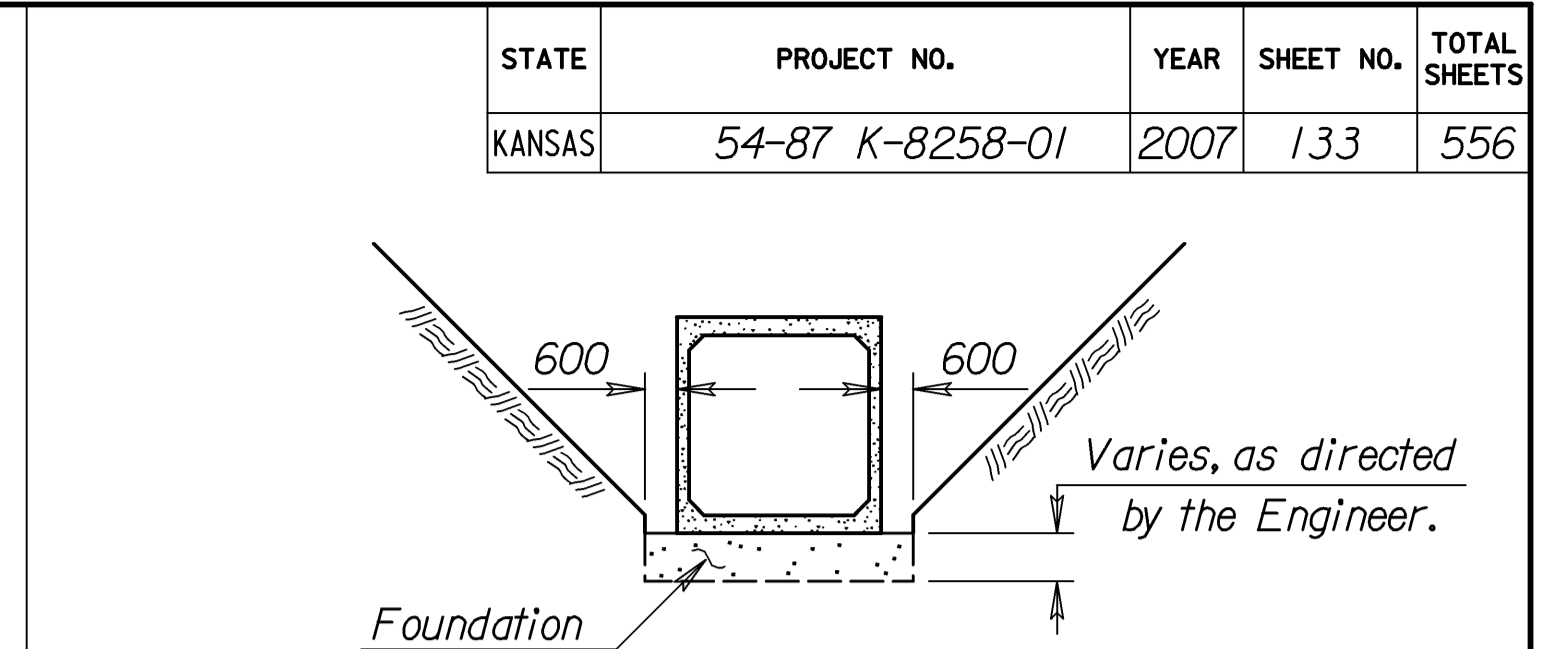
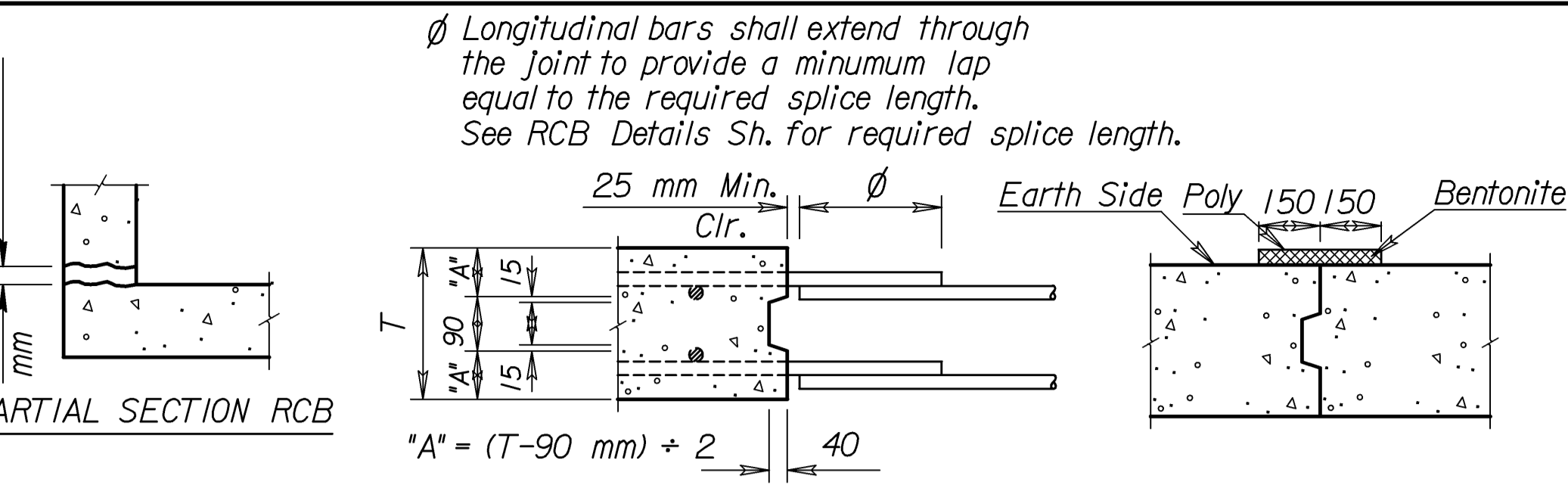
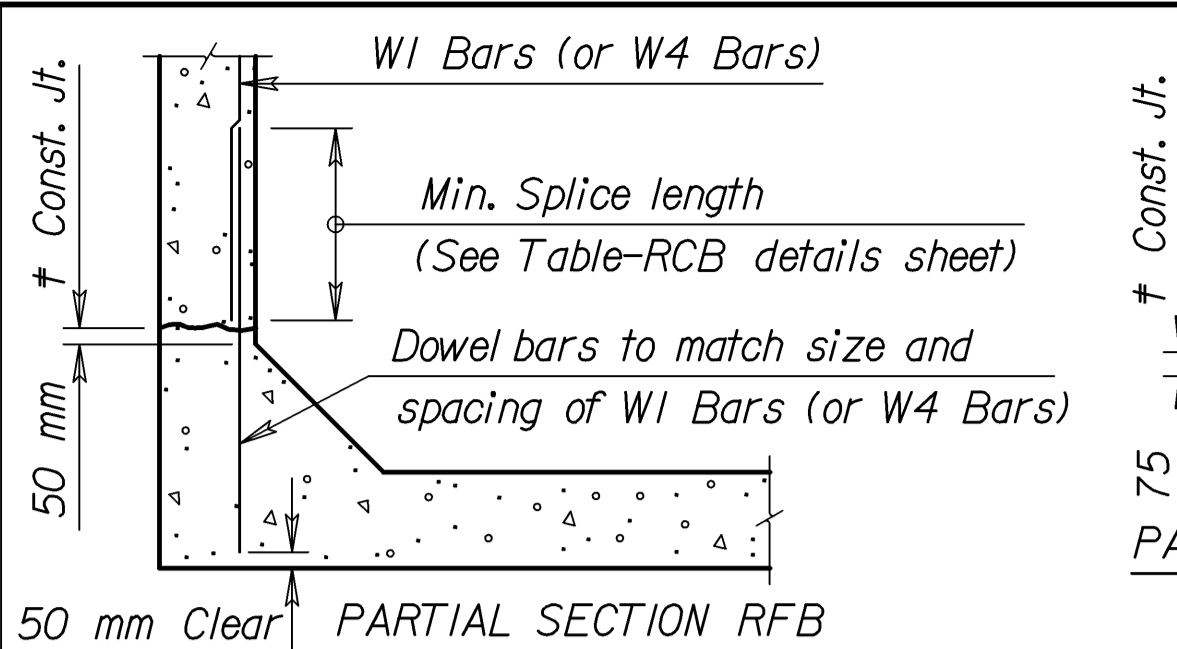
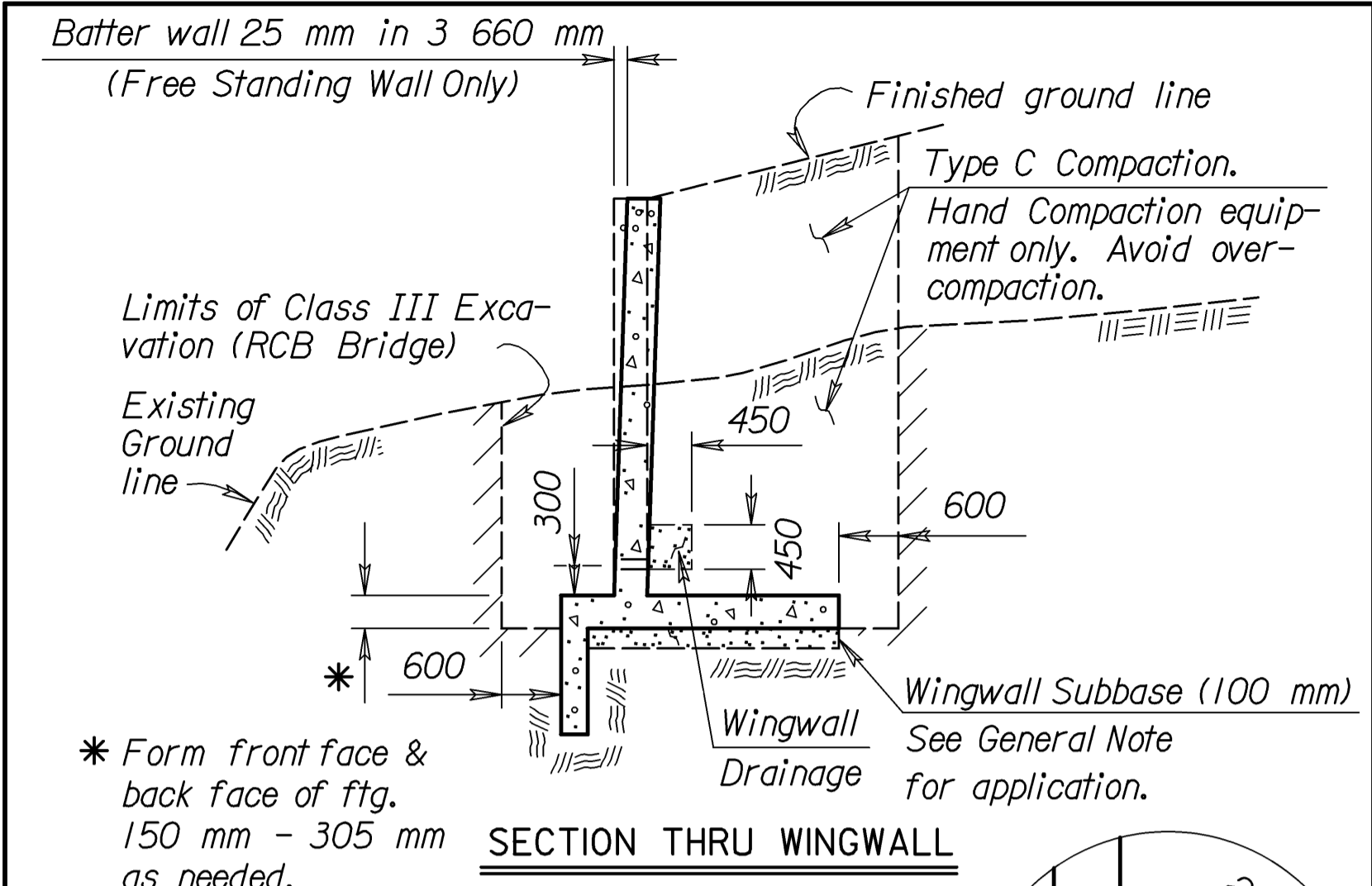


STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	54-87 K-8258-01	2007	133	556



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.

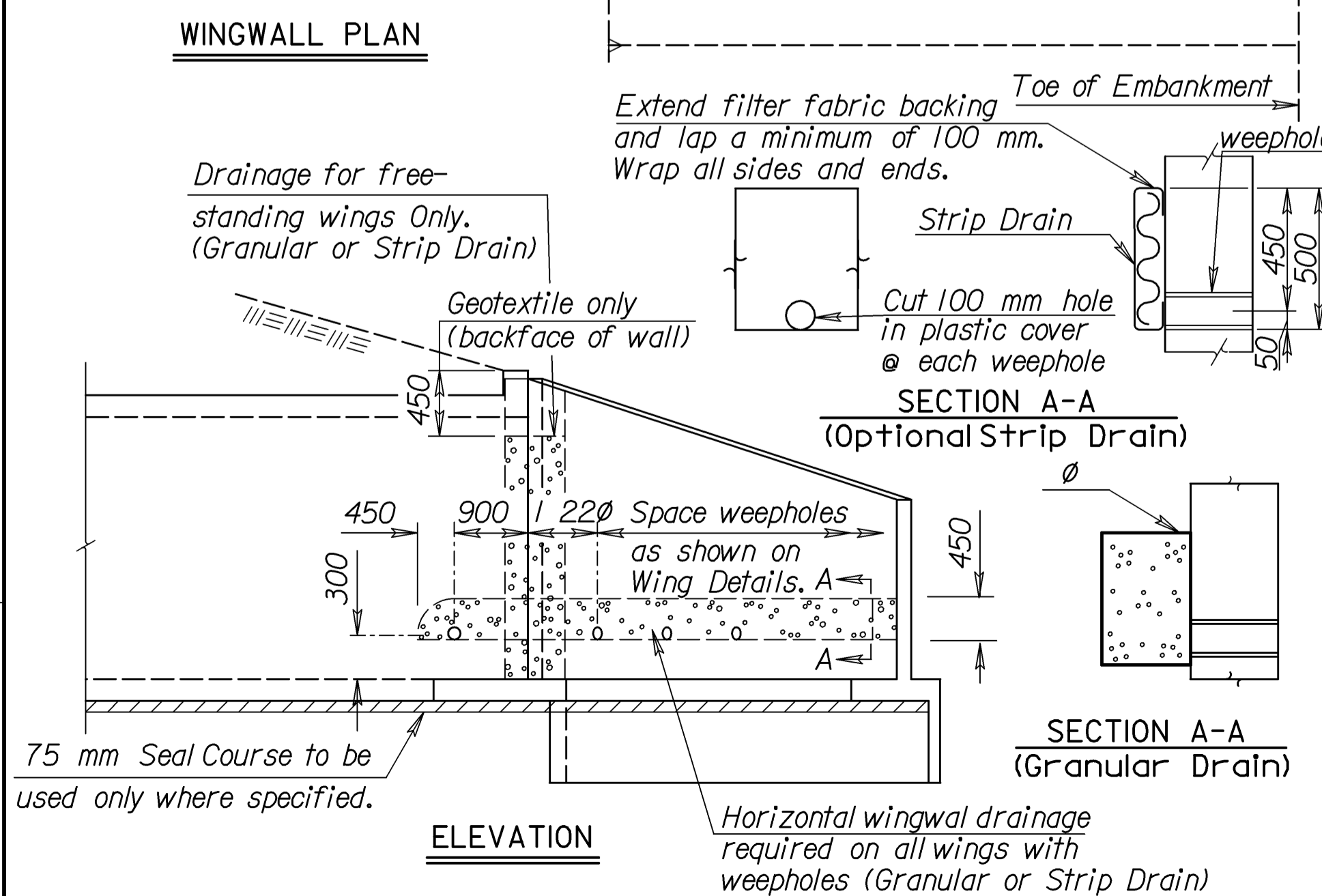
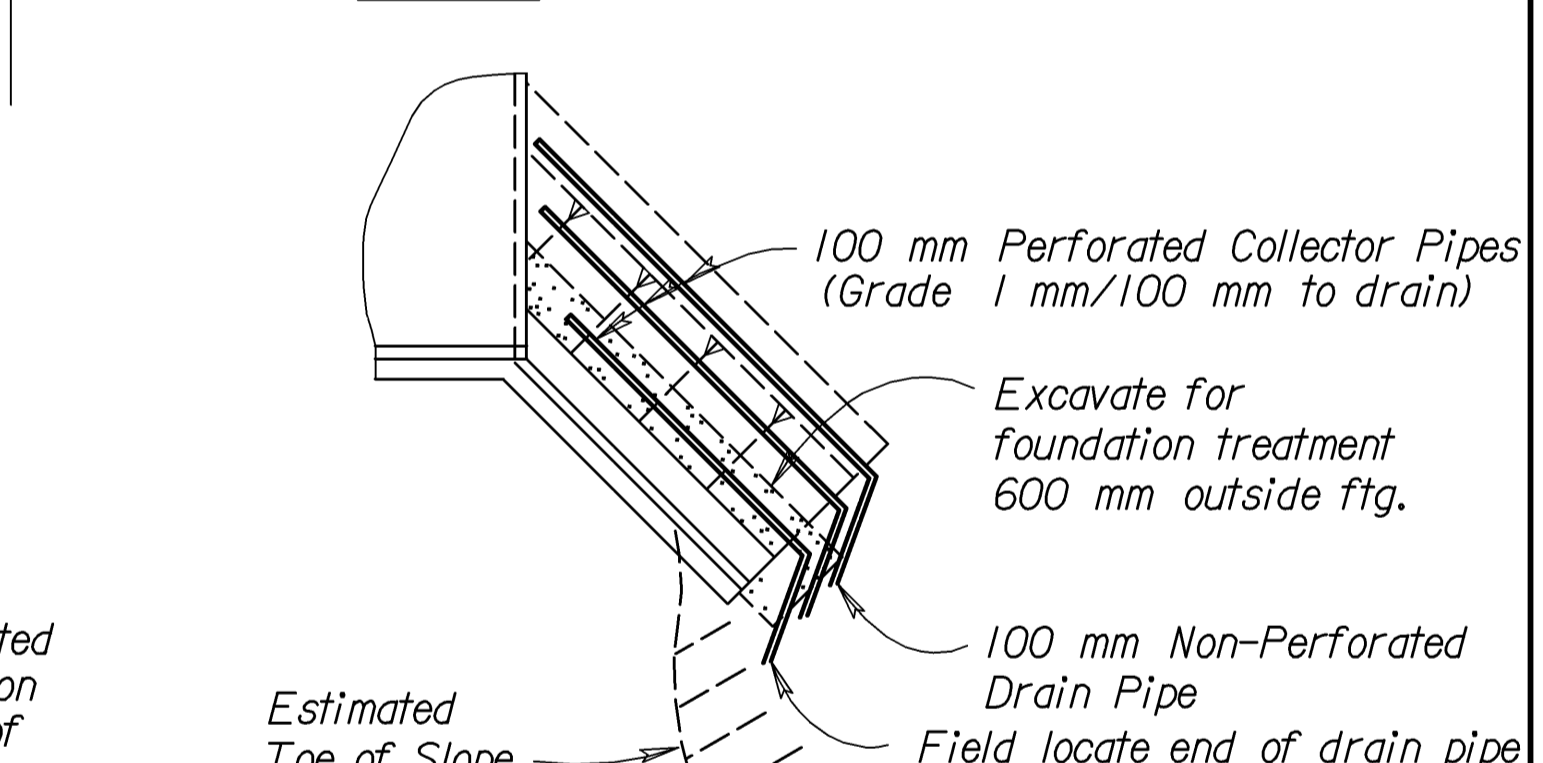
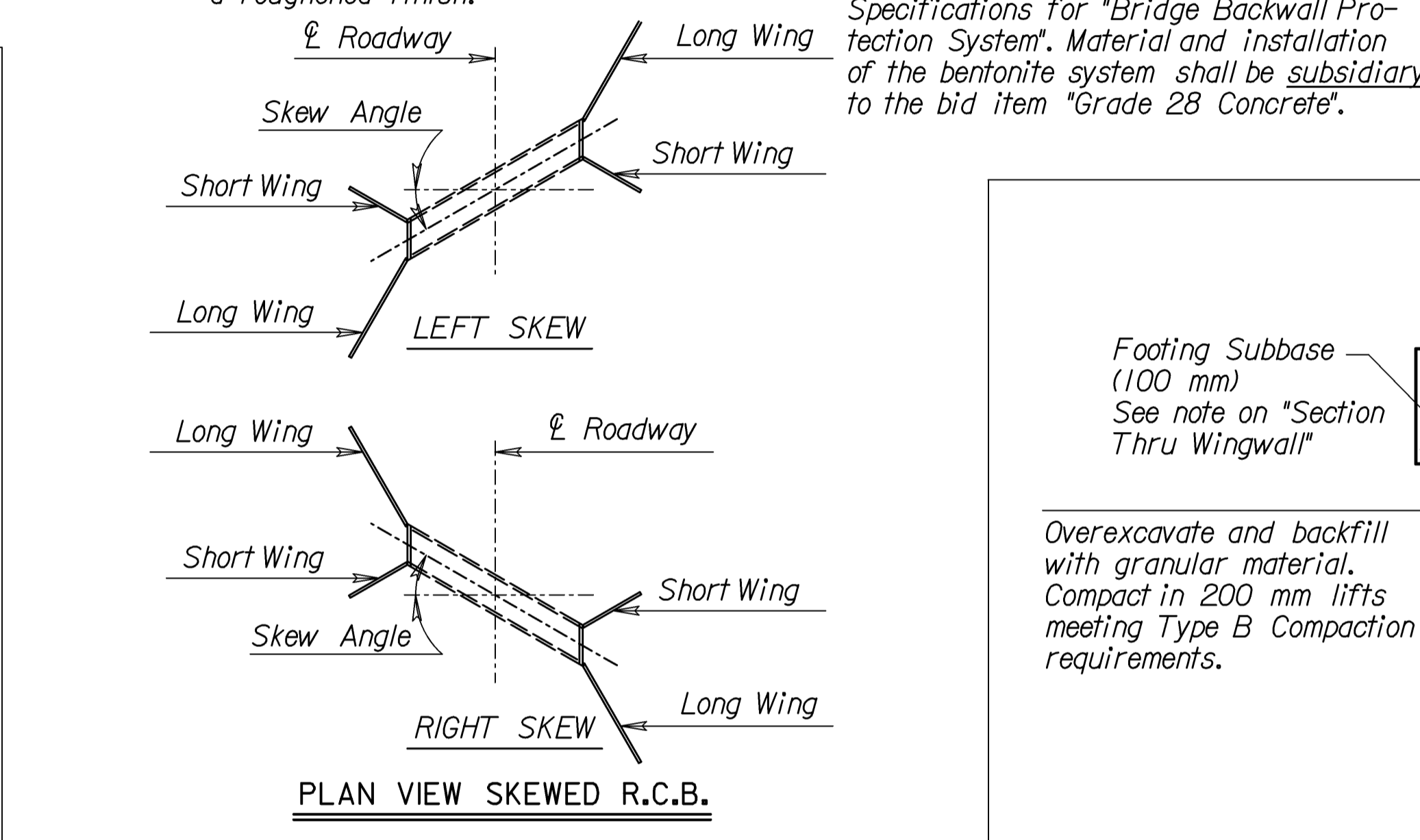
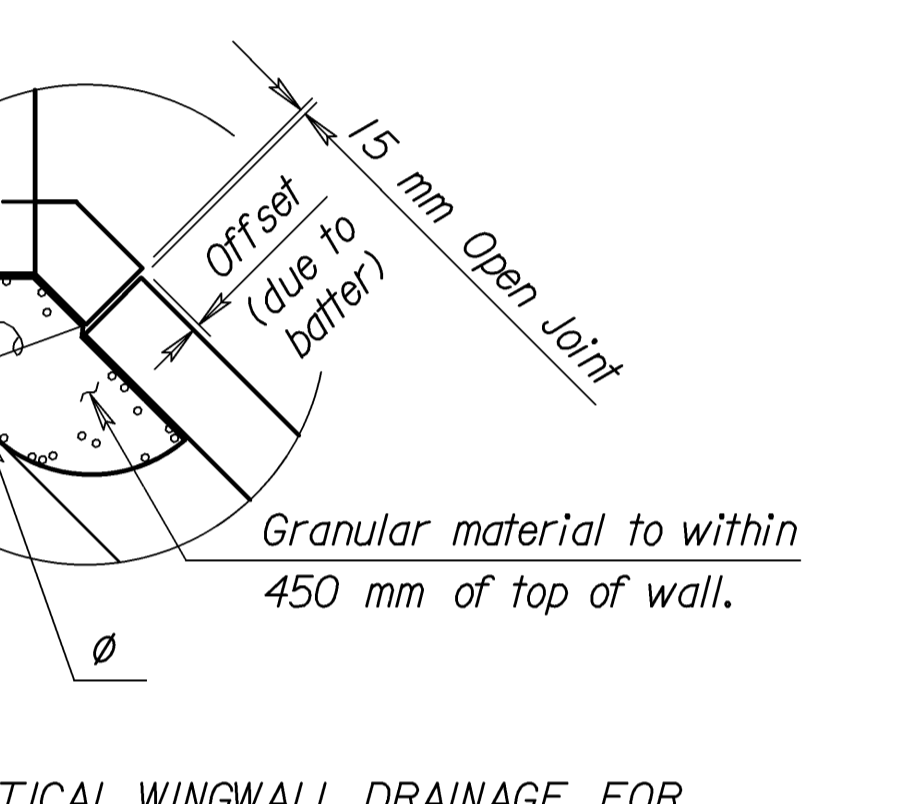
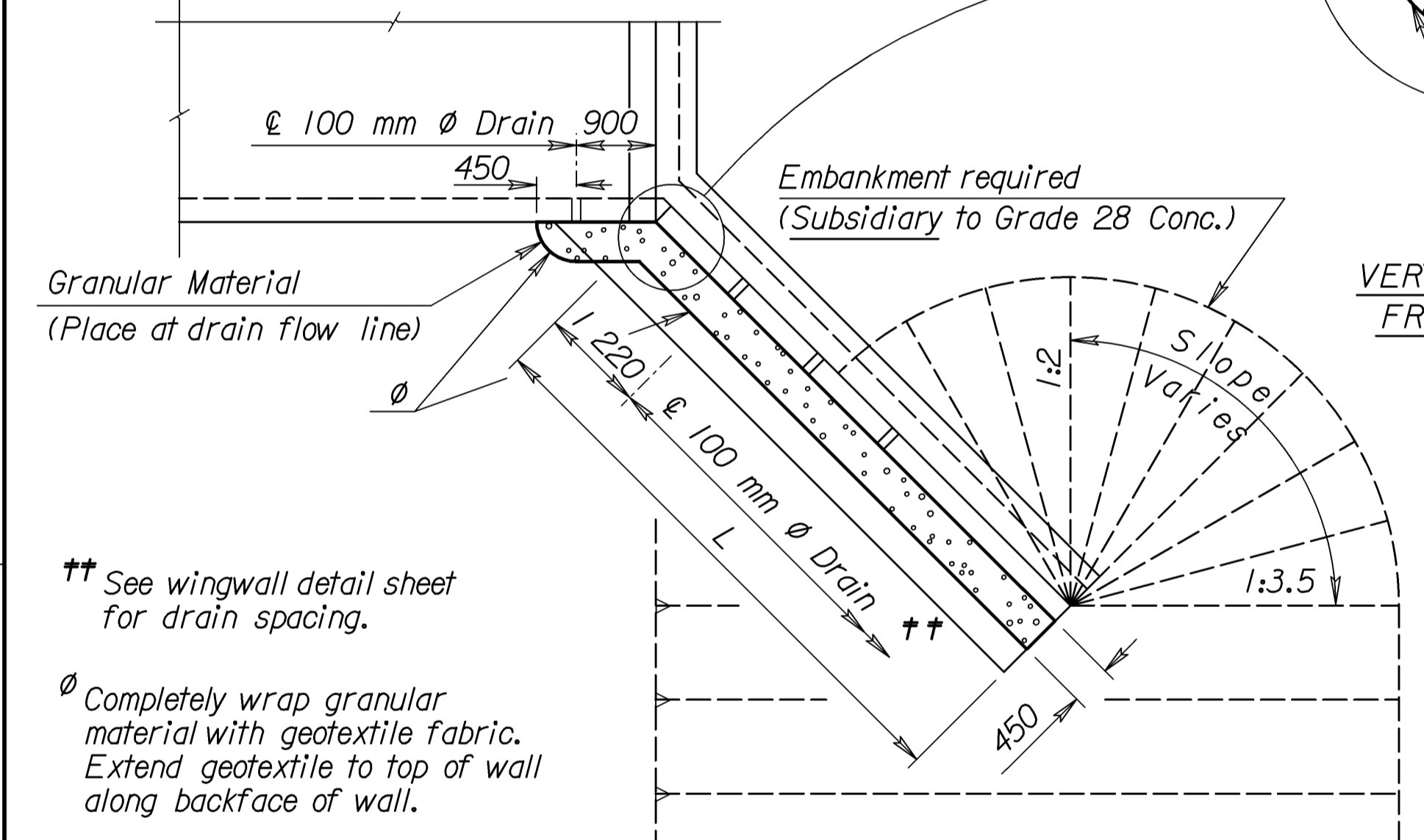
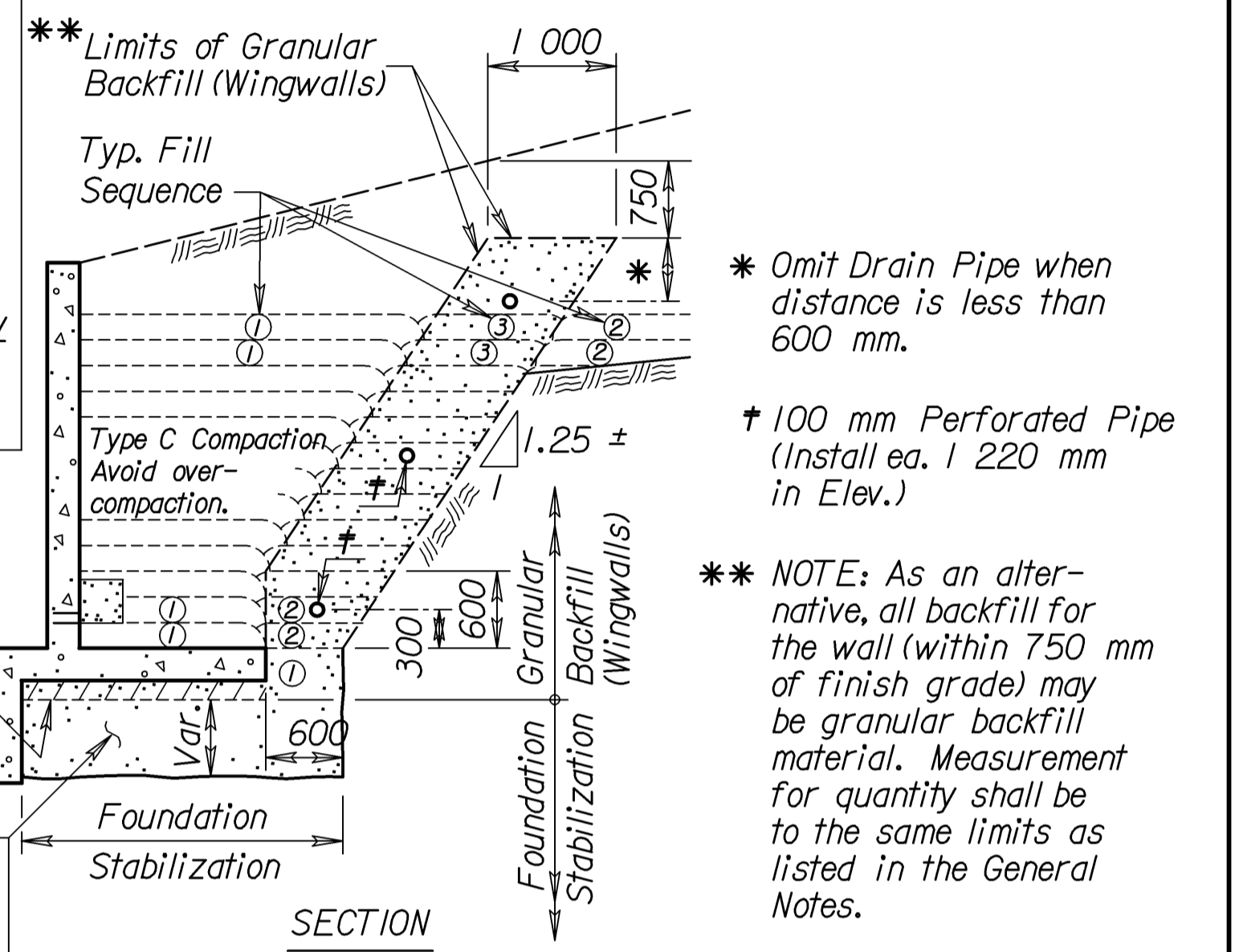
OPTIONAL COLD JOINT
The Contractor has the option of placing the Lower Horizontal Construction Joint at the top of the slab for RCB's or at the top of the fillet for RFB's

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: Barrel Construction Joints located in a median with less than 1.5 m 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 28 Concrete".

NOTE: Horizontal construction joints shall be a roughened finish.



GENERAL NOTES

Wingwall Drainage:

- 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.
- Construction and materials for wingwall drainage, including weepholes, geotextile fabric, granular material, and strip drain shall be subsidiary to the bid item, "Grade 28 Concrete". Granular material for wingwall drainage shall conform to the requirements of UD-1. Weepholes may be a formed opening or corrugated polyethylene tubing.

Wingwall Subbase:

- Wingwall subbase shall be constructed at all wingwall footings to assure the assumed coefficient of friction between the concrete footing and the foundation, with the following exceptions; or less in height unless otherwise determined by the Engineer.
- Subbase shall consist of 100 mm compacted granular material consisting of commercial grade clean sand or UD-1 material. All excavation, material and labor necessary to construct the wingwall subbase shall be subsidiary to "Grade 28 Concrete".

Seal Course:

- Seal Course consisting of 75 mm minimum 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:

- At sites where the wingwall footing or culvert floor is located within the limits of an existing streambed or is founded on unsuitable material, the Engineer will determine the depth of Foundation Stabilization.
- Foundation Stabilization may be required under the box and/or wingwalls as directed by the Engineer. The granular material placed for foundation stabilization shall be measured and paid for at the contract price per cubic yard for "Foundation Stabilization". Material for Foundation Stabilization shall be suitable backfill material as approved by the Engineer. The excavation for the placement of granular material shall be subsidiary to the bid item, "Foundation Stabilization".

Granular Backfill (Wingwalls):

- In locations where the material behind the wingwall consist of soils judged as high plasticity clays, fat clays, expansive clays or organic clays, Granular Backfill (Wingwalls) shall be used. Granular Backfill construction may be used separately or combined with Foundation Stabilization as directed by the Engineer.
- Measurement for the bid item, "Granular Backfill (Wingwalls)", shall be measured in m³ to the theoretical limits as shown Drainage pipe, rodent screens, and excavation shall be subsidiary to the bid item, "Granular Backfill (Wingwalls)".
- Material for Granular Backfill (Wingwalls) shall conform to the requirements of UD-1 or BD-1. Drainage Pipe shall be corrugated polyethylene tubing conforming to KDOT Specifications.

FOUNDATION STABILIZATION

Excavate for foundation treatment 600 mm outside ftg.

100 mm Non-Perforated Drain Pipe

Field locate end of drain pipe (Grade 1 mm/100 mm.). The end of drain pipe shall be fitted with 6 mm galvanized to prevent the entrance of rodents.

GRANULAR BACKFILL AND FOUNDATION STABILIZATION

NO.	DATE	REVISIONS	BY	APP'D
6	03/02/06	Optional Construction Joint	JPJ	KFH
5	12/29/03	Geotextile to top of wall	RAM	KFH
4	5/15/02	Removed Wing Height Stipulation	RAM	KFH
3	3/19/02	Concrete from Class to Grade	RAM	KFH
2	3-28-97	Wrap granular drains	RAM	KFH
1	9-20-96	Strip drain & bentonite joints	RAM	KFH

KANSAS DEPARTMENT OF TRANSPORTATION			
RCB AUXILIARY DETAILS			
BRO20 SI			
DESIGNED	RAMI DETAILED	RDR QUANTITIES	KENNETH F. HURST
DESIGN CK.	DETAIL CK.	QUAN. CK.	TRACE CK.

Std. Base File: br020si.dgn
 Plotted By: \$USER\$
 File: \$\$\$\$\$\$CONSPEC\$\$\$\$\$\$\$\$\$
 Plot Date: \$\$\$\$STTIME\$\$\$\$\$