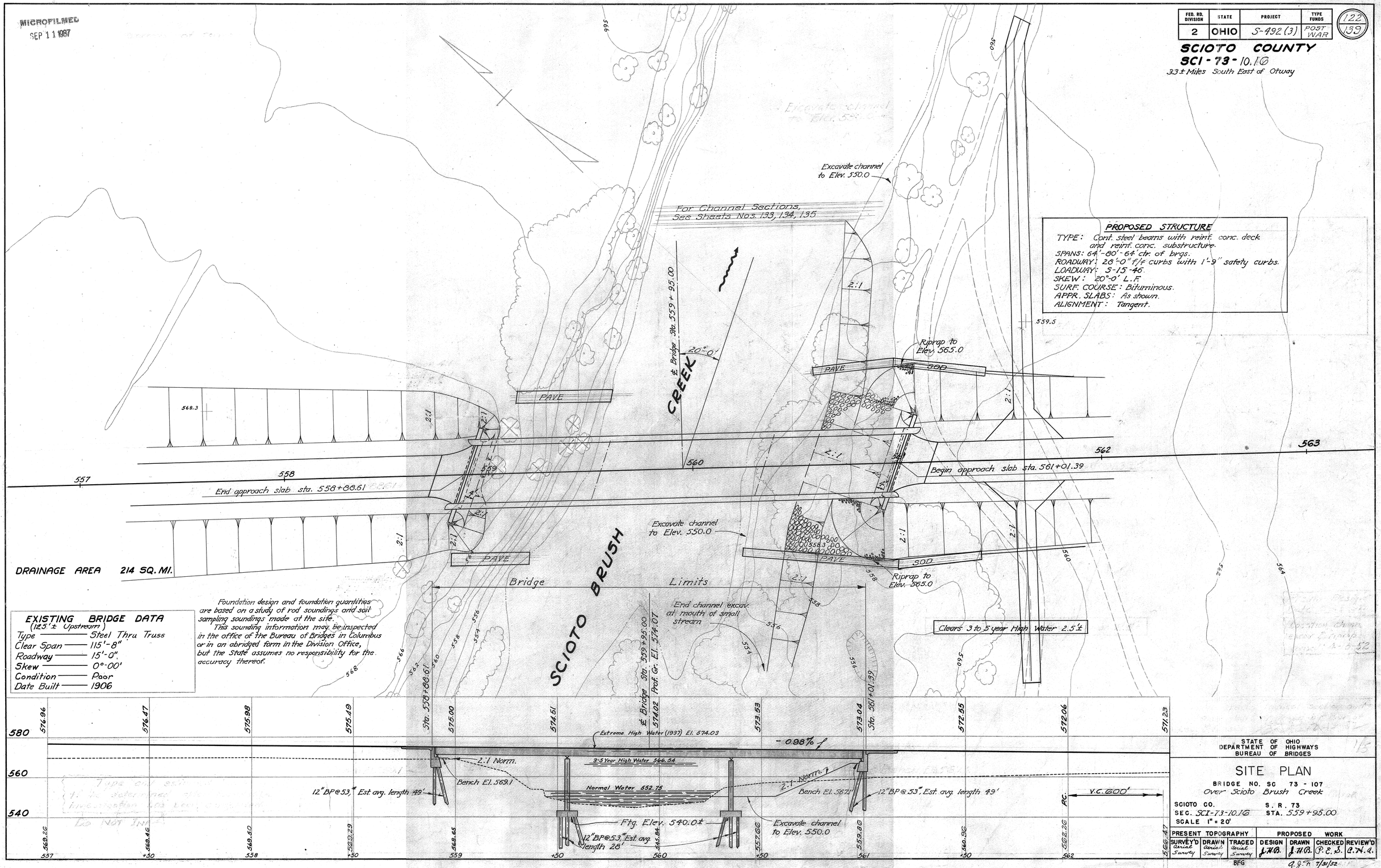
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	S-492(3)	POST WAR

122
139

SCIOTO COUNTY
SCI-73-10.16
3.3± Miles South East of Otway



PROPOSED STRUCTURE

TYPE: Cont. steel beams with reinf. conc. deck and reinf. conc. substructure.
SPANS: 64'-80'-64' ctr. of brgs.
ROADWAY: 28'-0" f/f curbs with 1'-9" safety curbs.
LOADWAY: 5-15-46.
SKEW: 20°-0' L.F.
SURF. COURSE: Bituminous.
APPR. SLABS: As shown.
ALIGNMENT: Tangent.

EXISTING BRIDGE DATA
(125'± Upstream)

Type	Steel Thru Truss
Clear Span	115'-8"
Roadway	15'-0"
Skew	0°-00'
Condition	Poor
Date Built	1906

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 assumes no responsibility for the accuracy thereof.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

SITE PLAN

BRIDGE NO. SC 73 - 107
Over Scioto Brush Creek

SCIOTO CO. S. R. 73
SEC. SCI-73-10.16 STA. 559+95.00
SCALE 1" = 20'

PRESENT TOPOGRAPHY			PROPOSED WORK			
SURVEY'D	DRAWN	TRACED	DESIGN	DRAWN	CHECKED	REVIEW'D
Aerial Survey	Aerial Survey	Aerial Survey	J.H.B.	J.H.B.	P.E.S.	G.F.A.

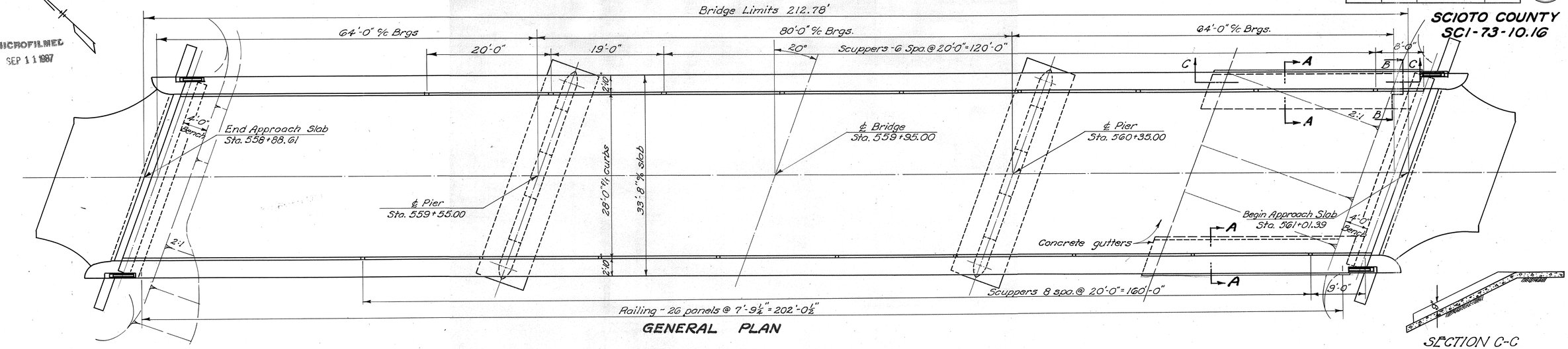
BFG

G.J.F. 7/31/52

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	S-492 (3)	POST WAR

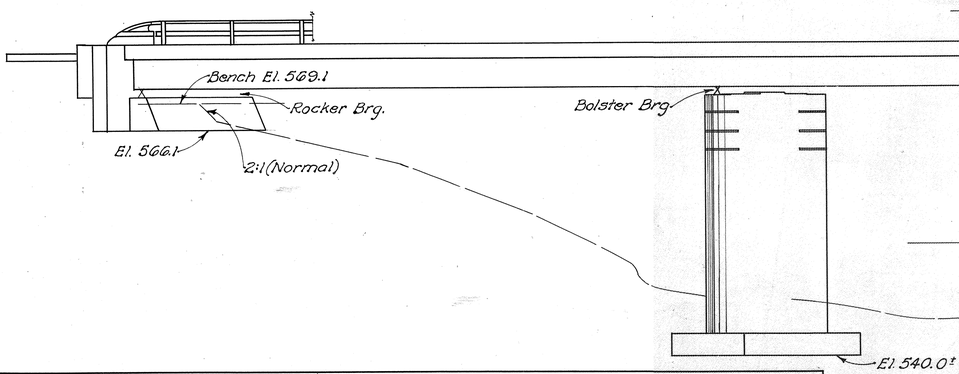
123
139

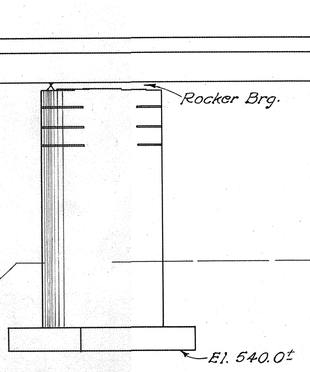
SCIOTO COUNTY
SCI-73-10.16



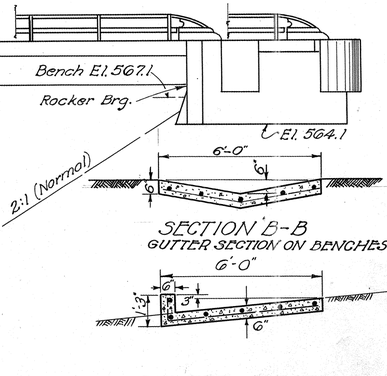
GENERAL PLAN

SECTION C-C





ELEVATION
Piling not shown



SECTION B-B
GUTTER SECTION ON BENCHES

GUTTER SECTION A-A

ESTIMATED QUANTITIES

Item	Total	Unit	Description	Superstr.	Abuts.	Piers	Gen'l.		
E-2	Lump	Sum	Cofferdams, cribs and sheeting				Lump Sum		
E-2	343	Cu. Yd.	Unclassified excavation		69	274			
E-3	1869	Cu. Yd.	Channel excavation				1869		
S-1	184	Cu. Yd.	Class "C" concrete, superstructure	184					
S-1	89	Cu. Yd.	Class "E" concrete, abutments		89				
S-1	159	Cu. Yd.	Class "E" concrete, pier walls			159			
S-1	85	Cu. Yd.	Class "E" concrete, pier footings			85			
S-3	643	Sq. Yd.	Type "C" waterproofing	643					
S-4	50,996	Lb.	Reinforcing steel	43,785	1,364	5,778	69		
S-7	229,000	Lb.	Structural steel	229,000					
S-8	229,000	Lb.	Field painting of structural steel	229,000					
S-14	427	Lin. Ft.	Railing (steel with concrete end posts)	427					
S-16	Lump	Sum	First test pile				Lump Sum		
S-18	2,170	Lin. Ft.	Steel piling, 12" BP @ 53 lbs.		882	1,288			
S-24	Lump	Sum	Removal of existing structure				Lump Sum		
S-29	418	Lin. Ft.	Subdrainage for wearing surface course	418					

ESTIMATED QUANTITIES cont'd.

Item	Total	Unit	Description	Superstr.	Abuts.	Piers	Gen'l.		
1-10	364	Sq. Yd.	Type "A" riprap				364		
1-14	99	Lin. Ft.	Concrete gutter				99		
T-35	44	Cu. Yd.	Asphaltic concrete surface course Type A or C						
			(70-80)	44					

GENERAL NOTES

REFERENCE shall be made to Standard Drawings CSB-1-47 revised 8-25-49 and RB-1-47 revised 7-27-49.

REMOVAL OF EXISTING STRUCTURE
When no longer needed to maintain traffic, existing structure shall be removed except as noted below.
Structural steel shall be match marked, carefully removed and piled along right of way at the disposal of the State.
Remainder of removed materials shall become the property of the Contractor.
N. Abutment shall be removed to a minimum of 6" below existing ground line at the face of abutment and slopes dressed to 2:1 slope. Dressing of slopes shall be included with removal of existing structure for payment. S. Abutment to remain in place.

Waste masonry may be disposed of as bank protection at the direction of the Engineer.

EXCAVATION quantity includes the removal of fill material between top of earth bench and bottom of abutment crossbeam.

PILING shall be driven to a minimum bearing capacity of 35 tons.

SURFACE FINISH OF CONCRETE
Railing end posts, curb faces and fascias of deck shall receive a rubbed surface finish. All other exposed surfaces shall be governed by the provisions of Item 511.

CONCRETE GUTTERS shall be of the cross section shown. They shall extend from face of abutment down to Elev. 548.0 and shall be centered under scuppers. Reinforcing bars ½" ℄ @ 1'-6" centers, both directions, included in price per lin. ft.

BITUMINOUS SURFACE COURSE
2½ Asphaltic concrete surface course, Item T-35, laid in two 1¼ courses.

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

GENERAL PLAN, ELEVATION, NOTES & ESTIMATED QUANTITIES

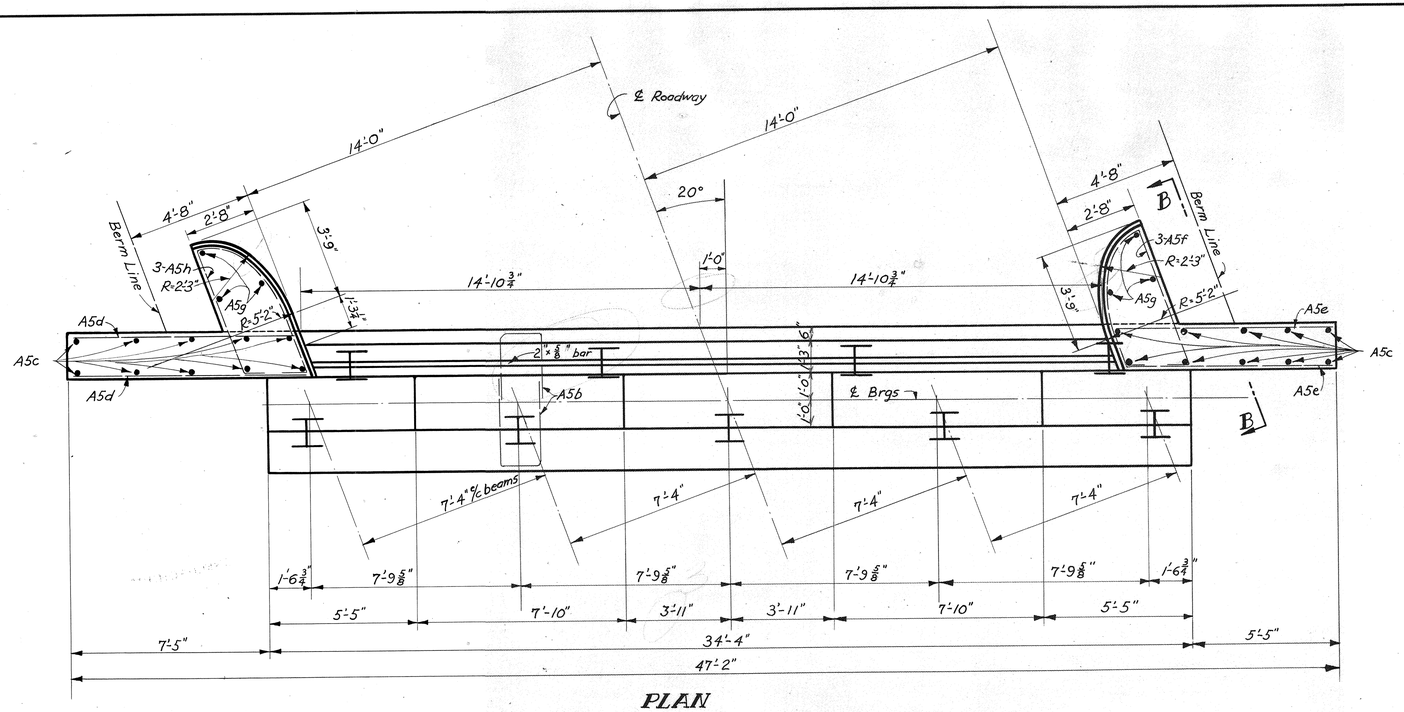
BRIDGE No. SC-73-107
OVER SCIOTO BRUSH CREEK
SCIOTO COUNTY
SEC. SCI-73-10.16 STA. 559+95.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED BFG	DATE	REVISED
R.H.L.	R.H.L.	J.D.J	mfw	A.G.F.	7/31/52	

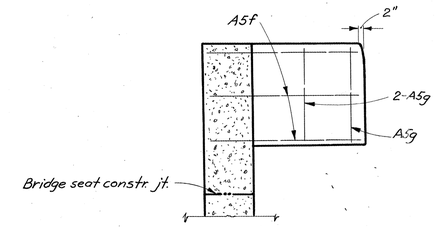
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	S-492(3)	POST WAR

124
139

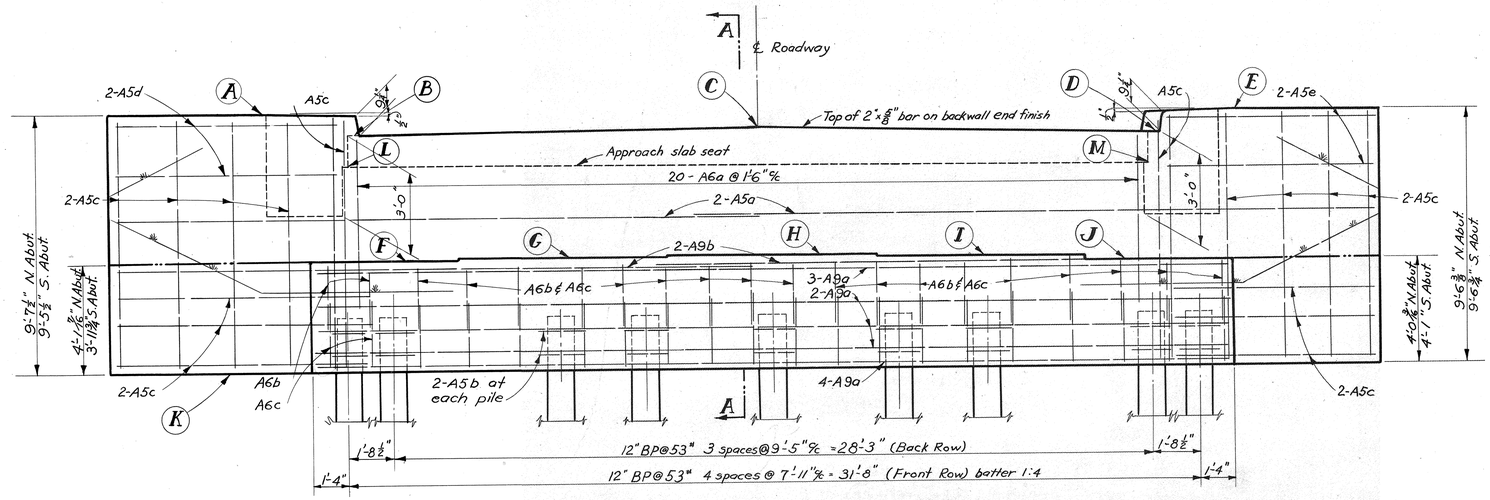
SCIOTO COUNTY
SCI-73-10.16



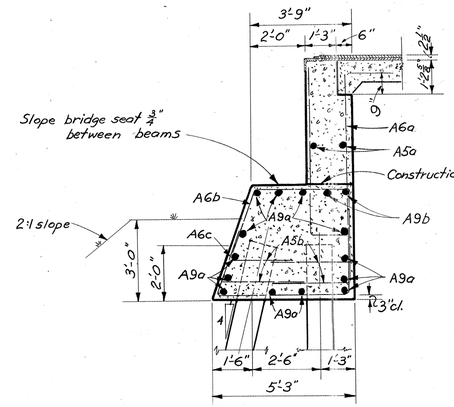
PLAN



SECTION B-B



ELEVATION



SECTION A-A

ELEVATIONS	A	B	C	D	E	F	G	H	I	J	K	L	M
NORTH ABUTMENT	575.73	574.91	575.08	574.81	575.63	570.22	570.31	570.40	570.26	570.11	566.1	573.74	573.64
SOUTH ABUTMENT	573.56	572.75	573.02	572.85	573.66	568.08	568.22	568.36	568.27	568.18	564.1	571.55	571.65

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

Concrete above bridge seat construction joint shall not be placed until after steelwork is erected. Steel end finish shall be used as a template for top of backwall.

Clearance between reinforcing steel and surface of concrete shall be 2" unless otherwise shown.

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

ABUTMENT DETAILS
BRIDGE NO. SC-73-107
OVER SCIOTO BRUSH CREEK

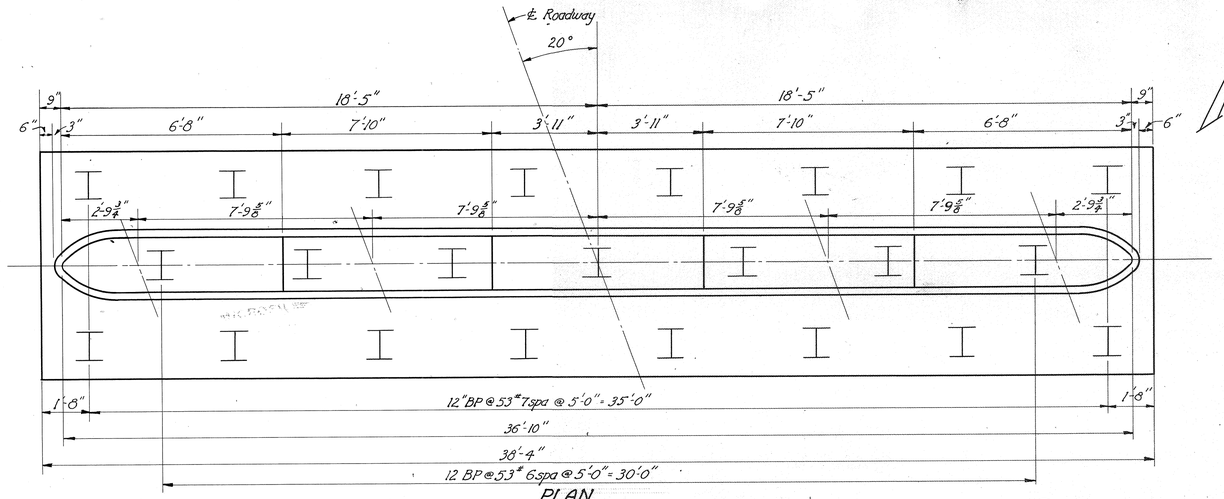
SCIOTO COUNTY
SEC. SCI-73-10.16 STA. 559+95.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED BFG	DATE	REVISED
RHL	RHL	DHO	mfw	A.F.T.	7/31/52	

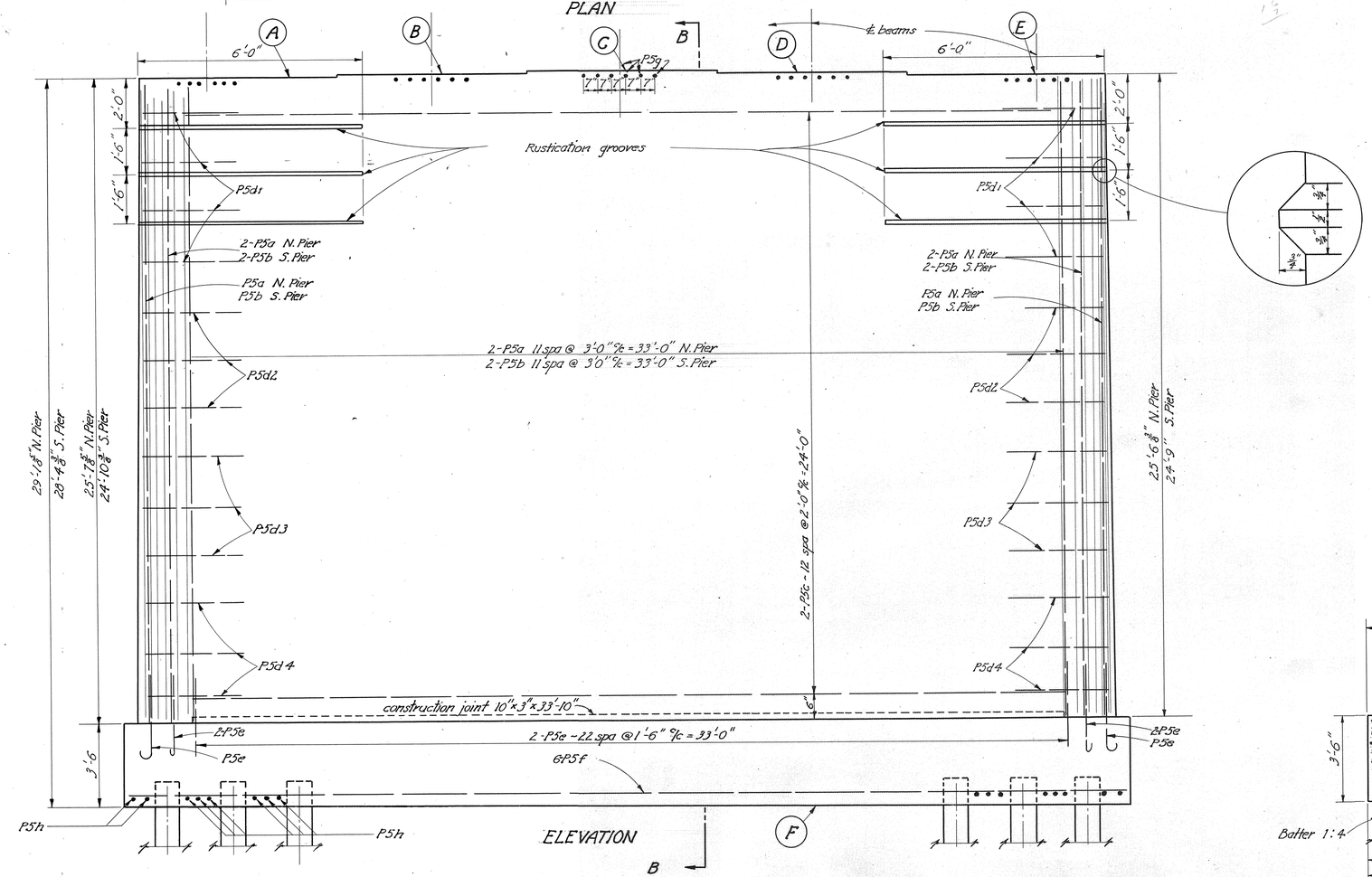
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	S-492(3)	POST WAR

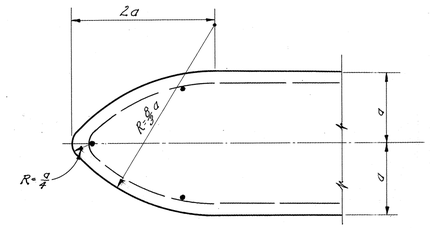
125
139

SCIOTO COUNTY
SCI-73-10.16

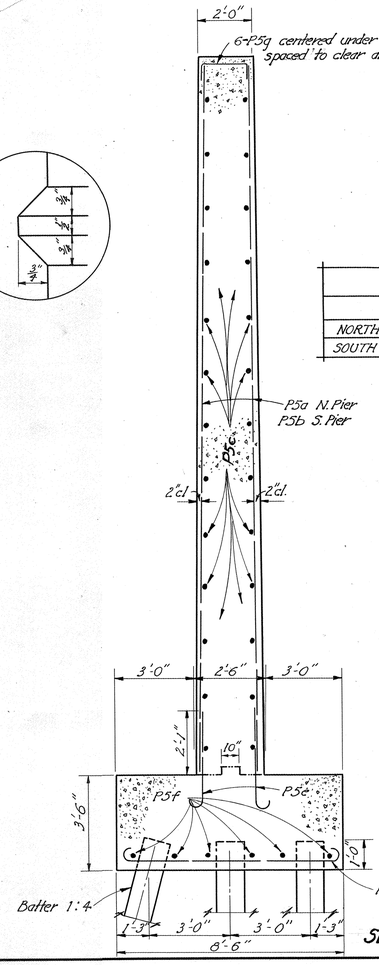


PLAN





DETAIL OF PIER NOSE



SECTION B-B

ELEVATIONS

	A	B	C	D	E	F
NORTH PIER	569.14	569.23	569.32	569.17	569.03	540.0
SOUTH PIER	568.36	568.44	568.53	568.39	568.25	540.0

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

PIER DETAILS
BRIDGE NO. SC-73-107
OVER SCIOTO BRUSH CREEK

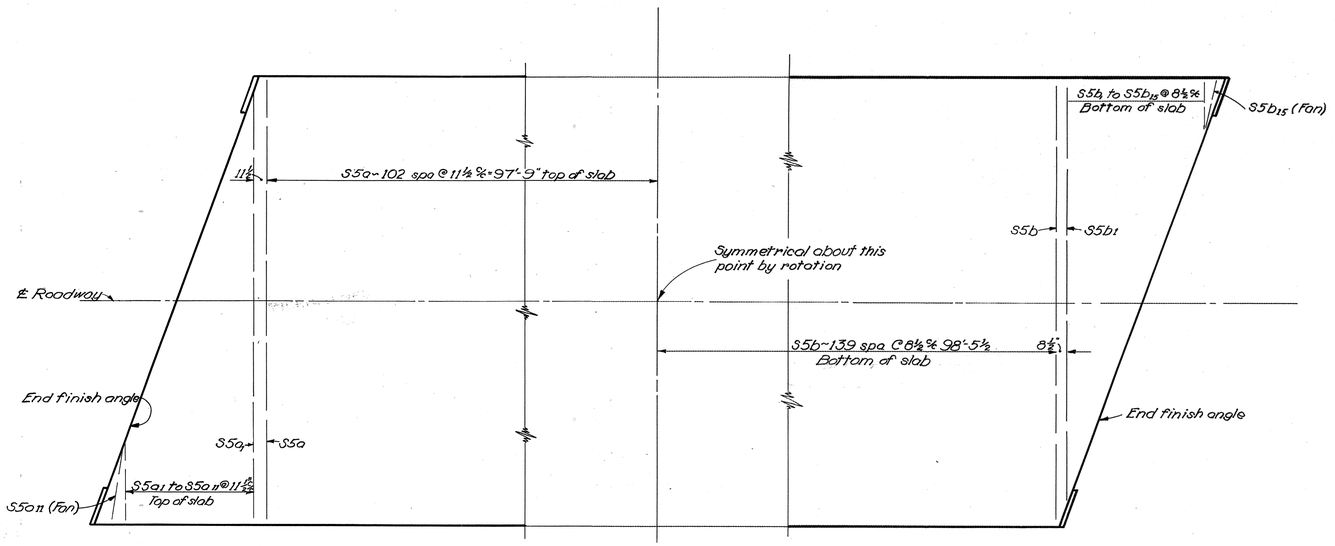
Scioto County
Sec SCI 73-10.16 Sta 559+95.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.H.L.	R.H.L.	GMF	[illegible]	BFG	7/31/62	

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	S-492(3)	POST WAR

126
139

SCIOTO COUNTY
SCI-73-10.16

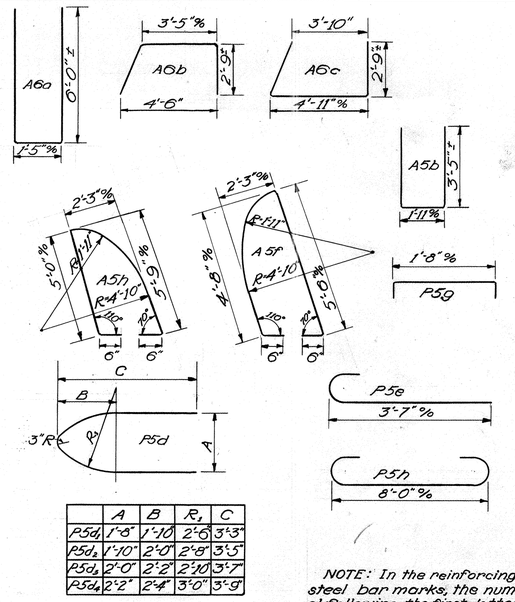


•REINFORCING STEEL PLAN•

•REINFORCING STEEL LIST•

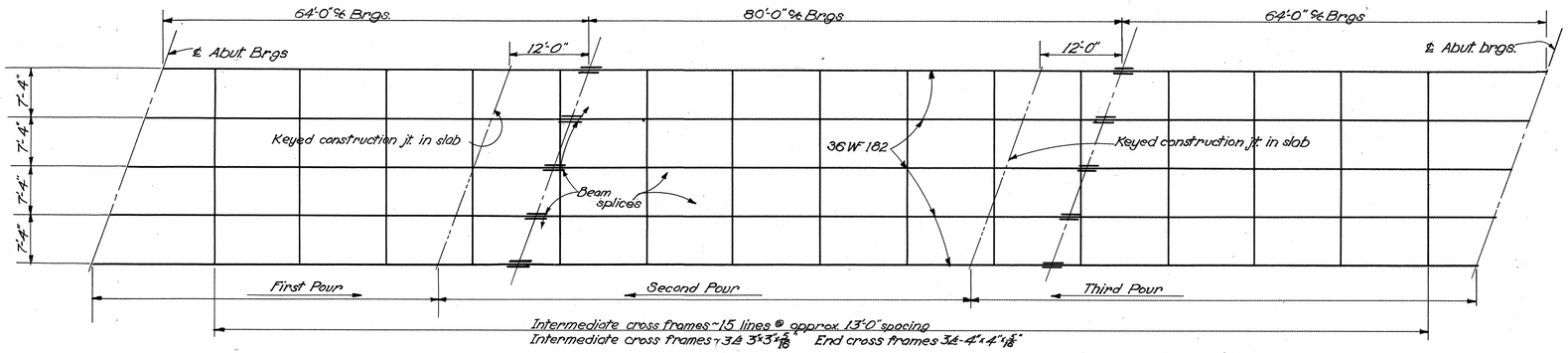
Mark	No.	Length	Weight	Shp
Abutment				
A9a	26	34'-0"	3,006	St.
A9b	8	25'-1"	682	St.
A6a	40	13'-1"	786	Bt.
A6b	40	8'-7"	515	Bt.
A6c	40	10'-1"	606	Bt.
A5a	8	24'-5"	204	St.
A5b	72	8'-6"	638	Bt.
A5c	64	9'-0"	601	St.
A5d	8	8'-3"	69	St.
A5e	8	7'-8"	64	St.
A5f	6	11'-9"	74	Bt.
A5g	12	3'-3"	41	St.
A5h	6	12'-6"	78	Bt.
Piers				
P5a	30	25'-4"	793	St.
P5b	30	24'-7"	769	St.
P5c	52	32'-10"	1,781	St.
P5d1	16	7'-7"	126	Bt.
P5d2	12	7'-10"	98	Bt.
P5d3	12	8'-1"	101	Bt.
P5d4	12	8'-4"	104	Bt.
P5e	104	4'-2"	452	Bt.
P5f	12	38'-0"	476	St.
P5g	60	3'-2"	198	Bt.
P5h	92	9'-2"	880	Bt.
Replacement Bars				
RE9	1	7'-4"	25	St.
RE7	1	6'-11	14	St.
RE6	2	6'-6"	20	St.
RE5	1	6'-1"	6	St.
RE4	1	5'-8"	4	St.

Bending Diagrams



	A	B	R_1	C
P5d1	1'-8"	1'-10"	2'-6"	3'-3"
P5d2	1'-10"	2'-0"	2'-8"	3'-5"
P5d3	2'-0"	2'-2"	2'-10"	3'-7"
P5d4	2'-2"	2'-4"	3'-0"	3'-9"

NOTE: In the reinforcing steel bar marks, the numeral following the first letter is the Bar Number which indicates the size of the bar.

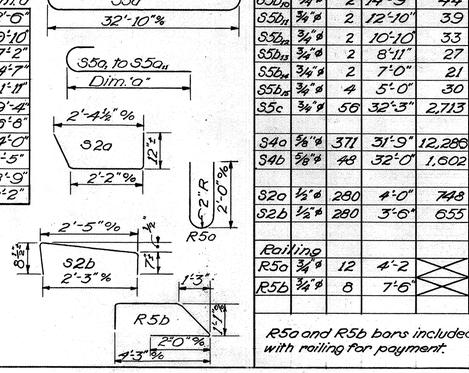


•STEEL FRAMING PLAN•

Slab pouring sequence shown

Mark	Size	No.	Length	Weight	Shp
Superstructure					
S5a	¾"ø	205	34'-2"	10,520	Bt.
S5a1	¾"ø	2	33'-2"	100	Bt.
S5a2	¾"ø	2	30'-6"	92	Bt.
S5a3	¾"ø	2	27'-10"	84	Bt.
S5a4	¾"ø	2	25'-3"	76	Bt.
S5a5	¾"ø	2	22'-7"	68	Bt.
S5a6	¾"ø	2	20'-0"	60	Bt.
S5a7	¾"ø	2	17'-4"	52	Bt.
S5a8	¾"ø	2	14'-8"	44	Bt.
S5a9	¾"ø	2	12'-1"	36	Bt.
S5a10	¾"ø	2	9'-5"	28	Bt.
S5a11	¾"ø	4	6'-10"	41	Bt.
S5b	¾"ø	279	32'-9"	13,724	St.
S5b1	¾"ø	2	32'-3"	97	St.
S5b2	¾"ø	2	30'-4"	91	St.
S5b3	¾"ø	2	28'-4"	85	St.
S5b4	¾"ø	2	26'-5"	79	St.
S5b5	¾"ø	2	24'-6"	74	St.
S5b6	¾"ø	2	22'-6"	68	St.
S5b7	¾"ø	2	20'-7"	62	St.
S5b8	¾"ø	2	18'-8"	56	St.

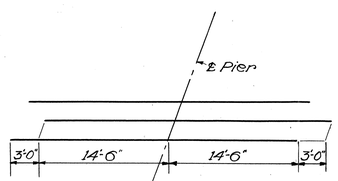
Bending Diagrams



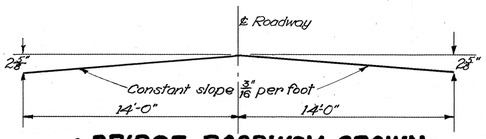
Mark	Size	No.	Length	Weight	Shp
S5b9	¾"ø	2	16'-5"	50	St.
S5b10	¾"ø	2	14'-9"	44	St.
S5b11	¾"ø	2	12'-10"	39	St.
S5b12	¾"ø	2	10'-10"	33	St.
S5b13	¾"ø	2	8'-11"	27	St.
S5b14	¾"ø	2	7'-0"	21	St.
S5b15	¾"ø	4	5'-0"	30	St.
S5c	¾"ø	56	32'-3"	2,713	St.
S4a	⅝"ø	371	31'-9"	12,286	St.
S4b	⅝"ø	48	32'-0"	1,602	St.
S2a	½"ø	280	4'-0"	748	Bt.
S2b	½"ø	280	3'-6"	655	Bt.
Railing					
R5a	¾"ø	12	4'-2		Bt.
R5b	¾"ø	8	7'-6"		Bt.

R5a and R5b bars included with railing for payment.

NOTE: The bar size designations shown above do not correspond with the size designations given in the January 1, 1951 edition of the Construction and Material Specifications.



•STAGGER OF S4b BARS OVER PIERS•



•BRIDGE ROADWAY CROWN•

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

SUPERSTRUCTURE DETAILS
BRIDGE SC-73-107
OVER SCIOTO BRUSH CREEK

SCIOTO COUNTY
SEC. SCI-73-10.16 STA. 559+95.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DFG	DATE	REVISED
R.H.L.	R.H.L.	E.D.B.	m.f.w.	A.J.F.	7/31/52	