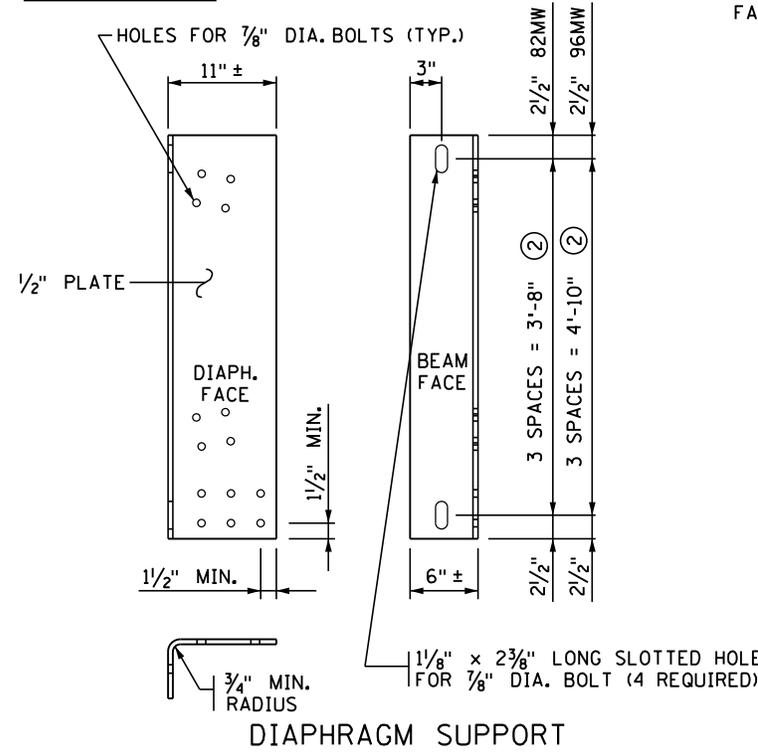
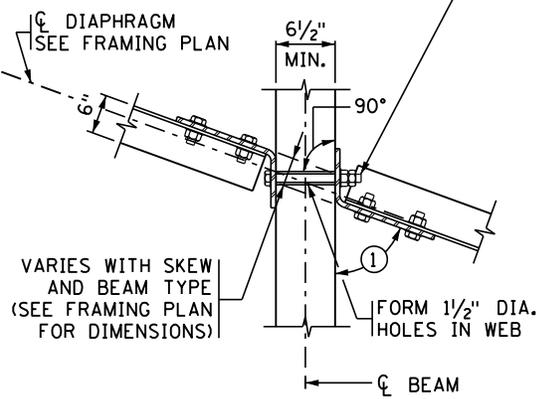
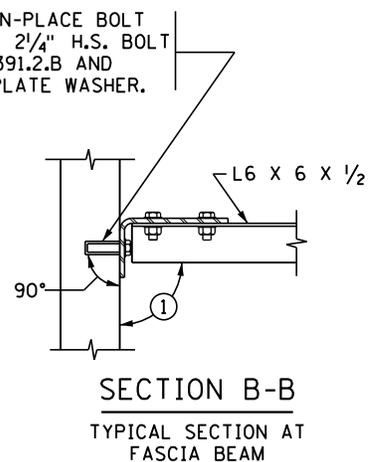
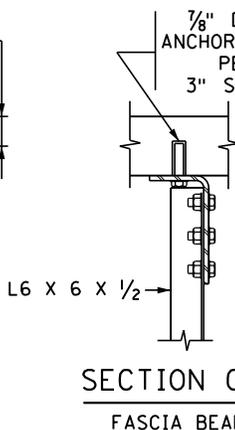
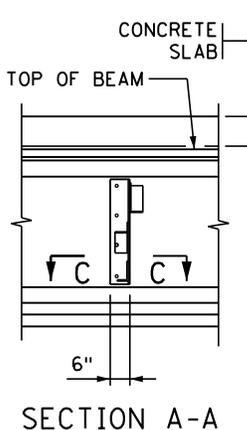


7/8" DIA. A307 BOLTS, PER SPEC. 3391.2.A, WITH TWO HEX NUTS, OR EQUAL, AND TWO HARDENED 3" SQ. x 5/16" PLATE WASHERS EACH AT ALL INTERIOR BEAM DIAPHRAGM CONNECTIONS



- NOTES:**
- PROVIDE STEEL PER SPEC. 3306.
 - INCLUDE ALL STRUCTURAL STEEL SHOWN ON THIS DETAIL, INCLUDING BOLTS AND WASHERS, IN THE PAYMENT FOR DIAPHRAGMS FOR PRESTRESSED BEAMS.
 - INSTALLATION PER SPEC. 2405.3.K
 - TORQUE ALL BOLTS, INCLUDING ANCHOR BOLTS TO 80 FT. LBS.
 - GALVANIZE STEEL PLATES AND SHAPES PER SPEC. 3394.
 - GALVANIZE BOLTS, NUTS AND WASHERS PER SPEC. 3392.
 - (1) FOR SKEW ANGLES UNDER 20°, USE 90° LESS THE SKEW ANGLE. FOR SKEW ANGLES OVER 20°, USE 90°.
 - (2) SPACE BOLT HOLES SO AS TO MISS PRESTRESSED STRANDS IN CONCRETE BEAMS. SEE PRESTRESSED CONCRETE BEAM SHEETS FOR MORE INFORMATION.
 - (3) DIAPHRAGM SHOWN DESIGNED FOR BEAM SPACING UP TO 13'-0".

APPROVED: SEPTEMBER 22, 2011

Nancy Subenberger
STATE BRIDGE ENGINEER

STATE OF MINNESOTA
DEPARTMENT OF TRANSPORTATION

STEEL INTERMEDIATE BOLTED DIAPHRAGM
(ALL MW PRESTRESSED CONCRETE BEAMS)

REVISED
09-11-2014
11-03-2015
01-05-2017
10-22-2019

DETAIL NO.
B412