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I hereby give notice that a hearing by commissioners will be held on:

**Date:** Monday, 4 September 2023  
**Time:** 9.30am  
**Meeting Room:** Reception Lounge  
**Venue:** Level 2, Auckland Town Hall,  
301-303 Queen Street, Auckland

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**HEARING REPORT**

**CENTRAL INTERCEPTOR EXTENSION - PT ERIN  
TUNNEL - PT ERIN PARK & CURRAN STREET &  
ROAD RESERVE**

**WATERCARE SERVICES LIMITED**

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**COMMISSIONERS**

<b>Chairperson</b>	<b>Robert Scott</b>
<b>Commissioner</b>	<b>Michael Parsonson</b>

**BEVAN DONOVAN  
KAITOHUTOHU WHAKAWĀTANGA  
HEARINGS ADVISOR**

Telephone: 09 890 8056 or 021 325 837  
Email: [bevan.donovan@aucklandcouncil.govt.nz](mailto:bevan.donovan@aucklandcouncil.govt.nz)  
Website: [www.aucklandcouncil.govt.nz](http://www.aucklandcouncil.govt.nz)

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**Note:** The reports contained within this document are for consideration and should not be construed as a decision of Council. Should commissioners require further information relating to any reports, please contact the hearings advisor.

## **WHAT HAPPENS AT A HEARING**

### **Te Reo Māori and Sign Language Interpretation**

Any party intending to give evidence in Māori or NZ sign language should advise the hearings advisor at least ten working days before the hearing so a qualified interpreter can be arranged.

### **Hearing Schedule**

If you would like to appear at the hearing please return the appearance form to the hearings advisor by the date requested. A schedule will be prepared approximately one week before the hearing with speaking slots for those who have returned the appearance form. If changes need to be made to the schedule the hearings advisor will advise you of the changes.

Please note: during the course of the hearing changing circumstances may mean the proposed schedule may run ahead or behind time.

### **Cross Examination**

No cross examination by the applicant or submitters is allowed at the hearing. Only the hearing commissioners are able to ask questions of the applicant or submitters. Attendees may suggest questions to the commissioners and they will decide whether or not to ask them.

### **The Hearing Procedure**

The usual hearing procedure is:

- **the chairperson** will introduce the commissioners and will briefly outline the hearing procedure. The Chairperson may then call upon the parties present to introduce themselves. The Chairperson is addressed as Madam Chair or Mr Chairman.
- The **applicant** will be called upon to present their case. They may be represented by legal counsel or consultants and call witnesses in support of the application. The hearing panel may ask questions of the speakers.
- The **local board** may wish to present comments. These comments do not constitute a submission however the Local Government Act allows the local board to make the interests and preferences of the people in its area known to the hearing panel.
- **Submitters** (for and against the application) are then called upon to speak. Submitters' active participation in the hearing process is completed after the presentation of their evidence so ensure you tell the hearing panel everything you want them to know during your presentation time. Submitters may be represented by legal counsel or consultants and may call witnesses on their behalf. The hearing panel may then question each speaker.
  - Late submissions: The council officer's report will identify submissions received outside of the submission period. At the hearing, late submitters may be asked to address the panel on why their submission should be accepted. Late submitters can speak only if the hearing panel accepts the late submission.
  - Should you wish to present written evidence in support of your submission please ensure you provide the number of copies indicated in the notification letter.
- **Council Officers** will then have the opportunity to clarify their position and provide any comments based on what they have heard at the hearing.
- The **applicant** or their representative then has the right to summarise the application and reply to matters raised. Hearing panel members may further question the applicant. The applicants reply may be provided in writing after the hearing has adjourned.
- **The chairperson** will outline the next steps in the process and adjourn or close the hearing.
- If adjourned the hearing panel will decide when they have enough information to make a decision and close the hearing. The hearings advisor will contact you once the hearing is closed.
- Decisions are usually available within 15 working days of the hearing closing.

### **Please note**

- that the hearing will be audio recorded and this will be publicly available after the hearing
- catering is not provided at the hearing.

## A NOTIFIED DISCRETIONARY ACTIVITY RESOURCE CONSENT APPLICATION BY WATERCARE SERVICES LIMITED

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### Mark Ross, Planner (consultant)

Reporting on an application for Land use consent, and water, stormwater discharge and diversion, and the discharge of contaminants to air, land and water permits associated with the construction, operation, and maintenance of wastewater infrastructure, being a wastewater storage and conveyance tunnel, a terminal access shaft, a control chamber and above ground ancillary structures, for the Central Interceptor Extension - Pt Erin Tunnel - Pt Erin Park & Curran Street & Road Reserve. The reporting officer is recommending, subject to contrary or additional information being received at the hearing, that the application be **CONSENTED** to, subject to certain conditions.

**APPLICANT:** WATERCARE SERVICES LIMITED

SUBMITTERS:	
Page 239	Victoria Ann Hibbins
Page 241	a
Page 243	Cameron Peachey and Amber McKnight
Page 245	The Hampton & Spartacus Trusts (Petrina Madeleine Madsen-Fisk)
Page 249	Peter Wren
Page 253	Michael Costa and Pauline Rose Gambitsis
Page 256	GES Consulting Ltd (Gillian Somerville)
Page 258	Ministry of Education (Vicky Hu)

<b>LATE SUBMITTERS:</b>	
Page 262	Mrs Jennifer Ekanayaka & Dr Kumudith Ekanayaka
Page 264	Paula Were
Page 266	The Equal Justice Project (Dr Grant Hewison)
Page 268	The St Mary's Bay Association (David Abbott)



# Report on a notified application for resource consents under the Resource Management Act 1991 (RMA)



Discretionary activity

**To:** Independent Hearing Commissioners  
**From:** Mark Ross, Consultant Planner  
**Hearing date:** 4 September 2023

## 1. Application description

Application and property details

**Application numbers:** BUN60415108 (Council reference)  
LUC60415109 (s9 land use consent)  
WAT60415460 (s14 water permit)  
DIS60415110 (s15 discharge and diversion permit, stormwater)  
DIS60415116 (s15 discharge permit, air)

**Applicant's name:** Watercare Services Limited

**Site address:** 94 Shelly Beach Road, Ponsonby (northern end)  
28, and 30 Sarsfield Street and road reserve, Ponsonby  
49 Curran Street and road reserve, Ponsonby  
31 Emmett Street, Ponsonby  
90, 92, 94, 96-100, and 102 Jervois Road and road reserve, Ponsonby  
2, 4, 6, 8, 10, 12, 14, and 16 Provost Street, Ponsonby  
37, and 40 Prosford Street and road reserve, Ponsonby  
50, 53, 55, 57, 59, and 61 Clarence Street and road reserve, Ponsonby  
56, 58, 59, 60, 61, 63, 65, and 67 Islington Street and road reserve, Ponsonby  
Pompallier Terrace road reserve, Ponsonby

62, 64, 66, 68, 69, 70, 71, and 75 John Street, Ponsonby

70, 72, 74, 76, and 78 Ardmore Road, Ponsonby

2, 4, 6, and 8 Trinity Street, Ponsonby

183 Richmond Road, Ponsonby

82-84 Kelmarna Avenue, Ponsonby

46 and 48 Tawariki Street, Ponsonby (southern end)

**Lodgement date:** 7 February 2023

**Notification date:** 17 March 2023

**Submission period ended:** 18 April 2023

**Number of submissions received:** In support – 0  
Neutral – 2  
In opposition – 10

## 2. Locality Plan



Figure 1: Aerial Photograph, proposed alignment between 94 Shelly Beach Road and 46 and 48 Tawariki Street - Source: Figure 1.1 for the submitted Assessment of Effects on the Environment





Figure 2: Aerial Photograph, 94 Shelly Beach Road, Ponsonby - Source: Auckland Council GeoMaps



Figure 3: Aerial Photograph, 46 and 48 Tawariki Street, Ponsonby - Source: Auckland Council GeoMaps

### 3. Application documents

The list of application documents is set out in **attachment 1** of this report and is listed below:

#### **Assessment of Effects on the Environment**

- a. Application Forms and Assessment of Effects on the Environment, prepared by Tonkin & Taylor Ltd, Version 1, dated 7 February 2023.

#### **Reports Lodged with Assessment of Effects on the Environment**

- b. Watercare Central Interceptor Point Erin Park Recreation Assessment, prepared by Rob Greenaway & Associates, dated 23 January 2023 (Final).
- c. Extension to the Central Interceptor - Point Erin Tunnel: Assessment of Noise and Vibration Effects, prepared by Tonkin & Taylor Ltd, Version 1, dated 1 February 2023.
- d. Preliminary Site Investigation – Point Erin Park, prepared by Tonkin & Taylor Ltd, Version 2, dated December 2022.
- e. Draft Erosion and Sediment Control Plan – Central Interceptor Point Erin Tunnel, prepared by McConnell Consultancy Ltd, Revision 1, dated 25 January 2023.
- f. CI Extension – Point Erin Tunnel: Screening-level Assessment of Groundwater and Settlement Effects, prepared by Tonkin & Taylor Ltd, Version 1, dated 7 February 2023.
- g. Central Interceptor – Point Erin Extension: Natural Character, Landscape and Visual Assessment Report, prepared by Isthmus Group Limited, dated 1 February 2023 (Final).
- h. Arboricultural Assessment of Effects of Extension of the Central Interceptor wastewater tunnel into Point Erin Park, resulting in the removal of reserve trees, prepared by The Tree Consultancy Company, dated 25 January 2023.
- i. Central Interceptor Extension, Point Erin Park, Auckland: Archaeological Assessment, prepared by Clough & Associates Ltd, dated January 2023.
- j. Central Interceptor Extension – Point Erin Tunnel: Integrated Transport Assessment, prepared by Tonkin & Taylor Ltd, Version 1.0, dated 1 February 2023.
- k. Point Erin Extension – Assessment of Potential Flood Impacts Memorandum, prepared by Jacobs, Revision C, dated 25 January 2023.
- l. Central Interceptor Extension – Point Erin Tunnel: Air Quality Assessment, prepared by Tonkin & Taylor Ltd, Version 1, dated 1 February 2023.

#### **Further Information Response Documents**

- m. Point Erin Central Interceptor: Addendum Report – Assessment of Groundwater and Settlement Effects, prepared by Tonkin & Taylor Ltd, Version 1, dated 17 March 2023.
- n. 'Further information on potential design and appearance of above-ground infrastructure – Point Erin Park' letter, prepared by Tonkin & Taylor Ltd, dated 17 March 2023.
- o. 'Response to s92 requests – Point Erin Tunnel' letter, prepared by Tonkin & Taylor Ltd, dated 19 April 2023.

- p. Cultural Values Assessment, Watercare, Central Interceptor Extension, Point Erin Park, prepared by Ngaati Te Ata Waiohū, dated 14 April 2023.
- q. Cultural Impact Assessment, Watercare Services Limited, Central Interceptor – Point Erin Tunnel, prepared by Ngaati Whanaunga Incorporated Society, dated 9 June 2023.
- r. Cultural Values Assessment, Watercare, Central Interceptor Extension, Pt Erin Tunnel Project, prepared by Te Ākitai Waiohū, dated 2023.
- s. Precedent study images, indicative planting plan and cross-sections, prepared by Isthmus, dated April 2023 (Appendix B of Response to s92 requests – Point Erin Tunnel’ letter, dated 19 April 2023).
- t. ‘Update on engagement with mana whenua partners and Cultural Values Assessments’ correspondence received via email from Rachel Signal-Ross of Tonkin & Taylor Ltd, dated 9 May 2023.
- u. Ngaati Whanaunga Cultural Impact Assessment – Point Erin Tunnel’ correspondence received via email from Xenia Meier of Watercare Services Limited, dated 3 July 2023.
- v. ‘Point Erin Tunnel: Response to s92 request: Landscape and Visual effects – further clarification questions’ letter, prepared by Tonkin & Taylor Ltd, dated 26 May 2023.
- w. Indicative Planting Masterplan, prepared by Isthmus, dated May 2023 (Appendix B of ‘Point Erin Tunnel: Response to s92 request: Landscape and Visual effects – further clarification questions’, dated 26 May 2023).
- x. Email on further comments from the Council’s Parks Department, from Rachel Signal-Ross, dated 1 June 2023.
- y. ‘Point Erin Tunnel: Response to additional questions from Auckland Council Parks’ letter, prepared by Tonkin & Taylor Ltd, dated 20 June 2023.
- z. Plans as detailed below:

<b>Drawing title and reference</b>	<b>Rev</b>	<b>Date</b>
<i>Prepared by Jacobs in association with AECOM and McMillen Jacobs Associates:</i>		
Tawariki St to Pt Erin – Tunnel Plan 2011933.006	2	2.2.23
Tawariki St to Pt Erin – Tunnel Plan 2011933.007	2	2.2.23
Tawariki St to Pt Erin – Auckland Unitary Plan Zoning 2011933.008	1	2.2.23
Tawariki St to Pt Erin – Other Auckland Unitary Plan Zoning 2011933.009	1	2.2.23
Site General – Proposed Site Layout 2013964.002	2	2.2.23
Site General – Point Erin Site – Construction Phase Plan 2013964.003	3	17.4.23
MH – 11 Shaft/Tunnel Connection Plan and Section 2013964.005	2	2.2.23
Point Erin Flow Diversion Pipeline Longitudinal Section 2013964.006	2	2.2.23
Point Erin Control Chamber Plan and Sections 2013964.007	2	2.2.23
Point Erin Site – Longitudinal Section and Cross sections 2013964.009	1	2.2.23
Point Erin – Other Auckland Unitary Plan Zoning 2013964.010	1	2.2.23
Site General – South West Corner Site Entry	1	17.4.23



## 4. Adequacy of information

The information submitted by the applicant is sufficiently comprehensive to enable the consideration of the following matters on an informed basis:

- The nature and scope of the proposed activity that the applicant is seeking resource consents for.
- The extent and scale of the actual and potential effects on the environment.
- Those persons and / or customary rights holders who may be adversely affected.
- The requirements of the relevant legislation.

A request for further information was made under s92 of the RMA. The applicant has provided responses to this request, which were in respect of earthworks, stormwater, groundwater, contamination, noise and vibration, traffic, landscape, visual, and general planning matters. These responses have ensured that all required information has been received to allow for the subject application to be determined.

## 5. Qualifications and experience

My full name is Mark Andrew Ross. I am a consultant planner at Sentinel Planning Limited, a company that provides independent and professional advice and services related to planning, resource management, resource consenting and plan-making. I hold a Bachelor of Science specialising in resource and environmental planning from the University of Waikato. I am a full member of the New Zealand Planning Institute. I have a total of 22 years planning experience working for local authorities and the private sector in New Zealand and the United Kingdom. In my current position with Sentinel Planning Limited, I am responsible for supervising and mentoring fellow work colleagues as well as managing my own caseload of both private consents and the processing of consents for Auckland Council. I have processed a number of resource consents relating to the provision of infrastructure, including previous consents related to the applicant's Central Interceptor wastewater project.

## 6. Report and assessment methodology

The application is appropriately detailed and comprehensive and includes a number of expert assessments. Accordingly, no undue repetition of descriptions or assessments from the application is made in this report.

I have made a separate and independent assessment of the proposal, with the review of technical aspects by independent experts engaged by the Council, as required.

Where there is agreement on any descriptions or assessments in the application material, this is identified in this report.

Where professional opinions differ, or extra assessment and / or consideration is needed for any reason, the relevant points of difference of approach, assessment, or conclusions are detailed.

The assessment in this report also relies on reviews and advice from the following specialists:

- Matthew Revill – Principal Project Manager, Regulatory Engineering

- Bridget Kelly – Consultant Specialist, Stormwater
- Pat Shorten – Principal, Geotechnical Engineering (Consultant)
- Gerhard van der Westhuizen – Principal Transportation Engineer (Consultant)
- Neil Stone – Senior Development Planner
- Gabrielle Howdle – Landscape Architect
- Shanelle Beer – Specialist, Earthworks
- Paul Crimmins – Senior Specialist, Contamination,
- Rachel Terlinden – Specialist, Air Quality
- Jamie Exeter – Principal Specialist, Noise and Vibration (Consultant)
- Paul Hansen – Arborist
- Chris Mallows – Team Leader, Cultural Heritage
- Roja Tafaraji – Senior Parks Planner

Copies of the reviews from these specialists are included in **attachment 2** of this report

**This report is prepared by:**

Mark Ross

Consultant Planner to Council

Sentinel Planning

Signed:



Date:

11 August 2022

**Reviewed and approved for release by:** Colin Hopkins

Principal Project Lead

Premium Resource Consents

Signed:



Date:

11 August 2022

## 7. Executive Summary

Watercare Services Limited has applied to Auckland Council for resource consent for a 1.6km extension to their consented Central Interceptor wastewater project (a 4.5m internal diameter wastewater conveyance and storage tunnel) at depths of between 20m and 60m from its current termination point at 46 and 48 Tawariki Street, Ponsonby to 94 Shelly Beach Road (Point Erin Park), Ponsonby, including associated above ground infrastructure and enabling works, including earthworks, construction noise and vibration non-compliances, groundwater diversion and dewatering, the diversion and discharge of stormwater, and the discharge of contaminants to air. Overall, the activities are classified as discretionary.

The relevant matters that require consideration include:

- earthworks;
- stormwater;
- archaeology;
- groundwater;
- flooding;
- air discharge;
- contamination;
- construction noise, vibration and traffic;
- operational traffic;
- vegetation;
- landscape, visual, character, and amenity values;
- open space amenity; and
- cultural.

Having reviewed the documentation submitted by the applicant as well as taking into account the expert assessments provided by the Council's specialists and the content of the submissions received, I consider that the application, on balance, fulfils the relevant statutory tests of sections 104 and 104B of the RMA as it is consistent with the objectives and policies of the relevant planning documents, while any actual or potential effects will be avoided, remedied, or mitigated to acceptable levels. The detailed reasons for this conclusion are substantiated within the body of this report.

Accordingly, I consider that the proposed development meets the relevant statutory tests of the RMA and will achieve its purpose as outlined in part 2. Unless further evidence is presented at the hearing that alters this assessment, I recommend that consent be **GRANTED** subject to appropriate conditions.



## 8. The proposal, site and locality description and background information

The applicant's agent, Tonkin & Taylor Limited, has provided an Assessment of Effects on the Environment (**AEE**) in support of the application, which includes an introduction, the context of the proposed works, and descriptions of the existing environment and the proposal. This is included in Sections 1 to 4 on pages 1 to 47.

Having reviewed the application plans and associated documentation and undertaken a site visit to 94 Shelly Beach Road (Point Erin Park) and 46 and 48 Tawariki Street and their immediate surroundings, I concur with these descriptions and note the following salient points:

### Background

In 2013, Watercare Services Limited (**WSL**) obtained a suite of consents to construct and operate what they refer to as the Central Interceptor (**CI**). The CI is essentially a 13km underground wastewater tunnel that will run between the Mangere Wastewater Treatment Plant in the south to Western Springs in the north. It also includes associated above ground facilities, two link sewers (link sewers B and C) and ten shafts for connection, access, and maintenance purposes.

In 2019, WSL obtained consent for an extension of the CI from Western Springs to 46 and 48 Tawariki Street, Ponsonby. This included two shafts (with one being for a future connection to the Grey Lynn Park Branch Sewer) and associated amenities. This extension is referred to as the Grey Lunn Tunnel (**GLT**).

### Proposal

Following on from the consented GLT, WSL now propose to undertake a further extension from 46 and 48 Tawariki Street to 94 Shelly Beach Road, Ponsonby (otherwise known as Point Erin Park).

To allow for this, the following works are proposed in two distinct parts, being the wastewater interceptor tunnelling works and the terminal shaft and control chamber. These are described as follows:

#### Wastewater Interceptor Tunnelling

The tunnelling works will be undertaken from 46 and 48 Tawariki Street and will extend for a length of approximately 1.6km underneath the sites and areas of road reserve at Kelmarna Avenue, Richmond Road, Trinity Street, Ardmore Road, John Street, Pompallier Terrace, Islington Street, Clarence Street, Prosford Street, Provost Street, Jervois Road, Emmett Street, Curran Street, and Sarsfield Street to the proposed terminal shaft at Point Erin Park. The tunnel will generally be located at depths of between 20m and 60m, with the shallowest point being 17m at the entry point to Point Erin Park. The tunnel will have an internal diameter of 4.5m and a gradient of between 1:750 and 1:1,000. A 10m wide corridor is proposed within which to install the tunnel, which noting the outside diameter of the tunnel boring machine of just under 6m, allows for a 2m tolerance either side of the alignment centreline. All of these works will be underground with no above ground structures proposed.

The tunnel boring machine (**TBM**) that is currently being utilised to construct the CI and that will then be used for the GLT will be used for the tunnelling works associated with this consent.

Tunnelling operations will occur 24 hours per day, seven days a week and are expected to commence in February 2025 (when the TBM arrives at the end of tunnelling for the GLT). With tunnelling generally progressing 10m to 20m per day, the TBM will likely reach the terminal shaft at Point Erin Park in May 2025. The TBM will then be retrieved from the Point Erin Park shaft site.

It is noted within the AEE that all spoil will be removed from the tunnel at WSL's May Road site as consented as part of the original CI consent and that this (the soil removal) does not form part of the subject application.

#### Terminal Shaft and Control Chamber

The terminal shaft and control chamber will be constructed within Point Erin Park, with the terminal shaft being within a grassed area immediately to the south of the existing swimming pool complex and the control chamber being to the southwest adjacent to the boundaries with Curran Street (west) and Sarsfield Street (south).

Construction of the terminal shaft is scheduled to commence in September 2024 with the aim of completing it in February 2025 to allow for it to be in place when the TBM is scheduled to arrive in May 2025. The TBM will then be removed via the shaft following which the internal structure of the shaft will be completed, with this scheduled to be completed by February 2026. Construction of the control chamber is scheduled to occur from January to June 2025. Taking into account the necessary remediation works, construction works within Point Erin Park are estimated to occur over a two-year period, although this may be longer (potentially up to three years) taking into account supply chain and resourcing issues. It is noted that construction works will not be continuous over the entire two-to-three-year period, with there being periods of inactivity, such as while waiting for the arrival of the TBM.

While construction works will generally be limited to 7am to 6pm Monday to Friday and 8am to 6pm on Saturday, works, such as concrete pouring and shaft dewatering, are proposed outside these hours.

Separate construction works areas are proposed for the terminal shaft and control chamber areas, with an area of 3,150m<sup>2</sup> required for the former and an area of 1,880m<sup>2</sup> required for the latter. A range of site establishment works are associated with each, including enabling earthworks, the construction of temporary retaining walls, the relocation of services, and vegetation removal / pruning / rootzone works. Temporary site buildings for worker amenity and storage purposes are also proposed, along with the provision of loading, laydown, and machinery storage areas. The perimeters of both areas will be encapsulated by 1.8m to 2.4m high perimeter fencing, which will be design as necessary to provide acoustic attenuation. The terminal shaft site will be accessed via the existing accessway to Point Erin Park from Sarsfield Street, with new accesses proposed from Sarsfield Street and Curran Street to service the control chamber site. This includes a permanent access adjacent to the control chamber to allow for access by maintenance vehicles.

The terminal shaft will be approximately 31m deep with a diameter of 12m, noting that this is only required for retrieval of the TBM, with the finished diameter to be smaller. The shaft will be supported by secant piles (or similar) for structural support and to limit groundwater ingress. The control chamber will be 12m by 12m and approximately 20m deep. It has been designed to accommodate a peak design flow of 5.5m<sup>3</sup>/s and will direct flows from the existing Sarsfield overflow collector and the St Mary's Bay pressure main into the extended CI tunnel. To achieve this, a 2.4m pipe is proposed between the terminal shaft and the control chamber.

In respect of above ground development, an air vent will be required in association with the terminal shaft, which will have a footprint of 4m by 2.5m and a height of 3m. The only other above ground structures will all be associated with the control chamber, being a plant room that will be located adjacent to Curran Street. It will have a footprint of 40m<sup>2</sup> and will be 4m high, albeit that its effective height will be reduced as viewed from Curran Street as a consequence of the proposed earthworks. An excavated retaining wall with a maximum retained height of approximately 2.3m is proposed along the Curran Street boundary, with a second retaining wall potentially being developed to the north and east of the plant room. It will a filled wall with a maximum height of approximately 1.2m. As an alternative option, this retaining wall may not be constructed, with the raised ground level battered down to natural ground level, noting that this would require additional space. It is noted that detailed design information in respect of the proposed plant room, air vent, and retaining walls has not been submitted with the application, as this information is still being resolved and worked through and is proposed to be addressed by condition (and to reflect the design process being undertaken with Mana Whenua partners). Visual simulations, cross sections, precedent imagery, and indicative planting plans have been provided to allow for the likely adverse effects to be understood and assessed.

In terms of reinstatement work, once the works are completed, all construction yards, equipment, and accessways (other than those required for long term operation and maintenance), will be removed along with all temporary retaining walls. Replacement planting and associated landscaping is also proposed, including that necessary to mitigate the adverse visual effects associated with the permanent above ground works.

## Site and locality description

### 94 Shelly Beach Road (Point Erin Park)

94 Shelly Beach Road is located on the western side of Shelly Beach Road, with Sarsfield Street to the south and Curran Street to the west. It is known and Point Erin Park, with public swimming pools locating on its northern portion, a public car park, playground, and toilet block to the southeast along the Shelly Beach Road frontage, and the remainder occupied by undulating grassland and mature vegetation. The vegetation along the northern side of the site is within a significant ecological area overlay, with this vegetation and a notable portion of the area occupied by the pools being subject to the Sites and Places of Significance to Mana Whenua Overlay – 006, Te Koraenga Oka, 1. A walkway is also located within the southern portion of the site along with an above ground network utility structure to the southwest along the Sarsfield Street frontage. It is not highly visible as a consequence of being benched into the site.

The site is surrounded by residentially zoned sites to the south, east, and west, being a mixture of Residential – Terrace Housing and Apartment Buildings, Residential – Mixed Housing Urban, and Residential – Single House zoned sites. The sites to the southwest along Sarsfield Street and Curran Street will be those located in closest proximity to the proposed works, being those associated with the control chamber and associated plant room.

Photos of this site and the surrounding area are included Figures 4 to 14 below:





*Figure 4: portion of Pt Erin Park where terminal shaft construction area will be established*



*Figure 5: Pt Erin Park car park and access (which will be used to access the terminal shaft construction site)*





*Figure 6: portion of Pt Erin Park where control chamber construction area will be established*



*Figure 7: portion of Pt Erin Park where control chamber construction area will be established (Curran Street to the left)*





*Figure 8: southern portion of Pt Erin Park*



*Figure 9: Pt Erin Park along Sarsfield Street and existing above ground utility structure*





*Figure 10: 24 and 26 Sarsfield Street*



*Figure 11: 28 and 30 Sarsfield Street*





Figure 12: 32 Sarsfield Street



Figure 13: 37 Sarsfield Street





*Figure 14: 72 and 74 Curran Street*

#### 46 and 48 Tawariki Street

46 and 48 Tawariki Street are located on the northern side of Tawariki Street at its eastern end noting that it is a cul-de-sac street. The residential dwellings shown on Council's GeoMaps have been removed such that these sites are vacant. At the time of my site visit, temporary construction fencing had been located along the frontage of the sites and initial site establishment works associated with the GLT consent had commenced.

44 Tawariki Street is located to the west. It is owned by WSL and is also vacant, with the dwelling having been removed to allow for the future GLT works. Single residential dwellings of longstanding construction are located to the south on the opposite side of the road at 37, 39 and 41 Tawariki Road. They are located centrally within the site and with their front portions being of moderate gradient, they are elevated above road level. To the north and east at 82-84 Kelmarna Avenue is Marist Catholic School (Herne Bay). It is also elevated above the sites and is screened by dense vegetation. None of the school buildings located on this site are visible from the subject sites.

Photos of these sites and the surrounding area are included Figures 15 to 18 below:





Figure 15: 48 Tawariki Street



Figure 16: 44 and 46 Tawariki Street





Figure 17: 39 and 41 Tawariki Street



Figure 18: 35 and 37 Tawariki Street

Noting the nature of the development and that the works with respect to all other sites will be below ground level, there are no characteristics or features associated with them that require further detail or description.

## 9. Reasons for the application

### The relevant operative plan and proposed plan provisions

In assessing an application for resource consent, the relevant provisions requiring consideration are:

- those provisions of the Auckland Unitary Plan (Operative in Part) (**AUP(OP)**) that are not subject to appeal and are operative (including treated as operative under s86F of the RMA);
- those provisions of the AUP(OP) that are identified as subject to appeal and therefore remain proposed plan provisions;
- the relevant provisions of any relevant plan that remain operative as a consequence of the appeals against certain provisions of the AUP(OP); and
- the relevant provisions of a plan change to the AUP(OP) (including a private plan adopted by the Council) or a variation to a plan change to the AUP(OP) where the relevant provisions have legal effect.

The task of identifying the relevant provisions, as described above, requires individual analysis of the provisions of the AUP(OP) and the relevant appeals, within the context of the specific resource consent application.

There are no current plan changes that are of relevance to the subject application.

In this instance, resource consents are required for the following reasons:

### Land use consents (s9) – LUC60415109

#### District

#### Auckland Unitary Plan (Operative in Part) (**AUP(OP)**)

##### *Noise and Vibration*

- The undertaking of construction works that will not comply with the construction noise and vibration limits set out in Standards E25.6.27.(1) and E25.6.30.(1), is a **restricted discretionary activity** under Rule E25.4.1(A2).

##### *Infrastructure*

- The construction of a plant room within an open space zone, being an above ground ancillary structure associated with the proposed wastewater infrastructure that exceeds the maximum building area and height as set out in Standards E26.2.5.2.(2)(a)(ii) and (3)(a), is a **restricted discretionary activity** under Rule C1.9.(2).
- The construction of an air vent within an open space zone, being an above ground ancillary structure associated with the proposed wastewater infrastructure that exceeds the maximum building height as set out in Standard E26.2.5.2.(3)(a), is a **restricted discretionary activity** under Rule C1.9.(2).
- The pruning and trimming of trees located within an open space zone and a road that will not comply with Standard E26.4.5.1, is a **restricted discretionary activity** under Rule E26.4.3.1(A84).

- Works within the protected root zone of trees located within an open space zone and a road that are not otherwise provided for, is a **restricted discretionary activity** under Rule E26.4.3.1(A88).
- The removal of trees located within an open space zone and a road that exceed 4m in height, is a **restricted discretionary activity** under Rule E26.4.3.1(A92).
- The undertaking of earthworks within residential, business, special purpose, and open space zoned environments and roads associated with the installation of wastewater infrastructure that exceed 2,500m<sup>2</sup> in area and 2500m<sup>3</sup> in volume, is a **restricted discretionary activity** under Rules E26.5.3.1(A97 and A97A).
- The undertaking of earthworks within Special Character Area and Historic Heritage overlays associated with the installation of wastewater infrastructure that range between 10m<sup>2</sup> to 2500m<sup>2</sup> in area and 5m<sup>3</sup> to 2500m<sup>3</sup> in volume, is a **restricted discretionary activity** under Rule E26.6.3.1(A117).

#### *Transport*

- The construction and use of a vehicle crossing along Sarsfield Road that is within 10m of the intersection with Curran Street, being a situation where a vehicle access restriction applies under Standard E27.6.4.1.(3)(a), is a **restricted discretionary activity** under Rule E27.4.1(A5).

#### *Natural Hazards and Flooding*

- The provision of wastewater infrastructure located within a 1% AEP floodplain and overland flow paths, is a **restricted discretionary activity** under Rule E36.4.1(A56).

#### *Temporary Activities*

- The undertaking of construction works to allow for implementation of the proposed wastewater infrastructure for a period longer than 24 months, is a **restricted discretionary activity** under Rule E40.4.1(A24).

### **Regional**

#### *Infrastructure*

- The undertaking of earthworks within residential, business, special purpose, and open space zoned environments and roads associated with the installation of the proposed wastewater infrastructure that exceed 2,500m<sup>2</sup> in area and are located within a sediment control protection area, is a **restricted discretionary activity** under Rule E26.5.3.2(A107).

## **Water permit (s14) – WAT60415460**

### Auckland Unitary Plan (Operative in Part)

#### *Taking, Using, Damming and Diversion of Water and Drilling*

- The diversion of groundwater associated with the tunnelling and excavation works associated with the proposed wastewater tunnel and terminal shaft that exceed the permitted activity standards set out in Standard E7.6.1.10, is a **restricted discretionary activity** under Rule E7.4.1(A28).

- Dewatering associated with a groundwater diversion that does not meet the associated permitted activity standards, is a **restricted discretionary activity** under Rule E7.4.1(A20).

## Stormwater permit (s14) – DIS60415110

### (AUP (OP))

#### *Stormwater – Discharge and Diversion*

- The diversion and discharge of stormwater from impervious surfacing associated with the temporary construction yard areas, which will have a combined area greater than 5,000m<sup>2</sup>, is a **discretionary activity** under Rule E8.4.1(A10).

## Discharge permit (s15) – DIS60415116

### (AUP (OP))

#### *Air Quality*

- The discharge of contaminants into air from the operation of wastewater infrastructure that is for the primary purpose of pumping, storing, or transferring wastewater, that does not meet the permitted activity standards, and is located within a high air quality - dust and odour area, is a **restricted discretionary activity** under Rule E14.4.1(A167).

## 10. Status of the applications

The proposal involves multiple resource consents under different chapters of the AUP(OP) and sections of the RMA. Where there is an overlap between the consents and / or the effects of the activities – so that consideration of one could affect the outcome of another – the appropriate practice is to treat the applications together.

In this instance, the consents include a range of restricted discretionary, and discretionary activities and, noting the integrated nature of the proposed development, the relevant matters to be considered in respect of all associated consenting matters overlap.

Accordingly, the resource consents are considered together as a **discretionary** activity.

## 11. Notification and submissions

### Notification background

The application was publicly notified on 17 March 2023 at the request of the applicant. Notice of the application was also served on the same date to the landowners above the proposed tunnel alignment as well as identified Mana Whenua groups and the Waitemata Local Board.

### Submissions

When the submission period ended on 18 April 2023, a total of eight submissions had been received. Seven of these submissions were in opposition, and one was neutral, noting that one submission (submission 2) appears to have been lodged in error as it only specifies the letter 'a'.

Four late submissions were received. Three of these were in opposition and one did not state a position.



A summary of the issues raised in submissions together with the relief sought by the submitters is set out in the tables below. This table is only a summary of the key issues raised in submissions. For the specific details, please refer to the full set of submissions included in **attachment 3** to this report.

This summary of submissions identifies the following:

- The issues raised in submissions in terms of the key issues below.
- Details any relief sought by the submitter.
- Whether a submitter wishes to be heard at the hearing, noting that this includes those submitters that do not wish to be heard individually but that may wish to be heard jointly with others making a similar submission.

### Summary of submissions

Issues raised in opposition / neutral:	
1.	Subsidence issues as a consequence of the proposed earthworks / tunnelling.
2.	Construction related effects, including noise, vibration, dust, works hours, site access and traffic, including the safety of Ponsonby Primary School students along Curran Street during drop-off and pick-up times.
3.	Property damage and subsequent adverse effects on the health and safety of residents and the residential enjoyment of their property.
4.	The need for pre-and-post condition surveys of properties and the repair of any subsequent damage (including being able to choose the remediation company) without needing to notify the submitter's insurance company and / or confirmation that this would not preclude the submitter from Public Works Act compensation.
5.	The need for monitoring during construction to assess if surrounding buildings are within acceptable tolerances of damage risk.
6.	Future property development implications (e.g., the need to apply for works over permission due to presence of the wastewater interceptor).
7.	Toxic discharges.
8.	Realignment of the tunnel / there are, arguably, more direct routes that the tunnel could take.
9.	Reduced property value and / or the need for compensation.
10.	The 10-year lapse period is too long.
11.	The resource consent covers works under land which the Applicant has no legal right to carry out the works. The Applicant needs to obtain written consent under the Local Government Act 2002 or acquire the affected property.
12.	A lack of site-specific soil assessment and a lack of evidence to confirm that tunnelling rock below will have no effect on areas of upper soil.
13.	Consideration be given to the effects of greenhouse gas emissions on climate change when considering the subject air discharge permit.

Issues raised in opposition / neutral:	
14.	There is a need to identify key issues and endeavour to negotiate solutions that work for all parties.
15.	The application was rushed through by the applicant with deadlines falling during holiday periods when there were also extreme weather events to deal with.

Relief sought:
Grant consent
Grant consent subject to conditions
Refuse consent
Neutral
Other, including realignment of the tunnel away from dense residential areas and under local roads; the need to acquire property to address significant adverse effects that will result; and the imposition of conditions relating to greenhouse gas emissions.

No	Name	Physical address	Issues raised	Relief sought	To be heard
1	Victoria Hibbins	Ann 70 John Street, Ponsonby	1, 3, 6, 7	C	N
2	[lodged in error] a	a	-	-	-
3	Cameron Peachey and Amber McKnight	64 John Street, Ponsonby	3, 8, 9	C, E	N
4	Petrina Madeleine Madsen-Fisk	28 Sarsfield Street Herne Bay.	2, 3, 8, 9, 10 11	C, E	N
5	Peter Wren	61 Clarence Street, Ponsonby	2, 3, 4, 8, 9	C	N
6	Michael Costa and Pauline Rose Gambitsis	57 Clarence Street, Ponsonby	2, 4, 8, 9	C	N
7	Gillian Somerville	61 Islington Street, Ponsonby	3	C	N
8	Ministry of Education	of Ponsonby Primary School and Ponsonby Intermediate	2, 5	D	N



9	<i>Jennifer Ekanayaka and Dr Kumudith Ekanayaka</i>	55 Clarence Street, Ponsonby	2, 4, 8, 9, 12	C	N
10	<i>Paula Elline Were</i>	53 Clarence Street, Ponsonby	2, 3, 8, 15	C	N
11	<i>Equal Justice Project</i>	PO Box 47188, Ponsonby 1011	13	C, E	N
12	<i>The St Mary's Bay Association</i>	No address given	14	-	-

Key:

- For those wishing to be heard “-” means not stated.
- Submissions in *italics* identify late submissions received.

## Late Submissions

At the start of the hearing, the Independent Hearing Commissioners must decide whether to extend the closing date for submissions. For this decision, the considerations under s37 and s37A of the RMA in making this decision are:

- the interests of any person who, in the council’s opinion, may be directly affected by the waiver;
- the interests of the community in achieving adequate assessment of the effects of the proposal; and
- the Council’s duty under s21 of the RMA to avoid unreasonable delay.

Of the submissions received late, the submission from Jennifer Ekanayaka and Dr Kumudith Ekanayaka was received on 27 April 2023. However, I can confirm that Dr Ekanayaka tried to contact me the day after submissions closed as he was unable to submit his submission online. I was on leave at the time and was unable to return Dr Ekanayaka’s call until the morning of 27 April 2023. I informed him to send his submission directly to me as it could be considered as a late submission. Other than queries around the soil assessment undertaken, the issues raised by Dr Ekanayaka are similar to those raised in other submissions and given the circumstances around why the submission was late, I consider that this late submission does not adversely affect the applicant and should be accepted.

The submission from Paula Elline Were was received on 1 May 2023. There is a note on the submission that the submitter was delayed in making the submission due to family illness that involved intensive hospital care. Other than the concern raised that the application has been rushed through with deadlines falling during holiday periods and being further affected by extreme weather events (which is not a resource management consideration), the issues raised by Ms Were are similar to those raised in other submissions and given the

circumstances around why the submission was late, I consider that this late submission does not adversely affect the applicant and should be accepted.

The submission from the Equal Justice Project was received on 9 May 2023, 14 working days after the close of submissions. The reason stated for the late submission was University work pressures. The submission is broad in nature and raises greenhouse gas emissions and their effect on climate change, which is not an issue raised in any of the other submissions and is not a matter of concern as assessed by the Council's Specialist Air Quality Advisor, Ms Rachel Terlinden. Given that the submission was 14 days late and does not assist with achieving an adequate assessment of the proposal, I consider that it does adversely affect the applicant and should not be accepted.

Noting that the submission from The St Mary's Bay Association was 30 days late and does not raise any issues of substance other than the need to identify key issues and endeavour to negotiate solutions that work for all parties, I consider that it also adversely affects the applicant and should not be accepted.

A recommendation on the above late submissions is included in section 19 of this report.

### Written approvals

No written approvals have been provided.

### Amendments to the application following notification

While additional information has been submitted following notification of the application in order to address a number of the further information issues raised, no amendments have been made to the alignment of the tunnel or the bulk and scale of the proposed above ground amenities.

### Need for a hearing

A hearing is required because the applicant has not confirmed that they waive their right to be heard at a hearing, noting that there are currently unresolved issues in respect of open space planning matters.

## Consideration of the applications

### 12. Statutory considerations

#### Resource Management Act 1991

When considering an application for resource consent for a non-complying activity, the council must have regard to Part 2 ("purpose and principles" – sections 5 to 8), and sections 104 and 104B and in this instance, sections 105, 107, and 108.

In considering any application for resource consent and any submissions received, the council must have regard to the following requirements under s104(1) – which are subject to Part 2 (the purpose and principles):

- any actual and potential effects on the environment of allowing the activity;
- any relevant provisions of national policy statements, New Zealand coastal policy statement; a regional policy statement or proposed regional policy statement; a plan or proposed plan, a

national environmental standard (NES), or any other regulations; and

- any other matter the council considers relevant and reasonably necessary to determine the application.

When considering any actual or potential effects, the council may disregard any adverse effects that arise from permitted activities in a NES or a plan (the permitted baseline). The Council has discretion whether to apply this permitted baseline.

For a discretionary activity or non-complying activity, the council may grant or refuse consent (under s104B). If it grants the application, it may impose conditions under s108.

Sections 105 and 107 address certain matters (in addition to the matters in s104(1)), relating to discharge permits where the proposal would otherwise contravene s15 (or ss15A or 15B).

Section 108 provides for consent to be granted subject to conditions and sets out the kind of conditions that may be imposed.

### **13. Actual and potential effects on the environment – s104(1)(a)**

#### **Effects that must be disregarded**

##### Any effect on a person who has given written approval to the application

No persons have provided their written approval.

##### Trade competition

There are no trade competition matters that need to be considered.

##### Effects that may be disregarded – Permitted baseline assessment

The permitted baseline refers to permitted activities on the subject site.

In this case, there are no similar activities that could be undertaken as a permitted activity such that there is no applicable permitted baseline.

#### **Receiving environment**

The receiving environment is made up of:

- the existing environment and associated effects from lawfully established activities.
- effects from any consents on the subject site (not impacted by proposal) that are likely to be implemented; and
- the existing environment as modified by any resource consents granted and likely to be implemented.

This is the reasonably foreseeable environment within which the adverse effects of the proposal are considered. In this case, the receiving environment includes xx

There are no unimplemented consents that affect the subject site that I am aware of.

These aspects must be taken into consideration when assessing the effects of the proposed

development.

## Assessment of effects

While having regard to the above, the following assessment is undertaken after I have:

- analysed the application (including any proposed mitigation measures);
- reviewed the Council's records;
- reviewed the application material as detailed in section 3 above;
- reviewed the submissions received as summarised in section 11 above; and
- taken advice from appropriate experts.

Taking into consideration the nature of the application and the consents required, the following adverse effects are considered relevant.

### Sedimentation

The sedimentation effects of the proposed earthworks have been assessed by the Council's Specialist Advisor, Ms Shanelle Beer, with a summary of the commentary contained in her 26 April 2023 review set out as follows:

- As set out in the submitted draft erosion and sediment control plan (**ESCP**), the project will utilise erosion and sediment control measures designed in accordance with Auckland Council Guidance Document 005, *Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region, June 2016, Incorporating Amendment 2 (GD05)*. These measures include the provision of clean water diversions, super silt fencing, and stabilised construction entrances at the two proposed works sites (Point Erin Park, and 46 and 48 Tawariki Street). A water treatment plant will also be used when dewatering is proposed.
- The proposed erosion and sediment control measures are considered to be appropriate for an earthworks operation of the nature proposed. A condition is recommended to ensure that 100mm depth clarity is achieved from dewatering works prior to discharge, as is the submission of a final erosion and sediment control plan given that the proposed measures may be refined or amended as a consequence of detailed design works. A winter works condition is also recommended that requires all earthworks to be undertaken during the standard Council earthworks season, being 1 October to 30 April of any year, unless further approval is sought.

Subject to compliance with recommended conditions, Ms Beer has confirmed the following in her review summary:

*I consider that the earthworks will be appropriately managed and the effects will be suitably mitigated should the applicant install erosion and sediment controls in accordance with GD05 and comply with the recommended conditions as the earthworks are small in nature and generally low risk if managed appropriately.*

I rely on and adopt the assessment of Ms Beer in assessing the appropriateness of the erosion and sediment control measures proposed.

The provision of clean water diversions will limit the amount of water that enters the works area, reducing overall erosive potential, while the proposed super silt fencing, which is the primary sediment control measure, will ensure that any sediment laden water is suitably controlled and contained. Where dewatering is proposed, the use of a water treatment plant will ensure that any discharged water is treated to appropriate levels, particularly noting the recommended condition from Ms Beer to ensure that the necessary level of clarify is achieved. The installation of stabilised construction entrances at each of the works areas will ensure that the tracking of sediment onto the local road network from earthworks related vehicles is suitably minimised. I rely on Ms Beer that the erosion and sediment control measures proposed are the most appropriate given the nature and scale of the works but accept that they could be modified through the submission of a final erosion and sediment control plan for certification (noting that this depends on contractor methodologies). Accordingly, I consider that appropriate measures will be implemented to minimise the potential for sediment runoff and ensure that any that is unavoidable is suitably controlled and contained.

Based on the above, I consider that adverse sedimentation effects will be suitably mitigated, with the implementation of the above measures, as assessed by Ms Beer, ensuring that the overall environmental risk from sediment runoff is low. While all sediment will not be contained, it will be minimal in extent when compared to the scale of the works proposed and will disperse within the receiving environment in a manner that ensures that adverse effects on the local environment and receiving waters, including the coastal environment adjoining Point Erin Park, will be minimal in extent and acceptable.

### **Land Stability**

The applicant has undertaken geotechnical investigations, with the geotechnical reporting submitted, being the Groundwater & Settlement Effects Assessment, detailing the findings of these investigations and recommending the implementation of a number of engineering methodologies to address land stability issues.

This report has been reviewed by Mr Matthew Revill, Principal Project Manager, Regulatory Engineering, who has confirmed that he does not have any concerns from a geotechnical perspective.

I rely on the assessment of Mr Revill and his review of the submitted geotechnical information and that the implementation of the engineering methodologies and recommendations it contains will ensure that land stability will be maintained such that adverse effects resulting from mechanical settlement, being the effects resulting from the physical excavation of earth, will be suitably mitigated. Adverse effects associated with the diversion and dewatering of groundwater are considered separately immediately below.

### **Groundwater**

The groundwater diversion and dewatering matters have been detailed in the above referenced Groundwater & Settlement Effects Assessment, which has been reviewed by the Council's Consultant Principal Geotechnical Engineer, Mr Pat Shorten, with a summary of the assessment contained in his review dated 7 August 2023 set out as follows:

- Adverse effects on any users of the Auckland Isthmus Waitematā aquifer will be less than minor as significant volumes will remain available for allocation to other users, while saltwater intrusion is unlikely on the basis that dewatering at the terminal shaft and control chamber

excavations is limited and temporary in nature.

- Separation distances and the groundwater pumping rates proposed are such that there will be no adverse effects on nearby streams.
- The extent of the geotechnical investigations undertaken is satisfactory for the purpose of understanding and assessing groundwater diversion and dewatering effects, with the risk of encountering unforeseen ground conditions being low. Sufficient geotechnical investigation data is also available to accurately determine the likely ground movement adjacent to the proposed development. In this respect, the maximum modelled mechanical settlement is approximately 6mm at chainages 1400m and 1440m; the maximum modelled total settlement is approximately 8mm at chainage 1400m; and the maximum modelled differential settlement is 1 in 2,600 at chainage 40m.
- The assessment within the submitted Groundwater & Settlement Effects Assessment is agreed with in terms of effects on buildings, structures, infrastructure, and public services and subject to undertaking the proposed works in accordance with this report, along with adherence to good practice and the recommended resource consent conditions, any actual adverse effects will remain within the consented envelope. To address any unforeseen settlement risks outside the consented envelope (due to the uncertainty of geology and related groundwater flows, and actual retaining wall performance), actions are required to address any damage that may be caused.

I rely and adopt the assessment of Mr Shorten in respect of the appropriateness of the submitted assessments and the potential adverse effects that may result from the excavations proposed.

Based on the information provided, there is no evidence that the proposed diversion of groundwater and associated dewatering will have any effects on existing surface flow regimes (streams), while the Auckland Isthmus Waitematā aquifer will not be impacted in terms of available water for user allocation or the infiltration of saltwater.

No scheduled historic heritage places will be affected by the proposed groundwater diversion and dewatering works.

In terms of settlement, the expert evidence is that the works will be undertaken in a manner that will minimise the likely levels of mechanical, total, and differential settlement, noting that a majority if the works are associated with the tunnel and are located between 20m to 60m below ground level, which ensures that the risk of damage to buildings, structures, infrastructure, and public services located at ground level as a consequence of the diversion and dewatering of groundwater will be minimal in the first instance. To ensure that ground settlement is no greater than that modelled / predicted, a detailed monitoring programme is proposed, which will be instigated through the preparation and implementation of a groundwater and settlement monitoring and contingency plan (**GSCMP**). The monitoring proposed within the GSCMP includes a warning system with alarms raised if trigger levels (being slightly below the maximum modelled levels) at identified ground surface markers, building pin locations, and retaining wall deformation stations (as relevant) are met. This will allow the works to be modified to ensure that the noted settlement limits are not exceeded. The GSCMP also needs to include a risk assessment of buildings and structures likely to be at risk of damage due to the chamber and shaft excavations and tunnelling activities, with the need for pre-and-post-condition surveys to be undertaken where a damage risk is identified. Any damage identified as part of the post-condition surveys will need to be rectified by the applicant, noting that the likelihood of any damage will be low and likely restricted to

aesthetic damage, being external cracking from hairline to widths of up to 5mm.

Accordingly, noting the detailed assessment undertaken by the applicant and its review and endorsement by Mr Shorten, I consider that any adverse effects associated with the proposed groundwater diversion and dewatering works will either be avoided, or where adverse effects do occur, they will be minimal in extent and can be appropriately remedied.

In respect of the issues raised in submissions, I adopt the assessment contained in section 4.3 of Mr Shorten's review and note that he has assessed any potential to these submitter properties as being within the "*negligible to very slight*" damage category (hairline cracks to 1mm wide cracks). Noting that these properties will be included within GSCMP and will be subject the required risk of damage assessment and the need for pre-and post-condition surveys and damage remediation as necessary, I consider that their concerns in respect of groundwater diversion and dewatering matters will be suitably addressed.

### **Construction Noise and Vibration**

The construction noise and vibration effects have been set out in the submitted assessment of noise and vibration effects, which has been reviewed by the Council's Consultant Principal Specialist, Mr Jamie Exeter. Within Mr Exeter's review, dated 1 June 2023, he confirms that construction noise from surface works is predicted to comply with permitted construction noise limits, except during piling, wood chipping, and periods when 'out of standard hours' activities are proposed (e.g., concrete pours, dewatering, over pumping etc) where short-term infringements of between 8 to 10 dB are expected. The same also applies with respect to vibration, with compliance with permitted construction vibration amenity limits expected other than during sheet piling, where infringements of 1-2 mm/s will result. Noise and vibration from tunnelling works will be compliant at all times, while above ground vibration will be compliant with the standards relating to building damage. No operational noise or vibration non-compliances will result.

To manage adverse noise and vibration effects, Mr Exeter notes that this will be addressed through the implementation of a detailed construction noise and vibration management plan (**CNVMP**), which will incorporate a suite of mitigation measures, including:

- consultation with the neighbouring building occupants before works begin and particularly when noise and / or vibration amenity limits are expected to be exceeded, with sensitive times for high noise and vibration works, as informed by consultation, to be avoided. Where unreasonable noise and / or vibration levels cannot be avoided, an activity specific construction noise and vibration management plan (**ASCNVMP**) will be prepared, with potential mitigation including temporary relocation;
- the selection of equipment and the implementation of construction methodologies to minimise vibration;
- use of acoustic barriers and localised screening;
- restricting noisy works to between the hours of 7.30am and 6pm wherever practical; and
- the undertaking of pre-condition building surveys where there are concerns regarding damage to buildings from vibration are raised (notwithstanding that structural damage limits will not be exceeded).

Mr Exeter considers that the mitigation and management measures that will be implemented

through the CNVMP and ASCNVMP will be effective in reducing the noise and vibration effects on the neighbouring sites. In making this assessment, Mr Exeter notes the following:

- Construction noise effects within neighbouring buildings during daytime hours are based on noise levels that are highly conservative, as the applied facade reduction of 17 dB is less than the more realistic attenuation of 20-30 dB (the level depends on the construction of the receiving building).
- Internal noise levels above 55 dB LAeq will typically cause disturbance with people likely to seek respite from such levels, even for short durations. However, internal noise levels of greater than 55 dB LAeq only seem likely when wood chipping is undertaken in a worst-case location, which could be avoided through the measures detailed within the CNVMP.
- The recording studio at 108-114 Jervois Road is sensitive to noise from the tunnel operation, with additional consultation recommended with them prior to arrival of the TBM in order to discuss sensitive recording times and minimise disruption.
- The highest construction noise and vibration levels will be intermittent and of short duration such that they are unlikely to interfere with residential or commercial activities or result in unreasonable levels of disturbance.

Having assessed the proposed noise and vibration exceedances, Mr Exeter's conclusion is that they will be of a nature and scale that can be tolerated by neighbours such that they will not cause unreasonable disruption taking into account their limited extent, duration, and timing and the mitigation that will be achieved through implementation of detailed management plans, which includes consultation with affected neighbours.

I rely on the assessment of Mr Exeter and his review of the submitted noise and vibration effects assessment and consider that detailed and appropriate measures will be implemented to mitigate adverse noise and vibration effects. This includes the provision of a detailed CNVMP, and the implementation of measures to reduce effects in the first instance, including the provision of temporary acoustic barriers and the use of quieter, lower disturbance / impact equipment. Communication with neighbouring occupants will also be undertaken to gain an understanding of their sensitivities to noise and vibration effects from the works proposed and assist with the potential timing of works that may result in disturbance. This includes the recording studio at 108-114 Jervois Road, being an activity that is potentially more sensitive to noise. In this respect, it is also noted that if a site was to be vacant for a period of time, which would be identified through neighbour consultation, higher noise and vibration works could be undertaken during this time without resulting in disturbance.

I further note the assessment of Mr Exeter that the internal noise assessment undertaken by the applicant is conservative in that the level of attenuation provided by the facade treatments has been underestimated such that the modelled noise levels may not actually result. The ability to relocate higher noise generating activity, such as wood chipping, to locations that will allow for noise compliance to be achieved is also noted.

In terms of building integrity, I note that full compliance with vibration standards with respect to structural integrity will be achieved, notwithstanding the ability to undertake pre-condition building surveys to address concerns in respect of building damage where identified during the necessary neighbour consultation. This includes with respect to the public swimming pool at Point Erin Park.

Noting the above and that the nature and scale of the works is such that compliance with permitted



noise and vibration standards is neither practical or feasible, when taking into consideration the limited duration of the proposed noise and vibration exceedances (particularly in the context of the overall works duration), the implementation of a comprehensive array of measures to mitigate any adverse effects that may result, and that full compliance with structural integrity vibration standards will be achieved, I consider that any result adverse effects will be mitigated to appropriate levels.

### **Construction Traffic**

In respect of construction traffic, as set out in section 6.11.1 of the AEE, the highest level of construction vehicles will be generated during construction of the terminal shaft within 94 Shelly Beach Road and removal of the TBM, where a total of 58 truck and 9 vehicle movements are anticipated, noting that this is a worst-case estimation. While a notable number, the AEE notes that the submitted integrated transport assessment (**ITA**) considers this to be a minimal increase and within daily traffic fluctuations along the surrounding road network. The other primary impact at Point Erin Park relates to the need to temporarily close part of the footpath along Sarsfield Street. Adverse effects as a consequence of these works will be addressed through the development and implementation of a construction traffic management plan (**CTMP**), which will include the following:

- The provision of appropriate access and manoeuvring arrangements to avoid the queueing of heavy vehicles and ensure that the required turning circles are provided for.
- A driver education programme, particularly due to the inter-relationship with the public park and pool and associated levels of pedestrians and cyclists and the close proximity to Ponsonby Primary School.
- Measures to manage potential effects on park and pool users to ensure that safe access is maintained, including the provision of controllers and supervisors and alternative accesses / temporary footpaths.
- Containment and cordoning off of construction areas.
- Measures to maintain existing vehicle access to property, or to provide alternative access arrangements where not practicable.
- Implementation of appropriate temporary traffic management measures.

The construction traffic related matters have been reviewed by Mr Neil Stone, a Senior Development Planner at Auckland Transport in a review dated 6 June 2023. Mr Stone has not raised any concern with the applicant's worst-case trip generation rates and has stated that they are not expected to result in adverse operational effects due to the low volume and dispersal of trips throughout the day. Mr Stone has further confirmed that the adverse construction traffic effects can be addressed through submission and certification of a CTMP as a condition of consent, as is proposed by the applicant. This includes the need to ban left turn movements to the southwestern construction area from Sarsfield Street given the conflicts that will likely result due to its proximity to its Curran Street intersection. Any additional matters can be addressed through the Corridor Access Request approval process, being a separate consenting process that is managed by Auckland Transport.

Mr Gerhard van der Westhuizen, the Council's Consultant Principal Transportation Engineer specialist has also reviewed construction traffic matters and in his review dated 2 June 2023 has

confirmed agreement to managing adverse effects through the submission of a detailed CTMP, noting the following:

- There will not be any significant impacts on traffic flow as a result of the construction traffic generated.
- Sufficient space will be provided on site to allow for construction vehicle access / manoeuvring. With respect to access of the southwestern construction area, this is subject to limited ingress to tight turn movements from Sarsfield Road only, as its proximity to Curran Street is such that left turn movements cannot be safely undertaken.
- Measures can be implemented to address pedestrian connectivity and safety, including reduce speed limits and the provision of a temporary road crossing, steps, and wayfinding signage.
- The need to consult with Ponsonby Primary School and for the use of Curran Street by construction related heavy vehicles to be minimised, where possible, noting that Shelly Beach Road will be a safe and suitable alternative in many instances.

I rely on the assessment of Messrs Stone and van der Westhuizen and their confirmation that adverse construction traffic effects can be addressed via the submission of a detailed CTMP. Of particular importance is ensuring that accesses to the various construction areas are designed appropriately and are capable of safely accommodating the vehicles that will be generated. The provision of a site traffic management supervisor and the need for detailed driver briefings will ensure that this occurs, noting the importance of doing so given the interplay between the construction works and use of Point Erin Park as a public reserve and swimming pool facility. The need to control vehicle speed along Sarsfield Road and to provide a temporary pedestrian crossing along the provision of temporary pathway / step access through the park, is also important in terms of pedestrian safety and connectivity.

Noting the submission from the Minister of Education, the need to address traffic along Curran Street during the drop-off and pick-up periods (8:05am – 8:50am and 3:00pm – 3:30pm) is also of importance. Based in particular on the review Mr van der Westhuizen, I consider that a complete ban on heavy traffic is not necessary given the arterial of Curran Street and that it is safely utilised by approximately 350 vehicles per day. However, as recommended by Mr van der Westhuizen, I agree that consultation with Ponsonby Primary School is important in order to allow for the design and implementation of measures that will provide for student safety. This includes minimising use of Curran Street where possible and the undertaking of driver briefings so that they are aware of the school and the need for additional levels of vigilance. I further note that Shelly Beach Road will likely be the preferable heavy traffic vehicle route, particularly noting its accessibility from the Northern Motorway and the ban of left turn movements into the southwestern construction area from Sarsfield Street.

Accepting that complete avoidance of adverse construction traffic effects is not possible (and is certainly not possible for a development of the scale of that proposed) and taking into account the comprehensive assessment of all relevant matters contained within the AEE and ITA and the mitigation measures proposed by the applicant through the implementation of a detailed CTMP, I consider that any associated adverse effects will be mitigated to acceptable levels.

### **Operational Traffic**

Messrs Stone and van der Westhuizen have also assessed matters relating to operational traffic

matters, which essentially relates to the on-going use of the vehicular access to the control chamber and plant room amenities for maintenance purposes.

Mr Stone notes that the proposed use of this access will be low and will likely be limited to one to two vehicles per year, albeit that additional use may be required to address a fault or an unforeseen maintenance issue. That notwithstanding, as with the use of this crossing during construction, Mr Stone considers that entry must be by means of a right hand turn only with a left turn ban imposed. As the egress onto Curran Street is at an angle and given that mirrors will not be positioned to allow for full visibility of oncoming traffic, Mr Stone has recommended a condition requiring traffic supervisor direction to ensure that this movement can be safely undertaken. The assessment from Mr van der Westhuizen confirms the acceptability of the use of this access from a traffic safety perspective and agrees with the assessment of Mr Stone in respect of the need for supervised exit manoeuvres onto Curran Street.

I adopt the assessment of Messrs Stone and van der Westhuizen and consider that this access, despite its close proximity to the intersection of Sarsfield Street and Curran Street, will operate in a manner that provides for traffic and pedestrian safety, particularly given its very low frequency of use. This includes any additional or unforeseen maintenance requirements that would increase use beyond one to two truck movements per year. I accept that movements need to be via right hand turns given the difficulty with left hand turns as a consequence of the proximity to the intersection and conflicts with other berm elements, which may result in trucks making unsafe manoeuvres and / or blocking the intersection. While infrequent, I accept that exit angles and the position of the truck will be such that a driver will not have sufficient visibility of oncoming vehicles and that use of a supervisor is necessary to allow for these movements to be completely safely.

Accordingly, I consider that the on-going use and operation of the vehicle crossing necessary to access the control chamber and plant room will be managed to ensure that adverse traffic and pedestrian safety effects are mitigated to acceptably low levels.

### **Air Discharges**

The air quality effects of the proposed works, as detailed within the submitted air quality assessment, have been assessed by the Council's Specialist Air Quality Advisor, Ms Rachel Terlinden, with a summary of the commentary contained in her 9 June 2023 review set out as follows:

#### **Odour**

- Discharges from the proposed pressure relief vent and the control chamber at Point Erin Park will likely occur less than once every 10 years, with discharges from the plant room being even less frequent. Furthermore, the high air flows and vertical momentum of the relief vent discharge is likely to aid in the dispersion of emissions, with any plant room discharges, while not being discharged vertically through a stack, being directed away from residential areas.
- While odour discharges may occur during large wet weather events, the higher flows and more dilute nature of the wastewater along with meteorological conditions (wind), the relatively low frequency of these events, and the likely low levels of public usage (during adverse weather events), are such that significant odour effects will not result. Any odour will also be less than what currently occurs from undiluted wastewater overflows.

- In terms of a potential for a lag to occur between the end of a storm and the pressure relief discharge at Point Erin Park, although odour is likely to accumulate in the immediate area and drift westward towards the coastal marine area, this will be most likely to occur overnight when the park is predominantly occupied.
- The FIDOL assessment submitted by the applicant, which considers the frequency, intensity, duration, offensiveness, and location of an odour, concluded that while the surrounding environment has a high sensitivity to odour discharges, due to the low frequency of the discharges, the relatively low intensity of the odour due to dilution, and the low duration (likely to be less than an hour), the exposure to odour at sensitive residential receptors is likely to be minimal and unlikely to be offensive or objectionable.

### Dust

- While discharges of dust from earthworks are typically considered as a permitted activities, mitigation measures will be implemented in accordance with the *Good Practice Guide for Assessing and Managing Dust (MfE, 2016)*, and will include:
  - minimising the handling of material (particularly during windy conditions), stabilising exposed areas, and removing spoil from site on a regular basis;
  - watering dry soil surfaces prior to disturbance and applying water to exposed earth, stockpiles, and accessways during dry conditions;
  - limiting vehicle speeds to 15 km/h on site; and
  - installation of wheel cleaning facilities at construction site exits.
- A FIDOL assessment submitted by the applicant for construction dust concluded that any adverse effects will generally be localised, and if managed in accordance with the proposed mitigation measures and industry best practice, exposure to dust in the environment is likely to be low and will not be offensive or objectionable at nearby sensitive residential receptors.

I rely on and adopt the assessment of Ms Terlinden in assessing the submitted air quality assessment and the appropriateness of the resulting air discharges.

In respect of odour, I acknowledge that releases from the relief vent will be infrequent and will be discharged vertically via the proposed vent stack, which in conjunction with the rate of discharge will ensure that dispersal is such that adverse odour effects as they relate to local residents and users of Point Erin Park will be minimal in extent. While odour from the plant room will not be discharged vertically via a vent, I note that the frequency, being a return period of greater than 10 years, combined with separation distances and wind direction away from residential dwellings will ensure that adverse odour effects are unlikely to result.

I accept that odour discharges during large wet weather events will be more frequent. However, I adopt the assessment of Ms Terlinden that the increased dilution rates, weather conditions in terms of wind patterns, and low levels of public reserve usage during such events will serve to suitably mitigate associated adverse effects. I further accept that this assessment, which also includes odour discharges from the vent stack and plant room, has been confirmed through a FIDOL assessment, with adverse odour effects at sensitive residential receptors being minimal in extent and unlikely to be offensive or objectionable. This is particularly so when compared to odour released from current wastewater overflow events, noting that one of the key purposes of the proposed development is to reduce / eliminate these discharges.

In terms of dust, while they are not a consenting requirement in terms of reasons for consent, given the discretionary nature of the application, all adverse effects can be considered. In this respect, I note that extensive measures are proposed to minimise dust emissions. This includes the wetting of temporary accessways, the implementation of 15kph speed limit, and the provision of wheel wash facilities to ensure that dust and dirt from the wheels of construction vehicles is removed. Measures will also be implemented to minimise the movement of potentially dusty material, with water to be applied to exposed surfaces and stockpiles, particularly during windy conditions, to further suppress dust by reducing windblown distribution. I again note that the FIDOL assessment undertaken provides the necessary level of reassurance that the mitigation measures proposed will ensure that dust emissions will not be offensive or objectionable at nearby sensitive residential receptors.

According, I consider that the extent, frequency, and nature of the air discharges from the operational wastewater system and the management measures to be implemented during construction will ensure that any adverse odour and dust effects will be mitigated to acceptable levels.

### **Contamination**

The submitted preliminary site investigation (**PSI**) has been reviewed by the Council's Senior Contamination Specialist, Mr Paul Crimmins. As set out in his reviewed dated 24 May 2023, Mr Crimmins agrees with the applicant's further information response, dated 19 April 2023, that there are no contamination related consenting matters under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (**NES:CS**) or chapter E30 of the AUP(OP). This is because the PSI has confirmed that works areas have not been subject to historical land uses that are included within the Hazardous Activities and Industries List such that contaminated soils are unlikely to be encountered during the project works. To address an unlikely scenario whereby contaminated soils are encountered, Mr Crimmins considers the condition proposed by the applicant that requires a suitably qualified and experienced contaminated land practitioner to investigate and manage any unexpected discovery of soil contamination through the development of generic contingency measures similar to those included within the applicant's Central Interceptor contaminated site management plans to be appropriate.

I rely entirely on the expertise of Mr Crimmins and adopt his assessment that there is no contamination related consenting requirements (which the applicant now agrees with noting that they originally applied a precautionary approach and applied for contamination related consents) and that any contamination discovered during the proposed earthworks can be appropriately addressed through the measures detailed in the applicant's proposed condition.

Accordingly, I consider that it is likely that no adverse contamination effects will result, with contingency measures proposed to suitably mitigate any contaminated material that may be discovered, noting that this is unlikely.

### **Archaeology**

The submitted archaeological assessment has been reviewed by the Council's Team Leader, Cultural Heritage, Mr Chris Mallows. Within his reviewed dated 15 March 2023, Mr Mallows agrees with the submitted archaeological assessment that the proposed activity (including the tunnelling works underneath the above ground Special Character Area and Historic Heritage overlays) will not affect any known archaeological remains, and notes that this conclusion has been reached following research of relevant literature and archaeological reports, the undertaking



of archival research, reviewing of survey plans and aerial photographs, and carrying out a visual inspection of Point Erin Park, including the excavation of 14 archaeological test pits.

The above notwithstanding, Mr Mallows agrees with the submitted archaeological assessment that in any area where archaeological sites have been recorded in the general vicinity, it is possible that unrecorded subsurface remains exist and that they may be exposed during development. In this instance, it is possible that unrecorded subsurface archaeological remains associated with Māori occupation and use, early 19th century European domestic occupation, and the development of Point Erin as a public park are present and that they may be exposed as a consequence of the earthworks proposed. Subject to rewording of the accidental discovery protocol condition proposed by the applicant to reflect Council's standard wording, and a condition to address any post-1900 subsurface features associated with the John Campbell estate, the public park (post-1911 until the 1950s), and the temporary accommodation for Auckland Harbour Bridge construction workers (as these features fall outside the definition of an archaeological site), Mr Mallows is satisfied that the proposed development will be undertaken in a manner suitably mitigates any archaeological / historic heritage risk.

I rely on and adopt the assessment of Mr Mallows in assessing the submitted archaeological assessment and the appropriateness of the measures proposed to address potential adverse effects.

Based on the detailed assessment undertaken by the applicant, which includes a detailed review of all available information and on-site investigations, I accept the conclusion that the proposed works will not adversely affect any known archaeological remains. However, noting the historical occupation and use of the works area by Māori and subsequent European settlers, I accept that there is potential for undiscovered remains to be discovered by the proposed earthworks. In this respect, I rely on the expertise of Mr Mallows to confirm that the proposed condition to engage a suitably qualified and experienced archaeologist to advise on project works and monitor the preliminary earthworks is necessary and appropriate, and along with the need to implement the accidental discovery protocols as detailed within the AUP(OP), will be sufficient to ensure that any unidentified remains that are uncovered will be preserved and protected as necessary. I further rely on his expertise with respect to post 1900s features and the need to ensure that any remains associated with known post 1900s activity are also preserved and protected.

Accordingly, I consider that it is likely that no adverse archaeology related effects will result, with the implementation of appropriate management measures ensuring that any undiscovered remains that may be uncovered will be preserved and protected and subsequent adverse effects will be suitably mitigated.

### **Flooding**

As set in section 6.15 of the AEE, an overland flow path and 1% annual exceedance probability (AEP) is located within the southwestern portion of Point Erin Park, both of which will be affected by a small section of the proposed construction works platform and the eastern-most permanent retaining wall. The flooding assessment submitted with the application confirms that the overland flow path entry and exit points will not be altered, and while the works will narrow the flow channel within the site, flow velocities will be low such that any potential adverse effects on upstream or downstream catchments will be negligible. The resulting reduction in floodplain capacity will also be minimal in extent such that additional adverse flooding effects will not result.

The submitted flooding assessment has been reviewed by Mr Revill, who requested additional

assessment in respect of potential adverse effects from removing the stormwater pipe under the proposed control chamber building. In response the applicant confirmed that the subject stormwater pipe is the existing Sarsfield Street overflow collector and that it will be maintained during the construction period as per the existing situation. When the subject wastewater tunnel becomes operation, flows from it will be directed to the control chamber and then diverted into the subject wastewater tunnel. Mr Revill has reviewed this response with his assessment being that there will be no adverse effects following the removal of this stormwater pipe. He has also confirmed his agreement with the applicant's flooding assessment that there will be negligible effects on the floodplain as a consequence of the presence of the construction platform and the permanent retaining wall.

I rely on the flooding assessment submitted by the applicant and its review by Mr Revill and note that while the proposed works will affect the floodplain and overland flow paths within Point Erin Park, any resulting increase in adverse effects for upstream and downstream sites will be negligible given that flow velocities will be low and that appropriate levels of storage capacity will be maintained. I also note that the purpose of the development is to assist with reducing wet-weather network overflows that result from the combined wastewater and stormwater network, which will serve to more than offset any adverse effects that result from any reduction in floodplain capacity.

Accordingly, I consider that any adverse flooding related effects will be mitigated to acceptable levels.

### **Stormwater**

Adverse effects resulting from the proposed diversion and discharge of stormwater have been reviewed by the Council's Consultant Stormwater Specialist, Ms Bridget Kelly, with a summary of the commentary contained in her 3 May 2023 review set out as follows:

- The proposed construction areas will not be sources of significant pollutants, with runoff to be discharged to the surrounding grassed area via the proposed sediment treatment and detention devices. Consequently, there is no concern with the omission of specific stormwater quality treatment devices.
- The site is adjacent to the coast and is not within a stormwater management area. With Mr Revill having confirmed that the proposed earthworks will have a negligible impact on the floodplain and with runoff from the construction areas to be discharged as diffuse sheet flow to the surrounding grassed area (as opposed to a concentrated discharge), attenuation by means of infiltration to ground is sufficient to mitigate any adverse stormwater quantity effects.

I rely on and adopt the assessment of Ms Kelly in assessing stormwater diversion and discharge matters.

The construction areas have been designed to ensure that stormwater will sheet flow from them in a uniform manner, which in combination with the proposed erosion and sediment control measures, ensures that adverse sedimentation effects will be suitably addressed. With sedimentation effects being mitigated appropriately and noting that the construction areas, as assessed by Ms Kelly, will not be significant sources of pollution, any adverse effects from the discharge of stormwater in respect of water quality matters, and particularly with respect to the adjacent coastal environment, will be minimal in extent.

With the Point Erin Park construction site being close to the coast, being the receiving environment

for discharged stormwater, best practice stormwater management is to ensure that stormwater is discharged as quickly as possible to avoid overlapping with slower discharging water from upper catchment areas. Noting this and that neither of the construction areas are in stormwater management areas where detention and retention is required to manage adverse water quantity discharge effects in respect of ecological and / or biodiversity values, there is no requirement to manage stormwater on site in terms of water quantity.

Accordingly, noting the above, the fact that the impervious areas associated with the construction areas is temporary and the assessment of Ms Kelly, I consider that the stormwater management approach proposed is appropriate and that any subsequent adverse effects (and particularly on the adjacent coastal environment) from the diversion and discharge of stormwater in terms of water quantity and quality will be negligible and well within acceptable levels.

### **Trees**

Adverse effects resulting from the proposal as it relates to trees have been assessed within the submitted Arboricultural Report, which has been reviewed by the Council's Arborist, Mr Paul Hansen, with a summary of the commentary contained in his 31 May 2023 review set out as follows:

- With respect to the construction area associated with the main shaft at Point Erin Park, it will occupy a small portion of the root zone of a Macrocarpa tree, a group of Pōhutukawa trees, and two Oak trees. The impact on tree health of these trees is expected to be minimal given the small extent of the intrusion and the large undisturbed root zone area outside the construction yard. Access to this construction area will also require the pruning of two mature Elm trees that overhang Sarsfield Street and the entranceway, with the trees to be removed within it including a Silky Oak in poor health, a declining Lombardy Poplar and two mature Pōhutukawa with obvious structural anomalies. There are no matters of concern with respect to these pruning and removal works.
- With respect to the construction area in the southwestern corner of Point Erin Park, the works will be tunnelled beneath mature trees at a significant depth, with any adverse effects on retained trees being negligible. The most notable effects will be the removal, or potential removal, of two mature Pōhutukawa. Both trees have structural defects and noting the extensive root disturbance that will result from earthworks associated with the construction of retaining walls and the control chamber, associated levels of pruning, root disturbance, and changes in soil levels, the overall impact on the health of these trees will be negative. As such, they will likely need to be removed, unless they can be retained following a post works assessment by the project arborist.
- On the assumption that the two above Pōhutukawa will be removed, the applicant's Arborist has determined that a minimum of 38 exotic or 49 native trees will need to be planted, noting that this takes into account carbon neutrality principles. While Mr Hansen cannot confirm the accuracy of the proposed replacement planting in terms of carbon neutrality principles (he is not able to peer review the i-Tree modelling that determined tree numbers based on carbon neutrality), he has confirmed that, in his opinion, from an Arboricultural perspective the replacement planting number appears to be more than adequate.

I adopt the assessment of Mr Hansen with respect to the proposed pruning and rootzone works, and consider the range of measures proposed, which includes supervision by a suitably qualified and experienced works arborist, the use of a combination of hand-held tools and machinery,

protection of exposed and retained roots, and compliance with best industry practice arboricultural standards, will ensure that the health and wellbeing of retained vegetation is suitably provided for. I further note that, as detailed by Mr Hansen, the construction yard areas will not significantly impinge upon the root zone area of retained vegetation, with a majority of their root zone remaining unaffected.

With respect to the proposed removals, the two Pōhutukawa within the southwestern corner of Point Erin Park are the most notable. As noted in the submitted Arboricultural Report, the applicant's design team has explored options for their retention, but due to the positioning of existing infrastructure and the requirement to provide connections with the proposed wastewater tunnel, there are no other feasible alternatives available. I accept this assessment and consider that the works to allow for the provision of the control chamber and plant room, which are required to provide network connections to the proposed wastewater tunnel, have been located in a manner that will minimise adverse effects on users of Point Erin Park in terms of separation from the pool complex and the large central open grassed area. Their location next to a motorway on-ramp and away from a majority of the surrounding residential dwellings will also minimise associated amenity effects. While a worst-case scenario will result in the removal of these mature Pōhutukawa, noting the expansive mature vegetation cover with Point Erin Park (including in close proximity to the proposed removals), that they have not been identified as being intrinsically important for cultural or heritage reasons, the extensive replacement planting proposed (with two of these trees needing to be 160l at the time of planting), and the likely long term carbon benefits, I consider that adverse effects resulting from the loss of the subject trees will be suitably mitigated.

Accordingly, I consider that any adverse effects resulting from the proposed tree removal, pruning, and rootzone works will be mitigated to acceptable levels.

### **Landscape, Visual, Character and Amenity**

The submitted Natural Character, Landscape and Visual Assessment has been reviewed by the Council's Specialist Landscape Architect, Ms Gabrielle Howdle, with a summary of the commentary contained in her 15 June 2023 review set out as follows:

- The proposed construction areas have been located to minimise disruption to, and removal of, existing vegetation within Point Erin Park, including ensuring that the central construction site is setback from a group of Pōhutukawa trees.
- The likely removal of the two large Pōhutukawa trees within the southwestern construction area will result in adverse landscape, amenity, and visual effects that cannot be offset by replacement trees, especially if located offsite. However, replacement of these trees with larger 160l trees as close as practicable their location will assist with addressing adverse visual effects.
- On initial review of the proposal, there were concerns that the information provided, and the conditions offered, did not provide sufficient certainty that the final design outcome for Point Erin Park would be suitable in terms of retaining the landscape character, coastal amenity and visual amenity values of the site. To address these concerns the applicant has provided 'Indicative Planting Masterplan' drawings and incorporated more outcome-based requirements into the conditions. While the final appearance, design outcomes, and character of Point Erin Park are not outlined in detail, the effects on the values of the park are anticipated to be appropriately managed through the proposed conditions, associated precedent images, and indicative planting plans.

- Following on from the above, the 'Indicative Planting Masterplan', while being a conceptual planting and reinstatement plan, demonstrates that post construction, Point Erin Park will generally retain its open space characteristics (central) and planted boundary elements (southwest). This is subject to further design engagement with Council and Mana Whenua and includes the need for the reinstatement of open space for informal recreation and mitigation of tree loss to ensure that the landscape, amenity, and recreational values of Point Erin Park are maintained and enhanced. Native trees, including Pōhutukawa and Puriri, which are already present within the park, are proposed as part of the final reinstatement works.
- From wider public locations, the existing treed nature of the site and topography will generally screen the proposed works.
- From private properties along Curran Street, Sarsfield Street and Shelly Beach Road, the visibility of the proposed works will vary, with changes in topography and intervening trees filtering views, especially for properties along Shelly Beach Road. While the properties immediately to the south (Sarsfield Street) and west (Curran Street) will have visibility of one or both of the construction areas, properties to the east along Sarsfield Street will have filtered views due to intervening vegetation, with the depression within the southwestern portion of the site also reducing visibility for properties along Curran Street. Overall, the number of properties with direct views is of the works within the park is limited.

Overall, Ms Howdle considers that the proposed works will result in:

- moderate adverse effects on the physical and ecological landscape effects during construction, reducing to low adverse effects upon completion of all reinstatement and mitigation works;
- high adverse effects on landscape character values of the open space during construction, reducing to moderate – low adverse effects upon completion of all reinstatement and mitigation works;
- high adverse effects on the visual amenity and appreciation of the open space values for visitors and recreational users of the park during construction, reducing to moderate – low to low adverse effects upon completion of all reinstatement and mitigation works (effects on motorists will be slightly reduced compared to pedestrians as their experience is more transient, except during congestion / peak hours); and
- high adverse effects on the visual amenity values of immediate residential properties during construction, reducing to low to very low adverse visual amenity effects upon completion of all reinstatement and mitigation works.

I acknowledge the landscape and visual assessment provided by the applicant and its review by Ms Howdle and her associated assessment. I agree that relatively high levels of adverse landscape and visual effects will result during the construction period as a consequence of the presence of the construction yards and associated machinery, including heavy vehicles and cranes. In this respect, I concur with the assessment within Section 6.5.4 of the AEE on page 58 that construction activity is commonplace within urban environments, including within open space zones. Indeed, the consented Central Interceptor project to the south involved (and still involves) construction activity of similar scale within a number of open space areas, including Keith Hay Park, Walmsley Park, Mt Albert War Memorial Reserve, and Miranda Reserve. This is because



these spaces generally contain larger areas of open space that are capable of containing the necessary level of construction activity and equipment noting that adverse landscape and visual effects are unavoidable during the construction period.

Accordingly, the focus is on mitigating adverse effects to the greatest extent possible, which I consider will be successfully achieved in this instance by:

- minimising the size of the construction areas to contain only the necessary equipment to allow for construction of the proposed below and above ground infrastructure.
- siting the construction areas in locations that minimise their external visibility, and particularly with respect to adjacent residential uses, through a combination of distance, viewing angles, topographical variations, and the screening presence of existing vegetation.
- positioning the construction areas in a manner that minimises the impact on existing vegetation in terms of both root zone works and the need for removals; and
- the erection of site fencing and hoardings to reduce visibility of the works area, noting that they are also required for acoustic mitigation and site safety.

In terms of long-term effects, I accept the conclusion of Ms Howdle that adverse effects from the loss (or potential loss) of the two mature Pōhutukawa trees cannot be offset by replacement planting. I consider that the best outcome from a landscape and visual perspective is their retention, but if that cannot be achieved, the replacement planting proposed (38 exotic or 49 native trees, noting that this also mitigates the loss of other trees and not just the two Pōhutukawa), which includes two large grade 160l trees, will provide the necessary level of mitigation, particularly in the context of an open space environment with abundant levels of mature vegetation.

I concur with the assessment of Ms Howdle in respect of the final outcome for Point Erin Park in terms of the design of the above ground structures (the plant room, air vent, and retaining walls) and the extent of landscape planting proposed. In response to further information requests from the Council, the applicant has provided additional detail in the form of: visual simulations and cross sections of other plant rooms, air vents and landscaped retaining walls along the Central Interceptor alignment; precedent imagery of plant room, air vent, and retaining wall designs that could be constructed; and an indicative planting plan as to where replacement / mitigation planting could be established. They have also amended and strengthened the conditions around: the final design of these buildings and structures; the extent and detail of mitigation planting; and the need for the development and implementation of a detailed Park Restoration and Landscape Plan.

As a starting point, it is my opinion that these design matters are usually resolved as part of the resource consent process, with final architectural plans detailing the bulk, scale, design, and location of the above ground buildings and structures and the landscape plans showing the necessary restoration / landscape planting and including details such as plant species, sourcing, number, height at the time of planting and maturity etc. However, in this instance, I support the approach taken by the applicant in terms of the provision of higher-level design and landscaping information for the following reasons:

- The approach is similar to that undertaken with respect to the consented Central Inceptor project in that the critical matters are addressed as part of the original resource consent and the detailed design matters are deferred to secondary approval / certification processes. While I acknowledge the Central Interceptor was consented as part of a Notice of

Requirement process, with all s9(3) matters then addressed by way of an Outline Plan of Works application, a similar design processes will be followed as part of the subject resource consent, with detailed conditions requiring the submission of built form design and landscape plans to the Council for certification. Noting the quality outcomes that have been achieved with respect to these matters in association with the Central Interceptor, I have the necessary level of confidence that the same level of quality will be achieved in this instance.

- The proposed plant room building is relatively small in size and will be located in the southwestern corner of the site adjacent to Curran Street, being to the north of existing dwellings to the west and at a lower ground level as a consequence of the excavations proposed. The air vent is also small in size and will be located adjacent to a tall stand of existing vegetation. The retaining wall to the west of the plant room, while up to 2.3m in height, will be an excavated wall and will be located along the site boundary, which will minimise its external visibility. Internal visibility will be screened to a degree by the proposed plant room and mitigation planting, as will the lower retaining wall to the north and east (of the plant room), noting that it may be developed as an embankment instead. Noting the appropriate location of these permanent physical works, that they are at the lower end of the scale in terms of bulk and physical presence, and that indicative images have been provided to indicate what can be expected, I consider that there is sufficient information to understand the level of effects that will result and to make a determination that an appropriate visual outcome will result.
- The Park Restoration and Landscape Plan conditions require a photographic record of Point Erin Park to be prepared and submitted to Council at least one month prior to the commencement of works. This record will then be used as the basis for the design and content of the final plan, with its objective being to restore and enhance the landscape, amenity, and recreational values of Point Erin Park, as set out in recommend condition 109. Condition 110 then sets out the required content of the plan and the range of design matters it needs to address. I therefore consider that it is likely that an improved outcome will result upon completion of the works, which will sufficiently offset any adverse effects associated with the presence of the associated above ground buildings and structures, noting that they will be minimal in extent for the reasons outlined above.
- The Park Restoration and Landscape Plan is to be designed in conjunction with Mana Whenua. As it is yet to be finalised, allowing for this to occur via condition allows for meaningful Mana Whenua input into fundamental design decisions as opposed to making minor amendments to a design that has already been resolved.

Accordingly, while adverse landscape, visual, character, and amenity effects will occur during construction, these adverse effects cannot be avoided, with a range of measures to be implemented to mitigate these adverse effects to the greatest extent possible. Noting the appropriate bulk, scale, design and location of the permanent above ground works and the undertaking of replacement planting, landscaping, and restoration of the construction yards and the wider Point Erin Park Area, all of which will be confirmed through the submission and certification of detailed design and restoration / landscape plans, I consider that any adverse landscape, visual, character, and amenity effects will be mitigated to acceptable levels.

### **Open Space**

The submitted AEE and the associated recreation assessment and further information responses

have been reviewed by the Council's Senior Parks Planner, Ms Roja Tafaraji, with a summary of the commentary contained in her 14 July 2023 review set out as follows:

- The assessment provided within the submitted AEE concludes that the works will result in temporary adverse effects on the amenity and landscape character of Point Erin Park due to the proposed temporary and permanent structures, with measures referred to avoid, remedy or mitigate such adverse effects. Despite several requests for clarification on these measures, a clear demonstration of them has not been provided (on the drawings). Reference has only been made to proposed conditions to mitigate adverse effects on the amenity values and landscape character of Point Erin Park. For example, reference has been made to restoration planting, but no clear information has been provided.
- The applicant has stated that the detail requested by Parks Planning has not been provided as it would pre-empt the design outcome, which will be clarified after consultation with mana whenua and Auckland Council Parks department (it is assumed that this is the Land Advisory Team that manage the landowner approval process). This is not acceptable as the assessment at resource consent stage must be based on the provision of sufficient information, as required by Rule C1.2(1) of AUP(OP).
- Confirmation is required if construction of the retaining wall along the southwestern boundary at Point Erin Park is a building as defined within chapter J of the AUP(OP), noting that an additional reason for consent may be required for non-compliance with Front Yard Standard H7.11.3.1. The applicant's response that chapter E26 applies and chapter H7 does not is not agreed with.
- Concerns expressed by the Regional Aquatic Facilities Manager in respect of adverse effects in respect to access and use of the outdoor pool as well as adverse visual effects on Point Erin Park have not been addressed by the applicant, other than use of recommended conditions (for mitigation purpose).

I acknowledge the assessment provided by Ms Tafaraji.

As outlined in the landscape, visual, character, and amenity effects assessment above, I agree that the final design and landscape matters are usually resolved as part of the resource consent process. However, I disagree that a clear demonstration of the measures proposed to avoid, remedy, or mitigate adverse effects that will result from the proposed temporary and permanent structures has not been provided. As outlined above, I consider that the visual simulations, cross sections, precedent imagery, and indicative planting plans provided in combination with the detailed conditions proposed in respect of the final design of all buildings and structures, the extent and detail of mitigation planting, and the development and implementation of a detailed Park Restoration and Landscape Plan ensure that an appropriate outcome in respect of visual amenity and landscaped character will result.

I consider the approach of finalising the detailed design of the required landscaping and parks restoration to be appropriate given that it will allow for both Mana Whenua and Auckland Council's Parks Department to have meaningful input, with the information submitted, in my assessment, being sufficient to allow for the likely adverse effects to be understood and assessed and for appropriate remediation and mitigation measures to be implemented. I further consider that this approach is consistent with accepted resource management practices and that the information submitted with the application meets the requirements of Rule C1.2(1) of AUP(OP) (as set out in section 6, page 5 of Ms Tafaraji's review).

In respect to the proposed retaining wall along the southwestern boundary, I concur with the response from the applicant on pages 4 and 5 of the letter from Tonkin & Taylor Ltd, titled 'Point Erin Tunnel: Response to additional questions from Auckland Council Parks', dated 20 June 2023, whereby they stated that the infrastructure activity rules apply and those in chapter H7 are not relevant, at least in terms of reasons for consent. That notwithstanding, as a discretionary activity, all adverse effects need to be considered, including those from the proposed retaining wall. This assessment has been undertaken in the landscape, visual, character, and amenity effects section above, and I consider that any resulting adverse effects from its presence will be minimal in extent noting its location below existing ground level, the presence of the plant room, and mitigation planting.

There is no evidence before me that use of the outdoor pool at Point Erin Park will be adversely affected by the proposed construction activity. Monitoring is proposed to ensure that the pool structure and associated buildings will be suitably protected from adverse effects that may result in respect of vibration and the diversion and dewatering of groundwater, while the proposed construction areas will not impede access to it. While there may be traffic management and footpath / pathway diversions in place that may result in additional delays or diversions, the public parking area will remain open and access to the pool will continue to be provided.

The construction areas, and particularly the central area, will result in a decrease in public space availability. As previously assessed, this is an adverse effect that cannot be avoided. As set out in section 6.7 of the AEE on page 60, the Recreation Assessment submitted by the applicant notes that there is no indication that Point Erin Park is near or at capacity, with the remaining greenspace being adequate for recreation activities to take place. Noting that the Regional Aquatic Facilities Manager has not questioned this assessment (they were only concerned that the works would adversely affect the operation of the pool), and that the construction areas, at just over 5,000m<sup>2</sup>, equate to approximately 12% of the total park area, I consider that any resulting adverse effects in terms of recreational opportunities for the local community will be mitigated to acceptable levels. In this respect, I note that no submissions have been received raising concerns in this regard.

I therefore disagree with the assessment of Ms Tafaroji and while I accept that adverse effects will result in respect of the ability to use Point Erin Park during construction, they will be temporary and will not result in an unacceptable reduction in open space opportunities for the local community. Adverse effects in the long term will be remediated / mitigated through the development and implementation of a Park Restoration and Landscape Plan, the appropriate bulk, scale, and design of the above ground buildings and structures, and the undertaking of restoration and landscape planting.

Irrespective of the above assessment, it should be noted that the applicant will, if consent is granted, need to obtain landowner approval for the works in Point Erin Park. This is a separate process to the resource consent process and will be subject to review and assessment by Auckland Council's Land Advisory Team. It is understood that the applicant has commenced this process. It must be noted that approval of this consent, should that occur, does not influence the landowner approval process in any way.

### **Cultural Values**

The applicant has engaged directly with those Iwi groups that have expressed Mana Whenua interest in the area, with Cultural Values / Impact Assessments received from Ngaati Te Ata

Waiohūa, Ngaati Whanaunga Incorporated Society (Ngaati Whanaunga) and Te Ākitai Waiohūa. While other Iwi groups have indicated that they are interested in preparing Cultural Values / Impact Assessments, at the time of writing this report, no additional assessments had been received.

The applicant has undertaken a detailed review of the received Cultural Values / Impact Assessments, with their responses to their content included within the application documents contained in attachment 1. Having reviewed the Cultural Values / Impact Assessments, I consider that the applicant has responded to all of the identified issues and has provided detail on conditions of consent to ensure that an appropriate cultural outcome will be achieved. In this respect, I note that the conditions put forward by the applicant will:

- provide mana whenua representatives the opportunity to undertake cultural inductions to ensure that the workers involved in earthworks / topsoil stripping are aware of the cultural implications of these works and the need to ensure that they are undertaken in a culturally sensitive manner;
- provide mana whenua representatives the opportunity to undertake cultural monitoring, karakia, placement of tohu, and any necessary cultural ceremonies relative to the respective consenting milestones, including at the pre-start meeting and prior to, and on completion of, earthworks (along with any other agreed milestones);
- implement accidental discovery protocols to ensure that any undiscovered remains of importance to Māori that are uncovered are protected and preserved, with the relevant Iwi groups to be notified of any such findings;
- allow for mana whenua involvement in the identification of appropriate locations for the two replacement Pōhutukawa trees, should the two existing Pōhutukawa trees in the southwestern portion of Point Erin Park need to be removed; and
- allow for mana whenua involvement in the preparation of the required Park Restoration and Landscape Plan, which includes removal of all construction yard amenities and the restoration of Point Erin Park to at least the same condition as was the case prior to works commencing. This includes all soft and hard landscape elements, wayfinding and interpretational signage, and landscaping necessary to assist with visually integrating the plant room, vent stack and permanent retaining walls into the park environment.

Noting that neither of the submitted Cultural Values / Impact Assessments have requested that the application be refused and given that the matters raised have been reviewed and responded to by the applicant, with conditions to be imposed to ensure that appropriate outcomes will result in respect of identified matters of cultural importance (and noting that the applicant has confirmed that consultation with Mana Whenua groups will be on-going throughout the construction and operational period of the development), I consider that any adverse effects on cultural values will be suitably mitigated.

### **Positive effects**

The following positive effects are noted in section 6.4 of the AEE and are considered significant:

- Providing network capacity for existing development and future growth.
- Reducing overflows to stream and coastal environments in the catchments it serves.



- Enabling future works to further improve freshwater and coastal water quality within the Western Isthmus catchment.

I agree that all of the above are positive effects that need to be considered in light of the adverse effects identified and assessed above. Notably, I agree that reducing existing overflows to the stream and coastal environments within the catchments that the proposed wastewater infrastructure will serve is a significant positive effect noting the adverse effects that occur from overflows from the combined stormwater and wastewater network during high rainfall / storm events.

### Effects conclusion

For the reasons outlined above, I consider that the proposed development will result in adverse effects in respect of sedimentation, land stability, groundwater, construction noise, vibration and traffic, (operational) traffic, air discharges, contamination, archaeology, flooding, stormwater, trees, landscape, visual, character, and amenity values, open space amenity, and cultural values that, when viewed in the context of the surrounding environment and the nature and scale of infrastructure development anticipated and provided for within existing urban environments, and then balanced against the resulting positive effects, will be acceptable in nature.

## **14. Relevant statutory documents - s104(1)(b)**

### **National Environmental Standards – s104(1)(b)(i)**

As outlined above and confirmed in the assessment of Mr Crimmins there no consenting requirements under the NES:CS, and as such I concur with the assessment in section 7.3 of the AEE on page 84 and consider that there are no National Environmental Standards that are relevant to the subject application.

### **National Policy Statements – s104(1)(b)(iii)**

#### National Policy Statement on Urban Development

The primary objective of the National Policy Statement on Urban Development 2020 (**NPSUD**) (Updated May 2022) is to provide for well-functioning urban environments through the development of regional policy statements and district plans that enable intensification within areas that are in or near areas with employment opportunities and / or are well-served by existing or planned public transport and infrastructure where there is high demand for housing relative to other areas within the urban environment.

The Council has responded to the NPSUD through Plan Change 78 'Intensification' (**PC78**), with the intention being, as set out in the explanatory note, to:

- *enable more development in the city centre and at least six-storey buildings within walkable catchments from the edge of the City Centre, Metropolitan Centres and Rapid Transit Stops;*
- *enable development in and around neighbourhood, local and town centres*
- *incorporate Medium Density Residential Standards that enable three storey housing in relevant residential zones in urban Auckland; and*

- *implement qualifying matters to reduce the height and density of development required by the RMA to the extent necessary to accommodate a feature or value that means full intensification is not appropriate.*

As outlined in section 7.2.2 of the AEE on page 83, the general area along the alignment of the proposed wastewater tunnel is subject to PC78. However, one of the identified qualifying matters is an Infrastructure – Combined Wastewater Network Control. This qualifying matter has been identified by the applicant because of a lack of capacity in the combined system to enable the level of intensification provided for by PC78. Implementation of the subject development will provide notable additional capacity and would likely allow for this qualifying matter to be addressed thereby enabling the outcomes sought by PC78.

#### National Policy Statement for Freshwater Management

The National Policy Statement for Freshwater Management NPSFM 2020 came in force in February 2023, being an updated version of NPSFM 2014 (amended 2017).

The key requirement of the NPSFM is the management of freshwater in a manner that gives effect to Te Mana o te Wai, being a concept that refers to the fundamental importance of water and recognises that protecting the health of freshwater protects the health and well-being of the wider environment and the mauri of water (wai).

The sole objective within the NPSFM is to ensure that natural and physical resources are managed in a way that prioritises the health and well-being of water bodies and freshwater ecosystems, then the health needs of people, and then the ability of people and communities to provide for their social, economic, and cultural well-being, both now and in the future.

As outlined in section 7.2.3 of the AEE on page 83, the proposed development will provide additional wastewater network capacity and resilience which will in turn reduce the potential for associated overflows to freshwater and coastal environments, particularly during periods of high rain. Noting that these overflows discharge into streams and then into the coastal environment (and in some instances, directly into the coastal environment), these reduced flows will prioritise the health and well-being of water bodies and freshwater ecosystems, which will recognise the health needs of people and provide for their social, economic, and cultural well-being.

Accordingly, I consider that the proposed development will be entirely consistent with the NPSFM and will achieve the outcomes it seeks with respect to the freshwater environment.

#### **New Zealand Coastal Policy Statement 2010 – s104(1)(b)(iv)**

The purpose of the New Zealand Coastal Policy Statement (**NZCPS**) is to state policies to achieve the purpose of the RMA in relation to the coastal environment of New Zealand. As Point Erin Park is located on a headland adjacent to the Waitemata Harbour, consideration of the NZCPS is necessary.

In this respect, the assessment contained within section 7.2.1 of the AEE on pages 80 to 82 addresses the key components of the NZCPS in respect to: safeguarding the integrity, form, functioning and resilience of the coastal environment and its ecosystems (objective 1); preserving natural character and protecting natural features and landscape values (objective 2); taking into account the principles of the Treaty of Waitangi and recognising the role of Tangata Whenua as kaitiaki (objective 3); maintaining and enhancing public open space qualities and recreation opportunities (objective 4); and enabling people and communities to provide for their social,

economic, and cultural wellbeing and their health and safety (objective 6). In addition, I note the need to ensure that development appropriately manages coastal hazard risks (objective 5).

Noting that as NZCPS pre-dates the AUP(OP) and effectively gives direct effect to its provisions, I concur entirely with the assessment within the submitted AEE, noting the following:

- The proposed works will improve the capacity of the existing combined wastewater and stormwater system within the subject catchment, which will reduce overflows during high rainfall events and improve the quality of water being discharged to the coast, which will safeguard the integrity, functioning and resilience of its associated ecosystems while providing for the social and cultural wellbeing of people within the local community and their health and safety.
- The Point Erin headland has been extensively modified by human development, including areas of reclamation and urbanisation in the form of roading infrastructure and built development. While adverse landscape, visual, and public access effects will result during the construction period, this will be temporary and unavoidable, with the design, restoration and planting works proposed ensuring that any resulting adverse effects will be suitably remedied and mitigated such that existing levels of natural character will be preserved, natural features and landscape values will be protected, and public open space qualities and recreation opportunities will be maintained and enhanced.
- The applicant has actively engaged with Mana Whenua (Tangata Whenua) with conditions of consent proposed to recognise their role as kaitiaki.
- The proposed works will not result in any adverse effects with respect to increased levels of coastal hazards risk.

Accordingly, I consider that the proposed works will result in an appropriate form of development adjacent to, and affecting, the coastal environment.

## Auckland Unitary Plan (Operative in Part) - s104(1)(b)(v) and (vi)

Chapter B of the AUP(OP) sets out the Regional Policy Statement (**RPS**) in respect of managing the use, development and protection of the natural and physical resources of the Auckland region and provides a RMA framework for the identified issues of significance and resultant priorities and outcomes sought. These align with the direction contained in the Auckland Plan.

The primary regional issues of relevance to this application are set out in chapters B2 'Urban Growth and Form', B3 'Infrastructure', B5 'Historic Heritage and Special Character', B6 'Mana Whenua', B7 'Natural Resources' and B10 'Environmental Risk'.

The specific measures for achieving the RPS outcomes in chapter B2 have been adopted and incorporated within the relevant low-order chapters within the AUP(OP) as set out below:

### ***E1. Water Quality and Integrated Management***

#### ***E1.2. Objectives***

- (1) Freshwater and sediment quality is maintained where it is excellent or good and progressively improved over time in degraded areas.*
- (2) The mauri of freshwater is maintained or progressively improved over time to enable traditional and cultural use of this resource by Mana Whenua.*

- (3) *Stormwater and wastewater networks are managed to protect public health and safety and to prevent or minimise adverse effects of contaminants on freshwater and coastal water quality.*

### E1.3. Policies

- (1) *Manage discharges, until such time as objectives and limits are established in accordance with Policy E1.3 (7), having regard to:*
- (a) *the National Policy Statement for Freshwater Management National Bottom Lines;*
  - (b) *the Macroinvertebrate Community Index as a guideline for freshwater ecosystem health associated with different land uses within catchments in accordance with Policy E1.3(2); or*
  - (c) *other indicators of water quality and ecosystem health.*
- (2) *Manage discharges, subdivision, use, and development that affect freshwater systems to:*
- (a) *maintain or enhance water quality, flows, stream channels and their margins and other freshwater values, where the current condition is above National Policy Statement for Freshwater Management National Bottom Lines and the relevant Macroinvertebrate Community Index guideline in Table E1.3.1 below; or*
  - (b) *enhance water quality, flows, stream channels and their margins and other freshwater values where the current condition is below national bottom lines or the relevant Macroinvertebrate Community Index guideline in Table E1.3.1 below.*

*Table E1.3.1 Macroinvertebrate Community Index guideline for Auckland rivers and streams*

<i>Land use</i>	<i>Macroinvertebrate Community Index guideline</i>
<i>Native forest</i>	<i>123</i>
<i>Exotic forest</i>	<i>111</i>
<i>Rural areas</i>	<i>94</i>
<i>Urban areas</i>	<i>68</i>

### *National Policy Statement on Freshwater Management*

*The National Policy Statement on Freshwater Management requires that Policies E1.3(4) to (7) below are included in the Plan.*

- (4) *When considering any application for a discharge, the Council must have regard to the following matters:*
- (a) *the extent to which the discharge would avoid contamination that will have an adverse effect on the life-supporting capacity of freshwater including on any ecosystem associated with freshwater; and*
  - (b) *the extent to which it is feasible and dependable that any more than a minor adverse effect on freshwater, and on any ecosystem associated with freshwater, resulting from the discharge would be avoided.*



- (5) *When considering any application for a discharge the Council must have regard to the following matters:*
- (a) *the extent to which the discharge would avoid contamination that will have an adverse effect on the health of people and communities as affected by their secondary contact with fresh water; and*
  - (b) *the extent to which it is feasible and dependable that any more than minor adverse effect on the health of people and communities as affected by their secondary contact with fresh water resulting from the discharge would be avoided.*
- (7) *Develop Freshwater Management Unit specific objectives and limits for freshwater with Mana Whenua, through community engagement, scientific research and mātauranga Māori, to replace the Macroinvertebrate Community Index interim guideline and to give full effect to the National Policy Statement for Freshwater Management.*

#### *Stormwater management*

- (8) *Avoid as far as practicable, or otherwise minimise or mitigate, adverse effects of stormwater runoff from greenfield development on freshwater systems, freshwater and coastal water by:*
- (a) *taking an integrated stormwater management approach (refer to Policy E1.3.10);*
  - (b) *minimising the generation and discharge of contaminants, particularly from high contaminant generating car parks and high use roads and into sensitive receiving environments;*
  - (c) *minimising or mitigating changes in hydrology, including loss of infiltration, to:*
    - (i) *minimise erosion and associated effects on stream health and values;*
    - (ii) *maintain stream baseflows; and*
    - (iii) *support groundwater recharge;*
  - (d) *where practicable, minimising or mitigating the effects on freshwater systems arising from changes in water temperature caused by stormwater discharges; and*
  - (e) *providing for the management of gross stormwater pollutants, such as litter, in areas where the generation of these may be an issue.*
- (10) *In taking an integrated stormwater management approach have regard to all of the following:*
- (a) *the nature and scale of the development and practical and cost considerations, recognising:*
    - (i) *greenfield and comprehensive brownfield development generally offer greater opportunity than intensification and small-scale redevelopment of existing areas;*
    - (ii) *intensive land uses such as high-intensity residential, business, industrial and roads generally have greater constraints; and*
    - (iii) *site operational and use requirements may preclude the use of an integrated stormwater management approach.*

- (b) *the location, design, capacity, intensity and integration of sites/development and infrastructure, including roads and reserves, to protect significant site features and hydrology and minimise adverse effects on receiving environments;*
  - (c) *the nature and sensitivity of receiving environments to the adverse effects of development, including fragmentation and loss of connectivity of rivers and streams, hydrological effects and contaminant discharges and how these can be minimised and mitigated, including opportunities to enhance degraded environments;*
  - (d) *reducing stormwater flows and contaminants at source prior to the consideration of mitigation measures and the optimisation of on-site and larger communal devices where these are required; and*
  - (e) *the use and enhancement of natural hydrological features and green infrastructure for stormwater management where practicable.*
- (11) *Avoid as far as practicable, or otherwise minimise or mitigate adverse effects of stormwater diversions and discharges, having particular regard to:*
- (a) *the nature, quality, volume and peak flow of the stormwater runoff;*
  - (b) *the sensitivity of freshwater systems and coastal waters, including the Hauraki Gulf Marine Park;*
  - (c) *the potential for the diversion and discharge to create or exacerbate flood risks;*
  - (d) *options to manage stormwater on-site or the use of communal stormwater management measures;*
  - (e) *practical limitations in respect of the measures that can be applied; and*
  - (f) *the current state of receiving environments.*

### Assessment

Having reviewed these objectives and policies in detail, I provide the following assessment:

- The erosion and sediment control measures proposed by the applicant to address sedimentation during the construction phase will ensure that freshwater quality is maintained with respect to the discharge of sediment.
- The same applies with respect to the diversion and discharge of stormwater, with the proposed erosion and sediment control measures ensuring that discharged stormwater from the proposed construction areas will be appropriately treated, with the nature of the discharges and the environment in which they are located ensuring that retention and detention is not required for the purpose of mitigating changes in hydrology or maintaining stream baseflows. These measures ensure that stormwater discharged from the construction areas will accord with applicable AUP(OP) requirements and associated technical guidance documents and that it will not adversely affect the life-supporting capacity of freshwater or the health of people and the local community and will minimise adverse effects of contaminants on the coastal environment. They will also address effects in terms of peak flow runoff (no detention is required) and will ensure that flood risk is not exacerbated.
- Noting the above assessment, I consider it likely that the mauri of freshwater will be

maintained, noting that no evidence to the contrary has been provided from Mana Whenua.

## **E2. Water Quantity, Allocation and Use**

### E2.2. Objectives

- (2) *Water resources are managed within limits to meet current and future water needs for social, cultural and economic purposes.*
- (4) *Water resources are managed to maximise the efficient allocation and efficient use of available water.*
- (5) *Mana Whenua values including the mauri of water, are acknowledged in the allocation and use of water.*

### E2.3. Policies

- (23) *Require proposals to divert groundwater, in addition to the matters addressed in Policy E2.3(6) and (7) above, to ensure that:*
  - (a) *the proposal avoids, remedies or mitigates any adverse effects on:*
    - (i) *scheduled historic heritage places and scheduled sites and places of significance to Mana Whenua; and*
    - (ii) *people and communities.*
  - (b) *the groundwater diversion does not cause or exacerbate any flooding;*
  - (c) *monitoring has been incorporated where appropriate, including:*
    - (i) *measurement and recording of water levels and pressures; and*
    - (ii) *measurement and recording of the movement of ground, buildings and other structures.*
  - (d) *mitigation has been incorporated where appropriate including:*
    - (i) *minimising the period where the excavation is open/unsealed;*
    - (ii) *use of low permeability perimeter walls and floors;*
    - (iii) *use of temporary and permanent systems to retain the excavation; or*
    - (iv) *re-injection of water to maintain groundwater pressures.*

### Assessment

Having reviewed these objectives and policies in detail, I provide the following assessment:

- No scheduled historic heritage places or scheduled sites and places of significance to Mana Whenua will be affected by the proposed groundwater diversion and dewatering works.
- There is no evidence that the proposed diversion of groundwater will exacerbate flooding.
- Extensive works have been undertaken to model and predict likely levels of ground settlement, with all retaining structures, including those supporting the proposed shaft and control chamber works and wastewater tunnel, having been designed to minimise potential

adverse effects. In this respect, a detailed monitoring programme is proposed to record water levels and the movement of ground, buildings, and structures on directly affected site. This includes a warning system with trigger levels, which will allow the works to be modified if necessary to ensure that the noted settlement limits are not exceeded. This will significantly reduce the likelihood of damage, noting that the undertaking of pre-and-post-condition surveys will allow for any damage (external cracking from hairline to 5mm in width) to be identified and rectified by the applicant.

## **E11. Land disturbance – Regional**

### **E11.2. Objectives**

- (1) *Land disturbance is undertaken in a manner that protects the safety of people and avoids, remedies and mitigates adverse effects on the environment.*
- (2) *Sediment generation from land disturbance is minimised.*
- (3) *Land disturbance is controlled to achieve soil conservation.*

### **E11.3 Policies**

- (2) *Manage land disturbance to:*
  - (a) *retain soil and sediment on the land by the use of best practicable options for sediment and erosion control appropriate to the nature and scale of the activity;*
  - (b) *manage the amount of land being disturbed at any one time, particularly where the soil type, topography and location is likely to result in increased sediment runoff or discharge;*
  - (c) *avoid, remedy and mitigate adverse effects on accidentally discovered sensitive material; and*
  - (d) *maintain the cultural and spiritual values of Mana Whenua in terms of land and water quality, preservation of wāhi tapu, and kaimoana gathering.*
- (4) *Enable land disturbance necessary for a range of activities undertaken to provide for people and communities social, economic and cultural well-being, and their health and safety.*
- (5) *Design and implement earthworks with recognition of existing environmental site constraints and opportunities, specific engineering requirements, and implementation of integrated water principles.*
- (6) *Require that earthworks are designed and undertaken in a manner that ensures the stability and safety of surrounding land, buildings and structures.*

## **E12. Land Disturbance – District**

### **E12.2. Objective**

- (1) *Land disturbance is undertaken in a manner that protects the safety of people and avoids, remedies and mitigates adverse effects on the environment.*

### **E12.3. Policies**



- (1) *Avoid where practicable, and otherwise, mitigate, or where appropriate, remedy adverse effects of land disturbance on areas where there are natural and physical resources that have been scheduled in the Plan in relation to natural heritage, Mana Whenua, natural resources, coastal environment, historic heritage and special character.*
- (2) *Manage the amount of land being disturbed at any one time, to:*
  - (a) *avoid, remedy or mitigate adverse construction noise, vibration, odour, dust, lighting and traffic effects;*
  - (b) *avoid, remedy and mitigate adverse effects on accidentally discovered sensitive material; and*
  - (c) *maintain the cultural and spiritual values of Mana Whenua in terms of land and water quality, preservation of wāhi tapu, and kaimoana gathering.*
- (3) *Enable land disturbance necessary for a range of activities undertaken to provide for people and communities social, economic and cultural well-being, and their health and safety.*
- (4) *Manage the impact on Mana Whenua cultural heritage that is discovered undertaking land disturbance by:*
  - (a) *requiring a protocol for the accidental discovery of kōiwi, archaeology and artefacts of Māori origin;*
  - (b) *undertaking appropriate actions in accordance with mātauranga and tikanga Māori; and*
  - (c) *undertaking appropriate measures to avoid adverse effects, or where adverse effects cannot be avoided, effects are remedied or mitigated.*
- (5) *Design and implement earthworks with recognition of existing environmental site constraints and opportunities, specific engineering requirements, and implementation of integrated water principles.*
- (6) *Require that earthworks are designed and undertaken in a manner that ensures the stability and safety of surrounding land, buildings and structures.*

### Assessment

Having reviewed these objectives and policies in detail, I provide the following assessment:

- Erosion and sediment control measures of suitable scale and design will be implemented, which will limit the potential for erosion to occur and ensure that any sediment runoff that is unavoidable is suitably controlled, contained and treated.
- The earthworks will be undertaken in accordance with geotechnical recommendations under the supervision of a suitably qualified professional, which ensures that adverse land stability issues from mechanical settlement (being those effects associated with the physical removal of earth) with respect to the surrounding environment are unlikely to result.
- There floodplain and overland flow path within the application site will be affected to a negligible degree and with the entry and exit points of the overland flow paths not being altered and noting that one of the key outcomes associated with the proposed works is reduced overflows and improved flood management, adverse effects with respect to flooding and

unacceptable levels of flood risk will not result.

- There is no evidence that adverse effects on Mana Whenua cultural heritage will result, with adverse effects in respect of unknown artefacts of Māori origin able to be addressed through the implementation of accidental discovery protocols, as supported by the two Mana Whenua groups that proposed Cultural Values / Impact Assessments.
- There is no evidence that adverse effects with respect to soil conservation will result.

## **E14. Air Quality**

### E14.2. Objectives

- (2) *Human health, property and the environment are protected from significant adverse effects from the discharge of contaminants to air.*
- (3) *Incompatible uses and development are separated to manage adverse effects on air quality from discharges of contaminants into air and avoid or mitigate reverse sensitivity effects.*
- (4) *The operational requirements of light and heavy industry, other location-specific industry, infrastructure, rural activities and mineral extraction activities are recognised and provided for.*

### E14.3. Policies

- (1) *Manage the discharge of contaminants to air, including by having regard to the Auckland Ambient Air Quality Targets in Table E14.3.1, so that significant adverse effects on human health, including cumulative adverse effects, are avoided, and all other adverse effects are remedied or mitigated.*
- (2) *In the coastal marine area and in urban and rural zones, except for those zones and precincts subject to policies E14.3(3) to (5):*
  - (a) *avoid offensive or objectionable effects from dust and odour discharges and remedy or mitigate all other adverse effects of dust and odour discharges; or*
  - (b) *require adequate separation distance between use and development which discharges dust and odour to air and activities that are sensitive to adverse effects of dust and odour discharges, or both of the above.*
- (8) *Avoid, remedy or mitigate the adverse effects on air quality from discharges of contaminants into air by:*
  - (a) *using the best practicable option for emission control and management practices that are appropriate to the scale of the discharge and potential adverse effects; or*
  - (b) *adopting a precautionary approach, where there is uncertainty and a risk of significant adverse effects or irreversible harm to the environment from air discharges.*
- (9) *Avoid, remedy or mitigate the adverse effects on air quality beyond the boundary of the premises where the discharge of contaminants to air is occurring, in relation to:*
  - (a) *noxious or dangerous effects on human health, property or the environment from hazardous air pollutants; or*

*(b) overspray effects on human health, property or the environment.*

### Assessment

Having reviewed these objectives and policies in detail, I provide the following assessment:

- Discharges will be infrequent, with those from the relief vent to be discharged vertically via the proposed air vent to assist with dispersal. These factors combined with separation distances and wind direction will ensure that adverse odour effects, including those that result during high rainfall events, as they relate to local residents and users of Point Erin Park, will be minimal in extent.
- Dust discharges during construction will be minimised through the implementation of a range of mitigation measures, including the wetting of exposed surfaces and soil stockpiles (particularly during windy conditions), the implementation of a 15kph speed limit, and the provision of wheel wash facilities.
- Noting the above factors, FIDOL assessments have confirmed that odour and dust emissions will not be offensive or objectionable at the nearest residential receptors.
- For the above reasons, human health, property, and the environment will be protected from significant adverse effects from the discharge of contaminants to air, with offensive and objectionable effects from dust and odour discharges being avoided and incompatible uses not being located adjacent to one another.

### **E25. Noise and Vibration**

#### E25.2. Objectives

- (1) People are protected from unreasonable levels of noise and vibration.*
- (2) The amenity values of residential zones are protected from unreasonable noise and vibration, particularly at night.*
- (3) Existing and authorised activities and infrastructure, which by their nature produce high levels of noise, are appropriately protected from reverse sensitivity effects where it is reasonable to do so.*
- (4) Construction activities that cannot meet noise and vibration standards are enabled while controlling duration, frequency and timing to manage adverse effects.*

#### E25.3. Policies

- (1) Set appropriate noise and vibration standards to reflect each zone's function and permitted activities, while ensuring that the potential adverse effects of noise and vibration are avoided, remedied or mitigated.*
- (2) Minimise, where practicable, noise and vibration at its source or on the site from which it is generated to mitigate adverse effects on adjacent sites.*
- (3) Encourage activities to locate in zones where the noise generated is compatible with other activities and, where practicable, adjacent zones.*
- (10) Avoid, remedy or mitigate the adverse effects of noise and vibration from construction, maintenance and demolition activities while having regard to:*

- (a) *the sensitivity of the receiving environment; and*
- (b) *the proposed duration and hours of operation of the activity; and*
- (c) *the practicability of complying with permitted noise and vibration standards.*

#### **E40. Temporary Activities**

##### E40.2. Objectives

- (1) *Temporary activities and events contribute to a vibrant city and enhance the social, environmental, economic and cultural well-being of communities.*
- (2) *Temporary activities are located and managed to mitigate adverse effects on amenity values, communities and the natural environment.*

##### E40.3 Policies

- (1) *Enable temporary activities and associated structures, provided any adverse effects on amenity values are avoided, remedied or mitigated, including by ensuring:*
  - (a) *noise associated with the activity meets the specified standards;*
  - (b) *activities on adjacent sites that are sensitive to noise are protected from unreasonable or unnecessary noise;*
  - (c) *noise from outdoor events using electronically amplified equipment is controlled through limiting the times, duration and the frequency of events;*
  - (d) *waste and litter are effectively managed and minimised; and*
  - (e) *any restrictions on public access or other users of open space areas are minimised, and any adverse effects are mitigated.*
- (3) *Control traffic generated by a temporary activity, including heavy traffic, so that it does not detract from*
  - (a) *the capacity of the road to safely and efficiently cater for motor vehicles, pedestrians and cyclists; and*
  - (b) *the well-being of residents and reasonable functioning of businesses on surrounding sites.*
- (6) *Manage the effects of temporary activities so that the values of any scheduled ecological, natural character, natural features, landscape, historic heritage or Mana Whenua areas are maintained, and any adverse effects on the natural environment are avoided, remedied or mitigated.*

##### Assessment

Having reviewed these objectives and policies in detail, I provide the following assessment:

- The proposed construction works are required to allow for implementation of the proposed wastewater conveyance and storage tunnel, being a form of development that is necessary within the subject urbanised environment to address existing infrastructure capacity issues and wastewater overflow events during periods of high rain. As any works in association with the delivery of such infrastructure will result in a level of disturbance, the emphasis is



on remediation and mitigation and not pure avoidance. This is recognised with the applicable objectives and policies within E25 and E40, with protection of unreasonable noise and vibration being the key consideration. It should be noted that mitigation measures to achieve noise and vibration compliance is not practically achievable given the nature and scale of the works proposed.

- In this respect, non-compliances with permitted standards will result infrequently, which ensures that associated levels of disturbance will be minimal in the first instance. When non-compliances do result, management measures will be implemented as part of a CNVMP to ensure that potential levels of nuisance are suitably mitigated. This will involve communication with affected residents, with such works potentially able to be undertaken while residents are not at home or at times whereby such levels can be tolerated. Subject to implementation of these measures along with the provision of acoustic barriers and the selection of quieter, lower disturbance equipment where possible, I consider that people within the surrounding residential neighbourhood will be suitably protected from unreasonable levels of noise and vibration.
- The implementation of an appropriately detailed CTMP will ensure that adverse effects from construction traffic, including all generated heavy vehicles and the need for the closure of footpaths and pathways within Point Erin Park. will be suitably addressed.
- The development, once completed and operational, will comply with the applicable noise standards with respect to all residential boundaries, including noise generated from plant machinery and persons undertaking maintenance. This ensures that adverse effects from the on-going operation of the wastewater conveyance and storage tunnel will not result.
- The nature, scale and location of the proposed temporary construction activity are such that adverse effects in respect of natural character, natural features, landscape, historic heritage and Mana Whenua values will not result.

## **E26. Infrastructure**

### **E26.2.1. Objectives**

- (1) *The benefits of infrastructure are recognised.*
- (2) *The value of investment in infrastructure is recognised.*
- (4) *Development, operation, maintenance, repair, replacement, renewal, upgrading and removal of infrastructure is enabled.*
- (6) *Infrastructure is appropriately protected from incompatible subdivision, use and development, and reverse sensitivity effects.*
- (8) *The use and development of renewable electricity generation is enabled.*
- (9) *The adverse effects of infrastructure are avoided, remedied or mitigated.*

### **E26.2.2. Policies**

- (1) *Recognise the social, economic, cultural and environmental benefits that infrastructure provides, including:*
  - (a) *enabling enhancement of the quality of life and standard of living for people and*

*communities;*

- (b) providing for public health and safety;*
  - (c) enabling the functioning of businesses;*
  - (d) enabling economic growth;*
  - (e) enabling growth and development;*
  - (f) protecting and enhancing the environment;*
  - (g) enabling the transportation of freight, goods, people; and*
  - (h) enabling interaction and communication.*
- (2) Provide for the development, operation, maintenance, repair, upgrade and removal of infrastructure throughout Auckland by recognising:*
- (a) functional and operational needs;*
  - (b) location, route and design needs and constraints;*
  - (c) the complexity and interconnectedness of infrastructure services;*
  - (d) the benefits of infrastructure to communities with in Auckland and beyond;*
  - (e) the need to quickly restore disrupted services; and*
  - (f) its role in servicing existing, consented and planned development.*

#### *Adverse effects of infrastructure*

- (4) Require the development, operation, maintenance, repair, upgrading and removal of infrastructure to avoid, remedy or mitigate adverse effects, including, on the:*
- (a) health, well-being and safety of people and communities, including nuisance from noise, vibration, dust and odour emissions and light spill;*
  - (b) safe and efficient operation of other infrastructure;*
  - (c) amenity values of the streetscape and adjoining properties;*
  - (d) environment from temporary and ongoing discharges; and*
  - (e) values for which a site has been scheduled or incorporated in an overlay.*
- (5) Consider the following matters when assessing the effects of infrastructure:*
- (a) the degree to which the environment has already been modified;*
  - (b) the nature, duration, timing and frequency of the adverse effects;*
  - (c) the impact on the network and levels of service if the work is not undertaken;*
  - (d) the need for the infrastructure in the context of the wider network; and*
  - (e) the benefits provided by the infrastructure to the communities within Auckland and beyond.*

- (6) Consider the following matters where new infrastructure or major upgrades to infrastructure are proposed within areas that have been scheduled in the Plan in relation to natural heritage, Mana Whenua, natural resources, coastal environment, historic heritage and special character:
- (a) the economic, cultural and social benefits derived from infrastructure and the adverse effects of not providing the infrastructure;
  - (b) whether the infrastructure has a functional or operational need to be located in or traverse the proposed location;
  - (c) the need for utility connections across or through such areas to enable an effective and efficient network;
  - (d) whether there are any practicable alternative locations, routes or designs, which would avoid, or reduce adverse effects on the values of those places, while having regard to E26.2.2(6)(a) - (c);
  - (e) the extent of existing adverse effects and potential cumulative adverse effects;
  - (f) how the proposed infrastructure contributes to the strategic form or function, or enables the planned growth and intensification, of Auckland;
  - (g) the type, scale and extent of adverse effects on the identified values of the area or feature, taking into account:
    - (i) scheduled sites and places of significance and value to Mana Whenua;
    - (ii) significant public open space areas, including harbours;
    - (iii) hilltops and high points that are publicly accessible scenic lookouts;
    - (iv) high-use recreation areas;
    - (v) natural ecosystems and habitats; and
    - (vi) the extent to which the proposed infrastructure or upgrade can avoid adverse effects on the values of the area, and where these adverse effects cannot practicably be avoided, then the extent to which adverse effects on the values of the area can be appropriately remedied or mitigated.
  - (h) whether adverse effects on the identified values of the area or feature must be avoided pursuant to any national policy statement, national environmental standard, or regional policy statement.

#### *New technologies*

- (11) Provide flexibility for infrastructure operators to use new technological advances that:
- (a) improve access to, and efficient use of services;
  - (b) allow for the re-use of redundant services and structures where appropriate;
  - (c) result in environmental benefits and enhancements; and
  - (d) utilise renewable sources.

## Assessment

The relevant objectives and policies recognise the environmental, public health, and growth development benefits of infrastructure and the value of investment in it, with its development and operation enabled noting the need to protect against reverse sensitivity effects and ensure that adverse effects are avoided, remedied or mitigated. In this respect, the policies note that there will be instances whereby infrastructure is required within sensitive environments, including sites that have been scheduled in terms of natural heritage, Mana Whenua, natural resources, historic heritage and special character.

Noting the above, I provide the following assessment:

- I consider that the benefits of the proposed wastewater conveyance and storage tunnel are recognised in terms of additional network capacity to support future urbanisation and intensification of the surrounding residential area and reducing untreated wastewater overflows to the stream and coastal environments within the subject catchment during high rainfall events.
- There is a functional and operational need for the proposed wastewater conveyance and storage tunnel with its route and design taking into account the relevant constraints in terms of geology, space availability, and the location of the existing and consented infrastructure services to which it will connect.
- The proposed works will not affect any sites that have been scheduled in terms of natural heritage, Mana Whenua, and natural resources. While works are proposed underneath sites within historic heritage and special character overlays, the assessment of Mr Mallows is that subject adverse effects will not result noting the depth of the tunnelling works.
- Adverse effects during construction will be temporary and will not result in an unacceptable reduction in open space opportunities for the local community. Adverse effects in the long term will be remediated / mitigated through the development and implementation of a Park Restoration and Landscape Plan, the appropriate bulk, scale, and design of the above ground buildings and structures, and the undertaking of restoration and landscape planting.
- Noting the appropriateness of the resulting air discharges and above ground buildings and structures, reverse sensitivity effects with respect to the neighbouring residential properties will not exist.

## **E27. Transport**

### E27.2. Objectives

- (4) *The provision of safe and efficient parking, loading and access is commensurate with the character, scale and intensity of the zone.*
- (5) *Pedestrian safety and amenity along public footpaths is prioritised.*

### E27.3. Policies

#### **Access**

- (20) *Require vehicle crossings and associated access to be designed and located to provide for safe, effective and efficient movement to and from sites and minimise potential conflicts between vehicles, pedestrians, and cyclists on the adjacent road network.*



- (21) *Restrict or manage vehicle access to and from sites adjacent to intersections, adjacent motorway interchanges, and on arterial roads, so that:*
- (a) *the location, number, and design of vehicle crossings and associated access provides for the efficient movement of people and goods on the road network; and*
  - (b) *any adverse effect on the effective, efficient and safe operation of the motorway interchange and adjacent arterial roads arising from vehicle access adjacent to a motorway interchange is avoided, remedied or mitigated.*

### Assessment

Having reviewed these objectives and policies in detail, I provide the following assessment:

- The permanent vehicle crossing that will access the control chamber and plant room will be used infrequently, and will be accessed by right turn movements only, as the proximity of the crossing to the intersection of Sarsfield Street and Curran Street and the presence of other berm elements are such that left turn movements would be unsafe. With a traffic controller to be used to guide exiting vehicles onto Curran Street given that exit angles and the position of the truck will be such that a driver will not have sufficient visibility of oncoming vehicles, the proposed access arrangements will function in an acceptable manner with respect to traffic and pedestrian safety.
- The implementation of an appropriately detailed CTMP will ensure that pedestrian safety and amenity along public footpaths is provided for in instances where temporary closures are necessary, and the provision of alternative routes is required

### E36.2. Objectives

- (2) *Subdivision, use and development, including redevelopment in urban areas, only occurs where the risks of adverse effects from natural hazards to people, buildings, infrastructure and the environment are not increased overall and where practicable are reduced, taking into account the likely long term effects of climate change.*
- (4) *Where infrastructure has a functional or operational need to locate in a natural hazard area, the risk of adverse effects to other people, property, and the environment shall be assessed and significant adverse effects are sought first to be avoided or, if avoidance is not able to be totally achieved, the residual effects are otherwise mitigated to the extent practicable.*
- (5) *Subdivision, use and development including redevelopment, is managed to safely maintain the conveyance function of floodplains and overland flow paths.*

### E36.3. Policies

#### *General*

- (3) *Consider all of the following, as part of a risk assessment of proposals to subdivide, use or develop land that is subject to natural hazards:*
  - (a) *the type, frequency and scale of the natural hazard and whether adverse effects on the development will be temporary or permanent;*
  - (b) *the type of activity being undertaken and its vulnerability to natural hazard events;*

- (c) *the consequences of a natural hazard event in relation to the proposed activity;*
  - (d) *the potential effects on public safety and other property;*
  - (e) *any exacerbation of an existing natural hazard risk or the emergence of natural hazard risks that previously were not present at the location;*
  - (h) *the design and construction of buildings and structures to mitigate the effects of natural hazards;*
  - (i) *the effect of structures used to mitigate hazards on landscape values and public access;*
  - (j) *site layout and management to avoid or mitigate the adverse effects of natural hazards, including access and exit during a natural hazard event; and*
  - (k) *the duration of consent and how this may limit the exposure for more or less vulnerable activities to the effects of natural hazards including the likely effects of climate change.*
- (4) *Control subdivision, use and development of land that is subject to natural hazards so that the proposed activity does not increase, and where practicable reduces, risk associated with all of the following adverse effects:*
- (a) *accelerating or exacerbating the natural hazard and/or its potential impacts;*
  - (b) *exposing vulnerable activities to the adverse effects of natural hazards;*
  - (c) *creating a risk to human life; and*
  - (d) *increasing the natural hazard risk to neighbouring properties or infrastructure.*

#### *Floodplains in urban area*

- (13) *In existing urban areas require new buildings designed to accommodate more vulnerable activities to be located:*
- (a) *outside of the 1 per cent annual exceedance probability (AEP) floodplain; or*
  - (b) *within or above the 1 per cent annual exceedance probability (AEP) floodplain where safe evacuation routes or refuges are provided.*
- (15) *Within existing urban areas, enable buildings containing less vulnerable activities to locate in the 1 per cent annual exceedance probability (AEP) floodplains where that activity avoids, remedies or mitigates effects from flood hazards on other properties.*

#### *Floodplains - general*

- (21) *Ensure all development in the 1 per cent annual exceedance probability (AEP) floodplain does not increase adverse effects from flood hazards or increased flood depths and velocities, to other properties upstream or downstream of the site.*

#### *Overland flow paths*

- (29) *Maintain the function of overland flow paths to convey stormwater runoff safely from a site to the receiving environment.*
- (30) *Require changes to overland flow paths to retain their capacity to pass stormwater flows safely without causing damage to property or the environment.*

### *Infrastructure in areas subject to natural hazards*

*(35) Allow for the operation, maintenance, upgrading and construction of infrastructure, in areas subject to natural hazards when:*

- (a) infrastructure is functionally or operationally required to locate in hazard areas or it is not reasonably practicable that it be located elsewhere;*
- (c) in all flood hazard areas risks to people, property and the environment are mitigated to the extent practicable.*

### **Assessment**

Having reviewed these objectives and policies in detail, I provide the following assessment:

- The proposed earthworks will be minimal in extent in terms of the area of encroachment in the floodplain and narrowing of the overland flow path, which ensures that flow velocities will be low and that appropriate levels of storage capacity will be maintained. With a key purpose of the development being to reduce / eliminate the wet-weather network overflows that result from the combined wastewater and stormwater network, adverse flooding effects for upstream and downstream sites will not result, with the likely outcome being a reduction in associated levels of flood risk on a catchment-wide basis.
- Noting the location of existing infrastructure and the need to minimise adverse effects on the long-term recreational operation of Point Erin Park, there is a functional and operational need for the undertaking of the works within a floodplain and overland flow path and noting that adverse flooding related effects will not result, additional flood hazard risks to people, property and the environment will also not result.
- The proposed plant building and air vent will be located outside of the existing floodplain area.

### ***H7 Open Space zones***

#### **H7.2. Objectives – All Zones**

*In addition to the specific objectives that apply to each open space zone, the following objectives apply generally to open space areas.*

- (1) Recreational needs are met through the provision of a range of quality open space areas that provide for both passive and active activities.*
- (2) The adverse effects of use and development of open space areas on residents, communities and the environment are avoided, remedied or mitigated.*

#### **H7.3. Policies – General**

*In addition to the specific policies that apply to each open space zone, the following policies apply generally to open space areas.*

- (1) Design, develop, manage and maintain open spaces to:*
  - (a) provide for the needs of the wider community as well as the needs of the community in which they are located;*
  - (b) achieve the objectives for the open space zone;*

- (c) *use resources efficiently and where appropriate be adaptable and multifunctional;*
  - (d) *provide for people of differing ages and abilities;*
  - (e) *be safe and attractive to users;*
  - (f) *and where appropriate for the zone, reflect the natural, heritage and landscape values of the area.*
- (2) *Develop open spaces which reflect Mana Whenua values where appropriate, including through:*
- (a) *restoring and enhancing ecosystems and indigenous biodiversity, particularly taonga species;*
  - (b) *providing natural resources for customary use;*
  - (c) *and providing opportunities for residents and visitors to experience Māori cultural heritage, while protecting Māori cultural heritage and sites and features of significance to Mana Whenua.*
- (3) *Enable the provision of infrastructure necessary to service open spaces and recreation facilities.*
- (4) *Enable the construction operation, maintenance, repair and minor upgrading of infrastructure located on open spaces.*

#### H7.5. Open Space – Informal Recreation Zone

##### H7.5.2. Objectives

- (1) *The open and spacious character, amenity values and any historic, Mana Whenua, and natural values of the zone are maintained.*
- (2) *Informal recreation activities are the predominant use of the zone.*
- (3) *Buildings and exclusive-use activities are limited to maintain public use and open space for informal recreation.*

##### H7.5.3. Policies

- (1) *Provide for a variety of informal recreation activities, including small-scale community uses and accessory activities.*
- (2) *Maintain or enhance the natural character values of open spaces by retaining significant vegetation (where appropriate and practical) and through weed removal, new planting and landscaping.*
- (4) *Limit buildings, structures and activities to those necessary to enhance people's ability to use and enjoy the open space for informal recreation.*
- (5) *Locate and design buildings and structures to:*
  - (a) *complement the open and spacious character, function and amenity values of the zone;*
  - (b) *maintain public accessibility and minimise areas for exclusive use;*
  - (c) *and protect any natural or historic heritage values.*

- (7) *Manage the intensity of activities to minimise adverse effects such as noise, glare and traffic on the amenity values of the surrounding area.*
- (8) *Limit activities and their associated facilities adjoining the coast or water bodies to those that have a functional or operational need for a coastal location.*
- (9) *Avoid use and development in locations adjoining the coast or water bodies where they will have more than minor adverse effects on any of the following:*
  - (a) *public access;*
  - (b) *the visual amenity values of the coast and water bodies;*
  - (c) *areas of high natural or historic heritage value;*
  - (d) *or Mana Whenua values.*

#### H7.6. Open Space – Sport and Active Recreation Zone

##### H7.6.2. Objectives

- (1) *Indoor and outdoor sport and active recreation opportunities are provided for efficiently, while avoiding or mitigating any significant adverse effects on nearby residents, communities and the surrounding areas.*
- (2) *Activities accessory to active sport and recreation activities are provided for in appropriate locations and enhance the use and enjoyment of areas for active sport and recreation.*

##### H7.6.3. Policies

- (1) *Enable indoor and outdoor organised sports, active recreation, recreation facilities, community activities, accessory activities and associated buildings and structures.*
- (2) *Enable accessory activities that enhance the use and enjoyment of the public open space and that relate to the primary activities on the site.*
- (3) *Design and locate buildings and structures (including additions) to be compatible with the surrounding environment in which they are located, particularly residential environments, and to avoid or mitigate any adverse effects, including visual, dominance, overlooking and shading.*
- (4) *Design and locate buildings, structures and activities so that any adverse effects, including noise, glare and traffic effects, are managed to maintain a reasonable level of amenity value for nearby residents, communities and the surrounding environment.*
- (6) *Limit activities and associated facilities on open space adjoining the coast or a water body to those that have a functional or operational requirement for a coastal location.*
- (7) *Require activities and development in locations adjoining the coast or a water body to meet all of the following:*
  - (a) *maintain public access, unless access is to be excluded for safety and security reasons;*
  - (b) *maintain the visual amenity of the coastal environment and water bodies;*
  - (c) *avoid areas scheduled for their outstanding natural landscape, outstanding or high natural character or historic heritage values;*



(d) and recognise Mana Whenua values.

### Assessment

Having reviewed these objectives and policies in detail, I provide the following assessment:

- While there will be a reduction in the recreation space available within Point Erin Park during the construction works phase, it will be temporary and with approximately 88% of the park still being available for use, including the pool, car parking area, pathways (including the necessary alternative access arrangements) and areas of green space, an unacceptable reduction in open space opportunities will not result. This ensures that the recreational needs of the local community will continue to be met, noting that no submissions were received raising the temporary loss of recreational opportunities as an issue of concern.
- Long term adverse effects on the Point Erin Park open space area will be mitigated through the development and implementation of a Park Restoration and Landscape Plan, the appropriate bulk, scale, and design of the above ground buildings and structures, and the undertaking of restoration and landscape planting. Of note is that Mana Whenua input into the Park Restoration and Landscape Plan will ensure that their values in terms of restoring and enhancing ecosystems and indigenous biodiversity, and providing opportunities for residents and visitors to experience Māori cultural heritage, will be recognised and provided for.
- The design and location of the proposed buildings and structures will be compatible with the surrounding residential environment, with adverse effects, including those in respect of visual, dominance, overlooking and shading being suitably mitigated by a combination of quality design, distance, viewing angles, topographical variations, and the screening presence of existing vegetation. Of further note is that the plant room will be able to function in accordance with permitted noise requirements, while the nature and design of the permanent works will not result in any adverse traffic or glare effects, all of which ensures that a reasonable level of amenity will be achieved for nearby residents, communities, and the surrounding environment.
- While it is acknowledged that the proposed infrastructure and associated buildings and structures are not necessary to serve Point Erin Park, there is a functional and operational need for these works as proposed given: the alignment of the consented Central Interceptor; the location of existing infrastructure that will connect to it; and the need to address infrastructure capacity constraints and reduce wastewater overflows during a high rainfall event within the subject catchment. While there will be an impact from the provision of this infrastructure during the construction period, adverse effects will be mitigated to the greatest extent possible, with long term adverse effects being minimal in extent for the reasons detailed above.
- The proposed works will not impede public access to the coast or have more than minor adverse effects on the visual amenity values of the coast, water bodies, areas of high natural or historic heritage value or Mana Whenua values.

### Conclusion

For the reasons outlined above, I consider that the proposed development will be generally consistent with the relevant objectives and policies within the AUP(OP). Noting the hierarchical relationship of the applicable assessment criteria with the associated objectives and policies and

that they do not raise or identify additional issues that have not otherwise been assessed, I consider that a detailed review / assessment of the applicable criteria is not necessary.

## 15. Any other matters - s104(1)(c)

### Submissions

The submissions received by the Council in the processing of this application have been reviewed and, where relevant, have been considered in the overall assessment of this report. In term of those matters not considered, I note the following:

- There is no evidence to substantiate that the proposed works will have any adverse implications with respect to a reduction in property value, noting that this is not, in any case, an effect that can be considered.
- Any compensation under the Public Works Act or obligations under the Local Government Act are relevant to those Acts only and are not matters for consideration as part of this resource consent application.
- There is no evidence to suggest that toxic discharges will result from the proposed wastewater conveyance and storage tunnel, noting that air discharge matters have been fully assessed and are considered to fall within acceptable levels.
- There is no evidence to suggest that the location of the proposed wastewater conveyance and storage tunnel beneath private properties will have any adverse future development implications.
- There is no evidence to suggest that greenhouse gas emissions will be anything more than negligible, as assessed by the applicant (section 6.16 of the AEE on page 75), noting that Ms Terlinden has not raised them as issues of concern in association with the proposed air discharge.
- Realignment of the tunnel and whether alternative / more direct routes are available is not a matter than can be considered, particularly given that the proposed alignment will result in acceptable levels of actual and potential effects and will be generally consistent with the applicable statutory documents.
- The application has been processed in accordance with the requirements of the RMA in respect of timeframes, and particularly with respect to the public notification period for the lodgement of submissions. Any 'rushing' of pre-lodgement consultation with the public and stakeholders is not a matter for consideration given that there is no requirement under the RMA that requires this to occur.

### Local Board comments

The Waitemata Local Board were notified of the subject application on 17 March 2023, with the following comments received on 21 April 2023:

*The local board is supportive of the Central Interceptor Extension to Point Erin and surrounding area. We would note that it is still necessary for Watercare to separate waste water and stormwater in the medium to longterm. We recommend that Watercare work with*

*other council and government agencies and utility companies to do other necessary work at the same time where possible and to be responsive to the requests of local submitters and the St Mary's Bay, Herne Bay, and Grey Lynn Residents Association and the Ponsonby Road Business Association to mitigate adverse impacts of work on residents, businesses and park users as far as practicable.*

These comments are noted and do not require further specific comment, noting that, for the reasons outlined above, I consider that the applicant has been responsive to the requests of local submitters to mitigate adverse impacts of the proposed works on residents, businesses, and park users as far as practicable.

## Financial and development contributions

In this instance, the payment of financial and development contribution is not applicable.

## Other relevant legislation

There is no other relevant legislation to consider.

# 16. Other relevant RMA provisions

## Conditions of resource consents – s108

The recommended conditions of consent are referenced in section 20 below, and, where relevant, expand upon those conditions included with the submitted application documents in response to the reviews from the respective Council specialists.

The rational for these conditions has been set out in the effects and statutory assessments undertaken above and they are considered appropriate and reasonable in that they will ensure that adverse effects that may result from the proposed development are avoided or appropriately remedied or mitigated.

## Lapsing of resource consents – s125

Under s125, if a resource consent is not given effect to within five years of the date of the commencement (or any other time as specified) it lapses automatically, unless the Council has granted an extension. A ten-year lapse date has been requested by the applicant due to the nature and scale of the project, being a large-scale infrastructure project.

In accordance with section 125 of the RMA, if consent is granted by the Independent Hearing Commissioners, I consider that a 10-year period would be acceptable in this instance. While I acknowledge the submission from Petrina Madeleine Madsen-Fisk objecting to this time period, it aligns with the 10-year period provided for as part of the Grey Lunn Tunnel consent and is an appropriate time period in the context of what is a large infrastructure project. It allows for contingencies to the commencement of works should unforeseen delays occur, noting that the time period for the construction works will remain the same, being two to three years from start to finish.

## Duration of resource consents – s123

In accordance with section 123 of the RMA, if consent is granted by the Independent Hearing Commissioners, I consider that it would be appropriate to impose the following duration periods:

- 10 years for the regional earthworks consent and for the diversion and discharge of stormwater during construction (which aligns with the lapse period for these construction related activities).
- 35 years for the diversion and dewatering of groundwater and the discharge of contaminants to air (being activities that extend beyond construction and are associated with operational matters).

## Monitoring – s35

As the recommended conditions of consent will require monitoring, a condition requiring the payment of fees to recover the actual costs of doing so is included within the set of recommended conditions.

# 17. Consideration of Part 2 (Purpose and Principles)

## Purpose

Section 5 identifies the purpose of the RMA as the sustainable management of natural and physical resources. This means managing the use of natural and physical resources in a way that enables people and communities to provide for their social, cultural and economic well-being while sustaining those resources for future generations, protecting the life supporting capacity of ecosystems, and avoiding, remedying or mitigating adverse effects on the environment.

## Principles

Section 6 sets out a number of matters of national importance which need to be recognised and provided for. The relevant matters with respect to the subject development include:

- preservation of the natural character of the coastal environment and its protection from inappropriate subdivision, use, and development;
- the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers;
- the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga; and
- the protection of historic heritage from inappropriate use and development; and
- the management of significant risks from natural hazards.

Section 7 identifies a number of “other matters” to be given particular regard by the Council in considering an application for resource consent. These include the efficient use of natural and physical resources and the maintenance and enhancement of amenity values and the quality of the environment.

Section 8 requires the consent authority to take into account the principles of the Treaty of Waitangi.

## Assessment

Any consideration of an application under s104(1) of the RMA is subject to Part 2. The Court of Appeal in *R J Davidson Family Trust v Marlborough District Council* [2018] NZCA 316 has held that, in considering a resource consent application, the statutory language in section 104 plainly contemplates direct consideration of Part 2 matters, when it is appropriate to do so. Further, the Court considered that where a plan has been competently prepared under the RMA, it may be that in many cases there will be no need for the Council to refer to Part 2. However, if there is doubt that a plan has been “competently prepared” under the RMA, then it will be appropriate and necessary to have regard to Part 2. That is the implication of the words “subject to Part 2” in s104(1) of the RMA.

In the context of this discretionary activity application for district and regional land use consents and permits for groundwater diversion and dewatering, the diversion and discharge of stormwater, and the discharge of contaminants to air, where the objectives and policies of the AUP(OP) were prepared having regard to the relevant statutory documents and Part 2 of the RMA, they capture all relevant planning considerations and contain a coherent set of policies designed to achieve clear environmental outcomes. They also provide a clear framework for assessing all relevant potential effects, and I consider that there is no need to go beyond the provisions of these documents and look to Part 2 in making this decision, as an assessment against Part 2 would not add anything to the evaluative exercise.

## 18. Conclusion

Overall, I consider that the proposal meets the relevant statutory tests of s104 and s104B.

The proposed development will result in adverse effects in respect of matters associated with sedimentation, land stability, groundwater, construction noise, vibration and traffic, traffic, air discharges, contamination, archaeology, flooding, stormwater, trees, landscape, visual, character, and amenity values, open space amenity, and cultural values. However, when such adverse effects are assessed in the context of the surrounding environment, and particularly an environment that lacks the essential infrastructure required to adequately address the combined discharge of stormwater and wastewater during high rainfall events, and are then balanced against the positive effects that will result from increased network capacity and reducing wastewater overflows to the receiving stream and coastal environments, overall, I consider that the actual and potential adverse effects will be acceptable.

For similar reasons, the proposal will be generally consistent with the relevant objectives and policies within the NPSUD, NPSFM, NZCPS, AUP(OP).

I therefore consider that the activity has met the statutory tests required to gain approval and I recommend that consent be **GRANTED**, subject to appropriate conditions.

## 19. Recommendation

### Recommendation on the late submissions

1. Under s37 and s37A of the RMA I recommend that the following late submissions are accepted:
  - Jennifer Ekanayaka and Dr Kumudith Ekanayaka from 55 Clarence Street, Ponsonby.



- Paula Elline Were from 55 Clarence Street, Ponsonby

The reason for this recommendation is because while these submissions were received on 27 April 2023 and 1 May 2023, Dr Ekanayaka was unable to submit his submission online despite attempting to do prior to submissions closing on 18 April 2023, while Ms Were was attending to a family illness that required intensive care hospital support. With the issues of relevance raised in these submissions being similar to those raised in other submissions and / or relating to issues that have been assessed by the applicant and Council specialists, these submissions do not adversely affect the applicant and should be accepted.

2. Under s37 and s37A of the RMA I recommend that the following late submissions are not accepted:

- Equal Justice Project, PO Box 47188, Ponsonby 1011.
- The St Mary's Bay Association, no address details given.

The reason for this recommendation is because these submissions were received 14 and 30 working days after the close of submissions. The Equal Justice Project submission raises greenhouse gas emissions and their effect on climate change, which is not an issue raised in any of the other submissions and is not a matter of concern as assessed by the Council's Specialist Air Quality Advisor, Ms Rachel Terlinden. The St Mary's Bay Association submission does not raise any issues of substance other the need to identify key issues and endeavour to negotiate solutions that work for all parties. For these reasons, these submissions may adversely affect the applicant and should not be accepted.

## Recommendation on the application for resource consent

Subject to new or contrary evidence being presented at the hearing, I recommend that under s104 and s104B of the RMA, resource consent be **GRANTED** to the discretionary activity application by Watercare Services Limited for a 1.6km extension to their consented Central Interceptor wastewater project (a 4.5m internal diameter wastewater conveyance and storage tunnel) at depths of between 20m and 60m from its current termination point at 46 and 48 Tawariki Street, Ponsonby to 94 Shelly Beach Road (Point Erin Park), Ponsonby.

The reasons for this recommendation are:

1. In accordance with an assessment under s104(1)(a) of the RMA, the actual and potential effects from the proposal will be of an acceptable nature and scale in this environment. This is because the proposed development has been designed in a manner that is respectful of its surrounding environment, with any adverse effects in terms of sedimentation, land stability, groundwater, construction noise, vibration and traffic, operational traffic, air discharges, contamination, archaeology, flooding, stormwater, trees, landscape, visual, character, and amenity values, open space amenity, and cultural values mitigated by:
  - a. the implementation of accidental discovery protocols and appropriate erosion and sediment control, geotechnical management, and tree protection measures, which will minimise adverse effects resulting from physically undertaking the proposed earthworks.
  - b. the detailed management measures proposed to ensure that adverse noise, vibration, dust, and traffic effects are appropriately addressed during the construction period.
  - c. the nature and design of the works within the existing floodplain and overland flow path,

which ensures that adverse effects with respect to increased levels of flooding and other natural hazard risks will not result.

- d. the implementation of detailed monitoring measures to quantify ground settlement and ensure that acceptable limits are not exceeded, with building and structure damage being unlikely and able to be remedied as necessary in the unlikely event that it does occur.
  - e. the manner in which stormwater will be discharged from the impervious construction areas ensures that adverse water quantity and quality effects will not result.
  - f. the likelihood of encountering contaminated material is low, with appropriate measures able to be implemented to address adverse effects on the environment and people in the unlikely event of contamination exposure.
  - g. the extent, frequency, and nature of the air discharges from the operational wastewater system will ensure that any adverse odour and dust effects are minimised to as great an extent as possible with respect to nearby sensitive residential receivers.
  - h. the design of the permanent vehicle crossing along with a prohibition of left turn movements and the provision of a traffic controller will ensure that service vehicles will be able to safely access the permanent control chamber and plant room amenities.
  - i. the appropriate bulk, scale, design, and location of the works, including the plant room, vent stack, and retaining walls within the Point Erin Park Open Space environment and the undertaking of detailed restoration and replanting works, which ensures that adverse natural character, landscape, and visual amenity effects will be suitably addressed; and
  - j. the positive effects in respect of:
    - providing network capacity for existing development and future growth.
    - reducing overflows to stream and coastal environments in the catchments it serves; and
    - enabling future works to further improve freshwater and coastal water quality within the Western Isthmus catchment.
2. With reference to an assessment under s104(1)(ab) of the RMA, there are no specific offsetting or environmental compensation measures proposed or agreed to by the applicant to ensure positive effects on the environment.
  3. In accordance with an assessment under s104(1)(b) of the RMA, the proposal is generally consistent with the National Policy Statement on Urban Development, the National Policy Statement for Freshwater Management; the New Zealand Coastal Policy Statement, and the relevant objectives and policies within Chapters B 'Regional Policy Statement', E1 'Water Quality and Integrated Management', E2 'Water Quantity, Allocation and Use', E11 'Land Disturbance – Regional', E12 'Land Disturbance – District', E14 'Air Quality', E25 'Noise and Vibration', E26 'Infrastructure' E27 'Transport', E36 'Natural Hazards and Flooding' and H7 'Open Space Zones' for the following reasons:
    - a. The necessity and benefits of the proposed wastewater conveyance and storage tunnel are recognised in terms of enabling the efficient discharge of wastewater from the upstream catchment and the benefit this will provide for existing development and the facilitation of future growth.

- b. The works will improve the resilience of existing public infrastructure, allowing for increased levels of urban development and significantly reducing the overflow of untreated discharges from the combined wastewater and stormwater network into the receiving environment during periods of high rainfall.
- c. Erosion and sediment control measures of suitable scale and design will be implemented, which will limit the potential for erosion to occur and suitably control and contain any sediment runoff that is unavoidable, noting the importance of doing so with respect to general environmental and cultural values.
- d. The earthworks will be undertaken in accordance with geotechnical recommendations, which in combination with the implementation of suitably designed retaining structures ensures that adverse land stability issues associated with the physical excavation works proposed are highly unlikely to result.
- e. The proposed earthworks will be minimal in extent in terms of the area of encroachment in the floodplain and narrowing of the overland flow path, which ensures that flow velocities will be low and that appropriate levels of storage capacity will be maintained. With a key purpose of the development being to reduce wet-weather network overflows that result from the combined wastewater and stormwater network, adverse flooding effects for upstream and downstream sites will not result, with the likely outcome being a reduction in associated levels of flood risk on a catchment-wide basis.
- f. There are no known sites or areas of historic heritage or cultural value located within the works areas as recognised or identified within the AUP(OP), with the implementation of accidental discovery protocols ensuring that any unknown artefacts that may be uncovered and that are of historic heritage importance or of interest to Māori will be identified and protected and preserved as necessary. Cultural induction, works blessings, and input from Ngaati Te Ata Waiohua, Ngaati Whanaunga and Te Ākitai Waiohua into the preparation of the required Park Restoration and Landscape Plan, being the only Mana Whenua groups that expressed interest in the development, will further ensure that cultural values are suitably addressed.
- g. Adverse noise and vibration effects resulting from undertaking the proposed works will be suitably managed through the implementation of a detailed construction noise and vibration management plan and best practicable option construction management measures. This includes the installation of temporary noise barriers, the appropriate selection of construction equipment, compliance with structural integrity vibration limits, liaising with neighbouring site occupants to ascertain levels of sensitivity and suitable times for undertaking high disturbance works, and the implementation of more detailed activity-specific management plans as necessary. These factors ensure that adverse noise and vibration effects will be minimised to as great an extent as possible, and that any resulting adverse effects, noting the limited duration of the proposed exceedances, will be mitigated to acceptable levels.
- h. Construction traffic will be managed through the implementation of a detailed construction traffic management plan, which will ensure that any adverse traffic and pedestrian safety effects as a consequence of the proposed works, including increased levels of vehicular activity, public footpath, and path closures through Point Erin Park, and heavy vehicle traffic flows along Curran Street and past Ponsonby Primary School, will be suitably

addressed.

- i. The nature of the dewatering works is such that they will not result in any adverse effects on existing surface flow regimes.
- j. There are no lawful groundwater takes or diversions in the area that may be affected by the dewatering works proposed on either a standalone basis or cumulatively with other works that are occurring in the area.
- k. The level of ground settlement that will result from the proposed groundwater diversion and dewatering works has been assessed as low. To address any unforeseen settlement risk due to the uncertainty of geology and related groundwater flows and performance of the ground retaining structures, detailed monitoring of the changes to groundwater levels is proposed, with the works to be adjusted as necessary to ensure that settlement levels remain within acceptable limits. Pre-and-post-condition surveys of buildings and structures potentially susceptible to damage are also proposed, with remedial works to be implemented to address any damage that may occur, noting that the risk of this occurring has been assessed as low.
- l. The small extent of impervious surfacing within the proposed construction areas and the manner in which surface water will discharge via sheet flow, along with their temporary nature and location within their respective catchments ensures that the diversion and discharge of stormwater in respect of water quality and quantity will be managed in an appropriate manner with respect to the receiving environment, particularly with respect to downstream flooding, coastal habitats, public health and safety, aquatic biodiversity and mana whenua values.
- m. Air discharges from the relief vent will be infrequent and will occur vertically via the proposed vent stack, which in conjunction with the rate of discharge will ensure that dispersal is such that adverse odour effects as they relate to local residents and users of Point Erin Park will be minimal in extent. While odour from the plant room will not be discharged vertically, such discharges will be even less frequent (a return period of more than 10 years), which combined with separation distances and the likely wind direction ensures that adverse odour effects with respect to sensitive residential receptors will be unlikely to result. This is particularly so when compared to odour released from current wastewater overflow events, noting that one of the key purposes of the proposed development is to reduce / eliminate these discharges.
- n. The permanent vehicle crossing that will access the control chamber and plant room will be used infrequently, and will be accessed by right turn movements only, as the proximity of the crossing to the intersection of Sarsfield Street and Curran Street and the presence of other berm elements are such that left turn movements would be unsafe. With a traffic controller to be used to guide exiting vehicles onto Curran Street given that exit angles and the position of the truck will be such that a driver will not have sufficient visibility of oncoming vehicles, the access arrangements will function in an acceptable manner with respect to traffic and pedestrian safety.
- o. The above ground physical works within Point Erin Park are consistent with the bulk, form, scale, and design anticipated to enable the ongoing operation of significant underground infrastructure, as demonstrated by the provision of similar amenities elsewhere along the Central Interceptor Project to the south. While within an Open Space

environment, they are small in size in comparison to the overall size of Point Erin Park and have been located in areas that will minimise interference with its zoned informal recreation and sport and active recreational uses. Although the park, including its public usage and visual amenity values, will be adversely affected during construction, this will be temporary and is unavoidable. Any subsequent adverse effects, including any adverse visual effects associated with above ground physical works will be fully remediated through the development and implementation of detailed design plans and a Park Restoration and Landscape Plan, which require the landscape, amenity, and recreational values of Point Erin Park to be restored and enhanced. These factors, in combination with separation distances from neighbouring residential properties and the further mitigation provided by topographical differences, viewing angles, and the presence of intervening vegetation, ensure that adverse natural character, landscape, visual, and residential amenity effects will fall well within acceptable levels.

4. The provisions of s105 of the RMA will be met, as the proposed discharges represent the best practicable option, the receiving environment will not be adversely affected in an unacceptable manner and discharges into an alternative receiving environment is neither practical nor necessary.
5. The provisions of s107 of the RMA will be met, as after reasonable mixing, proposed discharges will not give rise to any of the following effects on receiving waters:
  - a. The production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials.
  - b. Any conspicuous change in the colour or visual clarity.
  - c. Any emission of objectionable odour.
  - d. The rendering of fresh water unsuitable for consumption by farm animals.
  - e. Any significant adverse effects on aquatic life.
6. In the context of this discretionary activity application where the relevant objectives and policies in the relevant statutory documents were prepared having regard to Part 2 of the RMA, they capture all relevant planning considerations and contain a coherent set of policies designed to achieve clear environmental outcomes. They also provide a clear framework for assessing all relevant potential effects such that there is no need to go beyond these provisions and look to Part 2 in making this decision as an assessment against Part 2 would not add anything to the evaluative exercise.

## 20. Consent conditions

Please see **attachment 5** for the list of recommended consent conditions.



# ATTACHMENT 1

## APPLICATION DOCUMENTS

This attachment has not been re-produced in this agenda. The information can be found at

<https://www.aucklandcouncil.govt.nz/have-your-say/have-your-say-notified-resource-consent/notified-resource-consent-applications-open-submissions/Pages/ResourceConsentApplication.aspx?itemId=554&applNum=BUN60415108>



**ATTACHMENT 2**

**COUNCIL SPECIALIST REVIEWS**



**Application Number:** BUN60415108  
**Address:** 94 Shelly Beach Road, Ponsonby  
**Property:** 11267202  
**Revision / Status:** 1.01 Final

## Proposal and Site Description

The Project involves the construction, commissioning, operation and maintenance of a wastewater interceptor and associated activities at Point Erin Park in Herne Bay.

## Review/Audit of Report submitted as part of the Application

AEE (Tonkin & Taylor, February 2023)

Certificate of Title (No Interests to note)

Plans

Groundwater & Settlement Effects Assessment (Tonkin and Taylor, February 2023)

Flood Memorandum (25<sup>th</sup> January 2023)

Proposed Conditions (Tonkin & Taylor, February 2023)

Section 92 response (Tonkin & Taylor, 19<sup>th</sup> April 2023)

Public records reviewed on GIS.



## **Main Points/Discussion**

This is a further extension of the Central Interceptor project. Regulatory Engineering has reviewed the documentation and the proposed conditions which are understood to be derived from the previous applications. Regulatory Engineering concurs with the proposed conditions which will cover most Engineering matters assessed.

### **Earthworks**

At a district level, above ground earthworks encroach into a flood plain.  
The earthworks are of a size that do not adversely affect the function of the flood plain.

The proposed silt and sediment control measures are within keeping for the size and scale of the works.

Regulatory Engineering believes that the proposed conditions for construction management and silt and sediment control appear to cover matters at a district level.

***Regulatory Engineering concurs the applicants' proposed conditions and understands that no further earthworks related conditions will be required.***

### **Geotechnical**

Regulatory Engineering has reviewed the Groundwater & Settlement Effects Assessment and does not have any further geotechnical concerns.

### **Overland Flow Path**

The site of near the proposed control room is subject to overland flow and flooding.

A small section of the supporting earthworks for the building encroaches into the flood plain.

Regulatory Engineering has reviewed the flood memorandum and on a general review concurs that the earthworks would have negligible effect on the flood plain.

There is a 1050mm diameter stormwater pipe that is proposed to be removed under the proposed controlled building. It is unclear in the application of the current purpose of this pipe, but it is thought to be some form of overflow bypass. Removing this pipe may have an effect on the flood plain that has not been assessed.

## **S92 E36**

Please review and provide assessment of any effect on the flood plain and overland flow as a result of removing the stormwater pipe under the proposed control building.



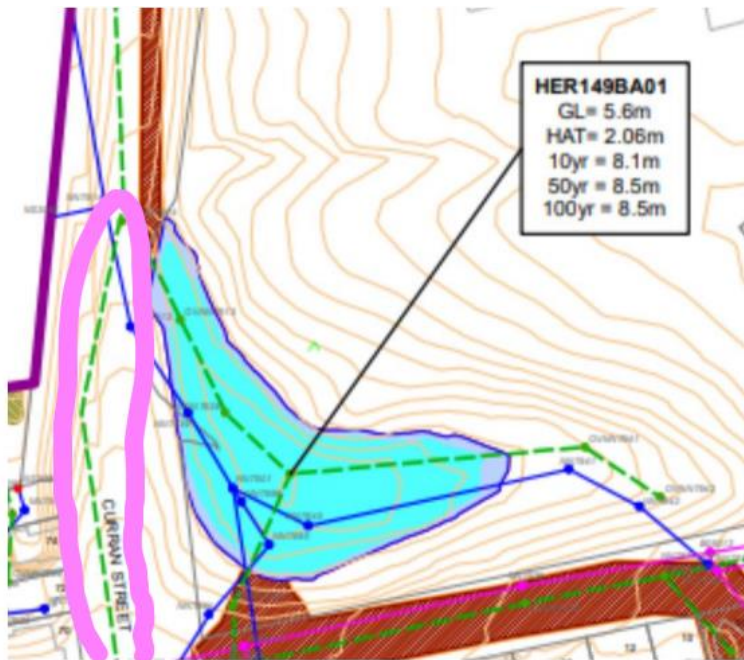


Figure 2 Auckland Council flood hazard mapping

### Other Utility Services

The proposed works include the removal of a stormwater pipe.

It is unclear on the plans what the purpose of the existing pipe is and what effect removing the pipe will have on the surrounding network, overland flow path and flood plain.

### S92 Other Matters

Please provide further details and assessments of effects related to the removal of the stormwater pipe under the proposed control building.

### Further comment after s92

Regulatory Engineering has reviewed the section 92 response and is satisfied that there is no effects arising from removing the pipe.

The response states *'This pipe is the existing Sarsfield overflow collector. Flows from this pipe will be diverted into the Point Erin Tunnel. It will be maintained during the construction period and will continue to operate/perform. At commissioning of the Point Erin Tunnel, flows will be picked up by the control chamber and diverted into the Central Interceptor. Therefore, there will be no effects on the flood plain and overland flow path.'*

## Conclusion & Recommendation

Regulatory Engineering Central supports the proposed development subject to the imposition of the applicants proposed condition set for engineering matters.

**Signed**

 **Matt Revall**

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Matthew Revall  
BEng (Hons) CEng (UK) CPEng IntPE(NZ) MICE CMEngNZ (Civil, Environmental)

**Principal Project Manager Regulatory Engineering**

**Date**

1.01Final 21<sup>st</sup> April 2023

## Technical Memo – Specialist Input Unit

To:	Colin Hopkins – Principal Project Lead, Premium Resource Consents
From:	Bridget Kelly, Consultant Specialist – Stormwater, Wastewater and Industrial Trade Activities, Specialist Input Unit
Date:	3 May 2023

### 1.0 APPLICATION DESCRIPTION

#### Application and property details

Applicant's name:	Watercare Services Limited
Application number:	BUN60415108 DIS60415110
Activity type:	Diversion and Discharge of Stormwater
Purpose description:	To divert and discharge stormwater from associated infrastructure for the extension to the Central Interceptor
Site address:	94 Shelly Beach Road, Westhaven, Auckland 1011 (Point Erin Park)

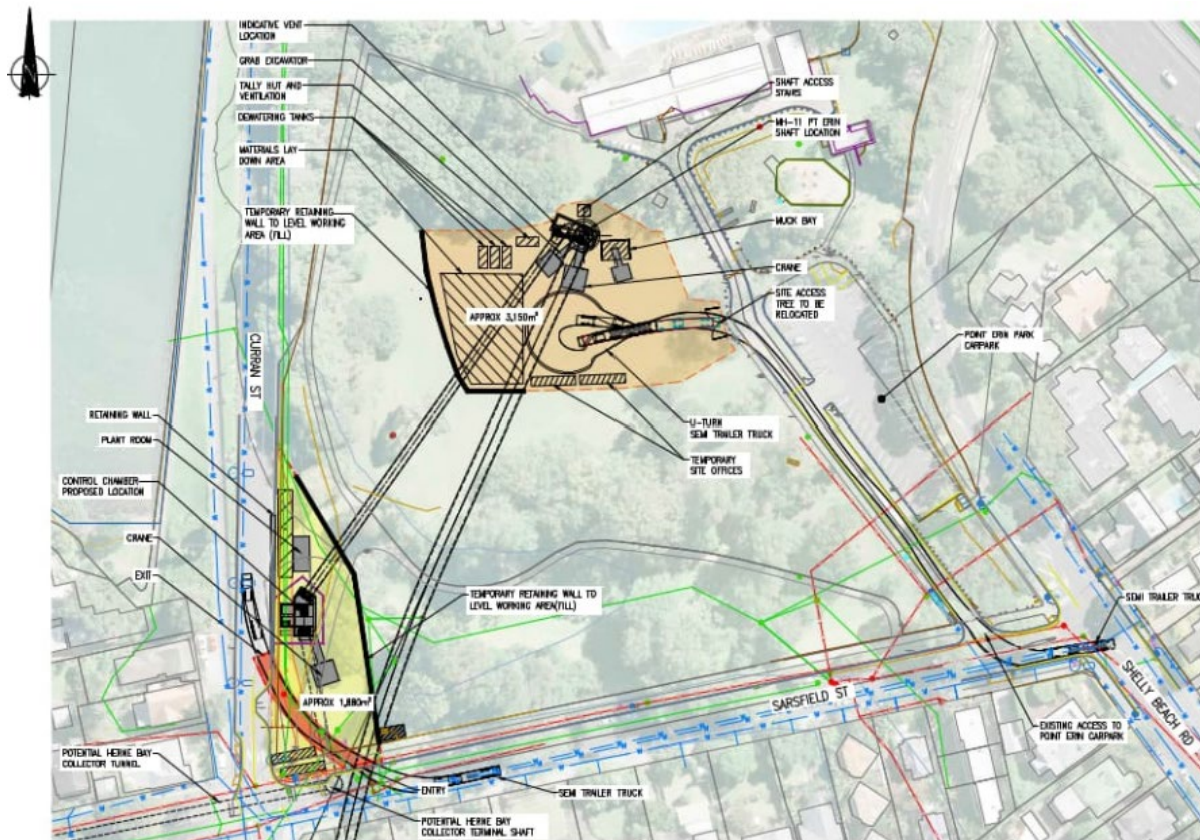
### 2.0 PROPOSAL, SITE AND LOCALITY DESCRIPTION

#### 2.1 Proposal relevant to this permit/consent only

The Applicant, Watercare Services Limited, is proposing to undertake a 1.6km extension to the consented Central Interceptor (a 4.5m internal diameter wastewater conveyance and storage tunnel).

The works at Point Erin Park will occur at two locations in the park with the main construction area for the proposed terminal shaft as shown in orange in Figure 1 and another area for the proposed control chamber and plant room shown in yellow in Figure 1.

The main construction area include approximately 3,150m<sup>2</sup> of impervious area for the terminal shaft and temporary 1,880m<sup>2</sup> of impevious area for the construction of the control chamber and plant room, along with connections to the local sewer network. This is a total impervious area of 5,030m<sup>2</sup> associated with the above ground works.



**Figure 1. General layout of works within Point Erin Park**

Stormwater runoff from the construction areas will discharge from the impervious surfaces to the surrounding grass and vegetated areas as sheet flow, via the sediment treatment and detention devices during the construction period. The existing grass vegetation will provide preliminary biofiltration and erosion protection.

## 2.2 Site description

The proposed works will be undertaken in two locations in Point Erin Park.

The Applicant has provided a description of the site and surrounding environment in Section 3.1 of the application report. In brief:

- Point Erin Park is a large grassed open space which is approximately 2.1 ha and is currently used for a variety of recreational purposes. The park also contains native vegetation at the southern end of the site which is subject to the *Significant Ecological Area* overlay in the AUP.
- It is owned by Auckland Council and contains the Point Erin Pools in the northern area of the park. The Pools are located at the highest point of the site.
- The site is within the *Open space – Sports and Active Recreation Zone* and *Open Space – Informal Recreation Zone* under the AUP.



- The surrounding area is predominantly residential, with the Auckland Harbour Bridge located to the north of the site and Westhaven Marina occupies a large area of the coastal marine area to the north and east of the site.
- It is within the Grey Lynn stormwater catchment and the receiving environment is the Waitematā Harbour.

The location of the site is shown in the maps below (Auckland Council GeoMaps, 2023)



## 2.3 Background and site history

No relevant regional stormwater consents have been held for the site prior to this application.

## 3.0 REASON FOR CONSENT

### 3.1 Reasons for consent

#### **Auckland Unitary Plan – Operative in Part**

Consent is required for the diversion and discharge of stormwater under Rule E8.4.1(A10) as a **Discretionary Activity** for the creation of more than 5,000m<sup>2</sup> of impervious area within an urban area.

### 3.2 Other activities considered

Consent is not required under E9 as the proposal does not include the development of new or redevelopment of existing impervious area associated with a High Contaminant Generating Car Park or a High Use Road.

Consent is not required under E10 as the site is not within a SMAF area.

## 4.0 TECHNICAL ASSESSMENT OF EFFECTS

### 4.1 Assessment of effects on the environment

The Applicant's Agent has discussed the potential effects resulting from stormwater runoff and the proposed measures to avoid remedy or mitigate those effects within the application report.

The assessment summarised through this report focusses on matters relevant to the regional stormwater consent framework, and should be read in conjunction with separate Development Engineering reporting, which addresses other detailed matters including flooding and overland flow paths.

In summary, the following effects and proposed measures have been identified:

#### **Stormwater quality**

The construction areas are not considered sources of significant pollutants and therefore no quality treatment is proposed as no adverse effects are expected. Runoff from the areas will be discharged to the surrounding grassed area, via the sediment treatment and detention devices during the construction period.

The omission of stormwater quality treatment regarding this proposal is considered appropriate in the context of the development and the anticipated contaminants such that the effects of stormwater discharging to the receiving environment will be adequately avoided or suitably mitigated.

#### **Stormwater quantity**



The site is adjacent to the Waitematā coastal receiving environment and is not within a SMAF area. The construction area in the southwestern corner is identified as being partly within a floodplain and flood prone area. The proposed impervious areas will interfere with an overland flow path, however the Regulatory Engineering has reviewed the flood memorandum and on a general review concurs that the earthworks would have negligible effect on the flood plain.

It is proposed that runoff from the construction areas is discharged as diffuse sheet flow to the surrounding grassed area rather than at a concentrated discharge point and therefore should not create any erosion issues. Attenuation by means of infiltration to ground is considered suitable to mitigate any expected effects on stormwater quantity in this context.

The water quantity effects on the downstream receiving environment are therefore considered to be adequately avoided and suitably mitigated.

### **Long-term ownership of proposed devices**

No stormwater treatment devices are proposed to be built for this activity.

### **Conclusion**

Overall, it has been assessed that any effects of the proposed activity on the environment as identified above will be suitably avoided or adequately mitigated.

## **5.0 STATUTORY CONSIDERATIONS**

### **5.1 Relevant statutes**

#### **Auckland Unitary Plan – Operative in Part**

The following provisions of the AUP relate to the management of stormwater.

- Objectives - E1.2.(1)-(3)
- Policies - E1.3.(9)-(11), E2.3.(22)

The proposed stormwater management will achieve the above objectives through the proposed stormwater management. It is assessed that the proposed stormwater management is the Best Practicable Option for the site. The following general objectives and policies of the plan may also be relevant to the planner's assessment of the application:

- General Policies - E1.3.(1)-(3)
- Chapter B7 Natural Resources – Auckland Regional Policy Statement

The proposal addresses the matters set out within the relevant policies and objectives of the AUP. The proposed stormwater management addresses the potential effects of the development on the receiving environment as required within the objectives and is generally consistent.

## **5.2 Other statutory documents**

The following statutory documents are considered relevant to the planner's assessment of the application:

- New Zealand Coastal Policy Statement 2010
- Hauraki Gulf Marine Park Act 2000

The above documents have been taken into account and it is concluded that the proposal relevant to this application is in accordance with the relevant objectives and policies of these documents.

## **5.3 Matters relevant to discharge or coastal permits (Section 105) and restrictions on certain permits (Section 107)**

The provisions of Section 105 have been met as it has been determined that there are no significant effects on the receiving environment as concluded in Section 4 of this memo. It has been assessed that the applicant's reasons for the proposed choice of stormwater management are appropriate in the circumstances and regard has been had to alternative methods of discharge applicable in this case.

Section 107(1) of the RMA places restrictions on the granting of certain discharge permits that would contravene Sections 15 or 15A of the RMA. The proposal will not give rise to any of the effects listed in Section 107(1).

## **5.4 Duration of consent: Section 123**

### *Stormwater diversion and discharge*

It is normally appropriate to set a term of 35 years because the nature of the activity subject to consent is unlikely to alter during this period, and the ongoing maintenance of the stormwater management systems as required by the recommended conditions of consent will ensure that the required standards continue to be met. The applicant has however sought a consent duration of 10 years due to the temporary nature of the work which is agreed is appropriate.

# **6.0 CONDITIONS**

## **6.1 General conditions**

The following general conditions are recommended:

- s36 and charges
- access to the site
- lapse date
- works in accordance with the plans

## 6.2 Specific consent conditions for permit number – DIS60415110

As no significant adverse effects are expected as a result of the proposed works, no specific conditions are recommended.

The following general conditions which are specific to management of stormwater are recommended:

### Expiry date

X.1 Stormwater diversion and discharge permit shall expire on (date to be inserted by lead planner; 10 years from decision date) unless it has lapsed, been surrendered or been cancelled at an earlier date pursuant to the RMA.

## 6.3 Advice notes

No additional specific advice notes recommended.

## 7.0 REVIEW

### Memo prepared by:

Bridget Kelly



Consultant Specialist – Stormwater, Wastewater and Industrial Trade Activities  
**Specialist Input, Resource Consents**

Date:

10<sup>th</sup> May 2023

### Memo and technical review reviewed and approved for release by:

Rod Dissmeyer



Team Leader – Stormwater, Wastewater and Industrial Trade Activities  
**Specialist Input, Resource Consents**

Date:

4<sup>th</sup> May 2023

## 8.0 DEFINITIONS

AUP	Auckland Unitary Plan – Operative in Part
CMA	Coastal Marine Area (as defined by the RMA)
RMA	Resource Management Act 1991
SMAF	Stormwater Management Area Flow (as defined by the AUP)

## Technical Memo – Specialist Unit

To: Mark Ross – Consultant Planner – Sentinel Planning

From: Pat Shorten, Principal – Geotechnical Engineering, Fraser Thomas Ltd

Date: 7 August 2023

### 1.0 APPLICATION DESCRIPTION

#### Application and property details

Applicant's Name: Watercare Services Ltd

Service Centre Application Number / Water Allocation Consent Number: BUN60415108 & WAT60415460

Activity type: Ground Dewatering and Groundwater Diversion

Site address: 44-48 Tawariki Street, Grey Lynn to Point Erin Park, Herne Bay

### 1.1 Application Documents

Key application documents are as follows:

- A report titled “*CI Extension – Point Erin Tunnel: Screening-level Assessment of Groundwater and Settlement Effects*”, prepared by Tonkin & Taylor (T&T), dated 10 February 2023, job No. 30552.9081 v1.
- A draft report titled “*CI Extension to Point Erin – Geotechnical Factual Report*”, prepared by Beca Ltd, dated 10 February 2023, rev. 1.1
- A report titled “*Central Interceptor – Point Erin Tunnel – Assessment of Effects on the Environment*”, prepared by T&T, dated February 2023, job No. 30552.9081 v1, referred to as “*The AEE*” in this Technical Memo.
- A report titled “*Point Erin Central Interceptor: Addendum Report – Assessment of Groundwater and Settlement Effects*”, prepared by T&T, dated 17 March 2023, job No. 30552.9081 v1, referred to as “*The Addendum Report*” in this Technical Memo.
- A letter report titled “*Response to s92 requests - Point Erin Tunnel*”, prepared by T&T dated, 19 April 2023, job No.30552.9082.

**Consent No:** WAT60415460

**Address:** 44-48 Tawariki Street, Grey Lynn to Point Erin Park – Herne Bay.



The application was technically peer reviewed on behalf of Auckland Council by Fraser Thomas Limited (FTL), who also prepared this Technical Memo.

## 2.0 PROPOSAL, SITE AND LOCALITY DESCRIPTION

## 2.1 Proposal relevant to this permit/consent only

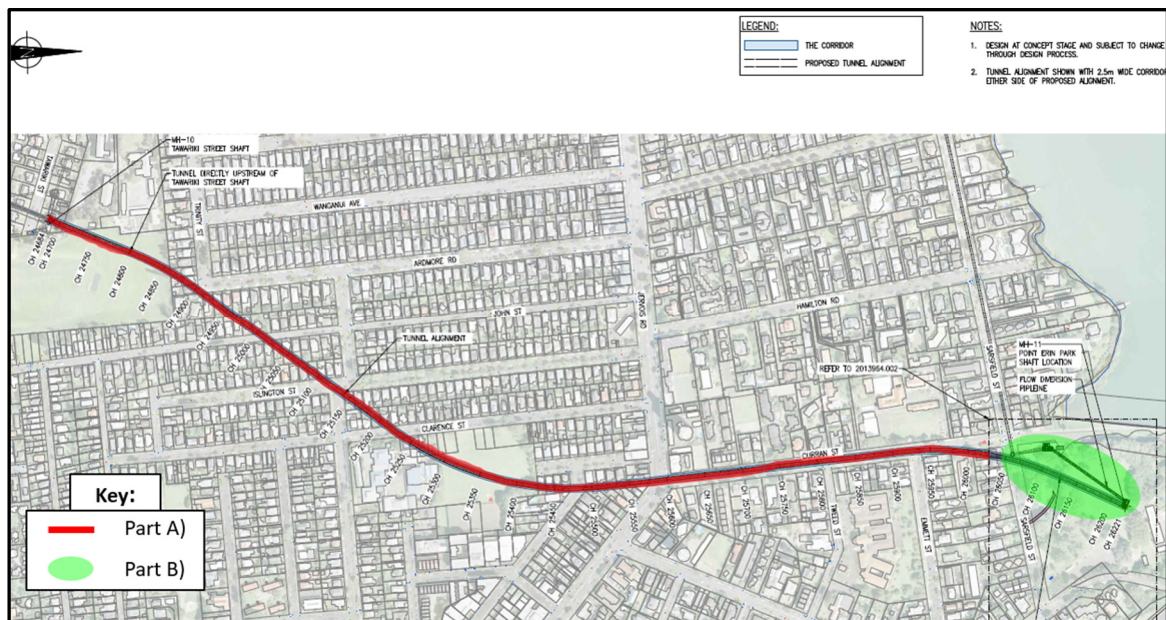
The Applicant is seeking consent to take groundwater for dewatering purposes and to divert groundwater in the short-term during the construction of “*The Point Erin Tunnel*”, which is a 1.6 km-long wastewater extension of the Central Interceptor (CI).

The works (Part A in Figure 1) will be undertaken using a Tunnel Boring Machine (TBM), from a shaft approximately 25 m deep at 44-48 Tawariki Street in Grey Lynn to Point Erin Park, at depths ranging between approximately 20 metres below ground level (m bgl) and 60 m bgl. The tunnel will reach its shallowest depth of 17 m bgl as it enters Point Erin Park.

It is anticipated that the existing CI TBM will be used, which is a Herrenknecht TBM Earth Pressure Balance (EPB) shield machine with an outside diameter of 5.44 m.

In addition, works at Point Erin Park (Part B in Figure 1 and on Figure 2) will include the excavation of a 26 m deep “*Terminal Shaft*” south of the buildings for the Point Erin Pools and a 17 m deep control chamber in the southwest corner of Point Erin Park, near Curran Street.

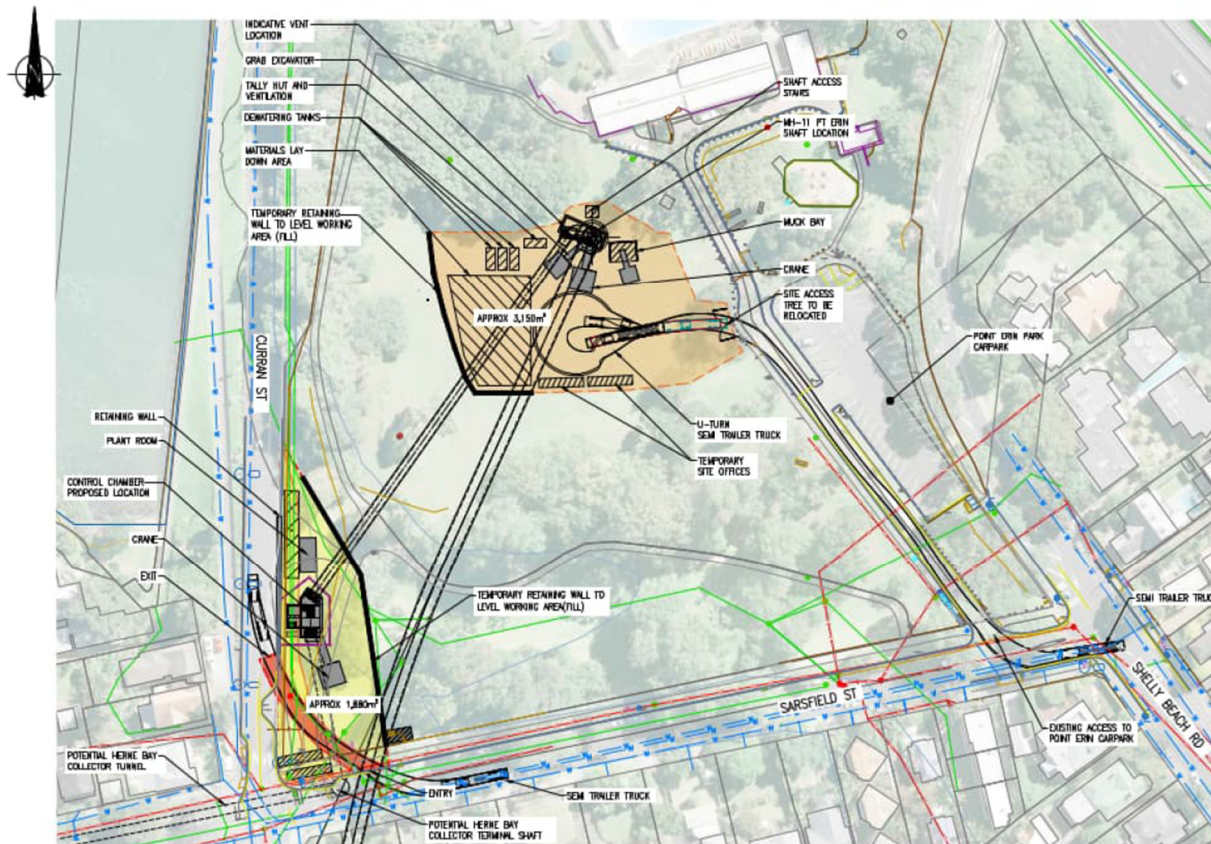
**Figure 1 - Proposed Point Erin Tunnel Alignment Plan.**



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**Figure 2 – Layout of Works within Point Erin Park. Terminal Shaft Area in orange and Control Chamber, Plant Room and Associated Construction Area in yellow.**



In relation to Part A works, in their AEE, T&T state:

- “The Point Erin Tunnel involves the continuation of the CI TBM from the current termination point at Tawariki Street in Grey Lynn to Point Erin Park in Herne Bay. The tunnel will have a length of up to approximately 1.6 km and be constructed at a slope of between 1:750 to 1:1000. The tunnel has an internal diameter of 4.5 m and is located entirely below ground at depths generally ranging between 20 m and 60 m depending on local topography. It will reach its shallowest point of approximately 17 m as it enters Point Erin Park where the terminal shaft is proposed to be located. There are no surface works required for the tunnel between Tawariki Street and Point Erin Park.”
- “Excavation of the tunnel will continue using the existing CI TBM. This machine is currently in operation and is excavating the southern section of the CI Tunnel with daily excavation rates of approximately 15-20 m/day. The TBM uses a cutter head to grind through a variety of different soils and rocks. Construction spoil from the Point Erin Tunnel will be taken back down the tunnel and removed at the existing consented/designated CI May Road construction site and does not form part of this application.”

- *“The final alignment will be confirmed through detailed design and will be located within a 10 m wide horizontal corridor i.e. within 5 m either side of the centreline shown in Figure 1 above. Vertically, the tunnel will be located within a corridor of -2 m/+2 m based on the centreline and tunnel invert level. The final level of the tunnel and alignment within the 10 m wide horizontal corridor will be determined by the required hydraulic grade and the specific geology encountered during detailed design.”*
- *“The Grey Lynn end of the tunnel is located within the Tawariki Street construction site (existing Watercare Designation 9468). Tawariki Street is a cul-de-sac defined by single-lot residential development. Land uses along the southern half of the tunnel alignment include residential dwellings, local businesses and a commercial area focused along the Jervois Road ridge line, a number of schools (Marist School Herne Bay, St Pauls College and Ponsonby Intermediate) and the road network.”*
- *“The northern half of the alignment is largely contained within the Curran Street road corridor which is bordered by adjacent residential and business land uses. Ponsonby Primary School is also located towards the northern end of the alignment.”*

In relation to Part B works, in their AEE, T&T state:

- *“The terminal shaft and associated construction area is proposed to be located in the grassed area immediately to the south of the Point Erin Pools. The terminal shaft provides for the removal of the CI TBM.”*
- *“The control chamber, plant room and associated construction area is proposed to be located towards the southwest corner of Point Erin Park near the intersection of Curran and Sarsfield Streets (referred to as the south western construction area”*

T&T has incorporated historical geotechnical information and the findings of seven machine boreholes (TPE\_BH01 to TPE\_BH03, TPE\_BH03A, TPE\_BH04 to TPE\_BH06) drilled between November 2022 and January 2023 along the tunnel alignment to depths of between 37 m bgl and 75 m bgl, with vibrating wire piezometers installed, together with two cone penetration tests (CPT001 & CPT002) undertaken in Point Erin Park, to depths of approximately 6.9 m bgl and 9.2 m bgl, to create a ground model along the alignment of the proposed pipeline and within Point Erin Park, using the software package “Leapfrog.”

In the AEE, T&T state:

*“Five geological units have been defined for the Point Erin Shaft Site and the tunnel alignment.”* The Formations that have been modelled are presented in Table 1 below:



**Table 1 – Geological Formations Modelled, Tonkin + Taylor, February 2023**

Code	Formation	Description
FILL	Fill	Clay, silt, gravel, sand, cobbles, boulders, and refuse.
TAKAANINI	Takaanini Group Alluvium (Previously referred to as Tauranga Group Alluvium)	Clay, silt, and sand mixtures, occasionally with minor organics
RES ECBF	East Coast Bays Formation	Residual soil (SPT N <20)
WECBF	East Coast Bays Formation	Weathered soil/rock (SPT N 20 – 50)
ECBF ROCK	East Coast Bays Formation	Sandstone/siltstone rock (SPT N 50+)

Packer permeability testing was undertaken in the fractured East Coast Bay Formation (ECBF) rock in six of the machine boreholes. The results of the testing were analysed by T&T using “*Aquifer Test Pro*” software to derive in-situ permeability values.

In addition, after the piezometers were “*developed*”, falling head and constant head permeability tests were undertaken. Permeability (hydraulic conductivity) values were calculated using the Hvorslev (1951) and Bouwer & Rice (1976) methods for falling head tests and the Barker (1988) and Jacob-Lohman (1952) methods for constant head tests.

## 2.2 Background and site history relevant to this permit/consent only

A bundled resource consent BUN60334952 was granted to the Applicant on 9 October 2019 for the Grey Lynn Tunnel (GLT), which included the shaft at 44-48 Tawariki Street, and a consent for dewatering and groundwater diversion WAT60334954.

No other dewatering and groundwater diversion consents are held along the route of the Point Erin Tunnel or within Point Erin Park.

## 3.0 REASON FOR CONSENT – GROUND DEWATERING AND DIVERSION

### 3.1 Reasons for consent

Auckland Unitary Plan (Operative in Part) (AUP(OP))

Chapter E, Standard E7.6.1.10 and Standard E7.6.1.6 provide the permitted activity criteria under the AUP(OP) for the diversion of groundwater associated with any excavation, including a trench or tunnel and dewatering or groundwater level control associated with a groundwater diversion permitted under Standard E7.6.1.10.

- The water take (dewatering) during tunnel and shaft excavations will be for more than 30 days and hence will not comply with E7.6.1.6 (2)

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- The Point Erin Tunnel will have a diameter greater than 1.5 m and hence it will not comply with E7.6.1.10 (1b).
- The Point Erin Tunnel will extend more than 2 m below the natural groundwater level and will impede the flow of groundwater over a length of more than 20 m and hence will not comply with E7.6.1.10 (4).
- The proposed Terminal Shaft, which extends below natural groundwater level, is deeper than the distance to the nearest building at Point Erin Pools, and the Control Chamber, which also extends below natural groundwater, is deeper than the distance to Curran Road and hence, will not comply with E7.6.1.10 (5a).

Accordingly, consent is required under AUP(OP) Chapter E Rule 7.4.1 (A28) for the diversion of groundwater and Chapter E Rule 7.4.1 (A20) for dewatering associated with excavation as **Restricted Discretionary Activities**.

## 4.0 TECHNICAL ASSESSMENT OF EFFECTS

### 4.1 Assessment of Effects on the Environment

The Applicant's planner, T&T has assessed the effects of the proposed activity on the environment that are likely to arise from the works, along with any mitigating factors in their report titled:

- “Central Interceptor – Point Erin Tunnel – Assessment of Effects on the Environment”, dated February 2023, Job No. 30552.9081 v1.

Regarding effects on the regional groundwater availability T&T state:

*“The tunnel alignment is through the Auckland Isthmus Waitematā aquifer i.e. primarily ECBF rock unit. Auckland Council confirmed that this aquifer has a groundwater availability of 1,302,001 m<sup>3</sup>/year and that 966,664 m<sup>3</sup>/year remained available for allocation in February 2023. The dewatering rates presented in this report are orders of magnitude (trivial) less than the groundwater available for allocation and significant volumes remain for allocation to other users.”*

Regarding stream depletion effects, T&T state:

*“The nearest stream mapped on the LINZ topographical map is located approximately 300 m west of the southern end of the tunnel alignment. There are no stream monitoring stations reported by Auckland Council near any of the proposed excavations, further indicating that there are no major streams in proximity to the site. However, we note that there may be unmapped (i.e. small) streams in the local area. Our evaluation is that pumping rates required for construction dewatering purposes are small (i.e. less than 1 L/s) as the hydraulic conductivity of the ECBF is low. This means that, if unmapped (i.e. small) streams in the local area are present, stream depletion will be negligible even if this*

*pumping were to occur for 150 days. On this basis stream depletion effects are assessed as negligible.”*

Regarding the occurrence of saltwater intrusion, T&T state:

*“Saltwater intrusion occurs when groundwater in an aquifer near the coast is replaced by seawater from the ocean. The Ghyben-Herzberg relation predicts that the depth below sea level to the saline interface is approximately 40 times the height of the freshwater table above sea level. This height results from the assumption that the density of freshwater is 1,000 kg/m<sup>3</sup> and 1,025 kg/m<sup>3</sup> for seawater.” ... “ Saltwater intrusion is unlikely to be observed during the construction of the tunnel, terminal shaft, and control chamber. However, should it occur, effects are considered inconsequential due to the low groundwater use in the aquifer”.*

FTL concur with the above assessments undertaken by T&T and consider that the effects on any users of the aquifer will be less than minor, there will not be any adverse effects on any nearby streams and that saltwater intrusion is considered to be unlikely, on the basis that dewatering at the terminal shaft and control chamber excavations is limited and temporary in nature.

## **4.2 Assessment of Effects on the Building, Structures Infrastructure and Public Services**

In February 2023, T&T prepared a screening-level settlement effects assessment based on published datasets and site-specific available information at that time. This screening-level assessment was refined when the site-specific geotechnical investigation data became available in March 2023. The updated assessment is referred to as “*The Addendum Report*” below.

### **4.2.1 Groundwater Drawdown for the Tunnel Alignment**

In the AEE, T&T state:

*“The TBM has the ability to operate in open or closed mode, depending on the ground conditions and groundwater levels. Where the TBM is operating in competent rock, it will likely operate in open mode and some groundwater inflow into the tunnel is expected. However, this will occur for a short duration under any particular property as the TBM progresses along the alignment (at a rate of 10 to 20 m per day). Furthermore on completion of tunnelling every 12.5 m section, the lining is installed and grouted behind the TBM which effectively seals that section off from groundwater inflow. Where appropriate, the TBM will operate in closed mode. In closed mode, no groundwater inflow into the tunnel or depressurisation of the aquifer immediately outside the tunnel is expected.”*

In the Addendum Report, T&T state:

*“This section presents a revised and updated assessment of the hydrogeological*



*conceptual model for the tunnel alignment compared with the Screening-level assessment, with consideration of:*

- *Analysis of project-specific hydrogeological testing data.*
- *Review of project-specific groundwater level monitoring data.*
- *An updated methodology for estimating inflow rates into the tunnel during the temporary construction period.”*

In relation to groundwater levels, T&T state that they:

*“Conservatively adopted 2.4 m bgl along the full length of the tunnel alignment based on our assessment of groundwater levels (refer Section 3).*

*Conservative assumption made that the shallow groundwater level adopted (2.4 m bgl) is hydraulically connected to the deeper regional aquifer system.”*

In relation to groundwater inflow rates, T&T indicate that their assessment was based on:

*“5.44 m outer diameter of tunnel.*

*Scenario 1: Adopted a hydraulic conductivity of  $2 \times 10^{-8}$  m/s selected with consideration to project specific testing outlined in this report. Slight increase in equivalent inflow rate into the tunnel equal to  $1.32 \text{ m}^3/\text{day}$ , applying the same analytical method as the Screening-level assessment (assessed as lower bound).*

*Scenario 2: Capped at  $30 \text{ m}^3/\text{day}$  based on an estimated upper bound inflow which that contactor can efficiently manage in “open mode”. It is assumed that if inflows greater than  $30 \text{ m}^3/\text{day}$ , the TBM will operate in “closed mode” resulting in no further inflows. These values adopted were informed by discussions with the existing CI tunnelling contractor.”*

T&T assessed groundwater drawdown along the tunnel alignment on the basis of the following:

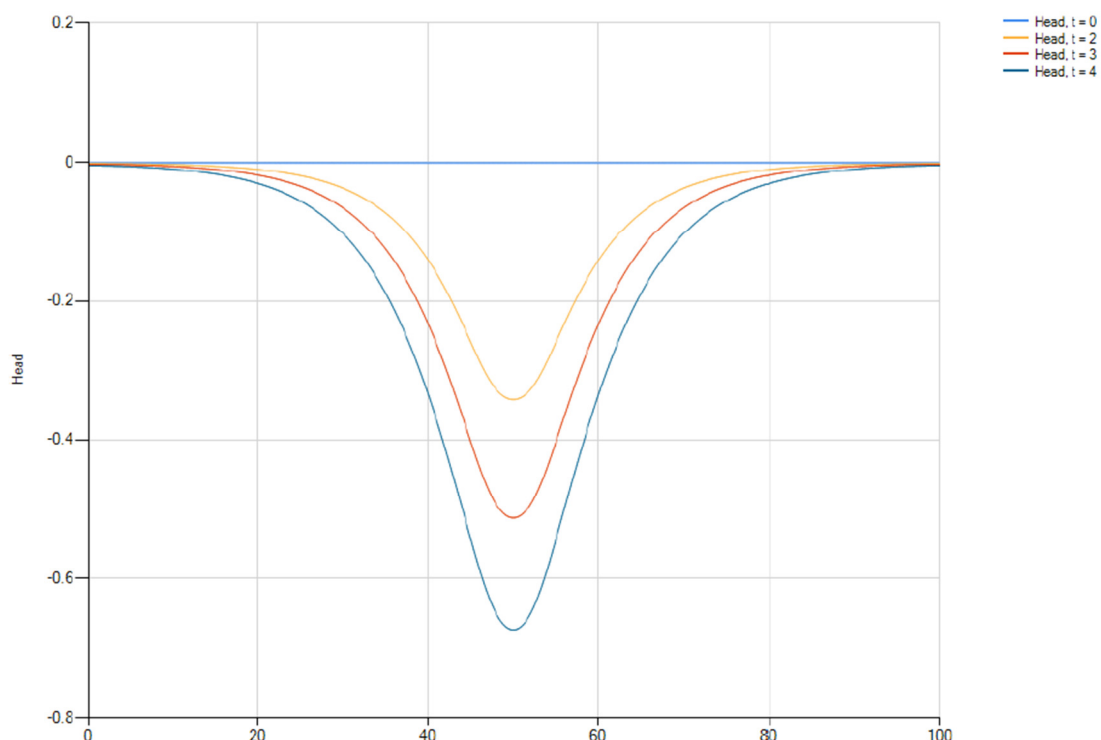
- *“Analytical Element Method and AnAqSim software which applied similar assumptions to the Theis method (above), however the revised method assumed that pumping only occurs from within a screened section of the modelled well, positioned at the appropriate average depth of the tunnel (an assumed depth of 30 m was adopted to allow a direct comparison with the Theis method).*
- *The diameter of the modelled well was 5.44 m, the same as the outer diameter of the tunnel.*
- *The length of the modelled well screen was also set to 5.44 m, the same as the*

outer diameter of the tunnel.

- Assessed upper bound groundwater inflow rate of 30 m<sup>3</sup>/day was adopted as the pumping rate.
- Assessed upper bound isotropic hydraulic conductivity of 1x10<sup>-6</sup> m/s was adopted.
- Refined assessment accounting for the unlikely event that groundwater may enter the same 'open' 12.5 m section of the tunnel for up to 4 days."

The updated groundwater drawdown analysis is presented graphically in Figure 3 below, which shows the maximum modelled groundwater drawdown at the tunnel axis to be approximately 0.66 m, reducing to zero drawdown at 50 m distance from the tunnel centreline.

**Figure 3 - Revised groundwater tunnel drawdown analysis upper bound results (K =1x10<sup>-6</sup> m/s) for up to 4 days (distance in metres (m)), Tonkin + Taylor, March 2023.**



#### 4.2.2 Groundwater Drawdown Induced Settlement Along the Tunnel Alignment

T&T made the following assumptions to assess groundwater drawdown induced settlement along the tunnel alignment:

- "A constant groundwater level of 2.4 m bgl was applied along the full length of tunnel alignment."
- "Constant drawdown values adopted from the revised upper bound analysis

*presented above (i.e. maximum 0.66 m drawdown at the tunnel centreline, reducing to zero drawdown at 50 m distance from the tunnel centreline)."*

- *"Variable depth to incompressible ECBF geological unit, based on developed rockhead surface from the LeapFrog model."*
- *"Assigned assumed bulk constrained modulus of compressible unit = 30 MPa derived from Table 9-1 of the Central CI Geotechnical Interpretative Report."*
- *"The groundwater drawdown induced settlement estimates assume settlement occurs immediately, when in reality settlement occurs over a period of time depending on permeability and based on a sustained soil stress change. Given the rate of TBM progress, it is highly unlikely that the estimated full settlement results presented in the figures above will be experienced, rather a small percentage of this is possible. The TBM can also be operated in "closed mode" greatly reducing settlement effects if monitored settlements are approaching alert or alarm level thresholds."*

T&T has assessed groundwater induced settlement along the tunnel alignment at 40 m chainage intervals and presented this in Appendix B of their Addendum Report. The maximum groundwater induced settlement is only 2.4 mm at chainage 1480 m.

FTL consider that the approach taken by T&T to assessing groundwater drawdown and settlement is appropriate.

#### **4.2.3 Effects of Mechanical Settlement for the Tunnel Alignment**

In relation to mechanical settlement along the tunnel alignment T&T state:

- *"Mechanical settlement is caused by the slight over extraction of material by the TBM in excess of the in situ volume of the ground. Modern TBM techniques have significantly reduced this effect. The small over excavation results in strain in the surrounding ground which manifests as vertical and horizontal ground displacement ahead and around the tunnel. The method of New and O' Reilly (1982) has been used to assess the maximum magnitude and lateral extent of mechanically induced ground settlement due to construction of the proposed wastewater tunnel"*

T&T has assessed mechanical settlement along the tunnel alignment at 40 m chainage intervals and presented this in Appendix B of their Addendum Report. The maximum mechanical settlement is only 6 mm, at chainages 1400 m and 1440 m.

#### **4.2.4 Total & Differential Settlement and Assessment of Effects from the Tunnel Alignment**

T&T state:

*"In this addendum report, we have considered the effects upon buildings and utilities along the tunnel alignment from both mechanical settlement due to volume*

*loss and groundwater drawdown. Given the low level of settlement estimated and adopting the methodologies presented in our initial report, we assess that the effects arising from settlement upon the roadway, curb, sidewalk and buried utilities to be negligible. Buildings along the tunnel alignment are expected to be subjected to less than 10 mm of total settlement and differential settlements no steeper than 1V:1000H. Adopting the Burland Classification, this would place all buildings in Burland Risk Category of 0 (negligible) to 1 (very slight) which corresponds to less than minor effects. At these risk categories, damage (if any) will be limited to aesthetic damage predominantly in the form of fine cracks in linings which would be readily repairable during redecoration.”*

The Burland Classification is taken from the following reference – Chapter 26 “*Building Response to Ground Movements*” by John B. Burland, ICE Manual of Geotechnical Engineering: Volume 1, January 2012, pp 281-296.

T&T has calculated the total and differential settlement along the tunnel alignment at 40 m chainage intervals and presented this in Appendix B of their Addendum Report. The maximum total settlement is approximately 8 mm and occurs at chainage 1400 m and the maximum differential settlement is 1 in 2,600 at chainage 40 m.

We concur with the assessment settlement effects as a result of the proposed Point Erin Tunnel undertaken by T&T.

#### **4.2.5 Groundwater Drawdown for the Terminal Shaft & Control Chamber**

In the AEE, T&T state:

*“Infiltration of groundwater into the shaft and control chamber will be primarily controlled through the design and specification of excavation support systems, which reduce water inflows that would otherwise have to be pumped out of the shafts, treated and disposed of. However, some (limited) groundwater will still need to be removed from the proposed shaft and chamber at Point Erin Park, treated and disposed of. Groundwater will be pumped out of the excavations at Point Erin and managed in accordance with GD05 Chapter G1.0 Dewatering or otherwise discharged to trade waste (subject to a trade waste agreement). Where dewatering water is discharged to the stormwater network, a water treatment plant will be provided on site and water will be treated to Auckland Council requirements ( $\geq 100$  mm clarity and pH 5.5 – 8.5) prior to discharge. Where possible and appropriate, water may also be applied to adjacent trees during summer. Any dewatering required will be limited to the duration of construction. On completion of construction there will be no dewatering or discharge of groundwater.”*

In relation to the Terminal Shaft, T&T state:

*“The modelled drawdown is generally even in all directions around the proposed shaft excavation. Maximum groundwater drawdown levels of up to 3 m are predicted next to the excavations, reducing to less than 0.5 m at approximately 27 m distance, and to near zero to within 100 m distance.”*

In relation to the Control Chamber, T&T state:

*“The modelled groundwater drawdown is generally even in all directions around the proposed control chamber excavation. Maximum groundwater drawdown levels of up to 2.8 m are predicted next to the excavations, reducing to less than 0.5 m at approximately 25 m distance, and to near zero to within 100 m distance.”*

#### **4.2.6 Groundwater Drawdown Induced Settlement for the Terminal Shaft Terminal Shaft & Control Chamber**

In relation to the Terminal Shaft, T&T state:

*“Modelled groundwater induced ground settlement immediately outside the shaft excavation ranges from approximately 5 mm to 8 mm and reduces towards zero at increasing distance from the excavation (refer Appendix C). We expect this level of movement is within the natural seasonal fluctuations of the ground.”*

In relation to the Control Chamber, T&T state:

*“Modelled groundwater induced ground settlement immediately outside the excavation ranges from approximately 4 mm to 5 mm and reduces towards zero at increasing distance from the excavation (refer Appendix C). As above, we expect this level of movement is within the natural seasonal fluctuations of the ground.”*

#### **4.2.7 Effects of Mechanical Induced Settlement for the Terminal Shaft and Control Chamber**

In relation to the Terminal Shaft, T&T state:

*“The shaft excavation will have an upper soil support system consisting of secant piles (or other support system) which will be designed to be near-watertight to limit groundwater drawdown. Based on previous assessments of secant piles shafts adopting a similar methodology and which are of similar depth in a similar geological setting, circular secant pile shafts result in very limited mechanical settlement (less than 5 mm at the edge of excavation). The effects of this are negligible.”*

In relation to the Control Chamber, T&T state:

*“Based on the proposed sheet piling construction methodology, a maximum vertical ground settlement of 36 mm can be expected at the edge of the control chamber. Settlement of no more than 10 mm (Category 1 on the Burland Classification, generally considered less than minor effects) is estimated to occur at 6 m from the edge of the chamber. The effects of mechanical settlement are estimated to be negligible beyond 12 m from the chamber’s edge.”*



#### 4.2.8 Total & Differential Settlement and Assessment of Effects from the Terminal Shaft and Control Chamber

In relation to the construction of the Terminal Shaft and the Control Chamber, T&T has prepared a plan titled “*Point Erin Park : Total Ground Settlement Analysis*”, Figure 1, rev. 0, dated February 2023. The buildings associated with Point Erin Pools are all located beyond the 3 mm total settlement contour. T&T state:

*“Adopting the Burland Classification for risk of damage, the combined settlement effects for the terminal shaft are assessed to be negligible (Category 0) to very slight (Category 1). This is generally considered to be less than minor effects”.*

The dwellings on the western side of Curran Street (72 Curran Street, 74 Curran Street and 37 Sarsfield Street) are all located beyond the 5 mm total settlement contour. T&T state:

*“All dwellings and buildings are outside the 5 mm settlement contour line for the works being undertaken in Point Erin Park, indicating that the risk of damage to dwellings and buildings is negligible based on the Burland Classification.”*

In relation to the effects on Curran Street, in their s92 response, T&T state:

*“As presented on Figure 1 in Appendix D of the addendum report, total settlement values at the Curran Street SH1 onramp located to the west of the control chamber in Point Erin Park has been assessed as between 5 to 20 mm (upper bound potential effect). Based on the predicted levels of settlement shown in the addendum report, we confirm the effects of the excavation and retention for the control chamber are likely to be minor or less than minor on the area of the Curran Street SH1 on-ramp which adjoins the control chamber. Revised assessments will be confirmed through detailed design and the development of the Groundwater Settlement Monitoring and Contingency Plan (GSMCP). As set out in the proposed conditions of consent, if minor damage should result from any settlement, Watercare will remedy it. Nevertheless, Watercare is engaging directly with NZTA regarding their assets.”*

In relation to the effects on Healthy Waters assets in their s92 response, T&T state:

*“Healthy Waters has provided written approval to the proposed works and has confirmed it should not be considered an affected party for the purposes of the Point Erin Tunnel proposal. Therefore, when considering the proposal, Council as the consent authority cannot have regard to any effects on Healthy Waters’ assets pursuant to s104(3)(a)(ii) RMA. For this reason, no further assessment of the potential effects on stormwater assets has been provided.*

*Based on the predicted levels of settlement shown in the addendum report, we confirm the effects of the excavation and retention for the control chamber are likely to be less than minor on kerb-lines, footpaths, and private driveways.*

*Revised assessments will be confirmed through detailed design and the development of the Groundwater Settlement Monitoring and Contingency Plan (GSMCP). As set out in the proposed conditions of consent, if minor damage should result from any settlement, Watercare will remedy it. Nevertheless, the application has been publicly notified and there is no requirement to demonstrate that the effects will be less than minor.”*

FTL concurs with the above assessment undertaken by T&T in relation to potentially affected infrastructure and public services.

#### **4.2.9 Monitoring and Consent Conditions**

In their Addendum Report T&T state:

*“Ground settlement and groundwater drawdown monitoring during the construction works will be undertaken to monitor ground settlements and assess if the response of the surrounding buildings and structures is within acceptable tolerances. This process allows for the geotechnical effects to be monitored and can act as a trigger for mitigation measure to be implemented if required.*

*The purpose of the monitoring programme is to monitor actual settlements and establish alert and alarm levels below levels that can be expected to result in the onset of minor damage to structures under worst-case assumptions. Predicted settlements at monitored structures in many instances are too small to accurately measure and well below the threshold of damage. As such, we recommend that the potential for the onset of minor damage (Burland Risk Classification of 1) under worst-case assumptions equates to the Alarm Trigger Level, and the Alert Trigger Level is set at 80% of the Alarm for ground deformations. These recommended trigger levels can then be reviewed and confirmed through the Ground and Settlement Monitoring and Contingency Plan (GSMCP).*

*Monitoring is recommended including (as required) through the use of:*

- *Building and Ground Settlement Monitoring Points via survey markers.*
- *Groundwater level monitoring via standpipe piezometers*
- *Tunnel settlement survey arrays spaced every 600 m from the launch shaft along the length of the tunnel consistent with previous array monitoring requirements on CI.*

*The specific location of monitoring and buildings to be monitored shall be confirmed in the GSMCP. However, preliminary recommendations for monitoring identifying monitoring type and locations are presented in Appendix D.*

*We expect that all existing monitoring points (piezometers) will continue to be read at regular intervals until construction commences. Furthermore, baseline monitoring or a review of InSAR data can be undertaken to further understand the*

*level of natural seasonal fluctuations of the ground and structures proposed to be monitored during construction.”*

In relation to the construction of the Terminal Shaft and the Control Chamber, T&T has prepared a plan titled “*Point Erin Park: Proposed Monitoring Plan*”, Figure 1, rev. 0, dated January 2023, which includes:

- Eight building settlement pins (MP1 to MP8) on the Point Erin Pools Buildings.
- Four ground settlement pins (MP9 to MP12) on the western side of Curran Street.
- Three building settlement pins (MP13 to MP15) on the dwelling at 74 Curran Street.
- Three building settlement pins (MP16 to MP18) on the dwelling at 72 Curran Street.
- Three ground settlement pins (MP19 to MP21) on the northern side of Sarsfield Street.

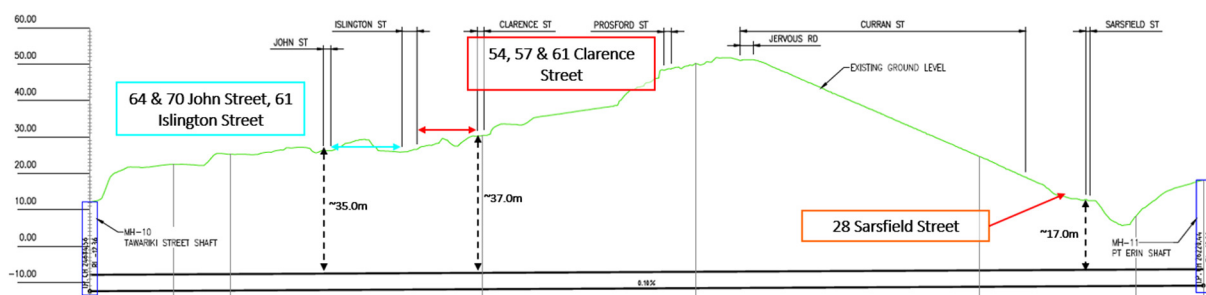
We consider that the approach proposed by T&T to the monitoring is appropriate together with the Conditions of this Consent presented in Appendix A.

#### 4.3 Review of Submissions

Fraser Thomas Ltd has reviewed the six submissions received by Council in opposition to the Application.

The locations of the six properties whose owners have sent submissions to Auckland Council are shown on Figure 4 below.

**Figure 4 – Annotated Long Section of Point Erin Tunnel (CI-Stat & Plan, Issue 2, 2023)**



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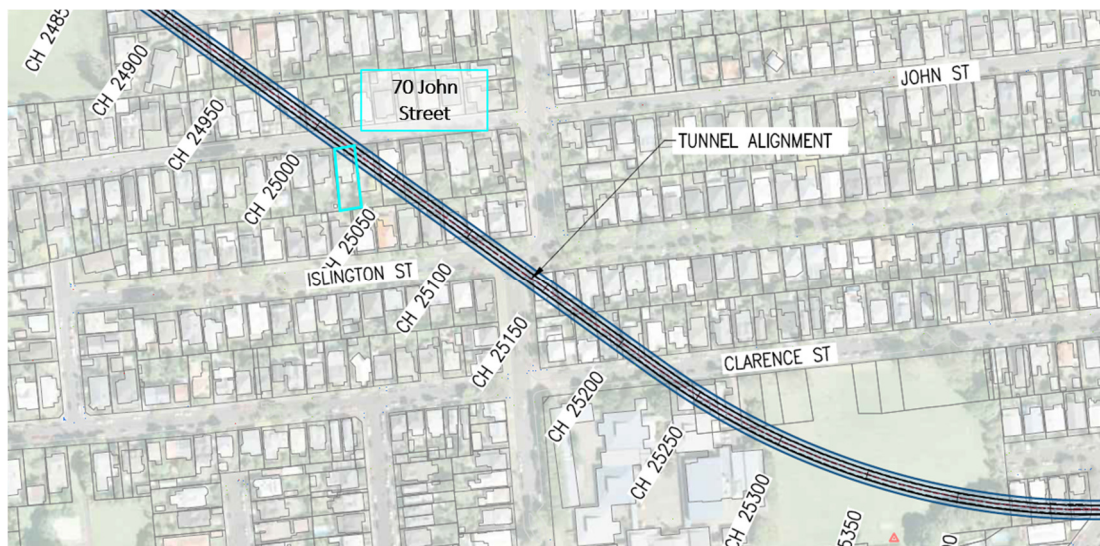
**Address:** 44-48 Tawariki Street, Grey Lynn to Point Erin Park – Herne Bay.

## Submission ID\_16143

The owner of the dwelling at 70 John Street, as shown in Figure 5 below, has raised concerns regarding “*Potential land subsidence causing damage to our home*”. The property at 70 John Street is located at approximate chainage 320 m of the Point Erin Tunnel.

Based on the long-section of the tunnel presented in Figure 4, the crown of the tunnel is approximately 35 m bgl at the above property. The settlement assessment presented in Appendix B of the T&T Addendum Report indicates that at chainage 320 m, the predicted maximum total settlement is approximately 5 mm at a distance of up to 4 m from the tunnel axis and the predicted maximum differential settlement is 1:3,100. Both of these settlement values are considered to within the “*Negligible to Very Slight*” Damage Category after Burland 2012.

**Figure 5 – Location of 70 John Street in relation to the Point Erin Tunnel**



## Submission ID\_16146

The owners of the dwelling at 64 John Street, as shown in Figure 6 below, have raised concerns and they state: “*Tunneling [sic] under residential properties is an unreasonable intrusion on the rights of property owners to the unencumbered enjoyment of their property. While the tunnel is for the benefit of the wider community, there is no question that it will have a material impact on the desirability and therefore value of the residential properties under which the tunnel is to be built.*” ... “*In addition, no clear evidence has been provided to demonstrate that tunneling [sic] under residential properties will be of no risk to impacted properties or to the health and safety of impacted residents.*” The property at 64 John Street is located at approximate Chainage 360 m of the Point Erin Tunnel.



Based on the long-section of the tunnel presented in Figure 4, the crown of the tunnel is approximately 35 m bgl at the above property. The settlement assessment presented in Appendix B of the T&T Addendum Report indicates that, at Chainage 360 m, the predicted maximum total settlement is approximately 5 mm up to 3 m from the tunnel axis and the predicted maximum differential settlement is 1:4,400. Both of these settlement values are considered to within the “Negligible to Very Slight” Damage Category after Burland 2012.

**Figure 6 – Location of 64 John Street in relation to the Point Erin Tunnel**



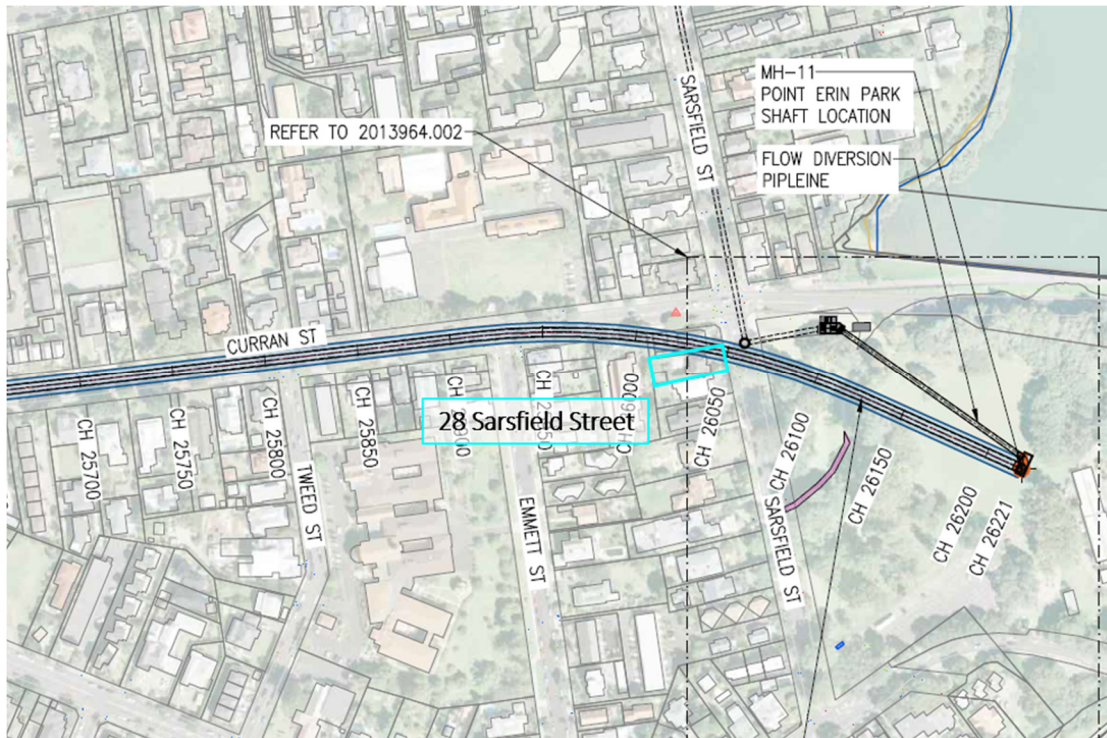
#### **Submission ID\_16148**

The Trust which owns the dwelling at 28 Sarsfield Street (Figure 7), Herne Bay has raised concerns and they state: “*The depth at which the tunnel passes under Sarsfield Street is extremely shallow, when compared to the depth of the tunnel elsewhere. This will have a huge impact on my property.*” The property at 28 Sarsfield Street is located at approximate chainage 1360 m of the Point Erin Tunnel.

Based on the long-section of the tunnel presented in Figure 4, the crown of the tunnel is approximately 17 m bgl at the above property. The settlement assessment presented in Appendix B of the T&T Addendum Report indicates that, at chainage 1360 m, the predicted maximum total settlement is approximately 6 mm at a distance of up to 5 m from the tunnel axis and the predicted maximum differential settlement is 1:3,100. Both of these settlement values are considered to within the “Negligible to Very Slight” Damage Category after Burland 2012.

**Figure 7 – Location of 28 Sarsfield Street in relation to the Point Erin Tunnel**





### Submission ID\_16150

The owners of the dwelling at 61 Clarence Street (Figure 8) have raised concerns and they state: “.. we oppose the route of this tunnel given the past light industrial use of the land in this area. We feel that without evidence to the contrary, this unknown quantity represents an unreasonable level of risk.” .. “Assurance from Watercare, in writing, that from evidence based testing of the land beneath our home, it considers that our home will not be vulnerable to the tunnelling. Also, at Watercare’s cost, Watercare agrees to undertake a precondition and post-condition survey of our property. This survey to include a photographic record of the inside and outside of the property, and the setting up of markers for building and ground settlement monitoring on the exterior of the property. If it is established that damage has occurred, Watercare will repair that damage to the condition documented in the precondition survey, under Watercare’s liability insurance, to our satisfaction.” The property at 61 Clarence Street is located at approximate chainage 480 m of the Point Erin Tunnel.

Based on the long-section of the tunnel presented in Figure 4, the crown of the tunnel is approximately 37 m bgl at the above property. The settlement assessment presented in Appendix B of the T&T Addendum Report indicates that, at chainage 480 m, the predicted maximum total settlement is approximately 4 mm at a distance of up to 5 m from the tunnel axis and the predicted maximum differential settlement is 1:3,100. Both of these settlement values are considered to within the “Negligible to Very Slight” Damage Category after Burland 2012.

**Figure 8 – Location of 61 Clarence Street in relation to the Point Erin Tunnel**



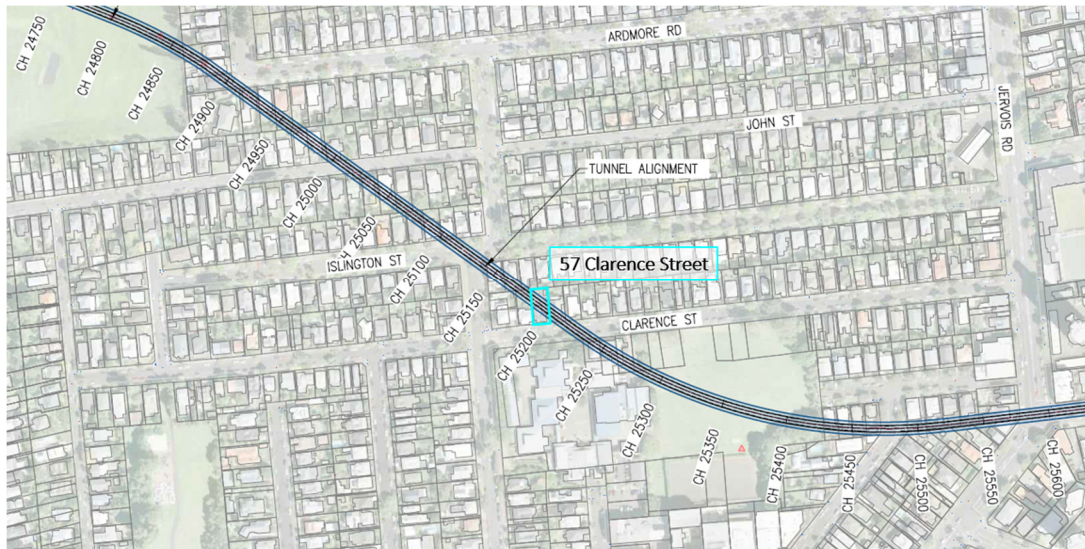
### Submission ID\_16151

The owners of the dwelling at 57 Clarence Street (Figure 9) have raised concerns and they state: “ ... we oppose the route of this tunnel given the past light industrial use of the land in this area. We feel that without evidence to the contrary, this unknown quantity represents an unreasonable level of risk.” ... “Assurance from Watercare, in writing, that from evidence based testing of the land beneath our home, it considers that our home will not be vulnerable to the tunnelling. Also, at Watercare’s cost, Watercare agrees to undertake a precondition and post-condition survey of our property. This survey to include a photographic record of the inside and outside of the property, and the setting up of markers for building and ground settlement monitoring on the exterior of the property. If it is established that damage has occurred, Watercare will repair that damage to the condition documented in the precondition survey, under Watercare’s liability insurance, to our satisfaction.” The property at 57 Clarence Street is located at approximate chainage 520 m of the Point Erin Tunnel.

Based on the long-section of the tunnel presented in Figure 4, the crown of the tunnel is approximately 37 m bgl at the above property. The settlement assessment presented in Appendix B of the T&T Addendum Report indicates that, at Chainage 480 m, the predicted maximum total settlement is approximately 4 mm at a distance of up to 5 m from the tunnel axis and the predicted maximum differential settlement is 1:3,100. Both of these settlement values are considered to within the “Negligible to Very Slight” Damage Category after Burland 2012.

**Figure 9 – Location of 57 Clarence Street in relation to the Point Erin Tunnel**



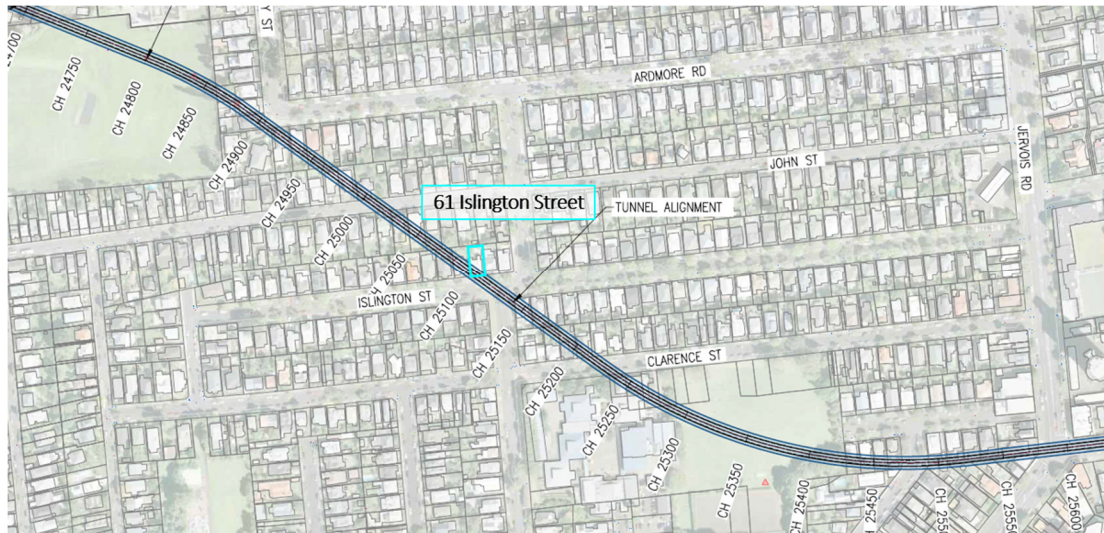


### Submission ID\_16152

The owner of the dwelling at 61 Islington Street (Figure 10) has raised concerns and states: *“I understand the pipeline has a 100-year life, what guarantee do I have that any damage arising in that time will be addressed by the Council or Watercare.” ... “Watercare have offered a pre- and a post-building survey, if I accept this then am I effectively precluding myself from the Public Works Act compensation.”* The property at 61 Islington Street is located at approximate chainage 400 m of the Point Erin Tunnel.

Based on the long-section of the tunnel presented in Figure 4, the crown of the tunnel is approximately 33 m bgl at the above property. The settlement assessment presented in Appendix B of the T&T Addendum Report indicates that, at chainage 400 m, the predicted maximum total settlement is approximately 5 mm at a distance of up to 4 m from the tunnel axis and the predicted maximum differential settlement is 1:3,100. Both of these settlement values are considered to within the *“Negligible to Very Slight”* Damage Category after Burland 2012.

**Figure 10 – Location of 61 Islington Street in relation to the Point Erin Tunnel**



#### 4.4 AC Peer Reviewer Conclusions

The predicted ground dewatering and groundwater diversion effects during construction of the Point Erin Tunnell and the excavations for the Terminal Shaft and Control Chamber in Point Erin Park have been peer reviewed by Fraser Thomas Ltd with respect to the potential for ground settlement.

The scope of geotechnical investigation is satisfactory for the proposed development and the risk of encountering unforeseen ground conditions is low. Sufficient geotechnical investigation data is available for groundwater and geotechnical modelling purposes in order to determine the likely ground movement adjacent to the proposed development.

FTL concur with T&T's assessment of effects on buildings, structures, infrastructure and public services.

Undertaking the proposed activities in accordance with the application, adherence to good practice and the recommended resource consent conditions should ensure any actual adverse effects remain within the consented envelope and the risks to the infrastructure and public services are less than minor, i.e., the activity should have less than minor adverse effects on the environment.

There can, however, be some unforeseen settlement risk (outside the envelope presented in the application documentation) due to the uncertainty of geology and related groundwater flows, and actual retaining wall performance. This settlement risk, while unlikely, cannot be ruled out and this is addressed by Condition 62 that requires actions should any damage be caused by the exercise of this consent. This effects assessment conditions should be reviewed at final design and building consent stage.

Provided the take and diversion of groundwater are undertaken in the manner described in the application material and summarised above, and subject to the proposed conditions, the potential adverse effects of the activity on the environment and on neighbouring properties are considered likely to be less than minor.

#### **4.5 Peer Reviewer's Qualifications & Experience**

Pat Shorten is a Principal of Fraser Thomas Ltd, a firm of consulting engineers providing professional services in civil, structural, geotechnical and environmental engineering and surveying and was formerly a Director until he recently retired.

Pat has 45 years' experience as a professional geotechnical engineer/engineering geologist, with 38 years in New Zealand. Pat holds a degree of Bachelor of Science (geology) (Hons) from the University of Aberdeen 1974 and a Master of Science (engineering geology) 1977 from the University of Durham.

Pat is a Chartered Professional Engineer (CPEng), an International Professional Engineer (IntPE(NZ)) and a Chartered Member of Engineering New Zealand (CMEngNZ). Pat is also a member of the New Zealand Geotechnical Society.

Pat specialises in foundation engineering, geotechnical hazard assessments, engineering geology, forensic investigations and geotechnical quality control and assurance. Pat has a sound background in geotechnical investigations and appraisal for land developments, multi-storey building developments, with particular experience in determining the settlement effects of deep excavations and dewatering on neighbouring properties and has carried out technical reviews of effect assessments for Council, for more than 60 multi-storey buildings with multi-level basements and infrastructure developments. Projects that have been reviewed include the Central Rail Link (CRL), the Britomart Transport Centre, the New Lynn rail trench and station, the Commercial Bay (Downtown) Centre, the Civic Quarter (Aotea Centre) Development, the Penlink Highway, the SH20A grade separation at Kirkbride Road and the Takanini stormwater conveyance channel and culvert. Pat has attended committee hearings on Council's behalf for notified applications.

Pat has also been involved with numerous projects that have required litigation support and provision of expert evidence for hearings in the High Court, the Environment Court, and mediations, arbitrations, adjudications and Council committee hearings.

### **5.0 STATUTORY CONSIDERATIONS**

#### **5.1 Objectives and policies of the Auckland Unitary Plan (AUP)**

The Auckland Unitary Plan objectives and policies are provided in Chapter B section 7.3 and Chapter E sections 1 and 2.

#### **5.2 Other relevant matters**

There are no other matters considered relevant and reasonably necessary to consider with respect to the proposed groundwater take and diversion.

#### **5.3 Duration of consent: Section 123**

It is considered appropriate to set a term of five years for the Restricted Discretionary



Activity groundwater take and diversion consent because the groundwater take and diversion will only occur in the short-term, and any adverse effects on the environment will be less than minor.

## **6.0 RECOMMENDATION AND CONDITIONS**

### **6.1 Recommendation**

The assessment in this memo does not identify any reasons to withhold consent, and the aspect of the proposal considered by this memo could be granted consent subject to recommended conditions.

## **Appendix A – Proposed Draft Conditions of Consent**

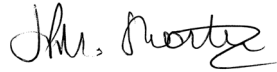
The proposed draft conditions for Water Permit WAT604154460 are Conditions 45 to 79 in the attached document.

## 7.0 REVIEW

**Memo prepared Richard Simonds and reviewed by:**

**Pat Shorten**

**Principal – Geotechnical  
Engineering  
Fraser Thomas Ltd**



**Date:**

7 August 2023

**Memo reviewed and approved for release by:**

**Marija Jukic**

**Team Leader, Coastal and  
Water Allocation Resource  
Consents**



**Date:**

7 August 2023

# Appendix A - Proposed Key Conditions – 20 June 2023

## Notes:

*The effects of the proposed Point Erin Tunnel project are well understood as a result of the existing work that has occurred to date on CI. The conditions of consent proposed below are informed by practical on-the-ground experience gained through the CI project to date and have proven to be effective at managing effects while also providing sufficient flexibility for the contractor.*

*The proposed conditions are based on the CI and Grey Lynn Tunnel consent conditions previously approved by Auckland Council, subject to changes to reflect current practice for condition drafting, experience from CI and implementation of the CI conditions, and specific matters relevant to the Project location particularly for the works in Point Erin Park.*

*The proposed conditions are intended to provide a project-specific key condition set. Watercare expects that there will be standard and administrative type conditions, along with additional other conditions, Auckland Council considers are required.*

*This is the Section 92 condition set – changes since lodgement are shown in track change.*

## A. General conditions

1	<p>Except as modified by the conditions below and subject to final design, the works shall be undertaken in general accordance with the plans and information submitted with the application, including:</p> <ul style="list-style-type: none"><li>• Central Interceptor – Point Erin Tunnel Assessment of Effects on the Environment (AEE), prepared by Tonkin &amp; Taylor Ltd dated February 2023</li></ul> <p><b>Reports</b></p> <ul style="list-style-type: none"><li>• Watercare Central Interceptor Point Erin Park Recreation Assessment, prepared by Rob Greenaway &amp; Associates, dated February 2023</li><li>• Extension to the Central Interceptor - Point Erin Tunnel: Assessment of Noise and Vibration Effects, prepared by Tonkin &amp; Taylor Ltd, dated February 2023</li><li>• Preliminary Site Investigation – Point Erin Park, prepared by Tonkin &amp; Taylor Ltd, dated December 2022</li><li>• Draft Erosion and Sediment Control Plan – Central Interceptor Point Erin Tunnel, prepared by McConnell Consultancy Ltd, dated 25 January 2023</li><li>• CI Extension – Point Erin Tunnel: Screening-level Assessment of Groundwater and Settlement Effects, prepared by Tonkin &amp; Taylor Ltd, dated February 2023</li><li>• Central Interceptor – Point Erin Extension: Natural Character, Landscape and Visual Assessment Report, prepared by Isthmus Group Limited, dated 1 February 2023</li><li>• Arboricultural Assessment of Effects of Extension of the Central Interceptor wastewater tunnel into Point Erin Park, resulting in the removal of reserve trees, prepared by The Tree Consultancy Company, dated 25 January 2023</li><li>• Central Interceptor extension, Point Erin Park, Auckland: Archaeological Assessment, prepared by Clough &amp; Associates Ltd, dated January 2023</li><li>• Central Interceptor extension – Point Erin Tunnel: Integrated Transport Assessment, prepared by Tonkin &amp; Taylor Ltd, dated February 2023</li><li>• Point Erin Extension – Assessment of Potential Flood Impacts Memorandum, prepared by Jacobs, dated 25 January 2023<ul style="list-style-type: none"><li>• Central Interceptor Extension – Point Erin Tunnel: Air Quality Assessment, prepared by Tonkin &amp; Taylor Ltd, dated February 2023</li><li>• Point Erin Central Interceptor: Addendum Report – Assessment of Groundwater and Settlement Effects, prepared by Tonkin &amp; Taylor Ltd, dated March 2023</li></ul></li></ul>
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	<b>Drawing title and reference</b>			<b>Rev</b>	<b>Date</b>
	<i>Prepared by Jacobs in association with AECOM and McMillen Jacobs Associates:</i>				
	Tawariki St to Pt Erin – Tunnel Plan 2011933.006			2	2.2.23
	Tawariki St to Pt Erin – Tunnel Plan 2011933.007			2	2.2.23
	Tawariki St to Pt Erin – Auckland Unitary Plan Zoning 2011933.008			1	2.2.23
	Tawariki St to Pt Erin – Other Auckland Unitary Plan Zoning 2011933.009			1	2.2.23
	Site General – Proposed site layout 2013964.002			2	2.2.23
	Site General – Point Erin Site – Construction Phase Plan 2013964.003			3	17.4.23
	MH – 11 Shaft/Tunnel Connection Plan and Section 2013964.005			2	2.2.23
	Point Erin Flow Diversion Pipeline Longitudinal Section 2013964.006			2	2.2.23
	Point Erin Control Chamber Plan and Sections 2013964.007			2	2.2.23
	Point Erin Site – Longitudinal Section and Cross sections 2013964.009			1	2.2.23
	Point Erin – Other Auckland Unitary Plan Zoning 2013964.010			1	2.2.23
	Site General - South West Corner Site Entry			1	17.4.23
	<b>Other additional information</b>				
	<ul style="list-style-type: none"> <li>• ‘Response to s92 requests – Point Erin Tunnel’, prepared by Tonkin &amp; Taylor Ltd, dated April 2023</li> <li>• ‘Response to s92 requests: Landscape and Visual effects - further clarification questions’, prepared by Tonkin &amp; Taylor Ltd, dated May 2023-</li> <li>• ‘Point Erin Tunnel: Landscape and Visual effects – further clarification questions’, prepared by Tonkin &amp; Taylor Ltd, dated May 2023</li> <li>• Indicative planting masterplan, prepared by Isthmus, dated May 2023</li> <li>• Precedent study, prepared by Isthmus, dated April 2023</li> <li>• ‘Further information on potential design and appearance of above-ground infrastructure – Point Erin Park’, prepared by Tonkin &amp; Taylor Ltd, dated March 2023</li> </ul>				
2	<p>The consent shall lapse on the expiry of a period of ten (10) years after the date on which the last of any appeals on the consent are determined or withdrawn, or if no appeals are lodged, the date on which the consent is granted in accordance with Section 104 of the RMA.</p> <p><b>Advice note:</b> An extension to the lapse date specified above is subject to the provisions of Section 125 (1A) of the RMA.</p>				
3	<p><b>Detailed drawings and design</b></p> <p>At least twenty (20) working days prior to commencement of works, the Consent Holder shall submit detailed engineering design plans for the Project, or for that stage of the Project works, to the Council.</p>				

## B. Construction phase consent conditions

Community Liaison and Communications	
4	<p>A liaison person shall be appointed by the Consent Holder for the duration of the construction phase of the Project to be the main and readily accessible point of contact for persons affected by the construction work. The liaison person's name and contact details shall be advised to affected parties by the Consent Holder. This person must be reasonably available for on-going consultation on all matters of concern to affected persons arising from the Project. If a liaison person will not be available for any reason, an alternative contact person shall be nominated to ensure that a Project contact person is available by telephone 24 hours per day seven days per week during the construction phase.</p>
5	<p>The Consent Holder shall prepare a Communications Plan (CP) for the construction phase of the Project or for each Project stage. The CP shall be submitted to the Council no less than twenty (20) working days prior to works commencing for certification that the CP complies with the requirements of Condition 6.</p> <p><b>Advice note:</b> "Project stage" means a separable part of the Project by activity, programme or location/geographic extent (e.g. tunnelling, terminal shaft construction, control chamber construction, TBM removal).</p>
6	<p>The objective of the CP is to set out a framework to ensure appropriate communication is undertaken with key stakeholders during the construction phase of the Project. The CP shall set out:</p> <ul style="list-style-type: none"> <li>(a) the method(s) of consultation and liaison with key stakeholders and the owners/occupiers of neighbouring properties regarding the likely timing, duration and effects of works. This shall include the method(s) to ensure affected properties are notified of noisy activities prior to works commencing;</li> <li>(b) details of prior consultation or community liaison undertaken with the parties referred to in (a) above, including outlining any measures developed with such persons or groups to manage or to mitigate any adverse effects or inconvenience that may arise from any construction;</li> <li>(c) full contact details for the person appointed in accordance with Condition 4 to manage the public information system and be the point of contact for related enquiries.</li> </ul>
Construction Management	
7	<p>The Consent Holder shall prepare a Construction Management Plan (CMP) for the Project or for each stage of the Project (e.g. tunnelling works, terminal shaft construction and control chamber construction). The purpose of the CMP is to set out the detailed management procedures and construction methods to be undertaken in order to avoid, remedy or mitigate potential adverse effects arising from construction activities and to achieve compliance with the specific conditions of this consent that relate to the matters referred to in Condition 8 (a) to (l) below. The CMP shall be submitted to Auckland Council no less than twenty (20) working days prior to works commencing on the Project or stage of the Project (as relevant) for certification that the CMP complies with the requirements of Condition 8 as applicable.</p>
8	<p>The CMP required by Condition 7 above shall include specific details relating to the management of all construction activities associated with the relevant Project stage, including:</p> <ul style="list-style-type: none"> <li>(a) Details of the site or project manager and the construction liaison person identified in Condition 4 including their contact details (phone, postal address, email address);</li> </ul>



	<ul style="list-style-type: none"> <li>(b) An outline construction programme;</li> <li>(c) The proposed hours of work;</li> <li>(d) Measures to be adopted to maintain the land affected by the works in a tidy condition in terms of disposal / storage of rubbish, storage and unloading of construction materials and similar construction activities;</li> <li>(e) Location of site infrastructure including site offices, site amenities, contractor's yards site access, equipment unloading and storage areas, contractor car parking, and security;</li> <li>(f) Procedures for controlling sediment run-off, dust and the removal of soil, debris, demolition and construction materials (if any) from public roads and / or other places adjacent to the work site;</li> <li>(g) Procedures for ensuring that residents, road users, park users and businesses (including Community Leisure Management (CLM) which manages the Point Erin Pool) in the immediate vicinity of construction areas are given prior notice of the commencement of construction activities and are informed about the expected duration and effects of the works;</li> <li>(h) Means of providing for the health and safety of the general public and for pedestrian management as required by Conditions 31 and 32;</li> <li>(i) Procedures for the management of works which directly affect or are located in close proximity to existing network utility services (note: this requirement does not apply to the Consent Holder's infrastructure or where written approval has been obtained from the relevant network utility operator);</li> <li>(j) A mechanism and nominated stakeholder manager responsible for receiving, addressing and monitoring queries and responding to complaints in relation to the construction works;</li> <li>(k) Procedures for the refuelling of plant and equipment;</li> <li>(l) Measures for the protection and management of trees as identified in Conditions 39 and 40.</li> </ul>
9	The CMP shall be implemented and maintained by the Consent Holder throughout the entire construction period for the Project or relevant Project stage to manage potential adverse effects arising from construction activities. The CMP or any specific component of the CMP shall be updated as necessary and provided to the Council for certification prior to being implemented.
<b>Construction hours</b>	
10	<p>Construction hours shall be as follows, except where work is necessary outside the specified days or hours for the purposes specified in Condition 11 below.</p> <ul style="list-style-type: none"> <li>(a) Tunnelling activities - 24 hours a day, 7 days a week operations for all tunnelling activities;</li> <li>(b) General site activities - 7 am to 6pm, Monday to Friday, 8am to 6pm Saturday; and</li> <li>(c) Truck movements - 7am to 6pm, Monday to Friday, 8am to 6pm Saturday.</li> </ul>
11	<p>Work may occur outside of the specified days or hours set out in Condition 10 for the following purposes:</p> <ul style="list-style-type: none"> <li>(a) where, due to unforeseen circumstances, it is necessary to complete an activity that has commenced;</li> </ul>

	<p>(b) where work is specifically required to be planned to be carried out at certain times (e.g. to tie into the existing network during period of low flow or for commissioning sewer connections);</p> <p>(c) for delivery of large equipment or special deliveries required outside of normal hours due to traffic management requirements;</p> <p>(d) in cases of emergency;</p> <p>(e) for the securing of the site or the removal of a traffic hazard; and/or</p> <p>(f) for any other reason specified in the CMP or CTMP.</p> <p>Where any work is undertaken pursuant to (a) to (f) above, the Consent Holder shall, within five (5) working days of the commencement of such work, provide a report to Council detailing how the work was authorised under those provisions.</p> <p>Activities such as dewatering during excavation and concrete pours may be undertaken outside of the specified days or hours subject to meeting the noise limits specific in Condition 24 (or as otherwise provided for through an ASCNVMP required by Condition 25).</p>
<p><b>Earthworks</b></p> <p><i>Note: It is anticipated that Auckland Council will include a full suite of standard earthworks conditions. The below proposed conditions are intended to provide a key condition set.</i></p>	
12	At least ten (10) working days prior to the commencement of any earthworks at the site authorised by this consent, the Consent Holder must submit a final Erosion and Sediment Control Management Plan (ESCP) for certification by the Council. No earthworks activities shall commence until the ESCP has been certified. Any subsequent amendments to the certified ESCP(s) and/or methodology must be provided to the Council at least ten (10) working days prior to the proposed amendment and certified prior to any such amendment being implemented.
13	The objective of the ESCP shall be to set out the methods and techniques and management procedures and protocols for controlling the potential for erosion and sediment runoff as a consequence of earthworks. The ESCP must be prepared by a suitably qualified and experienced practitioner in accordance with Auckland Council Guidance Document, Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region, June 2016, Guideline Document 2016/005 (GD05) and the draft ESCP referenced in Condition 1.
14	<p>The ESCP shall include the following information:</p> <p>(a) Timing and duration of construction and operation of control works;</p> <p>(b) Specific erosion and sediment control works (location, dimensions, capacity) in accordance with GD05, including staging details (where relevant) and specific erosion and sediment controls. Erosion and sediment controls are to include:</p> <ul style="list-style-type: none"> <li>a. stabilised site accesses</li> <li>b. clean water diversion around the construction areas to reduce the contributing catchment to the exposed working areas;</li> <li>c. silt fences and super silt fences;</li> <li>d. stabilised construction area platform surface;</li> <li>e. wheel wash facility at the site exit (as a contingency/if required);</li> <li>f. progressive stabilisation of works area as required; and</li> </ul>

	<p>g. the removal of stripped topsoil and surplus excavated material from site.</p> <p>(c) Supporting calculations and design drawings;</p> <p>(d) Catchment boundaries and contour information;</p> <p>(e) Provision for regular inspection and maintenance of ESC measures to maximise the sediment retention efficiency of the site; and</p> <p>(f) Specific dust control measures (where required) in accordance with the Good Practice Guide for Assessing and Managing the Environmental Effects of Dust Emissions, MfE (2016) and the Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region – GD05, Auckland Council (2016).</p>
15	All perimeter controls shall be operational before bulk earthworks commence. All cleanwater runoff from stabilised surfaces including catchment areas above the construction areas shall be diverted away from earthworks areas via a stabilised system so as to prevent surface erosion.
16	At least ten (10) working days prior to the commencement of earthworks at the site, a Chemical Treatment Management Plan (ChTMP) shall be submitted to the Council for certification. The objective of the ChTMP is to set out the management methods, controls and reporting standards to be implemented relating to the chemical treatment of the water treatment devices. For the avoidance of doubt, the ChTMP can be prepared as a standalone plan or as part of the ESCP required by Condition 12 above.
17	To prevent discharge of sediment-laden water or other debris into any public stormwater drainage systems or watercourses and therefore into receiving waters, and to prevent nuisance and amenity impacts on users of the road reserve, there shall be no deposition of earth, mud, dirt or other debris on any public road or footpath resulting from earthworks activity on the site. In the event that such deposition does occur, it shall immediately be removed. In no instance shall roads or footpaths be washed down with water without appropriate erosion and sediment control measures in place to prevent contamination of the stormwater drainage system, watercourses or receiving waters.
18	The Consent Holder shall ensure that all excavation, dewatering systems, retaining structures and associated works for the construction of the chamber, shafts, tunnels, underground structures and associated works, including all temporary and permanent works, are designed, constructed and maintained to avoid, as far as practicable, any damage to buildings, structures and services (including road infrastructure assets such as footpaths, curbs, catch-pits, pavements and street furniture).
19	The Consent Holder shall ensure that all discharges from dewatering activities, wheel washes and other occasional construction site related discharges are treated to an appropriate standard prior to discharge to either land or stormwater drainage systems or other receiving waters.
<b>Unexpected Contamination</b>	
20	In the event of the accidental discovery of contamination during earthworks which has not been previously identified, including asbestos material, the consent holder must immediately cease the works in the vicinity of the contamination, notify the council, and engage a suitably qualified and experienced contaminated land practitioner (SQEP) to assess the situation (including possible sampling and revision of the ESCP) and decide on the best option for managing the material.
<b>Construction Lighting</b>	

21	Construction lighting shall be minimised to the extent practicable and shall meet the relevant permitted standards in Chapter E24 of the Auckland Unitary Plan.
<b>Construction Noise and Vibration</b>	
22	<p>The Consent Holder shall prepare a Construction Noise and Vibration Management Plan (CNVMP) for the Project, or each stage of the Project, that addresses the management of construction noise and vibration from the works. The CNVMP shall be submitted to the Council no less than twenty (20) working days prior to works on that stage commencing for certification by Council that the CNVMP complies with the requirements of Conditions 23 to 29, as applicable.</p> <p>The objectives of the CNVMP are to:</p> <ul style="list-style-type: none"> <li>(a) Identify the Best Practicable Option (BPO) for the management and mitigation of construction noise and vibration effects.</li> <li>(b) Identify how Project noise and vibration limits will be met and set out the methods for scheduling and undertaking works to manage disruption.</li> <li>(c) Ensure engagement with affected receivers and timely management of complaints.</li> </ul>
23	<p>The CNVMP shall be prepared by a suitably qualified and experienced practitioner and shall set out, as a minimum:</p> <ul style="list-style-type: none"> <li>(a) The relevant construction noise and vibration criteria/limits set out in these conditions;</li> <li>(b) Description and duration of the works, predicted construction noise and vibration levels, anticipated equipment and hours of operation (including specific times and days when construction activities causing noise/vibration would occur);</li> <li>(c) The processes to be undertaken including general acoustic management and mitigation measures proposed to be implemented throughout the course of the Project consistent with best practice and the triggers or thresholds for implementing them (if relevant);</li> <li>(d) Physical noise mitigation measures, including prohibiting the use of tonal reverse alarms, maintenance of access roads (to ensure they are smooth), plant selection and maintenance procedures, orientation of plant and machinery, and site layout. Physical noise mitigation measures shall also include the following, as required to ensure a BPO approach to the management of noise: setting minimum setback distances from sensitive receivers (dwellings); acoustic screening of the control chamber construction area and shaft site construction area; and/or pre-drilling of pile locations;</li> <li>(e) The identification of activities (e.g. sheet piling, tree chipping, out of hours concrete pours, night works) and locations that will require specific noise mitigation measures (including scheduling of works, location and orientation of works and/or the use of temporary acoustic barriers e.g. for tree chipping or night works), consultation undertaken with affected properties to develop the proposed noise management measures, any feedback received from those stakeholders along with the noise management measures that will be adopted based on this consultation;</li> <li>(f) Identification of any activities particularly sensitive to vibration and noise in the vicinity of the proposed works (e.g. Stebbing Recording Centre located at 108/114 Jervois Road, Herne Bay) along with the details of consultation with the land owner(s) of the sites where the sensitive activities are located and any management measures that will be adopted, where required, based on this consultation;</li> <li>(g) Details of noise and vibration monitoring to be undertaken and reporting requirements.</li> <li>(h) Communication requirements with stakeholders including notice to owners and occupiers of adjacent buildings prior to construction activities commencing on the site;</li> </ul>

	<p>(i) A complaint management system with contact numbers for key construction staff responsible for the implementation of the CNVMP and complaint investigation.</p> <p>(j) The process for changing, updating, and certifying any changes to the CNVMP; and</p> <p>(k) Training procedures for construction personnel.</p> <p>The CNVMP shall be implemented and maintained by the Consent Holder throughout the construction period for the Project or relevant Project stage to manage potential adverse noise and vibration effects arising from construction activities. The CNVMP or any specific component of the CNVMP shall be updated as necessary and provided to the Council for certification prior to being implemented.</p>																																													
24	<p>Construction noise shall be measured and assessed in accordance with NZS6803:1999 <i>Acoustics – Construction Noise</i>, and shall comply with the following noise limits except where authorised by an ASCNVMP (Condition 25):</p> <table><tr><th rowspan="2">Time of week</th><th rowspan="2">Time Period</th><th colspan="2">Maximum noise level (dBA)</th></tr><tr><th>L<sub>eq</sub></th><th>L<sub>max</sub></th></tr><tr><td rowspan="4">Weekdays</td><td>6:30am - 7:30am</td><td>60</td><td>75</td></tr><tr><td>7:30am - 6:00pm</td><td>75</td><td>90</td></tr><tr><td>6:00pm - 8:00pm</td><td>70</td><td>85</td></tr><tr><td>8:00pm - 6:30am</td><td>45</td><td>75</td></tr><tr><td rowspan="4">Saturdays</td><td>6:30am - 7:30am</td><td>45</td><td>75</td></tr><tr><td>7:30am - 6:00pm</td><td>75</td><td>90</td></tr><tr><td>6:00pm - 8:00pm</td><td>45</td><td>75</td></tr><tr><td>8:00pm - 6:30am</td><td>45</td><td>75</td></tr><tr><td rowspan="4">Sundays and public holidays</td><td>6:30am - 7:30am</td><td>45</td><td>75</td></tr><tr><td>7:30am - 6:00pm</td><td>55</td><td>85</td></tr><tr><td>6:00pm - 8:00pm</td><td>45</td><td>75</td></tr><tr><td>8:00pm - 6:30am</td><td>45</td><td>75</td></tr></table> <p><b>Advice note:</b></p> <p><i>i. Project construction hours are subject to Condition 10.</i></p>	Time of week	Time Period	Maximum noise level (dBA)		L <sub>eq</sub>	L <sub>max</sub>	Weekdays	6:30am - 7:30am	60	75	7:30am - 6:00pm	75	90	6:00pm - 8:00pm	70	85	8:00pm - 6:30am	45	75	Saturdays	6:30am - 7:30am	45	75	7:30am - 6:00pm	75	90	6:00pm - 8:00pm	45	75	8:00pm - 6:30am	45	75	Sundays and public holidays	6:30am - 7:30am	45	75	7:30am - 6:00pm	55	85	6:00pm - 8:00pm	45	75	8:00pm - 6:30am	45	75
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24A	Between 22:00 and 07:00 regenerated noise from tunnelling activities shall not exceed 35 dB LAeq(15 min) within occupied buildings except where authorised by an ASCNVMP (Condition 25).																																													
25	An Activity Specific Construction Noise and Vibration Management Plan (ASCNVMP) shall be prepared for works predicted to exceed the project construction noise or vibration limits. For the avoidance of doubt, an ASCNVMP may be a separate management plan or may be included as a section in the CNVMP or otherwise appended to the CNVMP.																																													
26	<p>In preparing an ASCNVMP, the Consent Holder shall consult with those parties likely to be exposed to noise levels exceeding the relevant noise limit(s) and shall submit the results of this consultation to Auckland Council, including any response by the Consent Holder to a matter raised in consultation. The ASCNVMP(s) shall be submitted to the Council for review and approval at least 7 working days prior to the proposed works commencing.</p> <p>Works subject to the ASCNVMP(s) shall not commence until approval is received from the Council. If monitoring shows that levels specified in an ASCNVMP are being exceeded, work generating the exceedance shall stop and not recommence until further mitigation is implemented in accordance with an amended ASCNVMP approved by the Council.</p> <p>An ASCNVMP must:</p>																																													



	<div><div><div><div><div><div></div><div>(a) describe the activity (including duration), plant and machinery that is expected not to comply with the noise limits in Condition 24;</div></div><div><div></div><div>(b) describe the mitigation measures proposed to reduce the noise levels as far as practicable, including any options that have been discounted due to cost or any other reason;</div></div><div><div></div><div>(c) provide predicted noise levels for all receivers where the noise levels will not be compliant with the limits in Condition 24, including the effect of mitigation specified in (b) above;</div></div><div><div></div><div>(d) provide a set of noise limits that are Activity – Specific;</div></div><div><div></div><div>(e) describe the noise monitoring that will be undertaken to determine compliance with the Activity – Specific noise limits; and</div></div><div><div></div><div>(f) describe any additional noise mitigation measures that may be implemented to maintain compliance with Activity Specific noise limits.</div></div></div></div><div>Note: It is accepted that the noise limits in Condition 24 may not be met at all times, but that the Consent Holder will adopt the Best Practicable Option to achieve compliance.</div></div></div>											
27	An ASCNVMP shall be submitted to Auckland Council no less than seven (7) working days prior to works on that stage commencing for certification that the ASCNVMP complies with the requirements of Conditions 25 and 26, as applicable.											
28	Construction activities shall comply with the Guideline vibration limits set out in the German Industrial Standard DIN 4150-3 (1999) Structural Vibration – Part 3 Effects of Vibration on Structures (DIN 4150).											
29	<div>All tunnelling and construction works must be designed and undertaken to ensure that vibration from the Project does not exceed the following vibration limits in buildings (amenity values):</div> <table><tr><th>Receiver</th><th>Period</th><th>Peak Particular Velocity (PPV) mm/s</th></tr><tr><td rowspan="2">Occupied activity sensitive to noise</td><td>Night-time 10 pm to 7 am</td><td>0.3 mm/s</td></tr><tr><td>Day-time 7 am to 10 pm</td><td>2.0 mm/s</td></tr><tr><td>Other occupied buildings</td><td>At all times.</td><td>2.0 mm/s</td></tr></table> <div><div>Note: Works generating vibration for three days or less between the hours of 7 am to 6 pm may exceed these limits subject to compliance with Condition 28 and provided that all occupied buildings within 50 m of the extent of the works generating vibration are advised in writing no less than three days prior to the vibration-generating works commencing. The written advice must include details of the location of the works, the duration of the works, a phone number for questions and complaints and the name of the site manager.</div><div><b>Advice note:</b> These limits are contained in Table E25.6.30.1 of the AUP.</div></div>	Receiver	Period	Peak Particular Velocity (PPV) mm/s	Occupied activity sensitive to noise	Night-time 10 pm to 7 am	0.3 mm/s	Day-time 7 am to 10 pm	2.0 mm/s	Other occupied buildings	At all times.	2.0 mm/s
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Other occupied buildings	At all times.	2.0 mm/s										
30	<div>If measured or predicted vibration exceeds the limits set out in Condition 29 the Consent Holder must consult with the occupants to:</div> <div><div><div><div></div><div>(a) Discuss the nature of the work and the anticipated days and hours when the exceedances are likely to occur.</div></div><div><div></div><div>(b) Determine whether the exceedances could be timed or managed to reduce the effects on the receiver.</div></div><div><div></div><div>(c) Provide in writing, no less than three (3) days before the vibration-generating works begin, details of the location of the works, the duration of the works, a</div></div></div></div>											

	<p>phone number for questions and complaints, and the name of the liaison person (Condition 4).</p> <p>The Consent Holder must maintain a record of the consultation and provide this to the Council upon request.</p> <p><b>Advice note:</b> <i>Vibration amenity limits do not apply at any dwelling that is not occupied during the works. This allows high vibration works to be scheduled when residents are not home, subject to compliance with Condition 28 and compliance with amenity controls at other nearby dwellings that are occupied.</i></p>
<b>Traffic management</b>	
31	<p>The Consent Holder shall submit a Construction Traffic Management Plan (CTMP) to Council at least twenty (20) working days prior to the commencement of Project works at Point Erin Park. No construction activity shall commence until certification is provided from Council that the CTMP satisfactorily gives effect to the objectives set out below, and complies with the requirements in Conditions 32 to 34.</p> <p>The objectives of the CTMP are to:</p> <ul style="list-style-type: none"> <li>(a) Ensure construction traffic movements on the transport network, including Sarsfield Street, Curran Street and the SH1 onramp, are appropriately managed;</li> <li>(b) Provide for the safety of everyone at all times;</li> <li>(c) Minimise disruption and maintain pedestrian and vehicle access to/from surrounding residential properties and Point Erin Park including Point Erin Pool, carpark and playground;</li> <li>(d) Minimise disruption from construction traffic on the travelling public and road users along the identified sections of the construction routes;</li> <li>(e) Seek to avoid full road closures and minimise any partial or managed closures;</li> <li>(f) Manage integration with other construction projects and Auckland Transport projects.</li> </ul>
32	<p>The CTMP shall be prepared by a suitably qualified and experienced traffic expert and in accordance with the Council's requirements for traffic management plans or CTMPs (as applicable) and New Zealand Transport Authority's Code of Practice for Temporary Traffic Management and must set out, as a minimum:</p> <ul style="list-style-type: none"> <li>(a) Traffic management measures to be implemented;</li> <li>(b) Any road closures that will be required and the nature and duration of any traffic management measures that will result, including any temporary restrictions, detours or diversions for general traffic and buses;</li> <li>(c) Construction traffic routing.</li> <li>(d) The design of the access roads and vehicle crossings;</li> <li>(e) Methods to manage the effects of the delivery of construction material, plant and machinery. This shall include, but not be limited to: <ul style="list-style-type: none"> <li>• ensuring heavy vehicles access the south-western construction area via Shelly Beach Road and Sarsfield Street and a right turn into the construction area (i.e. not via Curran and Sarsfield Streets / no left turn into the construction area);</li> <li>• traffic management measures, including a site Traffic Management Supervisor: <ul style="list-style-type: none"> <li>– to ensure the safe movement of construction vehicles on Sarsfield Street and the Pool access road, to manage any potential effects, and to ensure the safe access of cars, cyclists, pedestrians, service trucks and emergency vehicles accessing the Pool and public carpark;</li> <li>– to ensure safe ingress from Sarsfield Street to the southwestern construction area and safe egress onto Curran Street;</li> </ul> </li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>– to ensure construction vehicles can negotiate access and egress to avoid any additional queueing on the adjacent road network during congested peak periods and to ensure a suitable truck layover area is provided if required.</li> </ul> <p>(f) Measures to maintain existing vehicle access to property where practicable, or to provide alternative access arrangements;</p> <p>(g) Measures to maintain pedestrian and cyclist movements adjacent to and through Point Erin Park and measures to reduce the impact on mobility impaired users on roads and footpaths adjacent to the construction works. Where the works impact on existing pedestrian or cycle ways, alternative temporary accessways shall be provided where practicable in accordance with Condition 37. Such access shall be safe, clearly identifiable and seek to minimise significant detours.</p> <p>(h) Provision for construction staff and visitor parking on site as far as practicable;</p> <p>(i) Proposed traffic volumes and movements associated with works outside the usual construction hours specified in Condition 11 and associated management and mitigation measures to be implemented.</p> <p>(j) A construction driver education programme (due to the proximity of the Point Erin Pool, carpark and playground, and Ponsonby Primary School). This shall include a briefing for all construction drivers on the importance of slowing down and adhering to established speed limits when driving past Ponsonby Primary School, and to look out for school children and reversing vehicles at all times;</p> <p>(k) Measures to communicate traffic management measures throughout construction activities (note: these measures may form part of the CP required by Condition 5).</p> <p>(l) Any proposed monitoring to measure the impact of the works on traffic and the impact of the traffic management measures. If safety or operational issues are evident, measures to be implemented to address these issues.</p> <p>(m) Measures to manage and/or supervise the egress of vehicles onto Curran Street.</p> <p>(n) Measures to manage traffic on the Shelly Beach Rd off-ramp (where required).</p> <p>(o) Details of consultation (including outcomes agreed) with the consent holder and Ponsonby Primary School with regard to maintaining the safety of school students during construction. Details of all safety measures and interventions will be documented in the CTMP. The CTMP will include details of restrictions on heavy vehicles along Curran Street (between Sarsfield Street and Jervois Road) during school pick up and drop off times (between 8:05am – 8:50am and 3:00pm – 3:30pm) during term time.</p>
33	The Consent Holder shall consult with the landowner (Auckland Council) and CLM to confirm measures to manage parking and ensure access is maintained for Pool maintenance and operational vehicles, emergency vehicles, and construction traffic during peak parking demand periods for the Point Erin Pool, how these measures will be implemented and the party responsible for implementing any measures identified.
34	Access for all vehicles to the south western construction area shall be via a one-way system entering from the Sarsfield Street access and exiting from the Curran Street access. The design of the access and vehicle crossing on Curran Street shall ensure it does not affect the effective, efficient and safe operation of the Curran Street SH1 onramp.
35	The temporary and permanent vehicle crossings from the south western construction area onto Curran Street shall be designed to meet minimum sight distance requirements of the Safe Intersection Sight Distance (SISD) requirements set out in ' <i>Austrorad (2009). Guide to Road Design Part 4A: Unsignalised and Signalised Intersections. Sydney</i> '.
36	The Consent Holder shall ensure the construction areas in Point Erin Park are cordoned off/fenced to ensure public safety.

37	<p>The Consent Holder shall install construction site fencing to prevent pedestrians using the section of footpath on Sarsfield Street between Curran Street and the site ingress.</p> <p>Prior to the temporary closure of the existing footpath through the south-western corner of Point Erin Park, the Consent Holder shall:</p> <ul style="list-style-type: none"> <li>(a) provide temporary pedestrian access through the Park to the east of the construction area and wayfinding signs to direct pedestrians to the temporary route and an existing accessible route in the south eastern corner of the Park.</li> <li>(b) undertake temporary improvements on the north side of Sarsfield Street for pedestrians to cross Sarsfield Street. This shall include the provision of a dropped kerb and tactile paving, a short section of surfacing in the berm, and a temporary parking restriction in the immediate area.</li> </ul> <p>These shall be maintained for the duration of the construction works. Once construction works are completed, the closed footpath through the south-western corner of Point Erin Park and the section of footpath on the northern side of Sarsfield Street shall be reinstated.</p> <p><b>Advice note:</b> <i>These requirements are subject to landowner and asset manager approvals.</i></p>
38	All construction traffic shall be managed at all times in accordance with the certified CTMP.
<b>Tree management</b>	
39	<p>The Consent Holder shall provide details in the CMP (required by Condition 7) as to how the potential impacts of construction on trees and vegetation will be managed and minimised. The details shall provide for the:</p> <ul style="list-style-type: none"> <li>(a) Identification of trees to be protected, pruned, removed, or transplanted and procedures for marking these out on site.</li> <li>(b) Procedures for identifying and protecting trees to be retained where works occur in the dripline or rootzone of such trees as identified by a suitably qualified and experienced arborist.</li> <li>(c) Temporary tree protection fencing which must remain in place for the duration of the works for the Project or relevant Project stage.</li> <li>(d) Procedures for undertaking the works under the supervision of a suitably qualified and experienced arborist including works within the dripline or rootzone of trees and the installation of the temporary fencing.</li> </ul>
40	All works shall be undertaken in accordance with the Tree Protection Methodology set out in Appendix A of the Arboricultural Report referenced in Condition 1. All tree removal and pruning shall be undertaken by a suitably qualified and experienced arborist, with all work carried out in accordance with currently accepted arboricultural techniques (e.g., Arb Australia and NZ Arb Minimum Industry Standard MIS308).
41	Within thirty (30) working days following completion of works on the site, the Consent Holder must supply a completion report to Council. The report must be prepared by a suitably qualified and experienced arborist. The completion report must confirm (or otherwise) that the works have been undertaken in accordance with the tree protection measures contained within the Arboricultural Report referenced in Condition 1 and subject to the specific tree protection measures identified in accordance with Conditions 39 and 33 above.
<b>Cultural</b>	
42	<i>[To be developed in consultation with mana whenua and in response to forthcoming cultural values assessments]</i>

Archaeology and heritage	
43	<p>The Consent Holder must engage a suitably qualified and experienced archaeologist to give advice on work undertaken on the site in Point Erin Park including monitoring preliminary earthworks. The names and qualifications of this specialist must be provided to the Council prior to earthworks commencing.</p> <p><b>Advice note:</b></p> <p><i>The Heritage New Zealand Pouhere Taonga Act 2014 (hereafter referred to as the Act) provides for the identification, protection, preservation and conservation of the historic and cultural heritage of New Zealand. All archaeological sites are protected by the provisions of the Act (section 42). It is unlawful to modify, damage or destroy an archaeological site without prior authority from Heritage New Zealand Pouhere Taonga. An Authority is required whether or not the land on which an archaeological site may be present is designated, a resource or building consent has been granted, or the activity is permitted under Unitary, District or Regional Plans.</i></p> <p><i>It is the responsibility of the Consent Holder to consult with Heritage New Zealand Pouhere Taonga about the requirements of the Act and to obtain the necessary authorities under the Act should these become necessary, as a result of any activity associated with the consented proposals. For information please contact the Heritage New Zealand Pouhere Taonga Archaeologist - 09 307 0413 / archaeologistMN@historic.org.nz.</i></p>
44	<p>If any archaeological sites, including human remains are exposed during site works then the following procedures shall apply:</p> <ul style="list-style-type: none"> <li>(a) Immediately after it becomes apparent that an archaeological or traditional site has been exposed, all site works in the immediate vicinity shall cease.</li> <li>(b) The Consent Holder shall immediately secure the area so that any artefacts or remains are untouched.</li> <li>(c) The Consent Holder shall notify mana whenua, the Heritage New Zealand Pouhere Taonga and the Council (and in the case of human remains, the New Zealand Police) as soon as practicable, and advise those parties that an archaeological site has been exposed so that appropriate action can be taken. Works shall not recommence in the immediate vicinity of the archaeological site until approval is obtained from the Heritage New Zealand Pouhere Taonga.</li> </ul> <p><b>Advice note:</b> <i>Should earthworks on the site result in the identification of any previously unknown archaeological site, including any archaeological artefact, koiwi or taonga, the Land Disturbance – Regional Accidental Discovery rule [E12.6.1] set out in the AUP(OP) apply.</i></p>
<b>Groundwater Permit Conditions – WAT60415460</b>	
45	<p>This consent shall expire 35 years from the granting of the consent (or in August 2058) unless it has lapsed, been surrendered or been cancelled at an earlier date pursuant to the RMA.</p>
46	<p>The Consent Holder must ensure that all excavation, dewatering systems, retaining structures and associated works for the construction of the shafts, tunnels, underground structures and associated works, including all temporary and permanent works, must be designed, constructed and maintained so as to avoid, <u>subject to conditions 54 to 62</u>, any damage to buildings, structures and services (including road infrastructure assets such as footpaths, kerbs, catch-pits, pavements and street furniture).</p>
47	<p>The Consent Holder must ensure that all backfilling of temporary shafts is designed and constructed to the required engineering standard, so as to avoid any damage to buildings, structures and services</p>



48	The Consent Holder must, at least 10 working days prior to the Commencement of Dewatering, advise the Council, in writing, of the date of the proposed commencement of this work.
49	The Consent Holder must, at least 10 working days following Completion of Dewatering and excavation, advise the Council, in writing, of the date of completion
50	<p>Under section 128 of the RMA the conditions of this consent may be reviewed by the Council at the Consent Holder's cost:</p> <p>Within six months after Completion of Dewatering in order:</p> <ul style="list-style-type: none"> <li>a) To deal with any adverse effects on the environment which may arise or potentially arise from the exercise of this consent and which it is appropriate to deal with at a later stage</li> <li>b) To vary the monitoring and reporting requirements, and performance standards, in order to take account of information, including the results of previous monitoring and changed environmental knowledge on: <ul style="list-style-type: none"> <li>• ground conditions</li> <li>• aquifer parameters</li> <li>• groundwater levels; and</li> <li>• ground surface movement</li> </ul> </li> </ul>
51	<p><b>Groundwater and Settlement Monitoring and Contingency Plan</b></p> <p>The Consent Holder must, before Commencement of Dewatering, prepare a Groundwater and Settlement Monitoring and Contingency Plan (GSMCP) addressing groundwater and settlement monitoring for each of the relevant Project stages. This includes a draft and final GSMCP as required by Condition 52.</p> <p>The GSMCP must demonstrate how the conditions of this consent will be implemented and must include the following:</p> <ul style="list-style-type: none"> <li>(a) details of the groundwater monitoring programme;</li> <li>(b) details of the ground surface settlement and building movement monitoring required;</li> <li>(c) details of the building risk assessment process and building condition surveys process;</li> <li>(d) a location plan of settlement and building deformation marks, retaining wall deflection markers and the location of existing and proposed groundwater monitoring bores.</li> <li>(e) details of the shaft and control chamber retaining wall monitoring programme.</li> <li>(f) the groundwater, deformation and settlement Alert and Alarm Levels (Trigger Levels) to be utilised for early warning of settlement with the potential to cause damage to buildings and services and details of the processes used to establish, and if necessary, to review these triggers;</li> <li>(g) details on the procedures for notification of the Council in the event that Trigger Levels are exceeded;</li> <li>(h) options for additional investigations and analyses to determine the potential for groundwater effects or settlement and for damage to structures, including additional groundwater or settlement monitoring and building condition surveys; and</li> </ul>

	<p>(i) details of the contingency measures to be implemented in the event of Trigger Levels being exceeded, including details on the practicable methodologies to avoid, remedy, or mitigate surface settlements with the potential to cause damage to buildings.</p> <p><b>Advice note:</b></p> <p><i>'Commencement of Dewatering' means commencement of bulk excavation and/or commencing taking any groundwater from a chamber/shaft or tunnel excavation.</i></p>
52	<p>The Consent Holder must submit to the Auckland Council for certification:</p> <ul style="list-style-type: none"> <li>(a) a draft GSMCP including aspects dealing with pre-construction monitoring and locations of monitoring marks, including the pre-construction monitoring required under the conditions of this consent. This must be provided at least 6 months prior to the Commencement of Dewatering for chamber excavations/shaft sinking or tunnelling of any Project stage; and</li> <li>(b) the final GSMCP. This must be provided at least 20 working days prior to Commencement of Dewatering for chamber excavations/shaft sinking or tunnelling of any Project stage.</li> </ul>
53	<p>The Consent Holder must comply with the GSMCP at all times.</p> <p>The Consent Holder may amend the GSMCP from time to time, as necessary for the Project or any Project stage. Any amendments to the GSMCP must be certified by Auckland Council prior to any such amendment being implemented.</p>
54	<p><b>Risk Assessment</b></p> <p>The Consent Holder must undertake a risk assessment to identify existing buildings and structures at risk of damage due to settlement caused by shaft sinking and chamber excavations, or tunnelling activities. The risk assessment process must be set out in the GSMCP required by Condition 51 and must be based upon the final tunnel alignment and construction methodology of the tunnel and chamber/shaft excavations, the groundwater and settlement monitoring required under this consent, and groundwater and settlement modelling completed using this data. The risk assessment must include:</p> <ul style="list-style-type: none"> <li>(a) identification of the zone of influence where differential settlements of greater (steeper) than 1:1,000 are predicted due to chamber excavations/shaft sinking or tunnelling activities;</li> <li>(b) identification of the building types in this zone, and their susceptibility to settlement induced damage; and</li> <li>(c) identification of the buildings and structures at risk of damage due to chamber excavations/shaft sinking or tunnelling activities.</li> </ul>
55	<p>A schedule of the addresses of existing buildings and structures identified as being potentially at risk of damage through the risk assessment process defined in Condition 54 must be included in the GSMCP required by Condition 51 (Note: this requirement does not apply to the Consent Holder's infrastructure or where written approval has been obtained from the relevant network utility operator).</p>
56	<p><b>Pre-construction condition survey</b></p> <p>The Consent Holder must consult with owners of existing buildings and structures identified through the building risk assessment process defined in Condition 54, and subject to the owner's approval on terms acceptable to the Consent Holder, undertake a detailed pre-construction condition survey of these structures to confirm their existing condition and enable the sensitivity of the existing buildings and structures to any groundwater and ground settlement changes to be</p>

	<p>accurately determined. The survey must be completed at least three months prior to the Commencement of Dewatering of any Project stage involving shaft sinking and chamber excavation, or tunnelling. The intent of the survey is to assist in enabling the magnitude of allowable effects from changes in groundwater pressure and ground settlement movements to be reasonably determined.</p> <p>The survey must include but not necessarily be limited to the following:</p> <ul style="list-style-type: none"> <li>(a) major features of the buildings and site developments, including location, type, construction, age and existing condition;</li> <li>(b) type and capacity of foundations;</li> <li>(c) existing levels of aesthetic damage;</li> <li>(d) existing level of structural distress or damage;</li> <li>(e) assessment of structural ductility;</li> <li>(f) susceptibility of structure to movement of foundations, including consideration of the local geological conditions.</li> </ul> <p><b>Advice note:</b> 'Commencement of Dewatering' means commencement of bulk excavation and/or commencing taking any groundwater from a shaft or tunnel excavation (after construction of the pile walls (if required) and/or dewatering prior to bulk excavation).</p>
57	<p><b>Post-construction condition surveys</b></p> <p>Unless otherwise agreed in writing with the building owner that such survey is not required, the Consent Holder must (subject to the owner(s) approval on terms acceptable to the Consent Holder), within six months of the Completion of Dewatering of any Project stage involving shaft sinking, chamber excavation or tunnelling, undertake a post construction survey of buildings identified in accordance with Condition 54.</p> <p>The Consent Holder may, if they are able to provide evidence to show the deformation was not caused by activities related to this consent, seek written approval from Auckland Council to waive this condition. If any building damage is identified following completion of the pre-construction survey, the survey must determine the likely cause of damage.</p> <p><b>Advice note:</b></p> <p><i>'Completion of Dewatering' means when all the permanent chamber and shaft lining, base slab and walls are complete and the tunnel lining is complete, and effectively no further groundwater is being taken for the construction of the chamber/shaft/tunnel, in accordance with the design.</i></p>
58	<p><b>Additional condition surveys</b></p> <p>The Consent Holder must, at the direction of Auckland Council, and subject to the owner's approval on terms acceptable to the Consent Holder, undertake an additional survey on any existing building or structure surveyed in accordance with Condition 56, for the purpose of checking for damage and for following up on a report of damage to that building. The requirement for any such survey will cease six months after the Completion of Dewatering of any Project stage involving shaft sinking, chamber excavation or tunnelling.</p>
59	<p>The building condition surveys required by the conditions of this consent must be undertaken by an independent and suitably qualified person. When requested in writing by the Council, the Consent Holder shall provide the contact details and qualifications of this person within five working days</p>

60	The Consent Holder must ensure that a copy of the pre, post-construction and any additional building survey reports are provided to the respective property owner(s). A copy is also to be made available to Auckland Council upon request (unless the property owner(s) has instructed the Consent Holder not to do so).
61	The building condition surveys required by this consent must be undertaken by an independent and suitably qualified and experienced practitioner. When requested in writing by Auckland Council, the Consent Holder provide the contact details and qualifications of this person within five working days.
62	<p><b>Repair of damage</b></p> <p>If the exercise of this consent causes any unforeseen damage to buildings, structures or services not assessed under Conditions 56 and/or 58, the Consent Holder must notify Auckland Council as soon as practicable, and provide in writing to the Auckland Council a methodology for repair of the damage caused that has been certified by a Chartered Professional Engineer, and must urgently undertake such repairs in accordance with the certified methodology, at its cost, unless written approval for this damage is provided from the owners.</p> <p><b>Advice note:</b></p> <p><i>Unforeseen damage - means damage to buildings and structures that has occurred outside the area identified as the zone of influence under Condition 54 or to buildings or structures that are located within the zone of influence but were not considered to be at risk at the time of the approval of the GSMCP.</i></p>
63	<p><b>Groundwater Monitoring</b></p> <p>The Consent Holder must install and maintain groundwater monitoring boreholes at the locations described in the GSMCP for the period required by Conditions 65, 67 and 69 or as otherwise set out in the GSMCP. Should any of the monitoring bores be damaged and become in-operable or unsuitable for monitoring, then the Consent Holder must contact the Council within three working days and a new monitoring bore must be installed at a nearby location in consultation with, and to the satisfaction of, the Council.</p>
64	The Consent Holder must monitor groundwater levels in the groundwater monitoring boreholes and keep records of the water level measurement and corresponding date. All water level data must be recorded to an accuracy of at least $\pm 5\text{mm}$ . These records must be compiled and submitted to the Council at six monthly intervals.
65	The Consent Holder must monitor groundwater levels monthly in boreholes identified in the GSMCP and keep records for a period of at least six (6) months before the Commencement of Dewatering of any Project stage involving shaft sinking or tunnelling. The variability in groundwater levels over this period will be utilised to establish the seasonal groundwater level variability. The Consent Holder must monitor groundwater levels at regular intervals in all proposed monitoring boreholes during the monitored period (three readings indicating steady state) before the Commencement of Dewatering of any Project stage involving shaft sinking or dewatering.
66	Prior to the Commencement of Dewatering of any Project stage involving shaft sinking or tunnelling, the Consent Holder must assess the potential groundwater effects resulting from the exercise of this consent. The output of this assessment must be used to define the expected groundwater level at each borehole and to establish groundwater Trigger Levels for each borehole that minimise the potential for damage to existing buildings or structures. The process for establishing groundwater Trigger Levels must be set out in the GSMCP and must be based upon the final tunnel alignment and construction methodology, and any groundwater monitoring required under this consent, and must be based upon groundwater modelling completed using this data. A

	factor of natural seasonal variability must be allowed for in this review based on the survey completed under Condition 65.
67	From Commencement of Dewatering of any Project stage involving shaft sinking or tunnelling, the Consent Holder must monitor groundwater levels in each borehole at a minimum of monthly intervals and records must be kept of each monitoring date, the corresponding water level in each borehole and the corresponding depth of all excavations or as otherwise set out in the GSCMP. In addition to the above, all boreholes located within 100 metres of the shaft construction site or within 100 metres of the tunnel excavation face must be monitored for groundwater level at least once in any period of seven consecutive days or as otherwise set out in the GSCMP. These records must be compiled and submitted to the Council at six (6) monthly intervals.
68	All monitoring data obtained pursuant to Condition 67 must be compared to the predicted groundwater levels for each borehole. Where Trigger Levels are exceeded the actions as set out in the GSMCP must be undertaken and the Council must be notified within three working days, advising of the trigger exceedance, the risk of settlement causing damage to buildings and details of the actions taken.
69	<p>The Consent Holder must continue to monitor groundwater levels in each borehole at monthly intervals for a period of twelve (12) months following Completion of Dewatering of any Project stage involving shaft sinking or tunnelling, or for a lesser period if groundwater levels in any particular borehole show either:</p> <ul style="list-style-type: none"> <li>a) recovery of the groundwater level to within two (2) metres of the pre-construction groundwater level and is above trigger levels; or</li> <li>b) a trend of increasing groundwater level in at least three consecutive monthly measurements and is above trigger levels, in which case monitoring at that borehole may cease.</li> </ul> <p>After 12 months following the Completion of Dewatering of any Project stage involving shaft sinking or tunnelling, monitoring of groundwater levels must continue at the direction of the Council if groundwater levels are not recovering from construction effects and there is a risk of adverse effects on neighbouring buildings or properties.</p>
70	<p><b>Settlement and Deflection Monitoring</b></p> <p>The Consent Holder must establish and maintain a Settlement Monitoring Network of ground and building settlement monitoring and retaining wall marks and inclinometers to detect any deformation (vertical and/or horizontal movements) at the locations described in the GSMCP and for the period required by the conditions of this consent.</p> <ul style="list-style-type: none"> <li>a. The locations of the monitoring marks must be identified on a plan within the GSMCP, as required under Condition 51 (note: this must reflect the draft monitoring plans provided as Appendix D to the Addendum Report – Assessment of Groundwater and Settlement Effects referenced in Condition 1);</li> <li>b. The locations and number of monitoring marks must be sufficient to provide a reliable basis for assessing, monitoring and responding to settlement risk during chamber/shaft and tunnel construction work, and for confirming compliance with the limits set out in the GSMCP.</li> </ul>
71	In the event of any of the monitoring marks required under Condition 70 being destroyed or becoming inoperable, the Consent Holder must, unless otherwise agreed in writing by the Council, replace the monitoring marks with new monitoring marks.
72	The Consent Holder must survey and record the elevation of each monitoring mark and record the corresponding date. Monitoring marks must be surveyed at least three times over a 12-month period prior to commencement of any Project stage involving shaft sinking or tunnelling to



	establish seasonal variability, and the minimum level of these baseline surveys must be used to establish the pre-construction reference ground level. All surveys are to be completed to an accuracy of at least $\pm 2\text{mm}$ for level and $\pm 5\text{mm}$ for plan position, or as otherwise achieved by best practice precise levelling.
73	The Consent Holder must survey and record the readings of each inclinometer as required in Condition <del>707070</del> at an average of each two (2) metres depth of shaft excavation, and at a minimum frequency of fortnightly intervals from the Commencement of Dewatering of any Project stage involving shaft sinking for a period of one month after the Completion of Excavation, then monthly until the Completion of Dewatering for any Project stage involving shaft sinking, or as otherwise set out in the GSCMP. At least two baseline surveys must be completed by the Consent Holder before Commencement of Dewatering.
74	<p>Prior to the Commencement of Dewatering of any Project stage involving chamber/shaft sinking or tunnelling, the Consent Holder must assess the potential settlement effects resulting from the exercise of this consent. The output of this assessment must be used to define the expected settlement levels and to establish settlement Trigger Levels (Alert Levels and Alarm Levels) that minimise the potential for damage to existing buildings or structures. The process for establishing settlement Trigger Levels must be set out in the GSMCP and must be based upon the final tunnel alignment and construction methodology, any groundwater, deformation or settlement monitoring required under this consent, and groundwater and settlement modelling completed using this data. A factor of natural seasonal variability must be allowed for in this review.</p> <p><b>Advice Note:</b></p> <p><i>'Alert Level' is the Differential and Total Settlement Limit set at a threshold less than the Alarm Level, at which the Consent Holder must implement further investigations and analyses as described in the GSMCP to determine the cause of settlement and the likelihood of further settlement.</i></p> <p><i>'Alarm Level' is the Differential and Total Settlement Limit set in Condition 77, or which has the potential to cause damage to buildings, structures and services, at which the Consent Holder must immediately stop dewatering the site and cease any activity which has the potential to cause deformation to any building or structure or adopt the alternative contingency measures approved by the Council.</i></p>
75	During construction in any Project stage involving shaft sinking or tunnelling, the Consent Holder must survey the settlement monitoring network described in Condition 70 at maximum six monthly intervals and keep records of each date and the corresponding ground surface and building level. In addition to the above, all monitoring marks located within 50 metres of the excavated tunnel and within 100 metres of the tunnel excavation face must be monitored at least once every month, monitoring marks located within 100 metres of an excavated shaft must be monitored at least once every week, or as otherwise set out in the GSCMP. These records must be compiled and submitted to the Council at six monthly intervals.
76	The Consent Holder must compare all settlement monitoring data obtained during shaft sinking and tunnelling construction work to the pre-construction minimum levels in accordance with the GSMCP. Where Trigger Levels are exceeded the appropriate actions as set out in the GSMCP must be undertaken and the Council must be notified within three working days, advising of the trigger exceedance, the risk of settlement causing damage to buildings, and details of the actions taken
77	<p>The Consent Holder must ensure that the exercise of this consent does not cause building or ground settlement greater than the Alarm Level thresholds specified below or as otherwise identified in accordance with Condition 74 and set out in the approved GSMCP.</p> <p>(a) greater (i.e. steeper) than 1:1,000 differential settlement (the Differential Settlement Alarm Level) between any two adjacent settlement monitoring marks required under this consent; or</p>

	(b) greater than 50 mm total settlement (the Total Settlement Alarm Level) at any settlement monitoring mark required under this consent.
78	The Consent Holder must continue to monitor the Monitoring Stations at monthly intervals for a total period of 12 months after Completion of Dewatering of any Project stage involving shaft sinking or tunnelling, or for a shorter period if certified by the Council. At 12 months following the Completion of Dewatering of any Project stage involving shaft sinking or tunnelling, monitoring of ground and settlement marks must continue at the direction of the Council if monitoring marks have breached trigger levels and there is risk of adverse effects.
79	<p>The Council must be advised in writing within 10 working days of when excavation and dewatering has been completed.</p> <p><b>Advice Note:</b> The Consent Holder is advised that the discharge of pumped groundwater to a stormwater system or waterbody will need to comply with any other regulations, bylaws or discharge rules that may apply.</p>
<b>Temporary construction yards</b>	
79A	Any temporary retaining wall required to form the construction areas for the Project shall be timber post and board, unless otherwise approved by Auckland Council. An alternative construction material may be used, provided that the alternative material will achieve similar or better landscape and amenity outcomes (and subject to the approval of Auckland Council).
79B	The consent holder shall ensure that any graffiti applied to structures, buildings, or other surfaces within the temporary construction yards shall be promptly and effectively removed. Graffiti removal shall commence within 48 hours of its discovery.

## C. Park reinstatement and permanent assets

<b>Permanent buildings and structures</b>	
80	<p>At least three (3) -months prior to their construction, the Consent Holder shall provide design plans and information which specifies the design details, location and materials of the permanent above-ground wastewater infrastructure to remain at the site including:</p> <ul style="list-style-type: none"> <li>(a) The plant room;</li> <li>(b) The air vent;</li> <li>(c) Permanent retaining walls</li> <li>(d) Any lid structures and chamber covers.</li> </ul> <p>The design for the buildings/aboveground structures shall take into account the following matters:</p> <ul style="list-style-type: none"> <li>(a) The requirement to meet the AUP permitted activity limits for operational noise (Condition <del>8788</del>);</li> <li>(b) The extent to which the buildings/structures minimise potential adverse effects, and maintain and enhance the amenity of the surroundings (including neighbouring properties) including through; <ul style="list-style-type: none"> <li>• The use of building materials which minimise the potential for graffiti and vandalism;</li> <li>• Ensuring buildings/structures are visually integrated into, and respond to, the immediate surrounding environment through use of appropriate colours, textures, design and modulation of buildings/structures;</li> <li>• Minimising the visual clutter of surface elements;</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>• The application of Crime Prevention Through Environmental Design (CPTED) principles in the design of buildings/structures; and</li> <li>• The use of planting to screen and/or visually anchor the plant room building and enhance amenity values.</li> </ul> <p>The design plans and information for permanent buildings and structures may be provided separately or may form part of the PRLP required by Condition <a href="#">8384</a> below.</p>
<b>Mitigation Planting</b>	
81	<p>The Consent Holder shall provide planting to replace and mitigate the removal of trees within Point Erin Park. This shall comprise the planting of a minimum of 38 exotic trees or 49 native trees (native trees shall be preferentially used wherever practicable). As many of these trees as practicable and acceptable to the landowner (Auckland Council) shall be planted within Point Erin Park and comprise a component of the Park Restoration and Landscape Plan required by Condition <a href="#">8384</a> below.</p> <p><b>Advice note:</b> <i>Where these trees are to be planted within Auckland Council Parks, then the location and species to be planted shall be subject to the agreement of Auckland Council as landowner (Parks and Community Facilities).</i></p>
82	<p>Should the two large pōhutukawa trees in the south-western corner of the park be removed for the project, and subject to obtaining approval from Auckland Council Parks, at least two of the trees referred to in Condition <a href="#">8182</a> shall be native specimen trees, at least 160L in size. The specimen trees are to be located as close as practicable to the two removed pōhutukawa trees in the south-western corner of the park, taking into account:</p> <ul style="list-style-type: none"> <li>• <a href="#">prioritisation of native specimen trees wherever practicable</a></li> <li>• the long-term viability of the trees (e.g. suitable soil/proximity to the coast/potential disease such as myrtle rust)</li> <li>• the extent to which the replacement trees will mitigate the visual and amenity effects of the removal of the pōhutukawa trees</li> <li>• provision for informal recreation and walkways through the south-western corner of the park</li> <li>• the need to avoid future conflicts between rootzones and infrastructure.</li> <li>• Feedback received from mana whenua and Auckland Council Parks</li> </ul> <p>The species and location selected shall be provided to Auckland Council, setting out the reasons for the species and location selection.</p> <p>If Auckland Council Parks does not agree to the replanting of two large specimen trees in south-western corner of the park, the Consent Holder shall provide a record of Auckland Council Parks decision to the Council. The consent holder will still be obliged to meet the replanting requirements in condition <a href="#">8182</a>.</p>
<b>Park Restoration and Landscape Plan (PRLP)</b>	
83	<p>The Consent Holder shall prepare a photographic record of the pre-construction condition of the park and any park assets within the footprint and immediate vicinity of the construction areas. This record shall be provided to the Council at least one (1) month prior to construction in Point Erin Park commencing.</p>
84	<p>At least three (3) months prior to the completion of the Project, the Consent Holder shall prepare and submit to Auckland Council for certification a Park Restoration and Landscape Plan (PRLP) for the site. The objective of the PRLP is to provide details on the reinstatement of Point Erin Park to restore</p>

	<p>and enhance the landscape, amenity and recreational values of the park. In particular, the PRLP shall seek to achieve the following outcomes:</p> <ol style="list-style-type: none"> <li>1 Visual integration of above-ground permanent infrastructure.</li> <li>2 Reinstatement of open space for informal recreation.</li> <li><u>3</u> Mitigation for the visual and amenity effects of the loss of two large pōhutukawa trees (if removed).</li> <li><u>34</u> <u>Retaining the open space characteristics and informal use of the central area of the park, and achieving a balance of open space and trees/vegetation within the south-west corner of the park.</u></li> </ol>
85	<p>The PRLP is to be prepared by a suitably qualified and experienced landscape architect in consultation with the landowner (Auckland Council) and mana whenua and shall include the following:</p> <ol style="list-style-type: none"> <li>(a) Removal of construction yards, equipment, temporary retaining walls, and construction access not required for operation and maintenance access.</li> <li>(b) Details of the restoration of the open space to at least the same standard as that recorded as per Condition <u>8384</u>.</li> <li>(c) Replacement or reinstatement of any park assets that were affected by the Project, or any new proposed assets, including, but not limited to: <ul style="list-style-type: none"> <li>• grassed areas</li> <li>• footpaths</li> <li>• park furniture</li> </ul> </li> <li>(d) Details of proposed contouring, landscaping and planting. This is to include: <ul style="list-style-type: none"> <li>• finished contours / levels</li> <li>• details on the replacement of trees removed as per the mitigation planting required by Condition <u>8182</u></li> <li>• any additional planting (including proposed species, location and planting timetable). This shall include details of replacement planting in the south western corner of the park to mitigate tree removal in this area and to assist in visually integrating the plant room and permanent retaining walls, as well as any planting proposed to visually integrate the air vent.</li> <li>• implementation and maintenance programmes (including a landscape planting management and maintenance plan)</li> </ul> </li> <li>(e) Details of the treatment of permanent retaining walls, including wall construction, materials and design, planting, and any health and safety requirements (e.g. fencing).</li> <li>(f) Details of all hard landscaping materials, dimensions and specifications;</li> <li>(g) Any details of proposed way finding and interpretation signage within and adjacent to the park.</li> <li>(h) Record of consultation with the landowner (Auckland Council) and mana whenua.</li> </ol> <p>In preparing the PRLP, consideration shall be given to opportunities to enhance Point Erin Park including its existing recreation, landscape and amenity values (e.g. additional or alternative walkways, seating, appropriate recognition of cultural values, etc), and planting and landform modification around the plant room, ventilation arrangement and permanent retaining walls to assist in the visual integration of any permanent above ground infrastructure.</p>
86	<p><u>The consent holder shall implement the final PRLP, as certified by Council under condition 84. The PRLP shall set out a timeframe for implementation, which shall be agreed with Council's Manager, Parks. This shall be as soon as reasonably practicable, and unless otherwise confirmed through the PLRP, shall be within twelve (12) months of practical completion of construction works. The consent holder shall carry out a 2-year maintenance programme following implementation of the PRLP.</u></p>

## D. Operational phase consent conditions

Noise										
87	<p>The noise arising from the operation of the plant room shall not exceed the following noise limits when measured within the notional boundary of any site zoned as follows:</p> <table border="1"> <tr> <th colspan="2">Residential</th></tr> <tr> <th>Time</th><th>Noise Limit</th></tr> <tr> <td>Monday to Saturday 0700-2200 hours</td><td rowspan="2">50 dB LAeq</td></tr> <tr> <td>Sunday 0900-1800 hours</td></tr> <tr> <td>All other times</td><td>40 dB LAeq 75 dB LAFmax</td></tr> </table> <p><b>Advice notes:</b></p> <p>(a) These noise limits relate to noise generated by the normal operation of permanent works associated with the Project and do not apply to short term maintenance activities.</p> <p>(b) Noise levels shall be measured and assessed in accordance with New Zealand Standards NZS6801:2008 Acoustics - Measurement of Environmental Sound and NZS6801:2008 Acoustics - Environmental Noise.</p>	Residential		Time	Noise Limit	Monday to Saturday 0700-2200 hours	50 dB LAeq	Sunday 0900-1800 hours	All other times	40 dB LAeq 75 dB LAFmax
Residential										
Time	Noise Limit									
Monday to Saturday 0700-2200 hours	50 dB LAeq									
Sunday 0900-1800 hours										
All other times	40 dB LAeq 75 dB LAFmax									
Operational air quality										
88	The Consent Holder shall, at all times operate, monitor and maintain the Point Erin Tunnel so that odour discharges authorised by this consent are maintained at the minimum practicable level.									
89	<p>Within any private property there shall be no odour caused by discharges from the normal operation of the Point Erin Tunnel which, in the opinion of an enforcement officer, is noxious, offensive or objectionable.</p> <p><b>Advice Note:</b> The storage and transfer of wastewater within the Point Erin Tunnel as well as scheduled maintenance activities, and any discharges into air arising from this, are considered part of the normal operation of the tunnel.</p>									
90	<p>The air vent shall be designed to disperse odour and minimise effects. This shall include:</p> <ul style="list-style-type: none"> <li>(a) a stack height of at least 3 m; and</li> <li>(b) a uni-directional discharge vent to allow the discharge when required but prevent inlet of air and preferentially draw inlet air through the control chamber.</li> </ul> <p>In the event that odour discharges are found to result in noxious, dangerous, offensive or objectionable, the Team Leader, Central Compliance Monitoring, may require the Consent Holder increase the vertical stack height to enable greater dispersion.</p>									
91	Except during maintenance, cleaning, or other inspections all access hatches shall be adequately covered to ensure fugitive discharges to atmosphere are kept to a minimum practicable level									
92	All odour complaints that are received arising from the operation of the Point Erin Tunnel shall be recorded. The complaint details shall include:									

	<p>(a) the date, time, location and nature of the complaint;</p> <p>(b) the name, telephone number and address of the complainant, unless the complainant elects not to supply these details;</p> <p>(c) weather conditions, including approximate wind speed and direction, at time of the complaint; and</p> <p>(d) any remedial actions undertaken.</p> <p>Details of any complaints received (as recorded above) shall be provided to the Council within 7 days of receipt of the complaint(s).</p>
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## E. Definitions

Alarm Level – specific levels at which actions are required as described in the relevant conditions.

Alert Level – Specific levels at which actions are required as described in the relevant conditions.

Bulk Excavation – includes all excavation that affects groundwater excluding minor enabling works and piling less than 1.5m in diameter.

Commencement of Dewatering – Means commencement of bulk excavation and/or commencing taking any groundwater from a shaft or tunnel excavation (after construction of the pile walls (if required) and/or dewatering prior to bulk excavation).

Completion of Dewatering – Means when all the permanent shaft lining, base slab and walls are complete and the tunnel lining is complete and effectively no further groundwater is being taken for the construction of the shaft/tunnel, in accordance with the design.

Commencement of excavation – means commencement of Bulk Excavation for shafts, trenches and tunnels

Condition Survey – Means an external visual inspection or a detailed condition survey (as defined in the relevant conditions).

Damage – Includes Aesthetic, Serviceability, Stability, but does not include Negligible Damage. Damage as described in the Building Damage Classification reference table below.

Monitoring Station – Means any monitoring instrument including a ground or building settlement monitoring mark, inclinometer, groundwater monitoring bore, retaining wall deflection station, or other monitoring device required by this consent.

Category of damage	Normal Degree of Severity	Description of Typical Damage (Building Damage Classification after Burland (1995), and Mair et al (1996))	General Category (after Burland – 1995)
0	Negligible	Hairline cracks	Aesthetic Damage
1	Very Slight	Fine cracks easily treated during normal redecoration. Perhaps isolated slight fracture in building. Cracks in exterior visible upon close inspection. Typical crack widths up to 1mm.	
2	Slight	Cracks easily filled. Redecoration probably required. Several slight fractures inside building. Exterior cracks visible, some repainting may be required for weather-tightness. Doors and windows may stick slightly. Typical crack widths up to 5 mm.	



<b>Category of damage</b>	<b>Normal Degree of Severity</b>	<b>Description of Typical Damage</b> <i>(Building Damage Classification after Burland (1995), and Mair et al (1996))</i>	<b>General Category</b> <i>(after Burland – 1995)</i>
3	Moderate	Cracks may require cutting out and patching. Recurrent cracks can be masked by suitable linings. Brick pointing and possible replacement of a small amount of exterior brickwork may be required. Doors and windows sticking. Utility services may be interrupted. Weather tightness often impaired. Typical crack widths are 5 to 15 mm or several greater than 3 mm	Serviceability Damage
4	Severe	Extensive repair involving removal and replacement of walls especially over door and windows required. Window and door frames distorted. Floor slopes noticeably. Walls lean or bulge noticeably. Some loss of bearing in beams. Utility services disrupted. Typical crack widths are 15 to 25 mm but also depend on the number of cracks.	
5	Very Severe	Major repair required involving partial or complete reconstruction. Beams lose bearing walls lean badly and required shoring. Windows broken by distortion. Danger of instability. Typical crack widths are greater than 25 mm but depend on the number of cracks	Stability Damage

2 June 2023

Colin Hopkins  
Auckland Council  
Auckland House  
Level 24, 135 Albert Street  
Auckland CBD  
**AUCKLAND 1010**

Dear Colin

## **REVIEW OF TRANSPORTATION MATTERS FOR CENTRAL INTERCEPTOR EXTENSION – PT ERIN TUNNEL**

### **1 SUMMARY OF OUR REVIEW**

Auckland Council (Council) has commissioned Flow Transportation Specialists (Flow) to review the traffic and transportation matters associated with an application for resource consents for the construction, operation and maintenance of the Point Erin Tunnel, an extension of the Central Interceptor (BUN60415108) to Point Erin Park at 94 Shelly Beach Road in Westhaven (Site).

We have reviewed the following documents in preparing our review:

- ◆ Integrated Transport Assessment (ITA) prepared by Tonkin & Taylor Ltd, dated February 2023
- ◆ S92 response prepared by Tonkin & Taylor Ltd, dated 19 April 2023
- ◆ Eight submissions received, including one from the Ministry of Education being the only that refers to traffic effects.

We agree with the transport-related recommendations included in the ITA, which recommends Council impose a condition requiring a Construction Traffic Management Plan (CTMP) covering a range of matters (see Section 7.2.1 of the ITA) and temporary footpath improvements for the duration of construction (see Section 7.2.2 of the ITA).

In addition, we recommend:

1. Council impose a condition of consent requiring that the CTMP detail where heavy vehicle layover will be accommodated and how this will be managed by the STMS to minimise disruption to the surrounding transport network. Refer to our discussion in Section 3.1.3
2. Council impose a condition of consent requiring that the main construction area access is monitored by the STMS at all times during holiday periods and weekends, while construction is occurring on site. Refer to our discussion in Section 3.2.1

3. we recommend that the applicant's CTMP manage traffic speeds on affected sections of Sarsfield Street during construction, and provide a concept design for the proposed temporary crossing, demonstrating compliance with Waka Kotahi's Pedestrian Network Guidance and the TDM. Refer to our discussion in Section 3.2.2
4. the applicant's CTMP provide tracking drawings demonstrating that a medium rigid truck and an 85<sup>th</sup> percentile car can pass one another on the Point Erin Pools access road. Refer to our discussion in Section 3.2.3
5. Council impose a condition of consent requiring that the CTMP detail how semi-trailer truck movements will be managed safely while minimising disruption to the surrounding transport network. Refer to our discussion in Section 3.2.3
6. we recommend that the applicant's CTMP manage traffic speeds in the vicinity of the Point Erin Pools access road. Refer to our discussion in Section 3.5.2
7. we recommend that the applicant's CTMP include details of consultation with Ponsonby Primary School, detail efforts to minimise the use of Curran Street by construction trucks during school pick-up and drop-off times, and detail safety briefings given to construction drivers in relation to road safety outside Ponsonby Primary School
8. we recommend that Council impose a condition of consent requiring that the egress of maintenance vehicles onto Curran Street be assisted with a spotter.

## 2 SUMMARY OF THE PROPOSAL

The Proposal involves the extension of the Central Interceptor tunnel from Tawariki Street in Grey Lynn to a new terminal shaft in Point Erin. The Project can be broken into two parts:

- ♦ the Point Erin tunnel, which runs from Tawariki Street in Grey Lynn to Point Erin Park in Herne Bay; and
- ♦ the Point Erin Park shaft site.

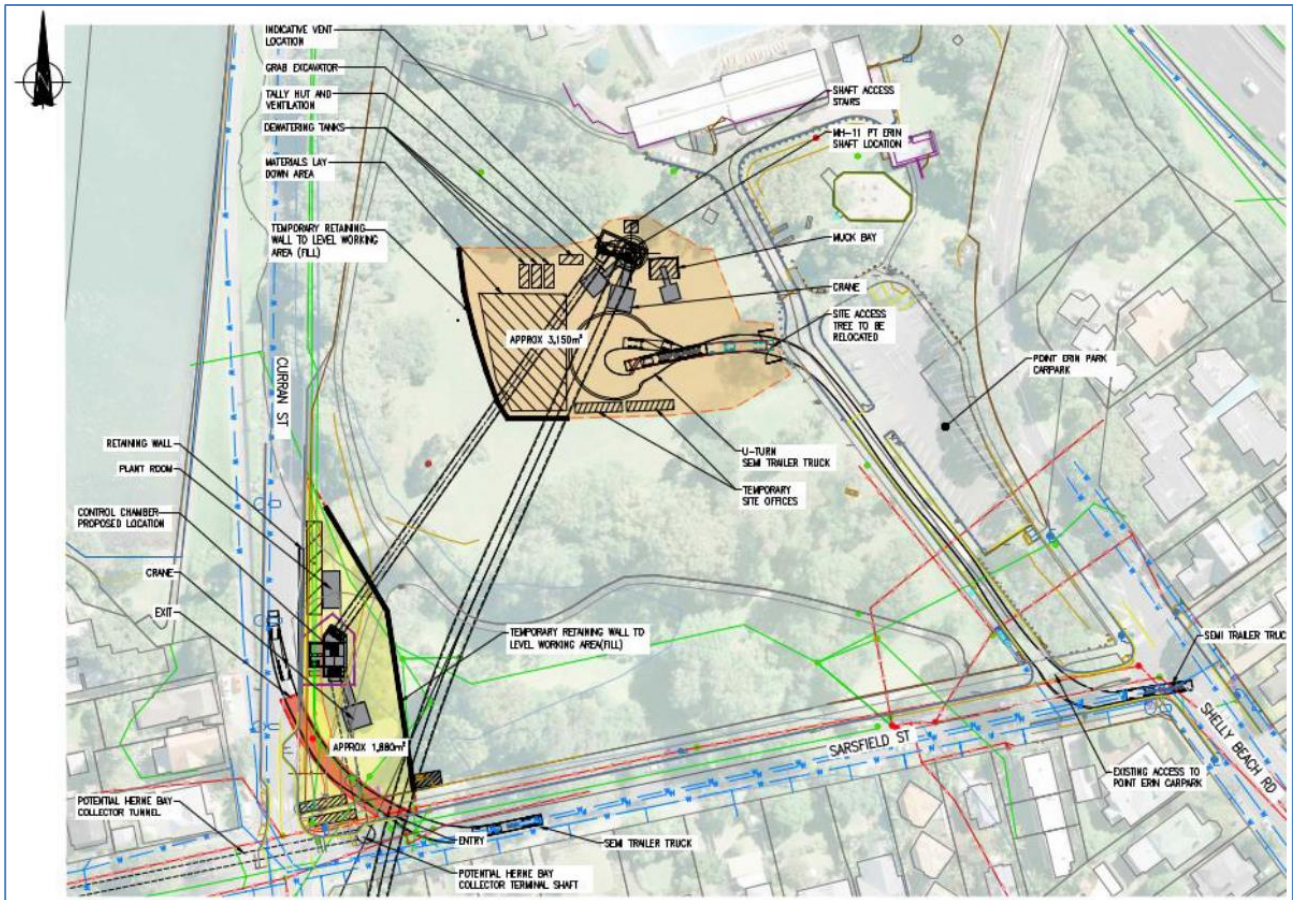
Construction of the tunnel will take place entirely below ground, with no surface work required. As such, it is not anticipated to have any traffic effects and is not considered in this review.

Works at the Point Erin shaft site will occur in two locations within Point Erin Park:

- ♦ The terminal shaft and associated construction area, located immediately south of the Point Erin Pools (the main construction area)
- ♦ The control chamber, plant room and associated construction area, located in the southwest corner of Point Erin Park near the intersection of Curran Street and Sarsfield Street (the southwestern construction area).

The proposed layout for these two activities and their locations within Point Erin Park are shown in Figure 1.

Figure 1: Proposed site layout



There are several potential traffic effects associated with the proposal that are covered in this report:

- ♦ impacts of construction traffic on the surrounding transport network (see Section 3.1)
- ♦ impacts on pedestrian and vehicle access to Point Erin Park (see Section 3.2)
- ♦ impacts on access to surrounding residential properties (see Section 3.3)
- ♦ impacts on parking in the vicinity of the site (see Section 3.4)
- ♦ safety impacts as a result of the construction activity (see Section 3.5).

### 3 REVIEW OF TRANSPORTATION MATTERS

#### 3.1 Construction traffic impacts

##### 3.1.1 Construction traffic generation

The ITA estimates the maximum number of construction vehicle movements anticipated to be generated by the Proposal:

- ♦ 67 daily vehicle movements are anticipated, comprising 58 truck movements and 9 car movements per day

- ♦ distributed across a 10-hour work day this equates to 6.7 vehicle movements per hour (one vehicle movement every 9 minutes).

We note that the assumption regarding hourly movements does not account for any peaking but are satisfied that vehicle movements will be relatively evenly distributed across the day given the majority of vehicle movements are truck movements.

The additional vehicle movements resulting from the proposal equate to an increase in daily traffic of between 1% and 2% on Curran Street and Shelly Beach Road and an increase of 3.2% on Sarsfield Street. As the ITA notes, this is within the day-to-day fluctuations in traffic flow that regularly occur. We are comfortable that there will not be any significant impacts on traffic flow as a result of the traffic generated by the proposal.

Construction traffic is expected to comprise a combination of light vehicles, 11.5 m medium rigid trucks, and 17 m semi-trailer trucks for delivery of larger items. Larger low-loader trucks will be used for one-off large plant delivery and pick-up events, for which bespoke SSTMPs and CARs will be developed with approval from Auckland Transport and Waka Kotahi.

Auckland Transport (AT) has requested the Applicant to confirm the largest truck that will access the site whereby the Applicant confirmed that the 17 m semi-trailer trucks would be typical. The Applicant also outlined that bespoke SSTMPs and CARs will be developed once exact details of the machinery and vehicles required is known.

We find the Applicant's response acceptable and consider that any effect associated with larger vehicles could be sufficiently addressed in a CTMP once the exact vehicle sizes are known.

### 3.1.2 Construction traffic routes

Trucks are anticipated to travel to and from the site using the following routes:

- ♦ to North via the State Highway 1 Currant Street on-ramp
- ♦ from North via Shelly Beach Road off-ramp
- ♦ to/from South via Shelly Beach Road and Curran Street.

All these roads are arterial roads or State Highways and therefore considered appropriate for truck movements.

### 3.1.3 Construction traffic queueing

The main construction area can accommodate one semi-trailer truck or up to five medium rigid trucks at any one time, while the southwestern area can accommodate one semi-trailer or up to two medium rigid trucks. The ITA states that this is sufficient and that if more trucks arrive than can be accommodated on-site, this can be managed by a Site Traffic Management Supervisor (STMS) in accordance with the Construction Traffic Management Plan (CTMP).

The Applicant further outlines that for the main site access, if required, the vehicle layover could be located on Shelly Beach Road utilising either the on-street 120 minute time limited parking on the west



side or the painted median on the east side. For the south west site access, if required, the vehicle layover could be located on Sarsfield Street utilising the on street 120 minute time limited parking on the south side.

We are satisfied with this response but recommend Council impose a condition of consent requiring that the CTMP detail where heavy vehicle layover will be accommodated and how this will be managed for the site.

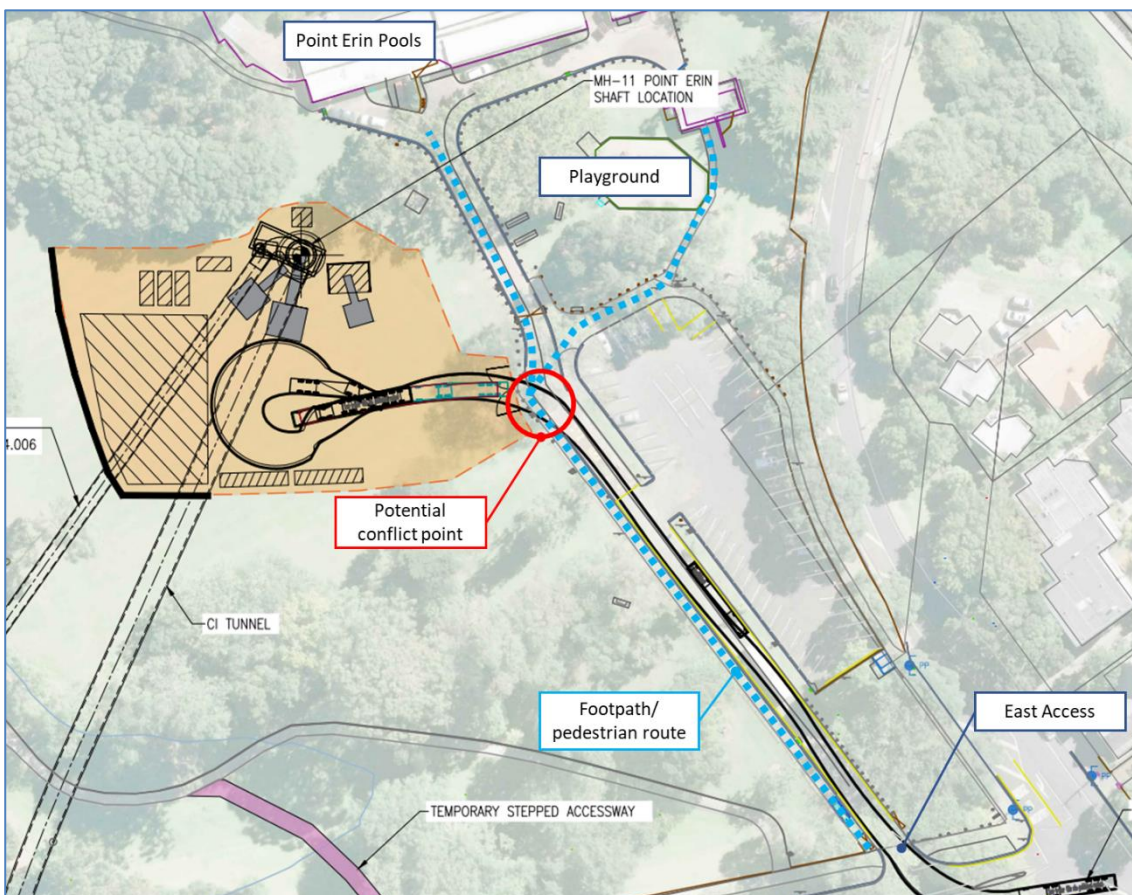
**Outcome:** We recommend Council impose a condition of consent requiring that the CTMP detail where heavy vehicle layover will be accommodated and how this will be managed by the STMS to minimise disruption to the surrounding transport network.

## 3.2 Impact on public access to Point Erin Park

### 3.2.1 Pedestrian access – east footpath

Throughout construction pedestrian access to Point Erin Park, including to the pools and the carpark, will be maintained via the footpath at the eastern side of the park (adjacent to the pools access road). The footpath will remain relatively unchanged, apart from the vehicle access to the main construction area which will cross the footpath. This will create a conflict between construction vehicles and pedestrians using the footpath as shown in Figure 2:

**Figure 2: Conflict between construction vehicles and pedestrians – east access**





In the s92 response the Applicant outlines that

- ♦ the TM supervisor will monitor and assist pedestrians on the access road footpath to the Pool and playground to cross the site access and also assist any pedestrians from the car park to cross the access road to the park during times that construction vehicles are accessing the site
- ♦ site surveys were undertaken which indicated use of the footpath (whilst the Pool was open) was observed to be from people who had parked on Sarsfield Street and this is not considered as ‘*high level*’ usage. Outside of the peak Pool usage for the remaining 11 months of the year, use of the footpath is likely to be minimal.

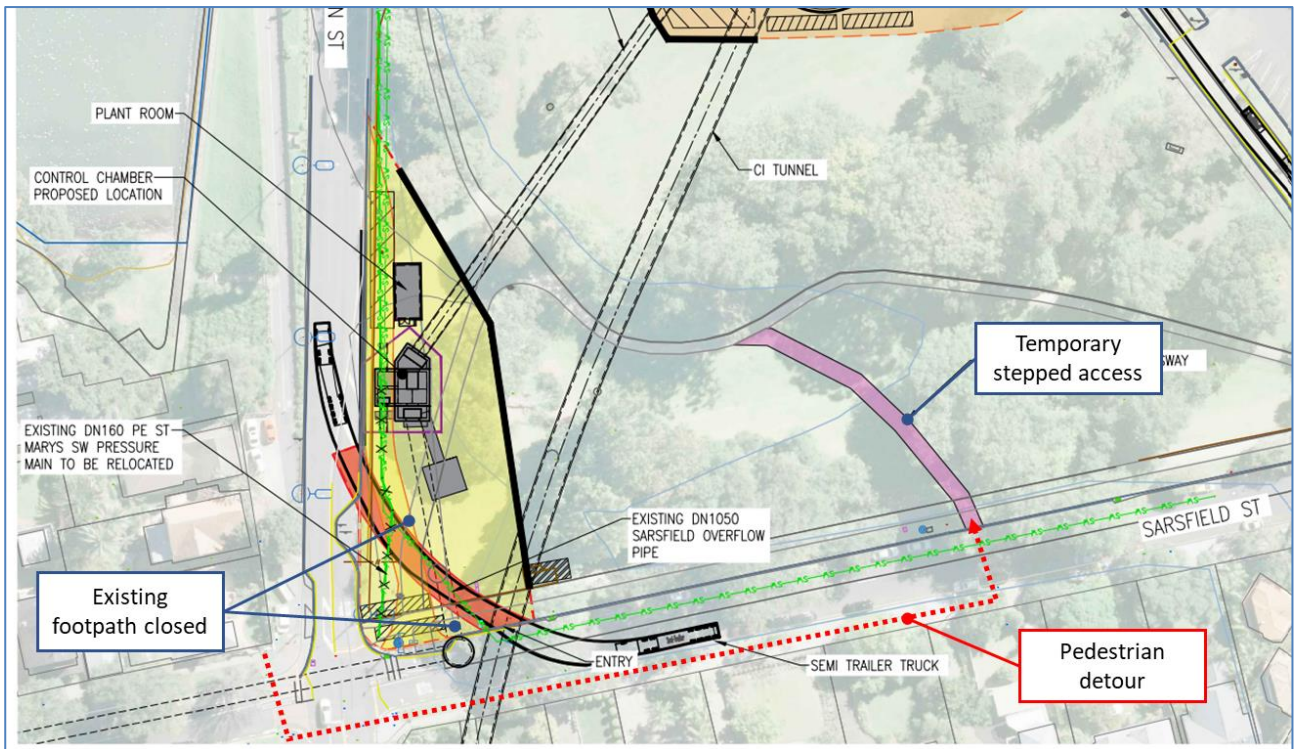
Given the number of construction vehicles accessing the site (one every 9-12 minutes) and the likelihood of high numbers of pedestrians using the footpath during holiday periods and weekends, including children, we recommend Council impose a condition of consent requiring that the STMS monitor the main construction area access at all times during holiday periods and weekends, while the construction site is operational. We note that STMS management of vehicle movements on the pool access road and STMS assistance for pedestrians crossing the construction area access is already proposed as a condition in the ITA.

**Outcome:** *We recommend Council impose a condition of consent requiring that the main construction area access is monitored by the STMS at all times during holiday periods and weekends, while construction is occurring on site.*

### 3.2.2 Pedestrian access – west footpath

The footpath at the western end of Point Erin Park will be closed throughout the construction period, as will the section of the footpath on the northern side of Sarsfield Street immediately adjacent to the southwestern construction area access, as shown in Figure 3.

**Figure 3: Temporary footpath closure - west access**



Pedestrian access to the western side of the park will be facilitated by

- ♦ an alternative temporary path with steps, c. 90 m east of the existing path, connecting to the footpath within the park
- ♦ a temporary crossing over Sarsfield Street adjacent to the temporary stepped access comprising
  - a dropped kerb, tactile paving, a short section of surfaced berm and temporary parking restrictions on the northern side of Sarsfield Street
  - an existing vehicle crossing on the southern side
- ♦ wayfinding signage for the temporary path and to direct people with limited mobility to the existing east footpath.

The proposed temporary pedestrian access will not be accessible to all users. The ITA notes that the applicant has investigated the possibility of providing an alternative path in the form of a ramp as opposed to steps, but that a ramped access was not considered feasible due to additional retaining works required which would impact existing trees in Point Erin Park. The ITA also notes that the existing footpath has a gradient that exceeds the 8% maximum specified in the Auckland Transport's Transport Design Manual (TDM) for accessible footpaths.

The existing footpath, while not compliant with the TDM standard, does provide access for some users (such as cyclists or people with strollers) who will not be able to use the temporary access. However, we accept the applicant's reasons for not providing a ramped access given an accessible alternative route into the park is available via the east access (albeit with a substantial detour).

The southwestern construction access requires the removal of an existing raised table crossing over Sarsfield Street. The applicant has proposed a pram crossing to provide access to the temporary stepped access, which is not a like-for-like replacement. Applying Waka Kotahi NZ Transport Agency's (Waka Kotahi) crossing selection process,<sup>1</sup> a pram/kerb crossing may be appropriate if the operating speed is 30 km/h or less.

We recommended that the applicant's CTMP safely manage traffic speeds on affected sections of Sarsfield Street during construction, and provide a concept design for the replacement crossing demonstrating compliance with Waka Kotahi's Pedestrian Network Guidance and the TDM.

In the s92 response the Applicant outlines that at this stage they do not have a design drawing available but expect the temporary pedestrian crossing of Sarsfield Street will consist of:

- ♦ Sarsfield Street (south side) use the dropped crossing of the existing driveway at #14.
- ♦ Sarsfield Street (north side) either retain the existing kerb or provide reflective heavy duty rubber temporary kerb ramp.
- ♦ Surface a 1.8m wide section of berm on the north side of Sarsfield Street to connect to the existing footpath to avoid pedestrians crossing over wet grass.
- ♦ Introduce temporary removal of parking on Sarsfield Street for a distance of 20m east and west of #14 driveway and 20m east and west of the north side pedestrian crossing point to avoid pedestrians crossing in between parked vehicles.
- ♦ As part of the overall CTMP, investigate the scope to have a temporary reduced speed limit on Sarsfield Street of 30 km/h between Shelly Beach Road and Curran Street.

We accept that the above design outline could be compliant with the relevant guidelines.

**Outcome:** *We recommend that the applicant's CTMP manage traffic speeds on affected sections of Sarsfield Street during construction, and provide a concept design for the proposed temporary crossing as part of the CTMP, demonstrating compliance with Waka Kotahi's Pedestrian Network Guidance and the TDM.*

### 3.2.3 Vehicle access

Vehicle access to the public carpark within Point Erin Park and to pool staff/contractor parking will be maintained throughout construction and will be largely unaffected.

The ITA states that tracking indicates cars will be able to pass a medium rigid truck on the pool access road. However, tracking drawings have not been provided to demonstrate this movement. Medium rigid truck movements are anticipated to occur at a high frequency over a long period, so it is important that access to the park and pool can be maintained while these movements are occurring.

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<sup>1</sup> Waka Kotahi NZ Transport Agency. (2022). *Pedestrian Network Guidance - Crossing Selection Process*. <https://www.nzta.govt.nz/walking-cycling-and-public-transport/walking/walking-standards-and-guidelines/pedestrian-network-guidance/design/crossings/crossing-selection/crossing-selection-process/>

We requested that the applicant provide tracking drawings demonstrating an 85<sup>th</sup> percentile car and a medium rigid truck passing one another on the pool access road as part of the CTMP. The Applicant responded that it is unlikely that a semi-trailer truck and car will be able to safely pass one another but a rigid truck and car will be able to pass each other. The Applicant therefore proposed that the CTMP includes measures whereby once the Traffic Management (TM) supervisors are radioed of an incoming semi-trailer truck, then one TM supervisor will hold cars wanting to leave the public car park within the car park (there is sufficient space to do this), whilst another TM supervisor controls the truck (and any other following cars) into the Pool access road.

We consider this to be an appropriate measure to manage large truck movements and recommend a condition of consent that requires the CTMP to outline this procedure, along with providing vehicle tracking curves to demonstrate an 85<sup>th</sup> percentile car and a medium rigid truck passing one another on the pool access road.

The ITA notes that a car will not be able to pass a semi-trailer truck on the access road. We are comfortable with this as semi-trailer trucks will be used relatively infrequently, and closures of the access road will be for short periods only. We recommend the CTMP detail how semi-trailer truck movements will be managed safely and how disruption to the surrounding transport network will be minimised.

AT requested the Applicant to confirm if the traffic management supervisor assistance for all trucks leaving the site is offered as a condition of consent for both construction and permanent use.

The Applicant responded by offering two additional key conditions that sets out what should be addressed in the CTMP, namely

- ♦ Measures to manage and/or supervise the egress of vehicles onto Curran Street
- ♦ Measures to manage traffic on Shelly Beach Rd offramp.

The Applicant further noted that egress onto Curran Street is anticipated to be very infrequent, likely once or twice a year, and that no condition is required to address the egress manoeuvre.

**Outcome:** *We request the applicant's CTMP provide tracking drawings demonstrating that a medium rigid truck and an 85<sup>th</sup> percentile car can pass one another on the Point Erin Pools access road. We outline a condition of consent in Section 5 to address this.*

**Outcome:** *We recommend the CTMP detail how semi-trailer truck movements will be managed safely while minimising disruption to the surrounding transport network. We outline a condition of consent in Section 5 to address this.*

### 3.3 Impact on access to surrounding residential properties

No impact on access to surrounding residential properties is anticipated in the ITA, as construction access and activity will take place on the northern side of Sarsfield Street, adjacent to the park. We are comfortable with this conclusion, provided the applicant can satisfactorily manage construction vehicle queueing and layover as outlined in Section 3.1.3.

### 3.4 Impact on parking

Staff and visitor car parking is proposed to be accommodated within the main construction area and is therefore unlikely to impact the availability of on-street parking, provided the applicant can satisfactorily manage construction vehicle queueing and layover as outlined in Section 3.1.3. A small amount of temporary parking removal will be required as part of temporary traffic management and pedestrian arrangements, but the impact of this is anticipated to be minor.

The ITA notes that during the Point Erin Pool's summer peak period, the public carpark within Point Erin Park often becomes full, with people occasionally parking on the access road (despite the presence of No Stopping At All Times (NSAAT) lines) or on the grassed area of the park.

The proposal will require enforcement of the NSAAT lines on the pool access road to ensure construction vehicles can access the main construction area. The proposal will also potentially remove public vehicle access to the grassed area. This will result in increased demand for on-street parking on Sarsfield Street and the surrounding streets during the summer period. In our view, this is acceptable as on-street parking is available on Sarsfield Street, Shelly Beach Road and Curran Street, and parking on the access lane and on the grass area is not permitted anyway.

The ITA proposes that the CTMP include provisions giving the contractor powers to tow vehicles parked on the pool access road on Council's behalf. We are comfortable with this, but recommend that signage is provided for the duration of construction to warn drivers not to park on the NSAATs, and that non-complying vehicles will be removed.

### 3.5 Safety impacts

#### 3.5.1 Historical crash assessment

The ITA includes an assessment of road safety in the vicinity of Point Erin Park using Waka Kotahi NZ Transport Agency's Crash Analysis System (CAS). In the period between 2017 and 2023

- ◆ a total of 23 crashes were recorded, including one serious injury crash and no fatal crashes
- ◆ no crashes occurred at the intersection of Sarsfield Street and the Point Erin Pool access road
- ◆ five crashes occurred at the Sarsfield Street/Curran Street intersection, suggesting a potential safety issue here. We note that recent safety improvements including raised table crossings on both Sarsfield Street approaches have been installed at this intersection
- ◆ four crashes occurred on Sarsfield Street between Curran Street and Shelly Beach Road, with no clear common cause
- ◆ two crashes involved vulnerable road users – one cyclist and one pedestrian. Neither of these crashes occurred on the section of Sarsfield Street adjacent to Point Erin Park or at the intersections of Sarsfield Street and Curran Street or Shelly Beach Road.

Overall we consider there are no safety issues likely to be exacerbated by the proposal, provided traffic speeds are appropriately managed on Sarsfield Street (noting the removal of the raised table crossing) and measures are taken to maintain visibility on intersection approaches.



### 3.5.2 Access to main construction area - construction

As noted above in Section 3.2.1, construction vehicle access to the main construction area will cross the existing footpath creating a conflict between construction vehicles and pedestrians. This can be managed by the STMS as outlined in our earlier recommendation.

To accommodate semi-trailer access, the temporary removal of the traffic island on Sarsfield Street at the Shelly Beach Road intersection is proposed. The traffic island is not a pedestrian refuge. We consider that any safety impacts of the removal of the traffic island can be mitigated through temporary traffic management measures, including temporary 30 km/h speed limits in the vicinity of the Point Erin Pools access road.

Visibility from the pool access road is currently restricted by existing overhanging trees, which the applicant recommends Auckland Transport or Council trim to improve sight lines. The applicant notes that approach speeds are low (c. 15 km/h) due to the proximity to the intersection and as such Safe Intersection Sight Distance requirements are met.

**Outcome:** *We recommend that the applicant's CTMP manage traffic speeds in the vicinity of the Point Erin Pools access road.*

### 3.5.3 Access to main construction area - maintenance

Following the completion of construction, access to the tunnel shaft site will be required for maintenance vehicles (a 7 m rigid truck) approximately once or twice a year. Access will continue to occur from the pool access road. We are satisfied that maintenance access can be managed safely as it will be undertaken infrequently with a smaller vehicle which can enter and exit the site in a forward direction (as evidenced by tracking drawings provided with the ITA).

### 3.5.4 Access to southwestern construction area - construction

Access to the southwestern construction area will have ingress via an access about 20 m from the Curran Street/Sarsfield Street intersection and egress onto Curran Street adjacent to the planted kerb extension. Both ingress and egress movements are proposed to be assisted by the STMS, and as such, we consider that any safety concerns as a result of proximity to the intersection will be effectively mitigated.

The applicant has undertaken a desktop assessment of available sight distance and deduced that a sight distance of approximately 148 m is available, which exceeds the required sight distance of 97 m (applying Austroads SISD with a design speed of 50 km/h).

We note that operating speeds for approaching vehicles may be closer to 60 km/h given the downhill grade of Curran Street and the fact that many vehicles will be approaching the motorway on-ramp. There are also some existing trees which may obscure visibility to the south for trucks exiting the site. However, we agree that the effects of this construction access can be managed through the traffic management measures proposed.

Pedestrian safety aspects of the southwestern access are covered in Section 3.2.2.



### 3.5.5 Access to southwestern construction area – maintenance

Following the completion of construction work access to the southwest site will be required for maintenance vehicles approximately once or twice a year.

The ingress from Sarsfield Street will be relocated closer to the intersection with Curran Street to the existing pedestrian entrance, approximately 10 m from the intersection, with bollards put in place to prevent unauthorised vehicle access (but maintain pedestrian access). The proximity of the vehicle access to the intersection raises a potential safety issue, particularly as the applicant has indicated semi-trailer trucks may be used for maintenance in some instances.

The egress will be moved slightly further north on Curran Street. The applicant has proposed that egress from the site onto Curran Street, as well as ingress into the site from Sarsfield Street, can both be undertaken without a supervisor.

AT requested that the Applicant provides an assessment of the vehicle crossing's design to Sarsfield Street, including an assessment of effects the location and design of this proposed crossing on pedestrian safety and amenity. The Applicant has addressed AT's concerns and responded that the access design maintains the pedestrian-oriented entrance to the park which can be used infrequently for vehicular access and therefore there will be no impact on pedestrian safety or amenity.

AT further requested the Applicant to clarify how the operation and removal procedures of the bollards, whereby the Applicant responded that the proposed situation is no different to the existing situation and that there is ample on-street parking on Sarsfield St for the ute or truck to park up and wait in while the driver removes the bollard to provide access.

The Applicant confirmed that where maintenance is required, the largest anticipated vehicle is an 8m medium rigid truck, and that due to the infrequency and nature of vehicles using this entrance and the existing low speeds at this location, consider truck movements into the site for maintenance can be performed safely without a TM supervisor.

We are satisfied that maintenance vehicle access via Sarsfield Street can be undertaken safely as described by the applicant, permitted it occurs once or twice a year.

However, AT has raised a concern about the safety of the proposed egress onto Curran Street, which is at an acute angle to the street. Due to this angle, truck drivers may not have a clear line of sight up Curran Street to approaching traffic, and may be forced to rely on their mirrors alone. Vehicles on this section of Curran Street are often travelling at greater than 50 km/h, accelerating downhill to the motorway on-ramp below. We agree with AT's concern, and recommend that maintenance vehicle egress onto Curran Street be supervised. We further note that this was proposed by the applicant in their initial application, but subsequently withdrawn.

**Outcome:** *We recommend a condition of consent requiring that the egress of maintenance vehicles onto Curran Street be supervised.*

## 4 SUBMISSIONS

There were eight submissions received relating to this resource consent application of which only one referred to transportation effects<sup>2</sup>.

The Ministry of Education (MoE) is of view that there is a safety concern for students accessing the school site at pick-up and drop-off times during the peak of construction. The MoE notes that there is currently a signalised pedestrian crossing located outside Ponsonby Primary School between Emmett Street and Tweed Street which provides safe walking and cycling access to the school. However, in the MoE's view signalised crossings do not always guarantee students will use this crossing facility and some may cross at other points along the road.

The MoE is concerned with the high volume of large truck movements proposed that could pose a threat to students walking and cycling to school, or students getting out of cars at peak pick-up and drop-off times. Larger trucks also reduce the visibility to other drivers of students on the road. In order to minimise adverse effects on student safety, the MoE request that all heavy vehicle movements are avoided on Curran Street during peak school pick-up and drop-off times via a condition of consent outlined below. This consent wording has been accepted by other applicants across Auckland to manage construction traffic effects and school safety risks.

The condition of consent proposed by the MoE is outlined below:

*1) The Construction Traffic Management Plan (CTMP) shall include details of consultation (including outcomes agreed) with the applicant and Ponsonby Primary School with regard to maintaining the safety of school students during construction. Details of all safety measures and interventions will be documented in the CTMP. The CTMP will include details of:*

*a. Restrictions on heavy vehicles along Curran Street (between Sarsfield Street and Jervois Road) during school pick up and drop off times (between 8:05am – 8.50am and 3.00pm – 3:30pm) during term time.*

*b. Briefing for all construction drivers on the importance of slowing down and adhering to established speed limits when driving past Ponsonby Primary School, and to look out for school children and reversing vehicles at all times.*

We recognise MoE's concern for road safety outside Ponsonby Primary School. We note that:

- ♦ Curran Street is classified as an arterial road, and as such is an appropriate street for heavy commercial vehicle traffic
- ♦ Shelly Beach Road and Curran Street tend to operate as a one-way pair, with Curran Street used by northbound traffic and Shelly Beach Road used by southbound traffic. As such, construction traffic to and from the site is likely to be divided between the two streets

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<sup>2</sup> Submission received from the Ministry of Education (Vicky Hu, Planner at Beca Ltd – Consultant to the MoE)

- ♦ Curran Street is currently used by around 350 heavy commercial vehicles each weekday<sup>3</sup>. The additional heavy commercial vehicles proposed will not result in a significant increase

As a result, we do not consider that a condition prohibiting the use of Curran Street would be necessary or reasonable. However, we agree with MoE that the CTMP should include specific measures to address road safety outside the school, and have recommended conditions that:

- ♦ Require the applicant consult with Ponsonby Primary School as per MoE's submission
- ♦ Require the use of Curran Street by construction related heavy vehicles to be minimised, where possible, given that Shelly Beach Road will be a safe and suitable alternative in many instances
- ♦ Require construction drivers to be briefed, as per MoE's submission.

## 5 PROPOSED CONDITIONS OF CONSENT

We have summarised the transportation related proposed conditions of consent as provided by the Applicant through the s92 response in Table 1 below. On the basis of our review, our recommendations of any changes or additions to the set of conditions of consented is underlined and coloured blue.

**Table 1: Transportation related proposed conditions of consent**

<b>Construction hours</b>	
10	<p>Construction hours shall be as follows, except where work is necessary outside the specified days or hours for the purposes specified in Condition 11 below.</p> <p>(a) Tunnelling activities - 24 hours a day, 7 days a week operations for all tunnelling activities;</p> <p>(b) General site activities - 7 am to 6pm, Monday to Friday, 8am to 6pm Saturday; and</p> <p>(c) Truck movements - 7am to 6pm, Monday to Friday, 8am to 6pm Saturday.</p>
<b>Traffic management</b>	
31	<p>The Consent Holder shall submit a Construction Traffic Management Plan (CTMP) to Council at least twenty (20) working days prior to the commencement of Project works at Point Erin Park. No construction activity shall commence until certification is provided from Council that the CTMP satisfactorily gives effect to the objectives set out below, and complies with the requirements in Conditions 32 to 34.</p> <p>The objectives of the CTMP are to:</p> <p>(a) Ensure construction traffic movements on the transport network, including Sarsfield Street, Curran Street and the SH1 onramp, are appropriately managed;</p>

<sup>3</sup> Average of 11 Auckland Transport tube counts, 2013 to 2021

**Table 1: Transportation related proposed conditions of consent**

	<ul style="list-style-type: none"> <li>(b) Provide for the safety of everyone at all times;</li> <li>(c) Minimise disruption and maintain pedestrian and vehicle access to/from surrounding residential properties and Point Erin Park including Point Erin Pool, carpark and playground;</li> <li>(d) Minimise disruption from construction traffic on the travelling public and road users along the identified sections of the construction routes;</li> <li>(e) Seek to avoid full road closures and minimise any partial or managed closures;</li> <li>(f) Manage integration with other construction projects and Auckland Transport projects.</li> </ul>
32	<p>The CTMP shall be prepared by a suitably qualified and experienced traffic expert and in accordance with the Council's requirements for traffic management plans or CTMPs (as applicable) and New Zealand Transport Authority's Code of Practice for Temporary Traffic Management and must set out, as a minimum:</p> <ul style="list-style-type: none"> <li>(a) Traffic management measures to be implemented;</li> <li>(b) Any road closures that will be required and the nature and duration of any traffic management measures that will result, including any temporary restrictions, detours or diversions for general traffic and buses;</li> <li>(c) Construction traffic routing;</li> <li>(d) The design of the access roads and vehicle crossings; <a href="#"><u>including appropriate measures to manage large truck movements and provision of vehicle tracking curves to demonstrating an 85th percentile car and a medium rigid truck passing one another on the pool access road.</u></a></li> <li>(e) Methods to manage the effects of the delivery of construction material, plant and machinery. This shall include, but not be limited to: <ul style="list-style-type: none"> <li>• ensuring heavy vehicles access the south-western construction area via Shelly Beach Road and Sarsfield Street and a right turn into the construction area (i.e. not via Curran and Sarsfield Streets / no left turn into the construction area);</li> <li>• traffic management measures, including a site Traffic Management Supervisor: <ul style="list-style-type: none"> <li>• to ensure the safe movement of construction vehicles on Sarsfield Street and the Pool access road, to manage any potential effects, and to ensure the safe access of cars, cyclists, pedestrians, service trucks and emergency vehicles accessing the Pool and public carpark;</li> <li>• to ensure safe ingress from Sarsfield Street to the southwestern construction area and safe egress onto Curran Street;</li> <li>• to ensure construction vehicles can negotiate access and egress to avoid any additional queueing on the adjacent road network during congested peak periods and to ensure a suitable truck layover area is provided if required</li> </ul> </li> </ul> </li> </ul>

Table 1: Transportation related proposed conditions of consent

	<p><u><a href="#">Advice note: The CTMP to detail where heavy vehicle layover will be accommodated and how this will be managed for the site.</a></u></p> <p>(f) Measures to maintain existing vehicle access to property where practicable, or to provide alternative access arrangements;</p> <p>(g) Measures to maintain pedestrian and cyclist movements adjacent to and through Point Erin Park and measures to reduce the impact on mobility impaired users on roads and footpaths adjacent to the construction works. Where the works impact on existing pedestrian or cycle ways, alternative temporary accessways shall be provided where practicable in accordance with Condition 37. Such access shall be safe, clearly identifiable and seek to minimise significant detours.</p> <p>(h) Provision for construction staff and visitor parking on site as far as practicable;</p> <p>(i) Proposed traffic volumes and movements associated with works outside the usual construction hours specified in Condition 11 and associated management and mitigation measures to be implemented.</p> <p>(j) A construction driver education programme (due to the proximity of the Point Erin Pool, carpark and playground);</p> <p>(k) Measures to communicate traffic management measures throughout construction activities (note: these measures may form part of the CP required by Condition 5).</p> <p>(l) Any proposed monitoring to measure the impact of the works on traffic and the impact of the traffic management measures. If safety or operational issues are evident, measures to be implemented to address these issues.</p> <p>(m) Measures to manage and/or supervise the egress of vehicles onto Curran Street.</p> <p>(n) Measures to manage traffic on the Shelly Beach Rd off-ramp if appropriate/required.</p> <p>(o) <u><a href="#">Measures to manage traffic speeds safely on affected sections of Sarsfield Street during construction</a></u></p> <p>(p) <u><a href="#">A concept design for the proposed temporary crossing, demonstrating compliance with Waka Kotahi's Pedestrian Network Guidance and the TDM</a></u></p> <p>(q) <u><a href="#">Details of consultation (including outcomes agreed) with the applicant and Ponsonby Primary School with regard to maintaining the safety of school students during construction. Details of all safety measures and interventions will be documented in the CTMP. The CTMP will include details of:</a></u></p> <ul style="list-style-type: none"> <li>• <u><a href="#">Efforts to minimise the use of Curran Street (between Sarsfield Street and Jervois Road) by heavy commercial vehicles during school pick up and drop off times (between 8:05am – 8.50am and 3.00pm – 3:30pm) during term time, noting that Shelly Beach Road will be a safe and suitable alternative arterial route in many instances</a></u></li> <li>• <u><a href="#">Briefings for all construction drivers on the importance of slowing down and adhering to speed limits and safe driving practices when</a></u></li> </ul>
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**Table 1: Transportation related proposed conditions of consent**

	<a href="#"><u>driving past Ponsonby Primary School, and to look out for school children and reversing vehicles at all times.</u></a>
33	The Consent Holder shall consult with the landowner (Auckland Council) and CLM to confirm measures to manage parking and ensure access is maintained for Pool maintenance and operational vehicles, emergency vehicles, and construction traffic during peak parking demand periods for the Point Erin Pool, how these measures will be implemented and the party responsible for implementing any measures identified.
34	Access for all vehicles to the south western construction area shall be via a one-way system entering from the Sarsfield Street access and exiting from the Curran Street access. The design of the access and vehicle crossing on Curran Street shall ensure it does not affect the effective, efficient and safe operation of the Curran Street SH1 onramp.
35	The temporary and permanent vehicle crossings from the south western construction area onto Curran Street shall be designed to meet minimum sight distance requirements of the Safe Intersection Sight Distance (SISD) requirements set out in ' <i>Austroad (2009). Guide to Road Design Part 4A: Unsignalised and Signalised Intersections. Sydney</i> '. <a href="#"><u>Egress of all vehicles from the temporary and permanent vehicle crossing onto Curran Street should be assisted by a spotter.</u></a>
36	The Consent Holder shall ensure the construction areas in Point Erin Park are cordoned off/fenced to ensure public safety.
37	<p>The Consent Holder shall install construction site fencing to prevent pedestrians using the section of footpath on Sarsfield Street between Curran Street and the site ingress.</p> <p>Prior to the temporary closure of the existing footpath through the south-western corner of Point Erin Park, the Consent Holder shall:</p> <ul style="list-style-type: none"> <li>(a) provide temporary pedestrian access through the Park to the east of the construction area and wayfinding signs to direct pedestrians to the temporary route and an existing accessible route in the south eastern corner of the Park.</li> <li>(b) undertake temporary improvements on the north side of Sarsfield Street for pedestrians to cross Sarsfield Street. This shall include the provision of a dropped kerb and tactile paving, a short section of surfacing in the berm, and a temporary parking restriction in the immediate area.</li> </ul> <p>These shall be maintained for the duration of the construction works. Once construction works are completed, the closed footpath through the south-western corner of Point Erin Park and the section of footpath on the northern side of Sarsfield Street shall be reinstated.</p> <p><i>Advice note: These requirements are subject to landowner and asset manager approvals.</i></p>



**Table 1: Transportation related proposed conditions of consent**

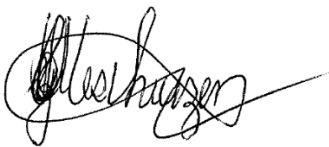
38	<u>The Consent Holder shall ensure that the main construction area access is monitored by the STMS at all times during holiday periods and weekends, while construction is occurring on site.</u>
39	All construction traffic shall be managed at all times in accordance with the certified CTMP.

## 6 CONCLUSION

Overall we consider that there are no transport-related reasons for Council to refuse consent for the proposed construction activities, provided the applicant can respond adequately to the matters raised in our review and construction is managed in accordance with the recommendations made in the ITA and the additional recommendations outlined in this report.

We note that there is still a range of matters to be agreed with Auckland Transport and Auckland Council which will be resolved through the preparation and approval of CTMPs for the site.

Yours sincerely



Gerhard van der Westhuizen

PRINCIPAL TRANSPORTATION ENGINEER

Reference: P:\ACXX\441 Central Interceptor Pt Erin Extension- 94 Shelly Beach Road (PRR00039860)\4.0 Reporting\L1B230519 Transport Review of CI Tunnel Extension Pt Erin.docx

# Memorandum

To: Mark Ross | Consultant Planner, Sentinel Planning (for AC)  
Colin Hopkins | Principal Projects Lead (AC)

From: Neil Stone | Senior Development Planner (AT)

Date: 6 June 2023

Subject: BUN60415108 - Point Erin Park Tunnel - Central Interceptor Extension

## 1. Introduction

Thank you for the opportunity to provide feedback on the proposed temporary and permanent works for the extension of Watercare's Central Interceptor located within Point Erin Park (94 Shelly Beach Road, Ponsonby (herein referred to as the 'site')).

As part of Auckland Transport's (AT) assessment, the Auckland Unitary Plan (AUP), the Auckland Code of Practice for Land Development and Subdivision Chapter 3: Transport (ACoP:T) have been considered. The following application documents were reviewed:

- AEE prepared by Tonkin + Taylor dated February 2023;
  - S92 response dated 19 April 2023;
- Proposed Key Conditions prepared by Tonkin + Taylor, undated;
- ITA prepared by Tonkin + Taylor, dated February 2023;
- Consent drawings prepared by Watercare dated 2 February 2023;
- Flooding Memorandum prepared by Jacobus, dated 25 January 2023;
- ITA review prepared by Flow on behalf of Council, dated 19 May 2023; and
  - Updated flow review dated 1 June 2023.

In conducting this review, the following Auckland Transport specialist teams were also consulted:

- Design and Standards
- PTM Consultant (Road Safety and Traffic Operations Consultants) on behalf of AT;
- Property and Planning;
- Road Corridor Requests.

We also confirm that a site visit was undertaken accompanied by Watercare on the 23<sup>rd</sup> of March 2023.

## 2. Site and Proposal

Key details regarding the site and proposal are outlined in the following table:

Site Address:	Point Erin Park Reserve (94 Shelly Beach Road, Ponsonby)
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# Memorandum


AUP Zoning:	<p>Open Space – Informal Recreation Zone</p> <p>The proposal includes access onto Curran Street which is an arterial road with an applicable vehicle access restriction.</p>
Proposal:	<p>Watercare proposes to extent their central wastewater interceptor line from Grey Lynn through to Point Erin Park. This includes a new tunnel shaft in Point Erin park with limited permanent work on the surface area of the park.</p> <p>The proposal includes two sections:</p> <ul style="list-style-type: none"> <li>• Main interceptor line located centrally in the park with access obtained from the existing public vehicle access to the park,</li> <li>• Maintenance shaft located on the south western part of the park with access from existing parks maintenance access.</li> </ul> <p>The proposal involves construction work for a duration of roughly 3 years, intermittently swapping between the two construction sites.</p> <p>The proposal includes a permanent vehicle crossing from Sarsfield Street which is proposed at an existing park entrance. The permanent proposal offers no on site manoeuvring and as such egress is proposed onto Curran Street. Overall, the proposal requires consideration as a <b>Discretionary</b> activity.</p>
Layout:	 <p>Figure 1: Central interceptor line in Point Erin Park – Watercare drawing CI-STAT&amp;PLAN, DWG no 2011933.006, issue 2.</p>



Figure 2: Proposed permanent entry from Sarsfield Street and egress onto Curran Street Site General Layout, Watercare drawing CI-STAT&PLAN, DWG no 2013964.002, issue 2.



	<i>Figure 3: Proposed construction entry from Sarsfield Street and egress onto Curran Street Site General Layout, Watercare drawing CI-STAT&amp;PLAN, DWG no 2013964.003, issue 2.</i>
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### 3. Background

Upon request from Watercare, AT attended a site visit to Point Erin Park on the 23<sup>rd</sup> of March 2023. The visit was attended by Watercare planner Xenia Meier, Manini Abernethy from AT Property and Planning Group and myself representing AT Development Planning. The visit included inspection of the central section of the park where the main intersection shaft will be located as well as the current public vehicle entrance to the park located to the south east of the park. It was noted that a large tree on the western side of the vehicle crossing which initially presented some visibility and vehicle tracking concerns to AT was recently removed. The solid median on the eastern side of Sarsfield Street was also observed.

The site visit also included a visit to the site of the proposed construction and temporary vehicle crossings, which are located on the south western side of Sarsfield Street and onto Curran Street, as shown under figures 2 and 3 above. On this visit the proximity of the proposed access to the Sarsfield Rd/Curran Street intersection and the safety risks this raises was noted to Watercare. AT's view of limiting access to this site to right hand turns from Sarsfield Street only was discussed. AT's concerns regarding visibility for maintenance trucks exiting the site after the construction phase was explained to Watercare and was noted that this would not likely result in a significant adverse effect on road user safety based on the ITA's offered condition of having a pointsman direct vehicles leaving the site.

### 4. AUP Reasons for Consent/ Scope of Assessment Related to Transport

- **E27.4.1 (A5)** - Construction or use of a vehicle crossing where a Vehicle Access Restriction applies (within 10 m of any intersection) under standards E27.6.4.1(2)/(3),
- **Rule E26.5.3.1 (A97/A97A)** – Earthworks greater than 2,500 m<sup>2</sup>/2,500m<sup>3</sup>,
- **Rule E40 (A24)** - Temporary activities associated with construction that exceed 24-months duration.

### 5. Assessment

Auckland Transport generally accepts the findings of the Integrated Transport Assessment, Assessment of Environmental Effects and subsequent s92 responses. On this basis Auckland Transport have no significant concerns with the proposed infrastructure works and related temporary and permanent vehicle crossings subject to the recommended conditions and advice notes provided in section 7 below.

The applicant will be required to obtain all other necessary transport related approvals for the works which includes but are not limited to an Engineering Plan Approval and a Corridor Access Request. Consent approval does not constitute approval for these approvals.

Additional matters are outline in the 'specific comment' section below.



## 6. Specific Comments

### 6.1 Stormwater

It is understood that construction of the proposed works will not modify the entry or exit point of the overland flow path. The proposed permanent control chamber structure on the south western side of the site is located outside of the 1% AEP rainfall event area. Due to the size of the proposed maintenance room, the applicant's stormwater assessment notes that there will be no discernible impact on the flood plan or flood prone areas. Flow velocities are expected to increase from 0.17m/s to 0.19m/s which is within an acceptable range as per AT's TDM Road Drainage requirements and no significant flooding effects are expected on AT's road network.

### 6.2 Temporary Construction and Earthworks

Earthworks involves includes approximately 5,000 m<sup>2</sup> in total across the two construction areas. 3,150 m<sup>2</sup> in the grassed area to the south of the Point Erin Pools and approx. 1,880 m<sup>2</sup> in the southwestern corner of the park. This requires a Construction Traffic Management Plan (CTMP) to ensure no adverse safety and undue operational effects on AT's network. The applicant has offered a comprehensive CTMP as a condition of consent.

It is understood that construction will commence in the first half of 2024 and end around mid to late 2026. The expected trip generation rates are shown below and are not expected to result in adverse operational effects due to the low volume and dispersion of trips throughout the day instead of the normal peak hour traffic generation other developments provide. AT considers that the majority of AT safety concerns not addressed in this memo can be addressed through the required Corridor Access Request approval required from AT.

Programme Date (indicative)	July/August 2024	Sept 2024 to February 2025	January 2025 to June 2025	May 2025 to February 2026
Peak Truck Movements/day	7	18	18	40
Peak Car Movements/day	9	9	9	9
Peak total vehicles/day	16	27	27	49
Peak vehicles/hour	1.6	2.7	2.7	4.9

Figure 4: Expected Trip Generation Rate – Tonkin + Taylor ITA table 4.1

### 6.3 Temporary Sarsfield Street East Access

The applicant proposes temporary use of the eastern Sarsfield Street vehicle access. The use of this access will require the removal of the existing solid median/traffic island on Sarsfield Street at the Shelly Beach Road intersection to accommodate construction vehicle accessing this part of the site. The removal and reinstatement of this island relates to a temporary activity and must be addressed through the required Corridor Access Request process from Auckland Transport.



As mentioned in the background section above, a large tree was recently removed from the western side of this vehicle crossing which resulted in increased intervisibility between pedestrian and vehicle using this access. No significant adverse effects are expected with the use of this crossing for construction access and the applicant is advised to include the management of this access in the required Corridor Access Request approval.

## *6.4 Temporary Sarsfield Street West Access*

Temporary construction related access is proposed from the existing western vehicle crossing on Sarsfield Street. This is currently an AC Community Facilities maintenance vehicle crossing.

The temporary use of this crossing will result in a much more frequent use (see figure 4 above) and will require adequate management in terms of safety and impacts on the roadside assets for the duration of construction period. AT consider that this can be appropriately managed in the required Corridor Access Request approval but the access must function as assessed in the consent, meaning that truck movements into the site at this access must occur from right turn movements from Sarsfield Street only. This is based on the access's proximity to the Sarsfield Street/Curran Street intersection. Any trucks entering from the south or wester i.e., the intersections side it will likely block the intersection and would be in conflict with berm elements that includes an existing power pole, kerbs and a catch pit. This must be avoided. To ensure the ongoing safety of road users and to avoid operational delays on the Sarsfield Street/Curran Street intersection the use of this vehicle crossing for trucks must be limited to right turns in from Sarsfield Street only. This is in line with the tracking and vehicle crossing proposal provided by the applicant for the temporary vehicle crossing from Sarsfield Street and recommended as a condition of consent in section 7 below.

The applicant will be responsible for reinstating this vehicle crossing and all other elements in the berm once the construction use of this vehicle crossing has concluded, this includes the proposed temporary egress crossing onto Curran Street. Please refer to recommended condition of consent in section 7 below.

## *6.5 Permanent Sarsfield Street and Curran Street Access*

### *Sarsfield Street*

It is understood that once the construction work is concluded a permanent vehicle crossing from Sarsfield Street with an egress crossing onto Curran Street is proposed for maintenance purposes. It is noted that the maintenance requirements to the central interceptor tunnel will be low, the applicant projects this to be limited to 1 to 2 vehicles per year. The low use of this entry and egress crossing is noted, however the infrequent use proposed is somewhat queried by AT as a fault or issue in the infrastructure would likely require additional vehicle movements.

Similar to the temporary vehicle crossing from Sarsfield Street, the entry arrangement for trucks from Sarsfield Street must be undertaken by means of a right hand turn into the site only. The applicant in their s92 response dated 19 April 2023 has indicated that this access is designed for trucks to turn right into the site. A left turn ban into the site from Sarsfield Street for trucks is recommended as a condition of consent in section 7 below.

The applicant will ensure that the existing bollard at this entrance will continue to operate as normal and must ensure the bollard is removed and replaced after every use of this permanent vehicle crossing.

## *Curran Street*

The permanent egress only vehicle crossing proposed onto Curran Street vehicle is designed and assessed to be used for right turning movements only. This crossing presents exiting trucks into Curran Street at an acute angle which results in trucks drivers leaving the site to not have a clear line of sight southbound on Curran Street. A driver will not be able to see oncoming traffic out of his window and the vehicle side mirrors are likely also not positioned to show Curran Street, this is especially the case for trucks, which are considered the main users of this permanent egress vehicle crossing. To ensure that vehicle leaving this site do so safely the ITA noted that egress manoeuvres will be supervised. This seems to have been revised by the applicant and it is unsure if supervised egress movements are proposed or not. AC planner have requested AT's inputs on the application noting that AT considers that safety concerns regarding the Curran Street egress can be addressed through a condition of consent. AT advised that this applicant is only considered to not have significant safety effects based on this condition being accepted, if this condition is not accepted by the applicant AT needs to be contacted as further s92 requests will then be required to determine if alternative mitigation is required.

## **7. Recommended Conditions**

Overall, should Auckland Council approve the proposed activity/development, we advise that it be subject to the following conditions of consent:

### *Recommended Conditions*

#### *Construction Traffic Management Plan*

- x. *Prior to the commencement of any works on the site, the consent holder must submit to and have certified by the Council, a Construction Traffic Management Plan (CTMP) The CTMP must be prepared in accordance with the Auckland Code of Practice for Land Development and Subdivision Chapter 3: Transport or CTMPs (as applicable) and New Zealand Transport Authority's Code of Practice for Temporary Traffic Management and must address the surrounding environment including pedestrian and bicycle traffic as well as public transport. No construction activity must commence until the CTMP has been certified by the Council and all construction traffic must be managed at all times in accordance with the approved CTMP. The CTMP must be included in the application for a Corridor Access Request. The Consent Holder must submit this CTM) to Council at least twenty (20) working days prior to the commencement of Project works at Point Erin Park.*

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*The CTMP must include the following:*

- a) Ensure construction traffic movements on the transport network, including Sarsfield Street, Curran Street and the SH1 onramp, are appropriately managed;*
- b) Provide for the safety of everyone at all times;*
- c) Minimise disruption and maintain pedestrian and vehicle access to/from surrounding residential properties and Point Erin Park including Point Erin Pool, carpark and playground;*
- d) Minimise disruption from construction traffic on the travelling public and road users along the identified sections of the construction routes;*
- e) Seek to avoid full road closures and minimise any partial or managed closures;*
- f) Manage integration with other construction projects and Auckland Transport projects.*

## *Avoid Damaging Assets*

- x. Unless specifically provided for by this consent approval, there must be no damage to public roads, footpaths, berms, kerbs, drains, reserves or other public asset as a result of the earthworks and construction activity. In the event that such damage does occur, the Council will be notified within 24 hours of its discovery. The costs of rectifying such damage and restoring the asset to its original condition must be met by the consent holder.*

## *Restriction on Truck Movements*

- x. Left turn movements for trucks entering the site via the permanent vehicle crossing at the south western corner of Point Erin Park are banned and must not be undertaken. This is for both the construction and permanent use of this vehicle crossing.*
- x. Left turn movements for trucks exiting the site via the proposed Curran Street vehicle crossing are banned and must not be under taken during the construction of this project as well as for the permanent use of this vehicle crossing.*

## *Supervised Maintenance Vehicles*

- x. No trucks may exit the permanent vehicle crossing onto Curran Street without traffic supervisors directing them to leave the site when it is safe to do so. This must be done for each truck leaving the after construction of the project and must be done at the expense of the consent holder.*

## Advice Note

### *Engineering Approval – Transport*

*The consent holder will need to obtain Engineering Approval which will require input from Auckland Transport for the reinstatement of the solid median in Sarsfield Street and the reinstatement of kerbsite elements around the western vehicle crossing on Sarsfield Street*

- x. Prior to the commencement of any engineering works, the consent holder must submit engineering plans (including engineering calculations and specifications) to the Council for approval in writing. The engineering plans must include, but not be limited to, the information regarding the detailed design of all roads and road network activities provided for by this resource consent approval.*
- x. As part of the application for Engineering Plan Approval, a registered engineer must:*
  - a) Certify that all public structures/facilities associated with roads or access ways have been designed in accordance with the Auckland Transport's Transport Design Manual.*
  - b) Provide a statement that the proposed infrastructure has been designed for the long-term operation and maintenance of the asset.*
  - c) Confirm that all practical measures are included in the design to facilitate safe working conditions in and around the asset.*

### *Advice Notes*

*If the Engineering Plan Application (EPA) drawings require any permanent traffic or parking restrictions, then the consent holder must submit a resolution report for approval by Auckland Transport Traffic Control Committee to legalise these restrictions. The resolutions, prepared by a qualified traffic engineer, will need to be approved so that the changes to the road reserve can be legally implemented and enforced. The resolution process requires external consultation to be undertaken in accordance with Auckland Transport's standard procedures. It is the responsibility of the consent holder to prepare and submit a permanent Traffic and Parking Changes report to Auckland Transport Traffic Control Committee (TCC) for review and approval. A copy of the resolution from Traffic Control Committee must be submitted to Council prior to applying for a certificate under section 224(c) of the RMA.*

*The engineering plan application forms including fees can be found at the following Auckland Council website:*

*<https://www.aucklandcouncil.govt.nz/building-and-consents/engineering-approvals/Pages/default.aspx>*

# Memorandum

## Corridor Access Requests

The consent holder will require Corridor Access Request approval from Auckland Transport for the proposed works as well as for the required removal and reinstatement of the traffic island on Sarsfield Street at its intersection with Shelly Beach Road.

- x. It will be the responsibility of the consent holder to determine the presence of any underground services that may be affected by the applicants work in the road reserve. Should any services exist, the applicant must contact the owners of those and agree on the service owners' future access for maintenance and upgrades. Services information may be obtained from <https://www.beforeudig.co.nz/>.

All work in the road reserve must be carried out in accordance with the general requirements of The National Code of Practice for Utility Operators' Access to Transport Corridors <http://nzuag.org.nz/national-code/ApprovedNationalCodeFeb13.pdf> and Auckland Transport Design Manual <https://at.govt.nz/about-us/manuals-guidelines/transport-design-manual/>

Prior to carrying out any work in the road corridor, the consent holder must submit to Auckland Transport a Corridor Access Request (CAR) and temporary traffic management plan (TMP), the latter prepared by an NZ Transport Agency qualified person and work must not commence until such time as the applicant has approval in the form of a Works Access Permit (WAP). The application may be made at <https://at.govt.nz/about-us/working-on-the-road/corridor-access-requests/apply-for-a-car/> and 15 working days should be allowed for approval.

Should resource consent be granted, we kindly request a copy of the decision notice and approved plans be provided, for us to manage our records.

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### **Disclaimer / Important note:**

The views and comments expressed by Auckland Transport's specialists within this memorandum are made without prejudice, on the applicant's proposal. Specialists have not conducted a specific review for design and standards compliance. We reserve the right to add to our comments in the future should there be any further changes or information presented. This memorandum has been compiled for the use of Auckland Council only and is not to be amended, used, forwarded or circulated without the written permission of Auckland Transport. It is an express condition of the supply of this information that the recipient is responsible for verifying its content, correctness, and completeness. Auckland Transport accepts no liability or responsibility for any error, loss or damage suffered by the recipient arising out of, or in connection with, the use or misuse of this information.

## LANDSCAPE ARCHITECTURE SPECIALIST REPORT

**To:** Mark Ross – Consultant Planner on behalf of Council; and Colin Hopkins  
Principal Project Lead Premium  
**Resource Consenting Unit, Resource Consents Department**

**From:** Gabrielle Howdle, Specialist Landscape Architect  
**Design Review Team, Tāmaki Makaurau Design Office**

**Date:** 15.06.2023

**Applicant:** Watercare Services Limited

**Application:** BUN60415108  
94 Shelly Beach Road, Ponsonby (Pt Erin)

**Activity Status:** Discretionary Activity

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Dear Mark,

### 1. Introduction

- 1.1 Thank you for the opportunity to review the proposal to extend the Central Interceptor (CI) tunnel 1.6km from Grey Lynn through to Point Erin Park Herne Bay.
- 1.2 My full name is Gabrielle Katarina Howdle. I have been working at Auckland Council as a Specialist Landscape Architect since September 2017 and hold a Bachelor of Landscape Architecture (*hons*). I am a graduate member of the NZILA Tuia Pito Ora and am an active member of the NZILA Auckland Branch. My qualifications and experience are set out in Appendix A - Experience and Qualifications below.
- 1.3 The terminus site (Point Erin Park) is located within the Open Space – Informal Recreation and Open Space – Sport and Active Recreation zone of the Auckland Unitary Plan (Operative in Part) (AUP (OP)). The site is also subject to the following:
- Significant Ecological Areas overlay (SEA\_T\_6025),
  - Sites and Places of Significant to Mana Whenua overlay – 006, Te Koraenga Oka (1), and
  - Coastal Inundation 1 percent AEP Plus 1m control – 1m sea level rise.
  - The outer edges of the site are also subject to a Designation – 6718 Motorway(s).
- 1.4 It is understood that consent as a restricted discretionary activity is required for the above ground structures (C1.9), tree trimming and tree removal in open space zone (E26.4.3.1 (A84) & (E26.4.3.1 (A92))). Overall, however it is understood that the



application requires consent as a discretionary activity (E8.4.1 (A10) Diversion and discharge of stormwater runoff from an impervious area greater than 5,000m<sup>2</sup> not otherwise provided for, and (E30.4.1 (A7) – Discharge of contaminants onto or into land without a Detailed Site Investigation (DSI)).

1.5 I am familiar with the local area, but for the purpose of reviewing this application, I visited the site and surrounding area on a number of occasions, most recently on the 17<sup>th</sup> of January 2023. I also attended the group site visit on 12<sup>th</sup> December 2022 to a couple of CI sites under construction.

1.6 I confirm that I have reviewed the relevant application material including the further information response, including the below:

- Drawings prepared by Jacobs, AECOM and McMillen Jacobs Associates, dated February 2023.
- Natural Character, Landscape and Visual Assessment Report prepared by Isthmus, dated February 2023.
- Point Erin Central Interceptor – Appendix B Graphic Attachments prepared by Isthmus dated January 2023.
- Landscape and Visual – Additional Information prepared by Tonkin + Taylor, dated 17<sup>th</sup> of March 2023.
- Further Information Response prepared by Tonkin + Taylor, dated 19<sup>th</sup> of April 2023, including plant room, vent stack and retaining wall precedent images, SK01 Planting Intent Indicative Concept (Isthmus).
- Further Information Response prepared by Tonkin + Taylor, dated 26<sup>th</sup> of May 2023, including Proposed Key Conditions Section 92 Set, Indicative Planting Masterplan, Planting Intent – Lower Terrace & Planting Intent – Upper Terrace, prepared by Isthmus, dated May 2023.

## **2. Methodology**

2.1 The Natural Character, Landscape and Visual Assessment Report (“Isthmus Report”) has been prepared for the proposed works and the methodology is consistent with Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines<sup>1</sup>. In assessing the scale of landscape effects, a seven-point scale of effects has been applied. For the purpose of reviewing the landscape effects of the application, I have utilised the same rating scale as utilised within the Isthmus Report, provided in Appendix B below.

2.2 The application is supported by site photography (Isthmus) and 3D Design model views which help to visualise the location and scale of the plant room, vent stack, retaining walls and landform modification within the park; it is understood that these are not taken from pedestrian eye level, but do aid in demonstrating the final above ground changes resulting from the proposal.

## **3. Proposal**

3.1 The proposal will extend the CI tunnel an additional ~1.6km from the terminus point at Grey Lynn to Point Erin Park, Herne Bay. The permanent works will include:

- The extension of the tunnel (internal diameter 4.5m at depths of 20-60m not

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<sup>1</sup> Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines', Tuia Pito Ora New Zealand Institute of Landscape Architects, July 2022  
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visible),

- A new shaft site at Pt Erin,
- An above ground plant room (measuring ~40m<sup>2</sup> and ~4m high) – south-west site,
- Vent stack(s) (measuring ~10m<sup>2</sup> and ~3m high) – central site,
- Retaining walls (varying in heights up to 3m high and 90m long) – south-west site;
- Removal of protected and non-protected trees within the park; and
- The reinstatement of the public open space (e.g., recontouring, reinstatement of footpaths) across both work sites.

3.2 The proposal will also require temporary works within the two work areas within Pt Erin Park these being the south-west corner measuring 1,880m<sup>2</sup> and the central site measuring 3,150m<sup>3</sup>. Temporary works will include:

- Earthworks (4,900m<sup>3</sup> cut and fill) to provide for level working areas in both work sites,
- Site access and circulation and parking,
- Fencing / hoarding around the two work sites,
- Construction of retaining walls at both work sites,
- Site storage; and
- Temporary pedestrian access along the southern boundary (further east along Sarsfield Street to replace the south-west footpath access during construction).

3.3 The proposal also requires the removal of seventeen trees. Five which are required to be removed for project works as a Restricted Discretionary Activity (RDA) (meet the threshold 4m high x 400mm girth); this includes the removal of two early mature pōhutukawa trees approximately 13m in height, in the south-west of the park (See Figure 1, 2 & 3). In addition, four trees are also recommended to be removed for poor health, with the other eight a permitted activity to remove (although landowner approval is required) (See Figure 1 below for tree removal locations).



Figure 1: Arboricultural Report (Tree Consultancy, 23.12.2022) - Appendix C - Point Erin Park - Tree Plan

#### 4. Landscape and Site Description

- 4.1 I generally concur with the site description provided within the Isthmus Report<sup>2</sup> and specifically note the range of recreational use of the site, including visitors to the pool amenities, walkers, dog-walkers, parents with children (play-ground and open space area). The physical proximity, visual connection, and cultural connection (including Okā / Te Koraenga) with the Waitematā Harbour is also recognised as a significant value and attribute of the headland park. It is recognised that the landscape has been modified by the motorway on-ramp, however the vegetation; including the pōhutukawa which are associated with New Zealand's coastal environments, contribute to the parks character, amenity, and visual values. In my view, the park has a balance with a treed and vegetated boundary character and undulating open space centrally.
- 4.2 There are two main areas where works will be undertaken, the central site is characterised by its open space nature, gentle to moderate topography, bordered by groups of the trees to the north and south and is easily accessed from the main vehicle entrance and outside the pool. The south-west corner is accessible only by pedestrians/cyclist, with the footpath utilised by dog walkers and the like. This part of the site is bordered by Sarsfield Street to the south and Curran Street / the onramp to the Harbour Bridge to the west. The path is bordered by grass batters, and scatterings of individual trees, including the two pōhutukawa trees in Figure 2 & 3 below.



Figure 2 & Figure 3: Pōhutukawa trees to be removed.

#### 5. Physical and Ecological Landscape Effects

- 5.1 To undertake the works will require the physical modification of Point Erin Park in the two work zones: including retaining walls up to 3m high, but more generally between 1.5-2m high, tapering at the ends to meet ground level and approximately 90m long. The wall will require a safety fence/barrier ~1.5m high (Drawing 2013964.009 – Sections). It is understood that the majority of the physical modifications will be temporary to provide for level working platforms, and a condition (Condition 86 (d) - Park Reinstatement Landscape Plan) is offered, which will go towards ensuring that the contours of the public

<sup>2</sup> Isthmus Report, Description of the Point Erin Park's localised setting, paragraphs 37 – 48 and Description of Point Erin Park and its immediate setting, paragraphs 49 – 57  
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open space are reinstated to maintain the provision of a variety of informal recreational activities (H7.5.3 (1)).

- 5.2 The proposed work sites have been located to minimise the disruption and removal of existing vegetation within the park; this has included ensuring the central site is setback from a group of pōhutukawa trees. It is understood that there were a number of options explored to try and protect as many trees as possible, but the location of the existing pipes/services in the south-west corner meant the location of works was somewhat set.
- 5.3 Seventeen trees are proposed to be removed (eight permitted, four due to health/structural concerns, and five which need consent which are within the works area). This includes the removal of two early mature pōhutukawa trees located near the south-west pedestrian access, which are located within the works zone. It is noted within the Arboricultural Report that they may be able to be retained, however the location of the eastern retaining wall within the south-west work site is currently proposed to run through the location of one and within the root zone of the other, and the area will also have earthworks to create a level platform, and as such it is understood due to these reasons that the trees may not be able to be kept.
- 5.4 Should the trees be required to be removed, ecologically<sup>3</sup>, I understand that the removal of all seventeen trees will be mitigated by the planting of at least thirty-eight exotic trees or forty-nine native trees (they may be planted within Pt Erin Park or elsewhere). However, the removal of two large pōhutukawa trees will result in a landscape, amenity, and visual loss which cannot be simply offset by the replacement of trees; especially if these are planted offsite. As such to address this concern, the applicant has offered a condition as follows:

*(83) Should the two large pōhutukawa trees in the south-western corner of the park be removed for the project, and subject to obtaining approval from Auckland Council Parks, at least two of the trees referred to in Condition 82 shall be native specimen trees, at least 160L in size. The specimen trees are to be located as close as practicable to the two removed pōhutukawa trees in the south-western corner of the park, taking into account:*

- the long-term viability of the trees (e.g. suitable soil/proximity to the coast/potential disease such as myrtle rust).*
- the extent to which the replacement trees will mitigate the visual and amenity effects of the removal of the pōhutukawa trees.*
- provision for informal recreation and walkways through the south-western corner of the park.*
- the need to avoid future conflicts between rootzones and infrastructure.*
- Feedback received from mana whenua and Auckland Council Parks.*

*The species and location selected shall be provided to Auckland Council, setting out the reasons for the species and location selection.*

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<sup>3</sup> From an atmospheric carbon sequestration rate perspective to ensure a no deficit by 2050  
BUN60397498

*If Auckland Council Parks does not agree to the replanting of two large specimen trees in southwestern corner of the park, the Consent Holder shall provide a record of Auckland Council Parks decision to the Council. The consent holder will still be obliged to meet the replanting requirements in condition 82.*

- 5.5 While the offered condition suggests that the applicant is amenable to mitigating the loss of the pōhutukawa trees from a landscape perspective, the condition provides for a contingency clause. Should the trees not be implemented it is considered that the loss of the pōhutukawa trees from a visual perspective would impact on the sense of arrival, amenity of the park for users and the connection to the coast which is appreciated in the south-west corner. I understand that the final design will also need to be approved by Council Parks who may also have a view of how the site needs to be reinstated and tree loss mitigated. However, it is my opinion that the trees must be replaced to address the visual effects.
- 5.6 The 'Indicative Planting Masterplan'; a conceptual planting and reinstatement plan provided, demonstrates post works, that the majority of the park will retain the open space characteristics (central) and planted boundary elements (south-west). The 'Indicative Planting Masterplan' and offered conditions for 'Park reinstatement and permanent assets' (conditions 81 – 87) are written to ensure the future design engagement / with Auckland Council (incl. Parks) and mana whenua must consider the reinstatement of open space for informal recreation, mitigation of loss of trees and enhance the landscape, amenity and recreational values of the park. In my view, it is recommended that native trees; including pōhutukawa and puriri which are already native specimens presentable within the park; are proposed as part of the final reinstatement works.
- 5.7 In my opinion the proposal will initially have moderate adverse physical and ecological landscape effects, reducing to low once the landform is reinstated (to a more undulating form) and the vegetation loss on site is mitigated.

**6. Landscape Character Effects including Natural Character effects**

- 6.1 The AUP (OP) Open Space – Informal Recreation zone outlines that development should maintain the open and spacious character, amenity values and any historic, Mana Whenua and natural values of the zone. Outlining that these values should be maintained or enhanced through retaining significant vegetation, new planting, recognising the relationship of structures and works in relation to the values of mana whenua, and ensuring the location and design of buildings complement the open and spacious character, function and amenity of the zone<sup>4</sup>.
- 6.2 On initial review of the proposal, I held concerns that the information provided, and conditions offered didn't provide enough certainty that the designed outcome of the park would be suitable in terms of retaining the landscape character, coastal amenity and visual amenity values of the site.
- 6.3 The provision of a more developed landscape plan for the reinstatement works of the site and conceptual drawings and designs of the permanent structures / buildings would normally be required as part of a review of a resource consent. However, it is understood that timeframes have meant the engagement with Auckland Council and mana whenua around the design has not occurred and therefore the design of the structures and

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<sup>4</sup> AUP (OP), Chapter H7 – Open spaces, Objective H7.5.2 (1), Policies H7.5.3 (2) (3) (5), H7.6.3 (3)  
BUN60397498



reinstatement works haven't been provided as the applicant does not want to pre-empt the engagement process and final design.

- 6.4 To address these concerns the applicant has provided 'Indicative Planting Masterplan' drawings and incorporated more outcome-based requirements to the conditions, including:

*"ensuring buildings/structures are visually integrated into and respond to, the immediate surrounding environment through use of appropriate colours, textures, design and modulation of buildings/structures"*

*"the objective of the PRLP is to provide details on the reinstatement of Point Erin Park to restore and enhance the landscape, amenity and recreational values of the park. In a particular, the PRLP shall seek to achieve the following outcomes: 1 visual integration of above-ground permanent infrastructure, reinstatement of open space for informal recreation, mitigation for the visual and amenity effects of the loss of two large pōhutukawa trees (if removed),"*

- 6.5 The high-level planting plans and conditions suggest that the open space characteristics and vegetated boundary character will be able to be reinstated, albeit in a different way / design, and with the introduction of more structures (plant room, retaining wall), all which will need to respond to the context and manage dominance effects. The number of large trees within the south-west corner will need to be well managed to ensure the open space characteristics are still kept, balanced with replacing those trees lost.
- 6.6 I recognise that once the works are complete, that the project will have positive effects on the water quality and health of the harbour, as well as improving the quality of other waterways along the CI route. While the south-west part of the park has already been modified by the motorway onramp works, this part of the park still retains a connection to the harbour visually and through vegetation (e.g., pōhutukawa); as such the final design must ensure it responds to and complements the character of the area.
- 6.7 My initial review of the proposal also outlined concerns with the adverse effects of temporary structures on the visual amenity values of the park. Significant landform changes and tall walls (up to 3m high) are proposed. However, these will be situated entirely within the worksites which will be screened with fences / hoardings. As such the visual impact of these walls will not be as negative as originally perceived.
- 6.8 Overall while the final appearance, design outcomes and character of the park are not outlined in detail (e.g., design drawings, planting schedules, materiality etc), the effects on the values of the park are anticipated to be appropriately managed through the proposed conditions, associated precedent images and indicative planting plans.
- 6.9 I generally agree with the Isthmus Report that the project will result in high adverse effects on the landscape character values of the open space during construction (temporary) and that these will reduce to moderate-low post construction.

## **7. Visual Amenity Effects**

- 7.1 I generally concur with the visual catchment and audience set out within the Isthmus Report<sup>5</sup>.

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<sup>5</sup> Isthmus Report, Paragraph 125  
BUN60397498



- 7.2 The construction works will be most visible for visitors within the park and immediately adjacent roads (e.g., Curran Street entry), with elevated locations within the park providing views across both work sites. The earthworks, retaining walls, truck movements, construction machinery / cranes and removal of trees visible will also impact on the amenity afforded for users of the park during construction, to a high degree.
- 7.3 Once the works are complete, the permanent above ground structures (plant room and vents) and reinstatement of the park will ensure the open space amenity values are altered but retained. The permanent 3m high retaining wall (plus safety fence/barrier) sits below the road along the south-west boundary and will only be visible outside the site for those travelling from the eastern end of Sarsfield. The location and scale of the wall will however, be a dominant feature for users within the park (compared to the planted grass bank currently); particularly for those accessing the park from the south-west corner or utilising the outer pathway network. The wall will need to be softened with planting to ensure it doesn't detract from the amenity of the park and create an inviting and human-scaled entrance. The quality and site-specific outcome-based wording of the conditions will help to ensure that the visual qualities of the park are maintained as much as possible. Once reinstatement is undertaken the proposal will result in moderate-low to low adverse effects for users within the park and those travelling west along Sarsfield Street nearer the Curran Street intersection.
- 7.4 From wider public locations, including the Harbour Bridge, Masefield Bay and the Waitematā harbour the existing treed nature of the site and topography will block the majority of works. The height of the crane may be visible from some locations, but it will not be an uncommon feature of the view; with cranes common within the CBD which is visible within the background.
- 7.5 From private properties along Curran Street, Sarsfield Street and Shelly Beach Road the extent of the proposed works which will be visible will vary, with changes in topography and intervening trees (within the open space and roads) filtering views, especially for properties along Shelly Beach Road. The crane, movement of cars and other machinery to the central site will be visible from the northern end of Shelly Beach Road, however these will be highly filtered views as a result of intervening pōhutukawa trees screening much of the view, along with cars within the carpark (when in use).
- 7.6 The neighbours immediately to the south (Sarsfield Street)<sup>6</sup> and west (Curran Street)<sup>7</sup> of the park will look out on to one or both of the worksites with the removal of trees further opening up views of the construction zones, machinery, truck movements, lighting etc. Properties further east along Sarsfield will have filtered views due to intervening vegetation within the park, which are not being removed. The depression of the south-west site will also mean some of the lower machinery / works are not visible from the properties along Curran Street. The number of properties with direct views of the works within the park is limited<sup>8</sup>.
- 7.7 The works will change the outlook from a well-treed open space to a construction site and will result in moderate to high adverse effects on the visual amenity values associated with the park and their outlook. Nuisance effects could also occur during night-time hours

<sup>6</sup> Closer and more direct views will be achieved from 24, 26, 28, 30 and 32 Sarsfield Street to the south-west work site

<sup>7</sup> Closer and more direct views will be achieved from 70, 72 and 74 Curran Street to the south-west work site, and for 74 Curran and 1/7 Masefield Avenue the central site.

<sup>8</sup> See footnotes 6 & 7 above, 4a – 22 Sarsfield (evens), 82, 107a, 109, 115 & 117 Shelly Beach Road and 34 Sarsfield Street will have partial, screened and peripheral views of the works. As one rises (south of the park) other properties may also have views of the works, but they will be filtered due to existing trees, and they will also likely have outlook over the Waitemata, with the park not being the main feature in the view.

from lighting and truck movement etc. Once the construction works are complete, the integration of the permanent tall retaining wall, plant room and vent stack, as well as reintroducing a treed character along the boundaries will be important to retaining the visual amenity of these residents. Once works are complete, and the park is reinstated in a way which responds to the recreational, open space and treed characteristics of the park, the proposal will have very low to low adverse visual effects on residential properties.

## **8. Submissions**

8.1 I understand eight submissions were received through the notification process. Seven are in opposition and one is neutral.

8.2 The majority of the submission points raised were specifically in relation to the tunnel works and the correlating impact on private properties (e.g., vibration, fumes, property value, property damage). Potential safety effects on school students disrupted by construction traffic were also raised.

8.3 From a landscape, including amenity perspective, one submission did raise concerns around the ongoing effects of works in the area on their amenity *"I have already endured many years of the loss of quiet enjoyment of the property as substantial works have been undertaken in this area" & "the resource consent that Watercare is seeking approval for will be extremely obtrusive to the use and enjoyment of my property."*<sup>9</sup>

8.4 One of the key reliefs sought by submitters was for Watercare to consider an alternative route.

8.5 I am comfortable that my assessment provided above (paragraphs 5.1 – 7.7) addresses the above landscape concerns that have been raised within the submissions.

## **9. Recommended Conditions of Consent**

9.1 I recommend the inclusion of the following conditions of consent should the application be granted, in addition to the conditions offered by the applicant in Appendix A.

### **Appendix A. C – Park reinstatement and permanent assets**

Condition 82 and / or 83 – to be included / added.

- Native specimen trees are to be prioritised within the reinstatement design, including pōhutukawa and puriri which are already present within the park.
- Retaining the open space characteristics of the central space and the informal use is to be encouraged, and a balance of open space and trees within the south-west corner should be achieved.

### **Implementation of Approved Landscape**

The consent holder must implement the final detailed landscape design, as certified by Council under condition (#), within the first appropriate planting season following completion of works on site and thereafter maintain and retain this landscape (planting,

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<sup>9</sup> Submitter – Petrina Madeleine Madsen-Fisk / The Hampton and Spartacus Trusts  
BUN60397498

pavement, furniture, lighting etc) in accordance with the landscape maintenance and management plan certified by Council under condition (#).

## 10. Conclusion

10.1 Following my review, the proposal is considered to result in:

- Moderate adverse effects on the physical and ecological landscape effects during construction (temporary), reducing to low adverse effects on the physical and ecological landscape effects after completion of reinstatement works and mitigation.
- High adverse effects on landscape character values of the open space during construction (temporary), reducing to moderate – low adverse effects on landscape character values of the open space after completion of reinstatement works and mitigation.
- High adverse effects on the visual amenity and appreciation of the open space values for visitors and recreational users of the park; particularly those who utilise the periphery footpath network, access the park at the Curran Street / Sarsfield Street entry<sup>10</sup> or use the open space at the centre<sup>11</sup> and pedestrians within the surrounding streets (temporary effects) reducing to moderate – low to low adverse effects on the visual amenity and appreciation of the open space values after completion of reinstatement works and mitigation (permanent effects). Effects on motorists will be slightly reduced compared to pedestrians as their experience is more transient, except during congestion / peak hours.
- High adverse effects on the visual amenity values of immediate residential properties during construction (temporary), reducing to low to very low adverse visual amenity effects once reinstatement and mitigation works are complete.

Please let me know if you require any further clarification.

Kind regards,

Gabrielle Howdle

Specialist Landscape Architect

Tāmaki Makaurau Design Ope

Report Peer reviewed by:	Paul Murphy Principal Landscape Architect
Date:	15.06.20203

<sup>10</sup> Who will be diverted further east along Sarsfield Street to a temporary access point.

<sup>11</sup> To a lesser degree users who access via the vehicle entry and utilise the pool facilities primarily  
BUN60397498

## Appendix A: Experience and Qualifications

Name: Gabrielle Howdle

Organisation: Tāmaki Makaurau Design Ope, Auckland Council

Role: Specialist Landscape Architect

### Qualification(s) and Training:

- Bachelor of Landscape Architecture (Hons.) (2016), Unitec Institute of Technology, NZ
- Environment Court and Expert Witness Training by DLA Piper (2019)
- Crime Prevention Through Environmental Design, Level 1. International Security Management and Crime Prevention Institute (2018)
- Previously held - Ministry for the Environment Panel Certificate Holder (Excellence) (Exp. 31.12.21)

### Professional Membership:

- Graduate Member New Zealand Institute of Landscape Architecture
- NZILA Auckland Branch Secretary (2020-current, branch member since 2019)

### Experience:

- Specialist Landscape Architect, Design Review Team, Tāmaki Makaurau Design Ope (*né Auckland Design Office and Urban Design Unit*), Auckland – Council (September 2017- current)
- Graduate Landscape Architect, Brown NZ Ltd. (April 2017- July 2017)
- Landscape Intern, Urban Logic (January 2015- February 2015)

In my role at Auckland Council, I have reviewed consents ranging from small scale (e.g., single dwellings within sensitive landscapes, billboards) to apartment buildings, public realm, and large scale greenfield and brownfield subdivisions. I have also more recently been involved in providing specialist input into applications going through the Covid-19 Recovery (Fast Track) Consenting Act 2020 process. I have provided evidence and attended a number of hearings:

- 258 – 268 Hobsonville Road, Hobsonville (The Tower / Apartment Building – THAB Zone) – October 2018
- 52 -56 Anzac Street, Takapuna (Digital Billboard – Metropolitan Centre) – May 2019
- 443-445 Mount Eden Road, Mt Eden (Office and Retail – Local Centre) – June 2019
- 1 & 3 Purewa Road, Meadowbank (Apartment Building -MHU Zone) – November 2019
- 88 Remuera Road, Remuera (Apartment Building – Business Mixed Use Zone) – February 2020

- 58 Blake Road, Pukekohe (School – Rural Countryside Living) – June 2020 (*online attendance*)
- 118 Manuroa Road, Takanini (Residential Subdivision and Development in the Single House Zone) – September 2020
- 197 Botany Road, Howick (Retirement Village – MHS Zone) – March 2021
- 400 Titirangi Road, Titirangi (Public Bathroom Facilities – Local Centre and Road) - April 2021
- 24 Summit Drive, Mount Eden (2-lot vacant subdivision – Single House Zone) – November 2021
- 135 Wairau Road, Wairau Valley (2x Digital Billboards – Light Industrial Zone) - 16th December 2021 (*in absentia*)
- 79 College Road, St John (Residential development & subdivision – MHU Zone) – December 2021 (*in absentia*) and February 2022
- 141 Bader Drive, Mangere (Digital Freestanding Billboard – Town Centre) - 20th October 2022
- 82 & 100 Kahikatea Flat Road (Rural Subdivision – Mixed Rural Zone) - 4th November 2022
- 75 Pomona Road, Kumeū (Childcare centre – Rural Countryside Living) – 7<sup>th</sup> June 2023

## Appendix B: Seven-point rating scale – Isthmus

Adverse Effect Rating	Very Low	Low	Moderate – low	Moderate	Moderate – high	High	Very high
RMA terminology	Less than Minor		Minor		More than Minor		
NZCPS terminology						Significant	

**From:** Shanelle Beer <shanelle.beer@aucklandcouncil.govt.nz>  
**Sent:** Wednesday, April 26, 2023 2:06 PM  
**To:** Colin Hopkins <Colin.Hopkins@aucklandcouncil.govt.nz>  
**Cc:** Mark Ross <mark@sentinelplanning.co.nz>; rcregulatorysupportcentral2 <rcregulatorysupportcentral2@aucklandcouncil.govt.nz>  
**Subject:** BUN60415108 / LUC60415109 - 94 Shelly Beach Road (Central Interceptor Pt Erin Extension) Regional Earthworks Memo

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Good Afternoon Colin,

Please see the below assessment and recommended conditions for the proposed activity at 94 Shelly Beach Road, Ponsonby.

**Proposal/Activity Type:** Regional Earthworks.

**Application Number:** LUC60415109

**Applicants Name:** Watercare Services Limited

**Reason for Consent:** Earthworks greater than 2,500m<sup>2</sup> within a Sediment Control Protection Area and includes land with a slope greater than 10 degrees – E11.4.1(A8) and E11.4.1 (A9)

**Proposal:**

Resource consent is sought by Watercare for regional earthworks that are required in two separate areas (terminal shaft construction area and control chamber construction area) across the site to enable the extension of the central interceptor to the termination point at the subject site. The total volume of earthworks over the two areas is approximately 12,500m<sup>3</sup> over 5,030m<sup>2</sup>. This is broken down further below;

1. Terminal shaft construction requires earthworks over an area of approximately 3,150m<sup>2</sup> and comprises of an approximate volume of 7,500m<sup>3</sup>.
2. Control chamber construction requires earthworks over an area of approximately 1,880m<sup>2</sup> and comprises of an approximate volume of 5,000m<sup>3</sup>.

**Technical assessment of effects:**

The applicant has provided a Draft Erosion and Sediment Control Plan (ESCP) which has been assessed as in general accordance with GD05. The draft ESCP includes a number of controls proposed including super silt fencing, clean water diversions and stabilised entranceways to each of the two areas on the site. It is also proposed to potentially use a water treatment plant during dewatering which would need to ensure 100mm depth clarity prior to discharge. As such, a standard condition for dewatering has been included to ensure that any sediment-laden water is appropriately treated and managed prior to discharge to the stormwater system. The applicant has stated that the ESCP has been developed based on the anticipated construction methodologies at the time of consent application, however there is potential for modifications to the plan as a result of detailed design and/or revised construction methodologies. Therefore, a condition requiring a finalised ESCP to be submitted prior to works commencing has been included below.

The applicant has stated earthworks are likely to commence in the first half of 2024 and are expected to take around two years although may take longer. Given the longer than typical



timeframe of works and the proximity to receiving environments, it is considered appropriate to include a winter works restriction. It is also considered appropriate for a 5-year expiry to allow for any contractor delays with commencing work.

It is considered that the proposed activity in accordance with the recommended conditions will ensure earthworks will be managed and/or treated via best practice measures to avoid uncontrolled sediment-laden discharges overland to freshwater systems. Uncontrolled discharges would likely discharge via overland flow to the stormwater or straight to the Waitemata Harbour located approximately 37m at the closest point from the proposed earthworks area.

### **Summary**

I consider that the earthworks will be appropriately managed and the effects will be suitably mitigated should the applicant install erosion and sediment controls in accordance with GD05 and comply with the recommended conditions as the earthworks are small in nature and generally low risk if managed appropriately.

### **General & Specific Conditions:**

#### **Expiry date**

X1 Consent LUC60415109 must expire five (5) years from the date it has been granted unless it has been surrendered or cancelled at an earlier date pursuant to the RMA.

X2 Prior to the commencement of earthworks activity on the subject site, a finalised Erosion and Sediment Control Plan (ESCP) must be prepared in accordance with GD05 and submitted to Council for certification. Earthworks activity on the subject site must not commence until the Council has certified that the ESCP satisfactorily meets the requirements of GD05 and contains sufficient detail to address the following matters:

- a. specific erosion and sediment control works including the final location of super silt fencing, stabilised entranceway(s) and clean water diversion bunds
- b. specific location and design for a stabilised entranceway
- c. specific location and controls required for stockpiling management
- d. specific information on devices proposed for dewatering and associated management
- e. supporting calculations and design drawings
- f. catchment boundaries and contour information
- g. details of construction methods
- h. timing and duration of construction and operation of control works (in relation to the staging and sequencing of earthworks)
- i. details relating to the management of exposed areas (e.g. grassing, mulching)
- j. monitoring and maintenance requirements

X3 All water discharged from the site and associated sediment control devices during the earthworks operation must achieve a minimum of 100mm depth of clarity prior to discharge in accordance with Auckland Council's Guideline Document 2016/005 Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region (GD05).

X4 The operational effectiveness and efficiency of all erosion and sediment control measures specifically required by the Erosion and Sediment Control Plan (referenced in **condition X2**) must be maintained throughout the duration of earthworks activity, or until the site is permanently stabilised

against erosion. A record of any maintenance work must be kept and be supplied to Council on request.

X5 Earthworks must be managed to avoid deposition of earth, mud, dirt or other debris on any public road or footpath resulting from earthworks activity on the subject site. In the event that such deposition does occur, it must immediately be removed. In no instance must roads or footpaths be washed down with water without appropriate erosion and sediment control measures in place to prevent contamination of the stormwater drainage system, watercourses or receiving waters.

Advice note:

*In order to prevent sediment laden water entering waterways from the road, the following methods may be adopted to prevent or address discharges should they occur:*

- *provision of a stabilised entry and exit(s) point for vehicles*
- *provision of wheel wash facilities*
- *ceasing of vehicle movement until materials are removed*
- *cleaning of road surfaces using street-sweepers*
- *silt and sediment traps*
- *catchpits or enviropods*

*In no circumstances should the washing of deposited materials into drains be advised or otherwise condoned.*

*It is recommended that you discuss any potential measures with Council who may be able to provide further guidance on the most appropriate approach to take. Please contact Council on [monitoring@aucklandcouncil.govt.nz](mailto:monitoring@aucklandcouncil.govt.nz) for more details. Alternatively, please refer to “GD05 Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland region”.*

X6 Earthworks shall be progressively stabilised against erosion at all stages of the earthworks activities and shall be sequenced to minimise the discharge of sediment to surface water.

Advice note:

*Earthworks shall be progressively stabilised against erosion during all stages of the earthwork activity. Interim stabilisation measures may include:*

- *the use of waterproof covers, geotextiles, or mulching*
- *top-soiling and grassing of otherwise bare areas of earth*
- *aggregate or vegetative cover that has obtained a density of more than 80% of a normal pasture sward*

X7 Immediately upon completion or abandonment of earthworks on the subject site, all areas of bare earth shall be permanently stabilised against erosion to the satisfaction of the Council.

X8 Erosion and sediment control measures shall be constructed and maintained in general accordance with Auckland Council Guidance Document GD05; Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region and any amendments to this document, except where a higher standard is detailed in the documents referred to in conditions above, in which case the higher standard shall apply.

X9 No earthworks on the subject site must be undertaken between 01 May and 30 September in any year, without the submission of a ‘Request for winter works’ for approval by the Council. All requests must be renewed prior to the approval expiring and no works must occur until written approval has been received from the Council. All winter works will be re-assessed monthly or as required to ensure that adverse effects are not occurring in the receiving environment and approval may be revoked by Council upon written notice to the consent holder

Thank-you,

Ngā mihi | Kind regards,

**Shanelle Beer | Specialist – Earth, Streams and Trees**

Specialist Unit | Resource Consents Department

Ph: 09 301 0101 or M: 027 250 2617

Level 6, 135 Albert Street, Auckland Central

Visit our website: [www.aucklandcouncil.govt.nz](http://www.aucklandcouncil.govt.nz)



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# Memo

24 May 2023

To: Colin Hopkins, Principal Project Lead – Premium Consenting;  
Mark Ross, Consultant Planner

From: Paul Crimmins, Senior Specialist – Contamination, Air & Noise

**Subject: BUN60415108: Central Interceptor Point Erin Tunnel – Soil Contamination Review**

I have reviewed the AEE (Tonkin+Taylor, 07/02/2023) and soil contamination information (PSI: T+T, Dec-2022; s92 Response: T+T, 19/04/2023) submitted for application *BUN60415108: Central Interceptor Point Erin Extension project*, with respect to soil contamination and the requirements of the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES:CS) and AUP(OP) Chapter E30: Contaminant Discharges.

Further to the above application material, I have reviewed the submissions received regarding the application. I did not identify any submissions that specifically raised any concerns regarding soil contamination matters.

- I agree with the s92 Response that no soil contamination consenting triggers exist under the NES:CS or AUP(OP) Chapter E30 for this proposal.
- I consider that soil contamination matters do not restrict the grant of this consent application.
- I agree that one condition of consent (as offered under the s92 Response) should be imposed regarding soil contamination management.
- The reasons for this are:
  - A Preliminary Site Investigation, prepared by a Suitably Qualified and Experienced contaminated land Practitioner (SQEP) with adequate adherence to the requirements of the NES:CS and the *Contaminated Land Management Guidelines No. 1* (Ministry for the Environment, revised 2021), concludes that:
    - The site where the soil disturbance activity for the Pt Erin extension of the Central Interceptor project is to occur is not a 'piece of land' under Regulation 5(7) of the NES:CS as no activities included on the Hazardous Activities and Industries List (Ministry for the Environment, 2011) are more likely than not to have occurred.
    - There are negligible risks of encountering significant soil contamination during the Project.
    - There is a low-likelihood of landfill gas and leachate migration from an adjacent Closed Landfill at Masefield Reserve to the west of the project site.
  - The NES:CS only applies at a 'piece of land' as defined by Reg.5(7). As the PSI demonstrates that the site where the soil disturbance activity is to occur is not a 'piece of land', the NES:CS does not apply.
  - I consider the risks of soil contamination being present at levels exceeding the AUP(OP) Permitted Activity soil acceptance criteria of standard E30.6.1.4 are negligible.
    - Chapter E30 of the AUP(OP) only requires a contaminant discharge consent from 'contaminated land' or 'land containing elevated levels of contaminants'. These terms are defined by the AUP(OP) with reference to Permitted Activity Standard E30.6.1.4.
    - As no such contaminated land is likely to be encountered during the Project, the contaminant discharges are a Permitted Activity under AUP(OP) Rule E30.4.1(A4). No contaminant discharge consent is required.
  - Any unexpected discovery of significant contamination (exceeding the Soil Contaminant Standards for the protection of human health referenced by the NES:CS or AUP(OP) Permitted Activity soil

acceptance criteria for contaminant discharges) during the works is proposed to be handled in accordance with existing Central Interceptor Contaminated Site Management Plans.

- I consider this is adequate and adheres with the relevant Accidental Discovery protocols of AUP(OP) E11.6.1 and E12.6.1.
- Appendix A of the s92 Response included Proposed Conditions; Proposed Condition 20 relates to the management of soil contamination in the contingency scenario that unexpected discovery of such material is encountered during the works.
- I agree that this one condition of consent is suitable to include within the bundled resource consent (alongside those conditions relating to Earthworks controls) as a contingency measure to suitably manage any unexpected discovery of soil contamination during the works. The condition requires a SQEP to investigate and respond to the unexpected discovery in a manner similar to the generic contingency measures outlined by the Central Interceptor Contaminated Site Management Plans.

The condition of consent that I recommend to suitably mitigate the contingency scenario of encountering unexpected soil contamination during the works is:

### **Soil contamination management (unexpected discovery)**

CS1. In the event of the accidental discovery of contamination during earthworks which has not been previously identified, including asbestos material, the consent holder must immediately cease the works in the vicinity of the contamination, notify the council, and engage a suitably qualified and experienced contaminated land practitioner (SQEP) to assess the situation (including possible sampling and revision of the ESCP) and decide on the best option for managing the material.

Paul Crimmins  
*MSc(Hons), BA*  
**Senior Specialist**



**Contamination, Air & Noise, Specialist Unit, Resource Consents**

Date:

24 May 2023

## Technical memo: Air quality

To: Colin Hopkins, Consultant Planner – Premium

From: Rachel Terlinden, Specialist – Contamination, Air & Noise

Date: 9 June 2023

### 1 Application details

Applicant's name: Watercare Services Limited

Application number: BUN60415108 (Air discharge: DIS60415116)

Activity type: Discharge of contaminants into air

Site address: Various – from Grey Lynn to Point Erin Park

### 2 Introduction

I have reviewed the above application and relevant supporting information with reference to the requirements of the Auckland Unitary Plan (Operative in Part) (AUP(OP)), Chapter E14: Air Quality, and the Resource Management (National Environmental Standards for Air Quality) Regulations 2004 (NES:AQ).

I have visited the Site and surrounding area and have reviewed following documents relevant to the application:

- *Assessment of Environmental Effects* (AEE, Central Interceptor – Point Erin Tunnel Assessment of Effects on the Environment);
- *Assessment of Air Quality Effects* (AQR, Central Interceptor – Point Erin Tunnel Air Quality Assessment);



### 3 Summary of proposal and background information

#### 3.1 Proposal as relevant to air quality

The applicant, Watercare Services Limited, is seeking consent to discharge contaminants into air (odour) from the operation of an extension of the 14.7 km long Central Interceptor (CI) sewage conveyance tunnel and associated processes. A full description of the proposal is provided in the AEE. In brief:

- The proposed extension will extend from Grey Lynn (Tawariki Street) to Point Erin Park, Herne Bay, over a distance of approximately 1.6 km (The Point Erin Tunnel). The tunnel will be 4.5 m in diameter and excavation will continue using the existing Tunnel Boring Machine.
- A terminal shaft site is proposed in Point Erin Park immediately south of the Point Erin Pools. An air vent associated with the terminal shaft is proposed to be located in the north-western corner of the park.
- Approximately 5,000 m<sup>2</sup> of earthworks are required to facilitate the development within Point Erin Park. This includes excavation, piling and drilling, handling of soil, stockpiles, and movement of vehicles across unsealed surfaces.
- The CI network is designed to operate under negative pressure, with air continuously drawn into the tunnel through air intakes along the sewer network. However, during storm/rainfall events, excess wastewater filling the tunnel displaces this air which may be required to be released via locations along the CI network.
- Under normal conditions, air is extracted for treatment and discharge at the primary air treatment facility (ATF) at the Mangere Pump Station. In the event this is not possible, and depending on the severity of the rainfall event, a secondary ATF is located at May Road, Mount Roskill. If the two ATFs are inoperable due to filling of the tunnel, displaced air would be discharged at a pressure relief point at Western Springs. There is a second pressure relief point at Tawariki Street, Grey Lynn.
- During a significant storm event, release at the above ATFs or pressure relief valves may not be possible. In these limited circumstances, displaced air will need to be discharged at the proposed Point Erin Park pressure relief vent.
- In a tunnel filling scenario, gates are used across the CI network to control the rate and extent of filling. There will be a Real Time Control (RTC) gate located at the Point Erin Control Chamber. The position of this gate will influence the rate and duration of the pressure relief discharge from the Point Erin shaft.
  - If all CI RTC gates are open 37.5 m<sup>3</sup>/s of air will be released for up to 15 minutes.
  - If all RTC gates are closed the release will be 9.5 m<sup>3</sup>/s of air for up to 1 hour.

- If the water level in the main CI tunnel in the above scenario exceeds the topmost internal level of the pipe of the connecting tunnel between the Control Chamber and the Point Erin shaft, a further 100 – 150 m<sup>3</sup> of air will not be able to be discharged from the main shaft and will have to be exhausted as an emergency release from the plant room of the Control Chamber. This equates to approximately 1.5 m<sup>3</sup>/s over a duration of two minutes.
- Discharges will be exhausted vertically from the roof of a purpose-built building of approximately 3 m in height. The location of this vent is shown in Figure 4.2 of the AEE.
- As stated in Section 6.16 of the AEE, with the current wastewater network in St Marys Bay and Herne Bay there is approximately a 250ML/year overflow to the harbour, which can result in odour and amenity related effects. The CI Point Erin Tunnel will reduce the average annual wastewater overflow volumes being discharged into the environment and is considered by the applicant to therefore have associated odour control benefits.
- The AEE states the effects of greenhouse gas emissions from the proposed project are considered to be less than minor.

### 3.2 Location

The Site is located on an alignment from Grey Lynn to Point Erin Park and is shown in Figure 1.1 of the AEE.

The applicant provides a description of the Site and receiving environment in section 3 of the AEE and section 4 of the AQR. I consider these descriptions are adequate for the purposes of the air quality assessment and note:

- The AUP(OP) zones the area of the proposed discharge at Point Erin Park as Open Space – Sport and Active Recreation Zone/Informal Recreation Zone. Chapter E14 of the AUP(OP) schedules this zone as a ‘High air quality – dust and odour area’ in recognition of its increased air quality amenity expectations.
- Point Erin Park is bordered by residential areas to the west, south, and east including single house and mixed housing zones.
- The nearest ‘activity sensitive to air discharges’ (as defined by Chapter J of the AUP(OP)) is Point Erin Pools approximately 50 m to the north-east. The nearest residential property to the proposed vent is located to the south-east at a distance of approximately 125 m. The nearest residential property to the proposed plant control room is approximately 35 m to the north-west.
- Winds at the Site are predominantly from the south-west (refer Fig. 4.3 of the AQR).

### 3.3 Background and site history

The Central Interceptor is a 14.7 km gravity tunnel that was consented in 2013 and construction commenced in 2019. This holds an existing air discharge consent (ID: 40842). Works to date include a number of sites located within public parks and reserves in close proximity to residential housing and most of the 17 shafts along the CI alignment have been built. This project is designed to provide additional sewer capacity, reduce wet weather wastewater overflow discharges, and enable future works to improve Auckland waterways.

## 4 Reasons for application: Air discharges

### 4.1 Reason for application: Air discharges

Resource Consent is required for air discharges from the proposal under the provisions of the AUP(OP):

***Rule E14.4.1: Discharge of contaminants into air from waste processes.***

*(A167): Wastewater facility that is for the primary purpose of pumping, or storage or transfer of wastewater and not meeting the permitted activity standards [Restricted Discretionary Activity in all zones].*

The total potential storage volume of the CI extension exceeds the Permitted Activity storage volume of 10,000 m<sup>3</sup> (enclosed tank of less than 4,000 m<sup>3</sup> or between 4,000 m<sup>3</sup> and 10,000 m<sup>3</sup> where it is fitted with an effective odour control system).

The relevant Matters of Discretion are provided in AUP(OP) E14.8.1(12) and Assessment Criteria at E14.8.2.

Pursuant to section 15(1)(c) of the RMA, no person may discharge any contaminant from an industrial or trade premises into air unless the discharge is expressly allowed by a national environmental standard or other regulations, a rule in a regional plan as well as a rule in a proposed regional plan for the same region (if there is one), or a resource consent.

### 4.2 Other discharges considered

The proposal includes earthworks associated with two construction areas in Point Erin Park across approximately 5,000 m<sup>2</sup>. Discharges of dust from earthworks are typically considered as a Permitted Activity under Rule E14.4.1(A1) of the AUP(OP), as long as the works comply with the General Air Quality Standards of E14.6.1.1, notably, that there is no 'offensive or objectionable dust effects beyond the boundary of the site'.

## 5 Technical assessment of air quality effects

### 5.1 Assessment of air quality effects

The applicant identifies and assesses the effects of the proposed activity on the environment that are likely to arise and mitigating factors in sections 6 and 7 of the AQR. The most significant air quality effects are considered to arise from discharges of odour from the pressure relief vents and dust from the construction of the Point Erin Tunnel at Point Erin Park.

#### ***5.1.1 Odour discharges from the Central Interceptor extension***

The AQR includes a summary of potential discharges from the CI extension in Sections 3.2 and 6. Discharges from the Point Erin Shaft pressure relief vent and the control chamber are considered to occur less than once every 10 years (Table 3.1 of the AQR). The discharges from the plant room are expected to occur very rarely, less often than those from the pressure relief vent.

Although odour discharges may occur from the Point Erin shaft and Control Chamber during large wet weather events, it is anticipated that the higher flows and the more dilute nature of the wastewater in such circumstances, along with the relatively low frequency of such events, would not result in significant adverse effects. Meteorological conditions during such events are also likely to result in effective and rapid dispersion of any odour. Additionally, the prevailing wind is more likely to come from the southwest, propagating odour towards the Westhaven Marina and beyond (away from residential areas). Further, the shaft is located within a public reserve area; the very heavy rainfall events that would trigger a discharge from the relief vent would also be expected to drive the majority of the public out of these reserve areas well before they are exposed to any odours.

As outlined in the AQR, there is potential for a lag to occur between the end of a storm and the pressure relief discharge at Point Erin. In such instances, the weather conditions may be different than during a significant storm event. In calm, stable conditions, odour is likely to accumulate in the immediate area and drift westward towards the coastal marine area. However, it is noted in Section 4.3 of the AQR that these conditions would be most likely to occur overnight, while the park and pools are predominantly unoccupied.

During significant storm events significant dilution of the wastewater is also expected to occur. Although the odour will be of an unpleasant character, the intensity of the odour is likely to be significantly lower than odour generated from undiluted sewer flows as outlined in Section 3.2.1 of the AQR.

Due to the design of the CI (extraction to ATFs under normal conditions and negative pressure differential), it is unlikely there will be any fugitive release of odour at the Point Erin site outside of these infrequent storm scenarios. The CI system is designed to extract, treat, and discharge odour at other locations in the network in all but extreme

weather circumstances. Further, the relief discharge is likely to involve a high flow of air and the vertical momentum of the discharge is likely to aid in the dispersion of emissions. Plant room discharges, while not through the stack, is less frequent and therefore vertical discharge is considered less important, however, the AQR outlines these discharges should be directed away from residential areas.

A FIDOL assessment (considering the frequency, intensity, duration, offensiveness, and location of an odour) was undertaken to assess the odour discharges associated with the proposed Point Erin discharge point. This FIDOL assessment concluded that while the surrounding environment has a high sensitivity to odour discharges, due to the low frequency of the discharges, the relatively low intensity of the odour due to dilution, and the low duration (likely to be brief and last for less than an hour), the exposure to odour at sensitive locations at sensitive residential receptors is likely to be minimal and unlikely to be offensive or objectionable.

### **5.1.2 Dust discharges from construction**

As discussed in Section 4.2 of this report, earthworks associated with the construction of the Central Interceptor extension do not require consent for discharges to air. The visible nature of dust emissions means that operators can identify any issues before they become problematic.

Mitigation measures for construction dust effects are outlined in the AQR. These measures are proposed in accordance with the Good Practice Guide for Assessing and Managing Dust (MfE, 2016) (GPG:Dust). This includes the following:

- Limiting excavation extent, minimising drop heights during handling of material, stabilising exposed areas not being utilised, and removing spoil from site on a regular basis.
- Maintaining active earthworks surfaces in a damp condition during dry weather and pre-watering dry soil surfaces prior to disturbance.
- Minimising loading/unloading during windy conditions and covering loads of fine materials.
- Dampening stockpiles where required and minimising heights of stockpiles as much as practicable.
- Limiting vehicle speeds to 15 km/h on site and watering of unsealed access routes during dry conditions.
- Regular cleaning of sealed surfaces (e.g. wet suction sweeping) or application of water.
- If visible tracking of material on public roads is observed wheel cleaning facilities will be implemented at site exits.

- Water will be used as a dust suppressant should visible emissions arise from the works.

A FIDOL assessment was undertaken in accordance with the GPG:Dust for the proposed earthworks at the site. Again, the sensitivity of the receiving environment was considered to be high. This assessment concluded that the effects of dust from the construction activities will generally be localised, and the majority of particulate is expected to deposit out of the air within about 100 m of the dust source. This material can travel further under strong wind speed conditions (greater than 5 m/s). According to local meteorological data, these are expected most frequently from the south-west. The frequency of these winds is low, occurring no more than 1.5% of the time from any given direction.

The FIDOL assessment concludes that provided the construction activities are managed in accordance with the mitigation measures and industry best practice to minimise dust generation in dry, high wind conditions, the frequency, intensity, duration, and exposure to dust in the environment is likely to be low. Overall, it is considered that with the proposed measures the risk of nuisance dust effects at nearby sensitive receptors is expected to be low and offensive or objectionable effects is considered unlikely. This is also supported by similar works performance at the 15 other CI construction sites established to date.

### **5.1.3 Submissions**

One submitter has commented on the potential discharge of contaminants into the air from the proposed central interceptor. Multiple submissions were received for the proposal, however only submission 1 (ID: 16143) mentioned air quality effects, as well as other issues not related to the proposed air discharges, located at 70 John Street, Ponsonby. Specifically, with respect to air, this submission was concerned with the *“toxic fumes being released from the finished project”*.

The submitter is located approximately 1.2 km from the proposed pressure relief vent in Point Erin Park. As discussed in Section 5.1.1 above, no offensive or objectionable effects are expected beyond the boundary of Point Erin Park due to the predicted frequency and intensity of discharges. Accordingly, it is not anticipated there will be any adverse effects at the submitter’s property.

## **5.2 Assessment of effects conclusion**

The AEE concludes that there would be less than minor/minor adverse effects to the environment. Particularly, the discharges of odour and dust are proposed to be controlled by adherence to the proposed mitigation measures so that offensive or objectionable dust/odour effects, or adverse human health effects, are not likely to arise.

I agree with the AQR’s air quality effects assessment and consider that:



- Significant adverse air quality effects are not likely to occur at any location beyond the boundary of the site.
- Discharges of odour and dust can be adequately controlled (including by the measures outlined by the proposed conditions of consent) so that offensive or objectionable amenity effects are not likely to arise.
- The proposed air discharge activity's actual and potential adverse effects to the environment are less than minor, including at neighbouring properties.

## 6 Statutory considerations

### 6.1 Notification: Sections 95A to 95E

This application was publicly notified at the applicant's request in February 2023. Nine submissions were received during the notification period. I have taken the content of the submissions into account as part of the above assessment of effects.

### 6.2 Statutory considerations: Section 104(1)(b)

In Sections 7.3.3 and 7.4.8 of the AEE, the applicant assesses the Site's air discharges against the relevant statutory planning documents. I consider that the relevant statutory document for assessing this application is the AUP(OP).

As is outlined in Section 7.3.3 of the AEE, the NES:AQ contains standards relating to specific contaminants (particulate matter, carbon monoxide, nitrogen dioxide, ozone, and sulphur dioxide). The proposed discharge does not contain any of these specified contaminants and therefore the NES:AQ is not considered to apply to this application.

#### 6.2.1 Auckland Unitary Plan (Operative in Part)

I consider the proposed air discharges are consistent with the relevant provisions of the AUP(OP):

- I consider that the air discharges comply with all relevant Regional Policy Statement objectives and policies, as contained in Chapter B7.5 of the AUP(OP). Notably, the control measures employed shall adequately avoid significant health and amenity effects.
- I consider that the proposal complies with the Regional Plan objectives and policies contained in Chapter E14 Air Quality of the AUP(OP) as air quality shall be maintained and significant adverse effects shall be avoided:
  - In accordance with Policy E14.3(1), no exceedance of the Auckland Ambient Air Quality Targets (AAAQT) is predicted to occur.

- Offensive and objectionable amenity effects or other significant adverse effects are not likely to occur provided that the proposed mitigation measures are employed.

## **6.2.2 Statutory considerations conclusion**

I conclude that the Site's air discharges are consistent with the relevant provisions of all applicable plans and policy statements, subject to compliance with the recommended conditions of consent.

## **6.3 Matters relevant to discharge or coastal permits (Section 105) and restrictions on certain permits (Section 107)**

I consider that sections 105 and 107 do not restrict the grant of this air discharge consent as no significant adverse effects are likely to occur.

## **6.4 Conditions of consent: Section 108**

I have recommended a range of conditions of consent in section 7.3 below. The recommended wording of the conditions generally follows the main Central Interceptor air discharge consent (ID: 40842). The applicant has proposed general conditions (relating to all consents they have applied for) as well as conditions specific to each technical area, in this case air quality.

## **6.5 Duration of consent: Section 123**

The applicant has not requested a specific term of consent. I consider it appropriate to set a term of 35 years for the air discharge consent:

- A 35 year term will allow the activity to be reassessed at the end of the term in light of any advances in control technologies and any changes to the surrounding environment.
- The understanding of air quality issues can change significantly in a 35 year period, with new or revised health-based assessment criteria becoming available as more is understood regarding the impacts of specific air pollutants.
- A 35 year consent duration allows the applicant an adequate degree of future operating certainty while balancing the potential for future changes to the process and off-site effects.

# **7 Recommendation and conditions**

## **7.1 Adequacy of information**

The above air quality assessment is based on the information submitted as part of the application. I consider that the information submitted is sufficiently comprehensive to assess the air discharges:

- The level of information provides a reasonable understanding of the nature and scope of the air discharge activity as it relates to the AUP(OP).
- The extent and scale of any adverse effects on the environment are able to be assessed.
- Persons who may be adversely affected are able to be identified.

## 7.2 Recommendation

I recommend that the air discharge consent application could be granted consent, subject to specific conditions, for the following reasons:

- I consider that the overall adverse effects of the air discharges to the receiving environment are less than minor. Subject to the imposition of conditions, the effects can be further avoided, remedied, or mitigated.
- I consider that the air discharges are consistent with the relevant provisions of the and AUP(OP).
- Discharges of dust and odour can be adequately controlled using mitigation measures as detailed by the conditions of consent so that offensive or objectionable effects are not likely to occur beyond the boundary of the Site.
- The air discharge activity is appropriately located with adequate separation distances to activities sensitive to air discharges, given the scale of the discharges and control measures.

## 7.3 Conditions

I recommend that the air discharge consent application is granted subject to the following conditions.

### **General conditions**

- AQ1. [Activity in accordance with the plans]
- AQ2. Air discharge consent number                      expires on [35 years after the consent is issued] unless it has lapsed, been surrendered or been cancelled at an earlier date pursuant to the RMA.
- AQ3. Beyond the boundary of the site, there must be no dust caused by discharges from the site, which in the opinion of the council, is noxious, offensive or objectionable.
- AQ4. All processes on site must be operated in accordance with the Construction Management Plan as required by Condition (XX) of this consent.

- AQ5. The Consent Holder must ensure that dust management during excavation works generally complies with the Good Practice Guide for Assessing and Managing Dust, MfE (2016).
- AQ6. The consent holder must at all times operate, monitor, and maintain the Point Erin Tunnel so that odour discharges authorised by this consent are maintained at the minimum practicable level.
- AQ7. Within any private property there must be no odour caused by discharges from the normal operation of the Point Erin Tunnel, which, in the opinion of an enforcement officer, is noxious, offensive or objectionable.

*Advice Note:*

*The storage and transfer of wastewater within the Point Erin Tunnel as well as scheduled maintenance activities, and any discharges into air arising from this, are considered part of the normal operation of the tunnel.*

- AQ8. The air vent must be designed to disperse odour and minimise effects. This must include:
- a. A stack height of at least 3m; and
  - b. A uni-directional discharge vent to allow the discharge when required but prevent inlet of air and preferentially draw inlet air through the control chamber.

In the event that odour discharges are found to result in noxious, dangerous, offensive or objectionable effects, the Team Leader (the council), may require the Consent Holder to increase the vertical stack height to enable greater dispersion.

- AQ9. The plant room discharge point must be directed away from adjacent residential areas.
- AQ10. Except during maintenance, cleaning, or other inspections, all access hatches must be adequately covered to ensure fugitive discharges to atmosphere are kept to a minimum practicable level.
- AQ11. All odour complaints that are received arising from the operation of the Point Erin Tunnel must be recorded. The complaint details must include:
- a. The date, time, location, and nature of the complaint;
  - b. The name, telephone number, and address of the complainant, unless the complainant elects not to supply these details;
  - c. Weather conditions, including approximate wind speed and direction, at the time of the complaint; and
  - d. Any remedial actions taken.

Details of any complaints received (as recorded above) must be provided to the manager within 7 days of receipt of the complaint(s).

AQ12. DIAll records required by the conditions of this consent must be made available upon reasonable request by the council during working hours and must be kept for a minimum period of two years from the date of each entry.

AQ13. Under section 128 of the RMA, the conditions of this consent may be reviewed by the Manager Resource Consents at the consent holder's cost in order to:

- a. Deal with any significant adverse effects on the environment arising from the exercise of the consent which was not foreseen at the time the application was considered and which is appropriate to deal with at the time of the review.
- b. Consider the adequacy of conditions which prevent nuisance and adverse effects beyond the boundary of the Site, particularly if regular or frequent complaints have been received and validated by an enforcement officer.
- c. Consider developments in control technology and management practices that would enable practical reductions in the discharge of contaminants to air.
- d. Alter the monitoring requirements, including requiring further monitoring, or increasing or reducing the frequency of monitoring.
- e. Take into account any Act of Parliament, regulation, national policy statement, regional policy statement or relevant regional plan that relates to limiting, recording or mitigating emissions by this consent.

Or, the consent may be reviewed by the Manager Resource Consents at any time, if it is found that the information made available to the council in the application contained inaccuracies which materially influenced the decision and the effects of the exercise of the consent are such that it is necessary to apply more appropriate conditions.


#### **7.4 Advice notes**

1. *Any administrative charge fixed in accordance with section 36(1) of the Resource Management Act 1991 (RMA) and any additional charge required pursuant to section 36(3) in respect of this consent shall be paid to Auckland Council.*
2. *The initial monitoring deposit is to cover the cost of inspecting the Site, carrying out tests, reviewing conditions, updating files, etc., all being work to ensure compliance with the resource consent. In order to recover actual and reasonable costs, monitoring of conditions, in excess of those covered by the deposit, shall be charged at the relevant hourly rate applicable at the time. The consent holder will be advised of the further monitoring charges.*
3. *Any reference to number of days within this decision refers to working days as defined in section 2 of the RMA.*


4. For the purpose of compliance with the conditions of consent, “the council” refers to the council’s monitoring inspector unless otherwise specified. Please contact the Compliance Unit at [monitoring@aucklandcouncil.govt.nz](mailto:monitoring@aucklandcouncil.govt.nz) to identify your allocated monitoring inspector.
5. If you disagree with any of the above conditions, or disagree with the additional charges relating to the processing of the application, you have a right of objection pursuant to sections 357A or 357B of the RMA. Any objection must be made in writing to the council within 15 working days of notification of the decision.
6. The consent holder is responsible for obtaining all other necessary consents, permits, and licences, including those under the Building Act 2004, and the Heritage New Zealand Pouhere Taonga Act 2014. This consent does not remove the need to comply with all other applicable Acts (including the Property Law Act 2007 and the Health and Safety at Work Act 2015), regulations, relevant Bylaws, and rules of law. This consent does not constitute building consent approval.

## 8 Review

### 8.1 Memo and technical review prepared by:

<p>Rachel Terlinden MSc <b>Specialist</b></p>	
<p><b>Contamination, Air &amp; Noise   Specialist Unit   Resource Consents</b></p>	
<p>Date:</p>	<p>9 June 2023</p>

### 8.2 Memo peer reviewed by:

<p>Jared Osman BSc(Hons) <b>Team Leader</b></p>	
<p><b>Contamination, Air &amp; Noise   Specialist Unit   Resource Consents</b></p>	
<p>Date:</p>	<p>9 June 2023</p>



## Acoustics review

P. 09 308 9015  
E. [info@stylesgroup.co.nz](mailto:info@stylesgroup.co.nz)  
W. [www.stylesgroup.co.nz](http://www.stylesgroup.co.nz)  
Saatchi & Saatchi Building,  
L2, 125 The Strand, Parnell  
PO Box 37857, Parnell,  
Auckland 1151

Date:	1 June 2023
From:	Jamie Exeter
To:	Mark Ross
Application reference:	BUN60415108
Applicant:	Watercare Services Limited
Application details:	A 1.6 km extension to the consented Central Interceptor at depths between 20 m and 60 m from its current termination point at 46 and 48 Tawariki Street to 94 Shelly Beach Road (Pt Erin Park).
Site address:	94 Shelly Beach Road, Curran Street Road Reserve, 46 and 48 Tawariki Street and approximately 72 properties in between.

### 1.0 Introduction

Auckland Council has engaged Styles Group to review the acoustic assessment submitted with the application, including the following documents:

- *Extension to the Central Interceptor – Point Erin Tunnel, Assessment of Noise and Vibration Effects* prepared by Tonkin+Taylor dated February 2023 (the **Acoustic Report**)
- *Response to s92 requests – Point Erin Tunnel* prepared by Tonkin+Taylor dated 19 April 2023 (the **s92 Response**).

The proposal includes temporary infringements of the Auckland Unitary Plan (the **AUP**) permitted construction noise and construction vibration amenity limits.

### 2.0 The proposed works and the nearest sites

Descriptions of the proposed works are provided in the Acoustic Report and s92 Response. These are consistent with the AEE and other application documents.

The nearest sites within 100 m of the works where people and structures could be affected by the proposed works (the **receivers**) are identified in Table 4–2 of the Acoustic Report. The identified sites include single and multiple level residential dwellings, and the Point Erin Pools.

The relevant sites have been identified and included in the construction noise and vibration assessment.

### 3.0 Permitted noise and vibration standards

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The Acoustic Report and s92 Report correctly identify the AUP permitted operational and construction noise and vibration limits that apply to the project.

The relevant rules are below for reference:

- Operational noise: E25.6.2.1.
- Construction noise: E25.6.27.
- Construction vibration (buildings): E25.6.30.1.a.
- Construction vibration (amenity): E25.6.30.1.b.

### 4.0 Methodology and reference sound levels

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We generally agree with the noise and vibration reference levels and methodology used in the analysis for the proposed works.

Outstanding points of disagreement following the s92 Response are as follows:

- i. We don't agree that the Standard AS/NZ 2107:2016 or the World Health Organisation guidelines are appropriate references for the assessment of construction noise levels within buildings. We recommend that they are not referenced in the project CNVMP.
- ii. We don't agree that the guideline limits of DIN 4150–3:2016 are an appropriate reference for assessing potential damage to swimming pools. The appropriate response to concerns regarding potential damage to swimming pools in the CNVMP should be to seek assessment or comment from a suitably qualified expert, and not comparison of predicted or measured levels with the guideline values of DIN 4150–3:2016.

The significance of these disagreements is low if the references in (i) and (ii) above are not carried over to the project CNVMP.

### 5.0 Proposed mitigation and management measures

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The Acoustic Report and s92 Response recommend the following noise and vibration management and mitigation measures:

- i. Preparing a CNVMP for the project to be certified by Auckland Council
- ii. Consulting with the nearest building occupants before works begin, and further consultation where vibration amenity limits are expected to be exceeded
- iii. Using acoustic barriers and localised screening
- iv. Restricting noisy works to only occur between 07:30 and 18:00 wherever practicable
- v. Avoiding sensitive times for high noise and/or vibration generating works based on consultation

- vi. Selecting equipment and methodologies to minimise vibration
- vii. Noise and/or vibration monitoring at the beginning of works close to receivers and where vibration is expected to exceed 2 mm/s
- viii. Offering relocation to neighbours if unreasonable noise and/or vibration levels cannot be avoided
- ix. Offering pre-condition building surveys where there are concerns regarding damage to buildings from vibration
- x. Preparing an Activity Specific Construction Noise and Vibration Management Plan (**ASCNVMP**) to be reviewed and approved by Auckland Council where an activity cannot practicably comply with the project noise and /or vibration limits
- xi. Complying with an internal noise limit of 35 dB  $L_{Aeq(15 \text{ min})}$  for regenerated noise during tunnelling.

We consider that the proposed mitigation and management measures will be effective in reducing the noise and vibration effects on the neighbouring sites. These will be set out in further detail in the project CNVMP. The ASCNVMP will include further mitigation for the activities that will generate the highest levels of noise and vibration.

## 6.0 Predicted noise and vibration levels

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Predicted noise and vibration levels at the relevant neighbouring sites are provided in the Acoustic Report and in the s92 Response. These are summarised below:

- Construction noise from surface works is predicted to comply with the AUP permitted construction noise limits except during piling and wood chipping. Short-term infringements of up to 8-10 dB are expected during these activities.
- Regenerated noise from tunnelling is predicted to consistently comply with a proposed internal noise limit of 35 dB  $L_{Aeq(15 \text{ min})}$ .
- Construction vibration from surface works is predicted to comply with the AUP permitted construction vibration amenity limits except during sheet piling. Short-term infringements of 1-2 mm/s are expected during sheet piling.
- Vibration from tunnelling is predicted to comply with 0.3 mm/s. The vibration is not expected to be perceptible within any building and is predicted to be no greater than 0.03 mm/s within the Recording Studio at 108-114 Jervois Rd.
- All vibration generated by the project is predicted to consistently comply with the permitted AUP vibration standards for avoiding building damage.
- Operational noise is predicted to consistently comply with the AUP permitted noise limits.

The predicted noise and vibration levels are consistent with the source levels, separation distances, and proposed mitigation.

## 7.0 Potential noise and vibration effects

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Operational noise is predicted to be less than 40 dB  $L_{Aeq}$  and consistently comply with the AUP permitted night-time noise limit. Operational noise at night is unlikely to cause annoyance or disturbance in the context of the existing background noise levels in the environment, which are controlled by road traffic.

Potential construction noise and vibration effects are described in Section 6 of the Acoustic Report. We generally agree with the assessment of potential construction vibration effects.

Table 6–1 describes internal construction noise effects during the daytime based on predicted external construction noise levels from surface works. The descriptions are highly conservative because they are based on a reduction of only 17 dB through the façade, when 20-30 dB is more realistic depending on the construction of the receiving building.

We do not agree with the statement in Section 6.2.2.1 that “*an internal noise level less than 60 dB  $L_{Aeq}$  is unlikely to interfere with normal residential activities for short durations*”. Internal construction noise levels above 55 dB  $L_{Aeq}$  will typically cause disturbance within residential environments and people will seek respite from the noise, even for short durations. However, internal noise levels of greater than 55 dB  $L_{Aeq}$  only seem likely if wood chipping is undertaken in the worst-case location identified in the s92 Response. The provisions of the CNVMP should require wood chipping to be avoided in this location if it is practicable to conduct it elsewhere.

The potential effects of tunnelling noise are described in the Acoustic Report as “*negligible*”. However, it is expected that noise could be audible within the recording studio and that they may need to schedule their operations around the times for tunnelling. We don’t agree with the description of potential noise effects as negligible if the noise could potentially cause disruption to business to the extent that the business may have to reschedule its activities. We support the proposed additional consultation with the studio before the TBM approaches the area to discuss sensitive operating times. We expect the noise can be managed to not cause unreasonable disturbance if this consultation is undertaken.

We otherwise generally agree with the comments and descriptions of potential noise effects during surface works, except where the planning assessment terms “less than minor”, “minor”, and “no more than minor” are used.

The highest construction noise levels and effects will be experienced intermittently and over short durations. For most of the project the construction noise levels are unlikely to interfere with residential or commercial activities. The identified infringements of the AUP permitted construction noise limits will be managed through ASCNMPs and they are unlikely to cause unreasonable disturbance.

The highest construction vibration levels from surface works will also be experienced intermittently and over short durations. Infringements of the amenity limits are predicted, but the limits for avoiding building damage will be consistently complied with. When vibration within buildings is between

2 mm/s and 5 mm/s it will be clearly perceptible and light items could potentially move or fall from shelves, but it will not cause cosmetic damage within dwellings and commercial buildings<sup>1</sup>.

Construction noise and vibration effects may be undesirable, but they are unavoidable during infrastructure projects in residential areas. The effects can be minimised through effective communication with the neighbours, physical mitigation, timing restrictions, and good management. These measures have all been proposed.

Higher noise levels from construction activities during the day are generally tolerated in residential areas if they are no louder than necessary and they occur for a limited duration. Short periods of perceptible vibration up to 5 mm/s during the day is also generally tolerated if the residents are expecting it, and they have been informed that the vibration will not reach levels that could cause cosmetic building damage. The effects of the highest construction noise and vibration levels will be managed through ASCNVMPs that are reviewed and approved by Auckland Council.

Objective E25.2.4 of the AUP seeks to enable construction activities that cannot meet noise and vibration standards while controlling duration, frequency, and timing to manage adverse effects. The Acoustic Report recommends avoiding noisy surface works at night, compliance with a regenerated noise limit of 35 dB  $L_{Aeq}$  during tunnelling, and managing noise effects from out-of-hours concrete pours through consultation and an ASCNMP. We consider these recommendations appropriate for managing adverse noise and vibration effects with respect to the criteria of E25.2.4. We also consider that the assessment criteria of E25.8.2 for Restricted Discretionary activities have generally been addressed by the information provided in the Acoustic Report.

It is common for construction works to infringe the permitted construction noise and vibration amenity standards in residential areas, including all forms of practicable mitigation. The proposed temporary infringements arise from the need to operate heavy construction equipment near to occupied buildings and not from unusual methodologies or proposing high noise or vibration activities at night.

We expect that the construction noise and vibration will be tolerated by the neighbours and will not cause unreasonable disruption. This is based on the predicted noise and vibration levels, the proposed mitigation and management plans, the limited level, duration, and timing of the infringements, and the proposed consultation with the neighbours.

## 8.0 Proposed conditions

We support the updated draft conditions, with the following exceptions.

24. The numerical noise limits in Condition 24 should all be reduced by 5 dB because the project is longer than 20 weeks.

The noise limits for “any other activity” from AUP Table E25.6.27.2 should be added to Condition 24 because these apply at the swimming pool buildings. The 5 dB

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<sup>1</sup> Based on the Line 1 and Line 2 guidance of DIN 4150–3:1999 which does not include buildings that are particularly sensitive to vibration and of great intrinsic value e.g., heritage buildings.

reduction for projects longer than 20 weeks must also be applied to these limits i.e., 70 dB  $L_{Aeq}$  from 07:30 to 18:00 and 75 dB  $L_{Aeq}$  from 18:00 to 07:30.

29. The note below the table of vibration limits should be deleted. As agreed in the s92 Response, the stated exception under AUP E25.6.30 does not apply to the project, and it has not been factored into the assessment of vibration effects.

## 9.0 Conclusion

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We generally agree with the noise and vibration reference levels, methodology, and predictions used in the analysis.

Operational noise is predicted to be less than 40 dB  $L_{Aeq}$  and to consistently comply with the AUP permitted night-time noise limit. Operational noise at night is unlikely to cause annoyance or disturbance in the context of the existing background noise levels in the environment, which are controlled by road traffic.

Brief infringements of the AUP permitted construction noise limits of 8-10 dB, and the permitted construction vibration limits of 1-2 mm/s have been identified. Any infringement will be managed through the provisions of an ASCNVMP that is reviewed and approved by Auckland Council.

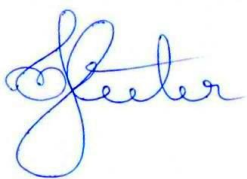
We have noted some disagreement with the assessments in the Acoustic Report, but we expect that the construction noise and vibration will be tolerated by the neighbours and will not cause unreasonable disruption. This is based on the predicted noise and vibration levels, the proposed mitigation and management plans, the limited level, duration, and timing of the infringements, and the proposed consultation with the neighbours.

We consider the recommended mitigation measures are appropriate for managing adverse noise and vibration effects with respect to the criteria of Objective E25.2.4 and that the assessment criteria of E25.8.2 for Restricted Discretionary activities have generally been addressed by the information provided in the Acoustic Report.

We have made recommendations for the draft conditions to be updated to be consistent with the assessments provided and the findings of our review.

Please contact me if you require any further information.

Yours sincerely,



Jamie Exeter, MASNZ, Assoc. NZPI  
Principal



**From:** Paul Hansen <Paul.Hansen@aucklandcouncil.govt.nz>  
**Sent:** Wednesday, May 31, 2023 3:30 PM  
**To:** Mark Ross <mark@sentinelplanning.co.nz>  
**Subject:** Trees - Pt Erin - Central Interceptor Project

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Good day, Mark.

Further to your brief and my site visit, please take this email as my support for the tree component in favour of the Central Interceptor project to be undertaken at Pt Erin.

As we know the proposal is a critical infrastructure project, required to reduce wastewater overflows in Auckland, improve the quality of beaches as well as that of the Waitemata Harbour.

As part of my assessment of the proposal, I have read through the Arboricultural report provided by Sean McBride (The Tree Consultancy Company), and I have viewed the site layout drawings, plan sections and read through the AEE and planning analysis, and, overall, concur with the findings and recommendations made. My understanding is that the final layout for the works has undergone a number of revisions to ensure that the encroachment on protected trees on site is minimised to the best extent possible.

There are two distinct areas within the park that are required to undertake the works.

The first area is located around a grassed area west of the existing Pt Erin Pools car park. This area is required to accommodate the main shaft, the contractor's yard, a large crane, temporary site offices, and access for construction. The second work area is situated in the southwestern corner of Pt Erin Park. This area is required to accommodate the control chamber and plant room and connect existing infrastructure to a new terminal shaft. Construction in this area requires a large crane and mini excavator. Two mature Pōhutukawa trees are implicated here.

Concerning protected trees in Area 1, the trees in this area are comprised of a large Macrocarpa tree which is to be retained and protected, a Silky oak in poor health and a declining Lombardy poplar, both to be removed, two mature Pōhutukawa with obvious structural anomalies (to be removed) a Lime tree to be retained, a mature Eucalypts to be retained, a row of 10 x Pōhutukawa to be retained and protected, 2 x English Oak trees (in fair condition), to be retained, and to the south of the Oak trees, there is a group of recently planted specimen trees, all with excellent long term amenity potential with the park environs.

The proposed contractor's yard will occupy a small portion of the root zone area of the Macrocarpa tree, the group of Pōhutukawa trees, and the two Oak trees. Filling or excavation may be necessary to create a level construction yard, while the shaft will be constructed outside the tree's root zones. The impact on tree health associated with the establishment of the construction yard and shaft construction is expected to be minimal. Construction activity on site is not expected to significantly affect the overall health of the trees, given the large undisturbed root zone area outside the contractor's yard and the relatively small proportion of disturbed tree roots.

Access to the main construction area is through the park entrance on Sarsfield Street, where two mature street Elm trees overhang the road and entranceway. Pruning of these trees will be conducted to improve clearance for vehicle movement. Contractors will access the grass area through the footprint of a juvenile Puriri tree which does not require resource consent for removal or alteration. The tree will be relocated within the park, following standard practices and maintenance, ensuring a successful tree relocation.

A second area required for the project is where a connection pipe is needed between the chamber in the southwestern corner of the site and the shaft. The pipe is proposed to be tunnelled beneath mature trees at a significant depth, causing negligible effects on the trees during construction.

Construction of the chamber and associated plant room in the southwestern corner of Point Erin Park is unavoidable due to the requirement to connect to existing pipework in that area, resulting in some impact on trees, particularly two mature Pōhutukawa.

One of the trees has experienced limb failure, with sections touching the ground. A retaining wall is proposed to be built close to the tree and a combination of wall construction, root disturbance from cutting, changes in soil levels, and pruning to clear the work site area are all expected to have a negative impact on the tree's health, and it is proposed to be removed, unless it can be retained, following an assessment from the works Arborist.

The second tree has a broken scaffold branch which continues to grow and about 18 meters away from the Curran Street boundary, close to the extent of the construction area. Due to significant root disturbance caused by chamber earthworks and overall construction activity in the area, it is likely that this tree will need to be removed, again, unless the works arborist determines that it can be preserved. It should be noted that significant pruning of the tree will also be required to create access for machinery, and this will negatively impact on its form and long-term performance.

Regarding replacement planting for the trees to be removed, the applicant's Arborist has determined that a minimum of thirty-eight exotic or forty-nine native trees would need to be planted. The selection of tree species and their specific locations will be determined by the Urban Forest Specialist responsible for the area. As I do not have information on the i-Tree modelling conducted to arrive at this number, I am unable to provide an argument for or against its sufficiency, in my opinion, it appears to be more than adequate.

Please include the below conditions in your final draft. Please use verbatim, as I have made small but important changes to some words i.e., shall to must.

1. Tree protection must form a part of any site-specific hazard management and is to be included in daily toolbox meetings and all site inductions.
2. No work must take place within the root zone of the trees without prior approval from the supervising arborist. Any amendments to the tree protection methodology must require prior written approval from the supervising arborist.

**Pre-start:**

3. The consent holder must engage the services of a suitably qualified and experienced on-site supervisory arborist (the 'supervising arborist'), who must supervise and coordinate all works and activities within the root zone of protected trees. All works must be undertaken in accordance with the Arborist report titled "Arboricultural Assessment of Effects of Extension of the Central Interceptor wastewater tunnel into Point Erin Park, resulting in the removal of reserve trees" prepared by Sean McBride , Dated 25 January 2023, Job Ref# 2499
4. Prior to any works commencing on site, the consent holder must arrange a site meeting with the supervising arborist, council's monitoring officer, council's urban forest specialist, and the contractor who has overall responsibility for the works. The purpose of this meeting is to discuss conditions of consent. At the meeting, the responsible contractor must confirm to the satisfaction of the supervising arborist and council the following:
  - Programming of works
  - Site access and transportation of materials
  - Temporary storage areas for materials
  - Silt and sediment controls
  - Excavations in the root zones of trees
  - When the supervising arborist is required to be present

**Reporting:**

5. At the completion of works, the supervising arborist, at their discretion, must 'sign off' the work of the contractor and, if requested, provide a brief account of the project to the council arborist (if necessary, with photos). The account of works must include, but not be limited to:
  - The effects of the works on the subject trees
  - Any remedial work that may be necessary

**Ground protection:**

6. No material must be stored, emptied, or disposed of in or around the root zone of any of the trees unless otherwise authorized by the supervising arborist. Any material that is to be stored or temporarily placed in or around the root zone of any of the trees must be stored carefully on an existing or temporary hard surface such as asphalt or plywood sheets, respectively.
7. If, during the course of the works, machinery or vehicle access/manoeuvring is required in or around the permeable/exposed root zone of any of the trees, then those areas must be covered with a protective overlay sufficient to protect the ground from being muddied, compacted, churned up, or otherwise disturbed (for example, 'Track Mats,' or a layer of mulch or sand/SAP7 overlaid if necessary, with a raft of wired planks, plywood, or similar) (see detail TP-04 of the Arborist report noted in 3 above)
8. If machinery/vehicles are to be operated or stored within the root zone area on an existing or temporary load-bearing surface, then the machinery/vehicle must not cause any detrimental effect to the tree(s) through compaction, physical damage, spillage of lubricants and fuels, or discharge of waste emissions.

**Excavations in and around root zones:**

9. All excavations that are to take place in or around the root zone of any of the trees must be done in conjunction with the supervising arborist, through a careful combination of hand digging and machine excavation, and to the satisfaction of the supervising arborist. Where the supervising arborist deems it likely that roots will be encountered in the areas, then these areas must first be explored using hand tools only to check for the presence of such roots.
10. Where concrete is to be poured into excavations containing exposed roots, then all exposed roots must first be covered in a layer of polythene to prevent the concrete from contacting the exposed root (see detail TP-06 of the Arborist report noted in 3 above).

**Tree pruning:**

11. All tree pruning must be confirmed to the satisfaction of the works arborist after liaison with the contractors represented around the extent of clearance required and practical options that may be available to retain large limbs. All pruning must be undertaken by a suitably experienced arboricultural contractor, with the work conforming to best industry practice, such as Arb Australia and NZ Arb Minimum Industry Standard MIS308.

**Protecting and pruning roots:**

12. Every effort must be made to avoid root severance from all trees by exploring on-site alternatives to construction/engineering, i.e., adjusting finished levels and basecourse depths, etc. Where root severance is unavoidable, the severance of any root must be carried out by the supervising arborist, who must select the most appropriate implement for the task. Roots must be cut cleanly to ensure that the traumatic cambium is able to initiate new root growth as effectively as possible, and the exposed cut faces should be covered over immediately with moist soil.
13. Where roots to be retained are encountered, and there is a need for these roots to remain exposed in order that works are not impeded, then those roots must be covered with a suitable protective material (such as moist Hessian or a wool mulch) to protect them from

desiccation and/or mechanical damage until such a time as the area around the root can be backfilled with the original material. The wrapping or covering of any roots must be undertaken by the supervising arborist.

### Mitigation planting

14. Following completion of the site works, the applicant shall plant thirty-eight exotic or forty-nine native trees in locations nearby, determined by the Urban Forest Specialist for the area. All replacement planting must be done as per best arboriculture practice and maintained thereafter for 3 years. Should a tree die during the maintenance period, it must be replaced on a like-for-like basis, with a new tree of the same size.

Regards

**Paul Hansen – Arborist – Earth Streams and Trees**

**Specialist Unit | Resource Consents Department**

Mob 027- 4983464 | Email: [paul.hansen@aucklandcouncil.govt.nz](mailto:paul.hansen@aucklandcouncil.govt.nz)

Auckland Council


Level 6, 135 Albert Street, Auckland Central,

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# Memo

To: Colin Hopkins, Principal Project Lead, Premium Unit, Resource Consents Department  
Mark Ross, Senior Planner, Sentinel Planning, consulting planner to the Resource Consents Department.

From: Chris Mallows, Team Leader: Cultural Heritage Implementation, Heritage Unit, Plans and Places Department.

Date: 15/03/2023

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**Subject:** BUN60415108, Central Interceptor – Point Erin Tunnel.

## 1. Introduction

- 1.1. This memo assesses the impact that the works applied through BUN60415108 will have on archaeology/historic heritage.
- 1.2. I visited the Point Erin Park application area, in conjunction with the applicant and their consultancy team on the 17<sup>th</sup> of January 2023.

## 2. Exclusions

- 2.1. This memo does not include an assessment of the cultural significance of the application area to mana whenua. The cultural and other values that mana whenua places in the area may differ from its archaeological values and are determined by mana whenua. For example, low archaeological values do not necessarily equate to low cultural values. Archaeological mitigation proposed in the application should not be considered mitigation for effects on cultural values.

## 3. Definitions

- 3.1. Chapter J in the Auckland Unitary Plan Operative in part (updated 10 February 2023) defines an archaeological site as having the same meaning as in the Heritage New Zealand Pouhere Taonga Act 2014. No definition of an archaeological site is provided within the Resource Management Act, rather historic heritage is provided in Part 1, section 2. The definition of historic heritage is substantially broader than just an archaeological site and is not limited by the inclusion of a *terminus ante quem* date.
- 3.2. As such, when the term 'archaeological' is used within this memo, it specifically refers to a site that would meet the definition of an archaeological site as provided in Chapter J in the Auckland Unitary Plan Operative in part (updated 10 February 2023). All other sites fall under the Resource Management Act definition of historic heritage.

## 4. Reviewed application documents

- 4.1. I have reviewed the following documents relevant to archaeology/historic heritage submitted with application BUN60415108:
  - *Central Interceptor – Point Erin Tunnel. Assessment of Effects on the Environment.* February 2023. Prepared by Tonkin and Taylor for Watercare Services Limited.
  - Appendix A: *Proposed Consent Conditions.*

- Appendix B: *Drawings*.
- Appendix D: *Restricted Discretionary Activity Matters of Discretion*.
- Appendix E: *Permitted Activity Standards Assessment*.
- Appendix F: *Auckland Unitary Plan – Relevant Objectives and Policies*.
- Appendix H3: *Preliminary Site Investigation. Point Erin Park*. December 2022. Prepared by Tonkin and Taylor for Watercare Services Limited.
- Appendix H8: *Watercare Services Ltd, Central Interceptor Extension, Point Erin Park, Auckland: Archaeological Assessment*. January 2023. Prepared by Clough and Associates Limited for Watercare Services Limited.

## 5. The application proposal

- 5.1. The application proposal involves the construction, commissioning, operation, and maintenance of a wastewater interceptor and associated activities between Tawariki Street, Grey Lynn, and Point Erin Park, Herne Bay.
- 5.2. A detailed overview of the proposal is provided in the submitted Assessment of Effects on the Environment and is not repeated in this memo<sup>1</sup>.

## 6. Archaeology/historic heritage within the application area

- 6.1. The application proposal does not affect scheduled archaeological sites in Schedule 14.1 (Schedule of Historic Heritage) in the Auckland Unitary Plan Operative in part (updated 10 February 2023) [AUP OIP].
- 6.2. No sites are recorded on the New Zealand Heritage List/Rārangī Kōrero for the application area.
- 6.3. There are no known archaeological/historic heritage places within the tunnel shaft location at Tawariki Street, Grey Lynn.
- 6.4. The alignment of the Central Interceptor – Point Erin Tunnel is located below ground at depths generally ranging between 20m and 60m depending on local topography<sup>2</sup>. This is beyond the depth of archaeological/historic heritage places.
- 6.5. Point Erin Park, Herne Bay is the proposed location for a terminal shaft and control chamber. Point Erin Park has had multiple layers of occupation and activities that have defined the current park landscape. These include –
  - Te Koraenga Okā or Okā Pā (Auckland Council Cultural Heritage Inventory database identifiers: CHI 6815 and CHI 22406 / New Zealand Archaeological Association ArchSite database identified: NZAA R11/78) which is scheduled under Schedule 12 Sites and Places of Significance to Mana Whenua Schedule in the Auckland Unitary Plan Operative in part (updated 10 February 2023) [ID 006], with a defined extent of place on the northern part of the headland. Based on a 1954 University thesis by H.J.R. Brown, the original NZAA site record form described the pa as “completely destroyed by

<sup>1</sup> Central Interceptor – Point Erin Tunnel. Assessment of Effects on the Environment. February 2023, p.2-4.

<sup>2</sup> Central Interceptor – Point Erin Tunnel. Assessment of Effects on the Environment. February 2023, p.2.



*settlement and park formation. Proposed swimming pool may reveal something during excavation.”*<sup>3</sup> Additional information on the condition of the place was recorded on the NZAA site record form by Brenda Sewell in 1981. Sewell noted that “...*despite previous report of complete damage, possible evidence for a large ditch and bank along the road side of the park area, south of the swimming pool complex*” and “*Old crushed midden eroding north west edge of headland*”.<sup>4</sup>

- The development of the John Campbell estate (*circa* post-1846 to 1911). The estate was part of a Crown Grant named ‘Erin’ covering an area from Shelly Beach Road to Wallace Road and south to Jervois Road. Campbell built a house, outbuildings, and a “park-like landscape” within the estate.
- The repurposing of the Campbell estate as a public park in 1911 following the sale to the council. Campbell’s house was converted into a kiosk and a band rotunda was built. Stone entrance gates were constructed, and the park was landscaped, including a natural stream gully, at the southern end of the park, with ponds. As a dynamic park landscape environment, a later addition was the drinking fountain, while the stone entrance gates were removed in the 1930s and the kiosk in the 1940s, amongst other changes.
- Temporary houses being built in the 1950s over the northern and eastern ends of Point Erin Park for the Auckland Harbour Bridge construction workers. These were removed once the bridge was completed.
- Point Erin Pools being constructed in 1962.
- A dynamic park landscape environment after the construction of the pools culminating in the current park layout.

6.6. The applicants’ archaeological assessment provides a more detailed discussion of the historical and archaeological background of the place.<sup>5</sup>

## **7. Effects of the proposed works on archaeology/historic heritage within the application area**

7.1. The applicant’s consultant archaeologist states –

*“The proposed activity will not affect any known archaeological remains.”*<sup>6</sup>

7.2. This statement has been made through the applicant’s consultant archaeologist consulting literature and archaeological reports, carrying out archival research, reviewing survey plans and aerial photographs, and carrying out a visual inspection of Point Erin Park, Herne Bay which included the excavation of fourteen hand-dug archaeological test pits.

7.3. The results of the hand-dug archaeological test pit are described by the applicant’s consultant archaeologist as follows –

*“No definitive archaeological evidence was identified in any of the test pits. However, two pieces of ceramic chinoiserie style decorated ware were found at 300mm deep in TP5. This*

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<sup>3</sup> NZAA Site Record Form.

<sup>4</sup> NZAA Site Record Form.

<sup>5</sup> Watercare Services Ltd, Central Interceptor Extension, Point Erin Park, Auckland: Archaeological Assessment. January 2023, pp.9-33.

<sup>6</sup> Watercare Services Ltd, Central Interceptor Extension, Point Erin Park, Auckland: Archaeological Assessment. January 2023, p.49.

*style of ceramic decoration began prior to 1900. A few small fragments of marine shell (likely to be cockle) were also found on the surface where there had been some ground disturbance. No in situ shell midden was found in any of the test pits.”<sup>7</sup>*

- 7.4. In summarising the potential archaeological/historic heritage risk the applicant’s consultant archaeologist states –

*“In any area where archaeological sites have been recorded in the general vicinity it is possible that unrecorded subsurface remains may be exposed during development. It is considered possible that unrecorded subsurface archaeological remains associated with either Māori occupation and use and/or 19th century early European domestic occupation, as well as with the early development of Point Erin as a public park from 1911, may be exposed during development within the proposed main construction area...”<sup>8</sup>*

- 7.5. I agree with and support this assessment of the potential archaeological/historic heritage risk.

## **8. Applicants Proposed Conditions**

- 8.1. The applicant has proposed that the following conditions and advice notes be attached to any granted resource consent for archaeology/historic heritage –

*Condition 43: The Consent Holder must engage a suitably qualified and experienced archaeologist to give advice on work undertaken on the site in Point Erin Park including monitoring preliminary earthworks. The names and qualifications of this specialist must be provided to the Council prior to earthworks commencing.*

Advice note:

*The Heritage New Zealand Pouhere Taonga Act 2014 (hereafter referred to as the Act) provides for the identification, protection, preservation and conservation of the historic and cultural heritage of New Zealand. All archaeological sites are protected by the provisions of the Act (section 42). It is unlawful to modify, damage or destroy an archaeological site without prior authority from Heritage New Zealand Pouhere Taonga. An Authority is required whether or not the land on which an archaeological site may be present is designated, a resource or building consent has been granted, or the activity is permitted under Unitary, District or Regional Plans.*

*It is the responsibility of the Consent Holder to consult with Heritage New Zealand Pouhere Taonga about the requirements of the Act and to obtain the necessary authorities under the Act should these become necessary, as a result of any activity associated with the consented proposals. For information please contact the Heritage New Zealand Pouhere Taonga Archaeologist - 09 307 0413 / [archaeologistMN@historic.org.nz](mailto:archaeologistMN@historic.org.nz)*

*Condition 44: If any archaeological sites, including human remains are exposed during site works then the following procedures shall apply:*

*(a) Immediately after it becomes apparent that an archaeological or traditional site has been exposed, all site works in the immediate vicinity shall cease.*

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<sup>7</sup> Watercare Services Ltd, Central Interceptor Extension, Point Erin Park, Auckland: Archaeological Assessment. January 2023, p.34.

<sup>8</sup> Watercare Services Ltd, Central Interceptor Extension, Point Erin Park, Auckland: Archaeological Assessment. January 2023, p.50.

*(b) The Consent Holder shall immediately secure the area so that any artefacts or remains are untouched.*

*(c) The Consent Holder shall notify mana whenua, the Heritage New Zealand Pouhere Taonga and the Council (and in the case of human remains, the New Zealand Police) as soon as practicable, and advise those parties that an archaeological site has been exposed so that appropriate action can be taken. Works shall not recommence in the immediate vicinity of the archaeological site until approval is obtained from the Heritage New Zealand Pouhere Taonga.*

Advice note:

*Should earthworks on the site result in the identification of any previously unknown archaeological site, including any archaeological artefact, koiwi or taonga, the Land Disturbance – Regional Accidental Discovery rule [E12.6.1] set out in the AUP(OP) apply.*

8.2. I support the inclusion of proposed condition 43 and the associated advice note.

8.3. I recommend changes to proposed condition 44. Proposed condition 44 specifies steps to be taken for the accidental discovery of archaeological sites (including human remains). A specific process on the steps to follow should previously unknown sensitive materials (i.e., archaeological sites) be discovered is provided for in Chapters E11 and E12 in the Auckland Unitary Plan Operative in part (updated 10 February 2023)) as the Accidental Discovery Rule.

8.4. As the Accidental Discovery Rule covers a range of sensitive materials – not just archaeological sites - it is recommended that the specific wording of the Accidental Discovery Rule is retained. The wording for proposed condition 44 should be replaced with the following –

*Should the consented works result in the identification of any previously unknown sensitive materials (i.e., archaeological sites), the requirements of land disturbance – Regional and District Accidental Discovery rules set out in the Auckland Unitary Plan Operative in part (updated 10 February 2023)) shall be complied with.*

8.5. The associated advice note should be deleted.

8.6. My proposed wording for condition 44 is consistent with the wording used on other granted resources consents.

8.7. As the Accidental Discovery Rule is a district/regional rule that requires adherence or compliance it does not need to be included as a condition. However, the inclusion of it as a condition is ultimately a planning decision to make and outside of my subject matter expertise.

8.8. What the Accidental Discovery Rule does not cover is historic heritage sites that do not meet the definition of an archaeological site in the Auckland Unitary Plan Operative in part (updated 10 February 2023) or meet the definitions provided in the Protected Objects Act 1975. Within Point Erin Park, Herne Bay historic heritage sites that fall outside of the definition of an archaeological site include any development of the John Campbell estate post-1900; the repurposing of the Campbell estate as a public park, and the temporary houses being built in the 1950s for the Auckland Harbour Bridge construction workers. Additional management processes need to be considered where there is reasonable cause to suspect the presence of these sites. The following consent condition is recommended to be included if the consent is granted to manage this risk –

*The following protocol will apply should any post-1900 subsurface features associated with the John Campbell estate, the public park (post-1911 until the 1950s), or the temporary accommodation for the Auckland Harbour Bridge construction workers be exposed during works associated with this consent:*

- The consented works will be halted while an archaeologist is called in to assess the features.
- The features will be recorded and analysed in accordance with current archaeological practice.
- A report on any features exposed will be provided by the project archaeologist to Auckland Council's Heritage Unit for inclusion in the Auckland Council Cultural Heritage Inventory.

## **9. Recommendations**

- 9.1. After reviewing the application documentation, and where the planner supports the resource consent application, and the possible granting of resource consent under s104 of the RMA, I make the following recommendations.
- 9.2. Proposed condition 43 (and associated advice note) should be included in any granted consent with no changes.
- 9.3. Should a condition be included about the Accidental Discovery Rule, the wording of proposed condition 44 (and associated advice note) should be replaced with the wording in paragraph 8.4.
- 9.4. An additional condition should be included to cover the exposure of subsurface post-1900 historic heritage features. Recommended wording is provided in paragraph 8.8.
- 9.5. In reviewing the application documentation, the conditions I have recommended will mitigate for potential archaeological/historic heritage risk and give effect to s6 (f) of the RMA.

## **10. Contact for further information**

Chris Mallows, Team Leader: Cultural Heritage Implementation,  
[chris.mallows@aucklandcouncil.govt.nz](mailto:chris.mallows@aucklandcouncil.govt.nz).

**Parks Memo****14.07.2023**

To: Mark Ross, Consultant Planner

From: Roja Tafaroji, Senior Parks Planner, Auckland Council

Subject: Request for Parks Planning Advice on resource consent BUN60415108 at 94 Shelly Beach Road, Ponsonby, Auckland 1011

Thank you for providing the application documents relating to the application for resource consents for construction, operation and maintenance of the Point Erin Tunnel at Point Erin Park, 94 Shelly Beach Road, Ponsonby. The purpose of this memo is to discuss the matters raised and recommend conditions to be included in the resource consent decision.

**1. Limitations**

This memo provides specialist parks advice based on a desktop review of the plans and application submitted for the proposal. A site visit has not been undertaken by Parks Planning. Please note that this document does not signify parks affected party approval (landowner approval), which if required, can be approved by the Land Advisory Team by a separate process.

**2. Site Description and Proposal**

The subject site for this application is Point Erin Park at 94 Shelly Beach Road which is owned by Auckland Council.

A comprehensive description of the site (section 3: Description of Existing Environment), and the proposed activities (section 4: Description of proposed works) is provided in the applicant's lodged AEE titled:

- *“Central Interceptor - Point Erin Tunnel - Assessment of Effects on the Environment”* prepared by Tonkin & Taylor Ltd, dated February 2023

This description is considered accurate and should be referred to for the purpose of this memo. The site is zoned as Open Space-Informal Recreation as well as Open Space-Sport and Active Recreation.

Figure 1. Pt Erin Park, 94 Shelly Beach Rd. (Source: AC Geomaps)



Figure 2. Indicative Planting Masterplan. Drawing base: Jacobs 2013964.002, prepared by Isthmus Ltd. Dated May 2023



In relation to Parks Planning's interests the proposal involves the following:



- The proposed works are in two locations within Point Erin Park as stated in the applicant's lodged AEE report dated February 2023:
  - *The main construction area (approx. 3,150 m<sup>2</sup>) for the proposed terminal shaft which is located in the grassed area immediately to the south of the Point Erin Pools and allows for the retrieval of the TBM.*
  - *The south western construction area (approx. 1,880 m<sup>2</sup>) which is located near the intersection of Curran and Sarsfield Streets and provides for the proposed control chamber and plant room, along with connections to the local sewer network.*
- The application provides an Ecological Enhancement and Management Plan which proposes extensive weed control and full enhancement planting of the entire esplanade reserve down to MHWS. A pest plant control programme is to be implemented for a period of five years to remove established pest plants and control any re-infestations within the esplanade reserve. All vegetation in the esplanade reserve area will be maintained by the consent holder for five years prior to handover to Auckland Council for ongoing maintenance.

### 3. Background Information

#### Lodged Land Owner Approval

Parks Planning understands that Land Advisory has been processing a Land Owner Approval application since February 2023 for the following proposed works within the park:

- Earthworks of approximately 5,000 m<sup>2</sup> in total across the two construction areas (approx. 3,150m<sup>2</sup> in the grassed area to the south of the Point Erin Pools and approx. 1,880m<sup>2</sup> in the southwestern corner of the park).
- Tree works (pruning, works in the root zone, removal, relocation).
- Temporary works including retaining walls to create level working areas, site access and internal circulation, and contractor's site compound.
- Transport movements including delivery of plant and construction materials, removal of material excavated during the construction of the shaft and control chamber.

Jacqui Thompson Fell and Thomas Dixon, Parks and Places Specialists, have provided the comments below while LOA was lodged to be processed:

*"... We also have concerns for the impact on the access to the park, as well as the postponement of any capital works within the park for a length of time. The site access for the project team will have an impact on the public access, and the occupation of a significant portion of the green open space will impact on many people who use the space for dog walking and other passive recreation. Pt Erin pool is highly-valued facility for the residents and other Aucklanders. The pool complements the Parnell Baths and Tepid Baths, while providing its own unique experience."*

The latest update from Land Advisory team processing the LOA for the proposed activities on Pt Erin Park suggests the following:

*"There will be some significant process required before the council can agree to any temporary occupation of any land within Pt Erin Park...For [the] permanent infrastructure, we [Land Advisory] will need to have agreements to easement. It will*

*reduce our ability to use, manage and develop the land for its purpose, so there would need to be a \$ consideration payable for impairment.”*

#### Specialist Input

Parks Planning has relied on specialist input and technical advice from the following Council staff in the assessment of this application:

- Margaret Lenehan, Senior Specialist Advisor (Arboriculture), dated 29/06/2023
- Csongor Czegledi, Senior Landscape Architect, dated 07/07/2023
- Allan Christensen, Manager Land Advisory Services, dated 13/07/2023
- Tony Edney, Principal Property Advisor, dated 09/03/2023
- Gwyn De-Arth, Regional Aquatic Facilities Manager, dated 15/03/2023

#### **4. Information Assessed**

My assessment is based on a review of the application materials provided by the applicant, particularly, but not limited to, the following:

- *‘Central Interceptor - Point Erin Tunnel – Assessment of Effects on the Environment’* prepared by Tonkin & Taylor Ltd, dated February 2023
- *‘Central Interceptor – Point Erin Extension- Natural Character, Landscape and Visual Assessment Report’*, prepared by Isthmus Group Ltd. dated 1 February 2023
- *‘Response to s92 requests - Point Erin Tunnel’*, Job No: 30552.9082, prepared by Tonkin & Taylor Ltd. dated 19 April 2023
- *‘Point Erin Tunnel Response to s92 request: Landscape and Visual effects - further clarification questions’*, Job No: 30552.9082, prepared by Tonkin & Taylor Ltd. dated 26 May 2023
- *‘RE: Point Erin Tunnel - progress check in 31 May’*, email correspondence from Rachel Signal-Ross to Mark Ross, dated 1 June 2023
- *‘Point Erin Tunnel-Response to additional questions from Auckland Council Parks’*, Job No: 30552.9082, prepared by Tonkin & Taylor Ltd. dated 20 June 2023

During the process of the application, Parks Planning issued a request for further information as per S92 of RMA to the the processing planner Mark Ross on 24/03/2023, followed by two more requests asking for further clarifications of the proposed outcome on the park land raised on behalf of Parks Planning. The main matters raised by Parks Planning included the followings:

1. The proposed landscape design and planting outcome on the park demonstrated on clear drawings (e.g. plans and cross sections). This was to understand number of trees to be removed, number of specimens to be planted, footpath network and connections, park boundary treatment, viewshafts etc.)
2. A suitable planting plan that includes details on species to retain/remove and any proposed planting within the park.
3. All proposed retaining walls and their structural elements within and along the boundary of Pt Erin Park (temporary and permanent).

4. Confirming the proposed retaining structure along the boundary of the park as a reason for consent following an infringement of Yard setback requirement (H7.11.3.1) and providing relevant assessment under AUP.
5. Providing a suitable assessment of the proposed activities on Pt Erin Park against the relevant policies of AUP under Open Space zone.

Parks Planning has received the response from the Applicant to Parks requests as noted above. However, it is acknowledged that the responses provided were not found satisfactory to Parks Planning.

## 5. Reasons for consent and application status

The application requires resource consent for some of the proposed activities on Pt. Erin Park as listed in section 1.4 (Resource consent requirements) of the Applicant's lodged AEE report. However, the overall activity status of the application is **discretionary** activity for temporary diversion and discharge of stormwater runoff from construction areas as per E8.4.1(A10).

## 6. Assessment relevant to Parks Planning

### a) Adverse effects of the proposed activities on the amenity values of Pt Erin Park

The applicant has provided an assessment of effects on the environment in accordance with Schedule 4 of the RMA in the lodged AEE report referenced above. The assessment provided concluded that the Project will result in "temporary" adverse effects on the amenity and landscape character of the park due to proposed (temporary and permanent) structures in the park. In order to "avoid, remedy and mitigate effects", the AEE report does refer to measures. Despite several requests for clarification on these measures, Parks Planning have not received any clear demonstration of these measures/methods on the drawings. Instead, the applicant has made references to proposed consent conditions to ensure mitigating the adverse effects on the amenity values and landscape character of the park.

The Applicant, also, referred to restoration planting to be undertaken on the park with no clear information provided for Parks assessment. Similarly, the AEE report refers to proposed consent conditions for restoration planting within the site.

While conditions would be recommended to ensure the quality outcome on the basis of the information provided for the application, every resource consent application must include all of the following as per rule C1.2(1) of AUP:

- a) *the information specified in Schedule 4 to the Resource Management Act 1991;*
- b) *an assessment of the environmental effects of the proposal in accordance with Schedule 4 to the Resource Management Act 1991;*
- c) *a certificate of title not more than three months old and including any documents listed or identified on that title relating to restrictions on the use of the site;*
- d) *plans or drawings accurately showing what is existing and what is proposed at a scale of at least 1:100 or 1:200 or otherwise to a scale that shows sufficient detail of the proposal to determine its effects;*
- e) *and any specific information required by any other provision in the Plan.*

In response to Parks Planning request for demonstration of sufficient detail of the proposed outcome on the park, the Applicant refused to provide the required information as to "not

pre-empting the design outcome” at this stage (resource consent application stage) and that it would be clarified after consultation with mana whenua and Auckland Council Parks department. This is clearly not acceptable from Parks Planning as the assessment during the resource consent stage must be based on sufficient information provided demonstrating the outcome proposed by the application as per rule C1.2(1) of AUP (noted above).

While Csongor Czegledi, Senior Landscape Architect, advised that it is not possible to review plans which are not submitted, Margaret Lenehan, Senior Specialist Advisor (Arboriculture), has reviewed the information provided and provided the following comment:

*“The indicative planting plans indicates planting intent to screen the plant and the retaining wall from some directions in the park. It states that the final design will be determined after consultation with stakeholders. This leaves a lot open to interpretation at EPA. Detailed design at EPA could result in some departures from the intent of the Resource Consent plans.*

*Arb report uses i-tree to estimate that replacement canopy cover will require 38 exotic or 49 native trees to be planted depending on how many actual trees are removed. Indicative planting plan shows 17 with some of the natives being small trees such as kohu & kowhai which we would not consider providing adequate canopy cover long term. It is unclear if all these trees including the 2 replacement pohutukawa could be accommodated in the park and if so where exactly.*

*There is currently limited clarity regarding the purposed retaining wall and how it’s effects will be mitigated.”*

b) Relevant assessment against objectives and policies of open space zone

The proposal involves construction of a retaining wall along the south western boundary of Pt Erin Park which is considered a building according to the definition chapter in AUP (J1.4.1). As one of the Parks s92 matters which remained unsatisfactory, I requested for confirmation of an additional reason for consent for construction of this retaining wall as a new building that does not comply with Yards standard (H7.11.3.1) which is a **discretionary activity** as per H7.9.1(A39).

In a s92 response on 1<sup>st</sup> of June, the Applicant provided the statement below:

*“We consider that the works, including retaining walls required to facilitate the construction all form part of the infrastructure activity so should be considered under the Infrastructure chapter of the AUP (E26) rather than the zone provisions. This has been our experience to date of how Auckland Council interprets and applies rules for infrastructure projects. It also reflects the approach typically taken to infrastructure projects throughout New Zealand.”*

According to Introduction chapter of AUP (A1.7.4), an application for resource consent for a discretionary activity will be fully assessed in terms of the relevant provisions of the Plan, including all relevant objectives and policies, and the Resource Management Act 1991.

Below is the final response from the applicant to my request above:

*“... the works, including retaining walls required to facilitate the construction all form part of the infrastructure activity and therefore the rules which apply are those contained in Chapter E26. The rules in Chapter H7 are not applicable. There are no rules within Chapter H7 which relate to infrastructure, and as such we do not consider that there are “additional infrastructure provisions” in the rules section of Chapter H7 which need to be considered.”*

I **do not** agree with the applicant’s response, and I do consider the construction of the retaining structure (considered as a building as per the definition in J1.4.1) to be assessed under the development category in Open Space zone as per H7.9.1(A39).

c) Further inputs received from relevant specialists:

During the processing of this resource consent application, Parks Planning received some comments from Gwyen De-Arth, Regional Aquatic Facilities Manager. The main concerns from aquatic experience perspective were around any adverse effects of the interceptor on access to and use of the outdoor pool as well as any visual adverse effects on the park in general. Except for some of the recommended conditions to mitigate the adverse effects of the proposed activities on the park, the Applicant has not provided any further detailed information addressing the above matters.

## **7. Conclusion**

In summary, the proposal is **NOT** acceptable for the following reasons:

- **Not** all Parks matters have been satisfactorily responded to in detail by the applicant through the s92 process.
- Applicant has referred to “not pre-empting the design outcome” at resource consent stage as they tend to have consultation with mana whenua and Auckland Council in the future. This is not acceptable as a justification for not providing sufficient information at resource consent as required per rule C1.2(1) of AUP and not demonstrating the design outcome at this stage.
- Additionally, the Applicant consistently referred to chapter E26 for justifying the precedence of the provision of the infrastructure to the amenity values and purposes of the open space on the subject site which is an open space zoned land. As I noted previously in Parks s92 requests, Unitary Plan requires for the provision of infrastructure to be assessed based on Auckland-wide provisions, zone, and overlays and should be referred to where applicable. Parks does not consider the assessment provided appropriate in this regard.
- While the Applicant has included restoration planting within the recommended conditions, no clear plan with sufficient information has been provided to Parks in order to have a thorough assessment at resource consent stage. However, should the consent get granted this plan will be assessed further at EPA stage, along with any public infrastructure and engineering plans to ensure the park is not affected by the proposed infrastructure and retaining walls. The detail design elements for all landscaped areas will be assessed at EPA stage. Parks Planning will need to assess detailed and final planting plans showing soft and hard landscaping elements and full written specifications, methodologies, and maintenance plans etc.
- Should a resource consent be granted for this application, Parks Planning requires a five-year maintenance period of the proposed soft/hard landscaping within the park.

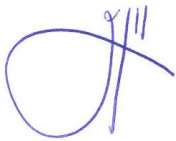
This will be secured by conditions of consent on issue of 224c certification and payment of maintenance bonds by the applicant.

- Any approval of the resource consent for this application relies on the approval granted by the land owner via a Land Owner Approval.

Parks **cannot** support the application with the insufficient level of information provided. Should a resource consent be granted for the current application on Point Erin Park, Parks Planning recommends number of consent conditions and advice note to be included (see the recommended conditions in **track changes** below).

Should you have any questions relating to this memo or the proposed conditions of consent feel free to contact me.

Regards,



Roja Tafaroji  
Senior Parks Planner  
[roja.tafaroji@aucklandcouncil.govt.nz](mailto:roja.tafaroji@aucklandcouncil.govt.nz)  
021 937 084



## **RECOMMENDED CONDITIONS**

### **A. General conditions**

3	<p><b>Detailed drawings and design</b></p> <p>At least three (3) months prior to commencement of works, the Consent Holder must submit detailed engineering design plans for the Project, or for that stage of the Project works, to the Council.</p> <p>The consent holder must submit detailed landscaping on Pt. Erin Park, Lot 3 DP 48893, PT ALLOT 9 SEC 8 Suburbs AUCKLAND, PT ALLOT 10 SEC 8 Suburbs for the approval by the Parks Planning Team Leader. In particular, the plans must:</p> <ol style="list-style-type: none"> <li>a. Be prepared by a suitably qualified person/s.</li> <li>b. Be in general accordance with “Indicative Planting MasterPlan. Drawing base: Jacobs 2013964.022”, “Planting Intent- Lower Terrace. Drawing base: Jacobs 2013964.008”, “Planting Intent – Upper Terrace. Drawing base: Jacobs sketch”, prepared by Isthmus. Dated May 2023.</li> <li>c. Include a weed management plan detailing weed eradication and control methods for the reserve, prior to and after planting.</li> <li>d. Identify all planting to be removed and all new planting to be undertaken on the site including details of the intended species, spacing, quantities, location, plant sizes at the time of planting, their likely heights on maturity, tree pit specifications, the overall material palette, and how planting will be staged and established.</li> <li>e. Include specifications for plant condition and a written specification detailing the planting methodologies to be used.</li> <li>f. Identify the existing species to be retained.</li> <li>g. Ensure that selected species can maintain appropriate separation distances from paths, roads, street lights and vehicle crossings in accordance with the Auckland Transport Code of Practice.</li> <li>h. An annotated pavement plan and related specifications, detailing proposed site levels and the materiality and colour of all proposed hard surfacing.</li> <li>i. Include design details of all above-ground structure to remain at the site including: <ol style="list-style-type: none"> <li>(a) The plant room;</li> <li>(b) The air vent;</li> <li>(c) Permanent retaining walls;</li> <li>(d) Any lid structures and chamber covers.</li> </ol> </li> </ol>
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	<p>j. Comply with the <a href="#">Auckland Code of Practice for Land Development and Subdivision: Chapter 7: Landscape</a>.</p> <p>k. Any other relevant agreed assets to mitigate for the development including but not limited to walkways on the existing park land.</p> <p><i>Advice note:</i></p> <p><i>To place any public structures, or assets, on Pt. Erin Park, Lan Owner Approval will need to be obtained from Land Advisory.</i></p> <p><i>Plans approved under Resource Consent do not constitute an Engineering Plan Approval and should not be used for the purposes of constructing public works in the absence of that approval.</i></p>
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## **B. Construction phase consent conditions**

Implementation of landscape works on Pt. Erin Park	
X	<p>All hard and soft landscape works (including but not limited to planting, retaining walls, plant room, air vent, any lid structures and chamber covers) within the Park must be implemented in accordance with the approved landscape plans to the satisfaction of the Parks Planning Team Leader and landscaped in accordance with the Auckland Code of Practice for <a href="#">Land Development and Subdivision Chapter 7: Landscaping</a>, and in particular:</p> <ul style="list-style-type: none"> <li>a) All areas of the reserve that have been grassed must have a 90 percent strike rate, in a mowable condition, and be weed and rubbish free.</li> <li>b) Planted slopes to be a maximum 1:3 grade and grassed slopes to be a maximum 1:5 grade.</li> <li>c) Grassing and planting must be carried out by a suitably qualified landscape contractor in the planting season (April to September) and when the weather is suitable (mild, dull and moist) and when the ground is moist and workable. Where delays occur in the agreed programme which prevents areas being planted, the consent holder must inform the Parks Planning Team Leader immediately.</li> <li>d) At practical completion auditing, a chartered professional engineer engaged by the applicant must provide certificates of compliance and producer statements as relevant and certify that the parks construction works have been carried out in accordance with the approved plans and comply with the requirements in condition (s) – above). Written manufacturers guarantee must be supplied for any products where warranties are available or applicable.</li> <li>e) Any defects identified at the practical completion audit are to be remedied by the applicant. The practical completion of the works will be determined by the Parks Planning Team Leader to their satisfaction, and this indicates the commencement of the maintenance period.</li> </ul>
Maintenance – Revegetation	

Xx	<p>Prior to the completion of the work, the consent holder must provide for the approval of the Parks Planning Team Leader a Maintenance Plan, for all planting and landscaping to be established on Pt Erin Park, Lot 3 DP 48893, PT ALLOT 9 SEC 8 Suburbs AUCKLAND, PT ALLOT 10 SEC 8 Suburbs. The Maintenance Plan must include:</p> <ul style="list-style-type: none"> <li>a) Vegetation maintenance policies for the proposed planting, in particular details of maintenance methodology and dates / frequencies.</li> <li>b) Details of watering, weeding, trimming, cultivation, pest and disease control, checking of stakes and ties, pruning and other accepted horticultural operations to ensure normal and healthy plant establishment and growth.</li> <li>c) Vandalism eradication policies.</li> <li>d) All invasive pest plants and pest animals must be controlled in accordance with the pest management plan prior to planting (site preparation) and following planting for the plant maintenance period.</li> </ul>
Xxx	<p>Maintenance in accordance with the approved planting/revegetation plan must occur until 80% canopy closure has occurred and a minimum survival rate of the plants (being 90% of the original density through the entire planting area(s) has been achieved. The maintenance period must be a minimum of five years and must commence once the planting completion report has been approved by the Team Leader Parks Planning in accordance with condition X above. Plant maintenance includes ongoing replacement of plants that do not survive. All invasive pest plants and pest animals must be controlled in accordance with the EMP/pest management plan prior to planting (site preparation) and following planting the plant maintenance period.</p> <p>If any damage/theft to the planting occurs during the maintenance period, the consent holder must replace damaged/stolen plants with the same species and height, and must be maintained following the replacement planting, to the satisfaction of the Parks Planning Team Leader.</p>
Retaining Walls	
Xxxx	<p>Any retaining wall(s) and ancillary and supporting structures must be entirely located outside the yard setbacks within the reserve. The retaining wall must be no higher than 1m above existing ground level.</p>
Boundary Treatment	

Xxxxx	Any fencing, hedging or planting along boundaries or within 2 metres of boundaries of Pt Erin Park, Lot 3 DP 48893, PT ALLOT 9 SEC 8 Suburbs AUCKLAND, PT ALLOT 10 SEC 8 Suburbs must be either low height (1.2m) or at least 50% visually permeable (max height 1.8m). Landscape planting may be implemented on either side of the fence and must be maintained to ensure 50% visual permeability. The council is exempt from sharing costs. A consent notice will be required to be registered on Pt. Erin Park Lot 3 DP 48893, PT ALLOT 9 SEC 8 Suburbs AUCKLAND, PT ALLOT 10 SEC 8 Suburbs for the consent holder (Watercare Services). The consent notices will be prepared by the Council's solicitor at the consent holder's cost.
Landowner Approvals	
	<p><u>Advice Notes:</u></p> <p><i>All works in Pt. Erin Park Lot 3 DP 48893, PT ALLOT 9 SEC 8 Suburbs AUCKLAND, PT ALLOT 10 SEC 8 Suburbs shall require Landowner Approval prior to any works being undertaken.</i></p>



# **ATTACHMENT 3**

## **SUBMISSIONS**



**From:** [NotifiedResourceConsentSubmissionOnlineForm@donotreply.aucklandcouncil.govt.nz](mailto:NotifiedResourceConsentSubmissionOnlineForm@donotreply.aucklandcouncil.govt.nz)  
<[NotifiedResourceConsentSubmissionOnlineForm@donotreply.aucklandcouncil.govt.nz](mailto:NotifiedResourceConsentSubmissionOnlineForm@donotreply.aucklandcouncil.govt.nz)>

**Sent:** Friday, 24 March 2023 1:30 pm

**To:** Central RC Submissions <[CentralRCSubmissions@aucklandcouncil.govt.nz](mailto:CentralRCSubmissions@aucklandcouncil.govt.nz)>

**Cc:** [RSignal-Ross@tonkintaylor.co.nz](mailto:RSignal-Ross@tonkintaylor.co.nz)

**Subject:** BUN60415108 [ID:16143] Submission

We have received a submission on the notified resource consent for Central Interceptor Extension – Pt Erin Tunnel – Pt Erin Park and Curran Street Road Reserve.

## Details of submission

### Notified resource consent application details

**Property address:** Central Interceptor Extension – Pt Erin Tunnel – Pt Erin Park and Curran Street Road Reserve

**Application number:** BUN60415108

**Applicant name:** Watercare Services Limited

**Applicant email:** [RSignal-Ross@tonkintaylor.co.nz](mailto:RSignal-Ross@tonkintaylor.co.nz)

**Application description:** Watercare Services Limited has applied for land use consent, and water, stormwater discharge and diversion, and the discharge of contaminants to air, land and water permits associated with the extension of the Central Interceptor (Pt Erin Tunnel) for the construction, operation, and maintenance of wastewater infrastructure, being a wastewater storage and conveyance tunnel, a terminal access shaft, a control chamber and above ground ancillary structures. Overall, the application is a discretionary activity.

The following properties are along the proposed tunnel alignment:

- 94 Shelly Beach Road, Ponsonby (northern end)
- 28, and 30 Sarsfield Street and road reserve, Ponsonby
- 49 Curran Street and road reserve, Ponsonby
- 31 Emmett Street, Ponsonby
- 90, 92, 94, 96-100, and 102 Jervois Road and road reserve, Ponsonby
- 2, 4, 6, 8, 10, 12, 14, and 16 Provost Street, Ponsonby
- 37, and 40 Prosford Street and road reserve, Ponsonby
- 50, 53, 55, 57, 59, and 61 Clarence Street and road reserve, Ponsonby
- 56, 58, 59, 60, 61, 63, 65, and 67 Islington Street and road reserve, Ponsonby
- Pompallier Terrace road reserve, Ponsonby
- 62, 64, 66, 68, 69, 70, 71, and 75 John Street, Ponsonby
- 70, 72, 74, 76, and 78 Ardmore Road, Ponsonby
- 2, 4, 6, and 8 Trinity Street, Ponsonby
- 183 Richmond Road, Ponsonby
- 82-84 Kelmarna Avenue, Ponsonby
- 46 and 48 Tawariki Street, Ponsonby (southern end)

### Submitter contact details

**Full name:** Victoria Ann Hibbins

**Organisation name:**

**Contact phone number:** 021 974489

**Email address:** [victoria.jackson@hotmail.com](mailto:victoria.jackson@hotmail.com)

**Postal address:**

70 John Street  
Ponsonby  
Auckland 1011

**Submission details**

**This submission:** opposes the application in whole or in part

**Specify the aspects of the application you are submitting on:**

Potential land subsidence causing damage to our home  
Toxic fumes being released from the finished project, we have a young child  
Have to obtain "works over" permission from Watercare if we wish to do any work to our property (this was confirmed in writing by Watercare as something that would be required).  
Loss of value to our home being the most significant issue as this drain will show on the LIM report.

**What are the reasons for your submission?**

My husband and I, as joint owners do not support the Central Interceptor going underneath our house at 70 John Street, Ponsonby. Watercare sent us documentation asking for our permission to which we did not return as we do not give permission. We do not want potential subsidence to occur at our property, we do not want to have to apply for "work over" permission from Watercare for any future works we may complete at our property (watercare advised us this would be required) and we do not want toxic discharge fumes as we have a young child. My husband is a real estate agent and as this will show on the LIM report advises this will lower the value of our home. We oppose this and have not given our permission to Watercare. We do not accept a potential loss of value to our largest asset and as owners of this land do not give permission for Watercare to enter this site at above or below ground level.

**What decisions and amendments would you like the council to make?**

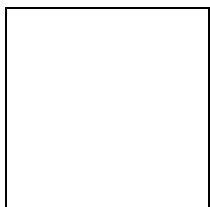
Watercare to amend their drainage plan to not include 70 John Street Ponsonby.

**Are you a trade competitor of the applicant?** I am not a trade competitor of the applicant.

**Do you want to attend a hearing and speak in support of your submission?** No

**If other people make a similar submission I will consider making a joint case with them at the hearing:** Yes

**Supporting information:**



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**From:** [NotifiedResourceConsentSubmissionOnlineForm@donotreply.aucklandcouncil.govt.nz](mailto:NotifiedResourceConsentSubmissionOnlineForm@donotreply.aucklandcouncil.govt.nz)  
<[NotifiedResourceConsentSubmissionOnlineForm@donotreply.aucklandcouncil.govt.nz](mailto:NotifiedResourceConsentSubmissionOnlineForm@donotreply.aucklandcouncil.govt.nz)>

**Sent:** Thursday, 30 March 2023 2:31 pm

**To:** Central RC Submissions <[CentralRCSubmissions@aucklandcouncil.govt.nz](mailto:CentralRCSubmissions@aucklandcouncil.govt.nz)>

**Cc:** [RSignal-Ross@tonkintaylor.co.nz](mailto:RSignal-Ross@tonkintaylor.co.nz)

**Subject:** BUN60415108 [ID:16144] Submission

We have received a submission on the notified resource consent for Central Interceptor Extension – Pt Erin Tunnel – Pt Erin Park and Curran Street Road Reserve.

## Details of submission

### Notified resource consent application details

**Property address:** Central Interceptor Extension – Pt Erin Tunnel – Pt Erin Park and Curran Street Road Reserve

**Application number:** BUN60415108

**Applicant name:** Watercare Services Limited

**Applicant email:** [RSignal-Ross@tonkintaylor.co.nz](mailto:RSignal-Ross@tonkintaylor.co.nz)

**Application description:** Watercare Services Limited has applied for land use consent, and water, stormwater discharge and diversion, and the discharge of contaminants to air, land and water permits associated with the extension of the Central Interceptor (Pt Erin Tunnel) for the construction, operation, and maintenance of wastewater infrastructure, being a wastewater storage and conveyance tunnel, a terminal access shaft, a control chamber and above ground ancillary structures. Overall, the application is a discretionary activity.

The following properties are along the proposed tunnel alignment:

- 94 Shelly Beach Road, Ponsonby (northern end)
- 28, and 30 Sarsfield Street and road reserve, Ponsonby
- 49 Curran Street and road reserve, Ponsonby
- 31 Emmett Street, Ponsonby
- 90, 92, 94, 96-100, and 102 Jervois Road and road reserve, Ponsonby
- 2, 4, 6, 8, 10, 12, 14, and 16 Provost Street, Ponsonby
- 37, and 40 Prosford Street and road reserve, Ponsonby
- 50, 53, 55, 57, 59, and 61 Clarence Street and road reserve, Ponsonby
- 56, 58, 59, 60, 61, 63, 65, and 67 Islington Street and road reserve, Ponsonby
- Pompallier Terrace road reserve, Ponsonby
- 62, 64, 66, 68, 69, 70, 71, and 75 John Street, Ponsonby
- 70, 72, 74, 76, and 78 Ardmore Road, Ponsonby
- 2, 4, 6, and 8 Trinity Street, Ponsonby
- 183 Richmond Road, Ponsonby
- 82-84 Kelmarna Avenue, Ponsonby
- 46 and 48 Tawariki Street, Ponsonby (southern end)

### Submitter contact details

**Full name:** a

**Organisation name:** a

**Contact phone number:** 1

**Email address:** [a@gmail.com](mailto:a@gmail.com)

**Postal address:**

a

a

a 1010

## **Submission details**

**This submission:** opposes the application in whole or in part

**Specify the aspects of the application you are submitting on:**

1

**What are the reasons for your submission?**

1

**What decisions and amendments would you like the council to make?**


1

**Are you a trade competitor of the applicant?** I am not a trade competitor of the applicant.

**Do you want to attend a hearing and speak in support of your submission?** Yes

**If other people make a similar submission I will consider making a joint case with them at the hearing:** Yes

**Supporting information:**



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**From:** [NotifiedResourceConsentSubmissionOnlineForm@donotreply.aucklandcouncil.govt.nz](mailto:NotifiedResourceConsentSubmissionOnlineForm@donotreply.aucklandcouncil.govt.nz)  
<[NotifiedResourceConsentSubmissionOnlineForm@donotreply.aucklandcouncil.govt.nz](mailto:NotifiedResourceConsentSubmissionOnlineForm@donotreply.aucklandcouncil.govt.nz)>

**Sent:** Monday, 10 April 2023 2:16 pm

**To:** Central RC Submissions <[CentralRCSubmissions@aucklandcouncil.govt.nz](mailto:CentralRCSubmissions@aucklandcouncil.govt.nz)>

**Cc:** [RSignal-Ross@tonkintaylor.co.nz](mailto:RSignal-Ross@tonkintaylor.co.nz)

**Subject:** BUN60415108 [ID:16146] Submission

We have received a submission on the notified resource consent for Central Interceptor Extension – Pt Erin Tunnel – Pt Erin Park and Curran Street Road Reserve.

## Details of submission

### Notified resource consent application details

**Property address:** Central Interceptor Extension – Pt Erin Tunnel – Pt Erin Park and Curran Street Road Reserve

**Application number:** BUN60415108

**Applicant name:** Watercare Services Limited

**Applicant email:** [RSignal-Ross@tonkintaylor.co.nz](mailto:RSignal-Ross@tonkintaylor.co.nz)

**Application description:** Watercare Services Limited has applied for land use consent, and water, stormwater discharge and diversion, and the discharge of contaminants to air, land and water permits associated with the extension of the Central Interceptor (Pt Erin Tunnel) for the construction, operation, and maintenance of wastewater infrastructure, being a wastewater storage and conveyance tunnel, a terminal access shaft, a control chamber and above ground ancillary structures. Overall, the application is a discretionary activity.

The following properties are along the proposed tunnel alignment:

- 94 Shelly Beach Road, Ponsonby (northern end)
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- 49 Curran Street and road reserve, Ponsonby
- 31 Emmett Street, Ponsonby
- 90, 92, 94, 96-100, and 102 Jervois Road and road reserve, Ponsonby
- 2, 4, 6, 8, 10, 12, 14, and 16 Provost Street, Ponsonby
- 37, and 40 Prosford Street and road reserve, Ponsonby
- 50, 53, 55, 57, 59, and 61 Clarence Street and road reserve, Ponsonby
- 56, 58, 59, 60, 61, 63, 65, and 67 Islington Street and road reserve, Ponsonby
- Pompallier Terrace road reserve, Ponsonby
- 62, 64, 66, 68, 69, 70, 71, and 75 John Street, Ponsonby
- 70, 72, 74, 76, and 78 Ardmore Road, Ponsonby
- 2, 4, 6, and 8 Trinity Street, Ponsonby
- 183 Richmond Road, Ponsonby
- 82-84 Kelmarna Avenue, Ponsonby
- 46 and 48 Tawariki Street, Ponsonby (southern end)

### Submitter contact details

**Full name:** Cameron Peachey and Amber McKnight

**Organisation name:**

**Contact phone number:** 029 921 6013

**Email address:** [mcknightpeachey@gmail.com](mailto:mcknightpeachey@gmail.com)

**Postal address:**

64 John Street  
Ponsonby  
Auckland 1011

**Submission details**

**This submission:** opposes the application in whole or in part

**Specify the aspects of the application you are submitting on:**

Construction and alignment of Point Erin Tunnel.

**What are the reasons for your submission?**

Tunneling under residential properties is an unreasonable intrusion on the rights of property owners to the unencumbered enjoyment of their property. While the tunnel is for the benefit of the wider community, there is no question that it will have a material impact on the desirability and therefore value of the residential properties under which the tunnel is to be built. Accordingly, it would be reasonable for Watercare (or other appropriate person) to be required to compensate those materially impacted for the benefit others in the community.

In addition, no clear evidence has been provided to demonstrate that tunneling under residential properties will be of no risk to impacted properties or to the health and safety of impacted residents. This is of great concern and a source of anxiety to impacted residents (particularly those with young families who are concerned about the safety of their children and pets).

**What decisions and amendments would you like the council to make?**

We submit that the granting of any resource consent must be conditional upon:

1. re-alignment of the tunnel away from dense residential areas (under arterial roads rather than under houses in a densely populated suburb); or

2. requirement for Watercare (or other appropriate person) to provide the following as a condition to the construction of the tunnel:

(a) pay reasonable compensation to property owners affected by the tunnel (reflecting both anticipated property value reduction and the material inconvenience and stress associated with the construction of the tunnel); and

(b) acceptable evidence that the construction and ongoing operation of the tunnel will not result in any risk to property or the health and safety (both physical health and mental health) of any impacted residents.

**Are you a trade competitor of the applicant?** I am not a trade competitor of the applicant.

**Do you want to attend a hearing and speak in support of your submission?** No

**If other people make a similar submission I will consider making a joint case with them at the hearing:** Yes

**Supporting information:**

**From:** [NotifiedResourceConsentSubmissionOnlineForm@donotreply.aucklandcouncil.govt.nz](mailto:NotifiedResourceConsentSubmissionOnlineForm@donotreply.aucklandcouncil.govt.nz)  
<[NotifiedResourceConsentSubmissionOnlineForm@donotreply.aucklandcouncil.govt.nz](mailto:NotifiedResourceConsentSubmissionOnlineForm@donotreply.aucklandcouncil.govt.nz)>

**Sent:** Friday, 14 April 2023 4:45 pm

**To:** Central RC Submissions <[CentralRCSubmissions@aucklandcouncil.govt.nz](mailto:CentralRCSubmissions@aucklandcouncil.govt.nz)>

**Cc:** [RSignal-Ross@tonkintaylor.co.nz](mailto:RSignal-Ross@tonkintaylor.co.nz)

**Subject:** BUN60415108 [ID:16148] Submission

We have received a submission on the notified resource consent for Central Interceptor Extension – Pt Erin Tunnel – Pt Erin Park and Curran Street Road Reserve.

## Details of submission

### Notified resource consent application details

**Property address:** Central Interceptor Extension – Pt Erin Tunnel – Pt Erin Park and Curran Street Road Reserve

**Application number:** BUN60415108

**Applicant name:** Watercare Services Limited

**Applicant email:** [RSignal-Ross@tonkintaylor.co.nz](mailto:RSignal-Ross@tonkintaylor.co.nz)

**Application description:** Watercare Services Limited has applied for land use consent, and water, stormwater discharge and diversion, and the discharge of contaminants to air, land and water permits associated with the extension of the Central Interceptor (Pt Erin Tunnel) for the construction, operation, and maintenance of wastewater infrastructure, being a wastewater storage and conveyance tunnel, a terminal access shaft, a control chamber and above ground ancillary structures. Overall, the application is a discretionary activity.

The following properties are along the proposed tunnel alignment:

- 94 Shelly Beach Road, Ponsonby (northern end)
- 28, and 30 Sarsfield Street and road reserve, Ponsonby
- 49 Curran Street and road reserve, Ponsonby
- 31 Emmett Street, Ponsonby
- 90, 92, 94, 96-100, and 102 Jervois Road and road reserve, Ponsonby
- 2, 4, 6, 8, 10, 12, 14, and 16 Provost Street, Ponsonby
- 37, and 40 Prosford Street and road reserve, Ponsonby
- 50, 53, 55, 57, 59, and 61 Clarence Street and road reserve, Ponsonby
- 56, 58, 59, 60, 61, 63, 65, and 67 Islington Street and road reserve, Ponsonby
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- 62, 64, 66, 68, 69, 70, 71, and 75 John Street, Ponsonby
- 70, 72, 74, 76, and 78 Ardmore Road, Ponsonby
- 2, 4, 6, and 8 Trinity Street, Ponsonby
- 183 Richmond Road, Ponsonby
- 82-84 Kelmarna Avenue, Ponsonby
- 46 and 48 Tawariki Street, Ponsonby (southern end)

### Submitter contact details

**Full name:** Petrina Madeleine Madsen-Fisk

**Organisation name:** The Hampton & Spartacus Trusts

**Contact phone number:** 09 394 1470

**Email address:** [joanna@pjlaw.co.nz](mailto:joanna@pjlaw.co.nz)

**Postal address:**

PO Box 6535 Victoria Street West, Auckland 1142  
Herne Bay  
Auckland 1011

## **Submission details**

**This submission:** opposes the application in whole or in part

**Specify the aspects of the application you are submitting on:**

The entire application numbers, but in particular the proposed diversion of the Point Erin tunnel associated with BUN60415108, (Council reference) LUC60415109 (s9 land use consent) and WAT60415460 (s14 water permit) DIS 60415110 (s15 discharge and diversion permit, stormwater), that goes directly under 28 Sarsfield Street Herne Bay.

**What are the reasons for your submission?**

This submission is made in my capacity as Trustee of the Hampton Trust and Spartacus Trust.

The notification from Watercare dated 14 December 2022 advised that the tunnel will be located below ground at depths of 20m to 60m.

The Tunnel boring machine (TBM) enters Point Erin Park and will reach its shallowest point at a depth of 17m deep this is shown in attached document. The property being 28 Sarsfield St Herne Bay is situated across from the Pt Erin Park pedestrian entrance the plans provided have the TBM tunnel directly under the property. Along with my submission I have attached a drawing from the BUN60415108 Supporting Document Appendix B Drawings which shows the topography from the Tawariki Street Shaft to the Pt Erin Shaft represented by the green line. The depth at which the tunnel passes under Sarsfield Street is extremely shallow, when compared to the depth of the tunnel elsewhere. This will have a huge impact on my property. .

Sarsfield Street has already experienced significant disruptions over the past few years due to projects. these did not affect or require a Public Work to take place within the boundary of the property. The projects included the water pipe installed down Curran Street in 2015 and the St Marys Bay and Masefield Beach Water Quality Improvement Project. Sarsfield Street was only recently restored. I have already endured many years of the loss of quiet enjoyment of the property as substantial works have been undertaken in this area. In the Tonkin and Taylor Central Interceptor – Point Erin Tunnel Assessment of Effects on the Environment Report it is noted on page 7 that an extension of the Resource Consent will be requested:

“Due to the nature and scale of the project i.e., a large-scale infrastructure project, a 10-year lapse period is sought.”

I understand Resource Consent is limited to five years when issued. I do not agree that a 10-year lapse period should be granted as residents are left in limbo while the Applicant fails to act expeditiously. This area has already been subject to long delays with negative impacts for past projects and the statute should be complied with to ensure the project if it proceeds is carried out in a timely manner.

I have deep concerns about the negative impacts that I will face if resource consent were to be granted. The resource consent that Watercare is seeking approval for will be extremely obtrusive to the use and enjoyment of my property. In 2004 I carried out storm water and sewage separation due to Auckland Council requirements following a landscaping project on my property. I was pleased to see notification in August 2021 that finally all properties in Herne Bay would be required to do the same. I now feel as if I am being forced to suffer a disproportionate amount of disruption, stress, and potential loss in value of a restored 1940 heritage home due to Watercare's failure to get other Herne

Bay residents to separate their storm water and sewage. The separation of the storm water and sewage was referred to in a binding agreement between the St Mary's Bay Association and Herne Bay Association and Auckland Council (Healthy Waters Department) and Watercare Services Limited in November 2019.

I am of the opinion Watercare doesn't need to divert the proposed works under my property and an alternate route for the tunnel under the Curran Street on-ramp to enter the proposed site would mitigate damage and liability. It is also noted in the Tonkin Taylor report that entering via Shelley Beach Road is another option that could be explored. Therefore, I oppose this project and proposed resource consent in its entirety.

The resource consent covers works under land which the Applicant has no legal right to carry out works. The owner's written consent under the Local Government Act 2002 (LGA) would be required. To ensure Watercare has the necessary rights to carry out the construction works under this resource consent under private property, the Applicant, Watercare needs to either obtain written consent from the owner of the land to the construction of the tunnel beneath their property or follow a process under legislation. We note this is a separate legislative process that is not relevant to this consent application, and one which the Applicant has not progressed past the initial refusal being made by the owner.

There has been correspondence with the Applicant in this matter. Written consent will not be given to have a public work carried out within the property. The property has been offered for sale to Watercare via a formal sale and purchase agreement. To date Watercare has failed to engage in a way that this matter can be progressed to enable them to have the rights to carry out the activities covered by this application under this owner's property.

**What decisions and amendments would you like the council to make?**

I would like the council to either:

1. Not grant the resource consent that Watercare is seeking for this project, and require Watercare to go back to the original plan of private storm water and sewage separation that was advised and had been agreed to, or
2. Make the consent conditional on Watercare changing the route of the tunnel and use Public Land or Road Asset to complete the project, which does not require a public work to go under my property, or
3. Make Watercare's resource consent approval conditional on Watercare acquiring my property, given the significant negative impact that the project will have on my property, or
4. That a 10-year lapse period not be granted as residents are kept in limbo while Watercare fails to act expeditiously. The Applicant has the ability to have the resource consent extended under s125(1A)(b) if substantial progress or effort has been, and continues to be, made towards giving effect to the consent, so that affected parties are not left in limbo for an extended period of time.

Despite my efforts to engage with the Applicant, Watercare Services Limited has failed to take the necessary steps required under the Local Government Act 1974 or the Public Works Act 1981 to be able to carry out the works under my land by acquiring the property. If the Applicant acquires my property forthwith using proper processes I would withdraw my objection

**Are you a trade competitor of the applicant?** I am not a trade competitor of the applicant.

**Do you want to attend a hearing and speak in support of your submission?** No

**If other people make a similar submission I will consider making a joint case with them at the hearing:** No

**Supporting information:**

1078608 - RC Submission - Central Interceptor Diagram \_20230414163629.129.pdf

1. DESIGN AT CONCEPT STAGE AND SUBJECT TO CHANGE THROUGH DESIGN PROCESS.







						DESIGNED		AD	12.22	OPERATIONS	 <b>Watercare</b> <small>COPYRIGHT - This drawing, the design concept, remain the exclusive property of Watercare Services Limited and may not be used without approval. Copyright reserved.</small>	CENTRAL INTERCEPTOR (DSCIN) 82 GRAVITY SEWER INCLUDING MANHOLES TAWARIKI ST TO POINT ERIN - TUNNEL LONGITUDINAL SECTION	CAD FILE 2011933.007		DATE 02.02.23	
						DES. CHECKED		MBS	12.22				ORIGINAL SCALE A1		CONTRACT No.	
						DRAWN		PJG	12.22				AS SHOWN		6661	
						DWG. CHECKED		PMF	12.22							
2	02.02.23	ISSUED FOR CONSENT APPLICATION				PJG	DJK	PROJECT LEADER		INFRASTRUCTURE		REF. No.	CI-STAT&PLAN		ISSUE	
1	21.12.22	ISSUED FOR CONSENT APPLICATION				PJG		INFRASTR APP'D					DWG. No.	2011933.007		2
ISSUE	DATE	AMENDMENT				BY	APPD.		BY	DATE						



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<[NotifiedResourceConsentSubmissionOnlineForm@donotreply.aucklandcouncil.govt.nz](mailto:NotifiedResourceConsentSubmissionOnlineForm@donotreply.aucklandcouncil.govt.nz)>

**Sent:** Monday, 17 April 2023 8:31 am

**To:** Central RC Submissions <[CentralRCSubmissions@aucklandcouncil.govt.nz](mailto:CentralRCSubmissions@aucklandcouncil.govt.nz)>

**Cc:** [RSignal-Ross@tonkintaylor.co.nz](mailto:RSignal-Ross@tonkintaylor.co.nz)

**Subject:** BUN60415108 [ID:16150] Submission

We have received a submission on the notified resource consent for Central Interceptor Extension – Pt Erin Tunnel – Pt Erin Park and Curran Street Road Reserve.

## Details of submission

### Notified resource consent application details

**Property address:** Central Interceptor Extension – Pt Erin Tunnel – Pt Erin Park and Curran Street Road Reserve

**Application number:** BUN60415108

**Applicant name:** Watercare Services Limited

**Applicant email:** [RSignal-Ross@tonkintaylor.co.nz](mailto:RSignal-Ross@tonkintaylor.co.nz)

**Application description:** Watercare Services Limited has applied for land use consent, and water, stormwater discharge and diversion, and the discharge of contaminants to air, land and water permits associated with the extension of the Central Interceptor (Pt Erin Tunnel) for the construction, operation, and maintenance of wastewater infrastructure, being a wastewater storage and conveyance tunnel, a terminal access shaft, a control chamber and above ground ancillary structures. Overall, the application is a discretionary activity.

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- 56, 58, 59, 60, 61, 63, 65, and 67 Islington Street and road reserve, Ponsonby
- Pompallier Terrace road reserve, Ponsonby
- 62, 64, 66, 68, 69, 70, 71, and 75 John Street, Ponsonby
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- 2, 4, 6, and 8 Trinity Street, Ponsonby
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- 82-84 Kelmarna Avenue, Ponsonby
- 46 and 48 Tawariki Street, Ponsonby (southern end)

### Submitter contact details

**Full name:** Peter Wren

**Organisation name:**

**Contact phone number:** 274989869

**Email address:** [bambina@xtra.co.nz](mailto:bambina@xtra.co.nz)

**Postal address:**

61 Clarence street  
Ponsonby  
Auckland 1011

## **Submission details**

**This submission:** opposes the application in whole or in part

**Specify the aspects of the application you are submitting on:**

You will see from the map that the central interceptor/tunnel extension is to run, diagonally, under our home.

The timeframe for this extension to the central interceptor was sprung on us just on Christmas 2022/New Year 2023 and the submission deadline of 18 April 2023 again set at the challenging time of Easter/school holidays. In between, Auckland has been subjected to the Auckland 2023 Floods and the Cyclone which affected many of us in a significant way, including ourselves, requiring a lot of attention while we resolve insurance claims and repairs.

We applaud efforts to improve our water/sewage systems, however we oppose the route of this tunnel given the past light industrial use of the land in this area. We feel that without evidence to the contrary, this unknown quantity represents an unreasonable level of risk. We are particularly concerned over possible vibration damage to our property. Without question, there are other, arguably more direct routes, that the interceptor/tunnel could take.

In the event the Council considers approving Watercare's resource consent application, we feel that Watercare owe us a duty of care to ensure that our property is protected. We understand the need for public works for the greater good however the tunnel has been foisted upon us, we have no choice, indeed we feel that this is unfair. We also understand that we own the land it is to pass through, and yet we have no say in the matter of land being taken, and its use.

We therefore respectfully request that if the Council considers granting resource consent, the following conditions, that we consider necessary to protect our interests, be imposed on Watercare as a condition of the consent being granted:

Assurance from Watercare, in writing, that from evidence based testing of the land beneath our home, it considers that our home will not be vulnerable to the tunnelling. Also, at Watercare's cost, Watercare agrees to undertake a pre-condition and post-condition survey of our property. This survey to include a photographic record of the inside and outside of the property, and the setting up of markers for building and ground settlement monitoring on the exterior of the property. If it is established that damage has occurred, Watercare will repair that damage to the condition documented in the precondition survey, under Watercare's liability insurance, to our satisfaction.

Confirmation from Watercare, in writing, that this work need not involve our own insurance company and will not need to be notified to our insurers.

That Watercare compensate us as the owners of the property for our loss of land, and/or that subject to agreement on the parameters and total cost, Watercare agrees to pay the costs of a valuer of our choosing. If as a result of the valuation the valuer deems a loss will be incurred, Watercare will work with us, in good faith, to agree and compensate such loss.

A commitment in writing from Watercare, that any commitments it makes to us must be honoured by any new entity that Watercare might be transferred to and/or become.

We should add that we are involved in ongoing talks with Watercare however we have yet to reach any agreement or commitment from them in writing, hence this submission.'

**What are the reasons for your submission?**

You will see from the map that the central interceptor/tunnel extension is to run, diagonally, under our home.

The timeframe for this extension to the central interceptor was sprung on us just on Christmas 2022/New Year 2023 and the submission deadline of 18 April 2023 again set at the challenging time of Easter/school holidays. In between, Auckland has been subjected to the Auckland 2023 Floods and the Cyclone which affected many of us in a significant way, including ourselves, requiring a lot of attention while we resolve insurance claims and repairs.

We applaud efforts to improve our water/sewage systems, however we oppose the route of this tunnel given the past light industrial use of the land in this area. We feel that without evidence to the contrary, this unknown quantity represents an unreasonable level of risk. We are particularly concerned over possible vibration damage to our property. Without question, there are other, arguably more direct routes, that the interceptor/tunnel could take.

In the event the Council considers approving Watercare's resource consent application, we feel that Watercare owe us a duty of care to ensure that our property is protected. We understand the need for public works for the greater good however the tunnel has been foisted upon us, we have no choice, indeed we feel that this is unfair. We also understand that we own the land it is to pass through, and yet we have no say in the matter of land being taken, and its use.

We therefore respectfully request that if the Council considers granting resource consent, the following conditions, that we consider necessary to protect our interests, be imposed on Watercare as a condition of the consent being granted:

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Confirmation from Watercare, in writing, that this work need not involve our own insurance company and will not need to be notified to our insurers.

That Watercare compensate us as the owners of the property for our loss of land, and/or that subject to agreement on the parameters and total cost, Watercare agrees to pay the costs of a valuer of our choosing. If as a result of the valuation the valuer deems a loss will be incurred, Watercare will work with us, in good faith, to agree and compensate such loss.

A commitment in writing from Watercare, that any commitments it makes to us must be honoured by any new entity that Watercare might be transferred to and/or become.

We should add that we are involved in ongoing talks with Watercare however we have yet to reach any agreement or commitment from them in writing, hence this submission.'

**What decisions and amendments would you like the council to make?**

You will see from the map that the central interceptor/tunnel extension is to run, diagonally, under our home.

The timeframe for this extension to the central interceptor was sprung on us just on Christmas 2022/New Year 2023 and the submission deadline of 18 April 2023 again set at the challenging time of Easter/school holidays. In between, Auckland has been subjected to the Auckland 2023 Floods and the Cyclone which affected many of us in a significant way, including ourselves, requiring a lot of attention while we resolve insurance claims and repairs.

We applaud efforts to improve our water/sewage systems, however we oppose the route of this tunnel given the past light industrial use of the land in this area. We feel that without evidence to the contrary, this unknown quantity represents an unreasonable level of risk. We are particularly concerned over possible vibration damage to our property. Without question, there are other, arguably

more direct routes, that the interceptor/tunnel could take.

In the event the Council considers approving Watercare's resource consent application, we feel that Watercare owe us a duty of care to ensure that our property is protected. We understand the need for public works for the greater good however the tunnel has been foisted upon us, we have no choice, indeed we feel that this is unfair. We also understand that we own the land it is to pass through, and yet we have no say in the matter of land being taken, and its use.

We therefore respectfully request that if the Council considers granting resource consent, the following conditions, that we consider necessary to protect our interests, be imposed on Watercare as a condition of the consent being granted:

Assurance from Watercare, in writing, that from evidence based testing of the land beneath our home, it considers that our home will not be vulnerable to the tunnelling. Also, at Watercare's cost, Watercare agrees to undertake a pre-condition and post-condition survey of our property. This survey to include a photographic record of the inside and outside of the property, and the setting up of markers for building and ground settlement monitoring on the exterior of the property. If it is established that damage has occurred, Watercare will repair that damage to the condition documented in the precondition survey, under Watercare's liability insurance, to our satisfaction.

Confirmation from Watercare, in writing, that this work need not involve our own insurance company and will not need to be notified to our insurers.

That Watercare compensate us as the owners of the property for our loss of land, and/or that subject to agreement on the parameters and total cost, Watercare agrees to pay the costs of a valuer of our choosing. If as a result of the valuation the valuer deems a loss will be incurred, Watercare will work with us, in good faith, to agree and compensate such loss.

A commitment in writing from Watercare, that any commitments it makes to us must be honoured by any new entity that Watercare might be transferred to and/or become.

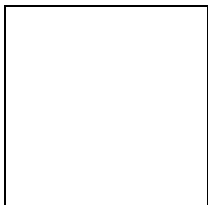
We should add that we are involved in ongoing talks with Watercare however we have yet to reach any agreement or commitment from them in writing, hence this submission.'

**Are you a trade competitor of the applicant?** I am not a trade competitor of the applicant.

**Do you want to attend a hearing and speak in support of your submission?** No

**If other people make a similar submission I will consider making a joint case with them at the hearing:** Yes

**Supporting information:**



CAUTION: This email message and any attachments contain information that may be confidential and may be LEGALLY PRIVILEGED. If you are not the intended recipient, any use, disclosure or copying of this message or attachments is strictly prohibited. If you have received this email message in error please notify us immediately and erase all copies of the message and attachments. We do not accept responsibility for any viruses or similar carried with our email, or any effects our email may have on the recipient computer system or network. Any views expressed in this email may be those of the individual sender and may not necessarily reflect the views of Council.

**From:** [NotifiedResourceConsentSubmissionOnlineForm@donotreply.aucklandcouncil.govt.nz](mailto:NotifiedResourceConsentSubmissionOnlineForm@donotreply.aucklandcouncil.govt.nz)  
<[NotifiedResourceConsentSubmissionOnlineForm@donotreply.aucklandcouncil.govt.nz](mailto:NotifiedResourceConsentSubmissionOnlineForm@donotreply.aucklandcouncil.govt.nz)>

**Sent:** Monday, 17 April 2023 7:01 pm

**To:** Central RC Submissions <[CentralRCSubmissions@aucklandcouncil.govt.nz](mailto:CentralRCSubmissions@aucklandcouncil.govt.nz)>

**Cc:** [RSignal-Ross@tonkintaylor.co.nz](mailto:RSignal-Ross@tonkintaylor.co.nz)

**Subject:** BUN60415108 [ID:16151] Submission

We have received a submission on the notified resource consent for Central Interceptor Extension – Pt Erin Tunnel – Pt Erin Park and Curran Street Road Reserve.

## Details of submission

### Notified resource consent application details

**Property address:** Central Interceptor Extension – Pt Erin Tunnel – Pt Erin Park and Curran Street Road Reserve

**Application number:** BUN60415108

**Applicant name:** Watercare Services Limited

**Applicant email:** [RSignal-Ross@tonkintaylor.co.nz](mailto:RSignal-Ross@tonkintaylor.co.nz)

**Application description:** Watercare Services Limited has applied for land use consent, and water, stormwater discharge and diversion, and the discharge of contaminants to air, land and water permits associated with the extension of the Central Interceptor (Pt Erin Tunnel) for the construction, operation, and maintenance of wastewater infrastructure, being a wastewater storage and conveyance tunnel, a terminal access shaft, a control chamber and above ground ancillary structures. Overall, the application is a discretionary activity.

The following properties are along the proposed tunnel alignment:

- 94 Shelly Beach Road, Ponsonby (northern end)
- 28, and 30 Sarsfield Street and road reserve, Ponsonby
- 49 Curran Street and road reserve, Ponsonby
- 31 Emmett Street, Ponsonby
- 90, 92, 94, 96-100, and 102 Jervois Road and road reserve, Ponsonby
- 2, 4, 6, 8, 10, 12, 14, and 16 Provost Street, Ponsonby
- 37, and 40 Prosford Street and road reserve, Ponsonby
- 50, 53, 55, 57, 59, and 61 Clarence Street and road reserve, Ponsonby
- 56, 58, 59, 60, 61, 63, 65, and 67 Islington Street and road reserve, Ponsonby
- Pompallier Terrace road reserve, Ponsonby
- 62, 64, 66, 68, 69, 70, 71, and 75 John Street, Ponsonby
- 70, 72, 74, 76, and 78 Ardmore Road, Ponsonby
- 2, 4, 6, and 8 Trinity Street, Ponsonby
- 183 Richmond Road, Ponsonby
- 82-84 Kelmarna Avenue, Ponsonby
- 46 and 48 Tawariki Street, Ponsonby (southern end)

### Submitter contact details

**Full name:** Michael Costa and Pauline Rose Gambitsis

**Organisation name:**

**Contact phone number:** 0211052519

**Email address:** [akgambitsis@gmail.com](mailto:akgambitsis@gmail.com)

**Postal address:**  
57 Clarence Street  
Ponsonby  
Auckland 1011

## **Submission details**

**This submission:** opposes the application in whole or in part

### **Specify the aspects of the application you are submitting on:**

The central interceptor/tunnel extension is to run, diagonally, under our home. We oppose the current route.

### **What are the reasons for your submission?**

We applaud efforts to improve our water/sewage systems, however we oppose the route of this tunnel given the past light industrial use of the land in this area. We feel that without evidence to the contrary, this unknown quantity represents an unreasonable level of risk. We are particularly concerned over possible vibration damage to our property. Without question, there are other, arguably more direct routes, that the interceptor/tunnel could take.

### **What decisions and amendments would you like the council to make?**

In the event the Council considers approving Watercare's resource consent application, we feel that Watercare owe us a duty of care to ensure that our property is protected. We understand the need for public works for the greater good however the tunnel has been foisted upon us, we have no choice, indeed we feel that this is unfair. We also understand that we own the land it is to pass through, and yet we have no say in the matter of land being taken, and its use.

We therefore respectfully request that if the Council does consider granting this resource consent, the following conditions that we consider necessary to protect our interests be imposed on Watercare as a condition of the consent being granted:

1. Assurance from Watercare, in writing, that from evidence based testing of the land beneath our home, it considers that our home will not be vulnerable to the tunnelling. Also, at Watercare's cost, Watercare agrees to undertake a pre-condition and post-condition survey of our property. This survey to include a photographic record of the inside and outside of the property, and the setting up of markers for building and ground settlement monitoring on the exterior of the property. If it is established that damage has occurred, Watercare will repair that damage to the condition documented in the precondition survey, under Watercare's liability insurance, to our satisfaction.
2. Confirmation from Watercare, in writing, that this work need not involve our own insurance company and will not need to be notified to our insurers.
3. That Watercare compensate us as the owners of the property for our loss of land, and/or that subject to agreement on the parameters and total cost, Watercare agrees to pay the costs of a valuer of our choosing. If as a result of the valuation the valuer deems a loss will be incurred, Watercare will work with us, in good faith, to agree and compensate such loss.
4. A commitment in writing from Watercare, that any commitments it makes to us must be honoured by any new entity that Watercare might be transferred to and/or become.

We should add that we are involved in ongoing talks with Watercare however we have yet to reach any agreement or commitment from them in writing.

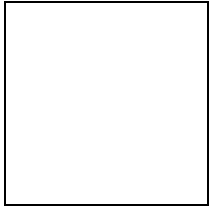
**Are you a trade competitor of the applicant?** I am not a trade competitor of the applicant.



**Do you want to attend a hearing and speak in support of your submission?** No

**If other people make a similar submission I will consider making a joint case with them at the hearing:** Yes

**Supporting information:**

A large, empty rectangular box with a thin black border, intended for providing supporting information.

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**From:** [NotifiedResourceConsentSubmissionOnlineForm@donotreply.aucklandcouncil.govt.nz](mailto:NotifiedResourceConsentSubmissionOnlineForm@donotreply.aucklandcouncil.govt.nz)  
<[NotifiedResourceConsentSubmissionOnlineForm@donotreply.aucklandcouncil.govt.nz](mailto:NotifiedResourceConsentSubmissionOnlineForm@donotreply.aucklandcouncil.govt.nz)>

**Sent:** Tuesday, 18 April 2023 2:00 pm

**To:** Central RC Submissions <[CentralRCSubmissions@aucklandcouncil.govt.nz](mailto:CentralRCSubmissions@aucklandcouncil.govt.nz)>

**Cc:** [RSignal-Ross@tonkintaylor.co.nz](mailto:RSignal-Ross@tonkintaylor.co.nz)

**Subject:** BUN60415108 [ID:16152] Submission

We have received a submission on the notified resource consent for Central Interceptor Extension – Pt Erin Tunnel – Pt Erin Park and Curran Street Road Reserve.

## Details of submission

### Notified resource consent application details

**Property address:** Central Interceptor Extension – Pt Erin Tunnel – Pt Erin Park and Curran Street Road Reserve

**Application number:** BUN60415108

**Applicant name:** Watercare Services Limited

**Applicant email:** [RSignal-Ross@tonkintaylor.co.nz](mailto:RSignal-Ross@tonkintaylor.co.nz)

**Application description:** Watercare Services Limited has applied for land use consent, and water, stormwater discharge and diversion, and the discharge of contaminants to air, land and water permits associated with the extension of the Central Interceptor (Pt Erin Tunnel) for the construction, operation, and maintenance of wastewater infrastructure, being a wastewater storage and conveyance tunnel, a terminal access shaft, a control chamber and above ground ancillary structures. Overall, the application is a discretionary activity.

The following properties are along the proposed tunnel alignment:

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- 28, and 30 Sarsfield Street and road reserve, Ponsonby
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- 90, 92, 94, 96-100, and 102 Jervois Road and road reserve, Ponsonby
- 2, 4, 6, 8, 10, 12, 14, and 16 Provost Street, Ponsonby
- 37, and 40 Prosford Street and road reserve, Ponsonby
- 50, 53, 55, 57, 59, and 61 Clarence Street and road reserve, Ponsonby
- 56, 58, 59, 60, 61, 63, 65, and 67 Islington Street and road reserve, Ponsonby
- Pompallier Terrace road reserve, Ponsonby
- 62, 64, 66, 68, 69, 70, 71, and 75 John Street, Ponsonby
- 70, 72, 74, 76, and 78 Ardmore Road, Ponsonby
- 2, 4, 6, and 8 Trinity Street, Ponsonby
- 183 Richmond Road, Ponsonby
- 82-84 Kelmarna Avenue, Ponsonby
- 46 and 48 Tawariki Street, Ponsonby (southern end)

### Submitter contact details

**Full name:** Gillian Somerville

**Organisation name:** GES Consulting Ltd

**Contact phone number:** 021968131

**Email address:** [gillian@gesconsulting.co.nz](mailto:gillian@gesconsulting.co.nz)

**Postal address:**

61 Islington Street  
Ponsonby  
Auckland 1011

**Submission details**

**This submission:** opposes the application in whole or in part

**Specify the aspects of the application you are submitting on:**

Watercare installing the Pt Erin extension pipeline directly under my house. My concerns are:

- the impact upon my insurance
- the lack of guarantee that any damage will be paid for over the 100-year life of the pipe
- precluding myself from compensation under the Public Works Act

**What are the reasons for your submission?**

I understand the pipeline has a 100-year life, what guarantee do I have that any damage arising in that time will be addressed by the Council or Watercare.

Watercare have offered a pre- and a post-building survey, if I accept this then am I effectively precluding myself from the Public Works Act compensation.

**What decisions and amendments would you like the council to make?**

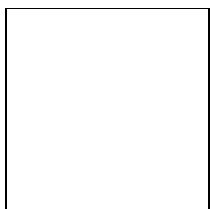
For the Council to acknowledge the potential for damage to my house.  
To reroute the pipeline away from my house.

**Are you a trade competitor of the applicant?** I am not a trade competitor of the applicant.

**Do you want to attend a hearing and speak in support of your submission?** No

**If other people make a similar submission I will consider making a joint case with them at the hearing:** Yes

**Supporting information:**



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**Te Tāhuhu o  
te Mātauranga**  
Ministry of Education

# Form 13

## Submission on a publicly notified application concerning a resource consent under Section 96, Resource Management Act 1991

To: Watercare Services Limited

**Name of submitter:** Te Tāhuhu o te Mātauranga | Ministry of Education (‘the Ministry’)

Address for service: Eden 5, Level 3/12-18  
Normanby Road  
Mount Eden  
Auckland 1011

Attention: Vicky Hu

Phone: 09 301 3772

Email: [vicky.hu@beca.com](mailto:vicky.hu@beca.com)

**This is a submission on the proposed Central Interceptor Extension at Point Erin Tunnel, Ponsonby.**

This submission relates to the potential safety effects on students from Ponsonby Primary School as a result of construction traffic of the proposed development and the potential effects on Ponsonby Intermediate resulting from the proposed tunnelling works beneath the school.

**Background:**

The Ministry is the Government’s lead advisor on the New Zealand education system, shaping direction for education agencies and providers and contributing to the Government’s goals for education. The Ministry assesses population changes, school roll fluctuations and other trends and challenges impacting on education provision at all levels of the education network to identify changing needs within the network so the Ministry can respond effectively.

The Ministry has responsibility for all education property owned by the Crown. This involves managing the existing property portfolio, upgrading and improving the portfolio, purchasing and constructing new property to meet increased demand, identifying and disposing of surplus State school sector property and managing teacher and caretaker housing.

The Ministry is therefore a considerable stakeholder in terms of activities that may impact on existing and future educational facilities and assets in the Auckland region.

**The Ministry’s submission is:**

Under the Resource Management Act 1991, decision makers must have regard to the health and safety of people and communities. Furthermore, there is a duty to avoid, remedy or mitigate actual and potential adverse effects on the environment.

The application is for the construction, operation and maintenance of a wastewater conveyance tunnel, a terminal access shaft, a control chamber and above ground ancillary structures. The control chamber, plant room and associated construction area is proposed to be located towards the southwest corner of Point Erin Park, approximately 100 m from Ponsonby Primary School (see Figure 1 below). The Ministry seeks for potential construction traffic effects on the safety of students at Ponsonby Primary School to be addressed and managed. The tunnel will also run directly beneath Ponsonby Intermediate and therefore the Ministry’s designation (ID 4767). The Ministry’s specific concern is outlined below.

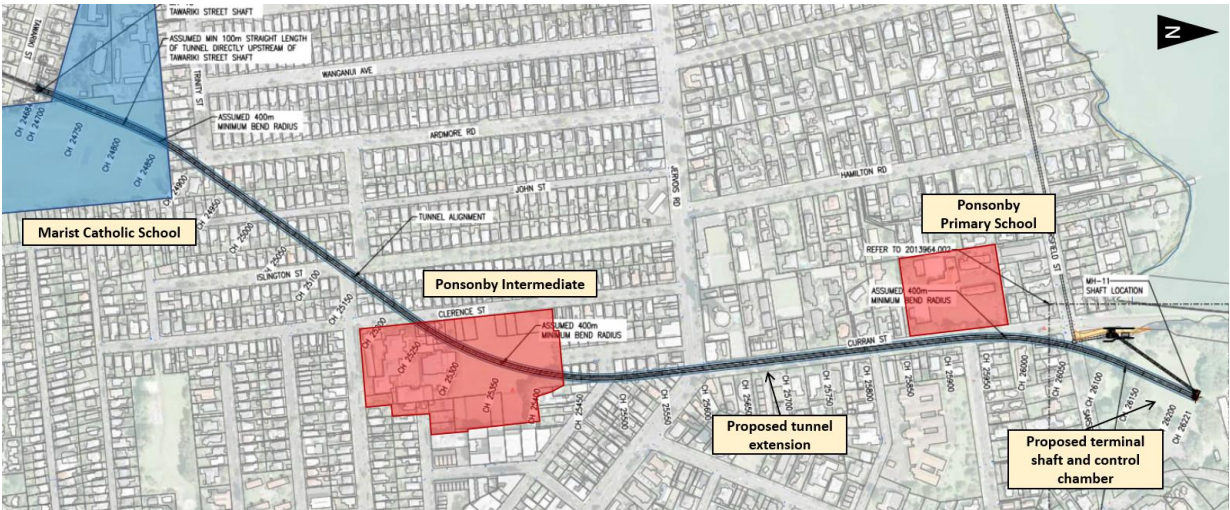


Figure 1: Location of proposed works in relation to Ponsonby Primary School and Ponsonby Intermediate.

**Construction traffic effects:**

The applicant’s Integrated Traffic Assessment states that construction hours are proposed to occur on the following general basis:

- Point Erin Park site construction activities – 7am to 6pm Monday to Friday, 8am to 6pm Saturday
- Truck movements – 7am to 6pm Monday to Friday, 8am to 6pm Saturday

Construction traffic to the Point Erin Park construction site will primarily utilise Curran Street (on which Ponsonby Primary School is located), Sarsfield Street, and Shelly Beach Road. At the peak of construction there could be 40 truck movements a day past the primary school. This is a safety concern for students accessing the school site at pick-up and drop-off times.

There is currently a signalised pedestrian crossing located outside Ponsonby Primary School between Emmett Street and Tweed Street which provides safe walking and cycling access to the school. However, signalised crossings do not always guarantee students will use this crossing facility and some may cross at other points along the road.

The Ministry is concerned with the high volume of large truck movements proposed that could pose a threat students walking and cycling to school, or students getting out of cars at peak pick-up and drop-off times. Larger trucks also reduce the visibility to other drivers of students on the road. In order to minimise adverse effects on student safety, the Ministry request that all heavy vehicle movements are avoided on Curran Street during peak school pick-up and drop-off times via a condition of consent outlined below. This consent wording has been accepted by other applicants across Auckland to manage construction traffic effects and school safety risks.

The Ministry looks forward to working with Watercare to manage construction traffic effects on student safety.

**Potential effects:**

The tunnel alignment will cross directly beneath Ponsonby Intermediate.

The tunnel will be at least 35m below ground and it is anticipated that the level of ground movement during construction is within the natural seasonal fluctuations of the ground. Although construction is over many months, the tunnel boring machine will only transit under any one property for typically two days. Given the Intermediate School is larger than the average surrounding residential property, we anticipate the tunnelling will take longer under the school.

The school has not been identified as containing any buildings or structures that could be potentially damaged by any settlement or groundwater effects. Both schools are not anticipated to feel any vibration from the construction of the tunnels either. The Ministry support the proposed monitoring during construction to assess if surrounding buildings are within acceptable tolerances of damage risk. This will allow the opportunity to implement mitigation measures if required.

While no physical works will affect the school or any of the Ministry's above ground assets, Watercare still requires the Ministry's approval under s176(1)(b) of the RMA for works within the Ministry's designation. On the basis of the provided information confirming that the proposed works will not affect the integrity of the school's buildings and student safety, the Ministry will provide their approval in a separate letter to this submission. Should any of the information provided in the application change, the Ministry should be informed.

**The Ministry's position on the Resource Consent Application:**


The Ministry is neutral on the proposed development if the following condition of consent is imposed on the application:

- 1) The Construction Traffic Management Plan (CTMP) shall include details of consultation (including outcomes agreed) with the applicant and Ponsonby Primary School with regard to maintaining the safety of school students during construction. Details of all safety measures and interventions will be documented in the CTMP. The CTMP will include details of:
  - a. Restrictions on heavy vehicles along Curran Street (between Sarsfield Street and Jervois Road) during school pick up and drop off times (between 8:05am – 8.50am and 3.00pm – 3:30pm) during term time.
  - b. Briefing for all construction drivers on the importance of slowing down and adhering to established speed limits when driving past Ponsonby Primary School, and to look out for school children and reversing vehicles at all times.



Should you wish to discuss any aspect of this feedback, please do not hesitate to contact the undersigned as a consultant to the Ministry.

**The Ministry wishes to be heard in support of its submission.**



---

**Vicky Hu**  
**Planner – Beca Ltd**  
**(Consultant to the Ministry of Education)**

55 Clarence Street  
Ponsonby  
Auckland 1011

18 April 2023

Mark Ross  
Consultant Planner  
Auckland Council

To Whom It May Concern:

Re: Extension of the Central Interceptor to Pt Erin Reserve (Pt Erin tunnel)  
BUN60415108 (Council reference)

We are writing to express our opposition to the planned Central interceptor project being delivered by Watercare (see reference above). The current pathway of the proposed new pipeline will run directly under our private property (55 Clarence Street, Ponsonby, Auckland 1011). We are writing a submission as we are deeply concerned about the impact that this project will have on our property.

We have been given no assistance or guidance on the process of making a submission and we have never made a submission to council before. We have been forced to meet with other affected parties to investigate the implications of this project. The time for these activities has come at the expense of precious family and personal time.

We were only made aware of the project after returning from holiday in late January 2023. Information was left by Watercare in our letterbox. No attempt was made to communicate with us through other standard means (telephone or e-mail). The correspondence received was dated December 2022 and we were then surprised to hear that submissions for resource consent were to be in by 18 April 2023. This tight time frame combined with the recent events in Auckland has not left us sufficient time to fully explore the implications of this project. Currently, we have yet to be able to meet with one of the trustees of our property to inform them off the proposed project.

A meeting was held between affected property owners and Watercare representatives. During this meeting we were informed that the rushed timelines for the resource consent process had to occur as the tunnelling machine would only be available for a certain time period.

As a homeowner we have taken great pride in maintaining, protecting, and upgrading our property over the past 19 years that we have owned it. We have always abided with council bylaw and process. We have invested a considerable amount of time and money to ensure that our house is a comfortable and a safe place to live. Up until late January 2023 there has never been any mention of any work or planned involving our private property by Watercare.

At our meeting with Watercare questions were raised in regards to the planned route for the interceptor tunnel. The Watercare representatives informed us that this was the route they felt affected the least number of private properties. Within minutes we as a group had found many alternate routes which affected far less properties.

No assessment of the soil conditions of our property has been made. We understand that pilot bores have been drilled in the area but none of these are close and likely non representative of the conditions at our property. Watercare have suggested that the

tunnelling is below the rock level with no effects on the upper soil levels. No studies or papers were presented and no detail given about the experience and qualification of the tunnelling team. Watercare admit that as the tunnelling machine passes under our property, we may feel vibrations. This has left our family feeling very anxious and vulnerable about the tunnelling process.

Watercare is using our private property without any prior indication or notification with unexplored effects on our property. We never purchased the property with the knowledge a tunnelling project would occur without our consent. We acknowledge the need to improve water and sewage systems in Auckland but this project is being rushed, other routes have not been explored and our concerns and reasonable requests have not been addressed. We strongly oppose this development.

If resource consent is granted by Council we feel the following issues need as a minimum to be addressed by Watercare.

- Watercare needs to contact our insurance company to explain the scope of the work being performed and to take over the affected insurances over the property. Watercare will also confirm with our insurance company that there will be no change to the risk at our property after the development to ensure no related change in premiums.
- Watercare should compensation for the loss and use of privately owned land where there are many other alternate routes available for the proposed Interceptor tunnel. We have indicated that we would be happy to engage an independent valuer (which Watercare would compensate us for) to assess this. No previous covenant exists in regards to any proposed works on our property.
- Watercare need to confirm that this project will have absolutely no implication on any potential or proposed future renovation work on our property and if there are any implications compensation be considered.
- Watercare need to give an assurance that homeowners have the right to choose their own remediation company to rectify any damage caused to the property due to the tunnelling project. This would be in order to reinstate the property to its original state.

Unfortunately we will be unable to attend in person to present this submission due to family and work commitments.

Yours faithfully

Mrs Jennifer Ekanayaka & Dr Kumudith Ekanayaka

# Submission on resource consent application

This submission is late due to family illness involving intensive care hospital support.

## 1.0 SUBMITTER DETAILS

Name of organisation or person(s) making the submission (please write all names in full)

PAULA ELLINE WERE

Contact person for organisation

PAULA ELLAINE WERE

Physical Address:

53 CLARENCE ST, PONSONBY  
AUCKLAND

Postcode: 1011

Your postal address (if it is different from above)

AS ABOVE

Contact phone number(s)

021 205 7801

Your email:

paulawere@xtra.co.nz

## PRIVACY INFORMATION

The information you have provided on this form is required so that your submission can be processed under the Resource Management Act and statistics can be collected by the council. The information will be stored on a public register and held by the council. The details may also be made available to the public on the council's website.

These details are collected to inform the general public and community groups about all consents which have been issued through the council. If you would like to request access to, or correction of your details, please contact the council.

## 2.0 APPLICATION DETAILS

Application Number:

BUN 604 15108  
LUC 604 15109, DIS 604 415110, DIS 604 15116, DIS 604 15117, WAT 604 5460

Name of applicant:  
(please write all names in full)

WATER CARE SERVICES LTD  
RSignal-Ross@tonkintaylor.co.nz  
Rachel Signal-Ross  
Tonkin & Taylor Ltd  
PO Box 5271, Victoria St West  
Auckland 1142

Address of proposed activity:

53 Clarence St, Ponsonby, Auckland

Postcode: 1011

### Description of proposed activity

Central interceptor/tunnel extension to run under right hand corner of my property.

Submission requirements are overleaf



### 3.0 SUBMISSION DETAILS

My/our submission: (please tick one)

☐

Supports the application

☒

Opposes the application

☐

is Neutral regarding the application

The specific parts of the application to which my/our submission relates to are: (use additional pages if required.)

The central interceptor/tunnel extension to run under the right hand corner of my property - 53 Clarence St Ponsonby.

The reasons for my/our submission are: (use additional pages if required.)

This was rushed through, by Watercare Services Ltd, by their own admission: deadlines fell just on Christmas, school summer holidays and public holidays. Visitations re the plan were in January - holiday time. There have also been extreme weather events to deal with.  
Concerns about vibration damage to property, noise with water going through tunnel. There are more direct routes.

The decision I/we would like the council to make is (including, if relevant, the parts of the application you wish to have amended and the general nature of any conditions sought. Use additional pages if required):

Preference to another, more direct route taken.

### 4.0 TRADE COMPETITION

☒

I/we are not a trade competitor of the applicant.

☐

I/we are a trade competitor of the applicant, and:

☐

are directly affected by an effect of the proposed activity that adversely affects the environment, and that effect does not relate to trade competition or the effects of trade competition

### 5.0 SUBMISSION AT THE HEARING

☒

I/we wish to speak in support of my/our submission.

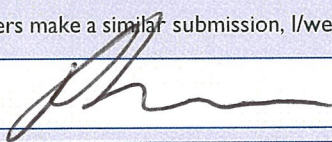
☒

I/we do not wish to speak in support of my/our submission.

☒

If others make a similar submission, I/we will consider presenting a joint case with them at the hearing.

Signature



Date:

30.4.2023

Signature

Date:

### IMPORTANT INFORMATION

The council must receive this submission before the date and time indicated. A copy of this submission must also be given as soon as reasonably practicable to the applicant at the applicant's address for service.

All submitters will be advised of hearing details at least 10 working days before the hearing. If you change your mind as to whether you wish to attend the hearing, please phone the council so that the necessary arrangements can be made.



**Submission by Equal Justice Project:**

**Central Interceptor Extension – Pt Erin Tunnel – Pt Erin Park and Curran Street Road Reserve**

The Equal Justice Project (EJP) is a non-partisan pro bono charity (CC54347) that utilises law students' legal training and knowledge to advocate for change, including the promotion of effective climate action in Auckland.

Contact Details/Agent:

**Dr Grant Hewison**

PO Box 47188, Ponsonby 1011

grant@granthewison.co.nz

mob: 021 577869

**Late Submission:** The EJP acknowledges that its Submission is late, but asks that it be accepted. The reasons are that the EJP overlooked the deadline for submissions due to student University work pressures. It is submitted that neither Watercare nor anyone else will be prejudiced by acceptance of the late submission.

**Notified resource consent application:** Watercare Services Limited has applied for land use consent, and water, stormwater discharge and diversion, and the discharge of contaminants to air, land and water permits associated with the extension of the Central Interceptor (Pt Erin Tunnel) for the construction, operation, and maintenance of wastewater infrastructure, being a wastewater storage and conveyance tunnel, a terminal access shaft, a control chamber and above ground ancillary structures.

**Property address:** Pt Erin Park and Curran Street Road Reserve

**Application number:** BUN60415108; LUC60415109, DIS60415110, DIS60415116, DIS60415117, WAT60415460

**Applicant name:** Watercare Services Limited

**Applicant email:** RSignal-Ross@tonkintaylor.co.nz

**Application description:** Watercare Services Limited has applied for land use consent, and water, stormwater discharge and diversion, and the discharge of contaminants to air, land and water permits associated with the extension of the Central Interceptor (Pt Erin Tunnel) for the construction, operation, and maintenance of wastewater infrastructure, being a wastewater storage and conveyance tunnel, a terminal access shaft, a control chamber and above ground ancillary structures.

**Submission**

**This submission:** opposes the application in whole or in part

**Specify the aspects of the application you are submitting on:** We are submitting on the whole of the application, but particularly the emission of greenhouse gases.

**What are the reasons for your submission?** As noted in the Assessment of Environmental Effects, consent authorities can consider the effects of greenhouse gas emissions on climate change when considering air discharge permit applications (because section 104E of the RMA was repealed on 30 November 2022). Although the greenhouse gas effects of the Project are considered by the Applicant to be negligible, the EJP asks they still be considered.



As noted by the UN Secretary-General at COP27: "... the clock is ticking. We are in the fight of our lives. And we are losing. Greenhouse gas emissions keep growing. Global temperatures keep rising. And our planet is fast approaching tipping points that will make climate chaos irreversible. We are on a highway to climate hell with our foot still on the accelerator."<sup>1</sup>

The climate crisis is accelerating, emissions are rising, and the last few years were globally the warmest on record.

**What decisions and amendments would you like the council to make?**

We ask that the consent be declined, or if granted, include conditions relating to greenhouse gas emissions.

**Are you a trade competitor of the applicant?** We are not a trade competitor of the applicant.

**Do you want to attend a hearing and speak in support of your submission?** Yes

**If other people make a similar submission I will consider making a joint case with them at the hearing:** Yes

**Supporting information:** None

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<sup>1</sup> UN Secretary-General's Remarks to High Level Opening of COP27 (7 November 2022)

From: David Abbott <dabbott@xtra.co.nz>  
Sent: Wednesday, May 31, 2023 12:59 PM  
To: Mark Ross <mark@sentinelplanning.co.nz>  
Cc: TScott <tom.scott@water.co.nz>; Dirk Hudig <dirkhudig@gmail.com>; Alison <stmarysbayassociation@gmail.com>  
Subject: Watercare application for RC to extend CI to Pt Erin

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe. If you wish to get this email verified, forward as an attachment to [HelpMe@itconfidence.co.nz](mailto:HelpMe@itconfidence.co.nz)

Good morning Mark

I have been given your name and email address by Tom Scott of Watercare.

I chair The St Mary's Bay Association Inc. (SMBA). We and neighbouring Herne Bay Residents Association Inc. (HBRA) have been working collaboratively with Watercare for several years on various infrastructure projects affecting St Mary's Bay, Masefield Beach and the Herne Bay beaches. SMBA and HBRA are also foundation members in a coalition of community organisations known by the acronym SASOC which has been working with Watercare and Council's stormwater department, Healthy Waters on the implementation of the Western Isthmus Water Quality Improvement Programme (WIWQIP).

We were consulted by Watercare in mid 2022 about its proposal to extend the Central Interceptor to Pt Erin, particularly because it is proposed as an alternative to separating stormwater and wastewater in St Mary's Bay and Herne Bay, under an agreement signed in November 2019. We were aware that Watercare lodged an application in late February/early March for a resource consent for the extension but at that point it had not been accepted by Council as regulator, not approved for public notification. Regrettably both of these steps took place without our being aware as they happened, and we were not aware of the submission period until shortly after it expired.

In large part the oversight about the submission period was due to my having suffered a personal bereavement at the start of this year, as a consequence of which I have stood back from much of my work, and our relationships with Watercare have largely been through me. However, it was also because we were waiting for an expert report on a review of the operation of the related stormwater tunnel in St Mary's Bay/Masefield Beach, which report was being undertaken by our expert environmental engineer on a collaborative basis with Watercare's engineers, and that report has not yet been delivered.

I contacted Tom as soon as I learned that the application had been notified, and the submission period had expired. He suggested that I contact you. I have not done so before now because we felt that we need to be clearer about any issues we might have on the extension project before taking a position formally on the application. However, I am also conscious of the passage of time and feel that we now need to act (notwithstanding that we are still to receive input from our expert) to be able to 'take a seat at the table' on what is an important project for our area.

I should add that our approach (and track record) on these matters is to identify key issues and then endeavour to negotiate solutions that work for all parties.

Would you please let me know what we need to do to take an active part on this application.

Regards  
David Abbott  
The St Mary's Bay Association  
027 479 5764

Sent from my iPhone



**ATTACHMENT 4**

**LOCAL BOARD COMMENTS**





**From:** RES Local Board Waitemata <[WaitemataLocalBoard@aucklandcouncil.govt.nz](mailto:WaitemataLocalBoard@aucklandcouncil.govt.nz)>  
**Sent:** Friday, 21 April 2023 12:20 pm  
**To:** rcregulatorysupportcentral2 <[rcregulatorysupportcentral2@aucklandcouncil.govt.nz](mailto:rcregulatorysupportcentral2@aucklandcouncil.govt.nz)>; RES Local Board Waitemata <[WaitemataLocalBoard@aucklandcouncil.govt.nz](mailto:WaitemataLocalBoard@aucklandcouncil.govt.nz)>  
**Cc:** Colin Hopkins <[Colin.Hopkins@aucklandcouncil.govt.nz](mailto:Colin.Hopkins@aucklandcouncil.govt.nz)>  
**Subject:** RE: INVITATION TO LOCAL BOARD RESOURCE CONSENT LEAD TO COMMENT ON A NOTIFIED APPLICATION FOR RESOURCE CONSENT

Kia ora Faye

Apologies for the delay in provide the local board's views on this application.

The local board is supportive of the Central Interceptor Extension to Point Erin and surrounding area. We would note that it is still necessary for Watercare to separate waste water and stormwater in the medium to longterm. We recommend that Watercare work with other council and government agencies and utility companies to do other necessary work at the same time where possible and to be responsive to the requests of local submitters and the St Mary's Bay, Herne Bay, and Grey Lynn Residents Association and the Ponsonby Road Business Association to mitigate adverse impacts of work on residents, businesses and park users as far as practicable.

Kind regards

**Tammy Hendricks**  
**PA/Office Manager - Waitematā**  
**Waitematā Local Board | Local Board Services**  
Ph 09 3010101  
MOB: 021854960  
Auckland Council, 33 Federal Street, Ground Floor, Auckland Central 1010.  
Visit our website: [www.aucklandcouncil.govt.nz](http://www.aucklandcouncil.govt.nz)



**From:** Faye Barraclough <[faye.barraclough@aucklandcouncil.govt.nz](mailto:faye.barraclough@aucklandcouncil.govt.nz)> **On Behalf Of** rcregulatorysupportcentral2  
**Sent:** Friday, March 17, 2023 7:31 AM  
**To:** RES Local Board Waitemata <[WaitemataLocalBoard@aucklandcouncil.govt.nz](mailto:WaitemataLocalBoard@aucklandcouncil.govt.nz)>  
**Cc:** Colin Hopkins <[Colin.Hopkins@aucklandcouncil.govt.nz](mailto:Colin.Hopkins@aucklandcouncil.govt.nz)>  
**Subject:** INVITATION TO LOCAL BOARD RESOURCE CONSENT LEAD TO COMMENT ON A NOTIFIED APPLICATION FOR RESOURCE CONSENT

Auckland Council has received a resource consent application for the site below. The application has been notified (the public notice or letter served if limited notified is attached) and a copy of the application plans and Assessment of Environmental Effects (AEE) can be found on the council web page at:  
<https://www.aucklandcouncil.govt.nz/have-your-say/have-your-say-notified-resource-consent/notified-resource-consent-applications-open-submissions/Pages/default.aspx>.

You are invited to make comments on the application as the Local Board Resource Consent Lead. This comments process allows the Local Board to communicate the interests or concerns or preferences of the local board in regards to the application. The comments you provide are not a submission under the Resource Management Act, but are to be taken into account by the Council planning officer and the decision maker. You may speak on your local board comments if a hearing on the application is to be held by indicating below.

**Date required by: 11:59 pm, 14<sup>th</sup> April 2023.**

Please note that if comments are not received by this date it will be assumed that you do not have any comments regarding this application and therefore also do not wish to speak at hearings. Please return this form and comments, only by email, with copy to your PA Liaison to the email address as set out above. Thank you.

**STREET ADDRESS:**

94 Shelly Beach Road, Ponsonby  
28, and 30 Sarsfield Street and road reserve, Ponsonby  
49 Curran Street and road reserve, Ponsonby  
31 Emmett Street, Ponsonby  
90, 92, 94, 96-100, and 102 Jervois Road and road reserve, Ponsonby  
2, 4, 6, 8, 10, 12, 14, and 16 Provost Street, Ponsonby  
37, and 40 Prosford Street and road reserve, Ponsonby  
50, 53, 55, 57, 59, and 61 Clarence Street and road reserve, Ponsonby  
56, 58, 59, 60, 61, 63, 65, and 67 Islington Street and road reserve, Ponsonby  
Pompallier Terrace road reserve, Ponsonby  
62, 64, 66, 68, 69, 70, 71, and 75 John Street, Ponsonby  
70, 72, 74, 76, and 78 Ardmore Road, Ponsonby  
2, 4, 6, and 8 Trinity Street, Ponsonby  
183 Richmond Road, Ponsonby  
82-84 Kelmarna Avenue, Ponsonby  
46 and 48 Tawariki Street, Ponsonby

**APPLICATION NUMBER(S):**

BUN60415108 (Council reference)  
LUC60415109 (s9 land use consent)  
WAT60415460 (s14 water permit)  
DIS60415110 (s15 discharge and diversion permit, stormwater)  
DIS60415116 (s15 discharge permit, air)  
DIS60415117 (s15 discharge permit, contamination)

OVERALL CONSENT STATUS: Discretionary  
Comments

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Initial here: \_\_\_\_\_  
Local Board Resource Consent Lead

Date: \_\_\_\_\_

Do you wish to speak to these comments if a hearing is held (yes / no )

**Local Board Guidelines**

*This comments process allows the Local Board to communicate its interests and concerns, and the preferences of the people in its local board area in regards to this application. To ensure that reporting timeframes are met the time limit for any comments has been set at the same time as the close of submissions. It is expected that comments will only be likely for applications that have invoked a high level of interest or concern from people in your local board area. The timeframe to comment may help in providing the time needed to canvas those interests and concerns.*

*You may have already made a comment on this application if it was previously lodged as a non-notified application and met the local board triggers set for comments on the notification decision. You may wish to re-submit those comments and /or add to those matters in regards to any interests or concerns on the merits of the proposal.*

*The planner will consider your comments as part of their section 42A report. If you note above that you would like to speak to these comments you will be contacted by council's democracy advisor closer to the hearing date.*

*Your local board comments are not a submission. However those making a decision on the application may take into account matters of relevance in terms of the criteria set by Section 104 of the Resource Management Act. The following provides a guide for understanding and context.*

**Summary of Section 104(c) – Consideration of Application**

*The consent authority when considering a resource consent application and any submissions must, subject to Part 2, have regard to–*

- c) any other matter the consent authority considers relevant and reasonably necessary to determine the application.*

**Comments**

*Your comments can canvas the merits of an application in terms of both effects and plan context. As Local Board representatives, your views will need to cover how a proposal will impact on the local board's interests or preferences or the well-being of communities within the local board area rather than any direct effects to particular persons.*

Colin Hopkins  
Principal Project Lead  
Premium Resource Consents

**ATTACHMENT 5**

**RECOMMENDED CONSENT CONDITIONS**





# BUN60415108 - Recommended Conditions

## A. General conditions

All Consents (conditions 1 and 2)	
1	<p>Except as modified by the conditions below and subject to final design, the works must be undertaken in accordance with the plans and all information submitted with the application, detailed below, and all referenced by the Council as consent numbers LUC60415109, WAT60415460 and DIS60415110 of BUN60415108:</p> <ul style="list-style-type: none"> <li>Central Interceptor – Point Erin Tunnel Assessment of Effects on the Environment (AEE), prepared by Tonkin &amp; Taylor Ltd, Version 1, dated 7 February 2023.</li> </ul> <p><b>Reports Lodged with AEE</b></p> <ul style="list-style-type: none"> <li>Watercare Central Interceptor Point Erin Park Recreation Assessment, prepared by Rob Greenaway &amp; Associates, dated 23 January 2023 (Final).</li> <li>Extension to the Central Interceptor - Point Erin Tunnel: Assessment of Noise and Vibration Effects, prepared by Tonkin &amp; Taylor Ltd, Version 1, dated 1 February 2023.</li> <li>Preliminary Site Investigation – Point Erin Park, prepared by Tonkin &amp; Taylor Ltd, Version 2, dated December 2022.</li> <li>Draft Erosion and Sediment Control Plan – Central Interceptor Point Erin Tunnel, prepared by McConnell Consultancy Ltd, Revision 1, dated 25 January 2023.</li> <li>CI Extension – Point Erin Tunnel: Screening-level Assessment of Groundwater and Settlement Effects, prepared by Tonkin &amp; Taylor Ltd, Version 1, dated 7 February 2023.</li> <li>Central Interceptor – Point Erin Extension: Natural Character, Landscape and Visual Assessment Report, prepared by Isthmus Group Limited, dated 1 February 2023 (Final).</li> <li>Arboricultural Assessment of Effects of Extension of the Central Interceptor wastewater tunnel into Point Erin Park, resulting in the removal of reserve trees, prepared by The Tree Consultancy Company, dated 25 January 2023.</li> <li>Central Interceptor Extension, Point Erin Park, Auckland: Archaeological Assessment, prepared by Clough &amp; Associates Ltd, dated January 2023.</li> <li>Central Interceptor Extension – Point Erin Tunnel: Integrated Transport Assessment, prepared by Tonkin &amp; Taylor Ltd, Version 1.0, dated 1 February 2023.</li> <li>Point Erin Extension – Assessment of Potential Flood Impacts Memorandum, prepared by Jacobs, Revision C, dated 25 January 2023.</li> <li>Central Interceptor Extension – Point Erin Tunnel: Air Quality Assessment, prepared by Tonkin &amp; Taylor Ltd, Version 1, dated 1 February 2023.</li> </ul> <p><b>Further Information Response Documents</b></p> <ul style="list-style-type: none"> <li>Point Erin Central Interceptor: Addendum Report – Assessment of Groundwater and Settlement Effects, prepared by Tonkin &amp; Taylor Ltd, Version 1, dated 17 March 2023.</li> <li>‘Further information on potential design and appearance of above-ground infrastructure – Point Erin Park’ letter, prepared by Tonkin &amp; Taylor Ltd, dated 17 March 2023.</li> <li>‘Response to s92 requests – Point Erin Tunnel’ letter, prepared by Tonkin &amp; Taylor Ltd, dated 19 April 2023.</li> <li>Cultural Values Assessment, Watercare, Central Interceptor Extension, Point Erin Park, prepared by Ngaati Te Ata Waiohū, dated 14 April 2023.</li> <li>Cultural Impact Assessment, Watercare Services Limited, Central Interceptor – Point Erin Tunnel, prepared by Ngaati Whanaunga Incorporated Society, dated 9 June 2023.</li> <li>Cultural Values Assessment, Watercare, Central Interceptor Extension, Pt Erin Tunnel Project, prepared by Te Ākitai Waiohū, dated 2023.</li> </ul>

	<ul style="list-style-type: none"><li>• Precedent study images, indicative planting plan and cross-sections, prepared by Isthmus, dated April 2023 (Appendix B of Response to s92 requests – Point Erin Tunnel’ letter, dated 19 April 2023).</li><li>• ‘Update on engagement with mana whenua partners and Cultural Values Assessments’ correspondence received via email from Rachel Signal-Ross of Tonkin &amp; Taylor Ltd, dated 9 May 2023.</li><li>• ‘Point Erin Tunnel: Response to s92 request: Landscape and Visual effects – further clarification questions’ letter, prepared by Tonkin &amp; Taylor Ltd, dated 26 May 2023.</li><li>• Indicative Planting Masterplan, prepared by Isthmus, dated May 2023 (Appendix B of ‘Point Erin Tunnel: Response to s92 request: Landscape and Visual effects – further clarification questions’, dated 26 May 2023).</li><li>• Email on further comments from the Council’s Parks Department, from Rachel Signal-Ross, dated 1 June 2023.</li><li>• ‘Point Erin Tunnel: Response to additional questions from Auckland Council Parks’ letter, prepared by Tonkin &amp; Taylor Ltd, dated 20 June 2023.</li></ul>																																										
	<table><tr><th>Drawing title and reference</th><th>Rev</th><th>Date</th></tr><tr><td colspan="3"><i>Prepared by Jacobs in association with AECOM and McMillen Jacobs Associates:</i></td></tr><tr><td>Tawariki St to Pt Erin – Tunnel Plan 2011933.006</td><td>2</td><td>2.2.23</td></tr><tr><td>Tawariki St to Pt Erin – Tunnel Plan 2011933.007</td><td>2</td><td>2.2.23</td></tr><tr><td>Tawariki St to Pt Erin – Auckland Unitary Plan Zoning 2011933.008</td><td>1</td><td>2.2.23</td></tr><tr><td>Tawariki St to Pt Erin – Other Auckland Unitary Plan Zoning 2011933.009</td><td>1</td><td>2.2.23</td></tr><tr><td>Site General – Proposed Site Layout 2013964.002</td><td>2</td><td>2.2.23</td></tr><tr><td>Site General – Point Erin Site – Construction Phase Plan 2013964.003</td><td>3</td><td>17.4.23</td></tr><tr><td>MH – 11 Shaft/Tunnel Connection Plan and Section 2013964.005</td><td>2</td><td>2.2.23</td></tr><tr><td>Point Erin Flow Diversion Pipeline Longitudinal Section 2013964.006</td><td>2</td><td>2.2.23</td></tr><tr><td>Point Erin Control Chamber Plan and Sections 2013964.007</td><td>2</td><td>2.2.23</td></tr><tr><td>Point Erin Site – Longitudinal Section and Cross sections 2013964.009</td><td>1</td><td>2.2.23</td></tr><tr><td>Point Erin – Other Auckland Unitary Plan Zoning 2013964.010</td><td>1</td><td>2.2.23</td></tr><tr><td>Site General - South West Corner Site Entry</td><td>1</td><td>17.4.23</td></tr></table>	Drawing title and reference	Rev	Date	<i>Prepared by Jacobs in association with AECOM and McMillen Jacobs Associates:</i>			Tawariki St to Pt Erin – Tunnel Plan 2011933.006	2	2.2.23	Tawariki St to Pt Erin – Tunnel Plan 2011933.007	2	2.2.23	Tawariki St to Pt Erin – Auckland Unitary Plan Zoning 2011933.008	1	2.2.23	Tawariki St to Pt Erin – Other Auckland Unitary Plan Zoning 2011933.009	1	2.2.23	Site General – Proposed Site Layout 2013964.002	2	2.2.23	Site General – Point Erin Site – Construction Phase Plan 2013964.003	3	17.4.23	MH – 11 Shaft/Tunnel Connection Plan and Section 2013964.005	2	2.2.23	Point Erin Flow Diversion Pipeline Longitudinal Section 2013964.006	2	2.2.23	Point Erin Control Chamber Plan and Sections 2013964.007	2	2.2.23	Point Erin Site – Longitudinal Section and Cross sections 2013964.009	1	2.2.23	Point Erin – Other Auckland Unitary Plan Zoning 2013964.010	1	2.2.23	Site General - South West Corner Site Entry	1	17.4.23
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2	<p>Consents LUC60415109, WAT60415460 and DIS60415110 lapse 10 years after the date on which the last of any appeals on the consent are determined or withdrawn, or if no appeals are lodged, the date on which the consents are granted in accordance with Section 104 of the RMA.</p> <p><u>Advice Note:</u></p> <p><i>An extension to the lapse date specified above is subject to the provisions of Section 125 (1A) of the RMA.</i></p>																																										

## B. Construction phase consent conditions

Land Use Consent Conditions – LUC60415109 (conditions 3 to 68)	
3	At least 20 working days prior to commencement of works, the Consent holder must submit detailed engineering design plans for the Project, or for that stage of the Project works, to the Council.
Community Liaison and Communications	

4	A liaison person must be appointed by the Consent holder for the duration of the construction phase of the Project to be the main and readily accessible point of contact for persons affected by the construction work. The liaison person's name and contact details must be advised to affected parties by the Consent holder. This person must be reasonably available for on-going consultation on all matters of concern to affected persons arising from the Project. If a liaison person will not be available for any reason, an alternative contact person must be nominated to ensure that a Project contact person is available by telephone 24 hours per day seven days per week during the construction phase.
5	<p>The Consent holder must prepare a Communications Plan (<b>CP</b>) for the construction phase of the Project or for each Project stage. The CP must be submitted to the Council no less than 20 working days prior to works commencing for certification that the CP complies with the requirements of Condition 6.</p> <p><u>Advice Note:</u></p> <p><i>"Project stage" means a separable part of the Project by activity, programme or location/geographic extent (e.g. tunnelling, terminal shaft construction, control chamber construction, TBM removal).</i></p>
6	<p>The objective of the CP is to set out a framework to ensure appropriate communication is undertaken with key stakeholders during the construction phase of the Project. The CP must set out:</p> <ol style="list-style-type: none"> <li>the method(s) of consultation and liaison with key stakeholders and the owners/occupiers of neighbouring properties regarding the likely timing, duration and effects of works. This must include the method(s) to ensure affected properties are notified of noisy activities prior to works commencing;</li> <li>details of prior consultation or community liaison undertaken with the parties referred to in (a) above, including outlining any measures developed with such persons or groups to manage or to mitigate any adverse effects or inconvenience that may arise from any construction; and</li> <li>full contact details for the liaison person appointed in accordance with Condition 3 to manage the public information system and be the point of contact for related enquiries.</li> </ol>
<b>Construction Management</b>	
7	The Consent holder must prepare a Construction Management Plan ( <b>CMP</b> ) for the Project or for each stage of the Project (e.g., tunnelling works, terminal shaft construction and control chamber construction). The purpose of the CMP is to set out the detailed management procedures and construction methods to be undertaken in order to avoid, remedy or mitigate potential adverse effects arising from construction activities and to achieve compliance with the specific conditions of this consent that relate to the matters referred to in Condition 8 a to <b>Error! Reference source not found.</b> below. The CMP must be submitted to Auckland Council no less than 20 working days prior to works commencing on the Project or stage of the Project (as relevant) for certification that the CMP complies with the requirements of Condition 8 as applicable.
8	<p>The CMP required by Condition 7 above must include specific details relating to the management of all construction activities associated with the relevant Project stage, including:</p> <ol style="list-style-type: none"> <li>details of the site or project manager and the construction liaison person identified in Condition 3 including their contact details (phone, postal address, email address);</li> <li>an outline construction programme;</li> <li>the proposed hours of work;</li> <li>measures to be adopted to maintain the land affected by the works in a tidy condition in terms of disposal / storage of rubbish, storage and unloading of construction materials and similar construction activities;</li> <li>location of site infrastructure including site offices, site amenities, contractor's yards site access, equipment unloading and storage areas, contractor car parking, and security;</li> <li>procedures for controlling sediment run-off, dust and the removal of soil, debris, demolition and</li> </ol>

	<p>construction materials (if any) from public roads and / or other places adjacent to the work site;</p> <p>g. procedures for ensuring that residents, road users, park users and businesses (including Community Leisure Management (<b>CLM</b>), which manages the Point Erin Pool) in the immediate vicinity of construction areas are given prior notice of the commencement of construction activities and are informed about the expected duration and effects of the works;</p> <p>h. means of providing for the health and safety of the general public and for pedestrian management as required by the Construction Traffic Management Plan (Conditions <b>Error! Reference source not found.</b> and <b>Error! Reference source not found.</b>);</p> <p>i. procedures for the management of works which directly affect or are located in close proximity to existing network utility services (note: this requirement does not apply to the Consent holder's infrastructure or where written approval has been obtained from the relevant network utility operator);</p> <p>j. a mechanism and nominated stakeholder manager responsible for receiving, addressing and monitoring queries and responding to complaints in relation to the construction works;</p> <p>k. procedures for the refuelling of plant and equipment; and</p> <p>l. the tree management measures required by condition 53.</p>
9	<p>The CMP must be implemented and maintained by the Consent holder throughout the entire construction period for the Project or relevant Project stage to manage potential adverse effects arising from construction activities. The CMP or any specific component of the CMP must be updated as necessary and provided to the Council for certification prior to being implemented.</p>
<b>Traffic management</b>	
10	<p>The Consent holder must submit a Construction Traffic Management Plan (<b>CTMP</b>) to Council at least 20 working days prior to the commencement of Project works at Point Erin Park. The CTMP must be prepared in accordance with the Auckland Code of Practice for Land Development and Subdivision Chapter 3: Transport or CTMPs (as applicable) and New Zealand Transport Authority's Code of Practice for Temporary Traffic Management and must address the surrounding environment including pedestrian-and bicycle traffic as well as public transport. Construction activity cannot commence until certification is provided from Council that the CTMP satisfactorily gives effect to the objectives set out below, and complies with the requirements in Conditions 11 to 13.</p> <p>The objectives of the CTMP are to:</p> <ol style="list-style-type: none"> <li>ensure construction traffic movements on the transport network, including Sarsfield Street, Curran Street and the SH1 onramp, are appropriately managed;</li> <li>seek to ensure that construction traffic movements are managed to provide for the safety of the general public;</li> <li>minimise disruption and maintain pedestrian and vehicle access to / from surrounding residential properties and Point Erin Park including Point Erin Pool, carpark and playground;</li> <li>minimise disruption from construction traffic on the travelling public and road users along the identified sections of the construction routes;</li> <li>seek to avoid to the extent practicable, full road closures and minimise any partial or managed closures; and</li> <li>manage integration with other construction projects and Auckland Transport projects.</li> </ol>
11	<p>The CTMP must be prepared by a suitably qualified and experienced traffic expert in accordance with the requirements of Condition 10 and must set out, as a minimum, the following:</p> <ol style="list-style-type: none"> <li>The traffic management measures to be implemented.</li> <li>Any road closures that will be required and the nature and duration of any traffic management</li> </ol>

	<p>measures that will result, including any temporary restrictions, detours or diversions for general traffic and buses.</p> <p>c. Construction traffic routing, including measures to ensure that construction traffic movements on the transport network, including Sarsfield Street, Curran Street and the SH1 onramp, are appropriately managed.</p> <p>d. The design of the access roads and vehicle crossings, including appropriate measures to manage large truck movements and provision of vehicle tracking curves to demonstrate an 85<sup>th</sup> percentile car and medium rigid truck passing one another on the swimming pool access road. Where it is not possible to demonstrate vehicle tracking curves for an 85<sup>th</sup> percentile car and medium rigid truck passing one another on the swimming pool access road, the CTMP must set out measures for managing the movements of medium rigid trucks on the swimming pool access road, such as the use of a site Traffic Management Supervisor;</p> <p>e. Methods to manage the effects of the delivery of construction material, plant and machinery. This must include, but not be limited to:</p> <ul style="list-style-type: none"> <li>• ensuring heavy vehicles access the south-western construction area via Shelly Beach Road and Sarsfield Street and a right turn into the construction area (i.e. not via Curran and Sarsfield Streets / no left turn into the construction area);</li> <li>• traffic management measures, including a site Traffic Management Supervisor: <ul style="list-style-type: none"> <li>– to ensure the safe movement of construction vehicles on Sarsfield Street and the Pool access road, to manage any potential effects, and to ensure the safe access of cars, cyclists, pedestrians, service trucks and emergency vehicles accessing the Pool and public carpark;</li> <li>– to ensure safe ingress from Sarsfield Street to the southwestern construction area and safe egress onto Curran Street; and</li> <li>– to ensure construction vehicles can negotiate access and egress to avoid any additional queueing on the adjacent road network during congested peak periods and to ensure a suitable truck layover area is provided if required.</li> </ul> </li> </ul> <p><u>Advice Note</u></p> <p><i>The CTMP will need to detail where the heavy vehicle layover will be accommodated and how this will be managed for the site.</i></p> <p>f. Measures to maintain existing vehicle access to property where practicable, or to provide alternative access arrangements.</p> <p>g. Measures to minimise disruption from construction traffic on the travelling public and road users along the identified sections of the construction routes. This includes avoidance of full road closures to the extent practicable and minimisation of partial or managed closures.</p> <p>h. Measures to ensure that the traffic management works are integrated with other construction and Auckland Transport projects.</p> <p>i. Measures to maintain pedestrian and cyclist movements adjacent to and through Point Erin Park and measures to reduce the impact on mobility impaired users on roads and footpaths adjacent to the construction works. Where the works impact on existing pedestrian or cycle ways, alternative temporary accessways must be provided where practicable in accordance with Condition 18. Such access must be safe, clearly identifiable and seek to minimise significant detours.</p> <p>j. Measures to minimise disruption and maintain pedestrian and vehicle access to and from the surrounding residential properties and Point Erin Park, including Point Erin Pool, carpark and playground.</p> <p>k. Provision for construction staff and visitor parking on site as far as practicable.</p> <p>l. Proposed traffic volumes and movements associated with works outside the usual construction hours specified in Condition 22 and associated management and mitigation measures to be implemented.</p> <p>m. A construction driver education programme (due to the proximity of the Point Erin Pool, carpark and</p>
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	<p>playground, and Ponsonby Primary School). This must include a briefing for all construction drivers on the importance of slowing down and adhering to established speed limits when driving past Ponsonby Primary School, and to look out for school children and reversing vehicles at all times.</p> <p>n. Measures to communicate traffic management measures throughout construction activities (note: these measures may form part of the CP required by Condition 5).</p> <p>o. Any proposed monitoring to measure the impact of the works on traffic and the impact of the traffic management measures. If safety or operational issues are evident, measures to be implemented to address these issues.</p> <p>p. Measures to manage and / or supervise the egress of vehicles onto Curran Street.</p> <p>q. Measures to manage construction traffic on the Shelly Beach Road off-ramp (where required).</p> <p>r. Measures to manage traffic speeds safely on affected sections of Sarsfield Street during construction.</p> <p>s. A concept design for the proposed temporary crossing in accordance with Waka Kotahi's Pedestrian Network Guidance and Auckland Transport's Transport Design Manual.</p> <p>t. Details of consultation (including outcomes agreed) with the applicant and Ponsonby Primary School with regard to maintaining the safety of school students during construction. Details of all safety measures and interventions will be documented in the CTMP. The CTMP will include details of:</p> <ul style="list-style-type: none"> <li>• efforts to minimise the use of Curran Street (between Sarsfield Street and Jervois Road) by heavy commercial vehicles during school pick up and drop off times (between 8:05am – 8.50am and 3.00pm – 3:30pm) during term time, noting that Shelly Beach Road will be a safe and suitable alternative arterial route in many instances; and</li> <li>• briefings for all construction drivers on the importance of slowing down and adhering to speed limits and safe driving practices when driving past Ponsonby Primary School, and to look out for school children and reversing vehicles at all times.</li> </ul> <p>u. Measures to ensure that construction traffic movements are managed to provide for the safety of the general public.</p> <p><u>Advice Notes:</u></p> <p><i>Engineering Approval – Transport</i></p> <p><i>The consent holder will need to obtain Engineering Approval which will require input from Auckland Transport for the reinstatement of the solid median in Sarsfield Street and the reinstatement of kerbside elements around the western vehicle crossing on Sarsfield Street</i></p> <p><i>As part of the application for Engineering Plan Approval (EPA), a registered engineer must:</i></p> <p>a. <i>Certify that all public structures/facilities associated with roads or access ways have been designed in accordance with the Auckland Transport's Transport Design Manual.</i></p> <p>b. <i>Provide a statement that the proposed infrastructure has been designed for the long-term operation and maintenance of the asset.</i></p> <p>c. <i>Confirm that all practical measures are included in the design to facilitate safe working conditions in and around the asset.</i></p> <p><i>If the EPA drawings require any permanent traffic or parking restrictions, then the Consent holder must submit a resolution report for approval by Auckland Transport Traffic Control Committee to legalise these restrictions. The resolutions, prepared by a qualified traffic engineer, will need to be approved so that the changes to the road reserve can be legally implemented and enforced. The resolution process requires external consultation to be undertaken in accordance with Auckland Transport's standard procedures. It is the responsibility of the consent holder to prepare and submit a permanent Traffic and Parking Changes report to Auckland Transport Traffic Control Committee for review and approval.</i></p> <p><i>The engineering plan application forms including fees can be found at the following Auckland Council website:</i></p>
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	<p><a href="https://www.aucklandcouncil.govt.nz/building-and-consents/engineering-approvals/Pages/default.aspx">https://www.aucklandcouncil.govt.nz/building-and-consents/engineering-approvals/Pages/default.aspx</a></p> <p><i>Corridor Access Request</i></p> <p><i>The Consent holder will require Corridor Access Request approval from Auckland Transport for the proposed works as well as for the required removal and reinstatement of the traffic island on Sarsfield Street at its intersection with Shelly Beach Road.</i></p> <p><i>It will be the responsibility of the Consent holder to determine the presence of any underground services that may be affected by the applicants work in the road reserve. Should any services exist, the applicant must contact the owners of those and agree on the service owners' future access for maintenance and upgrades. Services information may be obtained from <a href="https://www.beforeudig.co.nz/">https://www.beforeudig.co.nz/</a>.</i></p> <p><i>All work in the road reserve must be carried out in accordance with the general requirements of The National Code of Practice for Utility Operators' Access to Transport Corridors <a href="http://nzuag.org.nz/national-code/ApprovedNationalCodeFeb13.pdf">http://nzuag.org.nz/national-code/ApprovedNationalCodeFeb13.pdf</a> and Auckland Transport Design Manual <a href="https://at.govt.nz/about-us/manuals-guidelines/transport-design-manual/">https://at.govt.nz/about-us/manuals-guidelines/transport-design-manual/</a></i></p> <p><i>Prior to carrying out any work in the road corridor, the Consent holder must submit to Auckland Transport a Corridor Access Request and temporary traffic management plan, the latter prepared by an NZ Transport Agency qualified person and work must not commence until such time as the applicant has approval in the form of a Works Access Permit . The application may be made at <a href="https://at.govt.nz/about-us/working-on-the-road/corridor-access-requests/apply-for-a-car/">https://at.govt.nz/about-us/working-on-the-road/corridor-access-requests/apply-for-a-car/</a> and 15 working days should be allowed for approval.</i></p>
12	The Consent holder must consult with the landowner (Auckland Council) and CLM to confirm measures to manage parking and ensure access is maintained for pool maintenance and operational vehicles, emergency vehicles, and construction traffic during peak parking demand periods for the Point Erin Pool, how these measures will be implemented and the party responsible for implementing any measures identified.
13	Access for all vehicles to the southwestern construction area must be via a one-way system entering from the Sarsfield Street access and exiting from the Curran Street access. The design of the access and vehicle crossing on Curran Street must ensure it does not affect the effective, efficient and safe operation of the Curran Street SH1 onramp.
14	The temporary vehicle crossings from the southwestern construction area onto Curran Street must be designed to meet minimum sight distance requirements of the Safe Intersection Sight Distance (SISD) requirements set out in 'Austroad (2009). Guide to Road Design Part 4A: Unsignalised and Signalised Intersections. Sydney'. Egress of all vehicles from the temporary vehicle crossing onto Curran Street must be assisted by a spotter.
15	There must be no left turn movements for trucks entering the vehicle crossing serving the construction area in the southwestern corner of Point Erin Park.
16	There must be no left turn movements for trucks exiting the southwestern construction site via the proposed Curran Street vehicle crossing.
17	The Consent holder must ensure the construction areas in Point Erin Park are cordoned off / fenced to ensure public safety.
18	<p>The Consent holder must install construction site fencing to prevent pedestrians using the section of footpath on Sarsfield Street between Curran Street and the site ingress.</p> <p>Prior to the temporary closure of the existing footpath through the southwestern corner of Point Erin Park, the Consent holder must:</p> <ol style="list-style-type: none"> <li>provide temporary pedestrian access through the Park to the east of the construction area and wayfinding signs to direct pedestrians to the temporary route and an existing accessible route in the</li> </ol>

	<p>south eastern corner of the Park; and</p> <p>b. undertake temporary improvements on the north side of Sarsfield Street for pedestrians to cross Sarsfield Street. This must include the provision of a dropped kerb and tactile paving, a short section of surfacing in the berm, and a temporary parking restriction in the immediate area.</p> <p>These must be maintained for the duration of the construction works. Once construction works are completed, the closed footpath through the southwestern corner of Point Erin Park and the section of footpath on the northern side of Sarsfield Street must be reinstated.</p> <p><u>Advice Note:</u></p> <p><i>These requirements are subject to landowner and asset manager approvals.</i></p>
19	The Consent holder must ensure that the main construction area access is monitored by the Site Traffic Management Supervisor at all times during holiday periods and weekends while construction is occurring on site.
20	All construction traffic must be managed at all times in accordance with the certified CTMP.
21	Unless specifically provided for by this consent approval, there must be no damage to public roads, footpaths, berms, kerbs, drains, reserves or other public asset as a result of the earthworks and construction activity. In the event that such damage does occur, the Council will be notified within one working day of its discovery. The costs of rectifying such damage and restoring the asset to its original condition must be met by the Consent holder.
<b>Construction hours</b>	
22	<p>Construction hours must be as follows, except where work is necessary outside the specified days or hours for the purposes specified in Condition 23 below:</p> <p>a. Tunnelling activities - 24 hours a day, 7 days a week.</p> <p>b. General site activities and truck movements - 7 am to 6pm, Monday to Friday, 8am to 6pm Saturday.</p>
23	<p>Work may occur outside of the specified days or hours set out in Condition 22 for the following purposes:</p> <p>a. Where, due to unforeseen circumstances, it is necessary to complete an activity that has commenced.</p> <p>b. Where work is specifically required to be planned to be carried out at certain times (e.g. to tie into the existing network during period of low flow or for commissioning sewer connections).</p> <p>c. For delivery of large equipment or special deliveries required outside of normal hours due to traffic management requirements.</p> <p>d. In cases of emergency.</p> <p>e. For the securing of the site or the removal of a traffic hazard.</p> <p>f. or any other reason specified in the CMP or CTMP.</p> <p>Where any work is undertaken pursuant to a to f above, the Consent holder must, within five working days of the commencement of such work, provide a report to Council detailing how the work was authorised under those provisions.</p> <p>Activities such as dewatering during excavation and concrete pours may be undertaken outside of the specified days or hours subject to meeting the noise limits specific in Condition 26 (or as otherwise provided for through an ASCNVMP required by Condition 28).</p>
<b>Construction Noise and Vibration</b>	

24	<p>The Consent holder must prepare a Construction Noise and Vibration Management Plan (<b>CNVMP</b>) for the Project, or each stage of the Project, that addresses the management of construction noise and vibration from the works. The CNVMP must be submitted to the Council no less than 20 working days prior to works on that stage commencing for certification by Council that the CNVMP complies with the requirements of Conditions 25 to 30, as applicable.</p> <p>The objectives of the CNVMP are to:</p> <ol style="list-style-type: none"> <li>identify the Best Practicable Option (<b>BPO</b>) for the management and mitigation of construction noise and vibration effects;</li> <li>identify how Project noise and vibration limits will be met and set out the methods for scheduling and undertaking works to manage disruption; and</li> <li>ensure engagement with affected receivers and timely management of complaints.</li> </ol>
	<p>The CNVMP must be prepared by a suitably qualified and experienced practitioner and must set out, as a minimum:</p> <ol style="list-style-type: none"> <li>The relevant construction noise and vibration criteria / limits set out in these conditions.</li> <li>Description and duration of the works, predicted construction noise and vibration levels, anticipated equipment and hours of operation (including specific times and days when construction activities causing noise/vibration would occur).</li> <li>The processes to be undertaken including general acoustic management and mitigation measures proposed to be implemented throughout the course of the Project consistent with best practice and the triggers or thresholds for implementing them (if relevant).</li> <li>Physical noise mitigation measures, including prohibiting the use of tonal reverse alarms, maintenance of access roads (to ensure they are smooth), plant selection and maintenance procedures, orientation of plant and machinery, and site layout. Physical noise mitigation measures must also include the following, as required to ensure a BPO approach to the management of noise: setting minimum setback distances from sensitive receivers (dwellings); acoustic screening of the control chamber construction area and shaft site construction area; and/or pre-drilling of pile locations.</li> <li>The identification of activities (e.g. sheet piling, tree chipping, out of hours concrete pours, night works) and locations that will require specific noise mitigation measures (including scheduling of works, location and orientation of works and/or the use of temporary acoustic barriers e.g. for tree chipping or night works), consultation undertaken with affected properties to develop the proposed noise management measures, any feedback received from those stakeholders along with the noise management measures that will be adopted based on this consultation.</li> <li>Identification of any activities particularly sensitive to vibration and noise in the vicinity of the proposed works (e.g. Stebbing Recording Centre located at 108 / 114 Jervois Road, Herne Bay) along with the details of consultation with the land owner(s) of the sites where the sensitive activities are located and any management measures that will be adopted, where required, based on this consultation.</li> <li>Details of noise and vibration monitoring to be undertaken and reporting requirements.</li> <li>Communication requirements with stakeholders including notice to owners and occupiers of adjacent buildings prior to construction activities commencing on the site.</li> <li>A complaint management system with contact numbers for key construction staff responsible for the implementation of the CNVMP and complaint investigation.</li> <li>The process for changing, updating, and certifying any changes to the CNVMP.</li> <li>Training procedures for construction personnel.</li> </ol> <p>The CNVMP must be implemented and maintained by the Consent holder throughout the construction period for the Project or relevant Project stage to manage potential adverse noise and vibration effects arising from</p>



	<p>limits in Condition 26, including the effect of mitigation specified in b. above;</p> <p>d. provide a set of noise limits that are activity-specific;</p> <p>e. describe the noise monitoring that will be undertaken to determine compliance with the activity-specific noise limits; and</p> <p>f. describe any additional noise mitigation measures that may be implemented to maintain compliance with activity-specific noise limits.</p> <p><u>Advice Note:</u></p> <p><i>It is accepted that the noise limits in Condition 26 will not be met at all times but that the Consent holder will adopt the BPO to achieve compliance.</i></p>											
30	An ASCNVMP must be submitted to Auckland Council no less than 7 working days prior to works on that stage commencing for certification that the ASCNVMP complies with the requirements of Conditions 28 and 29, as applicable.											
31	Construction activities must comply with the Guideline vibration limits set out in the German Industrial Standard DIN 4150-3 (1999) Structural Vibration – Part 3 Effects of Vibration on Structures (DIN 4150).											
32	<p>All tunnelling and construction works must be designed and undertaken to ensure that vibration from the Project does not exceed the following vibration limits in buildings (amenity values):</p> <table><tr><th>Receiver</th><th>Period</th><th>Peak Particular Velocity (PPV) mm/s</th></tr><tr><td rowspan="2">Occupied activity sensitive to noise</td><td>Night-time 10 pm to 7 am</td><td>0.3 mm/s</td></tr><tr><td>Day-time 7 am to 10 pm</td><td>2.0 mm/s</td></tr><tr><td>Other occupied buildings</td><td>At all times.</td><td>2.0 mm/s</td></tr></table> <p><u>Advice Note:</u></p> <p><i>Works generating vibration for three days or less between the hours of 7 am to 6 pm may exceed these limits subject to compliance with Condition 31 and provided that all occupied buildings within 50m of the extent of the works generating vibration are advised in writing no less than three days prior to the vibration-generating works commencing. The written advice must include details of the location of the works, the duration of the works, a phone number for questions and complaints and the name of the site manager.</i></p>	Receiver	Period	Peak Particular Velocity (PPV) mm/s	Occupied activity sensitive to noise	Night-time 10 pm to 7 am	0.3 mm/s	Day-time 7 am to 10 pm	2.0 mm/s	Other occupied buildings	At all times.	2.0 mm/s
Receiver	Period	Peak Particular Velocity (PPV) mm/s										
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	Day-time 7 am to 10 pm	2.0 mm/s										
Other occupied buildings	At all times.	2.0 mm/s										
33	<p>If measured or predicted vibration exceeds the limits set out in Condition 32, the Consent holder must consult with the occupants to:</p> <p>a. discuss the nature of the work and the anticipated days and hours when the exceedances are likely to occur;</p> <p>b. determine whether the exceedances could be timed or managed to reduce the effects on the receiver; and</p> <p>c. provide in writing, no less than 3 days before the vibration-generating works begin, details of the location of the works, the duration of the works, a phone number for questions and complaints, and the name of the liaison person (Condition 3).</p> <p>The Consent holder must maintain a record of the consultation and provide this to the Council upon request.</p> <p><u>Advice Note:</u></p> <p><i>Vibration amenity limits do not apply at any dwelling that is not occupied during the works. This allows high</i></p>											

	<i>vibration works to be scheduled when residents are not home, subject to compliance with Condition 31 and compliance with amenity controls at other nearby dwellings that are occupied.</i>
<b>Construction Lighting</b>	
34	Construction lighting must be minimised to the extent practicable and must meet the relevant permitted standards in Chapter E24 of the Auckland Unitary Plan.
<b>Cultural</b>	
35	Prior to the commencement of earthworks (or at any other times to be agreed with between the Consent holder and Mana Whenua representatives), the Consent holder must invite Mana Whenua representatives to provide cultural inductions to the workers involved in earthworks / topsoil stripping associated with this application, including the workers involved in the establishment of earthworks controls. A register of the cultural inductions undertaken must be collated by the Consent holder and provided to the Council and respective Mana Whenua representatives upon request.
36	<p>The Consent holder must provide a minimum of 10 days notice to representatives of Mana Whenua of the dates for any cultural inductions as required by condition 35.</p> <p><u>Advice Note:</u></p> <p><i>“Earthworks” includes both topsoil stripping and/or bulk earthworks</i></p>
37	<p>Provision must be made by the Consent holder for Mana Whenua representatives to undertake cultural monitoring, karakia, placement of tohu, and / or other such cultural ceremonies on the site, associated with the following milestones if they wish:</p> <ol style="list-style-type: none"> <li>Pre-start meeting.</li> <li>Prior to construction of earthworks control measures.</li> <li>Prior to commencement of bulk earthworks.</li> <li>Immediately prior to completion of bulk earthworks across the site.</li> <li>At other times as agreed between the Consent holder and Mana Whenua representatives.</li> </ol>
38	<p>The Consent holder must provide a minimum of 10 working days notice to representatives of Mana Whenua of the anticipated dates for the above milestones.</p> <p><u>Advice Note:</u></p> <p><i>The consent holder has advised that they will engage with Mana Whenua representatives on an on-going basis to agree on appropriate timing and staging of any additional cultural monitoring, karakia and/or other cultural ceremonies as guided by Mana Whenua. This may also include the placement of tohu or other items on the site as guided by Mana Whenua.</i></p>
<b>Earthworks</b>	
39	Regional earthworks consent LUC60415109 expires 10 years from the granting of the consent unless it has lapsed, been surrendered, or been cancelled at an earlier date pursuant to the RMA.
40	No earthworks can be undertaken between 01 May and 30 September in any year, without the submission of a ‘Request for winter works’ for approval by the Council. All requests must be renewed prior to the approval expiring and no works must occur until written approval has been received from the Council. All winter works will be re-assessed monthly or as required to ensure that adverse effects are not occurring in the receiving environment and approval may be revoked by Council upon written notice to the Consent holder.



41	<p>At least 10 working days prior to the commencement of any earthworks at the site authorised by this consent, the Consent holder must submit a final Erosion and Sediment Control Management Plan (<b>ESCP</b>) for certification by the Council. No earthworks activities can commence until the ESCP has been certified.</p> <p>The objective of the final ESCP is to set out the methods and techniques and management procedures and protocols for controlling the potential for erosion and sediment runoff as a consequence of earthworks. The final ESCP must be prepared by a suitably qualified and experienced practitioner in accordance with Auckland Council's Guideline Document 2016/005 Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region (<b>GD05</b>) and must contain sufficient detail to address the following matters:</p> <ol style="list-style-type: none"> <li>Specific erosion and sediment control works including the final location of super silt fencing, stabilised entranceway(s) and clean water diversion bunds.</li> <li>Specific location and design for a stabilised entranceway.</li> <li>Specific location and controls required for stockpiling management.</li> <li>Specific information on devices proposed for dewatering and associated management.</li> <li>Supporting calculations and design drawings.</li> <li>Catchment boundaries and contour information.</li> <li>Details of construction methods.</li> <li>Timing and duration of construction and operation of control works (in relation to the staging and sequencing of earthworks).</li> <li>Details relating to the management of exposed areas (e.g. grassing, mulching).</li> <li>Monitoring and maintenance requirements.</li> </ol> <p>Any subsequent amendments to the certified final ESCP and / or methodology must be provided to the Council at least 10 working days prior to the proposed amendment and certified prior to any such amendment being implemented.</p>
42	<p>All water discharged from water treatment plant during the earthworks operation must achieve a minimum of 100mm depth of clarity prior to discharge in accordance with GD05.</p>
43	<p>The operational effectiveness and efficiency of all erosion and sediment control measures specifically required by the final ESCP certified in accordance with Condition 41 must be maintained throughout the duration of earthworks activity, or until the site is permanently stabilised against erosion. A record of any maintenance work must be kept and be supplied to Council on request.</p>
44	<p>Erosion and sediment control measures must be constructed and maintained in general accordance with GD05 and any amendments to this document, except where a higher standard is detailed in the documents referred to in conditions above, in which case the higher standard will apply.</p>
45	<p>Earthworks must be managed to avoid deposition of earth, mud, dirt or other debris on any public road or footpath resulting from earthworks activity on the subject site. In the event that such deposition does occur, it must immediately be removed. In no instance must roads or footpaths be washed down with water without appropriate erosion and sediment control measures in place to prevent contamination of the stormwater drainage system, watercourses or receiving waters.</p> <p><u>Advice Note:</u></p> <p><i>In order to prevent sediment laden water entering waterways from the road, the following methods may be adopted to prevent or address discharges should they occur:</i></p> <ul style="list-style-type: none"> <li><i>Provision of a stabilised entry and exit(s) point for vehicles.</i></li> </ul>

	<ul style="list-style-type: none"> <li>• <i>Provision of wheel wash facilities.</i></li> <li>• <i>Ceasing of vehicle movement until materials are removed.</i></li> <li>• <i>Cleaning of road surfaces using street-sweepers.</i></li> <li>• <i>Silt and sediment traps.</i></li> <li>• <i>Catchpits or enviropods.</i></li> </ul> <p><i>In no circumstances should the washing of deposited materials into drains be advised or otherwise condoned.</i></p> <p><i>It is recommended that any potential measures are discussed with Council who may be able to provide further guidance on the most appropriate approach to take. Please contact Council on <a href="mailto:monitoring@aucklandcouncil.govt.nz">monitoring@aucklandcouncil.govt.nz</a> for more details. Alternatively, please refer to GD05</i></p>
46	<p>Earthworks must be progressively stabilised against erosion at all stages of the earthworks activities and shall be sequenced to minimise the discharge of sediment to surface water.</p> <p><u><i>Advice Note:</i></u></p> <p><i>Earthworks shall be progressively stabilised against erosion during all stages of the earthwork activity. Interim stabilisation measures may include:</i></p> <ul style="list-style-type: none"> <li>• <i>the use of waterproof covers, geotextiles, or mulching.</i></li> <li>• <i>top-soiling and grassing of otherwise bare areas of earth; and</i></li> <li>• <i>aggregate or vegetative cover that has obtained a density of more than 80% of a normal pasture sward.</i></li> </ul>
47	Beyond the boundary of the site, there must be no dust caused by discharges from the site, which in the opinion of the council, is noxious, offensive, or objectionable.
48	Immediately upon completion or abandonment of earthworks on the subject site, all areas of bare earth shall be permanently stabilised against erosion to the satisfaction of the Council.
<b>Temporary Construction Yards</b>	
49	Any temporary retaining wall required to form the construction areas for the Project must be timber post and board, unless otherwise approved by the Council. An alternative construction material may be used, provided that the alternative material will achieve similar or better landscape and amenity outcomes (and subject to the approval of the Council).
50	The consent holder must ensure that any graffiti applied to structures, buildings, or other surfaces within the temporary construction yards must be promptly and effectively removed. Graffiti removal must commence within 48 hours of its discovery.
<b>Unexpected Contamination</b>	
51	In the event of the accidental discovery of contamination during earthworks which has not been previously identified, including asbestos material, the consent holder must immediately cease the works in the vicinity of the contamination, notify the council, and engage a suitably qualified and experienced contaminated land practitioner to assess the situation (including possible sampling and revision of the ESCP) and decide on the best option for managing the material.
<b>Tree Management</b>	
52	The Consent holder must engage the services of a suitably qualified and experienced on-site supervisory arborist (the 'supervising arborist'), who must supervise and coordinate all works and activities within the root zone of protected trees. All works must be undertaken in accordance with the Arborist report titled

	<p>"Arboricultural Assessment of Effects of Extension of the Central Interceptor wastewater tunnel into Point Erin Park, resulting in the removal of reserve trees" (<b>the Arboricultural Report</b>) prepared by The Tree Consultancy Company, dated 25 January 2023.</p>
53	<p>Prior to any works commencing on site, the Consent holder must arrange a site meeting with the supervising arborist, council's monitoring officer, council's urban forest specialist, and the contractor who has overall responsibility for the works. The purpose of this meeting is to discuss conditions of consent. At the meeting, the responsible contractor must confirm the following to the satisfaction of the supervising arborist and the Council:</p> <ol style="list-style-type: none"> <li>Programming of works.</li> <li>Site access and transportation of materials.</li> <li>Temporary storage areas for materials.</li> <li>Silt and sediment controls.</li> <li>Excavations in the root zones of trees.</li> <li>When the supervising arborist is required to be present.</li> </ol>
54	<p>Tree protection must form a part of any site-specific hazard management and is to be included in daily toolbox meetings and all site inductions.</p>
55	<p>The Consent holder must provide details in the CMP (required by Condition 7) as to how the potential impacts of construction on trees and vegetation will be managed and minimised. The details must provide for:</p> <ol style="list-style-type: none"> <li>the identification of trees to be protected, pruned, removed, or transplanted and procedures for marking these out on site;</li> <li>procedures for identifying and protecting trees to be retained where works occur in the dripline or rootzone of such trees as identified by a suitably qualified and experienced arborist;</li> <li>temporary tree protection fencing which must remain in place for the duration of the works for the Project or relevant Project stage; and</li> <li>procedures for undertaking the works under the supervision of a suitably qualified and experienced arborist including works within the dripline or rootzone of trees and the installation of the temporary fencing.</li> </ol>
56	<p>All works must be undertaken in accordance with the Tree Protection Methodology set out in Appendix A of the Arboricultural Report. All tree removal and pruning must be undertaken by a suitably qualified and experienced arborist, with all work carried out in accordance with currently accepted arboricultural techniques (e.g., Arb Australia and NZ Arb Minimum Industry Standard MIS308). Any amendments to the tree protection methodology must be certified by the supervisory arborist.</p>
57	<p>No material can be stored, emptied, or disposed of in or around the root zone of any of the trees unless otherwise authorized by the supervising arborist. Any material that is to be stored or temporarily placed in or around the root zone of any of the trees must be stored carefully on an existing or temporary hard surface such as asphalt or plywood sheets, respectively.</p>
58	<p>If, during the course of the works, machinery or vehicle access/manoeuvring is required in or around the permeable / exposed root zone of any of the trees, then those areas must be covered with a protective overlay sufficient to protect the ground from being muddied, compacted, churned up, or otherwise disturbed (for example, 'Track Mats,' or a layer of mulch or sand/SAP7 overlaid if necessary, with a raft of wired planks, plywood, or similar) (see detail TP-04 of the Arboricultural Report).</p>
59	<p>If machinery / vehicles are to be operated or stored within the root zone area on an existing or temporary</p>

	load-bearing surface, then the machinery/vehicle must not cause any detrimental effect to the tree(s) through compaction, physical damage, spillage of lubricants and fuels, or discharge of waste emissions.
60	All excavations that are to take place in or around the root zone of any of the trees must be done in conjunction with the supervising arborist, through a careful combination of hand digging and machine excavation, and to the satisfaction of the supervising arborist. Where the supervising arborist deems it likely that roots will be encountered in the areas, then these areas must first be explored using hand tools only to check for the presence of such roots.
61	Where concrete is to be poured into excavations containing exposed roots, then all exposed roots must first be covered in a layer of polythene to prevent the concrete from contacting the exposed root (see detail TP-06 of the Arboricultural Report).
62	All tree pruning must be confirmed to the satisfaction of the works arborist after liaison with the contractors represented around the extent of clearance required and practical options that may be available to retain large limbs. All pruning must be undertaken by a suitably experienced arboricultural contractor, with the work conforming to best industry practice, such as Arb Australia and NZ Arb Minimum Industry Standard MIS308.
63	Every effort must be made to avoid root severance from all trees by exploring on-site alternatives to construction/engineering, i.e., adjusting finished levels and basecourse depths, etc. Where root severance is unavoidable, the severance of any root must be carried out by the supervising arborist, who must select the most appropriate implement for the task. Roots must be cut cleanly to ensure that the traumatic cambium is able to initiate new root growth as effectively as possible, and the exposed cut faces should be covered over immediately with moist soil.
64	Where roots to be retained are encountered, and there is a need for these roots to remain exposed in order that works are not impeded, then those roots must be covered with a suitable protective material (such as moist Hessian or a wool mulch) to protect them from desiccation and/or mechanical damage until such a time as the area around the root can be backfilled with the original material. The wrapping or covering of any roots must be undertaken by the supervising arborist.
65	Within 30 working days following completion of works on the site, the Consent holder must supply a completion report to Council. The report must be prepared by a suitably qualified and experienced arborist. The completion report must confirm (or otherwise) that the works have been undertaken in accordance with the tree protection measures contained within the Arboricultural Report referenced in Condition 1 and subject to the specific tree protection measures identified in accordance with Conditions 54 to 64. It must also address any effects of the works on the subject trees and detail any remedial measures that were and / or may be necessary.

#### Archaeology and Heritage

66	<p>The Consent holder must engage a suitably qualified and experienced archaeologist to give advice on work undertaken on the site in Point Erin Park including monitoring preliminary earthworks. The names and qualifications of this specialist must be provided to the Council prior to earthworks commencing.</p> <p><u>Advice Note:</u></p> <p><i>The Heritage New Zealand Pouhere Taonga Act 2014 (hereafter referred to as the Act) provides for the identification, protection, preservation and conservation of the historic and cultural heritage of New Zealand. All archaeological sites are protected by the provisions of the Act (section 42). It is unlawful to modify, damage or destroy an archaeological site without prior authority from Heritage New Zealand Pouhere Taonga. An Authority is required whether or not the land on which an archaeological site may be present is designated, a resource or building consent has been granted, or the activity is permitted under Unitary, District or Regional Plans.</i></p> <p><i>It is the responsibility of the Consent holder to consult with Heritage New Zealand Pouhere Taonga about the</i></p>
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	<i>requirements of the Act and to obtain the necessary authorities under the Act should these become necessary, as a result of any activity associated with the consented proposals. For information please contact the Heritage New Zealand Pouhere Taonga Archaeologist - 09 307 0413 / archaeologistMN@historic.org.nz.</i>
67	Should the consented works result in the identification of any previously unknown sensitive materials (i.e., archaeological sites), the requirements of land disturbance – Regional and District Accidental Discovery rules set out in the Auckland Unitary Plan (Operative in Part) must be complied with.
68	<p>The following protocol will apply should any post-1900 subsurface features associated with the John Campbell estate, the public park (post-1911 until the 1950s), or the temporary accommodation for the Auckland Harbour Bridge construction workers be exposed during works associated with this consent:</p> <ol style="list-style-type: none"> <li>The consented works will be halted while an archaeologist is called in to assess the features.</li> <li>The features will be recorded and analysed in accordance with current archaeological practice.</li> <li>A report on any features exposed will be provided by the project archaeologist to Auckland Council's Heritage Unit for inclusion in the Auckland Council Cultural Heritage Inventory.</li> </ol>
<b>Stormwater Diversion and Discharge Conditions – DIS60415110 (condition 69)</b>	
69	This consent expires 10 years from the granting of the consent unless it has lapsed, been surrendered, or been cancelled at an earlier date pursuant to the RMA.
<b>Groundwater Permit Conditions – WAT60415460 (conditions 70 to 104)</b>	
70	This consent expires 35 years from the granting of the consent unless it has lapsed, been surrendered, or been cancelled at an earlier date pursuant to the RMA.
71	The Consent holder must ensure that all excavation, dewatering systems, retaining structures and associated works for the construction of the shafts, tunnels, underground structures and associated works, including all temporary and permanent works, must be designed, constructed and maintained so as to avoid, subject to Conditions 79 to 87, any damage to buildings, structures and services (including road infrastructure assets such as footpaths, kerbs, catch-pits, pavements and street furniture).
72	The Consent holder must ensure that all backfilling of temporary shafts is designed and constructed to the required engineering standard, so as to avoid any damage to buildings, structures and services
73	The Consent holder must, at least 10 working days prior to the Commencement of Dewatering, advise the Council, in writing, of the date of the proposed commencement of this work.
74	The Consent holder must, at least 10 working days following Completion of Dewatering and excavation, advise the Council, in writing, of the date of completion

75	<p>Under section 128 of the RMA the conditions of this consent may be reviewed by the Council at the Consent holder's cost within 6 months after Completion of Dewatering in order to:</p> <ol style="list-style-type: none"> <li>a. deal with any adverse effects on the environment which may arise or potentially arise from the exercise of this consent and which it is appropriate to deal with at a later stage; and / or</li> <li>b. vary the monitoring and reporting requirements, and performance standards, in order to take account of information, including the results of previous monitoring and changed environmental knowledge on: <ul style="list-style-type: none"> <li>• ground conditions;</li> <li>• aquifer parameters;</li> <li>• groundwater levels; and</li> <li>• ground surface movement.</li> </ul> </li> </ol>
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## Groundwater and Settlement Monitoring and Contingency Plan

76	<p>The Consent holder must, before Commencement of Dewatering, prepare a Groundwater and Settlement Monitoring and Contingency Plan (<b>GSMCP</b>) addressing groundwater and settlement monitoring for each of the relevant Project stages. This includes a draft and final GSMCP as required by Condition 77.</p> <p>The GSMCP must demonstrate how the conditions of this consent will be implemented and must include the following:</p> <ol style="list-style-type: none"> <li>Details of the groundwater monitoring programme.</li> <li>Details of the ground surface settlement and building movement monitoring required.</li> <li>Details of the building risk assessment process and building condition surveys process.</li> <li>A location plan of settlement and building deformation marks, retaining wall deflection markers and the location of existing and proposed groundwater monitoring bores.</li> <li>Details of the shaft and control chamber retaining wall monitoring programme.</li> <li>The groundwater, deformation and settlement Alert and Alarm Levels (Trigger Levels) to be utilised for early warning of settlement with the potential to cause damage to buildings and services and details of the processes used to establish, and if necessary, to review these triggers.</li> <li>Details on the procedures for notification of the Council in the event that Trigger Levels are exceeded.</li> <li>Options for additional investigations and analyses to determine the potential for groundwater effects or settlement and for damage to structures, including additional groundwater or settlement monitoring and building condition surveys.</li> <li>Details of the contingency measures to be implemented in the event of Trigger Levels being exceeded, including details on the practicable methodologies to avoid, remedy, or mitigate surface settlements with the potential to cause damage to buildings.</li> </ol> <p><i>Advice Note:</i></p> <p><i>'Commencement of Dewatering' means commencement of bulk excavation and/or commencing taking any groundwater from a chamber/shaft or tunnel excavation.</i></p>
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77	<p>The Consent holder must submit to the Auckland Council for certification:</p> <ol style="list-style-type: none"> <li>A draft GSMCP including aspects dealing with pre-construction monitoring and locations of monitoring marks, including the pre-construction monitoring required under the conditions of this consent. This must be provided at least 6 months prior to the Commencement of Dewatering for chamber excavations/shaft sinking or tunnelling of any Project stage.</li> <li>The final GSMCP. This must be provided at least 20 working days prior to Commencement of Dewatering for chamber excavations/shaft sinking or tunnelling of any Project stage.</li> </ol>
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78	<p>The Consent holder must comply with the GSMCP at all times. The Consent holder may amend the GSMCP from time to time, as necessary for the Project or any Project stage. Any amendments to the GSMCP must be certified by Auckland Council prior to any such amendment being implemented.</p>
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## Risk Assessment

79	<p>The Consent holder must undertake a risk assessment to identify existing buildings and structures at risk of damage due to settlement caused by shaft sinking and chamber excavations, or tunnelling activities. The risk assessment process must be set out in the GSMCP required by Condition 76 and must be based upon the final tunnel alignment and construction methodology of the tunnel and chamber/shaft excavations, the groundwater and settlement monitoring required under this consent, and groundwater and settlement</p>
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	<p>modelling completed using this data. The risk assessment must include identification of the:</p> <ol style="list-style-type: none"> <li>zone of influence where differential settlements of greater (steeper) than 1:1,000 are predicted due to chamber excavations/shaft sinking or tunnelling activities;</li> <li>building types in this zone, and their susceptibility to settlement induced damage; and</li> <li>buildings and structures at risk of damage due to chamber excavations/shaft sinking or tunnelling activities.</li> </ol>
80	<p>A schedule of the addresses of existing buildings and structures identified as being potentially at risk of damage through the risk assessment process defined in Condition 79 must be included in the GSMCP required by Condition 76.</p> <p><u>Advice Note:</u></p> <p><i>This requirement does not apply to the Consent holder's infrastructure or where written approval has been obtained from the relevant network utility operator.</i></p>
<b>Pre-Construction Condition Survey</b>	
81	<p>The Consent holder must consult with owners of existing buildings and structures identified through the building risk assessment process defined in Condition 79, and subject to the owner's approval on terms acceptable to the Consent holder, undertake a detailed pre-construction condition survey of these structures to confirm their existing condition and enable the sensitivity of the existing buildings and structures to any groundwater and ground settlement changes to be accurately determined. The survey must be completed at least three months prior to the Commencement of Dewatering of any Project stage involving shaft sinking and chamber excavation, or tunnelling. The intent of the survey is to assist in enabling the magnitude of allowable effects from changes in groundwater pressure and ground settlement movements to be reasonably determined.</p> <p>The survey must include but not necessarily be limited to the following:</p> <ol style="list-style-type: none"> <li>Major features of the buildings and site developments, including location, type, construction, age and existing condition.</li> <li>Type and capacity of foundations.</li> <li>Existing levels of aesthetic damage.</li> <li>Existing level of structural distress or damage.</li> <li>Assessment of structural ductility.</li> <li>Susceptibility of structure to movement of foundations, including consideration of the local geological conditions.</li> </ol> <p><u>Advice Note:</u></p> <p><i>'Commencement of Dewatering' means commencement of bulk excavation and/or commencing taking any groundwater from a shaft or tunnel excavation (after construction of the pile walls (if required) and/or dewatering prior to bulk excavation).</i></p>
<b>Post-Construction Condition Surveys</b>	
82	<p>Unless otherwise agreed in writing with the building owner that such survey is not required, the Consent holder must (subject to the owner(s) approval on terms acceptable to the Consent holder), within six months of the Completion of Dewatering of any Project stage involving shaft sinking, chamber excavation or tunnelling, undertake a post construction survey of buildings identified through the building risk assessment process defined in Condition 79.</p> <p>The Consent holder may, if they are able to provide evidence to show the deformation was not caused by</p>

	<p>activities related to this consent, seek written approval from Auckland Council to waive this condition. If any building damage is identified following completion of the pre-construction survey, the survey must determine the likely cause of damage.</p> <p><u>Advice Note:</u></p> <p><i>'Completion of Dewatering' means when all the permanent chamber and shaft lining, base slab and walls are complete and the tunnel lining is complete, and effectively no further groundwater is being taken for the construction of the chamber/shaft/tunnel, in accordance with the design.</i></p>
<b>Additional Condition Surveys</b>	
83	The Consent holder must, at the direction of Auckland Council, and subject to the owner's approval on terms acceptable to the Consent holder, undertake an additional survey on any existing building or structure surveyed in accordance with Condition 81, for the purpose of checking for damage and for following up on a report of damage to that building. The requirement for any such survey will cease six months after the Completion of Dewatering of any Project stage involving shaft sinking, chamber excavation or tunnelling.
84	The building condition surveys required by the conditions of this consent must be undertaken by an independent and suitably qualified person. When requested in writing by the Council, the Consent holder must provide the contact details and qualifications of this person within 5 workings days
85	The Consent holder must ensure that a copy of the pre, post-construction and any additional building survey reports are provided to the respective property owner(s). A copy is also to be made available to Auckland Council upon request (unless the property owner(s) has instructed the Consent holder not to do so).
86	The building condition surveys required by this consent must be undertaken by an independent and suitably qualified and experienced practitioner. When requested in writing by Auckland Council, the Consent holder provide the contact details and qualifications of this person within five workings days.
<b>Repair of Damage</b>	
87	<p>If the exercise of this consent causes any unforeseen damage to buildings, structures or services not assessed under Conditions 81 and/or 833, the Consent holder must notify Auckland Council as soon as practicable, and provide in writing to the Auckland Council a methodology for repair of the damage caused that has been certified by a Chartered Professional Engineer, and must urgently undertake such repairs in accordance with the certified methodology, at its cost, unless written approval for this damage is provided from the owners.</p> <p><u>Advice Note:</u></p> <p><i>Unforeseen damage - means damage to buildings and structures that has occurred outside the area identified as the zone of influence under Condition 79 or to buildings or structures that are located within the zone of influence but were not considered to be at risk at the time of the approval of the GSMCP.</i></p>
<b>Groundwater Monitoring</b>	
88	The Consent holder must install and maintain groundwater monitoring boreholes at the locations described in the GSMCP for the period required by Conditions 90, 92 and 94 or as otherwise set out in the GSCMP. Should any of the monitoring bores be damaged and become in-operable or unsuitable for monitoring, then the Consent holder must contact the Council within three working days and a new monitoring bore must be installed at a nearby location in consultation with, and to the satisfaction of, the Council.
89	The Consent holder must monitor groundwater levels in the groundwater monitoring boreholes and keep records of the water level measurement and corresponding date. All water level data must be recorded to an

	accuracy of at least $\pm 5\text{mm}$ . These records must be compiled and submitted to the Council at 6 monthly intervals.
90	The Consent holder must monitor groundwater levels monthly in boreholes identified in the GSMCP and keep records for a period of at least 6 months before the Commencement of Dewatering of any Project stage involving shaft sinking or tunnelling. The variability in groundwater levels over this period will be utilised to establish the seasonal groundwater level variability. The Consent holder must monitor groundwater levels at regular intervals in all proposed monitoring boreholes during the monitored period (three readings indicating steady state) before the Commencement of Dewatering of any Project stage involving shaft sinking or dewatering.
91	Prior to the Commencement of Dewatering of any Project stage involving shaft sinking or tunnelling, the Consent holder must assess the potential groundwater effects resulting from the exercise of this consent. The output of this assessment must be used to define the expected groundwater level at each borehole and to establish groundwater Trigger Levels for each borehole that minimise the potential for damage to existing buildings or structures. The process for establishing groundwater Trigger Levels must be set out in the GSMCP and must be based upon the final tunnel alignment and construction methodology, and any groundwater monitoring required under this consent, and must be based upon groundwater modelling completed using this data. A factor of natural seasonal variability must be allowed for in this review based on the survey completed under Condition 92.
92	From Commencement of Dewatering of any Project stage involving shaft sinking or tunnelling, the Consent holder must monitor groundwater levels in each borehole at a minimum of monthly intervals and records must be kept of each monitoring date, the corresponding water level in each borehole and the corresponding depth of all excavations or as otherwise set out in the GSCMP. In addition to the above, all boreholes located within 100m of the shaft construction site or within 100m of the tunnel excavation face must be monitored for groundwater level at least once in any period of seven consecutive days or as otherwise set out in the GSCMP. These records must be compiled and submitted to the Council at 6 monthly intervals.
93	All monitoring data obtained pursuant to Condition 92 must be compared to the predicted groundwater levels for each borehole. Where Trigger Levels are exceeded the actions as set out in the GSMCP must be undertaken and the Council must be notified within three working days, advising of the trigger exceedance, the risk of settlement causing damage to buildings and details of the actions taken.
94	<p>The Consent holder must continue to monitor groundwater levels in each borehole at monthly intervals for a period of 12 months following Completion of Dewatering of any Project stage involving shaft sinking or tunnelling, or for a lesser period if groundwater levels in any particular borehole show either:</p> <ol style="list-style-type: none"> <li>recovery of the groundwater level to within 2m of the pre-construction groundwater level and is above trigger levels; or</li> <li>a trend of increasing groundwater level in at least three consecutive monthly measurements and is above trigger levels, in which case monitoring at that borehole may cease.</li> </ol> <p>After 12 months following the Completion of Dewatering of any Project stage involving shaft sinking or tunnelling, monitoring of groundwater levels must continue at the direction of the Council if groundwater levels are not recovering from construction effects and there is a risk of adverse effects on neighbouring buildings or properties.</p>
<b>Settlement and Deflection Monitoring</b>	
95	<p>The Consent holder must establish and maintain a Settlement Monitoring Network of ground and building settlement monitoring and retaining wall marks and inclinometers to detect any deformation (vertical and/or horizontal movements) at the locations described in the GSMCP and for the period required by the conditions of this consent.</p> <ol style="list-style-type: none"> <li>The locations of the monitoring marks must be identified on a plan within the GSMCP, as required under</li> </ol>

	<p>Condition 76 (note: this must reflect the draft monitoring plans provided as Appendix D to the Addendum Report – Assessment of Groundwater and Settlement Effects referenced in Condition 1).</p> <p>b. The locations and number of monitoring marks must be sufficient to provide a reliable basis for assessing, monitoring and responding to settlement risk during chamber/shaft and tunnel construction work, and for confirming compliance with the limits set out in the GSMCP.</p>
96	In the event of any of the monitoring marks required under Condition 95 being destroyed or becoming inoperable, the Consent holder must, unless otherwise agreed in writing by the Council, replace the monitoring marks with new monitoring marks.
97	The Consent holder must survey and record the elevation of each monitoring mark and record the corresponding date. Monitoring marks must be surveyed at least three times over a 12-month period prior to commencement of any Project stage involving shaft sinking or tunnelling to establish seasonal variability, and the minimum level of these baseline surveys must be used to establish the pre-construction reference ground level. All surveys are to be completed to an accuracy of at least $\pm 2\text{mm}$ for level and $\pm 5\text{mm}$ for plan position, or as otherwise achieved by best practice precise levelling.
98	The Consent holder must survey and record the readings of each inclinometer as required in Condition 95 at an average of each 2m depth of shaft excavation, and at a minimum frequency of fortnightly intervals from the Commencement of Dewatering of any Project stage involving shaft sinking for a period of one month after the Completion of Excavation, then monthly until the Completion of Dewatering for any Project stage involving shaft sinking, or as otherwise set out in the GSCMP. At least two baseline surveys must be completed by the Consent holder before Commencement of Dewatering.
99	<p>Prior to the Commencement of Dewatering of any Project stage involving chamber/shaft sinking or tunnelling, the Consent holder must assess the potential settlement effects resulting from the exercise of this consent. The output of this assessment must be used to define the expected settlement levels and to establish settlement Trigger Levels (Alert Levels and Alarm Levels) that minimise the potential for damage to existing buildings or structures. The process for establishing settlement Trigger Levels must be set out in the GSMCP and must be based upon the final tunnel alignment and construction methodology, any groundwater, deformation or settlement monitoring required under this consent, and groundwater and settlement modelling completed using this data. A factor of natural seasonal variability must be allowed for in this review.</p> <p><u>Advice Note:</u></p> <p><i>'Alert Level' is the Differential and Total Settlement Limit set at a threshold less than the Alarm Level, at which the Consent holder must implement further investigations and analyses as described in the GSMCP to determine the cause of settlement and the likelihood of further settlement.</i></p> <p><i>'Alarm Level' is the Differential and Total Settlement Limit set in Condition 102, or which has the potential to cause damage to buildings, structures and services, at which the Consent holder must immediately stop dewatering the site and cease any activity which has the potential to cause deformation to any building or structure or adopt the alternative contingency measures approved by the Council.</i></p>
100	During construction in any Project stage involving shaft sinking or tunnelling, the Consent holder must survey the settlement monitoring network described in Condition 95 at maximum six monthly intervals and keep records of each date and the corresponding ground surface and building level. In addition to the above, all monitoring marks located within 50m of the excavated tunnel and within 100m of the tunnel excavation face must be monitored at least once every month, monitoring marks located within 100m of an excavated shaft must be monitored at least once every week, or as otherwise set out in the GSCMP. These records must be compiled and submitted to the Council at six monthly intervals.
101	The Consent holder must compare all settlement monitoring data obtained during shaft sinking and tunnelling construction work to the pre-construction minimum levels in accordance with the GSMCP. Where Trigger Levels are exceeded the appropriate actions as set out in the GSMCP must be undertaken and the Council must be notified within three working days, advising of the trigger exceedance, the risk of settlement causing

	damage to buildings, and details of the actions taken
102	<p>The Consent holder must ensure that the exercise of this consent does not cause building or ground settlement greater than the Alarm Level thresholds specified below or as otherwise identified in accordance with Condition 99 and set out in the approved GSMCP.</p> <ol style="list-style-type: none"> <li>Greater (i.e. steeper) than 1:1,000 differential settlement (the Differential Settlement Alarm Level) between any two adjacent settlement monitoring marks required under this consent.</li> <li>Greater than 50mm total settlement (the Total Settlement Alarm Level) at any settlement monitoring mark required under this consent.</li> </ol>
103	<p>The Consent holder must continue to monitor the Monitoring Stations at monthly intervals for a total period of 12 months after Completion of Dewatering of any Project stage involving shaft sinking or tunnelling, or for a shorter period if certified by the Council. At 12 months following the Completion of Dewatering of any Project stage involving shaft sinking or tunnelling, monitoring of ground and settlement marks must continue at the direction of the Council if monitoring marks have breached trigger levels and there is risk of adverse effects.</p>
104	<p>The Council must be advised in writing within 10 working days of when excavation and dewatering has been completed.</p> <p><u>Advice Note:</u></p> <p><i>The Consent holder is advised that the discharge of pumped groundwater to a stormwater system or waterbody will need to comply with any other regulations, bylaws or discharge rules that may apply.</i></p>
<b>Monitoring Charges - All Consents</b>	
105	<p>The consent holder must pay the Council an initial consent compliance monitoring charge of \$1,044 (inclusive of GST), plus any further monitoring charge or charges to recover the actual and reasonable costs that have been incurred to ensure compliance with the conditions attached to this consent.</p> <p><u>Advice Note:</u></p> <p><i>The initial monitoring deposit is to cover the cost of inspecting the site, carrying out tests, reviewing conditions, updating files, etc., all being work to ensure compliance with the resource consent. In order to recover actual and reasonable costs, monitoring of conditions, in excess of those covered by the deposit, must be charged at the relevant hourly rate applicable at the time. The consent holder will be advised of the further monitoring charge. Only after all conditions of the resource consent have been met, will the council issue a letter confirming compliance on request of the consent holder.</i></p>

## C. Park reinstatement and permanent assets

Land Use Consent Conditions – LUC60415109 (conditions 106 to 112)	
Permanent buildings and structures	
106	<p>At least 3 months prior to their construction, the Consent holder must provide design plans and information which specifies the design details, location, and materials of the permanent above-ground wastewater infrastructure to remain at the site, including:</p> <ol style="list-style-type: none"> <li>the plant room;</li> <li>the air vent;</li> <li>all permanent retaining walls; and</li> <li>Any lid structures and chamber covers.</li> </ol>

	<p>The design for the buildings / aboveground structures must take into account the following matters:</p> <ol style="list-style-type: none"> <li>The requirement to meet the AU(OP) permitted activity limits for operational noise (Condition 113).</li> <li>The extent to which the buildings / structures minimise potential adverse effects, and maintain and enhance the amenity of the surroundings (including neighbouring properties) including through: <ul style="list-style-type: none"> <li>the use of building materials which minimise the potential for graffiti and vandalism.</li> <li>ensuring buildings/structures are visually integrated into, and respond to, the immediate surrounding environment through use of appropriate colours, textures, design and modulation of buildings/structures;</li> <li>minimising the visual clutter of surface elements;</li> <li>the application of Crime Prevention Through Environmental Design principles in the design of buildings/structures; and</li> <li>the use of planting to screen and/or visually anchor the plant room building and enhance amenity values.</li> </ul> </li> </ol> <p>The design plans and information for permanent buildings and structures may be provided separately or may form part of the Park Restoration and Landscape Plan required by Condition 110 below.</p>
<b>Mitigation Planting</b>	
107	<p>The Consent holder must provide planting to replace and mitigate the removal of trees within Point Erin Park. This must comprise the planting of a minimum of 38 exotic trees or 49 native trees (native trees must be preferentially used wherever practicable). As many of these trees as practicable and acceptable to the landowner (Auckland Council) must be planted within Point Erin Park and comprise a component of the Park Restoration and Landscape Plan required by Condition 110 below.</p> <p><u>Advice Note:</u></p> <p><i>Where these trees are to be planted within Auckland Council Parks, then the location and species to be planted must be subject to the agreement of Council as landowner (Parks and Community Facilities).</i></p>
108	<p>Should the two large pōhutukawa trees in the south-western corner of the park be removed for the project, and subject to obtaining approval from Auckland Council Parks, at least two of the trees referred to in Condition 106 must be native specimen trees, at least 160L in size. The specimen trees are to be located as close as practicable to the two removed pōhutukawa trees in the south-western corner of the park, taking into account:</p> <ol style="list-style-type: none"> <li>prioritisation of native specimen trees wherever practicable;</li> <li>the long-term viability of the trees (e.g., suitable soil/proximity to the coast/potential disease such as myrtle rust);</li> <li>the extent to which the replacement trees will mitigate the visual and amenity effects of the removal of the pōhutukawa trees;</li> <li>provision for informal recreation and walkways through the south-western corner of the park;</li> <li>the need to avoid future conflicts between rootzones and infrastructure; and</li> <li>feedback received from mana whenua and Auckland Council Parks.</li> </ol> <p>The species and location selected must be provided to the Council setting out the reasons for the species and location selection.</p> <p>If Auckland Council Parks does not agree to the replanting of two large specimen trees in southwestern corner of the park, the Consent holder must provide a record of Auckland Council Parks decision to the Council. The consent holder will still be obliged to meet the replanting requirements in condition 107.</p>

## Park Restoration and Landscape Plan

109	The Consent holder must prepare a photographic record of the pre-construction condition of the park and any park assets within the footprint and immediate vicinity of the construction areas. This record must be provided to the Council at least 1 month prior to construction in Point Erin Park commencing.
110	<p>At least 3 months prior to the completion of the Project, the Consent holder must prepare and submit to Auckland Council for certification a Park Restoration and Landscape Plan (<b>PRLP</b>) for the site. The objective of the PRLP is to provide details on the reinstatement of Point Erin Park to restore and enhance the landscape, amenity and recreational values of the park. In particular, the PRLP must seek to achieve the following outcomes:</p> <ol style="list-style-type: none"> <li>Visual integration of above-ground permanent infrastructure.</li> <li>Reinstatement of open space for informal recreation.</li> <li>Mitigation for the visual and amenity effects of the loss of two large pōhutukawa trees (if removed).</li> <li>Retaining the open space characteristics and informal use of the central area of the park, and the achievement of a balance of open space and trees / vegetation within the southwest corner of the park.</li> <li>The prioritisation of native specimen trees within the reinstatement design, including pōhutukawa and puriri that are already present within the park.</li> </ol>
111	<p>The PRLP is to be prepared by a suitably qualified and experienced landscape architect in consultation with the landowner (Auckland Council) and mana whenua and must include the following:</p> <ol style="list-style-type: none"> <li>Removal of construction yards, equipment, temporary retaining walls, and construction access not required for operation and maintenance access.</li> <li>Details of the restoration of the open space to at least the same standard as that recorded as per Condition 109.</li> <li>Replacement or reinstatement of any park assets that were affected by the Project, or any new proposed assets, including, but not limited to: <ul style="list-style-type: none"> <li>grassed areas;</li> <li>footpaths; and</li> <li>park furniture</li> </ul> </li> <li>Details of proposed contouring, landscaping and planting. This is to include: <ul style="list-style-type: none"> <li>finished contours / levels;</li> <li>details on the replacement of trees removed as per the mitigation planting required by Condition 107;</li> <li>any additional planting (including proposed species, location, and planting timetable). This must include details of replacement planting in the southwestern corner of the park to mitigate tree removal in this area and to assist in visually integrating the plant room and permanent retaining walls, as well as any planting proposed to visually integrate the air vent; and</li> <li>implementation and maintenance programmes (including a landscape planting management and maintenance plan).</li> </ul> </li> <li>Details of the treatment of permanent retaining walls, including wall construction, materials and design, planting, and any health and safety requirements (e.g. fencing).</li> <li>Details of all hard landscaping materials, dimensions and specifications;</li> </ol>



	<p>g. Any details of proposed way finding and interpretation signage within and adjacent to the park.</p> <p>h. Record of consultation with the landowner (Auckland Council) and Mana Whenua.</p> <p>In preparing the PRLP, consideration must be given to opportunities to enhance Point Erin Park including its existing recreation, landscape and amenity values (e.g. additional or alternative walkways, seating, appropriate recognition of cultural values, etc), and planting and landform modification around the plant room, ventilation arrangement and permanent retaining walls to assist in the visual integration of any permanent above ground infrastructure.</p>
112	<p>The consent holder must implement the final PRLP, as certified by Council under condition 110. The PRLP must set out a timeframe for implementation, which must be agreed with the Council, in consultation with the Parks Planning Team Leader. This must be as soon as reasonably practicable, and unless otherwise confirmed through the PLRP, must be within 12 months of practical completion of construction works. The consent holder must carry out a 5-year maintenance programme following implementation of the PRLP, unless a shorter time period is agreed with the Council, in consultation with Parks Planning Team Leader.</p>

## D. Operational phase consent conditions

Land Use Consent Conditions – LUC60415109 (conditions 113 to 116)										
Noise										
113	<p>The noise arising from the operation of the plant room must not exceed the following noise limits when measured within the notional boundary of any site zoned as follows:</p> <table border="1"> <tr> <th colspan="2">Residential</th></tr> <tr> <th>Time</th><th>Noise Limit</th></tr> <tr> <td>Monday to Saturday 0700-2200 hours</td><td rowspan="2">50 dB LAeq</td></tr> <tr> <td>Sunday 0900-1800 hours</td></tr> <tr> <td>All other times</td><td>40 dBLAeq 75 dB LAFmax</td></tr> </table> <p><u>Advice Notes:</u></p> <p><i>These noise limits relate to noise generated by the normal operation of permanent works associated with the Project and do not apply to short term maintenance activities.</i></p> <p><i>Noise levels must be measured and assessed in accordance with New Zealand Standards NZS6801:2008 Acoustics - Measurement of Environmental Sound and NZS6801:2008 Acoustics - Environmental Noise.</i></p>	Residential		Time	Noise Limit	Monday to Saturday 0700-2200 hours	50 dB LAeq	Sunday 0900-1800 hours	All other times	40 dBLAeq 75 dB LAFmax
Residential										
Time	Noise Limit									
Monday to Saturday 0700-2200 hours	50 dB LAeq									
Sunday 0900-1800 hours										
All other times	40 dBLAeq 75 dB LAFmax									
Traffic										
114	<p>There must be no left turn movements for trucks entering the permanent vehicle crossing serving the control chamber and plant room in the southwestern corner of Point Erin Park.</p>									
115	<p>There must be no left turn movements for trucks exiting the southwestern control chamber and plant room facilities via the permanent Curran Street vehicle crossing.</p>									
116	<p>Trucks cannot exit the permanent vehicle crossing onto Curran Street without traffic supervisors directing</p>									

	them to leave the site when it is safe to do so. This must be done for each truck exiting via this crossing at the expense of the consent holder.
<b>Air Discharge Permit Conditions – DIS60415116 (conditions 117 to 126)</b>	
117	This consent expires 35 years from the granting of the consent unless it has lapsed, been surrendered, or been cancelled at an earlier date pursuant to the RMA.
118	The Consent holder must, at all times operate, monitor and maintain the Point Erin Tunnel so that odour discharges authorised by this consent are maintained at the minimum practicable level.
119	<p>Within any private property there must be no odour caused by discharges from the normal operation of the Point Erin Tunnel which, in the opinion of an enforcement officer, is noxious, offensive or objectionable.</p> <p><u>Advice Note:</u></p> <p><i>The storage and transfer of wastewater within the Point Erin Tunnel as well as scheduled maintenance activities, and any discharges into air arising from this, are considered part of the normal operation of the tunnel.</i></p>
120	<p>The air vent must be designed to disperse odour and minimise effects. This must include:</p> <ul style="list-style-type: none"> <li>a. a stack height of at least 3m; and</li> <li>b. a uni-directional discharge vent to allow the discharge when required but prevent inlet of air and preferentially draw inlet air through the control chamber.</li> </ul> <p>In the event that odour discharges are found to result in noxious, dangerous, offensive or objectionable, the Council may require the Consent holder increase the vertical stack height to enable greater dispersion.</p>
121	Except during maintenance, cleaning, or other inspections all access hatches must be adequately covered to ensure fugitive discharges to atmosphere are kept to a minimum practicable level
122	<p>All odour complaints that are received arising from the operation of the Point Erin Tunnel must be recorded. The complaint details must include:</p> <ul style="list-style-type: none"> <li>a. the date, time, location and nature of the complaint;</li> <li>b. the name, telephone number and address of the complainant, unless the complainant elects not to supply these details;</li> <li>c. weather conditions, including approximate wind speed and direction, at time of the complaint; and</li> <li>d. any remedial actions undertaken.</li> </ul> <p>Details of any complaints received (as recorded above) must be provided to the Council within 7 days of receipt of the complaint(s).</p>
123	The plant room discharge point must be directed away from adjacent residential areas.
124	The Consent holder must at all times operate, monitor, and maintain the Point Erin Tunnel so that odour discharges authorised by this consent are maintained at the minimum practicable level.
125	All records required by the conditions of this consent must be made available upon reasonable request by the council during working hours and must be kept for a minimum period of two years from the date of each entry.
126	Under section 128 of the RMA, the conditions of this consent may be reviewed by the Manager Resource Consents at the consent holder's cost in order to:

	<p>a. deal with any significant adverse effects on the environment arising from the exercise of the consent which was not foreseen at the time the application was considered and which is appropriate to deal with at the time of the review;</p> <p>b. consider the adequacy of conditions which prevent nuisance and adverse effects beyond the boundary of the Site, particularly if regular or frequent complaints have been received and validated by an enforcement officer;</p> <p>c. consider developments in control technology and management practices that would enable practical reductions in the discharge of contaminants to air;</p> <p>d. alter the monitoring requirements, including requiring further monitoring, or increasing or reducing the frequency of monitoring; and / or</p> <p>e. take into account any Act of Parliament, regulation, national policy statement, regional policy statement or relevant regional plan that relates to limiting, recording or mitigating emissions by this consent.</p> <p>Alternatively, the consent may be reviewed by the Council at any time, if it is found that the information made available to the council in the application contained inaccuracies which materially influenced the decision and the effects of the exercise of the consent are such that it is necessary to apply more appropriate conditions.</p>
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## E. Definitions

Alarm Level – specific levels at which actions are required as described in the relevant conditions.

Alert Level – Specific levels at which actions are required as described in the relevant conditions.

Bulk Excavation – includes all excavation that affects groundwater excluding minor enabling works and piling less than 1.5m in diameter.

Commencement of Dewatering – Means commencement of bulk excavation and/or commencing taking any groundwater from a shaft or tunnel excavation (after construction of the pile walls (if required) and/or dewatering prior to bulk excavation).

Completion of Dewatering – Means when all the permanent shaft lining, base slab and walls are complete and the tunnel lining is complete and effectively no further groundwater is being taken for the construction of the shaft/tunnel, in accordance with the design.

Commencement of excavation – means commencement of Bulk Excavation for shafts, trenches and tunnels

Condition Survey – Means an external visual inspection or a detailed condition survey (as defined in the relevant conditions).

Damage – Includes Aesthetic, Servability, Stability, but does not include Negligible Damage. Damage as described in the Building Damage Classification reference table below.

Monitoring Station – Means any monitoring instrument including a ground or building settlement monitoring mark, inclinometer, groundwater monitoring bore, retaining wall deflection station, or other monitoring device required by this consent.

Category of damage	Normal Degree of Severity	Description of Typical Damage (Building Damage Classification after Burland (1995), and Mair et al (1996))	General Category (after Burland – 1995)
0	Negligible	Hairline cracks	Aesthetic Damage

<b>Category of damage</b>	<b>Normal Degree of Severity</b>	<b>Description of Typical Damage</b> <i>(Building Damage Classification after Burland (1995), and Mair et al (1996))</i>	<b>General Category</b> <i>(after Burland – 1995)</i>
1	Very Slight	Fine cracks easily treated during normal redecoration. Perhaps isolated slight fracture in building. Cracks in exterior visible upon close inspection. Typical crack widths up to 1mm.	
2	Slight	Cracks easily filled. Redecoration probably required. Several slight fractures inside building. Exterior cracks visible, some repainting may be required for weather-tightness. Doors and windows may stick slightly. Typical crack widths up to 5 mm.	
3	Moderate	Cracks may require cutting out and patching. Recurrent cracks can be masked by suitable linings. Brick pointing and possible replacement of a small amount of exterior brickwork may be required. Doors and windows sticking. Utility services may be interrupted. Weather tightness often impaired. Typical crack widths are 5 to 15 mm or several greater than 3 mm	Serviceability Damage
4	Severe	Extensive repair involving removal and replacement of walls especially over door and windows required. Window and door frames distorted. Floor slopes noticeably. Walls lean or bulge noticeably. Some loss of bearing in beams. Utility services disrupted. Typical crack widths are 15 to 25 mm but also depend on the number of cracks.	
5	Very Severe	Major repair required involving partial or complete reconstruction. Beams lose bearing walls lean badly and required shoring. Windows broken by distortion. Danger of instability. Typical crack widths are greater than 25 mm but depend on the number of cracks	Stability Damage