FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	STATE	

1/163

ERIE COUNTY
ERI-250-(10.83-13.34)
ERI-113-(5.83)(6.04)
ERI-299-0.00

STATE OF OHIO
DEPARTMENT OF HIGHWAYS

ERI-250-(10.83-13.34) ERI-113-(5.83)(6.04) ERI-299-0.00

GRADE SEPARATION WITH THE N.Y., C. & ST. L. R.R. CO.

ERIE COUNTY

MILAN TOWNSHIP AND VILLAGE OF MILAN

LIMITED ACCESS

This improvement has been declared a limited access highway or freeway by action of the Director of Highways in accordance with the provisions of Section 5511.02, Revised Code of Ohio, and is especially designed for through traffic.

The standard specifications of the State of Ohio, Department of Highways, including changes and supplemental specifications listed in the proposal shall govern this improvement.

The right of way for this improvement will be provided by the State of Ohio.

I hereby approve these plans and declare that the making of this improvement will not require the closing to traffic of the highways, except as noted on Sheet 1A, and that provisions for the maintenance and safety of traffic will be as set forth on the plans and estimates.

Approved J. A. Emmons
Date 11-29-54 Division Deputy Director

Approved John J. Heiss
Date 12-3-54 Deputy Director of Planning and Programming

Approved Richard Smith
Date 12-28-54 Engineer of Bridges

Approved K. L. [illegible]
Date 1-4-55 Engineer of Location & Design

Approved I. T. Gerald
Date 1-3-55 Deputy Director of Design and Construction

Approved W. T. Schaeublin
Date 1-4-55 First Assistant Director

Approved [illegible]
Date 1-5-55 Director of Highways

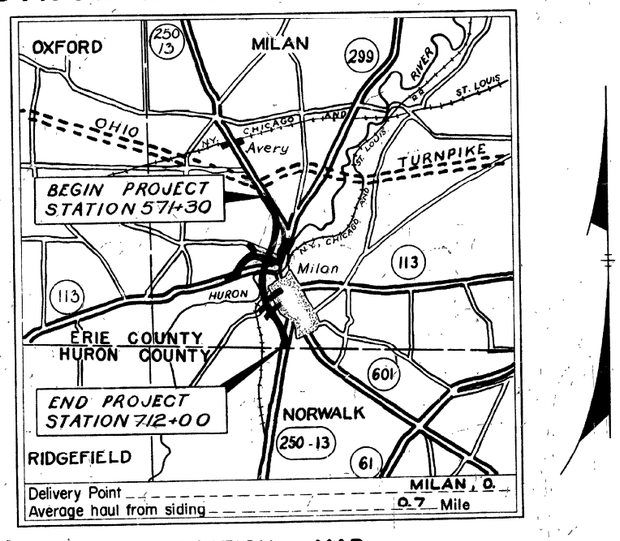
CONSTRUCTION BUREAU
MAY 6 1954
GROUND PHOTOLAB

CONVENTIONAL SIGNS

State Line
County Line
Township Line
Section Line
Center Line
Corporation Line
Fence Line
Guard Rail (existing)
Guard Rail (proposed)
Steam Railroad
Power Poles
Telephone Poles
Trees (existing)
Trees (to be removed)

INDEX OF SHEETS

DESCRIPTION	SHEET NO.
Title Sheet	1
Location Sheets	2 - 3
Typical Sections	4 - 9
General Notes	10 - 11
Summary of Quantities	12-13 & 13A
General Summary	14 - 15
Plan Sheets U.S. 250	16-29
Superelevation Tables U.S. 250	30-31
Cross Sections U.S. 250	32-75
Church St. Line Sheets	76-81
Church St. Cross Sections	82-89
Erie 113 Line Sheets	90-91
Erie 113 Cross Sections	92-99
S.R. 299-Service Rd. Line Sheets	100-102
S.R. 299-Service Rd. Cross Sections	103-108
Williams St. (Line, Sheet & Cross Sections)	109-113
Bryan Rd.	114
Intersections	115-119
Structures Under 20' Span	120-130
Right of Way	132-143
Structures Over 20' Span	131-131
Railroad Force Account Work	149



LOCATION MAP

SCALE OF MILES

0 ½ 1 2 3 4

Portion to be improved
State Roads
Other Roads

SCALE

Plan 1" = 50' and 1" = 20'
Profile: Horizontal 1" = 50' and 1" = 20'
Profile: Vertical 1" = 5'

Reviewed & Approved [illegible]
Date 7-12-54 Engineer of Traffic & Safety

LINE DATA

Begin Project U.S. 250	Sta. 571+30		
End Project U.S. 250	Sta. 712+00		
No Additions And No Deductions			
Net Length Of Project, U.S. 250		14070.00 LIN.FT.	or 2.664 Miles
Begin Work, U.S. 250	Sta. 571+30		
End Work, U.S. 250	Sta. 712+60		
Total U.S. 250		14130.00 LIN.FT.	or 2.676 Miles

Add For Approaches

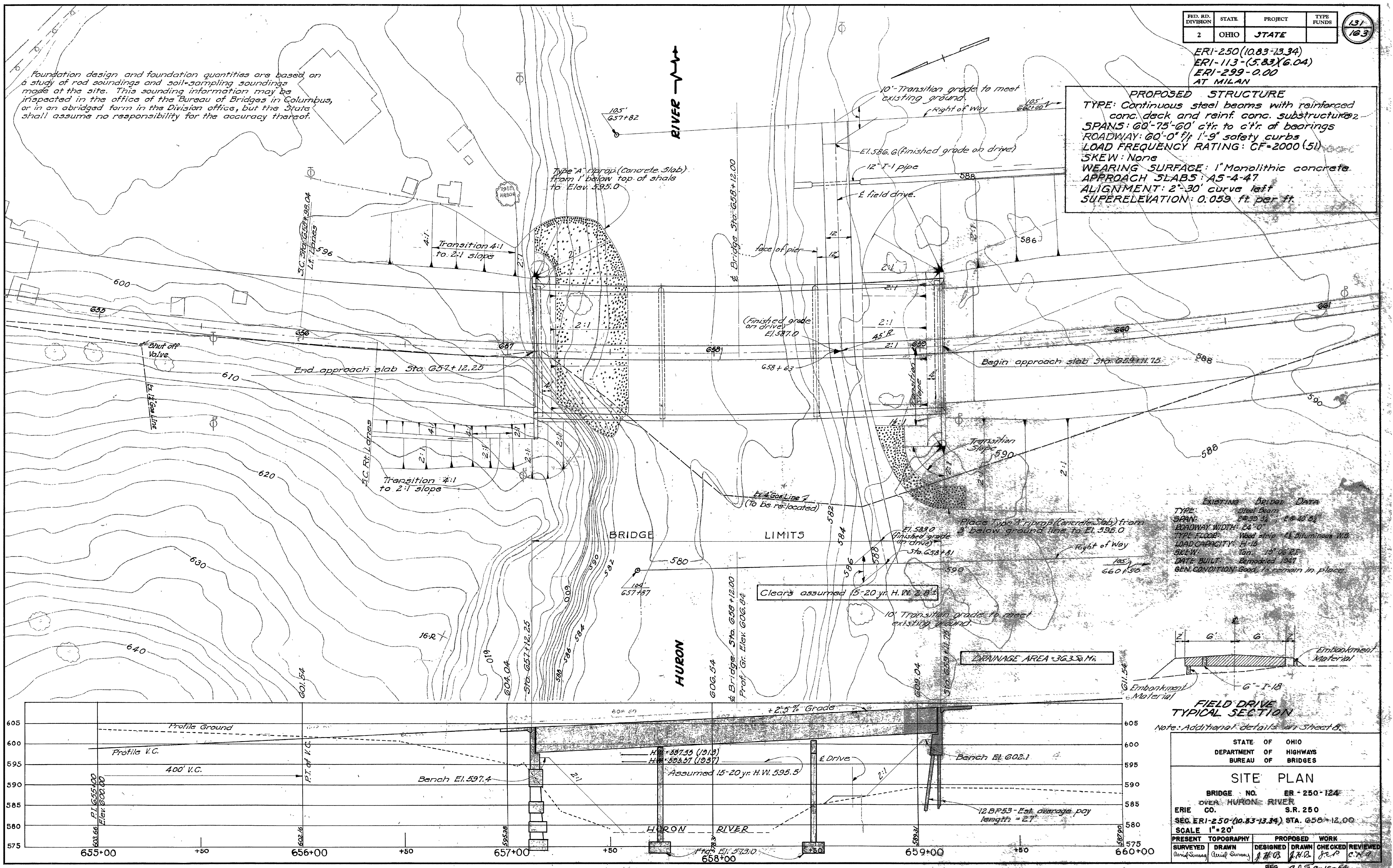
S.R. 299, Sta. 6+50 To Sta. 20+00		1350.00 LIN.FT.
Service Road Sta. 20+00 To Sta. 29+00		900.00 LIN.FT.
S.R. 113 (W) Sta. 0+40 To Sta. 20+10 = 1970.0 + 376.0 (Bryan Rd)		2346.00 LIN.FT.
S.R. 113-Church St.	On Left, Sta. 4+01.89 To Sta. 14+72	1070.11 LIN.FT.
Church St.	On Right, Sta. 15+40.47 To Sta. 24+60.2	918.43 LIN.FT. (1.30 Lin. Ft. deducted for Equation)
Sta. 683+44.2 (Williams St.)	On Left, Sta. 10+50 To Sta. 14+71	421.00 LIN.FT.
	On Right, Sta. 15+10 To Sta. 17+35	225.00 LIN.FT.
Total Length OF Work		21360.54 LIN.FT. or 4.045 Miles

Supplemental Prints of Standard Construction Drawings										Supplemental Specifications	
I-15 No.1	12-1-54	L-3	4-1-50	T.J. No.2	32-53	I-8 C.B.1-2-A&B	5-1-52	I-8 I. No.1	5-1-52	B-119	Rev. 12-1-54
I-15 No.2	12-1-54	L-3-A	4-1-50	T.J. No.3	10-1-54	I-8 C.B.2-2-A&B	5-1-52	I-8 C.B.2-3&2-4	5-1-52	L-209.12	7-17-54
I-21-23	12-1-54	R I-1	6-1-53	B-T-50-7.07-1E-No.1	10-1-47	I-8 C.B.No.3-A	5-1-52	I-8 M.H. No. I-A	6-1-54		
G-7.07	1-2-53	T-35	10-1-52	S-27 P.C.1	5-1-52	I-8 C.B.No.6	5-1-52	A5-3-47, A5.4-47	7-27-49		
L-1	4-1-50	B-T-7IR	3-2-53	S-27 P.C.3	2-20-45	I-8 M.H.No.1	5-1-52	SP-53	7-21-53		
		L.J. No.1	3-2-53	S-27 P.C.4	1-4-54	I-12	7-1-54	P-1-54	7-1-54		
		T.J. No.1	3-2-53	I-1,2,3 & 5	2-20-45	I-14 G	1-22-52	RD-1-47	7-27-49		

Added field drive left of Sta. 589+86 as per Change Order No 8 ~ 7-27-56 By G.W.S.
Change Order No. 10 change in Alignment on S.R. 113 from Sta. 10+00 to 17+00. west of U.S.R. 250.

119-E

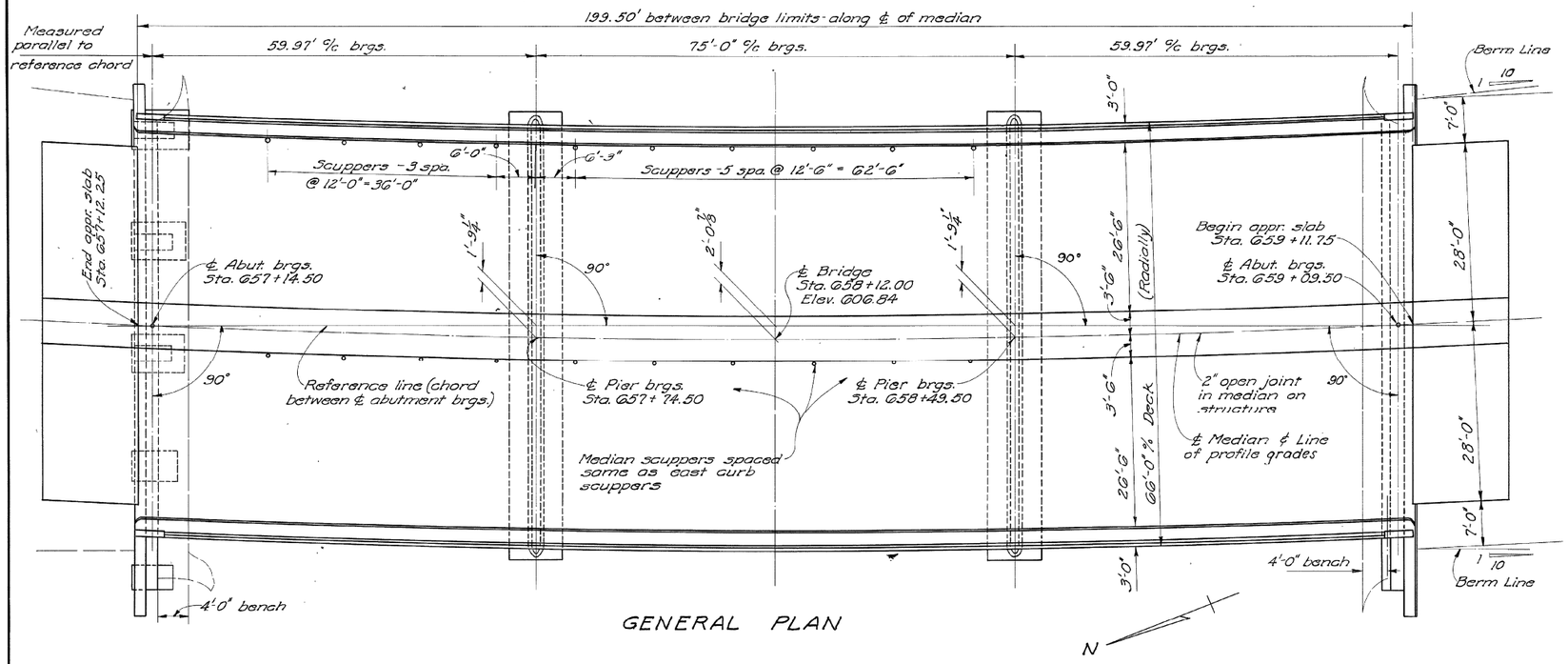
Date of Letting ____ 19
Contract No. ____


FED. RD. DIVISION 2
STATE OHIO
PROJECT STATE
TYPE FUNDS
131 / 163
ERI-250 (10.83-13.34)
ERI-113-(5.83)(6.04)
ERI-299-0.00
AT MILAN
Foundation design and foundation quantities are based on a study of rod soundings and soil-sampling soundings made at the site. This sounding information may be inspected in the office of the Bureau of Bridges in Columbus, or in an abridged form in the Division office, but the State shall assume no responsibility for the accuracy thereof.
PROPOSED STRUCTURE
TYPE: Continuous steel beams with reinforced conc. deck and reinf. conc. substructure
SPANS: 60'-75'-60' c'tr. to c'tr. of bearings
ROADWAY: 60'-0" f/f 1'-9" safety curbs
LOAD FREQUENCY RATING: CF=2000 (51)
SKEW: None
WEARING SURFACE: 1" Monolithic concrete
APPROACH SLABS: AS-4-47
ALIGNMENT: 2°-30' curve left
SUPERELEVATION: 0.059 ft. per ft.
RIVER
HURON
10'-Transition grade to meet existing ground.
Right of Way
El. 586.6 (Finished grade on drive)
12" I-1 pipe
℄ field drive.
Type "A" riprap (Concrete Slab) from 1' below top of shale to Elev. 595.0
℄ Bridge Sta. 658+12.00
face of pier
Transition 4:1 to 2:1 slope
S.C. Sta. 658+98.04 Lt. Lanes
S.C. Rt. Lanes
Shut off Valve
Ex. 12" Gas Line
End approach slab Sta. 657+12.25
Begin approach slab Sta. 658+11.75
(Finished grade on drive) El. 587.0
658+63
Transition Slope
Ex. 4" Gas Line (To be re-located)
BRIDGE LIMITS
El. 589.0 (Finished grade on drive)
Sta. 658+81
Place Type "A" riprap (Concrete Slab) from 3' below ground line to El. 595.0
Clears assumed 15-20 yr. H.W. 2.8'±
10' Transition grade to meet existing ground.
DRAINAGE AREA = 363 Sq. Mi.
EXISTING BRIDGE DATA
TYPE: Steel Beam
SPAN: 2@35'3" 2@40'8"
ROADWAY WIDTH: 24'-0"
TYPE FLOOR: Wood strip & Bituminous W.S.
LOAD CAPACITY: H-15
SKEW: 13°06' 25"
DATE BUILT: Remodeled 1947
GEN. CONDITION: Good, to remain in place.
Sta. 657+12.25
℄ Bridge Sta. 658+12.00 Prof. Gr. Elev. 606.84
Embankment Material
6" I-18
FIELD DRIVE TYPICAL SECTION
Note: Additional details on Sheet 8.
+2.5% Grade
Profile Ground
Profile V.C.
400' V.C.
P.I. 655+00 Elev. 600.00
P.T. of V.C.
Bench El. 597.4
Bench El. 602.1
H.W. 597.55 (1913)
H.W. 595.37 (1937)
Assumed 15-20 yr. H.W. 595.5
℄ Drive
HURON RIVER
12 BP53 - Est. average pay length = 27'
Ftg. El. 573.0
655+00 656+00 657+00 658+00 659+00 660+00
STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES
SITE PLAN
BRIDGE NO. ER-250-124
OVER HURON RIVER
ERIE CO. S.R. 250
SEC. ERI-250-(10.83-13.34) STA. 658+12.00
SCALE 1"=20'
PRESENT TOPOGRAPHY: SURVEYED, DRAWN
PROPOSED WORK: DESIGNED J.H.B., DRAWN J.H.B., CHECKED, REVIEWED

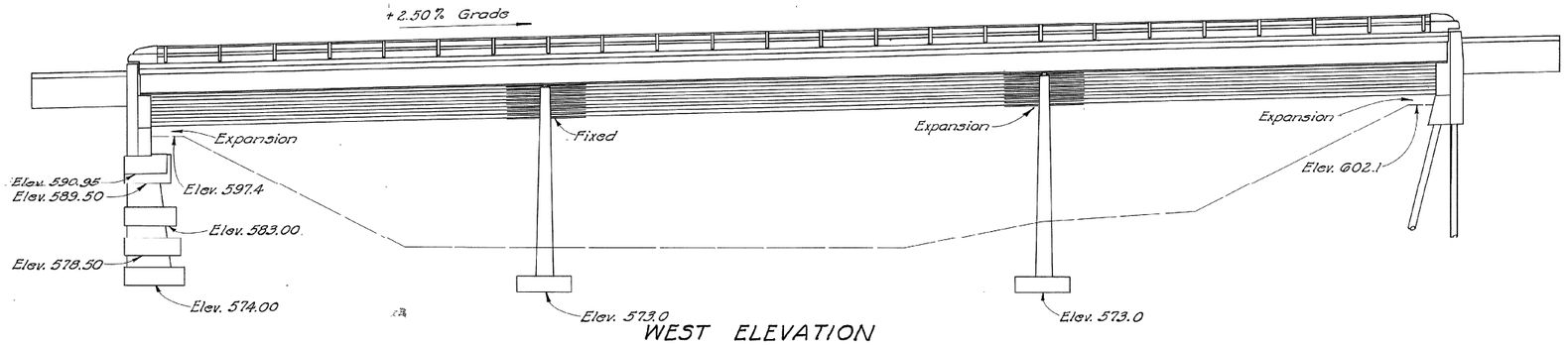
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	STATE	

132
163

ER1-250(10.83-13.34)
ER1-113-(5.83)(6.04)
ER1-299-0.00



GENERAL PLAN



WEST ELEVATION

660
216
110
129,777

ESTIMATED QUANTITIES

Item	Total	Unit	Description	Superstr.	N. Abut.	S. Abut.	N. Pier	S. Pier	Gen'l.		
E-2	Lump	Sum	Cofferdams, cribs and sheeting						Lump		
E-2	(640)	Cu. Yd.	Unclassified excavation; including shale	230	(210)	70	110	250			
S-1	426	Cu. Yd.	Class "C" concrete, superstructure	426							
S-1	(212)	Cu. Yd.	Class "E" concrete, abutments	108	(104)	108					
S-1	272	Cu. Yd.	Class "E" concrete, pier walls	✓			132	140			
S-1	(109)	Cu. Yd.	Class "E" concrete, footings	26	(25)		42	42			
S-4	(29,742)	Lbs.	Reinforcing steel	7846	104,531	(18,1)	5576	5711	5962	151	
S-7	380,000	Lbs.	Structural steel		380,000						
S-8	380,000	Lbs.	Field painting of structural steel		380,000						
S-14	400	Lin. Ft.	Railing, steel with concrete end posts		400						
S-16	Lump	Sum	First test pile			Lump					
S-18	490	Lin. Ft.	Steel piling, 12 BP 53			490					
I-10	537	Sq. Yd.	Type "A" riprap, (concrete slab)						537		

GENERAL NOTES

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated 10-1-51, together with revisions thereof dated 7-15-52 and 4-1-54.

EXISTING GAS LINE: The 4" gas line passing through the location of the proposed north abutment will be relocated by the owner of the line, but the Contractor shall cooperate with the owner in effecting the re-location.

EXCAVATION QUANTITY includes the removal of embankment material between top of earth bench and bottom of abutment crossbeam.

PILES shall be driven with a hammer of not less than 7,000'# energy per blow, to firm contact with shale which shall be considered as attained when the capacity according to the formula in Sec. 18.05 is at least 40 tons per pile if a 7,000'# steam hammer is used, or 30 tons if a steam hammer or drop hammer of 15,000'# or greater energy is used and if the length of penetration is approximately equal to the depth to shale according to the bridge foundation investigation report. If the energy rating of the hammer is between these values, the required formula capacity shall be determined by interpolation. (The design load is 27 tons per pile.) If a drop hammer is used, the capacity formula shall be $R=\frac{2E}{S+.3}$ instead of as specified in Sec. 5-18.05, the weight of the ram shall be not less than 3,000 pounds, and the height of fall shall be not more than 7 feet.

FOOTINGS shall extend a minimum of 3" into firm shale or to the elevation shown, whichever is lower.

WELDED STEEL. The steel for the 36 WF 170 beams shall conform to A.S.T.M. Designation A-373. All other structural steel shall conform to A.S.T.M. A-7 (as per Sec. M-7.1 (a) of the Construction and Material Specifications) or A-313. A-313 steel need not be preheated for welding.

WELDING of structural steel shall be Class "A" except for Class "B" welds shown thusly B

PAINTING, both shop and field, shall be according to Item 5-8 except that the paint shall be applied by brushing. Spray application will not be permitted.

REINFORCING STEEL shall be 2 inches clear from surface of concrete unless otherwise indicated.

SURFACE FINISH OF CONCRETE: Railing and posts, curb faces and fascias of deck shall be given a rubbed surface finish. All other exposed surfaces shall be governed by the provisions of Item 5-1.

GRAVEL, if used as the coarse aggregate, shall be according to Sec. M-3.93 instead of M-3.91 for class "C" concrete, superstructure. Gravel meeting the requirements of Sec. M-3.93 also may be used for other concrete in this structure.

Pencilled Revisions 5-10-55

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES AND RAILROAD CROSSINGS

GENERAL PLAN & ELEVATION, NOTES & QUANTITIES

BRIDGE No. ER-250-124
OVER HURON RIVER

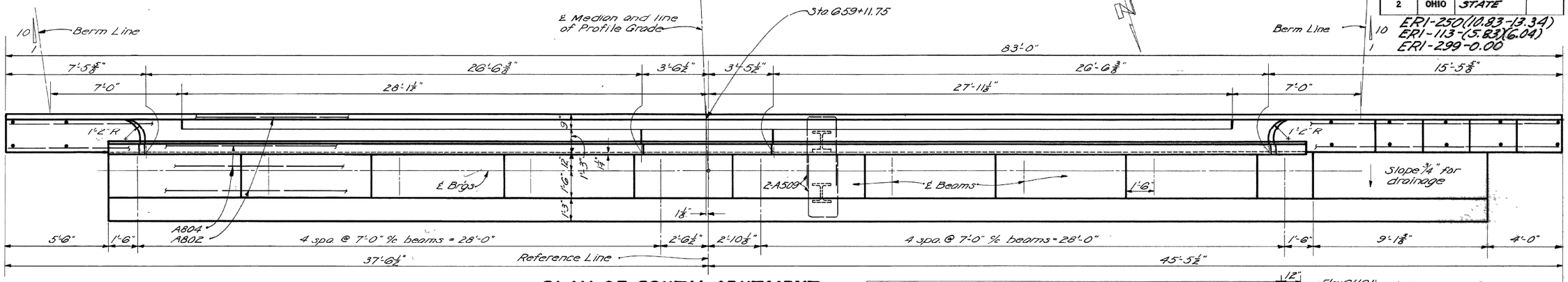
ERIE COUNTY STA. 658+12.00
SEC. ER1-250-(10.83-13.34)

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
Ray	Ray	JDJ	Myler	BFG	9-16-54	

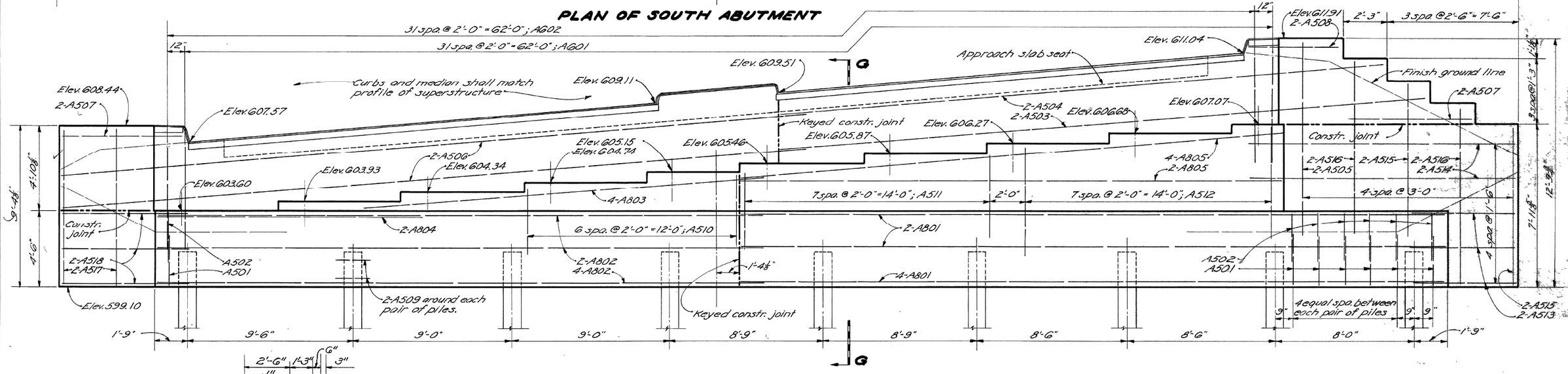
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	STATE	

133
163

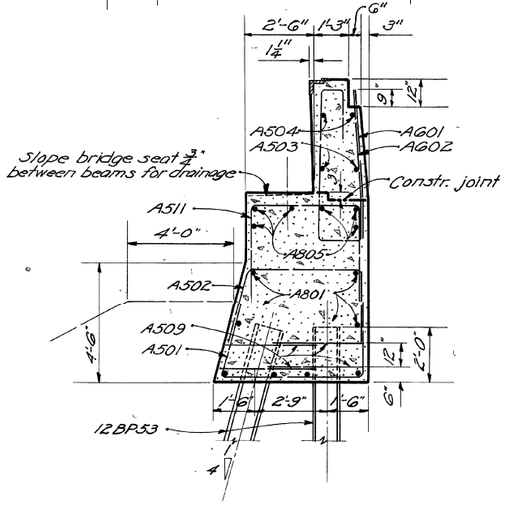
ERI-250(10.83-13.34)
ERI-113-(5.83)(6.04)
ERI-2.99-0.00



PLAN OF SOUTH ABUTMENT



ELEVATION OF SOUTH ABUTMENT



SECTION G-G

APPROACH EMBANKMENT: All earth fill around the abutment shall be made full height of earth bench. Excavation shall then be made for the abutment cap, after which the piling shall be driven.

BRIDGE SEAT PROCEDURE: Concrete above bridge seat construction joint shall not be placed until after steel work is erected. Steel end finish shall be used as a template for top of backwall.

REINFORCING STEEL in bridge seat shall be placed to clear anchor bars.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES AND RAILROAD CROSSINGS

SOUTH ABUTMENT DETAILS

BRIDGE NO. ER-250-124
OVER HURON RIVER

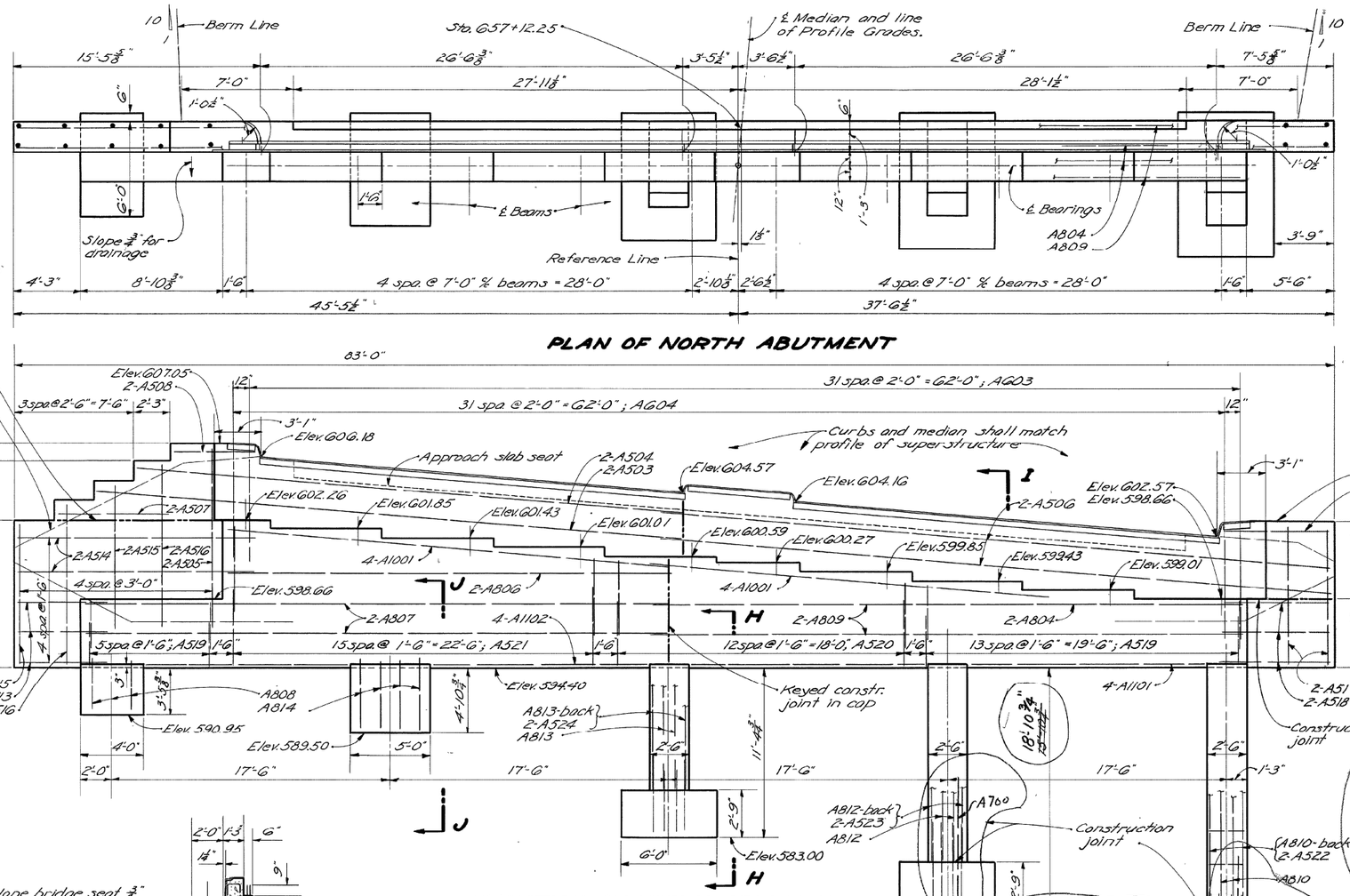
ERIE COUNTY
SEC. ERI-250-(10.83-13.34) STA. 658+12.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
Ray	Ray	EA	mjb	BFG	9-16-54	

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	STATE	

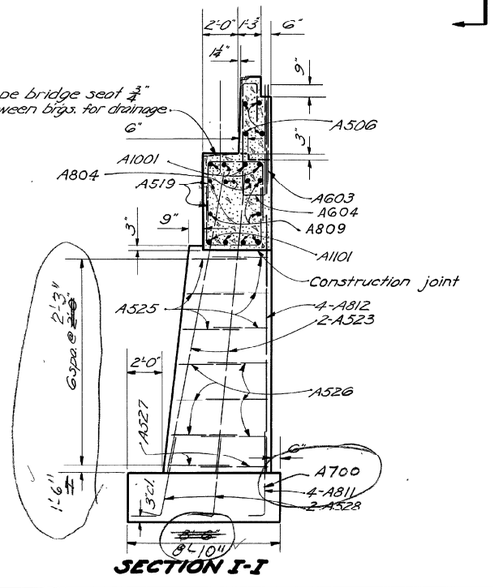
134
163

ER1-250(10.83-13.34)
ER1-113-(5.83)(6.04)
ER1-299-0.00



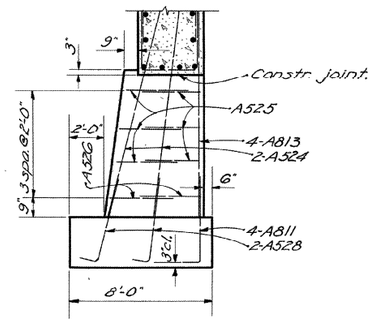
PLAN OF NORTH ABUTMENT

ELEVATION OF NORTH ABUTMENT

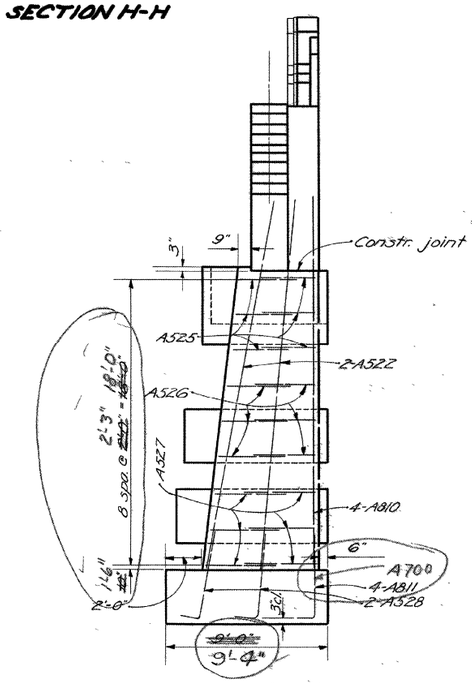


SECTION I-I

SECTION J-J



SECTION H-H



END ELEVATION

APPROACH EMBANKMENT: After the pedestals are placed, all earth fill shall be made full height of earth bench, and excavation shall then be made for the abutment cap.

BRIDGE SEAT PROCEDURE: Concrete above bridge seat construction joint shall not be placed until after steel work is erected. Steel and finish shall be used as a template for top of backwall.

REINFORCING STEEL in bridge seat shall be placed to clear anchor bars.

Penciled Revisions 5-10-55

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES AND RAILROAD CROSSINGS

NORTH ABUTMENT DETAILS

BRIDGE NO. ER-250-124
OVER HURON RIVER

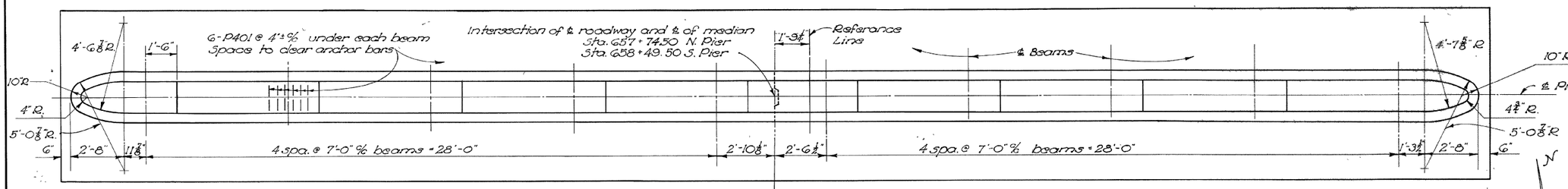
ERIE COUNTY
SEC. ER1-250-(10.83-13.34) STA. 658+12.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
Ray	Ray	EA	JMW	BFG	9-16-54	

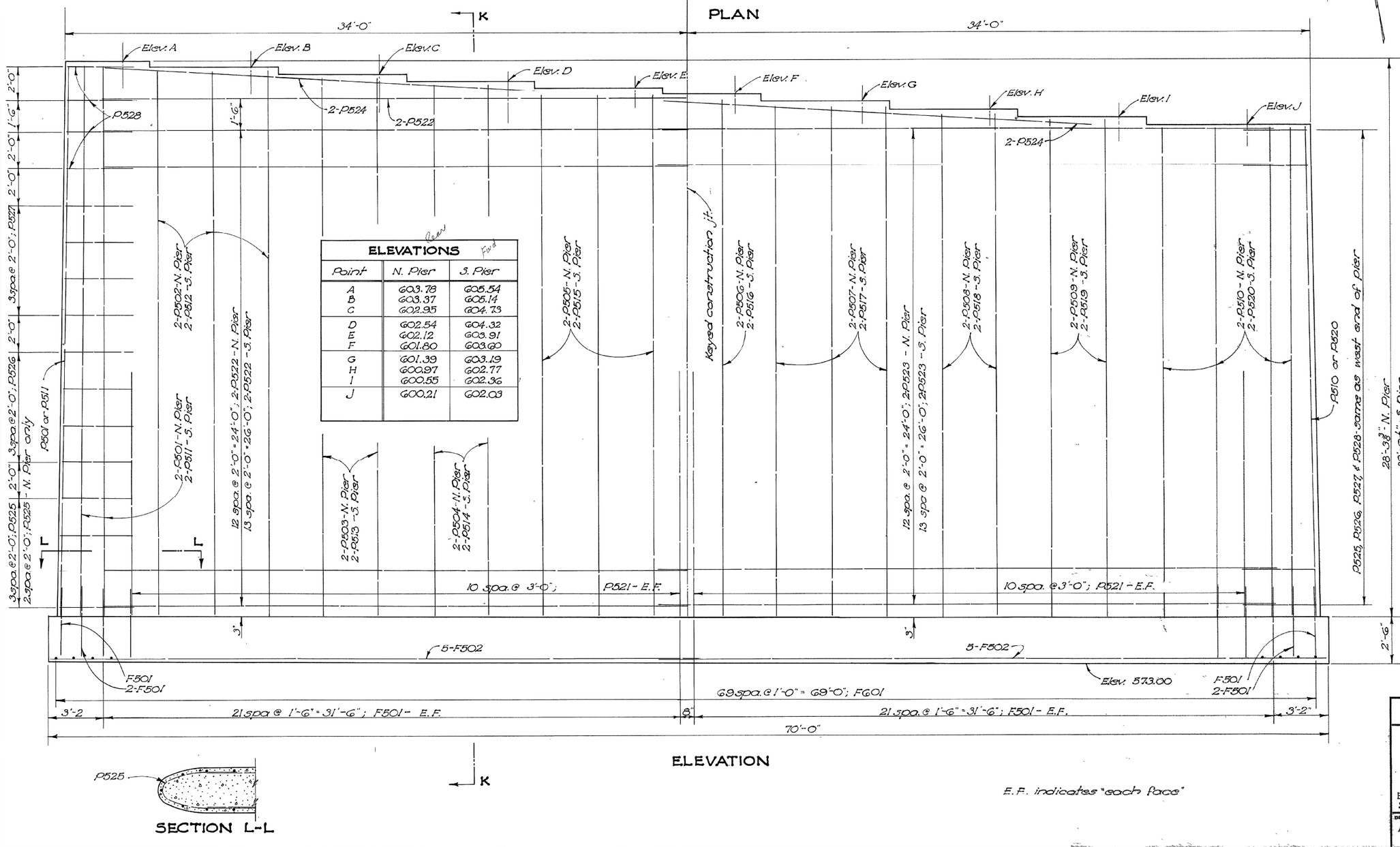
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	STATE	

135/163

ERI-250 (10.83-13.34)
ERI-113-(5.83)(6.04)
ERI-299-0.00



PLAN



ELEVATIONS		
Point	N. Pier	S. Pier
A	603.78	605.54
B	603.37	605.14
C	602.95	604.73
D	602.54	604.32
E	602.12	603.91
F	601.80	603.60
G	601.39	603.19
H	600.97	602.77
I	600.55	602.36
J	600.21	602.03

Revised

ELEVATION

SECTION L-L

SECTION K-K

E.F. indicates "each face"

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES AND RAILROAD CROSSINGS

PIER DETAILS

BRIDGE No. ER-250-124 OVER HURON RIVER

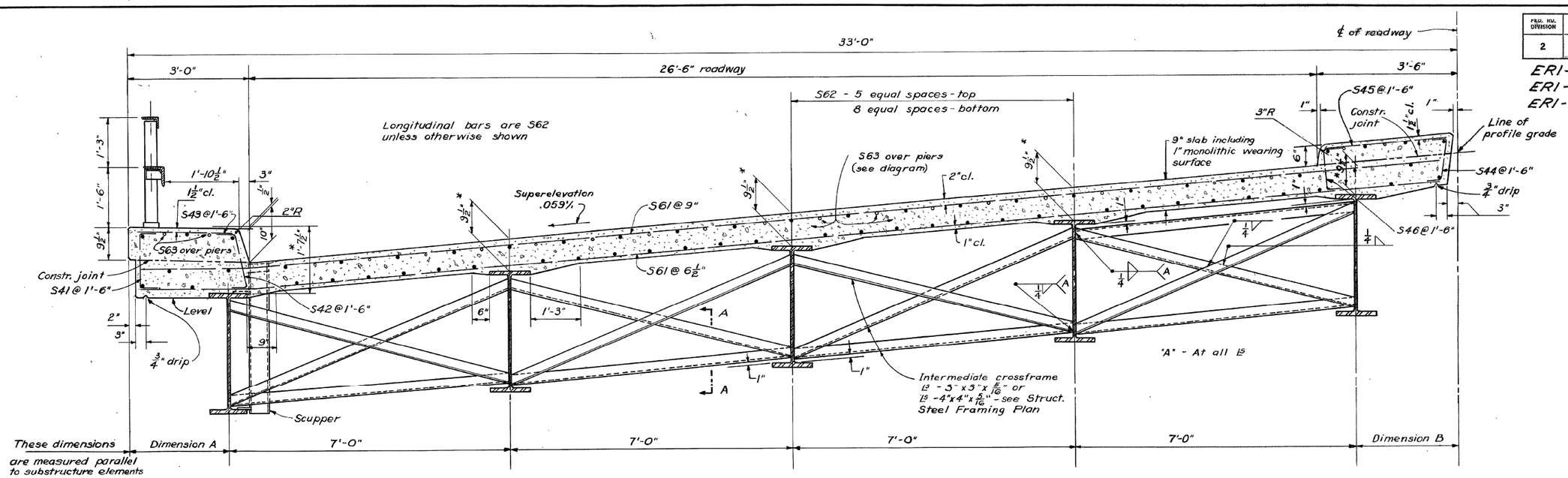
ERIE CO.
SEC. ER.1-250 (10.83-13.34) STA. 658+12.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
Ray	Ray	PGB	mjd	BFG	9-16-54	

FED. HWY. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	STATE	

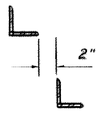
136/163

ERI-250(10.83-13.34)
ERI-113-(5.83)(6.04)
ERI-299-0.00

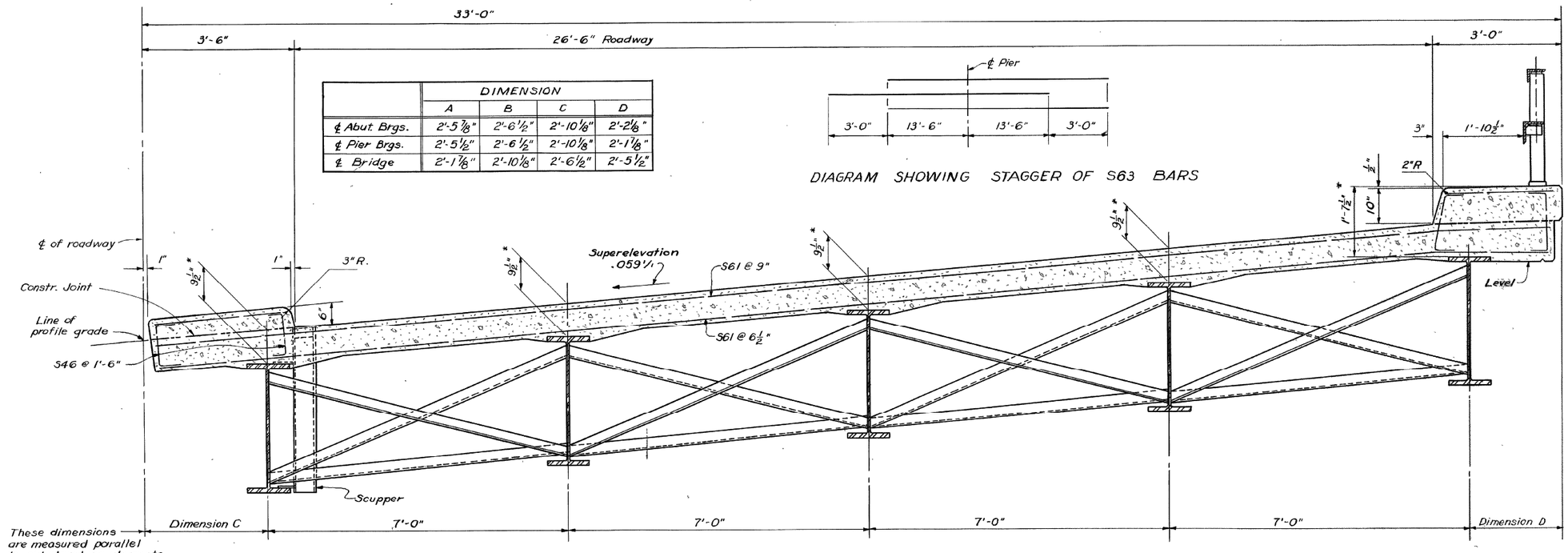


SECTION THRU LEFT HALF OF SUPERSTRUCTURE

* Applies only at abutments and piers



SECTION A-A



	DIMENSION			
	A	B	C	D
℄ Abut. Brgs.	2'-5⅞"	2'-6½"	2'-10⅛"	2'-2⅛"
℄ Pier Brgs.	2'-5½"	2'-6½"	2'-10⅛"	2'-1⅛"
℄ Bridge	2'-1⅛"	2'-10⅛"	2'-6½"	2'-5½"

DIAGRAM SHOWING STAGGER OF S63 BARS

SECTION THRU RIGHT HALF OF SUPERSTRUCTURE

For dimensions & details not shown see "Section Thru Left Half of Superstructure"

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES AND RAILROAD CROSSINGS

SUPERSTRUCTURE DETAILS

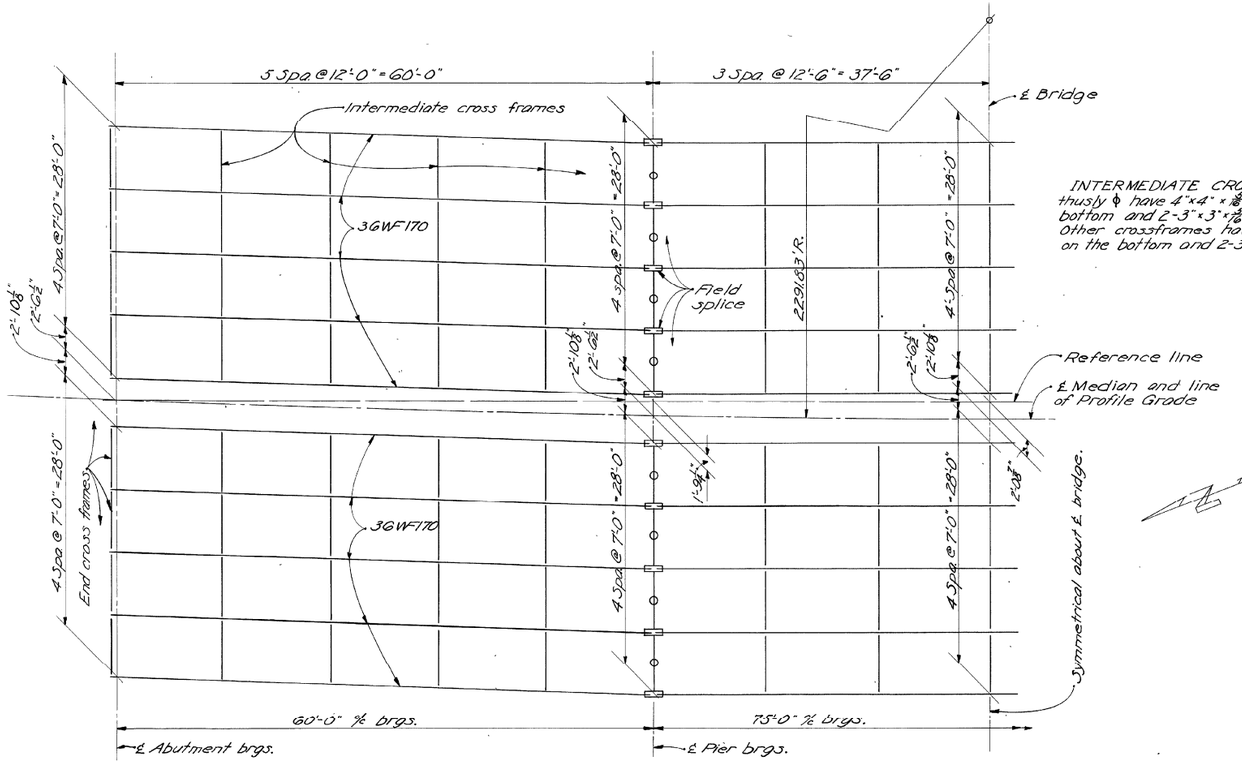
BRIDGE NO. ER-250-124
OVER HURON RIVER
ERIE COUNTY
SEC. ERI-250(10.83-13.34) STA. 658+12.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED BFG	DATE	REVISED
Ray	Ray	C.R.	mfm	A.B.F.	9-16-54	

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	STATE	

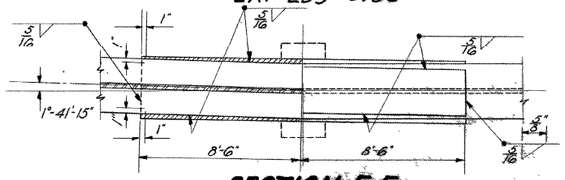
137
163

ER1-250(10.83-13.34)
ER1-113-(5.83)(6.04)
ER1-299-0.00



INTERMEDIATE CROSSFRAMES marked thusly ϕ have 4"×4"×⅜" L struts top and bottom and 2-3"×3"×⅛" diagonal Lg. Other crossframes have 3"×3"×⅜" L struts on the bottom and 2-3"×3"×⅛" diagonal Lg.

STRUCTURAL STEEL FRAMING PLAN



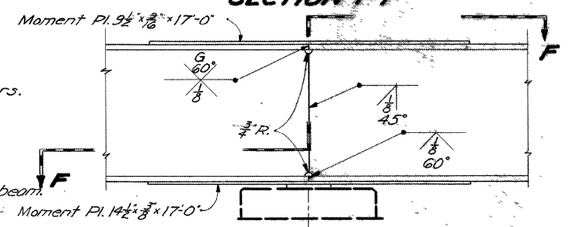
SECTION F-F

BEAM SPLICE WELDING PROCEDURE

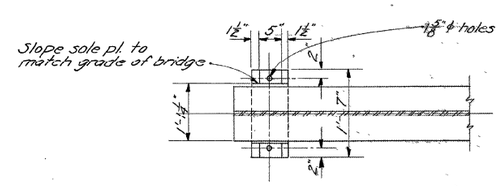
1. Raise abutment end of beams 1½" at both abutments.
2. Butt-weld the beam flanges and webs at both piers.
3. Weld the bottom and top moment plates at both piers.
4. Weld in place intermediate crossframes marked on Structurol Steel Framing Plan thusly ϕ.
5. Lower ends of beam to final position.

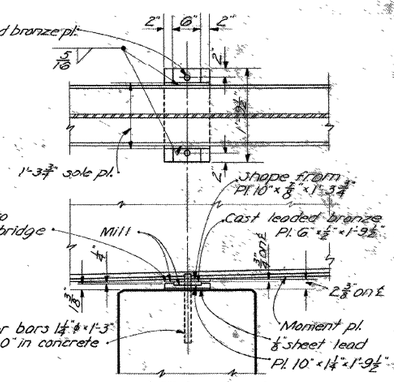
Beam ends need not all be lowered simultaneously. The ends of any beam may be lowered after it is connected at both piers by crossframes to another beam.

CAMBER: No cambering of beams is required, but the beams shall be so fabricated that any curved beams will be placed with the convex flange up.

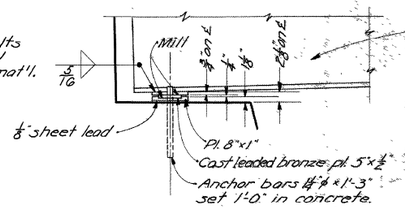


BEAM SPLICE DETAILS

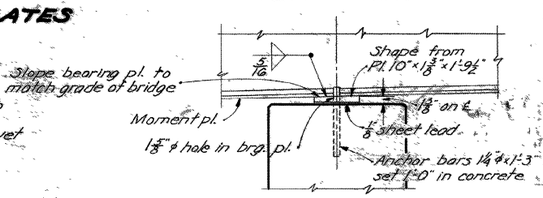




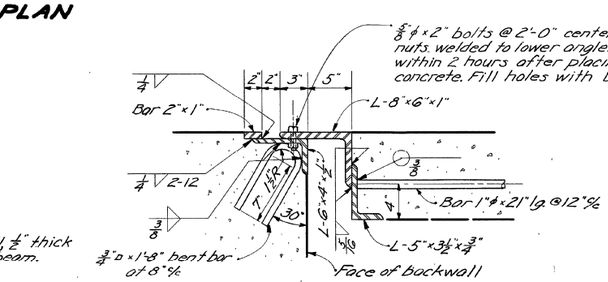
EXPANSION



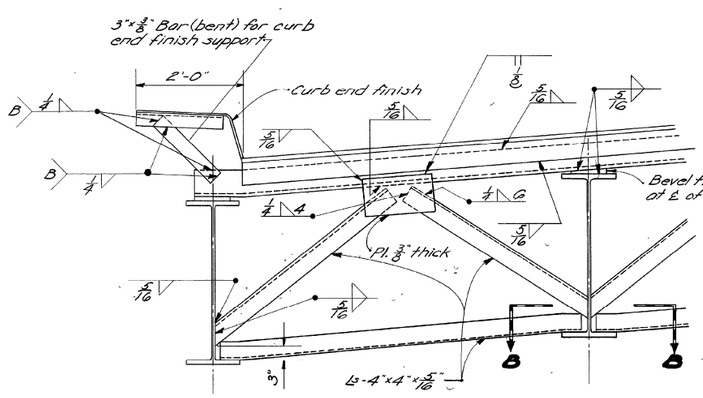
ABUTMENT BEARING PLATES



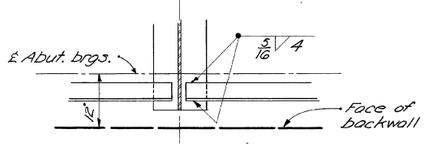
FIXED PIER BEARING PLATES



ROADWAY END FINISH

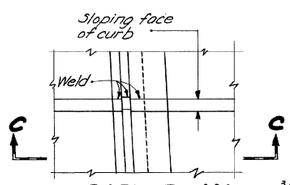


END CROSSFRAME DETAILS

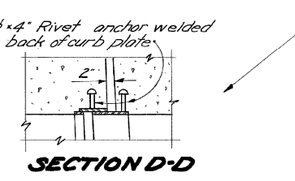


SECTION B-B

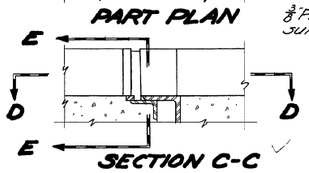
MEDIAN PLATE DETAILS shall be similar to "Curb Plate Details" except for profile of vertical face which shall match profile of median. Rivet anchors are not required.



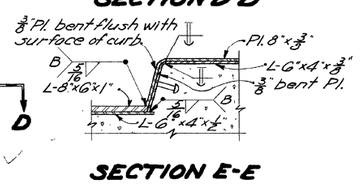
PART PLAN



SECTION D-D

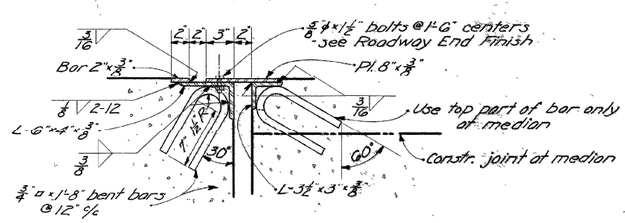


SECTION C-C



SECTION E-E

CURB PLATE DETAILS



CURB AND MEDIAN END FINISH

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES AND RAILROAD CROSSINGS

SUPERSTRUCTURE DETAILS

BRIDGE NO. ER-250-124
OVER HURON RIVER

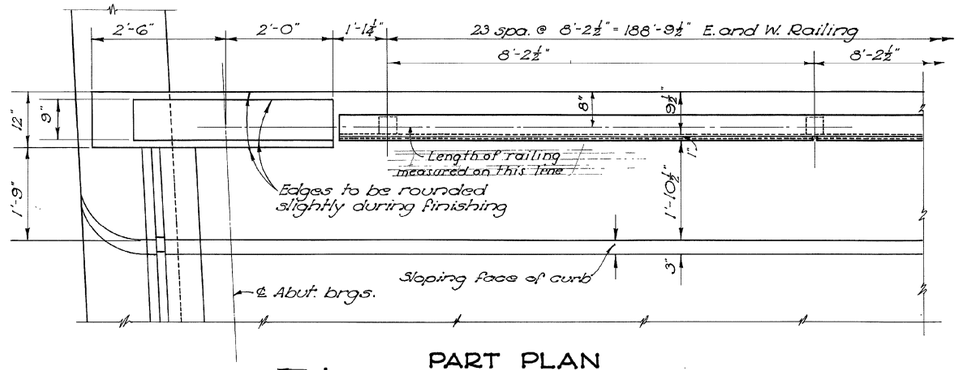
ERIE COUNTY
SEC. ER1-250-(10.83-13.34) STA. 658+12.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
Ray	Ray	LA	[illegible]	DFG	9-16-54	

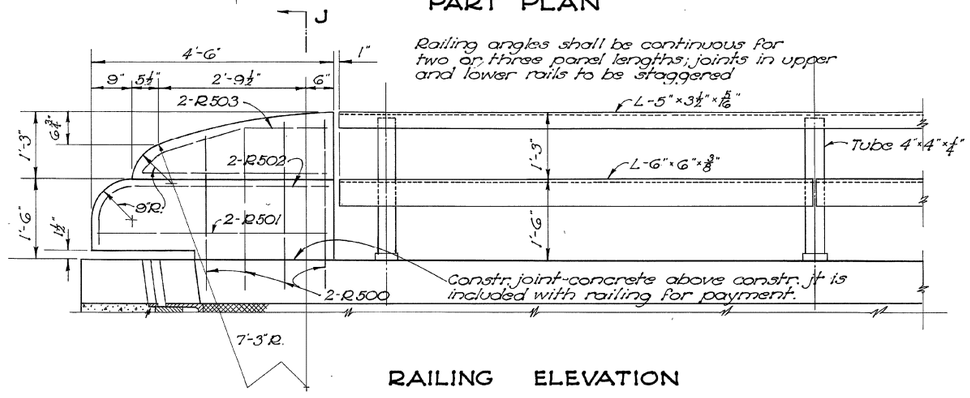
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	STATE	

138
163

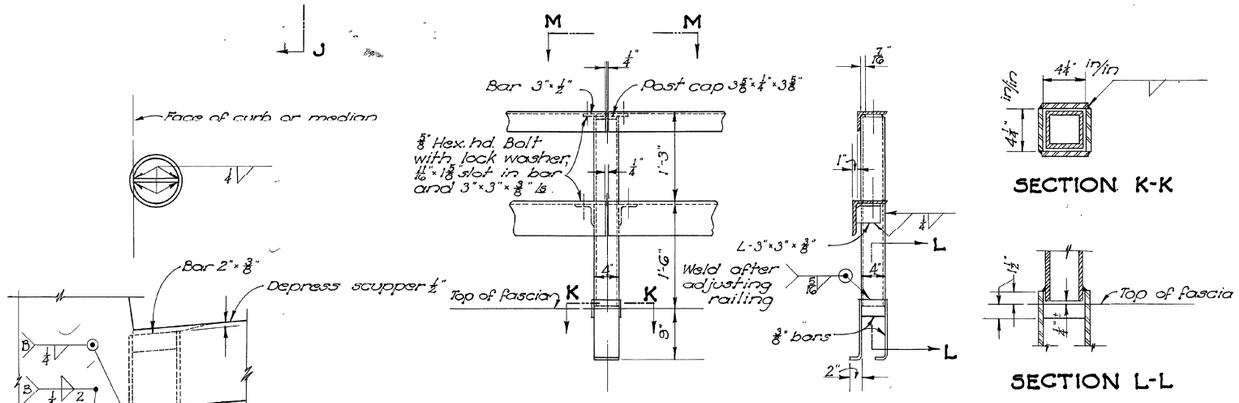
ER1-250 (10.83-13.34)
ER1-113-(5.83)(6.04)
ER1-299-0.00



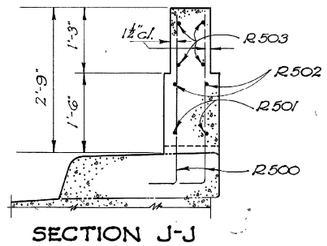
PART PLAN



RAILING ELEVATION



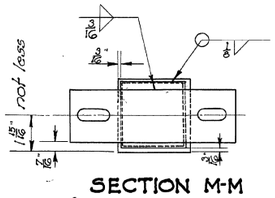
SCUPPER DETAILS
scupper included with structural steel for payment



SECTION J-J

SECTION K-K

SECTION L-L



SECTION M-M
(with upper rail removed)

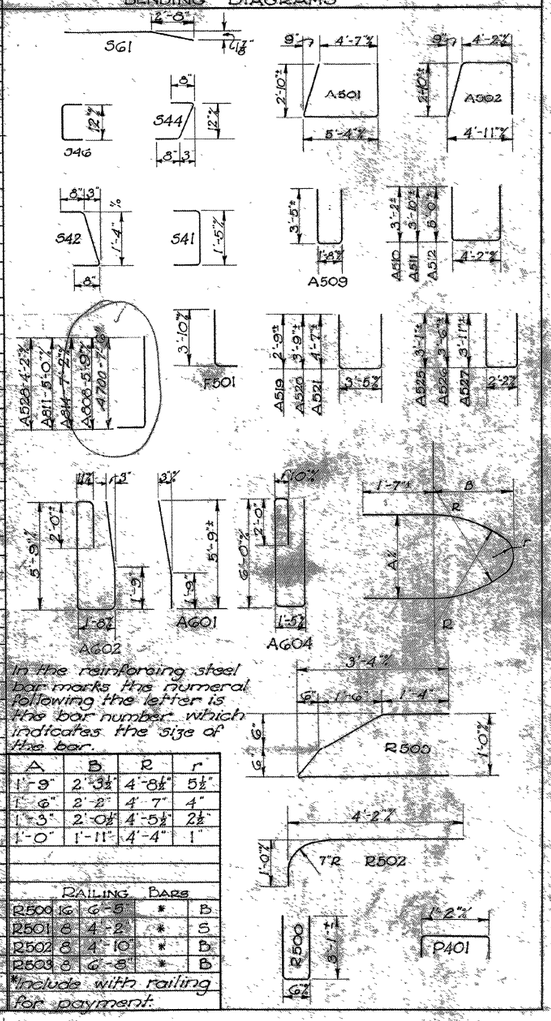
RAILING DETAILS

REINFORCING STEEL LIST

MARK	NO	LENGTH	WEIGHT	SHP
SUPERSTRUCTURE				
S61	1250	32'-3"	60,549	B
S62	610	40'-8	37,260	S
S63	82	30'-0"	4146	S
S41	260	2'-7"	449	B
S42	260	2'-6"	434	B
S43	260	2'-5"	420	S
S44	130	2'-2"	188	B
S45	260	3'-0"	521	S
S46	390	2'-2"	564	B
ABUTMENTS				
A1101	4	39'-7"	841	S
A1102	4	36'-10"	783	S
A1001	8	28'-0"	964	S
A801	8	39'-11"	853	S
A802	8	35'-8"	762	S
A803	4	24'-0"	256	S
A804	4	15'-0"	160	S
A805	6	30'-10"	494	S
A806	2	27'-11"	149	S
A807	4	36'-10"	393	S
A808	3	6'-11"	55	B
A809	4	38'-7"	412	S
A810	4	20'-2"	215	S
A811	12	6'-2"	198	B
A812	4	15'-8"	167	S
A813	4	11'-2"	119	S
A814	4	8'-4"	89	B
A700	2	8'-6"	35	B
AG01	32	5'-9"	296	S
AG02	32	15'-5"	741	B
AG03	32	6'-0"	288	S
AG04	32	15'-7"	749	B
A501	42	10'-10"	475	B
A502	42	9'-8"	423	B
A503	4	36'-10"	154	S
A504	4	34'-4"	143	S
A505	4	10'-0"	42	S
A506	8	42'-5"	354	S
A507	8	6'-0"	50	S
A508	4	4'-6"	19	S
A509	36	8'-3"	310	B
A510	7	10'-3"	75	B
A511	8	11'-7"	97	B
A512	8	13'-11"	116	B
A513	12	5'-10"	73	S
A514	8	14'-8"	122	S
A515	8	7'-6"	63	S
A516	8	8'-9	73	S
A517	8	8'-8"	72	S

MARK	NO	LENGTH	WEIGHT	SHP
ABUTMENTS				
A518	12	7'-1"	89	S
A519	40	8'-8"	362	B
A520	26	10'-8"	289	B
A521	32	12'-4"	412	B
A522	4	19'-3"	80	S
A523	4	14'-9"	62	S
A524	4	10'-3"	43	S
A525	18	8'-1"	152	B
A526	14	8'-11"	130	B
A527	8	9'-9"	81	B
A528	12	4'-11	62	B
PIERS				
FG01	140	6'-0"	1262	S
F501	188	4'-7"	899	B
F502	20	35'-7"	742	S
P501	5	28'-1"	146	S
P502	6	27'-7"	173	S
P503	4	27'-2"	113	S
P504	4	26'-8"	111	S
P505	6	26'-4"	165	S
P506	2	26'-0"	54	S
P507	6	25'-7"	160	S
P508	4	25'-2"	105	S
P509	4	24'-9"	103	S
P510	9	24'-5"	229	S
P511	5	29'-9"	155	S
P512	6	29'-4"	184	S
P513	4	29'-0"	121	S
P514	4	28'-6"	119	S
P515	6	28'-2"	176	S
P516	2	27'-10"	58	S
P517	6	27'-5"	172	S
P518	4	27'-0"	113	S
P519	4	26'-7"	111	S
P520	9	26'-3"	246	S
P521	88	14'-0"	1285	S
P522	58	31'-10"	1926	S
P523	54	33'-5"	1882	S
P524	8	24'-0"	200	S
P525	14	8'-5"	123	B
P526	16	8'-0"	131	B
P527	16	7'-8"	128	B
P528	12	7'-7"	91	B
P401	120	2'-4"	187	B
REPLACEMENT BARS				
RE11	1	7'-7"	40	S
RE10	1	7'-2"	31	S
RE8	1	6'-6"	17	S
RE6	6	5'-11"	53	S
RE5	1	5'-7"	6	S
RE4	1	5'-3"	4	S

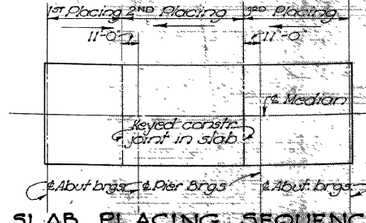
BENDING DIAGRAMS



	A	B	R	r
1	1'-9"	2'-3½"	4'-8½"	5½"
2	1'-6"	2'-2"	4'-7"	4"
3	1'-3"	2'-0½"	4'-5½"	2½"
4	1'-0"	1'-11"	4'-4"	1"

RAILING BARS				
R500	16	6'-5"	*	B
R501	8	4'-2"	*	S
R502	8	4'-10"	*	B
R503	8	6'-8"	*	B

*Include with railing for payment.



DECK SLAB PLACING SEQUENCE
Deck slab shall be placed in sections between transverse construction joints, in the numerical order and in the direction indicated in order that the major portion of the dead load deflection may occur prior to placing concrete over each pier.

Pencilled Revisions 5-10-55

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES AND RAILROAD CROSSINGS

SUPERSTRUCTURE DETAILS & REINFORCING STEEL LIST

BRIDGE No. ER-250-124 OVER HURON RIVER

ERIE CO.
SEC. ER1-250 (10.83-13.34) STA. 658+12.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
Ray	Ray	PLB	JWP	BFG	9-16-54	