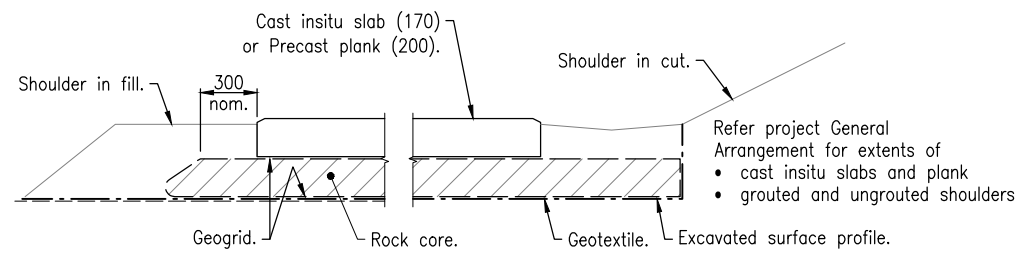
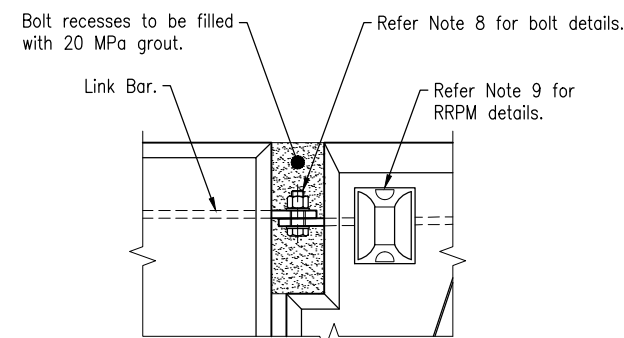


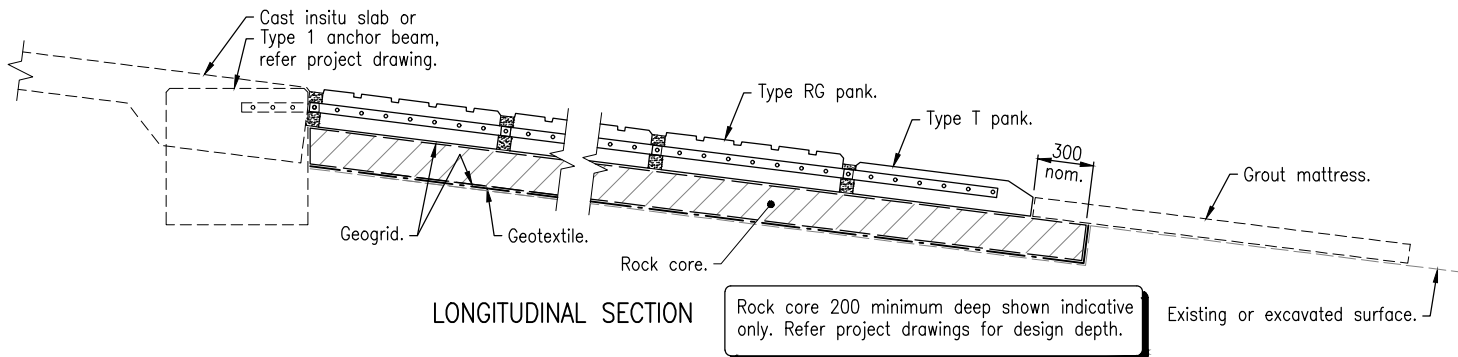
PLANK LAYOUT PLAN



TYPICAL CROSS SECTION THROUGH CAST INSITU SLAB OR PRECAST PLANKS



DETAIL 1



LONGITUDINAL SECTION

NOTES:

- APPLICATION OF THIS STANDARD DRAWING: This Standard Drawing shall only be used:
 - In conjunction with MRTS300, and
 - when referenced by a certified project drawing for a boat ramp designed in accordance with the TMR design manual "Design Criteria for Boat Ramps".
- CONSTRUCTION OF BOAT RAMP shall be in accordance with MRTS300.
- CORE ROCK: refer to MRTS300 for grading.
- CORE ROCK COMPACTION: refer to MRTS300 for compaction requirements.
- 10 mm GRAVEL BLINDING LAYER shall only be used under cast insitu concrete slabs. Blinding layer is not to be used under precast planks.
- GEOTEXTILE shall be either:
 - Texcel 600R,
 - Profab Ultra AS600X, or
 - An approved equivalent meeting the performance requirements defined in MRTS300.
- LAPPING: unless shown otherwise – minimum lap width 1000. Construction equipment shall not stand or travel directly over geotextile. Maximum drop height of rock armour (> 150 mm) placed directly on geotextile: 1500.
- GEOGRID shall be either:
 - Tensar SS30,
 - ProGrid 30/30, or
 - An approved equivalent meeting the performance requirements defined in MRTS300.
- LAPPING: unless shown otherwise – minimum lap width 500, sheets mechanically connected both sides at minimum 500 intervals.
- STAINLESS STEEL FASTENERS: shall be Grade 316 and conform to ISO 3506.

Fastener	Grade and Size	Quantity (each connection)
Bolts	A4/316 M16 x 50 long	1
Nuts	A4/316 A4-70 M16	1
Washers	316 M16	2

A nickel based anti-seize lubricant shall be applied to threads prior to assembly. Bolted joints shall be wrapped with polyethylene or Denso tape before grouting.
- RETROREFLECTIVE RAISED PAVEMENT MARKERS (RRPM): Extent and locations of RRPMs (if required) are shown on the project specific design drawings.

Type: Yellow Type A1 bidirectional markers

Size: 80 x 100 or 100 x 100.

Orientation: The reflective faces shall be aligned to face the water and the ramp approach.

Surface Preparation: The concrete contact surface shall be:
 - Evenly ground back 1-2mm
 - Cleaned to remove all loose material and other contaminants
 - Thoroughly dried prior to adhesion

Fixing: RRPMs shall be chemically and mechanically fixed.

Adhesive: A two part epoxy adhesive for bonding to concrete shall be spread evenly over the entire base of the marker with sufficient thickness to fill voids, and shall flow out the sides to demonstrate full adhesion.

Screws: 40mm SS316 screws shall be secured into starplugs in predrilled holes. Excess adhesive shall be removed without contaminating the reflective faces.
- DIMENSIONS are in millimetres unless shown otherwise.

Referenced Documents

Departmental Specifications
MRTS300 Construction of Boat Ramps
Design Criteria for Boat Ramps

Australian and International Standards
ISO3506-1:2020 Fasteners

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BOAT RAMP CONSTRUCTION				A3	Standard Drawing No
GENERAL ARRANGEMENT AND EARTHWORKS		Not to Scale	4030		Date 3/2024
A					