PORT OF TAURANGA LIMITED –

STELLA PASSAGE DEVELOPMENT DRAFT RECLAMATION AND CONSTRUCTION MANAGEMENT PLAN – RM – XXX

April 2025

Notes on the DRAFT Version

This is a draft version and as such refers to appendices or documents that are yet to be completed. The document will be updated and finalised to meet the requirements of the Structure consent conditions for the Stella Passage Development works upon appoint of a Contractor to undertake the Works and must then be reviewed by the Stella Passage Development Advisory Group (SPDAG) and subsequently certified by the Bay of Plenty Regional Council (BoPRC).

Contents

1. INTRODUCTION

1.1 Purpose

The purpose of this draft Reclamation and Construction Management Plan (RCMP) is to detail the planned activities authorised by resource consent number RM-xxx, detail the measures that will be implemented to address the potential effects of the works (particularly in relation to the risk from the effects of sediment dischargers and effects on marine mammals) in accordance with the requirements of the consent conditions.

The construction activities will be undertaken in stages and therefore likely to be performed by different contractors with varying methodologies. However, to maintain consistency and ensure compliance with the relevant resource consents this draft plan has been produced.

As the consent holder, Port of Tauranga Limited (PoTL) shall be responsible for ensuring the measures outlined in this RCMP are followed by any contractor that undertakes reclamation and construction works.

1.2 Resource Consents

Resource consent RM-xxx authorises the following reclamation and construction:

- Reclamation of no greater than 3.58 ha of the coastal marine area ("CMA") either side of Stella Passage, to facilitate wharf extensions. Approximately 1.81 ha is to be reclaimed on the Sulphur Point (western) side, and approximately 1.77 ha is to be reclaimed on the Mount Maunganui (eastern) side;
- Development of an approximately 385 m long extension to the south of the existing Sulphur Point wharves;
- Development of an approximately 315 m long extension to the south of the existing Mount Maunganui wharves;
- Development of new structures in the CMA, primarily wharf piles, mooring poles and jetties; and,

Condition 11.1 of RM-xxx requires that the consent holder must prepare a Reclamation and Construction Management Plan, and Condition 10.1 require the plan to be certified by the BoPRC no less than twenty (20) working days prior to any works commencing.

Condition 11.3 sets out the minimum requirements for the RCMP as:

a) Construction methodology;
b) Construction programme and timeframes (or schedule of works) of the main activities;
c) Staff and contractors' roles and responsibilities;
d) Identification of the locations and types of machinery required to be used in the coastal marine area;
e) Stakeholder and communication management;
f) Sediment and erosion control plan;
g) Sediment discharge and suspension mitigation measures to ensure that the NTU limits specified in condition 7.5 will be met;
h) Spill management measures to demonstrate how condition 7.10 will be complied with;
i) Measures to demonstrate how dust will be managed to comply with condition 7.4;
j) Measures to demonstrate how works will be undertaken to manage effects on marine mammals (condition 12);

k) Noise management measures, including, as a minimum:
l) Demonstration of how the construction works will be undertaken to comply with the relevant noise standards; and
m) Prioritising vibratory pile driving methods over impact pile driving methods where practical; and
n) The use of timber piles for the piles closest to Whareroa Marae that are associated with the penguin ramp; and
o) Limiting pile driving activities to the daytime hours (conditions 7.8 and 12.15).
p) A water quality monitoring schedule detailing the methodology for monitoring compliance with requirements of condition 8.1 for water discharging from any settling pond; and
q) A system for recording and responding to complaints received in relation to the construction activities authorised by this consent; and
r) Any feedback from the SPDAG and, where not accepted, an explanation as to why the consent holder cannot accommodate any such recommendation (condition 11.4).

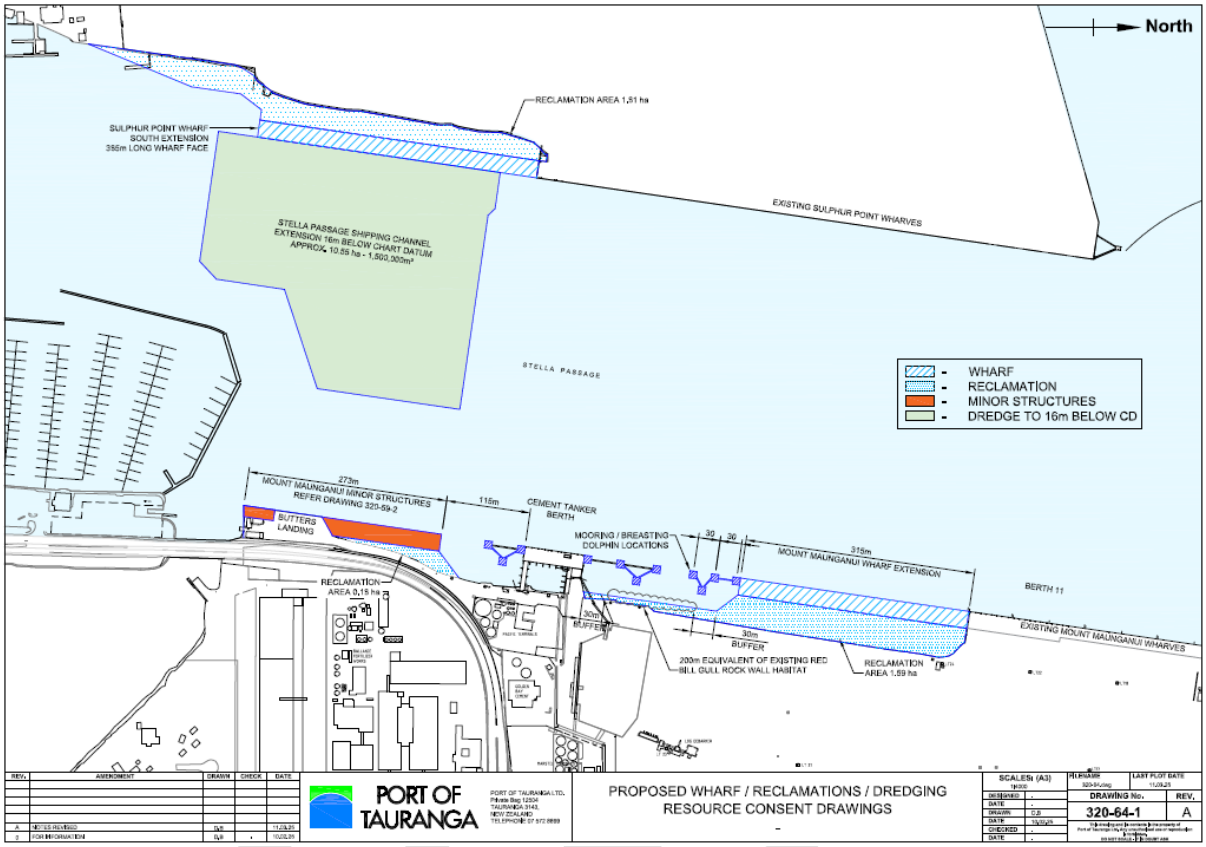
1.3 Report Structure

This RCMP is structured as follows:

Section 1	This introduction.
Section 2	Location.
Section 3	Construction methodology.
Section 4	Construction programme and timeframes.
Section 5	Role and responsibilities.
Section 6	Equipment likely to be used in the Coastal Marine Area.
Section 7	Stakeholder and communication management.
Section 8	Sediment and erosion control.
Section 9	Sediment discharge and suspension mitigation.
Section 10	Spill management.
Section 11	Dust management.
Section 12	Marine Mammals.
Section 13	Noise management.
Section 14	Water quality monitoring.
Section 15	Complaint register.
Section 16	SPDAG review and recommendations.
Section 17	Other management protocols.

2. LOCATION

The location of the reclamation and construction with in the Coastal Marine Area (CMA) is shown in the figure below.



The works associated with the Stella Passage Development involves the reclamation and wharf construction to extend the existing Sulphur Point and Mount Maunganui wharves, mooring dolphins for the existing Tanker Berth and minor structures in the vicinity of Butter landing to accommodate a Bunker Barge Jetty.

3. CONSTRUCTION METHODOLOGY

Once a contractor is appointed the construction methodology can be confirmed and this RCMP updated.

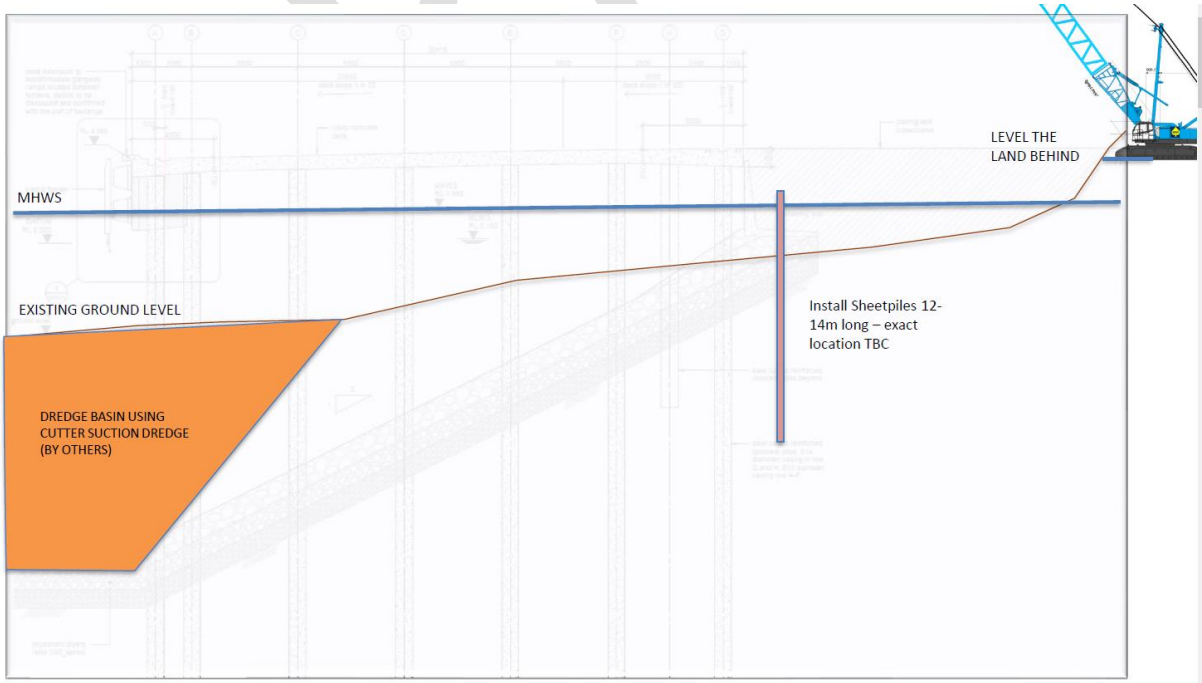
The various components of the proposed development (principally wharf and reclamation construction) is typically undertaken in the following sequence:

- Contractor establishment on site;
- Dredge/excavate/form the revetment slope;
- Perform piling works;
- Construct temporary staging platform for cranes;
- Place rock armour on revetment slope;
- Formwork for deck suspended off piles;
- Concrete deck formed;
- Rear retaining walls panels installed;
- Backfill behind retaining wall panels to form reclamation;
- Install wharf furniture; and
- Ground improvements (if required).

3.1 Contractor establishment on site

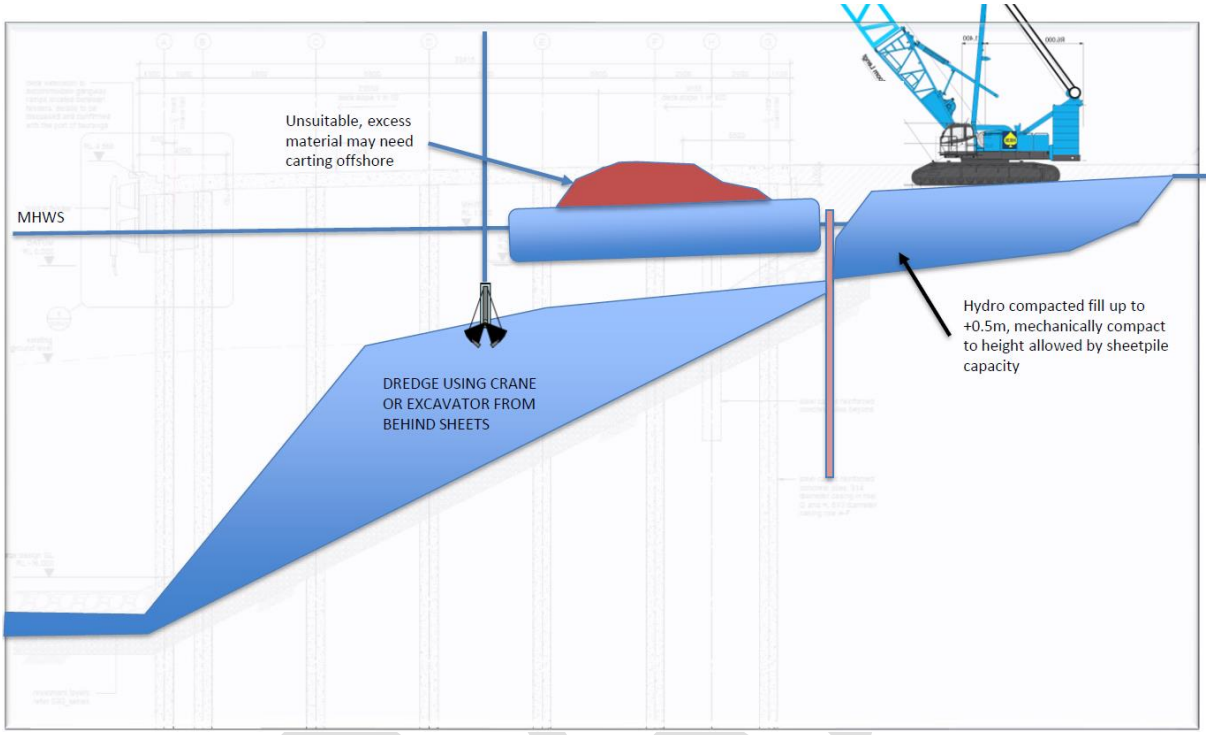
An area of Port operational land shall be made available to the Contractor immediately adjacent to the construction site.

The creation of a level platform behind the proposed wharf to minimize the crane size can be established by installing temporary sheetpiles and using dredged sand from the creation of the shipping channel. Refer figure below.



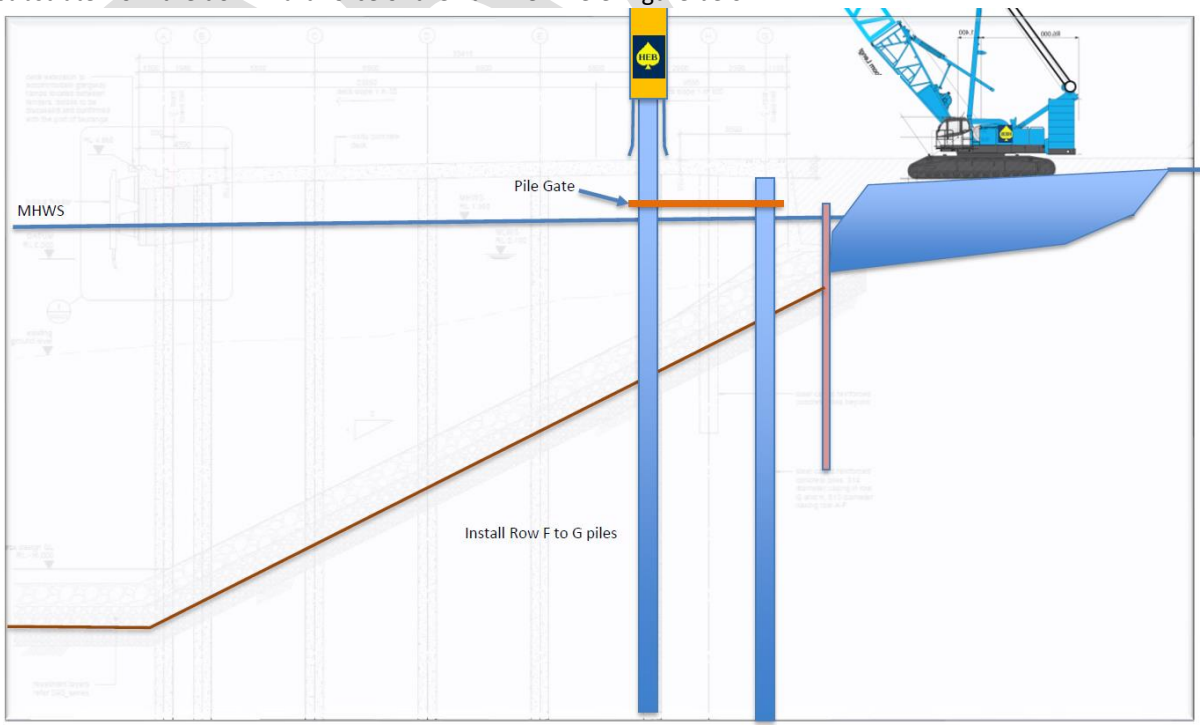
3.2 Dredge/excavate/form the revetment slope;

The vast bulk of dredging will be carried out by a Dredging Contractor. Some further trimming of the revetment slope will be required to form the design slope. This is typically undertaken using a grab suspended from a crane or long arm excavator and landed within the proposed reclamation or in a barge to be disposed in the Ports Deposition site. Refer figure below.



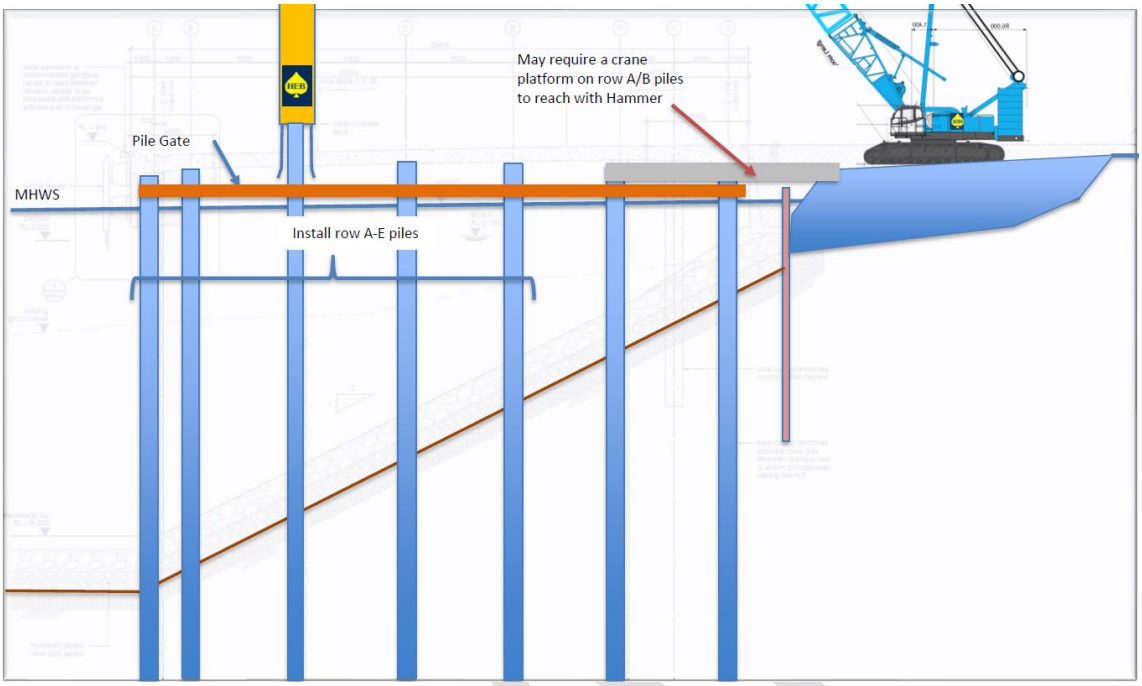
3.3 Perform piling works

Driving of the piles is achieved by impact from a falling weight. Impact hammers have guides that hold the hammer in alignment with the pile while a heavy piston strikes the top of the pile, driving the pile into the substrate from the downward force of the hammer. Refer figure below.



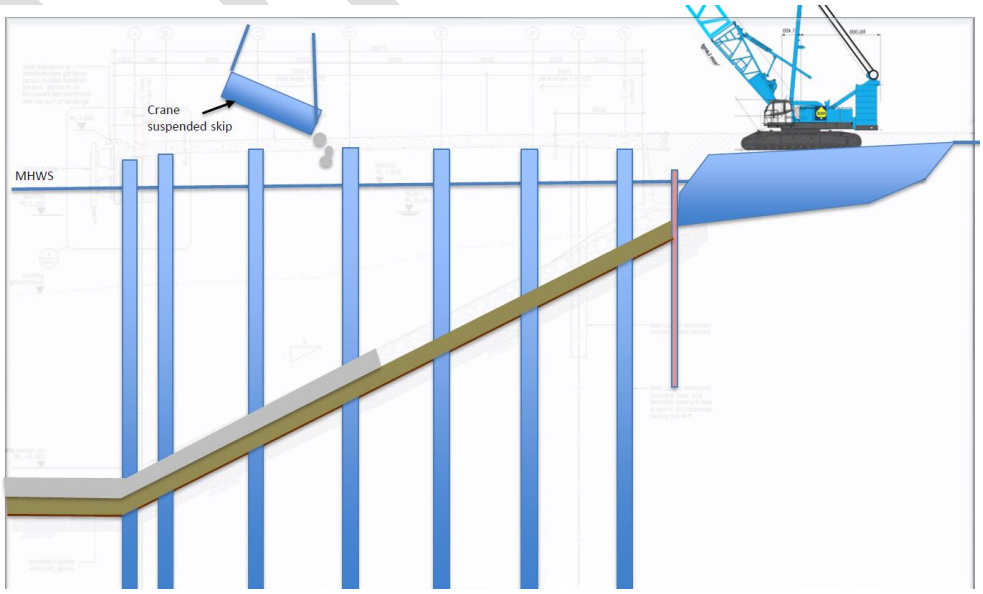
3.4 Construct temporary staging platform for cranes

Depending on the depth to the existing seabed and retaining capacity of the temporary sheetpile wall a temporary platform over driven piles may be required for the crane to operate from in order to reach the seaward most piles. Refer figure below.



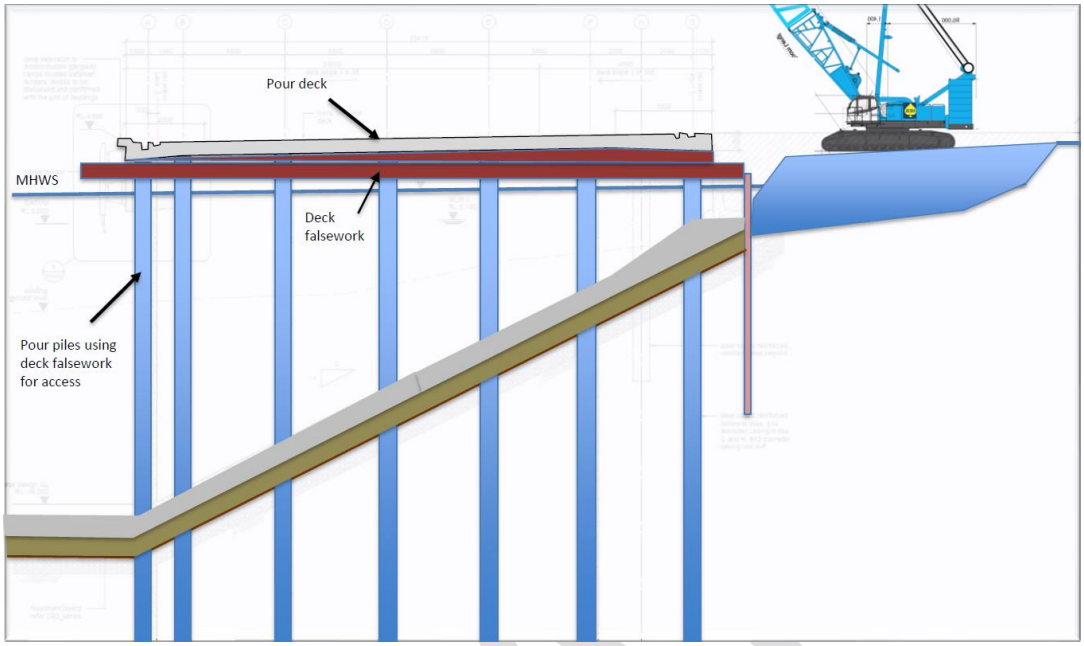
3.5 Place rock armour on revetment slope

The rock armouring of the batter slope will have a layer of small rocks sized to ensure the sands do not migrate through the batter slope armouring. Geotextile fabric as a base layer can also be used with progressively larger rock sizes placed on top to protect the geotextile prior to the armour rock being placed. Rock armouring is always toed into the base of the sitting basin at a depth to ensure foreseeable deepening will not undermine the wharf/rock revetment and to protect from scour/erosion at the toe of the wharf. The rock is typically placed by crane and grab, long reach excavator or purpose built barge. Refer figure below.



3.6 Formwork for deck suspended off piles;

Once several pile bents (line of piles) are completed, the deck soffit falsework is typically suspended temporarily from the piles. At this stage the steel piles have reinforcing cages lowered in and are filled with concrete. Refer figure below.

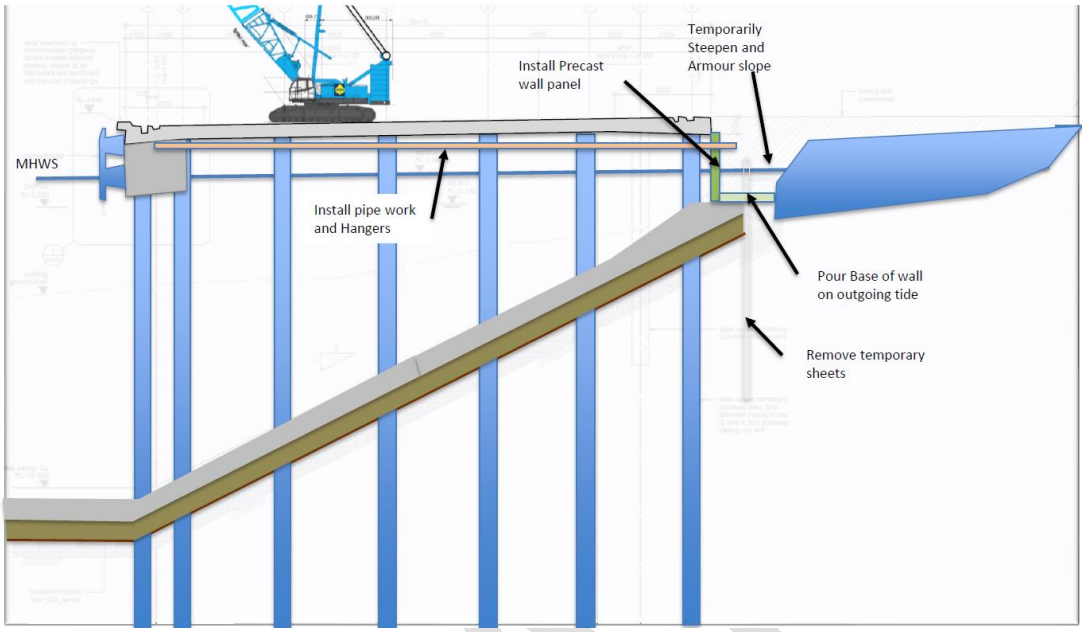


3.7 Concrete deck formed;

After installation of the reinforcing steel the concrete deck slab is poured. When the deck slab has cured the new deck will become the staging area for the successive pile and deck construction. The falsework will be released from the piles, lowered on to a barge and floated out, and used for the next section of deck construction. Refer photo below.

3.8 Rear retaining walls panels installed

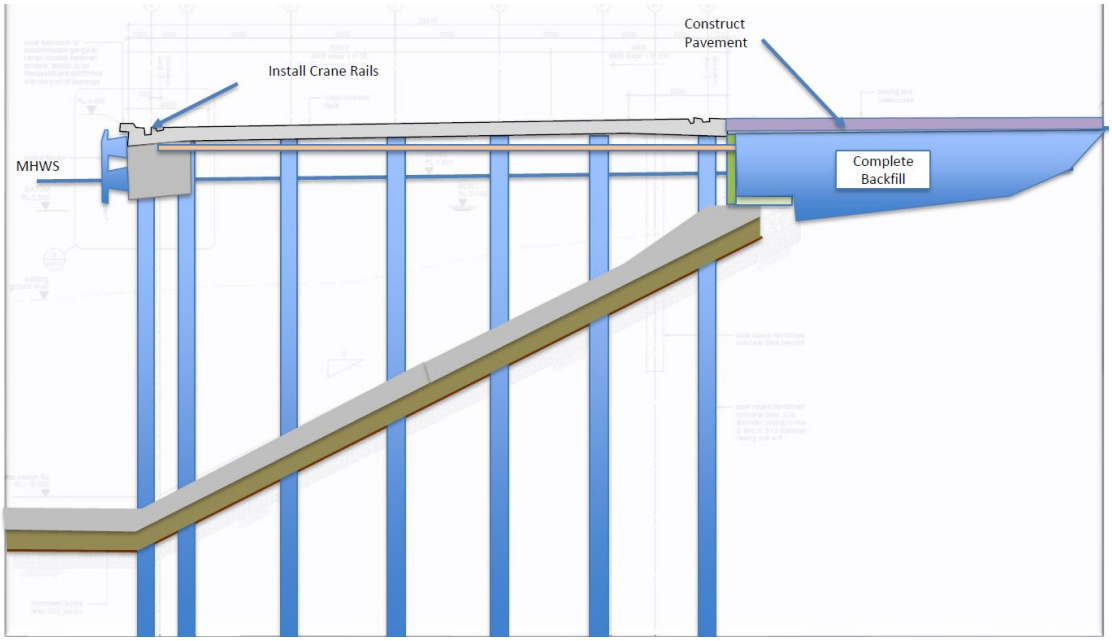
The interface between the reclamation, the wharf and the revetment slope will require a retaining wall sitting atop the revetment. This may be formed from either precast concrete 'L' sections, a deep concrete rear beam attached to the wharf, steel sheet piles or a combination of these items. At this stage the temporary sheet pile wall can be removed. Refer figure below.



3.9 Backfill behind retaining wall panels to form reclamation

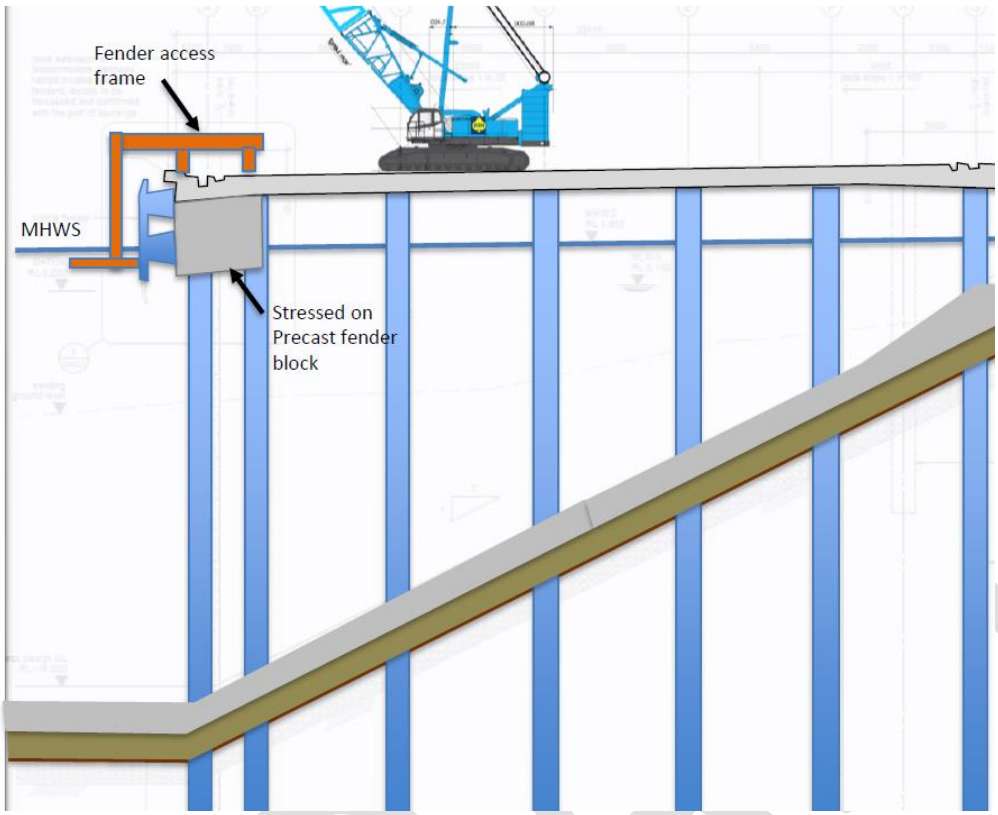
Backfilling behind the wharf retaining wall panels to complete the reclamation is required. Timing of the works and suitability of the material will dictate whether the material used in the reclamation is imported fill or material brought ashore from either the dredging of the shipping channel or the formation of the revetment batter slope.

The surface of the reclamation will be paved in asphalt and will typically rise in a gradient away from the back of the wharf at a 1(V) to 100(H) slope. Refer figure below.



3.10 Install wharf furniture

Fendering, crane rails, bollards and services are installed prior to completion of the wharf structure. Refer figure below.



3.11 Ground improvements (if required)

Ground improvements to weaker sand layers at depth, upper layers and the reclamation fill may be necessary to address the revetment stability and reduce the loads on the piled structure. While subject to confirmation in the detailed design phase, ground improvements may include:

- Cutter Soil Mixing ("CSM") – A specialised for deep mixing technique that enhances the engineering properties of soils and reinforces soil masses by mechanically mixing the in-situ soils with a binder slurry. CSM creates strengthened and stiffened soilcrete panels that are not susceptible to liquefaction, reducing the load on the wharf during an earthquake;
- Vibro compaction – Involves penetrating the existing ground materials with a probe, assisted by air or water jets. The probe then vibrates and compacts material as it is depression filled afterward; and
- Stone columns - created by inserting a vibrating probe into the ground, displacing soil, and filling the cavity with stone from a hopper. As the probe is raised and reinserted, the stone is compacted, strengthening and stabilising the surrounding soil.

The necessity for ground improvements will be driven by the final design and whether it is more economic to improve the ground or provide additional strength in the structure. Any ground improvements will be designed in accordance with the relevant design standards and typically carried out before the removal of the temporary sheet pile.

4. CONSTRUCTION PROGRAMME AND TIMEFRAMES

Upon confirmation of the extent of any stage of construction and when a contractor is appointed the construction programme and timeframes can be confirmed and this draft RCMP updated.

5. STAFF AND CONTRACTORS ROLES AND RESPONSIBILITIES

Once a contractor is appointed the roles and responsibilities will be confirmed and this RCMP updated.

6. EQUIPMENT LIKELY TO BE USED IN THE COASTAL MARINE AREA

The reclamation and construction activities occur in the Coastal Marine Area (CMA). As such at time machinery will be required to be working over, in or alongside the CMA. The types of machines include cranes, ground improvement rigs, excavators, rollers, work boats, barges, generators, hydraulic power packs, compressors, concrete trucks, concrete pumps, impact hammers, vibro hammers, grabs and other machines typically found on construction sites. *When a contractor is appointed the equipment to be used in the Coastal Marine Area (CMA) can be confirmed and this draft RCMP updated.*

6.1 Cranes

Several tracked crawler cranes will be used over the CMA from either the existing wharf, temporary staging, from a barge or directly alongside the CMA.

The cranes will be carrying piling material, hammers, grabs for trimming of the batter slope and bins to place rocks over the CMA.

6.2 Diggers

Tracked diggers will be used for the movement of material within the reclamation, forming of seawalls, trimming the batter slope and handling of rock armour. The diggers may be used over the CMA from either the existing wharf, temporary staging, from a barge or directly alongside the CMA.

6.3 Barge / Work boat

Floating or jack up barges may be used in the CMA to enable other equipment to be used within the CMA where they can not reach from land, existing wharf structures or temporary staging. The barges will be positioned by work boats.

The work boats will also be used for deployment of silt booms around the site for the control of turbidity.

6.4 Concrete Plant

Concrete will be placed in the piles and to form the deck through a concrete pump or concrete skip. The conveying of concrete by these means will occur over the CMA.

6.5 General Construction

All manner of typical handheld construction equipment will be used during construction.

Larger construction items such as compressors, generators, hydraulic power packs and piling hammers will be used during construction.

This general construction equipment will be used over the CMA.

7. STAKEHOLDER & COMMUNICATION MANAGEMENT

The following stakeholders have been identified as integral to the project:

- **Regulatory Authorities:** BoPRC, Department of Conservation (DoC), Tauranga City Council (TCC).
- **Iwi and Hapū Representatives:** The yet to be established SPDAG representing the interests of tangata whenua in accordance with consent condition 3 of RM-xxx.
- **Port Users:** Shipping operators, tenants, and businesses operating within the port.
- **Community Groups:** Local residents, harbour users and coastguard.
- **Contractors and Suppliers:** Companies engaged in construction

The communication strategy will focus on proactive, transparent, and timely engagement with stakeholders through the following methods:

- **Formal Notification:**
    - In accordance with condition 1.2 and condition 3.3c) of RM-xxx PoTL shall invite the SPDAG to carry out a ceremony on site prior to commencement of works and as necessary following commencement.
    - In accordance with condition 4.1 a) of RM-xxx prior to commencement of any stage of construction PoTL shall notify in writing the SPDAG, or if the SPDAG is not established, the Tauranga Moana Iwi Customary Fisheries Trust and/or the Ngā Mātarae Charitable Trust of the intention to commence works.
    - In accordance with condition 4.1 b) of RM-xxx prior to commencement of any stage of construction PoTL shall notify in writing the DoC of the intention to commence works.
    - In accordance with condition 4.1 c) of RM-xxx prior to commencement of any stage of construction PoTL shall notify in writing the BoPRC of the intention to commence works.
    - In accordance with condition 4.2 of RM-xxx prior to commencement of any stage of construction PoTL shall provide notice on its website of the intention to commence works.
    - In accordance with condition 6 of RM-xxx prior to commencement of any stage of works PoTL shall submit to the BoPRC a final design statement for the works, including design assumptions, parameters and methodology.
    - In accordance with condition 10 of RM-xxx prior to commencement of any stage of works PoTL shall submit to the BoPRC a copy of this RCMP for certification.
    - In accordance with condition 11.4 of RM-xxx prior to commencement of any stage of works PoTL shall submit to the SPDAG a copy of this RCMP and seek their feedback.

- **Regular Updates:**
    - In accordance with condition 4.6 of RM-xxx a page on the PoTL website shall be dedicated to the project. Regular updates of monitoring and reports shall be made

available through the web page to keep the Community Groups and Port Users informed.
    - Through the Marine Mammal Observer Auditor appointed by the SPDAG under condition 3.3 h) of RM-xxx regular engagement with the ongoing works will occur.

- **Stakeholder Meetings:**
    - In accordance with condition 1.1 b) i) and 3.4 a) of RM-xxx PoTL shall invite the SPDAG to meet quarterly for the first two (2) years following the commencement of the consent and thereafter twice per year.
    - In accordance with condition 1.1 b) ii) of RM-xxx the PoTL CEO and Chair of Board of Directors shall meet annually for strategic planning purposes with the entity established to represent iwi and hapu under the resource consent.
    - In accordance with condition 1.1 c) of RM-xxx quarterly meetings with representatives from Ngāi Tamarāwaho during construction works at Sulphur Point to provide progress updates and discuss any issues.
    - In accordance with condition 4.4 of RM-xxx prior to commencement of any stage of construction PoTL shall request a site meeting between the Contractor, the BoPRC and PoTL.
    - In accordance with condition 12.4 of RM-xxx PoTL shall invite the SPDAG, the Contractor and a suitably qualified marine mammal expert to a wānanga for an exchange of knowledge regarding marine mammals.

- **Incident and Issue Management:**
    - A contact person will be assigned for Community Groups and Port User stakeholder inquiries and concerns.
    - Any significant incidents or environmental breaches will be reported to the relevant authorities promptly.

- **Community Engagement:**
    - In accordance with condition 4.3 of RM-xxx a prominent sign shall be erected and maintained at the relevant access points to the Port for the duration of the works.
    - The Port Control hotline number will be available 24/7 for all stakeholders to raise any concerns.

8. SEDIMENT & EROSION CONTROL

When a contractor is appointed their specific sediment and erosion control measures can be confirmed and this draft RCMP updated.

Effective sediment and erosion control measures are critical to minimizing environmental impacts during reclamation and wharf construction. This section outlines the strategies and best management practices (BMPs) that will be implemented to prevent sediment runoff, protect water quality, and comply with regulatory requirements.

A combination of structural and non-structural controls will be employed to prevent sediment migration and minimise turbidity in the surrounding marine environment. The overriding principles of the control measures are to:

- **Minimise disturbance**: Limiting the extent of disturbance to the greatest extent possible at any given time to reduce sediment mobilisation;
- **Staging Construction Activities:** Phasing work to ensure exposed areas are stabilised progressively.
- **Temporary Stabilisation:** Applying geotextile wraps or riprap to prevent spread of sediment from beyond the site and where practicable using temporary sheetpiles to contain as much of the construction works as possible.
- **Construction Practices**: Capture waste and prevent discharges to the marine environment.

Due to the nature of the site being situated on the edge of the CMA perimeter the following containment controls are seen as an effective from of control.

- **Silt Curtains:** Deployed around the reclamation and construction areas to contain suspended sediments and reduce turbidity impacts on the marine environment.
- **Bunds and Barriers:** Installing rock bunds or sheet piles to minimise sediment dispersion beyond the site.
- **Stormwater Diversion:** Maintain existing stormwater cut off network to direct runoff away from exposed soil surfaces.
- **Sheetpiles:** Contain materials behind the back of the wharf including surface rainwater runoff until final surfacing and drainage has been constructed.

To assess the effectiveness of the controls in place during construction phase monitoring and maintenance shall be carried out.

- **Water Quality Monitoring:** Regular sampling and turbidity measurements in accordance with Section 14 of this RCMP.
- **Visual Inspections:** Daily checks on erosion control structures, with immediate corrective actions taken if failures are identified.
- **Adaptive Management:** Adjusting control measures based on weather conditions, sediment monitoring results, and construction progress.

9. SEDIMENT DISCHARGE & SUSPENSION MITIGATION

When a contractor is appointed their specific sediment discharge and suspension mitigation measures can be confirmed and this draft RCMP updated.

Effective management of sediment discharge and suspension is critical to minimising environmental impacts during reclamation and construction activities. The below activity specific control measures shall be implemented to control sediment release and maintain water quality compliance *(subject to Contractors construction methodology*). In accordance with condition 7.5 of RM-xxx, discharges shall be managed reclamation works must not result in an increase in water turbidity of more than 20 Nephelometric Turbidity Units ("NTU") above ambient level at any point fifty (50) metres or greater from the reclamation works

Piling:

- Where practicable in the first instance the Contractor shall employ piling methods that normally create the least disturbance - vibro and impact piling methods of closed end pile casings.
- Install full length piles above the high tide and wave crest height to remove the need for dewatering or placing concrete under water.
- If piles require dewatering of pile casings, then treatment of the discharge water may be required to meet the consent conditions. Likely treatment methods if required will be soakage in bunded containment areas within the reclamation or containerised decanting systems.

Concrete works:

- In accordance with condition 7.3 of RM-xxx, no water associated with the mixing, pouring, placing and/or cleaning of concrete structures and/or equipment shall be released into Te Awanui/Tauranga Harbour, except where concrete is required to be placed under water as part of the construction of structures.
- If construction activity requires concrete placed underwater, monitor the pH of the receiving environment as water is discharged. The pH of the receiving water should be maintained within the 6.0-9.0 range.
- Use quick setting and consider low ecotoxicity concrete where available.
- Form work shall be constructed to create a watertight seal to contain concrete run-off.
- Use any concrete cutting methods to contain/control concrete discharges.

Reclamation & Sea Walls

The containment, design, materials used and construction method is crucial to managing environmental effects.

- Armoured bunds, temporary seawalls or sheet piles shall be used during the formation of the reclamation to isolate the material from the harbour if erodible fill is to be placed into the water.
- Materials shall be selected that will not generate sediment by using clean rock that is resistant to weathering.
- Silt curtains where required to meet the water quality parameters in Section 13 shall be deployed around the reclamation and construction site to contain suspended sediments and reduce turbidity impacts on the marine environment.

Revetment Trimming

- Where material is brought ashore by the Contractor using a grab or long reach excavator it shall be discharged into the area to be reclaimed and dewatered before being handled.
- The rate of material being bought ashore shall be matched with the rate of dewatering to ensure uncontrolled overflows do not occur.
- Silt curtains where required to meet the water quality parameters in Section 13 shall be deployed around the reclamation and construction site to contain suspended sediments and reduce turbidity impacts on the marine environment.

Bulk Dredged Material Pump Ashore

To minimise sediment discharge when material is pumped ashore:

- Settling ponds will be used to contain and allow material to settle and dewater. Settling ponds will be designed and operated in accordance with condition 8.1 of RM-xxx to ensure that the following discharge quality is achieved:
    - The mixing zone is defined as being 250 metres from any discharge point.
    - The turbidity must not increase more than 15 NTU above ambient level at any point beyond the mixing zone.
    - No conspicuous oil or grease films, scums, foams, or floatable or suspended material.
    - No conspicuous change in colour or visual clarity outside the mixing zone.
    - No emission or objectionable odour.
    - No significant adverse effect on aquatic life.
- The temporary containment will be established immediately behind the dredging area.
- Physical control measures, such as weirs, skimmers, silt curtains, will be deployed based on pond size and filling rate to meet the required discharge quality.
- Outfall pipes will be set at an appropriate height to encourage soakage and further reduce sediment discharge.

In accordance with condition 8.2 of RM-xxx certification shall be provided from a suitably qualified and experienced engineer confirming that any settling pond is:

- Designed and constructed to recognized and appropriate engineering standards.
- Compliant with the discharge quality requirements in condition 8.1 of RM – xxx.

10. SPILL MANAGEMENT

When a contractor is appointed their specific spill management measures can be confirmed and this draft RCMP updated

The construction site and laydown area for the storage of materials (including any hazardous substances), plant, machinery and associated office and other construction site facilities will be securely fenced and located adjacent to the working area within the Port's operational area.

Due to the construction occurring over water the need for careful storage and use of hazardous substances is required. It is proposed that the following practical measures are undertaken to limit the risk and prevent external contaminants from entering the CMA:

10.1 Hazardous substances

- Hazardous Materials stored on site will be contained within a Hazardous goods container that is vented, contains a bunded base and meets the requirements for storing hazardous materials.
- Stored hazardous substances volumes shall be maintained below action levels identified in the City Plan.

10.2 Refueling

- Where practical refuelling at least 10m inland from the MHWS line measured at the time of reclamation.

- Bulk Diesel will not be stored on site, bulk diesel fuels will be delivered by mini-tankers on as required basis.
- Containers with less than 50 litres of diesel and less than 50 litres of petrol used for small pieces of plant such as generators and outboard motors shall be stored in secure tool containers.

10.3 Spill kits

- Appropriate spill kits shall be held and positioned on site relevant to the risks.
- Oil spill kits will be maintained on site and the Contractors staff will be required to be trained in their use should an unforeseen spill occur.

10.4 Equipment & Activities

- Where practical machinery maintenance to be carried out at least 10m inland from the MHWS.
- Equipment working over water must be kept clean and cleaning to occur away from the harbour.
- Equipment must be well maintained to minimize risk of blown hydraulic lines. Any fixed pieces of equipment such as piling power packs, generators that contain >100lt of hydrocarbons should have a fixed containment bund under the machine that is protected from rainrall.
- Where possible use biodegradable grease/oils
- Contractor to conduct machine checks on all plant and required prior to use.
- Wash water from tools, equipment or machinery shall not discharged into the harbour
- Contractor to provide appropriate wash-down area for concrete trucks and equipment.

Where refuelling and/or maintenance is not practical to be undertaken at least 10m inland from the MHWS, such as equipment on staging or barges, a refueling over water plan will be developed with additional measures to limit the risk of any spill. *To be confirmed by Contractor.*

In the event of a spill or leak of oil, fuel or other hazardous substances to water, PoTL must notify the BoPRC.

11. DUST MANAGEMENT

When a contractor is appointed their specific sediment discharge and suspension mitigation measures can be confirmed and this draft RCMP updated.

Effective dust control is essential to ensure dust nuisance does not occur beyond the boundary of the works as a result of activities associated with the reclamation and construction activities. The following measures can be implemented to manage and mitigate dust emissions *(subject to Contractors construction methodology*):

11.1 Dust Suppression Measures

- Access Roads: Roads and tracks regularly traversed by vehicles shall be formed out of materials that limit the generation of dust.
- Traffic Control: Restricting vehicle speeds on unsealed surfaces to minimize dust lift-off.
- Water Spraying: Regular application of water to exposed surfaces, stockpiles, and unsealed roads to suppress dust generation in adverse weather conditions.

- Dust Suppressants: Application of environmentally safe dust suppressants on high-traffic areas or where water spraying is insufficient.
- Minimizing Disturbance: Limiting earthworks and material handling during dry and windy conditions to reduce dust emissions.
- Stabilization of Stockpiles: Covering or vegetating long-term stockpiles and using windbreaks where feasible.

11.2 Monitoring and Compliance

- Visual Inspections: General visual monitoring of all construction areas should be undertaken on a daily basis or more frequently, if conditions change and during dry periods or in the instance of strong winds.
- Meteorological Monitoring: Assessing weather conditions (wind speed and direction) to adjust dust control measures as necessary.
- Community and Stakeholder Engagement: Addressing any dust-related concerns raised by harbour users, Port users, or regulatory authorities.

12. MARINE MAMMALS

The Assessment of Effects on Marine Mammals (attached as Appendix 3 of Port of Tauranga Limited Stella Passage Development - Substantive Application Report) appraises the available marine mammal data for Te Awanui/Tauranga Harbour and surrounds and describes what is known about marine mammal occurrence in and around the project area.

The Marine Mammal Management Plan accompanies the Assessment Effects on Marine Mammals and included as Appendix 1 of this draft RCMP. In accordance with condition 12 of RM-xxx the Contractor shall follow the requirements of the management plan so much as it relates to the work about to be undertaken.

While not all requirements are repeated here key principles and requirements to manage effects on Marine Mammals are as follows:

- Pile driving equipment shall be selected (i.e., hammer type, hammer size and driving force) and operated (i.e., hammer energy/power level) to ensure underwater noise is minimised to the extent practicable while still achieving construction goals;
- Pile driving equipment will be regularly maintained, including lubrication and repair;
- The duration of pile driving will be minimised to the extent practicable;
- Restricted hours of operation will be observed when appropriate;
- The use of cushion blocks is mandatory for all steel impact pile driving;
- The use of bubble curtains is mandatory for all steel impact pile driving;
- Impact pile driving shall not result in more than 8,000 strikes per day.
- Establishment of the Marine Mammal Observation Zone (MMOZ) and the requirements of the Marine Mammal Observer;
- The inner harbour observation zone that that extends from the Harbour Bridge towards Maungatapu bridge and will be observed for 30 minutes prior to the start of piling each day via fixed camera.
- Shutdown zone/s for Odontocetes and fur seals, and Baleen whales and Leopard seals;
- The functions and duties to be performed by the trained personnel carrying out the role of Marine Mammal Observer;
- Pre-start, normal works and standby observation requirements and actions to be taken based on those observations;

- Soft Start Protocols;
- Shutdown Protocols;
- Stand-by Observations;
- Hours of operation;
- Alert system for Marine Mammals in Te Awanui/Tauranga Harbour;
- Acoustic monitoring to be undertaken;
- Recording and reporting requirements for sightings of mammals; and
- Retrieve any waste or equipment lost to sea if safe to do so.

Any injured or dead marine mammals or any near misses between the operation and marine mammals, must be reported immediately to the Port, the Bay of Plenty Regional Council and Department of Conservation including details of the incident and any mitigation action taken.

13. NOISE MANAGEMENT

When a contractor is appointed their specific noise mitigation measures can be confirmed and this draft RCMP updated

While the proposed development is occurring within an operational Port, the noise generated from the reclamation and construction activities must be carefully managed. The nearest sensitive receiver is the Whareroa Marae, and associated dwellings located on the harbour edge. The detailed noise assessment showing compliance, subject to the controls below, with the relevant noise standards can be found in Appendix 8 of Port of Tauranga Limited Stella Passage Development - Substantive Application Report.

Piling has been identified as the noisiest activity and the primary control is a restriction on the time of day this can occur. Pile driving activities will only occur during daytime construction hours being:

- Monday to Friday 7.30am to 8.00pm; and
- Saturday 9.00am to 7.00pm.
- No piling will be undertaken during evening, night-time hours, before sunrise or after sunset.

Other noise mitigation measures to be adopted by the reclamation and construction Contractor are as follows:

- Contractors shall use vibratory piling rather than impact piling where practicable and when using impact piling employ equipment (i.e., hammer type, hammer size and driving force) and operated (i.e., hammer energy/power level) to ensure noise is minimised to the extent practicable while still achieving construction goals.
- The use of cushion blocks is mandatory for all steel impact pile driving.
- Timber piles shall be used for the penguin ramp located closest to Whareroa Marae.
- Where the Port has been advised 24 hours in advance of a Tangihanga occurring at the Whareroa Marae, and where piling activities at the Butters Landing/Bunker wharf area are demonstrated to be above 50 dB LAeq, the consent holder will cease piling activities at this location for three (3) days.

14. WATER QUALITY MONITORING

When a contractor is appointed their specific water quality monitoring measures can be confirmed and this draft RCMP updated

In accordance with condition 7.5 of RM-xxx the reclamation works must not result in an increase in water turbidity exceeding 20 Nephelometric Turbidity Units (NTU) above background levels at any point 50 metres or more from the reclamation site.

In accordance with condition 8.1 of RM-xxx in the case of a settling pond being used to dewater dredged material the increase in turbidity shall not exceed 15 NTU above background at any point 250m from any discharge point. Furthermore, the pond shall not result in the following:

- No conspicuous oil or grease films, scums, foams, or floatable or suspended material.
- No conspicuous change in colour or visual clarity outside the mixing zone.
- No emission or objectionable odour.
- No significant adverse effect on aquatic life.

To ensure compliance and assess the effectiveness of sediment control measures during works, the following monitoring and maintenance activities will be implemented:

- Water Quality Monitoring:
    - Regular sampling and turbidity measurements will be conducted to verify compliance with consent conditions.
    - Monitoring locations will be established at strategic points, including upstream and downstream of the works, to assess potential impacts.
- Visual Inspections:
    - Daily checks of erosion and sediment control structures will be carried out.
    - Any identified failures or deficiencies will be addressed immediately to prevent uncontrolled sediment discharge.
- Adaptive Management:
    - Control measures will be adjusted in response to weather conditions, sediment monitoring results, and construction progress.
    - Additional mitigation measures, such as extending silt curtains or modifying work sequences, will be implemented as needed to maintain water quality standards.

15. COMPLAINTS REGISTER

Records shall be maintained by the Port of any complaints received relating to the works. The records shall cover the following details:

- The location of the reports nuisance or effect;
- The date and time of the complaint;
- A description of any relevant details to the complaint, sea condition, weather;
- Any possible cause of the nuisance or effect;
- Actions taken to address the cause of the complaint; and

- Name of complainant and contact details if offered.

The Port shall follow its standard complaint response protocol to ensure any complaints received are appropriately responded to.

The records of complaints will be made available to the BoPRC upon request.

16. SPDAG REVIEW AND RECOMMENDATIONS

This section would be populated post-consent, following review and feedback from SPDAG.

In accordance with condition 11.4 of RM-xxx, the consent holder must invite the SPDAG to provide feedback on the Reclamation and Construction Management Plan. If the consent holder does not adopt any recommendations provided in the feedback, it must explain why this is the case in the RCMP provided to the BoPRC for certification.

17. OTHER MANAGEMENT PROTOCOLS

17.1 Resource Management (Marine Pollution) Regulations 1998

The disposal of all domestic and industrial rubbish and waste shall be in accordance with all applicable legislative or regulatory requirements.

The Contractor shall not discharge any domestic or industrial waste of any description from any vessel into any water body of the Port. Failure by the Contractor to comply with this requirement will result in the immediate suspension of the Contract Works by the Port. Work shall not be permitted to resume until any such contravention is investigated, work procedures reviewed and staff and crew re-trained in the relevant procedures all to the satisfaction of the Port.

17.2 Historical and Archeological Finds

All items having apparent historical or archaeological interest discovered in the course of the works shall be carefully preserved.

In accordance with condition 20.1 of RM-xxx, in the event of any archaeological site or koiwi being uncovered during the construction activities, the works in the vicinity of the discovery must cease immediately. The contractor (or POTL) will contact BOPRC to obtain details of the relevant iwi authority. The contractor (or POTL) must then consult with the relevant iwi authority and Heritage New Zealand Pouhere Taonga and must not recommence works in the area of the discovery until the relevant Heritage New Zealand approvals or other approvals to damage, destroy or modify such sites have been obtained, where necessary

17.3 Avian Management

The Assessment of Effects on Avifauna (attached as Appendix 4 of Port of Tauranga Limited Stella Passage Development - Substantive Application Report) appraises the available avifauna data for Te Awanui/Tauranga Harbour and surrounds and describes what is known about avifauna occurrence in and around the project area.

The Avifauna Management Plan accompanies the Assessment Effects on Marine Mammals and included as Appendix 2 of this draft RCMP. In accordance with condition 13 of RM-xxx the Contractor shall follow the requirements of the management plan in so much as it relates to the work about to be undertaken.

APPENDIX 1 MARINE MAMMAL MANAGEMENT PLAN

Add final MMMP prior to certification of the RCMP

APPENDIX 2 AVIFAUNA MANAGEMENT PLAN

Add final AMP prior to certification of the RCMP