BEARING NOTES

1. BEARINGS SHALL BE PAID FOR UNDER THE ITEM 531.11 "BEARING DEVICE ASSEMBLY, ELASTOMERIC PAD" AND SHALL CONFORM TO APPLICABLE SUBSECTIONS OF SECTIONS 531 AND 731.

2. THE FIELD WELD CONNECTING THE BOTTOM FLANGE WITH THE BEARING DEVICE SHALL BE MADE WITH E7018 RODS. AREAS OF METALIZING DAMAGED BY WELDING AND/OR HANDLING SHALL BE REPAIRED BY METALIZING IN ACCORDANCE WITH ASTM A 760.

3. FABRICATION DRAWINGS CONFORMING TO SUBSECTION 531.03 SHALL BE SUBMITTED AND INCLUDE ANY NECESSARY WELDING OR BONDING PROCEDURES.

4. ALL STEEL COMPONENTS SHALL BE METALIZED AS PER SUBSECTIONS 531.04(b) AND 506.15. AFTER THE BEARINGS ARE METALIZED, THEY SHALL BE SEALED WITH AN APPROVED PRIMER AS SPECIFIED IN SUBSECTION 506.15(b). ALL WASHERS SHALL BE 1/2 " PLATE MINIMUM. PAYMENT FOR ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE INCLUDED IN THE UNIT BID PRICE FOR "BEARING DEVICE ASSEMBLY, ELASTOMERIC PAD". ANCHOR BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED PER AASHTO M 232M/M 232.

5. ALL STEEL IN BEARING DEVICES SHALL BE AASHTO M 270M/M270 GRADE 50 UNLESS NOTED OTHERWISE.

6. ALL REINFORCEMENT BETWEEN LAYERS OF ELASTOMERIC SHALL BE STEEL ASTM A36. ALL INTERNAL STEEL PLATES SHALL BE SAND BLASTED AND FREE OF COATINGS, RUST, AND MILL SCALE. THE PLATES SHALL BE FREE OF SHARP EDGES AND BURRS.

7. STEEL REINFORCED ELASTOMERIC BEARINGS SHALL HAVE A MINIMUM OF 1/8 " EDGE SEAL OF ELASTOMER INTEGRAL WITH THE BEARING OVER ALL INTERNAL PLATES.

8. FOR ELASTOMERIC BEARINGS, ALL MATERIALS AND FABRICATION SHALL BE PER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS EDITION 2007 AND ITS LATEST REVISIONS AND AASHTO M 251.

9. ALTERNATE CONFIGURATIONS FOR BEARINGS MAY BE SUBMITTED FOR APPROVAL. ANY ALTERNATE SUBMITTED SHALL BE DESIGNED AND CERTIFIED TO MEET THE DESIGN LOADS AND CRITERIA SHOWN ON THIS SHEET. THE ALTERNATE SHALL MAINTAIN THE ANCHORAGE SYSTEM SHOWN AND SHALL BE DESIGNED PER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 2007 EDITION AND ITS LATEST REVISIONS.

10. BRIDGE SEAT ELEVATIONS MAY BE REVISED TO ACCOMMODATE AN ALTERNATIVE CONFIGURATION.

11. DESIGN CRITERIA:

    A. MASONRY PLATE TO CONCRETE DESIGN PRESSURE = 4 KSI
    B. DESIGN ROTATION = 0.017 RAD
    C. HORIZONTAL CAPACITY SHALL BE MINIMUM OF 20% VERTICAL LOAD IN ANY RESTRAINED DIRECTION.
    D. DESIGN LOAD PER BEARING
        RDL = 94.2 kips
        RLL = 81.7kips
    E. TEMPERATURE RANGE = -15° TO 105° F
    F. ELASTOMER SHALL HAVE NOMINAL HARDNESS OF 60 ON SHORE 'A' SCALE.
       ELASTOMER SHALL HAVE A SHEAR MODULUS BETWEEN 0.13KSI AND 0.20 KSI
       THE RAW ELASTOMER SHALL BE VIRGIN NEOPRENE CLASSIFIED AS LOW
       TEMPERATURE GRADE 4 AS DEFINED IN TABLE 14.7.5.2 - 1 OF AASHTO LRFD
       BRIDGE DESIGN SPECIFICATIONS
    G. NO FABRIC REINFORCEMENT WILL BE ALLOWED IN ELASTOMERIC PADS

12. THE STEEL SOLE PLATES AND MASONRY PLATES SHALL BE HOT BONDED TO THE REINFORCED ELASTOMERIC PAD DURING THE VULCANIZATION PROCESS. THE STEEL SURFACES TO BE BONDED TO THE PAD SHALL NOT BE METALIZED.

13. THE BEARING TOLERANCES SHALL MEET THOSE GIVEN IN AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 2007 EDITION AND ITS LATESTS REVISIONS.

14. THE ANCHOR BOLTS SHALL MEET THE REQUIREMENTS OF ASTM A 449, TYPE 1 CLASS 8.8. THEY SHALL BE GALVANIZED PER AASHTO M 232M/M 232.

BEARING DETAILS 3

PROJECT NAME: MORETOWN-MIDDLESEX
PROJECT NUMBER: BRS 0284(14)

FILE NAME: 78f219/struc./sf219sup
PROJECT LEADER: M. EVANS-MONGEON
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PLOT DATE: 15-JUN-2009
DRAWN BY: L. DUQUETTE
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SHEET 52 OF 103