10.1-A5-

GENERAL NOTES

- 1. ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION DATED 20_ AND AMENDMENTS.
- 2. THE SIGN STRUCTURES DESIGN AND ANALYSIS HAS BEEN DONE IN ACCORDANCE WITH AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS FIRST EDITION DATED 2015 (INCLUDING LATEST INTERIMS), USING BASIC WIND SPEED OF 115 MPH, WITH A MEAN RECURRENCE INTERVAL OF 1700 YEARS AND A FATIGUE CATEGORY I.
- 3. ALL BUTT JOINT WELDS SHALL BE FULL PENETRATION GROOVE WELDS WITH BACK-UP PLATES OF 4" MIN. THICKNESS.
- 4. THE BACK-UP PLATES FOR ALL FULL PENETRATION WELDS SHALL BE WELDED CONTINUOUSLY TO THE JOINED PIECES. THIS CAN BE DONE BY EITHER A CONTINUOUS FILLET WELD ON THE BACK SIDE OF THE PIECE, OR BY A CONTINUOUS WELD IN THE ROOT OF THE FULL PENETRATION WELD, UNLESS OTHERWISE NOTED.
- 5. ALL RODS, BOLTS, AND RELATED HARDWARE SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM F2329.
- 6. ALL STEEL SURFACES SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH AASHTO M 111. MAINTENANCE PLATFORMS AND ASSOCIATED HANDRAILINGS SHALL NOT BE PAINTED.
- 7. SIGN PANELS AS SHOWN IN THE CONTRACT PLANS SHALL BE INSTALLED WITH THE SIGN STRUCTURE OR IMMEDIATELY AFTER THE SIGN STRUCTURE IS ERECTED.

FABRICATE BEAM TO PROVIDE SMOOTH PARABOLIC CAMBER CURVE. SEE CAMBER DIAGRAM. DO NOT SHIM AT BOLTED SPLICES.

S FABRICATE BEAM TO PROVIDE STRAIGHT CAMBER, SEE CAMBER DIAGRAM. DO NOT SHIM AT BOLTED SPLICES

9. FABRICATE POST STRAIGHT.

ANCHOR RODS

COVER PLATES

10. MATERIALS SPECIFICATIONS: ALL STRUCTURAL STEEL EXCEPT AS OTHERWISE NOTED

ASTM A588

ASTM A572 GR. 50 OR

HANDHOLE COVER SCREWS SPLICE BOLTS SIGN BRACKET RODS MOUNTING BEAM BOLTS ASTM F1554 GR. 105 ASTM F593 GR. 1 ASTM F3125 GR. 325 ASTM A307 ASTM F3125 GR. 325

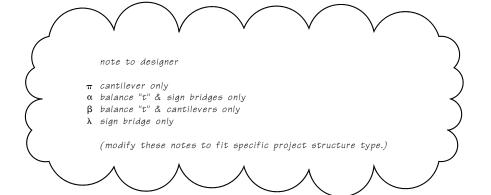
ASTM A36

- 11. BOTTOM OF BASE PLATE ELEVATIONS AND POST HEIGHTS SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL FIELD MEASURE ANCHOR ROD LOCATIONS, ELEVATIONS, CLEARANCES AND ALL STEEL STRUCTURE DIMENSIONS, AND SUBMIT TO ENGINEER FOR APPROVAL PRIOR TO COMPLETION OF FABRICATION. AS AN OPTION FOR SIGN BRIDGES, CAP OF ONE FOUNDATION MAY BE PLACED WHILE COMPLETED SIGN BRIDGE IS TEMPORARILY SUPPORTED IN PLACE.
- 12. POSTS, BASE PLATES, BEAMS AND SPLICE PLATES ARE MAIN LOAD CARRYING TENSILE
 MEMBERS OR TENSION COMPONENTS OF FLEXURAL MEMBERS AND SHALL MEET THE LONGITUDINAL
 CHARPY V-NOTCH TEST AS DESCRIBED IN SECTION 6-03.2 FOR AASHTO M 270 MATERIAL.
 NON-DESTRUCTIVE TEST ACCEPTANCE CRITERIA TO CONFORM TO TENSILE MEMBERS WITH CYCLIC
- 13. SEE OTHER PLANS FOR CONDUIT PENETRATIONS AND HAND HOLES. REFER TO ELECTRICAL PLANS FOR INTERNAL ROUTING OF CONDUCTORS. CONDUIT CONDUCTORS SHALL NOT BE ATTACHED TO THE OUTSIDE OF THE SIGN STRUCTURE. ISOLATION SWITCH SHALL BE LOCATED NEAR THE SHOULDER OF ROADWAY ON THE OPPOSITE SUDE OF THE BEAM AS THE SIGNS. SEE NEMA 3R TERMINAL CABINET DETAIL ON BRIDGE SHEET ____. (10.1-A5-2)
- 14. THE MAXIMUM SIGN AREA ON THE STRUCTURE SHALL BE AS NOTED.
- α 15.FOR SIGN AND LIGHT ATTACHMENT BRACKET DETAILS FOR MONOTUBES SEE STANDARD PLAN
 G-90.20. PAINT ENTIRE ATTACHMENT BRACKET TO MATCH EXISTING STRUCTURE EXCEPT FOR
 MOUNTING BEAM. SIGN, BEAM LENGTHS, AND SIZE SHALL BE DETERMINED FROM THE STANDARD
 PLANS. SPACING SHALL BE DETERMINED FROM THE CONTRACT PLANS. VARIABLE MESSAGE SIGNS
 SHALL HAVE MOUNTING BEAMS @ 3'-0" MAXIMUM. THE MAINTENANCE PLATFORM AND ASSOCIATED
 HAND RAILINGS SHALL NOT BE PAINTED. FOR MAINTENANCE PLATFORM ATTACHMENT BRACKET
 DETAILS FOR MONOTUBES SEE STANDARD PLAN G-95.20. MAINTENANCE WALKWAY DETAILS SHALL BE
 DETERMINED FROM THE CONTRACT PLANS OR THE STANDARD PLANS
- # 15) FOR SIGN AND LIGHT ATTACHMENT BRACKET DETAILS FOR MONOTUBES SEE STANDARD PLAN
 G-90.20. PAINT ENTIRE ATTACHMENT BRACKET TO MATCH EXISTING STRUCTURE EXCEPT FOR
 MOUNTING BEAM. SIGN, BEAM LENGTHS, AND SIZE SHALL BE DETERMINED FROM THE STANDARD
 PLANS. SPACING SHALL BE DETERMINED FROM THE CONTRACT PLANS.
- β 16. THE TOTAL BEAM LENGTH "S" SHALL NOT EXCEED 35'-O".
 - 17. ALL WELDING SHALL BE DONE TO MINIMIZE DISTORTION. PERMISSIBLE MONOTUBE DIMENSION VARIATIONS FOR OUTSIDE DIMENSIONS, WALL THICKNESS, LENGTH, STRAIGHTNESS, (PARABOLICALLY CAMBERED SIGN BRIDGE BEAMS EXCLUDED) SQUARENESS OF SIDES AND TWIST SHALL BE IN ACCORDANCE WITH SECTION 11 OF ASTM A500.

note to designer

suggested sheet order:

- layouts
 - cantilever balanced "t" sign bridge
- general notes & other misc. info.
- structural details cantilever balanced "t" sign bridge
- monotube sign structures common details
- foundation
 cantilever
 type 1
 type 2 or 3
 balanced "t"
 type 1
 type 2 or 3
 sign bridge
 type 1
 type 2 or 3
- barrier shape modification



LEGEND

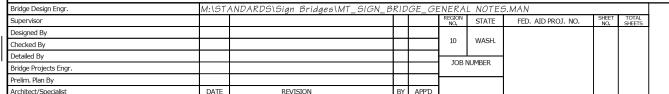
B IDENTIFIES SECTION OR VIEW

TAKEN OR SHOWN ON BRIDGE SHEET 15



TAKEN OR SHOWN ON THE SAME SHEET

FLAGNOTE: IDENTIFIES NOTE REFERENCE
ON THE SAME SHEET



BRIDGE AND STRUCTURES OFFICE



STANDARD MONOTUBE SIGN STRUCTURES

GENERAL NOTES

Fri Sep 25 10:48:13 2020