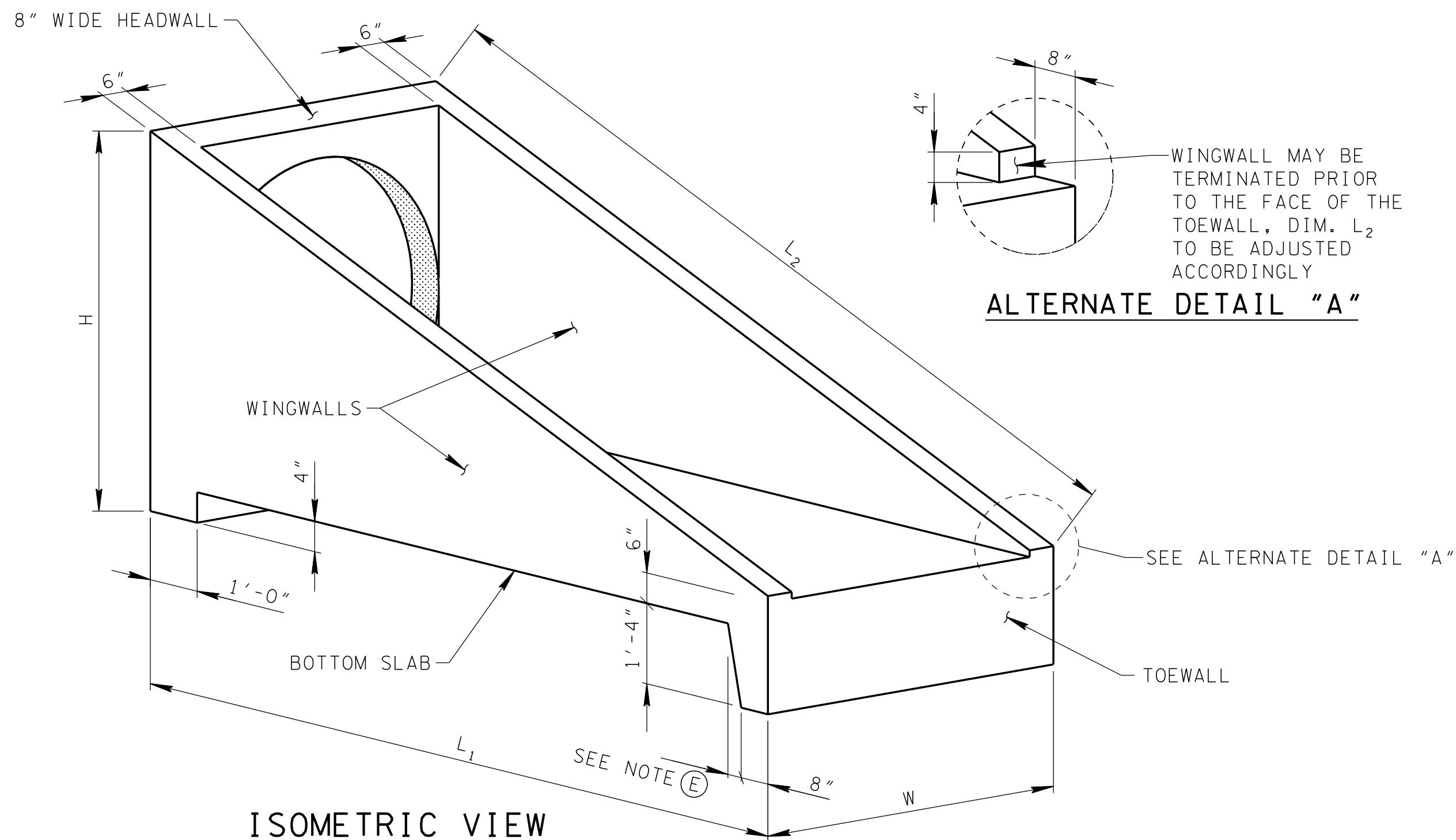
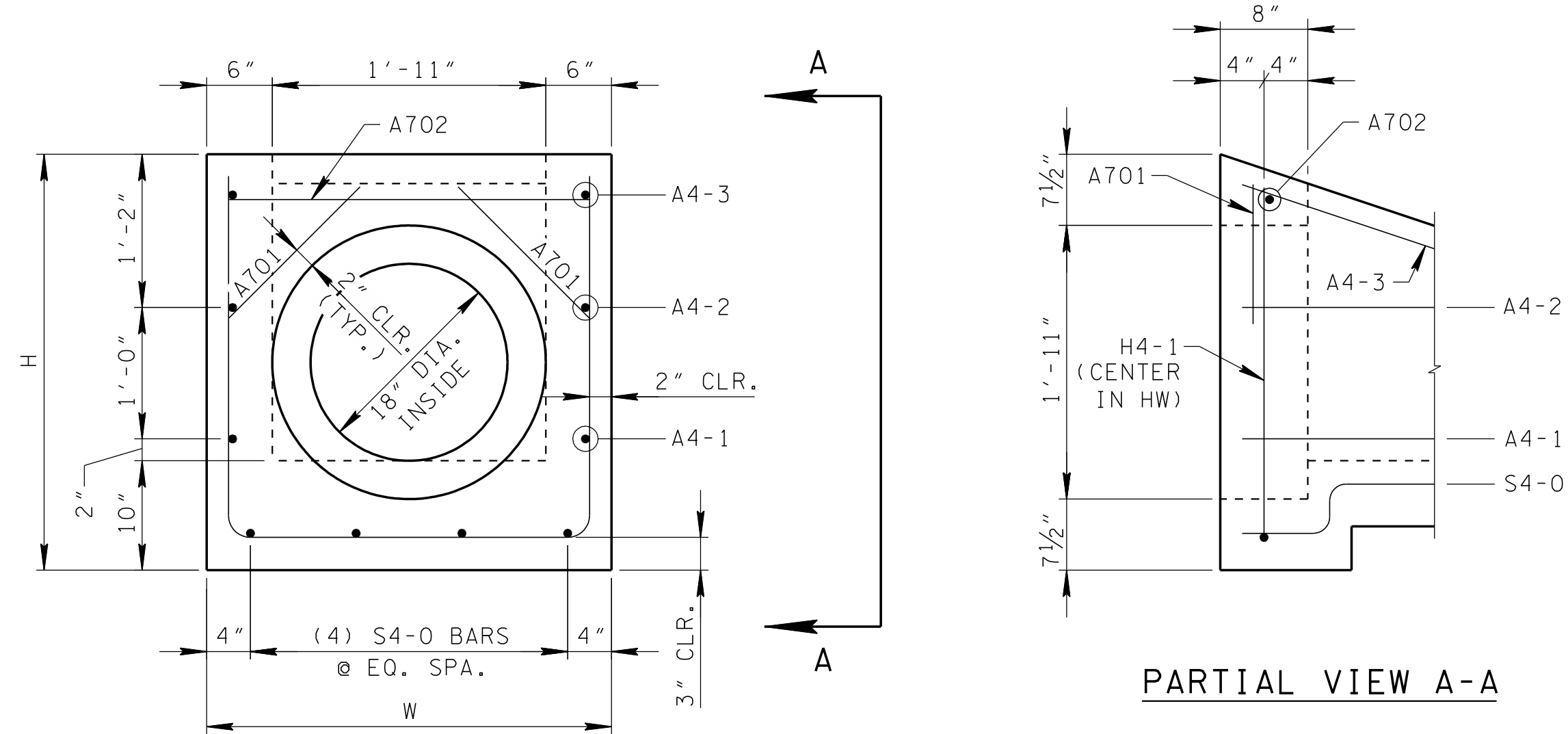




ISOMETRIC VIEW

NOTE: $\frac{3}{4}$ " CHAMFER REQUIRED ON ALL EXPOSED EDGES



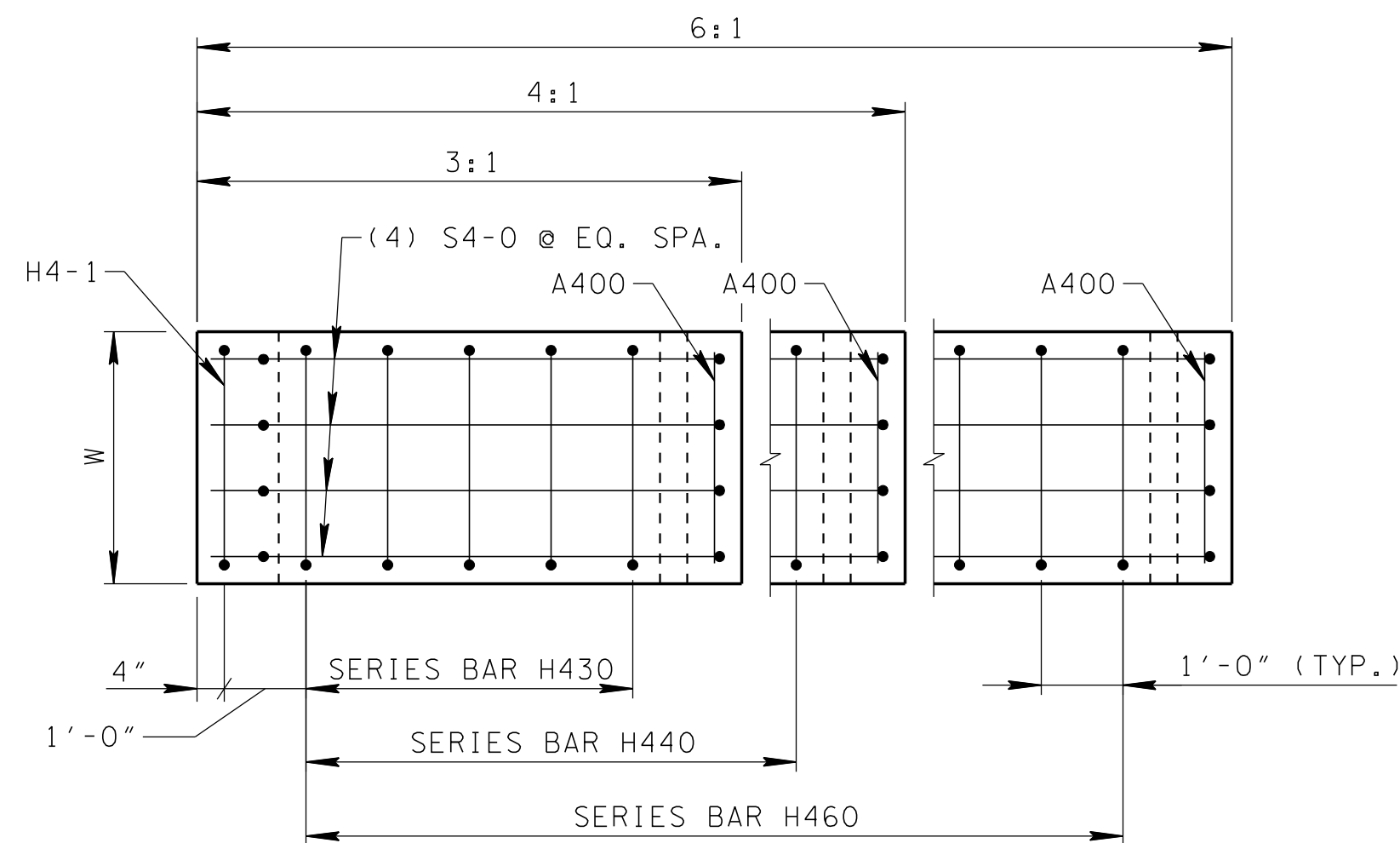
ELEVATION

HEADWALL DETAILS

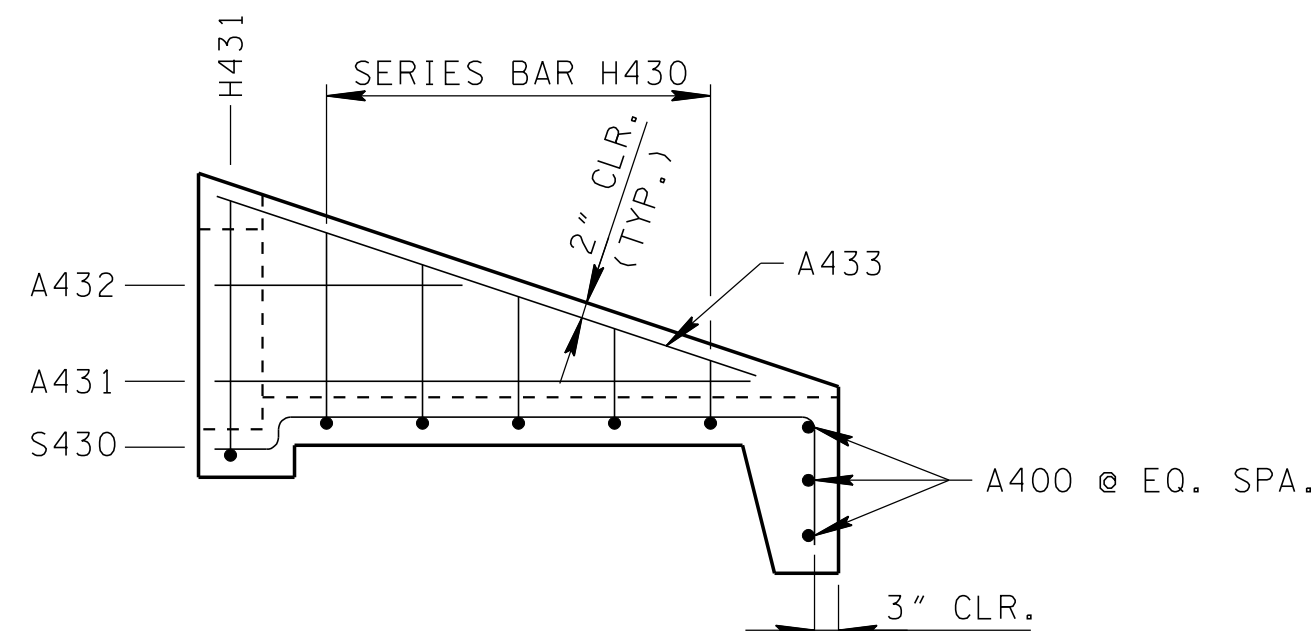
NOTES: INSTALL BARS A701 AT 45°
SEE GENERAL NOTES (C) & (F)

ISOMETRIC HALF-SECTION SHOWING REINFORCEMENT

(3:1 SHOWN, 4:1 & 6:1 SIMILAR)
SEE GENERAL NOTE (C)

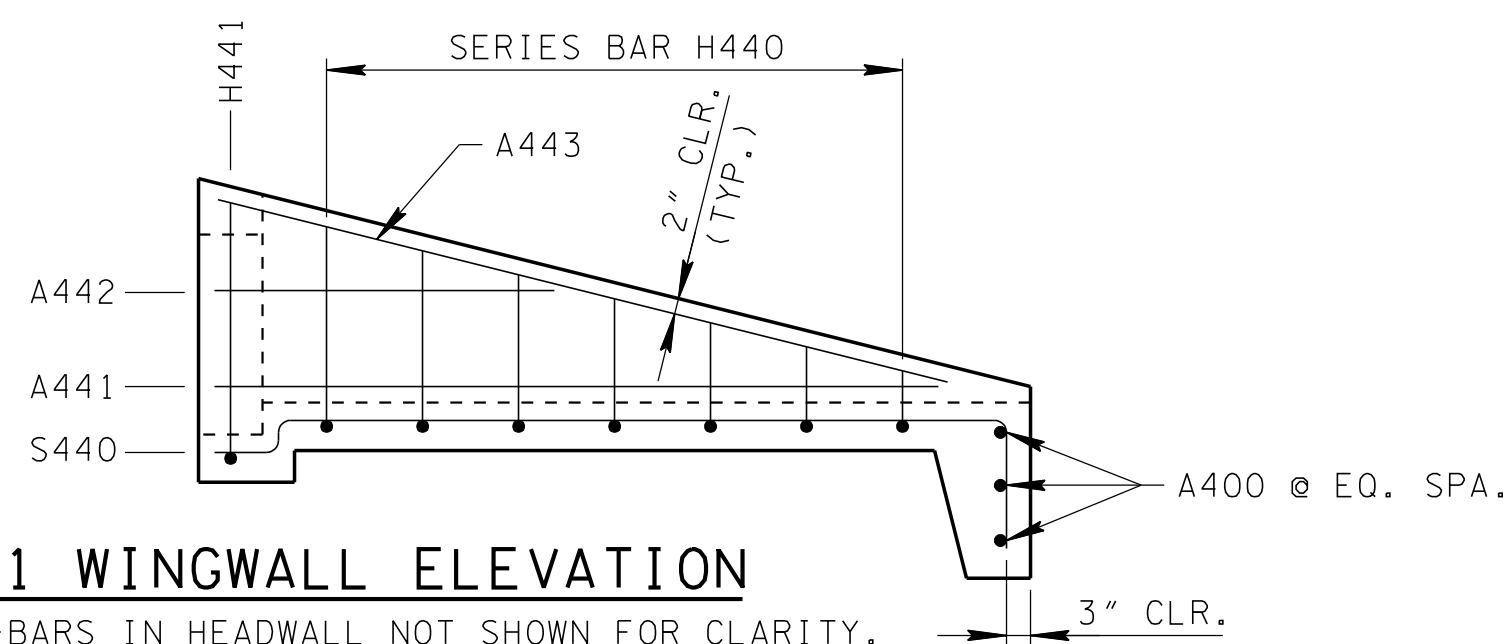


BOTTOM SLAB PLAN



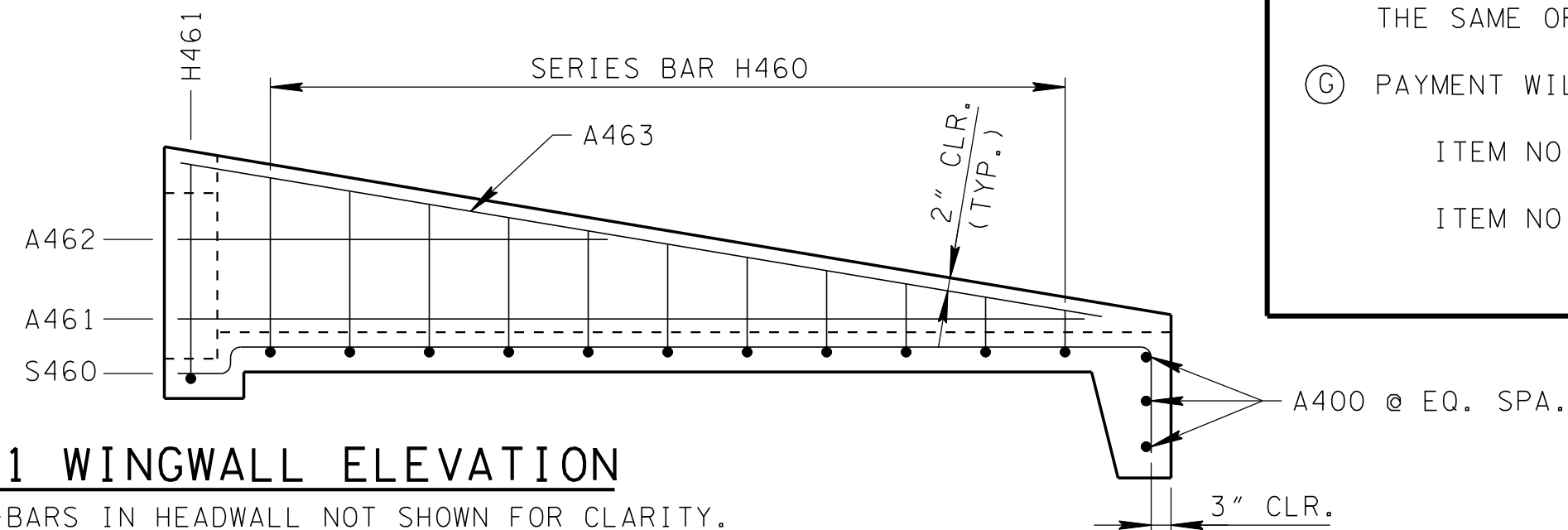
3:1 WINGWALL ELEVATION

NOTE: A-BARS IN HEADWALL NOT SHOWN FOR CLARITY.



4:1 WINGWALL ELEVATION

NOTE: A-BARS IN HEADWALL NOT SHOWN FOR CLARITY.



6:1 WINGWALL ELEVATION

NOTE: A-BARS IN HEADWALL NOT SHOWN FOR CLARITY.

GENERAL NOTES

- (A) DRAWING TO BE USED FOR ALL CAST-IN-PLACE AND ALL PRECAST 18" CONCRETE ENDWALLS (TYPE "U") FOR CROSS DRAINS ONLY. "U" ENDWALL TO BE PLACED AT 90° SKEW TO CENTERLINE. SEE STD. DWG. D-PE-99 FOR SKEWED CONNECTION DETAIL WHEN CROSS DRAIN IS NOT PERPENDICULAR TO CENTERLINE. CAST-IN-PLACE CONCRETE ENDWALL SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD SPECIFICATIONS, SECTION 611 AND/OR SPECIAL PROVISIONS.
- (B) SEE STD. DWG. D-PE-18B FOR BILL OF STEEL & PRECAST NOTES.
- (C) "-" IN BAR DESIGNATION REPRESENTS 3, 4 OR 6 FOR 3:1, 4:1 OR 6:1 SLOPES, RESPECTIVELY.
- (D) SPLICING OF REINFORCEMENT IS ACCEPTABLE PROVIDED THAT A MINIMUM 21" SPLICE LENGTH IS USED.
- (E) TOEWALL BACK SLOPE MAY BE CONSTRUCTED VARIABLE FROM VERTICAL UP TO 15°.
- (F) OPTIONAL STEPPED HOLE IS ALLOWED PROVIDED THE AMOUNT OF COVER BETWEEN THE PIPE OPENING AND BARS A701 AND A702 IS THE SAME OR GREATER THAN SHOWN ON THIS DRAWING.
- (G) PAYMENT WILL BE MADE UNDER:
- ITEM NO. 611-07.01, CLASS "A" CONCRETE (PIPE ENDWALLS)----CU. YD.
- ITEM NO. 611-07.02, STEEL BAR REINFORCING (PIPE ENDWALLS)----LB.

DIMENSIONS AND QUANTITIES FOR ONE ENDWALL 18" PIPE						
SLOPE	CONCRETE ENDWALL DIMENSIONS				ESTIMATED QUANTITIES	
					CLASS "A" CONC. CU. YD.	STEEL BAR REINF. LB.
	H	L ₁	L ₂	W		
3:1	3' - 2"	6' - 8"	7' - 0 $\frac{3}{8}$ "	2' - 11"	0.87	79
4:1		8' - 8"	8' - 11 $\frac{1}{4}$ "		1.08	98
6:1		12' - 8"	12' - 10 $\frac{1}{8}$ "		1.49	137

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

18"
CONCRETE ENDWALL
CROSS DRAIN
(FOR 3:1, 4:1 & 6:1 SLOPES)

NOT TO SCALE

3-01-12

D-PE-18A