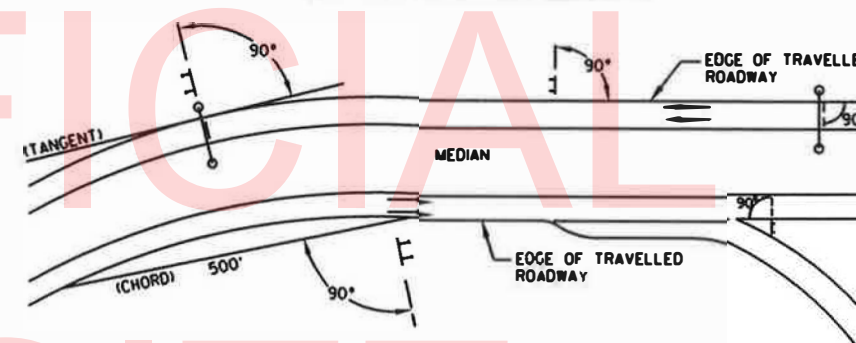


General Notes  
and  
Sign Location Detail

GENERAL NOTES

1. DESIGN CRITERIA ARE BASED ON "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS," 1994 BY AASHTO. MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE DELAWARE DEPARTMENT OF HIGHWAYS AND TRANSPORTATION, 2016 - STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS FOR THIS PROJECT.
2. BREAKAWAY POST SHALL CONFORM TO AASHTO M188 (ASTM A441) AND BE GALVANIZED IN ACCORDANCE WITH AASHTO M111 (ASTM A123), CLASS 'B' CONCRETE WITH ULTIMATE COMPRESSION STRENGTH  $f_c = 3,000$  PSL SHALL BE USED IN ALL FOOTINGS; BAR REINFORCEMENTS SHALL CONFORM TO AASHTO M31 (ASTM A615)
3. AN AUGER SHALL BE USED TO DRILL THROUGH THE SOIL UP TO THE DESIRED DEPTH OF FOUNDATION. REINFORCED CONCRETE SHALL BE PLACED ON UNDISTURBED SOIL TO SECURE A FIRM CONTACT BETWEEN SOIL AND CONCRETE. FOOTING TOPS SHALL BE FORMED TO A DEPTH OF 3" BELOW GROUND SURFACE.
4. MAXIMUM PROJECTION ABOVE GROUND LINE FOR FOOTING OR ANCHOR PLATE SHALL BE LIMITED TO 4". WHERE NECESSARY, A PORTION OF CONCRETE IN THE FOUNDATION SHALL BE CHAMFERED PARALLEL TO THE EARTH SLOPE IN ORDER TO MINIMIZE FOOTING PROJECTION ABOVE GROUND.
5. COMPLETE DETAILS OF BREAKAWAY COUPLINGS, ANCHOR PLATES, AND BOLTS SHALL BE SUBMITTED BY THE CONTRACTOR FOR APPROVAL BY THE BRIDGE ENGINEER.
6. THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT VEHICLE CRASH TESTING REPORTS INDICATING SATISFACTORY PERFORMANCE OF THE BREAKAWAY MECHANISM WITH BREAKAWAY COUPLINGS AND FUSE PLATES UNDER THE FOLLOWING CONDITIONS:  
 WEIGHT OF VEHICLE = 1800 LBS. OR EQUIVALENT  
 RANGE OF SPEED AT IMPACT = 20 MPH TO 60 MPH  
 IMPACT ANGLE = OMNIDIRECTIONAL  
 MAXIMUM CHANGE OF VELOCITY = 10 FPS
7. ALL DIMENSIONS AFFECTED BY THE GEOMETRICS OF THE EXISTING STRUCTURE ARE TO BE CHECKED IN THE FIELD BY THE CONTRACTOR BEFORE ANY CONSTRUCTION IS DONE AND BEFORE ANY STRUCTURAL STEEL IS ORDERED OR FABRICATED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SUPPLY THE ENGINEER WITH ALL FIELD DIMENSIONS REQUIRED TO CHECK DETAIL DRAWINGS.
8. ALL STRUCTURAL STEEL SHALL BE GALVANIZED TO MEET THE REQUIREMENTS OF ASTM. BOLTS, NUTS, AND WASHERS SHALL BE HOT-DIPPED OR MECHANICALLY GALVANIZED. THE COATING SHALL MEET THE ADHERENCE THICKNESS AND QUALITY REQUIREMENTS OF ASTM A153. STRUCTURAL STEEL TO BE GALVANIZED AFTER FABRICATION, EXCEPT AS NOTED. STEEL POSTS SHALL BE ASTM A36 UNLESS OTHERWISE NOTED.

ORIENTATION OF SIGN FACES



ROADSIDE SIGNS

1. VERTICAL ALIGNMENT  
POSITION PANEL SO FACE IS PLUMB.
2. HORIZONTAL ALIGNMENT (SEE DIAGRAM ABOVE)
  - A). ON STRAIGHT ROADWAY SECTIONS, ANGLE OF SIGN FACE TO ROADWAY SHALL BE 90 TO EDGE OF ROAD.
  - B). ON THE INSIDE OF HORIZONTAL CURVES, POSITION SIGN SO FACE OF PANEL MAKES AN ANGLE OF 90 WITH A CHORD BETWEEN A POINT ON NEAR EDGE OF PAVEMENT AT SIGN LOCATION AND A POINT ON EDGE OF PAVEMENT 500" IN ADVANCE OF SIGN.
  - C). ON THE OUTSIDE OF HORIZONTAL CURVES, POSITION SIGN SO FACE OF PANEL IS AT RIGHT ANGLES TO THE TANGENT OF THE CURVE AT THE SIGN LOCATION.
  - D). POSITIONING OF SIGNS AT CORES AND RAMP SEPARATIONS IS REFERRED TO THE NORMAL EDGE OF THE MAINLINE ROADWAY.

GROUND MOUNT SIGN  
LOCATION DETAIL

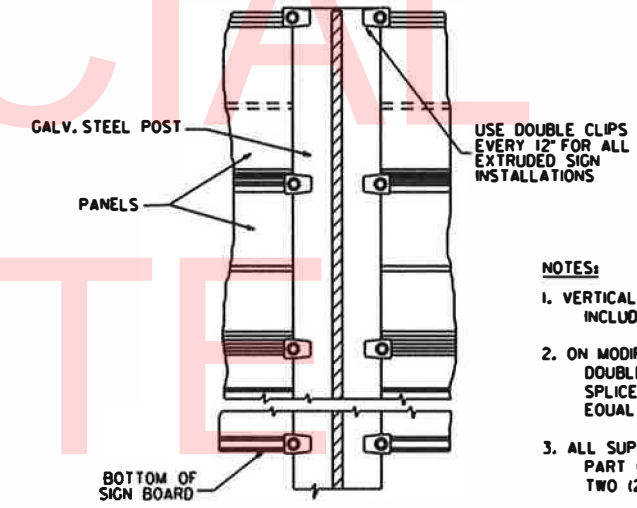
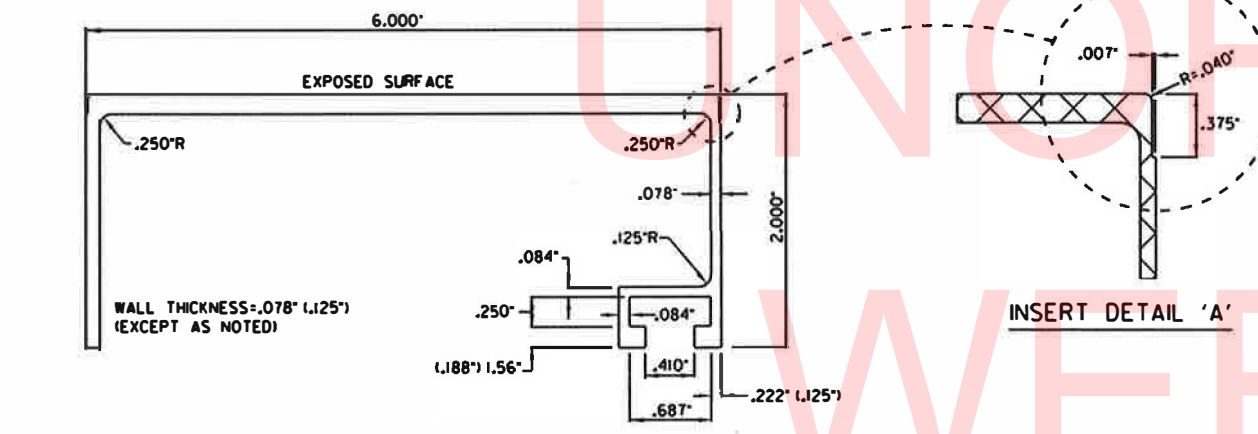
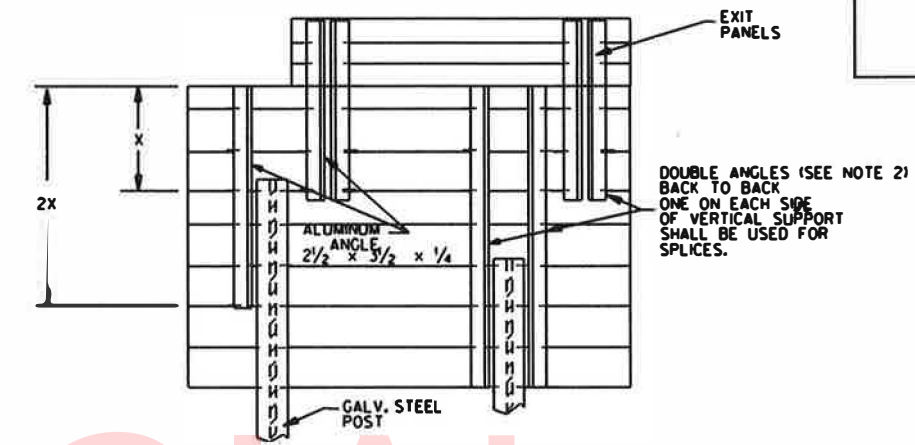
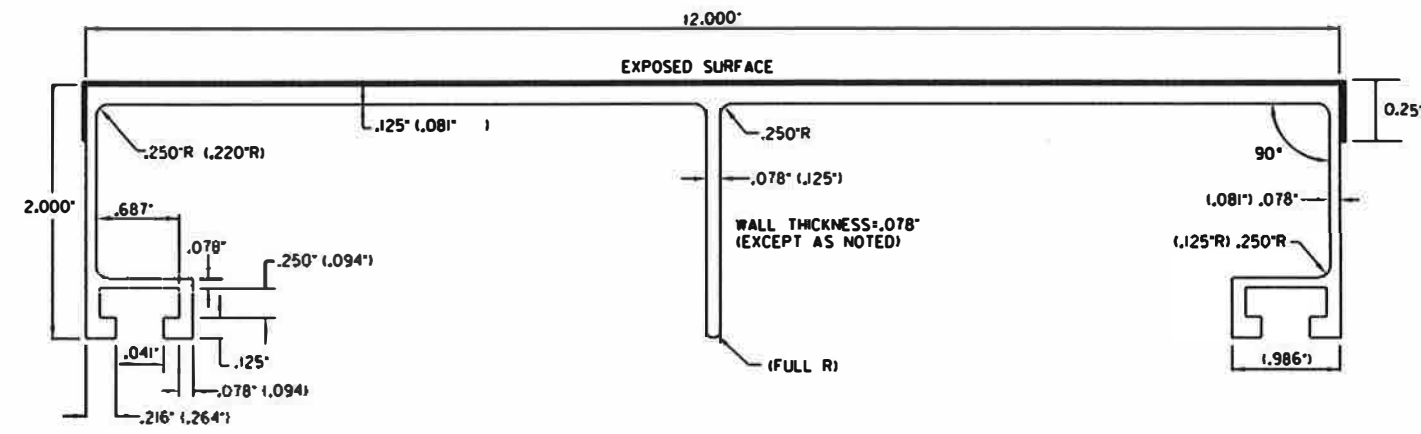
REVISIONS

CHD

DESIGN

PREL. TRACING

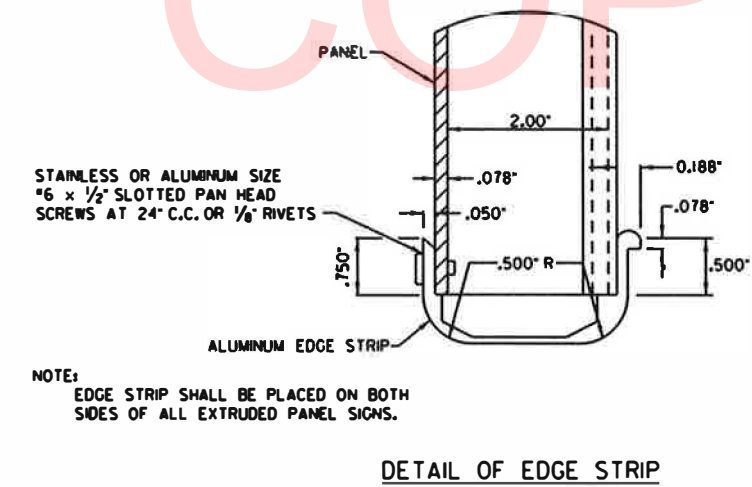
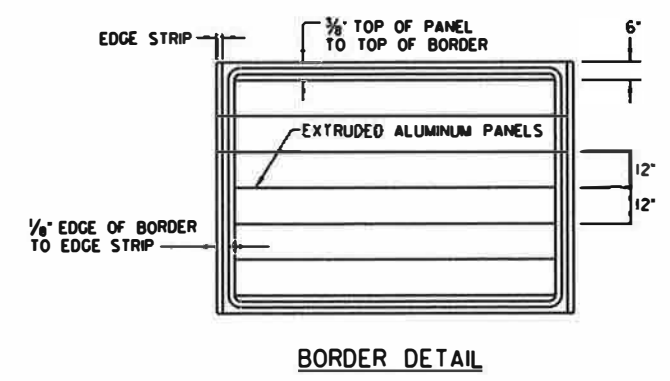
Extruded Aluminum Details



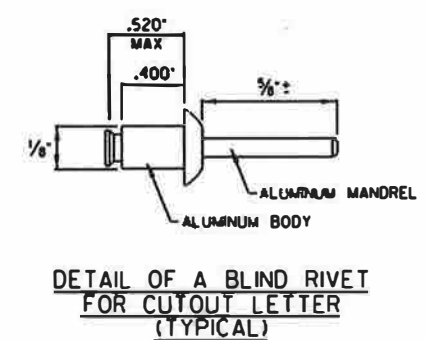
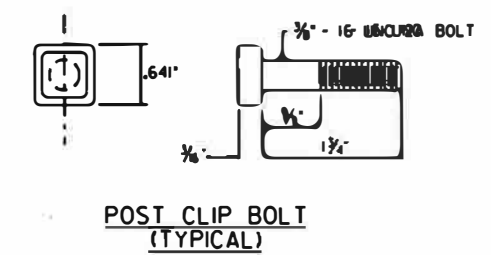
- NOTES:
1. VERTICAL SUPPORTS ARE TO BE CONTINUOUS TO ENTIRE HEIGHT OF SIGN, INCLUDING EXIT PANEL WHERE APPLICABLE.
  2. ON MODIFICATIONS NON-CONTINUOUS SUPPORTS WILL BE PERMITTED. SPLICE DOUBLE SHALL EXTEND A MIN. DISTANCE OF 'X' NOTED ABOVE. SPLICED SECTIONS 'X' OF 6'-0" OR MORE SHALL HAVE A W6 x 9 OR EQUAL SECTION ATTACHED TO FULL HEIGHT OF SIGN.
  3. ALL SUPPORTS SHALL BE POST CLIPPED AT 12" INTERVALS. THE BOTTOM PART OF THE SPLICED SUPPORT SHALL BE ATTACHED WITH AT LEAST TWO (2) POST CLIPS.

- NOTES:
1. ALUMINUM PANELS MAY HAVE SQUARE CORNERS OR NOTCHED CORNERS AS SHOWN. NO OTHER TYPE CORNERS ARE ACCEPTABLE.
  2. ALTERNATE DIMENSIONS INDICATED IN PARENTHESES ARE ACCEPTABLE.

EXTRUDED ALUMINUM DETAILS  
SIGN PANEL DIMENSIONS  
NOT TO SCALE



VERTICAL SUPPORT ATTACHMENT  
NOT TO SCALE



EXTRUDED ALUMINUM DETAILS  
NOT TO SCALE

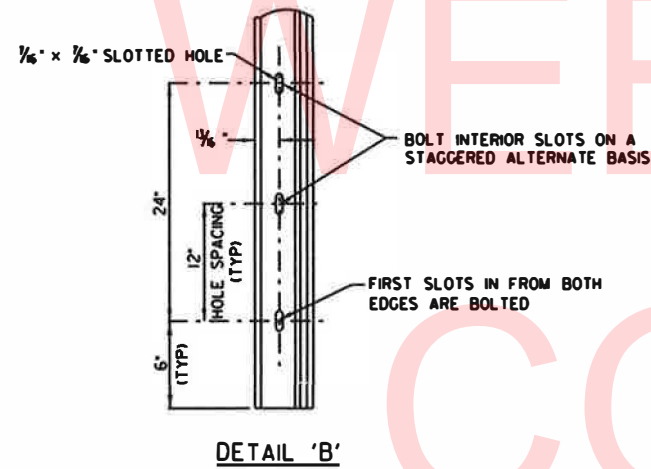
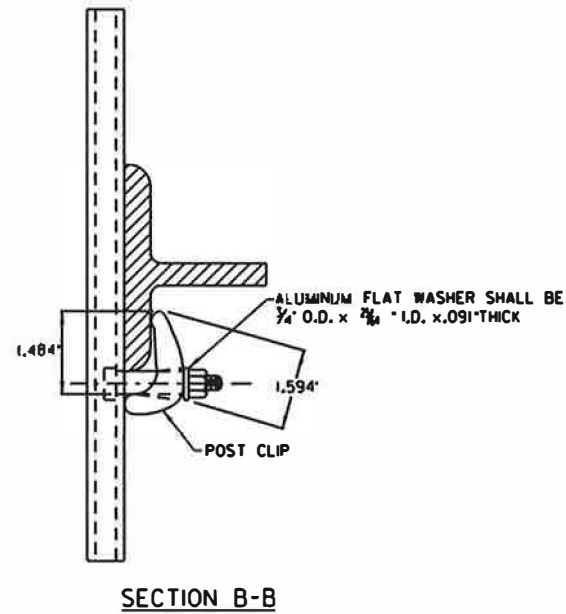
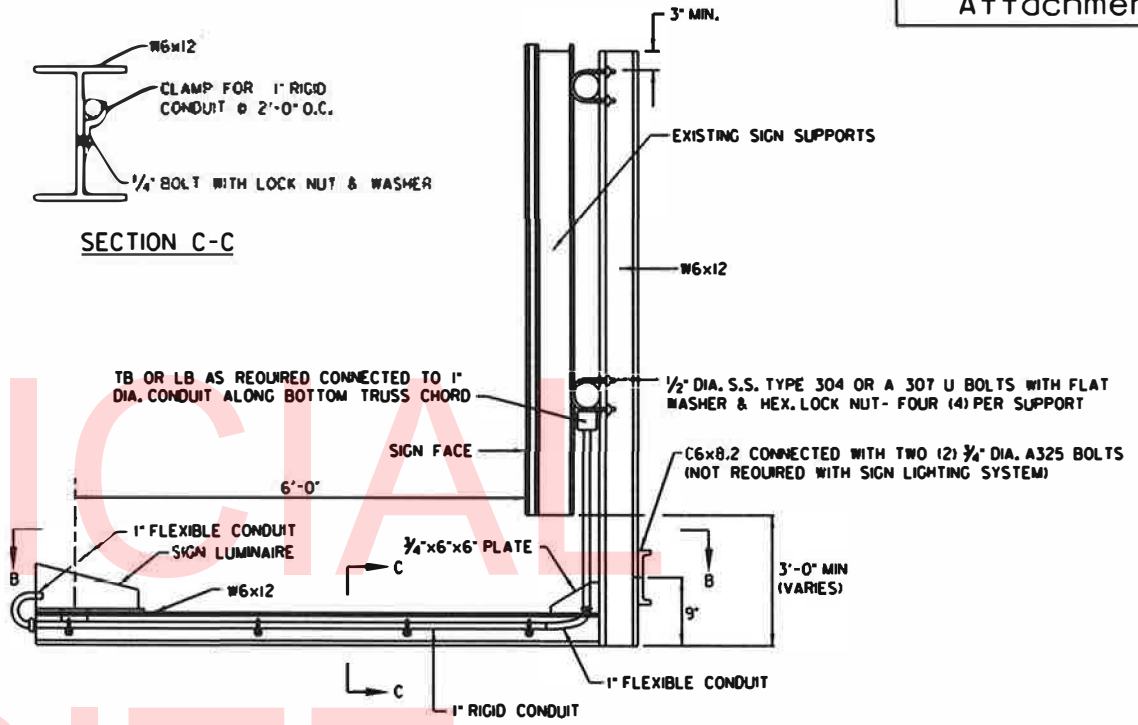
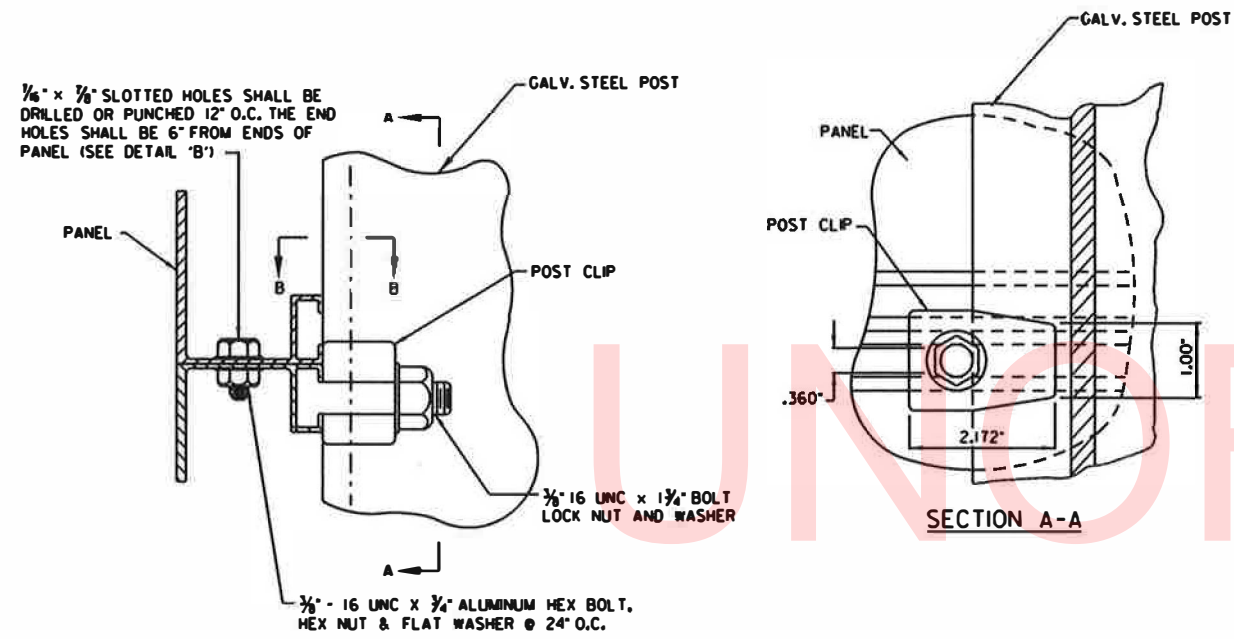
REVISIONS

PREL. TRACING

DESIGN

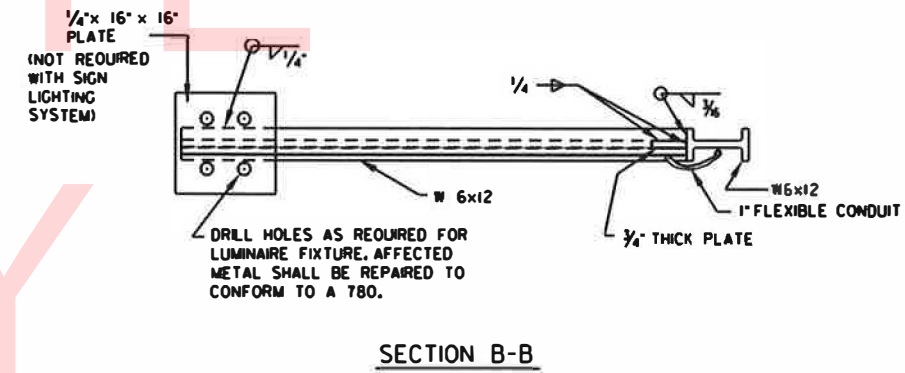
CHKD.

Extruded Assembly  
and  
Attachment Details



- BOLTS..... B211, ALLOY 2024-T4, 6262-T9 OR 6061-T6  
 FLAT WASHERS..... B209, ALLOY 2024-T4  
 RIVETS..... ALLOY 5052  
 NUTS..... B211, ALLOY 2017-T4  
 POST CLIPS..... B108, ALLOY 356-T6

DETAILS FOR ASSEMBLING SIGN PANELS  
NOT TO SCALE



NOTE: 1" DIA. CONDUIT SHALL BE ATTACHED TO BOTTOM CHORD OF TRUSS SPAN USING CONDUIT CLAMPS SPACED AT 5'-0" ON CENTER.

SIGN LUMINAIRE SUPPORTS  
MOUNTING FOR EXISTING STRUCTURES  
NOT TO SCALE

REVISIONS

CHG.

DESIGN

PREL. TRACING

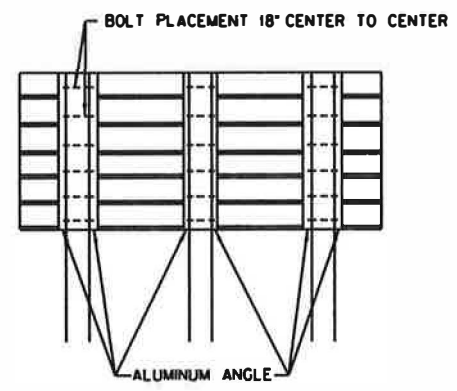
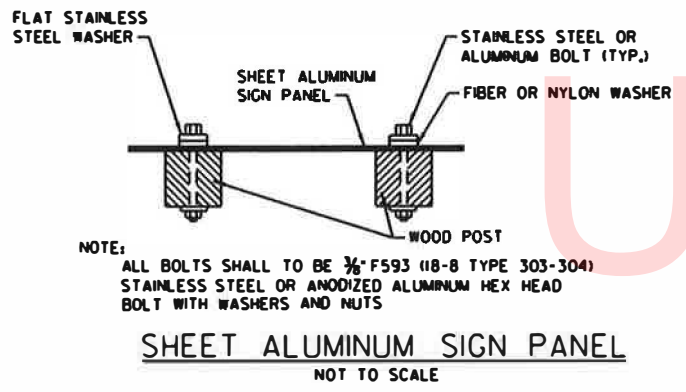
**Extruded Sign Panels  
and  
Sign Post Details**

REVISIONS

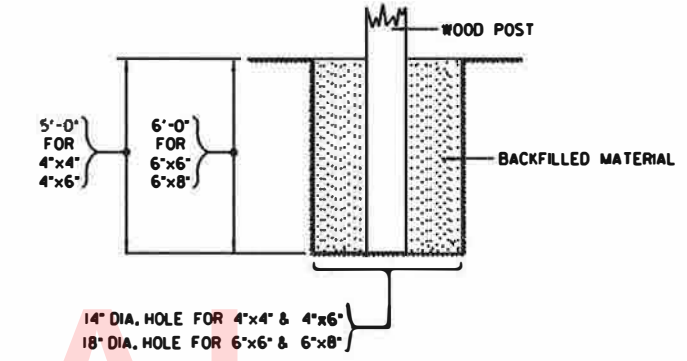
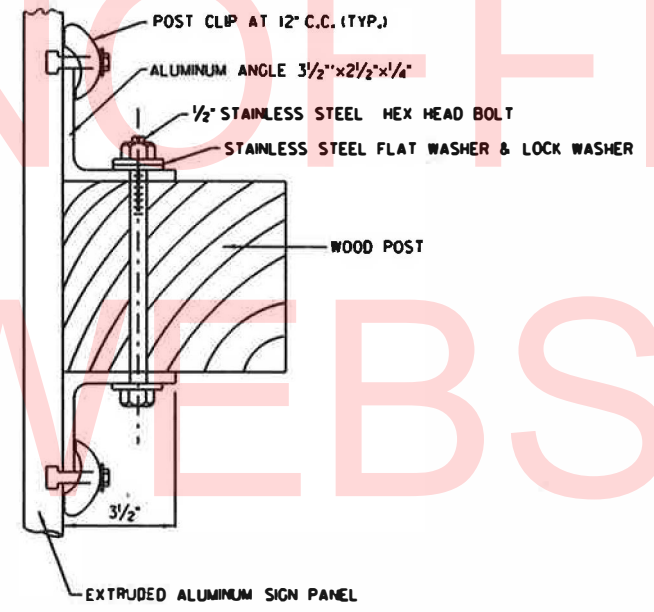
PREL. TRACING

DESIGN

CHKD.

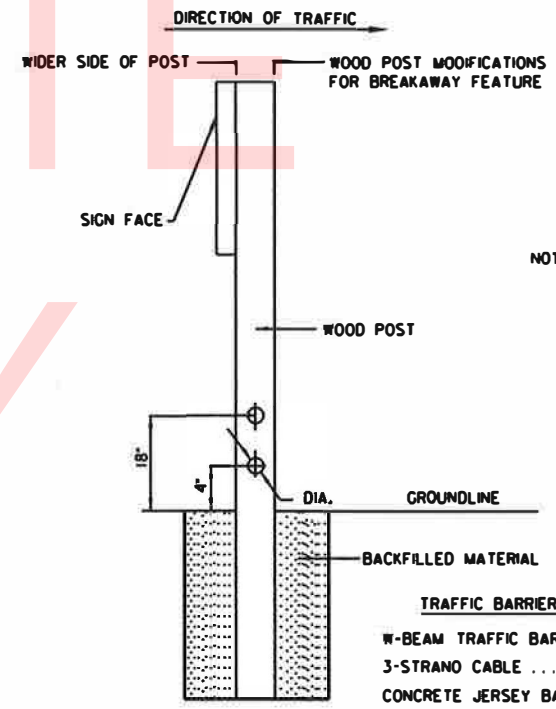


**EXTRUDED ALUMINUM SIGN PANEL**  
NOT TO SCALE



NOTE:  
TREATED WOODEN POST TO BE PLACED IN PRE-DUG HOLE IN GROUND, BACKFILLED USING SUITABLE MATERIAL AND TAMPED THOROUGHLY TO PROVIDE A RIGID SUB-SURFACE CONDITION AROUND THE POST.

**TYPICAL FOUNDATION FOR WOOD SUPPORTS**  
NOT TO SCALE



**WOOD POST MODIFICATIONS FOR BREAKAWAY FEATURE**  
NOT TO SCALE

### Sign Post Details

### Post Selection Table - Two Posts

W Feet	L <sub>B</sub> Feet	Height "H" In Feet														
		4	5	6	7	8	9	10	11	12	13	14	15			
6	6	W6x9	W6x9	W6x9	W6x9	W6x9	W6x9	W6x9	W6x9	W6x9	W6x12	W6x12	W6x12	W6x12	W6x12	
	8	W6x9	W6x9	W6x9	W6x9	W6x9	W6x9	W6x9	W6x9	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	
	10	W6x9	W6x9	W6x9	W6x9	W6x9	W6x9	W6x9	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	W6x15	
	12	W6x9	W6x9	W6x9	W6x9	W6x9	W6x9	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	W6x15	W6x15	
	14	W6x9	W6x12	W6x12	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	
8	6	W6x9	W6x9	W6x9	W6x9	W6x9	W6x9	W6x9	W6x9	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	
	8	W6x9	W6x9	W6x9	W6x9	W6x9	W6x9	W6x9	W6x9	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	
	10	W6x9	W6x9	W6x9	W6x9	W6x9	W6x9	W6x9	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	W6x15	
	12	W6x9	W6x9	W6x9	W6x9	W6x9	W6x9	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	W6x15	W6x15	
	14	W6x12	W6x12	W6x12	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	
10	6	W6x9	W6x9	W6x9	W6x9	W6x9	W6x9	W6x9	W6x9	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	
	8	W6x9	W6x9	W6x9	W6x9	W6x9	W6x9	W6x9	W6x9	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	
	10	W6x9	W6x9	W6x9	W6x9	W6x9	W6x9	W6x9	W6x9	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	
	12	W6x9	W6x12	W6x12	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	
	14	W6x12	W6x12	W6x12	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	

### Post Selection Table - Three Posts

W Feet	L <sub>B</sub> Feet	Height "H" In Feet														
		4	5	6	7	8	9	10	11	12	13	14	15			
22	6	W6x9	W6x9	W6x9	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	
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	10	W6x9	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	
	12	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	
	14	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	
24	6	W6x9	W6x9	W6x9	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	
	8	W6x9	W6x9	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	
	10	W6x9	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	
	12	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	
	14	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	
26	6	W6x9	W6x9	W6x9	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	
	8	W6x9	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	
	10	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	
	12	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	
	14	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	
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	12	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	
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	10	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	
	12	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	
	14	W6x12	W6x12	W6x12	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	W6x15	

### General Notes for Selection of Sign Support Posts

- Determine values of "W", "H" and "L<sub>B</sub>" as indicated in sketches "A" or "B".  
W = Maximum width of sign.  
H = Maximum height of sign.  
L<sub>B</sub> = Maximum distance between top of a footing and bottom of sign.
- For selection of posts, enter Tables with values of "W", "H" and "L<sub>B</sub>".
- For a size between those values of "W", "H" and "L<sub>B</sub>" in the table, use next highest foot value.
- All post sizes shown in upright lettering are A36 steel; all post sizes shown in slanted lettering with a crosshatched background are A441 or A572, grade 50 steel.
- Use the longest post to select all the post sizes.
- No more than 2 posts may be erected within any 7-foot path, the total combined weight of all posts within a 7-foot path should not exceed 45 lbs. per ft. The total combined weight of all posts within a 7-foot path should not exceed 600 lbs. below the post hinge.
- Transpo Industries or approved equal.

REVISIONS

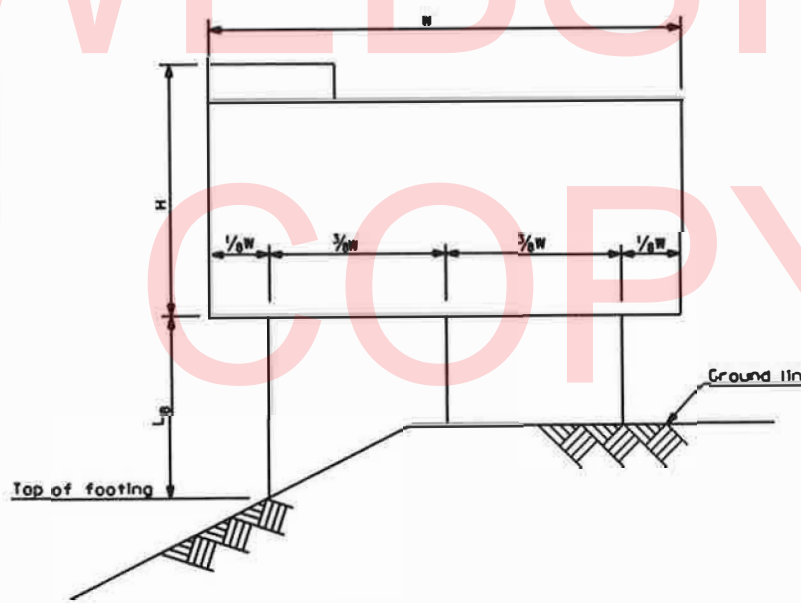
CHKD.

DESIGN

PREL. TRACKING

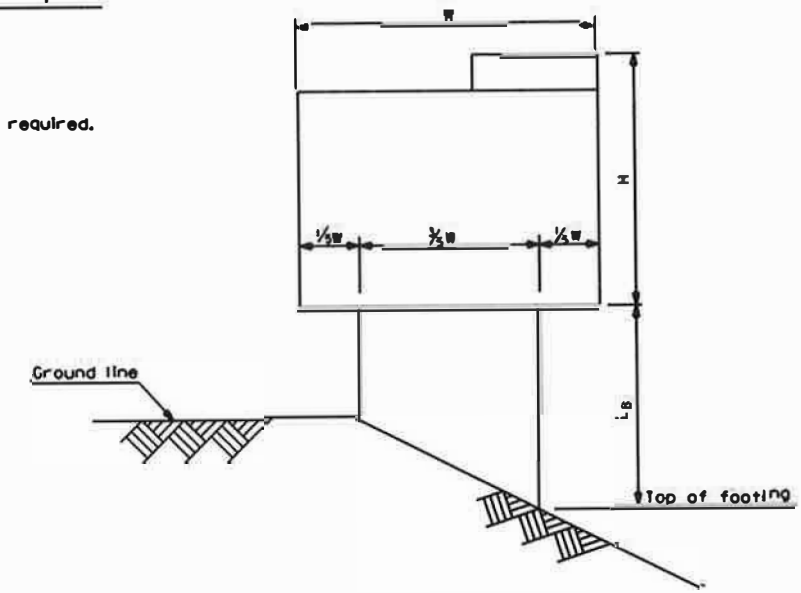
### Post Selection Example

For a sign where:  
W = 14'-0"  
H = 10'-0"  
L<sub>B</sub> = 8'-0"  
Two W6x15, A36 steel posts are required.



Sign on Three Posts

Sketch B

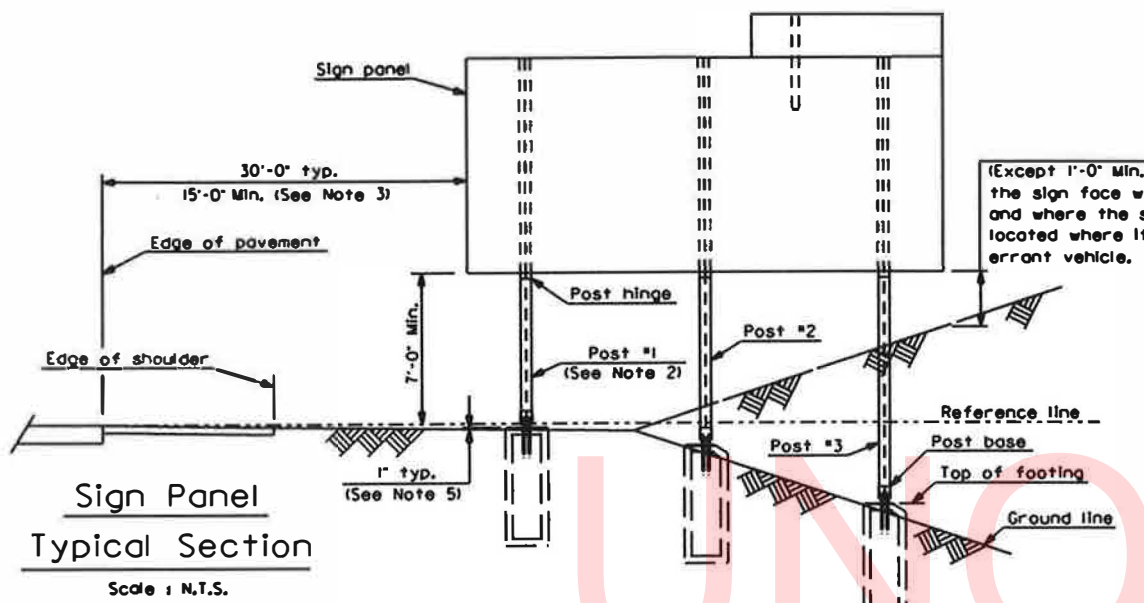


Sign on Two Posts

Sketch A

**General Notes for Bracket Number Selection Table**

- For each post, determine values of "H" and "L<sub>1</sub>" as indicated in sketch.  
"H" = Maximum height of sign in feet.  
"L<sub>1</sub>" = Distance between the top of footing and the top of sign in feet for each post.
- Enter Table with "H" and "L<sub>1</sub>" to select the required bracket for that post.
- For sizes of "H" and "L<sub>1</sub>" between those values on the table, use the next highest value.



**Footing Selection Table**

Post Size	L <sub>1</sub> Feet	Depth K <sub>1</sub> Feet	Reinf. Steel F <sub>1</sub>
W6	2.0	5.50	7-#4
W8	2.5	6.00	7-#4
W10	3.0	6.75	8-#4
W12		7.50	9-#4
W14	3.0	8.00	9-#4

\* Diameter if circular or min. side if square or rectangular.

**W6 Post**  
Post Length (L<sub>1</sub>) in feet

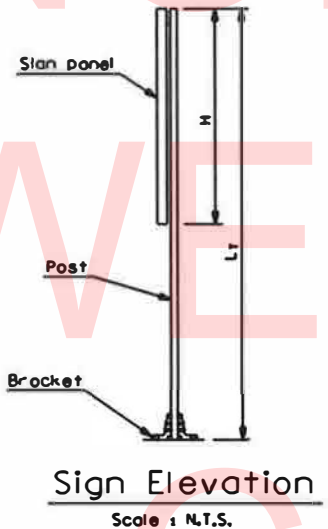
Post Length (L <sub>1</sub> ) in feet	3	4	5	6	7	8	9	10	11	12	13	14	15
Sign Height (H) in feet	3	4	5	6	7	8	9	10	11	12	13	14	15

**W8 Post**  
Post Length (L<sub>1</sub>) in feet

Post Length (L <sub>1</sub> ) in feet	3	4	5	6	7	8	9	10	11	12	13	14	15
Sign Height (H) in feet	3	4	5	6	7	8	9	10	11	12	13	14	15

**B-525 Bracket Tables**

- Notes:
- Materials and workmanship in accordance with Delaware Department of Transportation Standard Specifications, unless noted otherwise.
  - Post #1 is always adjacent to roadway whether sign is located on left or right.
  - At locations with unmountable curb, guardrail or barrier, place the near edge of the sign at least 2'-0" behind the curb face, guardrail or barrier. At locations with guardrail or barrier, it is desirable to place post #1 beyond the deflection distance of the guardrail or barrier. Prior to fabrication, determine actual lateral placement in the field with the approval of the Engineer.
  - Locate signs to avoid placing support in drainage ditches.
  - Mount all sign panels above post hinges.
  - For selection of posts, refer to Post Selection Tables on sheet No. 5.
  - For post base and hinge details, refer to sheet No. 7.
  - For selection of footing size and reinforcement, refer to Footing Selection Table on this sheet.
  - For detail of sign panels and attachment, see sheet No. 2, 3 and 4.



**W10 Post**  
Post Length (L<sub>1</sub>) in feet

Post Length (L <sub>1</sub> ) in feet	3	4	5	6	7	8	9	10	11	12	13	14	15
Sign Height (H) in feet	3	4	5	6	7	8	9	10	11	12	13	14	15

**W12 Post**  
Post Length (L<sub>1</sub>) in feet

Post Length (L <sub>1</sub> ) in feet	3	4	5	6	7	8	9	10	11	12	13	14	15
Sign Height (H) in feet	3	4	5	6	7	8	9	10	11	12	13	14	15

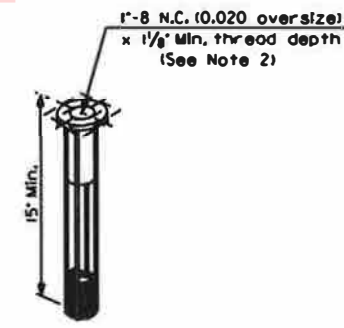
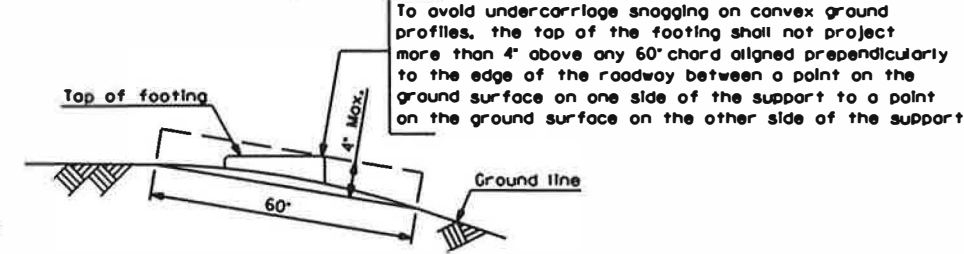
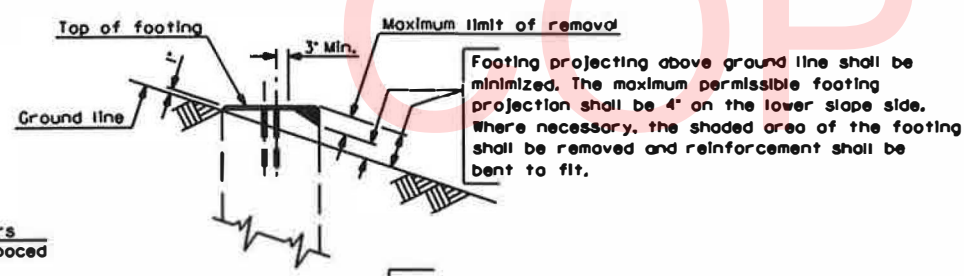
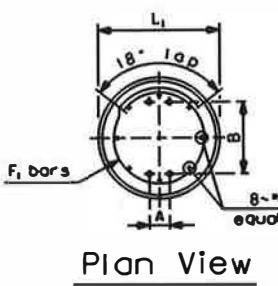
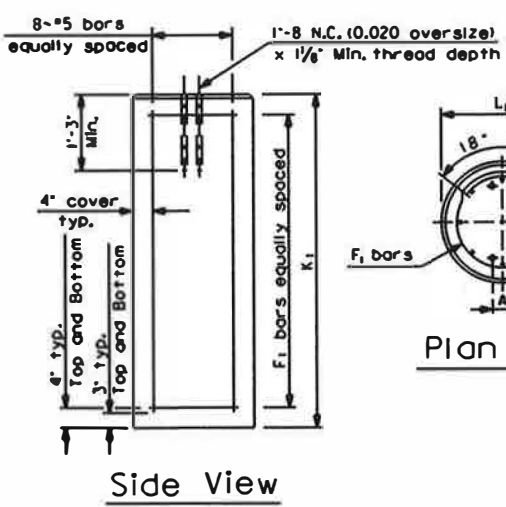
**W14 Post**  
Post Length (L<sub>1</sub>) in feet

Post Length (L <sub>1</sub> ) in feet	3	4	5	6	7	8	9	10	11	12	13	14	15
Sign Height (H) in feet	3	4	5	6	7	8	9	10	11	12	13	14	15

**B-650 Bracket Tables**  
**Bracket Number Selection Tables**

**Notes:**

- Enter Footing Selection Table with required post size and find required footing values as shown in Details.
- The anchor shall be 304 stainless steel with 1053 steel rod and coll.
- Form the top one foot of the footing.
- Use Class B cement concrete in all footings.
- Exact dimensions "A" and "B" should be obtained from the manufacturer or measured from the assembled brackets prior to placement of anchors. Approximate dimensions are as follows:  
 "A" (Lateral spacing of anchors)  
 3' for B-525 used on W6 and W8 posts  
 4' for B-650 used on W10, W12 and W14 posts.  
 "B" (Longitudinal spacing of anchors)  
 Bracket #1 - Depth of post selection plus 1 7/8".  
 Bracket #2 - Depth of post selection plus 8/8".  
 Bracket #3 - Depth of post selection plus 8/8".
- To insure proper spacing and alignment of anchors, it is recommended that all anchors be held in place by a rigid machined template while the concrete is placed and cured.
- Transpo Industries or approved equal.



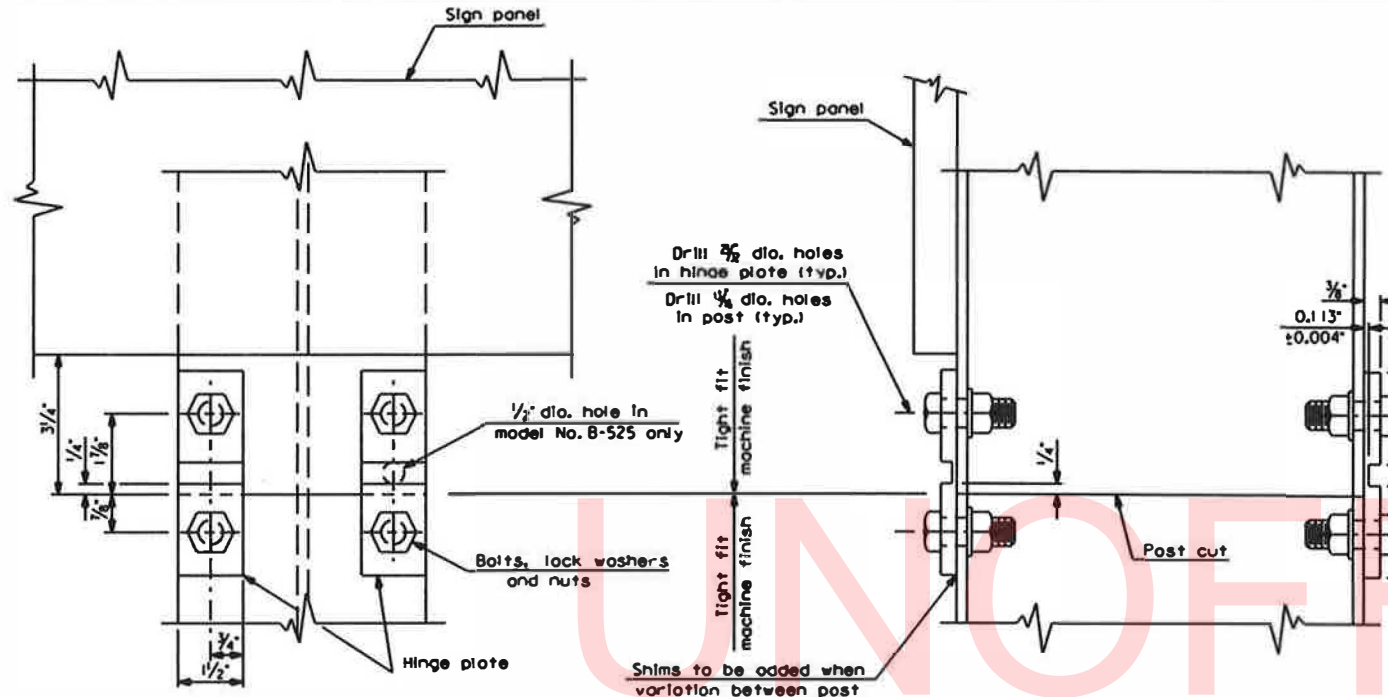
**Anchor**  
Scale: N.T.S.

REVISIONS

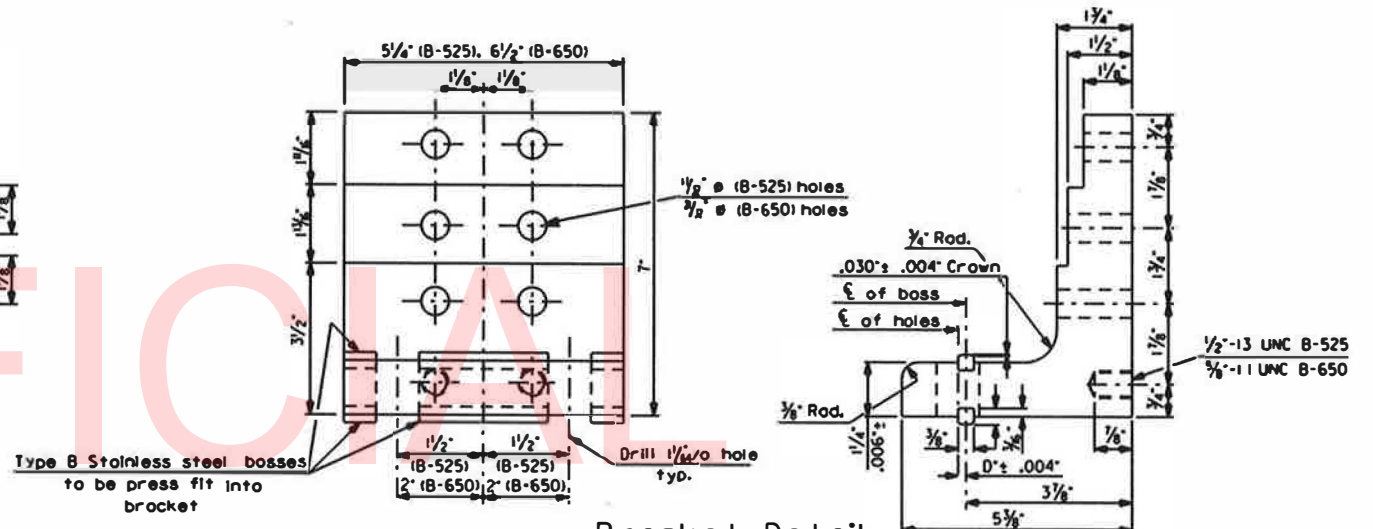
PREL. TRACING DESIGN CHG.

- Notes :**
1. The bracket number is stamped on the bracket.
  2. Bolt the brackets to post, then place post and connected bracket to breakaway coupling.
  3. For footing and anchor details, see sheet No. 6
  4. All bolts to be tightened in accordance with the manufacturer's specifications.
  5. Transpo Industries or approved equal.

Bracket No.	D (inches)
1	0.100
2	0.150
3	0.200

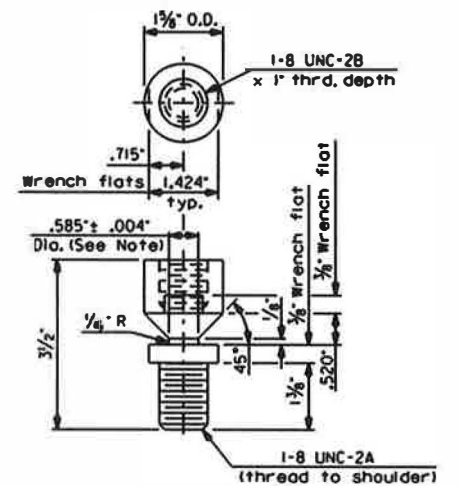


**Post Hinge Detail**



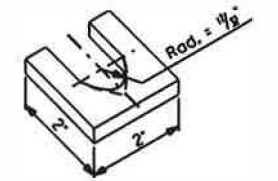
**Bracket Detail**

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



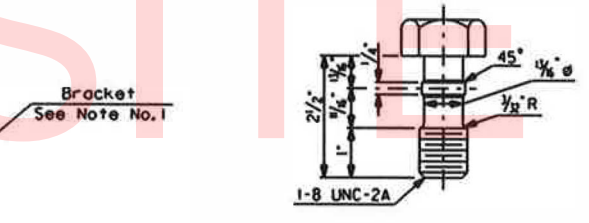
**Type B - Breakaway Coupling Detail**

Scale : N.T.S.  
Note : Do not place torque across neck portion of coupling.



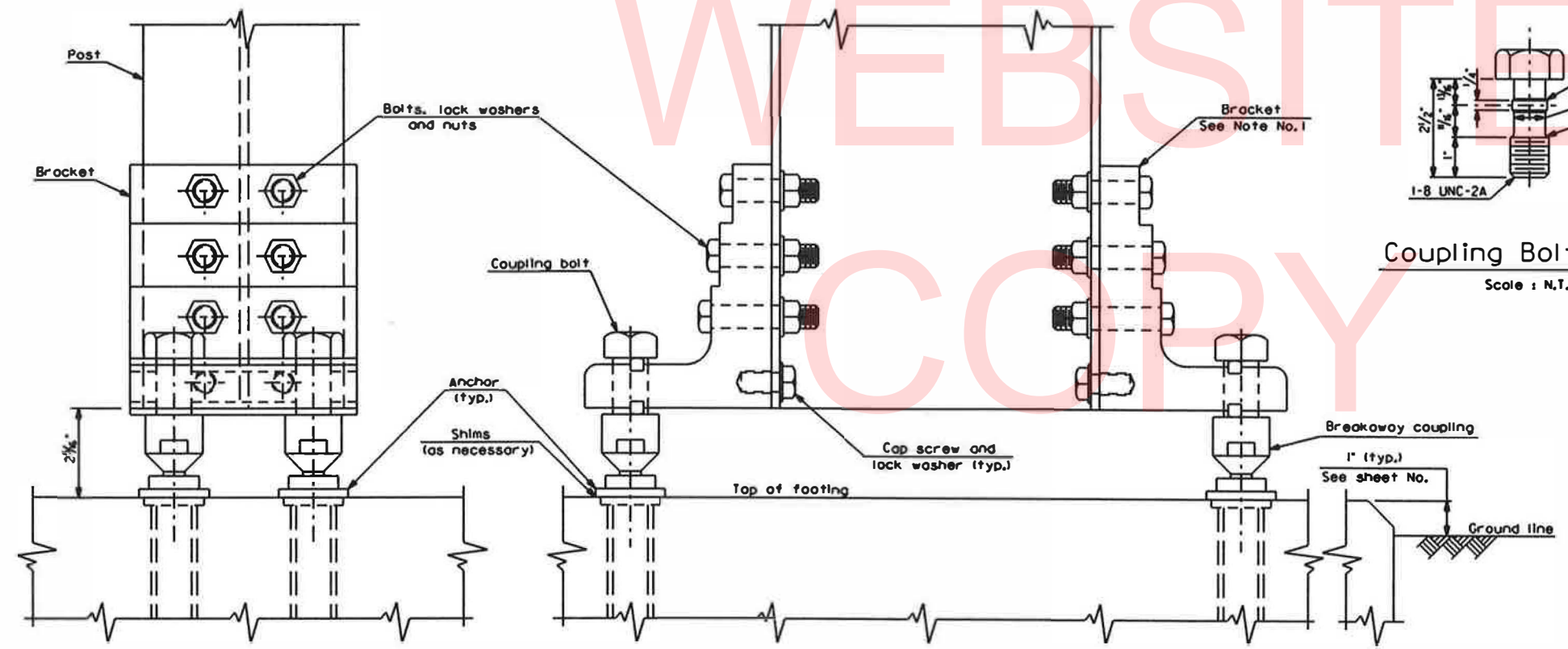
**Shim Detail**

Scale : N.T.S.  
Note : 14 or 18 gage galvanized steel sheet



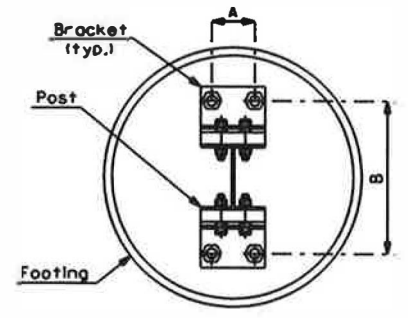
**Coupling Bolt Detail**

Scale : N.T.S.



**Breakaway Assemblies**

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



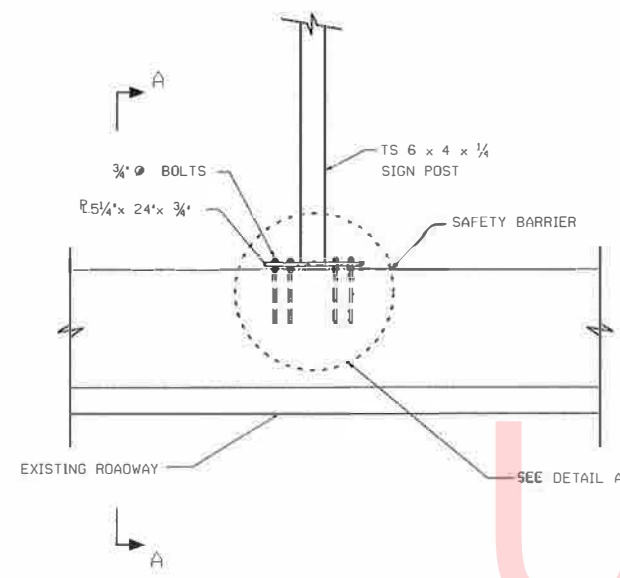
**Plan View**

Scale : N.T.S.  
Note : For dimensions A and B, see sheet No.

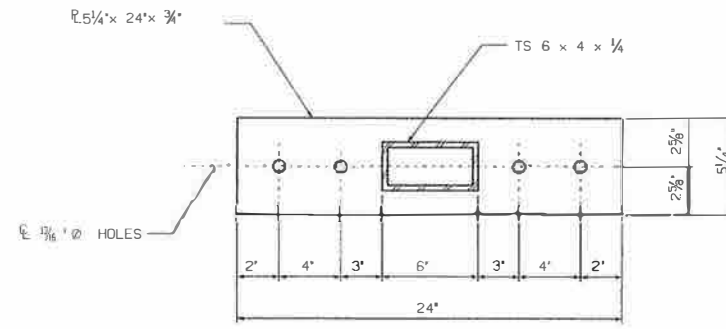
REVISIONS  
 PREL. TRACING  
 DESIGN  
 CHD.

CONTRACT	COUNTY	F.A.P. NO.	SHEET NO.	TOTAL SHEETS
T201908302	Statewide		8	8
GUIDE SIGN INSTALLATION CONTRACT - DETAILS				
REVISIONS				

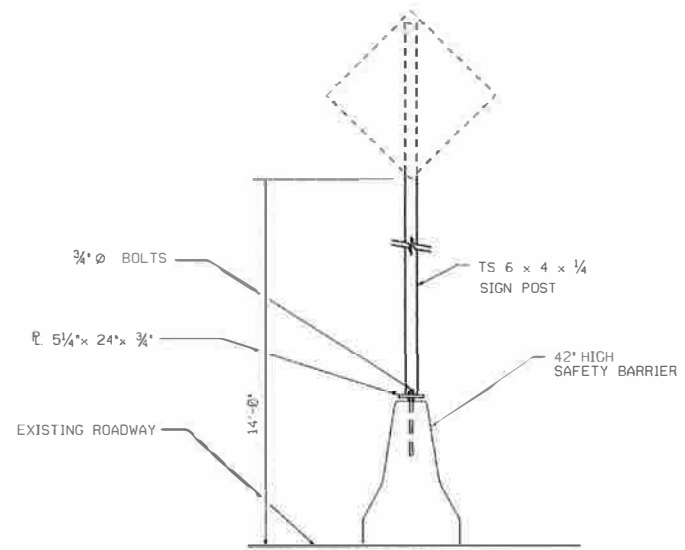
DETAILS



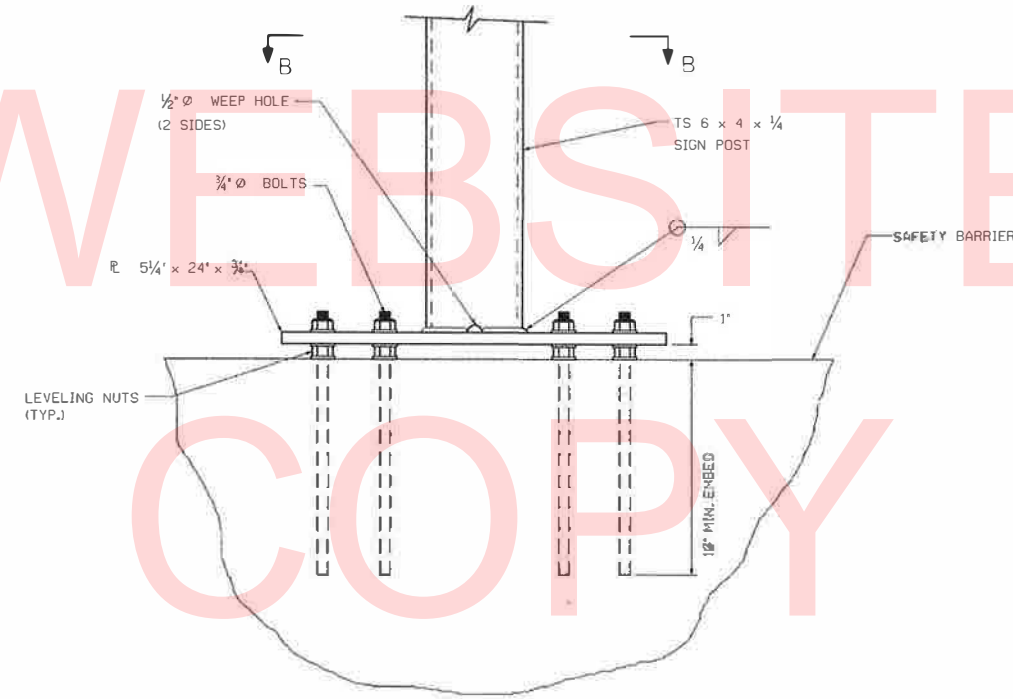
**ELEVATION AT BARRIER**  
NOT TO SCALE



**SECTION B-B**  
NOT TO SCALE



**SECTION A-A**  
NOT TO SCALE



**DETAIL A**  
NOT TO SCALE

**GENERAL NOTES:**

- SPECIFICATIONS:  
DELAWARE DEPARTMENT OF TRANSPORTATION - STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2016, INCLUDING ALL SUPPLEMENTS.  
A.A.S.H.T.O. - STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARE AND TRAFFIC SIGNALS - DATED 2000, USING A DESIGN WIND SPEED OF 105 M.P.H. AND ICE 3.0 PSF.  
  
AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE SPECIFICATIONS, AASHTO/AWS D1.5 2002 ONLY E70XX10W LOW HYDROGEN ELECTRODES ARE TO BE USED.  
A.I.S.C. - MANUAL OF STEEL CONSTRUCTION 9TH EDITION.
- MATERIALS:  
ALL PREFABRICATED SQUARE TUBING SHALL CONFORM TO ASTM A500 GRADE C WITH  $F_y$  MINIMUM = 50 KSI.  
ALL MISCELLANEOUS PLATE MATERIAL FOR BASE PLATES SHALL CONFORM TO ASTM A709 GRADE 50 WITH  $F_y$  MINIMUM = 50 KSI.  
ANCHOR BOLTS SHALL CONFORM TO ASTM A709 GRADE 50 WITH 50 KSI MINIMUM YIELD STRENGTH AND BE HOT - DIPPED GALVANIZED. WELDING TO HIGH STRENGTH ANCHOR BOLTS WILL NOT BE PERMITTED. (SEE SPECIAL PROVISIONS)
- WELDING SHALL BE DONE IN THE SHOP BEFORE GALVANIZING. ALL WELDING AND OXYGEN CUTTING SHALL BE IN ACCORDANCE WITH A.W.S. STRUCTURAL WELDING CODE ALL WELDING SHALL BE INSPECTED AT CONTRACTOR'S EXPENSE.
- ALL STRUCTURAL STEEL SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH A.A.S.H.T.O. M III (ASTM A-123).
- CONTRACTOR SHALL SUBMIT FOR APPROVAL, AN ADHESIVE ANCHOR BOLT SYSTEM CAPABLE OF PROVIDING THE FOLLOWING UNFACTORED LOAD CAPACITY SIMULTANEOUSLY:  
  
TENSION = 4 kips/BOLT MIN.  
  
SHEAR = 0.7 kips/BOLT MIN.  
MIN. NUMBER OF BOLTS, DIAMETER AND EMBEDMENT DEPTHS SHOWN ON THE PLAN SHALL BE MAINTAINED.

**P.C.C. SAFETY BARRIER SIGN CONNECTION**

NOT TO SCALE

PREL. TRACING DESIGN CHKD.