



# CONSTRUCTION TRAFFIC MANAGEMENT PLAN

NZ Transport Agency Waka Kotahi  
Mill Road Stage 1

AUGUST 2026

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## QUALITY REVIEW AND APPROVAL RECORD

| Item                       | Name                       | Date        |
|----------------------------|----------------------------|-------------|
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# 1 INTRODUCTION

## 1.1 Purpose

This Construction Traffic Management Plan (**CTMP**) has been prepared for Stage 1 of the Mill Road Project (**the Project**). The objective of the CTMP is to, as far as practicable, manage adverse effects on the transport network, traffic movement and access to adjacent land during construction of the Project.

The management measures include tools to:

- manage the effects of temporary traffic management activities.
- manage the safety of all transport users.
- manage the effects of construction works, including monitoring compliance with identified network performance parameters.
- manage the effects of construction traffic, including any specific non-working or non-movement hours to manage vehicular and pedestrian traffic near educational facilities or to manage traffic congestion by adopting the best practicable options.
- manage the effects of site access routes and access points for heavy vehicles, as well as effects of parking areas for plant, construction vehicles and the vehicles of workers and visitors.
- enable the safe management and maintenance of traffic flows, including public transport services, pedestrians and cyclists.
- maintain access to and within property and/or private roads where practicable, or to provide alternative arrangements when it will not be, including details of access for managing loading and unloading of goods.
- maintain pedestrian access to private property at all times.
- engage with landowners or occupiers whose access is directly affected;
- manage the effects of heavy vehicles, including covering loads of fine material, the use of wheel-wash facilities at site exit points and the timely removal of any material deposited or spilled on public roads.
- communicate traffic management measures to affected road users (e.g. residents / public / stakeholders / emergency services).
- ensure the auditing, monitoring and reporting of traffic management activities in accordance with the New Zealand Guide to Temporary Traffic Management (**NZGTTM**).

The implementation of this CTMP, which is in accordance with the relevant legislation, regulations and guidelines (as set out in Section 1.2) will effectively manage the transport effects associated with the construction works of the Project.

## 1.2 Relevant legislation, regulations and guidelines

This CTMP has been developed in accordance with NZGTTM. Temporary traffic management (**TTM**) is a crucial component in construction planning as it allows for the safe movements of all road users whilst maintaining efficient transport operations. In addition, TTM activities are planned to mitigate risks related to construction-related activities.

In developing this CTMP, alignment with the following requirements have been considered:

- Health and Safety at Work Act 2015 (**HSWA**);
- Local Government Act 2002 and 1974 (**LGA**);
- Land Transport Management Act 2003 (**LTMA**);
- Land Transport Act 1998;
- Land Transport (Road User) Rule 2004; and
- Land Transport (Traffic Control Devices) Rule 2004.

This CTMP adheres to the following guidance documents:

- New Zealand Guide to Temporary Traffic Management (**NZGTTM**);
- NZTA Corridor Access Request (**CAR**) Process;
- WorkSafe Keeping healthy and safe while working on the road or roadside Good Practice Guide (2022); and
- New Zealand Construction Industry Council (**NZCIC**) Guidelines (2022).

This CTMP has been prepared in accordance with the above frameworks and reflects a commitment to protecting the safety of all road users and workers whilst minimising disruptions on the transport network.

## 1.3 Project extent

### 1.3.1 Site location

The Project is divided into three construction packages based on three geographical classifications shown in Figure 1-1. The general works and indicative construction period anticipated for each section shown in Table 1-1.

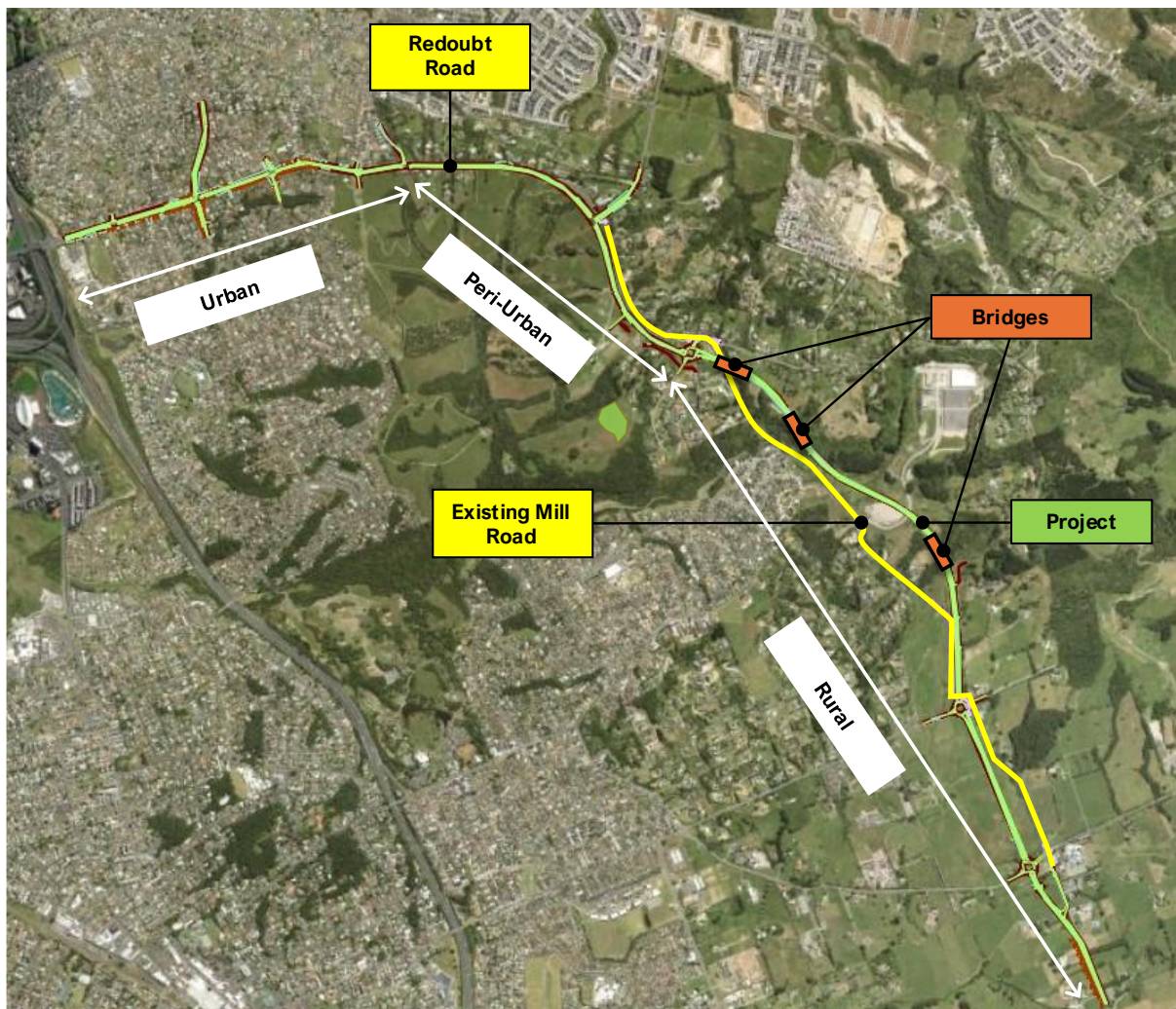


Figure 1-1 Project Extent and Geographical Classification

Table 1-1 Type of Works

| Section                                 | Construction Works       |                                                                                                                                                                                            |
|-----------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Urban (SH1 Interchange to Hilltop Road) | Urban road widening      | Widening of an existing carriageway through densely populated areas with a heavy interaction with peak urban traffic and residential activities and the upgrade of existing intersections. |
| Peri-urban (Hilltop Road to Mill Road)  | Peri-urban road widening | Widening of an existing carriageway in a peri-urban environment where the area being widened has more room and opportunity for more efficient construction.                                |
| Rural (Mill Road to Phillip Road)       | Greenfields construction | Construction of road in a rural area with mostly greenfield construction and some interaction with driveways and side roads.                                                               |

The construction programme is anticipated take place over a period of seven years.

In addition to the Project extent shown above, it is understood that laydown areas and site compounds are to be established with the final locations to be determined. These areas are established to support construction along the proposed corridor alignments, and the locations should enable manageable access to key construction zones via arterial routes. The locations of the laydown areas and site compounds will follow recognised best practice in New Zealand and the relevant standards and guidelines, as discussed in Section 4.5.

Access for the laydown and compound areas will be provided in accordance with the guidelines and recommendations set in the NZGTTM and the NZCIC Guidelines. These sites will only be used during construction and will be reinstated upon completion of the works.

### 1.3.2 Truck haul routes

The anticipated core routes of heavy trucks are illustrated in Figure 1-2 below.

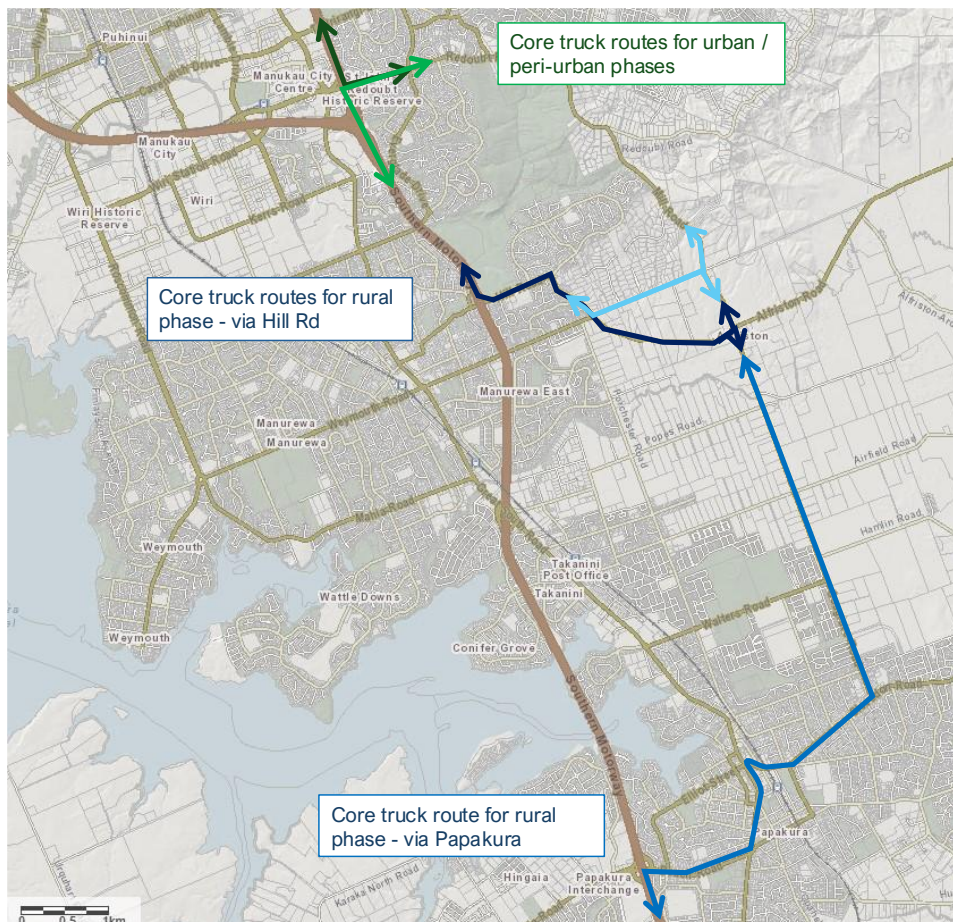


Figure 1-2 Anticipated Heavy Vehicle Movement Routes During Construction (Basemap: AC Geomaps)

These routes are on the regional arterial road network and/or approved overweight and over-dimensioned transport routes, which are designed to accommodate such vehicle types. In identifying these routes, consideration has been given to the planned construction activities and road closures associated with the Takanini level crossing upgrades (given the potential for overlapping construction periods).

## 1.4 Responsibilities

The contractor's Project Director will have overall responsibility for meeting the requirements of the CTMP.

The Project's Construction Manager in conjunction with the Project's Construction Traffic Manager will be responsible for implementation and monitoring of the CTMP.

## 1.5 Key contacts

The contact details for the key Project staff as they relate to the CTMP, along with a Project hotline, for general queries and/or complaints will be provided, as per Table 1-2 below.

*Table 1-2 Key Contact Details*

| Role                                                  | Contact                                              | Contact Number                                       |
|-------------------------------------------------------|------------------------------------------------------|------------------------------------------------------|
| <b>Project Hotline</b>                                |                                                      | [to be populated prior to construction commencement] |
| <b>Construction Manager</b>                           | [to be populated prior to construction commencement] | [to be populated prior to construction commencement] |
| <b>Construction Traffic Manager</b>                   | [to be populated prior to construction commencement] | [to be populated prior to construction commencement] |
| <b>Stakeholder and Engagement Manager (S&amp;E M)</b> | [to be populated prior to construction commencement] | [to be populated prior to construction commencement] |
| <b>Health and Safety Manager</b>                      | [to be populated prior to construction commencement] | [to be populated prior to construction commencement] |

## 1.6 Heavy truck definitions

There will be a variety of construction vehicles accessing the Project sites, including heavy trucks. For the purposes of this document, the heavy trucks are categorised as follows:

- Rigid trucks – Rigid vehicles with a gross vehicle mass exceeding 3.5 tonnes;
- Articulated trucks – Semi-trailers, truck and trailers and B-trains; and
- Oversize trucks – Over-dimensional vehicles and other oversize / wide loads.

# 2 PROJECT WORKS

## 2.1 Key construction works areas

The Project will require activities to be undertaken in locations set out in Table 2-1. The key features of the sites are also shown in the table. Refer to Figure 1-1 for the location of each section/area.

Table 2-1 Features of Works

| Features                             | Urban and Peri-Urban Sections                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Rural Section                                                                                                                                          | Bridges (3 Locations)                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Enabling and Construction Activities | <ul style="list-style-type: none"> <li>Demolish houses (if applicable)</li> <li>Remove above ground features and services back to mains road</li> <li>Clear trees and vegetation</li> <li>Lower driveways and construct retaining walls</li> <li>Cut material at front of retaining walls</li> <li>Relocate services</li> <li>Construct new fences and stormwater retention / treatment devices</li> <li>Construct new pavement for widened area</li> <li>Install lights</li> <li>Construct new paths</li> <li>Tie in to existing pavement</li> <li>Landscaping and ecological mitigation works</li> </ul> |                                                                                                                                                        | <ul style="list-style-type: none"> <li>Establish facility and compounds</li> <li>Clear trees and vegetation</li> <li>Form crane pads and commence piling</li> <li>Construct ground improvement as required</li> <li>Install cross head formwork and bearings</li> <li>Land beam units</li> <li>Fix topping slab reinforcement</li> <li>Form topping slab for final casting</li> <li>Finishing works</li> </ul> |
| Space Limitations                    | Relatively constrained site requires management of vehicle circulation and on-site parking during the construction period.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Less spatial constraints. Although requires management of vehicle circulation and on-site parking during bulk earthworks.                              | Less spatial constraints. Although requires management of vehicle circulation and on-site parking during bulk earthworks.                                                                                                                                                                                                                                                                                      |
| Access                               | Interaction with various modes (general traffic, buses, pedestrians and cyclists) on Redoubt Road and Mill Road to be managed, as discussed in this CTMP. Refer to Section 4.3.                                                                                                                                                                                                                                                                                                                                                                                                                            | Interaction with various modes (general traffic, pedestrians and cyclists) to be managed on Mill Road, as discussed in the CTMP. Refer to Section 4.3. | Interaction with various modes (general traffic, pedestrians and cyclists) to be managed on Mill Road, as discussed in the CTMP. Refer to Section 4.3.                                                                                                                                                                                                                                                         |
| Anticipated Vehicle Types            | <ul style="list-style-type: none"> <li>General deliveries using range of rigid trucks</li> <li>Truck and trailers for spoil removal and fill material etc</li> <li>Flat-deck semi-trailer trucks for piling equipment, in-situ and pre-cast structural components etc</li> <li>Cranes</li> <li>Concrete trucks</li> <li>Oversize trucks and over-dimensional vehicles</li> </ul>                                                                                                                                                                                                                           |                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                |

## 2.2 Traffic flows

The anticipated main routes of heavy trucks, illustrated in Figure 1-2, will provide satisfactorily for the anticipated heavy truck movements associated with the construction phase. This includes overweight and over-dimensional (**OD**) vehicles, which can operate under the necessary permits.

The additional heavy truck movements are acceptable provided they do not result in a more than 50% increase in the existing heavy vehicle volumes (**HV%**) on the identified construction haul routes. The current daily HV% figures range from 3% to 10%, with most routes falling within the 4 to 7% range. Based on the above, a threshold of around 2.5% of the total daily and equivalent peak hour traffic volumes is considered acceptable for additional heavy vehicle movements on these routes.

Table 2-2 below shows the daily and peak hour traffic flows on different sections of the project extent and haul routes, as well as the resulting indicative acceptable thresholds for heavy vehicle movements on these sections.

Table 2-2 Existing Traffic Volumes and Acceptable Additional Truck Movements

| Road                                          | Section                     | Classification <sup>1</sup> :<br><i>Arterial Road/ Freight Route/ Over-dimension Route</i> | Existing Daily Movements <sup>2</sup> | Indicative Acceptable Thresholds |                                   |
|-----------------------------------------------|-----------------------------|--------------------------------------------------------------------------------------------|---------------------------------------|----------------------------------|-----------------------------------|
|                                               |                             |                                                                                            |                                       | Daily (veh/day)                  | Peak Hour <sup>3</sup> (veh/hour) |
| Project Corridor                              |                             |                                                                                            |                                       |                                  |                                   |
| Redoubt Rd                                    | SH1 to Hollyford Dr         | Arterial road, freight route                                                               | Up to 33,400                          | 800                              | 80                                |
| Redoubt Rd                                    | Hollyford Dr to Hilltop Rd  | Arterial road, freight route                                                               | Up to 17,600                          | 450                              | 45                                |
| Redoubt Rd                                    | Hilltop Rd to Mill Rd       | Arterial road, freight route                                                               | Up to 16,800                          | 400                              | 40                                |
| Mill Rd                                       | Redoubt Rd to Alfriston Rd  | Arterial road, freight route, OD route <sup>4</sup>                                        | Up to 16,800                          | 400                              | 40                                |
| Core Truck Routes (Urban & Peri-Urban Phases) |                             |                                                                                            |                                       |                                  |                                   |
| Redoubt Road ( <i>as above</i> )              |                             |                                                                                            |                                       |                                  |                                   |
| Core Truck Routes (Rural Phase via Hill Rd)   |                             |                                                                                            |                                       |                                  |                                   |
| Hill Rd                                       | SH1 to Stratford Rd         | Arterial road, freight route                                                               | Up to 23,500                          | 550                              | 55                                |
| Stratford Rd                                  | Hill Rd to Ranfurly Rd      | Arterial road, freight route                                                               | Up to 20,400                          | 500                              | 55                                |
| Alfriston Rd                                  | Ranfurly Rd to Mill Rd      | Arterial road, freight route                                                               | Up to 16,600                          | 400                              | 40                                |
| Ranfurly Rd                                   | Alfriston Rd to Mill Rd     | Arterial road, OD route                                                                    | Up to 6,400                           | 160                              | 20                                |
| Mill Rd                                       | Alfriston Rd to Phillip Rd  | Arterial road, freight route, OD route                                                     | Up to 20,400                          | 500                              | 50                                |
| Core Truck Routes (Rural Phase via Papakura)  |                             |                                                                                            |                                       |                                  |                                   |
| Beach Rd                                      | SH1 to Great South Rd       | Arterial road, freight route, OD route                                                     | Up to 17,900                          | 450                              | 45                                |
| Great South Rd                                | Beach Rd to Broadway        | Arterial road, freight route <sup>5</sup> , OD route                                       | Up to 16,900                          | 400                              | 50                                |
| Broadway                                      | Great South Rd to Pricor St | Arterial road, OD route                                                                    | Up to 14,000                          | 350                              | 35                                |
| Clevedon Rd                                   | Pricor St to Cosgrave Rd    | Arterial road, OD route                                                                    | Up to 16,200                          | 400                              | 40                                |

<sup>1</sup> Classified as part of the as part of the regional arterial road network, regional freight network or approved over-dimensioned transport routes by Auckland Transport.

<sup>2</sup> Information from Mobile Road.

<sup>3</sup> Peak hour volumes assumed to be 10% of daily threshold volumes.

<sup>4</sup> OD route between Ranfurly Road and Alfriston Road

<sup>5</sup> Freight route between Beach Road and Wellington Street

|             |                          |                                        |              |     |    |
|-------------|--------------------------|----------------------------------------|--------------|-----|----|
| Cosgrave Rd | Clevedon Rd to Hamlin Rd | Arterial road, freight route, OD route | Up to 16,000 | 400 | 40 |
| Mill Rd     | Hamlin Rd to Phillip Rd  | Arterial road, freight route, OD route | Up to 17,900 | 450 | 45 |

Scheduling of heavy vehicle movements should generally be coordinated to remain under these thresholds and will also be informed by site-specific risk assessments as recommended in the NZGTTM. It is considered best practice to schedule the movements of construction vehicles outside of peak hours unless determined to be the best practicable option (i.e. concrete pours may necessitate additional heavy truck movements, as an exception to enable the practical completion of this activity).

Where routes other than those illustrated in Figure 1-2 will be needed for heavy truck movements, the specific characteristics of those routes and the ability to satisfactorily accommodate heavy vehicles should be carefully considered (refer to Section 4.2). Other routes should preferably be part of the regional freight network and arterial or, where necessary, collector roads. Scheduling of heavy truck movements should be targeted to enable movements remain under the equivalent thresholds (i.e. 2.5% of daily traffic volumes or equivalent peak hour volumes) on these affected road/s.

Where heavy vehicles need to use routes other than on the defined regional arterial road network, regional freight network or approved overweight and over-dimensioned transport routes, consideration should also be given to where vehicles directly pass sensitive receptors (such as schools, childcare facilities, and/or community facilities). In these cases, it will be necessary to restrict heavy vehicle movements at peak times for those activities (refer to Section 4.2), which should be determined on consultation with the relevant stakeholders.

## 2.3 Construction traffic management philosophy

The overarching philosophy for the management of construction traffic during the Project is to:

- Manage the safe and efficient operation of Redoubt Road, Mill Road and other adjacent roads impacted by the construction works and construction traffic;
- Minimise congestion on the surrounding road network and delays to the travelling public and road users;
- Minimise disruption to private property access;
- Maximise the safety of the travelling public and site staff;
- Maintain safety for pedestrians and cyclists;
- Enable construction efficiencies;
- Enable appropriate access for emergency vehicles at all times; and
- Inform the public and directly affected stakeholders about potential impacts of Project construction traffic on the transport network.

This will broadly be achieved by:

- Planning construction traffic movement and management to reduce adverse effects;
- Restrictions on heavy trucks at certain times of the day / week, where necessary;
- Appropriate design of access points and TTM;
- Maintenance of roads, signs and work sites;
- Coordination with Auckland Transport in relation to other construction activity;
- Communication internally within the Project team, with Auckland Transport, road users and key stakeholders that may be impacted by construction; and
- Educating construction staff on the needs of pedestrian and cyclists, as well as other key activities, near the Project area or along identified construction haul routes.

## 2.4 Roles and responsibilities

General roles and responsibilities for the Project will be outlined separately by the contractor. Specific roles and responsibilities relating to the implementation of the CTMP are outlined in Table 2-3.

Table 2-3 CTMP Roles and Responsibilities

| Roles                                     | Responsibilities                                                                                                                                                                                                               |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Project Director                          | <ul style="list-style-type: none"><li>Overall responsibility for site management.</li><li>Report any incidents or issues, as appropriate.</li></ul>                                                                            |
| Health and Safety Manager                 | <ul style="list-style-type: none"><li>Oversight and advice on the safety of the interfaces with the public.</li></ul>                                                                                                          |
| Construction Manager                      | <ul style="list-style-type: none"><li>Oversee the implementation of the CTMP.</li><li>Confirm that staff are trained to the required level.</li><li>Maintain TTM records, monitor results and TTM audits undertaken.</li></ul> |
| Construction Traffic Manager              | <ul style="list-style-type: none"><li>Prepare and submit Traffic Management Plans (<b>TMPs</b>).</li></ul>                                                                                                                     |
| Stakeholder and Engagement Manager        | <ul style="list-style-type: none"><li>Coordination with key stakeholders.</li></ul>                                                                                                                                            |
| Site Traffic Management Supervisor (STMS) | <ul style="list-style-type: none"><li>Implement TTM in accordance with approved TMPs.</li><li>Maintain TTM records.</li></ul>                                                                                                  |
| Traffic controller (TC)                   | <ul style="list-style-type: none"><li>Fulfil manual traffic control roles on-site, as directed by the STMS.</li></ul>                                                                                                          |
| Auckland Transport                        | <ul style="list-style-type: none"><li>Input to the preparation of the SSTMPs as part of the CAR process<sup>6</sup>, including advising on relevant adjacent works on the public road network.</li></ul>                       |

## 3 MANAGEMENT PROCEDURES

Several procedures will exist to identify and manage temporary traffic impacts during the Project, which are discussed further below.

### 3.1 Site staff

The success of management measures developed is heavily dependent on the support of the Project workforce in implementing them. The Project construction team will make significant effort to build a culture where safety and strong relationships with Project neighbours are a key focus area.

All Project staff will need to attend a Project induction prior to the commencement of work on-site to confirm a common basis for approaching their work. The induction will include environmental, health and safety and hazard management in relation to the Project area, along with temporary traffic management control.

Regular briefings will be conducted to reinforce and educate staff around specific temporary traffic control issues and for site staff to raise issues identified.

This approach would involve the workforce in identifying and developing solutions to manage effects and can enable positive contributions to be recognised and rewarded, where appropriate.

---

<sup>6</sup> Where SSTMPs are implemented on roads controlled by Auckland Transport

## 3.2 Construction and temporary traffic planning

### 3.2.1 Construction planning

Construction of the Project will be divided into a number of work activities, with a Site Engineer responsible for managing a number of activities at any one time. As part of the construction planning process, the Site Engineers will develop a work package for each activity.

The work pack will then be reviewed and signed off by the Construction Manager, Construction Environmental Manager, Design Manager and Health and Safety Manager (or their respective delegates) before those activities commence. TTM requirements associated with the work activities will be included in those works packs and will be subject to appropriate approvals.

### 3.2.2 Site specific traffic management plans

The implementation of this CTMP, which is in accordance with the relevant legislation, regulations and guidelines (as set out in Section 1.2) will effectively manage the transport effects associated with the construction works of the Project.

SSTMPs will be required and submitted, as part of the CAR process<sup>7</sup>, and will follow the format set out in the NZGTTM. CARs will be submitted to and approved by Auckland Transport.

The scope of the SSTMPs will include addressing specific traffic management measures, such as in work areas and around site compound locations. SSTMPs will be required for all work or physical controls within the 'live' road corridor. They will describe the measures to be implemented to manage the temporary traffic effects. SSTMPs will be assessed for compliance with NZGTTM and the ability to avoid or mitigate adverse effects on the travelling public.

### 3.2.3 Road maintenance

The areas immediately adjacent to the Project sites that will be used by construction traffic will be inspected and photographed before construction begins. These areas will be monitored throughout construction and inspected at completion. Any damage directly attributable to the Project construction will be repaired.

In addition to the provision of wash down or similar facilities, brooms will be in place at each site access point, so that gatemen (if required) can sweep up detritus.

### 3.2.4 Implementation

Each day's work is anticipated to begin with a briefing for each crew, as which specific work being undertaken that day will be discussed and documented. This will include risks involved with the work to be undertaken and the mitigation measures to be implemented to avoid or mitigate the risks, such as temporary traffic control measures.

Any issues which cannot be solved by the crew will be escalated to the Construction Manager / Traffic Manager / Project Director, as appropriate. A process for escalation, including where necessary, beyond the Project Director, will be in place.

## 4 MITIGATION MEASURES

### 4.1 Heavy vehicle access routes

The objective of selecting the appropriate heavy vehicle access routes is to support the safe and efficient construction operations while minimising disruptions to the transport network and surrounding communities. The anticipated core routes of heavy vehicles are illustrated in Figure 4-1.

---

<sup>7</sup> Where SSTMPs are implemented on roads controlled by Auckland Transport

The expected primary route for heavy trucks accessing the Project sites will be along SH1 and Redoubt Road for the urban and peri-urban sections. For the rural section, the roads listed in Figure 4-1 are expected to be utilised.

These routes are on the regional arterial road network and/or approved overweight and over-dimensioned transport routes, which are designed and approved to accommodate such vehicle types. Route selection has taken into account the expected construction activities and road closures associated with the Takanini level crossing upgrades. The heavy truck movements will be managed in accordance with the requirements identified in Section 2.2.

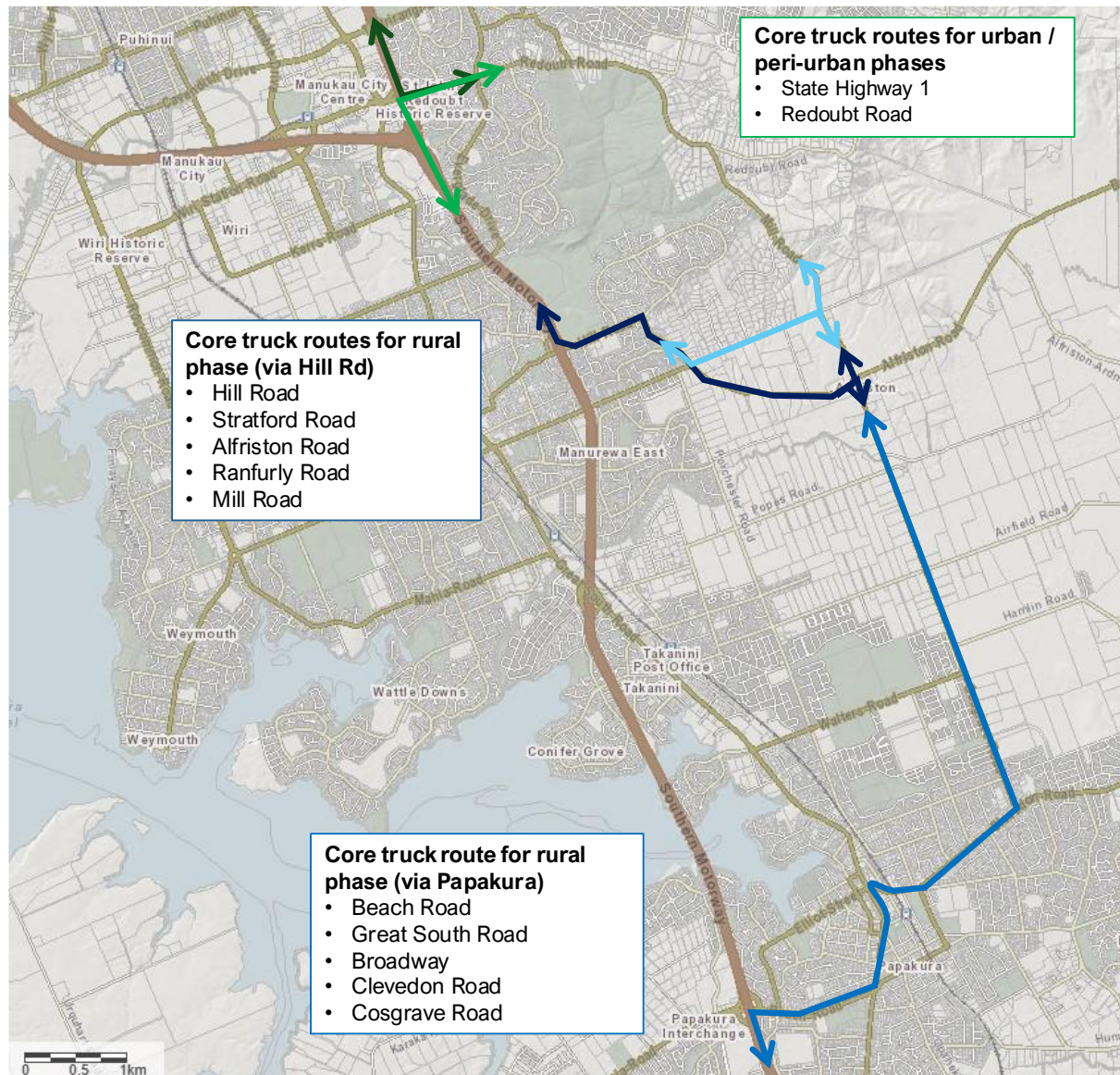


Figure 4-1 Indicative Heavy Truck Access Routes During Construction (Basemap: AC Geomaps)

In the event that the other roads need to be used by heavy trucks during construction, or alternative roads are required to access construction compounds, the following are the key considerations in determining the appropriate routes:

- Similar to the above, roads should have the ability to accommodate heavy loads and wide dimensions, i.e., arterial roads, over-dimension and overweight routes.
- Avoid sensitive areas such as schools, childcare facilities, community facilities, unless it can be demonstrated to be the best practicable option. Limitations on vehicle movements, such as access time restrictions, will be implemented on these roads, as discussed in Section 4.2.

- The routes should provide safe and direct access to the construction sites, as discussed in Section 4.3.
- All selected heavy vehicle routes must comply with the requirements outlined in the NZGTTM.

Where other or alternative roads are identified to be necessary, this will be part of the consultation with Auckland Transport to confirm the appropriate truck routing. The routing for oversize trucks will be specifically discussed and agreed with Auckland Transport, as part of the SSTMPs and CAR process<sup>8</sup>.

Coordination with other works in the area will also be part of the CAR application<sup>9</sup>, in order to avoid road closure overlaps with other construction activities, as required by the NZGTTM.

## 4.2 Access times

Based on the anticipated core routes of heavy vehicles, and identified indicative acceptable thresholds for heavy trucks, it is considered that heavy trucks accessing the Project site will be appropriately managed. It is understood that normal construction activities will not require heavy trucks to operate on Sundays.

Where heavy vehicles need to use routes other than on the defined regional arterial road network, regional freight network or approved overweight and over-dimensioned transport routes, and the route directly passes activities such as schools, child care facilities, community facilities, then restrictions may be necessary. The NZGTTM recommends site-specific risk assessments to guide decisions in access time restrictions and work scheduling should avoid peak activity periods, such as:

- School / childcare drop off and pick up times
- Morning and afternoon/evening commuter peaks
- Peak times for community facilities.

Restrictions on heavy vehicle movements at peak times for these activities should be determined on consultation with the relevant stakeholders. This would support the continued accessibility of these locations for the public. These restrictions may not always be practicable throughout the construction period, due to specific requirements of construction efficiencies, such as during concrete pours.

## 4.3 Site access interfaces

### 4.3.1 Site Access

Access to construction sites/compounds will be confirmed, when the locations are known. In determining the appropriate locations, the risk-based approach in the NZGTTM considers road user types (pedestrians, cyclists), visibility and sight distances and proximity to intersections and driveways. The access should allow for safe exit and entry of construction vehicles without disrupting the existing traffic flows.

The location and TTM measures to be implemented for the construction site access will be confirmed through the process of approval of the SSTMPs for the construction works. It is expected that this will include temporary speed restrictions along these roads through the works area. The safe and appropriate speed limits will be based on the guidance provided in Part 3 of the NZGTTM.

### 4.3.2 On-site manoeuvring

The sites will be managed to enable heavy trucks and other vehicles to turn on the site, thereby avoiding the need during the normal operation of the construction for heavy trucks to reverse to or from local roads.

Should reversing to or from local roads be required very occasionally, such as during the transport of plant to/from the site by oversize trucks, this would be managed under appropriate traffic management supervision by an STMS with the necessary SSTMPs approved through the CAR process<sup>10</sup>.

<sup>8</sup> Where SSTMPs are implemented on roads controlled by Auckland Transport

<sup>9</sup> Where SSTMPs are implemented on roads controlled by Auckland Transport

<sup>10</sup> Where SSTMPs are implemented on roads controlled by Auckland Transport

#### **4.3.3 Pedestrians and cyclists**

Existing footpaths along Redoubt Road would normally remain open during the construction works, where safe to do so, and appropriate measures to provide for the safe and accessible movements of pedestrians along the footpaths will be included in the SSTMPs. This would include measures, such as:

- the provision of signage to warn pedestrians of the presence of construction traffic, particularly heavy vehicles, as well as alert construction vehicles to the presence of pedestrians
- 'gatemen' to manage the interaction between vehicles and pedestrians
- safe temporary crossing facilities at key locations that will accommodate all users, including those with visual or mobility impairments.
- where necessary, the provision of alternative pedestrian routes that will be clearly marked and design to be accessible for all users, including the elderly, people with mobility impairments and parents with prams.
- complementary training and the identified Project induction, that will alert construction staff to the presence of and the needs of pedestrians using this footpath.

#### **4.3.4 Staff parking**

On-site construction staff parking may be limited due to the physical constraints of the sites. Staff will be informed through the Project induction (refer to Section 7.2) of:

- limitations on on-site parking, which will be specifically allocated
- arrangements for alternative shuttle buses to/from construction compounds
- areas where parking would not be permitted, to manage impacts on public / residential parking.

#### **4.3.5 Bus services and stops**

During the course of the works, existing bus stops on Redoubt Road will be relocated or removed at times. The existing bus stop locations (in yellow) are shown in Figure 4-2 below.

All changes to bus stop locations and operations will be coordinated with Auckland Transport to minimise disruption of public transport services. The specific arrangements will be documented and approved through the SSTMPs and may include the following measures:

- Maintain safe pedestrian access to bus stops, with clear signage and temporary footpaths, if needed.
- If existing stops are impacted, identify suitable and safe temporary locations. Temporarily relocated bus stops should remain accessible by footpaths.
- Implement temporary traffic controls (e.g. cones, barriers) to maintain safe boarding/alighting zones.
- Bus priority measures will be considered where necessary to enable reliable services during the construction period.
- Provide clear and timely communication to the public about any changes to bus stop locations or service times.

Documentation of consultation with AT Metro and relevant stakeholders will be included as part of the SSTMP documentation through the CAR process.



*Figure 4-2 Existing Bus Stop Locations*

## 4.4 Staff travel

It is anticipated that a limited number of staff parking spaces may be available on the Project sites. The parking spaces will likely be allocated to:

- Minor trades – assigned at the discretion of the Construction Manager, based on those needing to bring tools to the site for specialist activities etc.
- Priority for car / van pooling.
- Mobility impaired staff / visitors.
- Staff working outside standard hours (in the event this is permitted).

Supporting the limited parking on the Project sites, will be a Staff Travel Management Plan (**STMP**), which will be prepared. The STMP will outline the staff parking arrangements, including the provision of staff parking within construction compounds, as well as the details relating to the provision for shuttle buses (including scheduling) for travel to and from the Project site at the beginning at end of the working day. In addition, the STMP outlines the alternatives for staff to access the construction compounds by modes other than the private car.

## 4.5 Site compounds

Site compounds will function as central hubs during construction and will accommodate offices, staff facilities, equipment storage and material laydown. The locations are identified using the best practicable option, balancing construction efficiencies with minimising disruption to surrounding areas. Consideration will be given to avoid sensitive areas such as schools, childcare facilities, community facilities, unless it can be demonstrated to be the best practicable option. Final compound locations and configurations will be confirmed prior to construction commencement. As mentioned in Section 1.3.1, the site compound locations and configurations will adhere to the guidelines and recommendations set in the NZGTTM and the NZCIC Guidelines.

## 4.6 Property access

To maintain access to affected properties during construction, the contractor will undertake a detailed assessment of all affected driveways. Where necessary, temporary access solutions will be implemented, and these may include the installation of temporary concrete or steel barriers, and staging of works, among other TTM measures.

For rural properties, temporary access roads may be established within the property and / or designation boundary. The contractor will identify the best practicable option to enable continued entry and exit to affected properties.

Engagement and communication with affected property owners will be undertaken.

A process should also be established by the construction contractor to ensure that properties remain visible and identifiable such as regular cleaning of mailbox numbers and signage or the installation and maintenance of temporary identification measures.

## **4.7 Emergency vehicle access**

Emergency vehicle access measures will be incorporated into the SSTMPs. Emergency response agencies will be coordinated with during the development of the SSTMPs to establish communication protocols and enable real-time coordination during emergencies.

The SSTMPs will include measures such as:

- identification of priority access routes and ensuring these routes are clear of obstructions from construction vehicles and equipment.
- maintaining accessible diversion and safe crossing points for all users near emergency routes.
- use of temporary lane prioritisation, where possible, to facilitate efficient emergency vehicle access.
- development of an Emergency Action Plan for each SSTMP to include detour routes, emergency service access and communication protocols.

## **4.8 Incident reporting**

An incident reporting system needs to be developed which considers:

- immediate reporting of incidents, near misses and unsafe conditions to the STMS
- proper documentation of incident details, people involved and actions taken
- proper investigation of incidents and implementation of corrective actions.

The incident reporting system will follow the guidelines set in Part 2 of the NZGTTM.

Findings from incident reports will be used to update the CTMP and determine additional training for site staff, where necessary.

## **4.9 Monitoring of transport network congestion**

To effectively understand and respond to the impacts of construction on the surrounding transport network, a proactive and efficient traffic monitoring strategy will be established.

Rather than relying solely on periodic traffic surveys, the use of digital monitoring tools is preferred, as they provide real-time data on congestion levels and travel delays. This approach enables the construction team to make timely adjustments to TTM setups, applying the best practicable option to reduce traffic impacts where feasible.

The contractor will liaise with NZTA and Auckland Transport to agree on expectations around acceptable levels of congestion and disruptions when developing the traffic monitoring strategy.

# **5 COMMUNICATION AND STAKEHOLDER ENGAGEMENT**

## **5.1 General engagement**

Communication will focus on providing information to the travelling public (road users and footpath users) and property owners/occupants of the construction activities around the Project sites. This would include the potential for activities to result in any temporary disruption to their travel plans, any congestion, or impacts on parking or property access, enabling them to plan accordingly.

The Project stakeholder and communications team will be available for the duration of the Project to field queries and speak to affected property owners / occupants about work that may impact them. They will serve as a central point of contact for involving other Project team members, such as the Traffic Manager, in discussion with property owners/occupiers, as required.

## 5.2 Specific engagement

In addition, the Project will engage with the following key stakeholders in relation to construction traffic management:

- Auckland Transport – in relation to other construction sites and street works in adjacent areas, including along haul routes, during the Project, as well as in relation to public transport (i.e. temporary bus stop relocations).
- Schools and other education facilities (such as childcare centres / kindergartens) along the Project corridor that may be directly impacted by construction traffic during the Project, such as the Alfriston School and The Gardens Early Childhood Education centre (Alfriston) at 1379 Mill Road.
- Places of worship (such as churches and temples) that may be directly impacted by construction traffic during the Project, including the Church of Jesus Christ of the Latter-Day Saints at 19 Redoubt Road, Manurewa Assembly of God at 174 Mill Road and Wat Dipadhammarama Buddhist Temple at 160 Mill Road.
- Community facilities that may be directly impacted by construction traffic during the Project including Alfriston Hall at 300 Mill Road.
- Businesses / business owners along the Project corridor that may be directly impacted by construction traffic during the Project.
- Recreational groups frequently using the road corridor, such as Bike Auckland, Tōtara Park Mountain Biking Club and Tōtara Park Equestrian Centre among others.
- Emergency services such as Fire and Emergency NZ (FENZ), NZ Police and Hato Hone St John.

## 5.3 Traffic management coordination

The Construction Traffic Manager will regularly meet with relevant personnel at Auckland Transport to inform Auckland Transport of any specific upcoming traffic management, as well as identify and resolve any conflicts arising in relation to the Project and any other separate works being undertaken.

## 5.4 Mechanisms for queries and complaints

The Stakeholder Engagement Manager will be responsible for implementing a process for receiving, addressing and monitoring any queries and complaints in relation to the Project construction works. This would address wider matters than traffic management, so will be further addressed in other documentation to be prepared by the contractor, once appointed. NZTA has advised that a complaints process will be in place for the duration of the Project.

# 6 MONITORING

Table 6-1 outlines the indicative responsibilities for the monitoring of temporary traffic planning that would be undertaken during the Project enabling and construction programme.

*Table 6-1 Indicative CTMP Monitoring Plan*

| Monitoring Activities                                                            | Frequency                                 | Responsibility                                        |
|----------------------------------------------------------------------------------|-------------------------------------------|-------------------------------------------------------|
| Check method statements reflect requirements and requisite TMP has been approved | Prior to the work packs being implemented | Construction Manager and Construction Traffic Manager |
| Inspect TTM layout                                                               | Two-hourly, when site is 'live'           | STMS                                                  |

| Monitoring Activities                                                         | Frequency                                                                                                                                                                                   | Responsibility                     |
|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| Documented check of all TTM                                                   | Daily and, as layouts change                                                                                                                                                                | STMS                               |
| TTM audit in accordance with NZGTTM                                           | Monthly                                                                                                                                                                                     | Construction Traffic Manager       |
| Monitoring of traffic performance along the corridor and adjacent local roads | Ongoing, utilising digital traffic monitoring tools to enable monitoring of traffic effects, with preset conditions on how to respond if impacts on the traffic exceed planned expectations | Construction Traffic Manager       |
| Review of communications log, incident register and workforce feedback        | As issues arise, with monthly review                                                                                                                                                        | Construction Manager               |
| Road condition survey                                                         | Formal surveys pre-enabling works, regular informal inspections, and at construction completion                                                                                             | Construction Traffic Manager       |
| Crash investigation                                                           | Report within 24 hours of an incident. Initial investigation within two working days with details provided to relevant Team Leader Compliance Monitoring at Auckland Council                | Health and Safety Manager          |
| Complaints                                                                    | As issues arise, with monthly review                                                                                                                                                        | Stakeholder and Engagement Manager |

## 7 TRAINING

### 7.1 General

In addition to general Project training requirements, training in relation to temporary traffic management and the implementation of this CTMP is outlined in Table 7-1.

*Table 7-1 Indicative Training Activities*

| Qualification / Training  | Description                                                                                            | Who                                                                                                                  |
|---------------------------|--------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| <b>Project Induction</b>  | Initial induction (refer to Section 7.2)                                                               | All Project staff, including site staff, office staff and anyone who is approved to enter the site without an escort |
| <b>Regular briefings</b>  | Meetings (likely weekly) to highlight key messages or issues and receive feedback                      | All site staff working on the Project at that time                                                                   |
| <b>STMS (Level C)</b>     | NZQA Qualification to oversee site in 'live' road environment in higher speed and complex environments | Person responsible for setting out and monitoring traffic management                                                 |
| <b>Traffic Controller</b> | NZQA Qualification to assist with traffic management                                                   | All staff undertaking traffic management associated with the Project                                                 |

The training activities will be based on the guidance set out in Part 2 of the NZGTTM.

## 7.2 Project induction

The Project induction will address (but not be limited to) the following matters relevant to this CTMP:

- Information about the surrounding Project transport environment, including information relating to traffic management and safety of site staff and road users, as well as on haul routes (where relevant to specific staff, i.e. truck drivers).
- Roles and responsibilities of Project staff, including individual responsibilities around traffic management and safety.
- Safety hazards – including pedestrians and cyclists, as well as manoeuvring plant, amongst others – particularly rules and processes to mitigate safety hazards.
- Educating construction staff on the safety needs of pedestrians and cyclists adjacent to the Project sites.
- Key aspects of this CTMP and SSTMPs, including interaction with existing transport users and land use activities along the identified haul routes.
- Options for travel to and from the Project site/s.
- Rules relating to parking at or in the vicinity of the Project site/s.
- The emergency plan.
- Looking after Project neighbours and the travelling public.