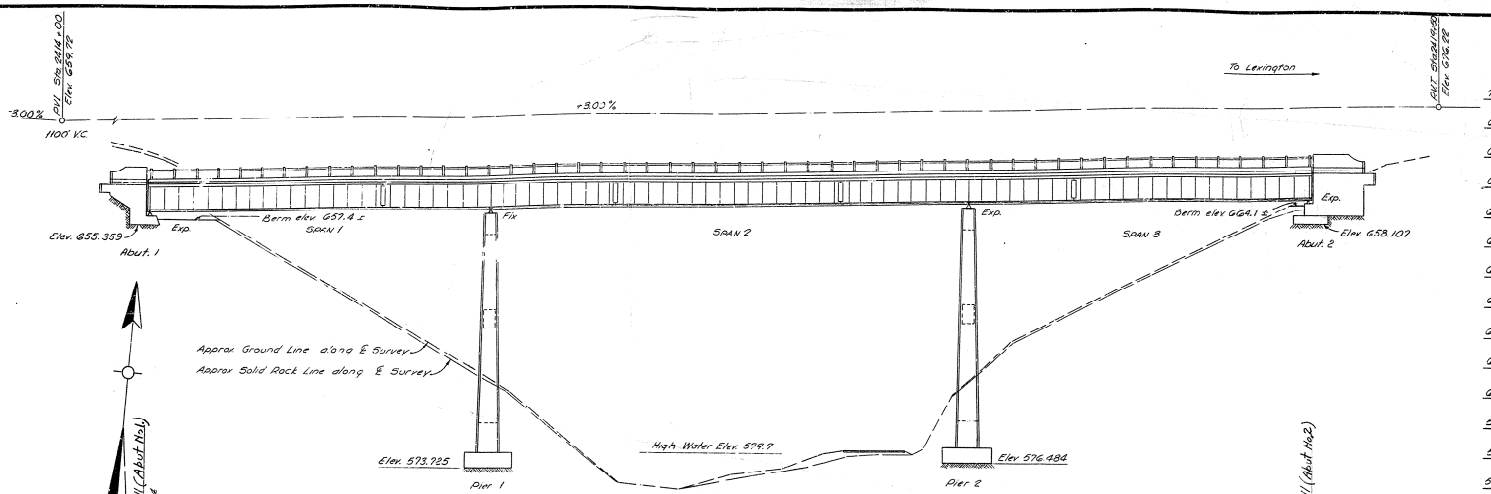
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
7	KY.			

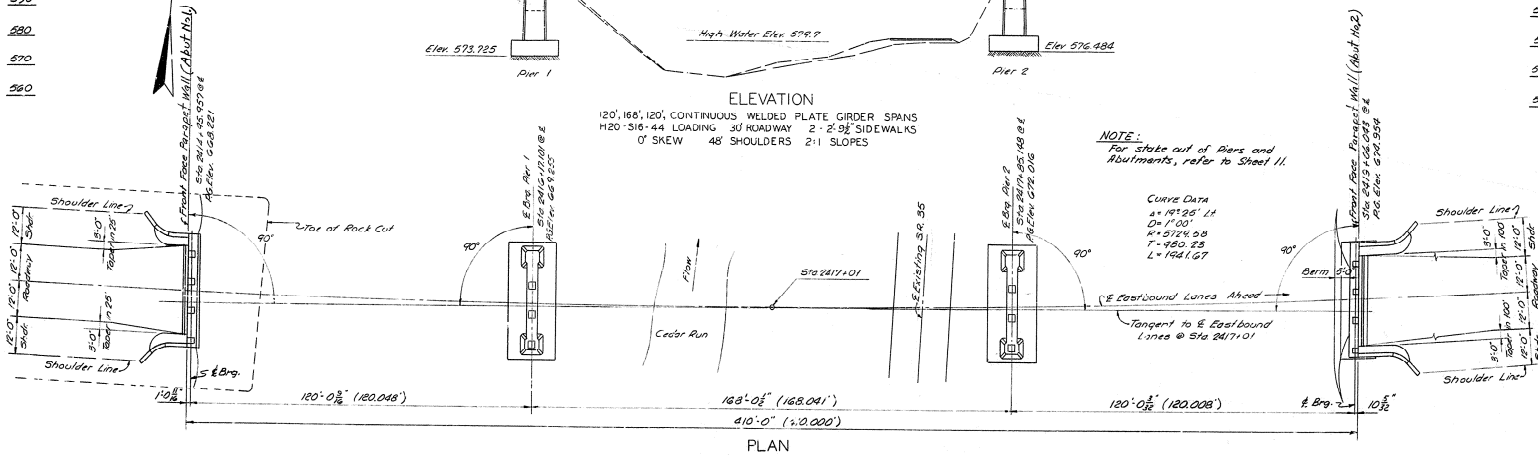


ELEVATION

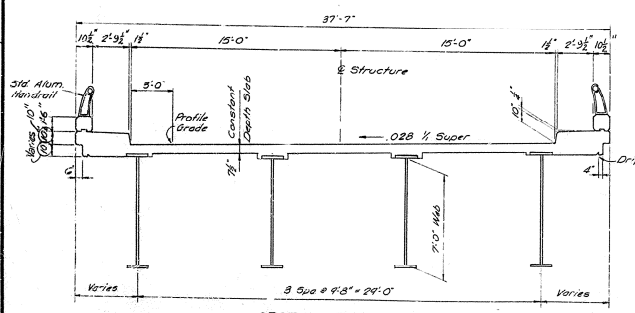
120', 168', 120', CONTINUOUS WELDED PLATE GIRDER SPANS
H20-S16-44 LOADING 30' ROADWAY 2-2'-9½" SIDEWALKS
0° SKEW 48' SHOULDERS 2:1 SLOPES

NOTE: For state out of Piers and Abutments, refer to Sheet 11.

CURVE DATA
Δ = 19°26' Lt
D = 1°00'
R = 5726.08
T = 980.28
L = 1941.67



PLAN
(Deck Removed)



SECTION THRU DECK

GENERAL NOTES

700 SPECIFICATIONS ~ Kentucky Department of Highways 1956 with subsequent amendments.

690 DESIGN LOAD ~ Bridge designed for H20-S16-44 loading as specified in AASHO 1957, or alternate loading of two tandem axles four feet apart, each axle weighing 24,000 lbs. whichever gives greater stress.

680 DESIGN STRESSES ~ F_c = 1200 psi ; F_s = 18,000 psi.

FOUNDATION PRESSURES ~ 16,000 psf maximum on rock.

670 CONCRETE ~ Class "A" Concrete to be used throughout.

REINFORCEMENT ~ Dimensions shown from face of concrete are clear distances. Spacing of bars is center to center of bars.

690 BEVELED EDGES ~ All exposed edges shall be beveled ¾" unless otherwise shown.

650 EXPANSION JOINT MATERIAL, COMPRESSIBLE STRIP ~ The cost of these items to be included in the unit price bid for Class "A" Concrete.

640 CONSTRUCTION JOINTS ~ Construction joints shall be made at locations shown on the plans. Provide substantial keys at all construction joints.

630 ANCHOR BOLT HOLES ~ Drill all anchor bolt holes and place anchor bolts to dimensions shown. The Contractor shall exercise care in placing reinforcing steel in top of all substructure units to the dimensions shown.

620 PAINTING EXPANSION DAMS ~ All exposed parts of Expansion Dams which cannot be painted after erection shall have two coats of aluminum paint applied before erection.

610 STRUCTURAL STEEL ~ See Sheet 12 for Note and Specifications. For purpose of payment, "Lump Sum Bid" for structural steel includes structural steel, bolts, steel pins, cast iron and lead plates or preformed fabric pads.

600 WELDING ~ No direct payment will be made for welding or welding material but the cost of same shall be included in the "Lump Sum Bid" for structural steel. See Sheet 12 for Specifications.

590 SHOP AND MILL INSPECTION ~ By Kentucky Department of Highways.

580 C.I. DRAINS - W.I. PIPE ~ See Sheet 15 for Foundry note and specifications of Wrought Iron Pipe.

570 PAINT ~ See note on Sheet 12.

560 RECORD SHOP DRAWINGS ~ A set of linen tracings of Approved Drawings of Shop Details shall become the property of the Department of Highways when the Contract is completed and before final payment is made. No direct payment shall be made for record drawings but the cost shall be included in the "Lump Sum Bid" for structural steel.

BEARING AREAS ~ Bearing areas to receive superstructure shall be finished smooth and level of the elevations shown on the plans.

REFERENCE AND ESTIMATE OF QUANTITIES

ITEM	SHEET NO.	CONCRETE CLASS "A" C.Y.	REINFORCEMENT LBS.	STRUCTURE EXCAV. COMMON C.Y.	STRUCTURE EXCAV. SOLID ROCK C.Y.	STRUCT. STEEL Approx. Wt. LBS.	ALUM. HANDRAIL LIN. FT.	6" ϕ W.I. PIPE LIN. FT.		
GENERAL PLAN	1									
SOUNDINGS	2									
ABUTMENT 1	3 & 5	68.1	8,180	—	160	This Column is for Bridge Post & Bed				
PIER 1	6, 7	459.2	76,450	50	970					
PIER 2	6, 7	459.2	76,450	15	800					
ABUTMENT 2	4, 5	116.0	10,575	90	80					
SPANS 1, 2 & 3 (CONC.)	16, 17	541.7	113,930							
STRUCT. STEEL	8 THRU 14					670 to 350				
CONTROL ELEV.	18									
CURVE OFFSETS	15									
FLOOR DRAINS	15									
HANDRAIL	H-112									
TOTALS		1644.2	285,595	155	2,010	670 to 350	818.8	150.0		

STANDARD DRAWINGS
G-351
H-112

BILL OF INCIDENTAL MATERIAL

ITEM	NO. PIECES	DESCRIPTION	LOCATION
Copper Strip	9	⅜" x 36'-3"	Between Deck Pours
½" Prem. Exp. H. Mat'l.	9	1'-0" - 36'-3"	Between Deck Pours

Note: 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.

EXISTING S.R. 35 East Bound Lane SHEET 1 OF 18

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

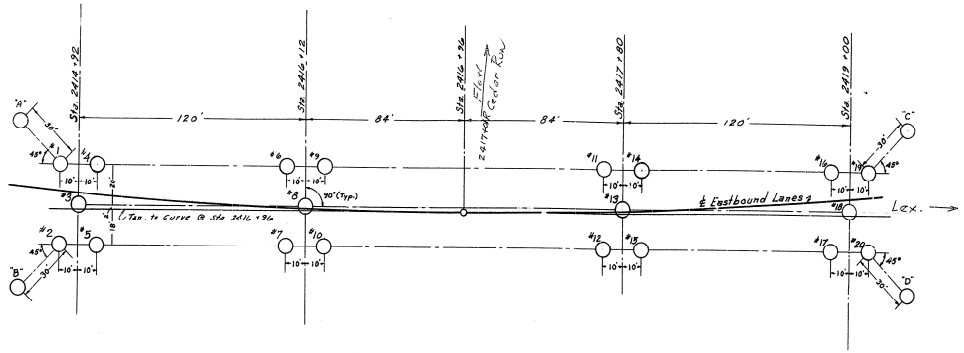
STATION 24+17+01 R PROJECT NO. I-04-4(1)

BRIDGE NUMBER 37-906-E467 DRAWING NO. 14038

EASTBOUND STRUCTURE

DESIGNED BY: DATE: 2-22
DETAILED BY: DATE: 2-22
TRACED BY: DATE:
CHECKED BY: DATE:
CHECKED BY: DATE:
CHECKED BY: DATE:
REVISED: Fascia dimensions below plants DATE: 5-19-61
REVISED: DATE:
REVISED: DATE:

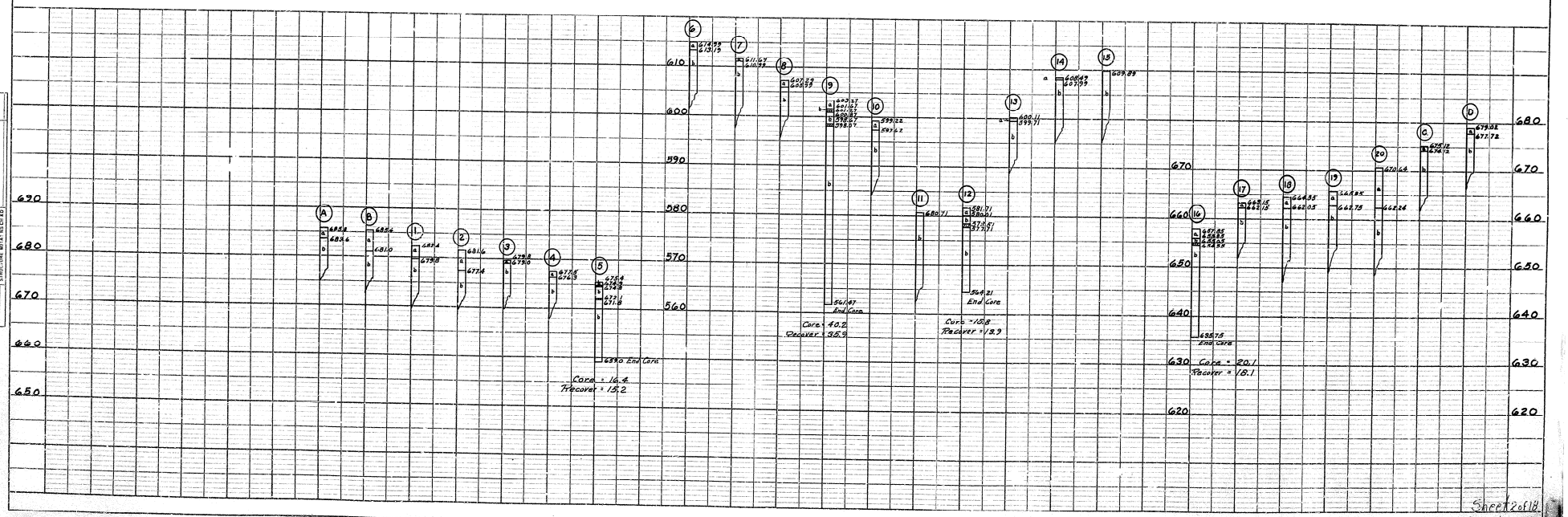
SOUNDING LAYOUT



LEGEND
a. BROWN CLAY
b. LIMESTONE
MUD SEAM

FRANKLIN COUNTY
I-64-4 (1)
SOUNDINGS FOR BRIDGE AT OLD KY. 35
EASTBOUND LANE

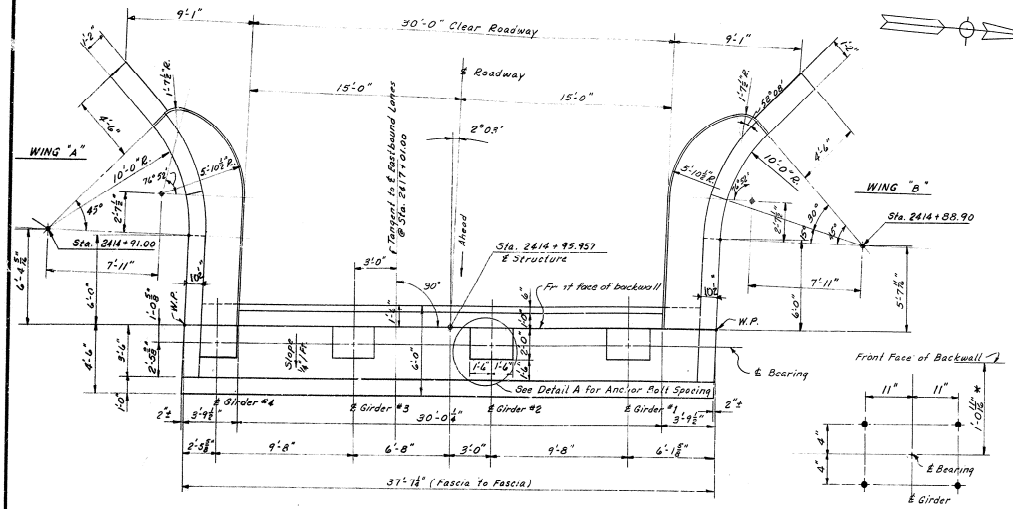
SCALE 1"=30'



Sheet 2 of 18.
Drwg. No 14038.

PLAN
PROFILE

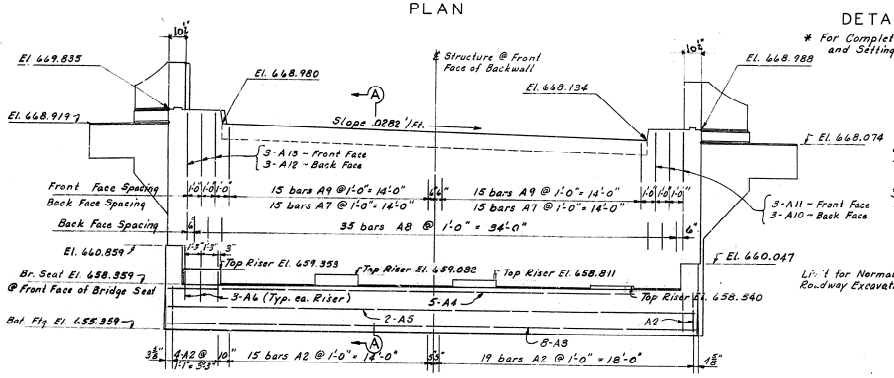
FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



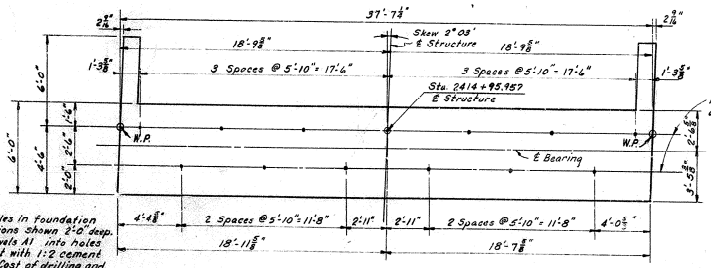
PLAN

DETAIL A

* For Complete Anchor Bolt Plan and Setting note, see Sh. #11.



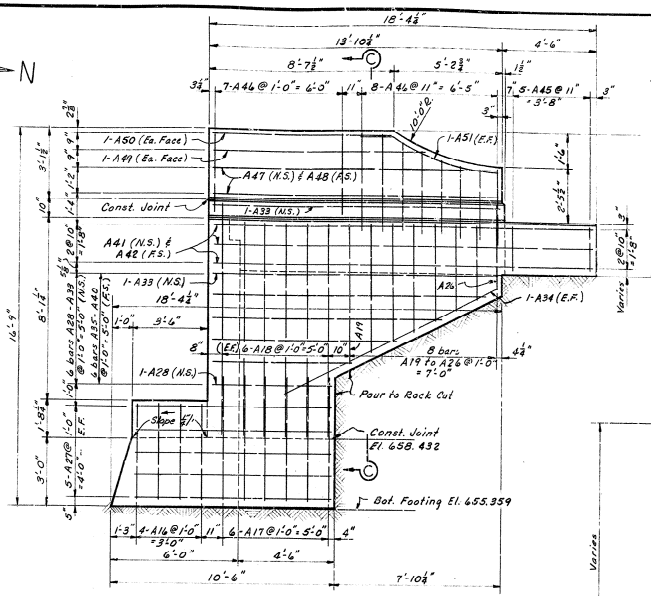
ELEVATION



NOTE:
Drill holes in foundation at locations shown 2'-0" deep. Place dowels A1 into holes and grout with 1:2 cement mortar. Cost of drilling and grouting to be included in unit price bid for Class "A" Concrete.

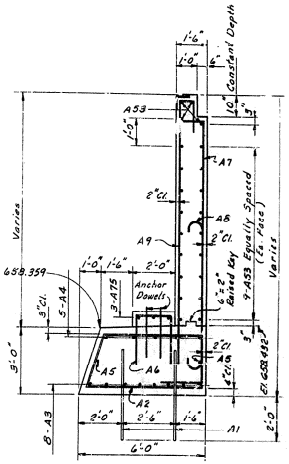
FOOTING PLAN

SECTION B-B

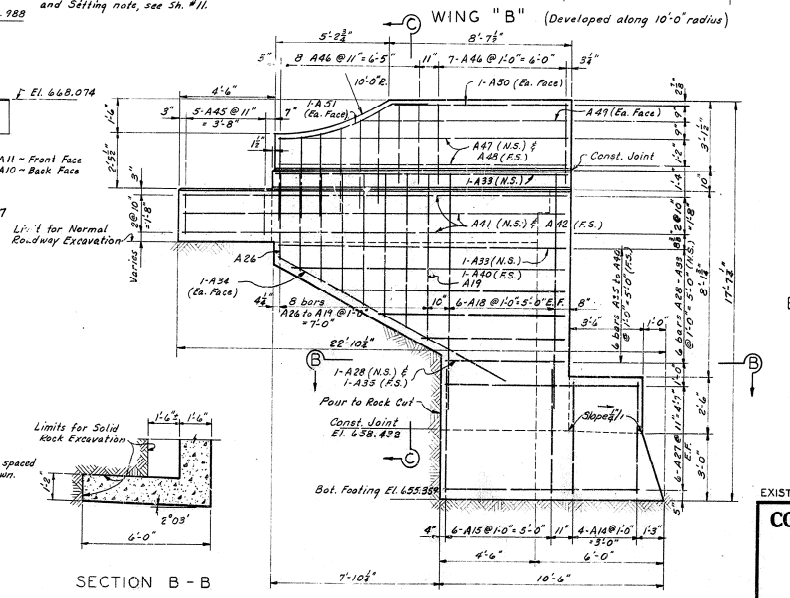


WING "B" (Developed along 10'-0" radius)

NOTE:
Field bend Bars A47 thru A51 & A28 thru A42.



SECTION A-A



WING "A" (Developed along 10'-0" radius)

ESTIMATE OF QUANTITIES

Concrete, Class "A"	68.1	Cu. Yds.
Reinforcement	8180	Lbs.

EXISTING S.R. 35 SHEET 3 OF 18

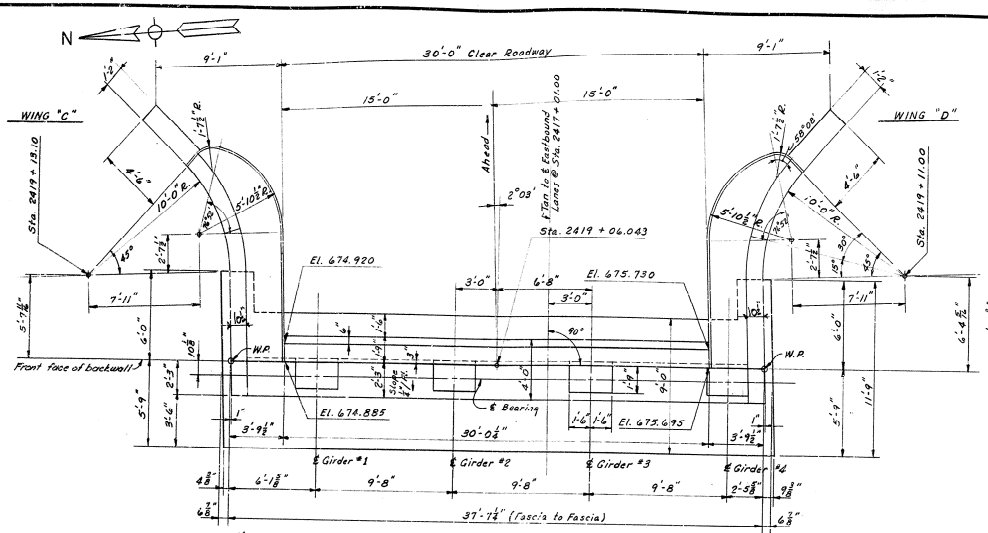
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN
LOUISVILLE – LEXINGTON
ROAD

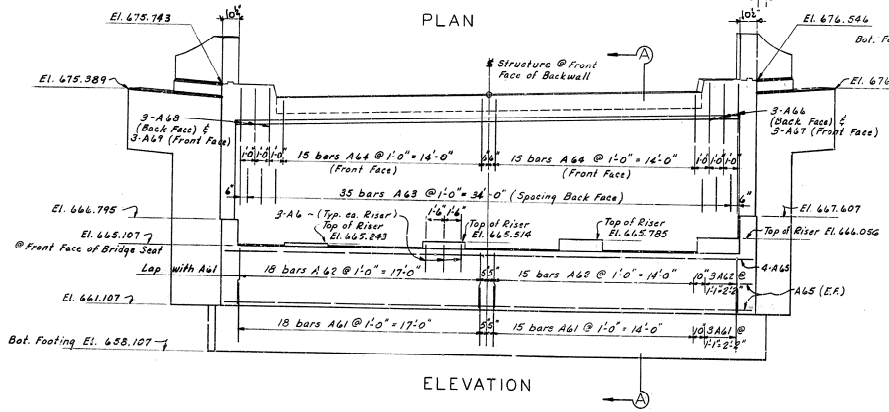
STATION 2417 + 01 R **PROJECT NO.** I-04-4(1)

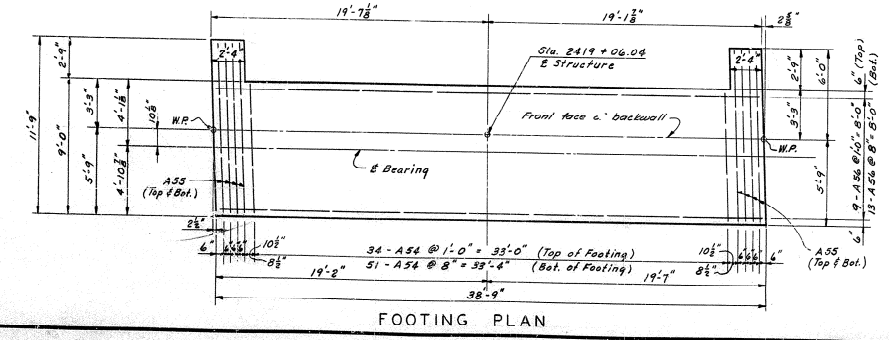
BRIDGE NUMBER | DRAWING NO. 14038 | INDEX

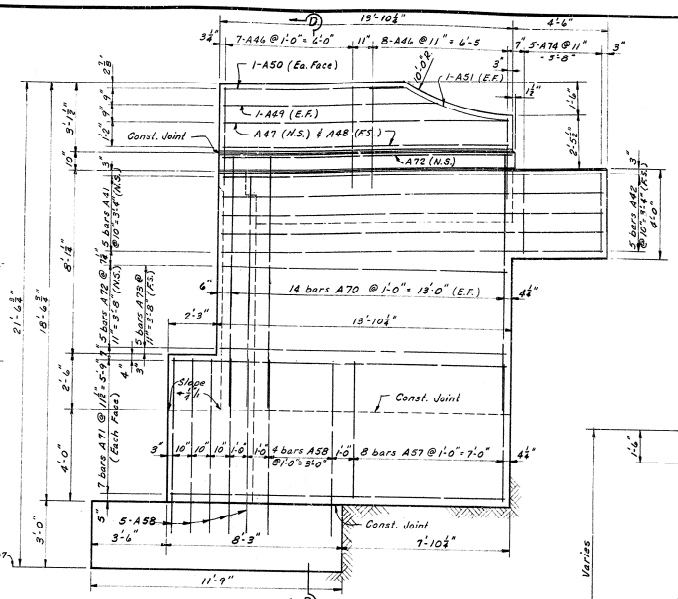
DESIGNED BY JDD CHECKED BY RNW DATE 2-5-72
DETAILED BY JDD CHECKED BY RAD DATE 2-5-72
TRACED BY CHECKED BY DATE
REVISED DATE REVISED DATE REVISED DATE

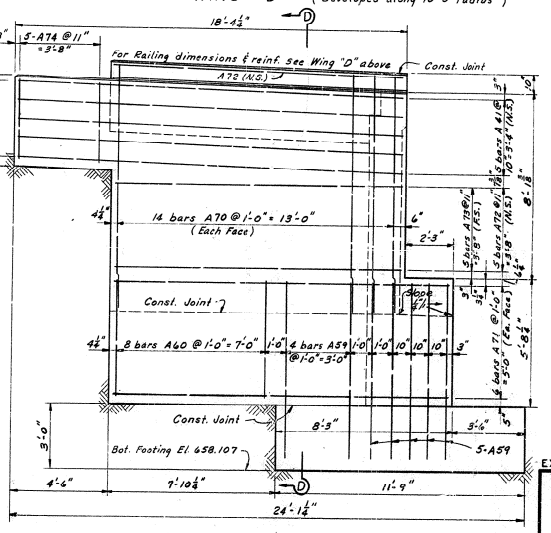
ABUTMENT NO. 1 - EASTBOUND, DETAILS

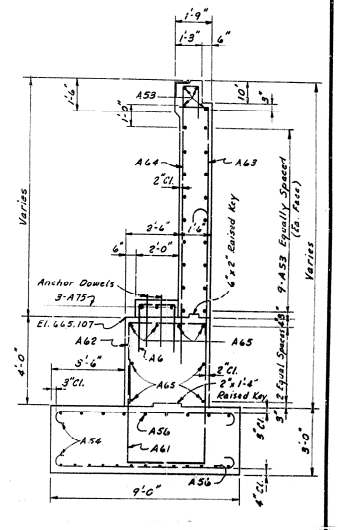












NOTE: Field bend Bars A41, A42, A47-A51 and A71 - A73.

ESTIMATE OF QUANTITIES

Concrete, Class "A"	116.0	Cu. Yds.
Reinforcement	10,575	Lbs.

ABUTMENT NO. 2 ~ EASTBOUND, DETAILS

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

EXISTING S.R. 35 SHEET 4 OF 18

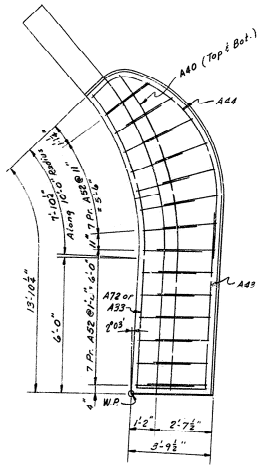
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN

LOUISVILLE - LEXINGTON ROAD

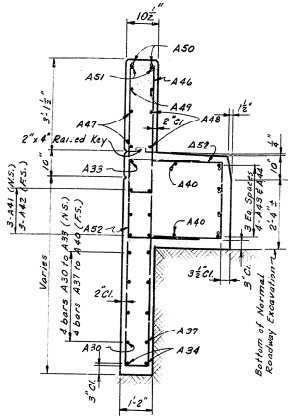
STATION 2417 + 01 R PROJECT NO. I-04-411

BRIDGE NUMBER | DRAWING NO. 14038 | INDEX

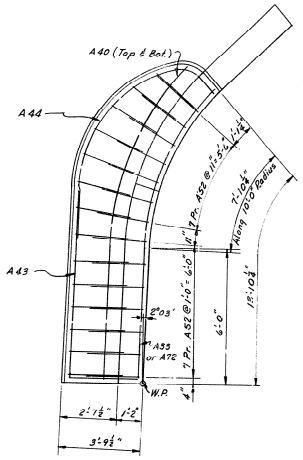
DESIGNED BY JDD CHECKED BY JMM DATE 6-67
DETAILED BY JDD CHECKED BY JBD DATE 6-67
TRACED BY CHECKED BY DATE
REVISED DATE REVISED DATE REVISED DATE



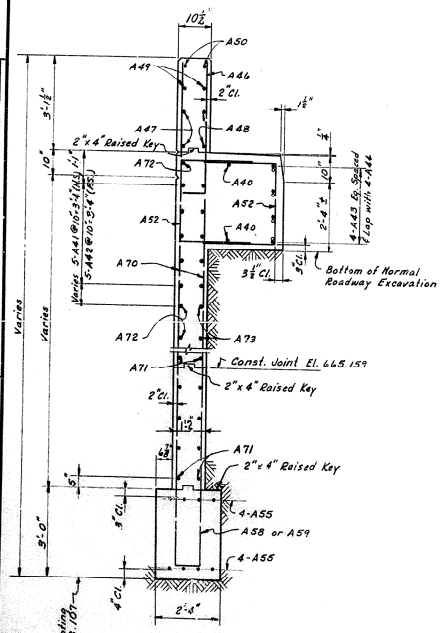
PLAN OF CURB "A" & "D"
(Curb "D"- Opposite Hand)



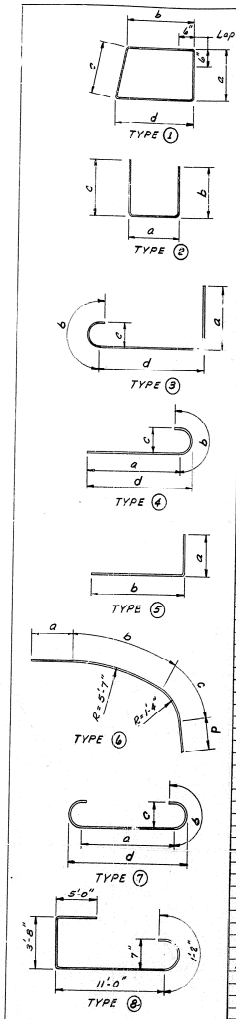
SECTION C-C



PLAN OF CURB "B" & "C"
(Curb "C"- Opp. Hand)



SECTION D-D



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

BILL OF REINFORCEMENT

Bar Mark	Type	No. Bars Req'd. Abut #1	No. Bars Req'd. Abut #2	Size	Length Ft.	Length In.	Location	a Ft.	a In.	b Ft.	b In.	c Ft.	c In.	d Ft.	d In.
A1	Str.	13	-	#8	4	0	Dowels	-	-	-	-	-	-	-	-
A2	(1)	38	-	5	15	11	Stirrups	2	5	4	7	2	7	5	7
A3	Str.	8	-	8	37	3	Footing ~ Bot.	-	-	-	-	-	-	-	-
A4	Str.	5	-	7	37	3	Footing ~ Top	-	-	-	-	-	-	-	-
A5	Str.	2	-	3	37	3	Footing ~ Mid.	-	-	-	-	-	-	-	-
A6	(2)	12	12	5	5	5	Risers	1	7	2	2	2	2	-	-
A7	(3)	50	-	7	13	3	Backwall	1	2	1	2	0	7	11	1
A8	(3)	35	-	7	9	6	"	2	0	1	9	0	7	6	6
A9	(2)	30	-	6	14	3	"	0	8	1	7	12	3	-	-
A10	(4)	3	-	7	13	11	"	12	9	1	2	0	7	13	0
A11	Str.	3	-	6	13	0	"	-	-	-	-	-	-	-	-
A12	(4)	3	-	7	14	10	"	13	8	1	2	0	7	13	11
A13	Str.	3	-	6	13	9	Backwall	-	-	-	-	-	-	-	-
A14	(2)	4	-	5	10	8	Wingwall	0	10	5	0	5	0	-	-
A15	(2)	6	-	5	11	8	Wingwall	0	10	5	6	5	6	-	-
A16	(2)	4	-	5	9	0	Wingwall	0	10	4	2	4	2	-	-
A17	(2)	6	-	5	10	0	Wingwall	0	10	4	8	4	8	-	-
A18	Str.	24	-	5	10	4	Wingwall	-	-	-	-	-	-	-	-
A19	(2)	2	-	5	14	8	"	0	10	7	0	7	0	-	-
A20	(2)	2	-	5	13	10	"	0	10	6	7	6	7	-	-
A21	(2)	2	-	5	12	10	"	0	10	6	1	6	1	-	-
A22	(2)	2	-	5	11	10	"	0	10	5	7	5	7	-	-
A23	(2)	2	-	5	10	10	"	0	10	5	1	5	1	-	-
A24	(2)	2	-	5	9	10	"	0	10	4	7	4	7	-	-
A25	(2)	2	-	5	9	0	"	0	10	4	2	4	2	-	-
A26	(2)	2	-	5	8	0	"	0	10	3	8	3	8	-	-
A27	Str.	22	-	5	9	0	"	-	-	-	-	-	-	-	-
A28	(5)	2	-	5	8	6	"	3	1	5	6	-	-	-	-
A29	(5)	2	-	5	9	6	"	3	1	6	6	-	-	-	-
A30	(5)	2	-	5	11	9	"	3	1	8	9	-	-	-	-
A31	(5)	2	-	5	13	9	"	3	1	10	9	-	-	-	-
A32	(5)	2	-	5	15	9	"	3	1	12	9	-	-	-	-
A33	(5)	4	-	5	16	6	"	3	1	13	6	-	-	-	-
A34	Str.	4	-	5	11	0	"								
A35	Str.	2	-	5	5	6	"								
A36	Str.	2	-	5	6	6	"								
A37	Str.	2	-	5	8	9	"								
A38	Str.	2	-	5	10	9	"								
A39	Str.	2	-	5	12	9	"								
A40	Str.	6	4	5	14	3	Wingwall								
A41	Str.	6	10	5	18	0	Curb								
A42	Str.	6	10	5	18	6	Curb								
A43	(5)	8	8	5	11	3	Curb	3	1	3	3	-	-	-	-
A44	(6)	8	8	5	11	6	Curb	1	8	1	6	1	6	1	0
A45	(2)	10	-	5	4	4	Wing Tip ~ A.F.D.	0	10	1	10	1	10	-	-
A46	(2)	30	30	5	9	4	Railing	0	6½	4	6	4	6	-	-
A47	Str.	4	4	5	13	6	"								
A48	Str.	4	4	5	14	0	"								
A49	Str.	4	4	5	9	9	"								
A50	Str.	4	4	5	8	3	"								
A51	Str.	4	4	5	7	3	Railing	-	-	-	-	-	-	-	-
A52	(2)	56	56	5	7	7	Curb	2	9	2	6	2	6	-	-
A53	Str.	22	22	5	37	3	Backwall	-	-	-	-	-	-	-	-
A54	(7)	-	85	5	9	9	Footing	8	1	0	10	0	5	8	6
A55	(7)	-	16	5	12	6	Footing	10	10	0	10	0	5	11	3
A56	(7)	-	22	5	39	6	Footing	37	10	0	10	0	5	38	3
A57	(2)	-	8	5	18	8	Wingwall	0	10	6	0	6	0	-	-
A58	(2)	-	9	5	19	0	"	0	10	9	2	9	2	-	-
A59	(2)	-	9	5	17	0	"	0	10	8	2	8	2	-	-
A60	(2)	-	8	5	11	0	Wingwall	0	10	5	2	5	2	-	-
A61	(2)	-	34	7	20	6	Dowels	-	-	-	-	-	-	-	-
A62	(2)	-	34	5	7	8	Ties	3	8	3	8	0	6	-	-
A63	(3)	-	35	7	14	1	Backwall	12	10	1	5	-	-	-	-
A64	(2)	-	30	6	14	0	Backwall	0	8	1	7	12	0	-	-
A65	Str.	-	8	5	37	0	Bridge Seat	-	-	-	-	-	-	-	-
A66	Str.	-	3	7	11	3	Backwall	-	-	-	-	-	-	-	-
A67	Str.	-	3	6	12	10	"	-	-	-	-	-	-	-	-
A68	Str.	-	3	7	10	5	"	-	-	-	-	-	-	-	-
A69	Str.	-	3	6	12	0	Backwall	-	-	-	-	-	-	-	-
A70	Str.	-	56	5	10	6	Wingwall	-	-	-	-	-	-	-	-
A71	Str.	-	84	5	15	9	"	-	-	-	-	-	-	-	-
A72	(5)	-	18	5	14	6	"	3	1	13	6	-	-	-	-
A73	Str.	-	10	5	12	3	Wingwall	-	-	-	-	-	-	-	-
A74	(2)	-	10	5	7	8	Wing Tip ~ C.F.D.	0	10	3	4	3	4	-	-
A75	(2)	12	12	5	6	9	Risers	2	7	2	2	2	2	-	-

ABUTMENT NO. 1 & 2 - EASTBOUND

DESIGNED BY	CHECKED BY	DATE	REVISED	DATE
UDD	AMW	4-59		
DETAILED BY	CHECKED BY	DATE	REVISED	DATE
UDD	EBD	4-59		
TRACED BY	CHECKED BY	DATE	REVISED	DATE

EXISTING S.R. 35 SHEET 5 OF 18

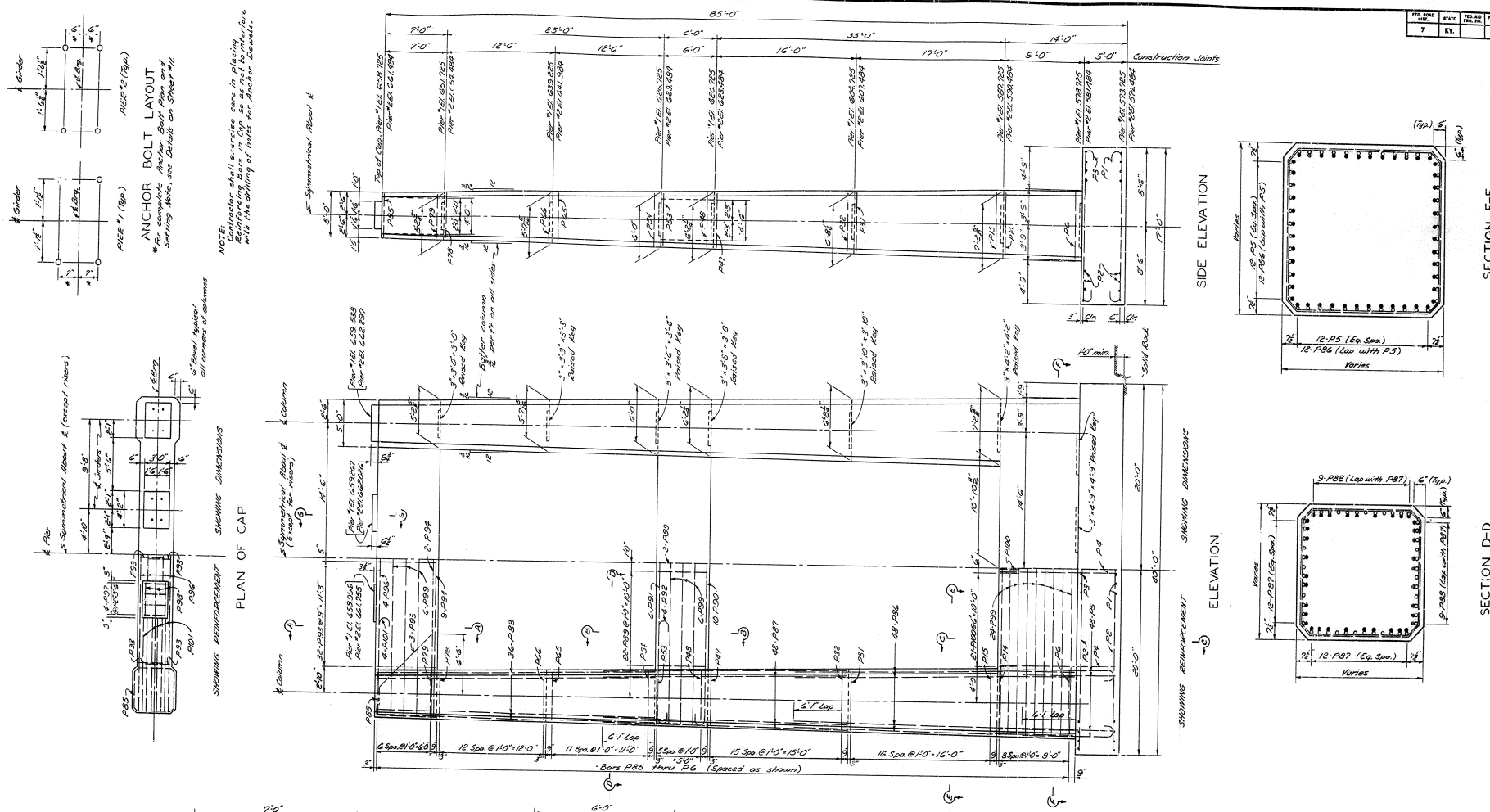
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN

LOUISVILLE - LEXINGTON
ROAD

STATION 2417 + 01 R PROJECT NO. I-04-4(1)

BRIDGE NUMBER

DRAWING NO. 14038 INDEX



ESTIMATE OF QUANTITIES

	Pier #1	Pier #2	Total
Class "A" Concrete	459.2	459.2	918.4 C.Y.
Reinforcement	76,450	76,450	152,900 Lbs.

PIERS NO. 1 AND NO. 2 EASTBOUND

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

EXISTING S.R. 35 SHEET 6 OF 18

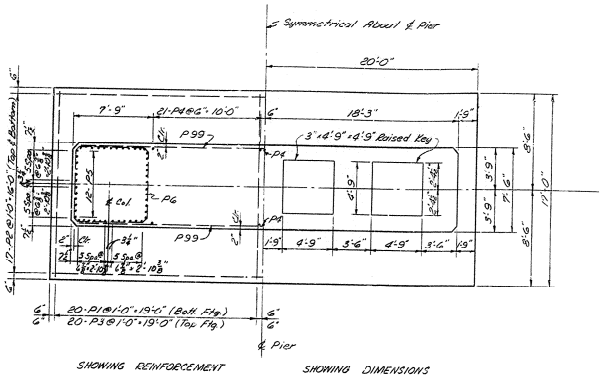
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN
LOUISVILLE - LEXINGTON
ROAD

STATION 2417 + 01 R **PROJECT NO.** 1-04-4(1)

BRIDGE NUMBER | DRAWING No. 14038 | INDEX

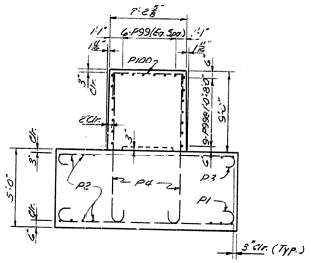
DESIGNED BY RPD CHECKED BY H.M.W. DATE 8-59 REVISED DATE
DETAILED BY RPD CHECKED BY H.M.W. DATE 8-59 REVISED DATE
TRACED BY DATE REVISED DATE

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



SHOWING REINFORCEMENT SHOWING DIMENSIONS

SECTION F-F

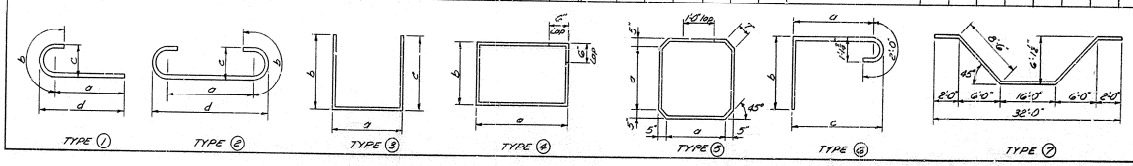


SECTION C-C

BILL OF REINFORCEMENT

MARK	TYPE	NUMBER Pier #1	NUMBER Pier #2	BAR SIZE	LENGTH Ft.	LENGTH In.	LOCATION	a Ft.	a In.	b Ft.	b In.	c Ft.	c In.	d Ft.	d In.
P1	2	40	40	10	19	2	Bottom Footing	15	6	1	10	1	0 3/8	16	6 1/2
P2	Str.	34	34	6	33	6	Top & Bottom Footing								
P3	2	40	40	7	18	3	Top Footing	15	11	1	2	0	7	16	6
P4	1	86	86	9	14	6	Crashwall Dowels	12	10	1	8	0	11 1/8	13	5 3/8
P5	1	96	96	11	12	0	Column Dowels	10	0	2	0	1	1 1/8	10	0 3/8
P6	3	2	2	5	28	7	Column Hoops	6	3 3/4						
P7	6	2	2	5	28	6	" "	6	3 3/8						
P8	6	2	2	5	28	4	" "	6	3						
P9	6	2	2	5	28	3	" "	6	2 5/8						
P10	6	2	2	5	28	1	" "	6	2 1/4						
P11	6	2	2	5	28	0	" "	6	1 7/8						
P12	6	2	2	5	27	10	" "	6	1 1/2						
P13	6	2	2	5	27	9	" "	6	1 1/8						
P14	6	2	2	5	27	7	" "	6	0 3/4						
P15	6	2	2	5	27	6	" "	6	0 3/8						
P16	6	2	2	5	27	4	" "	6	0						
P17	6	2	2	5	27	3	" "	5	11 5/8						
P18	6	2	2	5	27	1	" "	5	11 1/4						
P19	6	2	2	5	27	0	" "	5	10 7/8						
P20	6	2	2	5	26	10	" "	5	10 1/2						
P21	6	2	2	5	26	9	" "	5	10 1/8						
P22	6	2	2	5	26	7	" "	5	9 3/4						
P23	6	2	2	5	26	6	" "	5	9 3/8						
P24	6	2	2	5	26	4	" "	5	9						
P25	6	2	2	5	26	3	" "	5	8 5/8						
P26	6	2	2	5	26	1	" "	5	8 1/4						
P27	6	2	2	5	26	0	" "	5	7 7/8						
P28	6	2	2	5	25	10	" "	5	7 1/2						
P29	6	2	2	5	25	9	" "	5	7 1/8						
P30	6	2	2	5	25	7	" "	5	6 3/4						
P31	6	2	2	5	25	6	" "	5	6 3/8						
P32	6	2	2	5	25	4	" "	5	6						
P33	6	2	2	5	25	3	" "	5	5 5/8						
P34	6	2	2	5	25	1	" "	5	5 1/4						
P35	6	2	2	5	25	0	" "	5	4 7/8						
P36	6	2	2	5	24	10	" "	5	4 1/2						
P37	6	2	2	5	24	9	" "	5	4 1/8						
P38	6	2	2	5	24	7	" "	5	3 3/4						
P39	6	2	2	5	24	6	" "	5	3 3/8						
P40	6	2	2	5	24	4	" "	5	3						
P41	6	2	2	5	24	3	" "	5	2 5/8						
P42	6	2	2	5	24	1	" "	5	2 1/4						
P43	6	2	2	5	24	0	" "	5	1 7/8						
P44	6	2	2	5	23	10	" "	5	1 1/2						
P45	6	2	2	5	23	9	" "	5	1 1/8						
P46	6	2	2	5	23	7	" "	5	0 3/4						
P47	6	2	2	5	23	6	" "	5	0 3/8						
P48	6	2	2	5	23	4	" "	5	0						
P49	6	2	2	5	23	3	" "	4	11 5/8						
P50	6	2	2	5	23	1	" "	4	11 1/4						
P51	6	2	2	5	23	0	" "	4	10 7/8						
P52	6	2	2	5	22	10	" "	4	10 1/2						
P53	6	2	2	5	22	9	" "	4	10 1/8						
P54	6	2	2	5	22	7	" "	4	9 3/4						
P55	6	2	2	5	22	6	" "	4	9 3/8						
P56	6	2	2	5	22	4	" "	4	9						
P57	6	2	2	5	22	3	" "	4	8 5/8						
P58	6	2	2	5	22	1	" "	4	8 1/4						
P59	6	2	2	5	22	0	" "	4	7 7/8						
P60	6	2	2	5	21	10	Column Hoop	4	7 1/2						

MARK	TYPE	NUMBER Pier #1	NUMBER Pier #2	BAR SIZE	LENGTH Ft.	LENGTH In.	LOCATION	a Ft.	a In.	b Ft.	b In.	c Ft.	c In.	d Ft.	d In.
P61	6	2	2	5	21	9	Column Hoop	4	7 1/8						
P62	6	2	2	5	21	7	" "	4	6 3/4						
P63	6	2	2	5	21	6	" "	4	6 3/8						
P64	6	2	2	5	21	4	" "	4	6						
P65	6	2	2	5	21	3	" "	4	5 5/8						
P66	6	2	2	5	21	1	" "	4	5 1/4						
P67	6	2	2	5	21	0	" "	4	4 7/8						
P68	6	2	2	5	20	10	" "	4	4 1/2						
P69	6	2	2	5	20	9	" "	4	4 1/8						
P70	6	2	2	5	20	7	" "	4	3 3/4						
P71	6	2	2	5	20	6	" "	4	3 3/8						
P72	6	2	2	5	20	4	" "	4	3						
P73	6	2	2	5	20	3	" "	4	2 5/8						
P74	6	2	2	5	20	1	" "	4	2 1/4						
P75	6	2	2	5	20	0	" "	4	1 7/8						
P76	6	2	2	5	19	10	" "	4	1 1/2						
P77	6	2	2	5	19	9	" "	4	1 1/8						
P78	6	2	2	5	19	7	" "	4	0 3/4						
P79	6	2	2	5	19	6	" "	4	0 3/8						
P80	6	2	2	5	19	4	" "	4	0						
P81	6	2	2	5	19	3	" "	3	11 5/8						
P82	6	2	2	5	19	1	" "	3	11 1/4						
P83	6	2	2	5	19	0	" "	3	10 7/8						
P84	6	2	2	5	18	10	" "	3	10 1/2						
P85	6	2	2	5	18	9	Column Hoop	3	10 1/4						
P86	Str.	96	96	11	32	1	Column								
P87	Str.	96	96	11	28	1	Column								
P88	Str.	72	72	11	31	9	Column								
P89	4	46	46	6	18	7	Strut Stirrup	5	8	3	4				
P90	2	10	10	8	34	8	Bottom Strut	33	8	1	6	0	10	34	6
P91	2	6	6	11	31	4	Top Strut	33	4	2	0	1	1 1/2	34	5 1/2
P92	2	4	4	11	15	0	Top Strut	10	3	3	0	10	9 1/2		
P93	4	64	64	6	19	7	Cap Stirrup	6	8	2	10				
P94	Str.	11	11	11	33	8	Bottom Cap								
P95	7	3	3	11	37	0	Bottom Cap								
P96	5	4	4	11	45	0	Top Cap	33	4	6	1	6	1		
P97	3	12	12	5	6	9	Risers	2	9	2	1	2	1		
P98	Str.	9	9	5	3	9	Risers								
P99	Str.	36	36	6	33	6	Cap, Strut & Crashwall								
P100	3	43	43	6	10	8	Top Crashwall	6	9	2	1	2	1		
P101	8	8	8	11	16	8	Column	8	2	6	9	8	8 1/2		



EXISTING S.R. 35 SHEET 7 OF 18

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

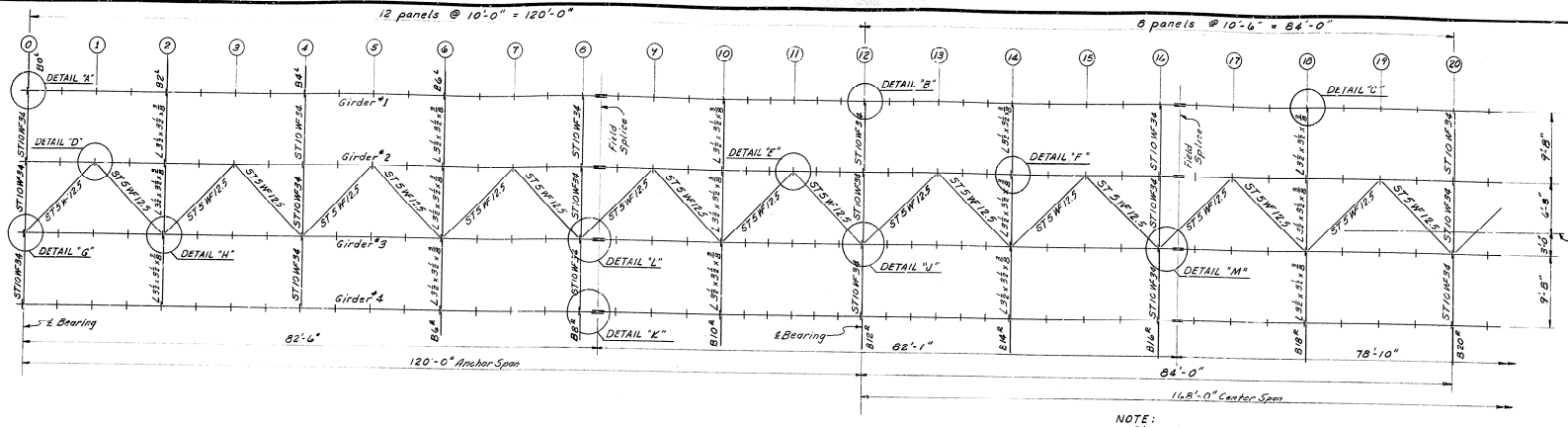
STATION 2417 + 01R **PROJECT NO.** I-04-4(1)

BRIDGE NUMBER DRAWING NO. 14038 INDEX

PIERS NO. 1 AND NO. 2 EASTBOUND

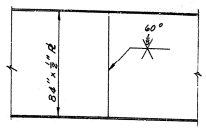
DESIGNED BY RRD CHECKED BY HHH DATE 6-57 REVISED DATE
DETAILED BY RRD CHECKED BY HHH DATE 6-57 REVISED DATE
TRACED BY CHECKED BY DATE REVISED DATE

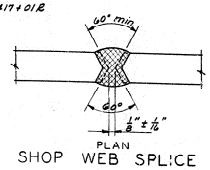
FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



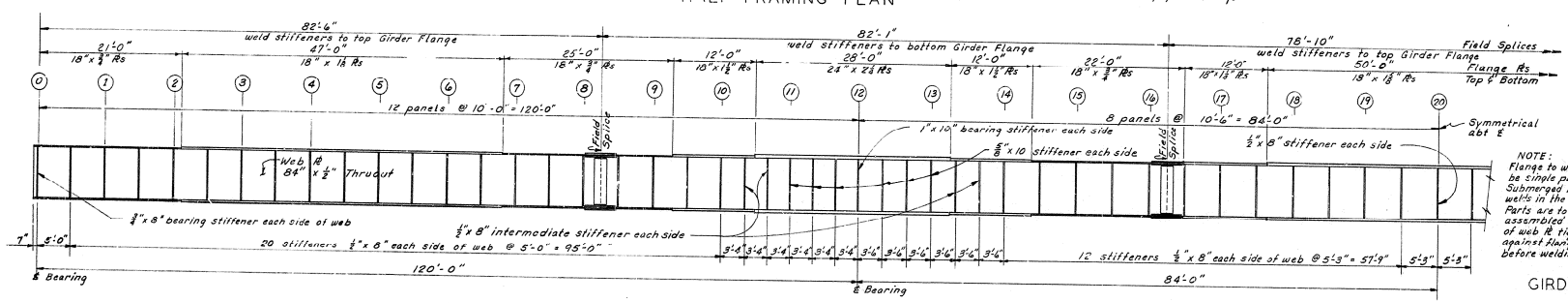
NOTE:
Dimensions shown are measured along underside of top girder flange.

HALF FRAMING PLAN

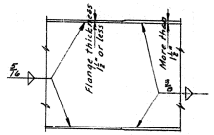


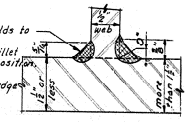


SHOP WEB SPLICE



HALF ELEVATION GIRDERS 1 THRU 4

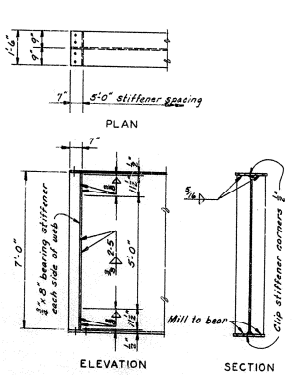




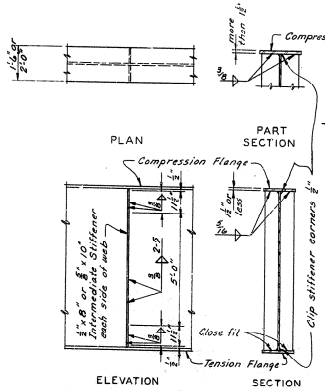
NOTE:
Flange to web welds to be single pass Submerged Arc fillet welds in the flat position. Parts are to be assembled with edges of web ℞ tight against flange ℞ before welding.

SECTION

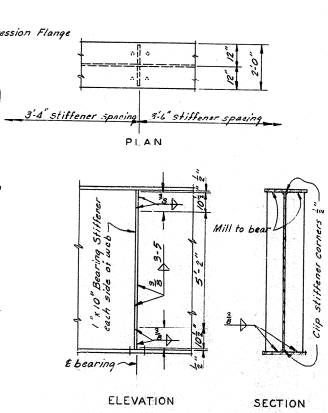
GIRDER WEB TO FLANGE WELD DETAIL



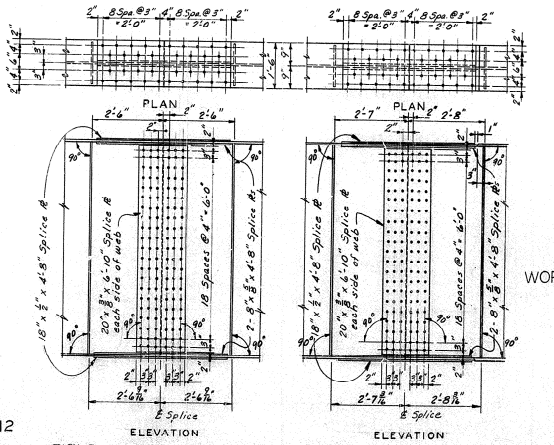
BEARING STIFFENER AT PP0



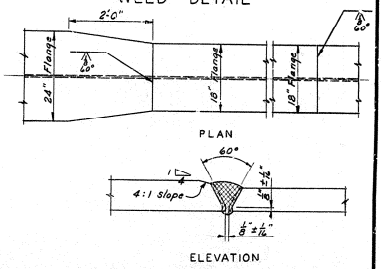
TYPICAL INTERMEDIATE STIFFENER DETAILS



BEARING STIFFENER AT PP12



FIELD SPLICE AT PP8¼ FIELD SPLICE AT PP16¼



SHOP FLANGE SPLICE

WORK SHEETS 8 THRU 12 TOGETHER

EXISTING S.R. 35 SHEET 8 OF 18

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN
LOUISVILLE LEXINGTON
ROAD

STATION 2417+01 R **PROJECT NO.** I-04-4(1)

BRIDGE NUMBER | DRAWING No. 14038 | INDEX

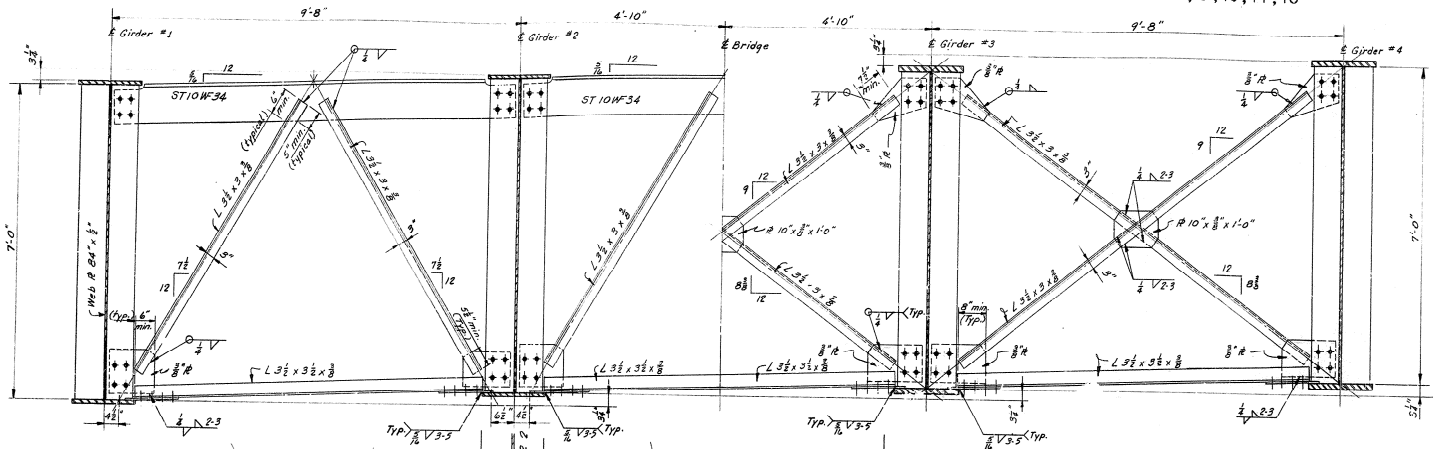
DESIGNED BY RBD CHECKED BY JWM DATE 5-52 REVISED DATE REVISED
DETAILED BY DOZIER CHECKED BY JWM DATE 2-53 REVISED DATE REVISED
TRACED BY CHECKED BY DATE

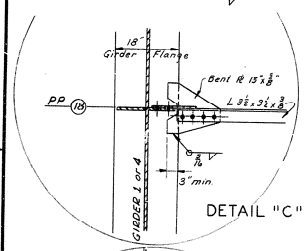
EASTBOUND STRUCTURE - 120'-168'-120' CONT. WELDED PLATE GIRDER

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

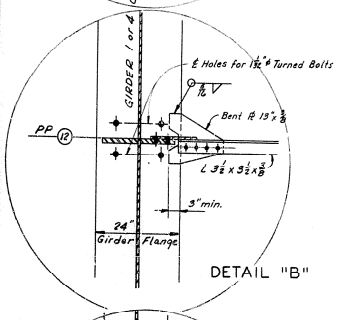
HALF ELEVATION
X-FRAME AT PANEL POINTS 0,4,8,16,20

HALF ELEVATION
X-FRAME AT PANEL POINTS 2,6,10,14,18

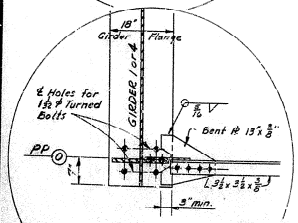




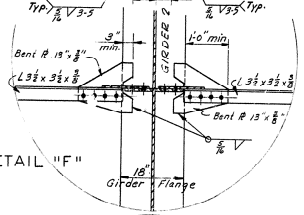
DETAIL "C"



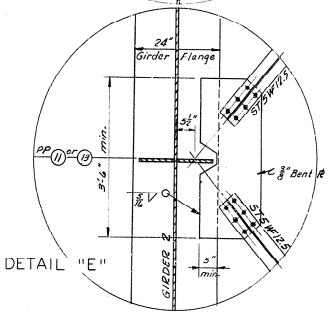
DETAIL "B"



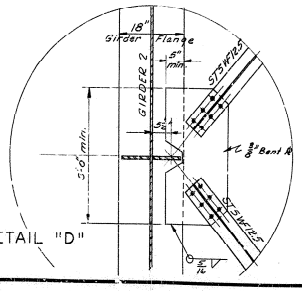
DETAIL "A"



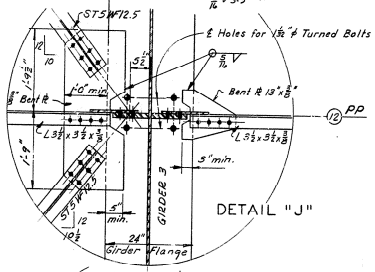
DETAIL "F"



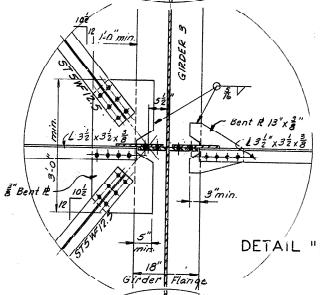
DETAIL "E"



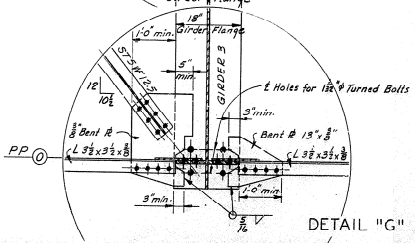
DETAIL "D"



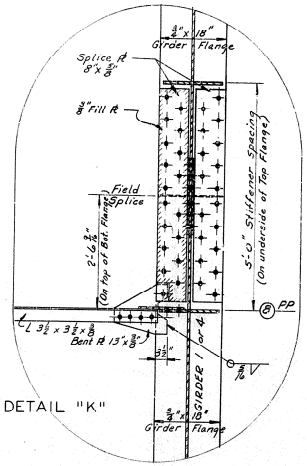
DETAIL "J"



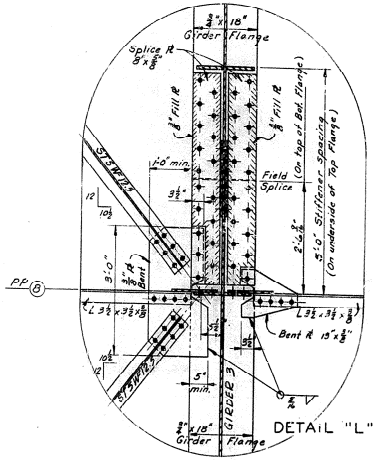
DETAIL "H"



DETAIL "G"



DETAIL "K"



DETAIL "L"

CONT. WELDED PLATE GIRDER EASTBOUND

EXISTING S.R. 35 SHEET 9 OF 18

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN

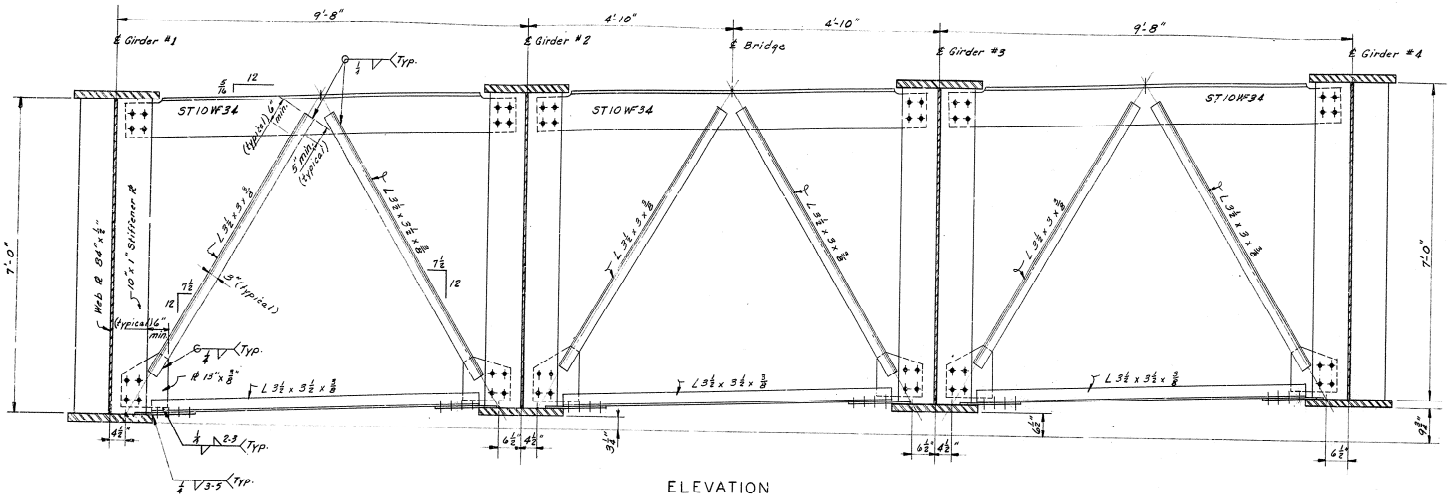
LOUISVILLE LEXINGTON
ROAD

STATION 2417+01 R **PROJECT NO.** I-04-411

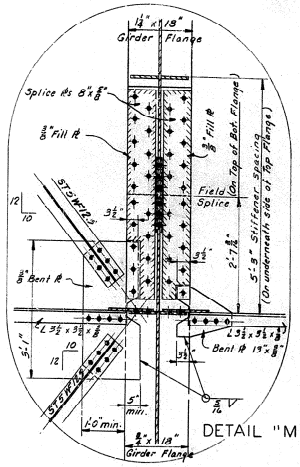
BRIDGE NUMBER	DRAWING NO.	INDEX
	14038	

DESIGNED BY R.B.D.	CHECKED BY J.M.M.	DATE 6-53	REVISED DATE
DETAILED BY DOZIER	CHECKED BY J.M.M.	DATE 8-53	REVISED DATE
TRACED BY	CHECKED BY	DATE	REVISED DATE

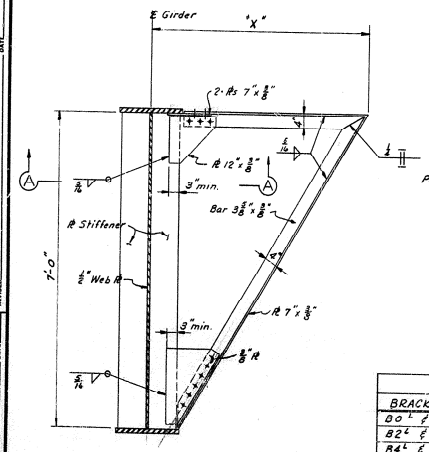
FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



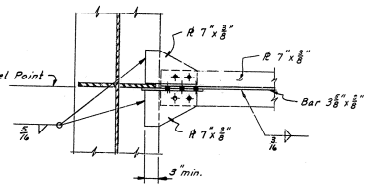
ELEVATION
X-FRAME AT PANEL POINT 12



DETAIL "M"



BRACKET DETAIL



SECTION A-A

BRACKET OFFSETS			
BRACKET MK	Dim. "X"	BRACKET MK	Dim. "X"
$B0^L$ & $B40^L$	3'-1 1/2"		
$B2^L$ & $B38^L$	4'-5 5/8"		
$B4^L$ & $B36^L$	3'-9 3/4"		
$B6^L$ & $B34^L$	3'-3 1/2"	$B6^R$ & $B34^R$	3'-3 3/8"
		$B8^R$ & $B32^R$	3'-9 3/4"
		$B10^R$ & $B30^R$	4'-2 1/4"
		$B12^R$ & $B28^R$	4'-6 7/8"
		$B14^R$ & $B26^R$	4'-9 3/8"
		$B16^R$ & $B24^R$	4'-11 5/8"
		$B18^R$ & $B22^R$	5'-1"
		$B20^R$	5'-1 1/8"

EASTBOUND ~
120'-168'-120' CONT. WELDED PLATE GIRDER

DESIGNED BY R.A.D.	CHECKED BY H.M.M.	DATE 4-57	REVISED DATE
DETAILED BY DOZIER	CHECKED BY H.M.M.	DATE 2-57	REVISED DATE
TRACED BY	CHECKED BY	DATE	REVISED DATE

EXISTING S.R. 35 SHEET 10 OF 18

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN

LOUISVILLE LEXINGTON
ROAD

STATION 2417 + 01 R **PROJECT NO.** I-04-4(1)

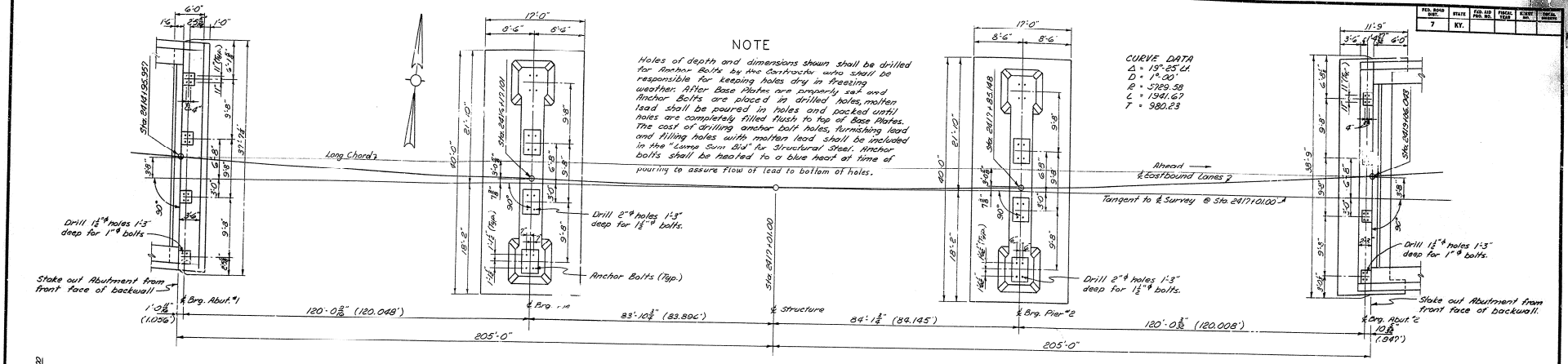
BRIDGE NUMBER | DRAWING NO. 14038 | INDEX

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

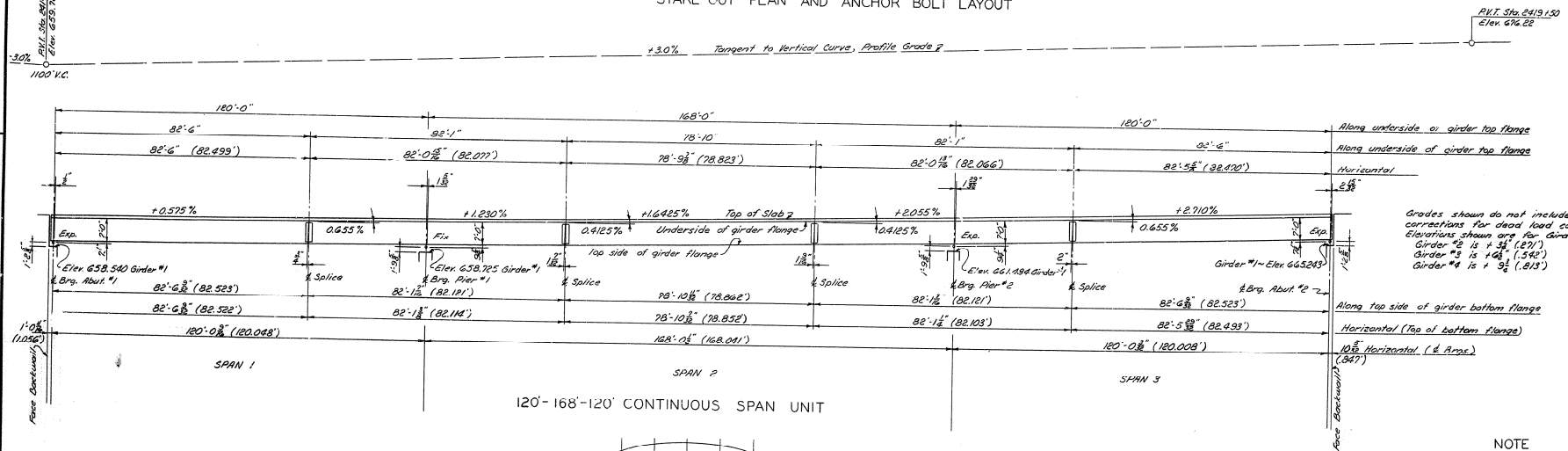
NOTE

Holes of depth and dimensions shown shall be drilled for Anchor Bolts by the 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 included in the "Lump Sum Bid" for Structural Steel. Anchor bolts shall be heated to a blue heat at time of pouring to assure flow of lead to bottom of holes.

CURVE DATA
Δ = 19°-25' Lt.
D = 1°-00'
R = 5729.58
L = 1941.67
T = 980.23



STAKE-OUT PLAN AND ANCHOR BOLT LAYOUT

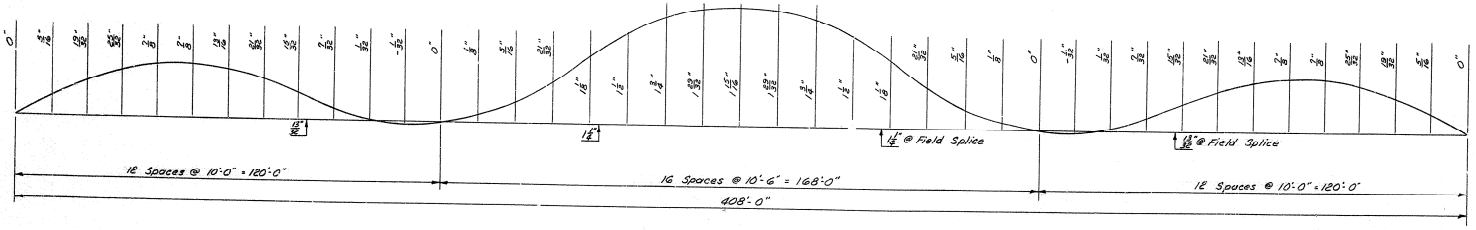


120'-168'-120' CONTINUOUS SPAN UNIT

Grades shown do not include any corrections for dead load camber. Elevations shown are for Girder #1;
Girder #2 is + 3 1/4" (.271')
Girder #3 is + 6 1/8" (.592')
Girder #4 is + 9 3/4" (.813')

NOTE

Camber Diagram shown on this sheet includes the weight of concrete deck, handrail, future surfacing and structural steel.



CAMBER DIAGRAM
TOTAL DEAD LOAD
Note: Ratio of dead load above girders to total dead load = 0.772

WORK SHEETS 8 THRU 12 TOGETHER

EXISTING S.R. 35 SHEET 11 OF 18

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN
LOUISVILLE - LEXINGTON
ROAD
STATION 2417 + 01R **PROJECT No.** I-04-4(1)

BRIDGE NUMBER | DRAWING No. 14038 | INDEX

STAKE-OUT PLAN, GIRDER ELEV. AND CAMBER DIAGRAM - EASTBOUND

DESIGNED BY: RBD	CHECKED BY: N.M.M.	DATE: 4-5-50	REVISED	DATE	
DETAILED BY: RBD	CHECKED BY: N.M.M.	DATE: 4-5-50	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.				

STRUCTURAL STEEL NOTE

SPECIFICATIONS: Kentucky Department of Highways Standards, 1956 Edition with Amendments.

DESIGN LOADING: Bridge is designed for H20-S16-44 loading as specified in AASHO Specifications, 1957 Edition, or alternate loading See Sheet 1.

MATERIALS: ASTM Specifications hereinafter designated shall govern the materials furnished

MATERIAL	ASTM-DESIGNATION
Structural Steel (Stiffeners, bracing, splices, anchor bolts, exp. dams, shoes and Rockers, bearing pls.)	A7-58T
Structural Steel (Flange & web of main girders.)	A373-58T
High-Strength Bolts, Nuts, & Washers	A325-58T
Steel Pins	A108-58T (Grade 1016 to 1050 inclusive)
For submerged arc-welding Lincoln 1-60 electrodes with Lincoln weld flux #780 or #760 or Linde #29 electrode with Gr 50 (B48) flux will be acceptable	
Gray Iron Castings	A48-56
Molten Lead	B29-55
Lead Plates	B29-55
Steel Machine Bolts & Nuts	A307-58T
Mild steel arc-welding electrodes	A233-58T

MILL TEST REPORTS: Notarized test reports in triplicate shall be furnished the Kentucky Department of Highways showing that all materials furnished conform to the Specifications.

DIMENSIONS: Dimensions are for a normal temperature of 60° Fahrenheit with dead load on the structure.

PAINT: All structural steel shall be given one shop coat of Type I, Red Lead paint, and two field coats of aluminum paint in accordance with the Specifications, except as noted. Shop paint shall not be applied to surfaces where high-strength steel bolts are used for field connections. Surfaces in contact with the concrete are not to be painted. Weld spatter shall be removed from the welded assemblies before painting in accordance with AWS Specification 5.8 A.

SHOP ASSEMBLY: General reaming of holes for each field splice will be required with all parts for each splice completely shop assembled. Parts adjusted to lines and camber, fit for drilling or reaming. This applies to field splices in girders only. Girders shall remain assembled for inspection by the Department of Highway Inspector. Sections to be matchmarked while assembled. Other field connections shall be drilled or reamed in the shop with connecting parts assembled, or shall be drilled or reamed to a metal template without assembly.

FIELD CONNECTIONS: High-Strength Steel Bolts to be used in accordance with 5.2.8-A-8.(1) of the specifications. Open holes shall be 9/16" diameter for 7/8" diameter high strength bolts.

SHOP DETAIL DRAWINGS: The contractor shall submit shop detail drawings of all structural steel to the Bridge Engineer for approval in accordance with section 5.2.8-A-1 of the Specifications. The shop detail plans shall show definite welding procedures as noted below under Welding Procedure.

WELDING: Welding and welding materials shall be in accordance with the American Welding Society Specifications for Welded Highway and Railroad Bridges, 1956 Edition. No direct payment shall be made for welding or welding material but price for same shall be included in the "Lump Sum Bid" for Structural Steel.

SHOP SPLICES: All shop splices in flange plates and web plates shall be made before welding flange plates to web plates. All such proposed splices shall be shown on shop drawings.

SHOP WELDS: Extension bars shall be used in making butt welds in the girder flanges, See A.W.S. Section 805 (j)(k). A submerged-arc, single-pass fillet weld in the flat position is to be used to connect the flange plates to the web plates.

RADIOGRAPHIC TESTS: Radiographic Tests for discontinuities of weld in girders are to be made by the Kentucky Department of Highways in accordance with A.S.T.M. E94-52T Specifications. This service is to be an inspection operation, whereby material is accepted or rejected. All parts and material which have been accepted should be marked permanently, with a characteristic identifying symbol which will indicate, to subsequent or final inspectors, the fact of x-ray acceptance. This service including Radiographs, Custody and Preservation, Interpretation and Reports shall be arranged by the Kentucky Department of Highways. All butt welds shall be of satisfactory quality as determined by radiographic inspection. The method of inspection shall be based on the following outline:-

For shop butt welds, Radiography shall be used in conjunction with procedure qualification to insure that the materials, machines, methods and workmen being used are producing work of radiographic quality. Except for unusual circumstances not over 25% of the shop splices will be radiographed, but 100% of the shop butt tension flange welds are to be radiographed. Radiographs shall be made of each welding operators work.

For fillet welds of the web to the flange on the built-up girders, sections of fillet welds that are shown by magnetic particle inspection to have major subsurface discontinuities shall be radiographed to determine the extent and exact nature of the defect.

A spot radiograph shall be taken for each 50 feet of fillet weld in web-to-flange fillets of main girders.

Sections of butt welds that are shown by radiography to have any of the following types of imperfections shall be removed and repaired.

(1) Any type of crack or zone of incomplete fusion or penetration.
(2) Any elongated slag inclusion which has a dimension greater than ¼" for T up to ¾", and ⅓ T for T from ¾" to 2½", where T is the thickness of the thinner plate being welded.
(3) Any group of slag inclusions in line having an aggregate length greater than T in a length of 12 T, unless the distance between adjacent defects is greater than L, where L is the length of the longest imperfection in the group.
(4) Porosity in excess of that shown by pictures standard as designated in Section VIII of the A.S.M.E. Boiler Code, paragraph W W 51, subparagraph (M) (4).

For Radiography of fillet weld, any section of weld shown to have any of the following types of subsurface defects shall be removed and repaired:

(1) Any types of crack or zone of incomplete fusion or penetration.
(2) Any elongated slag inclusion which has a dimension greater than ⅓ T where T is the thickness of the thinner plate being welded. Any such imperfection ¼" or less shall be acceptable for any plate thickness.
(3) Porosity is not a factor in welds subject to this type spot radiography except as noted for surface porosity in paragraph 509 (a) of the A.W.S. Specifications.

In any of the above radiography, the discovery of poor workmanship shall require that additional radiographs be made of either the area of work showing defects, or other work done by the same operator whose work is not acceptable.

STRUCTURAL STEEL: For purpose of payment "Lump Sum Bid" for Structural Steel includes structural steel, bolts, steel pins, cast iron, lead plates or premolded fabric pads if used, welding and welding materials.

FIELD SPLICES: If additional field splices are permitted in girders, these splices shall be at the contractors expense and shall be included in the "Lump Sum Bid" for Structural Steel.

WELDING PROCEDURE: The procedure of welding to be followed in fabrication shall be established by the fabricator in accordance with Section D101 a of A.W.S. Specifications. The procedure specification shall be recorded as a part of the shop detail drawings and shall be submitted to the Bridge Engineer for approval. The procedure specification shall outline the welding sequence for each welded shop assembly excepting shoes and rockers. The procedure specification shall specify for each type of weld, prequalified or other, the following: joint preparation, fit up, electrode specification, electrode diameter, welding position, polarity, amperage and number of passes, indicating any procedure change from one pass to the next in the same weld and indicating the maximum thickness in a weldment layer. Where preheating of the base metal is required it shall be indicated with the weld symbol on the shop detail drawings. Extension bars used in making butt welds shall be detailed on the shop detail drawings.

Procedure specifications submitted which are not tailored to suit the particular work to be fabricated shall not be considered as fulfilling the requirements of the contract.

A submerged arc, single-pass fillet weld in the flat position is to be used to connect the flange plates to the web plates.

The welding sequence outlined in the procedure specification shall be such as to avoid needless distortion and shrinkage stresses in accordance with section 304 of the A.W.S. specifications. For welded plate girders the broad outline of sequence shall be as follows:

1. Flange butt weld
2. Web butt weld
3. Web to flange weld
4. Stiffeners to web welds
5. Stiffeners to flange welds.

WELDED SHOES AND ROCKERS: The Provisions for preheating required by the AWS Specifications shall apply to welded shoes and rockers in addition to the provisions of AWS Specification 5.12 in regard to stress relief heat treatment.

MAGNETIC PARTICLE INSPECTION OF FILLET WELDS: Fillet welds in main girders between web and flanges shall be inspected by the dry-powder magnetic particle inspection method in accordance with ASTM Specification E109-57T. This inspection shall be conducted by the Kentucky Department of Highways inspector who shall accept or reject the weld. The inspector shall demonstrate to the fabricator the performance and sensitivity of the equipment and the inspecting personnel on standard prepared specimens which shall illustrate the following types of defects:

(1) Surface or subsurface cracking
(2) Lack of penetration
(3) Incomplete fusion
(4) Slag inclusion
(5) Porosity

The demonstrated performance of the inspection technique on the standard defective specimens shall be the basis of acceptance or rejection of the weld. Any section of fillet weld shown to have the above types of imperfections shall be removed and repaired, except that porosity and slag inclusions having a dimension of ¼" or less or ⅓ T or less, where T is the thickness of the thinner plate being welded, will be acceptable.

The inspector shall schedule and perform his work in such a manner as to keep interference with regular fabrication operations to a minimum. The fabricator shall provide an adequate source of electrical current to the inspector and furnish the current required to conduct the inspection.

A minimum of fifty percent of the linear feet of fillet in main girders between web and flanges shall be tested.

ESTIMATE OF QUANTITIES

* Structural Steel	668,586
Pin Steel	272
Cast Iron	960
Lead Plates	532
Total	670,350 Lbs.

* Does not include weight of weld material

EASTBOUND STRUCTURE
120'-168'-120' CONT WELDED PLATE GIRDER

DESIGNED BY	CHECKED BY	DATE	REVISED
DETAILED BY	CHECKED BY	DATE	REVISED
TRACED BY	CHECKED BY	DATE	REVISED

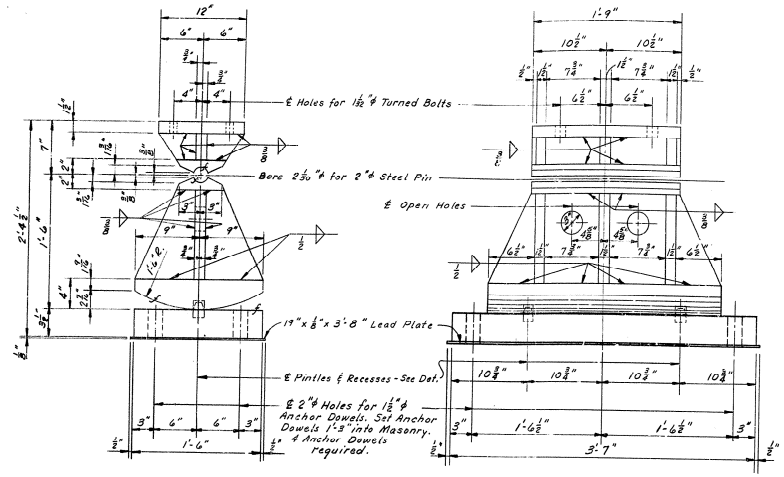
EXISTING S.R. 35 SHEET 12 OF 18

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

STATION 241+01 R PROJECT NO. I-04-4(1)

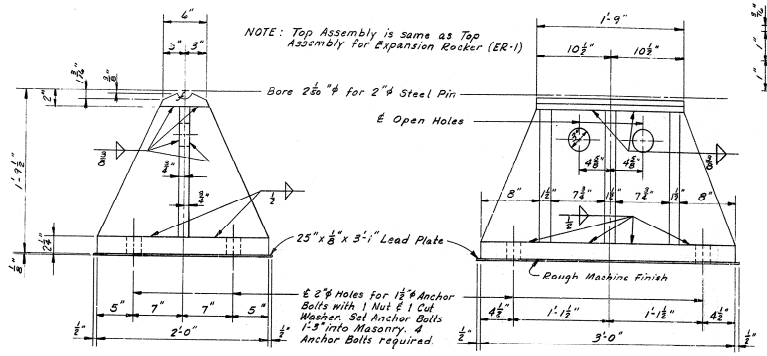
BRIDGE NUMBER DRAWING NO. 14033

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



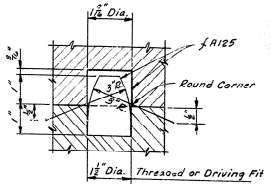
EXPANSION ROCKER (ER-1)

4 Required
Weight of 1 Assembly
* Structural Steel = 1903.0 lb.
Pin Steel = 21.0 lb.
Lead Plate = 42.0 lb.

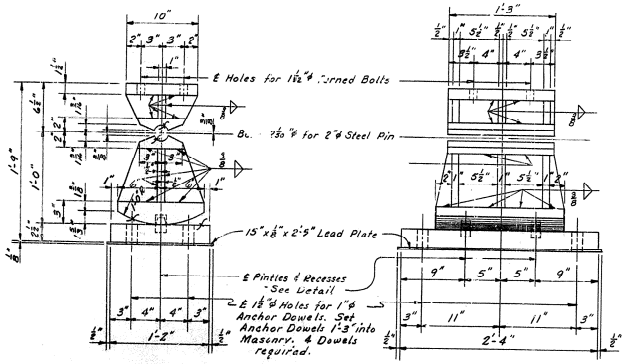


FIXED SHOE (FS-1)

4 Required
Weight of 1 Assembly
* Structural Steel = 1554.0 lb.
Pin Steel = 21.0 lb.
Lead Plate = 47.0 lb.

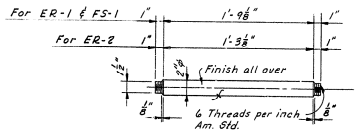


DETAIL OF PINTLE AND RECESS



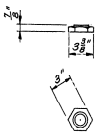
EXPANSION ROCKER (ER-2)

8 Required
Weight of 1 Assembly
* Structural Steel = 681.0 lb.
Pin Steel = 13.0 lb.
Lead Plate = 22.0 lb.



STEEL PIN

8 Required 1'-11 1/2" Long
8 Required 1'-5 1/8" Long
Weight of 1'-11 1/2" Long Pin = 21.0 lb.
Weight of 1'-5 1/8" Long Pin = 13.0 lb.



RECESSED PRESSED STEEL NUT

NOTES

Specifications	Kentucky Department of Highways 1956 Standard with Amendments.
Paint	All material shown on this sheet except finished surfaces of steel pins and pin bearing surfaces shall be given one shop coat of Type 1 red lead paint according to specifications. All exposed surfaces not in contact with concrete shall be given two field coats of aluminum paint in accordance with specifications.
Welding Material	Welding material shall conform to the American Welding Society Specifications for Welded Highway and Railway Bridges, 1956 Edition and subsequent adopted amendments.
Welding	The cost of welding material and labor to be included in the lump sum bid for structural steel. No direct payment will be made for welding and welding materials.
Anchor Dowels	The cost of lead required to set anchor dowel and the cost of drilling anchor dowel holes shall be included in the lump sum bid for structural steel. The Contractor shall be responsible for keeping holes dry in wet and freezing weather. At the time of setting, anchor dowels are to be heated to a blue heat to assure free flow of lead to the bottom of the hole.
White Lead & Tallow	Finished surfaces of steel pins and pin bearing surfaces in steel shoes shall be coated with white lead and tallow in accordance with current specifications with amendments.
Plates	Plates must be true and free of warp.
Mill Test Reports	Notarized statements in triplicate shall be furnished the Department of Highways showing that all structural steel furnished meets specifications.
Shop Plans	The Contractor shall furnish the Department of Highways with complete shop detail plans in accordance with Article 5.2.3A.1 of the Specifications.
Masonry Bearing Plates	One-eighth (1/8) inch thick lead plates or preformed fabric pads may be used.

* Weight includes Anchor Dowels, but does not include Lead Plate, Pin Steel, or Weld Material.

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 Rockers	A.S.A. 250
Pins and Pin Holes	A.S.A. 125

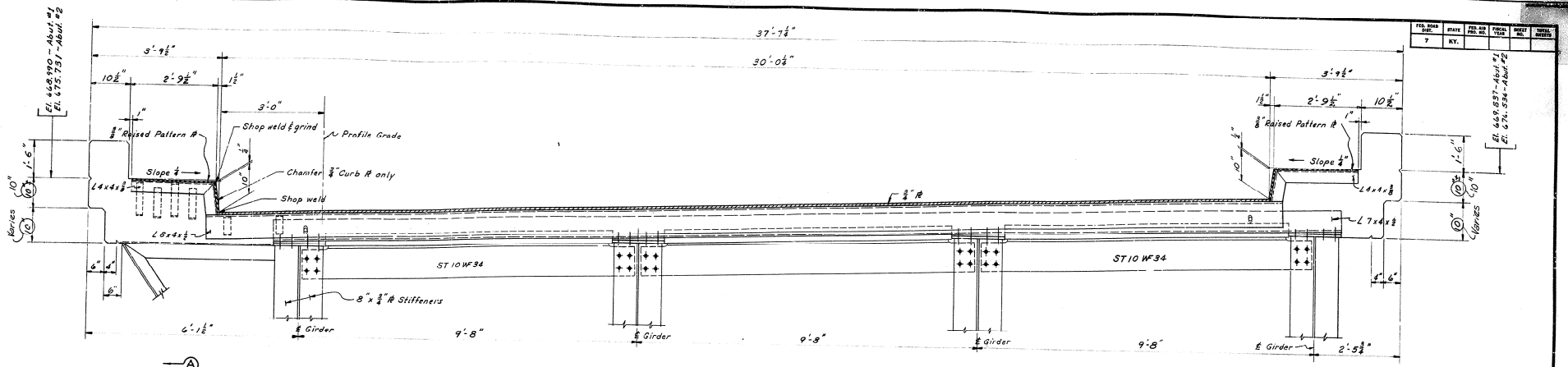
A.S.T.M. SPECIFICATIONS	
Structural Steel	A7 - 58T
Steel Pins	A108 - 58T Grade 1018 to 1030 incl.
Sheet Lead & Lead for Anchor Dowel Holes	B29 - 49
Pintles may be A7 or A108 - Grade 1018 to 1030 incl.	

EASTBOUND STRUCTURE
ROCKERS & SHOES

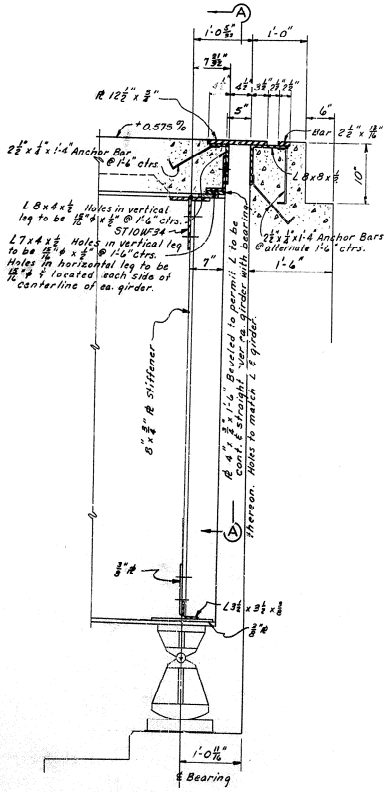
DESIGNED BY R.A.D.	CHECKED BY J.W.K.	DATE 5-58	REVISED DATE
DETAILED BY Desir	CHECKED BY J.W.K.	DATE 5-59	REVISED DATE
TRACED BY	CHECKED BY	DATE	REVISED DATE

EXISTING S.R. 35 SHEET 13 OF 18

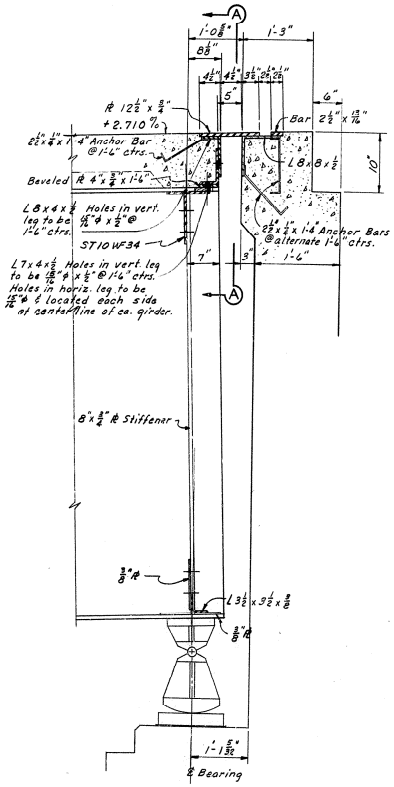
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN
LOUISVILLE - LEXINGTON
ROAD
STATION 2417+01R PROJECT NO. I-04-4(1)
BRIDGE NUMBER
DRAWING NO. 14038
INDEX



SECTION A-A



ABUTMENT NO. 1



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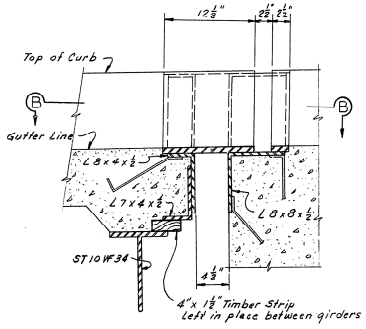
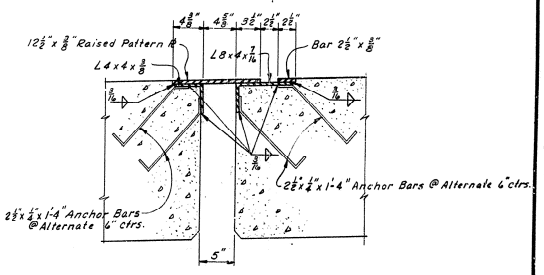
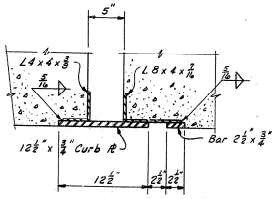


SECTION AT GUTTER LINE



SECTION AT SIDEWALK



SECTION B-B

EXPANSION DETAILS, EASTBOUND STRUCTURE

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

EXISTING S.R. 35 SHEET 14 OF 18

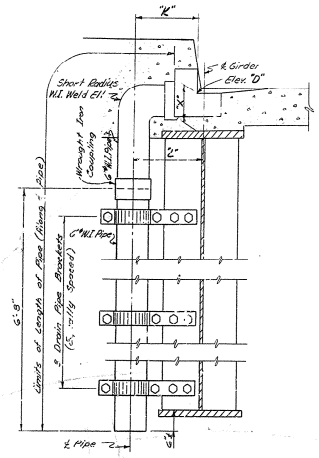
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN
LOUISVILLE-LEXINGTON
ROAD

STATION 2417+01 R **PROJECT NO.** I-64-4(1)

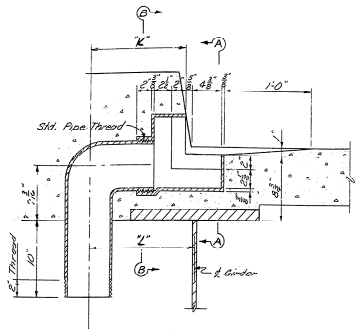
BRIDGE NUMBER | DRAWING No. 14038 | INDEX

DESIGNED BY JDD CHECKED BY NMM DATE 4-59
DETAIL AT JDD CHECKED BY NMM DATE 4-59
TRACED BY JDD CHECKED BY DATE
REVISED Space dimension below slab - JDD on 9/14/61 DATE
REVISED DATE
REVISED DATE

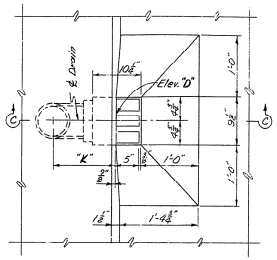
FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



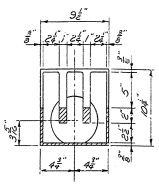
ELEVATION - TYPE A



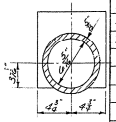
SECTION C-C



PLAN - TYPE A



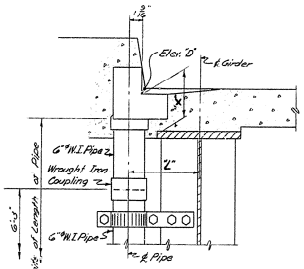
SECTION A-A



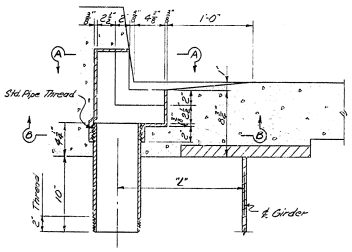
SECTION B-B

Floor Drains	Steel Elevation	Dimension "X"	Location	Type	Dimension "K"	Dimension "L"	Dimension "M"	Elevation "D"
1	667.680	.563	Sta. 2415+22.0	B	—	1'-8"	9"	668.249
2	667.828	.578	Sta. 2415+42.0	B	—	1'-0 2/8"	* 1 2/8"	668.406
3	667.938	.624	Sta. 2415+62.0	A	1'-3"	1'-8"	9"	668.562
4	668.018	.707	Sta. 2415+82.0	A	1'-8 1/2"	"	"	668.725
5	668.270	.626	Sta. 2416+00.33	A	2'-1 1/8"	"	"	668.896
6	668.630	.587	Sta. 2416+27.5	A	2'-5 3/8"	"	"	669.217
7	668.787	.741	Sta. 2416+48.5	A	2'-8 1/2"	"	"	669.528
8	663.150	.731	Sta. 2416+69.5	A	2'-10 3/8"	"	"	669.881
9	663.578	.649	Sta. 2416+90.5	A	2'-11 2/8"	"	"	670.227
10	669.310	.663	Sta. 2417+11.5	A	2'-11 2/8"	"	"	670.573
11	670.169	.750	Sta. 2417+32.5	A	2'-10 3/8"	"	"	670.919
12	671.581	.632	Sta. 2418+01.67	A	2'-1 1/8"	"	"	672.213
13	671.940	.706	Sta. 2418+20.0	P	1'-8 1/2"	"	"	672.646
14	672.502	.640	Sta. 2418+40.0	A	1'-3"	1'-8"	9"	673.142
15	673.043	.602	Sta. 2418+60.0	B	—	1'-0 2/8"	* 1 2/8"	673.645
16	673.554	.594	Sta. 2418+80.0	B	—	1'-8"	9"	674.148

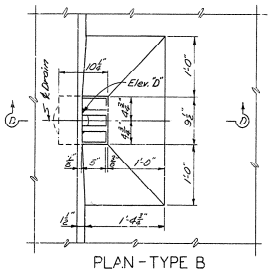
FLOOR DRAINS



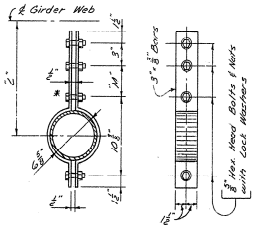
ELEVATION - TYPE B



SECTION D-D



PLAN - TYPE B



DRAIN PIPE BRACKET

*This bolt not to be used on brackets for Drains "2 & "15. Its location to be used for dimensioning purpose only.

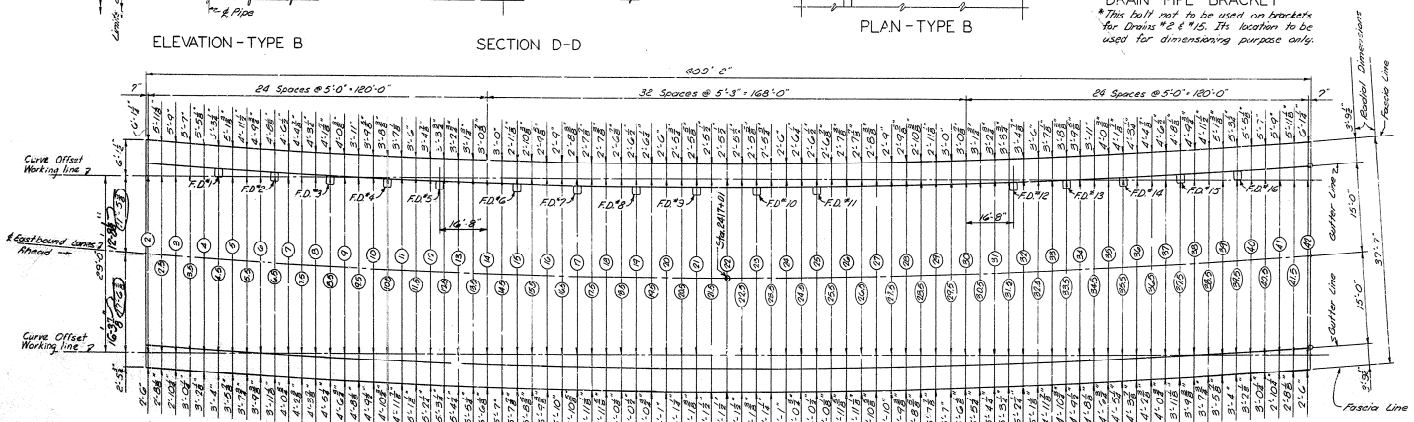
NOTES

FOUNDRY NOTE: All drains to be grey iron castings. A.S.T.M. A48-56, except that tensile and transverse tests are not required. Form T-521, Report of Field Inspection of Castings, is to be submitted to the Laboratory. Drains are to be furnished by the Contractor and the cost of furnishing and placing same is to be included in the "Lump Sum Bid" price for Structural Steel.

WROUGHT IRON PIPE: Wrought iron pipe is to be 6" dia. Standard Weight, 19 lbs. per linear foot, in accordance with A.S.T.M. A72-56T. Pipe, fittings and connections are to be paid for at unit price per linear foot of pipe and connections complete in place. (Length to be measured along ℄ pipe between limits shown on drawings.) Pipe and all fittings to be given one coat of red lead and two field coats of aluminum paint in accordance with the Specifications.

CONSTRUCTION NOTE

1. Take elevations on top of steel at points opposite floor drains after crossframes 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 target rod.
2. Compute Dimension "X" as follows - Elevation "D" minus corresponding Steel Elevation equals Dimension "X". Deviations "D" indicate corner due to weight of concrete slab, parapet, handrail and future wearing surface.
3. For setting floor drains, measure Dimension "X" above top of steel for top of grating. Do not set floor drains by elevations.



CURVE OFFSETS AND FLOOR DRAIN LOCATIONS

FOR LAYOUT OF CURVE OFFSET WORKING LINES SEE SHEET 17

DRAINS AND CURVE OFFSETS EASTBOUND

ESTIMATE OF QUANTITIES

6" Dia. Wrought Iron Pipe — 150 Lin. Ft.

Drains ~ 16 Required

Weight of Each Drain = 60 Lbs.

Total Weight = 960 Lbs.

EXISTING S.R. 35 — SHEET 15 OF 18

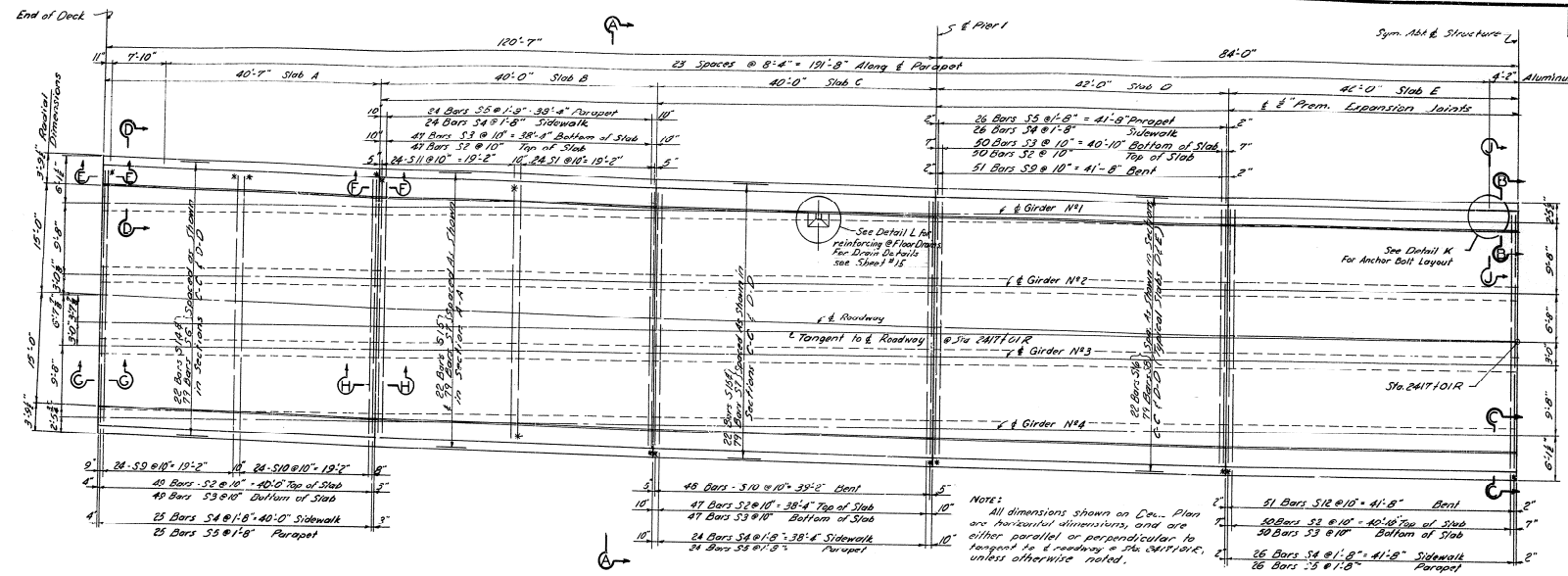
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN
LOUISVILLE - LEXINGTON
ROAD

STATION 2417 + 01 R — **PROJECT NO.** I-04-4(1)

BRIDGE NUMBER — DRAWING NO. 14038 — INDEX

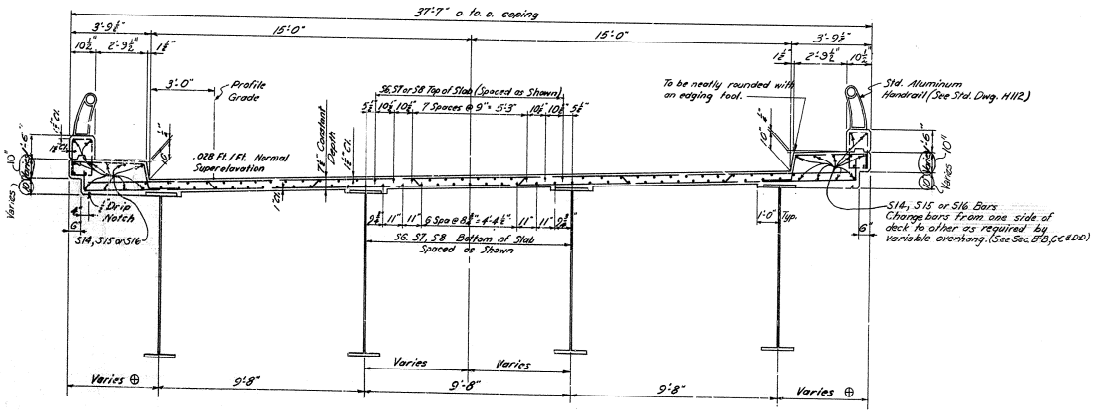
REVISED - Dimensions in Curve Offset Layout 12-16-61 S.G.
REVISED - Added Curve Offset Working Line 9-14-61
REVISED - Rev. Table for Floor Drains 8-1-61
REVISED - Showing Steel Elev. & Dimen. "X" 5-22-61 L.H.E.

PREPARED BY — DATE — CHECKED BY
REVISED BY RBD — DATE 5-57 — CHECKED BY HWW
TRACED BY — DATE — CHECKED BY
REVISED — DATE 6-P



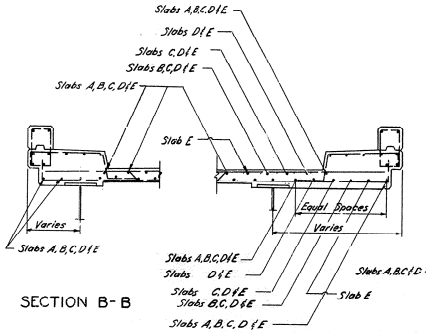
Note:
All dimensions shown on Deck Plan are horizontal dimensions, and are either parallel or perpendicular to tangent to ℄ roadway @ Sta. 2417+01R, unless otherwise noted.

HALF PLAN



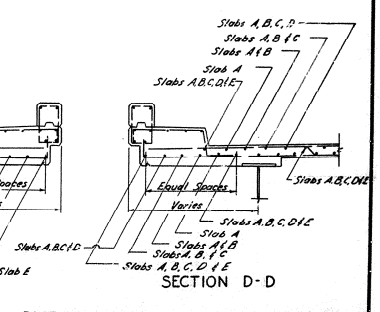
SECTION A-A

⊕ For Curve Offsets See Sheet No. 15



SECTION B-B

SECTION C-C



SECTION D-D

DECK SLAB DETAILS
EASTBOUND STRUCTURE

EXISTING S.R. 35 SHEET 16 OF 18

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

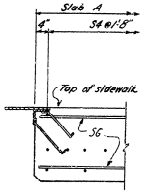
STATION 2417 + 01R **PROJECT NO.** I-04-40(

BRIDGE NUMBER | DRAWING NO. 14038 | SHEET

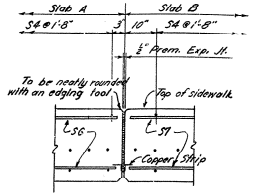
FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				

DESIGNED BY: RMD CHECKED BY: RMD DATE: 2-2-72 REVISED: Revise dimensions below plinks - RMD DATE: 3/14/61
DETAILED BY: CEP CHECKED BY: RMD DATE: 2-2-72 REVISED: DATE: REVISED: DATE:
TRACED BY: DATE:

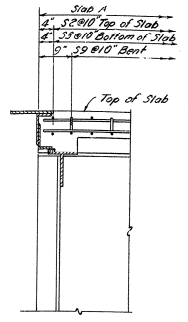
FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



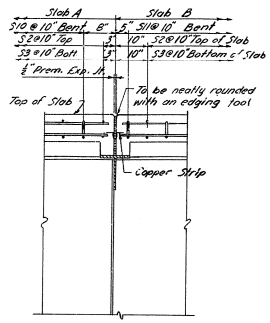
SECTION E-E



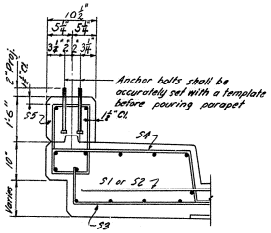
SECTION F-F



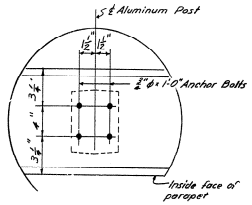
SECTION G-G



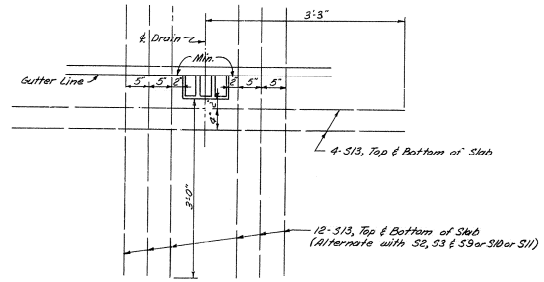
SECTION H-H



SECTION J-J
(TYPICAL)



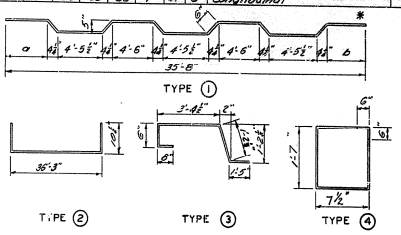
DETAIL K
(TYPICAL)



DETAIL L
(Typical for all Floor Drains)

BILL OF REINFORCEMENT

Mark	Type	Number: Slab A	Slab B	Slab C	Slab D	Slab E	Total	Size	Length Ft.	Length In.	Location	a Ft.	a In.	b Ft.	b In.
S2	Str.	49	47	47	50	50	486	5	36	3	Transverse - Top of Slab				
S3	②	49	47	47	50	50	486	5	37	10	Transverse - Bottom of Slab				
S4	③	50	48	48	52	52	500	6	9	9	Sidewalk				
S5	④	50	48	48	52	52	500	5	5	6	Parapet				
S6	Str.	79	-	-	-	-	158	4	40	3	Longitudinal				
S7	Str.	-	79	79	-	-	316	4	39	8	Longitudinal				
S8	Str.	-	-	-	79	79	316	4	41	8	Longitudinal				
S9	⑦	24	-	-	51	-	150	6	36	7	Transverse - Bent	4	1	7	1
S10	⑦	24	-	48	-	-	144	6	36	7	"	4	9	6	5
S11	⑦	-	48	-	-	-	96	6	36	7	"	5	4	8	10
S12	⑦	-	-	-	-	51	102	6	36	7	Transverse - Bent	3	11	7	3
S13	Str.	16	32	32	32	32	256	5	6	6	Slab, Around Floor Drains				
S14	Str.	22	-	-	-	-	44	7	0	3	Longitudinal				
S15	Str.	-	22	22	-	-	88	7	39	8	Longitudinal				
S16	Str.	-	-	-	22	22	88	7	41	8	Longitudinal				



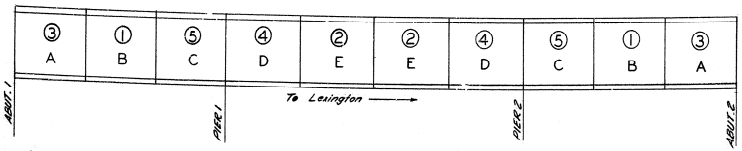
* Corresponding asterisk shown on HALF PLAN indicates orientation of TYPE 1 bars.
△ Slab D adjacent to Pier 2 has no Floor Drains or P13 bars.

ESTIMATE OF QUANTITIES

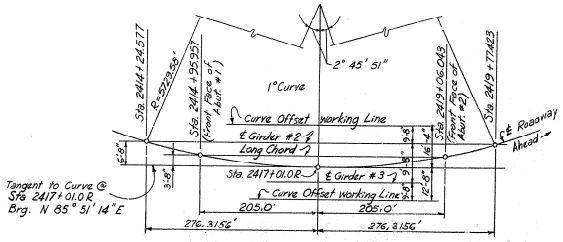
Class A Concrete	541.7 C.Y.
Reinforcement	113,930 Lbs.

TOTAL NUMBER OF SLABS REQUIRED

Description		No. Of Each Required
Slab	A	2
Slab	B	2
Slab	C	2
Slab	D	2
Slab	E	2
Total		10



SLAB POURING SEQUENCE



LAYOUT OF CURVE OFFSET WORKING LINES
USE THIS LAYOUT WITH PLAN
SHOWING CURVE OFFSETS ON SHEET 15

DECK SLAB DETAILS
EASTBOUND STRUCTURE

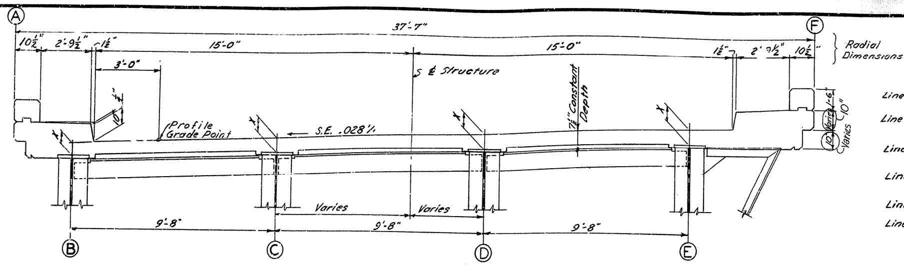
EXISTING S.R. 35 SHEET 17 OF 18

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN
LOUISVILLE - LEXINGTON
ROAD
STATION 2417 + 01R **PROJECT NO.** I-04-4(1)

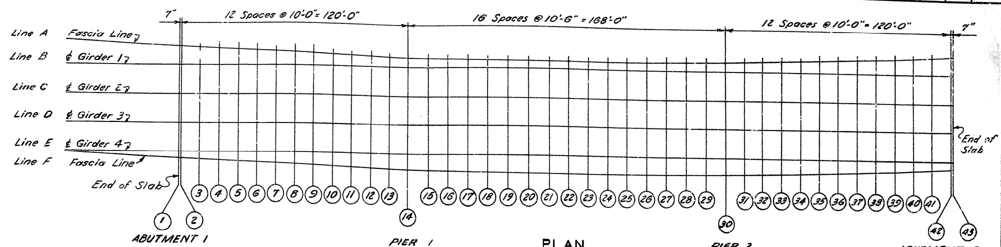
BRIDGE NUMBER DRAWING NO. 14038 INDEX

DESIGNED BY E.B.D. CHECKED BY J.M.W. DATE 8-57
DETAILED BY C.M.V. CHECKED BY J.M.W. DATE 8-57
TRACED BY CHECKED BY DATE
REVISED Added Length of Curb Offset Working Lines DATE 7-58
REVISED DATE
REVISED DATE

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



TYPICAL CROSS SECTION

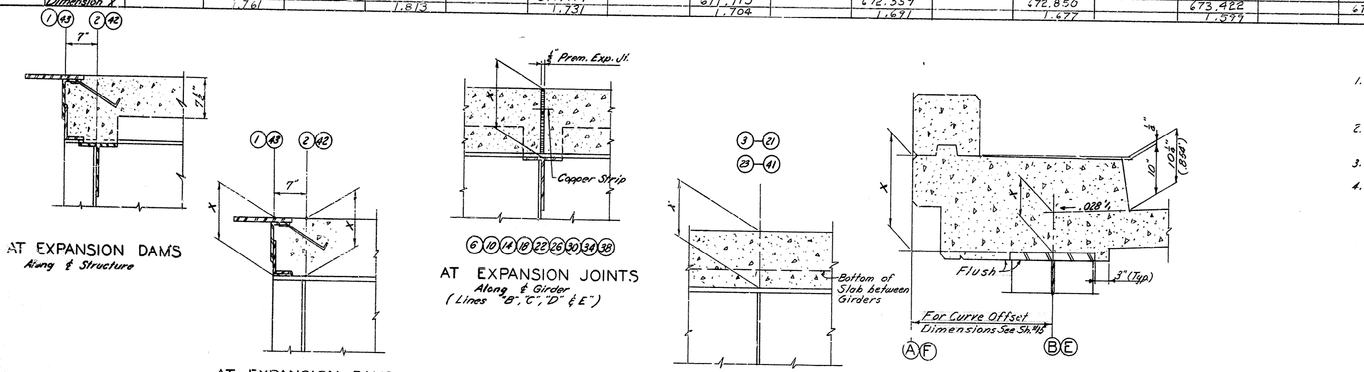


PLAN
(For Girder Location & Curve Offsets-See Sheet #15)

TABLE OF ELEVATIONS FOR SETTING SLAB FORMS FOR 120' - 168' - 120' PLATE GIRDER

SECTION Nº		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
LINE "A"	Const. Elev.	668.990	668.993	669.068	669.147	669.226	669.304	669.382	669.460	669.539	669.620	669.705	669.798	669.903	670.021	670.154	670.303	670.465	670.641	670.818	670.992	671.164	671.337
	Steel Elev.		667.400		667.562		667.749		667.860			668.061	668.234	668.408	668.509	668.630	668.701	668.787	668.928	669.150	669.380	669.578	669.750
	Dimension "X"		1.593		1.585		1.555		1.600			1.644	1.564	1.495	1.512	1.524	1.602	1.678	1.713	1.668	1.612	1.586	1.587
LINE "B"	Const. Elev.	668.202	668.205	668.270	668.339	668.410	668.480	668.550	668.620	668.692	668.764	668.846	668.934	669.034	669.148	669.276	669.422	669.581	669.754	669.929	670.102	670.273	670.445
	Steel Elev.	667.425	667.429	667.508	667.602	667.722	667.801	667.862	667.910	667.921	667.966	668.061	668.234	668.408	668.509	668.630	668.701	668.787	668.928	669.150	669.380	669.578	669.750
	Dimension "X"	.777	.776	.762	.737	.688	.679	.688	.710	.771	.798	.785	.700	.626	.639	.646	.721	.794	.826	.779	.722	.695	.695
LINE "C"	Const. Elev.	668.474	668.477	668.543	668.612	668.682	668.752	668.822	668.892	668.965	669.040	669.118	669.206	669.306	669.420	669.549	669.694	669.852	670.026	670.200	670.373	670.544	670.716
	Steel Elev.	667.704	667.707	667.790	667.882	667.995	668.077	668.132	668.183	668.198	668.241	668.340	668.510	668.688	668.790	668.907	668.978	669.047	669.180	669.399	669.630	669.822	670.000
	Dimension "X"	.770	.770	.753	.730	.687	.675	.690	.709	.767	.799	.778	.696	.618	.630	.642	.716	.805	.846	.801	.743	.722	.716
LINE "D"	Const. Elev.	668.749	668.750	668.815	668.864	668.955	669.025	669.095	669.165	669.237	669.312	669.391	669.479	669.579	669.692	669.821	669.966	670.124	670.297	670.472	670.644	670.815	670.986
	Steel Elev.	667.971	667.975	668.063	668.157	668.274	668.353	668.408	668.459	668.466	668.512	668.610	668.780	668.954	669.049	669.163	669.229	669.301	669.439	669.659	669.888	670.080	670.260
	Dimension "X"	.778	.775	.752	.727	.681	.672	.687	.706	.771	.800	.781	.699	.625	.643	.658	.737	.823	.858	.813	.756	.735	.726
LINE "E"	Const. Elev.	669.019	669.022	669.088	669.157	669.228	669.298	669.368	669.438	669.510	669.585	669.663	669.751	669.852	669.964	670.093	670.238	670.396	670.569	670.744	670.915	671.086	671.257
	Steel Elev.	668.234	668.237	668.326	668.425	668.547	668.630	668.695	668.750	668.762	668.814	668.910	669.068	669.228	669.315	669.420	669.486	669.545	669.670	669.892	670.121	670.310	670.501
	Dimension "X"	.785	.785	.762	.732	.681	.668	.673	.688	.748	.771	.753	.683	.624	.649	.673	.752	.851	.899	.852	.794	.776	.756
LINE "F"	Const. Elev.	669.837	669.84[illegible]	669.916	669.995	670.074	670.152	670.231	670.308	670.387	670.468	670.552	670.645	670.750	670.868	671.000	671.149	671.310	671.485	671.661	671.834	672.005	672.177
	Steel Elev.		668.237	668.326	668.425	668.547	668.630		668.737		668.810		668.980		669.140		669.394		669.644		670.060		670.409
	Dimension "X"		1.603	1.590	1.570	1.527	1.522		1.571		1.658		1.665		1.728		1.755		1.841		1.774		1.768

SECTION Nº		23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
LINE "A"	Const. Elev.	671.510	671.684	671.856	672.025	672.195	672.379	672.576	672.789	673.000	673.225	673.460	673.706	673.954	674.204	674.456	674.708	674.960	675.210	675.461	675.715	675.731
	Steel Elev.		670.072	670.169	670.292	670.449	670.767	671.040	671.264	671.492	671.658	671.823			672.612		673.106		673.594		674.105	
	Dimension "X"		1.612	1.687	1.733	1.746	1.612	1.536	1.525	1.508	1.567	1.637			1.592		1.602		1.616		1.610	
LINE "B"	Const. Elev.	670.619	670.793	670.967	671.137	671.310	671.497	671.697	671.913	672.129	672.358	672.599	672.850	673.104	673.361	673.620	673.879	674.138	674.396	674.656	674.920	674.986
	Steel Elev.	669.910	670.072	670.169	670.292	670.499	670.767	671.040	671.264	671.492	671.658	671.823	672.050	672.329	672.640	672.914	673.178	673.430	673.640	673.879	674.126	674.142
	Dimension "X"	.709	.721	.798	.845	.811	.730	.657	.649	.637	.700	.776	.800	.775	.721	.706	.701	.708	.756	.777	.794	.794
LINE "C"	Const. Elev.	670.889	671.063	671.236	671.406	671.578	671.765	671.965	672.181	672.396	672.625	672.866	673.115	673.369	673.626	673.884	674.142	674.401	674.659	674.918	675.180	675.197
	Steel Elev.	670.163	670.[illegible]	670.437	670.566	670.769	671.039	671.306	671.535	671.762	671.916	672.084	672.311	672.595	672.911	673.189	673.459	673.711	673.919	674.157	674.389	674.405
	Dimension "X"	.726	.728	.799	.840	.809	.726	.657	.646	.634	.709	.782	.804	.774	.715	.695	.683	.690	.740	.761	.791	.792
LINE "D"	Const. Elev.	671.159	671.333	671.506	671.676	671.847	672.033	672.233	672.449	672.664	672.891	673.131	673.381	673.635	673.890	674.148	674.406	674.664	674.921	675.180	675.441	675.460
	Steel Elev.	670.403	670.563	670.672	670.792	671.017	671.293	671.572	671.800	672.030	672.190	672.363	672.590	672.871	673.186	673.465	673.733	673.983	674.196	674.432	674.663	664.679
	Dimension "X"	.756	.770	.834	.884	.830	.740	.661	.649	.634	.701	.768	.791	.764	.705	.683	.673	.681	.725	.748	.778	.781
LINE "E"	Const. Elev.	671.430	671.603	671.776	671.945	672.116	672.302	672.501	672.716	672.931	673.158	673.398	673.647	673.900	674.155	674.413	674.670	674.927	675.184	675.441	675.703	675.719
	Steel Elev.	670.662	670.828	670.952	671.067	671.281	671.554	671.833	672.065	672.298	672.460	672.642	672.862	673.145	673.458	673.732	674.004	674.252	674.464	674.701	674.936	674.952
	Dimension "X"	.768	.775	.824	.878	.835	.748	.668	.651	.633	.698	.756	.785	.755	.697	.681	.666	.675	.720	.740	.767	.767
LINE "F"	Const. Elev.	672.349	672.521	672.692	672.860	673.028	673.210	673.406	673.617	673.827	674.050	674.283	674.527	674.773	675.021	675.271	675.521	675.770	676.018	676.266	676.513	676.534
	Steel Elev.		670.760		671.047		671.479		671.913		672.359		672.850		673.422		674.004	674.252	674.464	674.701	674.936	
	Dimension "X"		1.761		1.813		1.731		1.704		1.691		1.677		1.599		1.517	1.518	1.554	1.565	1.582	



AT EXPANSION DAMS *Along ℄ Structure*

AT EXPANSION DAMS *Along ℄ Girder (Lines "B", "C", "D" & "E")*

AT EXPANSION JOINTS *Along ℄ Girder (Lines "B", "C", "D" & "E")*

AT INTERMEDIATE SECTIONS *Along ℄ Girder (Lines "B", "C", "D" & "E")*

AT GIRDER 1 *Along Sections 11 Thru 33*
AT GIRDER 4 *Along Sections 1 Thru 6 & 38 Thru 43*

CONSTRUCTION NOTE

1. Take elevations on top of steel at points indicated after crossframes and lateral bracing are in place and after all falsework has been removed, but before forms for concrete slabs have been put into place. Read elevations to three decimals using target rod and enter readings in table under Steel Elevations.
2. Compute Dimension X as follows - Construction Elevation minus Steel Elevation equals Dimension X. Construction Elevations include camber due to weight of concrete slab, parapet, handrail, and future surfacing.
3. For setting templates, measure Dimension X above top of steel for top of template. Do not set templates by elevations.
4. Construct handrail parapet to sidewalk grade. Do not add camber to parapet.

ELEVATIONS EASTBOUND STRUCTURE

EXISTING S.R. 35 SHEET 18 OF 18

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN
LOUISVILLE - LEXINGTON
ROAD
STATION 2417 + 01 R PROJECT NO. I-04-4(1)
BRIDGE NUMBER
DRAWING No. 14038 INDEX