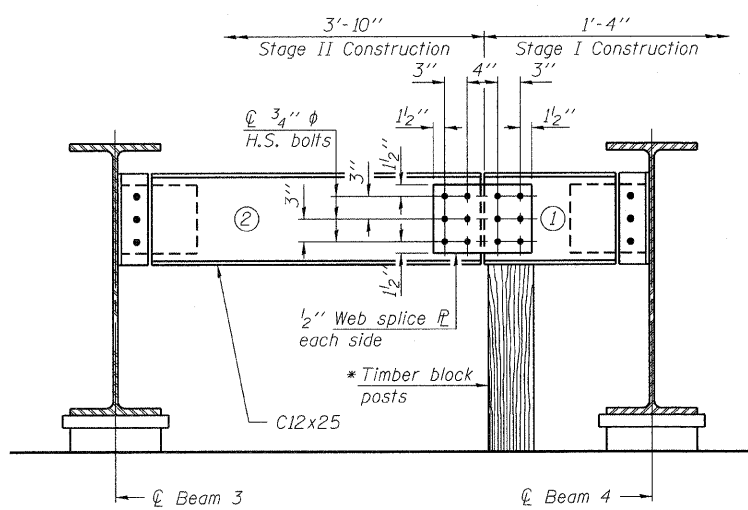


* Cost of Timber Block Posts is included with Structural Steel.



END DIAPHRAGM D₂
(2 Required)

END DIAPHRAGM STAGE CONSTRUCTION SEQUENCE

- 1.) Order diaphragm in two sections.
- 2.) Attach section ① of diaphragm to beam
- 3.) Place timber block posts between section ① of diaphragm and abutment bearing section.
- 4.) Attach section ② of diaphragm to both beam and section ① of diaphragm during stage II construction with splice plates.
- 5.) Remove timber block posts.

Notes:

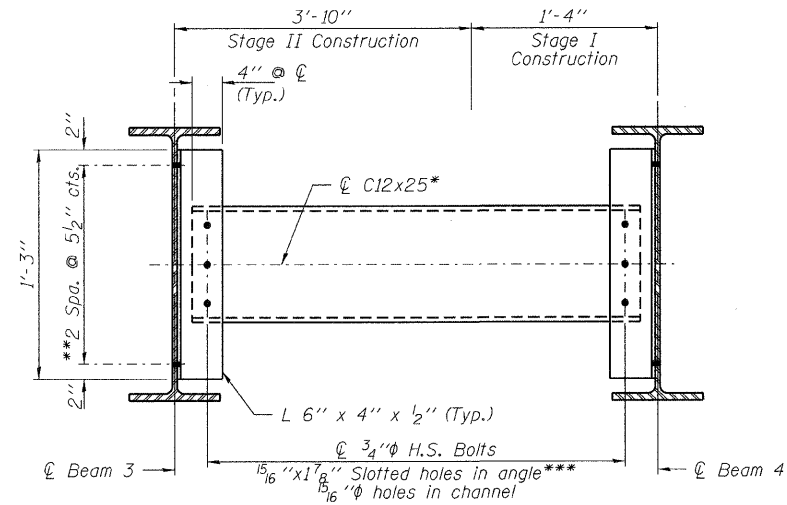
Two hardened washers required for each set of oversized holes.

Bolts in slots shall be finger tight until the second stage pour is complete and fully tightened after completion of the deck pour for Stage II Construction. Position slots so bolts start at the end with no concrete load and finish near the opposite end under deck load, allowing maximum displacement without laterally stressing main members.

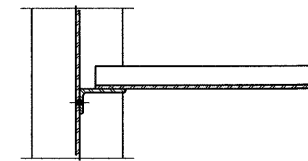
*Alternate channels (C12X30) are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section. The alternate, if utilized, shall be provided at no additional cost to the Department.

***3/4" φ HS bolts, 5/16" φ holes.

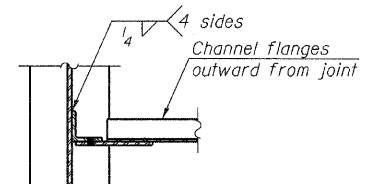
***Use slotted holes in angle on South side of Beam 3 (Stage II Construction) and North side of Beam 4 (Stage I Construction) only.



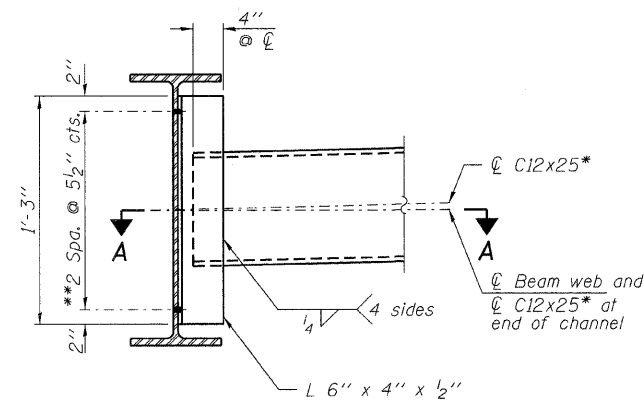
INTERIOR DIAPHRAGM D₃
(7 Required)



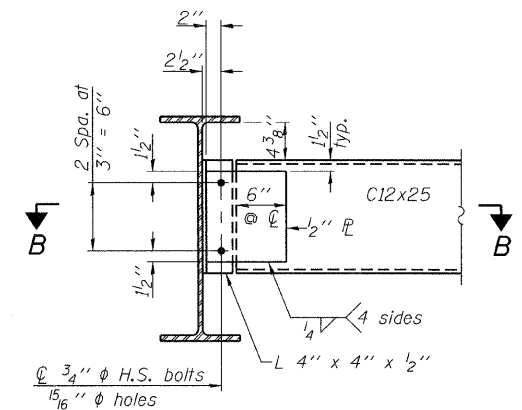
SECTION A-A



SECTION B-B



INTERIOR DIAPHRAGM D
(28 Required)



END DIAPHRAGM D₁
(8 Required)

Note:
Two hardened washers required for each set of oversized holes.

FILE NAME = 100108-sht-bridge.dgn	USER NAME =	DESIGNED - C.C.S.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3263 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62705	PLOT SCALE =	CHECKED - S.M.S.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT DATE = 2/9/2012	DRAWN - D.A.B.	REVISED -
		CHECKED - S.W.M.	REVISED -

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

STRUCTURAL STEEL DETAILS
STRUCTURE NO. 092-0085

SHEET NO. 15 OF 33 SHEETS

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7043	09-00171-00-BR	VERMILION	66	48
CONTRACT NO. 91449			ILLINOIS FED. AID PROJECT	