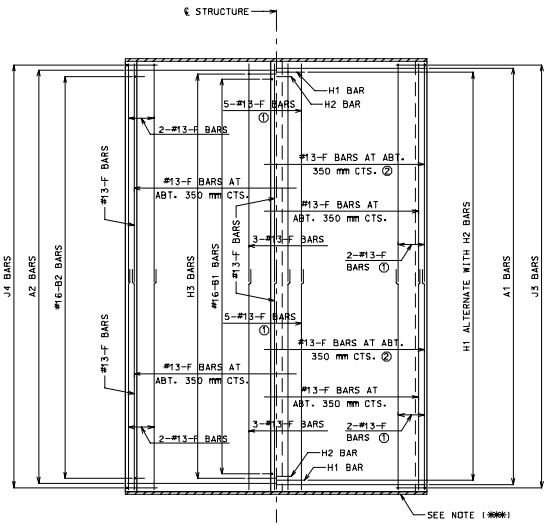
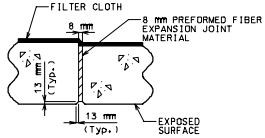
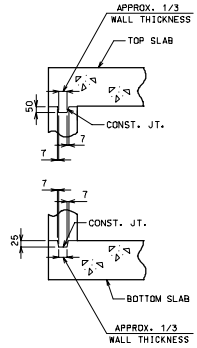


HALF HORIZONTAL SECTION HALF PLAN



DETAIL OF TRANSVERSE JOINT THRU BARREL OF CULVERT



DETAIL OF KEYED CONST. JT.

GENERAL NOTES:

DESIGN UNIT STRESSES:
CLASS B-1 CONCRETE, f'c = 28 MPa
REINFORCING STEEL (GRADE 420), fy = 420 MPa

ALL DIMENSIONS SHOWN ARE IN mm UNLESS OTHERWISE NOTED.

FOR DIMENSIONS AND SIZE AND SPACING OF REINFORCING STEEL, SEE STANDARD SHEET M703.45.

LAP ALL LONGITUDINAL BARS A MINIMUM OF 610 mm AT SPLICES.

MINIMUM CLEARANCE TO REINFORCING STEEL SHALL BE 40 mm UNLESS OTHERWISE SHOWN.

PREFORMED FIBER EXPANSION JOINT MATERIAL SHALL BE SECURELY STITCHED TO ONE FACE OF THECONCRETE WITH 3.5 mm DIA. (10 GAGE) COPPER WIRE OR 2.8 mm DIA.(12 GAGE) SOFT DRAWN GALVANIZED STEEL WIRE.

A FILTER CLOTH 1 METER 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 THE APPROVAL OF THE ENGINEER AND HAVING A GRAB TENSILE STRENGTH OF 800 N. (ASTM D-4632) AND AN APPARENT OPENING SIZE OF 300 TO 150 MICROMETERS (ASTM D-4751). 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 M703.42 SHEET 2 OF 2.

① USE THESE BARS FOR DESIGN FILLS OF MORE THAN 610 mm.

② USE THESE BARS FOR DESIGN FILLS OF 610 mm OR LESS.

(✱✱✱) USE TRANSVERSE JOINT WHEN BARREL IS OVER 25 METERS LONG BETWEEN HEADWALLS MEASURED ALONG ℄ OF BOX.

USE ADDITIONAL TRANSVERSE JOINTS TO PROVIDE 15 METERS MAXIMUM SPACING BETWEEN JOINTS.

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION			
	CONCRETE DOUBLE BOX STRUCTURE (CUT SECTIONS)		
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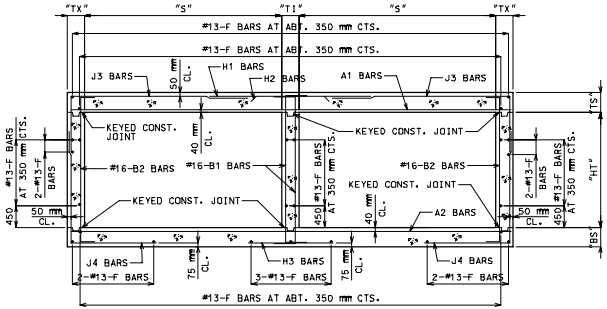
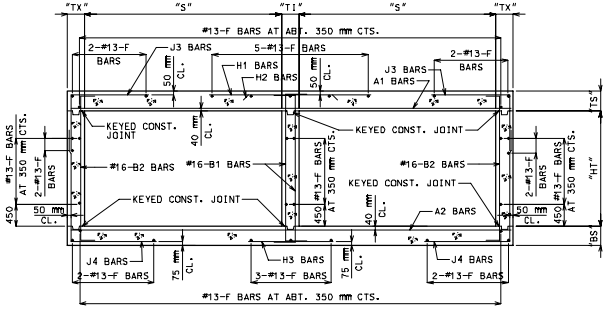
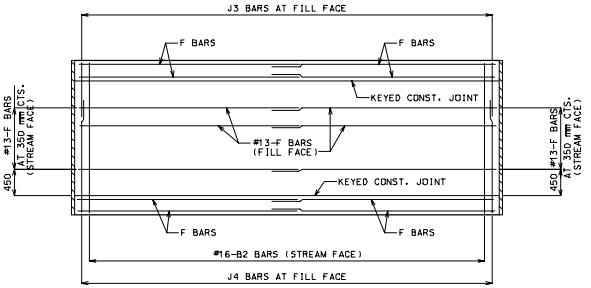


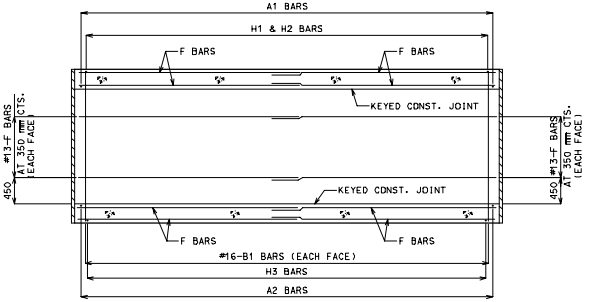
SECTION THRU BOX (DESIGN FILLS 610 mm OR LESS)



SECTION THRU BOX (DESIGN FILLS OVER 610 mm)



ELEVATION OF EXTERIOR WALL



SECTION NEAR INTERIOR WALL

NOTE: CONSTRUCTION JOINT KEY OMITTED FOR CLARITY.

GENERAL NOTES:

ALL DIMENSIONS SHOWN ARE IN mm UNLESS OTHERWISE NOTED.

FOR DIMENSIONS AND SIZE AND SPACING OF REINFORCING STEEL, SEE STANDARD SHEET M703.45.

MINIMUM CLEARANCE TO REINFORCING STEEL SHALL BE 40 mm UNLESS OTHERWISE SHOWN.

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION			
	CONCRETE DOUBLE BOX STRUCTURE (CUT SECTIONS)		
DATE: _____	EFFECTIVE: 07-01-2004	M703.42F	2/2