

ridge Lim	iits					
= 23.50'	1-	587.40	584 95			582.90
	Sta. I		1			
'Clear <sub>3</sub>	EI.580	2.5		Proposed Profile S.R.2 Rela	ocated	
		ter Datum El.570.5		Existing Profile & S.R.2	Relocated	
	<u>, ∕EI.563</u>	300			<u></u>	······
	Propo	osed m of channel El. 567.0				
M.					· · · · · ·	······································
XL	13	34	13.	5		136
		Piles 10 BP42 . d Average Pay Length = 30'				

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS	(117
2	OHIO	F-1042(10)		133
OTT. 2 2.3 mil	• - • • •	3 of Port Clinton	n , 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.

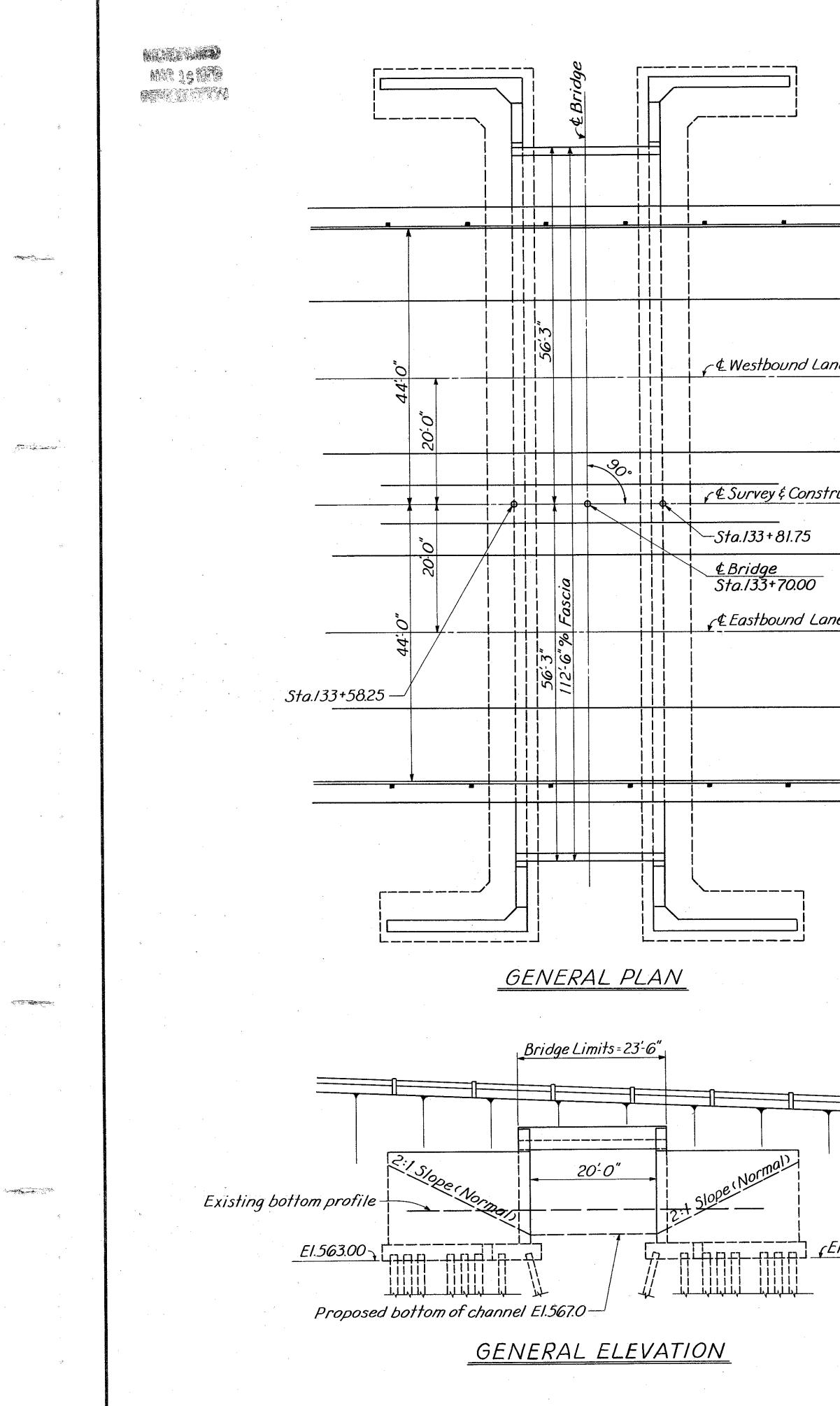
SANZENBACHER, MILLER & BRIGHAM CONSULTING ENGINEERS TOLEDO OHIO

## SITE PLAN

BRIDGE No. OTT. 2-1862 OVER PORTAGE RIVER

STA: 133 + 58.25 to OTTAWA COUNTY SCALE : 1" = 20' STA.133 + 81.75

RESENT	TOPOGRAPHY	<u>Pl</u>	ROPOSED	WORK	
URVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
S. M. B.	T.W.D.	J.H.Y., O.M.B.	JHY,OMB.	B.J.H.	FCM 2-12-63



		Length Weight Shape	IST BRIDGE OTT.2-1862 Bending Diagrams	,
		UTMENTS		
N	R901 40	8'-0" 1088 B		
	R801 536	7'1" 10137 B	R901 5	
	R802 232	<u>9'7" 5936 B</u>		
$\mathbf{X}$	R701 244	14-9" 7356 S	6-0"%	楦
`\	R702 4	15'-0" 123 S		<u>DES</u>
	R703 4	15'-8" 128 S		Spe
•	R704 4	16-4" 134 S	R801	dat
<b>-</b>	R705 4	17'0" 139 S	<u></u>	עות
-	R706 4	17'8" 144 S	<u>6'2"</u>	<u>PIL</u> con
	R707 4	18'-3" 149 S		roci
	R601 224	14'7" 4906 S	sťd	be c
-	R602 16	14'3" 342 S	570 <del>4 •</del>	not
	R603 4	14'10" 89 S		· 35 †
	R604 4	15'4" 92 S	7-5"% R802	35 1
	R605 4	15'10" 95 S	7'-5"% R511	
	R606 4	16'-4" 98 S	<u>23'2"% S1001</u>	The
	R607 4			The
	R608 4	17'4" 104 5		8 8
	R609 4	17 <sup>-</sup> 9" 107 5	std	· 4
-	R610 4	14'9" 89 S 5'0" 928 S		¢.
	R501 178		5502	с <sub>и</sub>
tion SR 2 Relocated	R502 104	<u>35'6"</u> 3851 <u>5</u>		BAA
	R503 88 R504 8	<u>36'-10" 3381 5</u> 5'-0" 42 5	3'-6"%	and
	R505 8	7'3'' 60 S		еха
	R506 8	2'-8" 22 S		
i.	R507 56	14'-3" 832 S		REFE
	R508 88	22 <sup>:</sup> 2" 2034 S		
	R509 56	5'-3" 307 S		
	R510 48	24 <sup>:</sup> // <sup>"</sup> /247 S		
	R511 68	8'7" 609 B		
	R512 88	29'8" 2723 S		
		RSTRUCTURE		
	51001 244	26'0" 27298 B		
	5601 132	29'7" 5865 S		
	5602 132	28-11" 5733 S		
	5501 48	23'2" 1160 S		÷.
	5502 32	8'-10" 295 B	1	
<b>-</b>	······································	ACEMENT BARS	1	
• •	RE1001 2	7'3" 62 5	1	
	RE901 1	6 <sup>:</sup> 10 <sup>"</sup> 23 S		
	RE801 1	6 <sup>-</sup> 6" 17 S	1	
	RE701 1	6 <sup>-</sup> 3" 13 S		
	REGOI 1	5-11" 9 S	·	
	RE501 1	5 <sup>-</sup> 7" 6 S		

			ESTIMATED QUANTITIES BRIDGE OTT.2-1862						
Item	Total	Unit	Description	Super.	Abuts.	General			
E-2	Lump	Sum	Cofferdams, cribs and sheeting			Lump			
E-2	882	Cu.Yds.	Unclassified excavation		882			,	
E-3	340	Cu.Yds.	Channel excavation			340			
5-1	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				
5-3	92	Lin.ft.	Waterproofing , premolded sealing strip		92				
S-4	87874	Lbs	Reinforcing steel	40351	47393	130			
5-9	94	Sq.ft.	1"preformed expansion joint filler		94				
5:101	153	Each	Water-reducing, set retarding Admixture	/53					
S-16	Lump	Sum	First test pile			Lump		, <b></b>	
S-18	4320				4320				
S-29	152	Cu.Yds.	Porous backfill		152				

çE1.563.00

	FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
	2	оню	F-1042(10)	
•	<i>0TT.2</i>	-16.48		



## <u>GENERAL NOTES</u>

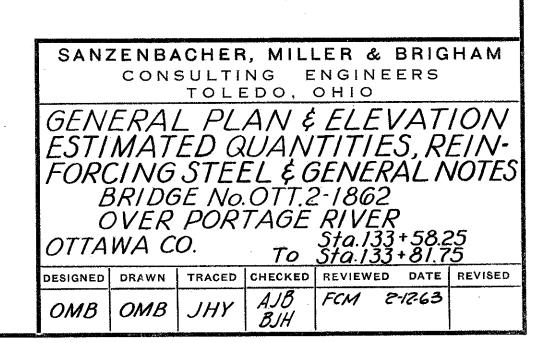
<u>IGN SPECIFICATIONS</u>: This structure conforms to the requirements of "Design cifications for Highway Structures" of the State of Ohio Department of Highways ed 9-1-57 together with current revisions thereof.

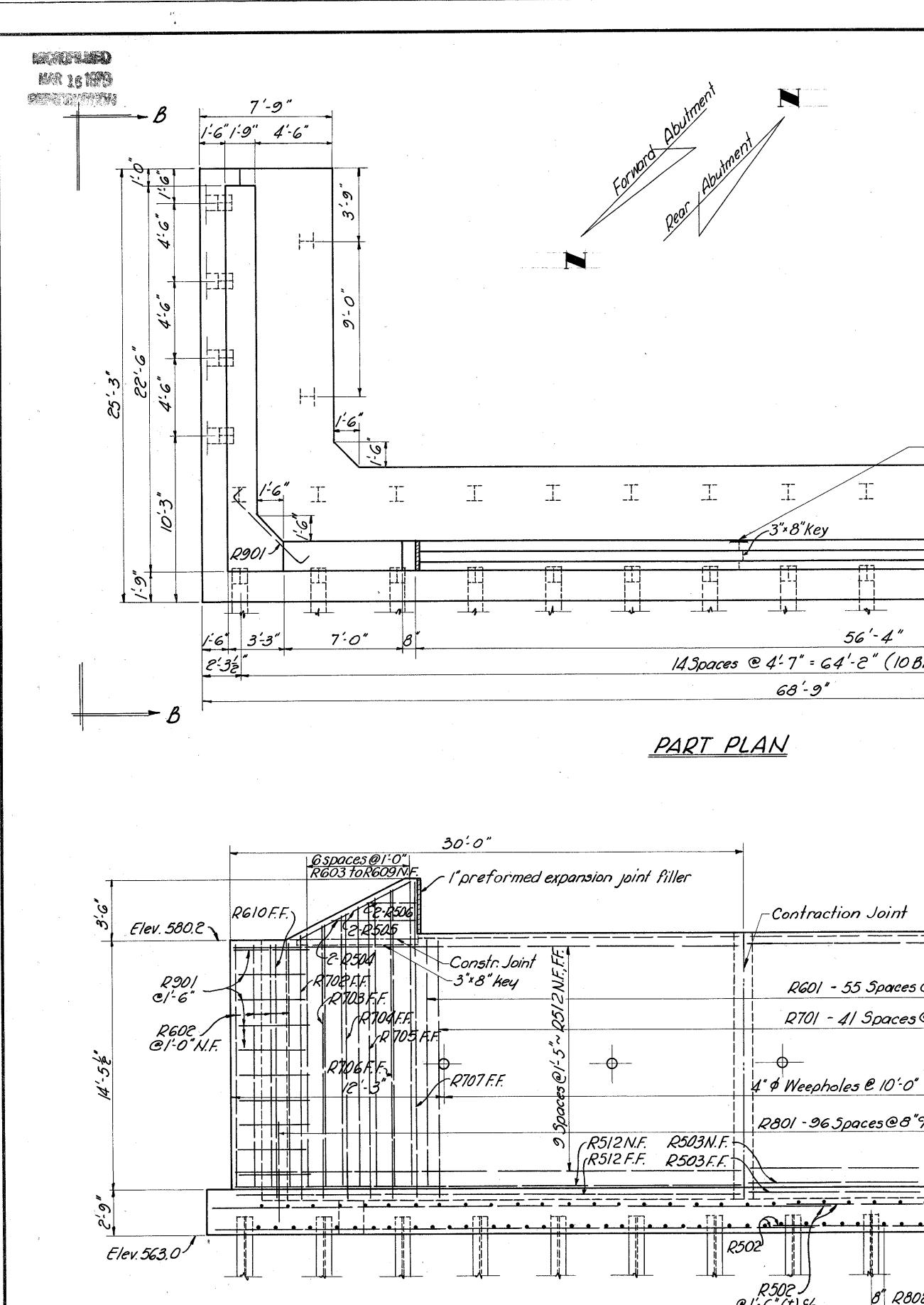
<u>ES</u> shall be driven with a hammer of not less than 11000 ft.lbs.per blow to firm tact with rock. If the length of penetration is approximately equal to the depth to k according to the bridge foundation investigation report, the firm contact shall considered as attained when the capacity according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

design load is 35 tons per pile .

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

RENCE shall be made to Supplemental Specification 5-101, dated 7-12-62.





and the second

1

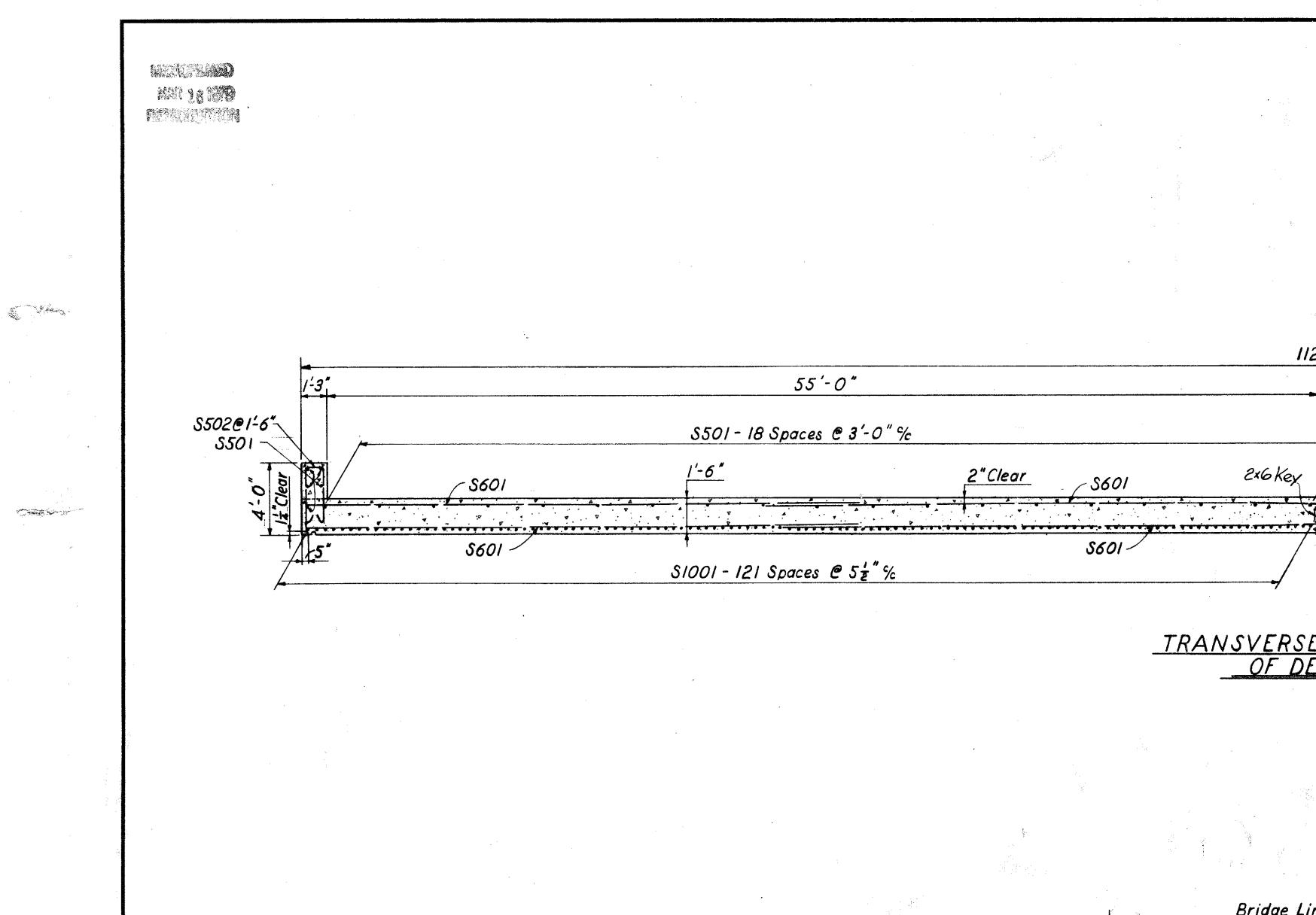
and the second se

N.F. = Near Face F.F. = Far Face

PART ELEVATION

N ⊈Survey & Construction\_\_\_\_\_ S.R.∂(Reloc.) Symmetrical about & except footing construction joint Waterproofing , Premolded Sealing Strip  $\sim$ -<del>-</del>-------3"×8"Key R509@1'-@ R510@1'-6 \_\_\_\_ ia i \_\_\_\_\_ .....i. I"Preformed expansion joint filler 56'-4" 2'3=" 14 Spaces @ 4'-7" = 64'-2" (10 BP42 piles) 68'-9" A -----Contraction Joint -Elev. 580.5 Expansion Joint RGOI - 55 Spaces @1-0" = 55-0" N.F. R701 - 41 Spaces@1'-4" = 54'-8" F.F. 3 6-,71 4" \$ Weepholes @ 10'-0" 5'-0" 6 R801 - 96 Spaces@8"% = 64'-0" F.F. -R501@1-6"(±)% ົດ *. R802* -0, 0 R502 R502 Batter 1:4 -Construction Joint -1-6" R502) CI'-G"(±)% 8" R802 B" 3 Spa. @1'-1"(Typ. between piles)  $A \rightarrow$ 

	FED. RD. DIVISION	STATE	PROJECT		TYPE FUNDS	(119)
	2	оню	F-1042	(10)		133
	0T T. E	-16.4	8	د ۱		
		,				
				2		
		· ·				
C						
	· · · · · · · · · · · · · · · · · · ·		-			
KK.						
3" RT01 - 18 Spaces @	1'-1" E E					
@ R507 - 13 Spaces @	1'-6" N.F.		с			
Dace				÷		
5	1 //					
6 R801-365paces@6	ē F.F.			~		
Q R508 N.F. R.	508 F. F.		-			
-6''% - p p p p p - p p p p p p p p p p p p		<u> </u>				
R511 4-R511 R511	R511	R51				
		<del>_</del>	lit			
C = +	(0					
WINGWALL ELEVATION VIEW B-B	REINF.	BAK L	ETAILS J			
		1.9"				
· · · · · · · · · · · · · · · · · · ·	. , , , , , , , , , , , , , , , , , , ,	14. 14				
	R508					
1-9"	N. C. C.					
669"		0				
H: St.	DEAT		0701			
	R507		~2701			
R503 20"	R801					
Porous Backfill	/-(		4'-6"		ŝ	·
	R509		R510		4	
R601- (R701 Q	9 T Q.			, in in		
	R510-	LV .			<b>I</b>	
R801-1-9" 4'-3" Batte	r1:4	R 33	5/0 pa@ J=3-5"8"/-6"	3 Clea		
	/2	681-20	1=3-581-6			
2502 R502		/				
	<u>St</u>	CTIO	NC-C			
02- R502				-		
1-6810(+)=3-581-6 m	SAN		CHER, M	ENG	INEEF	
7-9"			TOLEDO			
SECTION A-A		BRID	GE No. O	TT.2	1862	
		OVER	PORTAC	5E RIV 5TA. 13	IER	,
	ΟΤΤΑ	WA CO		51A. 13. 5TA. 13:		
	DESIGNED	-	TRACED CHEC		ewed d <i>i</i> M <i>C-1</i> 8	ATE REVISED
	OMB	OMB	BB BJH		-1 676	
		adaminin waa ya kuningawa kuninga ya kuninga kuninga kuninga kuninga kuninga kuninga kuninga kuninga kuninga ku				



• & Survey & Construction S.R.2 (Reloc.) - Reinforcement is symmetrical about & except transverse bars 112'-6" - Construction Joint 2"Clear 2×6 Key - 5601 . <del>.</del> . 5601-TRANSVERSE SECTION Bridge Limits = 23'-6" S601 or S602-20 Spaces @1-0"% S601 or S602--S601 or S602 SIOOI ~\$501 to the state of th 601or \$602-42 Spaces @ 53 % LONGITUDINAL SECTION \_\_\_\_OF BRIDGE\_\_\_

