

SHEET NUMBER	SECTION	STRUCTURE				DRAWING NUMBER	SUBJECT	BRIDGE CONTRACT NO.
		NO.	TYPE	SPAN	OVER			
1							Index & Title Sheet	1979
2-3							25 Sheets Road Plan & Profile	
4	F	3172	Steel Truss	10@175'	Mill Creek	79+20	51 Layout	
5							52 General Plan	
6							53 Substructure Details	
7							54 Substructure Details	
8							55 Substructure, Bend, Diags. & Bill of Maf's.	
9							56 Special Pl. De'tls, Bend, Diags. & Bill of Maf's.	
10							57 Screeds & Data for Setting Shoes & Toehd Exp. Jt.	
11							58 Details & Bill of Maf's, Toehd Exp. Jt.	
12						Std. 475-A	1 Stress & Erection Diagrams	
13							2 End Post, Top Chord & Diagrams	
14							3 Top Chords, Diags. & Bottom Laterals	
15							4 Top Chords & Top Laterals	
16							5 Lower Chords	
17							6 Sway Frames & Struts	
18							7 Sway Frames & Struts	
19							8 Verticals, Fl.Bms, Stringers, Shoes	
20							9 Portal & H.R. Details	
21							10 Std. Pl. Unit, Bend Diags. & Bill of Maf's.	
22							11 Bill of Maf's (For Struts using Timber Scheme #1)	
23						Br. Std. A	Concrete Handrail Details (Rev. 9-1-37)	
24						Br. Std. D	Six Inch Rdwy Drain De'tls. (Oct. 15, 1937)	
25							1 Sheet Summary	
26-40						Br. Std.	15 Sheets Cross Sections	
41							1/2 C-8-FS Section (Rev. 5-23-40)	
42							Std. Misc. Road Stds. Sheet 'A' (Rev. 3-25-40)	
43							Std. " " " " " " " " 'B' (Rev. 2-5-40)	
44							Std. " " " " " " " " 'C' (Rev. 2-27-39)	
45							Std. " " " " " " " " 'D' (Rev. 2-27-39)	
46							Std. " " " " " " " " 'H' (Mar. 1940)	
47							Std. " " " " " " " " 'J' (Apr. 1940)	
48							Std. Headwalls (Feb. 1936)	
49							Std. Flex. Steel Pl. Guard Rail (Jan. 1938)	
50							Std. Super-elevation & Widening of Curves (Sept. 1932)	
51						Br. Std. S1	Special Filling Material (June 15, 1939)	
52						Br. Std. Z	Defour Signs-Sheet 'A' (Rev. 10-10-39)	
53						Br. Std. Z	" " " " " " " " 'B' (Rev. 7-17-39)	

STATE OF INDIANA  
STATE HIGHWAY COMMISSION

# BRIDGE PLANS

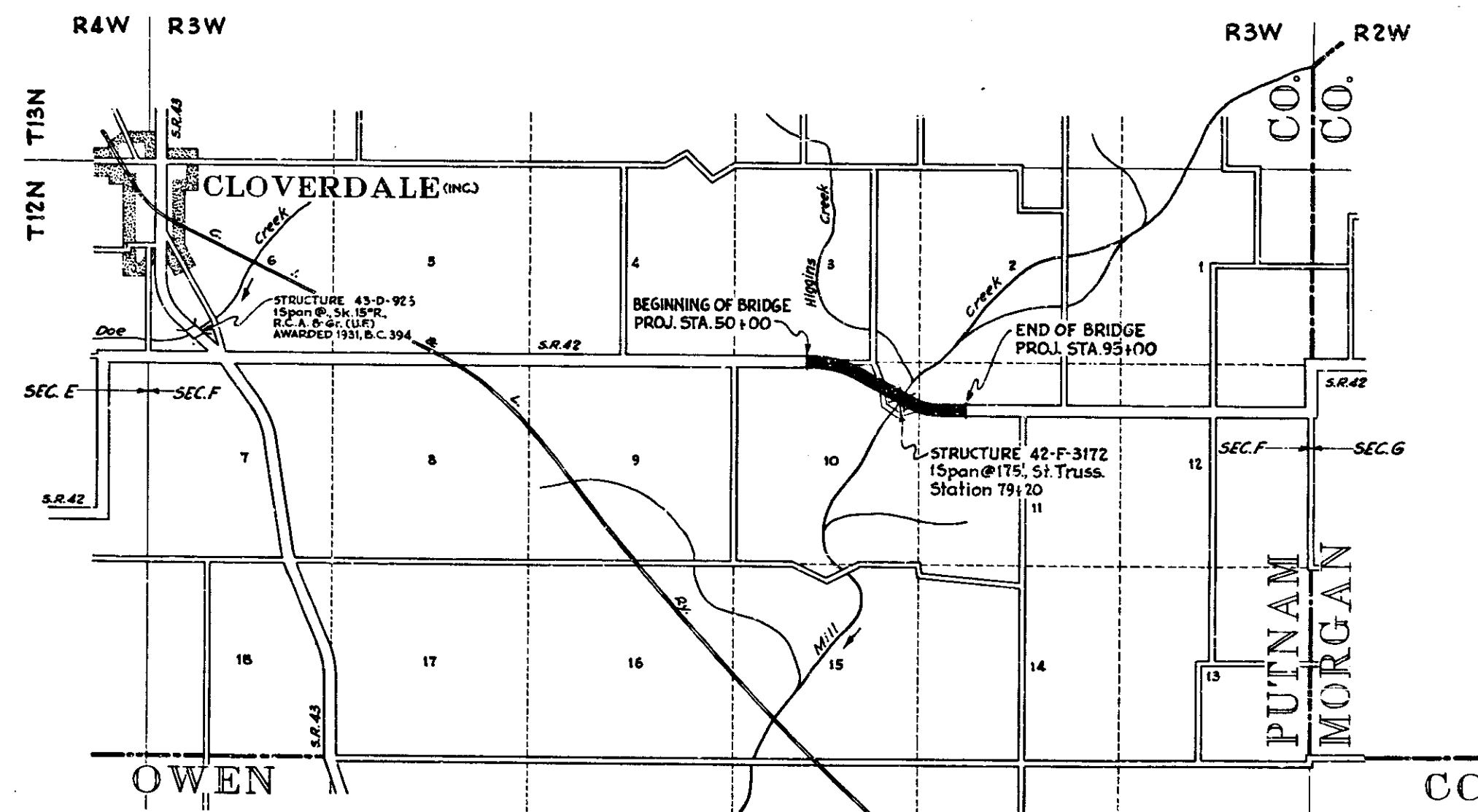
## FOR SPANS OVER 20 FEET

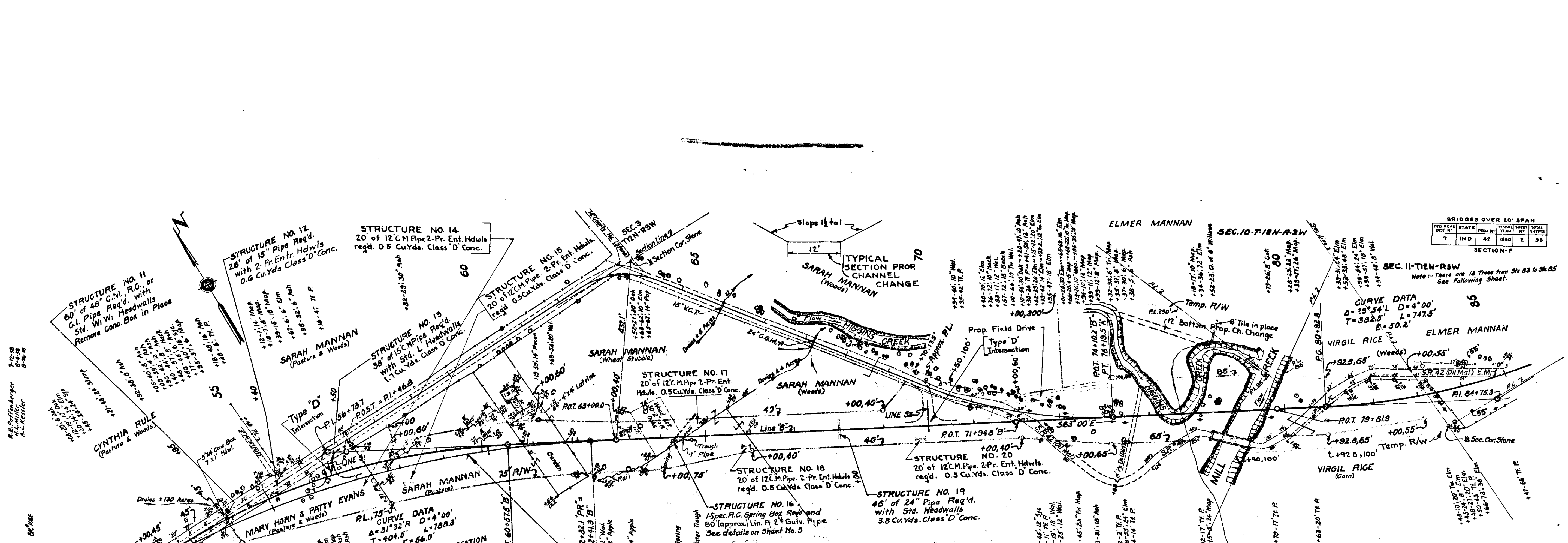
### ON

## STATE ROAD NO. 42 SECTION F

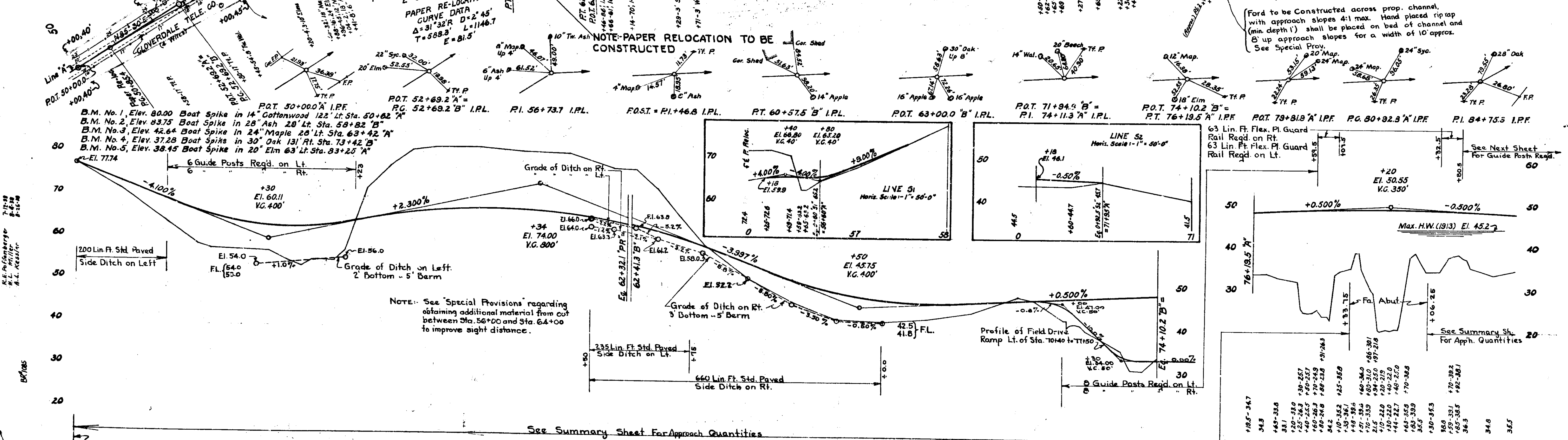
TERRE HAUTE - MOORESVILLE ROAD

DESCRIPTION OF BRIDGE PROJECT-BEGINNING AT A POINT ON S.R. 42 APPROX. 1800' EAST OF THE NORTHWEST CORNER OF SECTION 10, AND EXTENDING IN A SOUTHEASTERLY DIRECTION A DISTANCE OF APPROX. 4500' TO A POINT ON S.R. 42 APPROX. 1160' EAST OF THE EAST LINE OF SECTION 10, ALL IN T12N-R3W, IN PUTNAM COUNTY.





PROJECT	STATE	BRIDGES OVER 20' SPAN	
		NO. OF BRIDGES	NO. OF SPANS
7	IND.	42	1940
		2	98



STATION	ELEVATION	GRADE	REMARKS
77	77.7		
78	78.1		
79	78.5		
80	78.9		
81	79.3		
82	79.7		
83	80.1		
84	80.5		
85	80.9		
86	81.3		
87	81.7		
88	82.1		
89	82.5		
90	82.9		
91	83.3		
92	83.7		
93	84.1		
94	84.5		
95	84.9		
96	85.3		
97	85.7		
98	86.1		
99	86.5		
100	86.9		
101	87.3		
102	87.7		
103	88.1		
104	88.5		
105	88.9		
106	89.3		
107	89.7		
108	90.1		
109	90.5		
110	90.9		
111	91.3		
112	91.7		
113	92.1		
114	92.5		
115	92.9		
116	93.3		
117	93.7		
118	94.1		
119	94.5		
120	94.9		
121	95.3		
122	95.7		
123	96.1		
124	96.5		
125	96.9		
126	97.3		
127	97.7		
128	98.1		
129	98.5		
130	98.9		
131	99.3		
132	99.7		
133	100.1		
134	100.5		
135	100.9		
136	101.3		
137	101.7		
138	102.1		
139	102.5		
140	102.9		
141	103.3		
142	103.7		
143	104.1		
144	104.5		
145	104.9		
146	105.3		
147	105.7		
148	106.1		
149	106.5		
150	106.9		
151	107.3		
152	107.7		
153	108.1		
154	108.5		
155	108.9		
156	109.3		
157	109.7		
158	110.1		
159	110.5		
160	110.9		

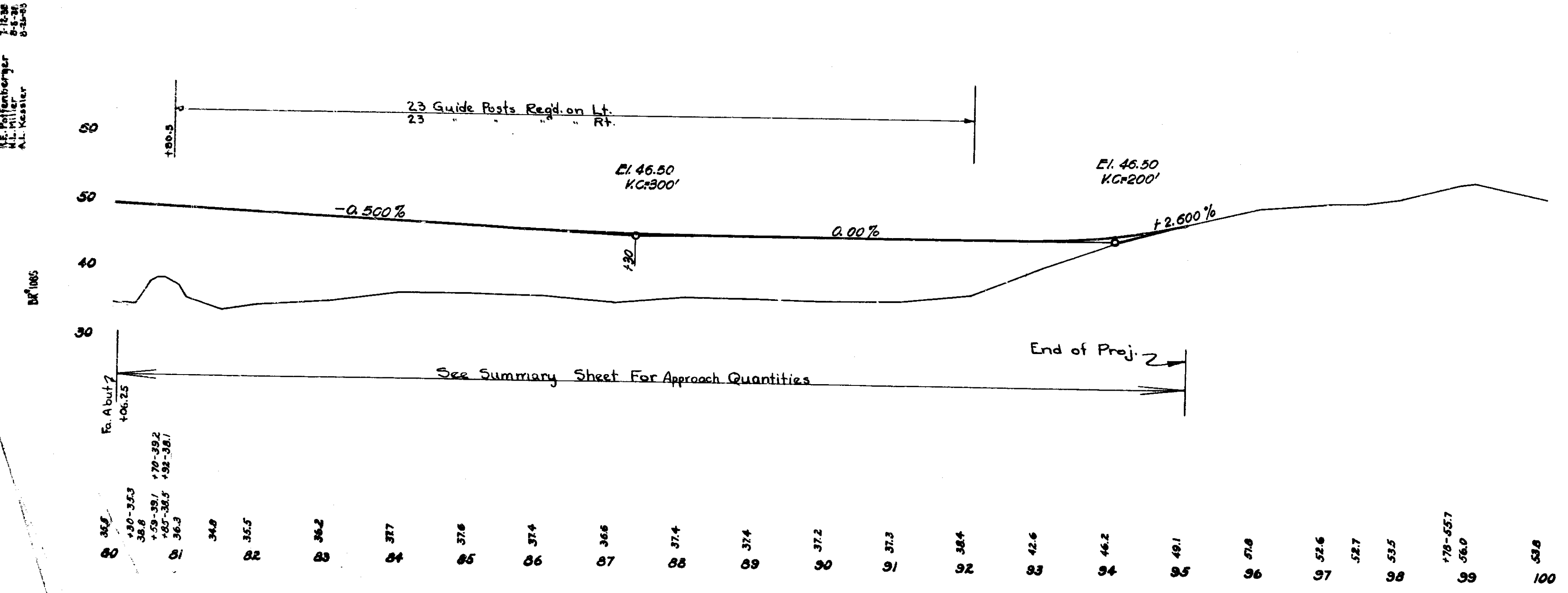
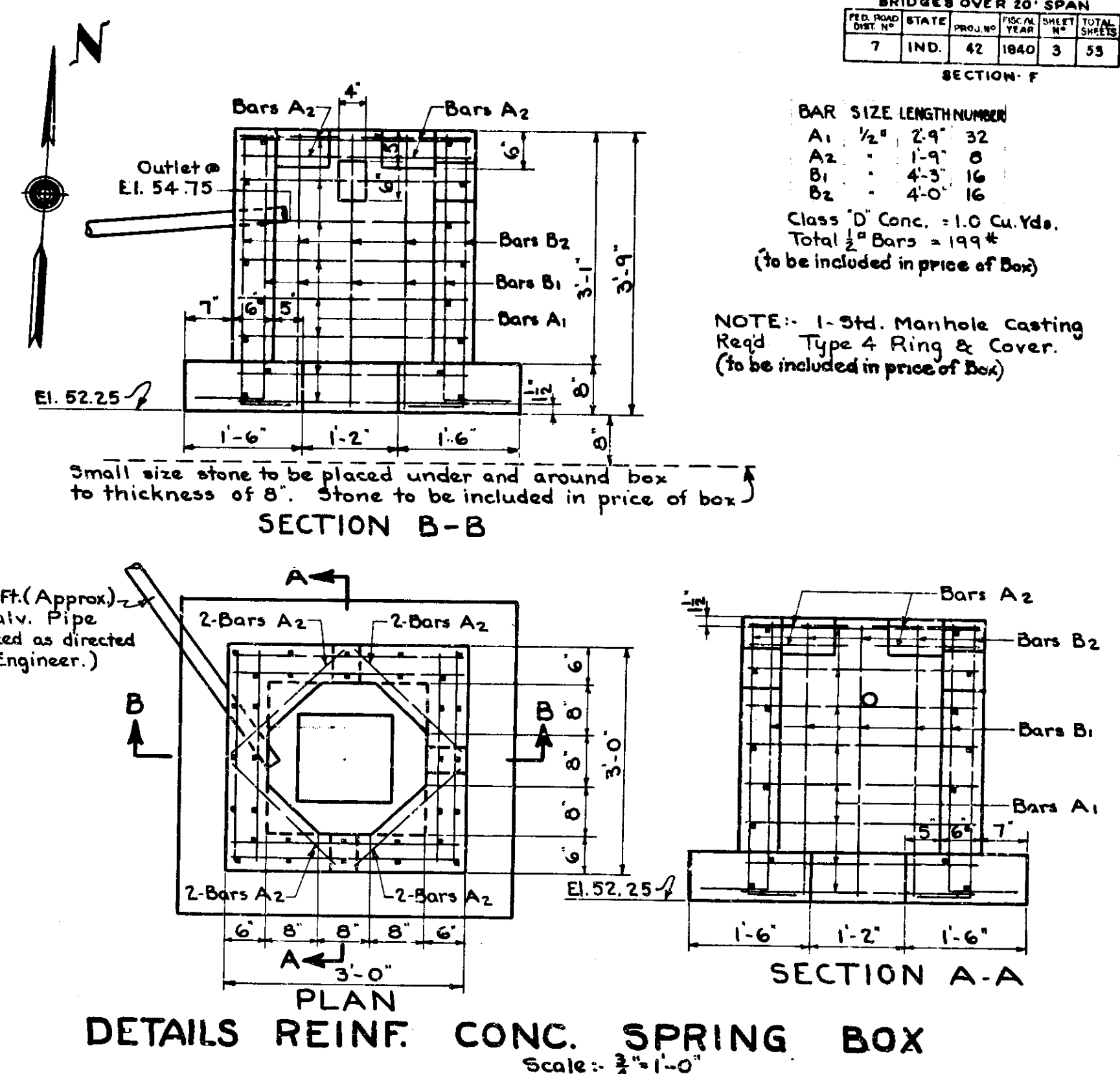
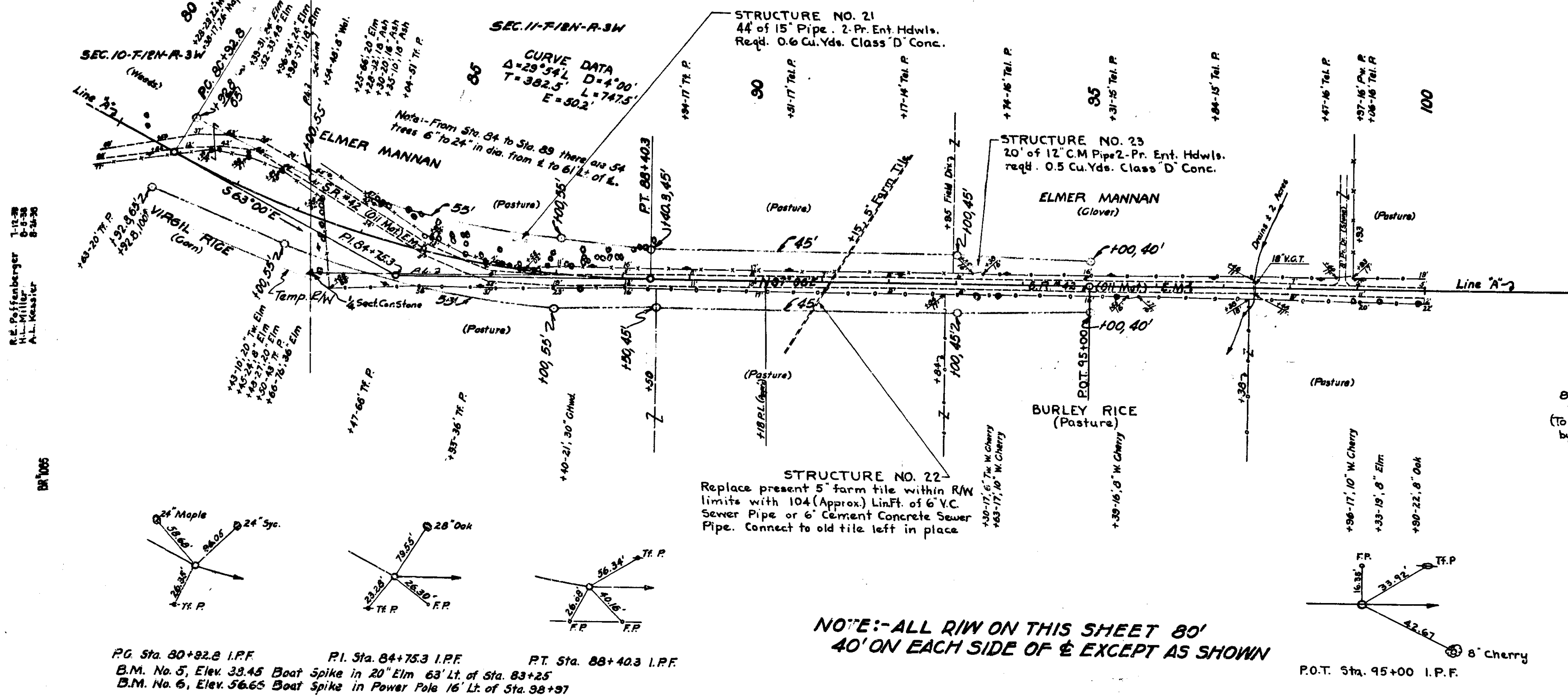
**ROAD PLAN AND PROFILE**

SCALE - HORIZ. 1"=100', VERT. 1"=10'

RECOMMENDED FOR APPROVAL: *[Signature]* MAY 27 1940

STRUCTURE NO. 42-F-3172

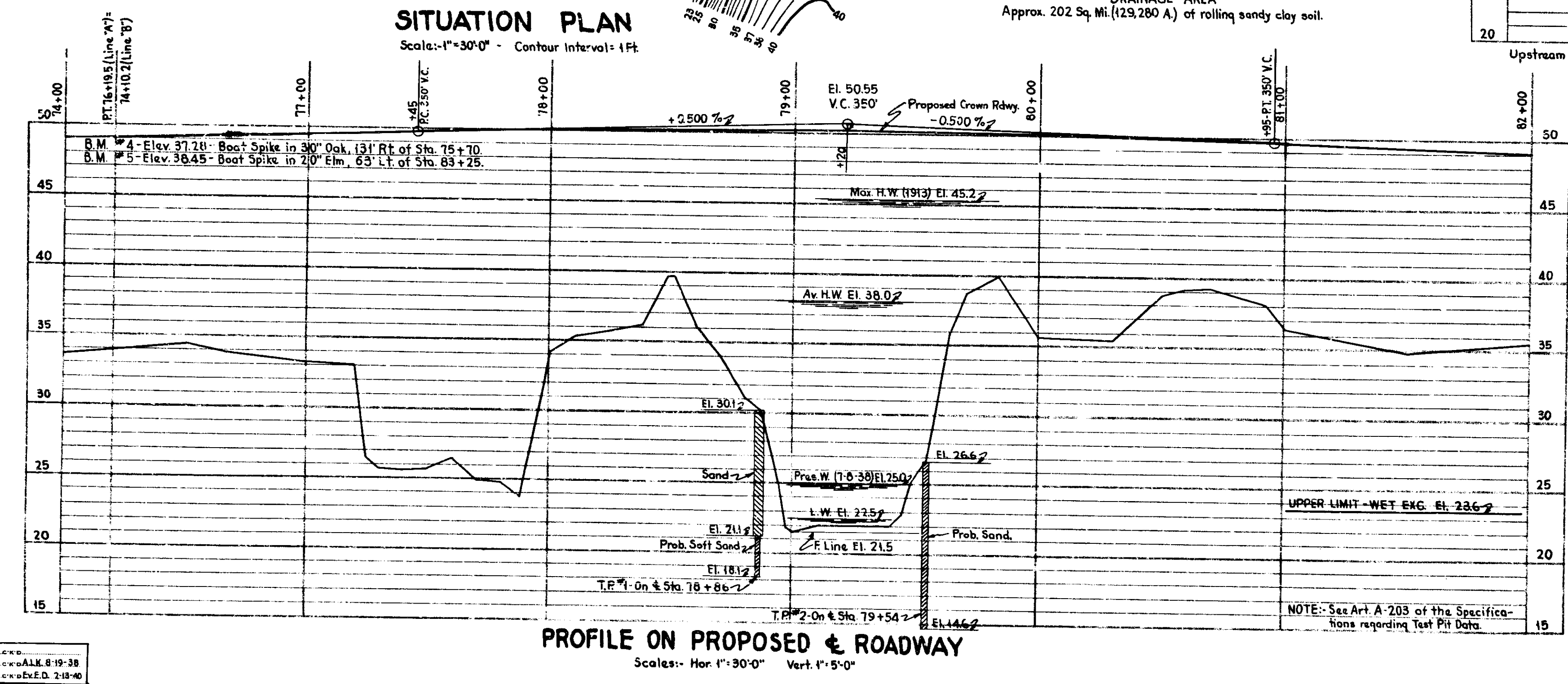
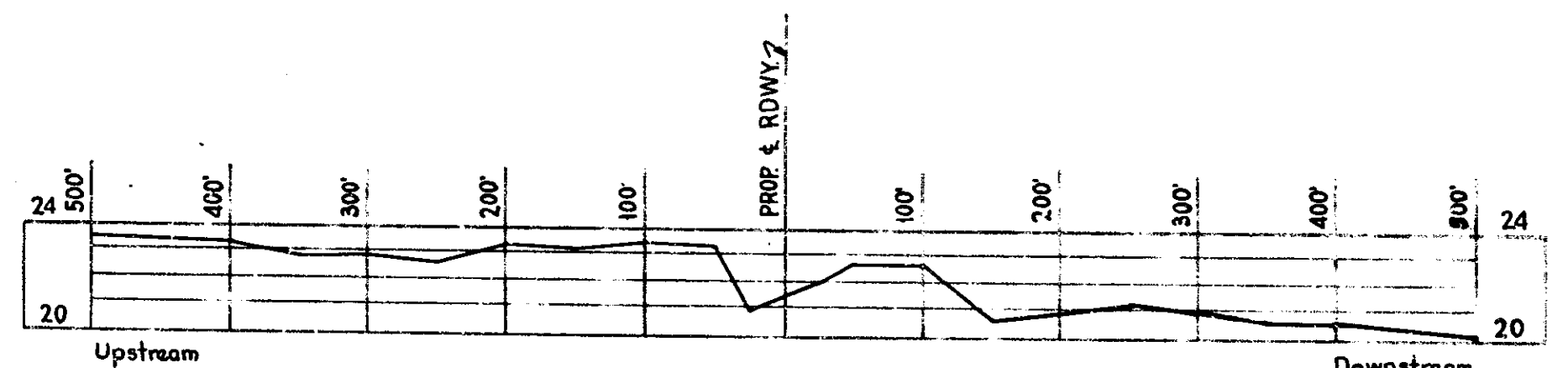
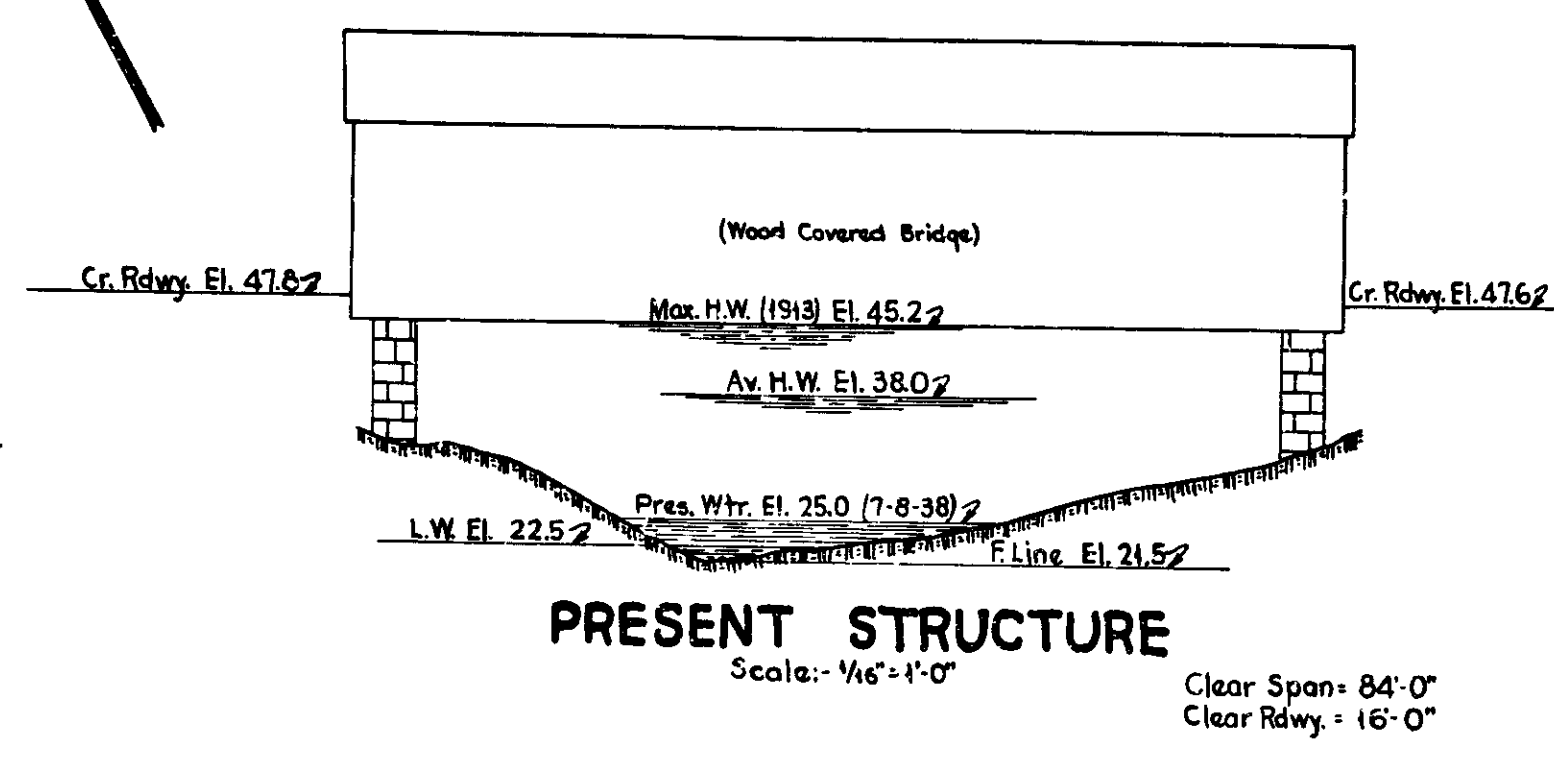
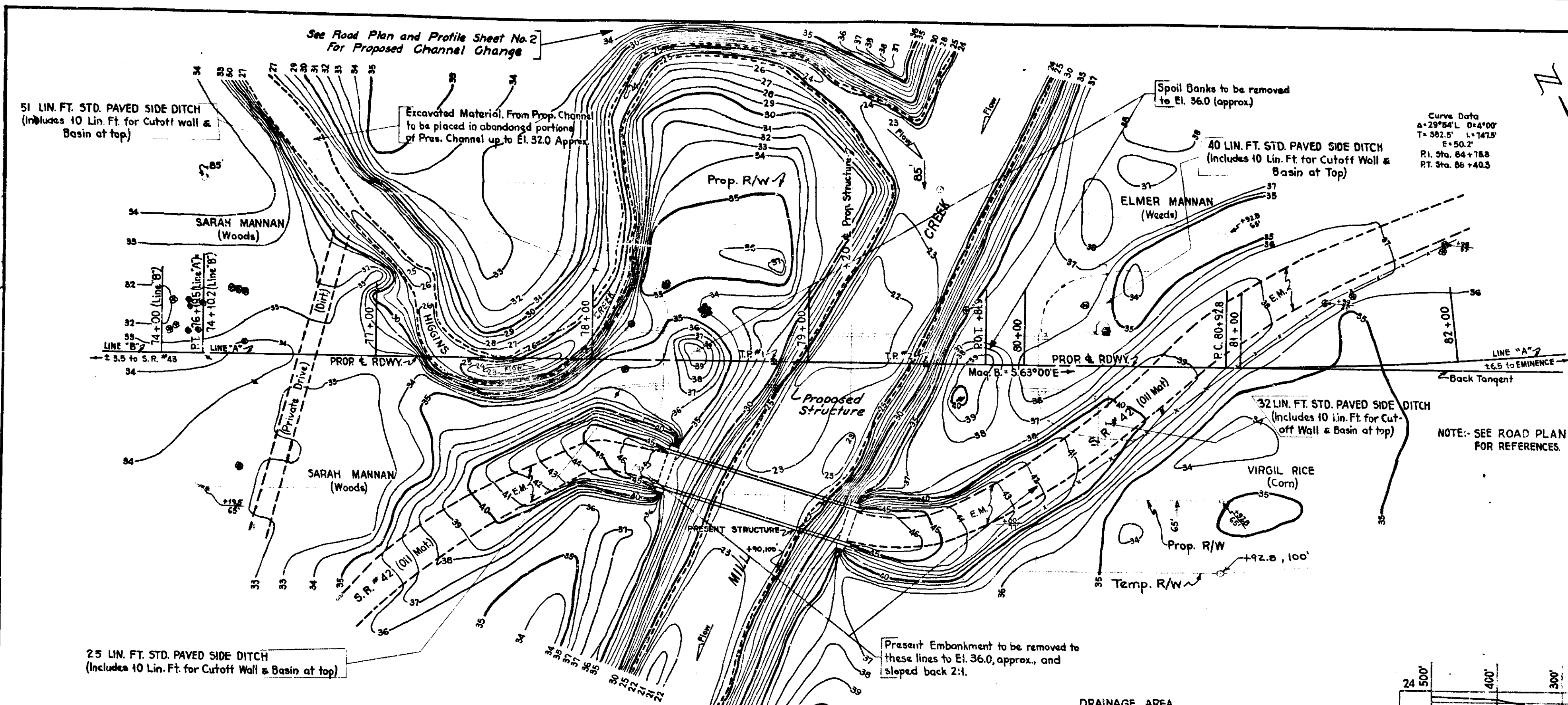
BRIDGE CONTRACT NO. 1979



**ROAD PLAN AND PROFILE**  
SCALE S-HORIZ-1"=100', VERT-1"=10'  
MAY 27, 1940  
RECOMMENDED FOR APPROVAL: [Signature]  
STRUCTURE NO. 42-F3172  
BRIDGE CONTRACT NO. 1979

BRIDGES OVER 20' SPAN					
FILE NO.	STATE	PROJ. NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	IND.	42	1940	4	83

SECTION - F



**LAYOUT STEEL TRUSS BRIDGE**  
1 SPAN @ 175'-0"  
OVER MILL CREEK  
24'-0" ROADWAY  
ON STATE ROAD-42 F

**STATE HIGHWAY COMMISSION OF INDIANA**  
**PUTNAM COUNTY**  
MAY 27, 1940

SCALE: AS NOTED  
RECOMMENDED FOR APPROVAL: *[Signature]*

PROJECT: 42  
SECTION: F  
DRAWING: 51 OF 8

STATION: 79+20  
STRUCTURE NO. 3172

BRIDGE CONTRACT NO. 1979

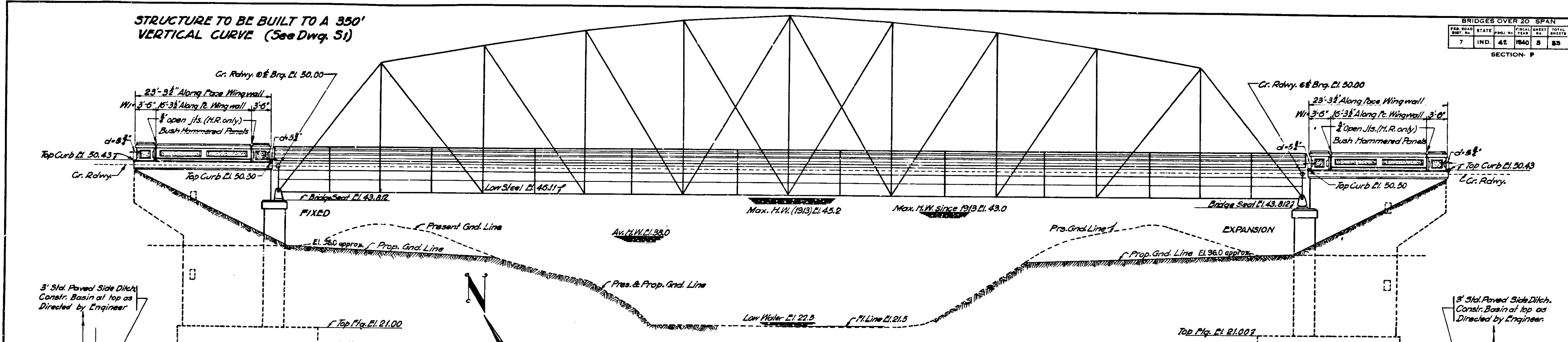
DESIGNED BY: H.L.M. 7-21-38  
CHECKED BY: W.A.C. 2-8-40

NOTE: Field Notes, Book BR. 1085, Page 1 to 45.

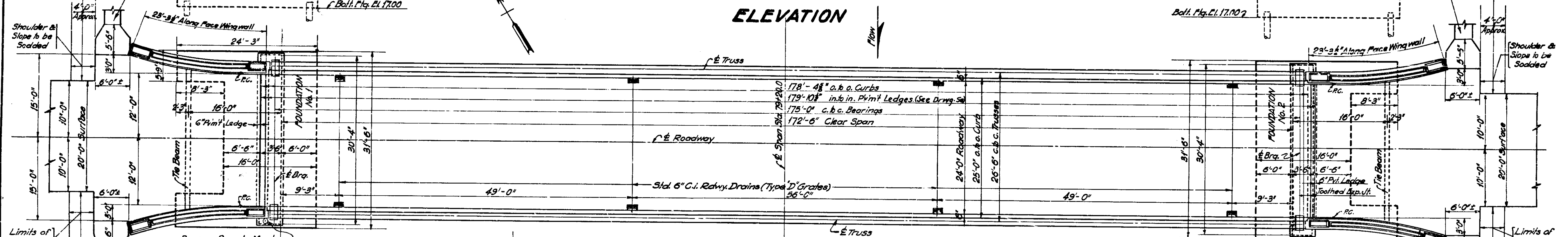
STRUCTURE TO BE BUILT TO A 350' VERTICAL CURVE (See Dwg. S1)

BRIDGES OVER 20' SPAN			
PER ROAD	STATE	FISCAL YEAR	TOTAL PROJECT
7	IND.	42	1940
		5	85

SECTION - F



ELEVATION



PLAN

GENERAL NOTES

Present Structure approximately 80' downstream.  
 Depth of footings to be extended if found necessary. See Art. B 202 of Specifications.  
 Piles shall have bearing value shown on Detail Drawings. Determine pile lengths by Art. J 101 of Specifications.  
 Reinforcing steel covering shall be 1 inch in floor slabs, 3 inches in footings, 2 inches in all other parts unless noted.  
 All Dimensions on Bending Diagrams for Reinforcing Bars are measured on centerlines of Bars.  
 Concrete in footings, wingwalls, abutments, & tie beams to be Class "E".  
 Concrete in floor slab to be Class "D".  
 Concrete in superstructure including handrail to be Class "D".  
 Concrete in Headwalls to be Class "D".  
 Waterproof abutments and wingwalls in accordance with Specifications.  
 Bevel forms 1/4 inch under copings; and chamfer exposed edges 1/4" unless noted.  
 8" Std. 6" C.I. Roadway Drains (Type D Grates) to be placed as shown on Dwg. S2 Shop and field paint to be procured from the State. See Art. J 202 of the Specifications.  
 Outlet Ends of drains thru Structure to project 3". Cut or burn off Inlet Ends flush with Concrete.

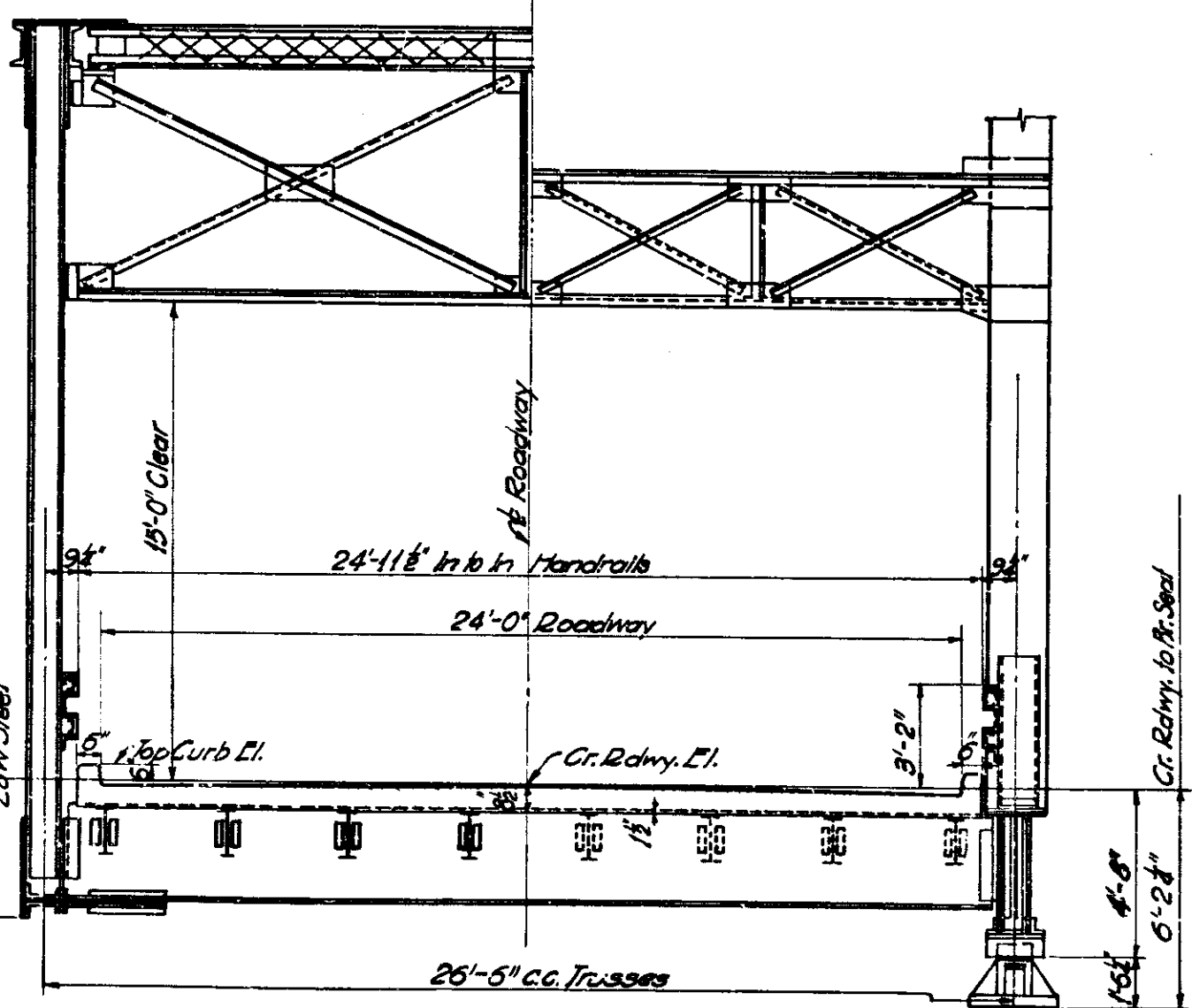
STANDARD DRAWINGS  
 Superstructure: - Use Standard Superstructure Details, 175'-0" Span Steel Truss, 24'-0" Roadway, Drawing Std. No. 475-A dated Sept. 12, 1933, Revised April 2, 1940.  
 Use Concrete Handrail Details, Br. Std. 14, Revised Sept. 1, 1937.  
 Use 6" C.I. Roadway Drain Details, Br. Std. 10, dated Oct. 15, 1937.

NOTE:- For Typical Details for placing Special Filling Material See Sr. Std. 31.

STANDARD C-B-FS SECTION  
 Construct 2-3 Courses. See Std. Dwg.

GENERAL PLAN  
**STEEL TRUSS BRIDGE**  
 1 SPAN @ 175'-0"  
 OVER MILL CREEK  
 STATE HIGHWAY COMMISSION OF INDIANA  
 PUTNAM COUNTY

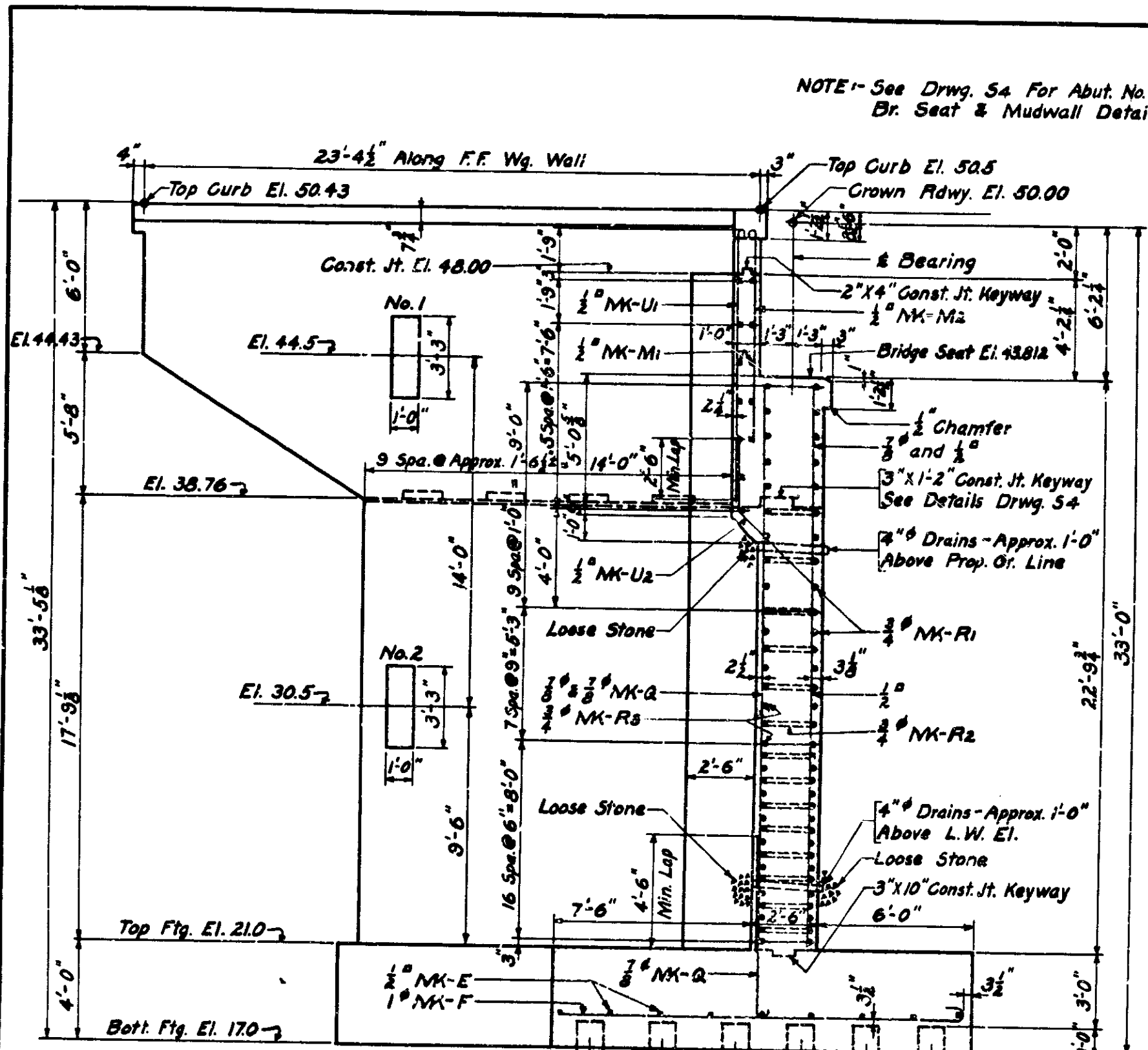
SCALE:- 1/8" = 1'-0"  
 RECOMMENDED FOR APPROVAL: [Signature] MAY 27 1940  
 PROJECT:- 42  
 SECTION:- F  
 DRAWING:- S2 OF 8  
 STATION:- 79+20  
 STRUCTURE NO. 3172  
 BRIDGE CONTRACT NO. 1979



HALF SECTION HALF END ELEVATION

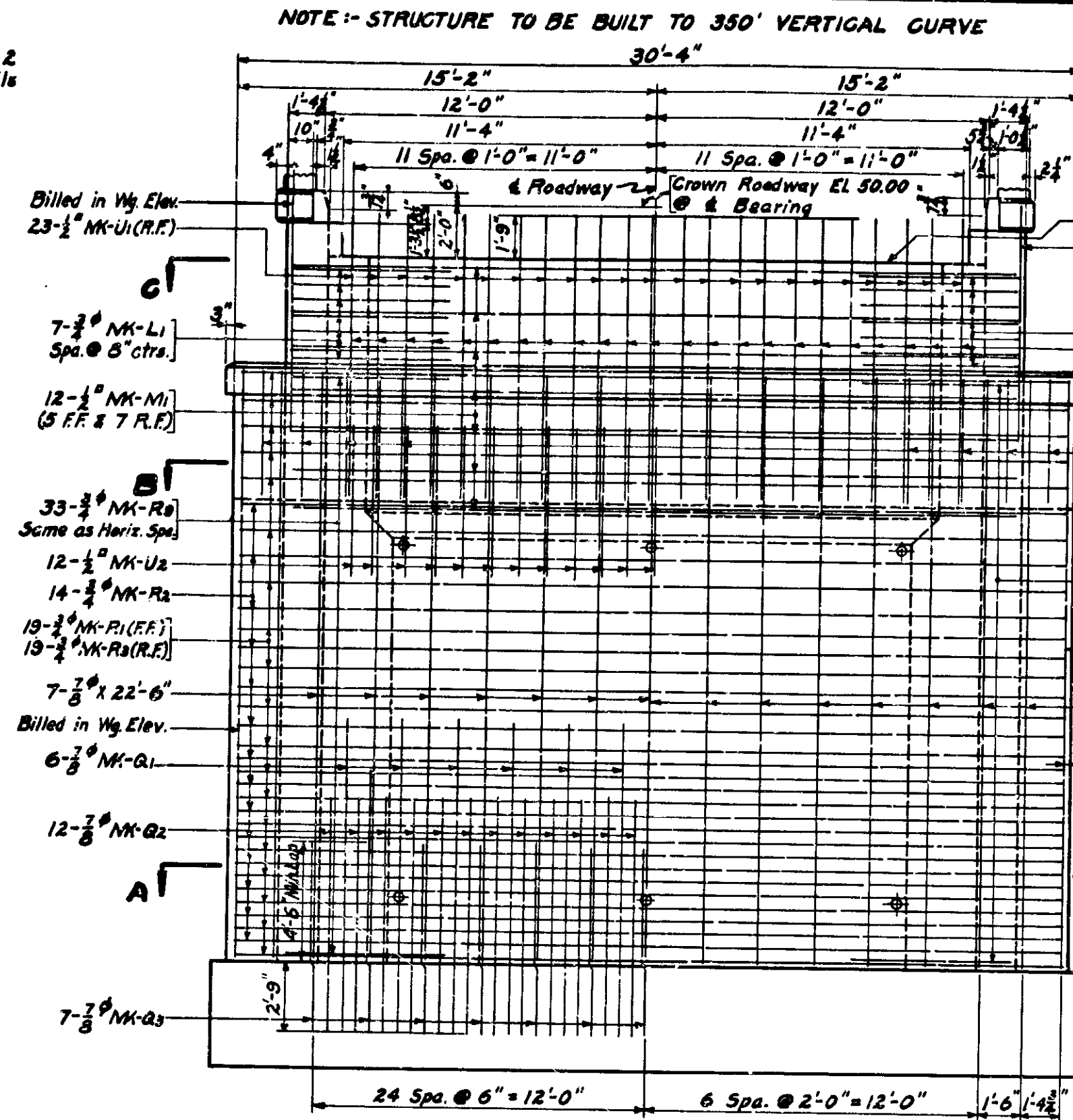
Scale: 1/4" = 1'-0"

DESIGNED: C.F.D.  
 DRAWN: J.S.T. 2-16-40 C.S.B. E.D. 2-16-40  
 TRACKED: J.S.T. 3-4-40 C.S.B. E.D. 3-4-40



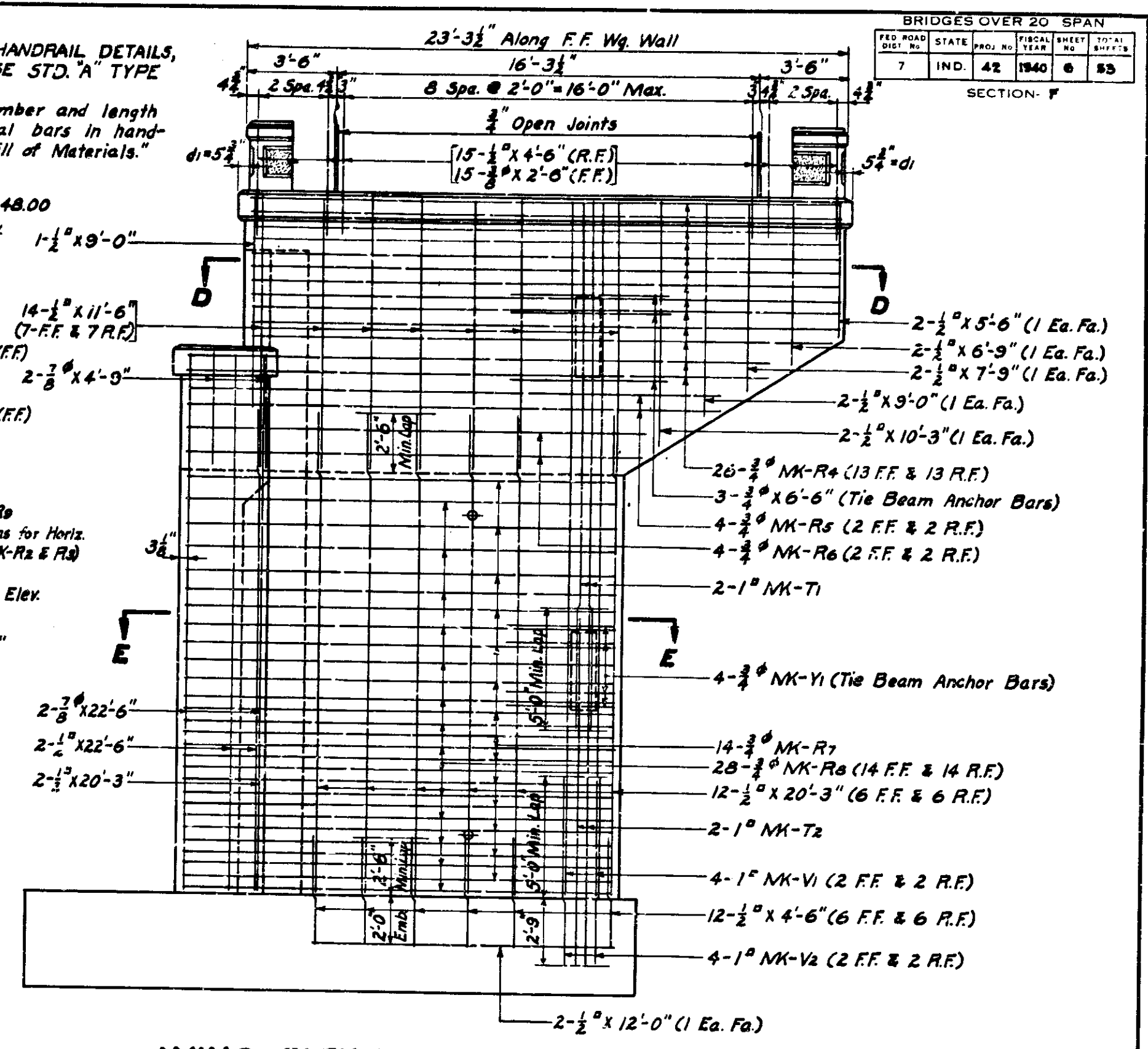
**SECTION ON & ROADWAY**  
Max. Soil Pressure = 2.65 T/s (Without Piles)

**HALF SECTION C-C**



**ELEVATION-ABUTMENT NO. 1-FIXED END**  
LEFT HALF SHOWING R.F. STEEL RIGHT HALF SHOWING F.F. STEEL

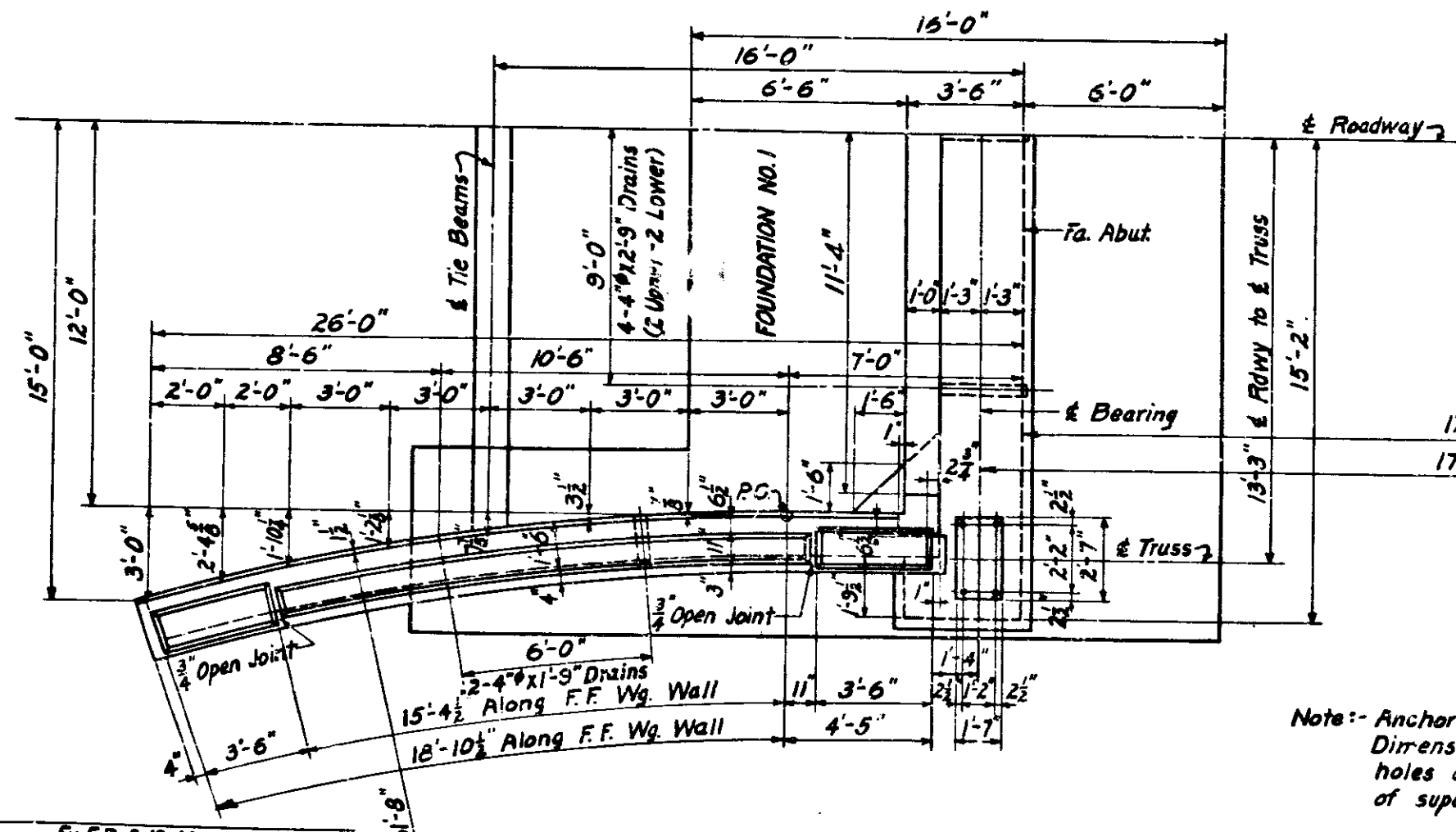
**HALF SECTION A-A HALF SECTION B-B**



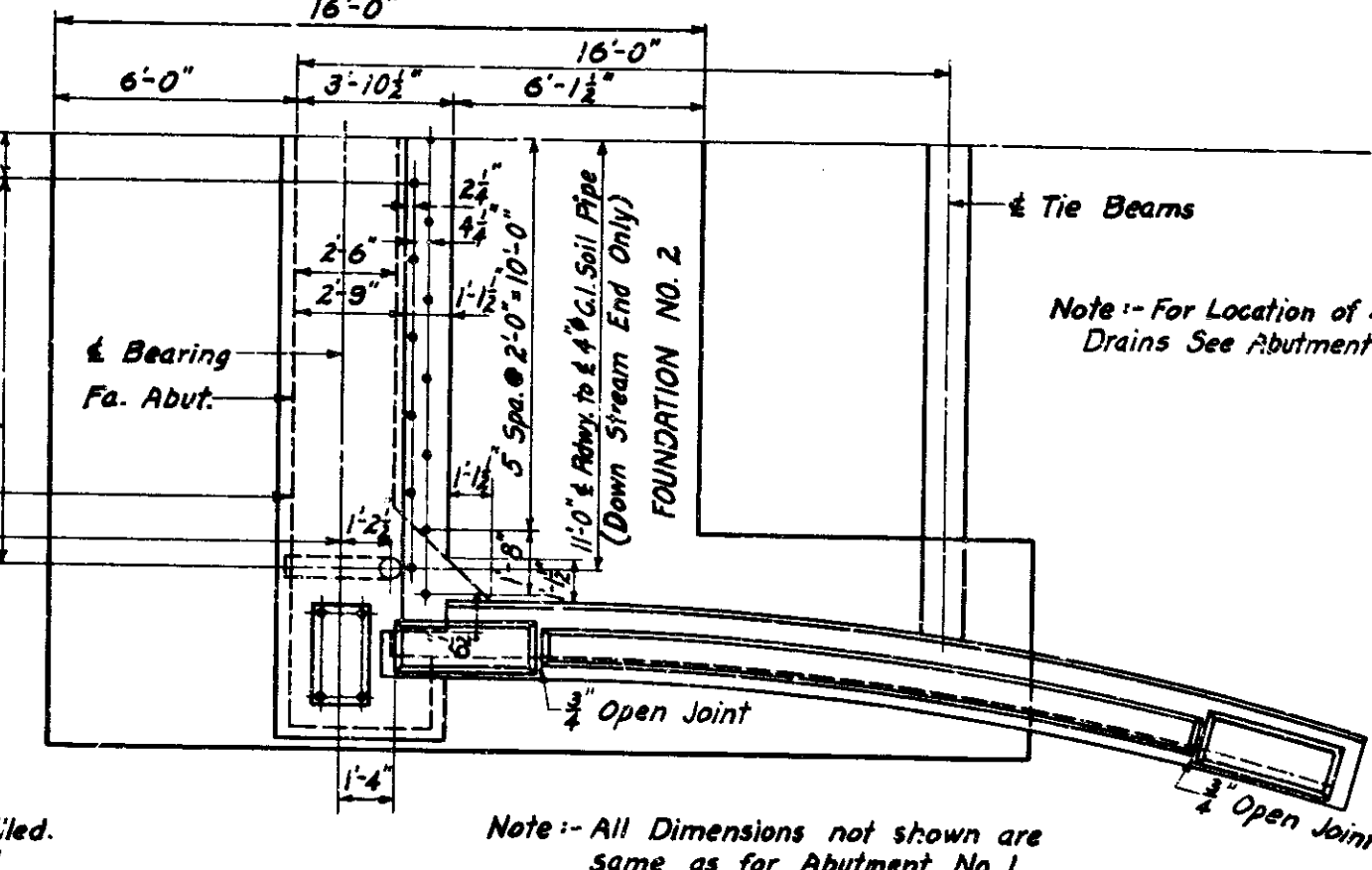
**WING ELEVATION**

**SECTION D-D**

**SECTION E-E**



**HALF PLAN**  
(See Drwg. S4 for Stationing of Abuts.)

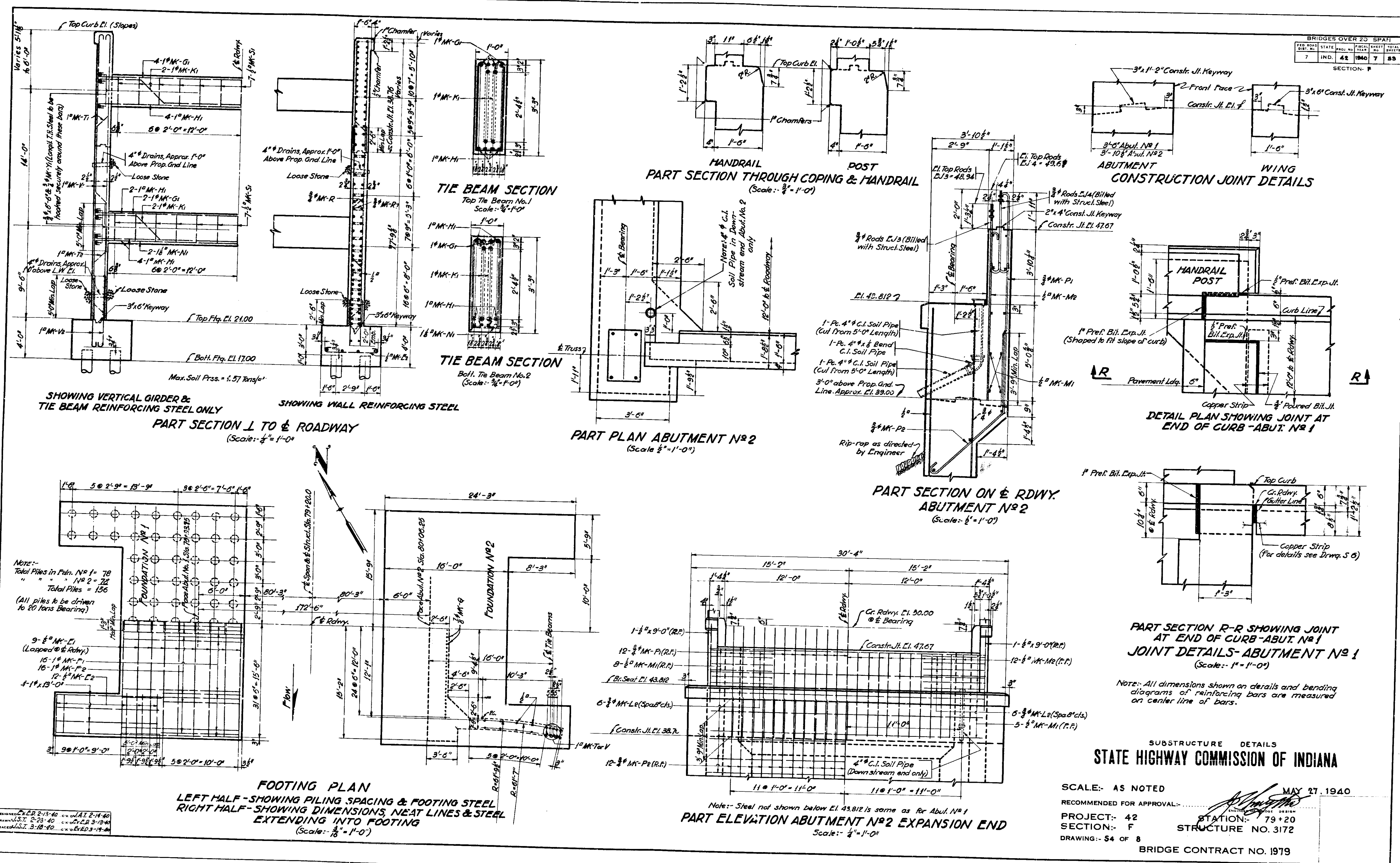


Note:- All Dimensions not shown are same as for Abutment No. 1

**SUBSTRUCTURE DETAILS**  
**STATE HIGHWAY COMMISSION OF INDIA**

SCALE:- 1/4" = 1'-0"  
RECOMMENDED FOR APPROVAL: [Signature] MAY 27 1940  
PROJECT:- 42 STATION:- 79+20  
SECTION:- F STRUCTURE NO. 3172  
DRAWING:- 53 OF 8  
BRIDGE CONTRACT NO. 1979

BRIDGES OVER 25 SPAN			
NO.	STATE	PROJ. NO.	TOTAL SPANS
7	IND.	42	7
SECTION - F			



REVISIONS:  
 1. 2-14-40  
 2. 2-23-40  
 3. 3-13-40  
 4. 5-12-40

Note: All dimensions shown on details and bending diagrams of reinforcing bars are measured on center line of bars.

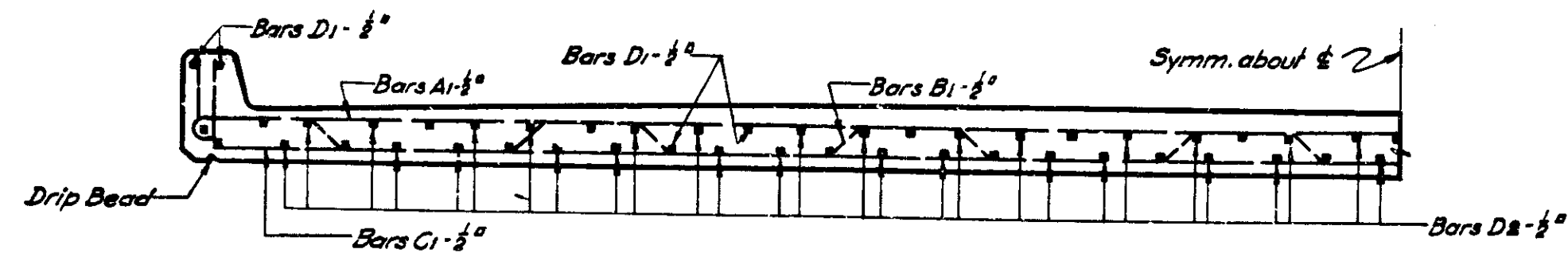
Note: Steel not shown below EL. 43.812 is same as for Abut. No. 1



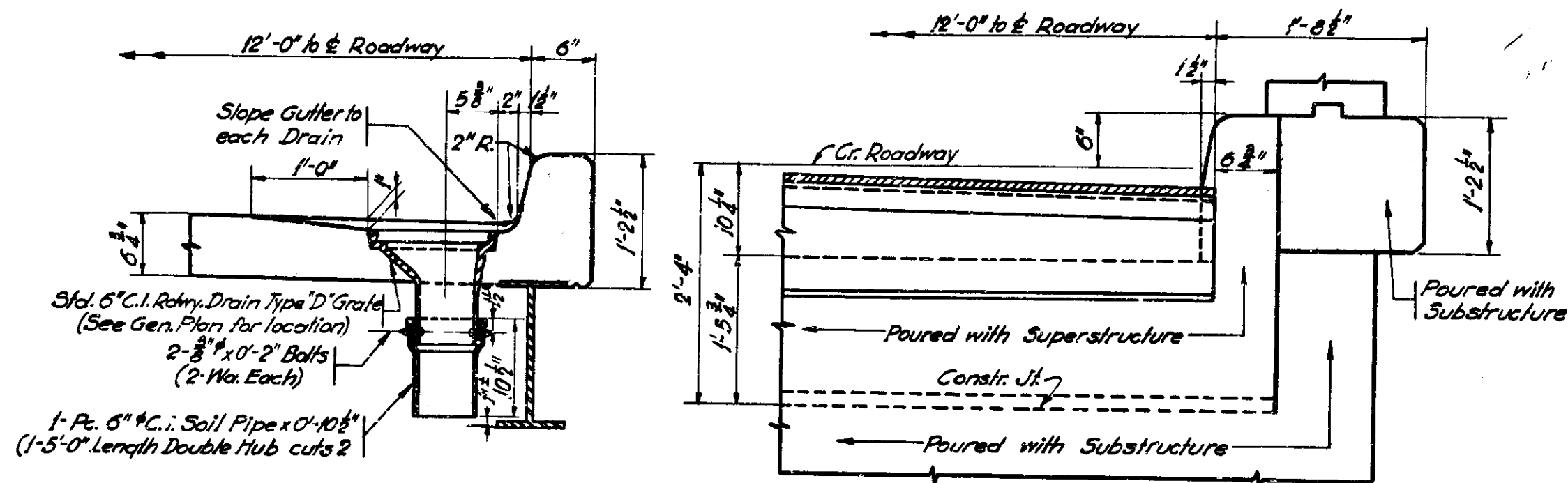


BRIDGES OVER 20 SPAN						
FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS	DATE	SCALE
7	IND.	42	1940	9	59	

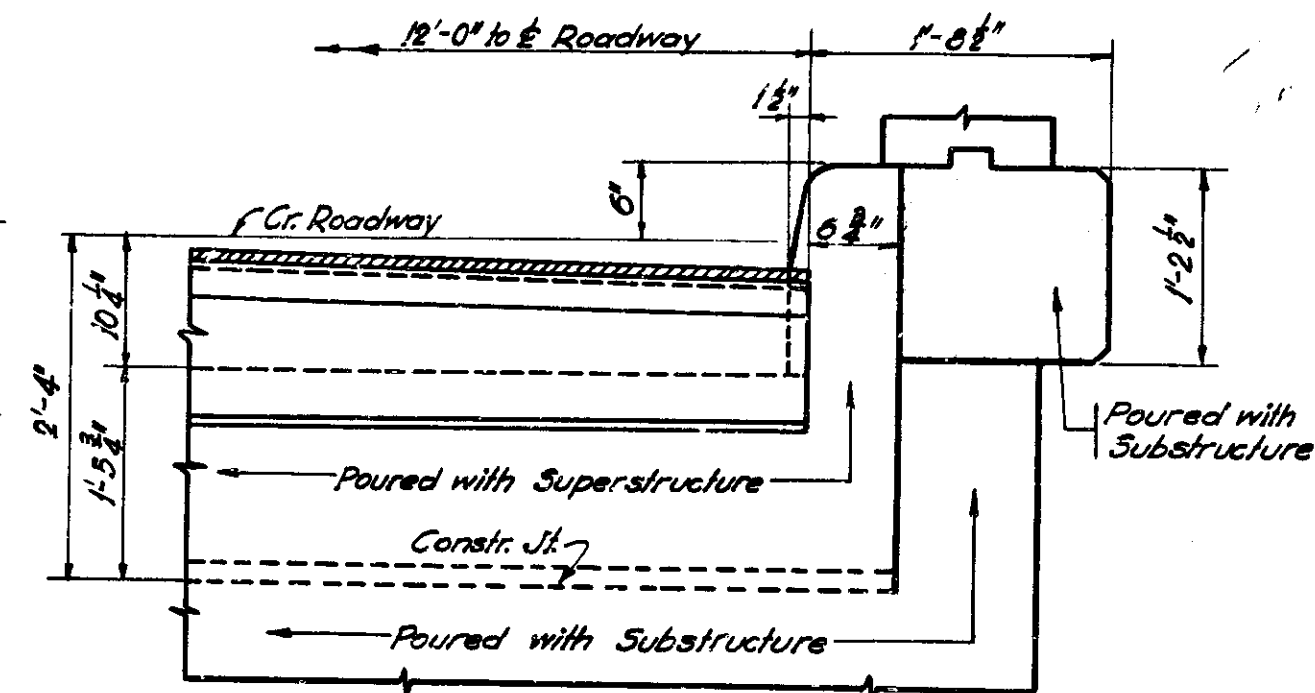
SECTION - F



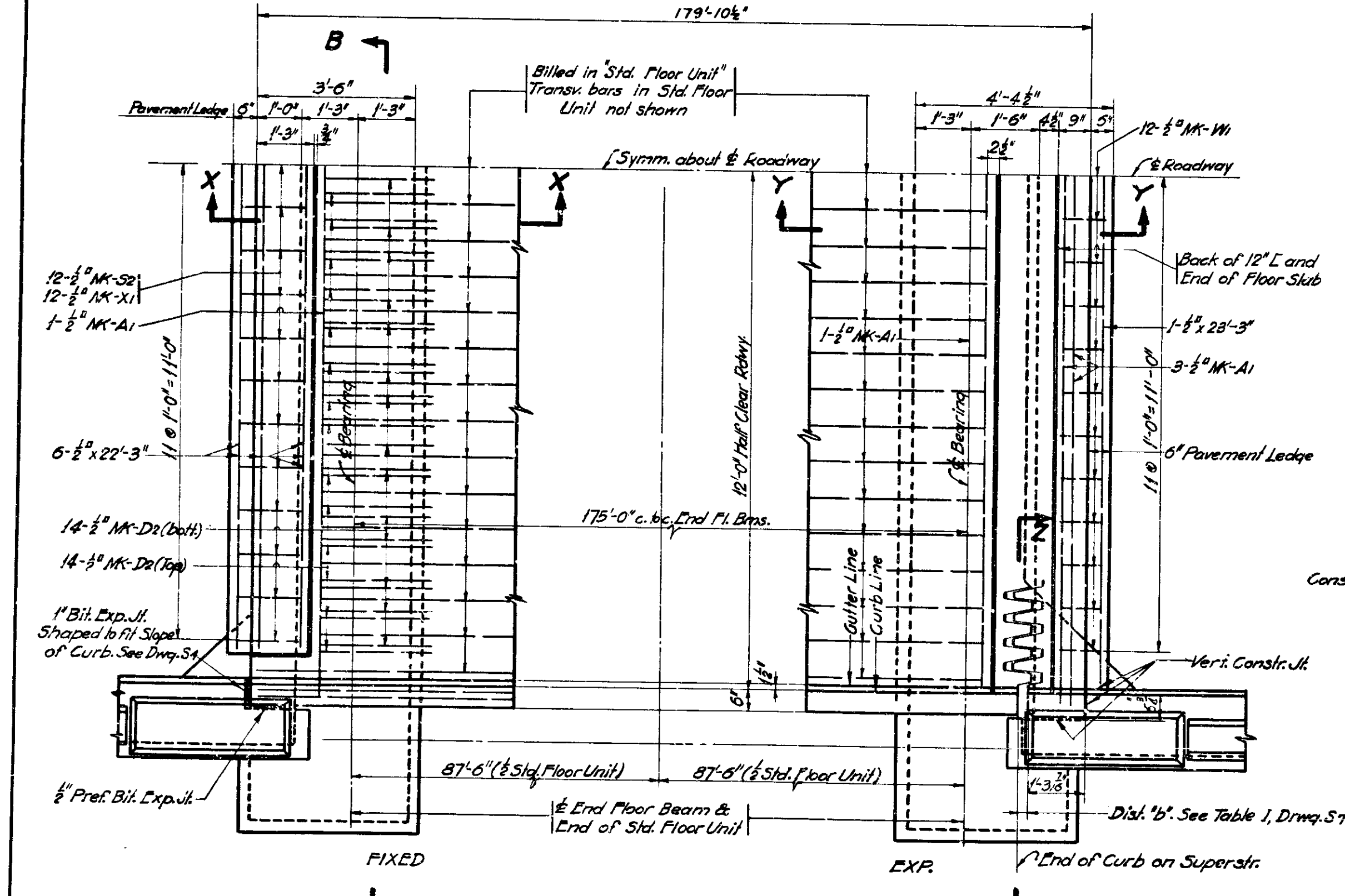
HALF SECTION FLOOR SLAB AT END OF SLAB  
SHOWING SPACING OF SHORT BARS IN END OF SLAB  
Scale: 3/4" = 1'-0"



ROADWAY DRAIN DETAIL  
Scale: 1" = 1'-0"

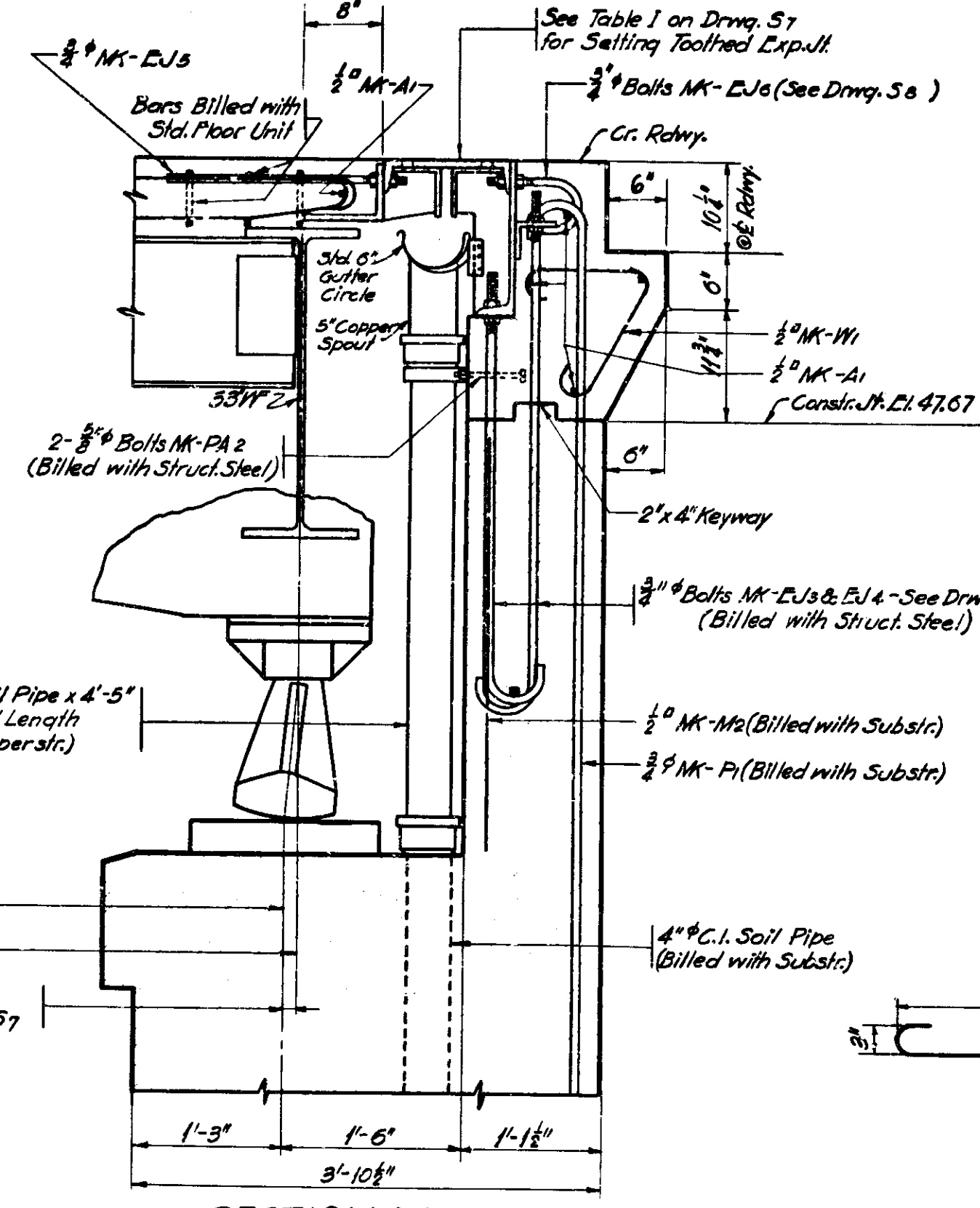


ELEVATION Z-Z  
Scale: 1" = 1'-0"

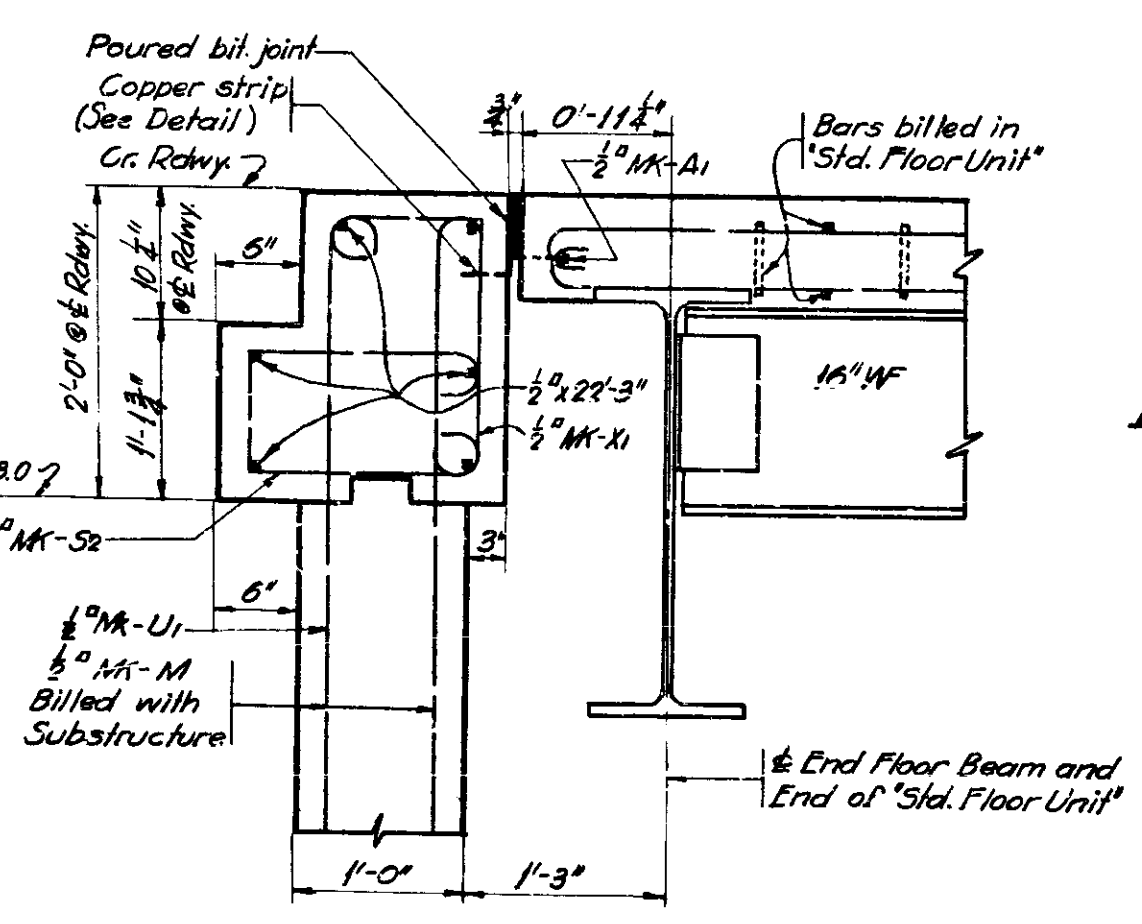


HALF PLAN  
Scale: 3/4" = 1'-0"

DESIGNED BY: E.C.D. 3-9-40  
DRAWN BY: S.D. 3-11-40  
CHECKED BY: C.V. 3-11-40



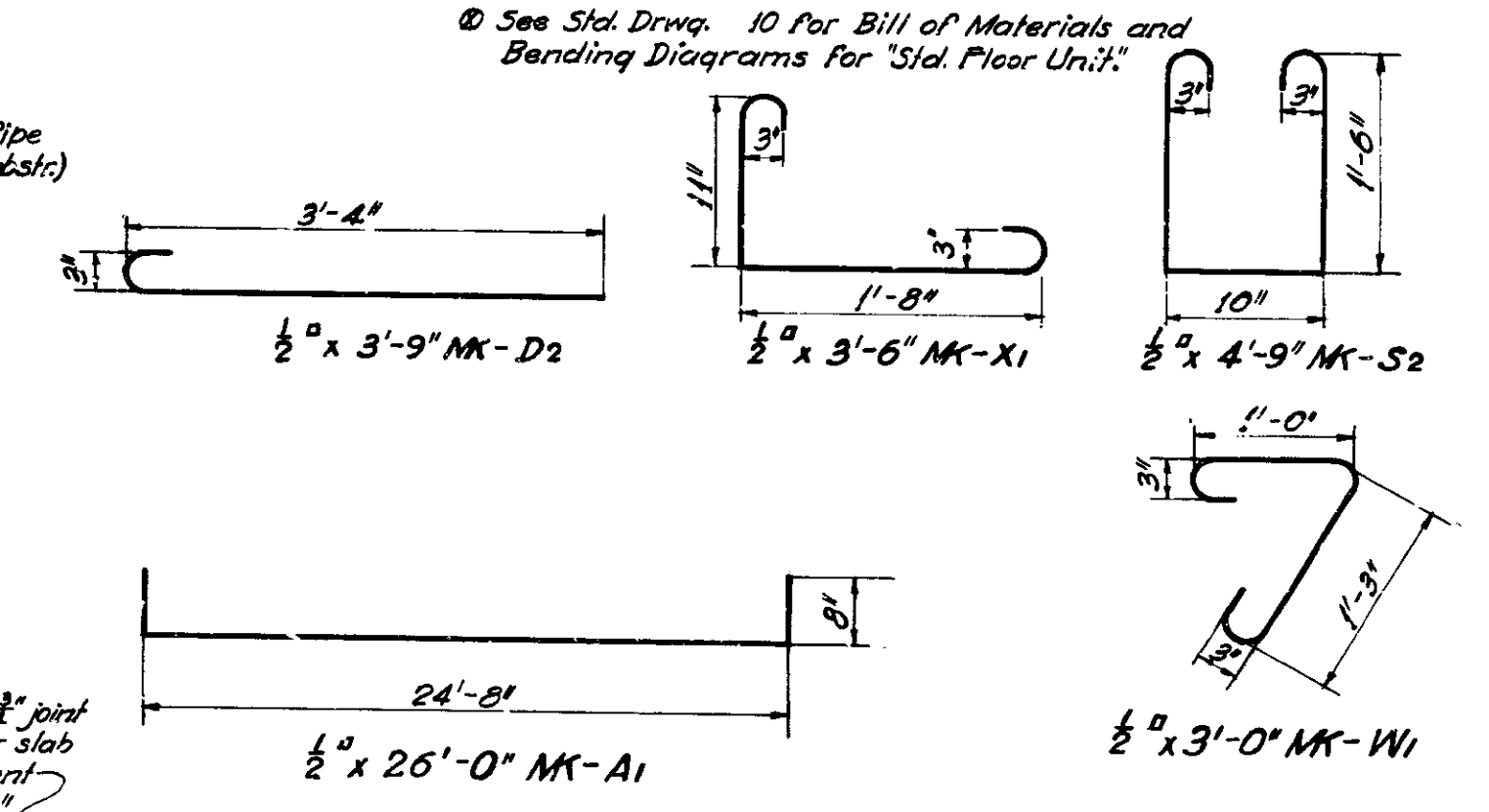
SECTION Y-Y  
Scale: 1" = 1'-0"



SECTION X-X  
Scale: 1" = 1'-0"

**BILL OF MATERIALS**  
~ REINFORCING STEEL ~

Mark	No.	Size	Length	Location	Total Lgh.	Weight
A1	5	1/2"	25'-0"	Slab - Transv.	130'-0"	
D2	26	"	3'-9"	" - Long. Top & Bot. Bars	210'-0"	
S2	23	"	4'-9"	Cap - Transv. - Fixed End	109'-3"	
W1	23	"	3'-0"	" - Exp. End	69'-0"	
X1	23	"	3'-0"	" - Fixed End	80'-6"	
1	1	"	23'-3"	" - Exp. End	23'-3"	
6	6	"	22'-3"	" - Fixed End	133'-6"	
Total (Outside Std. Floor Unit)					755'-6"	642#
Total Steel (Std. Floor Unit)						19,342#
GRAND TOTAL STEEL						19,984#
# Weights For 1934 Slabs.						
~ CONCRETE ~						
Class 'D' Superstructure Outside 'Std. Floor Unit'					1.0	Cu. Yds.
Cap - Expansion End					2.3	"
" - Fixed End					2.5	"
" - Std. Floor Unit					111.3	"
GRAND TOTAL CLASS 'D'					117.1	"
~ MISCELLANEOUS ~						
8 - Std. 6" C.I. Roadway Drains (Type 'D' Grates) @ 116"						928#
4 - Pcs. 6" Double Hub C.I. Soil Pipe (1'-5" Length cuts @ 109"						400#
1 - Pcs. 4" C.I. Soil Pipe x 4'-5" (Cut from 5'-0" Length) @ 60"						60#
16 - 3/8" x 0'-2" Balls (2 #/No. Each)						2#
TOTAL CASTIRON						1,390#



**DETAIL OF COPPER STRIP**  
Cost as shown to be included in Class 'D' Concrete. Use minimum lap of 2" at any splice.

SPECIAL FLOOR DETAILS, BEND DIAGS & BILL OF MATLS.  
**STATE HIGHWAY COMMISSION OF INDIANA**

SCALE: AS NOTED  
RECOMMENDED FOR APPROVAL: *[Signature]* MAY 27, 1940  
PROJECT: 42  
SECTION: F  
STRUCTURE NO. 3172  
DRAWING: 56 OF 8  
BRIDGE CONTRACT NO. 1979





APPROACH STRUCTURES							
NO.	LOCATION	DESCRIPTION	LENGTH	CLASSIFICATION			REMARKS
				CONCRETE	STEEL	CAST IRON	
		KIND		CU YDS	# LBS	* LBS	
11	Sta. 54+95	48" C.M. P.C. or C.I. Pipe	60'	4.6	790		1. 3rd. Wt. Hdwl. - See Std. Hdwl. Sheet "D"
12	47' L Sta. 54+35	15" Pipe	26'	0.6			2. Priv. Entr. Hdwl. - See Misc. Stds. Sheet "D"
13	54' L Sta. 55+30	15" C.M. Pipe	58'	1.7			7. Std. L. Hdwl. - See Misc. Stds. Sheet "D"
14	22' R Sta. 57+00	15" C.M. Pipe	20'	0.5			2. Priv. Entr. Hdwl. - See Misc. Stds. Sheet "D"
15	72' R Sta. 56+10	15" C.M. Pipe	20'	0.5			2. Priv. Entr. Hdwl. - See Misc. Stds. Sheet "D"
16	5' R Sta. 64+24	-	-	-	-	-	1. Priv. Entr. Hdwl. - See Misc. Stds. Sheet "D"
17	50' L Sta. 64+80	Spec. R.C. Spring Box	20'	0.5			1. Std. M.H. Casting Type 4 Ring & Cover - road.
18	54' R Sta. 65+40	15" C.M. Pipe	20'	0.5			2. Priv. Entr. Hdwl. - See Misc. Stds. Sheet "D"
19	37' R Sta. 67+68	24" Pipe	46'	3.0			2. Priv. Entr. Hdwl. - See Misc. Stds. Sheet "D"
20	80' L Sta. 69+90	12" C.M. Pipe	20'	0.5			2. Priv. Entr. Hdwl. - See Misc. Stds. Sheet "D"
21	50' L Sta. 86+40	15" Pipe	44'	0.6			2. Priv. Entr. Hdwl. - See Misc. Stds. Sheet "D"
22	37' R Sta. 91+15	V.C. or Cem. Conc. Sewer Pipe	104'	-	-	-	Connect to old farm tile left in place.
23	50' L Sta. 93+50	12" C.M. Pipe	20'	0.5			2. Priv. Entr. Hdwl. - See Misc. Stds. Sheet "D"
TOTALS				19.5	790		

SUMMARY OF MATERIAL QUANTITIES									
ITEM	QUANTITY			UNIT	QUANTITY			UNIT	REMARKS
	WET	DRY	CLAS.		WET	DRY	CLAS.		
	CU YDS	CU YDS	CU YDS		CU YDS	CU YDS	CU YDS		
Concrete Pavement									
Base Course									
Subgrade									
Gravel									
Asphalt									
Concrete Sidewalk									
Gravel Sidewalk									
Concrete Curb									
Stone Curb									
Concrete	1245								
Spec. R.C. Spring Box							1		
								74	

SUMMARY OF NETWORK QUANTITIES									
EXCAVATION		CONCRETE		STEEL		SPRINKLING		HAND PLACED	
WET	DRY	CLAS.	CLAS.	CLAS.	CLAS.	CLAS.	CLAS.	CLAS.	CLAS.
CU YDS	CU YDS	CU YDS	CU YDS	CU YDS	CU YDS	CU YDS	CU YDS	CU YDS	CU YDS
366	720		29720	2665	1775	30660	270	30	75
									540

SUMMARY OF STRUCTURE QUANTITIES														
ITEM	CONCRETE					STEEL					TOTALS			
	CU YDS	CU YDS	CU YDS	CU YDS	CU YDS	CU YDS	CU YDS	CU YDS	CU YDS	CU YDS	CU YDS	CU YDS	CU YDS	CU YDS
SUBSTRUCTURE - Abutment No. 1	88.7	145.3	4.1	46.6	254	2647	3393	1926	8950	2914	206	20,292	76	1580
Abutment No. 2	88.7	147.0	4.1	46.6	254	2647	3393	1926	8950	2914	206	20,292	76	1580
SUPERSTRUCTURE - Span	117.1									19,984		19,984	302,926	1390
Expansion Jt.												4,069		
TOTALS	186.4	292.3	8.2	93.2	508	5294	6786	3852	10601	20,250	416	61,715	507,007	1619

SUMMARY OF PIPE															
TYPE	UNIT	SIZE													
		4"	6"	8"	10"	12"	15"	18"	24"	30"	36"	42"	48"	54"	60"
V.C. Sewer or Cem. Conc. Sewer	" "									104					

REINFORCING STEEL				BITUMINOUS STABILIZED AGGREGATE SURFACE				
NO.	DESCRIPTION	LOCATION	WEIGHT	ITEM	UNIT	USING CRUSHED GRAVEL	USING CRUSHED STONE	USING CRUSHED AGGREGATE
1	Aggregate for Bitum. Stabilized Aggregate Surface - Class "A" or "B"				Tons	1191	1096	1015
2	Aggregate for Compacted Aggregate Base - Class "C"				Tons	1191	1096	1013
3	Screenings for Surface - Class "A" or "B"				Tons		95	
4	Screenings for Base - Class "C"				Tons		95	
5	Limestone Dust				Tons			356
6	Covering Aggregate - Class "A"				Tons	95	95	95
7	Bituminous Matl. for Prime (Type of Base)				Gals.	1144	1144	1144
8	Bituminous Matl. for Surface (Type of Base)				Gals.	14298	14298	14298
9	Bituminous Matl. for Seal				Gals.	3336	3336	3336

TRAFFIC MARKINGS	
ITEM	QUANTITY
See Bridge Std. "Z"	
Std. Signs - W-30X1-R	4
" " - W-24X1-R	2
" " - W-23X1-R	2
" " - X-17	1
" " - X-15R	2
" " - X-13	2
" " - X-11-R	1
" " - X-11-R (omit words "Follow Detour")	1
" " - G-17-R	1
Std. Barricades	2
Staircase Barriers	2
Lanterns or Torches	20

STATE HIGHWAY COMMISSION - INDIANA

MAY 27 1940

END STR