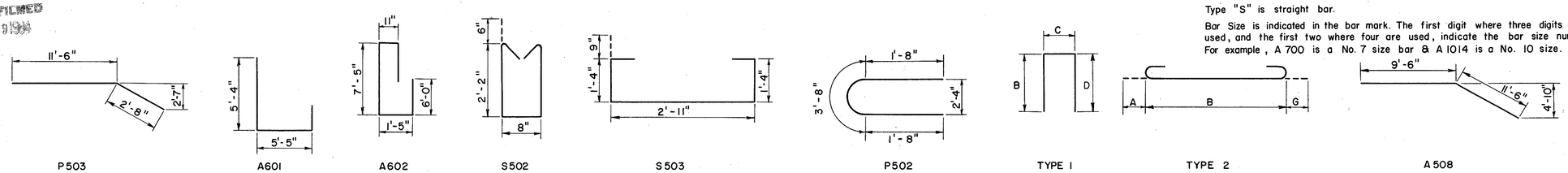
MICROFILMED
MAR 29 1984

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

233/313

LAKE COUNTY
LAK-2-16.49

NOTES: All dimensions are out to out of the bar.
Type "S" is straight bar.
Bar Size is indicated in the bar mark. The first digit where three digits are used, and the first two where four are used, indicate the bar size number. For example, A 700 is a No. 7 size bar & A 1014 is a No. 10 size.



REINFORCING STEEL LIST

ABUTMENTS

MARK	LEFT REAR	RIGHT REAR	LEFT FWD.	RIGHT FWD.	TOTAL	LENGTH	WEIGHT LT. BRIDGE	WEIGHT RT. BRIDGE	TYPE	B	C	D	VARIES BY	NO. OF EACH
A801	14	14	14	14	56	26'-1"	1,950	1,950	S					
A601	54	54	54	54	216	12'-6"	2,028	2,028	–					
A602	28	28	28	28	112	18'-0"	1,514	1,514	–					
A603	10	10	10	10	40	17'-2"	516	516	1	8'-0"	1'-5"	8'-0"		
A501	54	54	54	54	216	9'-6"	1,070	1,070	1	2'-2"	5'-5"	2'-2"		
A502	54	54	54	54	216	6'-2"	695	695	1	5'-6"	9"	0		
A503	38	38	38	38	152	10'-0"	793	793	1	3'-5"	3'-5"	3'-5"		
A504	12	12	12	12	48	18'-3"	457	457	S					
A505	12	12	12	12	48	33'-9"	845	845	S					
A506	4	4	4	4	16	32'-0"	267	267	S					
A507	4	4	4	4	16	28'-9"	240	240	S					
A508	4	4	4	4	16	21'-0"	175	175	–					
A509	22	22	22	22	88	9'-9"	447	447	S					
A510	28	28	28	28	112	5'-5" to 9'-9 1/4"	444	444	S				8 3/4"	16
A511	44	44	44	44	176	6'-1"	558	558	1	2'-8"	1'-0"	2'-8"		

SUPERSTRUCTURE

MARK	LEFT BRIDGE	RIGHT BRIDGE	TOTAL	LENGTH	WEIGHT LT. BRIDGE	WEIGHT RT. BRIDGE	TYPE	B	C	D	VARIES BY	NO. OF EACH
S701	361	361	722	36'-2"	26,689	26,689	S					
S701A	32	32	64	34'-10" to 7'-6"	1,385	1,385	S				1'-10"	4
S701B	6	6	12	5'-6"	67	67	S					
S601	361	361	722	36'-2"	19,612	19,612	S					
S601A	32	32	64	34'-10" to 7'-6"	1,018	1,018	S				1'-10"	4
S601B	6	6	12	5'-6"	49	49	S					
S602	730	730	1,460	28'-0"	30,701	30,701	S					
S603	64	64	128	40'-0"	3,845	3,845	S					
S501	360	360	720	4'-2"	1,566	1,566	1	9"	2'-11"	9"		
S502	360	360	720	5'-9"	2,160	2,160	–					
S503	360	360	720	6'-10"	2,563	2,563	–					

PIERS

MARK	LEFT REAR	RIGHT REAR	LEFT FWD.	RIGHT FWD.	3	4	5	6	TOTAL	LENGTH	WEIGHT LT. BRIDGE	WEIGHT RT. BRIDGE	TYPE	A	B	C	D	G
P1101	6	6	6	6					24	38'-10"	2,475	2,475	2	1'-7"	35'-8"			1'-7"
P1102	6	6	6	6					24	35'-8"	2,274	2,274	S					
P 801	25	25	25	25					100	16'-6"	2,203	2,203	S					
P 802	28	28	28	28					112	5'-6"	822	822	1		4'-9"	1'-0"	0	
P 601	10	10	10	10					40	8'-6"	255	255	S					
P 602	12	12	12	12					48	14'-6"	523	523	S					
P 603	12	12	12	12					48	7'-8"	276	276	1		2'-8"	2'-8"	2'-8"	
P 604	28	28	28	28					112	9'-4"	785	785	1		3'-6"	2'-8"	3'-6"	
P 605	12	12	12	12					48	10'-4"	372	372	1		4'-0"	2'-8"	4'-0"	
P 501	12	12	12	12					48	12'-0"	300	300	S					
P 502	12	12	12	12					48	7'-0"	175	175	–					
P 503	4	4	4	4					16	14'-2"	118	118	–					
P 504	10	10	10	10					40	6'-0"	125	125	S					
P 505	2	2	2	2					8	20'-3"	84	84	S					
P 506	4	4	4	4					16	17'-0"	142	142	S					
P 507	4	4	4	4					16	18'-8"	156	156	S					

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	LEFT BRIDGE SUPER	LEFT BRIDGE ABUTS.	LEFT BRIDGE PIERS	LEFT BRIDGE GEN'L	RIGHT BRIDGE SUPER	RIGHT BRIDGE ABUTS.	RIGHT BRIDGE PIERS	RIGHT BRIDGE GEN'L	URBAN	RURAL
E- 2	Lump	Sum	Cofferdams, Cribs and Sheeting				Lump				Lump	Lump/2	Lump/2
E- 2	450	Cu. Yds.	Unclassified Excavation		186	39			186	39		225	225
E- 2	72	Cu. Yds.	Shale Excavation			36				36		36	36
S- 1	646	Cu. Yds.	Class C Concrete, Superstructure	323				323				323	323
S- 1	153	Cu. Yds.	Class C Concrete, Piers above Footings			76				77		76	77
S- 1	209	Cu. Yds.	Class E Concrete, Abut. above Footings		104				105			104	105
S- 1	198	Cu. Yds.	Class E Concrete, Footings		71	28			71	28		99	99
S- 4	225,478	Lbs.	Reinforcing Steel	89,655	11,999	11,085		89,655	11,999	11,085		112,739	112,739
S- 7	554,940	Lbs.	Structural Steel	277,470				277,470				277,470	277,470
S- 8	554,940	Lbs.	Field Painting of Structural Steel	277,470				277,470				277,470	277,470
S- 14	1,046.66	Lin. Ft.	Railing (Aluminum Rail. & Type A Posts w/Conc. Parapets)	523.33				523.33				523.33	523.33
S- 16	Lump	Sum	First Test Pile *		Lump							Lump/2	Lump/2
S- 18	918	Lin. Ft.	10 BP 42 Piles		459				459			374	544
S- 29	114	Cu. Yds.	Porous Backfill		57				57			57	57
S- 29	28	Each	Scuppers, Including Supports	14				14				14	14
S-101	646	Each	Water-reducing, Set-retarding Admixtures	323				323				323	323
I- 10	874	Cu. Yds.	Dumped Rock Channel Protection, 2'-0" Thick				437				437	403	471
E- 3	12,048	Cu. Yds.	Channel Excavation									6764	5884

* Payment will be made for only one first test pile. It may be driven for either the Left or Right Bridge.

RAILING

MARK	LEFT BRIDGE	RIGHT BRIDGE	TOTAL	LENGTH	WEIGHT	TYPE	A	B
R501	112	112	224	15'-10"	*	S		
R501A	16	16	32	17'-4"	*	S		

* Included with Item S-14 for Payment.

REPLACEMENT BARS

MARK	NO.	LENGTH	WEIGHT	TYPE
RE 500	2	5'-7"		S
RE 600	6	5'-11"		S
RE 700	3	6'-3"		S
RE 800	1	6'-6"		S
RE 1100	1	7'-7"		S

PREPARED BY
CAPITOL ENGINEERING ASSOCIATES, DILLSBURG, PA.
FOR
STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

ESTIMATED QUANTITIES & REINFORCING STEEL LIST
BRIDGE NO. LAK-2-1652 L & R
RELOC. SR. 2 OVER GRAND RIVER
LAKE COUNTY
STA. 772 + 03.61
STA. 774 + 68.39

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
M.J.F. L.L.D.	M.J.F.	FWB	L.L.D. M.J.F.	G.S.W. M.C.P.		