

# Decision on an application for resource consent under the Resource Management Act 1991



## Proposal

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.

This resource consent is **GRANTED**. The reasons are set out below:

<b>Application number(s):</b>	BUN60415108 (Council reference) LUC60415109 (s9 land use consent) WAT60415460 (s14 water permit) DIS60415110 (s15 discharge and diversion permit, stormwater) DIS60415116 (s15 discharge permit, air)
<b>Applicant:</b>	Watercare Services Limited
<b>Site addresses:</b>	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)
<b>Lodgement date:</b>	7 February 2023
<b>Notification date:</b>	17 March 2023
<b>Submission period ended:</b>	18 April 2023

## Summary of Decision

Watercare Services Limited (**WSL** or **the applicant**) seeks resource consents to extend the Central Interceptor (**CI**) wastewater tunnel approximately 1.6km, commencing from its existing consented terminus at 46 and 48 Tawariki Street, Grey Lynn to a new terminus and shaft at Pt Erin Reserve, St Mary's Bay. The new terminus will include a new plant room and control chamber adjacent to Curren Street. The extension is referred to herein as the **Point Erin Tunnel**. The project will reduce the frequency of wastewater overflows to St Mary's Bay, provide for future local connections and increase network resilience.

All potential adverse effects that are associated with the activities for which consent is sought have been considered, and those effects determined to be acceptably mitigated or otherwise avoided or remedied. An extensive suite of conditions has been developed by the applicant and the Council's reporting planner to ensure such effects remain within the scope of the assessments.

In exercising our delegation under sections 34 and 34A of the RMA and having regard to the foregoing matters, sections 104, 104B, 105, 107, 108 and 108AA, 123 and Part 2 of the RMA, resource consent is **GRANTED**.

## Relevant Information

In this decision, we rely, somewhat on the **s42A Report**<sup>1</sup> prepared by Mark Ross, including his recommended conditions that have been accepted by WSL. That said, we have undertaken our own evaluation of the proposal and this decision is our own. In Section 3 of his report, Mr Ross lists the material provided by the applicant that he and other technical specialists for Council have reviewed and reported on. We adopt that list of materials as relevant to our decision. We have read various of those documents that explain the details of the proposal, and other reports and assessments that specifically address matters in contention.

<sup>1</sup> Report on a notified application for resource consents under the Resource Management Act 1991 (RMA); 11 August 2022

## Procedural Matters

### Waiver of Public Hearing

Dated 16 August 2023, Counsel for the applicant submitted a memorandum waiving WSL's right to be heard on the basis of its agreement with, and acceptance of, the recommendations of the s42A report, and in the absence of submitters wishing to be heard. In that memorandum, WSL maintained its willingness to respond in writing to any questions we may have of it or its planning and technical experts.

Having carefully considered Mr Ross's comprehensive analysis of issues raised, the information provided by the applicant and submitters, and the remaining matters in contention, we are satisfied that a hearing is not required. We also consider that we have sufficient information to complete our deliberations and decide on the applications. On that basis, we agree to conclude the procedures without a public hearing.

### Late submissions

Four late submissions were received, three in opposition and one not stating a position. Those submission were from:

- Jennifer Ekanayaka and Dr Kumudith Ekanayaka received on 27 April 2023);
- Paula Elline Were received on 1 May 2023;
- The Equal Justice Project received on 9 May 2023; and
- The St Mary's Bay Association received on 18 May 2023.

In Section 11 of his s42A report, Mr Ross discusses the late submissions. Mr Ross recommends with reasons that the submission from Jennifer Ekanayaka and Dr Kumudith Ekanayaka, and that from Paula Elline Were, be accepted, while those from the Equal Justice Project and The St Mary's Bay Association (**SMBA**) not be accepted.

In agreement with Mr Ross, we find that the reasons for the late submissions by Jennifer Ekanayaka and Dr Kumudith Ekanayaka, and Paula Elline Were, are reasonable, the submission points are generally consistent with those others that were received on time, and that the applicant is not prejudiced by their acceptance. Accordingly, we accept those submissions under s37 of the RMA.

Mr Ross recommends that the late submissions by the Equal Justice Project and St Mary's Bay Association not be accepted, as they do not raise any issues of specific concern to the activities for which are sought, and their lateness has not been reasonably explained. As a contingency in deference to our delegation, however, Mr Ross has included these submissions and points raised in his overall assessment. We understand Mr Ross' reasons in regard to these two submissions but find that they too, can be accepted.

The submission by the Equal Justice Project seeks to address the whole application but focuses on the broader impact of climate change, and in particular, requests that the impacts of greenhouse gases be specifically considered in the decision. We acknowledge that s7(i) of the RMA does require

us to have particular regard to “the effects of climate change”. For reasons we explain later, we do not consider this matter to be specifically relevant to this proposal and accept that the applicant has not provided a specific assessment of that effect. Nor have we received evidence from any other party in that regard.

The email correspondence provided to Mr Ross by SMBA on 31 May 2023 provided explanation on why a submission had not been submitted on time and sought further process guidance from Mr Ross. Mr Ross followed up with the submitter by email on 19 July 2023<sup>2</sup>, enquiring whether the submitter had any further comment before completion of the s42A Report. No response was received. While we cannot presume the matters of interest of concern to SMBA, we note that other submissions (including those from St Mary’s Bay addresses) raise a broad suite of issues retaining to property effects, noise and vibration, traffic and other amenity. Such effects on all properties within and adjacent to the alignment have been addressed in the application, Council reviews, s42A report and recommended conditions.

Overall, while the submissions by the Equal Justice Project and SMBA were significantly late and could reasonably be rejected, we find that the applicant will not be prejudiced by their acceptance. Noting that the submission points have been taken account of in the s42A Report and in our decision herein, we accept those submissions under s37A of the RMA.

## **Close of Hearing**

After deliberations, the ‘hearing’ was closed on 6 September 2023.

## **Proposal**

As described in the Executive Summary of the applicants Assessment of Effects on the Environment (AEE):

*“The Pt Erin Tunnel will collect flows from the existing Sarsfield overflow collector and the St Mary’s Bay Pump Station and transport it to Māngere Wastewater Treatment Plant (WWTP). As a result of the Point Erin Tunnel, the St Mary’s Bay Tunnel will not need to store as much flow as this could be pumped into the Point Erin Tunnel and its storage capacity utilised, thus reducing the frequency of overflows from the St Mary’s Bay Tunnel. The Point Erin Tunnel will also provide for future local connections and increased network resilience through the diversion of flows to CI. This will reduce flows along the Ōrākei Main towards the Hobson Bay Tunnel and the Eastern Interceptor where there are capacity constraints.”*

The s42A report provides the following background and description of the proposal, which we adopt.

### *“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*

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<sup>2</sup> Mr Ross provided us with a copy of that email on 13 September 2023.

*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~~<sup>3</sup> sites and [/or]<sup>1</sup> areas of road reserve at Kelmarna Avenue<sup>4</sup>, Richmond Road<sup>5</sup>, 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**

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<sup>3</sup> Edits recommended by Mr Ross after release of his report.

<sup>4</sup> Marist Catholic School

<sup>5</sup> St Pauls College

*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 be 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 Description

We adopt the site description provided in the s42A report. Key elements of the project alignment are:

- Point Erin Park and the adjacent Curran Street. This will be the location of a construction laydown, the new north shaft, control chamber and plant room. Site access will be from Sarsfield Street via Curran Street and Shelley Beach Road, and directly from Curran Street.
- Tawariki Street, an established residential street extending between Purawai Crescent and the St Pauls College fields. Formal access to the fields is not provided from the street. Numbers 44, 46 and 48 Tawariki Street are formerly residential sites that are now vacant and have been established for the northern terminus and shaft of the GLT. As proposed, the TBM will continue from this point to Point Erin Park.
- The subsurface alignment of the tunnel that is proposed to cross diagonally under Trinity Street-Ardmore Road Intersection, John Street, Islington Street, Pompallier Terrace, Clarence Street, Ponsonby Intermediate, Prosford Street, Jervois Road, and then along the alignment of Curran Street, before crossing Sarsfield Street into Point Erin Park to the new shaft location. The specific properties under which the alignment will pass are identified in Appendix C of the application.

## Reasons for the Applications

### 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 and s15<sup>6</sup>) – DIS60415110**

### Auckland Unitary Plan (Operative in Part)

#### *Stormwater – Discharge and Diversion*

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<sup>6</sup> s15 not noted in the s42A report but the Chapter E8 provisions provide for diversions under s14 RMA and discharges under s15 RMA.

- 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**

### Auckland Unitary Plan (Operative in Part

#### *Air Quality*

- a. 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).

## **Overall activity status**

The activities for which consent is sought are inter-related. Consequently, the applications are considered together with an overall **discretionary activity** status.

## **Submissions**

### **Acceptance of submissions**

Eight submissions were received by the end of the submission period (18 April 2023). Seven were in opposition and one neutral. As discussed earlier in this decision report, four late submissions have also been accepted. No submitters wish to be heard.

We have read the submissions and agree with the summary of submission points provided by Mr Ross. That list of submitters and submission points are also included in Appendix A of our decision.

## **Principle Issues in Contention**

We are satisfied that as assessed by Mr Ross, the technical information and responses presented by the applicant, the technical reviews undertaken by the Council specialists, and the performance standards and management plan requirements of the recommended conditions will ensure that the following potential adverse effects will be appropriately avoided, remedied or mitigated. We note that no other parties have provided expert technical assessments to refute these conclusions.

- Sedimentation.
- Land stability.
- Groundwater diversion and dewatering.
- Construction noise and vibration.
- Construction traffic.

- Operational traffic.
- Air discharges.
- Contamination.
- Archaeology.
- Flooding.
- Stormwater.

In forming this view, we have taken into account the details of the extensive conditions recommended, including performance standards, reference to specific properties, activities and effects, and including:

- Condition 1 – unless otherwise specified in another condition and subject to final design, works to be in accordance with the listed consent application documents.
- Condition 5 – Communication Plan
- Condition 7 – Construction Management Plan
- Condition 10 – Construction Traffic Management Plan
- Condition 24 – Construction Noise and Vibration Management Plan
- Condition 28 – Activity Specific Noise and Vibration management Plan
- Conditions 35 – 38 – Mana Whenua engagement
- Condition 41 – Erosion and Sediment Control Plan
- Conditions 52 – 65 – tree effects management
- Conditions 66 – 68 – archaeological effects management
- Conditions 70 – 104 – groundwater and settlement management, monitoring and surveying, and responses, including associated management plan.
- Conditions 113 – 125 – operational conditions

The remaining matter in contention are the impact that the proposal will have on Point Erin Park; those effects being the removal of trees, the temporary use of areas of the park for construction laydown and activities, and the permanent placement of structures within the park. These impacts include landscape and amenity effects.

We also address the submission by the Equal Justice Project.

## Discussion and Findings

### Impacts on Climate Change

It was requested by the Equal Justice Project that the effects of greenhouse gas emissions be given specific consideration, and that the application be declined or if granted, include conditions relating to those emissions. In this case, the trigger for air discharge consent relates to the discharges odour to air from a wastewater facility within a high air quality – dust and odour area, where the activity does not meet the relevant permitted standard. That standard is E14.6.1.24 which relates to the size of the facility and the associated potential generation of odour. While dust generation from construction activities is provided for under permitted rules and standards, the applicant has also assessed potential dust effects that are anticipated during construction. Consequently, and not reading down the importance of climate change effects, the applications do not trigger the need for an assessment of greenhouse gas emissions, and the applicant does not require a consent to authorise such emissions. We do encourage WSL to address the minimisation of greenhouse gases during its design, tendering, materials sourcing and construction of the project. That said, we do not impose direct control of that through this consent process.

### Impacts on Point Erin Park

As presented in the s42A Report, there remains concern by Council's Senior Parks Planner, Ms Roja Tafaraji, that the applicant has not sufficiently demonstrated how adverse amenity and landscape effects within the park will be managed such that they are acceptable. Ms Tafaraji was not satisfied with the applicant's reliance on consent conditions and sought more finalised detailed drawings that identify the restoration planting, and the precise location of structures such as the retaining wall that is proposed as potentially required along the south-western boundary of the park. Ms Tafaraji also reported concern expressed by the Regional Aquatic Facilities Manager in respect of adverse effects on access and use of the outdoor pool as well as adverse visual effects on the park.

As we understand it, the applicant's position is that sufficient detail has been provided to allow an appropriate granularity of assessment of potential effects on the park. This includes the confirmation of which trees are to be pruned and removed, the location of construction laydowns and permanent structures, and for the purposes of assessment the assumption that the retaining wall will be required. Final landscape mitigation / planting details are to be developed through detailed design of the project and in consultation with Auckland Council Parks and Mana Whenua.

As reported in the s42A Report, the Council's Arboricultural and Landscape peer reviewers are satisfied that the proposal can appropriately minimise and mitigate those effects, subject to the adoption of the recommended conditions. Construction unavoidably generates adverse effects. In this case the purpose of the project includes reduction in wastewater discharges to the Waitemata Harbour, which is an obvious environmental benefit. It also provides for future capacity and local connections. We find that the applicant has appropriately minimised those effects through its initial project design, and that the extent of those effects and mitigation are sufficiently locked in through consent conditions.

As noted by Mr Ross, the applicant has also provided visual simulations, cross sections, precedent imagery, and indicative planting plans. He concludes that:

*“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 appropriate outcomes in respect of visual amenity and landscaped character will be achieved.”*

We agree with that conclusion.

Similarly, we accept that the applicant’s proposed approach to finalising details in conjunction with project detailed design is consistent with the realities of infrastructure projects, where minor adjustments to project details are made interactively and management plans are finalised accordingly, within the scope provided for by consent conditions. We also accept that the finalisation of those measures appropriately includes Mana Whenua engagement and Auckland Council Parks (Land Advisory Team), which provides that team meaningful input into those design outcomes as landowner and property manager.

The assessments undertaken by experts for the applicant and the Council indicate that the works will not adversely impact the safety or function of the Point Erin Pool, and public parking will remain accessible for visitors to the pool. Traffic management will be controlled in accordance with the Construction Traffic Management Plan to be submitted, which will ensure the ongoing safe access to the site for pedestrians and vehicles. This is specifically listed as a matter to be addressed in than plan.

Recommended conditions require that at least three months prior to construction, the consent holder must submit to Council details of all above-ground structures in Point Erin Park, and a Park Restoration and Landscape Plan that is to be prepared in consultation with the landowner and Mana Whenua. In addition, recommended conditions require the provision of mitigation planting, with as many of the trees as acceptable to the landowner to be planted within Point Erin Park. Conditions also require replacement planting in the event that the two Pohutukawa trees in the south-west corner of the park require removal.

While we acknowledge the concerns raised by Ms Tafaraji, we find that these requirements are consistent with the recommendations of the effects assessments undertaken and provide a significant level of input by Auckland Council Parks. Overall, we find that the potential effects of the proposal on Point Erin Park will be avoided, remedied, or mitigated to an acceptable level, and that enduring effects will be minor. The work will not compromise the use of the Point Erin Pool and post-construction, the amenity of the park, while slightly altered, will nonetheless be restored.

## Conditions

The recommended conditions provided in Attachment 5 of the s42A Report have been accepted in full by the applicant. Having carefully considered those extensive conditions, we find that they will provide sufficient certainty to the outcomes assessed through the processing of the consent application. They will appropriately avoid, remedy or mitigate potential adverse

effects during construction, and post-construction during operation of the Point Erin Tunnel. We adopted those conditions unchanged.

## Statutory Considerations

In accordance with section 104 of the RMA and subject to Part 2, we have had regard to the relevant statutory provisions of sections 104, 104B, 105, 107, 107F and 108 of the RMA, and the following.

- National Policy Statement on Urban Development 2020 – s104(1)(b)(iii)
- National Policy Statement for Freshwater Management 2022 – s104(1)(b)(iii)
- New Zealand Coastal Policy Statement 2010 (NZCPS) – s 104(1)(b)(iv)
- Hauraki Gulf Marine Park Act 2000 (HGMPA) – s104(1)(b)(iv).
- Auckland Unitary Plan (Operative in part): Chapter B Regional Policy Statement – s104(1)(b)(v).
- Auckland Unitary Plan (Operative in part) - section 104(1)(b)(vi).

Mr Ross addresses these matters in Section 14 of the s42A Report. We concur with his assessment and conclusions that the proposal is consistent with the relevant provisions of those planning instruments. For completeness, we include the HGMPA as a relevant statute, given that the site is within the catchment of the Hauraki Gulf, and one of the purposes of the project is to reduce the frequency and volume of discharges into the Hauraki Gulf. In that regard, we find the proposal to be entirely consent with the relevant provisions of the HGMPA.

## Decision

In exercising our delegation under sections 34 and 34A of the RMA and having regard to the foregoing matters, sections 104, 104B, 105, 107, 107F, 123 and Part 2 of the RMA, resource consent is **GRANTED** to construct the Point Erin Tunnel extension of the Central Interceptor wastewater tunnel, and associated infrastructure, between Tawariki Street Grey Lynn and Pt Erin Park, St Mary's Bay.

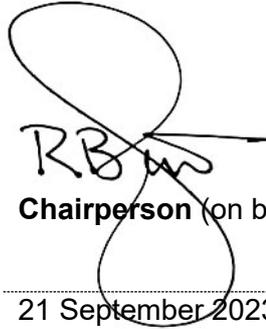
## Reasons

1. In accordance with an assessment under s104(1)(a) of the RMA, the actual and potential effects from the proposal will be avoid, remedied or otherwise mitigated such that they are acceptable. The design of the proposal has been respectful of, and accommodated to the extent practicable, its surrounding environment. Potential adverse effects relating to 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 will be sufficiently mitigated. An extensive suite of conditions has been developed and adopted by the Applicant. Subject to compliance with those conditions, they will ensure the assessed effects and anticipated outcomes are achieved.

2. The proposal will result in 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.
3. With reference to an assessment under s104(1)(ab) of the RMA, there will be no residual, unmitigated effects that require offsetting or environmental compensation.
4. 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 Hauraki Gulf Marine Park Act; 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'.
5. 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.
6. 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.

7. 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.

Signed:



Handwritten signature consisting of the letters 'RBW' in a stylized, cursive font. The signature is written in black ink and is positioned above the printed name 'Chairperson'.

**Chairperson** (on behalf of Commissioner Michael Parsonson)

Date:

21 September 2023

## Appendix A: Summary of Submissions

### Submissions Accepted

No	Name	Physical address	Issues raised	Relief sought	To be heard
1	Victoria Ann Hibbins	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	Ponsonby Primary School and Ponsonby Intermediate	2, 5	D	N
9	<i>Jennifer Ekanayaka and Dr Kumudith Ekanayaka</i>	<i>55 Clarence Street, Ponsonby</i>	<i>2, 4, 8, 9, 12</i>	<i>C</i>	<i>N</i>
10	<i>Paula Elline Were</i>	<i>53 Clarence Street, Ponsonby</i>	<i>2, 3, 8, 15</i>	<i>C</i>	<i>N</i>
11	<i>Equal Justice Project</i>	<i>PO Box 47188, Ponsonby 1011</i>	<i>13</i>	<i>C, E</i>	<i>N</i>
12	<i>The St Mary's Bay Association</i>	<i>No address given</i>	<i>14</i>	<i>-</i>	<i>-</i>

#### Key:

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

## Summary of Submission Points

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.
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	

Issues raised in opposition / neutral:

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.

## Appendix B: Conditions

Under sections 108 and 108AA of the RMA, this consent is subject to the following 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></ul> |
|---|--|

- Central Interceptor Extension, Point Erin Park, Auckland: Archaeological Assessment, prepared by Clough & Associates Ltd, dated January 2023.
- Central Interceptor Extension – Point Erin Tunnel: Integrated Transport Assessment, prepared by Tonkin & Taylor Ltd, Version 1.0, dated 1 February 2023.
- Point Erin Extension – Assessment of Potential Flood Impacts Memorandum, prepared by Jacobs, Revision C, dated 25 January 2023.
- Central Interceptor Extension – Point Erin Tunnel: Air Quality Assessment, prepared by Tonkin & Taylor Ltd, Version 1, dated 1 February 2023.

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

- Point Erin Central Interceptor: Addendum Report – Assessment of Groundwater and Settlement Effects, prepared by Tonkin & Taylor Ltd, Version 1, dated 17 March 2023.
- ‘Further information on potential design and appearance of above-ground infrastructure – Point Erin Park’ letter, prepared by Tonkin & Taylor Ltd, dated 17 March 2023.
- ‘Response to s92 requests – Point Erin Tunnel’ letter, prepared by Tonkin & Taylor Ltd, dated 19 April 2023.
- Cultural Values Assessment, Watercare, Central Interceptor Extension, Point Erin Park, prepared by Ngaati Te Ata Waiohua, dated 14 April 2023.
- Cultural Impact Assessment, Watercare Services Limited, Central Interceptor – Point Erin Tunnel, prepared by Ngaati Whanaunga Incorporated Society, dated 9 June 2023.
- Cultural Values Assessment, Watercare, Central Interceptor Extension, Pt Erin Tunnel Project, prepared by Te Ākitai Waiohua, dated 2023.
- 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).
- ‘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.
- ‘Point Erin Tunnel: Response to s92 request: Landscape and Visual effects – further clarification questions’ letter, prepared by Tonkin & Taylor Ltd, dated 26 May 2023.
- 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).
- Email on further comments from the Council’s Parks Department, from Rachel Signal-Ross, dated 1 June 2023.
- ‘Point Erin Tunnel: Response to additional questions from Auckland Council Parks’ letter, prepared by Tonkin & Taylor Ltd, dated 20 June 2023.

	<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
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><i>Advice Note:</i></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

<b>Land Use Consent Conditions – LUC60415109 (conditions 3 to 68)</b>	
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.
<b>Community Liaison and Communications</b>	
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>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 must 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; and</li> <li>c. full contact details for the liaison person appointed in accordance with Condition 4 to manage the public information system and be the point of contact for related enquiries.</li> </ol>

## Construction Management

7	<p>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 (l) 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.</p>
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> <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><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 (<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;</li><li>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 11 and 12);</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></ul>

	<ul style="list-style-type: none"> <li>k. procedures for the refuelling of plant and equipment; and</li> <li>l. the tree management measures required by condition 53.</li> </ul>
9	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.
<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> <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. seek to ensure that construction traffic movements are managed to provide for the safety of the general public;</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 to the extent practicable, full road closures and minimise any partial or managed closures; and</li> <li>f. manage integration with other construction projects and Auckland Transport projects.</li> </ul>
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> <ul style="list-style-type: none"> <li>a. The 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, including measures to ensure that construction traffic movements on the transport network, including Sarsfield Street, Curran Street and the SH1 onramp, are appropriately managed.</li> </ul>

- 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;
- e. Methods to manage the effects of the delivery of construction material, plant and machinery. This must include, but not be limited to:
- 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);
  - traffic management measures, including a site Traffic Management Supervisor:
    - 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;
    - to ensure safe ingress from Sarsfield Street to the southwestern construction area and safe egress onto Curran Street; and
    - 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.

Advice Note

*The CTMP will need to detail where the heavy vehicle layover will be accommodated and how this will be managed for the site.*

- f. Measures to maintain existing vehicle access to property where practicable, or to provide alternative access arrangements.
- 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.
- h. Measures to ensure that the traffic management works are integrated with other construction and Auckland Transport projects.
- 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.
- 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.

- k. Provision for construction staff and visitor parking on site as far as practicable.
- 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.
- m. A construction driver education programme (due to the proximity of the Point Erin Pool, carpark and 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.
- n. Measures to communicate traffic management measures throughout construction activities (note: these measures may form part of the CP required by Condition 5).
- 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. Measures to manage and / or supervise the egress of vehicles onto Curran Street.
- q. Measures to manage construction traffic on the Shelly Beach Road off-ramp (where required).
- r. Measures to manage traffic speeds safely on affected sections of Sarsfield Street during construction.
- 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.
- 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:
  - 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
  - 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.
- u. Measures to ensure that construction traffic movements are managed to provide for the safety of the general public.

Advice Notes:

### *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 kerbside elements around the western vehicle crossing on Sarsfield Street*

*As part of the application for Engineering Plan Approval (EPA), 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.*

*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.*

*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>*

### *Corridor Access Request*

*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.*

*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 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 <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.*

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 ' <i>Austroad (2009). Guide to Road Design Part 4A: Unsignalised and Signalised Intersections. Sydney</i> '. 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>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; and</li> <li>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.</li> </ol> <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.

**Construction hours**

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> <ul style="list-style-type: none"> <li>a. Tunnelling activities - 24 hours a day, 7 days a week.</li> <li>b. General site activities and truck movements - 7 am to 6pm, Monday to Friday, 8am to 6pm Saturday.</li> </ul>
23	<p>Work may occur outside of the specified days or hours set out in Condition 22 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> <li>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).</li> <li>c. For delivery of large equipment or special deliveries required outside of normal hours due to traffic management requirements.</li> <li>d. In cases of emergency.</li> <li>e. For the securing of the site or the removal of a traffic hazard.</li> <li>f. or any other reason specified in the CMP or CTMP.</li> </ul> <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>

**Construction Noise and Vibration**

24	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
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	<p>30, as applicable.</p> <p>The objectives of the CNVMP are to:</p> <ol style="list-style-type: none"> <li>a. identify the Best Practicable Option (<b>BPO</b>) 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; and</li> <li>c. ensure engagement with affected receivers and timely management of complaints.</li> </ol>
25	<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>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 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>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> <li>i. A complaint management system with contact numbers for key construction staff responsible for the implementation of the CNVMP and complaint investigation.</li> </ol>

- j. The process for changing, updating, and certifying any changes to the CNVMP.
- k. Training procedures for construction personnel.

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 construction activities. The CNVMP or any specific component of the CNVMP must be updated as necessary and provided to the Council for certification prior to being implemented.

26 Construction noise must be measured and assessed in accordance with NZS6803:1999 *Acoustics – Construction Noise*, and must comply with the following noise limits except where authorised by an Activity Specific Construction Noise and Vibration Management Plan (Condition 28):

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

Advice Note:

*Project construction hours are subject to Condition 22.*

27 Between 22:00 and 07:00 regenerated noise from tunnelling activities must not exceed 35 dB LAeq(15 min) within occupied buildings except where authorised by an Activity Specific Construction Noise and Vibration Management Plan (Condition 28).

28 An Activity Specific Construction Noise and Vibration Management Plan (**ASCNVMP**) must 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.

29 In preparing an ASCNVMP, the Consent holder must consult with those parties likely to be exposed to noise levels exceeding the relevant noise limit(s) and must submit the results of this consultation to Auckland Council, including any response by the Consent holder to a matter raised in consultation. The ASCNVMP must be submitted to the Council for review and approval at least 7 working days prior to the proposed works commencing.

Works subject to an ASCNVMP must 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 must stop and not recommence until further mitigation is implemented in accordance with an amended ASCNVMP approved by the Council.

	<p>An ASCNVMP must:</p> <ol style="list-style-type: none"> <li>describe the activity (including duration), plant and machinery that is expected not to comply with the noise limits in Condition 26;</li> <li>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;</li> <li>provide predicted noise levels for all receivers where the noise levels will not be compliant with the limits in Condition 26, including the effect of mitigation specified in b. above;</li> <li>provide a set of noise limits that are activity-specific;</li> <li>describe the noise monitoring that will be undertaken to determine compliance with the activity-specific noise limits; and</li> <li>describe any additional noise mitigation measures that may be implemented to maintain compliance with activity-specific noise limits.</li> </ol> <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	<p>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.</p>											
31	<p>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).</p>											
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 border="1" data-bbox="236 1413 1217 1704"> <thead> <tr> <th>Receiver</th> <th>Period</th> <th>Peak Particular Velocity (PPV) mm/s</th> </tr> </thead> <tbody> <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> </tbody> </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
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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> <ol style="list-style-type: none"> <li>a. discuss the nature of the work and the anticipated days and hours when the exceedances are likely to occur;</li> <li>b. determine whether the exceedances could be timed or managed to reduce the effects on the receiver; and</li> <li>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 4).</li> </ol> <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 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></p>
<b>Construction Lighting</b>	
34	<p>Construction lighting must be minimised to the extent practicable and must meet the relevant permitted standards in Chapter E24 of the Auckland Unitary Plan.</p>
<b>Cultural</b>	
35	<p>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.</p>
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>a. Pre-start meeting.</li> <li>b. Prior to construction of earthworks control measures.</li> <li>c. Prior to commencement of bulk earthworks.</li> </ol>

	<p>d. Immediately prior to completion of bulk earthworks across the site.</p> <p>e. At other times as agreed between the Consent holder and Mana Whenua representatives.</p>
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	<p>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.</p>
40	<p>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.</p>
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>a. Specific erosion and sediment control works including the final location of super silt fencing, stabilised entranceway(s) and clean water diversion bunds.</li> <li>b. Specific location and design for a stabilised entranceway.</li> <li>c. Specific location and controls required for stockpiling management.</li> <li>d. Specific information on devices proposed for dewatering and associated management.</li> <li>e. Supporting calculations and design drawings.</li> <li>f. Catchment boundaries and contour information.</li> <li>g. Details of construction methods.</li> <li>h. Timing and duration of construction and operation of control works (in relation to the</li> </ol>

	<p>staging and sequencing of earthworks).</p> <p>i. Details relating to the management of exposed areas (e.g. grassing, mulching).</p> <p>j. Monitoring and maintenance requirements.</p> <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	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.
43	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.
44	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.
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> <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	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><u>Advice Note:</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 "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.
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> <p>a. Programming of works.</p>

	<ul style="list-style-type: none"> <li>b. Site access and transportation of materials.</li> <li>c. Temporary storage areas for materials.</li> <li>d. Silt and sediment controls.</li> <li>e. Excavations in the root zones of trees.</li> <li>f. When the supervising arborist is required to be present.</li> </ul>
54	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.
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> <ul style="list-style-type: none"> <li>a. the 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; and</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>
56	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.
57	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.
58	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).
59	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.
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,</i></p>
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	<p><i>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>
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>a. The consented works will be halted while an archaeologist is called in to assess the features.</li> <li>b. The features will be recorded and analysed in accordance with current archaeological practice.</li> <li>c. 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

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:

- 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
- 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:
  - ground conditions;
  - aquifer parameters;
  - groundwater levels; and
  - ground surface movement.

## 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>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.</li> <li>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.</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 chamber/shaft or tunnel excavation.</i></p>
77	<p>The Consent holder must submit to the Auckland Council for certification:</p> <ol 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.</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> </ol>

78	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.
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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 modelling completed using this data. The risk assessment must include identification of the:</p> <ol style="list-style-type: none"> <li>a. 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. building types in this zone, and their susceptibility to settlement induced damage; and</li> <li>c. buildings and structures at risk of damage due to chamber excavations/shaft sinking or tunnelling activities.</li> </ol>
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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>
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**Pre-Construction Condition Survey**

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>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> </ol>
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	<p>e. Assessment of structural ductility.</p> <p>f. Susceptibility of structure to movement of foundations, including consideration of the local geological conditions.</p> <p><u>Advice Note:</u>  <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>
<p><b>Post-Construction Condition Surveys</b></p>	
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 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>  <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>
<p><b>Additional Condition Surveys</b></p>	
83	<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 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.</p>
84	<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 must provide the contact details and qualifications of this person within 5 workings days</p>
85	<p>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).</p>
86	<p>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.</p>

## Repair of Damage

- 87 If the exercise of this consent causes any unforeseen damage to buildings, structures or services not assessed under Conditions 81 and/or 83, 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.
- Advice Note:
- 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.*

## Groundwater Monitoring

- 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

	<p>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.</p>
93	<p>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.</p>
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>a. recovery of the groundwater level to within 2m 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> </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>
<p><b>Settlement and Deflection Monitoring</b></p>	
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>a. The locations of the monitoring marks must be identified on a plan within the GSMCP, as required under 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).</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> </ol>
96	<p>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.</p>
97	<p>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 <math>\pm 2\text{mm}</math> for level and <math>\pm 5\text{mm}</math> for plan position, or as</p>

	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> <ul 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</li> </ul>

	<p>this consent.</p> <ul style="list-style-type: none"> <li>Greater than 50mm total settlement (the Total Settlement Alarm Level) at any settlement monitoring mark required under this consent.</li> </ul>
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>
<p><b>Monitoring Charges - All Consents</b></p>	
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

<p><b>Land Use Consent Conditions – LUC60415109 (conditions 106 to 112)</b></p>	
<p><b>Permanent buildings and structures</b></p>	
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> <ul 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> </ul>

	<p>The design for the buildings / aboveground structures must take into account the following matters:</p> <ul 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. <ul style="list-style-type: none"> <li>• 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.</li> </ul> </li> </ul> </li> </ul>
<p><b>Mitigation Planting</b></p>	
<p>107</p>	<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>
<p>108</p>	<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>a. prioritisation of native specimen trees wherever practicable;</li> <li>b. the long-term viability of the trees (e.g., suitable soil/proximity to the coast/potential disease such as myrtle rust);</li> </ol>

	<p>c. the extent to which the replacement trees will mitigate the visual and amenity effects of the removal of the pōhutukawa trees;</p> <p>d. provision for informal recreation and walkways through the south-western corner of the park;</p> <p>e. the need to avoid future conflicts between rootzones and infrastructure; and</p> <p>f. feedback received from mana whenua and Auckland Council Parks.</p> <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>
<p><b>Park Restoration and Landscape Plan</b></p>	
109	<p>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.</p>
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> <p>a. Visual integration of above-ground permanent infrastructure.</p> <p>b. Reinstatement of open space for informal recreation.</p> <p>c. Mitigation for the visual and amenity effects of the loss of two large pōhutukawa trees (if removed).</p> <p>d. 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.</p> <p>e. The prioritisation of native specimen trees within the reinstatement design, including pōhutukawa and puriri that are already present within the park.</p>
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> <ul 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</li> </ul>

	<p>any new proposed assets, including, but not limited to:</p> <ul style="list-style-type: none"> <li>• grassed areas;</li> <li>• footpaths; and</li> <li>• park furniture</li> </ul> <ul style="list-style-type: none"> <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> <li>• Any details of proposed way finding and interpretation signage within and adjacent to the park.</li> <li>• Record of consultation with the landowner (Auckland Council) and Mana Whenua. <ul style="list-style-type: none"> <li>• 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.</li> </ul> </li> </ul>
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**

<p><b>Land Use Consent Conditions – LUC60415109 (conditions 113 to 116)</b></p>
<p><b>Noise</b></p>

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" data-bbox="231 250 1029 533"> <tr> <td colspan="2" data-bbox="231 250 1029 297">Residential</td> </tr> <tr> <td data-bbox="231 297 742 344">Time</td> <td data-bbox="742 297 1029 344">Noise Limit</td> </tr> <tr> <td data-bbox="231 344 742 392">Monday to Saturday 0700-2200 hours</td> <td data-bbox="742 344 1029 392" rowspan="2">50 dB LAeq</td> </tr> <tr> <td data-bbox="231 392 742 439">Sunday 0900-1800 hours</td> </tr> <tr> <td data-bbox="231 439 742 533">All other times</td> <td data-bbox="742 439 1029 533">40 dB LAeq 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 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									
<b>Traffic</b>										
114	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.									
115	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.									
116	Trucks cannot 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 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 stack height of at least 3m; and</li> </ul>									

	<ul style="list-style-type: none"> <li>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>the date, time, location and nature of the complaint;</li> <li>the name, telephone number and address of the complainant, unless the complainant elects not to supply these details;</li> <li>weather conditions, including approximate wind speed and direction, at time of the complaint; and</li> <li>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	<p>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> <ol style="list-style-type: none"> <li>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;</li> <li>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;</li> <li>consider developments in control technology and management practices that would enable practical reductions in the discharge of contaminants to air;</li> <li>alter the monitoring requirements, including requiring further monitoring, or increasing or reducing the frequency of monitoring; and / or</li> <li>take into account any Act of Parliament, regulation, national policy statement, regional policy statement or relevant regional plan that relates to limiting, recording or</li> </ol>

mitigating emissions by this consent.

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.

## **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, Servicability, 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.

<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>
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.	
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