Project Number: W-SL001.03

Erosion and Sediment Control Plan

Queen Street Wastewater Diversion Programme (Part 3-Part 4 Connector)

10 November 2023

CONFIDENTIAL

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Revision Details

Revision	Details
V1	First Draft
V2	Client Review (No changes)
V2	Client Issue

This report ('Report') has been prepared by WSP exclusively for Watercare Services Limited ('Client') in relation to erosion and sediment controls necessary for the construction of the P3P4 Connector link tunnel for the Queen Street Waste Water Diversion, for consenting purposes ('Purpose') and in accordance with the Master Services Agreement between the Client and Consultant dated 23 July 2022 The findings in this Report are based on and are subject to the assumptions specified in the Report. WSP accepts no liability whatsoever for any reliance on or use of this Report, in whole or in part, for any use or purpose other than the Purpose or any use or reliance on the Report by any third party.

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Abbreviation and Definitions

AC	Auckland Council
AEE	Assessment of Environmental Effects
AEP	Annual Exceedance Probability
ARI	Average Recurrence Interval
AT	Auckland Transport
AUP	Auckland Unitary Plan
BPO	Best Practicable Option
CRLL	City Rail Link Limited
CSA	Construction Support Area
ESCP	Erosion and Sediment Control Plan
DCS	Design and Construction Statement
TBM	Tunnel Boring Machine
NES	National Environmental Standard
NPS	National Policy Statement
TMPs	Traffic Management Plans
WSL	Watercare Services Limited
WSP	WSP New Zealand Limited

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1 Executive Summary

WSP has been engaged by Watercare Services Limited to prepare an Erosion and Sediment Control Plan (ESCP) for the Part 3 - Part 4 Connector Tunnel of the Queen Street Wastewater Diversion Programme. The project, and more specifically, the Greys Ave construction support area (CSA), involves land disturbing activities and has the potential to produce sedimentation and erosion effects on the receiving environment.

This ESCP has been developed to assist in identifying and responding to the environmental effects of the project generated by earthworks (land disturbance) at locations within the project area. The ESCP has been developed in accordance with best practice and core principles of the Auckland Council guideline GD05 - Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region. This report should be read in conjunction with the Part 3 ESCP (refer to Appendix J of the Part 3 application). Additionally, this assessment should be read in conjunction with Flood Hazard Assessment prepared for this specific project (refer to Appendix G of the application).

To manage adverse effects, the main perimetral control devices proposed during construction for the Greys Ave CSA are concrete barriers and hot mix asphalt bunds. Concrete barriers sealed with hotmix are proposed upslope of the CSA to direct clean water away from the site and into protected catchpits. Hot mix bunds are also proposed at the downslope extents of the CSA to retain sediment laden water within the compound. Water accumulated within the CSA is to be pumped into clarifying tanks and discharged off-site once sufficiently treated. Catchpit protection devices are to be installed wherever possible around the CSA with a focus on catchpits that are either downstream or within the compound.

The proposed services tunnel is entirely underground, however the shafts required for the works are a potential source of sediment mobilisation. The Greys Ave CSA is proposed to be divided into three areas, one “clean water” corridor, and two “dirty water areas”, either side. It was found that the upstream interface of the dirty water sites should be protected by a concrete training barrier with a minimum height of 700 mm. This is to divert overland flow into the corridor and prevent it from entering the dirty water areas if pooling or backflow were to occur due to flow constriction. These concrete barriers are also to be adopted along the walls of the clean water corridor until the point where trucks or other vehicles are expected to pass over the corridor. Here and beyond this point there is only to be a hot mix bund separating the dirty water areas from the clean water corridor.

The Greys Ave CSA will require a strict management regime to prohibit both “dirty” activities and the storage of materials within the 5m minimum width OLFP corridor over the entire construction period. The P4MH4 shaft sits at an adequate distance outside of the clean water corridor.

Erosion and sediment control devices are expected to be installed, monitored, and maintained as per GD05 guidelines.

This ESCP presents a Best Practicable Option for sediment control based on the current understanding of extent and timing of project works. The appointed contractor will customise this erosion and sediment control strategy to their own specific construction methodology, however the overall environmental outcome will not worsen. Underground service relocations or any other enabling works outside the CSA are not covered by this ESCP.

With the application of these best practice erosion and sediment control measures, the project will minimise the erosion and sediment effects on the surrounding environment.

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2 Introduction

Watercare Services Limited ("Watercare") is a lifeline utility providing water and wastewater services to a population of 1.7 million people in Auckland. Its services are vital for life, keep people safe and help communities to flourish. More specifically, Watercare is the council-controlled organisation of Auckland Council responsible for municipal water supply and wastewater treatment within Auckland, and the provider of bulk water and wastewater services to Pokeno and Tuakau in the Waikato District.

Watercare are proposing to upgrade the wastewater network within the upper catchment (southern) of Auckland City Centre. It has been established by Watercare that the existing network does not have sufficient capacity to meet future demands. WSP New Zealand (WSP) has been engaged by Watercare to design and consent a new wastewater mainline through Auckland City Centre.

This report provides an erosion and sediment control plan in relation to the service tunnel which will connect Parts 3 and 4 of the Queen Street Wastewater Diversion Programme ('the Project'). Resource consent for Parts 3 and 4[1] of the wider programme of works has been sought separately from these connecting works.

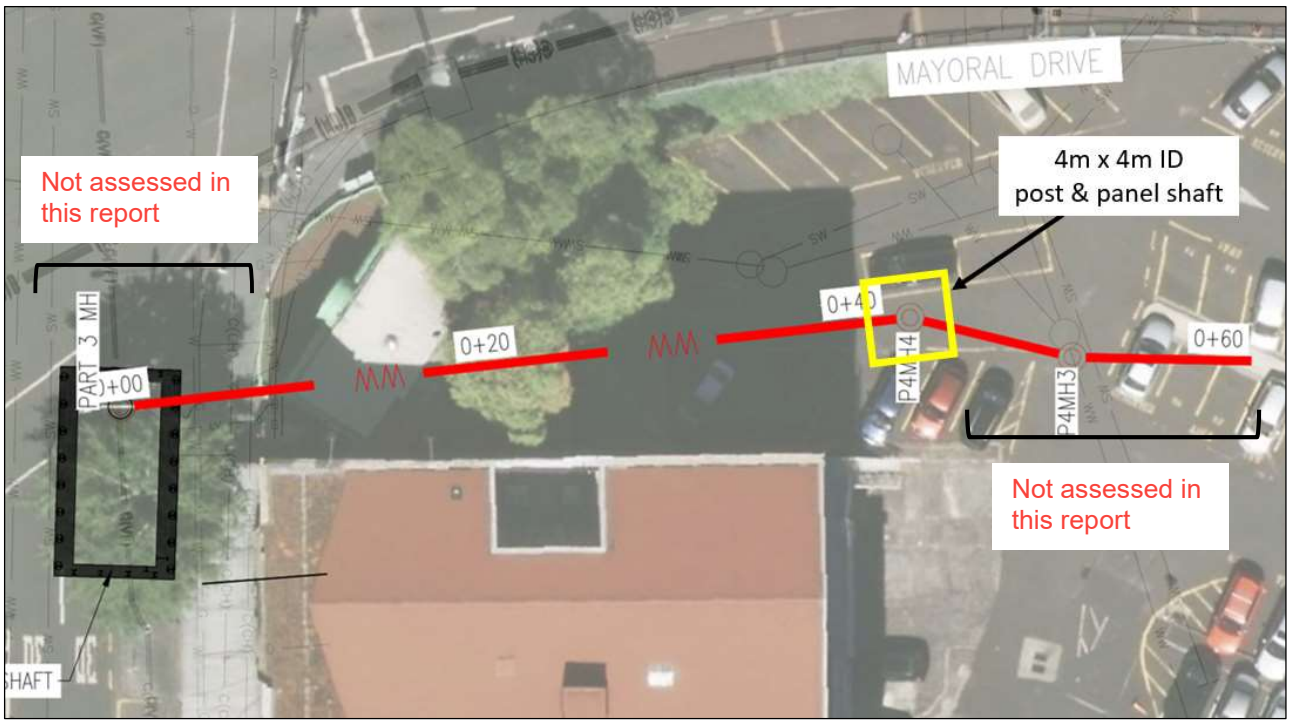

Figure 2-1: Site plan of the P3-P4 connector tunnel and shaft

This project involves the early construction of a section of pipeline to enable the tunnelling works required for the Part 3 alignment of wastewater pipeline. These works will consist of constructing one shaft (P4MH4), shown as the yellow square at the Greys Avenue carpark in Figure 2-1, and a 43m length of tunnel from this shaft to the Part 3 launch shaft at the intersection of Mayoral Drive and Queen Street (Mayoral Drive Shaft). The Mayoral Drive Shaft will not be assessed for Erosion and Sediment Control within this report, as this is covered in the Part 3 assessments. The 17m of pipeline and singular manhole following the shaft at Greys Ave are also not being assessed. This is indicated in Figure 2-1.

[1] Part 4 of the project sits within the 'Mayoral Drive' alignment consent, which will be consented as a separate package of works.

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The purpose of this tunnel is to service the Tunnel Boring Machine (TBM) which will be used to construct the Part 3 alignment of pipeline from the Mayoral Shaft down Queen Street. During the Part 3 construction phase, the P3-P4 connector tunnel will carry all required power, hydraulic and other cables and hoses from the staging area in the Greys Avenue Carpark into the bottom of the Mayoral Shaft to support the operation of the TBM.

Upon completion of the Part 3 construction works, the P3-P4 connector tunnel will no longer be needed to service the TBM. The tunnel will then assume it's primary role as the section of sewer pipe which will convey wastewater from the new Mayoral Drive wastewater pipe (Part 4) into the newly installed Queen Street wastewater pipe (Part 3).

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3 Description of Existing Environment

The following provides a description of the existing environment applicable to the application.

3.1 Location and Physical Environment

The project is located within Auckland City Centre in the surface carpark at 329 Queen Street and a portion of the road reserve (footpath) below ground on Queen Street. The tunnel to be constructed will connect to the Construction support Area (CSA) in the adjacent carpark at 34 and 36-38 Greys Avenue. Figure 3-1 below shows the wider environment in which the connector tunnel will be constructed. The green box represents the location of the shaft/manhole while the purple line shows the path of the underground tunnelling.

Figure 3-1: P3-P4 connector tunnel existing environment

The land use around the intersection of Mayoral Drive and Queen Street is a mixture of retail, commercial, hospitality, civic, residential, and represents a highly developed urban environment. For the most part, retail activity is provided at street level with other uses provided above. The buildings along Queen Street are multi-levelled with a mixture of heritage structures and more modern high-rises.

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4 Project Works

Establishment of the P3-P4 connector tunnel comprises of two main construction activities, being the post and panel shaft and the 43m length of tunnel below ground. The temporary shaft will then be backfilled to become a manhole on the Part 4 wastewater alignment.

The shaft construction is expected to take 15 days followed by tunnelling operations which will last 20 days. Once the tunnel has finished being used as a duct, the shaft will be converted into a manhole, which is expected to take 10 days.

4.1 Shaft Construction Details

The shaft (P4MH4) will be constructed within the carpark at 329 Queen Street to a depth of 5.5m. The necessary plant equipment for this construction has been included in Table 1 below.

Table 1: Plant list for shaft works

Activity	Plant List
Drilling and installing steel posts	10-20t excavator and/or GEAX EK-40
Excavating shaft	10-20t excavator
Spoil removal	6-wheeler or artic truck
Concrete base	Concrete truck, pump truck

The major components of constructing the temporary post and panel shaft P4MH4 are outlined below and shown in the plan in Figure 4-1:

- An auger attachment on a 10 – 20t excavator or small piling rig (GEAX EK-40) will be used to drill 300 to 400mm diameter holes and steel H beams will be set into each with sand or concrete backfill.
- The shaft will be excavated from the top using an excavator at surface level to a depth of 5.5 metres, approximately 1m below pipe invert. Six-wheeler trucks will be used to remove spoil off site. The approximate shaft spoil volume will be 100m^3 (20 return truck trips).
- Steel road plates or timber lagging will be installed between H beams as the excavation advances.
- The shaft base will be lined out with 500mm of aggregate or blinding concrete to provide a solid and level working platform.
- If dewatering is required, a 50 to 100mm submersible pump will be used to remove water from excavation. The water will be pumped into clarifying tanks for treatment before discharging. The pumps will run continuously while the trench is open and will be powered by a diesel generator or grid power from the CSA.

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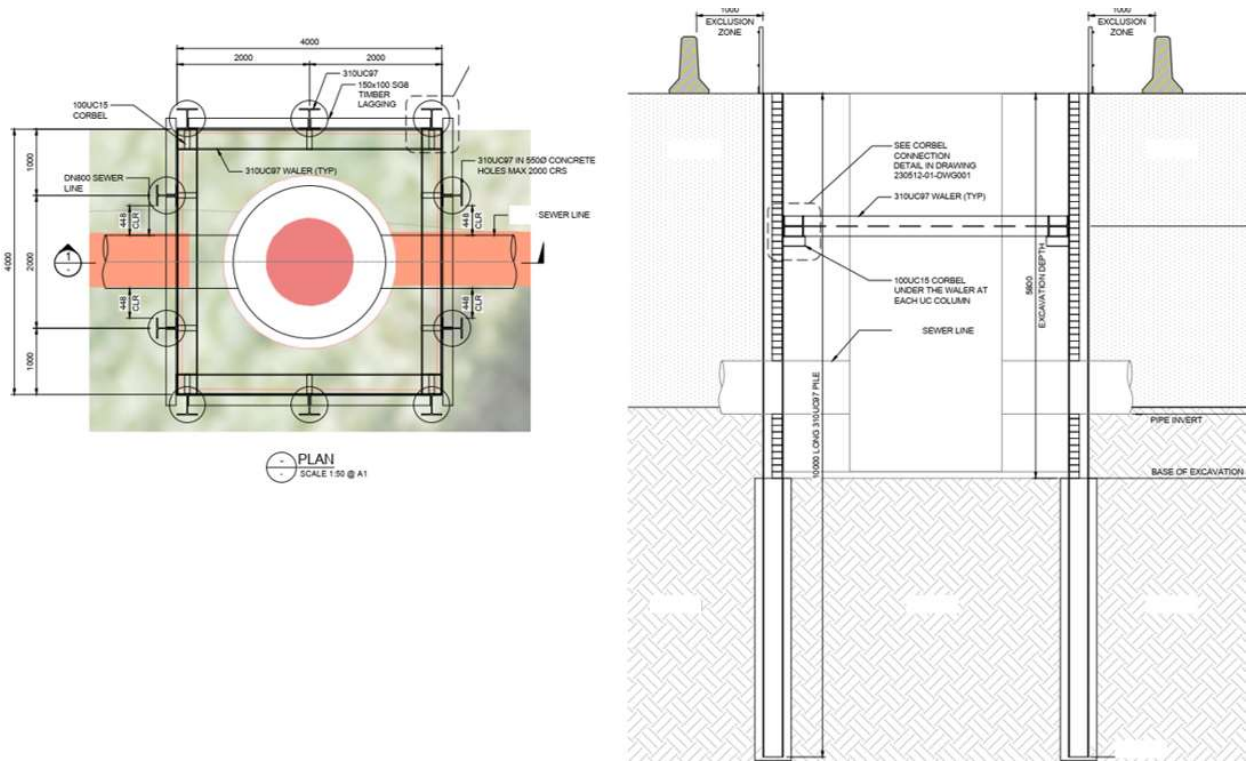

Figure 4-1: Post and panel shaft details

Following completion of the tunnelling required for the P3-P4 connector and the Part 3 construction works, the shaft will be backfilled with GAP65 or low strength concrete and will become a manhole for any necessary servicing of the pipeline in future.

4.2 Trenchless Tunnel Construction Details

A trenchless laser guided pilot bore construction methodology will be followed to create the tunnel from the P4MH4 shaft to the Mayoral Shaft. The plant equipment list for tunnelling works is included in Table 2 below.

Table 2: Plant list for tunnelling works

Activity	Plant List
Tunnelling – P4MH4 Launch shaft	Crane truck, power pack container, thrust boring machine, sucker truck or 6 wheeler, tool truck.
Tunnelling – Mayoral Receiving shaft	Crane truck, power pack container, thrust boring machine, tool truck.

The major components of this methodology are outlined below:

- Setup of power pack, pump and water tank on surface adjacent to launch pit
- Lift pilot bore rig into pit and survey into position
- Drill pilot hole to reception pit using laser guided steering head
- Install cutting reamer and pull back to launch pit
- An auger or vacuum with sucker truck will be used to remove spoil from drive to be disposed offsite using 6 wheelers or sucker trucks. The approximate wet tunnel spoil volume will be 20m3 (8 return truck trips).
- Simultaneously jack GRP pipes between pits

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- Clean up and flush drill slurry out of pipe by jetting and vacuum truck
- CCTV inspection and low pressure air test upon completion

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5 Assessment Methodology

The purpose of the ESCP is to outline potential environmental effects, and to suggest the most appropriate mitigation measures. The Auckland Unitary Plan (AUP), Chapter E11, recognises that it is not feasible to prevent all discharges of sediment, and requires the application of a Best Practicable Option (BPO) approach. It further defines best practice as compliance with Auckland Council guideline GD05 - Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region, or alternative equivalent.

The ten fundamental principles of erosion and sediment control listed under Auckland Council guideline GD05 are as follow:

- *Minimise disturbance by retaining existing environment values and minimising earthworks.*
- *Stage construction to minimise the extent of land disturbance at a given time.*
- *Protect steep slopes.*
- *Protect receiving environments locate and map out all existing watercourses on the plan.*
- *Fully stabilise disturbed soils and exposed earthworks areas with vegetation rapidly after each stage and at specific milestones within stages.*
- *Install perimeter controls to retain dirty water within the site and clean water out of the working site.*
- *Employ sediment retention devices to collect and treat sediment-laden water to protect surrounding watercourses.*
- *Engage trained and experienced staff when implementing erosion and sediment controls.*
- *The erosion sediment control must adapt to the site's changing needs as the project progresses.*
- *Inspect, monitor, and maintain the operation of erosion and sediment control measures.*

These best practice principles have informed the ESC strategy presented on the following pages.

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6 Technical Analysis

The Universal Soil Loss Equation is not suited to quantifying the sediment yield from the discrete Queen Street sites, and there is no readily available alternative form of analysis that might be used. Therefore, the erosion and sediment control analysis has largely been qualitative, focusing on whether applied erosion and sediment control represents a suitable Best Practicable Option or not.

The receiving environment is the upper Waitemata Harbour, with sediment reaching it principally via the piped stormwater system. There are no existing natural watercourses within or downstream of the project area.

The City Centre is heavily urbanised and highly impervious, and therefore fully stabilised from an earthworks viewpoint. Other sources of contaminants arising from human activities (hydrocarbons, heavy metals) remain present, but these are outside the scope of this ESCP.

Project works include two shaft construction sites where earth will be exposed, one of which is assessed in this report. The greatest risk is associated with exposed earth at a surface-level, principally excavated spoil dropped from excavators or vehicles. Spoil "down-hole" within the shaft is a much lower risk, as the only way it can reach the surface is by being lifted or pumped out (assuming extreme event flows are suitably managed).

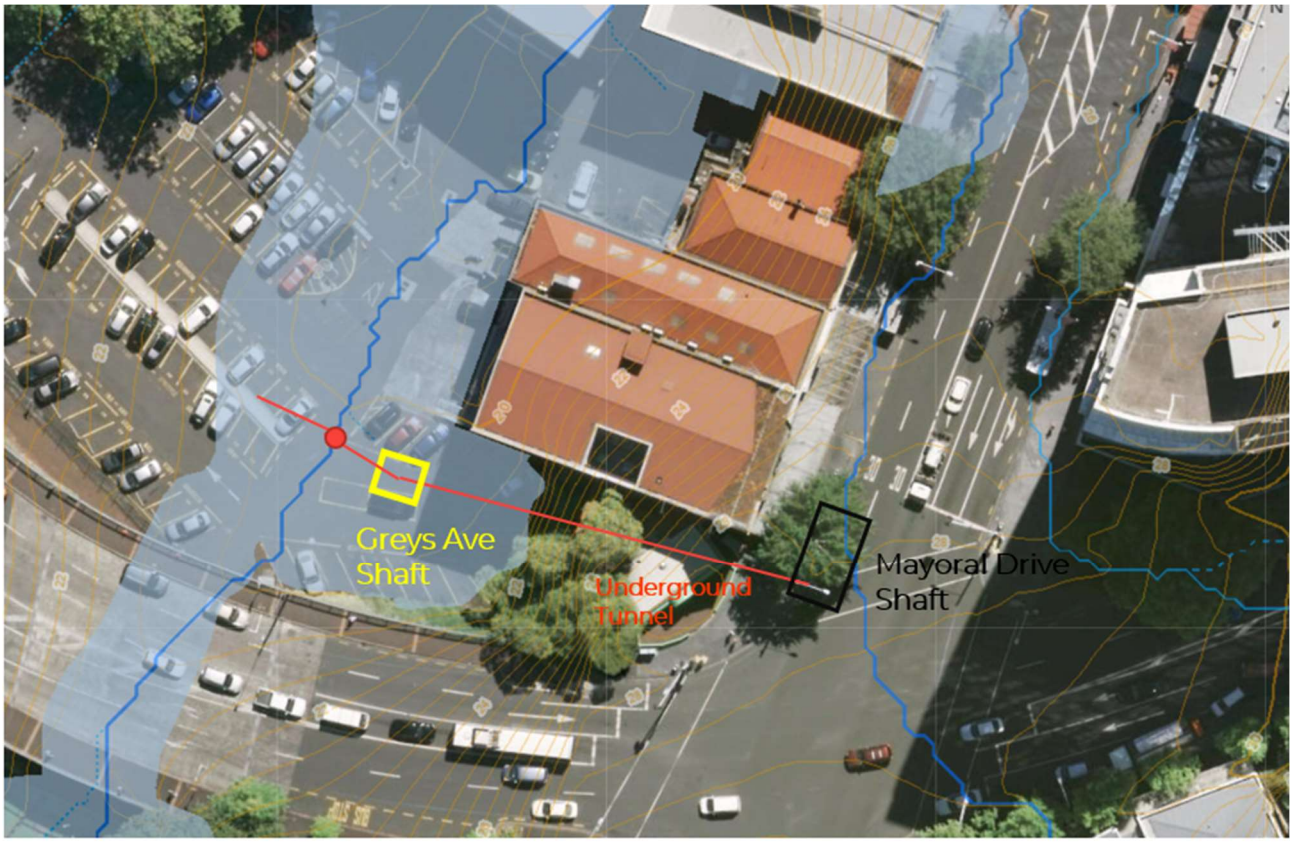

Figure 6-1: Mayoral Drive and Greys Ave tunnelling shafts with stormwater features

The Greys Ave CSA has an overland flow path (OLFP) running directly through it and also contains significant portions of flood plains within its boundary. Concrete training walls or hot mix bunds will be configured to divert flood flows around, or via a 5m wide corridor through the compound. Proposed in the works is a tunnel that connects the Greys Ave CSA to the Mayoral Drive shaft. The work involves the construction of shafts at both Greys Ave and Mayoral Drive compounds. Figure 6-1 shows the Greys Ave shaft within the combined OLFP and flood plain. In a

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storm event, this shaft has the potential to generate dirty water due to flow coming into contact with exposed earth and being released back into the stormwater system. Certain measures are required to minimise the amount of contact made between the exposed sediments generated on site, and the clean water generated from the storm event. Measures must also be taken to prevent any sediment laden water from being released back into the environment without appropriate treatment. These measures will be discussed in Section 8.

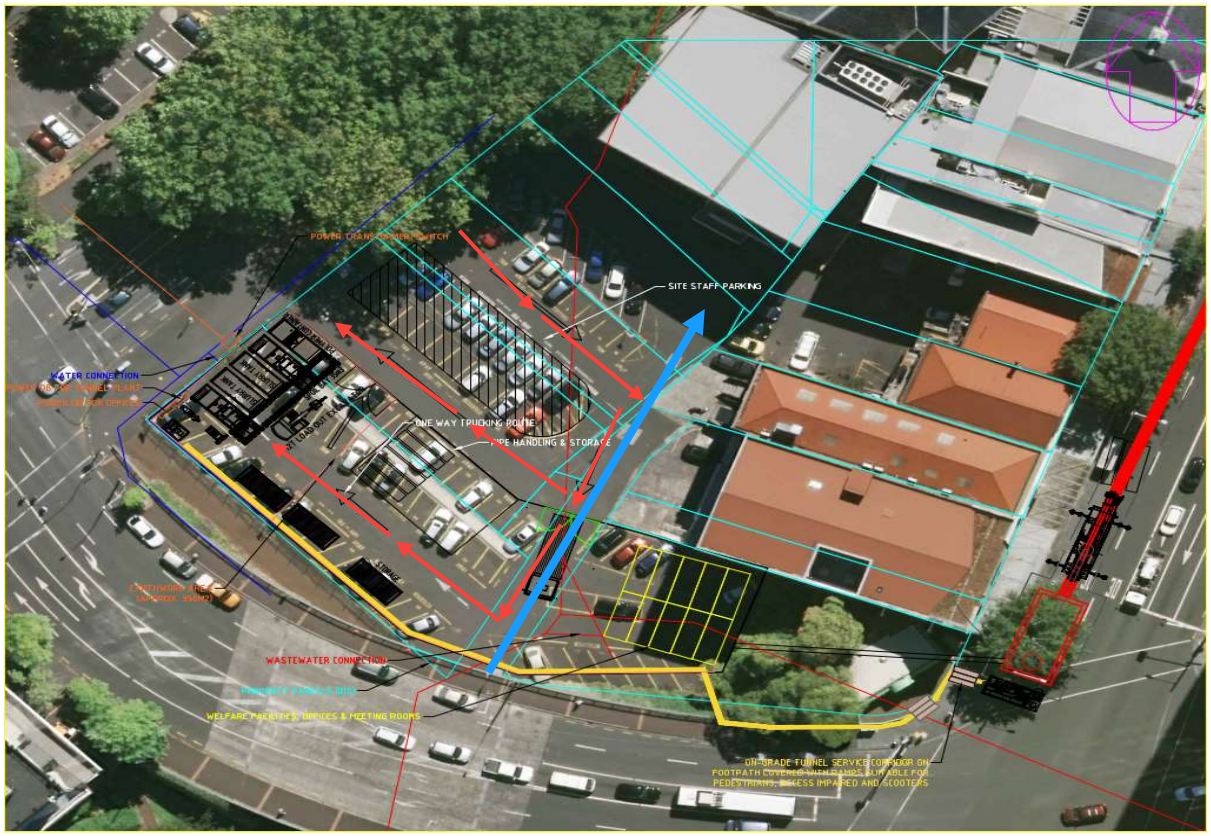

Figure 6-2: Greys Ave CSA layout indicating vehicle route (red arrows) and OLFP trajectory (blue arrow)

Figure 6-2 illustrates the route taken by trucks when transporting materials in and out of the compound. This route runs directly over the same overland flow path mentioned above.

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7 Effects Assessment

Sediment laden flows – from both extreme storm events and minor, regular rainfalls – are the primary concern regarding the receiving environment. Previous sections of this report highlight the possibility for a storm event to mobilise sediment and cause clean water contamination at the Greys Ave CSA. If left unmitigated, stormwater runoff flowing over the site has the potential to mobilise sediment and transport sediments into the receiving environment. Suspended sediments would reach the Waitemata Harbour, resulting in issues such as clogging fish gills and limiting the penetration of light, which is essential for aquatic life. Sediment laden water could also infiltrate public utilities surrounding the site and jeopardise their operation.

Through the application of best ESC practice described in this document (i.e. meeting the ten fundamental ESC principles outlined in Section 5), the residual environmental effects of the project works will be made acceptably low or negligible.

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8 Mitigation Measures

The following erosion and sediment controls are proposed to retain and treat sediment laden runoff on site. The devices mentioned must be monitored weekly during construction and adapted to suit the specific conditions as required.

Appendix A shows the indicative layout of the proposed controls. The appointed contractor of the works will be expected to refine this strategy into a more detailed erosion and sediment control plan based on their own specific construction methodology and work sequencing.

8.1 Erosion and Sediment Control Measures

8.1.1 Clean Water Diversion

Hot mix asphalt bunds and silt socks are to be constructed around the perimeter of the proposed "dirty" areas at the Greys Ave CSA. The role of these devices is to direct clean water, including flow from major storms, away from the construction sites and into existing street catchpits and stormwater channels downslope of the site. Where compound boundaries rest on footpaths or raised pavements, silt socks will be used. Where boundaries sit on road surfaces, hot mix bunds will be used.

The Greys Ave CSA is to have hot mix bunds running parallel to the significant overland flow path that passes through the site, forming a flow corridor of 5m minimum width. Within this zone the siting of amenities, the carrying-out of silt-generating activities and storage of materials will be prohibited. This will allow "clean" overland flow to move through the site and pass downstream. The 10% annual exceedance probability (AEP) storm flow depth has been estimated by Mannings Formula to be approximately 200mm through the constructed cross section.

Adding an allowance for freeboard (estimated using a velocity head calculation), it was found that the upstream perimeter of the dirty water sites should be protected by a concrete barrier with a minimum height of 700 mm. This will divert overland flow from up-gully into the corridor and prevent it from entering the "dirty" areas. These walls will also turn and extend alongside the clean water corridor to the point where vehicles need to cross over the corridor as part of their route. This is indicated on the ESCP drawing in Appendix A.

Any stormwater downpipes running down the walls of surrounding buildings and into the dirty water compounds should be identified and diverted into a suitable discharge location as determined by the appointed contractor.

Hot mix bunds and silt socks must be designed to withstand flow from the 5% AEP storm. Hot mix bunds and must be installed prior to the excavation works at the compound.

8.1.2 Dirty Water Diversion

Dirty water is intended to be retained within the site using the hot mix bunds lining the compound. Dirty water is to be treated using the appointed contractor's on-site treatment system. Additional freeboard will be provided at the downslope bunds of the dirty water areas to retain dirty water up to the 5% annual exceedance probability (AEP) storm.

Catchpit protection devices are to be installed as a back-up line of defence around the CSA with focus on catchpits that are downstream of the compound. Particular care will be needed with catchpit protection to ensure inlets do not become blocked; as they lie in a land-locked basin with no natural drainage, any catchpit blockage is likely to lead to building flooding.

8.1.3 Stabilised Entrances

The access points and entrances to the CSA will be adequately stabilised in accordance with GD05. In general, this will involve retaining the existing sealed surface or installing hardfill. Appropriate stabilisation of entrances and access paths will prevent these locations from becoming sources of sediment, minimise dust generation, and minimise disturbance to surrounding areas.

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9.1.4 Construction Discharge Locations

Sediment laden water collected within the compound is to be treated and discharged off site or as per the recommendations outlined in the Dewatering Assessment Report (Appendix K of the resource consent application).

8.2 Dewatering

Low-lying sections within the Greys Ave CSA, including the shaft site, may be inundated after a severe rainfall event. The following steps are to be undertaken when dewatering is required subject to ground investigations:

- Water to be removed via 50 to 100mm submersible pump
- Water will be pumped into clarifying tanks/containers for treatment
- Water to be discharged directly offsite after being treated to a minimum black disc clarity of 100mm

8.3 Heavy Rainfall Response and Contingency Measures

Heavy rainfall events have the potential to damage or displace erosion and sediment controls and result in uncontrolled sediment discharge. As a minimum, the appointed contractor must monitor weather patterns on the site daily and ensure the erosion and sediment control devices are fit for purpose before and during any forecast rainfall event. Notwithstanding this, the selected ESCP devices and methods (hot mix bunds, silt socks) are not generally vulnerable to weather events.

In general, the appointed contractor must:

- Monitor weather forecasts regularly to assess the risks and amend erosion and sediment controls to suit weather conditions
- Inspect controls after heavy rainfall and repair any damage immediately
- Report heavy rainfall incidents and liaise with Auckland Council as part of routine reporting
- Report any serious incidents to Council within 24 hours.
- If the shaft is expected to flood, contain the silty water on site until it can be pumped out and processed after the event.

Activities within the overland flow path must be strictly managed to avoid sediment release. Maintaining a clear, 5m minimum width flow corridor through the construction support area will be a key factor in achieving this.

8.4 Monitoring and Maintenance

GD05 provides indicative methods for ESC device maintenance. As a minimum, it is recommended that each device is inspected once a week, and after every rainfall event for correct operation. It is also recommended to remove accumulated sediment in the devices regularly and to clearly identify sediment disposal locations. Any damage to devices must be immediately remediated. The contractor is expected to have a trained environmental manager to supervise the sediment controls. The contractor must also keep records of all inspections and provide related reports at the request of the Engineer. Table 3 highlights the key device-specific maintenance procedures.

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Table 3: Indicative Maintenance Procedures

Erosion and Sediment Control Measure	Indicative Maintenance Procedure	Frequency
Hot mix Bunds	• Inspect for water ponding and blockages. Reinstate if damaged. • Inspect inverts and outlets for any signs of scour and erosion. • Remove sediment deposited around the bunds to avoid overtopping due to lack of freeboard.	Weekly and after every rainfall event.
Stabilised Construction Entrances	• Inspect daily and after each rainfall. Maintain as required to preserve function. • Pick up droppings and sweep surface regularly. • Re-construct or re-surface construction entrance if it becomes ineffective through surface contamination.	Daily and after every rainfall event.

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9 Conclusion and Recommendations

Across the Greys Ave CSA, devices such as hot mix bund and catchpit protection are to be implemented for erosion and sediment control. The hot mix bunds will be used to divide the site into two dirty water areas and a 5m wide clean water section for the overland flow path to pass through the site. The western (upstream) perimeter of the two “dirty” areas will need a 700mm high concrete barrier or gravel bund in the gully base. The barrier is also proposed along both sides of the clean water corridor boundaries to the point where vehicles will cross.

A constructed sump and potential turkey nest are proposed in each dirty water section, although the contractor may opt to provide alternative treatment through the on-site treatment system. Placement of amenities or materials within the overland flow corridor is to be prohibited. Catchpit protection is to be applied to all on-site and immediate downstream stormwater inlets, as well as the sections between compounds where any unintentional release of sediment laden water might reach. Particular care is needed to ensure these inlets are not blocked as they form the only means of drainage for the basin.

This provisional ESCP is expected to be adopted and developed further by the appointed contractor. Any developments must align with the principles and guidelines provided by Auckland Council’s GD05 and deliver environmental outcomes equivalent to those described in this plan.

In summary, the Part 3 - Part 4 Connector Tunnel of the Queen Street Wastewater Diversion Programme has the potential to create sedimentation and erosion effects on the receiving environment. Provided the control measures are implemented as per this Report, the project will have a less than minor effect on the environment.

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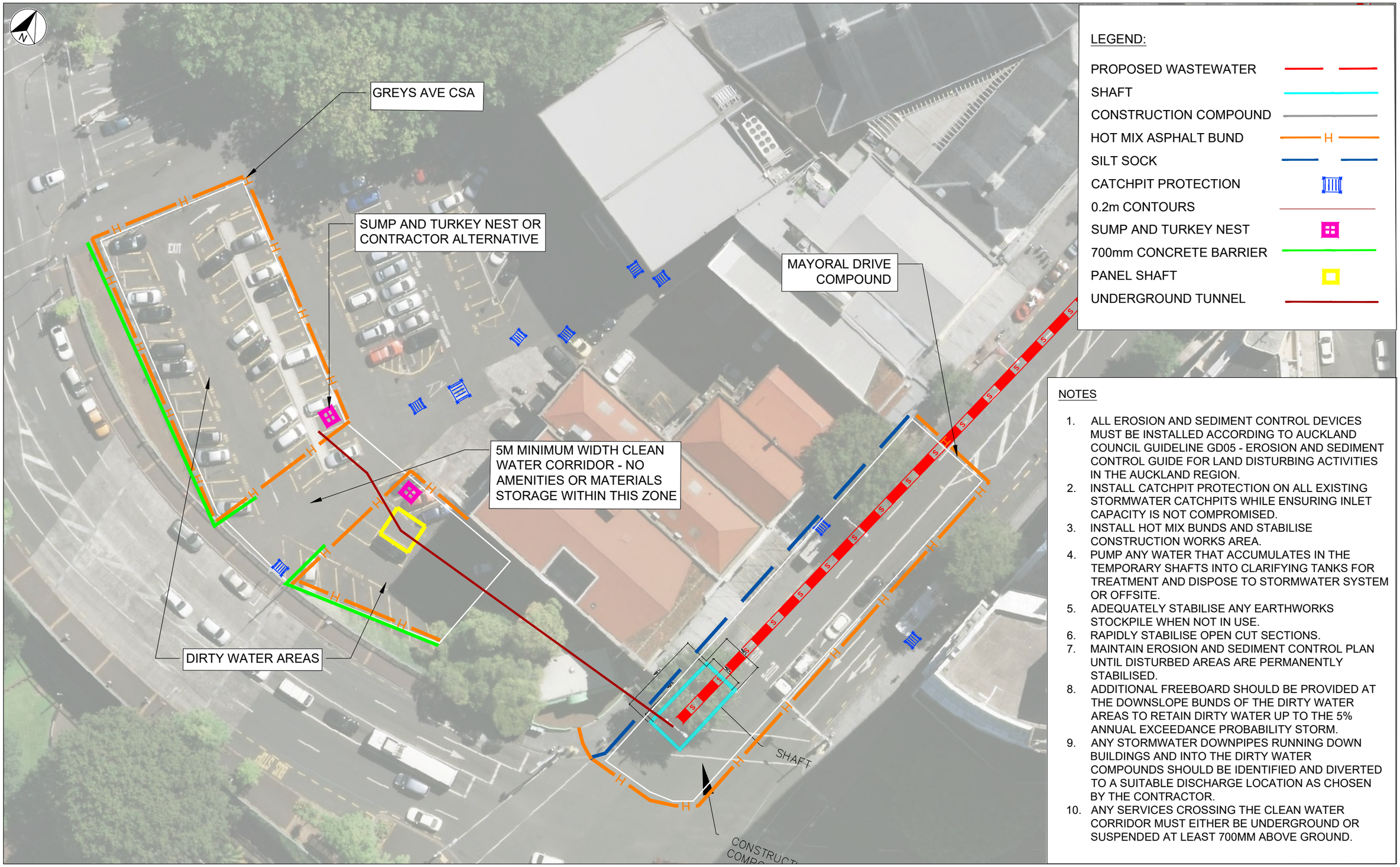
Appendix A - Erosion and Sediment Control Plan

Queen Street Wastewater Diversion Project – Part 3/Part 4 Connector



LEGEND:

- PROPOSED WASTEWATER
- SHAFT
- CONSTRUCTION COMPOUND
- HOT MIX ASPHALT BUND
- SILT SOCK
- CATCHPIT PROTECTION
- 0.2m CONTOURS
- SUMP AND TURKEY NEST
- 700mm CONCRETE BARRIER
- PANEL SHAFT
- UNDERGROUND TUNNEL

NOTES

1. ALL EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED ACCORDING TO AUCKLAND COUNCIL GUIDELINE GD05 - EROSION AND SEDIMENT CONTROL GUIDE FOR LAND DISTURBING ACTIVITIES IN THE AUCKLAND REGION.
2. INSTALL CATCHPIT PROTECTION ON ALL EXISTING STORMWATER CATCHPITS WHILE ENSURING INLET CAPACITY IS NOT COMPROMISED.
3. INSTALL HOT MIX BUNDS AND STABILISE CONSTRUCTION WORKS AREA.
4. PUMP ANY WATER THAT ACCUMULATES IN THE TEMPORARY SHAFTS INTO CLARIFYING TANKS FOR TREATMENT AND DISPOSE TO STORMWATER SYSTEM OR OFFSITE.
5. ADEQUATELY STABILISE ANY EARTHWORKS STOCKPILE WHEN NOT IN USE.
6. RAPIDLY STABILISE OPEN CUT SECTIONS.
7. MAINTAIN EROSION AND SEDIMENT CONTROL PLAN UNTIL DISTURBED AREAS ARE PERMANENTLY STABILISED.
8. ADDITIONAL FREEBOARD SHOULD BE PROVIDED AT THE DOWNSLOPE BUNDS OF THE DIRTY WATER AREAS TO RETAIN DIRTY WATER UP TO THE 5% ANNUAL EXCEEDANCE PROBABILITY STORM.
9. ANY STORMWATER DOWNPIPES RUNNING DOWN BUILDINGS AND INTO THE DIRTY WATER COMPOUNDS SHOULD BE IDENTIFIED AND DIVERTED TO A SUITABLE DISCHARGE LOCATION AS CHOSEN BY THE CONTRACTOR.
10. ANY SERVICES CROSSING THE CLEAN WATER CORRIDOR MUST EITHER BE UNDERGROUND OR SUSPENDED AT LEAST 700MM ABOVE GROUND.

1

PLAN
SCALE 1:750 (A3)

WORK IN PROGRESS

ISSUE	DATE	AMENDMENT	BY	APPD.
2	--	FOR CONSENTING		
1	27/05	FOR CLIENT APPROVAL	B.S.	W.B

		DATE
DESIGNED	B.SUTTON	25/08
DES. APPROVED		
DRAWN	B.SUTTON	25/08
DWG. APPROVED	W.BIRD	
WSL DESIGN MGMT.		-
WSL PROJ. LEAD	-	-
BY		DATE

Watercare

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QUEEN STREET WW DIVERSIONS P3/P4 LINK
MAYORAL DRIVE AND GREYS AVE CONSTRUCTION AREAS
EROSION AND SEDIMENT CONTROL PLAN – SHEET 1

CAD FILE R0021853.104	DATE 25/08/2023
ORIGINAL SCALE A3 AS SHOWN	CONTRACT No. --
REF No. W-SL001.03	
DWG No. R0021853.104	ISSUE 1

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