DIVISION 400 - STRUCTURES

SECTION 408 – ELASTOMERIC BEARING PADS

408.03 METHODS OF CONSTRUCTION

(A) Fabrication

The first paragraph is revised as follows:

Fabrication of elastomeric bearing pads shall be in accordance with the latest edition of the AASHTO LRFD Construction Specifications, including the latest interims.

The first sentence of the second paragraph is revised as follows:

Laminated Elastomeric Bearing Pads shall be vulcanized to the sole plate and base or masonry plate during the fabrication process unless otherwise noted on the plans

The following is added after the fourth paragraph:

The Contractor shall have a minimum of 10% of all welds tested by the magnetic particle method with testing to be performed by an independent laboratory procured by the Contractor. The Contractor shall submit test reports to the Engineer.

The following is added after the fifth paragraph:

The remaining coats shall be applied in the field after installation to the bearings and preparation of the steel surfaces to be painted. No paint shall be applied to the laminated elastomeric bearing pads.

(D) Testing

The first paragraph is revised as follows:

Regardless of the results of the test reports furnished by the contractor, the contractor shall furnish <u>one</u> additional full size laminated elastomeric bearing (including sole plate, base plate, guide bars, etc.) of each size manufactured but not <u>more than six bearings</u>; and neoprene or rubber bearing pad material samples from <u>25 percent</u> of the batches of elastomer manufactured to the Authority's designated testing firm for testing. Elastomeric materials and laminated elastomeric bearings provided will be tested in accordance with the *Section 18.2 of the latest edition of AASHTO LRFD Construction Specifications including the latest interims*.

[Note to the Designer: The frequency of Authority testing as indicated by bold underlined text in the above paragraph should be evaluated on a project by project basis. As an alternate procedure the specification could be modified to allow for the bearing manufacturer's testing to be observed by a qualified testing laboratory selected by the Authority in lieu of having the testing performed by an independent testing laboratory.]

The third paragraph is revised as follows:

The Contractor shall provide the Authority with Certified Test Reports *and* Materials Certificates indicating the requirements of the latest edition of the AASHTO *LRFD Construction Specifications including the latest interims.*

[Note *to the* Designer: In reference to contractor testing to provide certifications in the above paragraph, the frequency of testing required by the AASHTO specifications should be evaluated on a project by project basis. These specifications may require excessive testing for contracts with a limited number of bearings.]

The fourth sentence of the fourth paragraph is revised as follows:

Where elastomer samples must be tested or where testing will destroy the bearing, two additional elastomer samples from the same batch or two additional bearings from the same lot shall be tested to satisfy the requirement to test each bearing.

The following Subsection is added:

(E) Delivery, Storage and Handling of Bearings

Delivery, storage and handling of the laminated elastomeric bearings shall meet the following:

- (1) Each bearing shall be protected from weather elements.
- (2) Each bearing shall be protected from damage during construction.
- (3) Contamination of the various components of the bearings with construction materials shall be prevented.
- (4) Bearings delivered to the bridge site shall be stored under cover on a platform above the ground surface. Bearings shall be protected at all times from damage. When placed, bearings shall be dry, clean and free from dirt, oil, grease or other foreign substances.
- (5) Bearing devices shall not be disassembled during installation unless otherwise permitted by the Engineer or Manufacturer.

408.04 INSTALLATION

Replace the third paragraph with the following:

All new laminated elastomeric bearings installed will be sealed around the base after installation of the bearing. The sealant shall comply with Subsection 923.28.

Replace the fourth paragraph with the following:

Installation shall also conform to the latest edition of the AASHTO LRFD Construction Specifications, including the latest interims.

408.05 MEASUREMENT

The following is added:

Laminated Elastomeric Bearing Pads of the various sizes and types will be measured by the number of each size and type installed and accepted.

All labor and equipment necessary to obtain field measurements will not be measured for payment.

[Note to the Designer: If the bearings are within the limits of painting for steel structures, they shall be painted. If the bearings are outside the limits of painting for steel structures, they shall be weathering steel. If the bearings are for concrete beams, they shall be galvanized.

Painting or galvanizing of steel plates and testing of welds will not be measured for payment.

408.06 **PAYMENT**

The following is added:

No separate payment will be made for obtaining field measurements but the cost thereof shall be included in the unit price bid for the appropriate Laminated Elastomeric Bearing pay items.

No separate payment will be made for furnishing and installing shims, welding or testing of welds, or cleaning and painting, but the costs thereof shall be included in the unit price bid for the appropriate Laminated Elastomeric Bearing pay items.

No separate payment will be made for masonry plates, sole plates, anchor bolts, nuts, washers and elastomeric pads. The costs associated with furnishing, fabricating and installing these items shall be included in the price bid for the item Laminated Elastomeric Bearing.

No separate payment will be made for painting or galvanizing the laminated elastomeric bearings. The costs shall be included in the appropriate Laminated Elastomeric Bearing pay items.

SECTION 923 - MISCELLANEOUS

923.02 BEARING PADS.

(A) Elastomeric Bearing Pads for Bridge Beams.

Replace the section in its entirety with the following:

Elastomeric Bearing Pads for Bridge Beams shall conform to the latest edition of the AASHTO LRFD Construction Specifications, including the latest interims, as modified by Section 408 of the Supplementary Specifications. All elastomers shall be Temperature Grade 3, 60 Durometer elastomers unless indicated otherwise on the plan.

The required bearings can be supplied by the following manufacturers: Cosmec, Inc., Walpole, MA Ph (508) 668-6600); D.S. Brown Company, North Baltimore, Ohio Ph (419) 257-3561; Tobi Engineering, Glenview, Illinois Ph (847) 724-7880; Scougal Rubber, Seattle, Washington Ph (206) 763-2650); Seismic Energy Products, Athens, Texas Ph (903) 675-8571; AMSCOT Structural Products, Dover, NJ Ph (973) 989-8800.