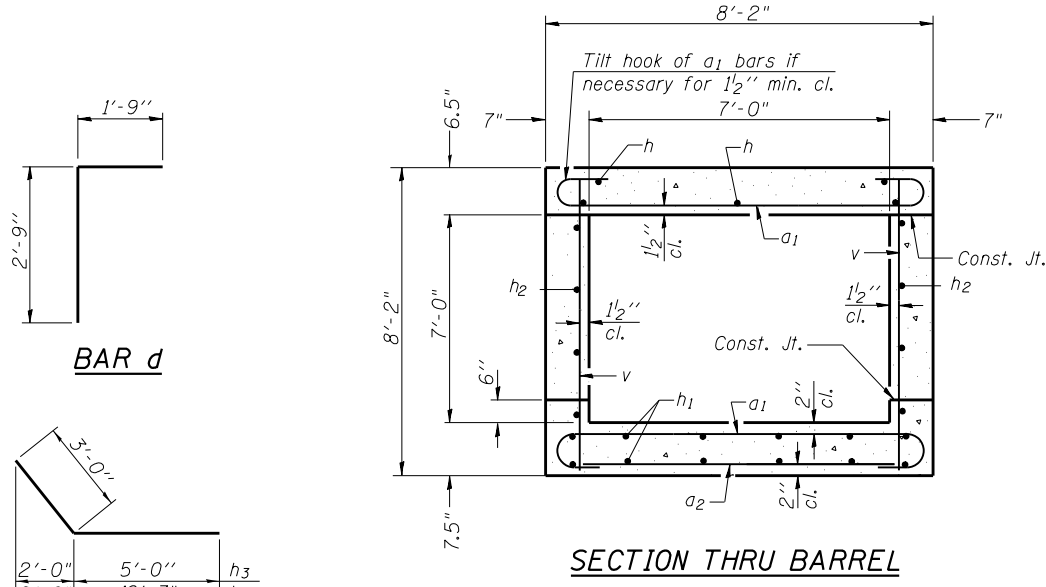


HALF LONG. SECTION

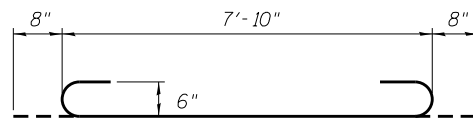
HALF ELEVATION



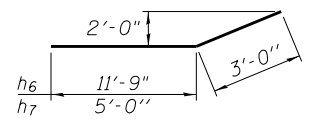
BAR d

BARS h3 & h8

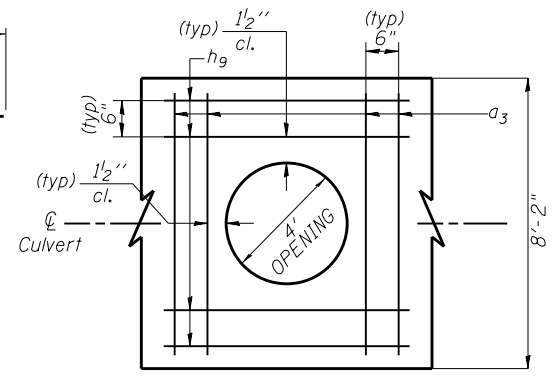
SECTION THRU BARREL



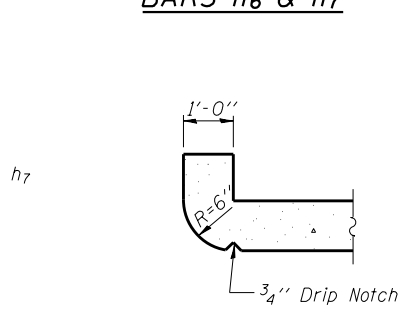
BAR a1



BARS h6 & h7



DETAIL FOR MANHOLE OPENING
REINF. IN BOTTOM OF SLAB

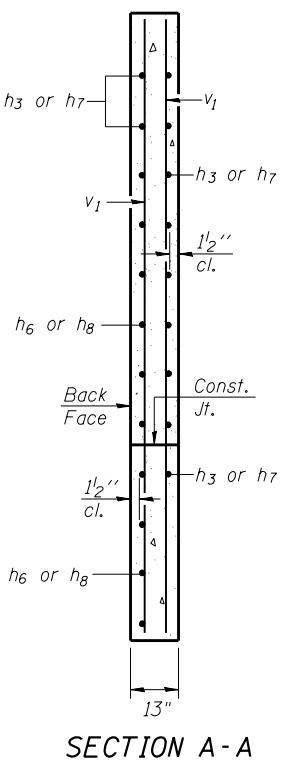


SECTION THRU HEADWALL
(Up Stream End Only)

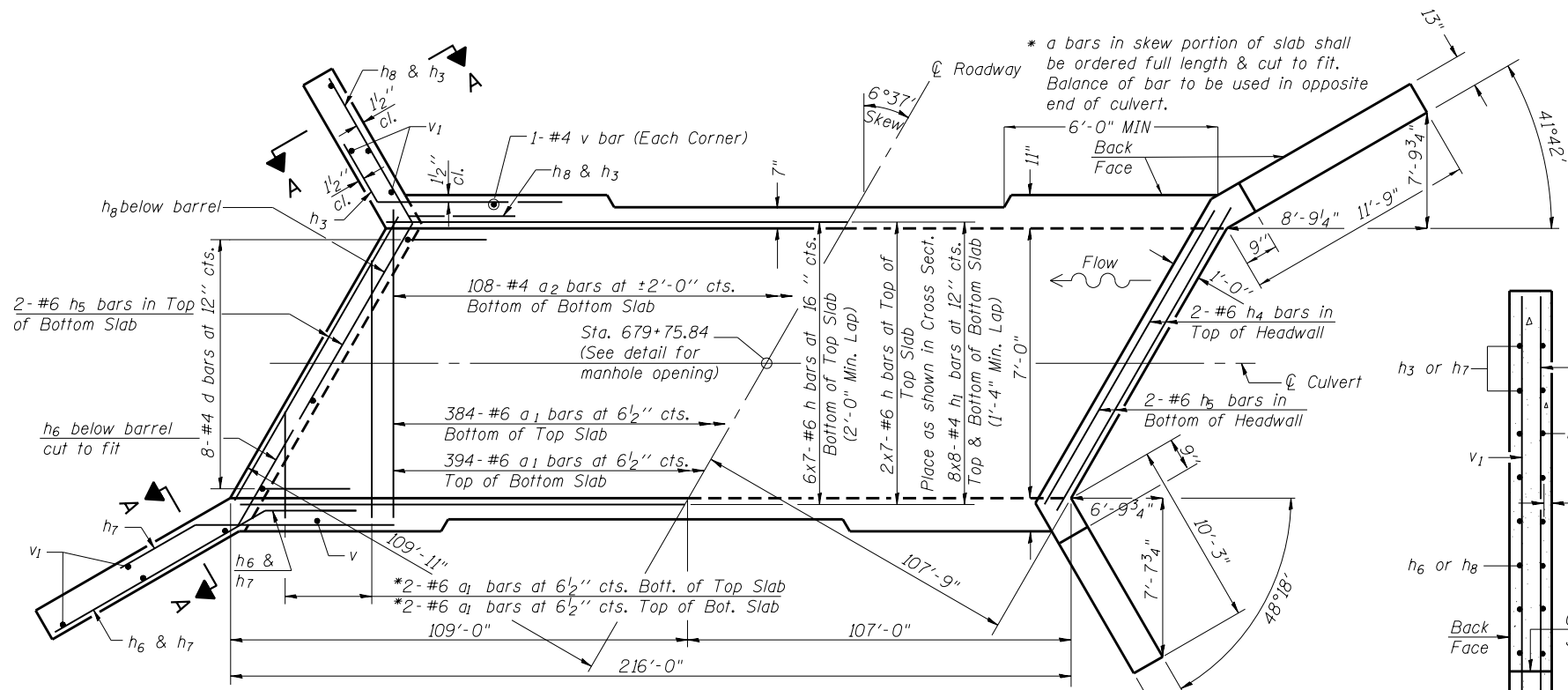
DESIGN STRESSES

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

LOADING HL-93



SECTION A-A



SHOWING REINFORCEMENT

SHOWING OUTLINES

PLAN



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.

DESIGNED	TCD
CHECKED	DSP
DRAWN	ZDL
CHECKED	DSP

SSB-H-R 7-1-10

FILE NAME = D468409-SHT-15-DETAIL-7X7 BOX CULVERT.dgn	USER NAME = zachl	DESIGNED - DBS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SPECIAL DETAILS CAST IN PLACE 7' X 7' BOX CULVERT		F.A.P. RTE. 313	SECTION 7-2 ; 6-1	COUNTY HENDERSON	TOTAL SHEETS 976	SHEET NO. 536	
PLOT SCALE = 100.0000' / 1" =	PLOT DATE = 10/16/2012	DRAWN - PSBA	REVISED -		SCALE: NTS	SHEET 15 OF 21 SHEETS	STA. TO STA.	CONTRACT NO. 68409				
		CHECKED - CSB	REVISED -		ILLINOIS FED. AID PROJECT							
		DATE - 10/2012	REVISED -									

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1	782	#6	9'-2"	U
a2	110	#4	7'-3"	—
a3	4	#8	7'-3"	—
d	16	#4	4'-6"	L
h	56	#6	32'-7"	—
h1	128	#4	28'-2"	—
h2	98	#6	32'-7"	—
h3	22	#8	8'-0"	—
h4	4	#6	8'-1"	—
h5	8	#6	8'-1"	—
h6	20	#8	14'-9"	—
h7	22	#8	8'-0"	—
h8	20	#8	13'-3"	—
h9	4	#6	8'-0"	—
v	742	#4	7'-10"	—
v1	16	#4	10'-9"	—
Porous Granular Embankment			Cu. Yd.	861
Concrete Box Culverts			Cu. Yd.	162.0
Reinforcement Bars			Pound	28,000