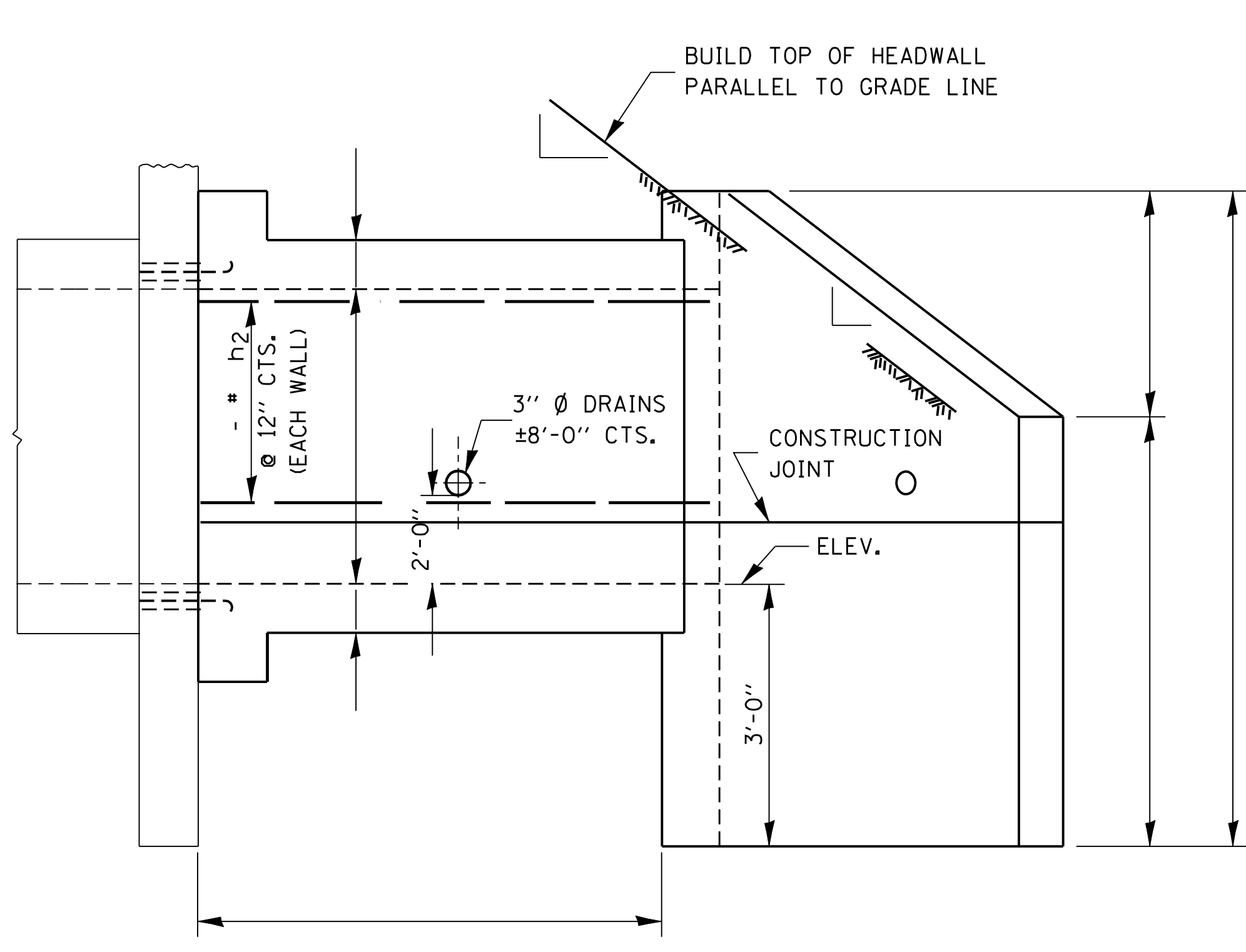
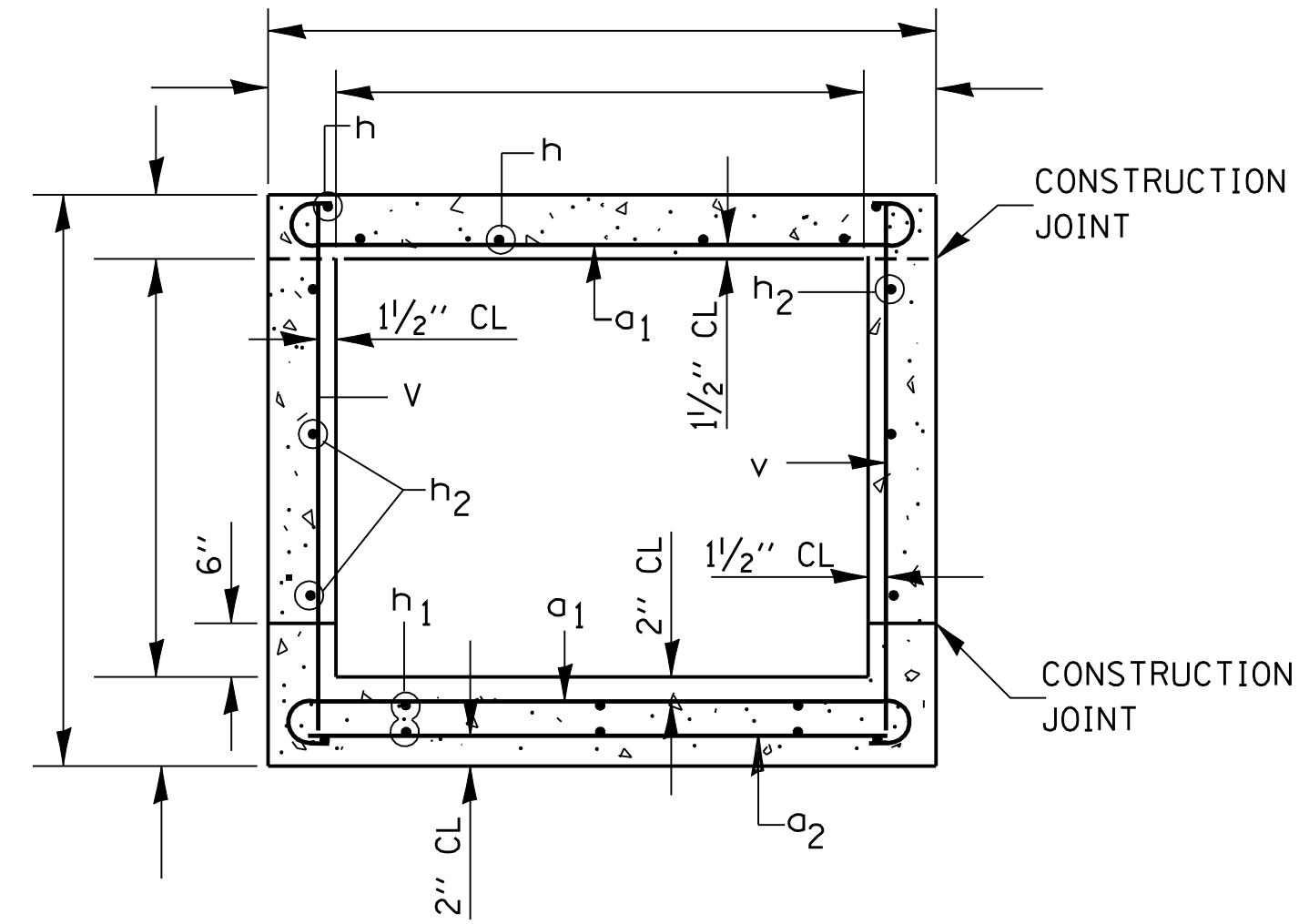


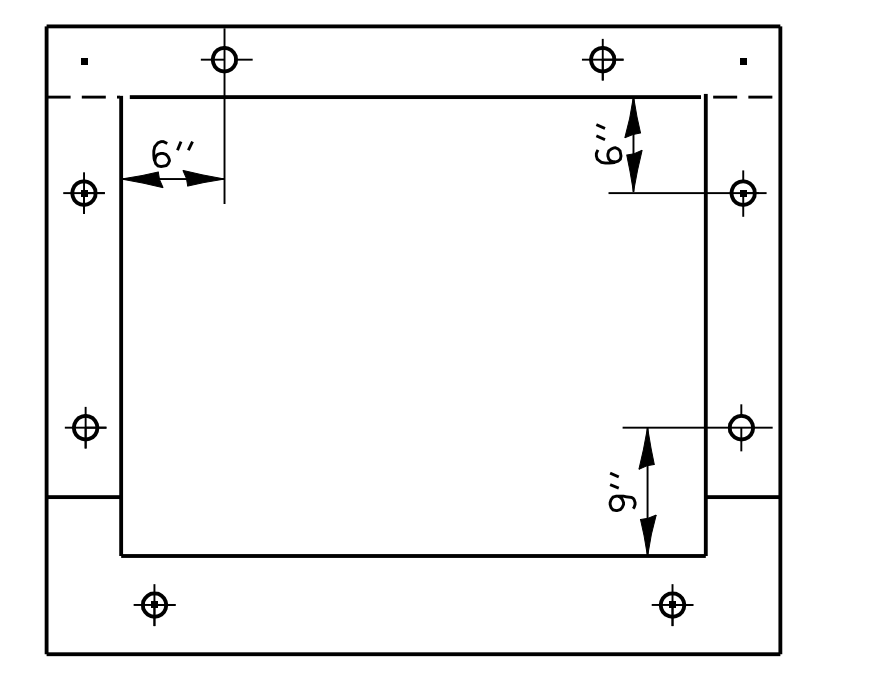
HALF LONG SECTION



HALF ELEVATION



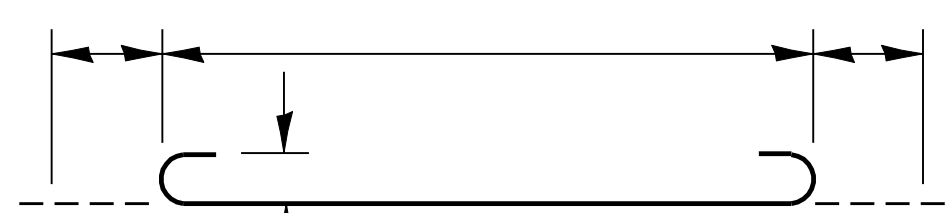
SECTION THRU BARREL



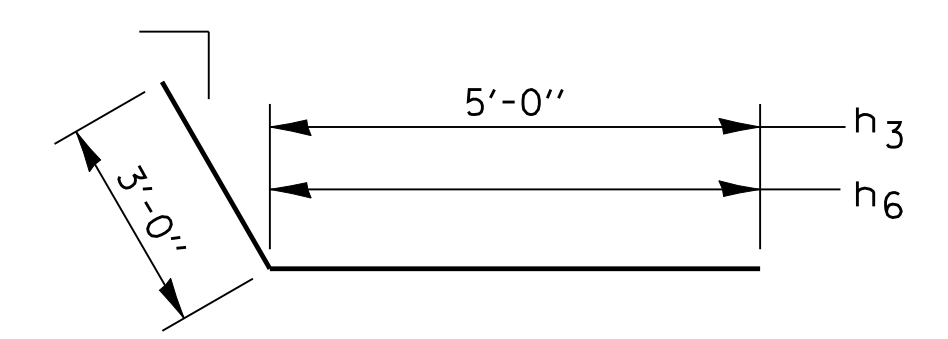
SIDEWALLS @ " CTS.
TOP & BOTTOM . . . @ " CTS.

EXPANSION BOLT LOCATION

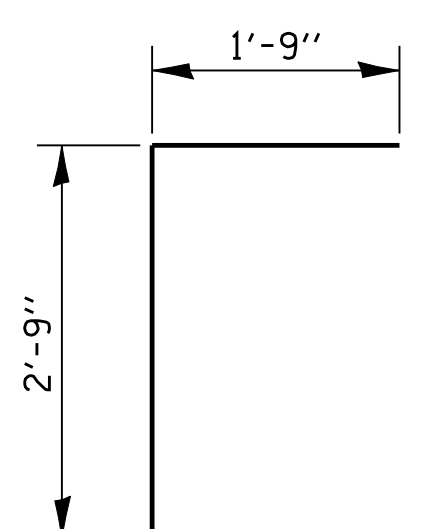
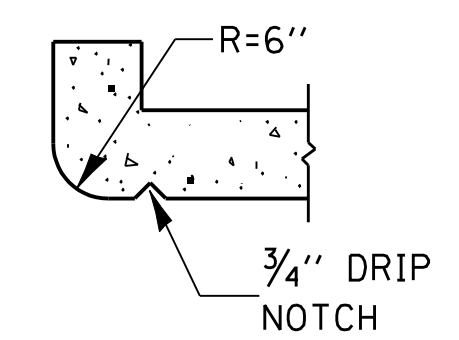
NOTE: EPANSION BOLTS SHALL CONSIST OF SELF DRILLING EXPANSION SHIELD AND 3/4" DIAMETER HOOKED BOLTS. HOOKED BOLTS SHALL EXTEND A MINIMUM OF 9" INTO NEW CONCRETE. MINIMUM CERTIFIED PROOF LOAD = 4,080 LBS.



BAR a1



BARS h3 & h6

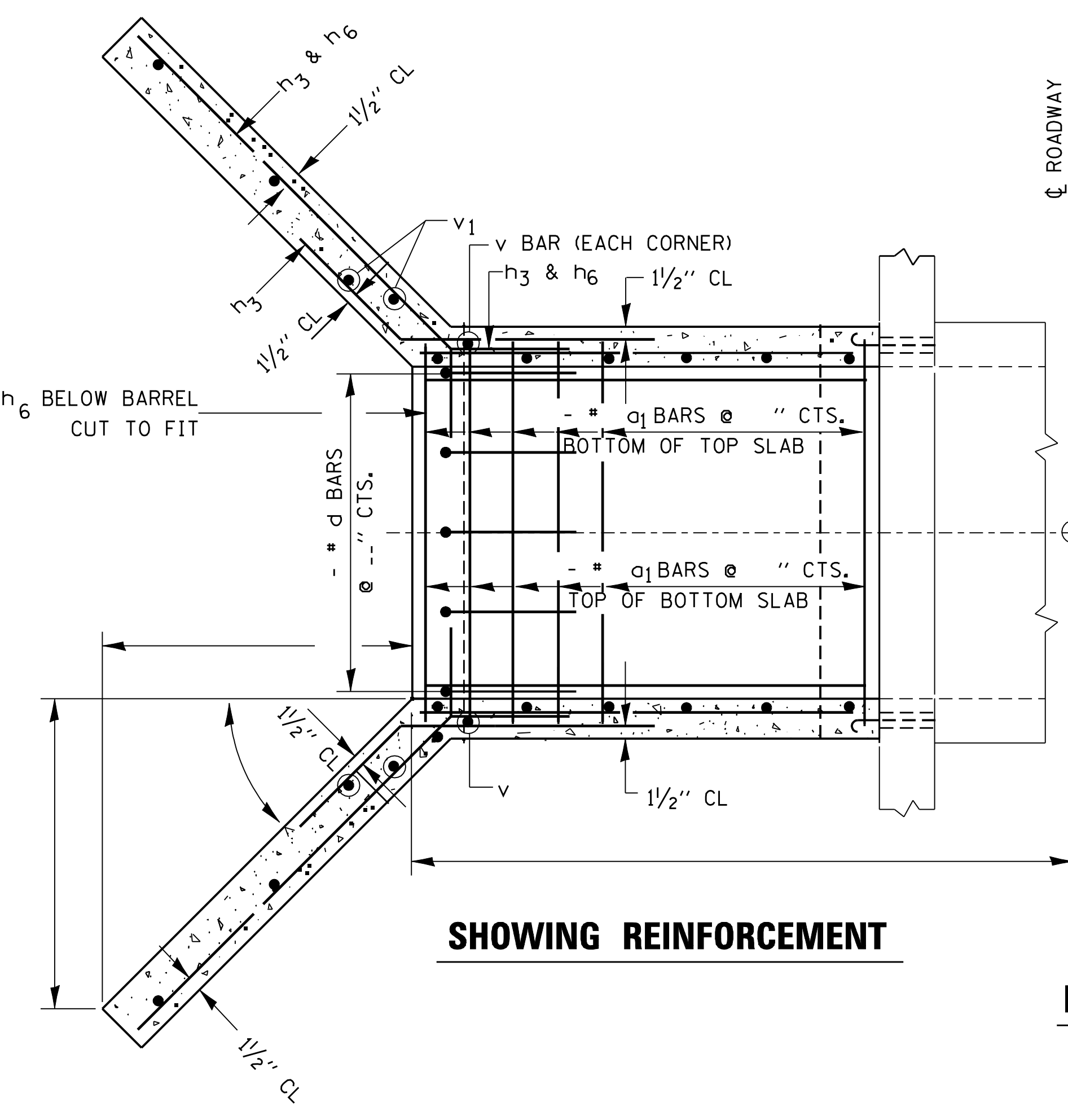


BAR d

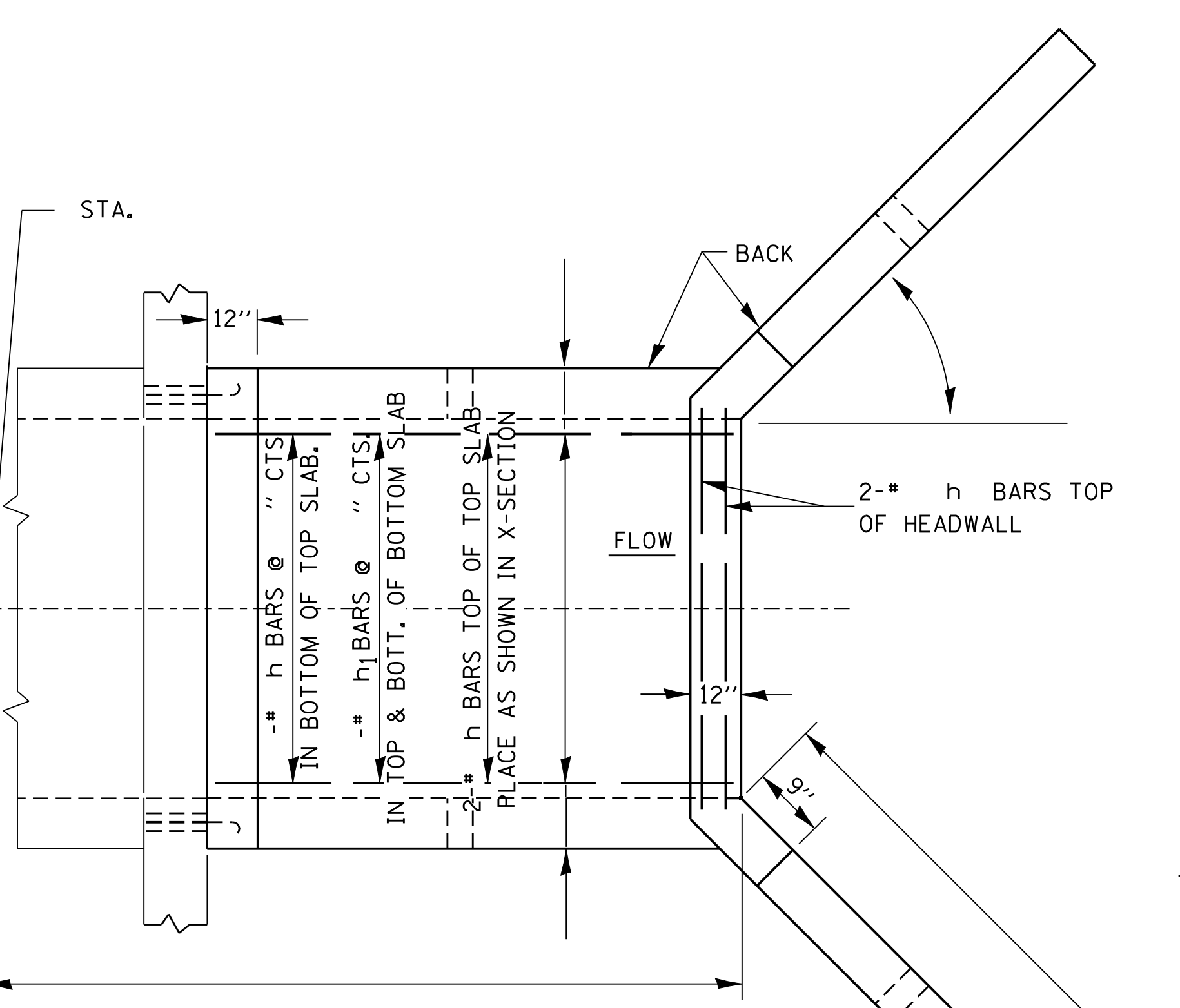
SECTION THRU HEADWALL
(UP STREAM END ONLY)

GENERAL NOTES

CLASS SI CONCRETE SHALL BE USED THROUGHOUT.
AT LEAST SIX FEET OF BARREL SHALL BE POURED MONOLITHICALLY WITH WINGWALLS.
EXPOSED EDGES SHALL BE BEVELED 3/4".
FOR BACKFILLING AND EMBANKMENTS SEE STANDARD SPECIFICATIONS.
TILT HOOK OF a1 BARS, IF NECESSARY, TO OBTAIN 1/2" MINIMUM CLEARANCE AT TOP OF HOOK.
REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31, M-42, ORM-53, GRADE 60.



SHOWING REINFORCEMENT



SHOWING OUTLINES

PLAN

DESIGN STRESSES

fy=60,000 p.s.i.
f'c= 3,500 p.s.i.

LOADING HS 20-44 & ALT.

BILL OF MATERIALS

BAR	NUMBER	SIZE	LENGTH
a1			
a2			
a3			
d			
h			
h1			
h2			
h3			
h4			
h6			
v			
v1			
v2			
CONCRETE BOX CULVERTS	CU. YDS.		
REINFORCEMENT BARS	LBS.		
EXPANSION BOLTS	EACH		