Tupua Horo Nuku.

Whiorau (Lowry) Bay - Design Protocols

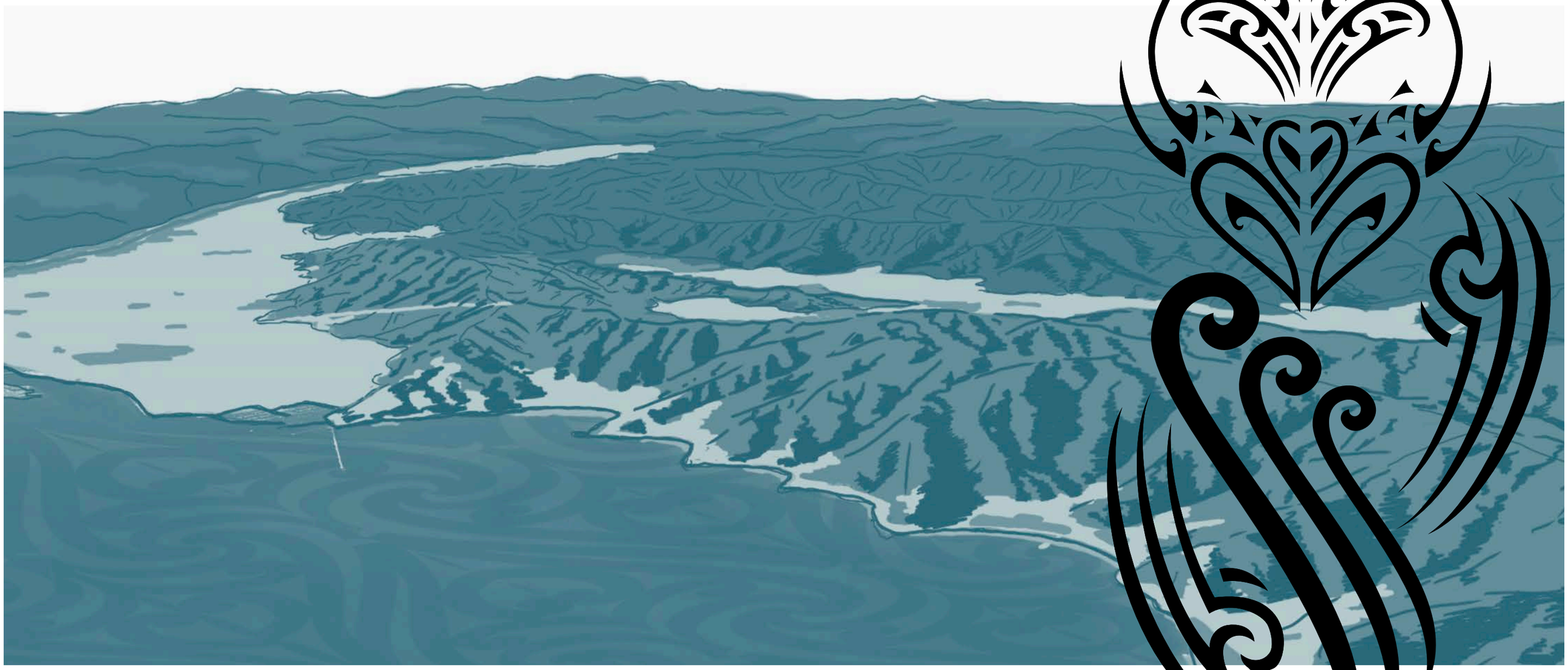
Eastern Bays Shared Path

NKP-TAT-THN-PLN-LS-LS-000004.

23 May
2024

Te Ara Tupua Alliance
Shifting gear to connect past, present and future

HUTT CITY
TE AWA KAIRANGI



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Contents

Tupua Horo Nuku
Eastern Bays

The Eastern Bay area encapsulates many wahi tapu from Te kongutu o Te Awa Kairangi to Te Waha o te Ikanui. Its beginnings emanate out of the power and mana of Tupua-horo-nuku (evolving mass of solid matter), known as the tupua, Ngake.

Instructed by the mountain clan people who were summoned to the head of the fish, gathering on Pukeatua where they were gifted the appropriate incantations to prise open the mouth of the great catch of Māui-tikitiki-a-Taranga to enable it to breathe again, where they summoned from the great depths of Rua Tupua and Rua Tawhito of the fresh water lake who brought forth Tupua-horo-nuku and Tupua-horo-rangi.

Tupua-horo-nuku, Tupua-horo-rangi
Tai kukume mai takiwā ia mouri e runga
Kia horo wawe mouri e raro koi ikaroa[1]

The narrative of the eastern bay speaks of and highlights "te ihi, te wehi me te mana nui o Tupua-horo-nuku."

Te Awa Kairangi, formed out of the raging whip lashing tail of Ngake as he wound himself up into a frenzy, generating and amassing energy and power, splitting the land mass immediately behind him lacerating Papatūānuku, imbuing "te ara mouri" inland to the Tararua and Remutaka. Whilst at the same time hurling himself towards the barriers hearing the pounding and thunderous waves smashing in the distant. Smashing his way out from his land lock imprisonment to freedom unto Hinemoana and Tangaroa. In his destructive escape came forth the islands of the harbour later to be named by Kupe the pacific navigator, and as centuries passed the peopling of Te Wai-manga arrived gifting new names later to be suppressed through imperialistic and colonial methodologies which are still impacting on us since their arrival in 1769.

Tēnei te ara kei runga
Tēnei te ara ō Ranginui e tū nei
Tēnei te ara o Papatūānuku e takoto nei...[2]

Ripiripia te ika nui
Haehaea te ika roa
Ka hora, ka hora te kai ki a Tamanuiterā
Ka hora, ka hora te kai ki a Tāwhiri-mātea...[3]

Immediately following the severing, Hine-wai-tootaa and Hine-kōrako went about their duties caressing and gently healing Papatūānuku. Calling upon their sister Hine-wairere they asked her if she could follow the scarification marks of Papatūānuku until she was fully covered to sooth her skin to ease the pain. To this day they still nurture and care for her.

Te Awa Kairangi like many rivers began its life through the kuia Hine-wai-tota, Hine-kōrako and Hine- wairere, being the ancestress of condensation, lunar droplets and water flow gathering on the many peaks on both sides of the river. Fed by melting snow, ice and rainwater running off the land, the collective of droplets follows cracks and crevices within the landscape formed out of the raging whip lashing of the tail of Ngake (seismic activity) in his attempt to escape to freedom from his land lock lake imprisonment.

The many small tributaries joining together growing larger forming the collective mass of Te Awakairangi, flowing every second of the day. The following whakatauaaki encapsulates who the people of Te Ātiawa are and our responsibility for the water and the whenua.

Te Ātiawa tupua rau, he auripo i te manga iti, he auripo i te manga nui rānei, he kaitiaki ki te whenua [4]

Te Ātiawa of many phenomena's, where there is a ripple in a small tributary or great river, there is a guardian and protector on the land.

Over time the continuous flow of Te Awa Kairangi has shaped the landscape moving and wearing away rock, carving out a network of valleys eventually reaching the lower grounds, widening and reaching the point where the fresh water meets the salt water.

Whakapakarukaru puare te waha o te ika roa
Te hononga o ngā wai e rua...[5]

The Eastern Bay commences at the meeting of the waters.

1 He karakia nō te kainga
2 He karakia nō te kainga
3 He karakia nō te kainga
4 Nā Kura Moeahu whakahī
5 He karakia nō te kainga

Tupua Horo Nuku
The Pathway

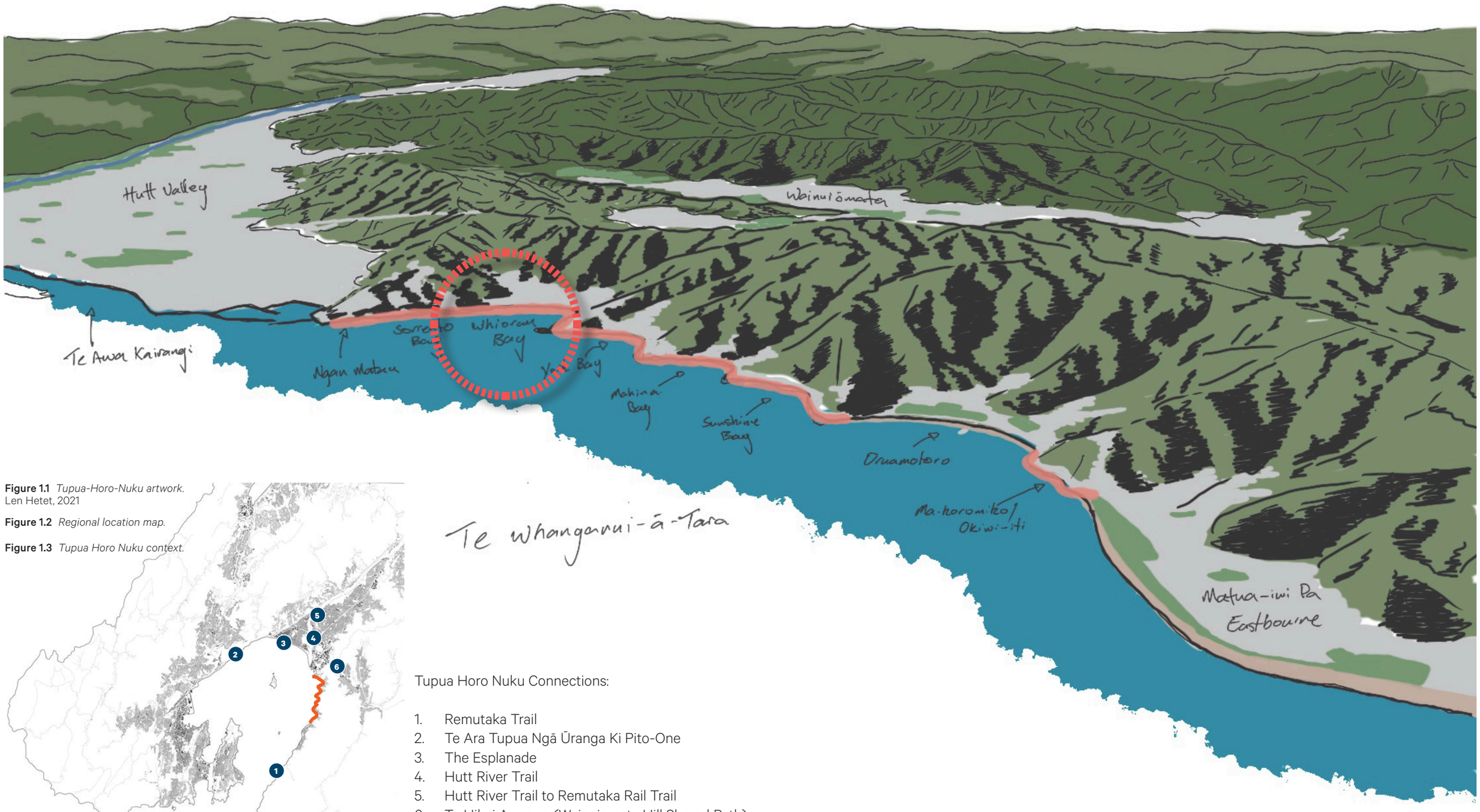


Figure 1.1 *Tupua-Horo-Nuku artwork.* Len Hetet, 2021

Figure 1.2 *Regional location map.*

Figure 1.3 *Tupua Horo Nuku context.*

Tupua Horo Nuku Connections:

1. Remutaka Trail
2. Te Ara Tupua Ngā Ūranga Ki Pito-One
3. The Esplanade
4. Hutt River Trail
5. Hutt River Trail to Remutaka Rail Trail
6. Te Hikoi Ararewa (Wainuiomata Hill Shared Path)

Introduction

Purpose & Objectives

The purpose of the Bay Specific Urban Design Plan (BSUDP) is to provide bay specific detailed design for the Project responding to local landscape character, identity and land use, in the broader context of the Landscape and Urban Design Plan (LUDP).

Consent conditions for the Eastern Bays Shared Path (Tupua Horo Nuku) guide the content of the BSUDP and the preceding LUDP. The conditions outline the purpose of the management plans, the contents of the plans, expert inputs, stakeholders to be consulted, the approval and certification process and how to manage disputes. Community aspirations, engineering constraints with urban design and landscape layers are applied to achieve a unique bay specific design, integrated with the Eastern Bays Shared Pathway.

Relevant Consent Conditions

LV.5 The LUDP shall include the final BSUDPs for each bay within the Project area. The final BSUDPs shall address detailed design within the particular bay for the benefit of pedestrians, cyclists and others using the local road network as well as the specific urban design, landscape, ecology and recreational amenity matters (including those listed in Condition LV.7) as relevant to the particular bay.

The final BSUDPs may be prepared later and added to the LUDP on a staged basis if the Construction Works are staged bay by bay and individually certified under Condition LV.6.

LV.6 The BSUDPs shall be prepared by the Consent Holder in two stages for each bay:

(a) Stage 1: A draft design protocol that sets out the priorities for the bay design in terms of engineering, safety and access and mobility requirements as well as ecology, natural character, landscape, urban design and recreational amenity elements and issues. The draft design protocol shall provide visual representations of best practice on comparable coastal Shared Path Projects to demonstrate the level of design to be targeted. The protocol shall be provided to the relevant Resident Association for the affected bay (if any). The East Harbour Environment Association and the Eastbourne Community Board for comments (if any) within 15 working days from receipt.

Any comments received, and the Consents Holder's response and reasons if they are not accepted, are to be provided to the Manager, Environmental Regulation, and Team Leader, Resource Consents alongside the draft design protocol, within 20 working days from receipt of the comments.

(b) Stage 2: The final BSUDPs are to be certified either on their own (in accordance with Condition GC.5) or, if included in the initial LUDP, when the LUPD is certified under Condition LV.1.

LV.7 The BSUDPs shall include specific landscape and urban design details for:

(a) Seawall structures, including transition zones between seawall types and transitions between natural or rocky areas and seawall structures;
(b) Beach access including steps, ramps and associated handrails where required, so that people wishing to access the beach can do so safely;
(c) Safety barriers and railing and screening barriers between important habitat for Shoreline Foragers and the Shared Path;
(d) The treatment of stormwater structures at the coastal interface;
(e) Little Penguin and Shoreline Forager related structures including penguin passage elements, ramps, nests, boxes and wooden poles for roosting;
(f) Planting treatment;
(g) The treatment of existing trees and existing landscape and natural features;
(h) The design and area of space available for recreational amenity activities;
(i) The design and orientation of features, spaces and access points;
(j) Refuge and seating opportunities, including size and arrangement of space to allow for stopping and gathering at frequent intervals distributed along the route;
(k) Signage ensuring their consistency along the Shared Path, including branding and reduction of visual clutter;
(l) Storyboards;
(m) Surface treatments;
(n) Any other relevant matter for that bay necessary to achieve the purposes of the LUDP in condition LV.2.

Structure

In satisfying Conditions LV.5 - LV.7 of the Resource Consent the Draft Design Protocol process informing the BSUDPs is:

- Illustrate bay locations and describe the landscape context.
- Ascertain draft priorities for each bay. Priorities include issues involving: safety, access and mobility; engineering; ecology; natural character; landscape; urban design; and recreational and amenity elements.
- Show visual representations of best practice through precedent examples of comparable Shared Path Projects.
- Outline landscape and urban design approaches and principles for each bay to set the scene for design plans and details.
- Develop an illustrative schematic plan for each bay.

Consultation

Summary of consultation process

The consultation process for Whiorau/Lowry & Sorrento Bay was further adapted from the previous consultations to streamline the process without compromising the extent of the engagement.

In accordance with condition LV.6 the consultation on the Bay Specific Urban Design Plans will be completed by providing the draft Design Protocol to the specified groups. Concurrently to this, the plans will also be published on the Hutt City Council website to allow for feedback from the wider public.

This consultation is for bays 1 and 2 of Tupua Horo Nuku. It gives residents and relevant interest groups the chance to have their say on the elements of the designs. If required, this may lead to a subsequent consultation period.

Prior to the release of the draft protocols, a meeting will be set up between representatives of the Alliance and named organisations.

1. Set meeting between Alliance and named organisations
2. Send BSUDP consultation and note 15 working day timeframe for comments. Draft BSUDPs also published online via Hutt City Council HaveYourSay engagement website.
3. Create comments and responses document within 20 working days
4. Update BSUDP
5. Submit for certification.

After the first round of consultation, the Alliance felt that all matters raised had been appropriately addressed. Therefore, the team did not proceed with a subsequent consultation.

Timeline for consultation on Ngau Matau/ Pt Howard, Sorrento Bay and Whiorau/Lowry Bay*	
Early November 2023	Briefing to Eastbourne Community Board at regular meeting
Mid November	Development of draft BSUDP
23 November	Meeting with Alliance, Eastbourne Community Board, Lowry Bay Residents Association and Point Howard Residents Association
24 November	Meeting with Alliance and East Harbour Environment Association
24 November 2023	Draft BSUDPs circulated to ECB, EHEA, Lowry Bay Residents Association and Point Howard Residents Association and published online with survey
27 November-15 December	Comments window (15 working days) – team available for further questions and discussions in this time. Prompt to be sent one week prior to deadline.
2 February	Compile response to community comments (20 working days, and holiday shutdown period).
March 2024 (date TBC)	BSUDPs updated, finalised, submitted for certification and circulated back to community.

*The Alliance and Hutt City Council are continuing to engage with members of the Ngau Matau, Sorrento Bay and Whiorau Bay community around some design elements. If these discussions result in material amendments to the BSUDP, the process outlined in resource consent condition GC.5 will be adhered to.

Consultation Matrix

Summary Table.

Location	*Comment Title*	*Raised by*	*Desciption*	*Project Team Response*
General	Bus stops	Eastbourne Community Board	Bus shelter design needs more protection from weather, waves, etc than the standard design provides, especially at ground level.	**Not accepted.** A standardised design is required by GWRC with potential for adaptations to suit the conditions within the bay. Due to the size and nature of the existing shelters, it was determined that the new shelters provided greater accessibility (by being able to provide ramps and a platform), as well as improved visibility and safety for users. The existing bus shelters will now be replaced with standard GWRC shelters. These will, to the greatest extent practicable, be designed taking into account the following design principles: (a) A preference that the shared path run behind the bus stop/ shelter; (b) The bus stop / shelter will be raised (separated with a kerb from the traffic lane where possible); (c) The bus stop / shelter will be designed in accordance with universal accessibility principles (such as, but not limited to, wheelchair friendly ramps and tactile pavers); and (d) Bus stop / shelter design will be fit for purpose to appropriately protect public transport users from the coastal elements under relatively frequent events. With these principles in mind, the standard GWRC shelter will be used. The entrance point will be modified to provide further protection from the elements.
Lowry Bay	Bus stops	Lowry Bay Residents Association	Current bus stop has a partially fenced area for children's safety as they get the school bus to Muritai. New design needs to have something in place for child's safety at bus stop. Concern bus stop is too close to the road. Request that safety standards are, at minimum, equal to safety features at current stop.	The footpath between the road and shelter is 1.2m wide with a raised kerb. This setback should help with safety for people waiting at the bus stop. A site safety audit will be completed after construction and before the shared path opens. This will consider whether any additional safety features are required.
General	Bus stop design	Online	Glass bus stops are graffiti prone, concern these will be quickly defaced. Can we make them more visually interesting as a deterrent?	**Not accepted.** The inclusion of bus stop artwork is not within the Alliance's scope.
General	Bus stops	Online	Comment to support switching to standard bus stops. Comment to support path going behind bus stops.	**Noted.**
General	Bus stops	East Harbour Environment Association	Not convinced design is satisfactory for exposed coastal condition. Request meeting with alliance reps, GWRC and Metlink to discuss design.	A standardised design is required by GWRC with potential for adaptations to suit the conditions within the bay. Due to the size and nature of the existing shelters, it was determined that the new shelters provided greater accessibility (by being able to provide ramps and a platform), as well as improved visibility and safety for users. The existing bus shelters will now be replaced with standard GWRC shelters. These will, to the greatest extent practicable, be designed taking into account the following design principles: (a) A preference that the shared path run behind the bus stop/ shelter; (b) The bus stop / shelter will be raised (separated with a kerb from the traffic lane where possible); (c) The bus stop / shelter will be designed in accordance with universal accessibility principles (such as, but not limited to, wheelchair friendly ramps and tactile pavers); and (d) Bus stop / shelter design will be fit for purpose to appropriately protect public transport users from the coastal elements under relatively frequent events. With these principles in mind, the standard GWRC shelter will be used. The entrance point will be modified to provide further protection from the elements.
General	Bus stops	East Harbour Environment Association	If there's 1.2m of path in front of bus stops, can path be narrowed behind to 2 or 1.5m to reduce impact on CMA or increase depth of shelter?	**Not accepted.** To provide a safe path along the length of Tupua Horo Nuku, the minimum width of 2.5m needs to be maintained. This is particularly important at potential conflict zones, such as bus stops.

Summary Table.

Location	*Comment Title*	*Raised by*	*Desciption*	*Project Team Response*
General	Bus stops / place making	East Harbour Environment Association	Current bus stops are unique designs. Can new bus stops be painted in unique way to represent each bay?	**Not Accepted.** The inclusion of bus stop artwork is not within the Alliance's scope.
Lowry Bay	Balustrades	East Harbour Environment Association	Balustrade at north end of Lowry Bay will likely get damaged in southerly/storm events – should be double wide seawall with bench? Can they have a modular design so they're cheap/easy to replace? Can they be angled outwards with inner rail for cyclists?	**Partially accepted.** A review is underway to balance path user safety and coastal area footprint to minimise the lengths of balustrade. The Balustrade has been designed to meet New Zealand standards for wind loading and is a permeable structure to minimise damage under extreme wave loading events. The barrier is not modular but parts that get damaged can be replaced with ease. All balustrades are angled seaward with an inner rub rail.
	Patterns on path	East Harbour Environment Association	Can some of the patterns to be etched on the path be designed by locals/ residents?	**Not accepted.** Working alongside our mana whenua partners the urban design and cultural narratives including decorative paving, layout and art will be conducted through select iwi artists, in order to convey the cultural narrative appropriately.
Lowry Bay	Seats on seawall	East Harbour Environment Association	For Lowry Bay, where there may be more space, could timber steps be built over the finished sea wall with the dual function of steps and seating? This area is reasonably sheltered and timber structures seem to survive.	**Not accepted.** Recreational access has been provided in the design at safe locations. In Lowry Bay beach, there may be opportunity for people to choose to sit on the 'bench' of the seawall during appropriate tidal conditions. The seawall is designed for expected future storm events. Timber is likely to wear and get damaged quickly. Adding additional stairs could compromise the seawall's effectiveness during storm events.
General	Beach nourishment	East Harbour Environment Association	Needs long term plan to maintain – could rocks be strategically placed at beach ends to help retention?	**Not Accepted.** The resource consents do not allow for any additional engineering modifications (eg groynes). The seawall is designed to be stable even with depletion of beach sediments over the design life of the seawall.
		Online	What's the commitment for maintenance? Lots of beach is washed onto the road to be swept back, will the new design increase sand washing onto the road?	Modelling indicates that material will be relatively stable in the short- to medium-term. It is acknowledged that over the long-term, material may be lost due to sea level rise and gradual depletion if not managed (i.e. replenished). It is not expected that the new seawall or beach nourishment will increase the quantity or frequency of sand migrating onto the path. However, the impact of future sea level rise on the storm events is uncertain and this may increase the amount of sand and debris that is washed onto the shared path and carriageway. The shared path will form part of HCC's standard maintenance programme for the wider city.
General	Beach access	Lowry Bay Residents Association	Lowry Bay beach has informal access along its length - people can step off the road anywhere and be on the beach. The seawall will limit this informal access.	**Not accepted.** Access locations are based on the resource consent documents and these formalise safe access to the beach. These are based on keeping a similar number of access points that are currently present, as well as the safe transition of people on to the beach with the introduction of the new seawall.
		Online	Can more formal access points be considered? Suggestions include Cheviot Road, Gill Road, Taumaru Avenue and Kaikoura Path and steps at the bus stop. Without a handrail, the ramp at the bus stop will be dangerous when wet or covered with algae.	Beach access has been provided at Cheviot Road via a ramp with handrail and stairs located at Taumaru Avenue. These locations provide dry access at either end of the beach. No access point is proposed at Kaikoura Path to be consistent with the resource consent documents. The existing informal Gill Road steps will be removed given the proximity to the steps at Taumaru Avenue. All new ramps will have handrails for accessibility.

Summary Table.

Location	*Comment Title*	*Raised by*	*Desciption*	*Project Team Response*
Lowry Bay	Beach access ramp	Online	One comment asking for a ramp at south end of Lowry Bay for wheelchair user/ parents with strollers, kayakers etc.	**Not accepted** There is a ramp at the northern area and stairs at the southern end of Lowry Bay beach. A second ramp on this beach would significantly impact the amount of beach space available.
			One comment saying ramps can get slippery, steps are safer option.	New ramps will have handrails and provide additional accessibility. Concrete ramp design maximises the quality of the surfaces but there is potential for some marine growth in the intertidal areas. Stairs are provided at several locations as an alternative access.
General	Kerb blocks	Eastbourne Community Board	Kerb blocks too close together, makes it difficult for prams, wheelchairs, kayaks, cyclists, etc to access.	**Partially Accepted.** This has been considered and breaks in the continuity of the kerb blocks are proposed between bus stops and pedestrian crossing locations. These breaks give path users the opportunity to leave the path and encourage road crossing at safer locations.
		Lowry Bay Residents Association	Removing every third or fourth barrier could solve issues.	
		Online		
Lowry Bay	Boat sheds	Eastbourne Community Board	Looking forward to further consultation on both boat sheds. Blue boat shed is not historical.	**Noted.** HCC are currently in discussion with the occupier of the land and blue boatshed with regards to its future status.
		Online	Comment to support moving boat sheds.	HCC will lead a separate consultation on the future of the boatsheds.
Lowry Bay	Stair design	Lowry Bay Residents Association	Steps with the turn limit accessibility for kayaks, prams, etc. Can there straight stairs?	**Not accepted.** The turn in the stairs is designed to reduce impact on the beach area. A straight line stair design would pave over more beach area or make the steps steeper which could limit accessibility.
		Eastbourne Community Board	Can steps be wooden with a handrail (and built in strategic places)?	Ramps are provided to allow for kayak and wheelchair access at some locations. Concrete steps are more durable, creating safer access over the expected lifespan of the asset.
Lowry Bay	Beach facilities	Lowry Bay Residents Association	Please note our concern that building the beach up and making it sandier may increase its popularity, but there's no corresponding increase in facilities, carparks, etc.	**Noted.** Tupua Horo Nuku is designed to improve the resilience and accessibility of the eastern bays along Marine Drive, including Lowry Bay beach. The provision of additional amenities is not part of the scope of the project. The requests for additional amenities will be passed on to HCC for future consideration.
Lowry Bay	Path sweeping	Lowry Bay Residents Association	Request for a path clearing/sweeping maintenance plan to be included in the design.	**Noted.** The shared path will form part of HCC's standard maintenance programme for the wider city.
Lowry Bay	Breakwater	Lowry Bay Residents Association	Request for a breakwater in northern end of Lowry Bay or extension of existing one at Whiorau Reserve.	**Not accepted.** Tupua Horo Nuku's resource consents and project scope do not allow for a breakwater structure.
Lowry Bay	Memorial plaque	Online	Can I sponsor a suitable bench in Lowry Bay to have a memorial plaque?	**Noted.** This has been passed on to HCC for consideration.
Lowry Bay	Pedestrian crossing	Online	Can we have a pedestrian crossing near the bus stop?	**Not accepted.** This is out of scope for this project but will be passed along to HCC for future consideration.

Summary Table.

Location	*Comment Title*	*Raised by*	*Desciption*	*Project Team Response*
Lowry Bay	Seawall height	Online	High likelihood of king tides overtopping the seawall, wouldn't it make sense to be conservative from the outset and build higher?	**Not accepted.** The project budget and resource consent currently allow for a seawall that ties into the existing road levels. The team are considering options to allow for future proofing against the effects of sea-level rise. However, this decision needs to be considered in line with project affordability.
General	Education campaign	Online	Please do an education campaign as to the purpose of a shared path – e.g. not a racetrack for cyclists.	The project does not include this type of education campaign. However, we will consider opportunities for messaging around this in project communications.
General	Shared path signage	Online	Two comments for signs/restrictions of speed on shared path.	**Not accepted.** Currently there is no plan for speed restrictions on the path. Ongoing reviews of path use will be necessary to determine if controls are required.
General	Asphalt	Online	Can a soft but tough asphalt be used to discourage seagulls using the shared path to open shells?	**Not accepted.** There is a mix of asphalt and concrete surfaces along the path length. These were selected to balance initial capital cost and maintenance costs. There is no plan to do any further review of these materials.
General	Seaweed regeneration	Online	Attempt speculative seeding of shellfish spat and seaweed along the areas disrupted by the seawall construction.	**Not accepted.** The project has a seagrass management plan to minimise environmental impacts.
General	Path access	Online	Please consider how children and elderly people can safely get on the path from across the road.	**Noted.** Existing pedestrian crossings, and breaks in the continuity of the kerb blocks have been retained / proposed in locations where it is safest to cross the road, and / or join the shared path.

Compliance Matrix

Consent Condition	Response
LV 5.	
The LUDP shall include the final BSUDPs for each bay within the Project area. The final BSUDPs shall address detailed design within the particular bay for the benefit of pedestrians, cyclists and others using the local road network as well as the specific urban design, landscape, ecology and recreational amenity matters (including those listed in Condition LV.7) as relevant to the particular bay. The final BSUDPs may be prepared later and added to the LUDP on a staged basis if the Construction Works are staged bay by bay and individually certified under Condition LV.6.	The final Whiorau Bay BSUDP will be individually certified and attached to the LUDP on completion.
LV 6	
The BSUDPs shall be prepared by the Consent Holder in two stages for each bay:	
(a) Stage 1: A draft design protocol that sets out the priorities for the bay design in terms of engineering, safety and access and mobility requirements as well as ecology, natural character, landscape, urban design and recreational amenity elements and issues. The draft design protocol shall provide visual representations of best practice on comparable coastal Shared Path Projects to demonstrate the level of design to be targeted. The protocol shall be provided to the relevant Resident Association for the affected bay (if any) The East Harbour Environment Association and the Eastbourne Community Board for comments (if any) within 15 working days from receipt. Any comments received, and the Consents Holder's response and reasons if they are not accepted, are to be provided to the Manager, Environmental Regulation, and Team Leader, Resource Consents alongside the draft design protocol, within 20 working days from receipt of the comments.	This draft design protocol sets out relevant priorities for engineering, safety and access and mobility requirements as well as ecology, natural character, landscape, urban design and recreational amenity elements and issues. This design protocol reflects the aspirations and objectives of the LUDP. This draft design protocol will be issued to all relevant parties.
(b) Stage 2: The final BSUDPs are to be certified either on their own (in accordance with Condition GC.5) or, if included in the initial LUDP, when the LUDP is certified under Condition LV.1.	Final Whiorau Bay BSUDP to be developed and certified following completion of LV6(a).

Consent Condition.	Response	Page ref
LV 7.		
The BSUDPs shall include specific landscape and urban design details for:		
(a) Seawall structures, including transition zones between seawall types and transitions between natural or rocky areas and seawall structures;	In general, colonised rock will be placed below mean high water springs (MWHS) and non-colonised rock will be placed above MHWS at the seawall transitions (if appropriate). The placement of rock will occur under the guidance of the Project Ecologist and Project Landscape Architect as required.	12-17, 20-21
(b) Beach access including steps, ramps and associated handrails where required, so that people wishing to access the beach can do so safely;	Mini steps with handrails have been located along the extent of Whiorau Bay as well as an accessible ramp to access the beach. The construction of additional ramps and access points beyond that shown would increase the amount of reclamation and occupation of the coastal marine area.	12-17, 22

Consent Condition	Response	Page ref
(c) Safety barriers and railing;	It is a legal requirement to include features that prevent people from falling from heights of 1m or more, where serious injury could result - particularly to children or other vulnerable people. In some places this can be achieved by using a wider 'step' or ledge in the double-curve seawall design. This takes up space and the footprint over which the Shared Path can be built is limited. The New Zealand Building Code required that any new structure with a potential fall from height of greater than 1 metre have fall prevention measures (generally balustrades). In the situation where balustrades have been specified on this Project, there is insufficient space to allow for the wide fall mitigation platforms (as used elsewhere) to be used without considerable encroachment into the coastal marine area (CMA).	Pg 22
(d) The treatment of stormwater structures at the coastal interface;	Stormwater outlets will be in-situ sections between pre-cast wall units. The outlet will sit within the curved seawall via a concrete housing which visually integrates the pipe to the seawall.	Pg 22
(e) Little Penguin and Shore Forager related structures including penguin passage elements, ramps, and wooden poles for roosting;	There are no Little Penguin and Shore Forager related structures proposed in Whiorau Bay. However, the proposed seawall design will help stop penguins from accessing the path and road.	Pg 24
(f) Planting treatment;	Planting has been included at the bus stop area. Plant species will be chosen from the Plant Palette within the LUDP that has been developed with the Project Ecologists.	Pg 24
(g) The treatment of existing trees and existing landscape and natural features;	There are no existing trees along the coastal edge in Whiorau Bay. The treatment of landscape is sympathetic to that which is existing.	Pg 11, 12-13, 7, 24
(h) The design and area of space available for recreational amenity activities;	The BSUDP has provided the design and area of space available for recreational and amenity values in accordance with Condition LV.7(h). We consider that our design provides the best solution in the circumstances as it falls within the consented footprint, does not increase the overall CMA reclamation, and provides a useable pathway.	Pg 12-17, 25 - 26
(i) The design and orientation of features, spaces and access points;	Refuge spaces are located to balance user needs, community preference, utilise retained existing trees for their character and amenity benefits, avoid encroachment on beaches as well as fit within CMA consented footprint. We note that creating further refuge spaces and access points would likely increase the area of the CMA occupied and/or reclaimed, which is not authorised by the resource consents.	Pg 12-17, 25 - 26
(j) Refuge and seating opportunities, including size and arrangement of space to allow for stopping and gathering at frequent intervals distributed along the route;	In Whiorau Bay we are only providing continued seating at the bus stop. This helps avoid encroachment into the CMA.	Pg 12-17, 25 - 26
(k) Signage ensuring their consistency along the Shared Path, including branding and reduction of visual clutter;	Signage will be designed so it is integrated into landscape elements to reduce visual clutter along the Shared Path. This approach is consistent across all bays.	Pg 25 - 26
(l) Storyboards;	The Alliance is taking a culturally led approach and therefore Mouri markers are used as the main interpretation method for the pathway in Whiorau Bay. Consideration of ecological and other local history as a second layer to be shared will be made through the detailed design process.	Pg 27
(m) Surface treatments;	A robust palette of materials is used to ensure visual cohesiveness and quality. Predominantly asphalt with sections of concrete. Concrete will also be used for areas where cultural graphics will be applied to the path.	Pg 27
(n) Consideration of a minimum 3 m path width for York Bay only (for a 90 m length south of the existing bus stop; and	N/A	
(o) Any other relevant matter for that bay necessary to achieve the purposes of the LUDP in condition LV.2.	Beach nourishment will be provided in the southern part of Whiorau Bay to improve a 'dry' high tide area for sitting and beach activities. The existing bus stop shelter will be replaced with a standard GWRC shelter.	Pg 22-23, 28-27

01. Urban Design Plan

Whiorau (Lowry) Bay Urban Design Plan

LV.6 (a)

Whiorau Bay is characterised by:

Whiorau Bay, also known as Lowry Bay, sits between Sorrento Bay and Whiorau Reserve. It is the largest of the Tupua Horo Nuku bays and has the largest residential population associated with it. This is likely due to the greater depth and more gradual elevation change compared to other bays. Since the World War II era, Whiorau Bay saw residential development and it became a sought-after suburb of Wellington. Many homes were built in the mid-20th century, and it continues to grow as a residential community. The surrounding hills and slopes are substantially covered with native New Zealand vegetation. This natural setting provides a tranquil backdrop for the bay.

Typical of the surrounding area, Whiorau Bay has a steep escarpment surrounding it with various public walking tracks. Whiorau Bay is not only a residential area but also a popular recreational destination. The Bay offers ample opportunities for outdoor activities, such as swimming, picnicking, beachcombing, bird watching, hiking, boating or water sports. The area's natural beauty and proximity to Wellington make it an attractive place for both residents and visitors.

Whiorau Bay has a shallow sandy beach, bus stop, and small informal ramps for the likes of kayaks and dinghy's. The bay currently has limited landscape design features with all of its seating, bins and informational signage located at the existing bus stop.

Almost all housing along the Bay's coastal edge is two stories allowing for uninterrupted sea views. Most are setback from Marine Drive with tall solid fences likely to help address storm surges and inundation of sea water in storm events. Most properties are accessed from Marine Drive but some also have side access from local streets.

The Skerrett Boat Shed is located on the water's edge in the northern part of the bay. It serves as a landmark and a symbol of the area's maritime heritage.

There are no trees along the bays coastal edge compared to other parts of Tupua Horo Nuku. The edge is predominately hard with small pockets of likely self-seeded coastal plants. Before being called Lowry Bay, the bay had the traditional name Whiorau meaning the place with many blue ducks. This was not only a place favoured for birding but also for fishing.

Natural character:

In respect of natural character, this was discussed in detail during the resource consent process. The following discussion provides a summary of impact of the Project on natural character as well as highlights how different design features of the Project take natural character into account.

The resource consent application assessed the natural character of the Eastern Bays at a wider scale as having a moderate abiotic, biotic and experiential natural character. The Project was considered to have low effects on the wider Eastern Bays coastal landscape.

The impact of the Project at a local level on natural character was considered to depend largely on the final detailing and texture on the curved seawall faces, the material used for beach nourishment, the design response to the local landform where the walls finish at rocky outcrops, and design treatments in the more exposed, untamed areas outside of the beaches. Visual impact was considered to diminish over time because of weathering and as they become familiar features reducing to low adverse effects over time.

Within Whiorau Bay (and elsewhere) the Project is in general accordance with the consented approach and retains natural features such as rocky outcrops and beaches keeping the untamed character here intact.

The new design occupies existing beaches, however, beach nourishment with appropriate imported sands and fine gravels is expected to maintain the balance of natural character.

Ecological detailing is included on the curved seawall faces consistent with the consent design addressing loss of local natural character relating to perception and experience of the structure, as well as providing habitat opportunity where the wall texture is below high tide level. Marine growth will colonise these areas and it is expected the structure will weather into place.

Large boulders from site will be used to ameliorate transitions between seawall types and to cover footing concrete where it occurs. Culvert outfalls penetrate the recurve wall in two locations and require boxing in with a simple exposed aggregate concrete support flush with the recurve and are experienced as part of the greater patterned wall.

Ramps and steps are also finished with exposed pebble aggregate consistent in texture with the beach fine gravels which help to detune the engineered nature of these structures along with fit to landscape and natural character.

Whiorau (Lowry) Bay General Arrangement Plan
Part 1 of 3

LV.6 (a) LV.7 (g) (h) (i) (j)

Legend.

- Bus stop
- Location of Mini steps
- Wayfinding and signage locations

Seawalls & Path

- Timber kickrail
- Single curved seawall with balustrade
- Double curved seawall with Balustrade
- Triple curved seawall with bench and kickrail
- Shared Path
- Concrete Shared Path pavement

Ecology and Landscape

- Planting - new or additional
- Existing Seagrass
- Stream Culvert
- Fish passage- Stream outlet
- Indicative location of Ecological Enhancement Units (such as tide pools, Vertipools, and Small drilled rock pools)

Tides Existing

- Mean High Water Springs (MHWS)
- High Tide
- Mid Tide
- Low Tide

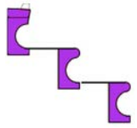
*We anticipate some little penguin activity around culvets in the bay alongside potential nesting areas

Wall Type Sections.

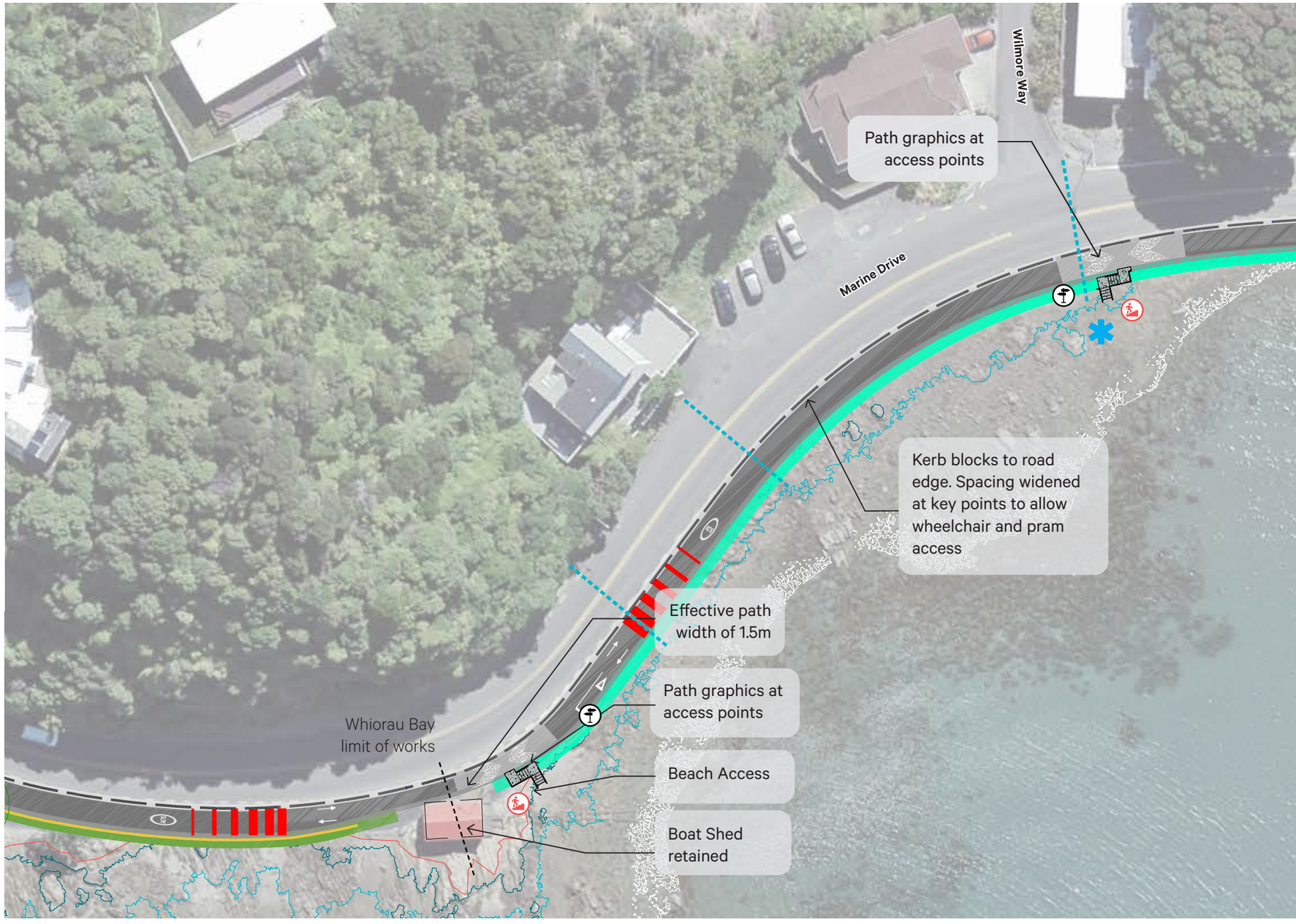
Single curved seawall with balustrade

Double curved seawall with Balustrade

Triple curved seawall with Balustrade



Triple curved seawall with bench and kickrail



1:500 scale bar

0m 5m 10m 25m

Marine Drive

Effective path width of 1.5m

Historic Skerret Boat Shed retained

Path graphics at access points

Kerb blocks to road edge. Spacing widened at key points to allow wheelchair and pram access

Beach Access

Whiorau (Lowry) Bay General Arrangement Plan
Part 2 of 3

LV.6 (a) LV.7 (g) (h) (i) (j)

Legend.

- Bus stop
- Parking
- Location of Mini steps
- Wayfinding and signage locations

Seawalls & Path

- Timber kickrail
- Single curved seawall with balustrade
- Double curved seawall with Balustrade
- Triple curved seawall with Balustrade
- Triple curved seawall with bench and kickrail
- Shared Path
- Concrete Shared Path pavement

Ecology and Landscape

- Known Penguin nesting areas
- Planting - new or additional
- Existing Seagrass
- Extent of beach nourishment
- Indicative high tide level resulting from beach nourishment
- Stream Culvert.*
- Fish passage- Stream outlet
- Indicative location of Ecological Enhancement Units (such as tide pools, Vertipools, and Small drilled rock pools)
- Tree Retained
- Tree Removed

Tides Existing

- Mean High Water Springs (MHWS)
- High Tide
- Mid Tide
- Low Tide

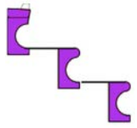
Wall Type Sections.

Single curved seawall with balustrade

Double curved seawall with Balustrade

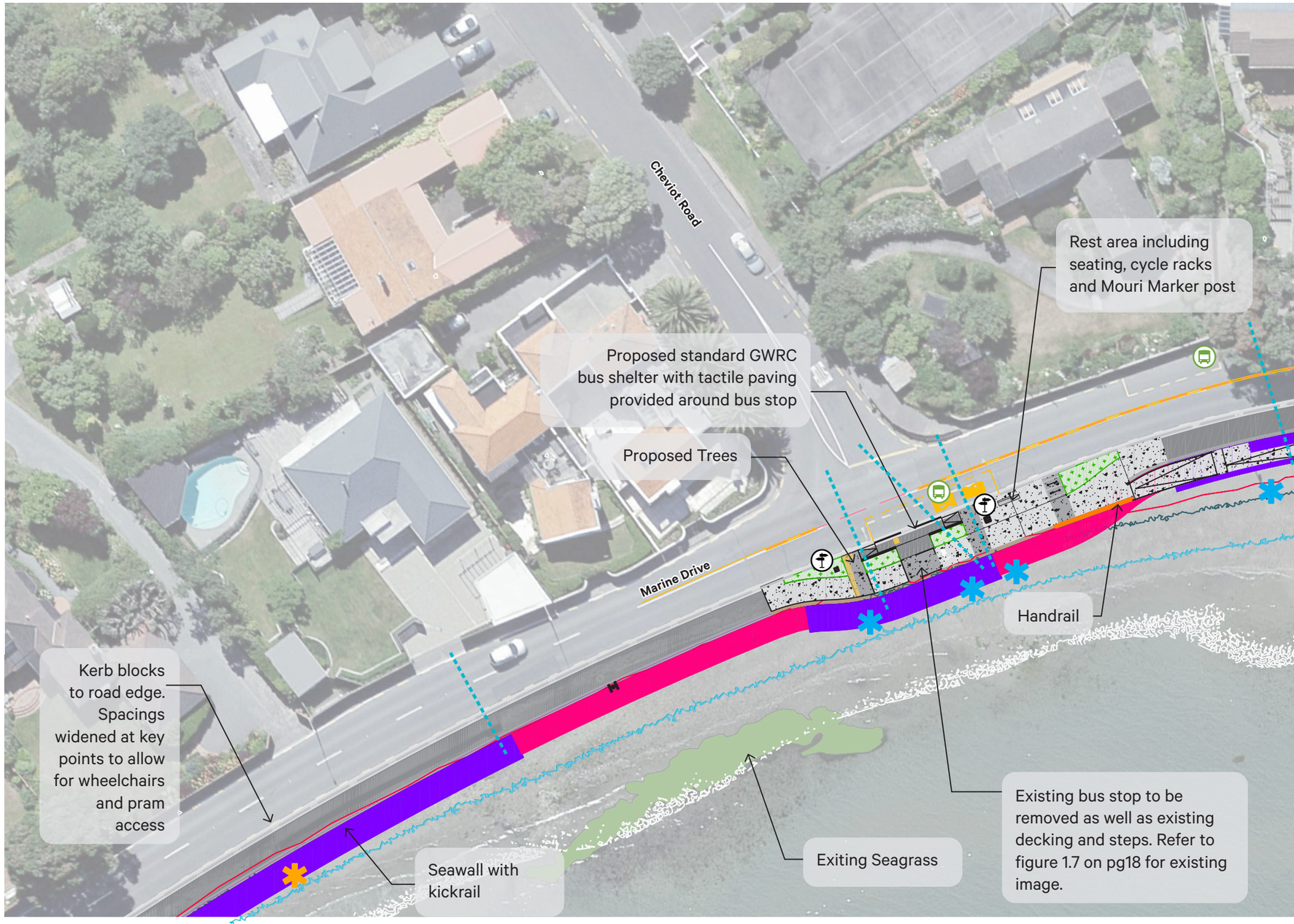
Triple curved seawall with Balustrade

Double curved seawall with bench and kickrail



Triple curved seawall with bench and kickrail

*We anticipate some little penguin activity around culvets in the bay alongside potential nesting areas



1:500 scale bar

0m 5m 10m 25m

Informal ramp removed

Continuous seaward timber kickrail

Kerb blocks to road edge

Path graphics at access points

Beach access

Marine Drive

Taumaru Ave

Ramp access retained for accessibility

Current high tide level

Indicative high tide level

Extent of beach nourishment

Existing Seagrass

Whiorau (Lowry) Bay General Arrangement Plan
Part 3 of 3

LV.6 (a) LV.7 (g) (h) (i) (j)

Legend.

- Bus stop
- Parking
- Location of Mini steps
- Wayfinding and signage locations

Seawalls & Path

- Timber kickrail
- Single curved seawall with balustrade
- Double curved seawall with Balustrade
- Triple curved seawall with Balustrade
- Triple curved seawall with bench and kickrail
- Shared Path
- Concrete Shared Path pavement

Ecology and Landscape

- Known Penguin nesting areas
- Planting - new or additional
- Existing Seagrass
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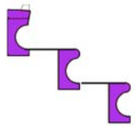
Triple curved seawall with Balustrade

Double curved seawall with bench and kickrail



Triple curved seawall with bench and kickrail

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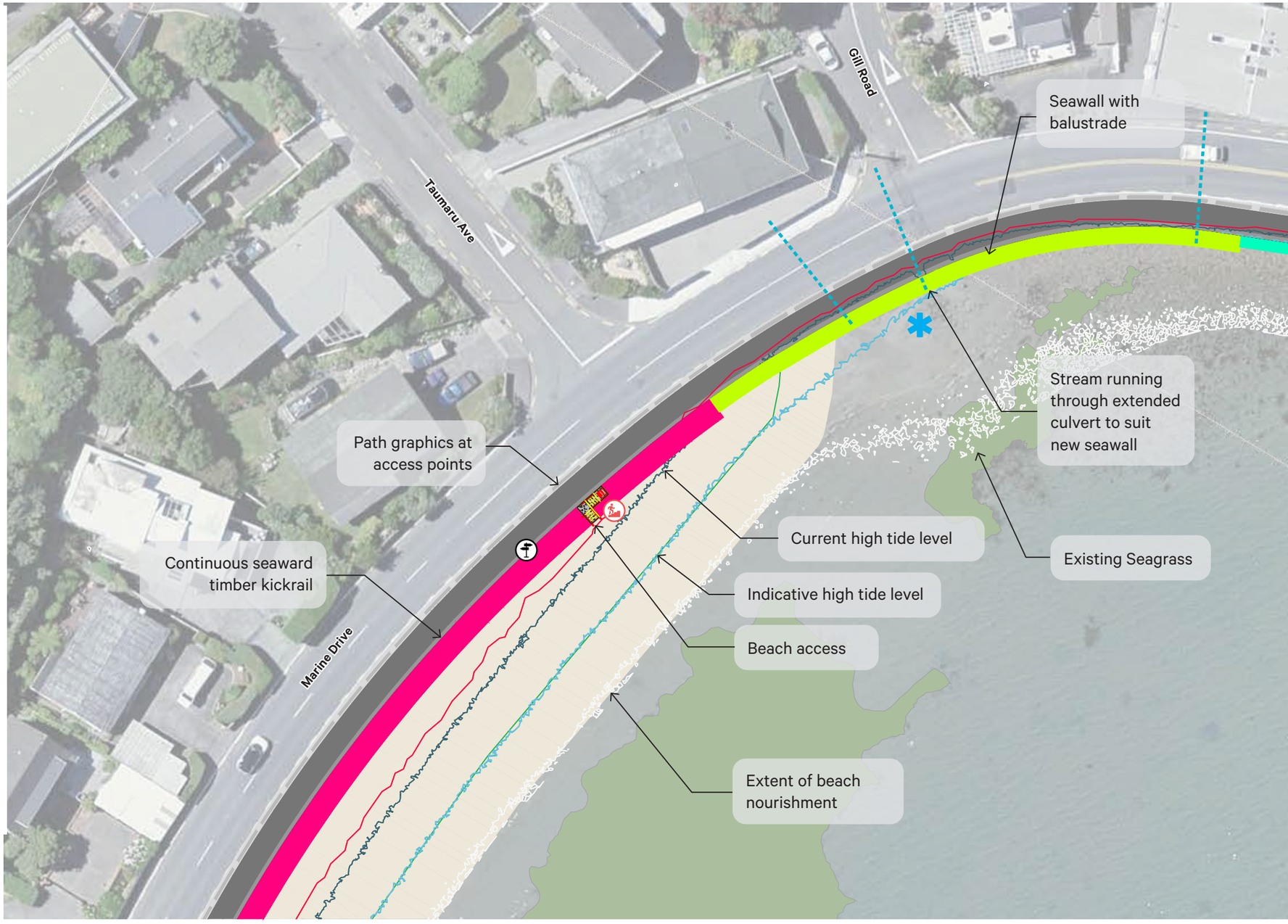


1:500 scale bar

0m 5m 10m 25m

Kerb blocks to road edge

Whiorau Bay limit of works

Marine Drive

Refer to Whiorau Reserve BSUDP for further details

Seawall with balustrade

Single curved seawall with balustrade

Seawall with balustrade

Site Photos

Figure 1.4 *View of Whiorau Bay from Whiorau Reserve.*

Figure 1.5 *Whiorau Bay at low tide.*

Figure 1.6 *Existing stream and culvet in Whiorau Bay*

Figure 1.7 *Decking structure around existing bus stop.*

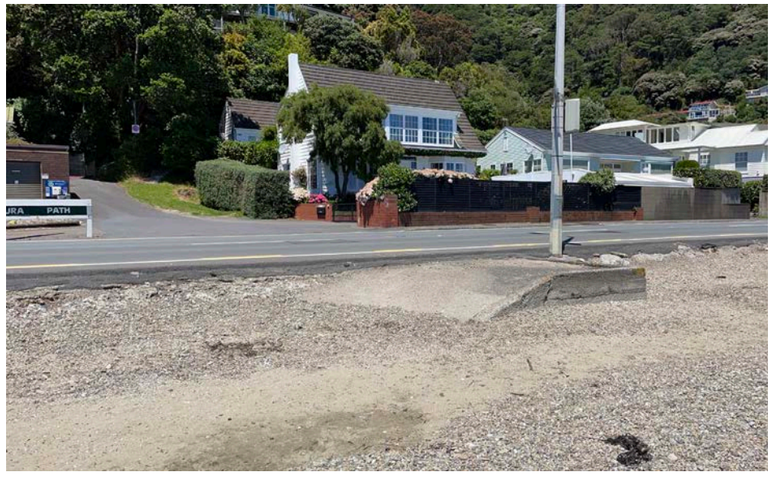


Figure 1.8 *Informal ramp from roads to beach.*

Figure 1.9 *Shallow waters and beach recreation.*

Approach and Principles

Rugged Coastal Environment	— Reflect the wild coastal character and narrow edge through minimal disturbance and intervention at the coastal edge. — Retain any rocky outcrops. — Sympathetic transitions between seawalls and natural coastal edges. — Retain fishing access at southern end.
Less is more	— Features added minimise obstruction to views and beach access.
Maintain integrity of rock outcrops	— Rock outcrops are remnants of the existing coastal edge. — Retain the natural form of each outcrop. — Where modification is taking place integrate transition from the outcrop to the structure in a natural way. — Retain as much of the existing natural colonized rock as possible during seawall construction. — In addition, reuse the natural colonized rock removed during construction at the base of the seawalls. — Use natural colonized rock at seawall transitions, particularly those where the concrete seawall ties back into the natural rocky beach, to integrate the seawall and eliminate hard concrete edges.
Details and elements	
Consistency	— Features and elements consistent across the Project.
Simple robust forms	— Elements such as seating, wheel stops and steps are formed with simple block/rectangular shapes, not to detract from the wild coastal character, yet simple and accessible to use.
Existing structures and elements	— Existing bus shelter to be replaced by a standard GWRC shelter.
	— Decking around existing bus stop to be removed

Maintenance	— The selected materials and patterns are durable, designed with longevity in mind, and that are able to be replicated. — Allow native plant species to self establish where conditions are appropriate. — Work with Hutt City Council to understand maintenance requirements. — Relocate electricity poles. — Remove concrete blocks and building rubble, previously used for managing coastal erosion.
Bay specific narratives	— To be undertaken with mana whenua advisors and artists. Cultural expression to be integrated into the overall design in relevant areas.
Materials palette	— Hardwood timber - seating, linear barriers, wayfinding marker posts, where required. — Stainless steel - step hand rails, detailing into seating, cycle stands. — Textured concrete - seawall, vertipools, tidepools, mini steps. — Asphalt - Shared Path and stopping place north of the Day Bay Headland. — Natural colonized rock - seawall transition points and base of seawall. — Gravel around trees retained.
Plant communities	— Enhancement planting to headland areas.

Priorities for Whiorau (Lowry) Bay

Seawall Structures

LV 7. (a) - Seawall types and transitions

Vertical curved seawalls have been chosen across most of the Shared Path including Whiorau Bay because they deflect wave over-topping most effectively and create a reduced footprint on the foreshore compared to other non-vertical seawalls. This design also offers the flexibility to adapt the design to accommodate sea level rise in the future. Seawalls are required to be rebuilt along the majority of the Shared Path. They are designed to prevent coastal erosion and protect against storm surge and are therefore integral to protecting the Shared Path. The Design Features Report (Stantec, 2019) sets out engineering requirements for the Project. The main points can be summarised as:

- The seawall design allows for adaptive pathways to address sea level rise, such as protection to be added on top of the wall in future as required.
- Achieve consistency in the seawall profile throughout the corridor.
- The seawall is to be constructed from reinforced pre-cast concrete units. Construction methodology of the seawall will be determined by site conditions.
- Resilience of the road and underground services was considered in the design.
- Replacement and extensions to storm water pipes through the wall are to be like for like, and finish flush with the face of the seawall.
- Seawall transitions to be integrated to avoid abrupt ends/divisions. Transitions between seawall types e.g. between single and double will be managed between access points (steps and ramps). Transitions between wall edges and the existing coastal edge e.g. at headlands, will be softened/integrated with natural rock.
- Width of the Shared Path is to have a 2.5m effective width except for area past the boat shed which is currently design as 1.5m.
- The path surface is to be mixed asphalt and concrete with a 300mm wide concrete strip on the 'sea side' to define the coastal edge.
- The work is to be an improvement on existing conditions throughout the corridor.
- Fall from height safety will be addressed by either a 1.2m landing, where there is room, or a balustrade where there is not.

Seawall types in Whiorau Bay

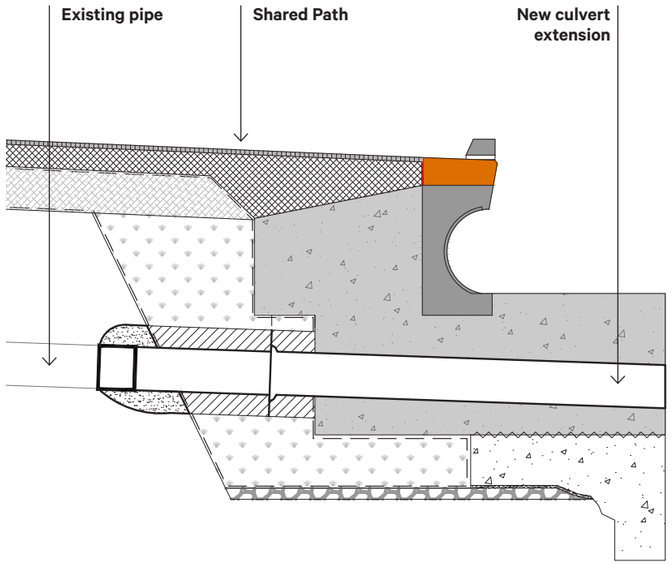


Figure 1.10 Single curved seawall with bench (type C1L) and stormwater outfall penetration.

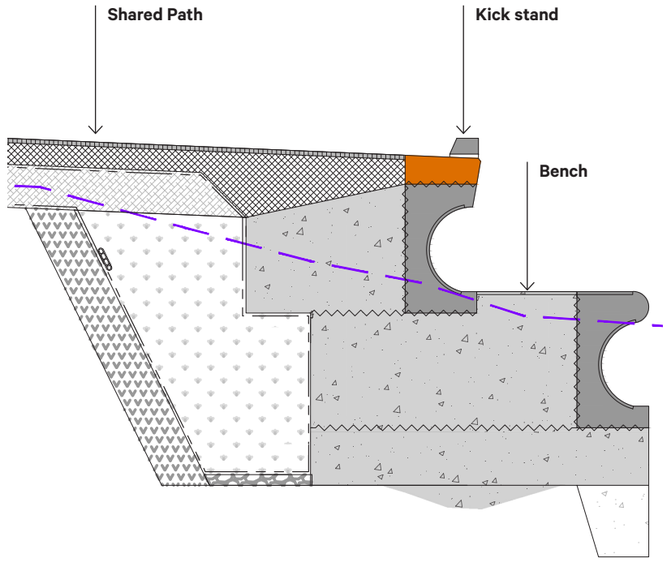


Figure 1.11 Double curved seawall with bench and kickrail.

- For the northern boat shed, the path will be narrowed and shared path installed on the existing hard shoulder. The new seawall will terminate either side of the boat shed and tie into the existing seawall. An in-situ poured concrete facing will be cast against the existing ground to form a transition between the end of the seawall and existing path at the blue boat shed.
- For the southern (Skerrett) boat shed the typical seawall form will terminate either side of the boat shed. The new path immediately adjacent the boat shed will effectively bridge over the existing seawall structure on a concrete slab to avoid any damage to the Skerrett boat shed foundations. The shared path installed in front of the boat shed will be at the narrower 1.5m effective width.

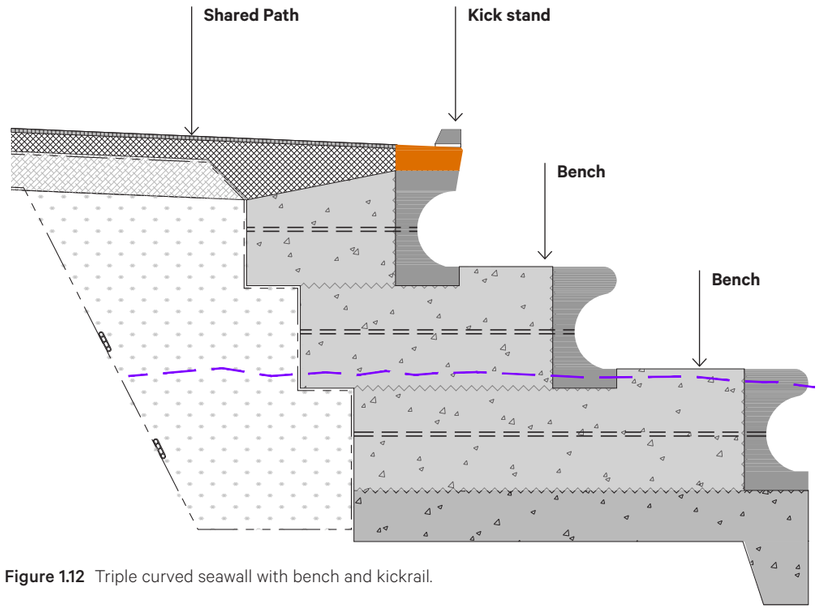


Figure 1.12 Triple curved seawall with bench and kickrail.

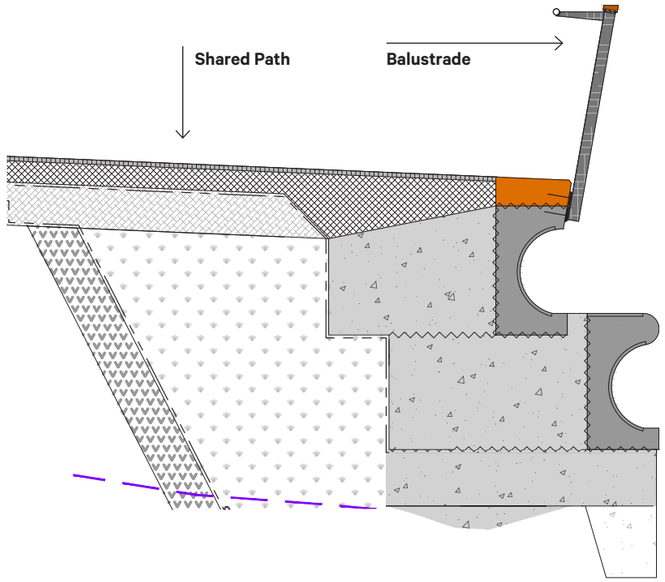


Figure 1.13 Double curved seawall with Balustrade.

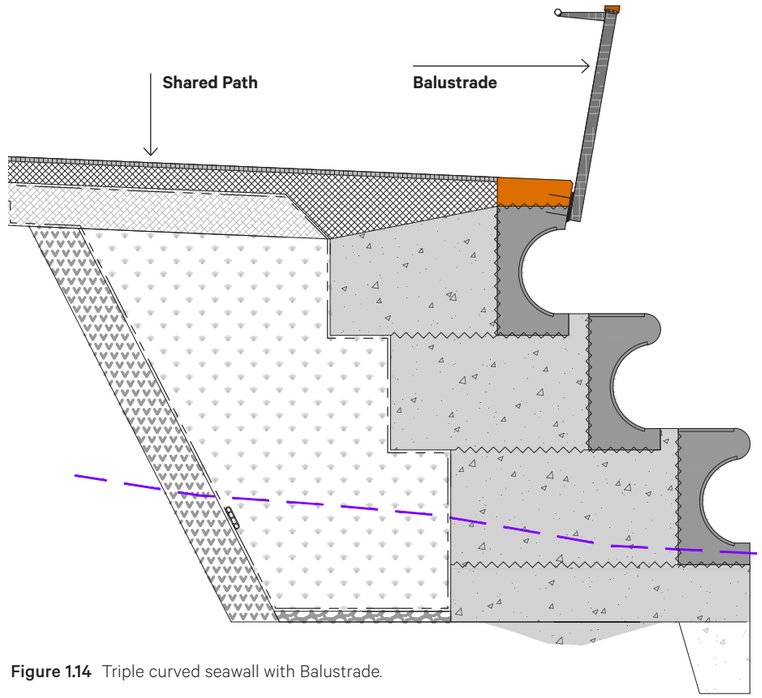


Figure 1.14 Triple curved seawall with Balustrade.

Priorities for Whiorau (Lowry) Bay

Beach Access & Safety Barriers

LV 7. (b)(c) - Steps, Ramps & Handrails

An important aspect of the Shared Path is that public access to the beach is maintained and, at certain places, enhanced. Two forms of access are provided to the coastal marine area in Whiorau Bay, these include 'Mini Steps' and 'Ramps'.

Mini steps are proposed to provide additional access to the beach without encroaching unnecessarily onto the coastal marine area. Ramps are proposed to minimise encroachment onto the beach. The ramp shown in Whiorau Bay is existing.

The design priorities relating to beach access are:
- Should draw people to the coastal edge, away from the main path.
- Should be inviting and intentionally separate to the main path.
- Fit for purpose, using materials suitable for the marine context.
- Safety in design considering ease of use, surface texture/grip and handrails.
- Steps to be sited in logical, accessible locations with visual links to and from the Shared Path to enable their use.
- Design to reflect a distinctly Tupua Horo Nuku aesthetic, fitting in with their surroundings while providing opportunity for unique, place-based expression.
- Parallel design to seawall/coastline to reduce footprint on the beach and interference with coastal processes.
- Sight lines shall be maintained and unobscured as per CPTED (Crime Prevention Through Environmental Design) guidelines.
- Fall heights and barriers must comply with NZ Building Code D1 (Access Routes) and F4 (Safety from Falling).
- Provision for safe crossing places and desire lines shall be met as per the Pedestrian Planning and Design Guide (and the Pedestrian Network Guidance (Waka Kotahi, 2021) forthcoming).
- Consideration for the safety of sea birds and animals shall be informed by designed elements and interventions.
- Where stainless steel is used, some minor staining (tea bagging) is likely to occur.
- The balustrade and seaside buffer (kick stand) design and material has remained consistent across all bays. The balustrade comprises of metal post and wire and the kick stand comprises a timber buffer

Figure 1.15 Completed balustrade at southern end of Mā-koromiko.

Figure 1.16 Completed timber kickstand.

Beach Nourishment

LV 7. (o) - Other matters

The effects of Tupua Horo Nuku on recreation and loss of amenity value are mitigated by placing beach nourishment at Whiorau Bay. By addressing adverse effects on this beach with 'dry' high tide areas used for sitting and other 'dry' beach activities, the proposal will maintain coastal amenity and ensure effects are no more than minor. Losses in the width of the beach – where nourishment is not proposed – and at rocky areas, are minimised by relying on a narrowed path where appropriate.

The placement of beach nourishment will avoid areas of high value intertidal and marine habitat, in accordance with the relevant consent conditions.

- Sand and gravel beach material brought into site.
- 1:4 profile to crest of new beach.
- Approximately 15m max of beach depth which varies as it ties into proposed seawalls.

Stormwater

LV 7. (d) Structures and coastal interface

Storm water outlets will be in-situ sections between pre-cast wall units and are designed sympathetically to limit adverse effects on recreation.

Legend.

- Location of Mini steps
- Extent of beach nourishment
- Existing Seagrass
- Indicative high tide level resulting from beach nourishment

Seawalls & Path

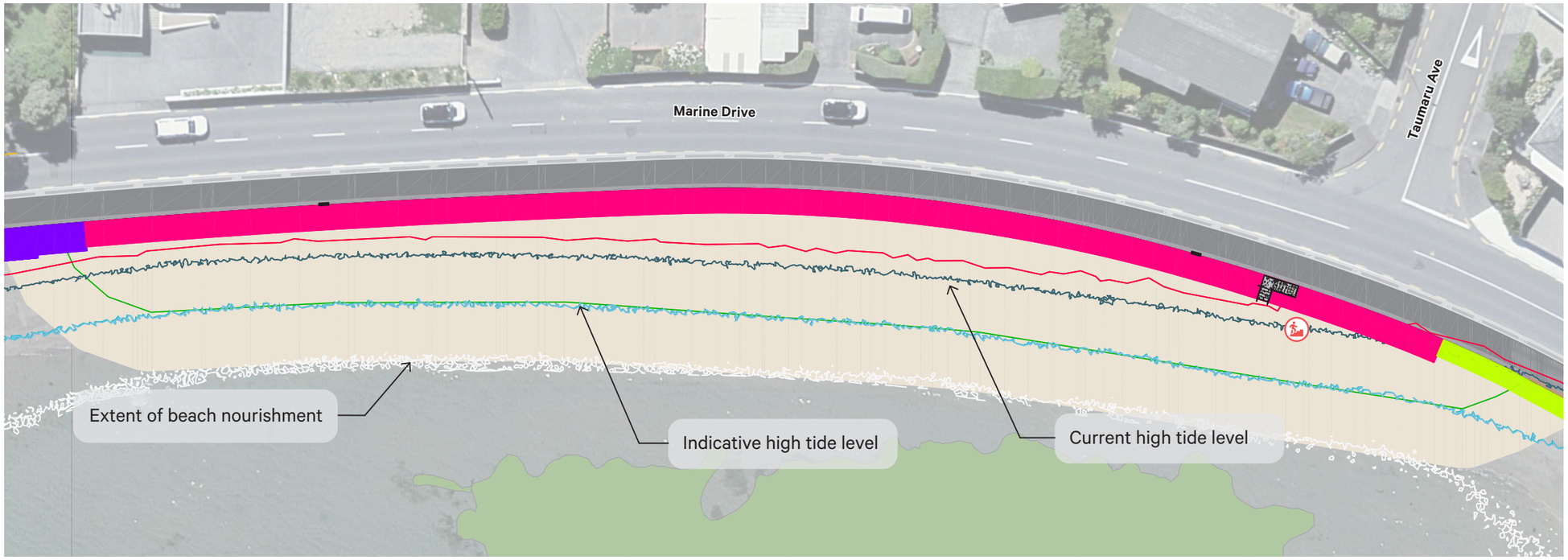
- Double curved seawall with bench
- Timber kickrail
- Shared Path
- Concrete Shared Path pavement

Tides Existing

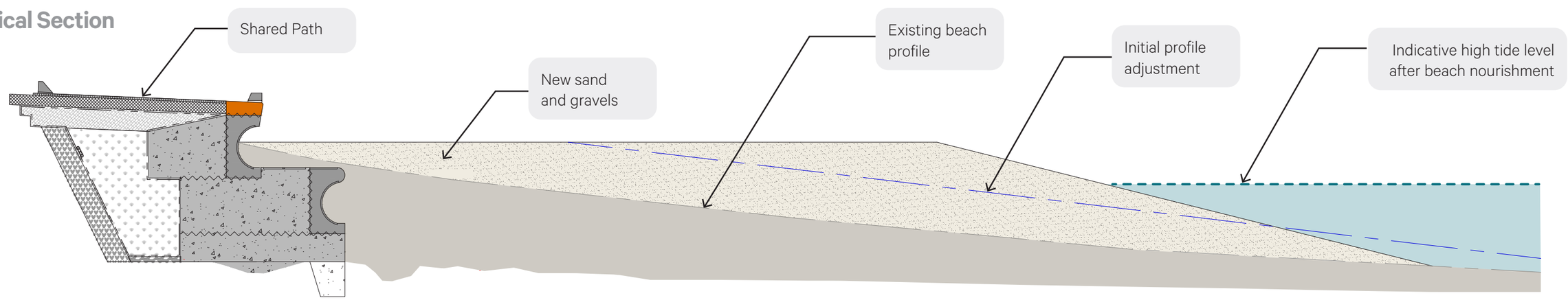
- High Tide
- Low Tide

1:500 scale bar

0m 5m 10m 25m



Typical Section



Priorities for Whiorau (Lowry) Bay

Ecology

LV 7. (e) - Little penguins, rock pools, barriers

An ecology assessment of intertidal benthic ecology was undertaken in 2016-2017 by EOS Ecology (McMurtrie & Brennan, 2019). The assessment found that the existing intertidal environment is currently highly modified, with seawalls along the majority of the shoreline consisting primarily of angled concrete seawalls that support diversity and richness. Beach areas and fish passage issues have been summarized in the LUDP. Seabird protection is detailed in the Bird Protection Plan.

The main design aspects that will help to improve intertidal ecology and fish passage include:

— A texture applied to the curved seawalls horizontal flat steps and the vertical sides of access. points (steps and ramps) to provide habitat for intertidal biota and splash zone coastal species. The textures are described and shown in the LUDP, the Seawall Revetment Habitat Plan (SRHP).
— Ecological enhancements, such as tide pools, vertipools, and small drilled rock pools are applied to discreet locations along the coastal edge that are within the intertidal zone.
— Re-use of colonised rocky material in front of the new curved seawalls to suit condition EM.19 (c) of the SHRP.
— Providing for fish passage at stream culverts to ensure the current level of passage for fish species migrating into upstream freshwater habitats is maintained or improved.

The number and locations of ecological enhancements may change post-construction based on suitable areas for placement to achieve the best ecological outcomes. The main ecological limitation for placement of such enhancements is that they need to be within the intertidal zone.

Figure 1.17 *Texture applied to the curved seawalls*

Planting

LV 7. (f)(g) -Trees, planting, natural character

Planting
The planting design for Whiorau Bay gives consideration to the dynamic coastal environment, its ecology, the various user experiences along the route, and maintenance and operations factors. Plant species have been chosen from the Plant Palette in the LUDP, which has been developed with the Project Ecologists. This includes indigenous species, which are suited to this specific coastal environment, and will encourage species of birds, lizards and insects which currently (or could potentially) inhabit areas along the route.

Proposed planting is reflective of (and reinforces) the Whiorau Bay context; planting provides a variety of experiences in response to the character, context, landscape and natural features along the route. Proposed Plant species are:

Waiuatua
Euphorbia glauca, shore spurge

Wīwī
Ficinia nodosa, knobby clubrush

Wī
Poa cita, silver tussock

Sand piripiri
Acaena pallida, sand bidibid

Natural Character
The overall adverse effects on natural character for Whiorau Bay are considered to be less than minor for the coastal landscape. The landscape and urban design approach and principles have been developed to mitigate effects of the Project on natural character.

As outlined in the LUDP, it is expected that any project effects on natural character, including the seawall and Shared Path will lessen over time as they weather and become established. A list of mitigation measures related to natural character attributes is provided below. Further detail of mitigation of effects on natural character and integration with the natural landscape is provided with the description of design areas and elements in the Urban Design Outcomes section of the LUDP.

Legibility – geomorphology:
— Retention of local rock for reuse at base of the seawalls.

Legibility – wayfinding and orientation:
— Reinforcement of the undulating coastline morphology by positioning the Shared Path along the coastal edge.
— Opportunities for local variation/reinforcement of local identity in the form of access points from the path to the foreshore.
— Improved access to headlands with strong natural character and natural features (such as trees, rocky outcrops and rock stacks).
— Provision of wayfinding markers, street furniture and signage to enhance the bays and associated neighbourhoods.
— Provisions for cultural expression and naming to reinforce sense of place.

Visibility – public and private views:
— Consistent detailing along the coastal edge and road edge to reduce the visual impact.
— Appropriate/considered design of urban features and landscape elements such as seating, bins, handrails, seaward side linear barriers, stormwater outlets, planting, signage and path markings to integrate them with the landscape setting.
— Incorporation of eco-mitigation surface textures consistently applied along the lower curve and 'step' of the wall to reduce the visual presence of the seawalls.
— Any safety balustrades to be designed as 'transparent' as possible to reduce visual appearance.

Picturesqueness:
— Path alignment responds to the local landform and land use patterns.
— Sensitive detailing of urban design and landscape elements, that respond to Mana Whenua (Taranaki Whānui and Ngāti Toa Rangatira), community identity and sense of place.
— Removal of existing unsightly structures and infrastructure along the Project site and the replacement of an eroding road with a consistent structurally stable edge.

Priorities for Whiorau (Lowry) Bay

Urban Design

LV 7. (h)(i)(j)(k) - Open spaces, features and signage

The Design Features Report (DFR) (Stantec, 2019) established a set of design principles and outlined the engineering requirements for the Project. This BSUDP has been developed in general accordance with these principles and requirements. The LUDP outlines the overarching principles, palettes, and narratives for detailed design. Principles for Whiorau Bay can be summarized as:

- Reflective of rugged coastal environment – materiality, robustness.
- Less is more – emphasise the natural setting and views.
- Maintain integrity of natural rock outcrops.
- Retain and enhance coastal vegetation where possible along coastal edge.
- Consistency across elements – a coordinated suite.
- Simple robust forms.
- Simple colour, surface texture, bespoke signage palettes.
- Maintenance considerations.
- Bay specific narratives expressed through cultural design.
- Sympathetic materials palette.

Open space and Recreational Amenity

Tupua Horo Nuku provides a connection to a continuous coastal edge experience along Whiorau Bay. The Project will enhance existing levels of recreation and amenity values with the Shared Path improving access for people walking and cycling along the coast and between bays. This includes new beach access points providing access to the foreshore.
The main priorities identified are:

- Creating a fit for purpose Shared Path that provides access to the coast and to the bays between Point Howard and Eastbourne for people walking and cycling.
- Provide access to the beach, water and headlands.
- Provide stopping and resting places.
- Maintain views to the coast.
- Retain fishing access.

Furniture and Features

The furniture palette for Whiorau Bay consists of interpretation signage and wayfinding, seating, bike racks and bins. The palette is to reflect the coastal setting of Tupua Horo Nuku and provide opportunities for cultural expression and narrative to some elements.

The design outcomes relating to furniture are:

- Use of standard Hutt City Council design elements where practical.
- A cohesive suite across multiple elements using robust materials suitable to the coastal environment.
- Appropriate in scale and number, avoiding visual clutter so as not to detract from the environment.
- Contribute positively to the character of Tupua Horo Nuku.
- Allow for opportunities to incorporate individual bay identities.

Formal seating is generally provided at places where stopping and gathering is encouraged and there is sufficient space. The proposed seats are made of timber which is a hard wearing material suitable for the coastal environment. There is a mixture of seating options including benches and seats with back rests and arms. The design is robust, with preference given to solid, chunky forms that are more in keeping with the coastal environment.

Bike racks are generally co-located with complimentary furniture and nearby bus stops and stopping locations. A standard simple design with a narrow profile is proposed to reduce the footprint. They have been located appropriately to assist safe and easy movement along the path.

Signage and Wayfinding

Where width allows, gathering spaces, beach access points and bus stops are appropriately separated from paths to allow for slower and safer movement. Linemarking, symbols and directional arrows are also considered at the approaches and alongside bus stops and beach access points to visually separate fast and slow movement minimising conflict. These have been jointly expressed through cultural expression and symbols.

Traffic signage and markings will form part of the detailed design. The position of such signage should ensure minimal visual clutter and follow a clear design logic to the positioning, combining and layout of signs.

The design priorities relating to Signage & Wayfinding are:

- Give consideration to Hutt City Council cycleways and Transport Agency standards and Great Harbour Way precedents.
- Ensure CPTED concerns inform the wayfinding design approach.
- Create a visual language for Tupua Horo Nuku which suits the needs of the Project and is in line with Hutt City Council standards.
- Clearly communicate and link key destinations and named landmarks and assist in legibility of the proposed path.
- Ensure the level, format and intensity of wayfinding signage varies along the path, according to need.
- Create a coherent graphic language using robust materials suited to the coastal environment.

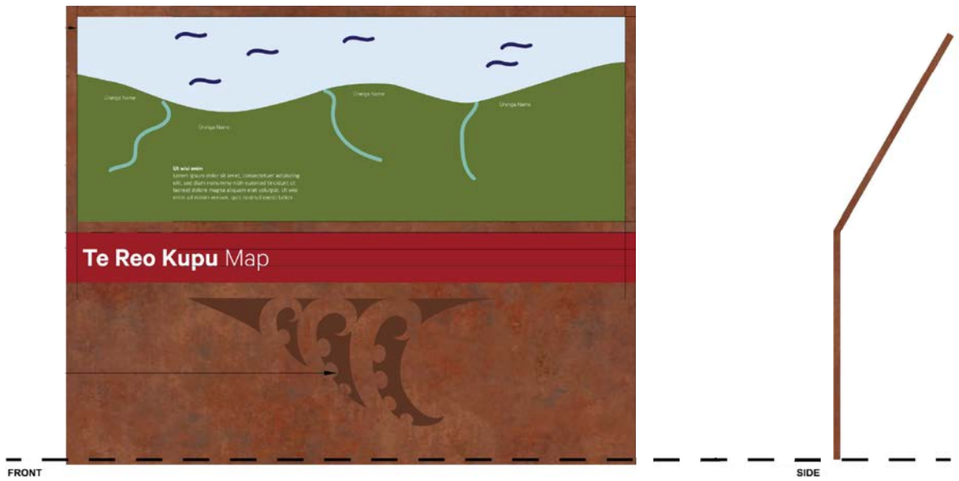


Figure 1.18 *Signage design for stopping places (example only).*

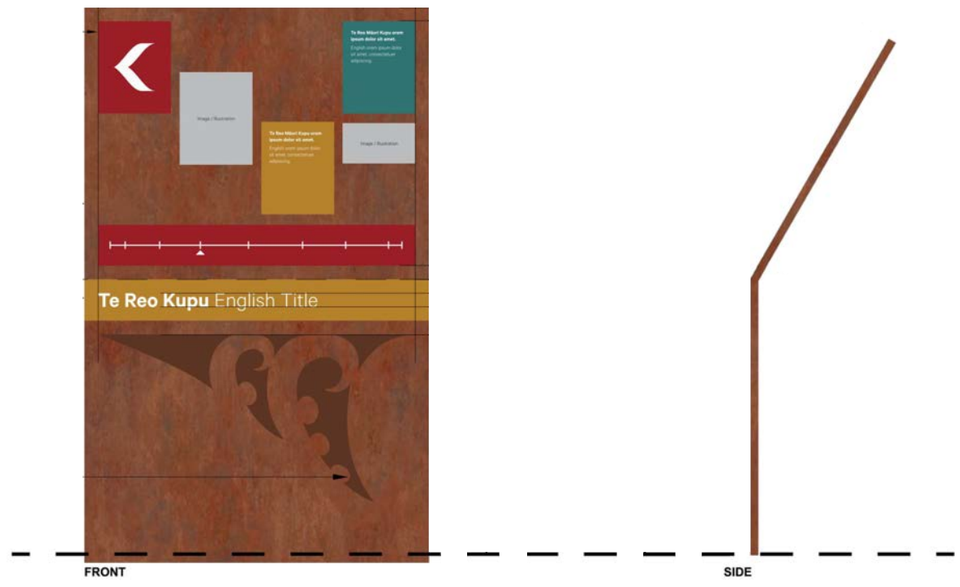


Figure 1.19 *Signage design for habitat areas (example only).*

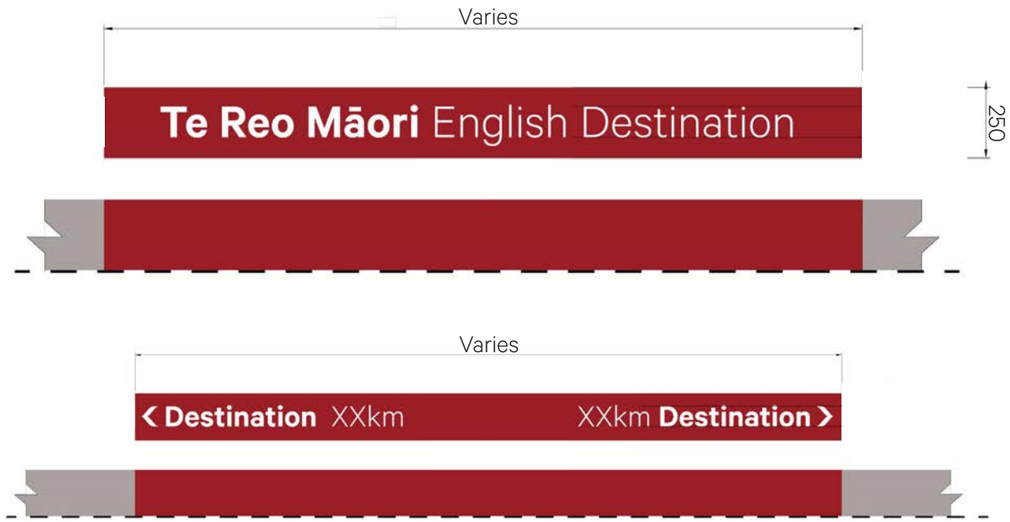


Figure 1.20 *Steel panel with named location applied to kickrail (example only).*

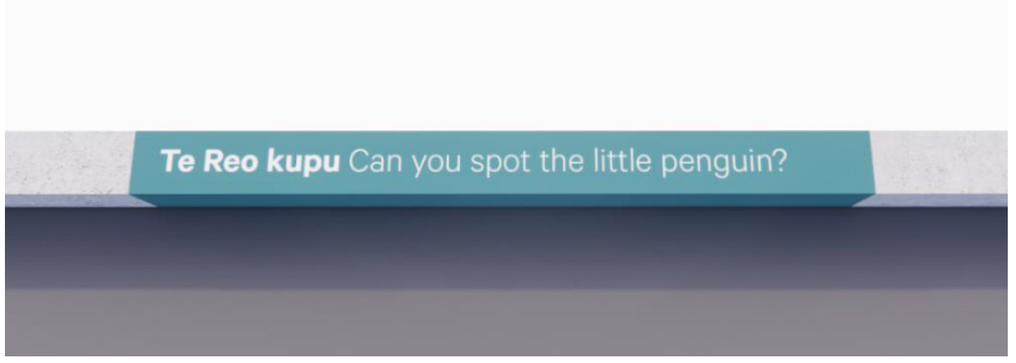


Figure 1.21 *Interpretative panel applied to kickrail (example only).*

Priorities for Whiorau (Lowry) Bay

Cultural Landscape

LV 7. (l)(m) - Storyboards and surface treatments

Celebration and interpretation of the cultural landscape is integral to the Project vision, design principles and design themes. The Cultural Narrative and Overlay for Tupua Horo Nuku sets out the principles and design response that will guide the cultural expression and create a foundation for the Project in partnership with Taranaki Whānui and Ngāti Toa, along with key Project groups.

It will be reflected in all parts of the urban and landscape design process, from the overall form of the footprint through a focus on kaitiakitanga and in the design of the seawall and other structures. This can also be realised though materials used, naming conventions, arrangement of gathering spaces, treatment of the stream crossings, signage, lighting, sculptural elements and artwork along with the consideration of options for future events, recreation and education activities.

The following imagery illustrates specific cultural expression design elements by Len Hetet. These elements complement and form part of the integrated approach to cultural expression as set out in the vision for the Project and outcomes for all of the components; from the underlying form to specific details.

Patterns:
Te Āti Awa tupua rau, he auripo i te manga iti, he auripo i te manga nui raanei, he kaitiaki ki te whenua.

Te Āti Awa of many phenomenas, where there is a ripple in a small tributary or great river, there is a guardian and protector on the land.

— This speaks to the connection between the tidal movements and the creation of the eastern bays land mass by Tupua Horo Nuku – Ngake.

Mouri Marker:
— The Mouri Marker represents an area of significance to Mana Whenua. It will highlight the Māori and English names of the bays and allow for our cultural narratives of those bays to be told.

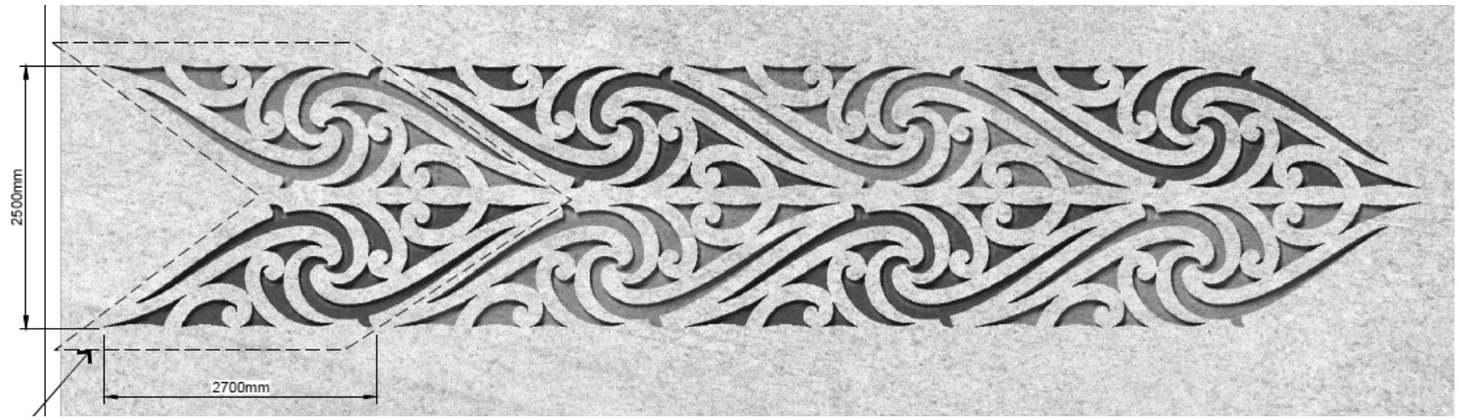


Figure 1.22 *Indicative set out of cultural pattern to the path.*

Figure 1.23 *Mouri Marker post in timber, indicative sketch (artist supplied).*

Figure 1.24 *Indicative application of cultural pattern to the path.*

Other Matters

LV 7. (o) - Bus Stops & Shelters

As per the conditions, bus shelters shall enhance safety and convenience, and minimise risk for all users of the Shared Pathway and the road. The bus stops/ Shelter requiring replacement will, to the greatest extent practical, be designed taking into account the following design principles:

(a) A preference that the Shared Path run behind the bus stop/ shelter;
(b) The bus stop / shelter will be raised (separated with a kerb from the traffic lane where possible);
(c) The bus stop / shelter will be designed in accordance with universal accessibility principles (such as, but not limited to, wheelchair friendly ramps and tactile pavers); and
(d) Bus stop / shelter design will be fit for purpose to appropriately protect public transport users from the coastal elements.

The Alliance is proposing to replace the existing bus stop shelter with a standard GWRC shelter. The benefits of replacing this shelter are:

— Create an accessible bus stop for those less mobile.
— Improve safety by having glass shelters that allow better visibility for path users.
— Provide a raised kerb/access point for the bus shelter to ensure better safety for those boarding the bus.

A standard bus shelter is preferred by GWRC. These shelters were chosen as the design aligns well with the landscape and urban design principles with the potential for some modifications:

— Incorporate timber slats with a panel that can be painted and/or used as a community noticeboard.
— Painting of the roof fascia in a colour that matches the other urban design elements.
— Apply cultural expression onto glass or other materials.
— Potential to involve local schools in art creations.
— Modification to entrance point to avoid prevailing wind and splashback from passing vehicles when wet.

We cannot use the existing bus shelter in Whiorau Bay when creating an accessible bus stops due to the depth of the shelter. Using the existing shelter would encroach on the Shared Path and also on the coastal marine area.

The design outcomes relating to bus shelters are:

— Fit for purpose, providing best possible shelter from wind, rain and seawater ingress during storm events.
— Bus stop location needs to be safe and convenient for users.
— Bus shelters and entrance point onto the bus should be accessible for wheelchair users.
— Bus shelters should be designed so there is enough space for wheelchairs to get into.
— Design to reflect a distinctly Tupua Horo Nuku aesthetic, fitting in with the surroundings while providing opportunity for unique, place-based expression.
— Coastal plantings next to bus stops to soften hardscape through the bay specific plans.

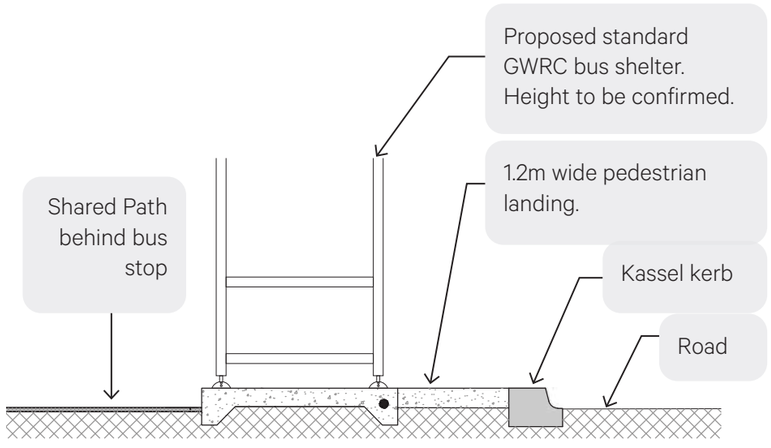


Figure 1.27 *Typical bus stop side elevation showing level changes*

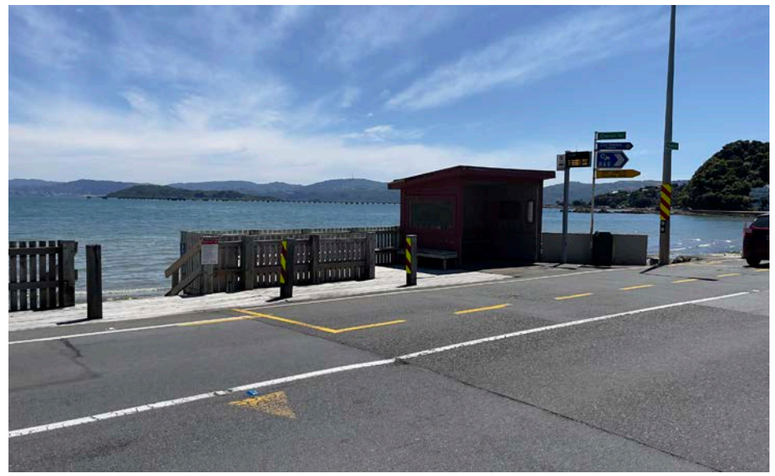


Figure 1.25 *Whiorau Bay Bus Stop*

Figure 1.26 *Example of a standard bus shelter preferred by GWRC.*