

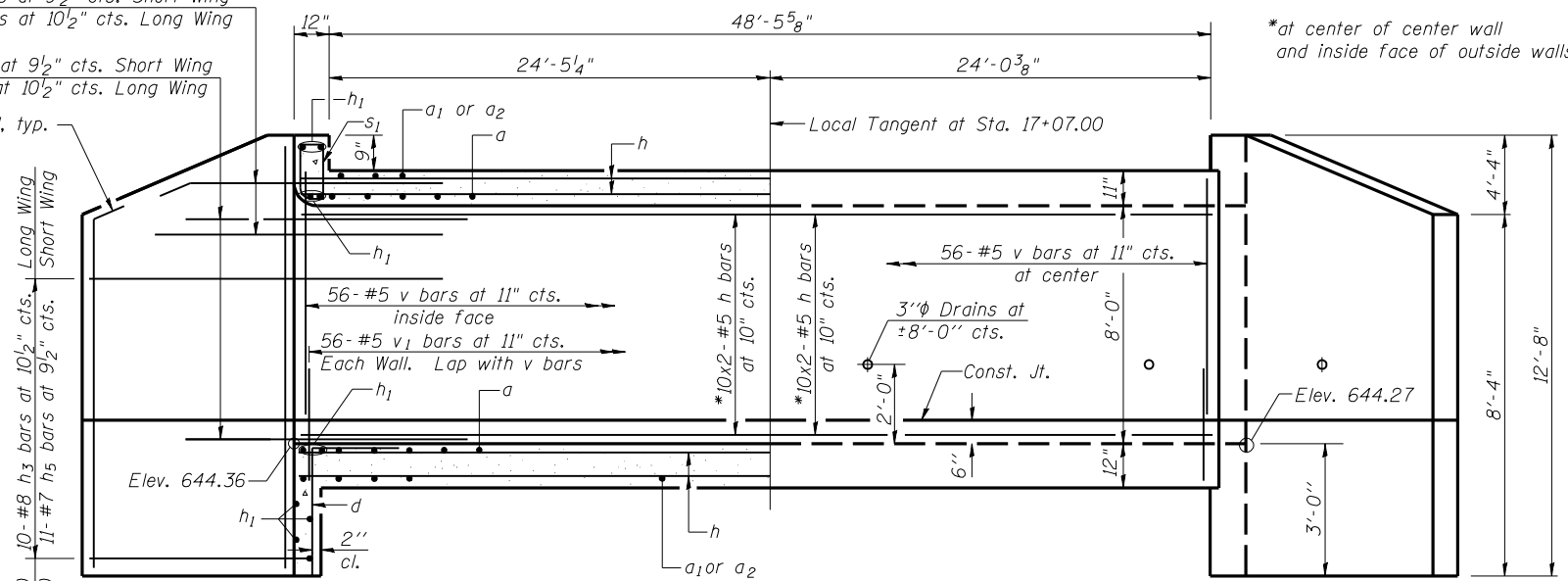
(Back)
4-#7 h₂ bars at 9 1/2" cts. Short Wing
4-#8 h₄ bars at 10 1/2" cts. Long Wing

(Front)
10-#7 h₂ bars at 9 1/2" cts. Short Wing
9-#8 h₄ bars at 10 1/2" cts. Long Wing

Bend in Field, typ.

(Back) 10-#8 h₃ bars at 10 1/2" cts. Long Wing
(Back) 11-#7 h₅ bars at 9 1/2" cts. Short Wing

(Back) 4-#4 v₂ bars Ea. Wing See Plan View

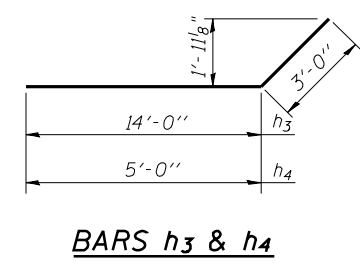


HALF LONG SECTION
Showing bars in Outside Wall

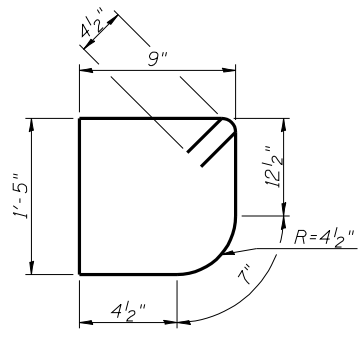
HALF ELEVATION
Showing bars in Center Wall

Dimensions are at right angles to Local Tangent

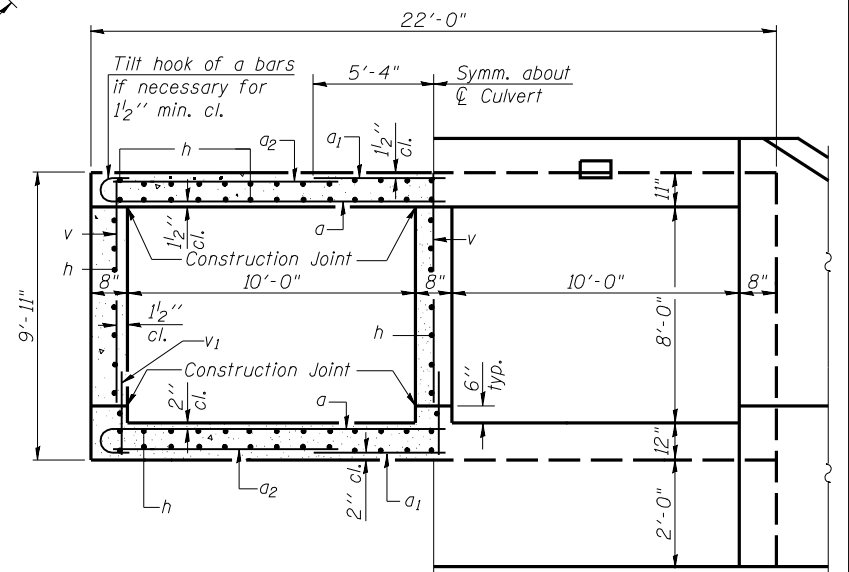
MIN. BAR LAP
#4 Bar = 1'-5"
#5 Bar = 1'-9"



BARS h₃ & h₄



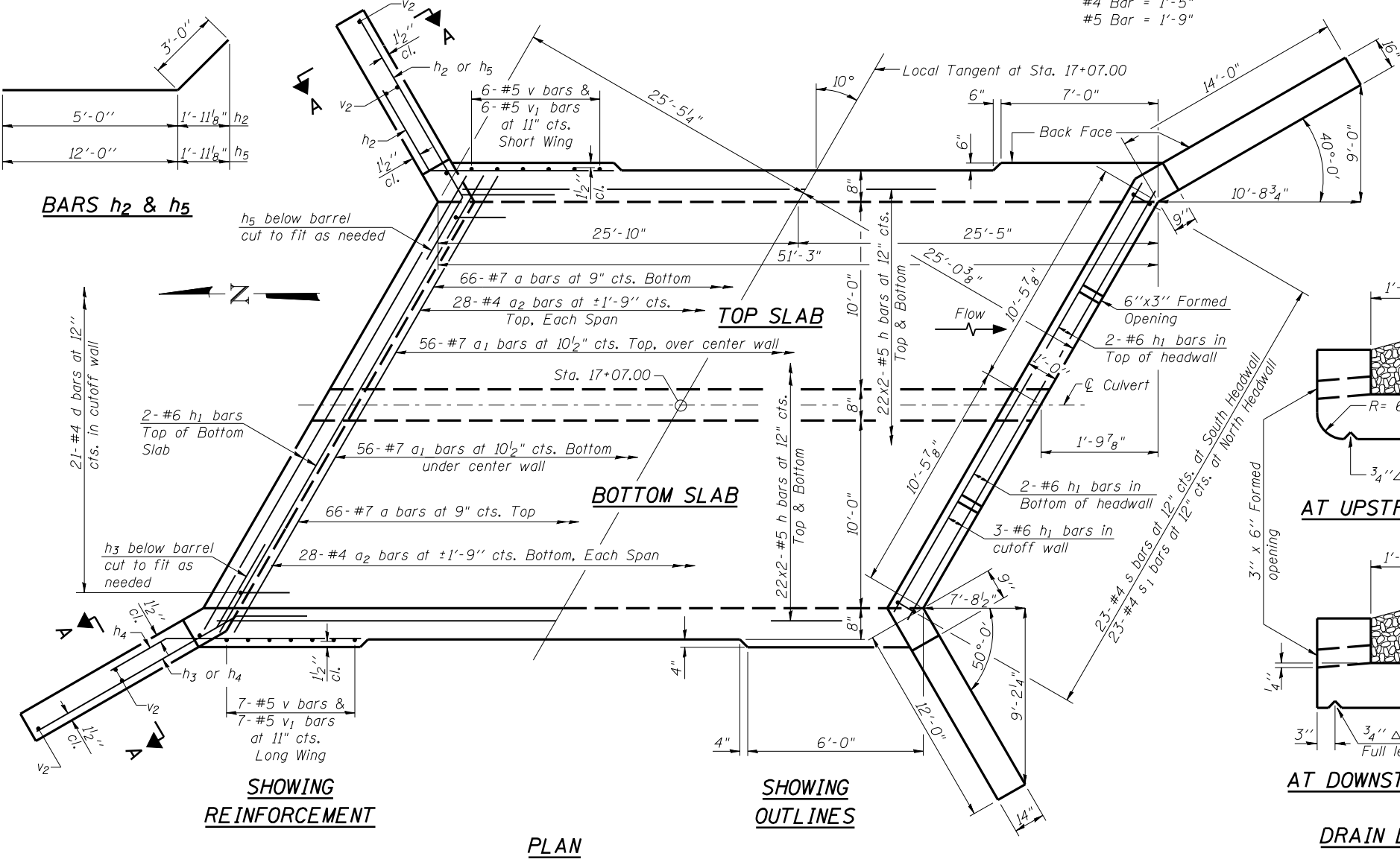
BAR s₁



HALF SECTION THRU BARREL

HALF END ELEVATION

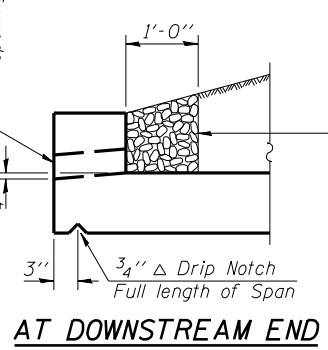
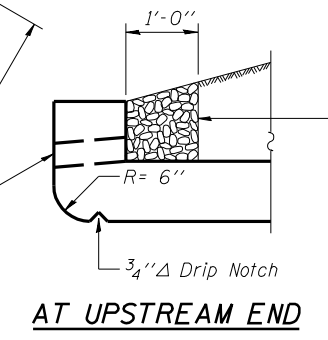
(Dimensions at right angles to Local Tangent)



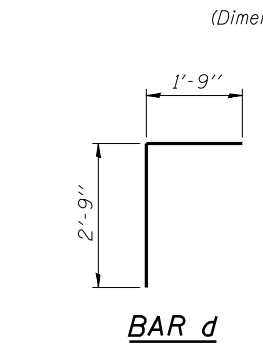
SHOWING REINFORCEMENT

SHOWING OUTLINES

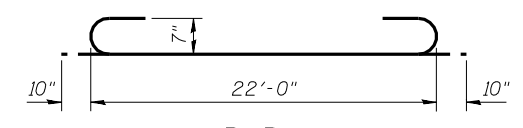
PLAN



DRAIN DETAIL



BAR d

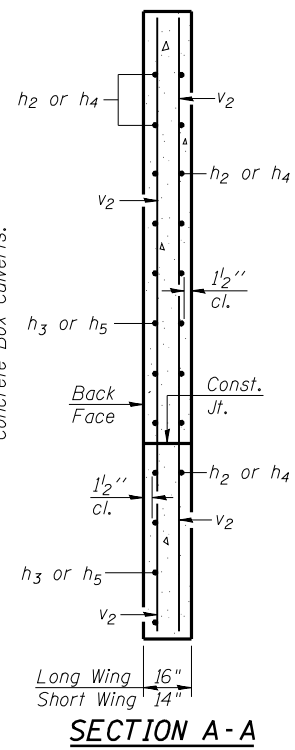


BAR a

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.
Bars indicated thus 22x2-#5 etc. indicates 22 lines of bars with 2 lengths per line.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	132	#7	23'-8"	U
a ₁	112	#7	10'-10"	—
a ₂	112	#4	7'-4"	—
d	42	#4	4'-6"	—
h	236	#5	26'-5"	—
h ₁	18	#6	22'-3"	—
h ₂	28	#7	8'-0"	—
h ₃	20	#8	17'-0"	—
h ₄	26	#8	8'-0"	—
h ₅	22	#7	15'-0"	—
s	23	#4	5'-1"	□
s ₁	23	#4	4'-11"	□
v	194	#5	8'-1"	—
v ₁	194	#5	3'-3"	—
v ₂	16	#4	12'-4"	—
Concrete Box Culverts			Cu. Yd.	142.2
Reinforcement Bars			Pound	21820



SECTION A-A



USER NAME =	DESIGNED - MTH	REVISED -
FILE NAME =	CHECKED - ZTB	REVISED -
PLOT SCALE =	DRAWN - AJF	REVISED -
PLOT DATE =	CHECKED - MTH	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CULVERT DETAILS
STRUCTURE NO. 011-3413**

SHEET NO. 2 OF 3 SHEETS

F.A.P. RTE. 322	SECTION 11-13	COUNTY CHRISTIAN	TOTAL SHEETS 437	SHEET NO. 259
CONTRACT NO. 72961			ILLINOIS FED. AID PROJECT	