MICROFILMED-72

FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			

DEPARTMENT OF HIGHWAYS
KENTUCKY RIVER BRIDGE
FRANKFORT, KY.
LIST OF DRAWINGS

A - LIST OF DRAWINGS
B - GENERAL NOTES & QUANTITIES

1 GENERAL ELEVATION
2 LAYOUT OF RETAINING WALL APPROACHES
3 BORING DATA
4 ANCHOR BOLT PLAN
5 ABUTMENT NO.1
6 RETAINING WALL SECTION - A
7 RETAINING WALL SECTION - A
8 RETAINING WALL SECTION - B
9 RETAINING WALL SECTION - B
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11 PIERS A & B - BASES
12 PIERS A & B - SHAFTS
13 PIER S1
14 PIERS S_2 & S_3
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16 ABUTMENT NO.2
17 RETAINING WALL SECTION - C
18 R.C. SPAN NO.1
19 R.C. SPAN NO.1
20 R.C. SPAN NO.1
21 SPAN NO. 1
22 BRONZE TABLETS
23 470'-6" CONTINUOUS GIRDER SPAN
24 470'-6" CONTINUOUS GIRDER SPAN
25 470'-6" CONTINUOUS GIRDER SPAN
26 470'-6" CONTINUOUS GIRDER SPAN
27 470'-6" CONTINUOUS GIRDER SPAN
28 470'-6" CONTINUOUS GIRDER SPAN
29 LIGHT & LADDER
30 66'-7" GIRDER SPAN
31 ROADWAY ELEVATIONS FOR CAMBER
32 ROADWAY SLAB FOR 470'-6" CONTINUOUS GIRDER SPAN
33 ROADWAY SLAB FOR 470'-6" CONTINUOUS GIRDER SPAN
34 TRAP DOORS IN SIDEWALK
35 ROADWAY SLAB FOR 66'-7" GIRDER SPAN
36 HANDRAIL FOR 470'-6" SPAN
37 HANDRAIL FOR 66'-7" SPANS
38 HANDRAIL FOR 66'-7" SPANS
39 LIGHTING DETAILS
40 LIGHTING DETAILS

P-2 STANDARD 14" R.C. PILE

2-A REVISIONS TO ABUT. 1, & RET. WALL, SECTIONS A & B.

CONTRACT	SHEETS	TOTAL NO. OF SHEETS
SUBSTRUCTURE	A B G-251 1 TO 22 - INCLUSIVE P-2 39 - 40	27
SUPERSTRUCTURE	A B G-251 1 TO 4 - INCLUSIVE ~~23 TO 38~~ - INCLUSIVE	22
LIGHTING	A B 39 40	4

DESIGNED BY Engelbrecht DATE 1-37
TRACED BY Engelbrecht DATE 1-37
CHECKED BY H.F. Eubank DATE 1-37

REVISED DATE
REVISED DATE
REVISED DATE

SHEET 1A

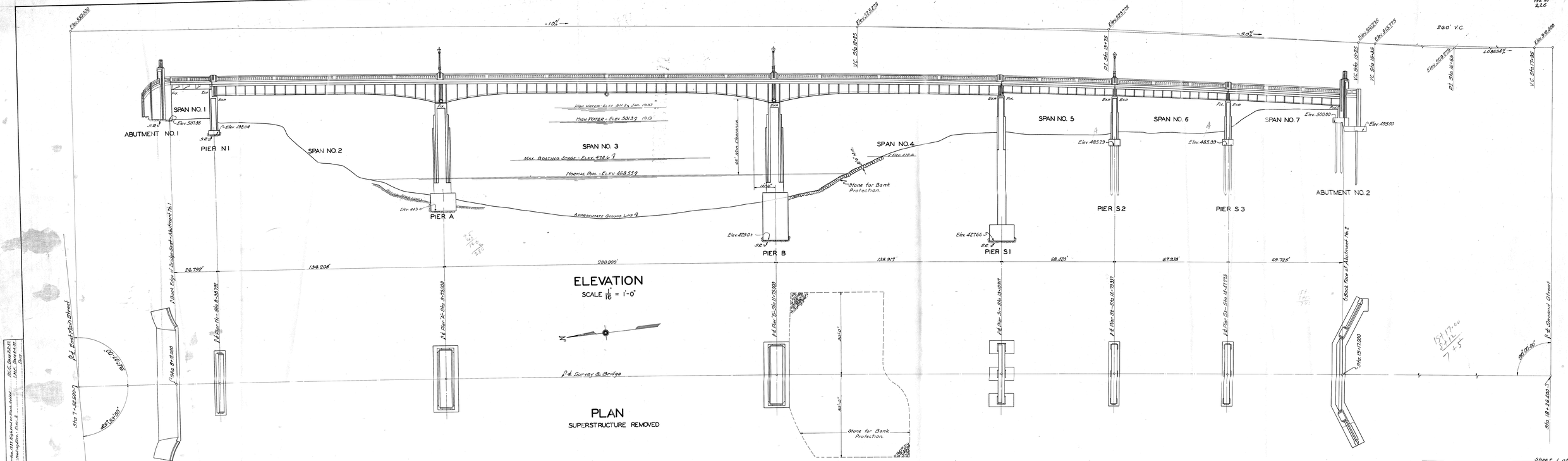
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

DRAWING No. 6742

INDEX

POST 2329—500—11-36



KENTUCKY RIVER BRIDGE — FRANKFORT, KY.

Note - For Layout of North & South Retaining Wall Approaches see Sheet 2 of 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

Station - 11+63.73

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

GENERAL NOTE

SPECIFICATIONS: 1932 Standard Specifications, Kentucky State Highway Department with subsequent adopted amendments and special provisions.

CONCRETE: Class "A" concrete shall be used thruout except in Piles and Handrail on Spans. Class "D" concrete shall be used in Piles and Handrail on Spans.

REINFORCEMENT: To be deformed bars. Dimensions from face of concrete to steel are clear distances. Dimensions for bar spacing are distances c. to c. of bars. All reinforcement shall be securely held in correct position by means of precast mortar or concrete blocks and wired at all intersections. Precast mortar or concrete blocks supporting reinforcement shall be spaced not farther apart than 50 diameters of the supported bar.

WEARING SURFACE: Top of concrete roadway slab and sidewalks shall be finished in accordance with the requirements for Monolithic Wearing Surface.

BEVELED EDGES: All exposed corners shall be beveled $\frac{7}{8}$" unless otherwise shown on plans for concrete structures.

EXPANSION JOINT FILLER: Expansion Joint Material shall meet the requirements for premolded filler as shown on Std. Drwg. No. 6-251. Cost to be included in unit price bid for Class "A" concrete.

COPPER STRIP: Copper strips shall meet the requirements as shown on Std. Drwg. No. 6-251. Cost to be included in unit price bid for class "A" concrete.

STEEL EXPANSION ANGLES: Expansion angles on the concrete span at junction with the steel span are to be furnished by the Contractor for steel spans and placed by the Contractor for concrete spans. Contractor for concrete spans shall notify the Department at least 60 days in advance of the need of expansion angles.

STRUCTURAL STEEL: To conform to A.S.T.M. specifications A7-34, having a minimum copper content of $\frac{2}{10}$ per cent (0.2%)

SHOP PAINT: All steel shall be given one shop coat of Red Lead or Basic Sulphate Blue Lead.

FIELD PAINT All steel shall be given two field coats of Aluminum Paint in accordance with the special provisions.

PILING: Piles to be driven to refusal or to sustain a minimum load of 50 tons per pile Concrete test piles to determine the length of piling required shall be driven at locations shown on plans. Test piles shall be accurately located, so as to be used as bearing piles in the finished structure.

DESIGN LOAD: Bridge is designed for H-20 loading as per A.R.S.H.O. Standard Specifications 1935. For loading diagrams for steel work see sheet Nos. 23 & 30.

RIVER NAVIGATION REQUIREMENTS: The work shall be so conducted at all times that the free navigation of the waterway shall not be impaired and falsework used shall conform to the clearances required by the United States District Engineer. Upon completion of the river piers and spans, the Contractor shall secure from the United States District Engineer a letter of approval stating that the work has been constructed in accordance with his requirements and that the clearance and dimensions of the actual construction are satisfactory to him.

LIGHTING SYSTEM: The cost of all fixtures, materials, tools, labor and incidentals required to complete the Roadway Lighting System and the Navigation Lighting System as shown on the plans, shall be included in the lump sum bid price for Lighting System.

MEMORIAL TABLET: The cost of furnishing and placing the the Bronze Memorial Tablets as shown on the plans shall be included in the unit price bid for Bronze Memorial Tablets.

STRUCTURE EXCAVATION UNCLASSIFIED:

The method of excavation and volume to be paid for shall be as follows:
PIER A - PIER B and PIER S1 - in accordance with special provisions.
ABUTMENTS - RETAINING WALLS - PIER N1 - PIER S2 - PIER S3 in accordance with the 1932 Standard Specifications.

The bidders shall submit unit bid prices for each item of Structure excavation unclassified shown hereon:
ITEM ① includes the excavation for Abutments Nos. 1 & 2; retaining walls A-B-C; and Piers N1-S2 and S3
ITEM ② includes the excavation for Pier A.
ITEM ③ includes the excavation for Pier B.
ITEM ④ includes the excavation for Pier S1

GENERAL NOTE CONT'D

CONSTRUCTION NOTE: The construction of Pier S1 shall be completed and backfill made before piles are driven or excavation started on Pier S2.

BANK PROTECTION STONE: That area on the south bank of the river shown and called for on plans shall be protected with rip rap in accordance with the special provisions.

REMOVING STONE MASONRY: Side of building foundations on the north approach as the Department may direct shall be removed and that portion lying outside of the limits included in the structure excavation shall be paid for at the unit price bid per cubic yard for removing masonry.

WATER PIPE: The materials and labor necessary to install the Water Company pipe on the bridge are not included in the contract but the Contractor shall cooperate with the Water Company in order to facilitate the work.

LIGHTING SYSTEM: The lighting contract is to be included with the Substructure Contract. The contractors on the work shall cooperate, each with the other and the contractor for Lighting System shall arrange to install such conduits and other parts of the Lighting System that must be installed in the work of the steel Superstructure as it progresses.

ESTIMATED QUANTITIES

SUBSTRUCTURE CONTRACT

LOCATION	CONCRETE CLASS "A" CUBIC YARDS	CONCRETE CLASS "D" CUBIC YARDS	REINFORCEMENT POUNDS	CLASS "D" BRONZE EXPANSION PLATES POUNDS	MEMORIAL TABLETS EACH	DRY ROCK RIP RAP SQ. YDS.	REMOVE STONE MASONRY-CU YDS.	LIGHTING CONTRACT	14" R.C. PILES LIN. FT.	STRUCTURE EXCAVATION UNCLASSIFIED ITEM ①	ITEM ②	ITEM ③	ITEM ④		
ABUTMENT No. 1	470.0		590							780					
RETAINING WALL SECTION-A	300.3		1810		1		200			250					
RETAINING WALL SECTION-B	295.5		3040				260			260					
PIER N1	109.8		11860							130					
PIER A	904.1		19700			SOUTH BANK OF RIVER					210				
PIER B	1304.0		19700									620			
PIER S1	364.1		44080										1830		
PIER S2	88.1		17540						1100	150					
PIER S3	84.4		16920						1100	200					
ABUTMENT No. 2	226.7		17890		1				2300	390					
RETAINING WALL SECTION-C	77.5		4470							170					
SPAN No. 1	88.8	5.7	23940	460											
TOTAL	4313.3	5.7	191340	460	2	630	460	LUMP SUM	4500	2330	210	620	1830		

SUPERSTRUCTURE CONTRACT

LOCATION	⊕ STRUCTURAL STEEL POUNDS	CONCRETE CLASS "A" CU. YDS.	CONCRETE CLASS "D" CU. YDS.	REINFORCEMENT POUNDS	SIDEWALK TRAP DOORS ON BRIDGE EACH	SELECT CREOSOTED SOUTHERN YELLOW PINE M.B.M.
470'-6" CONTINUOUS SPAN	1,769,570	548.3	68.0	117,010	6	6.314
3-66'-7" SPANS	324,660	233.9	29.7	49850		
TOTAL	2,094,230	782.2	97.7	166860	6	6.314

⊕ for purpose of payment the weight of "Structural Steel" includes: Structural Steel, Cast Steel, Cast Iron, forged Steel, Double Galvanized Common Steel Wire Strand and Lead Plates.

SHEET - 1B

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

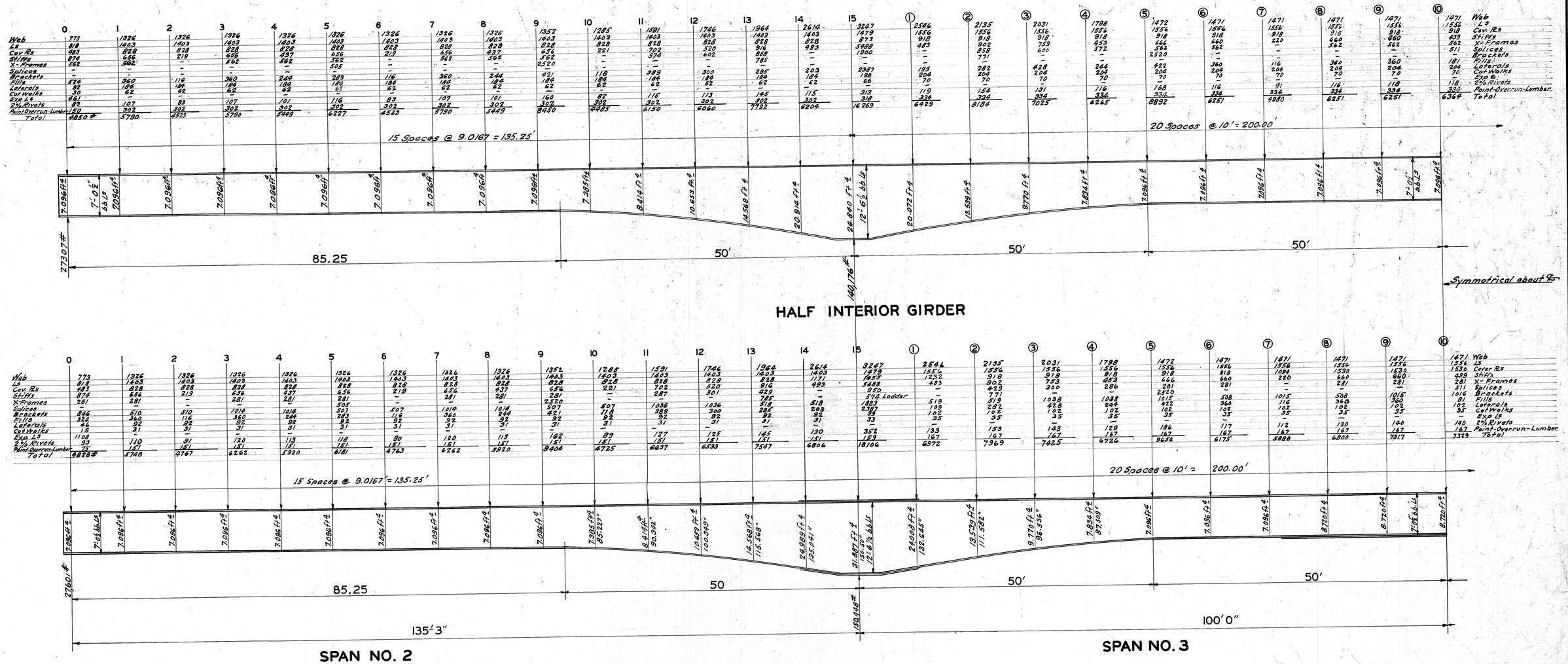
DRAWING No. 6742 | INDEX

GENERAL NOTE AND QUANTITIES

DESIGNED BY H.C. Brassfield DATE 1-37
TRACED BY Greg Glover DATE 2-37
CHECKED BY [illegible] DATE 2-2-37
REVISED Excav. Quant. & Notes DATE 2-37
REVISED DATE
REVISED DATE

POST 2379—500—11-36

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



STEEL DEAD LOAD WEIGHTS AND REACTIONS

SCALE 1" = 1'0"

Sheet C

DESIGNED BY Austin Griffith DATE 6/57 REVISED DATE
TRACED BY Gilbert DATE 6/57 REVISED DATE
CHECKED BY W. Stinson DATE REVISED DATE

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF

KENTUCKY RIVER BRIDGE

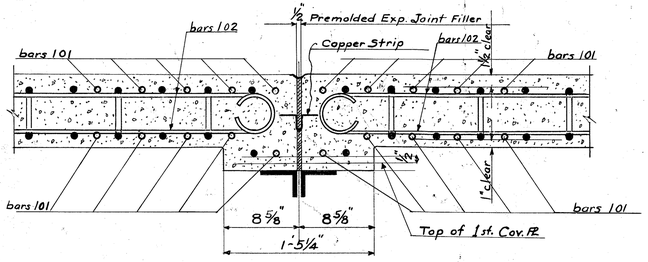
FRANKFORT
ROAD

STATION **PROJECT NO.**

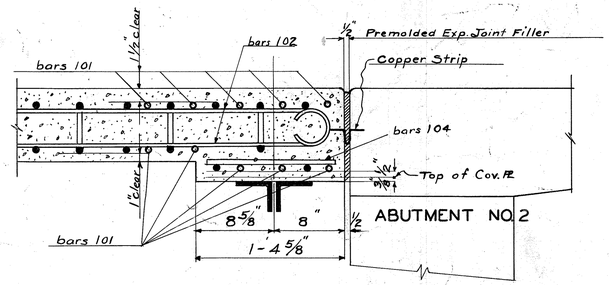
DRAWING No. 6742 | INDEX

POST 2329—500—11-56

FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	Ky.			1	1



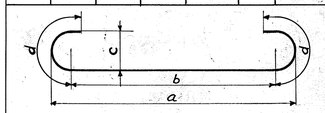
SECTION B-B Continuous Girder Span (Sheets 32-33)
SECTION A-A Simple Girder Span (Sheet 35)



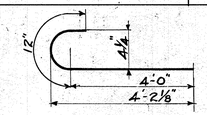
SECTION E-E Simple Girder Span No. 7 (Sheet 35)

BILL AND TYPES OF REINFORCEMENT

Mark	Type	No	Size	Length Feet	Length ins.	Location	a Ft.	a in	b Ft.	b in	c Ft.	c in	d Ft.	d in
101	①	350	5/8"ϕ	33	0	Transverse bars in slabs	31	5½	31	0	0	5½	1	0
102	②	620	5/8"ϕ	5	0	Longitudnol bars in slabs except "C"	—	—	—	—	—	—	—	—
103	①	40	½"ϕ	7	4	Longitudnol bars in slab "C"	6	0	5	8	0	4	0	10
104	Str.	8	½"ϕ	1	2	2 tie bars per panel								

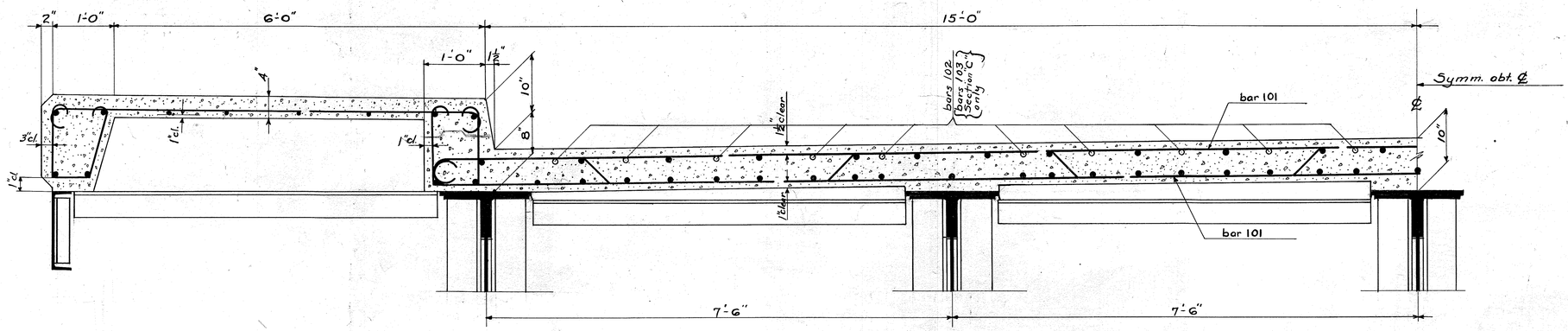


TYPE ①



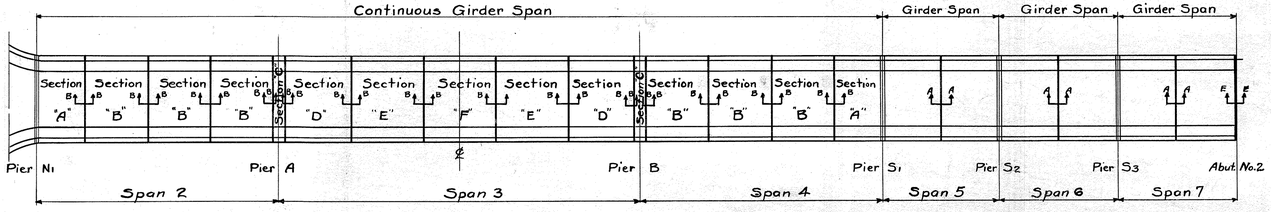
TYPE ②

(Dimensions are out to out.)



TYPICAL SECTION THRU ROADWAY
Showing additional reinforcing in slabs to be used at expansion joints in the floor

Reinforcement 15,490 lbs.



LAYOUT SHOWING EXPANSION JOINTS TO BE ADDITIONALLY REINFORCED

Sheet 1 of 1

DESIGNED BY Austin Griffith DATE 10-37 REVISED
TRACED BY " DATE 10-37 REVISED
CHECKED BY [illegible] DATE 10/37 REVISED

DIETZGEN IMPERIAL NO. 133

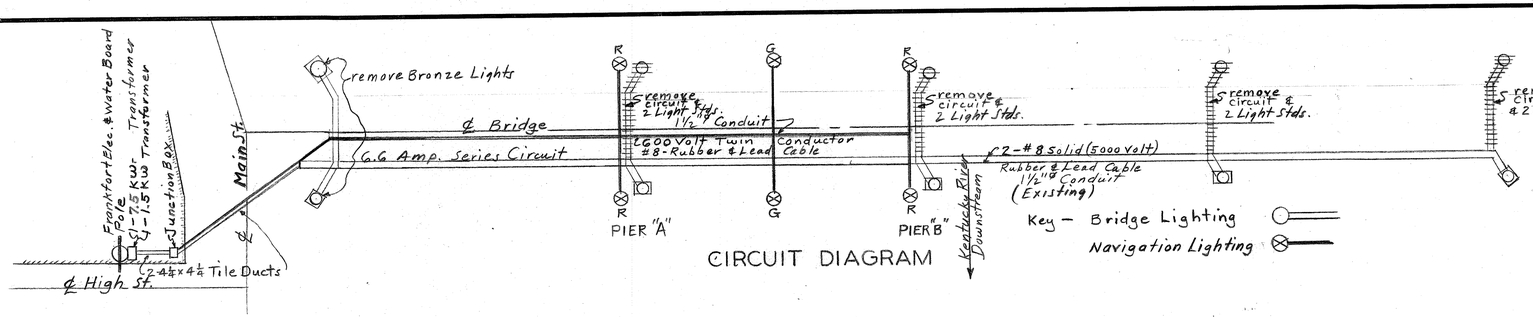
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

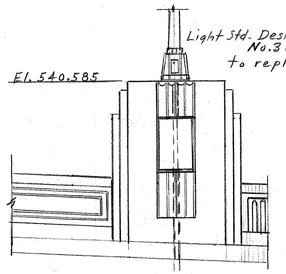
DRAWING No. 6742 INDEX

REVISED DETAILS SHOWING ADDITIONAL STEEL REINFORCING AT EXPANSION JOINTS

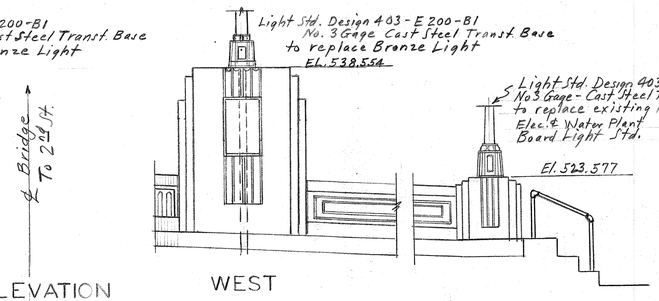
FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



CIRCUIT DIAGRAM

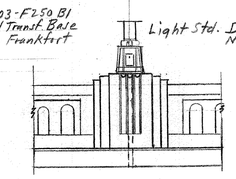


EAST

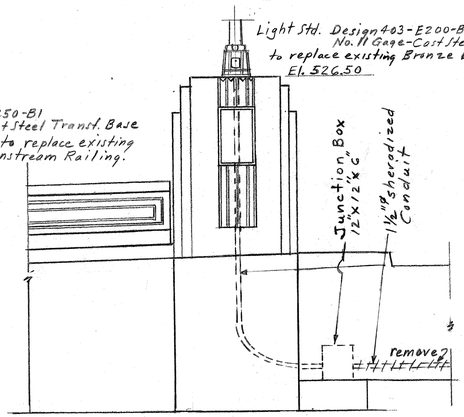


WEST

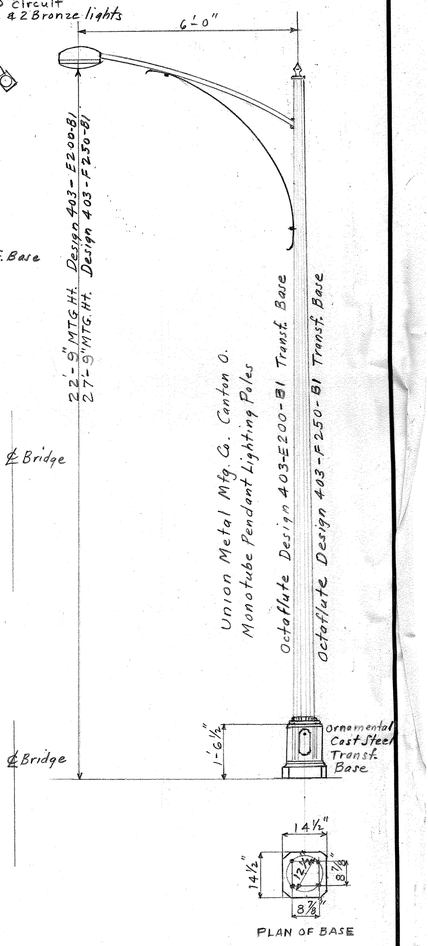
PART ELEVATION
MAIN ST. ENTRANCE



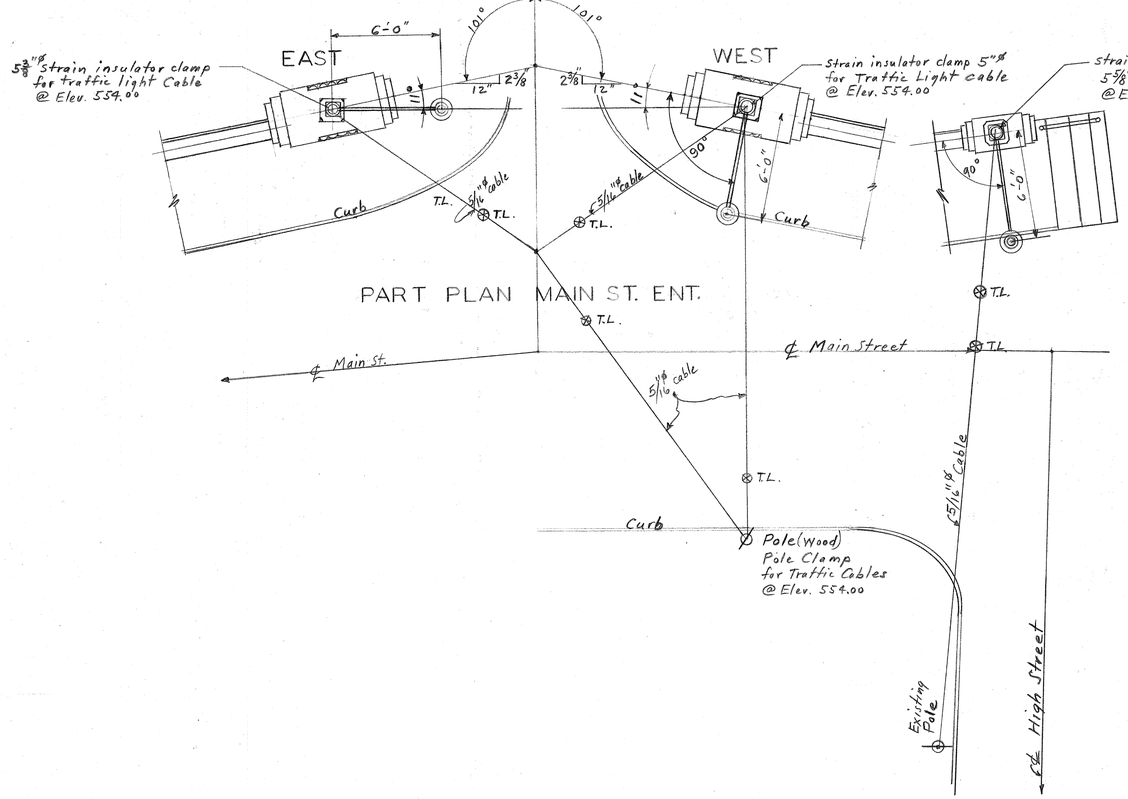
PART ELEV. INT. POSTS
(Downstream Side) only



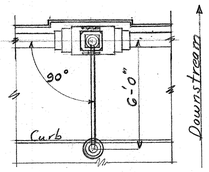
PART ELEVATION AT ABUT. 2
(Showing Details of Lighting Circuit)
(West Wing)



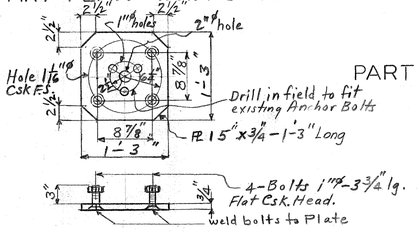
LAMP POST



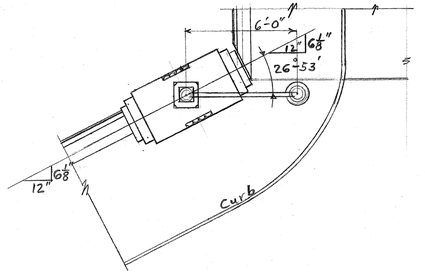
PART PLAN MAIN ST. ENT.



PART PLAN INT. POSTS



LAMP POST BASE PLATE
3 – Regd. Int. Posts only.



PART PLAN ABUT. 2

Sheet 1E

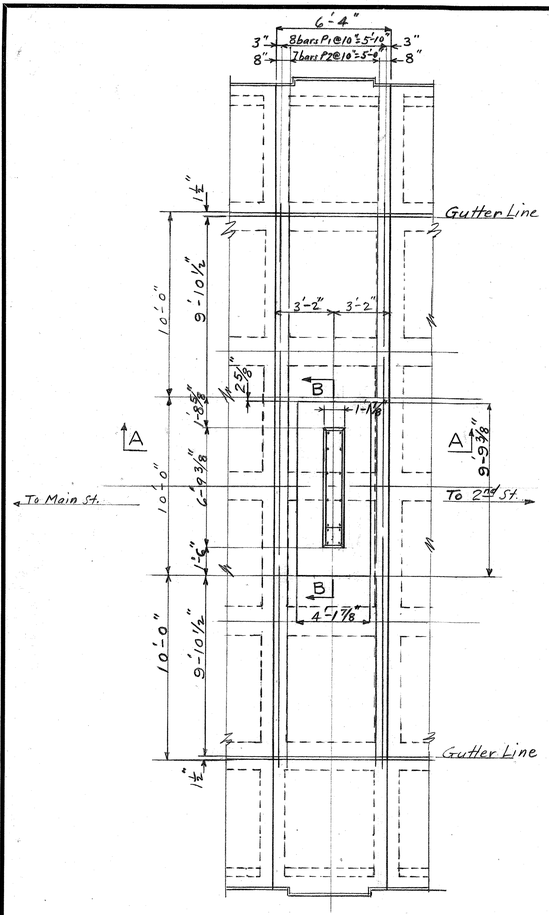
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

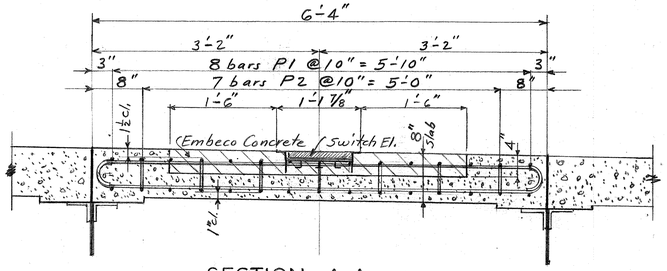
STATION	PROJECT NO.
BRIDGE NUMBER 37-5065-1	DRAWING NO. 6742
	INDEX

DESIGNED BY		CHECKED BY	DATE
DETAILED BY	A.G.	CHECKED BY	DATE 2/26/62
TRACED BY		CHECKED BY	DATE
REVISED		REVISED	
REVISED		REVISED	
REVISED		REVISED	

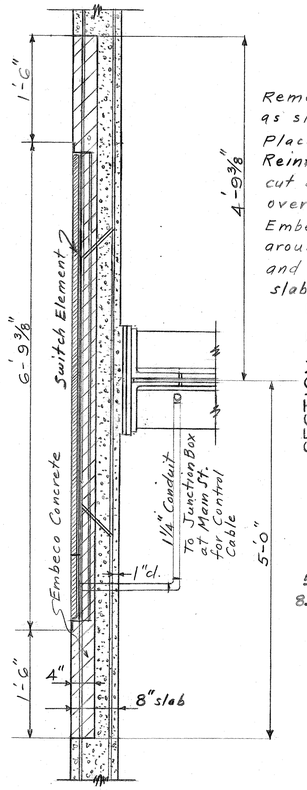
FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



PLAN OF SWITCH ELEMENT ON BRIDGE AT PIER "A"



SECTION A-A



SECTION B-B

NOTE

Remove Concrete from slab as shown on plans 4" deep. Place Switch Element on Reinforcement, mark and cut anchor angles to notch over reinforcement, place Embeco Cement Concrete around Switch Element and set flush with concrete slab.

B-B Regd. Cu.yds Embeco Concrete = .50 Cuyds
Excess 25% = .13 "
.63 "

Mix "B" More than 1" clearance

	Cutt.
1-sack Cement	.485
100# Embeco	.283
105# Sand laitt	.635
150# Pea Gravel 1¢ Cutt.	.906
6 gal. water	.799
Embeco Concrete	3.108 Cutt.

Amounts Regd. .63 Cuyd.

5.47 Sack Cement
547 # Embeco
5.24 ~~5.5~~ Cutt. Sand ~~574~~ # 550
8.22 ~~8.99~~ " ¼-⅜" Pea Gravel ~~821~~ # 822
32.8 gal. Water

GENERAL NOTE

BILL OF MATERIAL [Traffic Section]

2 - Octaflute Monotube Pendent Lighting Pole - Union Metal Mfg. Co. Canton O. Design 403 - E 200-B1 No. 3 gage - 7" bott Dia. - Cast Steel Transf. Base
1 - Octaflute Monotube Pendent Lighting Pole - Union Metal Mfg. Co. Canton O. Design 403 - F250-B1 No. 3 gage - 8" bott dia. - Cast Steel Transf. Base
3 - Octaflute Monotube Pendent Lighting Pole - Union Metal Mfg. Co. Canton O. Design 403 - F250 - B1 No. 11 Gage - Cast Steel Transf. Base
1 - Octaflute Monotube Pendent Light Pole - Union Metal Mfg. Co. Canton ohio. Design 403 - E200 B1 No. 11 Gage - Cast Steel Transf. Base.
3 - Lamp Post Base Plates - See detail Sheet 1
1 - 7.5 KW Pole Type C.S.P.H Transformer No 1609430 Westinghouse Mfg. Co. Pittsburgh Pa. Hanger Iron Style No. 1511817 2400 Volt Primary - C.6 amp. Secondary or Transformer to be furnished by Traffic Section Stock Ky. Dept. of Hwys.
1 - Strain Insulator Clamp 5/16" Union Metal Mfg. Co. Canton, O.
1 - " " " 5⅜/16" " " " " " "
1 - " " " 5⅝/16" " " " " " "
200 ft. " 1½" Conduit and Connections for Control Cable to switch Element @ Pier "A"
300 ft. Approx. Span Wire 5/16" (7 wire Galv. Strand.)
3 - Switch Elements. - 1 Bridge, 2 - Main St.
6 - Traffic Control Lights
Required length of Control Cable to Traffic Light System

BILL OF MATERIAL [Frankfort Electric & Water Plant Board.]

7 - Luminaires - Westinghouse Mfg. Co. Pittsburgh Pa. Type OV-20 E-H1 Mercury Lamp, 1 1/4" End Mounting, A.S.A.-1.E.S. Type II 1568516
7 - Ballasts - Type H1 Style 890800 Pole Base Type
1 - Pole (Wood) Main St. for Traffic Light Cable & Control.
Wire, Hardware for Poles and other incidentals not listed in Bill of Material which are required to complete work as outlined below.

ORDER OF WORK [Frankfort Electric & Water Plant Board]

1. Remove 4 Bronze Lights on End Posts and 6 Intermediate Post Lights on Bridge - To be turned in to Traffic Section Ky. Dept. of Highways.
2. Remove circuits on up stream side of Bridge as shown on plans.
3. Cut Anchor Bolts for Bronze Lights flush on End Posts. Drill 2'-0" deep Anchor bolt Holes to templates as shown and set Light Poles. At West End Post on Main St. Control Cable to be pulled to Junction Box before Light Pole is set.
4. Cut Anchor Bolts flush on Upstream Int. Posts, plug Conduits flush with top of Post.
5. Set Pole (Wood) on Main St. opposite West Post.
6. Place 5/16" span Cable as shown on plans with with Strain insulator Clamps at elev. shown - Sag approx. 5'-6"
7. Cut Anchor Bolts (5/8") on Intermediate Downstream Posts 3" above top Post. Rethread set Light Pole & Base Plates. as per plans.
8. Remove Transformer and replace with 7.5 KW or larger for new Lighting System.
9. Re wire Luminaires and Ballasts to existing wiring system
10. Inspect and Test system for Insulation Resistance, Voltage drop, grounds and operation.
11. Replace existing Frankfort Elec. & Water Plant Board Pendent Pole with Octaflute Monotube Pendent Lighting Pole - No 3 gage - F250-B1 in front of J.B. Blanton Co. - Place 5/16" Cable as shown with strain insulator clamp to wood Pole on High & Main St.

ORDER OF WORK [Traffic Dept.-Kentucky Dept. of Highways.]

1. Install Switch Elements - Install switch element on Bridge as per plans - Also install Switch Elements in Main St. locations - See Embeco Cement & Aggregates required on Plans.
2. Install Conduit from Switch Element with Control wires on bridge as shown on plans. Install Control Wires to Switch element on Main St.
3. Install Traffic Signal Lights on Cable Suspension system and control cables
4. Install Control System for Traffic lights and Test system for operation.

- NOTE -

The Installation of Traffic Light System & Bridge Lighting System to be made by the Joint cooperation of Traffic Section Ky. Dept of Highways and Frankfort Electric & Water Plant Board, Frankfort Ky. The Purchase of Materials as per Bill of Materials shown. The Maintenance of Traffic Light System to be under Traffic Section, Ky. Dept of Highways. The Maintenance of Bridge Lighting System to be under the Frankfort Electric & Water Plant Board.

DESIGNED BY ____ CHECKED BY ____ DATE ____
DETAILED BY A.G. CHECKED BY ____ DATE ____
TRACED BY ____ CHECKED BY ____ DATE ____
REVISED Quantities Min 6" DATE 3-64 A.G.
REVISED ____ DATE ____
REVISED ____ DATE ____

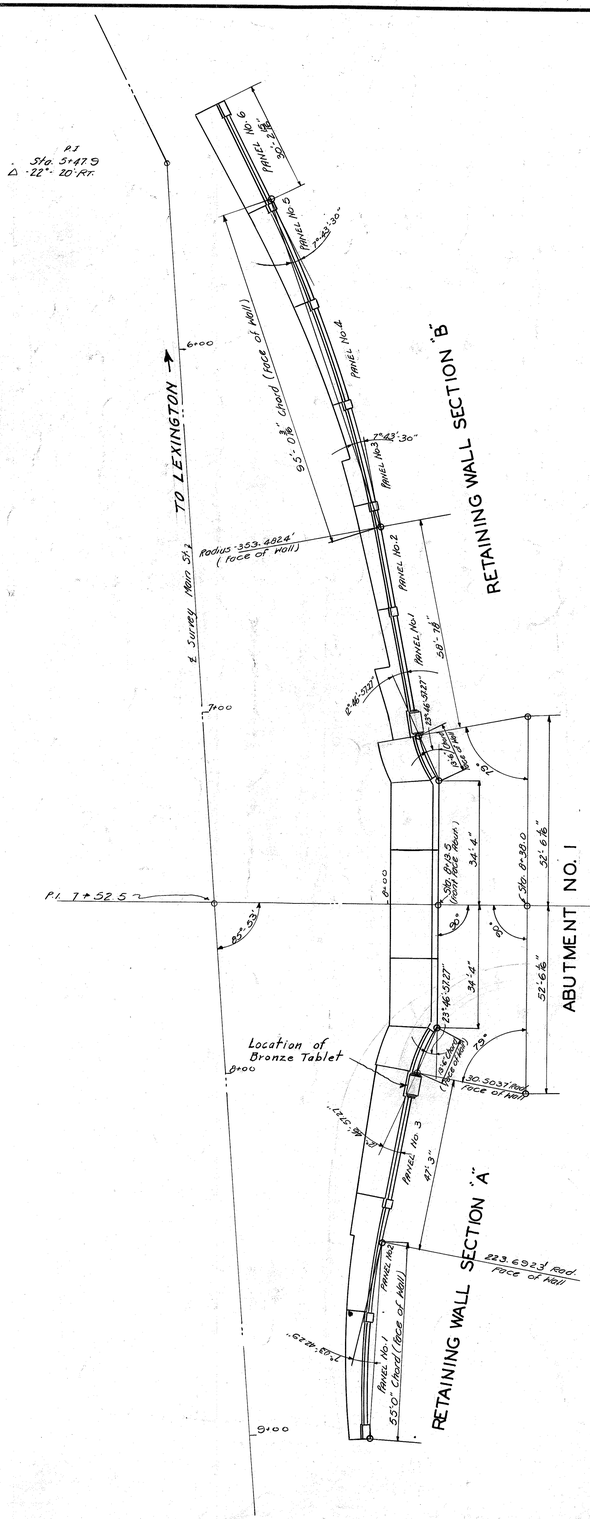
Sheet 2B

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

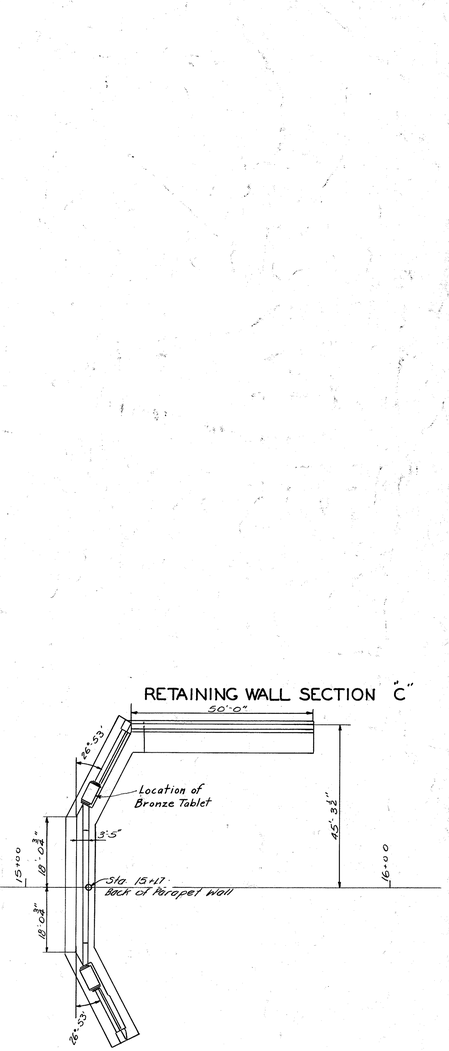
KENTUCKY RIVER BRIDGE FRANKFORT

STATION	PROJECT NO.		
BRIDGE NUMBER 37-5065-1	DRAWING NO. 6742	INDEX	

FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			







ABUTMENT NO. 2

PART PLAN

SHOWING ABUTMENTS & RETAINING-WALLS (SUPERSTRUCTURE REMOVED)

LAYOUT OF RETAINING-WALL APPROACHES

Approved:

President of the American War Mothers of Kentucky.

Governor - Commonwealth of Kentucky.

SHEET No. 2 OF 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

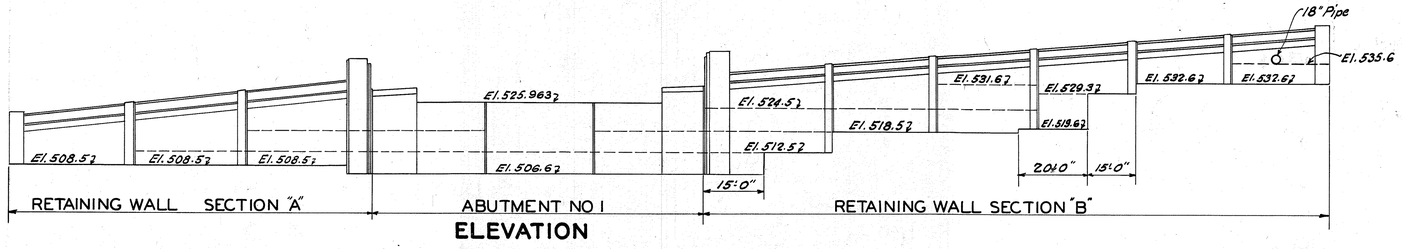
DRAWING No. 6742

INDEX

DESIGNED BY	E. Vaughan Jr.	DATE 12-36	REVISED DATE
TRACED BY	Engle Crum	DATE 2-36	REVISED DATE
CHECKED BY	Edgar Crum	DATE 12-36	REVISED DATE

POST 2329—500—11-36

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



ELEVATION

ESTIMATE OF QUANTITIES

Class "A" Concrete (Original)	300.3 Cu.Yds.
Class "A" Concrete (Revised)	319.6 Cu.Yds.
Overrun	19.3 Cu.Yds.

ESTIMATE OF QUANTITIES

Class "A" Concrete (Original)	470.0 Cu.Yds.
Class "A" Concrete (Revised)	503.6 Cu.Yds.
Overrun	33.6 Cu.Yds.

ESTIMATE OF QUANTITIES

Class "A" Concrete (Original)	295.5 Cu.Yds.
Class "A" Concrete (Revised)	546.5 Cu.Yds.
Overrun	251.0 Cu.Yds.

TOTAL OVERRUN

SECTION "A"	Class "A" Concrete	19.3 Cu.Yds.
ABUTMENT NO.1	Class "A" Concrete	33.6 Cu.Yds.
SECTION "B"	Class "A" Concrete	251.0 Cu.Yds
	TOTAL OVERRUN =	303.9 Cu.Yds

REVISIONS TO WALLS AND ABUTMENT NO.1

DESIGNED BY E.Shapleigh DATE 9-37
TRACED BY Gibbs DATE Sept 37
CHECKED BY E.S. Johnson DATE 9-37

REVISED DATE
REVISED DATE
REVISED DATE

POST 2329—500—11-36

Sheet 2-A of 40

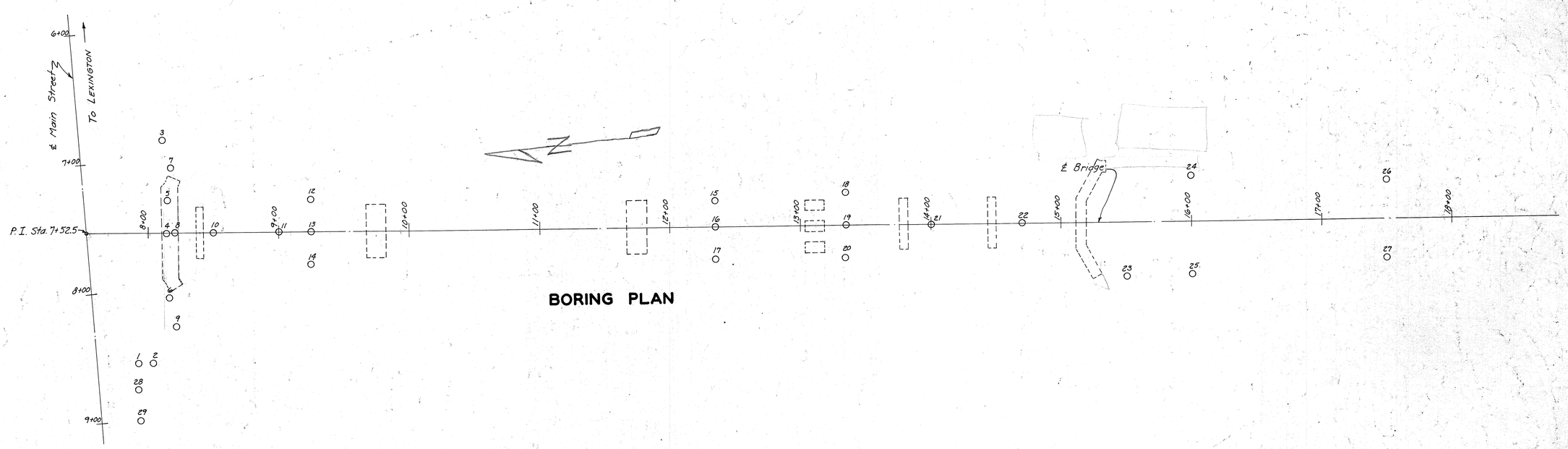
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF

KENTUCKY RIVER BRIDGE
FRANKFORT
ROAD

STATION PROJECT NO.

DRAWING No. 6742 INDEX

FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			



BORING PLAN

(1) Sta. 7+92 100' Rt.

Ground Elev. 514.7
3.2' Solid Rock
Elev. 511.5
28.2' Soft Sand
2.4' Hard Sand
16.1' Gravel
Elev. Solid Rock 430.5

(2) Sta. 8+03 100' Rt.

512.5
Elev. Solid Rock 508.7
46' Sand & Gravel
Elev. Solid Rock 431.2

(3) Sta. 8+11 72' Lt.

517.3
8.2' Solid Rock Ledge
509.1
469.7
20.5' Soft Sand
1.4' Hard Sand
17.3' Gravel
Elev. Solid Rock 430.5

(4) Sta. 8+14 ℄

508.9
2.6' Solid Rock Ledge
505.3
493.8
6' Sand & Loam
487.8
33.8' Soft Sand
454.0
20.3' Hard Sand
433.7
5.1' Hard Gravel
Elev. Solid Rock 428.6

(5) Sta. 8+15 25' Lt.

509.1
Solid Rock

(6) Sta. 8+16 50' Rt.

509.7
Elev. Solid Rock 504.6

(7) Sta. 8+175 50' Lt.

509.1
Solid Rock

(8) Sta. 8+20 ℄

507.7
Elev. Solid Rock 504.7

(9) Sta. 8+21 72' Lt.

509.1
Solid Rock

(10) Sta. 8+50 ℄

505.0
Elev. Solid Rock 498.3

(11) Sta. 9+00 ℄

484.5
Elev. Solid Rock 480.5

(12) Sta. 9+25 25' Lt.

469.3
Elev. Solid Rock 467.2

(13) Sta. 9+25 ℄

470.4
Elev. Solid Rock 466.5

(14) Sta. 9+25 25' Rt.

471.9
Elev. Solid Rock 466.7

(15) Sta. 12+35 20' Lt.

477.2
28.2' Soft Sand
449.0
2.4' Hard Sand
446.6
16.1' Gravel
Elev. Solid Rock 430.5

(16) Sta. 12+35 ℄

479.2
46' Sand & Gravel
Elev. Solid Rock 431.2

(17) Sta. 12+35 25' Rt.

469.7
20.5' Soft Sand
449.2
1.4' Hard Sand
447.8
17.3' Gravel
Elev. Solid Rock 430.5

(18) Sta. 13+35 25' Lt.

493.8
6' Sand & Loam
487.8
33.8' Soft Sand
454.0
20.3' Hard Sand
433.7
5.1' Hard Gravel
Elev. Solid Rock 428.6

(19) Sta. 13+35 ℄

492.2

(20) Sta. 13+35 25' Rt.

494.5

(21) Sta. 14+00 ℄

493.7
7.2' Loam
486.5
29.5' Soft Sand
457.0
20.0' Hard Sand
437.0
4.6' Hard Pack Gravel
Elev. Solid Rock 432.4

(22) Sta. 14+70 ℄

507.8
15.5' Waste, loose crushed stone, cinders
492.3
11.5' Clay
480.8
38.4' Soft Sand
442.4
5.8' Hard Gravel
436.6
0.3' Soft Shale Rock
436.3
0.5' Very Hard Gravel & Red Clay
Elev. Solid Rock 435.8

(23) Sta. 15+50 42' Rt.

507.8
9' Clay
498.8
11' Soft Sand
487.8
No Rock

(24) Sta. 16+00 35' Lt.

508.3
8' Clay
500.3
No Rock

(25) Sta. 16+00 40' Rt.

508.3
8' Clay
500.3
12' Soft Sand
488.3
No Rock

(26) Sta. 17+50 30' Lt.

509.7
8' Clay
501.7
No Rock

(27) Sta. 17+50 30' Rt.

509.7
8' Clay
501.7
No Rock

(28) Sta. 18+76 on Main St. 30' Lt.

513.4
Elev. Solid Rock 509.7

(29) Sta. 9+00 on Main St. 30' Lt.

513.9
505.4
No Rock

NOTE: The subsurface data shown hereon was obtained at the locations indicated and represents the best information available to the Department of Highways as to conditions existing at the site of work. The data is furnished for information only and bidders must draw their own conclusions as to conditions to be encountered. The Department of Highways does not give any guarantee as to the accuracy of data furnished or as to conditions which will actually be found to exist when the work is being executed.

DESIGNED BY [illegible] DATE 2-2-36
TRACED BY [illegible] DATE 12-36
CHECKED BY [illegible] DATE 12/36
REVISED DATE
REVISED DATE
REVISED DATE

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

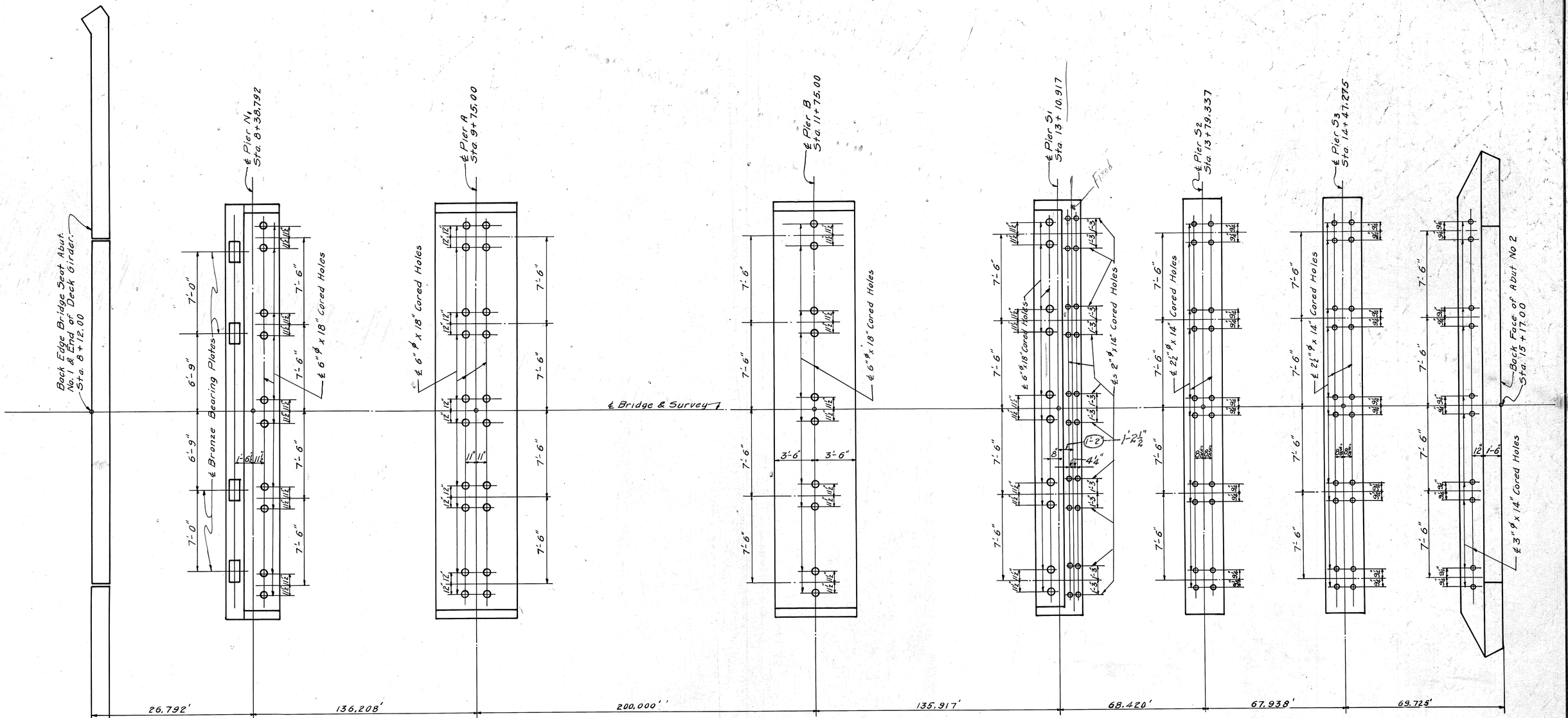
KENTUCKY RIVER BRIDGE
FRANKFORT

BORING DATA

DRAWING No. 6742
INDEX

FORT 2329—500—11-36

FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			



PLAN

(Showing Cored Holes and Bearing Plates)
(Keep Cored Holes Dry in freezing Weather)

Sheet 4 of 40

DESIGNED BY E. Slack, Jr. DATE 12/36 REVISED Horiz. Clearance diminished Pier S1 DATE 2-4-37
TRACED BY Draftsman DATE 12/36 REVISED DATE
CHECKED BY E. Vaughan, Jr. DATE 12/36 REVISED DATE

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

FRANKFORT
COUNTY OF

KENTUCKY RIVER BRIDGE
FRANKFORT

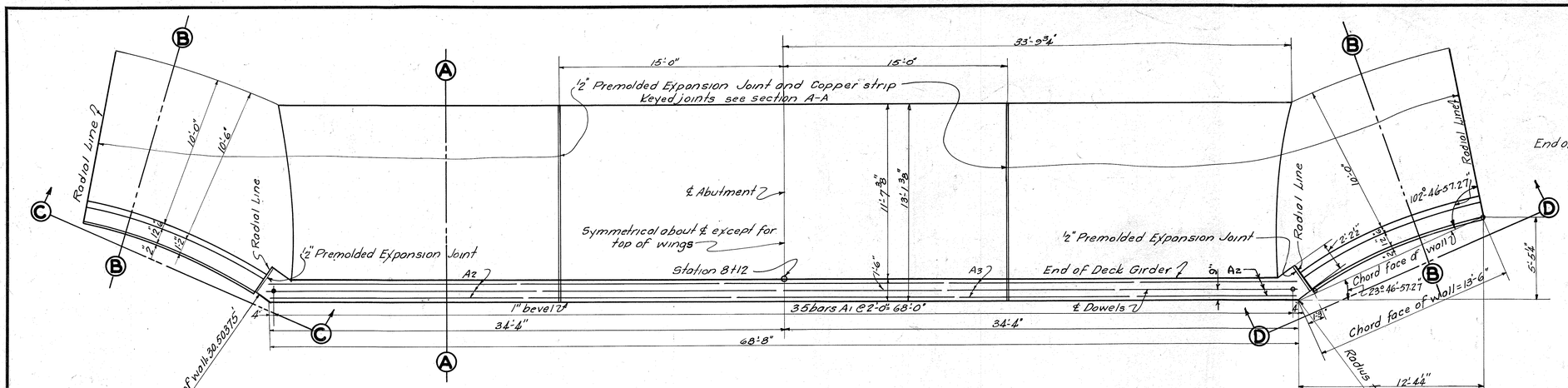
STATION ROAD PROJECT NO.

DRAWING No. 6742 INDEX

ANCHOR BOLT PLAN

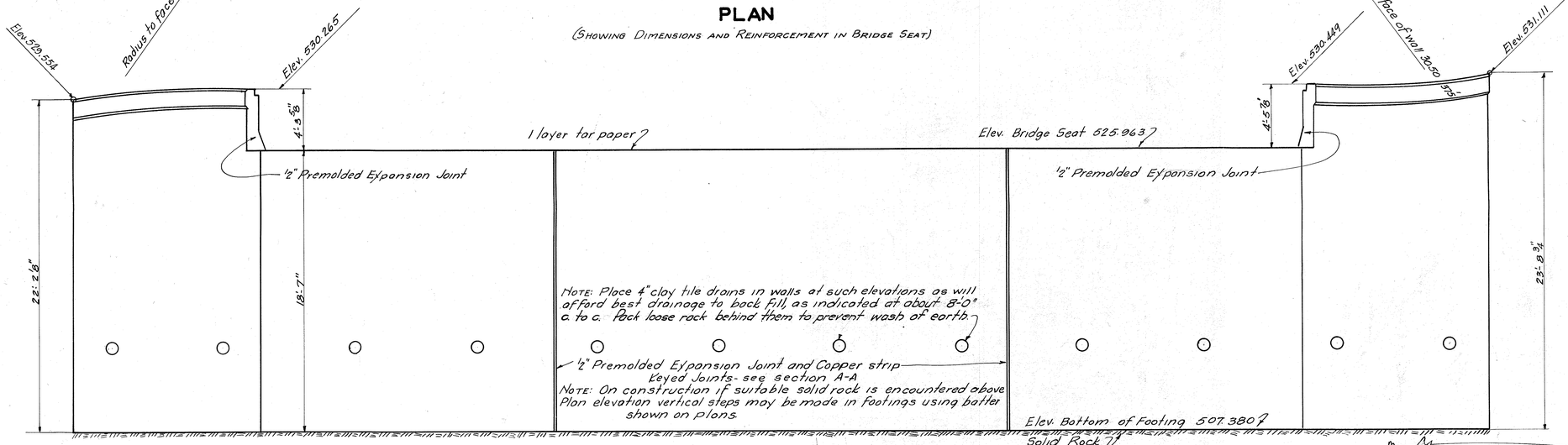
POST 2329—500—11-36

FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			

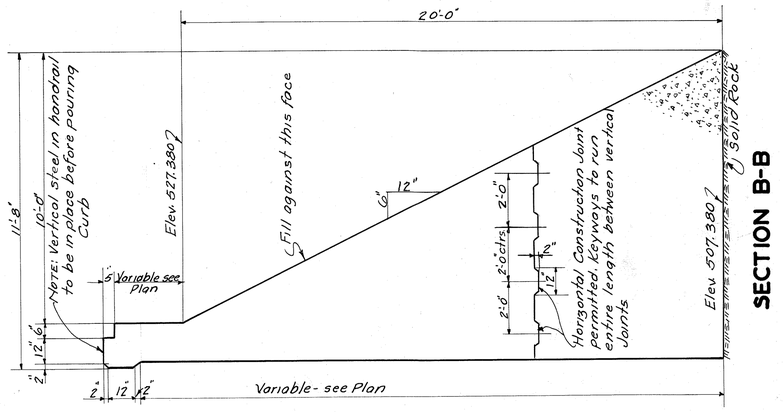


PLAN

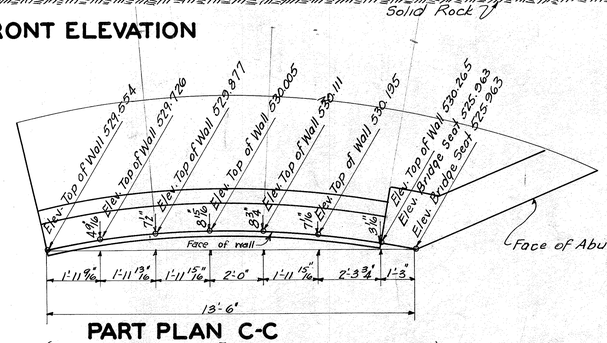
(Showing Dimensions and Reinforcement in Bridge Seat)



FRONT ELEVATION

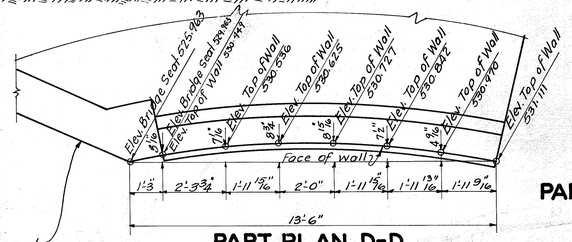


SECTION B-B



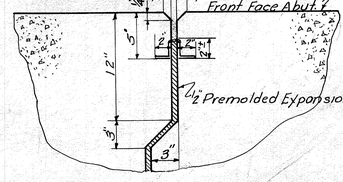
PART PLAN C-C

(Showing Offsets and Elevations at top of Wall)



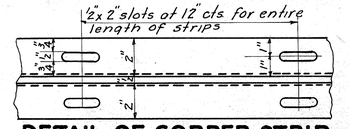
PART PLAN D-D

(Showing offsets & Elevations Top of wall)



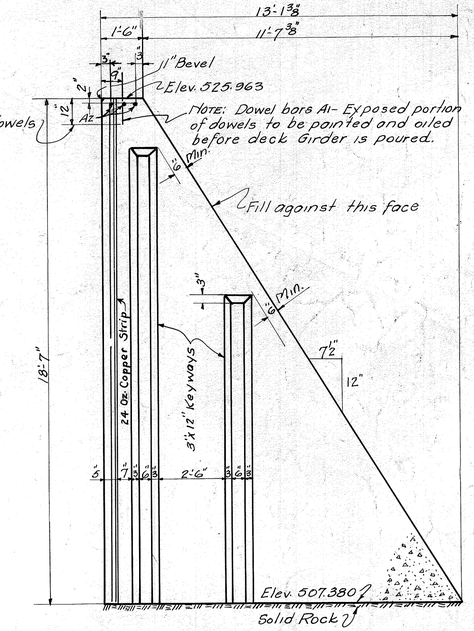
PART SECTION THRU EXPANSION J'NT

(Showing Location of Copper Strip and Keyway)



DETAIL OF COPPER STRIP

9" width of 24 oz. Copper strip - 18'-7½" Long (2 required)
23'-9½" " (1 ")
22'-2½" " (1 ")



SECTION A-A

(Showing Vertical Keyways Located only at ½ Expansion Joints and Copper Strip)

ESTIMATE OF QUANTITIES

Concrete, Class "A"	470 Cu.Yds.
Reinforcement	590 Lbs.

BILL OF REINFORCEMENT

Mark	Type	No.	Size	Length Ft.	Length In.	Location
A1	Str.	35	½"Ø	2	0	Dowels - Into Endwall
A2	"	6	1"Ø	19	0	Bridge Seat
A3	"	3	"	29	8	" "

DESIGNED BY	C. Shaufler	DATE	12/36
TRACED BY	Sanzdefer	DATE	12/36
CHECKED BY	Engel	DATE	12/36
REVISED		DATE	
REVISED		DATE	
REVISED		DATE	

For Revisions : see sheet 2-A.

SHEET 5 OF 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

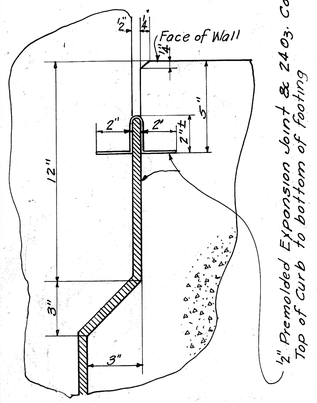
ABUTMENT NO. 1

DRAWING No. 6742

INDEX

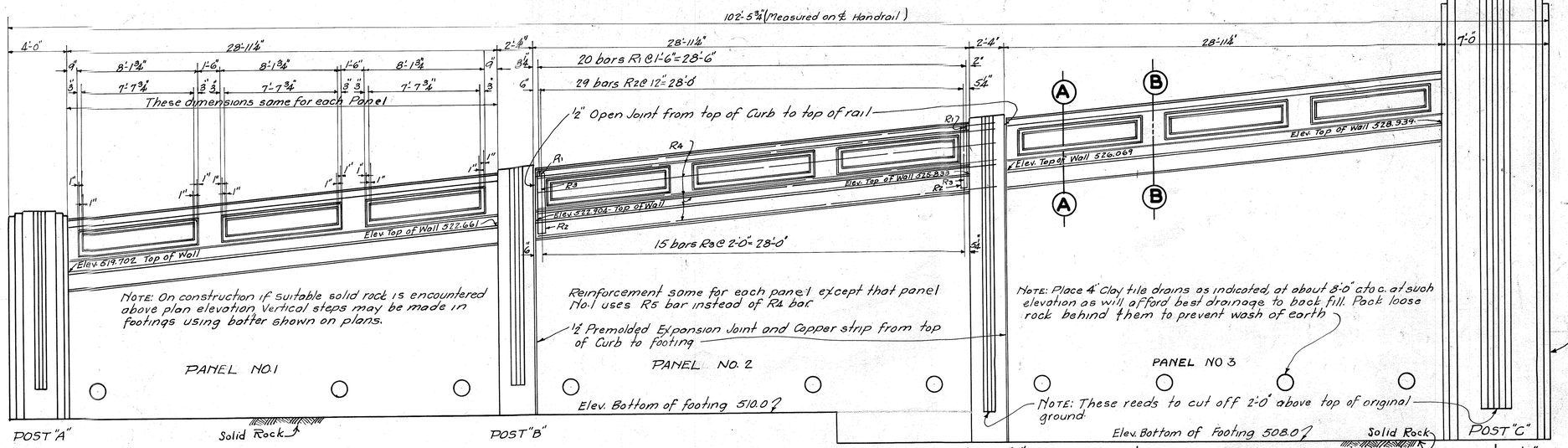
POST 2329—500—11-36

FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			

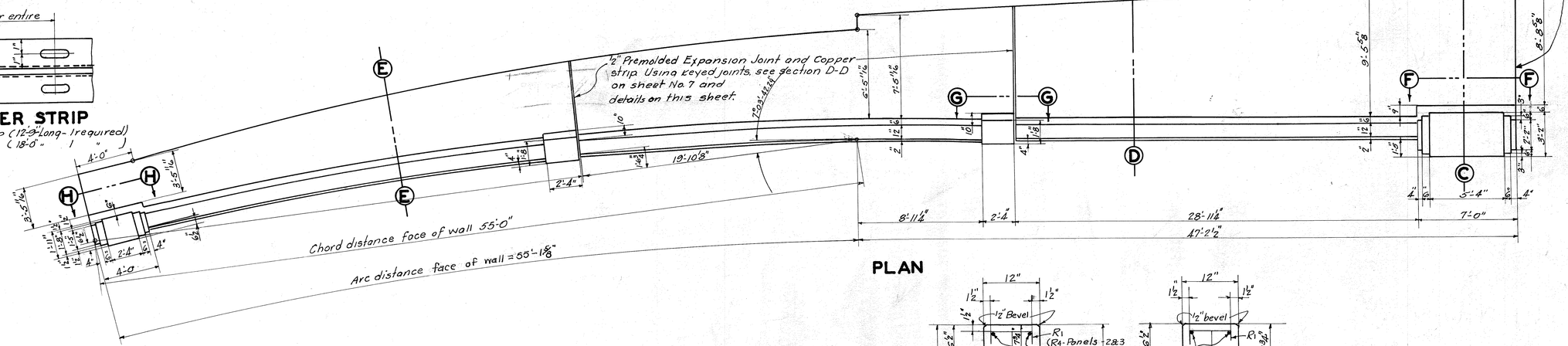


PART SECTION THRU EXP. JOINT
(SHOWING EXPANSION JOINT FILLER COPPER STRIP AND KEYWAY)

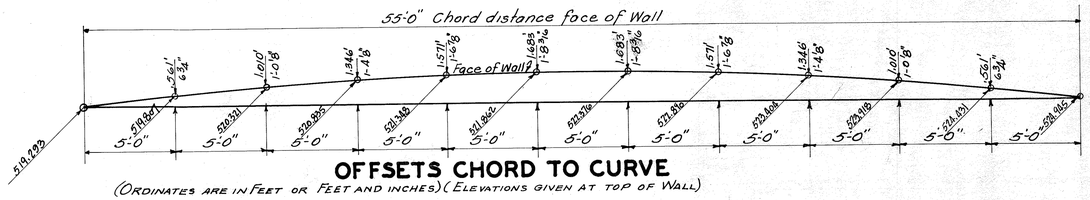
DETAILS OF COPPER STRIP
9" Width of 24 oz. Copper strip (12-9" long- 1 required)
(18-0" " 1 ")



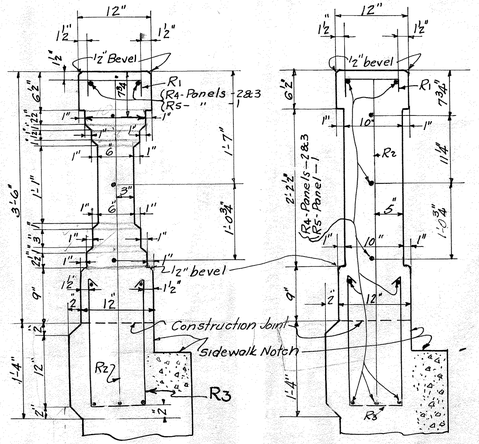
FRONT ELEVATION



PLAN



OFFSETS CHORD TO CURVE
(ORDINATES ARE IN FEET OR FEET AND INCHES) (ELEVATIONS GIVEN AT TOP OF WALL)



PART SECTION A-A PART SECTION B-B

FOR REVISIONS: see sheet 2-A

RETAINING WALL SECTION "A" (2 SHEETS)

Sheet 6 of 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE

FRANKFORT

DRAWING No. 6742

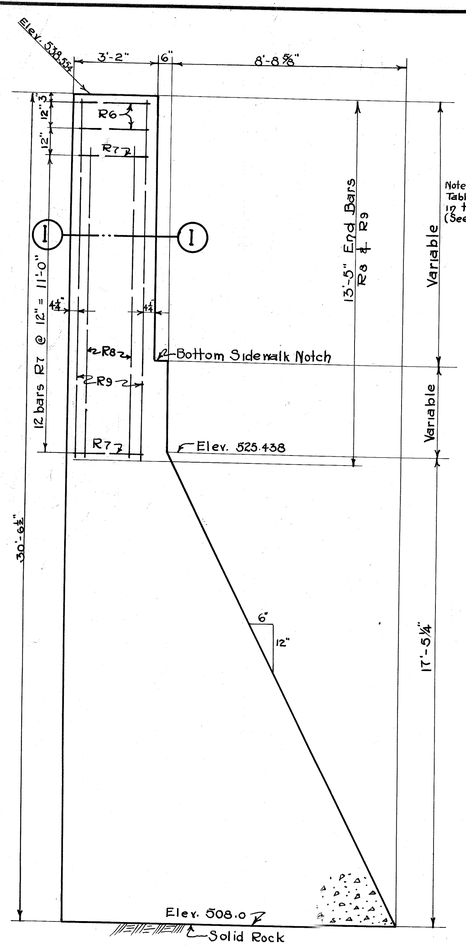
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DESIGNED BY E. Vaughan Jr. DATE 12-36
TRACED BY Sargefair DATE 12-36
CHECKED BY Carlson DATE 1-37

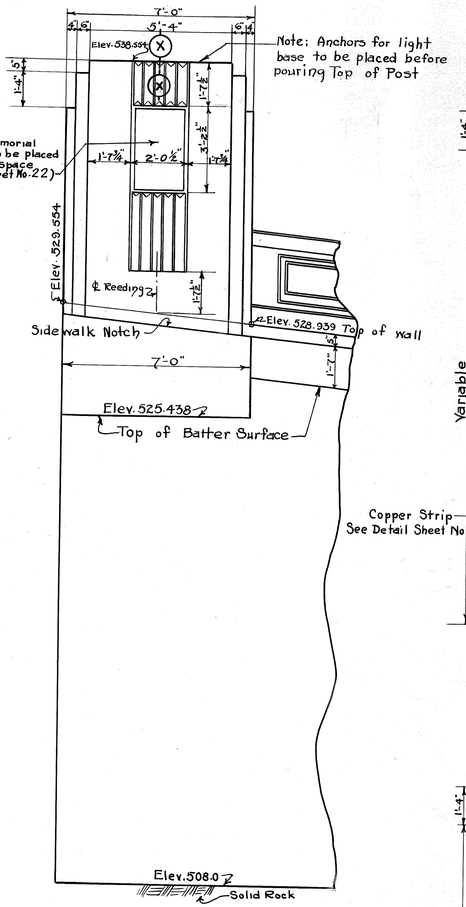
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REVISED ..... DATE .....
REVISED ..... DATE .....

POST 2329—500—11-36

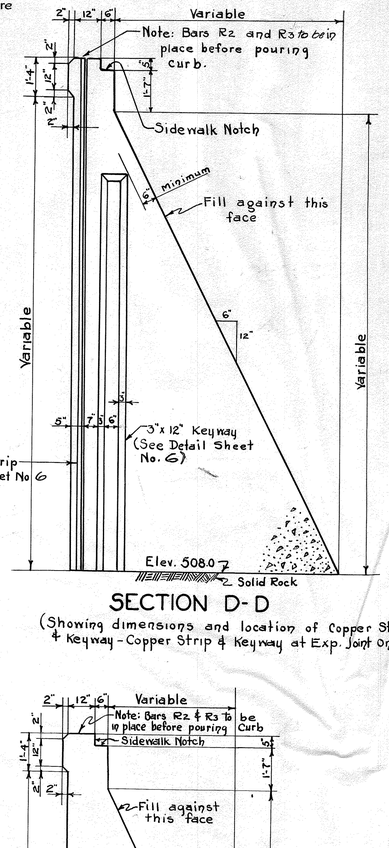
FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226		.	



SECTION C-C

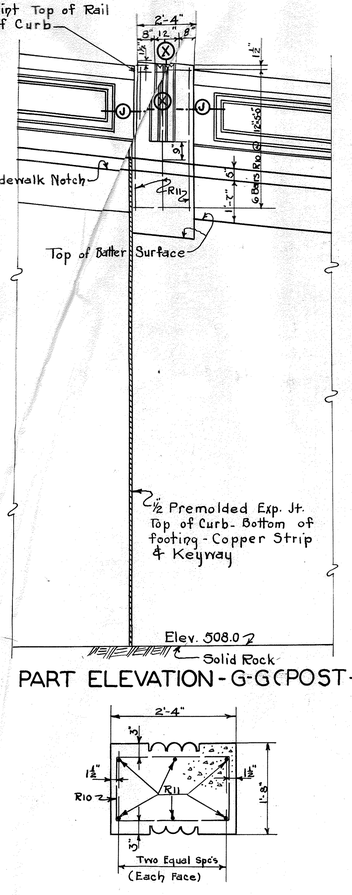


PART ELEVATION-F-F [POST-C]

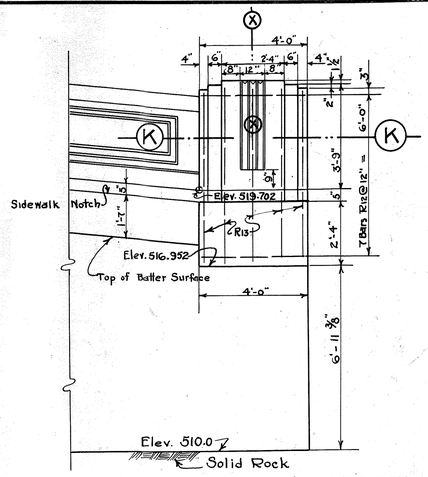


SECTION D-D

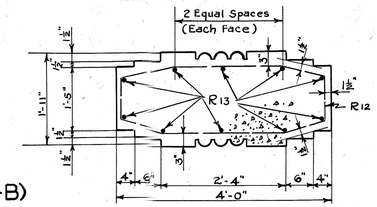
(Showing dimensions and location of Copper Strip & Keyway - Copper Strip & Keyway at Exp. Joint only)



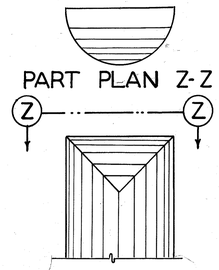
PART ELEVATION - G-G (POST-B)



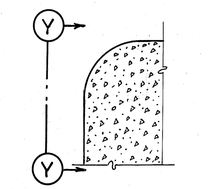
PART ELEVATION - H-H [POST-A]



SECTION K-K



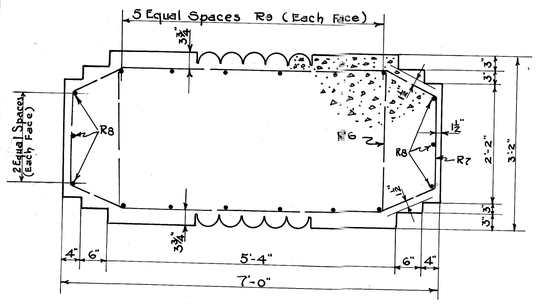
PART PLAN Z-Z



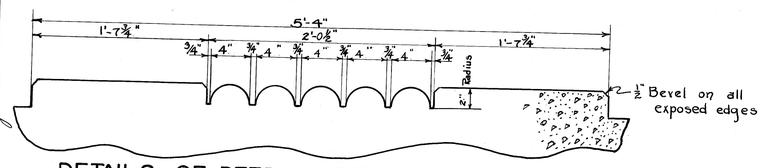
PART SECTION X-X

DETAILS OF REEDS

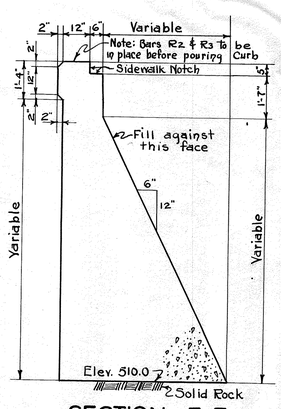
PART ELEV. Y-Y



SECTION I-I

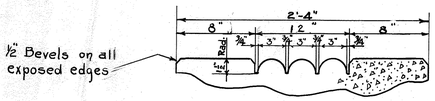


DETAILS OF REEDING FOR POST - C



SECTION E-E

SECTION - J-J



DETAILS OF REEDING FOR POSTS A & B

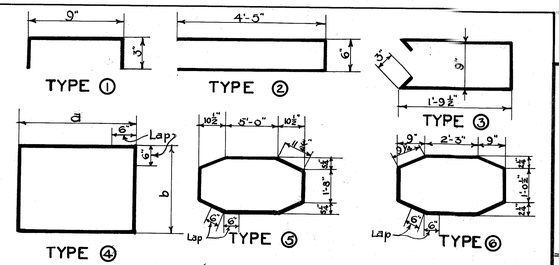
ESTIMATE OF QUANTITIES

Concrete Class "A"	300.3	Cuyds.
Reinforcement	(1810)	Lbs.

1970

BILL AND TYPES OF REINFORCEMENT

MARK	TYPE	NO	SIZE	LENGTH FT	LENGTH IN.	LOCATION	a FT.	a IN.	b FT.	b IN.
R1	①	60	½" □	1	1	Top of Rail	—	—	—	—
R2	②	87	½" ϕ	9	2	Curb into Rail	—	—	—	—
R3	③	45	"	4	8	" " Plinth	—	—	—	—
R4	Str.	(18 20)	"	31	0	Panels #2 & 3	—	—	—	—
R5	Str.	(9 10)	"	33	0	" #1	—	—	—	—
R6	④	2	"	15	9	Post "C"	5	0	2	6½
R7	⑤	12	"	(7) 17	11	" "	—	—	—	—
R8	Str.	6	"	11	5	" "	—	—	—	—
R9	"	12	"	13	3	" "	—	—	—	—
R10	④	12	"	7	2	" "B"	2	1	1	2
R11	Str.	12	"	5	6	" "	—	—	—	—
R12	⑥	7	"	10	4	" "A"	—	—	—	—
R13	Str.	10	"	6	4	" "	—	—	—	—



FOR REVISIONS: see sheet 2-A.

Sheet No. (7) of (70)

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE FRANKFORT

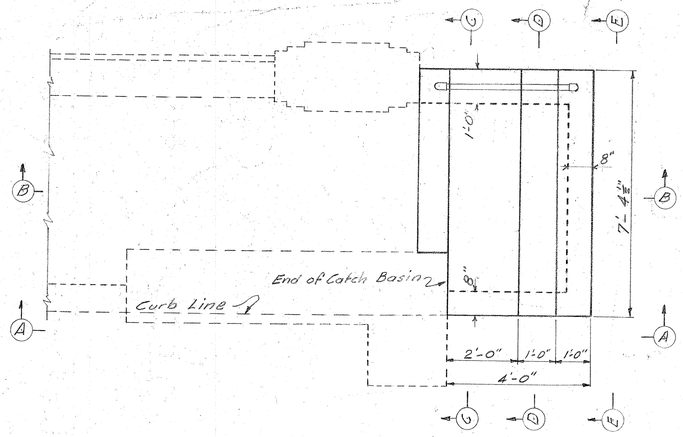
DRAWING No. 6742

INDEX

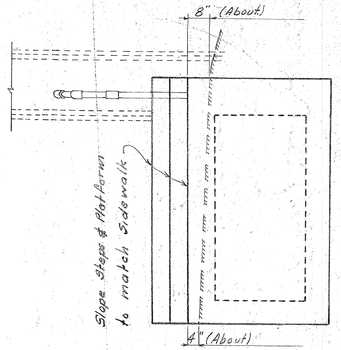
DESIGNED BY Klaybaugh DATE 12-36
TRACED BY M. Smith DATE 12-36
CHECKED BY Craig Timmo DATE 12-36

REVISED Length of Bars R7 DATE 12-36
REVISED No. of Bars R2 & R3 DATE 12-36
REVISED DATE

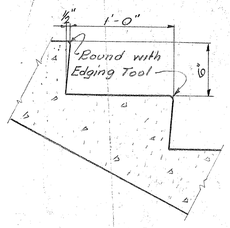
POST 2129—500—11-30



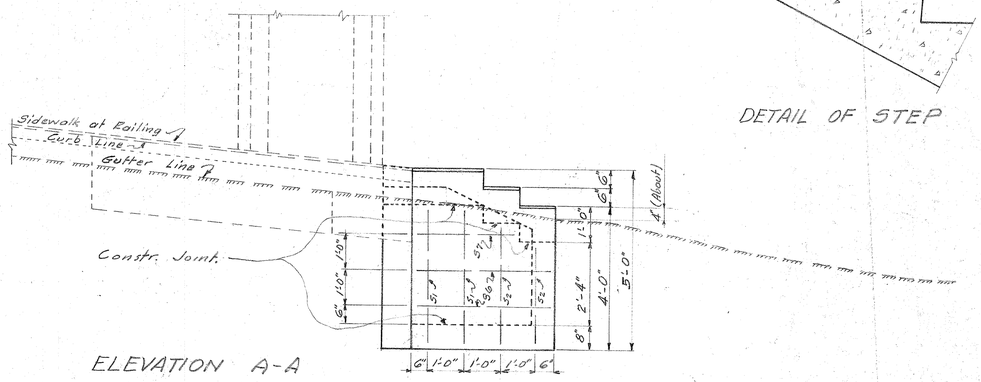
PLAN



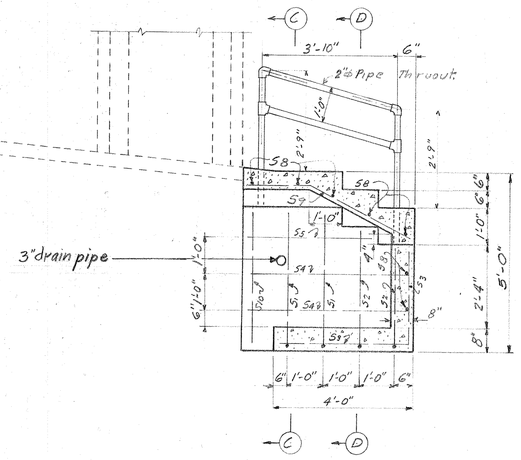
ELEVATION E-E



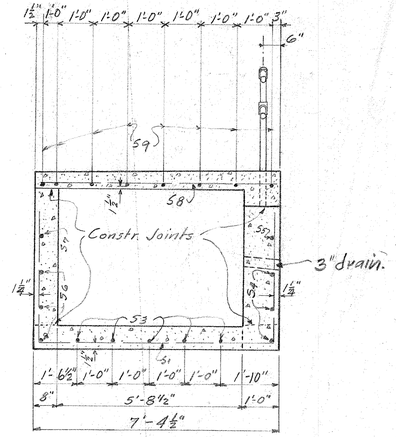
DETAIL OF STEP



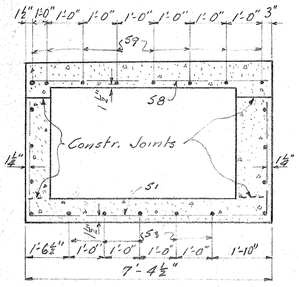
ELEVATION A-A



SECTION B-B



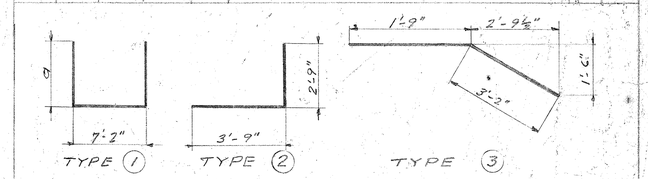
SECTION C-C



SECTION D-D

BILL & TYPES OF REINFORCEMENT

Mark	Type	No	Size	Length Ft	Length In	Location	Lap Ft	Lap In
S1	(1)	2	½" ø	14	4	Bottom Slab into Sidewalls	3	8
S2	(1)	2	"	13	4	" " " "	3	2
S3	(2)	5	"	6	5	" " " Front Wall		
S4	Str.	3	"	4	7	12" Sidewall (Hor.)		
S5	"	1	"	3	7	" " "		
S6	"	3	"	3	9	8" Sidewall "		
S7	"	1	"	2	9	" " "		
S8	"	7	"	7	1	Front Wall & Steps "		
S9	(3)	8	"	4	11	Steps		
S10	Str	1	"	3	8	12" Sidewall (Vert)		



(All dimensions are out to out)

ESTIMATE OF QUANTITIES

Class A Conc.	2.9	Cu. Yds.
Reinforcement	140	lbs
Structure Excavation (Und.)	5	Cu. Yds.
Pipe Railing	4	Lin. Ft.

GENERAL NOTES

Specifications - State Highway Department, Kentucky (1932 with Amendments)
Concrete - Class "A" thruout.
Reinforcement - Dimension shown from face of concrete is clear distance. Precast mortar or concrete blocks supporting reinforcement shall be spaced not farther apart than 50 diameters of the supported bar.
Railing - Pipe railing shall be standard weight steel or wrought iron pipe commercially galvanized in accordance with standard practice.
Steps - The unit price bid per cu. yd. for Class A concrete in steps shall include the cost of all reinforcement. See note on sheet 2 of roadway plans.

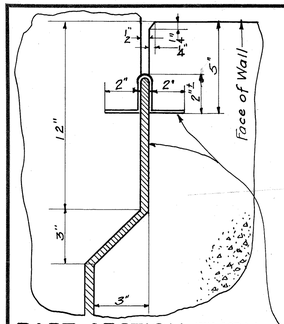
Detailed - E. Faunk 1/20/37
E. Vaughan Jr. 10/37
General Note Revised 12-16-37 E.D.S.

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT.

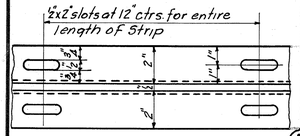
Drawing No. 6742

FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			



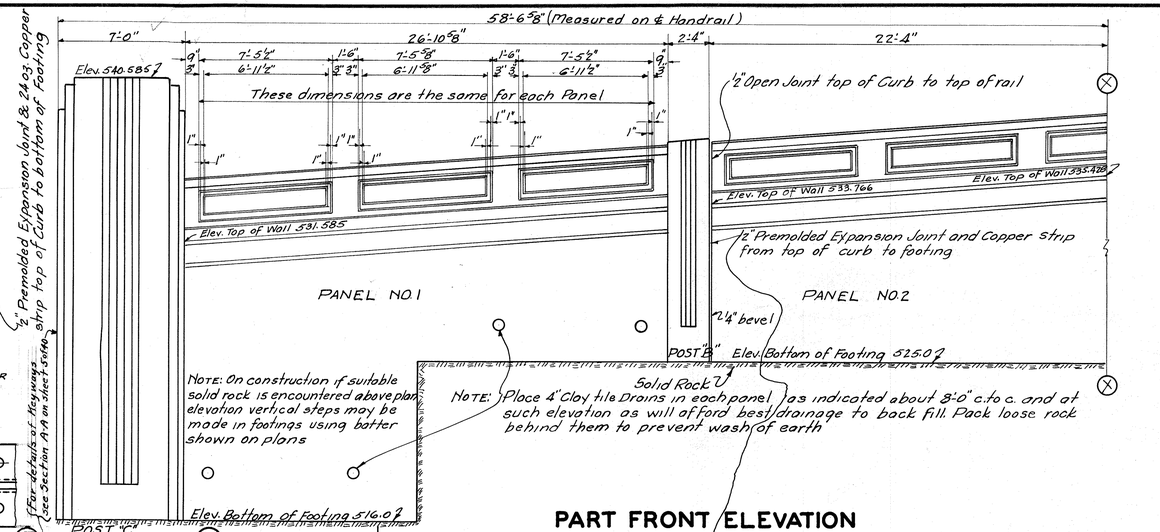
PART SECTION THRU EXPANSION JOINT

(Showing Expansion Joint Filler Copper Strip and Keyway)

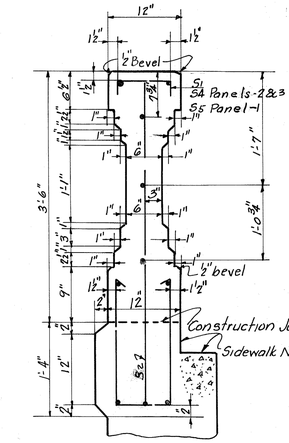


DETAILS OF COPPER STRIP

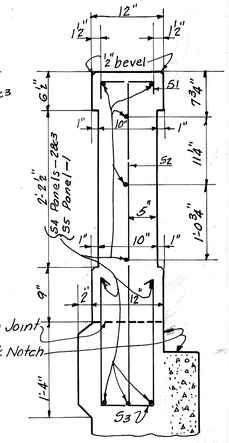
9" width-24 oz. Copper Strip-9'-6" Long (2 Required)
10'-6" " (1 ")
7'-0" " (1 ")
12'-0" " (1 ")



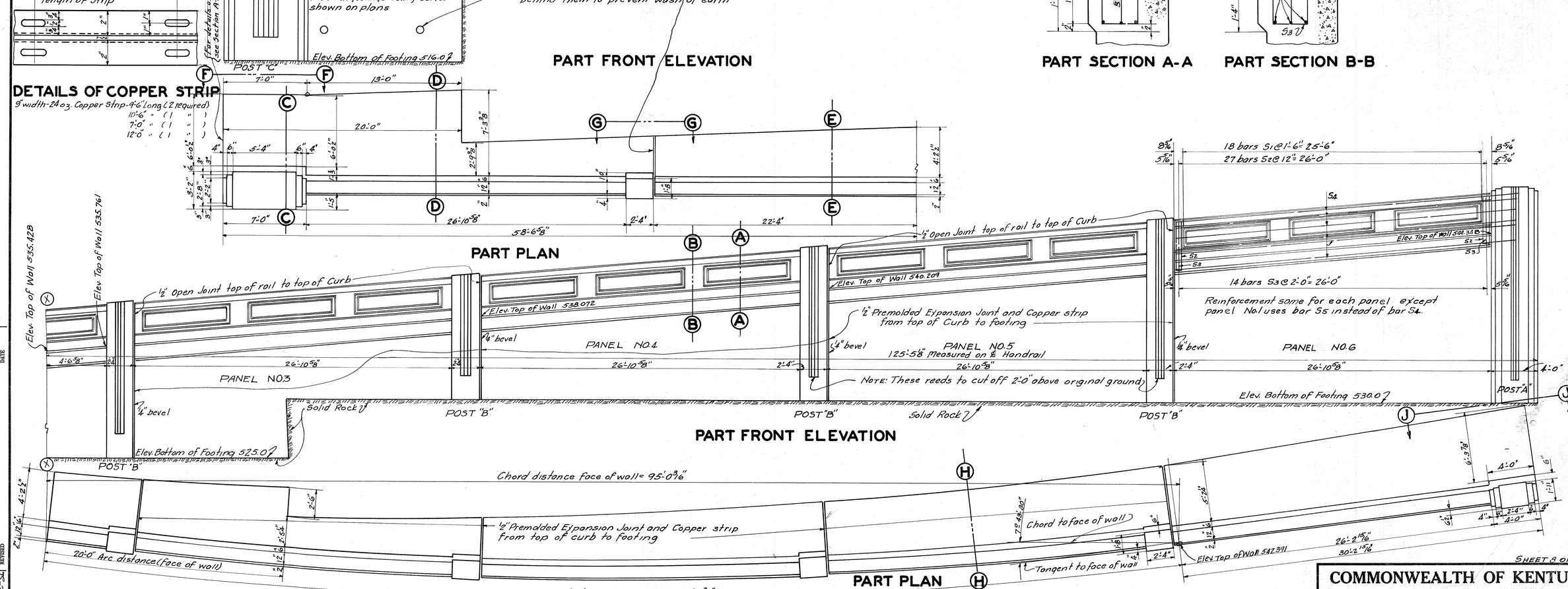
PART FRONT ELEVATION



PART SECTION A-A



PART SECTION B-B



PART PLAN

PART FRONT ELEVATION

OFFSETS CHORD TO CURVE

(Ordinates are in Feet Or Feet & Inches) (Elevations given at top of wall.)

For Revisions - see sheet 2-A.

RETAINING WALL SECTION "B" (2 Sheets)

Sheet 8 of 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE

FRANKFORT

DRAWING No. 6742

INDEX

DESIGNED BY E. Vaughan Jr. DATE 11-36
TRACED BY Sandefur DATE 12-36
CHECKED BY Engleburn DATE 12-36

REVISED DATE
REVISED DATE
REVISED DATE

FORM 2329—500—11-36

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

4" Sidewalk to be paid for on Sq. yd. basis

TO LEXINGTON

construction between these limits is all class "A" concrete

NOTE
Construct cut off wall to keep backfill from spilling thru. Pour this wall against exist. concrete Wall
Wall to be class "B" conc.

6' Sidewalk

Beginning of construction Sidewalk Elev. 537.83

Outside face of curb

Inside face of rail & Plinth.

½" Prem. Exp. Jt. in sidewalk and curb

½" Open Joint top of curb to top of rail
½" Prem. Exp. Jt in curb & sidewalk

½" prem. Jt in sidewalk & curb

Sidewalk Elev. 542.95

½" Prem. Exp. Jt. in sidewalk

6" Sidewalk

Projected point from ℄ survey
P.I Sta. 2+19.7 (27' Rt.)

20' Tangent

29'-6" (Construction "A")

30'-6" Construction "B"

60'-0"

22'-0" Construction "C"

45'-0

23'-0" Construction "D"

20' Tangent

125'-0"

face of existing post

GENERAL PLAN

½" Joint filler

4" sidewalk

2'-6±

SECTION E-E

cut off wall

29'-6"

30'-6"

22'-0"

23'-0"

20- bars A8 @ 18" = 28'-6"

30- bars A9 @ 12" = 29'-0"

21 - bars A8 @ 18" = 30'-0"

15 bars A8 @ 18" = 21'0"

14- bars A8 @ 18" = 19'-6"

½" open Joint

½" Prem. Exp. Jt.

½" open Joint

½" Prem. Exp. Jt.

31 - bars A9 @ 12" = 30'-0"

22 - bars A9 @ 12" = 21'-0"

23 - bars A9 @ 12" = 22'-0"

A10

A6

One layer of Tar Paper between top of Wall & curb

Top of Post to be Parallel to grade

℄ ½" Joint

Elev. Top of wall 546.45

½" open Jt.

½" bevel

OUTSIDE ELEVATION

29'-6"

29'-6"

30 bars A1 @ 12" - 29'-0"

20- bars A2 @ 12" = 19'-0"

10 - bars A3 @ 12" = 9'-0"

10'-0"

A4

A4

Outside face of existing wall?

Lap A10 With A6

A6

INCIDENTAL MATERIAL
1-Piece ⅝" x 14'-0"
1-Piece ½" x 5" x 16'-6"
1-Piece ½" x 4" x 9'-6"

NOTE
This bill of incidental material is approx. only, and the contractor is responsible for for furnishing enough material to complete the work according to plans and spec.

Construction "A"

PLAN

Construction "B"

BILL OF REINFORCEMENT

MARK	TYPE	NO	SIZE	LENGTH FT.	LENGTH IN.	LOCATION	a FT.	a IN.	b FT.	b IN.
A1	(1)	30	5/8" ℄	8	8	Sidewalk Construction A	6	7		
A2	"	20	"	8	1	" " "	6	0		
A3	(2)	10	"	9	8	" " B	6	0		
A4	Str	20	"	29	2	" " A & B				
A5	"	1	"	9	8	" " B				
A6	(3)	3	1" ℄	16	1	" " B				
A7	Str.	8	5/8" ℄	21	8	" " C				
A8	(4)	70	"	1	0	" " A-B-C&D	0	9	0	3
A9	"	106	"	8	8	" "	0	7	4	2
A10	Str.	5	"	15	9	" " B				
A11	"	9	"	30	2	" " B				
A12	Str	8	3/8" ℄	22	8	Constr. "D"				

TYPE (1)

TYPE (2)

TYPE (3)

TYPE (4)

TOTAL ESTIMATE OF QUANTITIES

Concrete Class "A"	24.3 cu.yds.
Concrete Class "B"	18.9 cu.yds.
Reinforcement	3050 lbs.
Removing Concrete Masonry	10.8 cu.yds
Removing Sidewalk	39.3 Sq.yds
Structure Excavation-Common	30 cu.yds
Structure Excavation - Solid Rock	5 cu.yds.
4" Sidewalk (Class "A" conc.)	24.7 sq.yds

Sheet 8 A

SECTION A-A

½" bevel
A8
A4 Construction A
A11 " B
A9
1" & Handrail
A1 Const. A
A2 " B
A4 Constr. A&B
Varies (see Plan
Slope Sidewalk ⅛" in 12"
A4 Constr. "A"
A10 " "B"
2" bevel
Remove Existing Handrail & curb to this Elev.
Existing Conc. retaining walls
Concrete Class "A"

SECTION B-B

A11
A9
A37
A4
A6
A5
2" bevel
Concrete Class "A"
Concrete Class "A" concrete

SECTION C-C

A7 Const. C
A12 " D
2" bev.
Concrete Class "B"
Concrete Class "A"

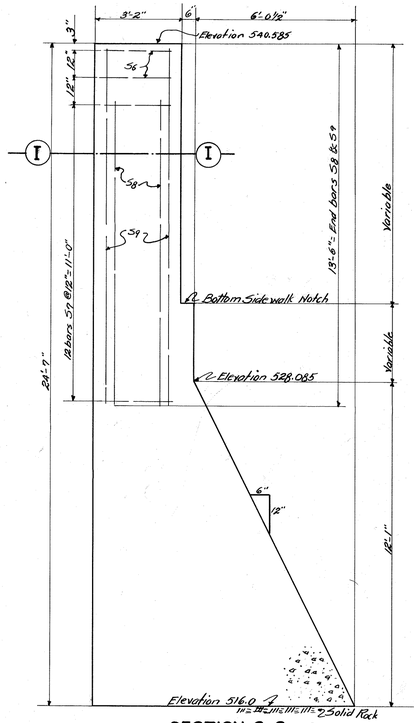
SECTION D-D

A12
A9
2" bevel
Concrete Class "B"
Concrete Class "A"

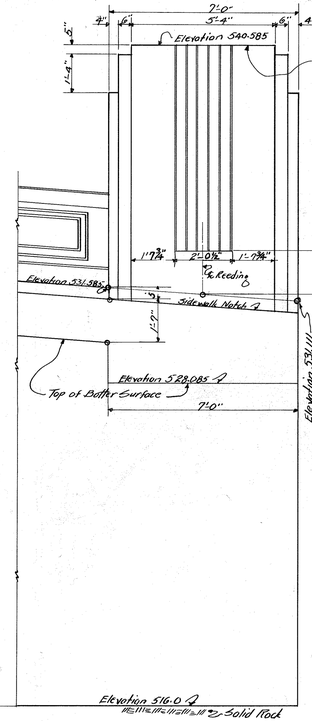
DESIGNED BY
DETAILED BY
TRACED BY
CHECKED BY
CHECKED BY
CHECKED BY
DATE
REVISED
DATE 6/1/60
EM

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
FRANKLIN
EAST MAIN ST. IN FRANKFORT
ROAD
STATION
UI PROJECT NO. 326 (20)
BRIDGE NUMBER
DRAWING NO. 6742
INDEX

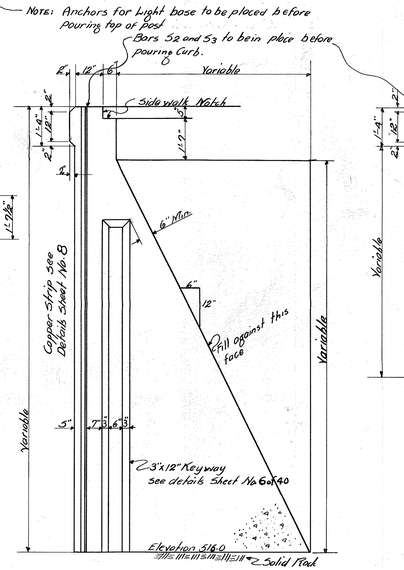
FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			



SECTION C-C

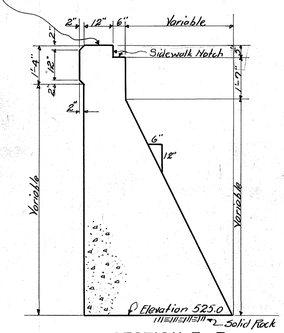


PART ELEVATION F-F POST 'C'

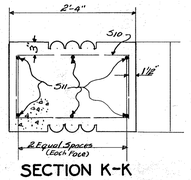


SECTION D-D

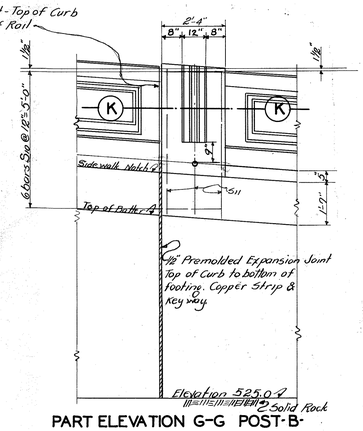
(SHOWING DIMENSIONS AND LOCATION OF COPPER STRIP AND KEYWAY) (COPPER STRIP AND KEYWAY BY EXPANSION JOINT ONLY)



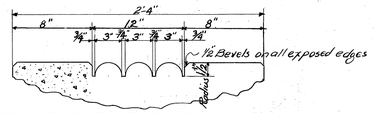
SECTION E-E



SECTION K-K



PART ELEVATION G-G POST 'B'

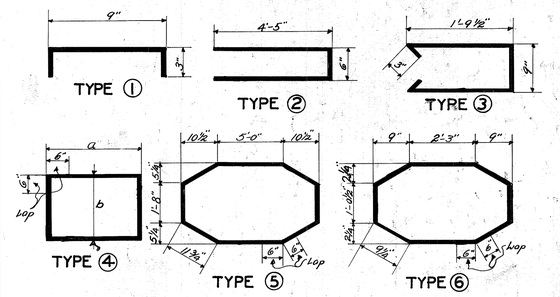


DETAILS OF REEDING FOR POSTS A&B

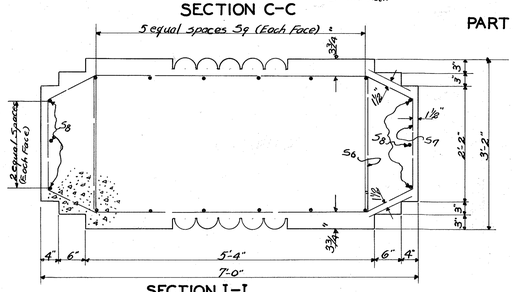
FOR ADDITIONAL DETAILS SEE SHEET 7 of 40.

BILL AND TYPES OF REINFORCEMENT

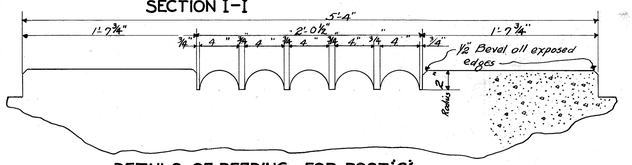
MARK	TYPE	NO.	SIZE	LENGTH FT.	LENGTH IN.	LOCATION	a FT.	a IN.	b FT.	b IN.
S1	①	108	½" ▭	1	1	Top of Rail	—	—	—	—
S2	②	162	½" ϕ	9	2	Curb into Rail	—	—	—	—
S3	③	84	"	4	8	Curb into Plinth	—	—	—	—
S4	Str.	95 50	"	28	6	Panels 2,3,4,5,&6	—	—	—	—
S5	Str.	9 10	"	31	0	Panel No.1	—	—	—	—
S6	④	2	"	15	9	Post "C"	5	0	2	6½
S7	③	12	"	17	11	" "C"	—	—	—	—
S8	Str.	6	"	11	7	" "C"	—	—	—	—
S9	Str.	12	"	13	4	" "C"	—	—	—	—
S10	④	30	"	7	2	" "B"	2	1	1	2
S11	Str.	30	"	5	4	" "B"	—	—	—	—
S12	⑥	6	"	10	4	" "A"	—	—	—	—
S13	Str.	10	"	5	4	" "B"	—	—	—	—



(All dimensions are out to out)

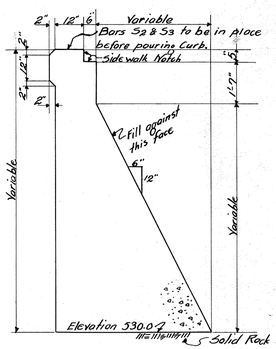


SECTION I-I

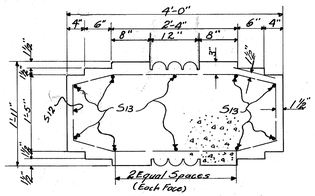


DETAILS OF REEDING FOR POST 'C'

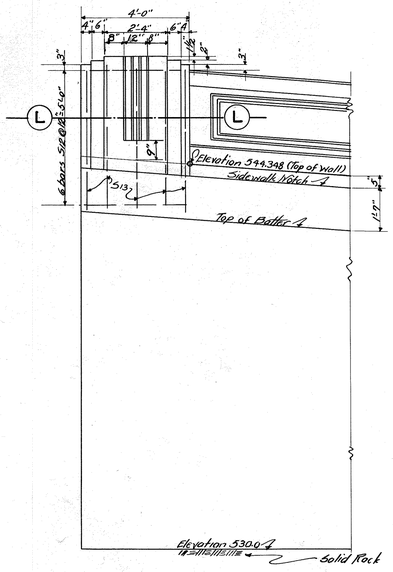
FOR ADDITIONAL DETAILS SEE SHEET 7 of 40.



SECTION H-H



SECTION L-L



PART ELEVATION J-J POST 'A'

ESTIMATE OF QUANTITIES

Concrete Class "A"	295.5	Cu. Yds.
Reinforcement	(3040) 3160	Lbs.

DESIGNED BY L. Vaughan DATE 3-56
TRACED BY Mark DATE 3-21-56
CHECKED BY Engstrom DATE 12-56

REVISED DATE
REVISED DATE
REVISED DATE

SHEET 9 OF 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

DETAILS OF RETAINING WALL SECTION-B- (2 SHEETS)

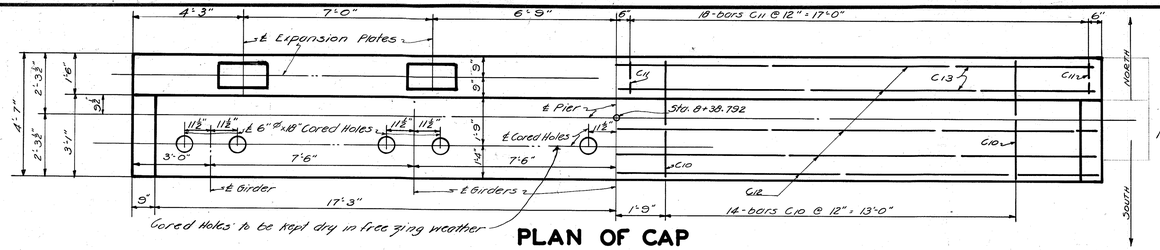
FOR REVISIONS: SEE SHEET 2-A.

DRAWING No. 6742

INDEX

POST 2329—500—11-56

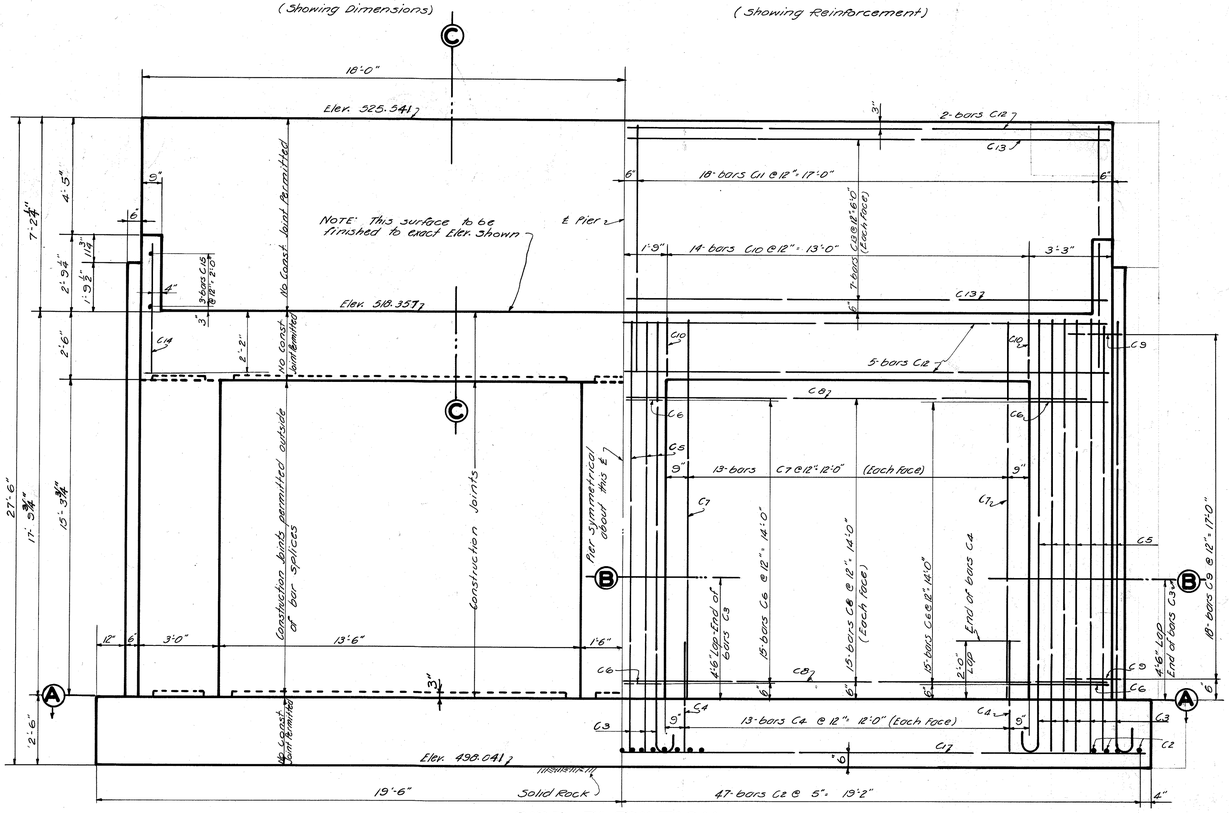
FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			



Note: Shift bars C10 if necessary to miss Cored Holes

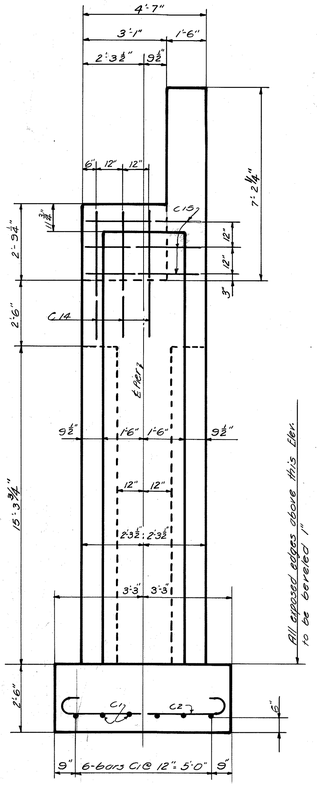
PLAN OF CAP

(Showing Dimensions) (Showing Reinforcement)

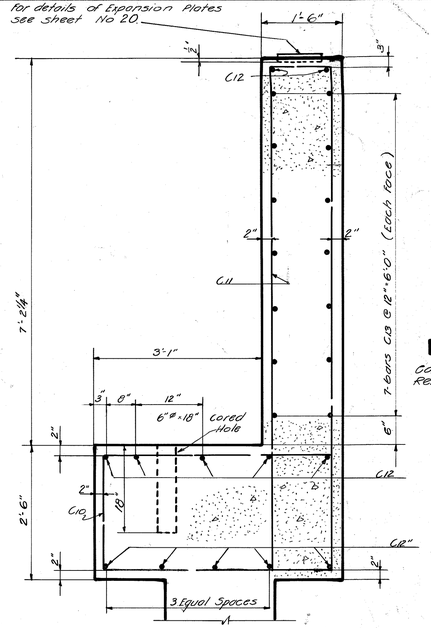


SIDE ELEVATION

(Showing Dimensions & bars C14-C15) (Showing Reinforcement)



END ELEVATION



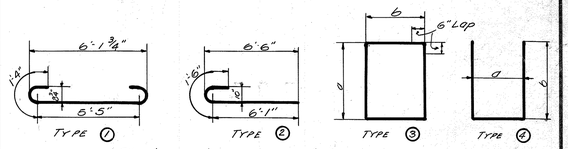
SECTION C - C

ESTIMATE OF QUANTITIES

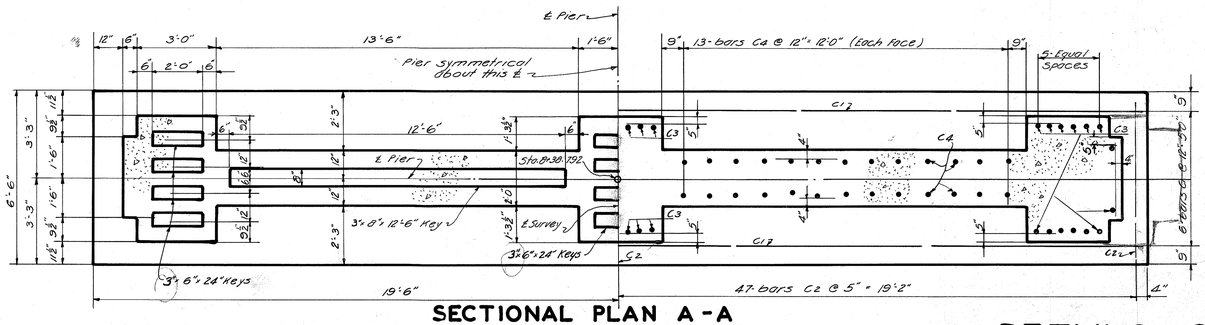
Concrete Class "A"	109.8	cu. yds.
Reinforcement	11860	lbs.

BILL AND TYPES OF REINFORCEMENT

MARK	TYPE	No.	SIZE	LENGTH FT.	LENGTH IN.	LOCATION	a FT.	a IN.	b FT.	b IN.
C1	Str.	6	¾"ø	38	8	Footing	—	—	—	—
C2	①	93	⅞"ø	8	1	"	—	—	—	—
C3	②	40	1"□	7	7	Dowels footing into Col's	—	—	—	—
C4	Str.	52	½"□	4	0	" " " Wall	—	—	—	—
C5	"	32	1"□	17	7	Column	—	—	—	—
C6	③	45	½"□	13	6	"	2	5	4	0
C7	Str.	52	"	17	0	Web Wall	—	—	—	—
C8	"	30	"	36	0	"	—	—	—	—
C9	④	36	"	5	3	Column	2	5	1	6
C10	③	28	"	13	6	Cap	4	3	2	2
C11	④	36	¾"ø	19	8	"	1	2	9	4
C12	Str.	12	1"□	35	8	"	—	—	—	—
C13	"	14	½"□	35	8	"	—	—	—	—
C14	"	6	"	4	9	Curtain Wall	—	—	—	—
C15	"	6	"	4	3	"	—	—	—	—

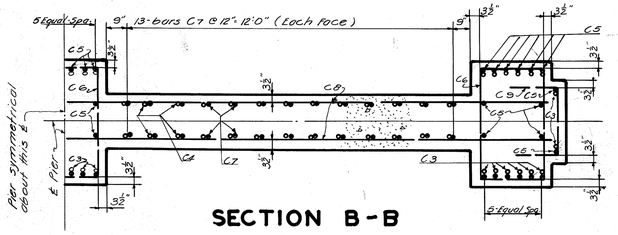


(All dimensions are out to out)



SECTIONAL PLAN A-A

(Showing Dimensions) (Showing Reinforcement)



SECTION B-B

DETAILS OF PIER N1

SHEET NO 10 OF 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

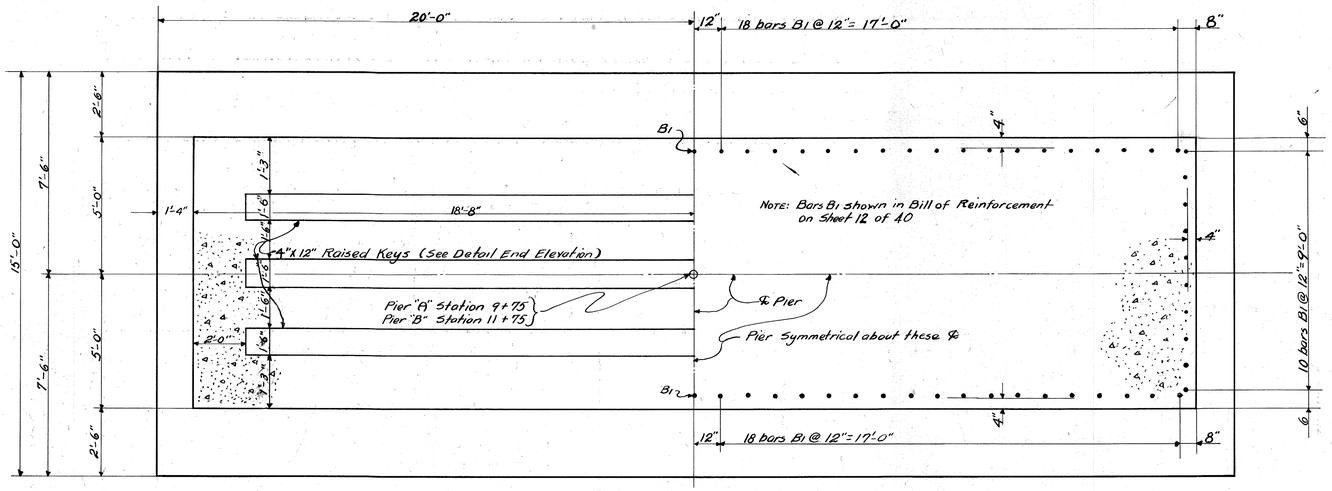
KENTUCKY RIVER BRIDGE
FRANKFORT

DRAWING No. 6742 | INDEX

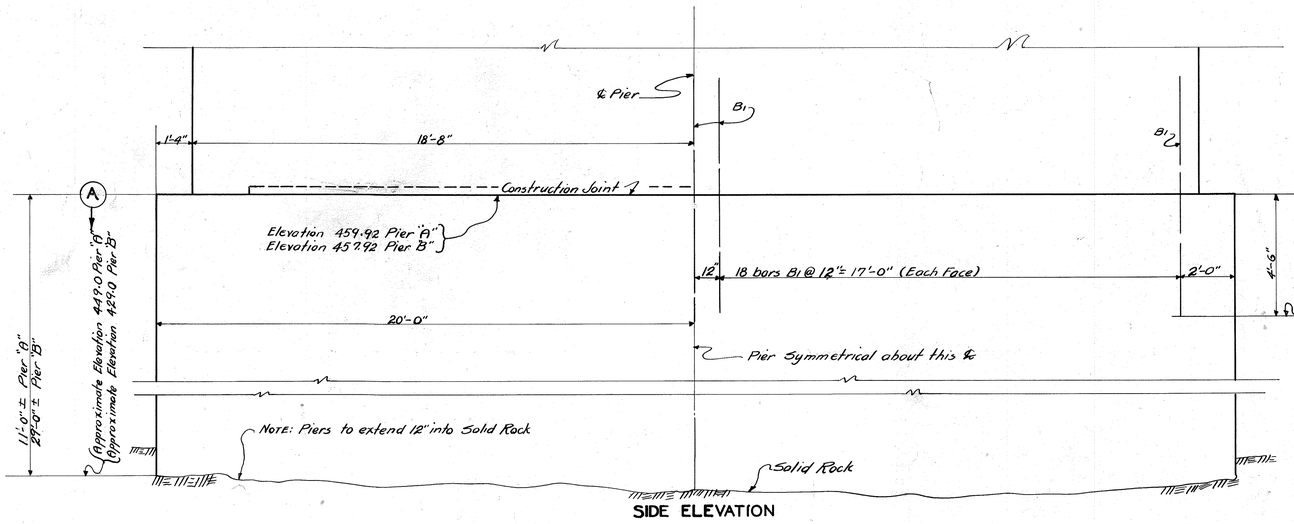
DESIGNED BY Plummer DATE
TRACED BY Singleton DATE 12-86
CHECKED BY Wedgeworth DATE 12/86
REVISED DATE
REVISED DATE
REVISED DATE

POST 2329—500—11-36

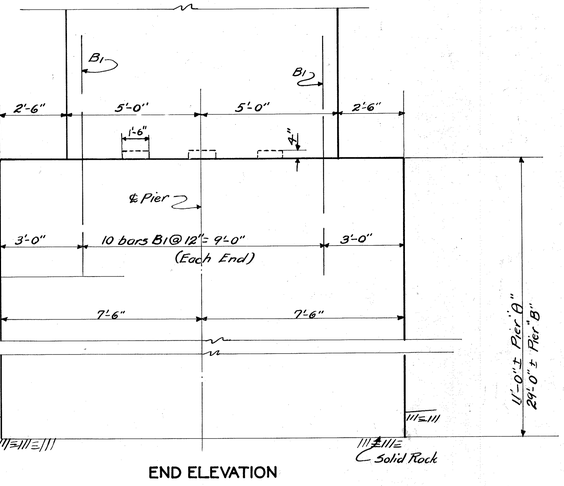
FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			



SECTIONAL PLAN A—A



SIDE ELEVATION



END ELEVATION

ESTIMATE OF QUANTITIES FOR BASES

	PIER "A"	PIER "B"	
Concrete Class "A"	244.3	644.4	Cu. Yds.

NOTE: Reinforcing Steel shown on this sheet carried in Bill of bars and Estimate of Quantities on Sheet 12 of 40.

Sheet 11 of 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

PIERS A AND B (BASES)

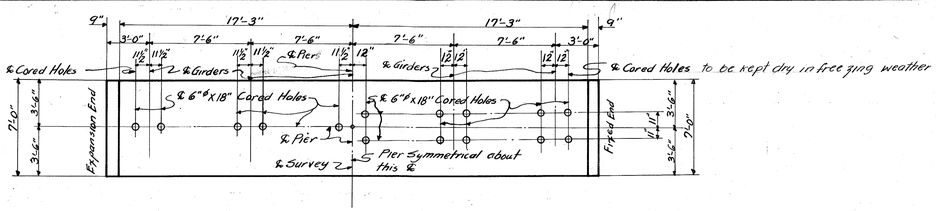
DRAWING No. 6742

INDEX

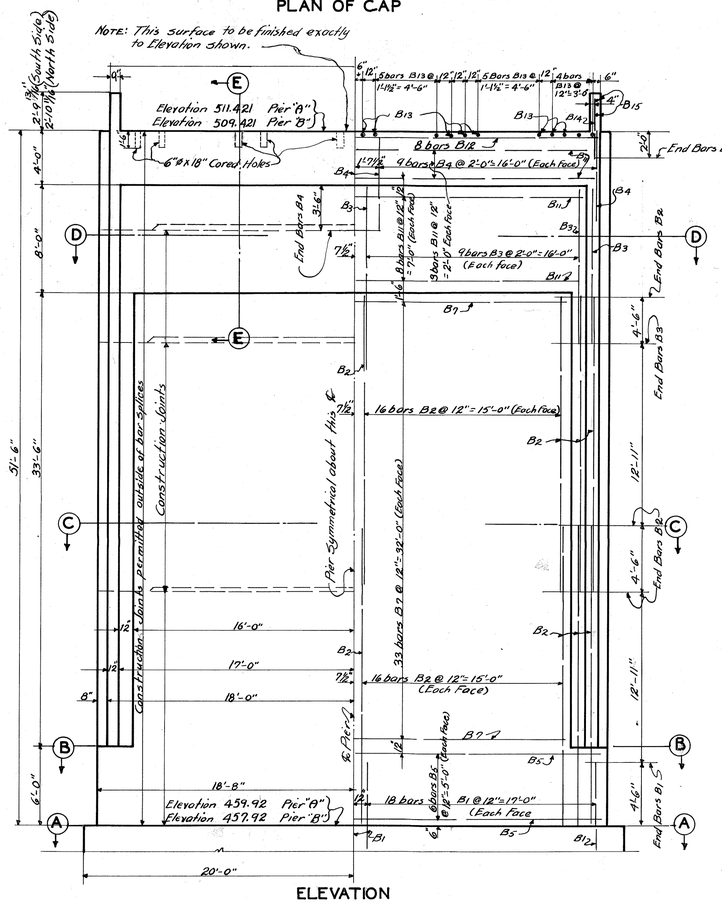
DRAWN	DATE	REVISED - Footing Elev. Pier A	DATE 2-4-37
TRACED	DATE 12-31-36	REVISED	DATE
CHECKED BY E. Vaughan Jr.	DATE 12/31/36	REVISED	DATE

POST 2329—500—11-36

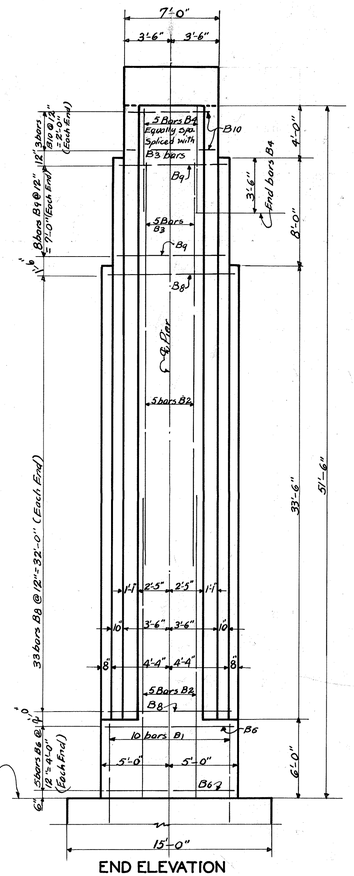
FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			



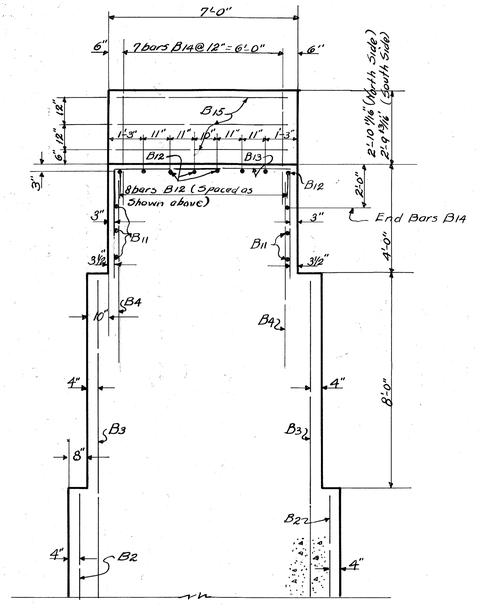
FOR PIER B PLAN OF CAP FOR PIER A



ELEVATION



END ELEVATION



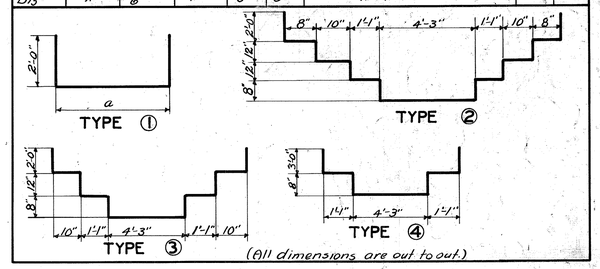
SECTION E—E

ESTIMATE OF QUANTITIES FOR SHAFTS

	PIER "A"	PIER "B"	
Concrete Class "A"	659.6	659.6	Cu. Yds.
Reinforcement	19700	19700	Lbs.

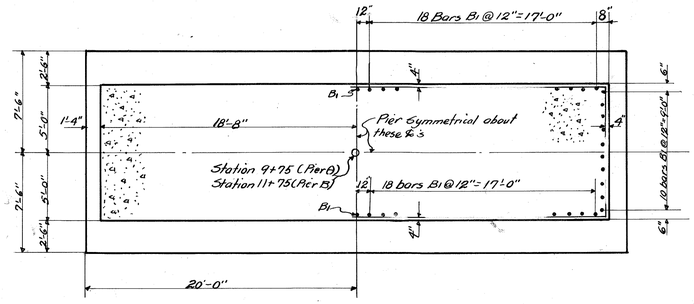
BILL AND TYPES OF REINFORCEMENT FOR ONE PIER

MARK	TYPE	NO.	SIZE	LENGTH FT.	LENGTH IN.	LOCATION	a FT.	a IN.
B1	Str.	94	1"ø	9	0	Pier Shaft	—	—
B2	"	164	"	21	11	"	—	—
B3	"	50	"	12	6	"	—	—
B4	"	48	"	7	0	"	—	—
B5	"	12	1½" D	36	9	"	—	—
B6	①	10	"	13	3	"	9	5
B7	Str.	66	"	31	5	"	—	—
B8	②	66	"	17	7	"	—	—
B9	③	16	"	14	7	"	—	—
B10	④	6	"	13	3	"	—	—
B11	Str.	22	"	33	5	"	—	—
B12	"	8	1"ø	35	8	Top of Pier	—	—
B13	①	34	1½" D	10	4	" " "	6	6
B14	Str.	14	"	4	7	" " "	—	—
B15	"	6	"	6	8	" " "	—	—

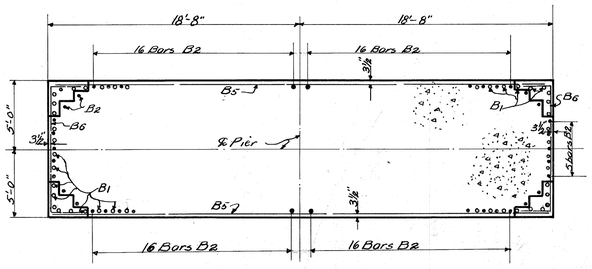


(All dimensions are out to out.)

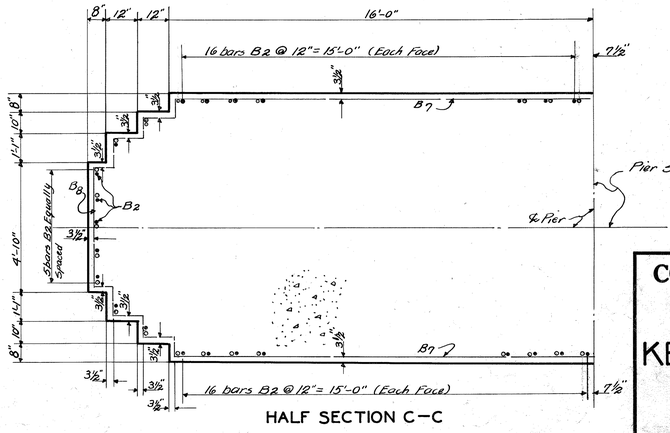
HALF SECTION D—D



SECTIONAL PLAN A—A



SECTIONAL PLAN B—B



HALF SECTION C—C

SHEET 12 OF 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

PIERS A AND B (SHAFTS)

DRAWING No. 6742 INDEX

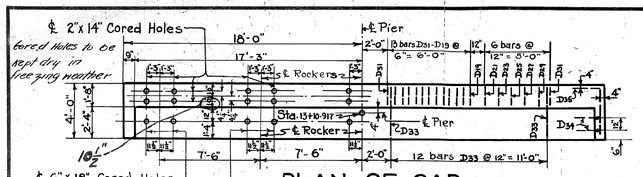
	DATE	REVISED	DATE	REVISED	DATE	REVISED
DESIGNED BY	P.J.					
TRACED BY	M.A.	DATE 2-16-36				
CHECKED BY	E.L.	DATE 2-18-36				

POST 2329—500—11-36

FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			

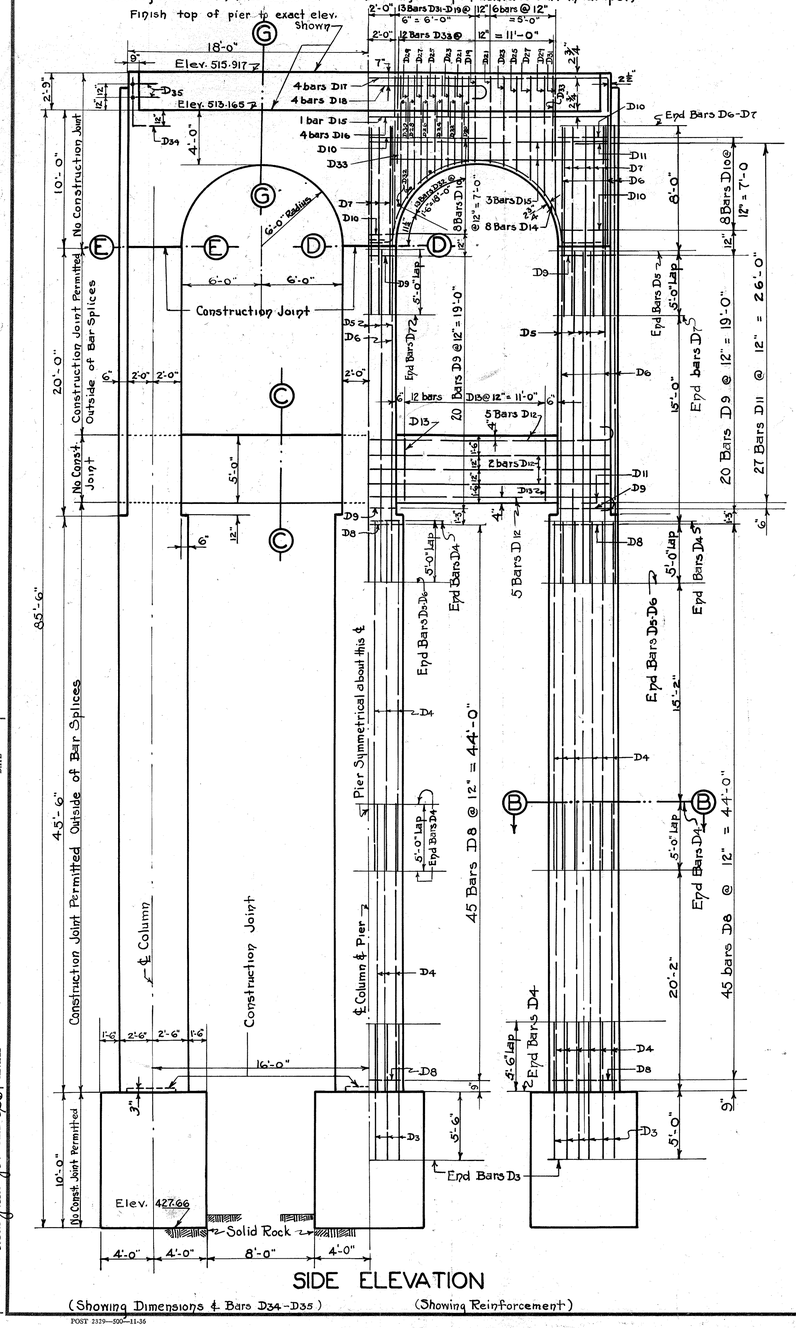
PLAN OF CAP

(Showing Dimensions) & (Cored Holes)



PLAN OF CAP

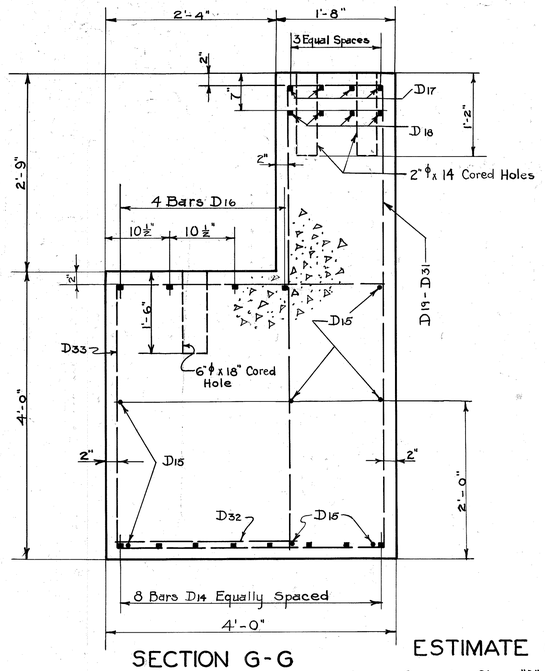
(Showing Stirrups & Reinforcement in Parapet)



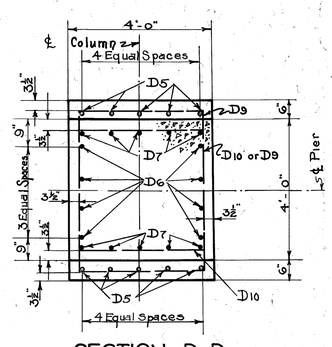
SIDE ELEVATION

(Showing Dimensions & Bars D34-D35) (Showing Reinforcement)

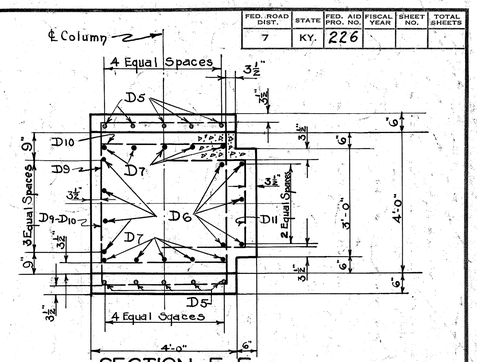
END ELEVATION



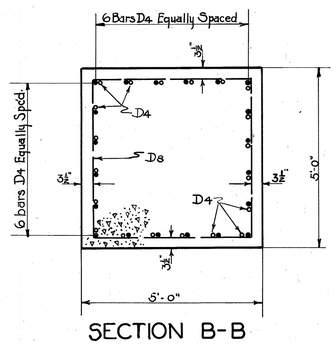
SECTION G-G



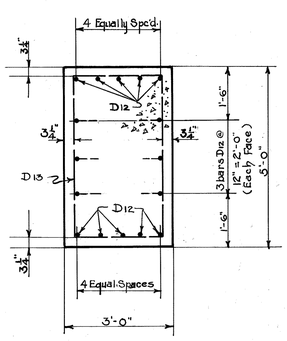
SECTION D-D



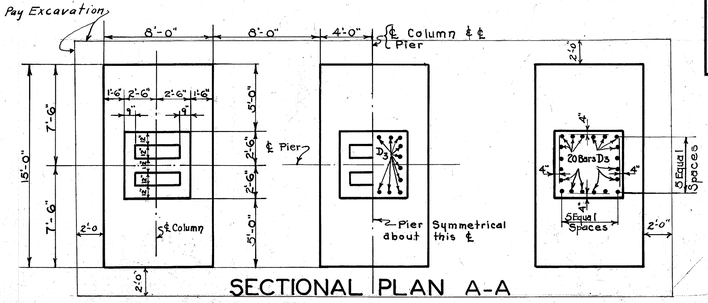
SECTION E-E



SECTION B-B



SECTION C-C



SECTIONAL PLAN A-A

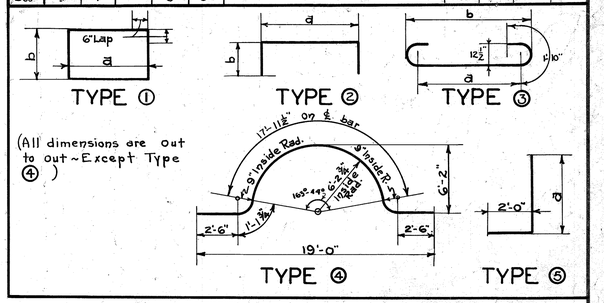
(Showing Dimensions & Keyways) (Showing Reinforcement)

ESTIMATE OF QUANTITIES

Concrete Class "A"	364.1 Cu.yds
Reinforcement	44080 lbs.

BILL AND TYPES OF REINFORCEMENT

MARK	TYPE	NO	SIZE	LENGTH Ft.	LENGTH In.	LOCATION	a Ft.	a In.	b Ft.	b In.
D1	①					NOT USED				
D2	"					" "				
D3	Str.	60	1¼" □	11	0	DOWELS-FOOTING INTO COLUMNS	—	—	—	—
D4	"	120	"	25	2	COLUMNS	—	—	—	—
D5	"	30	"	25	0	"	—	—	—	—
D6	"	26	"	33	0	"	—	—	—	—
D7	"	30	"	13	0	"	—	—	—	—
D8	①	135	½" □	18	4	"	4	5	4	5
D9	"	60	"	16	4	"	4	5	3	5
D10	"	24	"	14	4	"	3	5	3	5
D11	②	81	"	6	3	"	2	5	2	0
D12	③	16	1⅛" □	37	8	STRUT	34	0	35	0½
D13	①	24	⅞" ϕ	14	6	"	4	5½	2	5½
D14	④	16	1⅛" □	25	3	CAP	—	—	—	—
D15	Str.	7	⅞" ϕ	35	0	"	—	—	—	—
D16	②	4	1⅛" □	54	9	"	35	7	9	9
D17	"	4	1¼" □	60	3	"	35	7	12	6
D18	⑤	4	"	19	8	"	16	0	17	0½
D19	①	2	⅞" ϕ	16	2	"	6	5	1	4
D20	"	2	"	16	3	"	6	5¼	1	4
D21	"	4	"	16	5	"	6	6¼	1	4
D22	"	2	"	16	7	"	6	7½	1	4
D23	"	4	"	16	11	"	6	9¼	1	4
D24	"	2	"	17	3	"	6	11¼	1	4
D25	"	4	"	17	9	"	7	2½	1	4
D26	"	2	"	18	5	"	7	6¾	1	4
D27	"	4	"	19	2	"	7	10¾	1	4
D28	"	2	"	20	1	"	8	4½	1	4
D29	"	4	"	21	4	"	8	11¾	1	4
D30	"	2	"	22	11	"	9	9½	1	4
D31	"	4	"	26	3	"	11	5½	1	4
D32	Str.	26	"	2	8	"	—	—	—	—
D33	①	24	¾" ϕ	15	4	"	3	8	3	8
D34	⑤	4	½" □	5	5	PARAPET	3	6	—	—
D35	"	4	"	5	5	"	3	6	—	—



Sheet 13 of 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

DRAWING No. 6742 INDEX

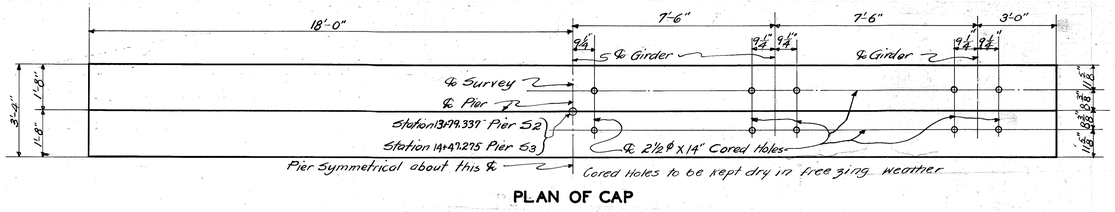
DETAILS OF PIER S1

DESIGNED BY Waterman DATE
TRACED BY M.S.Mankin DATE 4-9-36
CHECKED BY E.Vaughan Jr. DATE 4-9-36

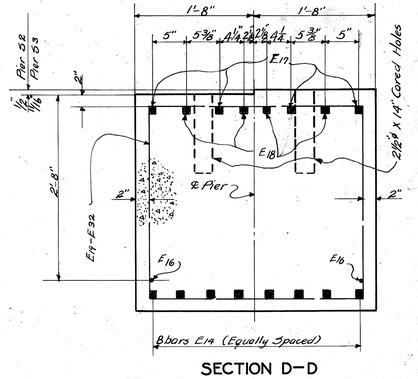
REVISED Horiz. clearance dimension at Pier - S1 DATE 2-5-37
REVISED DATE
REVISED DATE

POST 2329—500—11-35

FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			



PLAN OF CAP



SECTION D–D

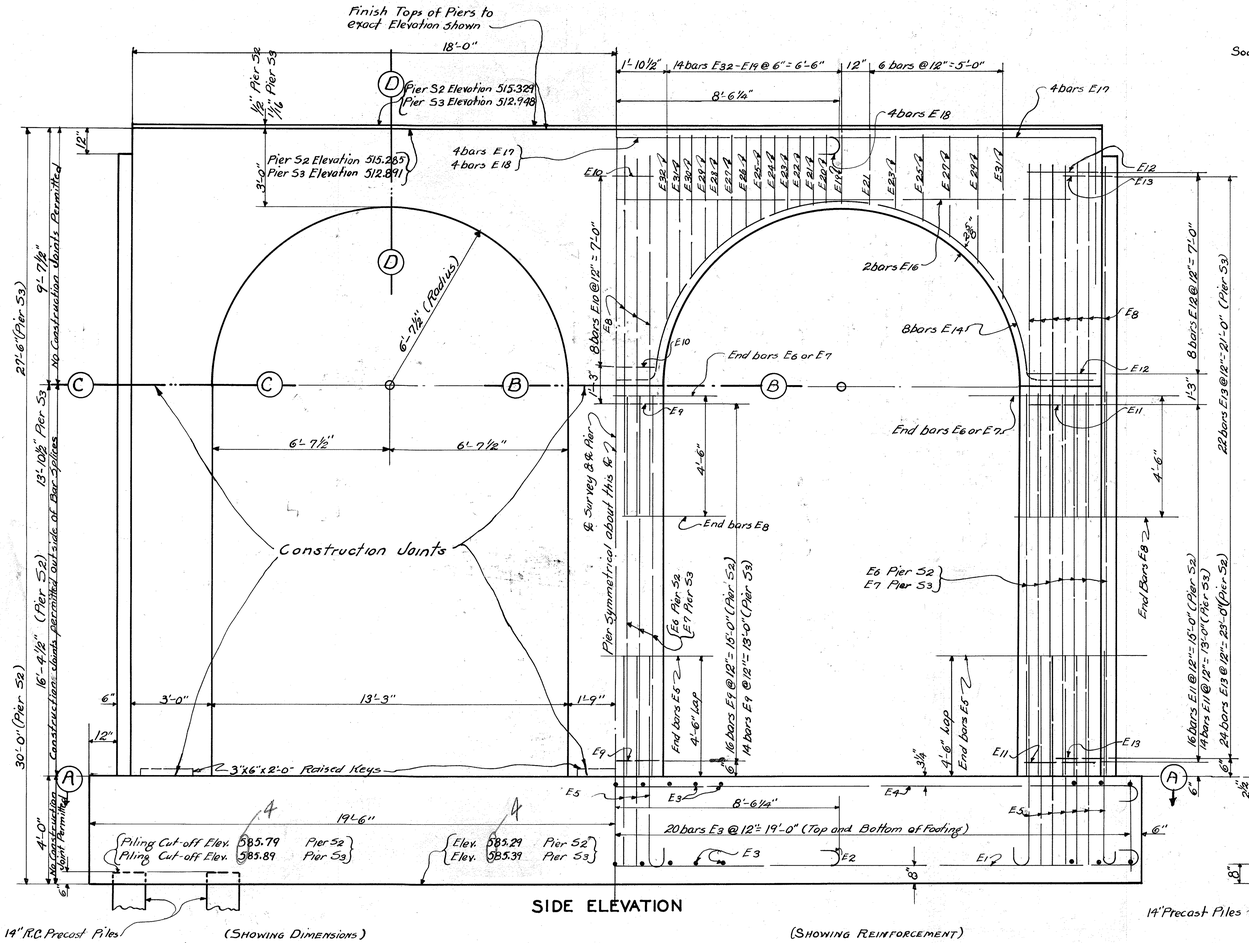
ESTIMATE OF QUANTITIES

FOR PIER S2

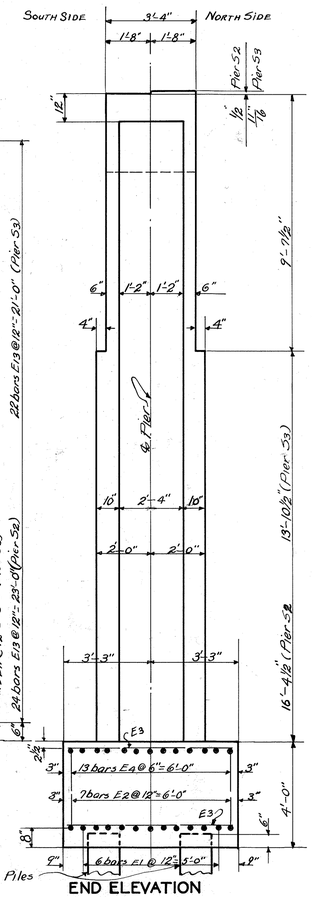
Concrete, Class "A"	88.1 Cu.Yds.
Reinforcement	19540 Lbs.
22-14" R.C. Precast Piles	1100 Lin.Ft.

FOR PIER S3

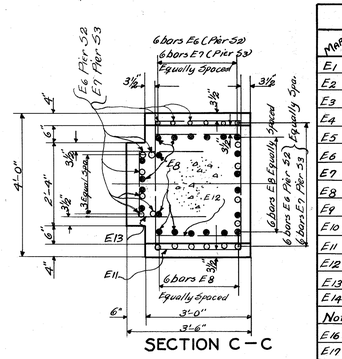
Concrete Class "A"	84.4 Cu.Yds.
Reinforcement	16920 Lbs.
22-14" R.C. Precast Piles	1100 Lin.Ft.



SIDE ELEVATION



END ELEVATION

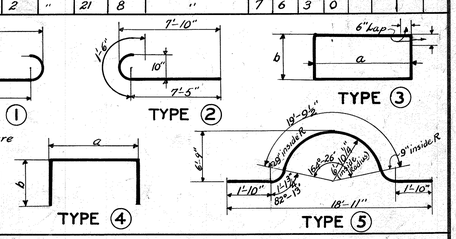


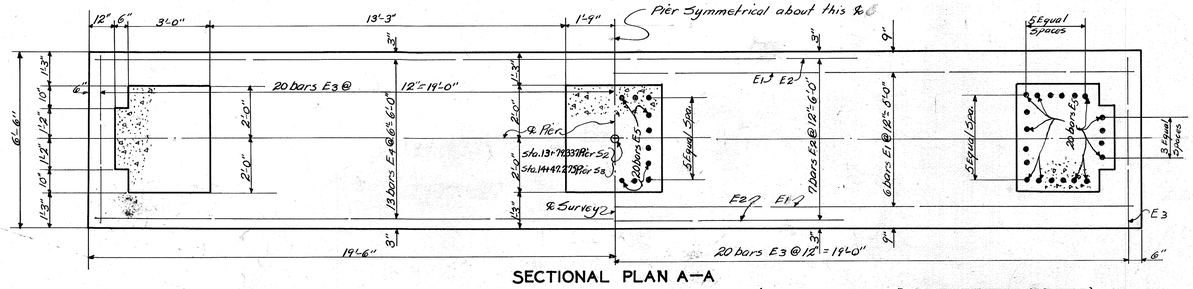
SECTION C–C

SECTION B–B

BILL AND TYPES OF REINFORCEMENT

Mark	Type	No. Per S2	No. Per S3	Size	Length Ft.	Length In.	Location	a Ft.	a In.	b Ft.	b In.	c Ft.	c In.	d Ft.	d In.
E1	(1)	6	6	1½"□	41	3	Footing	37	7	1	10	1	0½	38	7½
E2	"	7	7	"	19	8	"	16	0	1	10	1	0½	17	0½
E3	Str.	78	78	⅜"ø	6	2	"	–	–	–	–	–	–	–	–
E4	(1)	13	13	1"□	40	8	"	37	8	1	6	0	10	38	6
E5	(2)	60	60	"	8	11	Dowels Footing into Col.	–	–	–	–	–	–	–	–
E6	Str.	64	—	"	16	3	Column	–	–	–	–	–	–	–	–
E7	"	—	64	"	13	9	"	–	–	–	–	–	–	–	–
E8	"	64	64	"	13	0	"	–	–	–	–	–	–	–	–
E9	(3)	16	14	½"□	13	4	"	3	5	2	11	–	–	–	–
E10	"	8	8	"	12	0	"	2	9	2	11	–	–	–	–
E11	"	32	28	"	12	4	"	3	5	2	5	–	–	–	–
E12	"	16	16	"	11	0	"	2	9	2	5	–	–	–	–
E13	(4)	48	44	"	4	7	"	1	9	1	6	–	–	–	–
E14	(5)	16	16	1⅛"□	25	9	Cap	–	–	–	–	–	–	–	–
Not Used		–	–	–	–	–	———	–	–	–	–	–	–	–	–
E16	Str.	2	2	½"□	32	0	Cap	–	–	–	–	–	–	–	–
E17	(4)	4	4	1¼"□	47	0	"	35	4	6	0	–	–	–	–
E18	(1)	4	4	"	19	8	"	16	0	1	0	1	0½	17	0½
E19	(3)	2	2	⅝"ø	12	0	"	2	8	3	0	–	–	–	–
E20	"	2	2	"	12	1	"	2	8¼	3	0	–	–	–	–
E21	"	4	4	"	12	2	"	2	8⅜	3	0	–	–	–	–
E22	"	2	2	"	12	4	"	2	9⅜	3	0	–	–	–	–
E23	"	4	4	"	12	7	"	2	11½	3	0	–	–	–	–
E24	"	2	2	"	12	11	"	3	1⅝	3	0	–	–	–	–
E25	"	4	4	"	13	5	"	3	4½	3	0	–	–	–	–
E26	"	2	2	"	13	11	"	3	7½	3	0	–	–	–	–
E27	"	4	4	"	14	7	"	3	11½	3	0	–	–	–	–
E28	"	2	2	"	15	5	"	4	4⅛	3	0	–	–	–	–
E29	"	4	4	"	16	5	"	4	10⅛	3	0	–	–	–	–
E30	"	2	2	"	17	7	"	5	5½	3	0	–	–	–	–
E31	"	4	4	"	19	2	"	6	3	3	0				
E32	"	2	2	"	21	8	"	7	6	3	0				

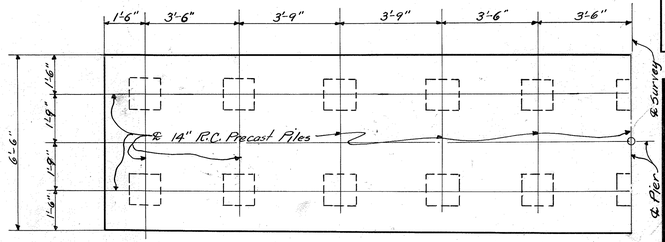




(Showing Dimensions and Steel in Top of Footing)

SECTIONAL PLAN A–A

(Showing Steel in Bottom of Footing & Dowels)



PILING PLAN

(22 Piles Required for Each Pier)

PIERS S2 & S3

DESIGNED BY Mentzer DATE
TRACED BY Moore DATE 12-14-36
CHECKED BY Claughton DATE 12-16-36
REVISED
REVISED
REVISED

SHEET 14 OF 40

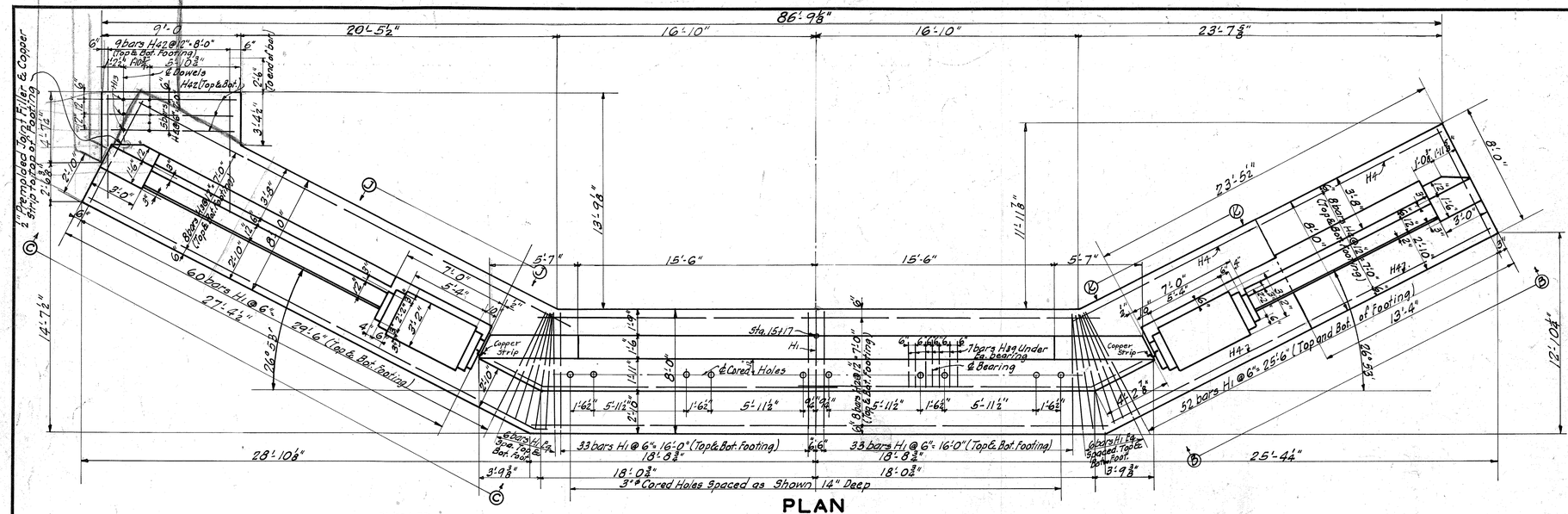
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

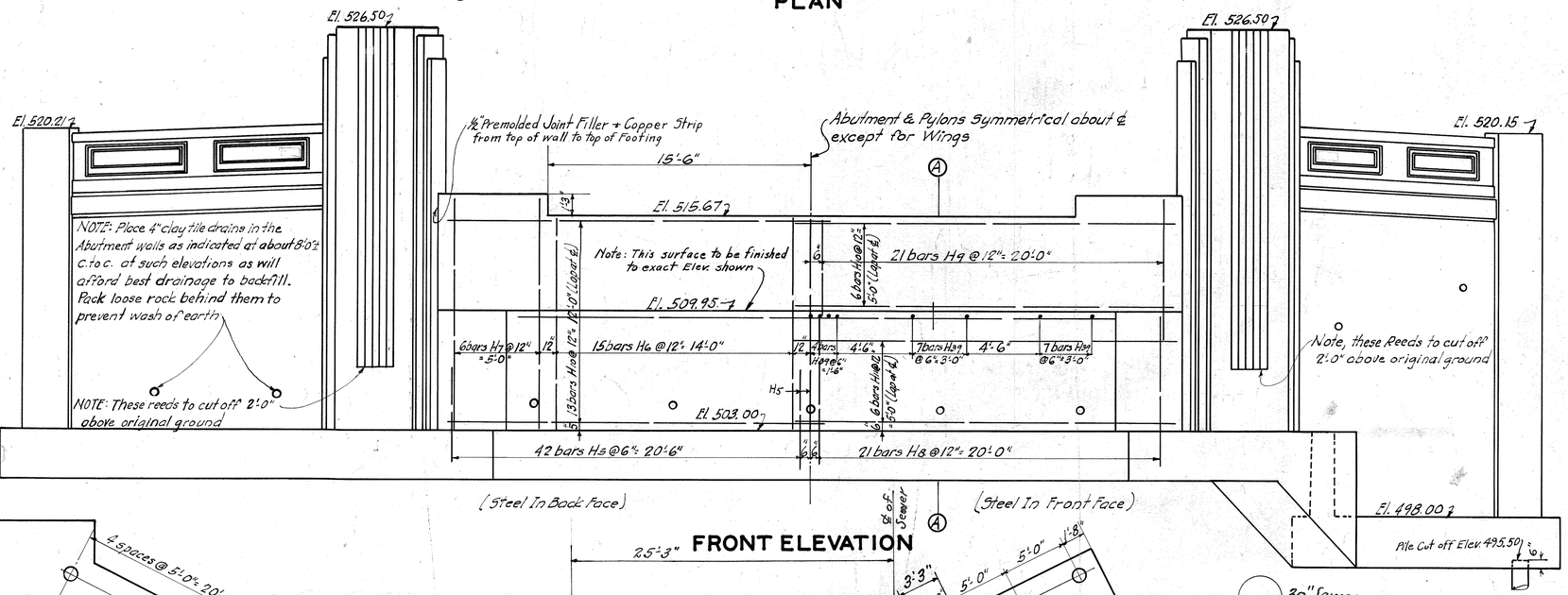
DRAWING No. 6742 INDEX

DETAILS OF

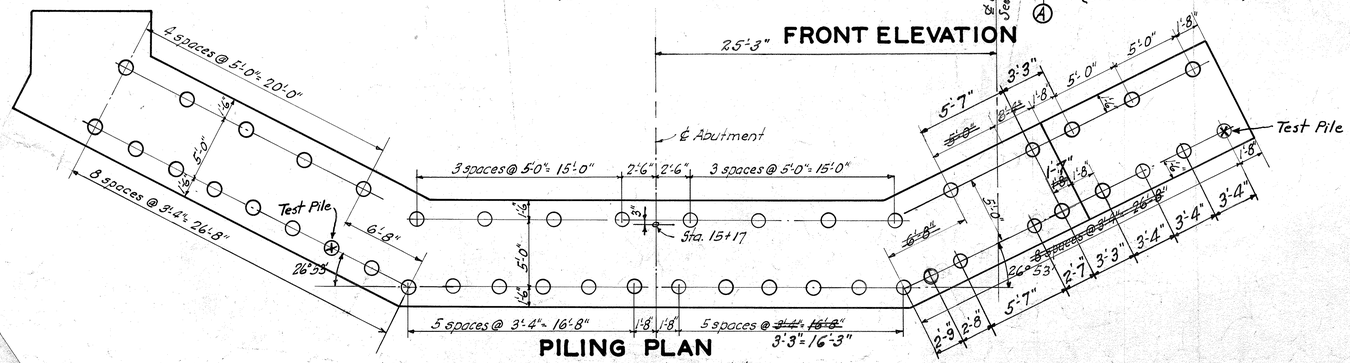
FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			



PLAN



FRONT ELEVATION

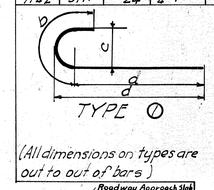


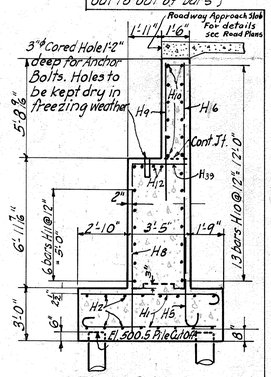
PILING PLAN

(For details of 14" Precast Concrete Piles see Std. Drwg. No. P2.)

BILL AND TYPES OF REINFORCEMENT

MARK	TYPE	NO.	SIZE	LENGTH Ft.	LENGTH In.	LOCATION	a Ft.	a In.	b Ft.	b In.	c Ft.	c In.	d Ft.	d In.
H1	①	382	½" ø	8	7	Footing	7	5	1	2	0	7½	7	8½
H2	Str.	16	1" ø	38	0	"	–	–	–	–	–	–	–	–
H3	"	16	"	32	0	"	–	–	–	–	–	–	–	–
H4	"	32	"	13	6	"	–	–	–	–	–	–	–	–
H5	①	189	⅝" ø	6	8	Back Face Dowels	5	6	1	2	0	7½	5	9⅜
H6	Str.	31	"	12	6	End Wall (Back Face)	–	–	–	–	–	–	–	–
H7	"	12	"	13	9	" " " "	–	–	–	–	–	–	–	–
H8	"	42	½" ø	9	0	" " (Front Face)	–	–	–	–	–	–	–	–
H9	"	42	"	8	0	Parapet Wall (Front Face)	–	–	–	–	–	–	–	–
H10	"	38	"	22	0	End Wall (Lap bars at ℄)	–	–	–	–	–	–	–	–
H11	②	12	"	23	0	" " " " "	–	–	–	–	–	–	–	–
H12	Str.	4	⅜" ø	35	0	" " Under Bridge Seat	–	–	–	–	–	–	–	–
H13	"	55	½" ø	4	0	Front Face Dowels (Wings)	–	–	–	–	–	–	–	–
H14	"	12	"	23	3	" " Pylons	–	–	–	–	–	–	–	–
H15	"	4	"	21	6	" " " "	–	–	–	–	–	–	–	–
H16	"	16	¾" ø	13	6	Back Face Pylons	–	–	–	–	–	–	–	–
H17	"	16	½" ø	10	0	" " " "	–	–	–	–	–	–	–	–
H18	③	28	"	20	0	Hoops in Pylons	–	–	–	–	–	–	–	–
H19	④	14	"	17	11	"	–	–	–	–	–	–	–	–
H20	⑤	4	"	15	9	"	2	6½	5	0	–	–	–	–
H21	Str.	17	⅝" ø	12	9	East Wing Wall (Back Face)	–	–	–	–	–	–	–	–
H22	"	17	½" ø	13	0	" " " (front ")	–	–	–	–	–	–	–	–
H23	"	6	¾" ø	17	0	" " (End Post)	–	–	–	–	–	–	–	–
H24	"	2	"	12	10	" " " "	–	–	–	–	–	–	–	–
H25	"	26	½" ø	22	6	" " (Both Faces)	–	–	–	–	–	–	–	–
H26	"	10	⅜" ø	17	9	West Wing Wall (Back Face)	–	–	–	–	–	–	–	–
H27	"	3	"	13	6	" " " "	–	–	–	–	–	–	–	–
H28	"	10	½" ø	18	0	" " (Front Face)	–	–	–	–	–	–	–	–
H29	"	3	"	13	9	" " " "	–	–	–	–	–	–	–	–
H30	"	6	¾" ø	22	0	West Wing (End Post)	–	–	–	–	–	–	–	–
H31	"	2	"	17	9	" " "	–	–	–	–	–	–	–	–
H32	"	10	½" ø	13	0	" " (Both Faces)	–	–	–	–	–	–	–	–
H33	"	24	"	18	6	" " " "	–	–	–	–	–	–	–	–
H34	"	7	"	17	0	East Wing (Handrail Panel)	–	–	–	–	–	–	–	–
H35	"	7	"	13	2	West " " "	–	–	–	–	–	–	–	–
H36	⑥	16	"	4	8	Curb into Plinth	–	–	–	–	–	–	–	–
H37	⑦	30	"	9	2	" " Rail	–	–	–	–	–	–	–	–
H38	⑧	21	"	1	1	Top of Rail	–	–	–	–	–	–	–	–
H39	Str.	35	¾" ø	3	2	Under Bearing Plate	–	–	–	–	–	–	–	–
H40	⑨	29	½" ø	9	7	Handrail Posts	–	–	–	–	–	–	–	–
H41	⑤	8	½" ø	8	4	" "	1	2	2	8	–	–	–	–
H42	Str.	24	½" ø	8	9	East Wing Reding Into Ret. Wall	–	–	–	–	–	–	–	–





ESTIMATE OF QUANTITIES

Concrete, Class "A"		226.7 Cu. Yds.
Reinforcement		17,890 Lbs.
46-14" Precast Con. Piles	(Appr.)	2,300 Lin. Ft.

SHEET 15 OF 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

DETAILS OF ABUTMENT NO. 2
(2 Sheets)

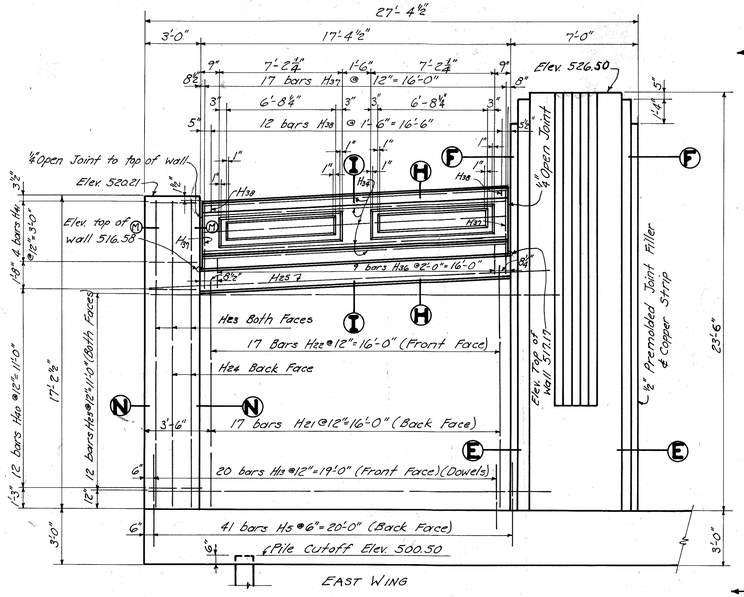
DRAWING No.	INDEX
6742	

Piling for Side of Abut. No. 2 in order to clear 30" Sewer

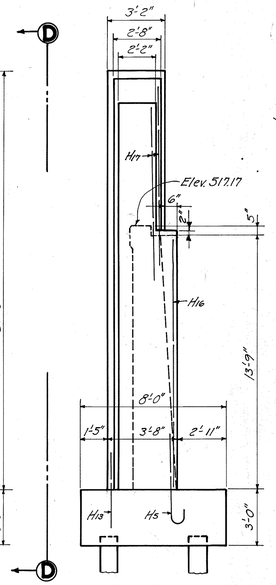
REVISED	DATE	REVISED	DATE
	12-36		12-36
	12-36		12-36

POST 2320—500—12-36

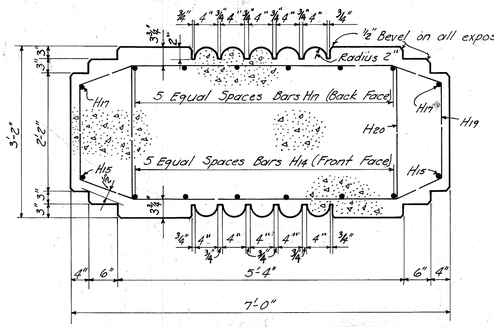
FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			



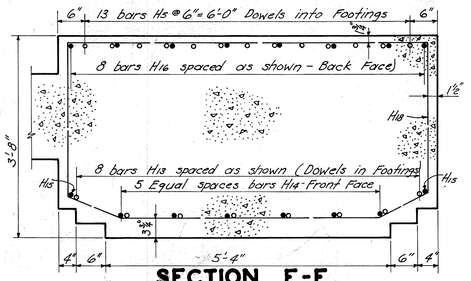
ELEVATION C-C



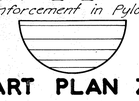
ELEVATION D-D



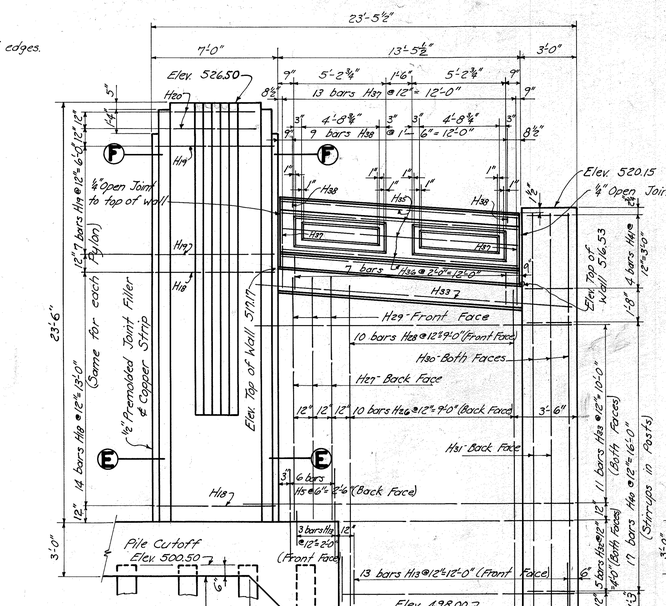
SECTION F-F
(Showing Reinforcement in Pylons)



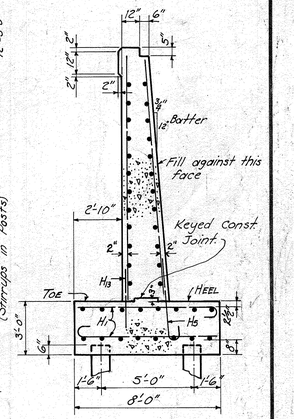
SECTION E-E
(Showing Reinforcement in Pylons)



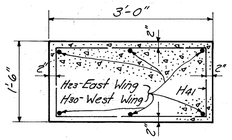
PART PLAN Z-Z



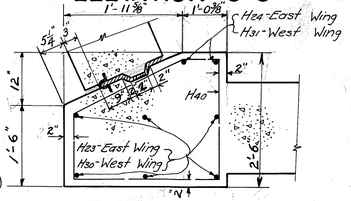
ELEVATION B-B



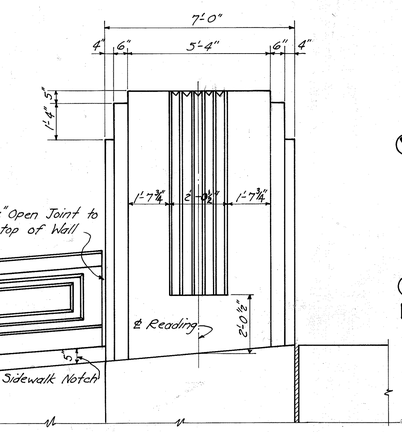
TYPICAL WING SECTION
(Handrail : Removed)



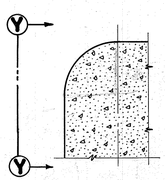
SECTION M-M
(Showing Reinforcement in Posts)



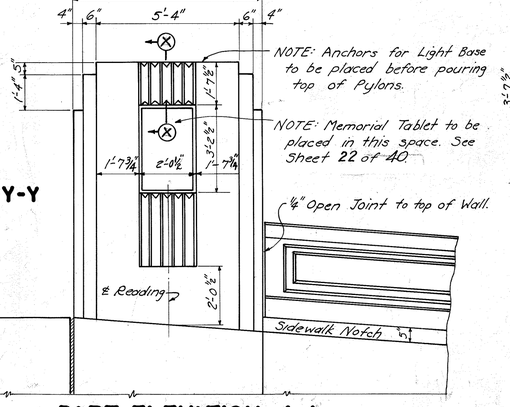
SECTION N-N
(Showing Reinforcement in Posts & Keyway in East Wing Post)



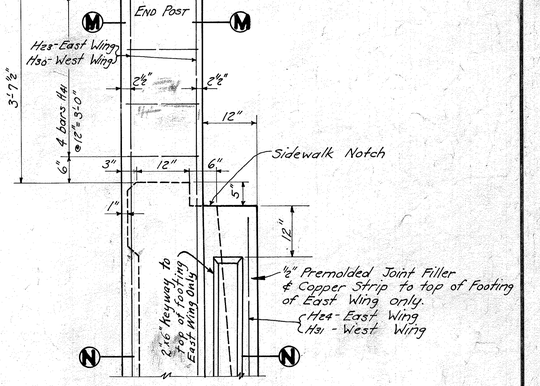
PART ELEVATION K-K



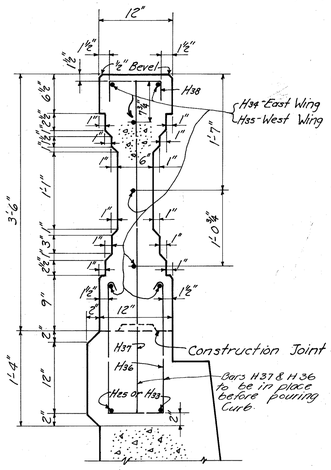
PART SECT. X-X PART ELEV. Y-Y
DETAILS OF REEDS



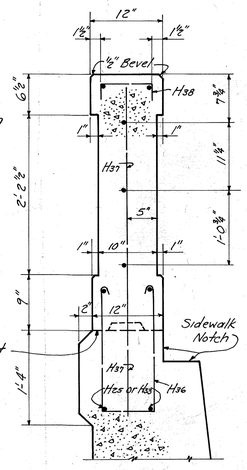
PART ELEVATION J-J



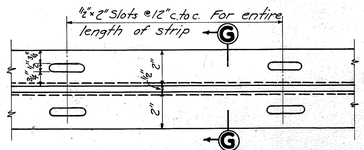
PART END ELEVATION
(Showing Reinforcement in Posts)



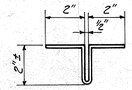
PART SECTION H-H



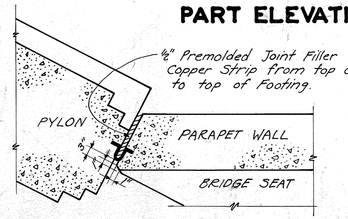
PART SECTION I-I



DETAILS OF COPPER STRIP
9" Width of 24 oz. Copper Strip 14'-0" long (3 Required)



SECTION G-G



PART SECTION THRU EXP. JOINT
(Showing Copper Strip & Premolded Joint Filler)

DESIGNED BY E.R.S. DATE 12-36
TRACED BY J.S.Stark, Jr. DATE 12-36
CHECKED BY Compton DATE 2-37

REVISED DATE
REVISED DATE
REVISED DATE

Sheet 16 of 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

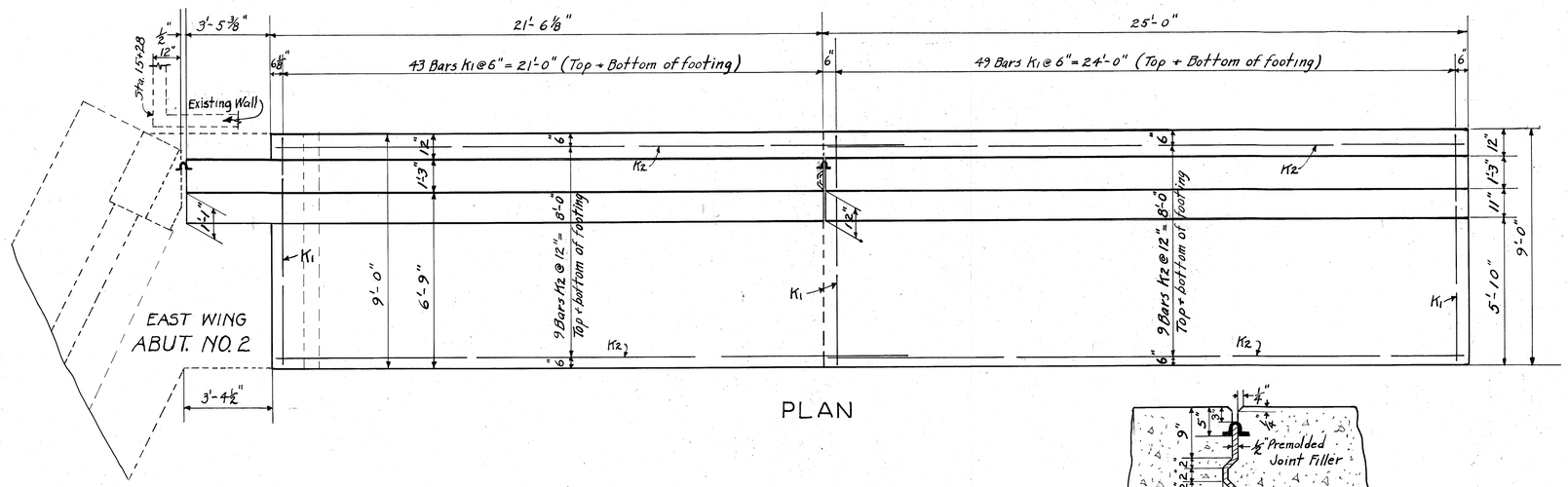
DRAWING No. 6742

INDEX

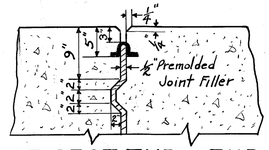
DETAILS OF ABUTMENT NO. 2 (2 Sheets)

POST 2329—500—11-36

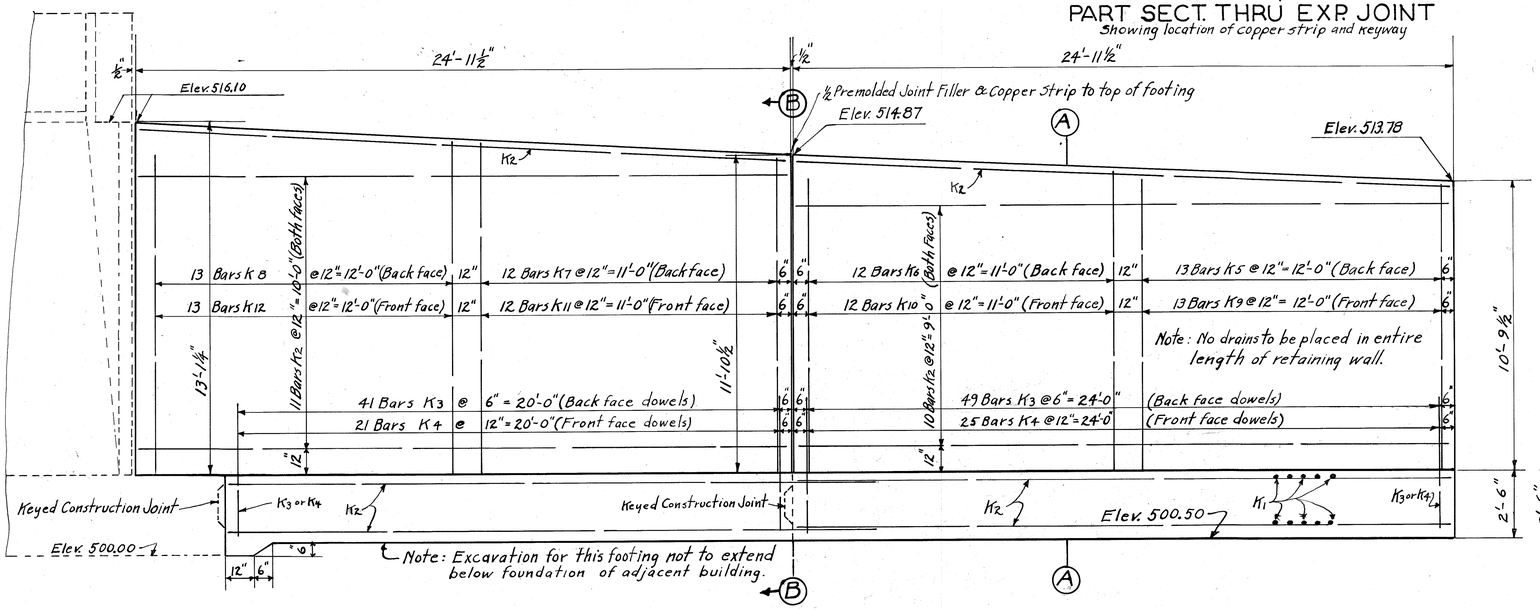
FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			



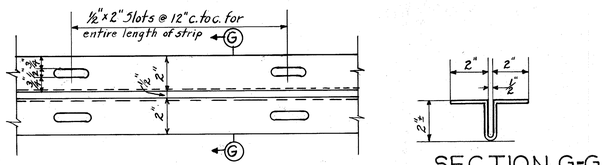
PLAN



PART SECT. THRU EXP. JOINT
Showing location of copper strip and keyway



BACK ELEVATION



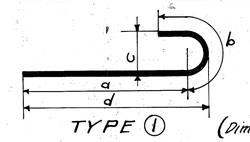
DETAILS OF COPPER STRIP
9" Width of 24 oz. Copper Strip 12'-0" Long (One required)

SECTION A-A
(Showing Reinforcement)

SECTION B-B
(Showing Keyway at Exp. Joint)

BILL AND TYPES OF REINFORCEMENT

MARK	TYPE	NO	SIZE	LENGTH FT	LENGTH IN	LOCATION	a FT	a IN	b FT	b IN	c FT	c IN	d FT	d IN
K1	①	184	½" □	9	4	Footing	8	6	0	10	0	5	8	8½
K2	Str.	82	½" ϕ	24	9	Footing + Walls	–	–	–	–	–	–	–	–
K3	①	90	⅝" ϕ	5	10	Footing into Wall	4	10	1	0	0	6¼	5	1⅛
K4	Str.	46	½" ϕ	4	0	" " "	–	–	–	–	–	–	–	–
K5	"	13	⅝" ϕ	10	7	Back Face of Wall	–	–	–	–	–	–	–	–
K6	"	12	"	11	4	"	–	–	–	–	–	–	–	–
K7	"	12	"	11	9	"	–	–	–	–	–	–	–	–
K8	"	13	"	12	4	"	–	–	–	–	–	–	–	–
K9	"	13	½" ϕ	10	7	Front Face of Wall	–	–	–	–	–	–	–	–
K10	"	12	"	11	4	"	–	–	–	–	–	–	–	–
K11	"	12	"	11	9	"	–	–	–	–	–	–	–	–
K12	"	13	"	12	4	"	–	–	–	–	–	–	–	–



TYPE ①

(Dimensions on type are out to out of bar)

ESTIMATE OF QUANTITIES

Concrete Class "A"	77.5 Cu. Yds.
Reinforcement	4470 Lbs.

SHEET NO 17 OF 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

DRAWING No. 6742

INDEX

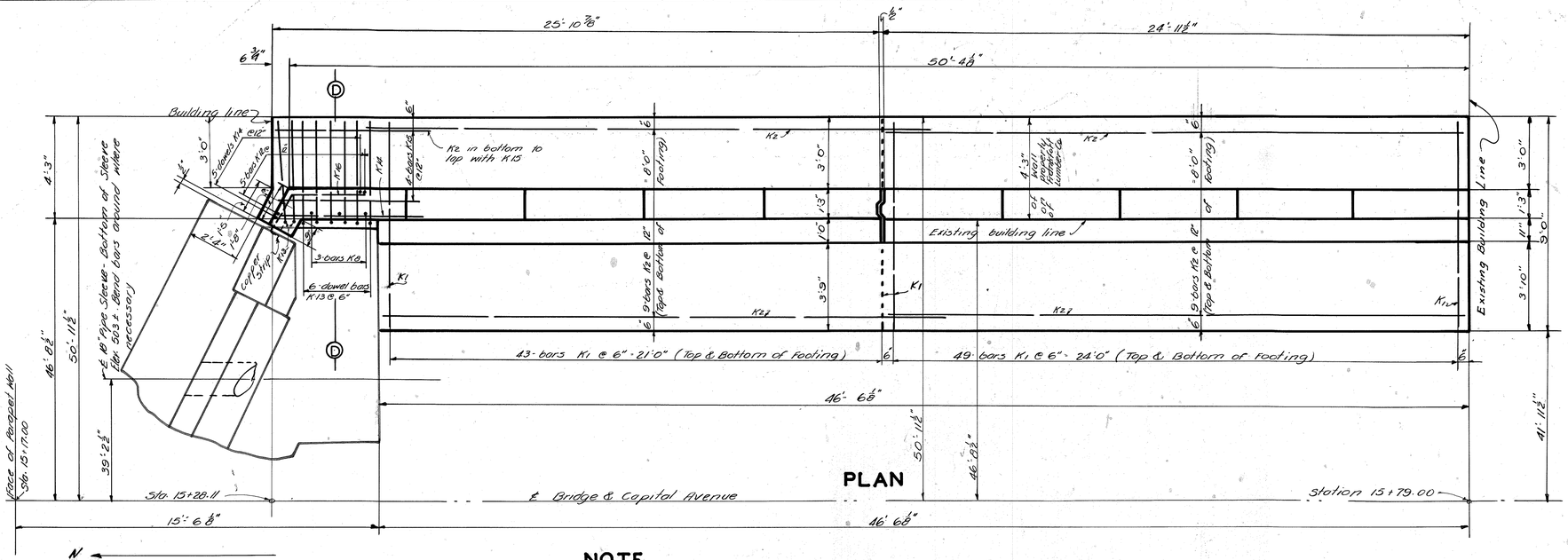
DETAILS OF RETAINING WALL SECTION "C"

DESIGNED BY E.B.S. DATE 12/36
TRACED BY E.B.S. DATE
CHECKED BY Eng. Bureau DATE 12-36

REVISED DATE
REVISED DATE
REVISED DATE

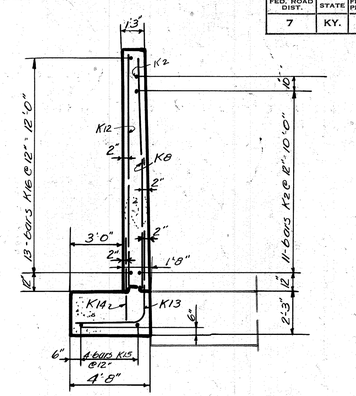
POST 2329—500—11-36

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

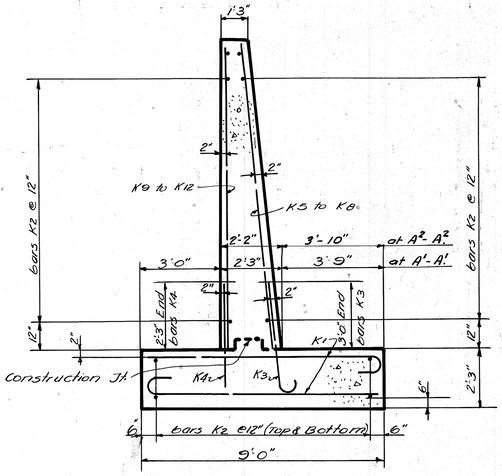


PLAN

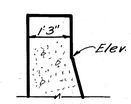
NOTE for details of Retaining Wall not shown on this sheet see original sheet No. 17 of 40



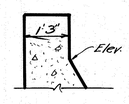
SECTION D-D



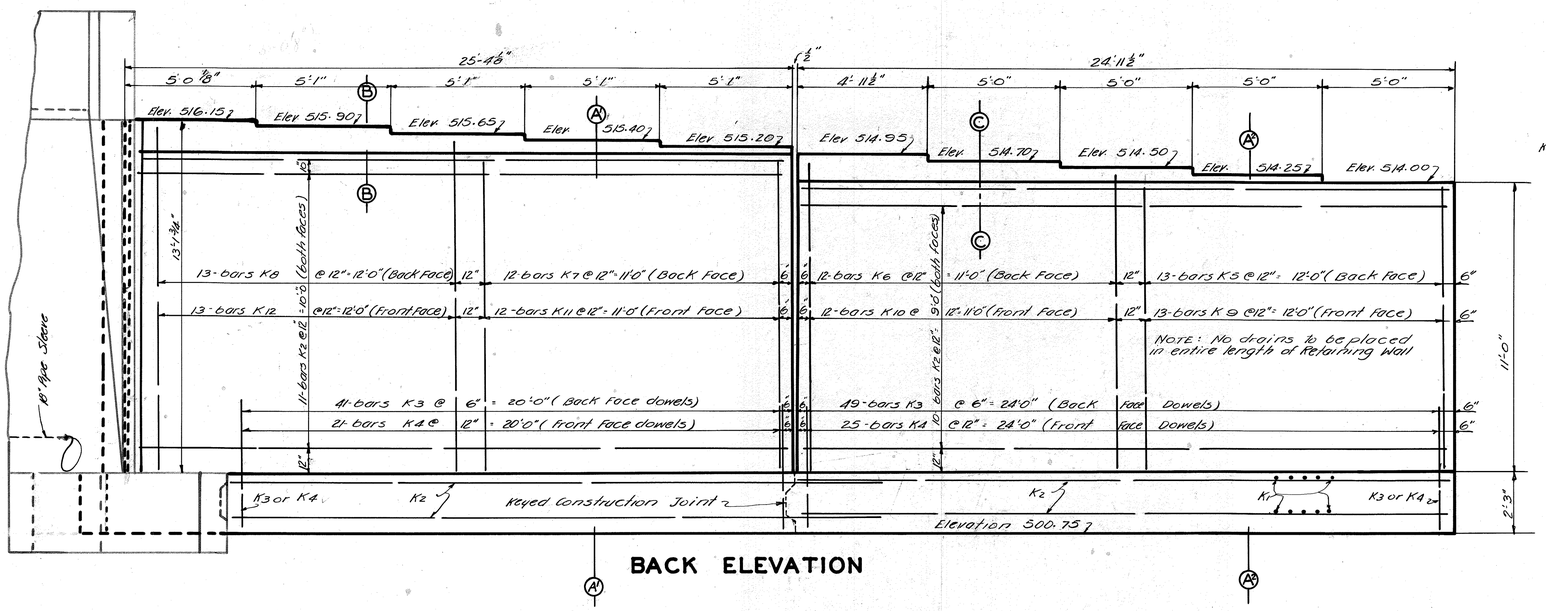
SECTION A-A



SECTION B-B
(Showing Point where batter begins)



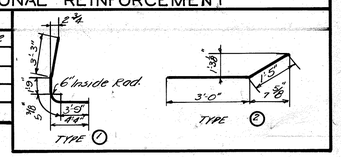
SECTION C-C



BACK ELEVATION

BILL AND TYPES OF ADDITIONAL REINFORCEMENT

MARK	TYPE	NO.	SIZE	LENGTH FT.	LENGTH IN.	LOCATION
K12	Str.	2	1/2"ø	12	4	Wall Front Face
K13	①	8	3/4"ø	9	2	Dowels Back "
K14	Str.	5	1/2"ø	4	0	" Front "
K15	"	4	"	6	6	Footing
K16	②	16	'	4	5	Wall Front Face



REVISED ESTIMATE OF QUANTITIES

Concrete Class "A"	74.5	cu yds
Reinforcement	4680	lbs

REVISION TO RETAINING WALL SECTION "C"

SHEET 17 A of 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

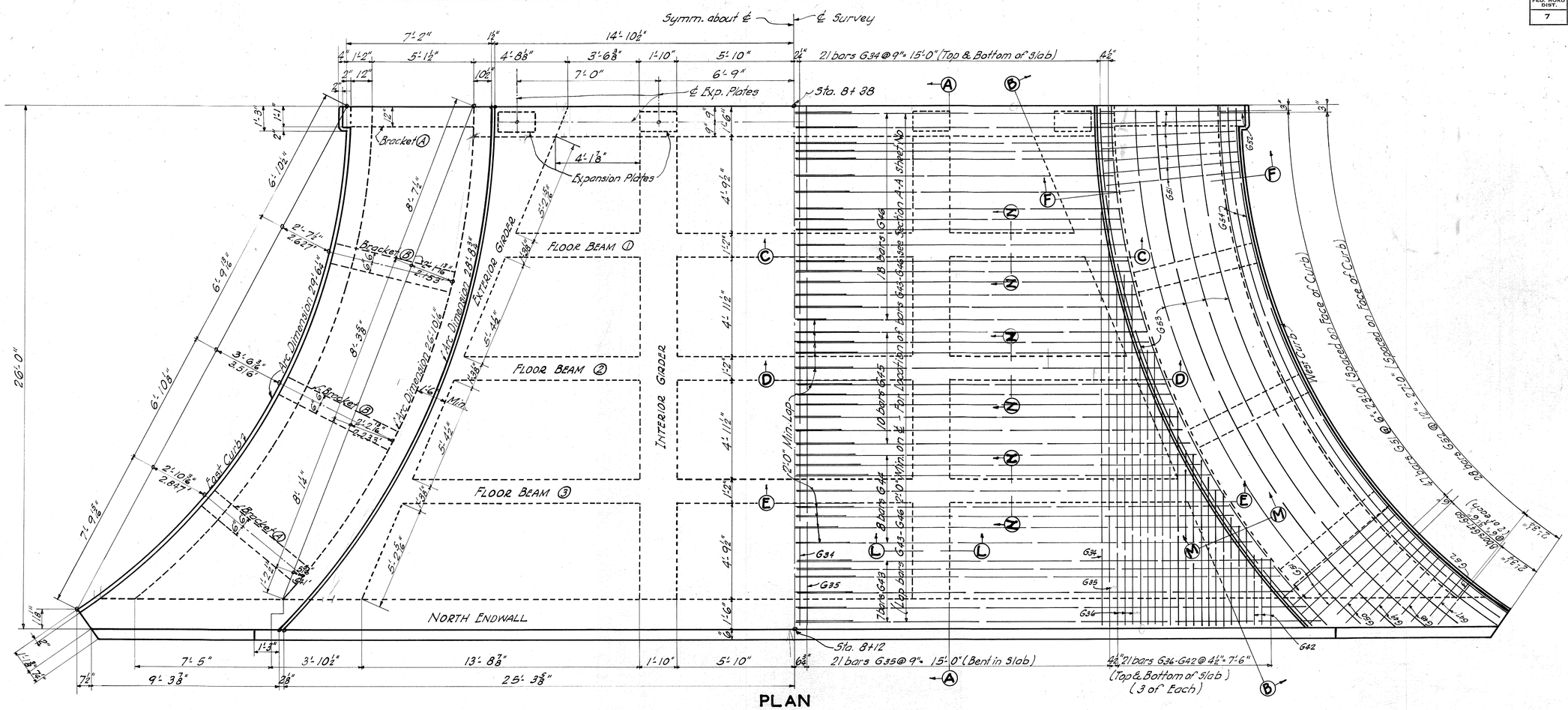
KENTUCKY RIVER BRIDGE
FRANKFORT

DRAWING No. 6742 | INDEX

DESIGNED BY ..... DATE .....
TRACED BY ..... DATE .....
CHECKED BY ..... DATE .....
REVISED ..... DATE .....
REVISED ..... DATE .....
REVISED ..... DATE 4/1957

POST 2329—500—11-56

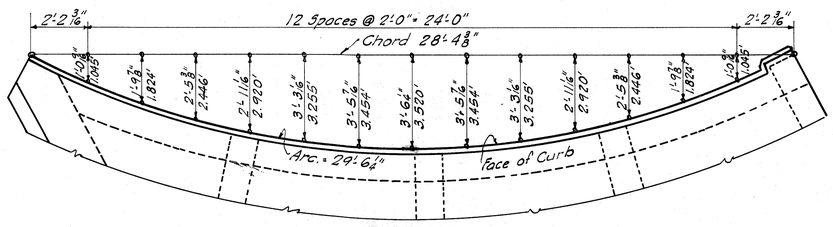
FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			



PLAN

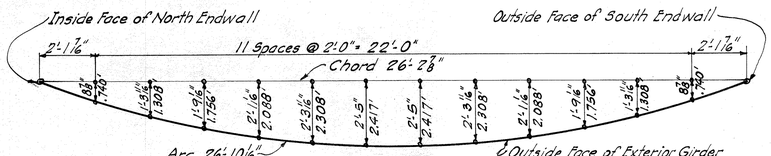
(Showing Dimensions)

(Showing Reinforcement in Slab & Sidewalk)



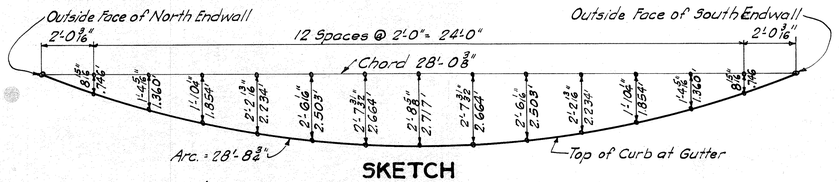
SKETCH

(Showing Offsets from Chord to Face of Curb)



SKETCH

(Showing Offsets from Chord to Outside Face of Exterior Girder)



SKETCH

(Showing Offsets from Chord to Top of Curb at Gutter)

ESTIMATE OF QUANTITIES

Concrete, Class "A"	88.8 Cu. Yds.
Reinforcement	22,650 Lbs.
8 Expansion Plates (Class "B" Bronze)	460 Lbs.

DETAILS R.C. DECK GIRDER SPAN NO. 1 - 4 SHEETS

SHEET 18 OF 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

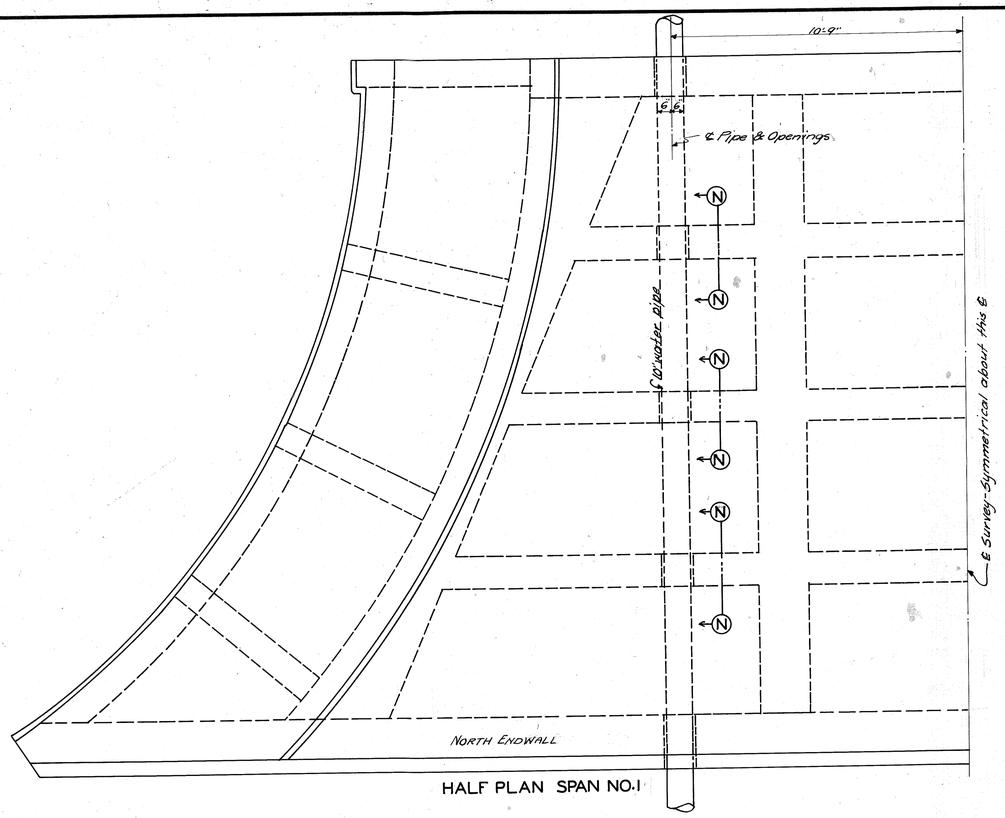
DRAWING No. 6742

INDEX

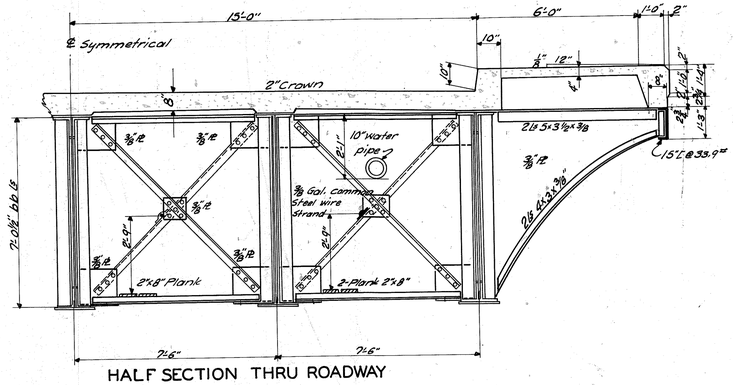
DESIGNED BY G.M.S.	DATE 12-36	REVISED	DATE
TRACED BY D.T.O.	DATE 12-36	REVISED	DATE
CHECKED BY Norman	DATE 12-36	REVISED	DATE

POST 2329—500—11-36

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

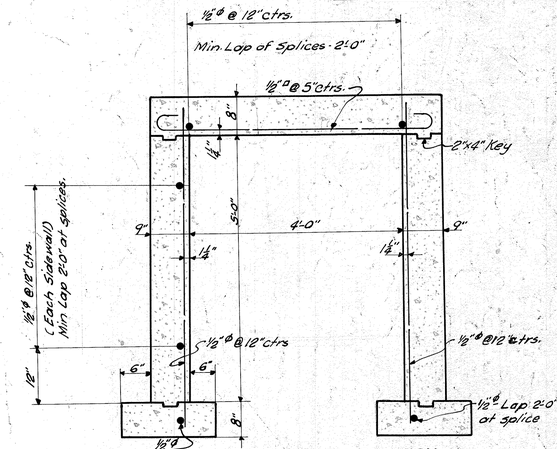


HALF PLAN SPAN NO.1

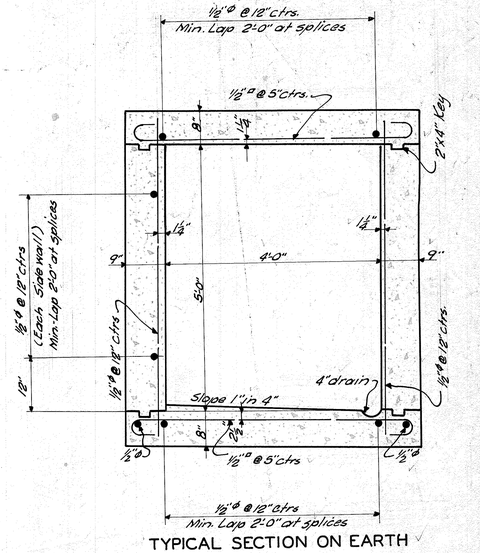


HALF SECTION THRU ROADWAY

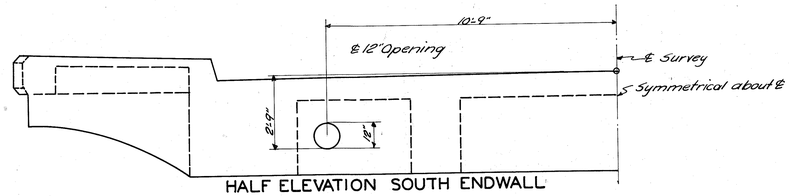
SCALE 3/8"=1'-0"



TYPICAL SECTION ON ROCK

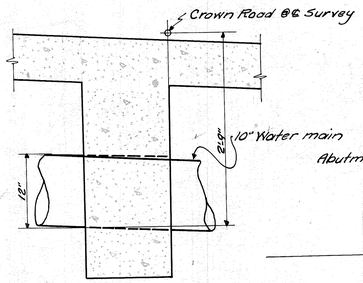


TYPICAL SECTION ON EARTH

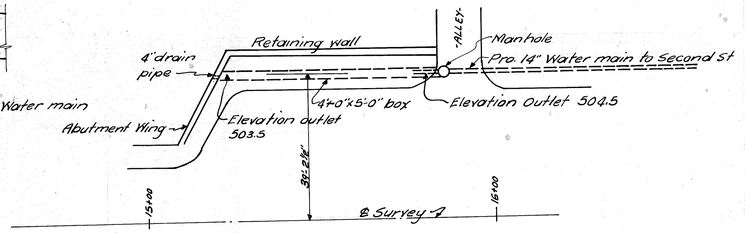


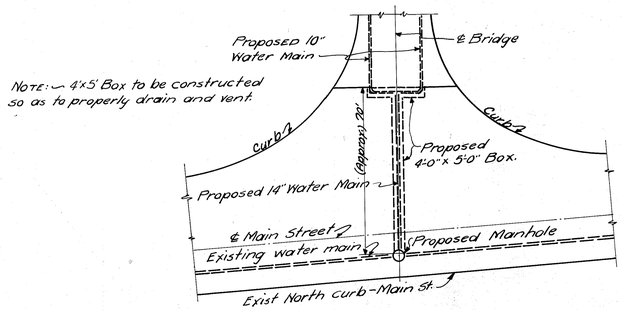
HALF ELEVATION SOUTH ENDWALL

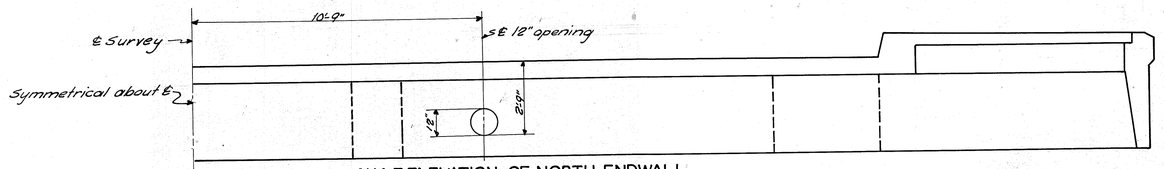
(SHOWING OPENING FOR 10" WATER MAIN)



SECTION N-N







HALF ELEVATION OF NORTH ENDWALL

(SHOWING OPENING FOR 10" WATER MAIN)

SKETCH SHOWING LOCATION FOR 2-LINES 10 WATER MAIN THRU SPAN NO.1

DETAILS OF TUNNELS FOR WATER MAIN

SHEET 18A of 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
KENTUCKY RIVER BRIDGE
FRANKFORT

DRAWING No. 6742	INDEX

DESIGNED BY ..... DATE .....
TRACED BY C. Moore DATE 6-37
CHECKED BY T.E.E. DATE 7-5-37

REVISED ..... DATE .....
REVISED ..... DATE .....
REVISED ..... DATE .....

POST 2329—500—11-36

FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			

Construction Joint formed with 2"x6"x12" Keys @ 12" ctrs. for entire length of girders & Endwalls

7 Bars G43 | 8 Bars - G44 | 10 Bars G45 | 18 Bars G46

8" min. | G34-G35 | G35 G34 | G34-G35

2 bars G4 | 2 bars G3 | 1 bar G2 | 5 bars G1 | G5

3'-3½" | 3'-0" | 3'-0" | 3'-0" | 3'-0" | 3'-3½"

1'-7" | 14 bars G5 @ 5" = 5'-5" | 9" | 15 bars G5 @ 9" = 10'-6" | 9" | 14 bars G5 @ 5" = 5'-5" | 1'-7"

26'-0"

SECTION A-A

(Showing Reinforcement in Slab & Interior Girder)

Construction Joint Formed with 2"x6"x10" Keys @ 12" ctrs. for entire length of all Floor Beams

Symm. about ℄ | ℄ Survey | 4'-10⅜"

2 bars G14 | G15 | G15 | 3 bars G13 | G15

3½" | 10 Bars G15 @ 7" = 5'-3" | 2'-3½" | 13 Bars G15 @ 6" = 6'-0"

PART SECTION C-C

(For Floor Beam — ①)

Symm. about ℄ | ℄ Survey | Keyed Construction Joint | 4'-10⅜"

2 bars G14 | G15 | G15 | 3 bars G16 | G15

3½" | 10 bars G15 @ 7" = 5'-3" | 2'-3½" | 18 bars G15 @ 6" = 8'-6"

PART SECTION D-D

(For Floor Beam — ②)

Rounded | 7'-2" | 6'-0" (Slope ⅜" in 12") | 12" | 2" | Level

G51 | G54 | G52 | G53 | G53 | G10 to G12

1'-0¾" | 4 Bars G53 @ 12" = 3'-0" | 1'-0¾" | 5'-1½" | 12" | 2"

SECTION F-F

Keyed Construction Joint

G10 | G11 | G12 | G53 | G12 | G12 | G11 | G10

G9 | G9 | G9 | G9

1 bar G8 | 4 bars G7 | 4 bars G6 | 1 bar G8

4½" | 16 bars G9 @ 5" = 6'-3" | 10" | 13 bars G9 @ 10" = 10'-0" | 10" | 19 bars G9 @ 5" = 7'-6"

4½" | 9 bars G10 @ 5" = 3'-9" | 5" | 7 bars G11 @ 5" = 2'-6" | 10" | 13 bars G12 @ 10" = 10'-0" | 10" | 7 bars G12 @ 5" = 2'-6" | 5" | 7 bars G11 @ 5" = 2'-6" | 5" | 5 bars G10 @ 5" = 1'-8"

SECTION B-B

(Showing Reinforcement in Exterior Girder - Stirrup Spacing Given on Inside Face of Girder)
(Stirrups to be Perpendicular to Inside Face of Girder)

Note: Bars G35-G37 in Handrail to be placed before pouring Sidewalk

Symm. about ℄ | ℄ Survey | Keyed Construction Joint | 4'-10⅜"

2 bars G14 | G15 | G15 | 3 bars G17 | G15

3½" | 10 Bars G15 @ 7" = 5'-3" | 2'-3½" | 23 bars G15 @ 6" = 11'-0"

PART SECTION E-E

(For Floor Beam — ③)

2 bars G26 - Bracket Ⓐ
2 bars G27 - Bracket Ⓑ

Rounded | Construction Joint | G33

2 bars G25 | G28 | G29 | G30 | G31 | G32

2 bars G24 Bracket Ⓐ
2 bars G26 Bracket Ⓑ

1½" | 5 Bars G28-G32 @ 12" = 4'-0" | 12" | 7½" | 1½"

TYPICAL ELEVATION OF BRACKET

(Showing Reinforcement)

G25 or G27 | G28 - G33 | G24 or G26

1'-4" | 1'-2" | 1½" | 1½" | 1'-0¾"

12"

ELEVATION G-G

7'-6" | 14'-10½" | Symm. about ℄

2" | 1'-4" | 6'-0" (Slope ⅜" in 12") | 10½" | 4"

℄ Survey

3 bars G18 | 2 bars G18 | 3 bars G18

G19 | G19

4'-3¾" | 1'-2" | 2'-1½" | 1'-9¾"

6' | 6'-1½" | Radius = 1'-3"

4 bars G16 @ 12" = 3'-6" | 6" | 4" | 6 bars G19 @ 12" = 5'-0" | 6"

HALF ELEVATION SOUTH END WALL

(Showing Bracket Dimensions & Reinforcement in Endwall)

Expansion Angle to be furnished by Steel Contractor & placed when slab is poured. See Sheet 28 of 40 for details.

1½" | 1½" | G18 | G19 | 1'-6"

SECTION H-H

5 Reinforcement Symmetrical about ℄

℄ Survey

2'-0" Min. Lap | G22 | 5 G22 | 2 bars G20 (Lap 2'-0" Min. on ℄) | G22 | G21 | G23 | G23

6' | 6 bars G22 @ 12" = 5'-0" | 4⅞" | 14 bars G22 @ 12" = 13'-0" | 4⅞" | 6" | 12" | 8 bars G23 @ 12" = 7'-0"

HALF ELEVATION OF NORTH END WALL

(Showing Reinforcement)

½" Bevel | 6" | 8" | ½" Bevel | G20 | G22 | 1'-6"

SECTION J-J

½" Bevel | 6" | Varies | G21 | G20 | G23 | 1'-6"

SECTION K-K

G35 | G 43-G46 | G34 | G5 | G2 | G3 | G4 | G1

2'-9" | 1½" | 1½" | 3" | 7½" | 2½"

4 Equal Spaces | 1'-10"

SECTION L-L

(For Interior Girder)

Rounded | G51 | G55 | G10 to G12

G9 | G7 | G8 | G6

2'-9" | 1½" | 1½" | 3" | 7½" | 2½"

2" | 4⅝" | 4½" | 4⅝" | Varies | 2"

Varies

SECTION M-M

(For Exterior Girder)

G13 - F.B. | G16 - F.B. | G17 - F.B. | G14 | G15

2'-9" | 4" | 6½" | 1½" | 2"

2 Eq. Spcs.

1'-2"

Note:- Place bars G13, G16, & G17 in bottom of Floor Beams under bars G1 & G6 in Girders.

SECTION N-N

(For Floor Beams ①, ② & ③)

Top of Curb | 6'-0" | 4"

PLAN P-P

(Showing Notch in Sidewalk for Expansion Plate)

Z

¾"

ELEVATION Z

PART SECTION Q-Q

Bar G5 at End to 2-#8 Dia. Rivets @ Abt. Ctrs. | Anchor-½"ø Bolts @ Abt. Ctrs. | 6'-4½" | Z

SECTION Z-Z

(THRU SIDEWALK)

Sheet No. 19 of 26

DESIGNED BY G.K.S. DATE 12-36 | REVISED Exp. Det. @ Sidewalk DATE 12-37
TRACED BY M.S.Mak DATE 12-36 | REVISED DATE
CHECKED BY Newman DATE 12-36 | REVISED DATE
T.E.E. DATE 4-2-37

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

DRAWING No. 6742 | INDEX

DETAILS OF R.C. DECK GIRDER — SPAN NO. 1

POST 2329—500—11-36

FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			

BILL AND TYPES OF REINFORCEMENT

MARK	TYPE	NO	SIZE	LENGTH Ft.	LENGTH In.	LOCATION	a Ft.	a In.	b Ft.	b In.	c Ft.	c In.	d Ft.	d In.
G1	①	10	1¼"ø	28	4	Interior Girder	24	8	1	10	1	0½	25	8½
G2	②	2	"	30	1	" "	6	2½	2	5½	7	5	3	5½
G3	"	4	"	30	1	" "	3	2½	2	5½	13	5	3	5½
G4	③	4	"	29	5	" "	2	3¼	19	5	3	3	2	5
G5	④	86	⅜"ø	8	1	" "	1	7	3	1	–	–	–	–
G6	①	8	1¼"ø	30	6	Exterior "	26	10	1	10	1	0½	27	10½
G7	③	8	"	31	0	" "	1	7¼	22	11	2	3½	1	9
G8	Str.	12	1"ø	11	0	" "	–	–	–	–	–	–	–	–
G9	⑤	96	⅝"ø	7	9	" "	1	3	3	0⅜	–	–	–	–
G10	⑥	28	½"ø	6	9	" "	2	8	3	11	–	–	–	–
G11	"	28	"	6	1	" "	2	0	3	11	–	–	–	–
G12	"	40	"	5	4	" "	1	3	3	11	–	–	–	–
G13	①	6	1"ø	34	9	Floor Beam ①	31	9	1	6	0	10	32	7
G14	①	6	⅞"ø	27	0	" " ①, ② & ③	24	4	1	4	0	8⅜	25	0⅜
G15	④	168	½"ø	7	7	" " " " "	0	11	3	1⅜	–	–	–	–
G16	①	6	1"ø	37	11	Floor Beam ②	34	11	1	6	0	10	35	9
G17	"	6	"	43	8	" " ③	40	8	1	6	0	10	41	6
G18	Str.	8	"	31	6	South Endwall	–	–	–	–	–	–	–	–
G19	⑦	20	½"ø	7	6	" "	–	–	–	–	–	–	–	–
G20	Str.	12	"	35	9	North "	–	–	–	–	–	–	–	–
G21	"	4	"	7	6	" "	–	–	–	–	–	–	–	–
G22	⑧	42	"	8	0	" "	–	–	–	–	–	–	–	–
G23	⑨	16	"	10	0	" "	–	–	–	–	–	–	–	–
G24	⑩	8	1"ø	9	5	Bracket Ⓐ	3	2	–	–	–	–	–	–
G25	①	8	"	11	4	" "	8	4	1	6	0	10	9	2
G26	⑩	8	"	7	8	" Ⓑ	1	5	–	–	–	–	–	–
G27	①	8	"	9	7	" "	6	7	1	6	0	10	7	5
G28	⑪	8	½"ø	7	7	Brackets Ⓐ & Ⓑ	0	9	3	6	–	–	–	–
G29	"	8	"	6	6	" " " "	0	9	2	11½	–	–	–	–
G30	"	8	"	5	9	" " " "	0	9	2	7	–	–	–	–
G31	"	8	"	5	1	" " " "	0	9	2	3	–	–	–	–
G32	"	8	"	4	9	" " " "	0	9	2	1	–	–	–	–
G33	"	16	"	5	1	" " " "	0	9	2	3	–	–	–	–
G34	①	84	⅝"ø	27	3	Roadway Slab	25	3	1	0	0	5¼	25	8¼
G35	⑫	42	"	27	9	" "	–	–	–	–	–	–	–	–
G36	①	12	"	19	2	" "	17	2	1	0	0	5¼	17	7¼
G37	"	12	"	15	5	" "	13	5	1	0	0	5¼	13	10¼
G38	"	12	"	12	7	" "	10	7	1	0	0	5¼	11	0¼
G39	"	12	"	10	3	" "	8	3	1	0	0	5¼	8	8¼
G40	"	12	"	8	3	" "	6	3	1	0	0	5¼	6	8¼
G41	"	12	"	6	7	" "	4	7	1	0	0	5¼	5	0¼
G42	"	12	"	5	0	" "	3	0	1	0	0	5¼	3	5¼
G43	Str.	14	½"ø	27	0	" "	–	–	–	–	–	–	–	–
G44	"	16	"	24	0	" "	–	–	–	–	–	–	–	–
G45	"	20	"	21	0	" "	–	–	–	–	–	–	–	–
G46	"	36	"	18	6	" "	–	–	–	–	–	–	–	–
G47	"	4	"	2	6	Sidewalk Slab	–	–	–	–	–	–	–	–
G48	"	4	"	3	6	" "	–	–	–	–	–	–	–	–
G49	"	4	"	4	6	" "	–	–	–	–	–	–	–	–
G50	"	4	"	5	6	" "	–	–	–	–	–	–	–	–
G51	⑬	94	"	8	9	" "	–	–	–	–	–	–	–	–
G52	⑤	56	½"ø	3	4	" Beam	0	11	1	0½	–	–	–	–
G53	Str.	12	½"ø	28	6	" Slab	–	–	–	–	–	–	–	–
G54	①	12	½"ø	30	6	" Beam	28	10	0	10	0	5	29	3
G55	⑪	24	½"ø	9	0	Curb into Handrail	0	4¼	4	5	–	–	–	–
G56	"	66	"	8	11	" " "	0	3	4	5	–	–	–	–
G57	⑤	60	"	4	2	" " "	0	6	1	8	–	–	–	–
G58	Str.	22	"	12	2	Top & Bottom Rail	–	–	–	–	–	–	–	–
G59	"	4	"	28	0	Bottom Rail	–	–	–	–	–	–	–	–
G60	⑪	60	"	0	11	Top Rail	0	7	0	3	–	–	–	–
G61	⑭	16	⅜"ø	4	6	Post "B"	–	–	–	–	–	–	–	–
G62	①	16	⅜"ø	8	11	Over Brackets	6	7	1	2	0	7½	7	2½

DETAILS OF EXPANSION PLATES

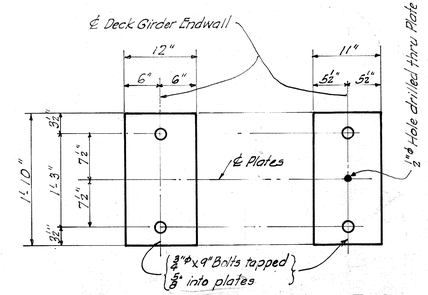
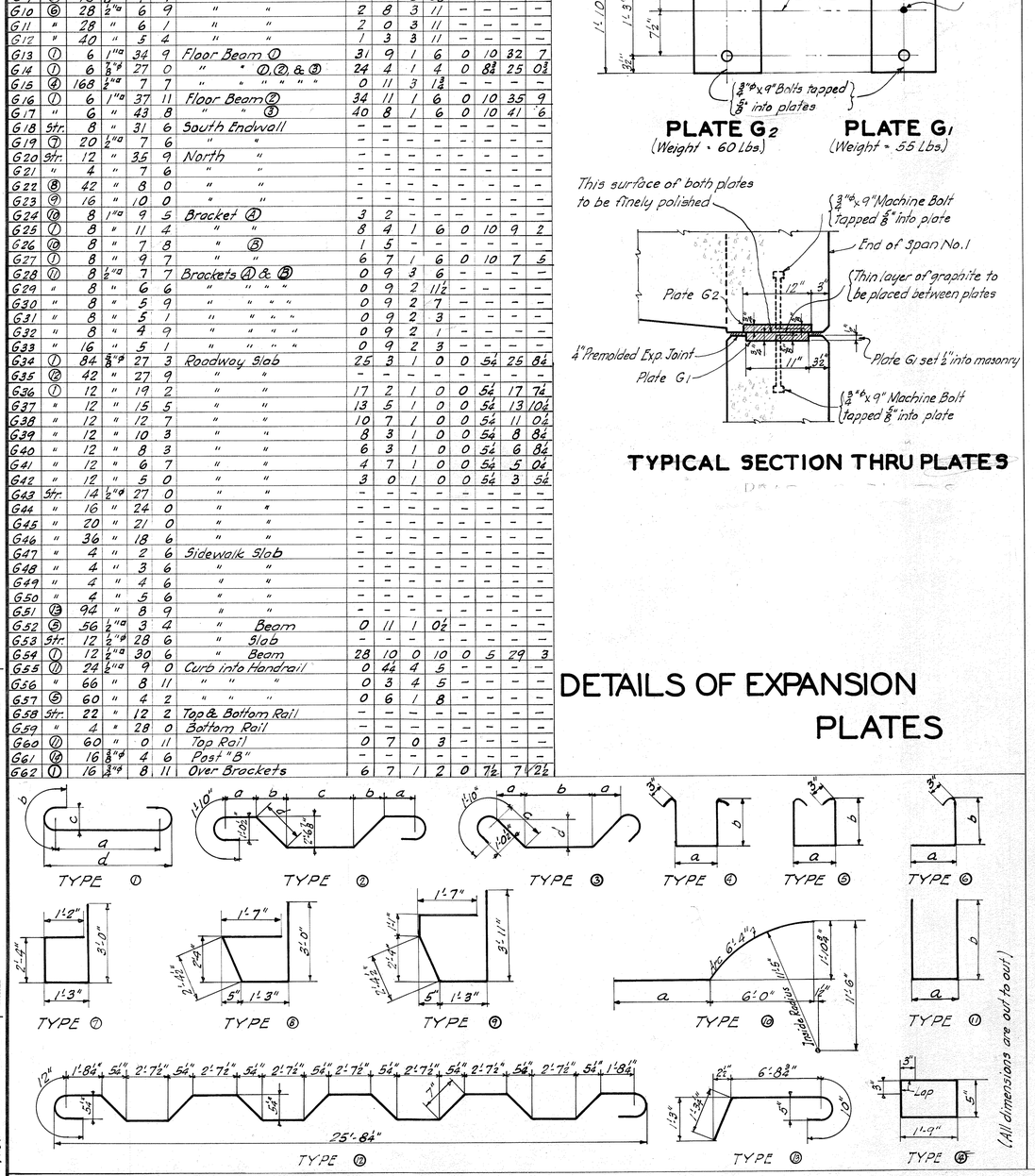
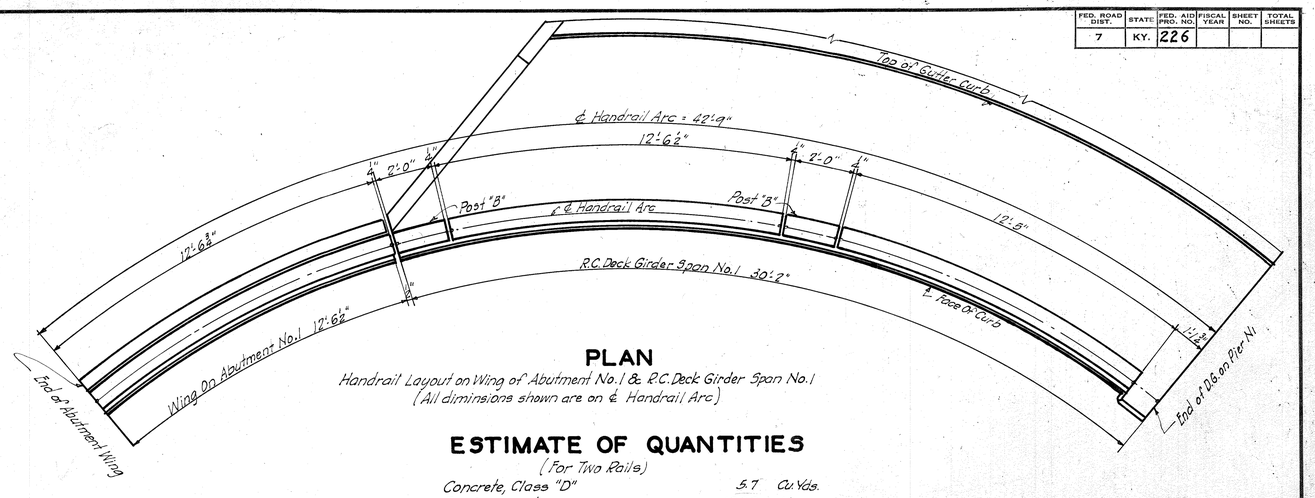


PLATE G2 (Weight - 60 Lbs.)

PLATE G1 (Weight - 55 Lbs.)

TYPICAL SECTION THRU PLATES





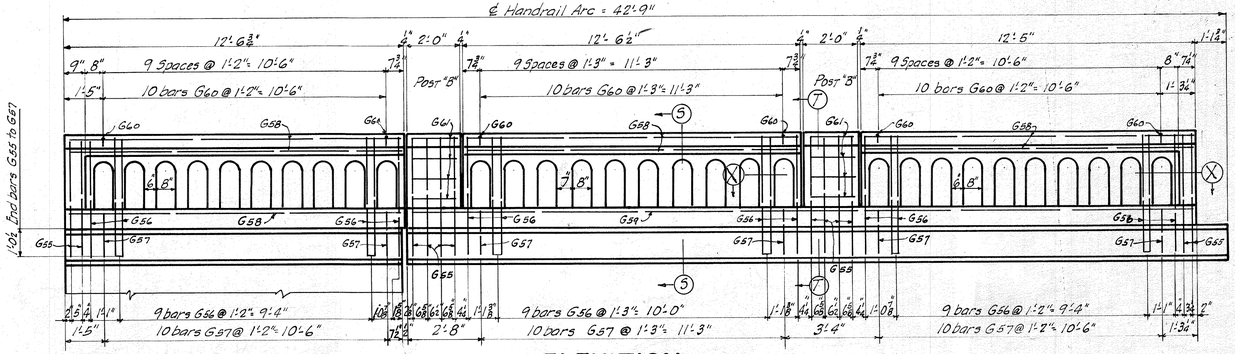
PLAN

Handrail Layout on Wing of Abutment No.1 & R.C. Deck Girder Span No.1
(All dimensions shown are on ℄ Handrail Arc)

ESTIMATE OF QUANTITIES

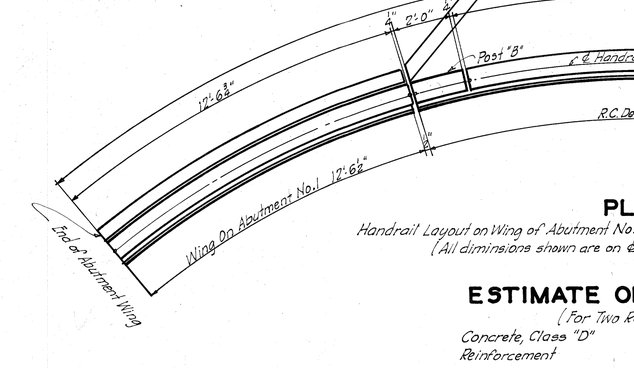
(For Two Rails)

Concrete, Class "D"	5.7	Cu. Yds.
Reinforcement	1290	Lbs.



ELEVATION

(All dimensions Shown Are On ℄ Handrail Arc)



SECTION S-S **SECTION T-T**

PART SECTION X-X

(All Dimensions Shown are on ℄ Handrail Arc)

DETAILS OF HANDRAIL FOR ABUTMENT NO. 1 AND R.C. DECK GIRDER SPAN NO. 1

R.C. DECK GIRDER SPAN NO 1

(4 SHEETS)

SHEET 20 OF 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

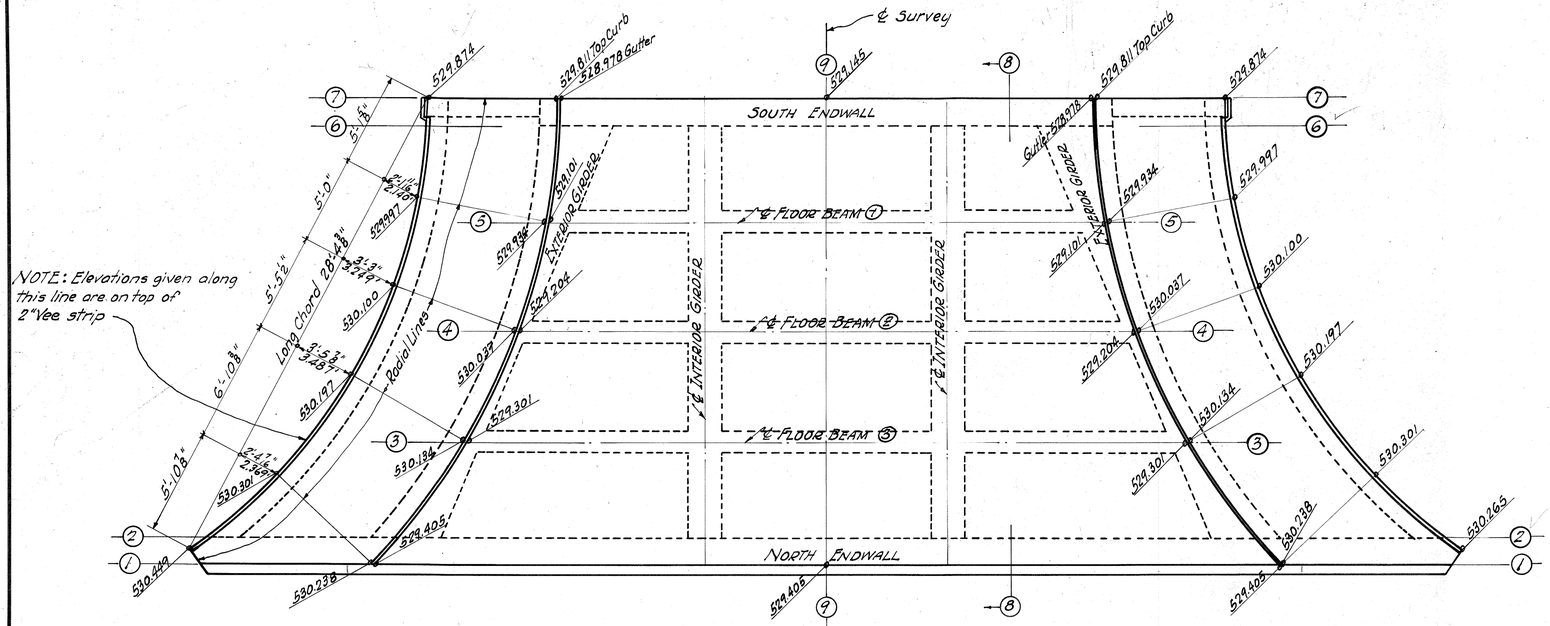
DRAWING No.	INDEX
6742	

DESIGNED BY G.W.S. DATE 12-36
TRACED BY D.J.O. DATE 12-36
CHECKED BY NEWMON DATE 12-36

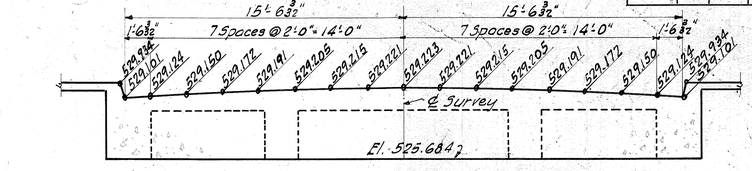
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DATE REVISED
DATE REVISED

POST 2329—500—11-35

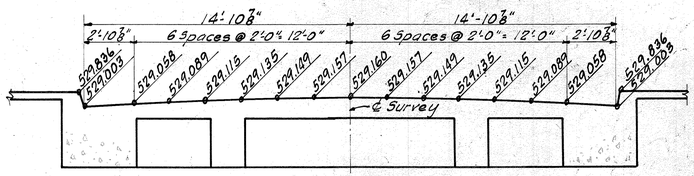
FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			



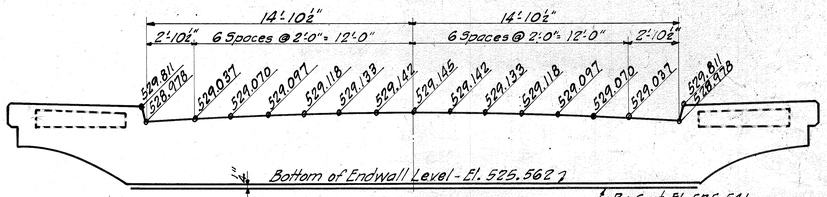
PLAN



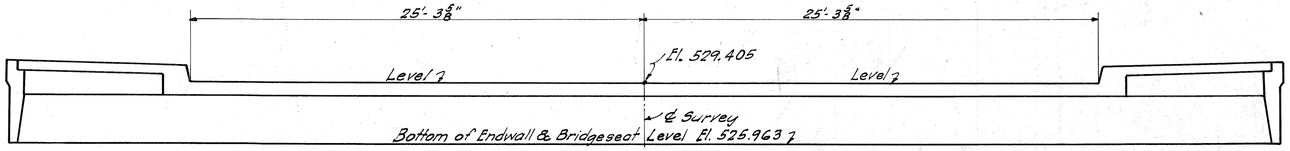
SECTION ⑤-⑤
(On ℄ Fl. Bm. ①



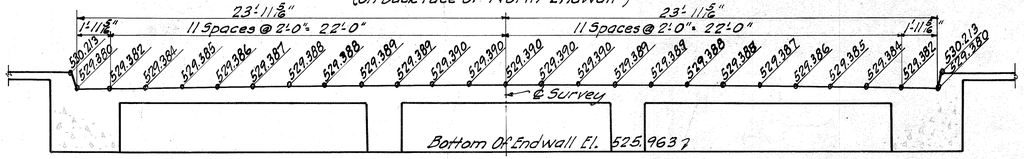
SECTION ⑥-⑥
(On Inside Face Of South Endwall)



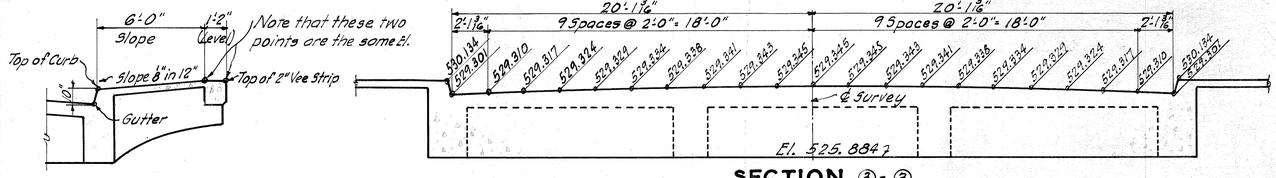
SECTION ⑦-⑦
(On Back Face South Endwall)



SECTION ①-①
(On Back Face Of North Endwall)

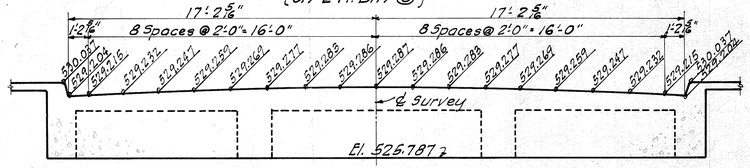


SECTION ②-②
(On Inside Face Of North Endwall)

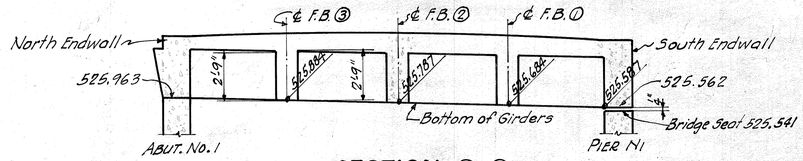


TYPICAL SECTION
THRU SIDEWALK
— On Radial Line —
(Showing Points Where
Elevations Are Given)

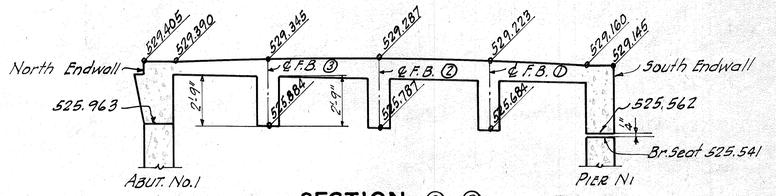
SECTION ③-③
(On ℄ Fl. Bm ③)



PART SECTION ④-④
On ℄ Fl. Bm. ②



SECTION ⑧-⑧
(For Interior Or Exterior Girders)



SECTION ⑨-⑨
(On ℄ Survey)

NOTE: Elevations shown on this sheet include camber

PLAN AND SECTIONS SHOWING
ELEVATIONS FOR CONSTRUCTION

R.C. DECK GIRDER SPAN NO 1
(43 SHEETS)

DESIGNED BY G.W.S. DATE 12-34 REVISED DATE
TRACED BY D.T.O. DATE 12-36 REVISED DATE 12-36
CHECKED BY NEWMAN DATE 12-36 REVISED DATE

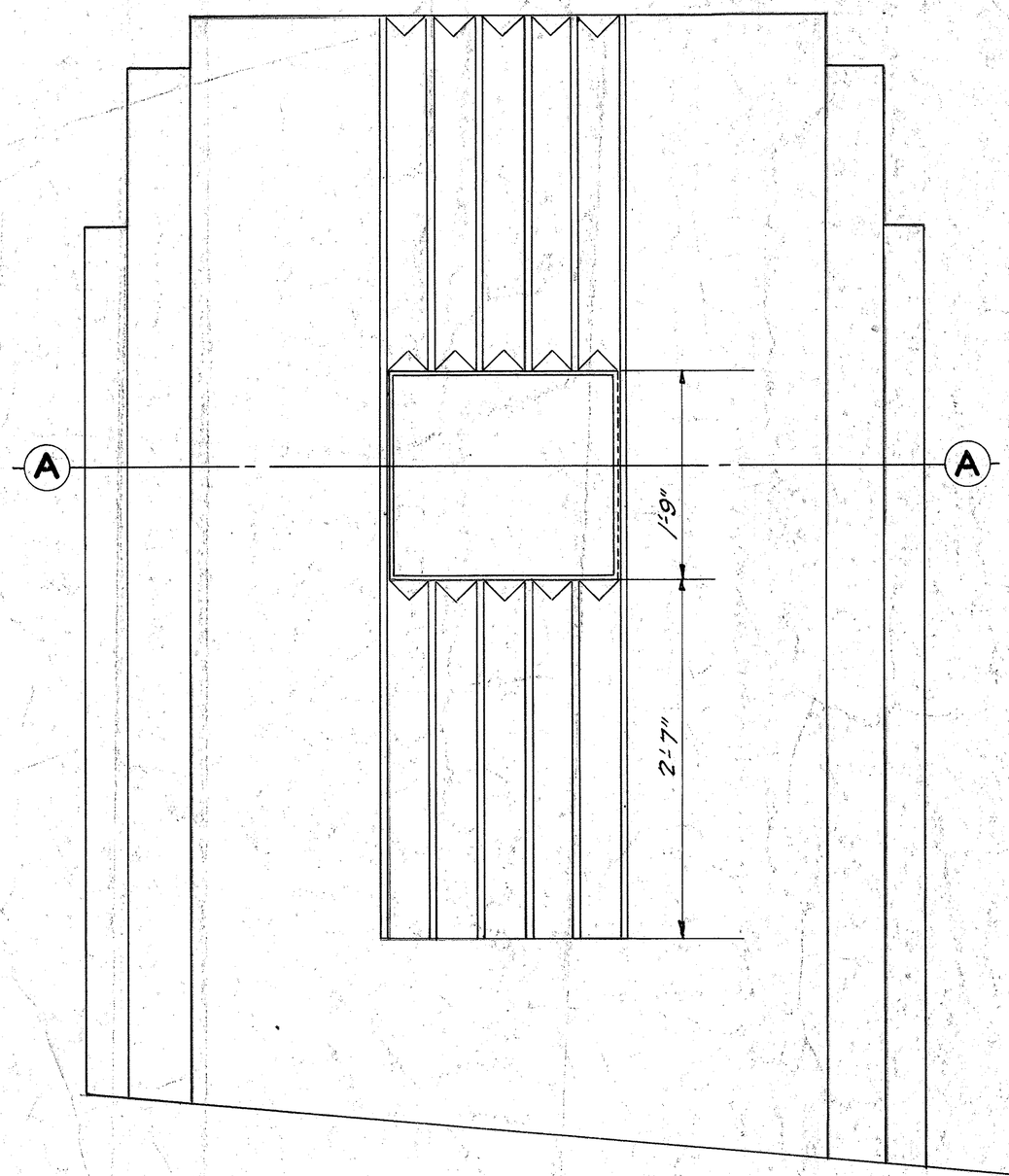
SHEET 21 OF 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

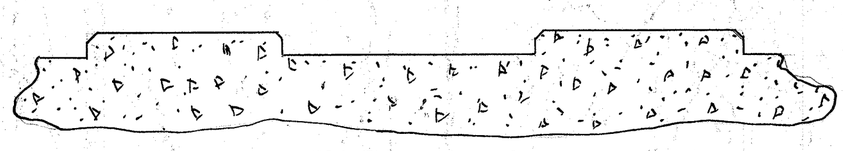
KENTUCKY RIVER BRIDGE
FRANKFORT

DRAWING No. 6742 INDEX

FORT 2319—500—11-56

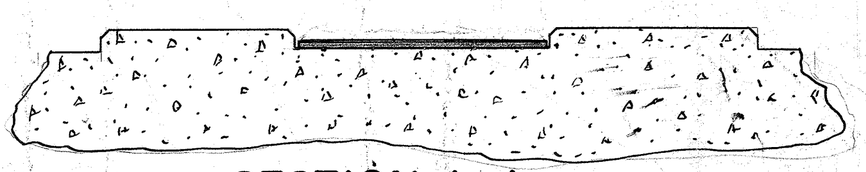


ELEVATION



SECTION A-A

(Showing Plate removed)



SECTION A-A

(Showing Plate in place)

GENERAL NOTE

TWO PLATES ARE TO BE PLACED AS SHOWN HEREON, ONE AT THE SOUTH ENTRANCE AND ONE AT THE NORTH ENTRANCE TO THE FRANKFORT BRIDGE.

ONE FOOT AND NINE INCHES OF REEDS SHALL BE REMOVED FROM EACH POST AS SHOWN IN SECTION A-A.

HOLES SHALL BE DRILLED FOR EXPANSION BOLTS.

THE WORKMANSHIP ON THE CUTTING, CHIPPING AND GRINDING AT THE CONCRETE REEDS SHALL BE FIRST CLASS

THE LUMP SUM BID PRICE SHALL INCLUDE ALL LABOR AND TOOLS NECESSARY FOR GRINDING AWAY THE REEDS AND THE SETTING OF THE BRONZE PLATES SATISFACTORY TO THE DEPARTMENT OF HIGHWAYS.

THE DEPARTMENT OF HIGHWAYS WILL FURNISH THE BRONZE PLATES AND EXPANSION BOLTS.

SETTING
AMERICAN WAR MOTHERS
NAME PLATE

Sheet 22

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE AT FRANKFORT

STATION

PROJECT NO. F.A. 226

DRAWING NUMBER
6742 - N.P.

FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			

(Max.) 5" Alt. Spacing

PLAN OF TOP FLANGE

N N N N N N

℄ Rd

10¾"

STIFFENERS NORMAL TO TOP FLANGE OF GIRDER

Cov. Pl. 18 × ¾

7'-0½" b.b.ls

8 Stiff Ls 7"×4"×7/16 (Mill 2E) to beat
2 Fills 18×¾

2 Stiff Ls 7"×4"×7/16
2 Fills 4×¾

4 - Stiff Ls 7"×4"×7/16
4 - Fills 8⅜×¾

2 - Stiff Ls 7"×4"×7/16
2 - Fills 4×¾

4 - Stiff Ls 7"×4"×7/16
2 - Fills 8⅜×¾

2 Ls 8×8×¾

2 - Stiff Ls 7"×4"×7/16
2 - Fills 4×¾

Web 84×½

2 Ls 8×8×¾

2 - Stiff Ls 7"×4"×7/16
2 - Fills 8⅜×¾

2 - Stiff Ls 7"×4"×7/16
2 - Fills 4×1¼

Web 84×½

2 - Stiff Ls 7"×4"×7/16
2 - Fills 8⅜×¾

2 - Stiff Ls 7"×4"×7/16
2 - Fills 4×¾

9¾"

Cov. Pl. 18 × ¾

N N N N N N

5'-11¾" 5'-9¼" 6'-2¼" 5'-9¼" 6'-2¼" 5'-9¼" 6'-2¼" 5'-9¼" 6'-2¼" 5'-9¼"

9" 9" 11'-9" 11'-11½" 11'-11½" 11'-11½" 11'-11½"

135'-3" (c. to c. Pins) Horizontal

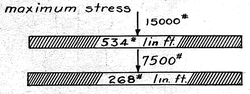
ELEVATION

(Max.) 5" Alt. Spacing

PLAN OF BOTTOM FLANGE

LIVE AND IMPACT LOADS.

Roadway Loading ~ Load on Girder as shown in Diagram, placed to produce maximum stress



Sidewalk Loading ~ (see A.A. of S.H.O. Specifications)
Impact on Roadway ~ 18% of Liveload
Impact on Sidewalk ~ None
A Concentrated load shall be applied to each such span if maximum stresses are produced by loading two or more spans simultaneously.

⅞" ℄ ⅞" Rivets
15/16" ℄ Holes

Expansion Dimensions Based on Temperature of 60°F
Max. Stress - Net Section - 18000 #/□"
Tight fit for all Stiffeners and fills except where otherwise noted.

ESTIMATE OF QUANTITIES

Structural Steel	1,721,590 lbs.
Cast Steel	43,290 lbs.
Forged Steel	970 lbs.
Cast Iron	1955 lbs.
Sheet Lead	1765 lbs.
Creosoted Select Grade Southern Yellow Pine	6,314 M.B.M.

DETAILS OF 470'-6" CONTINUOUS SPAN

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

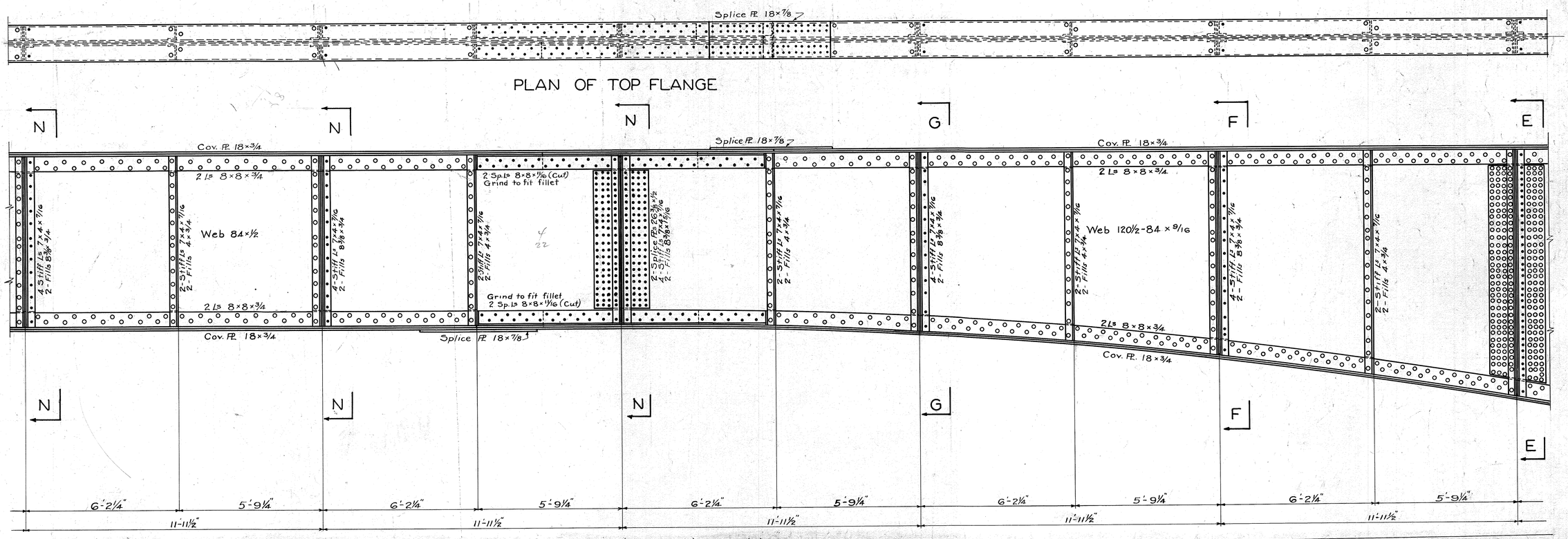
DRAWING No. 6742 INDEX

DESIGNED BY A. Griffith DATE 1-37
TRACED BY " " DATE 1-37
CHECKED BY W.D. Glen DATE 11/37

REVISED Note on bars & fills - added S12 sheet No. DATE 2-38
REVISED DATE
REVISED DATE

POST 2129—500—11-36

FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			



$8 \times \frac{7}{8} \times 42 = 294$

DESIGNED BY A. Griffith DATE 1-37
TRACED BY " DATE 1-37
CHECKED BY W.D. Gunn DATE 1/37

REVISED DATE
REVISED DATE
REVISED DATE

Sheet 24 of 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

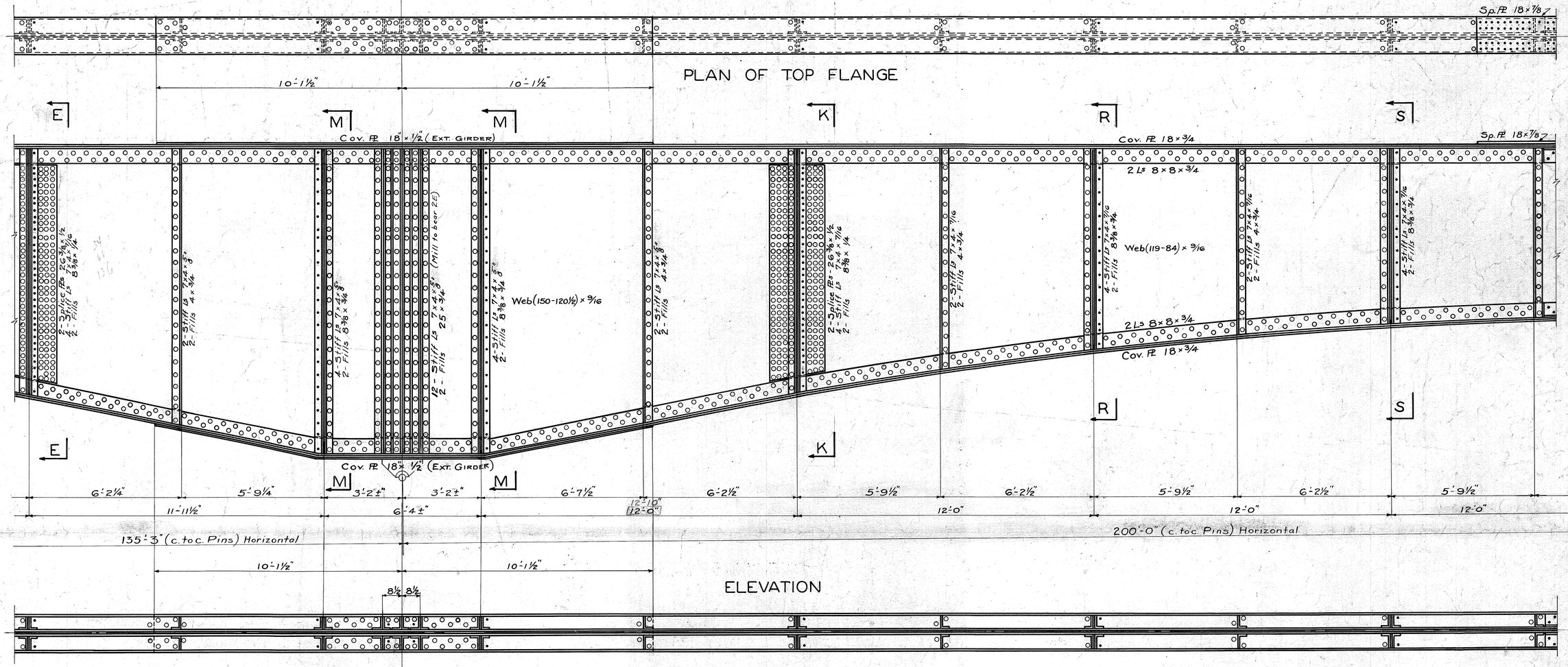
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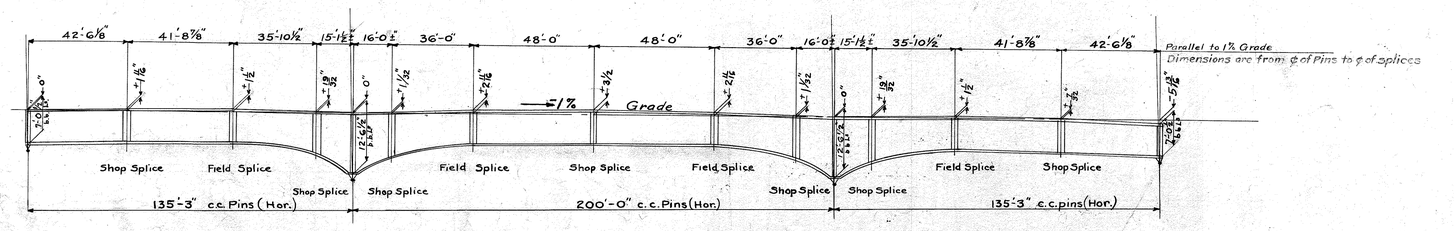
INDEX

DETAILS OF 470'-6" CONTINUOUS SPAN

POST 2329—500—11-36

FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			





CAMBER DIAGRAM OF CONTINOUS GIRDER SPAN

DETAILS OF 470'-6" CONTINUOUS SPAN

Sheet 25 of 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

DRAWING No. 6742

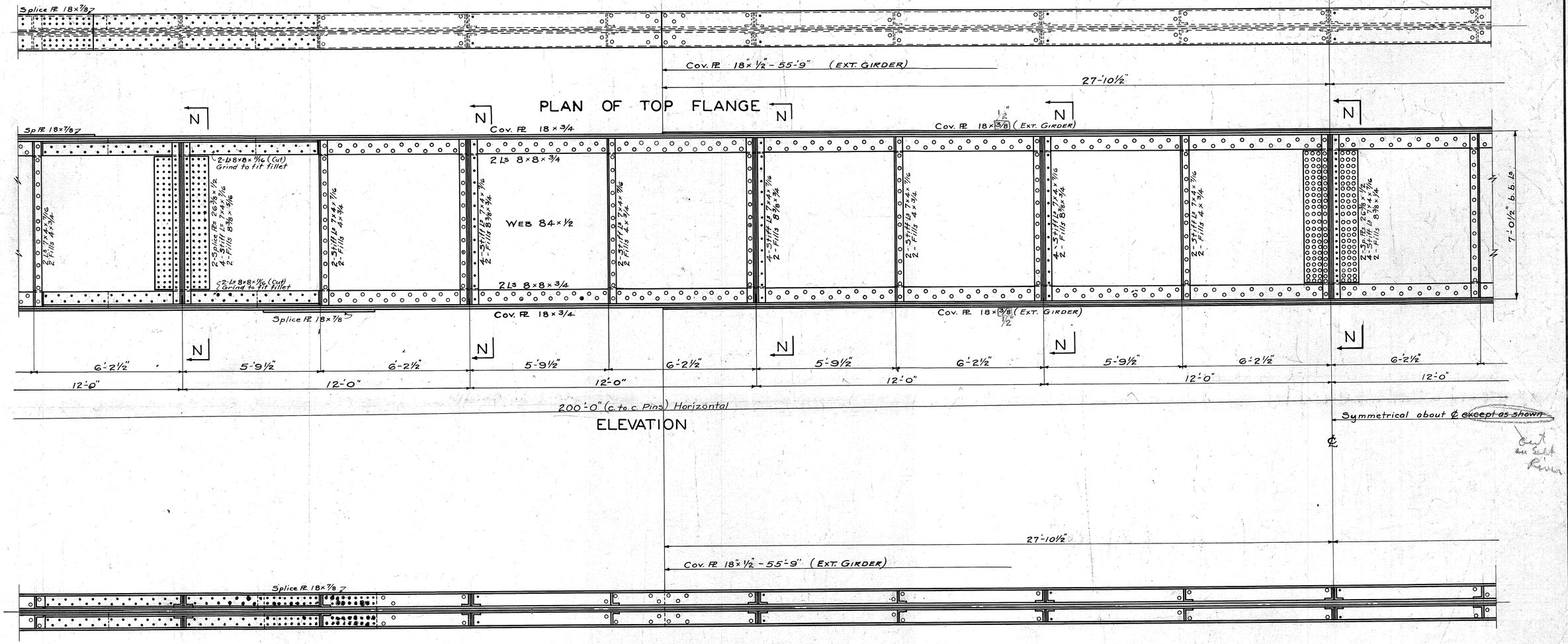
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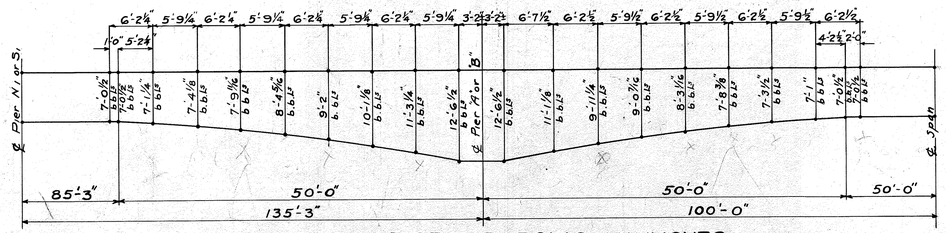
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TRACED BY " DATE 1-37
CHECKED BY W.O. Shaw DATE 1/31

REVISED ... DATE ...
REVISED ... DATE ...
REVISED Stiffener spacing DATE 2-37

POST 2329—500—11-36

FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			





DESIGNED BY A. Griffith DATE 1-37
TRACED BY " " DATE 1-37
CHECKED BY W.D.S. DATE 1/37

REVISED ..... DATE .....
REVISED ..... DATE .....
REVISED ..... DATE .....

POST 2329—500—11-36

Sheet 26 of 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

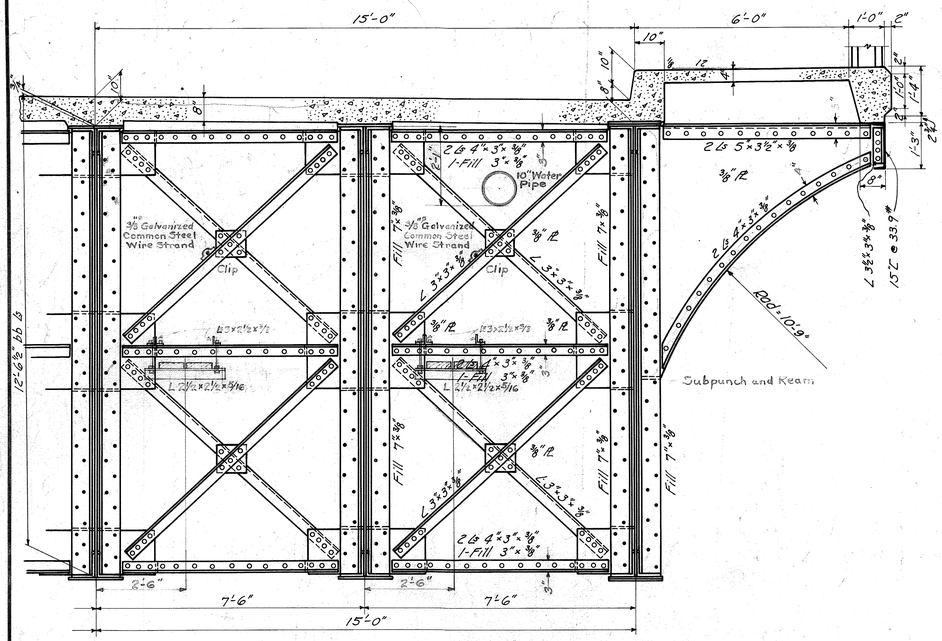
KENTUCKY RIVER BRIDGE FRANKFORT

DETAILS OF 470'-6" CONTINUOUS SPAN

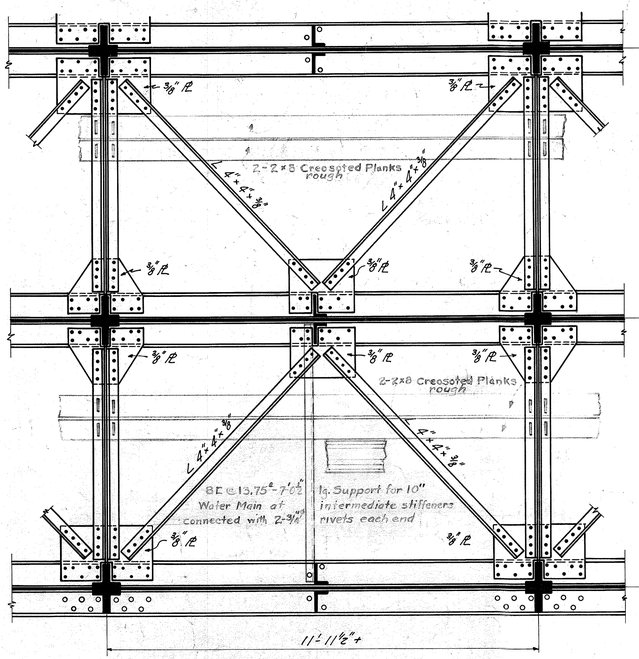
DRAWING No. 6742

INDEX

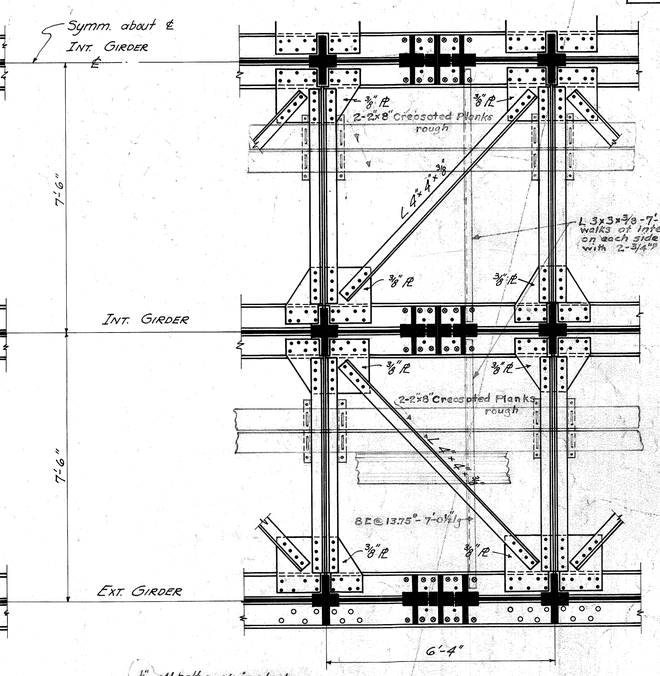
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7	KY.	226			



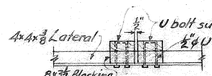
SECTION M-M - PIERS A & B



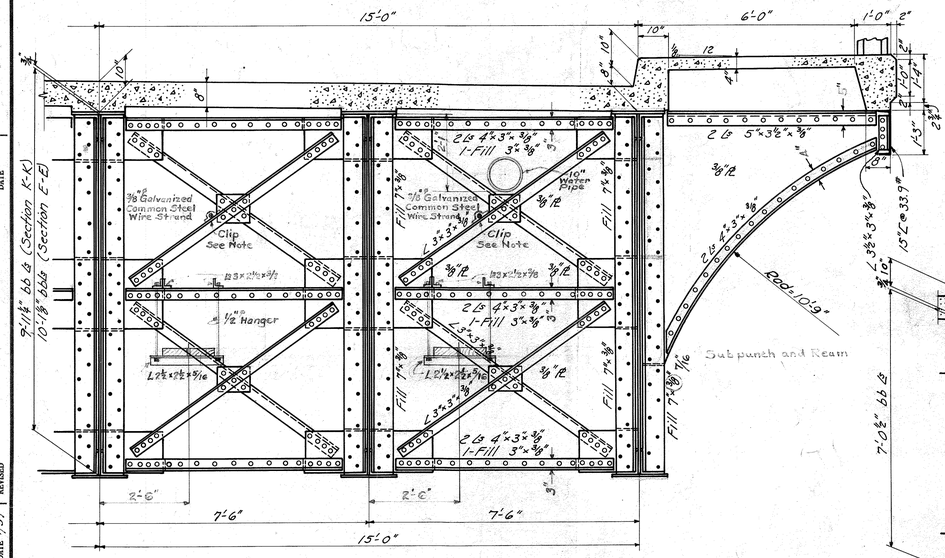
TYPICAL PANEL OF LATERALS



LATERALS OVER PIER

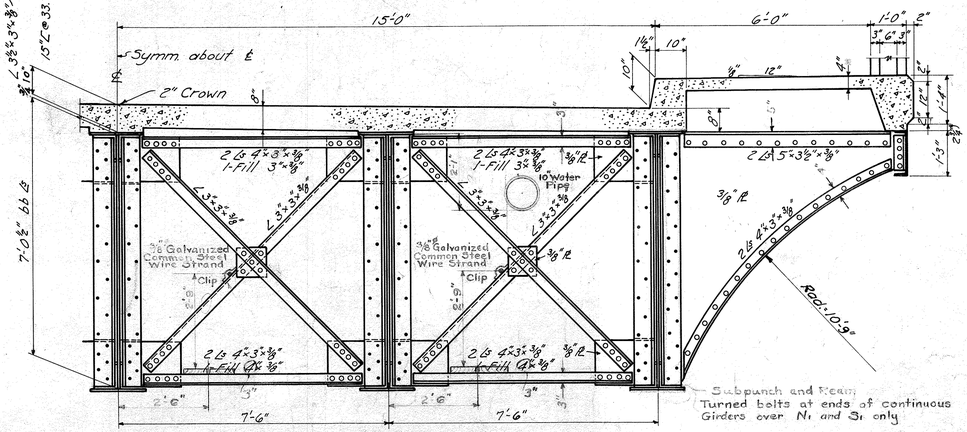


SECTION A-A

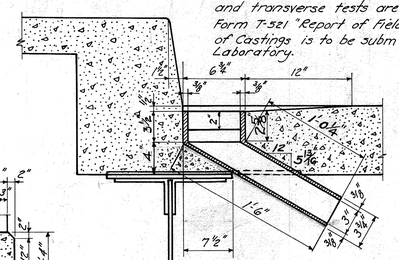


SECTION K-K
(Section E-E similar)

NOTE - Approximately 2000 lin ft of seven wire ⅜" double galv. common steel wire strand and galv. clips for attaching same to steel angles shall be paid for at the same price as bid per pound for Structural Steel. The steel wire shall conform to A.S.T.M. Spec. A122-33



SECTION N-N
(Sections F-F, G-G, R-R, & S-S Similar)



DETAILS OF CAST IRON DRAINS
66 Reqd.

NOTE: All drains to be Gray Iron Castings A.S.T.M. - A48-35T 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.

DETAILS OF 470' - 6" CONTINUOUS SPAN

Sheet 27 of 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

DRAWING No. 6742

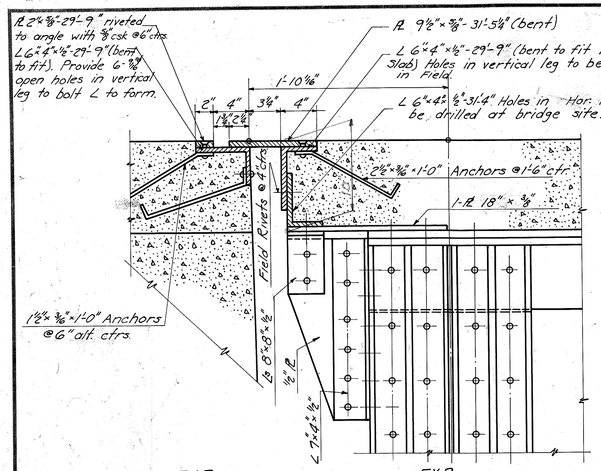
INDEX

	DESIGNED BY	TRACED BY	CHECKED BY
	A. Gentili	R. Clark, Jr.	W. D. Lynn
DATE	1-37	12-36	1/37

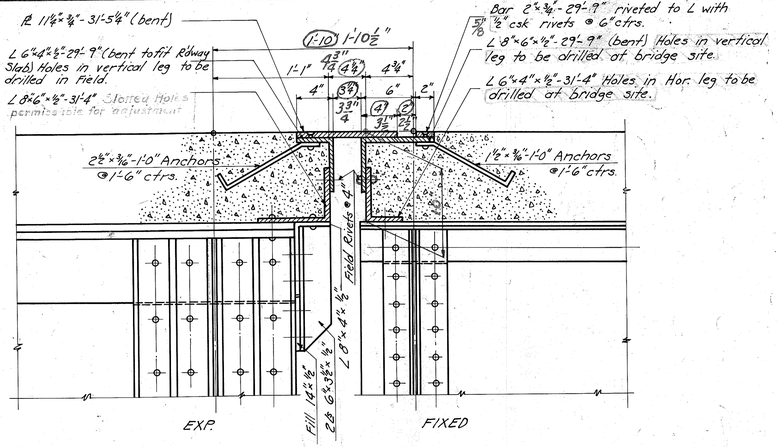
REVISED... Drawings of Plate Girder Spans & Trapezoidal Web Plate... DATE 4-37
REVISED... Cross Frame Fills See Sheet No. M... DATE 4-37
REVISED... DATE
REVISED... DATE

POST 2329—500—11-36

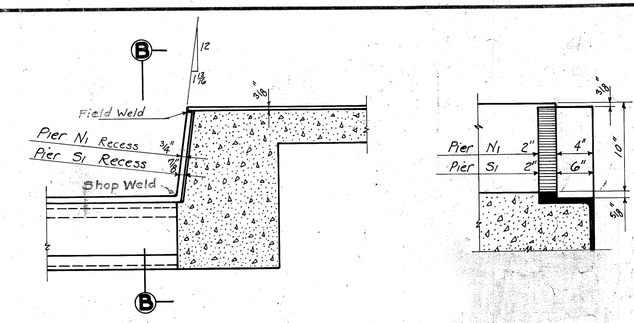
FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226		-	



EXP. DETAIL ℄ ROADWAY AT PIER (N)



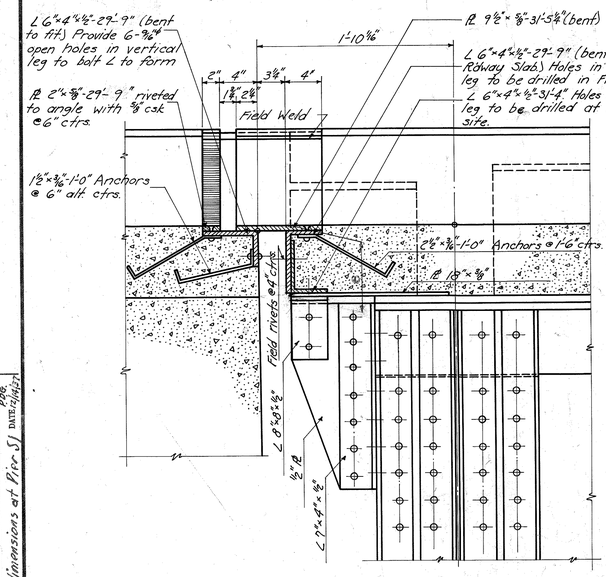
EXP. DETAIL ℄ ROADWAY AT PIER (S_1)



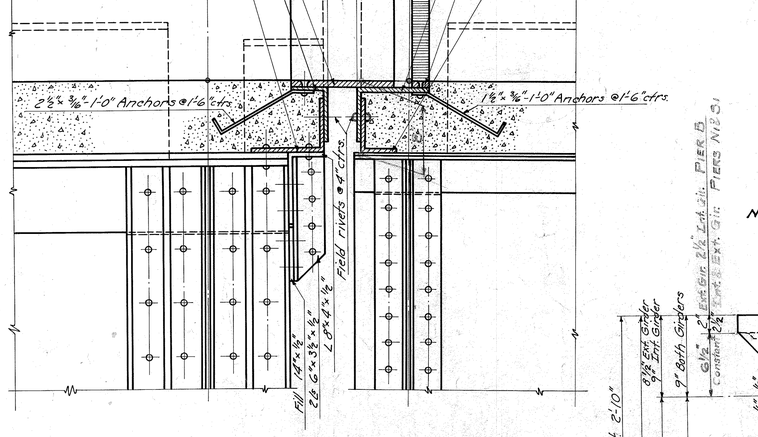
SECTION AT CURB SECTION B-B

DETAIL OF RECESSES IN CURBS

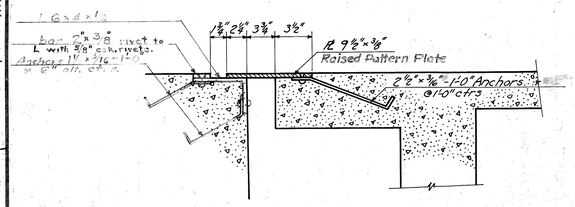
(To receive lip of 9½"×⅜" Plate)-Pier N
(To receive lip of 11⅛"×¾" Plate)-Pier S



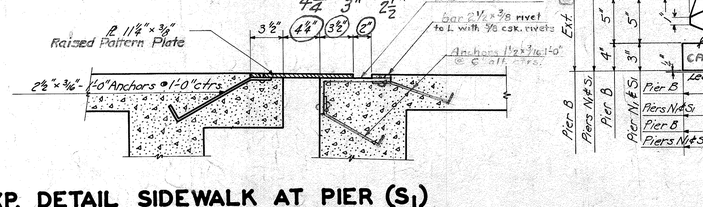
EXP. DETAIL AT CURB AT PIER (N)



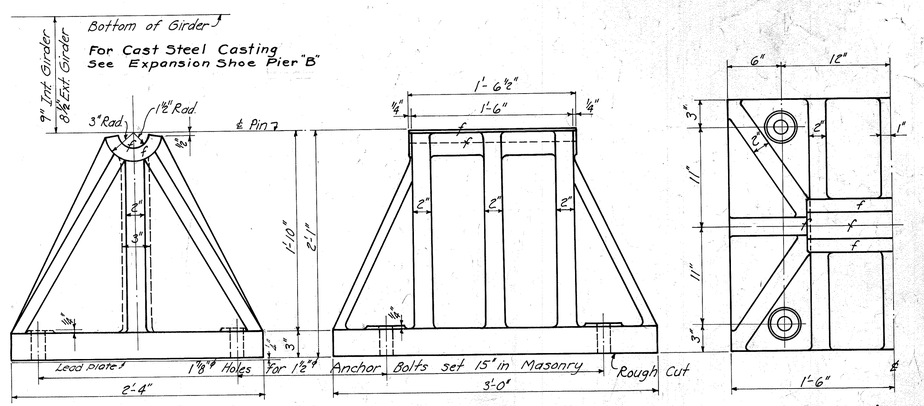
EXP. DETAIL AT CURB AT PIER (S_1)



EXP. DETAIL SIDEWALK AT PIER (N)



EXP. DETAIL SIDEWALK AT PIER (S_1)

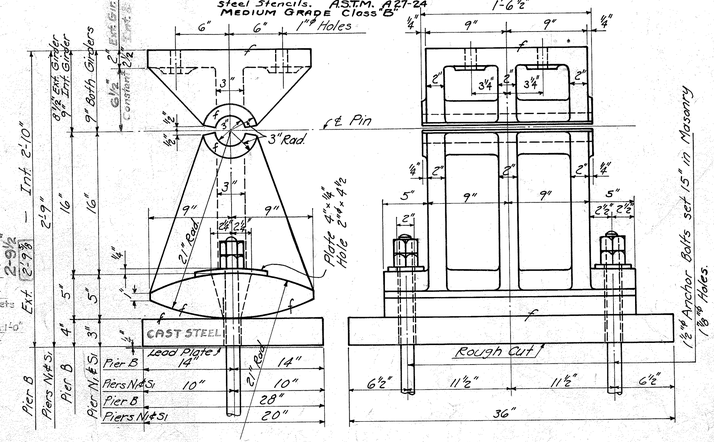


END VIEW SIDE ELEVATION HALF PLAN

FIXED SHOES

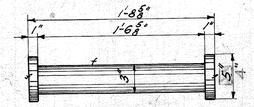
(5 Required)

NOTE - Cast two coupons of least 1¼"×2"×6" long on castings from each heat to make one bending and one tensile test. Coupons to be removed by the Department Inspector and forwarded to the Department of Highway Laboratory. Stamp Coupons and Castings with proper heat numbers with steel stencils. ASTM. A27-24 MEDIUM GRADE Class B



EXPANSION SHOES

(15 Required)



FORGED STEEL PIN
(FINISHED ALL OVER)
(20 Required)
A.S.T.M. A20-31T

Sheet 28 of 40

DETAILS OF 470'-6" CONTINUOUS SPAN

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE FRANKFORT

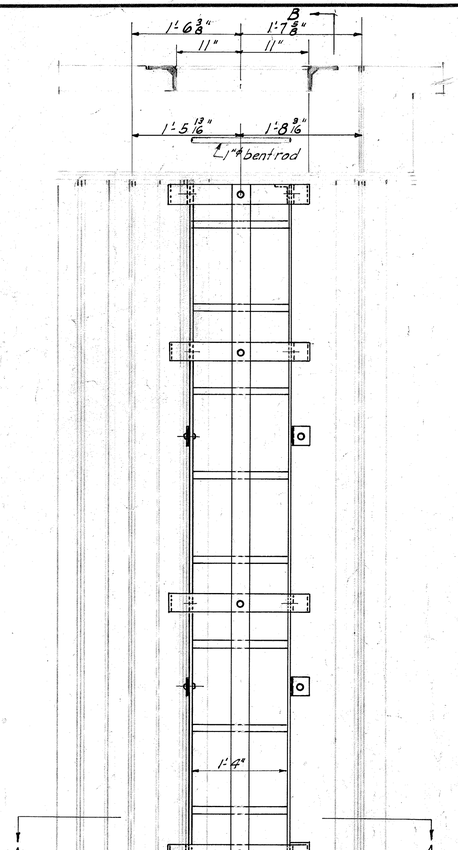
DRAWING No. 6742 INDEX

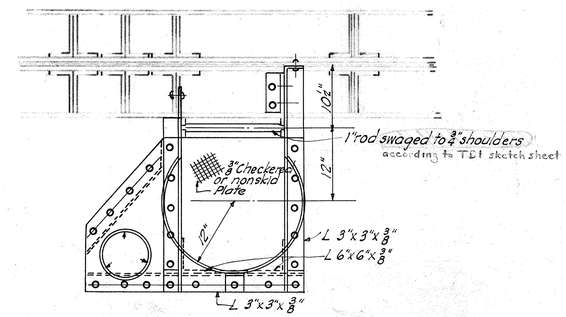
REVISED	DATE
Sta. Refer to Pier Plans - Added Dowel Det.	3-36
Masonry Plate & Cast Steel	7-36
Horiz. clearance dimensions at Pier S1	11-36

DESIGNED BY R. Griffith DATE 1/36
TRACED BY Jackson Jr. DATE 12-36
CHECKED BY W.C.M. DATE 1/37

POST 2329—500—11-35

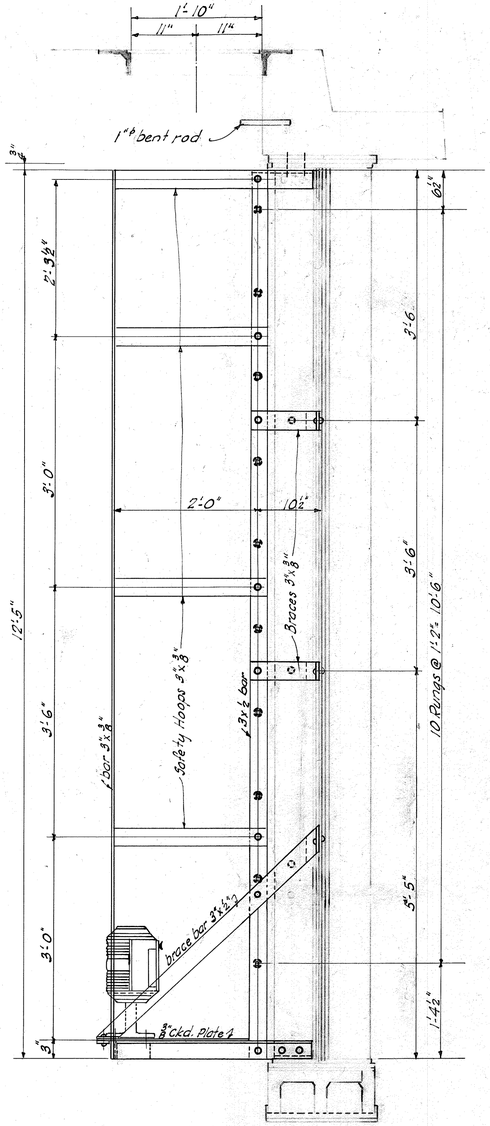
FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			



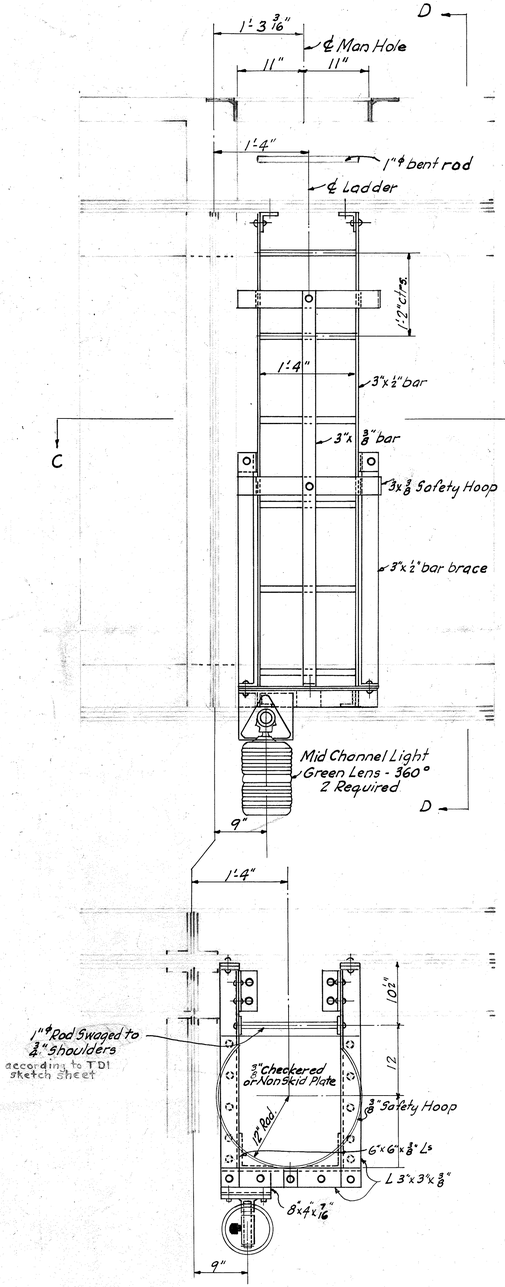


SECTION A-A

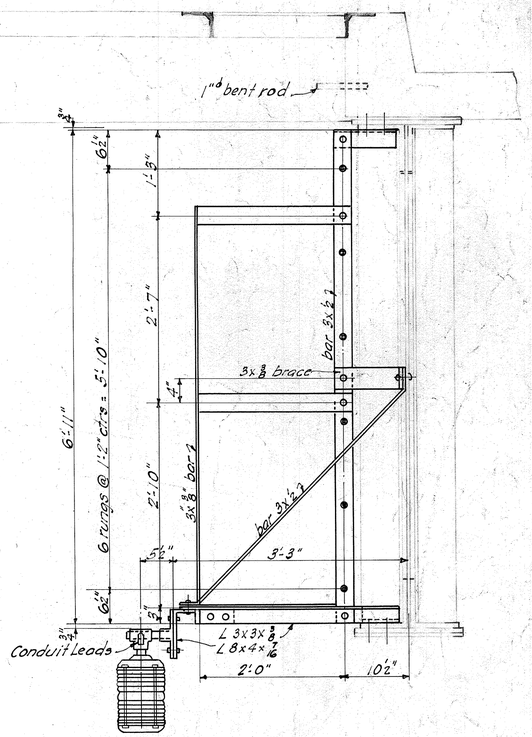
Pier Light
Red Lens
180°
4- Required



SECTION B-B



SECTION C-C



SECTION D-D

Sheet 29 of 40

DETAILS OF LIGHT AND LADDER

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

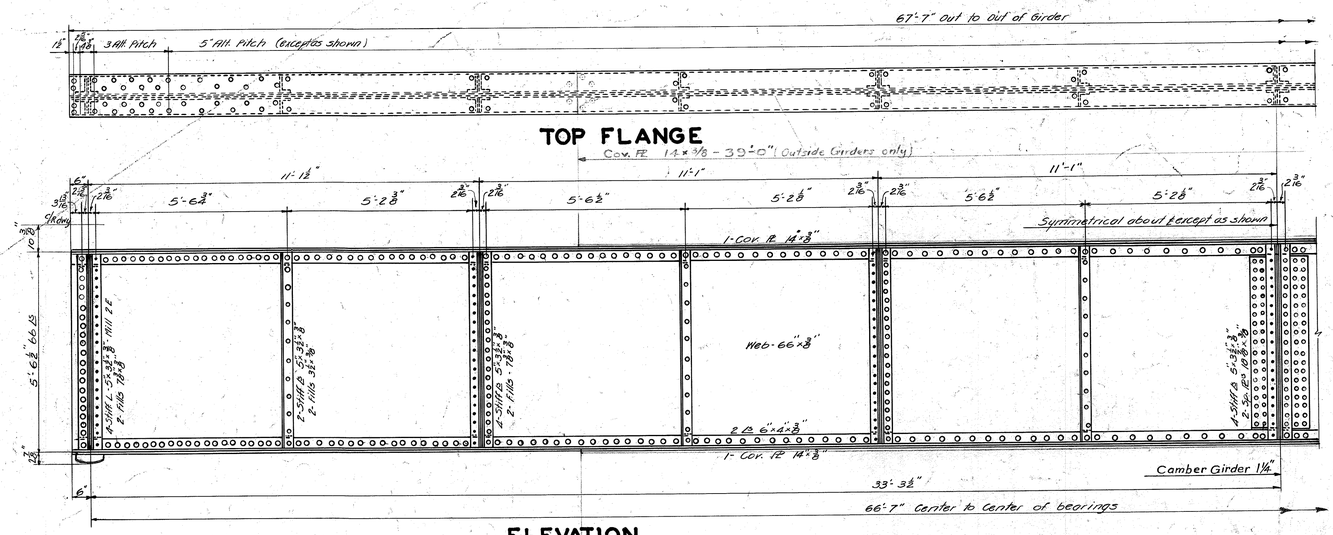
DRAWING No. 6742

INDEX

DESIGNED BY A.G. Griffith DATE 12-36
DETAILED BY D.T.D. DATE 12-36
TRACED BY V.D. DATE 1-37
CHECKED BY DATE
REVISED Revised ladder rungs according to T.D.I. DATE 4-37
REVISED DATE
REVISED DATE

POST 2329—500—11-36

FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			



NOTE - Bottom laterals not to be used on 66'-7" spans.

Roadway Loading - Load on girders as shown in diagram placed to produce maximum stress

100 LL-533# Lin. Ft. — INTERIOR GIRDERS

100 LL-267# Lin. Ft. — EXTERIOR GIRDERS

Sidewalk Loading - 249# per Lin. Ft of Girder
Impact on Roadway - 26.1 % of Live Load
Impact on Sidewalk - None
Maximum Stresses - Net Section - 18000 #/□"
Steel cambered for D.L.+½L.L. = 1¼"
⅞" ø Rivets
13/16" ø Holes

ESTIMATE OF QUANTITIES

Structural Steel for 3 Spans	313795 lbs.
Cast Steel for 3 Spans	8925 lbs.
Cast Iron for 3 Spans	1115 lbs.
Sheet Lead for 3 Spans	825 lbs.

DETAILS OF 66'-7" GIRDERS

DESIGNED BY A. Griffith DATE 12-12
DETAILED BY [illegible] DATE 12-13
TRACED BY [illegible] DATE 12-13
CHECKED BY V.S. Sam DATE 1/1/37
REVISED "Riveted & bent gusset = Plate" DATE 2-37
REVISED Note concerning Bottom laterals. DATE 6-37
REVISED Added "Cast Steel" to Girder & Shoes DATE 8-37
REVISED (Cover Plates on Girder Flanges) DATE

POST 2129—300—11-36

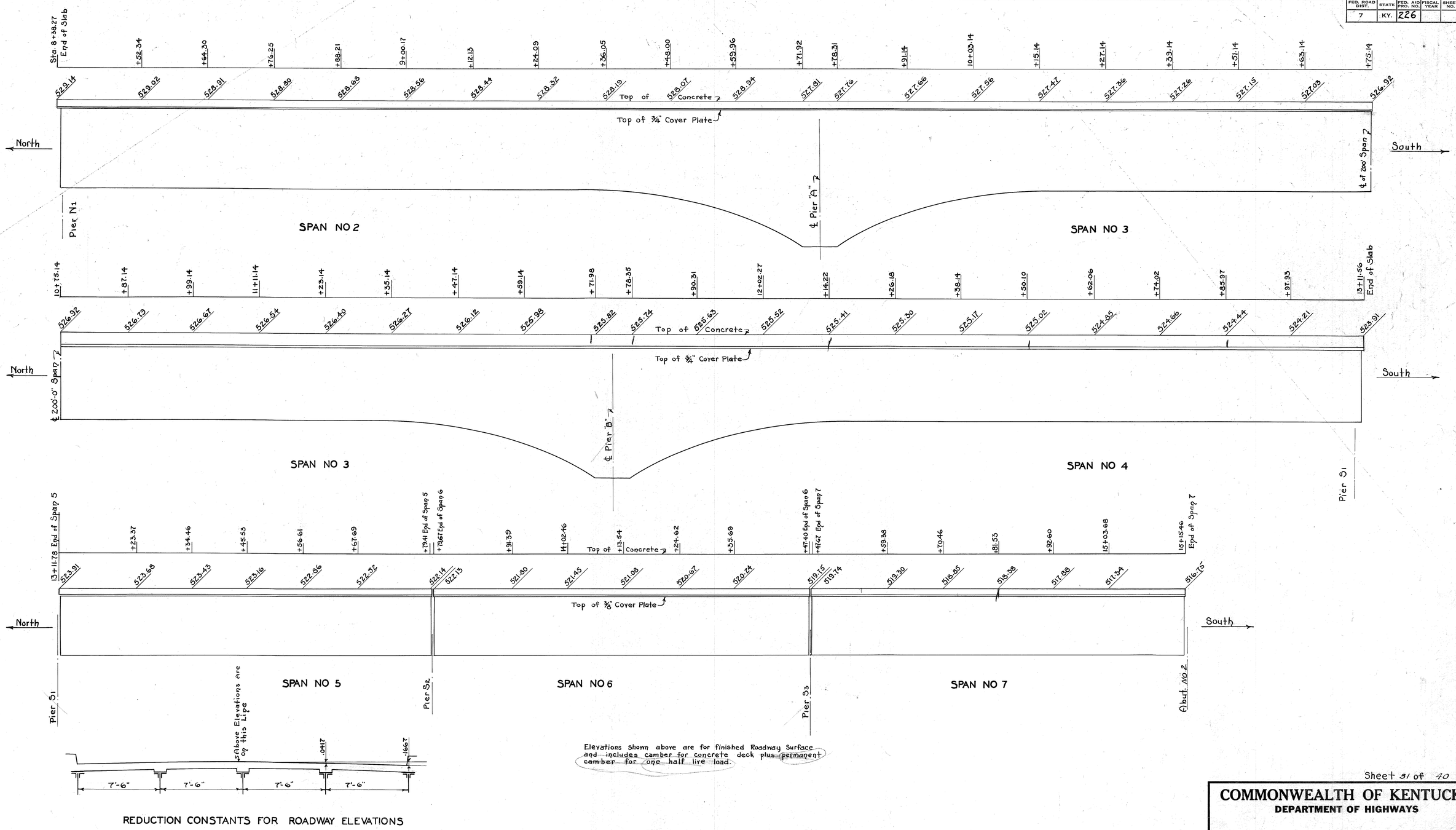
SHEET 30 OF 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

DRAWING No. 6742 | INDEX

FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			



REDUCTION CONSTANTS FOR ROADWAY ELEVATIONS

Elevations shown above are for finished Roadway Surface and includes camber for concrete deck plus permanent camber for one half live load.

DIAGRAM SHOWING ELEVATIONS OF TOP OF SLAB ALONG ℄ OF ROADWAY FOR CAMBER

DESIGNED BY	M.O.Gray	DATE 11/56	REVISED
TRACED BY	M.Makin	DATE 12-30-56	REVISED
CHECKED BY	A. Griffith	DATE 1-57	REVISED

Sheet 31 of 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

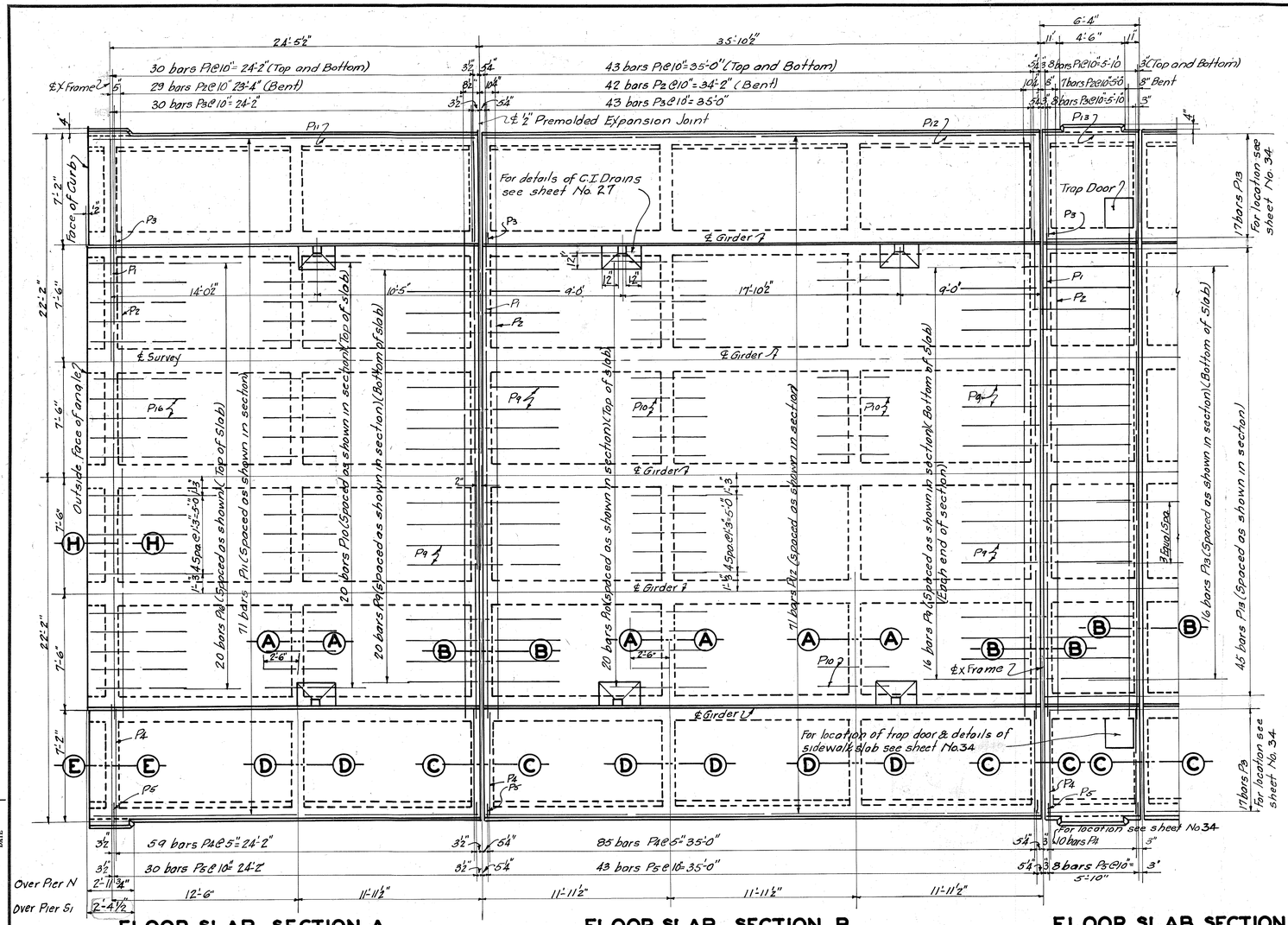
KENTUCKY RIVER BRIDGE
FRANKFORT

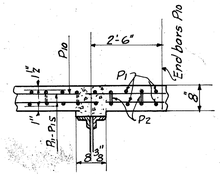
DRAWING No. 6742

INDEX

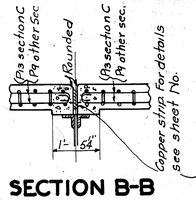
POST 2329—500—11-56

FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			

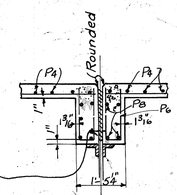




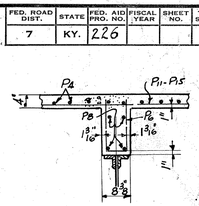
SECTION A-A



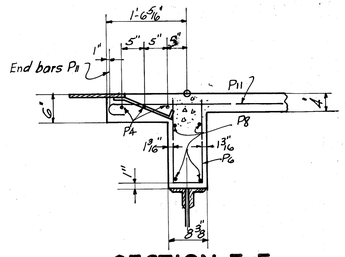
SECTION B-B



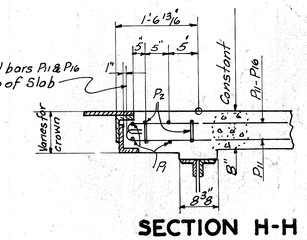
SECTION C-C



SECTION D-D



SECTION E-E



SECTION H-H

END OF SLAB OVER PIER N1

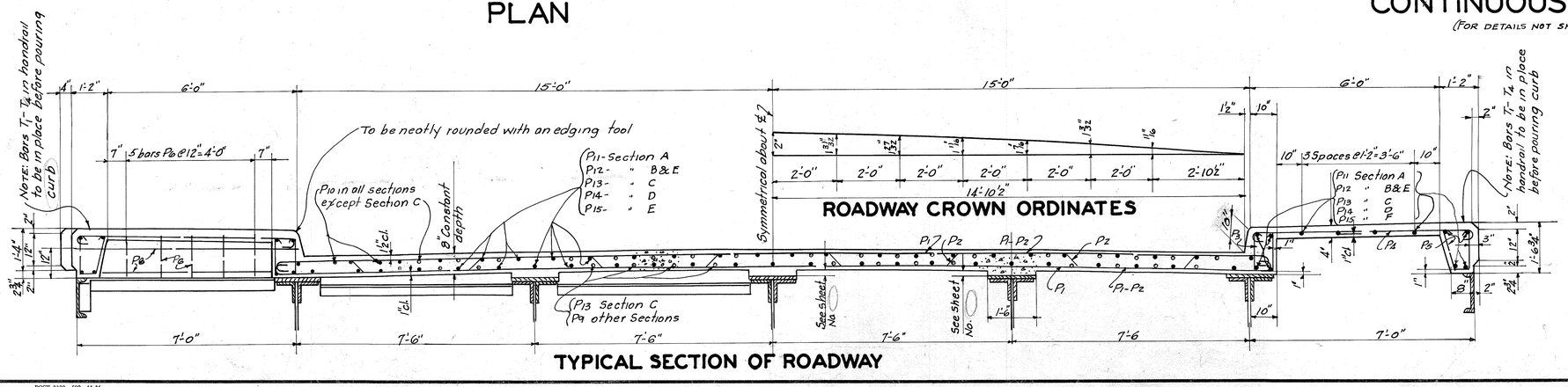
SECTION E-E

SECTION H-H

END OF SLAB OVER PIER S1

DETAILS OF FLOOR SLAB FOR 470'-6" CONTINUOUS PLATE GIRDER SPAN (3 SHEETS)

(FOR DETAILS NOT SHOWN HEREON SEE SHEET No. 34



TYPICAL SECTION OF ROADWAY

DESIGNED BY Newman DATE 12-36
TRACED BY Sandefur DATE 12-36
CHECKED BY WO DATE 1-37
REVISED DATE
REVISED DATE
REVISED DATE

SHEET 32 OF 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

DRAWING No. 6742

INDEX

POST 2329—500—11-36

FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			

36'-10" | 36'-0" | 24'-0"

44 bars P1 @ 10" = 35'-10" (Top & Bottom) | 43 bars P1 @ 10" = 35'-0" (Top & Bottom) | 29 bars P1 @ 10" = 23'-4" (Top & Bottom)

43 bars P2 @ 10" = 35'-0" (Bent) | 42 bars P2 @ 10" = 34'-2" (Bent) | 29 bars P2 @ 10" = 23'-4" (Bent)

44 bars P3 @ 10" = 35'-10" | 43 bars P3 @ 10" = 35'-0" | 29 bars P3 @ 10" = 23'-4"

Note: For details of C.I. Drains Sheet No 27

Lap bars P15 ~ 2'-0"

Trap Door

℄ X Frame

(Spaced as shown in Section) (Bottom of Slab)

(Spaced as shown in Section) (Top of Slab)

℄ Girder

4 Spcs @ 1'-3" = 5'-0"

16 bars P9 | 71 Bars P14 | 20 bars P10 | 16 bars P9 | 71 bars P12 | 20 bars P10 | 16 bars P9 | 71 bars P15 (Lap 2'-0" ℄) | 20 bars P10

87 bars P4 @ 5" = 35'-10" | 85 bars P4 @ 5" = 35'-0" | 58 bars P4 @ 5" = 23'-9"

44 bars P5 @ 10" = 35'-10" | 43 bars P5 @ 10" = 35'-0" | 29 bars P5 @ 10" = 23'-4"

12'-10" | 12'-0" | 12'-0" | 12'-0" | 12'-0" | 12'-0" | 12'-0" | 12'-0"

FLOOR SLAB SECTION -D-

FLOOR SLAB SECTION -E-

PLAN

(For Cross-Section and all Sections cut on this Plan See Sheet No. 33)

HALF FLOOR SLAB SECTION -F-

Note: For location of Trap Doors & Details of Reinforc. and Tp Side walk Slab See Sheet No. 34

Lap bars P15 ~ 2'-0"

BILL AND TYPES OF REINFORCEMENT

MARK	TYPE	NO	SIZE	LENGTH Ft.	LENGTH In.	LOCATION	a Ft.	a In.	b Ft.	b In.
P1	①	1140	⅝" ϕ	33	0	Roadway Slab	—	—	—	—
P2	②	552	"	33	7	" "	—	—	—	—
P3	③	1132	½" □	3	6	Curb	—	—	—	—
P4	④	2222	⅝" ϕ	7	10	Sidewalk Slab	—	—	—	—
P5	⑤	1132	½" □	3	6	Curb	—	—	—	—
P6	⑥	550	½" ϕ	3	0	Under Sidewalk Slab	—	—	—	—
P7	Str.	8	⅝" ϕ	8	0	Floor Slab Sec. F	—	—	—	—
P8	"	440	½" ϕ	6	9	Under Sidewalk Slab	—	—	—	—
P9	⑦	384	⅝" ϕ	5	0	Roadway Slab	4	0	4	2⅜
P10	Str.	500	"	5	0	" "	—	—	—	—
P11	⑧	142	½" ϕ	26	7	" "	24	11	25	3
P12	"	568	"	36	11	" "	35	3	35	7
P13	"	190	"	7	4	" "	5	8	6	0
P14	"	142	"	37	10	" "	36	2	36	6
P15	⑨	142	"	25	6	" "	—	—	—	—
P16	⑦	40	⅝" ϕ	7	4	" "	6	4	6	6⅜

TYPE ①

TYPE ②

TYPE ③

TYPE ④

TYPE ⑤

TYPE ⑥

TYPE ⑦

TYPE ⑧

TYPE ⑨

(All dimensions are out to out)

℄ Span & Floor Slab Sec. F

Floor Slab Section F Symmetrical about this ℄ except for Trap Door.

ESTIMATE OF QUANTITIES

Concrete Class "A"	548.3 Cu.yds
Reinforcement	103,390 lbs.
Trap Door	6 Required.

Note: The order of pouring to be either 1 then 1-A; then 2; then 2-A; then 3; then 4; then 4-A; etc., or 1-A; then 1; then 2-A; then 2; then 3; then 4-A; then 4, etc.

North End	①	②	④	⑥	⑧	⑦	⑤	③	5-A	7-A	8-A	6-A	4-A	2-A	1-A
22'-2"	A	B	B	B	C	D	E	F	E	D	C	B	B	B	A

℄ Span

South End

26'-0⅝" | 35'-10½" | 35'-10½" | 35'-10½" | 6'-4" | 36'-10" | 36'-0" | 48'-0" | 36'-0" | 36'-10" | 6'-4" | 35'-10½" | 35'-10½" | 35'-10½" | 25'-6⅜"

Diagram Showing Order of Pouring

FLOOR SLAB FOR 470'-6" SPAN (3 Sheets)

For Details not shown hereon see Sheet No 32 & 34

26'-0⅝" Slab over Pier N

25'-6½" Slab over Pier S1

½" Premolded Expansion Joint ~ For details of Copper Strip See Sheet No. 35

Omit drains on these two sections at North end of bridge.

Floor Slabs Symmetrical about this ℄ except over Piers & Drains at End of Bridge.

FLOOR SLAB SECTION -A- | FLOOR SLAB SECTION -B- | FLOOR SLAB SECTION -B- | FLOOR SLAB SECTION -B- | FLOOR SLAB SECTION -C- | FLOOR SLAB SECTION -D- | FLOOR SLAB SECTION -E- | FLOOR SLAB SECTION -F-

PLAN

Sheet 33 of 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE FRANKFORT

DRAWING No. 6742

INDEX

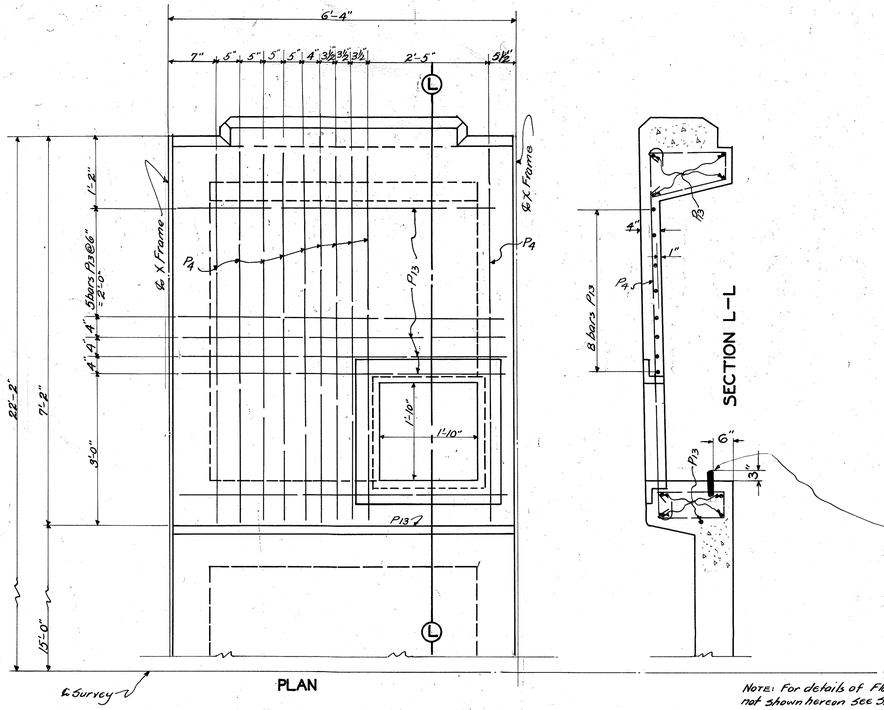
DESIGNED BY Newman DATE 12/36
TRACED BY Mapp DATE 12-12-36
CHECKED BY WSS DATE 1/37

REVISED DATE
REVISED DATE
REVISED DATE

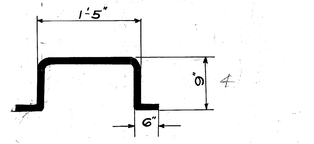
℄ Survey

POST 2329—500—11-36

FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			



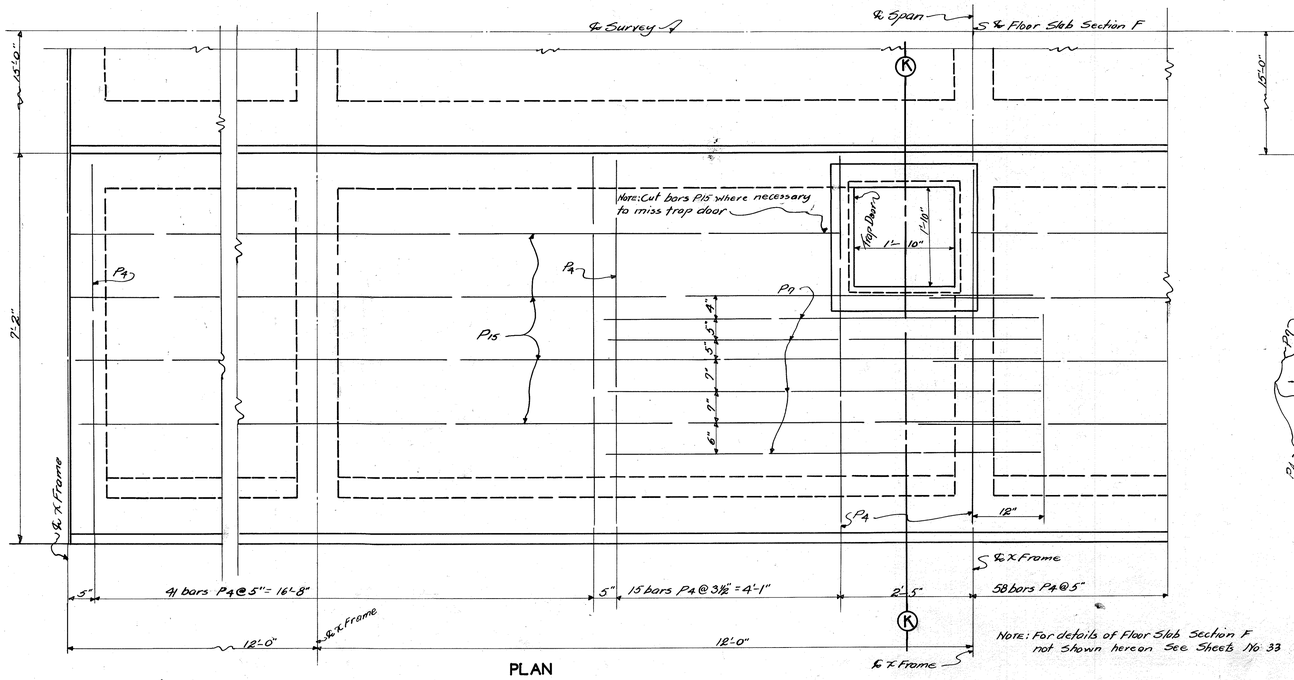
NOTE: For details of Floor Slab Section C not shown hereon see Sheet No 32

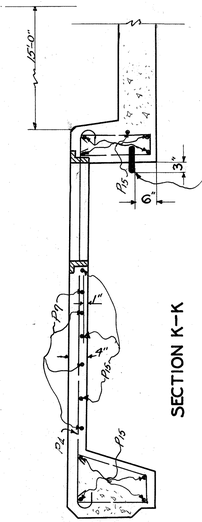


1" ϕ Bent Rod - 3'-7" long - 6 - Required
(All dimensions are out to out)

NOTE: Two trap doors to be placed in Each Fl Slab Section C - one on each side of ℄ Survey. Trap doors to be located above ladders built on Girders. Trap doors to be similar to those shown in "Clow-National Catalogue" No. A-1833. Locking devices to be provided, & top of door to have checker or other Non-skid surface. Trap doors of other manufacture meeting these requirements may be used with permission of Department.

DETAILS OF TRAP DOOR OPENING IN FLOOR SLAB SECTION-C





NOTE: For details of Floor Slab Section F not shown hereon see Sheets No 33

NOTE: Two Trap Doors to be placed in Floor Slab Section F, one on each Side of ℄ Survey. Trap Doors to be located above ladders built on Girders. Trap Doors to be same as specified above.

DETAILS OF TRAP DOOR OPENING IN FLOOR SLAB SECTION-F

TRAP DOORS IN SIDEWALK

SHEET 34 OF 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

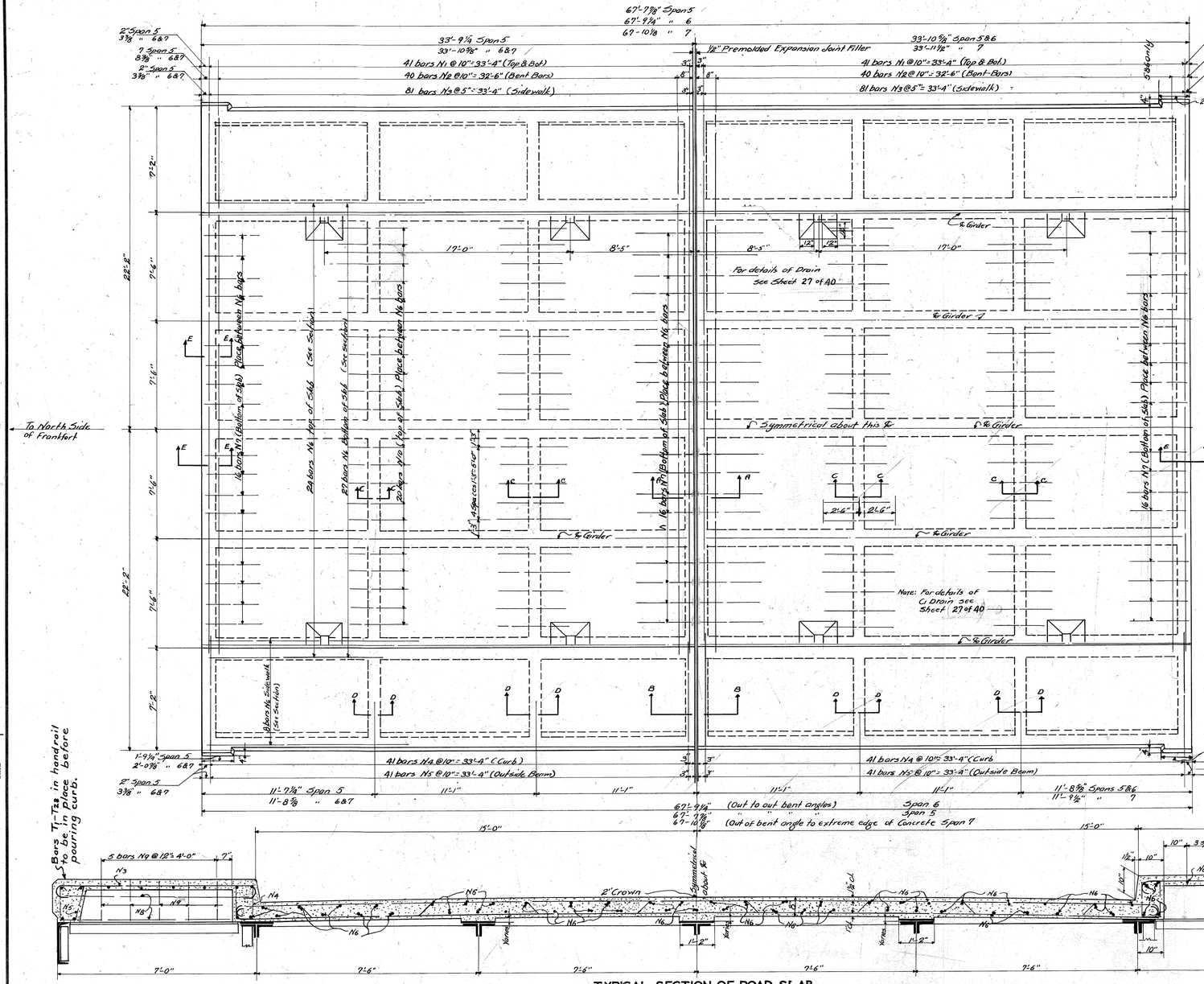
DRAWING No. 6742

INDEX

DESIGNED BY	DATE	REVISED	DATE
TRACED BY	DATE 12-24-36	REVISED	DATE
CHECKED BY	DATE 12-31-37	REVISED	DATE

POST 2329—500—11-36

FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			

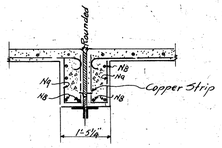


TYPICAL SECTION OF ROAD SLAB

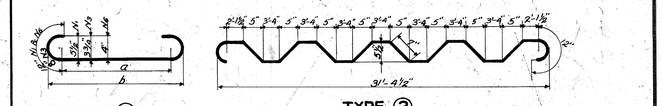
BILL AND TYPES OF REINFORCEMENT FOR ONE SPAN

Mark	TYPE	No.	Size	Length FT.	Length IN.	Location	a FT.	a IN.	b FT.	b IN.
N1	①	164	5/8" ℓ	33	0	Road Slab	31	0	31	5½
N2	②	80	"	33	7	" "	—	—	—	—
N3	①	324	3/8" ℓ	7	10	Sidewalk Slab	6	6	6	9¾
N4	③	164	½"	3	6	Curb	—	—	—	—
N5	④	164	"	3	6	Outside beam	—	—	—	—
N6	①	142	1½" ℓ	35	2	Longitudinal	33	2	33	6
N7	⑤	64	5/8" ℓ	5	0	At Expansion Joints	—	—	—	—
N8	Str.	64	½" ℓ	6	9	Beam over Bracket	—	—	—	—
N9	⑥	80	"	3	0	Stirrups	—	—	—	—
N10	Str.	80	5/8" ℓ	5	0	Over Cross Beams	—	—	—	—

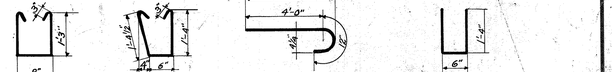
SECTION A-A



SECTION B-B

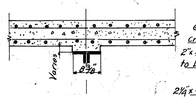


TYPE ① TYPE ②

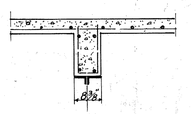


TYPE ③ TYPE ④ TYPE ⑤ TYPE ⑥

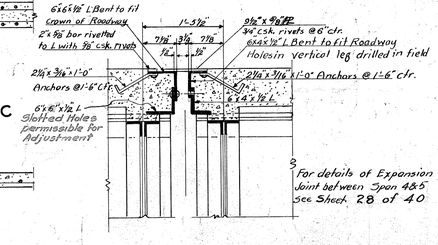
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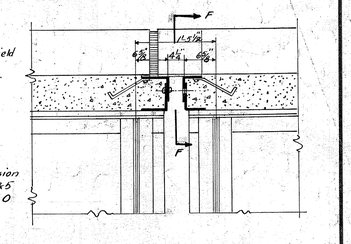
SECTION C-C



SECTION D-D

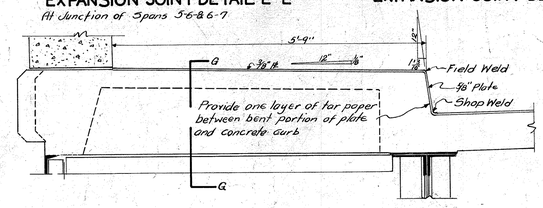


EXPANSION JOINT DETAIL E-E

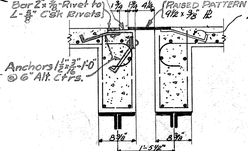


EXPANSION JOINT DETAIL AT CURB

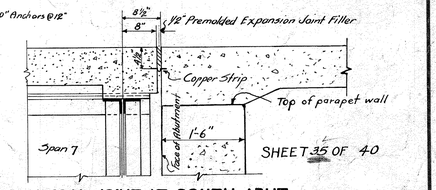
EXPANSION JOINT DETAIL E-E
At Junction of Spans 5-6 & 6-7



ELEVATION F-F



SECTION G-G
At Junction of Spans 5-6 & 6-7.

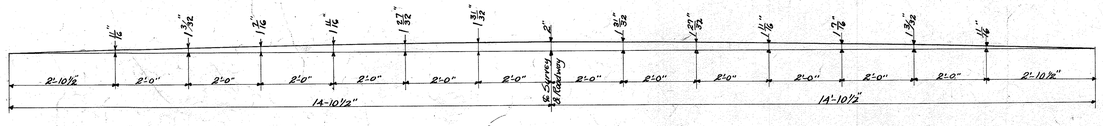


SHEET 35 OF 40

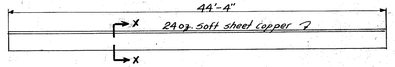
EXPANSION JOINT AT SOUTH ABUT.

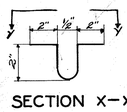
ESTIMATE OF QUANTITIES 3 SPANS

Concrete Class "D"	233.9	Cu.Yds.
Reinforcement	44,740	Lbs.



ROADWAY CROWN ORDINATES





SECTION X-X



PLAN Y-Y

DETAILS OF COPPER STRIP

DETAILS OF R.C. ROADWAY SLAB 66'-7" SPAN

DESIGNED BY W.D.GRAY DATE 11/36
TRACED BY McGee DATE 2-28-36
CHECKED BY A.GRIFFITH DATE 1-37
REVISED Sidewalk Plates DATE
REVISED Expansion Jt. Details E-E DATE 4-29-37
REVISED DATE
T.E.S. DATE 6/3/37
A.G. DATE 4-29-37

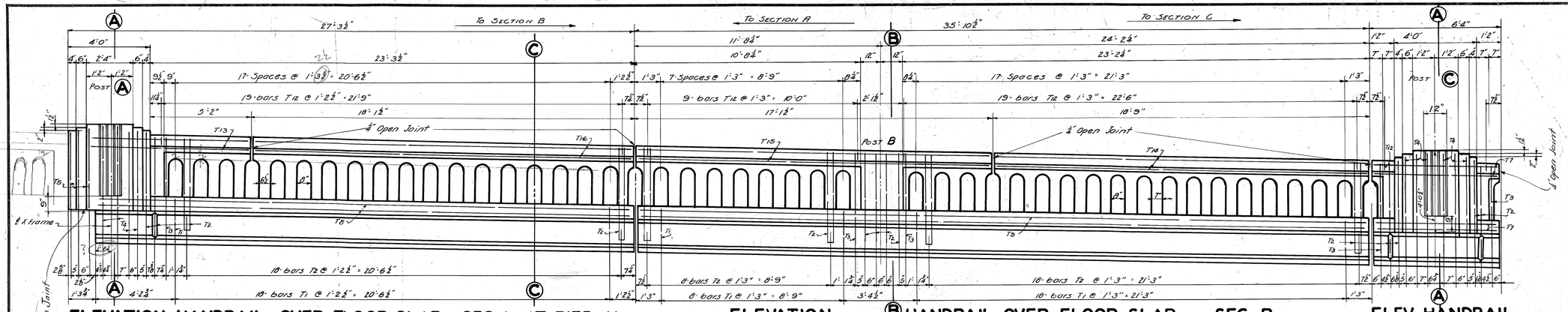
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

DRAWING No. 6742
INDEX

POST 2329—500—11-36

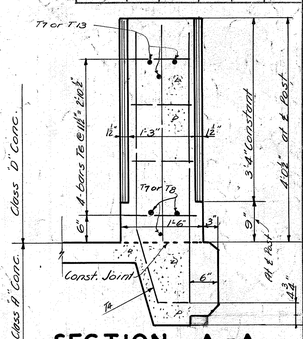
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7	KY.	226			



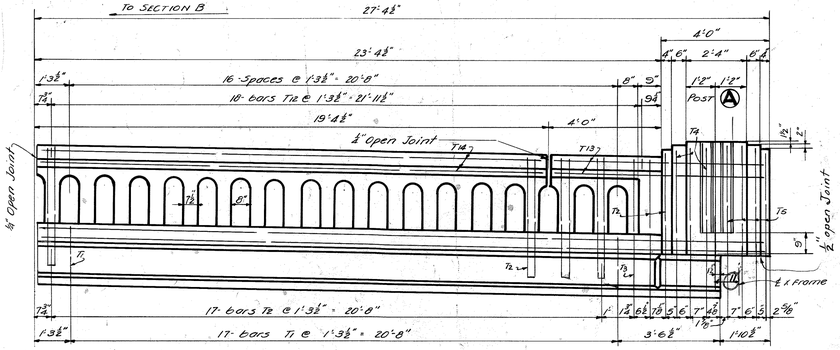
ELEVATION HANDRAIL OVER FLOOR SLAB SEC.A AT PIER N

ELEVATION HANDRAIL OVER FLOOR SLAB SEC. B

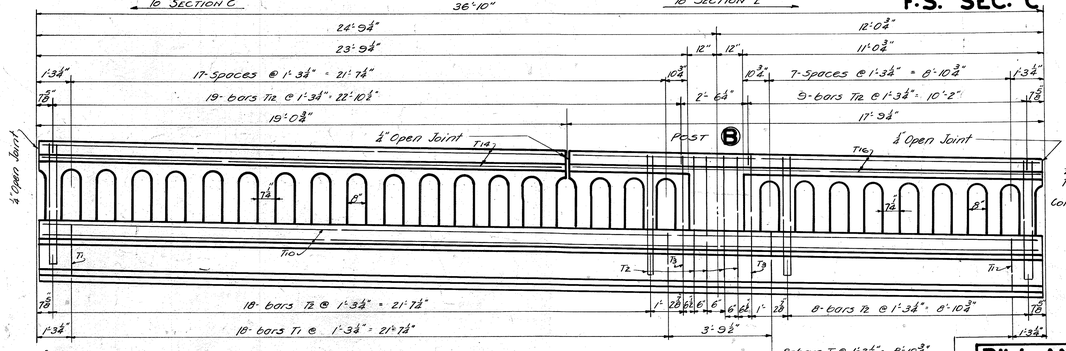
ELEV. HANDRAIL F.S. SEC. C



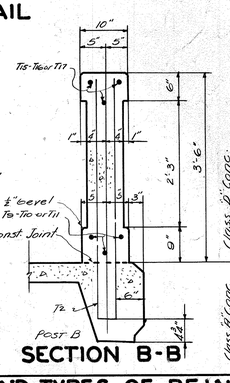
SECTION A-A
(This section same for Posts A & C)



ELEVATION HANDRAIL OVER FLOOR SLAB SEC.A AT PIER S1

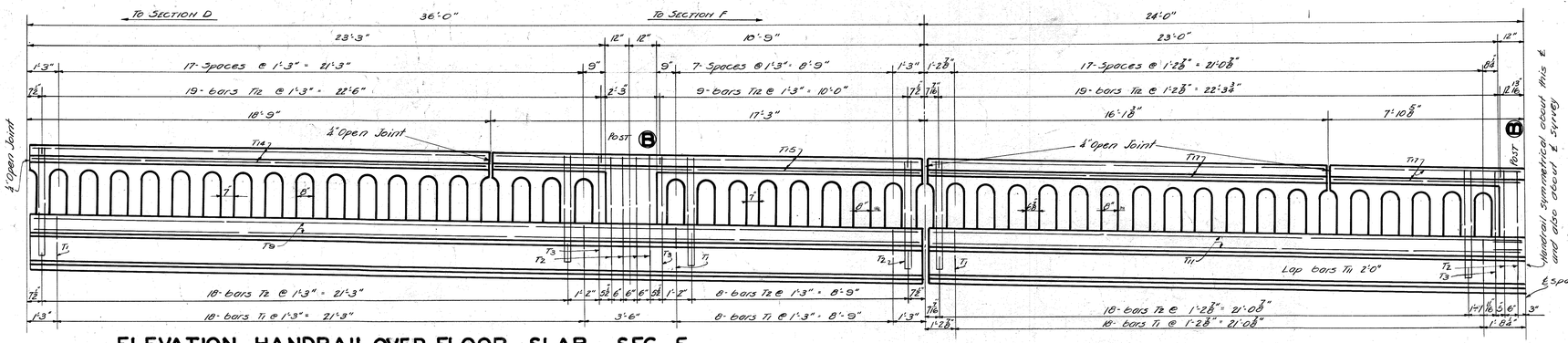


ELEVATION HANDRAIL OVER FLOOR SLAB SEC. D



SECTION B-B

SECTION C-C

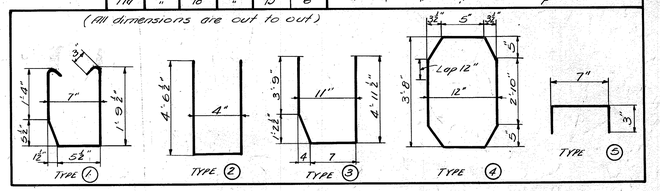


ELEVATION HANDRAIL OVER FLOOR SLAB SEC. E

ELEVATION HANDRAIL OVER FLOOR SLAB SEC. F

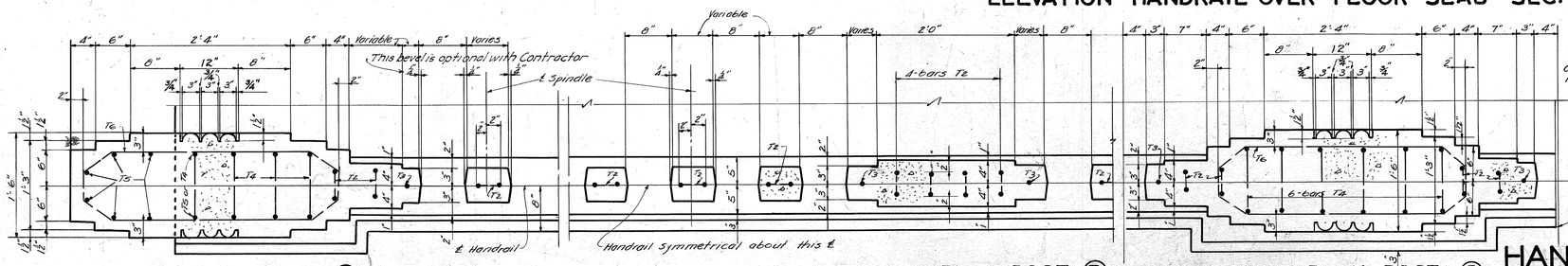
NOTE: Bend all corners on Horizontal ½" unless otherwise shown

(All dimensions are out to out)



BILL AND TYPES OF REINFORCEMENT

MARK	TYPE	NO.	SIZE	LENGTH FT.	LENGTH IN.	LOCATION
T1	①	662	⅝"ø	4	5	Curb into Plinth
T2	②	774	"	9	3	" " Spindles & Posts C
T3	Str.	56	"	4	6	" " Rail adjoining Posts
T4	③	38	"	10	4	" " Posts A & C
T5	Str.	28	"	3	6	Post A
T6	④	32	⅝"ø T.B.	9	3	Posts A & C
T7	Str.	24	½"ø T.B.	6	0	Top Rail and Plinth over F.S. Sec. C
T8	"	12	"	26	6	Plinth " " " A
T9	"	48	"	35	7	" " " B&E
T10	"	12	"	36	6	" " " D
T11	"	12	"	24	10	" " " F
T12	⑤	710	½"ø T.B.	0	11	Top Rail
T13	Str.	12	½"ø T.B.	7	8	Top Rail over F.S. Sec. A
T14	"	66	"	18	5	" " " A-B-D&E
T15	"	48	"	16	10	" " " B&E
T16	"	18	"	17	5	" " " D&A
T17	"	18	"	15	6	" " " F



SECTIONAL PLAN POST (A)

SECTIONAL PLAN POST (B)

SECTIONAL PLAN POST (C)

ESTIMATE OF QUANTITIES

Concrete Class 'D'	60.0	cu yds
Reinforcement	13620	lbs.

HANDRAIL 470'-6" SPAN

SHEET No 36 OF 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

DRAWING No. 6742

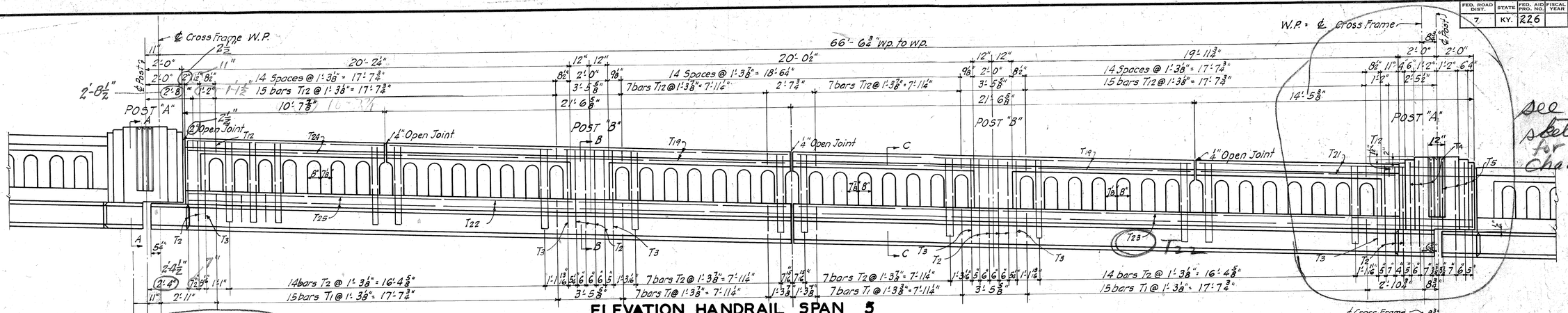
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TRACED BY Campbell DATE 12-29-36
CHECKED BY W.S.D. DATE 1/24/37

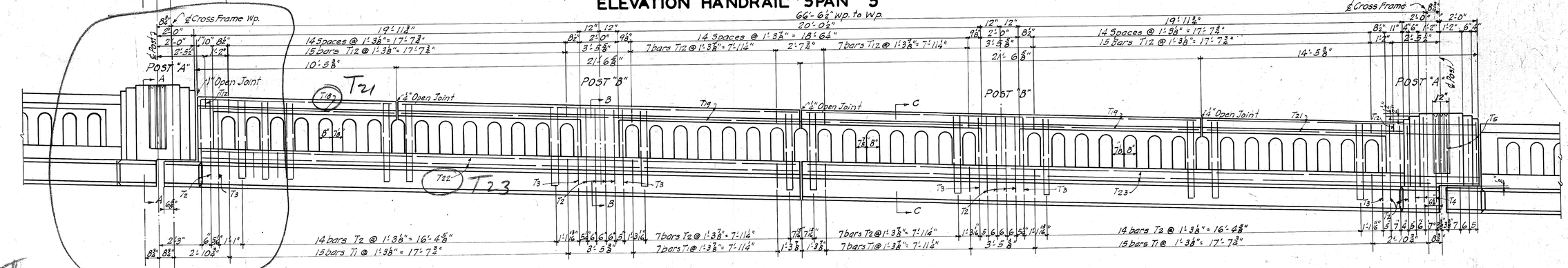
REVISED Post T2 & K Frame DATE 12-28-36
REVISED Joints at N.B.S.L. (¼"+½"+½" open joints) DATE 3-10-37
REVISED DATE

POST 2229—500—11-36

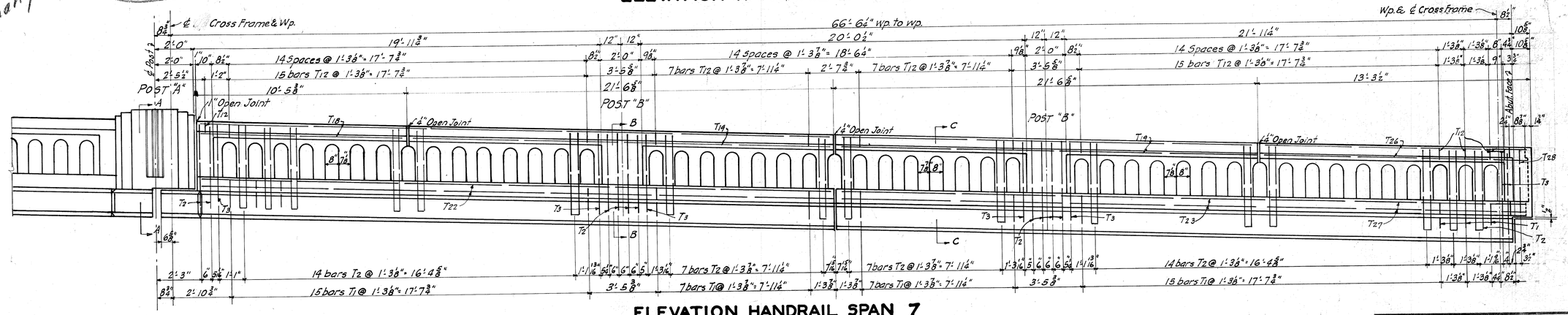
FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			



ELEVATION HANDRAIL SPAN 5



ELEVATION HANDRAIL SPAN 6



ELEVATION HANDRAIL SPAN 7

NOTE: For sections thru Handrail
See Sheet 38

HANDRAIL SPANS 5, 6, & 7
SPAN 66'-7"

SHEET 37 OF 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

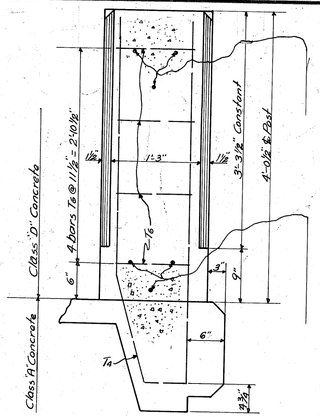
DRAWING No. 6742

INDEX

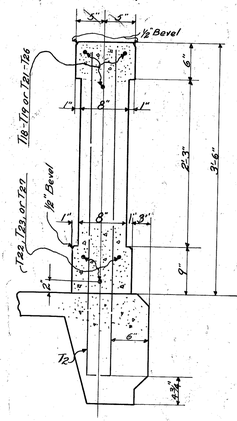
DESIGNED BY A. Gotch	DATE 12-36	REVISED Hdrl. & Clearance dimensions at Pier 5	DATE 2-37
TRACED BY D.T.D.	DATE 12-36	REVISED	DATE
CHECKED BY V.D.S.	DATE 1-37	REVISED	DATE

POST 2329—500—11-36

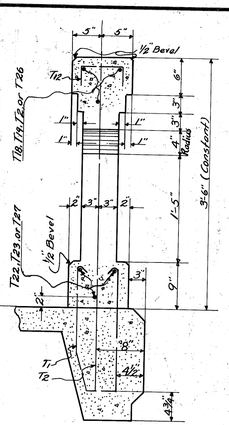
FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			



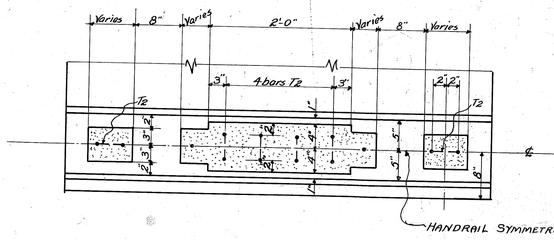
SECTION A-A



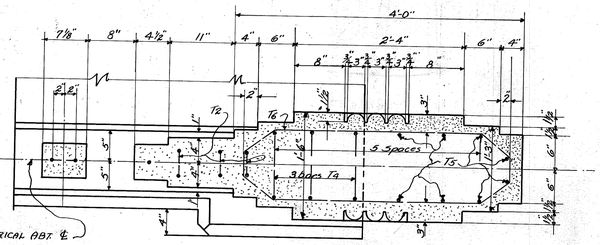
SECTION B-B



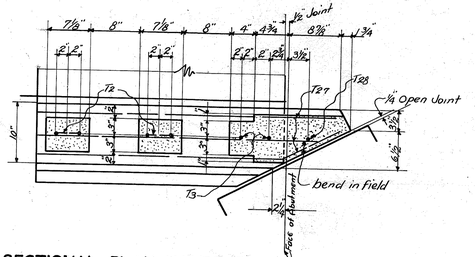
SECTION C-C



SECTIONAL PLAN POST-B-



SECTIONAL PLAN POST-A-



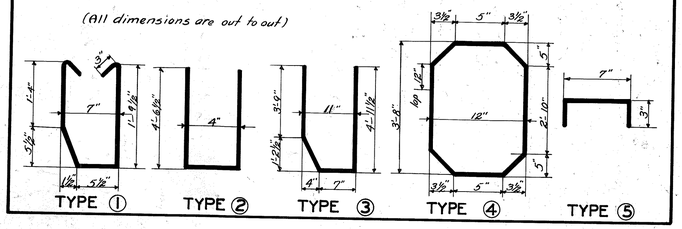
SECTIONAL PLAN HANDRAIL AT ABUTMENT (SOUTH)

NOTE: For location of Sections
See Sheet 37

BILL AND TYPES OF REINFORCEMENT

MARK	TYPE	NO.	SIZE	LENGTH FT.	LENGTH IN.	LOCATION
T1	(1)	268	½" □	4	5	Curb into Plinith
T2	(2)	(244) 288		9	3	" " Spindles & Posts (B)
T3	Str.	38	"	4	6	" " Rail adjoining Posts
T4	(3)	12	"	10	4	" " Posts (A)
T5	Str.	16	"	3	6	Posts (A)
T6	(4)	16	⅜" ϕ	9	3	Posts (A)
T12	(5)	280	½" □	0	11	Top Rail
T18	Str.	12	½" ϕ	10	2	Top Rail Span 6-7
T19	"	36	"	21	4	" " " 5-6-7
T21	"	12	"	14	3	" " " 6-5
T22	"	12	"	31	10	Plinith Span 6-7
T23	"	12	"	35	9	" " " 5-6
T24	"	6	"	10	4	Top Rail Span 5
T25	"	6	"	31	10	Plinith Span 5
T26	"	6	"	13	0	Top Rail Span 7
T27	"	6	"	34	5	Plinith Span 7
T28	"	2	"	3	3	Rail Span 7

(All dimensions are out to out)



ESTIMATE OF QUANTITIES

Concrete Class "D" 29.7 Cu.yds.
Reinforcement (5110) 5770 Lbs.

SHEET 38 OF 40

HANDRAIL SPANS ⑤-⑥-⑦
SPAN 66'-7"

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDGE
FRANKFORT

DRAWING No. 6742 | INDEX

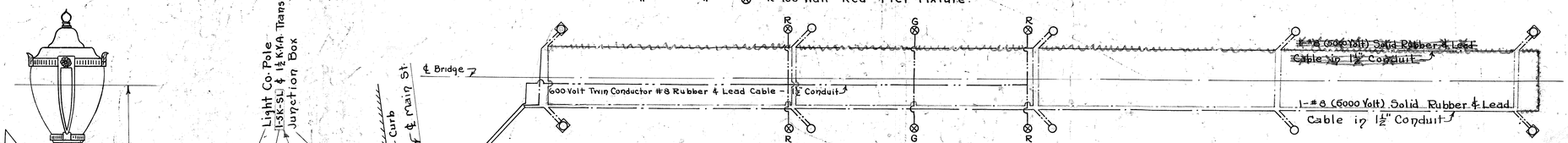
DESIGNED BY R. Griffith DATE 12-24
TRACED BY M. Young DATE 12-24
CHECKED BY V. P. DATE 1-25-37

REVISED Add Bars T2 DATE 2-10-38
REVISED DATE
REVISED DATE

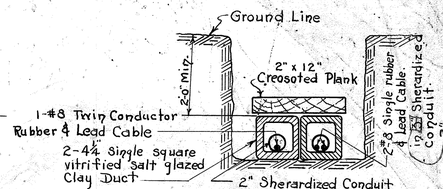
POST 2329—500—11-36

FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			

Key - Bridge Lighting - ○ - 6000 Lumen Standard Fixture
" " - □ - 6000 Lumen Special Fixture
Navigation Lighting ⊗ G-100 Watt Green Channel Fixture
" " ⊗ R-100 Watt Red Pier Fixture.

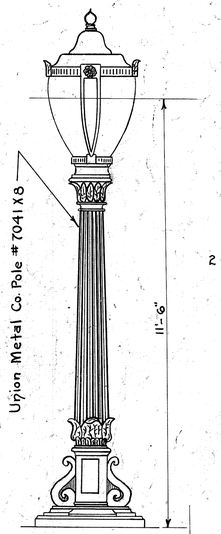


CIRCUIT DIAGRAM



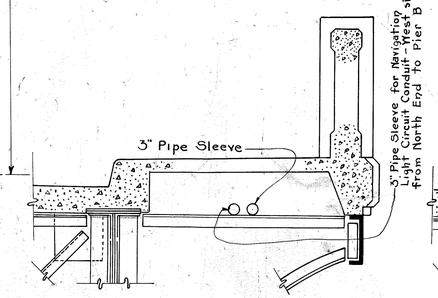
SECTION A-A

Note: 4¼" Y.T.C. pipe duct to be used with all conduits below surface of ground.



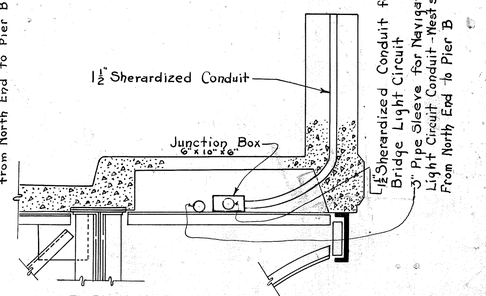
LAMP POST

(124 Globe, No. 1124 Canopy)
(Type M Casing)



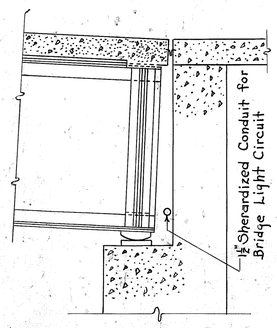
PART SECTION THRU STEEL SPANS

(Showing Location of Pipe Sleeves for Conduits)



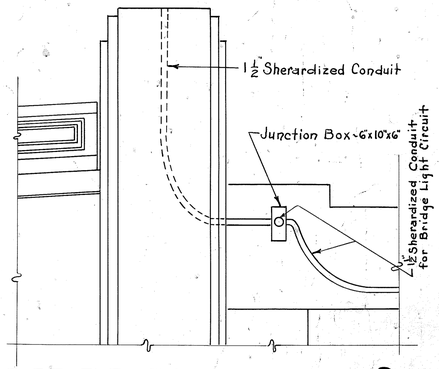
TYPICAL PART SECTION THRU BRACKETS ON STEEL SPANS

(Showing Details of Bridge Light Circuit)



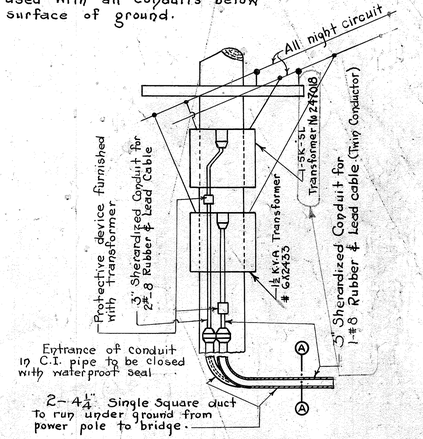
PART SECTION AT ABUT. NO. 2

(Showing Location of Bridge Light Circuit Conduit)

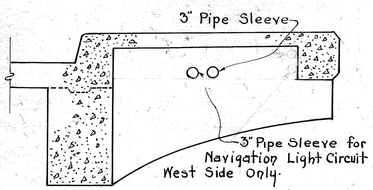


PART ELEVATION AT ABUT. NO. 2

(Showing Details of Bridge Light Circuit)

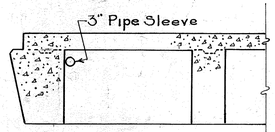


SERVICE WIRES FOR LIGHT CIRCUITS



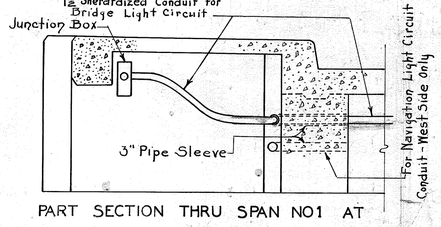
PART SECTION THRU SPAN NO. 1

(Showing Location of Pipe Sleeves for Conduits)



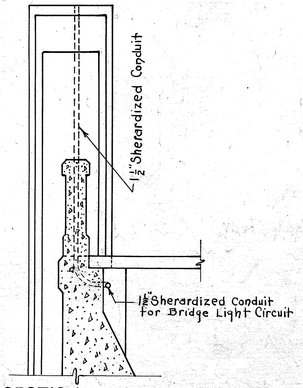
PART SECTION THRU SPAN NO. 1 AT NORTH ENDWALL

(Showing Location of 3" Pipe Sleeve for Bridge Light Circuit Conduit)



PART SECTION THRU SPAN NO1 AT NORT ENDWALL

(Showing Details of Bridge Light Circuit & Location of pipe sleeve for Navigation Light Circuit Conduit)



PART SECTION THRU RETAINING WALL AT POST -C-

(Showing Details of Bridge Light Circuit)

ITEMS FOR STREET LIGHTING CIRCUIT

4 - Special light fixtures - See details on Sheet No. 40.
6 - G.E. Form 12 Novalux lighting units consisting of:
*124-#1124 light alabaster rippled Glassware; Form M casing; External Ornamental Ribs; "B" symmetric Dome Refractor; Socket for 6000 Lumen Lamp;
All to operate on 6.6 amperes straight Series Circuit.
6 - Union Metal Co. - Poles Design 7041X8; Pressed Steel fluted shafts; Base to center of light to be 11'-6" Contractor to furnish anchor bolts and template for setting same.
1 - 5K-5D Aerial type Transformer with protective device Similar to General Electric Catalogue # 247018 for operating on a 6.6 Ampere primary and secondary street lighting Circuit.
10 G.E. Junction boxes No. 2277 - 6"x10"x6"
900 ft. (Approx.) 1½" Sherardized or Galvanized Conduit & Couplings, clamps, bolts, etc., for fastening conduits & junction boxes To Concrete & steel work.
1400 ft (Approx.) - No. 8 B&S gauge single conductor, solid copper wire, 5000 Volt, rubber & lead insulation.
400 ft. (Appox.) Ornamental Pole & Bracket cable - #8 - Stranded - 5000 volt for use in Standards, junction box to lighting unit.
14 - 6000 Lumen Mazda lamps to be operated on 6.6 Amperes Straight Series circuit.
1 343335 RMS, 2 pole R.C.G.C. switch, 2500 Volt

ITEMS FOR POWER CONNECTION

500 Ft 4¼"x4¼" Single Square Vitrified Salt glazed Clay Duct.
250 Ft - 2"x12" Creasoted Plank
250 Ft - 1½" Conduit for lighting Circuit
250 Ft - 2" Conduit for Navigation Circuit.
1 - Junction Box x x G.E. Catalogue #

NOTES:-

Included: This work includes the furnishing of all materials and the installation of a complete series roadway lighting system on the Bridge and Retaining walls, and a complete system for Navigation Lights on the Bridge, in strict accordance with the 1933 National Electric Code. Both systems shall begin with provisions for connections to the Power Companys nearest point of delivery and extended to the lighting fixtures, embracing the light fixtures, supports, poles, lamps, wiring, transformers, protective devices, junction boxes, conduits and all other parts necessary for complete lighting systems ready for service. The Lighting Contractor shall Cooperate with the power company in arranging the connection to the point of delivery, and shall cooperate with the other contractors on the bridge in arranging to install such conduits and other parts of the lighting system that must be installed in the work of the other contractor.

Materials: All fixtures and materials shall be of the design shown. Where specific makes or brands of equipment or materials are called for; it is intended that these shall be descriptive of the kind and quality of equipment or materials to be furnished. Any other make or brand of equipment or materials of similar design and equal in quality will be acceptable when approved by the Department.

Conduits: Conduits shall be rigid cold rolled steel sherardized or galvanized with perfectly smooth bore and shall be placed as shown hereon. All Conduits shall be cut straight with hack saws and reamed, threads shall be cut clean and perfect, oil lubricant being used while cutting, and shall be painted with red lead and linseed oil before turning into couplings. All conduits during installation shall be protected by metal caps, to prevent debris from entering them. They shall be bonded and grounded throughout. At each expansion joint in the structure provision shall be made for expansion. All conduits and junctions boxes shall be installed in such a manner as to provide for the draining off of moisture or condensation.

Test & Inspection: The entire system after completion shall be tested for insulation resistance, grounds and operation in the presence of the engineer and all test shall prove entirely satisfactory for the final acceptance of the lighting System. An underwriters inspection Certificate shall be delivered to the Department by the Contractor.

Drawings: These specifications shall be used in connection with the set of detailed drawings, and what is called for by either shall be as binding as called for by both.
Contractors shall furnish such additional working drawings as maybe required for the proposed lighting system. Contractor shall list all fixtures and materials by make and catalogue numbers for approval.

ITEMS FOR NAVIGATION LIGHTING CIRCUIT

4 - 180°-Red - # 888407 - "Westinghouse"
2 - 360° Green #888418 - "Westinghouse" Fixtures have all metal parts Cadmium plated.
2 - Sockets & water tight conduit for 3 wire system. Power-8" Dia. pressed Fresnel Lens with 6¾" clear height bare 100 Watt clear bulb. All lamps to meet the requirements of U.S. Gov't Lighthouse Service.
1 - Transformer - ½ K.V.A. (Pole Type) with Cut out - Two 5% taps - G.E. Catalogue No 6X2453.
4 - G.E. Junction Boxes - G.E. No 2277 - 6"x10"x6"
600 Ft (Approx.) 1½" Sherardized or Galvanized conduit and couplings, clamps, bolts etc., For fastening conduit & junction boxes.
600 Ft (Approx.) #8 Twin Conductor Stranded 600 Volt Rubber & Lead Cable.
12 - 100 Watt Mazda lamps to be operated on 110 Volt - 60 Cycle A.C.

Sheet No. 39 of 40

DESIGNED BY J.E. Black DATE
TRACED BY M. McMakin DATE 3-30-36
CHECKED BY H.C. Wilson DATE 4-2-36
REVISED Size of Conduit for Bridge DATE 4-3-36
REVISED CIRCUIT DIAGRAM DATE 5-5-36
REVISED DATE
REVISED DATE

POST 2329—500—11-36

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

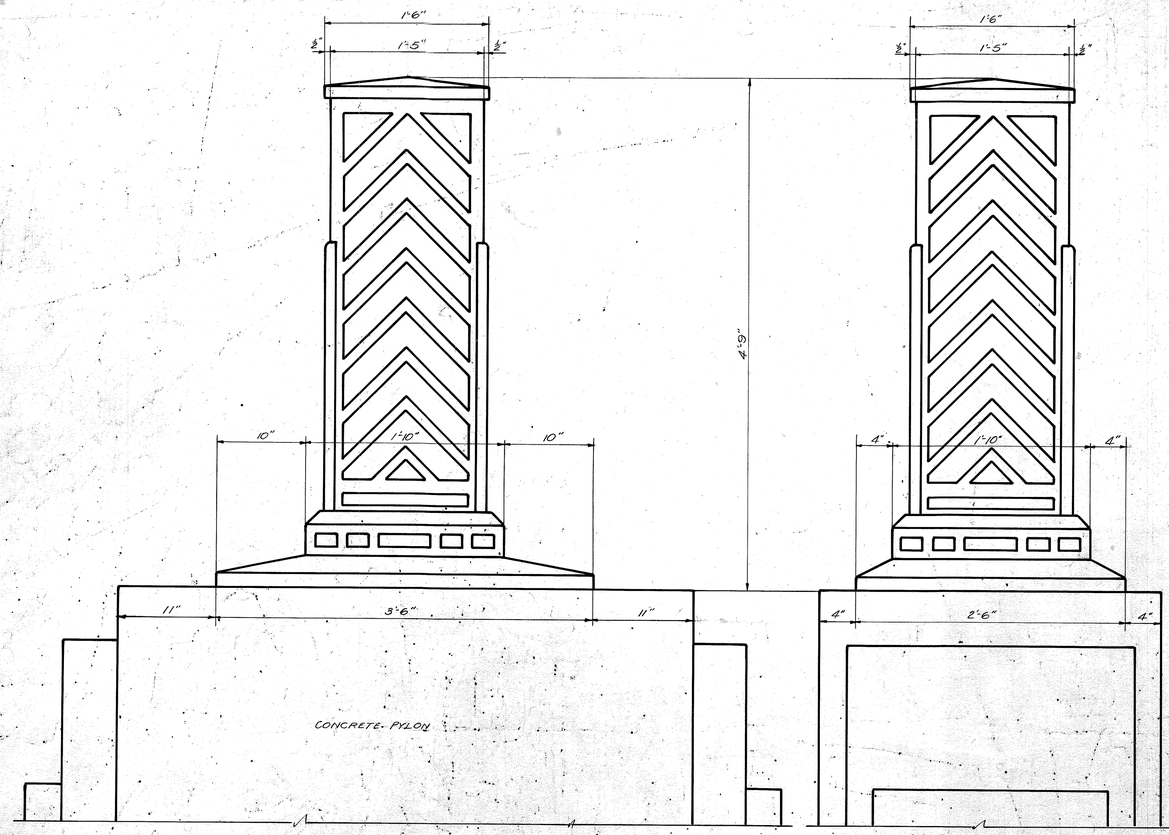
KENTUCKY RIVER BRIDGE
FRANKFORT

LIGHTING DETAILS

DRAWING No. 6742

INDEX

FED. ROAD DIST.	STATE	FED. AID PRO. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.	226			



SIDE ELEVATION

END ELEVATION

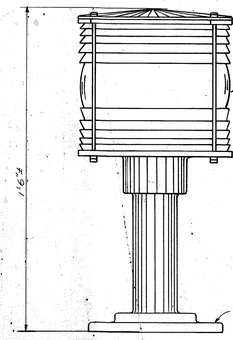
SKETCH OF LUMINAIRE AT ENDS OF BRIDGE (4 REQUIRED)

NOTE

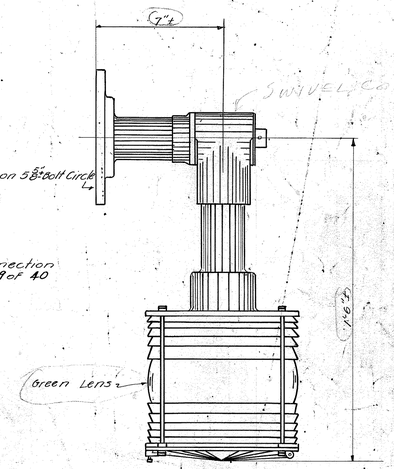
Luminaires to be of Cast Bronze Construction and medium density diffusing glass panels. Two lamps of 6000 Lumen size to be used in each Luminaire; one located near the Bottom and one near the Top.

Lighting Contractor to submit plans for the above special Luminaire for the approval of the Department.

Bronze for special lighting fixture to conform to A.S.T.M. Spec. B 62-28



PIER LIGHT
(4 REQUIRED)



MID CHANNEL LIGHT
(2 REQUIRED)

DETAIL OF NAVIGATION LIGHTS FOR BRIDGE

NOTE

All Pier Lights shall be shown from a Ruby Red 180 degree lens, the lights to be of power not less than that furnished by 6" pressed Fresnal lens, 8 inches inside diameter by 6½ inches clear height of opening with a bare 100 Watt Electric lamp with a clear bulb.

Each lamp shall be fitted with two bulb sockets and water right conduit for three wire system. All metal parts of lamps to be Cadmium plated.

Above specifications apply to Mid Channel Lights except lens which shall be a green 360 degree lens. Lamps shall meet the requirements of U.S. Government Lighthouse Service.

For circuit diagram of Navigation Lights see sheet No 39 of 40

Lamps shall be so constructed that parts may be replaced without soldering

DESIGNED BY Edd Erickson DATE 2-36
TRACED BY Congdon DATE 12-36
CHECKED BY [illegible] DATE 1-1-37

REVISED DATE
REVISED DATE
REVISED DATE

SHEET NO. 40 OF 40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY RIVER BRIDG
FRANKFORT

LIGHTING DETAILS

DRAWING No. 67

POST 2329—500—11-36