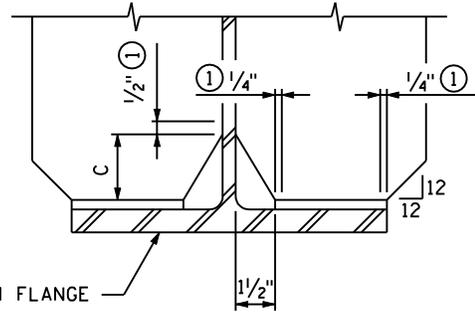


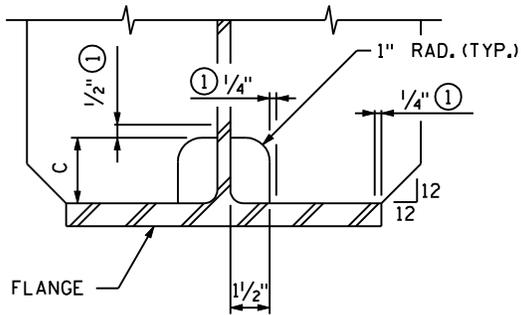
TOP OR BOTTOM FLANGE

STIFFENER TO FLANGE CONNECTION  
OPTION 1



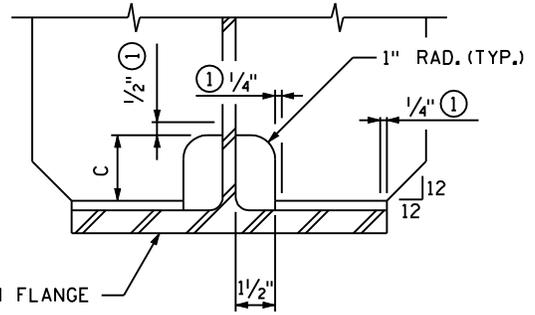
TOP OR BOTTOM FLANGE

STIFFENER TO TAB PLATE CONNECTION  
OPTION 1



TOP OR BOTTOM FLANGE

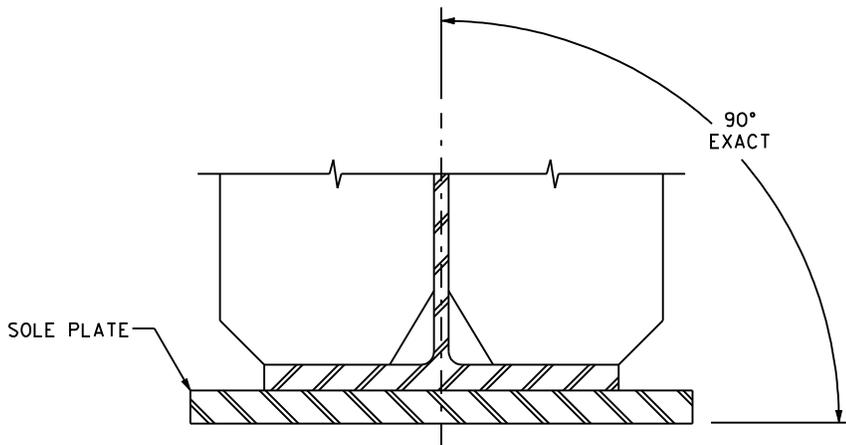
STIFFENER TO FLANGE CONNECTION  
OPTION 2



TOP OR BOTTOM FLANGE

STIFFENER TO TAB PLATE CONNECTION  
OPTION 2

STIFFENER COPE DETAIL  
PLATE GIRDER OR ROLLED BEAM



SOLE PLATE AT BEARING

| WEB THICKNESS       | DIMENSION C |
|---------------------|-------------|
| 1/2" ± 9/16" ± 5/8" | 2 1/2"      |
| 1/16" ± 3/4"        | 3"          |

NOTES:

- ① DO NOT WELD IN THIS AREA. SEE B410 FOR CONNECTION DETAILS.

APPROVED: OCTOBER 22, 2008

STATE OF MINNESOTA  
DEPARTMENT OF TRANSPORTATION

REVISION

DETAIL NO.

STIFFENER DETAILS  
(FOR STEEL BEAMS)

B411

*Daniel J. Morgan*  
STATE BRIDGE ENGINEER