



**Resource Consent
Application and Assessment
of Effects on the
Environment**

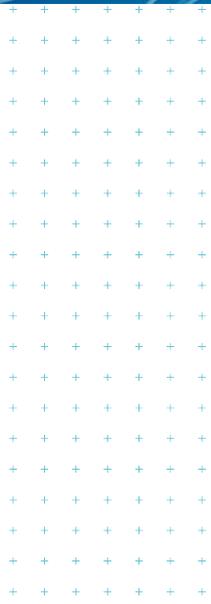
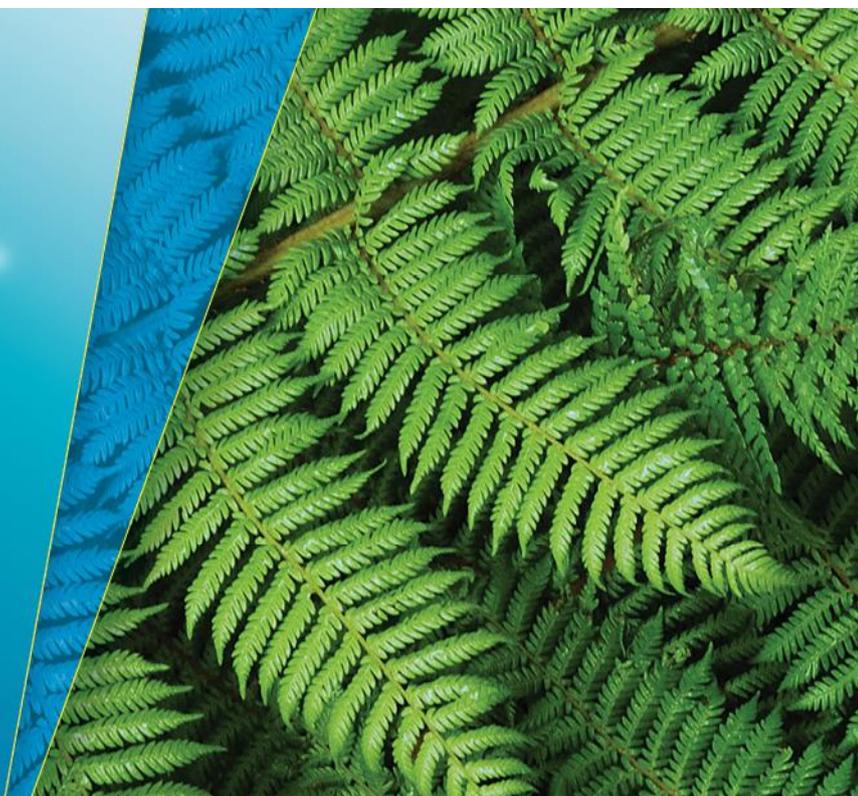
**Shelly Bay Road Sea Wall Remedial
Works**

Prepared for
Wellington City Council

Prepared by
Tonkin & Taylor Ltd

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Distribution:

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Schedule 4 requirements

Schedule 4 of the RMA sets out the information required in an application for a resource consent. All relevant matters required to be included have been addressed in the assessments and descriptions in this AEE. The following table provides a summary of the information required in Schedule 4 and a quick reference to its location in this report.

Schedule 4 Item	Location within report
A description of the activity	Section 3.1
A description of the site at which the activity is to occur	Section 2
The full name and address of each owner or occupier of the site	Section 1.2
A description of any other activities that are part of the proposal to which the application relates	Section 3.1
A description of any other resource consents required for the proposal to which the application relates	N/A
An assessment of the activity against the matters set out in Part 2	Section 6.2
An assessment of the activity against any relevant provisions of a document referred to in section 104(1)(b). This must include: <ul style="list-style-type: none"> Any relevant objectives, policies, or rules in a document Any relevant requirements, conditions, or permissions in any rules in a document Any other relevant requirements in a document (for example, in a national environmental standard or other regulations) 	Section 6
An assessment of the activity's effects on the environment that includes the following information: <ul style="list-style-type: none"> If it is likely that the activity will result in any significant adverse effect on the environment, a description of any possible alternative locations or methods for undertaking the activity. An assessment of the actual or potential effect on the environment of the activity. If the activity includes the use of hazardous substances and installations, an assessment of any risks to the environment that are likely to arise from such use. If the activity includes the discharge of any contaminant, a description of— <ul style="list-style-type: none"> The nature of the discharge and the sensitivity of the receiving environment to adverse effects; and Any possible alternative methods of discharge, including discharge into any other receiving environment. A description of the mitigation measures (including safeguards and contingency plans where relevant) to be undertaken to help prevent or reduce the actual or potential effect. Identification of the persons affected by the activity, any consultation undertaken, and any response to the views of any person consulted. If the scale and significance of the activity's effects are such that monitoring is required, a description of how and by whom the effects will be monitored if the activity is approved. 	<p>Section 5</p> <p>N/A</p> <p>Section 5</p> <p>N/A</p> <p>N/A</p> <p>Section 3.3</p> <p>N/A</p> <p>N/A</p>

Schedule 4 Item	Location within report
<ul style="list-style-type: none"> If the activity will, or is likely to, have adverse effects that are more than minor on the exercise of a protected customary right, a description of possible alternative locations or methods for the exercise of the activity (unless written approval for the activity is given by the protected customary rights group). 	N/A
<p>An assessment of the activity's effects on the environment that addresses the following matters:</p> <ul style="list-style-type: none"> Any effect on those in the neighbourhood and, where relevant, the wider community, including any social, economic, or cultural effects. Any physical effect on the locality, including any landscape and visual effects. Any effect on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity. Any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural value, or other special value, for present or future generations. Any discharge of contaminants into the environment, including any unreasonable emission of noise, and options for the treatment and disposal of contaminants. Any risk to the neighbourhood, the wider community, or the environment through natural hazards or the use of hazardous substances or hazardous installations. 	<p>Section 5</p> <p>Section 5.2</p> <p>Section 5.6</p> <p>Section 5.4</p> <p>Section 5.6</p> <p>Section 5.3</p> <p>N/A</p>
<i>For applications involving permitted activities</i>	
<p>If any permitted activity is part of the proposal to which the application relates, a description of the permitted activity that demonstrates that it complies with the requirements, conditions, and permissions for the permitted activity (so that a resource consent is not required for that activity under section 87A(1)).</p>	Section 4.3

1 Introduction

1.1 Overview of proposed works

Wellington City Council (WCC) is seeking resource consent for the construction of two mass concrete block walls that will act as temporary sediment control structures along Shelly Bay Road, Miramar, Wellington. The WCC projects team are undertaking remediation works following two landslip events on the western side of the Shelly Bay Road which have undermined the edge of the road shoulder.

The proposed remediation method is to construct a stone-faced concrete sea wall at each landslip location. The sea wall structures are located above mean high water springs (MHWS) and are therefore permitted under the Wellington District Plan (WDP) as part of road maintenance activities. In order to construct the two sea walls a mass concrete block wall is required to be placed at the toe of each sea wall as a sediment control measure. Sections of the concrete block sediment control structure will be located below MHWS and therefore, within the coastal marine area (CMA).

The mass concrete block walls are 10 m in length and are comprised of 900x900 mm blocks which are placed on a flat foundation composed of imported gravel (AP65) wrapped in geotextile. The concrete block walls will be in place for a maximum of 18 weeks during the construction of the two sea walls at which time they will be removed.

This application relates only to the temporary placement of the mass concrete block walls as sediment control structures due to their placement within the CMA. The permanent sea wall structures are above MHWS and are permitted under the WDP.

This report has been prepared in fulfilment of section 88 of the Resource Management Act 1991 (RMA), and in accordance with our letter of engagement to WCC dated 1 December 2016.

1.2 Applicant and property details

Table 1.1: Applicant and property details

Applicant	Wellington City Council
Owner/occupier of application site	Road reserve and coastal marine area
Site address / map reference	Site 1: 2662089 E 5987670 N Site 2: 2661917 E 5987343 N
Site area	Approximate footprint of the works for site 1 is 310 m ² and for site 2 is 230 m ²
Legal description	N/A
Certificate of Title reference	N/A
District Council / Plans	Wellington City Council/Wellington District Plan
Regional Council / Plans	Greater Wellington Regional Council/ Proposed Natural Resources Plan and Wellington Regional Coastal Plan
Address for service during consent processing	Tonkin + Taylor PO Box 5271, Wellesley Street, Auckland 1141 Attention: Lhani Voyle Phone: DDI: 09 362 1756 Mob: 027 370 7273

	Email: LVoyle@tonkintaylor.co.nz
Address for service during consent implementation and invoicing	Wellington City Council PO Box 2199, Wellington, 6140 Attention: Jone Sumasafu Phone: Ph.: 04 803 8030 Mob: 021 227 8030 Email: Jone.Sumasafu@wcc.govt.nz

We have attached copies of the application forms in **Appendix A** and the relevant planning maps in **Appendix B**.

1.3 Overview of resource consent requirements

Resource consent is required from Greater Wellington Regional Council (GWRC) under the following:

- Proposed Natural Resources Plan (PNRP):
 - Rule R161 – the proposed installation of the concrete block wall for erosion and sediment control in the CMA is considered a new structure outside a site of significance and is not permitted by Rule R156, R155 or R159 – **discretionary activity**
- Wellington Regional Coastal Plan (RCP)
 - Rule 25 – The construction of a concrete block wall structure outside any area of significant conservation values <1000 m in length and parallel to mean high water springs in the CMA is not specifically provided for in Rules 6 to 24 or Rules 26 or 27 - **discretionary activity**

Overall, resource consent is required from GWRC under the PNRP as a **discretionary activity** and under the RCP as a **discretionary activity**.

1.4 Consent duration

Resource consent is sought for a duration of 2 years.

2 Environmental setting

2.1 Site location and description

The subject sites are located along a section of Shelly Bay Road approximately 4 km east of the Wellington City Centre and approximately 1 km northwest of the Miramar Town Centre. The location of the two landslip sites is shown on Figure 2.1. Figure 2.2 shows the location of the sites within the wider Wellington region. The surrounding suburb of Maupuia is comprised of the coastal marine area, public open space and residential areas. To the north of the two sites is a Landscape Feature precinct referred to as Matakai-kai-poinga which is used as public open space.



Figure 2.1 Location of the two sites where landslips have occurred along Shelly Bay Road (Google Earth, 2017)

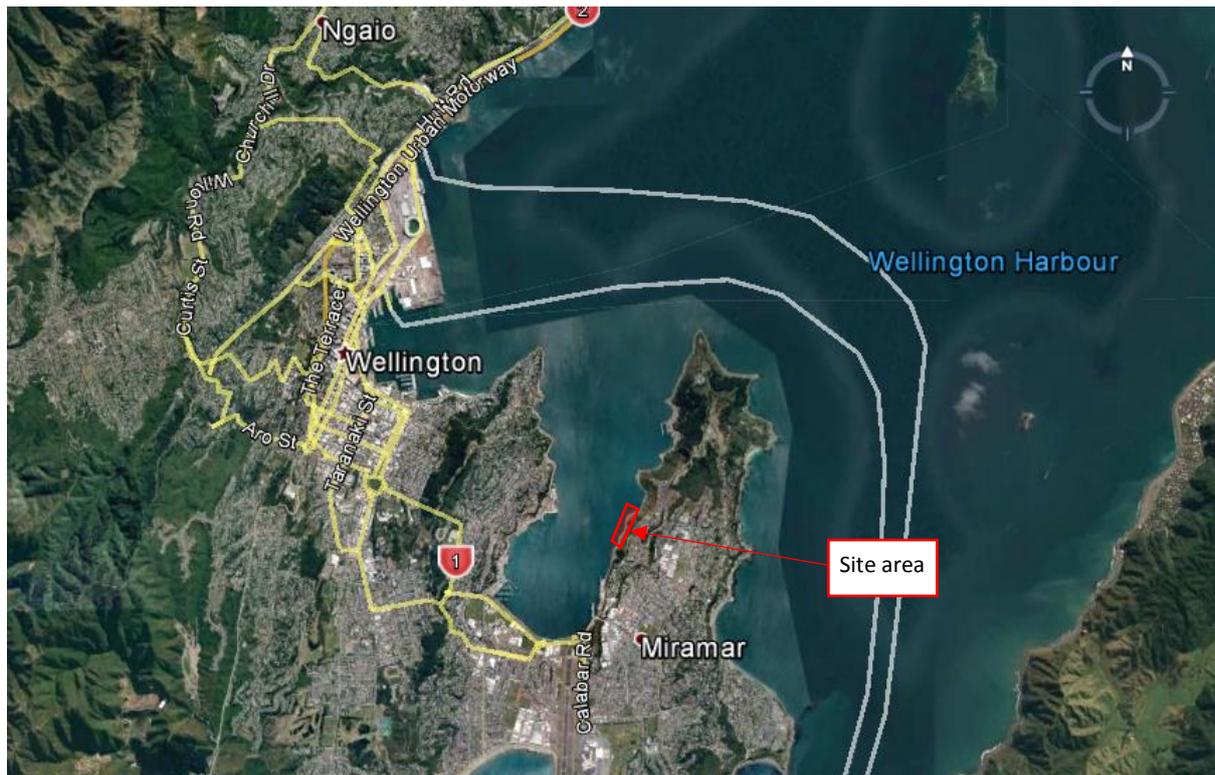


Figure 2.2: Location of the two sites within wider Wellington Region (Source: Google Earth Pro, 2017)

Shelly Bay Road is cut into a moderate sloping hill approximately 3 m above sea level. There are other existing seawalls along the coastal stretches of Shelly Bay Road. At the two locations of the proposed seawalls the road is bordered on the coastal side by a short moderate slope down to the sea which is covered by grass, flax and occasional trees. A moderate to steep slope runs the length of the eastern side of the road and is covered in moderately dense vegetation. Exposed bedrock is observed at the base of the embankment and surficial cover coarse gravel is also present at the base of the slope.

Photographs of the two landslips were taken during a T+T site investigation in November 2016. Figure 2.3 below shows landslip 1 and Figure 2.4 shows landslip 2. Landslip 1 occurred approximately 170 m north of 72 Shelly Bay Road in early August 2016. Landslip 2 occurred approximately 400 m further north of landslip 1 in late October 2016. Landslip 1 is 7.4 m wide however, it lies within a zone of instability approximately 14 m wide. Landslip 2 is 3 m wide, but is situated within an 8 m wide actively eroding area.



Figure 2.3: Photographs of Landslip 1 along Shelly Bay Road. Photo on left: View of the head scarp looking north. Photo on right: View of the head scarp and landslip debris looking south (Source: T+T, 2016)



Figure 2.4: Photographs of Landslip 2 along Shelly Bay Road. Photo on left: View of the head scarp looking north. Photo on right: View of the slip face from the base of the slope in the CMA. (Source: T+T, 2016)

A search of the New Zealand Archaeological Associations 'ArchSite' database confirms that there are no recorded archaeological sites in the vicinity of the two locations. The proposed works are not within any heritage sites or in close proximity to any notable trees or places of significance to mana whenua. As stated above, part of the works are to be temporarily located within the CMA as defined

as the landward boundary of MHWS. Drawings 1000807-04 and 1000807-05 in **Appendix C** show the location of the concrete blocks and their associated foundations in relation to the MHWS boundary.

2.2 Ecological values

The two slip remediation sites are located along the western edge of Evans Bay in the Wellington Harbour. The coastal margin of Evans Bay in and surrounding the two slip remediation sites is characterised by narrow cobble beach habitat in the upper intertidal regions, with rocky platform habitat present in the lower intertidal and subtidal areas. Previous work undertaken by T+T in nearby Breaker Bay found the upper intertidal cobble beach habitat to be generally devoid of surface marine benthic fauna, with low numbers of the modest barnacle (*Elminius modestus*) located in some areas where more stable habitat (such as rocky outcrops or seawalls) was present.

Under the PNRP, the Shelly Bay Road landslip remediation sites are located in an identified habitat for indigenous birds in the coastal marine area. This identified habitat includes the entire Wellington Harbour. A total of six 'threatened' or 'at risk' indigenous bird species are listed as either resident or regular visitors to the area. These species include fluttering shearwater (*Puffinus gavia*), variable oystercatcher (*Haematopus unicolour*), red-billed gull (*Chroicocephalus novaehollandiae scopulinus*), little black shag (*Phalacrocorax sulcirostris*), pied shag (*Phalacrocorax varius*) and white-fronted tern (*Sterna striata*). In addition to the species listed above it is also considered that the 'at risk' little blue penguin (*Eudyptula minor*) could potentially be present.

3 Description of proposed works

3.1 Proposed works

This resource consent application is being sought for the placement of two temporary mass concrete block walls which will be used as sediment control measures during the construction of two sea walls along Shelly Bay Road, Miramar. The purpose of the construction of the two sea walls is to repair two areas of the coastal embankment that were damaged during rainfall events in August and October 2016. The sea walls do not require resource consent however, in order to lawfully construct the proposed sea walls, erosion sediment control measures are required to be put in place. A number of the concrete blocks and the foundations for the concrete blocks, used for sediment control, are located below MHWS within the CMA and therefore require resource consent.

The concrete blocks are pre-cast and will be placed on gravel foundations, which are situated atop the rock platform. Excavation of rock material is not required for the placement of the foundations or the concrete blocks. The concrete block wall and associated temporary boxing (as shown in **Appendix C**) will contain any possible cement discharge during the pouring phase of the sea wall construction. A silt screen will be also installed on the inside face of the concrete block wall as an additional sediment control measure. As such, no silt or sediment is expected to be discharged during placement of the concrete walls or during construction of the sea walls.

The 900 x 900 mm sized concrete blocks will be placed in 10 m lengths and moved along the toe of the slope as construction of the sea wall progresses. The concrete blocks will more than likely be moved down the wall after approximately 2 weeks however, delays due to weather and construction could result in the blocks being in place for over a month.

The engineering design drawings for the proposed mass concrete block sediment control walls are provided in **Appendix C**. An overview of the works associated with the placement of the mass concrete block wall is as follows:

- Trimming and clearing of material on the slope to facilitate the placement of the concrete blocks;
- Placement of temporary foundations for the mass concrete blocks, which consist of AP65 imported gravel wrapped in geotextile fabric, on top of the pre-existing rock platform;
- Placement of temporary pre-cast 900 x 900 mm mass concrete blocks along the toe of the proposed sea wall; and
- Installation of a silt screen on the inside face of the concrete block wall as an additional sediment control measure.

Figure 3.1 below is an example of a mass concrete block wall similar to the walls proposed in this application.



Figure 3.1: Example of the concrete block wall to be constructed at the toe of the slope face as a sediment control measure (Source: AECOM, 2015)

3.2 Duration of works

The construction of the concrete block walls are expected to commence in spring 2017 and are expected to be completed in approximately 18 weeks.

3.3 Mitigation measures

For the placement of the mass concrete block walls, all works will be conducted above MHWS, on an area of the road shoulder reserved as the contractors working area. This will avoid the need to have machinery in the coastal area. The concrete block wall is temporary and will be removed after a maximum of 18 weeks. No excavation is required for the placement of the concrete blocks or their associated foundations therefore no discharge of sediment to the CMA is expected. The concrete blocks and their associated foundations will be removed as soon as construction of the sea wall is complete.

4 Resource consent requirements

The requirements for resource consents are determined by the rules in the Proposed Natural Resources Plan (PNRP) and the Wellington Regional Coastal Plan (RCP). The rules which apply are determined by the zoning of the site, any identified limitations in the plan and the nature of the activities proposed.

Table 4.1: Zoning and planning limitations

Zoning / planning limitation	Comment
Proposed Natural Resources Plan	
Habitat for Indigenous Birds in the CMA (Schedule F2c)	Six threatened or at risk indigenous bird species are known to be resident or regular visitors to this habitat: fluttering shearwater, variable oystercatcher, red-billed gull, little black shag, pied shag and white-fronted tern.
Wellington Regional Coastal Plan	
Coastal Marine Area	Defined as the area below MHWS. Some of the construction of the concrete block erosion sediment control structure is within the CMA and therefore Rule 25 applies.
40 m height restriction area	Not applicable to this application.

4.1 Proposed Natural Resources Plan

The PNRP is produced by the Wellington Regional Council and sets out the objectives, policies and methods for people and organisations that use the region's resources for a variety of purposes. Submissions on the proposed plan closed in April 2016 and the rules within the PNRP now have legal effect. The resource consent requirements under the PNRP are set out in **Table 4.2** below.

Table 4.2: Resource consents required under the PNRP

Proposed activity	Rule	Comment on compliance
Placement of a concrete block wall in the CMA	<p><u>Rule R161: New structures, additions or alterations to structures outside sites of significance</u></p> <p>A new structure, addition or alteration to a structure and the associated use of the structure outside a site or habitat identified in Schedule C (mana whenua), Schedule F4 (coastal sites), Schedule F5 (coastal habitats) or Schedule J (geological features) in the CMA, including any associated:</p> <p>a Occupation of space in the common marine and coastal area, and</p>	The concrete block wall is not considered temporary ¹ under the PNRP and is therefore defined as a new structure. The structure is not to be installed in a site or habitat of significance. The structure is not permitted by Rule R156, controlled under Rule R157 or restricted discretionary under Rule R155 and therefore the activity is discretionary under Rule R161.

¹ Definition of temporary structure in PNRP and RCP - A structure in the CMA which is not in place for a period exceeding a total of 31 days or part days during a 12 month period, inclusive of the placement and removal.

	<p>b Disturbance of the foreshore or seabed, and</p> <p>c Deposition in, on or under the foreshore or seabed, and</p> <p>d Discharge of contaminants, and</p> <p>e Diversion of open coastal water</p> <p>That is not permitted by Rule R156 or a controlled activity under Rule R157 or a restricted discretionary activity under Rule R155 or prohibited under Rule R159 is a discretionary activity.</p>	
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In summary, the proposed works require consent under the PNRP as a **discretionary activity**.

4.2 Wellington Regional Coastal Plan

The RCP became operative on 19 June 2000 and identifies issues to be addressed so that the CMA can be sustainably managed. The objectives, policies and rules in the RCP have been adopted to address these issues. The resource consent requirements under the RCP are set out in **Table 4.3** below.

Table 4.3: Resource consents required under the RCP

Proposed activity	Rule	Comment on compliance
Development of a structure outside any Area of Significant Conservation Value	<p><u>Rule 25: All remaining activities involving the use and development of structures outside any Area of Significant Conservation value</u></p> <p>Any activity involving the use or development of any structure or any part of a structure fixed in, on, under or over foreshore or seabed outside an Area of Significant Conservation Value:</p> <ul style="list-style-type: none"> - That is not specifically provided for in Rules 6 to 24 or Rules 26 or 27; or - Which cannot meet the requirements of those rules; <p>Is a discretionary activity.</p>	The placement of a concrete block wall <1000 m in length parallel to MHWS is not specifically provided for therefore, the development of the concrete block structures is a discretionary activity under Rule 25.

In summary, the proposed works require consent under the RCP as a **discretionary activity**.

Section 6.4 of the RCP sets out the requirements for an application for resource consent under Rules 25. Where applicable, this information is included in the relevant sections of this application.

4.3 Permitted activities

The construction of the stone-faced retaining walls, and the associated earthworks are permitted under the Wellington District Plan. Vegetation clearance, earthworks and discharges associated with the construction of the retaining walls above MHWS are permitted activities under the PNRP. An assessment of the activities associated with the proposed construction of the retaining walls that are permitted from a resource consent perspective is provided in **Table 4.4**.

Table 4.4: Permitted activities

Proposed activity	Rule	Comment on compliance
Wellington City District Plan		
Construction of the retaining walls to maintain the existing formed road	Rule 17.1.14 Any activity relating to the upgrade and maintenance of existing formed roads and public accessways (including associated earthworks), except the construction of a new legal road is a permitted activity.	The construction of the two stone-faced sea walls along Shelly Bay Road are to be completed for the maintenance of the existing road and road shoulder.
	Rule 5.1.5 Any activity relating to the upgrade and maintenance of exiting formed public roads (or other lawfully established roads) and public accessways including associated earthworks, except the construction of a new legal road, is a permitted activity.	
Proposed Natural Resources Plan		
Minor discharges associated with the placement of the concrete block sediment control walls	<p>Rule R42 – Water discharges</p> <p>The discharge of contaminants into water, or onto or into land where it may enter water that is not permitted, controlled, restricted discretionary, discretion, non-complying or prohibited by any other rule in this Plan is a permitted activity provided the following conditions are met:</p> <p>b where the discharge enters a surface water body or coastal water, the concentration of total suspended solids in the discharge shall not exceed:</p> <p>i <u>100g/m3</u> where the discharge enters any other water, except when the background total suspended solids concentration in the receiving water is greater than 100g/m3 in which case the decrease in water clarity after the zone of reasonable mixing shall not exceed 33%,</p> <p>d the discharge shall not cause any erosion of the channel or banks of the receiving water body or the coastal marine area,</p> <p>f the discharge shall not give rise to the following effects after the zone of reasonable mixing:</p> <p>i a change in the pH of ± 0.5pH unit, or</p> <p>ii the production of conspicuous oil or grease films, scums or foams, or floatable or suspended materials, or</p> <p>iii any conspicuous change in the colour or visual clarity, or</p>	<p>There is no expected discharge of sediment associated with the placement of the concrete block sediment control walls. Therefore, the proposed activity meets conditions b – e and is permitted under Rule R42.</p> <p>Note: Cement run-off during the construction of the stone-faced sea walls is not likely to occur however, should adverse weather conditions or leakage through the concrete block wall occur, the discharge will still comply with all permitted activity standards.</p>

	<ul style="list-style-type: none"> iv any emission of objectionable odour, or v the fresh water is unsuitable for consumption by farm vi animals, or vii any significant adverse effects on aquatic life. 	
Earthworks	<p><u>Rule R99 - Earthworks</u></p> <p>The use of land, and the discharge of stormwater into water or onto or into land where it may enter water from earthworks of a contiguous area up to 3,000 m² per property per 12 month period is a permitted activity, provided the following conditions are met:</p> <ul style="list-style-type: none"> a soil or debris from earthworks is not placed where it can enter a surface water body or the coastal marine area; b earthworks will not create or contribute to instability or subsidence of a slope or another land surface at or beyond the boundary of the property where the earthworks occurs; c work areas are stabilised within six months after the completion of the earthworks; and d any earthworks shall not, after the zone of reasonable mixing, result in any of the following effects in receiving waters: <ul style="list-style-type: none"> i the production of conspicuous oil or grease films, scums of foams, or floatable or suspended materials, or viii any conspicuous change in colour or visual clarity, or ix any emission of objectionable odour, or x the rendering of fresh water unsuitable for consumption by animals, or xi any significant adverse effect on aquatic life. 	There is no expected discharge of sediment into the CMA due to the placement of the concrete block walls. Therefore the earthworks associated with the placement of the concrete block wall is permitted under Rule R99.
Vegetation clearance on the coastal embankment	<p><u>Rule R100 – Vegetation clearance on erosion prone land</u></p> <p>The use of land, and the discharge of stormwater into water or onto or into land where it may enter water from vegetation clearance of a contiguous area up to 2 ha per property per 12 month period on erosion prone land is a permitted activity, provided the following conditions are met:</p> <ul style="list-style-type: none"> a any soil or debris from the vegetation clearance is not placed where it can enter a surface water body or the coastal marine area, and 	Vegetation clearance on the road shoulder for the development of the two concrete block walls is permitted as no soil or debris will enter the CMA during construction.

	<ul style="list-style-type: none"> g any soil disturbances associated with the vegetation clearance shall not after the zone of reasonable mixing, result in any of the following effects in receiving waters: ii the production of conspicuous oil or grease films, scums of foams, or floatable or suspended materials, or xii any conspicuous change in colour or visual clarity, or xiii any emission of objectionable odour, or xiv the rendering of fresh water unsuitable for consumption by animals, or any significant adverse effect on aquatic life. 	
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4.4 Other consents and approvals required

A building consent for the construction of the two stone-faced sea walls has been applied for separate to this application.

5 Assessment of effects on the environment

5.1 Introduction

The following assessment identifies and assesses the types of effects that may arise from the proposed works. This assessment also outlines the measures that the applicant proposes to avoid, remedy or mitigate any potential adverse effects on the environment.

Actual and potential effects on the environment have been identified as including:

- Positive effects;
- Discharge of contaminants during construction;
- Coastal ecology;
- Coastal processes;
- Construction noise;
- Tangata whenua values; and
- Visual amenity.

5.2 Positive effects

The proposed works involve the construction of two concrete block walls to act as sediment control measures during the development of two sea walls along the coast of Shelly Bay Road. The two sea walls are required as remedial works following two landslips which occurred following significant rainfall events in late 2016 and resulted in undermining of the road shoulder in the two slip locations. In order to protect the health and safety of the road users and the road, remedial works are required to address the effects of the landslips. The sea walls were designed by a Chartered Engineer and will improve the stability of the sites and reinforce the land in the occurrence of future landslip events.

The construction of the concrete block walls at each site will ensure sediment during the development of the sea walls does not enter the CMA and adversely impact on coastal water quality.

5.3 Discharge of contaminants during construction

The concrete block sediment control walls will be put in place from the road reserve. Through carrying out placement of these blocks from the road reserve, disturbance of the CMA and the discharge of sediment to the CMA during construction is expected to be nil. Therefore, the adverse effects of sediment discharge during construction of the temporary walls is expected to be less than minor.

5.4 Coastal ecology

A desktop ecological assessment has been completed by a T+T ecologist and is attached in **Appendix D**. The coastal margin of Evans Bay surrounding the two slip locations is characterised by rocky reef and narrow cobble beach habitat in the upper intertidal regions, with rock platform habitat present in the lower intertidal and subtidal areas. Previous work undertaken by T+T in nearby Breaker Bay found the upper intertidal cobble beach habitat to be generally devoid of surface marine benthic fauna. Under the PNRP, a total of six 'threatened' or 'at risk' indigenous bird species are listed as either resident or regular visitors to the area.

Taking into account the very high ecological value of the Evans Bay area due to the presence of 'Threatened' coastal bird species, but negligible magnitude of effects, the overall ecological effect of the project is considered, by an ecologist, to be low and less than minor.

5.5 Coastal processes

The effects on coastal processes caused by vertical walls, such as the proposed concrete block walls, include the occupation of the seabed and the potential for increased erosion rates at adjacent shorelines. The vertical concrete block walls can also enhance erosion of adjacent land via increased reflection and withholding material that would have otherwise been eroded.

These effects may be observed during the 18 week construction phase, however no enduring effects are expected after the temporary block wall structures have been removed and sediment has been replaced. Considering the temporary nature of the proposed works, the overall effect on coastal processes is expected to be less than minor.

5.6 Construction noise

The works are temporary in nature, and are expected to be completed within 18 weeks. The works will be undertaken between the hours of 7:00 am – 7:00 pm Monday to Saturday, no works are proposed on Sundays or Public Holidays, and they will be undertaken in accordance with "New Zealand Standard NZS 6803:1999 Acoustics – Construction Noise". Considering these measures, any potential noise effects will be temporary and less than minor.

5.7 Tangata whenua values

This application recognises the relationship of Maori and their culture and traditions with the land and resources as well as the concept of kaitiakitanga. The proposed works are not expected to result in any discharge to water or land and therefore water quality will not be affected. The works are not located within a site of significance to tangata whenua and are not expected to create adverse effects in relation to the characteristics of the coastal environment. The works will enable the use of the coastal environment along Shelly Bay Road for future generations. Considering the temporary nature of the works, and the minimal effects to the environment, the effects on tangata whenua values are less than minor.

5.8 Visual amenity

The concrete block walls are located below road level and are not located within an identified landscape feature, site of significance or outstanding water body. Therefore, the placement of the concrete blocks is not considered to affect the overall visual amenity for users of the area. In relation to the view of the coastline, there are many similar sea walls located along the coastline to ensure the stability of the road. Runner plants will be planted in boxes above the wall and will eventually cover the wall. Given the number and location of other seawalls along this area of coastline, as well as the temporary duration of the proposed structure, the effects on visual amenity from the concrete block wall are considered to be less than minor.

6 Statutory assessment

6.1 Section 104 of the RMA

Section 104 of the RMA sets out the matters to which a consent authority must have regard to, subject to Part 2 of the RMA, when considering an application for resource consent. These are:

- Any actual and potential effects on the environment of allowing the activity (refer Section 5 above);
- Any relevant provisions of:
 - a national environmental standard;
 - other regulations;
 - a national policy statement;
 - a New Zealand coastal policy statement;
 - a regional policy statement or proposed regional policy statement;
 - a plan or proposed plan; and
- Any other matter the consent authority considers relevant and reasonably necessary to determine the application.

6.2 Part 2 of the RMA

Part 2 of the RMA sets out the purpose and principles of the Act. The purpose of the RMA is to promote the sustainable management of natural and physical resources. With regard to Section 5 of the RMA, the proposed works provide for the future safety and ongoing usability of Shelly Bay Road.

The proposed installation of the concrete block walls for the purpose of sediment control will ensure silt and sediment generated by the construction of the two sea walls will not enter the CMA therefore, mitigating any adverse effects of the activity on the environment.

6.3 National Environmental Standards

There are no National Environmental Standards considered relevant to the proposed works.

6.4 New Zealand Coastal Policy Statement

The purpose of the New Zealand Coastal Policy Statement 2010 (NZCPS) is to state policies in order to achieve the purpose of the RMA with regards to the coastal environment of New Zealand. A consent authority, when considering an application for resource consent, must have regard to the relevant provisions of the NZCPS.

Table 6.1: NZCPS objectives and policies assessment

Objective/Policy	Comment
<p>Objective 1 - To safeguard the integrity, form, functioning and resilience of the coastal environment and sustain its ecosystems, including marine and intertidal areas, estuaries, dunes and land, by:</p> <ul style="list-style-type: none"> - Maintaining coastal water quality, and enhancing it, where it has deteriorated from what would otherwise be its natural 	<p>The proposed concrete block walls will act as sediment control structures and ensure that disturbed soil, as a result of the construction of two sea walls, will not enter the CMA and cause adverse effects on coastal water quality.</p>

condition, with significant adverse effects on ecology and habitat, because of discharges associated with human activity.	
<p>Objective 6 – To enable people and communities to provide for their social, economic, and cultural wellbeing and their health and safety, through subdivision, use, and development, recognising that:</p> <ul style="list-style-type: none"> - Some uses and developments which depend upon the use of natural and physical resources in the coastal environment are important to the social, economic and cultural wellbeing of people and communities 	The placement of the proposed concrete block walls as sediment control structures will enable the construction of two sea walls along Shelly Bay Road. The sea walls are required to reinstate two sections of road shoulder which were damaged by localised landslips. The development of the two sea walls will provide for the health and safety of the users of Shelly Bay Road.
<p>Policy 6 – (2) Additionally, in relation to the coastal marine area:</p> <p>a recognise potential contributions to the social, economic and cultural wellbeing of people and communities from use and development of the coastal marine area.</p>	

6.5 Regional Policy Statement for the Wellington Region

The Wellington Regional Policy Statement (RPS) contains objectives and policies around maintaining and enhancing coastal water quality (Policy 5, Objective 6) and minimising the effects of earthworks (Policies 15 and 41). By installing a sediment control structure such as the concrete block wall that is proposed in this application, sediment is prevented from entering the CMA during construction of two sea walls and therefore aids in the maintenance of coastal water quality and the minimisation of adverse effects from earthworks.

6.6 Regional Plan assessment

An assessment of the proposed works against the relevant objectives and policies of the RCP and PNRP is set out in **Table 6.2**. The works are consistent with the objectives and policies of the relevant Regional Plans.

Table 6.1: Regional Plan objectives and policies assessment

Objective/Policy	Comment
Wellington Regional Coastal Plan	
Objective 4.1.11 – Any adverse effects from natural hazards are reduced to an acceptable level.	The new sea walls that are to be constructed along Shelly Bay Road will be rectifying the damage caused to the road shoulder as a result of two localised landslips. In order to construct the sea walls, the concrete block sediment control structures must also be installed.
Objective 6.1.1 – Appropriate structures which enable people and communities to provide for their economic and social well-being are allowed	The proposed concrete block walls are critical to the construction of two new sea walls along Shelly Bay Road in a manner that minimises associated adverse environmental effects. The new walls will stabilise

	the road shoulder in two locations and ensure safety and well-being of the road users in the future.
Objective 10.1.1 – High quality water in the coastal marine area is protected and not degraded through human activities	The construction of the proposed concrete block sediment control structure at the base of each sea wall will ensure discharge of sediment during construction will not enter the CMA and therefore aid in protecting coastal water quality.
Policy 10.2.10 – To investigate, advocate for, and support opportunities to reduce the adverse effects of discharges to land or water in the coastal marine area	
Proposed Natural Resources Plan for the Wellington Region	
Objective 019 – The interference from use and development on natural processes is minimised	The concrete block structure will only be in place for 18 weeks during construction of the sea walls. The temporary nature of the proposed works will have limited effects on the functioning of natural coastal processes.
Policy P26 – Use and development will be managed to minimise effects on the integrity and functioning of natural processes	
Objective 023 - The quality of the water in the region’s rivers, lakes, natural wetlands, groundwater and the CMA is maintained or improved.	Due to the proximity to the CMA, the proposed works aim to prevent the discharge of sediment during construction of two sea walls. The works are considered to be consistent with this objective and policy.
Policy P67 - The adverse effects of discharges of contaminants to land and water will be minimised by: a Avoiding the production of the contaminant, and/or b Reusing, recovering or recycling the contaminant, and/or c Minimising the volume or amount of the discharge, and/or d Using land-based treatment where appropriate	
Objective 053 – Use and development in the coastal marine area has a functional need or operational requirement to be located there	There is a functional need for the concrete block walls as sediment control structures in order to prevent the discharge of sediment to the CMA during the construction of the two sea walls.
Policy P132 – Use and development in the coastal marine area shall have a functional need or an operational requirement to locate within the coastal marine area, and no reasonable or practicable alternative to locating it in the coastal marine area	
Objective 044 – The adverse effects on soil and water from land use activities are minimised	The construction of the concrete block walls at the toe of the new sea walls is a source control approach to prevent the discharge of sediment to the CMA during the construction phase.
Policy P97 – The discharge of sediment to surface water bodies and coastal water from earthworks activities shall be minimised by using a source control approach.	

6.7 Non notification

6.7.1 Public notification

Section 95A of the RMA is relevant when a consent authority is considering whether a consent application should be considered with or without public notification.

Having regards to the tests in section 95A, the following points are noted:

- a An assessment of effects on the environment is provided in Section 5 of this AEE report. This assessment concludes that the adverse effects on the environment are less than minor;
- b The applicant does not request public notification of the application;
- c There is no rule or NES that requires public notification of this application; and
- d No special circumstances are considered to exist in relation to the application.

Based on the assessment provided in the sections above, we consider that this proposal meets the tests of the RMA to be processed without public notification.

6.7.2 Limited notification

For applications that are not publicly notified, under section 95B, the consent authority must give limited notification of the application to any affected person or any affected protected customary rights group or customary marine title group, unless (in the case of affected persons) a rule or national environmental standard precludes limited notification of the application.

Section 95E states that a consent authority must consider a person to be an affected person if the activity's adverse effects on the person are minor or more than minor (but not less than minor). A consent authority must not consider a person affected if they have provided written approval to the activity.

Having regard to these requirements, there are no parties considered to be adversely affected by the activity.

6.7.3 Section 95 conclusions

The activity will not have adverse effects on the environment that are more than minor and there are no persons considered to be affected by the proposed activity. Therefore, WCC requests that the application be processed without public or limited notification.

7 Conclusion

This AEE report has been prepared on behalf of WCC to accompany an application to GWRC for resource consent for the installation of two concrete block sediment control structures along Shelly Bay Road, Miramar, Wellington.

This AEE report draws the following conclusions:

- The works are consistent with Part 2 of the Resource Management Act 1991;
- The works are consistent with the relevant objectives and policies of the PNRP and the RCP;
- The works require resource consent from GWRC under Rule R161 as a discretionary activity under the PNRP and under Rule 25 of the RCP as a discretionary activity;
- Our assessment has concluded that the installation of the two concrete block walls will have a less than minor adverse effect on the environment and positive effects will result from the works ensuring the future safety and usability of the road; and
- There are no parties who will be adversely affected by the proposed land remediation works.

Accordingly, we respectfully request that this resource consent application be granted on a non-notified basis, subject to fair and reasonable conditions. We would appreciate the opportunity to comment on draft conditions prior to consent being granted.

8 Applicability

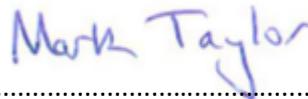
This report has been prepared for the exclusive use of our client Wellington City Council, with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose, or by any person other than our client, without our prior written agreement.

Tonkin & Taylor Ltd

Environmental and Engineering Consultants

Report prepared by:

Authorised for Tonkin & Taylor Ltd by:

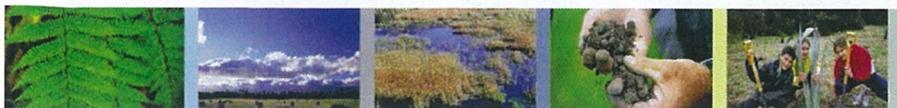
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Lhani Voyle
Resource Management Planner

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Mark Taylor
Project Director

25-May-17

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Appendix A: Consent application forms



Form 1: Application for resource consent

All sections must be completed in full and accompanied by the initial fixed application fee (see section 12) and the relevant activity form (see section 7). Failure to do so may result in your application not being accepted and/or returned. Please note that all information provided in your application is available to the public.

You can lodge your application in any of the following ways:

- By post to PO Box 11646, Wellington or PO Box 41, Masterton
- In person at our Wellington office (Shed 39, 2 Fryatt Quay, Pipitea) or Masterton office (34 Chapel Street)
- By email to info@gw.govt.nz (a signed PDF copy is required)

Office use only:	
FILE REF:	
Doc. No.	
Referred to	Int

1. Applicant's details

Applicant(s) name(s) and address ie, whose name will be on the consent. Note if a private or family trust is the applicant, all the trustees are required to provide contact details and sign the application form (see 4. below)

Name: Wellington City Council T: Business: 04 803 8030 T: Private:
 Address: PO Box 2199 Fax: T: Mobile: 0212278030
 Address: Wellington, 6140 Email address: Jone.Sumasafu@wcc.govt.nz

The applicant is the:

Owner Occupier Lessee Prospective Purchaser The Crown
 Network Utility Operator Other Please specify: District Council

2. Agent's details

Agent's name and address Please note that all correspondence will be sent to the Agent as the first point of contact during the application process, unless instructed otherwise

Name: Lhani Voyle T: Business: 09 362 1756 T: Private:
 Address: PO Box 5271, Wellesley Street Fax: T: Mobile: 0273707273
 Address: Auckland, 1141 Email address: LVoyle@tonkintaylor.co.nz

3. Property owner's details (if different from above)

Name: T: Business: T: Private:
 Address: Fax: T: Mobile:
 Address: Email address:

If your proposed activity will take place on land not owned by the applicant, the written approval of the property owner must be provided on a **completed and signed form 1B**.

4. Partnership/unincorporated entity details

For partnerships or unincorporated entities (such as private trusts or unincorporated bodies or societies) you **must** provide details of all authorised partners, trustees or members. Any consent granted will then include these names, and all individuals will be legally responsible for the consent and any associated costs. Should these persons change, then you must notify us.

Full name of person:

Status (eg, partner, trustee):

Address:

Email address:

Phone:

Full name of person:

Status (eg, partner, trustee):

Address:

Email address:

Phone:

Full name of person:

Status (eg, partner, trustee):

Address:

Email address:

Phone:

Include details of any further partners/trustees/members on a separate page if necessary

5. Location of proposed activity

Describe the location of activity and/or property address

Refer to Section 2 of AEE Report Map reference: NZTM:

Valuation reference [from rates]:

Include the name of any relevant stream, river or other waterbody to which the application may relate, proximity to any well known landmark, etc. (Note: a location map is required in your activity form.)

Legal description [from rates notice] [eg, Lot 9 DP58809 Block XI]

N/A Road Reserve and CMA

6. Description of proposed activity

Please refer to Section 2 of the attached AEE Report

7. Consents from the Greater Wellington Regional Council – activity forms you need to fill in

Consent(s) being applied for. You will need to fill in an activity form for each of the following activities: Make sure you attach the forms for your activity

Water:

- Dam/Divert (Form 2a)
- Take and use surface water (Form 2b)
- Take and use groundwater (Form 2c)

Discharge to Land:

- General discharges (Form 3a)
- Agricultural discharge (Form 3b)
- On-site wastewater (Form 3c)

Discharge to Water:

- General discharges (Form 4a)

Discharge to Air:

- Air discharge (Form 5a)

Land Use:

- General river/stream works (Form 6a)
- Bore/well construction (Form 6b)
- Bridge/culvert/pipe (Form 6c)
- Erosion protection structures (Form 6d)
- Land clearing/tracking/logging soil disturbance (Form 6e)

Coastal:

- General coastal (Form 7a)
- Boatshed (Form 7b)
- Swing mooring (Form 7c)

8. Consents from local authorities

Territorial authority in which land is situated:

- | | | | |
|-------------------------|-------------------------------------|----------------------------------|--------------------------|
| Wellington City Council | <input checked="" type="checkbox"/> | Kapiti Coast District Council | <input type="checkbox"/> |
| Hutt City Council | <input type="checkbox"/> | Masterton District Council | <input type="checkbox"/> |
| Upper Hutt City Council | <input type="checkbox"/> | South Wairarapa District Council | <input type="checkbox"/> |
| Porirua City Council | <input type="checkbox"/> | Carterton District Council | <input type="checkbox"/> |

Do you require any other resource consents from your local council? Yes No

If yes, please list:

Have these consents been applied for? Yes No

9. Other documentation

Please list any documents in addition to your application forms that form part of your application. Note: if multiple other documents exist, please attach a separate sheet of paper.

No other documents

Reports Title

Plans Title

Other documents Title

Title

10. Pre-application advice

Please list any pre-application meetings or advice (verbal and/or written) you have had with GWRC below:

- Meeting(s) – with who and when?
- Verbal advice – from who and when?
- Written advice – from who and when? Douglas Fletcher, 13th April and 4th May
- Other (eg, submitted draft application/AEE)

11. Consultation and written approval of affected persons

Consultation with all persons potentially affected by your activity prior to lodging your application may result in considerable time and cost savings.

Non-notified applications

Non-notified consents are for activities which have minor effects on the environment. For your activity to be considered on a non-notified basis you must consult and obtain written approval from all persons potentially affected by your activity (eg, neighbours, iwi, Fish and Game Council, Department of Conservation). If you are unsure who may be an affected party, please call us. **Non-notified consents are significantly cheaper and quicker to process.**

Limited notified and fully notified applications

Notified consents (either limited notified or fully notified consents) are for activities which do not meet requirements in the RMA for processing on a non-notified basis.

Please provide any consultation details and written approvals obtained in the space provided below.

Consultation details

Have you consulted with iwi? Yes No

If so, who did you consult?

Who else have you consulted?

What was their response?

How have you addressed any concerns they may have had?

Written approval of affected parties

If you have obtained the signature of affected persons please give their details below. Please note that for us to accept the approvals **they must each complete and sign form 1B.**

Name	Address	Contact details (phone, email etc)

12. Fees and charges

Non-notified initial fixed application fees including GST (please tick one or more)

Discharge permit	<input type="checkbox"/> Land \$2,328.75	<input type="checkbox"/> Water (other) \$3,432.75	<input type="checkbox"/> Land/Water (earthworks) \$3,432.75	<input type="checkbox"/> Air \$1,500.75
Water permit	<input type="checkbox"/> Take (new) \$2,052.75	<input type="checkbox"/> Take (renewal) \$1,224.75	<input type="checkbox"/> Dam/Divert \$1,086.75	
Land use consent	<input type="checkbox"/> Bore \$ 465.75	<input type="checkbox"/> River works \$1,155.75	<input type="checkbox"/> Land clearing/disturbance/logging \$1,776.75	
Coastal permit	<input type="checkbox"/> Mooring \$ 672.75	<input type="checkbox"/> Boatshed \$ 672.75	<input checked="" type="checkbox"/> Other \$1,155.75	

- Notes:
1. Where there is more than one application required for the same proposal, an initial fixed application fee is required for each application
 2. The initial fixed application fee is the average cost of processing an application type. Final processing costs are based on actual and reasonable time and disbursements spent processing your application.
 3. Contact the Greater Wellington Regional Council for information about notified initial fixed application fees

Payment method (please tick one) Please send invoice to WCC

Cheque (to be lodged with application documents)

Internet banking to:

Greater Wellington Regional Council – National Bank account 06-0582-0104781-00

Date of payment: _____ Reference details used: _____

Note: for reference details please quote "Consents" and the applicant name

Cash/Eftpos (to be made at Wellington or Masterton office)

Future payments

Any additional consent processing charges and consent monitoring charges will be invoiced directly to the applicant, unless instructed otherwise below:

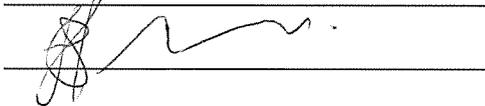
13. Applicant's declaration

I/we hereby certify that, to the best of my/our knowledge and belief, the information given in this application is true and correct.

I/we understand that the Council may charge me/us for all costs actually and reasonably incurred in processing this application and, if granted, for any subsequent monitoring charges. Subject to my/our rights under sections 357B and 358 of the RMA to object to any costs, I/we undertake to pay all and future processing costs and monitoring costs incurred by the Council. Without limiting the Council's legal rights, if any steps, including the use of debt collectors, are necessary to recover unpaid costs, I/we agree to pay all costs associated with recovering those costs. If this application is made on behalf of a trust (private or family), a society (incorporated or unincorporated) or a company in signing this application I/we are binding the trust, society or company to pay all the above costs and guaranteeing to pay all the above costs in my/our personal capacity.

Full name: Jone Sumasafu

Date: 23/5/17

Applicant's signature: 

(or person authorised to sign on behalf of the applicant)



7a Coastal permit application

Please answer all questions fully. The questions provide a guide in order to satisfy the minimum information requirements that must be included with your application as prescribed in Schedule 4 of the Resource Management Act 1991 (RMA). Depending on the scale of your proposed activity, more detailed information and an Assessment of Environmental Effects (AEE) will be required to support the resource consent application.

Officers from the Greater Wellington Regional Council’s (GWRC) Environmental Regulation department are available to assist with filling out this form or to clarify information to include with your application. Up to 1 hour of free pre application advice is available to you.

This form is required to be filled out in conjunction with Form 1 Resource Consent Application

Separate application forms should be used for any discharge of contaminants or water into coastal marine area (Form 4a). If you are applying to replace an existing consent for a boatshed please fill in application form 7b, or if you are applying for a swing mooring please fill in application form 7c.

Further information is provided at the end of this form on whether your activity falls within the coastal marine area.

Part A: General information on nature and scale of activity

1. Is this application a renewal of an existing consent?

Yes No If Yes, what is the existing consent number? WAR/WGN

2. What activity will you be undertaking?

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3. Are you:

- | | | |
|--|---|-----------------------------|
| (1) Reclaiming or draining? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (2) Erecting, reconstructing, placing, altering, extending, removing or demolishing any structure? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (3) Disturbing the foreshore or seabed by excavating, drilling or tunnelling? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (4) Depositing any substance? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (5) Destroying, damaging or disturbing the foreshore or seabed? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (6) Introducing or planting any exotic or introduced plant? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (7) Occupying an area of the foreshore or seabed? (including temporary activities which restricts public use and access) | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (8) Removing sand, shingle or other material? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (9) Undertaking any activity that will generate noise? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |

4. Why do you need to undertake this activity?

To allow the construction of two sea walls which will enable the protection and future stability of Shelly Bay Road.

5. Are there any alternative locations or methods for activity? If yes, where or how and why have you chosen this over others?

No - required as a result of two localized landslips

6. What is the area of foreshore and seabed affected by your proposal? Including width, depth, height

Please refer to the engineering drawings in Appendix C of the AEE Report attached

7. Construction/works methodology

Please provide a step by step construction methodology for the works including:

- Details of the works that will be undertaken to prepare the site
- Details of your proposed methodology for the works including the machinery and material to be used, whether the works are a one off or ongoing and if ongoing how frequently, whether the works will be staged etc
- Details of mitigation measures proposed to minimise the adverse effects of the works including ecological effects, sedimentation, and effects on other coastal users
- Details of site rehabilitation and ongoing monitoring once the works are complete

Please refer to Section 3 of the AEE report

[Continue on a separate page if necessary]

8. Locality map

Please show the location of you proposed activity. Alternatively you may wish to attach a plan/aerial photograph showing the above information.

Please refer to Section 2 of the attached AEE Report

9. Is the activity: permanent or temporary ?

10. What is the proposed commencement date of the activity?

Spring 2017

11. What is the proposed completion date or duration of activity?

12 week duration

12. Who will be undertaking the activity and supervising the activity?

Wellington City Council

13. What are the proposed hours of operation/construction?

7am to 7pm Monday to Saturday

4. What steps do you propose to take to avoid, remedy, or mitigate these effects?

Please refer to attached AEE Report

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Part C: Assessment against statutory documents

1. Part 2 of Resource Management Act 1991 (RMA)

Have you provided an assessment against Part 2 (Purpose and Principles) of the RMA?

<http://www.legislation.govt.nz/act/public/1991/0069/latest/DLM231904.html>

Please refer to Section 6.2 of attached AEE Report

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2. Regional Policy Statement (RPS) & Regional Coastal Plan (RCP)

Have you provided an assessment of the proposal against the relevant objectives, policies and rules of the Regional Policy Statement (<http://www.gw.govt.nz/rps/>) and Regional Coastal Plan (<http://www.gw.govt.nz/guide-to-the-regional-rules-and-regulations/>)?

Please refer to Section 6.5 and 6.6 of the attached AEE

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3. Proposed Natural Resources Plan (PNRP)

Have you provided an assessment of the proposal against the relevant objectives, policies and rules of the Proposed Natural Resources Plan? <http://www.gw.govt.nz/proposed-natural-resources-plan/>

Please refer to Section 4.1 and 6.6 of the attached AEE Report

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4. Other relevant statutory documents

Have you provided an assessment against all other relevant statutory documents? e.g. New Zealand Coastal Policy Statement (<http://www.doc.govt.nz/about-us/science-publications/conservation-publications/marine-and-coastal/new-zealand-coastal-policy-statement/new-zealand-coastal-policy-statement-2010/>)

Please refer to Section 6.4 of the attached AEE report

5. Permitted activities

Will you be undertaking any permitted activities as part of the proposed works? (<http://www.gw.govt.nz/regional-plans-policies-and-strategies/>)

Please refer to Section 4.3 of the attached AEE Report

6. Other activities that are part of the proposal

Are there any other activities that are part of the proposed activity which may require consent?

N/A

7. Value of investment

If you are applying to replace an existing consent, please provide an assessment of the value of the investment to which the activity relates.

N/A

Part D: Monitoring and management of your activity

1. Who is responsible for the maintenance or management of your activity after it has been implemented?

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2. Do you propose to monitor during and/or after completion of your activity? If yes, describe the monitoring (include details of what will be monitored, responsible persons, frequency of monitoring)

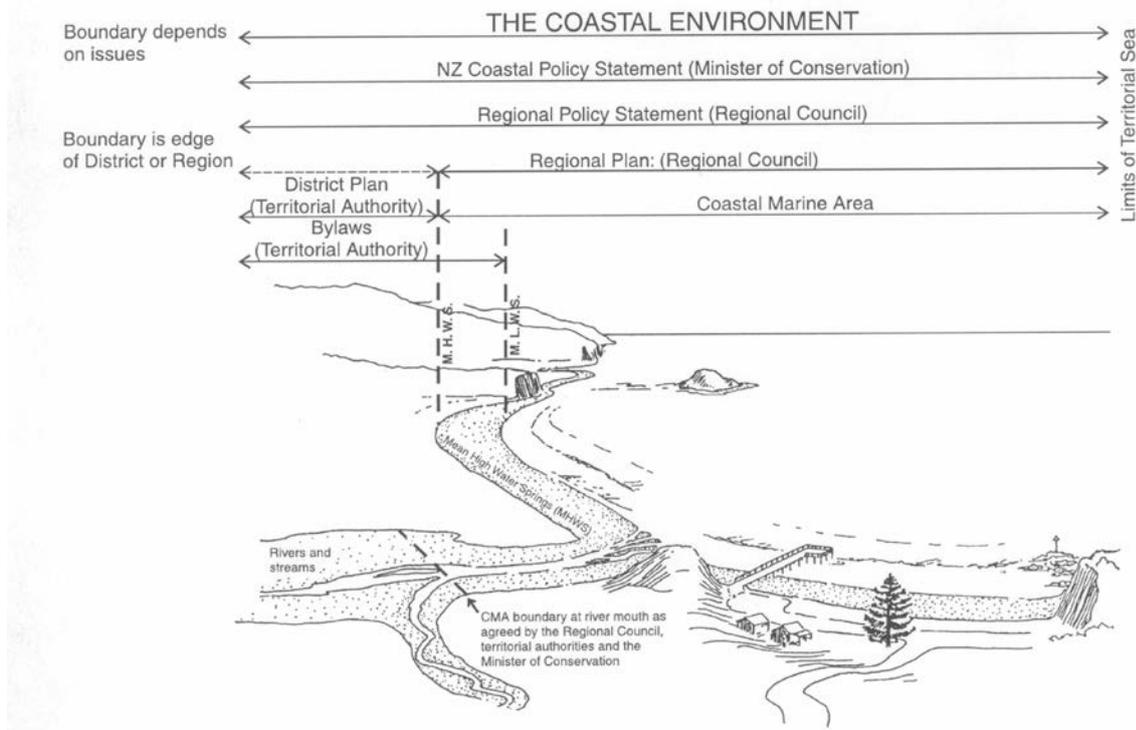
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3. How will maintenance be undertaken if required? (include any contingency or management plans prepared or details of potential ways in which maintenance would be undertaken)

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Do you need to make a coastal permit application?

You may need a coastal permit if your proposed activity will occur within the coastal marine area. The coastal marine Area (CMA) includes the foreshore, the seabed, the sea surface and the air above the sea from the mean high water springs (MHWS) mark to the 12 mile limit as illustrated below:



MHWS means the average of each pair of successive high waters during that period of about 24 hours in each semi-lunation (approximately every 14 days, when the range of tides is the greatest). Visually this level is generally close to being the "high water mark" where debris accumulates on the shore annually.

The CMA can also include river mouths and estuaries. Where the MHWS mark crosses a river, the landward boundary at that point shall be whichever is lesser of 1 kilometer upstream from the mouth of the river or the point upstream that is calculated by multiplying the width of the river mouth by 5.

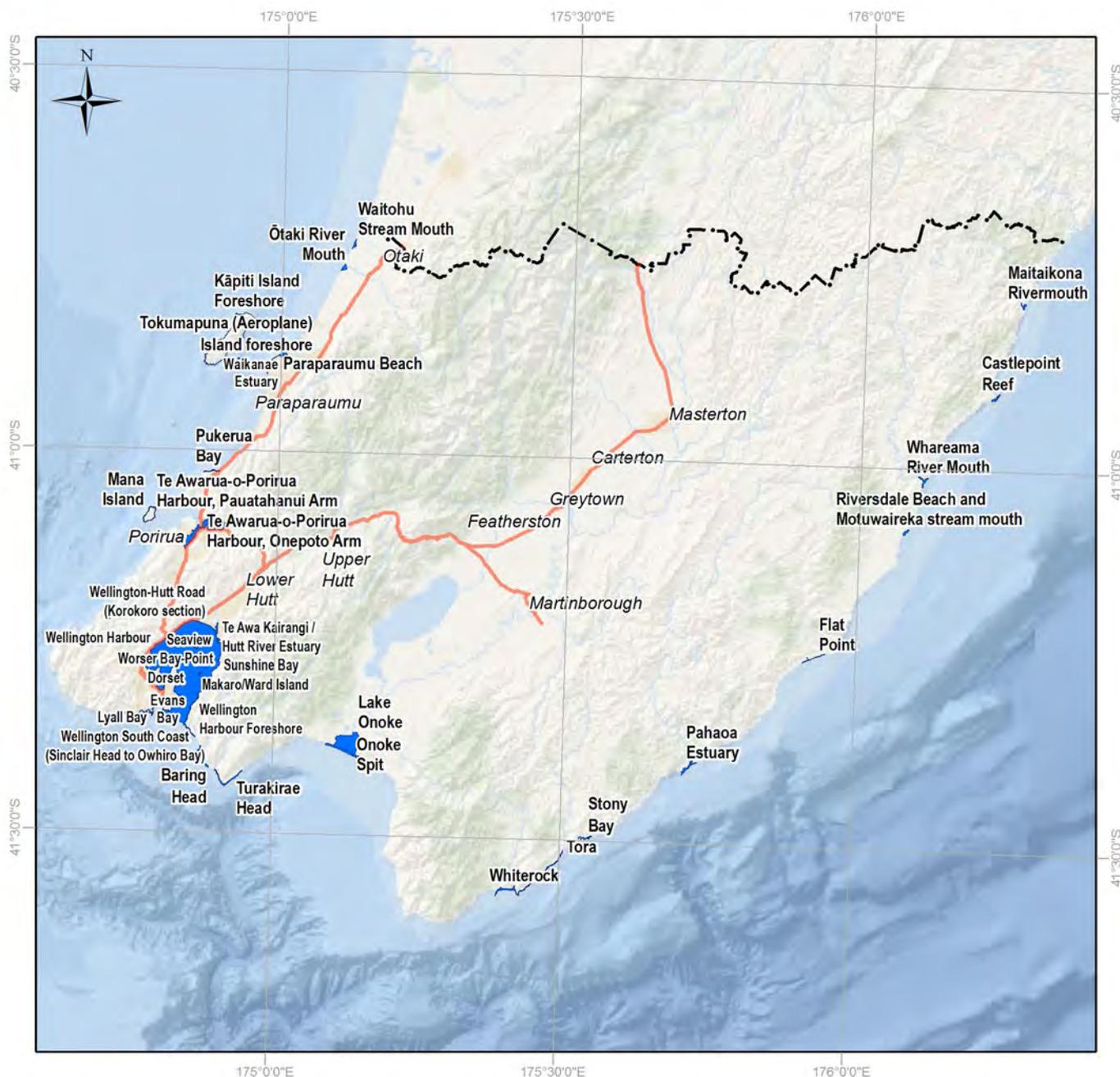
Such activities in the CMA which require a coastal permit include the following:

- Building or altering any structure on the foreshore or seabed (e.g. seawall, jetty, culvert, stormwater outfall, swing or pile mooring)
- Undertaking works which will alter the foreshore or seabed or adversely affect marine plants or animals or their habitat (e.g. extracting sand, reclamation, dredging, disturbance, deposition of material)
- Occupying land of the Crown in the coastal marine area (with for example structures, moorings, special activities)
- Introducing or planting any exotic or introduced plant in, on, or under the foreshore or seabed
- Noisy activities (e.g. fireworks displays, power boat competitions)
- Any other activity which is not permitted by the Regional Coastal Plan

Appendix B: Planning maps

Habitats for indigenous birds in the coastal marine area (Schedule F2c)

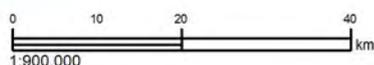
Map 18



This version of the map is not complete. The version of this map available online through the online web map viewer shows the complete, detailed information on a GIS overlay that is not shown on this hard copy. The online version is available on the Council's website at <http://mapping.gw.govt.nz/gwrc/> (select theme Proposed Natural Resources Plan 2015) and can be accessed from the Council offices or public library.

— State Highway - - - Region boundary line

■ Habitat for indigenous birds in the CMA

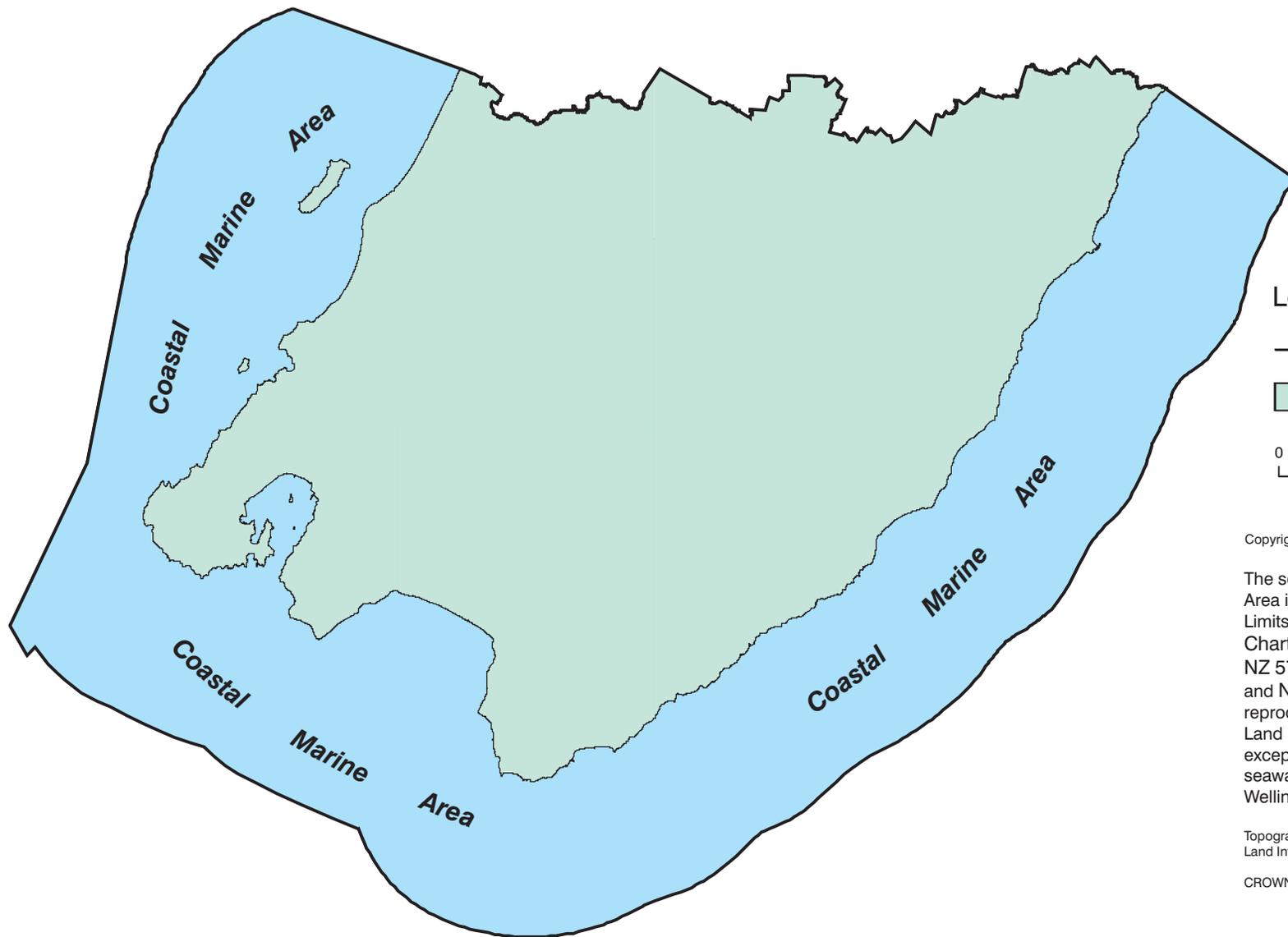


Basemap: World Oceans Base
Projection: NZTM 2000


greater WELLINGTON
REGIONAL COUNCIL
Te Pane Matua Taiao
Copyright
Basemap: Esri, DeLorme, GEBCO, NOAA NGDC,
and other contributors
Topographic and Cadastral: LINZ & CoreLogic Ltd

Regional Coastal Plan

Coastal Marine Area in the Wellington Region



Legend

— Wellington Region boundary

Land area

0 15 30
Kilometres

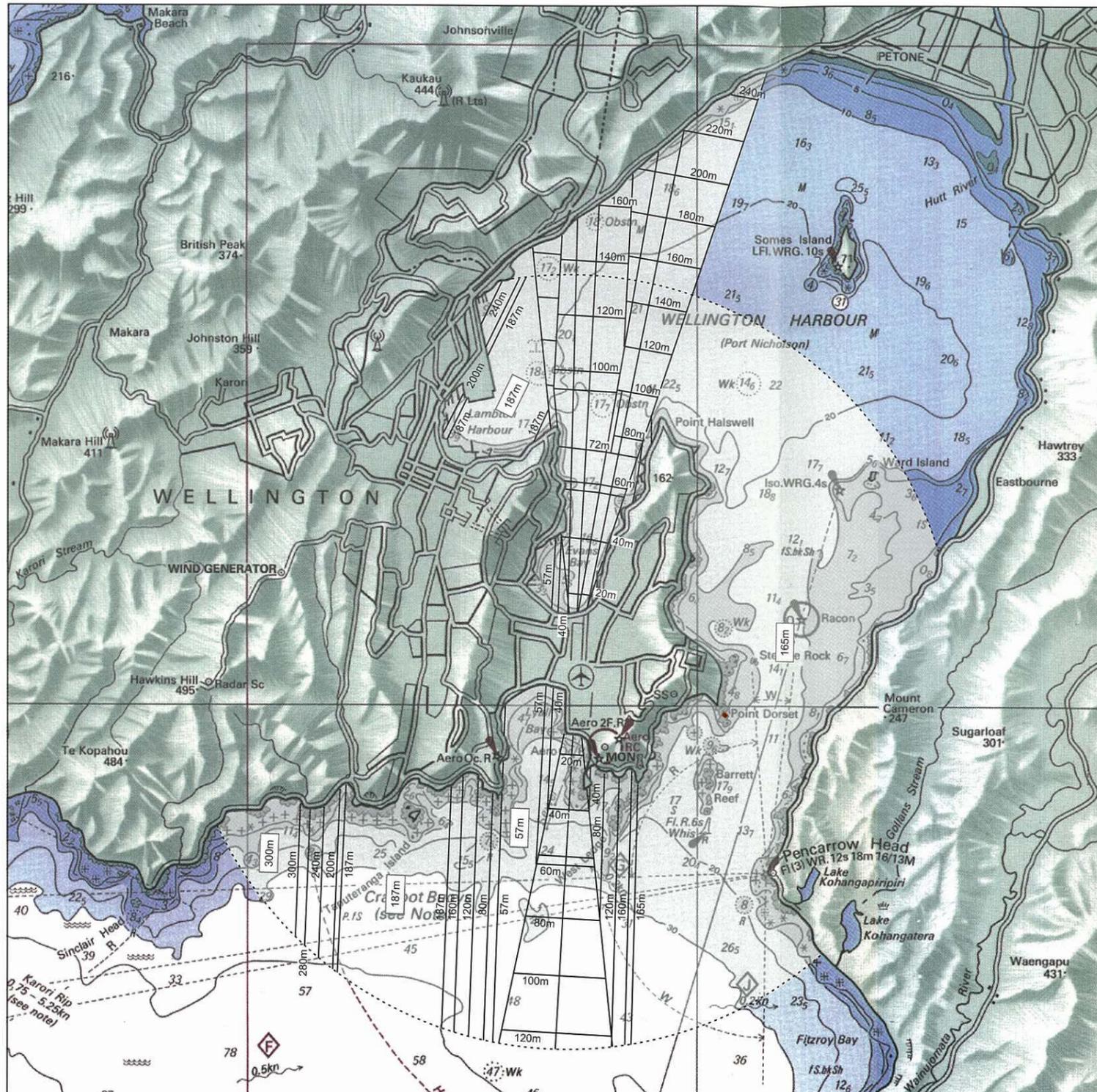
Copyright: Wellington Regional Council, August 1998

The seaward boundary of the Coastal Marine Area in the Wellington Region is the outer Limits of the Territorial Sea (adopted from Charts NZ 46 Cook Strait; NZ 57 Blackhead Point to Castle Point; and NZ 58 Castle Point to Cape Palliser reproduced by permission of Land Information New Zealand), except through part of Cook Strait where the seaward boundary is the outer limits of the Wellington Region (adopted from SO 35951)

Topographic information reproduced under licence from Land Information New Zealand.

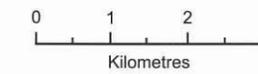
CROWN COPYRIGHT RESERVED.

Height Restrictions in the Coastal Marine Area Wellington International Airport



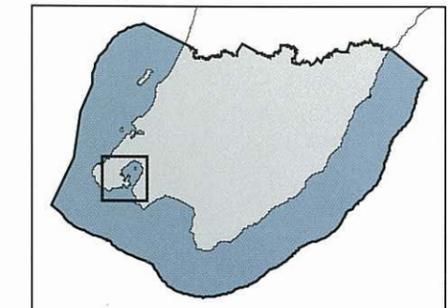
Legend

- Airport height restriction
- 300m
300m Height restriction surface
- Contour



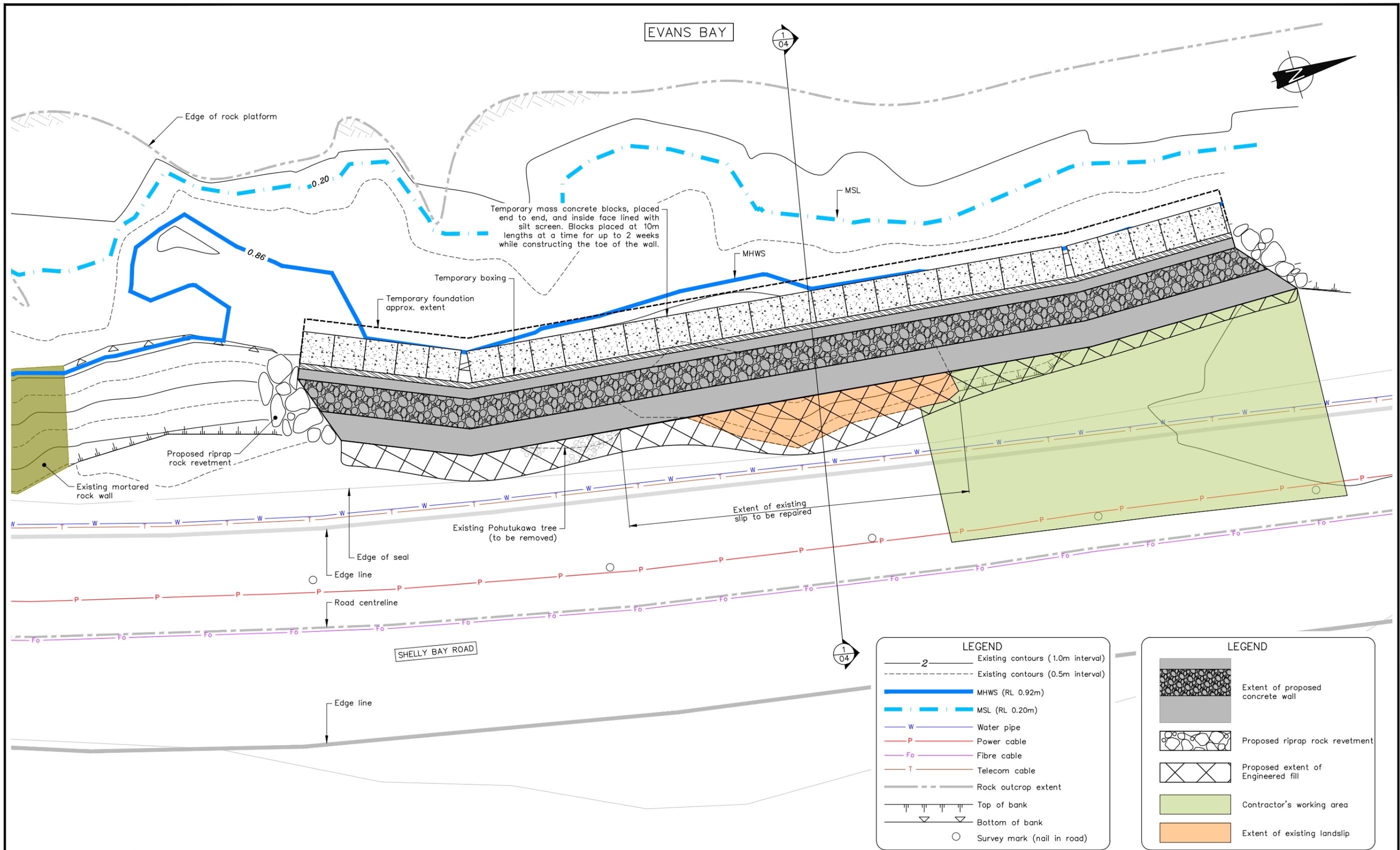
CAUTION
NOT TO BE USED FOR NAVIGATION
Part of Chart NZ 463
Wellington Harbour
reproduced by permission of
Land Information New Zealand

Locality Map



Appendix C: Drawings

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LEGEND

- Existing contours (1.0m interval)
- Existing contours (0.5m interval)
- MHWS (RL 0.92m)
- MSL (RL 0.20m)
- Water pipe (W)
- Power cable (P)
- Fibre cable (Fo)
- Telecom cable (T)
- Rock outcrop extent
- Top of bank
- Bottom of bank
- Survey mark (nail in road)

LEGEND

- Extent of proposed concrete wall
- Proposed riprap rock revetment
- Proposed extent of Engineered fill
- Contractor's working area
- Extent of existing landslip

DESIGNED :	NVK	May.17
DRAWN :	AGDS	May.17
DESIGN CHECKED :		
DRAFTING CHECKED :		
CADFILE :	\\1000807-04_05.dwg	
APPROVED :		
NOT FOR CONSTRUCTION		
This drawing is not to be used for construction purposes unless signed as approved		
REVISION DESCRIPTION	BY	DATE
1 Resource Consent		

NOTES :

- Base drawings provided by Spencer Holmes Ltd. Reference data: "S16-0977-T1c 3D.dwg" - Revision B, dated 26/12/2017.
- Coordinate Datum: NZGD2000, Wellington Circuit Coordinates. Origin: Lat 41 18 04S 174 46 35E 800,000mN 400,000mE Level Datum: LINZ (MSL) Wellington Vertical Datum 1953

REFERENCE :

Tonkin+Taylor

Level 4, 2 Hunter St, Wellington
 Tel. (04) 381 8560 Fax. (09) 307 0265
 www.tonkintaylor.co.nz

DRAWING STATUS: RESOURCE CONSENT

CLIENT, PROJECT
WELLINGTON CITY COUNCIL
SHELLY BAY LANDSLIP REMEDIAL SOLUTIONS

TITLE
 LAYOUT DRAWINGS
 Proposed Site Plan - Landslip 1

SCALES (AT A3 SIZE)
 1: 100

DWG. No.
 1000807-04

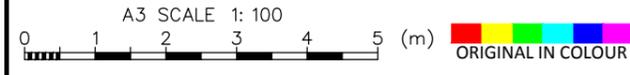
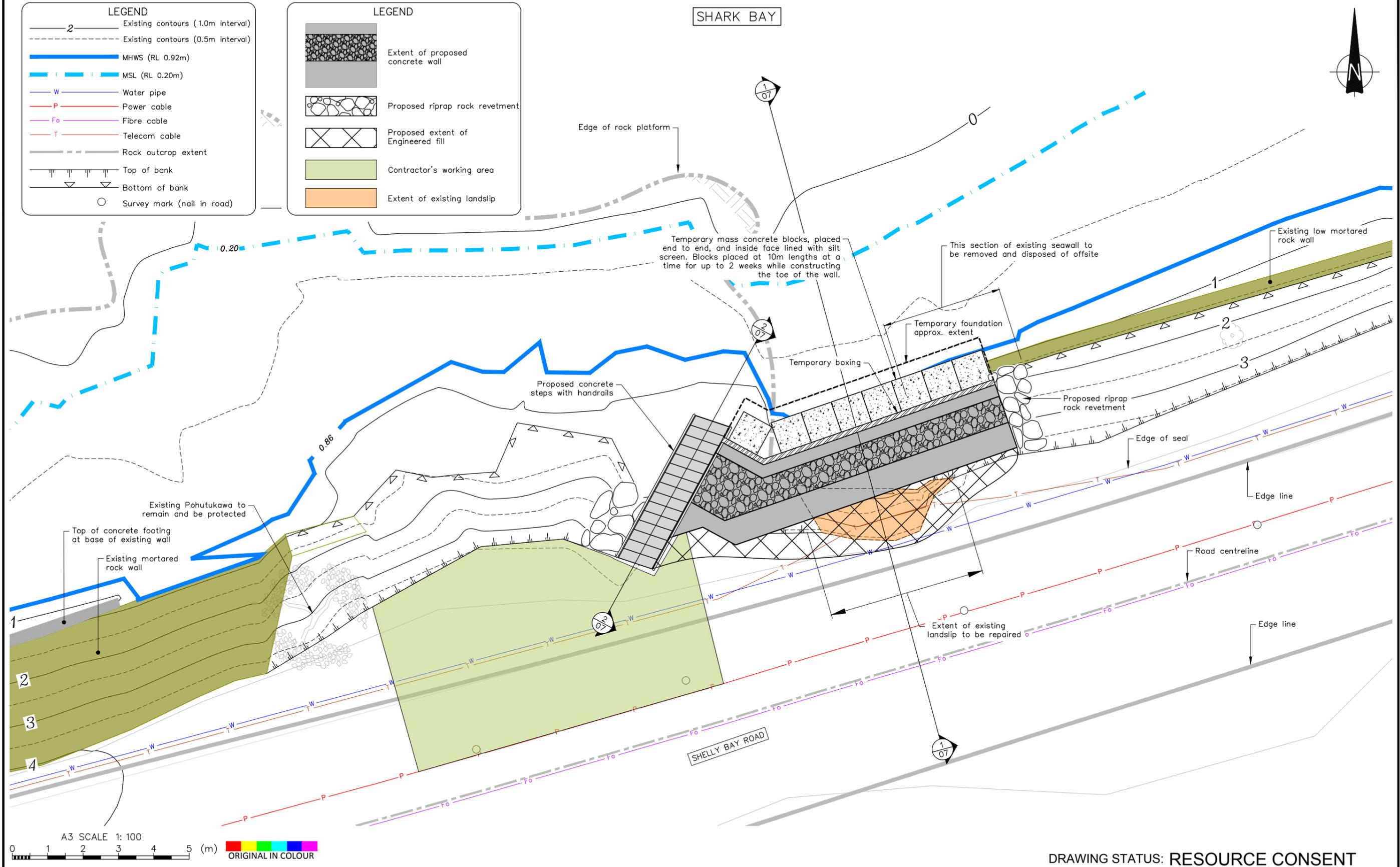
REV.
 1

LEGEND

	Existing contours (1.0m interval)
	Existing contours (0.5m interval)
	MHWS (RL 0.92m)
	MSL (RL 0.20m)
	Water pipe
	Power cable
	Fibre cable
	Telecom cable
	Rock outcrop extent
	Top of bank
	Bottom of bank
	Survey mark (nail in road)

LEGEND

	Extent of proposed concrete wall
	Proposed riprap rock revetment
	Proposed extent of Engineered fill
	Contractor's working area
	Extent of existing landslip



DRAWING STATUS: RESOURCE CONSENT

DESIGNED :	NVK	May.17
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DESIGN CHECKED :		
DRAFTING CHECKED :		
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APPROVED :	NOT FOR CONSTRUCTION	
This drawing is not to be used for construction purposes unless signed as approved		
REVISION DESCRIPTION	BY	DATE
1 Resource Consent		

NOTES :

1. Base drawings provided by Spencer Holmes Ltd. Reference data: "S16-0977-T1c 3D.dwg" - Revision B, dated 26/12/2017.
2. Coordinate Datum: NZGD2000, Wellington Circuit Coordinates. Origin: Lat 41 18 04S 174 46 35E 800,000mN 400,000mE Level Datum: LINZ (MSL) Wellington Vertical Datum 1953

REFERENCE :

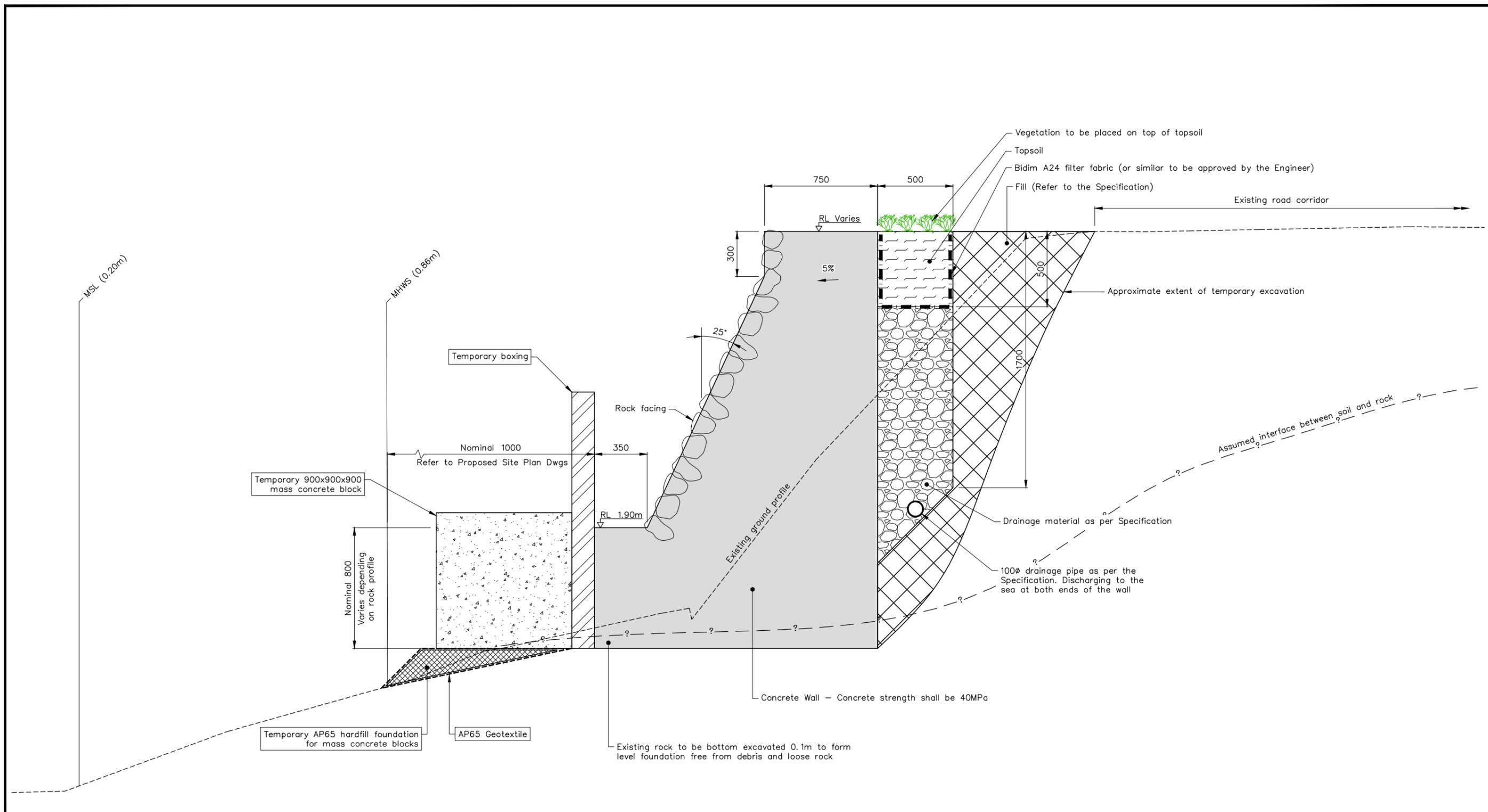
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CLIENT, PROJECT		
WELLINGTON CITY COUNCIL		
SHELLY BAY LANDSLIP REMEDIAL SOLUTIONS		
TITLE		
LAYOUT DRAWINGS		
Proposed Site Plan - Landslip 2		
SCALES (AT A3 SIZE)	DWG. No.	REV.
1: 100	1000807-05	1

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TYPICAL SECTION – SHOWING TEMPORARY FORMWORK
SCALE 1:25



DESIGNED :	NVK	Apr. 17
DRAWN :	AGDS	Apr. 17
DESIGN CHECKED :		
DRAFTING CHECKED :		
CADFILE :	\\1000807-06_10.dwg	
APPROVED :		
NOT FOR CONSTRUCTION		
This drawing is not to be used for construction purposes unless signed as approved		
REVISION DESCRIPTION	BY	DATE
1 Resource Consent		

NOTES :

- All dimensions are in millimetres unless noted otherwise.

REFERENCE :

Tonkin+Taylor

Level 4, 2 Hunter St, Wellington
Tel. (04) 381 8560 Fax. (09) 307 0265
www.tonkintaylor.co.nz

DRAWING STATUS: RESOURCE CONSENT

CLIENT, PROJECT	WELLINGTON CITY COUNCIL SHELLY BAY LANDSLIP REMEDIAL SOLUTIONS		
TITLE	SECTION DRAWINGS Typical Cross Section		
SCALES (AT A3 SIZE)	1:25	DWG. No.	1000807-06
REV.			1

Appendix D: Ecological Assessment

Wellington City Council
PO Box 2199
Wellington 6140

Attention: Jone Sumasafu

Dear Jone

Shelly Bay Road sea wall remedial works - desktop ecological assessment

In response to two recent landslips Wellington City Council Wellington City Council (WCC) has requested Tonkin & Taylor Ltd (T+T) assist them with preparing a resource consent for the construction of two temporary sediment control structures along Shelly Bay Road, Miramar, Wellington. The following letter report outlines a desktop ecological assessment of the project footprint and the surrounding area. This work has been undertaken in accordance with our letter of engagement to WCC dated 1 December 2016.

1 Introduction

WCC propose to undertake remediation works following two landslip events on the western side of the Shelly Bay Road which have undermined the edge of the road shoulder. The location of the two landslips are shown in Figure 1 below.

The proposed remediation method is to construct a rock-faced reinforced concrete sea wall at each landslip location. The sea wall structures are located above mean high water springs (MHWS) and are therefore permitted under the Wellington District Plan (WDP) as part of road maintenance activities. In order to construct the two sea walls a mass concrete block wall is required to be placed at the toe of each sea wall as a sediment control measure. Sections of the concrete block sediment control structure will be located below MHWS and therefore, within the coastal marine area (CMA). These concrete block sediment control structures will temporarily affect approximately 540 m² of the CMA.

The mass concrete block walls are 10 m in length and are comprised of 900x900 mm blocks which are placed on a flat foundation composed of imported gravel (AP65) wrapped in geotextile. The concrete block walls will be in place for a maximum of 18 weeks during the construction of the two sea walls at which time they will be removed.



Figure 1: Location of the two sites where landslips have occurred along Shelly Bay Road (Google Earth, 2017)

2 Assessment Methods

2.1 Ecological Characteristics and values

A desktop assessment was undertaken to review available information and data relating to the ecology of the project footprint and the surrounding area. This included the Greater Wellington Regional Council (GWRC) Proposed Natural Resources Plan (PNRP) and previous work undertaken by T+T in the surrounding area¹. Photographs from an initial site visit were also reviewed. Photographs from the two slip sites can be found in Appendix A.

2.2 Assessment of effects

Our assessment of ecological effects follows Ecological Impact Assessment guidelines (EclA) produced by the Environment Institute of Australia and New Zealand². The basis of the EIANZ assessment comprises a series of tables that are included in Appendix B for reference.

The EclA approach follows the steps outlined below:

- 1 Ecological values are assigned a level on a scale of Low, Moderate, High or Very High based on assessing the values of species, communities, and habitats identified against criteria set out in the EIA guidelines (Table B1);
- 2 The magnitude of the effect that the project is expected to have on ecological values is evaluated as being either No effect, Negligible, Low, Moderate, High or Very High (Table B2);

¹ Tonkin + Taylor Ltd. (2015). Breaker Bay seawall upgrade marine intertidal ecology assessment. Report prepared for Wellington City Council.

² Environment Institute of Australia and New Zealand. (2015). *Ecological Impact Assessment Guidelines for New Zealand*.

- 3 The overall level of effect is determined using a matrix that is based on the ecological values and the magnitude of effects on these values. Level of effect categories include No Ecological Effect, Very Low, Low, Moderate, Moderate/High, High and Very High (Table B3);
- 4 Matching up the overall level of effect with relevant RMA effects categories (e.g. significant, more than minor, minor and less than minor) (Table B4); and
- 5 The overall level of effect and the relevant RMA effects categories are used to determine if mitigation is required. Effects assessed as being 'Moderate' (EIANZ Guidelines) or 'More Than Minor' and greater (RMA effects categories), warrant efforts to avoid, remedy and mitigate or compensate for such effects.

3 Site description and existing ecological values

The two slip remediation sites are located along the western edge of Evans Bay in the Wellington Harbour. The coastal margin of Evans Bay in and surrounding the two slip remediation sites is characterised by rocky reef and narrow cobble beach habitat in the upper intertidal regions, with rocky platform habitat present in the lower intertidal and subtidal areas (Photographs 1-4). Previous work undertaken by T+T in nearby Breaker Bay found the upper intertidal cobble beach habitat to be generally devoid of surface marine benthic fauna, with low numbers of the modest barnacle (*Elminius modestus*), periwinkles, (*Nodolittorina spp.*), speckled top shell (*Melagraphia aethiops*), black nerita (*Nerita melanotragus*) and snakeskin chiton (*Sypharochiton pelliserpentis*) located in some areas where more stable habitat (such as rocky reef or seawalls) was present.

Under the PNRP, the Shelly Bay Road landslip remediation sites are located in an identified habitat for indigenous birds in the coastal marine area. This identified habitat includes the entire Wellington Harbour. A total of six 'threatened' or 'at risk' indigenous bird species are listed as either resident or regular visitors to the area. These species include fluttering shearwater (*Puffinus gavia*), variable oystercatcher (*Haematopus unicolour*), red-billed gull (*Chroicocephalus novaehollandiae scopulinus*), little black shag (*Phalacrocorax sulcirostris*), pied shag (*Phalacrocorax varius*) and white-fronted tern (*Sterna striata*). In addition to the species listed above it is also considered that the 'at risk' little blue penguin (*Eudyptula minor*) could potentially be present.

4 Assessment of ecological effects

4.1 Potential ecological effects associated with the proposed slip remediation works

The proposed slip remediation works will involve the temporary disturbance of a small area of cobble beach habitat. It is considered that the proposed slip remediation works could result in the following actual and potential effects on the ecology of Evans Bay:

- Temporary disturbance of 540 m² of rocky reef cobble beach habitat; and
- Potential temporary disturbance of foraging coastal birds.

4.2 Effects on ecology

A small area of rocky reef and cobble beach habitats will be temporarily disturbed as part of sediment control processes during the slip remediation works. The existing rocky reef and cobble beach habitats are common along the western edge of Evans Bay, as well as within the wider southern harbour area¹. Both of these habitat types are not good quality foraging habitat for coastal birds due to the limited presence of benthic fauna. Based on photographs of the slip sites, the habitat within the slip remediation sites are unlikely to provide nesting habitat based on the proximity to the road and because it is below the Mean High Water Spring level.

In accordance with the Ecological Impact Assessment Guidelines², habitat of 'Threatened' indigenous species is considered to be of Very High value. In this case, the PNRP lists several species as present in the Wellington Harbour, of which the pied shag and the red billed gull are considered 'Threatened'³. Therefore, the wider Evans Bay area is considered to be of Very High value to coastal birds.

However, the magnitude of the potential effects is considered to be Negligible due to the small size of the overall project footprint (540 m²) and because during the slip remediation works, any coastal birds foraging in the replenishment area will be able to use adjacent foraging areas within Evans Bay and the wider Wellington Harbour that are unaffected by the project. Furthermore, the existing habitat types in the slip remediation sites are not expected to provide nesting habitat for little blue penguin. Although surface benthic fauna are likely to be sparse, it is considered that the temporarily disturbed area would be rapidly re-colonised following the slip remediation works, and the cobble beach habitat has been reinstated.

Taking into account the Very High ecological value of the Evans Bay area due to the presence of 'Threatened' coastal bird species, but Negligible magnitude of effects, the overall ecological effect of the project is considered to be low and no more than minor in an RMA sense.

4.3 Proposed mitigation

Due to the small affected area by the project footprint compared with the wider Evans Bay and Wellington Harbour, and that the temporarily affected area will be re-colonised, we consider that no specific mitigation for the long-term effects on marine ecology is required.

Short-term, construction related effects may be managed by standard construction management techniques, appropriate storage of environmentally hazardous substances so that they do not find their way into coastal environments, and selection of tracking routes to, through and around the active construction site, which avoid areas of highest ecological value.

5 Conclusion

WCC propose to undertake remediation works following two landslip events on the western side of the Shelly Bay Road in Evans Bay, Wellington which will require two temporary sediment control structures to be constructed in the CMA. A desktop assessment to characterise the coastal marine species assemblages and habitat types, and to assess the ecological effects has been undertaken.

The coastal margin of Evans Bay in and surrounding the two slip remediation sites is characterised by rocky reef and narrow cobble beach habitat in the upper intertidal regions, with rocky platform habitat present in the lower intertidal and subtidal areas. Previous work undertaken by T+T in nearby Breaker Bay found the upper intertidal cobble beach habitat to be generally devoid of surface marine benthic fauna. Under the PNRP, a total of six 'threatened' or 'at risk' indigenous bird species are listed as either resident or regular visitors to the area.

An assessment of the actual and potential effects of the coastline rehabilitation has been undertaken. Taking into account the Very High ecological value of the Evans Bay area due to the presence of 'Threatened' coastal bird species, but Negligible magnitude of effects, the overall ecological effect of the project is considered to be low and no more than minor in an RMA sense.

³ Robertson, H.A., Dowding, J.E., Elliot, G.P., Hitchmough, R.A., Miskelly, C.M., O'Donnell, C.F.J., Powlsland, R.G., Sagar, P.M., Scofield, R.P. and Taylor, G.A. (2013). *Conservation status of New Zealand Birds, 2012*. New Zealand Threat Classification Series 4. Department of Conservation: Wellington.

6 Applicability

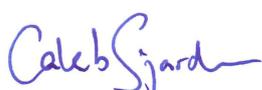
This report has been prepared for the exclusive use of our client Wellington City Council, with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose, or by any person other than our client, without our prior written agreement.

Tonkin & Taylor Ltd

Environmental and Engineering Consultants

Report prepared by:

Authorised for Tonkin & Taylor Ltd by:



.....
Caleb Sjardin

.....
Mark Taylor

Marine Ecologist

Project Director

cjns

t:\wellington\tt projects\1000807\phases 1-4 inspection, design, consenting\workingmaterial\ecology\cjns 120517 shelly bay eco assessment.docx

Appendix A: Photographs



Photographs 1 and 2: Photographs of Landslip 1 along Shelly Bay Road. Photograph on left: View of the head scarp looking north. Photograph on right: View of the head scarp and landslip debris looking south (Source: T+T, 2016)



Photographs 3 and 4: Photographs of Landslip 2 along Shelly Bay Road. Photograph on left: View of the head scarp looking north. Photograph on right: View of the slip face from the base of the slope in the CMA. (Source: T+T, 2016)

Appendix B: EclA guidelines summary tables

Table B-1: Assignment of values to species, vegetation and habitats

Value	Species Values	Vegetation/Habitat Values
Very High	Nationally Threatened - Endangered, Critical or Vulnerable, or a resource which is of national commercial importance.	Supporting more than one national priority type. Nationally Threatened species found or likely to occur there, either permanently or occasionally.
High	Nationally At Risk - Declining, or a resource which is of regional commercial importance.	Supporting one national priority type or naturally uncommon ecosystem. At Risk - Declining species found or likely to occur there, either permanently or occasionally.
Moderate-high	Nationally At Risk - Recovering, Relict or Naturally Uncommon, or a resource which is of local commercial importance.	N/A
Moderate	Not Nationally Threatened or At Risk, but locally uncommon or rare	Locally rare or threatened, supporting No Threatened or At Risk species.
Low	Not Threatened Nationally, common locally	Nationally or locally common, supporting no Threatened or At Risk species.

Table B-2: Summary of the criteria for describing the magnitude of effect

Magnitude	Description
Very High	Total loss or major alteration to one or more key elements or features of the existing baseline conditions; Loss of high proportion of the known population or range of the element / feature.
High	Major loss or alteration to one or more key elements of existing baseline conditions; Loss of high proportion of the known population or range of the element / feature.
Moderate	Loss or alteration to one or more key elements of existing baseline conditions; Loss of a moderate proportion of the known population or range of the element / feature.
Low	Noticeable shift away from existing baseline conditions; Change arising from the loss/alteration will be discernible, but underlying character, composition and/or attributes of the existing baseline condition will be similar to pre-development; Plus effect on the known population or range of the element / feature.
Negligible	Very slight change from the existing baseline physical or chemical conditions; change barely distinguishable from the 'no change' scenario; No measurable effect on the known population or range of the element / feature.
No effect	No detectable change in physical, chemical or biological parameters.

Table B-3: Criteria for describing overall levels of ecological effects

Magnitude of effect	Ecological Value			
	Very high	High	Moderate or Moderate-High	Low
Very high	Very high	Very high	High	Moderate
High	Very high	Very high	Moderate-High*	Low
Moderate	Very high	High	Low	Very low
Low	Moderate	Low	Low	Very low
Negligible	Low	Very low	Very low	Very low
No effect	No ecological effect	No ecological effect	No ecological effect	No ecological effect

*Overall ecological effect is considered to be "High" if ecological value is considered to be "Moderate-high" in Table 5-1 of the EIANZ guidelines, otherwise overall ecological effect is considered to be "Moderate".

Table B-4: Interpretation of assessed ecological effects against standard RMA terms

Ecological Effects	Description
No effect	No effects at all
Less than minor adverse effects	Adverse effects that are discernible day-to-day effects, but too small to adversely affect ecological value
Minor adverse effects	Adverse effects that are noticeable but that will not cause any significant adverse impacts
More than minor adverse effects	Adverse effects that are noticeable that may cause an adverse impact but could be potentially mitigated or remedied
Significant adverse effects that could be remedied or mitigated	An effect that is noticeable and will have a serious adverse impact on the environment but could potentially be mitigated or remedied
Unacceptable adverse effects	Extensive adverse effects that cannot be avoided, remedied or mitigated

