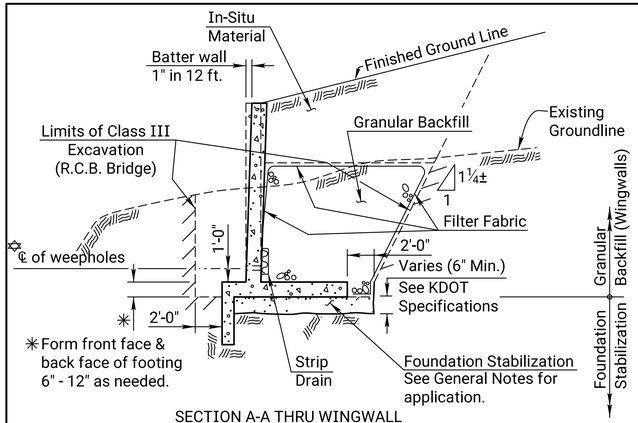
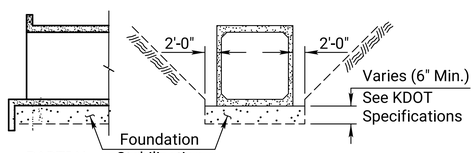
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS		0	0	



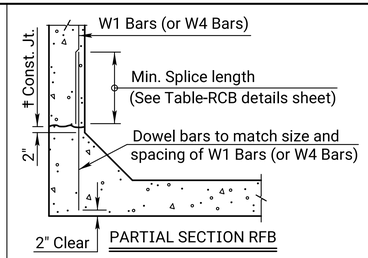
SECTION A-A THRU WINGWALL

Granular Backfill And Foundation Stabilization



PARTIAL ELEVATION

SECTION



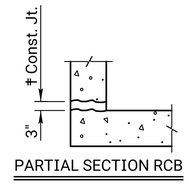
PARTIAL SECTION RFB

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.

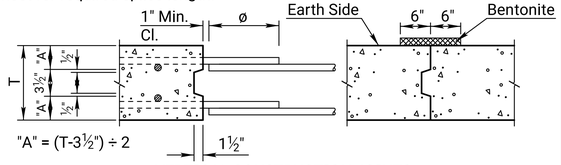
‡ OPTIONAL COLD JOINT

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 sheet for required splice length.

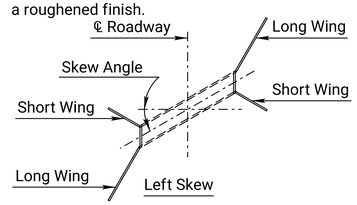


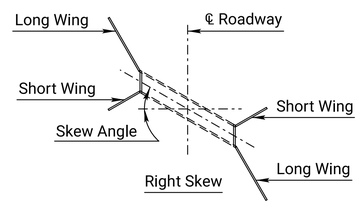
VERTICAL CONSTRUCTION JOINTS

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.

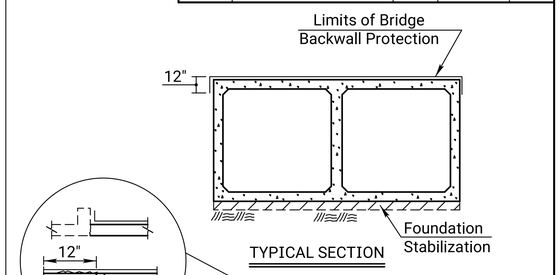
NOTE: Horizontal construction joints shall be a roughened finish.

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".

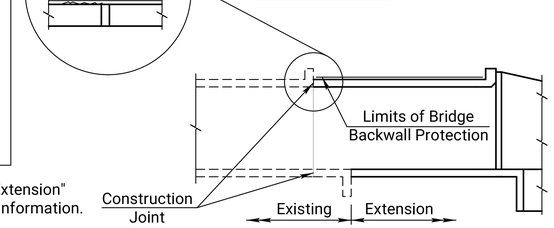




PLAN VIEW SKEWED R.C.B.

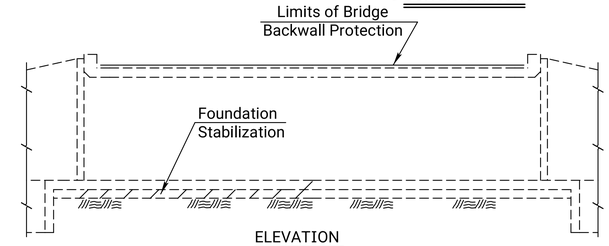


TYPICAL SECTION



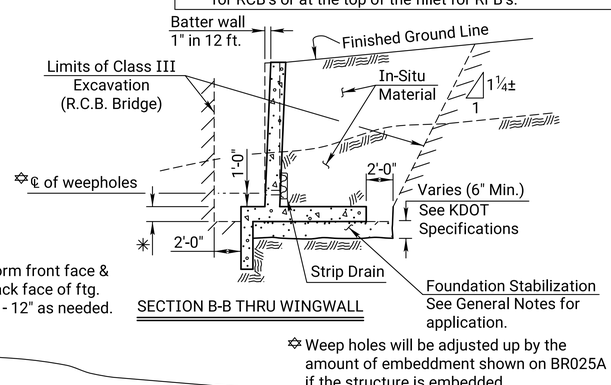
⊗ BOX EXTENSION

⊗ See "Typical Culvert Extension" RD080 for additional information.



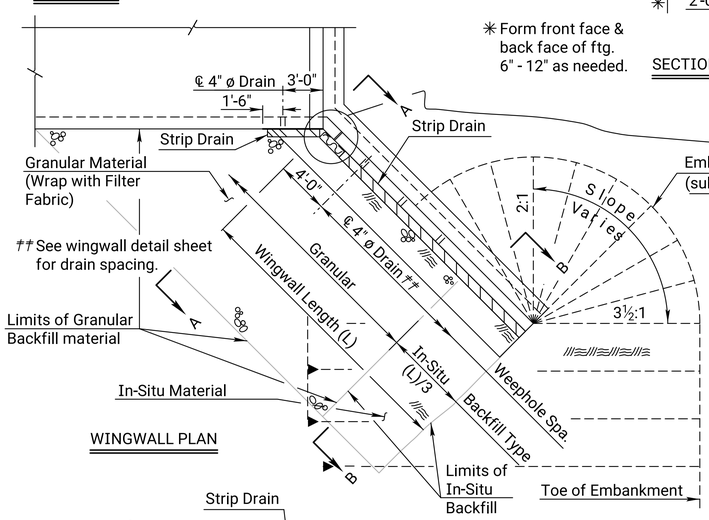
ELEVATION

(New Construction)

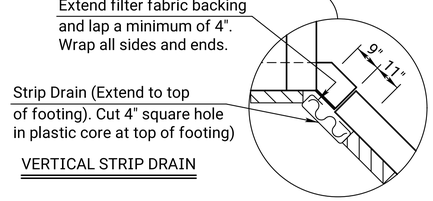


SECTION B-B THRU WINGWALL

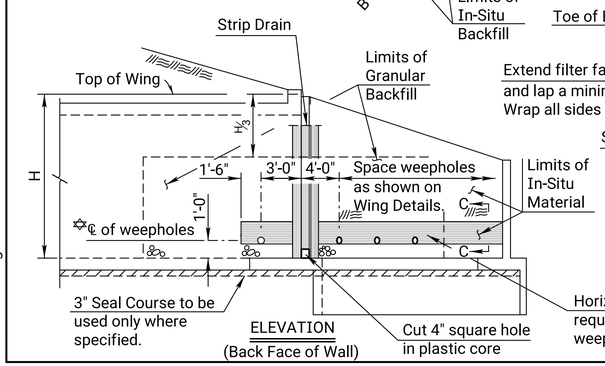
✡ Weep holes will be adjusted up by the amount of embeddment shown on BR025A if the structure is embedded.



WINGWALL PLAN

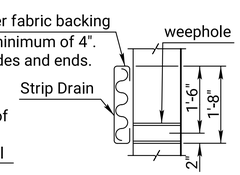


VERTICAL STRIP DRAIN



ELEVATION

(Back Face of Wall)



SECTION C-C

(Strip Drain)

GENERAL NOTES

Wingwall Drainage:

1. All wingwalls with weepholes shall have horizontal and vertical wingwall drainage as shown. Strip drains will be used. See KDOT Specifications for "Abutment Strip Drains" for strip drain requirements.
2. Construction and materials for wingwall drainage, including weepholes, and strip drain shall be subsidiary to the bid item, "Grade 4.0 Concrete". Weepholes may be a formed opening or corrugated polyethylene tubing.

Wingwall Foundation Stabilization:

The Foundation Stabilization quantity has been calculated to the limits shown in the Section Thru Wingwall. The depth may be increased by the Engineer. Use Foundation Stabilization on all wingwalls unless founded on rock or granular material.

Seal Course:

Seal Course consisting of 3" min. of Commercial Grade Concrete shall be constructed to the limits directed by the Engineer. No reinforcing in the floor of the slab or wall footing shall be placed until the Seal Course has gained sufficient strength to permit working upon it without injury.

GENERAL NOTES

Foundation Stabilization:

The depth of Foundation Stabilization may be increased by the Engineer. The Contractor may underrun Foundation Stabilization under the barrel if founded on firm material and with the Engineer's approval. Use Foundation Stabilization on all wingwalls unless founded on rock or granular material.

Granular Backfill (Wingwalls):

1. Granular Backfill shall be used to backfill behind wingwalls to the limits shown in the WINGWALL PLAN and Elevation detail. Granular Backfill construction may be used separately or combined with Foundation Stabilization as directed by the Engineer.
2. Measurement for the bid item, "Granular Backfill (Wingwalls)", shall be measured in Cubic Yards to the theoretical limits as shown.
3. Material for Granular Backfill (Wingwalls) shall conform to the requirements of SB-1, SB-2, SCA-1 or SCA-2.
4. Consolidate Granular Backfill using hand equipment only. Avoid over consolidation.
5. Use filter fabric complying with Section 1710. Use only within the limits of Granular Backfill to separate from the In-Situ Material. Filter Fabric is subsidiary to "Granular Backfill".

In-Situ Backfill (Wingwalls):

1. Use any material found within the project limits except Highly Plastic Clay(s) or organic material. The material is subsidiary to "Granular Backfill".
2. Use Type "B" Compaction.
3. Use only hand or walk behind equipment for Compaction.

GENERAL NOTES

Bridge Backwall Protection System:

1. For all structures with less than or equal to 2'-0" of fill, apply a "Bridge Backwall Protection System" from Section 1700 to the limits shown. Do not place hot mix asphalt directly on this material.
2. Use a "non-coal tar" material from KDOT's approved list.
3. Protect this material from damage during backfilling. Repair at no additional cost.
4. When the Plans show hot mix asphalt placed directly on the slab, substitute "Pavement Water Proofing" material from Section 800, this material shall be subsidiary. Wait 28 days after top slab is completed before applying this material.

NO.	DATE	REVISIONS	BY	APP'D
07	02-06-18	Filter Fabric Clarification	M.L.L.	J.P.J.
06	06-07-17	Filter Fabric Modification	J.P.J.	J.P.J.
05	10-11-13	Granular Backfill Limits	J.P.J.	L.R.R.

KANSAS DEPARTMENT OF TRANSPORTATION

RCB AUXILIARY DETAILS (LRFD)

BR020B

FHWA APPROVAL			04-17-10	APP'D.		Terry L. Fleck	
DESIGNED	J.P.J.	DETAILED	R.A.A.	QUANTITIES		TRACED	R.A.A.
DESIGN CK.	J.S.R.	DETAIL CK.	J.P.J.	QUAN.CK.		TRACE CK.	J.P.J.

KDOT Graphics Certified 06-20-2022 Sh. No. 0

KDOT Graphics Certified

Plotted by: KDOT#CADD.Support_ks.gov 25-JUN-2022 00:01
File : br020b.dgn