

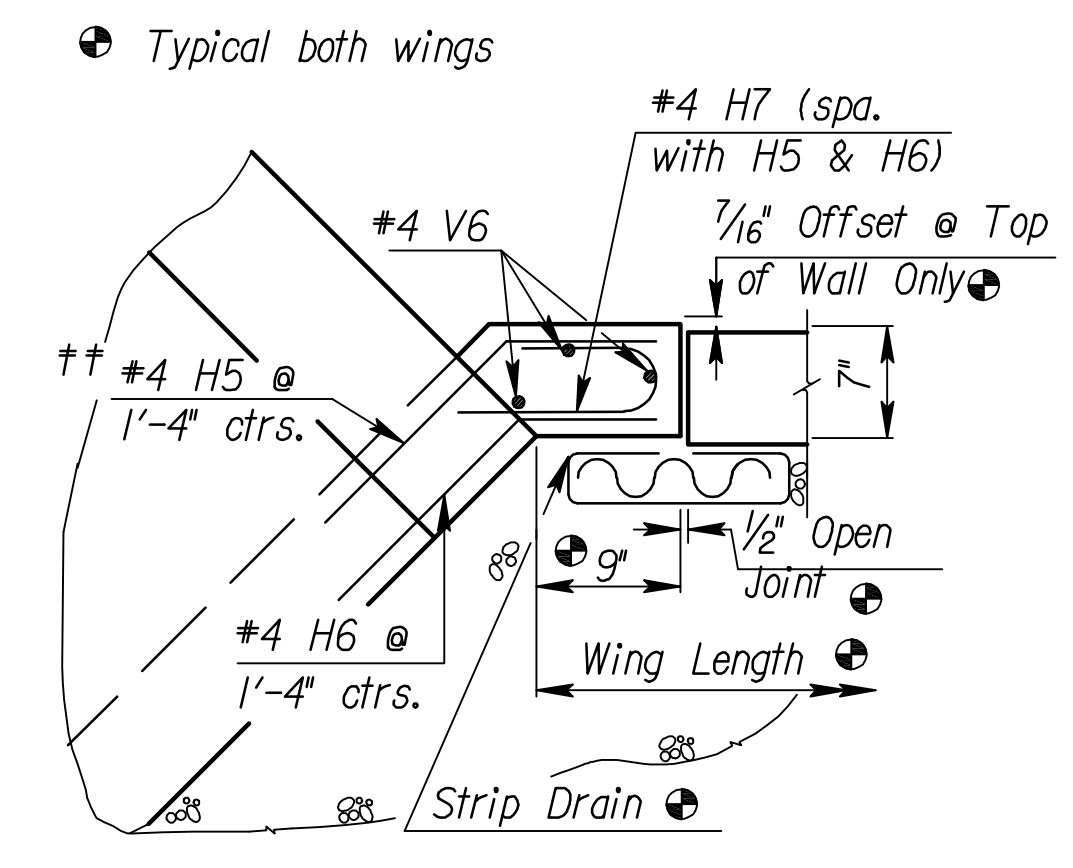
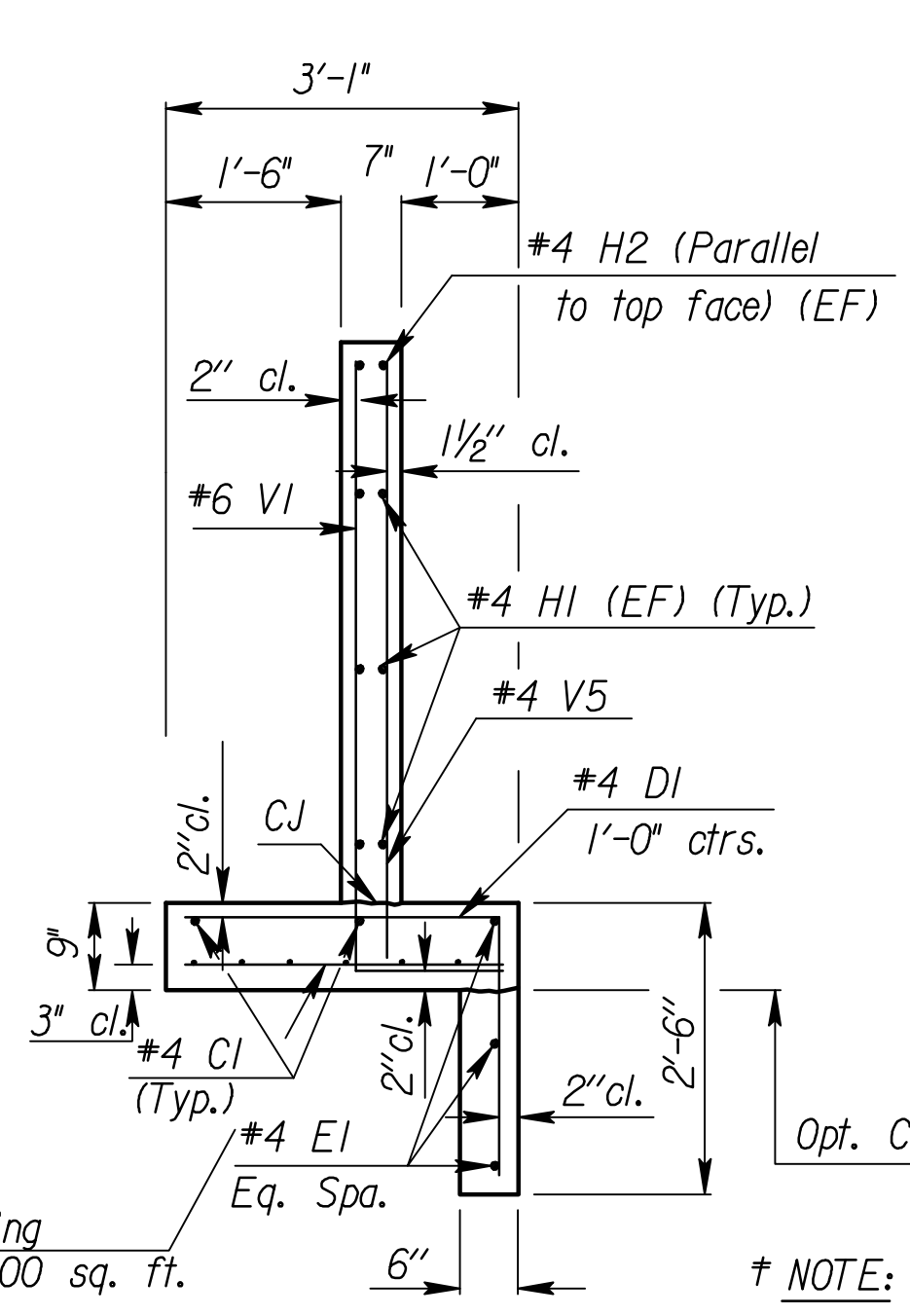
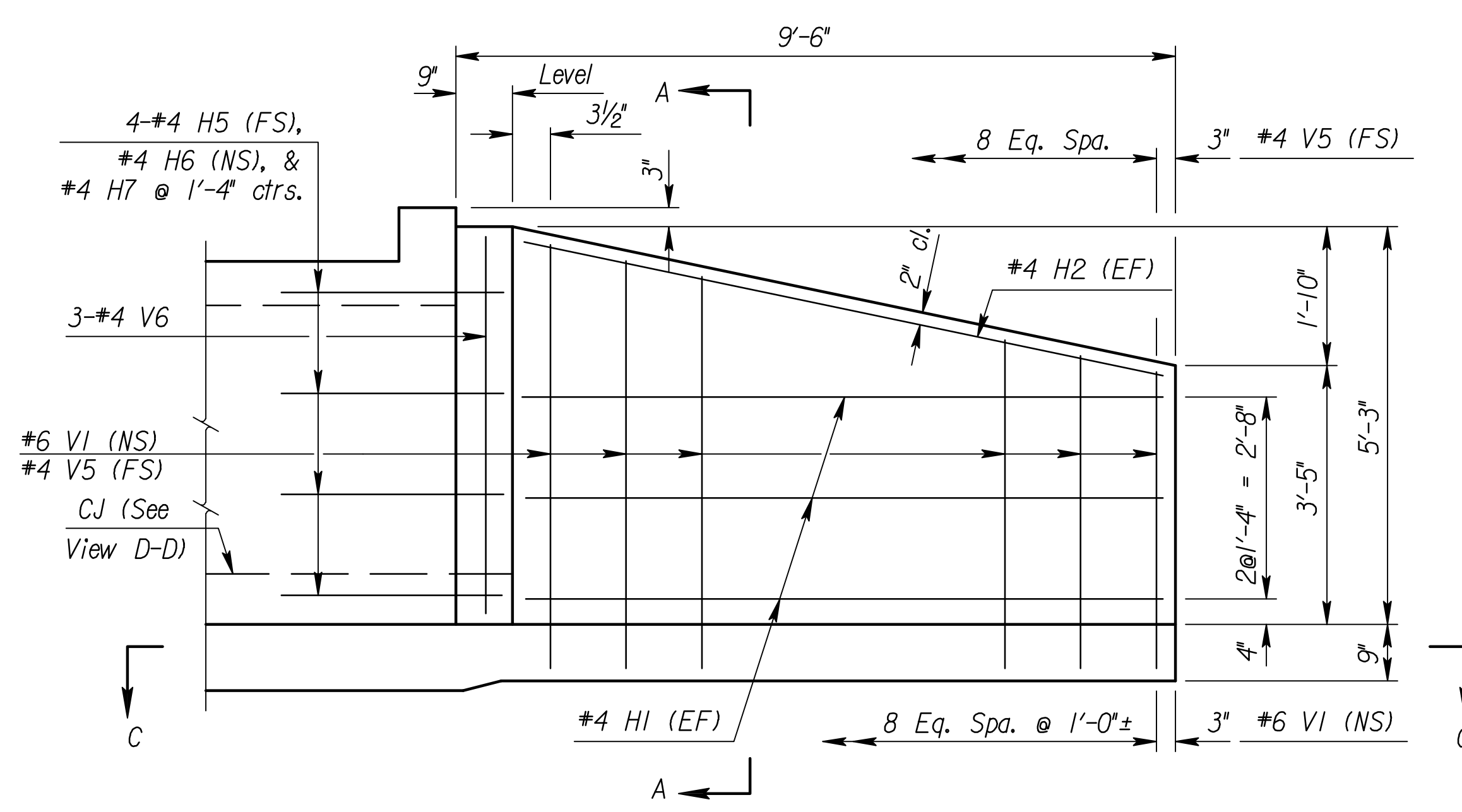
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	87 N-0615-01	2017	68	183



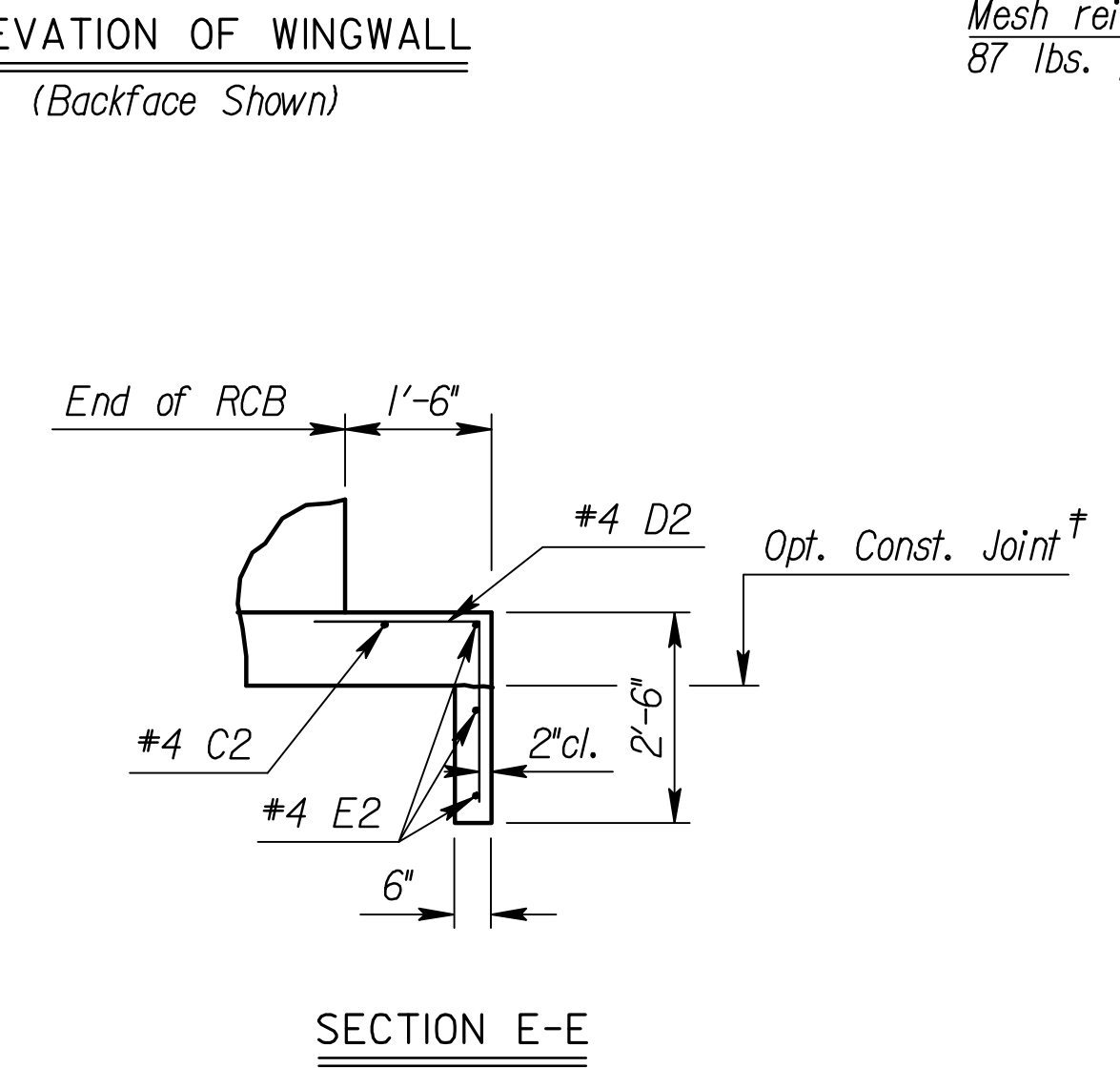
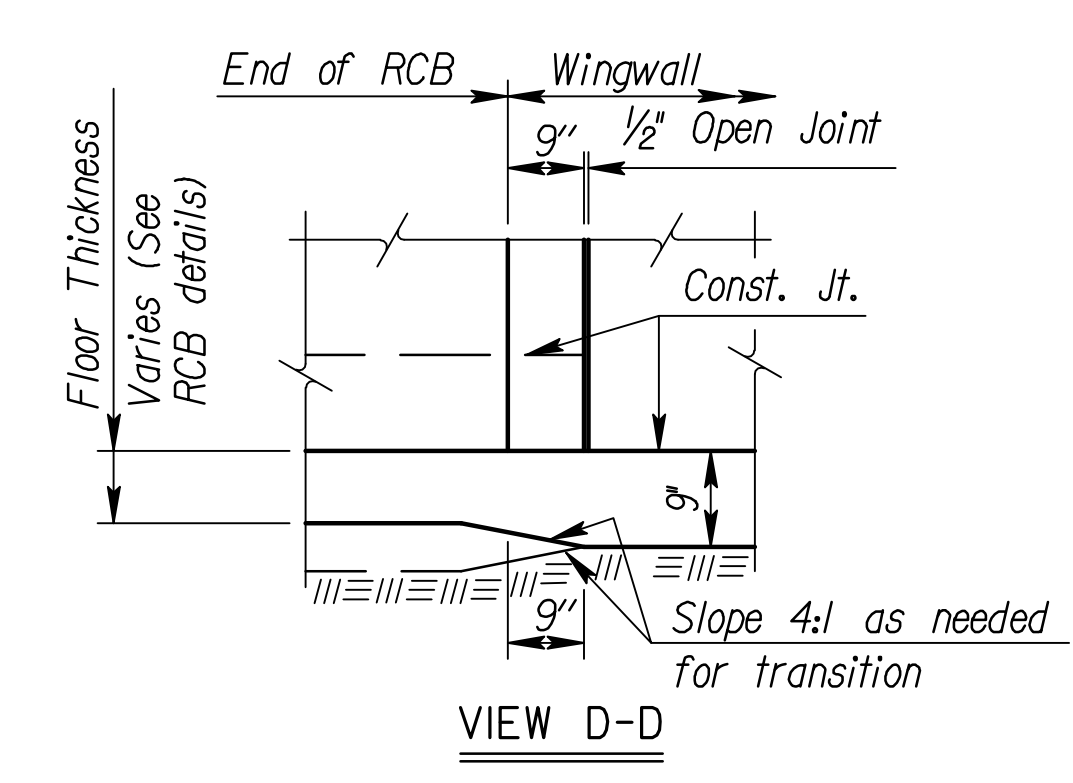
STREET IMPROVEMENTS FOR  
**127TH STREET EAST**  
FROM 13TH STREET NORTH TO 21ST STREET NORTH

**GENERAL NOTES**

**DESIGN SPECIFICATION:** AASHTO LRFD Spec., 2007 Ed., 2009 Int.  
**DESIGN LOADING:** HL93  
**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  $\frac{3}{4}$ " triangular mauling.  
**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 centerline of bar unless otherwise noted. Wire Reinforcing mesh shall be electrically welded and shall be composed of 6 x 6- W6 x W6 welded wire fabric and shall be classified as pounds of reinforcing and included in the total quantity for Reinforcing Steel (Gr. 60).  
**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.  
**BACKFILL MATERIAL:** Use Granular Backfill material meeting the requirements of SB-1, SB-2, SCA-1, SCA-2. Backfill all wings to limits shown on the "RCB Auxiliary Sheet".  
**FILTER FABRIC:** Separate in-situ material from granular backfill with approved filter fabric complying with Section 1710. Filter Fabric is subsidiary to the bid item "Pipe, SWS, RCBC (7'x4)".  
**FOUNDATION STABILIZATION:** Use Foundation Stabilization on all wingwalls unless founded on rock or granular material.

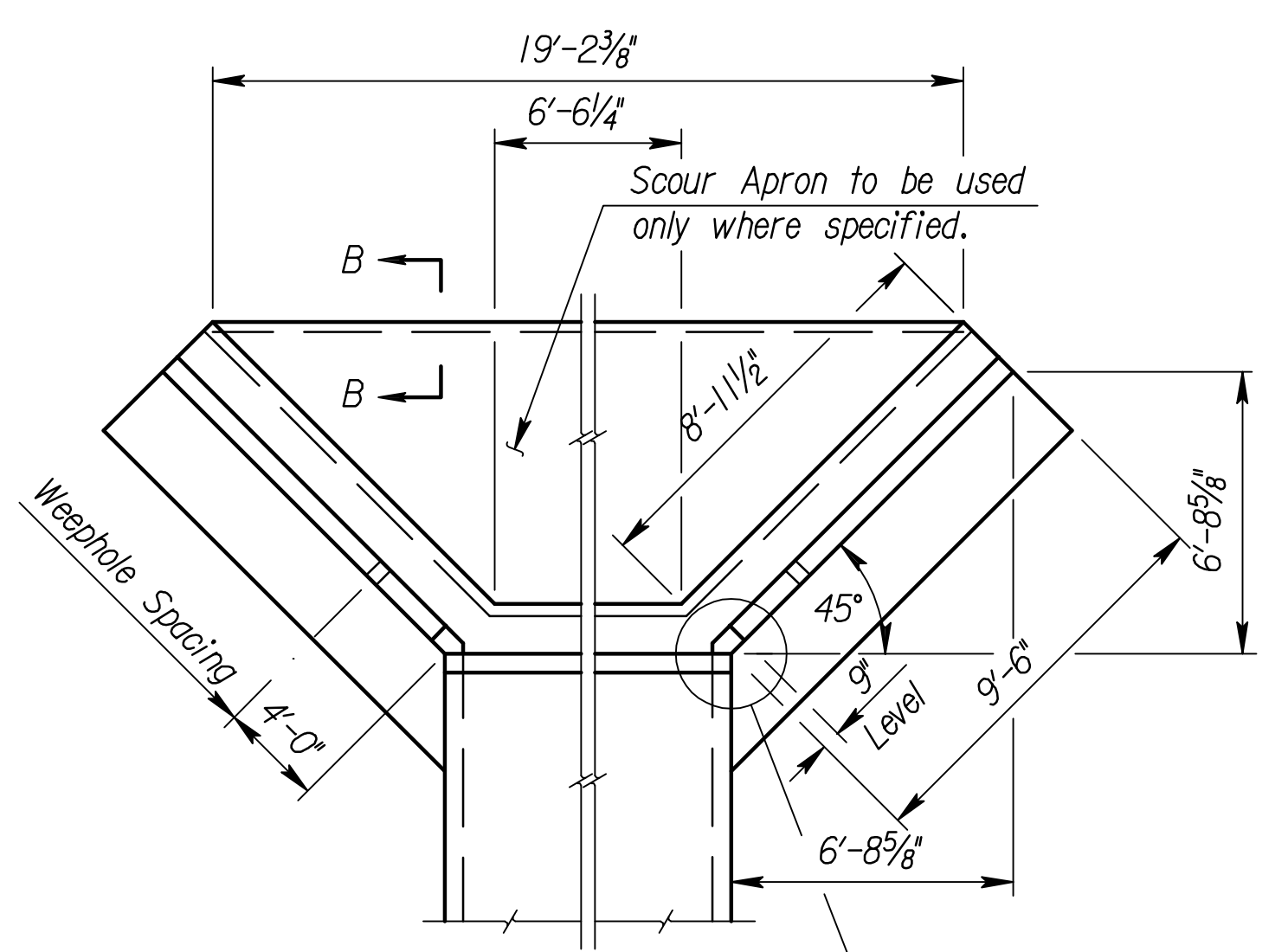


**WINGWALL JOINT DETAIL**  
(Plan View)



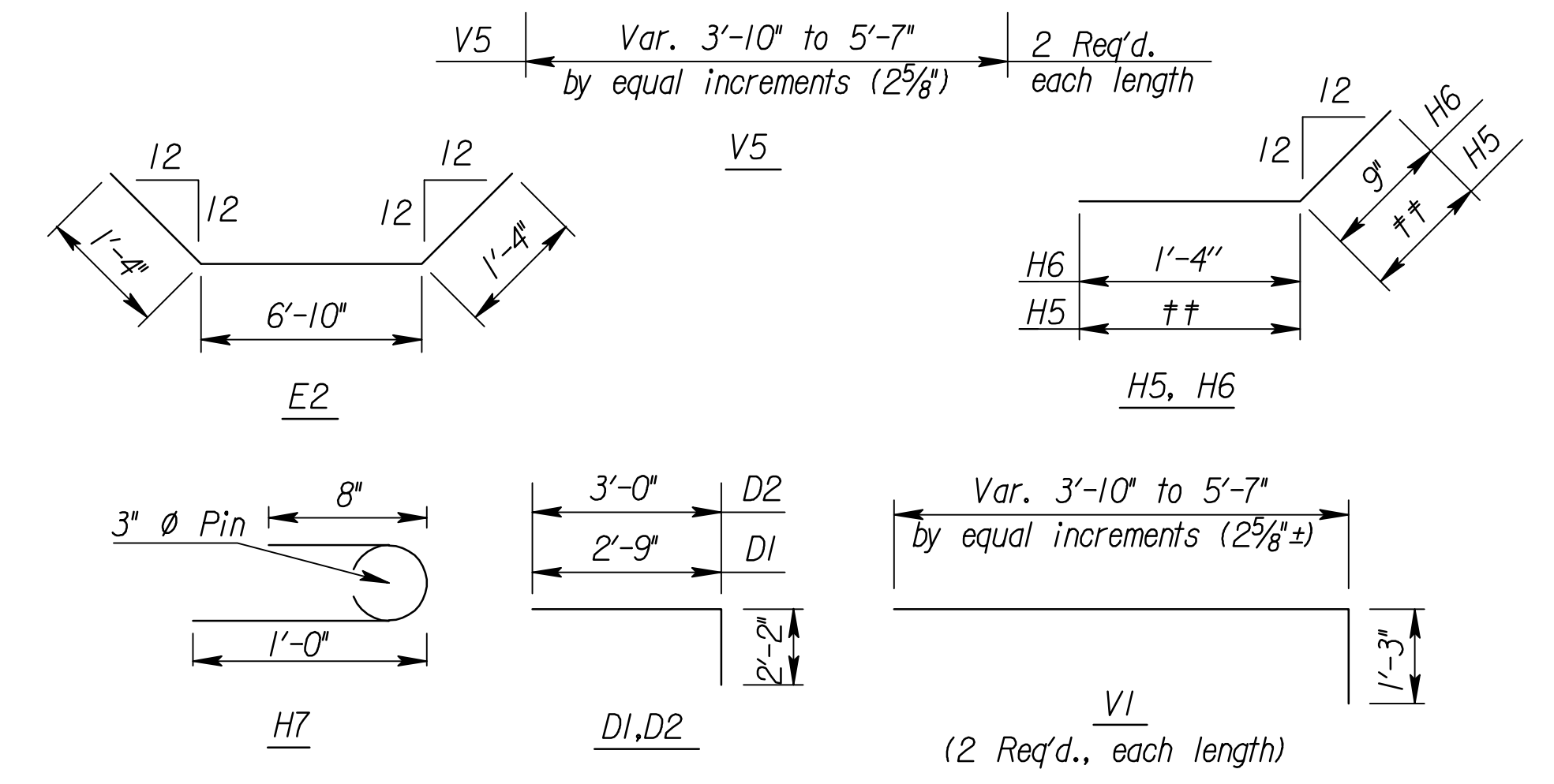
Mesh reinforcing 87 lbs. per 100 sq. ft.  
 † NOTE: Const. Jt. may be used at Contractor's option when approved by the Engineer. D1 bars or mesh may be spliced thus: Minimum overlap shall be 1'-3". No increase in quantities or cost shall be allowed when Contractor elects this option.

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



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

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

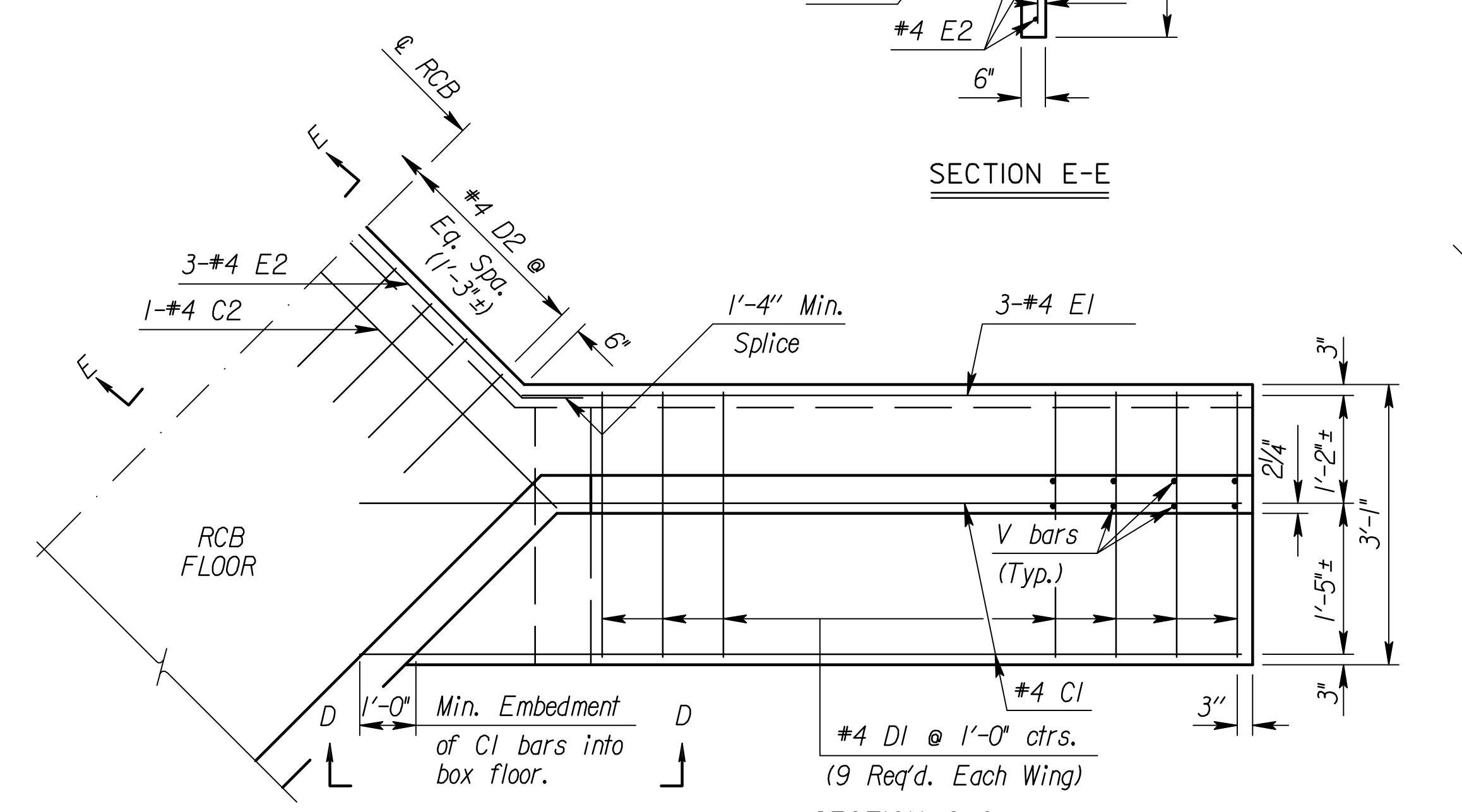


**BENDING DIAGRAM**

(All dimensions are out to out of bars.)  
 †† Bend in Field

Quantities listed below are provided for information only and are included in the Summary of Quantities shown on the RCB details.

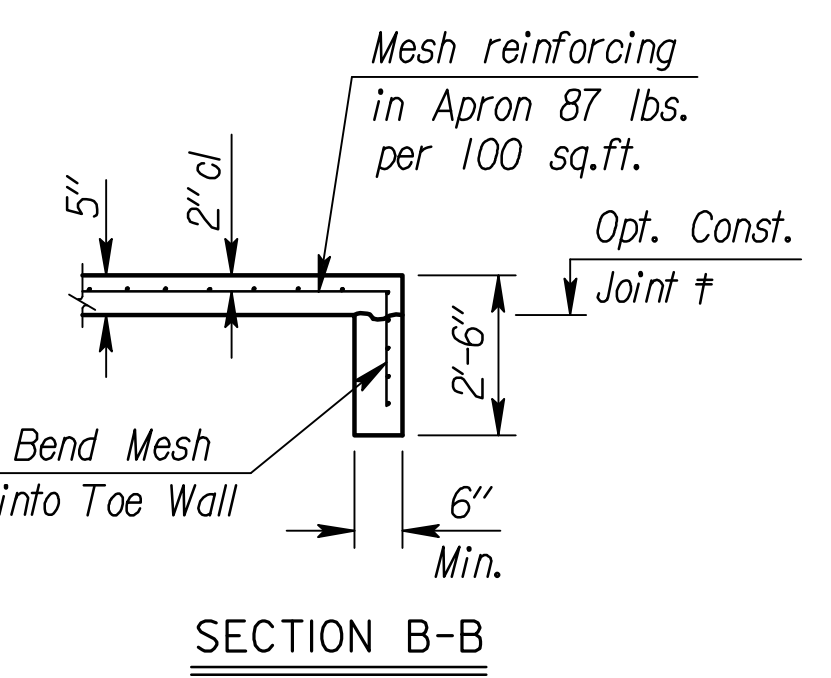
	WINGWALL QUANTITIES	
	Foundation Stabilization	Concrete (Gr. 4.0)
Wingwalls	1.80 (C.Y.)	4.63 (C.Y.)
Apron	1.34 (C.Y.)	1.98 (C.Y.)
Soil Saver	0.00 (C.Y.)	0.00 (C.Y.)
Reinforcing Steel (Gr. 60)		543 Lbs.
Welded Wire Fabric (Wings)		51 Lbs.
Welded Wire Fabric (Apron)		113 Lbs.
Granular Backfill (Wingwalls)		12.00 C.Y.
Filter Fabric (subsidiary)		18.00 S.Y.



**SECTION C-C**  
(Plan of Footing)

\* See Bending Diagram

0° Skew	No.	#4C1	#4D1	#4E1	#4C2	#4D2	#4E2	#6V1	#4H1	#4H2	#4H5	#4H6	#4H7	#4V5	#4V6
	Length	11'-7"	4'-11"	8'-9"	7'-8"	5'-2"	9'-6"	*	8'-4"	8'-6"	1'-10"	2'-1"	1'-9"	*	5'-0"



**SECTION B-B**

PLOTTED: Wednesday, November 29, 2017 @ 02:55PM  
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**STORM SEWER LINE 1-7' x 4' RCB WING DETAILS**

PROJECT NO.	472-85158
DATE	11/29/17
SCALE	NTS
DESIGNED	JRA
DRAWN	DMU
CHECKED	KJS

NO.	REVISION	DATE