
ORDINARY MEETING

OF

ENVIRONMENT COMMITTEE

SUPPLEMENTARY AGENDA

Time: 9.15am
Date: Tuesday, 16 December 2014
Venue: Committee Room 1
Ground Floor, Council Offices
101 Wakefield Street
Wellington

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4. Operational

ISLAND BAY SEAWALL PROJECT

Purpose

1. This report seeks the Environment Committee's agreement to the next steps in the process for the Island Bay seawall project.
2. This report presents two approaches for the Committee to consider:

- i. Reinstate the seawall as a short to medium-term solution and continue to gather more detailed design information to develop the long-term solution based on options 3 or 4 (these options are described in the report summary). This approach mitigates financial and liability risks associated with possible further damage to Council infrastructure and private property.
- ii. Continue to gather more detailed design information for options 3 or 4 for the Committee's consideration by June 2015. Under this approach the Council would have to continue to carry the risk of potential damage to Council infrastructure and private property.

Summary

3. In June 2013, Wellington experienced a severe storm comparable to the Wahine Storm of 1968. Large waves and storm surge damaged a section of the Island Bay seawall immediately in front of Shorland Park. This event triggered work to explore alternative options to simply repairing the damaged seawall.
4. In September 2014, the Environment Committee agreed a Project and Engagement plan to develop a recommended option for a long-term solution to manage coastal hazards for their consideration.
5. In considering how best to protect community assets and private property Island Bay from coastal hazards the Environment Committee needs to weigh-up several factors including: the changing risks from coastal hazards over time, community feedback, the time to implement the preferred solution, traffic impacts, amenity impacts, legislative obligations, risks, costs and heritage values.
6. To gather community views and gain an understanding of how different options would affect each of the factors outlined above, the Council identified and consulted on five concept options:
 - Option 1 – Status quo: Retain the seawall in its present alignment and rebuild the damaged section of the wall (Attachment 1)
 - Option 2 – Fix the wall and add sand to the beach: Fix the wall and provide a buffer by adding sand to the narrowest part of the beach where the wall is most vulnerable to large waves and storm surge (Attachment 2)
 - Option 3 – Increase the size of the beach: Relocate the wall and road further inland to match the natural contour of the beach (Attachment 3)
 - Option 4 – Close part of The Esplanade and connect Shorland Park to the beach: Remove a section of the seawall, close a part of the road and restore some coastal dunes – this option closes part of The Esplanade in front of Shorland Park (Attachment 4)

- Option 5 – Remove section of seawall, close some local roads and establish some coastal dune systems linking the beach with Shorland Park: This option closes part of The Esplanade and the intersection of Reef Street and The Esplanade (Attachment 5).

7. Based on community feedback and officers analysis of the other factors to be taken into consideration, this paper presents two approaches for the Environment Committee to consider.

I: Repair the wall and continue to gather detail design information (officers preferred approach)

8. Officers preferred approach involves repairing the seawall as a short to medium-term measure to manage risk while the Council continues to analyse, plan and consult on the implementation of a long-term solution based on either option 3 or 4.

9. This approach recognises that:

- **The status quo is not a long-term solution:** Based on engineering and coastal processes advice, the current seawall and road lay-out will not provide adequate protection from coastal hazards in the long-term (i.e. 50 years and possibly sooner). Even if repaired, there is no certainty that the seawall would not be damaged again with a storm of similar force to the June 2013 storm. Changes in sea-levels and coastal processes will increase flooding inundation risks over time. Experts advise that the service life of the repaired wall may only be 15 years depending on the severity of storms in the area.
- **Community feedback is split:** Diverse feedback was received from local residents, the Wellington community and stakeholder organisations. No option received overwhelming support. A significant number of people expressed concerns about the traffic implications of options 4 and 5. People concerned about traffic implications generally preferred options that keep the Esplanade open to traffic (options 1 and/or 3). On the other hand, option 4 attracted support from community and stakeholders, including a “family friendly Island Bay” petition seeking the connection of Shorland Park to the beach through the re-establishment of a dune system.
- **NZ Coastal Policy Statement (NZCPS):** The NZCPS sets out a directive that Councils must take into account the nature of the coastal hazard risk and plan to mitigate that risk over a 100 year timeframe. The NCPS also discourages seawalls due to the adverse impacts on natural and recreational assets.
- **Focus should be on implementing resilient solutions:** Engineering and coastal processes advice indicates that options 3 and 4 will provide better long term protection from coastal hazards than option 1. Based on the community feedback, although there is not overwhelming community support for change, there is general recognition that options 3 or 4 provide a better long-term solution.
- **The existing wall lay-out will lead to loss of beach:** Expert advice indicates that the beach will gradually shrink due to sea-level rise. A sea-level rise of around 0.5 metres (which is estimated to be reached in approximately 40-50 years’ time) is likely to result in high tide continually reaching the seawall at the narrowest part of the beach. This would split the beach into two parts resulting in a loss of recreation, public access and amenity. The loss of beach would result in more frequent wave interaction with the seawall. This may increase scour due to wave reflection, further lowering beach levels. Beach loss would continue until 2115 when the beach would completely disappear in front of 50-100m section of the seawall.

- **Risks relating to leaving the wall open in the short-term:** The Council installed a rip-rap in the open-section of the seawall to protect the road infrastructure from further damage. Should the Committee and Council choose option 3 or 4 now, implementation could take up to three years depending on consenting timelines and processes. Consequently, officers recommend that the wall be repaired in the interim to mitigate any risks associated with further storms. Costs to repair the wall are estimated to be around \$812,000, which would involve \$400k of sunk cost. However, should Wellington experience another extreme storm the disruption and costs could be high.
- **Heritage:** The Island Bay seawall has become part of the character of Island Bay. The wall itself is used for recreation (sitting, leaning and playing). The wall is an informal meeting place and it is recognised as a defining feature in the community. Unfortunately, the gradual increase in sea-levels will begin to undermine the heritage-listed seawall. At some stage in the future, the wall would need to be fundamentally altered either through the implementation of option 3 or 4 or through the upgrading of the seawall. For these reasons, officers recommend that the seawall is removed from the District Plan heritage list.
- **We have time to decide:** Identification of a long-term solution for managing coastal hazards (i.e. the status quo only provides a short-term solution) is not urgent. Repairing the seawall as a temporary measure provides time for the Council and community to determine the detail design of the long-term solution. However, we recommend that the final solution be agreed within the next three years and the solution be implemented within the next 10 years.
- **South Coast strategy:** Providing time for the Council and community to identify the long term solution ensures that the final decision can be made in the wider context of Council's strategy for dealing with sea-level rise on the South Coast. It is important that we undertake a detailed assessment of the risks and options of managing those risks for the South Coast. We also need to understand the thresholds for when intervention is required.
- **Costs:** Costs will need to be built into the Long-term Plan. The costs to implement options 3 and 4 have been estimated to be in the range of \$5m to \$6m. These cost estimates are indicative and require further work to fully cost.

II: Alternative Approach

10. Alternatively, the Committee could agree to progress to the detailed design phase of the project and pursue implementation at a faster-rate. Officers would recommend that designs be developed for options 3 and 4 (option 1 is largely a known quantity). Options 2 and 5 would be excluded as these options received little to no community support.
11. A second-round of consultation would then be undertaken on the detailed designs. More detailed information would be developed and presented on: costs, hazard protection, amenity and traffic re-configurations. It should also be noted that under this approach the Council carries a greater risk (financial liability and reputational risk) should the seawall be breached or damaged by a further storm.

Next Steps

12. Should the Committee endorse the preferred approach, officers would initiate repair work on the seawall in the next financial year (from 1 July 2015).
13. Officers would work to analyse and develop detailed designs for options 3 and 4. Further community engagement would be undertaken. This work would eventually lead

to the preparation of a final recommendation for a long-term solution based on option 3 or 4 for implementation in the 10-year Long-term Plan (by 2025).

14. Advice would be prepared for the Transport and Urban Development Committee to consider the removal the Island Bay seawall from the District Plan heritage list and on implementing traffic calming measures around Shorland Park that prioritise pedestrians.
15. Should the Committee agree to the alternative approach, officers will immediately begin project planning for gathering more detailed information on options, including detailed designs and traffic management plans.

Recommendations

That the Environment Committee:

1. Receive the information.
2. Note that the primary purpose and function of seawalls is to manage coastal hazard risks from tides, storm surges and large wave events.
3. Note that the NZ Coastal Policy Statement 2010 sets out when evaluating options in areas of existing development, councils must:
 - a. focus on approaches to risk management that reduce the need for hard protection structures and similar engineering interventions
 - b. take into account the nature of the coastal hazard risk and how it might change over at least a 100-year timeframe, including the expected effects of climate change.
4. Note that the current seawall will not cope with predicted sea-level rise and storms.
5. Note that the Island Bay seawall is a listed heritage item in the Council's District Plan.
6. Agree to:

EITHER

 - a. repair the Island Bay seawall in accordance with the plans and costs outlined in paragraphs 40 and 41.
 - b. continue to gather more detailed design information to develop the long-term solution based on options 3 or 4 (the options are outlined in Attachments 3 and 4 respectively) with implementation occurring by 2025

OR

 - c. continue to gather more detailed design information for options 3 or 4 (the options are outlined in Attachment 3 and 4 respectively) for the Committee to make a final implementation decision before June 2015.
7. Agree that the repairs represent a short to medium-term temporary coastal protection solution for Island Bay.
8. Agree that officers develop a resilience strategy for the South Coast for managing coastal hazards and report back on progress the Committee June 2015.
9. Note that officers will be presenting papers to the Transport and Urban Development Committee in early 2015 to:
 - a. consider the Council's District Plan heritage list and whether Council should remove items such seawalls from the District Plan.
 - b. introduce a pedestrian crossing between Shorland Park and the main Island Bay beach entrance in the interim period before a long-term solution is implemented.

Background

16. In June 2013, large waves and a heavy storm surge damaged a section of the Island Bay seawall immediately in front of Shorland Park. As a temporary coastal protection measure, boulders were placed by the damaged section of the wall to mitigate against future storm damage and secure the road/footpath.
17. To gauge whether the community was interested in exploring alternative options to repairing the existing wall (the status quo), officers conducted some early engagement in February 2014 at the Island Bay Festival. Staff also discussed the issue with various interested stakeholders and sections of the community. Over 60 emails from residents were received in the early stages of this engagement. Diverse views were expressed on a number of potential options including the option to rebuild the seawall and retain the current road lay-out (i.e. the status quo).
18. Officers also commissioned Tonkin & Taylor Ltd, Environmental & Engineering Consultants (T&T) to undertake a high level coastal process assessment and evaluation, and to identify possible alternative options to repairing the existing wall, which included:
 - Option 1 – Status quo: Retain the seawall in its present alignment and rebuild the damaged section of the wall.
 - Option 2 – Fix the wall and add sand to the beach: Fix the wall and provide a buffer by adding sand to the narrowest part of the beach where the wall is most vulnerable to large waves and storm surge.
 - Option 3 – Increase the size of the beach: Relocate the wall and road further inland to match the natural contour of the beach.
 - Option 4 – Close part of The Esplanade and connect Shorland Park to the beach: Remove a section of the seawall, close a part of the road and restore some coastal dunes – this option closes part of The Esplanade in front of Shorland Park.
 - Option 5 – Remove section of seawall, close some local roads and establish some coastal dune systems linking the beach with Shorland Park - This option closes part of The Esplanade and the intersection of Reef Street and The Esplanade.
19. Based on the high-level feedback from that early engagement and the report by T&T, officers determined that there was enough interest to initiate a broader project to explore different options to respond to the storm damaged wall. At one stage officers proposed the concept of a temporary road closure to measure the traffic effects of option 4. This proposal resulted in opposition from parts of the local community and led to the formation of the Island Bay Seawall Action Group. The Group formed primarily to ensure an open, fair and transparent process was being followed.
20. After some project delays, officers worked in partnership with the Island Bay Sea Wall Action Group to develop Project and Engagement Plans. Both these plans were approved by the Environment Committee in September 2014. The purpose of the project as outlined in the plan is to develop a recommended option for a long-term solution for managing hazards from storm surge and wave hazards for the area of the Island Bay Esplanade between Brighton Street and the southern end of Shorland Park.
21. Officers committed to delivering advice to Councillors on a recommended option, and to outline the various views of the community and advice from internal and external experts.

Discussion

22. In making a decision on how manage coastal hazards, the Environment Committee needs to weigh-up several factors: changing hazards over time, community feedback, the time to implement the preferred solution, traffic impacts, amenity impacts, legislative obligations, risks, costs and heritage. This paper presents two approaches for the Environment Committee to consider.

- Approach 1 (preferred approach) – This approach involves repairing the damaged seawall as a short-term measure (i.e. implementing option 1). The approach recognises that gradual sea-level rise will increase beach erosion and inundation risks. It also accepts that the current seawall and road lay-out will not provide adequate protection from coastal hazards in the long-term (i.e. 50 years plus). The Council would continue analysis, planning and community engagement to identify a long-term solution, which would be based on either option 3 or 4. The option to rebuild a stronger seawall in the current location would not be progressed.

The long-term solution would be implemented between by 2025. The work to temporarily repair the seawall will cost approximately \$812,000. Around half of this cost would be spent on repairing the sections of the wall that are likely to remain in place as part of the long-term solution (i.e. to strengthen the section of the wall east of the surf club).

- Approach 2 (alternative approach) – This approach would progress the detailed design for options 1, 3 and 4. The wall would not be repaired. More detailed information on: costs, hazard protection, amenity and traffic re-configurations would be developed and presented. A second-round of engagement and consultation would also be initiated. This approach involves more risk (financial liability and reputational) given the complete implementation of the solution could be 2-4 years away. The costs of options 3 and 4 have been estimated to be \$5 million and \$5.8 million to implement respectively. These cost estimates include 60 percent contingencies.

23. The remainder of this section provides more information, analysis and rationale to support the recommendations of this paper.

NZ Coastal Policy Statement 2010: Direction for evaluating options

24. The objectives and policies of the New Zealand Coastal Policy Statement 2010 (NZCPS) provide relevant guidance for the Island Bay seawall project about how to evaluate options and how to manage long-term risks in established areas of development. The NZCPS states that when evaluating options in areas of existing development, councils should:

- focus on approaches to risk management that reduce the need for hard protection structures and similar engineering interventions
- take into account the nature of the coastal hazard risk and how it might change over at least a 100-year timeframe, including the expected effects of climate change.

25. The NZCPS also states that the range of options for reducing coastal hazard risk that should be assessed include:

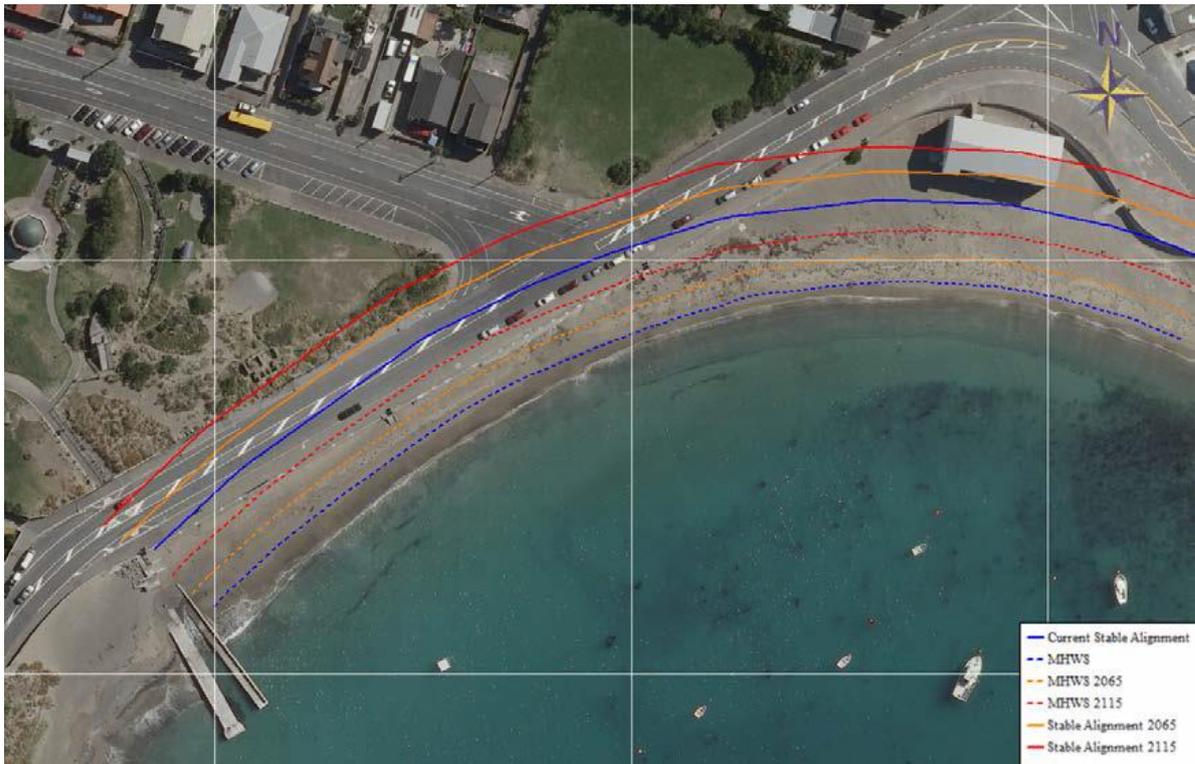
- promoting and identifying long-term sustainable risk reduction approaches including the relocation or removal of existing development or structures at risk

- recognising hard protection structures may be the only practical means to protect existing infrastructure of national or regional importance to meet the needs of future generations
 - recognising and considering the environmental and social costs of permitting hard protection structures to protect private property
 - identifying and planning for transition mechanisms and timeframes for moving to more sustainable practices.
26. Based on the NZCPS this Committee should:
- ensure that we assess and plan for the changes with coastal hazards in Island Bay over the next 100 years
 - consider soft engineering solution such as sand dunes as a coastal protection measure
 - consider options to manage and reduce risks that involve the relocation or removal of the seawall
 - consider whether The Esplanade in front of Shorland Park is (or part of) an existing piece of national or regional importance
 - recognize environmental costs such as beach loss associated with retaining the current seawall
 - identify and plan to implement more sustainable practices.
27. Given the requirements of the NZCPS, officers prefer a solution based on option 3 or 4 be progressed.

Coastal hazards and climate change in Island Bay

28. In 2012, a National Institute of Water and Atmospheric Research (NIWA) report for the Greater Wellington Regional Council, *Sea-level variability and trends: Wellington Region*, advised that existing communities in developed areas should be planning for a sea-level rise of at least 1.0m by 2115. NIWA recommend that councils should not be focused solely on changes in sea-level rise. Coastal inundation, coastal erosion, storm tide and wave extreme levels need to be assessed alongside projected sea-level rise.
29. Climate change and coastal hazards should be assessed through a risk-based approach which looks at the likelihood and consequence of an event. We have received high-level advice from coastal processes experts that with a sea-level rise increase of 0.45 metres, the current 1 in 100 year storm tide event is estimated to become a fortnightly event at high tide. With heavy wave action on-top of these high-tides, the likelihood and consequences of inundation and erosion increases substantially.
30. Figure 1 below shows an image from the T&T report (*Island Bay Seawall Alternatives Analysis: Coastal Processes Assessment*). The image shows how the mean high water springs of today would change by 2065 (using an assumed sea-level rise of 0.4m) and by 2115 (using a sea-level rise of 1m). These are both upper-bound sea-level estimates which is typical for hazard assessments.

Figure 1 – Changes of mean high water spring over by 2065 and 2115



31. The T&T report indicates that by 2065 there will be:
 - a reduction in beach size at the narrowest part of Island Bay Beach so that will mean high water springs would come up to the wall where the beach is at its narrowest
 - increased erosion rates over time with gradual sea-level rise, which will accelerate the rate of beach loss and present risks to the stabilisation of the current sea-wall foundation
 - an increased risk of inundation to the Esplanade and neighbouring property.
32. Further modelling is recommended for the South Coast to understand how sea-level rise will impact and influence on coastal flooding, erosion rates, storm-surge, storm-tides and extreme wave events. However, even preliminary assessments show a relatively common issue for developed coastal beach communities, that sea-level rise will reduce the size of beach and increase coastal hazard risks over-time. This can be conducted as part of the recommended work on the South Coast resilience strategy.

Establishing a strategy for managing climate change on the South Coast

33. As part of the Council's climate change resilience work, officers are planning to undertake a detailed assessment of:
 - the risks presented from climate change impacts across the South Coast
 - options for managing those risks for the South Coast (and the impacts of those options from a financial, social, cultural and environmental perspective)
 - thresholds for when intervention is required.
34. The Island Bay seawall accounts for around 200-300 metres of the South Coast. The long-term options for Island Bay may be impacted by the approach to mitigate climate-related risks to other sections of the South Coast. Officers preferred approach of repairing the wall and continuing progress the detailed design, alongside the

development of the Council’s Strategy, will ensure we understand the how this project relates to the wider South Coast.

Other legislative obligations and considerations

35. In addition to the NZCPS, the Council must consider the following legislation:

- Local Government Act 2002
- Resource Management Act 1991
 - Regional Policy Statement 2012
- Reserves Act 1977
- Building Act 2004
- Marine Reserves Act 1971
- Local Government Act 1974 or the Public Works Act 1981
- Marine and Coastal Area (Takutai Moana) Act 2011
- Heritage New Zealand Pouhere Taonga Act 2014.

36. A full summary assessment of these considerations is attached in Attachment 6.

Options 2 and 5

37. Officers recommend that the Committee does not undertake further development work on either option 2 or 5.

38. Option 2 is not supported because:

- The Council would be unlikely to be granted permission from the Department of Conservation to place the 12,500 m³ of sand onto the beach and shallows of Island Bay given its marine reserve status
- the sand would need continual replenishment therefor this solution would not be cost-effective in the long-term given the level of servicing required
- only a very small minority of feedback from the community supported this option.

39. Option 5 also received very little in the way of community support. In addition, the predicted traffic impacts, particularly for Trent Street, for option 5 were viewed as impractical.

Costs

40. Table 1 outlines the preliminary construction cost estimates for options 1, 3 and 4. It should be noted that “whole-of-life” costs have not been estimated at this stage. Whole-of-life costs include: construction, operation and maintenance, renewals/upgrades and disposal over the life of the asset.

Table 1: Construction costs of option 1, 3 and 4 (50% contingency, ^ 60% contingency)*

	Construction (\$000’s)	Professional fees (\$000’s)	Contingency (\$000’s)	Total Estimate (\$000’s)
Option 1	\$426.3	\$115.1	\$270.7*	\$812.1
Option 3	\$2,720.0	\$600.0	\$1,660.0^	\$4,980.0
Option 4	\$3,014.0	\$600.0	\$2,170.0^	\$5,784.0

41. The repair work for option 1 is estimated to last a minimum of 15 years. The repair work for option 1 involves three components:

- Section A – Repairing the south portion of the seawall that has rotated. The wall would be realigned, new foundation support would be put in place and steel

dowels would be inserted to connect the wall to the foundation. This work is estimated to cost \$97k plus fees and contingency.

- Section B – This section would repair the part of the 40+ metre part of the wall that was knocked over. A new concrete foundation would be constructed in a 17m section. The upper seawall blocks would be replaced, plastered and connected to the foundation with steel dowels. This work is estimated to cost \$105k plus fees and contingency.
- Section C – Install steel dowels to provide shear connection to the upper concrete block and plaster the upper seawall. There are also allowances to strengthen the foundation over certain section. This work is estimated to cost \$203k plus fees and contingency. The work relating to Section C would have to be undertake as part of either option 3 or 4.

42. It is a relatively costly to repair the wall for the short to medium-term so officers will continue to investigate alternatives that might provide an adequate level of protection at a reduced cost.
43. The cost estimates for options 3 and 4 should be treated as preliminary only and therefore large contingencies have been estimated. These costs should be treated as preliminary only hence the large contingencies attached to them. The point of providing these cost estimates to the Committee is to demonstrate that the up-front investment to introduce a long-term solution to manage coastal hazard risks is significant for such a small area of coastline. This raises the issue of the magnitude of costs for certain options for managing coastal hazard risks along the whole of the South Coast to respond with sea-level rise.

Amenity

44. There are different amenity properties and values of the different options that need to be considered. Some of the amenity values identified through the community consultation included:
- Maintaining a beachside promenade for walking – many people value the Esplanade for walking and resting, this would be maintained with options 1 and 3 but altered with option 4.
 - Car travel convenience – option 4 would increase travel time for those road users that regularly travel along The Esplanade in front of Shorland Park.
 - Traffic noise and volumes on Derwent and Reef Streets – option 4 would increase traffic volumes and noise for 25 to 35 properties on Derwent, The Parade and Reef Street.
 - Traffic noise and volumes on The Esplanade (south end) – option 4 would decrease traffic volumes (and to some degree noise) for the nine properties located on the new cul de sac on the south end of The Esplanade in option 4.
 - Natural amenity and eco-system development – option 4 would enhance the natural amenity and biodiversity of Island Bay by establishing a dune-system and enhancing the size of Island Bay beach.
 - Parking – option 4 would result in parking loss in the area that would be re-instated with dunes and some parking will also be lost on some narrow parts of Derwent Street.
 - Maintaining a beach amenity (long-term) – option 3 and 4 would do more to ensure that Island Bay beach continued to be an amenity over a long period of time. Option 1 (committing to the existing road lay-out) would lead to gradual beach loss, which would be a significant amenity loss for Island Bay.

- Coastal drive and cycling – the South Coast road is a popular route for sight-seeing and cycling. Option 4 would divert traffic in-land for few hundred metres which would disrupt the continuous coastal route.
 - Access to the beach – option 4 enhances access to the beach in some ways by taking away the road and traffic between the park and the beach. However, it was noted in some submissions that older residents rely on being able to park on The Esplanade in order to access the beach amenity (i.e. those with mobility restrictions might find option 4 results in less choices to access the beach). Both option 1 and option 3 provide good access to the beach for residents.
45. In the next stage of work, officers will gather more specific information to assess the amenity impacts, specifically traffic.

Heritage

46. The Island Bay Seawall is a heritage item in the District Plan.
47. The seawall has become a feature in the Island Bay community since its construction in the 1930's. It is used by locals and visitors for playing, sitting, leaning and as a meeting place. One of the themes of the feedback we received during consultation was that some submitters wanted to keep the seawall because of the character and heritage aspects it represented for Island Bay.
48. The seawall purpose is defined by its name. It is a wall designed to keep out the sea. The Island Bay seawall has provided this protection from waves, storm-surge and high-tides sufficiently for nearly 80 years. The amenity, heritage and recreational benefits of the seawall are secondary to the seawall's primary function, which is to protect public infrastructure and private property.
49. Officers believe that having the entire length of the seawall listed in the District Plan is not tenable in the long-term. The primary reason for this is that the current seawall will not be able to handle expected rises in sea-levels and it will have to be substantially modified. If the seawall were to be maintained in the long-term, it would need to be upgraded in order to manage increased coastal hazard risks that will result from rising sea-levels: inundation, storm-surge, king-tides and erosion. The seawall upgrade would involve one of the following:
- complete demolition and reconstruction of both the foundation and the wall
 - increasing the height and width of the wall as well as making improvements to the foundation.
50. In addition, should the Council endorse the approach to pursue option 3 or 4 in the medium-term, it would be logical to remove the seawall from the District Plan given that option 3 and 4 would result in substantial changes.
51. The Transport and Urban Development Committee would consider the recommendation to remove seawalls from the District Plan heritage list in early 2015 when the heritage chapter is brought to the Committee for consideration.

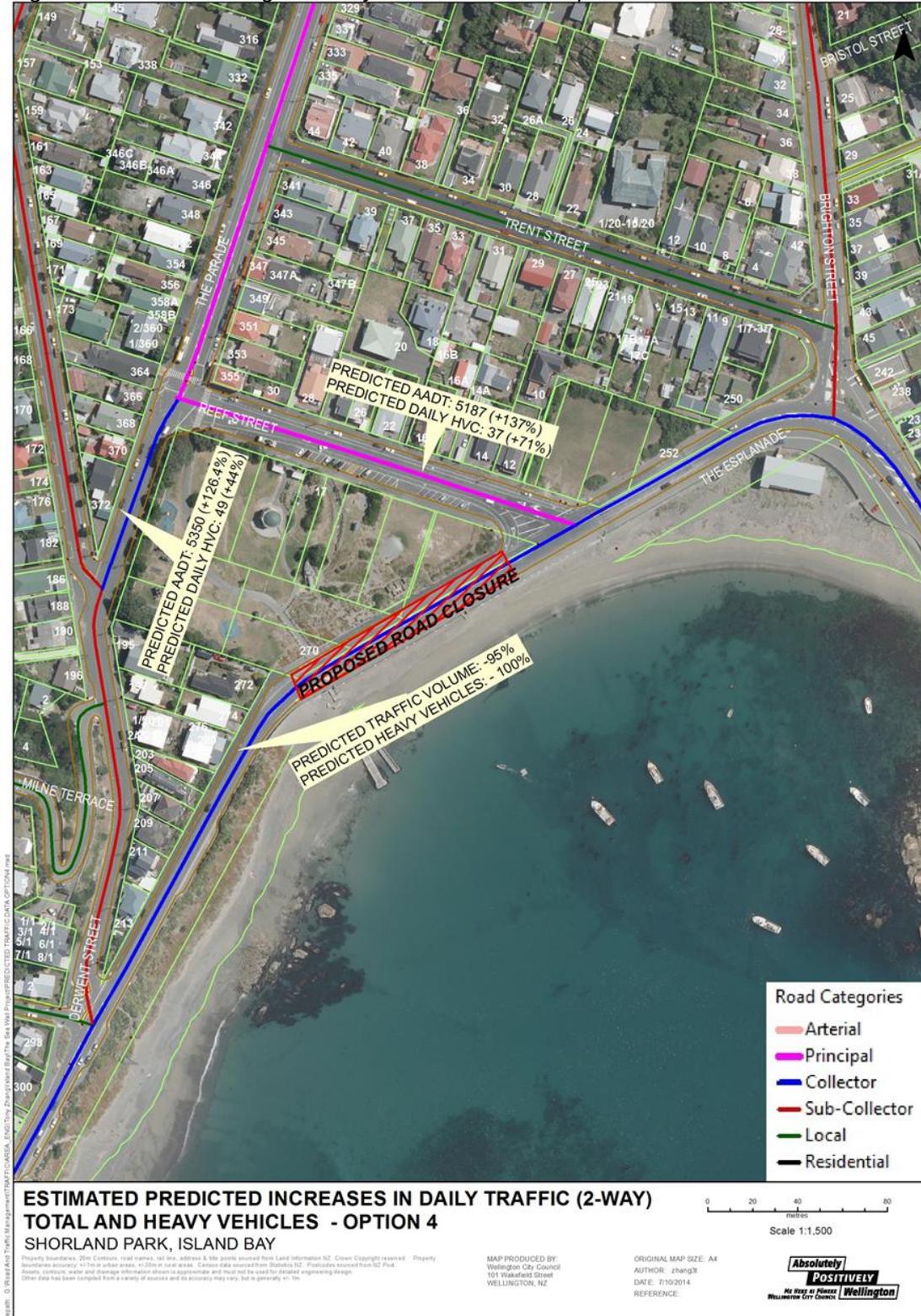
Traffic

52. The traffic impacts are a key consideration for the Environment Committee for this decision. Traffic was probably the most commonly raised issue during the engagement and consultation process. As stated previously in the report, officers advise that Option 5 should not be advanced due to predicted traffic impacts it will have on local roads, particularly Trent Street. The estimated increases in daily traffic for Option 5 are included in the map attached as Attachment 7.

Item 4.3

53. Officers believe option 4 provides a resilient, long-term solution to managing coastal hazards in Island Bay. However, the traffic impacts associated with this option need to be carefully considered in future planning work. The estimated increases in daily traffic for Option 4 are included in Figure 1 below, which shows predicted traffic increasing by 137% on Reef Street and 126% on Derwent Street. We received feedback during the consultation that these increases were unacceptable to some residents.

Figure 1: Estimated changes in daily traffic volumes for option 4



54. The other traffic related issues, risks and considerations that would need to be addressed or accepted relating to option 4 include:
- Derwent Street would need to be reclassified from sub-collector to collector road
 - there would be minor travel delays for traffic that regularly use The Esplanade
 - the increased traffic volume on Derwent Street, The Parade and Reef Street creates increased road safety risks, particularly around the intersections of Reef Street and The Parade, The Parade and Derwent Street, Derwent Street and Milne Terrace and Derwent Street and The Esplanade
 - intersections re-design, limited on-street parking removal (particularly on Derwent Street) and other traffic calming measures to manage traffic safety risks
 - reductions in on-street parking on The Esplanade where the dune system would be re-established and some loss of on-street parking on Derwent Street and Reef Street as well as near intersections (for road safety purposes)
 - heavy vehicle traffic will increase on Reef Street and Derwent Street, which would likely increase noise and vibration levels
 - changes to accommodate bus services, particularly bus turning
 - the South Coast route would be disrupted
 - elimination of traffic and traffic hazards that intersects Shorland Park and the beach creating a safer connection.
55. The Esplanade is a route used by heavy vehicles travelling to and from the Southern Landfill and the two cleanfills located adjacent to the Southern Landfill. It is also used as a route for over-sized loads. Careful consideration would need to be given to this specific vehicle type when designing and implementing the long-term solution.
56. A theme in the submissions was that there was a desire to implement traffic safety measures in and around Shorland Park considering it is heavily used by children and families. Average traffic speeds on The Esplanade in front of Shorland Park indicate vehicles travel above the speed limit. It is recommended that the Transport and Urban Development Committee consider traffic safety measures.

Consultation process

57. The Environment Committee endeavoured to initiate a collaborative engagement model with the community to deliver the consultation process and develop options. The Committee also agreed to implement an Engagement Plan that was jointly developed with the Island Bay Seawall Action Group.
58. To advertise the project and gather community feedback the Council:
- hosted 3 public meetings in Island Bay in cooperation with the Seawall Action Group
 - accepted online, email and written submissions from 9 October to 10 November
 - opened a drop-in information centre at the Island Bay Community Centre during the consultation
 - provided information at the Island Bay library during the consultation
 - advertised the consultation and the project through hoardings, flyers, posters, newspapers, online adverts and social media
 - updated the Island Bay Seawall project page on the Council website.
 - initiated stakeholder meetings.

Public meetings feedback

59. During the three public meetings, residents had the opportunity to ask questions and put forward views and officers also gathered feedback on preferences. Option 3,

relocating the road, had the most overall support across all three meetings. In general, it was viewed as a good compromise of not disrupting traffic in the area and also making changes to create a wider beach to manage sea-level rise. The Council also received feedback at the meeting that should option 3 be pursued, there was interest in keeping the same design of the current seawall for the newly constructed wall.

60. Option 1 also received support during the meetings. Those who supported option 1 generally valued the character and heritage aspects of the wall. Some spoke of sentimental attachments including family memories. Option 1 supporters felt strongly that the traffic impacts of option 4 or 5 would be too disruptive to the community. Others felt option 1 was not a design that could manage gradual sea-level rise.
61. Those who spoke in favour of option 4 believed the option would increase amenity values, help to retain the beach and manage sea-level rise issues over time. Some people in the meetings believed that option 4 would provide the most family-friendly solution while others had concerns that the traffic increases on local roads would lead to safety issues for children trying to get to and from the park.
62. Table 2 provides a summary of the preferences across all three meetings. It should be noted that not all meeting attendees provided feedback on their preferences.

Table 2: Preferences indicated at the October public meetings

Options	1st Preference	2nd Preference	Total
Option 1	24	20	44
Option 2	3	7	10
Option 3	55	25	80
Option 4	32	8	40
Option 5	5	12	17

Written submissions

63. The Council received 435 written submissions (online, email and hard-copy submission forms). Table 3 shows the breakdown of the preferences received during the written submission process.

Table 3: Preferences on options from written submissions

Options	Strongly agree	Agree	Total Agree	Disagree	Strongly disagree	Total Disagree
Option 1	162	45	207	49	105	154
Option 2	29	38	67	69	166	235
Option 3	111	52	163	43	115	158
Option 4	95	39	134	22	223	245
Option 5	42	37	79	29	234	263

64. The Council received a wide-range of feedback from residents at the meetings and through written submissions who did not support options 4 or 5. This was due mainly to concerns about traffic impacts and traffic safety. Other reasons included maintaining the coastal route and the heritage/character nature of the seawall.
65. In the written submissions, option 1 received the most support (207 submitters), followed by option 3 (163 submitters) and option 4 (144 submitters).
66. The feedback from both the written submissions and meetings shows that there is still strong support for the status quo but there is also support for alternatives. The key themes of the written submissions are summarised in Attachment 8. This analysis was

only conducted for options 1, 3 and 4 as officers believe that options 2 and 5 are impractical and not supported by the community.

Petition supporting a solution aligned to option 4

67. The Council received a Change.org petition signed by more than 140 people titled "family friendly Island Bay". The petition advocated that Council "create a more family friendly Island Bay by re-establishing the dune system, removing a section of the damaged seawall, and closing a part of The Esplanade." Other components of the petition included:
- creating a "premier park for families" where children can have input into the design process
 - a safer, direct link between the park and the beach
 - possibility of re-zoning some land to provide for uses that keep people at the park for longer (e.g. café)
 - better and more varied use of the Surf Club
 - improved economic activity for Island Bay and surrounding areas.

Stakeholder feedback

68. The Council also received feedback from stakeholders during the consultation process.
69. Ngati Toa – Ngati Toa submitted that "every effort must be made to restore coastal systems and processes as much as possible. Circumstances such as the one that has arisen at the Island Bay Seawall provide rare opportunities for ecological restoration enhancement in historically developed areas. Ngati Toa has Statutory Recognition over the coastal marine area at Island Bay and is supportive of environmental improvements that will benefit the marine environment. For these reasons we support options 4 or 5."
70. NZ Heavy Haulage Association – The NZ Heavy Haulage Association represents transport operators that move overdimension and overweight loads. They submitted that "this section of The Esplanade is part of the overdimension route in Wellington. This road is the only route to Island Bay, Owhiro Bay, Happy Valley, Brooklyn, Berhampore and some parts of Newtown...Options to cut The Esplanade at this point provide no suitable alternative options for overdimension loads to travel." The Heavy Haulage Association therefore has a strong preferences for options 1, 2 and 3.
71. Greater Wellington Regional Council (GWRC) – GWRC's submission referenced several policies of the Regional Policy Statement (RPS). These policies include how councils should deal with natural hazards and climate change and the protection/enhancement of ecosystems. GWRC's key points included:
- support for the further development of options that seek to employ soft engineering approaches to managing coastal hazards and indigenous ecosystems, consistent with the direction provided in the RPS
 - a request that harbour safety and navigation, including the possible need for relocation of navigation lights, be given appropriate consideration in the evaluation of options
 - a request to continue ongoing discussion with Council as the options are further developed to ensure that public transport considerations are taken into account
 - a request that traffic management assessments be undertaken once the list of shortlisted options is known.
72. Emergency Services – Council received a submission from the Wellington Free Ambulance and also had conversations with the police and fire departments about the various options. We received feedback that the emergency services would be able to perform their services under any option.

73. Youth Council – The Youth Council supported implementation of options 4 or 5. They feel that restoring the dune system is the most effective option to resolve the issue the Council is trying to address. They also believe option 4 is the most sustainable, would result in positive ecological outcomes and create new recreation opportunities.

Next Actions

- 74. Should the Committee endorse the preferred approach, officers would initiate repair work on the seawall in the next financial year (from 1 July 2015).
- 75. Officers would continue to work on further design and analysis of options 3 and 4. This work would eventually lead to the preparation of a final recommendation for a long-term solution based on option 3 or 4 for implementation in the 10-year Long-term Plan (by 2025).
- 76. Work on a broader strategy for options for managing climate change impacts on the South Coast will initiate in early 2015.
- 77. The Transport and Urban Development Committee will consider:
 - the recommendation to remove seawalls from the District Plan heritage list in early 2015 when the heritage chapter is brought to this Committee for considerations
 - traffic calming measures around Shorland Park that prioritise pedestrians.

Attachments

Attachment 1.	Option 1	Page 20
Attachment 2.	Option 2	Page 21
Attachment 3.	Option 3	Page 22
Attachment 4.	Option 4	Page 23
Attachment 5.	Option 5	Page 24
Attachment 6.	Legislation Summary	Page 25
Attachment 7.	Traffic impact volume assessment of option 5	Page 38
Attachment 8.	Key Themes of Consultation	Page 39

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SUPPORTING INFORMATION

Consultation and Engagement

In addition to feedback received from local residents and the wider Wellington community the following organisations were also consulted and engaged in the development of this paper:

- Greater Wellington Regional Council
- Ngati Toa
- Heavy Haulage Association
- Department of Conservation.

The internal business units consulted include:

- Strategic Asset Planning
- City Networks (Roads & Utilities)
- City Planning and Design (District Plan, Resource consent, Heritage, urban design & spatial planning)
- Parks Sport & Recreation
- Finance.

Treaty of Waitangi considerations

Ngati Toa has a historic connection to Tapu te Ranga Island and the surrounding area. As part of Ngati Toa's Treaty settlement, it was granted rights to Taputeranga Island (with Council retaining management of the Island). Ngati Toa provided a submission in support of Options 4 or 5.

Financial implications

It is estimated that repairing the seawall (Option 1) will cost approximately \$812,000. However, should the Council decide to progress Options 3 or 4 as recommended in this paper a temporary repair could be implemented for approximately \$400,000.

The costs to relocate the wall and road further inland (Option 3) or restore the dune system (Option 4) are estimated to be \$4.9 million and \$5.8m respectively.

Policy and legislative implications

Decisions taken in this paper may have implications for the Council's future climate change adaption strategy and policy.

Risks / legal

Legal advice was sought and has been incorporated into this paper. In particular, the Council when evaluating options must have regard to the New Zealand Coastal Policy Statement. If the seawall remains in its current state, with the temporary rip/rap solution in place, the Council may bear the financial risk/liability for any further damage to the area caused by future storms.

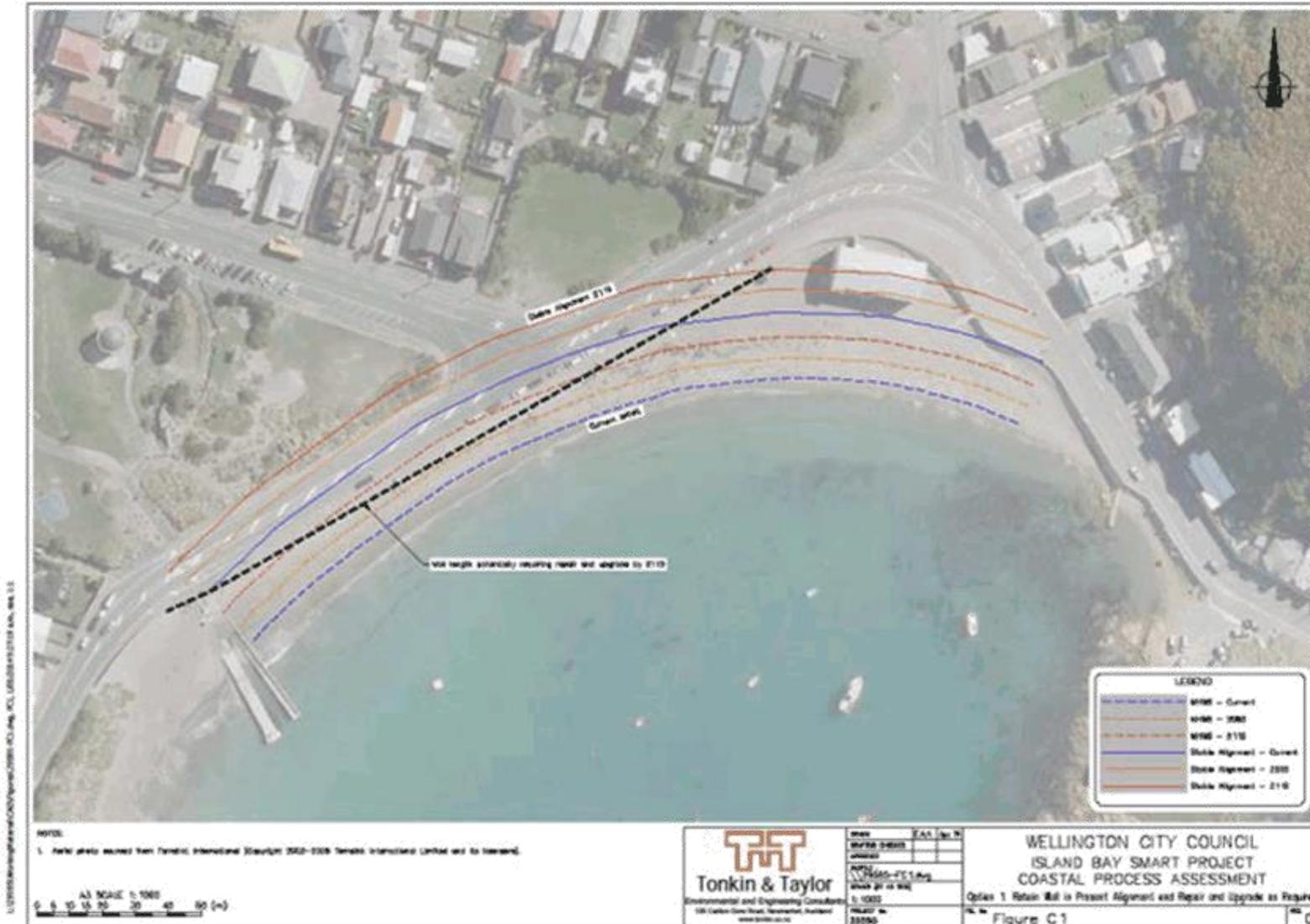
Climate Change impact and considerations

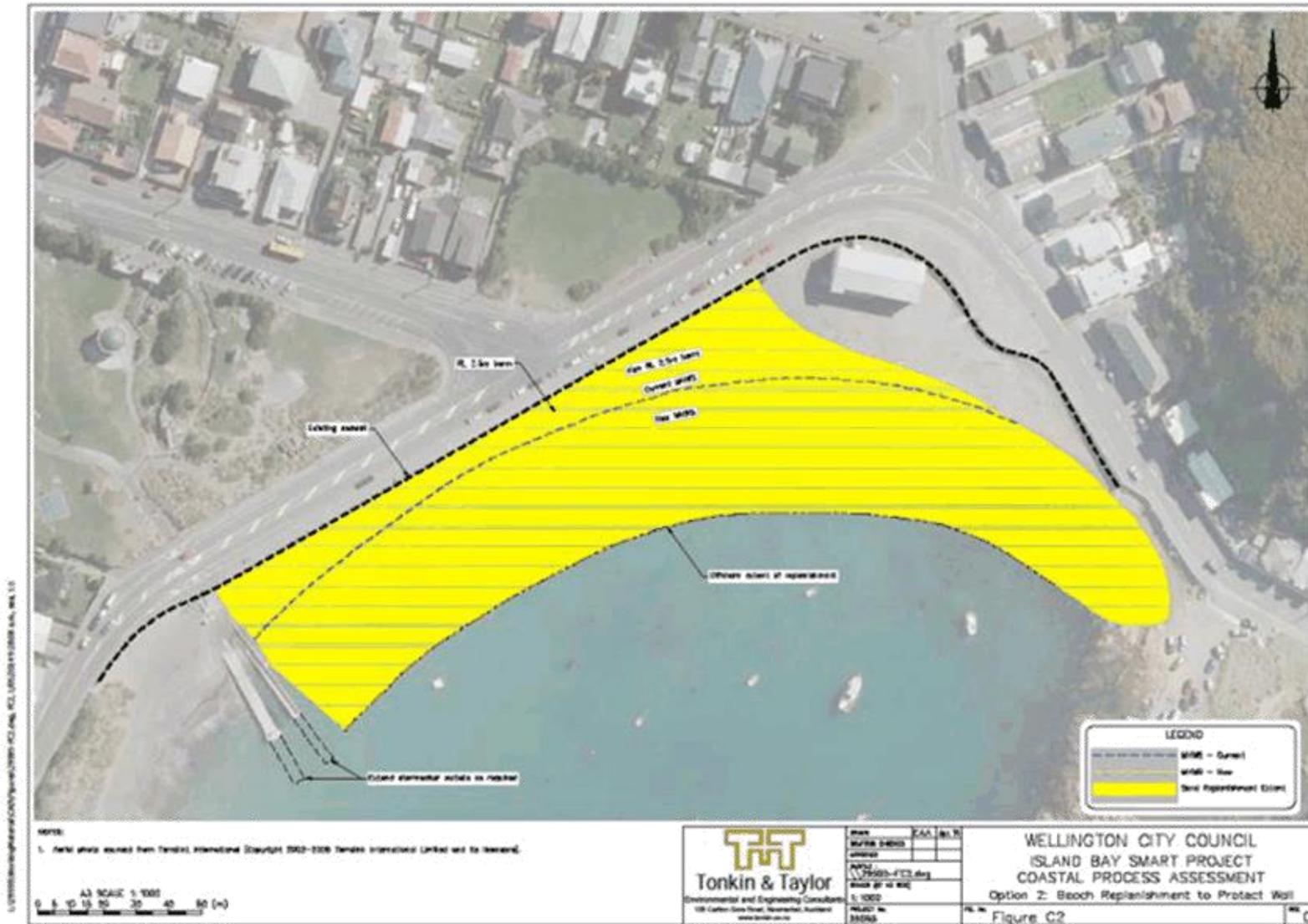
The recommendations made in this paper seek to mitigate climate change impacts in Island Bay.

Communications Plan

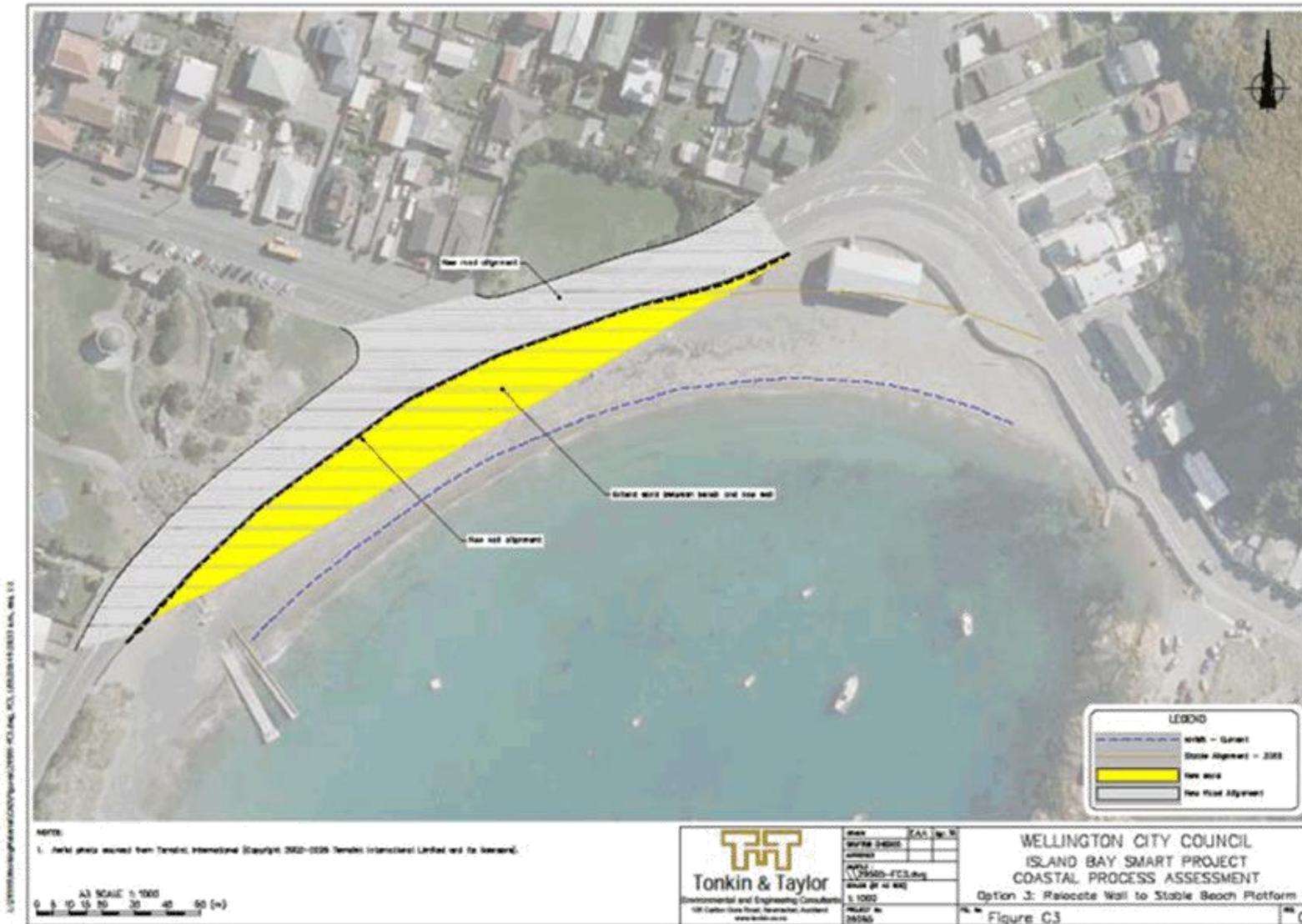
Following decisions made a communications plan will be developed to ensure all stakeholders are aware of the decision and next steps.

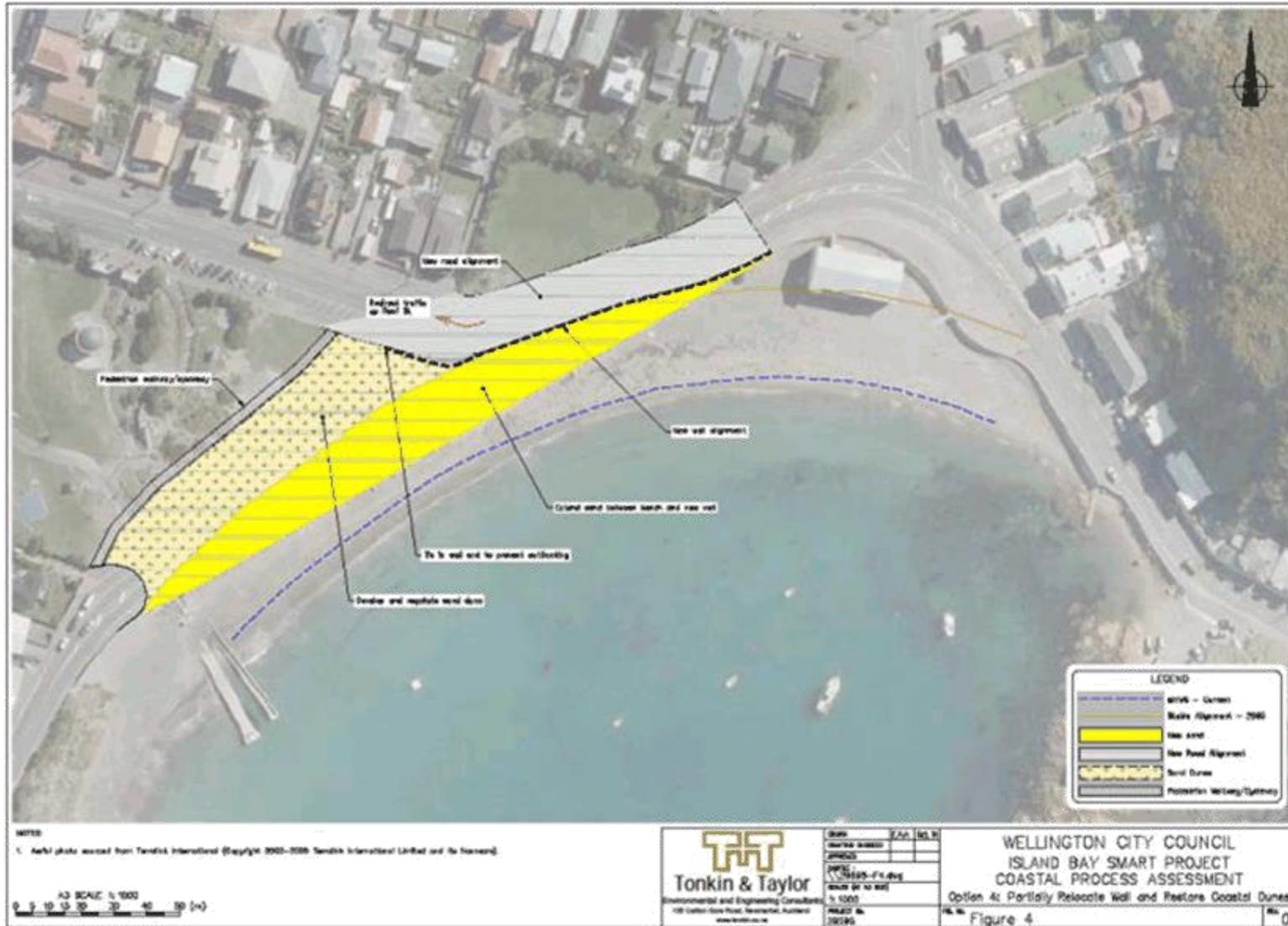
Item 4.3 Attachment 1



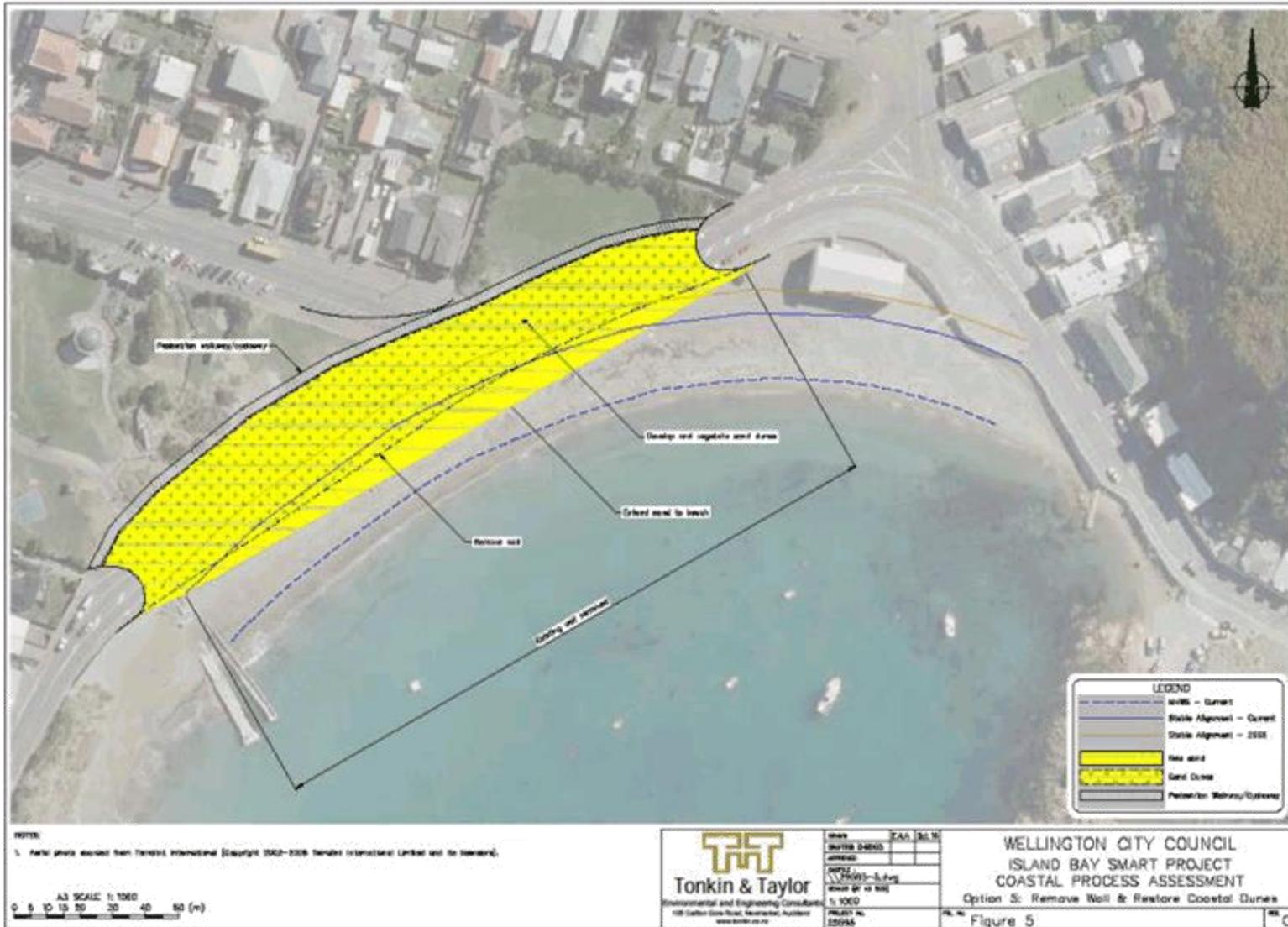


Item 4.3 Attachment 3





Item 4.3 Attachment 5



Island Bay seawall project
Legislative summary

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Purpose

- 1.1 This report provides a high level summary of the Council's key legislative responsibilities in considering the options relating to the Island Bay seawall project (the project).
- 1.2 The report has been developed to inform stakeholders about legislative requirements that must be met or considered by Council when deciding how best to protect Island Bay from long-term coastal hazards.

Introduction

- 2.1 The huge swells generated by the severe southerly storm that lashed Wellington in June 2013 caused widespread damage along Wellington's south coast. This included the collapse of a section of the 350-metre seawall in Island Bay, opposite Shorland Park.
- 2.2 The Council is looking for a long-term solution to manage coastal hazards like storm surge for the area of Island Bay Esplanade between Brighton Street and the southern end of Shorland Park.
- 2.3 In considering a long-term solution the Council will likely need to consider the following legislation, depending on the nature and location of the solution:
 - Local Government Act 2002 (LGA)
 - Resource Management Act 1991 (RMA)
 - Reserves Act 1977
 - Building Act 2004
 - Marine Reserves Act 1971
 - Local Government Act 1974 or the Public Works Act 1981
 - Marine and Coastal Area (Takutai Moana) Act 2011
 - Heritage New Zealand Pouhere Taonga Act 2014.

Legislative Framework

The Local Government Act 2002

3.1 The Local Government Act 2002 (LGA) provides the general framework and powers for local government. Under the LGA, the Council's overarching purpose (outlined in s 10) in relation to this project is to:

- enable democratic local decision-making and action by, and on behalf of the Island Bay and wider community;
- meet the current and future need of the community for good-quality local infrastructure, local public services, and performance of regulatory functions in a way that is most cost-effective for households and businesses.

3.2 The LGA also provides a strong mandate for the Council to work with the community to find an effective and efficient long-term solution to the coastal hazards. Specifically, one of the principles of the LGA that the Council "must act in accordance with", provided in section 14(1)(g) of the LGA, is that:

"A local authority should ensure prudent stewardship and the efficient and effective use of its resources in the interests of its district or region, including by planning effectively for the future management of its assets".

3.3 Section 14(1)(h) of the LGA is also of particular relevance, which states that:

"in taking a sustainable development approach, a local authority should take into account—

- (i) the social, economic, and cultural interests of people and communities;*
- and*
- (ii) the need to maintain and enhance the quality of the environment; and*
- (iii) the reasonably foreseeable needs of future generations."*

3.4 Part 6 of the LGA requires councils to undertake robust planning processes through long term plans and annual plans. These processes involve outlining and co-ordinating resources for the outcomes councils seek to achieve, including a financial strategy (as part of the long term plan), and providing an opportunity to the community to provide input into the decision-making process. Given the obligation on local government to meet community needs in a way that is most cost effective for households and businesses, it is important that any projects that will require significant expenditure are planned for, and communities are well informed and supportive of them.

3.5 More specifically, the LGA also:

- directs local government to have particular regard to the contribution of core services specified in section 11A to its communities (s 11A). Core services specified in section 11A that are relevant to this project include network

- infrastructure (e.g. roads and pipes), the avoidance or mitigation of natural hazards, and reserves and other recreational facilities and community amenities (for example the Tapu Te Ranga Marine Reserve and Shorland Park).
- sets out requirements on the timeframes that the Council must consider when planning infrastructure provision:
 - When developing a Long-term Plan the Council must plan for a minimum period of 10 consecutive financial years
 - When developing an Infrastructure Strategy the Council must plan for a minimum of 30 consecutive financial years.
 - sets out requirements around consultation and decision-making (ss 76AA to 83A), as further discussed below.
- 3.6 The Council's decision-making obligations include:
- seeking to identify all reasonably practicable options and assessing them in terms of their advantages and disadvantages
 - considering the views and preferences of persons likely to be affected by, or who have an interest in, the matter
 - identifying and explaining any significant inconsistency between the decision, or the anticipated consequences of the decision, and any policy adopted by the Council or plan required by the LGA or any other enactment, including any intention of the Council to amend the policy or plan to accommodate the decision
 - providing opportunities for Maori to contribute to the decision-making process.
- 3.7 The principles that apply to the Council's consultation include:
- providing persons who will or may be affected by, or have an interest in, the decision or matter, with reasonable access to relevant information in an appropriate manner and format
 - encouraging such persons to present their views to the Council
 - providing a reasonable opportunity to persons who wish to have their views considered by the Council to present those views in a manner and format appropriate to their preferences and needs.
- 3.8 Section 76AA of the LGA requires the Council to adopt a significance and engagement policy setting out, among other things, its general approach to determining the significance of proposals, how it will respond to community preferences about engagement in relation to specific matters, and how it will engage with communities on other matters. The Council adopted its Significance and Engagement Policy on 5 November 2014.

The Resource Management Act 1991

3.9 The Resource Management Act 1991 (RMA) is the principal legislation that governs the management of New Zealand’s environment. The purpose of the RMA is to promote the sustainable management of natural and physical resources. The RMA does this by providing a broad framework through its purpose, principles, matters of importance, and through the functions it delegates to councils. The following table summarises key principles under the RMA in considering options for this project. These principles will be relevant if the selected option will require a resource consent or a designation under the RMA.

Table 1: Summary of key RMA principles for considering and selecting options that may require a resource consent or designation.

Matters of national importance to “recognise and provide for” (s 6).	Other matters relevant to this project to “have particular regard to” (s 7).
<ul style="list-style-type: none"> • the preservation of the natural character of the coastal environment • the maintenance and enhancement of public access to and along the coastal marine area • the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga • the protection of historic heritage from inappropriate subdivision, use, and development. 	<ul style="list-style-type: none"> • the efficient use and development of natural and physical resources • the maintenance and enhancement of amenity values • the maintenance and enhancement of the quality of the environment • any finite characteristics of natural and physical resources • the effects of climate change.
Key functions of local government in relation to the Island Bay seawall project (ss 30 and 31)	Further responsibilities and considerations under the RMA.
<ul style="list-style-type: none"> • the <i>implementation</i> of objectives, policies and methods to achieve integrated management of the use, development or protection of land and natural and physical resources (see following section) • the control of land use and its effects for the purpose of the avoidance or mitigation of natural hazards. 	<ul style="list-style-type: none"> • The Council shall take into account the principles of the Treaty of Waitangi (s 8) • Part 3 of the RMA sets out restrictions on the carrying out of particular activities unless those activities are permitted by a district and regional plan or a resource consent • The Council shall adopt the best practicable option to ensure that emission of noise does not exceed a

	<p>reasonable level (s 16)</p> <ul style="list-style-type: none"> • The council has a duty to avoid, remedy or mitigate any adverse effect on the environment arising from an activity carried on by or on behalf of the Council (s 17).
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The NZ Coastal Policy Statement, Regional Policy Statement, and Regional and District Plans

3.10 The New Zealand Coastal Policy Statement 2010 (NZCPS), Regional Policy Statement and Regional and District Plans, developed under the RMA, provide specific objectives, policies and rules for local environmental management. The NZCPS is similar to a National Policy Statement (NPS), is provided by central government for coastal management, and incorporates the RMA responsibilities listed in Table 2 above in relation to the coastal environment. These responsibilities are also incorporated into the Regional Policy Statement, Regional Plan and District Plan, with functions split between regional and territorial authorities. Policy statements are higher level documents that guide the development of regional and district plans. The plans set lower level objectives, policies and rules to implement the policy guidance provided by the higher level documents.

3.11 Section 84 of the RMA requires the Council to observe and enforce the observance of policy statements and plans. That section states:

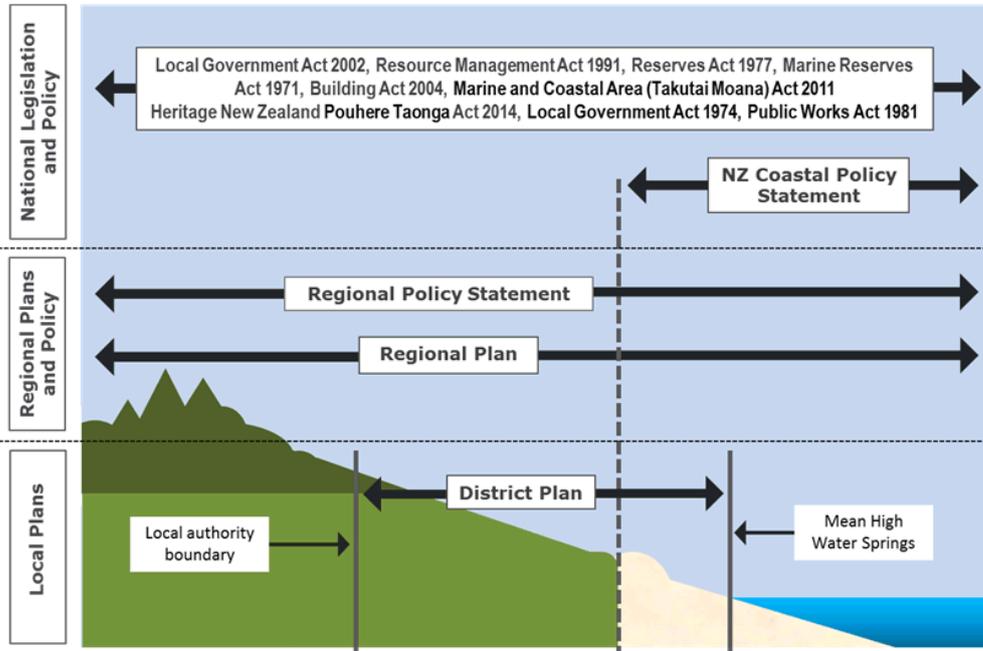
While a policy statement or a plan is operative, the regional council or territorial authority concerned, and every consent authority, shall observe and, to the extent of its authority, enforce the observance of the policy statement or plan (s. 84).

3.12 The City Council focuses on the effects of activities within its district, broadly relating to persons (eg traffic, noise, urban design etc), and inland from the coastal marine area. The Regional Council focuses on different effects and activities within its region, broadly those relating to physical and natural resources, including within the coastal marine area (together with the Minister of Conservation). Regional Policy Statements, Regional Plans and District Plans are created by local authorities and each must 'give effect' to the New Zealand Coastal Policy Statement 2010 (NZCPS).

3.13 The NZCPS prescribes national objectives and policies to guide management of the coastal environment under the RMA. The NZCPS serves as a key reference for the project, especially when considering the advantages and disadvantages of options. The

NZCPS also requires that councils consider a 100 year planning timeframe for certain matters, including in relation to coastal hazards.

Figure 1. Key legislation to be considered for the Island Bay Seawall Project.¹



Additional legislation

4.2 In addition, to the LGA and the RMA the following legislation may also need to be considered:

- Reserves Act 1977 – this Act will need to be considered if issues relevant to reserve land arise.
- Building Act 2004 – building consent is required to build, alter or demolish structures such as seawalls. The Building Act also requires that territorial authorities can only grant a building consent for a new building or an alteration to an existing building, which is intended to have a life span of less than 50 years, if the consent is subject to certain conditions.
- Marine Reserves Act 1971- may be relevant if issues relevant to the marine reserve arise.

¹ Note that the various pieces of listed legislation apply in differing degrees to the spatial area covered by the project.

- Local Government Act 1974 or the Public Works Act 1981 – may be relevant if a road is to be changed to another land use.
- Marine and Coastal Area (Takutai Moana) Act 2011, for example if interests of tangata whenua in the marine and coastal area are affected or if the Project affects rights of access or use of a road in the CMA.
- Heritage New Zealand Pouhere Taonga Act 2014, for instance if an archaeological site is affected and an authorisation is required.

Resource Consents and heritage status

- 5.1 Under the RMA a resource consent is required if a proposed project breaches any rule in a regional or district plan. Depending on the project and the extent of its effects, the application for resource consent will either be non-notified or notified.

Non-notified resource consent applications

- 5.2 A consent application will be non-notified where no party is an "affected person" in relation to the proposed activity under the RMA, or the written approval of all affected persons to the project has been obtained, and (with some exceptions) where the proposal has no more than a minor adverse effect on the environment. The timeframe to process a non-notified resource consent application if no hearing is required is 20 working days after the date the application was first lodged, subject to any extensions granted.

Notified resource consent applications

- 5.3 A consent authority may require either limited or public notification of the consent application:
- **Limited notification** means that only those persons who are considered to be affected are notified about the project by the council and can make a submission on the resource consent application.
 - **Public notification** means a notice is placed on the site and published in a newspaper and anyone can make a submission on the application to the Council.
- 5.4 The timeframe to process a notified consent application with a hearing (not including the time that a hearing is in progress) is 70 working days, subject to time extensions that may be granted. However, people who make a submission on a limited or publicly notified resource consent application can appeal decisions on consent applications. Appeals are heard by the Environment Court. If this occurs the resource consent does not commence until after the Environment Court's decision, unless the Environment

Court allows early commencement. Parties to an Environment Court appeal may appeal the Environment Court's decision to the High Court, on points of law.

Identified concept options

- 5.5 Currently the Council has identified five possible options to try and cope in different ways with storm surges and a predicted rise in sea levels:
- Option 1: Retain the sea wall in its present alignment and re-build the damaged section to current building code specifications.
 - Option 2: Initiate beach nourishment to provide a buffer where the beach is at its narrowest and where the wall is most vulnerable to large waves / storm surge.
 - Option 3: Relocate the wall and road further inland to the natural contour of the beach.
 - Option 4: Remove section of seawall, close a part of the road and restore some coastal dunes - this option closes part of The Esplanade in front of Shorland Park.
 - Option 5: Remove section of seawall, close some local roads and establish some coastal dune systems linking the beach with Shorland Park - this option closes part of The Esplanade and the intersection of Reef Street and The Esplanade.
- 5.6 Option 1 (status quo). Progressing Option 1 may not trigger any major requirements under legislation, although this would need to be the subject of a detailed consideration. Repairing the wall is considered repairs and maintenance therefore no resource consent or building consent would be required.
- 5.7 Option 2 (beach replenishment) would see sand introduced to the coastal marine area. This option is likely to require resource consent from the Regional Council, and potentially also from Wellington City Council for associated earthworks. However, the Council's advice from the Department of Conservation is this option is unlikely to be approved since it would involve depositing material into the Tapu Te Ranga Marine Reserve.²
- 5.8 Options 3, 4 and 5 that consider demolition of the wall or realignment of the road are likely to require publicly notified resource consents from the City Council and Regional Council.

² Sections 181 (2) of the Marine Reserves Act 1971 makes it an offence (without lawful authority or reasonable excuse) to discharge or cause to be discharged or deposits, whether directly or indirectly, in or into a marine reserve any toxic substance or pollutant or other substance or article of any kind injurious to marine life. Sections 181 (4)(c) of the Marine Reserves Act 1971 also makes it an offence (without lawful authority or reasonable excuse) to wilfully interfere with or wilfully disturb in a marine reserve any marine life, foreshore or seabed, or any of the natural features.

- 5.9 As there may be archaeological material in the vicinity, options 3, 4 and 5 may require an Archaeological Authority under the Heritage New Zealand Pouhere Taonga Act 2014.
- 5.10 Further, the Island Bay Seawall is a listed heritage object in the District plan and its heritage status will need to be taken into account.

Summary

- 5.11 The sustainable development approach of the LGA, and sustainable management in the case of the RMA are central to considering community preferences and the advantages and disadvantages of options. The Council's broad mandate in taking a sustainable development approach under the LGA is to take into account the:
- social, economic, and cultural interests of people and communities
 - need to maintain and enhance the quality of the environment
 - reasonably foreseeable needs of future generations.
- 5.12 Table 2 provides a summary of the legislation relevant to this project.

Table 2: Summary of the legislation relevant to this project.

<p>Local Government Act 2002 – applicable to all options Provides the Council's mandate to take a long-term view, consider a range of reasonably practicable options and the community's interests and preferences, and to include Maori in the decision-making process.</p>
<p>Resource Management Act 1991 – applicable to all options Considering the advantages and disadvantages of options and the effects on the urban and natural environment. The NZCPS is a key reference for the coastal area, and the district plan for effects emanating from activities landward of the coastal marine area, including traffic and road design considerations. City council building and resource consents are likely to be needed for options 3 – 5, and resource consent from the Regional Council for options 2 - 5.</p>
<p>Marine Reserves Act 1971- applicable to option 2, and any potential discharges into Tapu Te Ranga Marine Reserve (options 3 – 5) The Marine Reserves Act prohibits disturbance or interference with marine life, foreshore or seabed, or natural features within a marine reserve, or any discharge potentially injurious to marine life.</p>
<p>Reserves Act 1977 – applicable to option 3 and potentially option 4 Option 3 requires a strip of Shorland Park, and potentially also Cog Park to accommodate the natural curve of the beach and future sea-level rise. The Reserves Act 1977 allows for the exchange of reserve land for other land to be held for the purposes of that reserve (s 15). In this case, the road is being moved landward, and land that is currently road will become available as beach. The Council would need to consider the balance of values lost and gained. A previous example of a land exchange is here.</p>
<p>Building Act 2004 – applicable to option 3 and potentially option 4 A building consent would need to be obtained to show how the new sea wall complies with the building code (ss 17, 49). The building code details the relevant design and engineering standards. The Building Act 2004 requires that territorial authorities can only grant a building consent for a new building or an alteration to an existing building with a design life of less than 50 years if that consent is subject to certain conditions. A building consent is not required for certain maintenance and repairs (Option 1 and 2). A building consent may be required for other options, but more detailed proposals would be needed before this could be confirmed.</p>
<p>Local Government Act 1974 or the Public Works Act 1981 Should a formal road stopping process be necessary (potentially for options 4 and 5).</p>
<p>Marine and Coastal Area (Takutai Moana) Act 2011 For example if interests of tangata whenua in the marine and coastal area are affected, or public access to the common marine and coastal area is impacted. This could potentially be relevant to all options, subject to more detailed design.</p>

Heritage New Zealand Pouhere Taonga Act 2014

For example if an archaeological site in terms of this Act is affected, an authorisation under this Act may be required.

Item 4.3 Attachment 7



Summary themes	Option 1		Option 3		Option 4	
	Supporting feedback	Opposing feedback	Supporting feedback	Opposing feedback	Supporting feedback	Opposing feedback
General comments	<ul style="list-style-type: none"> Fix the wall as soon as possible. Seawall has proved itself, other options will fail. Wall provides important protection from the wind. Wall and road make the coast accessible to everyone. Walls are being rebuilt at Princess and Owhiro Bays - same should happen for Island Bay. Far more people use the road than the park. Keep the road. Least disruptive option. Joining the park and beach is a bad idea. Children could run off and drown. 	<ul style="list-style-type: none"> Short term solution, will be further damage to the wall in the event of another storm Eventually the beach will disappear 	<ul style="list-style-type: none"> This option works with the contours of the Bay. Preserves all current uses. Provides a longer term option with beach and the essential security of a wall. Provides more beach and less sea pressure on the wall. Best compromise option preserving character and minimising traffic impact. Works with rather than fights nature Seawalls work other options unproven Relocation of the seawall will provide protection for a significant period of time There is plenty of space to implement this option Reinstates original look of the bay. Least disruption to the community. New road would be located mostly on land that is not used right now 	<ul style="list-style-type: none"> Disruptive for little gain Short term solution 	<ul style="list-style-type: none"> Need to work with nature Best long term option as will require less maintenance Aesthetically appealing and a more natural feel A combined beach/park will be a wonderful asset for Wellington. Rethink and improve what we have. 	
Heritage	<ul style="list-style-type: none"> Heritage wall and road need to be retained. Wall is iconic. Need to keep the wall to retain the character of Island Bay. Heritage road important coastal drive. People should be able to drive and cycle around the coast. Cant understate the importance of being able to enjoy leaning on a seawall sharing lunch with seabirds and smelling the sea 		<ul style="list-style-type: none"> Need to incorporate our history into changes –wall is iconic Wall should be relocated using existing materials or build to same specifications to maintain character of the Bay Option that best maintains character of Island Bay. Allows for opportunity for new wall style/design to be replica of the existing, character wall. 			<ul style="list-style-type: none"> Detour will be detrimental to tourism with the loss of the longest marine drive in the Southern hemisphere Destroy the character of the Bay

Item 4.3 Attachment 8

Summary themes	Option 1		Option 3		Option 4	
	Supporting feedback	Opposing feedback	Supporting feedback	Opposing feedback	Supporting feedback	Opposing feedback
Climate changes	<ul style="list-style-type: none"> Climate change is not real Global warming is scaremongering Knee jerk/over reaction to the storm - fix the wall 	<ul style="list-style-type: none"> Will not cope with climate change This option does not address the problem of higher sea level rises. 	<ul style="list-style-type: none"> Widening the beach will to some extent alleviate rising sea levels and possible storm damage. Option 3 may not be a 100 year plan but a lot a can change in 10/20/30 years including technology and understanding of climate change. Option 3 provides reasonable interim solution and allows time for our understanding to be developed Opportunity to prepare for sea level rise now Best option for taking into account rising sea levels and a win/win for all. Allows for higher tides and sea level rise in the future 	<ul style="list-style-type: none"> Does not take into account sea level rise No proof around how long this option would protect the Bay from coastal hazards 	<ul style="list-style-type: none"> Best solution to deal with climate change and sea level rise With climate change and depletion of oil reserves car access should not be the major consideration Sea level combined with forecast bigger storms and retreat of the seawall and road is safest bet. Decisions on options should be weighted in favour of future generations. IPCC report highlights risk to coastal infrastructure. Will ensure future of the beach as sea levels rise. First significant decision where climate change is the most influential factor for the Council. 	<ul style="list-style-type: none"> Climate change is not real Global warming is scaremongering Other parts of the coast are in more danger, money should be spent on wider issue rather than this minute local one. Focus on the big picture
Sand	<ul style="list-style-type: none"> Protection from sand 		<ul style="list-style-type: none"> Less affect from sand 		<ul style="list-style-type: none"> Sand dunes are important to act as a natural buffer to storm events and restore equilibrium Sand dunes will provide long term coastal hazard protection 	<ul style="list-style-type: none"> Ongoing issues with wind-blown sand, dune roll-over and beach recession. No room for dunes to roll-over. Also given the strong winds dunes are not sensible. Sand drift is an enormous problem Dunes are fenced off , dunes will result in public space being taken away from the public A barrier would be needed Dunes will become a barrier not a link between the park and beach No proof that dunes will provide protection Dunes take years to establish and are easily degraded by wind and high tides therefore this option is not practical and

Summary themes	Option 1		Option 3		Option 4	
	Supporting feedback	Opposing feedback	Supporting feedback	Opposing feedback	Supporting feedback	Opposing feedback
						<ul style="list-style-type: none"> may not work increasing the chance of flooding Dune do not increase the usable space of Shorland Park as dune vegetation ca not be walked on Removing the seawall would result in more wind-blown sand. There would be more sand impacting on households in immediate neighbourhood as well as roads and footpaths.
Costs	<ul style="list-style-type: none"> Option 1 is the lowest cost and most sustainable option. Other options would be a waste of rates Waste of time/money connecting the park and the beach. Virtually no one uses the park or beach from April to September If wall had been maintained properly this would not have happened. 	<ul style="list-style-type: none"> Expensive as the wall will continue to require fixing in the future 		<ul style="list-style-type: none"> Adds considerable expense for very little gain 		<ul style="list-style-type: none"> Significantly more expensive option without benefits, not cost effective
Traffic and safety	<ul style="list-style-type: none"> Safest option –all other options require redirection of traffic which will cause bottlenecks and accidents 		<ul style="list-style-type: none"> Good comprise to ensure traffic not disrupted Suggested the relocated Esplanade should be one way possibly with speed bumps too slow traffic or road could be cobblestones Relocated Esplanade should have low speed limit to reduce the risk of injury Cyclist need to be slowed on the Esplanade Keeps heavy traffic on the Esplanade rather than residential areas. Least disruptive option. Keeps road link on coast for traffic, pedestrians and cyclists. 		<ul style="list-style-type: none"> Removing traffic from the foreshore will improve environment and recreational outcomes. Very few parts of the coast line are road-free Represents minimal impact on local roads Avoids having traffic in the relatively narrow confines of Trent Street. Corner of Reef Street and the Parade would need to be reconstructed to make it safer. Concerns parents have about this option because of free access to the water from the park, can be addressed by good park design. Traffic calming measures needed. Takes traffic away from 	<ul style="list-style-type: none"> Traffic will be a nightmare. Smaller streets are too narrow for increases in traffic (e.g. Derwent) Diverting heavy traffic through residential areas unacceptable and dangerous Lengthens the existing route between the airport and the city and the city and landfill – increasing carbon emissions Streets are too narrow and intersections will not cope with traffic Shared cycleway and walkways are not safe Will create major disadvantages to surrounding streets. Board walk for cyclists and walkers would be

Summary themes	Option 1		Option 3		Option 4	
	Supporting feedback	Opposing feedback	Supporting feedback	Opposing feedback	Supporting feedback	Opposing feedback
					<ul style="list-style-type: none"> play area and beach. Provides better accessibility for pedestrians and cyclists Reef Street is wide and can handle traffic and roading issues can be addressed (but Brighton and Trent cannot). Look at the traffic more closely with this option and consider slowing traffic right down. Aim should be to introduce option 4 with minimal traffic disruption. Create a round-about at Brighton/Esplanade intersection Supports the future Great Harbour Way cycling/walking route. 	<ul style="list-style-type: none"> dangerous. Tip trucks are dangerous and should not be re-routed. Intersection of Parade and Reef Street is very busy and concerns about problems option 4 would create. Children could end-up wondering un-supervised to the beach. Concerns about children crossing the street on Reef St and Derwent with additional traffic volume. Round-abouts are not cycle friendly, would not be suitable for the Reef/Parade intersection
Coastal protection	<ul style="list-style-type: none"> Seawall creates better protection and more permanent barrier against the sea. 		<ul style="list-style-type: none"> Damage to the seawall would have been avoided if council had continued putting sand on the beach. Option 3 reinstates this practice. 	<ul style="list-style-type: none"> Additional sand will be washed away 	<ul style="list-style-type: none"> Best long-term investment. Best fit with new legislation (ie. NZ Coastal Policy Statement) and city resilience. Need to make the decision based on what is best from a coastal hazard perspective. Maximise the amount of beach/open space on the seaward side. 	<ul style="list-style-type: none"> Planting coastal dunes will wash away.
Amenity and natural amenity	<ul style="list-style-type: none"> Better use of money that would be spent on other expensive options to improve the area, replace the playground and put a café in the park. Like the beach wall. Maintains marine drive. 		<ul style="list-style-type: none"> Almost all of Shorland Park will be untouched Moving the road back would create a bigger beach and allow for more beach nourishment. Important for the character of Island Bay that the marine drive remain continuous. Relocating wall/road inland will increase size of the beach. This drive is beautiful and the Esplanade should be 		<ul style="list-style-type: none"> Joining the park and beach will improve recreation and satisfaction. Creation of a natural sand dune environment. Opens up and connects the park to the seafront More usable for more people. Expanded recreation asset to South Coast resident (especially children). Families will benefit. 	<ul style="list-style-type: none"> Detract from the view of the island "Taputeranga" and the scenery of the south coast Radically alter the character of Island Bay. Visibility of sea lost from park with a dune system.

Summary themes	Option 1		Option 3		Option 4	
	Supporting feedback	Opposing feedback	Supporting feedback	Opposing feedback	Supporting feedback	Opposing feedback
			a part Island Bay community.		<ul style="list-style-type: none"> Great park/beach in the summer time. Good balance between community impacts and looking to the future. Once-in-a-generation opportunity to improve Island Bay beach environment. 	
Parking	<ul style="list-style-type: none"> Need to keep the parking especially for summer and the festival Need to keep parking for residents Need parking for visitors and people will limited mobility 		<ul style="list-style-type: none"> Option provides minimal disruption to parking. 		<ul style="list-style-type: none"> Still good parking on Reef St with this option. 	<ul style="list-style-type: none"> Loss of parking for residents and visitors Decreases the number of car parks close to the beach. Limits access to those who can't walk far. This option will create parking nuisance for people who live on Derwent and Reef Street.
Other	<ul style="list-style-type: none"> Council needs to initiate ongoing maintenance of both the wall and the beach 		<ul style="list-style-type: none"> Recommend wall, road and footpath be raised to increase the life time of the wall 	<ul style="list-style-type: none"> Access and amenity need to be considered as secondary to protection against sea level rise 		<ul style="list-style-type: none"> Value of homes would be affected with increase traffic
	<ul style="list-style-type: none"> Wall should be strengthened with steel. With today's technology you should be able to repair the wall and it should last a lot longer. 		<ul style="list-style-type: none"> A pedestrian bridge from the park to the beach should be built to reduce risk of injury. 			<ul style="list-style-type: none"> There is already a delinquency problem at night in the park. Opening up the space will cause more problems and need more policing.
	<ul style="list-style-type: none"> Please don't experiment with the Island Bay 		<ul style="list-style-type: none"> Plant coastal tussock at the base of the seawall to encourage sand retention. This will make the beach naturally steeper and prevent future damage to the seawall 			<ul style="list-style-type: none"> Road is necessary for business and industry.
	<ul style="list-style-type: none"> If you want to make it easier to cross from the park to the coast build a bridge. 					
	<ul style="list-style-type: none"> Use the money to be invested in the cycleway and save our coastline 					
	<ul style="list-style-type: none"> Stop the cycleway 					

Key themes

Option 1:

Supporting:

- Don't change what already works, seawalls
- Heritage value of the wall and coastal road needs to be maintained
- Safest option in terms of traffic
- Less disruptive in terms of traffic flow
- No such thing as climate and change and sea level rise.

Opposing:

- Short term solution that will not cope with climate change and sea level rise.

Option 2:

Supporting:

- Adding sand will increase the size of the beach.

Opposing:

- Expensive, waste of money
- Adding sand to the beach will require constant maintenance. The power of the sea will wash away the sand. This may deprive some other area of a stable sand system.
- Sand will blow everywhere and will not be good for the seabed
- Keep the wall and beach
- Concern about how the sand would affect the Marine Reserve Area
- Will not provide long term protection from storms and sea level rise

Option 3:

Supporting:

- Works with nature (contours of the beach)
- Will provide protection for a significant amount of time
- Less disruptive than options 4 and 5 in terms of traffic and retains some of the character of the Bay
- Best compromise.

Opposing:

- Expensive for not much benefit
- Short term option

Option 4:

Support:

- Best long term solution against coastal hazards – storms and sea level rise
- Amenity – access park and beach
- Family friendly

Opposing:

- Too expensive
- Traffic disruption and traffic safety are a major concern
- Loss of character and heritage value (wall and coastal road)
- Sand dunes will cut off access to the beach and sand will drift into properties
- Dunes take years to establish and are not a proven method of coastal protection

Option 5:

Supporting:

- Best solution for coastal hazards and climate change

Opposing:

- Not practical given Traffic and traffic safety concerns
- Concerns regarding sand
- Affects too many houses/residents

Other

- Council needs to make clear if there are any geological/engineering reasons why any one option is more viable. Voting for emotional and sentimental reasons is one thing but what should be more important is how practical those options are in the long term for the Esplanade area.
- A few people have submitted regarding the old toilets blocks. Some have people suggested the toilet blocks be demolished, while others have asked that they be retained for their heritage value but they need to be upgraded and maintained.

Item 4.3 Attachment 8

- Housing will have to be removed from low-lying coastal roads and road moved further inland in the very long term.
- Do not put traffic lights at Dee Street.
- Residents views should carry more weight than other factors
- Whatever option is adopted strong consideration must be given to improving pedestrian access from Shorland Park to the Island Bay Beach.
- Shorland Park needs to be cleaned up. Many areas are unusable and uneven. The park should be fenced off to make it more family friendly
- Other suggestion: extend the temporary rock barrier and make it permanent.
- Under option 3 rather than close the road permanently use barrier arms to close it between Reef Street and the houses at the park as suggested in Option 4. The road could be then closed during the summer school holidays and at weekends during the summer when easy access to the beach from the park is most needed
- Better ways of disposing of waste /rubbish would help reduce traffic to the landfill.
- Brighton's Streets access to hills could be more public in case of an emergency (the evacuation walkway zone)
- Island Bay is not the only community facing coastal issues (it impacts all of NZ).
- Be proactive and listen to the community.
- Can we break up wave action in the Bay before it reaches the coast?
- Café (3)
- How about prefab café to bring life beach in all seasons (on roadside grass triangle used for dog walking)
- Please consider a wind wall regardless of which option is progressed.
- Reuse sections of the old seawall.
- Need a bigger walkway/cycleway around the South Coast.
- Definitely trial a road closure before committing to option 4 or 5.
- Park/beach connection was done in Westport, Connecticut.
- Can sand be returned to beach after a storm?
- Consider development of the current dog walking area.
- Sell remainder of Trent Street Reserve (residential) to help fund the development.
- Put in more Pohutakawa Trees near Surf Life Saving Club.

School children – aged six and eight years old

- Option 3: I want to go through the middle of the park and beach. Can we please have a paddling pool?
- Option 4: I think Option 4 is the best because I can go from the Park to the beach without crossing the road. I think it would be safer. Can we please have a mini train track and a water slide with warm or sort of hot water? The train could go from the park over the sand dunes to the beach
- Option 4: I agree with option 4 so I can go to the beach without getting hit by cars. Put a seawall so the water won't go in the park. Connect the beach to the park so I can play with more sand. Make the seawall stronger
- Option 4: I want to be able to walk to the beach without crossing the road without being ran over by a car
- Option 4: I like this option because 12 other people in my class do and that's quite a lot of people. You don't have to walk to far to the beach and get tired. It is safer because we don't have to cross the road and no one gets run over. It's a bigger place for kids to play and some adults. People get a bigger place to run/jog/sprint/bike/scoot/plya/walk.
- Option 4: Can there please be a gate, sand dunes and a wall because if those things aren't there sea water could make everything muddy. The park will have more space.
- Option 4: Because you don't need to look for cars and if your dog escapes it won't get squashed.