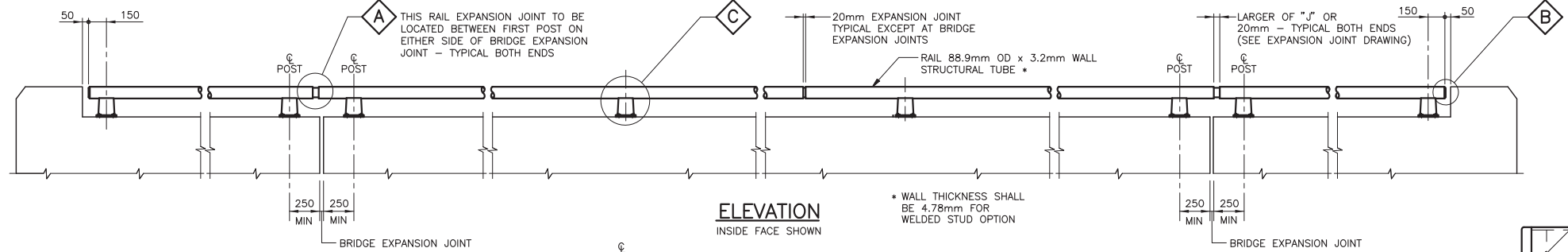
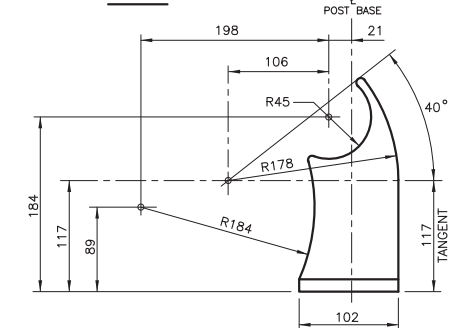
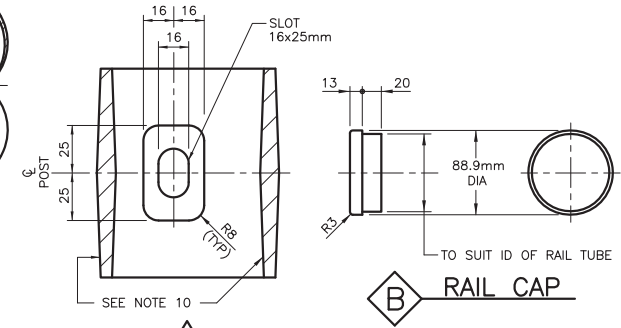
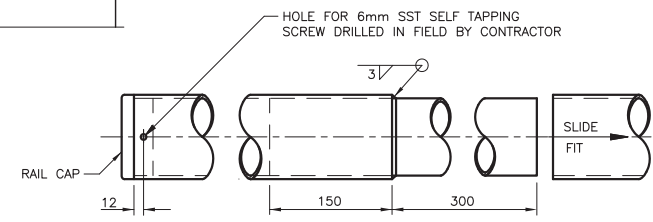


MDS BARRIERS



METRIC
DIMENSIONS ARE IN METERS AND / OR MILLIMETERS UNLESS OTHERWISE SHOWN



	MAXIMUM
POST+ SPACING FOR STEEL RAIL	3500mm
POST+ SPACING FOR ALUMINUM RAIL	2500mm

* POSTS MAY BE STEEL OR ALUMINUM

CONT No	WP No	○
RAILING FOR BARRIER / PARAPET WALL	SHEET	

- NOTES:**
- ALL NON-STAINLESS STEEL BOLT, NUT AND WASHER FOR FASTENING STEEL RAIL TO POSTS SHALL BE HOT-DIP GALVANIZED
 - ALL WELDED STUDS OR BLIND BOLTS OR SQUARE HEAD BOLTS SHALL BE INSTALLED AT THE MIDDLE OF THE SLOT AND SHALL BE TIGHTENED TO A CONDITION THAT WILL ALLOW RAIL MOVEMENT.
 - RAILS SHALL BE SUPPLIED IN LENGTHS TO BE ATTACHED TO A MINIMUM OF THREE (3) POSTS EXCEPT WHEN THE WINGWALL LENGTH OF A BRIDGE WITH EXPANSION JOINTS DOES NOT PERMIT THIS. IN THIS CASE, THE RAIL LENGTH CAN BE ATTACHED TO TWO (2) POSTS ON THE WINGWALL.
 - POST AND ANCHORAGES TO INCLUDE ALL BOLTS AND WASHERS.
 - RAILING ANCHORAGE TO BE PLACED PRIOR TO CONCRETING.
 - RAIL SHALL BE PRESENT TO FOLLOW ROAD CURVATURE WHERE RADIUS IS LESS THAN 150m.
 - RAIL POSTS SHALL BE SET PERPENDICULAR TO GRADE
 - WHERE LAYOUT OF POSTS IS NOT SHOWN, POST LOCATION SHALL BE DETERMINED BY THE CONTRACTOR.
 - WHEN CONNECTING TO EXISTING RAILING, RAIL MUST BE MADE CONTINUOUS AND POST SPACING DETERMINED WITH REFERENCE TO EXISTING POSTS.
 - THE COMBINATION OF STEEL RAIL AND ALUMINUM POSTS IS PERMITTED. - WHEN AN EXTRUDED POST IS USED, THE ALLOY SHALL BE 6061 ALLOY T-6 HEAT TREATED. THE POST DIMENSIONS SHALL NOT BE SMALLER THAN THE DETAILS SHOWN IN THE DRAWING. WALLS OF EXTRUDED POST ARE NOT TAPERED AND SHALL HAVE A UNIFORM THICKNESS OF 8mm MINIMUM. -WHEN A CAST POST IS USED THE ALLOY SHALL BE A444.0-T4.
 - RAIL CAP MATERIAL SHALL BE STEEL OR ALUMINUM. RAIL CAP CAN BE SAND CAST 356 ALUMINUM ALLOY. RAIL CAP TO INCLUDE SST SELF TAPPING FASTENERS.

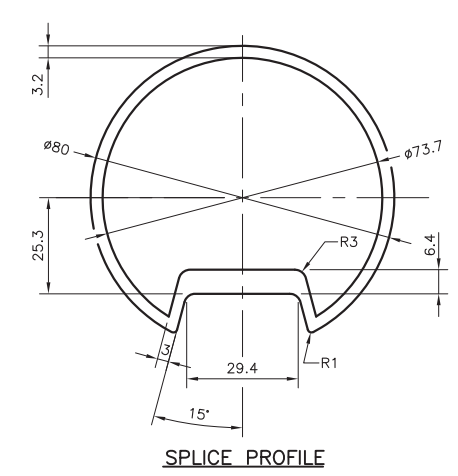
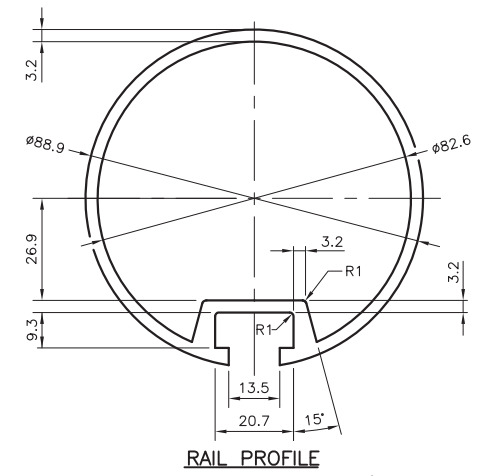
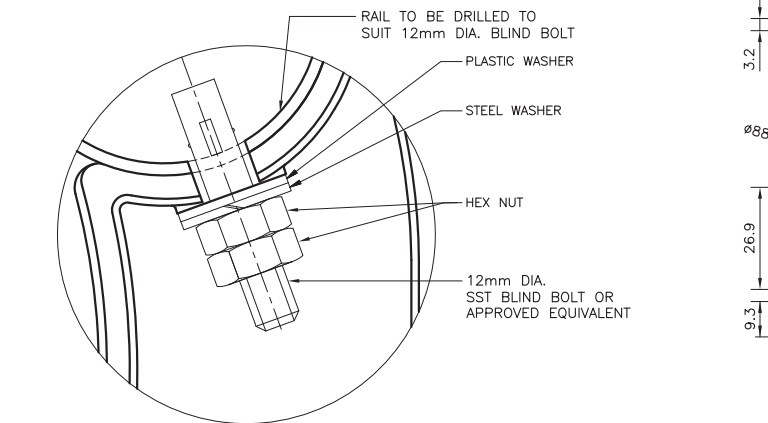
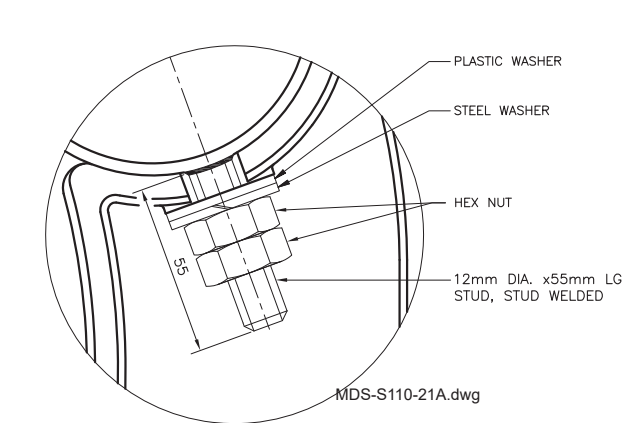
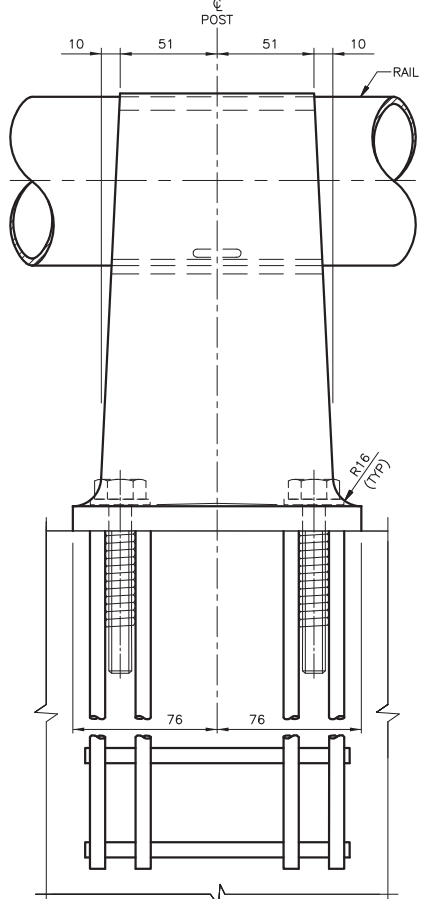
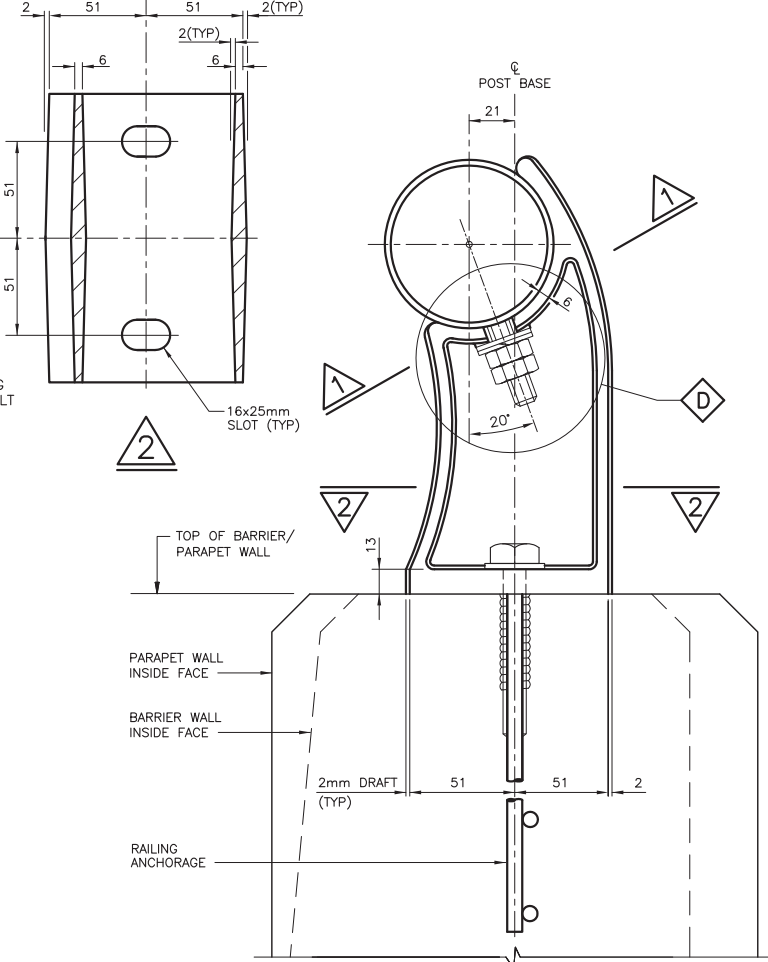
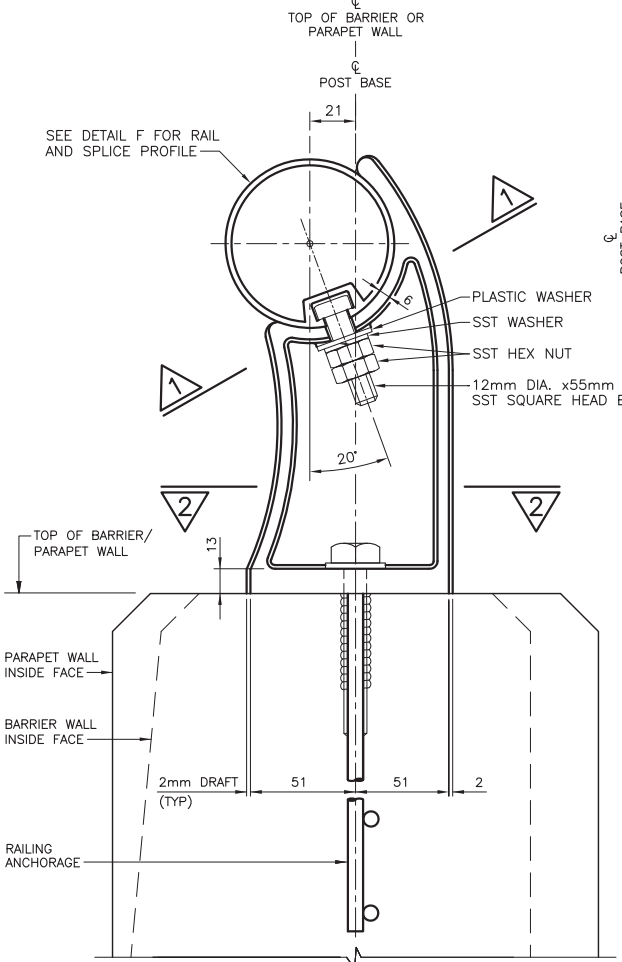
- NOTES FOR STEEL RAIL OPTION:**
- RAIL SHALL BE STRUCTURAL TUBING GRADE 350W. STEEL IN POST SHALL BE CAST STEEL SUPPLIED IN ACCORDANCE WITH ASTM A27 / A27M-08 GRADE 65-35. GALVANIZE RAIL TUBING MATING SURFACES TO HAVE A 2 ±0.5mm GAP ALL ROUND TO ENSURE A SLIDE FIT. FULL THREAD STUDS, WASHERS AND NUTS FOR FASTENING RAIL TO POST SHALL CONFORM TO ASTM A108.
 - POSTS AND RAILS SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.
 - RAIL MAY BE CUT AS REQUIRED IN FIELD WITH PIPE CUTTERS. CUT TO BE REPAIRED AS SPECIFIED IN OPSS 908.

- NOTES FOR ALUMINUM RAIL OPTION:**
- ALUMINUM RAIL SHALL BE 6061 ALLOY T-6 HEAT TREATED. STAINLESS STEEL BOLTS, WASHERS AND LOCK NUTS SHALL BE TYPE 304 ACCORDING TO ASTM A314.

LEGEND:

- SST - STAINLESS STEEL

MODEL No. ALUMINUM	MODEL No. STEEL	
MDS-SS110-21-A	MDS-SS110-21-S	
REFER TO 1. 1.8 IN THE STRUCTURAL MANUAL FOR PROFESSIONAL ENGINEER STAMPING REQUIREMENTS		
APPLICABLE STANDARD DRAWINGS		
OPSD 3419.150 BARRIERS AND RAILINGS - STEEL SINGLE RAILING ANCHORAGE		
RAIL MODEL REF	MDS-SS110-21-A	
RAILING FOR BARRIER/PARAPET WALL		
MDS BARRIERS 610 N. Mountain Rd Newington, CT. 06111 TEL: 860-289-8033 WWW.MDSBARRIERS.COM		
DESIGNED BY:	DATE:	DRAWING NO: MDS-SS110-21-SA
DRAWN BY:		
CHECKED BY: GJC	2017-11-08	
APPROVED BY:	SCALE: NT5	



D DETAIL FULL-THREADED WELDED STUD
(FOR ALTERNATIVE SEE E)

E DETAIL BLIND BOLT

F DETAIL EXTRUDED ALUMINUM RAIL

DRAWING NOT TO BE SCALED
100mm ON ORIGINAL DRAWING

DRAWING NAME: MDS-S110-21-SA.dwg
CREATED: 1998-03-13
MODIFIED: 2015-03-26