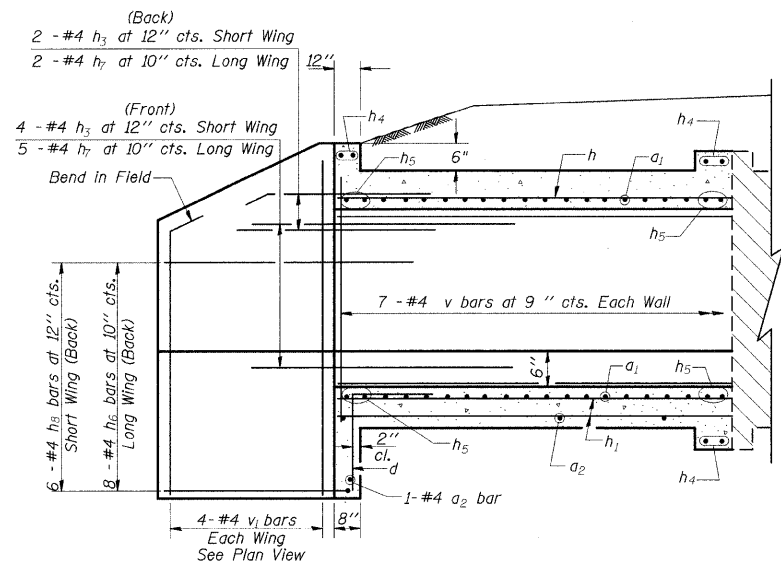
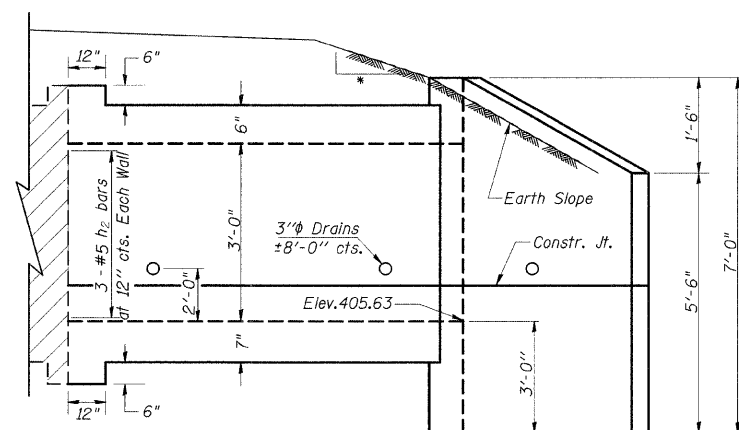


F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
932	(8,9,11)W,RS-1	*	401	190
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
JOHNSON/POPE				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

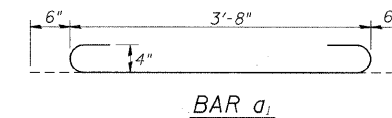
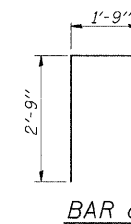
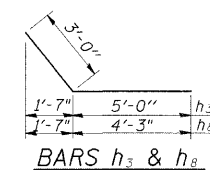


HALF LONG SECTION



HALF ELEVATION

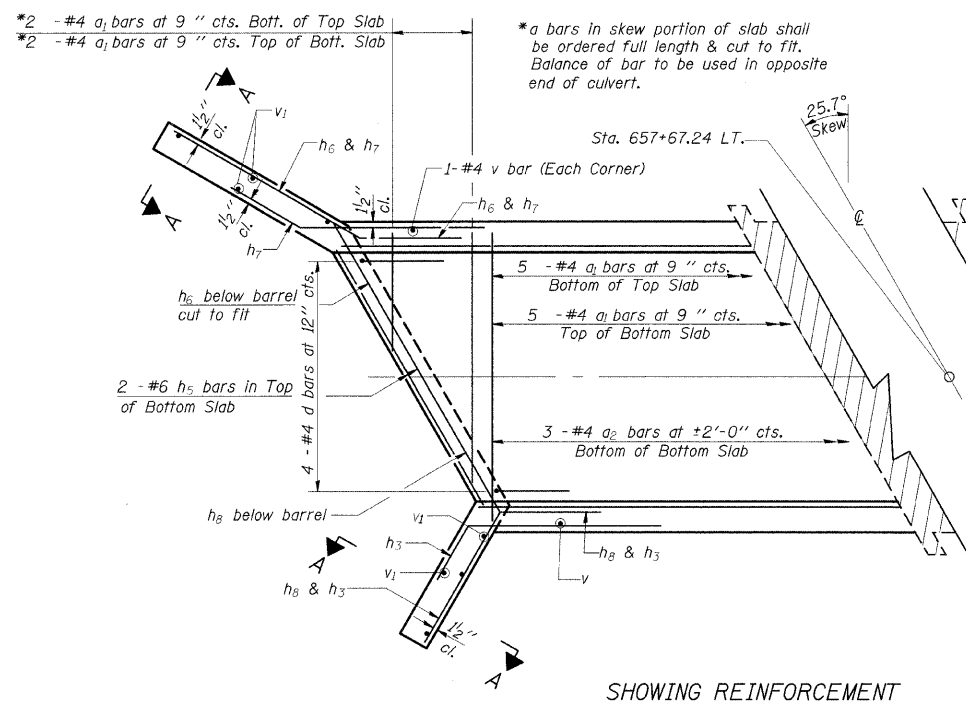
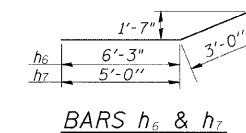
- 4:1 TO CLEAR ZONE
- 3:1 AFTER CLEAR ZONE



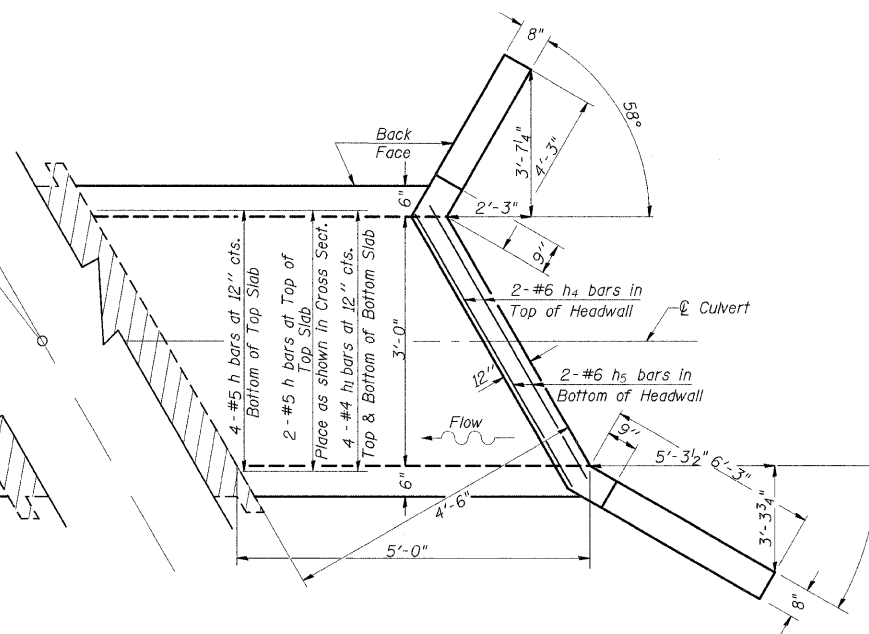
DESIGN STRESSES

f_y = 60,000 psi
f'c = 3,500 psi

LOADING HS 20-44 & ALT.



SHOWING REINFORCEMENT

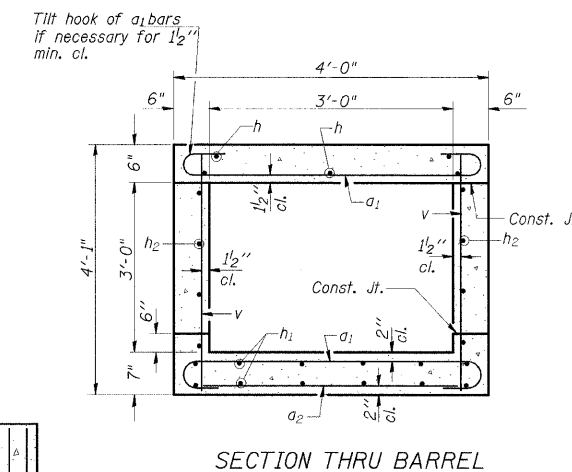


SHOWING OUTLINES

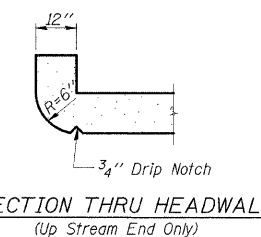
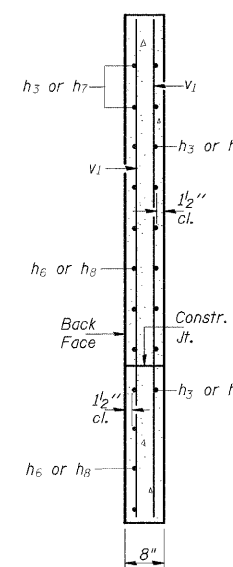
PLAN

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 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.



SECTION THRU BARREL



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a ₁	14	#4	4'-8"	U
a ₂	4	#4	3'-3"	—
d	4	#4	4'-6"	L
h	6	#5	4'-9"	—
h ₁	8	#4	4'-9"	—
h ₂	6	#5	4'-9"	—
h ₃	6	#4	8'-0"	—
h ₄	6	#6	3'-7"	—
h ₅	8	#6	4'-1"	—
h ₆	8	#4	9'-3"	—
h ₇	7	#4	8'-0"	—
h ₈	6	#4	7'-3"	—
v	16	#4	3'-9"	—
v ₁	8	#4	6'-7"	—
Expansion Bolts 3/4" Each 10				
Concrete Box Culverts Cu. Yd. 3.3				
Reinforcement Bars Pound 460				

ILLINOIS DEPARTMENT OF TRANSPORTATION
BOX CULVERT EXTENSION
STATION 657+67.24 LT.
3' X 3', SKEW 25.7° LT. AH.
EXTEND 5'-0"