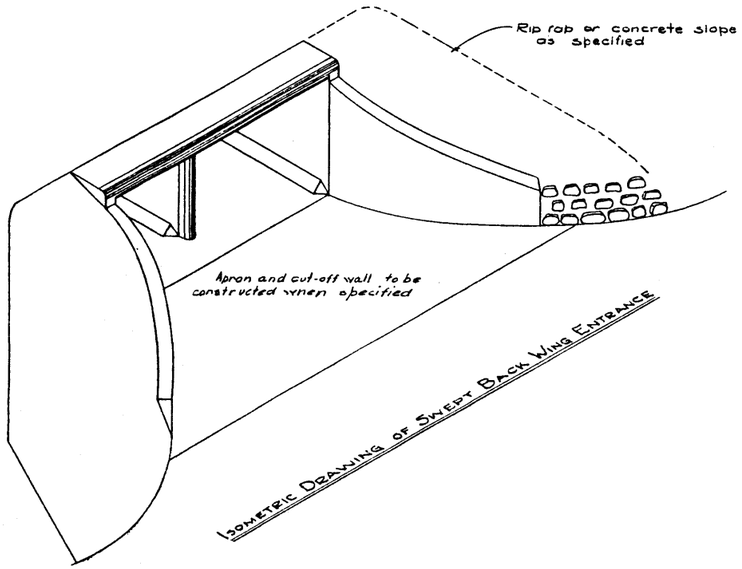
CULVERT FILE NO [ ]

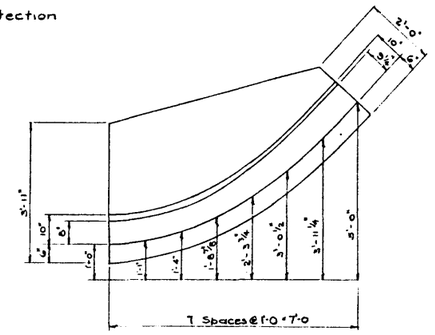
SWEPT BACK WING REINFORCING SCHEDULE - 4 WINGS

MARK	TYPE	CULVERTS 5'-6" HIGH					CULVERTS 6'-6" HIGH					CULVERTS 8'-0" HIGH				
		No	SIZE	X	LENGTH	SPACE	No	SIZE	X	LENGTH	SPACE	No	SIZE	X	LENGTH	SPACE
F_{L1}	Curved	8	½"ϕ		8'-4"	2"	8	½"ϕ		10'-6"	2"	8	½"ϕ		13'-11"	2"
F_{L2}	"	8			6'-0"	1'-0"	8			8'-4"	1'-0"	8			12'-0"	1'-0"
F_{L3}	"	4			3'-5"	1'-0"	4			6'-2"	1'-0"	8			7'-3"	1'-0"
F_{L4}	"						4			2'-10"	1'-0"	4			4'-8"	1'-0"
F_{T1}	Str.	4	½"ϕ		3'-7"	2"	4	½"ϕ		4'-4"	2"	4	⅝"ϕ		5'-9"	2"
F_{T2}	"	12			3'-7"	10"	4			4'-4"	7"	12			5'-5"	9"
F_{T3}	"	16			2'-10"	1'-0"	12			4'-4"	10"	16	½"ϕ		5'-5"	7"
F_{T4}	"	4			1'-11"	1'-0"	12			4'-0"	10"	20			5'-10"	10"
F_{T5}	"						12			3'-0"	1'-0"	8			3'-7"	1'-0"
F_{T6}	"						4			2'-1"	1'-0"	8			2'-4"	1'-0"
F_{T7}	"											4			1'-10"	1'-0"
V_{B1}	A	4	½"ϕ	11⅜"	6'-5"	2"	4	½"ϕ	11⅜"	7'-9"	2"	4	⅝"ϕ	1'-2⅛"	9'-7"	2"
V_{B2}	"	4			6'-4"	10"	4			7'-6"	7"	4			6'-0"	4½"
V_{B3}	"	4			5'-10"		4			7'-11"	10"	4			9'-2"	4½"
V_{B4}	"	4			5'-5"		4			6'-8"	10"	4			6'-0"	4½"
V_{B5}	"	4			4'-11"		4			6'-2"	1'-0"	4			8'-11"	4½"
V_{B6}	"	4			4'-5"		4			5'-5"	1'-0"	4	½"ϕ	1'-1¾"	8'-8"	7"
V_{B7}	"	4			4'-0"		4			5'-3"	1'-0"	4			8'-4"	7"
V_{B8}	"	4			3'-6"		4			4'-10"	1'-0"	4			8'-1"	7"
V_{B9}	"						4			4'-4"	1'-0"	4			7'-10"	7"
V_{B10}	"						4			3'-10	1'-0"	4			7'-5"	10"
V_{B11}	"						4			3'-5"	1'-0"	4			7'-1"	10"
V_{B12}	"											4			6'-7"	1'-0"
V_{B13}	"											4			6'-2"	1'-0"
V_{B14}	"											4			5'-9"	1'-0"
V_{B15}	"											4			5'-3"	1'-0"
V_{B16}	"											4			4'-9"	1'-0"
V_{B17}	"											4			4'-4"	1'-0"
V_{B18}	"											4			3'-11"	1'-0"
H_{B1}	Curved	4	½"ϕ		6'-10"	1'-6"	4	½"ϕ		9'-5"	1'-6"	4	½"ϕ		13'-0"	1'-6"
H_{B2}	"	4			5'-1"	1'-6"	4			7'-5"	1'-6"	4			10'-11"	1'-6"
H_{B3}	"	4			1'-11"	1'-6"	4			4'-2"	1'-6"	4			7'-7"	1'-6"
H_{B4}	"						4			11"	1'-6"	4			4'-3"	1'-6"
H_{B5}	"											4			0'-11"	1'-6"
V_{F1}	Str.	4	½"ϕ		5'-3"	2"	4	½"ϕ		6'-3"	2"	4	½"ϕ		8'-3"	2"
V_{F2}		4			4'-0"	3'-0	4			5'-0"	3'-0"	4			6'-11"	3'-0"
V_{F3}		4			2'-9"	3'-0	4			3'-8"	3'-0"	4			5'-6"	3'-0"
V_{F4}							4			2'-5"	3'-0"	4			4'-2"	3'-0"
V_{F5}												4			2'-5"	3'-0"
H_{F1}	Curved	4	½"ϕ		8'-0	1'-6"	4	½"ϕ		10'-3"	1'-6"	4	½"ϕ		13'-5"	1'-6"
H_{F2}		4			5'-10	1'-6"	4			8'-0"	1'-6"	4			11'-4"	1'-6"
H_{F3}		4			2'-0	1'-6"	4			4'-6"	1'-6"	4			8'-0"	1'-6"
H_{F4}							4			1'-0	1'-6"	4			4'-9"	1'-6"
H_{F5}												4			1'-3"	1'-6"
Total Steel Wt.		373 lb					543 lb					1,129 lb				

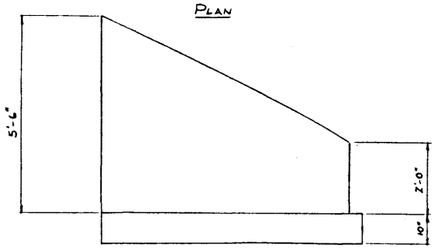
NOTE: Reinforcing schedule is for 4 wings (ie - for 2 complete entrances)
All reinforcing to be field bent.



ISOMETRIC DRAWING OF SWEPT BACK WING ENTRANCE

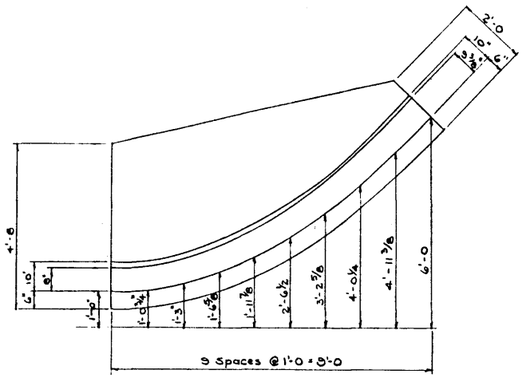


PLAN

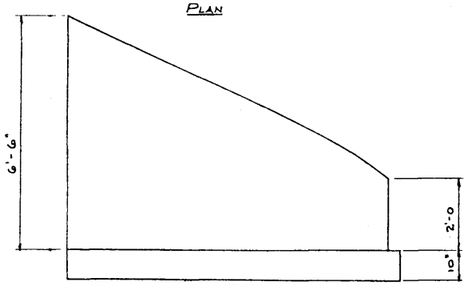


ELEVATION

WING FOR CULVERTS 5'-6 HIGH
Scale: ½" = 1'-0

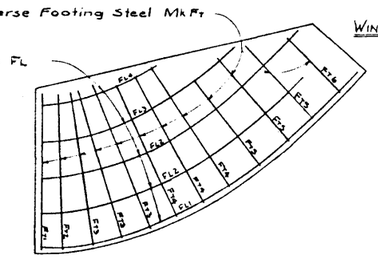


PLAN

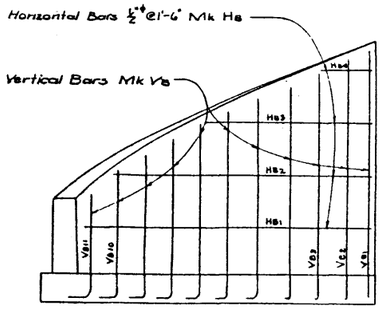


ELEVATION

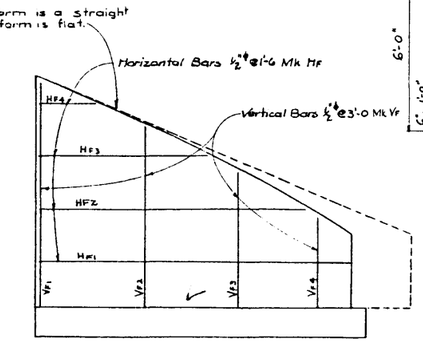
WING FOR CULVERTS 6'-6 HIGH
Scale: ½" = 1'-0



PLAN OF FOOTING

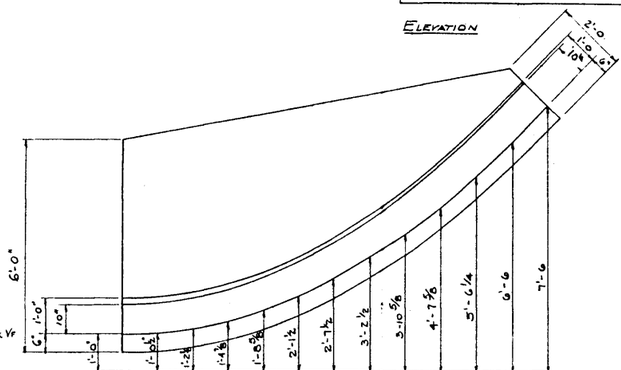


ELEVATION OF BACK FACE



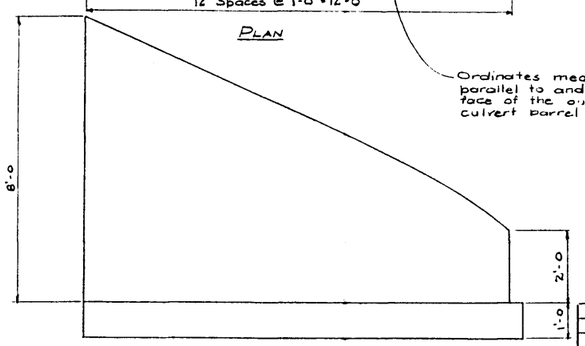
ELEVATION OF FRONT FACE

TYPICAL STEEL PLACEMENT FOR SWEPT BACK WING ENTRANCE
(WING FOR CULVERT 6'-6 HIGH SHOWN)



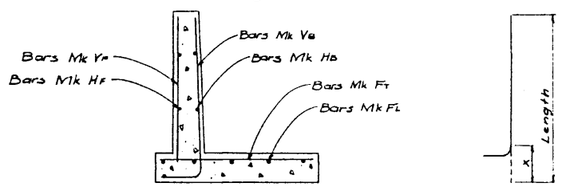
PLAN

Ordinates measured from a line parallel to and 1'-0 from the inside face of the outside wall of the culvert barrel



ELEVATION

WING FOR CULVERTS 8'-0 HIGH
Scale: ½" = 1'-0



TYPICAL RIGHT X-SECTION THROUGH WING

TYPE A BAR

Note
Refer to drawing 3-536 for standard culvert barrel and detail of straight wings.

CONCRETE QUANTITIES — 4 WINGS.
For 5'-6 high — 6.0 Cu. Yds.
For 6'-6 high — 9.5 Cu. Yds.
For 8'-0 high — 19.0 Cu. Yds.

NO.	DATE	DESCRIPTION	BY
4	May 22, 1956	Notes added	DWL

REVISIONS

DETAILS OF SWEPT BACK WING ENTRANCE FOR STANDARD CONCRETE BOX CULVERTS

GOVERNMENT OF THE PROVINCE OF ALBERTA
DEPARTMENT OF HIGHWAYS
BRIDGE BRANCH, EDMONTON

FILE NO. ____ HWY. NO. ____ DWG. NO. S-538-54
LOCATION ____ SCALE ____
STREAM ____ SHEET ____ OF ____

DESIGNED BY ____ DATE ____
DETAILED BY RLF DATE MAY 7 19 52
CHECKED BY ____ DATE ____

ALBERTA RECORDS CENTRE 1196662

W. P. & L. CO. LTD. CALGARY 700 1951