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

KENTUCKY DEPARTMENT OF HIGHWAYS
FRANKLIN COUNTY
LOUISVILLE-LEXINGTON-CATLETTSBURG RD.
INTERSTATE 64 OVER U.S. 60

REFERENCE AND ESTIMATE OF QUANTITIES-WESTBOUND

LOCATION / ITEM	SHEET NO.	CONCRETE (C.Y.) CLASS "A"	CLASS "AA" ITEM II	REINF. STEEL (LBS.)	END BENT BACKFILL (C.Y.)	CRUSHED AGGREGATE SLOPE PROT. (S.Y.)	HIGH STRENGTH HANDRAIL (L.F.)	STRUCTURAL STEEL (L.S.) ①	SHEAR CONNECTORS (L.S.) ②	STYRENE BUTADIENE PROT. COATING (GAL.)	12 BP53 STEEL PILES (L.F.) FURNISH	DRIVE	STRUCTURE EXCAVATION COMMON	SOLID ROCK	ELECTRICAL CONDUIT (L.S.)	LINSEED OIL PROTECTIVE COATING (S.Y.)
QUANTITIES	1															
NOTES	2															
LAYOUT	3															
SOUNDINGS	4															
PILE RECORD	5															
END BENT 1	6,7,11	44.1	28.6	9,676	50	685				1	200	200	125			
ABUTMENT 2	8,9,11	45.7	29.1	11,282		685				1			45	20		
PIER 1	10,11	53.2		9,322						2			25	60		
PIER 2	10,11	54.4		8,621						2				50		
SUPERSTRUCTURE	12-17		368.7	86,543			623	①	②	14					⑥	1293
ELEVATIONS	18															
ELECTRICAL CONDUIT	20															
SUPERSTRUCTURE TOTALS			368.7	86,543			623	①	②	14					⑥	1293
SUBSTRUCTURE TOTALS		197.4	57.7	38,901	50	1370				6	200	200	195	130		
BRIDGE TOTALS		197.4	426.4	125,444	50	1370	623	①	②	20	200	200	195	130	⑥	1293

① Approximate weight of Steel is 352,800 Lbs.
② Approximate weight of 3/4"Ø x 4" stud shear connectors is 1,738 lbs.
③ For Electrical Conduit Quantities see sheet 20

REFERENCE AND ESTIMATE OF QUANTITIES-EASTBOUND

LOCATION / ITEM	SHEET NO.	CONCRETE (C.Y.) CLASS "A"	CLASS "AA" ITEM I	CLASS "AA" ITEM II	CLASS "AA" MODIFIED	REINF. STEEL (LBS.)	END BENT BACK FILL (C.Y.)	CRUSHED AGGREGATE SLOPE PROT. (S.Y.)	HIGH STRENGTH HANDRAIL (L.F.)	STRUCTURAL STEEL (L.S.) ④	SHEAR CONNECTORS (L.S.) ⑤	STYRENE BUTADIENE PROT. COATING (GAL.)	12 BP53 STEEL PILES (L.F.) FURNISH	DRIVE	STRUCTURE EXCAVATION COMMON	SOLID ROCK	ELECTRICAL CONDUIT (L.S.)	LINSEED OIL PROTECTIVE COATING (S.Y.)
QUANTITIES	1																	
NOTES	2																	
LAYOUT	3																	
SOUNDINGS	4																	
PILE RECORD	5																	
END BENT 1	6,7,11	44.0		28.3		9,676	50	685				1	204	204	123			
ABUTMENT 2	8,9,11	42.6		28.8		11,022		685				1			25	20		
PIER 1	10,11	53.0				9,322						2			20	45		
PIER 2	10,11	54.2				8,621						2				30		
SUPERSTRUCTURE	12-17		143.7	32.9	192.1	86,543			623	④	⑤	14					⑥	1293
ELEVATIONS	19																	
ELECTRICAL CONDUIT	20																	
SUPERSTRUCTURE TOTALS			143.7	32.9	192.1	86,543			623	④	⑤	14					⑥	1293
SUBSTRUCTURE TOTALS		193.0		57.1		38,641	50	1370				6	204	204	190	115		
BRIDGE TOTALS		193.0	143.7	90.0	192.1	125,184	50	1370	623	④	⑤	20	204	204	190	115	⑥	1293

④ Approximate weight of Structural Steel is 352,800 Lbs.
⑤ Approximate weight of 3/4"Ø x 4" stud shear connectors is 1,738 lbs.
⑥ For Electrical Conduit Quantities see sheet 20

BILL OF INCIDENTAL MATERIAL

ITEM	*NO	SIZE & LOCATION
Joint Sealing Compound	4	1" x 3 1/2" x 41'-8" no. Barr
" " "	8	1" x 3 1/2" x 1'-6" (Curbs)
Bolt Insert Assembly	6	Wings

* Both Bridges

STANDARD DRAWINGS

Standard Drawings listed below are the current edition and are to be used with these plans
H111D, H150 B, P212 A, SF2B, A5F1D, 17400, AWS 2A

SPECIAL NOTES

Special Notes for Bridge Deck Construction for Eastbound I-64 Structure over U.S.60.

SPECIAL PROVISIONS

#12 Joint Sealing Compound
#30-B Membrane Curing of Concrete Structure
#35-B For Class AA Concrete
#17-B Styrene - Butadiene Protective Coating
#9-A Linseed Oil Protective Coating
#79 Concrete Bridge Deck Finishing Machine
#80-A Blast Cleaning and Painting Structural Steel

I-64 OVER U.S. 60 — SHEET 1 OF 20

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN
LOUISVILLE-LEXINGTON-CATLETTSBURG
ROAD I-64-4(5)56
STATION 73+39.00 REF. OF US 60 PROJECT NO. SP 37-905-25L
BRIDGE NUMBER 17632

DESIGNED BY	CHECKED BY	DATE	REVISED	DATE
DETAILED BY JB	CHECKED BY PS??	DATE 2-69	REVISED	DATE
TRACED BY	CHECKED BY	DATE	REVISED	DATE

GENERAL NOTES

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

DESIGN LOAD: THIS BRIDGE IS DESIGNED FOR HS 20-44 LIVE LOAD AS SPECIFIED IN 1965 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

CLASS "A"	CLASS "AA" ITEMS I, II AND MODIFIED
f_s = 20,000 PSI	f_s = 20,000 PSI
f_c = 1,200 PSI	f_c = 1,?00 PSI FOR DECK SLAB
f'_c = 3,000 PSI	f'_c = 4,000 PSI
n = 10	n = 8
u = 200 PSI (FOR EMBEDMENT)	u = 200 PSI (FOR EMBEDMENT)
u = 300 PSI (FOR SUM OF PERIMETERS)	u = 300 PSI (FOR SUM OF PERIMETERS)
FOR STRUCTURAL STEEL f_s = 20,000 PSI FOR A36	f_c = 1,600 PSI FOR OTHER THAN DECK SLABS

FOUNDATION PRESSURE: FOOTINGS ARE DESIGNED FOR A MAXIMUM PRESSURE OF 5830 LBS. PER SQ. FT. PILES ARE DESIGNED FOR A MAXIMUM AXIAL LOAD OF 24.1 TONS PER PILE AND A MAXIMUM HORIZONTAL SHEAR OF 55 TONS PER PILE. THESE MAXIMUMS ARE FOR GROUP I LOADS WITH INCREASES ALLOWED FOR OTHER LOADING GROUPS.

REINFORCEMENT: DIMENSIONS SHOWN FROM THE FACE OF CONCRETE TO BARS ARE CLEAR DISTANCE 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, ITEM II.

PAYMENT FOR STRUCTURAL STEEL: THE LUMP SUM BID FOR STRUCTURAL STEEL SHALL BE FULL PAYMENT FOR ALL STRUCTURAL STEEL, PINS, 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: 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 TEST PILES SHALL BE ACCURATELY LOCATED SO THAT THEY MAY BE USED IN THE FINISHED STRUCTURE. THE CONTRACTOR SHALL USE 12" BEARING PILES @ 53# THROUGHOUT. SEE STANDARD DRAWING P212, CURRENT EDITION.

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

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: (A) THE CONTRACTOR SHALL USE ONE OF THE FOLLOWING OPTIONS THROUGHOUT THIS STRUCTURE:
- OPTION 1 - 3/4" Ø X 4" STUDS
- OPTION 2 - 5/8" Ø X 4" DIAMETER SPIRALS
- OPTION 3 - 4" CHANNEL @ 5.4 LBS.

(B) IF THE CONTRACTOR WISHES TO USE OTHER THAN 3/4" X 4" 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 MADE USING 7/8" DIAMETER HIGH STRENGTH BOLTS OPEN HOLES SHALL BE 15/16" DIAMETER. ALL JOINTS ARE DESIGNED AS FRICTION TYPE CONNECTIONS. INSTALLATION SHALL BE BY THE TURN-OF-NUT METHOD. WHEN THE WIDTH OF HIGH STRENGTH BOLT HEAD CORRESPONDS TO THAT OF THE HEAVY SEMI-FINISHED HEXAGON BOLT, ONLY ONE WASHER PER BOLT IS REQUIRED.

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

OPTIONAL TYPES OF HANDRAIL: THE CONTRACTOR SHALL PROVIDE THROUGHOUT THE PROJECT, AT HIS OPTION, EITHER HIGH STRENGTH ALUMINUM HANDRAIL ACCORDING TO STANDARD DRAWING H117, CURRENT EDITION, OR HIGH STRENGTH CONCRETE HANDRAIL ACCORDING TO STANDARD DRAWING H150, 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.

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 LOCATION DESIGNATED IN THE AUTHORIZATION.

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

MATERIAL	ASTM DESIGNATION
STRUCTURAL STEEL	A36-67
STUD SHEAR CONNECTORS, GRADE 1015	A108-61T
HIGH STRENGTH CARBON STEEL BOLTS, NUTS & PLAIN HARDENED WASHERS	A325-66b
SHEET LEAD	B29-55

CONCRETE, EASTBOUND BRIDGE: CLASS AA CONCRETE, ITEM I, IS TO BE USED IN THE LOWER LAYER OF THE DECK SLAB IN ACCORDANCE WITH THE SPECIAL NOTES. CLASS AA CONCRETE, ITEM II, IS TO BE USED IN THE PORTIONS OF THE SUPERSTRUCTURE ABOVE THE TOP OF CURBS AND IN THE PORTION OF THE SUBSTRUCTURE ABOVE THE BRIDGE SEATS EXCEPT IN THE BEARING PADS AND THE CONCRETE HANDRAIL. CLASS AA MODIFIED CONCRETE IS TO BE USED IN THE UPPER LAYER OF THE DECK SLAB AND IN THE CURBS IN ACCORDANCE WITH THE SPECIAL NOTES AND AS SHOWN IN THE PLANS TYPICAL SECTION, SHEET 3. CLASS A CONCRETE IS TO BE USED IN THE BEARING PADS AND IN THE SUBSTRUCTURE BELOW THE BRIDGE SEATS. CLASS D CONCRETE IS TO BE USED IN THE CONCRETE HANDRAIL.

CONCRETE, WESTBOUND BRIDGE: CLASS AA CONCRETE, ITEM II, IS TO BE USED IN THE ENTIRE SUPERSTRUCTURE DECK AND IN THE PORTIONS OF THE SUBSTRUCTURE ABOVE THE BRIDGE SEATS EXCEPT IN THE BEARING PADS AND THE CONCRETE HANDRAIL. CLASS A CONCRETE IS TO BE USED IN THE BEARING PADS AND IN THE SUBSTRUCTURE BELOW THE BRIDGE SEATS. CLASS D CONCRETE IS TO BE USED IN THE CONCRETE HANDRAIL.

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.

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, ELEVATION, 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 CROSS FRAMES, DIAPHRAGMS, LONGITUDINAL BRACING, 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 PROCEDURES SHALL BE COMPLETED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO THE FINAL APPROVAL OF THE SHOP DRAWINGS AND WELDING PROCEDURES AND THE START OF THE FABRICATION.

MILL TEST REPORTS: NOTARIZED TEST REPORTS IN TRIPLICATE SHALL BE FURNISHED THE KENTUCKY DEPARTMENT OF HIGHWAY. SHOWING THAT ALL MATERIALS FURNISHED CONFORM TO THE SPECIFICATIONS.

STEEL FINISH: STEEL BEARING SURFACES IN CONTACT SHALL BE FINISHED IN ACCORDANCE WITH CURRENT SPECIFICATIONS.

SHOP PLANS: THE CONTRACTOR SHALL SUBMIT SHOP DETAIL PLANS IN ACCORDANCE WITH THE SPECIFICATIONS.

WELDING AND WELDING MATERIAL: WELDING AND WELDING MATERIAL SHALL CONFORM TO THE AMERICAN WELDING SOCIETY STANDARD "SPECIFICATIONS FOR WELDED HIGHWAY AND RAILWAY BRIDGES". AWS D2.0 66 AND KENTUCKY STANDARD DRAWING AWS 2, CURRENT EDITION.

CHANGES IN STRUCTURAL STEEL QUANTITIES: IN THE EVENT THAT CHANGES IN STEEL QUANTITIES ARE REQUIRED DUE TO CHANGES BY THE ENGINEER IN PLANS, ADDITIONAL PAYMENTS THEREFOR SHALL BE MADE AT A UNIT PRICE WHICH WILL BE EQUAL TO THE CONTRACT LUMP SUM PRICE DIVIDED BY THE ESTIMATED TOTAL WEIGHT.

STYRENE-BUTADIENE PROTECTIVE COATING, JOINT SEALING COMPOUND: THESE ITEMS ARE TO BE FURNISHED AND APPLIED IN ACCORDANCE WITH THEIR RESPECTIVE SPECIAL PROVISIONS.

ELECTRICAL CONDUIT: THE LUMP SUM BID 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.

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

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

FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	.Y.				

NOTES

I-64 OVER U.S. 60 SHEET 2

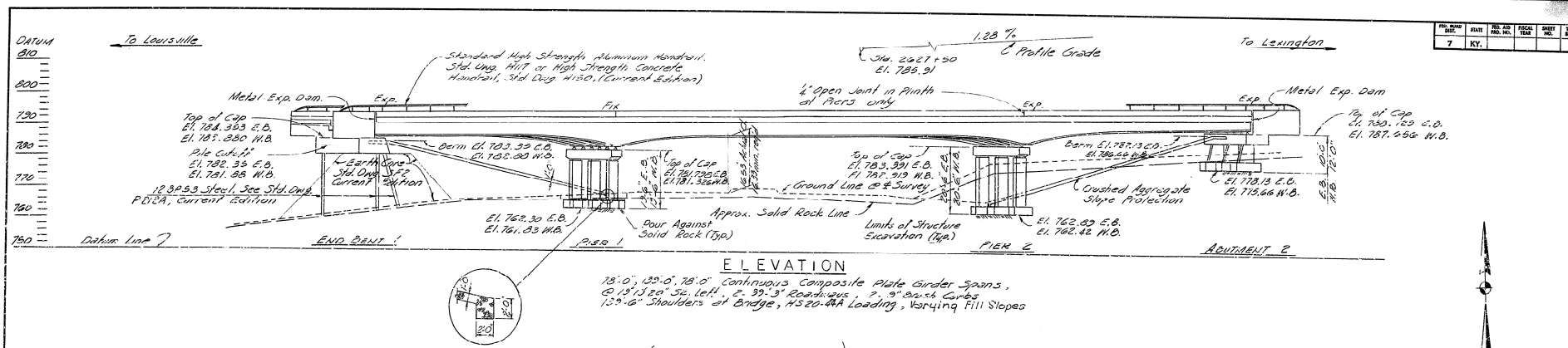
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN

LOUISVILLE-LEXINGTON-CATLETTSBURG ROAD

STATION 2632+69.25 I-64 = 73+39.00 RELOC. U.S. 60 PROJECT NO.

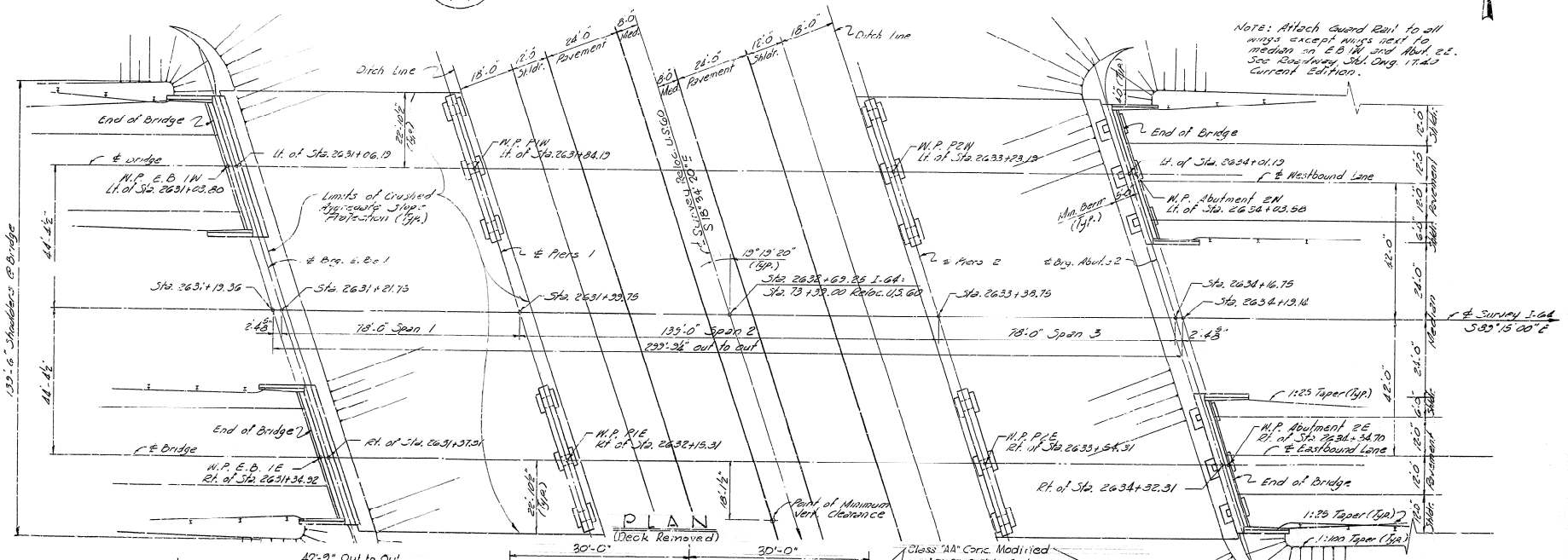
BRIDGE NUMBER | DRAWING NO. 17632 | INDEX

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



ELEVATION

78'-0", 139'-0", 78'-0" Continuous Composite Plate Girder Spans, @ 13°13'20" Sk. left, 2-39'-3" Roadways, 2-9" Brush Curbs 13'-6" Shoulders at Bridge, HS20-44A Loading, Varying Fill Slopes



PLAN
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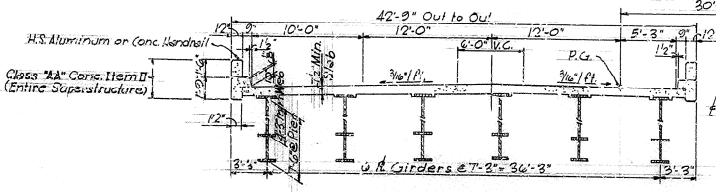
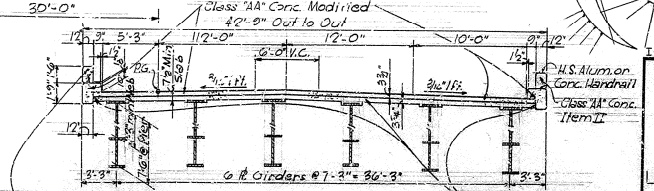


WESTBOUND BRIDGE



EASTBOUND BRIDGE

TYPICAL SECTION
(Looking Ahead)

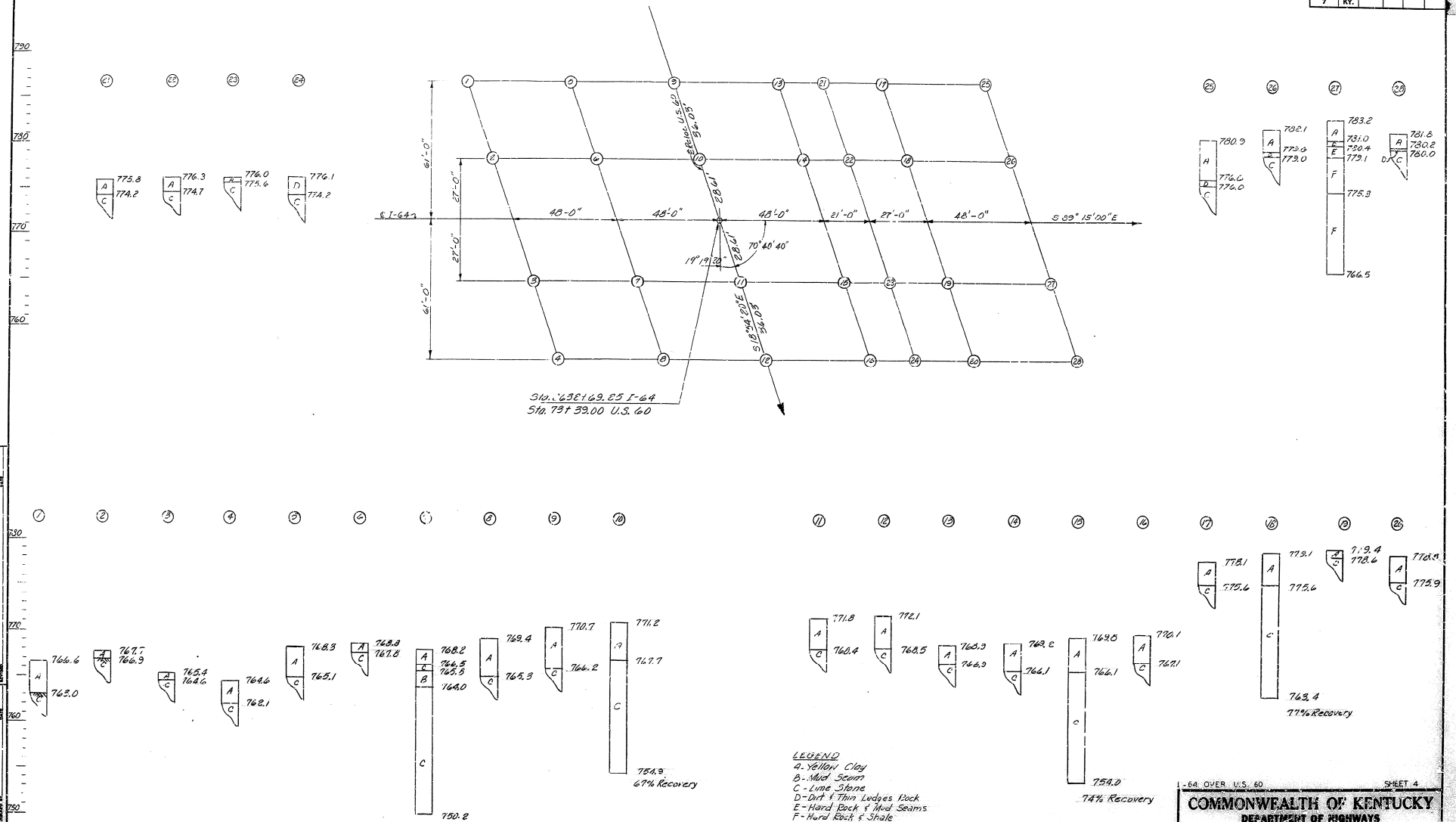
LAYOUT

I-64 OVER US. 60 SHEET 3

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN
LOUISVILLE-LEXINGTON-CATLETTSBURG
ROAD
STATION 73+39.00 RELOC. US 60 2632+69.25 I-64 = PROJECT NO.

BRIDGE NUMBER	DRAWING NO.	SHEET
	17632	

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



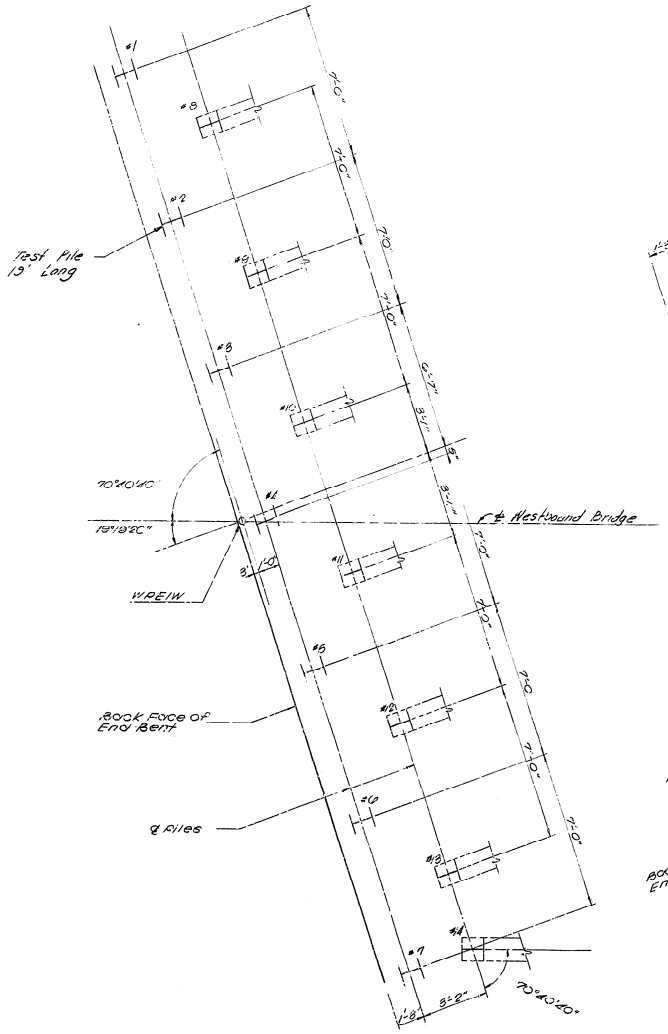
I-64 OVER U.S. 60 SHEET 4

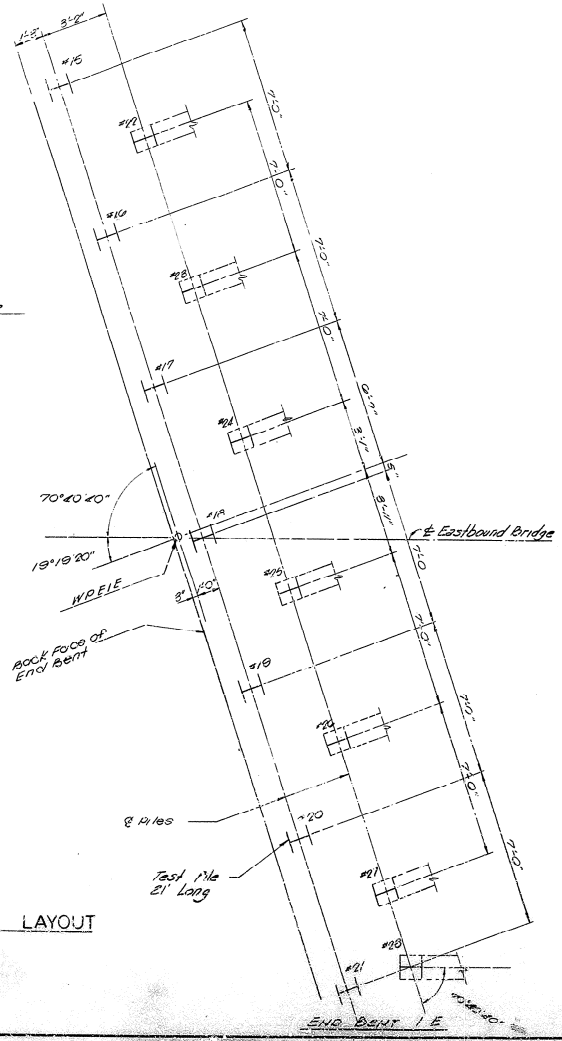
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN
LOUISVILLE-LEXINGTON-CATLETTSBURG

ROAD 2632-69.25 I-64
STATION 73+39.00 RFLOC. U.S. 60 PROJECT NO.
BRIDGE NUMBER
DRAWING NO. 17632

SOUNDINGS

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





PILE LAYOUT

NOTE:

This pile record does not replace other records of piles required to be kept and submitted by the Resident Engineer. After all piles have been driven the Resident Engineer shall record the top of pile elevation as driven, the length of piles in place, the calculated bearing capacity of each pile, and shall return one blue print copy of this sheet with this data to the Director of Bridges so that the data may be recorded on the original plans. Length of piles in place shown hereon are the actual lengths of piles in the finished structure below cut-off elevation and are not necessarily pay items.

For pile notes and details, see Std. Dwg. P212A.

See End Bent details Sheet 6, for batter on piles

PILE RECORD

Location	Pile No	Cutoff Elev. Shown	Tip of Pile Elevation as driven	Pile Length in place (Lin. Ft.)	Calculated Bearing Capacity (Tons)
End Bent 1W	1	781.88			
"	2	"			
"	3	"			
"	4	"			
"	5	"			
"	6	"			
"	7	"			
"	8	"			
"	9	"			
"	10	"			
"	11	"			
"	12	"			
"	13	"			
"	14	"			
End Bent 1E	15	782.36			
"	16	"			
"	17	"			
"	18	"			
"	19	"			
"	20	"			
"	21	"			
"	22	"			
"	23	"			
"	24	"			
"	25	"			
"	26	"			
"	27	"			
"	28	"			

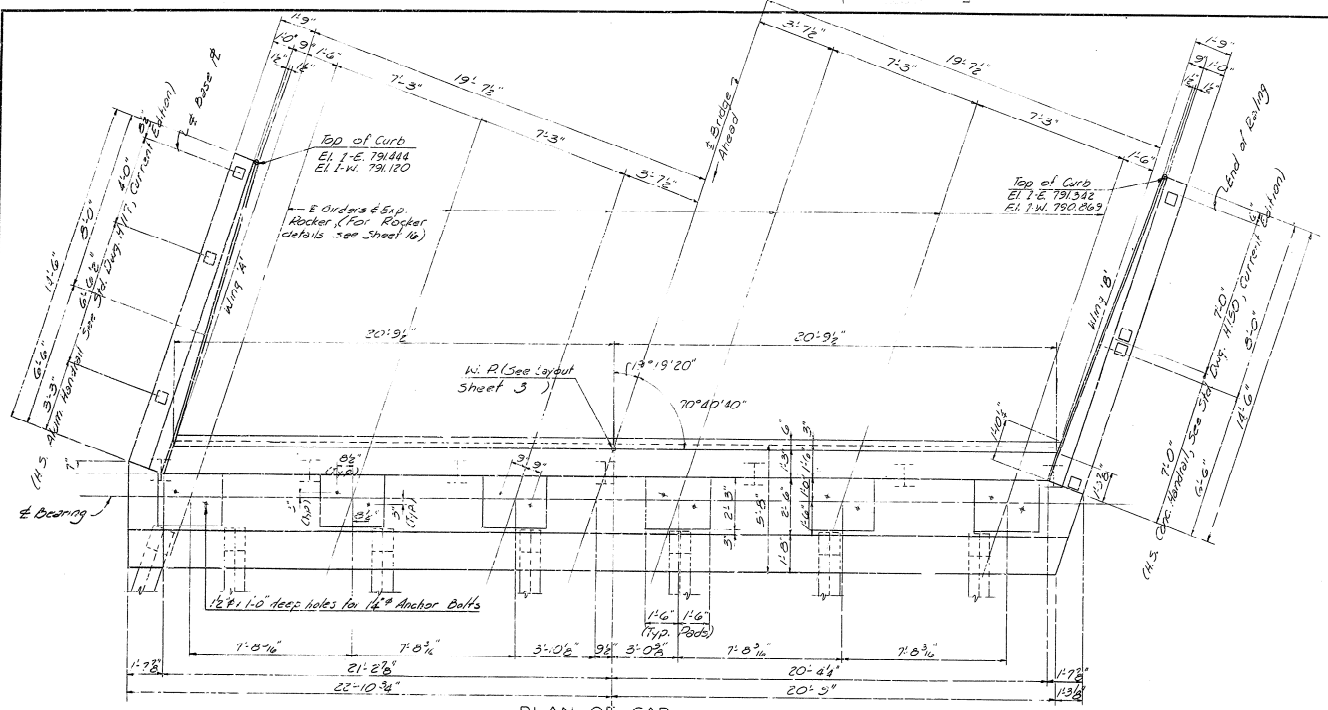
PILE RECORD

I-64 OVER US 60 SHEET 5

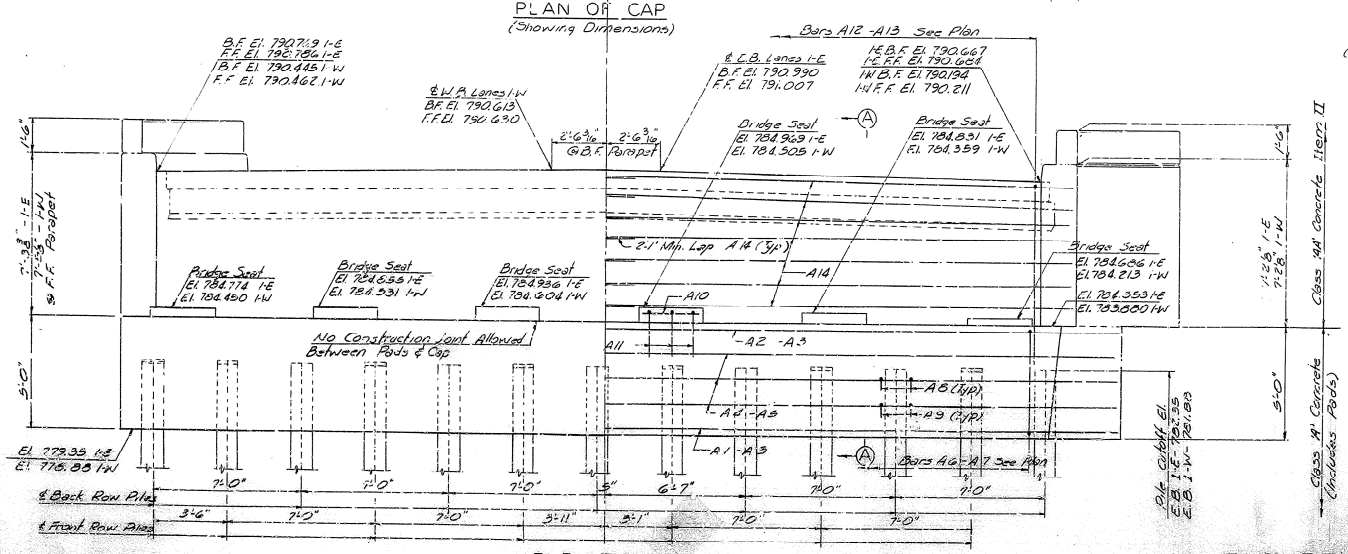
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN
LOUISVILLE-LEXINGTON-CATLETTSBURG ROAD
STATION 5+03.25 I-64 - 13+39.06 RELOC. US 60 PROJECT NO.
BRIDGE NUMBER 17332

DESIGNED BY JFP
DRAWN BY DEH
CHECKED BY
CHECKED BY
CHECKED BY
DATE
REVISED

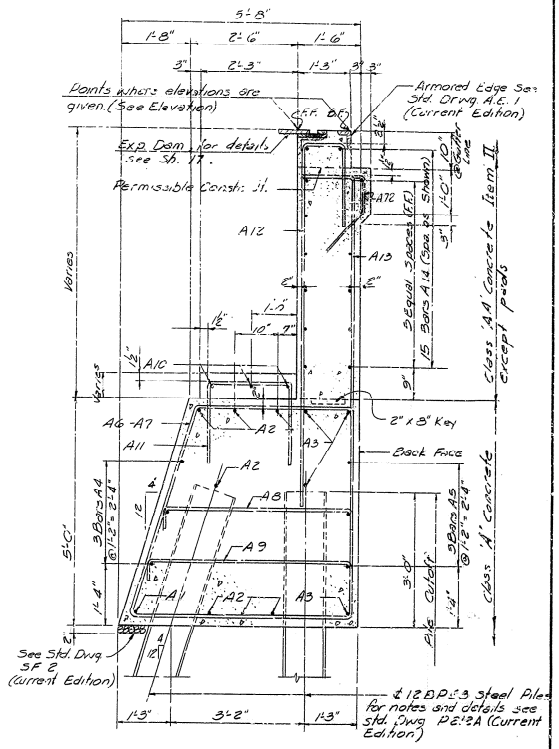
FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



PLAN OF CAP
(Showing Dimensions)



ELEVATION



SECTION A-A

ESTIMATE OF QUANTITES

	E.B. I-E	E.B. I-W	
Concrete, Class 'A'	44.0	44.1	Cu. Yd.
Concrete, Class 'AA' Item II	28.3	28.6	Cu. Yds.
Reinforcement	9676	9676	Lbs

END BENTS IE & IW

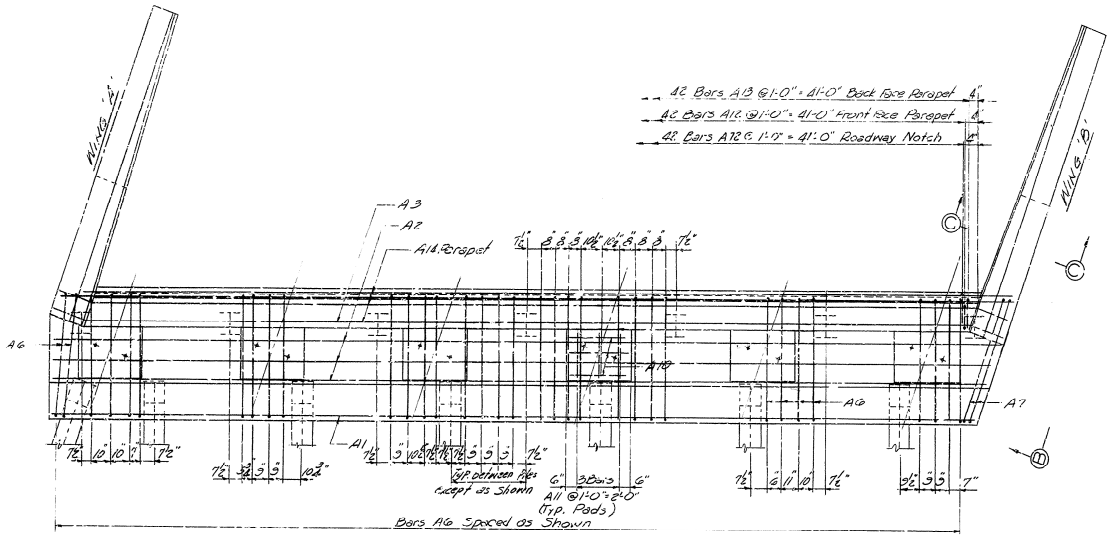
I-64 OVER U.S. 60 SHEET 6

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN
LOUISVILLE-LEXINGTON-CATLETTSBURG
ROAD
STATION 2633+69.23 I-64 = 731.39.00 REL. OC. U.S. 60
PROJECT NO.
BRIDGE NUMBER
DRAWING NO. 17632

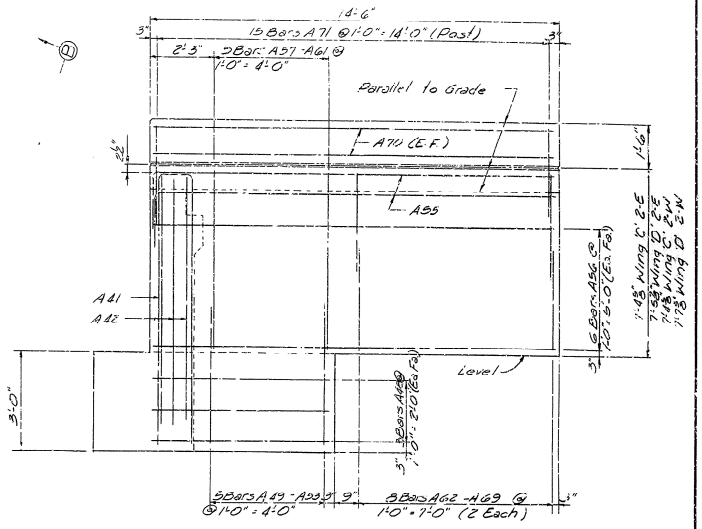
FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				

NOTE: Care is to be used in placing bars in pads & top of cap to provide clearance for anchor bolt holes.

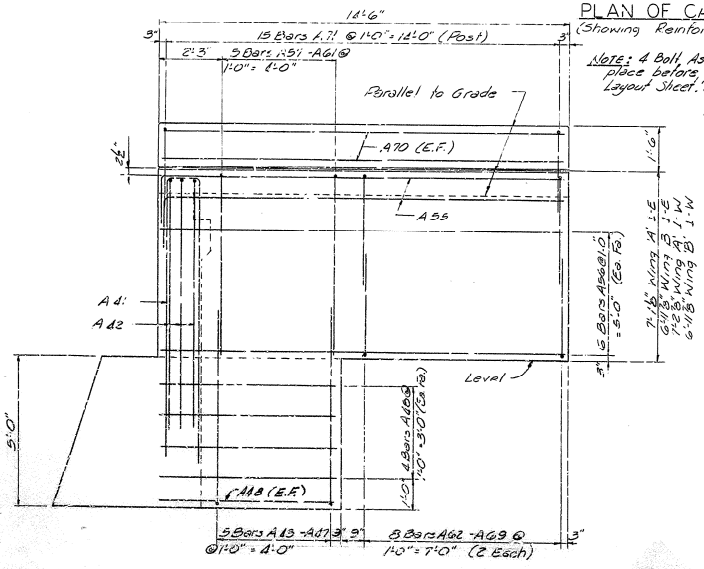
See Anchor Bolt Note Sheet 2.



PLAN OF CAP
(Showing Reinforcement)

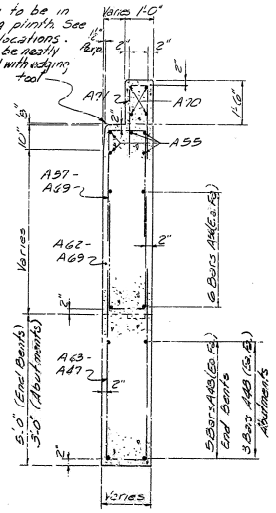


ELEVATION G-G
(Typ. Abutment Wing Reinforcement)

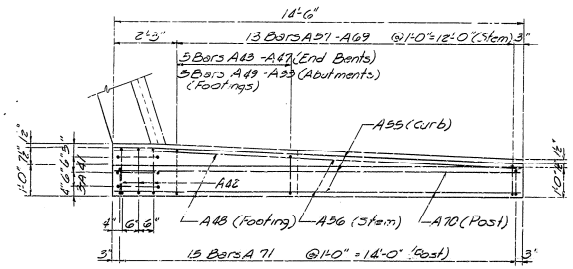


ELEVATION B-B
(Typ. End Bent Wing Reinforcement)

NOTE: 4 Bolt Assembly to be in place before pouring plinth. See Layout Sheet 3 for locations. To be neatly rounded with edging tool



SECTION C-C



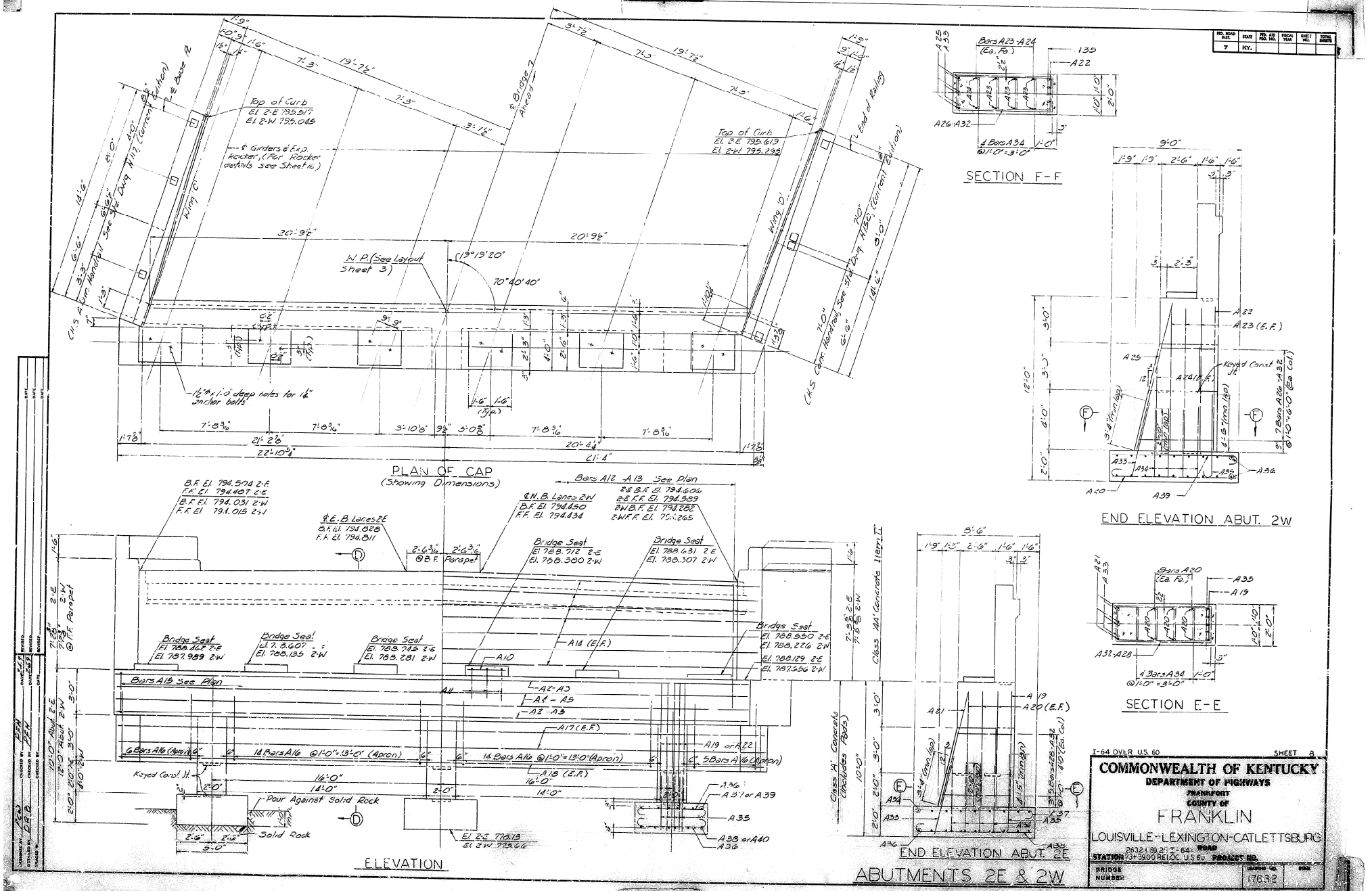
TYPICAL WING PLAN

END BENTS AND ABUTMENTS

I-64 OVER U.S. 60 SHEET 7

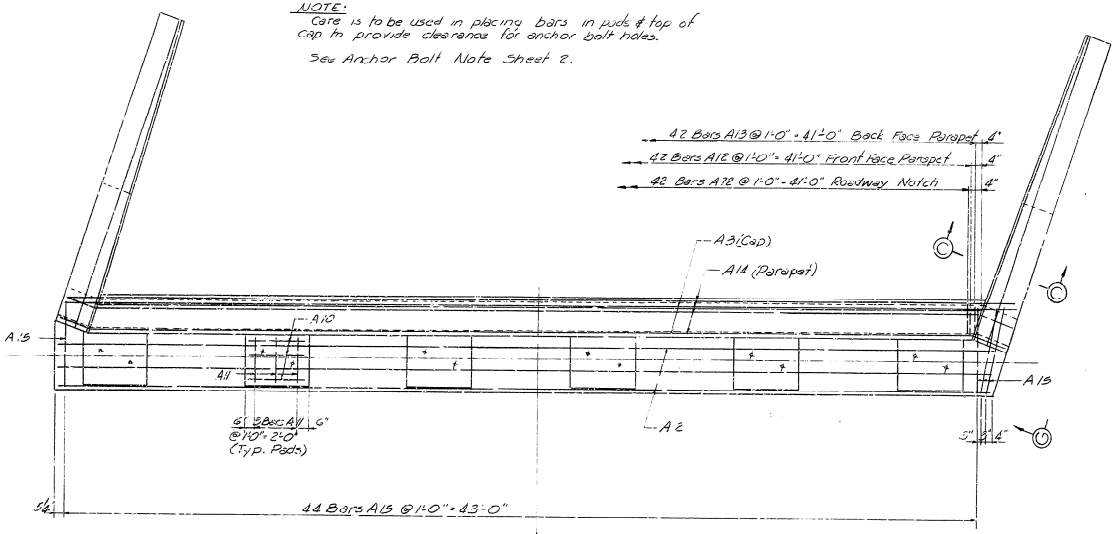
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN
LOUISVILLE-LEXINGTON-CATLETTSBURG
ROAD
2632+69.25 I-64= STATION 73+39.00 RELOC. U.S. 60 PROJECT NO.

BRIDGE NUMBER	DRAWING NO.	SHEET
	17632	

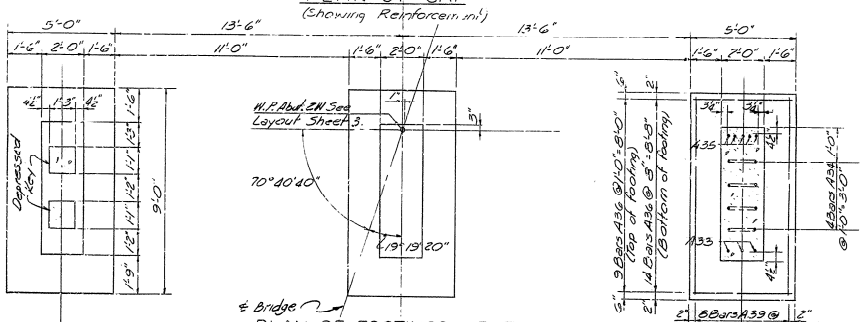

PLAN OF CAP
(Showing Dimensions)
ELEVATION
SECTION F-F
END ELEVATION ABUT. 2W
SECTION E-E
END ELEVATION ABUT. 2E
ABUTMENTS 2E & 2W
Top of Curb
El. 2-E 795.517
El. 2-W 795.045
Top of Curb
El. 2-E 795.619
El. 2-W 795.295
W.P. (See Layout Sheet 3)
70°40'40"
Bridge Seat
Pour Against Solid Rock
Solid Rock
Keyed Const. Jt.
Bars A12-A13 See Plan
Bars A15 See Plan
Bars A23-A24 (Ea. Fa.)
Bars A20 (Ea. Fa.)
Class 'AA' Concrete Includes Pads
Class 'A' Concrete Includes Pads
I-64 OVER U.S. 60
SHEET 8
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN
LOUISVILLE-LEXINGTON-CATLETTSBURG
ROAD
STATION 73+39.00 RELOC. U.S. 60
PROJECT NO.
BRIDGE NUMBER
17632

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

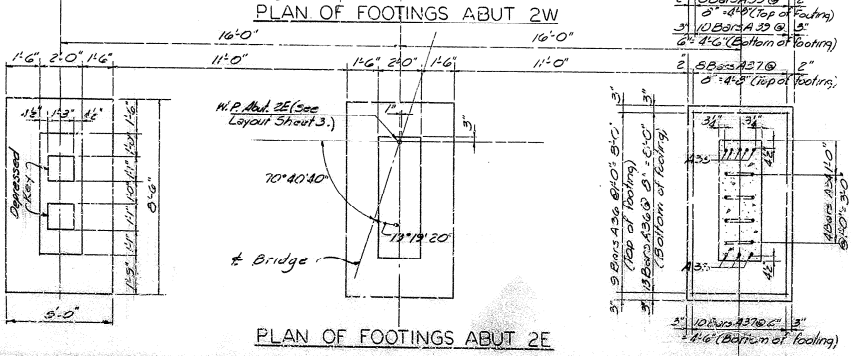
NOTE:
Care is to be used in placing bars in pads & top of cap to provide clearance for anchor bolt holes.
See Anchor Bolt Note Sheet 2.



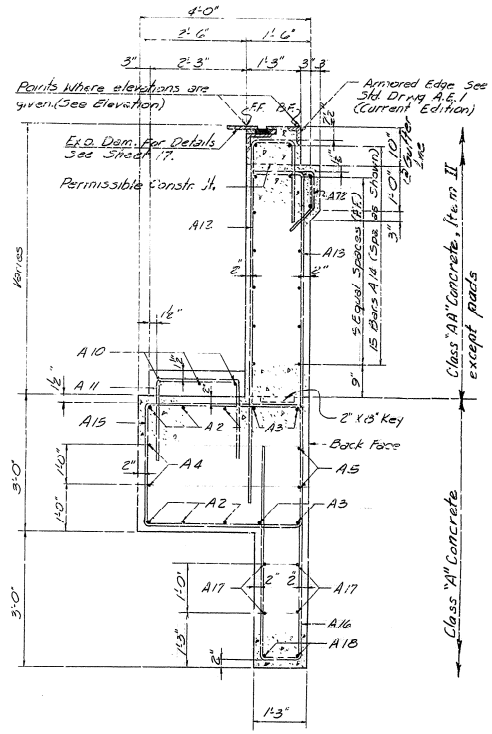
PLAN OF CAP
(Showing Reinforcement)



PLAN OF FOOTINGS ABUT 2W



PLAN OF FOOTINGS ABUT 2E



SECTION D-D

ESTIMATE OF QUANTITES

		Abutment 2-E		Abutment 2-W	
Concrete, Class 'A'		42.6	Cu. Yd.	45.7	Cu. Yd.
Concrete, Class 'AA'	Item II	28.8	Cu. Yd.	29.1	Cu. Yd.
Reinforcement		11022	Lb.	11287	Lb.

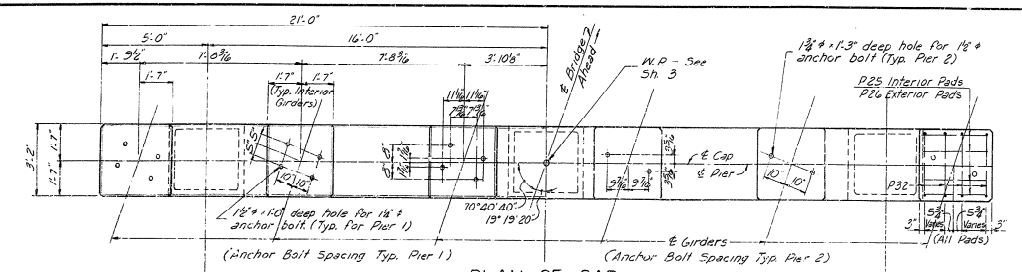
ABUTMENTS 2E & 2W

I-64 OVER U.S. 60 SHEET 9

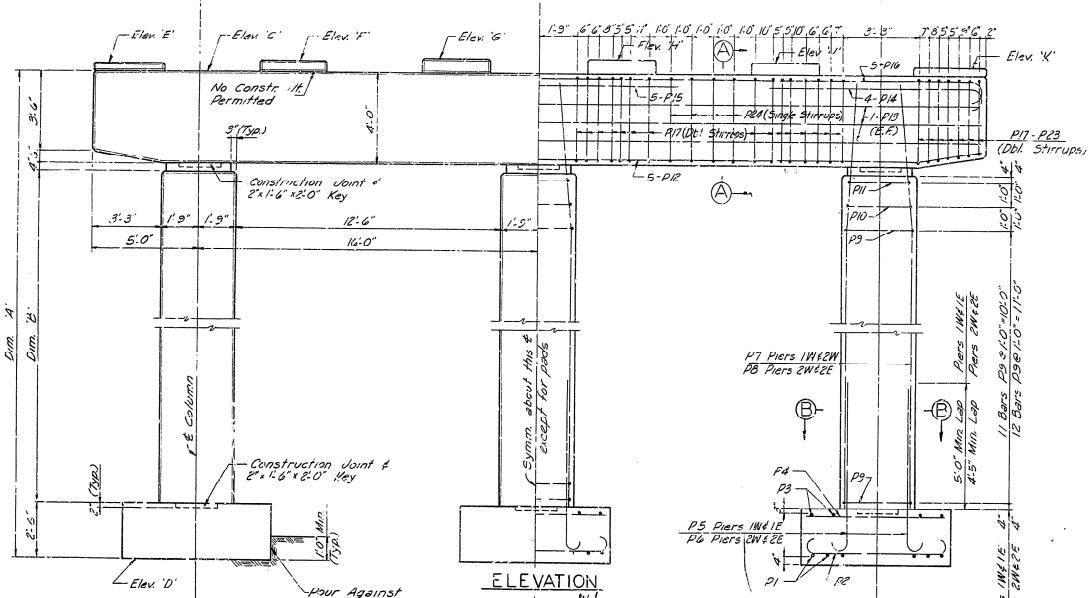
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN
LOUISVILLE-LEXINGTON-CATLETTSBURG
ROAD
STATION 731+33.00 RELOC. US 60 PROJECT NO.
2632+09.25 I-64
BRIDGE NUMBER
DRAWING NO. 17632
DATE

DESIGNED BY JCC CHECKED BY JCC DATE 4-6-61
DETAILED BY JCC CHECKED BY JCC DATE 4-6-61
TRACED BY JCC CHECKED BY JCC DATE
DETAILED DATE REVISED DATE REVISED DATE

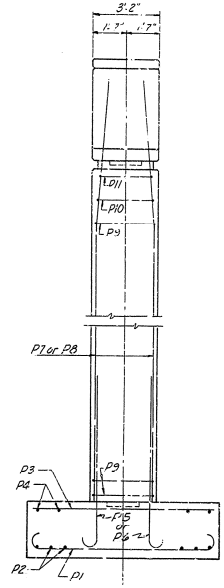
FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



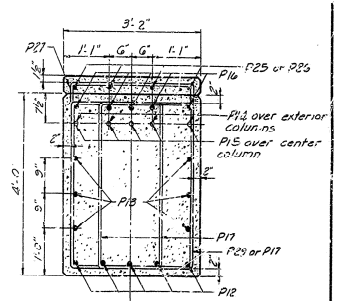
PLAN OF CAP



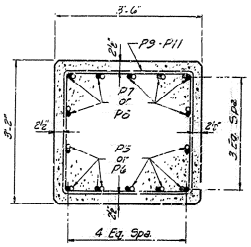
ELEVATION



END ELEVATION

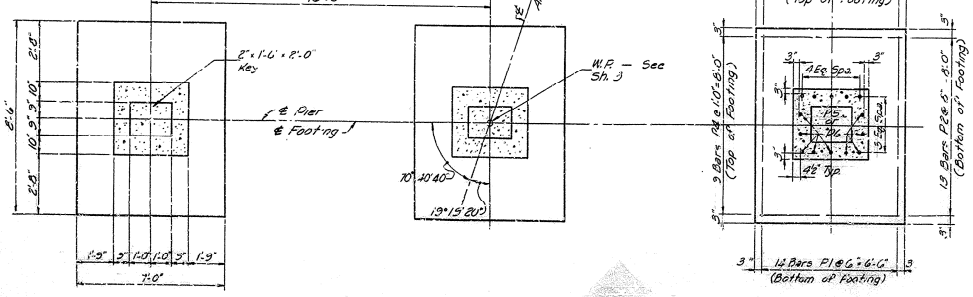


SECTION A-A



SECTION B-B

TABLE OF DIMENSIONS AND ELEVATIONS				
	Pier 1W	Pier 2W	Pier 1E	Pier 2E
'A'	19'-6"	20'-6"	19'-6"	20'-6"
'B'	12'-0"	13'-8"	12'-8"	13'-8"
'C'	781.226	782.919	781.799	783.391
'D'	761.83	762.42	762.30	762.89
'E'	781.659	783.252	782.132	783.724
'F'	.805	.397	.278	.870
'G'	.951	.543	.416	784.008
'H'	782.050	.642	.382	783.974
'J'	781.977	.569	.301	.895
'K'	.896	.483	.227	.813



PLAN OF FOOTINGS

ESTIMATE OF QUANTITIES

	Pier 1W	Pier 2W	Pier 1E	Pier 2E	
Concrete, Class 'A'	53.2	54.4	53.0	54.3	Cu. Yd.
Reinforcement	9322	8621	9322	8621	Lbs.

E.B. & W.B. PIERS

I-64 OVER U.S. 60 SHEET 10

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN
LOUISVILLE-LEXINGTON-CATLETTSBURG
ROAD
STATION 2632+60.25 I-64 = 73+39.00 RELOC. U.S. 60 PROJECT NO.
BRIDGE NUMBER
DRAWING NO. 17632
SHEET

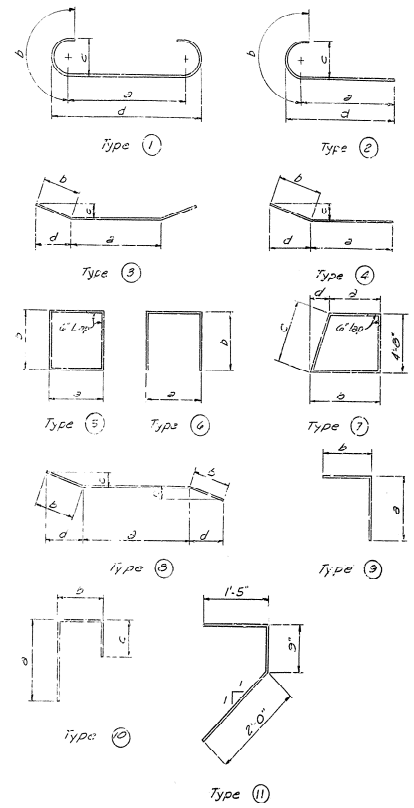
DESIGNED BY PEH DATE 2-63 REVISED DATE
DETAILED BY T.G. DATE 2-63 REVISED DATE
CHECKED BY PEH DATE REVISED DATE
TRACED BY DATE REVISED DATE

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

BILL OF REINFORCEMENT

Mark	Type	Number End Bent 1E	Number Abut 2E	Number End Bent 1W	Number Abut 2W	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.	1	–	1	–	10	43	3	Cap								
A2	"	7	6	7	6	10	43	10	"								
A3	"	4	4	4	4	10	44	10	"								
A4	"	3	2	3	2	6	43	10	"								
A5	"	3	2	3	2	6	44	11	"								
A6	7	50	–	50	–	5	19	4	"	3	8½	5	3	4	11	1	6½
A7	"	2	–	2	–	5	19	11	"	3	11¼	5	6¾	4	11½		7½
A8	6	26	–	26		6	5	3	@ Piles	4	6	3	6				
A9	"	26	–	26	–	6	5	7	"	4	10½	0	6				
A10	Str.	18	18	18	18	4	2	8	Brid. Seat								
A11	6	18	18	18	18	4	5	2	" "	2	0	1	8				
A12	12	42	42	42	42	6	11	4	Parapet	8	2	0	11	2	6		
A13	9	42	42	42	42	7	9	9	"	8	9	1	2				
A14	4	30	30	30	30	5	23	6	"	21	11	1	7	0	6¼	1	6
A15	5	–	46	–	46	5	13	5	Cap	3	8	2	8				
A16	6	–	39	–	39	5	9	1	Apron	0	11	4	2				
A17	8	–	4	–	4	6	44	9	"	41	7	1	7	0	6¼	1	6
A18	"	–	2	–	2	8	34	9	"	41	7	1	7	0	6¼	1	6
A19	Str	–	15	–	–	7	6	10	Columns								
A20	"	–	18	–	–	5	6	4	"								
A21	"	–	9	–	–	6	6	8	"								
A22	"	–	–	–	18	7	3	10	"								
A23	"	–	–	–	18	5	8	4	"								
A24	"	–	–	–	6	5	6	0	"								
A25	"	–	–	–	9	6	8	8	"								
A26	9	–	–	–	3	4	14	0	Column Hoops	5	0½	1	7				
A27	"	–	–	–	3	4	13	6	" "	4	9½	1	7				
A28	"	–	3	–	3	4	13	0	" "	4	6½	1	7				
A29	"	–	3	–	3	4	12	6	" "	4	3½	1	7				
A30	"	–	3	–	3	4	12	0	" "	4	0½	1	7				
A31	"	–	3	–	3	4	11	6	" "	3	9½	1	7				
A32	"	–	3	–	3	4	11	0	" "	3	6½	1	7				
A33	Str	–	9	–	9	6	5	1	Column Dowels								
A34	6	–	12	–	12	5	10	2	" "	1	6	4	5				
A35	2	–	15	–	15	8	7	2	" "	5	8	7	6	0	10	6	1
A36	1	–	66	–	66	5	5	11	Footings	4	3	0	10	0	5	4	8
A37	2	–	54	–	–	9	9	3	"	7	11	0	10	0	5	8	1½
A38			NOT	USED					"								
A39	2	–	–	–	54	5	9	3	"	8	5	0	10	0	5	8	7½
A40			NOT	USED													
A41	6	6	6	6	6	7	20	5	Wings	1	6	9	7				
A42	"	6	6	6	6	7	18	0	"	1	4	8	10				
A43	"	2	–	2	–	5	16	0	"	1	4½	1	5				
A44	"	2	–	2	–	5	16	6	"	1	4	7	5				
A45	"	2	–	2	–	5	15	11	"	1	3½	7	5				
A46	"	2	–	2	–	5	15	11	"	1	3	7	5				
A47	"	2	–	2	–	5	15	10	"	1	2½	7	5				
A48	Str	20	12	20	12	6	6	2	"								
A49	6	–	2	–	2	5	15	0	"	1	4½	5	5				
A50	"	–	2	–	2	5	12	0	"	1	4	5	5				
A51	"	–	2	–	2	5	11	11	"	1	3½	5	5				
A52	"	–	2	–	2	5	11	1	"	1	3	5	5				
A53	"	–	2	–	2	5	11	10	"	1	2½	5	5				
A54			NOT	USED					"								
A55	8	10	10	10	10	9	17	10	"	3	10	11	2				
A56	Str	24	24	24	24	6	14	2	"								
A57	6	2	2	2	2	5	14	10	"	1	3¾	6	10				
A58	"	2	2	2	2	5	14	10	"	1	3¼	6	10				
A59	"	2	2	2	2	5	14	9	"	1	2¾	6	10				
A60	"	2	2	2	2	5	14	9	"	1	2¼	6	10				
A61	"	2	2	2	2	5	14	5	"	1	1¾	6	10				
A62	"	4	4	4	4	5	10	3	"	1	1¼	4	8				
A63	"	4	4	4	4	5	10	3	"	1	1	4	8				
A64	"	4	4	4	4	5	10	2	"	1	¾	4	8				
A65	"	4	4	4	4	5	10	2	"	1	0	4	8				
A66	"	4	4	4	4	5	10	1	"	0	11½	4	8				
A67	"	4	4	4	4	5	10	1	"	0	11	4	8				
A68	"	4	4	4	4	5	10	0	"	0	10½	4	8				
A69	"	4	4	4	4	5	10	0	"	0	10	4	8				
A70	Str.	8	8	8	8	5	14	2	Posts								
A71	6	30	30	30	30	6	8	1	"	0	8	3	10				
A72	11	42	42	42	42	4	4	0	Roadway Notch								

Mark	Type	Number Pier 1E	Number Pier 2E	Number Pier 1W	Number Pier 2W	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	42	42	42	42	7	9	11	Bott. of Footing	7	7	1	2	0	7	8	2
P2	"	39	39	39	39	5	7	11	" " "	6	3	0	10	0	5	6	8
P3	Str.	21	21	21	21	5	8	2	Top " "								
P4	"	27	27	27	27	5	6	8	" " "								
P5	2	42	—	42	—	9	8	5	Column Dowels	6	9	1	8	6	11¼	7	2⅝
P6	"	—	42	—	42	8	7	0	" "	6	2	1	6	0	10	6	7
P7	4	42	—	42	—	9	16	2	Columns	10	4	5	10	0	7½	5	3¾
P8	"	—	42	—	42	8	17	2	"	11	4	5	10	0	7½	5	3¾
P9	5	33	36	33	36	4	12	5	Column Hoops	3	1	2	9				
P10	"	3	3	3	3	4	11	7	" " "	2	10½	2	6½				
P11	"	3	3	3	3	4	10	9	" " "	2	8	2	4				
P12	3	5	5	5	5	9	41	9	Cap	35	1	3	1½	0	5¾	3	1
P13	Str.	6	6	6	6	6	41	8	"								
P14	2	8	8	8	8	10	12	4	"	10	6	1	10	1	0½	11	0¼
P15	Str.	5	5	5	5	8	10	8	"								
P16	1	5	5	5	5	10	44	3	"	40	7	1	10	1	0½	41	7½
P17	5	64	64	64	64	5	12	0	Cap Stirrups	1	11½	3	8				
P18	"	4	4	4	4	5	11	11	" "	1	11½	3	7½				
P19	"	4	4	4	4	5	11	9	" "	1	11½	3	6¼				
P20	"	4	4	4	4	5	11	7	" "	1	11½	3	5½				
P21	"	4	4	4	4	5	11	5	" "	1	11½	3	4½				
P22	"	4	4	4	4	5	11	3	" "	1	11½	3	3¼				
P23	"	4	4	4	4	5	11	1	" "	1	11½	3	2¼				
P24	"	3	3	3	3	5	13	9	" "	2	10	3	8				
P25	Str.	16	16	16	16	4	2	10	Rods								
P26	"	8	8	8	8	4	3	0	"								
P27	6	24	24	24	24	4	6	2	"	2	10	1	9				



SUBSTRUCTURE

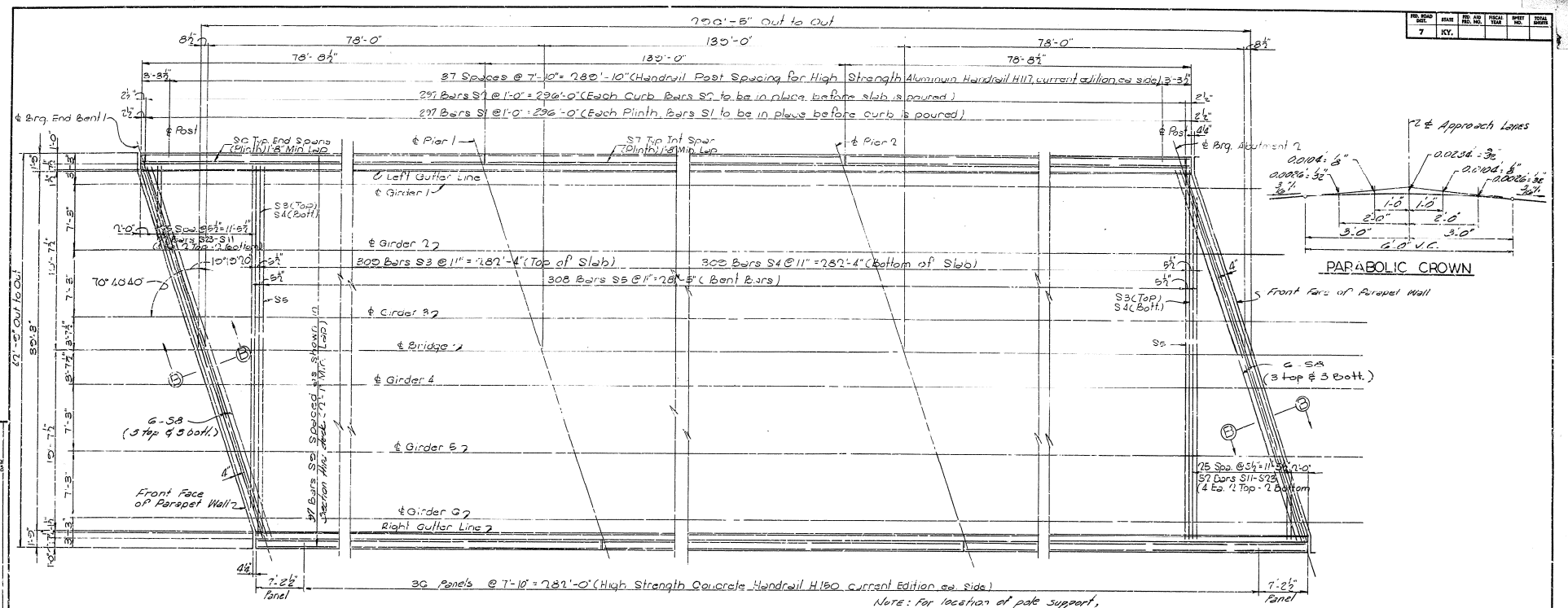
I-64 OVER U.S. 60 SHEET 11

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN

LOUISVILLE LEXINGTON-CATLETTSBURG
ROAD
STATION 263+69.25 I-64 = 263+33.00 RELOC. U.S. 60 **PROJECT NO.**

BRIDGE NUMBER — DRAWING NO. 17632 — SHEET

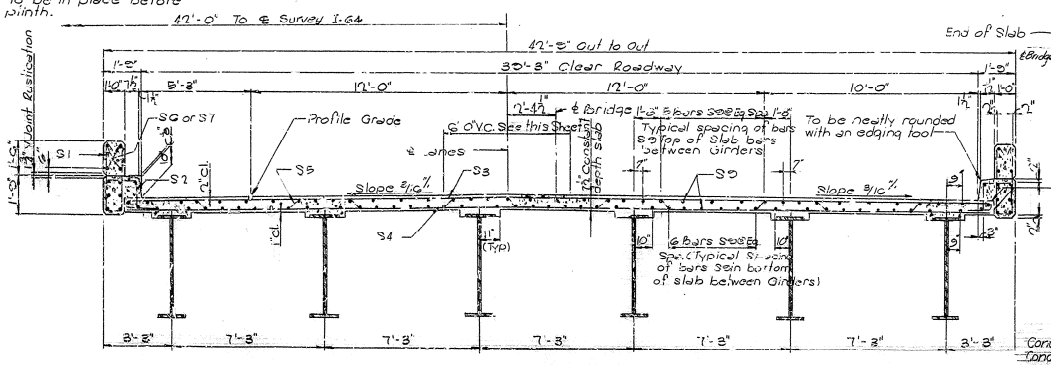
DESIGNED BY: T.B.E. DATE: CHECKED BY: DATE:
DETAILED BY: DATE: CHECKED BY: DATE:
TRACED BY: DATE: CHECKED BY: DATE:
DATE: DATE: DATE:



PLAN E.B. OR W.B.

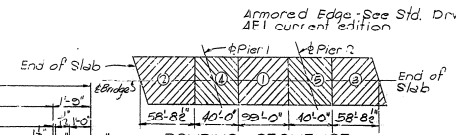
PARABOLIC CROWN

NOTE: Anchor bars for Concrete Handrail or Anchor bolts for Aluminum Handrail to be in place before pouring plinth.



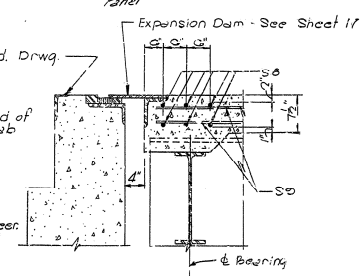
This constr. joint is mandatory. Concrete above this construction joint shall not be placed until after the deck has properly cured

SECTION THRU DECK
Looking Ahead Eastbound Bridge
Looking Ahead Westbound Bridge



POURING SEQUENCE

NOTE - The slab pouring sequence may be changed with the written approval of the Engineer.



SECTION B-B

ESTIMATE OF QUANTITIES

	EB	WB	
Concrete, Class "AA" Item I*	143.7	0	Cu. Yds.
Concrete, Class "AA" Item II*	32.9	368.7	Cu. Yds.
Concrete, Class "AA" Modified*	192.1	0	Cu. Yds.
Reinforcement	86,543	86,543	Lbs.

* For location, See Typical Section, Sheet 3. Also see Special Notes for Bridge Deck Construction.

SUPERSTRUCTURE

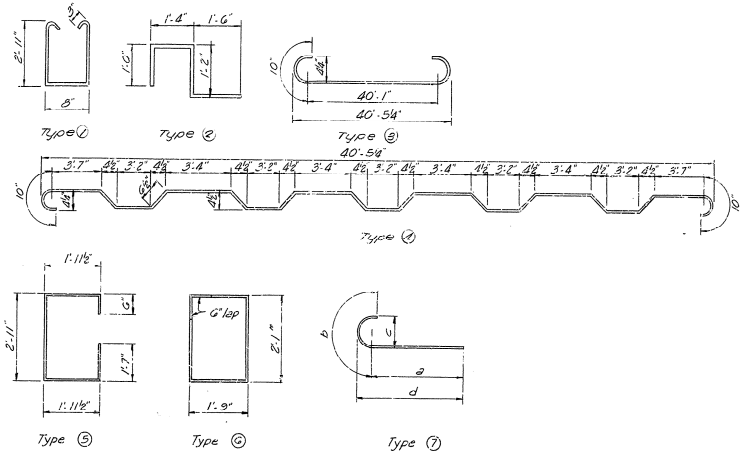
I-64 OVER U.S. 60 SHEET 12

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN
LOUISVILLE-LEXINGTON-CATLETTSBURG
ROAD
2632+69.25 I-64
STATION 73+39.00 RELOC. U.S. 60 PROJECT NO.
BRIDGE NUMBER
DRAWING NO. 17632

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

BILL OF REINFORCEMENT (ONE BRIDGE)

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.
S1	1	594	5	6	10	Plinth								
S2	2	594	7	4	9	Curb								
S3	3	309	5	41	9	Slab								
S4	Str.	309	5	40	6	"								
S5	4	308	5	43	5	"								
S6	Str.	32	4	40	1	Plinth								
S7	"	32	4	36	0	"								
S8	"	24	5	22	6	Slab @ Ends								
S9	"	776	5	38	11	Slab (Longit)								
S10						Not Used								
S11	7	8	5	37	10	Slab	37	0	0	10	0	4¼	37	2¼
S12	"	8	5	35	2	"	34	4	0	10	0	4¼	34	6¼
S13	"	8	5	32	7	"	31	9	0	10	0	4¼	31	11¼
S14	"	8	5	30	0	"	29	2	0	10	0	4¼	29	4¼
S15	"	8	5	27	4	"	26	6	0	10	0	4¼	26	8¼
S16	"	8	5	24	9	"	23	11	0	10	0	4¼	24	1¼
S17	"	8	5	22	1	"	21	3	0	10	0	4¼	21	5¼
S18	"	8	5	19	6	"	18	8	0	10	0	4¼	18	10¼
S19	"	8	5	16	11	"	16	1	0	10	0	4¼	16	3¼
S20	"	8	5	14	3	"	13	5	0	10	0	4¼	13	7¼
S21	"	8	5	11	8	"	10	10	0	10	0	4¼	11	0¼
S22	"	8	5	9	1	"	8	3	0	10	0	4¼	8	5¼
S23	"	8	5	6	5	"	5	7	0	10	0	4¼	5	9¼
S24	5	3	5	8	3	Pole Support								
S25	6	6	5	8	5	" "								



SUPERSTRUCTURE

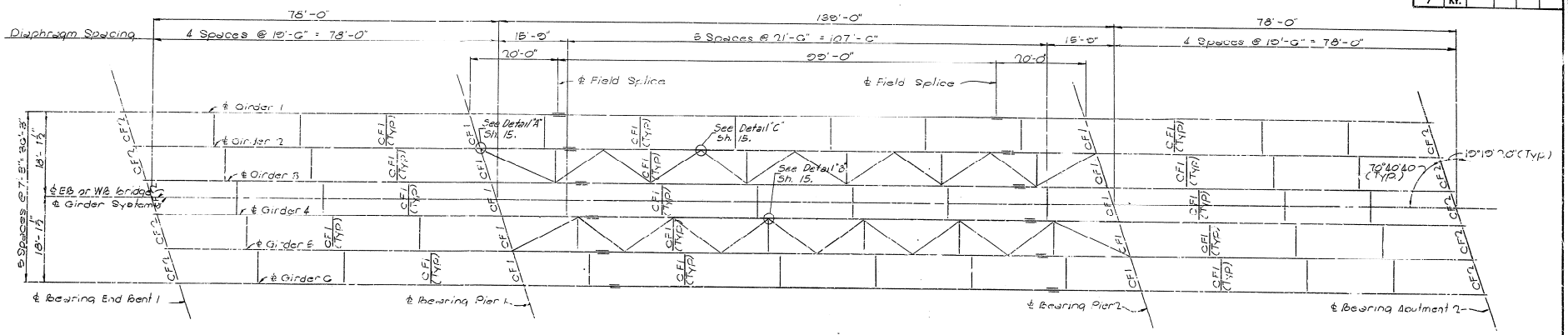
I-64 OVER U.S. 60 SHEET 13

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN
LOUISVILLE - LEXINGTON - CATLETTSBURG
ROAD
STATION 2632+69.25 I-64: 73+39.00 RELOC. U.S. 60 **PROJECT NO.**

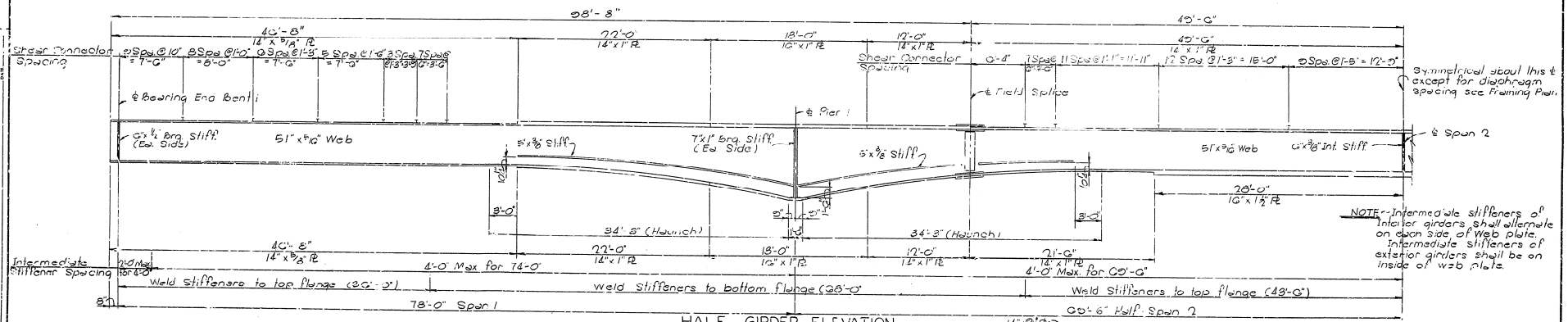
BRIDGE NUMBER	DRAWING NO.	SIZE
	17632	

DESIGNED BY B.K. CHECKED BY P.F.H. DATE 2-69 REVISED DATE
DETAILED BY B.K. CHECKED BY DATE 2-69 REVISED DATE
TRACED BY CHECKED BY DATE REVISED DATE

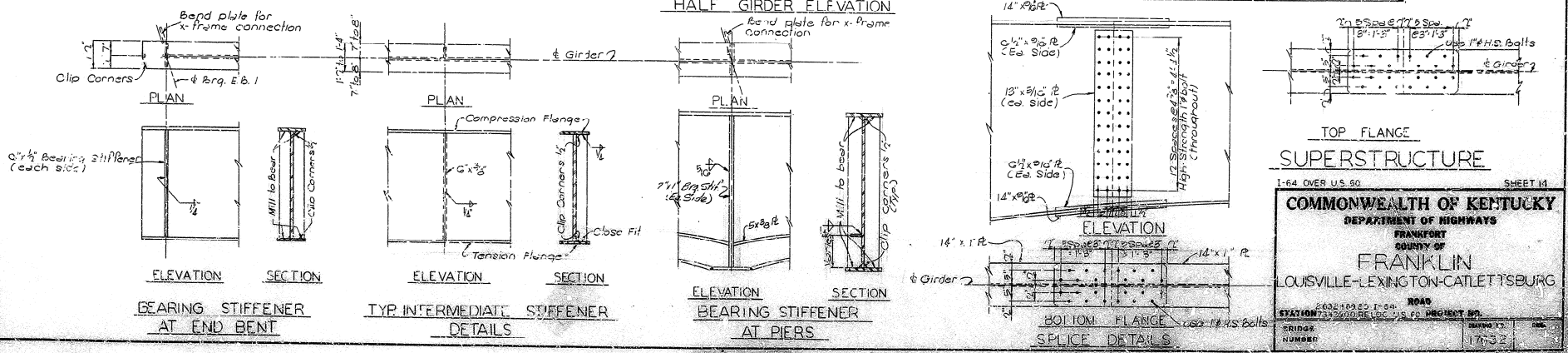
FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



FRAMING PLAN EB OR WB



HALF GIRDER ELEVATION



BEARING STIFFENER AT END BENT

TYP. INTERMEDIATE STIFFENER DETAILS

BEARING STIFFENER AT PIERS

SPLICE DETAILS

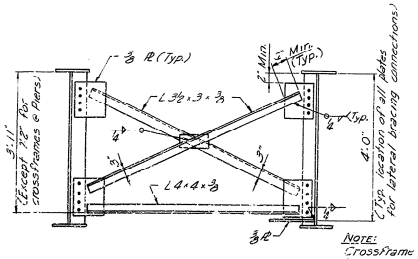
SUPERSTRUCTURE

I-64 OVER U.S. 60 SHEET 14

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN
LOUISVILLE-LEXINGTON-CATLETTSBURG
ROAD
STATION 2683+59.53 I-64 RELOC. U.S. 60 PROJECT NO.
BRIDGE NUMBER
DRAWING NO. 17-32

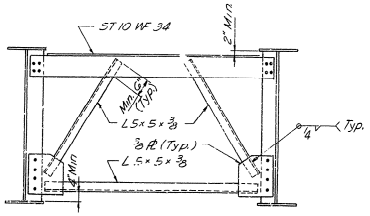
DESIGNED BY: PFH
DETAILED BY: PFH
TRACED BY:
CHECKED BY: PEH
CHECKED BY:
DATE: 2-69
DATE: 2-69
DATE:
DATE:
SUBMITTED:
APPROVED:
REVISED:

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



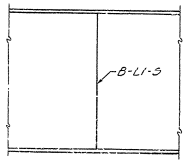
Note: Crossframe & lateral bracing connections to be made with 3/4" ϕ bolts.

CROSSFRAME CF 1

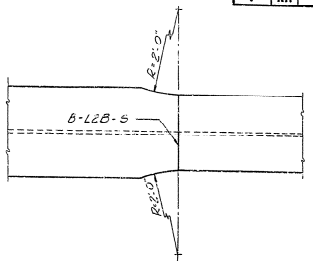


CROSSFRAME CF 2

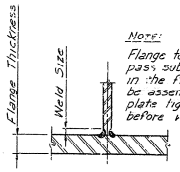
WELD SIZES	
Flange Thickness	Weld Size
3/8" & under	1/4"
over 3/8" to 1½"	5/16"



ELEVATION



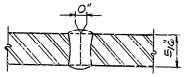
PLAN



Note: 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 plate tight against flange plate before welding.

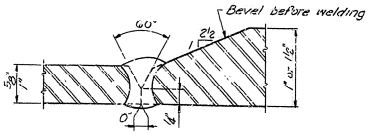
SECTION

FLANGE TO WEB WELD



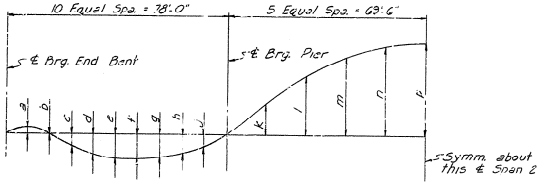
SECTION

SHOP WEB SPLICE
(Submerged Metal Arc Weld)
AWS B-L1-S



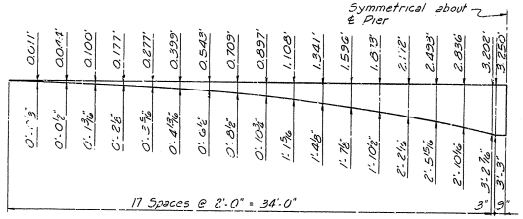
SECTION

SHOP FLANGE SPLICE
(Submerged Metal Arc Weld)
AWS B-L2B-S

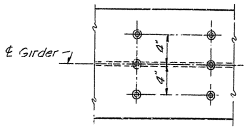


DEAD LOAD CAMBER

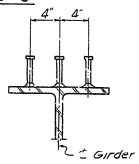
DEAD LOAD CAMBER							
Point	Steel Δ	Conc. Δ	Total Δ	Point	Steel Δ	Conc. Δ	Total Δ
a	0	1/32"	1/32"	j	1/16"	3/16"	1/4"
b	0	0	0	k	1/16"	9/16"	5/8"
c	0	1/16"	1/16"	l	3/16"	1 5/16"	1½"
d	1/16"	1/8"	3/16"	m	5/16"	2 1/16"	2 3/8"
e	1/16"	1/4"	5/16"	n	7/16"	2 3/16"	3"
f	1/16"	3/8"	7/16"	p	1/2"	2 3/8"	3 1/4"
g	1/8"	3/8"	1/2"				
h	1/16"	3/8"	7/16"				



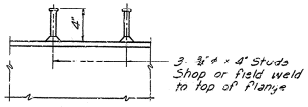
ORDINATES FOR PARABOLIC HAUNCH



PLAN

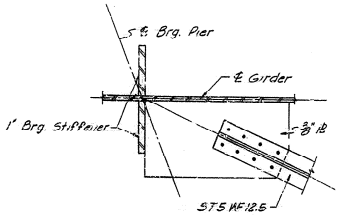


SECTION

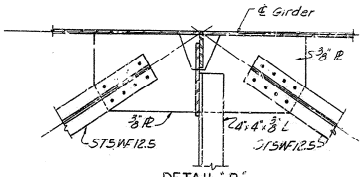


ELEVATION

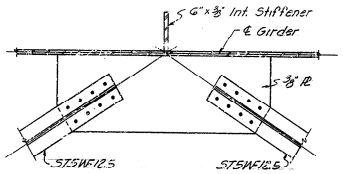
SHEAR CONNECTOR DETAILS



DETAIL "A"
AT PIER



DETAIL "B"
AT CROSS FRAME



DETAIL "C"
AT INTERMEDIATE KNEE BRACE

Note: For location of connection plates see framing plan, Sh. 14 and crossframe CF1, Sh. 15.

LATERAL BRACING CONNECTIONS

SUPERSTRUCTURE

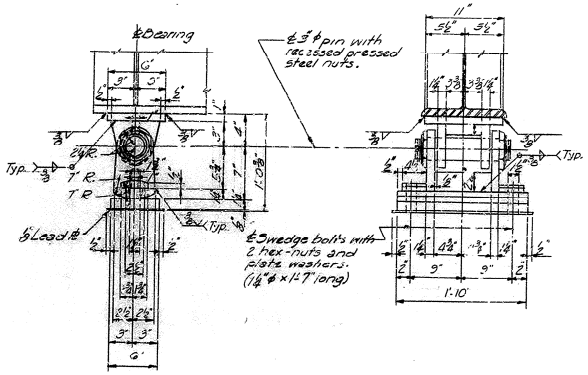
I-64 OVER US. 60 SHEET 15

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN
LOUISVILLE-LEXINGTON-CATLETSBURG
ROAD
STATION 26+32+69.85 I 64 - 73+39.00 RELOC. US 60 **PROJECT NO.**

BRIDGE NUMBER	DRAWING NO.	PROJ.
	17632	

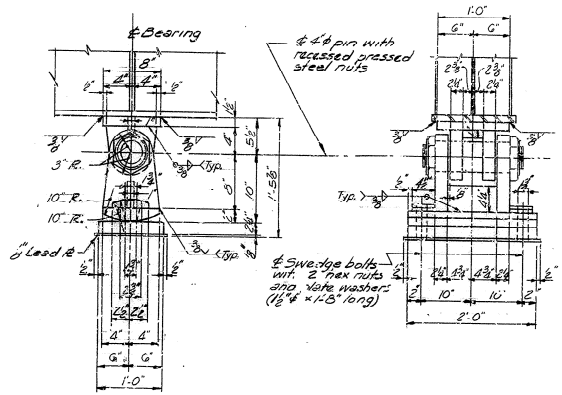
SUBMITTED		DATE	
DETAILED BY	T.B.	CHECKED BY	
TRACED BY		CHECKED BY	
REVISED		DATE	
REVISED		DATE	
REVISED		DATE	

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



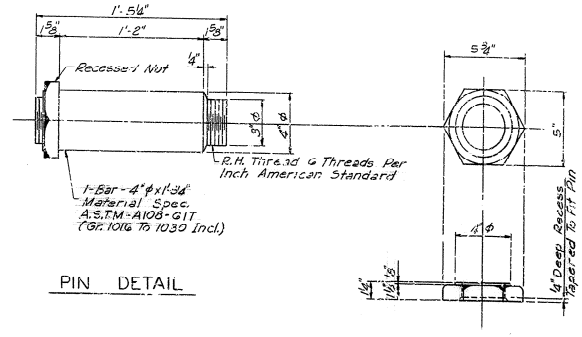
DETAIL OF EXPANSION ROCKER AT E. B. 1 & ABUT. 2

Capacity 100 kips
Weight, each shoe assembly 213 lb.



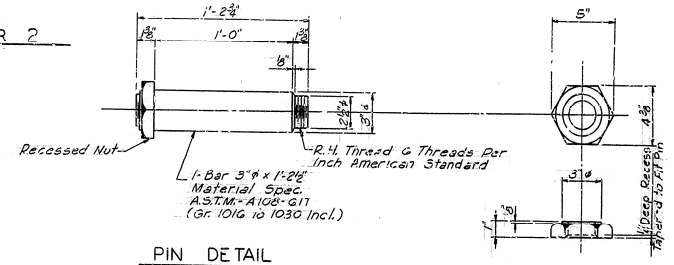
DETAIL OF EXPANSION ROCKER AT PIER 2

Capacity 250 kips
Weight, each shoe assembly 540 lb.



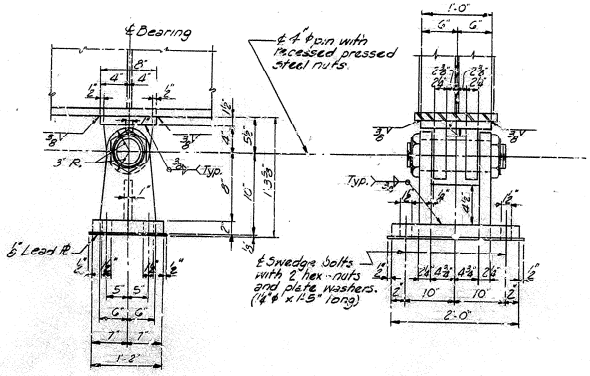
PIN DETAIL

RECESSED NUT



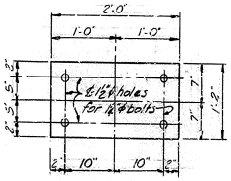
PIN DETAIL

RECESSED NUT



DETAIL OF FIXED SHOE AT PIER 1

Vertical Capacity 250 kips
Weight, each shoe assembly 465 lbs



PLAN OF BOTTOM PLATE

NOTE -
WELDS - Use ⅜" Fillet Welds for fabricating bearing devices.
PLATES - Plates must be true and free from Warp.
ANCHOR BOLTS - See Anchor Bolt Note, sheet 2.
Holes for Anchor Bolts are to be as shown.
WELDS - Use ⅜" Fillet Welds except as shown for fabricating bearing devices.
All surfaces of plates in contact except bearing surfaces to be welded.

SURFACE FINISH OF STEEL SPECIFICATIONS	
STEEL SLABS	A.S.A. 2000
HEAVY PLATES IN CONTACT IN SHOES TO BE WELDED	A.S.A. 1000
MILLED ENDS OF COMPRESSION MEMBERS, STIFFENERS & FILLERS	A.S.A. 500
BRIDGE ROLLERS AND ROLLERS	A.S.A. 250

SUPERSTRUCTURE

I-64 OVER U.S. 60 SHEET 16

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN

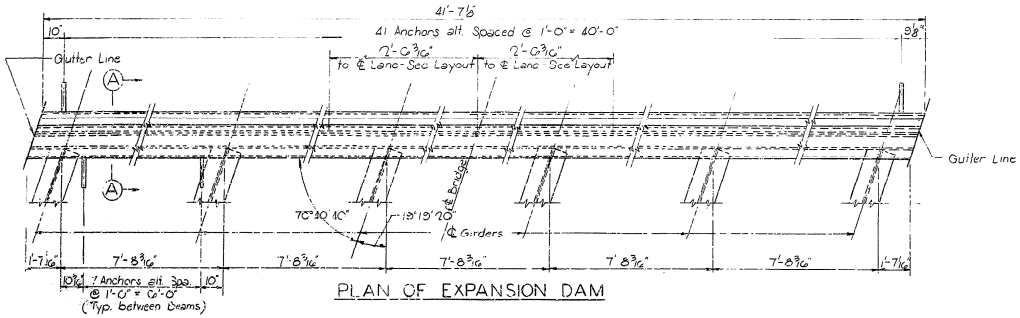
LOUISVILLE-LEXINGTON-CATLETTSBURG

ROAD 2432+69.251-64+ STATION 734+39.00 RELOC. US.60 PROJECT NO.

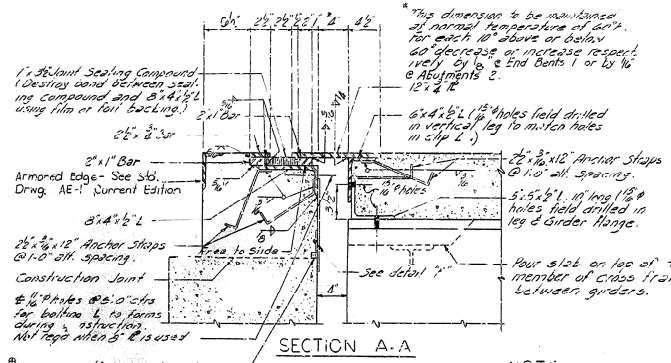
BRIDGE NUMBER | DRAWING NO. 17632 | SHEET

DESIGNED BY PCW | CHECKED BY PCF | DATE 2-67
DRAWN BY JD | CHECKED BY PCF | DATE 2-67
TRACED BY PCW | CHECKED BY PCF | DATE 2-67
REVISED | DATE | REVISED | DATE | REVISED | DATE

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

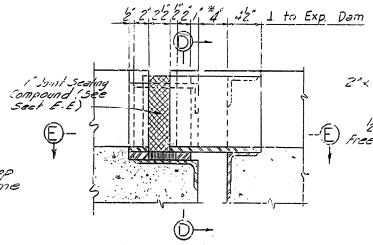


PLAN OF EXPANSION DAM

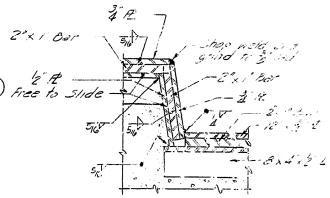


SECTION A-A

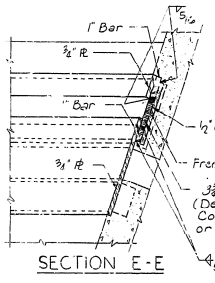
* This dimension to be maintained at normal temperature of 60°F. For each 10° above or below 60° decrease or increase respectively by 1/16" @ End Bents 1 or by 1/16" @ Abutments 2.



SECTION B-B



SECTION D-D



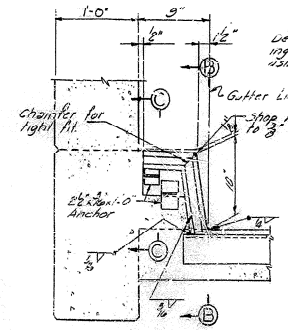
SECTION E-E

NOTE:

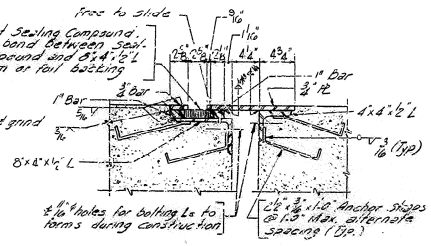
Bonding surface finish - Vertical edges of steel bars which require bonding to joint sealing compound shall receive neither shop nor field paint. Before applying joint sealing compound vertical edges of steel bars shall be cleaned to bare metal.

No. 9 Block iron or equivalent Wire Eyelets @ 2'-0" spacing tack welded to ⅝" ⌀ Eyelets are to be used in tying ⅝" ⌀ with wire so as to prevent leakage during construction

DETAIL F



SECTION THRU CURB



SECTION C-C

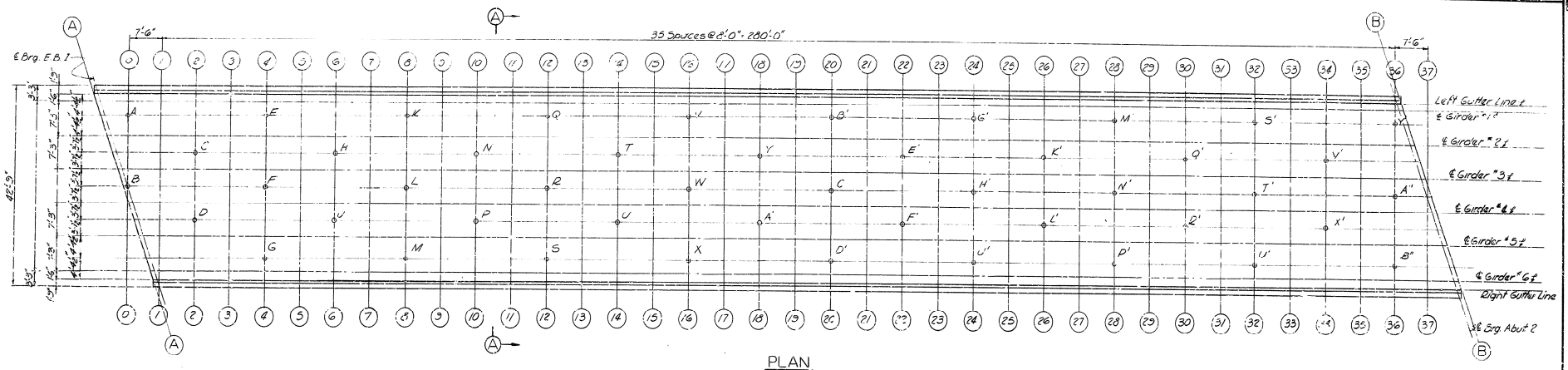
SUPERSTRUCTURE

I-64 OVER US 60 SHEET 17

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN
LOUISVILLE-LEXINGTON-CATLETTSBURG
2632+69.25 I-64 ROAD
STATION 73+39.00 RELOC. US 60 PROJECT NO.
BRIDGE NUMBER
DRAWING NO. 17632
SHEET

PLOTTED BY	P.C.W.	DATE 2-6-67	REVISED DATE
DESIGNED BY	P.F.H.	DATE 2-6-67	REVISED DATE
DETAILED BY	B.K.	CHECKED BY	REVISED DATE
REVIEWED BY		CHECKED BY	REVISED DATE

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



PLAN

ELEVATIONS

Section	Left Gutter Line Const Elev.	Left Gutter Line Top of Steel	Left Gutter Line Dim "X"	℄ Girder #2 Const Elev.	℄ Girder #2 Top of Steel	℄ Girder #2 Dim "X"	℄ Girder #3 Const Elev.	℄ Girder #3 Top of Steel	℄ Girder #3 Dim "X"	℄ Lanes Const Elev.	℄ Lanes Top of Steel	℄ Lanes Dim "X"	℄ Girder #5 Const Elev.	℄ Girder #5 Top of Steel	℄ Girder #5 Dim "X"	Right Gutter Line Const Elev.	Right Gutter Line Top of Steel	Right Gutter Line Dim "X"
0-0	790.316			790.453			790.563			—			—			—		
1-1	.410			.548			.662			790.731			790.622			790.484		
2-2	.504			.644			.762			.832			.723			.588		
3-3	.604			.742			.863			.926			.821			.689		
4-4	.697			.831			.992			791.026			.917			.783		
5-5	.789			.928			791.087			.113			791.012			.881		
6-6	.850			791.028			.140			.211			.104			.974		
7-7	.938			.131			.243			.313			.203			791.067		
8-8	791.110			.232			.343			.416			.307			.170		
9-9	.229			.358			.467			.532			.418			.279		
10-10	.357			.485			.591			.656			.531			.391		
11-11	.489			.613			.713			.780			.642			.516		
12-12	.625			.748			.830			.913			.791			.649		
13-13	.767			.887			.959			792.048			.927			.777		
14-14	.907			792.027			792.132			.190			792.063			.916		
15-15	792.038			.163			.267			.323			.208			792.059		
16-16	.162			.292			.338			.460			.341			.193		
17-17	.276			.408			.518			.598			.463			.324		
18-18	.381			.518			.630			.636			.586			.445		
19-19	.473			.614			.723			.801			.693			.567		
20-20	.557			.702			.822			.899			.768			.657		
21-21	.631			.780			.903			.979			.871			.743		
22-22	.638			.892			.981			793.052			.953			.879		
23-23	.763			.916			793.040			.117			793.023			.902		
24-24	.829			.990			.114			.184			.086			.967		
25-25	.902			793.049			.172			.248			.153			793.030		
26-26	.928			.128			.247			.320			.222			.099		
27-27	793.061			.202			.322			.393			.299			.172		
28-28	.147			.291			.401			.431			.377			.249		
29-29	.246			.398			.497			.571			.469			.334		
30-30	.348			.485			.538			.663			.564			.423		
31-31	.460			.591			.702			.779			.661			.524		
32-32	.572			.702			.814			.883			.766			.628		
33-33	.679			.814			.927			793.018			.850			.741		
34-34	.784			.922			793.033			.102			.959			.862		
35-35	.839			793.023			.12			.211			793.036			.957		
36-36	.934			.133			.246			.315			.206			793.069		
37-37	—			—			—			.403			.302			.166		
A-A	790.216									790.635						790.467		
B-B	793.010									793.389						793.260		

TABLE OF ELEVATIONS FOR CONTROL OF TOP SLAB THICKNESS

Slab Check Point	Top of Slab Elevation	Bottom of Slab Elevation	Computed Slab Thickness	Slab Check Point	Top of Slab Elevation	Bottom of Slab Elevation	Computed Slab Thickness
A	790.383			D'	792.723		
B	.613			E'	.913		
C	.703			F'	793.006		
D	.780			G'	792.926		
E	.767			H'	793.161		
F	791.010			I'	.027		
G	790.850			K'	.186		
H	791.084			L'	.276		
J	.160			M'	.219		
K	.176			N'	.469		
L	.108			P'	.313		
M	.239			Q'	.582		
N	.538			R'	.616		
P	.536			S'	.638		
Q	.687			T'	.869		
R	.900			U'	.637		
S	.718			V'	.918		
T	792.081						
U	.130			X'	793.067		
V	.227			Y'	.064		
W	.449			A"	.301		
X	.267			B"	.137		
Y	.671						
A'	.642						
B'	.630						
C'	.878						

NOTE

SLAB THICKNESS CONTROL ... 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 ¼" from the plan thickness, allowing 1/360 of the slab span for deflections of the form work, the form shall be adjusted until the computed slab thickness is within the tolerances allowed.

CONSTRUCTION NOTES

Lay out Sections 0-0 to 37-37 as shown in plan on this sheet (Center punch marks 0-0 to 37-37 on top of beam for elevation points).

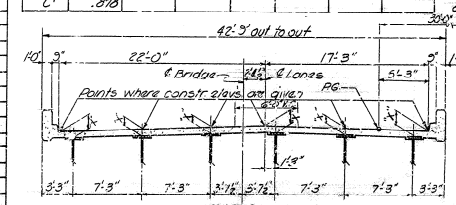
Take elevations on top of steel at points indicated after cross frames and lateral bracing are in place and after all falsework has been removed but before forms for concrete slab have been put in place. Read elevations to three decimals using a target rod and enter readings in table under top of steel.

Compute dimension "X" as follows: Construction Elevation minus top of Steel equals Dimension X. Construction Elevations include camber due to weight of concrete slab, plinth, handrail and future surfacing.

For setting templates measure Dimension "X" above top of steel for top of template. Do not set templates by elevations.

Construct handrail plinth to curb grade. Do not add camber to handrail plinth.

Slab elevation tolerances are based on delivery to the bridge site of fabricated steel having dimension and sweep tolerances meeting the requirements of A.W.S. Spec. current edition par. 401 for welded girders, and are based on erection of steel undamaged.



SECTION A-A

Note: For 6'-0" Parabolic Crown see sheet 1e.

WESTBOUND ELEVATIONS

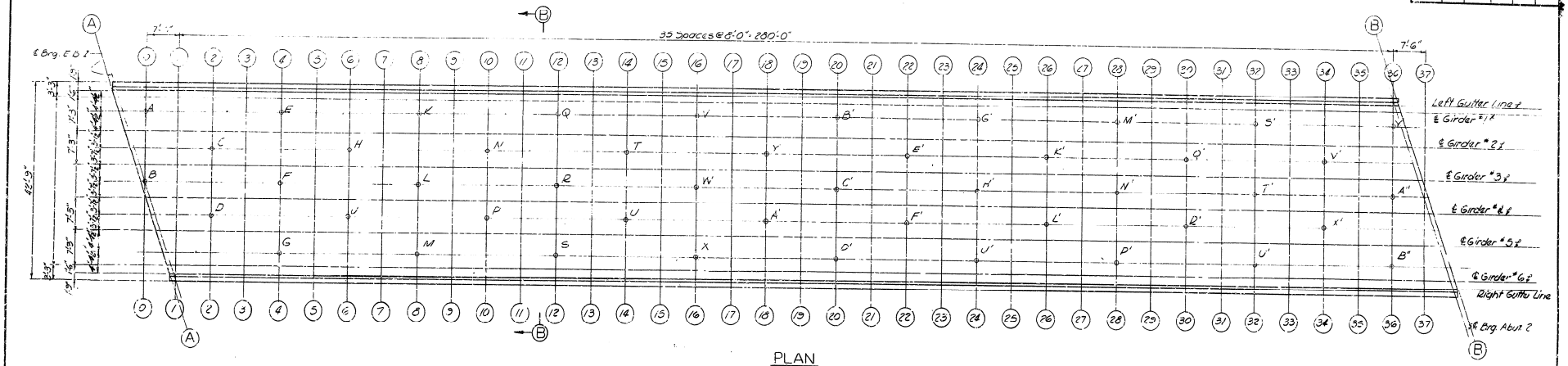
I-64 OVER US. 60 SHEET 1B

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN
LOUISVILLE-LEXINGTON-CATLETTSBURG

2632+60.25 I-64 = ROAD
STATION 73+33.00 RELOC. US. 60 PROJECT NO.

BRIDGE NUMBER | DRAWING NO. 17632 | INDEX

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



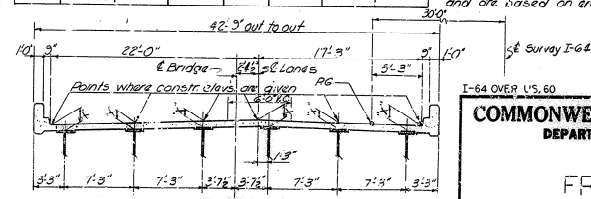
PLAN

ELEVATIONS

Section	Left Gutter Line Const. Elev.	Left Gutter Line Top of Steel	Left Gutter Line Dim. "X"	℄ Girder "2" Const. Elev.	℄ Girder "2" Top of Steel	℄ Girder "2" Dim. "X"	℄ Lanes Const. Elev.	℄ Lanes Top of Steel	℄ Lanes Dim. "X"	℄ Girder "4" Const. Elev.	℄ Girder "4" Top of Steel	℄ Girder "4" Dim. "X"	℄ Girder "5" Const. Elev.	℄ Girder "5" Top of Steel	℄ Girder "5" Dim. "X"	Right Gutter Line Const. Elev.	Right Gutter Line Top of Steel	Right Gutter Line Dim. "X"
0-0	790.788			790.925			791.032			—			—			—		
1-1	.882			791.020			.130			791.060			790.946			790.808		
2-2	.976			.116			.230			.161			791.017			.912		
3-3	791.076			.214			.326			.263			.165			791.013		
4-4	.163			.309			.423			.373			.241			.107		
5-5	.261			.400			.516			.487			.336			.205		
6-6	.362			.500			.609			.600			.428			.298		
7-7	.466			.603			.712			.702			.527			.391		
8-8	.582			.714			.813			.805			.631			.494		
9-9	.701			.830			.934			.899			.742			.593		
10-10	.829			.957			792.060			.917			.858			.718		
11-11	.961			792.089			.192			792.109			.986			.840		
12-12	792.097			.220			.319			.239			792.118			.969		
13-13	.239			.359			.456			.376			.251			792.101		
14-14	.379			.501			.595			.517			.392			.240		
15-15	.510			.636			.733			.655			.532			.379		
16-16	.634			.764			.866			.789			.665			.517		
17-17	.748			.880			.986			.913			.792			.648		
18-18	.853			.990			793.097			793.025			.903			.769		
19-19	.949			793.086			.197			.130			793.017			.881		
20-20	793.039			.174			.290			.223			.112			.981		
21-21	.123			.262			.371			.308			.201			793.072		
22-22	.170			.324			.444			.382			.277			.153		
23-23	.235			.388			.510			.451			.347			.226		
24-24	.301			.452			.573			.513			.410			.25		
25-25	.374			.521			.642			.579			.476			.334		
26-26	.450			.597			.715			.655			.546			.413		
27-27	.535			.674			.795			.730			.623			.496		
28-28	.612			.763			.876			.811			.701			.573		
29-29	.718			.856			.969			.897			.783			.668		
30-30	.830			.957			794.066			.996			.883			.747		
31-31	.932			794.063			.170			794.038			.986			.848		
32-32	794.044			.176			.282			.210			794.090			.952		
33-33	.151			.246			.330			.300			.204			794.069		
34-34	.261			.334			.439			.423			.313			.176		
35-35	.368			.501			.609			.533			.420			.281		
36-36	.466			.605			.710			.644			.523			.392		
37-37	—			—			—			.739			.626			.490		
A-A	790.683																	
B-B	794.482									791.012						790.791		
										794.006						794.584		

TABLE OF ELEVATIONS FOR CONTROL OF TOP SLAB THICKNESS

Slab Check Point	Top of Slab Elevation	Bottom of Slab Elevation	Computed Slab Thickness	Slab Check Point	Top of Slab Elevation	Bottom of Slab Elevation	Computed Slab Thickness
A	790.867			D'	793.087		
B	791.017			E'	.385		
C	.175			F'	.330		
D	.104			G'	.377		
E	.235			H'	.559		
F	.408			J'	.351		
G	.174			K'	.658		
H	.556			L'	.600		
J	.318			M'	.691		
K	.618			N'	.863		
L	.800			P'	.637		
M	.963			Q'	794.014		
N	792.010			R'	793.940		
P	791.919			S'	794.110		
Q	792.159			T'	.267		
R	.238			U'	.221		
S	.042			V'	.180		
T	.351						
U	.428			X'	794.371		
V	.633			Y'	.536		
W	.847			A''	.633		
X	.551			B''	.461		
Y	793.246						
A'	792.367						
B'	793.102						
C'	.276						



SECTION B-B

Note: For 6" ⅈ Parabolic Crown see sheet 18.

NOTE

SLAB THICKNESS CONTROL:— After the slab forms are erected and before the slab reinforcement is placed the Resident Engineer shall take 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 ¼" from the plan thickness, allowing 1/360 of the slab span for deflections of the form work, the form shall be adjusted until the computed slab thickness is within the tolerances allowed.

CONSTRUCTION NOTES

Lay out Sections 0-0 to 37-37 as shown in plan on this sheet. (Center punch marks 0-0 to 37-37 on top of beam for elevation points.)

Take elevations on top of steel at points indicated after cross frames and lateral bracing are in place and after all falsework has been removed but before forms for concrete slab have been put in place. Read elevations to three decimals using a target rod and enter readings in table under top of steel.

Compute dimension "X" as follows: Construction Elevation minus Top of Steel equals Dimension "X". Construction Elevations include camber due to weight of concrete slab, plinth, handrail and future surfacing.

For setting templates measure Dimension "X" above top of steel or top of template. Do not set templates by elevations.

Construct handrail plinth to curb grade. Do not add camber to handrail plinth.

Slab elevation tolerances are based on delivery to the bridge site of fabricated steel having dimension and sweep tolerances meeting the requirements of A.W.S. Spec. current edition par 407 for welded girders, and are based on erection of steel undamaged.

EASTBOUND ELEVATIONS

I-64 OVER U.S. 60 SHEET 19

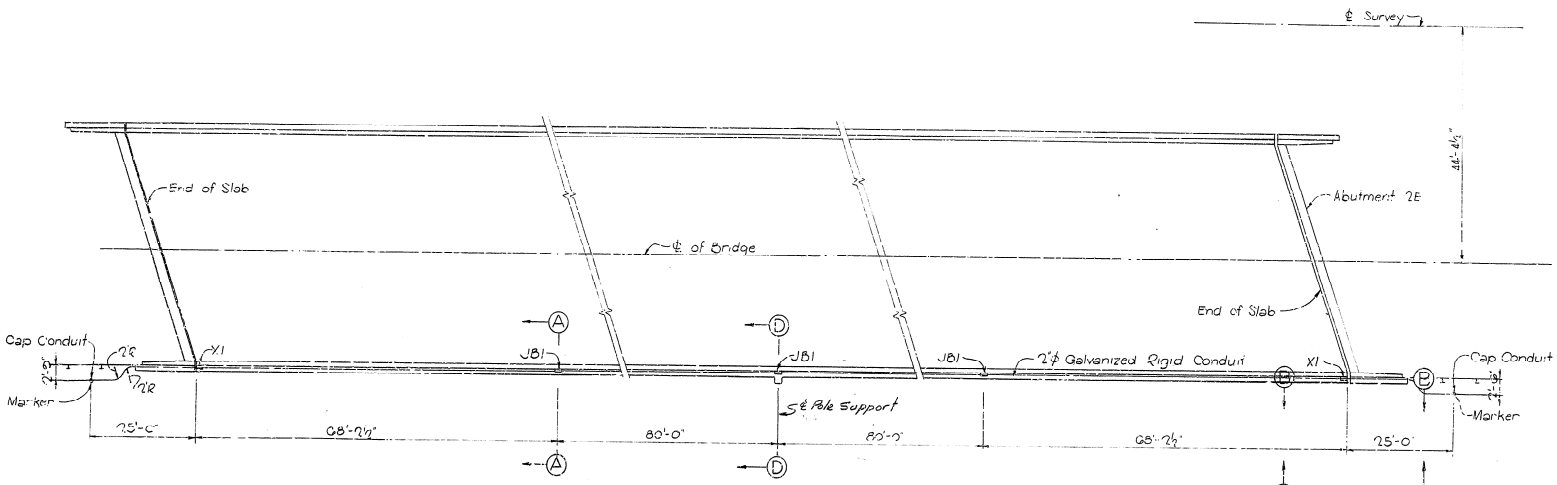
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN
LOUISVILLE-LEXINGTON-CATLETTSBURG

2632+69.25 I-64 = ROAD
STATION 73+39.00 RELOC. U.S. 60 PROJECT NO.

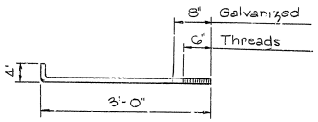
BRIDGE NUMBER | DRAWING NO. 17632 | INDEX

PREPARED BY	DATE	REVISED	DATE
DETAILED BY	DATE	REVISED	DATE
CHECKED BY	DATE	REVISED	DATE

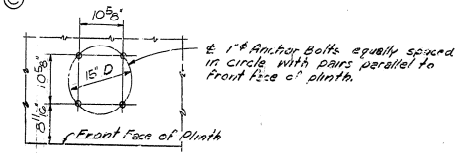
FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



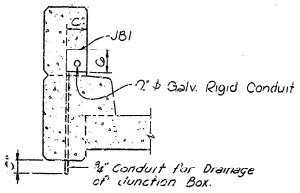
PLAN E.B. BRIDGE
(Rotate 180° for W.B.)



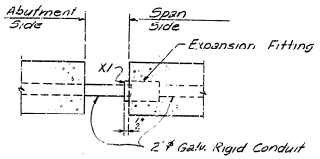
ANCHOR BOLTS
(Steel - Min. Yield Strength 50,000 psi)



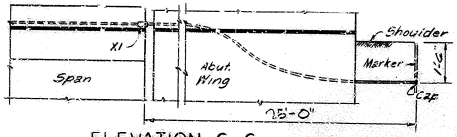
PART PLAN
(Showing location of Anchor Bolts)



SECTION A-A JB1



SECTION B-B



ELEVATION C-C

NOTE-

All conduit to be rigid galvanized.
Concrete and reinforcement for brackets, where required, are included in Superstructure quantities.
Junction Boxes and Conduit are to be placed so as to interfere with a minimum amount of reinforcement. Bend reinforcement where necessary.

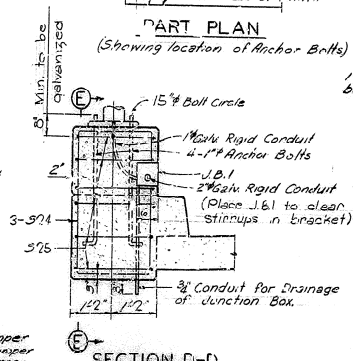
Concrete Marker at terminal points of conduit is to consist of a 4"-4"-36" reinforced concrete post with 4 size No. 4 deformed reinforcing steel rods. Markers to be 2" above grade.

X1 = Expansion Fitting for 2" conduit; manufacturer and number may be any of the following, or approved equal.

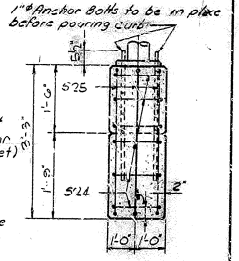
Manufacturer	Number
Crouse-Hinds Co.	Type XJG41 with GC100 Bonding Jumper
OZ Electric Co.	Type EX200 with BJ1520-24 Bonding Jumper
Spring City Electric Co.	Type EF200 with EJ200 Bonding Jumper

JB1 = Junction Box; manufacturer and number may be any of the following, or approved equal.

Manufacturer	16"x6"x6"	18"x6"x6"
OZ Electric Co.	Type YU	Type YR
Spring City Electric Co.	Type IR	Type ER
Hope Elec. Products Co.	Type HG200	Type H700



SECTION D-D



SECTION E-E

BILL OF MATERIALS

	E.B.	W.B.	
2"ϕ Galv. Rigid Conduit	350	350	Lin. Ft.
Concrete Markers	2	2	Each
*JB1 Junction Boxes	3	3	Each
Expansion Fittings	2	2	Each
2" Galv. Conduit Caps	2	2	Each
1"ϕ Galv. Rigid Conduit	8	8	Lin. Ft.
4-1"ϕ Anchor Bolts	4	4	Each
¾"ϕ Galv. Rigid Conduit	8	8	Lin. Ft.

*With two hex nuts

* JB1 Junction Boxes to be 16"x6"x6" or 18"x6"x6"

I-64 OVER U.S. 60 SHEET 20

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN
LOUISVILLE-LEXINGTON-CATLETTSBURG
2632.169.2V, E CAP - ROAD
STA. 1V 73+39.00 RELOC. U.S. 60 - PROJECT NO.

BRIDGE NUMBER | TRACING NO. 7632 | SHT.

ELECTRICAL CONDUIT