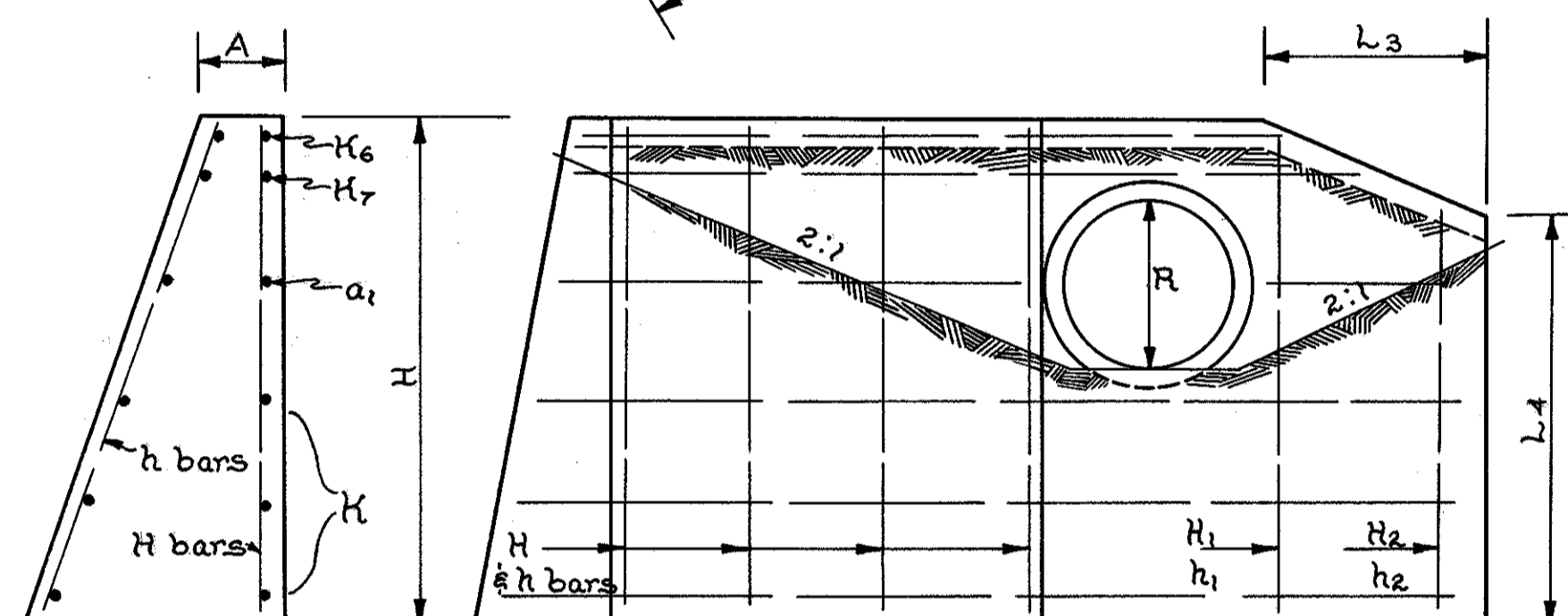
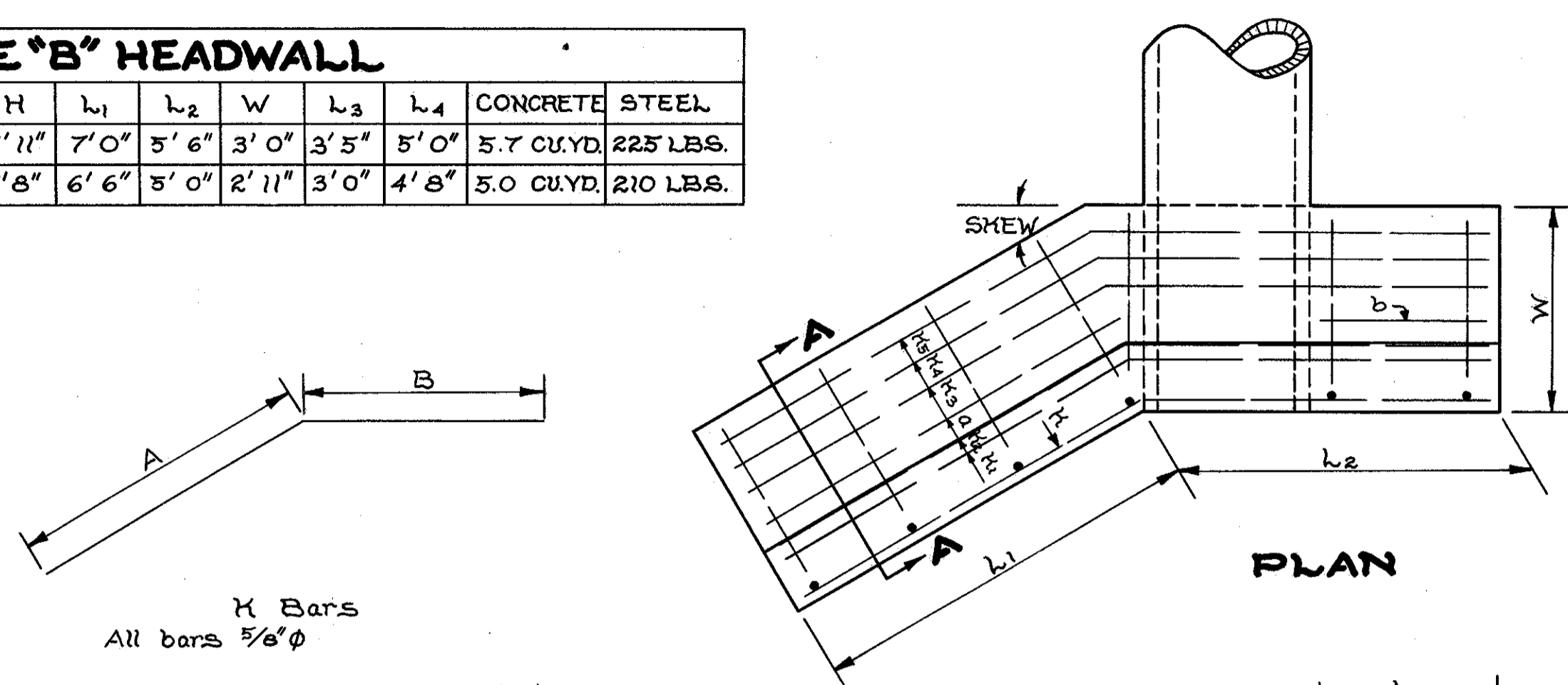


HEADWALLS-TYPE "B"

FED. RD. DIVISION	STATE	PROJECT	311 394
2	OHIO		

LAKE COUNTY
LAK-2-0.00

TYPE "B" HEADWALL												
ST. NO.	LOCATION	SKEW	R	A	H	h ₁	h ₂	W	h ₃	h ₄	CONCRETE	STEEL
77	308+00~194' Rt.	45°	24"	1' 0"	5' 11"	7' 0"	5' 6"	3' 0"	3' 5"	5' 0"	5.7 CU.YD.	225 LBS.
77	21+30 R.L.~501	45°	21"	1' 0"	5' 8"	6' 6"	5' 0"	2' 11"	3' 0"	4' 8"	5.0 CU.YD.	210 LBS.



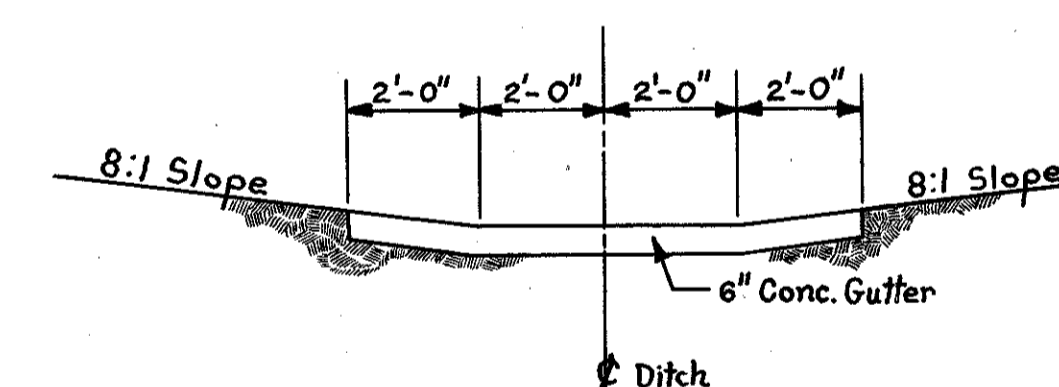
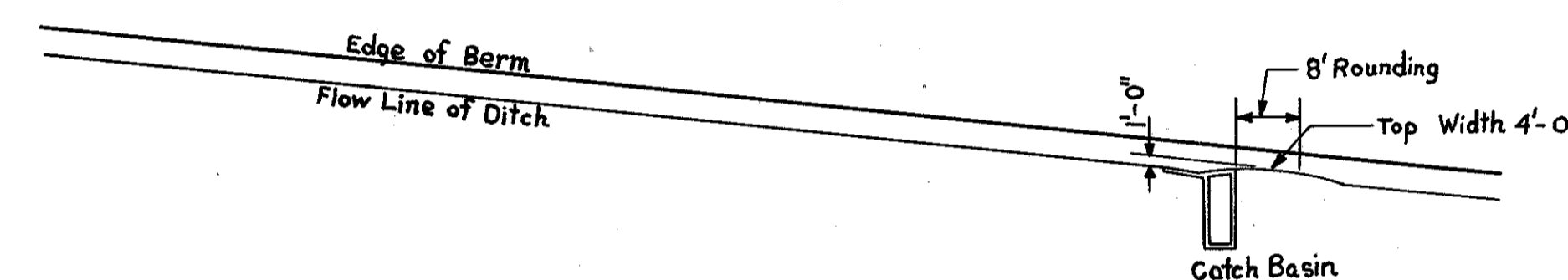
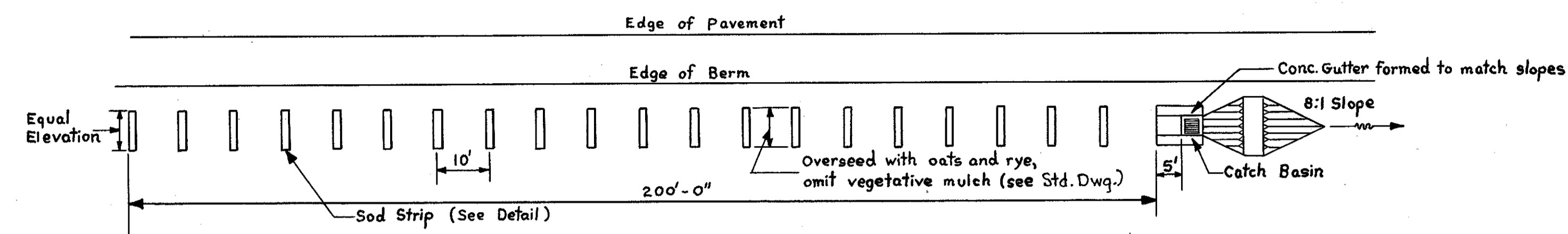
SEC. A-A

ELEVATION

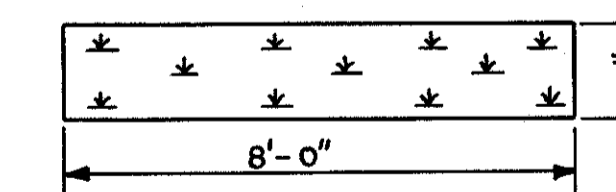
NOTE:
Unless otherwise shown, Details and Notes shall conform to Std. Drawing HW A & B.

REINFORCING STEEL-24"						
MARK	N ^o	A	B	LENGTH	LBS.	SHAPE
H	4			5' 6"	23.0	Straight
H ₁	1			5' 4"	5.6	"
H ₂	1			4' 9"	5.0	"
h	5			5' 11"	30.9	"
h ₁	1			5' 9"	6.0	"
h ₂	1			5' 2"	5.4	"
K	3	6' 9"	5' 4"	12' 1"	37.8	Bent
K ₁	1	7' 0"	5' 7"	12' 7"	13.1	"
K ₂	1	7' 1"	5' 8"	12' 9"	13.3	"
K ₃	1	7' 5"	6' 2"	13' 7"	14.2	"
K ₄	1	7' 7"	6' 4"	13' 11"	14.5	"
K ₅	1	7' 9"	6' 6"	14' 3"	14.9	"
K ₆	1	6' 9"	2' 4"	9' 1"	9.5	"
K ₇	1	6' 9"	4' 5"	11' 2"	11.7	"
a	1			7' 3"	7.6	Straight
a ₁	1			6' 9"	7.0	"
b	2			2' 9"	5.7	"
TOTAL STEEL				225 LBS.		

REINFORCING STEEL-21"						
MARK	N ^o	A	B	LENGTH	LBS.	SHAPE
H	4			5' 3"	21.9	Straight
H ₁	1			5' 0"	5.2	"
H ₂	1			4' 5"	4.6	"
h	5			5' 8"	29.5	"
h ₁	1			5' 5"	5.7	"
h ₂	1			4' 10"	5.0	"
K	3	6' 3"	4' 10"	11' 1"	34.7	Bent
K ₁	1	6' 7"	5' 2"	11' 9"	12.3	"
K ₂	1	6' 8"	5' 3"	11' 11"	12.4	"
K ₃	1	7' 0"	5' 7"	12' 7"	13.1	"
K ₄	1	7' 2"	5' 9"	12' 11"	13.5	"
K ₅	1	7' 4"	5' 11"	13' 3"	13.8	"
K ₆	1	6' 3"	2' 3"	8' 6"	8.9	"
K ₇	1	6' 3"	3' 3"	9' 6"	9.9	"
a	1			6' 11"	7.2	Straight
a ₁	1			6' 4"	6.6	"
b	2			2' 6"	5.2	"
TOTAL STEEL				210 LBS.		



UPSTREAM END VIEW
OF CONCRETE GUTTER



SOD DETAIL

MODIFIED STANDARD NO. 5 CATCH BASIN
SHOWING MODIFICATION OF PAVED GUTTER

NOTE:
Unless otherwise shown, Details and Notes shall conform to Standard Drawing No. I-8 Catch Basin No. 5