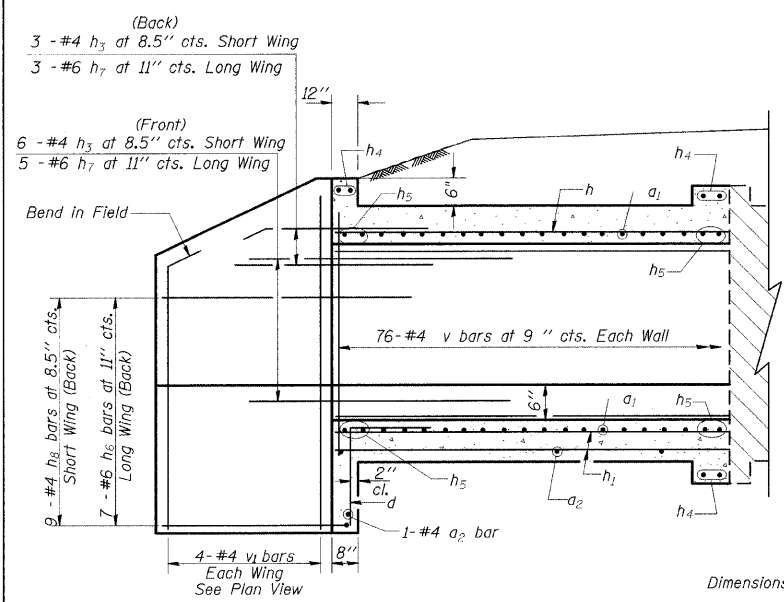
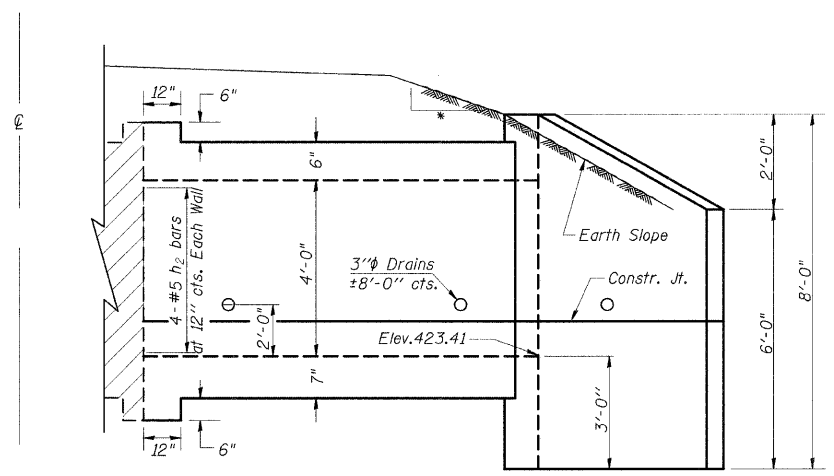


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
932	(8,9,11)W,RS-1		401	173
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
* JOHNSON/POPE				

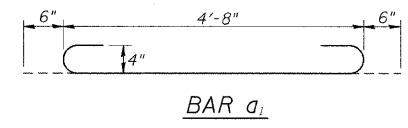
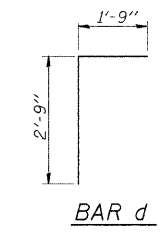
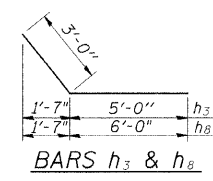


HALF LONG. SECTION



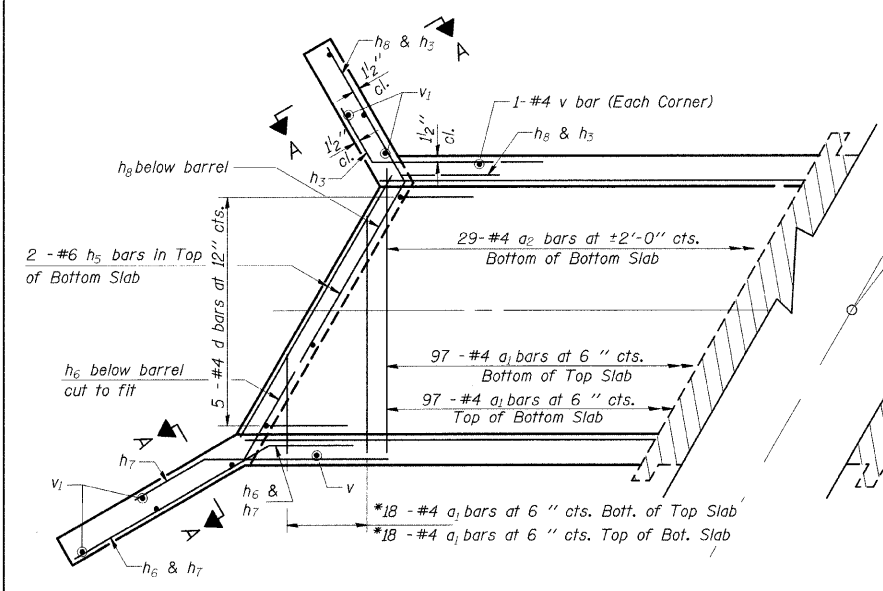
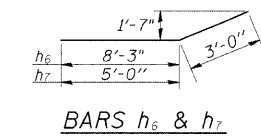
HALF ELEVATION

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

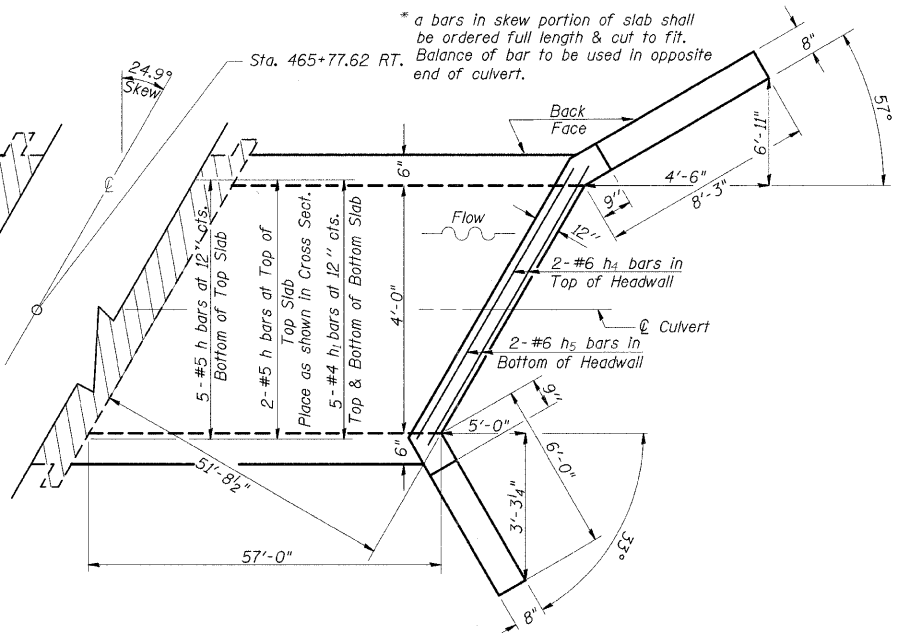


DESIGN STRESSES
fy = 60,000 psi
f'c = 3,500 psi

LOADING HS 20-44 & ALT.



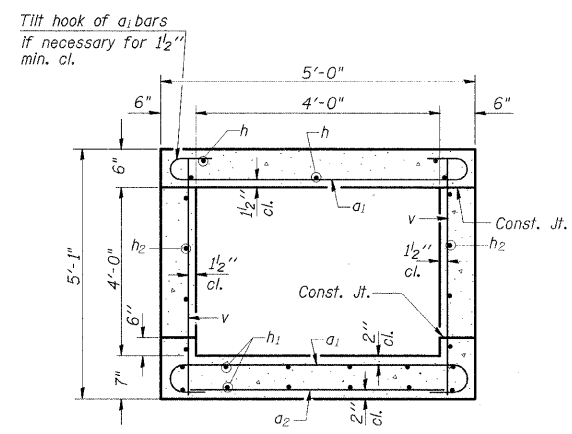
SHOWING REINFORCEMENT



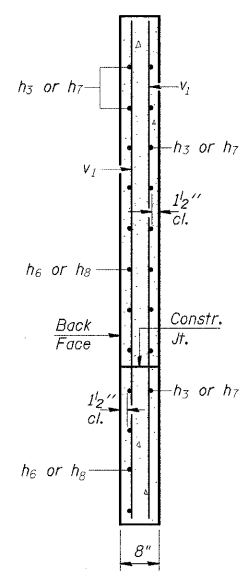
SHOWING OUTLINES

NOTES

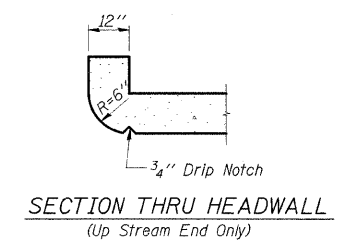
A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.
Reinforcement Bars shall conform to the requirements of AASHTO M-31, M-42 or M-53, Grade 60.
Bars indicated thus 12 x 4-#5 etc. Indicates 12 lines of bars with 4 lengths per line.
All construction joints shall be bonded.



SECTION THRU BARREL



SECTION A-A



SECTION THRU HEADWALL
(Up Stream End Only)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1	230	#4	5'-8"	U
a2	30	#4	4'-3"	—
d	10	#4	4'-6"	L
h	14	#5	29'-3"	—
h1	20	#4	29'-1"	—
h2	16	#5	29'-3"	—
h3	9	#4	8'-0"	—
h4	6	#6	4'-7"	—
h5	8	#6	4'-2"	—
h6	7	#6	11'-3"	—
h7	8	#6	8'-0"	—
h8	9	#4	9'-0"	—
v	154	#4	4'-9"	—
v1	8	#4	7'-1"	—
Expansion Bolts 3/4"				Each 12
Concrete Box Culverts				Cu. Yd. 22.8
Reinforcement Bars				Pound 3230

PRECAST OPTION NOT ALLOWED

ILLINOIS DEPARTMENT OF TRANSPORTATION
BOX CULVERT EXTENSION
STATION 465+77.62 RT.
4' X 4', SKEW 24.9° RT. AH.
EXTEND 57'-0"