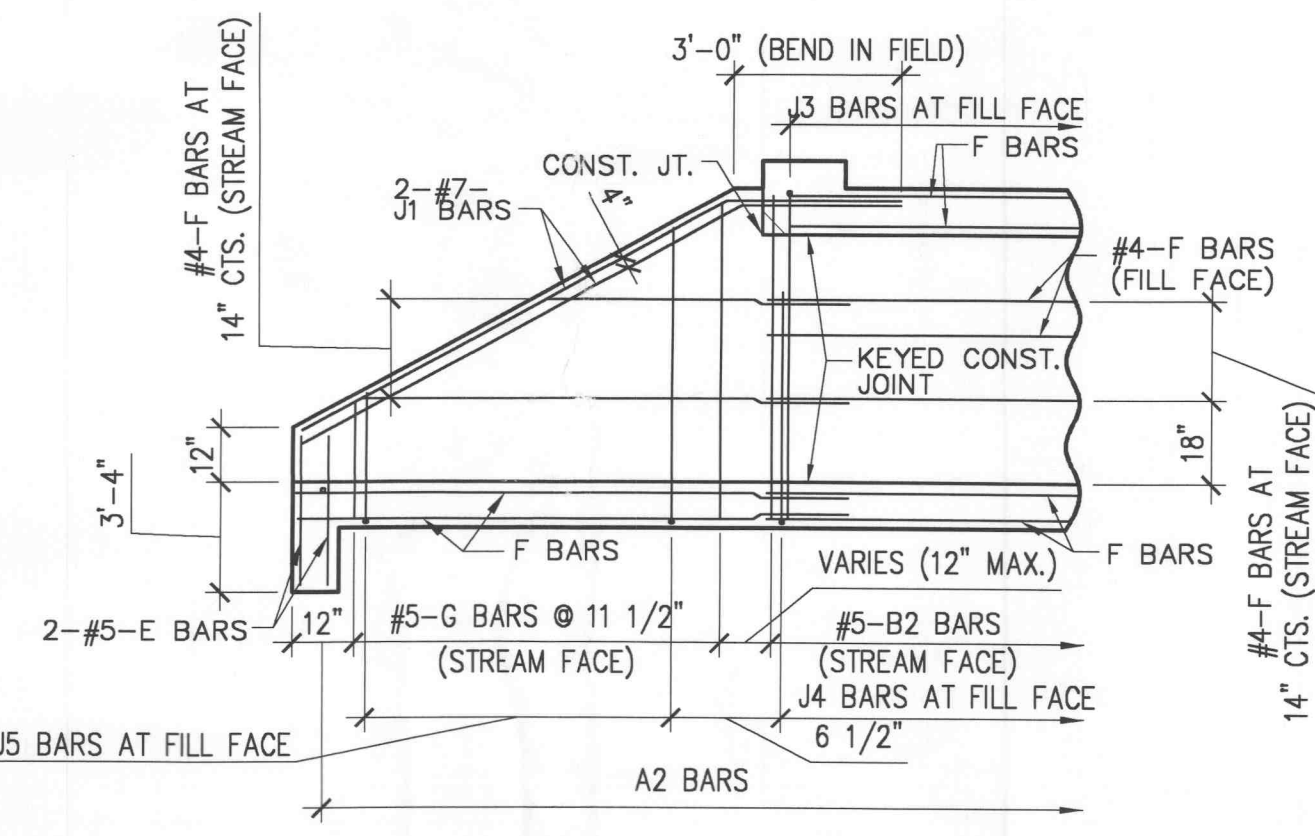
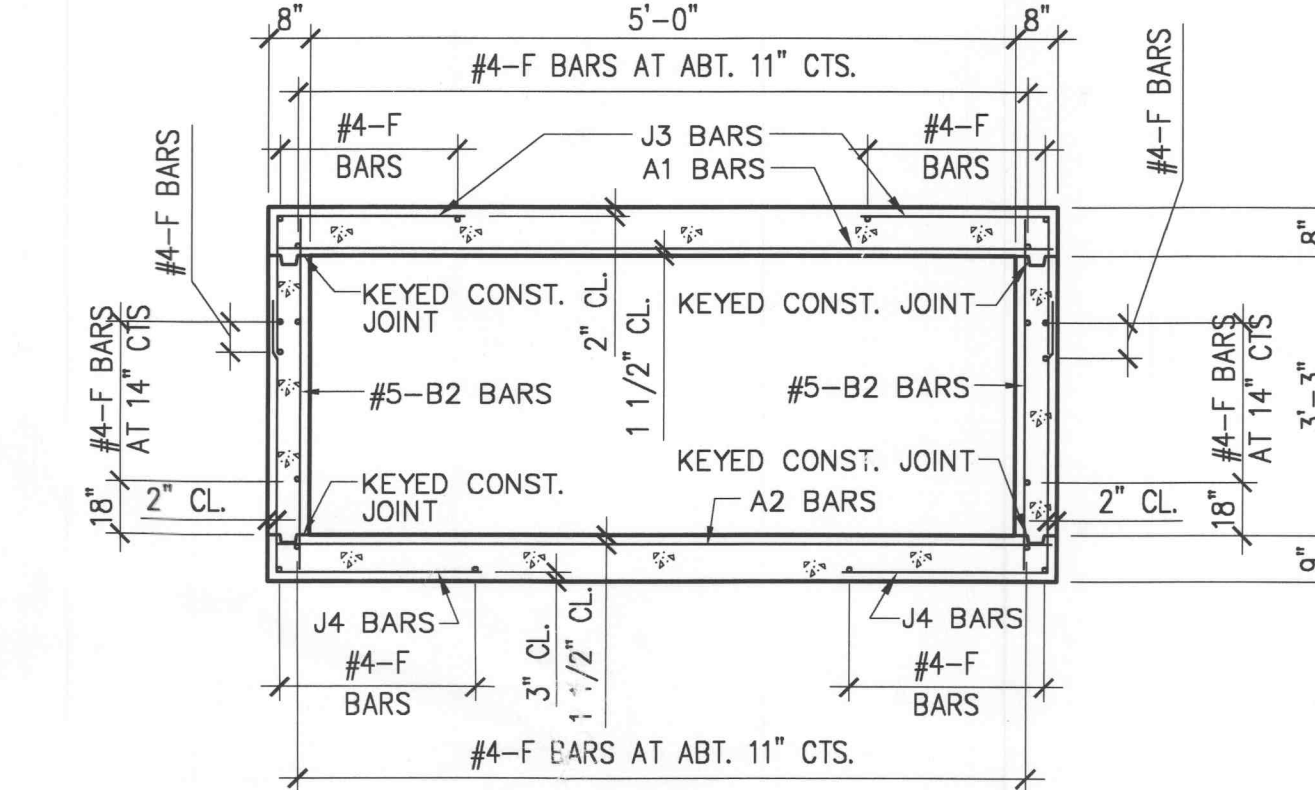
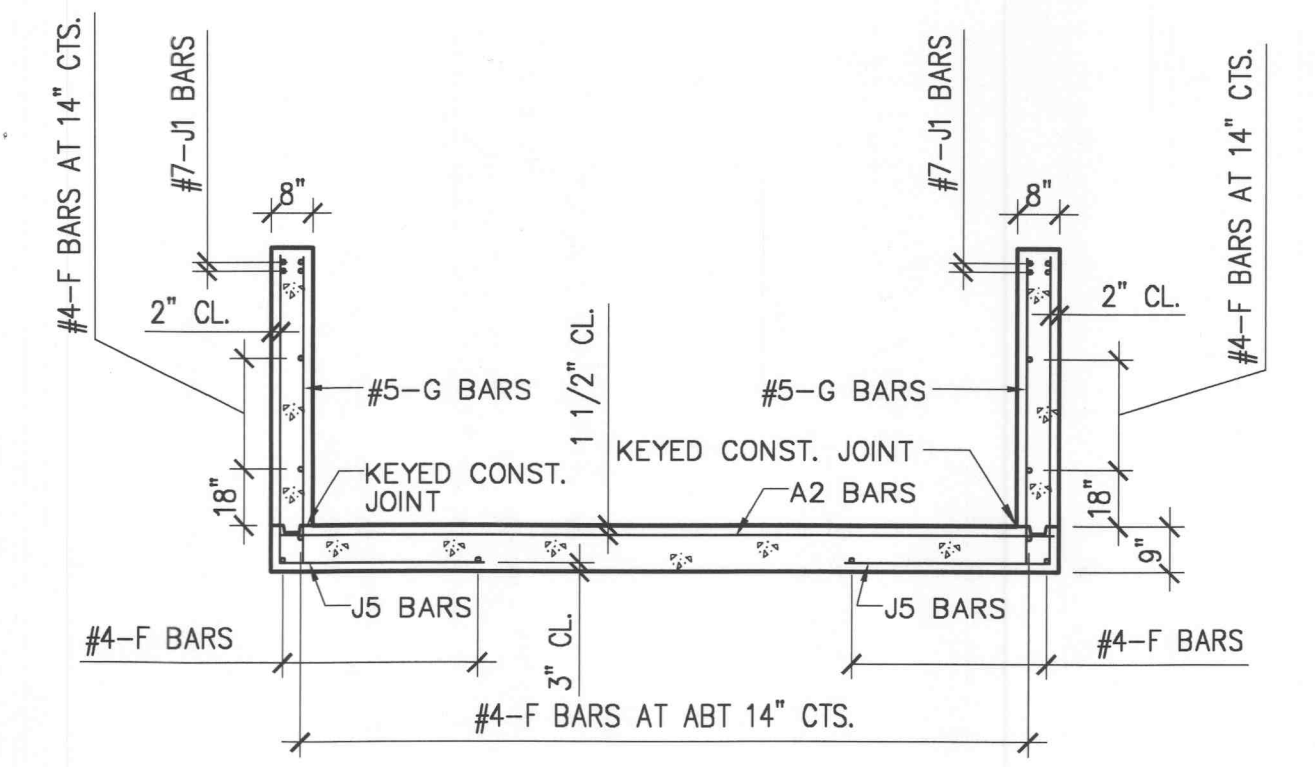
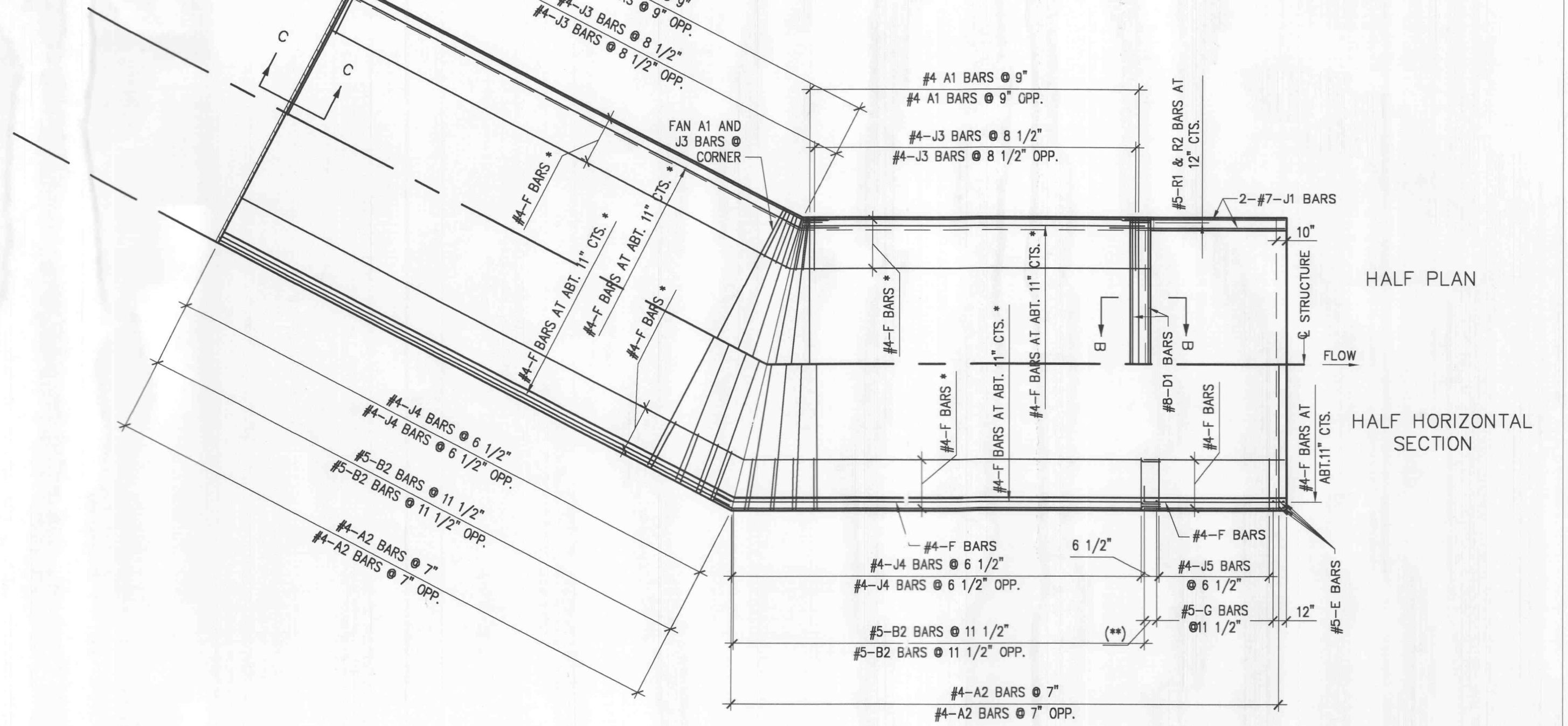
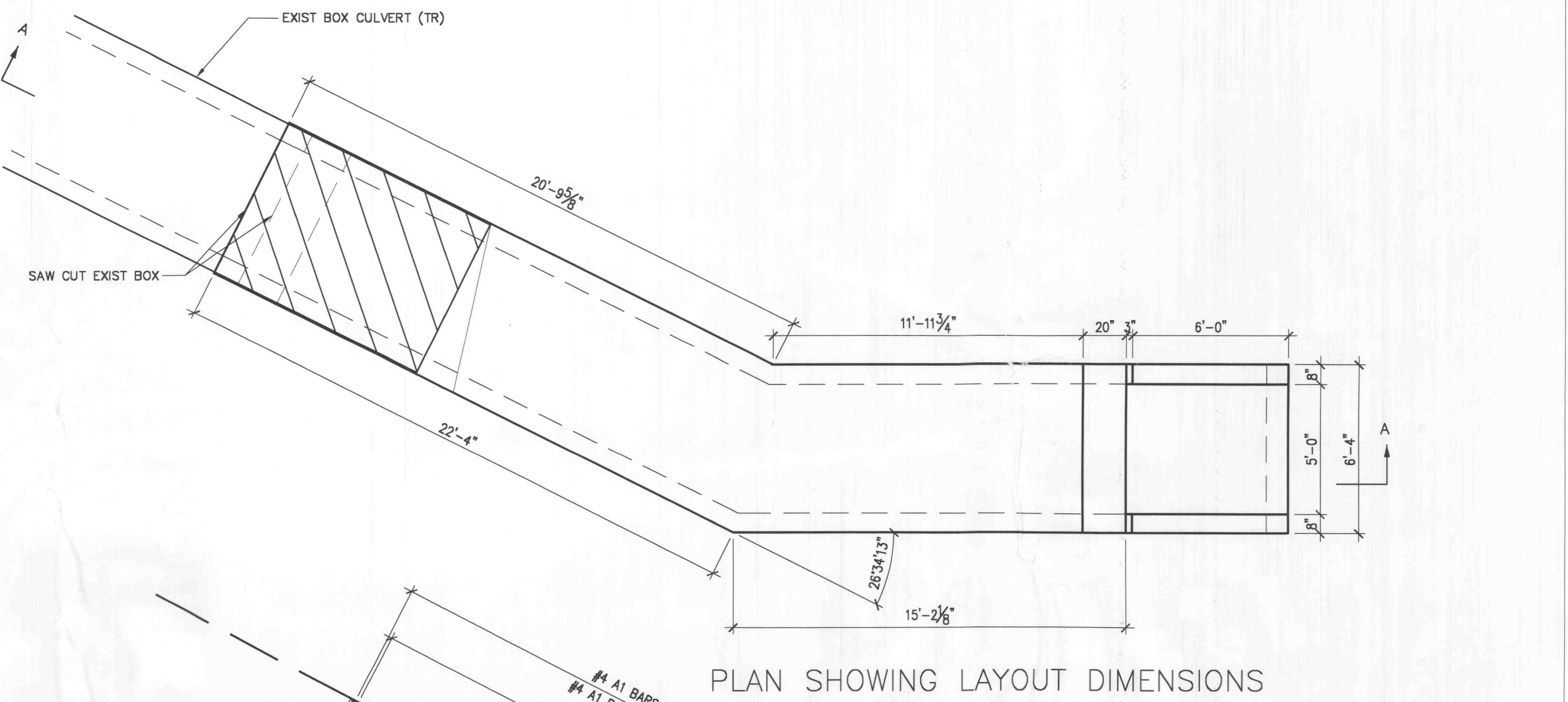
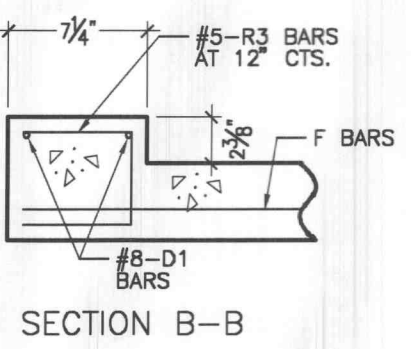
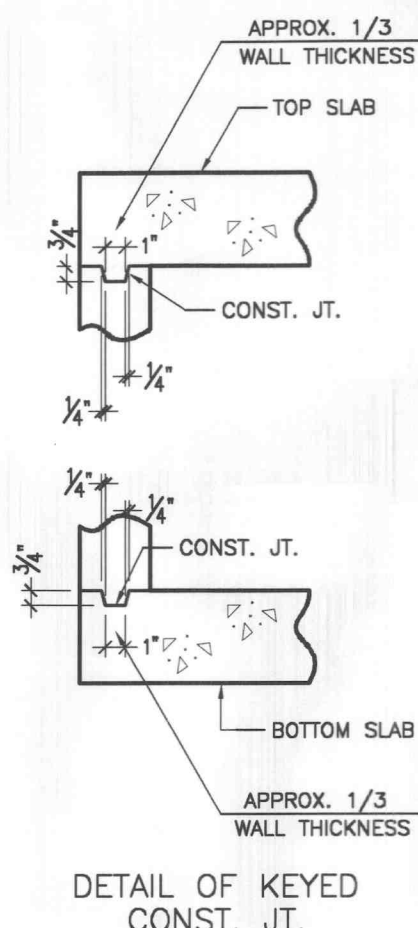
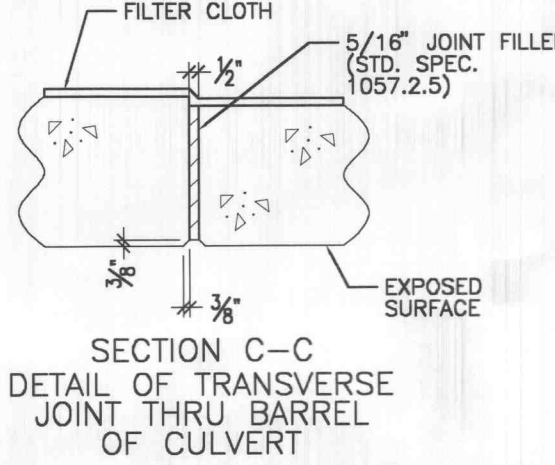
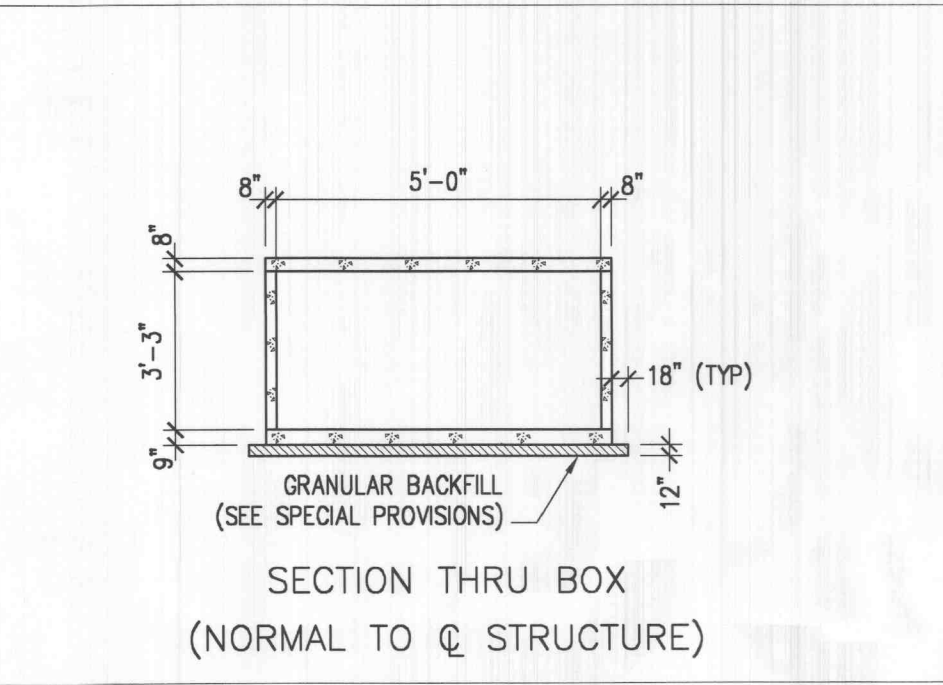
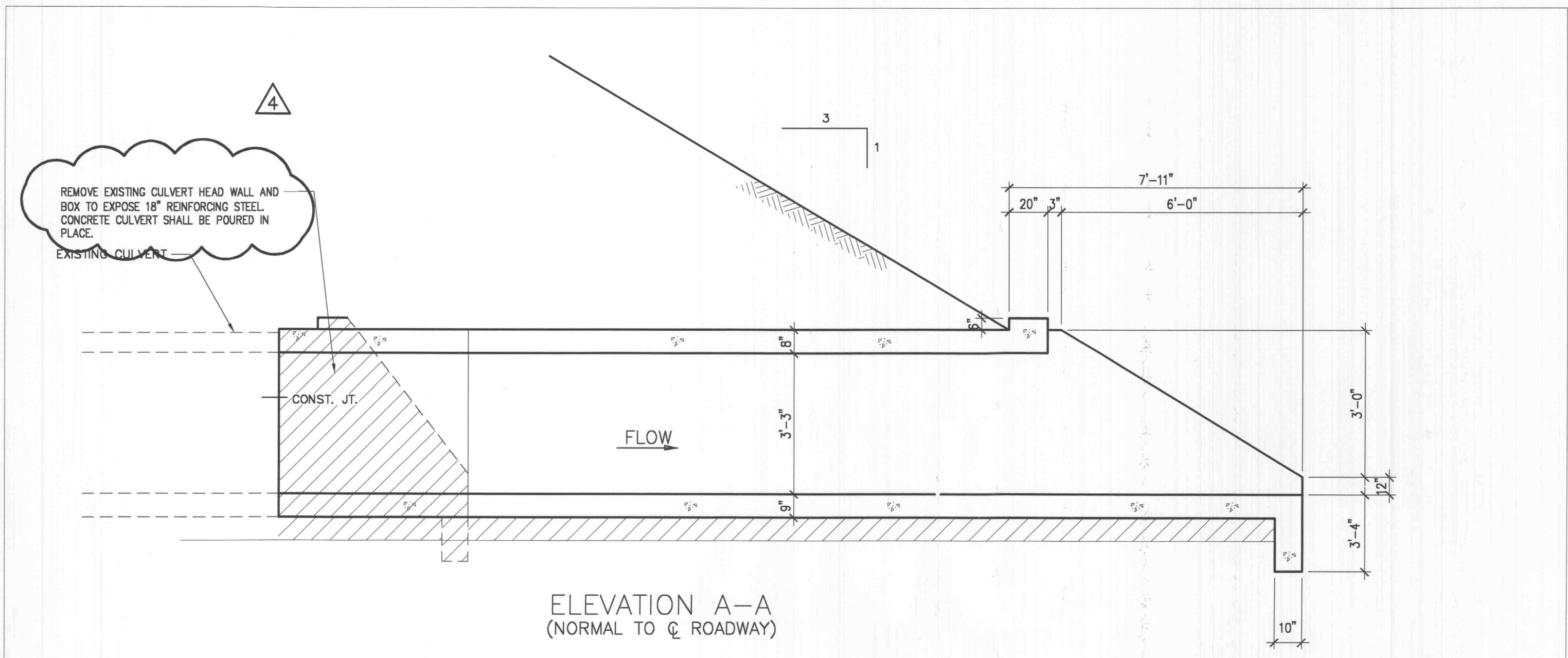


GENERAL NOTES:

DESIGN SPECIFICATIONS:
 AASHTO - 1996
 LOAD FACTOR DESIGN
 DESIGN UNIT STRESSES:
 CLASS B-1 CONCRETE $f'_c = 4,000$ psi
 REINFORCING STEEL (GRADE 60),
 $f_y = 60,000$ psi
 DESIGN LOADING:
 EARTH 120 #/SQ. FT.
 EQUIVALENT FLUID PRESSURE
 30 #/SQ. FT. (MIN.) - 60 #/SQ. FT. (MAX.)
 ALL DIMENSIONS SHOWN ARE IN INCHES
 (m.) UNLESS OTHERWISE NOTED.
 THIS DRAWING IS NOT TO SCALE.
 FOLLOW DIMENSIONS.

NOTE:
 WHEN ALTERNATE PRECAST BOX SECTIONS ARE USED, THE MINIMUM BARREL
 LENGTH MEASURED ALONG THE SHORTEST WALL FROM THE FIRST JOINT TO
 THE OUTSIDE OF THE HEADWALL SHALL BE 3'-2". REINFORCEMENT AND
 DIMENSIONS FOR THE WINGS AND HEADWALLS SHALL BE IN ACCORDANCE WITH
 MISSOURI STANDARD PLANS DRAWINGS.



GENERAL NOTES:
 ALL DIMENSIONS SHOWN ARE IN INCH UNLESS OTHERWISE NOTED.
 FOR DIMENSIONS AND SIZE AND SPACING OF REINFORCING STEEL, SEE
 STANDARD SHEET 703.15C.
 LAP ALL LONGITUDINAL BARS A MINIMUM OF 23" AT SPICES.
 MINIMUM CLEARANCE TO REINFORCING STEEL SHALL BE 1-1/2" UNLESS
 OTHERWISE SHOWN.
 JOINT FILLER 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.
 J1 BARS MAY BE BENT IN FIELD OR SHOP.
 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 GOTTRELL MEETING THE APPROVAL OF THE ENGINEER AND HAVING A
 GRAB TENSILE STRENGTH OF 180 LBS. (ASTM D-4632) AND AN APPARENT
 OPENING SIZE OF 50 TO 100 (ASTM D-4751). NO DIRECT PAYMENT
 WILL BE MADE FOR FURNISHING AND INSTALLING FILTER CLOTH.

ENGINEERS
 ARCHITECTS
 SURVEYORS
 SCIENTISTS

**Farnsworth
 GROUP**

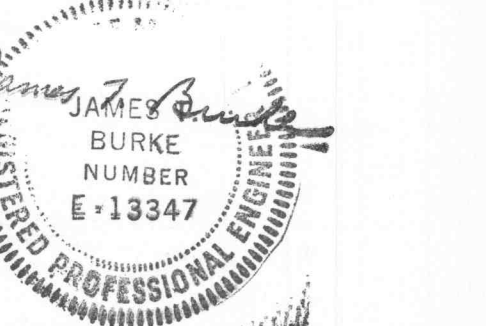
20 ALLEN AVENUE, SUITE 200
 ST LOUIS, MISSOURI 63119
 (314) 962-7900 / (314) 962-1263 Fax
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ISSUE:

#	Date:	Description:
1	2/13/04	City of O'Fallon Comments
2	2/13/04	Duckett Creek Sanitary District Comments
3	2/13/04	Cottleville Fire Protection District Comments
4	2/13/04	MoDot Comments
5	2/13/04	Corps of Engineers Comments

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PROJECT:
**PERSIMMON POINTE
 HOTEL DEVELOPMENT**



#4130 HIGHWAY 40-61
 O'FALLON, MO

Date: 12-30-03
 Design/Drawn: DB
 Approved: JTB
 Book No.:

SHEET TITLE:
CULVERT DETAIL

SHEET NUMBER:
C13
 SHEET 17 OF 36

Project No.: 29916312
 Planning & Zoning File: #3103.03

XRef File: I:\999\29916312-hey 40 @ rle k\wg\299163-01\LDWG | DATE: 02/13/2004 | Time: 14:25 |