

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 1/4" 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.
8. FABRICATE BEAM TO PROVIDE SMOOTH PARABOLIC CAMBER CURVE. SEE CAMBER DIAGRAM. DO NOT SHIM AT BOLTED SPLICES.
9. FABRICATE POST STRAIGHT.
10. MATERIALS SPECIFICATIONS:

ALL STRUCTURAL STEEL EXCEPT AS OTHERWISE NOTED	ASTM A572 GR. 50 OR ASTM A588
ANCHOR RODS	ASTM F1554 GR. 105
HANDHOLE COVER SCREWS	ASTM F593 GR. 1
SPLICE BOLTS	ASTM F3125 GR. 325
SIGN BRACKET RODS	ASTM A307
MOUNTING BEAM BOLTS	ASTM F3125 GR. 325
COVER PLATES	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 LOAD.
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 SIDE 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.
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.
16. THE TOTAL BEAM LENGTH "S" SHALL NOT EXCEED 35'-0".
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

α

π

λ

β

note to designer

π cantilever only

α balance "t" & sign bridges only

β balance "t" & cantilevers only

λ sign bridge only

(modify these notes to fit specific project structure type.)

LEGEND

-  IDENTIFIES SECTION OR VIEW
-  TAKEN OR SHOWN ON BRIDGE SHEET 15
-  IDENTIFIES DETAIL
-  TAKEN OR SHOWN ON THE SAME SHEET
-  FLAGNOTE: IDENTIFIES NOTE REFERENCE ON THE SAME SHEET

Last revised on : 09/25/2020

10.1-A5-1 SR JOB NO. SHEET

Bridge Design Engr.		M:\STANDARDS\Sign Bridges\MT_SIGN_BRIDGE_GENERAL NOTES.MAN									
Supervisor		REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS					
Designed By		10	WASH.								
Checked By		JOB NUMBER									
Detailed By											
Bridge Projects Engr.											
Prelim. Plan By											
Architect/Specialist	DATE	REVISION	BY	APP'D							

BRIDGE AND STRUCTURES OFFICE



STANDARD MONOTUBE SIGN STRUCTURES

GENERAL NOTES