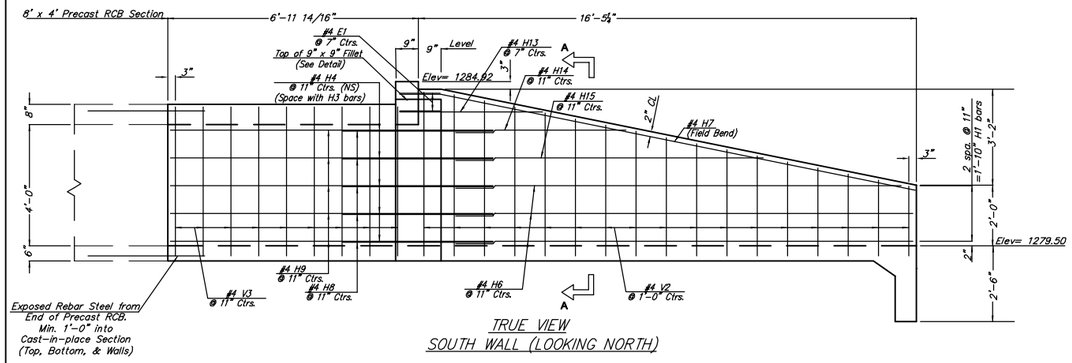
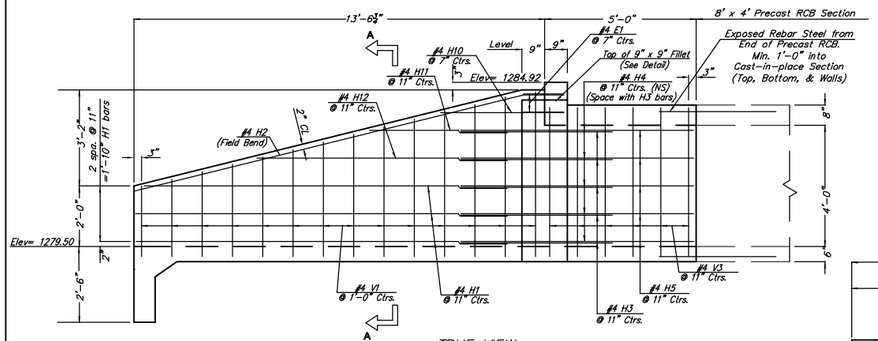
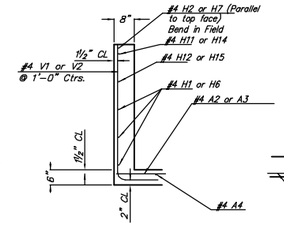


TRUE VIEW
SOUTH WALL (LOOKING NORTH)

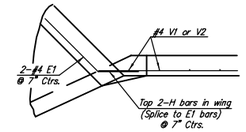


TRUE VIEW
NORTH WALL (LOOKING SOUTH)



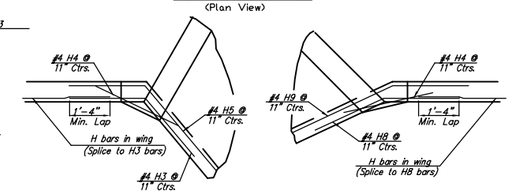
SECTION A–A

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

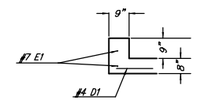


DETAIL OF WINGWALL TO RCB HEADWALL
(Plan View)

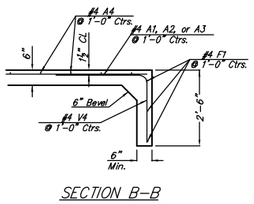
Fillet Detail



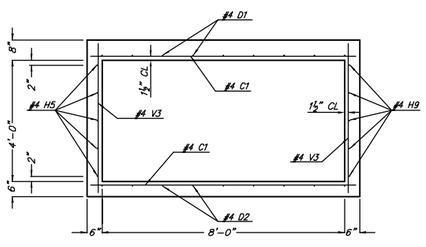
NORTH WALL SOUTH WALL
DETAIL OF 9" x 9" FILLET
(Plan View)



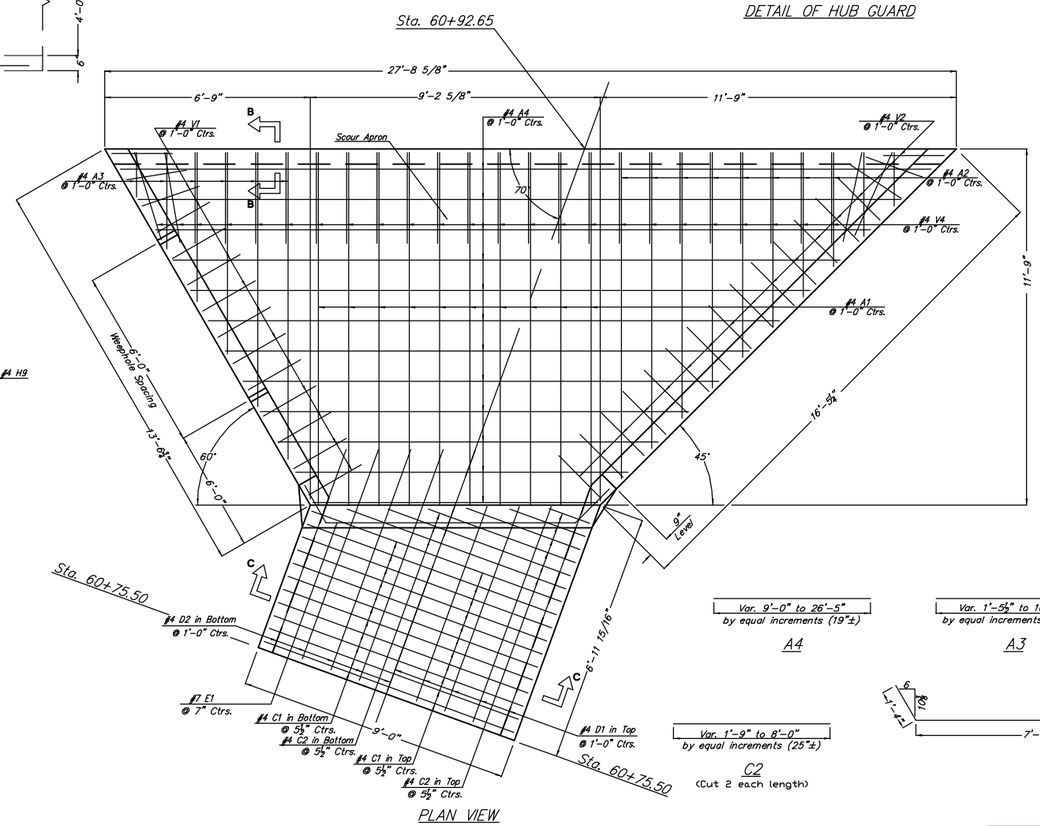
DETAIL OF HUB GUARD



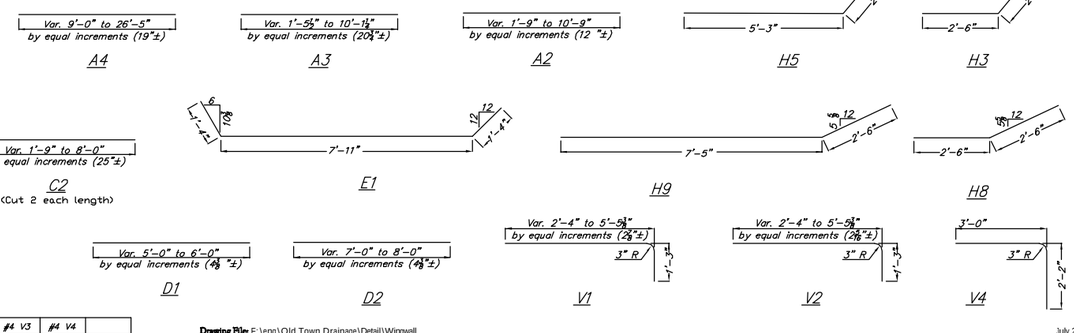
SECTION B–B



SECTION C–C



PLAN VIEW



NOTE: All top slab concrete shall be Grade 4.0 (AE). All Top Slab and Hubguard reinforcement steel shall be epoxy coated.

Summary of Quantities	
Concrete (Grade 4.0)	
Wingwalls	2.72 C.Y.
Apron	5.50 C.Y.
Box	3.42 C.Y.
Soil Saver	0.0 C.Y.
Reinforcing Steel	106B Lbs
Welded Wire Fabric	0.0 Lbs

△ = Epoxy Coated

* See Bending Diagram

	Bar Schedule	#4 A1	#4 A2	#4 A3	#4 A4	#4 C1 △	#4 C2 △	#4 D1	#4 D2 △	#7 E1	#4 F1	#4 H1	#4 H2	#4 H3	#4 H4	#4 H5	#4 H6	#4 H7	#4 H8	#4 H9	#4 H10	#4 H11	#4 H12	#4 H13	#4 H14	#4 H15	#4 V1	#4 V2	#4 V3	#4 V4
12'-30' Skew	Number	9	10	6	12	22	8	9	9	2	3	3	1	5*	10	5*	3	1	5*	5*	1	1	1	1	1	1	14	17	13	26*
	Length	11'-6"	*	*	*	8'-9"	*	*	*	10'-7"	27'-5"	12'-4"	14'-6"	5'-0"	3'-0"	7'-9"	15'	17'-4"	5'-0"	9'-11"	4'	4'-6"	8'-4"	4'-8"	5'-6"	10'-2"	*	*	4'-11"	5'-2"

GENERAL NOTES

LOADING: HS20–44 AASHTO Specifications, 1983 Edition.

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

CONCRETE: Grade 4.0 Concrete shall be used throughout. Bevel all exposed edges with a 3/4 inch triangular moulding. Where Grade 4.0 Concrete (AE) is specified, it shall be placed in the top slab above the Construction Joint.

REINFORCING: All reinforcing shall conform to ASTM A615, Grade 60. Welded wire fabric shall conform to ASTM A185. Wire fabric shall be electrically welded and shall be composed of 6x6–W1.4xW1.4 welded wire fabric and shall be classified as pounds of reinforcing. All dimensions relative to reinforcing steel shall be to centerline of bar unless otherwise noted.

SEAL COURSE: A Seal Course may be required. The Seal Course shall be unreinforced Concrete (Commercial Grade) to a minimum depth of 3 inches or as determined by the Engineer.

FOUNDATION AND BACKFILL MATERIAL: Soils judged as high plasticity clays, fat clays, expansive clays, or organic clays are unsuitable for foundation and/or backfill material for wingwalls and will not be used. Where these conditions exist, Foundation Stabilization and/or Granular Backfill (Wingwalls) shall be used as determined by the Engineer. See "RCB Auxiliary Details" sheet for additional details.

QUANTITIES: The quantities shown in the Culvert Summary include apron and/or soil saver quantities when their construction is required by the plans.

GRANULAR BACKFILL (WINGWALLS): Special backfill procedures may be required at the direction of the Engineer. See Auxiliary Details Sheet.

STRIKE LINE: Wingwalls and that portion of the RCB outside the Strike Line shall be constructed level. See wingwall detail sheet.

FLEXIBLE FLAP GATE: The Flap Gate shall be made of synthetic rubber and be reinforced as necessary. The body and anchor bolts are to be stainless steel. A dual flap design may be incorporated for easier opening during low flows. The flexible flap gate is to be manufactured by Plasti–Fab or approved equal. All costs associated with procuring and installing the Flap Gates shall be INCIDENTAL to the Lump Sum Bid Item "SWS Outfall at Canal".

Drawing File: F:\eng\Old Town Drainage\Detail\Wingwall
July 2007

Design: KK
Drawn: TCA
Approved: JFB
Scale: 1"=30'

Project No. 0505-E258 CITY OF WICHITA, KANSAS

FLARED WINGWALLS Sta. 60+75.50
3 ft. Rise (12°-30' Skew)(1-8'x4')

DOUGLAS AVENUE DRAINAGE OUTFALL PROJECT

Baughman Company, P.A.
315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149
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SHEET 59 OF 86