

Provisions for Moorings

Tasman Resource Management Plan Summary Guide No. 11

Current: July 2013



1. Introduction

Structures and occupation of the coastal marine area (CMA) are managed to control the location appropriateness, the scale of the structure, the structural integrity, and the effects on:

- the character of the land in the vicinity, including the frequency of use and ease of removal;
- the natural character of the coastal environment;
- the visual amenity of the shoreline;
- the stability of the foreshore or seabed;
- animal and plant habitats and ecosystems;
- the risk of contaminants into the CMA;
- change to currents, wave patterns, sediment deposits and other coastal processes;
- navigational safety;
- public access;
- efficiency of construction, use and maintenance; and
- water quality.

The following is a *summary* of Plan provisions for swing or pile moorings. Other conditions may apply. Please see the Plan for full details. The proposed activity may also be subject to additional standards and rules for other aspects of the development.

Plan changes occur from time to time and this guide will be updated to reflect the relevant changes as soon as is practicable.

2. Permitted Activities

Any structure for the mooring of craft is permitted if it complies with the following conditions:

- a. The structure is a swing mooring that existed on 25 May 1996 in the Mapua Mooring Area (see diagram below) and is listed in Schedule 25A.
- b. The structure is a swing mooring that existed on 25 May 1996 at Kaiteriteri Bay and is listed in Schedule 25A.

3. Controlled Activities

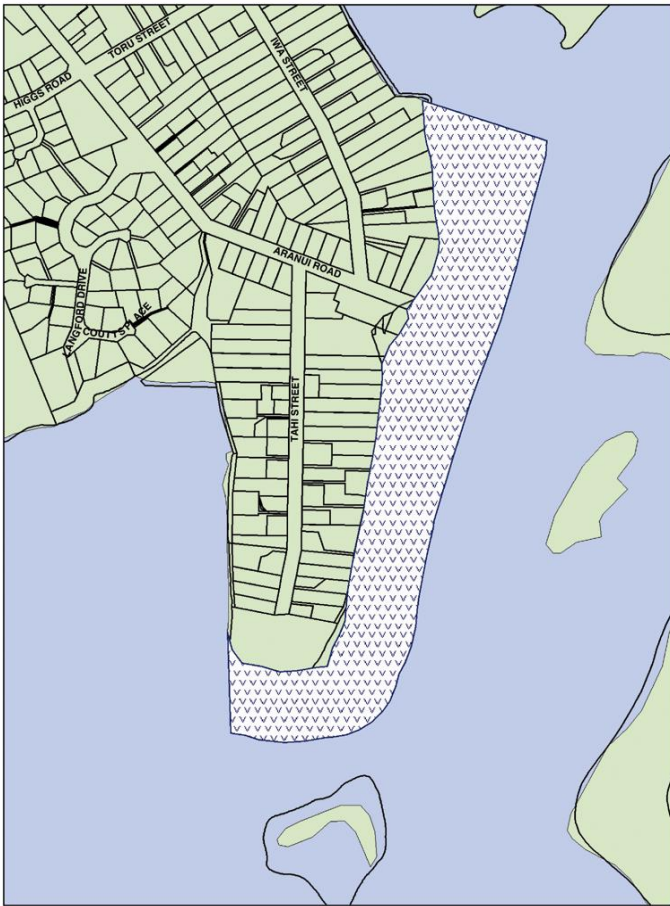
Any structure for the mooring of craft that cannot meet the permitted activity conditions, is a controlled activity if it complies with the following standards:

- a. The structure is in:
 - the Mapua Mooring Area;
 - the Stephens Bay Mooring Area — this is defined as at least 100 metres seaward of mean high water springs and within a straight line from Anawera Point to the northern headland of Stephens Bay, (see diagram below); and
 - the Motueka Mooring Area — this is defined as north of the line of the main channel and west of the flood-gated channel (see diagram above).

- b. There is adequate separation between moored vessels and any other structure (to avoid collisions).
- c. The Nautical Advisor (National Topo/Hydro Authority, Land Information New Zealand) is given written advice of the work at the time of commencement and completion.

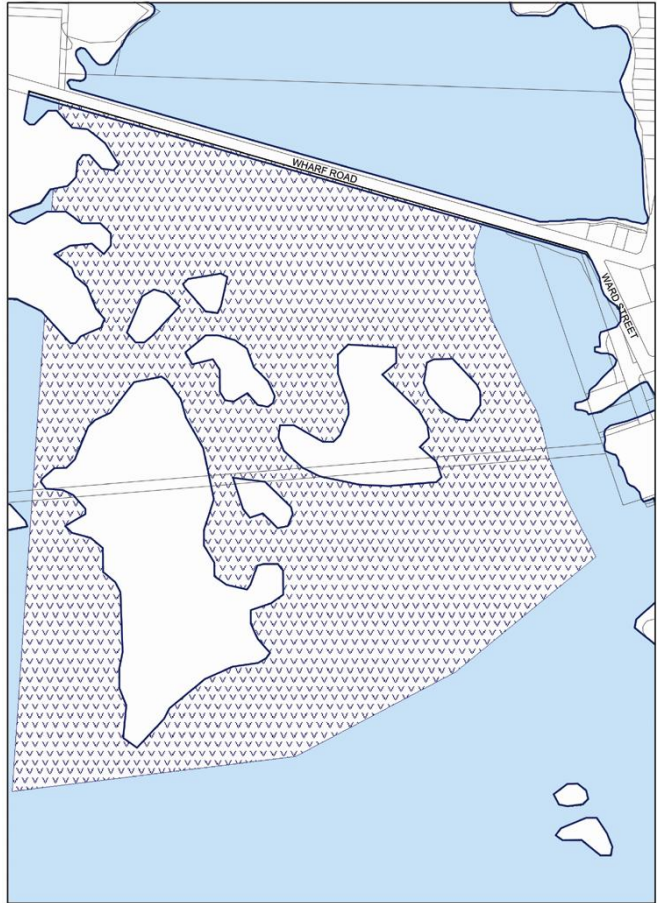
Resource consent is required for controlled activities and Council will grant consent subject to conditions on any of the three matters stated in the Plan.

Mapua Mooring Area



Mooring area

Motueka Mooring Area



Mooring area

4. Discretionary Activities

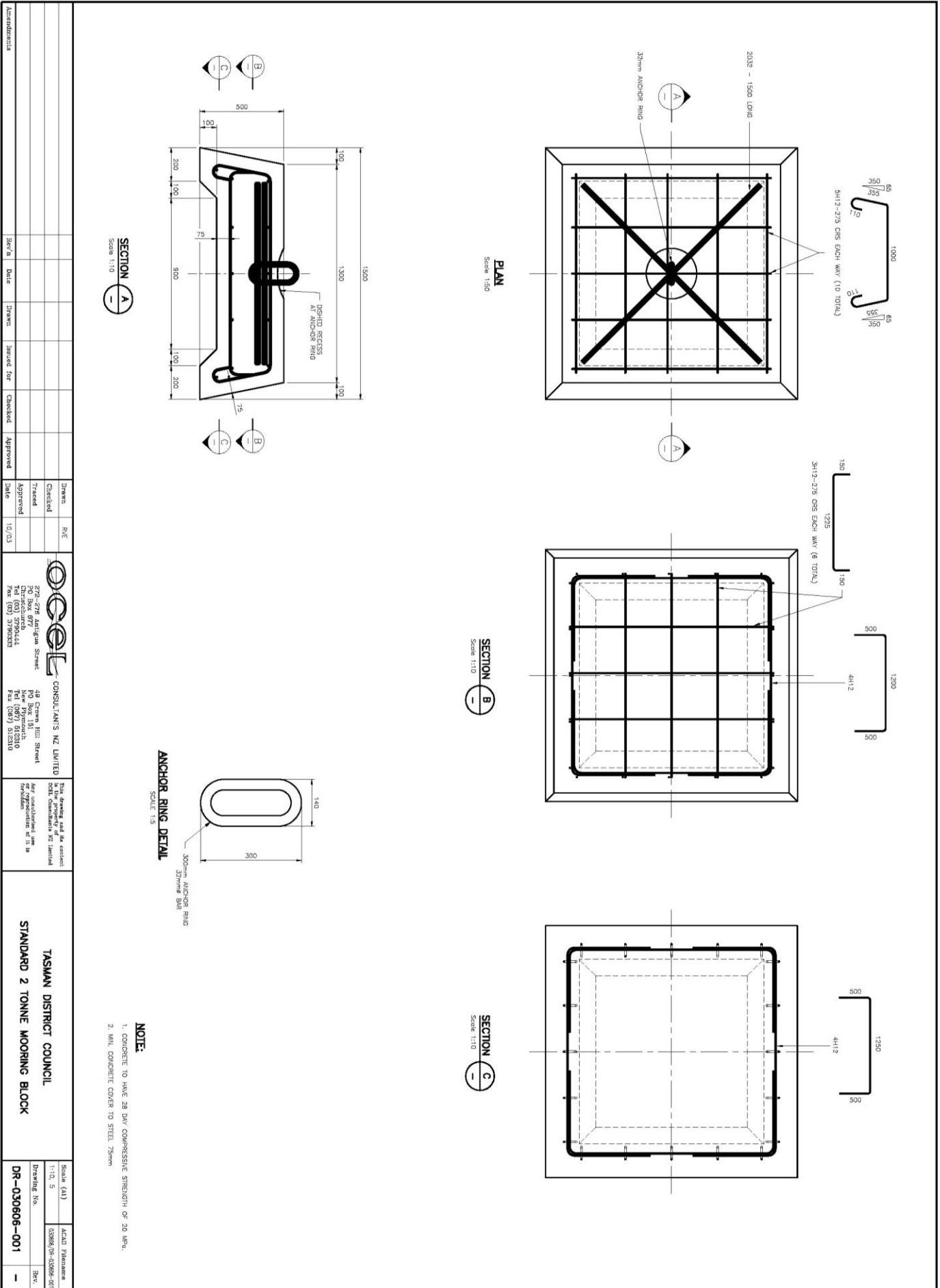
Any structure for the mooring of craft that cannot meet controlled activity standards, is a discretionary activity provided the activity meets the following standard:

- a. The Nautical Advisor, (National Topo/Hydro Authority, Land Information New Zealand) is given written advice of the work at the time of commencement and completion; and

EITHER

- i) The structure is not sited in areas with nationally or internationally important natural ecosystem values (see Schedule 25A in the Plan) except if it:

Specifications for a Standard 2 Mooring Block (as referred to in the Mooring Table on page 6)



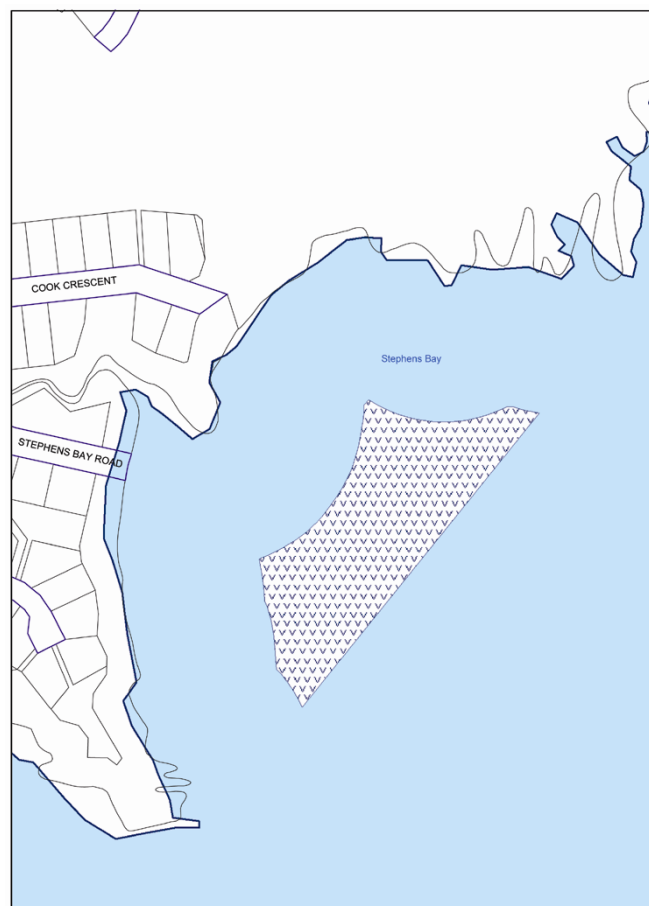
- is within 200 metres of the breakwaters at Port Taroako as they existed at 31 December 2002;
- is within 100 metres of wharves, jetties, boat ramps or slipways at Port Mapua, Port Motueka, Waitapu, Collingwood or Mangarakau as they existed at 31 December 2002;
- is within 75 metres of the public jetty at Torrent Bay as it existed at 31 December 2002;

OR

- ii) The structure is a swing mooring.

A resource consent is required. Consent may be refused or conditions imposed to manage any likely effect of the mooring.

Stephens Bay Mooring Area



Mooring area

5. Mooring Specifications

Mooring Table

Mooring Class	Mooring Components										
	A	B	C		D	E		F	G		H
Suitable for overall vessel length	OCEL Standard Mooring Block ¹	Shackle or Ring	Ground Chain		Shackle or Ring	Intermediate Chain		Swivel (+ optional 1.5kg anode)	Mooring Chain or Rope (nylon) ⁴		Buoy Rope (synthetic) – not for mooring vessel
		Min. bar size (mm)	Length	Min. diameter (mm)	Diameter (mm)	Length	Diameter (mm)	Diameter (mm)	Length	Diameter	
Class C: > 12 m	Subject to specific assessment by Chartered Professional Engineer with experience in mooring systems²										
Class B: ≤ 12 m	No. 2	38	6m	32	26	1.5 x depth at MHWS	20	26	To suit vessel. Minimum of 2.5m	20 mm chain or 24mm rope	14 - 16 mm
Class A: ≤ 6 m	No. 1	32	4m ³	24	22		16	22		16 mm chain or 20mm rope	12 - 14 mm

Notes

- ¹ Mooring blocks to be embedded in the seabed to ensure that the full passive earth pressure resistance is developed.
- ² Minimum factor of safety against the quasi-static force for the mooring block = 3.
- ³ May increase length to allow for low-tide inspection of chain join from a boat. If vessel and buoy(s) can take the weight it is acceptable to run ground chain for full length to swivel to avoid joins (ie no intermediate chain). Overall tackle length for system: minimum 2 x depth at MHWS.
- ⁴ Mooring ropes should be nylon or other non-buoyant type. Stainless-steel insert should be used at shackle eye. Chafe protection sleeve should be fitted to mooring loop.

Minimum Standards for Single Weight Moorings for Pleasure Craft Moored in Sheltered Waters

Applications to use mooring blocks, tackle or other mooring systems that do not conform with the above specifications must be supported by appropriate Chartered Professional Engineer design drawings and certification, and will be considered on a case-by-case basis.

For further details on TDC standard mooring design, and a discussion of other options, please download the “TDC Swing Mooring Design Report April 2013” on our website. The inspection form can also be downloaded from there or contact the Harbourmaster for a copy.

Harbourmaster’s Advice (not part of the Plan summary)

In addition to any conditions of its coastal permit (resource consent), all moorings and their use must comply with any relevant provisions of the current TDC Navigation Safety Bylaws. Applicable vessel insurance policies also carry clauses regarding standards and inspection frequencies for moorings, which should be observed.

Most mooring breakaways in this district are due to shackle failures. Usually this is due to hidden pin thread corrosion, or failure to prevent pins from working loose.

- Use similar metals throughout (where practicable – e.g., a black shackle may be used with a stainless steel block eye with appropriate inspection-frequency adjustments). A 1.5kg sacrificial anode may optionally be welded to the swivel or bolted to the intermediate chain. All tackle to be replaced when 10% worn.
- Where moorings are lifted from the water (or are exposed by tides) for inspection, the inspection interval must not exceed two years. The inspection report should be forwarded to the Harbourmaster within 14 days.
- Where the block is better left embedded in the seabed, especially in high-current areas, divers should routinely replace all underwater shackles during inspections. Experienced commercial divers should be used (Construction Diver Part 1 minimum qualification). Inspection interval must be at least every two years, or annually in high-current areas. The block must be lifted for inspection at least once every ten years.
- Shackle pin threads should be coated with a suitable corrosion-inhibiting compound. Shackles should be deep-penetrating welded around full pin shoulder wherever possible. Where the pin cannot be welded, it should be secured (moused) with 2mm stainless-steel wire in a manner that holds the pin tightly closed. This should be backed up with a plastic tie where possible. An alternative is the use of a bolt and nylock nut, secured with a stainless steel split pin.
- Consider running ground chain from the block right up to the swivel, with the swivel elevated at the buoy, to reduce potential weak points and corrosion.

Another common problem is propeller-fouling of mooring lines.

- Floating mooring ropes are not appropriate. Lead core and nylon ropes are suitable, or small weights can be attached to other rope types.
- Mooring systems should not be unnecessarily long. An overall length (from block to mooring loop) of about twice the depth of water at highest expected tide is usually sufficient.
- Mooring line rope should be parcelled where it may chafe against vessel or fittings. Sacrificial rope whipping, fire-hose or plastic pipe is often used.
- The marker buoy should be a colour or shape that contrasts with the background and marine environment, and have sufficient buoyancy to keep it afloat and clearly visible in all expected conditions, especially in high current areas.
- The buoy should be permanently marked with the permit number, or owner’s name and contact number. On hard plastic buoys this is usually engraved using a soldering iron or similar. On other buoy types, paint or vinyl labels may be more appropriate. Please keep your details up to date with Council too, so you can be readily contacted if anything untoward happens to your mooring or vessel.

These guidelines are not intended as a substitute for the need to address the particular seabed and weather conditions encountered at each individual mooring site. Consulting a professional mooring provider or Chartered Professional Engineer for site-specific advice tailored for the vessel/s to be moored is recommended.

Risk can’t be completely eliminated when mooring vessels. Adherence to the advice above will minimise the risk to you and other boaties, however Tasman District Council does not accept any responsibility for loss or damage which may occur as a consequence of following these guidelines and specifications, or as a result of the insufficiency of any allocated mooring position, or otherwise.

Tasman District Council Email info@tasman.govt.nz Website www.tasman.govt.nz 24 hour assistance

Richmond	189 Queen Street, Private Bag 4, Richmond, Nelson 7050, New Zealand	Phone 03 543 8400	Fax 03 543 9524
Murchison	92 Fairfax Street, Murchison 7007, New Zealand	Phone 03 523 1013	Fax 03 523 1012
Motueka	7 Hickmott Place, PO Box 123, Motueka 7143, New Zealand	Phone 03 528 2022	Fax 03 528 9751
Golden Bay	78 Commercial Street, PO Box 74, Takaka 7142, New Zealand	Phone 03 525 0020	Fax 03 525 9972