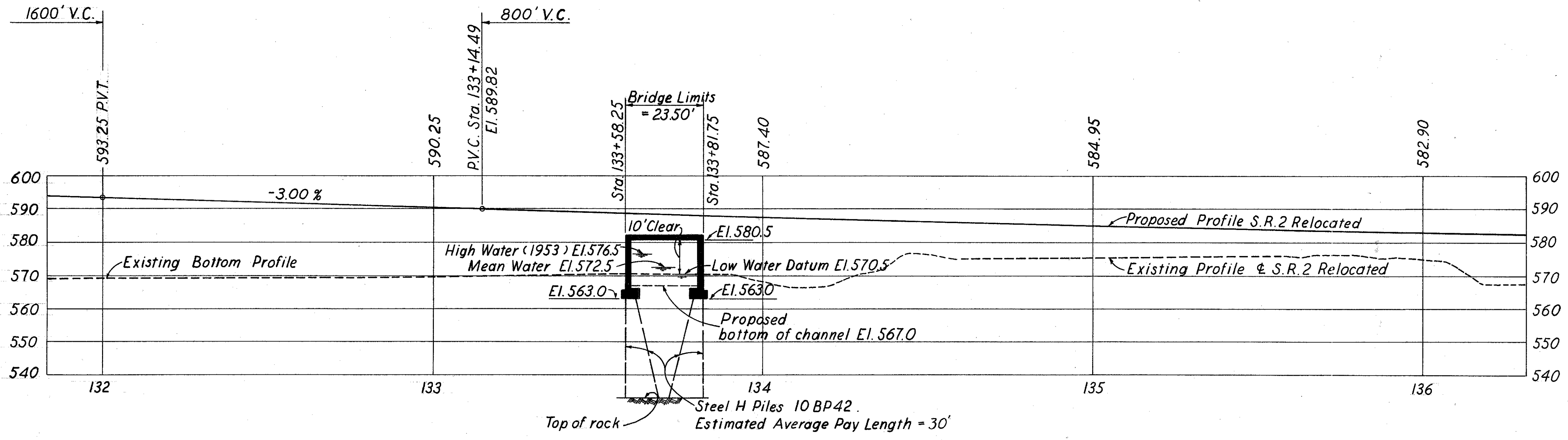
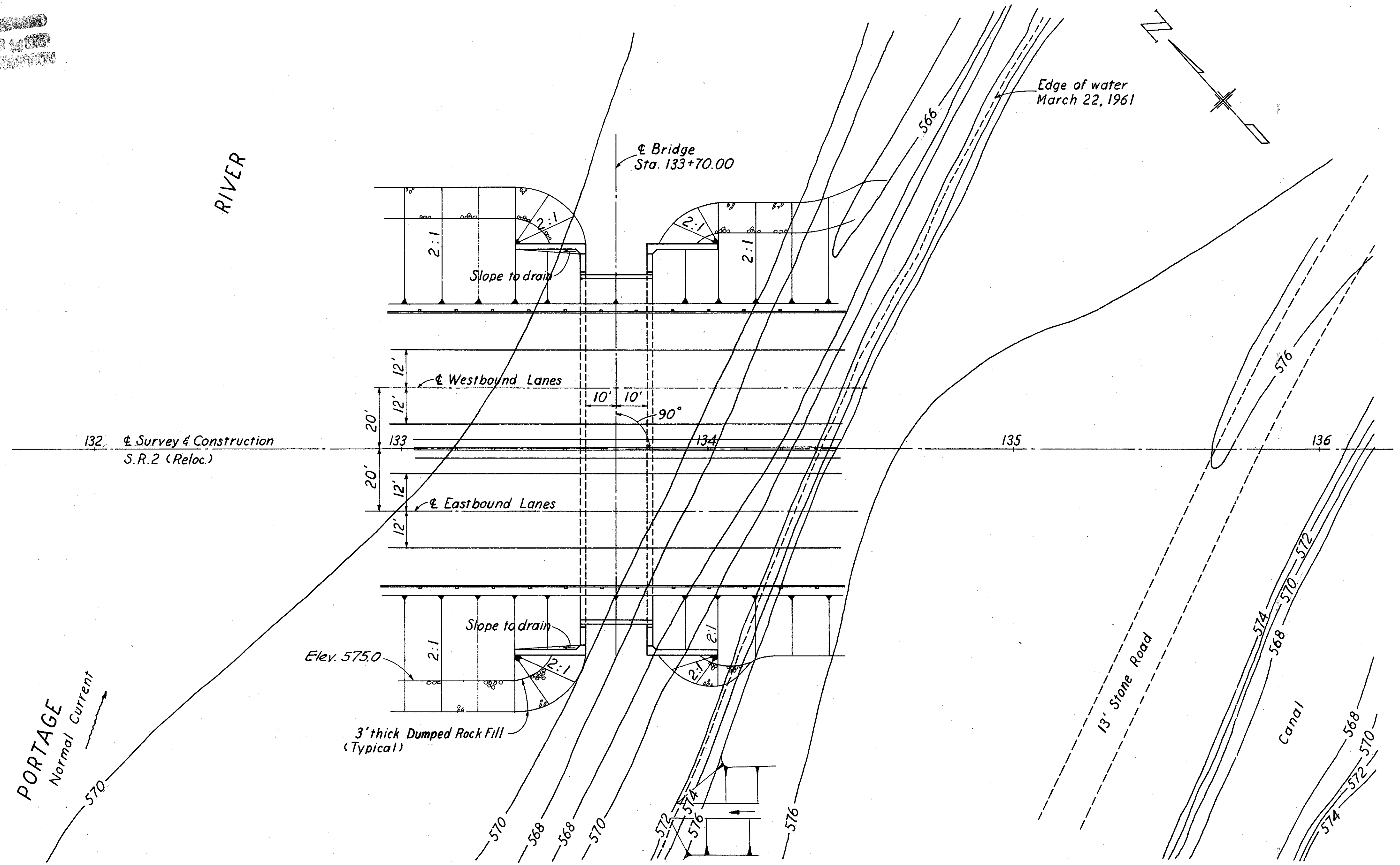


FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	117 133
2	OHIO	F-1042(10)		

OTT. 2-16.48
2.3 miles west of Port Clinton, Ohio



FOUNDATION SOUNDINGS

Foundation design and foundation quantities are based on a study of rod soundings and soil-sampling soundings made at the site. This sounding information, the accuracy of which the State does not guarantee, may be examined in the office of the Bureau of Bridges in Columbus or in the Division office.

BENCH MARKS

BM-RR Spike in South side of power pole. 155' Left of sta. 141+00. Elev. 578.79
BM #11 Nail in North side of 8" ash. 85' Right of sta. 150+01. Elev. 577.60

PROPOSED STRUCTURE

Type: Reinforced Concrete Slab
Reinforced Concrete Abutments
Span: 20'-0" Clear
Roadway: 88'-0" f/r Guardrails
Load Frequency: CF 400(57)
Skew: 0°
Wearing Surface: None
Approach Slabs: None
Alignment: Tangent

Waterway opening below low water datum = 70 square feet.

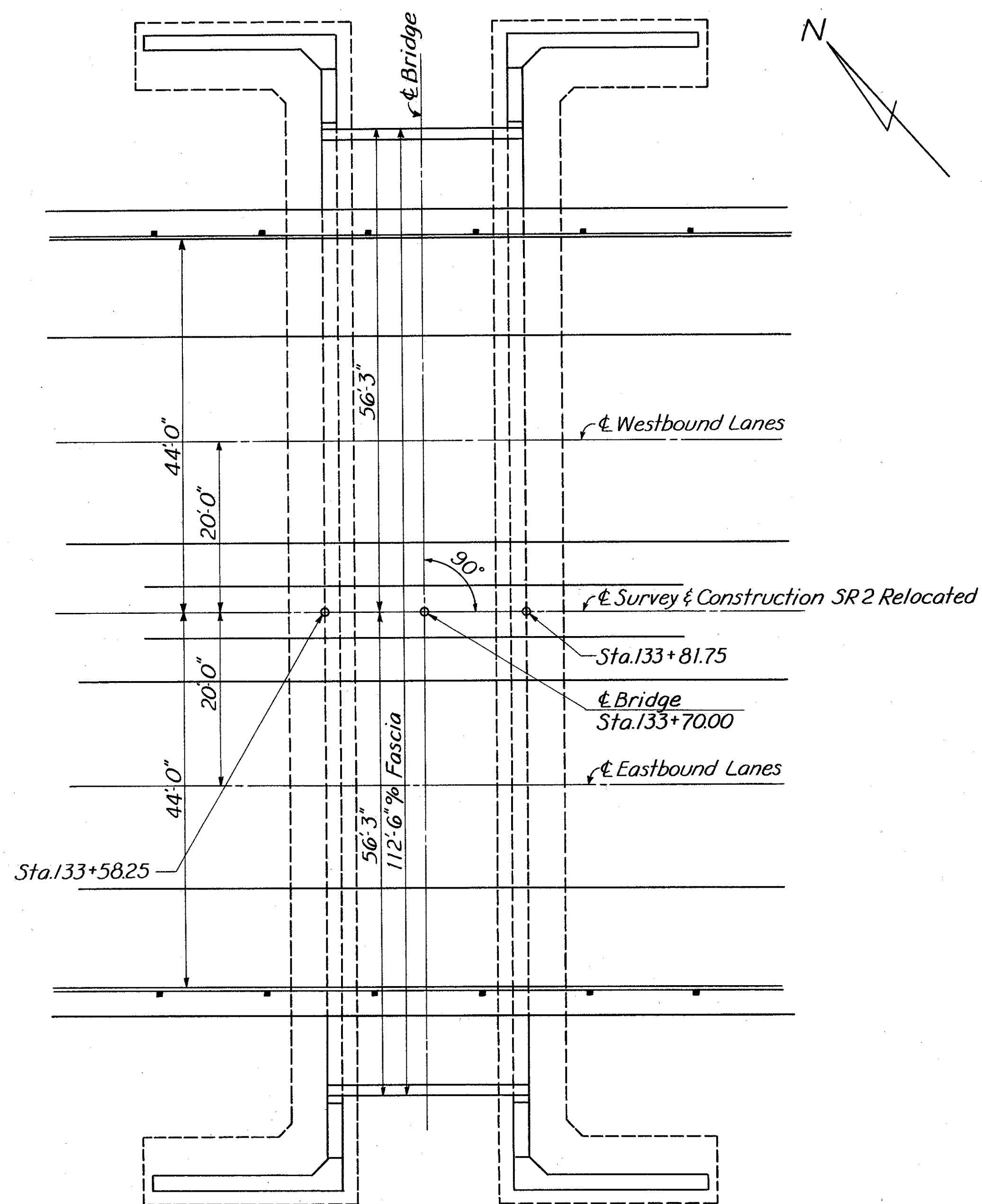
SANZENBACHER, MILLER & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

SITE PLAN

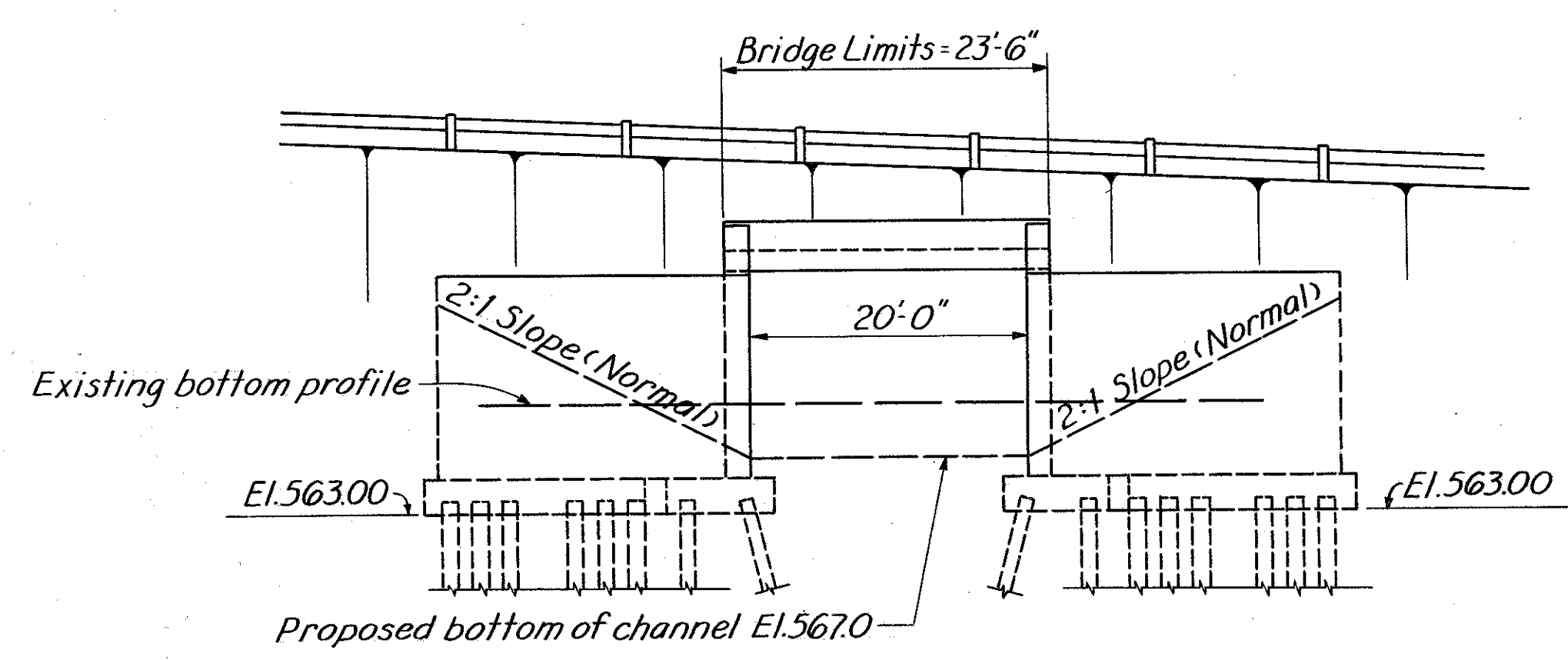
BRIDGE No. OTT. 2-1862
OVER PORTAGE RIVER
OTTAWA COUNTY STA. 133+58.25 to
SCALE: 1"=20' STA. 133+81.75

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
S. M. B.	T. W. D.	J. H. O. M. B.	J. H. O. M. B.	B. J. H.	FCM 2/16/63

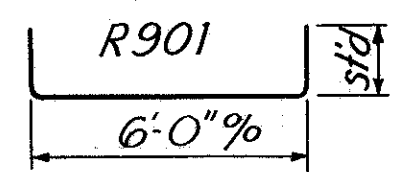
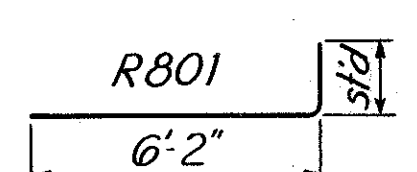
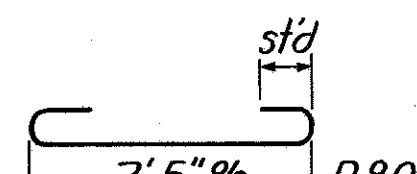
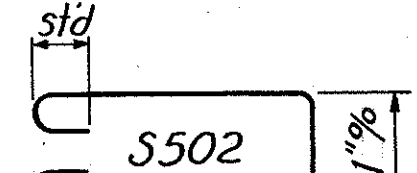
REVISIONS
 MAR 15 1970
 REVISED



GENERAL PLAN



GENERAL ELEVATION

REINFORCING STEEL LIST BRIDGE OTT.2-1862					
Mark	No.	Length	Weight	Shape	Bending Diagrams
ABUTMENTS					
R901	40	8'-0"	1088	B	
R801	536	7'-1"	10137	B	
R802	232	9'-7"	5936	B	
R701	244	14'-9"	7356	S	
R702	4	15'-0"	123	S	
R703	4	15'-8"	128	S	
R704	4	16'-4"	134	S	
R705	4	17'-0"	139	S	
R706	4	17'-8"	144	S	
R707	4	18'-3"	149	S	
R601	224	14'-7"	4906	S	
R602	16	14'-3"	342	S	
R603	4	14'-10"	89	S	
R604	4	15'-4"	92	S	
R605	4	15'-10"	95	S	
R606	4	16'-4"	98	S	
R607	4	16'-10"	101	S	
R608	4	17'-4"	104	S	
R609	4	17'-9"	107	S	
R610	4	14'-9"	89	S	
R501	178	5'-0"	928	S	
R502	104	35'-6"	3851	S	
R503	88	36'-10"	3381	S	
R504	8	5'-0"	42	S	
R505	8	7'-3"	60	S	
R506	8	2'-8"	22	S	
R507	56	14'-3"	832	S	
R508	88	22'-2"	2034	S	
R509	56	5'-3"	307	S	
R510	48	24'-11"	1247	S	
R511	68	8'-7"	609	B	
R512	88	29'-8"	2723	S	
SUPERSTRUCTURE					
S1001	244	26'-0"	27298	B	
S601	132	29'-7"	5865	S	
S602	132	28'-11"	5733	S	
S501	48	23'-2"	1160	S	
S502	32	8'-10"	295	B	
REPLACEMENT BARS					
RE1001	2	7'-3"	62	S	
RE901	1	6'-10"	23	S	
RE801	1	6'-6"	17	S	
RE701	1	6'-3"	13	S	
RE601	1	5'-11"	9	S	
RE501	1	5'-7"	6	S	

ESTIMATED QUANTITIES BRIDGE OTT.2-1862						
Item	Total	Unit	Description	Super.	Abuts.	General
E-2	Lump	Sum	Cofferdams, cribs and sheeting			
E-2	882	Cu.Yds.	Unclassified excavation		882	Lump
E-3	340	Cu.Yds.	Channel excavation			340
S-1	153	Cu.Yds.	Class "C" concrete, Superstructure	153		
S-1	345	Cu.Yds.	Class "E" concrete, Abutments above footings		345	
S-1	241	Cu.Yds.	Class "E" concrete, Abutment footings		241	
S-3	92	Lin.ft.	Waterproofing, premolded sealing strip		92	
S-4	87874	Lbs	Reinforcing steel	40351	47393	130
S-9	94	Sq.ft.	1" preformed expansion joint filler		94	
S-10	153	Each	Water-reducing, set-retarding Admixture	153		
S-16	Lump	Sum	First test pile			Lump
S-18	4320	Lin.ft.	Steel piles, 10BP42		4320	
S-29	152	Cu.Yds.	Porous backfill		152	

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-1042 (10)	

OTT.2-16.48

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 9-1-57 together with current revisions thereof.

PILES shall be driven with a hammer of not less than 11000 ft.lbs. per blow to firm contact with rock. If the length of penetration is approximately equal to the depth to rock according to the bridge foundation investigation report, the firm contact shall be considered as attained when the capacity according to the formula in Sec. S-18.05 is not less than the following value for a pile hammer of the indicated energy rating:
 35 tons per pile using an 11000 ft.lb. hammer
 35 tons per pile using a 15000 ft.lb. or greater hammer

The design load is 35 tons per pile.

BAR SIZE is indicated in the bar mark. The first digit where three digits are used and the first two digits where four are used, indicate the bar size number. For example, a R501 is a No.5 size bar, and a S1001 is a No.10 size.

REFERENCE shall be made to Supplemental Specification S-101, dated 7-12-62.

SANZENBACHER, MILLER & BRIGHAM
 CONSULTING ENGINEERS
 TOLEDO, OHIO

GENERAL PLAN & ELEVATION
 ESTIMATED QUANTITIES, REINFORCING STEEL & GENERAL NOTES
 BRIDGE No.OTT.2-1862
 OVER PORTAGE RIVER
 OTTAWA CO. Sta.133+58.25
 To Sta.133+81.75

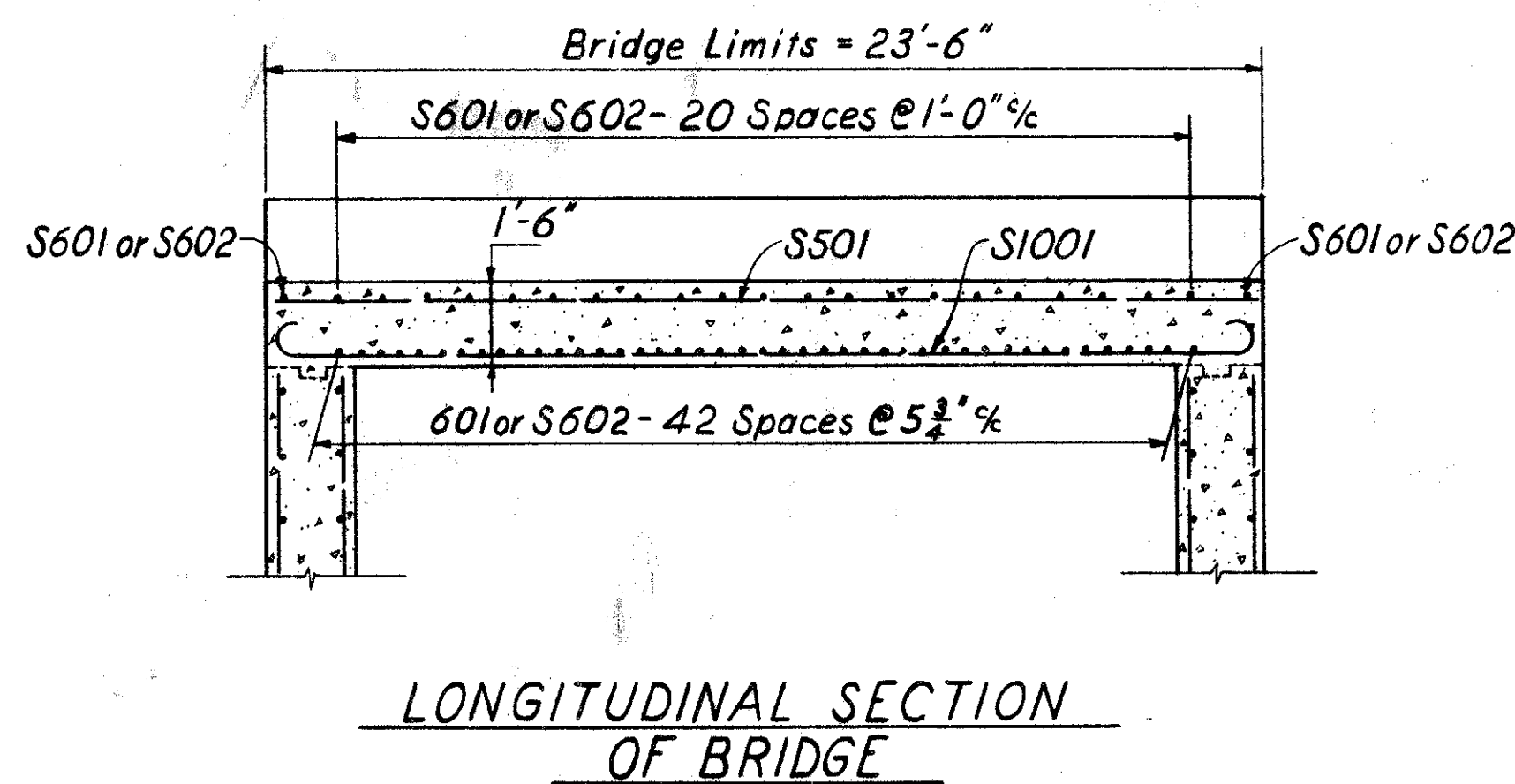
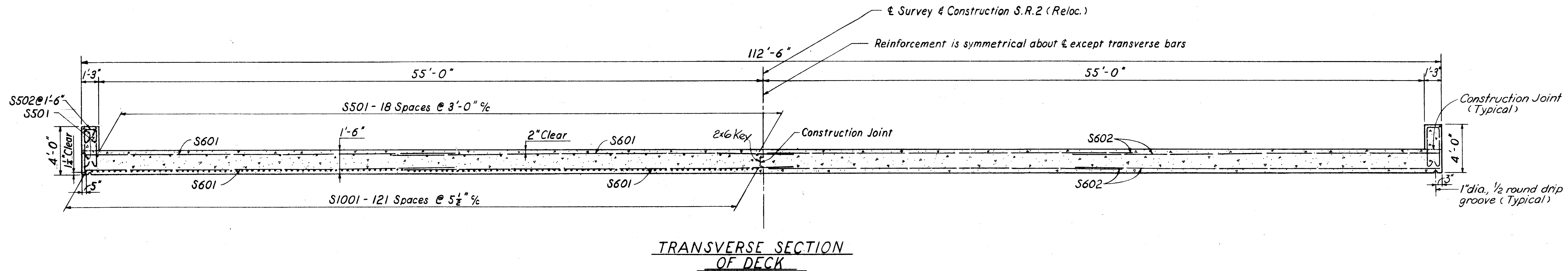
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
OMB	OMB	JHY	AJB BJH	FCM	2-12-63	

REPRODUCED
MAY 18 1978
REPRODUCTION

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-1042 (10)	

120
133

OTT. 2-16.48



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CONSULTING ENGINEERS
TOLEDO, OHIO

SUPERSTRUCTURE DETAILS
BRIDGE No. OTT. 2-1862
OVER PORTAGE RIVER

Sta. 133 + 58.25 to
Sta. 133 + 81.75
OTTAWA CO.

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
OMB	OMB		BJH	FCM	2-12-63	