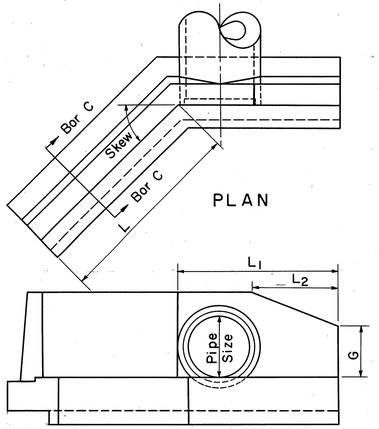
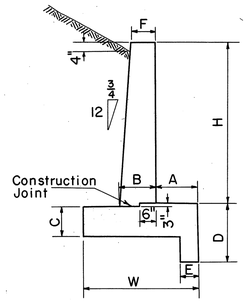
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	ACI-1103(27)	

LAKE COUNTY
LAK-1-16.55

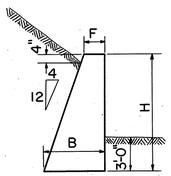


PLAN

ELEVATION



SECTION B-B



SECTION C-C

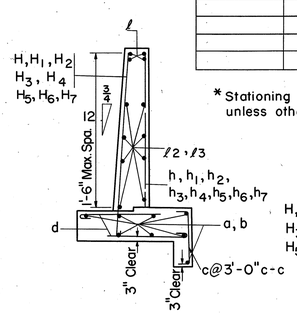
HEADWALL DIMENSIONS

STRUCTURE NO.	STATION*	PIPE SIZE	H	L	L_1	L_2	W	A	B	C	D	E	F	G
LAK-1-17.07	537 +75 Rt.	96"	9'-9"	21'-0"	18'-7"	10'-5"	6'-6"	2'-6"	2'-1 3/8"	2'-3"	3'-6"	1'-0"	1'-6"	5'-7"
	537 +75 Lt.	96"			SAME	AS RIGHT	SIDE							
LAK-1-17.71	571 +90 Rt.	30"	6'-6"	6'-3"	8'-6"	5'-9"	–	–	2'-2"	–	–	–	1'-0"	6'-2"
	571 +90 Lt.	30"	6'-8"	6'-5"	8'-0"	5'-3"	–	–	2'-2 5/8"	–	–	–	1'-0"	6'-0"
LAK-1-17.88	580 + 85 Rt.	60"	5'-11"	11'-0"	15'-0"	9'-10"	5'-3"	1'-10 1/2"	1'-10 7/8"	2'-3"	3'-6"	1'-0"	1'-6"	5'-3"
	580 + 85 Lt.	60"			SAME	AS RIGHT	SIDE							
	4+64 Lt. Ramp E	18"	5'-6"	5'-3"	4'-3"	2'-7"	–	–	2'-10"	–	–	–	1'-0"	4'-8"
LAK-1-18.74	626 + 28 Lt.	84"	9'-0"	15'-8"	20'-3"	12'-6"	6'-3"	2'-4 1/2"	2'-0 3/4"	2'-3"	3'-6"	1'-0"	1'-6"	7'-1"
	626 + 28 Rt.	84"	9'-6"	18'-1"	19'-1"	11'-5"	6'-6"	2'-6"	2'-1 1/8"	2'-3"	3'-6"	1'-0"	1'-6"	6'-1"
LAK-1-19.09	644+65 Rt.	42"	4'-6"	8'-7"	9'-6"	5'-11"	4'-3"	1'-4 1/2"	1'-9 3/8"	2'-3"	3'-6"	1'-0"	1'-6"	3'-3"
	644 + 65 Lt.	42"	4'-6"	8'-7"	9'-6"	5'-11"	4'-3"	1'-4 1/2"	1'-9 3/8"	2'-3"	3'-6"	1'-0"	1'-6"	3'-3"

REINFORCING STEEL LIST & CONCRETE QUANTITIES

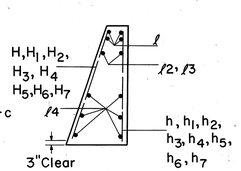
STRUCTURE NO.	STATION*	PIPE SIZE	SKEW	MARK a	NO.	MARK b	NO.	MARK c	NO.	MARK d	NO.	MARK ℓ	NO.	MARK ℓ1	NO.	MARK ℓ2	NO.	MARK ℓ3	NO.	MARK ℓ4	NO.	MARK H	NO.	MARK H_1	NO.	MARK H_2	NO.	MARK H_3	NO.	MARK H_4	NO.	MARK h	NO.	MARK h_1	NO.	MARK h_2	NO.	MARK h_3	NO.	MARK h_4	NO.	S-4* REINFORCING STEEL LBS.	S-1* CLASS "C" CONCRETE CU. YDS.	STRUCTURE DETAILS SHEET NO.
LAK-1-17.07	537+75	96"	27°	21-6	10	19-1	10	4-1	14	5-5	54	29-0	4	11-1	2	20-10	12	10-0	10	–	–	12-7	12	12-6	1	11-8	1	10-11	1	10-1	1	9-8	12	9-7	1	8-8	1	7-11	1	7-1	1	2,037	45.8	368
LAK-1-17.71	571 +90 Rt.	30"	10°	–	–	–	–	–	–	–	–	8-10	4	5-7	2	6-2	4	5-4	6	14-7	6	6-1	4	6-1	1	6-0	1	5-11	1	5-9	1	6-1	4	6-2	1	6-3	1	6-1	1	5-11	1	323	5.3	369
	571 +90 Lt.	30"	10°	–	–	–	–	–	–	–	–	9-0	4	5-1	2	6-4	4	4-11	6	14-3	6	6-3	4	6-3	1	6-0	1	5-10	1	5-7	1	6-3	4	6-5	1	6-2	1	6-0	1	5-9	1	320	5.4	369
LAK-1-17.88	580+85	60"	5°	11-6	10	15-6	10	4-1	10	4-2	36	16-0	4	9-7	2	10-8	8	9-6	10	–	–	8-9	7	8-9	1	8-7	1	8-6	1	8-4	1	5-9	7	5-9	1	5-8	1	5-6	1	5-4	1	999	20.8	370
	4+64 Ramp E	18"	39°30'	–	–	–	–	–	–	–	–	6-9	4	2-4	2	4-11	4	2-9	4	9-1	6	5-0	4	5-3	1	5-1	1	4-6	1	–	–	5-0	4	5-3	1	5-1	1	4-6	1	–	–	190	2.5	
LAK-1-18.74	626+28 Lt.	84"	15°	16-2	10	20-9	10	4-1	13	5-2	50	23-3	4	12-3	2	15-4	10	12-1	12	–	–	11-10	9	11-10	1	11-6	1	11-2	1	10-11	1	8-10	9	8-10	1	8-6	1	8-2	1	7-11	1	1,772	38.1	371
	626+28 Rt.	84"	15°	18-7	10	19-7	10	4-1	13	5-5	52	25-7	4	11-2	2	17-9	10	11-0	10	–	–	12-4	10	12-3	1	11-9	1	11-2	1	10-8	1	9-4	10	9-3	1	8-9	1	8-2	1	7-8	1	1,858	41.3	371
LAK-1-19.09	644+65	42"	15°	9-1	8	10-0	8	4-1	7	3-5	26	12-0	4	5-8	2	8-3	8	3-3	6	–	–	7-4	10	7-4	1	6-11	1	6-6	1	6-2	1	4-4	10	4-4	1	3-11	1	3-6	1	3-2	1	598	12.7	372

	H_5		H_6		H_7		h_5		h_6		h_7	
537+75	9-4	1	8-6	1	–	–	6-4	1	5-6	1	–	–
580+85	8-3	1	8-1	1	–	–	5-2	1	5-1	1	–	–
626+28 Lt.	10-7	1	10-3	1	9-11	1	7-7	1	7-3	1	6-11	1
626+28 Rt.	10-1	1	9-7	1	9-0	1	7-1	1	6-7	1	6-0	1

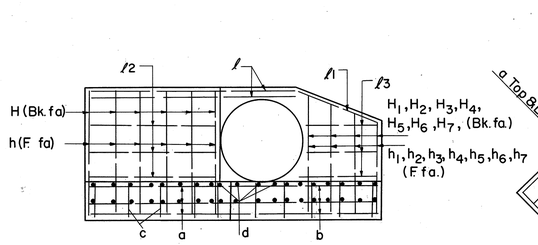


SECTION B-B

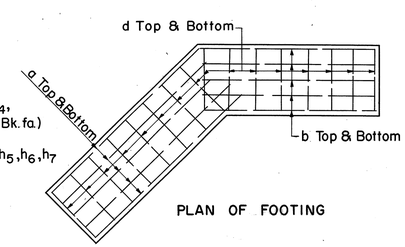
* Stationing on ℄ S. R. 1 unless otherwise shown



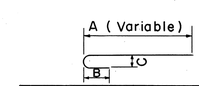
SECTION C-C



ELEVATION

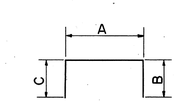


PLAN OF FOOTING



MARK	SIZE	A#	B	C
ALL H BARS	VARIES		4 3/4"	4 1/4"
d	5/8		4 3/4"	4 1/4"

#Varies



MARK	A	B	C
C	3'-1"	6"	6"

NOTE:
For additional information see Std. Constr. Dwgs. Hdwl. A, B & C.
Mark ℓ and ℓ4 bars to be bent in field.

* NOTE:
Quantities shown are for one Hdwl.
Vertical Bars spaced @ 2'-0" c-c.
Horizontal Bars spaced @ 1'-6" c-c Max.