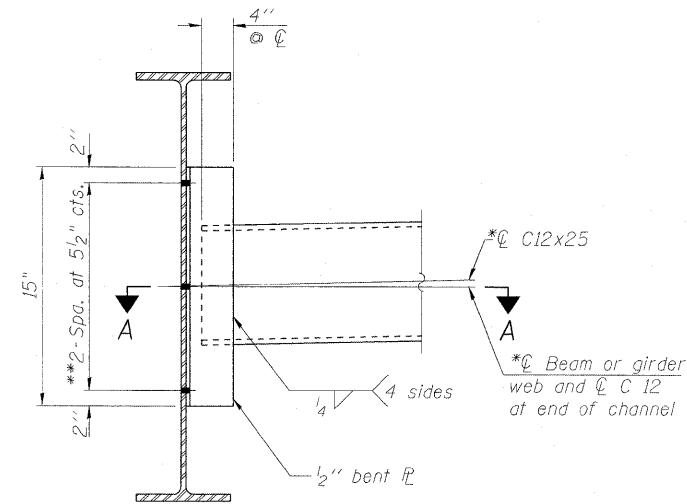
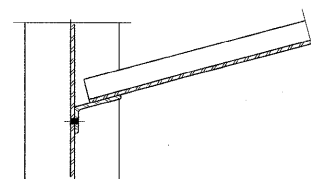


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DEPARTMENT OF TRANSPORTATION

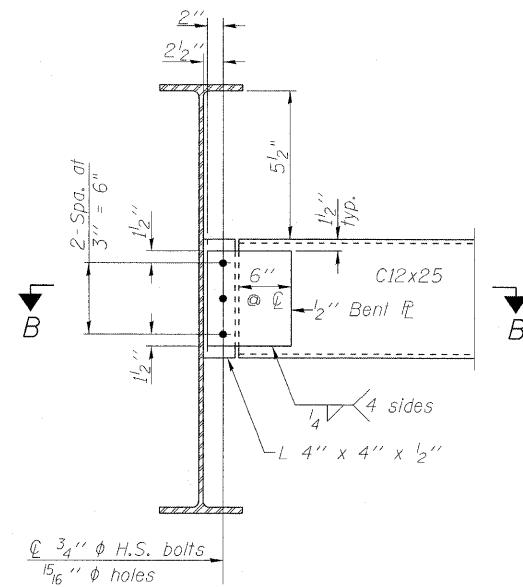


INTERIOR DIAPHRAGM

Note:
Two hardened washers required for each set of oversized holes.
*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, 15/16" ϕ holes
The interior diaphragms below the stage construction line (between beam numbers 6 and 7) require standard long slotted holes (1 1/8" x 1 7/8") in one connection angle. The bolts in the long slots shall be finger tight until the second stage pour is complete. Position slots so bolts start at one end with no concrete load and finish near the opposite end under deck load. All holes shall have appropriate hardened or plate washers.

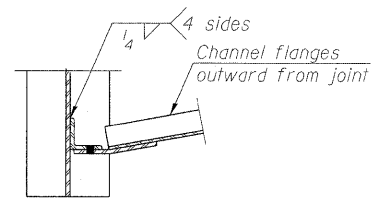


SECTION A-A

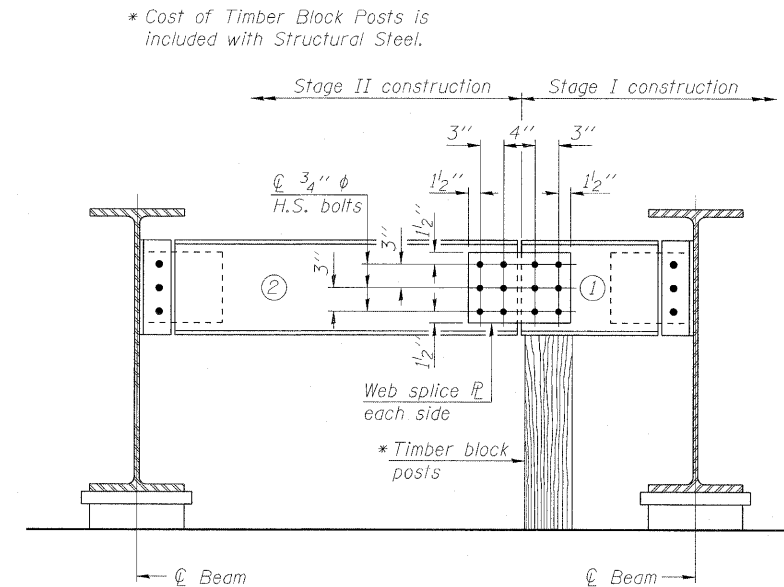


END DIAPHRAGM

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



SECTION B-B



END DIAPHRAGM

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.

Note:
All structural steel for diaphragms, connecting plates/angles shall be AASHTO M270 Grade 50W. All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

STEEL DETAILS
STRUCTURE NO. 016-0581

DESIGNED MAH
CHECKED JMH
DRAWN DR
CHECKED JMH

COLLINS ENGINEERS
123 N. WACKER DR., SUITE 300
CHICAGO, IL 60606
(312) 704-9300
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000993

SHEET NO. S18
OF
S27 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116-Y-2-BR-1	COOK	74	38
CONTRACT NO. 60J00				
ILLINOIS FED. AID PROJECT				