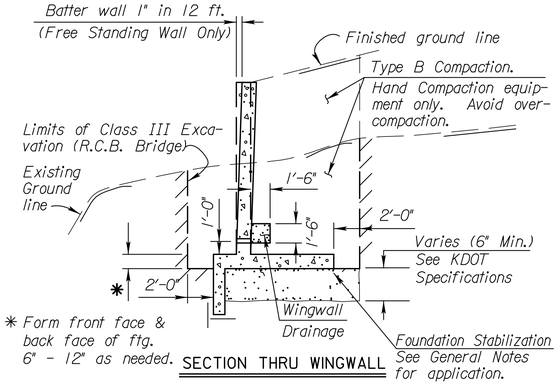
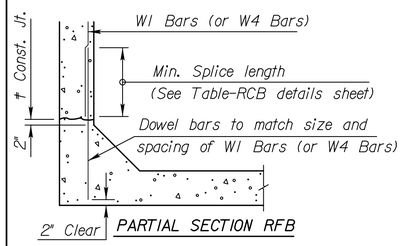
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	87N-0357-01	2008	77	185



* Form front face & back face of ftg. 6" - 12" as needed.

SECTION THRU WINGWALL



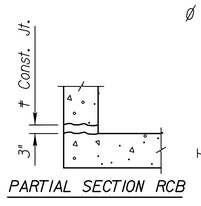
PARTIAL SECTION RFB

OPTIONAL BAR DETAIL

The Contractor shall have the option of using Dowel Bars to match vertical wall bars as shown, however no allowance will be made for additional steel required for bar laps.

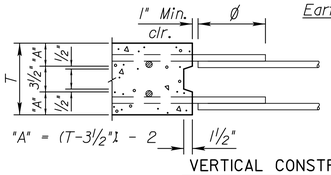
† OPTIONAL COLD JOINT

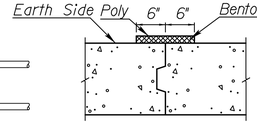
The Contractor has the option of placing the Lower Horizontal Construction Joint at the top of the slab for RCB's or at the top of the fillet for RFB's



PARTIAL SECTION RCB

Ø Longitudinal bars shall extend through the joint to provide a minimum lap equal to the required splice length. See RCB Details Sh. for required splice length.



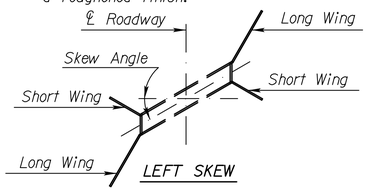


VERTICAL CONSTRUCTION JOINTS

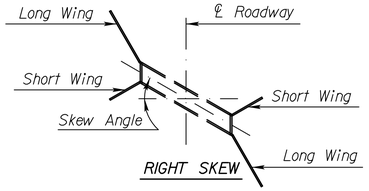
NOTE: Vertical construction joints shall be perpendicular to the longitudinal axis of the RCB and shall be placed at any location as needed for construction and as approved by the Engineer.

NOTE: Horizontal construction joints shall be a roughened finish.

NOTE: Barrel Construction Joints located in a median with less than 5 ft. of fill or at locations specified by the Engineer, shall be protected by a bentonite based system as shown. Place the bentonite on the exterior walls and top slab. See requirements for bentonite in the KDOT Specifications for "Bridge Backwall Protection System". Material and installation of the bentonite system shall be subsidiary to the bid item "Grade 4.0 Concrete".

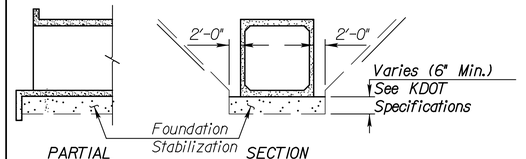


LEFT SKEW



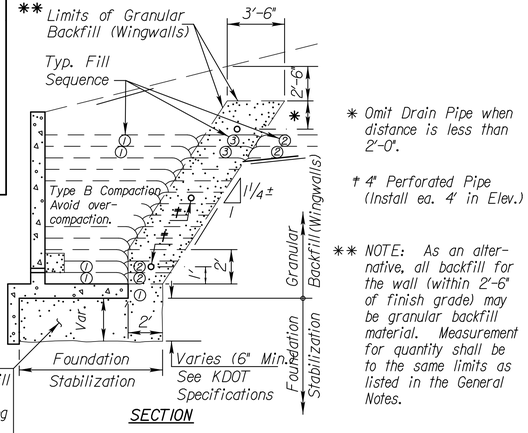
RIGHT SKEW

PLAN VIEW SKEWED R.C.B.



PARTIAL ELEVATION

SECTION

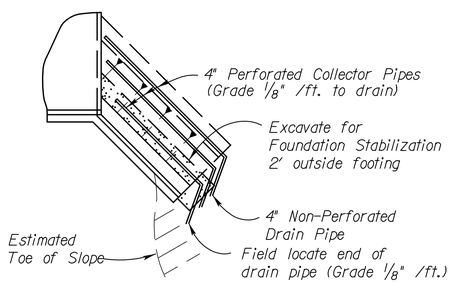


SECTION

* Omit Drain Pipe when distance is less than 2'-0".

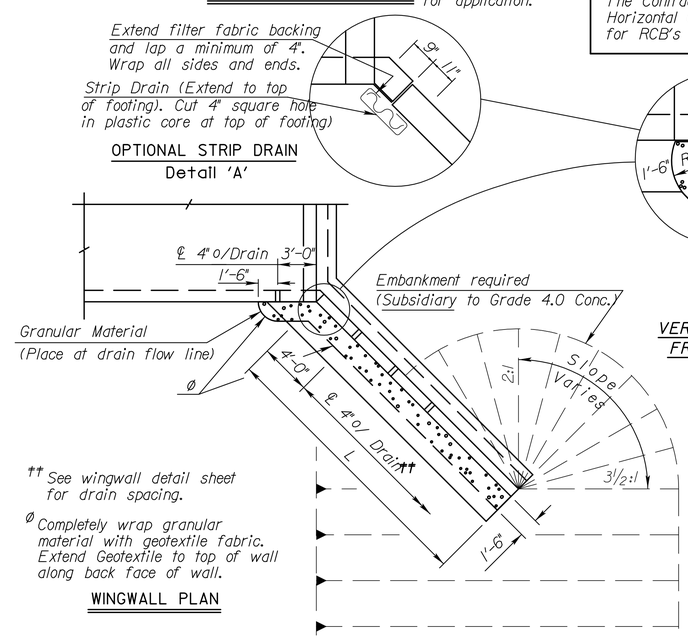
† 4" Perforated Pipe (Install ea. 4' in Elev.)

** NOTE: As an alternative, all backfill for the wall (within 2'-6" of finish grade) may be granular backfill material. Measurement for quantity shall be to the same limits as listed in the General Notes.

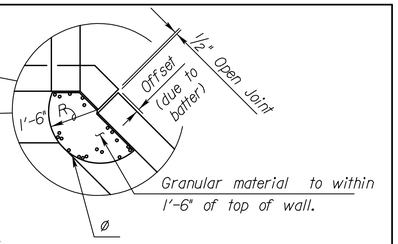


PLAN

GRANULAR BACKFILL AND FOUNDATION STABILIZATION



OPTIONAL STRIP DRAIN
Detail 'A'



VERTICAL WINGWALL DRAINAGE FOR FREE-STANDING WINGWALLS ONLY

†† See wingwall detail sheet for drain spacing.

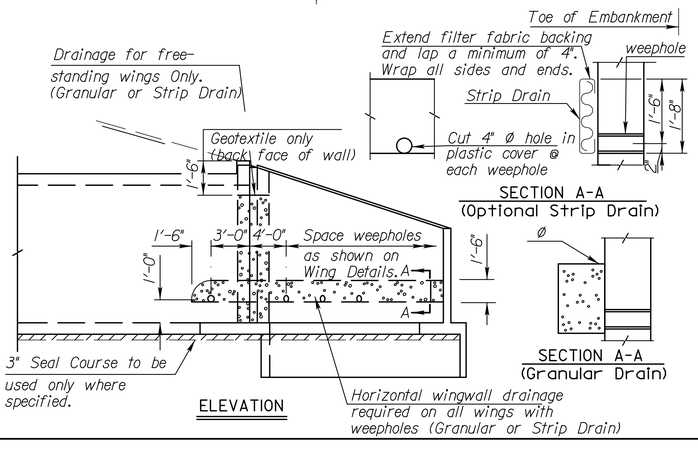
Ø Completely wrap granular material with geotextile fabric. Extend Geotextile to top of wall along back face of wall.

WINGWALL PLAN

GENERAL NOTES

Wingwall Drainage:

1. All wingwalls with weepholes shall have horizontal wingwall drainage as shown. Free-standing wingwalls shall also have the vertical wingwall drainage. Strip drains may be used in lieu of aggregate. See KDOT Specifications for "Abutment Strip Drains" for strip drain requirements.
2. Construction and materials for wingwall drainage, including weepholes, geotextile fabric, granular material, and strip drain shall be subsidiary to the bid item, "Grade 4.0 Concrete". Granular material for wingwall drainage shall conform to the requirements of UD-1. Weepholes may be a formed opening or corrugated polyethylene tubing.



ELEVATION

SECTION A-A
(Optional Strip Drain)

SECTION A-A
(Granular Drain)

GENERAL NOTES

FOUNDATION STABILIZATION: Foundation stabilization shall be required under the box, wingwalls and aprons in accordance with the dimensions shown in the details. Foundation stabilization shall consist of 6" thickness of crushed rock conforming to ASTM C-33, Gradation No. 67, and shall meet the requirements for Portland Cement Concrete Pavement Course Aggregate, Section 406.2 of the City of Wichita Standard Specifications. Foundation stabilization shall be subsidiary to "Grade 4.0 Concrete" and shall include all necessary excavation.

GRANULAR BACKFILL (WINGWALLS): Granular backfill (wingwalls) shall be required behind new wingwalls in accordance with the dimensions shown in the details. Granular backfill (wingwalls) shall conform to KDOT designation UD-1 or BD-1 or to the City of Wichita's designation for Crushed Rock for Underdrain. Granular backfill (wingwalls) shall be subsidiary to "Grade 4.0 Concrete" and shall include all necessary excavation, drainage pipe and rodent screens.

NO.	DATE	REVISIONS	BY	APP'D
3	7/14/08	Change Type 'C' Compaction to 'B'	JPJ	KFH
2	10/16/06	Add Found. Stab. Details and Notes	JPJ	KFH
1	3/2/06	Optional Construction Joint	JPJ	KFH

KANSAS DEPARTMENT OF TRANSPORTATION

RCB AUXILIARY DETAILS

~~BR020~~

FHWA APPROVAL		11/01/06	APP'D		KENNETH F. HURST
DESIGNED	RAM	DETAILED	RDR	QUANTITIES	TRACED
DESIGN CK.	RRR	DETAIL CK.	RRR	QUAN.CK.	TRACE CK.

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