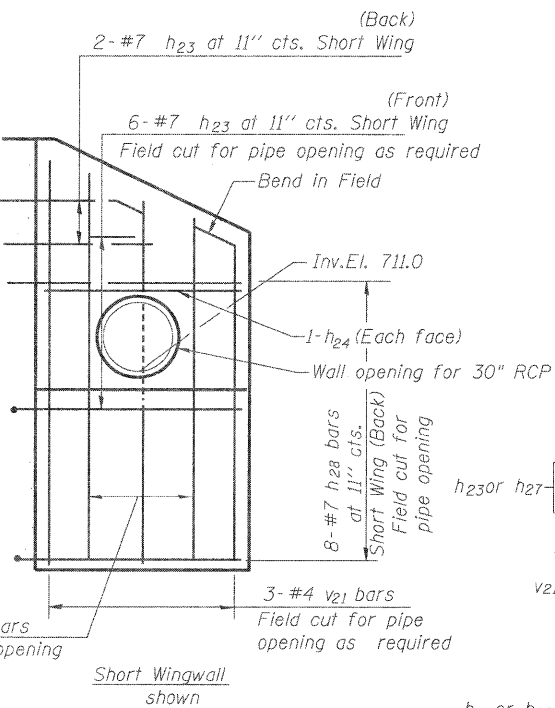
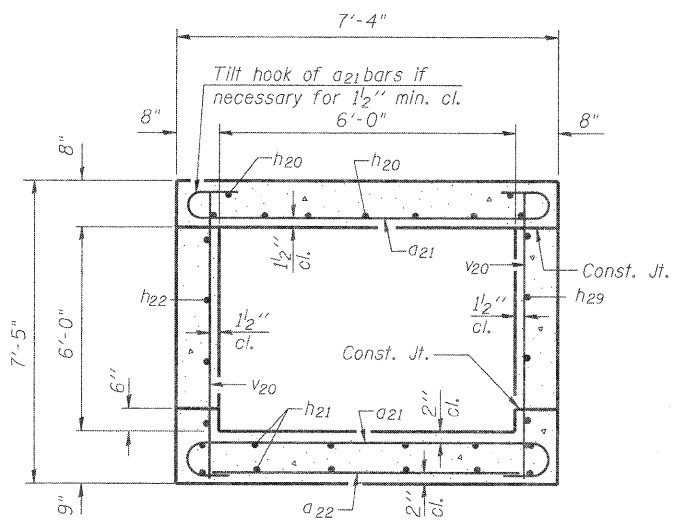


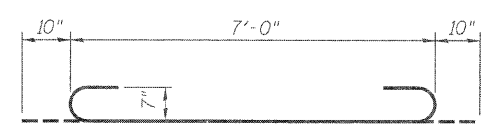
SECTION
Dimensions at Rt. L's to Roadway



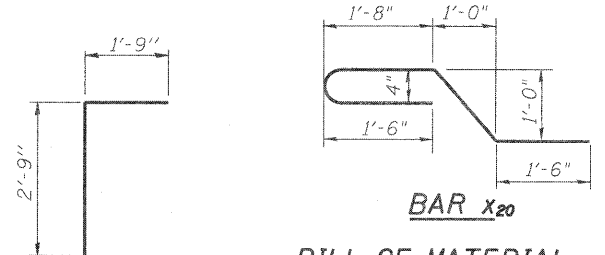
SECTION
Short Wingwall shown



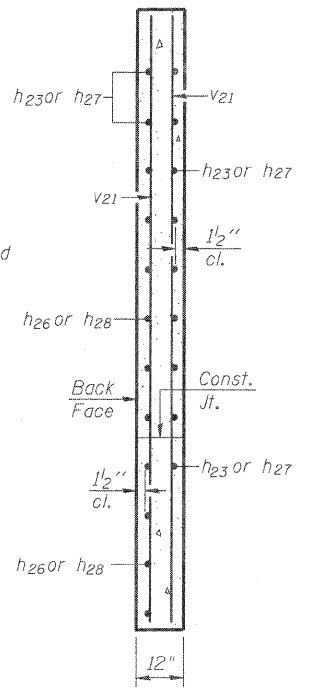
SECTION THRU BARREL



BAR a21



BAR X20

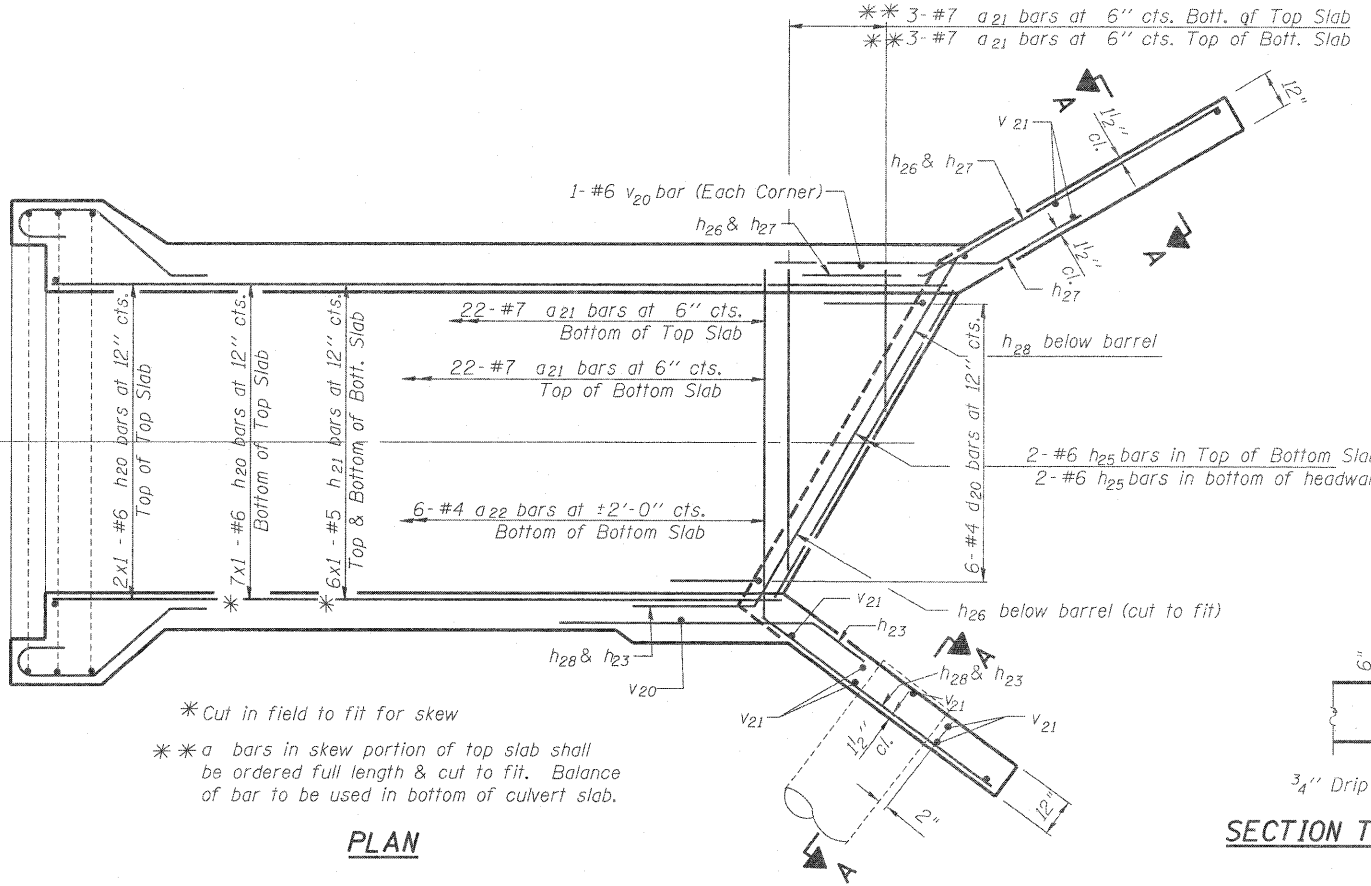


SECTION A-A

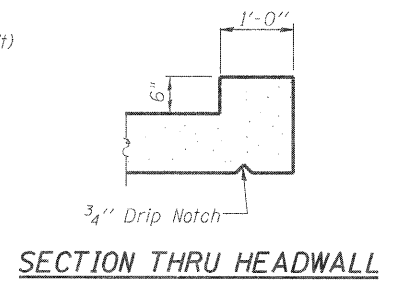
BAR d20

BILL OF MATERIAL

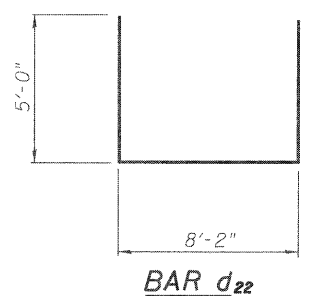
Bar	No.	Size	Length	Shape
a21	47	#7	8'-8"	U
a22	7	#4	6'-7"	—
d20	6	#4	4'-6"	U
d22	6	#4	18'-2"	U
h20	9	#6	12'-8"	—
h21	12	#5	12'-8"	—
h22	6	#6	12'-8"	—
h23	8	#7	8'-0"	—
h24	4	#6	7'-0"	—
h25	4	#6	7'-0"	—
h26	9	#7	14'-0"	—
h27	9	#7	8'-0"	—
h28	8	#7	11'-6"	—
h29	6	#6	10'-11"	—
v20	45	#6	7'-0"	—
v21	11	#4	9'-10"	—
x20	32	#4	6'-5"	U
Concrete Box Culverts	Cu. Yd.		16.8	
Reinforcement Bars	Pound		2,960	



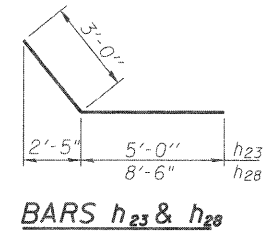
PLAN



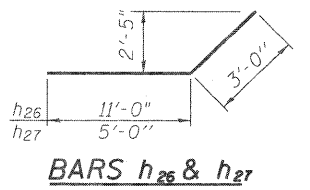
SECTION THRU HEADWALL



BAR d22



BARS h23 & h28



BARS h26 & h27

* Cut in field to fit for skew
 ** a bars in skew portion of top slab shall be ordered full length & cut to fit. Balance of bar to be used in bottom of culvert slab.

NOTES

A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.
 Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
 Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.

DESIGN STRESSES

$f_y = 60,000 \text{ psi}$
 $f'_c = 3,500 \text{ psi}$