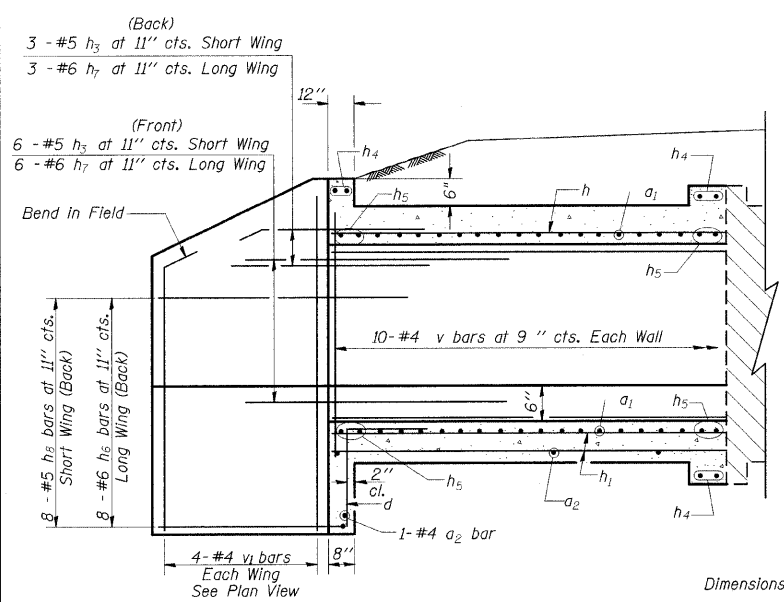


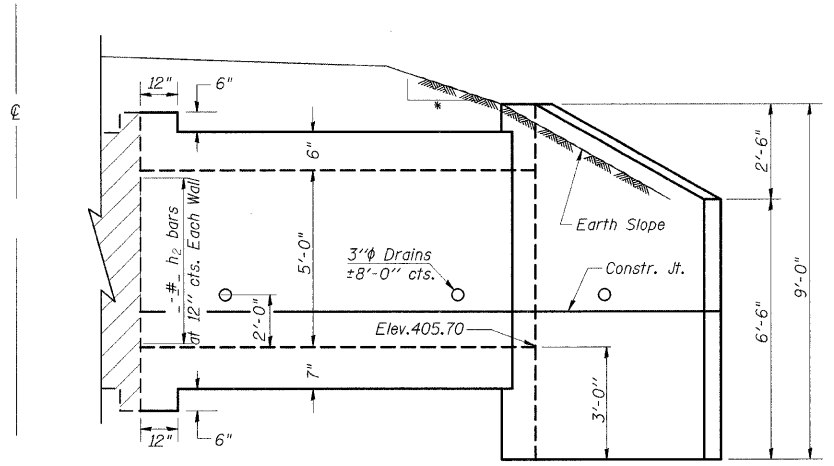
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
932	(8,9,11)W,RS-1	*	401	188
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* JOHNSON/POPE

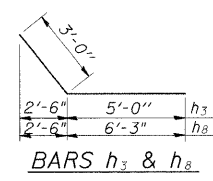


HALF LONG. SECTION

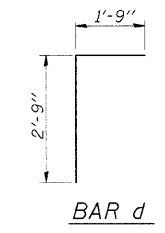


HALF ELEVATION

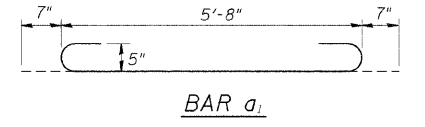
- 4:1 TO CLEAR ZONE
- 3:1 AFTER CLEAR ZONE



BARS h_3 & h_8



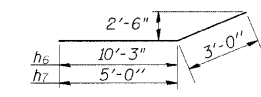
BAR d



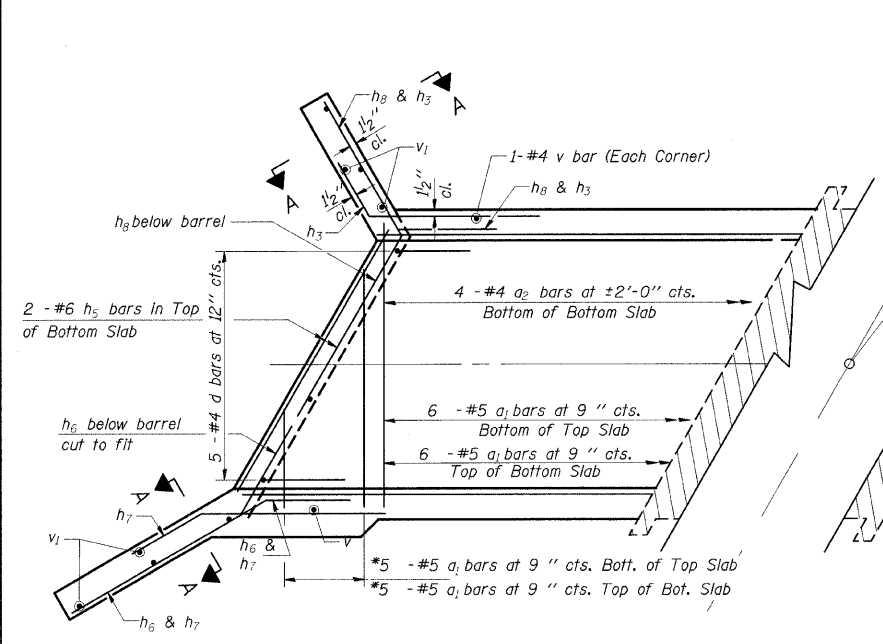
BAR a_1

DESIGN STRESSES
 $f_y = 60,000$ psi
 $f'_c = 3,500$ psi

LOADING HS 20-44 & ALT.

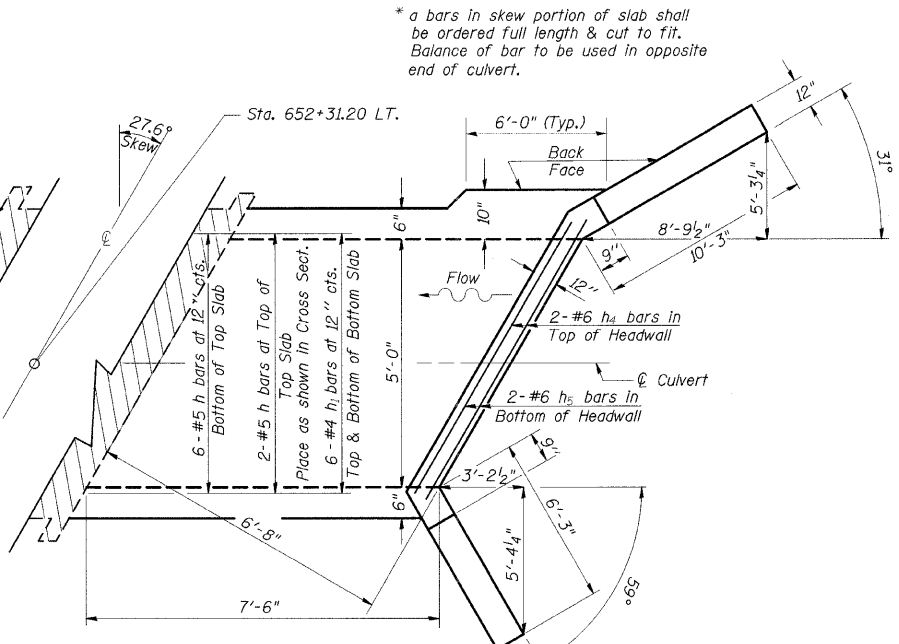


BARS h_6 & h_7



SHOWING REINFORCEMENT

PLAN

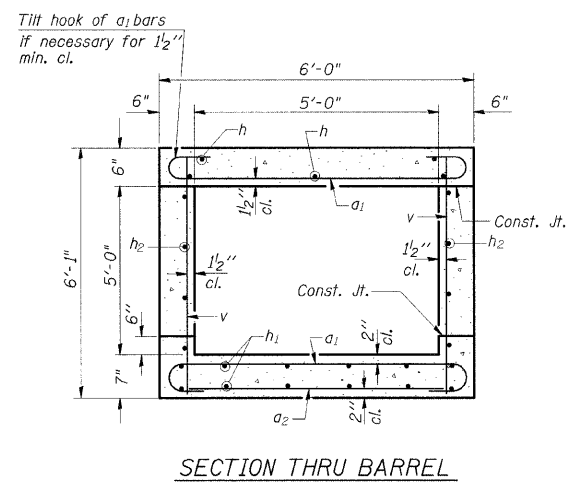


SHOWING OUTLINES

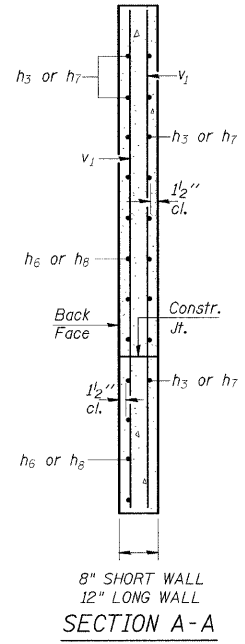
NOTES

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 AASHTO M-31, M-42 or M-53, Grade 60.
Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.
All construction joints shall be bonded.

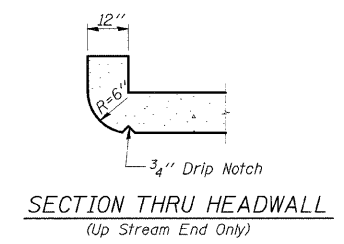
* a bars in skew portion of slab shall be ordered full length & cut to fit. Balance of bar to be used in opposite end of culvert.



SECTION THRU BARREL



SECTION A-A



SECTION THRU HEADWALL
(Up Stream End Only)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a_1	22	#5	6'-10"	
a_2	5	#4	5'-3"	
d	5	#4	4'-6"	
h	8	#5	7'-3"	
h_1	12	#4	7'-3"	
h_2	10	#5	7'-3"	
h_3	9	#5	8'-0"	
h_4	6	#6	5'-10"	
h_5	8	#6	6'-5"	
h_6	8	#6	13'-3"	
h_7	9	#6	8'-0"	
h_8	8	#5	9'-3"	
v	20	#4	5'-9"	
v_1	8	#4	8'-7"	
Expansion Bolts $3/4$ "				Each 16
Concrete Box Culverts				Cu. Yd. 8.2
Reinforcement Bars				Pound 1060

PRECAST OPTION NOT ALLOWED

ILLINOIS DEPARTMENT OF TRANSPORTATION
BOX CULVERT EXTENSION
STATION 652+31.2 LT.
5' X 5', SKEW 27.6° RT. AH.
EXTEND 7'-6"