

# Central Interceptor Scheme



## Central Interceptor Main Project Works Section 92 Response Report to Auckland Council

## Quality Information

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Section 92 Response Report to Auckland Council

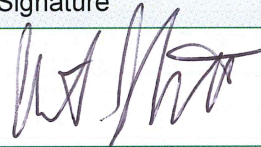
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## Section 92 Response Attachments

Attachment No.	Attachment Title
1.	Auckland Council s92 further information request letter
2.	Property Instruments
3.	Draft Construction Discharge Management Plan
4.	Archaeology
5.	Contamination
6.	Traffic
7.	Noise
8.	Vibration
9.	Trenching drawings

## A. Introduction and Background

### 1.1 Central Interceptor Main Project Works

Watercare Services Limited (Watercare) is proposing to construct a new underground wastewater interceptor within the Auckland Isthmus to collect, store, and convey wastewater to the Mangere Wastewater Treatment Plant (Mangere WWTP). This new interceptor is called the Central Interceptor. The Central Interceptor main project works comprise a 13 km gravity tunnel from Western Springs to the Mangere WWTP, four link sewers extending from the main tunnel, a series of connections to the existing Watercare wastewater network, and a new pumping station at the Mangere WWTP to pump wastewater from the tunnel to the plant. These works will provide the network capacity required for future growth within the Auckland Isthmus, will duplicate the lower section of the Western Interceptor which is ageing and at risk of failure, and will provide overflow mitigation at a number of Watercare's largest wastewater overflow points.

### 1.2 Purpose and Structure of this Report

Resource consent applications and Notices of Requirement for the proposed Central Interceptor main project works were lodged by Watercare with the Auckland Council ("Council") on 17 August 2012.

Auckland Council has requested further information under Section 92 of the Resource Management Act 1991 (RMA). The information requested is set out in Council's letter of 2 October 2012 ("the s92 request"). A copy of the s92 request is provided as **Attachment 1**. This Section 92 Response Report provides the further information requested. The report is structured in the following manner:

- Part A (this section) outlines the purpose of this report;
- Part B contains the requested information;

In each case, the question asked by Council is summarised and shown in *italics* and Watercare's response to the question follows immediately thereafter.

### 1.3 Technical Inputs

Technical inputs for this Section 92 Response Report have been provided by the following consultants:

- Earthworks – AECOM and SKM
- Archaeology – Clough & Associates
- Contaminated sites – Tonkin & Taylor
- Stormwater – SKM
- Traffic – Traffic Design Group
- Noise – Marshall Day
- Vibration – Tonkin & Taylor

The technical information provided by these consultants is included in the attachments to this Section 92 Response Report.



## 1.4 Attachments

Attachments which support the responses to questions are listed numerically and included at the end of this report under the divider page titled "Section 92 Response Attachments".

## 1.5 Supporting Documents

The following documents and reports were submitted to Auckland Council as part of the resource consent applications (refer Table 1). These documents should also be referred to for a complete understanding of the Central Interceptor main project works.

**Table 1: Application Documents**

<b>Part A</b>	<b>Assessment of Effects on the Environment</b> (referred to throughout this report as "the AEE")	
	Appendix A	Application forms
	Appendix B	Objectives and policies assessment
	Appendix C	Schedule of properties
	Appendix D	Planning maps
<b>Part B</b>	Site Specific Assessments	
	Appendix A	Certificates of title
	Appendix B	Stormwater calculations
<b>Part C</b>	Drawing Set	
<b>Part D</b>	Technical Reports	
	Technical Report A	Landscape and Visual Assessment
	Technical Report B	Arboricultural Assessment
	Technical Report C	Assessment of Ecological Effects
	Technical Report D	Archaeological Assessment
	Technical Report E	Traffic Impact Assessment
	Technical Report F	Noise Impact Assessment
	Technical Report G	Vibration Assessment
	Technical Report H	Odour Assessment
	Technical Report I	Ground Contamination Assessment
	Technical Report J	Groundwater and Surface Settlement Assessment
	Technical Report K	Erosion and Sediment Control and Stormwater Management
Notice of Requirement 1 Auckland Council District Plan: Auckland City Isthmus Section		
Notice of Requirement 2 Auckland Council District Plan: Manukau Section		

## B. Section 92 Questions and Response

### 1.0 AEE Report Questions

#### Question 1.1: Certificates of Title

##### Council Question:

*Provide copies of listed documents and advise of any additional legal requirements that may need to be addressed to enable the works.*

##### Response:

Russell McVeagh has provided Watercare with information in relation to the property instruments referred to in the s92 request. The instruments are provided as **Attachment 2**. Comments in relation to each are set out below.

(a) **Mt Albert War Memorial Reserve:** Certificate D626310.1 provides that as a condition of granting a building consent in 2001, the relevant properties may only be transferred or leased in conjunction with the other properties listed in the certificate. The certificate relates to 8 properties, being those contained in certificates of title NA217/108, NA1999/21, NA5A/1266, NA7D/1149, NA270/60, NA719/218, NA717/314 and NA719/127. In summary, the certificate will not prevent Watercare from undertaking the proposed works and nor will it impose any additional legal requirements. This is because a designation does not involve transferring or leasing any part of the properties contained in the relevant certificates of title, being NA217/108 and NA1999/21.

(b) **Haverstock Road:** Caveat C558939.9 is registered in favour of the Crown and forbids the registration of any instrument affecting the land without first obtaining the consent of the Crown or prior to the caveat being withdrawn/removed. As a designation does not involve the registration of any instrument that will affect the relevant land (being CFR 576501), the caveat does not impose any additional legal requirements that would need to be addressed to enable Watercare to undertake the proposed works.

(c) **Keith Hay Park:** Consent Notice 6387944.3 provides that as a condition of granting a subdivision consent in 2005, the ongoing operation and maintenance of the private sanitary sewer pump located on the property would be the sole responsibility of the flat owner(s). This certificate does not impose any additional legal requirements that would need to be addressed to enable Watercare to undertake the proposed works. Encumbrance 6387944.5 is registered in favour of Auckland Council. The encumbrance relates to a building consent granted by the Council for the construction of a submersible sewage pump station on the relevant land. The encumbrance provides that the property owner is obliged to carry out ongoing and regular maintenance of the pump. The relevant property is now owned by Auckland Council and the building that was previously constructed on the property has now been demolished and removed. It is likely that the encumbrance is now redundant. Regardless of whether the encumbrance is now redundant or not, it does not impose any additional legal requirements that would need to be addressed to enable Watercare to undertake the proposed works.

(d) **PS23 (Frederick Street):** Caveat 480523.2 is registered in favour of Auckland Council and forbids the registration of any instrument affecting the land without first obtaining the consent of the Council or prior to the caveat being withdrawn/removed. As a designation does not involve the registration of any instrument that will affect the relevant land (being CFR NA97C/394) the caveat

does not impose any additional legal requirements that would need to be addressed to enable Watercare to undertake the proposed works.

(e) **Haycock Avenue:** Please note that paragraph 1.1(e) of the Auckland Council s92 request letter referred to this site as being the 'Miranda Reserve' site, however, the building line restriction (K83194) referred to in the letter relates to the 'Haycock Avenue' site. The building line restriction prohibits any building being constructed within 8 feet of the outside line of the adjoining street. As Watercare does not intend to construct buildings on the property that are within 8 feet of the adjoining street then this building line restriction will not need to be lifted to enable Watercare to undertake the proposed works.

### **Question 1.2: Other Matters**

#### Council Question:

(a) *Confirm whether proposed conditions will be provided.*

#### Response:

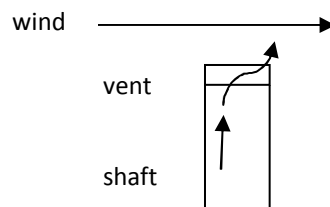
Proposed conditions of the resource consent are being prepared and will be provided in due course.

#### Council Question:

(b) *Clarify the meaning of “venturi effects”*

#### Response

“Venturi effect” refers to the phenomenon where wind blows across the top of a vent and pulls the air out of the vent due to the differences in pressure that are created.



## **2.0 Specialist Reports**

### **Question 2.1: Earthworks**

Question 2.1 in the s92 request references a memo to Graeme Michie from Campbell Stewart of SouthernSkies Environmental Limited, dated 18 September 2012. The questions summarised below derive from the Southern Skies memo.

#### Council Question:

1. *Provide further information on the detail of the CMP.*



Response:

A draft Construction Discharge Management Plan (CDMP) has been prepared and is attached as **Attachment 3**. The CDMP provides additional details on the construction works and sequencing, and sets out an overview approach for managing site related discharges from the various stages of the project.

Council Question:

*2. Further work is required to make the ESCPs consistent with TP90.*

Response:

The draft erosion and sediment control plans (ESCPs) have been reviewed and revised versions are contained in the draft CDMP.

Council Question:

*(a) Detail project methodologies, standards and protocols for dewatering. Indicate what chemicals/conditioners will potentially be used in tunnelling works and the potential effects these have on discharged water.*

Response:

These matters are addressed in the draft CDMP (refer Sections 2 and 3 of the CDMP).

Council Question:

*(b) Show a revised methodology to ensure that wheel washes will be closed systems or incorporate chemical flocculation to achieve an appropriate level of treatment.*

Response:

This is addressed in the draft CDMP (refer Section 3 and Section 4.1.2 of the CDMP).

Council Question:

*(c) A draft chemical treatment plan is required to clearly detail the standards and protocols for the use of chemicals for water treatment.*

Response:

This is addressed in the draft CDMP (refer Appendix C of the CDMP).

Council Question:

*(d) Provide detail to show how stabilised access roads will be maintained in a non-erodible state.*

Response:

This is addressed in the draft CDMP (refer Sections 3 and 4.1.3 of the CDMP).

## **Question 2.2: Groundwater and Settlement**

Question 2.2 in the s92 request references a letter to Graeme Michie from Aidan Nelson of Earthtech Consulting Ltd, dated 20 September 2012. The questions summarised below derive from the Earthtech Consulting letter.

### Council Question:

*Detailed geotechnical investigations, analysis and specimen designs are requested at WS2 and one other shaft site to demonstrate that settlement limits can be achieved (total of two detailed investigation areas). The following is requested:*

- i. Detailed geotechnical investigations.*
- ii. Groundwater modelling with and without mitigation.*
- iii. Assessment of cumulative effects from mechanical and dewatering induced settlement, based on the proposed detailed design drawings.*
- iv. Assessment of building locations and foundation details for all buildings located within 30m of the shaft perimeter.*

*Detailed plans for the two specimen design sites should address a number of matters listed in the s92 letter.*

### Response:

At a meeting with Auckland Council and Aidan Nelson of Earthtech on 4 October 2012 it was clarified that any two sites could be selected, as long as they represent sites with nearby dwellings. A further meeting was held on 9 November 2012 where Watercare's approach to answering the questions was discussed and agreed. The additional work required in order to respond to the information request is underway. As agreed at the 9 November meeting, this work is focussing on the Mt Albert War Memorial Reserve and Whitney Street sites. Once completed, a further meeting will be scheduled with Council and their technical reviewer Earthtech to confirm the findings and reporting will then be finalised and provided to Council.

## **Question 2.3: Archaeology**

Question 2.3 in the s92 request references a memo from Vanessa Tanner, Senior Archaeologist Environmental Strategy and Policy, dated 18 September 2012.

The responses to the questions relating to archaeology have been provided by Clough & Associates and are contained in **Attachment 4**.

## **Question 2.4: Contamination**

Question 2.4 in the s92 request references a memo from Renate Schutte.

The responses to the questions relating to contaminated land have been provided by Tonkin & Taylor and are contained in **Attachment 5**.

## **Question 2.5: Stormwater**

Question 2.5 in the s92 request references a memo from Gemma Chuah, Consents and Compliance Advisor - Stormwater, dated 20 September 2012. The questions summarised below derive from Gemma Chuah's memo.

Council Question:

*1. Discuss effects on streams.*

Response:

The Central Interceptor main project works construction sites are all located within the Auckland Isthmus in the Whau Creek, Oakley Creek, Meola Creek and Motions Creek catchments, as follows (sites are indicated with progression up the catchment):

Whau Creek catchment sites: PS 25 (L3S1), Miranda Reserve (L3S2), Whitney Street (L3S3), Dundale Ave (L3S4), Haycock Ave (L3S5);

Oakley Creek catchment sites: Walmsley Park (AS4), May Road (WS2), Keith Hay Park (AS5);

Meola Creek catchment sites: Motions Road (L1S1), Rawalpindi Reserve (L2S1), Norgrove Ave (L2S2), Mt Albert War Memorial Reserve (AS1), Lyon Ave (AS2), Haverstock Rd (AS3);

Motions Creek catchment sites: Western Springs Depot (L1S1), Western Springs (WS1).

These sites are located either adjacent to a watercourse, or are within a stormwater catchment that will eventually drain to the associated watercourse.

The remaining construction sites are located adjacent to the coastline (PS 23, Kiwi Esplanade, Mangere Pump Station).

A brief description of the stream environments associated with each catchment is provided below<sup>1</sup>.

Whau Creek:

Whau Creek is a tributary of the Whau River estuary. The creek originates south of Mount Roskill and flows to the west through Blockhouse Bay and then north-west through New Lynn. The catchment area is 6.2 km<sup>2</sup>, of which 96 % is residential land use. Although the wider catchment of the Whau River estuary has a large proportion of industrial land use, this is downstream of the Central Interceptor construction sites. There is very little industrial land use in the catchment down to the lowest construction site location (PS 25), and only a small proportion of commercial land use. The remainder of land use in the upper catchment is open space, including school fields, parks and a golf course. The catchment has an overall stream type classification under the Auckland Regional Plan: Air, Land, Water (ARP: ALW) of 4 (highly disturbed, largely natural channel).

The Whau Creek has low macro-invertebrate diversity, with the upper reaches supporting good to very good fish communities. Stream Ecological Valuation (SEV) scores ranged from 0.56 to 0.63 in these upper reaches.

Oakley Creek:

Oakley Creek is thought to be the longest fully open urban stream channel in New Zealand. There is a significant contrast between the upper and lower reaches of the stream. The upper reaches are highly modified, having been straightened and lined with concrete; whereas the

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<sup>1</sup> Summary ecological descriptions and SEV data based on existing reported information prepared for Watercare.

lower reaches include the largest natural waterfall in urban Auckland, in a location surrounded by native bush. The Central Interceptor construction sites are located in the upper, more modified, part of the catchment.

Oakley Creek is 11.3 km long and its modified headwaters are located in the vicinity of Keith Hay Park to the south east of Mount Roskill. The stream flows northwards through Mount Roskill, Wesley and Owairaka to discharge into the Waterview Inlet. The total catchment area of Oakley Creek is 12.3 km<sup>2</sup>, 85% of which is residential land use. The South-Western motorway (SH 20) is also located within the catchment and the proposed SH 20 extension to SH16 (the Waterview Connection) will result in a number of changes to the stream channel. The catchment has an overall stream type classification under the ARP: ALW of 4 / 5 (highly disturbed, mix of artificial and natural channel).

In the upper catchment of Oakley Creek in the vicinity of the Central Interceptor main project works construction sites, habitat quality is low to moderate, with modifications to the riparian vegetation, banks and channels evident (NIWA 2012). The invertebrate communities present reflect poor water quality. Ecological functioning is poor, as indicated by the overall SEV score of 0.42. Hydraulic functioning was substantially reduced, due to a loss of bank, groundwater and floodplain connectivity as a consequence of bank and channel lining.

#### Meola Creek:

Meola Creek starts in the vicinity of Haverstock Road in Sandringham and flows northwest for around 800 m through the Roy Clement Treeway before entering a 1.5 km underground piped section at Alberton Avenue. The stream re-emerges south of AIS St Helens tertiary institution on Linwood Avenue and flows for 2.7 km through the Chamberlain Golf Course, under the North-Western Motorway and alongside Motions Road, Western Springs College and MOTAT, before discharging into the Waitemata Harbour to the west of Te Tokaroa Reef.

Meola Creek has the largest catchment of the four streams within the Central Interceptor catchment, with a total area of 15 km<sup>2</sup>, extending from Point Chevalier through Mount Albert to Mount Eden and Three Kings. The majority of the land use in the catchment is residential. The catchment has an overall stream type classification under the ARP: ALW of 4 (highly disturbed, largely natural channel).

In the upper Meola Creek in the vicinity of the Central Interceptor main project works construction sites, SEV values indicate moderate ecological functioning (0.57). Hydraulic and biogeochemical functioning was good. With progression down the catchment in-stream habitat was of a moderate value where pools and riffles are present. The fish Index of Biotic Integrity (IBI) score indicated very good biotic integrity of the fish community in this location.

#### Motions Creek:

The Motions Creek catchment covers an area of 4.2 km<sup>2</sup>, 91 % of which is urban land use (residential, industrial or commercial land), with the remainder in bush and grassy reserves. The upper catchment extends upstream through Western Springs, Kingsland and along the north-west motorway to Newton. Of the four stream catchments within the Central Interceptor catchment, Motions Creek catchment has the lowest proportion of residential land use and the greatest proportion of industry. Motions Creek also has the shortest length of open channel of the four streams. The upper reaches of the stream have been piped and emerge just upstream of the point at which the stream is joined by outflows from Western Springs Lake, near the Western Springs Depot construction site.

Macro-invertebrate communities tolerant to pollution dominate in the upper part of Motions Creek. This is indicative of poor water quality. The condition of fish fauna was poor and in-stream habitat was low. The overall SEV score in this location was 0.53, which included

especially low scores for biodiversity function. The low value of specific variables was indicative of the modified nature of the stream.

The Central Interceptor main project works construction sites are small in comparison to the wider catchments within which they are located and will contribute very small runoff volumes relatively. Stormwater runoff from the permanent works at sites will largely be clean, being generated typically from impervious surfaces associated with the finished access and connection structures or from the adjacent grassed areas. Runoff will be directed either overland or via stormwater reticulation to the associated watercourses. For most sites, there is only a very small increase in impervious surface relative to the existing situation.

At four of the construction sites within the Auckland Isthmus (Western Springs, Haverstock Road, May Road and PS25), the permanent works will result in a larger increase in impervious surface (a significant increase in impervious surface also occurs at the Mangere Pump Station site). Stormwater runoff from the permanent works at these sites is expected to be of a relatively high quality as the facilities will experience low traffic movements and other sources of contaminants are not present. As outlined in section 5.9 of the AEE, a range of stormwater measures are proposed to provide stormwater treatment at these sites, generally to TP10 requirements.

Overall, stormwater discharges from the Central Interceptor construction sites either during construction or from the permanent works are not expected to result in any detectable adverse effects on the associated stream environments.

Council Question:

*2. Address inconsistencies between the sizes of the construction site areas in the AEE and ESCPs.*

Response:

These have been reviewed and amendments have been made to the ESCPs (included in **Attachment 3**). Construction site areas in the AEE are conservatively based on the size of the designation. In some instances the ESCPs have smaller construction site areas, such as where there is an existing access road or where an area of vegetation to be retained has not been included in the calculation of the construction area.

Council Question:

*3. Provide clarity in the CMP regarding the point at which the site will be considered stabilised and the TP90 controls will be removed and replaced with TP10 controls.*

Response:

The TP90 controls will remain in place until construction is completed and the site reinstated. Any TP10 measures will be designed as part of the permanent works and commissioned at the end of the construction period.

Council Question:

*4. Comment on how runoff from sites will be managed during the time sites are occupied but no active construction activities are occurring. The details for each site may be able to be addressed in the CMP.*

Response:

The CDMP (**Attachment 3**) provides detail on the construction phases and erosion and sediment control measures for each phase. As described in the CDMP, the Contractor will be responsible for the management and maintenance of all erosion and sediment control measures for the duration of the period of construction at each site. If construction activities cease for a period at any site, the Contractor will inspect the site, monitor the site discharges and maintain the measures that are in place at regular intervals. When construction activities resume, the Contractor will revert to the "active site" monitoring and inspection programme.

Council Question:

*5. The maintenance of devices at end of construction phase once the sites are re-established will be very important. This will need to be addressed in CMP for sites those controls will be relied on during construction phase (in particular Western Springs, Haverstock Road, Mangere Pump Station).*

Response:

At the end of construction, the Contractor will complete any permanent works required on the site. If required by the extent of permanent works, this may include construction of TP10 attenuation and treatment devices. When the site is stabilised, TP90 controls will be removed and the TP10 devices commissioned. On completion of construction, any devices to be used on a permanent basis will be cleaned out and rehabilitated as necessary for long term use.

Council Question:

*6. Consider effects on water quantity from the proposed impervious surfaces at PS 25.*

Response:

Hydraulic design calculations for the PS 25 (Miranda Reserve) permanent works are contained in Part B Appendix B of the AEE. The increase in peak flow from the PS 25 surfaces during a 1 in 10 ARI storm is approximately 26 l/s between the pre and post development cases for the design storm (very short duration and high intensity storm with time of concentration of 0.1 hours). The adjacent stream has a significantly longer time of concentration and hence peak flows in the stream are unlikely to coincide with peak flows from the PS 25 catchment. The flows arising from the permanent impervious surfaces at PS 25 are therefore likely to be a very low percentage of the total flow in the adjacent stream during peak stream flows and are likely to have a negligible effect on the stream.

Council Question:

*Amend incorrect reference to Motions Creek at the Motions Road site. This should be Meola Creek.*

Response:

The incorrect reference has been amended in the updated ESCP text for this site.

**Question 2.6: Landscape**

No further information was requested in relation to landscape in Auckland Council's s92 request letter.



## Question 2.7: Traffic

The questions relating to traffic are contained in a letter from Angie Crafer of Flow Transportation Specialists, dated 20 September 2012.

The responses to the questions relating to traffic have been provided by Traffic Design Group and are contained in **Attachment 6**.

Responses to the questions not addressed by Traffic Design Group are set out below:

### Council Question:

*Advise whether permission has been sought/gained from relevant stakeholders to use Morning Star Drive (a private road).*

### Response:

Watercare has an existing agreement with St Lukes Holdings Limited, Body Corporate No.346086 and St Lukes Gardens Apartments Progressive Society Incorporated with respect to works over the existing spillway and future works relating to the Central Interceptor project. The existing agreement grants Watercare access for all purposes connected with carrying out Watercare's works.

### Council Question:

*Advise whether alternatives are available to avoid locating permanent structures outside the road carriageway, particularly at L2S2 and L3S3.*

### Response:

L2S2 (Norgrove Avenue):

Works are required at this site to connect to a local overflow. As described in the AEE, Part B, Section 14, consideration was given to locating the site on the northern side of the stream, which is outside of the road reserve. The current site was chosen as it provides sufficient working area, only requires works on one side of the bank and only requires a single access point. The permanent works at the site will be limited to an access/drop shaft (below ground) with access covers at grade. Access for normal operation, inspection and maintenance will only be around once per month.

L3S3 (Whitney Street):

As described in the AEE, Part B, Section 17, consideration was given to locating this site on various private properties in the vicinity. Works at this site are required to connect into the Avondale Branch Diversion Sewer in the road reserve. The current site was selected as it minimises the impact on private properties. The permanent works at the site will be limited to an access/drop shaft (below ground) with access covers at grade. Access for normal operation, inspection and maintenance will occur in the order of once per month.

### Council Question:

*How will residents and affected parties be informed of the construction activity and how will the area of affected parties be identified.*

Response:

As described in Part A, Section 8.2.3 of the AEE, a detailed communications plan will be developed prior to construction. The communications plan will cover methods of consultation and liaison with key stakeholders, including directly affected property owners, neighbours, organisations, interest groups and road users.

**Question 2.8: Noise and Vibration**

The questions relating to noise and vibration are contained in a letter from Jon Styles of Styles Group, dated 24 September 2012.

Questions 1 to 4 in the s92 request relate to noise and responses have been provided by Marshall Day Acoustics. These are contained in **Attachment 7**.

Question 5 relates to vibration and a response has been provided by Tonkin & Taylor. This is contained in **Attachment 8**.

## 3.0 Site Specific Issues

**Question 3.1 Western Springs Interchange**

Council Question:

*Advise what consultation has been undertaken with the neighbouring Caltex service station site.*

Response

As part of the consultation undertaken in May 2012 (as described in Section 8.10.2 of the AEE, Part A), Watercare sent a letter and project information sheet to the owner of the site, Tawa Farms Limited. This was followed up by a phone call to confirm the material had been received. More recently information has been provided at the request of a representative of the landowner. No submission has been received from Tawa Farms Limited.

**Question 3.2 Mt Albert War Memorial Reserve**

Council Question:

*Clarify why noise barriers are not proposed along the eastern boundary of 9 Wairere Avenue.*

Response:

Marshall Day Acoustics has advised that predictions of sound using the domestic fence as an acoustic barrier indicate that sound from trucks accessing the site will be sufficiently screened to comply with the Construction Noise Standard. It is recognised that the domestic fence will not perform as well as a bespoke acoustic barrier and therefore the report recommends that trucks should not sit idling for extended periods adjacent to the property (particularly in the 7.00-7.30am period where a reduced noise limit is in place).

Construction traffic will be managed so as to avoid having trucks idling for extended periods of time.

Watercare is currently carrying out further consultation with neighbours at the Mt Albert War Memorial Reserve site and some refinement of the proposed site layout may occur as a result of this process.

### **Question 3.3 Lyon Avenue**

#### Council Question:

*Advise what consultation has been undertaken with Mt Albert Grammar School and the Ministry of Education.*

#### Response:

Watercare met with a representative of the Ministry of Education in June 2012 and provided information on the proposed works. Watercare has also sent emails to Mt Albert Grammar School with information on the project and spoken to the headmaster of the school about the works. No submissions have been received from Mt Albert Grammar School or the Ministry of Education.

### **Question 3.4 Keith Hay Park**

#### Council Question:

*Provide an assessment of effects for the area to be designated on Frost Road.*

#### Response:

As described in Section 7 of Part B of the AEE, this site is located to the north of the park on the northern side of the recently constructed section of SH20. It is zoned road reserve/Special Purpose 3 and designated for proposed motorway/rail/road (F05-05) and for railway purposes (G08-05). To the north of this site is Mt Roskill Grammar School and an area of light industrial development.

The site is required to connect to the existing sewer. Construction in this area will be of relatively short duration (around 3 to 6 months). There is a pedestrian crossing over the motorway to Keith Hay Park to the west of this site but the works will not interfere with this access. The location of the works is not within the formed road carriageway. There is no notable vegetation in this area.

The proposed works are within the KiwiRail designation. Watercare is discussing the works with KiwiRail so that detailed design can take account of the future Avondale-Southdown rail corridor and the Watercare works can be constructed at an appropriate depth.

### **Question 3.5 PS 25 (Miranda Reserve)**

#### Council Question:

*Advise what consents are required for demolition of the above ground sewer and how demolition noise will be remedied or mitigated.*

#### Response:

The demolition of the above ground sewer is not included in the scope of the Central Interceptor works. As outlined in Part B, Section 15 of the AEE, the existing above ground sewer at the site is expected to be removed as part of separate works to be undertaken by Watercare, prior to construction of the Central Interceptor works. The demolition is a permitted activity in the Auckland Council District Plan (Auckland City Isthmus Section). The work is currently scheduled to occur in 2014.

### **Question 3.6 General – dust effects**

Council Question:

*Provide an assessment of dust emission effects on neighbours.*

Response:

Dust will be managed to avoid the emission of dust beyond the boundaries of the sites. Methods for minimising and monitoring dust generated by construction activities will be included in the Construction Management Plan(s). Dust suppression measures will be implemented in accordance with the “*Good Practice Guide for Assessing and Managing the Environmental Effects of Dust Emissions*” published by the Ministry for the Environment in 2001.

For example, the following measures may be appropriate to minimise potential dust nuisance:

- Speed controls implemented on access roads;
- Areas of exposed earth stabilised as soon as practicable;
- Stockpiles covered or dampened to minimise dust generation;
- Water carts used to dampen access and haul roads and areas of exposed earth to minimise dust generation.

## 4.0 Maps - Trenching

Council Question:

*Identify more clearly the proposed areas of trenching.*

Response:

Areas of likely trenching have been highlighted in pink on the drawings provided as **Attachment 9**. In a number of locations trenching works occur outside the boundary of the area to be designated and are generally the sort of routine connection works that Watercare carries out in its day to day work. As the project is only at the concept design stage these are indicative only.

Much of this work is a permitted activity in the Auckland Council District Plan (Auckland City Isthmus Section) (Rule 4A.4.6B(iii)). If a resource consent is required for work at any particular locality outside of the designation, this will be sought prior to construction.

The CDMP sets out further details on controls that will be in place during trenching works to manage any potential effects.

## **Section 92 Response Attachments**

### **Attachment 1: Auckland Council s92 request**





## **Section 92 Response Attachments**

### **Attachment 2: Property Instruments**



## **Section 92 Response Attachments**

### **Attachment 3: Draft Construction Discharge Management Plan**



## **Section 92 Response Attachments**

### **Attachment 4: Archaeology**





## **Section 92 Response Attachments**

### **Attachment 5: Contamination**



## **Section 92 Response Attachments**

### **Attachment 6: Traffic**



## **Section 92 Response Attachments**

### **Attachment 7: Noise**





## **Section 92 Response Attachments**

### **Attachment 8: Vibration**



## **Section 92 Response Attachments**

### **Attachment 9: Trenching drawings**

