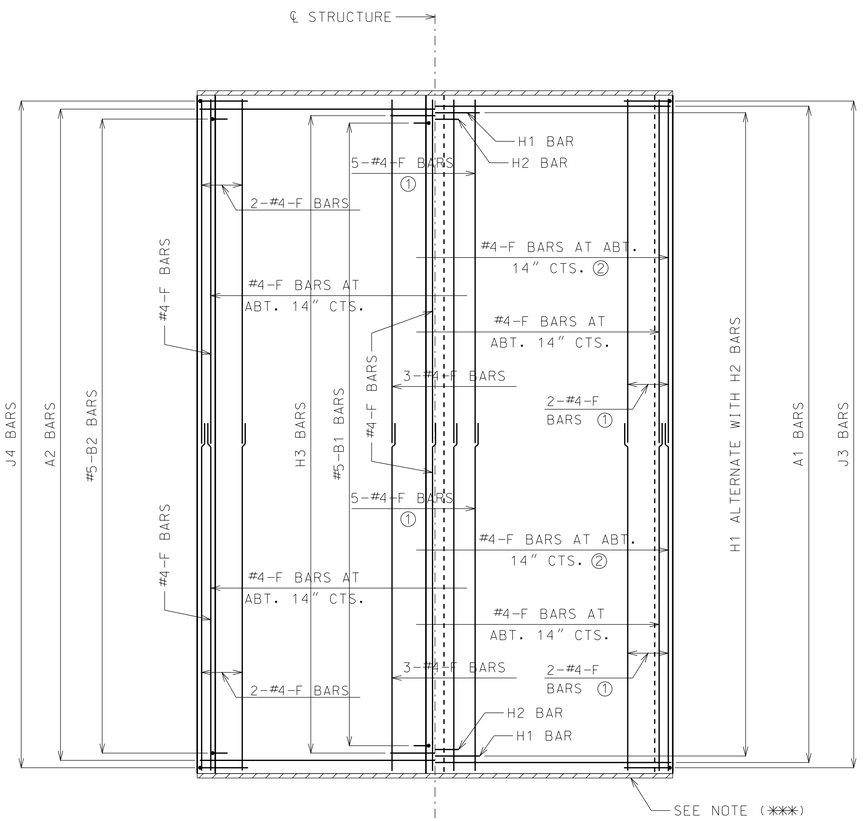
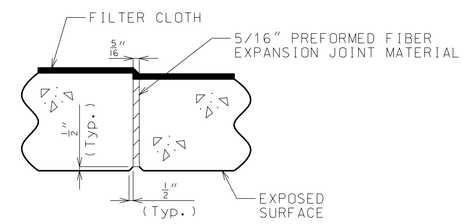
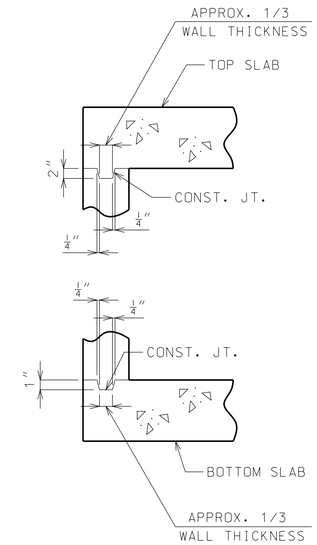


HALF HORIZONTAL SECTION

HALF PLAN



DETAIL OF TRANSVERSE JOINT THRU BARREL OF CULVERT



DETAIL OF KEYED CONST. JT.

① USE THESE BARS FOR DESIGN FILLS OF MORE THAN 2'-0".

② USE THESE BARS FOR DESIGN FILLS OF 2'-0" OR LESS.

(✱✱✱) USE TRANSVERSE JOINT WHEN BARREL IS OVER 80 FEET LONG BETWEEN HEADWALLS MEASURED ALONG ℄ OF BOX.

USE ADDITIONAL TRANSVERSE JOINTS TO PROVIDE 50 FEET MAXIMUM SPACING BETWEEN JOINTS.

GENERAL NOTES:

DESIGN UNIT STRESSES:
CLASS B-1 CONCRETE, f'c = 4,000 psi
REINFORCING STEEL (GRADE 60), fy = 60,000 psi

ALL DIMENSIONS SHOWN ARE IN INCH UNLESS OTHERWISE NOTED.

FOR DIMENSIONS AND SIZE AND SPACING OF REINFORCING STEEL, SEE STANDARD SHEET 703.45.

LAP ALL LONGITUDINAL BARS A MINIMUM OF 23" AT SPLICES.

MINIMUM CLEARANCE TO REINFORCING STEEL SHALL BE 1-1/2" UNLESS OTHERWISE SHOWN.

PREFORMED FIBER EXPANSION JOINT MATERIAL SHALL BE SECURELY STITCHED TO ONE FACE OF THE CONCRETE WITH NO. 10 GAGE COPPER WIRE OR NO. 12 GAGE SOFT DRAWN GALVANIZED STEEL WIRE.

A FILTER CLOTH 3 FEET IN WIDTH AND DOUBLE THICKNESS SHALL BE APPLIED TO ALL TRANSVERSE JOINTS IN THE TOP SLAB AND SIDEWALLS. THE MATERIAL SHALL BE CENTERED ON THE JOINT AND THE EDGES SEALED WITH A MASTIC OR WITH TWO SIDED TAPE. THE FILTER CLOTH SHALL BE A GEOTEXTILE MEETING SEC 1011 FOR SUBSURFACE DRAINAGE. COST OF FURNISHING AND INSTALLING THE FILTER CLOTH WILL BE CONSIDERED COMPLETELY COVERED BY THE CONTRACT UNIT PRICE FOR OTHER ITEMS.

FOR MORE DETAILS AND SECTION THROUGH BOX, SEE 703.42 SHEET 2 OF 2.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

STATE OF MISSOURI
DENNIS W. HECKMAN
NUMBER PE-27141
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

CONCRETE DOUBLE BOX STRUCTURE

(CUT SECTIONS)

DATE EFFECTIVE: 10/01/2009
DATE PREPARED: 8/18/2009

703.42G

SHEET NO. 1 OF 2

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.