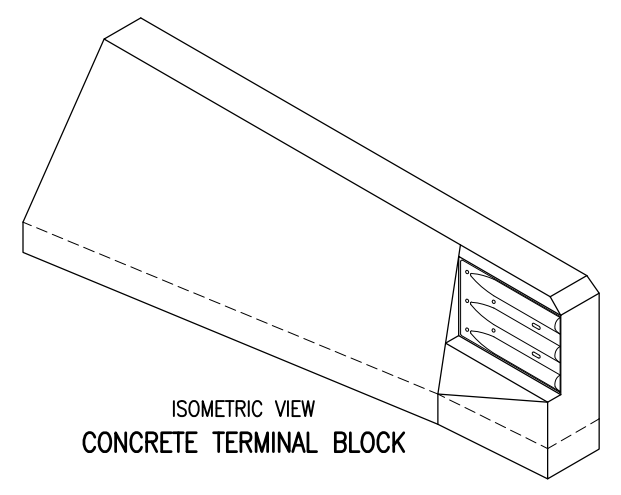
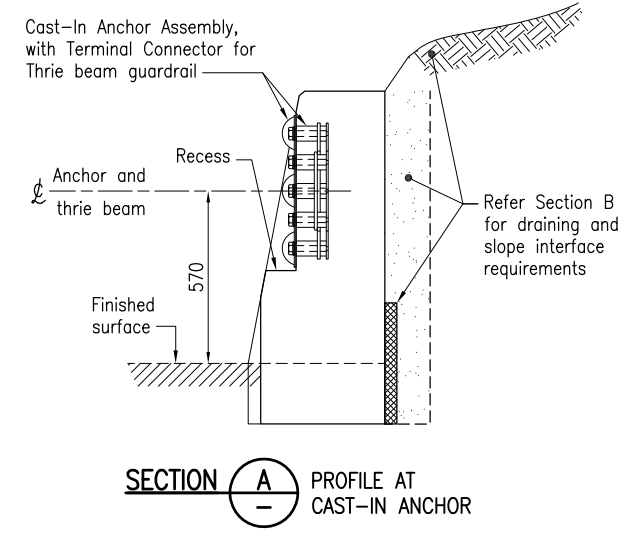
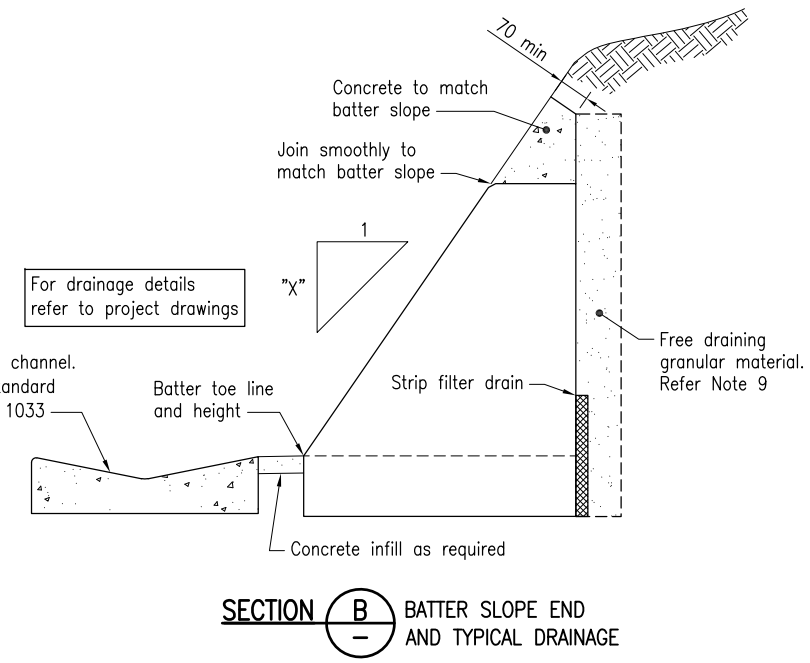


TERMINAL BLOCK AND GUARDRAIL INSTALLATION

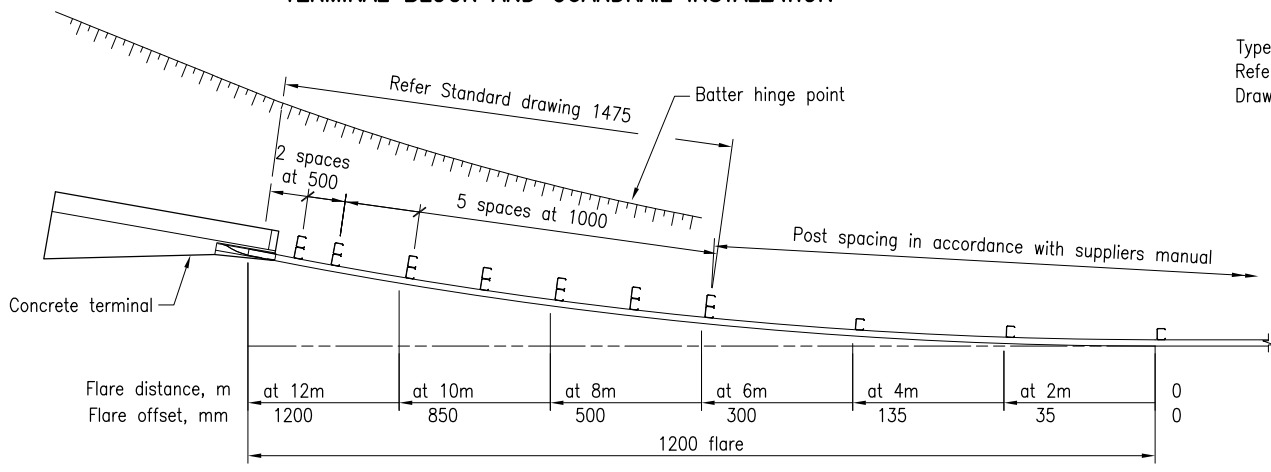


NOTES:

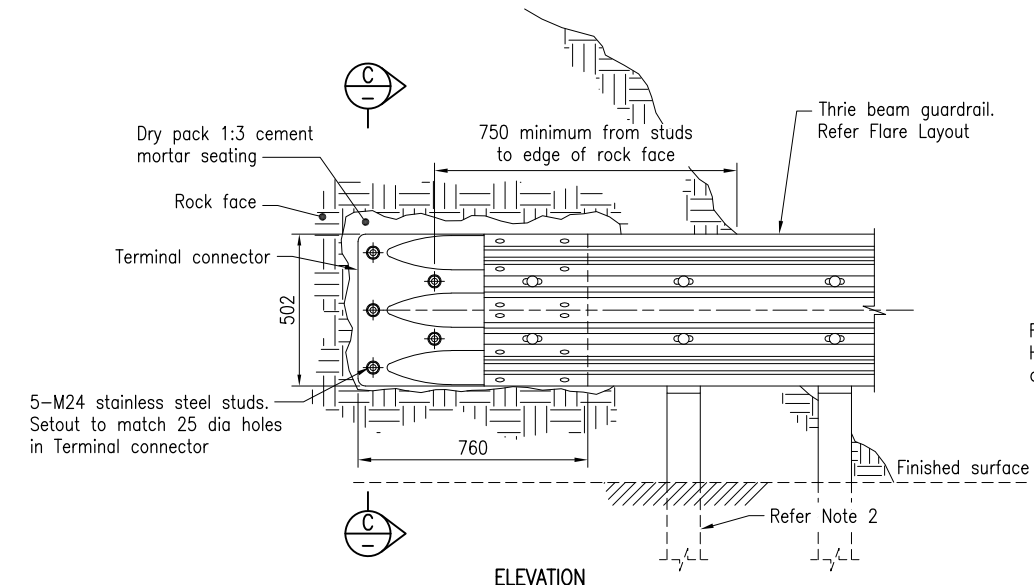
- SCOPE: This Standard Drawing provides details for thrie beam guardrail connection to concrete terminal block or rock face, for use at batter slopes 1 on 1 and steeper. A suitable road safety barrier design solution shall be adopted in accordance with the Road Planning and Design Manual, Traffic and Road Use Manual, MRTS03, MRTS14. The design decisions leading to adoption of this solution shall be fully documented and Project specific design shall be developed.
- MINIMUM 1000 OFFSET is required for guardrail installation to allow for nominal deflection upon impact, i.e. no hazards within this zone.
- THE GUARDRAIL POSTS and BASE PLATES SYSTEM shown in this Standard Drawing shall be constructed in accordance with MRTS14.
- POST ON BASE PLATE shall be used where rock encountered prevents the driving of guardrail posts.
- RAIL LAP AND POST AND BLOCKOUT ORIENTATION in relation to traffic direction as shown is essential. Stiffener plates shall be used at posts without a rail lap.
- CONCRETE TERMINAL BLOCK shall be constructed in accordance with Standard Drawing 1485. Batter slope "X" shall conform with existing batter or batter slope shown in the project drawing. Flattest slope permitted shall be 1 on 1. Length of concrete terminal and maximum width shall provide a smooth transition from batter slope end to the recess and single slope at the guardrail connection end, and shall be shown in the project drawing. Minimum length of concrete terminal shall be 1500. Notched blockouts shall not be used in terminals.
- ROCK FACE ANCHORAGE shall be as detailed on this drawing, and may be used in lieu of the concrete terminal block, only in sound rock approved by a Geotechnical Engineer. Where the batter slope prevents the use of adjacent posts, a blockout or approved spacer may be used in lieu of the post. Fixing of a blockout to rock face shall be similar to the anchorage detail shown using 2/M16 stainless steel studs in 20mm dia holes.
- SHEET FILTER DRAIN may be used, in lieu of free draining granular material, in conjunction with a strip filter drain. Filter drains are to be in accordance with the standard specification MRTS03.
- DIMENSIONS are in millimetres unless noted otherwise.



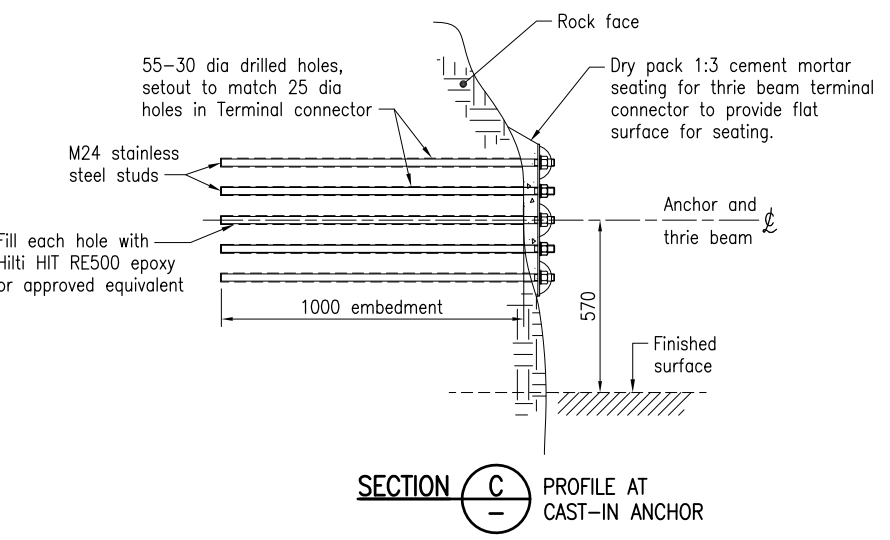
SECTION B - BATTER SLOPE END AND TYPICAL DRAINAGE



TYPICAL GUARDRAIL FLARE LAYOUT
Refer RPDM



ROCK FACE ANCHORAGE AND GUARDRAIL INSTALLATION



SECTION C - PROFILE AT CAST-IN ANCHOR

ASSOCIATED DEPARTMENTAL DOCUMENTS:
Road Planning and Design Manual (RPDM)
Traffic and Road Use Manual (TRUM)

REFERENCED DOCUMENTS:
Departmental Standard Drawings:
1033 Kerb and Channel - Profiles
1467 Concrete Barriers - Cast-in Anchor Assembly
1475 Steel Beam Guardrail - Installation on Bridge and Barrier Approaches
1485 Steel Beam Guardrail - Batter Slope Terminals - 1 on 1 and Steeper - Concrete Terminal Block
Departmental Specifications:
MRTS14 Road Furniture
MRTS03 Drainage, Retaining Structures and Protective Treatments
MRTS70 Concrete

Department of Transport and Main Roads			
STEEL BEAM GUARDRAIL			
BATTER SLOPE TERMINALS 1 ON 1 AND STEEPER - GENERAL ARRANGEMENT AND INSTALLATION DETAILS		Standard Drawing No 1484 Date 11/2021	A3 Not to Scale
A	B	C	D