

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

NO.

REVISION

DATE

BY

DRAWN

LAMINATED BEARING PAD CONTROL DIMENSIONS DESCRIPTION ABUT 1 PIER 1 PIER 2 ABUT 2 PAD TYPE NO. OF PADS SKEW PAD LENGTH W PAD WIDTH DESIGN REACTION (K) DESIGN ROTATION (RAD) DESIGN MOVEMENT (IN)

DESIGNS SHALL BE BY AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, METHOD B

## NOTES:

- 1. ALL LAMINATED BEARING PAD SHALL BE OF 60 DUROMETER (HARDNESS) ELASTOMER, STEEL LAMINATE SHALL CONFORM TO ASTM A1011, GRADE 36 OR BETTER
- 2. LAMINATED BEARINGS SHALL BE SUBJECT TO TESTING REQUIREMENTS IN ACCORDANCE WITH AASHTO LRFD CONSTRUCTION SPECIFICATIONS.
- 3. PRIOR TO SHIPMENT, LAMINATED BEARING ASSEMBLIES SHALL BE FULLY ASSEMBLED, BLOCKED AND SECURED INTO POSITION, AND WRAPPED WITH A WATERPROOFING COVERING. THE BEARING ASSEMBLY SHALL NOT BE UNWRAPPED UNTIL THE BEARING COMPONENTS ARE READY TO BE SET INTO THEIR FINAL POSITION.
- 4. BRIDGE SEATS ON WHICH BEARING PADS WILL BE MOUNTED SHALL BE FINISHED TO A TRULY LEVEL PLANE AT THE EXACT REQUIRED ELEVATION. IF FULL CONTACT IS NOT ACHIEVED AFTER THE DECK IS IN PLACE, FIELD ADJUSTMENTS OR MODIFICATIONS SHALL BE MADE BY THE CONTRACTOR TO ENSURE FULL CONTACT SUBJECT TO THE APPROVAL OF THE ENGINEER.
- 5. EPOXY GRIT COATING SHALL BE APPLIED TO ALL STEEL SURFACES CONTACTING THE BEARING PAD AND EXTEND ½" IN ALL DIRECTIONS BEYOND THE PAD'S LIMITS. THE EPOXY GRIT SHALL BE INSTALLED IN ACCORDANCE WITH THE EPOXY MANUFACTURER'S INSTRUCTIONS. ALLOW THE EPOXY TO FULLY CURE FOR THE MINIMUM TIME RECOMMENDED BY THE MANUFACTURER THEN REMOVE ANY LOOSE GRIT BEFORE BEARING INSTALLATION. EPOXY GRIT SHALL MEET THE REQUIREMENTS OF SSPC ABI ABRASIVE SPECIFICATIONS \*1 MINERAL & SLAG ABRASIVES, TYPE 2 OR BETTER.
- 6. WELDING WHILE THE LAMINATED BEARING PAD IS IN CONTACT WITH METAL IS DISCOURAGED. WHEN WELDING IS REQUIRED, TEMPERATURE INDICATING WAX PENS OR OTHER SUITABLE MEAN SHALL BE USED TO ENSURE THE PAD NOT BE EXPOSED TO TEMPERATURES GREATER THAN 250° F. ANY DAMAGE TO THE PAD DUE TO WELDING WILL BE CAUSE FOR REJECTION.
- 7. ALL BEARINGS SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATION AND A DIRECTION ARROW THAT POINTS UP-STATION. ALL MARKS SHALL BE PERMANENT AND SHALL BE VISIBLE AFTER THE BEARING IS INSTALLED.
- 8. ALL DESIGN PARAMETERS REQUIRED WITHIN THE LAMINATED BEARING PAD CONTROL DIMENSIONS TABLE SHALL BE UNFACTORED (SERVICE LIMIT STATE) AND INCLUDE IMPACT.
- 9. A STATIC COEFFICIENT OF FRICTION OF 0.20 SHALL BE USED IN THE DESIGN TO VERIFY LAMINATED BEARINGS ARE NOT SUBJECT TO SLIP UNDER SERVICE AND STRENGTH LIMIT STATES. ADDITIONAL CONSIDERATION MAY BE WARRANTED FOR STEEP GRADES.

NOT TO SCALE

BEARING DETAILS SHEET NUMBER

STANDARD BRIDGE PLANS

LAMINATED ELASTOMERIC DATE CHECKED DATE DATE DATE REVIEWED