

## Additional Waitemata Harbour Crossing



Assessment of the Auckland Regional Plan: Coastal





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## 1. Auckland Regional Coastal Plan

This Appendix provides an assessment of the defined options against the Auckland Regional Plan: Coastal (ARP: C).

### 1.1 Assessment of Objectives and Policies

Table 1.1 below provides an assessment of the defined options against key objectives and policies from the ARP: C.

Table 1.1: Comparative Assessment of the Defined Options against Objectives and Policies from the Auckland Regional Plan: Coastal

OBJECTIVES AND POLICIES	TUNNEL	BRIDGE
Natural Character		
<i>3.3 OBJECTIVES</i>		
<p>3.3.1 To preserve the natural character of the coastal environment by protecting the coastal marine area from inappropriate subdivision, use and development.</p>	<p>Whilst the Waitemata Harbour is modified elements of natural character remain. Shoal Bay is identified as an outstanding landscape and is classified within Coastal Protection Area 1 and 2. Northcote Point is a Regionally Significant Landscape.</p> <p>The defined tunnel option crossing the harbour channel beneath the seabed largely avoids adverse effects on the natural character of the harbour, with the exception of impacts on Shoal Bay from reclamation.</p>	<p>Whilst the Waitemata Harbour is modified elements of natural character remain. Shoal Bay is identified as an outstanding landscape and is classified within Coastal Protection Area 1 and 2. Northcote Point is a Regionally Significant Landscape.</p> <p>The defined bridge option will significantly impact on the natural character of the harbour. In combination with the AHB it will have a cumulative adverse effect on the natural character of the harbour, effectively 'sterilising' a portion of the inner harbour. In addition, reclamation associated with the bridge option will impact on the natural character of Shoal Bay and Northcote Point.</p>
<i>3.4 POLICIES</i>		
<p>3.4.1 The natural character of the coastal environment shall be preserved and protected from inappropriate subdivision, use, and development by avoiding where practicable, remedying or mitigating the adverse effects of subdivision, use and</p>	<p>The defined tunnel option largely avoids impacts on the natural character of the wider harbour because it is a bored tunnel beneath the seabed.</p> <p>The motorway corridor in the vicinity of Shoal Bay is constrained by cliff lines to the west and the CMA to the east, making it difficult to avoid adverse effects</p>	<p>There is little opportunity to avoid impacts of an additional bridge on the natural character of the wider harbour as it would be a highly visible structure within the harbour which in combination with the AHB would result in a significant change to the existing character of the harbour.</p>



<p>development on the qualities, elements and features which contribute to the natural character of the coastal environment, including those areas characterised by modification and development.</p>	<p>on Shoal Bay. However, there is potential for the degrees of adverse effects on the natural character of Shoal Bay to be reduced by:</p> <ul style="list-style-type: none"> <li>• designing the reclamation to as far as practical reflect the natural character of the existing coastal edge; and</li> <li>• refining to the design to reduce the degree of reclamation required in Shoal Bay.</li> </ul> <p>In particular, where it can be demonstrated that the mainline connection to Onewa Road is not necessary to meet future transport demand the reclamation associated with this connections would not needed and potentially reclamation in Sulphur Beach could be avoided altogether if the tunnel could emerge further north.</p>	<p>The defined bridge option may (in the same manner as the defined tunnel option) be able to reduce the degree of adverse effects on the natural character of Shoal Bay. Opportunities to avoid these effects are however more limited than those for the defined tunnel option. Any additional bridge across this part of the harbour would require reclamation to accommodate a northern bridge approach as there is insufficient landward space to accommodate a second bridge approach within this part of the motorway corridor.</p> <p>There is little ability to avoid or mitigate adverse effects on the natural character of Northcote Point. The constrained nature of the motorway corridor provides little opportunity to redesign or relocate the northern bridge approach and embankment to a position that would provide for the preservation of Northcote Point.</p>
<p>3.4.4 When subdivision, use and development in the coastal marine area gives rise to actual or potential adverse effects on the natural character of the coastal environment, where appropriate these effects shall be remedied or mitigated by restoration or rehabilitation of the natural character of the coastal environment.</p>	<p>The defined tunnel option offers more opportunities for effects to be remedied or mitigated. There are opportunities for the effects of tunnel vent stacks on natural character to be mitigated through design. There is an ability to rehabilitate and restore the natural habitats of Shoal Bay through the creation of new habitat and careful contouring of the permanent reclamations.</p>	<p>The defined bridge option offers fewer opportunities for effects to be remedied or mitigated. The cumulative effects of an additional bridge on the natural character of the harbour would be difficult to remedy or mitigate. An additional northern bridge approach and embankment within the harbour will permanently alter the landform of Northcote Point in a manner that leaves little opportunity for restoration or rehabilitation of natural character of the coast.</p>



		There is however, ability for the natural habitats of Shoal Bay to be rehabilitated or restored in the manner discussed for the defined tunnel option.
Landscape		
<i>4.3 OBJECTIVES</i>		
4.3.1 To protect Outstanding Landscapes, and the key elements, features and patterns of Regionally Significant Landscapes (as identified in the Plan Maps) from inappropriate subdivision, use and development in the coastal environment.	The permanent reclamation required for the defined tunnel option will directly impact on Shoal Bay (an outstanding landscape).	The permanent reclamation required for the defined tunnel option will directly impact on Shoal Bay (an outstanding landscape). In addition, the additional northern bridge approach and embankment will directly impact on the remaining natural character of Northcote Point (a Regionally Significant Landscape).
<i>4.4 POLICIES</i>		
4.4.1  (a) Subdivision, use and development in the coastal marine area shall be considered inappropriate where it would result in significant adverse effects on the landscape quality, aesthetic value and landscape sensitivity of those areas identified in this Plan as Outstanding Landscapes of the coastal environment.  (b) In assessing the significance of such adverse effects, particular regard will be had to ensuring that the visual integrity of the landscape in its entirety (including the unit's	Whilst permanent reclamation will impact on landscape quality of Shoal Bay, there is potential for reclamation to be contoured in a manner that enables the visual integrity of the landscape as a whole to be maintained.	Whilst permanent reclamation will impact on landscape quality of Shoal Bay, and the bridge approaches will obscure some views to this landscape, there is potential for reclamation to be contoured in a manner that enables the visual integrity of the landscape as a whole to be maintained.





<p>possible role within a wider sequence of coastline) is protected and its value as an outstanding landscape is maintained.</p>		
<p>4.4.2            (a) Subdivision, use and development in the coastal marine area shall be considered inappropriate where it would result in significant adverse effects on those key elements, features and patterns which contribute positively to the landscape quality, aesthetic value and landscape sensitivity of those areas identified in the Plan as being Regionally Significant Landscapes of the coastal environment            (b) In assessing the significance of such adverse effects, particular regard will be had to ensuring that those landscape elements, features and patterns which contribute to the visual integrity of the landscape unit and its value as a Regionally Significant Landscape are protected.</p>	<p>The defined tunnel option will not significantly impact on Regionally significant landscapes.</p>	<p>The northern bridge approach and embankment will significantly alter the landscape quality of Northcote Point, resulting in a permanent change to the landform associated with the Point.</p>
<p>Natural Features and Ecosystems</p>		
<p>5.3 OBJECTIVES</p>		
<p>5.3.3 To protect from inappropriate subdivision, use and development and where appropriate, preserve the ecological</p>	<p>The permanent reclamation required for the defined tunnel option traverses Coastal Protection Areas. These areas can be protected through the</p>	<p>The permanent reclamation required for the defined bridge option traverses Coastal Protection Areas. These areas can be protected through the</p>



<p>and physical values and processes of Coastal Protection Areas, in recognition of their intrinsic values, their regional, national and international significance, and their high vulnerability to adverse environmental effects.</p>	<p>rehabilitation and restoration of natural habitats (i.e. Dotterel nesting areas) and appropriate contouring of reclamation to reduce impacts on coastal processes.</p>	<p>rehabilitation and restoration of natural habitats (i.e. Dotterel nesting areas) and appropriate contouring of reclamation to reduce impacts on coastal processes.</p>
<p><b>5.4 POLICIES</b></p>		
<p>5.4.2 The values of, and the ecological and physical processes functioning in, Coastal Protection Areas 1 shall be preserved or protected as appropriate by:</p> <p>(a) avoiding inappropriate subdivision, use and development which will result in more than minor modification of, or damage to, these values and processes, or result in their destruction;</p> <p>(b) ensuring that as far as practicable changes in the size, quality and habitat diversity of these areas arise only from the functioning of natural processes.</p>	<p>The permanent reclamation required for the defined tunnel option traverses CPA1. These areas can be protected through the rehabilitation and restoration of natural habitats (i.e. Dotterel nesting areas) and appropriate contouring of reclamation to reduce impacts on coastal processes.</p>	<p>The permanent reclamation required for the defined tunnel option traverses CPA1. These areas can be protected through the rehabilitation and restoration of natural habitats (i.e. Dotterel nesting areas) and appropriate contouring of reclamation to reduce impacts on coastal processes.</p>
<p>5.4.3 The values of, and ecological and physical processes functioning in, Coastal Protection Areas 2 shall be protected by avoiding inappropriate subdivision, use and development which will have significant adverse effects on, or will result in the</p>	<p>The permanent reclamation required for the defined tunnel option traverses CPA2. These areas can be protected through the rehabilitation and restoration of natural habitats (i.e. Dotterel nesting areas) and appropriate contouring of reclamation to reduce impacts on coastal processes.</p>	<p>The permanent reclamation required for the defined tunnel option traverses CPA2. These areas can be protected through the rehabilitation and restoration of natural habitats (i.e. Dotterel nesting areas) and appropriate contouring of reclamation to reduce impacts on coastal processes.</p>



destruction of, these values and processes		
Public Access		
<b>7.3 OBJECTIVES</b>		
7.3.1 To maintain and enhance public access to, along and within the coastal marine area.	The defined tunnel option will in the long term enhance public access to and along the coast through the provision of a cycle and pedestrian way along the coastal edge between Esmonde Road and the CBD.	The defined bridge option will in the long term enhance public access to and along the coast through the provision of a cycle and pedestrian way along the coastal edge between Esmonde Road and the CBD.
<b>7.4 POLICIES</b>		
7.4.1 Subdivision, use, development and protection should ensure that public access to, along and within the coastal marine area is maintained or enhanced, except where it is necessary to restrict access.	The defined tunnel option will in the long term enhance public access to and along the coast through the provision of a cycle and pedestrian way along the coastal edge between Esmonde Road and the CBD. It is however acknowledged that the attractiveness and desirability of existing access across the motorway to the CMA may be further degraded given the extent of additional motorway width separating the CMA and the adjacent residential areas.	The defined tunnel option will in the long term enhance public access to and along the coast through the provision of a cycle and pedestrian way along the coastal edge between Esmonde Road and the CBD. It is however acknowledged that the attractiveness and desirability of existing access across the motorway to the CMA may be further degraded given the extent of additional motorway width separating the CMA and the adjacent residential areas.
Subdivision, Use & Development		
<b>10.3 OBJECTIVES</b>		
10.3.1 To provide for appropriate subdivision, use and development in the coastal marine area, and to protect the coastal marine area from inappropriate	The defined tunnel will provides for the future transport needs of the Auckland Region, in a manner that results in some significant adverse effects on natural character, landforms and natural	The defined bridge option will provide for the future transport needs of the Auckland Region, in a manner that results in significant adverse effects on natural character, landforms and natural features



<p>subdivision, use and development.</p>	<p>features and ecosystems.</p>	<p>and ecosystems. These effects are greater for the defined bridge option compared to the defined tunnel option as there is little opportunity to avoid, remedy or mitigate the cumulative effect of an additional bridge on the natural character of the harbour.</p>
<p><i>10.4 POLICIES</i></p>		
<p>10.4.3 Subdivision, use and development of the coastal marine area shall be considered more appropriate where the environment has already been highly modified by human activities, or located in areas where development already exists, unless:</p> <p>(a) location elsewhere in the coastal marine area of the Auckland Region would better avoid, remedy, or mitigate significant adverse effects of that subdivision, use and development; or</p> <p>(b) an application brought by Tangata Whenua better provides for the special relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga.</p>	<p>The defined tunnel option whilst being located within a modified CMA still retains ecological, landscape and natural character values. Potentially there are other route alignments within the harbour that would better avoid impacts on natural character, landforms and natural features and ecosystems and therefore be considered more appropriate.</p>	<p>The defined bridge option whilst being located within a modified CMA still retains ecological, landscape and natural character values. It would be difficult for a bridge on any alignment within the harbour to avoid impacts on natural character, landforms and natural features and ecosystems. For this reason a bridge is a less appropriate means of providing for future transport needs than the tunnel option.</p>
<p>10.4.8 Any cumulative adverse effects on the environment of new subdivision, use and development in the coastal marine area shall be avoided, remedied, or mitigated,</p>	<p>The permanent reclamation required for the defined tunnel option will result in cumulative effects on the harbour. There is potential to avoid or mitigate</p>	<p>The permanent reclamation required for the defined bridge option will result in cumulative effects on the harbour. There is potential to avoid or mitigate</p>



<p>taking into account the extent to which existing subdivision, use and development, either of the same or a different kind to that proposed, already has adverse effects, and the extent to which any new subdivision, use and development will exacerbate such effects.</p>	<p>these effects by:</p> <ul style="list-style-type: none"> <li>• using bridging structures as an alternative to reclamation;</li> <li>• contouring of reclamation foreshore;</li> <li>• rehabilitation and restoration of natural habitats;</li> <li>• reducing reclamation by rebuilding the Onewa Road Interchange or moving the motorway alignment further inland; and</li> <li>• removing of the mainline connection to the Onewa Road Interchange.</li> </ul>	<p>these effects by:</p> <ul style="list-style-type: none"> <li>• using bridging structures as an alternative to reclamation;</li> <li>• contouring of reclamation foreshore;</li> <li>• rehabilitation and restoration of natural habitats;</li> <li>• reducing reclamation by rebuilding the Onewa Road Interchange or moving the motorway alignment further inland; and</li> <li>• removing of the mainline connection to the Onewa Road Interchange.</li> </ul> <p>In addition, an additional bridge in combination with the AHB will have adverse cumulative effects on the natural character and landscape values of the harbour.</p>
<p>10.4.12 In assessing proposals for subdivision, use and development in the coastal marine area, particular regard shall be had to ensuring:</p> <p>(a) the efficient passage of vessels in Port Management Areas, Marina Management Areas, Mooring Management Areas, navigational channels and other areas of the coastal marine area which have recognised high levels of usage by vessels; and</p>	<p>The defined tunnel option will not impact on vessel navigation given that it is a bored tunnel beneath the seabed of the harbour.</p>	<p>The defined bridge option has been designed to maintain navigation to the upper Waitemata Harbour, through Westhaven Marina and through the marina management area within Shoal Bay. Additional piers associated with the bridge will however reduce the ease of navigation within the harbour channel and Westhaven Marina.</p>



(b) the safe passage of vessels throughout the coastal marine area.		
Reclamation and Drainage		
<i>13.3 OBJECTIVES</i>		
13.3.1 To avoid inappropriate reclamation or drainage of the coastal environment.	The defined tunnel option does not avoid the need for reclamation. Reclamation is proposed in Shoal Bay and Westhaven Marina. Temporary reclamation is proposed for the purposes of rail and road worksites and to enable the construction of a cut and cover tunnels. Permanent reclamation is proposed to accommodate road and rail tunnel portals and trenches, as well as and additional motorway lanes. For the reasons outlined below the reclamation proposed is not appropriate.	The defined bridge option does not avoid the need for reclamation. Reclamation is proposed in Shoal Bay and Westhaven Marina. Temporary reclamation is proposed for the purposes of a rail worksite and to enable the construction of a cut and cover tunnel for rail. Permanent reclamation is proposed to accommodate the northern bridge abutment, rail tunnel portals and trenches, as well as additional motorway lanes. For the reasons outlined below the reclamation proposed is not appropriate.
<i>13.4 POLICIES</i>		
13.4.1 Reclamation and drainage in the coastal marine area shall generally be considered inappropriate, unless:  (a) they are for either the operational needs of the port in Port Management Areas, or for the intensification of existing or approved marinas within Marina Management Areas, or for port purposes within the Devonport Defence Management Area where they comply with other relevant policies of this Plan; and	A land-based solution to accommodating all additional motorway and rail infrastructure within the current SH1 corridor is not practical given that the landward side of the corridor is constrained by a cliff line and residential area. That said there is a greater opportunity to reduce the degree of reclamation required for the defined bridge option through design refinements. In particular, where it can be demonstrated that the mainline connection to Onewa Road is not necessary to meet future transport demand the reclamation associated with	A land-based solution to accommodating all additional motorway and rail infrastructure within the current SH1 corridor is not practical given that the landward side of the corridor is constrained by a cliff line and residential area. Opportunities to reduce permanent reclamation are more limited than those for the defined tunnel option. Any additional bridge across this part of the harbour would require reclamation to accommodate a northern bridge approach as there is insufficient landward space to accommodate a second bridge



<p>(b) a method or a land-based site (above Mean High Water Springs) is not practicable; and</p> <p>(c) efficient use will be made of the coastal environment by using the minimum area of the coastal marine area necessary for the reclamation or drainage having regard to the activity proposed to utilise that area; and</p> <p>(d) the reclamation or drainage will have either positive or minor adverse effects including effects on natural character, visual and other amenity, ecology, Maori values, heritage values, water quality and coastal processes, or any adverse effects can be remedied or mitigated to an acceptable level by methods such as appropriate design and location of buildings, landscaping, planting, or other forms of environmental benefits in accordance with Chapter 38: Obtaining Environmental Benefits; and</p> <p>(e) the finished appearance of the reclaimed or drained area, including its size, shape and the materials used, is as far as practicable compatible with the environment in which it is located; and</p>	<p>this connections would not needed and potentially reclamation in Sulphur Beach could be avoided altogether if the tunnel could emerge further north.</p> <p>Without changing the route alignment a land-based solution to accommodating the required worksite for construction of the tunnel is not practical because:</p> <ul style="list-style-type: none"> <li>• there is insufficient land area in an appropriate location in the northern sector to accommodate a worksite, from which to bore the tunnels; and</li> <li>• boring the tunnels from the southern sector where there is a greater area of land to accommodate a worksite would increase the length of the construction phase (as it would prevent works to form southern sector connections from being undertaken until tunnel boring is complete) resulting in more longer term construction phase effects.</li> </ul> <p>Whilst it is not practical to accommodate all motorway infrastructure on land, the reclamation does not meet the majority of the other tests of 'appropriateness' because:</p> <ul style="list-style-type: none"> <li>• it is not being undertaken for the operation needs of the port in Port Management Areas, or for the intensification of existing</li> </ul>	<p>approach within this part of the motorway corridor.</p> <p>Whilst it is not practical to accommodate all motorway infrastructure on land, the reclamation does not meet the majority of the other tests of 'appropriateness' because:</p> <ul style="list-style-type: none"> <li>• it is not being undertaken for the operation needs of the port in Port Management Areas, or for the intensification of existing or approved marinas within Marina Management Areas, or for port purposes within the Devonport Defence Management Area;</li> <li>• the area of reclamation could be reduced, particularly if it could be demonstrated that the Onewa connections are not required or the rail route could be realigned, but also through the use of bridging, reconstruction of the Onewa Road Interchange, or a slight realignment of the motorway landward;</li> <li>• the proposed reclamation will have significant adverse effects on natural character given that it impacts directly on outstanding and regionally significant landscapes in the northern sector; and</li> <li>• the reclamation will have adverse cumulative effects on the natural</li> </ul>
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<p>(f) the reclamation or drainage will avoid, as far as practicable, adverse cumulative effects on the coastal environment.</p>	<p>or approved marinas within Marina Management Areas, or for port purposes within the Devonport Defence Management Area;</p> <ul style="list-style-type: none"> <li>• the area of reclamation could be reduced, particularly if it could be demonstrated that the Onewa connections are not required or the rail route could be realigned, but also through the use of bridging, reconstruction of the Onewa Road Interchange, or a slight realignment of the motorway landward;</li> <li>• the proposed reclamation will have significant adverse effects on natural character given that it impacts directly on outstanding landscapes in the northern sector; and</li> <li>• the reclamation will have adverse cumulative effects on the natural environment.</li> </ul> <p>On this basis the reclamation is inappropriate.</p>	<p>environment.</p> <p>On this basis the reclamation is inappropriate.</p>
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### 1.1.1 Summary

The defined options are both inconsistent with a number of objectives and policies of the ARP: C. The defined tunnel option is however more consistent with objectives and policies relating to natural character and landscape values than the defined bridge option because it largely avoids adverse effects on the natural character of the harbour associated with structures and provides a greater opportunity for avoidance of effects on natural character and landscape values associated with permanent reclamation. The defined bridge option is a less appropriate means of providing for the future transport needs of the Auckland Region (and therefore a less appropriate use of the harbour) because in combination with the AHB it will have adverse cumulative effects on the natural character and landscape values of the harbour that the defined tunnel option will avoid. The reclamation associated with both options is contrary to the objectives and policies for reclamation and drainage as it does not meet the tests of 'appropriate' reclamation.

## 1.2 Assessment of Rules

Table 1.2 provides an assessment of the defined options against rules from the ARP: C. A summary of the consents required for the defined options as outlined within Table 1.2 is provided below.

### 1.2.1 Structures and Occupation

The structures associated with the defined options both have the same activity status:

- the road crossing structure of the defined tunnel option (when considered as a whole, rather than in parts) is overall a discretionary activity as it traverses the Port Management Area and CPA2, and is outside of CPA1;
- the road crossing structure of the defined bridge option is overall a discretionary activity as it is a structure above the seabed and outside of CPA1;
- the rail crossing structures (when considered as a whole, rather than in parts) are overall a non-complying activity for both of the defined options because they traverse CPA1;
- the seawalls associated with required reclamation for both the defined options (when considered as a whole, rather than in parts) are overall non-complying activities because they traverse CPA1, and require restricted coastal activity consent because they are a solid structure extending more than 1,000 metres in length parallel to the line of MHWS; and
- the bridge structures across Onepoto Stream are at worst case are a non-complying activity for both of the defined options because they traverse CPA1.

Both the defined options also require the same consents for occupation. The status of these follow those of the consents required for structures.



### 1.2.2 Reclamation

The reclamation required for both the defined options also have the same activity status:

- reclamation for the road component of the defined options in the *northern sector* (when considered as a whole, rather than in parts) is a non-complying activity because the reclamation traverses the general management area, CPA2 and CPA1 and is required for the safe and efficient operation of SH1<sup>1</sup>;
- reclamation for the road component of the defined options in the *northern sector* also requires restricted coastal activity consent because it covers an area of greater than 1ha;
- reclamation for the road component of the defined options in the *central sector* (when considered as a whole, rather than in parts) is overall a non-complying activity because it traverses the general management area;
- reclamation for the road component of the defined options in the *central sector* also requires restricted coastal activity consent because, in the case of the defined tunnel option it is greater than 100 metres in length, and in the case of the defined bridge option it is greater than 1ha in area; and
- reclamation for the rail component of the defined options in the *northern sector* (when considered as a whole, rather than in parts) is overall a prohibited activity because it traverses CPA1 and is not required for the safe and efficient operation of SH1.

### 1.2.3 Extraction

The extraction activities required for both options also have the same activity status:

- extraction to form the bored road tunnels for the defined tunnel option (when considered as a whole, rather than in parts) is overall a non-complying activity because it is undertaken within CPA2;
- extraction to form and construct bridge piles for the defined bridge option (when considered as a whole, rather than in parts) is overall a non-complying activity because it is undertaken in CPA2; and
- extraction to form bored tunnels for rail for both the defined options (when considered as a whole, rather than in parts) is overall a prohibited activity because it is undertaken in CPA1.

### 1.2.4 Summary

On the basis that consent for rail crossing would be sought separately to that road crossing (given that the timing for rail is different to that of the road) the road component of either option is overall a non-complying activity. There is little opportunity for either option to be refined to avoid non-complying activity status given that the area of Shoal Bay adjacent to the existing SH1 motorway corridor is within

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<sup>1</sup> Should the interpretation of rule 13.5.6 as set out in the assessment in Table 1.2 not apply to the defined options the reclamation (when considered as a whole, rather than in parts) would be a prohibited activity.



CPA1 and CPA2. Even if the alignment of the defined options could be refined to avoid reclamation and/or extraction in CPA1 they would still require non-complying activity consent for reclamation and/or extraction in the CPA2.

The rail crossing is overall a prohibited activity because parts of the crossing traverse CPA1. Given the localised nature of the CPA1, the alignment of the rail may be able to be refined to avoid CPA1. Should this be possible rail would be a non-complying activity. For the same reasons stated for the road crossing, there is little opportunity for the alignment of the rail crossing to be refined to avoid the non-complying activity status.



Table 1.2: Comparative Assessment of the Defined Options against Rules from the Auckland Regional Plan: Coastal

RULE	CONSENT REQUIRED		
	Tunnel (road component)	Bridge (road component)	Rail
Structures			
<i>Permitted Activities</i>			
<p>12.5.3 Structures erected and placed entirely below the surface of the foreshore and seabed, by methods other than trenching, but not the occupation by those structures, subject to the following conditions:</p> <p>(a) the structure is not located in Coastal Protection Areas 1 or 2; and</p> <p>(b) any disturbance of the foreshore and seabed shall be in accordance with Chapter 16: Disturbance of the Foreshore and Seabed; and</p> <p>(c) the structure shall not be uncovered or moved by normal tidal and sediment movement processes; and</p> <p>(d) written advice is given to the ARC, and the National Topo/ Hydro Authority at LINZ at least 7 days prior to the work</p>	<p><u>Tunnel Structures</u> The part of the road tunnel outside of CPA 1, CPA2 and the Port Management Area, would be a <u>permitted</u> activity.</p> <p>The tunnel crossing as a whole is not a permitted activity because the alignment traverses CPA2 (see assessment of Rule 12.5.18) and the Port Management Area (see assessment of Rule 25.5.27) for part of its length, and the associated vent stacks would be above the seabed.</p>	<p>N/A – The bridge is above the surface of the seabed.</p>	<p><u>Tunnel Structures</u> The part of the rail tunnel outside of CPA 1, CPA2 and the Port Management Area, would be a <u>permitted</u> activity.</p> <p>The tunnel crossing as a whole is not a permitted activity because the alignment traverses CPA1, CPA2 (see assessment of Rule 12.5.18 and 12.5.22) and the Port Management Area (see assessment of Rule 25.5.27) for part of its length.</p>



RULE	CONSENT REQUIRED		
	Tunnel (road component)	Bridge (road component)	Rail
commencing.			
<i>Restricted Discretionary Activities</i>			
<p>12.5.16 Structures for scientific research, public access, education and interpretative purposes, in those Coastal Protection Areas 1 and 2 which are not approved marine reserves or marine protected areas.</p>	<p><u>Tunnel and Bridge Structures</u> It would be difficult to argue that the parts of the tunnel crossing structures and bridge structures for road (crossing Onepoto Stream) that traverse CPA1 and CPA2 provide public access in these areas because there is no ability to physically access the CMA from these structures.</p> <p>In any case this rule would not apply to the road crossing as a whole because parts of the crossing traverse the Port Management Area (see assessment of Rule 25.5.27).</p> <p><u>Onepoto Stream Footbridge</u> Depending on the degree of access to the CMA provided by the pedestrian footbridge across Onepoto Stream (CPA1), it could</p>	<p><u>Bridge Structures</u> It would be difficult to argue that the parts of the bridge crossing structure and the structures for road (crossing Onepoto Stream) that traverse CPA1 and CPA2 provide public access in these areas because there is no ability to physically access the CMA from these structures.</p> <p>In any case this rule would not apply to the road crossing as a whole because parts of the crossing traverse the General Management Area (see assessment of Rule 12.5.18).</p> <p><u>Onepoto Stream Footbridge</u> Depending on the degree of access to the CMA provided by the pedestrian footbridge across Onepoto Stream (CPA1), it could</p>	<p><u>Tunnel and Bridge Structures</u> It would be difficult to argue that the parts of the rail tunnels and bridge structures that traverse CPA1 and CPA2 provide public access in these areas because there is no ability to physically access the CMA from these structures.</p> <p>In any case this rule would not apply to the rail crossing as a whole because parts of the crossing traverse the Port Management Area (see assessment of Rule 25.5.27).</p>



RULE	CONSENT REQUIRED		
	Tunnel (road component)	Bridge (road component)	Rail
	be argued that this structure is for 'public access' purposes. On this basis the footbridge would be a <u>restricted discretionary</u> activity.	be argued that this structure is for 'public access' purposes. On this basis the footbridge would be a <u>restricted discretionary</u> activity.	
12.5.17 Occupation associated with structures erected and placed entirely below the surface of the foreshore and seabed in areas other than prohibited anchorage areas.	<p><u>Tunnel Structures</u> Those parts of the road tunnel that fall to be a permitted activity (see assessment of Rule 12.5.3 above) would be a <u>restricted discretionary</u> activity for occupation of the CMA.</p> <p>As parts of the tunnels are not permitted activities this rule would not apply to the tunnel crossing as a whole (see the assessment of occupation rules below).</p>	N/A – The bridge is above the surface of the seabed.	<p><u>Tunnel Structures</u> Those parts of the rail tunnel that fall to be a permitted activity (see assessment of Rule 12.5.3 above) would be a <u>restricted discretionary</u> activity for occupation of the CMA.</p> <p>As parts of the tunnels are not permitted activities this rule would not apply to the tunnel crossing as a whole (see the assessment of occupation rules below).</p>
<i>Discretionary Activities</i>			
12.5.18 The erection or placement of any structure, which is not provided for in any other rule contained in this chapter and is not located in Coastal Protection Areas 1.	<p><u>Tunnel Structures</u> The part of the tunnel structures that traverse the CPA2 and the tunnel vent stacks would be a <u>discretionary</u> activity against this</p>	<p><u>Bridge Structure</u> The bridge structure for the road crossing traverses the General Management Area and CPA2 (landing just south of CPA1 in</p>	<p><u>Tunnel and Bridge Structures</u> The part of the rail tunnel and bridge structures that traverse CPA2 would be a <u>discretionary</u> activity against this rule.</p>



RULE	CONSENT REQUIRED		
	Tunnel (road component)	Bridge (road component)	Rail
	<p>rule.</p> <p><u>Seawall Structures</u> There are seawalls associated with reclamation. Those outside of CPA1 are a <u>discretionary</u> activity.</p>	<p>the northern sector). The bridge crossing as a whole is a <u>discretionary</u> activity.</p> <p><u>Seawall Structures</u> There are seawalls associated with reclamation. Those outside of CPA1 are a <u>discretionary</u> activity.</p>	<p><u>Seawall Structures</u> There are seawalls associated with reclamation. Those outside of CPA1 are a <u>discretionary</u> activity.</p>
<p>25.5.27 The erection or placement of any new structure, building or slipway in Port Management Areas 2 and 4C, which is not provided for as a permitted, controlled or restricted discretionary activity.</p>	<p><u>Tunnel Structures</u> The part of the tunnels that traverse the Port Management Area would be a <u>discretionary activity</u> against this rule.</p>	<p>N/A – The bridge does not traverse the Port Management Area</p>	<p><u>Tunnel Structures</u> The part of the tunnels that traverse the Port Management Area would be a <u>discretionary activity</u> against this rule.</p>
<p><i>Non-Complying Activities</i></p>			
<p>12.5.22 The erection or placement, alteration or extension of any structure which is located in Coastal Protection Areas 1.</p>	<p><u>Onepoto Stream Road Bridge</u> The road bridge structures across Onepoto Stream, being located in CPA1 are a <u>non-complying</u> activity.</p> <p><u>Onepoto Stream Footbridge</u> Should the interpretation of rule 12.5.16 not stand, the footbridge</p>	<p><u>Onepoto Stream Road Bridge</u> The road bridge structures across Onepoto Stream, being located in CPA1 are a <u>non-complying</u> activity.</p> <p><u>Onepoto Stream Footbridge</u> Should the interpretation of rule 12.5.16 not stand, the</p>	<p><u>Tunnel and Bridge Structures</u> Overall the tunnel and bridge structures associated with the rail crossing would be a <u>non-complying</u> activity as part of the rail tunnels traverse CPA1.</p> <p><u>Seawall Structures</u> The seawalls within CPA1 are a</p>



RULE	CONSENT REQUIRED		
	Tunnel (road component)	Bridge (road component)	Rail
	<p>across Onepoto Stream would be <u>non-complying</u> activity.</p> <p><u>Seawall Structures</u> The seawalls within CPA1 are a <u>non-complying</u> activity.</p>	<p>footbridge across Onepoto Stream would be <u>non-complying</u> activity.</p> <p><u>Seawall Structures</u> The seawalls within CPA1 are a <u>non-complying</u> activity.</p>	<p><u>non-complying</u> activity.</p>
<i>Restricted Coastal Activities</i>			
<p>12.5.24 Any discretionary or non-complying activity involving the erection of a structure or structures in the coastal marine area which:</p> <p>(a) is solid or presents a significant barrier to water or sediment movement; and</p> <p>(b) when established on the foreshore or seabed would extend more than 1000 metres in length parallel to the line of Mean High Water Springs (including separate structures which incrementally total over 1000 metres, contiguously).</p>	<p><u>Tunnel and Bridge Structures</u> Bored and cut and cover sections of tunnel will be below the surface of the seabed, such that they do not present a barrier to water and sediment movement. Bridge structures across the Onepoto Stream will provide for the movement of water and sediment. On this basis this rule does not apply to tunnel and bridge structures associated with the road component of the defined tunnel.</p> <p><u>Seawall Structures</u> The seawall associated with</p>	<p><u>Bridge Structures</u> The bridge crossing and the bridge structures across Onepoto Stream will provide for the movement of water and sediment. On this basis this rule does not apply to the bridge structures associated with the road component of the defined bridge.</p> <p><u>Seawall Structures</u> The seawall associated with reclamation will be solid and will extend more than 1000 metres in length parallel to the line of MHWS. These would require consent as a <u>restricted coastal</u></p>	<p><u>Tunnel and Bridge Structures</u> Bored and cut and cover sections of tunnel will be below the surface of the seabed, such that they do not present a barrier to water and sediment movement. Bridge structures associated with the northern extent of the rail crossing will provide for the movement of water and sediment. On this basis this rule does not apply to the structures associated with the rail crossing.</p> <p><u>Seawall Structures</u> Seawalls associated with temporary reclamation for rail cut</p>





RULE	CONSENT REQUIRED		
	Tunnel (road component)	Bridge (road component)	Rail
	reclamation will be solid and will extend more than 1000 metres in length parallel to the line of MHWS. These would require consent as a <u>restricted coastal activity</u> .	activity.	and cover tunnels are less than 1,000 metres in length as are those associated with permanent reclamation for rail. On this basis this rule would not apply to the seawall structures.
12.5.25 Any discretionary or non-complying activity involving the erection of a structure or structures in the coastal marine area which: (a) is solid or presents a significant barrier to water or sediment movement; and (b) is sited obliquely or perpendicular in horizontal projection to the line of Mean High Water Springs in the coastal marine area; and (c) is in horizontal projection 1000 metres or more in length.	<p><u>Tunnel and Bridge Structures</u></p> <p>For the reasons stated in the assessment of rule 12.5.24 above this rule would not apply to the tunnel and bridge structures associated with the road component of the defined tunnel.</p> <p><u>Seawall Structures</u></p> <p>This rule does not apply to the seawall structures because they are not sited obliquely or perpendicular to the line of MHWS.</p>	<p><u>Tunnel and Bridge Structures</u></p> <p>For the reasons stated in the assessment of rule 12.5.24 above this rule would not apply to the bridge structures associated with the road component of the defined bridge.</p> <p><u>Seawall Structures</u></p> <p>This rule does not apply to the seawall structures because they are not sited obliquely or perpendicular in to the line of MHWS.</p>	<p><u>Tunnel and Bridge Structures</u></p> <p>For the reasons stated in the assessment of rule 12.5.24 above this rule would not apply to the structures associated with the rail crossing.</p> <p><u>Seawall Structures</u></p> <p>This rule does not apply to the seawall structures for the reason stated in the assessment of rule 12.5.25 above.</p>
Occupation			



RULE	CONSENT REQUIRED		
	Tunnel (road component)	Bridge (road component)	Rail
<i>Restricted discretionary Activities</i>			
10.5.4 Occupation by any activity specified as a restricted discretionary activity by another rule in this plan.	<u>Onepoto Stream Foot Bridge</u> Assuming the interpretation of the rule 12.5.16 stands, the footbridge across Onepoto Stream requires consent as a <u>restricted discretionary</u> activity for occupation of the CMA.	<u>Onepoto Stream Foot Bridge</u> Assuming the interpretation of the rule 12.5.16 stands, the footbridge across Onepoto Stream requires consent as a <u>restricted discretionary</u> activity for occupation of the CMA.	N/A – The tunnel and bridge structures associated with the rail crossing are not a restricted discretionary activity.
<i>Discretionary Activities</i>			
10.5.9 Occupation by any activity specified as a discretionary activity, including discretionary restricted coastal activities, by another rule in this plan.	<u>Tunnel Structure</u> The tunnel structures (including the vent stacks) for the road crossing as discretionary activities (in accordance with Rule 12.5.18 and 25.5.27) require consent as a <u>discretionary</u> activity for occupation of the CMA.  <u>Seawalls</u> The seawalls outside of CPA1, as discretionary activities require consent as a <u>discretionary</u> activity for occupation of the CMA.	<u>Bridge Structure</u> The bridge structure for the road crossing as a discretionary activity (in accordance with Rule 12.5.18) requires consent as a <u>discretionary</u> activity for occupation of the CMA.  <u>Seawalls</u> The seawalls outside of CPA1, as discretionary activities require consent as a <u>discretionary</u> activity for occupation of the CMA.	<u>Seawalls</u> The seawalls outside of CPA1, as discretionary activities require consent as a <u>discretionary</u> activity for occupation of the CMA.



RULE	CONSENT REQUIRED		
	Tunnel (road component)	Bridge (road component)	Rail
<i>Non-Complying Activities</i>			
10.5.10 Occupation by any activity specified as a non-complying activity, including non-complying restricted coastal activities, by another rule in this plan.	<p><u>Onepoto Stream Road Bridge</u> The road bridge structures across Onepoto Stream as non-complying activities (in accordance with Rule 12.5.22) would require consent as a <u>non-complying</u> activity for occupation of the CMA.</p> <p><u>Onepoto Stream Footbridge</u> Should the interpretation of the rule 12.5.16 not stand for the Onepoto Stream footbridge, as non-complying activity (in accordance with Rule 12.5.22) it would require consent as a <u>non-complying</u> activity for occupation of the CMA.</p> <p><u>Seawalls</u> The seawalls within CPA1, as non-complying activities require consent as a <u>non-complying</u> activity for occupation of the CMA.</p>	<p><u>Onepoto Stream Road Bridge</u> The road bridge structures across Onepoto Stream as non-complying activities (in accordance with Rule 12.5.22) would require consent as a <u>non-complying</u> activity for occupation of the CMA.</p> <p><u>Onepoto Stream Footbridge</u> Should the interpretation of the rule 12.5.16 not stand for the Onepoto Stream footbridge, as non-complying activity (in accordance with Rule 12.5.22) it would require consent as a <u>non-complying</u> activity for occupation of the CMA.</p> <p><u>Seawalls</u> The seawalls within CPA1, as non-complying activities require consent as a <u>non-complying</u> activity for occupation of the</p>	<p><u>Tunnel and Bridge Structures</u> The structures associated with the rail crossing, as non-complying activities (in accordance with Rule 12.5.22) require consent as a <u>non-complying</u> activity for occupation of the CMA.</p> <p><u>Seawalls</u> The seawalls within CPA1, as non-complying activities require consent as a <u>non-complying</u> activity for occupation of the CMA.</p>



RULE	CONSENT REQUIRED		
	Tunnel (road component)	Bridge (road component)	Rail
		CMA.	
Reclamation and Drainage			
<i>Restricted Discretionary Activities</i>			
13.5.1 Maintenance and repair of lawful reclamations and drainage systems.	This rule does not apply to permanent reclamation because the reclamation is required to accommodate tunnel portals as well as additional motorway width in the northern and central sectors of the study area.	This rule does not apply to permanent reclamation because the reclamation is required to accommodate the northern bridge abutment and approach as well as additional motorway width in the northern and central sectors of the study area.	This rule does not apply to the temporary and permanent reclamation for rail because the reclamation is required to enable the formation of cut and cover tunnels and accommodate tunnel portals and trenches.
<i>Discretionary Activities</i>			
13.5.2 Reclamation within any Port Management Area, Marina Management Area or the Devonport Defence Management Area.	<u>Northern Sector</u> This rule does not apply to the permanent reclamation in the northern sector because the reclamation is not within the Port Management Area, Marina Management Area or the Devonport Defence Management Area  <u>Central Sector Reclamation</u>	<u>Northern Sector</u> This rule does not apply to the permanent reclamation in the northern sector because the reclamation is not within the Port Management Area, Marina Management Area or the Devonport Defence Management Area  <u>Central Sector Reclamation</u>	<u>Northern Sector</u> This rule does not apply to the temporary and permanent reclamation for rail because the reclamation for rail is not within the Port Management Area, Marina Management Area or the Devonport Defence Management Area



RULE	CONSENT REQUIRED		
	Tunnel (road component)	Bridge (road component)	Rail
	<p>The permanent reclamation in the Port Management Area is a <u>discretionary</u> activity.</p> <p>This rule does not apply to the central sector reclamation as a whole because parts of the reclamation will be undertaken within the general management area (see the assessment of rule 13.5.3)</p>	<p>The permanent reclamation in the Port Management Area is a <u>discretionary</u> activity.</p> <p>This rule does not apply to the central sector reclamation as a whole because parts of the reclamation will be undertaken within the general management area (see the assessment of rule 13.5.3)</p>	
<i>Non-Complying Activities</i>			
<p>13.5.3 Any reclamation or drainage that is not provided for as a restricted discretionary, discretionary, or prohibited activity in any other rule contained in this chapter, or which is not otherwise restricted by Rule 13.5.6.</p>	<p><u>Northern Sector</u> Temporary and permanent reclamation located within the general management area and CPA2 is a <u>non-complying</u> activity.</p> <p>Should the assessment of rule 13.5.6 stand, the required temporary and permanent reclamation within CPA1 and also will be a <u>non-complying activity</u>.</p> <p><u>Central Sector</u></p>	<p><u>Northern Sector</u> Permanent reclamation located within general management area and CPA2 is a <u>non-complying</u> activity.</p> <p>Should the assessment of rule 13.5.6 stand, the required permanent reclamation within CPA1 will be a <u>non-complying activity</u>.</p> <p><u>Central Sector</u></p>	<p><u>Northern Sector</u> The temporary and permanent reclamation located outside of CPA1 in the northern sector is a <u>non-complying</u> activity.</p> <p>The permanent reclamation within CPA1 assessed under rule 13.5.6 below.</p>



RULE	CONSENT REQUIRED		
	Tunnel (road component)	Bridge (road component)	Rail
	The permanent reclamation within the General Management Area is a <u>non-complying</u> activity.	The permanent reclamation within the General Management Area is a <u>non-complying</u> activity.	
<i>Restricted Coastal Activities</i>			
13.5.5 Any non-complying reclamation of the foreshore or seabed which: (a) equals or exceeds 1 hectare; or (b) extends 100 or more linear metres in any direction; or (c) is an incremental reclamation connected to, or part of, another reclamation; (i) which was commenced or received a resource consent after 5 May 1994; and (ii) where the sum of the existing and proposed reclamations are equal to or exceed the dimensions in Rule 13.5.5 a and b.	<p><u>Northern Sector</u> The reclamation required in the northern sector exceeds 1ha. Should the assessment of rule 13.5.6 stand, this reclamation will be a <u>restricted coastal</u> activity.</p> <p><u>Central Sector</u> The reclamation required in the central sector is under 1ha in area but is greater than 100 metres in length. This reclamation is a <u>restricted coastal</u> activity.</p>	<p><u>Northern Sector</u> The reclamation required in the northern sector exceeds 1ha. Should the assessment of rule 13.5.6 stand, reclamation will be a <u>restricted coastal</u> activity.</p> <p><u>Central Sector</u> The reclamation required in the central sector exceeds 1ha. This reclamation is a <u>restricted coastal</u> activity.</p>	<p><u>Northern Sector</u> The reclamation (outside of CPA1) in the northern sector exceeds 1ha. This reclamation is a <u>restricted coastal</u> activity.</p>
<i>Prohibited Activities</i>			
13.5.6 Any reclamation or drainage in any Coastal Protection Area 1, except: (a) as carried out as part of rehabilitation or remedial works; or (b) where it is required for the safe and efficient operation of State Highway 1 or	<p><u>Northern Sector</u> Temporary reclamation and drainage is required within CPA1 for the purposes of creating a worksite for the operation of the tunnel boring machine. In</p>	<p><u>Northern Sector</u> Permanent reclamation and drainage within CPA1 is required to accommodate additional motorway width, a Busway lane, and a cycle and pedestrian way.</p>	<p><u>Northern Sector</u> Permanent reclamation and drainage located within CPA1 is required to accommodate rail. The reclamation is not required for rehabilitation, remedial works of</p>



RULE	CONSENT REQUIRED		
	Tunnel (road component)	Bridge (road component)	Rail
State Highway 16, in recognition of these as national strategic routes.	addition, permanent reclamation and drainage within CPA1 is required to accommodate additional motorway width, a Busway lane and a cycle and pedestrian way. It is arguable that the reclamation is required to enable the safe and efficient operation of SH1. On this basis that reclamation would not fall to be a prohibited activity.	It is arguable that the reclamation is required to enable the safe and efficient operation of SH1. On this basis that reclamation would not fall to be a prohibited activity.	the safe and efficient operation of the road network. This reclamation is a <u>prohibited</u> activity.
Extraction			
<i>Discretionary Activities</i>			
14.5.4 The extraction of sand, shell, shingle or other natural material from any location outside Coastal Protection Areas 1 or 2, except where prohibited under Rule 14.5.9.	To form the bored road tunnels material will be extracted from beneath the seabed. The required extraction within the General Management Area and Port Management Area is a <u>discretionary</u> activity.	Extraction is required to construct bridge piles. The extraction required in the General Management Area is a <u>discretionary</u> activity.	To form the bored rail tunnels material will be extracted from beneath the seabed. The required extraction within the General Management Area and Port Management Area is a <u>discretionary</u> activity.
<i>Non-Complying Activities</i>			
14.5.5 Any extraction that is not provided for as a permitted, discretionary or	The required extraction to form a bored tunnel through CPA2 is a	The required extract to construct bridge piles through CPA2 is a	The required extraction to form a bored tunnel through CPA2 is a



RULE	CONSENT REQUIRED		
	Tunnel (road component)	Bridge (road component)	Rail
<p>prohibited activity in any other rule contained in this chapter.            NB: This is likely to include the extraction of sand, shell, shingle or other natural material from any site located within Coastal Protection Areas 2 except as provided for by Rule 14.5.2.</p>	<p><u>non-complying</u> activity.</p>	<p><u>non-complying</u> activity.</p>	<p><u>non-complying</u> activity.</p>
<p><i>Restricted Coastal Activities</i></p>			
<p>14.5.7 Any non-complying removal of sand, shell, shingle or other natural material, in any 12 month period, which:            (a) is greater in volumes than 50,000 cubic metres; and            (b) is from areas equal to or greater than 4 hectares; and            (c) extends 1,000 metres or more over the foreshore and seabed.</p>	<p>Restricted coastal activity consent is not required as the extraction to form the tunnel is beneath the seabed.</p>	<p>Restricted coastal activity consent is not required as the extraction to form the bridge piles does not however an area of greater than 4ha.</p>	<p>Restricted coastal activity consent is not required as the extraction to form the tunnel is beneath the seabed.</p>
<p><i>Prohibited Activities</i></p>			
<p>14.5.8 The extraction of sand, shell, shingle or other natural materials, including prospecting, from within any Coastal Protection Area 1.</p>	<p>N/A - No extraction to form the bored tunnel is proposed in CPA1.</p>	<p>N/A - No extraction to form bridge piles is proposed in CPA1.</p>	<p>The extraction required to form the bored rail tunnels through CPA1 is a <u>prohibited</u> activity.</p>



