**DIAPHRAGM SUPPORT**

- **DIAPHRAGM SUPPORT**
- **PART TRANSVERSE SECTION**
  - **TOP OF BEAM**
  - **TOP OF ROADWAY SLAB**
  - **SECTION A-A**
    - **SECTION C-C**
      - **SECTION B-B**
        - **INTERMEDIATE DIAPHRAGM**
          - **TYPICAL SECTION AT FASCIA BEAM**
          - **INTERMEDIATE DIAPHRAGMS**
          - **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.
            - FOR SKEW ANGLES UNDER 20°, USE 90° LESS THE SKEW ANGLE. FOR SKEW ANGLES OVER 20°, USE 90°.
            - SPACE BOLT HOLES SO AS TO MISS PRESTRESSED STRANDS IN CONCRETE BEAMS. SEE PRESTRESSED CONCRETE BEAM SHEETS FOR MORE INFORMATION.
            - DIAPHRAGM SHOWN DESIGNED FOR BEAM SPACING UP TO 13'-0".

**STATE OF MINNESOTA**
**DEPARTMENT OF TRANSPORTATION**

**STEEL INTERMEDIATE BOLTED DIAPHRAGM**
**(ALL MW PRESTRESSED CONCRETE BEAMS)**

**APPROVED: SEPTEMBER 22, 2011**

**STATE BRIDGE ENGINEER**

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

**DETAIL NO.**

**B412**