MICROFILMED
DEC 11 1967

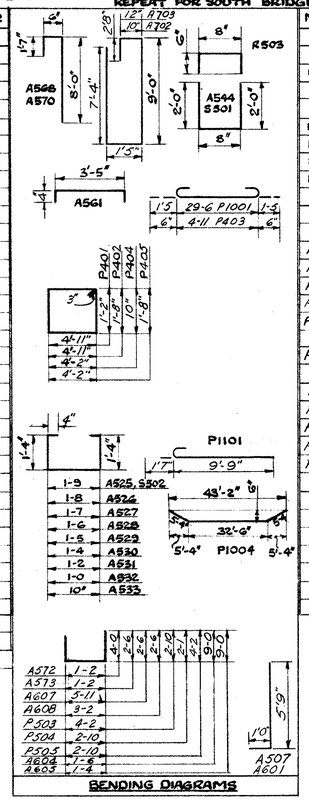
REINFORCING STEEL LIST

MARK	NO.	LENGTH	WEIGHT	SHP.
ABUTMENTS				
A501	18	13-1	329	S
A502	24	3-8	235	S
A501	25	45-2	1178	S
A502	8	13-6	113	S
A503	8	13-11	116	B
A504	94	6-6	637	S
A505	12	22-11	287	S
A506	6	4-3	27	S
A507	164	6-7	1125	B
A508	4	6-0	25	S
A509	4	7-9	32	S
A512	24	12-10	322	S
A514	4	11-1	46	S
A515	54	3-3	183	S
A516	12	8-0	100	S
A517	4	26-8	111	S
A518	2	22-0	46	S
A519	2	19-10	41	S
AE20	4	19-3	80	S
A521	22	24-8	566	S
A522	2	20-0	42	S
A523	2	17-10	27	S
A524	4	17-3	72	S
A525	60	4-7	287	B
A526	4	4-6	19	B
A527	4	4-5	18	B
A528	4	4-4	18	B
A529	4	4-3	18	B
A530	4	4-2	17	B

MARK	NO.	LENGTH	WEIGHT	SHP.
ABUTMENTS				
A531	4	4-0	17	B
A532	4	3-10	16	B
A533	4	3-8	15	B
A534	60	1-10	115	S
A535	4	1-9	7	S
A536	4	1-8	7	S
A537	4	1-7	7	S
A538	4	1-6	6	S
A539	4	1-5	6	S
A540	4	1-3	5	S
A541	4	1-1	5	S
A542	4	0-11	4	S
A544	88	4-5	406	B
A547	6	4-6	28	S
A548	4	4-10	20	S
A549	4	5-8	24	S
A553	13	11-5	155	S
A555	4	22-4	93	S
A556	2	17-2	36	S
A557	6	15-2	95	S
A558	20	20-4	424	S
A560	4	3-2	38	S
A561	60	3-10	240	B
A562	8	4-6	36	S
A563	24	5-6	138	S

MARK	NO.	LENGTH	WEIGHT	SHP.
ABUTMENTS				
A564	1	11-6	12	S
A565	1	10-2	11	S
A566	1	10-1	11	S
A568	4	9-10	41	B
A569	4	9-9	41	S
A570	4	9-10	41	B
A571	64	3-0	200	S
A572	44	8-11	409	B
A573	24	5-11	148	B
A579	32	43-4	1446	S
A580	2	26-6	55	S
A581	2	12-6	26	S
A582	2	6-6	14	S
A583	16	3-1	51	S
A584	6	2-10	18	S
A585	12	2-8	33	S
A601	80	6-2	741	B
A702	24	20-7	1010	B
A703	24	20-9	1018	B
A604	16	19-2	461	B
A605	16	19-0	457	B
A606	26	11-8	456	S
A607	40	10-7	636	B
A608	44	7-10	517	B
		Total	16,015	

NORTH BRIDGE
REPEAT FOR SOUTH BRIDGE



BENDING DIAGRAMS

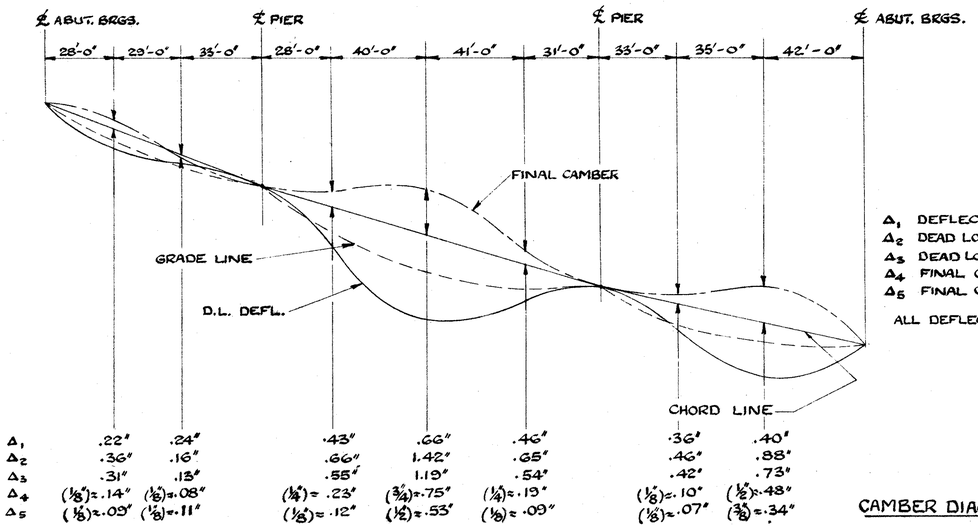
MARK	NO.	LENGTH	WEIGHT	SHP.
PIERS				
P1101	304	11-4	18300	B
P1102	144	15-0	11476	S
P1103	160	35-4	30058	S
P1104	96	8-0	4080	S
P1105	48	28-3	7204	S
P1106	48	26-8	6801	S
P1107	24	43-2	3505	S
P1108	16	19-0	1615	S
P1001	20	32-4	2782	B
P1002	12	26-0	1343	S
P1003	16	26-0	1790	S
P1004	8	43-2	1484	B
P1005	160	16-6	11360	S
P901	52	30-0	5304	S
RAILING				
R501	16	12-0	Included	S
R502	168	14-9	with rail-	S
R503	770	1-5	ing for	B
R504	4	23-5	payment.	S
R505	4	19-1	Item 514.	S

MARK	NO.	LENGTH	WEIGHT	SHP.
PIERS				
P701	10	39-6	807	S
P702	48	10-0	981	S
P501	4	26-0	108	S
P502	8	43-2	360	S
P503	28	9-7	280	B
P504	84	6-9	591	B
P505	84	10-11	957	B
P401	896	12-2	7284	B
P402	448	19-2	3941	B
P403	1248	5-11	4935	B
P404	560	10-0	3740	B
P405	280	11-8	2183	B
		TOTAL	135,241	
SUPERSTRUCTURE				
S701	512	43-8	45702	S
SG01	512	43-8	33583	S
SG02	860	35-10	46283	S
SG03	68	40-0	4085	S
S501	682	4-5	3144	S
S502	682	4-7	3258	S
S503	682	1-10	1302	S
		TOTAL	137,357	

REPLACEMENT BARS				
RE1101	1	7-6		S
RE1001	1	7-3		S
RE801	1	6-6		S
RE601	1	5-11		S
RE501	1	5-7		S
RE401	1	5-3		S

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.

All dimensions are out to out.



Δ_1	.22"	.24"	.43"	.66"	.46"	.36"	.40"
Δ_2	.36"	.16"	.66"	1.42"	.65"	.46"	.88"
Δ_3	.31"	.13"	.55"	1.19"	.54"	.42"	.73"
Δ_4	(1/8")=.14"	(1/8")=.08"	(1/4")=.23"	(3/4")=.75"	(1/4")=.19"	(1/8")=.10"	(1/2")=.48"
Δ_5	(1/8")=.09"	(1/8")=.11"	(1/8")=.12"	(1/2")=.53"	(1/8")=.09"	(1/8")=.07"	(3/8")=.34"

CAMBER DIAGRAM

Δ_1 DEFLECTION OF GRADE LINE FROM CHORD LINE.
Δ_2 DEAD LOAD DEFLECTION EXTERIOR STRINGER.
Δ_3 DEAD LOAD DEFLECTION INTERIOR STRINGER.
Δ_4 FINAL CAMBER EXTERIOR STRINGER.
Δ_5 FINAL CAMBER INTERIOR STRINGER.

ALL DEFLECTIONS IN INCHES.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	ACI-1103(21)	

461
488

LAKE COUNTY
LAK-1-12.89

ESTIMATED QUANTITIES - BOTH BRIDGES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	ABUT.	PIER	GEN.
E-2	LUMP	SUM	COFFERDAMS, CRIBS & SHEETING				LUMP
E-2	1532	CU. YD.	UNCLASSIFIED EXCAVATION		412	1120	
E-2	484	CU. YD.	Shale Excavation			484	
S-1	954	CU. YD.	CLASS 'C' CONCRETE, SUPERSTRUCTURE.	954			
S-1	641	CU. YD.	CLASS 'C' CONCRETE, PIERS ABOVE FOOTINGS			641	
S-1	504	CU. YD.	CLASS 'E' CONCRETE, PIER FOOTINGS.			504	
S-1	464	CU. YD.	CLASS 'E' CONCRETE, ABUTMENTS.		464		
S-4	577,266	LB.	REINFORCING STEEL	274,714	32,030	270,522	
S-7	1,755,778	LB.	STRUCTURAL STEEL	1,755,778			
S-8	1,755,778	LB.	FIELD PAINTING OF STRUCTURAL STEEL	1,755,778			
S-14	1540	LIN. FT.	RAILING (ALUMINUM RAIL & SUPPORTS, CONC. PARAPET)	1540			
S-16	LUMP	SUM	FIRST TEST PILE				LUMP
S-18	2738	LIN. FT.	Steel Piles, 12BP53		2738		
S-29	122	CU. YD.	POROUS BACKFILL		122		
S-29	512	CU. YD.	Slope Facing (S29.05 Type)				512
I-10	1825	CU. YD.	Dumped Rock Channel Protection				1825
E-3	11,150	CU. YD.	Channel Excavation				11,150

REPLACEMENT BARS:

If reinforcing bars are fabricated from stock which has previously been tested and approved by the Ohio Highway Testing Laboratory, test sample as provided in section S-4.02 need not be furnished and replacement bars will not be required.

SEC. C-32 FED. AID PROJ. AC I-1103 (21)

PREPARED BY
CAPITOL ENGINEERING ASSOCIATES, DILLSBURG, PA.
FOR
STATE OF OHIO
DEPARTMENT OF HIGHWAYS

REINFORCING BAR LIST - ESTIMATE
BRIDGE NO. LAK-1-1542
S.R.1 OVER BIG CREEK
LAKE COUNTY
STA. 461+30.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
	C.T.B.		A.M.P.		