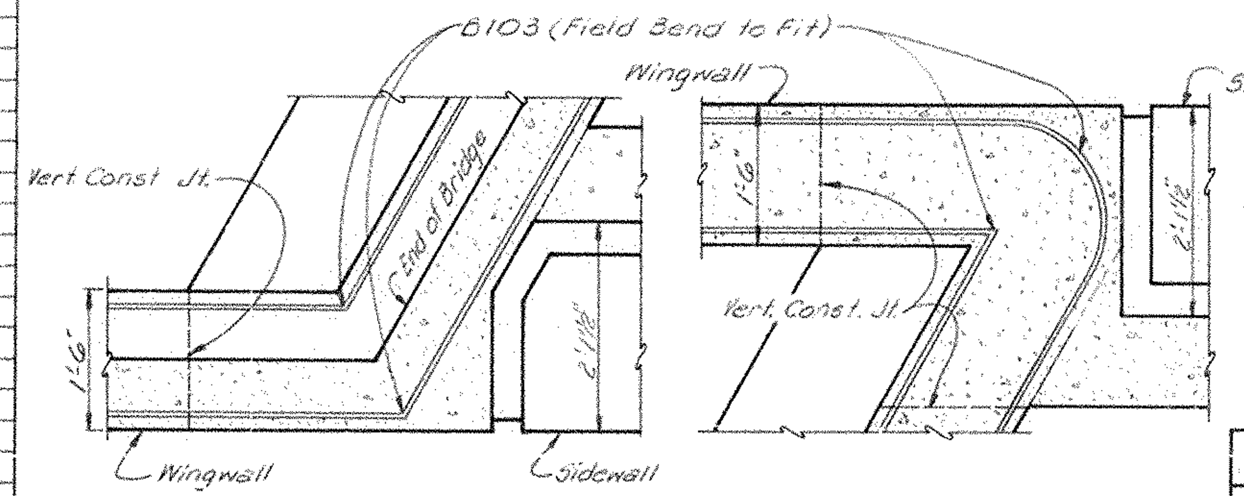
BRIDGE

LETTING DATE

BILL OF REINFORCEMENT

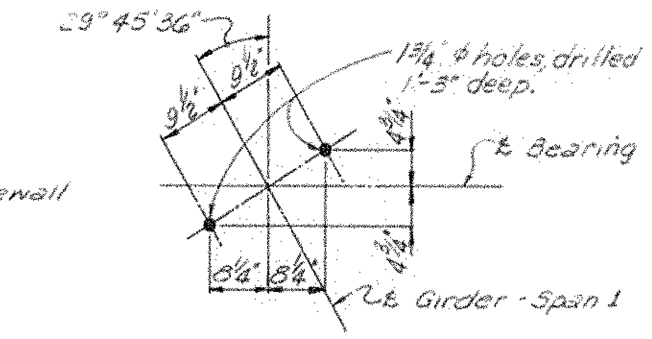
Mark	Type	No	Size	Length Ft	Length In	Location	a Ft	a In	b Ft	b In	c Ft	c In	d Ft	d In
B1	Str.	65	#6	6	3	Front Footing								
B2	Str.	36	#5	6	3	" "								
B3	Str.	20	#5	33	10	" "								
B4	(2)	44	#6	9	2	" "	0	9	4	3				
B5	Str.	2	#5	15	6	Back Footing								
B6	Str.	2	#5	10	0	" "								
B7	Str.	2	#5	14	0	" "								
B8	(3)	4	#5	18	9	" "	1	3	7	9				
B9	(3)	4	#5	22	3	" "	1	3	9	6				
B10	Str.	10	#6	30	9	" "								
B11	(3)	24	#5	11	3	" "	2	7	2	8				
B12	Str.	2	#5	13	6	" "								
B13	Str.	2	#5	8	9	" "								
B14	Str.	2	#5	11	0	" "								
B15	Str.	2	#5	13	6	" "								
B16	Str.	2	#5	15	9	" "								
B17	Str.	51	#6	5	9	" "								
B18	(7)	4	#6	16	2	Front Wall	12	4	3	1	0	9	2	10
B19	(8)	26	#6	21	0	" "	14	3	2	4	4	6		
B20	(5)	4	#6	15	9	" "	14	2	1	8				
B21	(7)	26	#6	20	4	" "	12	4	3	1	4	11	2	10
B22	Str.	20	#5	31	6	" "								
B23	(11)	14	#5	38	10	" "								
B24	Str.	12	#6	14	0	Counterforts								
B25	(2)	26	#5	7	8	"	0	9	3	6				
B26	(2)	4	#5	4	9	Pedestals	1	8	1	7				
B27	(2)	3	#5	5	5	"	1	8	1	11				
B28	(2)	3	#5	6	5	"	1	8	2	5				
B29	(2)	4	#5	7	3	"	1	8	2	10				
B30	Str.	6	#4	3	9	"								
B31	Str.	8	#4	2	9	"								
B32	Str.	8	#5	5	3	Sidewalls								
B33	Str.	8	#5	8	2	"								
B34	Str.	8	#5	11	1	"								
B35	Str.	8	#5	14	0	"								
B36	Str.	8	#5	16	11	"								
B37	Str.	4	#5	20	0	"								
B38	Str.	22	#5	20	9	"								
B39	Str.	2	#4	15	6	"								
B40	Str.	8	#4	13	4	"								
B41	Str.	8	#4	11	11	"								
B42	Str.	8	#4	10	7	"								
B43	Str.	8	#4	9	2	"								
B44	Str.	8	#4	7	9	"								
B45	Str.	8	#4	6	5	"								
B46	Str.	8	#4	5	1	"								
B47	Str.	8	#4	3	8	"								
B48	Str.	4	#5	21	0	"								
B49	(8)	18	#5	7	8	"	2	6	2	3	3	0		
B50	(7)	18	#5	8	7	"	2	6	2	7	3	6	2	3
B51	(8)	18	#5	9	2	"	4	0	2	3	3	0		
B52	(7)	18	#5	10	7	"	2	6	2	7	5	6	2	3
B53	(2)	13	#6	14	10	Parapet	1	3	6	10				
B54	(2)	13	#6	16	2	"	1	3	7	6				
B55	Str.	16	#5	26	7	"								
B56	Str.	8	#5	31	6	Back Wall								
B57	Str.	12	#5	13	0	" "								
B58	(5)	13	#6	7	4	" "	6	2	1	3				
B59	(4)	13	#6	9	11	" "	7	3	0	9	2	0		
B60	(5)	13	#6	6	5	" "	5	3	1	3				
B61	(4)	12	#6	9	0	" "	6	4	0	9	2	0		
B62	(5)	3	#6	3	6	" "	2	4	1	3				
B63	(4)	3	#6	6	3	" "	3	7	0	9	2	0		
B64	(2)	6	#11	26	3	Ext. Beams	20	5	3	0				
B65	Str.	20	#4	20	3	" "								
B66	(9)	18	#5	14	3	" "	0	9	6	4				
B67	(9)	18	#5	14	5	" "	0	9	6	5				
B68	(2)	10	#11	24	3	Int. Beams	20	5	2	0				
B69	(9)	36	#5	5	9	" "	1	5	1	9				
B70	Str.	4	#6	13	3	Wingwalls								
B71	Str.	4	#6	16	3	"								
B72	Str.	4	#6	19	3	"								
B73	Str.	4	#6	21	6	"								
B74	Str.	12	#6	22	6	"								
B75	Str.	1	#5	9	0	"								
B76	Str.	3	#5	8	1	"								
B77	Str.	3	#5	7	1	"								
B78	Str.	3	#5	6	2	"								
B79	Str.	3	#5	5	2	"								
B80	Str.	3	#5	4	3	"								
B81	Str.	3	#5	3	3	Wingwalls								
B82	(5)	1	#5	8	11	"	7	8	1	3				
B83	(5)	3	#5	8	0	"	6	9	1	3				
B84	(5)	3	#5	7	1	"	5	10	1	3				
B85	(5)	3	#5	6	2	"	4	11	1	3				
B86	(5)	3	#5	5	3	"	4	0	1	3				
B87	(5)	3	#5	4	4	"	3	1	1	3				
B88	(5)	3	#5	3	5	"	2	2	1	3				
B89	(1)	2	#6	15	6	"	13	9	1	9	1	7	0	8
B90	Str.	3	#5	10	0	"								
B91	Str.	3	#5	8	8	"								
B92	Str.	3	#5	7	5	"								
B93	Str.	3	#5	6	1	"								
B94	Str.	3	#5	4	10	"								
B95	Str.	3	#5	3	6	"								
B96	(5)	3	#5	10	0	"	8	9	1	3				
B97	(5)	3	#5	8	9	"	7	6	1	3				
B98	(5)	3	#5	7	6	"	6	3	1	3				
B99	(5)	3	#5	6	3	"	5	0	1	3				
B100	(5)	3	#5	5	0	"	3	9	1	3				
B101	(5)	3	#5	3	9	"	2	6	1	3				
B102	(1)	2	#6	12	7	"	10	10	1	9	1	7	0	9
B103	(5)	24	#6	12	0	"	6	0	6	0				
B104	(6)	44	#5	3	4	Wingwalls	2	6	0	10	0	5	2	8½
B105	Str.	8	#5	31	6	Slab								
B106	(6)	4	#5	5	5	"	4	7	0	10	0	5	4	9½
B107	(6)	4	#5	7	1	"	6	3	0	10	0	5	6	5½
B108	(6)	4	#5	8	9	"	7	11	0	10	0	5	8	1½
B109	(6)	4	#5	10	5	"	9	7	0	10	0	5	9	9½
B110	(6)	4	#5	12	1	"	11	3	0	10	0	5	11	5½
B111	(6)	4	#5	13	9	"	12	11	0	10	0	5	13	1½
B112	(6)	4	#5	15	5	"	14	7	0	10	0	5	14	9½
B113	(6)	4	#5	17	2	"	16	4	0	10	0	5	16	6½
B114	(6)	4	#5	18	9	"	17	11	0	10	0	5	18	1½
B115	(6)	4	#5	20	5	"	19	7	0	10	0	5	19	9½
B116	(6)	4	#5	22	1	"	21	3	0	10	0	5	21	5½
B117	(6)	4	#5	23	9	"	22	11	0	10	0	5	23	1½
B118	(6)	4	#5	25	5	"	24	7	0	10	0	5	24	9½
B119	(5)	4	#5	5	11	"	4	10	1	1				
B120	(5)	4	#5	7	7	"	6	6	1	1				
B121	(5)	4	#5	9	3	"	8	2	1	1				
B122	(5)	4	#5	10	11	"	9	10	1	1				
B123	(5)	4	#5	12	7	"	11	6	1	1				
B124	(5)	4	#5	14	3	"	13	2	1	1				
B125	(5)	4	#5	15	11	"	14	10	1	1				
B126	(5)	4	#5	17	8	"	16	7	1	1				
B127	(5)	4	#5	19	3	"	18	2	1	1				
B128	(5)	4	#5	20	11	"	19	10	1	1				
B129	(5)	4	#5	22	7	"	21	6	1	1				
B130	(5)	4	#5	24	3	"	23	2	1	1				
B131	(5)	4	#5	25	11	"	24	10	1	1				
B132	(13)	9	#5	28	5	"								
B133	(2)	9	#5	29	3	"	27	2	1	1				
B134	Str.	54	#5	20	1	"								
B135	Str.	20	#6	10	0	"								
B136	(12)	82	#5	7	4	Curbs								
B137	(10)	10	#5	4	11	Wing Curb	1	3½						
B138	(10)	10	#5	4	9	" "	1	1½						
B139	(10)	12	#5	4	8	" "	1	0½						
B140	(10)	12	#5	4	7	" "	0	11½						
B141	Str.	12	#5	42	3	Curbs								
B142	(9)	86	#5	7	7	Curb into Plinth	0	9	3	0				
B143	Str.	8	#4	42	3	Plinth								
B144	Str.	6	#5	2	4	Access Hole Cover								
B145	Str.	8	#6	14	6	Sidewall								
B146	Str.	8	#6	15	10	"								





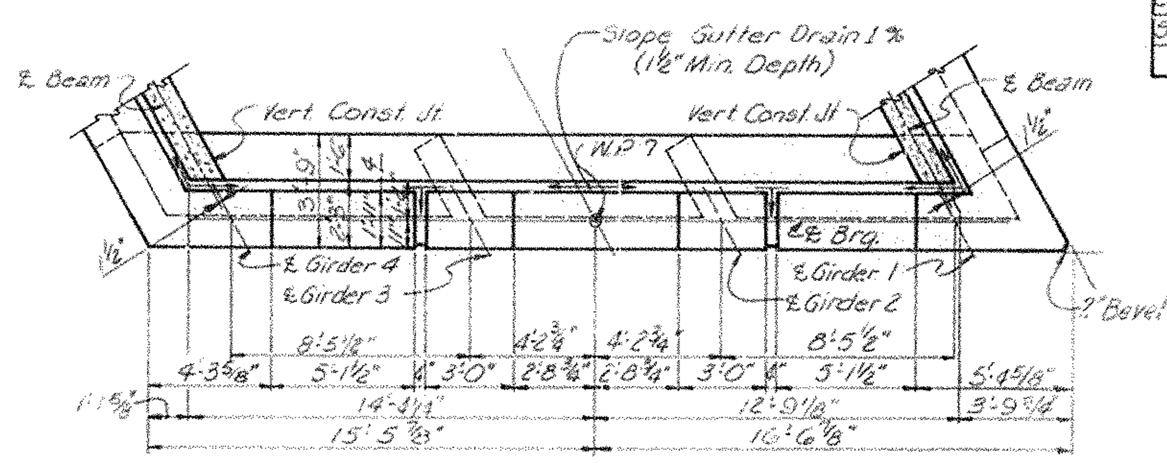
SECTION G-G

SECTION H-H



ANCHOR BOLT LAYOUT

ESTIMATE OF QUANTITIES		
Item		Quantities
Concrete, Class "A"	Cu.Yds.	82.3
Concrete, Class "AA"	Cu.Yds.	73.2
Steel Reinforcement	Lbs.	23,364



PLAN OF FRONTWALL CAP

ABUTMENT I-S

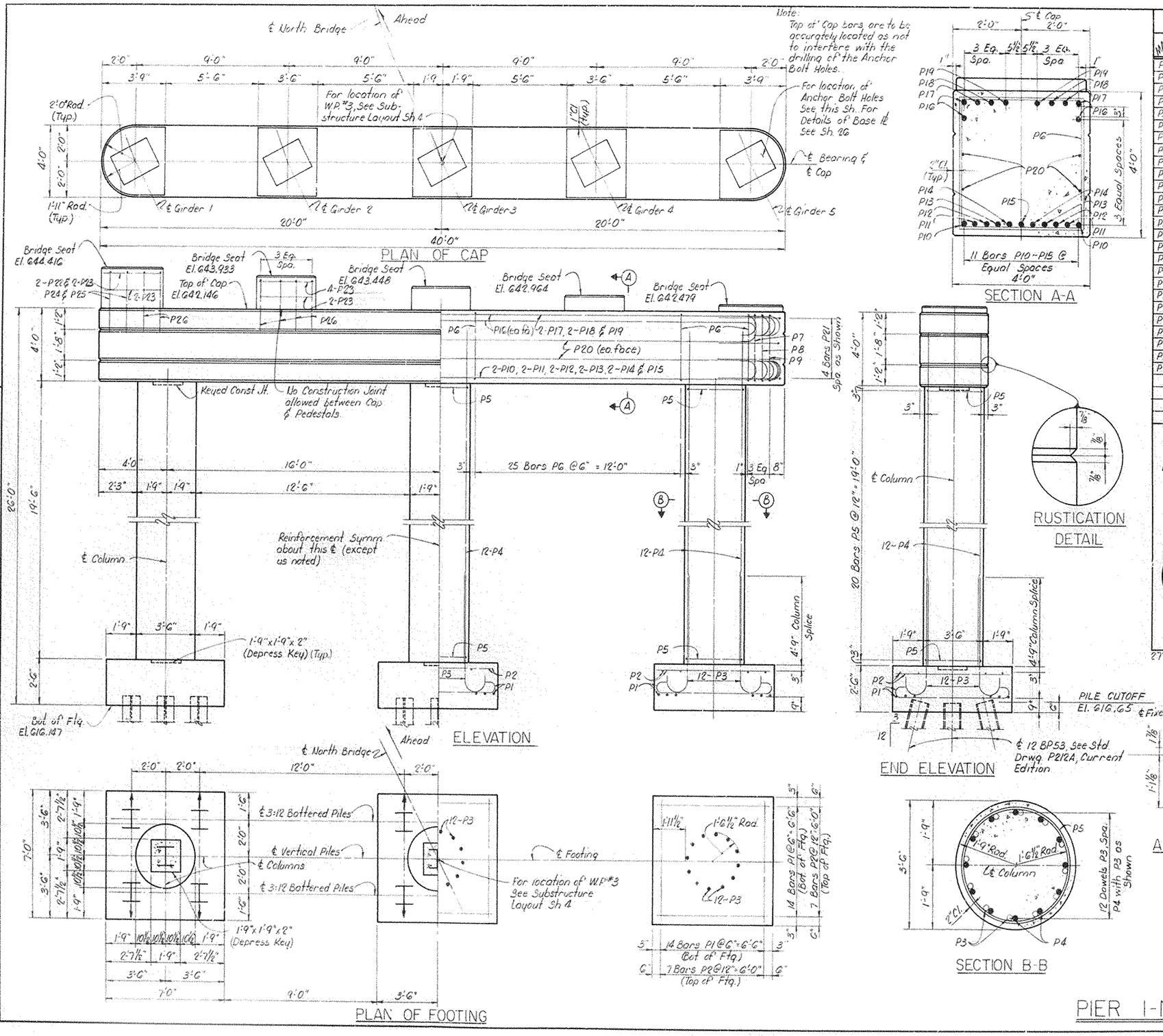
B.S.P. over I-65   Sheet 13

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN-SOMERSET PKWY.
ROAD
STATION 1064+38.75   **P. E. PROJECT NO.**

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18224

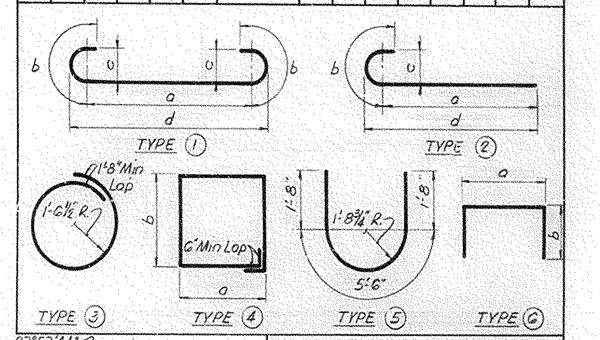
DESIGNED BY A.F. CHECKED BY DGM DATE 5-70
DETAILED BY DWG CHECKED BY DGM DATE 5-70
TRACED BY CHECKED BY DATE

BRIDGE



BILL OF REINFORCEMENT

MARK	TYPE	NO.	BAR SIZE	LENGTH Ft.	LENGTH In.	LOCATION	a Ft.	a In.	b Ft.	b In.	c Ft.	c In.	d Ft.	d In.
P1	1	64	#6	8	2	Footing	6	2	1	0	0	6	6	8
P2	Str.	42	#5	6	8									
P3	2	36	#11	7	9		5	9	2	0	1	2¼	6	4⅛
P4	Str.	36	#11	22	6	Column								
P5	3	60	#4	11	6	"								
P6	4	52	#6	15	4	Cap	3	8	3	8				
P7	4	2	#6	15	2	"	3	7	3	8				
P8	4	2	#6	13	8	"	2	10	3	8				
P9	4	2	#6	12	2	"	2	7	3	8				
P10	(1)	2	#10	39	4	"	35	8	1	10	1	0¾	36	8¾
P11	(1)	2	#10	40	8	"	37	0	1	10	1	0¾	38	0¾
P12	(1)	2	#10	41	4	"	37	8	1	10	1	0¾	38	8¾
P13	(1)	2	#10	41	10	"	38	2	1	10	1	0¾	39	2¾
P14	(1)	2	#10	42	0	"	38	4	1	10	1	0¾	39	4¾
P15	(1)	1	#10	42	2	"	38	6	1	10	1	0¾	39	6¾
P16	(1)	4	#10	39	4	"	35	8	1	10	1	0¾	36	8¾
P17	(1)	2	#10	40	10	"	37	2	1	10	1	0¾	38	2¾
P18	(1)	2	#10	41	6	"	37	10	1	10	1	0¾	38	10¾
P19	(1)	2	#10	42	0	"	38	4	1	10	1	0¾	39	4¾
P20	Str.	4	#4	36	0	"								
P21	(5)	8	#4	8	10	"								
P22	Str.	4	#4	1	7	Pedestal								
P23	Str.	20	#4	3	3	"								
P24	(6)	2	#5	8	8	"	2	1	3	4				
P25	(6)	2	#5	9	5	"	2	10	3	4				
P26	(6)	18	#5	10	1	"	3	6	3	4				



ESTIMATE OF QUANTITIES

Item	Location	Pier 1-N
Concrete, Class "A"	(Cu. Yds.)	60.8
Steel Reinforcement	(Lbs.)	13,003

B.S.P. over I-65

Sheet 14

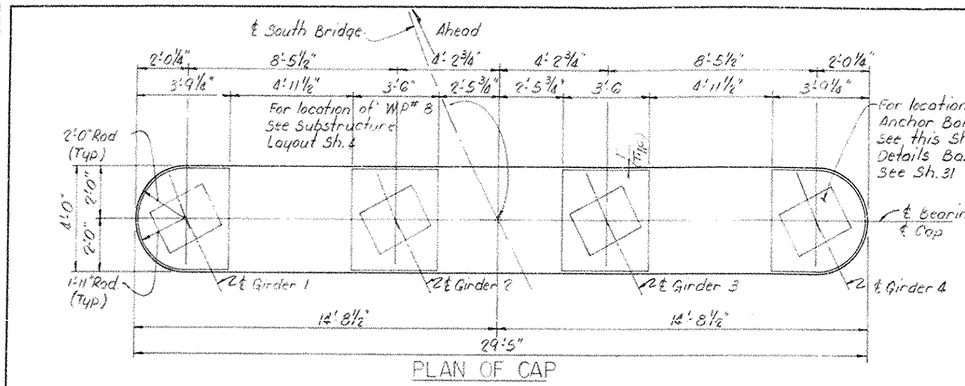
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN - SOMERSET PKWY.
ROAD
STATION 106+38.75 **P.E. PROJECT NO.**

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18224

LETTING DATE

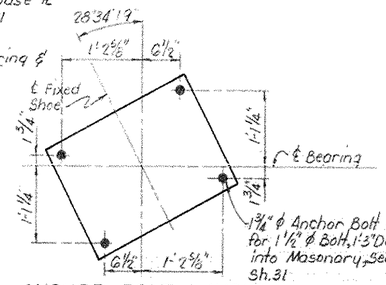
DESIGNED BY AF	CHECKED BY DGM	DATE 5-70	REVISED
DETAILED BY RAS	CHECKED BY DGM	DATE 5-70	REVISED
TRACED BY	CHECKED BY	DATE	REVISED

BRIDGE

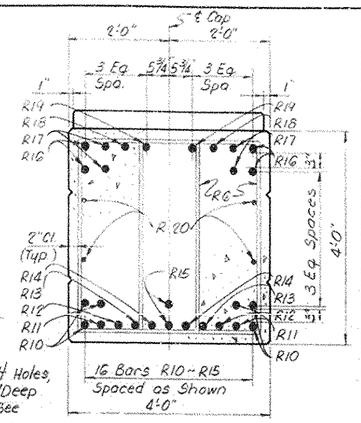


PLAN OF CAP

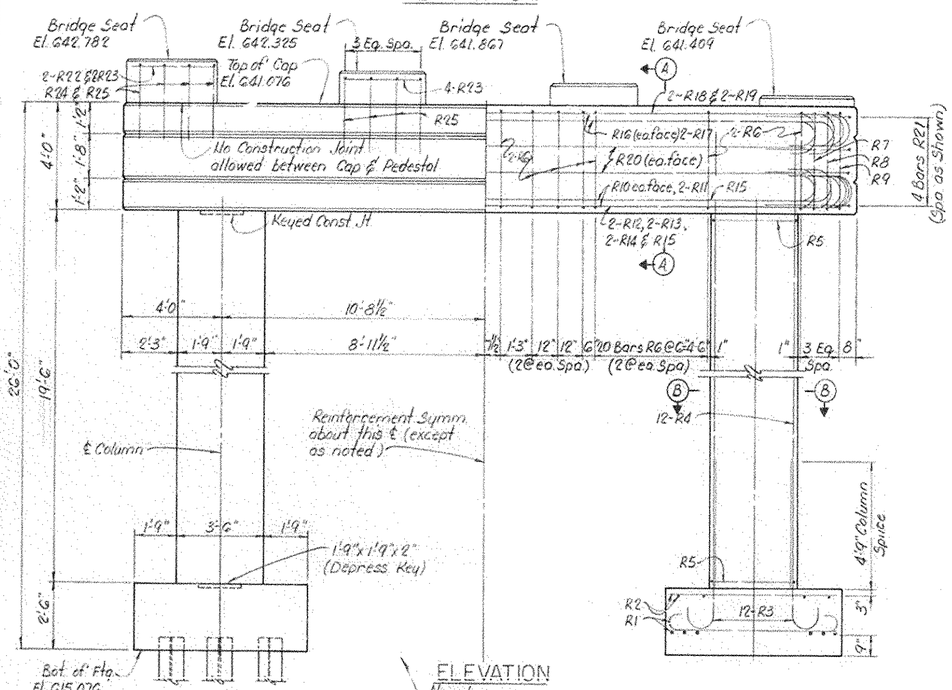
Note:
Top of Cap bars are to be accurately located as not to interfere with the drilling of the Anchor Bolt Holes



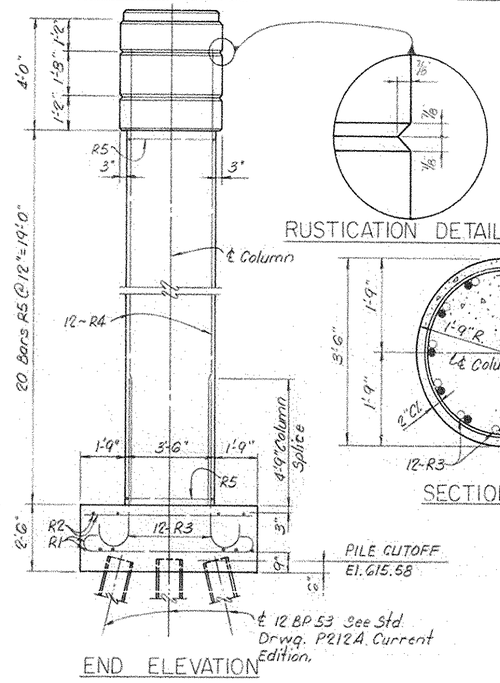
ANCHOR BOLT LAYOUT



SECTION A-A

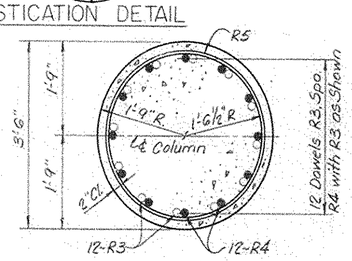


ELEVATION
Ahead

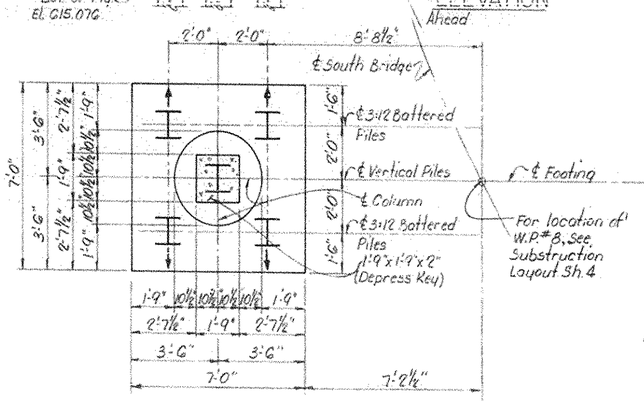


END ELEVATION

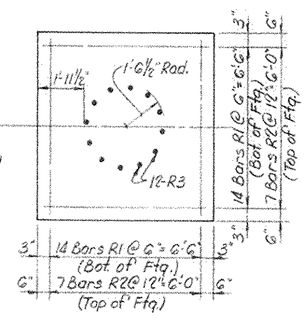
RUSTICATION DETAIL



SECTION B-B

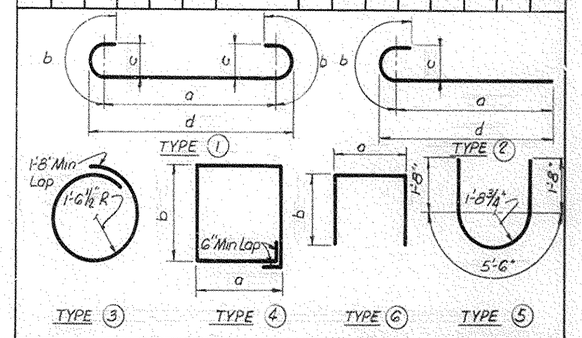


PLAN OF FOOTING



BILL OF REINFORCEMENT

MARK	TYPE	NO.	BAR SIZE	LENGTH Ft	LENGTH In	LOCATION	a Ft.	a In.	b Ft.	b In.	c Ft.	c In.	d Ft.	d In.
R1	1	56	#6	8	2	Footing	6	2	1	0	0	6	6	8
R2	Str.	28	#5	6	8	"								
R3	2	24	#11	7	10	"	5	10	2	0	1	2¼	6	5⅛
R4	Str.	24	#11	22	2	Column								
R5	3	40	#4	11	6	"								
R6	4	60	#6	12	10	Cap	2	5	3	8				
R7	4	2	#6	15	4	"	3	8	3	8				
R8	4	2	#6	13	6	"	2	9	3	8				
R9	4	2	#6	12	2	"	2	1	3	8				
R10	1	4	#11	28	11	"	24	11	2	0	1	2¼	26	1⅛
R11	1	4	#11	30	3	"	26	3	2	0	1	2¼	27	5¼
R12	1	2	#11	30	11	"	26	11	2	0	1	2¼	28	1¼
R13	1	2	#11	31	5	"	27	5	2	0	1	2¼	28	7¼
R14	1	2	#11	31	7	"	27	7	2	0	1	2¼	28	9¼
R15	1	2	#11	31	9	"	27	9	2	0	1	2¼	28	11¼
R16	1	4	#10	28	9	"	25	1	1	10	1	0¾	26	1¾
R17	1	2	#10	30	3	"	26	7	1	10	1	0¾	27	7¾
R18	1	2	#10	30	11	"	27	3	1	10	1	0¾	28	3¾
R19	1	2	#10	31	5	"	27	9	1	10	1	0¾	28	9¾
R20	Str.	4	#4	25	5	"								
R21	5	8	#4	8	10	"								
R22	Str.	4	#4	2	4	Pedestals								
R23	Str.	12	#4	3	3	"								
R24	6	2	#5	7	10	"	2	1	2	11				
R25	6	14	#5	9	3	"	3	6	2	11				



ESTIMATE OF QUANTITIES

Item	Location	Pier 1-S
Concrete, Class "A"	(Cu. Yds.)	41.9
Steel Reinforcement	(Lbs.)	10,520

B.S.P. over I-65

Sheet 15

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN - SOMERSET PKWY.
ROAD
STATION 106+38.75 **P. E. PROJECT NO.**

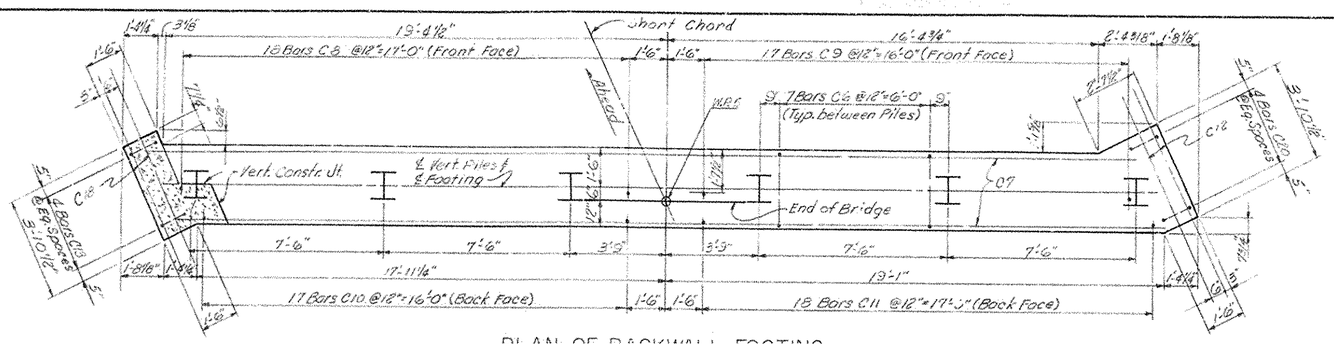
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		1822d

PIER 1-S

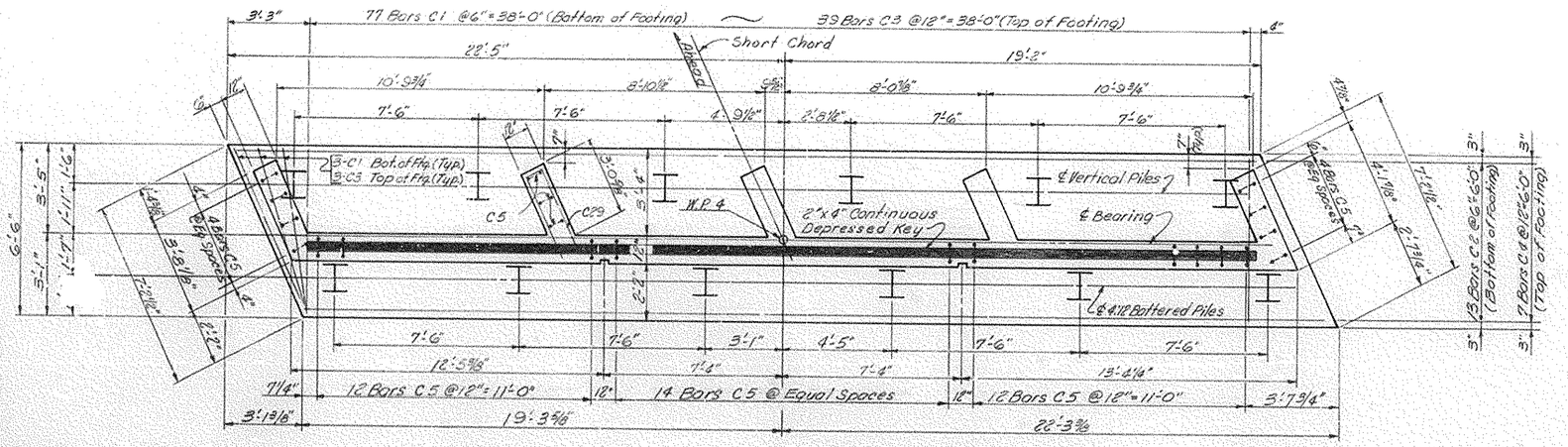
LETTING DATE

DESIGNED BY AF DATE 5-70
DETAILED BY RAS CHECKED BY DGM DATE 5-70
TRACED BY CHECKED BY DATE
REVISED REVISED REVISED

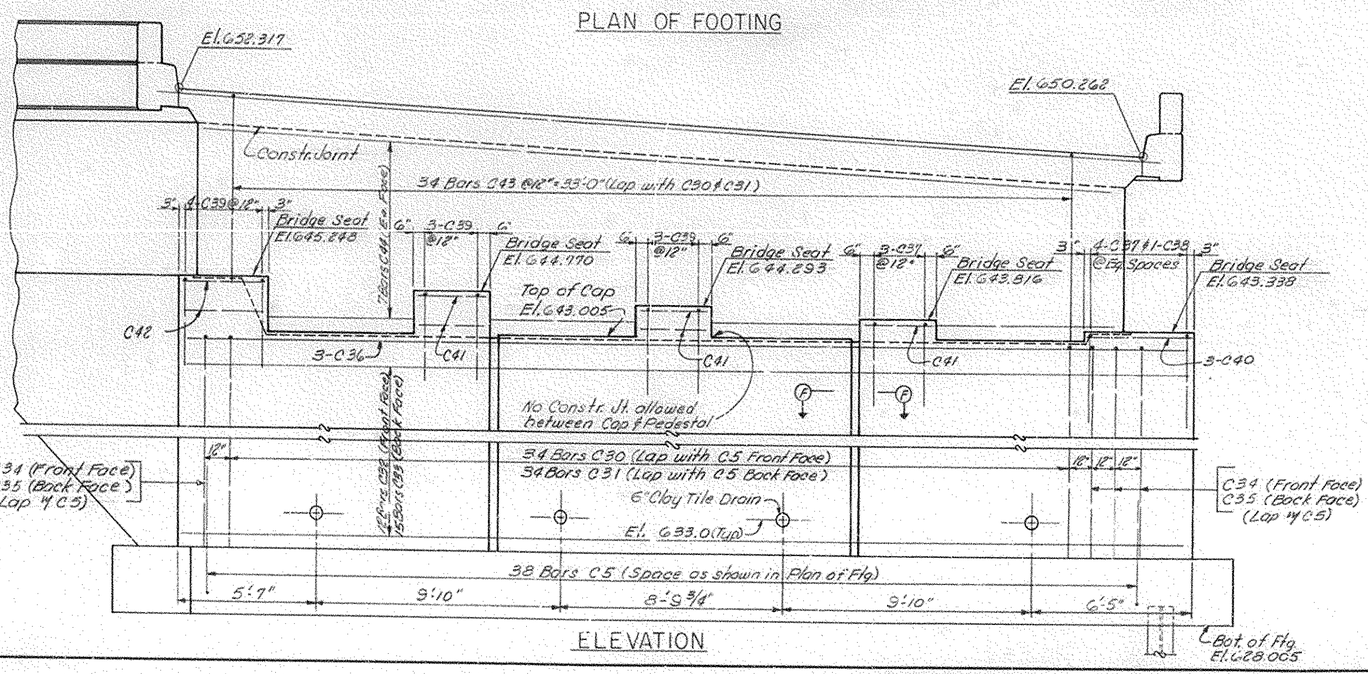
BRIDGE



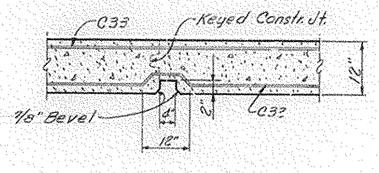
PLAN OF BACKWALL FOOTING



PLAN OF FOOTING



ELEVATION



SECTION F-F

ABUTMENT 2-N

B.S.P. over I-65

Sheet 16

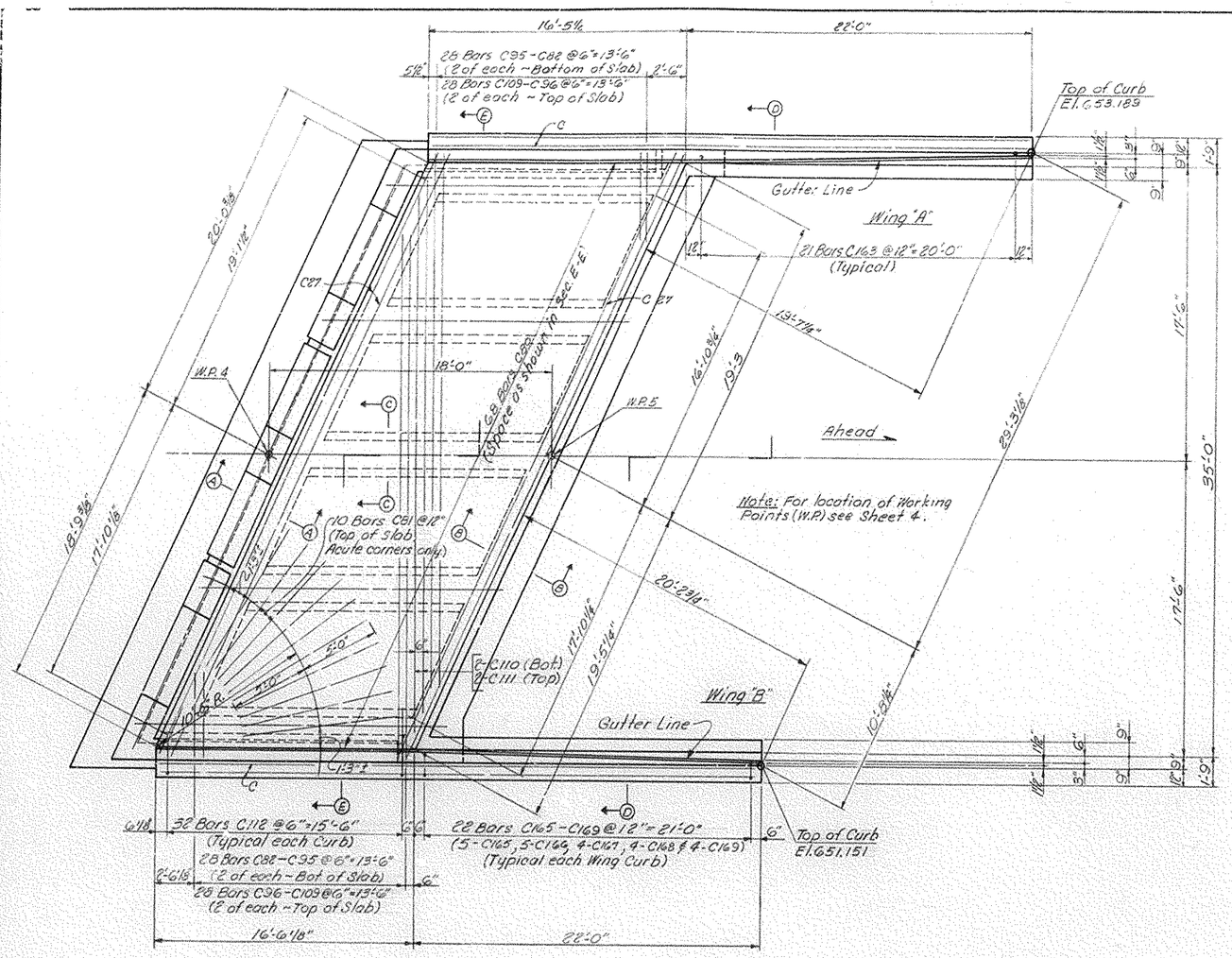
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN–SOMERSET PKWY.
ROAD

STATION 106+38.75	P. E. PROJECT NO.	
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO. 18224

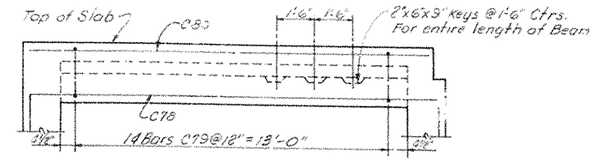
LETTING DATE

DESIGNED BY AF
DETAILED BY LG
TRACED BY
CHECKED BY DGM
CHECKED BY DGM
CHECKED BY
DATE 5-70
DATE 5-70
REVISED
REVISED

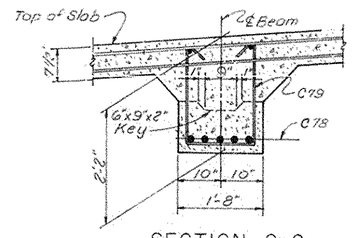
BRIDGE



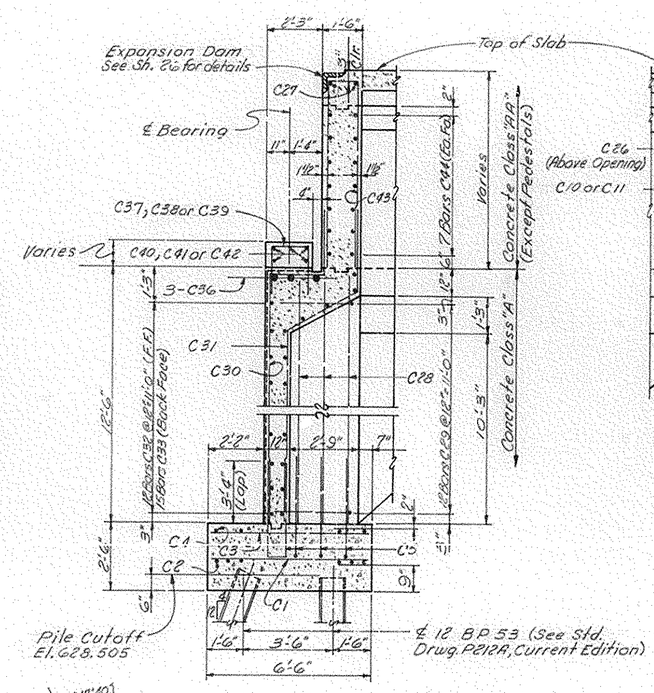
PLAN



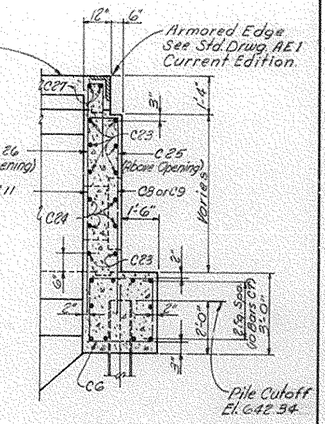
SECTION ALONG C/L BEAM



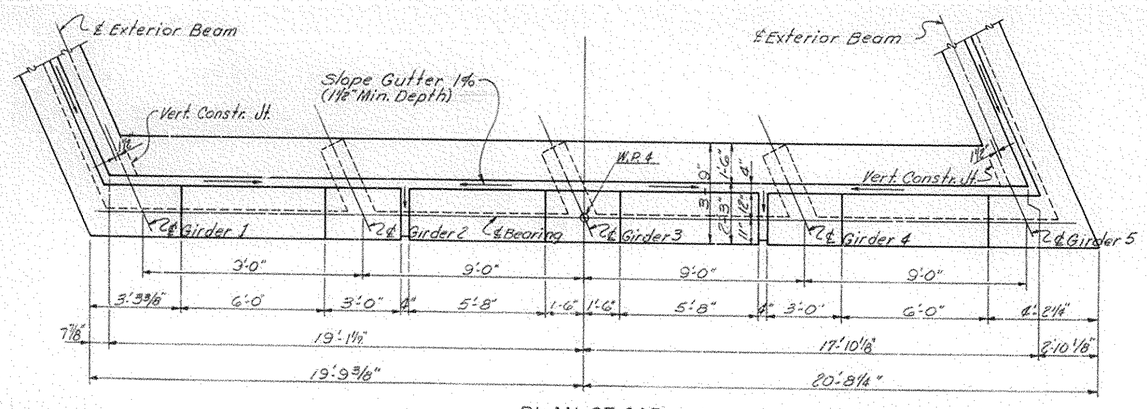
SECTION C-C



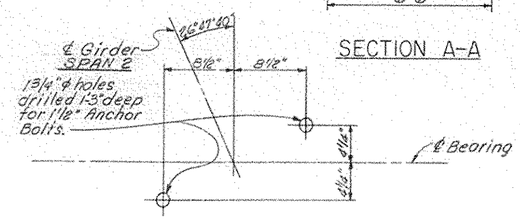
SECTION A-A



SECTION B-B



PLAN OF CAP



ANCHOR BOLT LAYOUT

ABUTMENT 2-N

B.S.P. over I-65 Sheet 17

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN-SOMERSET PKWY.
ROAD
STATION 106+38.75 **P.E. PROJECT NO.**

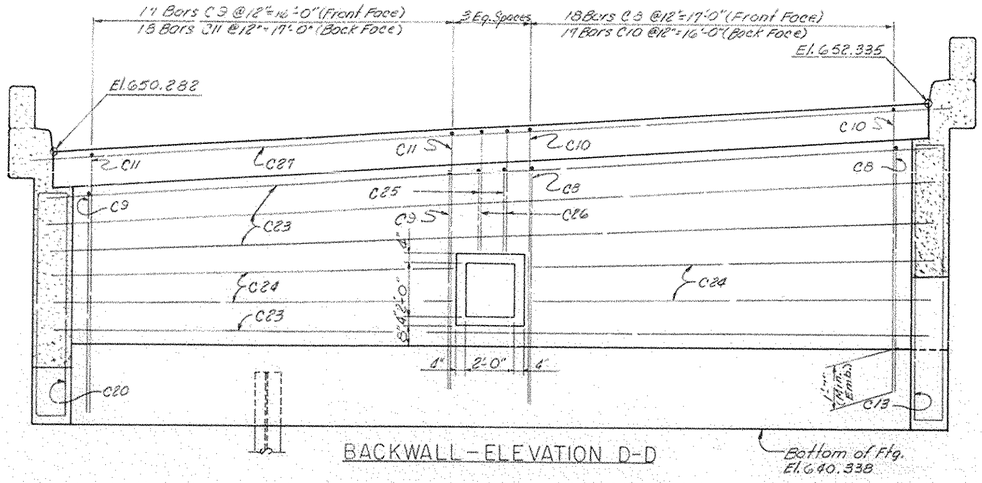
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18224

LETTING DATE

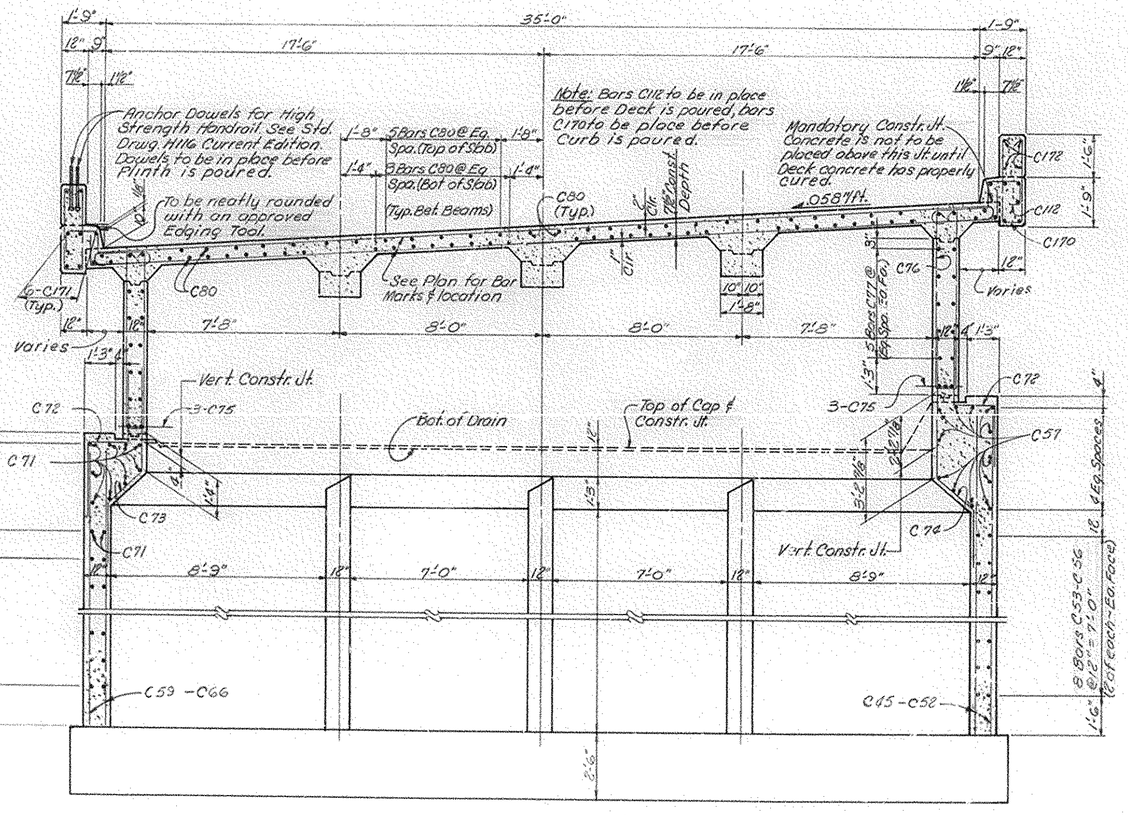
DESIGNED BY BF CHECKED BY DGM DATE 5-70
DRAWN BY JO CHECKED BY DGM DATE 5-70
TRACED BY CHECKED BY DATE

BRIDGE

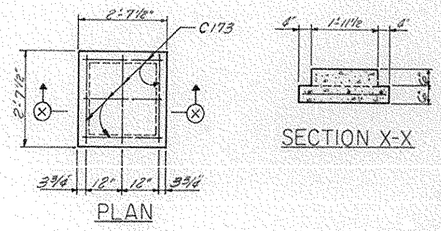
LETTING DATE



BACKWALL – ELEVATION D-D



SECTION E-E



PLAN

SECTION X-X

PRECAST CONCRETE ACCESS COVER

ABUTMENT 2-N

B.S.P. over I-65 — Sheet 18

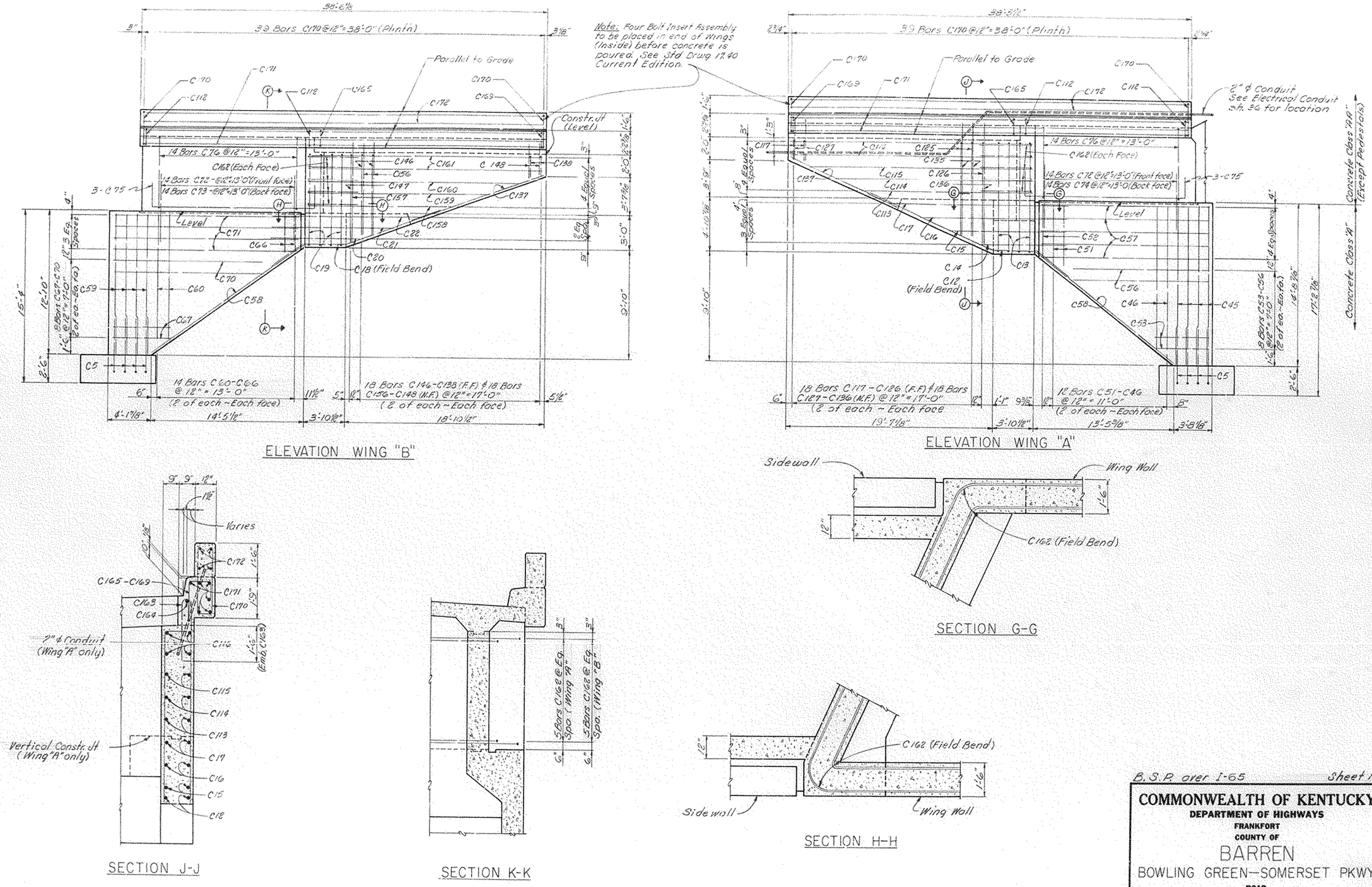
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN-SOMERSET PKWY.
ROAD
STATION 106+38.75 **P. E. PROJECT NO.**

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18224

DESIGNED BY: AF	CHECKED BY: DGM	DATE 5-70	REVISED
DETAILED BY: JC	CHECKED BY: DGM	DATE 5-70	REVISED
TRACED BY:	CHECKED BY:	DATE	REVISED

DATE DATE DATE

BRIDGE



B.S.P. over I-65 Sheet 19

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN—SOMERSET PKWY.
ROAD
STATION 106+38.75 **P. E. PROJECT NO.**

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18224

ABUTMENT 2-N

LETTING DATE

DESIGNED BY AF CHECKED BY DGM DATE 5-70 REVISED
DETAILED BY JC CHECKED BY DGM DATE 5-70 REVISED
TRACED BY CHECKED BY DATE REVISED

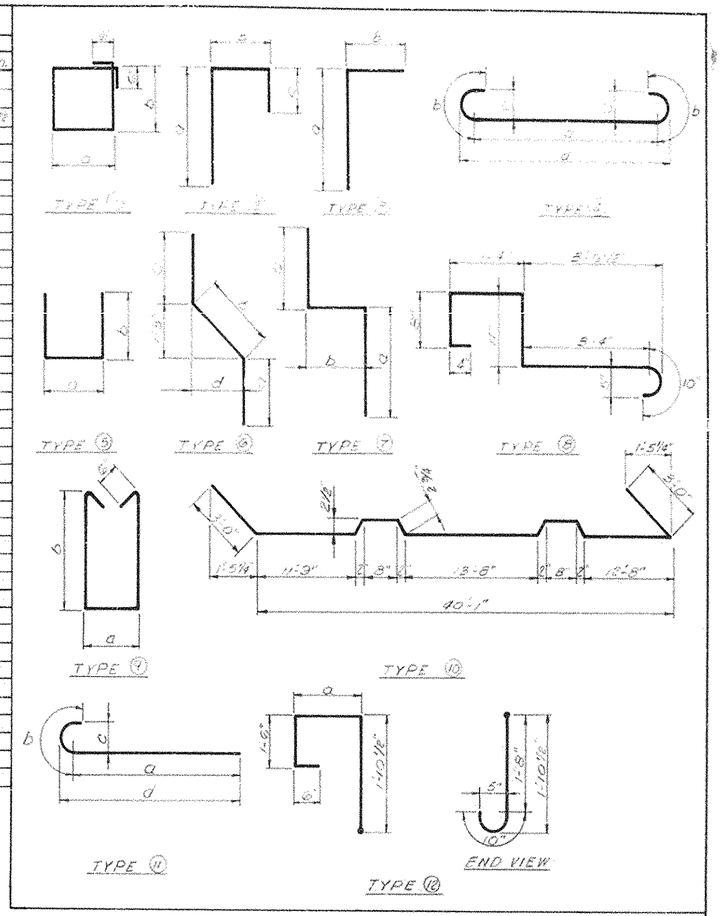
BRIDGE

BILL OF REINFORCEMENT

MARK	TYPE	NO.	BAR SIZE	LENGTH Ft.	LENGTH In.	LOCATION	a Ft.	a In.	b Ft.	b In.	c Ft.	c In.	d Ft.	d In.
C1	Str.	27	#6	5	8	Front Footing								
C2	"	18	#6	1	3	" "								
C3	"	45	#5	[illegible]	5	" "								
C4	"	7	#5	4	9	" "								
C5	3	52	#6	10	10	" "	0	9	2	1				
C6	1	35	#5	[illegible]	3	Back Footing	2	[illegible]	6	7				
C7	Str.	10	#5	3	3	" "								
C8	3	18	#6	10	4	" "	9	2		3				
C9	3	17	#6	9	4	" "	8	2		3				
C10	3	17	#6	12	1	" "	10	5	0	3	2	0		
C11	3	19	#6	12	1	" "	9	5	0	3	2	0		
C12	Str.	2	#6	18	10	" "								
C13	1	4	#6	22	10	" "	1	3	10	4				
C14	Str.	2	#6	8	0	" "								
C15	"	2	#6	11	0	" "								
C16	"	2	#6	14	0	" "								
C17	"	2	#6	17	0	" "								
C18	"	2	#6	18	10	" "								
C19	1	4	#6	19	5	" "	1	3	5	3				
C20	Str.	2	#6	8	6	" "								
C21	"	2	#6	11	0	" "								
C22	"	2	#6	14	0	" "								
C23	"	8	#5	33	4	Back Wall								
C24	"	8	#5	17	3	" "								
C25	3	2	#5	4	1	" "	2	10	1	3				
C26	2	2	#5	6	3	" "	4	1	0	9	2	0		
C27	Str.	4	#5	39	6	End of Slab								
C28	"	16	#6	12	3	Counterforts								
C29	5	36	#4	7	4	"	0	9	3	4				
C30	7	34	#6	19	3	Front Wall	12	2	2	4	4	10		
C31	6	34	#6	19	2	" "	10	4	3	1	5	3	2	10
C32	10	12	#5	46	4	" "								
C33	Str.	15	#5	40	1	" "								
C34	3	4	#6	15	6	" "	12	2	3	5				
C35	6	4	#6	14	2	" "	10	4	3	1	0	3		
C36	Str.	3	#8	40	1	Cap								
C37	5	7	#5	5	3	Pedestals	1	8	1	10				
C38	5	1	#5	5	6	"	1	11	1	10				
C39	5	10	#5	8	3	"	1	8	3	4				
C40	Str.	3	#4	3	6	"								
C41	"	13	#4	2	3	"								
C42	"	5	#4	3	0	"								
C43	5	34	#6	15	2	Parapet	1	3	7	0				
C44	Str.	14	#5	36	6	"								
C45	"	8	#6	14	6	Sidewall								
C46	"	4	#5	13	2	"								
C47	"	4	#5	11	8	"								
C48	"	4	#5	10	0	"								
C49	"	4	#5	8	8	"								
C50	"	4	#5	7	2	"								
C51	"	4	#5	5	8	"								
C52	"	2	#5	4	11	"								
C53	"	4	#5	4	6	"								
C54	"	4	#5	7	6	"								
C55	"	4	#5	10	6	"								
C56	"	4	#5	13	0	"								
C57	"	12	#5	16	3	"								
C58	"	4	#5	16	6	"								
C59	"	8	#6	12	8	"								
C60	"	4	#5	11	4	"								
C61	"	4	#5	10	0	"								
C62	"	4	#5	8	8	"								
C63	"	4	#5	7	5	"								
C64	"	4	#5	6	0	"								
C65	"	4	#5	4	8	"								
C66	"	4	#5	3	4	"								
C67	"	4	#5	5	6	"								
C68	"	8	#5	8	0	"								
C69	"	4	#5	11	0	"								
C70	"	4	#5	14	0	"								
C71	"	9	#5	17	3	"								
C72	1	28	#5	4	6	"	1	4	1	8				
C73	6	14	#5	5	11	"	1	4	2	1	2	6	1	6
C74	6	14	#5	5	0	"	1	4	2	1	4	7	1	8
C75	8	6	#11	20	5	Exterior Beam	16	7	2	0				
C76	9	28	#5	14	7	" "	0	9	6	6				
C77	Str.	20	#5	16	0	" "								
C78	5	15	#11	20	4	Interior Beam	16	6	2	0				
C79	10	42	#6	5	11	" "	1	5	1	10				
C80	Str.	68	#5	16	2	Slab								

MARK	TYPE	NO.	BAR SIZE	LENGTH Ft.	LENGTH In.	LOCATION	a Ft.	a In.	b Ft.	b In.	c Ft.	c In.	d Ft.	d In.
C81	3	20	#6	10	0	Slab								
C82	3	4	#6	2	4	"	5	4	1	1				
C83	3	4	#6	8	5	"	7	5	1	1				
C84	3	4	#6	10	6	"	9	6	1	1				
C85	3	4	#6	12	7	"	11	7	1	1				
C86	3	4	#6	14	8	"	13	8	1	1				
C87	3	4	#6	16	9	"	15	9	1	1				
C88	3	4	#6	18	10	"	17	10	1	1				
C89	3	4	#6	20	11	"	19	11	1	1				
C90	3	4	#6	23	0	"	22	0	1	1				
C91	3	4	#6	25	1	"	24	1	1	1				
C92	3	4	#6	27	2	"	26	2	1	1				
C93	3	4	#6	29	3	"	28	3	1	1				
C94	3	4	#6	31	4	"	30	4	1	1				
C95	3	4	#6	33	5	"	32	5	1	1				
C96	11	4	#6	6	1	"	5	1	1	0	0	6	5	4
C97	11	4	#6	8	2	"	7	2	1	0	0	6	7	5
C98	11	4	#6	10	3	"	9	3	1	0	0	6	9	6
C99	11	4	#6	12	4	"	11	4	1	0	0	6	11	7
C100	11	4	#6	14	5	"	13	5	1	0	0	6	13	8
C101	11	4	#6	16	6	"	15	6	1	0	0	6	15	9
C102	11	4	#6	18	7	"	17	7	1	0	0	6	17	10
C103	11	4	#6	20	8	"	19	8	1	0	0	6	19	11
C104	11	4	#6	22	9	"	21	9	1	0	0	6	22	0
C105	11	4	#6	24	10	"	23	10	1	0	0	6	24	1
C106	11	4	#6	26	11	"	25	11	1	0	0	6	26	2
C107	11	4	#6	29	0	"	28	0	1	0	0	6	28	3
C108	11	4	#6	31	1	"	30	1	1	0	0	6	30	4
C109	11	4	#6	33	2	"	32	2	1	0	0	6	32	5
C110	Str.	2	#6	32	9	"								
C111	1	2	#6	34	3	"	32	3	1	0	0	6	32	3
C112	9	64	#5	7	2	Curb								
C113	Str.	2	#6	15	3	Wing Wall								
C114	"	2	#6	18	6	" "								
C115	"	2	#6	21	6	" "								
C116	"	4	#6	22	9	" "								
C117	3	2	#4	3	0	" "	1	9	1	3				
C118	3	2	#4	3	11	" "	2	6	1	3				
C119	3	2	#4	4	9	" "	3	6	1	3				
C120	3	2	#4	5	7	" "	4	6	1	3				
C121	3	2	#4	6	5	" "	5	2	1	3				
C122	3	2	#4	7	3	" "	6	0	1	3				
C123	3	2	#4	8	1	" "	6	10	1	3				
C124	3	2	#4	8	11	" "	7	8	1	3				
C125	3	2	#4	9	9	" "	8	6	1	3				
C126	3	1	#4	10	7	" "	9	4	1	3				
C127	Str.	2	#4	3	1	" "								
C128	"	2	#4	4	0	" "								
C129	"	2	#4	4	10	" "								
C130	"	2	#4	5	8	" "								
C131	"	2	#4	6	6	" "								
C132	"	2	#4	7	4	" "								
C133	"	2	#4	8	2	" "								
C134	"	2	#4	9	0	" "								
C135	"	2	#4	9	10	" "								
C136	"	1	#4	10	8	" "								
C137	"	4	#4	11	0	" "								
C138	3	2	#4	3	0	" "	1	9	1	3				
C139	3	2	#4	3	8	" "	2	5	1	3				
C140	3	2	#4	4	4	" "	3	1	1	3				
C141	3	2	#4	5	0	" "	3	9	1	3				
C142	3	2	#4	5	8	" "	4	5	1	3				
C143	3	2	#4	6	4	" "	5	1	1	3				
C144	3	2	#4	7	1	" "	5	10	1	3				
C145	3	2	#4	7	9	" "	6	6	1	3				
C146	3	2	#4	8	5	" "	7	2	1	3				
C147	3	1	#4	9	1	" "	7	10	1	3				
C148	Str.	2	#4	3	1	" "								
C149	"	2	#4	3	9	" "								
C150	"	2	#4	4	5	" "								
C151	"	2	#4	5	1	" "								
C152	"	2	#4	5	9	" "								
C153	"	2	#4	6	5	" "								
C154	"	2	#4	7	2	" "								
C155	"	2	#4	7	10	" "								
C156	"	2	#4	8	6	" "								
C157	"	1	#4	9	2	" "								
C158	"	2	#6	15	9	" "								
C159	"	2	#6	16	9	" "								
C160	"	2	#6	19	9	" "								

MARK	TYPE	NO.	BAR SIZE	LENGTH Ft.	LENGTH In.	LOCATION	a Ft.	a In.	b Ft.	b In.	c Ft.	c In.	d Ft.	d In.
C161	Str.	4	#6	18	3	Wing Wall								
C162	9	20	#5	11	0	" "	2	6	5	6				
C163	11	42	#5	9	4	" "	4	6	2	10	0	5	2	2½
C164	Str.	2	#5	21	3	Wing Curb								
C165	12	10	#5	5	3	" "	1	4						
C166	12	10	#5	5	7	" "	1	2						
C167	12	5	#5	5	6	" "	1	1						
C168	12	5	#5	5	5	" "	1	0						
C169	12	8	#5	5	4	" "	0	11						
C170	9	78	#5	7	7	" "	0	9	3	0				
C171	Str.	12	#5	[illegible]	2	" "								
C172	"	6	#4	33	2	Plinth								
C173	"	6	#5	3	4	Access Cover								



ESTIMATE OF QUANTITIES		
Concrete, Class "A"	(Cu.Yds.)	88.2
Concrete, Class "AA"	(Cu.Yds.)	80.9
Steel Reinforcement	(Lbs.)	25,840

B.S.R. over I-65 Sheet 20

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN-SOMERSET PKWY.
ROAD
STATION 106+38.75 **P. E. PROJECT NO.**

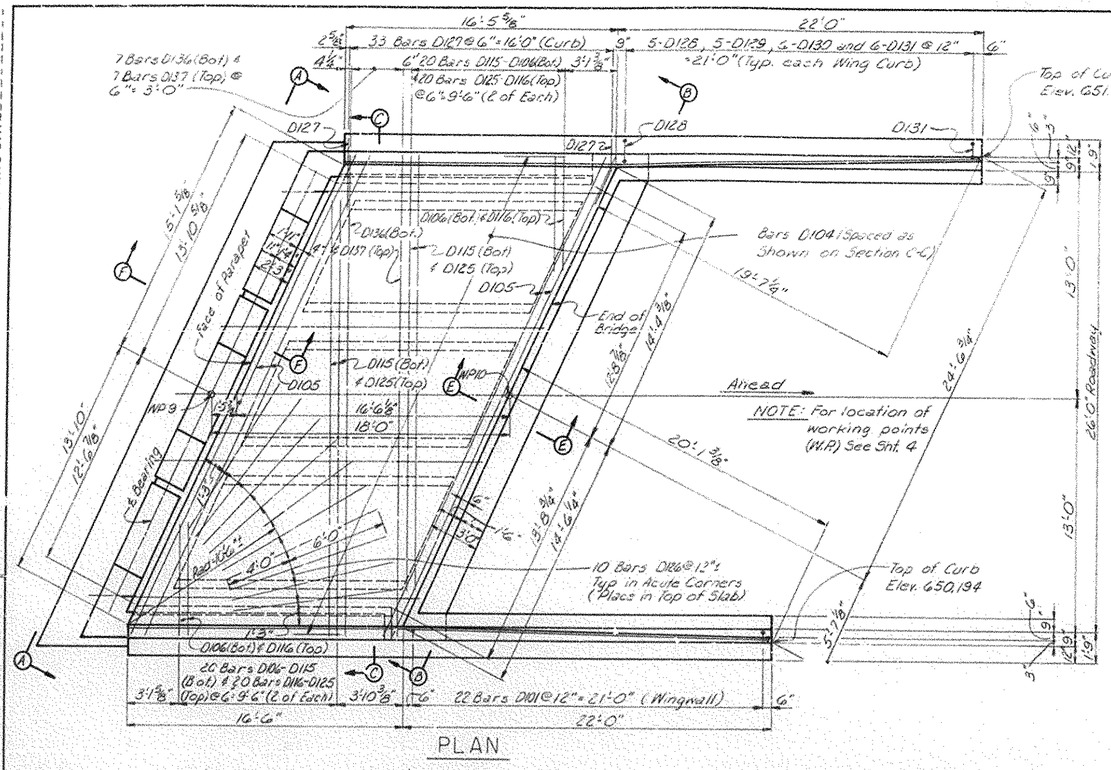
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18224

ABUTMENT 2-N

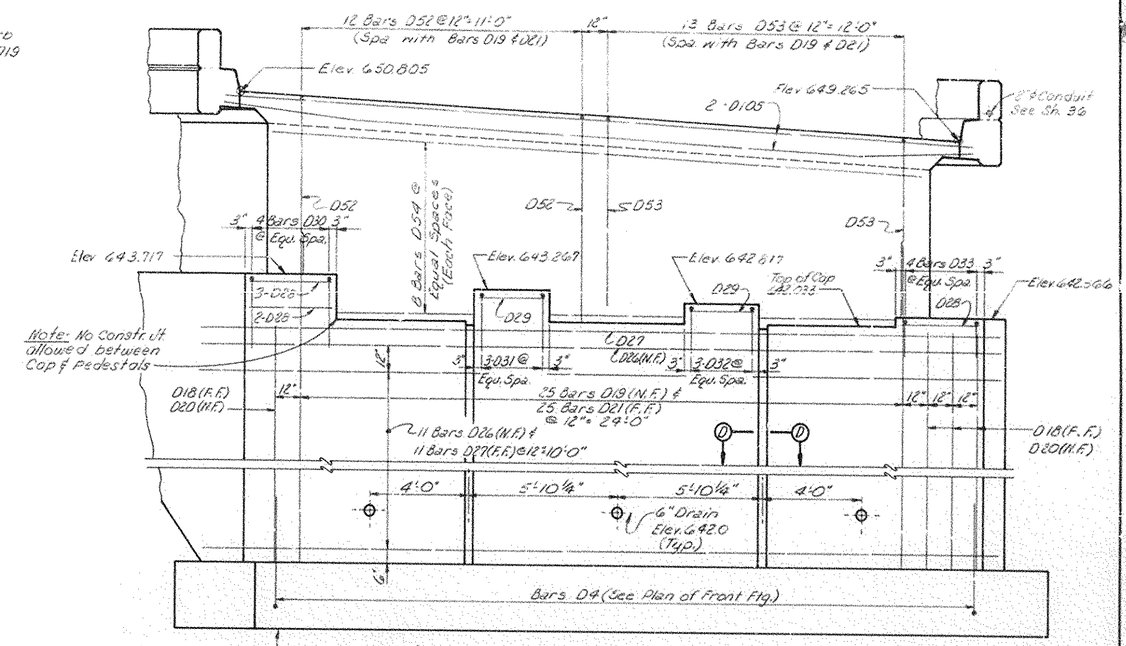
LETTING DATE

DGM 5-70
DGM 5-70

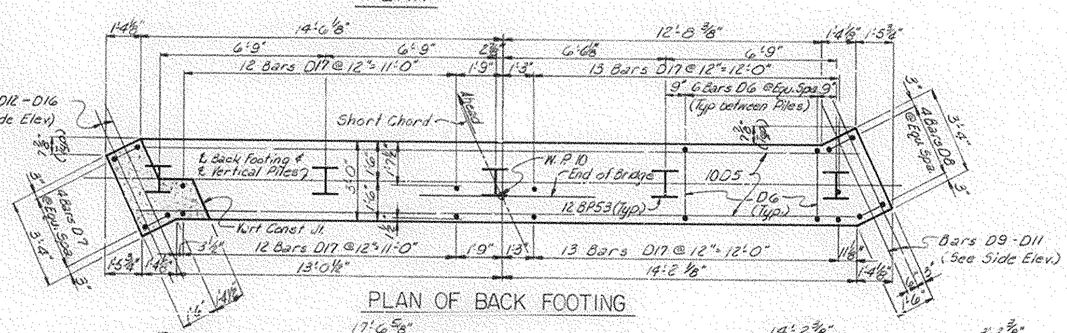
BRIDGE



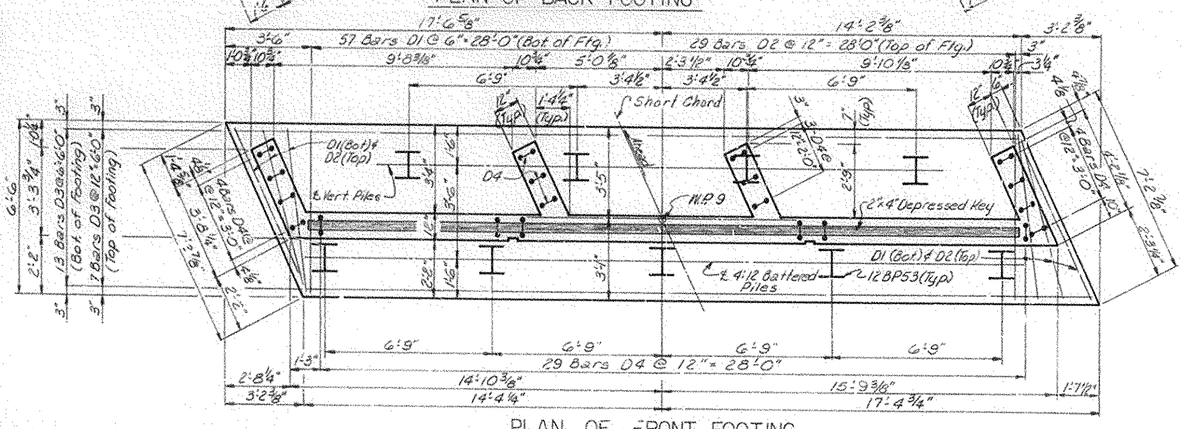
PLAN



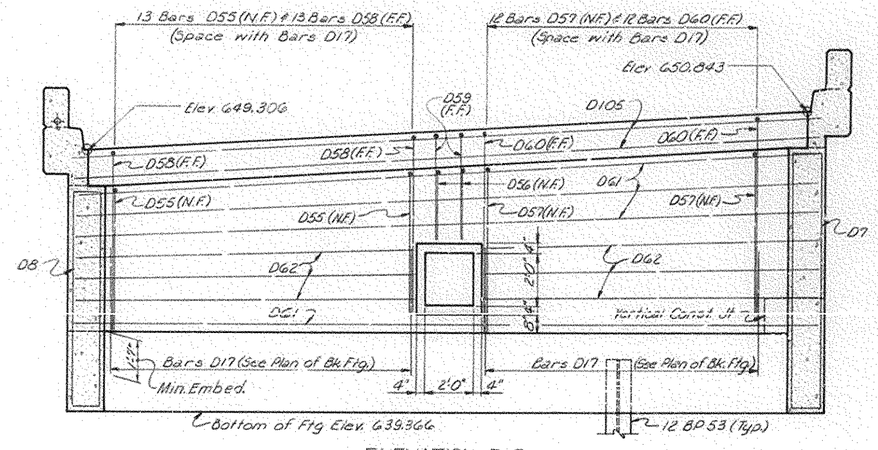
ELEVATION A-A



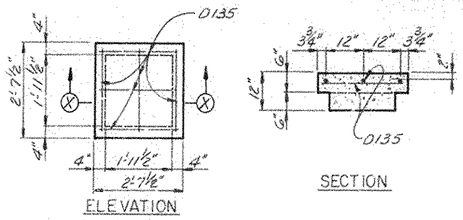
PLAN OF BACK FOOTING



PLAN OF FRONT FOOTING



ELEVATION B-B



PRECAST CONCRETE ACCESS HOLE COVER

ABUTMENT 2-S

B.S.P. over I-65 Sheet 21

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF

BARREN

BOWLING GREEN—SOMERSET PKWY.
ROAD

STATION 106+38.75 **P.E. PROJECT NO.**

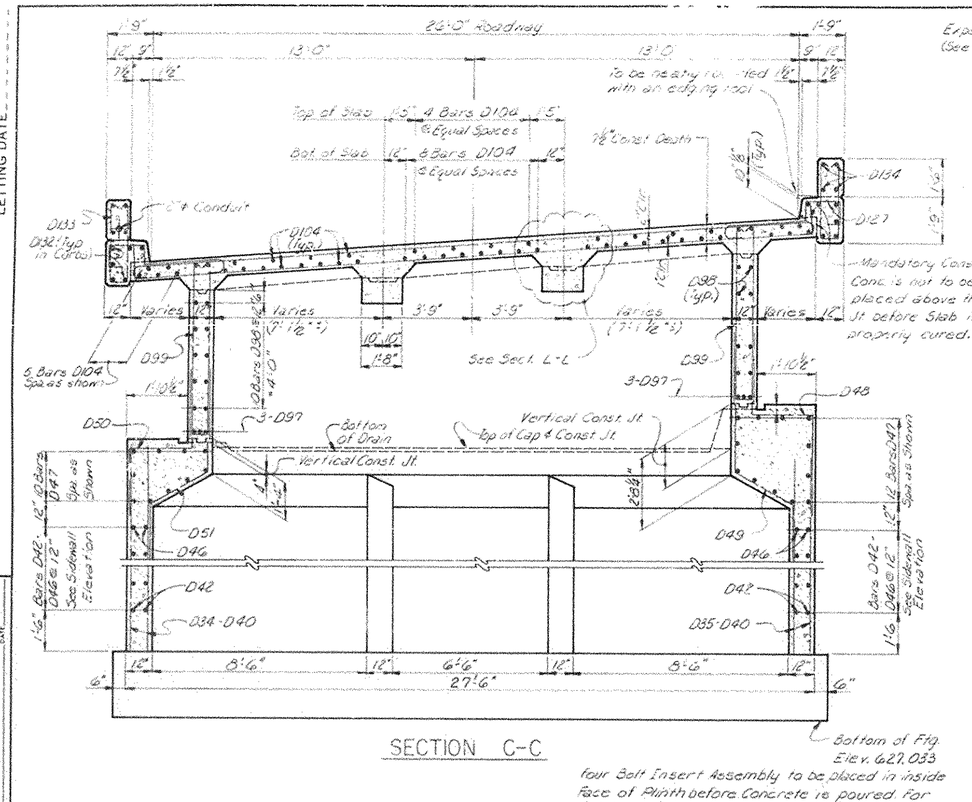
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18224

LETTING DATE

DESIGNED BY A.F. CHECKED BY D.G.M. DATE 5/70 REVISED
DETAILED BY D.W.G. CHECKED BY D.G.M. DATE 5/70 REVISED
TRACED BY CHECKED BY DATE REVISED

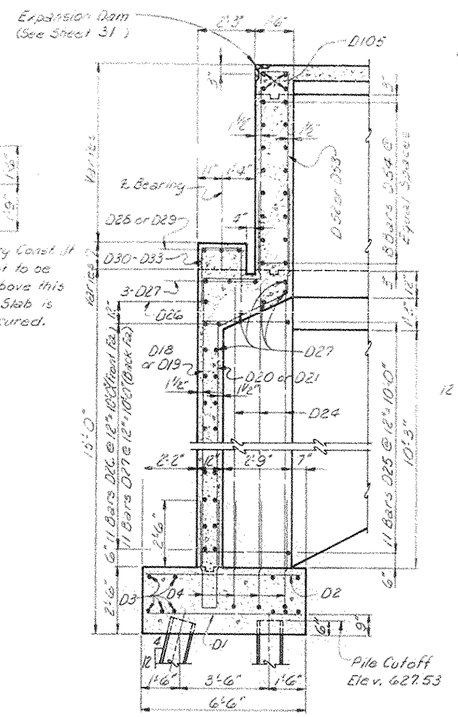
BRIDGE

LETTING DATE

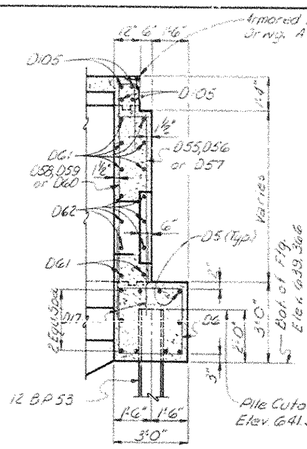


SECTION C-C

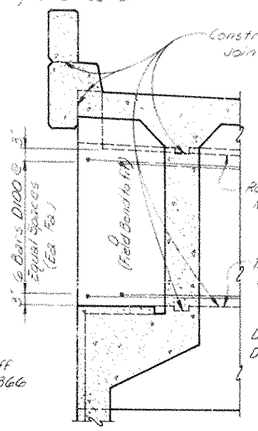
four Bolt Insert Assembly to be placed in inside face of Plinth before Concrete is poured. For details see Std. Drwg. 17.40, Current Edition.



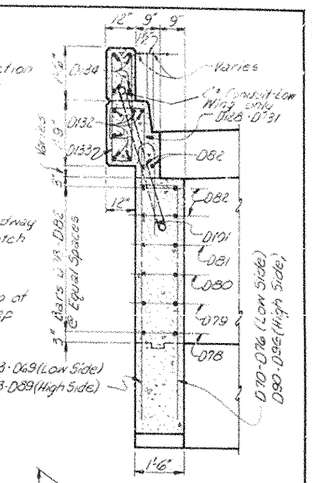
SECTION F-F



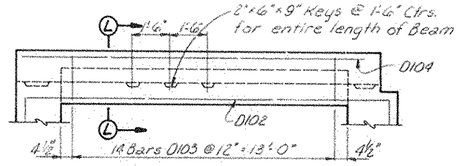
SECTION E-E



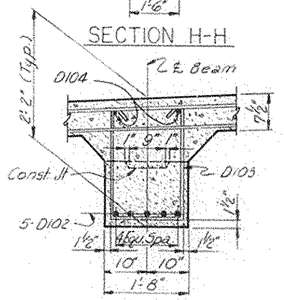
SECTION G-G



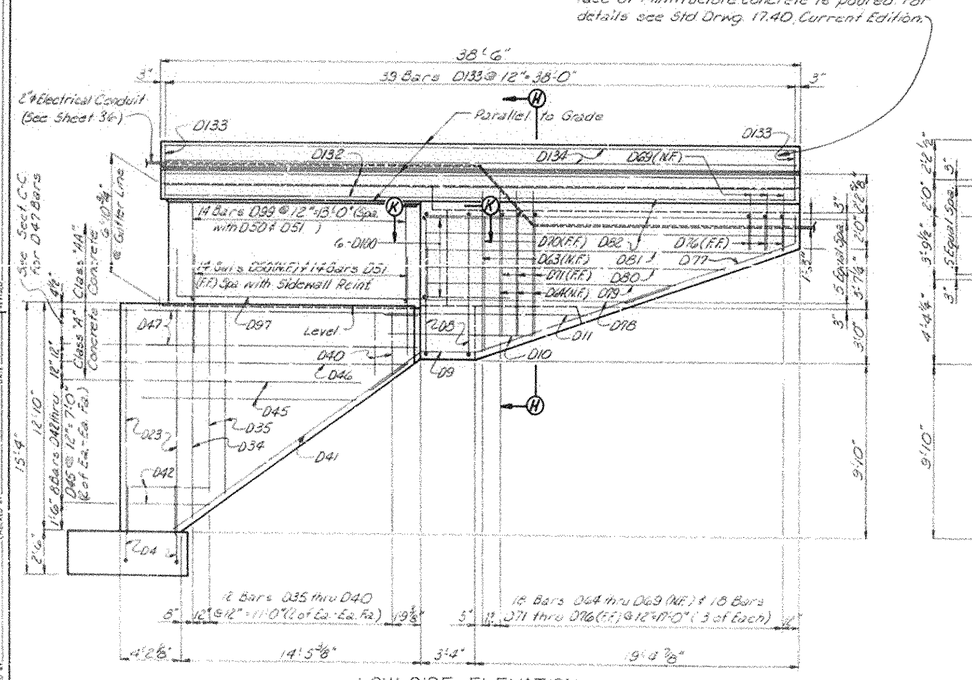
SECTION H-H



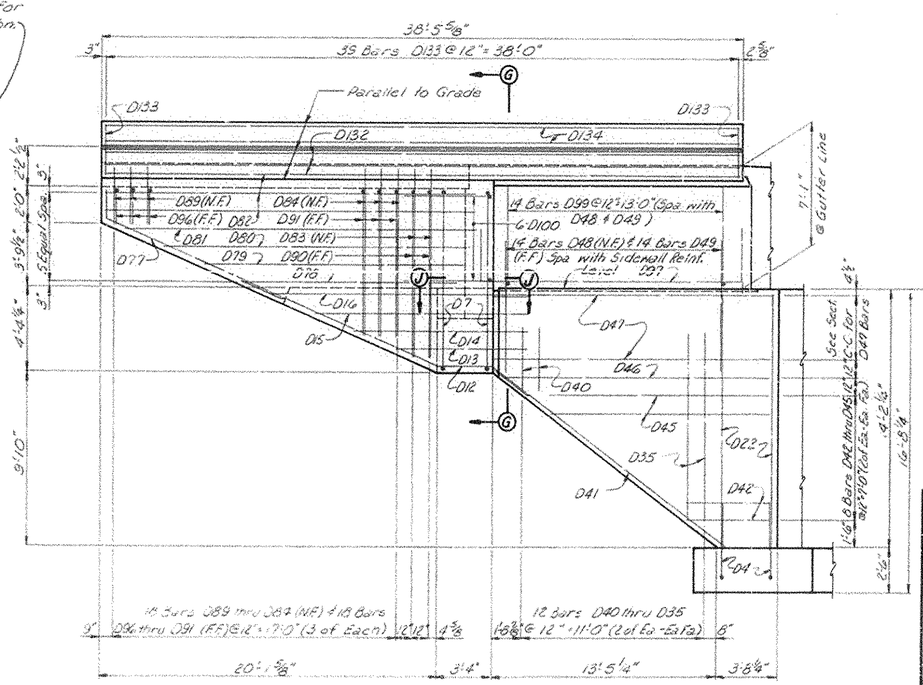
LONGITUDINAL SECTION ON ℄ BEAM



SECTION L-L

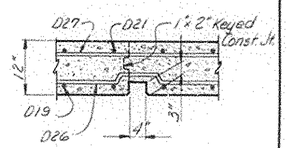


LOW SIDE ELEVATION



HIGH SIDE ELEVATION

ABUTMENT 2-S



SECTION D-D

B.S.P. over I 65

Sheet 22

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN – SOMERSET PKWY.
ROAD
STATION 106 + 38.75 **P. E. PROJECT NO.**

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18224

DESIGNED BY A. C. DATE 5/70 CHECKED BY D.G.M. DATE
DETAILED BY D.W.G. CHECKED BY D.G.M. DATE
TRACED BY CHECKED BY DATE
REVISED REVISED

BRIDGE

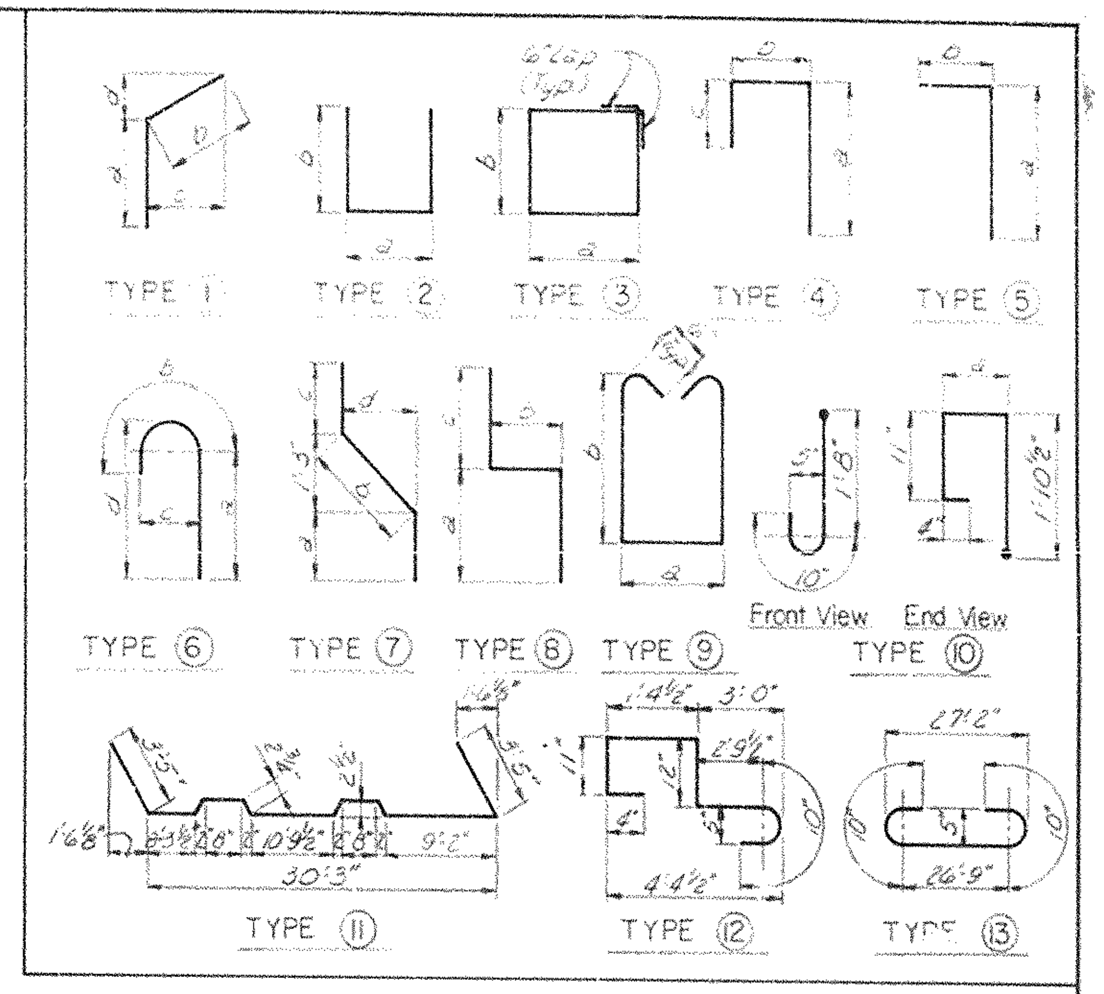
LETTING DATE

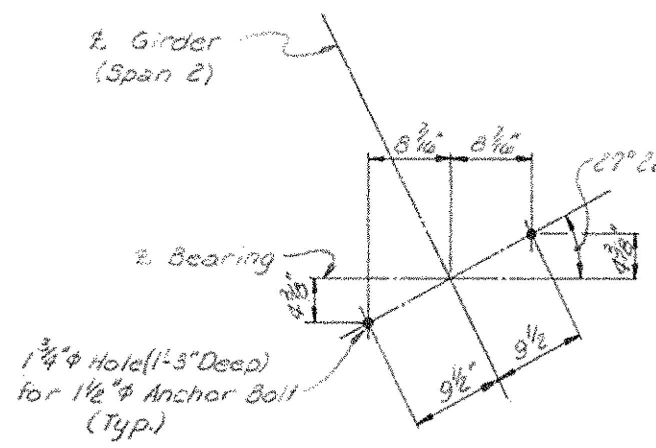
BILL OF REINFORCEMENT

Mark	Type	No.	Size	Length Ft	Length In	Location	a Ft	a In	b Ft	b In	c Ft	c In	d Ft	d In
D1	Str.	43	#6	6	3	Front Footing								
D2	Str.	35	#5	6	3	"								
D3	Str.	20	#5	31	3	"								
D4	(2)	43	#6	9	2	"	0	9	4	3				
D5	Str.	10	#6	23	0	Back Footing								
D6	(3)	24	#5	11	3	"	2	8	2	7				
D7	(3)	4	#5	22	11	"	1	3	9	10				
D8	(3)	4	#5	19	9	"	1	3	8	3				
D9	Str.	2	#5	19	0	"								
D10	Str.	2	#5	9	0	"								
D11	Str.	2	#5	12	6	"								
D12	Str.	2	#5	18	4	"								
D13	Str.	2	#5	8	0	"								
D14	Str.	2	#5	10	6	"								
D15	Str.	2	#5	12	9	"								
D16	Str.	2	#5	15	6	"								
D17	Str.	50	#6	4	10	"								
D18	(7)	4	#6	14	2	Frontwall	10	4	3	1	0	9	2	10
D19	(8)	25	#6	18	2	"	12	3	2	4	3	8		
D20	(5)	4	#6	15	2	"	12	3	3	0				
D21	(7)	25	#6	17	6	"	10	4	3	1	4	1	2	10
D22	Str.	8	#6	13	11	Sidewall								
D23	Str.	8	#6	18	6	"								
D24	Str.	12	#6	12	0	Counterforts								
D25	(2)	22	#5	7	6	"	0	9	3	5				
D26	(11)	12	#5	37	4	Frontwall								
D27	Str.	18	#5	30	2	"								
D28	Str.	8	#4	3	4	Pedestals								
D29	Str.	6	#4	2	9	"								
D30	(2)	4	#5	7	5	"	1	8	2	11				
D31	(2)	3	#5	6	5	"	1	8	2	5				
D32	(2)	3	#5	5	7	"	1	8	2	0				
D33	(2)	4	#5	4	7	"	1	8	1	6				
D34	Str.	2	#4	11	10	Sidewalls								
D35	Str.	8	#4	10	6	"								
D36	Str.	8	#4	9	2	"								
D37	Str.	8	#4	7	9	"								
D38	Str.	8	#4	6	5	"								
D39	Str.	8	#4	5	1	"								
D40	Str.	8	#4	3	9	"								
D41	Str.	4	#5	17	0	"								
D42	Str.	8	#5	5	0	"								
D43	Str.	8	#5	7	9	"								
D44	Str.	8	#5	10	6	"								
D45	Str.	8	#5	13	3	"								
D46	Str.	4	#5	16	0	"								
D47	Str.	22	#5	16	9	"								
D48	(8)	14	#5	8	10	"	4	0	1	11	3	0		
D49	(7)	14	#5	10	4	"	2	6	2	4	5	6	1	11
D50	(8)	14	#5	7	4	"	2	6	1	11	3	0		
D51	(7)	14	#5	8	10	"	2	6	2	4	4	0	1	11
D52	(2)	12	#6	16	6	Parapet	1	3	7	8				
D53	(2)	13	#6	15	0	"	1	3	6	11				
D54	Str.	16	#5	26	1	"								
D55	(5)	13	#6	6	6	Backwall	5	4	1	3				
D56	(5)	2	#6	3	8	"	2	6	1	3				
D57	(5)	12	#6	7	4	"	6	2	1	3				
D58	(4)	13	#6	9	3	"	6	7	0	9	2	0		
D59	(4)	2	#6	6	8	"	4	0	0	9	2	0		
D60	(4)	12	#6	10	1	"	7	5	0	9	2	0		
D61	Str.	8	#5	29	6	"								
D62	Str.	12	#5	13	3	"								
D63	Str.	1	#5	9	4	Wingwall								
D64	Str.	3	#5	8	4	"								
D65	Str.	3	#5	7	4	"								
D66	Str.	3	#5	6	4	"								
D67	Str.	3	#5	5	4	"								
D68	Str.	3	#5	4	4	"								
D69	Str.	3	#5	3	4	"								
D70	(5)	1	#5	9	3	"	8	0	1	3				
D71	(5)	3	#5	8	3	"	7	0	1	3				
D72	(5)	3	#5	7	3	"	6	0	1	3				
D73	(5)	3	#5	6	3	"	5	0	1	3				
D74	(5)	3	#5	5	3	"	4	0	1	3				
D75	(5)	3	#5	4	3	"	3	0	1	3				
D76	(5)	3	#5	3	3	"	2	0	1	3				
D77	(1)	4	#6	12	2	"	10	6	1	9	1	8	0	6
D78	Str.	4	#6	12	9	"								
D79	Str.	4	#6	15	8	"								
D80	Str.	4	#6	18	6	"								

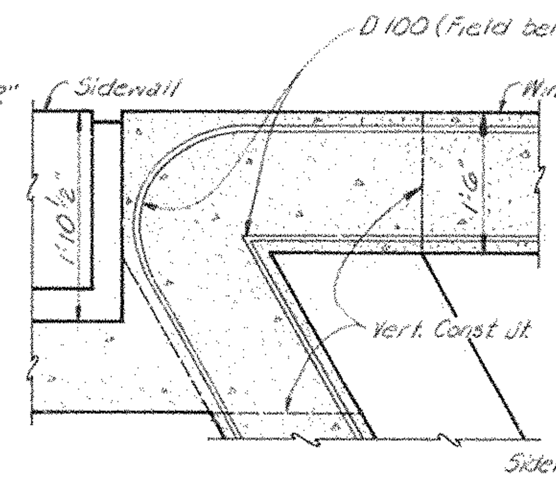
Mark	Type	No.	Size	Length Ft	Length In	Location	a Ft	a In	b Ft	b In	c Ft	c In	d Ft	d In
D81	Str.	4	#6	21	4	Wingwalls								
D82	Str.	12	#6	22	4	"								
D83	Str.	2	#5	10	9	"								
D84	Str.	3	#5	9	6	"								
D85	Str.	3	#5	8	3	"								
D86	Str.	3	#5	7	1	"								
D87	Str.	3	#5	5	10	"								
D88	Str.	3	#5	4	7	"								
D89	Str.	3	#5	3	4	"								
D90	(5)	2	#5	10	8	"	9	5	1	3				
D91	(5)	3	#5	9	5	"	8	2	1	3				
D92	(5)	3	#5	8	2	"	6	11	1	3				
D93	(5)	3	#5	7	0	"	5	9	1	3				
D94	(5)	3	#5	5	9	"	4	6	1	3				
D95	(5)	3	#5	4	6	"	3	3	1	3				
D96	(5)	3	#5	3	1	"	1	10	1	3				
D97	(2)	6	#11	22	4	Exterior Beams	16	6	3	0				
D98	Str.	20	#4	16	6	" "								
D99	(9)	28	#5	14	7	" "	0	3	6	6				
D100	(5)	12	#6	12	0	Wingwall	6	0	6	1				
D101	(6)	44	#5	3	4	"	2	6	0	10	0	5	2	8½
D102	(2)	10	#11	20	4	Interior Beams	16	6	2	0				
D103	(9)	28	#5	5	9	" "	1	5	1					
D104	Str.	54	#5	16	0	Slab								
D105	Str.	8	#5	30	2	"								
D106	(5)	8	#5	7	5	"	6	4	1	1				
D107	(5)	8	#5	9	6	"	8	5	1	1				
D108	(5)	8	#5	11	7	"	10	6	1	1				
D109	(5)	8	#5	13	8	"	12	7	1	1				
D110	(5)	8	#5	15	9	"	14	8	1	1				
D111	(5)	8	#5	17	10	"	16	9	1	1				
D112	(5)	8	#5	19	11	"	18	10	1	1				
D113	(5)	8	#5	22	0	"	20	11	1	1				
D114	(5)	8	#5	24	1	"	23	0	1	1				
D115	(5)	8	#5	26	2	"	25	1	1	1				
D116	(6)	8	#5	6	11	"	6	1	0	10	0	5	6	3½
D117	(6)	8	#5	9	0	"	8	2	0	10	0	5	8	4½
D118	(6)	8	#5	11	1	"	10	3	0	10	0	5	10	5½
D119	(6)	8	#5	13	2	"	12	4	0	10	0	5	12	6½
D120	(6)	8	#5	15	3	"	14	5	0	10	0	5	14	7½
D121	(6)	8	#5	17	4	"	16	6	0	10	0	5	16	8½
D122	(6)	8	#5	19	5	"	18	7	0	10	0	5	18	9½
D123	(6)	8	#5	21	6	"	20	8	0	10	0	5	20	10½
D124	(6)	8	#5	23	7	"	22	9	0	10	0	5	22	11½
D125	(6)	8	#5	25	8	"	24	10	0	10	0	5	25	0½
D126	Str.	20	#6	10	0	"								
D127	(12)	66	#5	7	4	Curbs								
D128	(10)	10	#5	4	11	Wing Curbs	1	3½						
D129	(10)	10	#5	4	9	" "	1	1½						
D130	(10)	12	#5	4	8	" "	1	0½						
D131	(10)	12	#5	4	7	" "	0	11½						
D132	Str.	12	#5	38	0	Curbs								
D133	(9)	78	#5	7	7	Plinths	0	9	3	0				
D134	Str.	8	#4	38	3	"								
D135	Str.	6	#4	2	4	Access Hole Cover								
D136	(2)	1	#5	29	3	Slab	27	2	1	1				
D137	(13)	7	#5	28	5	"	26	9	0	10	0	5	27	2

Designed by A.F. Checked by D.G.M. Date 5/70
Detailed by D.M.G. Checked by D.G.M. Date 5/70
Traced by — Checked by — Date —
Revised — Date —

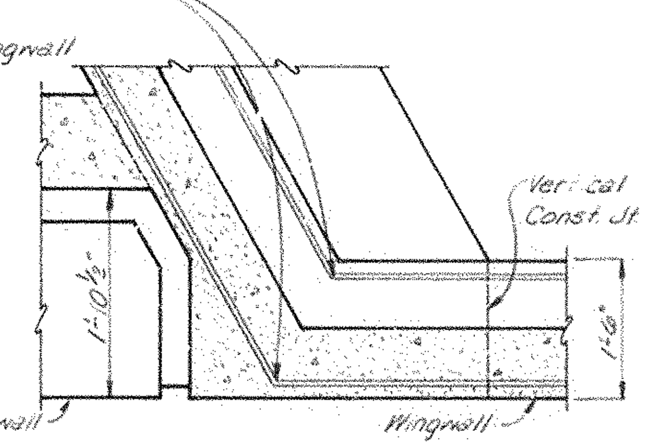




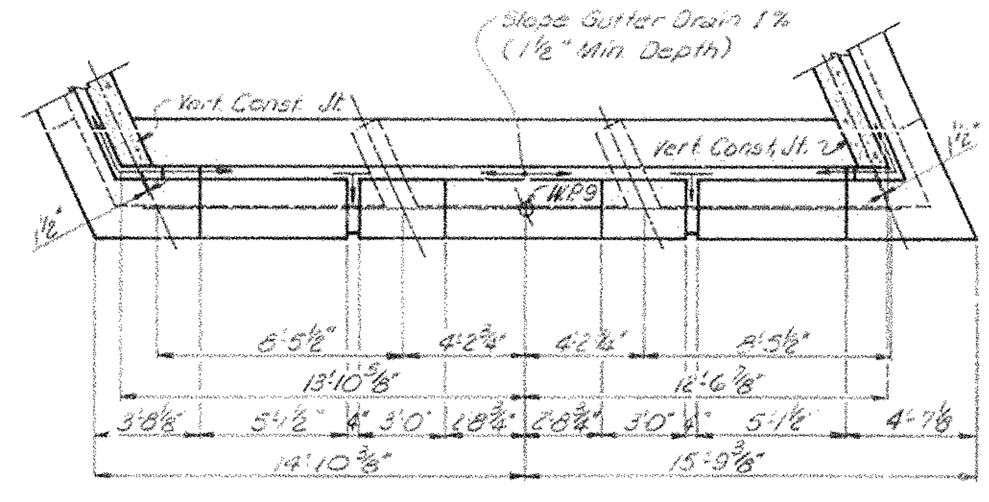
ANCHOR BOLT LAYOUT



SECTION J-J



SECTION K-K



PLAN OF FRONTWALL CAP

ESTIMATE OF QUANTITIES		
Item		Quantities
Concrete, Class "A"	Cu. Yds.	68.6
Concrete, Class "AA"	Cu. Yds.	66.2
Steel Reinforcement	Lbs.	21,635

B.S.P. over I-65 Sheet 23

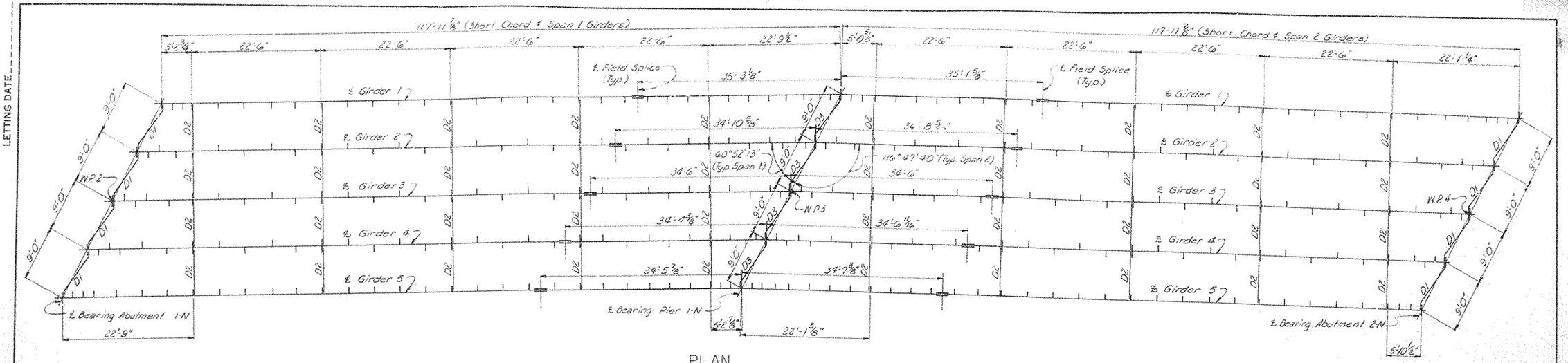
ABUTMENT 2-S

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN—SOMERSET PKWY.
ROAD
STATION 106+38.75 **P. E. PROJECT NO.**

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18224

BRIDGE

LETTING DATE



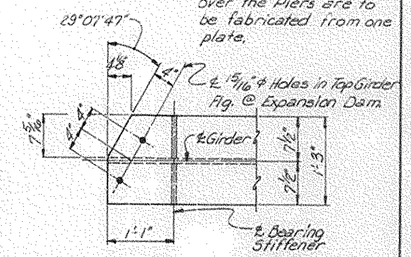
PLAN

NOTE: Stiffener Spacings are C. to C. of Stiffeners and are cumulative from left to right as shown in table. Stiffeners shall be placed on sides of webs as shown in plan above.

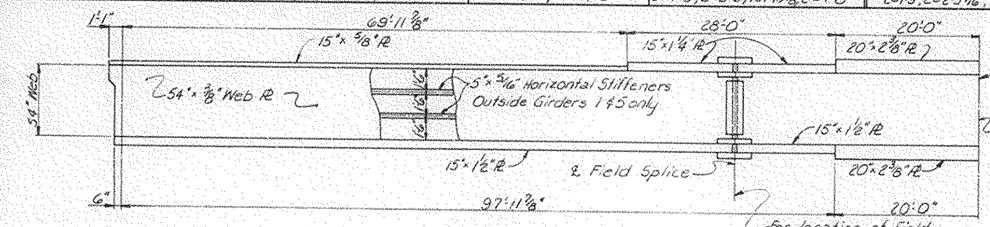
TABLE OF ELEVATIONS

Stiffener to Flange Weld	Bottom	(SPAN 1) Top	Top & Bottom	Bottom	Bottom	(SPAN 2) Top & Bottom	Top	Bottom	GIRDER LENGTH
Girder 1	℄ Brg.	1@1'-8 3/16", 2@1'-9", 14@4'-6"	1@4'-6", 3@4'-0", 2@3'-6"	4@3'-6", 2@3'-0", 1@2'-9 5/16", 2@1'-9"	2@1'-9", 1@2'-4 5/16", 3@3'-6", 2@4'-0"	1@4'-0", 4@4'-6"	1@4'-6", 1@4'-0", 1@3'-7 5/16", 3@1'-10"	℄ Brg.	117'-11 7/8"-117'-11 7/8" Continuous
Girder 2	℄ Brg.	2@2'-0", 2@2'-9 5/16", 13@4'-6"	2@4'-6", 3@4'-0", 1@3'-6"	5@3'-6", 2@2'-2 5/16", 2@1'-9"	2@1'-9", 1@2'-11 5/16", 4@3'-6", 1@4'-0"	2@4'-0", 3@4'-6"	1@4'-6", 1@3'-6", 3@1'-10 9/16"	℄ Brg.	117'-11 7/8"-117'-11 7/8" Continuous
Girder 3	℄ Brg.	1@1'-11 7/8", 2@2'-0", 2@4'-0", 12@4'-6"	3@4'-6", 3@4'-0"	6@3'-6", 2@1'-9"	2@1'-9", 6@3'-6"	3@4'-0", 2@4'-6"	1@4'-6", 1@4'-2 7/8", 3@1'-9"	℄ Brg.	117'-11 7/8"-117'-11 7/8" Continuous
Girder 4	℄ Brg.	3@1'-9", 1@4'-0", 14@4'-6"	3@4'-6", 2@4'-0"	1@4'-0", 4@3'-6", 1@2'-7 7/8", 2@1'-9"	2@1'-9", 1@2'-0", 1@2'-0 9/16", 5@3'-6"	1@3'-6", 3@4'-0", 1@4'-6"	1@4'-6", 1@1'-11 9/16", 2@1'-9"	℄ Brg.	117'-11 7/8"-117'-11 7/8" Continuous
Girder 5	℄ Brg.	3@1'-9", 1@4'-0", 13@4'-6"	5@4'-6", 1@4'-0"	2@4'-0", 3@3'-6", 1@1'-10 9/16", 2@1'-8"	2@1'-9", 2@2'-3 11/16", 4@3'-6"	3@3'-6", 3@4'-0"	1@5'-7 1/16", 3@1'-11 7/8"	℄ Brg.	117'-11 7/8"-117'-11 7/8" Continuous

NOTE: The 2 3/8" × 20" Flange Pls over the Piers are to be fabricated from one plate.

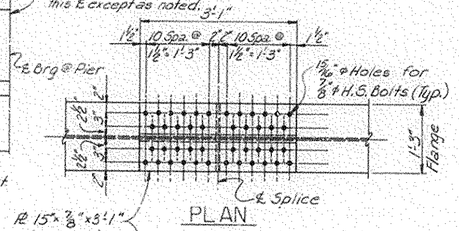


END OF TOP FLANGE
(@ Abut. 1)



GIRDER ELEVATION

NOTE: For Intermediate Stiffener Spacing see Table above. For Shear Connector Spacing see Sheet 25.

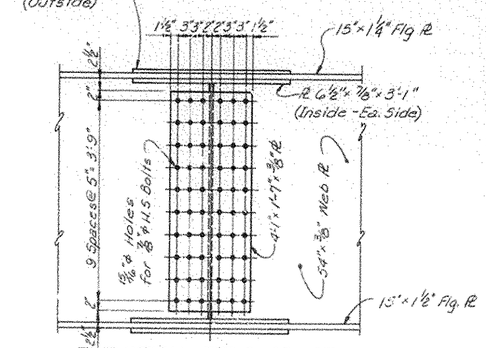


PLAN

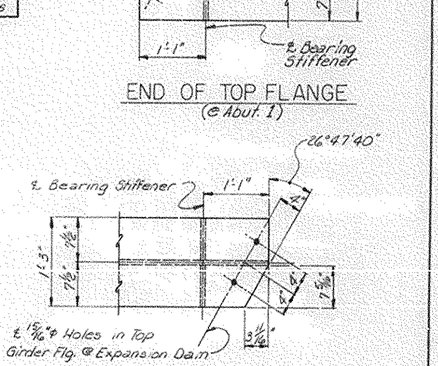
NOTE:
Each span is divided into ten (10) equal spaces. Total Web Camber plus offset due to Vertical Curve is to be cut into Web. Ordinates are symmetrical about ℄ Pier.

WEB CAMBER

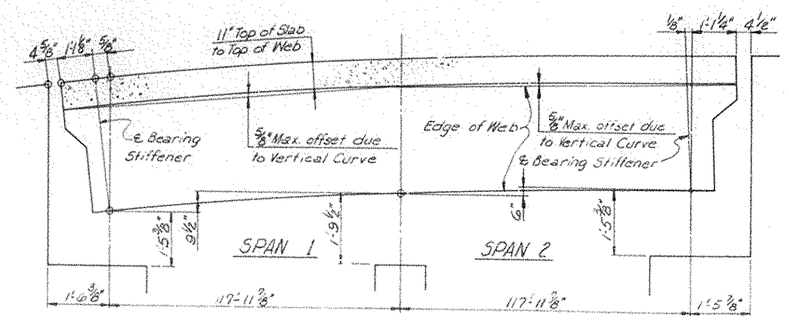
Point	DLs	DLc	DLT	Super Corr	Total
Abut.	0	0	0	0	0
.1	5/8"	1/8"	3/4"	-1/8"	5/8"
.2	1 1/8"	1/4"	1 3/8"	-1/4"	1 1/8"
.3	1 1/16"	3/8"	1 3/16"	-3/8"	1 1/16"
.4	1 5/8"	7/16"	2 1/16"	-3/8"	1 11/16"
.5	1 1/2"	7/16"	1 15/16"	-7/16"	1 1/2"
.6	1 1/4"	9/16"	1 5/8"	-3/8"	1 1/4"
.7	7/8"	1/4"	1 1/8"	-3/8"	3/4"
.8	1/2"	1/8"	5/8"	-1/4"	3/8"
.9	1/8"	0	1/8"	-1/8"	0
Pier	0	0	0	0	0



ELEVATION FIELD SPLICE



END OF TOP FLANGE
(@ Abut. 2)



BLOCKING DIAGRAM

NORTH BRIDGE
STRUCTURAL STEEL

B.S.R. over I-65 — Sheet 24

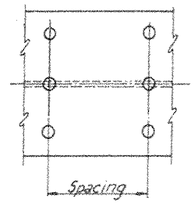
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN — SOMERSET PKWY.
ROAD
STATION 106+38.75 **P.E. PROJECT NO.**

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18224

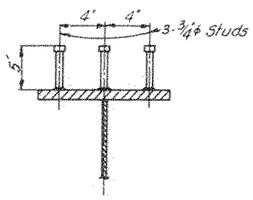
DESIGNED BY A.E. CHECKED BY D.G.M. DATE 4/70 REVISED
DRAWN BY D.K.G. CHECKED BY D.G.M. DATE 4/70 REVISED
TRACED BY DATE REVISED

BRIDGE

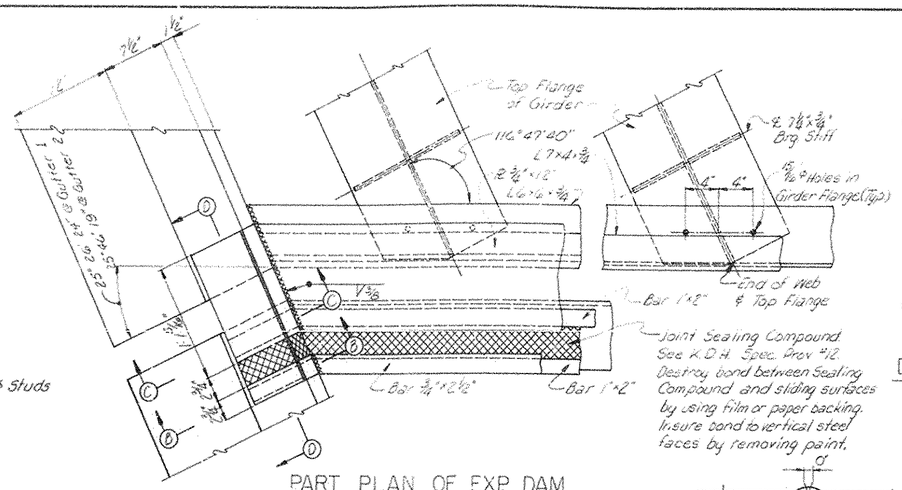
FED. ROAD DIST	STATE	FED AID PRO. NO.	FISCAL YEARS	SHEET NO.	TOTAL SHEETS
7	KY.				



PLAN

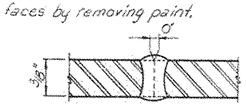


SECTION

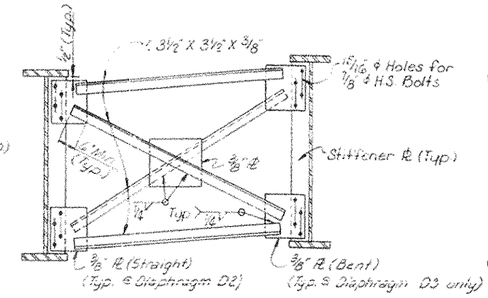


PART PLAN OF EXP. DAM
(@ Abut 2)

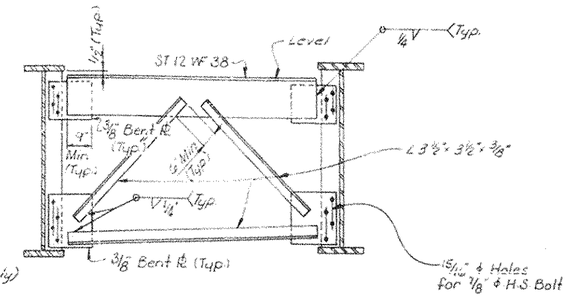
NOTE: For additional Expansion Dam Details see Sheet 26.



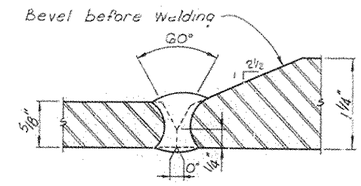
AWS B-L1-S
Shop Web Splice



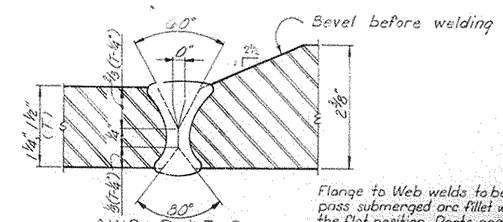
DIAPHRAGM D2 OR D3



DIAPHRAGM D1

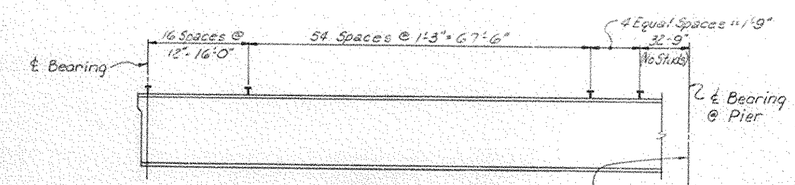


AWS B-L2b-S
Shop Flange Splice

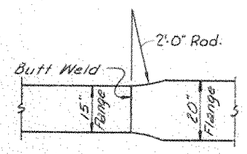


AWS B-L3-S
Shop Flange Splice

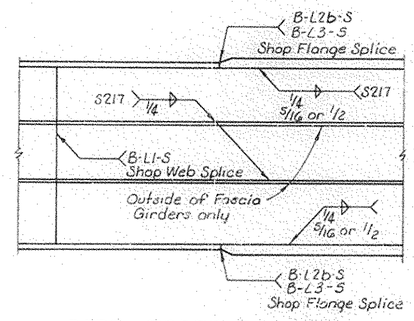
Flange to Web welds to be single pass submerged arc fillet welds in the flat position. Parts are to be assembled with edge of web PL tight against flange PL before welding.



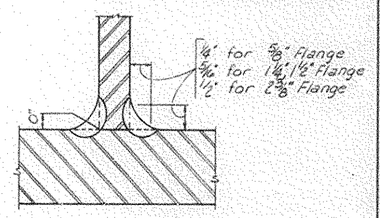
SHEAR CONNECTOR SPACING



FLANGE PL WIDTH TRANSITION

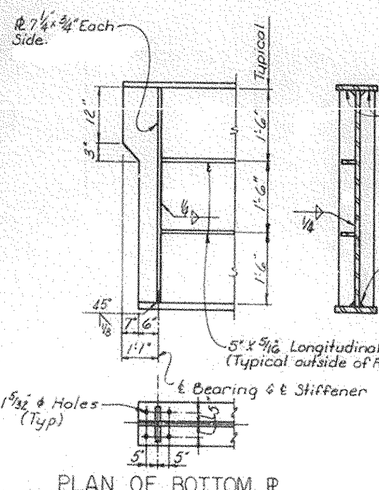


PART GIRDER ELEVATION
(Showing Welds)

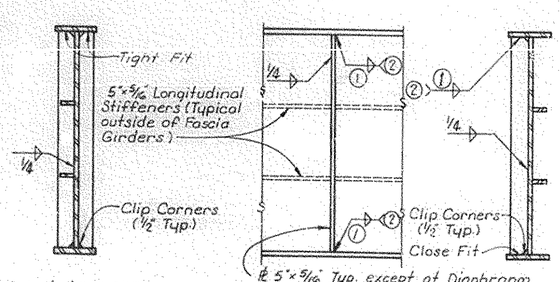


FLANGE TO WEB WELD

Note: See American Welding Society Specifications for welded Highway & Railway Bridges 1966 Edition for prequalified welds shown here.



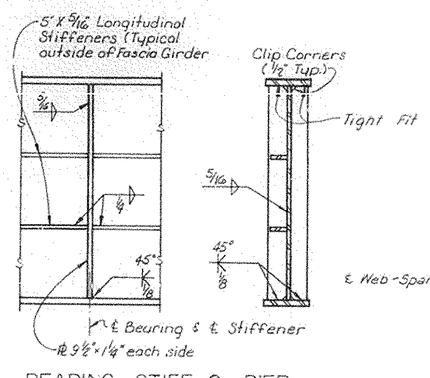
PLAN OF BOTTOM PL
BEARING STIFF @ ABUTMENT



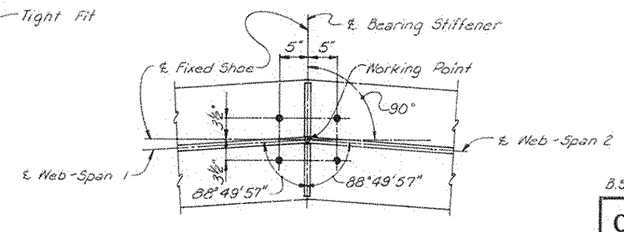
① 1/4" Fillet Weld for 5/8" Flange
5/16" Fillet Weld for 1 1/4", 1 1/2" Flange
1/2" Fillet Weld for 2 3/8" Flange

② See Stiffener Table for location.

INTERMEDIATE STIFFENER



BEARING STIFF @ PIER



BOTTOM FLANGE DETAIL
(@ Pier)

NORTH BRIDGE
STRUCTURAL STEEL DETAILS

B.S.P. over I-65 Sheet 25

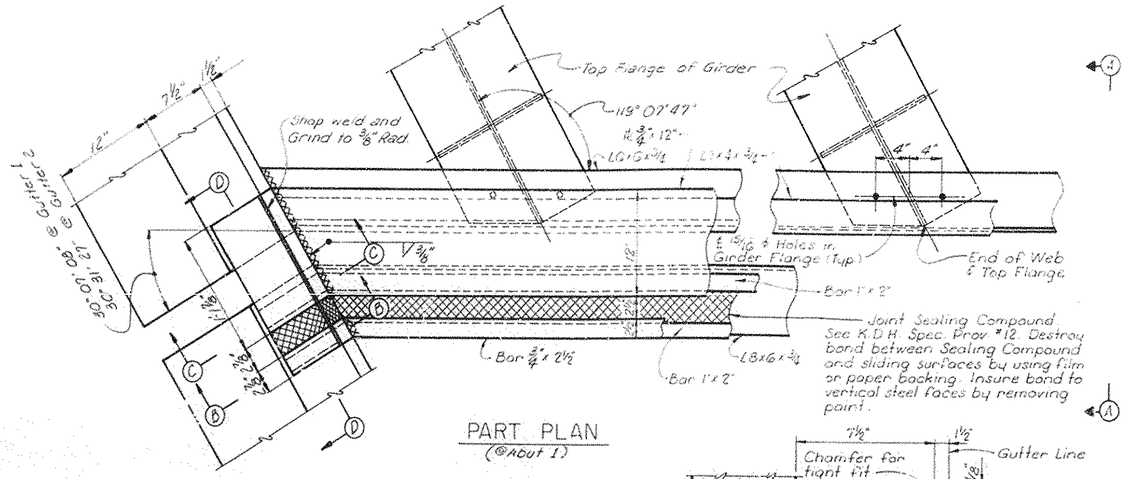
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN-SOMERSET PKWY.
ROAD
STATION 106+38.75 **PROJECT NO.**

BRIDGE NUMBER	DRAWING NO.	INDEX
	18224	

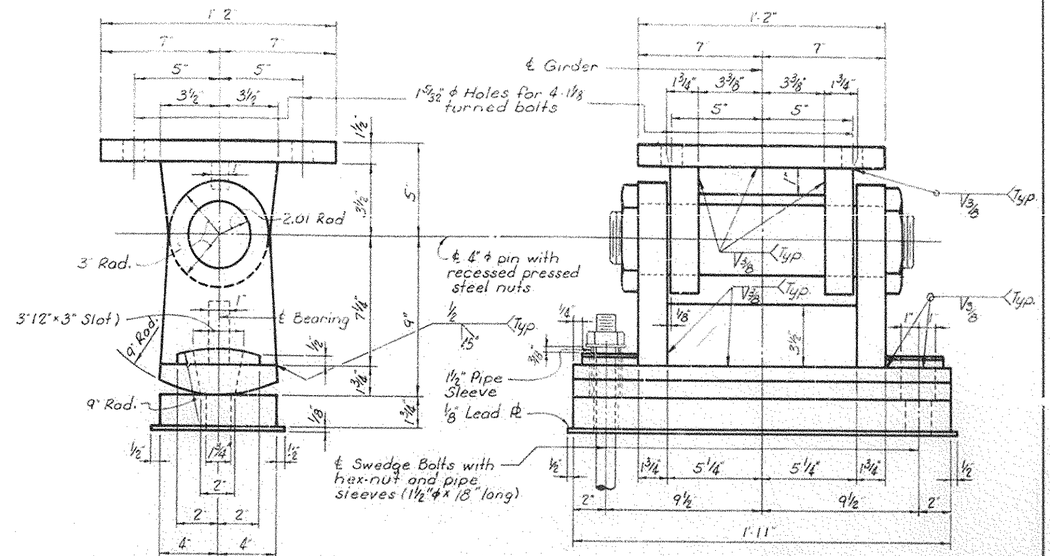
DESIGNED BY J.E.	DATE 4/70	REVISED	
DETAILED BY D.G.M.	DATE 4/70	REVISED	
CHECKED BY D.G.M.	DATE	REVISED	
CHECKED BY D.W.G.	DATE	REVISED	

BRIDGE

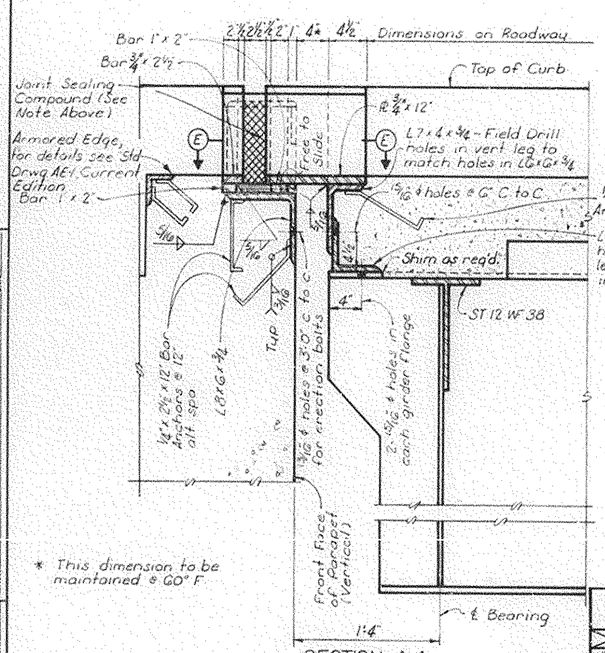
FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



PART PLAN
(About 1)

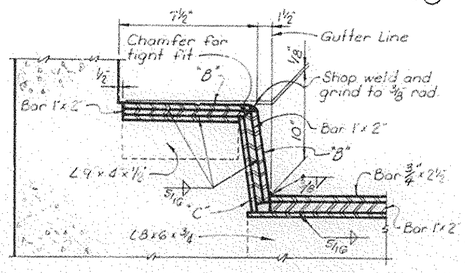


EXPANSION ROCKER (ER1)
(10 Required)

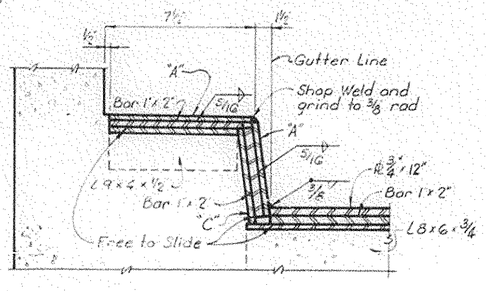


SECTION A-A

* This dimension to be maintained @ 60° F.

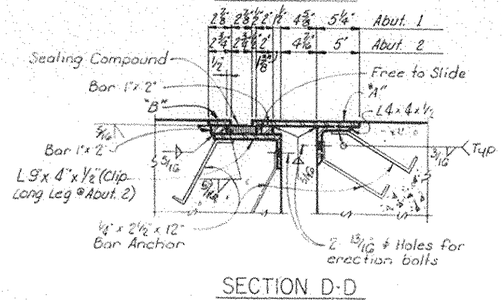


SECTION B-B

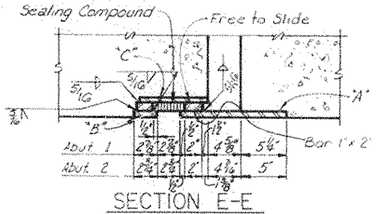


SECTION C-C

TABLE OF PLATE & BAR DIMENSIONS		
	About 1	About 2
"A"	PL 3/4" x 1-1 5/16"	PL 3/4" x 1-1 5/16"
"B"	Bar 3/4" x 2 1/2"	Bar 3/4" x 2 3/4"
"C"	PL 3/4" x 3"	PL 3/4" x 8 1/2"

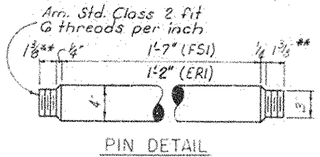


SECTION D-D



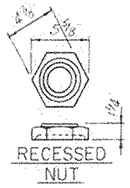
SECTION E-E

℄ 1 3/4" ϕ Holes for 1 1/2" Anchor Swedge Bolts with one Hex Nut heavy and one washer. Set Anchor Bolts 1'-5" into masonry. 4 Anchor Bolts required.

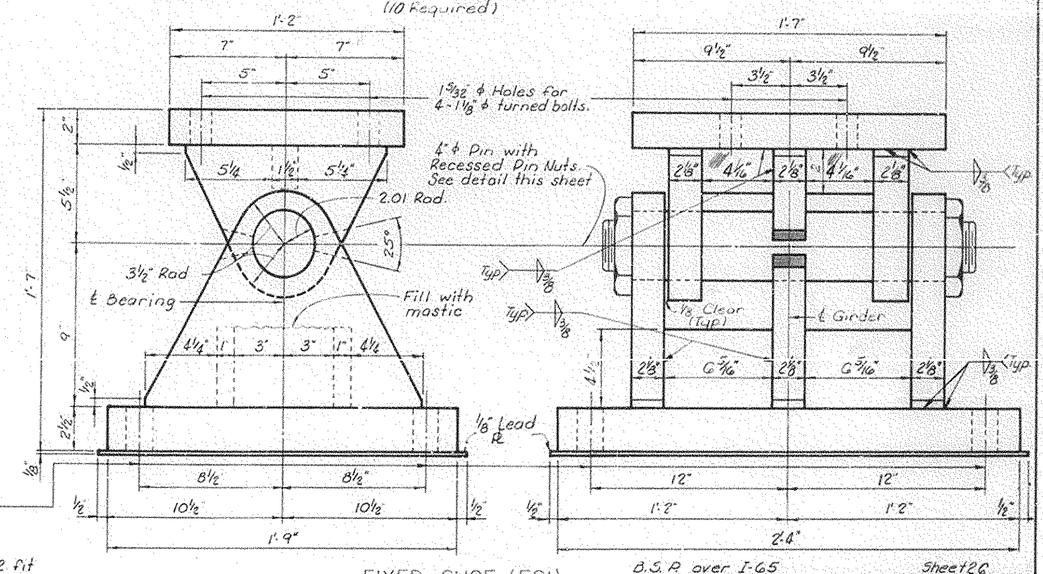


PIN DETAIL

** Secure Nut with cotter pin or provide enough length of threads to burn the threads after erection.



RECESSED NUT



FIXED SHOE (FS1)
(5 Required)

B.S.R. over I-65

Sheet 26

STEEL SURFACE FINISH SPECS.

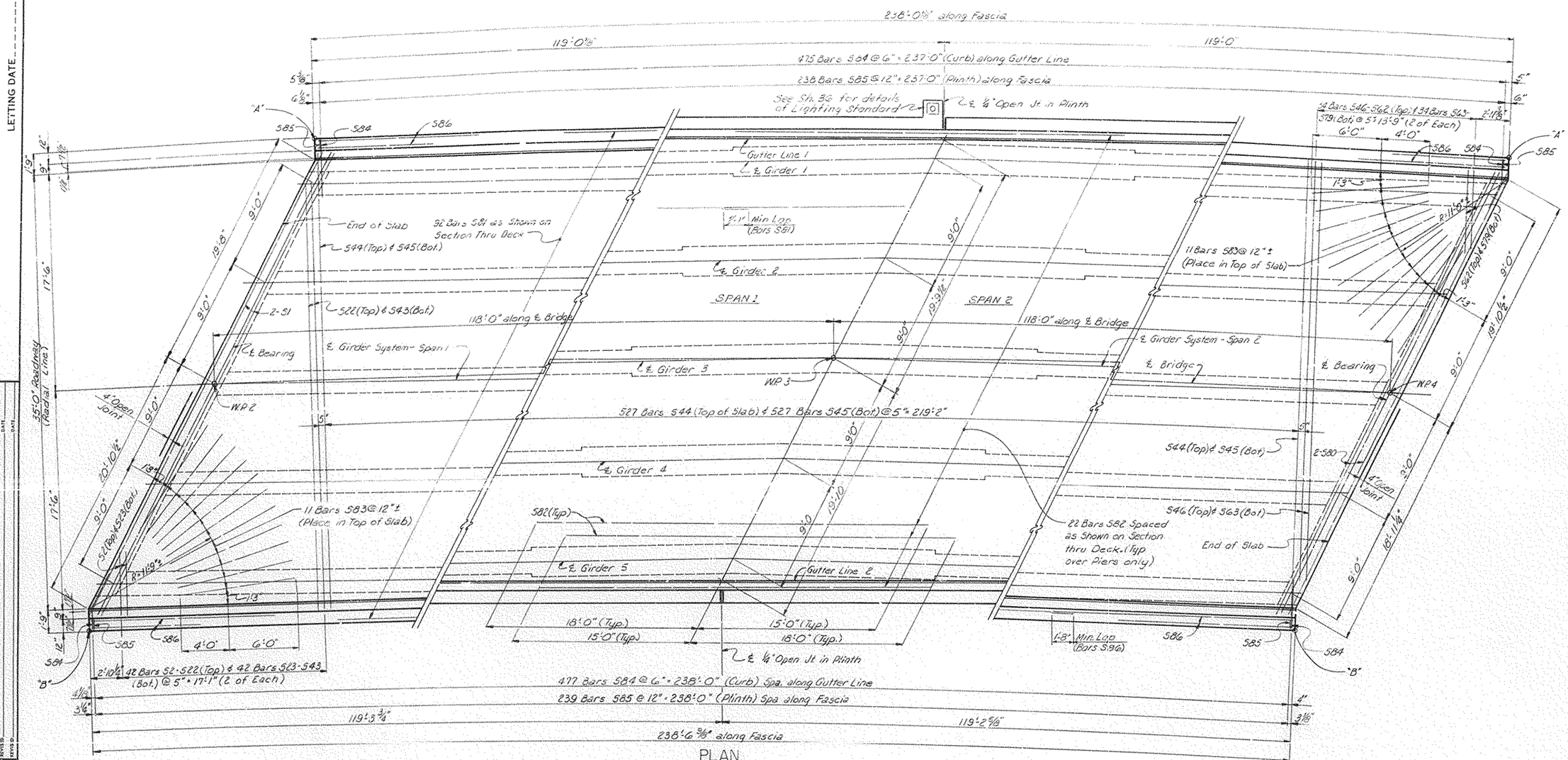
Steel Slabs	ASA 2000
Heavy PLs in contact in shoes to be welded.	ASA 1000
Milled Ends of compression members, Stiffs., & Fillers	ASA 500
Bridge Rollers & Rockers	ASA 250
Pins and pin holes	ASA 125

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN—SOMERSET PKWY.
ROAD
STATION 106+38.75 PROJECT NO.
BRIDGE NUMBER
DRAWING NO. 18224
INDEX

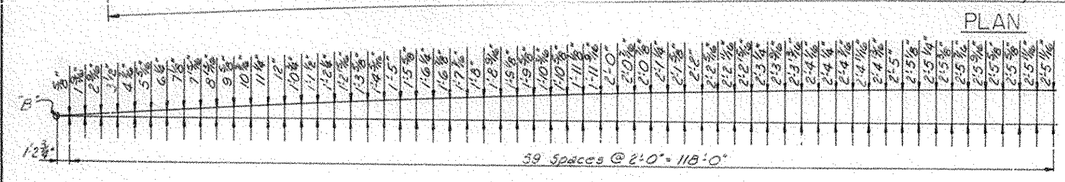
DESIGNED BY A.F. DATE
DETAILED BY D.H.G. DATE 5-70 REVISED DATE
TRACED BY CHECKED BY D.G.M. DATE 5-70 REVISED DATE
CHECKED BY D.G.M. DATE REVISED DATE

EXPANSION DAM & BEARING ASSEMBLIES—NORTH BRIDGE

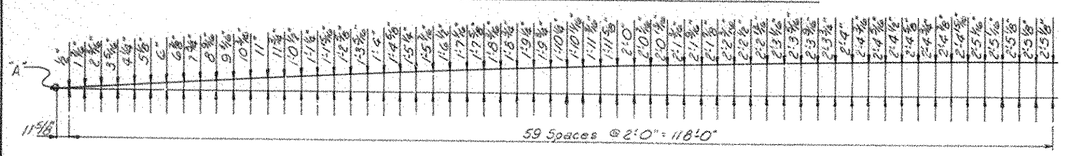
BRIDGE



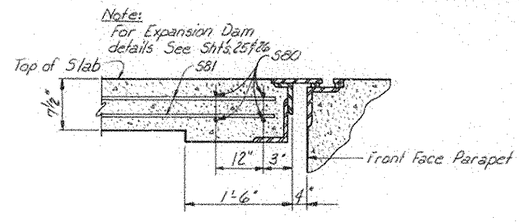
PLAN



CURVE OFFSETS – RIGHT FASCIA



CURVE OFFSETS – LEFT FASCIA



SECTION A-A

NORTH BRIDGE
SUPERSTRUCTURE

B.S.R. over I-65 — Sheet 27

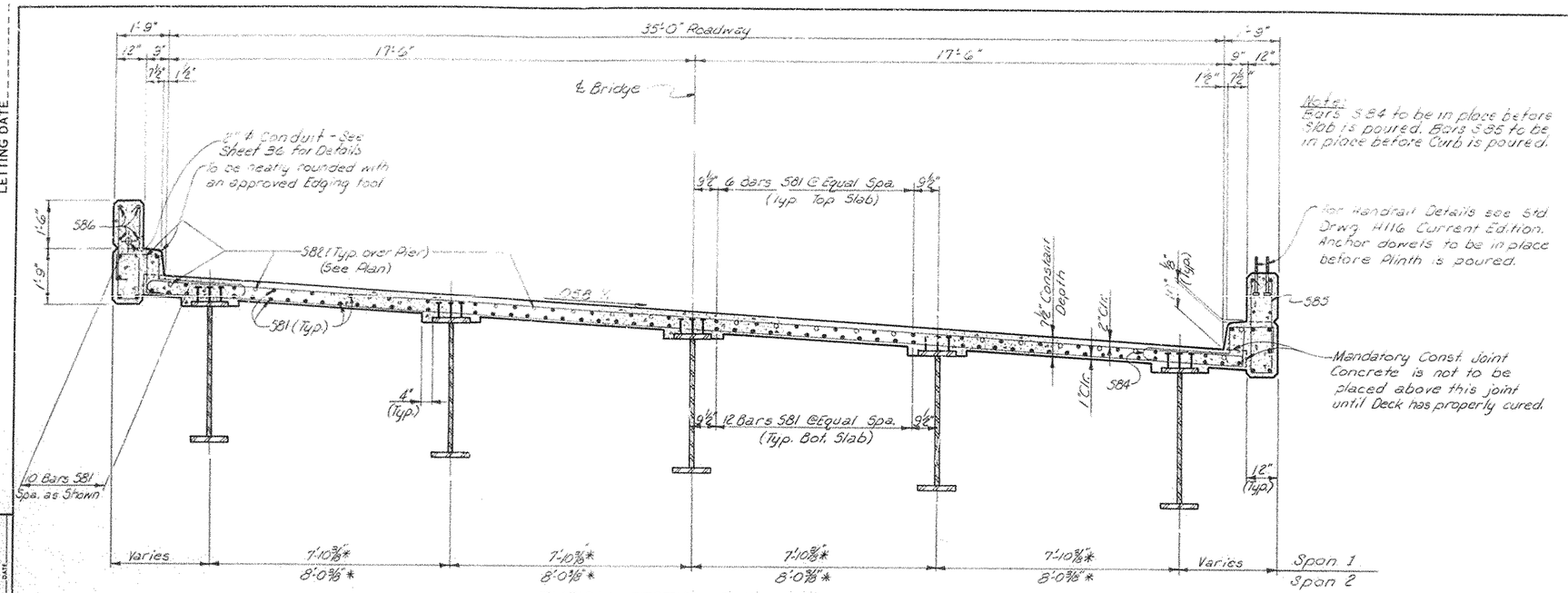
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN–SOMERSET PKWY.
ROAD
STATION 100+38.75 — **P.E. PROJECT NO.**

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18224

LETTING DATE

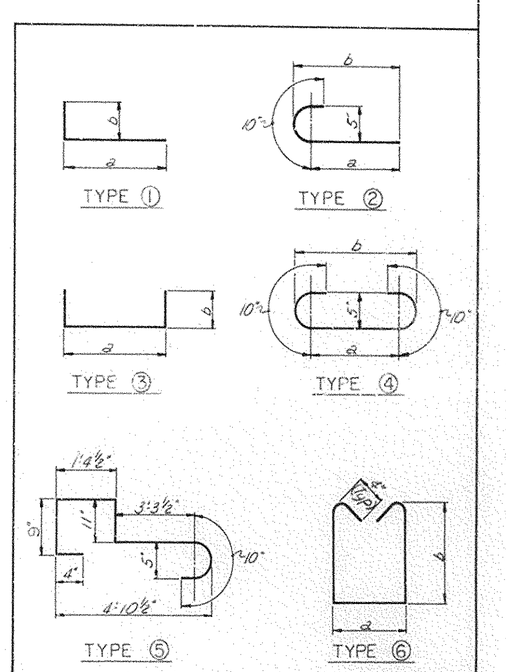
DESIGNED BY A.F. — CHECKED BY DGM — DATE 5-70
DETAILED BY D.N.G. — CHECKED BY DGM — DATE 5-70
TRACED BY — CHECKED BY — DATE
REVISED — REVISED — REVISED
DATE — DATE — DATE

BRIDGE



TYPICAL SECTION THRU DECK

*(Indicates Dimensions normal to Girders in particular span.)



BILL OF REINFORCEMENT

Mark	Type	No.	Size	Length Ft.	Length In.	Location	a Ft.	a In.	b Ft.	b In.
S1	Str.	4	#5	41	6	Slab				
S2	2	2	#5	6	0	"	5	2	5	4½
S3	2	2	#5	7	5	"	6	7	6	9½
S4	2	2	#5	8	11	"	8	1	8	3½
S5	2	2	#5	10	4	"	9	6	9	8½
S6	2	2	#5	11	9	"	10	11	11	1½
S7	2	2	#5	13	2	"	12	4	12	6½
S8	2	2	#5	14	7	"	13	9	13	11½
S9	2	2	#5	16	0	"	15	2	15	4½
S10	2	2	#5	17	6	"	16	8	16	10½
S11	2	2	#5	18	11	"	18	1	18	3½
S12	2	2	#5	20	4	"	19	6	19	8½
S13	2	2	#5	21	9	"	20	11	21	1½
S14	2	2	#5	23	2	"	22	4	22	6½
S15	2	2	#5	24	7	"	23	9	23	11½
S16	2	2	#5	26	1	"	25	3	25	5½
S17	2	2	#5	27	7	"	26	9	26	11½
S18	2	2	#5	29	0	"	28	2	28	4½
S19	2	2	#5	30	5	"	29	7	29	9½
S20	2	2	#5	30	10	"	30	0	31	2½
S21	2	2	#5	33	4	"	32	6	32	8½
S22	2	2	#5	34	9	"	33	11	34	1½
S23	1	2	#5	6	7	"	5	5	1	2
S24	1	2	#5	8	0	"	6	10	1	2
S25	1	2	#5	9	6	"	8	4	1	2
S26	1	2	#5	10	11	"	9	9	1	2
S27	1	2	#5	12	4	"	11	2	1	2
S28	1	2	#5	13	9	"	12	7	1	2
S29	1	2	#5	15	2	"	14	0	1	2
S30	1	2	#5	16	7	"	15	5	1	2
S31	1	2	#5	18	1	"	16	11	1	2
S32	1	2	#5	19	6	"	18	2	1	2
S33	1	2	#5	20	11	"	19	9	1	2
S34	1	2	#5	22	4	"	21	2	1	2
S35	1	2	#5	23	9	"	22	7	1	2
S36	1	2	#5	25	2	"	24	0	1	2
S37	1	2	#5	26	8	"	25	6	1	2
S38	1	2	#5	28	2	"	27	0	1	2
S39	1	2	#5	29	7	"	28	5	1	2

Mark	Type	No.	Size	Length Ft.	Length In.	Location	a Ft.	a In.	b Ft.	b In.
S40	1	2	#5	31	0	Slab	29	10	1	2
S41	1	2	#5	32	5	"	31	3	1	2
S42	1	2	#5	33	11	"	32	9	1	2
S43	1	2	#5	35	4	"	34	2	1	2
S44	4	527	#5	37	5	"	35	9	36	2
S45	3	527	#5	38	5	"	36	2	1	2
S46	2	2	#5	6	8	"	5	10	6	0½
S47	2	2	#5	8	4	"	7	6	7	8½
S48	2	2	#5	10	1	"	9	3	9	5½
S49	2	2	#5	11	10	"	11	0	11	2½
S50	2	2	#5	13	7	"	12	9	12	11½
S51	2	2	#5	15	4	"	14	6	14	8½
S52	2	2	#5	17	1	"	16	3	16	5½
S53	2	2	#5	18	9	"	17	11	18	1½
S54	2	2	#5	20	6	"	19	8	19	10½
S55	2	2	#5	22	3	"	21	5	21	7½
S56	2	2	#5	24	0	"	23	2	23	4½
S57	2	2	#5	25	9	"	24	11	25	1½
S58	2	2	#5	27	6	"	26	8	26	10½
S59	2	2	#5	29	2	"	28	4	28	6½
S60	2	2	#5	30	11	"	30	1	30	3½
S61	2	2	#5	32	8	"	31	10	32	0½
S62	2	2	#5	34	5	"	33	7	33	9½
S63	1	2	#5	7	3	"	6	1	1	2
S64	1	2	#5	8	11	"	7	9	1	2
S65	1	2	#5	10	8	"	9	6	1	2
S66	1	2	#5	12	5	"	11	3	1	2
S67	1	2	#5	14	2	"	13	0	1	2
S68	1	2	#5	15	11	"	14	9	1	2
S69	1	2	#5	17	8	"	16	6	1	2
S70	1	2	#5	19	4	"	18	2	1	2
S71	1	2	#5	21	1	"	19	11	1	2
S72	1	2	#5	22	10	"	21	8	1	2
S73	1	2	#5	24	7	"	23	5	1	2
S74	1	2	#5	26	4	"	25	2	1	2
S75	1	2	#5	28	1	"	26	11	1	2
S76	1	2	#5	29	9	"	28	7	1	2
S77	1	2	#5	31	6	"	30	4	1	2
S78	1	2	#5	33	3	"	32	1	1	2

Mark	Type	No.	Size	Length Ft.	Length In.	Location	a Ft.	a In.	b Ft.	b In.
S79	1	2	#5	35	0	Slab	33	10	1	2
S80	Str.	4	#5	40	0	"				
S81	Str.	644	#5	36	2	"				
S82	Str.	24	#8	33	0	Slab over Pier				
S83	Str.	22	#6	10	0	Acute Corners of Slab				
S84	5	952	#5	7	5	Curbs				
S85	6	477	#5	7	3	Plinths	0	9	3	0
S86	Str.	64	#4	31	1	Plinths				

ESTIMATE OF QUANTITIES *

Item		Quantity
Concrete, Class "AA"	Cu. Yds.	290.9
Steel Reinforcement	Lbs.	84,420

* Concrete & Reinforcement Quantities include Materials for Lighting Standards as shown on Sheet 36

B.S.P. over I-65

Sheet 28

NORTH BRIDGE
SUPERSTRUCTURE

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN — SOMERSET PKWY.
ROAD
STATION 106+38.75 **P.E. PROJECT NO.**

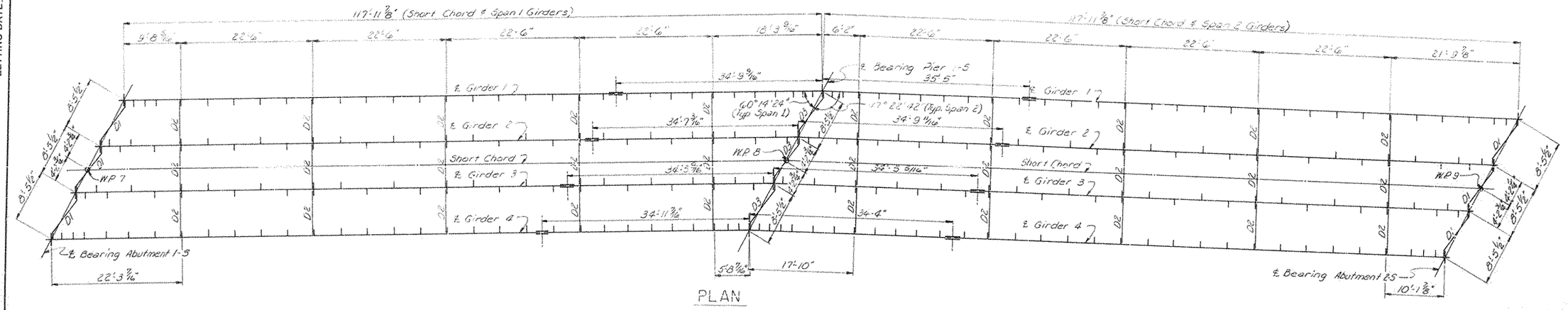
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18224

LETTING DATE

DESIGNED BY A.F. CHECKED BY D.G.M. DATE 5-70
DETAILED BY D.N.G. CHECKED BY D.G.M. DATE 5-70
TRACED BY DATE REVISED DATE REVISED DATE REVISED

BRIDGE

LETTING DATE



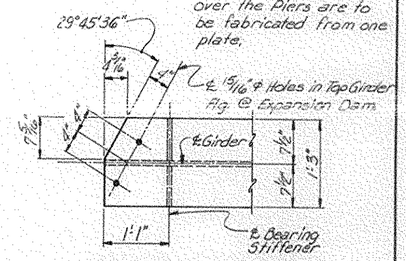
PLAN

NOTE: Stiffener Spacings are C. to C. of Stiffeners and are cumulative from left to right as shown in table. Stiffeners shall be placed on sides of webs as shown in plan above.

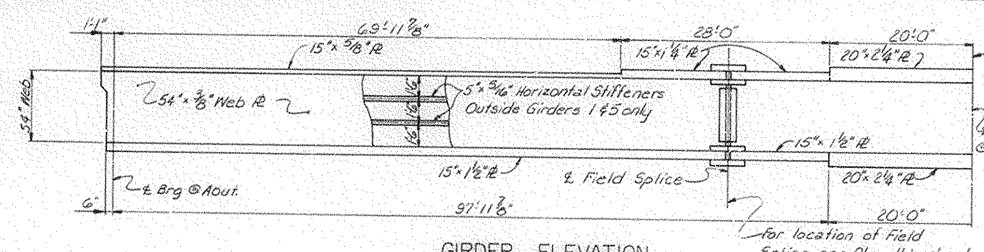
TABLE OF ELEVATIONS

Stiffener to Flange Weld	(SPAN 1) Bottom	Top	Top & Bottom	Bottom	(SPAN 2) Bottom	Top & Bottom	Top	Bottom	
Girder 1	℄ Brg.	3@1'-10 7/16", 1@4'-11 7/16", 13@4'-6"	2@4'-6", 3@4'-0"	6@3'-6", 1@3'-0 9/16", 3@1'-7"	2@1'-9", 1@2'-6", 3@3'-6", 2@4'-0"	1@4'-0", 4@4'-6"	14@4'-6", 1@4'-3 1/8", 2@2'-0"	℄ Brg.	117'-11 7/8"-117'-11 7/8" Continuous
Girder 2	℄ Brg.	3@1'-9 9/16", 1@4'-0", 13@4'-6"	3@4'-6", 2@4'-0"	10@4'-0", 6@3'-6", 1@1'-9 9/16", 1@1'-9 9/16"	2@1'-9", 1@3'-0 11/16", 4@3'-6", 1@4'-0"	2@4'-0", 3@4'-6"	14@4'-6", 1@2'-11 9/16", 3@2'-0"	℄ Brg.	117'-11 7/8"-117'-11 7/8" Continuous
Girder 3	℄ Brg.	3@1'-10 9/16", 2@4'-0 11/16", 12@4'-6"	4@4'-6", 1@4'-0"	2@4'-0", 4@3'-6", 1@3'-0 9/16", 2@1'-8"	1@1'-8 5/16", 1@1'-9", 6@3'-6"	3@4'-0", 2@4'-6"	14@4'-6", 1@4'-0 9/16", 3@1'-10"	℄ Brg.	117'-11 7/8"-117'-11 7/8" Continuous
Girder 4	℄ Brg.	3@1'-10 13/16", 2@3'-9 1/16", 12@4'-6"	5@4'-6"	3@4'-0", 3@3'-6", 1@2'-2 7/16", 2@1'-9"	2@1'-9", 2@1'-11", 5@3'-6"	@3'-6", 3@4'-0", 1@4'-6"	14@4'-6", 1@4'-1 7/8", 3@2'-0"	℄ Brg.	117'-11 7/8"-117'-11 7/8" Continuous

NOTE: The 2 1/4" x 20" Flange Pls over the Piers are to be fabricated from one plate.

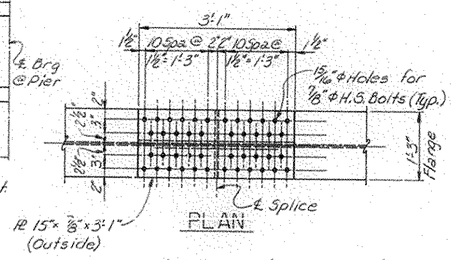


END OF TOP FLANGE
(@ Abut. 1)



GIRDER ELEVATION

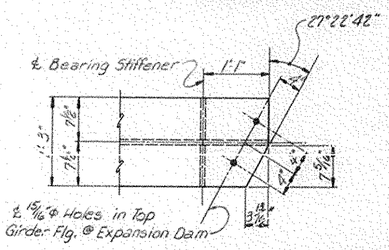
NOTE: For Intermediate Stiffener Spacing see Table above. For Shear Connector Spacing see Sheet 30



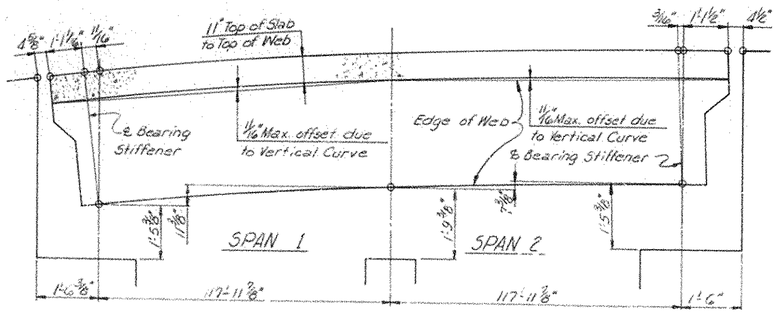
PLAN

NOTE:
Each span is divided into ten (10) equal spaces. Total Web Camber plus offset due to Vertical Curve is to be cut into Web. Ordinates are symmetrical about ℄ Pier

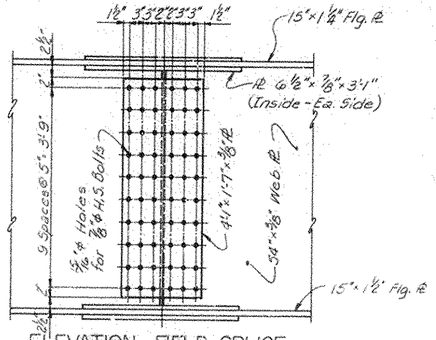
Point	WEB CAMBER DLs	DLc	DLr	Super Corr.	Total
Abut.	0	0	0	0	0
.1	1/16"	1/16"	5/16"	-1/16"	1/16"
.2	15/16"	1/4"	1 7/16"	-1/4"	15/16"
.3	1 3/16"	5/16"	1 1/2"	-3/16"	1 1/8"
.4	1 1/4"	5/16"	1 9/16"	-1/16"	1 1/8"
.5	1 3/16"	5/16"	1 1/2"	-1/16"	1 1/16"
.6	15/16"	1/4"	1 3/16"	-1/16"	3/4"
.7	5/16"	3/16"	13/16"	-3/16"	1/16"
.8	3/16"	1/16"	3/16"	-1/4"	1/16"
.9	1/16"	0	1/16"	-1/16"	-1/16
Pier	0	0	0	0	0



END OF TOP FLANGE
(@ Abut. 2)



BLOCKING DIAGRAM



ELEVATION FIELD SPLICE

SOUTH BRIDGE
STRUCTURAL STEEL

B.S.R. over I-65 Sheet 29

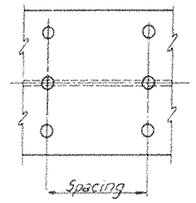
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN—SOMERSET PKWY.
ROAD
STATION 106+38.75 **P. E. PROJECT NO.**

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18224

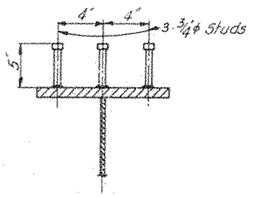
DESIGNED BY A.F. CHECKED BY D.G.M. DATE 4/70 REVISED
DETAILED BY D.H.G. CHECKED BY D.G.M. DATE 4/70 REVISED
TRACED BY CHECKED BY DATE REVISED

BRIDGE

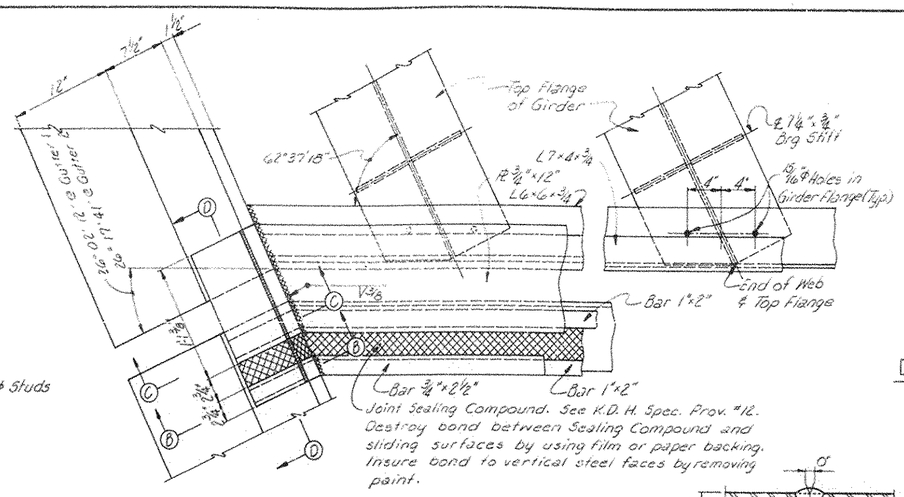
FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



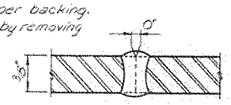
PLAN



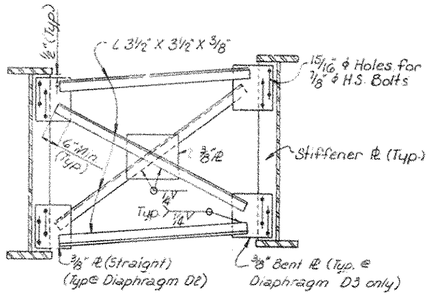
SECTION



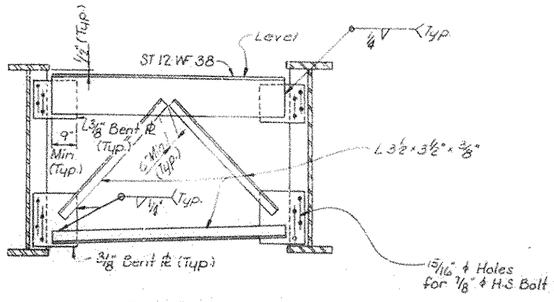
PART PLAN OF EXP. DAM
(@ Abut. 2)



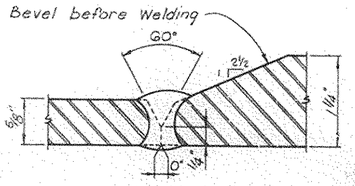
AWS B-L1-S
Shop Web Splice



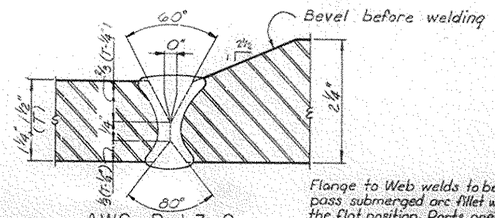
DIAPHRAGM D2 OR D3



DIAPHRAGM D1

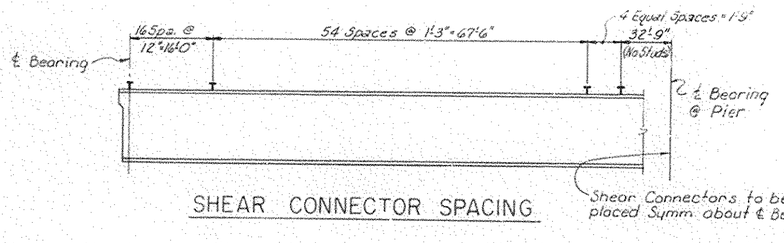


AWS B-L2b-S
Shop Flange Splice

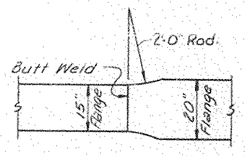


AWS B-L3-S
Shop Flange Splice

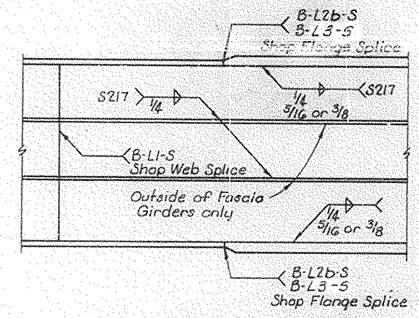
Flange to Web welds to be single pass submerged arc fillet welds in the flat position. Parts are to be assembled with edge of web PL tight against flange PL before welding.



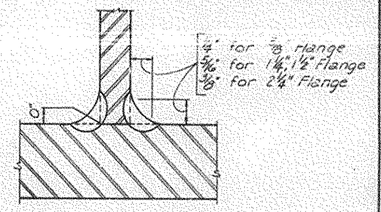
SHEAR CONNECTOR SPACING



FLANGE PL WIDTH TRANSITION

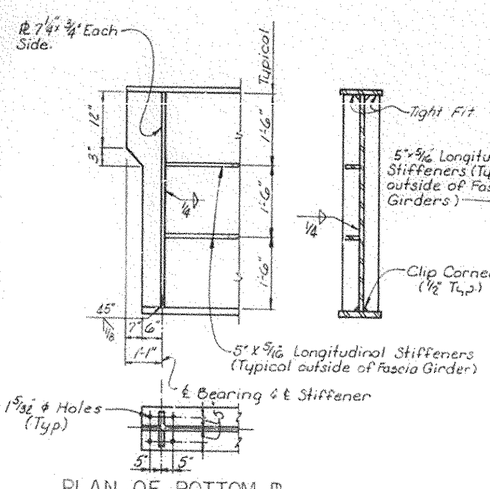


PART GIRDER ELEVATION
(Showing Welds)

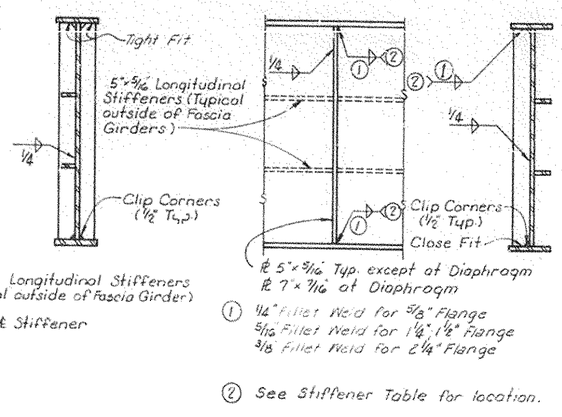


FLANGE TO WEB WELD

Note: See American Welding Society Specifications for welded Highway & Railway Bridges 1966 Edition for prequalified welds shown here.



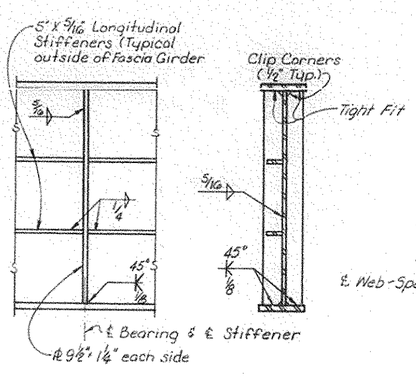
PLAN OF BOTTOM PL
BEARING STIFF. @ ABUTMENT



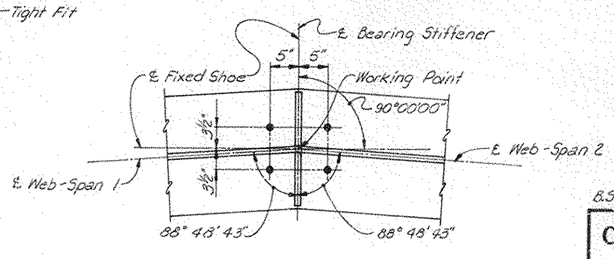
① 1/4" Fillet Weld for 5/8" Flange
5/16" Fillet Weld for 1 1/4", 1 1/2" Flange
3/8" Fillet Weld for 2 1/4" Flange

② See Stiffener Table for location.

INTERMEDIATE STIFFENER



BEARING STIFF @ PIER



BOTTOM FLANGE DETAIL
(@ Pier)

SOUTH BRIDGE
STRUCTURAL STEEL DETAILS

B.S.P. over I-65 Sheet 30

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN – SOMERSET PKWY.
ROAD

STATION 106+38.75 **PROJECT NO.**

BRIDGE NUMBER	DRAWING NO.	INDEX
	18224	

DETAILED BY A.E. DATE 4/70 REVISED DATE
CHECKED BY D.G.M. DATE 4/70 REVISED DATE
CHECKED BY D.G.M. DATE REVISED DATE
CHECKED BY J.W.S. DATE
DETAILED BY DATE

FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				

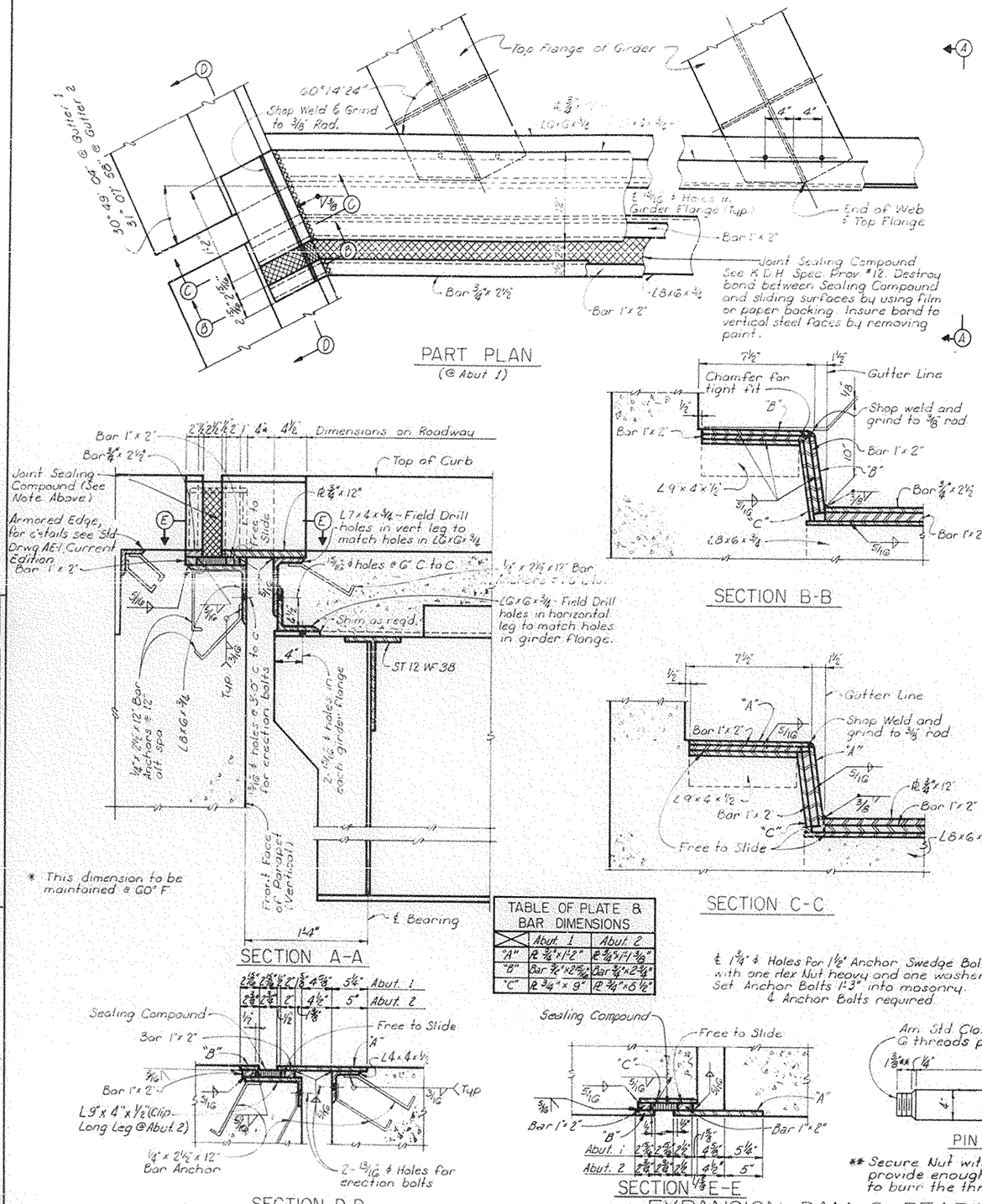
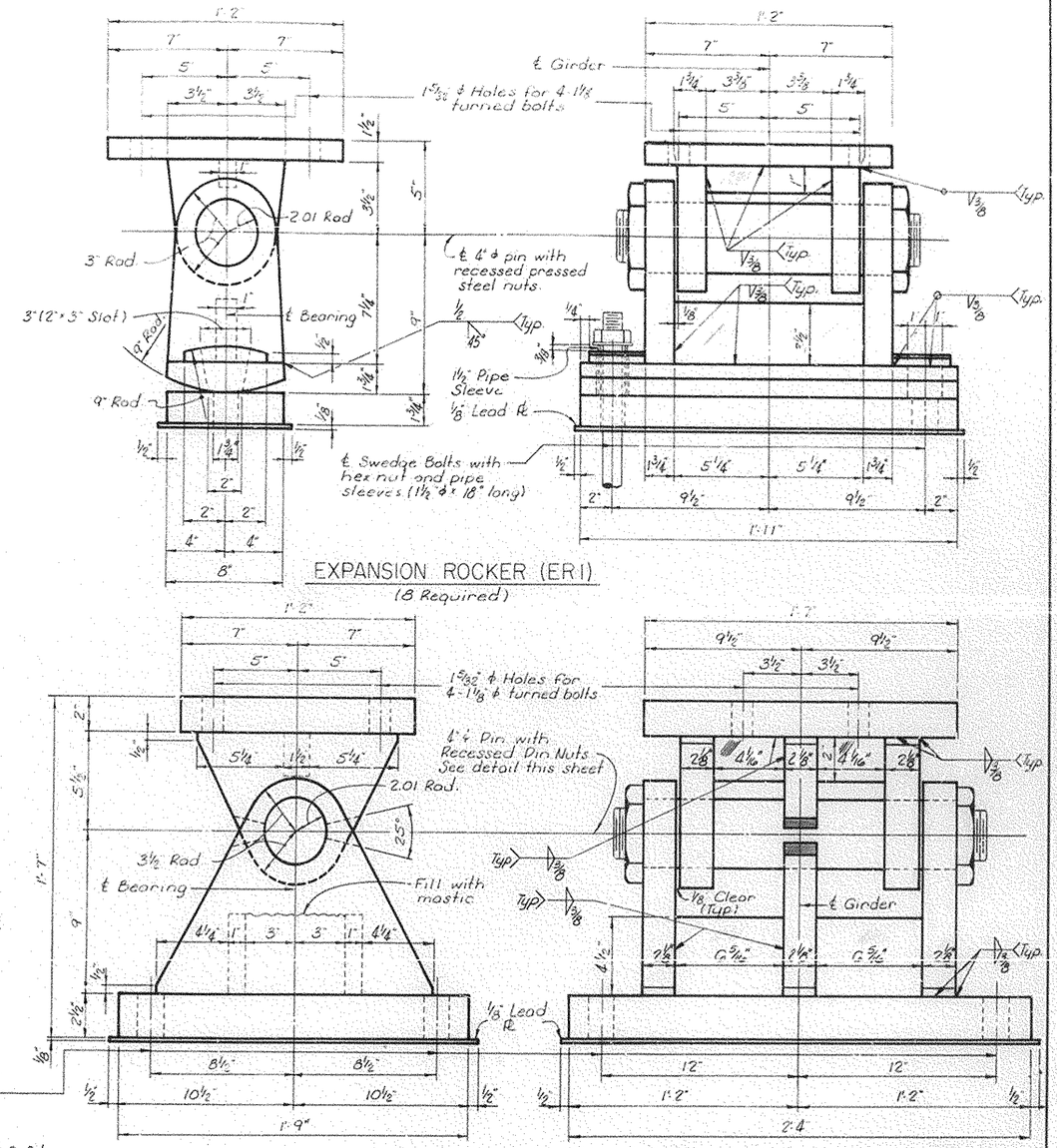
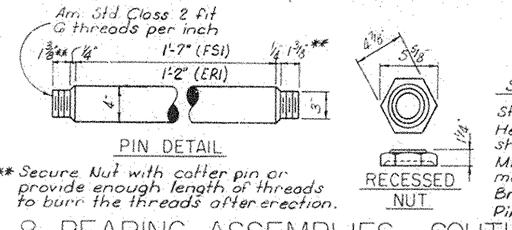


TABLE OF PLATE & BAR DIMENSIONS		
	Abut. 1	Abut. 2
"A"	PL 3/4"x1'-2"	PL 3/4"x1'-1 3/16"
"B"	Bar 3/4"x2 5/16"	Bar 3/4"x2 5/16"
"C"	PL 3/4"x 9"	PL 3/4"x 6 1/2"





STEEL SURFACE FINISH SPECS.

Steel Slabs	ASA 2000
Heavy Pls. in contact in shoes to be welded.	ASA 1000
Milled Ends of compression members, Stiffs., & Fillers	ASA 500
Bridge Rollers & Rockers	ASA 250
Pins and pin holes	ASA 125

B.S.P. over I-65 — Sheet 31

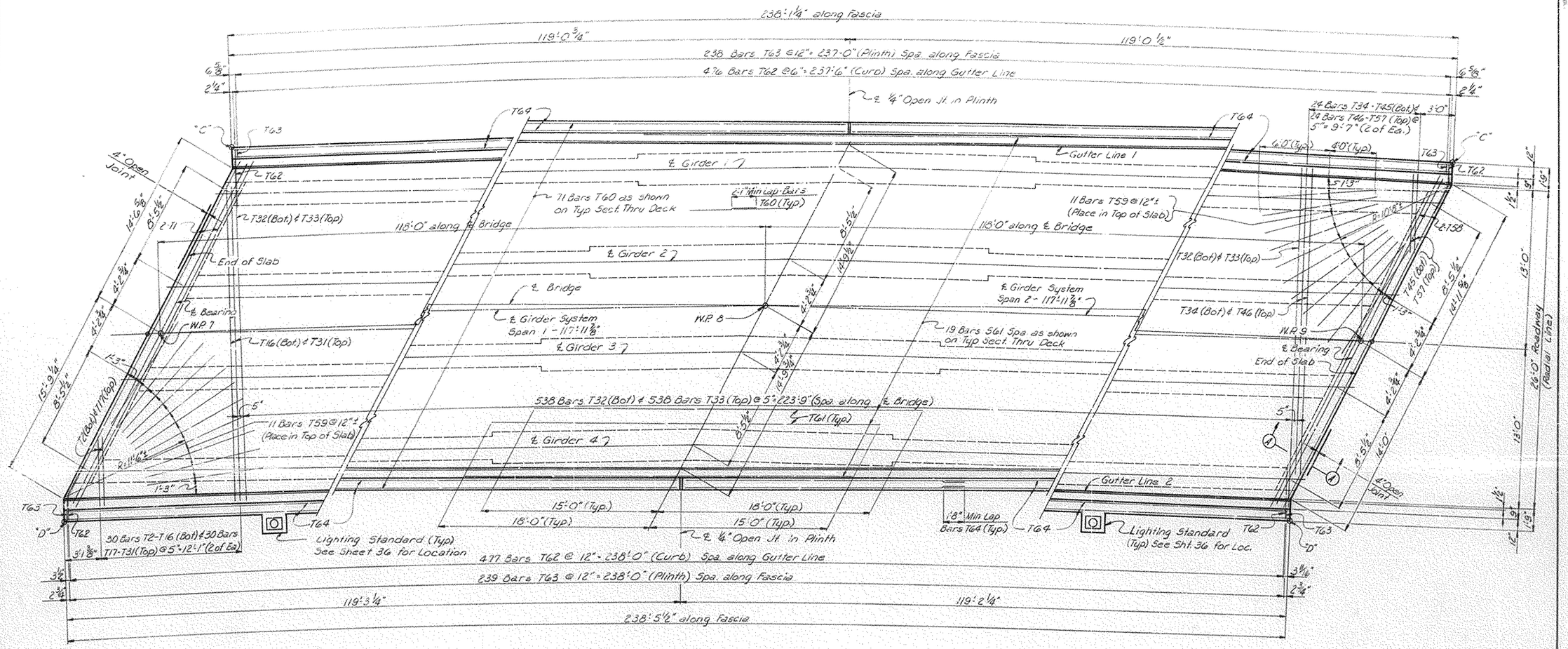
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN — SOMERSET PKWY.
ROAD
STATION 106+39.76 **PROJECT NO.**
BRIDGE NUMBER — DRAWING NO. 15224 — INDEX

DESIGNED BY A.F. DATE 4/70 REVISED DATE
DETAILED BY D.K.G. DATE 4/70 REVISED DATE
TRACED BY D.G.M. DATE 4/70 REVISED DATE
CHECKED BY DATE
CHECKED BY DATE
CHECKED BY DATE

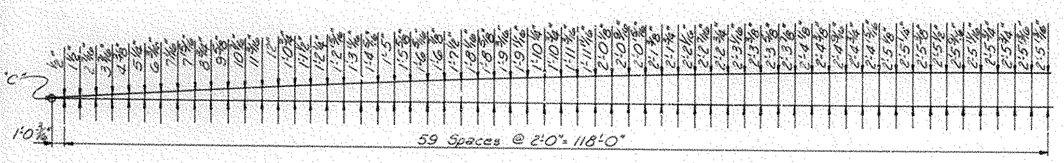
EXPANSION DAM & BEARING ASSEMBLIES — SOUTH BRIDGE

BRIDGE

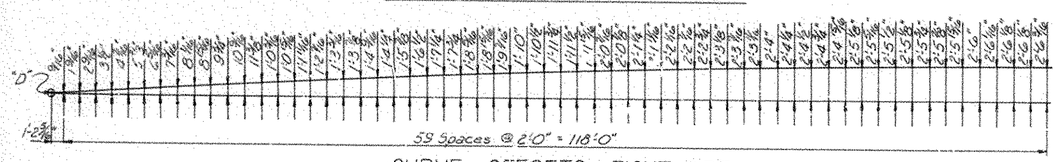
LETTING DATE



PLAN

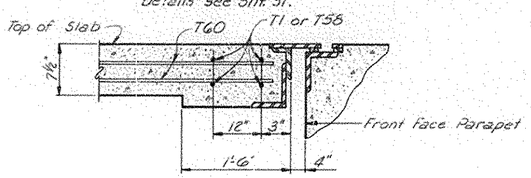


CURVE OFFSETS—LEFT SIDE



CURVE OFFSETS—RIGHT SIDE

Note:
For Expansion Dam Details see Sht. 31.



SECTION A-A

SUPERSTRUCTURE

B.S.P. over I-65 Sheet 32

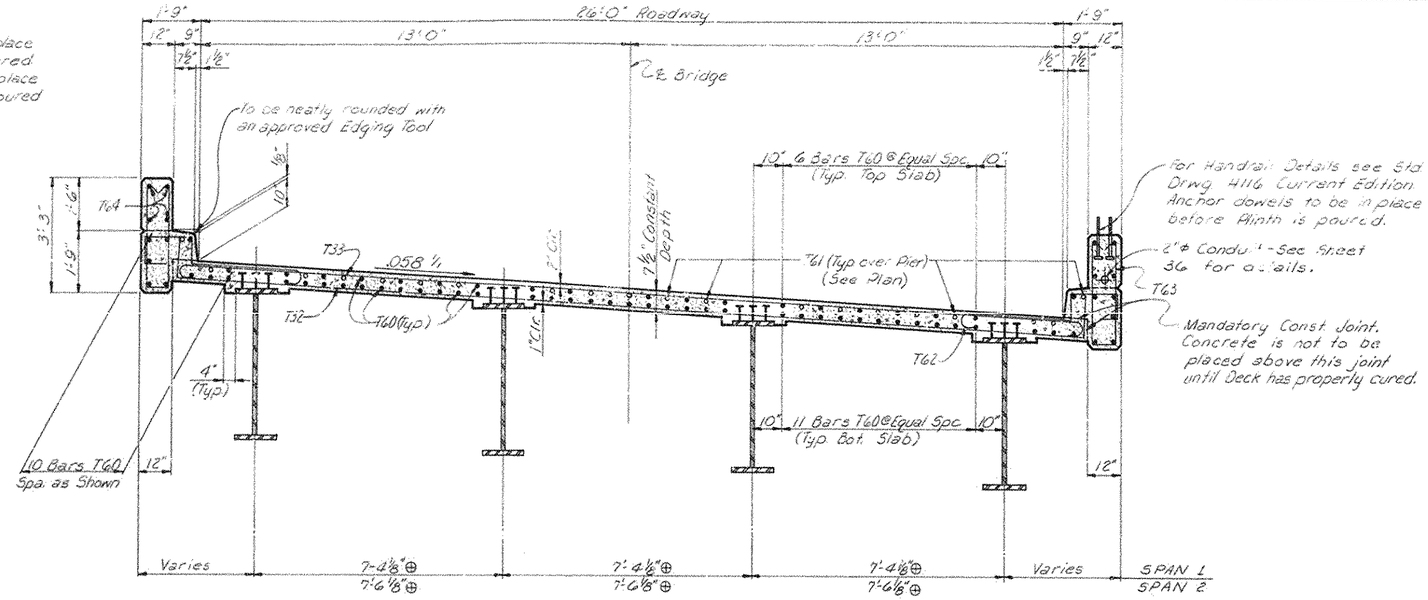
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN — SOMERSET PKWY.
ROAD

STATION 106+38.75	P. E. PROJECT NO.	
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO. 18224

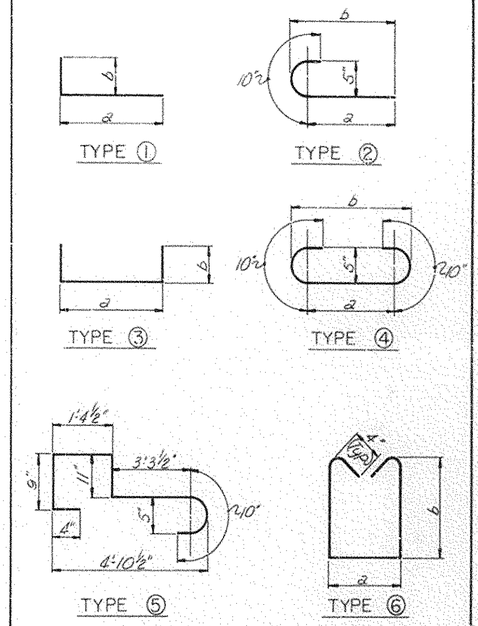
DESIGNED BY A.F. & P.A.P. CHECKED BY D.G.M. DATE 4/70
DETAILED BY D.W.G. CHECKED BY D.G.M. DATE 4/70
TRACED BY CHECKED BY DATE
REVISED REVISED REVISED

BRIDGE

NOTE:
Bars T62 to be in place before Slab is poured.
Bars T63 to be in place before Curb is poured



TYPICAL SECTION THRU DECK
⊕ Dimensions are ⊥ to Girders in each span.



BILL OF REINFORCEMENT

Mark	Type	No.	Size	Length Ft.	Length In.	Location	a Ft.	a In.	b Ft.	b In.
T1	Str.	4	#5	31	6	Slab				
T2	(1)	2	#5	6	7	"	5	5	1	2
T3	(1)	2	#5	8	0	"	6	10	1	2
T4	(1)	2	#5	9	5	"	8	3	1	2
T5	(1)	2	#5	10	10	"	9	8	1	2
T6	(1)	2	#5	12	3	"	11	1	1	2
T7	(1)	2	#5	13	8	"	12	6	1	2
T8	(1)	2	#5	15	0	"	13	10	1	2
T9	(1)	2	#5	16	5	"	15	3	1	2
T10	(1)	2	#5	17	10	"	16	8	1	2
T11	(1)	2	#5	19	3	"	18	1	1	2
T12	(1)	2	#5	20	8	"	19	6	1	2
T13	(1)	2	#5	22	1	"	20	11	1	2
T14	(1)	2	#5	23	6	"	22	4	1	2
T15	(1)	2	#5	24	11	"	23	9	1	2
T16	(1)	2	#5	26	4	"	25	2	1	2
T17	(2)	2	#5	6	0	"	5	2	5	4½
T18	(2)	2	#5	7	5	"	6	7	6	9½
T19	(2)	2	#5	8	10	"	8	0	8	2½
T20	(2)	2	#5	10	3	"	9	5	9	7½
T21	(2)	2	#5	11	8	"	10	10	11	0½
T22	(2)	2	#5	13	1	"	12	3	12	5½
T23	(2)	2	#5	14	5	"	13	7	13	9½
T24	(2)	2	#5	15	10	"	15	0	15	2½
T25	(2)	2	#5	17	3	"	16	5	16	7½
T26	(2)	2	#5	18	8	"	17	10	18	0½
T27	(2)	2	#5	20	1	"	19	3	19	5½
T28	(2)	2	#5	21	6	"	20	8	20	10½
T29	(2)	2	#5	22	11	"	22	1	22	3½
T30	(2)	2	#5	24	4	"	23	6	23	8½
T31	(2)	2	#5	25	9	"	24	11	25	1½
T32	(3)	538	#5	29	5	"	27	2	1	2
T33	(4)	538	#5	28	0	"	26	4	27	2
T34	(1)	2	#5	25	11	"	24	9	1	2
T35	(1)	2	#5	24	3	"	23	1	1	2
T36	(1)	2	#5	22	6	"	21	4	1	2
T37	(1)	2	#5	20	10	"	19	8	1	2
T38	(1)	2	#5	19	2	"	18	0	1	2
T39	(1)	2	#5	17	6	"	16	4	1	2

Mark	Type	No.	Size	Length Ft.	Length In.	Location	a Ft.	a In.	b Ft.	b In.
T40	(1)	2	#5	15	10	Slab	14	8	1	2
T41	(1)	2	#5	14	1	"	12	11	1	2
T42	(1)	2	#5	12	5	"	11	3	1	2
T43	(1)	2	#5	10	9	"	9	7	1	2
T44	(1)	2	#5	10	1	"	8	11	1	2
T45	(1)	2	#5	7	5	"	6	3	1	2
T46	(2)	2	#5	25	4	"	24	6	24	8½
T47	(2)	2	#5	23	8	"	22	10	23	0½
T48	(2)	2	#5	21	11	"	21	1	21	3½
T49	(2)	2	#5	20	3	"	19	5	19	7½
T50	(2)	2	#5	18	7	"	17	9	17	11½
T51	(2)	2	#5	16	11	"	16	1	16	3½
T52	(2)	2	#5	15	3	"	14	5	14	7½
T53	(2)	2	#5	13	6	"	12	8	12	10½
T54	(2)	2	#5	11	10	"	11	0	11	2½
T55	(2)	2	#5	10	2	"	9	4	9	6½
T56	(2)	2	#5	9	6	"	8	8	8	10½
T57	(2)	2	#5	6	10	"	6	0	6	2½
T58	Str.	4	#5	30	2	End of Slab				
T59	Str.	22	#6	10	0	Acute Corners of Slab				
T60	Str.	497	#5	35	10	Slab				
T61	Str.	19	#8	33	0	Slab over Pier				
T62	(5)	953	#5	7	5	Curbs				
T63	(6)	477	#5	7	3	Plinths	0	9	3	0
T64	Str.	48	#4	40	10	Plinths				

ESTIMATE OF QUANTITIES *

Item		Quantity
Concrete, Class "AA"	Cu. Yds.	237.2
Steel Reinforcement	Lbs.	67,329

* Concrete & Reinforcement Quantities include materials for Lighting Standards as shown on sheet 36

B.S.P. over I-65 Sheet 33

SOUTH BRIDGE
SUPERSTRUCTURE

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN – SOMERSET PKWY.
ROAD
STATION 106+38.75 **P. E. PROJECT NO.**

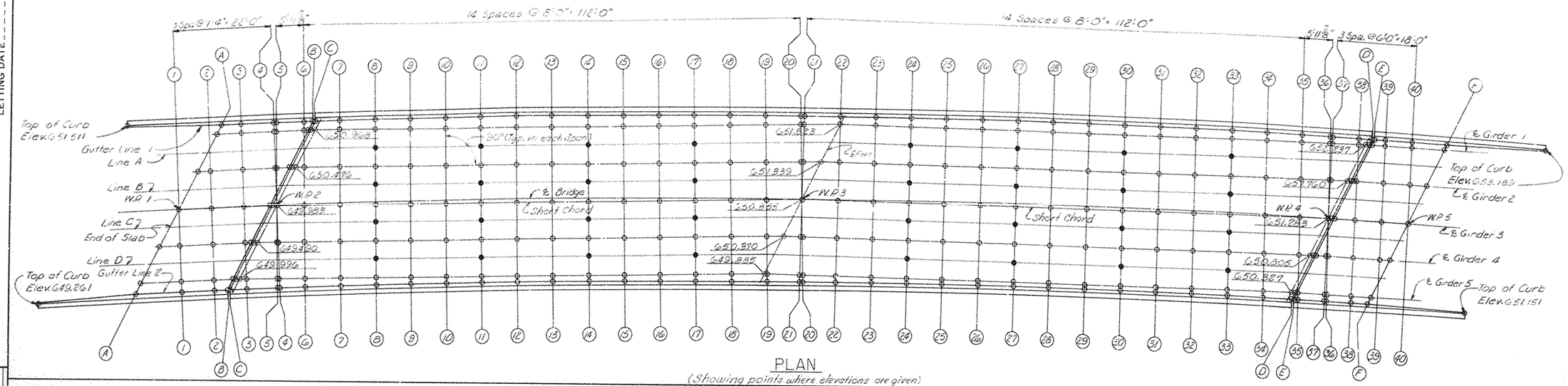
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18224

LETTING DATE

DESIGNED BY A.E. CHECKED BY D.L.M. DATE 4/70
DETAILED BY D.W.G. CHECKED BY D.G.M. DATE 4/70
TRACED BY CHECKED BY DATE
REVISED
REVISED
REVISED
DATE
DATE
DATE

BRIDGE

LETTING DATE



PLAN

(Showing points where elevations are given)

TABLE OF ELEVATIONS

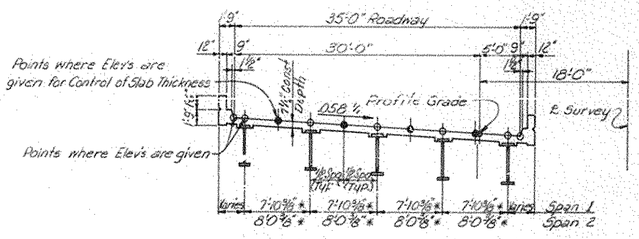
Location	Gutter Line 1 Top Conc.	Girder 1 Top Conc.	Girder 1 Top of Bm.	Girder 1 Dim. "X"	Girder 2 Top Conc.	Girder 2 Top of Bm.	Girder 2 Dim. "X"	Girder 3 Top Conc.	Girder 3 Top of Bm.	Girder 3 Dim. "X"	Girder 4 Top Conc.	Girder 4 Top of Bm.	Girder 4 Dim. "X"	Girder 5 Top Conc.	Girder 5 Top of Bm.	Girder 5 Dim. "X"	Gutter Line 2 Top Conc.
A-A	650.835	650.763			650.267			649.771			649.275			648.784			648.656
B-B	651.078	650.950			650.463			649.968			649.474			648.984			648.856
C-C	651.120	650.953			650.466			649.973			649.481			648.987			648.860
D-D	652.310	652.240			651.760			651.283			650.805			650.331			650.254
E-E	652.317	652.241			651.767			651.290			650.813			650.332			650.262
F-F	652.335	652.259			651.785			651.303			650.832			650.352			650.282
1-1	650.787	—			650.223			649.771			649.325			648.849			648.765
2-2	650.858	—			650.297			649.850			649.399			648.943			648.829
3-3	650.933	650.830			650.374			649.920			649.462			648.990			648.898
4-4	651.006	650.892			650.436			649.983			649.552			649.116			648.969
5-5	651.001	650.898			650.440			650.983			649.550			649.116			649.018
6-6	651.056	650.946			650.497			650.064			649.630			649.194			649.103
7-7	651.150	651.038			650.604			650.169			649.733			649.294			649.210
8-8	651.261	651.142			650.706			650.268			649.827			649.384			649.305
9-9	651.365	651.240			650.800			650.358			649.913			649.465			649.390
10-10	651.460	651.330			650.886			650.439			649.989			649.536			649.464
11-11	651.545	651.410			650.961			650.509			650.053			649.595			649.524
12-12	651.617	651.480			651.026			650.568			650.108			649.694			649.574
13-13	651.678	651.540			651.080			650.617			650.152			649.687			649.615
14-14	651.727	651.588			651.124			650.659			650.189			649.718			649.645
15-15	651.766	651.629			651.160			650.690			650.219			649.747			649.671
16-16	651.795	651.660			651.189			650.718			650.246			649.775			649.696
17-17	651.817	651.680			651.216			650.745			650.275			649.806			649.722
18-18	651.837	651.713			651.243			650.774			650.306			649.843			649.754
19-19	651.857	651.742			651.273			650.809			650.348			649.891			649.796
20-20	651.880	651.775			651.313			650.855			650.400			649.945			649.842
21-21	651.872	651.788			651.321			650.855			650.331			649.930			649.848
22-22	651.914	651.822			651.358			650.897			650.439			649.984			649.912
23-23	651.962	651.863			651.405			650.951			650.497			650.044			649.980
24-24	652.019	651.916			651.462			651.009			650.558			650.106			650.049
25-25	652.081	651.973			651.522			651.070			650.619			650.167			650.114
26-26	652.145	652.034			651.582			651.130			650.678			650.225			650.175
27-27	652.206	652.093			651.640			651.187			650.730			650.272			650.224
28-28	652.265	652.149			651.692			651.234			650.774			650.312			650.265
29-29	652.310	652.194			651.735			651.273			650.809			650.342			650.293
30-30	652.346	652.233			651.768			651.302			650.833			650.361			650.309
31-31	652.375	652.261			651.792			651.320			650.846			650.369			650.314
32-32	652.389	652.278			651.804			651.328			650.848			650.368			650.307
33-33	652.392	652.285			651.806			651.325			650.842			650.357			650.291
34-34	652.383	652.282			651.799			651.314			650.829			650.342			650.269
35-35	652.364	652.271			651.785			651.298			650.810			650.334			650.257
36-36	652.345	652.258			651.771			651.283			650.817			650.352			650.266
37-37	652.298	652.238			651.754			651.283			650.815			650.350			650.275
38-38	652.307	652.232			651.764			651.298			650.827			650.362			650.278
39-39	652.319	652.244			651.779			651.306			650.830			—			650.286
40-40	652.330	652.247			651.782			651.309			650.838			—			650.294

NOTE: TAKE ELEVATIONS ON TOP OF BEAM AT POINTS IND'CATED AFTER THE CROSS FRAMES ARE IN PLACE AND AFTER ALL FALSEWORK HAS BEEN REMOVED, BUT BEFORE FORMS FOR CONCRETE SLABS HAVE BEEN PUT IN PLACE. READ ELEVATIONS TO THREE DECIMALS USING A TARGET ROD AND ENTER READINGS IN TABLES UNDER TOP OF BEAM ELEVATIONS. COMPUTE ELEVATION INCLUDE CAMBER DUE TO WEIGHT OF CONCRETE SLAB, PLINTH, HANDRAIL, AND FUTURE SURFACING. MEASURING OF DIMENSION "X" GIVES THE FINAL CHECK ON BEAM TOLERANCES FOR SWEEP, CAMBER, BEAM DAMAGE AND ERRORS IN ERECTION THAT PRODUCE REVERSE CAMBERS, SAGS AND UNSIGHTLY FASCIA BEAMS. FOR SETTING TEMPLATES MEASURE DIMENSION "X" ABOVE TOP OF BEAM FOR TOP OF TEMPLATE. DO NOT SET TEMPLATES BY ELEVATIONS. CONSTRUCT PLINTH TO SIDEWALK GRADE. DO NOT ADD CAMBER TO PLINTH.

TABLE OF ELEVATIONS FOR CONTROL OF SLAB THICKNESS

Point	Plan Elev. Top of Slab	Field Elev. Top of Slab	Computed Slab Thickness
A-8	650.924		
B-8	650.486		
C-8	650.047		
D-8	649.606		
A-11	651.186		
B-11	650.735		
C-11	650.281		
D-11	649.834		
A-14	651.356		
B-14	650.892		
C-14	650.424		
D-14	649.953		
A-17	651.452		
B-17	650.981		
C-17	650.510		
D-17	650.041		
A-24	651.689		
B-24	651.236		
C-24	650.784		
D-24	650.332		
A-27	651.867		
B-27	651.414		
C-27	650.959		
D-27	650.501		
A-30	652.001		
B-30	651.535		
C-30	651.068		
D-30	650.597		
A-33	652.046		
B-33	651.566		
C-33	651.084		
D-33	650.600		

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.



TYPICAL SECTION THRU DECK

(* Dimensions ⊥ to Girder in each Span)

B.S.P. over I-65

Sheet 34

NORTH BRIDGE CONSTRUCTION ELEVATIONS

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF

BARREN

BOWLING GREEN — SOMERSET PKWY
ROAD

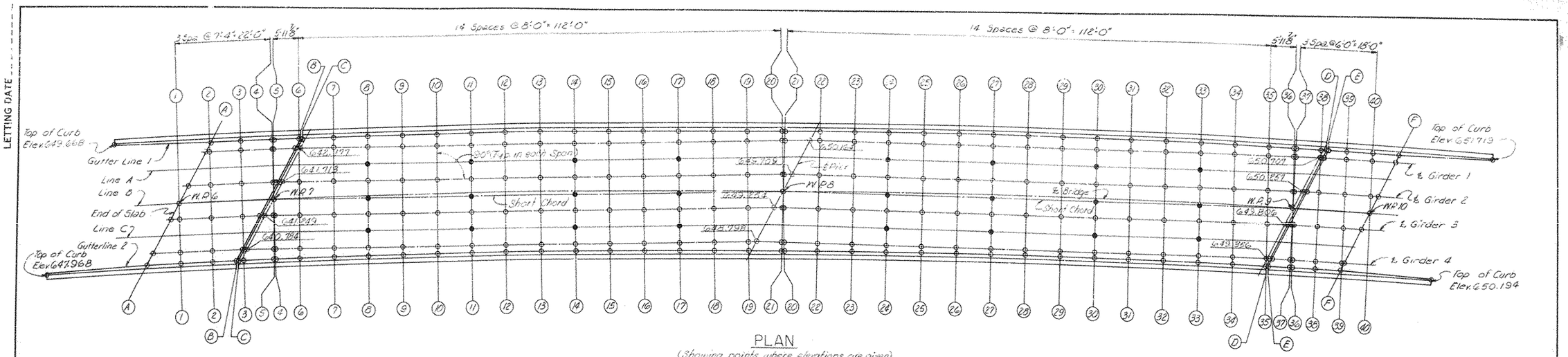
STATION 106+38.75 **P. E. PROJECT NO.**

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18224

DESIGNED BY: BAP DATE: 5-70 REVISED:
DETAILED BY: DMS DATE: 5-70 REVISED:
TRACED BY: DGM DATE: REVISED:
CHECKED BY: DGM DATE:
CHECKED BY: DATE:

BRIDGE

LETTING DATE



PLAN

(Showing points where elevations are given)

TABLE OF ELEVATIONS

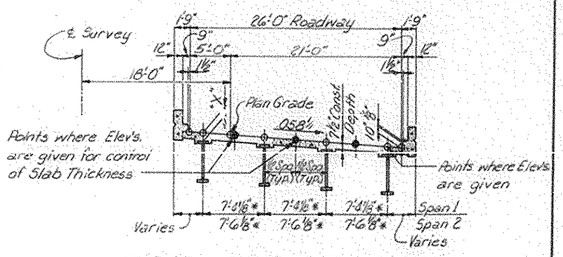
Location	Gutter Line 1 Top Conc.	Girder 1 Top Conc.	Girder 1 Top of Bm.	Girder 1 Dim. "X"	Girder 2 Top Conc.	Girder 2 Top of Bm.	Girder 2 Dim. "X"	Girder 3 Top Conc.	Girder 3 Top of Bm.	Girder 3 Dim. "X"	Girder 4 Top Conc.	Girder 4 Top of Bm.	Girder 4 Dim. "X"	Gutter Line 2 Top Conc.
A - A	649.072	648.932			648.465			647.997			647.532			647.389
B - B	649.291	649.151			648.687			648.220			647.755			647.615
C - C	649.293	649.156			648.692			648.228			647.763			647.620
D - D	650.805	650.711			650.261			649.811			649.360			649.263
E - E	650.805	650.712			650.262			649.812			649.362			649.264
F - F	650.843	650.750			650.299			649.850			649.404			649.306
1 - 1	648.986	——			648.441			648.023			647.632			647.485
2 - 2	649.066	——			648.528			648.111			647.710			647.563
3 - 3	649.153	649.029			648.609			648.185			647.785			647.638
4 - 4	649.231	649.107			648.680			648.261			647.864			647.717
5 - 5	649.227	649.109			648.683			648.268			647.862			647.748
6 - 6	649.290	649.164			648.757			648.351			647.944			647.837
7 - 7	649.401	649.273			648.864			648.458			648.048			647.949
8 - 8	649.514	649.379			648.969			648.558			648.145			648.052
9 - 9	649.620	649.478			649.065			648.651			648.234			648.144
10 - 10	649.717	649.570			649.153			648.734			648.312			648.225
11 - 11	649.803	649.652			649.230			648.807			648.381			648.295
12 - 12	649.878	649.724			649.299			648.870			648.440			648.355
13 - 13	649.942	649.787			649.357			648.925			648.492			648.406
14 - 14	649.996	649.841			649.408			648.974			648.539			648.451
15 - 15	650.042	649.883			649.454			649.018			648.583			648.493
16 - 16	650.082	649.932			649.497			649.062			648.628			648.535
17 - 17	650.120	649.975			649.541			649.108			648.676			648.579
18 - 18	650.157	650.019			649.587			649.157			648.728			648.625
19 - 19	650.196	650.067			649.638			649.211			648.786			648.676
20 - 20	650.239	650.120			649.694			649.270			648.848			648.730
21 - 21	650.288	650.137			649.700			649.265			648.830			648.730
22 - 22	650.290	650.180			649.746			649.314			648.883			648.793
23 - 23	650.346	650.229			649.799			649.369			648.941			648.859
24 - 24	650.405	650.283			649.855			649.428			649.002			648.927
25 - 25	650.467	650.341			649.915			649.490			649.065			648.996
26 - 26	650.532	650.402			649.978			649.553			649.128			649.062
27 - 27	650.596	650.464			650.039			649.613			649.186			649.122
28 - 28	650.657	650.523			650.096			649.668			649.238			649.174
29 - 29	650.711	650.577			650.147			649.715			649.281			649.217
30 - 30	650.757	650.623			650.189			649.753			649.315			649.248
31 - 31	650.791	650.659			650.222			649.782			649.339			649.268
32 - 32	650.816	650.687			650.244			649.800			649.354			649.277
33 - 33	650.829	650.704			650.258			649.810			649.361			649.278
34 - 34	650.831	650.713			650.263			649.812			649.360			649.270
35 - 35	650.825	650.714			650.262			649.809			649.356			649.261
36 - 36	650.816	650.711			650.258			649.814			649.379			649.278
37 - 37	650.786	650.705			650.252			649.811			649.379			649.282
38 - 38	650.800	650.701			650.256			649.832			649.386			649.298
39 - 39	650.819	650.724			650.288			649.845			———			649.307
40 - 40	650.835	650.732			650.296			649.854			———			649.321

NOTE: TAKE ELEVATIONS ON TOP OF BEAM AT POINTS INDICATED AFTER THE CROSS FRAMES ARE IN PLACE AND AFTER ALL FALSEWORK HAS BEEN REMOVED, BUT BEFORE FORMS FOR CONCRETE SLABS HAVE BEEN PUT IN PLACE. READ ELEVATIONS TO THREE DECIMALS USING A TARGET ROD AND ENTER READINGS IN TABLES UNDER TOP OF BEAM ELEVATIONS. COMPUTE DIMENSION "X" AS FOLLOWS: CONSTRUCTION ELEVATION MINUS TOP OF BEAM ELEVATION EQUALS DIMENSION "X". CONSTRUCTION ELEVATION INCLUDE CAMBER DUE TO WEIGHT OF CONCRETE SLAB, PLINTH, HANDRAIL, AND FUTURE SURFACING. MEASURING OF DIMENSION "X" GIVES THE FINAL CHECK ON BEAM TOLERANCES FOR SWEEP, CAMBER, BEAM DAMAGE AND ERRORS IN ERECTION THAT PRODUCE REVERSE CAMBERS, SAGS AND UNSIGHTLY FASCIA BEAMS. FOR SETTING TEMPLATES MEASURE DIMENSION "X" ABOVE TOP OF BEAM FOR TOP OF TEMPLATE. DO NOT SET TEMPLATES BY ELEVATIONS. CONSTRUCT PLINTH TO SIDEWALK GRADE. DO NOT ADD CAMBER TO PLINTH.

TABLE OF ELEVATIONS FOR CONTROL OF SLAB THICKNESS

Point	Plan Elev. Top of Slab	Field Elev. Bot of Slab	Computed Slab Thickness
A - 8	649.174		
B - 8	648.764		
C - 8	648.352		
A - 11	649.441		
B - 11	649.019		
C - 11	648.594		
A - 14	649.625		
B - 14	649.191		
C - 14	648.757		
A - 17	649.758		
B - 17	649.325		
C - 17	648.892		
A - 24	650.069		
B - 24	649.642		
C - 24	649.215		
A - 27	650.252		
B - 27	649.826		
C - 27	649.400		
A - 30	650.406		
B - 30	649.971		
C - 30	649.534		
A - 33	650.481		
B - 33	650.034		
C - 33	649.586		

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. IF THE 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.



TYPICAL SECTION THRU DECK

(* Dimension ⊥ to Girder in each Span)

SOUTH BRIDGE CONSTRUCTION ELEVATIONS

B.S.P. over I-65

Sheet 35

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN – SOMERSET PKWY.
ROAD

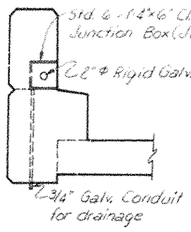
STATION 106+38.75 **P. E. PROJECT NO.**

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18224

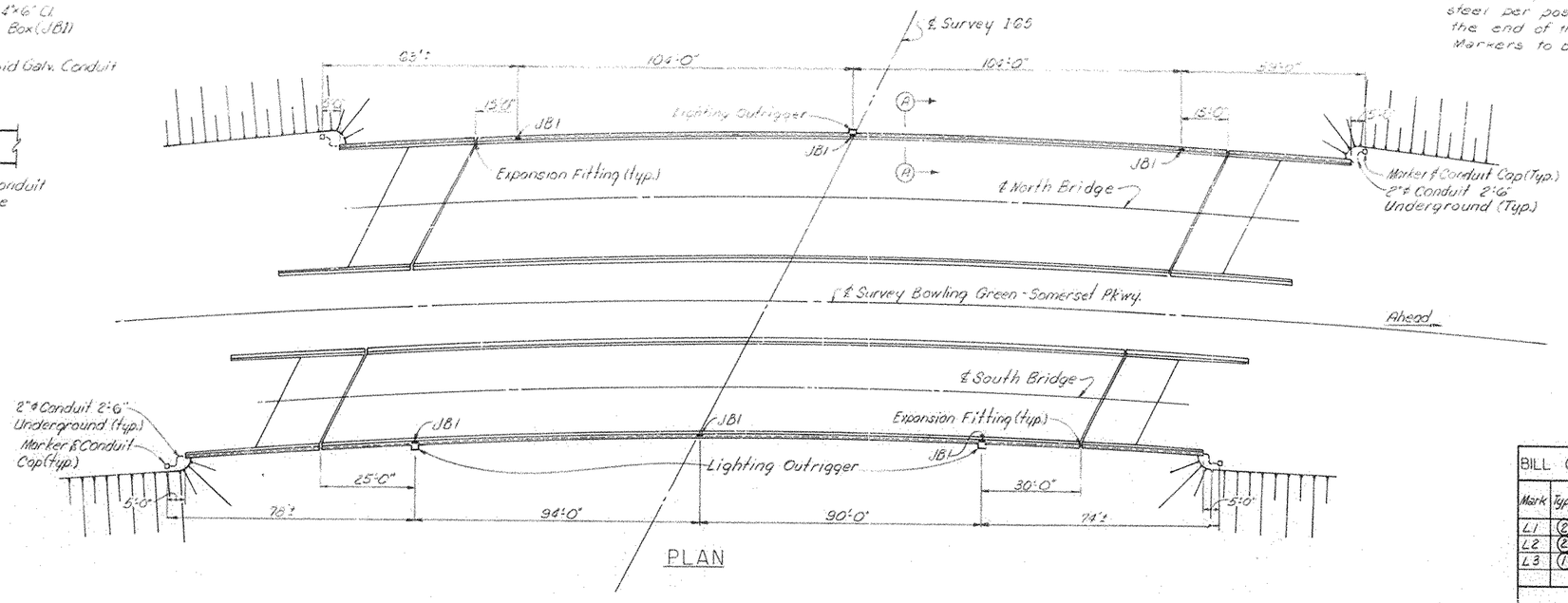
DESIGNED BY: PAP DATE: 5-7-70 REVISED
CHECKED BY: DGM DATE: 5-7-70 REVISED
CHECKED BY: DGM DATE: REVISED
DETAILED BY: DKG
TRACED BY:

BRIDGE

NOTE:
Markers shall consist of 4"x4"x36" reinforced concrete posts w/4 - 1/4" ϕ deformed reinforcing steel per post and a 2" brass disc cast in the end of the post inscribed "End of Duct". Markers to be 2" above grade w/disc exposed.

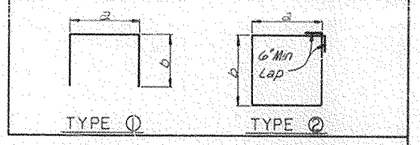


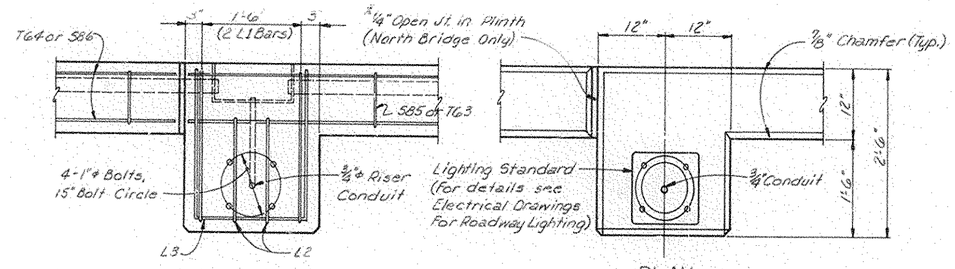
SECTION A-A



PLAN

BILL OF REINFORCEMENT FOR LIGHTING STD.											
Mark	Type	Number N.Br	Number S.Br	Size	Length Ft	Length In	Location	a Ft	a In	b Ft	b In
L1	2	2	4	#5	11	1	Outrigger	2	2	3	0
L2	2	2	4	#5	9	11	"	1	7	3	0
L3	1	5	10	#5	6	0	"	1	9	2	2





SECTION Y-Y

PLAN

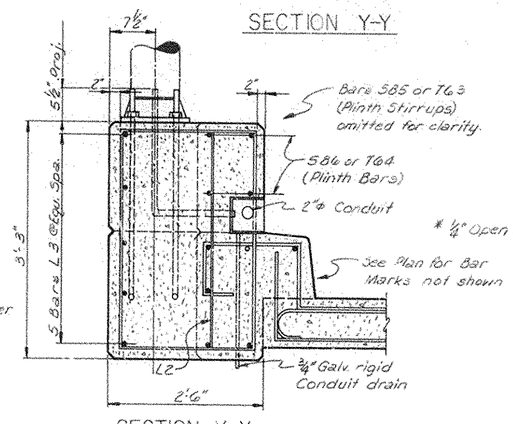
BILL OF MATERIAL		
2" ϕ Rigid Galvanized Conduit (Lin.Ft.)		698
Std. 6"x1'-4"x6" Junction Box (JB1) (1)	(Ea.)	6
2" ϕ Conduit Connection	(Ea.)	12
2" ϕ Galvanized Cap	(Ea.)	4
Expansion Fitting (2)	(Ea.)	4
3/4" ϕ Conduit	(Lin.Ft.)	20

ESTIMATE OF OUTRIGGER QUANTITIES *		
Item / Location	N. Bridge	S. Bridge
Concrete, Class "AA" (Cu.Yds)	.4	.7
Steel Reinforcement (Lbs.)	76	151

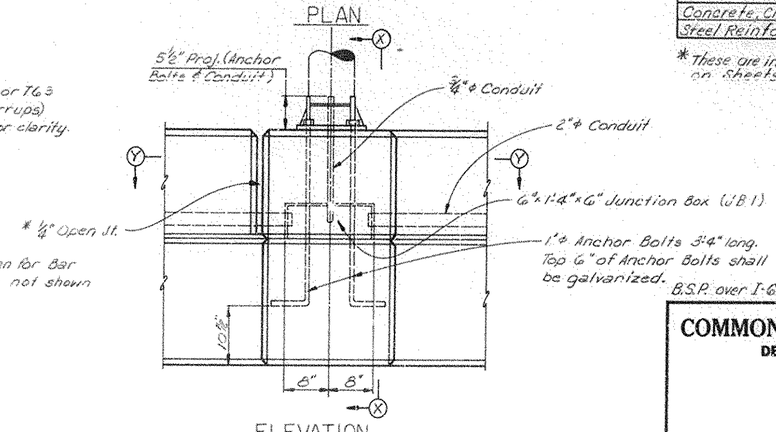
* These are included in Superstructure Quantities on Sheets 28 & 29

(1) a. OZ Electric Co., Type YU
b. Spring City Electric Co., Type IR
c. Hope Electric Products Co., Type H 6200
d. Or Approved Equal

(2) a. Crouse-Hinds, Type XJG41 w/GC 100 Bonding Jumper
b. OZ Electric Co., Type EX200 w/BJ 1520-24 Bonding Jumper
c. Spring City Electric Co., Type EFE200 w/EJ 200 Bonding Jumper
d. Or Approved Equal



SECTION X-X



ELEVATION

LIGHTING STANDARD MOUNTING DETAILS

ELECTRICAL CONDUIT

B.S.P. over I-65 Sheet 36

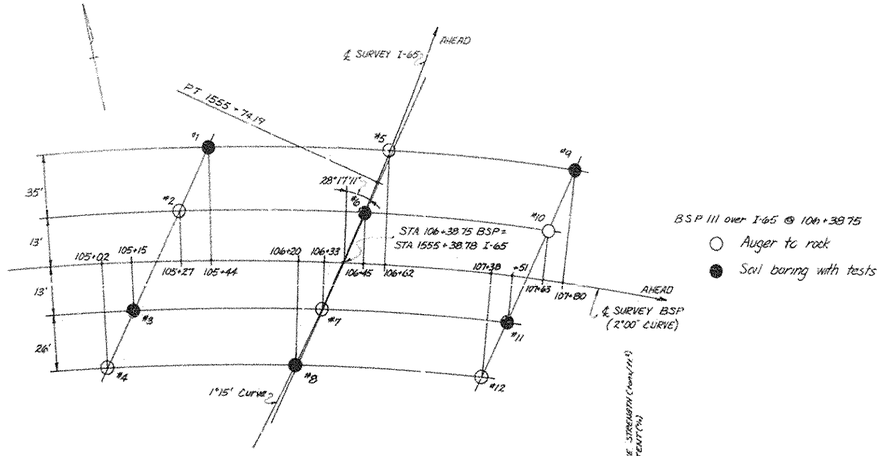
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN - SOMERSET PKWY.
ROAD
STATION 106+38.75
P.E. PROJECT NO.
CONSTRUCTION PROJECT NO. | MAINTENANCE PROJECT NO. | DRAWING NO. 18224

LETTING DATE

DESIGNED BY AF DATE 5-70 REVISED
DETAILED BY MP DATE 5-70 REVISED
TRACED BY CHECKED BY DATE REVISED
DGM CHECKED BY DGM
DRG. CHECKED BY

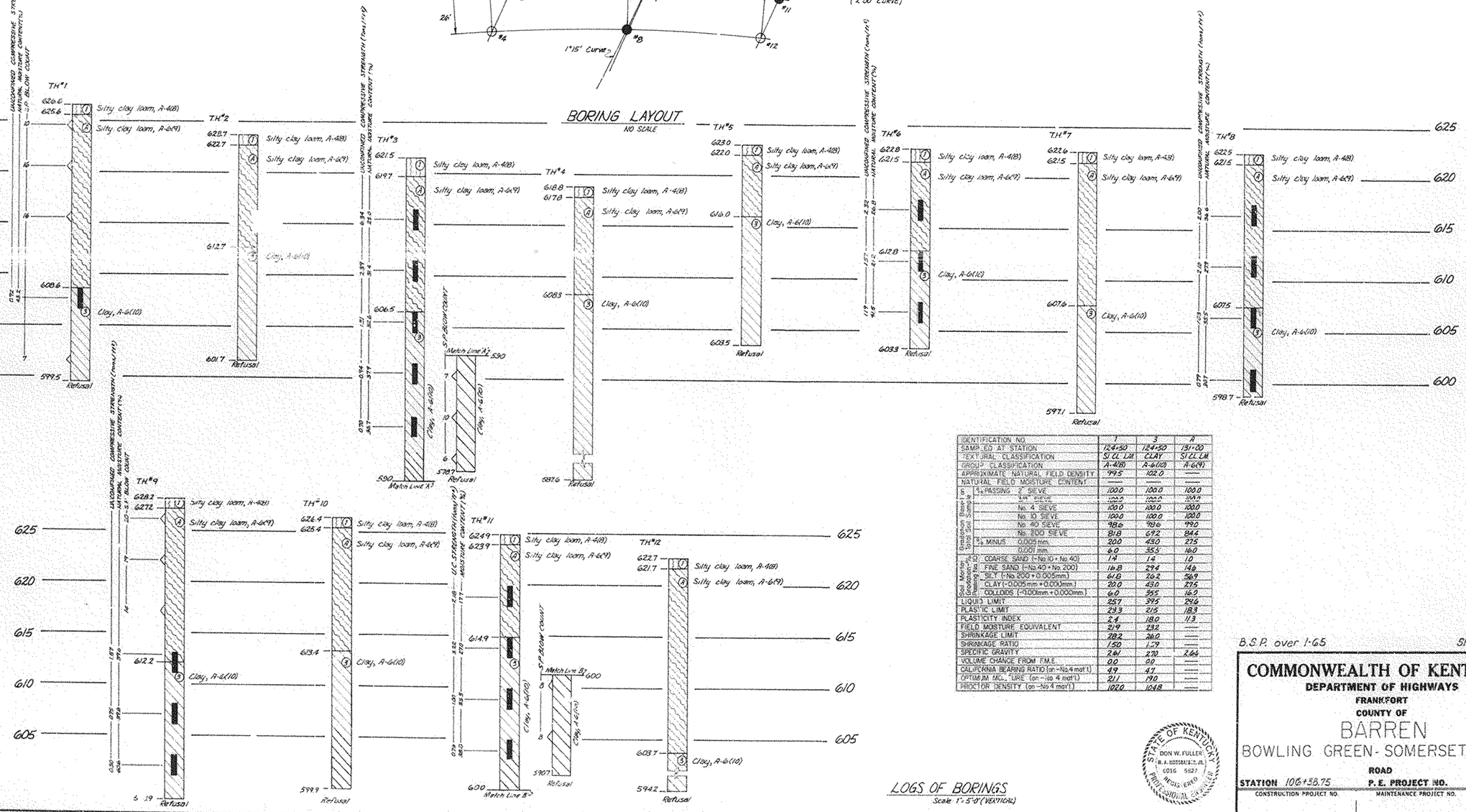
BRIDGE

LETTING DATE



BORING LAYOUT

NO SCALE



LOGS OF BORINGS

Scale 1" = 5'-0" (VERTICAL)

IDENTIFICATION NO.		1	3	A
SAMPLED AT STATION		124+50	124+50	131+00
TEXTURAL CLASSIFICATION		SI CL LM	CLAY	SI CL LM
GROUP CLASSIFICATION		A-4(8)	A-6(10)	A-6(9)
APPROXIMATE NATURAL FIELD DENSITY		99.5	102.0	—
NATURAL FIELD MOISTURE CONTENT		—	—	—
Gradation Base on Total Soil Sample	% PASSING 2" SIEVE	100.0	100.0	100.0
	3/8" SIEVE	100.0	100.0	100.0
	No. 4 SIEVE	100.0	100.0	100.0
	No. 10 SIEVE	100.0	100.0	100.0
	No. 40 SIEVE	98.6	98.6	99.0
	No. 200 SIEVE	81.8	69.2	84.4
	% MINUS 0.005 mm.	20.0	43.0	27.5
	0.001 mm.	6.0	35.5	16.0
Soil Mortar Gradation % Passing No. 10	COARSE SAND (-No. 10 + No. 40)	1.4	1.4	1.0
	FINE SAND (-No. 40 + No. 200)	16.8	29.4	14.6
	SILT (-No. 200 + 0.005 mm.)	61.8	26.2	56.9
	CLAY (-0.005 mm. + 0.000 mm.)	20.0	43.0	27.5
	COLLOIDS (-0.001 mm. + 0.000 mm.)	6.0	35.5	16.0
LIQUID LIMIT		25.7	39.5	29.6
PLASTIC LIMIT		23.3	21.5	18.3
PLASTICITY INDEX		2.4	18.0	11.3
FIELD MOISTURE EQUIVALENT		21.9	23.2	—
SHRINKAGE LIMIT		28.2	26.0	—
SHRINKAGE RATIO		1.50	1.59	—
SPECIFIC GRAVITY		2.61	2.70	2.66
VOLUME CHANGE FROM F.M.E.		0.0	0.0	—
CALIFORNIA BEARING RATIO (on -No. 4 mat'l.)		4.9	4.7	—
OPTIMUM MOISTURE (on -No. 4 mat'l.)		21.1	19.0	—
PROCTOR DENSITY (on -No. 4 mat'l.)		102.0	104.8	—

Soil Exploration: Fuller & Mossberger Civil Engineers
Engineer: D.W. Fuller

B.S.P. over I-65 Sheet 37

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BARREN
BOWLING GREEN - SOMERSET PKWY.
ROAD
STATION 106+38.75 **P.E. PROJECT NO.**

CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	DRAWING NO.
		18224

STATE OF KENTUCKY
DON W. FULLER
B. A. MOSSBARGER, JR.
6016 5827
REGISTERED PROFESSIONAL ENGINEER

BRIDGE