# **Hamilton City Council**

# **HCC Central City Reservoir Project**

**Draft Construction Traffic Management Plan** 

August 2025







# **Document control**

Project identification			
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Job number/s	149000.06		
Job name	Hamilton Central Reservoir Project		
Contract numbers	N/A		
Report name and number	Draft Construction Traffic Management Plan		
Date / period ending	August 2025		
File path	C:\12ds\data\10.7.120.14\149000.06 - HCC Central City Reservoir_5575\10 Traffic\Project Template\02 Reports and memos\HCC Central City Reservoir Construction Traffic Management Plan.docx		

Report status			
Status	Name	Signature	Date
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Approved for issue (V1)	Cameron Inder	Course Inder	18/08/2025

Document history			
Version	Changes	Signature	Issue date
V2			
V3			
V4			





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#### 1. Introduction

## 1.1 Background

Hamilton City Council (HCC) seeks to alter the existing A67 designation to enable the construction, operation and maintenance of the Central City Reservoir Project (the Project), which includes two 25 mega litres per day (MLD) reservoirs, valve chamber and ancillary pipelines. Current growth projections and modelling indicate that one 25 megalitre reservoir will be sufficient to meet population needs until at least 2041. Beyond that point, a second 25 megalitre water reservoir will be required to ensure continued service capacity. Therefore, the Project will be developed in two phases, Stage 1 will be constructing Reservoir 1 with construction anticipated to start from 2026 and Stage 2 will involve the design and construction of Reservoir 2 which is contingent on demand but is forecast to be constructed 8-10 years after the completion of Reservoir 1.

The location of the Project site is at 18 Ruakiwi Road, in central Hamilton. It is bounded by Ruakiwi Road to the east and Hamilton Lake to the west.

This draft Construction Traffic Management Plan (CTMP) has been prepared, on behalf of the HCC, to provide an outline of the measures to be implemented to manage, mitigate and monitor the transportation effects of the construction works for the proposed reservoirs.

This draft CTMP will be further developed following the approval of the proposed works and the appointment of a Contractor by HCC. The current report reflects the indicative construction methodology as understood at this stage and will be refined by the appointed Contractor to accommodate any design changes, construction methods, or unforeseen circumstances. It is considered that this draft CTMP provides suitable measures to address the currently identified actual and potential transportation effects associated with the construction activities.

## 1.2 Objectives of the CTMP

The purpose of this plan is to outline the approach and processes required to ensure that traffic management during the construction is conducted safely, and in accordance with contract and regulatory requirements. This plan aims to safeguard the efficient and safe movement of vehicles, belisha, and construction equipment within and around the construction zone. The scope of this draft CTMP includes all traffic management activities required to carry out works under the HCC City Reservoir Project.

## 1.3 Standards and Legislation

Temporary traffic management (TTM) is governed by New Zealand legislation, in particular, the Land Transport Act 1998. Land Transport Rules made pursuant to that Act which relate to TTM include:

- Land Transport (Road User) Rule 2004
- Land Transport Rule: Traffic Control Devices 2004
- Land Transport Rule: Setting Of Speed Limits 2003.

The Project will adopt the following standards and guidelines:

- Traffic Control Devices (TCD) Manual
- New Zealand guide to temporary traffic management (NZGTTM)
- Code of Practice for Temporary Traffic Management (COPTTM).



# 1.4 Review and Updates of the CTMP

This draft CTMP is a living document that will be reviewed and updated during the course of the Project construction to reflect any material changes associated with construction techniques, communication, mitigation or the natural environment.

This draft CTMP is to be read in conjunction with the Construction Transport Assessment report prepared by Bloxam Burnett and Olliver for this Project.

This draft CTMP maybe updated in accordance with the process set out in the resource consent conditions. The draft CTMP will also be updated following completion of detailed design to reflect issued "For Construction" drawings.

Prior to any construction activities commencing, detailed temporary traffic management plans for both access points and related Corridor Access Requests applications will need to be submitted to relevant RCAs for approvals.

# 1.5 Glossary of Abbreviations

Table No: 1 below sets out the technical abbreviations used in this document.



## Table No: 1

Abbreviations and Definitions			
Abbreviations	Definition		
NZGTTM	New Zealand Guide to Temporary Traffic Management		
CoPTTM	Code of Practice for Temporary Traffic Management		
СТМР	Construction Traffic Management Plan		
HCV	Heavy Commercial Vehicle		
СТА	Construction Traffic Assessment		
HPMV	High Productivity Motor Vehicle		
NZDF	New Zealand Defence Force		
NZGTTM	New Zealand Guide to Temporary Traffic Management		
NZTA	NZ Transport Agency		
OW / OD	Over-weight / Over-dimension		
PE	Project Engineer		
PM	Project Manager		
PPE	Personal Protective Equipment		
PSM	Project Safety Manager		
RCA	Road Controlling Authorities		
нсс	Hamilton City Council		
RP	Route Position		
SH	State Highway		
SSTMP	Site Specific Traffic Management Plan		
STMS	Site Traffic Management Supervisor		
тс	Traffic Controller		
TCD	NZTA Traffic Control Device Manual		
TMP	Traffic Management Plan		
VMP	Vehicle Management Plan		
SWMS	Safe Work Method Statements		
САР	Construction Area Plan		
vph	Vehicle Movement per Hour		
vpd	Vehicle Movement per Day		



# 2. Description of Proposed Works

The Project includes the design, build and maintenance of the following four key components:

- Reservoirs: 2 x 25 ML water reservoirs to be located at 18 Ruakiwi Road (the subject site). Development of each reservoir is to be staged with the first 25 MLD reservoir to be delivered by 2028 and the second reservoir to be delivered circa 2041.
- Valve chamber: Located on-site, between the reservoirs, to support the operation of the reservoirs.
- Ancillary pipelines: Includes scour discharge pipeline to Lake Rotoroa and connections to public three water systems from the site.
- Booster pump station: A booster pump station at 139 Clarence Street. Noting a separate land use consent is being sought for this aspect of the Project, thus, it is not subject to the NoR application.

# 2.1 Project Site Location

The locality of the subject site is shown in Figure No: 1.



Figure No: 1. Site Locality



# 3. Consent Conditions

[Placeholder – to be completed once the designation is approved and the conditions are confirmed]

# 4. Roles and responsibilities

General roles and responsibilities for the Project will be outlined separately by the appointed Contractor. Specific roles and responsibilities relating to the implementation of this CTMP are detailed in **Table No: 2** below.

Table No: 2

Roles and Responsibilities			
Role	Responsibility		
Project Manager	<ul> <li>Principal Project contact for HCC</li> <li>Responsible for all day-to-day construction operations on the Project.</li> <li>Overall responsibility for ensuring traffic management compliance is maintained onsite.</li> <li>Ensure staff are trained to the required level</li> <li>Report any incidents or issues, as appropriate</li> </ul>		
Construction Manager	<ul> <li>Responsible for all Civil works (including Traffic Management) operations on the Project</li> <li>Ensure the approved CTMP is implemented</li> <li>Ensure Site Specific Temporary Traffic Management (SSTMP) records / monitoring results are kept and SSTMP audits undertaken</li> </ul>		
Health and Safety Manager	<ul> <li>Oversight and advice on the safety of the interfaces with the public</li> <li>Completion of routine monthly safety site inspections, development of actions for remediation of any issues identified.</li> </ul>		
Communication & Stakeholder Manager	- Coordination with key stakeholders		
Traffic Manager	<ul> <li>Prepare and submit Site Specific Traffic Management Plans (SSTMPs)</li> <li>Auditing to access compliance with the TMP</li> </ul>		
Site Traffic Management Supervisor (STMS)	<ul> <li>Implement SSTMP on public roads in accordance with approved Traffic Management Plans</li> <li>Maintain SSTMP records</li> </ul>		
Traffic Controller (TC)	- Fulfil manual traffic control roles on-site as directed by the STMS		



# 5. Construction Operations

# **5.1** Construction Methodology

The Project construction programme is anticipated to take up to 30 months and will involve five main phases:

- **Phase 1**: This phase involves establishment of the site office and support facilities. Key tasks include the relocation or removal of trees, construction of site accesses, access roads and laydown areas.
- Phase 2: focuses on ground preparation, including topsoil stripping, earth bund construction, sheet piling (approximately 200 piles), and placement of preload material, followed by a settlement period to stabilize the ground.
- Phase 3 involves installing key stormwater infrastructure which includes the construction of the lake outlet and scour pipe, drilling and installation of two discharge lines. The construction of a valve chamber and removal of preload material, overlapping with Phase 2
- **Phase 4** covers the reservoir's structural construction, including subbase preparation, floor slab pouring, wall panel installation, and roof pouring, with some activity overlap into Phases 3 and Phase 5.
- **Phase 5** focuses on architectural treatments and final site enhancements, including backfilling, block walls, drainage, paving, façade walls, commissioning works (balustrades, lighting, stairways), and planting and reinstatement.

Table No: 3 is a summary of the five phases, activities occurring within each phase



Table No: 3

Physical Work	s Activity and Programme	Summary				
Phase	Activity	Estimated Duration (Weeks)	Maximum number of site staff	Start - end month	Notes	
Phase 1 – Infrastructure & Enabling	Site Establishment / Site Office	2	8	1-2		
	Improvement / Tree Relocation / removal	4	14	1-2	Phase 1 is expected to take approximately 1-2 months	
Work	Road / Access Roads / Laydowns	2	14	2-2		
	Topsoil Stripping, Bulk Earth cut to Preload	8	7	3-4	Phase 2 is expected to take approximately 4-	
Phase 2: Bulk Earth Works	Sheet Piling (200 piles)	2	11	5-5	6 months and (Assumed that Phase	
	Preload Settlement Period	16-24	18	5-10	2 will overlap with Phase 3)	
Phase 3:	Lake outlet construction, scour pipe	6	18	7-9	Phase 3 is expected to take approximately 9 months (Assumed that Phase 3 will overlap with Phase 2 & Phase 4	
Stormwater Pipeline, Discharge mains & Valve Chamber	Drilling & installation (2 lines)	12	18	8-11		
	Valve Chamber Subbase, Floor, Walls, Cladding, Culvert + Discharge Pipework, Frame & Roof	16	18	8-12		
Phase 4 - Reservoir	Preparations: Engineered Fill, Pipework, Chambers, Remove Preload	8	22	11-13		
Foundation, Structural	Subbase, Floor, Wall Panels	6	22	13-16	Phase 4 is expected to take approximately	
Works & Roofing	Infill pours, Roof Beams, Construction	16	22	16-20	14 months and overlap with Phase 3	
Construction	Pos-tensioning, Roof Pours, Finishing	22	20	20-26		
	Backfill, Block wall	4	18	26-27		
Phase 5 –	Drainage, paving, Façade Wall	8	15	28-29	Phase 5 is expected to take approximately 4 months and overlap with Phase 4	
Architectural Treatments	Commissioning Works: Balustrades, Lighting, Stairways	6	15	28-29		
	Planting and Reinstatement	8	15	29-30		



# **5.2** Project Working Hours

General working hours during the Project construction will be Monday to Friday, from 7:30am to 6pm. It is possible that the Project construction activities may occur sporadically during some weekends to utilise good weather conditions.

The site will be accessible by the Project team seven days a week with no time restriction.

#### **5.3** Predicted Trip Generation

The construction of the Project will generate vehicle movements by construction workers and vehicles delivering materials and equipment. Associated traffic generation is therefore likely to concentrate on local roads between SH1C and the Project.

The proposed new accesses will be accessible to Project traffic, and it will serve as the primary access for staff, delivery of materials, machinery and reservoir components. The construction activities are expected to peak around construction months 2-4 (Phase 1 and 2) which includes earth bulk works and 13-16 (Phase 4) coinciding with the reservoir base slab pouring activities. The traffic is expected to peak again in month 21-22 which involves the concrete pouring for reservoir roofing.

The following construction traffic volumes are anticipated through the new access points and shown in Figure No: 2:

- The peak hours are expected to occur from 7:00 am to 8:00 am with 20 vph as construction workers arrive for the day. Then each hour between 5:00 and 7:00 pm generates around 12 vehicle movements as shifts end.
- Total daily trips are predicted to be approximately 80 vpd.

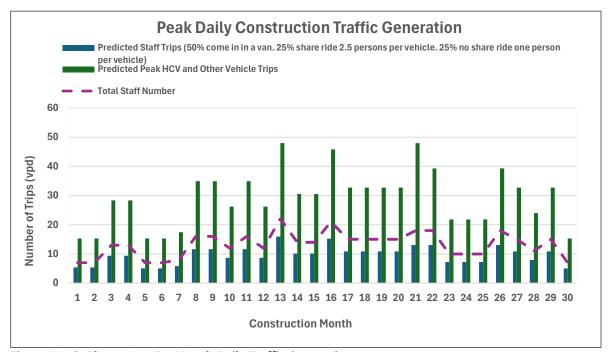


Figure No: 2. Phases 1 to 5 - Month Daily Traffic Generation



The average daily traffic volume on Ruakiwi Road near the proposed site access 1 is 7,280 vpd. The weekday peak flow period on urban roads typically occurs between 7-9am and 4-6pm peak hours. Therefore, the Project construction traffic peak hours fall within the commuter peak periods of the adjoining road network.

## 5.4 Site Access

During the Project construction, access to the site will be via two new accesses from Ruakiwi Road. Site Access 1 will be located at approximately RP 0.38, 18m north of Ruakiwi Road / Clarence Street intersection and Site Access 2 will be located at approximately RP 0.28, 80m to the south of this intersection.

Site Access 1 will accommodate all construction traffic vehicles including 19.45m articulated HPMVs. **Figure No: 3** shows vehicle tracking for 19.45m articulated HPMV. If larger vehicles are to be used for deliveries, a separate tracking analysis will be required. This access does not impact any on-street parking spaces.

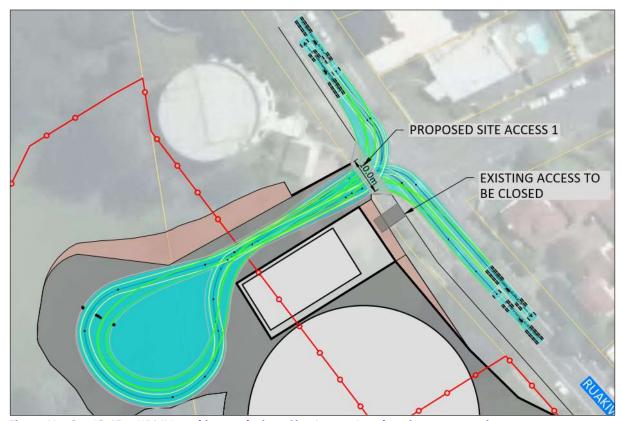


Figure No: 3 – 19.45m HPMV tracking analysis at Site Access 1 and onsite manoeuvring

Site Access 2 shall be designed to accommodate an 11 m large rigid truck. Therefore, any construction vehicle larger than an 11 m large rigid truck is not permitted to use Site Access 2. Figure No: 4 below shows Site Access 2 and on-site manoeuvring.



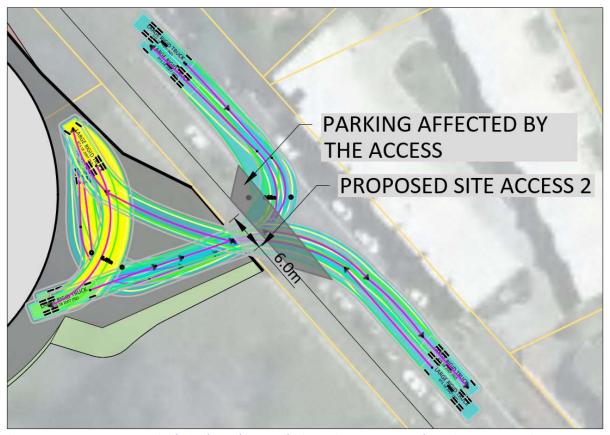


Figure No: 4 – 11m Large Rigid Truck tracking analysis at Site Access 2 and on-site manoeuvring

Each site access will be required to have an approved SSTMP (or be specifically covered in the relevant SSTMP developed for a defined work area) which will outline the systems and procedures required for safe access operation. Restrictions on site access operation and the main routes used by construction trucks will be agreed in discussion with the relevant RCA for documentation within the SSTMP.

## 5.4.1 Over-Weight and Over-Dimension Loads

Overweight and over-dimension deliveries are managed under their own processes including route evaluation and temporary traffic management planning, which would typically include pilot vehicles. Routes need to be approved by the local RCA. Specific SSTMPs will be required depending on the width and length (swept path) of each component.



# **6. Management Procedures**

Traffic management procedures will be planned and implemented to a level appropriate for the activity or work site. In accordance with NZGTTM, the procedures will be implemented to ensure safety of all road users and maintain an appropriate level of service as they approach, travel within and exit the project area.

#### 6.1 Site Staff

All Project personnel must complete a site-specific induction before commencing work to ensure a consistent understanding of Project expectations. The induction will cover environmental considerations, health and safety protocols, hazard management, and temporary traffic management procedures relevant to the site.

Regular briefings will educate staff on specific temporary traffic control matters and provide a platform for raising any concerns. This collaborative approach encourages staff involvement in identifying and developing mitigation strategies and allows for recognition and reward of constructive contributions where appropriate.

#### 6.1.1 Driver Education

A key aspect of the Project is the transportation of large wall panels, pipe components, large items of equipment and plant into the site as overweight and over-dimension loads. The Construction Transport Assessment report identified the preferred route for these loads between the designated overweight and over dimension (OW-OD) routes and the Project site is the southern route from the SH1C to the subject site (refer to Section 7.1).

Detailed SSTMP requirements for each construction phases will be explained to all drivers including:

- Hazzard, such as road debris and vehicle movements, identification and reporting.
- Hazzard associated with OW/OD load deliveries.

Additionally, a contractual obligation will be imposed on the appointed Contractor to ensure that their own induction procedures include reference to these points.

#### 6.2 Staff Travel Demand

As key part of traffic management, the Project team will minimise traffic movements to reduce road safety risk exposure associated with the additional reservoir construction vehicle trips. The measures to be implemented include but not limited to:

- Provide minivans to transport staff to / from site.
- Encourage ride sharing and car-pooling for the site team and sub-contractors.
- Utilise truck and trailers for material transportation as much as practical.
- Maximise the opportunities for backloading trips by co-ordinating material delivery and departure.

## 6.3 Site Specific Traffic Management Plans

SSTMPs outline how safety will be maintained for both road users and Project staff during all construction activities. Each SSTMP will describe how road users can safely move through the site and outline the steps construction workers must follow to keep the site safe.



The SSTMPs will be prepared in accordance with NZGTTM and will be prepared so that every construction activity which impacts the road network is conducted using an approved methodology, with the agreed mitigation measures in place and to the correct standard.

SSTMPs will be submitted to and approved by HCC's Traffic Management Coordinator. SSTMPs will be assessed by the Traffic Management Coordinator for compliance with NZGTTM and the ability to avoid or mitigate adverse effects on the travelling public.

[SSTMPs is to be appended to the CTMP].

# 6.4 Anticipated SSTMP Requirements

#### 6.4.1 Site Access

Each site access will be required to have an approved SSTMP (or be specifically covered in the relevant SSTMP developed for a defined work area) which will outline the systems and procedures required for safe access operation. Restrictions on site access operation and the main routes used by construction trucks will be agreed in discussion with the relevant RCA and/or the Department for documentation within the SSTMP, and align with the access width based on tracking assessment in the construction traffic assessment section 7.2

The site-specific requirements for installation and use of site accesses will be outlined in the SSTMP, which may include:

- Required signage and delineation.
- Permitted entry/exit movements to/from the site access.
- · Permitted hours of use
- Types of vehicles allowed, and any procedures relating to particular classes of vehicles (articulated trucks or oversized vehicles)
- Provision for manned accesses where required with consideration where site accesses interact with the shared paths or footpaths on the local roads.

#### 6.4.2 Peak Hour Capacity

The effect of construction activities or TTM measures on traffic flows during peak hours will be mitigated where possible. Further to operating restrictions, the location of site access points and routes used by construction vehicles will also be considered to minimise potential capacity effects during peak periods.

Any operational restrictions proposed for construction activities will be outlined in each SSTMP, which will be agreed with the relevant RCA on a case-by-case basis. Intensive traffic generation activities carried out during the construction period will be optimised to avoid peak travel times.

#### 6.4.3 Construction Traffic Movements

A task specific VMP will be prepared within the SSTMPs and SWMS to directly address vehicle movements associated with each work activity. These will define site access routes, gate entry points, width and load restrictions, and site entry protocol and sign-in requirements.

These plans will also address emergency vehicle access within each construction area, as defined by the CAPs.



#### **6.4.4** Signs

Site specific signage will be installed on Ruakiwi Road as per the Project's Communications and Stakeholder Management Plan. This includes all general construction signage, and VMS boards used for notification of any closures or unforeseen disruption.

In addition to the signage recommended in the CCCP, the following signs will also be installed:

- Site Access Point Signs
- 'Keep Out Construction' signage at all site gates and site access points.
- TTM signage on local roads and state highways as per the approved SSTMP.

#### 6.4.5 Local Road Inspections and Repairs

The local roads will be inspected monthly, and any damage and/or defects identified within the road pavement affecting ride quality and/or safety on identified transportation routes arising from construction related traffic movements will be mitigated subject to the agreement with HCC.

#### 6.4.6 Emergency Vehicles

The site Traffic Controller will ensure that the passage of emergency vehicles is not hindered by Project works at all times. Where traffic restrictions are in place, provision must be made for the passage either through the work zone or via a readily recognised alternate route. This will be stated in the SSTMP pro-forma where required.

#### 6.4.7 Site Specific Hazards

#### [Placeholder]

#### 6.4.8 Communication

It is expected that communication campaigns will be undertaken for a wide variety of traffic management activities throughout construction of the Project. Communications associated with traffic management activities will be undertaken on a case-by-case basis depending on the location and impact of the construction and traffic management activities. All Project communications shall be carried out in accordance with the Project's Communications and Stakeholder Management Plan.



# 7. Mitigation Measures

# 7.1 Overweight and Over-dimensional Vehicle Route

OW / OD deliveries are managed under their own processes including route evaluation and temporary traffic management planning, which would typically include pilot vehicles. Routes need to be approved by the local RCA.

These will be special deliveries which in some cases may require use of the road network outside the Projects normal working hours. The Project Communications & Stakeholder Manager will advise the HCC comms team of such deliveries in their weekly meetings and the Project Traffic Manager will advise the TMC's of the affected networks.

The layout of the Lake Road / King Street intersection to the north restricts the transportation of OW-OD components. The route from the south (SH1C) was found to have minimal issues and is therefore, recommended as the preferred route for OW-OD deliveries. **Figure No: 5** below shows the road network that will be used for heavy transport during the Project construction period. To accommodate the transport of large reservoir components, it may be necessary to temporarily remove the belisha beacons within the pedestrian refuge islands along this route.

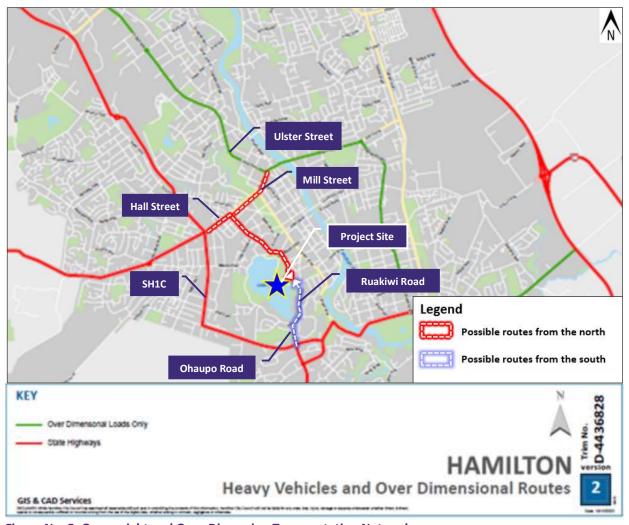


Figure No: 5. Overweight and Over-Dimension Transportation Network



The transport routes for each reservoir component will be confirmed once a Contractor is appointed and when the details of the construction methodology and programme are confirmed. During the delivery of OW-OD materials, any affected pedestrian refuge islands will be managed in accordance with SSTMP to ensure pedestrian safety and minimise disruption.

#### 7.2 Site Access

The new site accesses on Ruakiwi Road will be designed and constructed to accommodate large HCVs turning movements. Both accesses shall be managed through SSTMP during the construction period. The duration of the new access construction is expected to be around one month.

# 7.3 On-site Manoeuvring

The Project site will be managed to enable HPMV vehicles and other vehicles to turn on the site, thereby avoiding the need vehicles to reverse to or from Ruakiwi Road.

Should reversing to or from the site off Ruakiwi Road be required very occasionally, such as during the transport of plant or material to/from the site by vehicles larger than 19.45m HPMV, this would be managed under appropriate traffic management supervision by an STMS with the necessary SSTMPs approved by HCC.

# 7.4 Pedestrians and Cyclists

Pedestrian facilities will be maintained on each side of a road where current facilities exist, where possible. Where access is impeded as a result of construction works, safe and clearly identifiable alternative access arrangements will be implemented, such as:

- Temporary access in accordance with NZGTTM
- Temporary detours that are as short as possible and as convenient as practicable, having regard to safety.
- Signs to warn pedestrians of the presence of construction traffic, particularly heavy vehicles, as well as alert construction vehicles to the presence of pedestrians.
- Appropriate sightlines between pedestrians, cyclists and construction vehicles.
- Marshals to manage the interaction between vehicles and pedestrians.
- Safety fences for restricted access zones.
- Hoarding for long term work sites with excavations or other hazardous environments
- Pedestrian bridges across uneven surfaces.
- Pedestrian protection barriers for protection from traffic.
- Alternative crossing arrangements.

# 7.5 Roading Upgrade Works

The internal access road, laydown areas, including parking and accessways shall be formed and drained with a permanent sealed or paved all weather, dust-free surface in a manner suitable for the type and quantity of vehicles using the site, thereby minimising the transfer of dirt onto Ruakiwi Road and adjacent roadways. To uphold a high standard of road condition throughout the construction period, routine road sweeping and visual inspections are to be conducted regularly.



# 7.6 Parking

#### 7.6.1 Onsite Parking

Construction staff parking will be contained at designated areas well within the Project site boundaries. Parking spaces might be limited due to the physical constraints of the site. Staff will be informed through the Project induction that:

- There is limited on-site parking, which will be specifically allocated.
- Minivans to/from the site will be provided and rode sharing is encouraged.
- Parking on Ruakiwi Road and Clarence Street is not permitted.

#### 7.6.2 On-Street Parking

As mentioned in the Construction Transport Assessment, to facilitate the safe operations at Site Access 2, approximately six parking spaces on the western side of Ruakiwi Road will have to be temporarily removed. This reduction in parking supply is considered minimal, as sufficient on-street parking will remain to accommodate visitors in the surrounding area. As stated in the preceding section, staff parking is not permitted on Ruakiwi Road and Clarence Street. However, it is recommended that parking conditions in the surrounding area be monitored throughout the construction period.

## 7.7 Property Access

The impact of construction activities or TTM measures on existing vehicle access to properties and businesses will be mitigated to maintain access. Communications with the affected residences will be undertaken as part of the SSTMP process and as outlined in the Stakeholder and Communications Management Plan.

The effects of such activities may be mitigated using:

- Temporary accessways using metal plates or other methods.
- Construction methodologies that allow access during critical time periods.
- Provision of alternative access ways, parking or manoeuvring areas for the duration of the works.

Activities that may impact on access and their associated mitigation measures will be outlined in the SSTMP for approval by the relevant RCA.



# 8. Monitoring and Reporting

# 8.1 Monitoring Requirements

In accordance with the NZGTTM, the STMS, supported by other project personnel, will oversee the day-to-day monitoring of traffic management measures. Each active site governed by an approved SSTMP will be regularly assessed for layout, queuing, and delays.

Traffic management measures will be continuously monitored, and adjustments will be made promptly should unforeseen delays or issues arise. SSTMPs will incorporate contingency plans to address potential disruptions. Where necessary, trigger points and mitigation strategies will be agreed upon with the relevant RCA as part of the SSTMP review and approval process.

#### 8.1.1 Auditing

Regular internal audits will be carried out by the Traffic Manager, including immediately following major control changes or notable events, e.g., weather. These audits will be carried out in accordance with NZGTTM requirements, to ensure compliance with the SSTMP is maintained.

#### 8.1.2 Travel Times

Traffic operations will be monitored around all TTM implementations to ensure that adverse delays or safety to the road user are adequately mitigated. TTM reporting data will be recorded and maintained as per the Consent requirements and made available to HCC.

#### 8.1.3 Stakeholder Surveys

The Communication and Stakeholder Manager will be responsible for the implementation and reporting of stakeholder survey and road user feedback via the methods outlined in both the Construction Earthworks Management Plan and this document, as required.

#### 8.1.4 Inspections

The Project Construction Manager will be responsible for continuous monitoring of temporary traffic controls at work sites throughout the reservoir construction to ensure a safe environment for both workers and road users. Compliance will be monitored against the SSTMP, safety hazards identified, and corrective solutions implemented. The Project Construction Manager will also manage the monitoring of traffic management and traffic controls to assess compliance with the conditions of the SSTMP.

Inspections of the temporary traffic controls, both long and short term, will be conducted during the earthworks and general construction phases focusing on monitoring compliance against a SSTMP and identifying safety hazards to enable implementation of corrective solutions. Some of the main types of inspections on the Project may include:

- Inspections in accordance with NZGTTM rules and regulations.
- Weekly inspection of traffic control set ups by the site manager and/or senior construction staff.
- Pre-opening inspections of TTM (carried out in conjunction with RCAs where required).



# 8.2 Reporting

Weekly reporting will be conducted in conjunction with the finalised monitoring requirements for the Project. The Project Team shall inform HCC and / or appointed representative of the following:

- Summary of locations and description of work activity carried out during the previous week, including an estimate of the progress achieved on major work items.
- Issues requiring follow-up by the Engineer.
- Forward Weekly programme.
- Projected heavy traffic movements for the week ahead.
- Cumulative heavy traffic volumes for the project to date and for the season.
- GPS based speed exceedance reporting, including speed and location.
- Haul route weekly inspection identifying any new or emerging road defects or issues that may affect safety.
- Any other information agreed between the Contractor and Engineer
- Any instances where the requirements or limits imposed by this CTMP or SSTMPs are breached or exceeded, probable causes and actions required to be taken to mitigate, remedy or isolate the impact arising from the non-compliance.
- Copies of the random audits undertaken within every two months period.
- A copy of the Complaints Register shall be provided every month.
- Provide a copy of the CTMP if any significant revisions of the CTMP are made.

