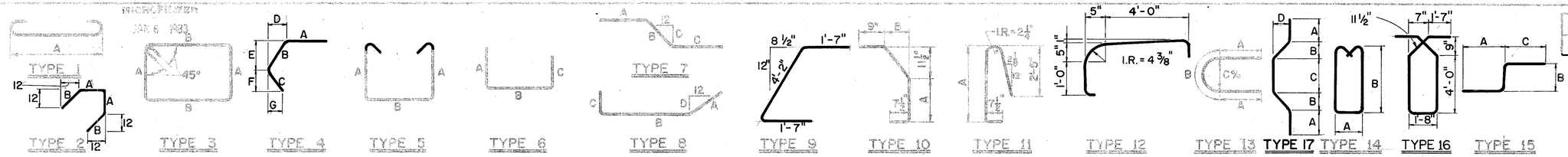

FED. OR. DIVISION	STATE	PROJECT	
5	OHIO		

75
85

LAKE COUNTY
LAK-20-5.60

LEGEND

R.Rt. = Rear Right
R.Lt. = Rear Left
C.Rt. = Center Right
C.Lt. = Center Left
F.Rt. = Forward Right
F.Lt. = Forward Left
Rt.Br. = Right Bridge
Lt.Br. = Left Bridge
Fwd. = Forward

ABUTMENTS

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	R.Rt.	R.Lt.	F.Rt.	F.Lt.
A801	56	23'-4"	3989	STR.									
A802	12	13'-10"	443	STR.									
A803	12	18'-0"	577	STR.						"F"	"G"		
A804	70	6'-7"	1230	4	1'-6'	3'-7"	1'-6"	12	12	1'6	0		
A601	120	19'-8"	2644	6	6'-7"	5'-10"	2'-7"						
A602	130	12'-1"	2359	6	5'6"	1'-5"	5'6"						
A603	162	6'-1"	1480	6	2'-6"	1'-5"	2'-6						
A604	130	8'-1"	1578	6	3'-9"	0'-11"	3'-9"						
A605	32	17'-1"	821	6	8'-0"	1'-5"	8'-0"						
A606	24	18'-0"	649	6	8'-7"	1'-2"	8'-7"						
A607	4	15'-6"	93	6	8'-1"	1'-2"	6'-7"						
A608	2	13'-10"	92	6	6'6"	1'-2"	6'6"						
A609	10	20'-4"	305	6	9'-9"	1'-2"	9'-9"						
A610	2	16'-2"	99	6	7'-8"	1'-2"	7'-8"						
A611	34	6'-8"	340	STR.									
A612	2 SER. OF 5 BARS 5'-2" TO 5'-5"		64	STR.	(6 3/4" INCREMENTS)								
A613	2 SER. OF 5 BARS 3'-2" TO 6'-0"		69	STR.	(8 1/2" INCREMENTS)								
A501	120	8'-9"	1095	6	1'-7"	5'-10"	1'-7"						
A502	122	7'-9"	933	6	0'-10 1/2"	6'-7"	—						
A503	162	9'-8"	1633	6	3'-0"	3'-11"	3'-0"						
A504	2	5'-5"	11	6	3'-0"	2'-6"	—						
A505	168	22'-1"	3869	STR.									
A506	4	9'-0"	38	STR.				'D'	'E'	'F'	'G'		
A507	8	5'-9"	98	4	1'-7"	2'-7"	1'-7"	1'-9"	2'-2"	1'-3"	1'-0"		
A508	8	3'-2"	26	4	1'-7"	1'-7"	—	11"	1'-9"	—	—		
A509	92	11'-2"	989	3	2'-2"	3'-2"							
A510	12	11'-0"	138	STR.									
A511	14	23'-5"	342	STR.									
A512	4	8'-0"	33	STR.									
A513	4	12'-3"	51	STR.									
A514	4	10'-0"	42	8	1'-7"	8'-5"		4 3/8"					
A515	18	16'-0"	300	STR.									
A516	2-SER. OF 5 BARS 3'-0" TO 5'-3"		93	STR.	(6 3/8" INCREMENTS)								
A517	54	7'-0"	394	3	1'-10"	1'-5"							
A518	4	13'-5"	56	STR.									
A519	4	17'-9"	74	STR.									
A520	4	10'-3"	43	8	1'-7"	8'-8"	—	5 1/4"					
A521	18	21'-5"	402	STR.									
A522	2-SER. OF 5 BARS 3'-0" TO 5'-10"		96	STR.	(8 1/2" INCREMENTS)								
A523	34	6'-6"	231	STR.									
A524	54	6'-1"	343	5	2'-5"	0'-8"							
A525	4	9'-7"	40	17	1'-0"	2'-9"	1'-5"	2'-2"					
A526	2	3'-3"	7	STR.									
		TOTAL	26,959										

RAILING BARS

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C
×R501	16	3'-3"	*	13	11"	1'-6"	6 1/2"
×R502	8	6'-7"	*	12			
×R503	8	8'-3"	*	6	3'-2"	4'-8"	0'-8"
×R504	16	7'-7"	*	14	8"	3'-2"	
×R505	8	9'-8"	*	STR.			
×R506	4	16'-0"	*	STR.			
×R507	4	21'-5"	*	STR.			

PIERS

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E
P1101	216	7'-7"	10,998	6	8'-5"	1'-6"	—		
P1102	72	39'-0"	14,919	STR.					
P1103	96	30'-0"	15,301	STR.					
P1104	72	38'-6"	14,728	STR.					
P1105	24	17'-4"	2210	STR.					
P1106	24	19'-10"	2,529	STR.					
P1107	24	17'-9"	2,263	STR.					
P1108	24	20'-6"	2,614	STR.					
P1109	24	18'-1"	2,306	STR.					
P1110	24	21'-1"	2688	STR.					
P1111	72	31'-0"	11,859	STR.					
P1112	72	27'-0"	10328	STR.					
P1113	48	34'-8"	8,841	6	30'-0"	5'-0"	—		
P1001	196	35'-6"	21,997	STR.					
P1002	48	13'-0"	2685	STR.					
P901	60	13'-6"	2,759	STR.					
P902	30	9'-6"	969	STR.					
P903	244	7'-7"	6,291	6	6'-7"	1'-3"	—		
P904	111	27'-4"	10,316	STR.					
P905	111	23'-4"	8,806	STR.					
P906	2-SERIES OF 5	24'-8" TO 4'-8"	499	STR.	(5'-0" INCREMENTS)				
P907	2-SERIES OF 4	20'-8" TO 5'-8"	358	STR.	(5'-0" INCREMENTS)				
P908	4	27'-9"	377	STR.					
P909	4	23'-9"	323	STR.					
P801	158	9'-6"	4,008	STR.					
P601	312	19'-6"	9138	3	5'-8"	3'-8"			
P602	6	21'-0"	189	3	5'-8"	4'-5"			
P501	48	22'-3"	1114	STR.					
P502	24	7'-1"	177	9					
P503	56	21'-1"	1231	STR.					
P504	35	8'-1"	295	13	1'-7"	4'-11"	3'-2"		
P505	35	7'-6"	274	2	2'-3"	1'-7"			
P506	2-SERIES OF 19	13'-11" TO 19'-1"	671	STR.	(3 1/2" INCREMENTS)				
P507	2-SERIES OF 16	13'-11" TO 18'-3"	937	STR.	(3 1/2" INCREMENTS)				
P508	210	20'-0"	4361	STR.					
P401	682	12'-5"	5,657	3	3'-2"	2'-10"			
P402	682	13'-11"	6,340	3	2'-1"	4'-8"			
		TOTAL	190,971						

SUPERSTRUCTURE

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	R.Br.	L.Br.
×S801	908	41'-6"	95208	STR.							
S802	18	80'-0"	1,442	STR.							
S803	66	4'-0"	1057	STR.							
×S601	1178	30'-0"	53,081	STR.							
×S602	1222	8'-0"	14,684	STR.							
×S603	4 SETS OF 25	6'-3" TO 29'-3"	2,666	STR.	(11 1/2" INCREMENTS)						
×S604	24	4'-0"	144	STR.							
×S605	10	5'-6"	83	STR.							
×S501	552	7'-3"	9,179	19	8"	3'-0"					
×S502	542	5'-7"	3,156	STR.							
×S503	548	5'-0"	2858	15	1'-7"	1'-0"	2'-8"				
×S504	18	7'-8"	144	STR.							
S505	490	7'-8"	3520	3	0'-8"	3'-0"					
S506	352	5'-0"	1,836	STR.							
S507	352	3'-8"	1,346	STR.							
×S508	132	4'-8"	643	3	0'-11"	1'-3"					
×S509	132	14'-5"	1,985	16							
S510	264	4'-6"	1,239	STR.							
×S511	12	9'-7"	120	17	1'-0"	2'-4"	1'-5"	2'-2"			
×S512	6	3'-2"	20	STR.							
×S401	1302	30'-0"	24,092	STR.							
×S402	93	9'-0"	559	STR.							
		TOTAL	10,440								
			× 155,617								
×RS01	216	19'-11"	*	STR.							

* INCLUDED WITH RAILING FOR PAYMENT.
× DENOTES EPOXY COATED BARS

Refer to CMS Sections 106.03, 700, 709.01 through 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structures by the additional steel, spliced in accordance with 509.08.

BAR SIZE: The bar size is indicated in the bar mark. The first digit where three digits are used and the first two digits where four digits are used indicate the bar size number. For example A700 is a No.7 size bar and A1014 is a No.10 size.

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FRANKLIN CONSULTANTS INC.
Consulting Engineers
COLUMBUS, OHIO

REINFORCING STEEL
CITY OF WILLOUGHBY
CHAGRIN RIVER BRIDGE

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
HH	B.B.	B.B.	PCB	JH	5/19/77	5-15-78