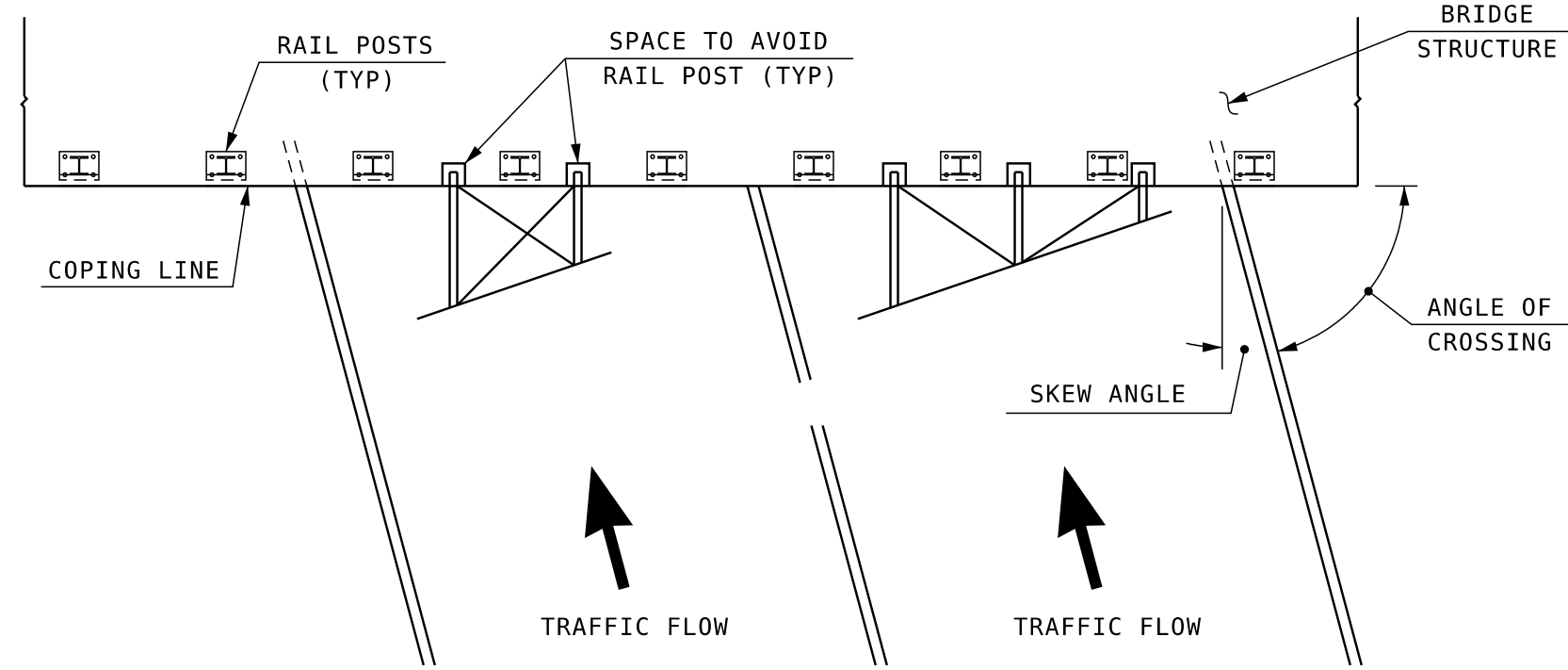


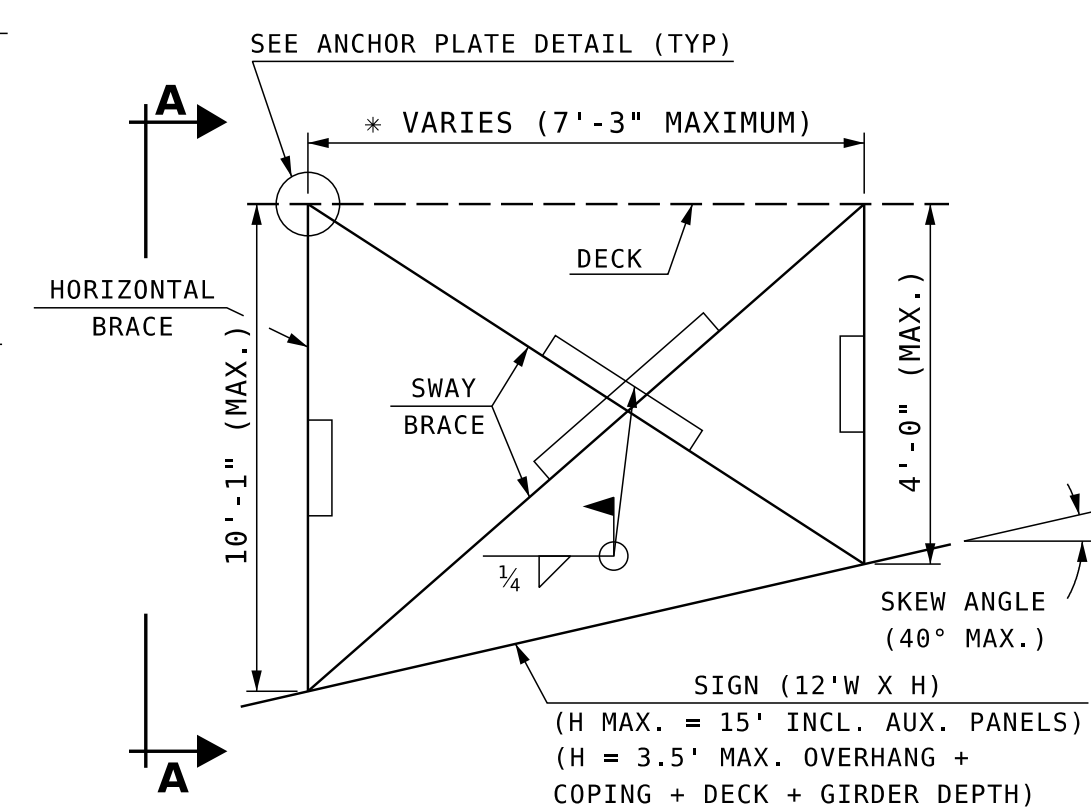
ANCHOR PLATE DETAIL (PLAN VIEW)

SCALE: 1" = 1'-0"



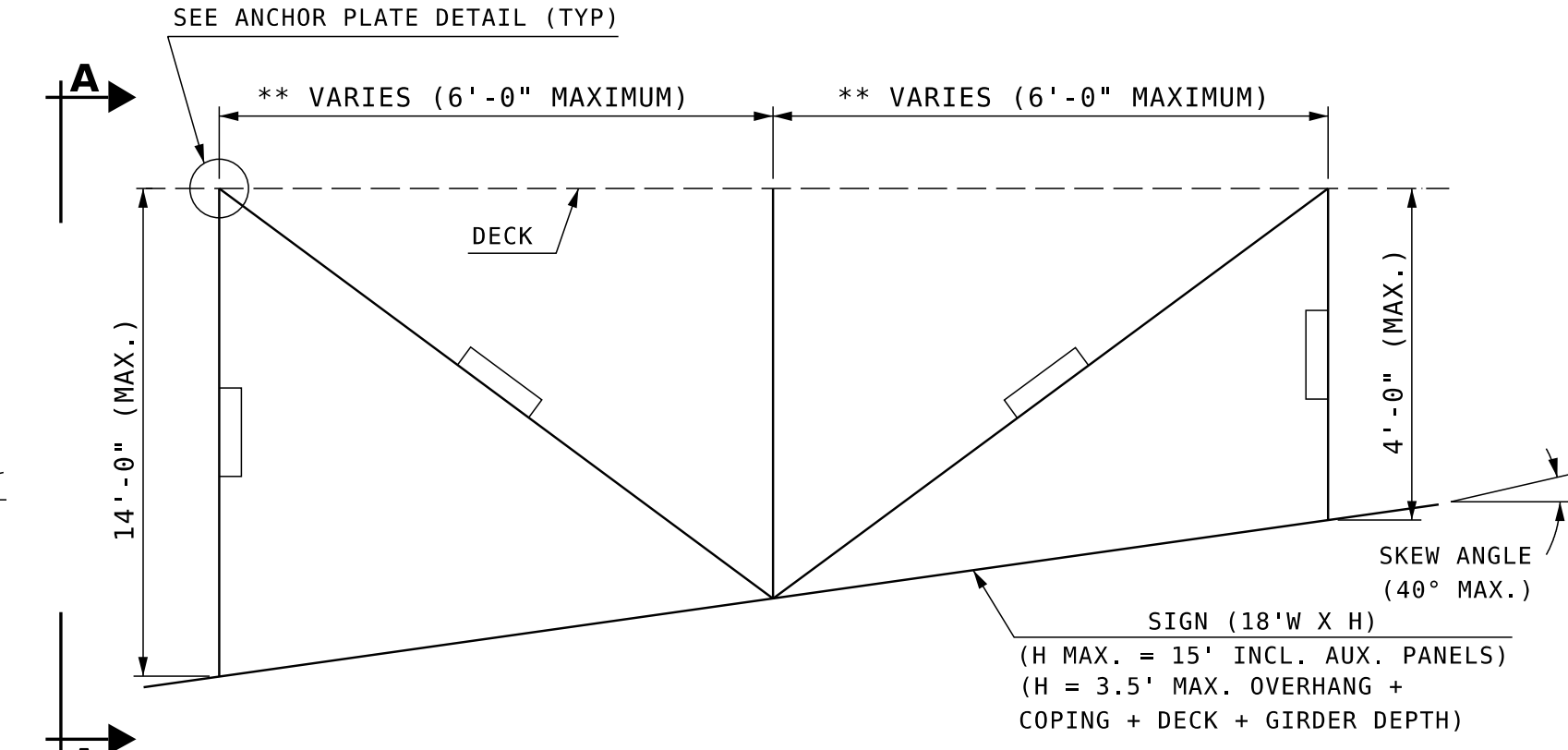
PLAN VIEW

NTS



TOP VIEW (2 SUPPORT SYSTEM)

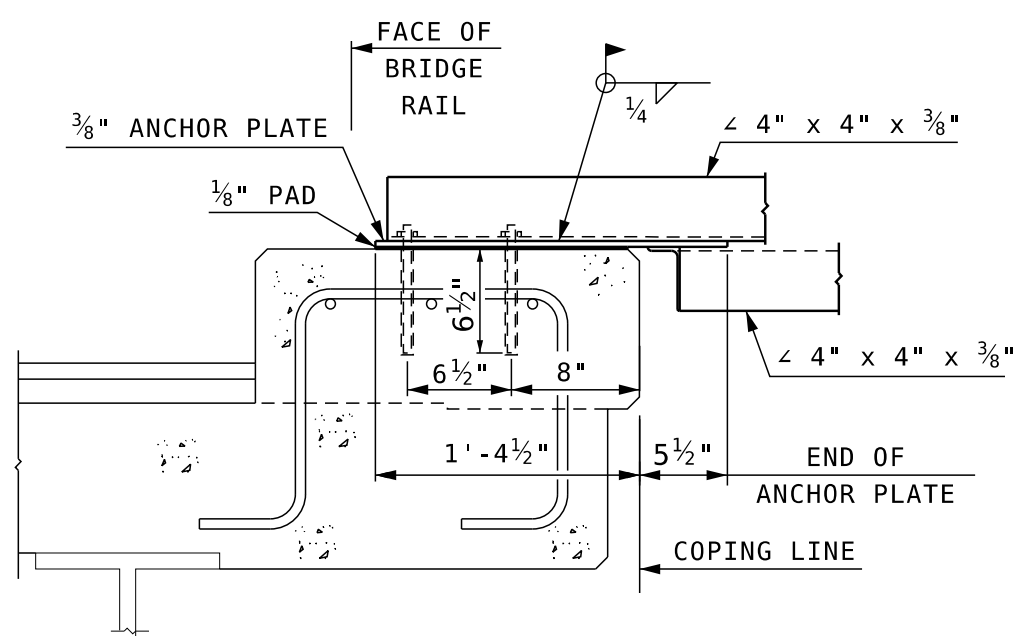
NTS



TOP VIEW (3 SUPPORT SYSTEM)

NTS

NO MODIFICATIONS SHALL BE MADE TO THIS SHEET.



ANCHOR PLATE SECTION

SCALE: 1" = 1'-0"

NOTE TO DESIGNER:

- 1) THE SIGN SUPPORT MEMBERS HAVE BEEN SIZED USING THE DESIGN CRITERIA NOTED. IF THE PROPOSED SIGN AND/OR SIGN SUPPORT EXCEEDS ANY OF THE DESIGN CRITERIA, THE BRIDGE MOUNTED SUPPORT MEMBERS AND ANCHORS SHALL BE RE-DESIGNED AND THE GIRDER ANALYZED, IF APPROVED BY THE DESIGN CHIEF. A NEW BRIDGE MOUNTED SIGN SUPPORT SHEET SHALL BE DRAWN WITH THE DESIGNER NOTED IN THE TITLE BOX.
- 2) SIGN HEIGHT AND LOCATION SHALL BE CONFIRMED WITH BUREAU OF BRIDGE DESIGN. THE DESIGNER SHALL CONFIRM THE ANCHORS DO NOT CONFLICT WITH BRIDGE RAIL POSTS, THE GIRDER WEB CONNECTION WITH OPPOSITE SIDE CONNECTION PLATES, AND THE SIGN HEIGHT MEETS THE MAX. REQUIREMENTS NOTED ON THIS SHEET, INCLUDING THE 3'-6" MAX. ABOVE BRIDGE DECK COPING.
- 3) THE SIGN SUPPORT ANCHOR PLATES SHALL BE SHOWN ON THE FRAMING PLAN AND RAILING LAYOUT SHEETS. THE SIGN STRUCTURE(S) AND ANCHOR PLATES SHALL BE SHOWN ON THE GENPLAN AND ELEVATION VIEW.

GENERAL NOTES

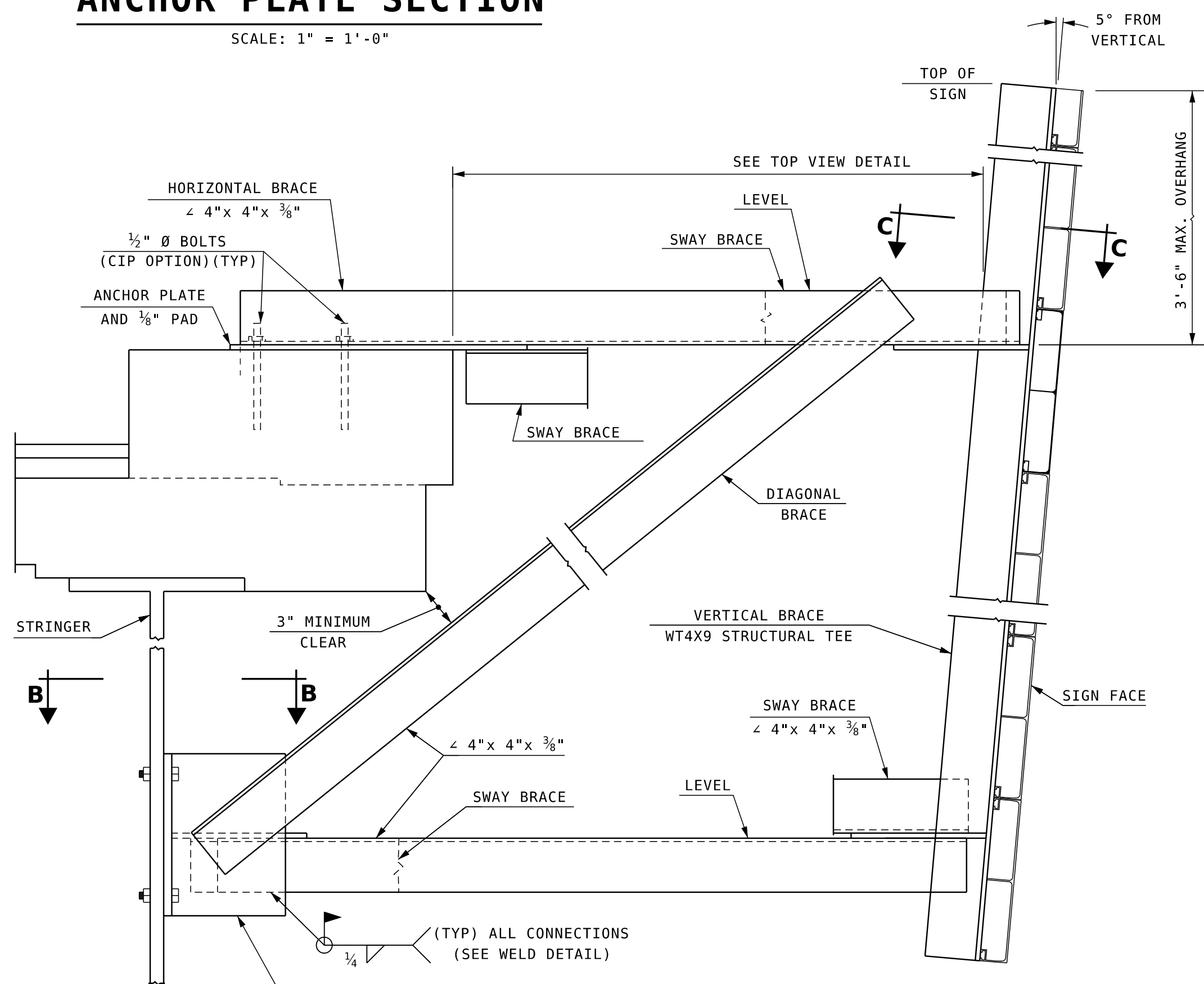
- (1) ALL WORK AND MATERIALS ON THIS SHEET SHALL BE PAID UNDER ITEM 615.3000X. EXISTING SIGN SUPPORTS SHALL BE REMOVED AS PART OF ITEM 502.
- (2) ALL STRUCTURAL STEEL SHALL BE AASHTO DESIGNATION M223 (ASTM A572) GRADE 50, GALVANIZED.
- (3) ALL BOLTS AND RELATED HARDWARE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M164 (ASTM A325) TYPE 1 (GALV.). ALL BOLTS SHALL BE SLIP CRITICAL (CLASS B), 7/8" Ø HIGH STRENGTH IN 1 1/16" Ø HOLES.
- (4) PREFORMED ELASTOMERIC BEARING PADS (1/8" THICK) SHALL CONFORM TO AASHTO M251.
- (5) THE NEW SIGN(S) SHALL BE AS SHOWN ELSEWHERE IN THE PLANS.
- (6) FIELD WELDING SHALL BE IN ACCORDANCE WITH NHDOT STANDARD SPECIFICATION SECTION 550.
- (7) GALVANIZING SHALL BE IN ACCORDANCE WITH NHDOT STANDARD SPECIFICATION SECTION 550. PRIOR TO FIELD WELDING, GRIND OFF GALVANIZING. REPAIR GALVANIZING WITH APPROVED MATERIALS PER NHDOT STANDARD SPECIFICATION SECTION 550.2.9.1.
- (8) IF EXISTING BRIDGE MOUNTED SIGN SUPPORTS ARE BEING REPLACED, ANY OPEN HOLES IN THE GIRDER WEB SHALL BE FILLED WITH NEW 7/8" Ø HIGH-STRENGTH BOLTS CONFORMING TO REQUIREMENTS OF ASTM F3125 GRADE A325, TYPE 3 (IN PAINTED AREAS, BOLTS SHALL BE TYPE 1, GALVANIZED) THE BOLTS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 550. ALL COSTS SUBSIDIARY TO ITEM 615.3000X.
- (9) SIGN HEIGHT AND LOCATION SHALL BE CONFIRMED WITH BUREAU OF BRIDGE DESIGN. THE DESIGNER SHALL CONFIRM THE ANCHORS DO NOT CONFLICT WITH BRIDGE RAIL POSTS, THE GIRDER WEB CONNECTION DO NOT CONFLICT WITH OPPOSITE SIDE CONNECTION PLATES, AND THE SIGN HEIGHT MEETS THE MAX. REQUIREMENTS.

DESIGN CRITERIA

- (1) SPECIFICATIONS: AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS, 1ST ED. 2015 AS AMENDED NHDOT 2016 STANDARD SPECIFICATIONS AS AMENDED.
- (2) DESIGN LOADING: WIND PRESSURE = 48 PSF (2-SUPPORT), 46 PSF (3-SUPPORT) WIND SPEED = 130 MPH SIGN WEIGHT = 5 PSF (INCLUDES WT4X9) STEEL YIELD STRENGTH (Fy) = 50 KSI
- (3) DESIGN DIMENSIONS: MAXIMUM DIMENSIONS AND SKEWS AS SHOWN ON PLAN.

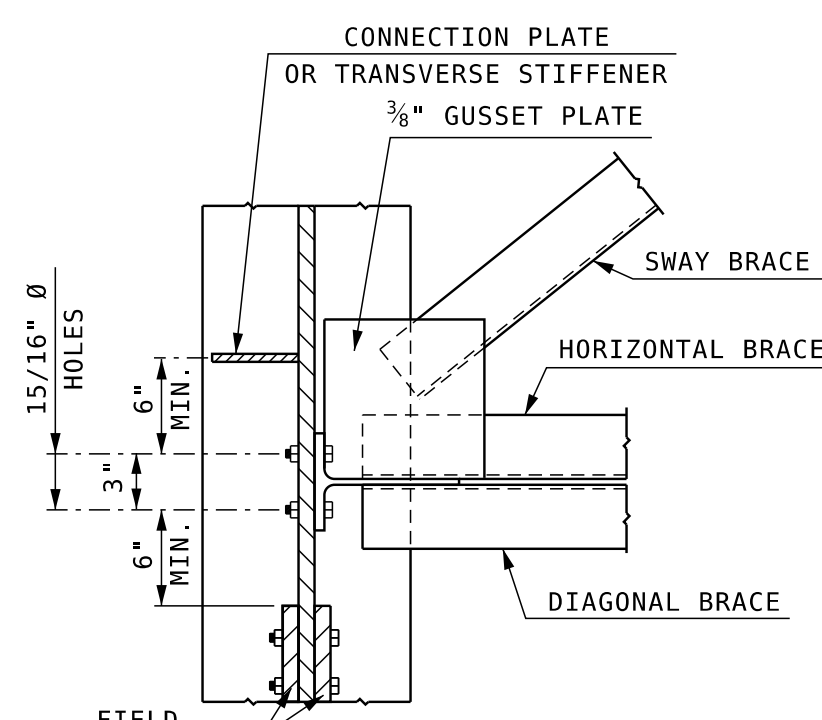
SUPPORT SYSTEM NOTES

- * (1) DISTANCE BETWEEN HORIZONTAL MEMBERS SHALL BE 60% OF SIGN WIDTH ON CENTER FOR SIGNS WITH WIDTHS ≤ 12'-0" (TWO SUPPORT SYSTEM).
- ** (2) DISTANCE BETWEEN HORIZONTAL MEMBERS SHALL BE ONE-THIRD OF SIGN WIDTH ON CENTER FOR SIGN WIDTHS 12'-0" TO 18'-0" (THREE SUPPORT SYSTEM).
- (3) THE SIGN SUPPORT MEMBERS HAVE BEEN SIZED USING THE DESIGN CRITERIA NOTED ON THIS PLAN.
- (4) DIAGONAL SWAY BRACE MEMBERS SHALL BE 4" x 4" x 3/8" (TWO MEMBERS ON TOP AND TWO MEMBERS ON BOTTOM).
- (5) IF THE SIGN EXTENDS > 4.5' FROM THE TOP HORIZONTAL, OVERHANG BRACES (4" x 4" x 3/8") SHALL BE PLACED AT EACH HORIZONTAL AS SHOWN IN VIEW A-A.
- (6) THE CONTRACTOR SHALL DETERMINE THE LENGTHS OF THE MEMBERS TO PROVIDE BRIDGE CLEARANCE AND TO ACCOMMODATE SKEW ANGLE.
- (7) THE FACE OF ALL STRUCTURAL TEES SHALL LIE IN THE SAME PLANE.
- (8) THE SUPPORT MEMBERS SHALL BE DETAILED TO PROVIDE A LEVEL SIGN POSITION, REGARDLESS OF THE GRADE OF THE BRIDGE STRUCTURE. THE DETAILING OF THE SUPPORT MEMBERS SHALL PROVIDE ADEQUATE SPACE FOR PAINTING (IF REQUIRED) AND INSPECTION OF THE BEAMS.
- (9) THE CONTRACTOR SHALL TAKE ALL MEASUREMENTS NECESSARY TO ENSURE THE PROPER ATTACHMENT AND MIN. CLEAR DISTANCES OF THE PROPOSED SIGN TO THE BRIDGE STRUCTURE.
- (10) NO PART OF THE SIGN STRUCTURE SHALL PROJECT BELOW THE BOTTOM FLANGE OF THE BRIDGE GIRDER OR REDUCE THE STRUCTURE'S VERTICAL CLEARANCE.
- (11) THE LOCATION OF THE PROPOSED SIGN ON THE BRIDGE STRUCTURE SHALL BE CENTERED WITHIN THE TRAVEL LANES, SUBJECT TO THE APPROVAL OF THE ENGINEER.
- (12) THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF THE SIGN SUPPORTS TO THE BUREAU OF BRIDGE DESIGN FOR APPROVAL.



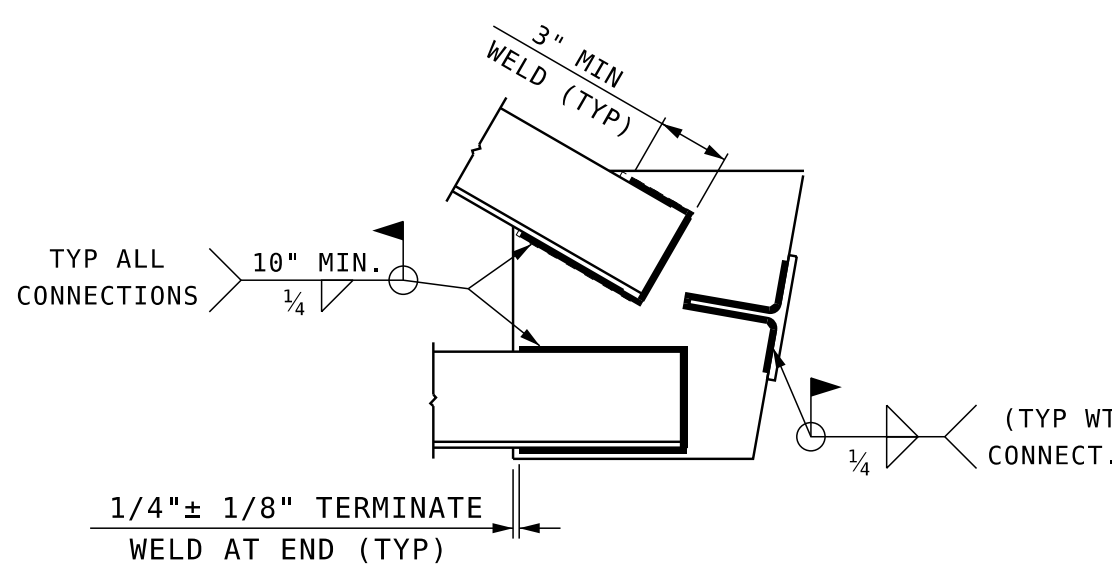
VIEW A-A

NOT TO SCALE



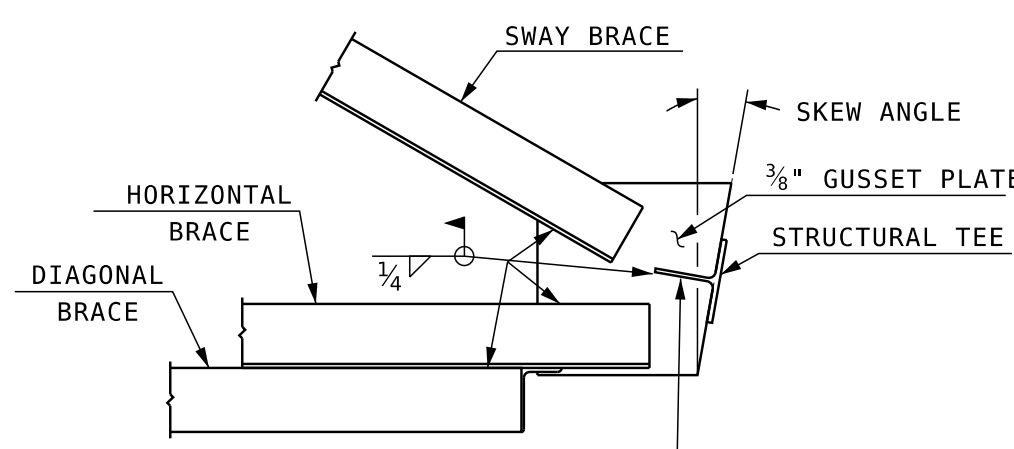
SECTION B-B

SCALE: 1" = 1'-0"



WELD DETAIL (ALL MEMBER CONNECTIONS)

SCALE: 1 1/2" = 1'-0"



SECTION C-C

SCALE: 1" = 1'-0"

WT9x23 (OR EQUAL STRUCTURAL TEE) ATTACH TO STRINGER WEB WITH FOUR 7/8" Ø HIGH-STRENGTH BOLTS IN 1 1/16" Ø HOLES, FIELD DRILLED (USING WT AS A TEMPLATE) AS APPROVED BY THE ENGINEER. HOLES SHALL BE A MINIMUM 6" CLEAR FROM STRINGER CROSS-FRAME CONNECTION PLATES, TRANSVERSE STIFFENERS, OR FIELD SPLICE PLATES.

SLOT GUSSET PLATE TO ACCOMMODATE VERTICAL BRACE (STRUCTURAL TEE). SKEW GUSSET PLATE AND TEE SO PLANE OF SIGN IS 90° TO DIRECTION OF TRAVEL.

STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN	BRIDGE NO.	STATE PROJECT
LOCATION		
BRIDGE-MOUNTED SIGN SUPPORTS (STEEL GIRDER)		
REVISIONS AFTER PROPOSAL	BY	DATE
DESIGNED	NHDOT	XX/XX
CHECKED	XXX	XX/XX
DRAWN	PJP	12/06
CHECKED	PAB/DAJN	6/21
QUANTITIES	XXX	XX/XX
CHECKED	XXX	XX/XX
ISSUE DATE	1/90	FEDERAL PROJECT NO.
REV. DATE	12/12/21	SHEET NO.
SUBDIRECTORY		SHEET SCALE
BRIDGE MOUNTED SIGN SUPPORTS		AS NOTED
BRIDGE SHEET	XX OF	FILE NUMBER
TOTAL SHEETS		