

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	472-84636	2008	96	282

**GENERAL NOTES**

**UNIT STRESSES:** Grade 4.0 Concrete;  $f'c = 4,000$  p.s.i.  
Reinforcing Steel;  $f_y = 60,000$  p.s.i.

**CONCRETE:** Grade 4.0 Concrete shall be used throughout. Bevel all exposed edges with a  $\frac{3}{4}$  inch triangular moulding.

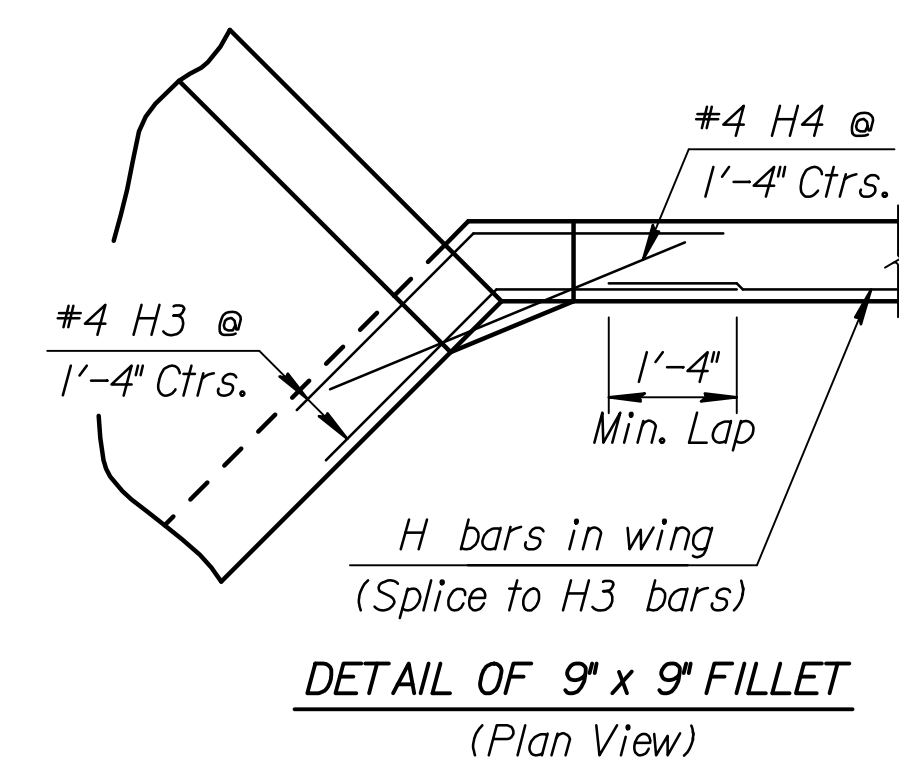
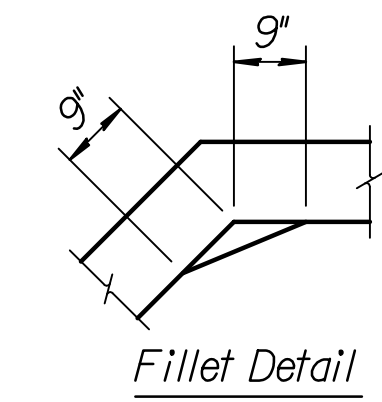
**REINFORCING:** All reinforcing shall conform to ASTM A615, Grade 60. Welded Wire Fabric shall conform to ASTM A185. All dimensions relative to reinforcing steel shall be to center-line of bar unless otherwise noted.

**QUANTITIES:** Wingwall Quantities include all quantities outside the neat lines of the box, excluding the hubguard.

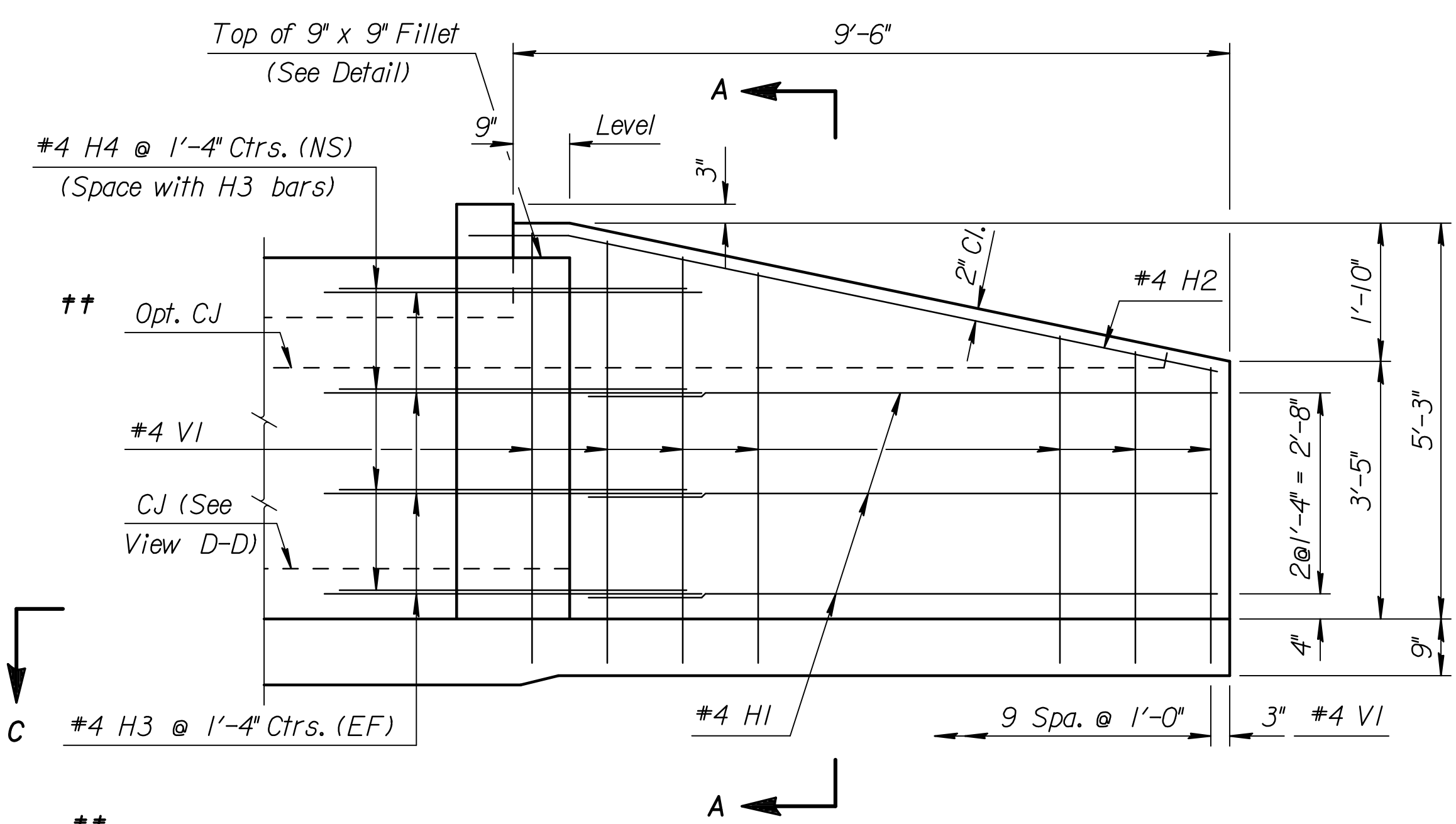
**APRON:** A 5" concrete slab shall be constructed between the downstream wings in locations subject to scour only when specified on the plans or by the Engineer. Wire Reinforcing mesh shall be electrically welded and shall be composed of 6 x 6-W1.4 x W1.4 welded wire fabric and shall be classified as pounds of reinforcing.

**BACKFILL MATERIAL:** Soils judged as high plasticity clays, fat clays, expansive clays, or organic clays are unsuitable for backfill material for wingwalls and will not be used. Where these conditions exist, use Granular Backfill (Wingwalls).

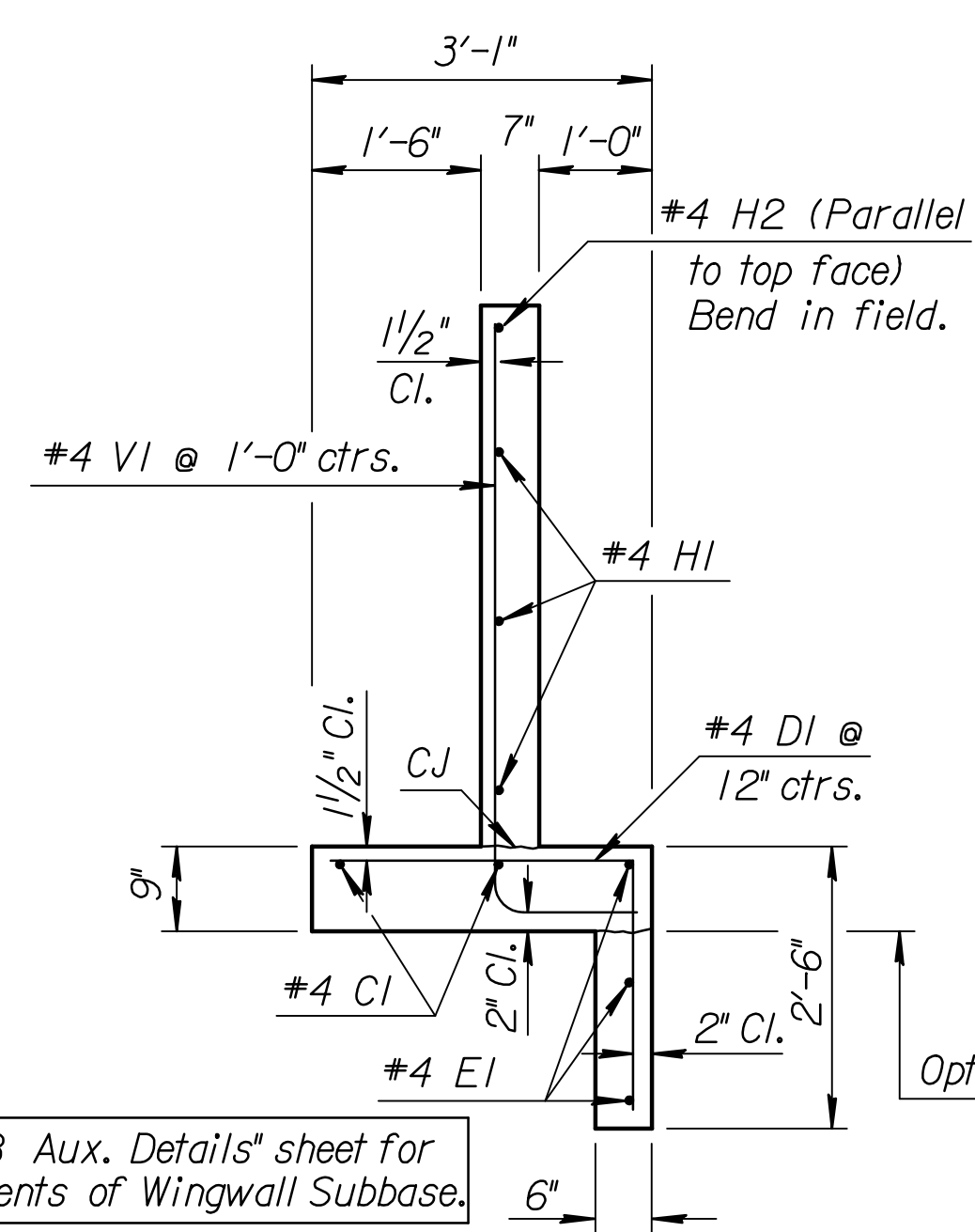
**FOUNDATION STABILIZATION:** Use Foundation Stabilization on all wingwalls unless founded on rock or granular material.



† NOTE: Const. Jt. may be used at Contractor's option when approved by the Engineer. DI bars or mesh may be spliced thus: Minimum overlap shall be 1'-3". No increase in quantities or cost shall be allowed when Contractor elects this option.

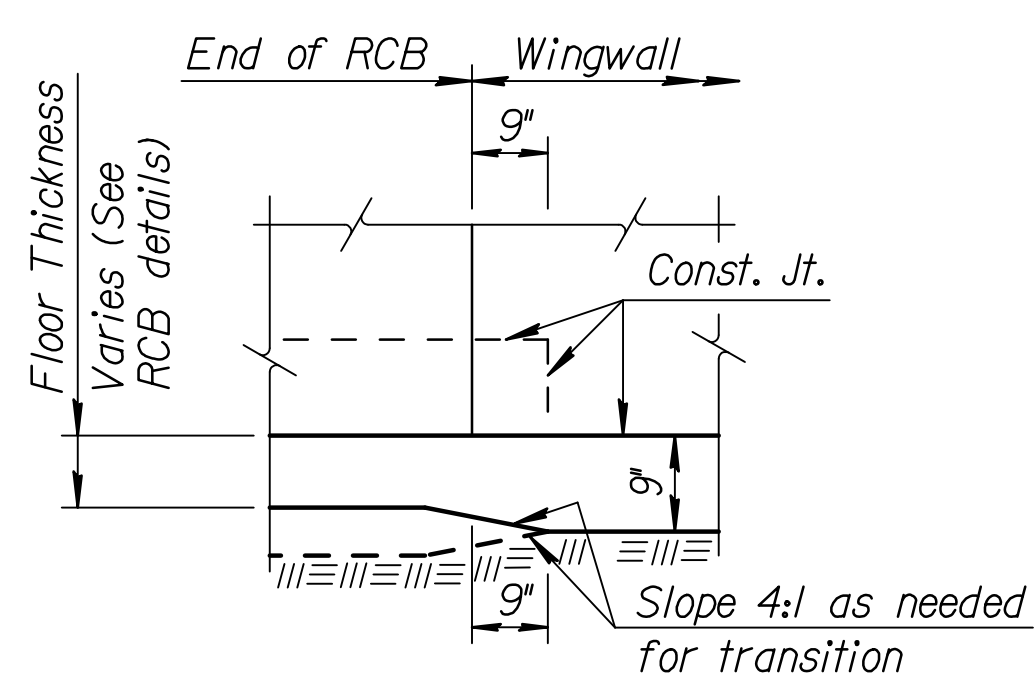


**ELEVATION OF WINGWALL**  
(Backface Shown)

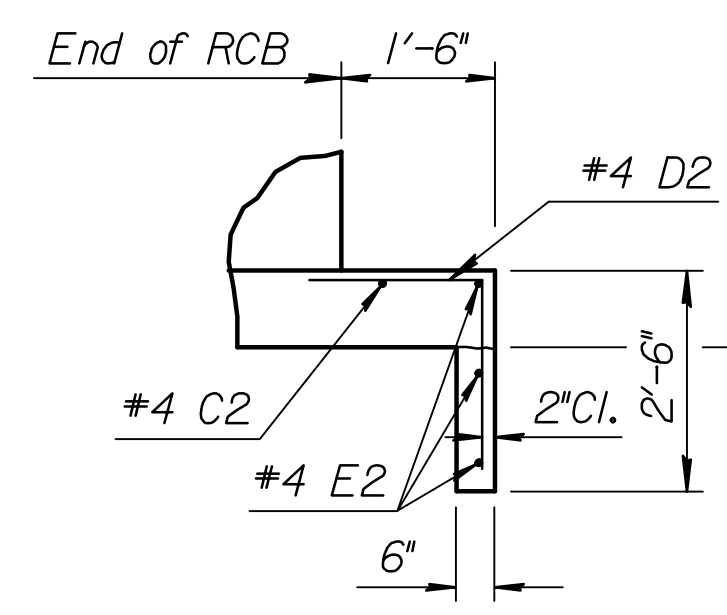


**SECTION A-A**

See "RCB Aux. Details" sheet for requirements of Wingwall Subbase.

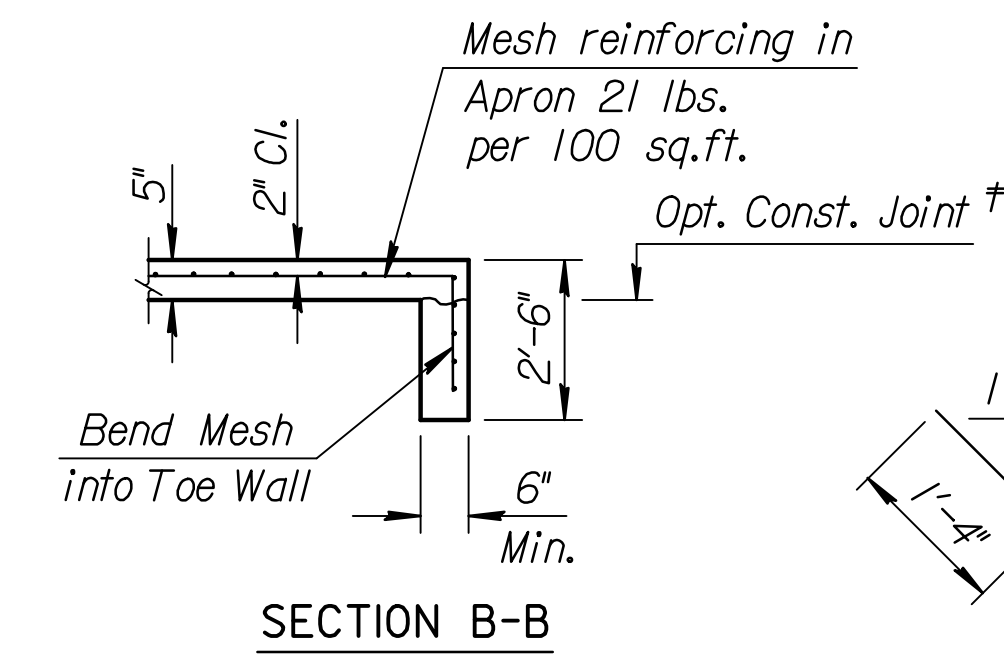


**VIEW D-D**

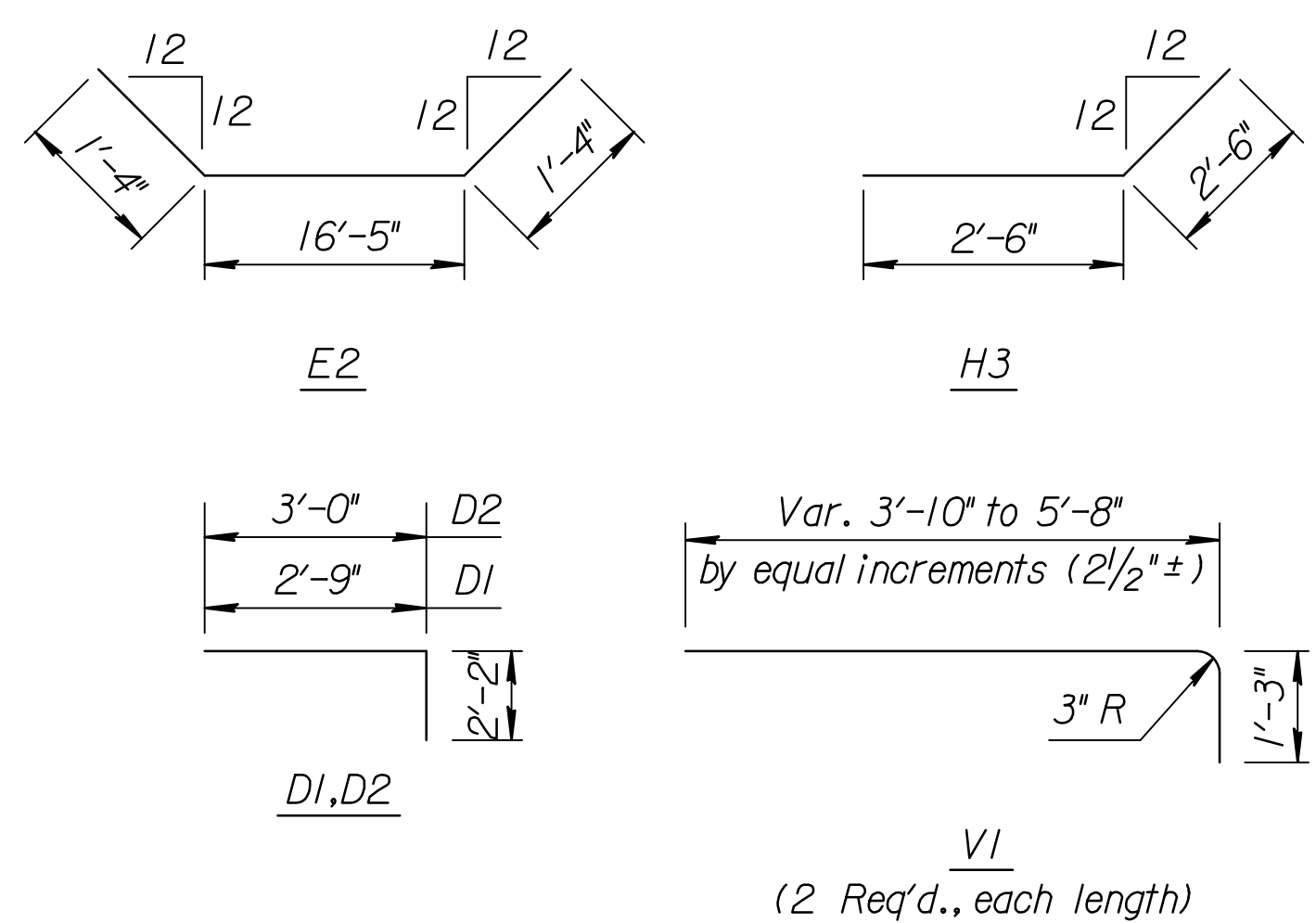


**SECTION E-E**

NOTE:  
EF = Each Face  
NS = Near Side  
FS = Far Side  
CJ = Const. Joint

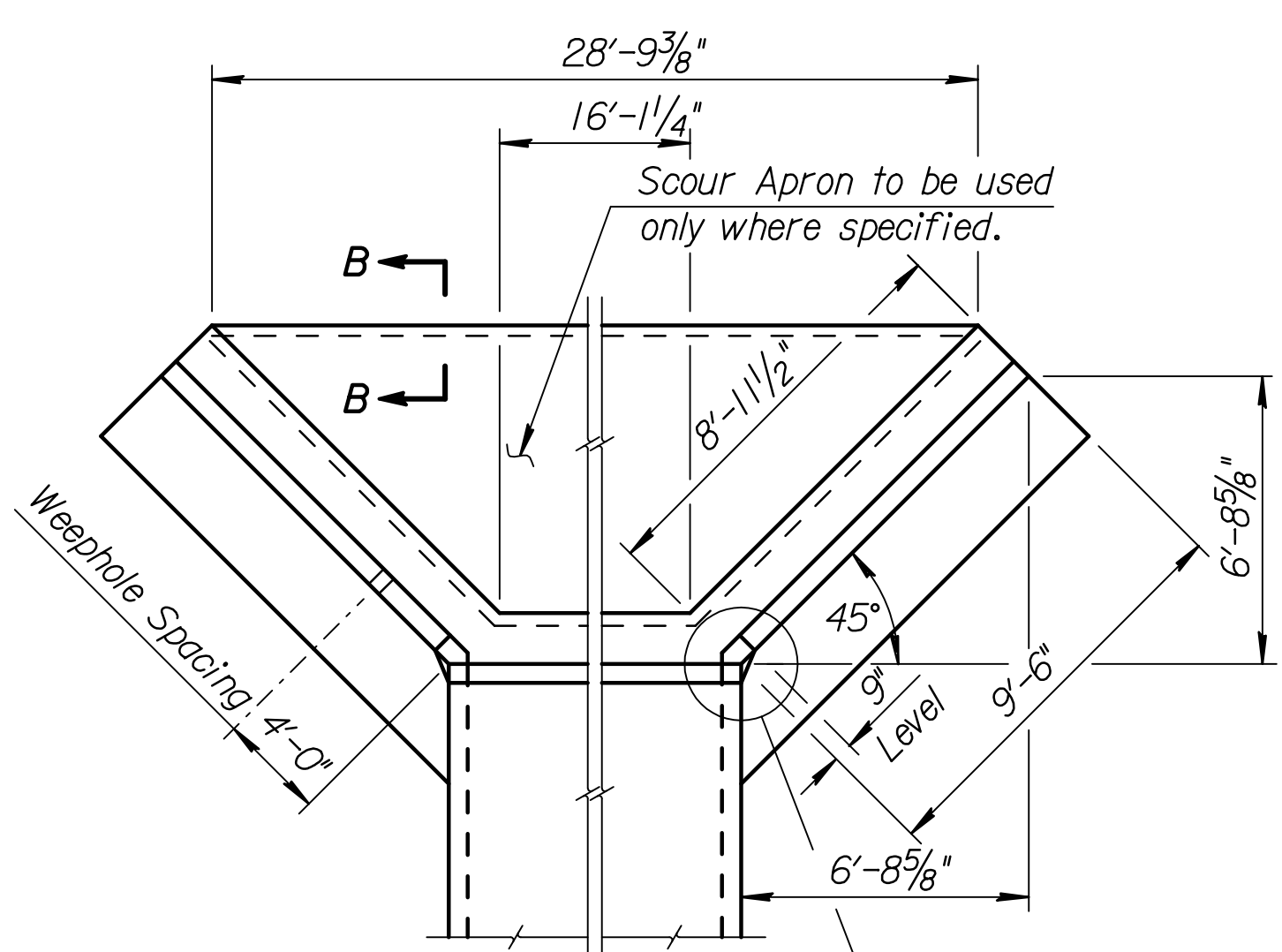


**SECTION B-B**



**BENDING DIAGRAM**

(All dimensions are out to out of bars.)



**WING DIMENSIONS FOR NORMAL BOX**  
(3/2:1 Embankment Slope)

NOTE: Space weepholes to clear reinforcing steel. See "RCB Aux. Details" sheet for additional weephole details.

Quantities listed below are included in the Summary of Quantities shown on the RCB details.

WINGWALL QUANTITIES (One End Only)		
	Foundation Stabilization (C.Y.)	Concrete (Gr. 4.0) (C.Y.)
Wingwalls	1.80	5.37
Apron	0.00	0.00
Soil Saver	0.00	0.00
Reinforcing Steel		416 Lbs.
Welded Wire Fabric		0 Lbs.

NO.	DATE	REVISIONS	BY	APP'D
KANSAS DEPARTMENT OF TRANSPORTATION				
Sta. 169+96.00				
FLARED WINGWALLS 4 ft Rise (O'SKEW)				
BR 10.00.04 Sedgwick Co.				
DESIGNED	6-5-91	APP'D	KENNETH F. HURST	
TRACED	DETAIL CK.	QUANTITIES	QUANTITIES	TRACED
DESIGN CK.	DETAIL CK.	QUAN. CK.	QUAN. CK.	TRACE CK.

NOTE: Reinforcing Bar List is for both wings at one end of box only.

0° Skew	#4C1	#4D1	#4E1	#4C2	#4D2	#4E2	#4V1	#4H1	#4H2	#4H3	#4H4
	No.	4	18 *	6	1	13 *	3 *	20	6	2	16 *
Length	11'-7"	4'-11"	8'-9"	17'-3"	5'-2"	19'-1"	*	8'-4"	10'-3"	5'-0"	3'-0"

\* See Bending Diagram

Plotted By: unfiled  
 File: I:\2001\016\RCB\01616-RCB-Sta 169+96\KDOT V81.dgn  
 Plot Date: 8/29/2008