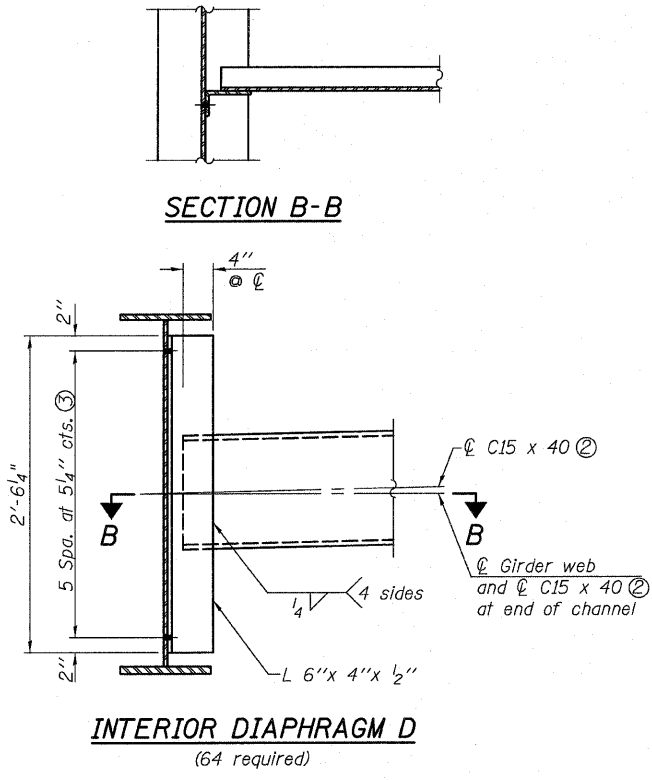


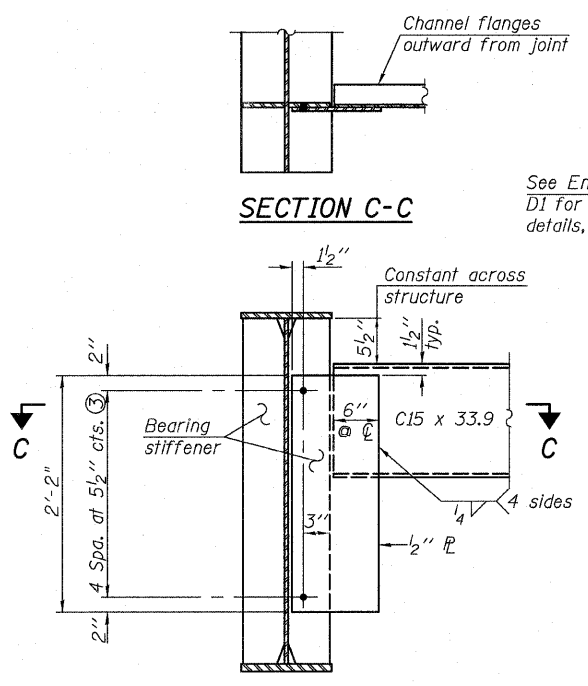
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SECTION B-B

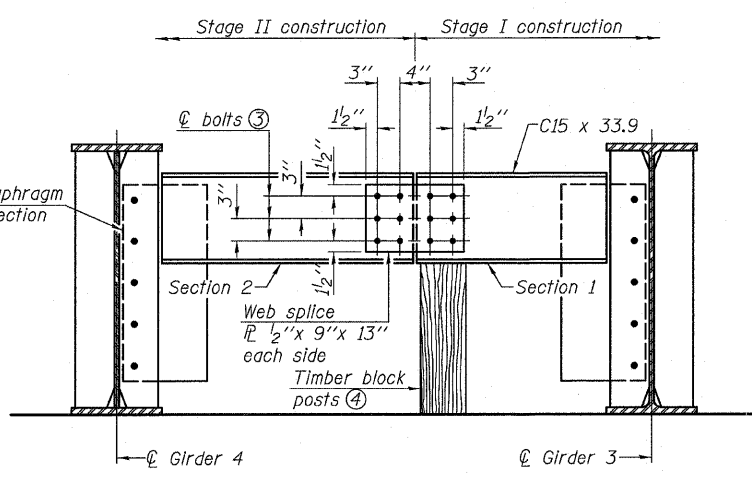


INTERIOR DIAPHRAGM D  
(64 required)

SECTION C-C



END DIAPHRAGM D1  
(8 required)

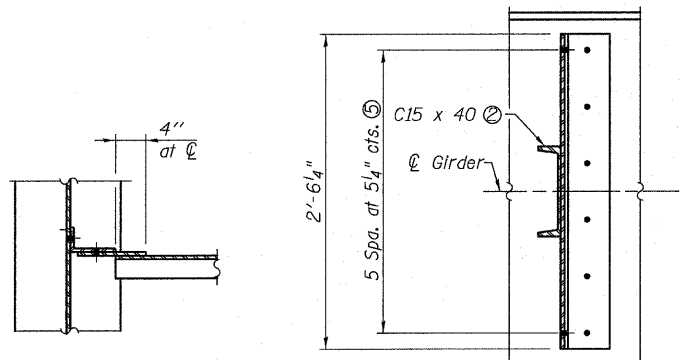


END DIAPHRAGM D2  
(2 required)

END DIAPHRAGM STAGE  
CONSTRUCTION SEQUENCE

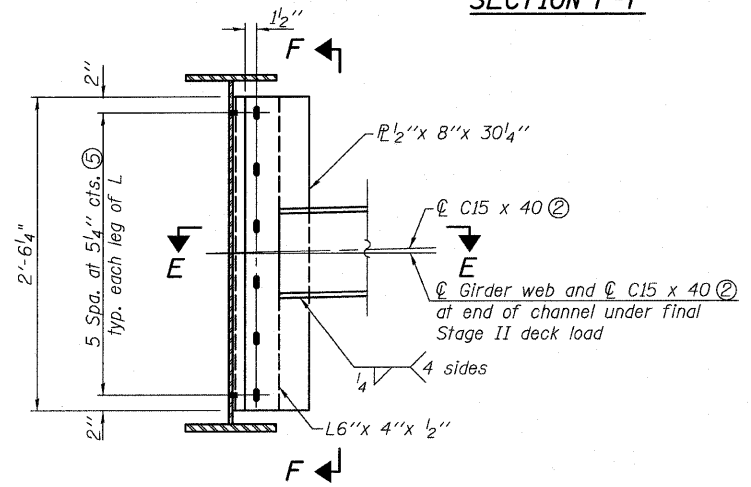
- 1.) Order Diaphragm in two sections.
- 2.) Attach section 1 of Diaphragm to Girder 3.
- 3.) Place Timber Block Posts between section 1 of diaphragm and abutment bearing section.
- 4.) Attach section 2 of diaphragm to both Girder 4 and section 1 of diaphragm during Stage II Construction with splice plates.
- 5.) Remove Timber Block Posts.

SECTION E-E

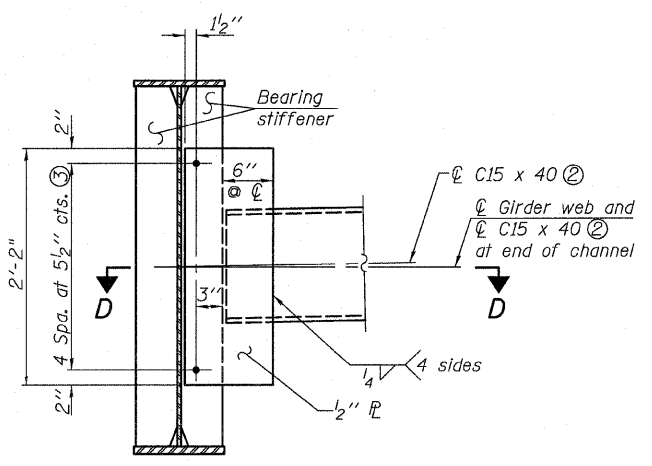


INTERIOR DIAPHRAGM D4  
(16 required)

SECTION F-F



SECTION D-D



INTERIOR DIAPHRAGM D3  
(15 required)

Notes:

- ① Two hardened washers required for each set of oversized holes.
- ② Alternate C15x50 channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section. The alternate, if utilized, shall be provided at no additional cost to the Department.
- ③ 3/4"  $\phi$  HS bolts, 1 1/8"  $\phi$  holes
- ④ Cost of Timber Block Posts is included with Furnishing and Erecting Structural Steel.
- ⑤ Use 3/4"  $\phi$  HS bolts. Provide 1 3/16" x 1 7/8" vertical slotted holes in connection plates attached to channel diaphragms only. Oversized 1 1/8"  $\phi$  holes shall be provided in the web of the girders and in both legs of the angle. Use 5/16" structural plate washers placed over all slotted holes in diaphragm connection. The bolts for the slotted holes shall be finger tight until the second stage pour is complete and then fully tightened. The connection plate and slots shall be positioned so bolts start at one end with no concrete load and finish near the opposite end under deck load, allowing maximum displacement without laterally stressing the main members. Fabricator shall detail connection plate location on channel to allow for differential deflection during Stage II concrete deck pour.

GIRDER DETAILS  
STRUCTURE NO. 026-0105

SHEET NO. 20  38 SHEETS	F.A.P. RTE. 752	SECTION (U-2BR)B-1	COUNTY FAYETTE	TOTAL SHEETS 71	SHEET NO. 42
	FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT	
			CONTRACT NO. 74235		



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DESIGNED JAD
CHECKED DGL
DRAWN JAD
CHECKED DGL