

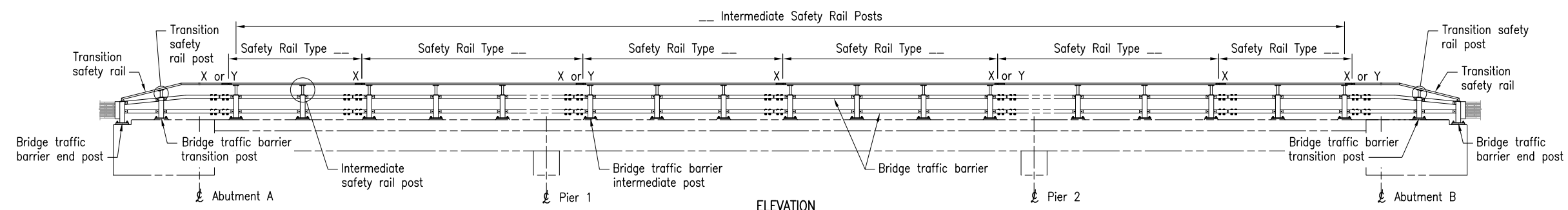
Note: The purpose of this drawing is to provide typical standard details. The fit for purpose requirements and project specific details shall be included on the Project Drawings.

— denotes project specific information that shall be shown on the project drawings

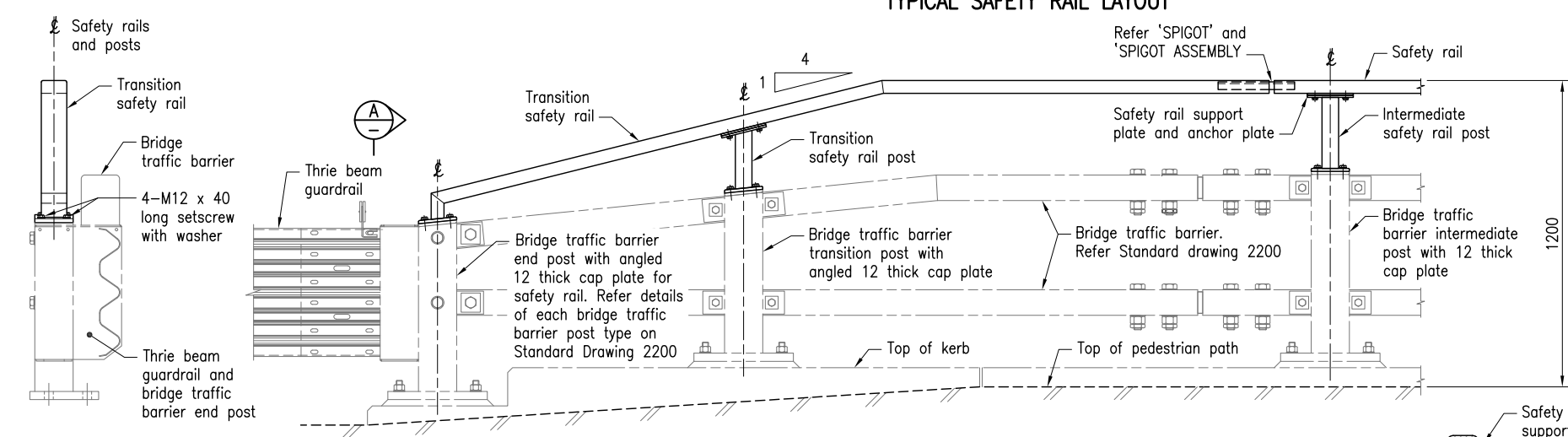
'X' denotes 20 nominal installation gap at 25°C (±1°C = ±1mm) – Fixed and Continuous Joints  
 'Y' denotes 40 nominal installation gap at 25°C (±1°C = ±1mm) – Expansion Joints

- Tapping Procedure:**
1. Drill holes through the support plates only (using the correct tapping drill to match bolt size or smaller size drill).
  2. Position and weld the support plates to the rail.
  3. Fill the holes in the support plates with natural silicone.
  4. Hot dip galvanize the rail.
  5. After galvanizing, drill and tap the required size holes through the support plates and the rail.

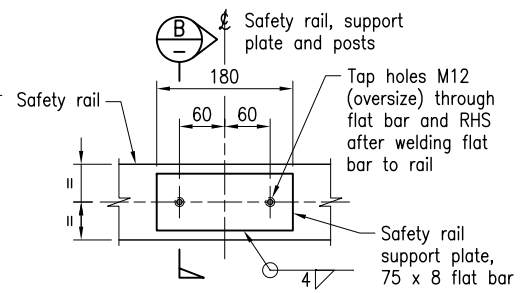
- NOTES:**
1. SCOPE: This Standard Drawing provides details of bridge safety rail for use with regular performance post and rail bridge traffic barriers. Refer Standard Drawing 2200 for regular performance bridge traffic barriers. The modifications required to the bridge traffic barrier posts to incorporate safety rails are shown on Standard Drawing 2200.
  2. DESIGN CRITERIA : The bridge safety rail shall be designed in accordance with the Bridge Traffic Barrier Design Criteria 2 to 7 on Standard Drawing 2200. The safety rail post spacings and rail lengths shall suit the dimensions of the corresponding bridge traffic barrier elements that the safety rail is attached to. Each rail type is project specific and shall be fully detailed in the project drawings.
  3. STEELWORK shall be fabricated to the requirements of MRTS78. RHS and SHS shall be Grade C450L0 to AS/NZS 1163. Steel plate shall be Grade 250 to AS/NZS 3678. Flat bar shall be Grade 300 to AS/NZS 3679.1. All hollow sections, plate and flat bar will require abrasive blasting to develop a surface profile of 50µm prior to hot dip galvanizing. Setscrews Class 4.6 to AS 1111.2. Washers for Class 4.6 setscrews to AS 1237.1. All setscrews and washers shall be hot dip galvanized to AS 1214. All other steelwork to be hot dip galvanized to AS/NZS 4680. Prior to galvanizing all weld splatter and welding slag is to be removed. Members to be branded with suitable type number after fabrication.
  4. WELDING symbols conform to AS 1101.3. All welding to AS/NZS 1554.1. Welding consumables to be controlled hydrogen type: G493 to AS/NZS ISO 14341-B or T493 to AS/NZS ISO 17632-B.
  5. DIMENSIONS are in millimetres unless shown otherwise.



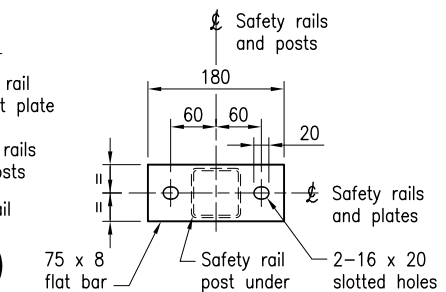
**TYPICAL SAFETY RAIL LAYOUT**



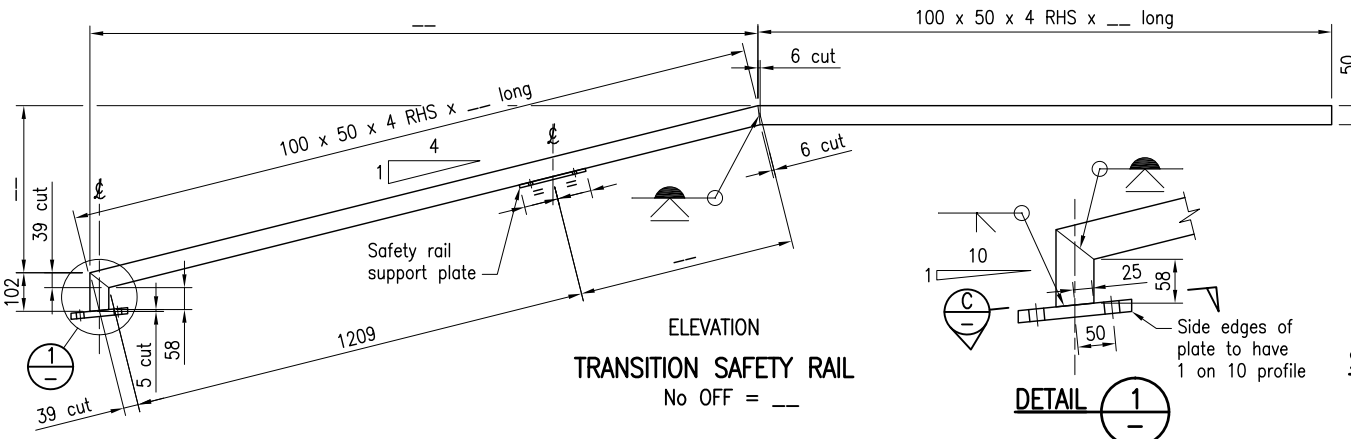
**TYPICAL ASSEMBLY – END, TRANSITION AND INTERMEDIATE POSTS**



**PLAN – LOOKING UP SAFETY RAIL SUPPORT PLATE**



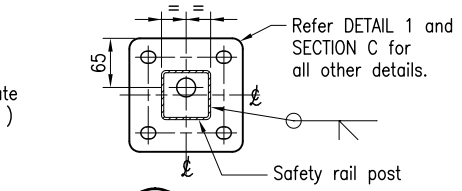
**PLAN – LOOKING DOWN SAFETY RAIL ANCHOR PLATE**



**TRANSITION SAFETY RAIL**  
No OFF = —



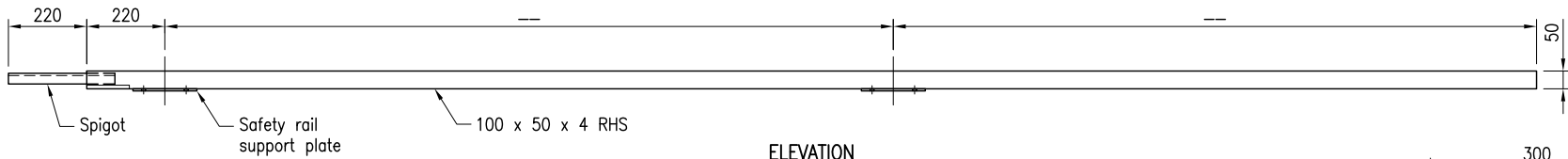
**SECTION C – ANGLED BASE PLATE FOR TRANSITION SAFETY RAIL CONNECTION TO TRAFFIC BARRIER END POST**



**SECTION D – ANGLED BASE PLATE FOR TRANSITION SAFETY RAIL POST**

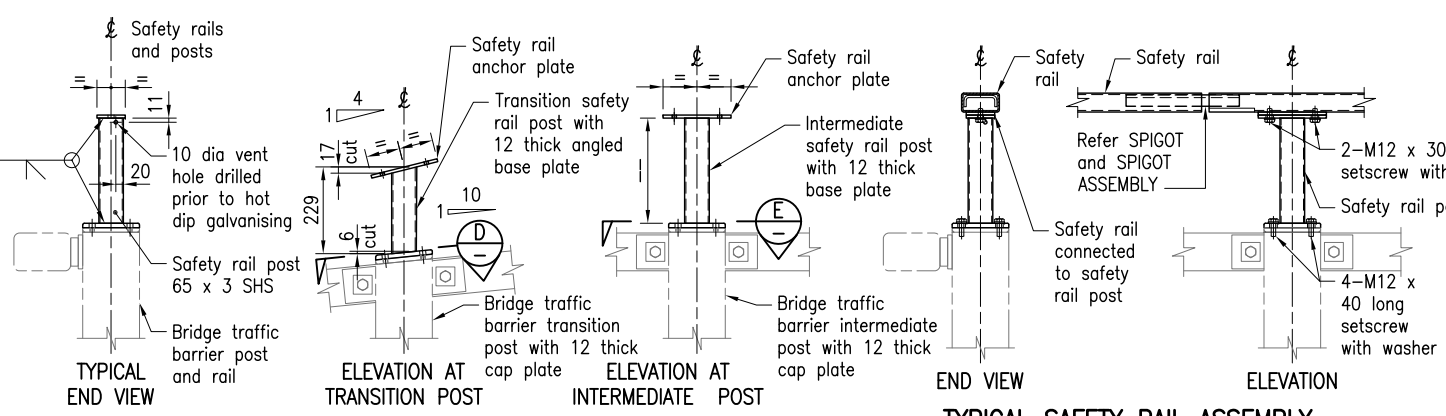


**SECTION E – BASE PLATE FOR INTERMEDIATE SAFETY RAIL POST SIMILAR**



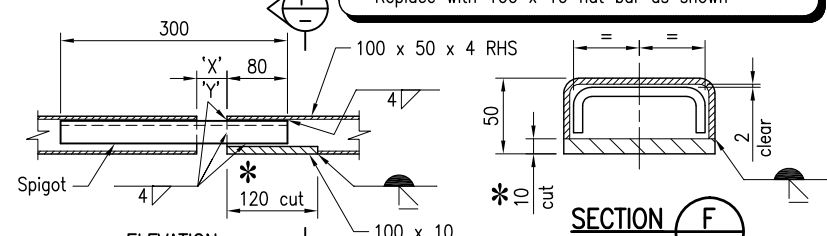
**TYPICAL SAFETY RAIL – TYPE —** No OFF = —

\* 120 x 10 deep cut-out in RHS for welding access. Replace with 100 x 10 flat bar as shown

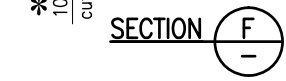


**SAFETY RAIL POST DETAILS**

**TYPICAL SAFETY RAIL ASSEMBLY**



**ELEVATION SPIGOT ASSEMBLY**



**SECTION F – END VIEW**

- ASSOCIATED DOCUMENTS:**  
 Design Criteria for Bridges and other Structures
- REFERENCED DOCUMENTS:**  
 Departmental Standard Drawings:  
 2200 Bridge Traffic Barriers – Post and Rail Traffic Barrier – Regular Performance Level  
 Departmental Specifications:  
 MRTS78 Fabrication of Structural Steelwork  
 MRTS80 Supply and Erection of Bridge Barrier

Department of Transport and Main Roads				BRIDGE TRAFFIC BARRIERS	
BRIDGE SAFETY RAIL FOR PEDESTRIAN ONLY PATH				A3	Standard Drawing No 2203
Not to Scale		Date 11/2020			